

September 03, 2020

**Vista Work Order No. 2001510**

Ms. Delaney Peterson  
Anchor QEA, LLC  
720 Olive Way, Suite 1900  
Seattle, WA 98101

Dear Ms. Peterson,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on July 17, 2020 under your Project Name 'Gasco PDI 000029-02.64'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at [mmaier@vista-analytical.com](mailto:mmaier@vista-analytical.com).

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier  
Laboratory Director



*Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.*

**Vista Work Order No. 2001510**

**Case Narrative**

**Sample Condition on Receipt:**

Five sediment samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

**Analytical Notes:**

**EPA Method 1613B**

These samples were extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-5MS GC column.

**Holding Times**

The samples were extracted and analyzed within the method hold times.

**Quality Control**

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

A duplicate was performed on sample "PDI-061SC-A-00-01-200428". The RPDs were out of the acceptance criteria for 1,2,3,7,8-PeCDD; 1,2,3,4,7,8-HxCDD; 1,2,3,4,6,7,8-HpCDD; OCDD; 1,2,3,7,8,9-HxCDF; 1,2,3,4,7,8,9-HpCDF and OCDF.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

## TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	15
Certifications.....	16
Sample Receipt.....	19
Extraction Information.....	22
Sample Data - EPA Method 1613.....	28
Confirmation.....	213
Continuing Calibration.....	222
Initial Calibration.....	289

# Sample Inventory Report

<b>Vista Sample ID</b>	<b>Client Sample ID</b>	<b>Sampled</b>	<b>Received</b>	<b>Components/Containers</b>
2001510-01	PDI-061SC-A-00-01-200428	DUP28-Apr-20 13:57	17-Jul-20 11:20	Amber Glass, 120 mL
2001510-02	PDI-061SC-A-01-02-200428	28-Apr-20 13:57	17-Jul-20 11:20	Amber Glass, 120 mL
2001510-03	PDI-061SC-A-02-03-200428	28-Apr-20 13:57	17-Jul-20 11:20	Amber Glass, 120 mL
2001510-04	PDI-174SC-A-08-09-200521	21-May-20 12:10	17-Jul-20 11:20	Amber Glass, 120 mL
2001510-05	PDI-174SC-A-09-10-200521	21-May-20 12:10	17-Jul-20 11:20	Amber Glass, 120 mL

## **ANALYTICAL RESULTS**

**Sample ID: Method Blank**

**EPA Method 1613B**

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	B0G0186-BLK1		
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Solid	Sample Size:	10.0 g	Column:	ZB-5MS

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.294			27-Jul-20 21:07	1
1,2,3,7,8-PeCDD	ND	0.205			27-Jul-20 21:07	1
1,2,3,4,7,8-HxCDD	ND	0.324			27-Jul-20 21:07	1
1,2,3,6,7,8-HxCDD	ND	0.365			27-Jul-20 21:07	1
1,2,3,7,8,9-HxCDD	ND	0.360			27-Jul-20 21:07	1
1,2,3,4,6,7,8-HpCDD	ND	0.349			27-Jul-20 21:07	1
OCDD	ND	0.447			27-Jul-20 21:07	1
2,3,7,8-TCDF	ND	0.185			27-Jul-20 21:07	1
1,2,3,7,8-PeCDF	ND	0.120			27-Jul-20 21:07	1
2,3,4,7,8-PeCDF	ND	0.110			27-Jul-20 21:07	1
1,2,3,4,7,8-HxCDF	ND	0.0815			27-Jul-20 21:07	1
1,2,3,6,7,8-HxCDF	ND	0.0835			27-Jul-20 21:07	1
2,3,4,6,7,8-HxCDF	ND	0.0972			27-Jul-20 21:07	1
1,2,3,7,8,9-HxCDF	ND	0.121			27-Jul-20 21:07	1
1,2,3,4,6,7,8-HpCDF	ND	0.129			27-Jul-20 21:07	1
1,2,3,4,7,8,9-HpCDF	ND	0.123			27-Jul-20 21:07	1
OCDF	ND	0.182			27-Jul-20 21:07	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00
---------------------	------

**Totals**

Total TCDD	ND	0.294
Total PeCDD	ND	0.205
Total HxCDD	ND	0.365
Total HpCDD	ND	0.349
Total TCDF	ND	0.185
Total PeCDF	ND	0.120
Total HxCDF	ND	0.121
Total HpCDF	ND	0.129

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	96.2	25 - 164		27-Jul-20 21:07	1
13C-1,2,3,7,8-PeCDD	IS	106	25 - 181		27-Jul-20 21:07	1
13C-1,2,3,4,7,8-HxCDD	IS	84.5	32 - 141		27-Jul-20 21:07	1
13C-1,2,3,6,7,8-HxCDD	IS	88.1	28 - 130		27-Jul-20 21:07	1
13C-1,2,3,7,8,9-HxCDD	IS	87.0	32 - 141		27-Jul-20 21:07	1
13C-1,2,3,4,6,7,8-HpCDD	IS	92.6	23 - 140		27-Jul-20 21:07	1
13C-OCDD	IS	87.6	17 - 157		27-Jul-20 21:07	1
13C-2,3,7,8-TCDF	IS	84.6	24 - 169		27-Jul-20 21:07	1
13C-1,2,3,7,8-PeCDF	IS	107	24 - 185		27-Jul-20 21:07	1
13C-2,3,4,7,8-PeCDF	IS	99.9	21 - 178		27-Jul-20 21:07	1
13C-1,2,3,4,7,8-HxCDF	IS	90.5	26 - 152		27-Jul-20 21:07	1
13C-1,2,3,6,7,8-HxCDF	IS	98.4	26 - 123		27-Jul-20 21:07	1
13C-2,3,4,6,7,8-HxCDF	IS	90.5	28 - 136		27-Jul-20 21:07	1
13C-1,2,3,7,8,9-HxCDF	IS	100	29 - 147		27-Jul-20 21:07	1
13C-1,2,3,4,6,7,8-HpCDF	IS	88.9	28 - 143		27-Jul-20 21:07	1
13C-1,2,3,4,7,8,9-HpCDF	IS	95.2	26 - 138		27-Jul-20 21:07	1
13C-OCDF	IS	92.2	17 - 157		27-Jul-20 21:07	1
37Cl-2,3,7,8-TCDD	CRS	84.9	35 - 197		27-Jul-20 21:07	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

**Sample ID: OPR**

**EPA Method 1613B**

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	B0G0186-BS1	Date Extracted:	21-Jul-20 08:09
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Column:	ZB-5MS
Matrix:	Solid	Sample Size:	10.0 g		

Analyte	Amt Found (pg/g)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	18.9	20.0	94.7	67-158		27-Jul-20 18:06	1
1,2,3,7,8-PeCDD	97.0	100	97.0	70-142		27-Jul-20 18:06	1
1,2,3,4,7,8-HxCDD	90.0	100	90.0	70-164		27-Jul-20 18:06	1
1,2,3,6,7,8-HxCDD	94.3	100	94.3	76-134		27-Jul-20 18:06	1
1,2,3,7,8,9-HxCDD	90.5	100	90.5	64-162		27-Jul-20 18:06	1
1,2,3,4,6,7,8-HpCDD	92.9	100	92.9	70-140		27-Jul-20 18:06	1
OCDD	185	200	92.3	78-144		27-Jul-20 18:06	1
2,3,7,8-TCDF	20.4	20.0	102	75-158		27-Jul-20 18:06	1
1,2,3,7,8-PeCDF	97.5	100	97.5	80-134		27-Jul-20 18:06	1
2,3,4,7,8-PeCDF	93.9	100	93.9	68-160		27-Jul-20 18:06	1
1,2,3,4,7,8-HxCDF	95.9	100	95.9	72-134		27-Jul-20 18:06	1
1,2,3,6,7,8-HxCDF	93.0	100	93.0	84-130		27-Jul-20 18:06	1
2,3,4,6,7,8-HxCDF	93.7	100	93.7	70-156		27-Jul-20 18:06	1
1,2,3,7,8,9-HxCDF	91.0	100	91.0	78-130		27-Jul-20 18:06	1
1,2,3,4,6,7,8-HpCDF	90.8	100	90.8	82-122		27-Jul-20 18:06	1
1,2,3,4,7,8,9-HpCDF	92.4	100	92.4	78-138		27-Jul-20 18:06	1
OCDF	191	200	95.5	63-170		27-Jul-20 18:06	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	90.9	20-175		27-Jul-20 18:06	1
13C-1,2,3,7,8-PeCDD	IS	106	21-227		27-Jul-20 18:06	1
13C-1,2,3,4,7,8-HxCDD	IS	84.3	21-193		27-Jul-20 18:06	1
13C-1,2,3,6,7,8-HxCDD	IS	85.9	25-163		27-Jul-20 18:06	1
13C-1,2,3,7,8,9-HxCDD	IS	86.6	21-193		27-Jul-20 18:06	1
13C-1,2,3,4,6,7,8-HpCDD	IS	87.9	26-166		27-Jul-20 18:06	1
13C-OCDD	IS	79.5	13-199		27-Jul-20 18:06	1
13C-2,3,7,8-TCDF	IS	83.9	22-152		27-Jul-20 18:06	1
13C-1,2,3,7,8-PeCDF	IS	113	21-192		27-Jul-20 18:06	1
13C-2,3,4,7,8-PeCDF	IS	108	13-328		27-Jul-20 18:06	1
13C-1,2,3,4,7,8-HxCDF	IS	91.2	19-202		27-Jul-20 18:06	1
13C-1,2,3,6,7,8-HxCDF	IS	100	21-159		27-Jul-20 18:06	1
13C-2,3,4,6,7,8-HxCDF	IS	93.2	22-176		27-Jul-20 18:06	1
13C-1,2,3,7,8,9-HxCDF	IS	97.1	17-205		27-Jul-20 18:06	1
13C-1,2,3,4,6,7,8-HpCDF	IS	87.2	21-158		27-Jul-20 18:06	1
13C-1,2,3,4,7,8,9-HpCDF	IS	92.7	20-186		27-Jul-20 18:06	1
13C-OCDF	IS	86.3	13-199		27-Jul-20 18:06	1
37Cl-2,3,7,8-TCDD	CRS	84.3	31-191		27-Jul-20 18:06	1

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	2001510-01	Date Received:	17-Jul-20 11:20
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Sediment	Sample Size:	16.5 g	Column:	DB-225
Date Collected:	28-Apr-20 13:57	% Solids:	61.3		ZB-5MS

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.291		21-Aug-20 19:41	1
1,2,3,7,8-PeCDD	0.454			J	21-Aug-20 19:41	1
1,2,3,4,7,8-HxCDD	0.627			J	21-Aug-20 19:41	1
1,2,3,6,7,8-HxCDD	2.64				21-Aug-20 19:41	1
1,2,3,7,8,9-HxCDD	1.68			J	21-Aug-20 19:41	1
1,2,3,4,6,7,8-HpCDD	65.0				21-Aug-20 19:41	1
OCDD	560				21-Aug-20 19:41	1
2,3,7,8-TCDF	3.37				02-Sep-20 16:07	1
1,2,3,7,8-PeCDF	3.75				21-Aug-20 19:41	1
2,3,4,7,8-PeCDF	1.80			J	21-Aug-20 19:41	1
1,2,3,4,7,8-HxCDF	6.95				21-Aug-20 19:41	1
1,2,3,6,7,8-HxCDF	2.14			J	21-Aug-20 19:41	1
2,3,4,6,7,8-HxCDF	0.931			J	21-Aug-20 19:41	1
1,2,3,7,8,9-HxCDF	0.439			J	21-Aug-20 19:41	1
1,2,3,4,6,7,8-HpCDF	9.67				21-Aug-20 19:41	1
1,2,3,4,7,8,9-HpCDF	1.73			J	21-Aug-20 19:41	1
OCDF	28.8				21-Aug-20 19:41	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	3.92
---------------------	------

**Totals**

Total TCDD	3.29	3.80
Total PeCDD	5.10	
Total HxCDD	29.6	
Total HpCDD	157	
Total TCDF	12.6	13.6
Total PeCDF	12.9	16.3
Total HxCDF	23.9	24.3
Total HpCDF	33.0	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	91.4	25 - 164		21-Aug-20 19:41	1
13C-1,2,3,7,8-PeCDD	IS	93.1	25 - 181		21-Aug-20 19:41	1
13C-1,2,3,4,7,8-HxCDD	IS	92.7	32 - 141		21-Aug-20 19:41	1
13C-1,2,3,6,7,8-HxCDD	IS	93.6	28 - 130		21-Aug-20 19:41	1
13C-1,2,3,7,8,9-HxCDD	IS	90.6	32 - 141		21-Aug-20 19:41	1
13C-1,2,3,4,6,7,8-HpCDD	IS	81.3	23 - 140		21-Aug-20 19:41	1
13C-OCDD	IS	68.5	17 - 157		21-Aug-20 19:41	1
13C-2,3,7,8-TCDF	IS	85.5	24 - 169		21-Aug-20 19:41	1
13C-1,2,3,7,8-PeCDF	IS	95.7	24 - 185		21-Aug-20 19:41	1
13C-2,3,4,7,8-PeCDF	IS	94.2	21 - 178		21-Aug-20 19:41	1
13C-1,2,3,4,7,8-HxCDF	IS	95.5	26 - 152		21-Aug-20 19:41	1
13C-1,2,3,6,7,8-HxCDF	IS	93.2	26 - 123		21-Aug-20 19:41	1
13C-2,3,4,6,7,8-HxCDF	IS	90.3	28 - 136		21-Aug-20 19:41	1
13C-1,2,3,7,8,9-HxCDF	IS	86.4	29 - 147		21-Aug-20 19:41	1
13C-1,2,3,4,6,7,8-HpCDF	IS	87.8	28 - 143		21-Aug-20 19:41	1
13C-1,2,3,4,7,8,9-HpCDF	IS	79.9	26 - 138		21-Aug-20 19:41	1
13C-OCDF	IS	66.6	17 - 157		21-Aug-20 19:41	1
37Cl-2,3,7,8-TCDD	CRS	86.6	35 - 197		21-Aug-20 19:41	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.



Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	B0G0186-DUP1	Source Lab Sample:	2001510-01
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Solid	Sample Size:	16.6 g	Column:	ZB-5MS

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.333		21-Aug-20 18:54	1
1,2,3,7,8-PeCDD	0.585			J	21-Aug-20 18:54	1
1,2,3,4,7,8-HxCDD	0.882			J	21-Aug-20 18:54	1
1,2,3,6,7,8-HxCDD	3.19				21-Aug-20 18:54	1
1,2,3,7,8,9-HxCDD	2.14			J	21-Aug-20 18:54	1
1,2,3,4,6,7,8-HpCDD	112				21-Aug-20 18:54	1
OCDD	727				21-Aug-20 18:54	1
2,3,7,8-TCDF	3.87				21-Aug-20 18:54	1
1,2,3,7,8-PeCDF	4.49				21-Aug-20 18:54	1
2,3,4,7,8-PeCDF	2.02			J	21-Aug-20 18:54	1
1,2,3,4,7,8-HxCDF	8.91				21-Aug-20 18:54	1
1,2,3,6,7,8-HxCDF	2.48				21-Aug-20 18:54	1
2,3,4,6,7,8-HxCDF	1.05			J	21-Aug-20 18:54	1
1,2,3,7,8,9-HxCDF	0.943			J	21-Aug-20 18:54	1
1,2,3,4,6,7,8-HpCDF	11.0				21-Aug-20 18:54	1
1,2,3,4,7,8,9-HpCDF	2.85				21-Aug-20 18:54	1
OCDF	43.0				21-Aug-20 18:54	1

Toxic Equivalent	
TEQMinWHO2005Dioxin	5.16

Totals		
Total TCDD	3.57	3.90
Total PeCDD	5.63	6.00
Total HxCDD	45.0	
Total HpCDD	308	
Total TCDF	15.6	16.3
Total PeCDF	14.4	18.3
Total HxCDF	29.4	29.6
Total HpCDF	45.7	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	90.0	25 - 164		21-Aug-20 18:54	1
13C-1,2,3,7,8-PeCDD	IS	88.7	25 - 181		21-Aug-20 18:54	1
13C-1,2,3,4,7,8-HxCDD	IS	82.1	32 - 141		21-Aug-20 18:54	1
13C-1,2,3,6,7,8-HxCDD	IS	85.6	28 - 130		21-Aug-20 18:54	1
13C-1,2,3,7,8,9-HxCDD	IS	82.0	32 - 141		21-Aug-20 18:54	1
13C-1,2,3,4,6,7,8-HpCDD	IS	73.9	23 - 140		21-Aug-20 18:54	1
13C-OCDD	IS	60.5	17 - 157		21-Aug-20 18:54	1
13C-2,3,7,8-TCDF	IS	90.2	24 - 169		02-Sep-20 15:36	1
13C-1,2,3,7,8-PeCDF	IS	92.2	24 - 185		21-Aug-20 18:54	1
13C-2,3,4,7,8-PeCDF	IS	90.6	21 - 178		21-Aug-20 18:54	1
13C-1,2,3,4,7,8-HxCDF	IS	85.6	26 - 152		21-Aug-20 18:54	1
13C-1,2,3,6,7,8-HxCDF	IS	84.4	26 - 123		21-Aug-20 18:54	1
13C-2,3,4,6,7,8-HxCDF	IS	79.0	28 - 136		21-Aug-20 18:54	1
13C-1,2,3,7,8,9-HxCDF	IS	79.6	29 - 147		21-Aug-20 18:54	1
13C-1,2,3,4,6,7,8-HpCDF	IS	78.6	28 - 143		21-Aug-20 18:54	1
13C-1,2,3,4,7,8,9-HpCDF	IS	71.2	26 - 138		21-Aug-20 18:54	1
13C-OCDF	IS	57.1	17 - 157		21-Aug-20 18:54	1
37Cl-2,3,7,8-TCDD	CRS	78.5	35 - 197		21-Aug-20 18:54	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

**Sample ID: PDI-061SC-A-00-01-200428**

**EPA Method 1613B**

Name:	Anchor QEA, LLC	Lab Sample:	B0G0186-DUP1	Source Lab Sample:	2001510-01
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20
Matrix:	Solid	Samp Size:	16.6g	Column:	ZB-5MS

Analyte	Sample (pg/g)	Sample Quals	DUP (pg/g)	DUP Quals	RPD	RPD Limits	Sample Analyzed	Sample Dil	DUP Analyzed	DUP Dil
2,3,7,8-TCDD	ND		ND		NA	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,7,8-PeCDD	0.454	J	0.585	J	25.1	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,4,7,8-HxCDD	0.627	J	0.882	J	33.8	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,6,7,8-HxCDD	2.64		3.19		19.0	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,7,8,9-HxCDD	1.68	J	2.14	J	24.3	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,4,6,7,8-HpCDD	65.0		112		53.3	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
OCDD	560		727		26.1	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
2,3,7,8-TCDF	3.37		3.87		14.0	25	02-Sep-20 16:07	1	21-Aug-20 18:54	1
1,2,3,7,8-PeCDF	3.75		4.49		18.1	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
2,3,4,7,8-PeCDF	1.80	J	2.02	J	11.2	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,4,7,8-HxCDF	6.95		8.91		24.7	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,6,7,8-HxCDF	2.14	J	2.48		14.9	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
2,3,4,6,7,8-HxCDF	0.931	J	1.05	J	11.7	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,7,8,9-HxCDF	0.439	J	0.943	J	73.0	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,4,6,7,8-HpCDF	9.67		11.0		12.6	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
1,2,3,4,7,8,9-HpCDF	1.73	J	2.85		48.9	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1
OCDF	28.8		43.0		39.6	25	21-Aug-20 19:41	1	21-Aug-20 18:54	1

Labeled Standards	Type	Sample % Rec	Sample Quals	DUP % Rec	DUP Quals	Limits	Sample Analyzed	Sample Dil	DUP Analyzed	DUP Dil
13C-2,3,7,8-TCDD	IS	91.4		90.0		25-164	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,7,8-PeCDD	IS	93.1		88.7		25-181	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,4,7,8-HxCDD	IS	92.7		82.1		32-141	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,6,7,8-HxCDD	IS	93.6		85.6		28-130	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,7,8,9-HxCDD	IS	90.6		82.0		32-141	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,4,6,7,8-HpCDD	IS	81.3		73.9		23-140	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-OCDD	IS	68.5		60.5		17-157	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-2,3,7,8-TCDF	IS	85.5		90.2		24-169	21-Aug-20 19:41	1	02-Sep-20 15:36	1
13C-1,2,3,7,8-PeCDF	IS	95.7		92.2		24-185	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-2,3,4,7,8-PeCDF	IS	94.2		90.6		21-178	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,4,7,8-HxCDF	IS	95.5		85.6		26-152	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,6,7,8-HxCDF	IS	93.2		84.4		26-123	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-2,3,4,6,7,8-HxCDF	IS	90.3		79.0		28-136	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,7,8,9-HxCDF	IS	86.4		79.6		29-147	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,4,6,7,8-HpCDF	IS	87.8		78.6		28-143	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-1,2,3,4,7,8,9-HpCDF	IS	79.9		71.2		26-138	21-Aug-20 19:41	1	21-Aug-20 18:54	1
13C-OCDF	IS	66.6		57.1		17-157	21-Aug-20 19:41	1	21-Aug-20 18:54	1
37Cl-2,3,7,8-TCDD	CRS	86.6		78.5		35-197	21-Aug-20 19:41	1	21-Aug-20 18:54	1

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	2001510-02	Date Received:	17-Jul-20 11:20
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Sediment	Sample Size:	13.9 g	Column:	ZB-5MS
Date Collected:	28-Apr-20 13:57	% Solids:	72.1		

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.117		21-Aug-20 20:28	1
1,2,3,7,8-PeCDD	ND	0.0754			21-Aug-20 20:28	1
1,2,3,4,7,8-HxCDD	ND	0.0854			21-Aug-20 20:28	1
1,2,3,6,7,8-HxCDD	ND	0.0818			21-Aug-20 20:28	1
1,2,3,7,8,9-HxCDD	ND	0.0940			21-Aug-20 20:28	1
1,2,3,4,6,7,8-HpCDD	1.96			J	21-Aug-20 20:28	1
OCDD	22.4				21-Aug-20 20:28	1
2,3,7,8-TCDF	ND	0.0630			21-Aug-20 20:28	1
1,2,3,7,8-PeCDF	ND		0.0824		21-Aug-20 20:28	1
2,3,4,7,8-PeCDF	ND	0.0410			21-Aug-20 20:28	1
1,2,3,4,7,8-HxCDF	0.101			J	21-Aug-20 20:28	1
1,2,3,6,7,8-HxCDF	ND	0.0391			21-Aug-20 20:28	1
2,3,4,6,7,8-HxCDF	ND	0.0448			21-Aug-20 20:28	1
1,2,3,7,8,9-HxCDF	ND	0.0662			21-Aug-20 20:28	1
1,2,3,4,6,7,8-HpCDF	ND		0.198		21-Aug-20 20:28	1
1,2,3,4,7,8,9-HpCDF	ND	0.105			21-Aug-20 20:28	1
OCDF	ND		0.840		21-Aug-20 20:28	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.0364
---------------------	--------

**Totals**

Total TCDD	ND		0.117
Total PeCDD	ND	0.0754	
Total HxCDD	0.951		
Total HpCDD	4.66		
Total TCDF	0.190		
Total PeCDF	0.106		0.189
Total HxCDF	0.306		
Total HpCDF	0.514		0.712

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	95.3	25 - 164		21-Aug-20 20:28	1
13C-1,2,3,7,8-PeCDD	IS	104	25 - 181		21-Aug-20 20:28	1
13C-1,2,3,4,7,8-HxCDD	IS	99.5	32 - 141		21-Aug-20 20:28	1
13C-1,2,3,6,7,8-HxCDD	IS	98.5	28 - 130		21-Aug-20 20:28	1
13C-1,2,3,7,8,9-HxCDD	IS	96.4	32 - 141		21-Aug-20 20:28	1
13C-1,2,3,4,6,7,8-HpCDD	IS	94.6	23 - 140		21-Aug-20 20:28	1
13C-OCDD	IS	81.1	17 - 157		21-Aug-20 20:28	1
13C-2,3,7,8-TCDF	IS	88.1	24 - 169		21-Aug-20 20:28	1
13C-1,2,3,7,8-PeCDF	IS	105	24 - 185		21-Aug-20 20:28	1
13C-2,3,4,7,8-PeCDF	IS	105	21 - 178		21-Aug-20 20:28	1
13C-1,2,3,4,7,8-HxCDF	IS	99.0	26 - 152		21-Aug-20 20:28	1
13C-1,2,3,6,7,8-HxCDF	IS	97.3	26 - 123		21-Aug-20 20:28	1
13C-2,3,4,6,7,8-HxCDF	IS	96.0	28 - 136		21-Aug-20 20:28	1
13C-1,2,3,7,8,9-HxCDF	IS	95.3	29 - 147		21-Aug-20 20:28	1
13C-1,2,3,4,6,7,8-HpCDF	IS	95.9	28 - 143		21-Aug-20 20:28	1
13C-1,2,3,4,7,8,9-HpCDF	IS	90.7	26 - 138		21-Aug-20 20:28	1
13C-OCDF	IS	80.9	17 - 157		21-Aug-20 20:28	1
37Cl-2,3,7,8-TCDD	CRS	85.0	35 - 197		21-Aug-20 20:28	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	2001510-03	Date Received:	17-Jul-20 11:20
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Sediment	Sample Size:	14.9 g	Column:	ZB-5MS
Date Collected:	28-Apr-20 13:57	% Solids:	67.4		

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0965			21-Aug-20 21:15	1
1,2,3,7,8-PeCDD	ND	0.0845			21-Aug-20 21:15	1
1,2,3,4,7,8-HxCDD	ND	0.102			21-Aug-20 21:15	1
1,2,3,6,7,8-HxCDD	ND	0.101			21-Aug-20 21:15	1
1,2,3,7,8,9-HxCDD	ND	0.108			21-Aug-20 21:15	1
1,2,3,4,6,7,8-HpCDD	0.669			J	21-Aug-20 21:15	1
OCDD	6.66				21-Aug-20 21:15	1
2,3,7,8-TCDF	ND	0.0611			21-Aug-20 21:15	1
1,2,3,7,8-PeCDF	ND	0.0421			21-Aug-20 21:15	1
2,3,4,7,8-PeCDF	ND	0.0352			21-Aug-20 21:15	1
1,2,3,4,7,8-HxCDF	ND	0.0434			21-Aug-20 21:15	1
1,2,3,6,7,8-HxCDF	ND	0.0434			21-Aug-20 21:15	1
2,3,4,6,7,8-HxCDF	ND	0.0485			21-Aug-20 21:15	1
1,2,3,7,8,9-HxCDF	ND	0.0657			21-Aug-20 21:15	1
1,2,3,4,6,7,8-HpCDF	ND	0.0584			21-Aug-20 21:15	1
1,2,3,4,7,8,9-HpCDF	ND	0.103			21-Aug-20 21:15	1
OCDF	ND	0.117			21-Aug-20 21:15	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00869
---------------------	---------

**Totals**

Total TCDD	0.230	
Total PeCDD	ND	0.165
Total HxCDD	0.884	
Total HpCDD	1.81	
Total TCDF	0.225	
Total PeCDF	ND	0.0421
Total HxCDF	ND	0.0657
Total HpCDF	ND	0.103

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	92.2	25 - 164		21-Aug-20 21:15	1
13C-1,2,3,7,8-PeCDD	IS	91.6	25 - 181		21-Aug-20 21:15	1
13C-1,2,3,4,7,8-HxCDD	IS	91.7	32 - 141		21-Aug-20 21:15	1
13C-1,2,3,6,7,8-HxCDD	IS	92.1	28 - 130		21-Aug-20 21:15	1
13C-1,2,3,7,8,9-HxCDD	IS	95.1	32 - 141		21-Aug-20 21:15	1
13C-1,2,3,4,6,7,8-HpCDD	IS	85.9	23 - 140		21-Aug-20 21:15	1
13C-OCDD	IS	73.7	17 - 157		21-Aug-20 21:15	1
13C-2,3,7,8-TCDF	IS	84.9	24 - 169		21-Aug-20 21:15	1
13C-1,2,3,7,8-PeCDF	IS	96.4	24 - 185		21-Aug-20 21:15	1
13C-2,3,4,7,8-PeCDF	IS	92.9	21 - 178		21-Aug-20 21:15	1
13C-1,2,3,4,7,8-HxCDF	IS	95.5	26 - 152		21-Aug-20 21:15	1
13C-1,2,3,6,7,8-HxCDF	IS	93.9	26 - 123		21-Aug-20 21:15	1
13C-2,3,4,6,7,8-HxCDF	IS	91.8	28 - 136		21-Aug-20 21:15	1
13C-1,2,3,7,8,9-HxCDF	IS	92.8	29 - 147		21-Aug-20 21:15	1
13C-1,2,3,4,6,7,8-HpCDF	IS	97.9	28 - 143		21-Aug-20 21:15	1
13C-1,2,3,4,7,8,9-HpCDF	IS	82.4	26 - 138		21-Aug-20 21:15	1
13C-OCDF	IS	72.9	17 - 157		21-Aug-20 21:15	1
37Cl-2,3,7,8-TCDD	CRS	88.1	35 - 197		21-Aug-20 21:15	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	2001510-04	Date Received:	17-Jul-20 11:20
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Sediment	Sample Size:	10.9 g	Column:	ZB-5MS
Date Collected:	21-May-20 12:10	% Solids:	91.9		

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.104		21-Aug-20 22:02	1
1,2,3,7,8-PeCDD	ND	0.0765			21-Aug-20 22:02	1
1,2,3,4,7,8-HxCDD	ND	0.0801			21-Aug-20 22:02	1
1,2,3,6,7,8-HxCDD	ND	0.0813			21-Aug-20 22:02	1
1,2,3,7,8,9-HxCDD	ND	0.0912			21-Aug-20 22:02	1
1,2,3,4,6,7,8-HpCDD	0.393			J	21-Aug-20 22:02	1
OCDD	4.59			J	21-Aug-20 22:02	1
2,3,7,8-TCDF	ND	0.0399			21-Aug-20 22:02	1
1,2,3,7,8-PeCDF	ND	0.0351			21-Aug-20 22:02	1
2,3,4,7,8-PeCDF	ND	0.0318			21-Aug-20 22:02	1
1,2,3,4,7,8-HxCDF	ND	0.0380			21-Aug-20 22:02	1
1,2,3,6,7,8-HxCDF	ND	0.0376			21-Aug-20 22:02	1
2,3,4,6,7,8-HxCDF	ND	0.0410			21-Aug-20 22:02	1
1,2,3,7,8,9-HxCDF	ND	0.0591			21-Aug-20 22:02	1
1,2,3,4,6,7,8-HpCDF	ND	0.0503			21-Aug-20 22:02	1
1,2,3,4,7,8,9-HpCDF	ND	0.0854			21-Aug-20 22:02	1
OCDF	ND	0.110			21-Aug-20 22:02	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.00531
---------------------	---------

**Totals**

Total TCDD	ND		0.104
Total PeCDD	ND	0.0765	
Total HxCDD	0.293		
Total HpCDD	1.18		
Total TCDF	ND	0.0399	
Total PeCDF	ND	0.0351	
Total HxCDF	ND	0.0591	
Total HpCDF	ND	0.0854	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	88.1	25 - 164		21-Aug-20 22:02	1
13C-1,2,3,7,8-PeCDD	IS	86.8	25 - 181		21-Aug-20 22:02	1
13C-1,2,3,4,7,8-HxCDD	IS	89.5	32 - 141		21-Aug-20 22:02	1
13C-1,2,3,6,7,8-HxCDD	IS	89.9	28 - 130		21-Aug-20 22:02	1
13C-1,2,3,7,8,9-HxCDD	IS	86.3	32 - 141		21-Aug-20 22:02	1
13C-1,2,3,4,6,7,8-HpCDD	IS	79.6	23 - 140		21-Aug-20 22:02	1
13C-OCDD	IS	74.2	17 - 157		21-Aug-20 22:02	1
13C-2,3,7,8-TCDF	IS	83.2	24 - 169		21-Aug-20 22:02	1
13C-1,2,3,7,8-PeCDF	IS	87.6	24 - 185		21-Aug-20 22:02	1
13C-2,3,4,7,8-PeCDF	IS	85.1	21 - 178		21-Aug-20 22:02	1
13C-1,2,3,4,7,8-HxCDF	IS	92.5	26 - 152		21-Aug-20 22:02	1
13C-1,2,3,6,7,8-HxCDF	IS	90.7	26 - 123		21-Aug-20 22:02	1
13C-2,3,4,6,7,8-HxCDF	IS	88.2	28 - 136		21-Aug-20 22:02	1
13C-1,2,3,7,8,9-HxCDF	IS	85.3	29 - 147		21-Aug-20 22:02	1
13C-1,2,3,4,6,7,8-HpCDF	IS	88.5	28 - 143		21-Aug-20 22:02	1
13C-1,2,3,4,7,8,9-HpCDF	IS	81.7	26 - 138		21-Aug-20 22:02	1
13C-OCDF	IS	72.4	17 - 157		21-Aug-20 22:02	1
37Cl-2,3,7,8-TCDD	CRS	89.0	35 - 197		21-Aug-20 22:02	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

Client Data		Laboratory Data			
Name:	Anchor QEA, LLC	Lab Sample:	2001510-05	Date Received:	17-Jul-20 11:20
Project:	Gasco PDI 000029-02.64	QC Batch:	B0G0186	Date Extracted:	21-Jul-20 08:09
Matrix:	Sediment	Sample Size:	12.0 g	Column:	ZB-5MS
Date Collected:	21-May-20 12:10	% Solids:	86.8		

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0735			21-Aug-20 22:49	1
1,2,3,7,8-PeCDD	ND	0.114			21-Aug-20 22:49	1
1,2,3,4,7,8-HxCDD	ND	0.0969			21-Aug-20 22:49	1
1,2,3,6,7,8-HxCDD	ND	0.0931			21-Aug-20 22:49	1
1,2,3,7,8,9-HxCDD	ND	0.107			21-Aug-20 22:49	1
1,2,3,4,6,7,8-HpCDD	0.907			J	21-Aug-20 22:49	1
OCDD	12.4				21-Aug-20 22:49	1
2,3,7,8-TCDF	ND	0.0443			21-Aug-20 22:49	1
1,2,3,7,8-PeCDF	ND	0.0516			21-Aug-20 22:49	1
2,3,4,7,8-PeCDF	ND	0.0443			21-Aug-20 22:49	1
1,2,3,4,7,8-HxCDF	ND	0.0553			21-Aug-20 22:49	1
1,2,3,6,7,8-HxCDF	ND	0.0547			21-Aug-20 22:49	1
2,3,4,6,7,8-HxCDF	ND	0.0577			21-Aug-20 22:49	1
1,2,3,7,8,9-HxCDF	ND	0.0814			21-Aug-20 22:49	1
1,2,3,4,6,7,8-HpCDF	ND	0.0682			21-Aug-20 22:49	1
1,2,3,4,7,8,9-HpCDF	ND	0.113			21-Aug-20 22:49	1
OCDF	ND	0.121			21-Aug-20 22:49	1

**Toxic Equivalent**

TEQMinWHO2005Dioxin	0.0128
---------------------	--------

**Totals**

Total TCDD	0.136	
Total PeCDD	ND	0.114
Total HxCDD	0.618	
Total HpCDD	2.44	
Total TCDF	ND	0.0443
Total PeCDF	ND	0.0516
Total HxCDF	ND	0.0814
Total HpCDF	ND	0.113

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	92.6	25 - 164		21-Aug-20 22:49	1
13C-1,2,3,7,8-PeCDD	IS	91.2	25 - 181		21-Aug-20 22:49	1
13C-1,2,3,4,7,8-HxCDD	IS	92.3	32 - 141		21-Aug-20 22:49	1
13C-1,2,3,6,7,8-HxCDD	IS	94.7	28 - 130		21-Aug-20 22:49	1
13C-1,2,3,7,8,9-HxCDD	IS	92.3	32 - 141		21-Aug-20 22:49	1
13C-1,2,3,4,6,7,8-HpCDD	IS	83.7	23 - 140		21-Aug-20 22:49	1
13C-OCDD	IS	72.6	17 - 157		21-Aug-20 22:49	1
13C-2,3,7,8-TCDF	IS	85.3	24 - 169		21-Aug-20 22:49	1
13C-1,2,3,7,8-PeCDF	IS	93.0	24 - 185		21-Aug-20 22:49	1
13C-2,3,4,7,8-PeCDF	IS	93.4	21 - 178		21-Aug-20 22:49	1
13C-1,2,3,4,7,8-HxCDF	IS	95.5	26 - 152		21-Aug-20 22:49	1
13C-1,2,3,6,7,8-HxCDF	IS	93.4	26 - 123		21-Aug-20 22:49	1
13C-2,3,4,6,7,8-HxCDF	IS	92.5	28 - 136		21-Aug-20 22:49	1
13C-1,2,3,7,8,9-HxCDF	IS	88.4	29 - 147		21-Aug-20 22:49	1
13C-1,2,3,4,6,7,8-HpCDF	IS	91.8	28 - 143		21-Aug-20 22:49	1
13C-1,2,3,4,7,8,9-HpCDF	IS	85.0	26 - 138		21-Aug-20 22:49	1
13C-OCDF	IS	72.6	17 - 157		21-Aug-20 22:49	1
37Cl-2,3,7,8-TCDD	CRS	81.6	35 - 197		21-Aug-20 22:49	1

EDL - Sample specific estimated detection limit  
 EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit  
 The results are reported in dry weight.  
 The sample size is reported in wet weight.

## DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

### Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

*Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.*



## NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A


MATRIX: Drinking Water	
Description of Test	Method
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

**Chain of Custody Record & Laboratory Analysis Request**

2001510 3.0°C

Laboratory Number:				<b>Test Parameters</b>																	
Date: 07.15.2020				No. of Containers	Dioxin/furans (1613B)	Total solids (SM 2540G)															
Project Name: Gasco PDI																					
Project Number: 000029-02.64																					
Project Manager: Delaney Peterson																					
Phone Number: 360.715.2707																					
Shipment Method: FedEx																					
Samplers: CO, SN																					
Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Dioxin/furans (1613B)	Total solids (SM 2540G)															Comments/Preservation
1	PDI-061SC-A-00-01-200428	04/28/2020 13:57:00	SE	1	X	X															
2	PDI-061SC-A-01-02-200428	04/28/2020 13:57:00	SE	1	X	X															
3	PDI-061SC-A-02-03-200428	04/28/2020 13:57:00	SE	1	X	X															
4	PDI-174SC-A-08-09-200521	05/21/2020 12:10:00	SE	1	X	X															
5	PDI-174SC-A-09-10-200521	05/21/2020 12:10:00	SE	1	X	X															
6	/																				
7	/																				
8	/																				
9	/																				
10	/																				
11	/																				
12	/																				
13	/																				
14	/																				
15	/																				

Relinquished By: Modi Raduma Company: Anchor QEA, LLC  
 Signature/Printed Name DMR Date/Time 7/16/2020 11:45

Received By: Hayden Granis Company: VAL  
 Signature/Printed Name Hayden Granis Date/Time 07/17/2020 11:30

Relinquished By: \_\_\_\_\_ Company: \_\_\_\_\_  
 Signature/Printed Name \_\_\_\_\_ Date/Time \_\_\_\_\_

Received By: \_\_\_\_\_ Company: \_\_\_\_\_  
 Signature/Printed Name \_\_\_\_\_ Date/Time \_\_\_\_\_

# Sample Log-In Checklist

 Page # 1 of 1

 Vista Work Order #: 2001510 TAT std

Samples Arrival:	Date/Time <u>07/17/2020 11:20</u>		Initials: <u>HOG</u>		Location: <u>WR-2</u>		
					Shelf/Rack: <u>NA</u>		
Delivered By:	<input checked="" type="radio"/> FedEx	<input type="radio"/> UPS	<input type="radio"/> On Trac	<input type="radio"/> GLS	<input type="radio"/> DHL	<input type="radio"/> Hand Delivered	<input type="radio"/> Other
Preservation:	<input checked="" type="radio"/> Ice		<input type="radio"/> Blue Ice		<input type="radio"/> Techni Ice	<input type="radio"/> Dry Ice	<input type="radio"/> None
Temp °C:	<u>3.0</u> (uncorrected)	Probe used: Y / <input checked="" type="radio"/> N			Thermometer ID: <u>IR-3</u>		
Temp °C:	<u>3.0</u> (corrected)						

	YES	NO	NA
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Custody Seals Intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Airbill	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trk # <u>7709 7538 9788</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain
Return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Dispose
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chain of Custody / Sample Documentation Complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Holding Time Acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Logged In:	Date/Time <u>07/17/20 1302</u>		Initials: <u>WWS</u>		Location: <u>WR-2</u>		
					Shelf/Rack: <u>D-7</u>		
COC Anomaly/Sample Acceptance Form completed?					<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

# CoC/Label Reconciliation Report WO# 2001510

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2001510-01	A PDI-061SC-A-00-01-200428	<input checked="" type="checkbox"/>	28-Apr-20 13:57	Amber Glass, 120 mL	Solid	DUP
2001510-02	A PDI-061SC-A-01-02-200428	<input checked="" type="checkbox"/>	28-Apr-20 13:57	Amber Glass, 120 mL	Solid	
2001510-03	A PDI-061SC-A-02-03-200428	<input checked="" type="checkbox"/>	28-Apr-20 13:57	Amber Glass, 120 mL	Solid	
2001510-04	A PDI-174SC-A-08-09-200521	<input checked="" type="checkbox"/>	21-May-20 12:10	Amber Glass, 120 mL	Solid	
2001510-05	A PDI-174SC-A-09-10-200521	<input checked="" type="checkbox"/>	21-May-20 12:10	Amber Glass, 120 mL	Solid	

Checkmarks indicate that information on the COC reconciled with the sample label.  
Any discrepancies are noted in the following columns.

	Yes	No	NA	Comments:
Sample Container Intact?	✓			
Sample Custody Seals Intact?			✓	
Adequate Sample Volume?	✓			
Container Type Appropriate for Analysis(es)	✓			
Preservation Documented: Na2S2O3 Trizma <u>None</u> Other		✓	✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓	

Verified by/Date: MWS 07/17/20

## **EXTRACTION INFORMATION**

Process Sheet  
**Workorder: 2001510**

Prep Expiration: 2021-04-28  
 Client: Anchor QEA, LLC

**Workorder Due: 14-Aug-20 00:00**

TAT: 28

Method: **1613 Full List**  
 Matrix: **Solid**  
 Also run: **Percent Solids**

Prep Batch: B060186

Prep Data Entered: 07/22/20 RR  
Date and Initials

Initial Sequence: S0H0057

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
2001510-01	A <input checked="" type="checkbox"/>	PDI-061SC-A-00-01-200428	17-Jul-20 11:20	WR-2 D-7	DUP
2001510-02	A <input checked="" type="checkbox"/>	PDI-061SC-A-01-02-200428	17-Jul-20 11:20	WR-2 D-7	
2001510-03	A <input checked="" type="checkbox"/>	PDI-061SC-A-02-03-200428	17-Jul-20 11:20	WR-2 D-7	
2001510-04	A <input checked="" type="checkbox"/>	PDI-174SC-A-08-09-200521	17-Jul-20 11:20	WR-2 D-7	
2001510-05	A <input checked="" type="checkbox"/>	PDI-174SC-A-09-10-200521	17-Jul-20 11:20	WR-2 D-7	

WO Comments: **Pest - 1g extraction (dry weight). DDX, Aldrin, 5-Chlordane, Dieldrin, Lindane**  
**Dioxin - 10g (dry weight)**  
**PCB - 5g extraction (dry weight)**  
**One dup required per batch of 20 samples**

Vista PM: Martha Maier

Vial Box ID: R2D2

Sample Reconciled By: TL ELL 07/21/20

PREPARATION BENCH SHEET

Matrix: Solid

B0G0186

Chemist: TC

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 21-Jul-20 08:09

Method: 1613 2.3.7.8-TCDD Only

Method: 8290 2.3.7.8-TCDD/TCDF Only

Sox	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS/PS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
	B0G0186-BLK1	NA	(10.00)	TL 07/21/20	TL 07/22/20	NA	TL 07/22/20	TL 07/22/20	RR 07/22/20	RR ME 07/22/20
	B0G0186-BS1	NA	(10.00)	T	T	T	T	T	T	T
	B0G0186-DUP1 2001510-01	16.31	16.59	T	T	T	Yellow	T	T	T
	2001459-03REI (A)	18.64	18.64	T	T	T	Brown	T	T	T
	2001484-02REI (A)(V)	61.08	61.53	T	T	T	dark Brown	T	NA	T
	2001486-01REI (B)	26.00	26.01	T	T	T	Brown	T	RR 07/22/20	T
	2001510-01	16.31	16.52	T	T	T	Yellow	T	T	T
	2001510-02	13.88	13.93	T	T	T	Yellow	T	T	T
	2001510-03	14.84	14.93	T	T	T	Yellow	T	T	T
	2001510-04	10.88	10.94	T	T	T	T	T	T	T
	2001510-05	11.92	11.98	T	T	T	T	T	T	T

- (A) Extract was brown in color TL 07/22/20
- (B) Extract was green in color TL 07/22/20
- (V) Sample took longer to go thru ABSG column RR 07/22/20

IS: <u>20F1101 10mL (V2)</u>	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: <u>TC 07/21/20</u>	Soxhlet Siphoned Chemist/Date:	Notes: (V) particulate formed during final volume; 1:20 dilution RR 07/22/20
NS: <u>20F0107 10mL (V3)</u>	Start Date/Time <u>07/21/20 10:30</u>	SOLV: <u>Tol</u>	Check In: <u>TC 07/21/20</u>	IM 07/22/2020	
PS/CRS: <u>20E0701 10mL (V4)</u>	Stop Date/Time <u>07/22/20 1:50</u>	Other: <u>NA</u>	Balance ID: <u>HRMS-8</u>	Vial Transfer Chemist/Date: <u>RR 07/22/20</u>	
RS: <u>20E0702, 10mL (V4)</u>		Final Volume(s) <u>20mL</u> <u>6.14</u>			
Diox/F PCB PAH PEST PBDE HCB					

Comments:

- 1 = Sample approached dryness on rotovap
- 2 = Sample bumped on rotovap; lost < 5%
- 3 = Sample poured through Na2SO4 to remove water
- 4 = Precipitate present at Final Volume
- 5 = Sample homogenized in secondary container
- 6 = Sample clogged during extraction; pipetted and used Nitrogen to assist
- 7 = Soxhlet approached dryness



Batch: B0G0186

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
2001459-03RE1	18.64 ✓	53.505	9.9733	20 ✓	21-Jul-20 08:09	TL ✓			Sludge	8290 2,3,7,8-TCDD/TCDF
2001484-02RE1	61.53 ✓	16.37168	10.0735	20	21-Jul-20 08:09	TL			Sludge	1613 2,3,7,8-TCDD Only
2001486-01RE1	26.01 ✓	38.46154	10.0038	20	21-Jul-20 08:09	TL			Soil	1613 Full List
2001510-01	16.52 ✓	61.30574	10.1277	20	21-Jul-20 08:09	TL			Sediment	1613 Full List
2001510-01	16.52 ✓			20	21-Jul-20 08:09	TL			Sediment	1613 2,3,7,8-TCDD Only
2001510-01	16.52 ✓			20	21-Jul-20 08:09	TL			Sediment	8290 2,3,7,8-TCDD/TCDF
2001510-02	13.93 ✓	72.06612	10.0388	20	21-Jul-20 08:09	TL			Sediment	1613 Full List
2001510-03	14.93 ✓	67.36842	10.0581	20	21-Jul-20 08:09	TL			Sediment	1613 Full List
2001510-04	10.94 ✓	91.94847	10.0592	20	21-Jul-20 08:09	TL			Sediment	1613 Full List
2001510-05	11.98 ✓	86.77042	10.3951	20	21-Jul-20 08:09	TL			Sediment	1613 Full List
B0G0186-BLK1	10 ✓			20	21-Jul-20 08:09	TL				QC
B0G0186-BS1	10 ✓			20	21-Jul-20 08:09	TL	20F0107 ✓	10 ✓		QC
B0G0186-DUP1	16.59 ✓	61.30574	10.1706	20 ✓	21-Jul-20 08:09	TL ✓				QC

All bolded data on report verified against written benchsheet by (initial/date) RR / 07/22/20

Percent Moisture/ Percent Solids

D2216-90

BATCH ID BOG0168

Analyst: RN ✓	Test Code: %Moist/%Solids	Data Entry Verified by: (Initial and Date) RN 07/20/20
Analyte:	Units: %	
Oven ID: 01 ✓ 02	Dried at 110°C±5°C	

Inst HRMS-9

Date/Time IN: 07/19/20 1513 ✓ Date/Time OUT: 07/20/20 0630 ✓

Particle Size	SampID	SampType	Initial and Date:		Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	RN 07/19/20 ✓				Sample Homogenized*	
			Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)				Visual Inspection	Cl-	pH Before	pH After		Acid Added
	2001510-01 ✓	A ✓	1.3000 ✓	7.5800 ✓	5.1500 ✓	3.8500	61.31	Mud ✓	N/A	N/A	N/A	N/A	X ✓
	2001510-02	A ✓	1.3200 ✓	7.3700 ✓	5.6800 ✓	4.3600	72.07	Mud ✓	N/A	N/A	N/A	N/A	X ✓
	2001510-03	A ✓	1.3400 ✓	7.9900 ✓	5.8200 ✓	4.4800	67.37	Mud ✓	N/A	N/A	N/A	N/A	X ✓
	2001510-04	A ✓	1.3200 ✓	7.5300 ✓	7.0300 ✓	5.7100	91.95	Sand ✓	N/A	N/A	N/A	N/A	X ✓
	2001510-05	A ✓	1.3000 ✓	9.0100 ✓	7.9900 ✓	6.6900	86.77	Sand ✓	N/A	N/A	N/A	N/A	X ✓

\*Sample homogenized in sample container unless otherwise noted.

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B0G0168

Analyst: <b>RN</b>	Test Code: %Moist/%Solids	Data Entry Verified by: (Initial and Date) _____
Analyte:	Units: %	
Oven ID: <b>01</b> 02	Dried at 110°C +/- 5°C	

Inst: **HEMS-9**

Date/Time IN: **07/19/20 15:13** Date/Time OUT: **07/20/20 08:30**

Particle Size	SampleID	Sample Type	Initial and Date:		Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	Visual Inspection	Cl-	pH Before	pH After	Acid Added	Sample Homogenized*
			Pan Tare Wt. (gms)	Date										
	2001510-01	Sample	1.30	RN 07/19/20	7.58	5.15		Mud						X
	2001510-02	Sample	1.32	RN 07/20/20	7.37	5.68		↓						X
	2001510-03	Sample	1.34		7.99	5.82		↓						X
	2001510-04	Sample	1.32		7.53	7.03		Sand						X
	2001510-05	Sample	1.30		9.01	7.99		↓						X

\*Sample homogenized in sample container unless otherwise noted.

SAMPLE DATA – EPA METHOD 1613

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 14:58:13 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 14:58:32 Pacific Daylight Time

*DB 7/28/20 C10A/B/2020*

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14  
Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD			NO	1.07	10.000	25.760		1.001				0.294	
2	2 1,2,3,7,8-PeCDD			NO	0.988	10.000	30.508		1.001				0.205	
3	3 1,2,3,4,7,8-HxCDD			NO	1.09	10.000	33.804		1.000				0.324	
4	4 1,2,3,6,7,8-HxCDD			NO	0.938	10.000	33.904		1.000				0.365	
5	5 1,2,3,7,8,9-HxCDD			NO	0.981	10.000	34.223		1.001				0.360	
6	6 1,2,3,4,6,7,8-HpCDD			NO	0.965	10.000	37.733		1.000				0.349	
7	7 OCDD			NO	0.900	10.000	40.916		1.000				0.447	
8	8 2,3,7,8-TCDF			NO	0.859	10.000	24.913		1.001				0.185	
9	9 1,2,3,7,8-PeCDF			NO	0.932	10.000	29.280		1.001				0.120	
10	10 2,3,4,7,8-PeCDF			NO	1.05	10.000	30.215		1.001				0.110	
11	11 1,2,3,4,7,8-HxCDF			NO	1.08	10.000	32.916		1.000				0.0815	
12	12 1,2,3,6,7,8-HxCDF			NO	1.14	10.000	33.058		1.000				0.0835	
13	13 2,3,4,6,7,8-HxCDF			NO	1.13	10.000	33.664		1.001				0.0972	
14	14 1,2,3,7,8,9-HxCDF			NO	1.14	10.000	34.551		1.000				0.121	
15	15 1,2,3,4,6,7,8-HpCDF			NO	1.16	10.000	36.376		1.001				0.129	
16	16 1,2,3,4,7,8,9-HpCDF			NO	1.28	10.000	38.249		1.000				0.123	
17	17 OCDF			NO	1.02	10.000	41.135		1.000				0.182	
18	18 13C-2,3,7,8-TCDD	1.05e5	0.85	NO	1.13	10.000	25.786	25.73	1.026	1.024	192.48	96.2	1.52	
19	19 13C-1,2,3,7,8-PeCDD	8.37e4	0.62	NO	0.817	10.000	30.210	30.49	1.202	1.213	212.88	106	0.972	
20	20 13C-1,2,3,4,7,8-HxCDD	7.21e4	1.27	NO	0.728	10.000	33.789	33.79	1.014	1.014	169.03	84.5	0.869	
21	21 13C-1,2,3,6,7,8-HxCDD	8.69e4	1.30	NO	0.842	10.000	33.898	33.90	1.017	1.017	176.11	88.1	0.751	
22	22 13C-1,2,3,7,8,9-HxCDD	8.13e4	1.30	NO	0.797	10.000	34.168	34.19	1.025	1.026	173.92	87.0	0.793	
23	23 13C-1,2,3,4,6,7,8-HpCDD	7.23e4	1.00	NO	0.666	10.000	37.621	37.72	1.129	1.132	185.21	92.6	1.08	
24	24 13C-OCDD	1.26e5	0.91	NO	0.613	10.000	40.633	40.92	1.219	1.228	350.48	87.6	1.03	
25	25 13C-2,3,7,8-TCDF	1.52e5	0.77	NO	1.03	10.000	24.882	24.89	0.990	0.990	169.20	84.6	1.04	
26	26 13C-1,2,3,7,8-PeCDF	1.50e5	1.59	NO	0.804	10.000	29.046	29.26	1.156	1.164	214.05	107	1.48	
27	27 13C-2,3,4,7,8-PeCDF	1.37e5	1.64	NO	0.790	10.000	29.933	30.18	1.191	1.201	199.87	99.9	1.51	
28	28 13C-1,2,3,4,7,8-HxCDF	1.07e5	0.52	NO	1.01	10.000	32.922	32.92	0.988	0.988	180.93	90.5	0.940	
29	29 13C-1,2,3,6,7,8-HxCDF	1.19e5	0.50	NO	1.03	10.000	33.055	33.05	0.992	0.992	196.72	98.4	0.922	
30	30 13C-2,3,4,6,7,8-HxCDF	1.03e5	0.51	NO	0.971	10.000	33.625	33.63	1.009	1.009	180.99	90.5	0.977	
31	31 13C-1,2,3,7,8,9-HxCDF	9.76e4	0.51	NO	0.833	10.000	34.522	34.55	1.036	1.037	200.06	100	1.14	

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 14:58:13 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 14:58:32 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	8.16e4	0.42	NO	0.784	10.000	36.221	36.34	1.087	1.091	177.73	55.9	1.20	
33	33 13C-1,2,3,4,7,8,9-HpCDF	6.61e4	0.43	NO	0.592	10.000	38.220	38.25	1.147	1.148	190.41	95.2	1.59	
34	34 13C-OCDF	1.52e5	0.91	NO	0.703	10.000	40.786	41.13	1.224	1.234	368.77	92.2	0.978	
35	35 37Cl-2,3,7,8-TCDD	4.29e4			1.31	10.000	25.784	25.76	1.026	1.025	67.937	84.9	0.199	
36	36 13C-1,2,3,4-TCDD	9.63e4	0.81	NO	1.00	10.000	25.130	25.13	1.000	1.000	200.00	100	1.73	
37	37 13C-1,2,3,4-TCDF	1.74e5	0.78	NO	1.00	10.000	23.560	23.54	1.000	1.000	200.00	100	1.07	
38	38 13C-1,2,3,4,6,9-HxCDF	1.17e5	0.51	NO	1.00	10.000	33.330	33.32	1.000	1.000	200.00	100	0.949	
39	39 Total Tetra-Dioxins				1.07	10.000	24.620		0.000				0.169	
40	40 Total Penta-Dioxins				0.988	10.000	29.960		0.000				0.0899	
41	41 Total Hexa-Dioxins				0.938	10.000	33.635		0.000				0.155	
42	42 Total Hepta-Dioxins				0.965	10.000	37.640		0.000				0.200	
43	43 Total Tetra-Furans				0.859	10.000	23.610		0.000				0.0809	
44	44 1st Func. Penta-Furans				0.932	10.000	27.090		0.000				0.0284	
45	45 Total Penta-Furans				0.932	10.000	29.275		0.000				0.0463	
46	46 Total Hexa-Furans				1.13	10.000	33.555		0.000				0.0542	
47	47 Total Hepta-Furans				1.16	10.000	37.835		0.000				0.0745	

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 14:58:13 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 14:58:32 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Penta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Penta-Furans function 1

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 14:58:13 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 14:58:32 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

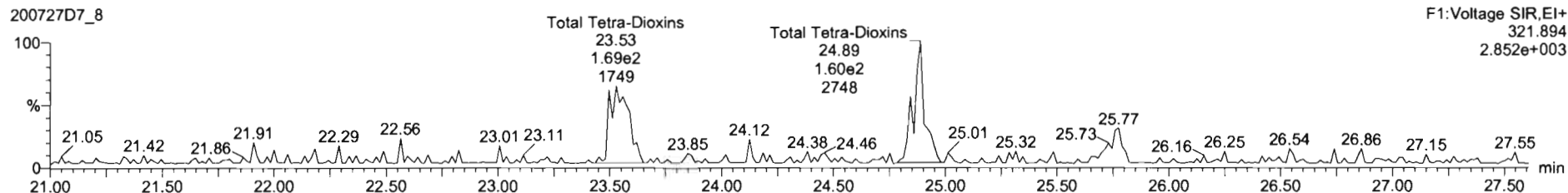
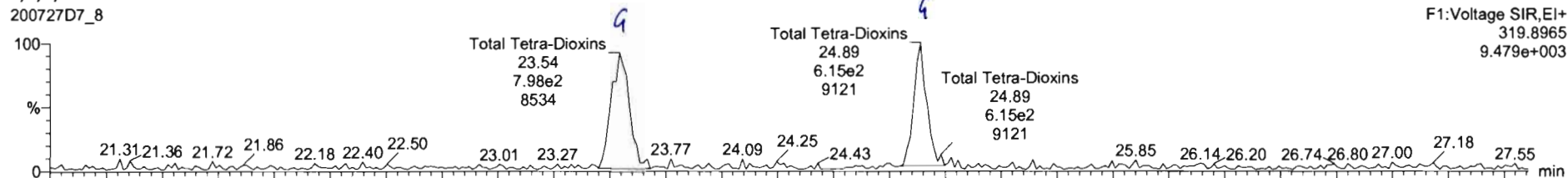


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld  
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

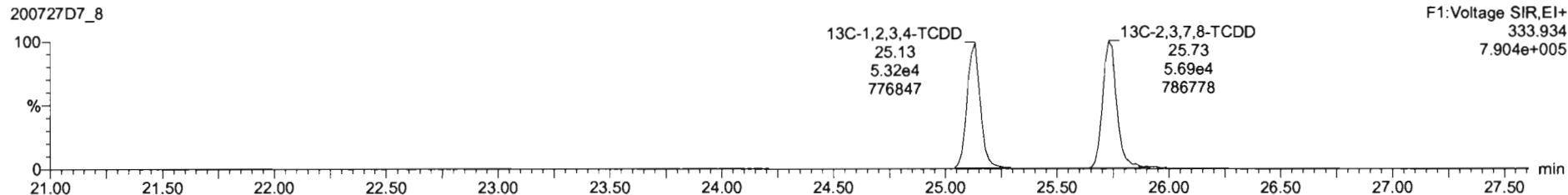
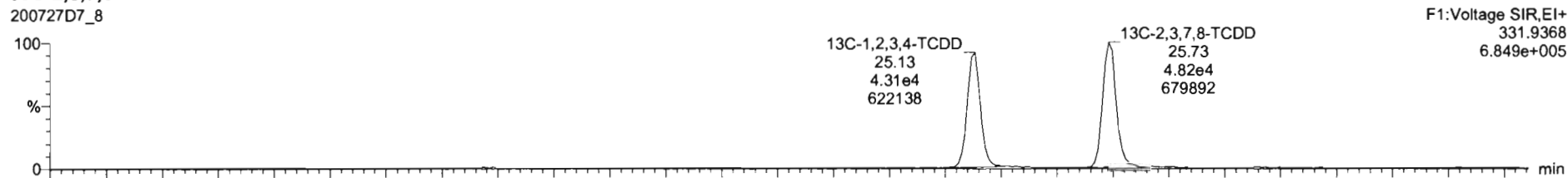
Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14  
Calibration: U:\VG7.PRO\CurveDB\1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

2,3,7,8-TCDD



13C-2,3,7,8-TCDD



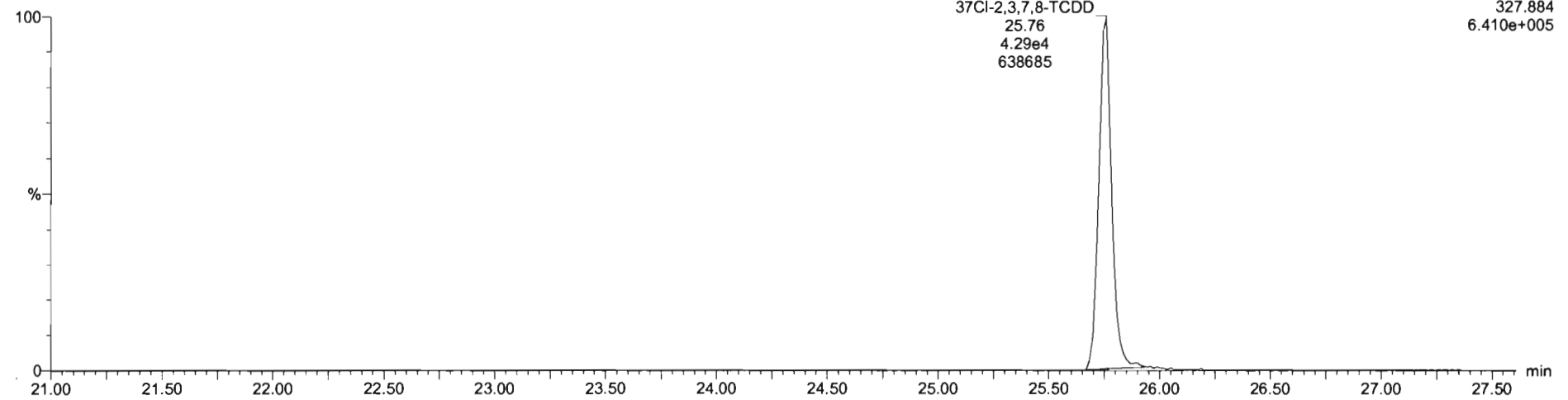
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

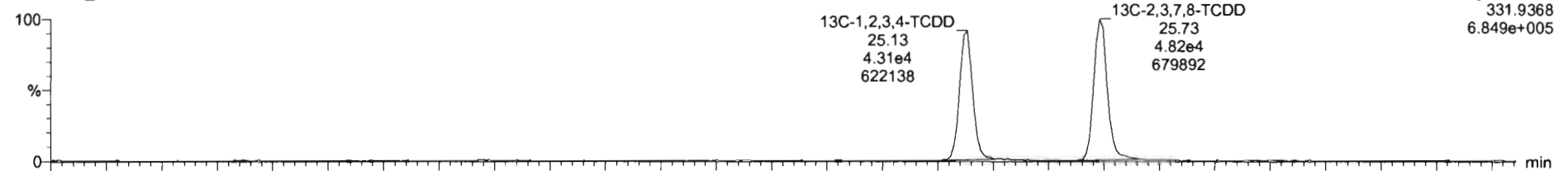
**37Cl-2,3,7,8-TCDD**

200727D7\_8

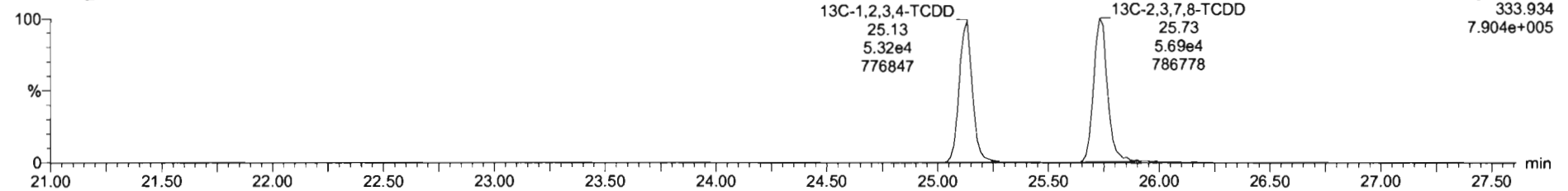


**13C-1,2,3,4-TCDD**

200727D7\_8



200727D7\_8

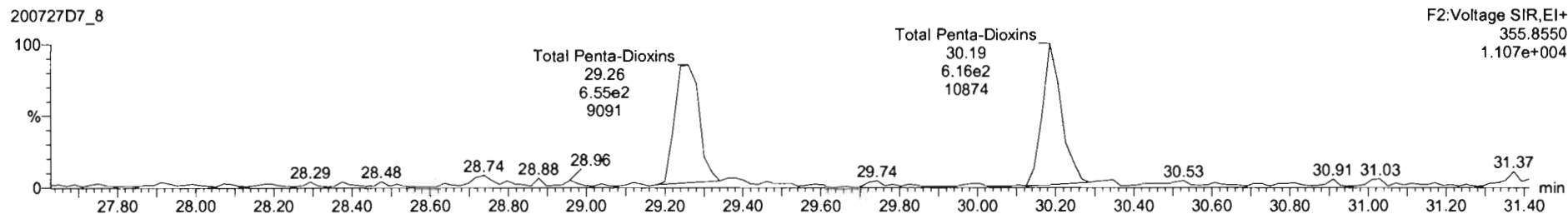
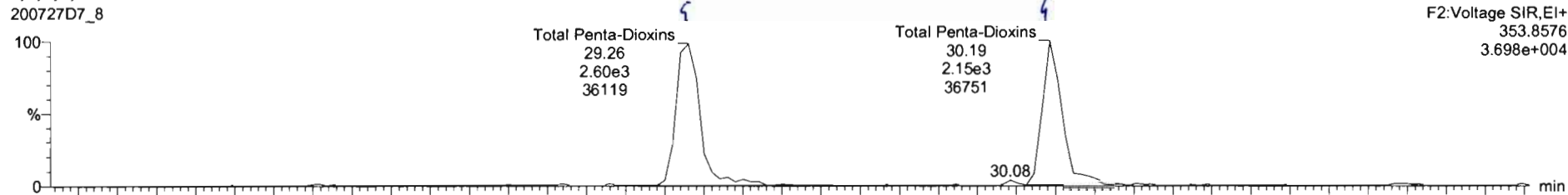


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

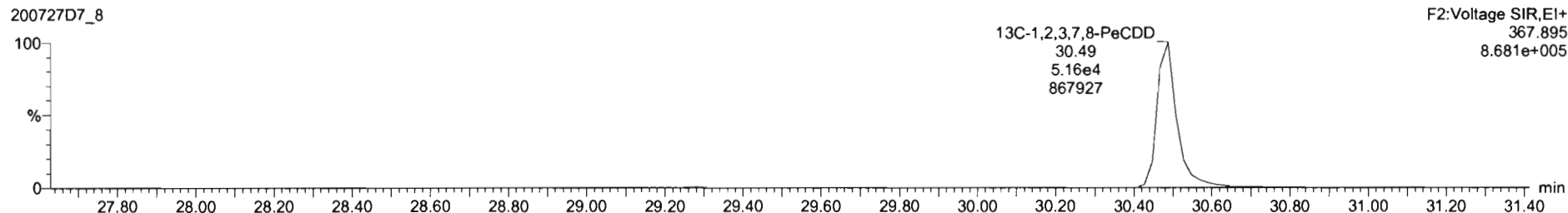
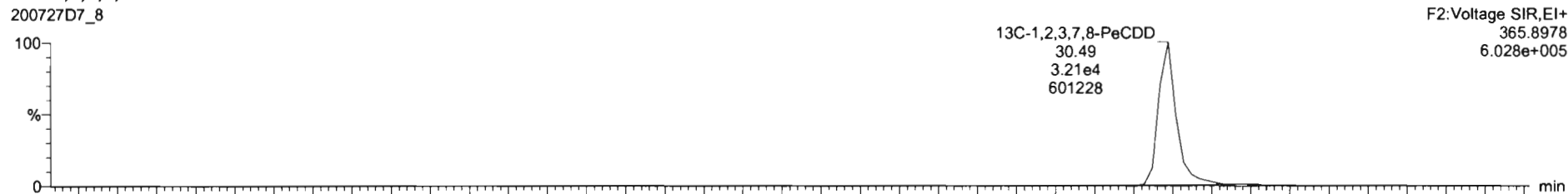
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

1,2,3,7,8-PeCDD



13C-1,2,3,7,8-PeCDD



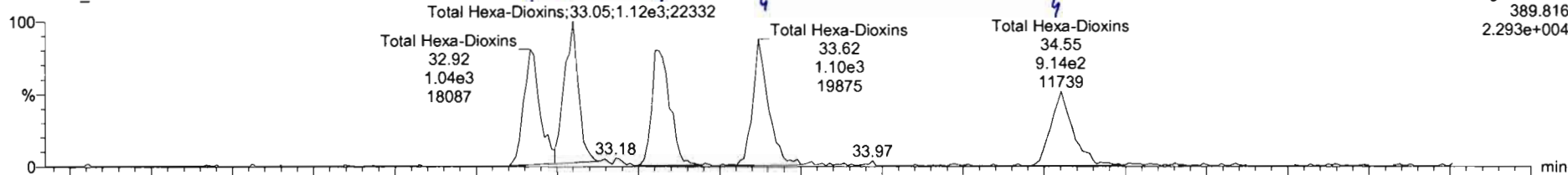
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

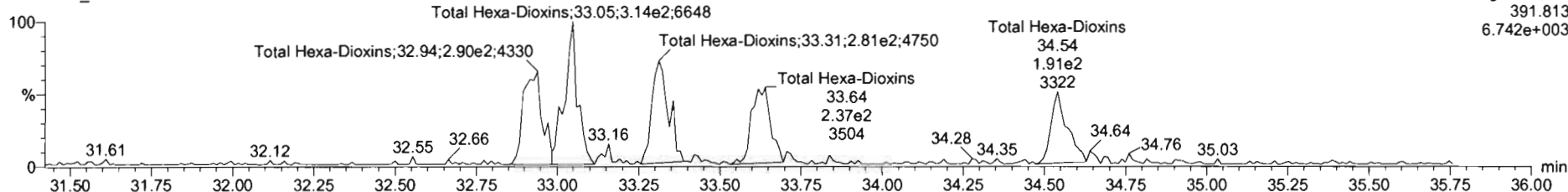
Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

1,2,3,4,7,8-HxCDD

200727D7\_8

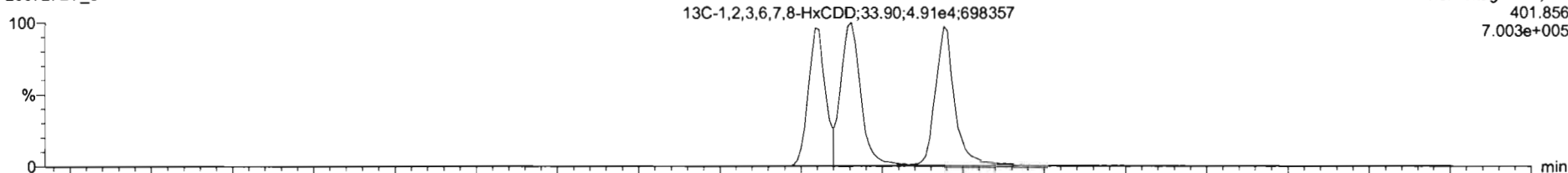


200727D7\_8

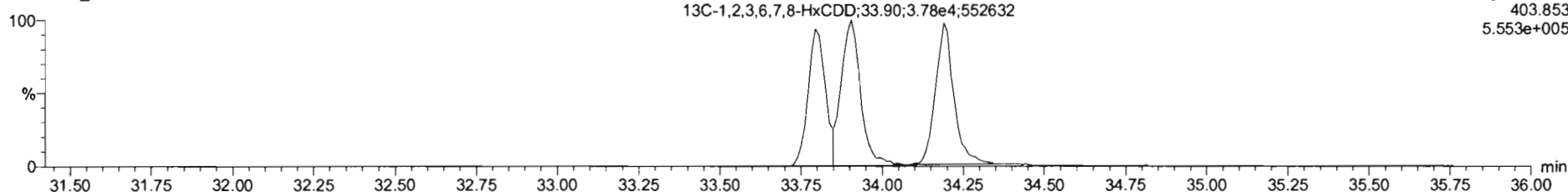


13C-1,2,3,4,7,8-HxCDD

200727D7\_8



200727D7\_8

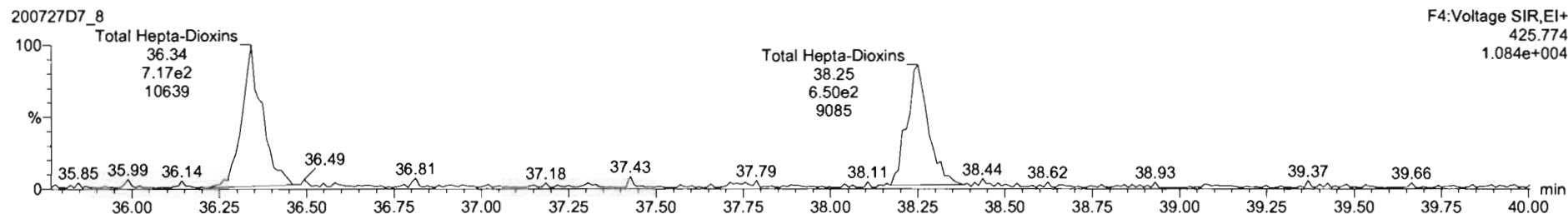
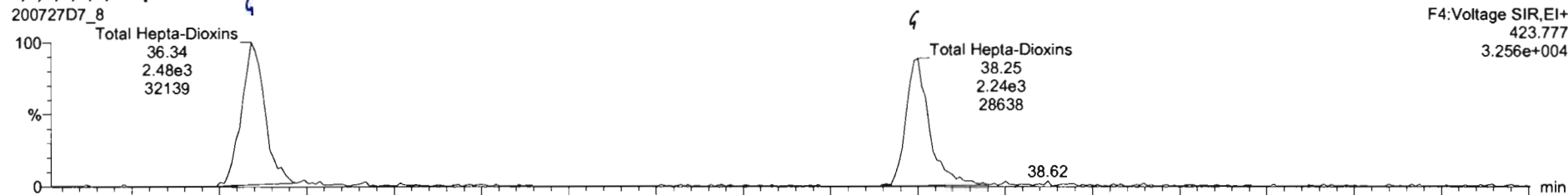


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

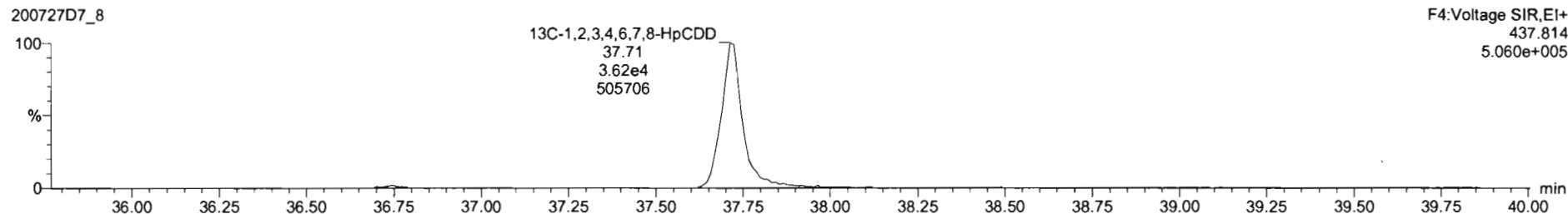
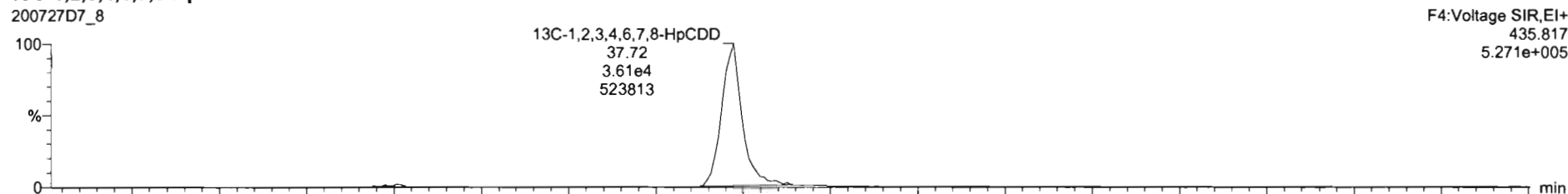
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

1,2,3,4,6,7,8-HpCDD



13C-1,2,3,4,6,7,8-HpCDD



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

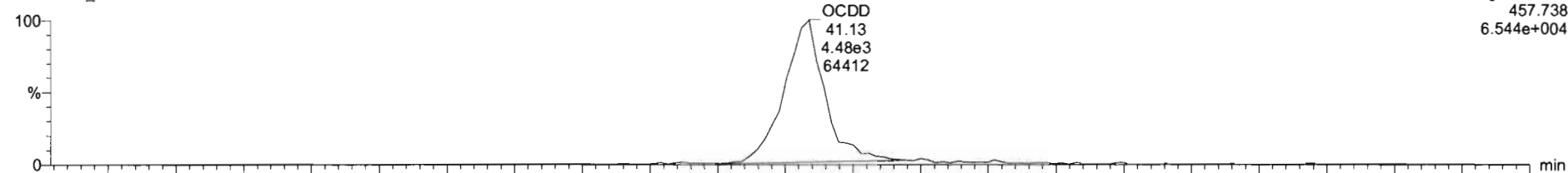
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

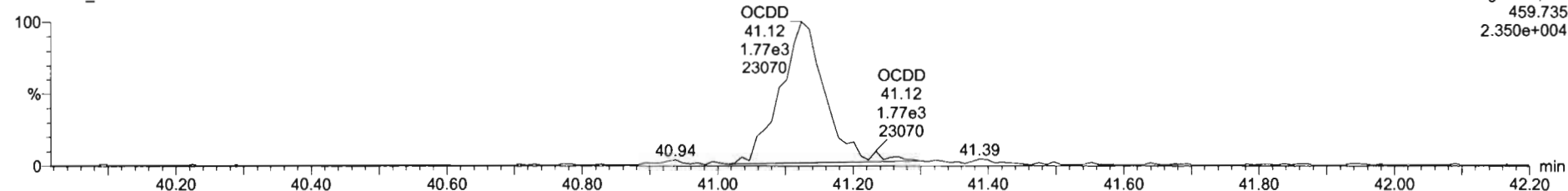
**OCDD**

200727D7\_8



F5:Voltage SIR,EI+  
457.738  
6.544e+004

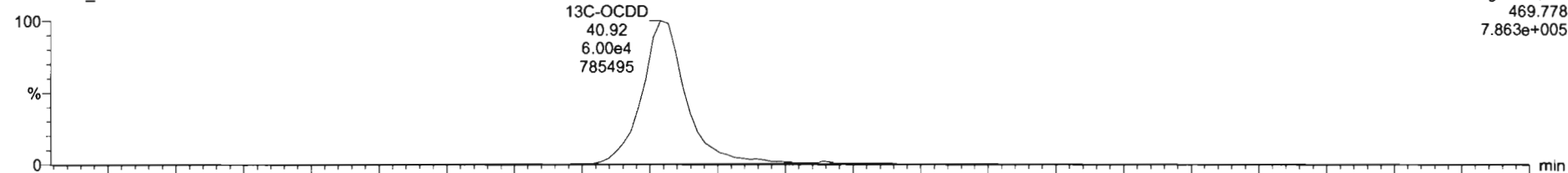
200727D7\_8



F5:Voltage SIR,EI+  
459.735  
2.350e+004

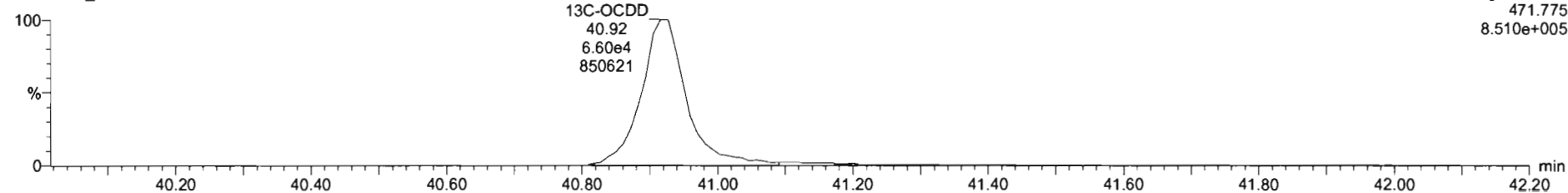
**13C-OCDD**

200727D7\_8



F5:Voltage SIR,EI+  
469.778  
7.863e+005

200727D7\_8



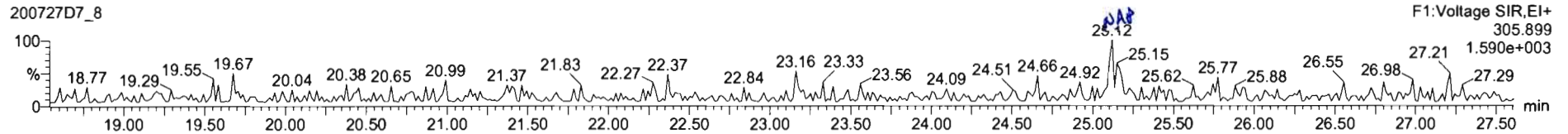
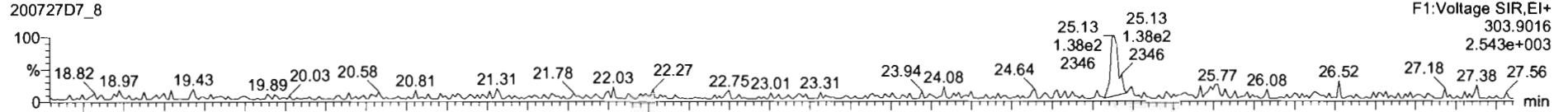
F5:Voltage SIR,EI+  
471.775  
8.510e+005

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

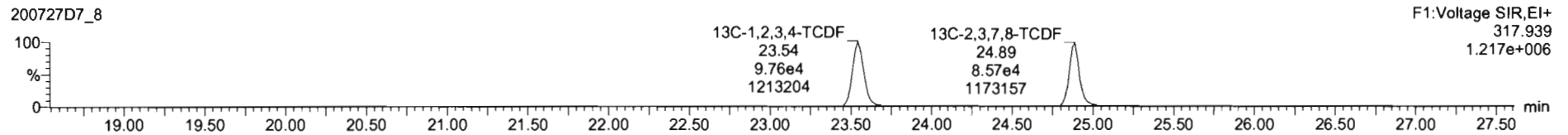
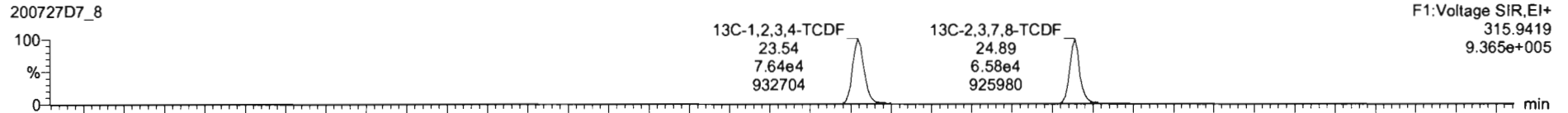
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

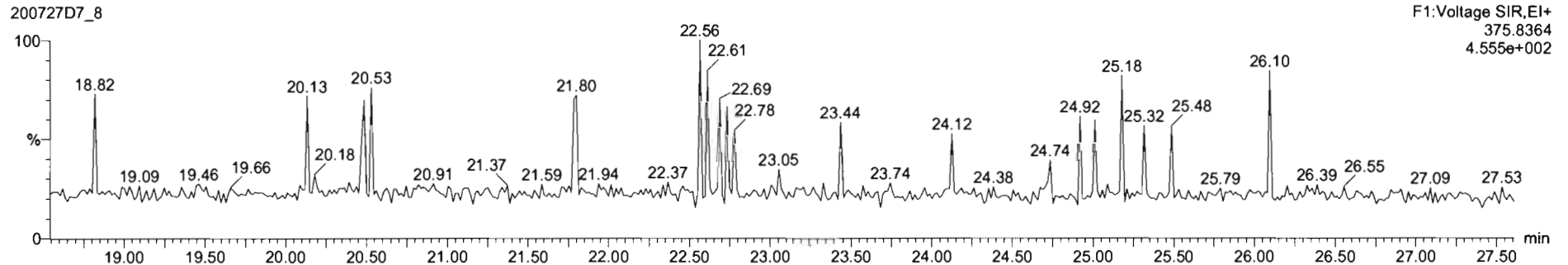
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



DPE1



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

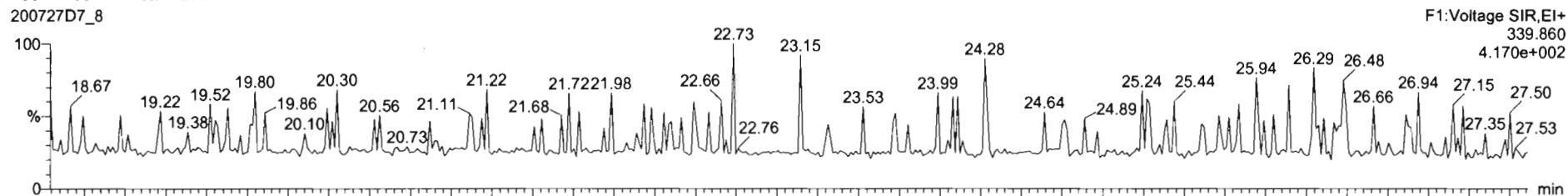
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

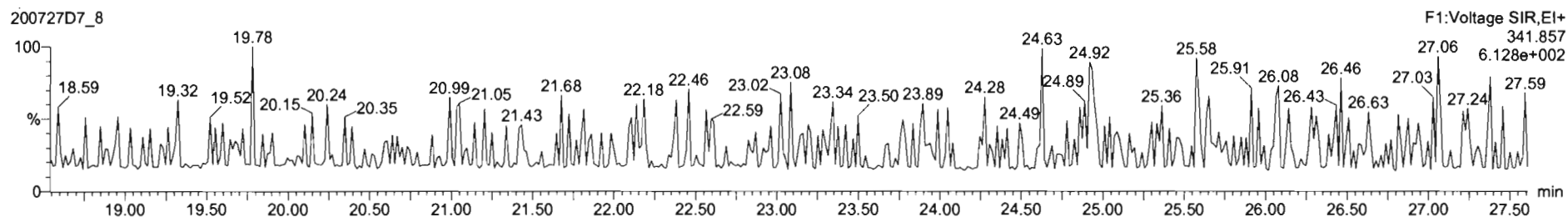
Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

1st Func. Penta-Furans

200727D7\_8

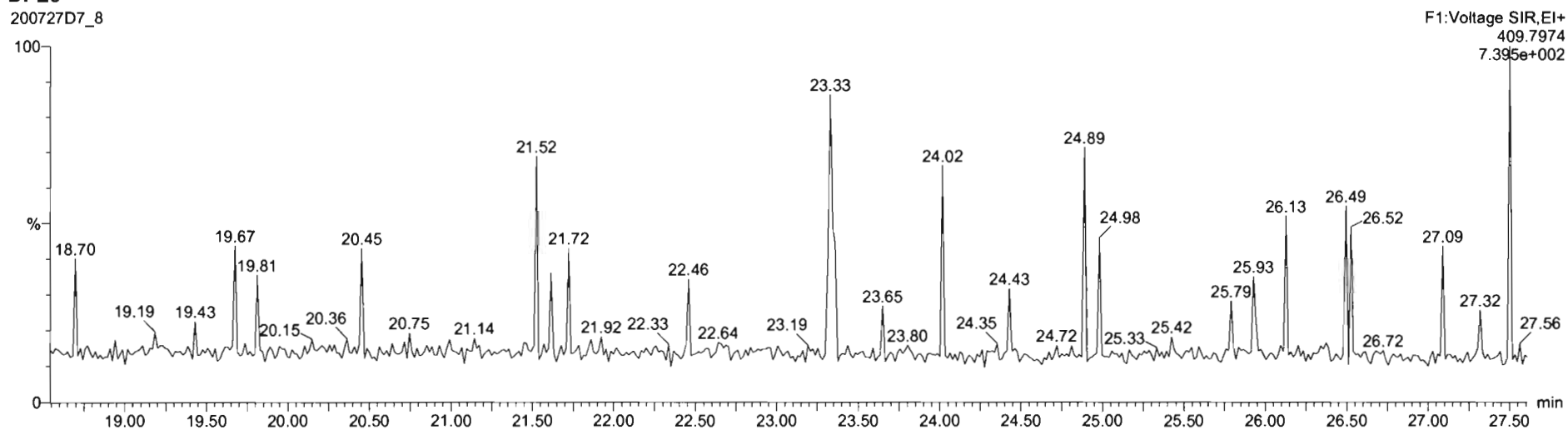


200727D7\_8



DPE6

200727D7\_8





Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

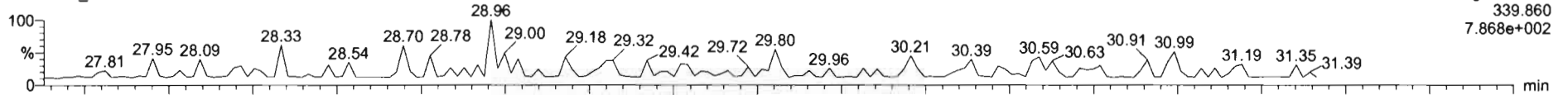
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

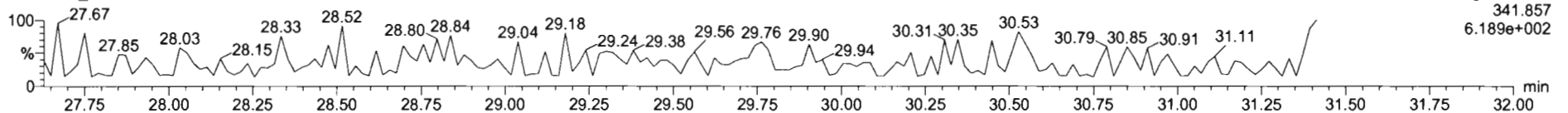
Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

1,2,3,7,8-PeCDF

200727D7\_8

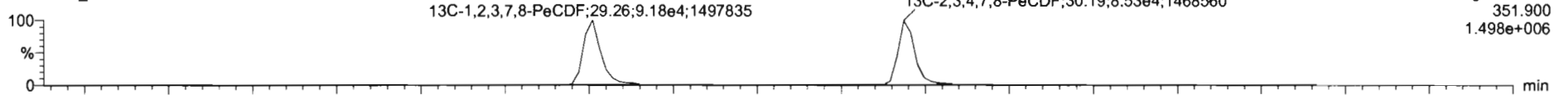


200727D7\_8

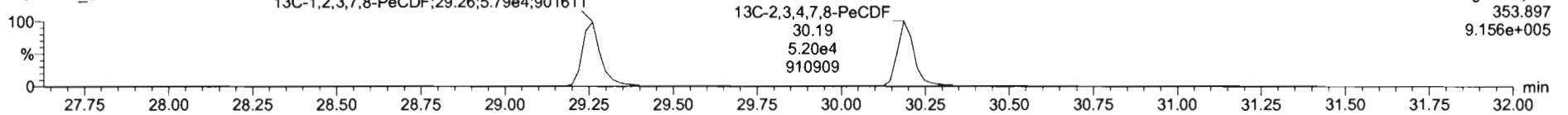


13C-1,2,3,7,8-PeCDF

200727D7\_8

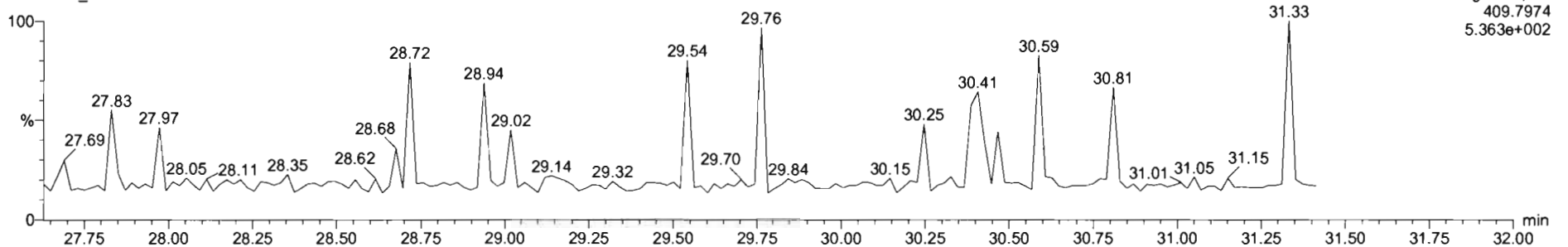


200727D7\_8



DPE2

200727D7\_8

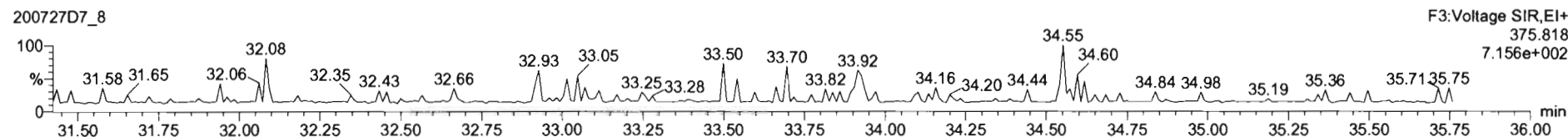
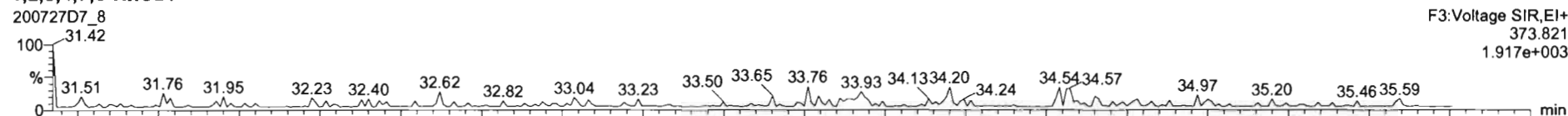


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

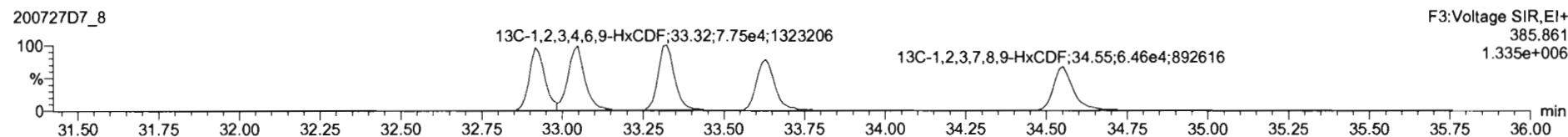
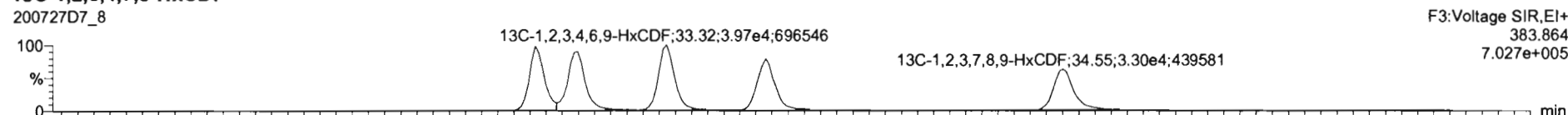
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

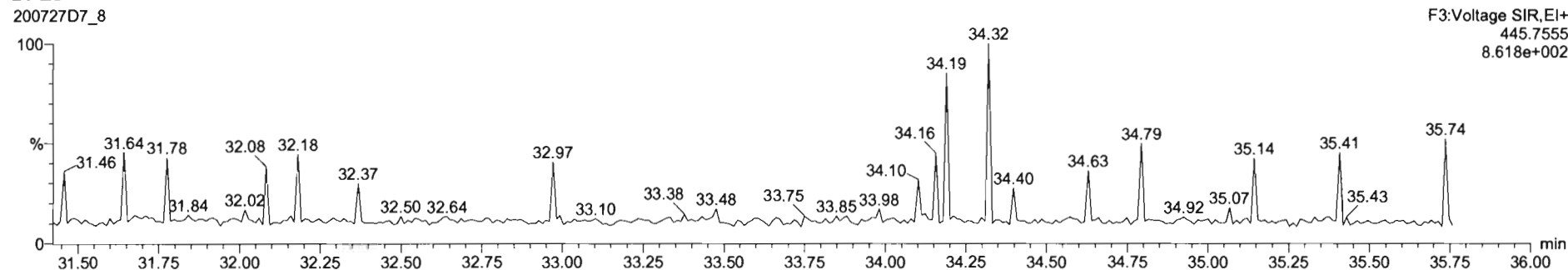
1,2,3,4,7,8-HxCDF



13C-1,2,3,4,7,8-HxCDF



DPE3

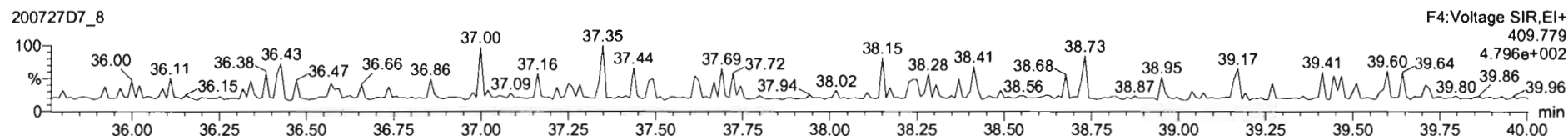
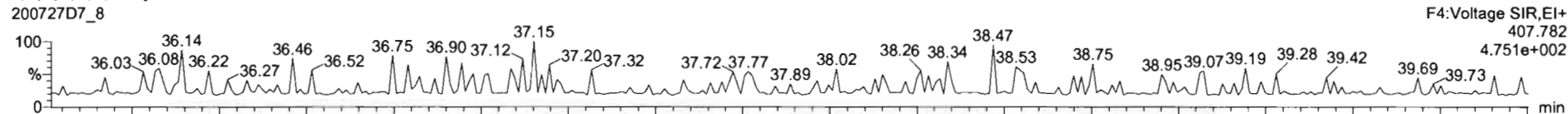


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

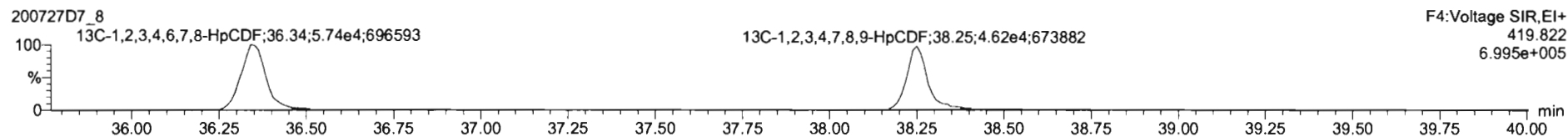
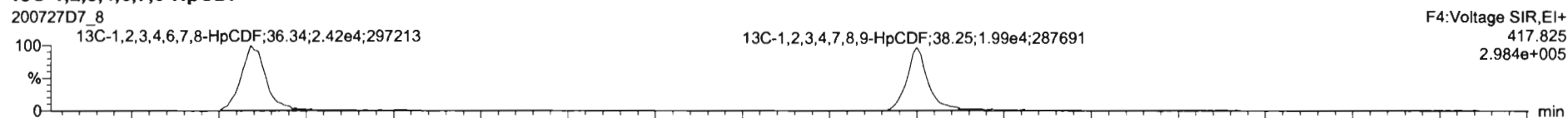
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

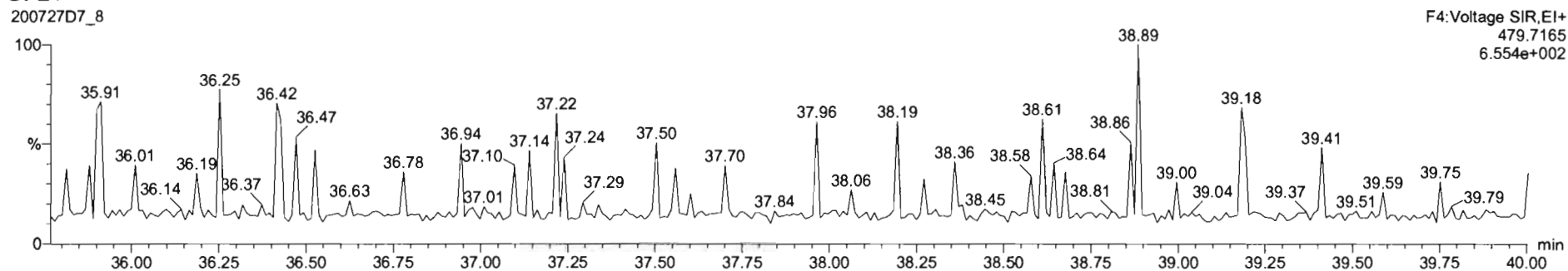
1,2,3,4,6,7,8-HpCDF



13C-1,2,3,4,6,7,8-HpCDF



DPE4

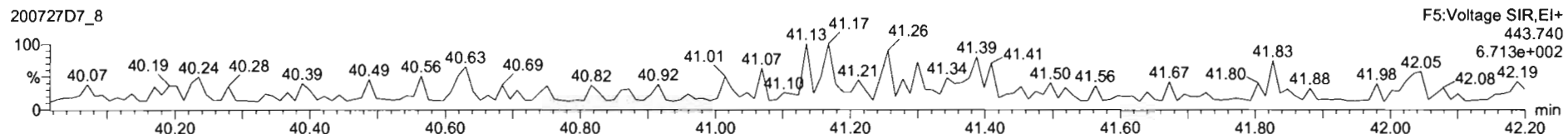
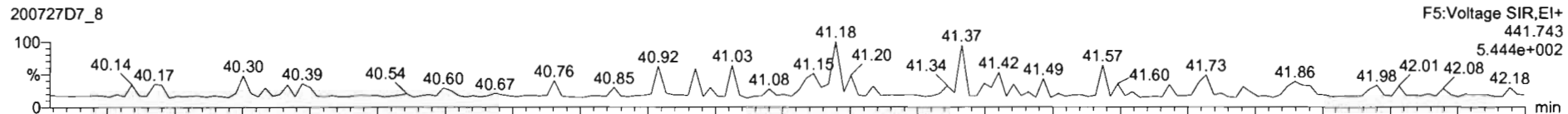


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

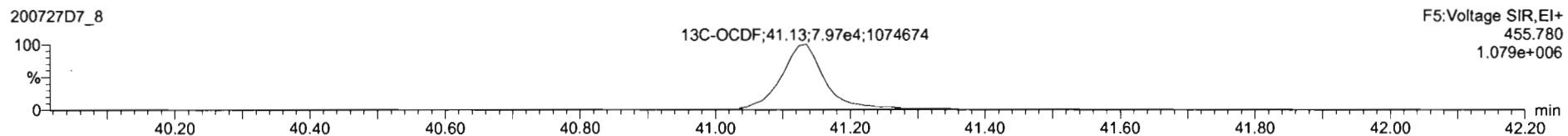
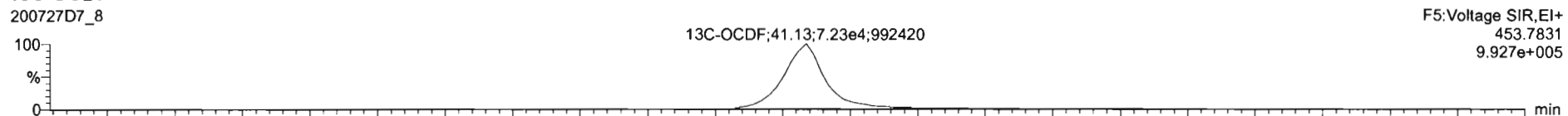
Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank

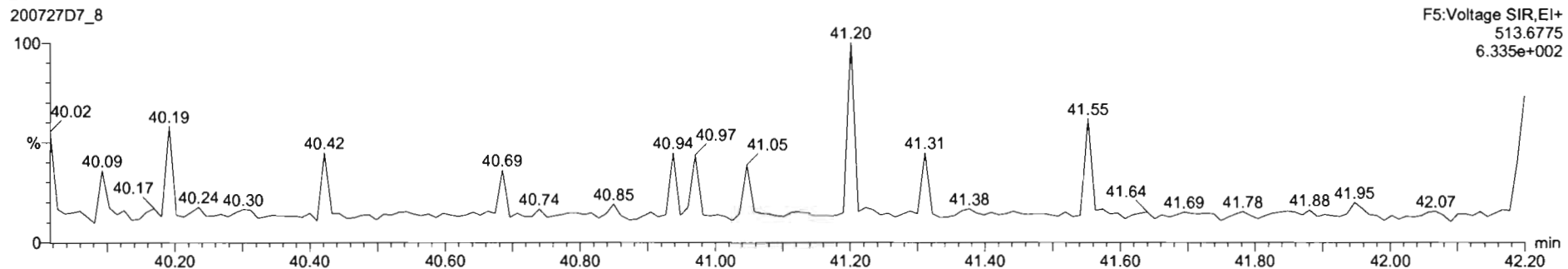
**OCDF**



**13C-OCDF**



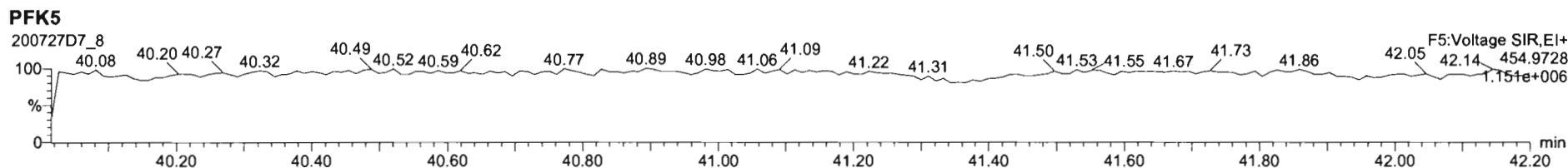
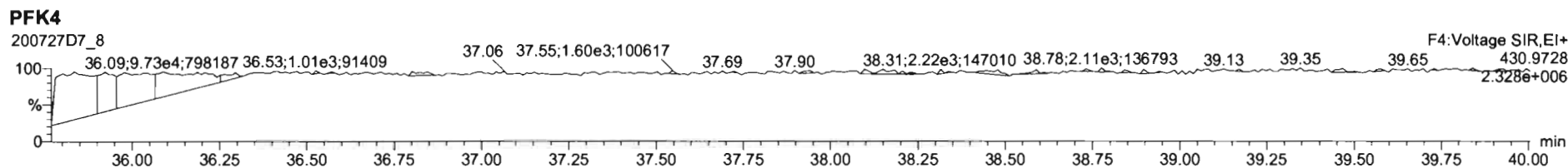
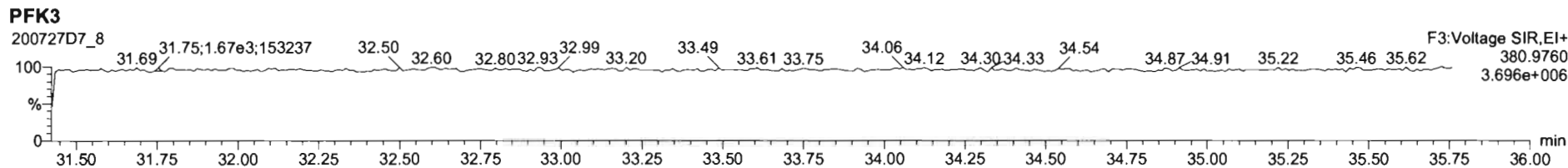
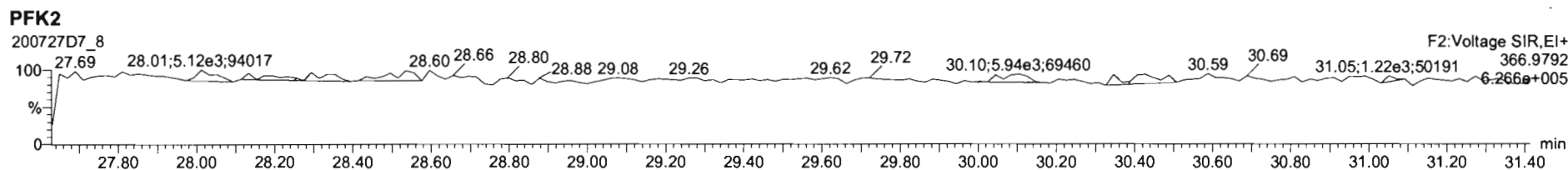
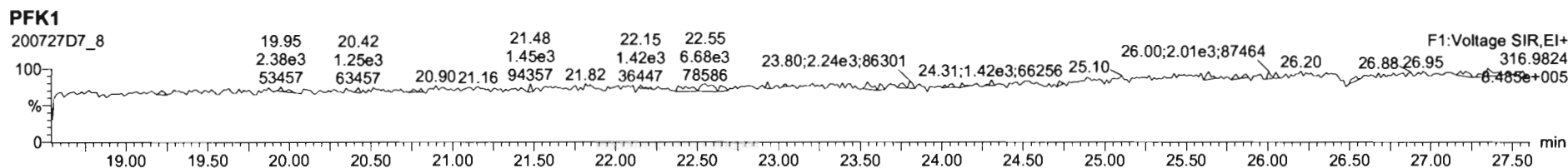
**DPE5**



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_8.qld

Last Altered: Tuesday, July 28, 2020 11:05:18 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:06:50 Pacific Daylight Time

Name: 200727D7\_8, Date: 27-Jul-2020, Time: 21:07:36, ID: B0G0186-BLK1 Method Blank 10, Description: Method Blank



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 14:46:31 Pacific Daylight Time

*DB 7/28/20 CT 07/30/2020*

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	8.37e3	0.74	NO	1.07	10.000	25.775	25.76	1.001	1.001	18.931	94.7 <i>75-144</i>	0.357 <i>70-130</i>	18.9
2	2 1,2,3,7,8-PeCDD	3.33e4	0.60	NO	0.988	10.000	30.509	30.51	1.001	1.001	97.026	97.0 <i>70-142</i>	0.420	97.0
3	3 1,2,3,4,7,8-HxCDD	3.60e4	1.29	NO	1.09	10.000	33.815	33.82	1.000	1.000	89.983	90.0 <i>70-164</i>	0.510	90.0
4	4 1,2,3,6,7,8-HxCDD	3.83e4	1.28	NO	0.938	10.000	33.904	33.93	1.000	1.001	94.285	94.3 <i>76-134</i>	0.532	94.3
5	5 1,2,3,7,8,9-HxCDD	3.67e4	1.28	NO	0.981	10.000	34.235	34.21	1.001	1.000	90.452	90.5 <i>64-162</i>	0.581	90.5
6	6 1,2,3,4,6,7,8-HpCDD	3.14e4	1.06	NO	0.965	10.000	37.734	37.73	1.000	1.000	92.902	92.9 <i>70-140</i>	0.931	92.9
7	7 OCDD	4.85e4	0.88	NO	0.900	10.000	40.916	40.93	1.000	1.000	184.50	92.3 <i>78-144</i>	0.765	185
8	8 2,3,7,8-TCDF	9.94e3	0.79	NO	0.859	10.000	24.929	24.92	1.001	1.001	20.409	102 <i>80-147</i>	0.349	20.4
9	9 1,2,3,7,8-PeCDF	5.40e4	1.70	NO	0.932	10.000	29.280	29.28	1.001	1.001	97.484	97.5 <i>80-134</i>	0.385	97.5
10	10 2,3,4,7,8-PeCDF	5.55e4	1.63	NO	1.05	10.000	30.236	30.23	1.001	1.001	93.852	93.8 <i>68-160</i>	0.305	93.9
11	11 1,2,3,4,7,8-HxCDF	5.73e4	1.25	NO	1.08	10.000	32.928	32.95	1.000	1.001	95.889	95.9 <i>72-134</i>	0.495	95.9
12	12 1,2,3,6,7,8-HxCDF	6.58e4	1.18	NO	1.14	10.000	33.058	33.07	1.000	1.001	93.049	93.0 <i>84-130</i>	0.458	93.0
13	13 2,3,4,6,7,8-HxCDF	5.75e4	1.24	NO	1.13	10.000	33.674	33.65	1.001	1.000	93.670	93.7 <i>70-156</i>	0.554	93.7
14	14 1,2,3,7,8,9-HxCDF	5.00e4	1.27	NO	1.14	10.000	34.563	34.57	1.000	1.000	90.972	91.0 <i>78-130</i>	0.713	91.0
15	15 1,2,3,4,6,7,8-HpCDF	4.33e4	1.03	NO	1.16	10.000	36.387	36.36	1.001	1.000	90.833	90.8 <i>92-122</i>	0.727	90.8
16	16 1,2,3,4,7,8,9-HpCDF	3.90e4	1.04	NO	1.28	10.000	38.249	38.26	1.000	1.000	92.423	92.4 <i>78-138</i>	0.725	92.4
17	17 OCDF	7.07e4	0.87	NO	1.02	10.000	41.135	41.15	1.000	1.000	191.06	95.5 <i>63-170</i>	0.734	191
18	18 13C-2,3,7,8-TCDD	8.25e4	0.83	NO	1.13	10.000	25.786	25.74	1.026	1.024	181.79	90.9 <i>25-141</i>	2.17 <i>40-135</i>	
19	19 13C-1,2,3,7,8-PeCDD	6.95e4	0.63	NO	0.817	10.000	30.210	30.49	1.202	1.213	212.60	106 <i>21-227</i>	1.02	
20	20 13C-1,2,3,4,7,8-HxCDD	7.36e4	1.29	NO	0.728	10.000	33.800	33.81	1.014	1.014	168.65	84.3 <i>21-193</i>	0.801	
21	21 13C-1,2,3,6,7,8-HxCDD	8.68e4	1.29	NO	0.842	10.000	33.910	33.90	1.017	1.017	171.89	85.9 <i>25-163</i>	0.692	
22	22 13C-1,2,3,7,8,9-HxCDD	8.28e4	1.23	NO	0.797	10.000	34.180	34.20	1.025	1.026	173.15	86.6 <i>21-193</i>	0.730	
23	23 13C-1,2,3,4,6,7,8-HpCDD	7.02e4	1.08	NO	0.666	10.000	37.634	37.72	1.129	1.132	175.78	87.9 <i>26-164</i>	1.16	
24	24 13C-OCDD	1.17e5	0.89	NO	0.613	10.000	40.647	40.92	1.219	1.227	318.00	79.5 <i>13-198</i>	1.09	
25	25 13C-2,3,7,8-TCDF	1.13e5	0.76	NO	1.03	10.000	24.882	24.90	0.990	0.991	167.79	83.9 <i>26-126</i>	1.40	
26	26 13C-1,2,3,7,8-PeCDF	1.19e5	1.68	NO	0.804	10.000	29.046	29.26	1.156	1.164	225.50	113 <i>21-192</i>	1.98	
27	27 13C-2,3,4,7,8-PeCDF	1.12e5	1.60	NO	0.790	10.000	29.933	30.21	1.191	1.202	216.95	108 <i>13-328</i>	2.01	
28	28 13C-1,2,3,4,7,8-HxCDF	1.10e5	0.52	NO	1.01	10.000	32.933	32.93	0.988	0.988	182.32	91.2 <i>19-202</i>	1.08	
29	29 13C-1,2,3,6,7,8-HxCDF	1.24e5	0.54	NO	1.03	10.000	33.067	33.05	0.992	0.991	200.71	100 <i>21-159</i>	1.06	
30	30 13C-2,3,4,6,7,8-HxCDF	1.09e5	0.53	NO	0.971	10.000	33.637	33.64	1.009	1.009	186.49	93.2 <i>22-176</i>	1.13	
31	31 13C-1,2,3,7,8,9-HxCDF	9.69e4	0.50	NO	0.833	10.000	34.534	34.56	1.036	1.037	194.11	97.1 <i>17-205</i>	1.31	

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 14:46:31 Pacific Daylight Time

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	8.19e4	0.43	NO	0.784	10.000	36.234	36.35	1.087	1.090	174.42	87.2	1.43	
33	13C-1,2,3,4,7,8,9-HpCDF	6.58e4	0.42	NO	0.592	10.000	38.234	38.25	1.147	1.148	185.37	92.7	1.89	
34	13C-OCDF	1.46e5	0.88	NO	0.703	10.000	40.800	41.13	1.224	1.234	345.38	86.3	1.24	
35	37Cl-2,3,7,8-TCDD	3.54e4			1.31	10.000	25.784	25.76	1.026	1.025	67.418	84.3	0.236	
36	13C-1,2,3,4-TCDD	8.00e4	0.83	NO	1.00	10.000	25.130	25.13	1.000	1.000	200.00	100	2.46	
37	13C-1,2,3,4-TCDF	1.31e5	0.75	NO	1.00	10.000	23.560	23.56	1.000	1.000	200.00	100	1.44	
38	13C-1,2,3,4,6,9-HxCDF	1.20e5	0.53	NO	1.00	10.000	33.330	33.33	1.000	1.000	200.00	100	1.09	

1613 8290

21-158  
20-186  
13-198  
31-191

1.4340-135



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

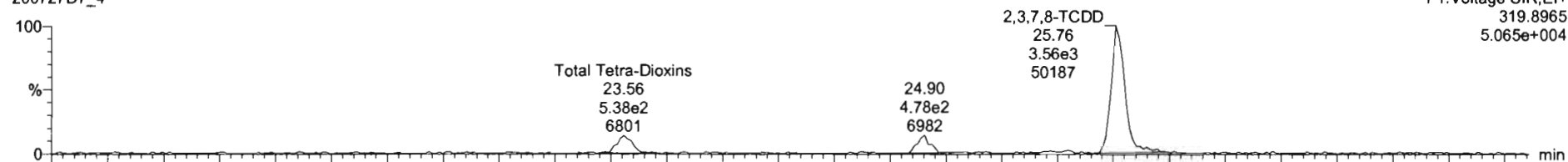
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14  
Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

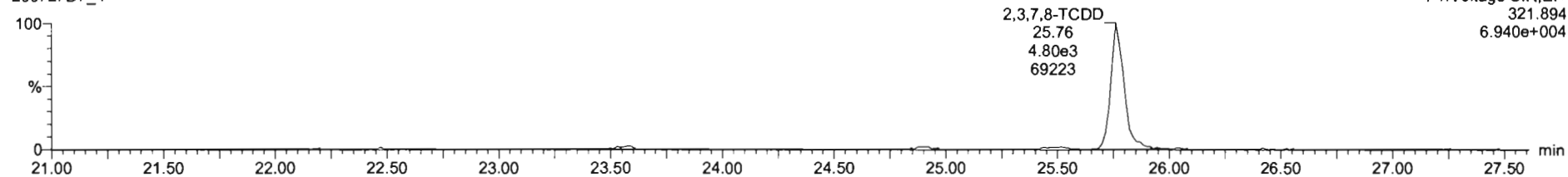
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**2,3,7,8-TCDD**

200727D7\_4

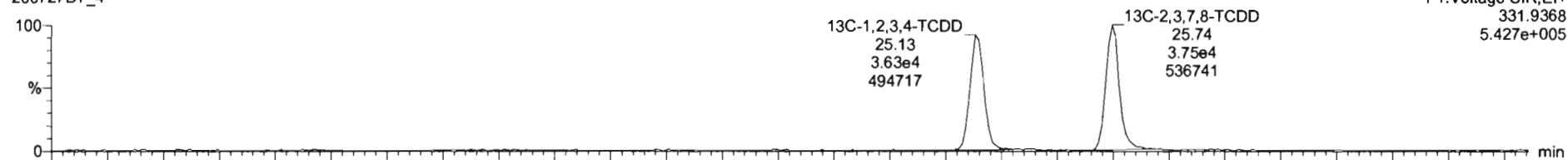


200727D7\_4

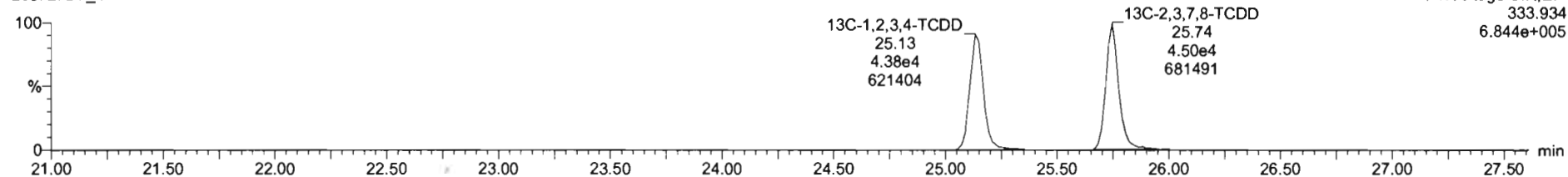


**13C-2,3,7,8-TCDD**

200727D7\_4



200727D7\_4





Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

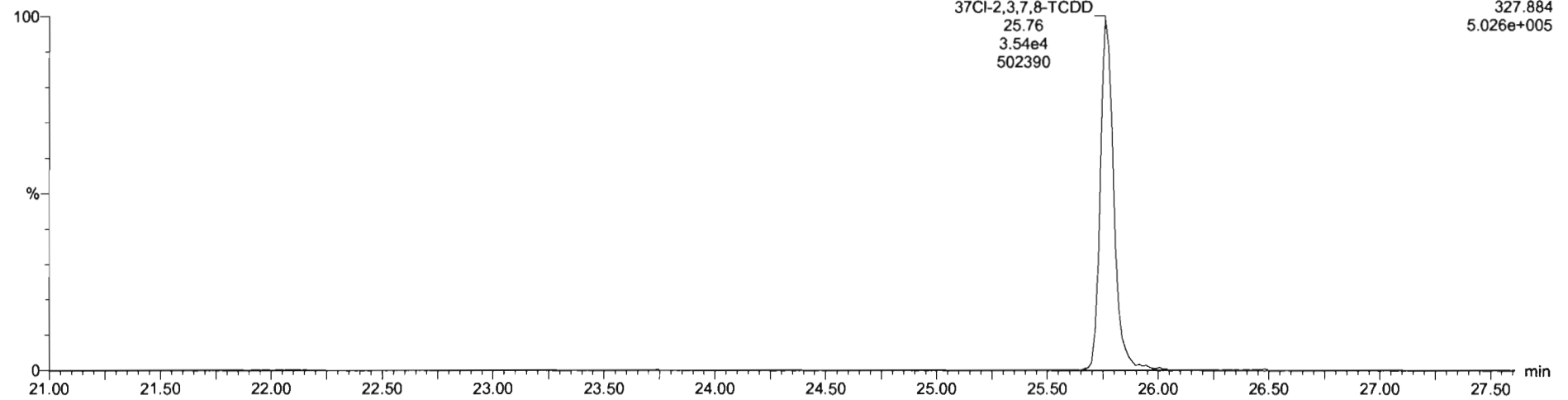
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

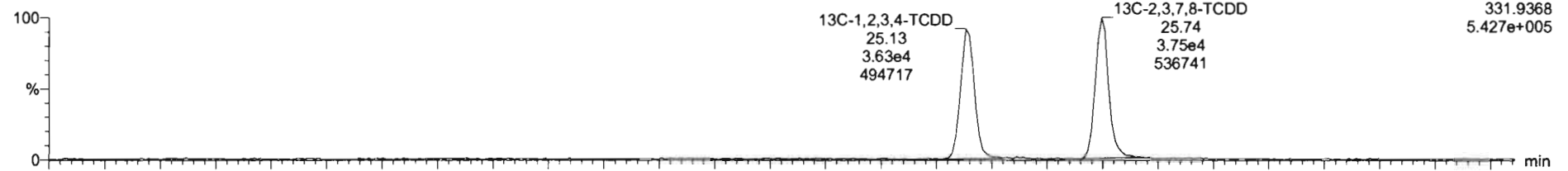
**37Cl-2,3,7,8-TCDD**

200727D7\_4

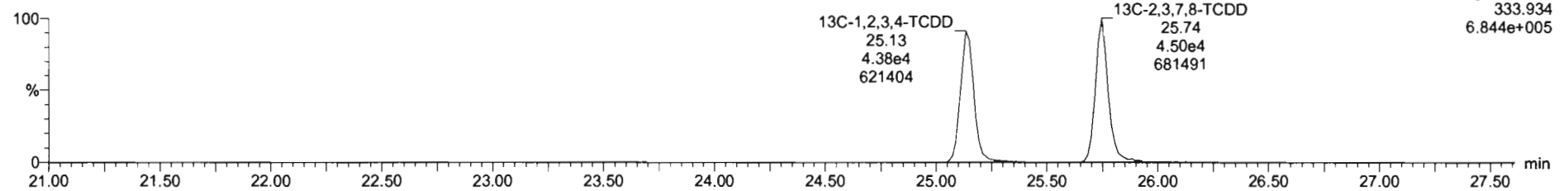


**13C-1,2,3,4-TCDD**

200727D7\_4



200727D7\_4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

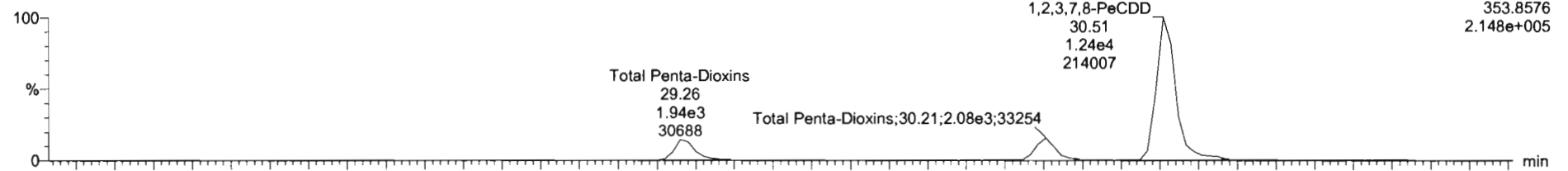
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

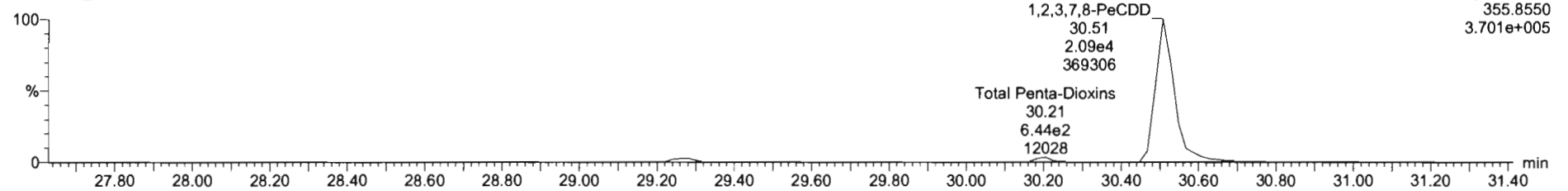
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**1,2,3,7,8-PeCDD**

200727D7\_4

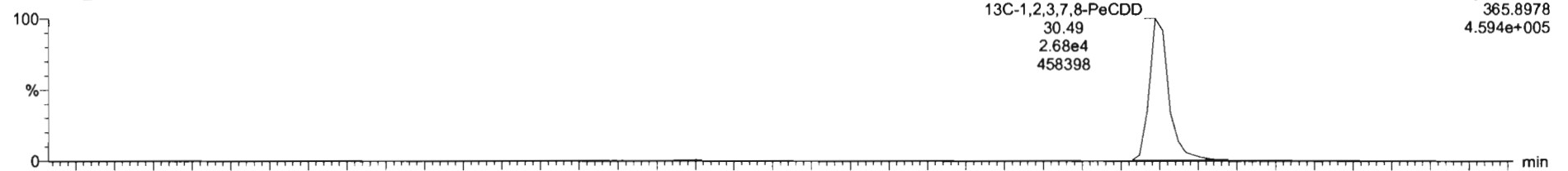


200727D7\_4

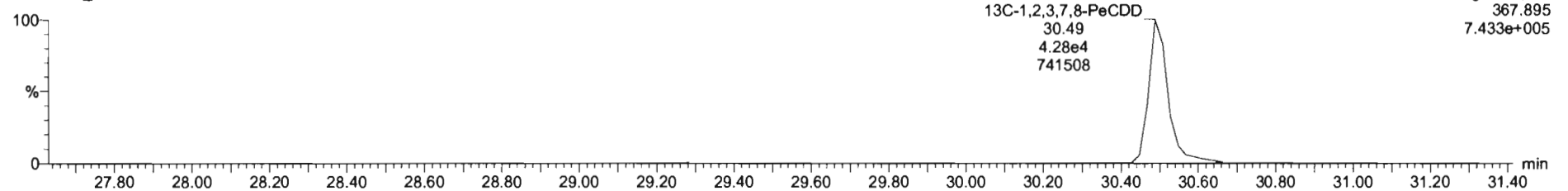


**13C-1,2,3,7,8-PeCDD**

200727D7\_4



200727D7\_4



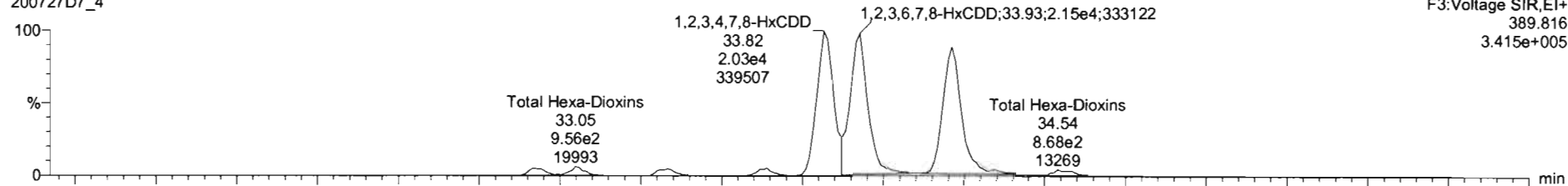
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

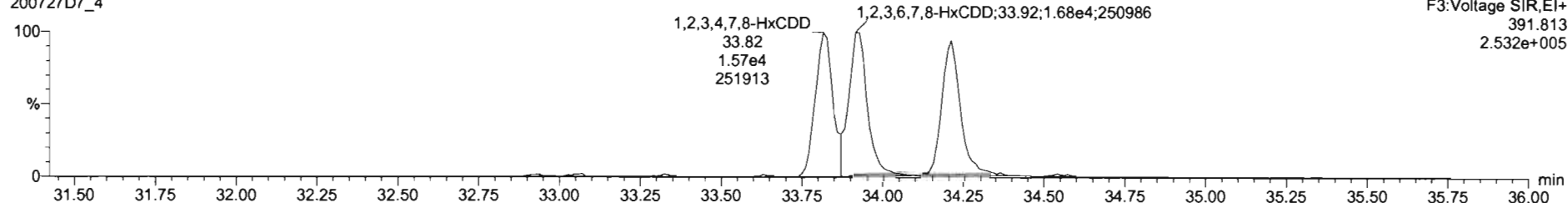
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**1,2,3,4,7,8-HxCDD**

200727D7\_4

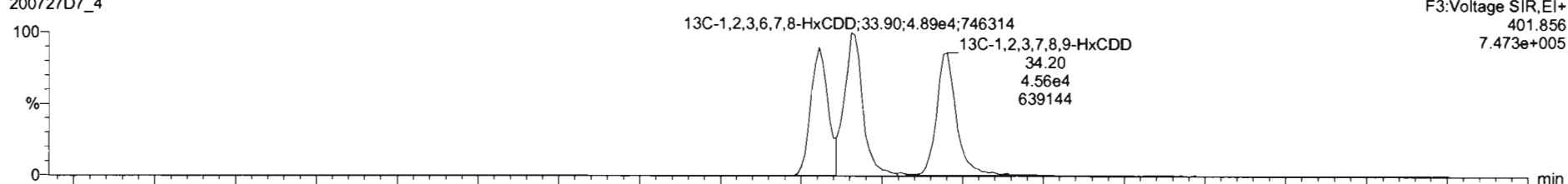


200727D7\_4

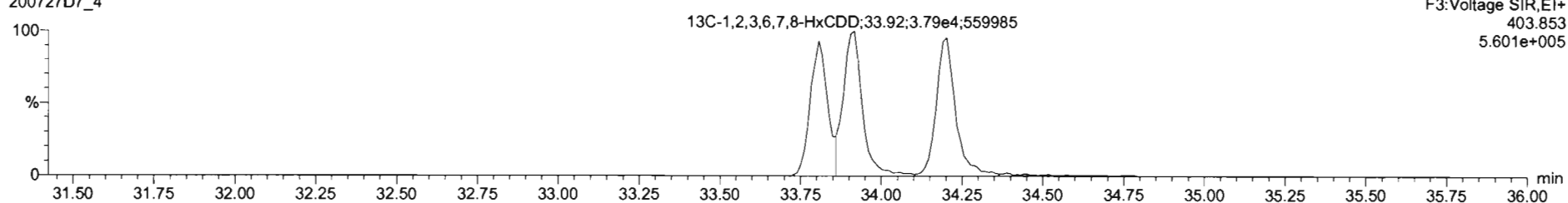


**13C-1,2,3,4,7,8-HxCDD**

200727D7\_4



200727D7\_4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

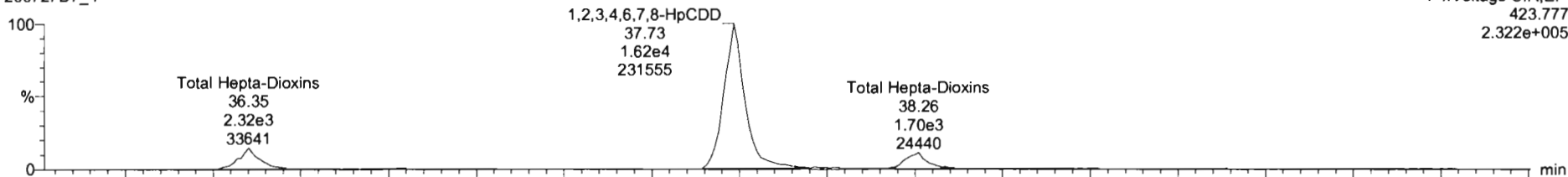
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

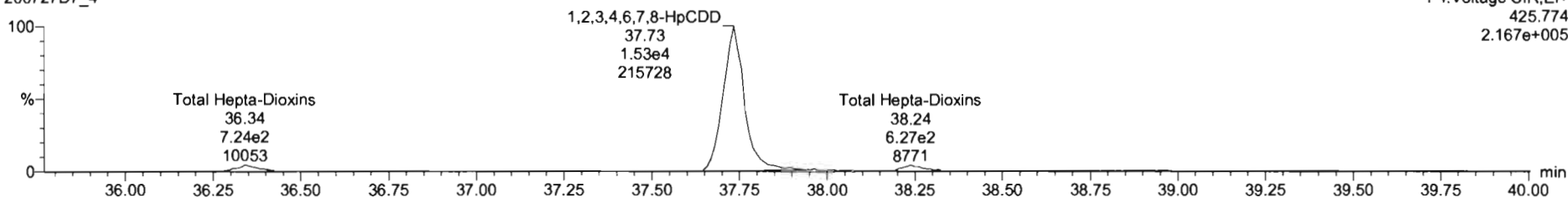
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**1,2,3,4,6,7,8-HpCDD**

200727D7\_4

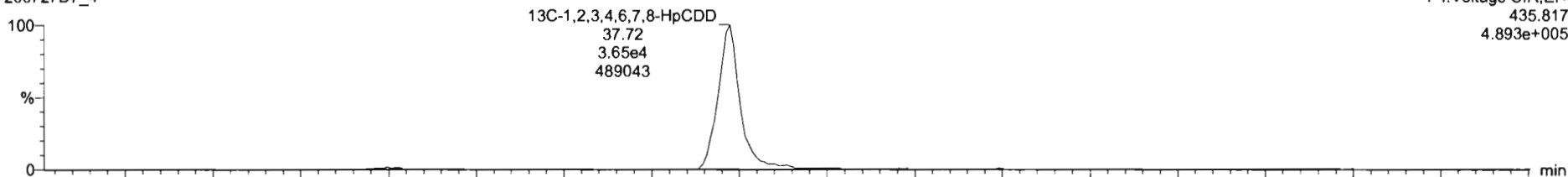


200727D7\_4

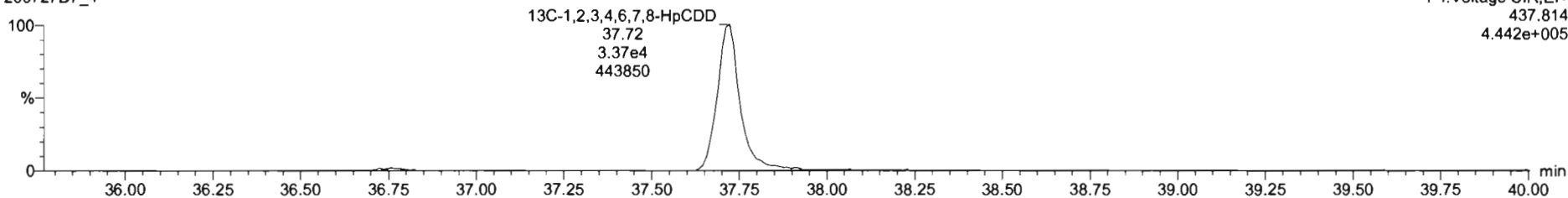


**13C-1,2,3,4,6,7,8-HpCDD**

200727D7\_4



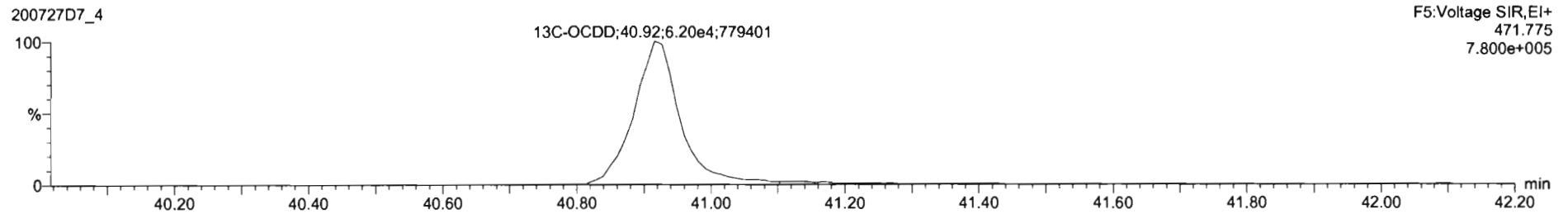
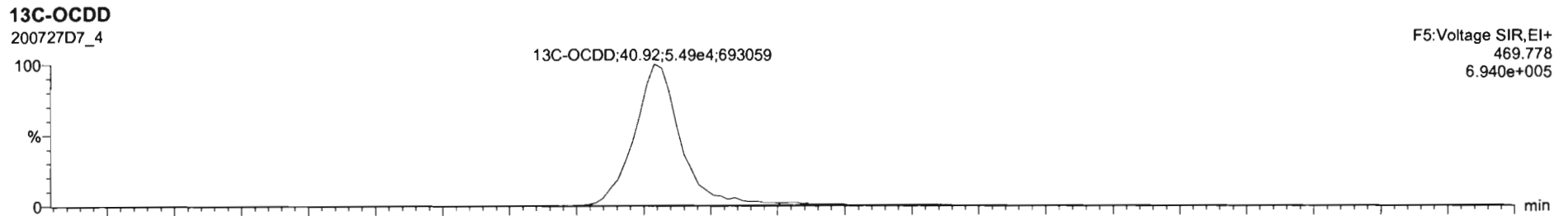
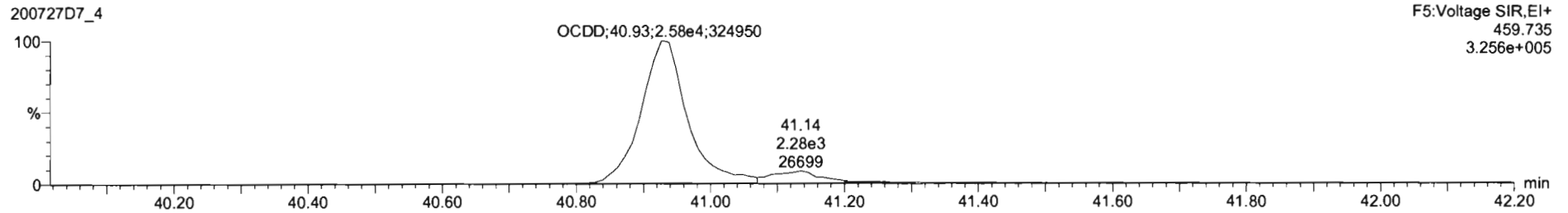
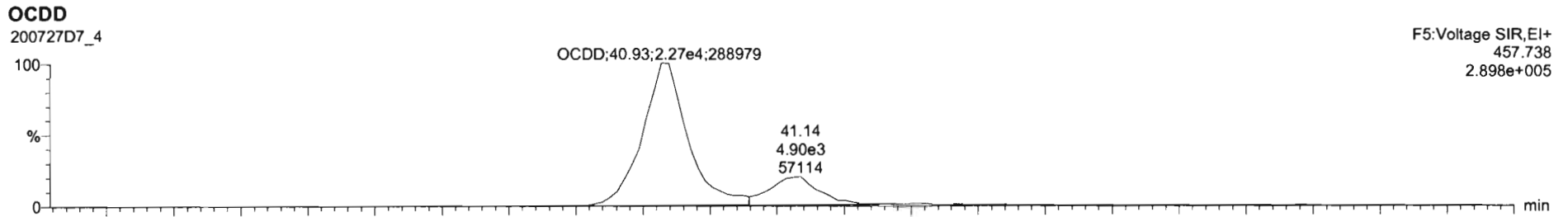
200727D7\_4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

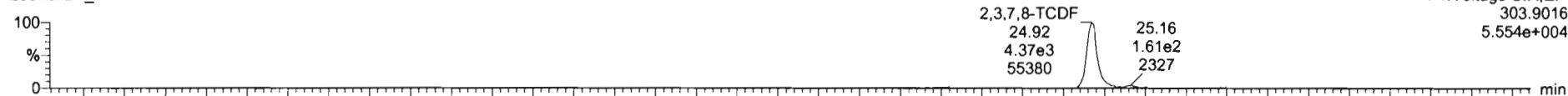
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

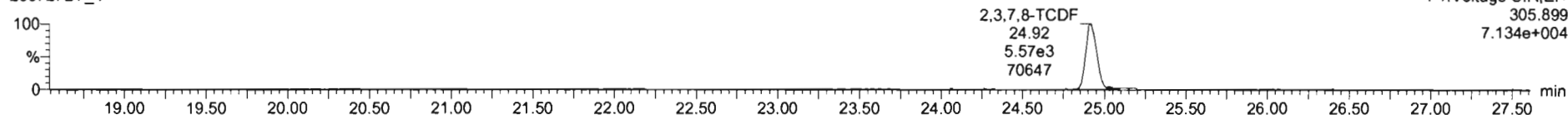
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**2,3,7,8-TCDF**

200727D7\_4

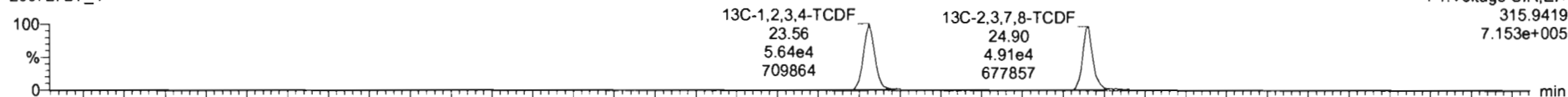


200727D7\_4

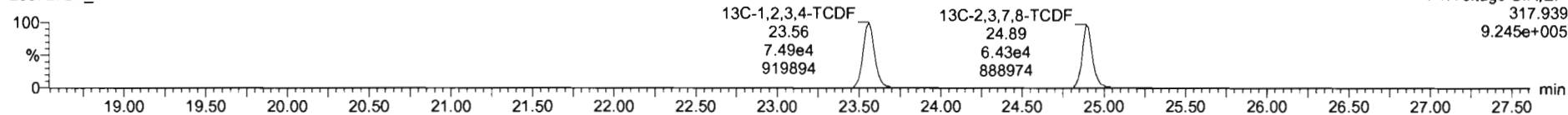


**13C-2,3,7,8-TCDF**

200727D7\_4

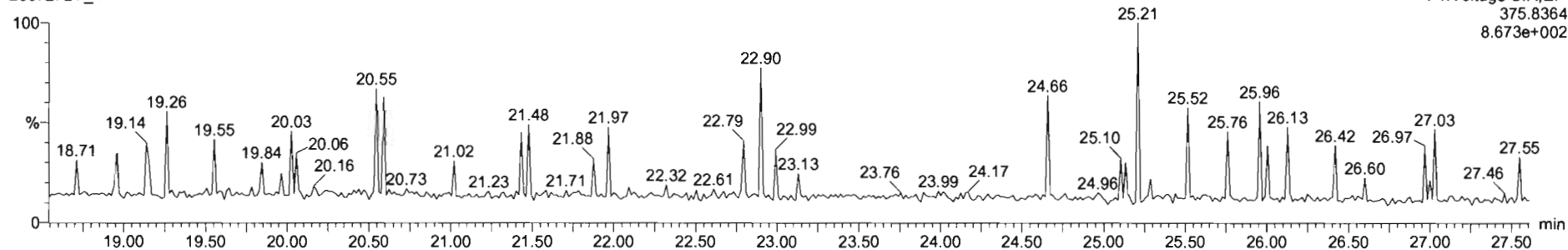


200727D7\_4



**DPE1**

200727D7\_4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

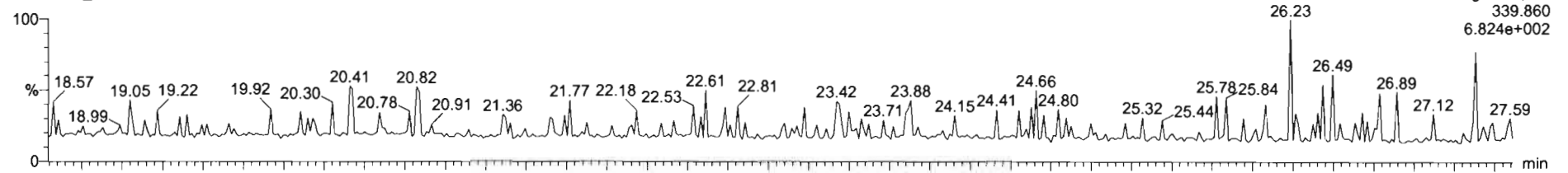
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

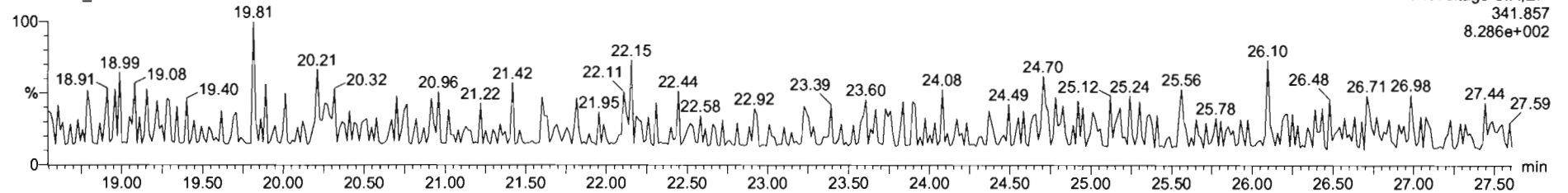
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

1st Func. Penta-Furans

200727D7\_4

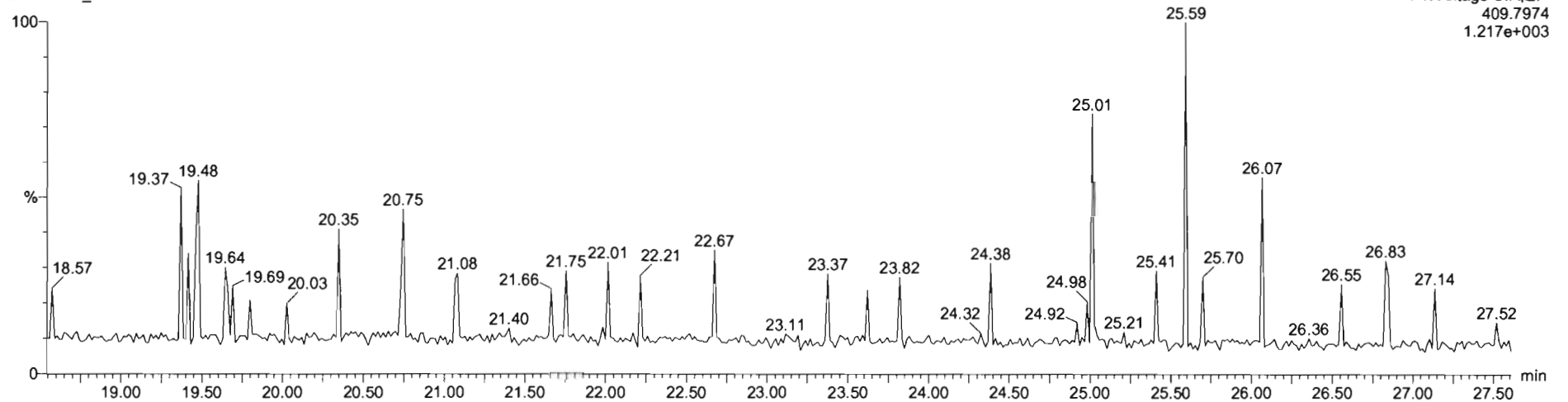


200727D7\_4



DPE6

200727D7\_4



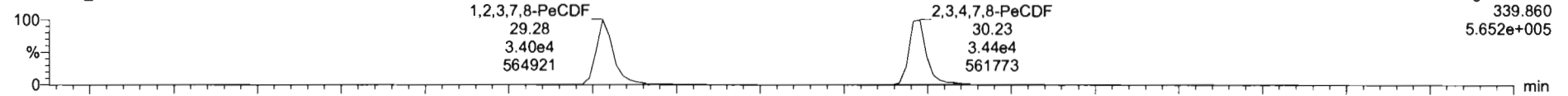
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

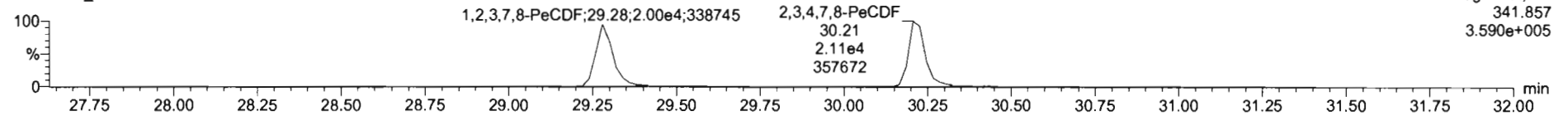
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

1,2,3,7,8-PeCDF

200727D7\_4

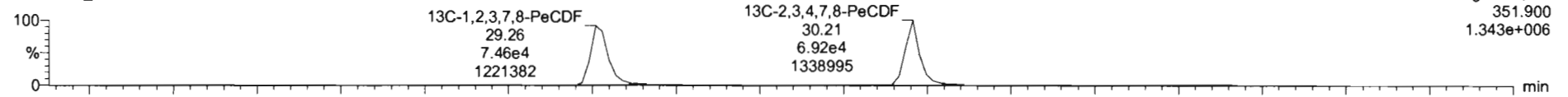


200727D7\_4

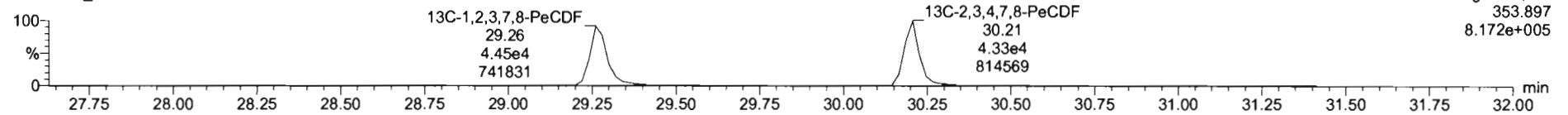


13C-1,2,3,7,8-PeCDF

200727D7\_4

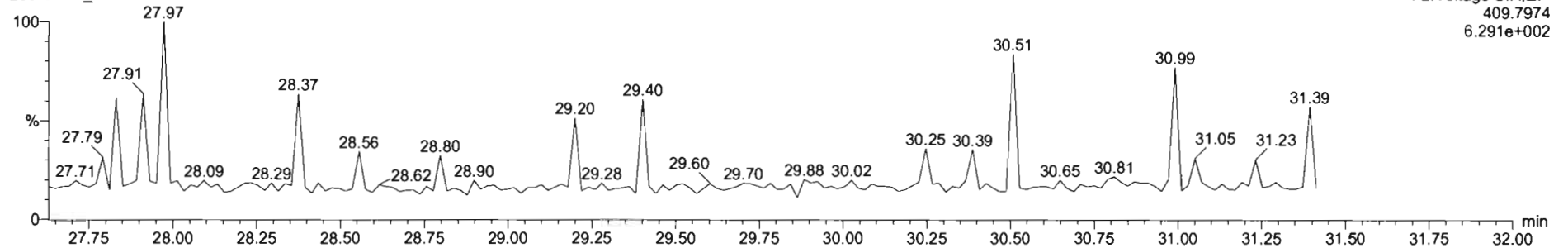


200727D7\_4



DPE2

200727D7\_4





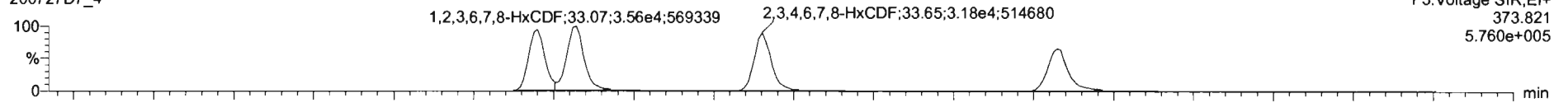
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

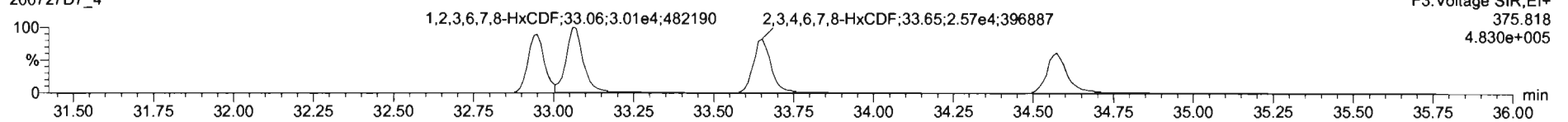
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**1,2,3,4,7,8-HxCDF**

200727D7\_4

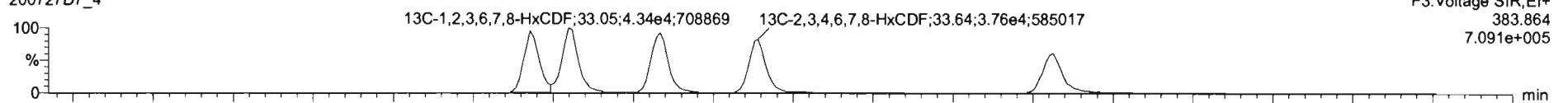


200727D7\_4

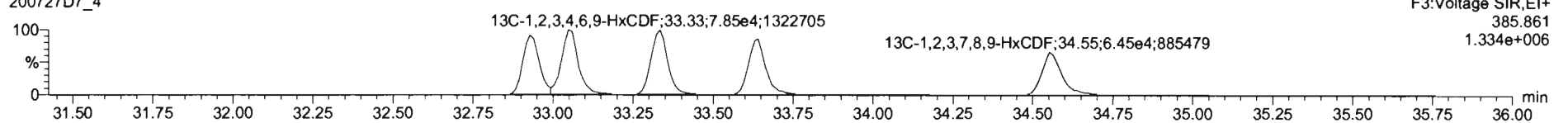


**13C-1,2,3,4,7,8-HxCDF**

200727D7\_4

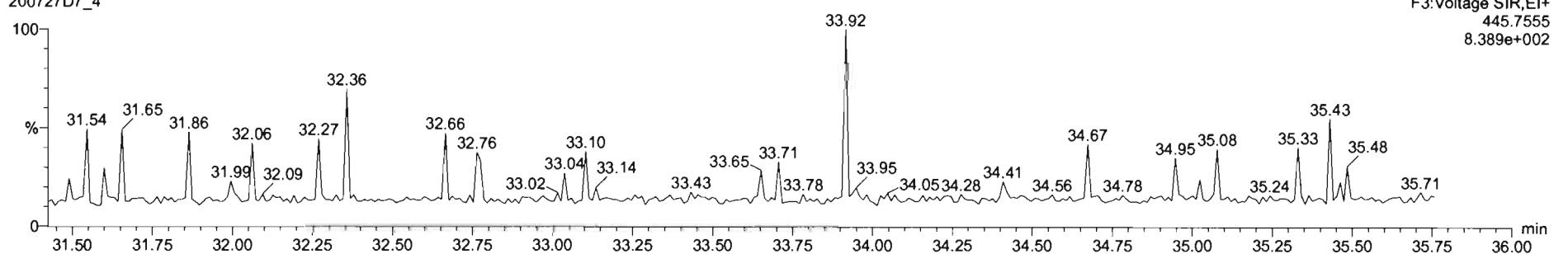


200727D7\_4



**DPE3**

200727D7\_4

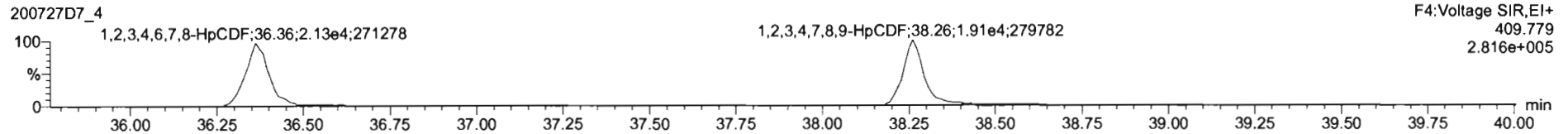
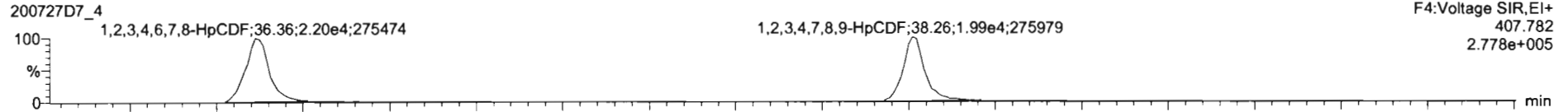


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

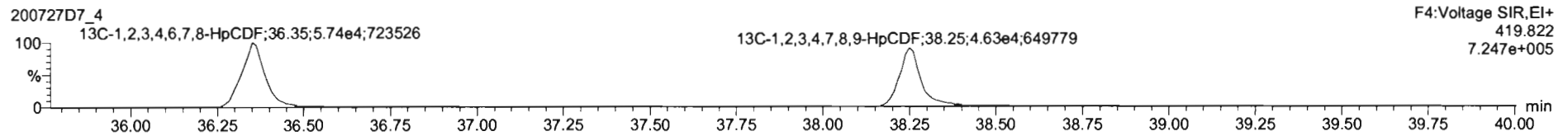
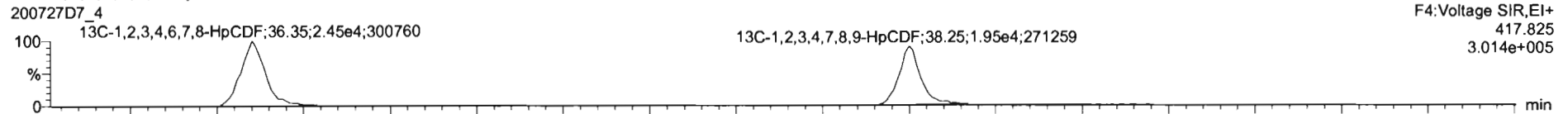
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

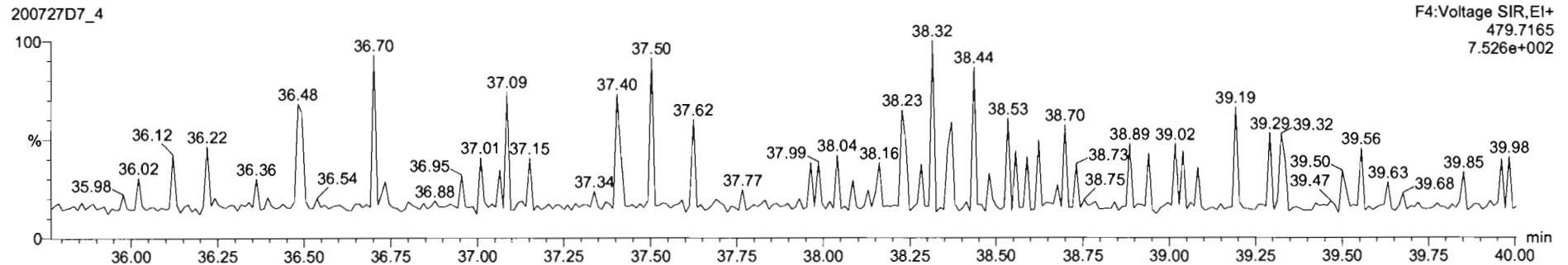
1,2,3,4,6,7,8-HpCDF



13C-1,2,3,4,6,7,8-HpCDF



DPE4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

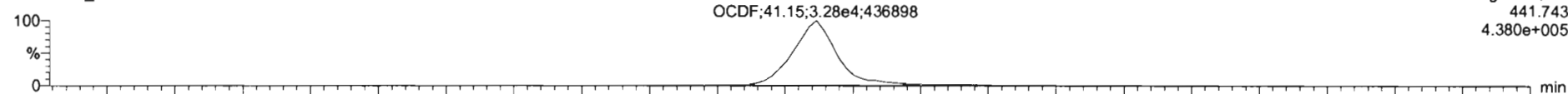
Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

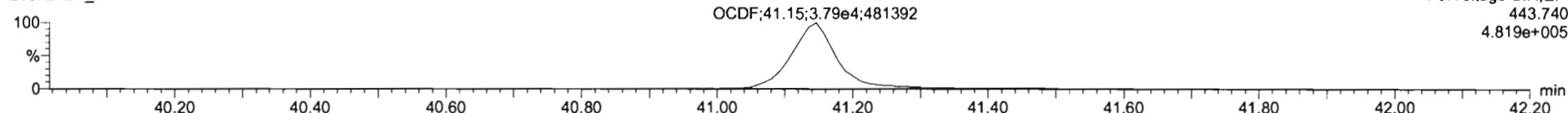
Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR

**OCDF**

200727D7\_4

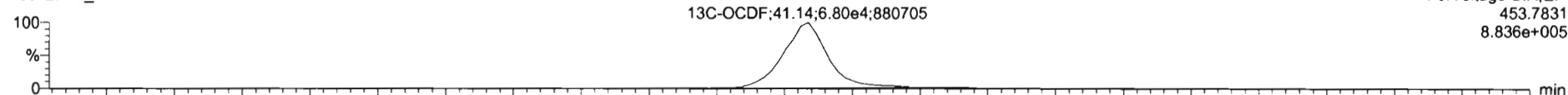


200727D7\_4

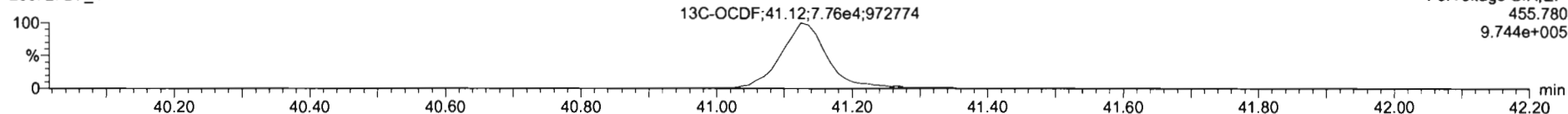


**13C-OCDF**

200727D7\_4

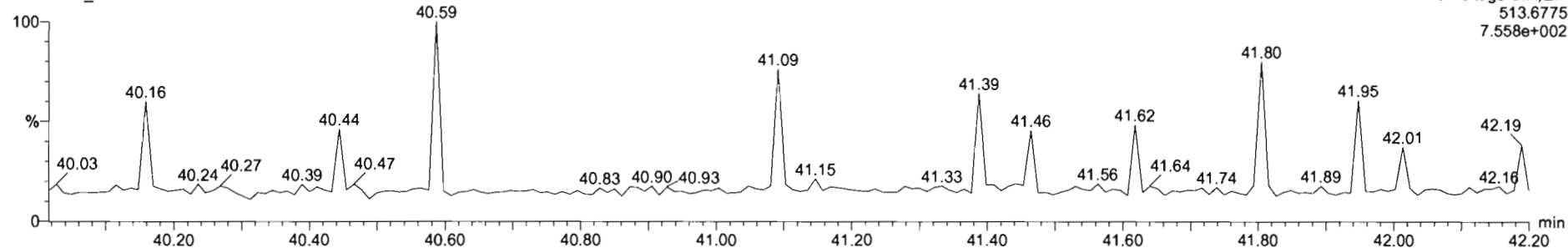


200727D7\_4



**DPE5**

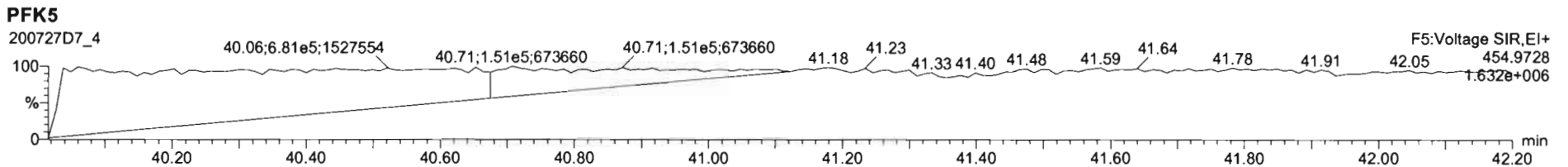
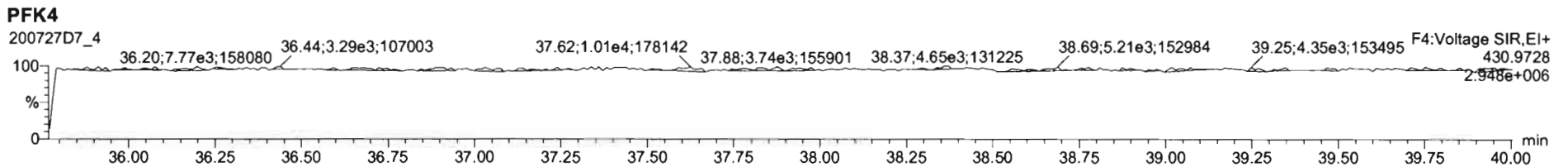
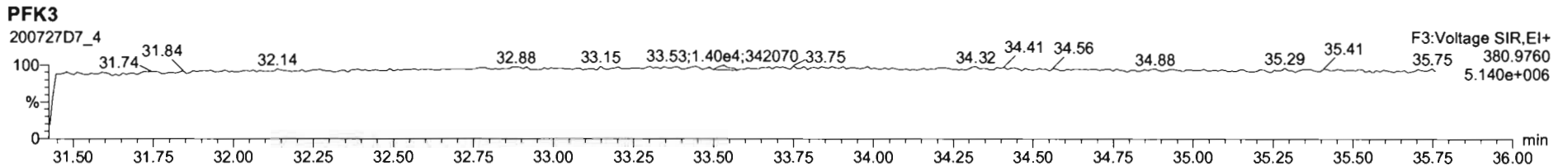
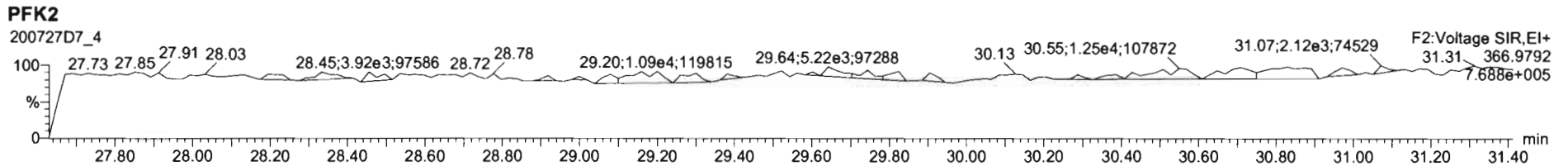
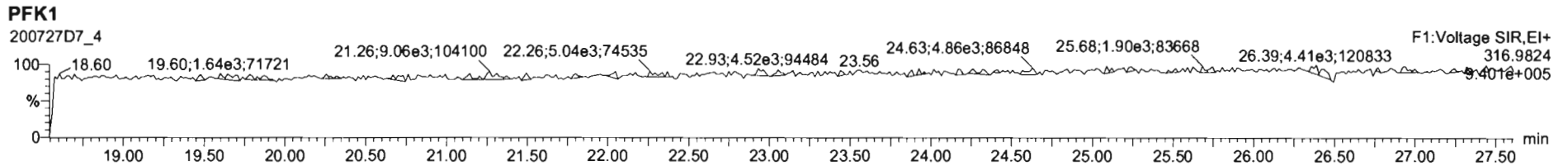
200727D7\_4



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_4.qld

Last Altered: Tuesday, July 28, 2020 11:00:25 Pacific Daylight Time  
Printed: Tuesday, July 28, 2020 11:01:55 Pacific Daylight Time

Name: 200727D7\_4, Date: 27-Jul-2020, Time: 18:06:58, ID: B0G0186-BS1 OPR 10, Description: OPR



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

*GPB 08/25/2020*

*CT 08/20/2020*

Method: Untitled 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.85e3	0.44	YES	0.974	10.128	25.925	25.91	1.001	1.001	0.41295		0.107	0.291
2	2 1,2,3,7,8-PeCDD	1.34e3	0.71	NO	0.917	10.128	31.806	31.80	1.001	1.000	0.45442		0.107	0.454
3	3 1,2,3,4,7,8-HxCDD	1.46e3	1.14	NO	1.04	10.128	35.341	35.35	1.000	1.001	0.62670		0.146	0.627
4	4 1,2,3,6,7,8-HxCDD	6.95e3	1.18	NO	0.938	10.128	35.426	35.44	1.000	1.000	2.6380		0.132	2.64
5	5 1,2,3,7,8,9-HxCDD	3.97e3	1.18	NO	0.964	10.128	35.693	35.70	1.000	1.001	1.6772		0.161	1.68
6	6 1,2,3,4,6,7,8-HpCDD	1.09e5	0.98	NO	0.902	10.128	39.027	39.03	1.000	1.000	64.955		0.469	65.0
7	7 OCDD	6.64e5	0.88	NO	0.905	10.128	42.231	42.24	1.000	1.000	559.54		0.974	560
8	8 2,3,7,8-TCDF	1.67e4	0.72	NO	0.858	10.128	24.751	24.74	1.001	1.001	3.3888 (3.37)		0.143	3.39
9	9 1,2,3,7,8-PeCDF	1.74e4	1.57	NO	0.968	10.128	30.340	30.33	1.001	1.001	3.7472		0.115	3.75
10	10 2,3,4,7,8-PeCDF	8.83e3	1.73	NO	1.08	10.128	31.457	31.46	1.000	1.000	1.8046		0.0991	1.80
11	11 1,2,3,4,7,8-HxCDF	2.12e4	1.19	NO	0.968	10.128	34.467	34.48	1.000	1.000	6.9508		0.101	6.95
12	12 1,2,3,6,7,8-HxCDF	7.11e3	1.28	NO	1.00	10.128	34.595	34.60	1.000	1.000	2.1361		0.0993	2.14
13	13 2,3,4,6,7,8-HxCDF	2.76e3	1.13	NO	0.997	10.128	35.195	35.18	1.001	1.001	0.93129		0.111	0.931
14	14 1,2,3,7,8,9-HxCDF	1.00e3	1.38	NO	0.961	10.128	36.001	36.05	1.000	1.001	0.43907		0.151	0.439
15	15 1,2,3,4,6,7,8-HpCDF	2.07e4	0.96	NO	1.00	10.128	37.701	37.67	1.001	1.000	9.6742		0.140	9.67
16	16 1,2,3,4,7,8,9-HpCDF	2.63e3	0.90	NO	1.11	10.128	39.665	39.69	1.000	1.001	1.7314		0.236	1.73
17	17 OCDF	3.90e4	0.85	NO	0.896	10.128	42.391	42.40	1.000	1.000	28.791		0.293	28.8
18	18 13C-2,3,7,8-TCDD	9.10e5	0.78	NO	1.10	10.128	25.835	25.89	1.032	1.034	180.55	91.4	0.419	
19	19 13C-1,2,3,7,8-PeCDD	6.36e5	0.62	NO	0.757	10.128	31.497	31.78	1.258	1.269	183.88	93.1	0.451	
20	20 13C-1,2,3,4,7,8-HxCDD	4.42e5	1.28	NO	0.647	10.128	35.332	35.33	1.014	1.014	183.11	92.7	0.684	
21	21 13C-1,2,3,6,7,8-HxCDD	5.55e5	1.27	NO	0.805	10.128	35.433	35.43	1.017	1.016	184.77	93.6	0.550	
22	22 13C-1,2,3,7,8,9-HxCDD	4.85e5	1.24	NO	0.726	10.128	35.705	35.68	1.025	1.024	178.91	90.6	0.610	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.66e5	1.10	NO	0.611	10.128	39.075	39.01	1.121	1.119	160.49	81.3	0.450	
24	24 13C-OCDD	5.17e5	0.89	NO	0.513	10.128	42.274	42.23	1.213	1.212	270.40	68.5	0.615	
25	25 13C-2,3,7,8-TCDF	1.14e6	0.77	NO	0.933	10.128	24.743	24.73	0.988	0.987	168.91	85.5	0.408	
26	26 13C-1,2,3,7,8-PeCDF	9.48e5	1.60	NO	0.696	10.128	30.302	30.32	1.210	1.211	188.94	95.7	0.609	
27	27 13C-2,3,4,7,8-PeCDF	8.97e5	1.56	NO	0.669	10.128	31.426	31.45	1.255	1.256	186.12	94.2	0.634	
28	28 13C-1,2,3,4,7,8-HxCDF	6.23e5	0.51	NO	0.886	10.128	34.471	34.47	0.989	0.989	188.60	95.5	0.527	
29	29 13C-1,2,3,6,7,8-HxCDF	6.56e5	0.53	NO	0.955	10.128	34.590	34.58	0.993	0.992	184.07	93.2	0.489	
30	30 13C-2,3,4,6,7,8-HxCDF	5.87e5	0.50	NO	0.882	10.128	35.161	35.16	1.009	1.009	178.38	90.3	0.529	
31	31 13C-1,2,3,7,8,9-HxCDF	4.69e5	0.51	NO	0.737	10.128	36.015	36.00	1.033	1.033	170.69	86.4	0.634	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	4.21e5	0.44	NO	0.651	10.128	37.702	37.66	1.082	1.081	173.39	87.8	0.568	
33	13C-1,2,3,4,7,8,9-HpCDF	2.71e5	0.42	NO	0.459	10.128	39.727	39.67	1.140	1.138	157.79	79.9	0.805	
34	13C-OCDF	5.97e5	0.89	NO	0.609	10.128	42.435	42.39	1.218	1.216	263.08	66.6	0.555	
35	37Cl-2,3,7,8-TCDD	3.55e5			1.14	10.128	25.732	25.92	1.028	1.035	68.399	86.6	0.136	
36	13C-1,2,3,4-TCDD	9.02e5	0.79	NO	1.00	10.128	25.070	25.04	1.000	1.000	197.48	100	0.463	
37	13C-1,2,3,4-TCDF	1.42e6	0.80	NO	1.00	10.128	23.080	22.89	1.000	1.000	197.48	100	0.381	
38	13C-1,2,3,4,6,9-HxCDF	7.37e5	0.51	NO	1.00	10.128	34.740	34.85	1.000	1.000	197.48	100	0.467	
39	Total Tetra-Dioxins				0.974	10.128	24.620		0.000		3.2923		0.107	3.80
40	Total Penta-Dioxins				0.917	10.128	29.960		0.000		5.1032		0.107	5.10
41	Total Hexa-Dioxins				0.938	10.128	33.635		0.000		29.586		0.152	29.6
42	Total Hepta-Dioxins				0.902	10.128	37.640		0.000		157.20		0.469	157
43	Total Tetra-Furans				0.858	10.128	23.610		0.000		12.630		0.143	13.6
44	1st Func. Penta-Furans				0.968	10.128	27.230		0.000		3.8527		0.0317	3.85
45	Total Penta-Furans				0.968	10.128	29.275		0.000		9.0368		0.113	12.4
46	Total Hexa-Furans				0.997	10.128	33.555		0.000		23.946		0.112	24.3
47	Total Hepta-Furans				1.00	10.128	37.835		0.000		33.009		0.187	33.0

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time  
 Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Method: Untitled 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\ddb5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.33	1.664e4	2.817e4	1.624e3	2.253e3	0.72	NO	3.877e3	0.86347	0.86347	0.107
2	Total Tetra-Dioxins	21.69	6.923e3	9.887e3	6.677e2	8.899e2	0.75	NO	1.558e3	0.34692	0.34692	0.107
3	Total Tetra-Dioxins	22.18	3.182e3	3.892e3	2.121e2	3.062e2	0.69	NO	5.182e2	0.11543	0.11543	0.107
4	Total Tetra-Dioxins	23.14	5.321e3	5.504e3	3.409e2	4.848e2	0.70	NO	8.258e2	0.18392	0.18392	0.107
5	Total Tetra-Dioxins	23.39	5.037e3	4.131e3	3.999e2	5.289e2	0.76	NO	9.288e2	0.20686	0.20686	0.107
6	Total Tetra-Dioxins	23.71	3.148e3	5.206e3	4.490e2	5.088e2	0.88	NO	0.000e0	0.00000	0.21333	0.107
7	Total Tetra-Dioxins	25.59	3.192e4	4.078e4	3.118e3	3.956e3	0.79	NO	7.075e3	1.5757	1.5757	0.107
8	2,3,7,8-TCDD	25.91	5.550e3	1.381e4	5.682e2	1.286e3	0.44	YES	1.854e3	0.00000	0.29090	0.107

Penta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.30	2.345e4	2.727e4	1.799e3	2.635e3	0.68	NO	4.434e3	1.5017	1.5017	0.107
2	Total Penta-Dioxins	29.86	6.663e3	1.138e4	4.360e2	6.825e2	0.64	NO	1.118e3	0.37879	0.37879	0.107
3	Total Penta-Dioxins	30.43	8.816e3	1.878e4	5.942e2	1.039e3	0.57	NO	1.633e3	0.55304	0.55304	0.107
4	Total Penta-Dioxins	30.61	1.083e4	1.485e4	6.528e2	9.181e2	0.71	NO	1.571e3	0.53198	0.53198	0.107
5	Total Penta-Dioxins	30.72	8.623e3	1.065e4	4.940e2	7.130e2	0.69	NO	1.207e3	0.40877	0.40877	0.107
6	Total Penta-Dioxins	30.96	7.294e3	1.268e4	7.562e2	1.181e3	0.64	NO	1.938e3	0.65621	0.65621	0.107
7	Total Penta-Dioxins	31.34	3.952e3	6.900e3	2.590e2	4.164e2	0.62	NO	6.754e2	0.22874	0.22874	0.107
8	1,2,3,7,8-PeCDD	31.80	1.131e4	1.269e4	5.558e2	7.860e2	0.71	NO	1.342e3	0.45442	0.45442	0.107
9	Total Penta-Dioxins	31.89	4.717e3	5.232e3	2.215e2	3.091e2	0.72	NO	5.306e2	0.17969	0.17969	0.107
10	Total Penta-Dioxins	32.23	4.308e3	7.036e3	2.338e2	3.859e2	0.61	NO	6.197e2	0.20986	0.20986	0.107

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.86	2.384e5	1.926e5	1.216e4	9.908e3	1.23	NO	2.207e4	9.4059	9.4059	0.152
2	Total Hexa-Dioxins	34.42	4.040e4	3.181e4	2.421e3	1.857e3	1.30	NO	4.277e3	1.8230	1.8230	0.152
3	Total Hexa-Dioxins	34.69	2.228e5	1.873e5	1.516e4	1.238e4	1.22	NO	2.754e4	11.738	11.738	0.152
4	Total Hexa-Dioxins	34.79	2.632e4	2.173e4	1.519e3	1.146e3	1.33	NO	2.665e3	1.1359	1.1359	0.152
5	1,2,3,4,7,8-HxCDD	35.35	1.767e4	1.521e4	7.779e2	6.837e2	1.14	NO	1.462e3	0.62670	0.62670	0.146
6	1,2,3,6,7,8-HxCDD	35.44	6.424e4	5.209e4	3.763e3	3.191e3	1.18	NO	6.954e3	2.6380	2.6380	0.132
7	Total Hexa-Dioxins	35.62	1.678e4	1.272e4	6.684e2	6.018e2	1.11	NO	1.270e3	0.54135	0.54135	0.152
8	1,2,3,7,8,9-HxCDD	35.70	3.386e4	2.665e4	2.150e3	1.818e3	1.18	NO	3.968e3	1.6772	1.6772	0.161

Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.06	1.174e6	1.188e6	7.736e4	7.673e4	1.01	NO	1.541e5	92.248	92.248	0.469
2	1,2,3,4,6,7,8-HpCDD	39.03	7.254e5	7.342e5	5.376e4	5.474e4	0.98	NO	1.085e5	64.955	64.955	0.469



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time  
 Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.43	6.823e3	8.012e3	4.400e2	6.471e2	0.68	NO	1.087e3	0.22023	0.22023	0.143
2	Total Tetra-Furans	19.89	5.606e3	8.489e3	4.698e2	6.881e2	0.68	NO	1.158e3	0.23457	0.23457	0.143
3	Total Tetra-Furans	20.48	3.562e4	4.659e4	2.735e3	3.641e3	0.75	NO	6.376e3	1.2917	1.2917	0.143
4	Total Tetra-Furans	20.91	1.135e4	1.116e4	1.434e3	1.831e3	0.78	NO	3.266e3	0.66155	0.66155	0.143
5	Total Tetra-Furans	21.30	2.569e4	2.874e4	2.514e3	3.278e3	0.77	NO	5.793e3	1.1735	1.1735	0.143
6	Total Tetra-Furans	21.70	1.275e4	1.983e4	1.199e3	1.680e3	0.71	NO	2.878e3	0.58314	0.58314	0.143
7	Total Tetra-Furans	21.87	4.838e3	6.617e3	3.553e2	4.602e2	0.77	NO	8.155e2	0.16521	0.16521	0.143
8	Total Tetra-Furans	22.08	6.881e3	1.104e4	7.897e2	1.089e3	0.72	NO	1.879e3	0.38069	0.38069	0.143
9	Total Tetra-Furans	22.65	3.874e3	5.265e3	3.416e2	3.970e2	0.86	NO	7.387e2	0.14964	0.14964	0.143
10	Total Tetra-Furans	22.84	1.374e4	1.996e4	7.934e2	1.141e3	0.70	NO	1.935e3	0.39193	0.39193	0.143
11	Total Tetra-Furans	22.87	1.759e4	2.109e4	1.578e3	2.131e3	0.74	NO	0.000e0	0.00000	0.75138	0.143
12	Total Tetra-Furans	23.48	6.199e4	7.683e4	5.967e3	7.504e3	0.80	NO	1.347e4	2.7291	2.7291	0.143
13	Total Tetra-Furans	23.86	5.175e3	6.682e3	4.669e2	6.301e2	0.74	NO	0.000e0	0.00000	0.22224	0.143
14	Total Tetra-Furans	24.67	1.029e4	1.392e4	8.831e2	1.065e3	0.83	NO	1.949e3	0.39475	0.39475	0.143
15	2,3,7,8-TCDF	24.74	7.123e4	1.010e5	6.989e3	9.739e3	0.72	NO	1.673e4	3.3888	3.3888	0.143
16	Total Tetra-Furans	25.24	8.729e3	1.251e4	7.981e2	1.037e3	0.77	NO	1.835e3	0.37173	0.37173	0.143
17	Total Tetra-Furans	27.33	1.115e4	1.245e4	1.052e3	1.386e3	0.76	NO	2.438e3	0.49394	0.49394	0.143

Penta-Furans function 1

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1st Func. Penta-Furans	27.35	1.275e5	8.639e4	1.054e4	6.884e3	1.53	NO	1.742e4	3.8527	3.8527	0.0317

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	29.04	1.496e4	8.455e3	1.137e3	6.982e2	1.63	NO	1.836e3	0.40594	0.40594	0.113
2	Total Penta-Furans	29.22	1.089e5	7.475e4	8.090e3	5.082e3	1.59	NO	0.000e0	0.00000	2.9126	0.113
3	Total Penta-Furans	29.27	3.595e4	2.007e4	1.267e3	9.557e2	1.33	NO	0.000e0	0.00000	0.49142	0.113
4	Total Penta-Furans	29.92	2.568e4	1.633e4	1.903e3	1.144e3	1.66	NO	3.047e3	0.67371	0.67371	0.113
5	Total Penta-Furans	30.14	2.008e4	1.328e4	1.049e3	7.796e2	1.34	NO	1.828e3	0.40427	0.40427	0.113
6	1,2,3,7,8-PeCDF	30.33	1.619e5	1.059e5	1.064e4	6.775e3	1.57	NO	1.741e4	3.7472	3.7472	0.115
7	Total Penta-Furans	30.64	5.431e4	3.860e4	3.485e3	2.216e3	1.57	NO	5.702e3	1.2608	1.2608	0.113
8	Total Penta-Furans	31.34	6.430e3	4.490e3	3.936e2	2.619e2	1.50	NO	6.555e2	0.14495	0.14495	0.113
9	2,3,4,7,8-PeCDF	31.46	1.040e5	6.338e4	5.592e3	3.236e3	1.73	NO	8.828e3	1.8046	1.8046	0.0991
10	Total Penta-Furans	31.49	5.518e4	3.574e4	1.275e3	7.729e2	1.65	NO	2.048e3	0.45296	0.45296	0.113
11	Total Penta-Furans	32.47	6.168e3	5.838e3	3.660e2	2.777e2	1.32	NO	6.437e2	0.14235	0.14235	0.113

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	33.25	5.353e4	4.490e4	2.806e3	2.393e3	1.17	NO	5.198e3	1.7632	1.7632	0.112
2	Total Hexa-Furans	33.43	1.575e5	1.289e5	8.611e3	6.751e3	1.28	NO	1.536e4	5.2104	5.2104	0.112
3	Total Hexa-Furans	33.82	4.829e3	3.856e3	2.539e2	2.345e2	1.08	NO	4.883e2	0.16564	0.16564	0.112
4	Total Hexa-Furans	34.02	2.018e5	1.551e5	9.983e3	8.118e3	1.23	NO	1.810e4	6.1397	6.1397	0.112
5	Total Hexa-Furans	34.37	6.409e3	7.149e3	3.261e2	2.935e2	1.11	NO	6.196e2	0.21017	0.21017	0.112
6	1,2,3,4,7,8-HxCDF	34.48	2.295e5	1.905e5	1.156e4	9.677e3	1.19	NO	2.124e4	6.9508	6.9508	0.101
7	1,2,3,6,7,8-HxCDF	34.60	7.243e4	5.474e4	3.995e3	3.115e3	1.28	NO	7.111e3	2.1361	2.1361	0.0993
8	2,3,4,6,7,8-HxCDF	35.18	2.887e4	2.400e4	1.467e3	1.294e3	1.13	NO	2.761e3	0.93129	0.93129	0.111
9	1,2,3,7,8,9-HxCDF	36.05	1.447e4	1.256e4	5.819e2	4.208e2	1.38	NO	1.003e3	0.43907	0.43907	0.151
10	Total Hexa-Furans	36.06	1.942e4	1.476e4	5.771e2	5.320e2	1.08	NO	0.000e0	0.00000	0.37617	0.112

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_11.qld

Last Altered: Tuesday, August 25, 2020 8:43:16 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 8:43:43 AM Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	37.67	1.650e5	1.674e5	1.013e4	1.055e4	0.96	NO	2.068e4	9.6742	9.6742	0.140
2	Total Hepta-Furans	38.05	4.798e3	4.465e3	3.700e2	3.715e2	1.00	NO	7.415e2	0.42235	0.42235	0.187
3	Total Hepta-Furans	38.24	2.844e5	2.869e5	1.844e4	1.874e4	0.98	NO	3.718e4	21.181	21.181	0.187
4	1,2,3,4,7,8,9-HpCDF	39.69	1.660e4	2.034e4	1.249e3	1.380e3	0.90	NO	2.629e3	1.7314	1.7314	0.236

Dataset: Untitled

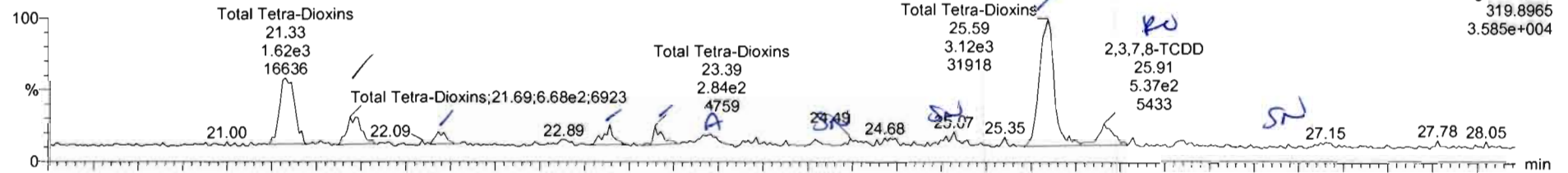
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

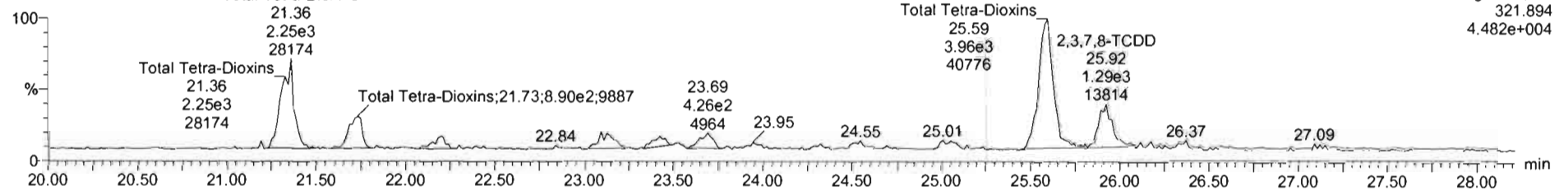
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**2,3,7,8-TCDD**

200821R1\_11

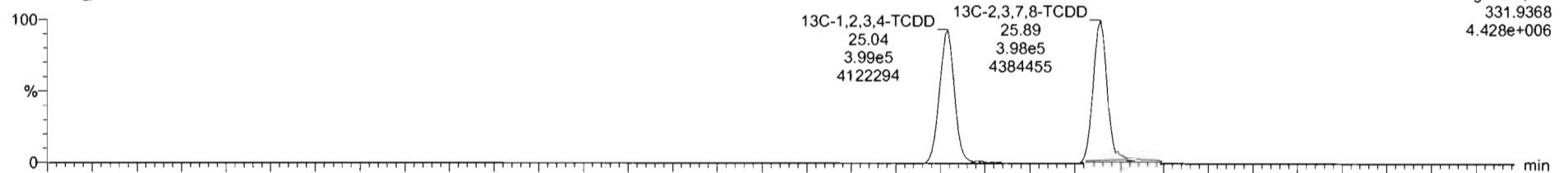


200821R1\_11

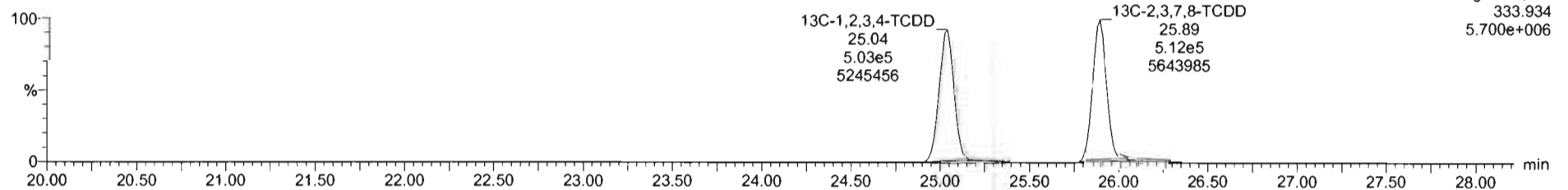


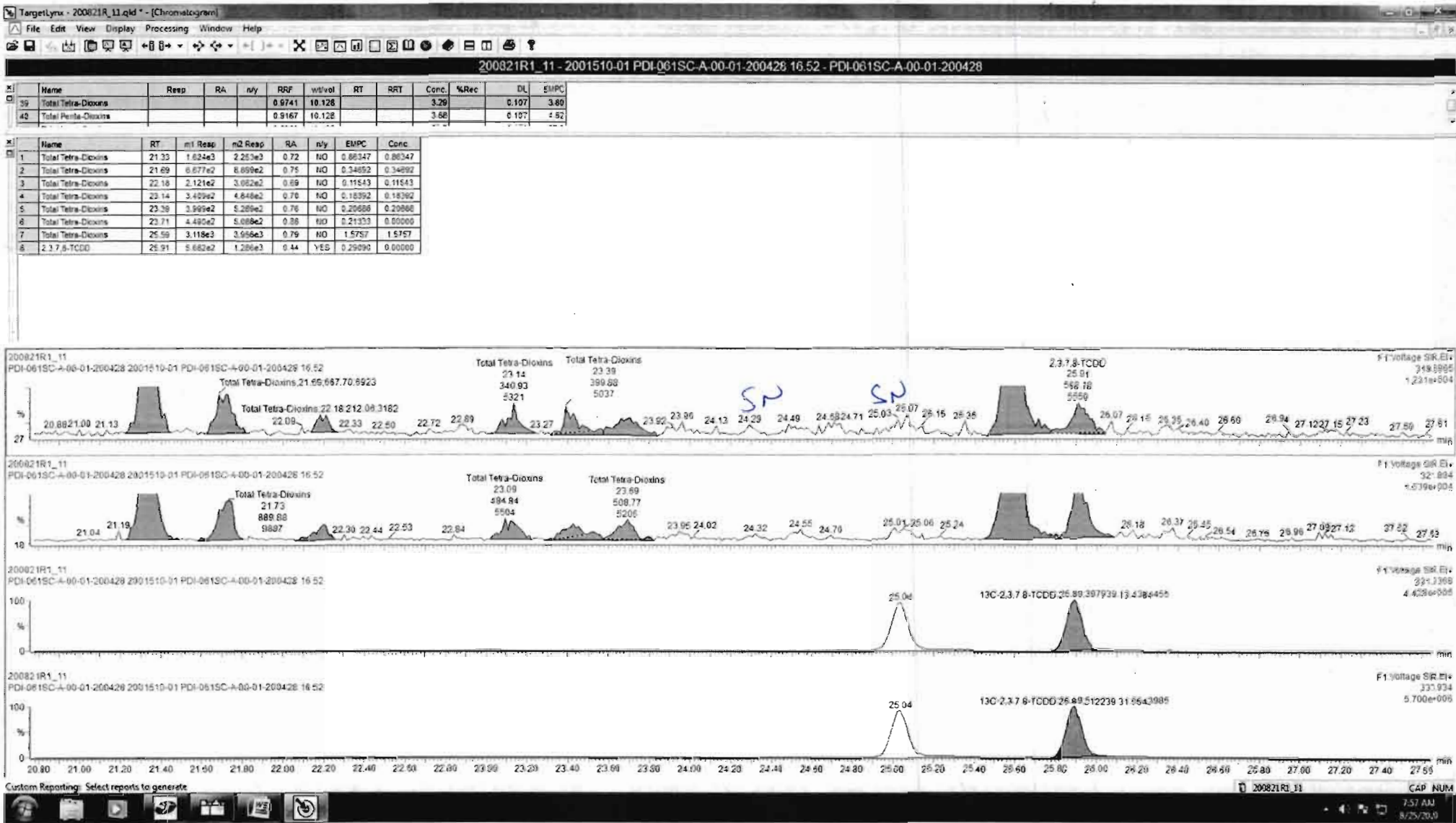
**13C-2,3,7,8-TCDD**

200821R1\_11



200821R1\_11





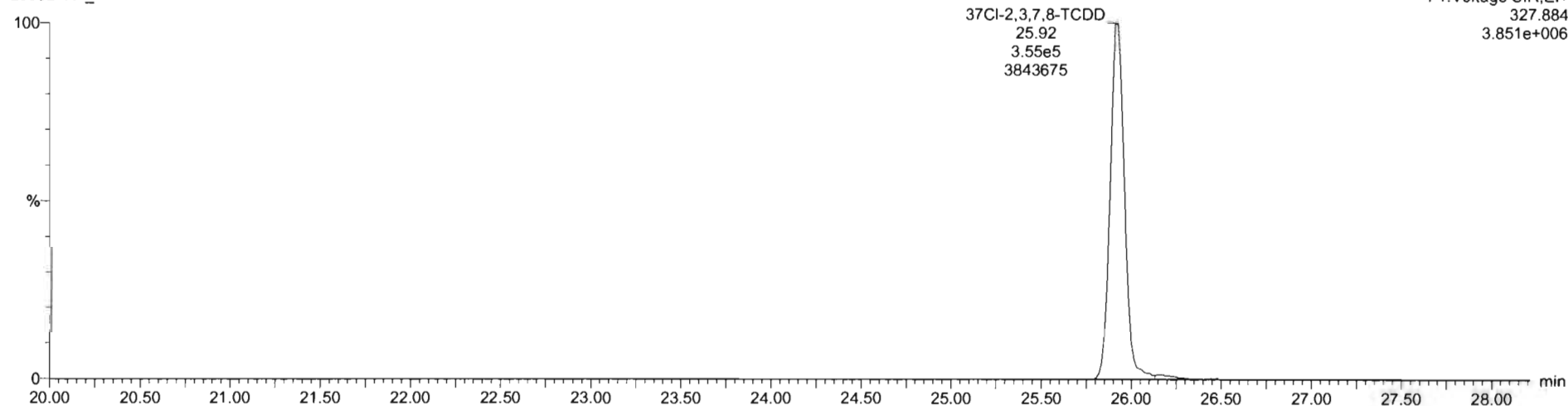
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

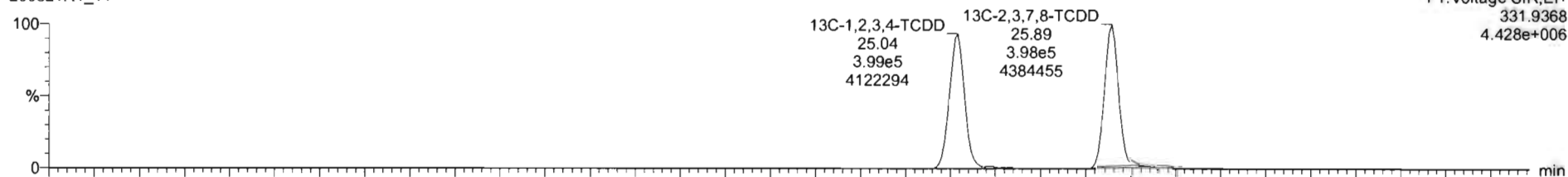
**37Cl-2,3,7,8-TCDD**

200821R1\_11

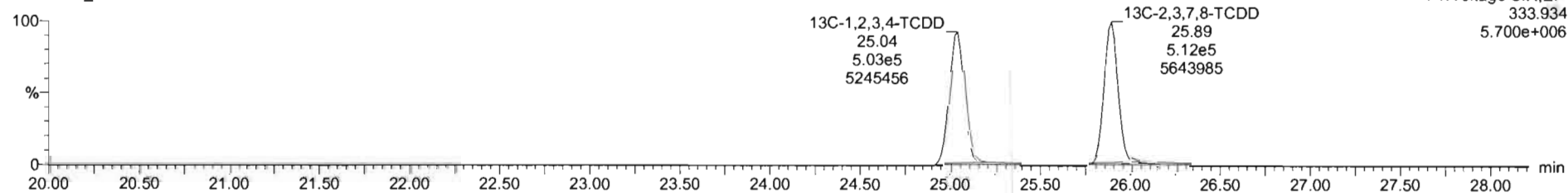


**13C-1,2,3,4-TCDD**

200821R1\_11



200821R1\_11



Dataset: Untitled

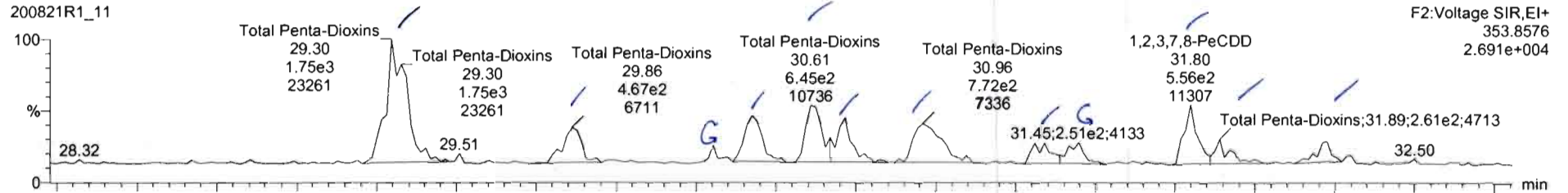
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

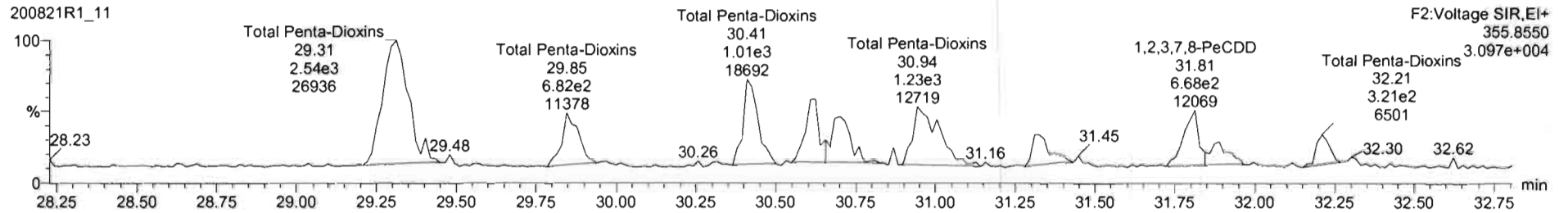
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

1,2,3,7,8-PeCDD

200821R1\_11

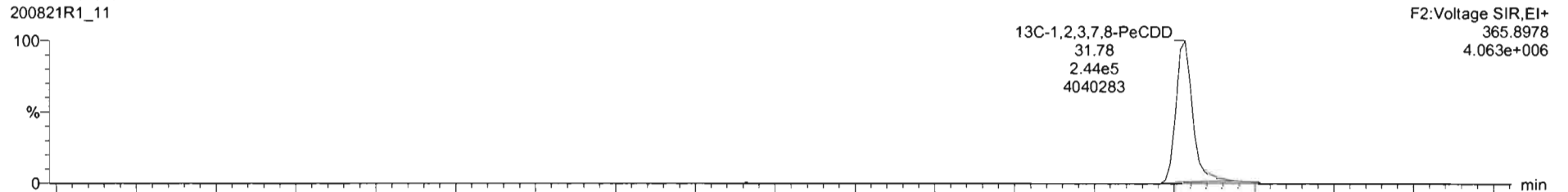


200821R1\_11

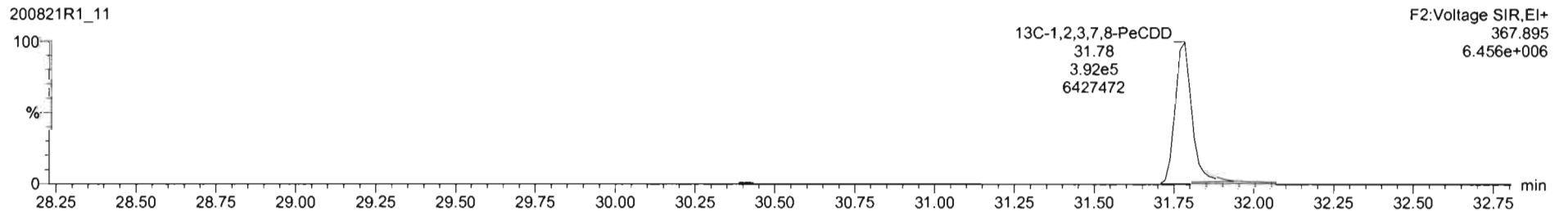


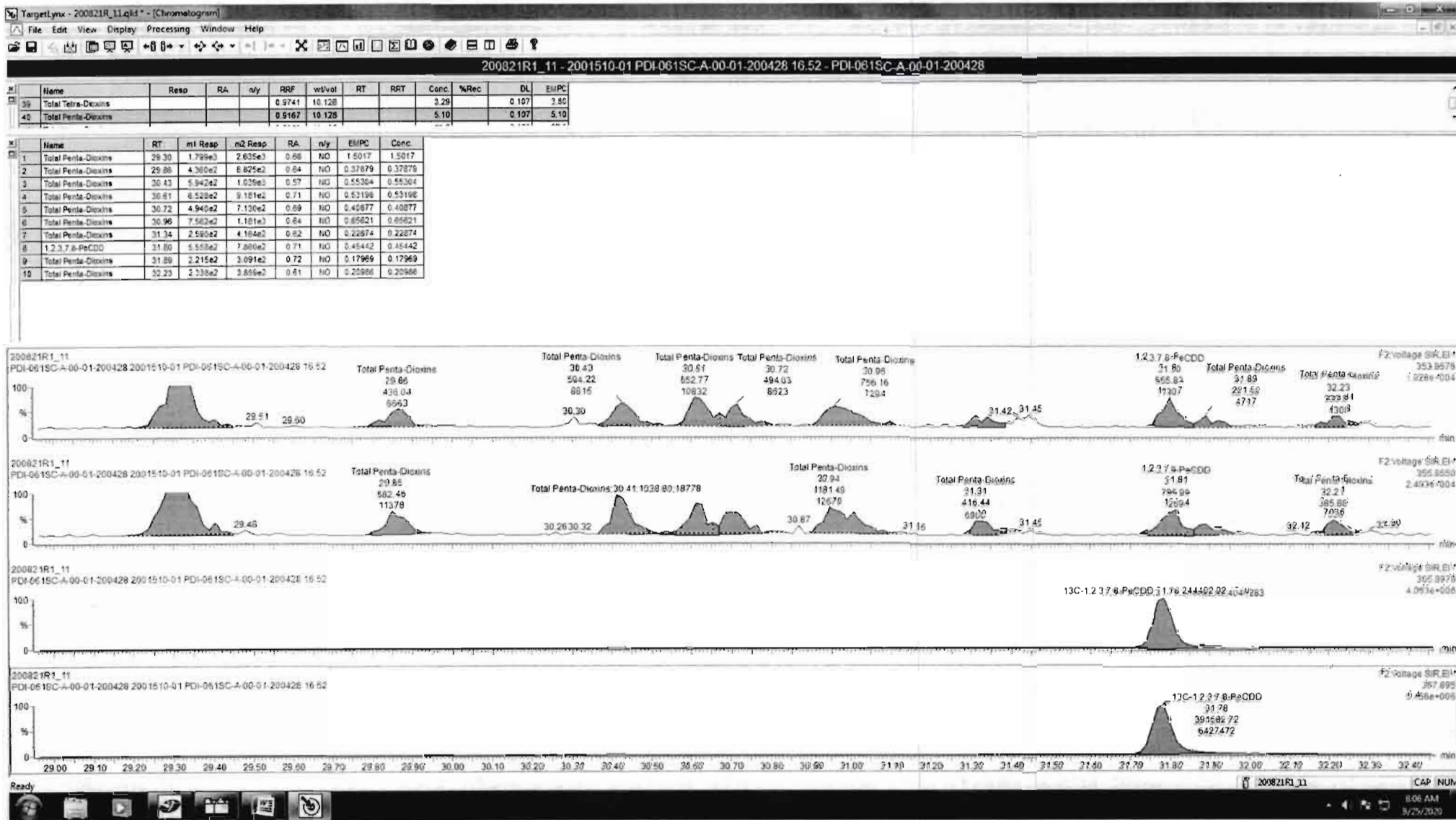
13C-1,2,3,7,8-PeCDD

200821R1\_11



200821R1\_11







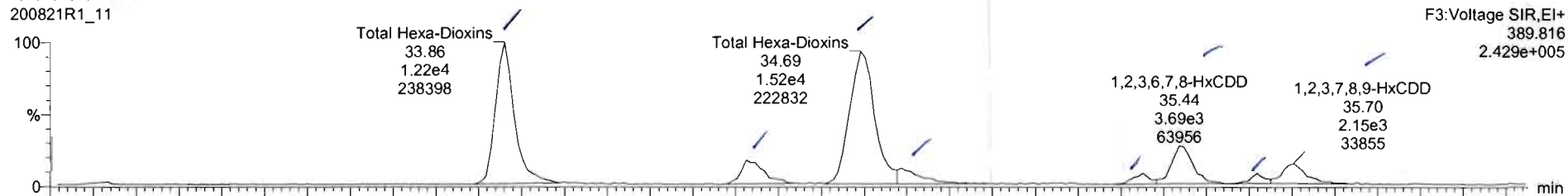
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

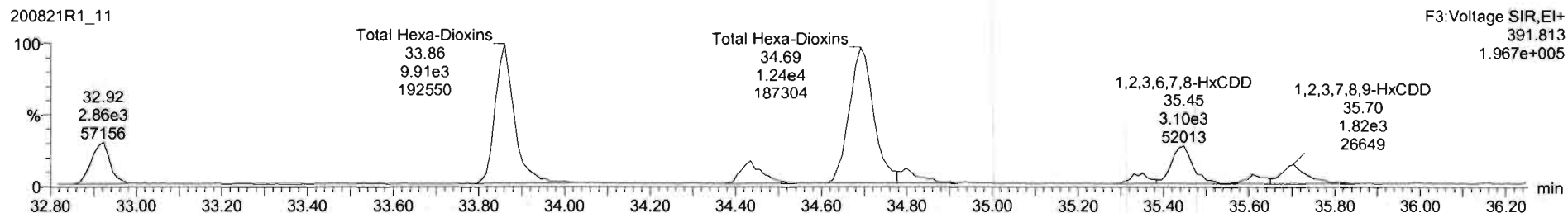
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

1,2,3,4,7,8-HxCDD

200821R1\_11

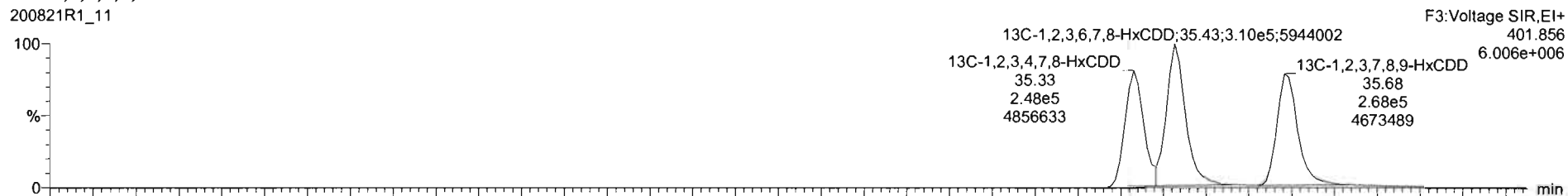


200821R1\_11

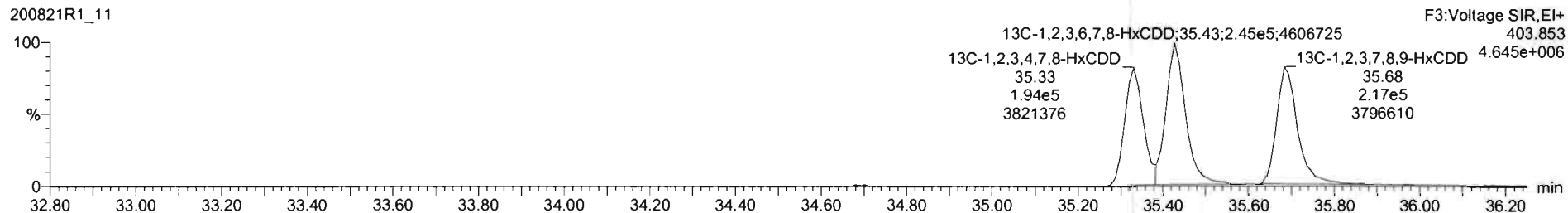


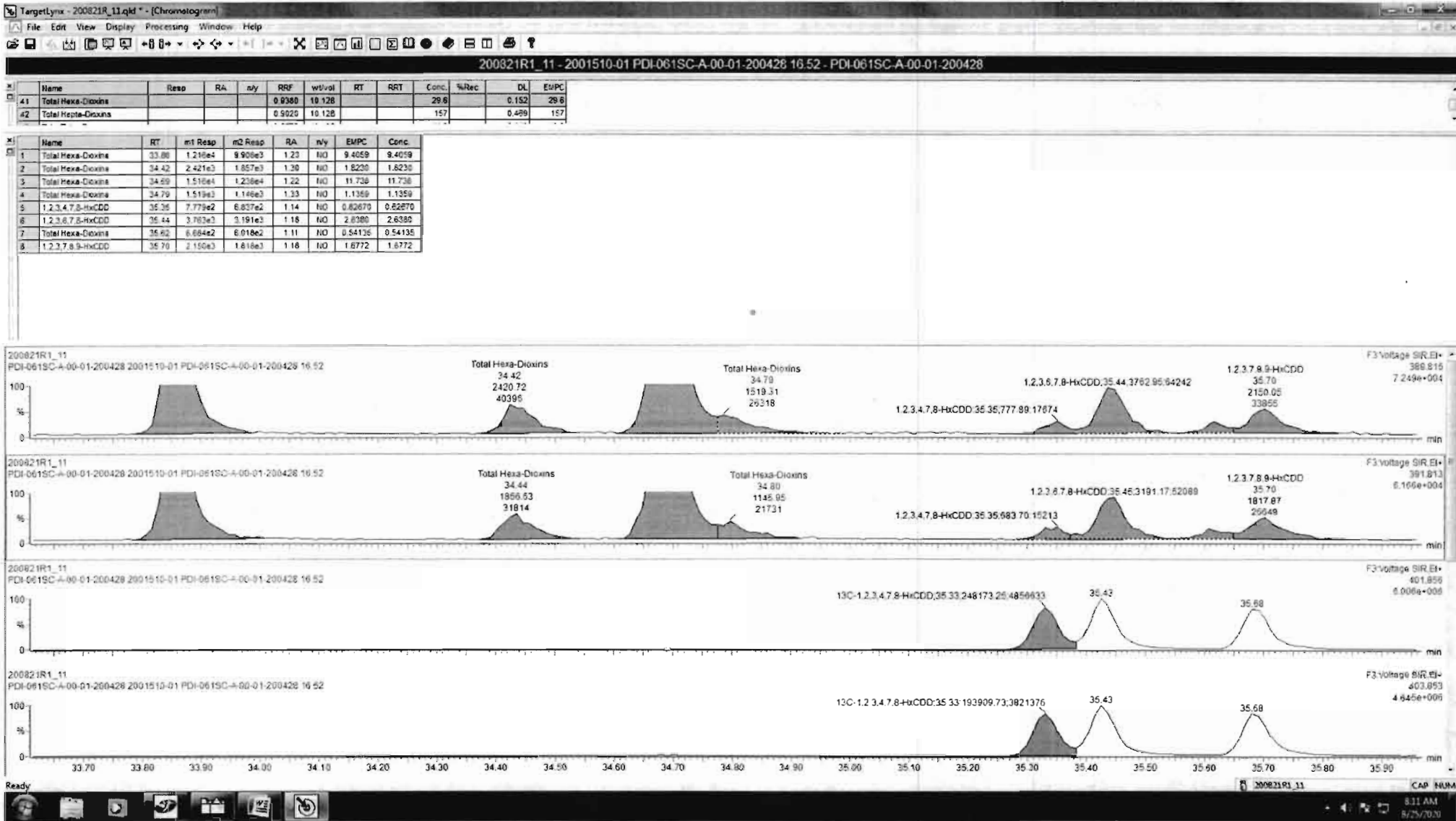
13C-1,2,3,4,7,8-HxCDD

200821R1\_11



200821R1\_11





Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

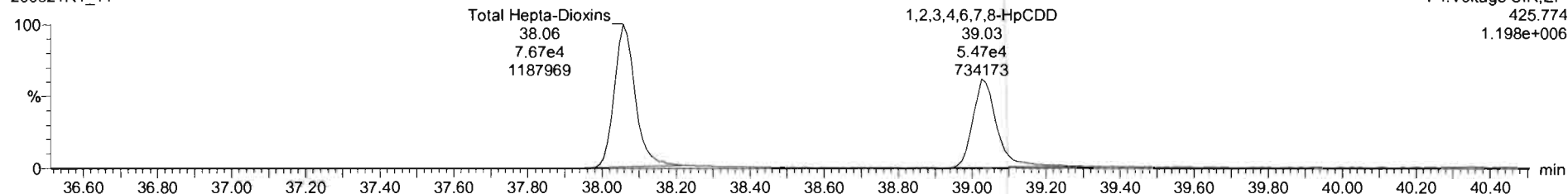
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

1,2,3,4,6,7,8-HpCDD

200821R1\_11

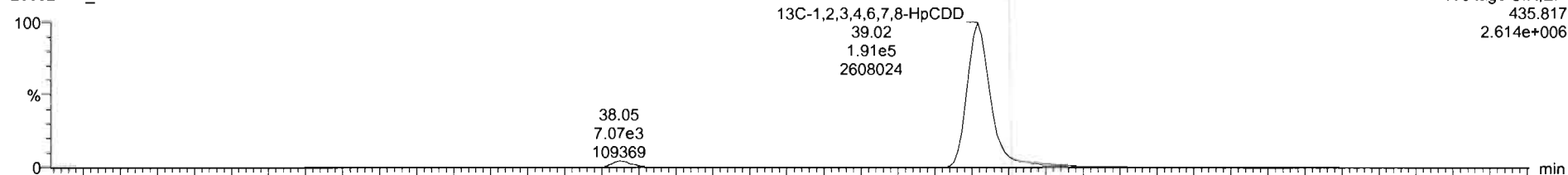


200821R1\_11

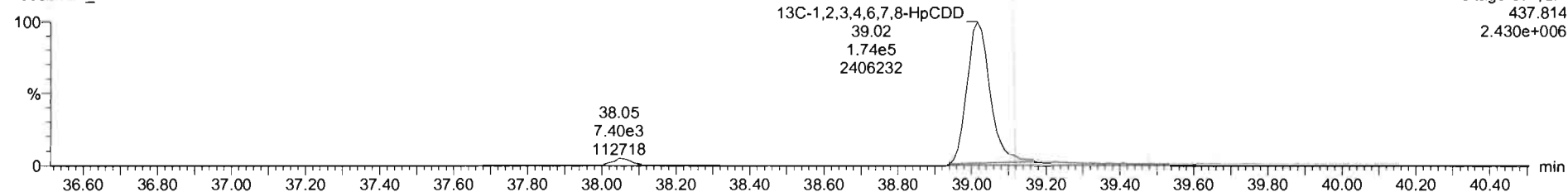


13C-1,2,3,4,6,7,8-HpCDD

200821R1\_11



200821R1\_11



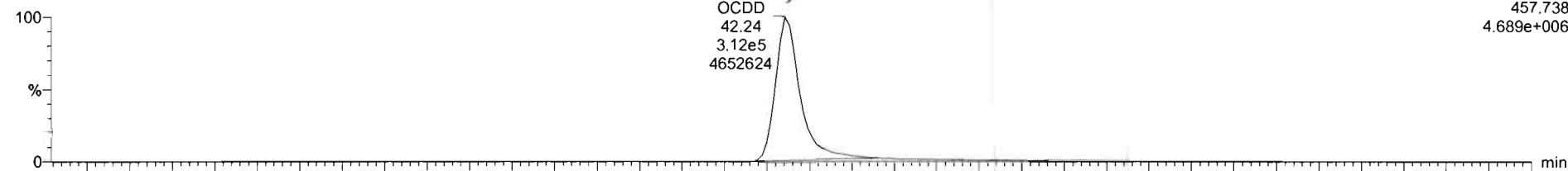
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

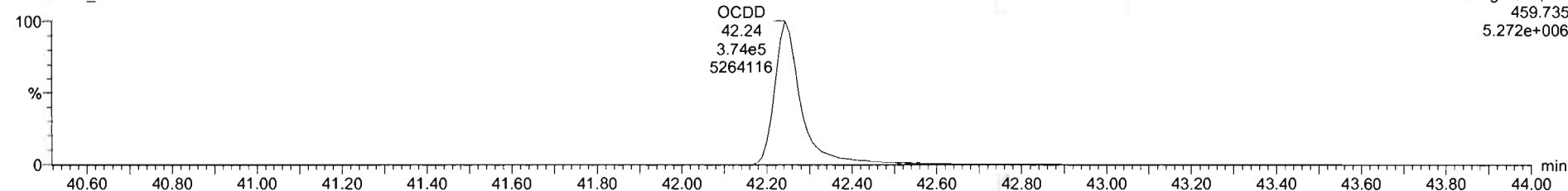
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**OCDD**

200821R1\_11

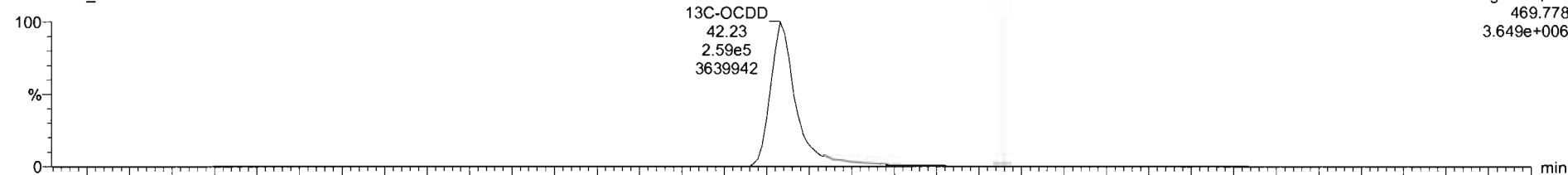


200821R1\_11

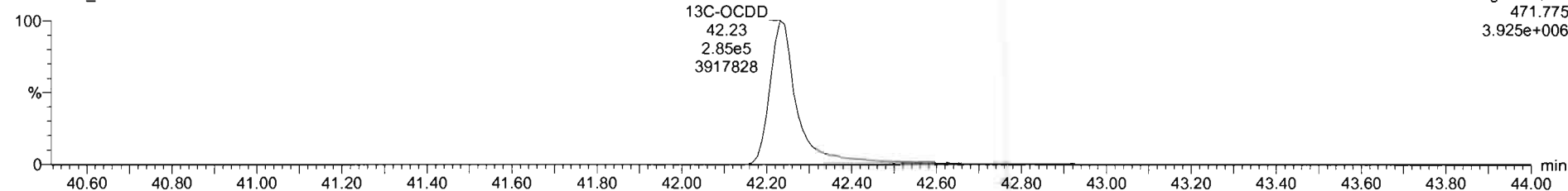


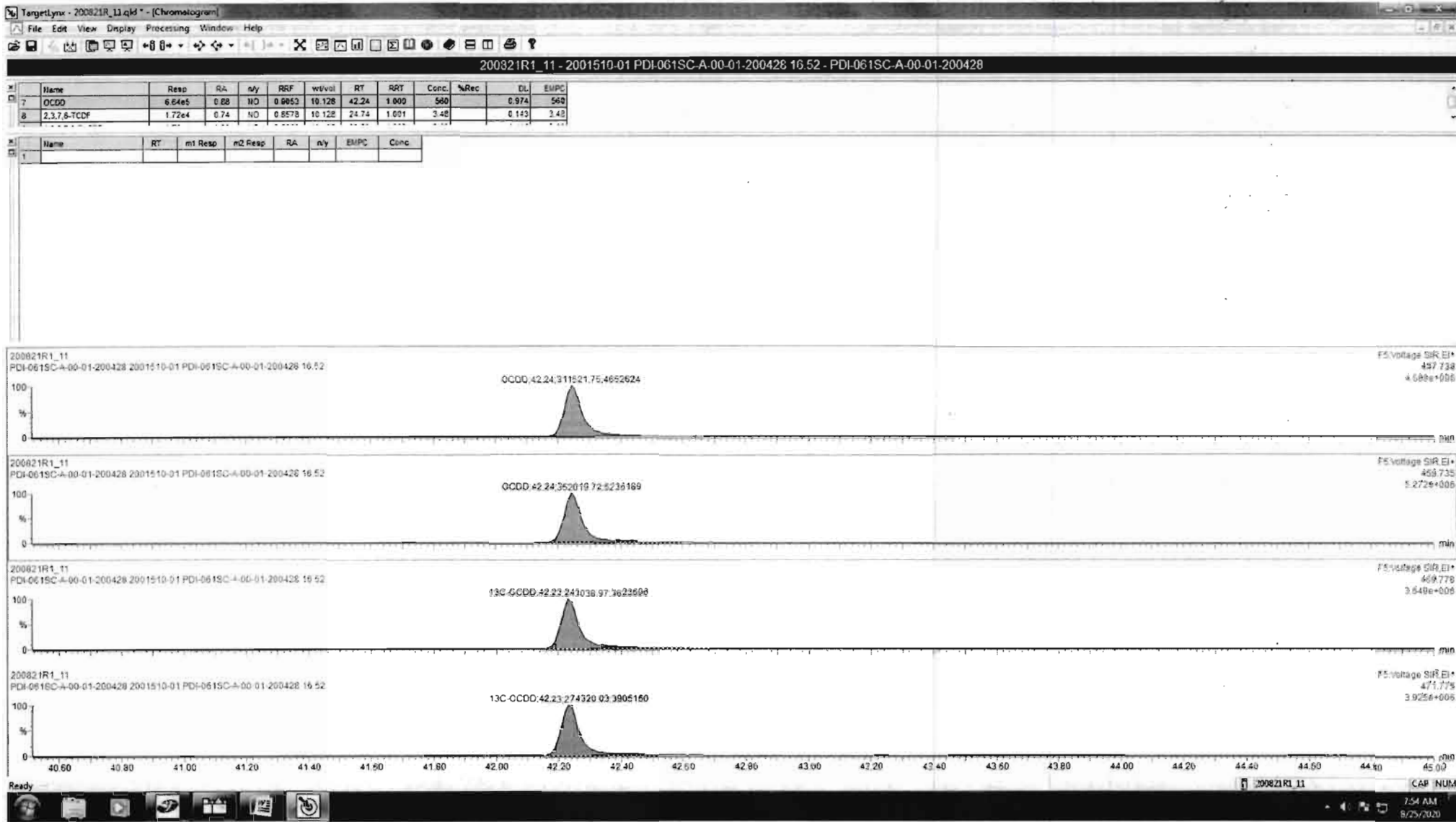
**13C-OCDD**

200821R1\_11



200821R1\_11





Dataset: Untitled

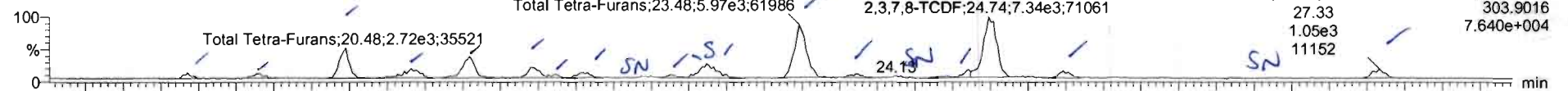
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

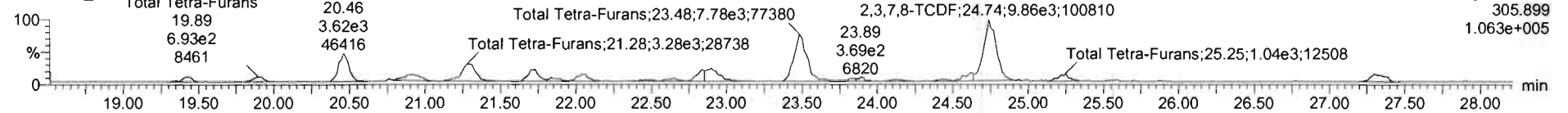
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**2,3,7,8-TCDF**

200821R1\_11

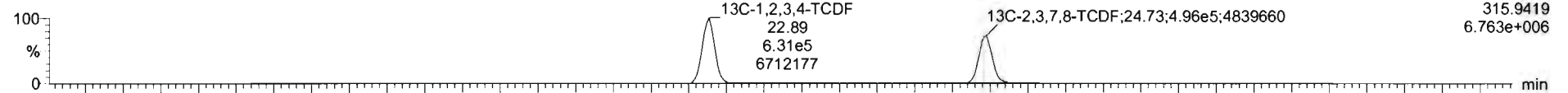


200821R1\_11

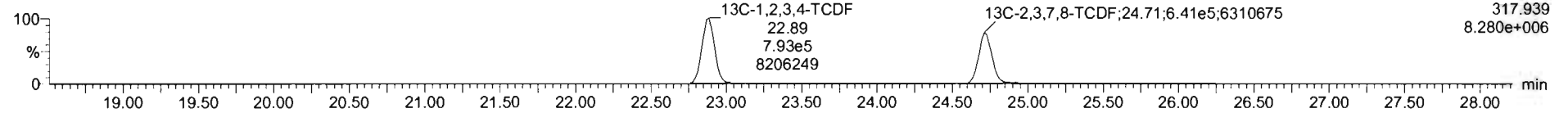


**13C-2,3,7,8-TCDF**

200821R1\_11

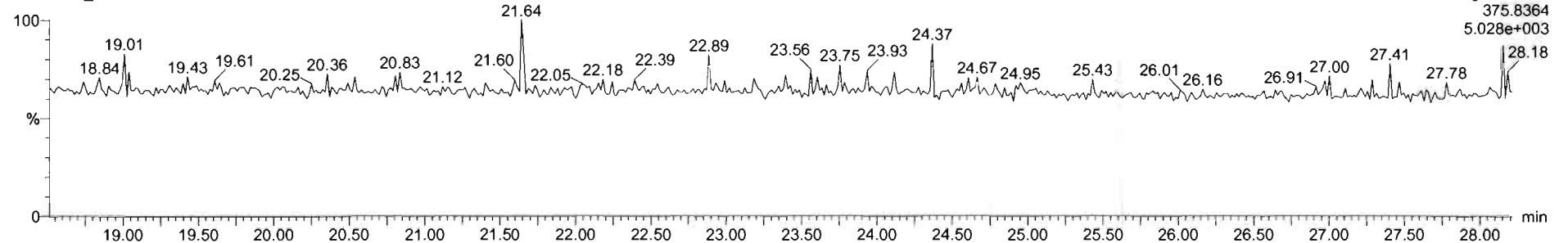


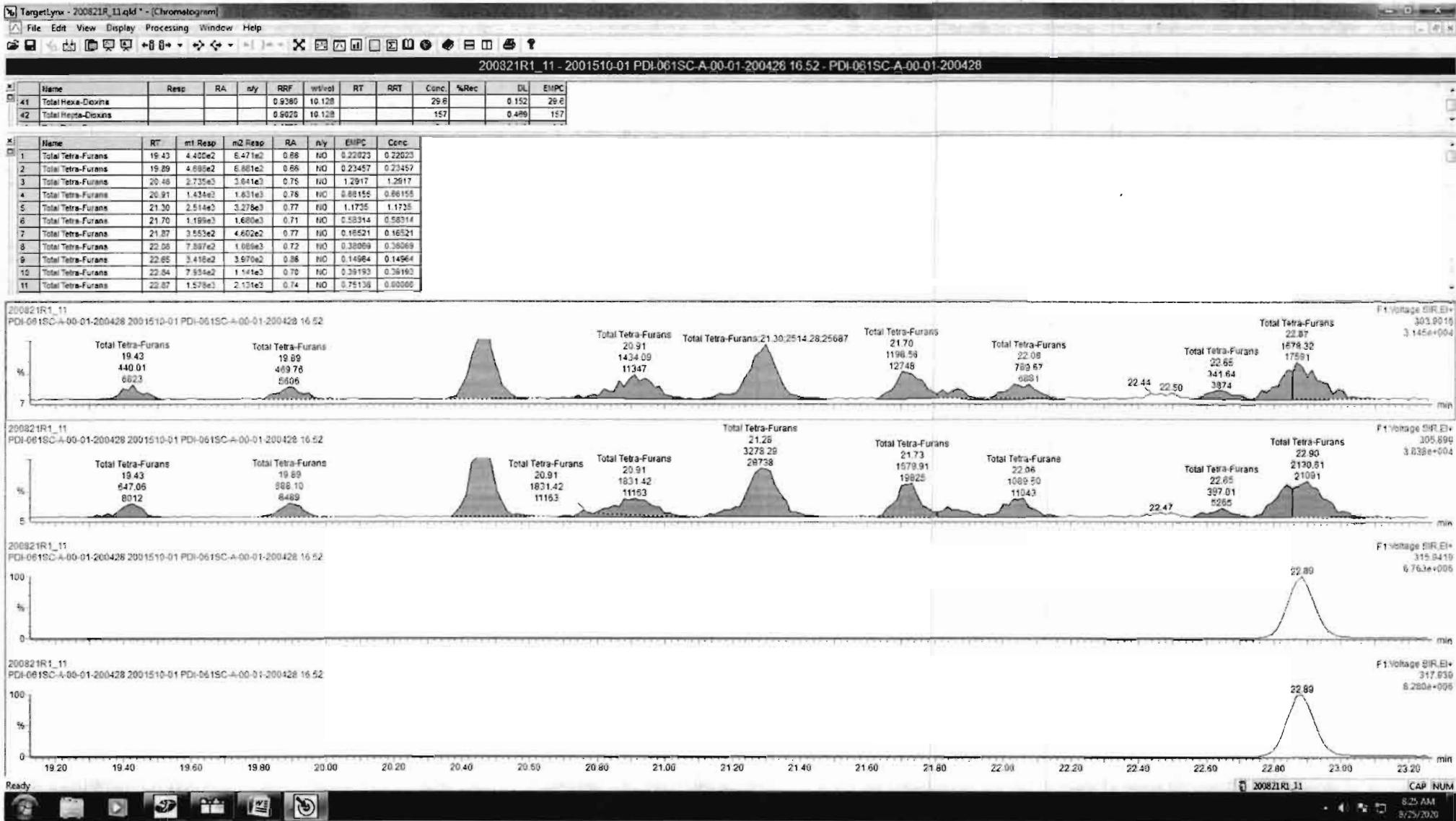
200821R1\_11

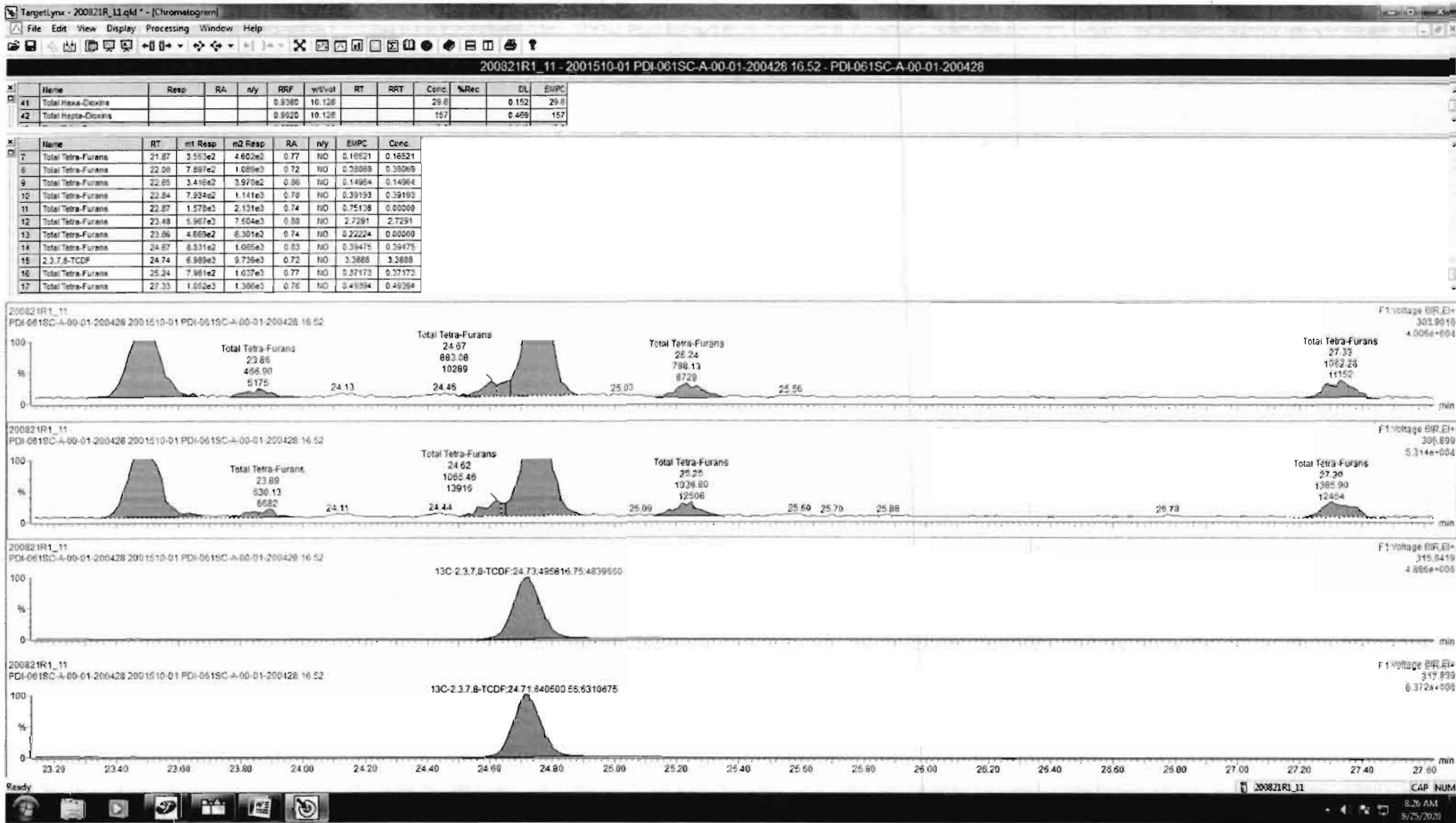


**DPE1**

200821R1\_11









Dataset: Untitled

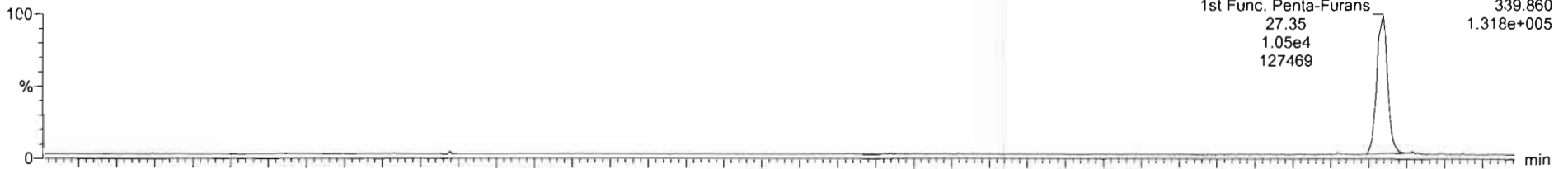
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

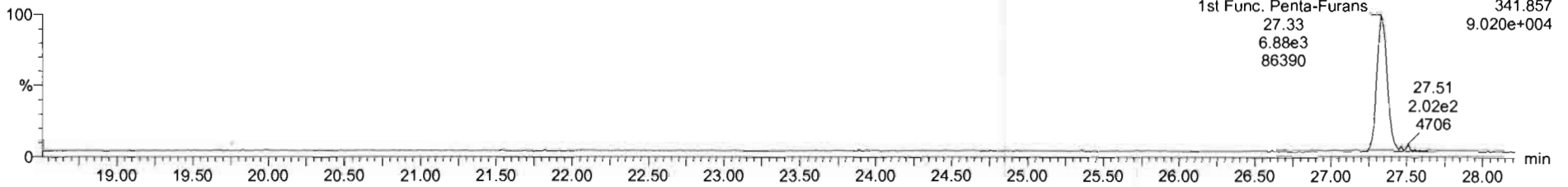
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

1st Func. Penta-Furans

200821R1\_11

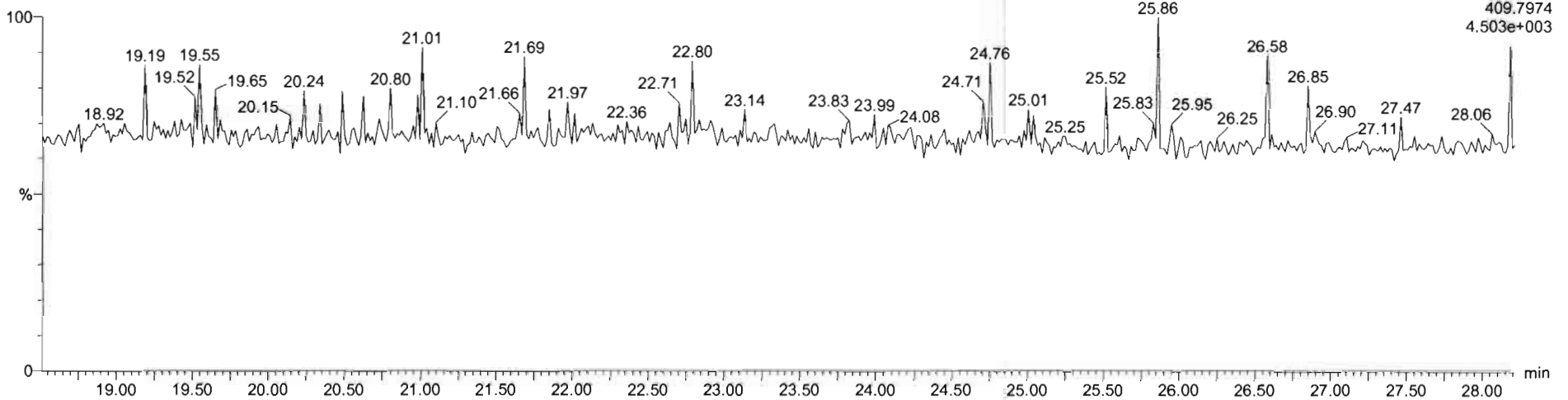


200821R1\_11



DPE6

200821R1\_11



Dataset: Untitled

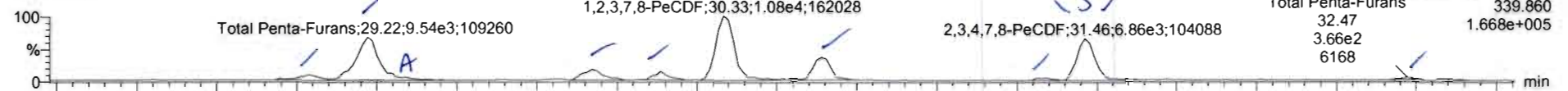
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

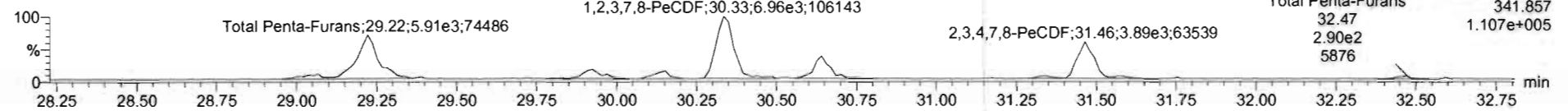
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**1,2,3,7,8-PeCDF**

200821R1\_11

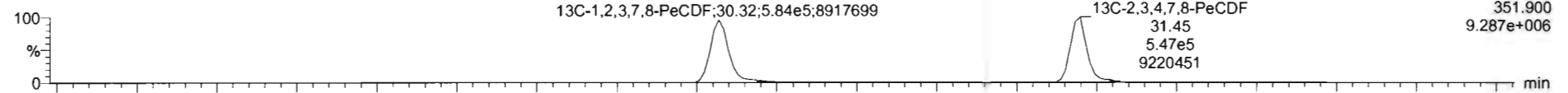


200821R1\_11

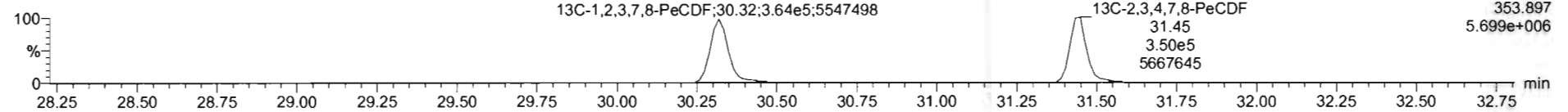


**13C-1,2,3,7,8-PeCDF**

200821R1\_11

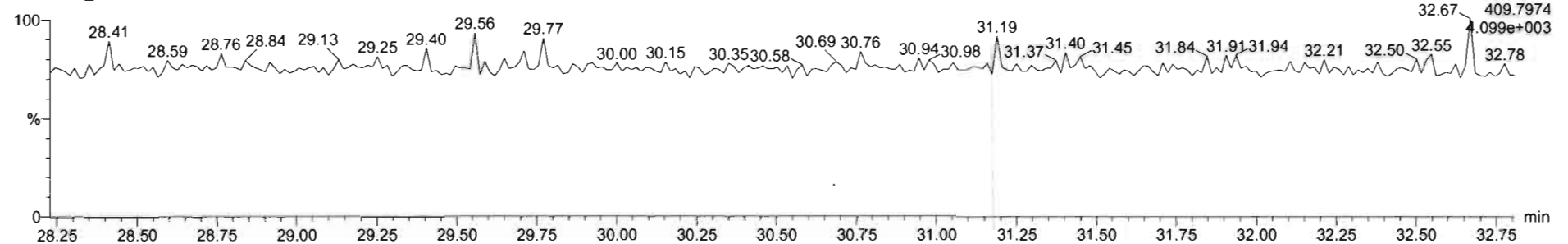


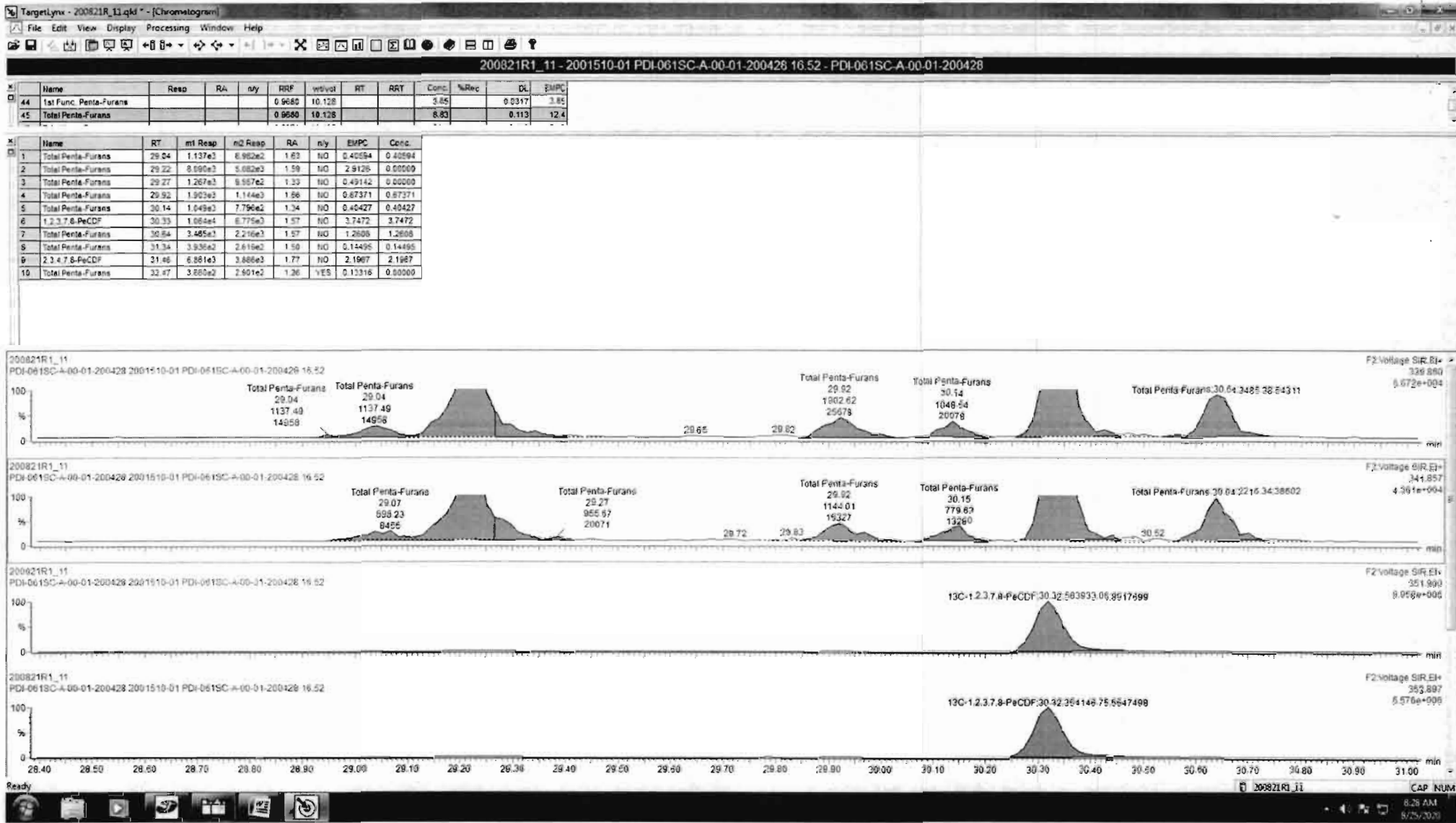
200821R1\_11

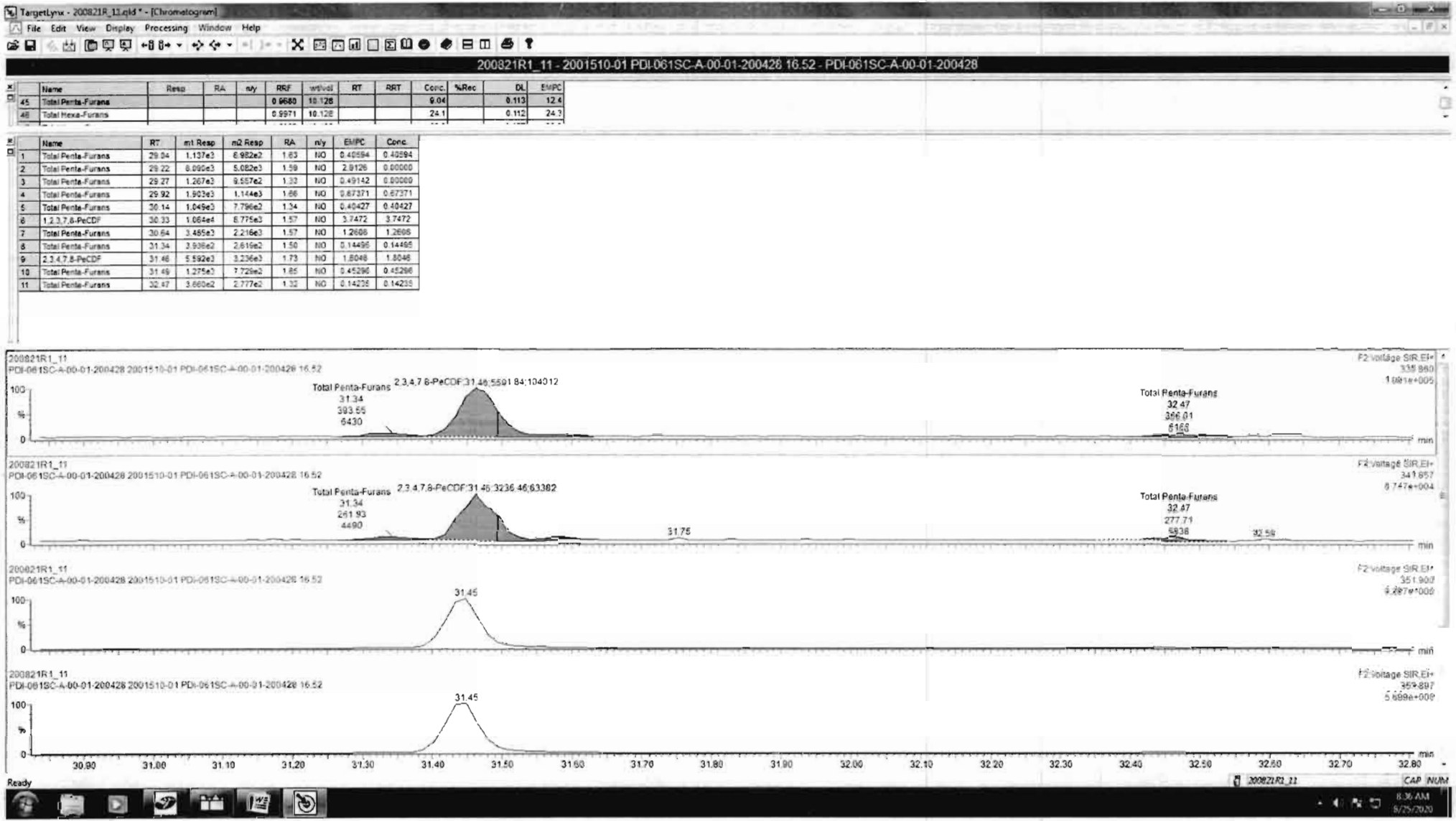


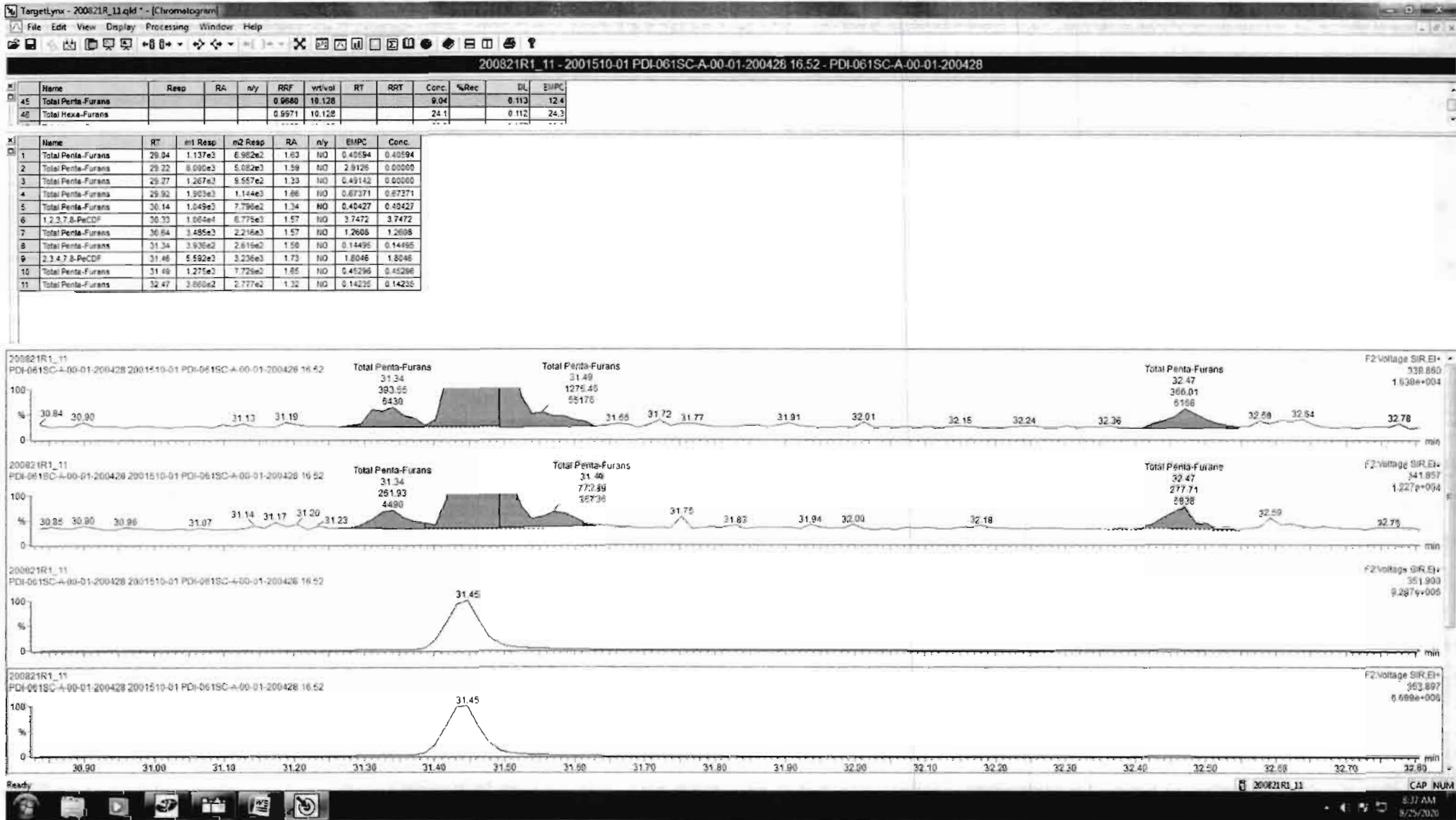
**DPE2**

200821R1\_11









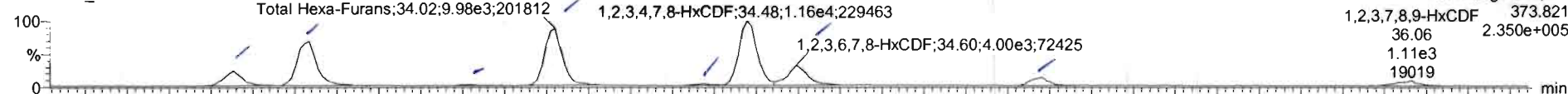
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

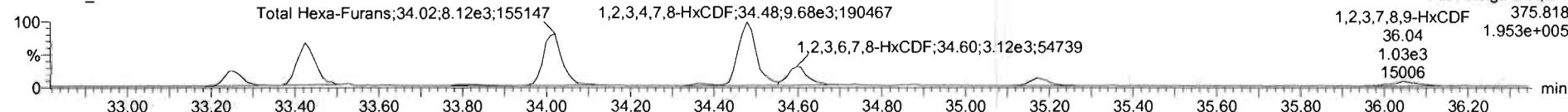
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**1,2,3,4,7,8-HxCDF**

200821R1\_11

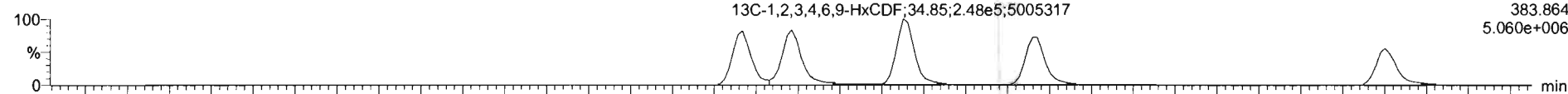


200821R1\_11

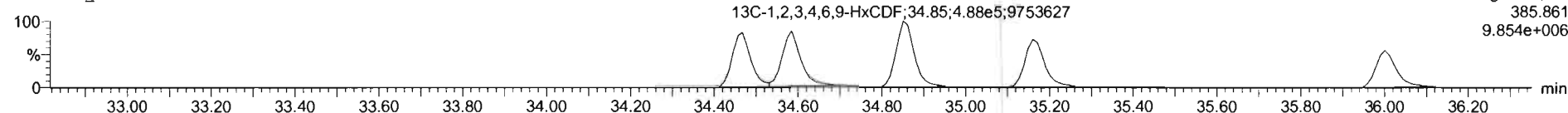


**13C-1,2,3,4,7,8-HxCDF**

200821R1\_11

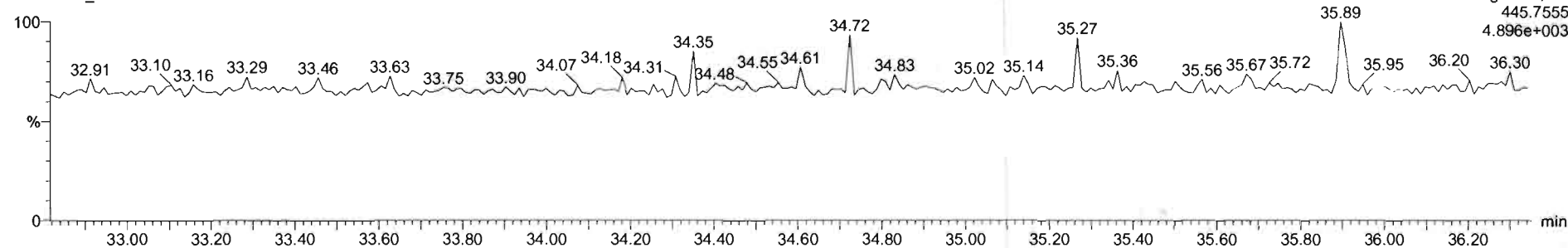


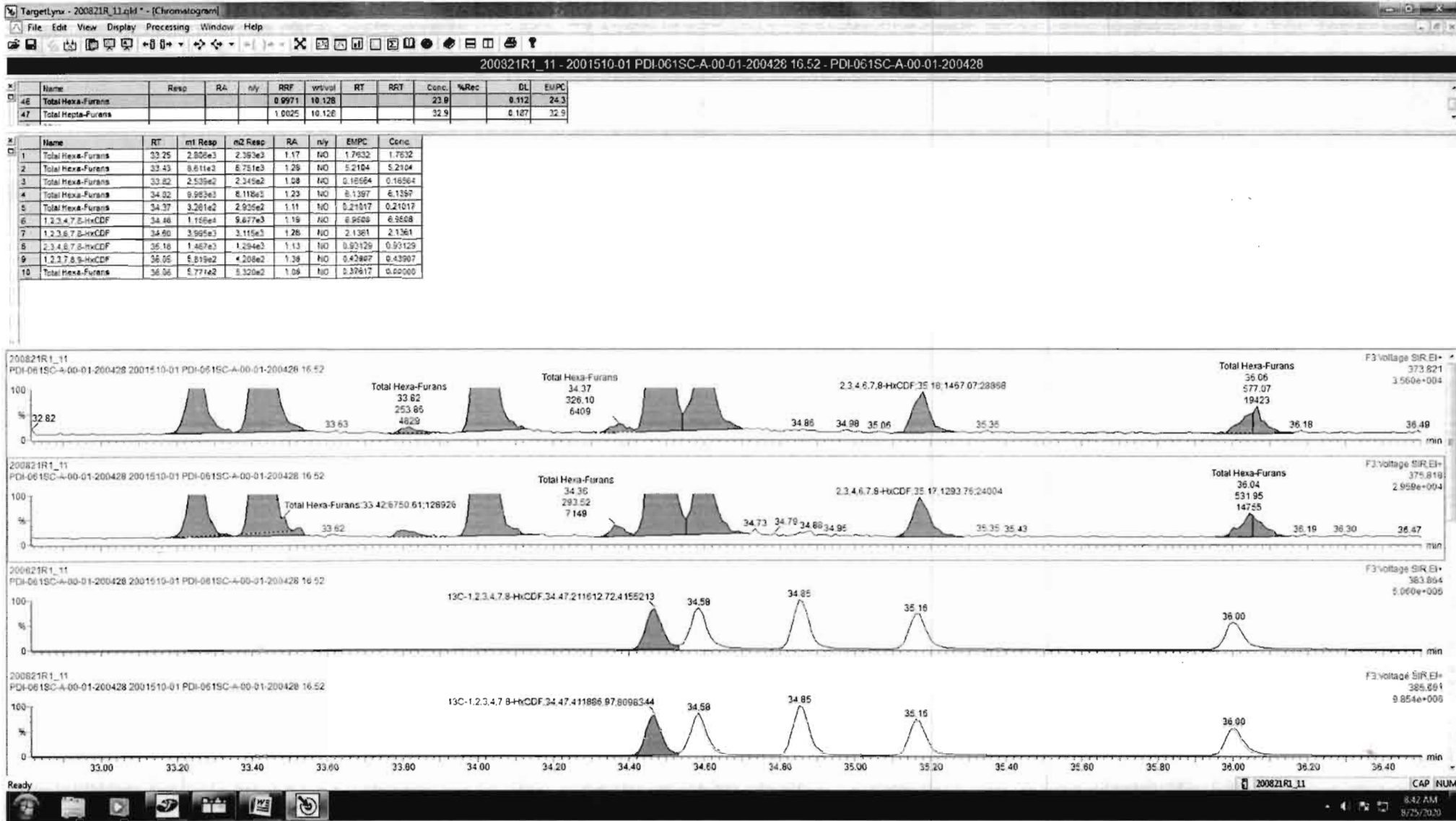
200821R1\_11



**DPE3**

200821R1\_11





Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

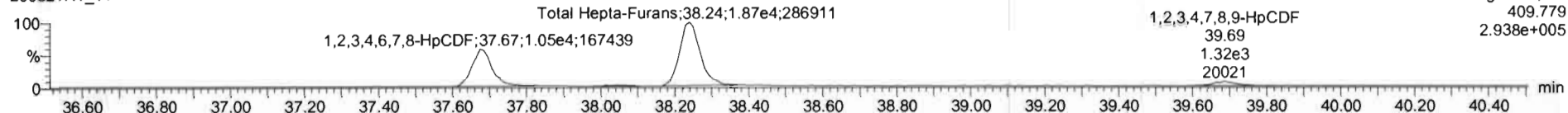
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**1,2,3,4,6,7,8-HpCDF**

200821R1\_11

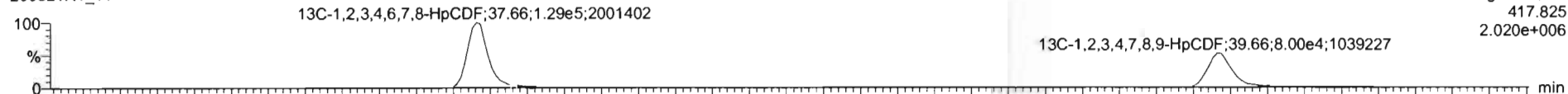


200821R1\_11

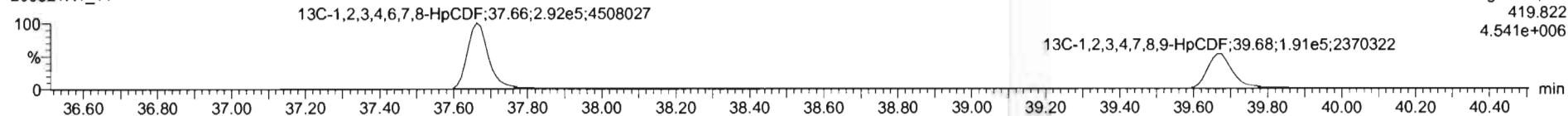


**13C-1,2,3,4,6,7,8-HpCDF**

200821R1\_11

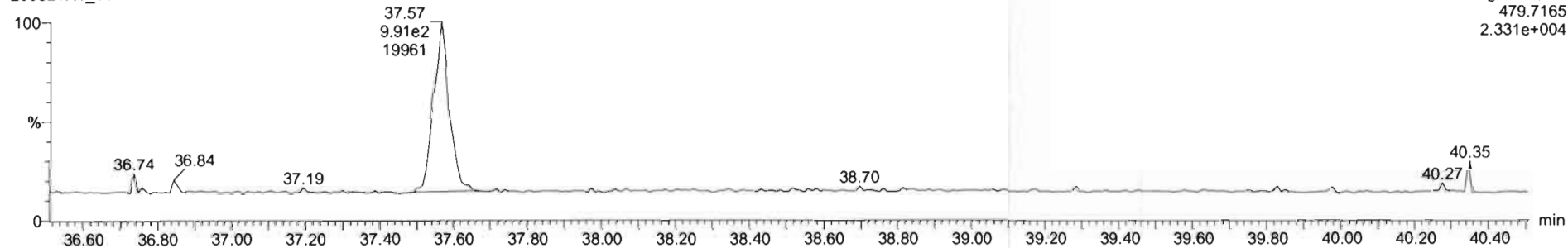


200821R1\_11

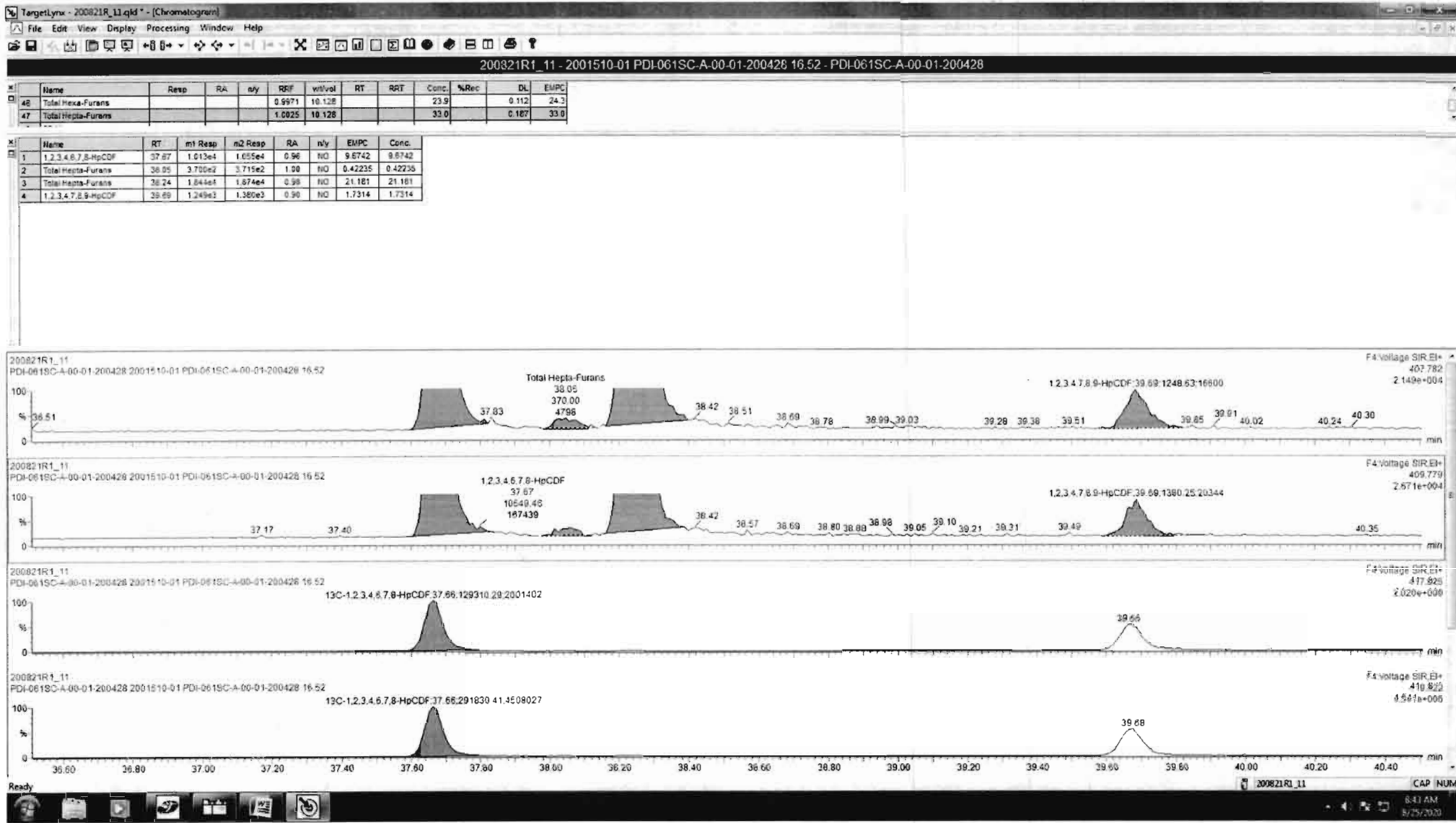


**DPE4**

200821R1\_11



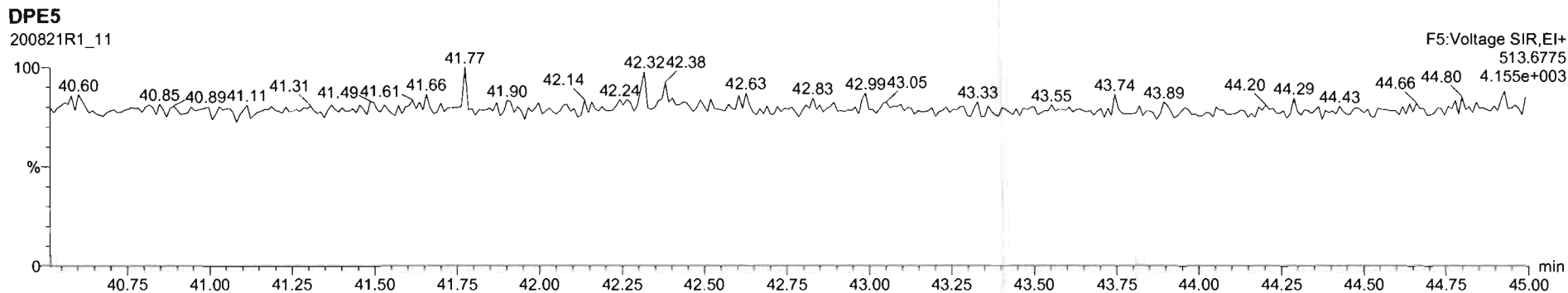
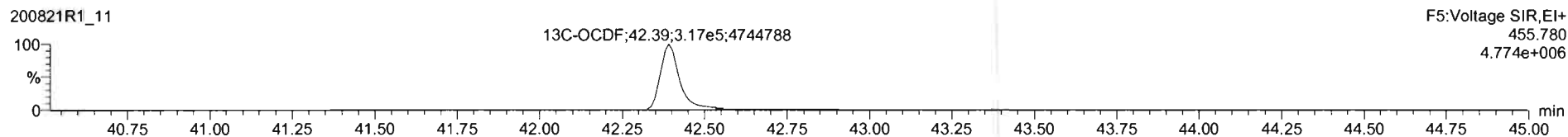
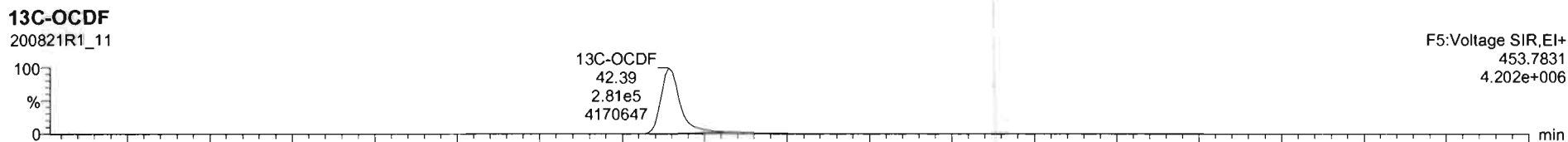
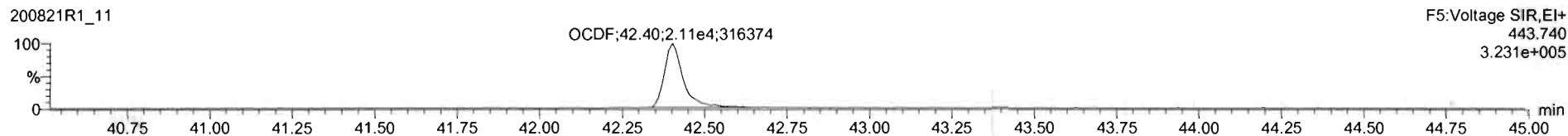
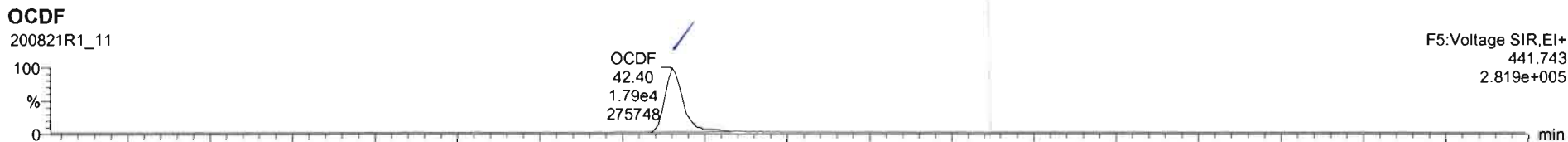




Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

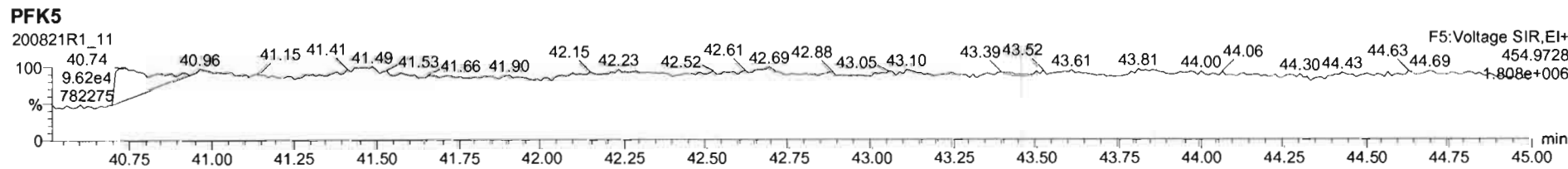
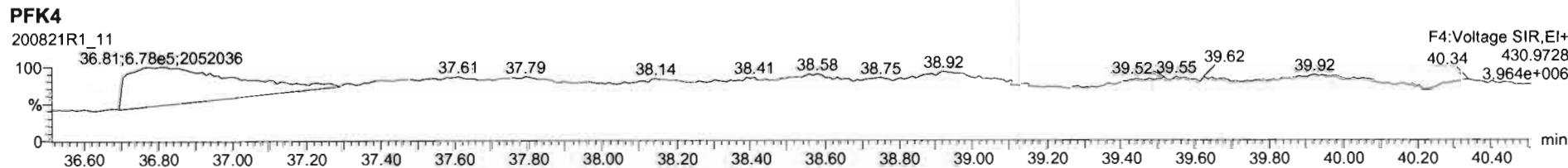
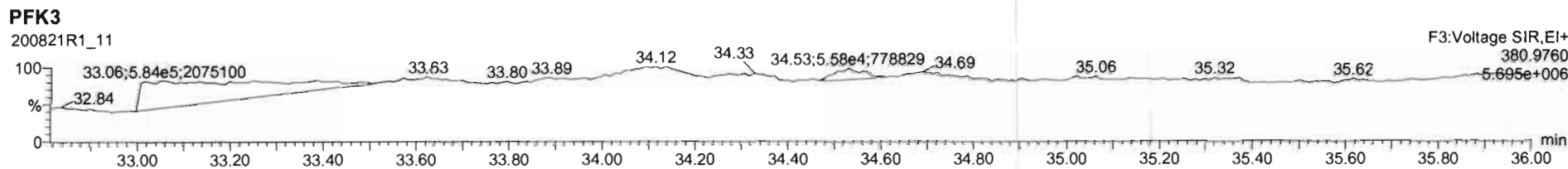
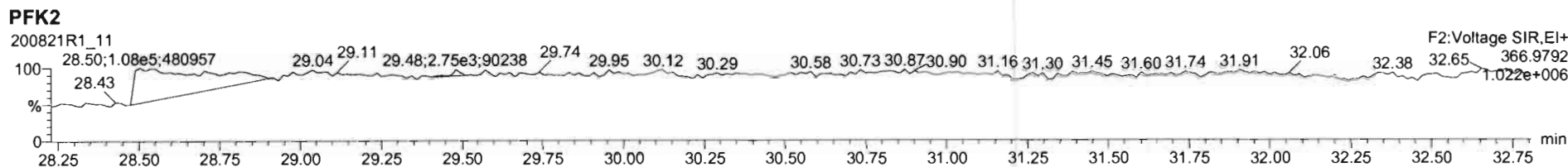
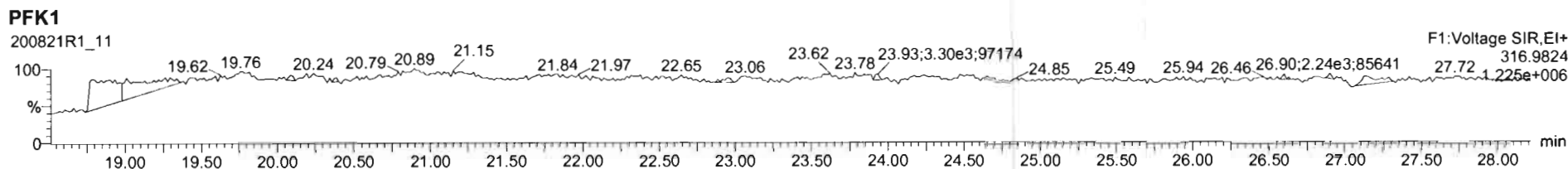
Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428



Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_11, Date: 21-Aug-2020, Time: 19:41:36, ID: 2001510-01 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time  
Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

*GRB 08/25/2020*

*C7 08/25/2020*

Method: Untitled 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2.00e3	0.48	YES	0.974	10.171	25.925	25.95	1.001	1.002	0.44560		0.134	0.333
2	2 1,2,3,7,8-PeCDD	1.67e3	0.54	NO	0.917	10.171	31.790	31.78	1.001	1.000	0.58464		0.148	0.585
3	3 1,2,3,4,7,8-HxCDD	1.91e3	1.17	NO	1.04	10.171	35.341	35.35	1.000	1.001	0.88183		0.160	0.882
4	4 1,2,3,6,7,8-HxCDD	8.08e3	1.22	NO	0.938	10.171	35.426	35.44	1.000	1.000	3.1934		0.157	3.19
5	5 1,2,3,7,8,9-HxCDD	4.81e3	1.15	NO	0.964	10.171	35.693	35.69	1.000	1.000	2.1411		0.181	2.14
6	6 1,2,3,4,6,7,8-HpCDD	1.79e5	1.01	NO	0.902	10.171	39.027	39.04	1.000	1.001	112.10		0.570	112
7	7 OCDD	7.99e5	0.87	NO	0.905	10.171	42.232	42.23	1.000	1.000	727.34		0.950	727
8	8 2,3,7,8-TCDF	1.85e4	0.75	NO	0.858	10.171	24.751	24.76	1.001	1.001	3.8712	OK	0.170	3.87
9	9 1,2,3,7,8-PeCDF	2.03e4	1.59	NO	0.968	10.171	30.340	30.33	1.001	1.001	4.4946		0.154	4.49
10	10 2,3,4,7,8-PeCDF	9.58e3	1.65	NO	1.08	10.171	31.433	31.46	1.000	1.001	2.0189		0.138	2.02
11	11 1,2,3,4,7,8-HxCDF	2.56e4	1.16	NO	0.968	10.171	34.457	34.48	1.000	1.001	8.9104		0.110	8.91
12	12 1,2,3,6,7,8-HxCDF	7.85e3	1.13	NO	1.00	10.171	34.584	34.60	1.000	1.001	2.4803		0.109	2.48
13	13 2,3,4,6,7,8-HxCDF	2.85e3	1.22	NO	0.997	10.171	35.195	35.17	1.001	1.000	1.0468		0.120	1.05
14	14 1,2,3,7,8,9-HxCDF	2.08e3	1.19	NO	0.961	10.171	36.001	36.05	1.000	1.001	0.94349		0.180	0.943
15	15 1,2,3,4,6,7,8-HpCDF	2.20e4	1.01	NO	1.00	10.171	37.701	37.67	1.001	1.000	10.974		0.185	11.0
16	16 1,2,3,4,7,8,9-HpCDF	4.05e3	1.00	NO	1.11	10.171	39.665	39.68	1.000	1.000	2.8527		0.333	2.85
17	17 OCDF	5.23e4	0.90	NO	0.896	10.171	42.381	42.39	1.000	1.000	42.986		0.386	43.0
18	18 13C-2,3,7,8-TCDD	9.05e5	0.75	NO	1.10	10.171	25.835	25.89	1.032	1.034	176.89	90.0	0.351	
19	19 13C-1,2,3,7,8-PeCDD	6.12e5	0.62	NO	0.757	10.171	31.497	31.77	1.258	1.269	174.37	88.7	0.478	
20	20 13C-1,2,3,4,7,8-HxCDD	4.09e5	1.28	NO	0.647	10.171	35.332	35.33	1.014	1.014	161.37	82.1	0.326	
21	21 13C-1,2,3,6,7,8-HxCDD	5.30e5	1.26	NO	0.805	10.171	35.433	35.43	1.017	1.016	168.31	85.6	0.262	
22	22 13C-1,2,3,7,8,9-HxCDD	4.58e5	1.27	NO	0.726	10.171	35.705	35.68	1.025	1.024	161.21	82.0	0.290	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.47e5	1.09	NO	0.611	10.171	39.075	39.01	1.121	1.119	145.32	73.9	0.409	
24	24 13C-OCDD	4.77e5	0.89	NO	0.513	10.171	42.274	42.23	1.213	1.212	237.83	60.5	0.440	
25	25 13C-2,3,7,8-TCDF	1.10e6	0.78	NO	0.933	10.171	24.743	24.73	0.988	0.987	161.69	82.2	0.425	
26	26 13C-1,2,3,7,8-PeCDF	9.18e5	1.60	NO	0.696	10.171	30.302	30.32	1.210	1.211	181.30	92.2	0.530	
27	27 13C-2,3,4,7,8-PeCDF	8.66e5	1.59	NO	0.669	10.171	31.426	31.43	1.255	1.255	178.15	90.6	0.551	
28	28 13C-1,2,3,4,7,8-HxCDF	5.84e5	0.51	NO	0.886	10.171	34.471	34.46	0.989	0.989	168.35	85.6	0.503	
29	29 13C-1,2,3,6,7,8-HxCDF	6.21e5	0.49	NO	0.955	10.171	34.590	34.57	0.993	0.992	166.06	84.4	0.467	
30	30 13C-2,3,4,6,7,8-HxCDF	5.37e5	0.52	NO	0.882	10.171	35.161	35.16	1.009	1.009	155.42	79.0	0.505	
31	31 13C-1,2,3,7,8,9-HxCDF	4.51e5	0.52	NO	0.737	10.171	36.015	36.00	1.033	1.033	156.56	79.6	0.605	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	3.94e5	0.42	NO	0.651	10.171	37.702	37.66	1.082	1.081	154.62	78.6	0.470	
33	13C-1,2,3,4,7,8,9-HpCDF	2.52e5	0.43	NO	0.459	10.171	39.727	39.67	1.140	1.138	139.98	71.2	0.666	
34	13C-OCDF	5.35e5	0.92	NO	0.609	10.171	42.435	42.38	1.218	1.216	224.49	57.1	0.424	
35	37Cl-2,3,7,8-TCDD	3.25e5			1.14	10.171	25.732	25.92	1.028	1.035	61.728	78.5	0.0642	
36	13C-1,2,3,4-TCDD	9.11e5	0.78	NO	1.00	10.171	25.070	25.04	1.000	1.000	196.64	100	0.388	
37	13C-1,2,3,4-TCDF	1.43e6	0.79	NO	1.00	10.171	23.080	22.89	1.000	1.000	196.64	100	0.396	
38	13C-1,2,3,4,6,9-HxCDF	7.70e5	0.51	NO	1.00	10.171	34.740	34.85	1.000	1.000	196.64	100	0.446	
39	Total Tetra-Dioxins				0.974	10.171	24.620		0.000		3.5687		0.134	3.90
40	Total Penta-Dioxins				0.917	10.171	29.960		0.000		5.6268		0.148	6.00
41	Total Hexa-Dioxins				0.938	10.171	33.635		0.000		45.020		0.172	45.0
42	Total Hepta-Dioxins				0.902	10.171	37.640		0.000		308.35		0.570	308
43	Total Tetra-Furans				0.858	10.171	23.610		0.000		15.634		0.170	16.3
44	1st Func. Penta-Furans				0.968	10.171	27.230		0.000		4.1763		0.0306	4.18
45	Total Penta-Furans				0.968	10.171	29.275		0.000		10.241		0.153	14.1
46	Total Hexa-Furans				0.997	10.171	33.555		0.000		29.428		0.125	29.6
47	Total Hepta-Furans				1.00	10.171	37.835		0.000		45.717		0.256	45.7

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time  
 Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

Method: Untitled 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.33	1.560e4	2.104e4	1.436e3	1.919e3	0.75	NO	3.355e3	0.74868	0.74868	0.134
2	Total Tetra-Dioxins	21.72	8.135e3	9.211e3	5.953e2	7.909e2	0.75	NO	1.386e3	0.30935	0.30935	0.134
3	Total Tetra-Dioxins	22.20	5.064e3	4.873e3	2.756e2	4.207e2	0.66	NO	6.964e2	0.15540	0.15540	0.134
4	Total Tetra-Dioxins	23.14	3.507e3	5.715e3	4.009e2	4.833e2	0.83	NO	8.842e2	0.19732	0.19732	0.134
5	Total Tetra-Dioxins	23.44	3.338e3	5.508e3	4.416e2	6.186e2	0.71	NO	1.060e3	0.23659	0.23659	0.134
6	Total Tetra-Dioxins	23.68	5.005e3	5.816e3	4.969e2	5.884e2	0.84	NO	1.085e3	0.24222	0.24222	0.134
7	Total Tetra-Dioxins	25.59	3.518e4	4.639e4	3.313e3	4.211e3	0.79	NO	7.524e3	1.6791	1.6791	0.134
8	2,3,7,8-TCDD	25.95	7.081e3	1.707e4	6.488e2	1.349e3	0.48	YES	1.998e3	0.00000	0.33285	0.134

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.31	1.936e4	3.081e4	1.775e3	2.988e3	0.59	NO	4.763e3	1.6698	1.6698	0.148
2	Total Penta-Dioxins	29.86	1.279e4	1.567e4	7.727e2	1.108e3	0.70	NO	1.881e3	0.65935	0.65935	0.148
3	Total Penta-Dioxins	30.41	8.951e3	1.821e4	5.215e2	9.697e2	0.54	NO	1.491e3	0.52283	0.52283	0.148
4	Total Penta-Dioxins	30.61	1.311e4	1.591e4	6.452e2	8.914e2	0.72	NO	1.537e3	0.53875	0.53875	0.148
5	Total Penta-Dioxins	30.72	5.370e3	1.569e4	4.130e2	8.958e2	0.46	YES	0.000e0	0.00000	0.37463	0.148
6	Total Penta-Dioxins	30.96	1.212e4	1.526e4	8.568e2	1.460e3	0.59	NO	2.316e3	0.81211	0.81211	0.148
7	Total Penta-Dioxins	31.33	4.733e3	9.070e3	2.960e2	5.083e2	0.58	NO	8.043e2	0.28199	0.28199	0.148
8	1,2,3,7,8-PeCDD	31.78	1.118e4	1.664e4	5.831e2	1.084e3	0.54	NO	1.668e3	0.58464	0.58464	0.148
9	Total Penta-Dioxins	31.86	3.684e3	1.074e4	2.882e2	4.911e2	0.59	NO	7.793e2	0.27323	0.27323	0.148
10	Total Penta-Dioxins	32.20	4.205e3	8.298e3	3.154e2	4.951e2	0.64	NO	8.105e2	0.28417	0.28417	0.148

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.86	3.928e5	3.461e5	2.087e4	1.723e4	1.21	NO	3.810e4	17.150	17.150	0.172
2	Total Hexa-Dioxins	34.44	5.101e4	4.789e4	3.223e3	2.730e3	1.18	NO	5.953e3	2.6796	2.6796	0.172
3	Total Hexa-Dioxins	34.68	2.656e5	2.101e5	1.813e4	1.483e4	1.22	NO	3.296e4	14.837	14.837	0.172
4	Total Hexa-Dioxins	34.79	5.401e4	5.268e4	3.569e3	2.888e3	1.24	NO	6.457e3	2.9064	2.9064	0.172
5	1,2,3,4,7,8-HxCDD	35.35	1.940e4	1.751e4	1.030e3	8.795e2	1.17	NO	1.909e3	0.88183	0.88183	0.160
6	1,2,3,6,7,8-HxCDD	35.44	7.804e4	5.802e4	4.445e3	3.632e3	1.22	NO	8.077e3	3.1934	3.1934	0.157
7	Total Hexa-Dioxins	35.61	2.519e4	2.958e4	1.481e3	1.253e3	1.18	NO	2.734e3	1.2308	1.2308	0.172
8	1,2,3,7,8,9-HxCDD	35.69	3.826e4	3.725e4	2.572e3	2.236e3	1.15	NO	4.808e3	2.1411	2.1411	0.181

Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.06	2.452e6	2.332e6	1.581e5	1.545e5	1.02	NO	3.126e5	196.25	196.25	0.570
2	1,2,3,4,6,7,8-HpCDD	39.04	1.162e6	1.158e6	8.970e4	8.889e4	1.01	NO	1.786e5	112.10	112.10	0.570

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.41	7.545e3	9.029e3	5.370e2	6.407e2	0.84	NO	1.178e3	0.24605	0.24605	0.170
2	Total Tetra-Furans	19.91	8.643e3	1.015e4	5.667e2	7.436e2	0.76	NO	1.310e3	0.27376	0.27376	0.170
3	Total Tetra-Furans	20.48	3.894e4	4.258e4	2.996e3	3.733e3	0.80	NO	6.729e3	1.4059	1.4059	0.170
4	Total Tetra-Furans	20.89	1.494e4	1.853e4	1.584e3	2.379e3	0.67	NO	3.963e3	0.82795	0.82795	0.170
5	Total Tetra-Furans	21.30	2.363e4	3.947e4	2.722e3	3.913e3	0.70	NO	6.635e3	1.3863	1.3863	0.170
6	Total Tetra-Furans	21.72	1.702e4	2.286e4	1.467e3	2.199e3	0.67	NO	3.666e3	0.76590	0.76590	0.170
7	Total Tetra-Furans	21.88	4.724e3	8.226e3	3.227e2	4.774e2	0.68	NO	8.000e2	0.16715	0.16715	0.170
8	Total Tetra-Furans	22.05	1.043e4	1.109e4	8.784e2	1.007e3	0.87	NO	1.885e3	0.39384	0.39384	0.170
9	Total Tetra-Furans	22.48	2.768e3	3.835e3	3.284e2	4.273e2	0.77	NO	0.000e0	0.00000	0.15788	0.170
10	Total Tetra-Furans	22.65	4.432e3	5.767e3	3.964e2	5.008e2	0.79	NO	8.972e2	0.18744	0.18744	0.170
11	Total Tetra-Furans	22.86	1.993e4	2.984e4	9.459e2	1.281e3	0.74	NO	0.000e0	0.00000	0.46533	0.170
12	Total Tetra-Furans	22.90	2.218e4	2.912e4	1.949e3	2.635e3	0.74	NO	4.584e3	0.95765	0.95765	0.170
13	Total Tetra-Furans	23.50	6.283e4	8.491e4	6.527e3	8.453e3	0.77	NO	1.498e4	3.1297	3.1297	0.170
14	Total Tetra-Furans	23.86	3.738e3	6.765e3	4.080e2	5.463e2	0.75	NO	9.543e2	0.19939	0.19939	0.170
15	Total Tetra-Furans	24.44	3.470e3	3.329e3	3.266e2	3.973e2	0.82	NO	7.239e2	0.15125	0.15125	0.170
16	Total Tetra-Furans	24.64	1.302e4	1.828e4	1.295e3	1.564e3	0.83	NO	2.859e3	0.59729	0.59729	0.170
17	2,3,7,8-TCDF	24.76	8.521e4	1.094e5	7.919e3	1.061e4	0.75	NO	1.853e4	3.8712	3.8712	0.170
18	Total Tetra-Furans	25.25	9.444e3	1.722e4	9.933e2	1.375e3	0.72	NO	2.368e3	0.49478	0.49478	0.170
19	Total Tetra-Furans	27.33	1.308e4	1.402e4	1.283e3	1.484e3	0.86	NO	2.767e3	0.57802	0.57802	0.170

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1st Func. Penta-Furans	27.33	1.431e5	8.952e4	1.129e4	7.040e3	1.60	NO	1.833e4	4.1763	4.1763	0.0306



Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_10.qld

Last Altered: Tuesday, August 25, 2020 7:50:59 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 7:51:23 AM Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	29.04	1.582e4	9.267e3	1.322e3	8.194e2	1.61	NO	2.141e3	0.48773	0.48773	0.153
2	Total Penta-Furans	29.22	1.144e5	7.532e4	9.027e3	5.906e3	1.53	NO	0.000e0	0.00000	3.4015	0.153
3	Total Penta-Furans	29.27	3.481e4	2.278e4	1.273e3	8.899e2	1.43	NO	0.000e0	0.00000	0.49257	0.153
4	Total Penta-Furans	29.92	2.436e4	1.553e4	1.857e3	1.149e3	1.62	NO	3.006e3	0.68466	0.68466	0.153
5	Total Penta-Furans	30.14	2.409e4	1.614e4	1.311e3	9.136e2	1.44	NO	2.225e3	0.50679	0.50679	0.153
6	1,2,3,7,8-PeCDF	30.33	1.895e5	1.231e5	1.248e4	7.827e3	1.59	NO	2.030e4	4.4946	4.4946	0.154
7	Total Penta-Furans	30.64	5.751e4	4.179e4	3.876e3	2.396e3	1.62	NO	6.272e3	1.4286	1.4286	0.153
8	Total Penta-Furans	31.33	7.500e3	6.763e3	4.222e2	3.159e2	1.34	NO	7.381e2	0.16813	0.16813	0.153
9	2,3,4,7,8-PeCDF	31.46	1.078e5	6.076e4	5.969e3	3.607e3	1.65	NO	9.576e3	2.0189	2.0189	0.138
10	Total Penta-Furans	31.49	4.959e4	3.390e4	1.236e3	7.459e2	1.66	NO	1.982e3	0.45155	0.45155	0.153

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	33.25	4.715e4	3.947e4	2.787e3	2.304e3	1.21	NO	5.091e3	1.8321	1.8321	0.125
2	Total Hexa-Furans	33.42	1.508e5	1.288e5	8.410e3	6.941e3	1.21	NO	1.535e4	5.5244	5.5244	0.125
3	Total Hexa-Furans	33.81	7.219e3	5.295e3	2.804e2	2.654e2	1.06	NO	5.458e2	0.19642	0.19642	0.125
4	Total Hexa-Furans	34.01	2.460e5	2.133e5	1.267e4	1.042e4	1.22	NO	2.309e4	8.3092	8.3092	0.125
5	Total Hexa-Furans	34.36	6.984e3	7.964e3	2.924e2	2.602e2	1.12	NO	0.000e0	0.00000	0.19888	0.125
6	1,2,3,4,7,8-HxCDF	34.48	2.616e5	2.233e5	1.375e4	1.184e4	1.16	NO	2.560e4	8.9104	8.9104	0.110
7	1,2,3,6,7,8-HxCDF	34.60	7.882e4	6.673e4	4.155e3	3.691e3	1.13	NO	7.846e3	2.4803	2.4803	0.109
8	2,3,4,6,7,8-HxCDF	35.17	3.043e4	2.440e4	1.565e3	1.283e3	1.22	NO	2.848e3	1.0468	1.0468	0.120
9	1,2,3,7,8,9-HxCDF	36.05	2.409e4	1.795e4	1.129e3	9.521e2	1.19	NO	2.082e3	0.94349	0.94349	0.180
10	Total Hexa-Furans	36.08	1.312e4	9.222e3	2.783e2	2.356e2	1.18	NO	5.138e2	0.18490	0.18490	0.125

**Hepta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	37.67	1.806e5	1.810e5	1.107e4	1.097e4	1.01	NO	2.204e4	10.974	10.974	0.185
2	Total Hepta-Furans	38.06	5.961e3	5.647e3	4.234e2	4.068e2	1.04	NO	8.303e2	0.50453	0.50453	0.256
3	Total Hepta-Furans	38.24	3.910e5	3.949e5	2.599e4	2.566e4	1.01	NO	5.165e4	31.386	31.386	0.256
4	1,2,3,4,7,8,9-HpCDF	39.68	2.869e4	2.611e4	2.025e3	2.023e3	1.00	NO	4.047e3	2.8527	2.8527	0.333

Dataset: Untitled

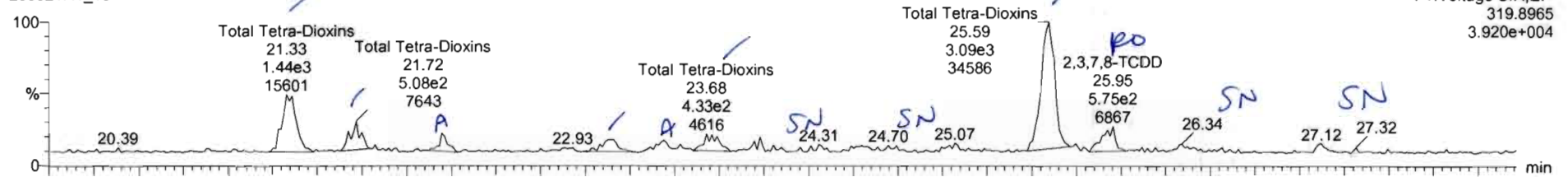
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

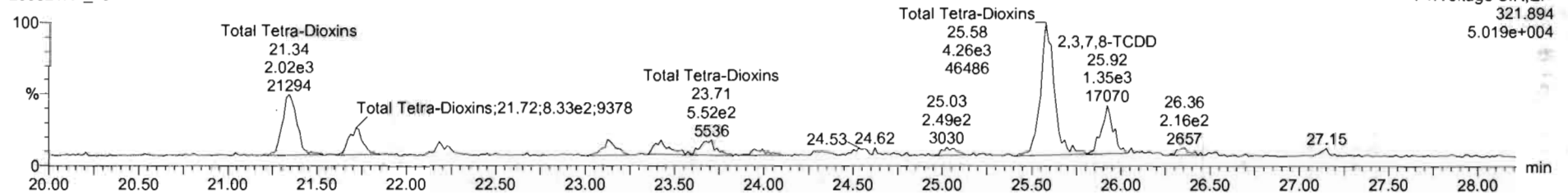
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**2,3,7,8-TCDD**

200821R1\_10

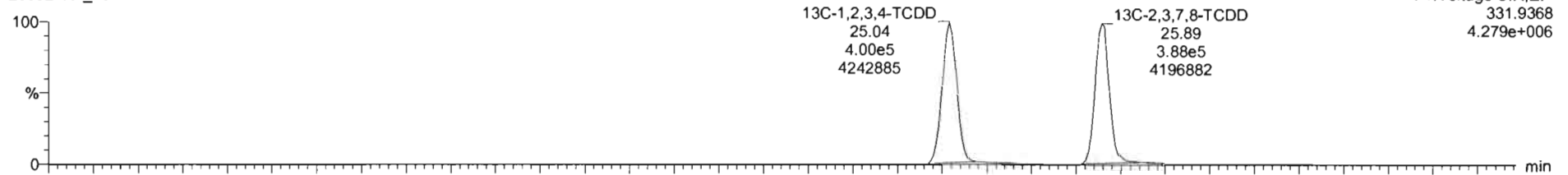


200821R1\_10

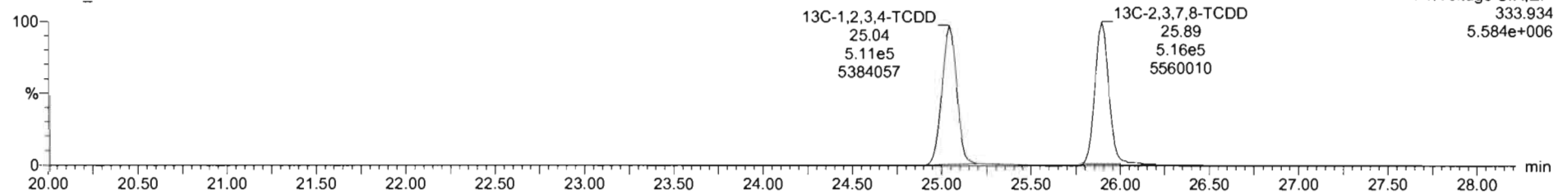


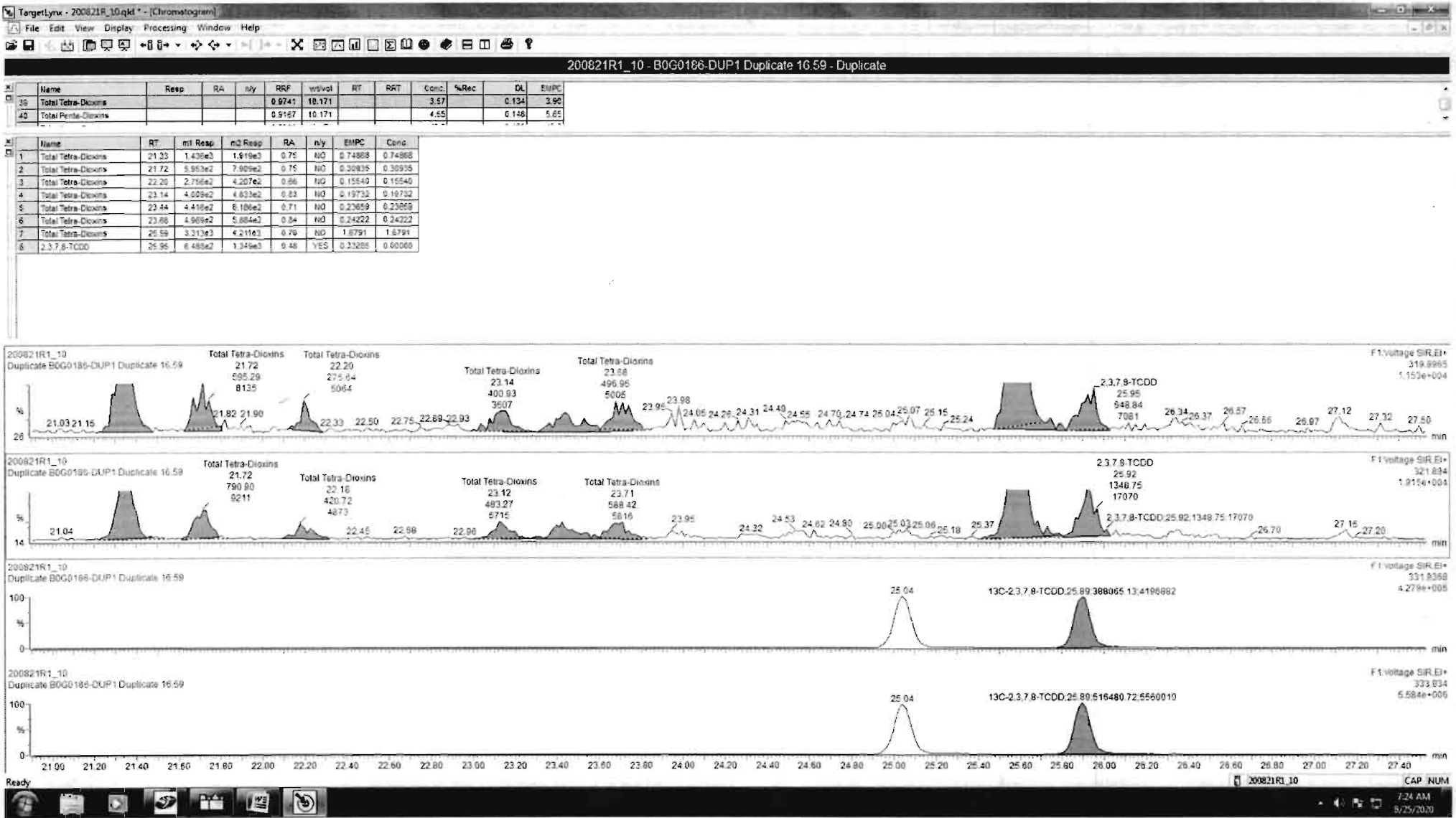
**13C-2,3,7,8-TCDD**

200821R1\_10



200821R1\_10





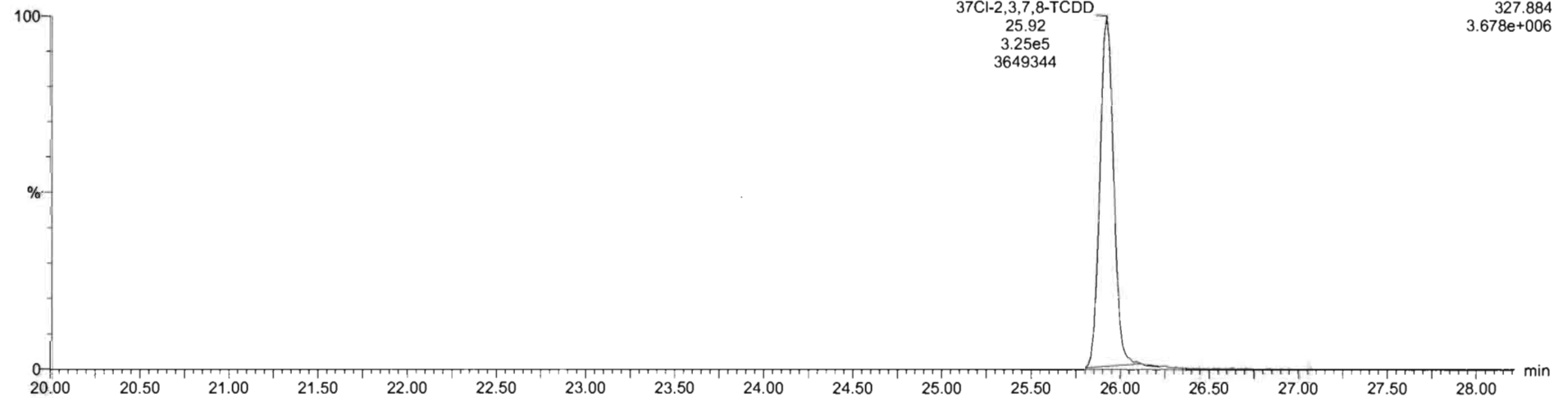
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

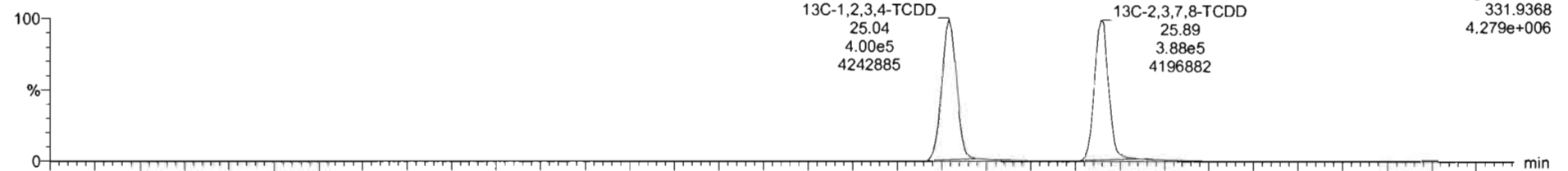
**37Cl-2,3,7,8-TCDD**

200821R1\_10

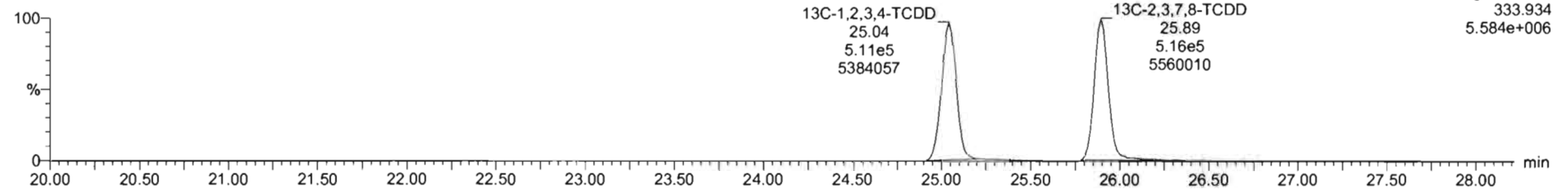


**13C-1,2,3,4-TCDD**

200821R1\_10



200821R1\_10



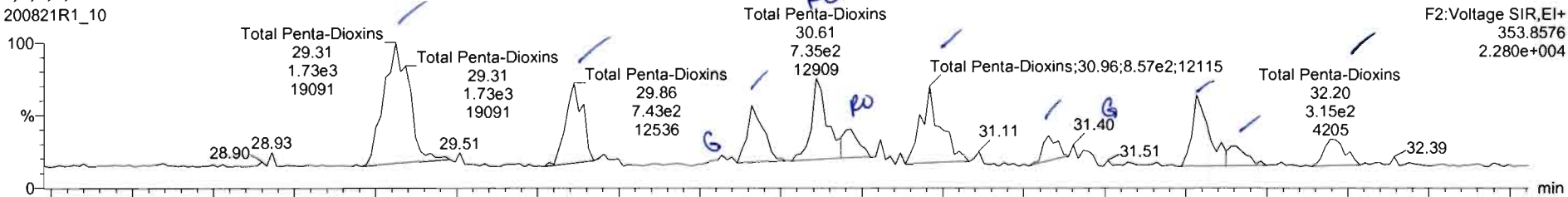
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

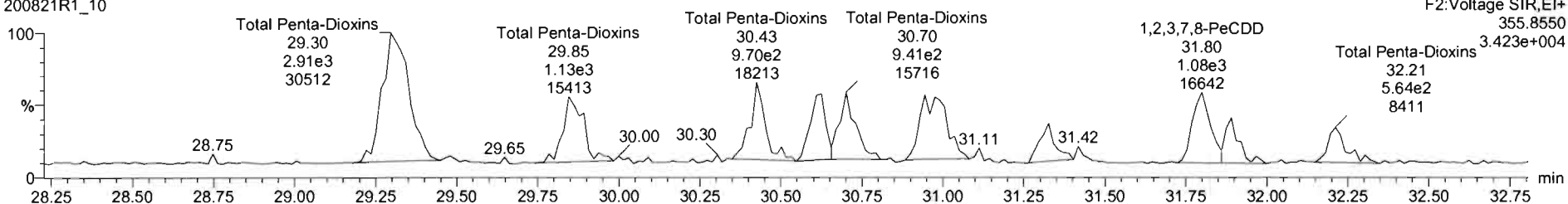
1,2,3,7,8-PeCDD

200821R1\_10



F2: Voltage SIR, EI+  
353.8576  
2.280e+004

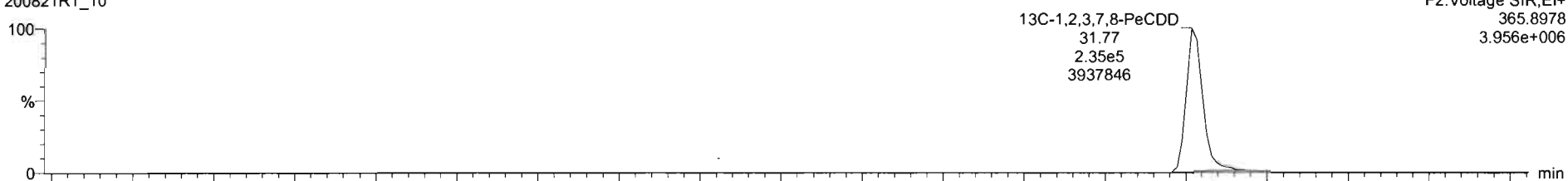
200821R1\_10



F2: Voltage SIR, EI+  
355.8550  
3.423e+004

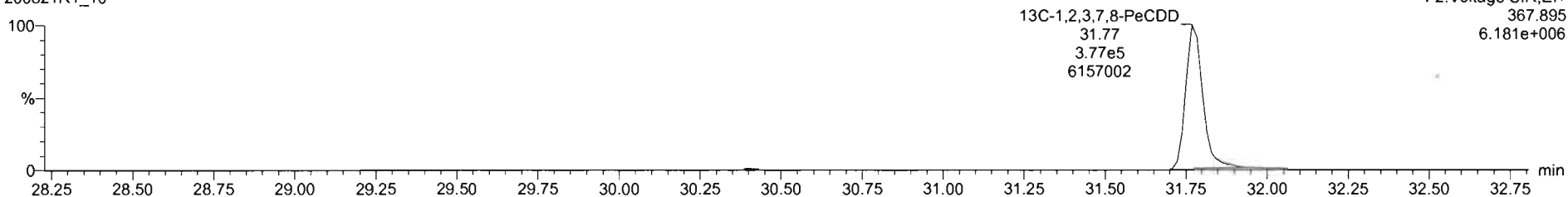
13C-1,2,3,7,8-PeCDD

200821R1\_10

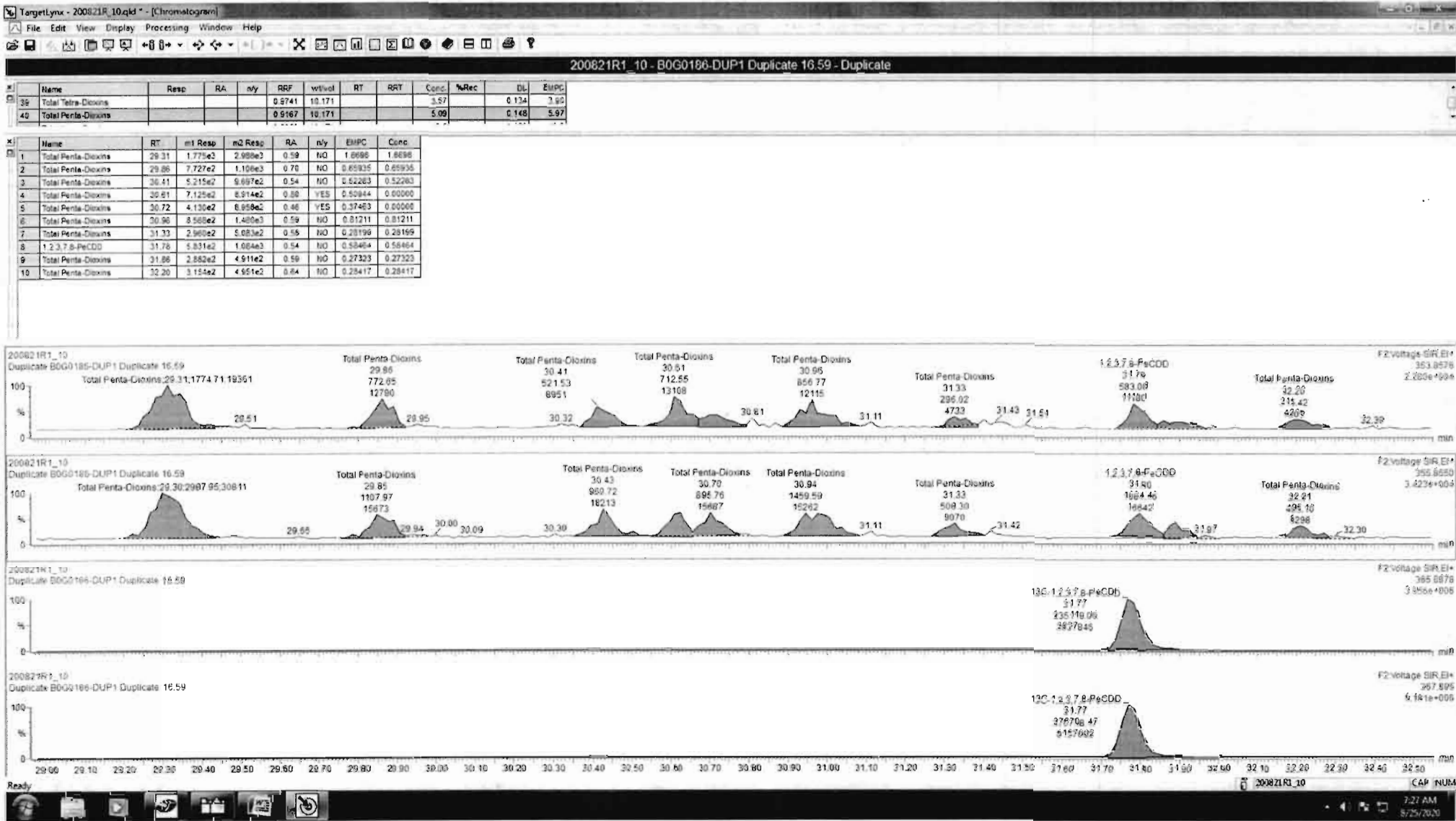


F2: Voltage SIR, EI+  
365.8978  
3.956e+006

200821R1\_10



F2: Voltage SIR, EI+  
367.895  
6.181e+006



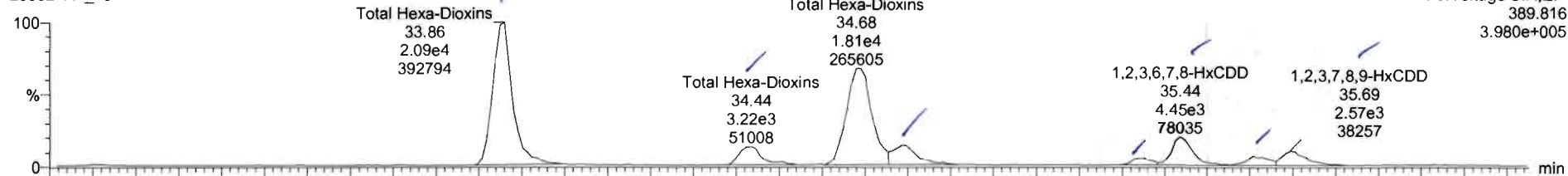
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

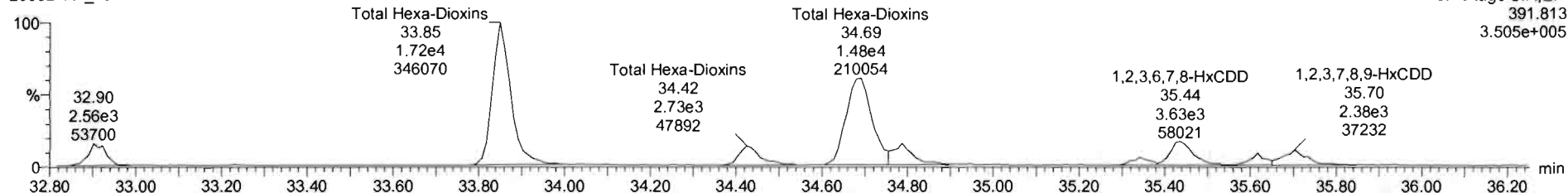
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

1,2,3,4,7,8-HxCDD

200821R1\_10



200821R1\_10

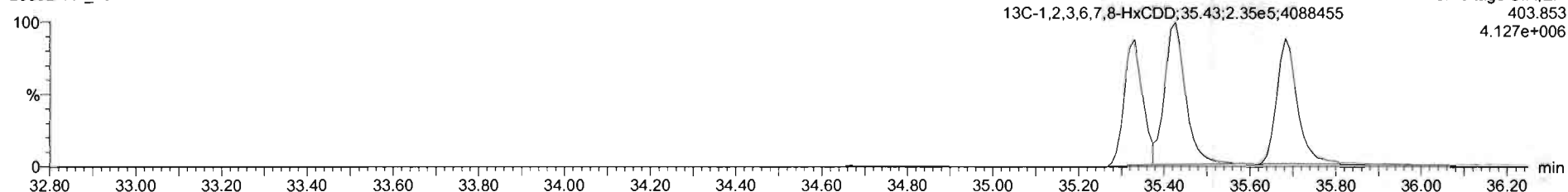


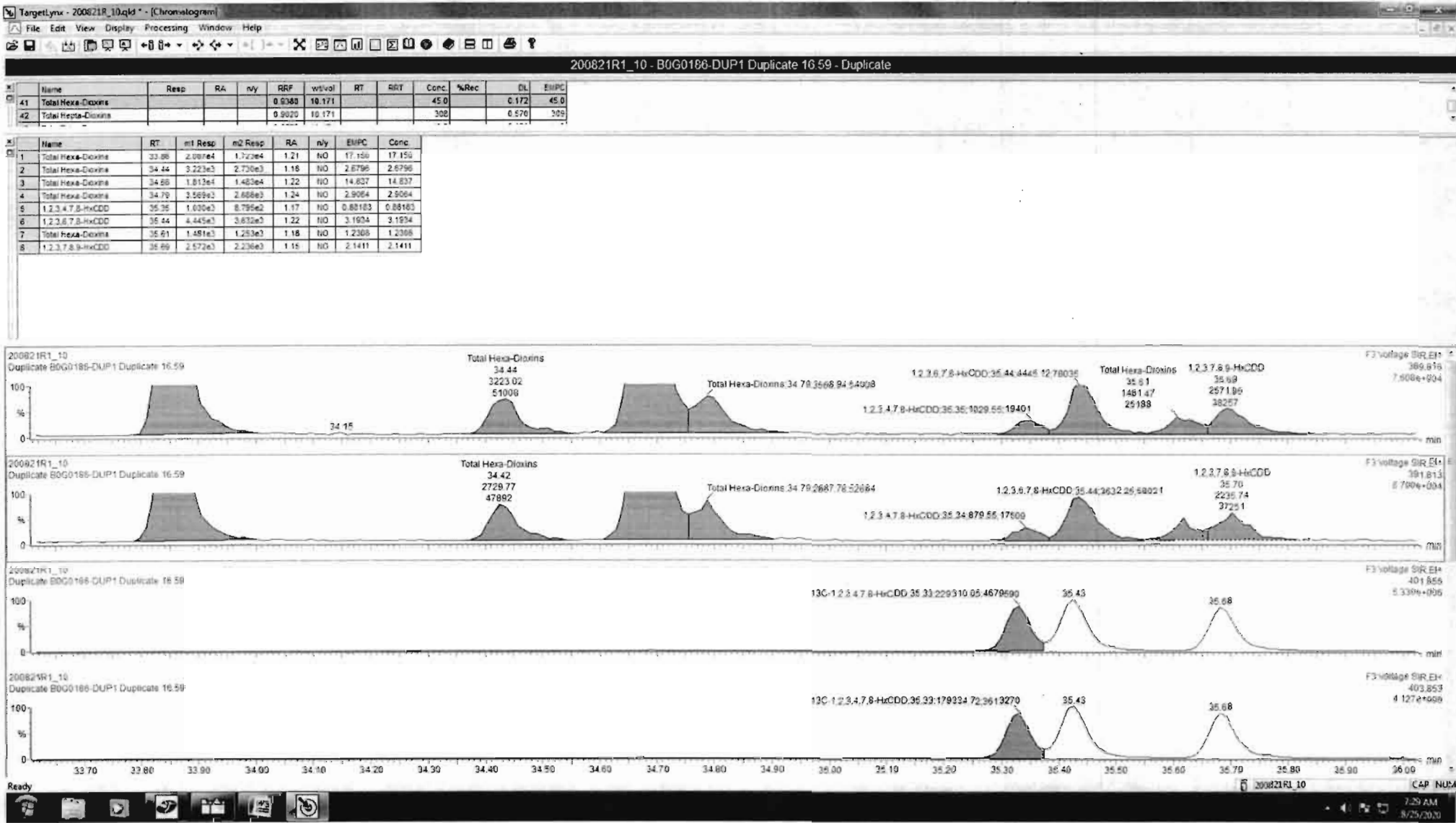
13C-1,2,3,4,7,8-HxCDD

200821R1\_10



200821R1\_10







Dataset: Untitled

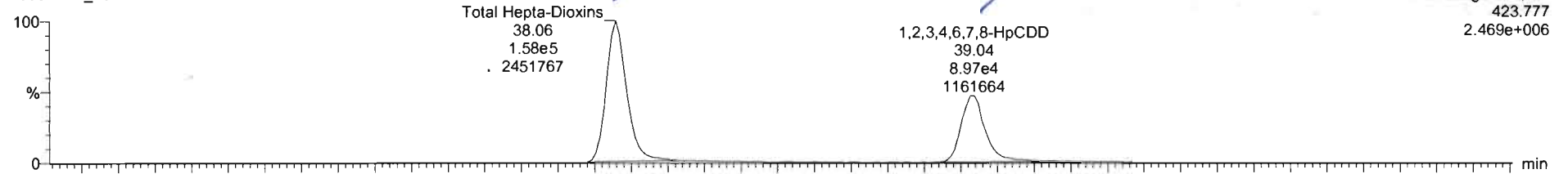
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

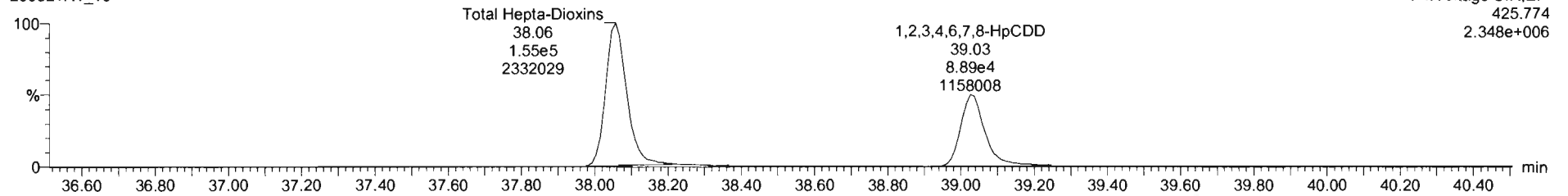
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

1,2,3,4,6,7,8-HpCDD

200821R1\_10

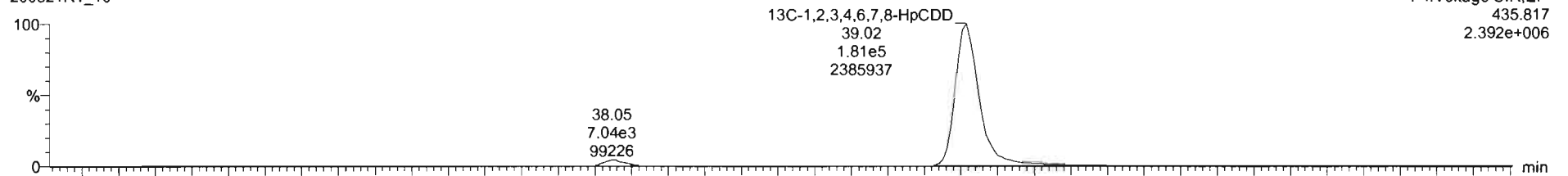


200821R1\_10

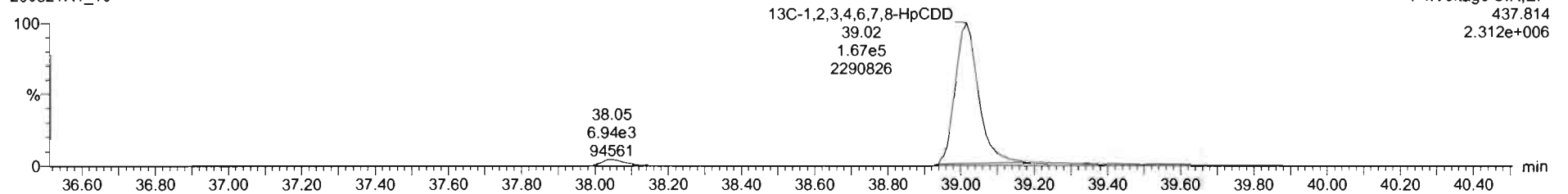


13C-1,2,3,4,6,7,8-HpCDD

200821R1\_10



200821R1\_10

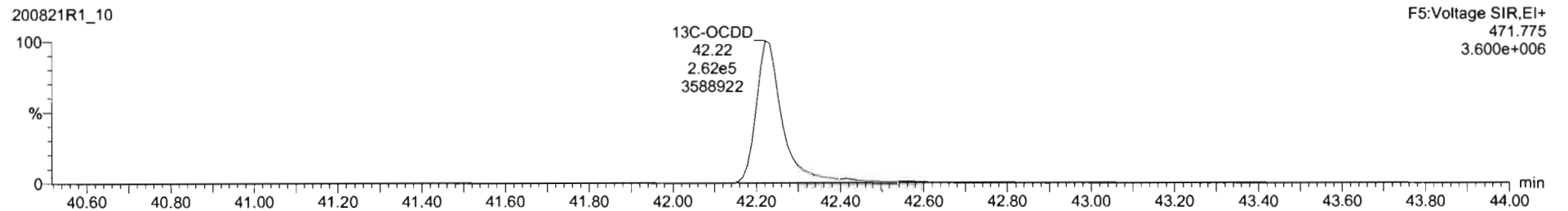
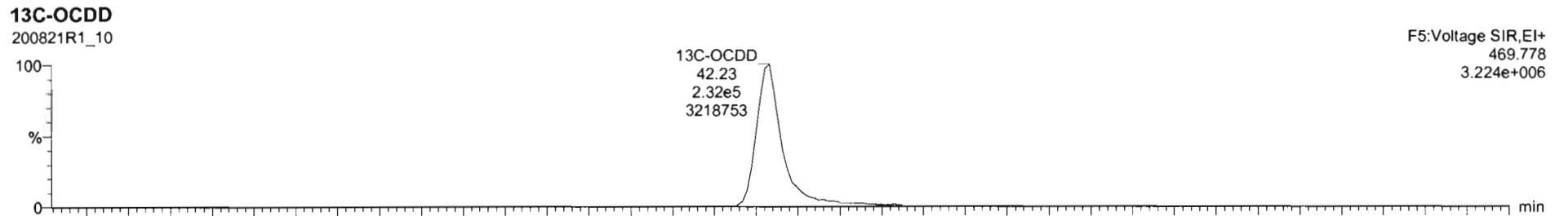
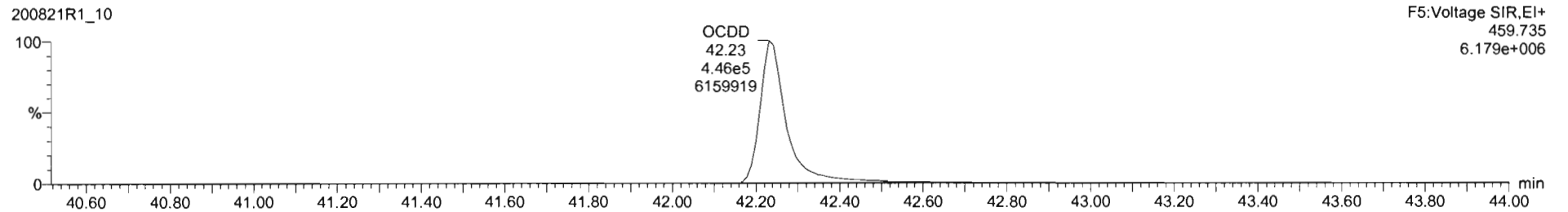
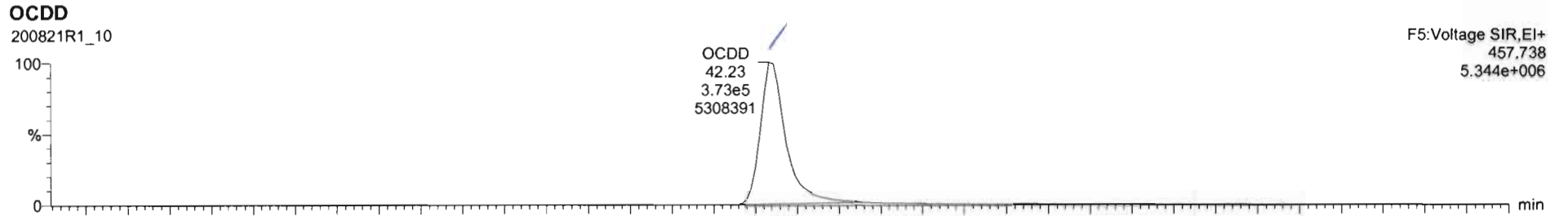


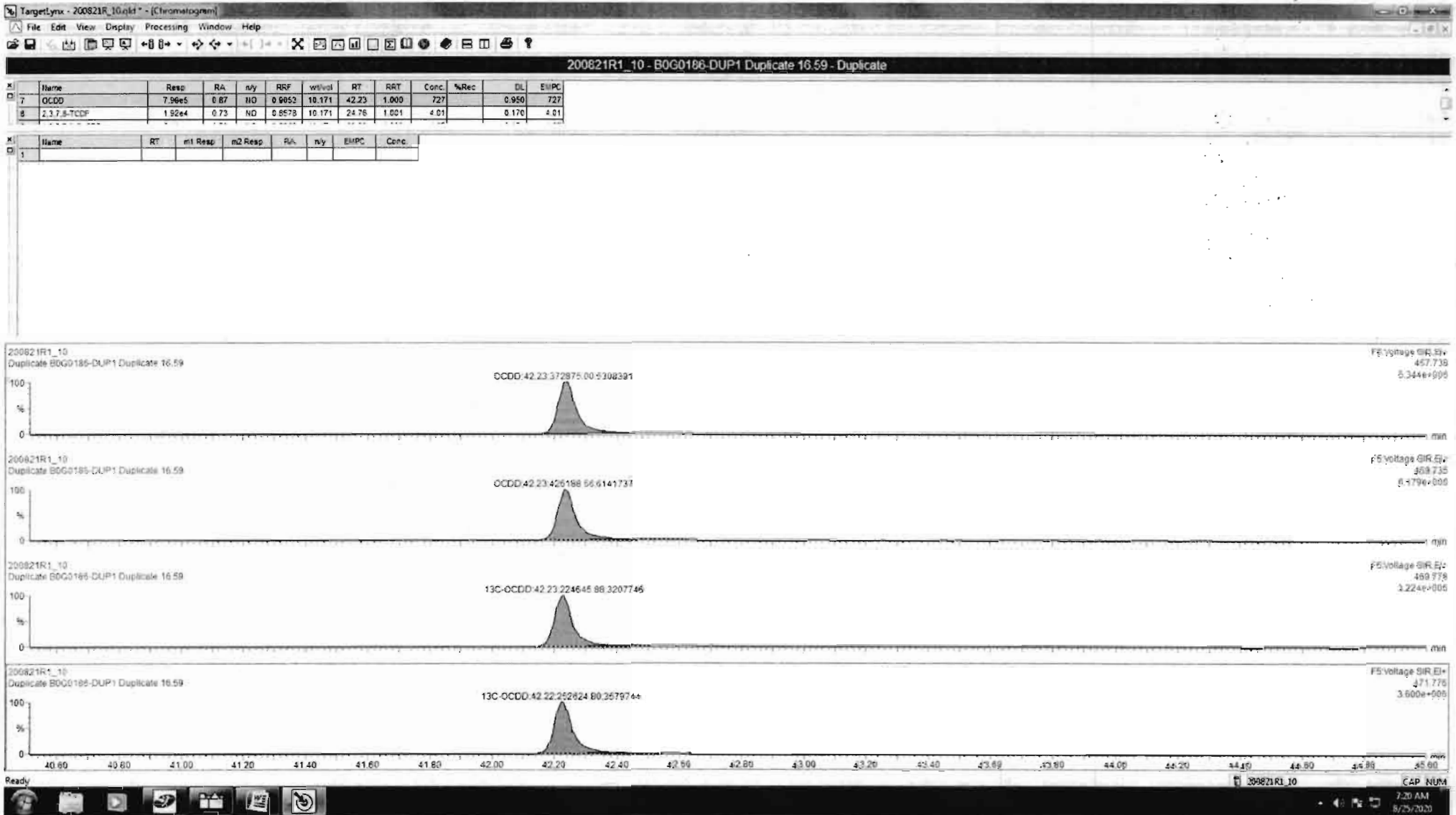
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate



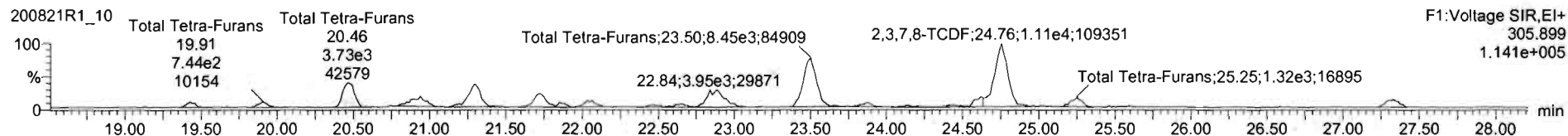
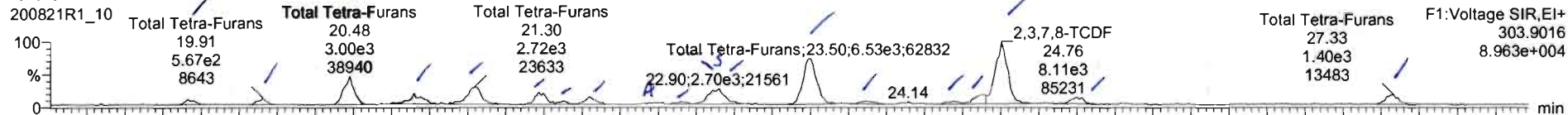


Dataset: Untitled

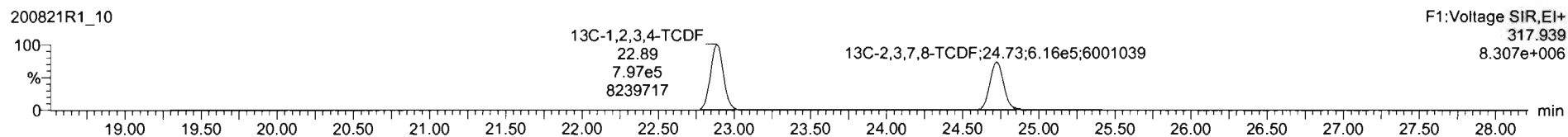
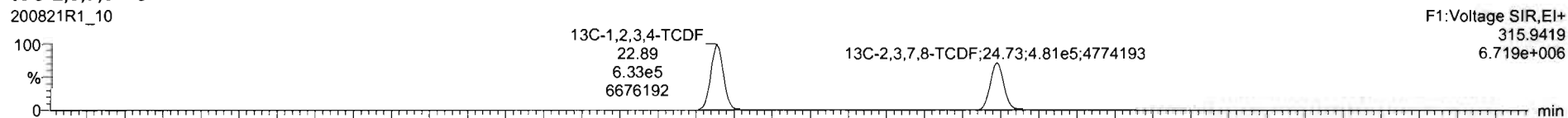
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

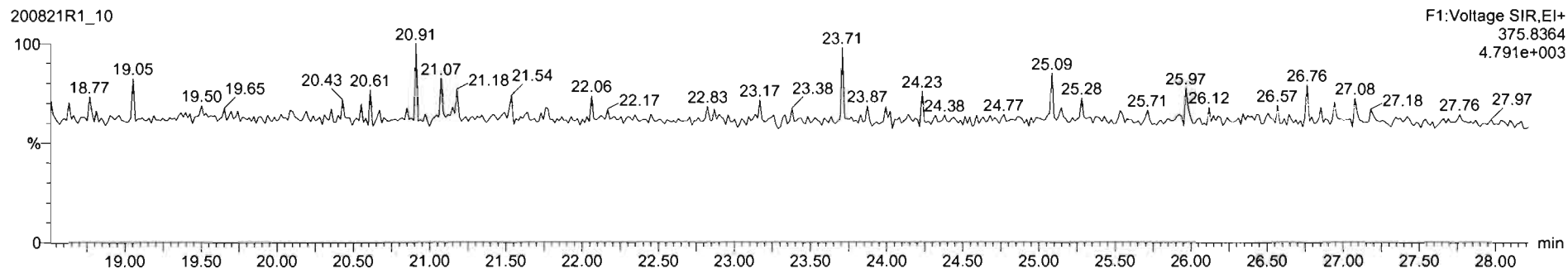
### 2,3,7,8-TCDF

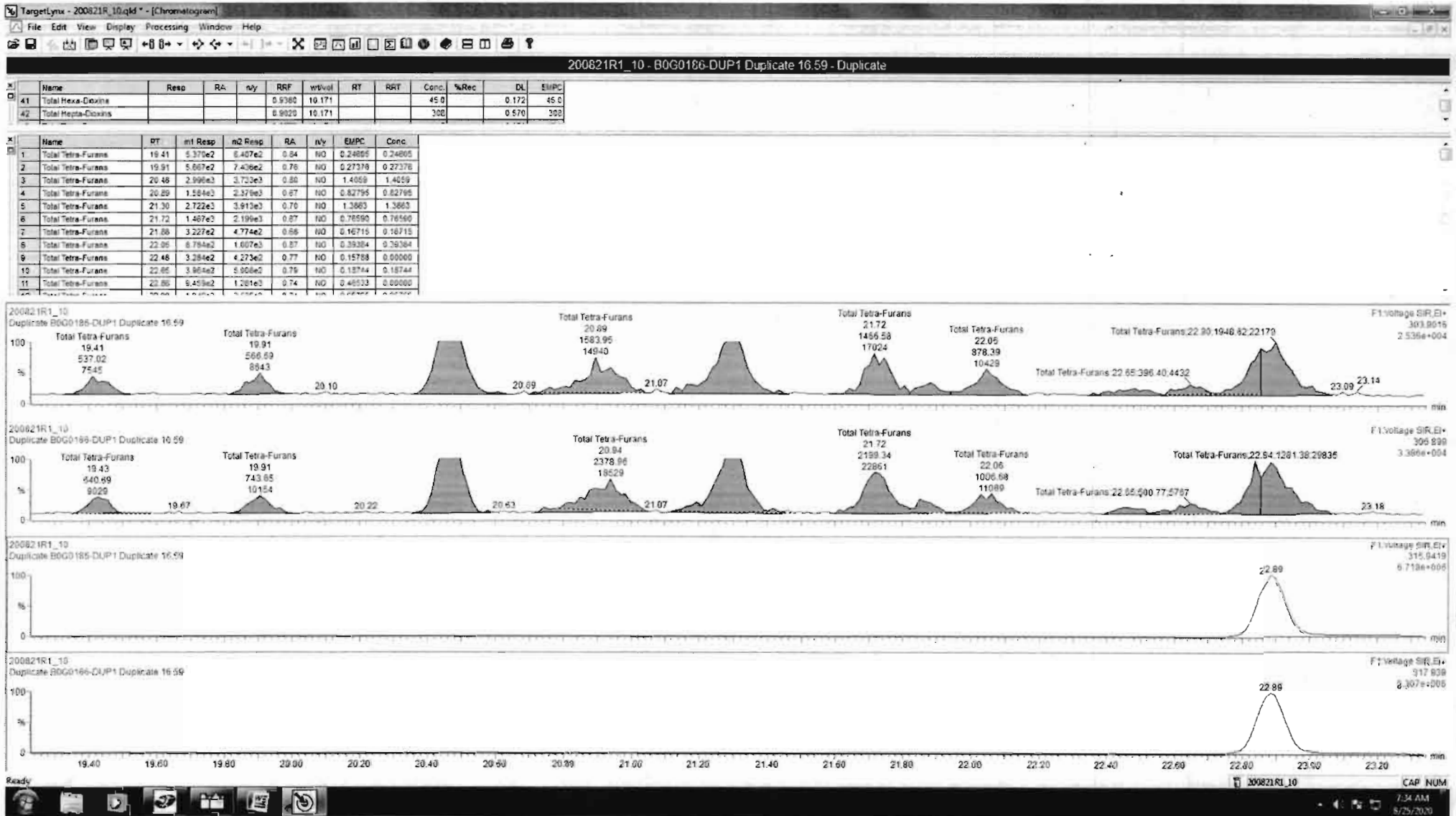


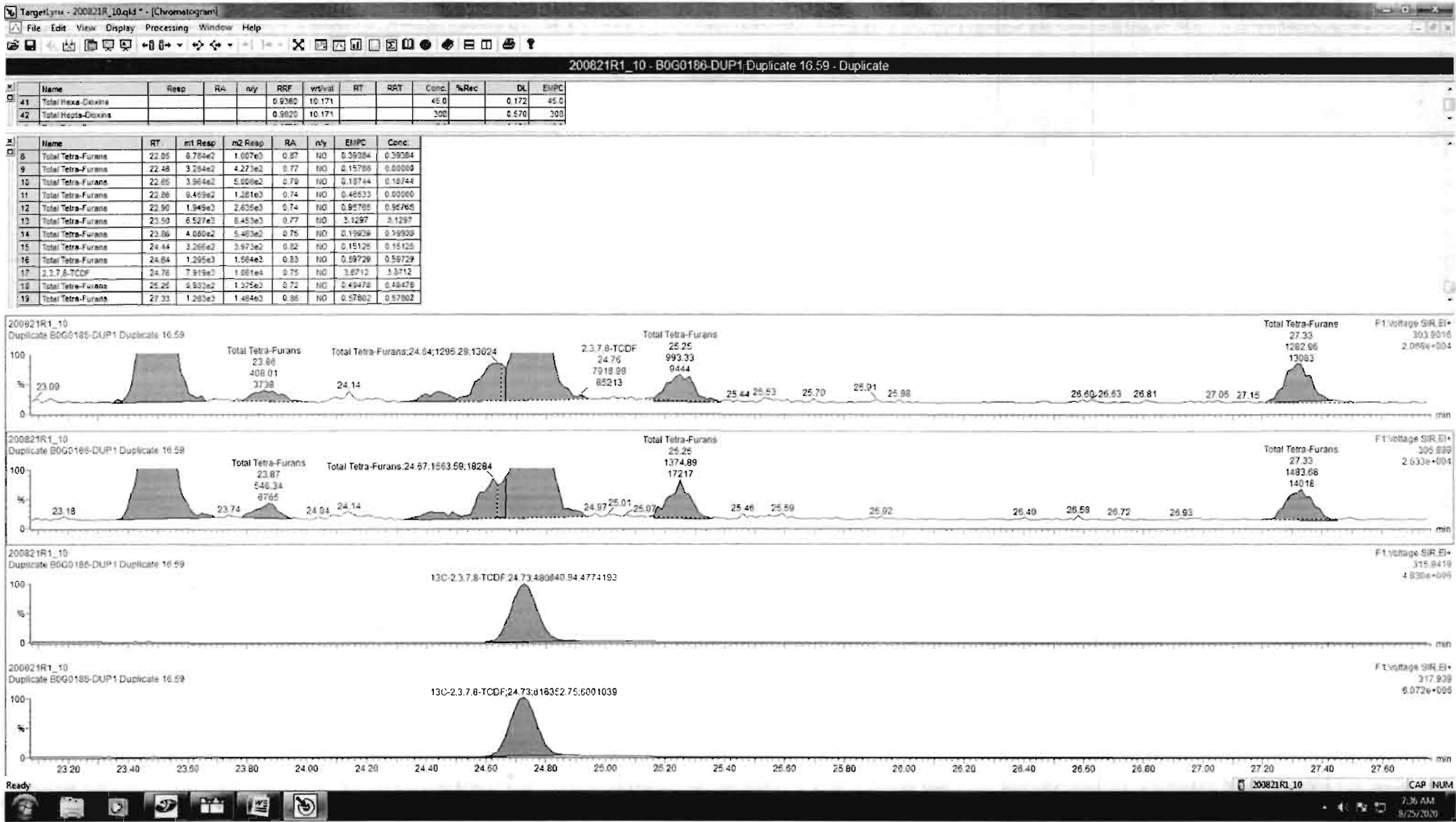
### 13C-2,3,7,8-TCDF



### DPE1







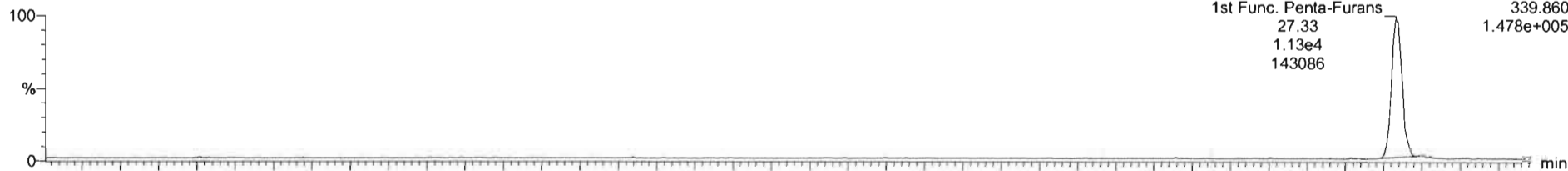
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

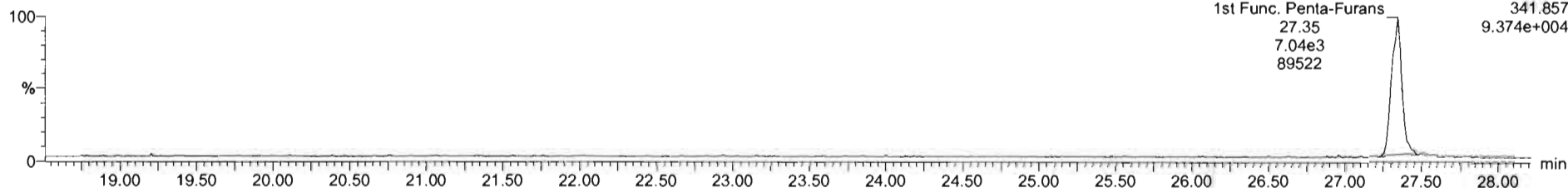
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

1st Func. Penta-Furans

200821R1\_10

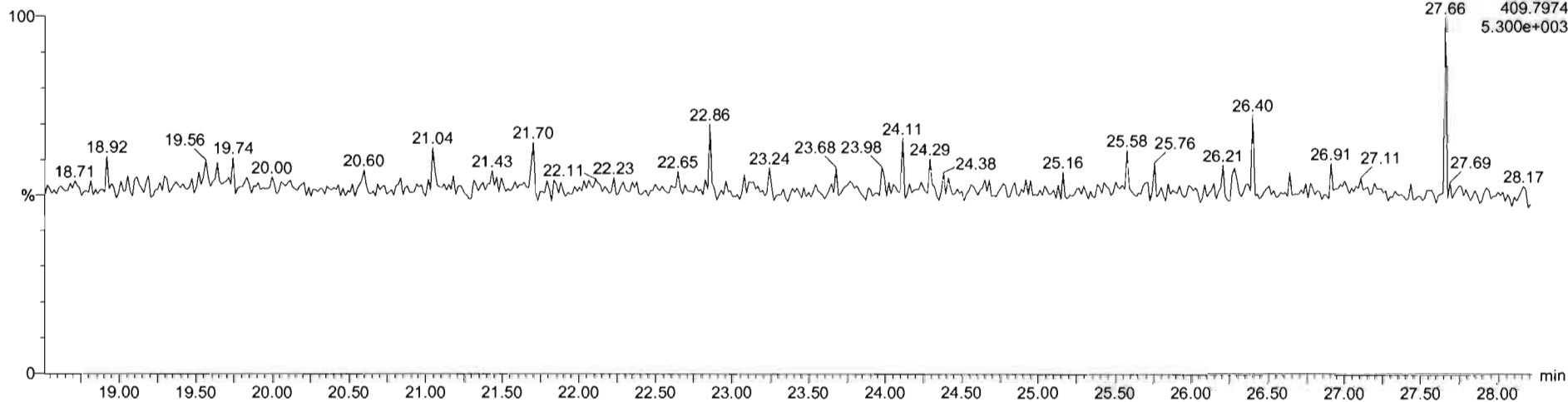


200821R1\_10



DPE6

200821R1\_10



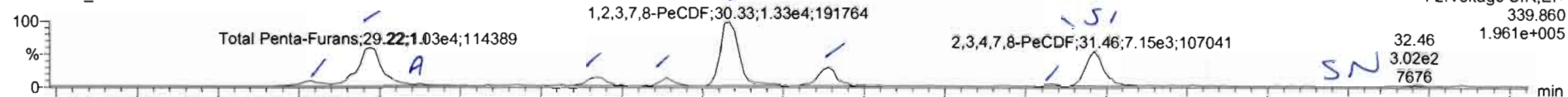
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

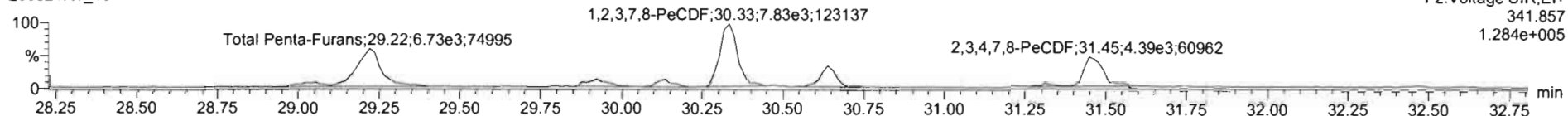
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**1,2,3,7,8-PeCDF**

200821R1\_10

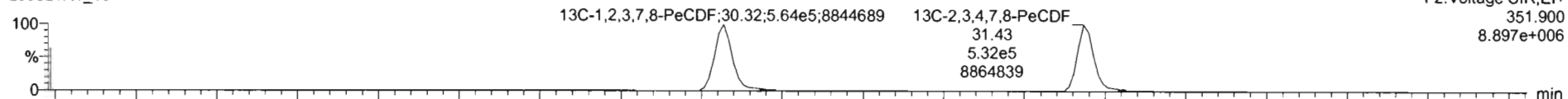


200821R1\_10

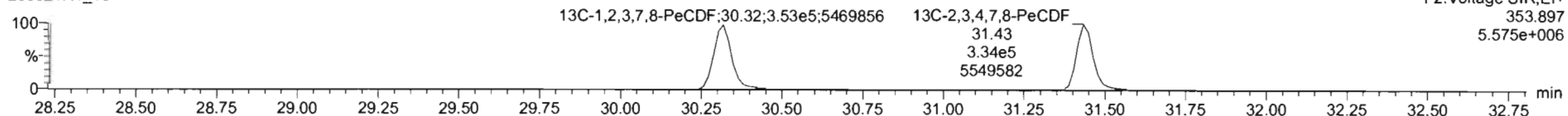


**13C-1,2,3,7,8-PeCDF**

200821R1\_10

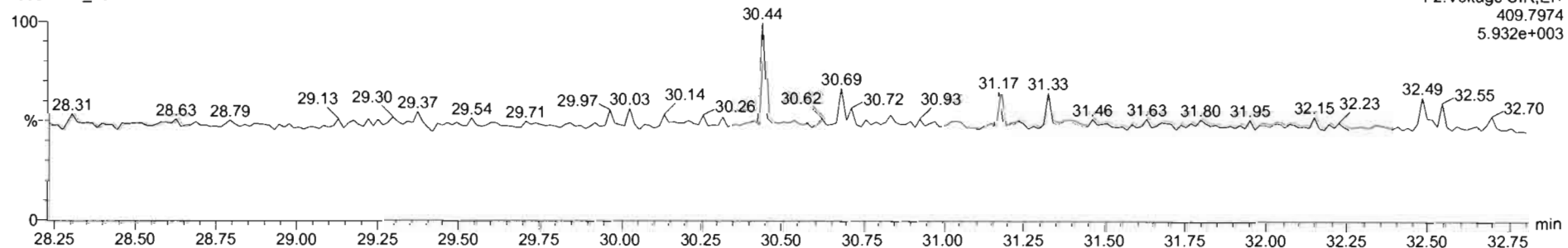


200821R1\_10

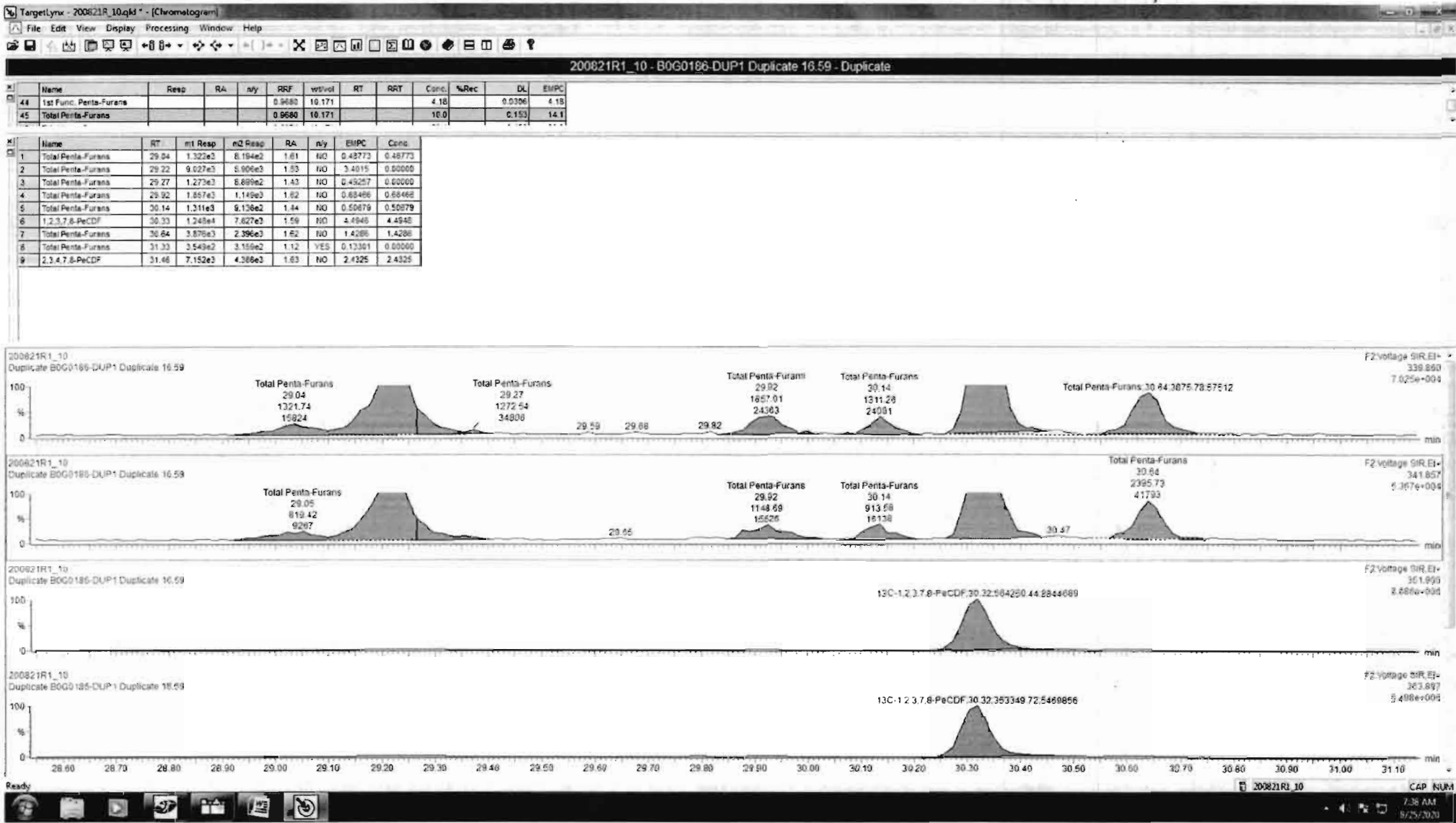


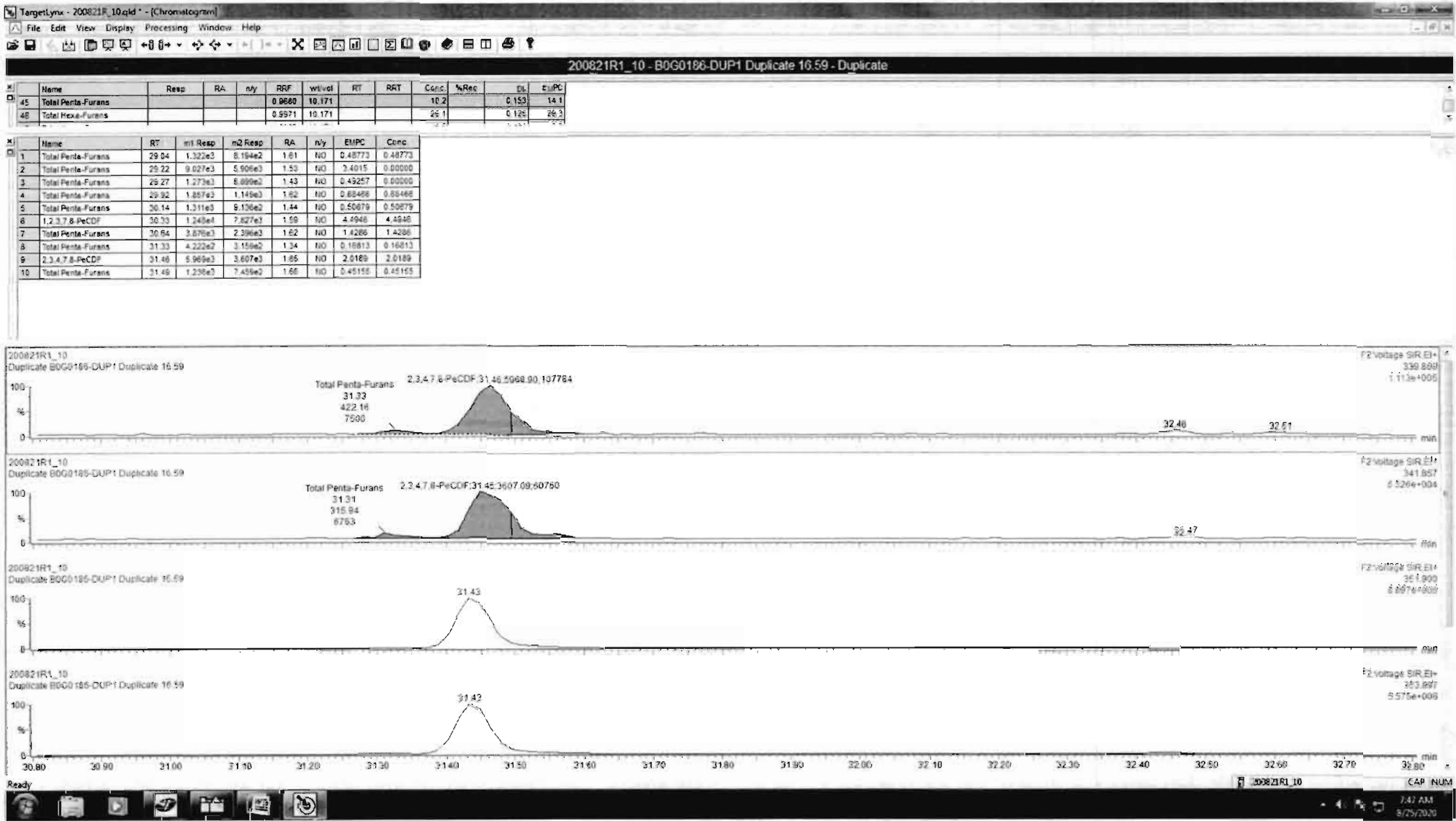
**DPE2**

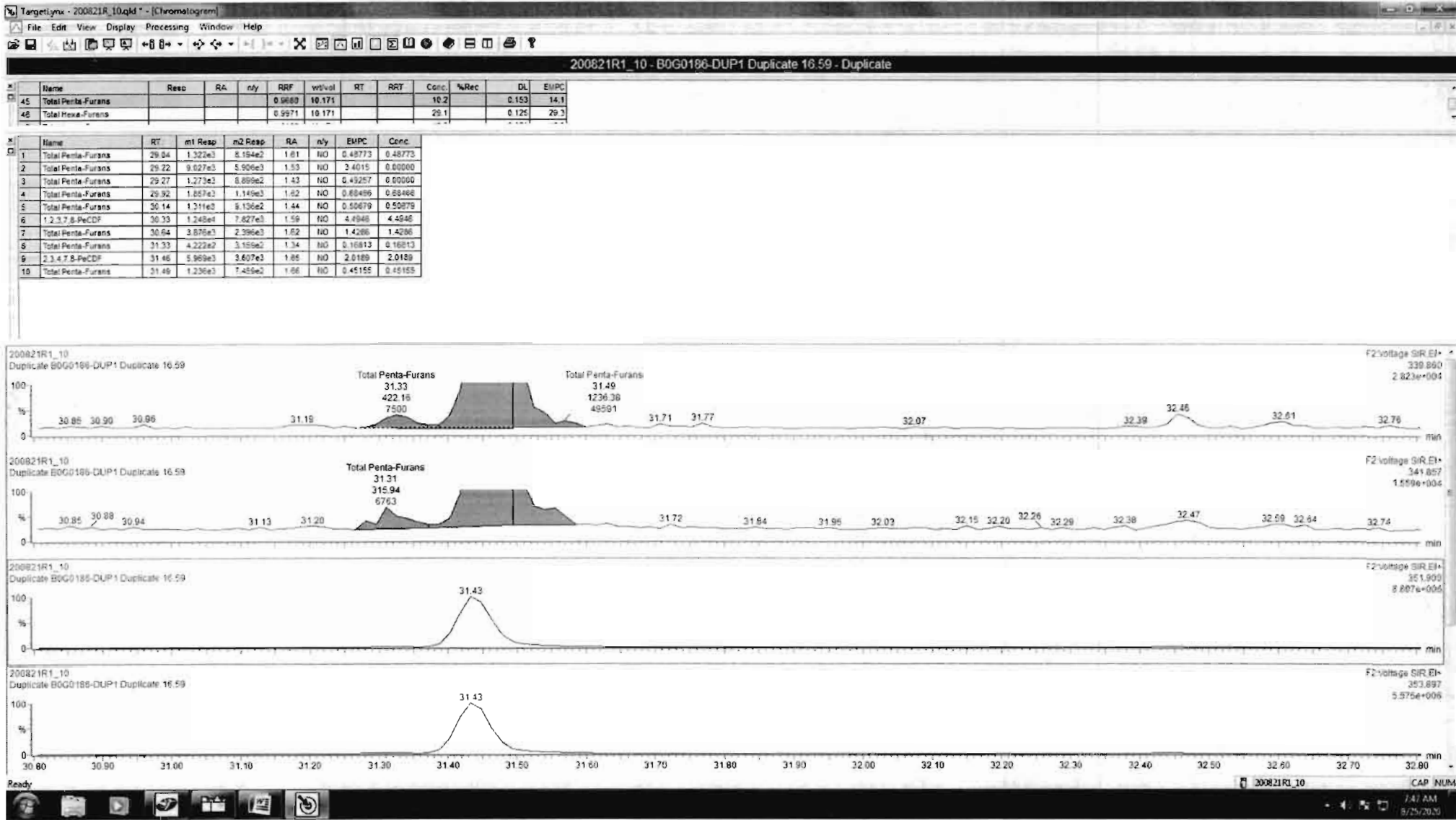
200821R1\_10











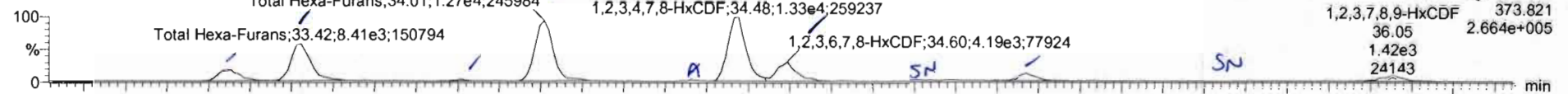
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

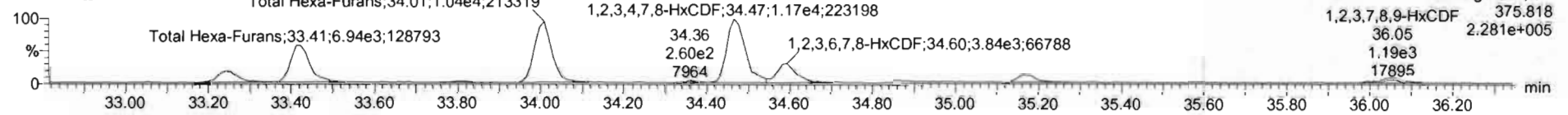
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**1,2,3,4,7,8-HxCDF**

200821R1\_10

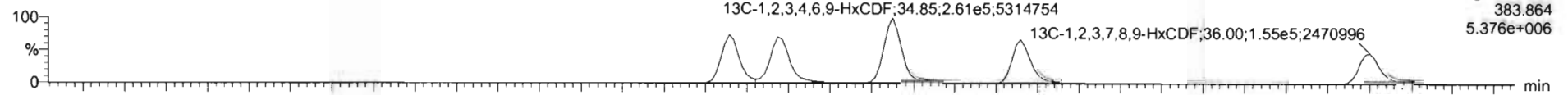


200821R1\_10

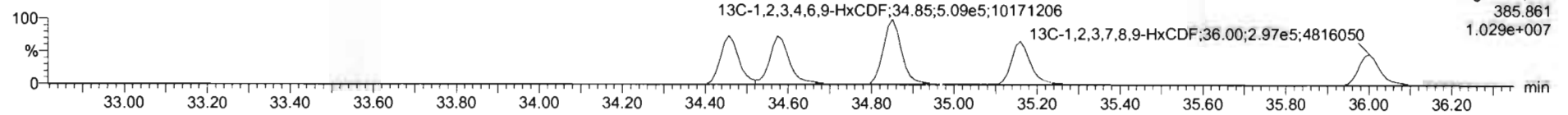


**13C-1,2,3,4,7,8-HxCDF**

200821R1\_10

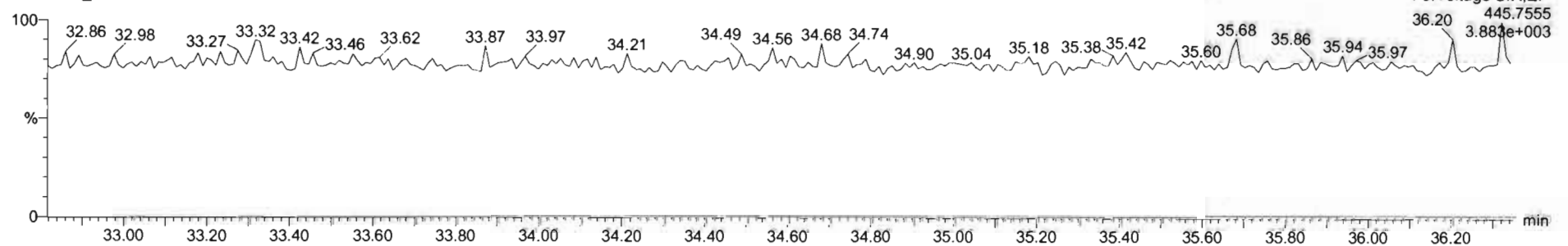


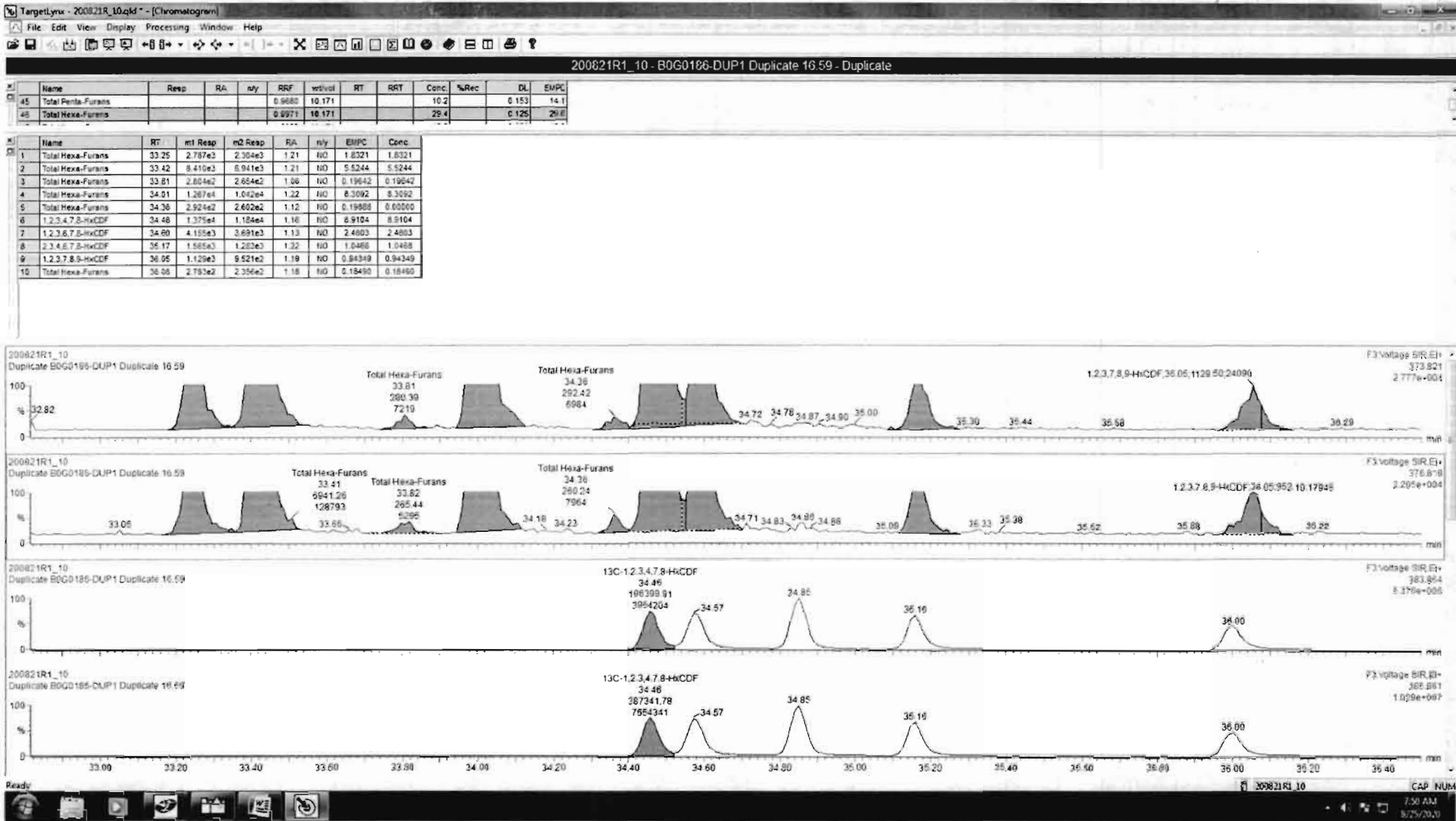
200821R1\_10



**DPE3**

200821R1\_10





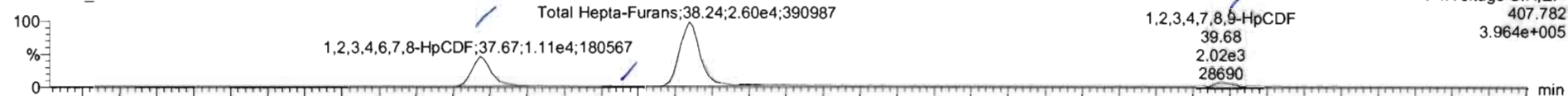
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

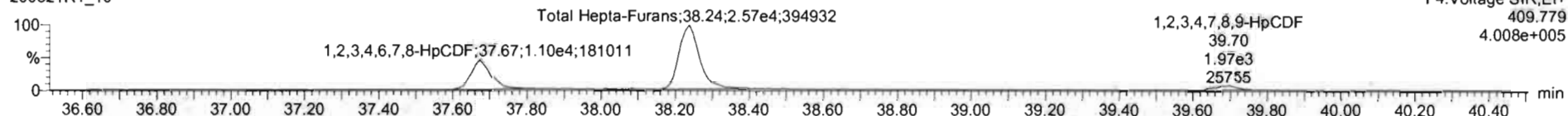
Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

**1,2,3,4,6,7,8-HpCDF**

200821R1\_10

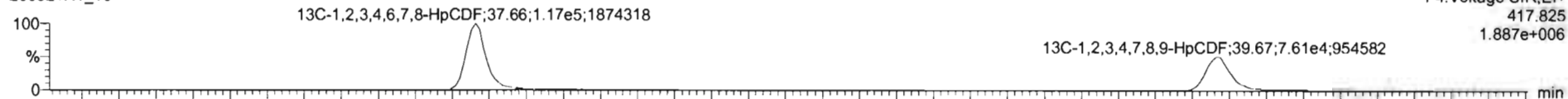


200821R1\_10

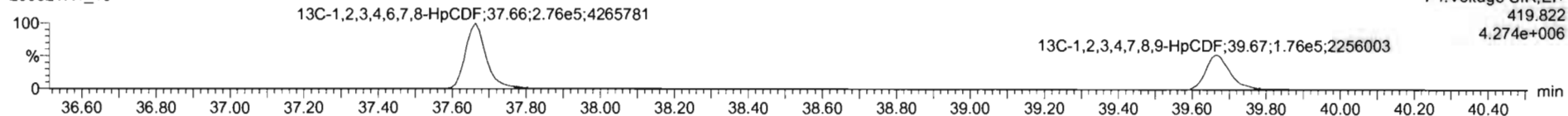


**13C-1,2,3,4,6,7,8-HpCDF**

200821R1\_10

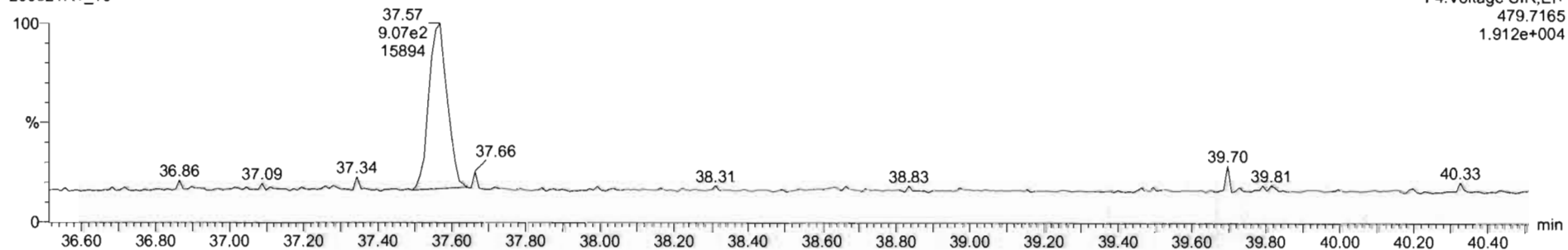


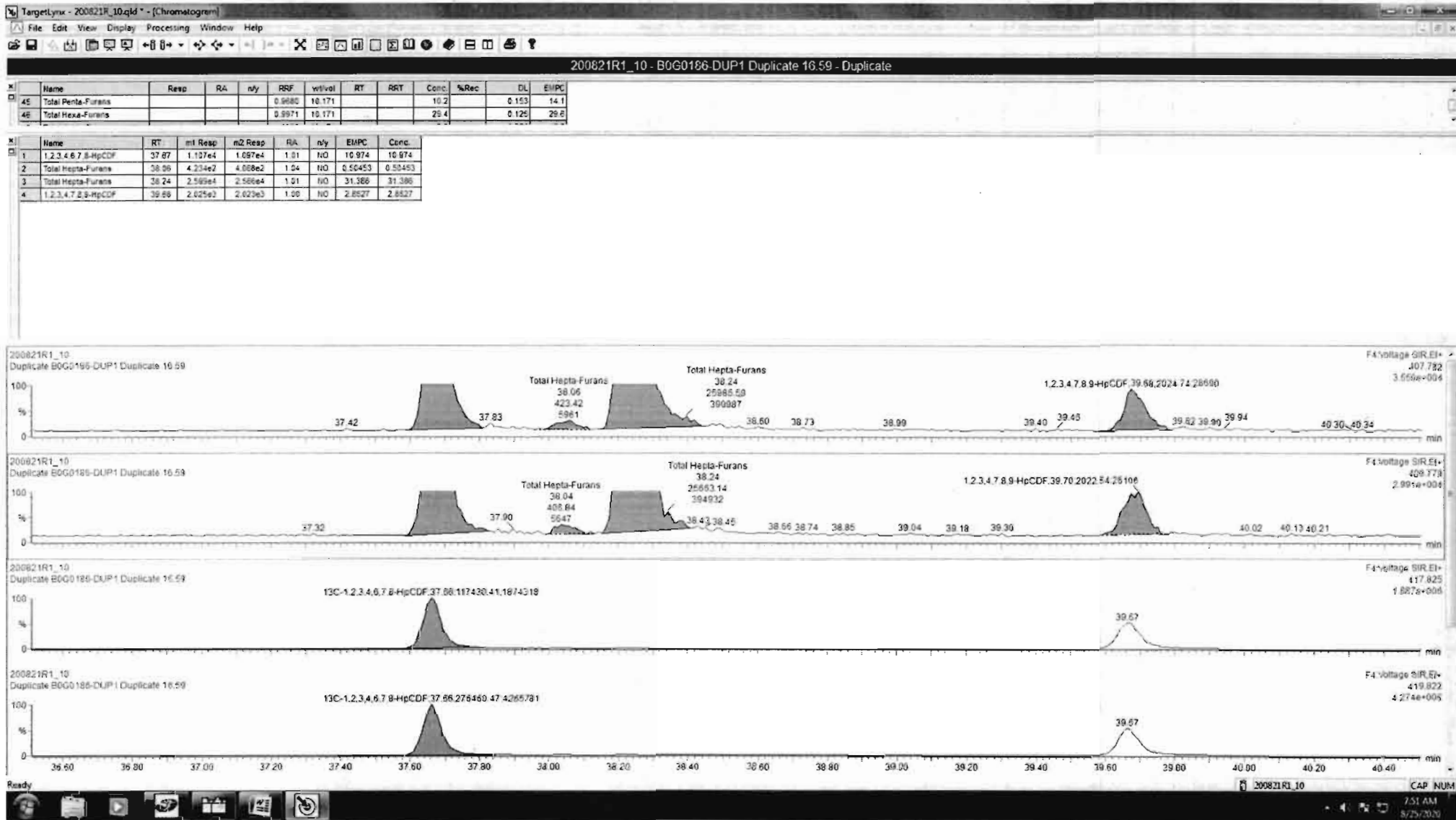
200821R1\_10



**DPE4**

200821R1\_10



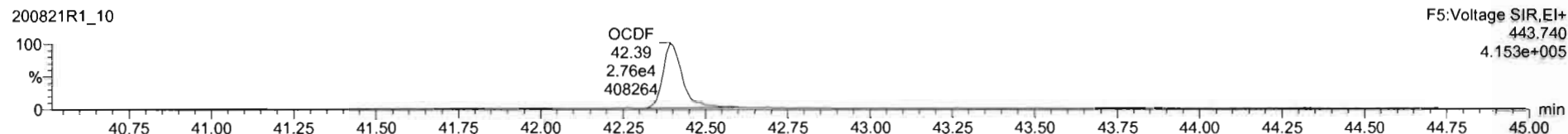


Dataset: Untitled

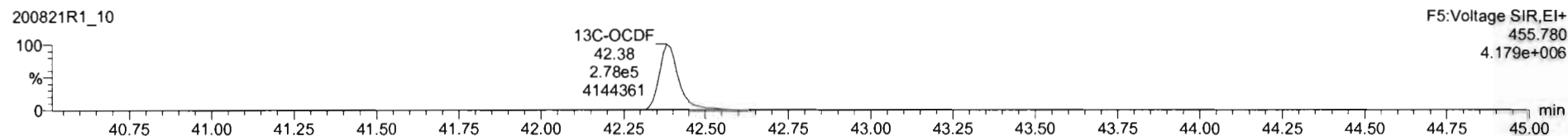
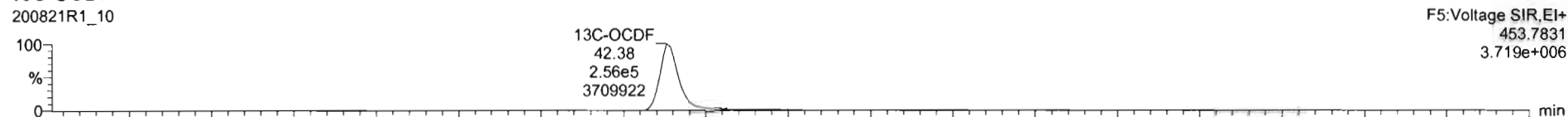
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate

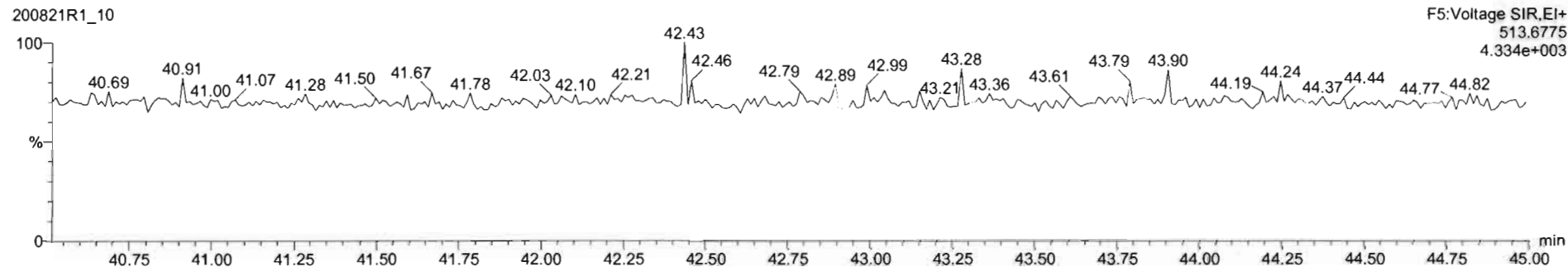
**OCDF**



**13C-OCDF**



**DPE5**



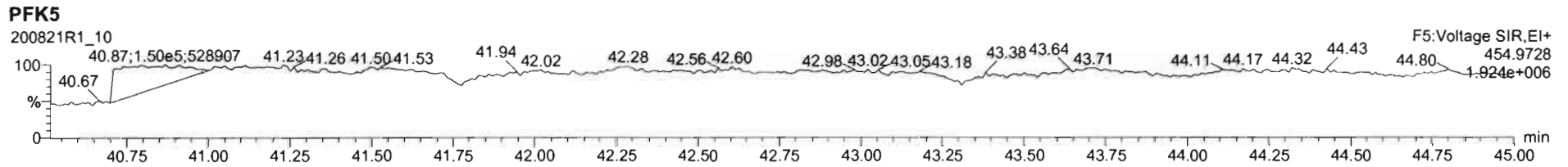
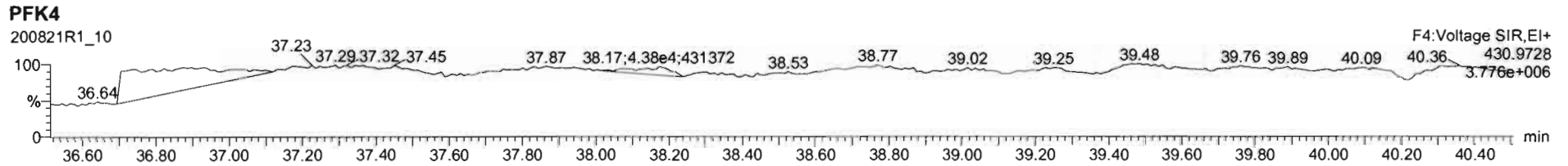
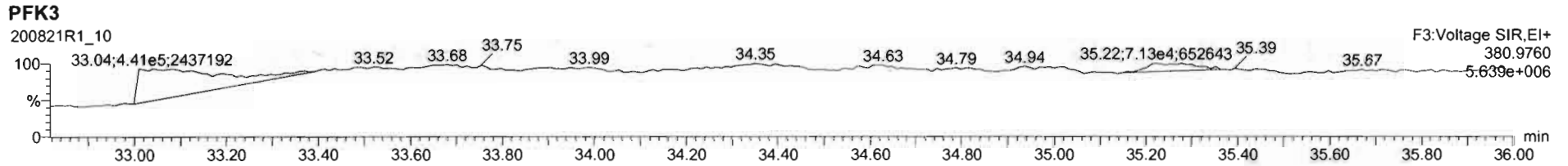
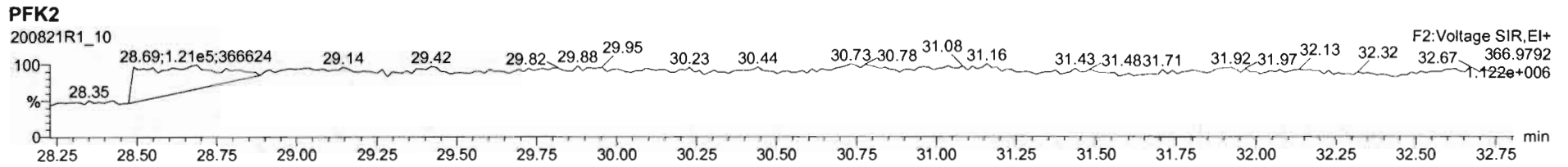
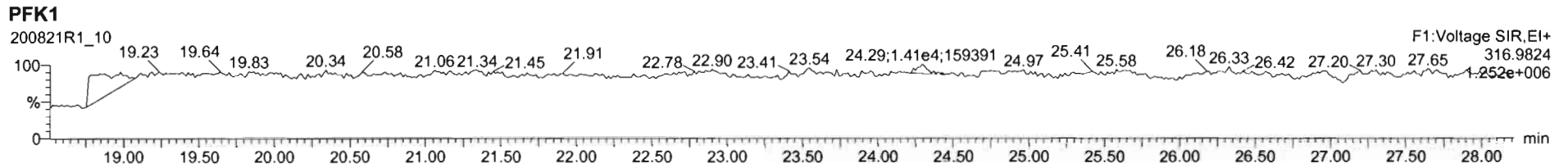


Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_10, Date: 21-Aug-2020, Time: 18:54:42, ID: B0G0186-DUP1 Duplicate 16.59, Description: Duplicate



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_12.qld

Last Altered: Friday, August 28, 2020 1:42:36 PM Pacific Daylight Time

Printed: Friday, August 28, 2020 1:43:25 PM Pacific Daylight Time

*GRB 08/28/2020*

*CT 08/28/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.30e3	0.25	YES	0.974	10.039	25.955	25.97	1.001	1.002	0.25350		0.0721	0.117
2	2 1,2,3,7,8-PeCDD			NO	0.917	10.039	31.791		1.001				0.0754	
3	3 1,2,3,4,7,8-HxCDD			NO	1.04	10.039	35.330		1.000				0.0854	
4	4 1,2,3,6,7,8-HxCDD			NO	0.938	10.039	35.416		1.000				0.0818	
5	5 1,2,3,7,8,9-HxCDD			NO	0.964	10.039	35.693		1.000				0.0940	
6	6 1,2,3,4,6,7,8-HpCDD	4.50e3	0.99	NO	0.902	10.039	39.027	39.03	1.000	1.000	1.9631		0.171	1.96
7	7 OCDD	3.71e4	0.87	NO	0.905	10.039	42.232	42.24	1.000	1.000	22.423		0.360	22.4
8	8 2,3,7,8-TCDF			NO	0.858	10.039	24.781		1.001				0.0630	
9	9 1,2,3,7,8-PeCDF	5.14e2	1.86	YES	0.968	10.039	30.340	30.35	1.001	1.001	0.092516		0.0231	0.0824
10	10 2,3,4,7,8-PeCDF			NO	1.08	10.039	31.464		1.001				0.0410	
11	11 1,2,3,4,7,8-HxCDF	3.78e2	1.22	NO	0.968	10.039	34.457	34.46	1.000	1.000	0.10123		0.0403	0.101
12	12 1,2,3,6,7,8-HxCDF			NO	1.00	10.039	34.584		1.000				0.0391	
13	13 2,3,4,6,7,8-HxCDF			NO	0.997	10.039	35.195		1.001				0.0448	
14	14 1,2,3,7,8,9-HxCDF			NO	0.961	10.039	35.991		1.000				0.0662	
15	15 1,2,3,4,6,7,8-HpCDF	6.01e2	0.86	YES	1.00	10.039	37.690	37.68	1.001	1.001	0.21835		0.0815	0.198
16	16 1,2,3,4,7,8,9-HpCDF			NO	1.11	10.039	39.665		1.000				0.105	
17	17 OCDF	1.80e3	0.74	YES	0.896	10.039	42.391	42.41	1.000	1.001	0.92771		0.146	0.840
18	18 13C-2,3,7,8-TCDD	1.05e6	0.78	NO	1.10	10.039	25.881	25.92	1.032	1.033	189.79	95.3	0.254	
19	19 13C-1,2,3,7,8-PeCDD	7.87e5	0.63	NO	0.757	10.039	31.553	31.77	1.258	1.266	207.64	104	0.482	
20	20 13C-1,2,3,4,7,8-HxCDD	5.64e5	1.27	NO	0.647	10.039	35.332	35.32	1.014	1.013	198.22	99.5	0.440	
21	21 13C-1,2,3,6,7,8-HxCDD	6.95e5	1.26	NO	0.805	10.039	35.433	35.42	1.017	1.016	196.27	98.5	0.353	
22	22 13C-1,2,3,7,8,9-HxCDD	6.14e5	1.27	NO	0.726	10.039	35.705	35.68	1.025	1.024	192.05	96.4	0.392	
23	23 13C-1,2,3,4,6,7,8-HpCDD	5.07e5	1.05	NO	0.611	10.039	39.075	39.01	1.121	1.119	188.52	94.6	0.334	
24	24 13C-OCDD	7.29e5	0.91	NO	0.513	10.039	42.274	42.23	1.213	1.212	322.97	81.1	0.545	
25	25 13C-2,3,7,8-TCDF	1.29e6	0.77	NO	0.933	10.039	24.787	24.76	0.988	0.987	175.62	88.1	0.368	
26	26 13C-1,2,3,7,8-PeCDF	1.14e6	1.59	NO	0.696	10.039	30.357	30.32	1.210	1.209	208.37	105	0.698	
27	27 13C-2,3,4,7,8-PeCDF	1.10e6	1.57	NO	0.669	10.039	31.483	31.43	1.255	1.253	208.74	105	0.727	
28	28 13C-1,2,3,4,7,8-HxCDF	7.69e5	0.51	NO	0.886	10.039	34.471	34.46	0.989	0.989	197.20	99.0	0.531	
29	29 13C-1,2,3,6,7,8-HxCDF	8.14e5	0.52	NO	0.955	10.039	34.590	34.57	0.993	0.992	193.84	97.3	0.493	
30	30 13C-2,3,4,6,7,8-HxCDF	7.42e5	0.52	NO	0.882	10.039	35.161	35.16	1.009	1.009	191.29	96.0	0.534	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_12.qld

Last Altered: Friday, August 28, 2020 1:42:36 PM Pacific Daylight Time

Printed: Friday, August 28, 2020 1:43:25 PM Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
31	13C-1,2,3,7,8,9-HxCDF	6.15e5	0.53	NO	0.737	10.039	36.015	35.99	1.033	1.033	189.91	95.3	0.639	
32	13C-1,2,3,4,6,7,8-HpCDF	5.47e5	0.43	NO	0.651	10.039	37.702	37.65	1.082	1.080	191.03	95.9	0.414	
33	13C-1,2,3,4,7,8,9-HpCDF	3.65e5	0.43	NO	0.459	10.039	39.727	39.67	1.140	1.138	180.74	90.7	0.587	
34	13C-OCDF	8.63e5	0.88	NO	0.609	10.039	42.435	42.39	1.218	1.216	322.20	80.9	0.420	
35	37Cl-2,3,7,8-TCDD	3.85e5			1.14	10.039	25.778	25.95	1.028	1.035	67.713	85.0	0.0747	
36	13C-1,2,3,4-TCDD	9.97e5	0.77	NO	1.00	10.039	25.070	25.09	1.000	1.000	199.23	100	0.281	
37	13C-1,2,3,4-TCDF	1.57e6	0.79	NO	1.00	10.039	23.080	22.94	1.000	1.000	199.23	100	0.343	
38	13C-1,2,3,4,6,9-HxCDF	8.76e5	0.51	NO	1.00	10.039	34.740	34.85	1.000	1.000	199.23	100	0.471	
39	Total Tetra-Dioxins				0.974	10.039	24.620		0.000		0.00000		0.0402	0.117
40	Total Penta-Dioxins				0.917	10.039	29.960		0.000				0.0342	
41	Total Hexa-Dioxins				0.938	10.039	33.635		0.000		0.95130		0.0906	0.951
42	Total Hepta-Dioxins				0.902	10.039	37.640		0.000		4.6633		0.171	4.66
43	Total Tetra-Furans				0.858	10.039	23.610		0.000		0.19001		0.0630	0.190
44	1st Func. Penta-Furans				0.968	10.039	27.230		0.000		0.10627		0.0287	0.106
45	Total Penta-Furans				0.968	10.039	29.275		0.000		0.00000		0.0229	0.0824
46	Total Hexa-Furans				0.997	10.039	33.555		0.000		0.30601		0.0458	0.306
47	Total Hepta-Furans				1.00	10.039	37.835		0.000		0.51370		0.0835	0.712

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_12.qld

Last Altered: Friday, August 28, 2020 1:42:36 PM Pacific Daylight Time

Printed: Friday, August 28, 2020 1:43:25 PM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDD	25.97	3.633e3	1.254e4	2.620e2	1.037e3	0.25	YES	1.299e3	0.00000	0.11748	0.0721

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.85	1.655e4	1.193e4	9.102e2	7.387e2	1.23	NO	1.649e3	0.56097	0.56097	0.0906
2	Total Hexa-Dioxins	34.69	9.342e3	8.128e3	6.496e2	4.978e2	1.31	NO	1.147e3	0.39033	0.39033	0.0906

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.06	3.732e4	3.738e4	3.055e3	3.137e3	0.97	NO	6.192e3	2.7001	2.7001	0.171
2	1,2,3,4,6,7,8-HpCDD	39.03	2.925e4	2.585e4	2.241e3	2.261e3	0.99	NO	4.502e3	1.9631	1.9631	0.171

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	20.52	5.742e3	8.607e3	4.281e2	6.284e2	0.68	NO	1.056e3	0.19001	0.19001	0.0630

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1st Func. Penta-Furans	27.36	4.709e3	3.248e3	3.701e2	2.088e2	1.77	NO	5.789e2	0.10627	0.10627	0.0287

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_12.qld

Last Altered: Friday, August 28, 2020 1:42:36 PM Pacific Daylight Time

Printed: Friday, August 28, 2020 1:43:25 PM Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8-PeCDF	30.35	6.918e3	3.724e3	3.344e2	1.793e2	1.86	YES	5.137e2	0.00000	0.082357	0.0231

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	33.44	3.587e3	3.716e3	1.735e2	1.572e2	1.10	NO	3.307e2	0.089877	0.089877	0.0458
2	Total Hexa-Furans	34.00	3.682e3	4.659e3	2.172e2	2.056e2	1.06	NO	4.228e2	0.11490	0.11490	0.0458
3	1,2,3,4,7,8-HxCDF	34.46	4.192e3	3.844e3	2.079e2	1.701e2	1.22	NO	3.780e2	0.10123	0.10123	0.0403

**Hepta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	37.68	4.533e3	4.884e3	2.784e2	3.226e2	0.86	YES	6.011e2	0.00000	0.19841	0.0615
2	Total Hepta-Furans	38.26	9.005e3	8.293e3	6.345e2	5.447e2	1.16	NO	1.179e3	0.51370	0.51370	0.0835

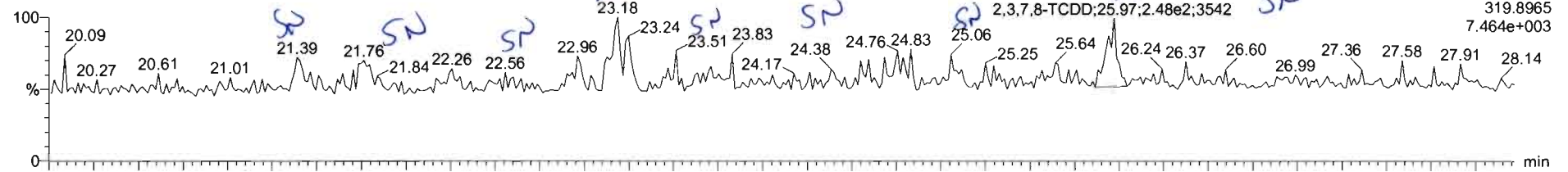
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

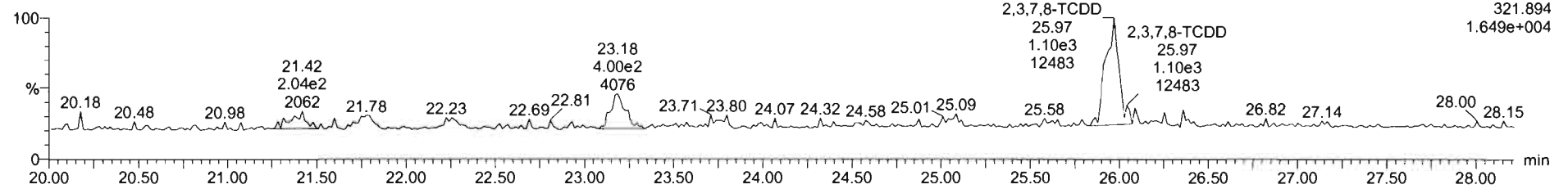
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**2,3,7,8-TCDD**

200821R1\_12

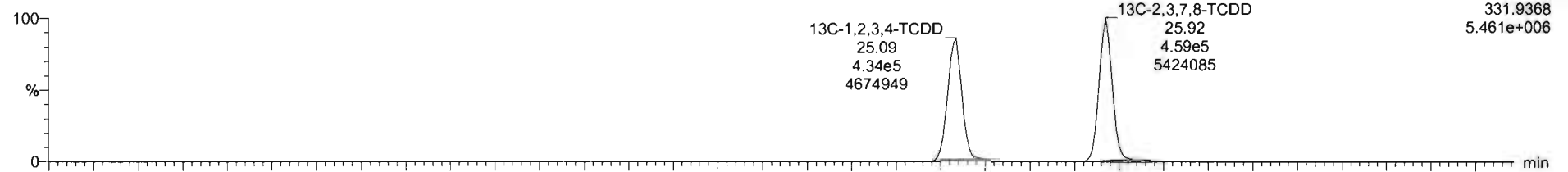


200821R1\_12

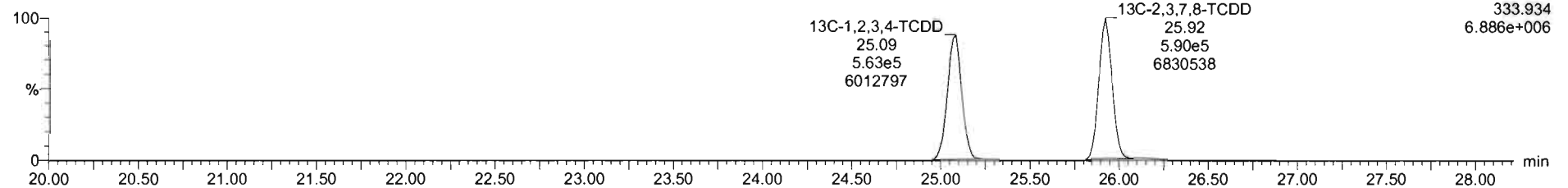


**13C-2,3,7,8-TCDD**

200821R1\_12



200821R1\_12



TargetLynx - 200821R\_12.d - [Chromatogram]

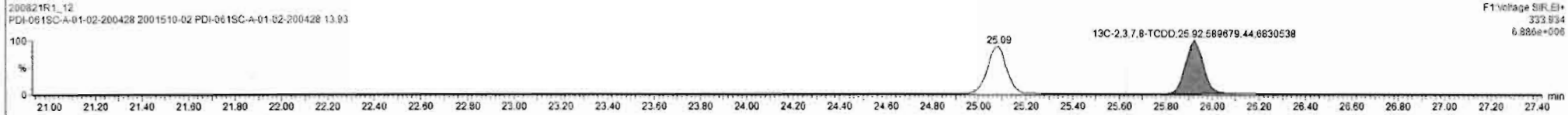
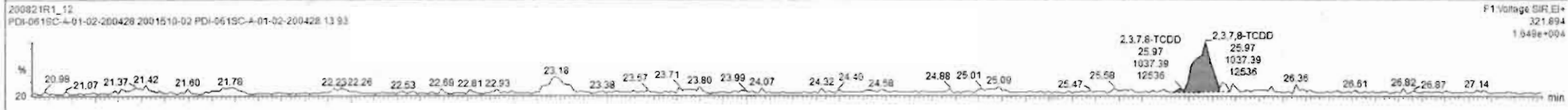
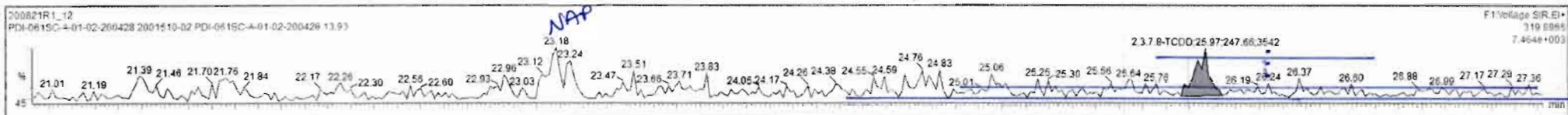
File Edit View Display Processing Window Help

200821R1\_12 - 2001510-02 PDI-061SC-A-01-02-200428 13.93 - PDI-061SC-A-01-02-200428

PK	Name	Resp	RA	nly	RRF	wtval	RT	RRT	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.8741	10.039			0.000	0.0402	0.111	
40	Total Penta-Dioxins				0.9167	10.039				0.0342		

PK	Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
1	2,3,7,8-TCDD	25.97	2.477e2	1.037e3	0.24	YES	0.11107	0.00000



Dataset: Untitled

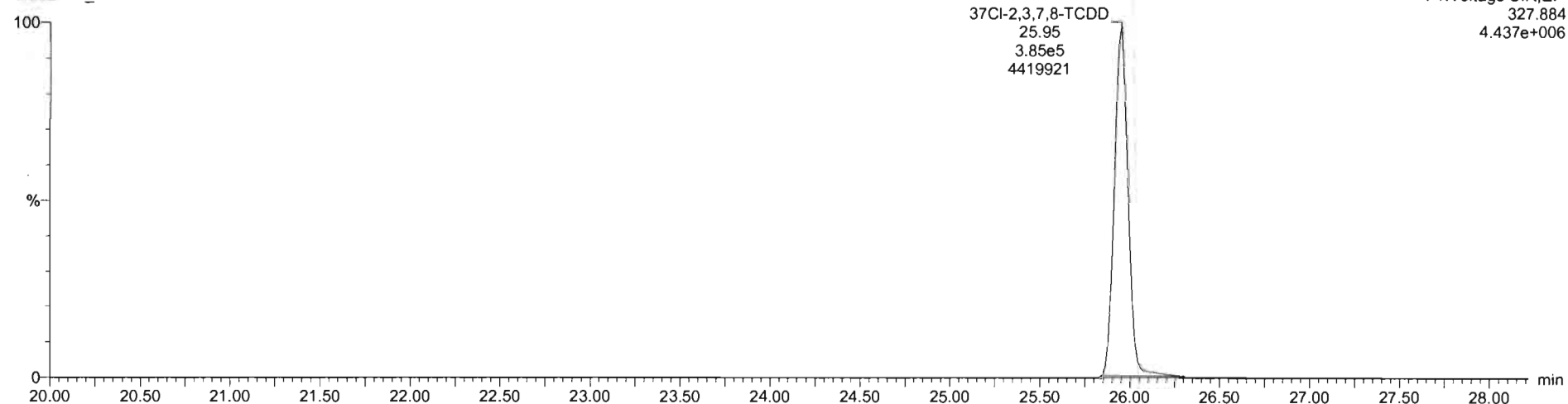
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

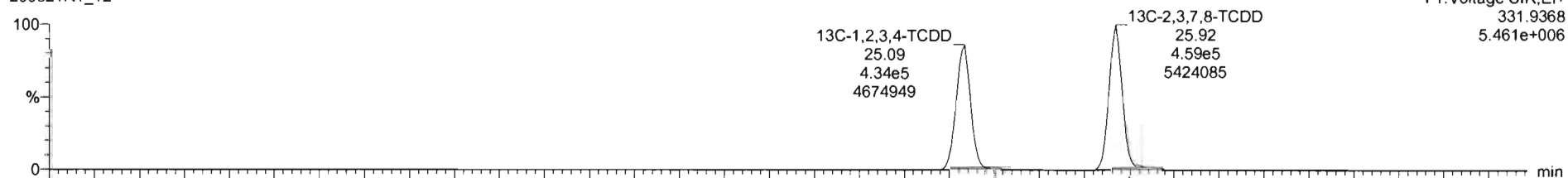
**37Cl-2,3,7,8-TCDD**

200821R1\_12

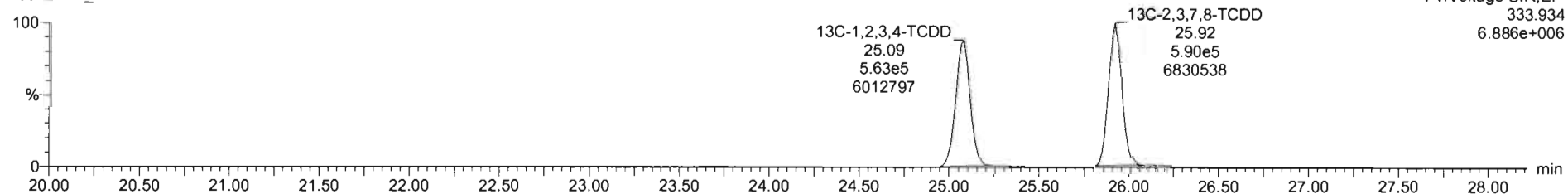


**13C-1,2,3,4-TCDD**

200821R1\_12



200821R1\_12





Dataset: Untitled

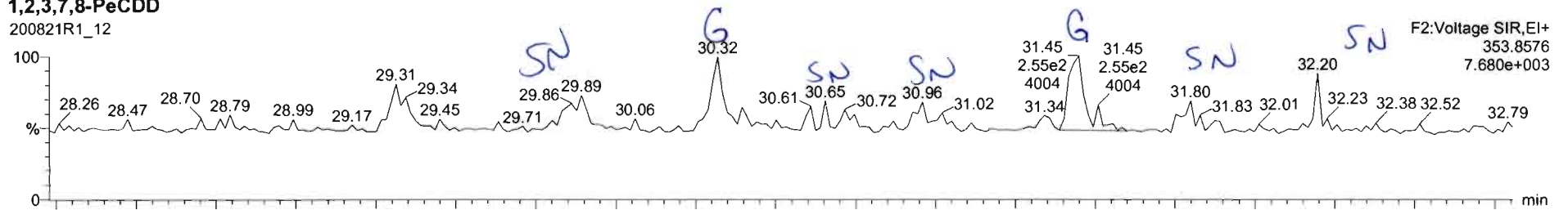
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

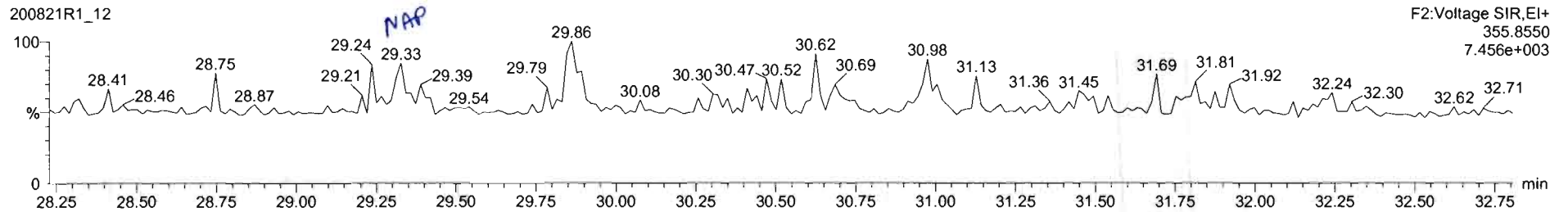
1,2,3,7,8-PeCDD

200821R1\_12



F2: Voltage SIR, EI+  
353.8576  
7.680e+003

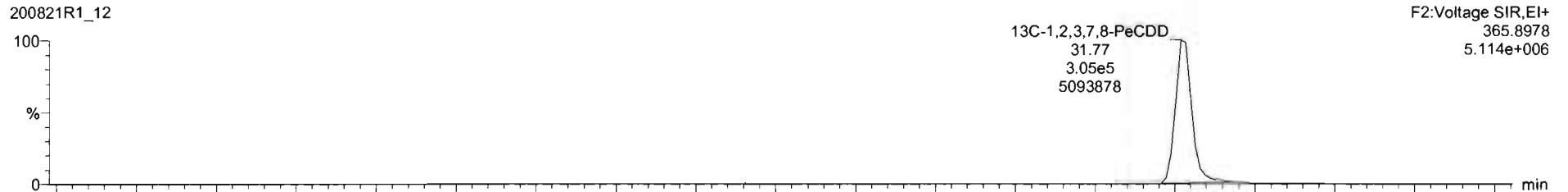
200821R1\_12



F2: Voltage SIR, EI+  
355.8550  
7.456e+003

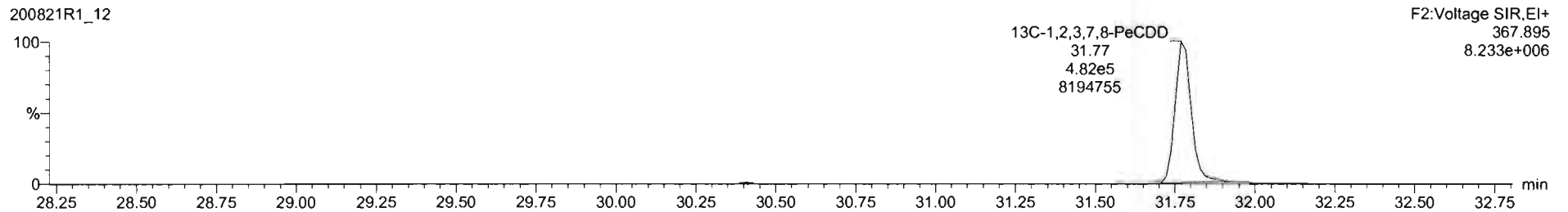
13C-1,2,3,7,8-PeCDD

200821R1\_12



F2: Voltage SIR, EI+  
365.8978  
5.114e+006

200821R1\_12



F2: Voltage SIR, EI+  
367.895  
8.233e+006

Dataset: Untitled

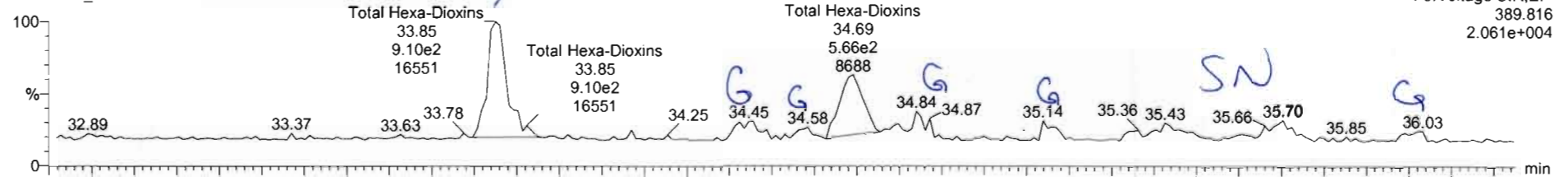
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

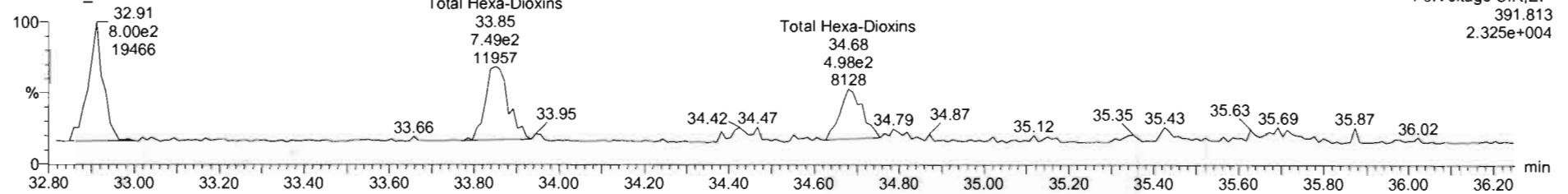
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

1,2,3,4,7,8-HxCDD

200821R1\_12

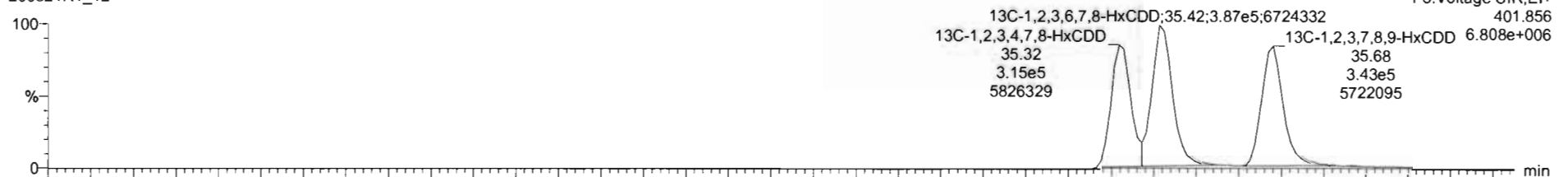


200821R1\_12

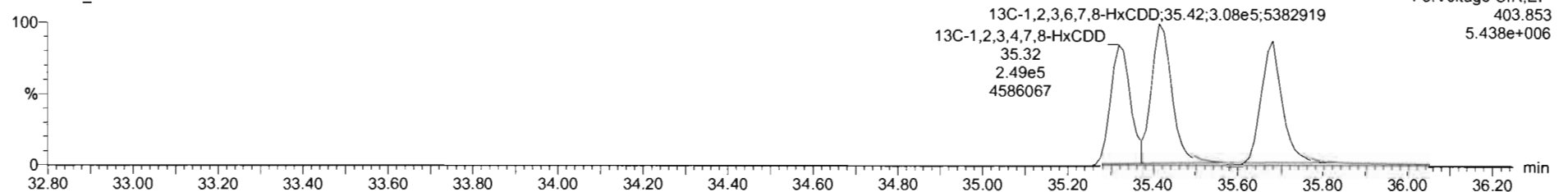


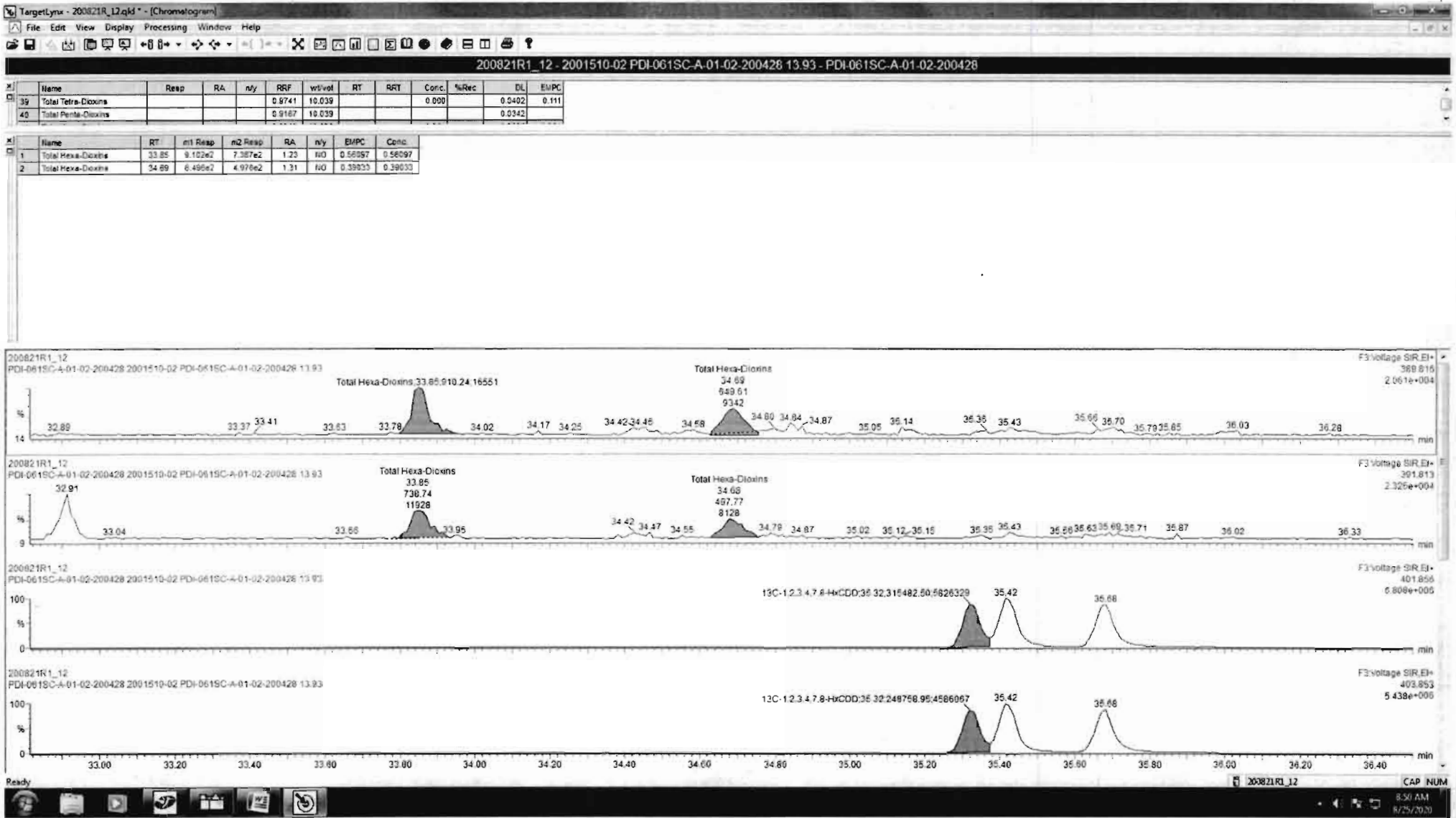
13C-1,2,3,4,7,8-HxCDD

200821R1\_12



200821R1\_12





Dataset: Untitled

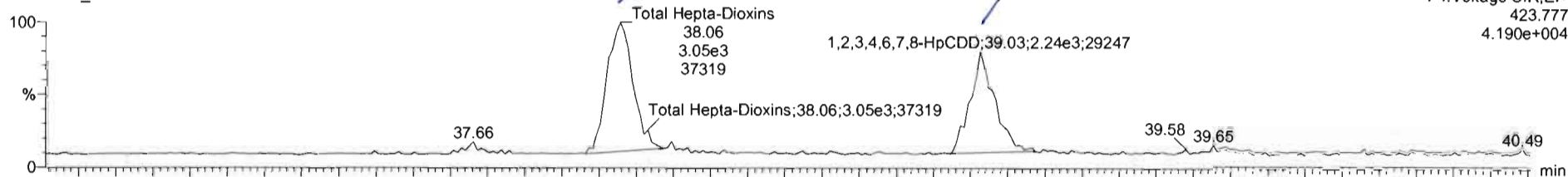
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

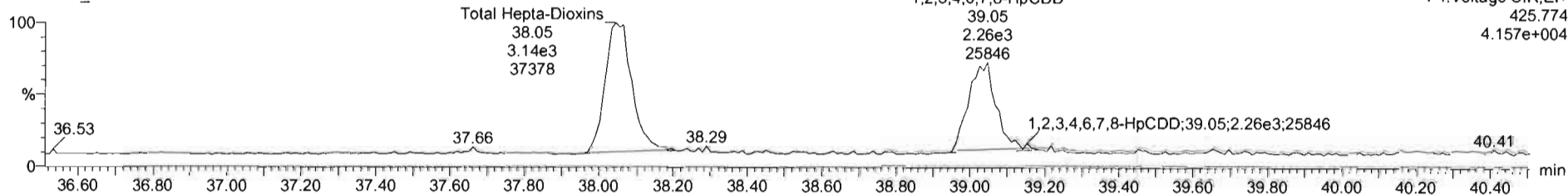
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**1,2,3,4,6,7,8-HpCDD**

200821R1\_12

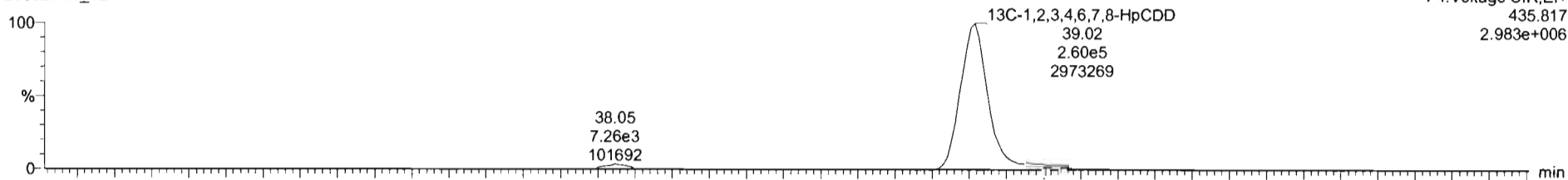


200821R1\_12

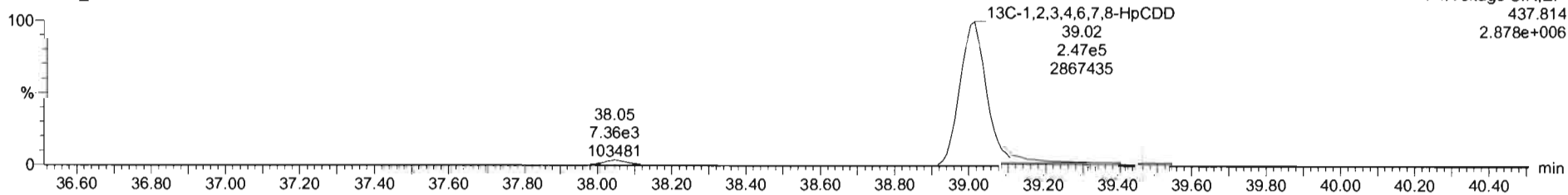


**13C-1,2,3,4,6,7,8-HpCDD**

200821R1\_12



200821R1\_12



Dataset: Untitled

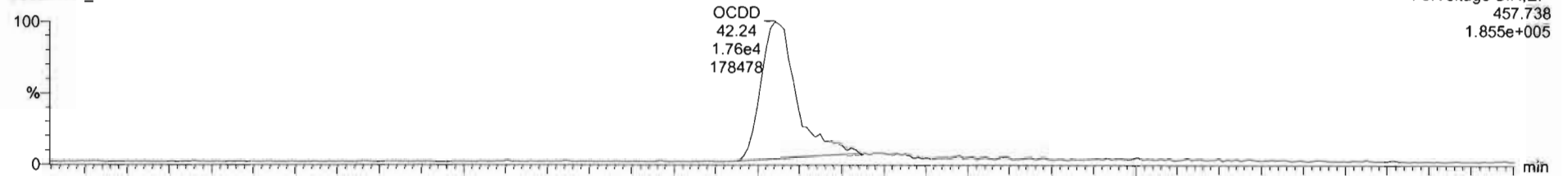
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

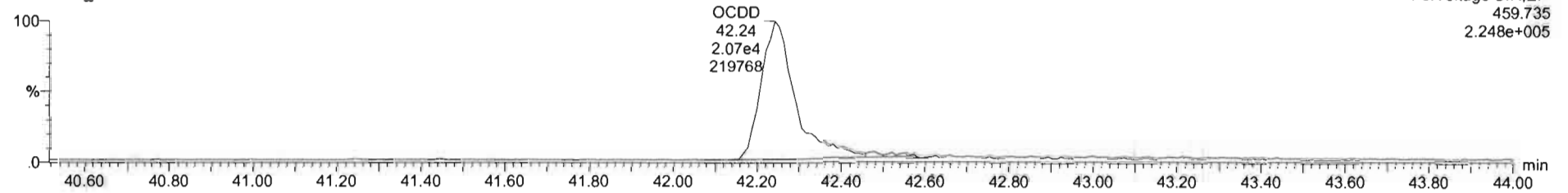
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**OCDD**

200821R1\_12

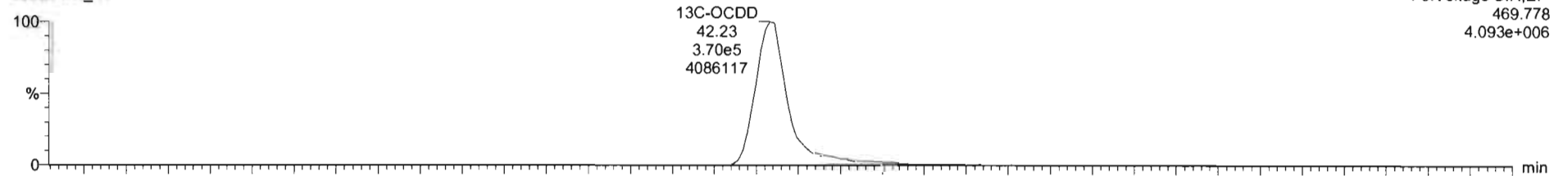


200821R1\_12

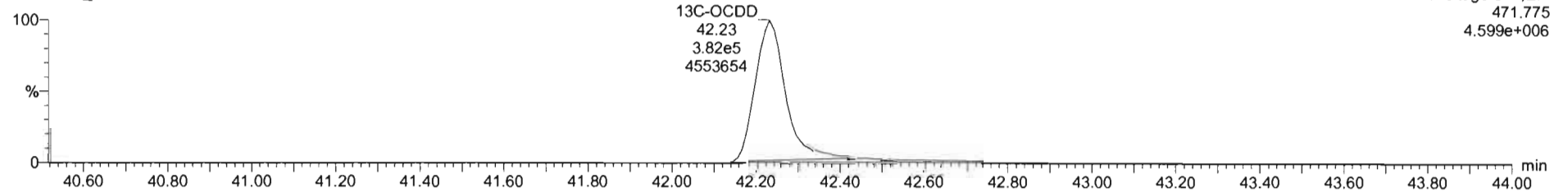


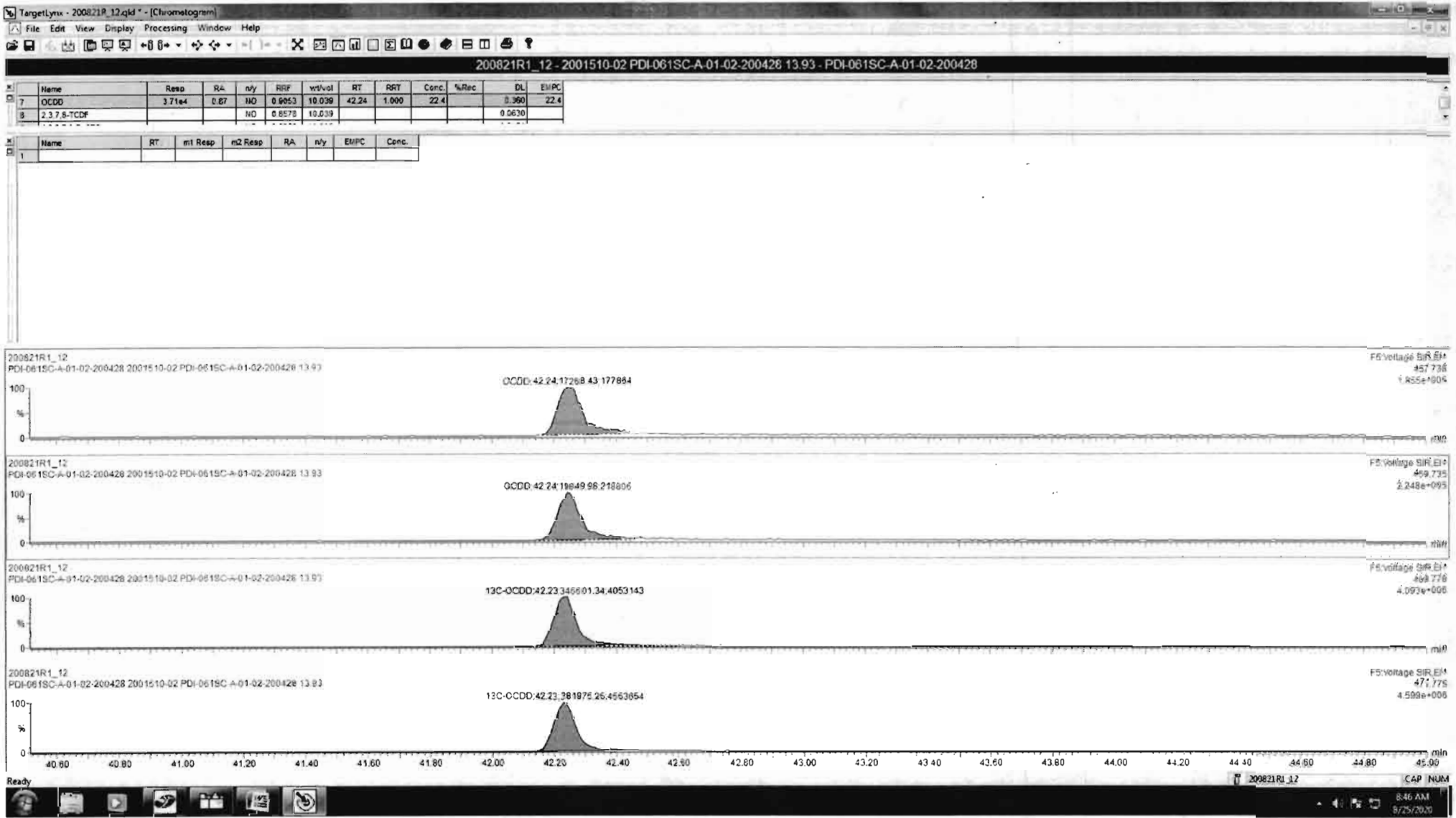
**13C-OCDD**

200821R1\_12



200821R1\_12





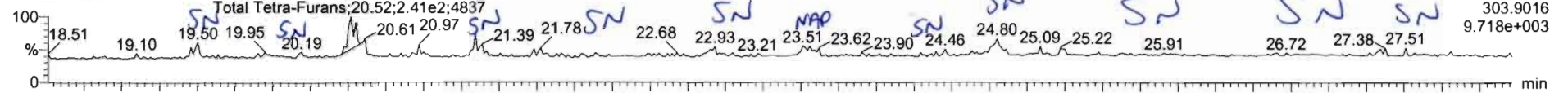
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

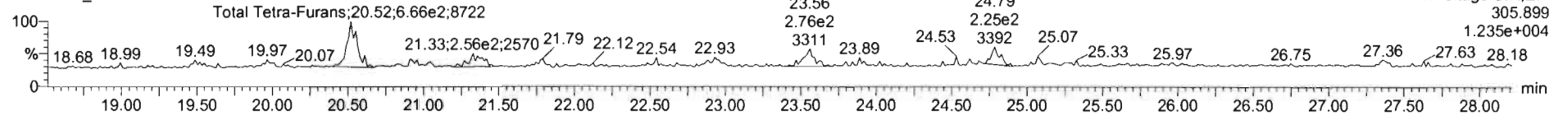
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**2,3,7,8-TCDF**

200821R1\_12

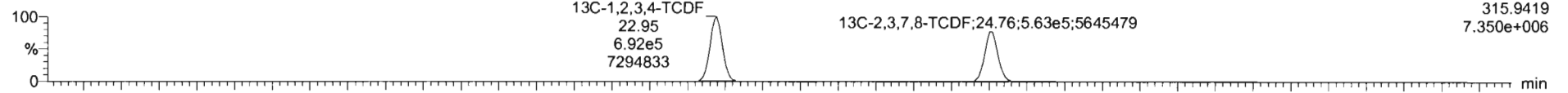


200821R1\_12

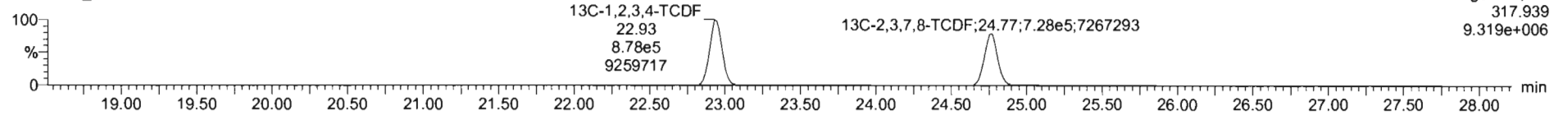


**13C-2,3,7,8-TCDF**

200821R1\_12

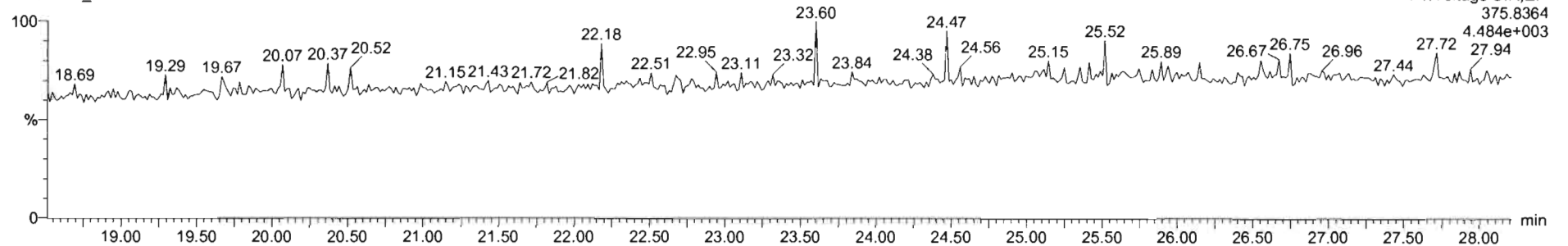


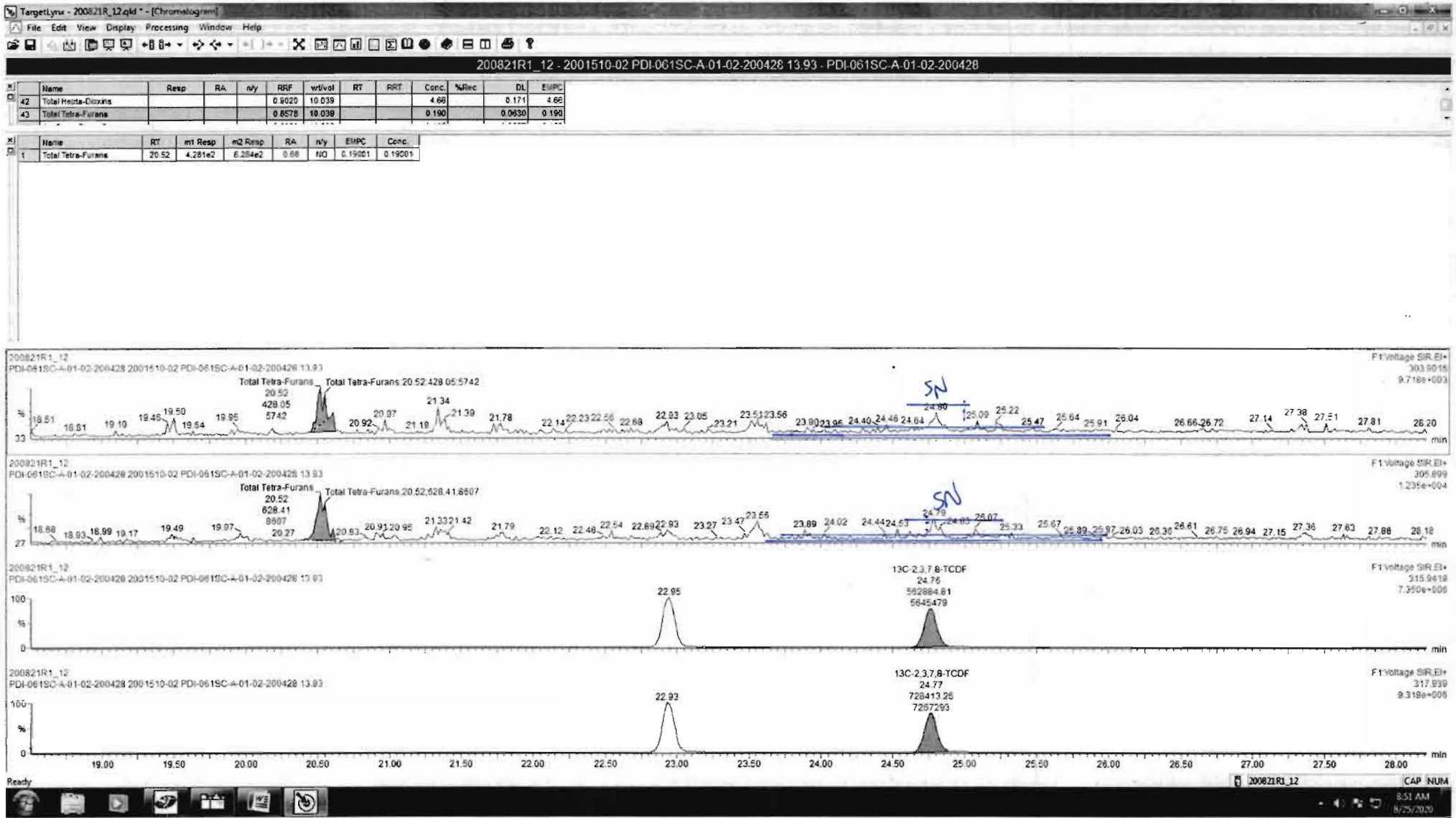
200821R1\_12



**DPE1**

200821R1\_12







Dataset: Untitled

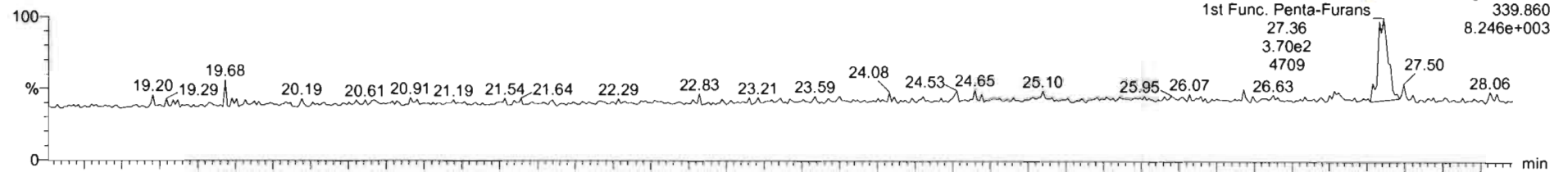
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

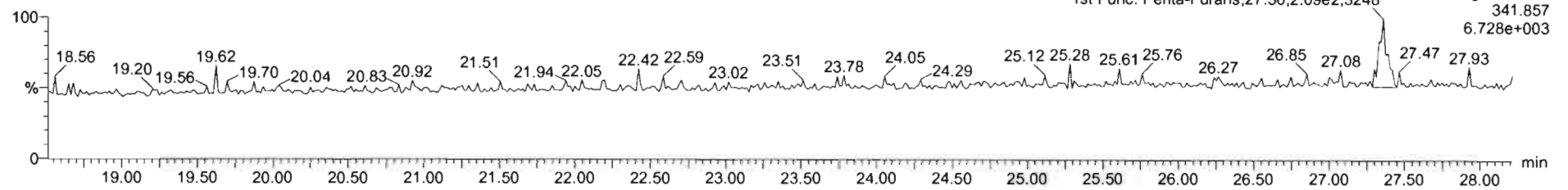
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

1st Func. Penta-Furans

200821R1\_12

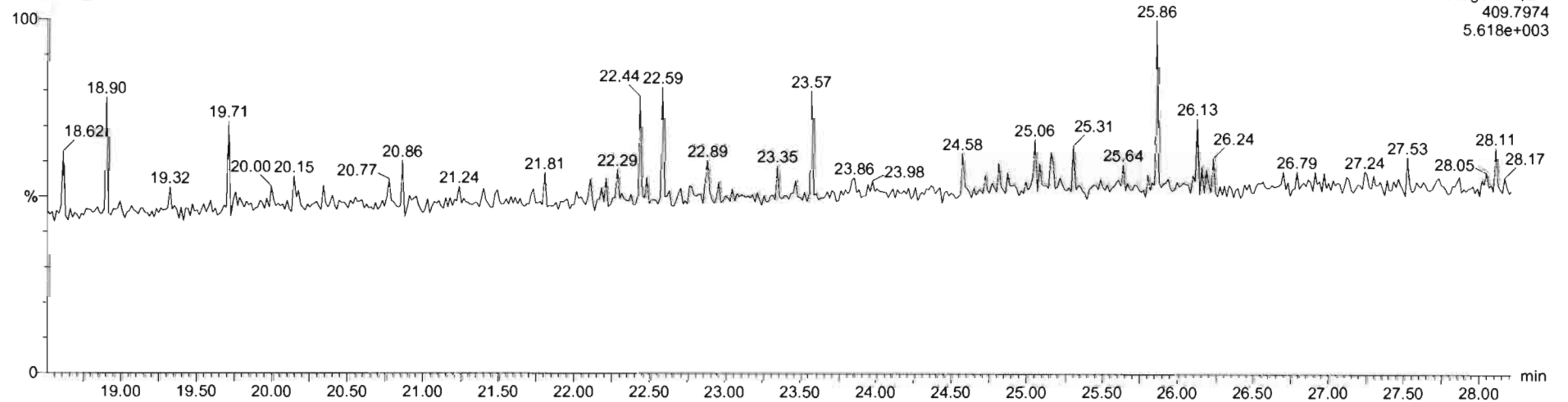


200821R1\_12



DPE6

200821R1\_12



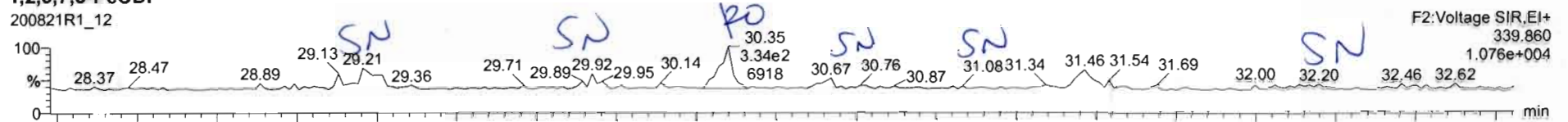
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

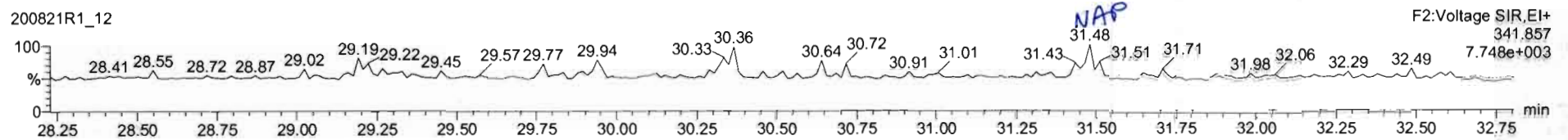
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**1,2,3,7,8-PeCDF**

200821R1\_12

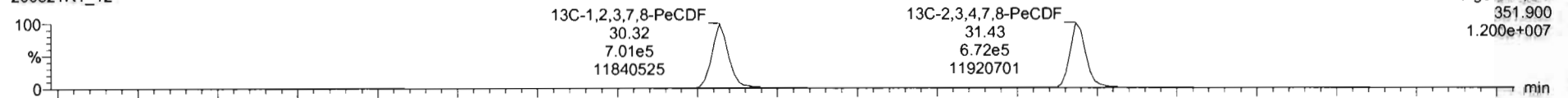


200821R1\_12

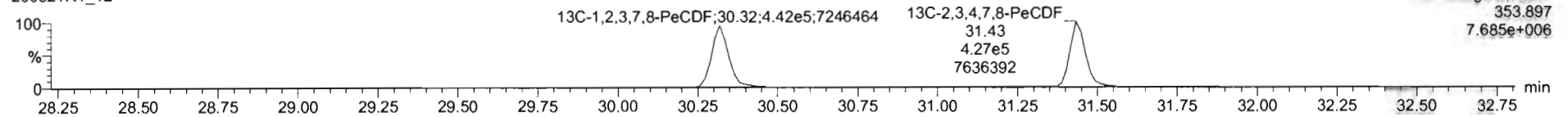


**13C-1,2,3,7,8-PeCDF**

200821R1\_12

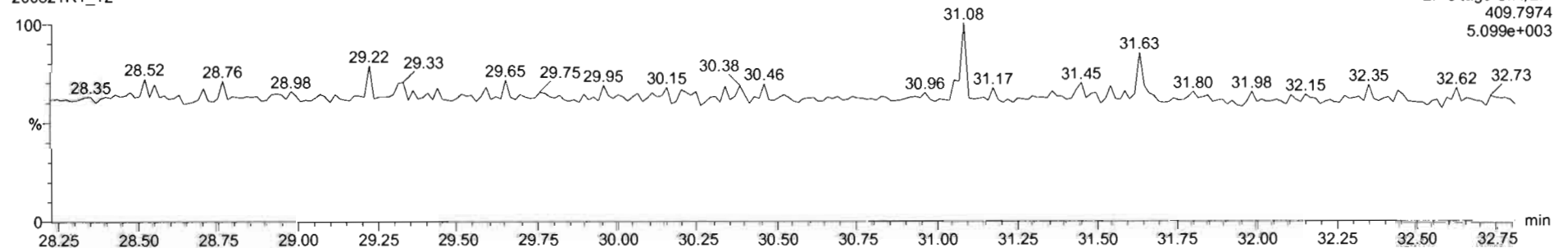


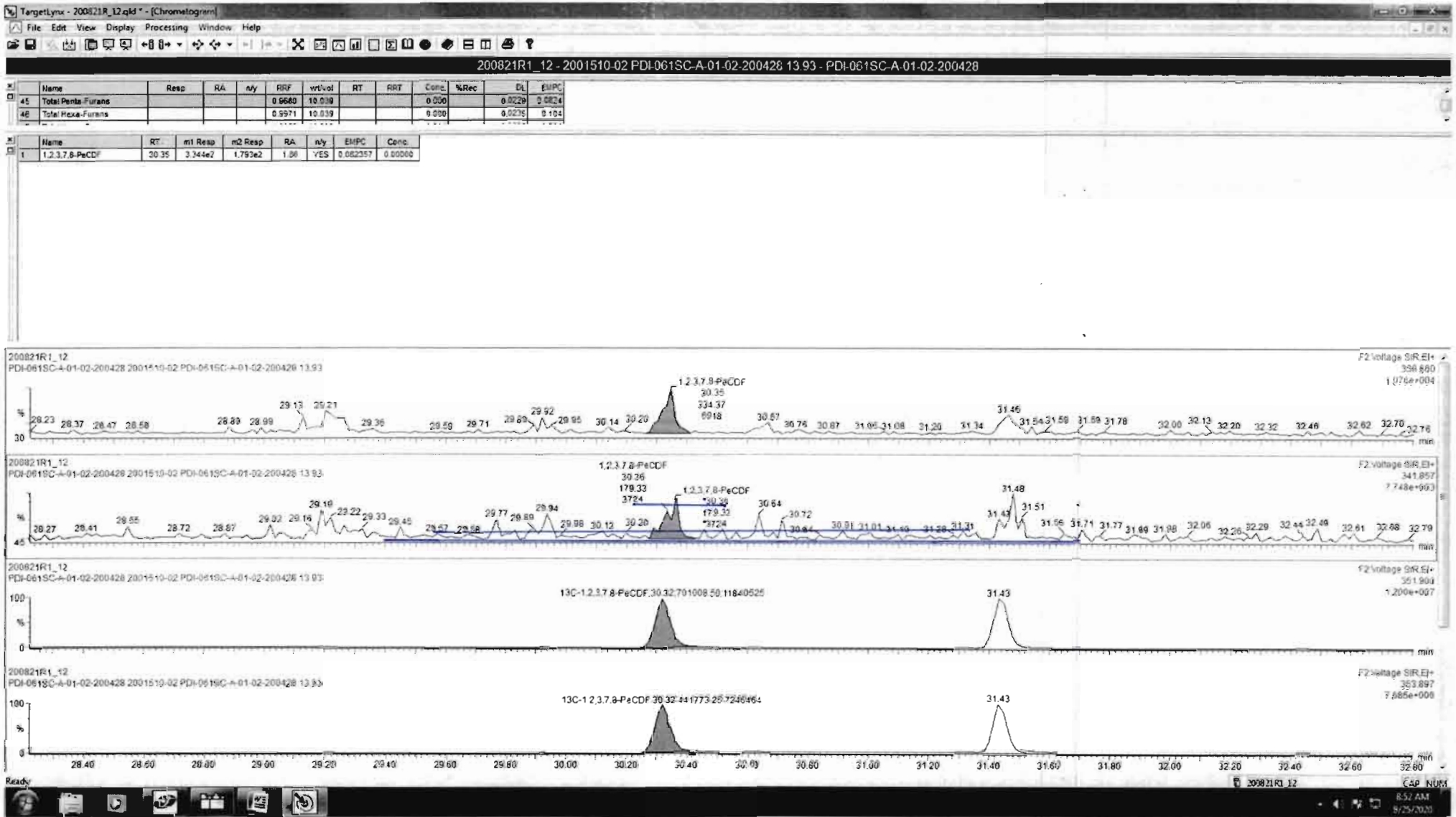
200821R1\_12



**DPE2**

200821R1\_12





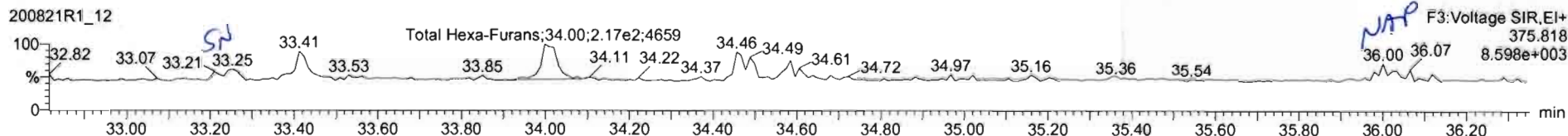
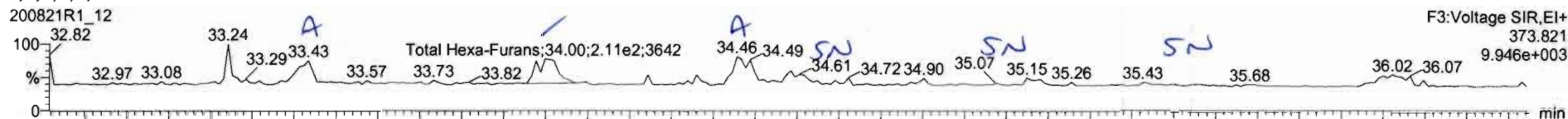
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

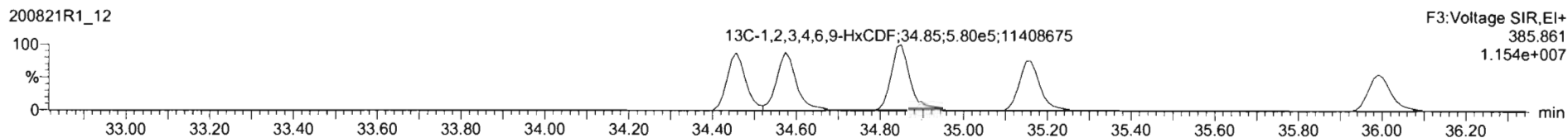
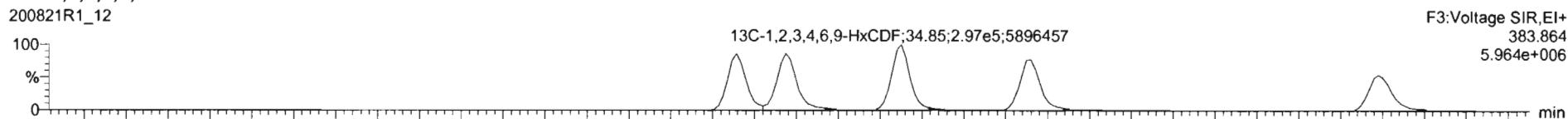
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

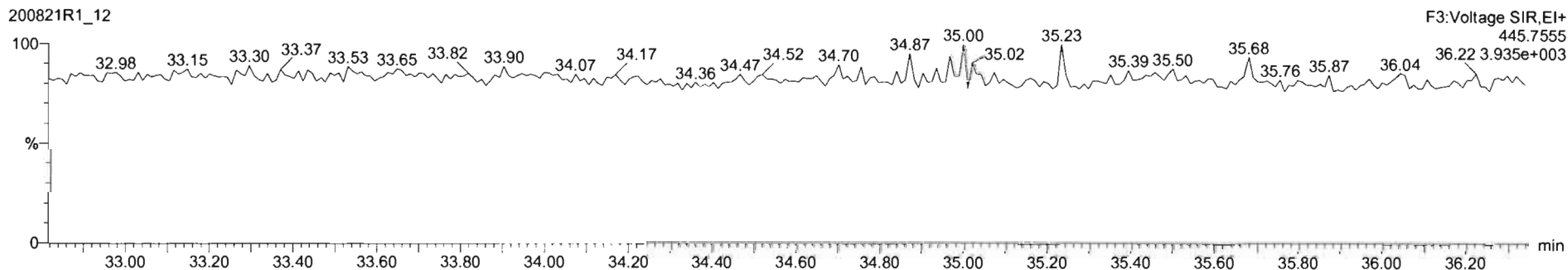
1,2,3,4,7,8-HxCDF

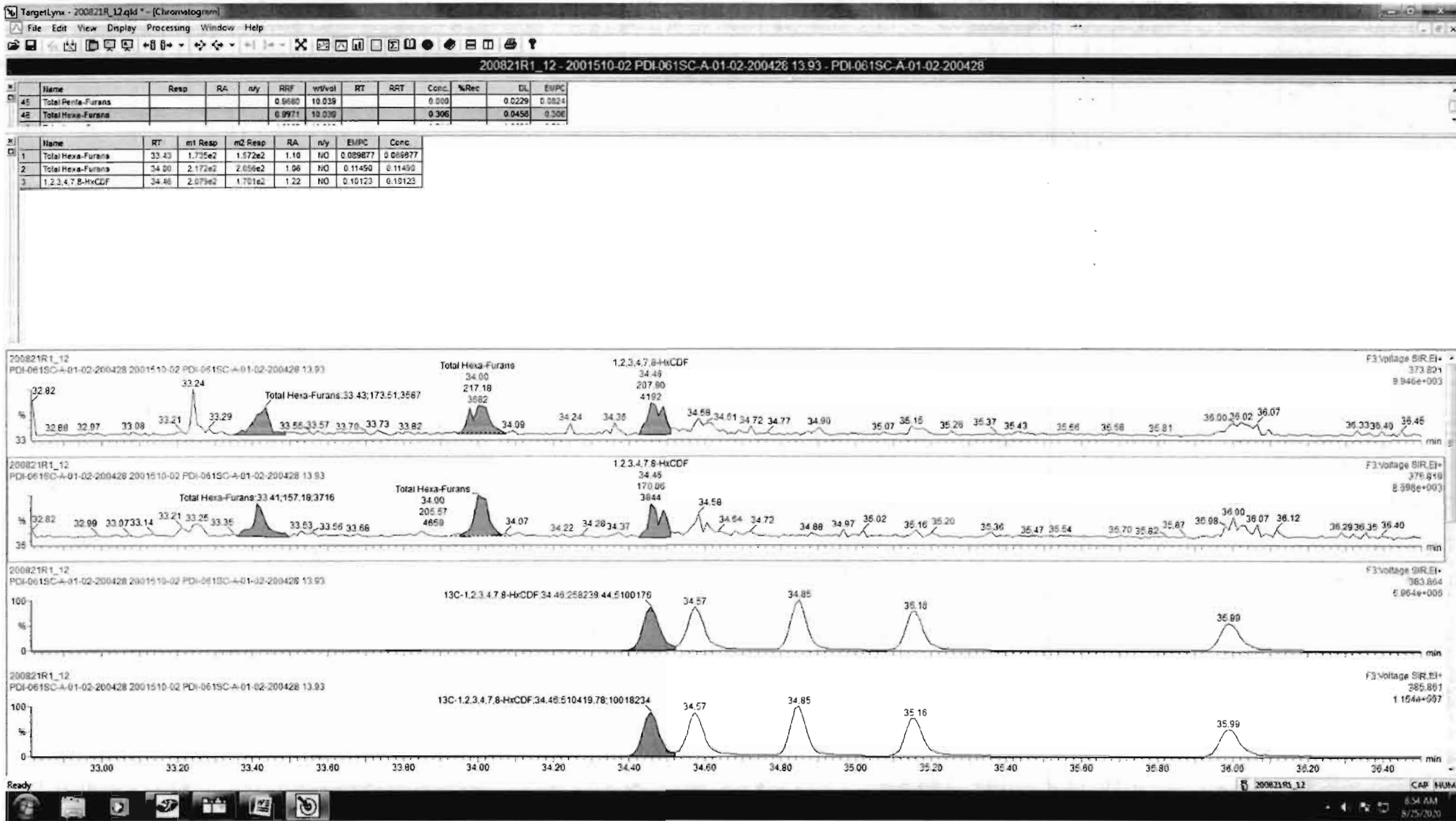


13C-1,2,3,4,7,8-HxCDF



DPE3





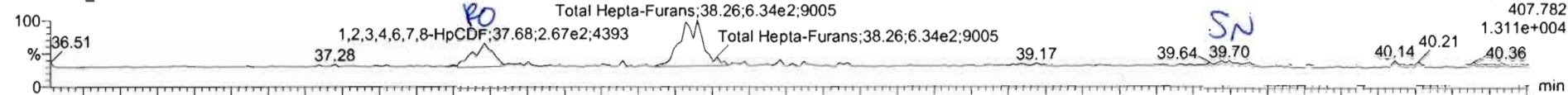
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

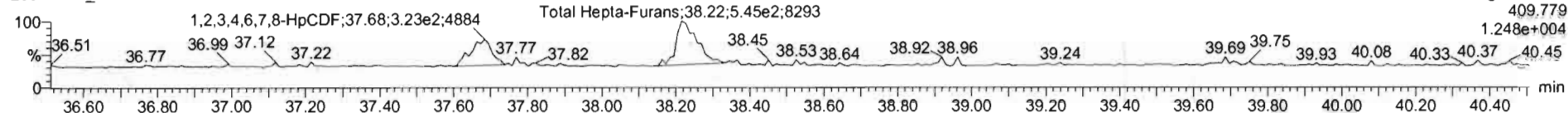
Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

**1,2,3,4,6,7,8-HpCDF**

200821R1\_12

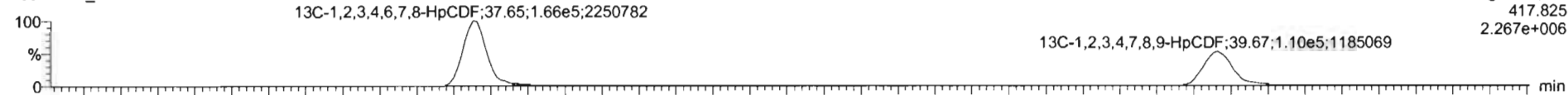


200821R1\_12

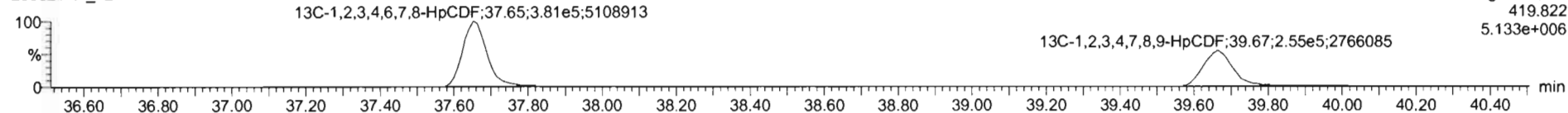


**13C-1,2,3,4,6,7,8-HpCDF**

200821R1\_12

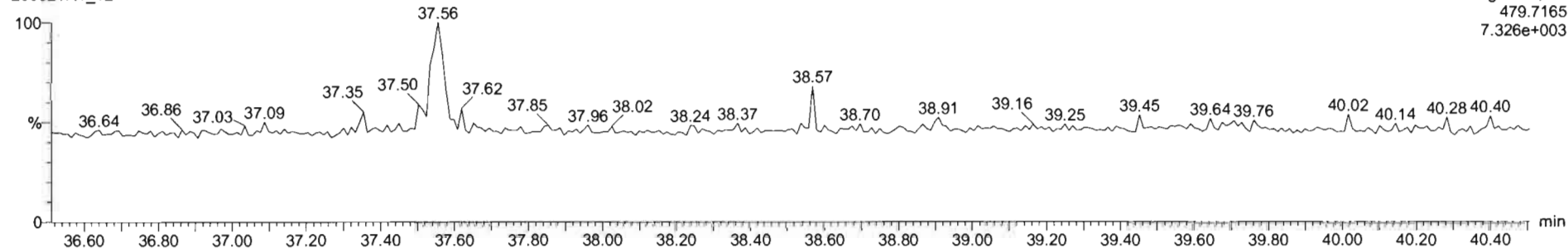


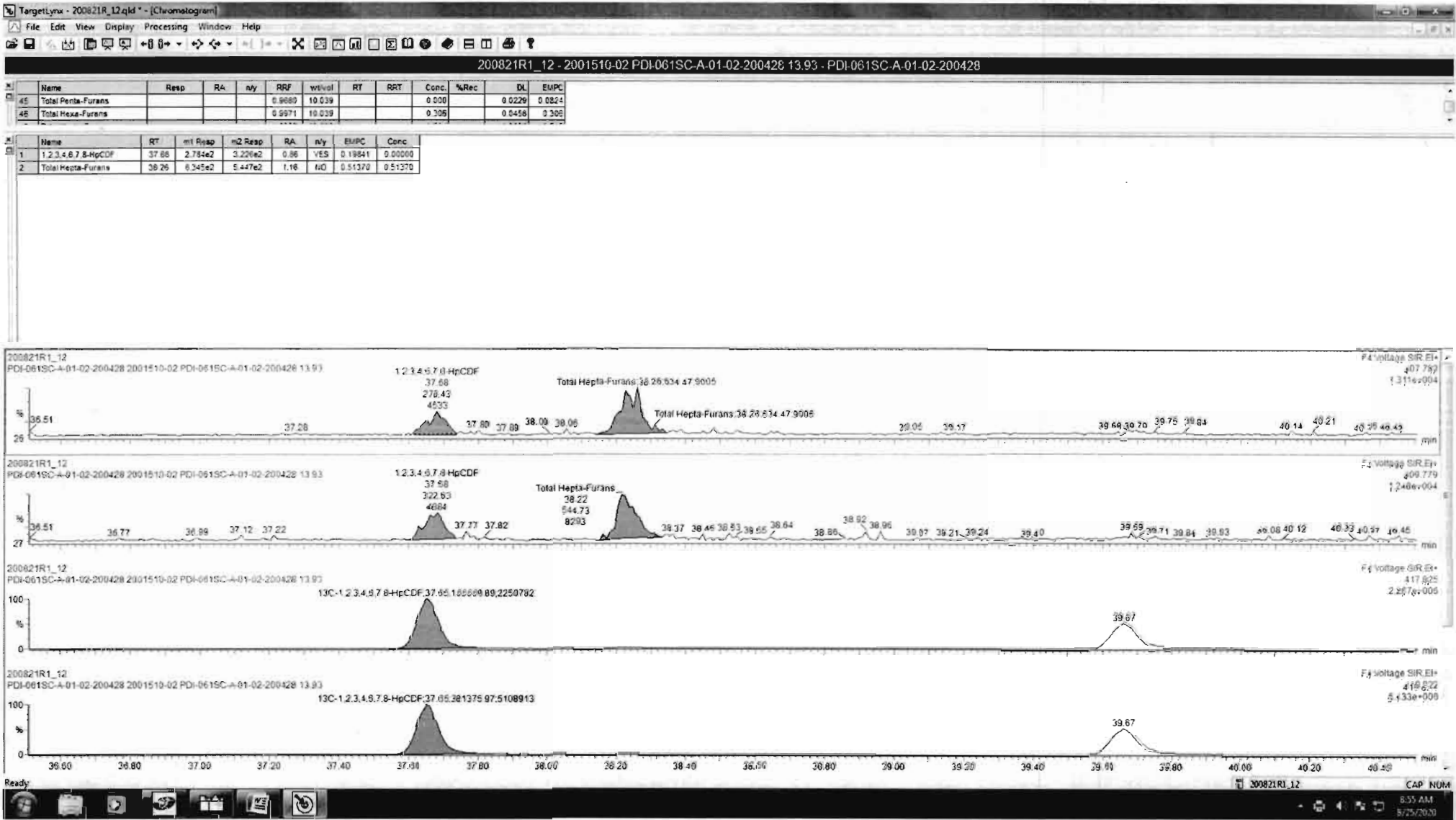
200821R1\_12



**DPE4**

200821R1\_12



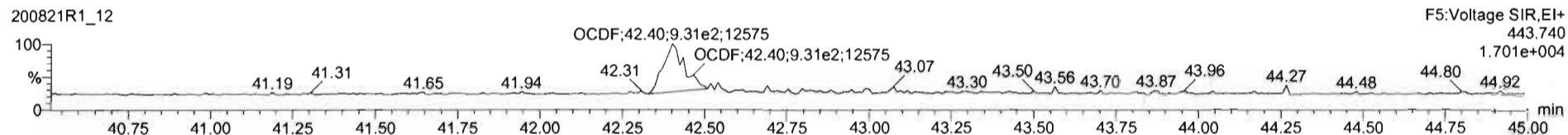
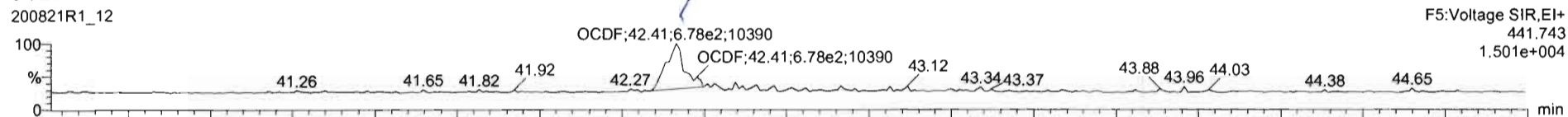


Dataset: Untitled

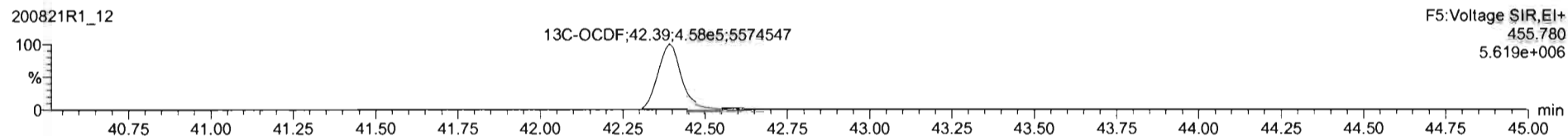
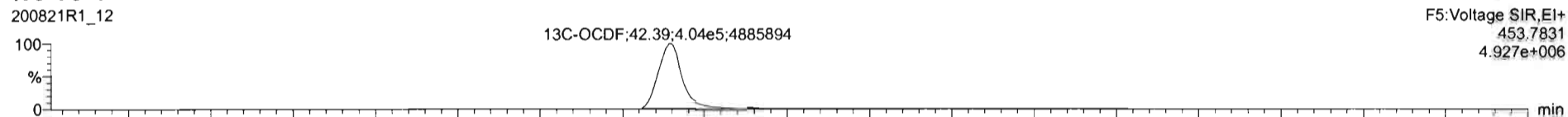
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428

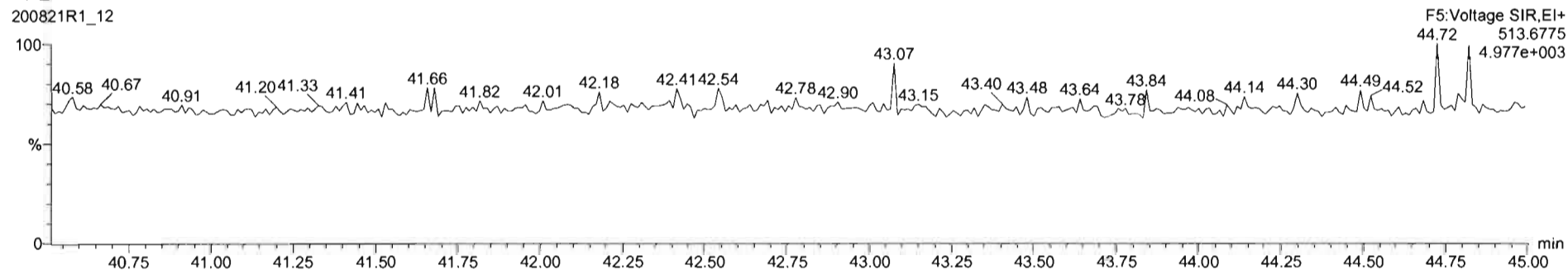
**OCDF**



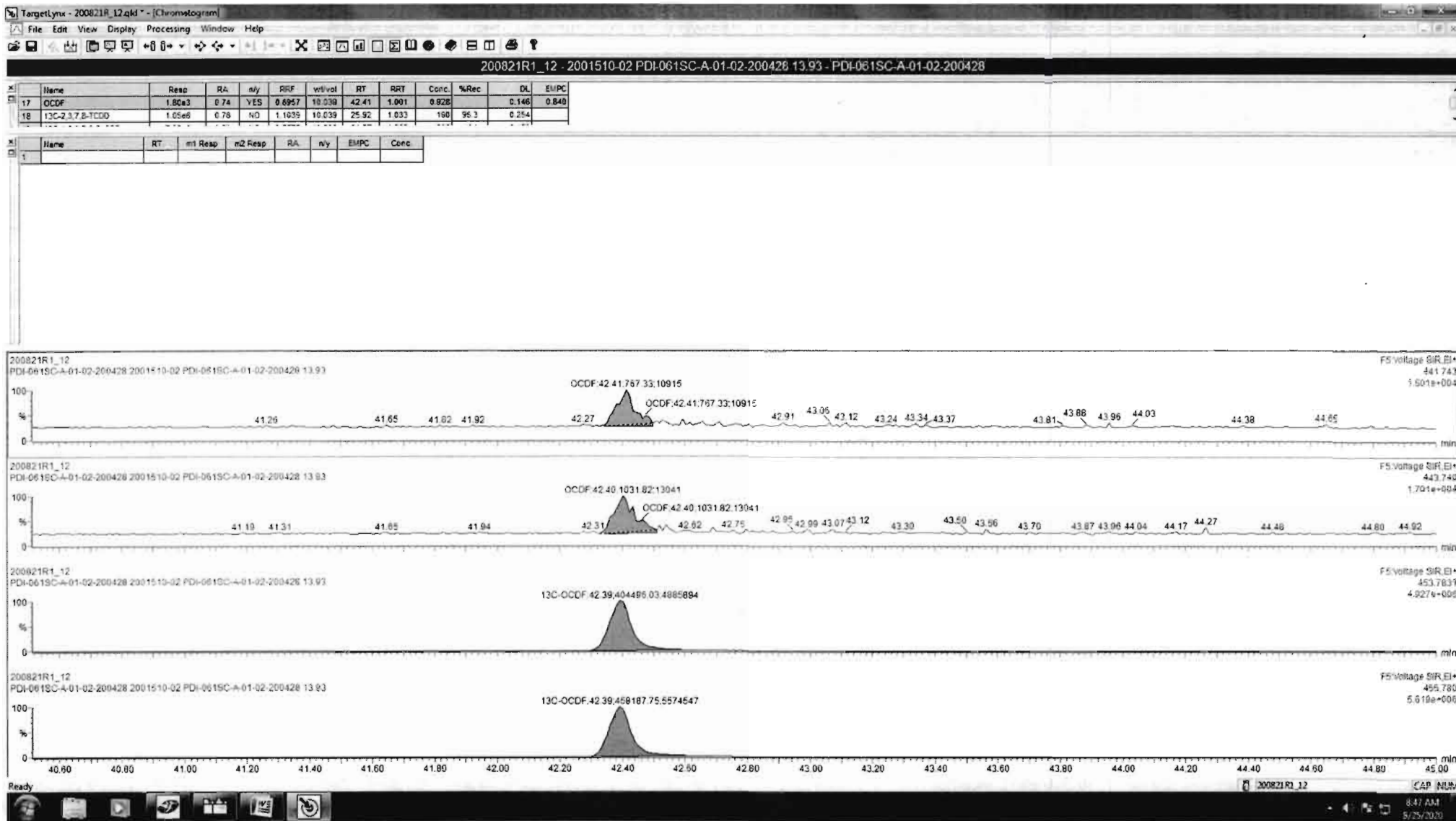
**13C-OCDF**



**DPE5**



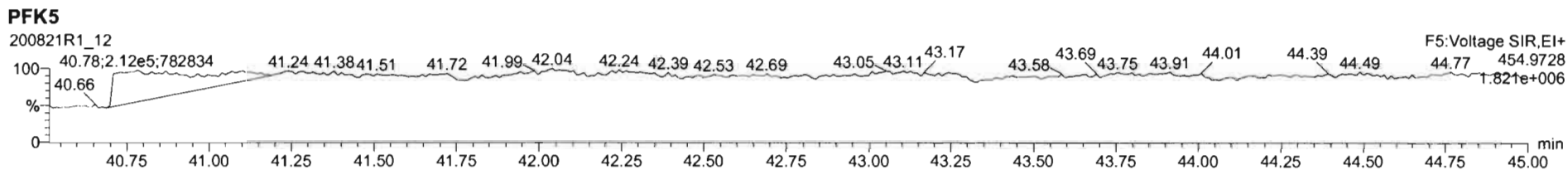
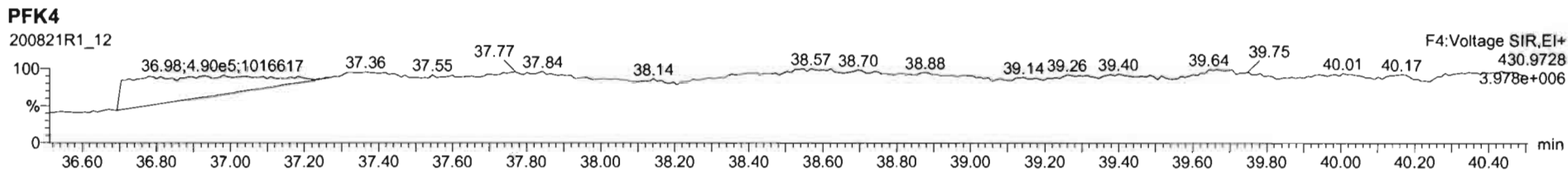
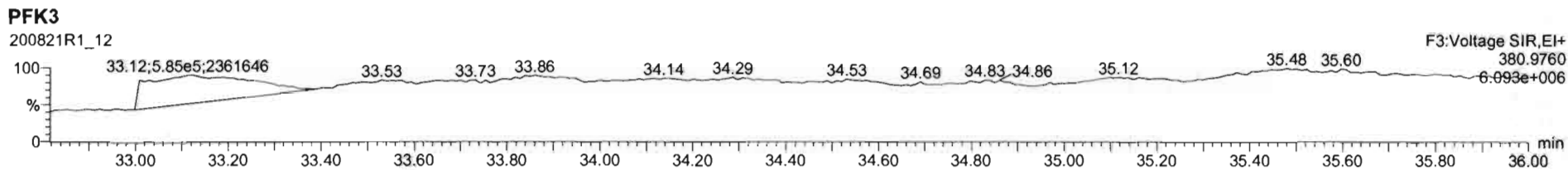
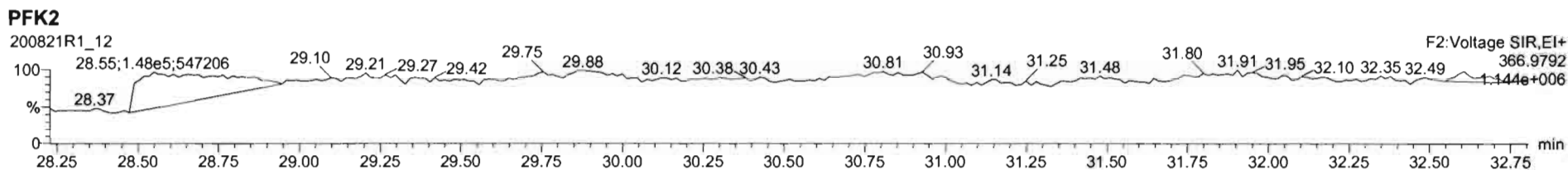
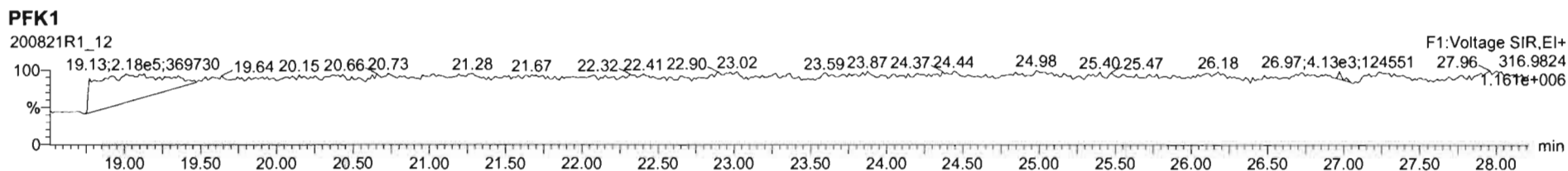




Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_12, Date: 21-Aug-2020, Time: 20:28:28, ID: 2001510-02 PDI-061SC-A-01-02-200428 13.93, Description: PDI-061SC-A-01-02-200428



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_13.qld

Last Altered: Tuesday, August 25, 2020 10:06:34 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:07:34 AM Pacific Daylight Time

*GPB - 08/25/2020*  
*C702/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	2,3,7,8-TCDD			NO	0.974	10.058	25.910		1.001				0.0965	
2	1,2,3,7,8-PeCDD			NO	0.917	10.058	31.790		1.001				0.0845	
3	1,2,3,4,7,8-HxCDD			NO	1.04	10.058	35.330		1.000				0.102	
4	1,2,3,6,7,8-HxCDD			NO	0.938	10.058	35.426		1.000				0.101	
5	1,2,3,7,8,9-HxCDD			NO	0.964	10.058	35.692		1.000				0.108	
6	1,2,3,4,6,7,8-HpCDD	1.19e3	0.98	NO	0.902	10.058	39.027	39.02	1.000	1.000	0.66923		0.127	0.669
7	OCDD	8.55e3	0.88	NO	0.905	10.058	42.221	42.23	1.000	1.000	6.6605		0.424	6.66
8	2,3,7,8-TCDF			NO	0.858	10.058	24.721		1.001				0.0611	
9	1,2,3,7,8-PeCDF			NO	0.968	10.058	30.325		1.001				0.0421	
10	2,3,4,7,8-PeCDF			NO	1.08	10.058	31.464		1.001				0.0352	
11	1,2,3,4,7,8-HxCDF			NO	0.968	10.058	34.457		1.000				0.0434	
12	1,2,3,6,7,8-HxCDF			NO	1.00	10.058	34.584		1.000				0.0434	
13	2,3,4,6,7,8-HxCDF			NO	0.997	10.058	35.195		1.001				0.0485	
14	1,2,3,7,8,9-HxCDF			NO	0.961	10.058	35.990		1.000				0.0657	
15	1,2,3,4,6,7,8-HpCDF			NO	1.00	10.058	37.690		1.001				0.0584	
16	1,2,3,4,7,8,9-HpCDF			NO	1.11	10.058	39.665		1.000				0.103	
17	OCDF			NO	0.896	10.058	42.381		1.000				0.117	
18	13C-2,3,7,8-TCDD	9.11e5	0.77	NO	1.10	10.058	25.818	25.88	1.032	1.034	183.35	92.2	0.402	
19	13C-1,2,3,7,8-PeCDD	6.21e5	0.64	NO	0.757	10.058	31.476	31.77	1.258	1.269	182.08	91.6	0.276	
20	13C-1,2,3,4,7,8-HxCDD	4.43e5	1.27	NO	0.647	10.058	35.332	35.32	1.014	1.013	182.34	91.7	0.465	
21	13C-1,2,3,6,7,8-HxCDD	5.54e5	1.26	NO	0.805	10.058	35.433	35.43	1.017	1.016	183.23	92.1	0.374	
22	13C-1,2,3,7,8,9-HxCDD	5.15e5	1.25	NO	0.726	10.058	35.705	35.68	1.025	1.024	189.01	95.1	0.414	
23	13C-1,2,3,4,6,7,8-HpCDD	3.92e5	1.07	NO	0.611	10.058	39.075	39.01	1.121	1.119	170.82	85.9	0.386	
24	13C-OCDD	5.64e5	0.90	NO	0.513	10.058	42.274	42.22	1.213	1.211	292.91	73.7	0.525	
25	13C-2,3,7,8-TCDF	1.13e6	0.78	NO	0.933	10.058	24.727	24.70	0.988	0.987	168.90	84.9	0.461	
26	13C-1,2,3,7,8-PeCDF	9.57e5	1.54	NO	0.696	10.058	30.283	30.30	1.210	1.211	191.68	96.4	0.683	
27	13C-2,3,4,7,8-PeCDF	8.86e5	1.59	NO	0.669	10.058	31.406	31.43	1.255	1.256	184.65	92.9	0.711	
28	13C-1,2,3,4,7,8-HxCDF	6.32e5	0.51	NO	0.886	10.058	34.471	34.46	0.989	0.989	189.99	95.5	0.560	
29	13C-1,2,3,6,7,8-HxCDF	6.70e5	0.52	NO	0.955	10.058	34.590	34.57	0.993	0.992	186.78	93.9	0.520	
30	13C-2,3,4,6,7,8-HxCDF	6.05e5	0.51	NO	0.882	10.058	35.161	35.16	1.009	1.009	182.59	91.8	0.563	
31	13C-1,2,3,7,8,9-HxCDF	5.10e5	0.50	NO	0.737	10.058	36.015	35.99	1.033	1.033	184.57	92.8	0.674	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_13.qld

Last Altered: Tuesday, August 25, 2020 10:06:34 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:07:34 AM Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	4.76e5	0.45	NO	0.651	10.058	37.702	37.65	1.082	1.080	194.70	97.9	0.499	
33	13C-1,2,3,4,7,8,9-HpCDF	2.82e5	0.41	NO	0.459	10.058	39.727	39.67	1.140	1.138	163.75	82.4	0.706	
34	13C-OCDF	6.63e5	0.89	NO	0.609	10.058	42.435	42.38	1.218	1.216	290.04	72.9	0.447	
35	37Cl-2,3,7,8-TCDD	3.59e5			1.14	10.058	25.716	25.91	1.028	1.035	70.101	88.1	0.0698	
36	13C-1,2,3,4-TCDD	8.95e5	0.79	NO	1.00	10.058	25.070	25.02	1.000	1.000	198.84	100	0.444	
37	13C-1,2,3,4-TCDF	1.43e6	0.79	NO	1.00	10.058	23.080	22.85	1.000	1.000	198.84	100	0.430	
38	13C-1,2,3,4,6,9-HxCDF	7.46e5	0.51	NO	1.00	10.058	34.740	34.85	1.000	1.000	198.84	100	0.497	
39	Total Tetra-Dioxins				0.974	10.058	24.620		0.000		0.23001		0.0965	0.230
40	Total Penta-Dioxins				0.917	10.058	29.960		0.000		0.00000		0.0845	0.165
41	Total Hexa-Dioxins				0.938	10.058	33.635		0.000		0.88420		0.108	0.884
42	Total Hepta-Dioxins				0.902	10.058	37.640		0.000		1.8090		0.127	1.81
43	Total Tetra-Furans				0.858	10.058	23.610		0.000		0.22534		0.0611	0.225
44	1st Func. Penta-Furans				0.968	10.058	27.230		0.000				0.0116	
45	Total Penta-Furans				0.968	10.058	29.275		0.000				0.0155	
46	Total Hexa-Furans				0.997	10.058	33.555		0.000				0.0251	
47	Total Hepta-Furans				1.00	10.058	37.835		0.000				0.0472	

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_13.qld

Last Altered: Tuesday, August 25, 2020 10:06:34 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:07:34 AM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	23.11	6.468e3	7.371e3	4.739e2	5.529e2	0.86	NO	1.027e3	0.23001	0.23001	0.0965

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.86	2.544e3	5.851e3	1.680e2	3.037e2	0.55	NO	0.000e0	0.00000	0.16480	0.0845

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.85	1.523e4	1.255e4	7.399e2	6.890e2	1.07	NO	1.429e3	0.60102	0.60102	0.108
2	Total Hexa-Dioxins	34.69	6.224e3	7.213e3	3.472e2	3.261e2	1.06	NO	6.733e2	0.28318	0.28318	0.108

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.05	1.776e4	1.574e4	1.039e3	9.860e2	1.05	NO	2.025e3	1.1398	1.1398	0.127
2	1,2,3,4,6,7,8-HpCDD	39.02	8.148e3	9.483e3	5.873e2	6.016e2	0.98	NO	1.189e3	0.66923	0.66923	0.127

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	20.43	4.779e3	7.468e3	4.362e2	6.632e2	0.66	NO	1.099e3	0.22534	0.22534	0.0611

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_13.qld

Last Altered: Tuesday, August 25, 2020 10:06:34 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:07:34 AM Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

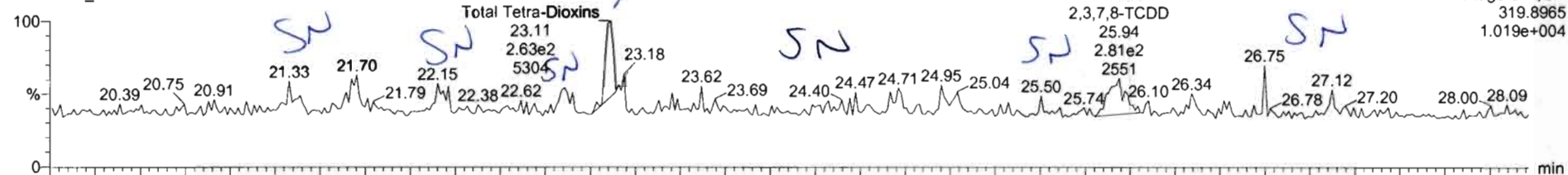
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

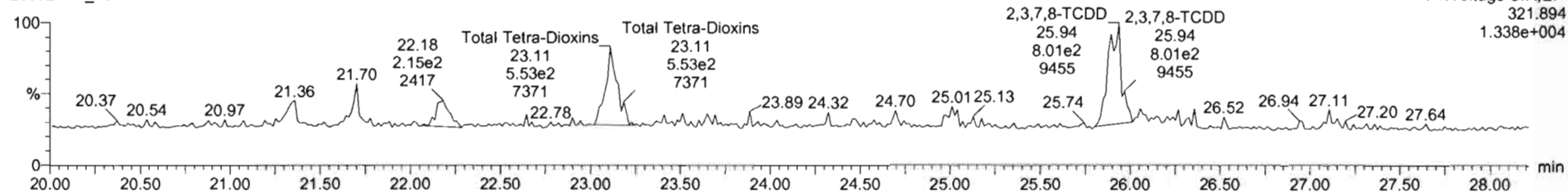
2,3,7,8-TCDD

200821R1\_13



F1: Voltage SIR, EI+  
319.8965  
1.019e+004

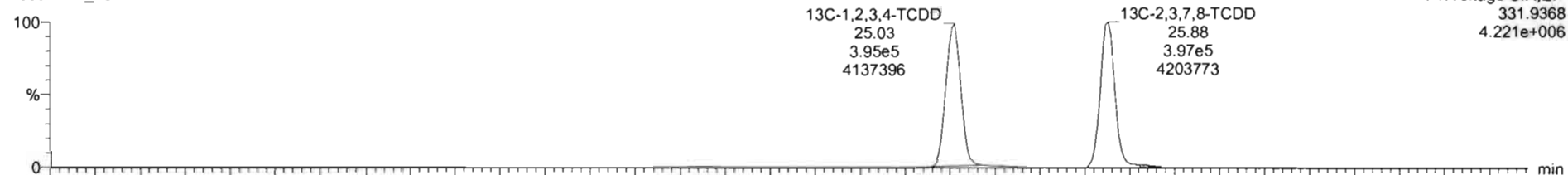
200821R1\_13



F1: Voltage SIR, EI+  
321.894  
1.338e+004

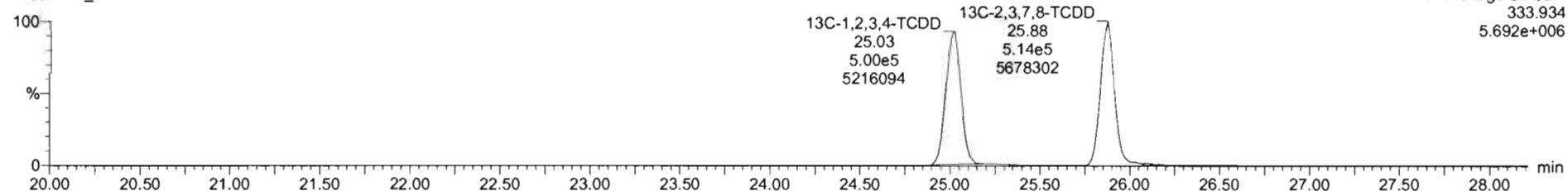
13C-2,3,7,8-TCDD

200821R1\_13



F1: Voltage SIR, EI+  
331.9368  
4.221e+006

200821R1\_13



F1: Voltage SIR, EI+  
333.934  
5.692e+006

TargetLynx - 200821R\_13.qld - (Chromatogram)

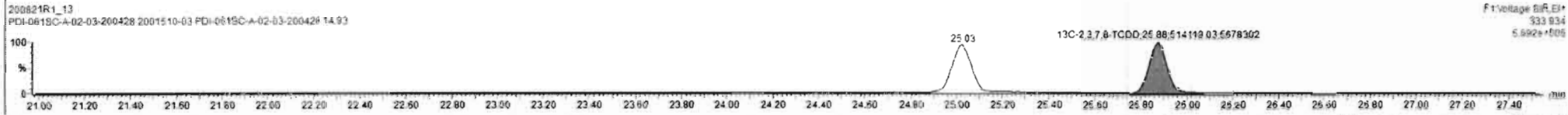
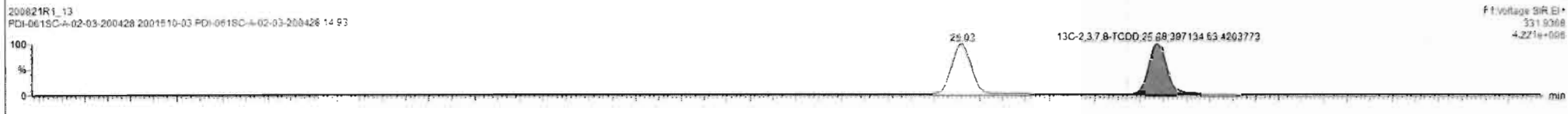
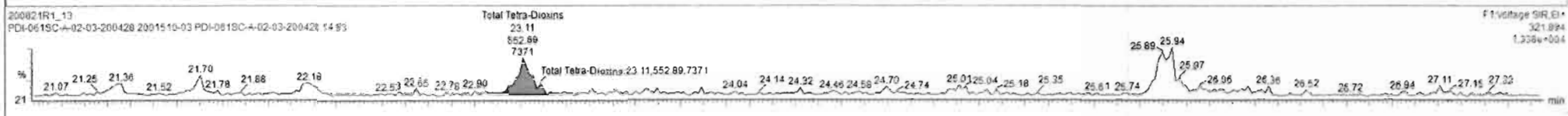
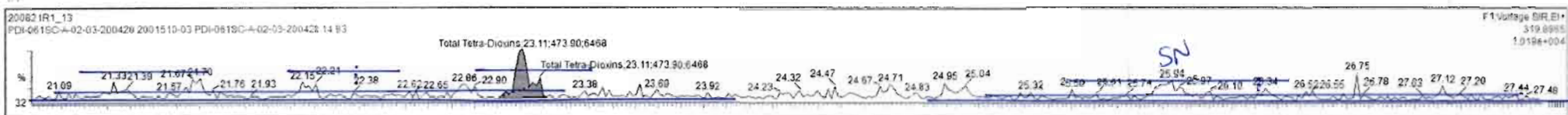
File Edit View Display Processing Window Help

200821R1\_13 - 2001510-03 PDI-061SC-A-02-03-200426 14.93 - PDI-061SC-A-02-03-200428

Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9741	10.058			0.230	0.0965	0.238	
40 Total Penta-Dioxins				0.9167	10.058				0.0406		
41 Total Hexa-Dioxins				0.9360	10.058			0.618	0.108	0.844	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Tetra-Dioxins	23.11	4.738e2	5.529e2	0.86	NO	5.23001	0.23001





Dataset: Untitled

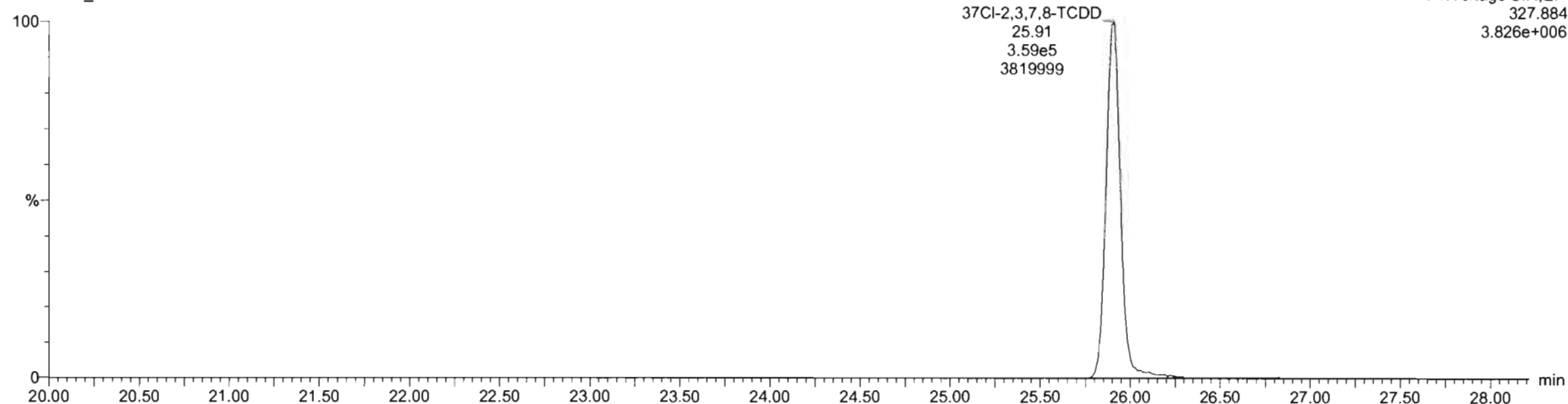
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

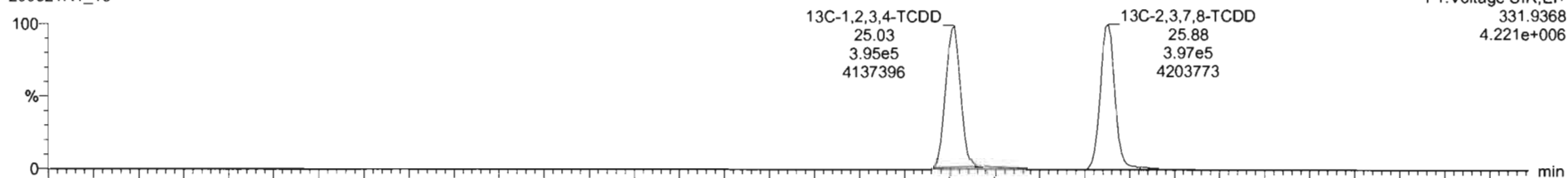
**37Cl-2,3,7,8-TCDD**

200821R1\_13

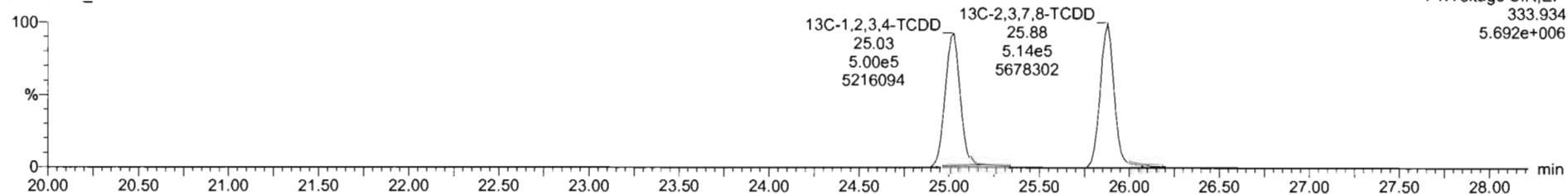


**13C-1,2,3,4-TCDD**

200821R1\_13



200821R1\_13



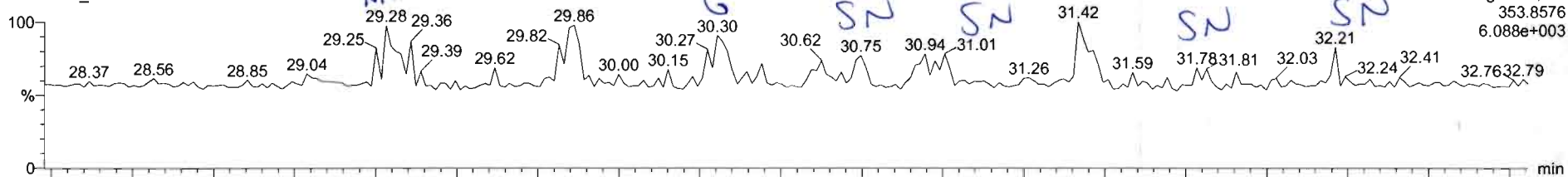
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

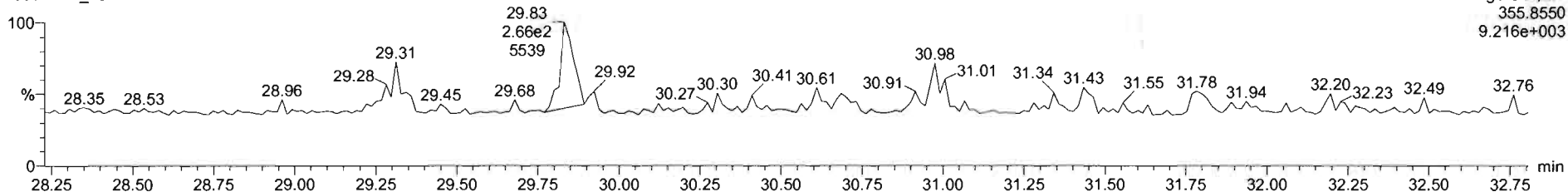
1,2,3,7,8-PeCDD

200821R1\_13



F2: Voltage SIR, EI+  
353.8576  
6.088e+003

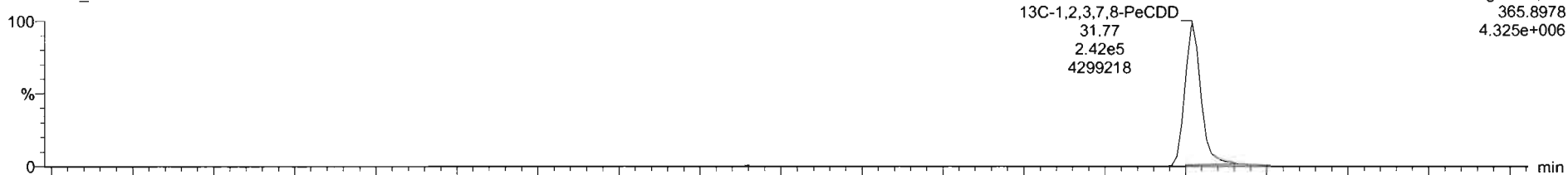
200821R1\_13



F2: Voltage SIR, EI+  
355.8550  
9.216e+003

13C-1,2,3,7,8-PeCDD

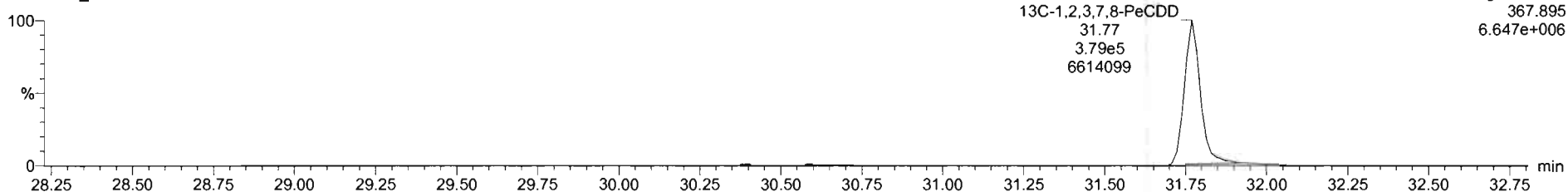
200821R1\_13



13C-1,2,3,7,8-PeCDD  
31.77  
2.42e5  
4299218

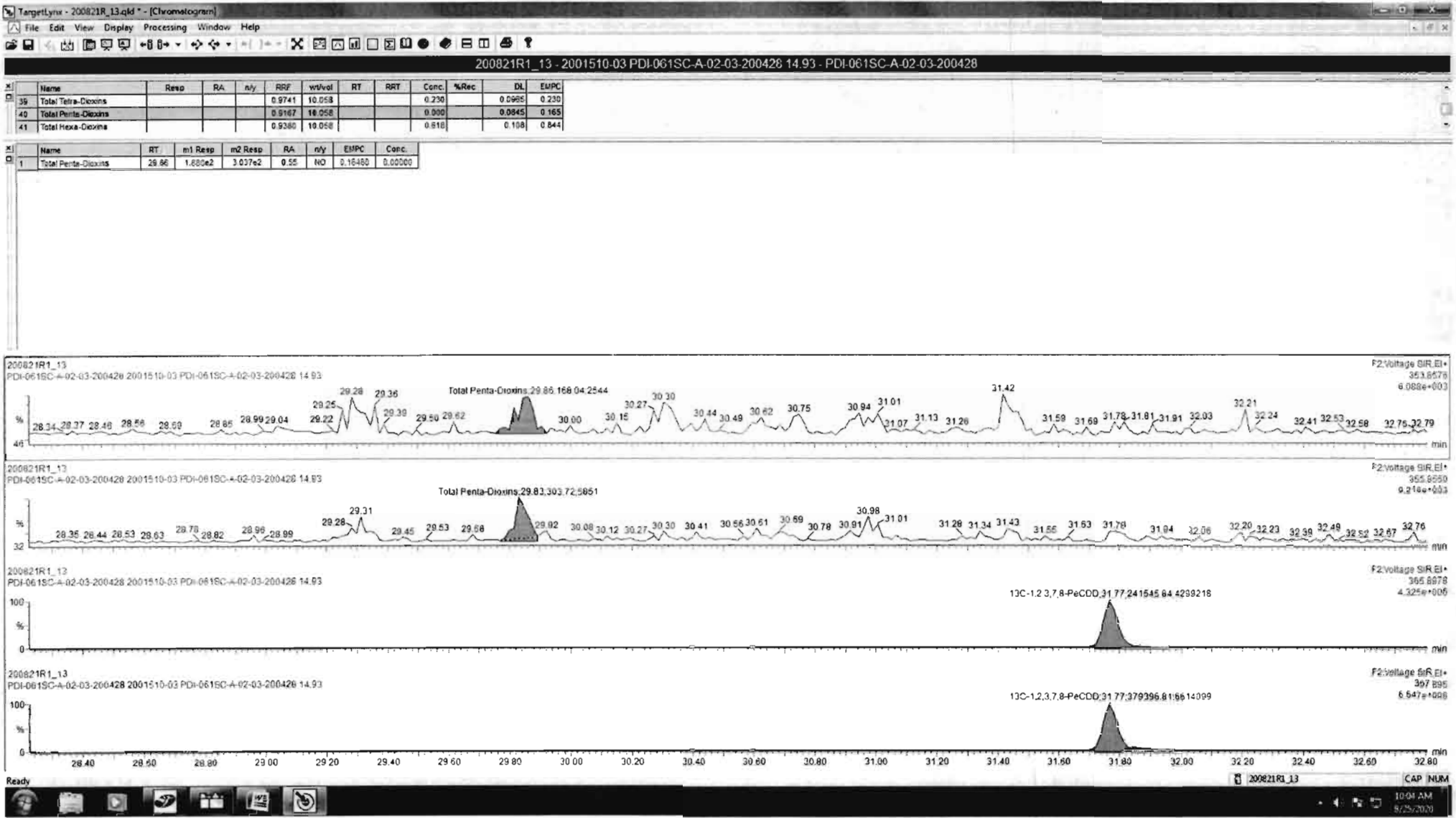
F2: Voltage SIR, EI+  
365.8978  
4.325e+006

200821R1\_13



13C-1,2,3,7,8-PeCDD  
31.77  
3.79e5  
6614099

F2: Voltage SIR, EI+  
367.895  
6.647e+006



Dataset: Untitled

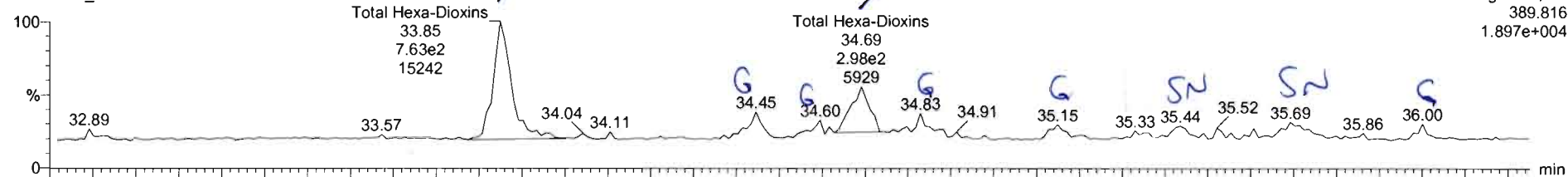
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

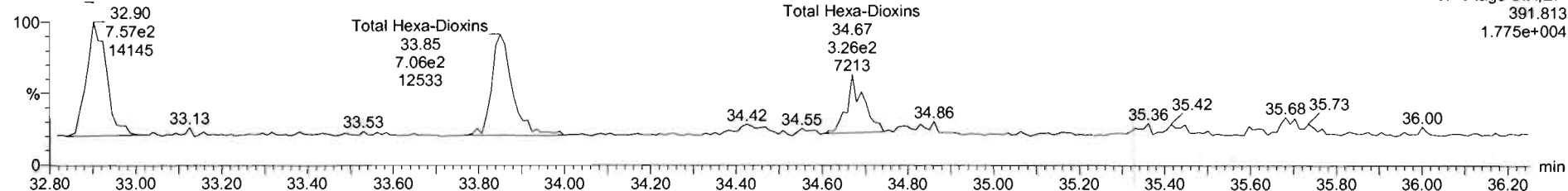
1,2,3,4,7,8-HxCDD

200821R1\_13



F3:Voltage SIR,EI+  
389.816  
1.897e+004

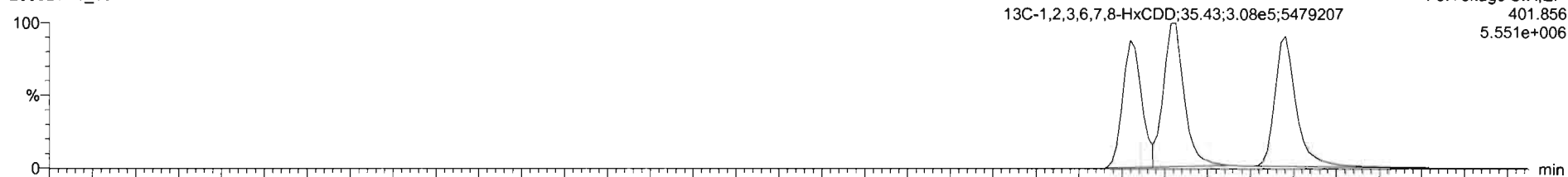
200821R1\_13



F3:Voltage SIR,EI+  
391.813  
1.775e+004

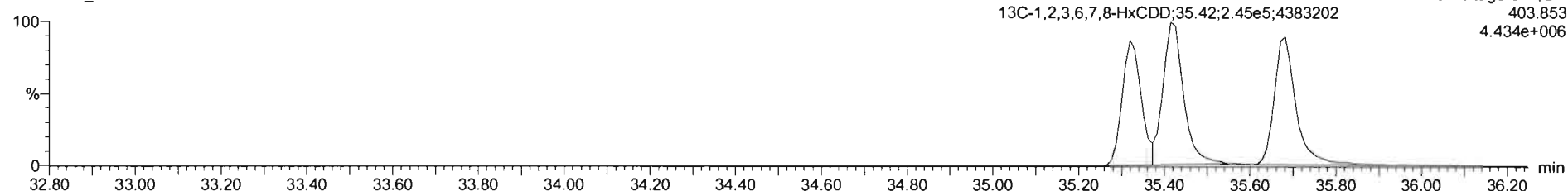
13C-1,2,3,4,7,8-HxCDD

200821R1\_13



F3:Voltage SIR,EI+  
401.856  
5.551e+006

200821R1\_13



F3:Voltage SIR,EI+  
403.853  
4.434e+006

TargetLynx - 200821R\_13.d - [Chromatogram]

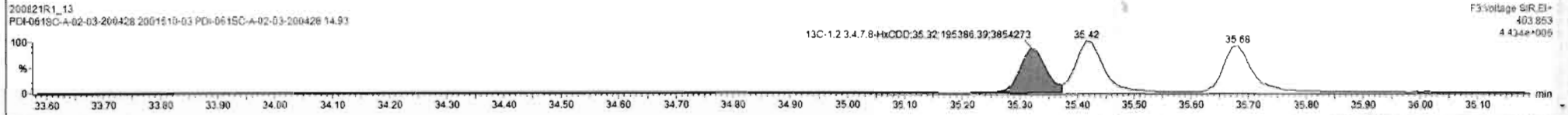
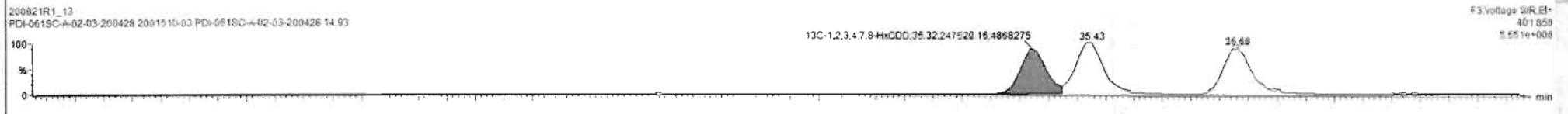
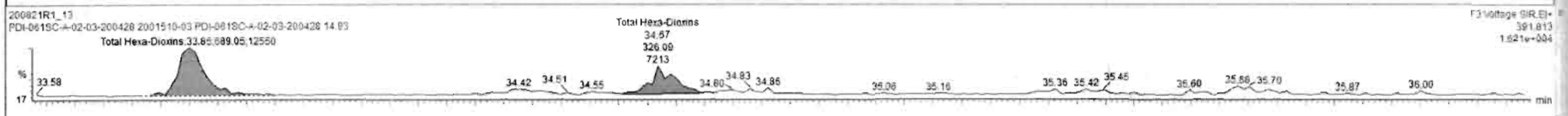
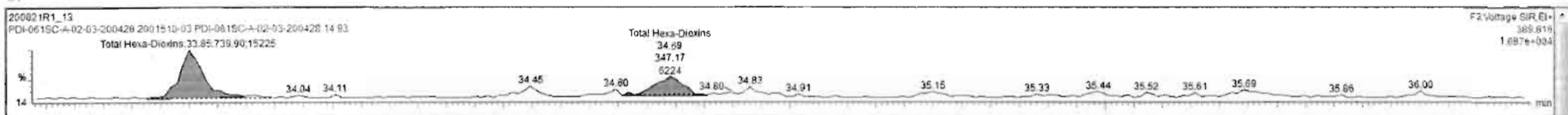
File Edit View Display Processing Window Help

200821R1\_13 - 2001510-03 PDI-061SC-A-02-03-200428 14.93 - PDI-061SC-A-02-03-200428

Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9741	10.058			0.230	0.0695	0.230	
40 Total Penta-Dioxins				0.9167	10.058			0.000	0.0845	0.165	
41 Total Hexa-Dioxins				0.9360	10.058			0.884	0.108	0.884	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Hexa-Dioxins	32.85	7.391e2	6.690e2	1.07	NO	0.60102	0.60102
2 Total Hexa-Dioxins	34.89	3.472e2	3.261e2	1.06	NO	0.28318	0.28318



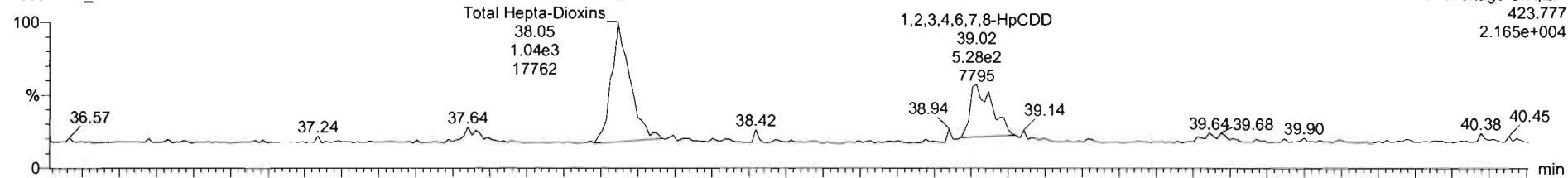
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

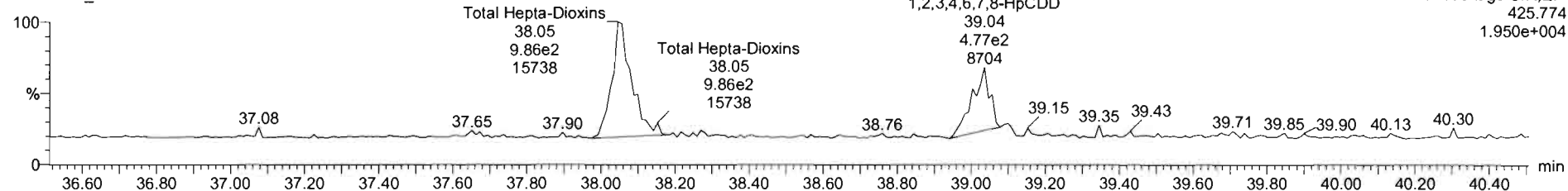
Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

**1,2,3,4,6,7,8-HpCDD**

200821R1\_13

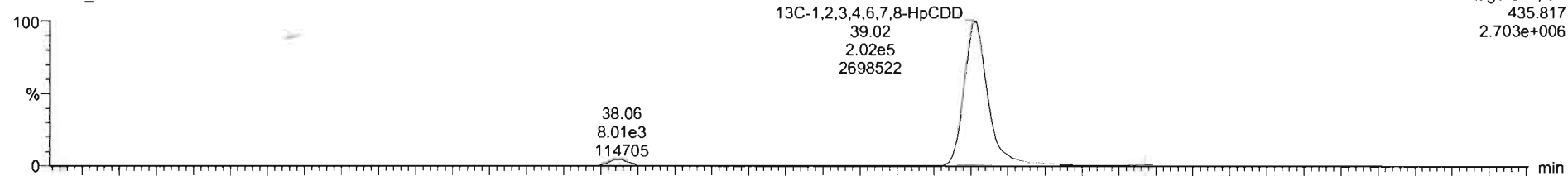


200821R1\_13

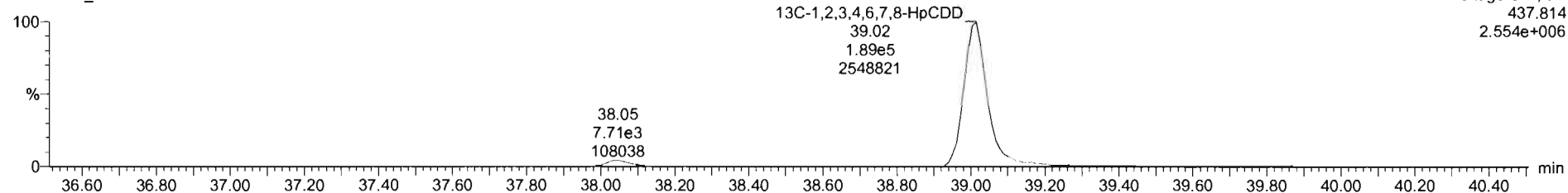


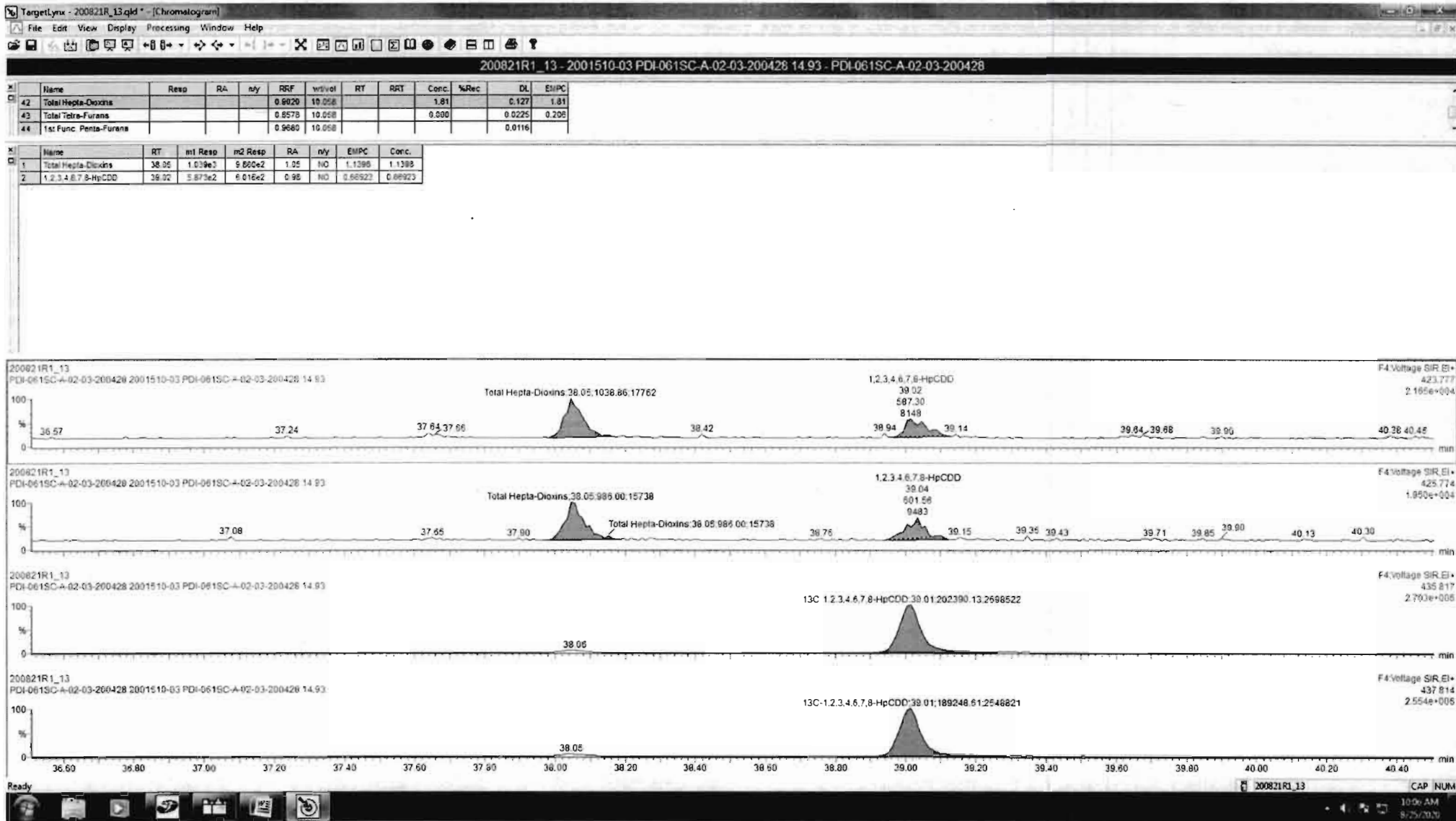
**13C-1,2,3,4,6,7,8-HpCDD**

200821R1\_13



200821R1\_13





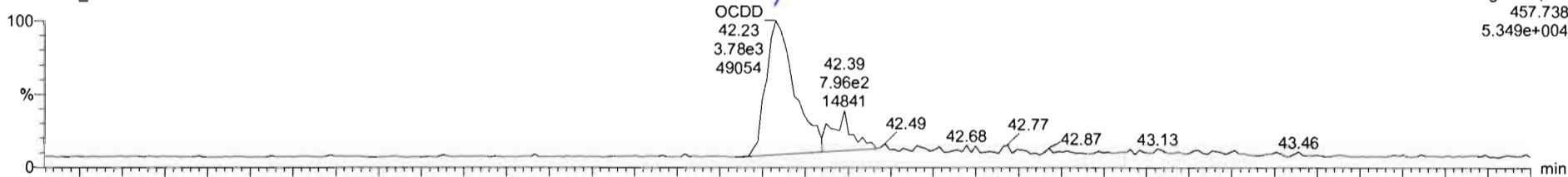
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

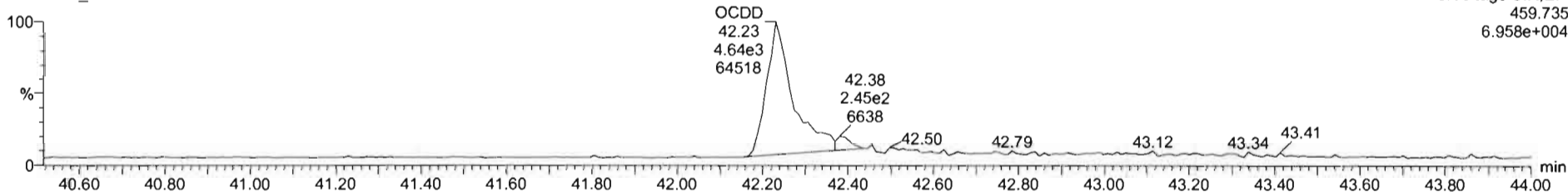
Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

**OCDD**

200821R1\_13

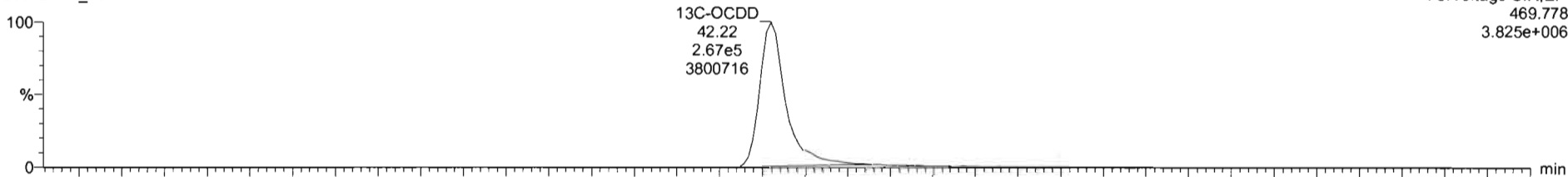


200821R1\_13

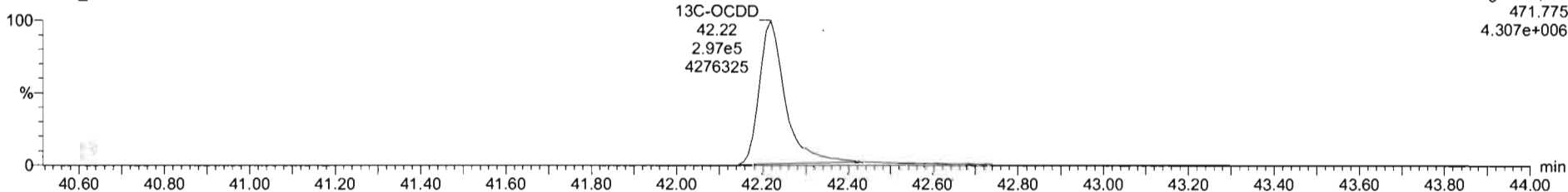


**13C-OCDD**

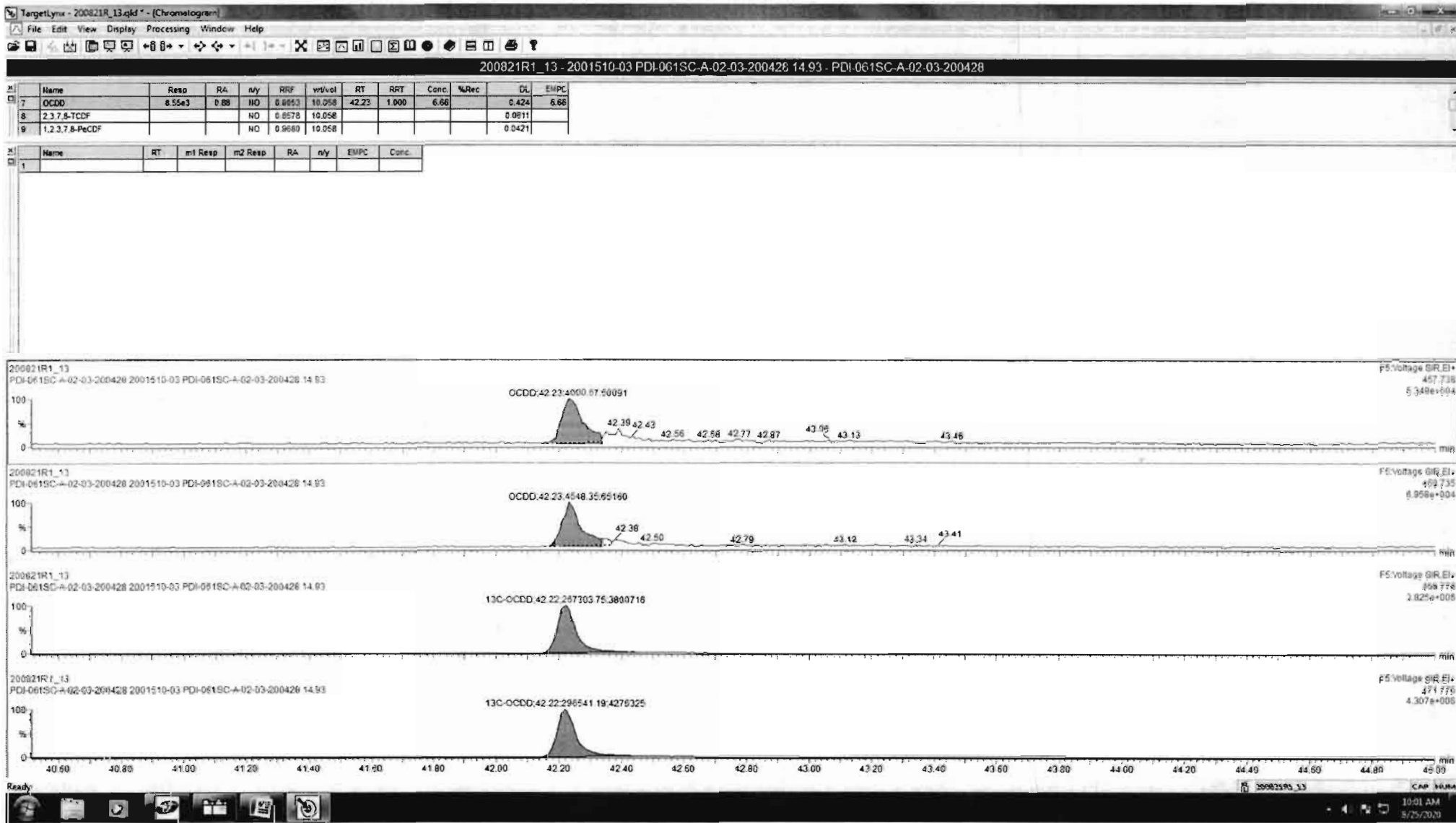
200821R1\_13



200821R1\_13







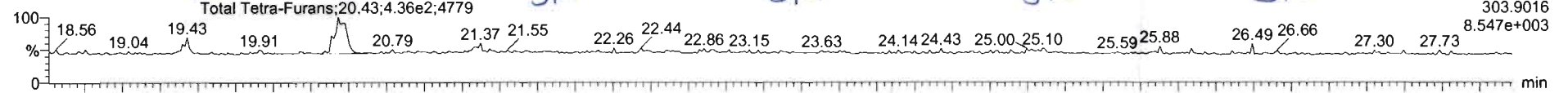
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

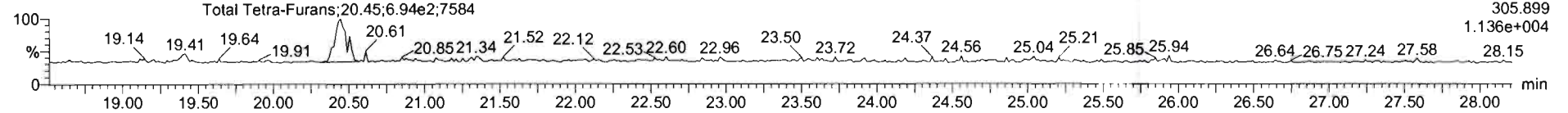
Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

**2,3,7,8-TCDF**

200821R1\_13

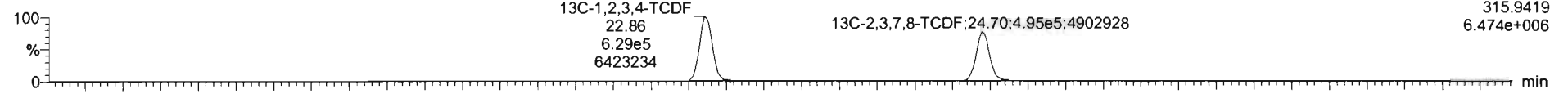


200821R1\_13

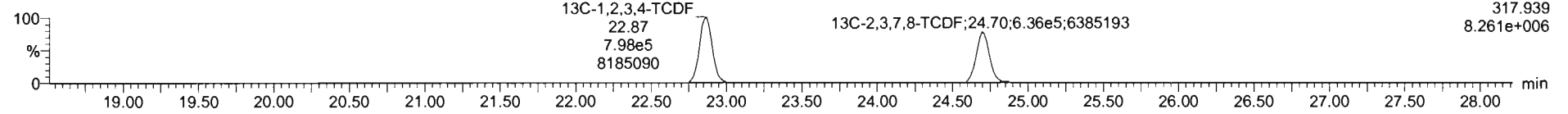


**13C-2,3,7,8-TCDF**

200821R1\_13

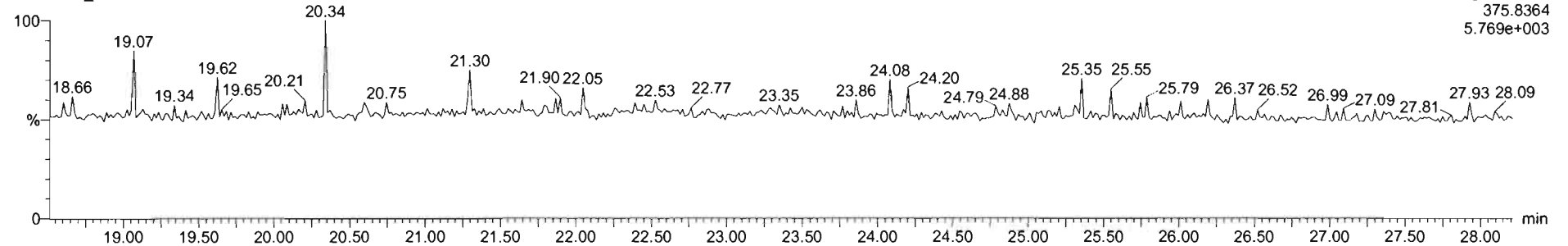


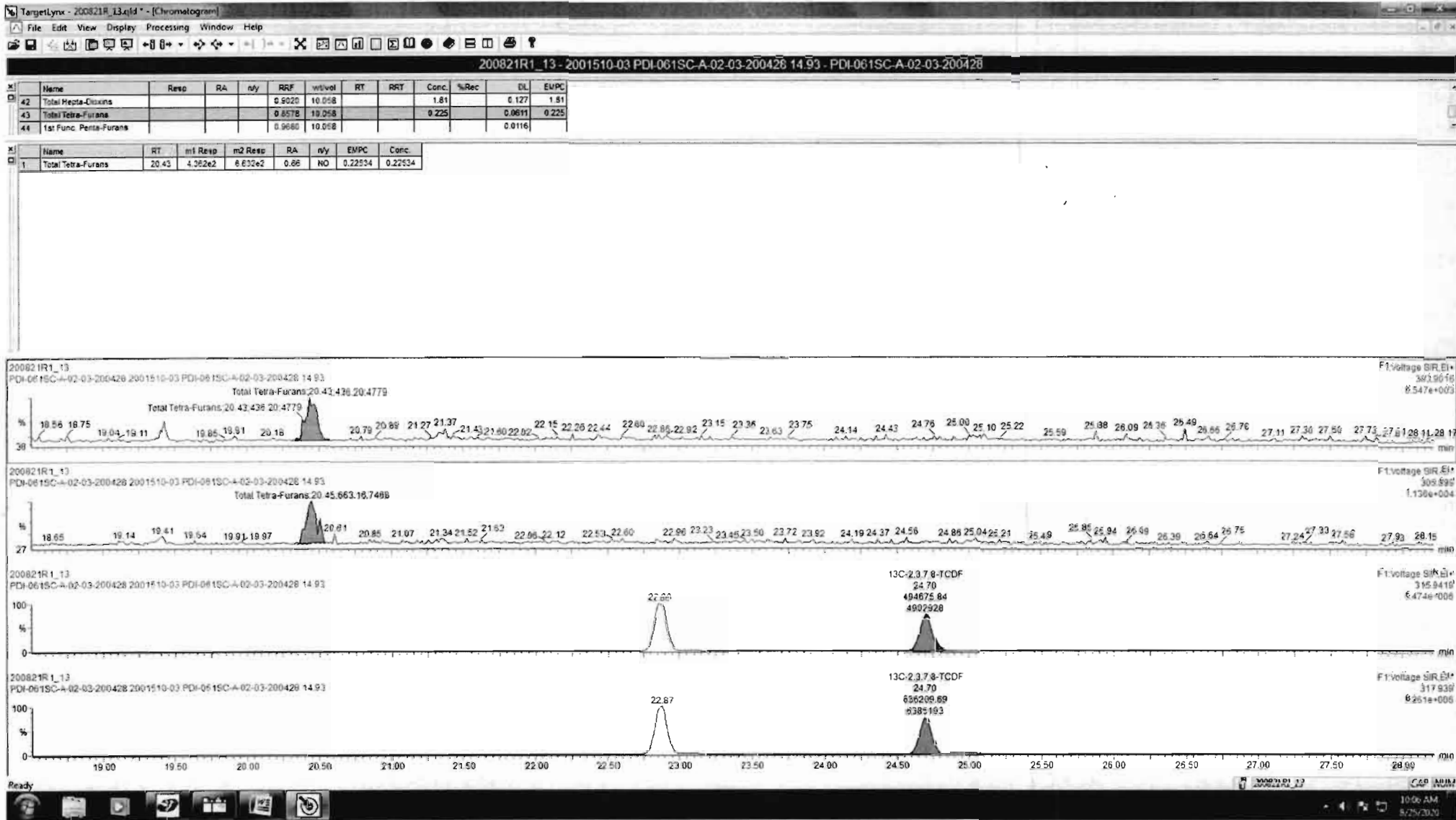
200821R1\_13



**DPE1**

200821R1\_13





Dataset: Untitled

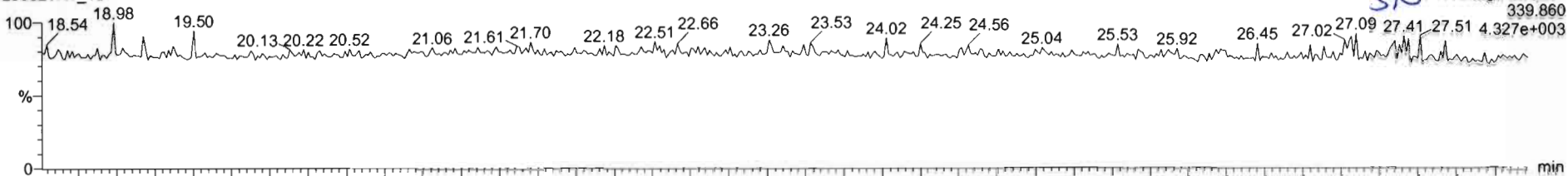
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

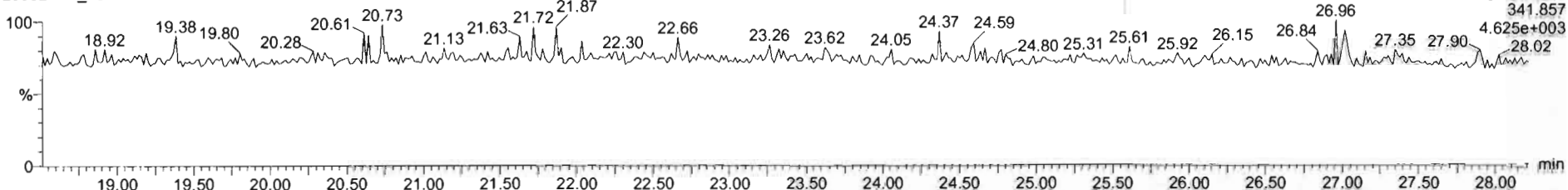
Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

1st Func. Penta-Furans

200821R1\_13

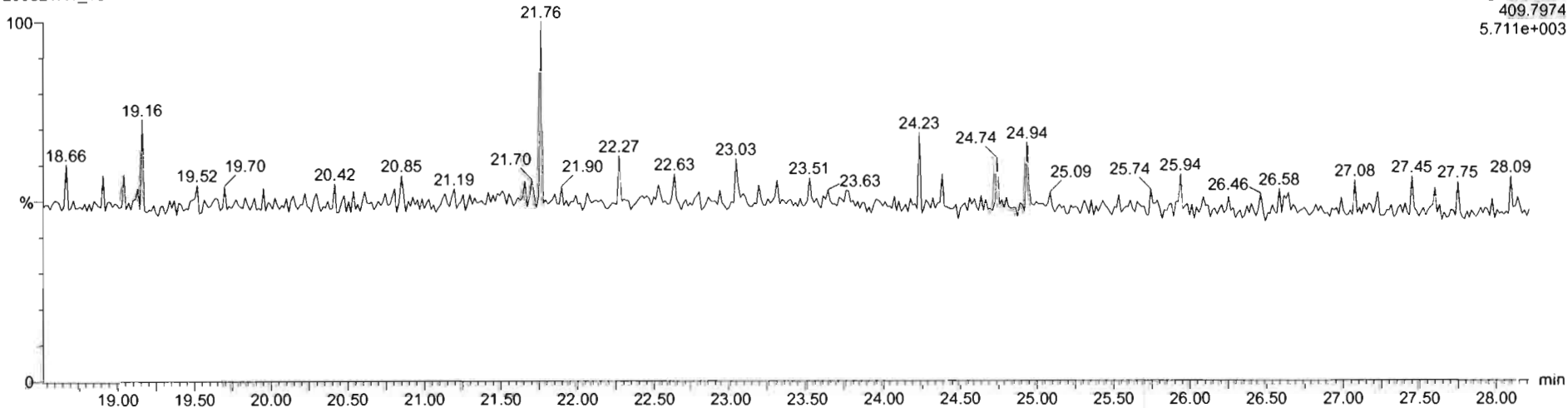


200821R1\_13



DPE6

200821R1\_13

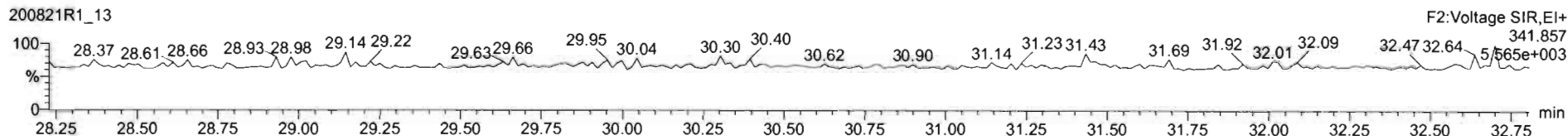
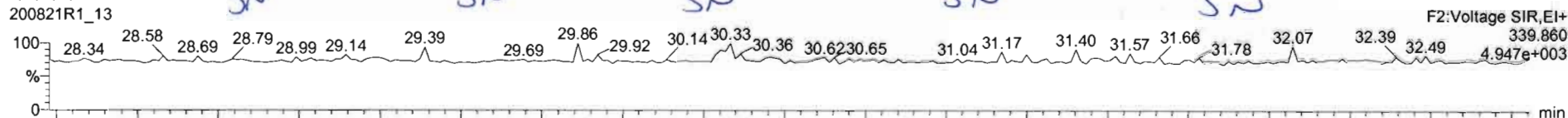


Dataset: Untitled

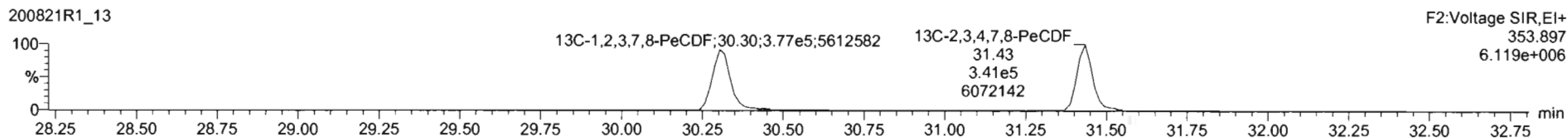
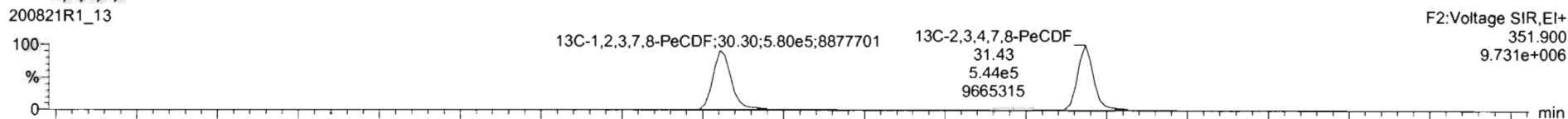
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

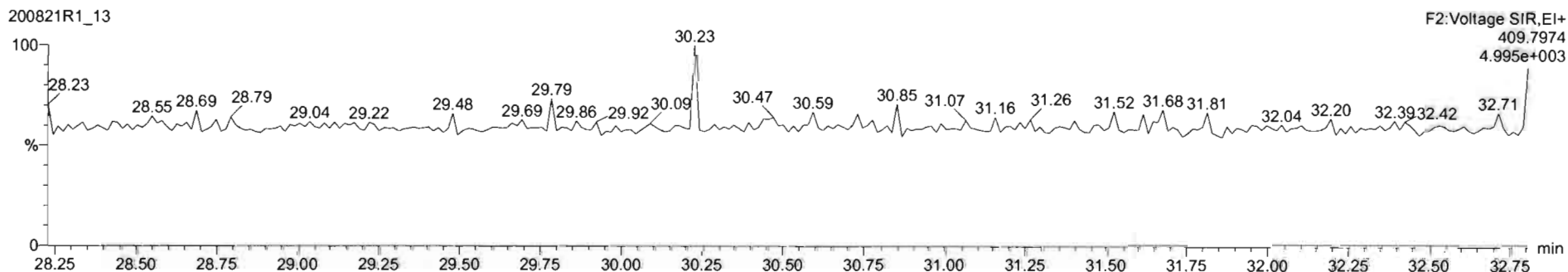
**1,2,3,7,8-PeCDF**



**13C-1,2,3,7,8-PeCDF**



**DPE2**



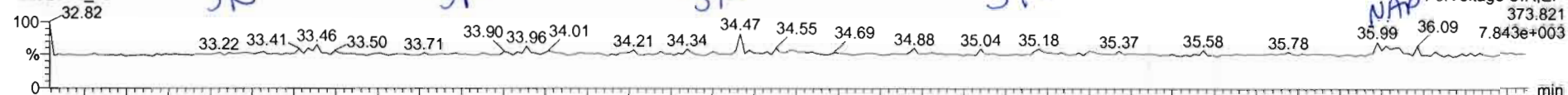
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

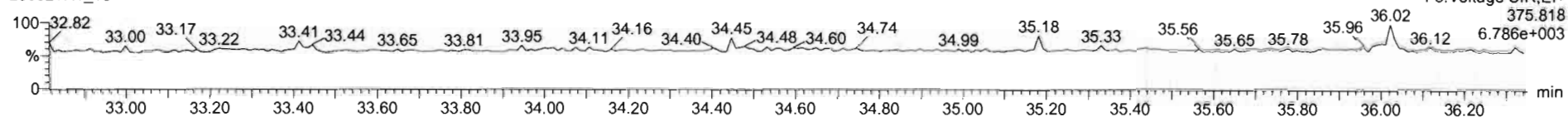
Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

**1,2,3,4,7,8-HxCDF**

200821R1\_13

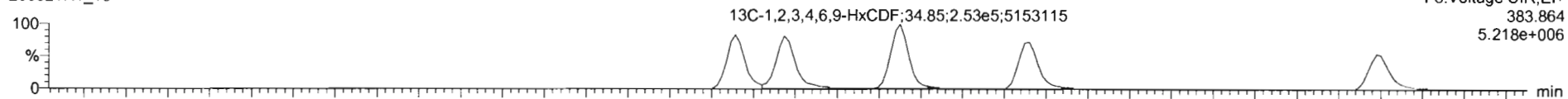


200821R1\_13

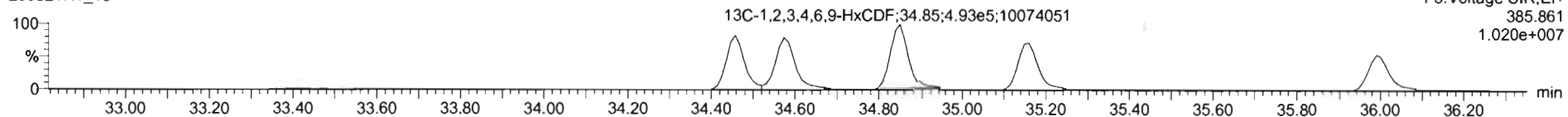


**13C-1,2,3,4,7,8-HxCDF**

200821R1\_13

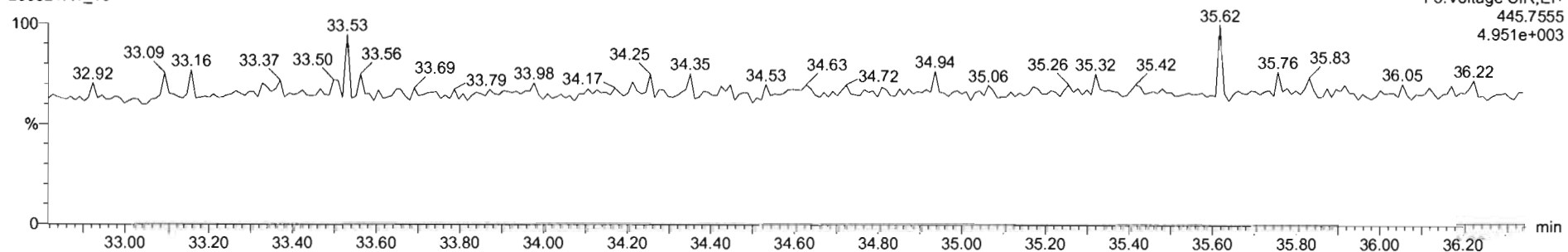


200821R1\_13



**DPE3**

200821R1\_13

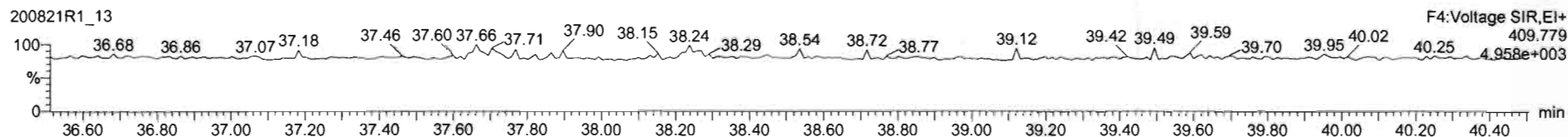
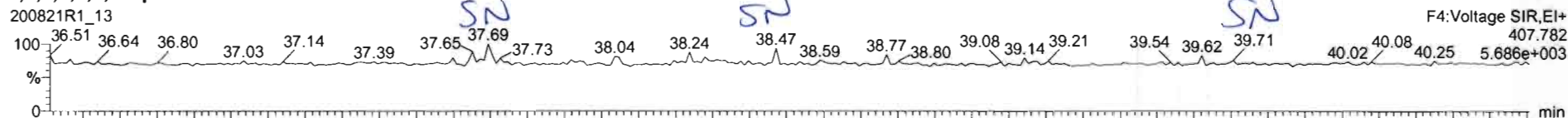


Dataset: Untitled

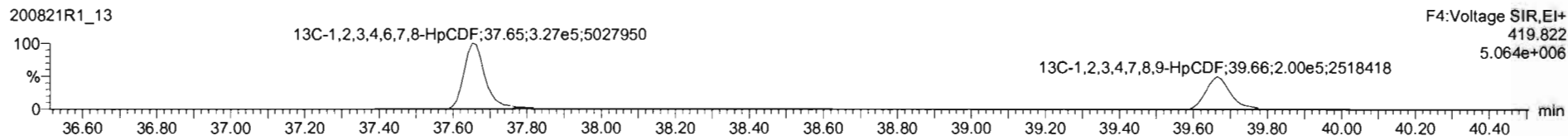
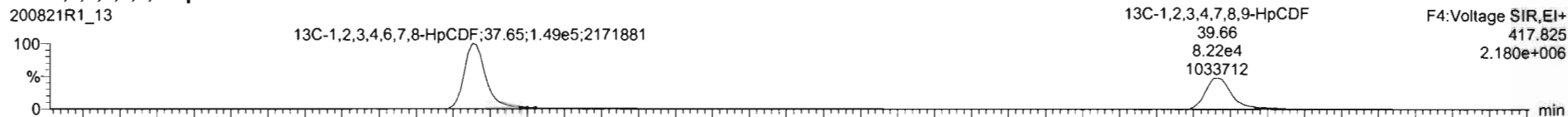
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

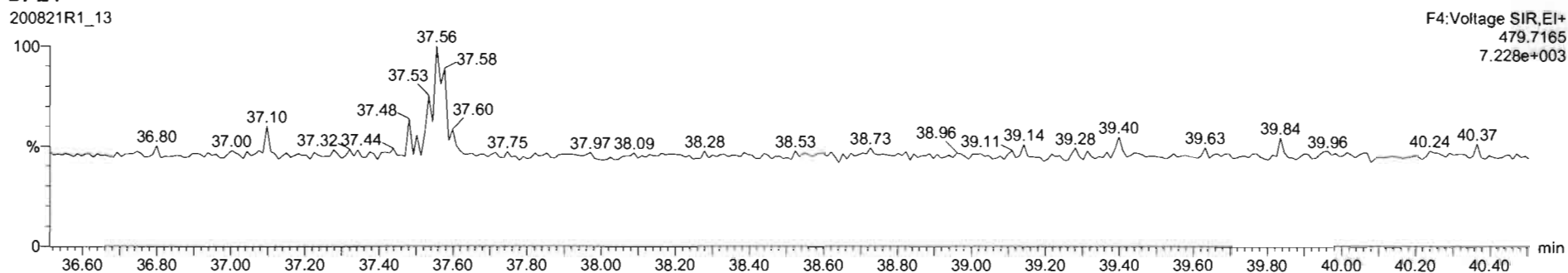
1,2,3,4,6,7,8-HpCDF



13C-1,2,3,4,6,7,8-HpCDF



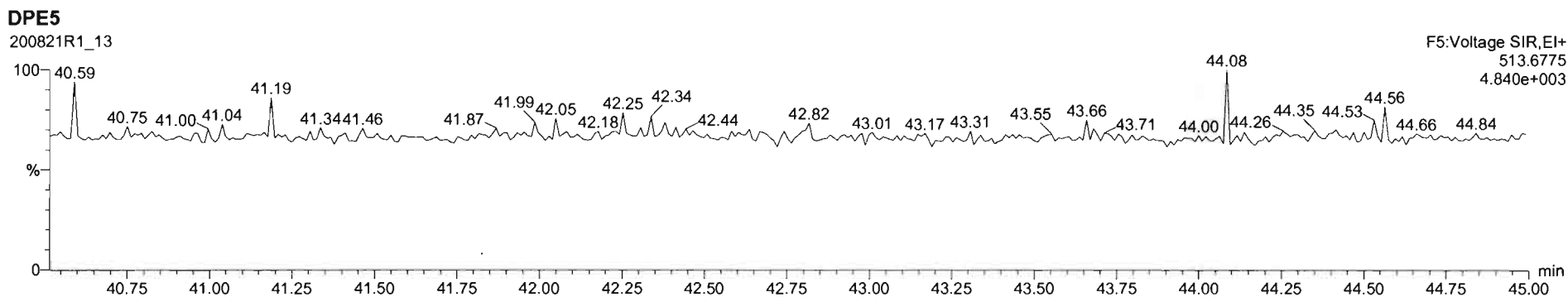
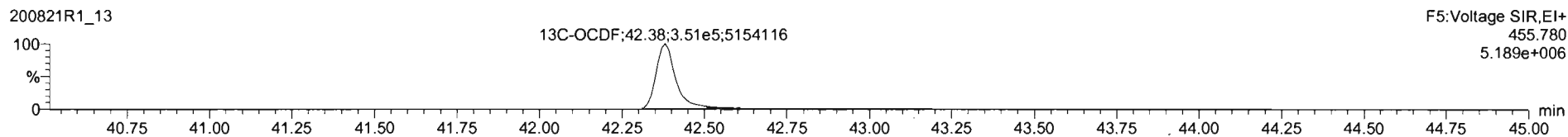
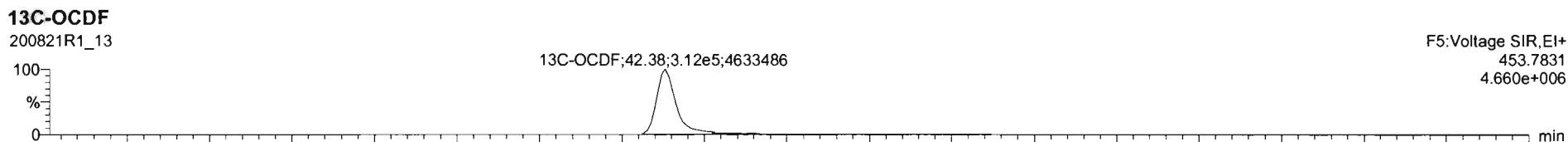
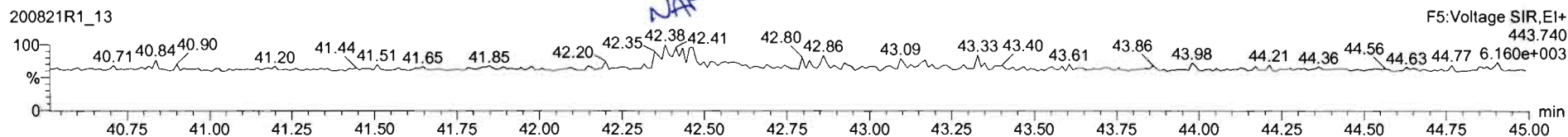
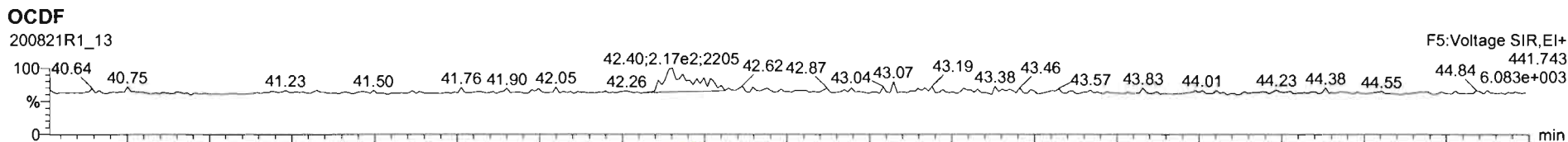
DPE4



Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428

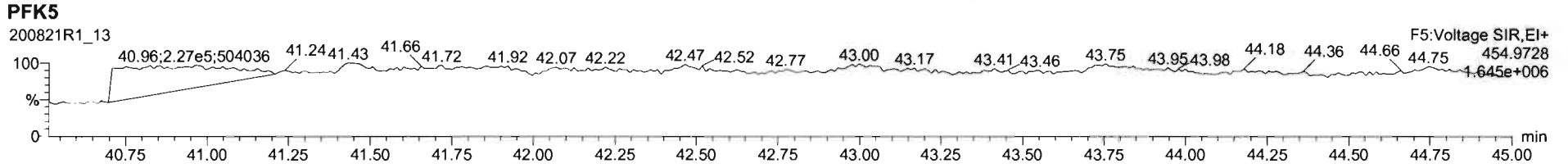
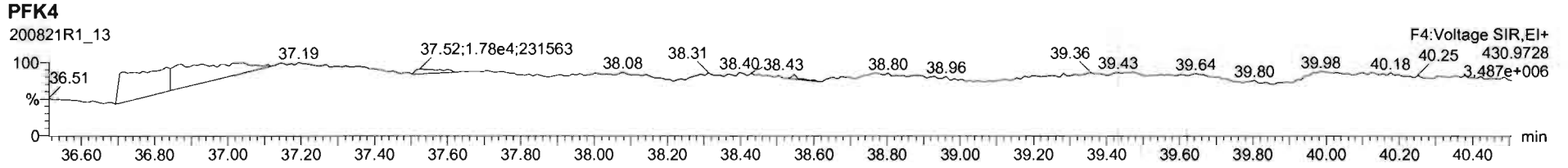
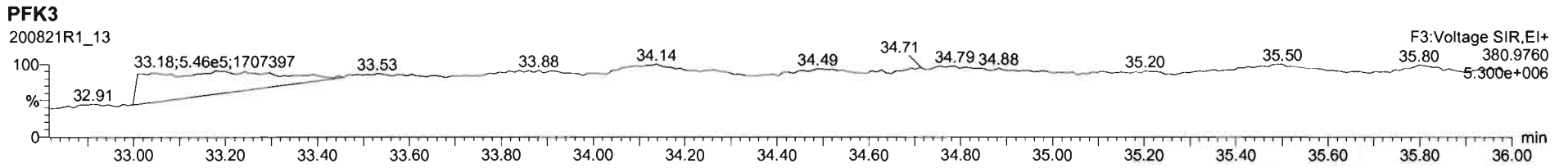
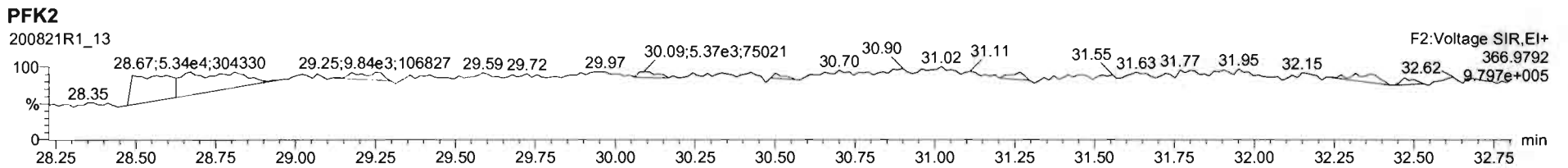
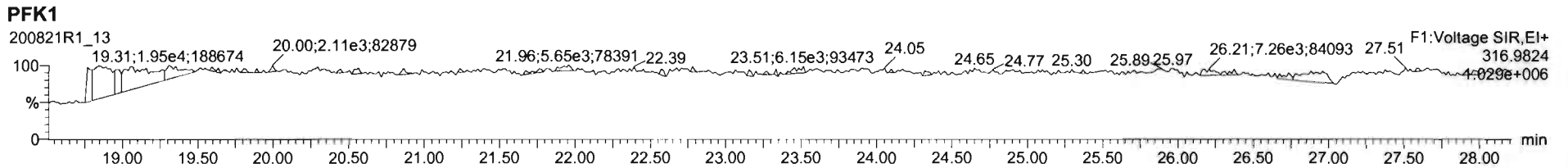




Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_13, Date: 21-Aug-2020, Time: 21:15:20, ID: 2001510-03 PDI-061SC-A-02-03-200428 14.93, Description: PDI-061SC-A-02-03-200428



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_14.qld

Last Altered: Tuesday, August 25, 2020 10:13:07 AM Pacific Daylight Time  
Printed: Tuesday, August 25, 2020 10:16:24 AM Pacific Daylight Time

*GPB 08/25/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

*CT 08/25/2020*

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.18e3	0.19	YES	0.974	10.059	25.925	25.91	1.001	1.001	0.27810		0.0779	0.104
2	2 1,2,3,7,8-PeCDD			NO	0.917	10.059	31.806		1.001				0.0765	
3	3 1,2,3,4,7,8-HxCDD			NO	1.04	10.059	35.341		1.000				0.0801	
4	4 1,2,3,6,7,8-HxCDD			NO	0.938	10.059	35.437		1.000				0.0813	
5	5 1,2,3,7,8,9-HxCDD			NO	0.964	10.059	35.703		1.000				0.0912	
6	6 1,2,3,4,6,7,8-HpCDD	6.21e2	0.95	NO	0.902	10.059	39.038	39.07	1.000	1.001	0.39281		0.126	0.393
7	7 OCDD	5.71e3	0.90	NO	0.905	10.059	42.253	42.26	1.000	1.000	4.5909		0.314	4.59
8	8 2,3,7,8-TCDF			NO	0.858	10.059	24.751		1.001				0.0399	
9	9 1,2,3,7,8-PeCDF			NO	0.968	10.059	30.340		1.001				0.0351	
10	10 2,3,4,7,8-PeCDF			NO	1.08	10.059	31.479		1.001				0.0318	
11	11 1,2,3,4,7,8-HxCDF			NO	0.968	10.059	34.467		1.000				0.0380	
12	12 1,2,3,6,7,8-HxCDF			NO	1.00	10.059	34.595		1.000				0.0376	
13	13 2,3,4,6,7,8-HxCDF			NO	0.997	10.059	35.205		1.001				0.0410	
14	14 1,2,3,7,8,9-HxCDF			NO	0.961	10.059	36.001		1.000				0.0591	
15	15 1,2,3,4,6,7,8-HpCDF			NO	1.00	10.059	37.711		1.001				0.0503	
16	16 1,2,3,4,7,8,9-HpCDF			NO	1.11	10.059	39.686		1.000				0.0854	
17	17 OCDF			NO	0.896	10.059	42.412		1.000				0.110	
18	18 13C-2,3,7,8-TCDD	8.65e5	0.78	NO	1.10	10.059	25.835	25.89	1.032	1.034	175.25	88.1	0.316	
19	19 13C-1,2,3,7,8-PeCDD	5.85e5	0.63	NO	0.757	10.059	31.497	31.78	1.258	1.269	172.59	86.8	0.389	
20	20 13C-1,2,3,4,7,8-HxCDD	4.15e5	1.27	NO	0.647	10.059	35.342	35.33	1.014	1.013	177.91	89.5	0.430	
21	21 13C-1,2,3,6,7,8-HxCDD	5.19e5	1.28	NO	0.805	10.059	35.443	35.44	1.017	1.017	178.71	89.9	0.346	
22	22 13C-1,2,3,7,8,9-HxCDD	4.50e5	1.26	NO	0.726	10.059	35.715	35.69	1.025	1.024	171.64	86.3	0.383	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.49e5	1.08	NO	0.611	10.059	39.086	39.03	1.121	1.119	158.24	79.6	0.482	
24	24 13C-OCDD	5.46e5	0.88	NO	0.513	10.059	42.286	42.25	1.213	1.212	295.15	74.2	0.557	
25	25 13C-2,3,7,8-TCDF	1.13e6	0.77	NO	0.933	10.059	24.743	24.73	0.988	0.987	165.36	83.2	0.402	
26	26 13C-1,2,3,7,8-PeCDF	8.90e5	1.58	NO	0.696	10.059	30.302	30.32	1.210	1.211	174.18	87.6	0.517	
27	27 13C-2,3,4,7,8-PeCDF	8.31e5	1.56	NO	0.669	10.059	31.426	31.45	1.255	1.256	169.21	85.1	0.539	
28	28 13C-1,2,3,4,7,8-HxCDF	5.88e5	0.51	NO	0.886	10.059	34.481	34.47	0.989	0.989	183.85	92.5	0.602	
29	29 13C-1,2,3,6,7,8-HxCDF	6.21e5	0.51	NO	0.955	10.059	34.600	34.58	0.993	0.992	180.29	90.7	0.558	
30	30 13C-2,3,4,6,7,8-HxCDF	5.58e5	0.51	NO	0.882	10.059	35.171	35.17	1.009	1.009	175.42	88.2	0.604	
31	31 13C-1,2,3,7,8,9-HxCDF	4.51e5	0.51	NO	0.737	10.059	36.025	36.00	1.033	1.033	169.60	85.3	0.724	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_14.qld

Last Altered: Tuesday, August 25, 2020 10:13:07 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:16:24 AM Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	4.13e5	0.43	NO	0.651	10.059	37.713	37.67	1.082	1.081	175.91	88.5	0.492	
33	13C-1,2,3,4,7,8,9-HpCDF	2.69e5	0.42	NO	0.459	10.059	39.738	39.69	1.140	1.138	162.47	81.7	0.697	
34	13C-OCDF	6.32e5	0.85	NO	0.609	10.059	42.447	42.41	1.218	1.217	287.89	72.4	0.446	
35	37Cl-2,3,7,8-TCDD	3.60e5			1.14	10.059	25.732	25.92	1.028	1.035	70.806	89.0	0.0722	
36	13C-1,2,3,4-TCDD	8.89e5	0.79	NO	1.00	10.059	25.070	25.04	1.000	1.000	198.82	100	0.349	
37	13C-1,2,3,4-TCDF	1.46e6	0.79	NO	1.00	10.059	23.080	22.89	1.000	1.000	198.82	100	0.375	
38	13C-1,2,3,4,6,9-HxCDF	7.17e5	0.51	NO	1.00	10.059	34.740	34.86	1.000	1.000	198.82	100	0.533	
39	Total Tetra-Dioxins				0.974	10.059	24.620		0.000		0.00000		0.0471	0.104
40	Total Penta-Dioxins				0.917	10.059	29.960		0.000				0.0325	
41	Total Hexa-Dioxins				0.938	10.059	33.635		0.000		0.29298		0.0876	0.293
42	Total Hepta-Dioxins				0.902	10.059	37.640		0.000		1.1846		0.126	1.18
43	Total Tetra-Furans				0.858	10.059	23.610		0.000				0.0152	
44	1st Func. Penta-Furans				0.968	10.059	27.230		0.000				0.0128	
45	Total Penta-Furans				0.968	10.059	29.275		0.000				0.0159	
46	Total Hexa-Furans				0.997	10.059	33.555		0.000				0.0210	
47	Total Hepta-Furans				1.00	10.059	37.835		0.000				0.0328	

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_14.qld

Last Altered: Tuesday, August 25, 2020 10:13:07 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:16:24 AM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDD	25.91	2.716e3	1.139e4	1.914e2	9.873e2	0.19	YES	1.179e3	0.00000	0.10381	0.0779

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.86	7.677e3	5.767e3	3.515e2	2.862e2	1.23	NO	6.377e2	0.29298	0.29298	0.0876

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.08	1.134e4	1.154e4	5.957e2	6.567e2	0.91	NO	1.252e3	0.79183	0.79183	0.126
2	1,2,3,4,6,7,8-HpCDD	39.07	3.971e3	4.666e3	3.031e2	3.182e2	0.95	NO	6.213e2	0.39281	0.39281	0.126

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_14.qld

Last Altered: Tuesday, August 25, 2020 10:13:07 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:16:24 AM Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

Penta-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Hexa-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Hepta-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Dataset: Untitled

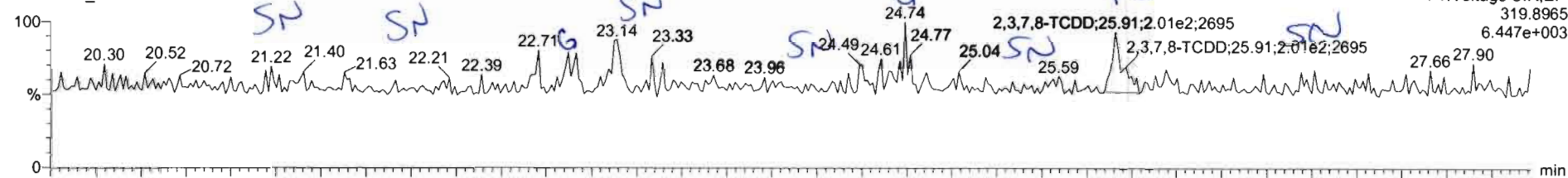
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

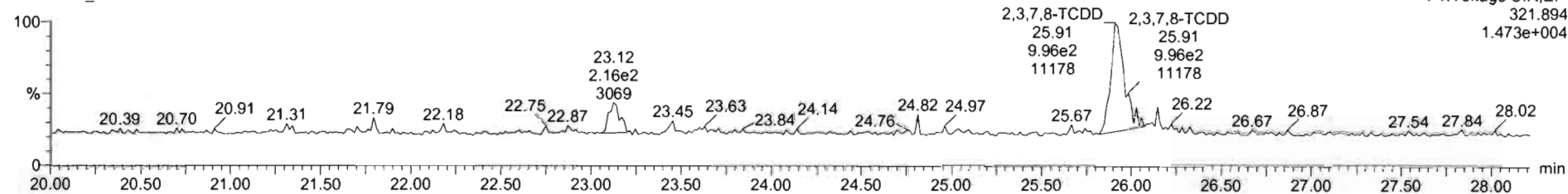
**2,3,7,8-TCDD**

200821R1\_14



F1:Voltage SIR,EI+  
319.8965  
6.447e+003

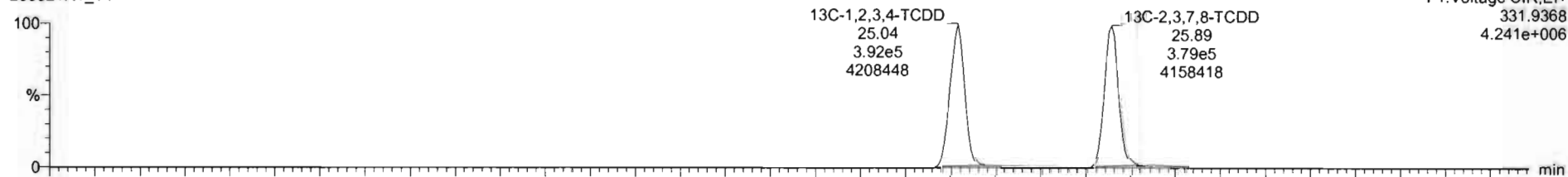
200821R1\_14



F1:Voltage SIR,EI+  
321.894  
1.473e+004

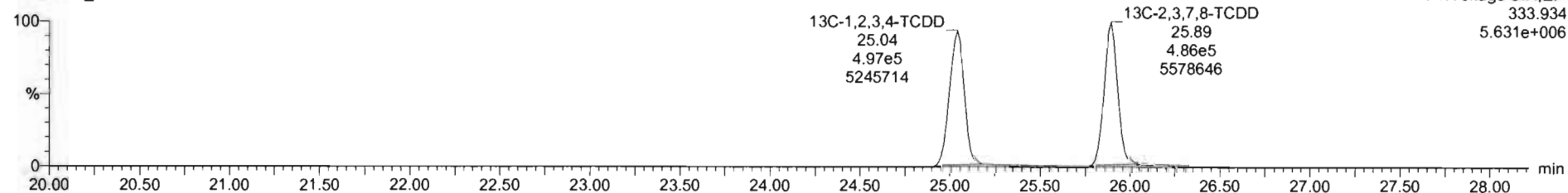
**13C-2,3,7,8-TCDD**

200821R1\_14

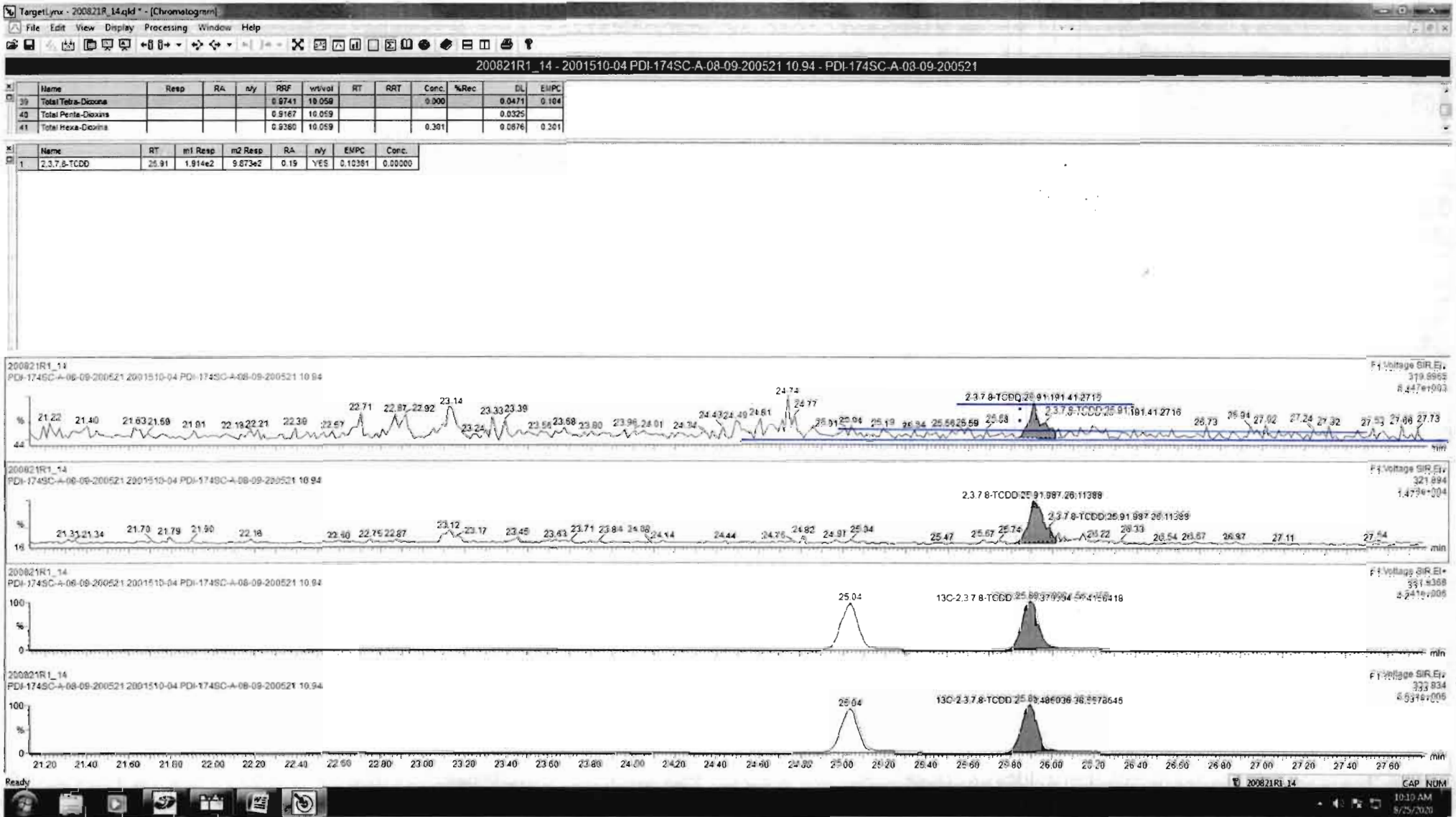


F1:Voltage SIR,EI+  
331.9368  
4.241e+006

200821R1\_14



F1:Voltage SIR,EI+  
333.934  
5.631e+006



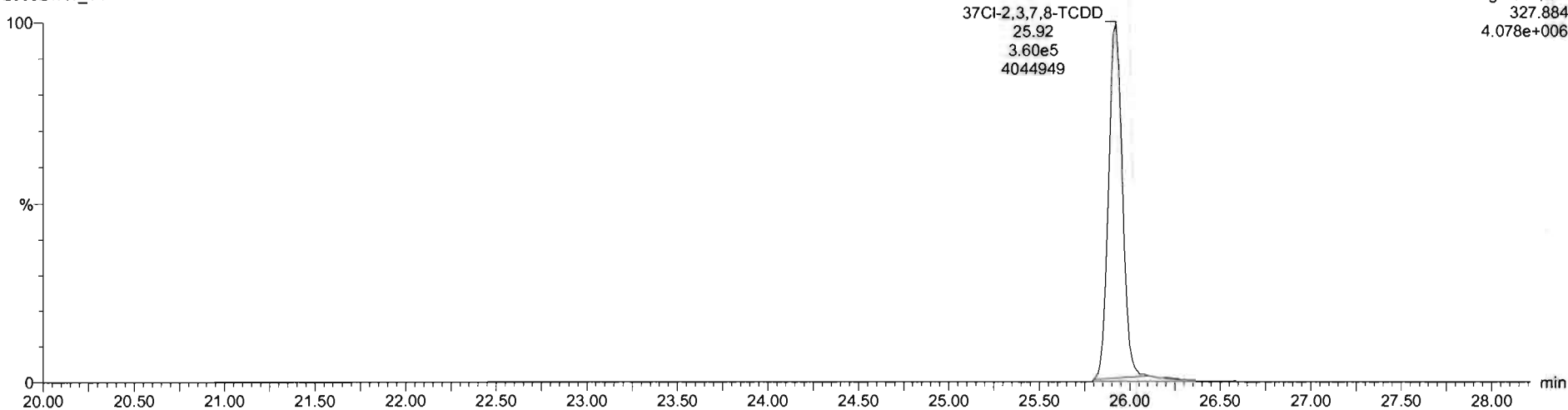
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

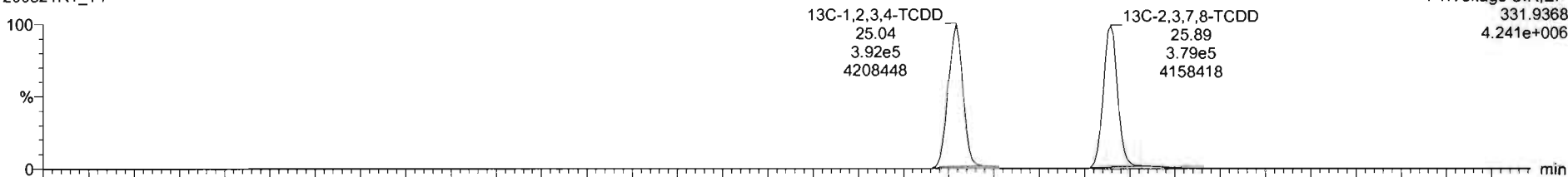
**37Cl-2,3,7,8-TCDD**

200821R1\_14

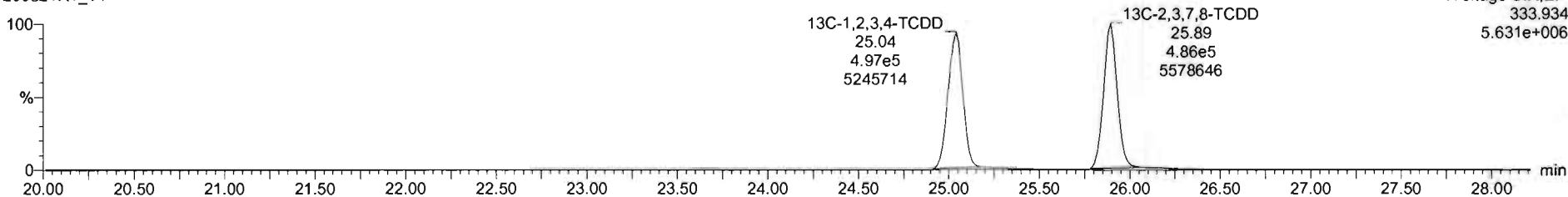


**13C-1,2,3,4-TCDD**

200821R1\_14



200821R1\_14





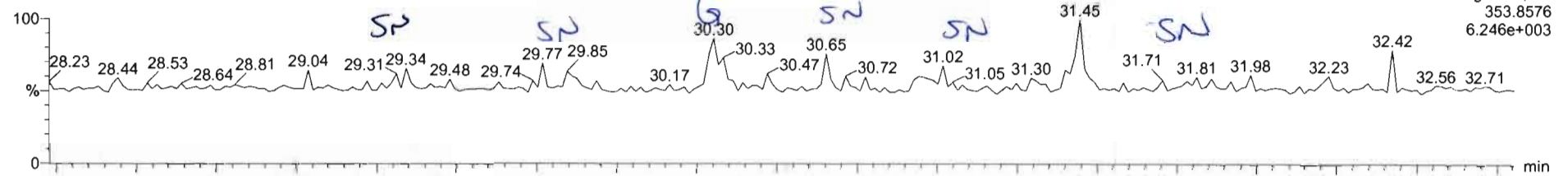
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

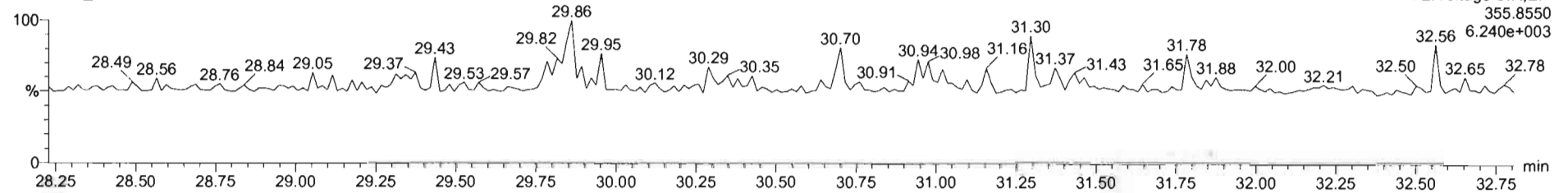
Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

**1,2,3,7,8-PeCDD**

200821R1\_14

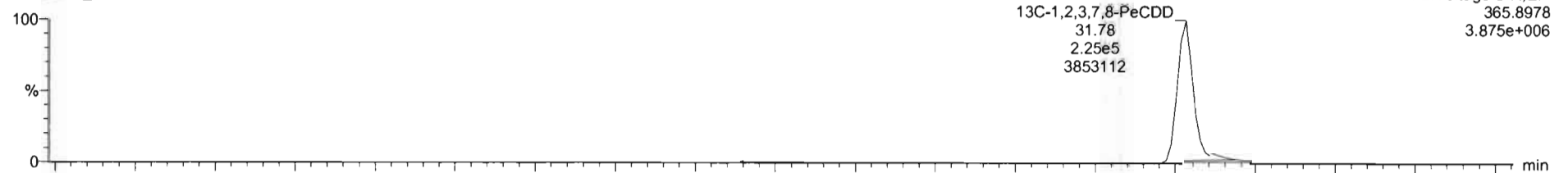


200821R1\_14

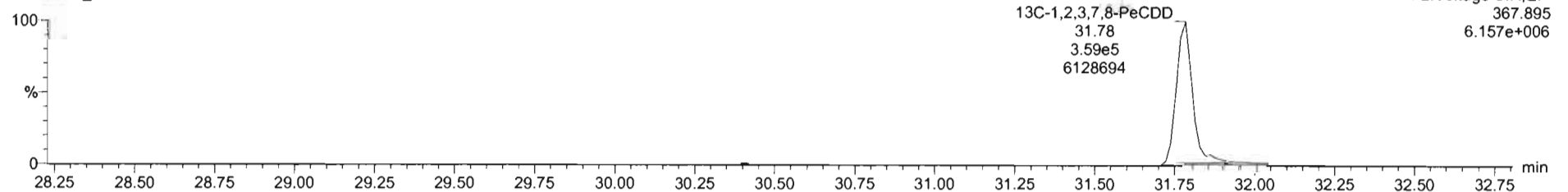


**13C-1,2,3,7,8-PeCDD**

200821R1\_14



200821R1\_14



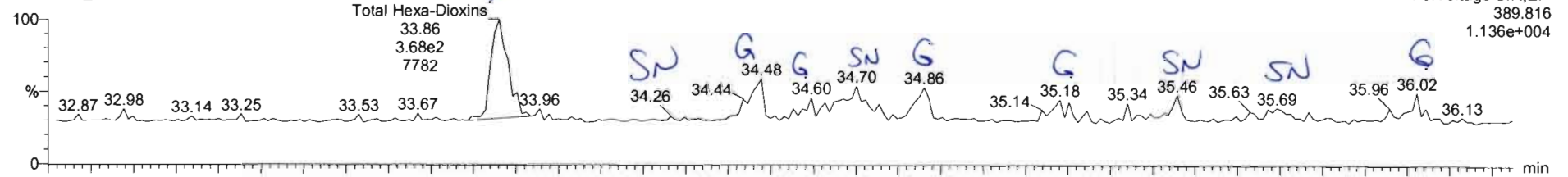
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

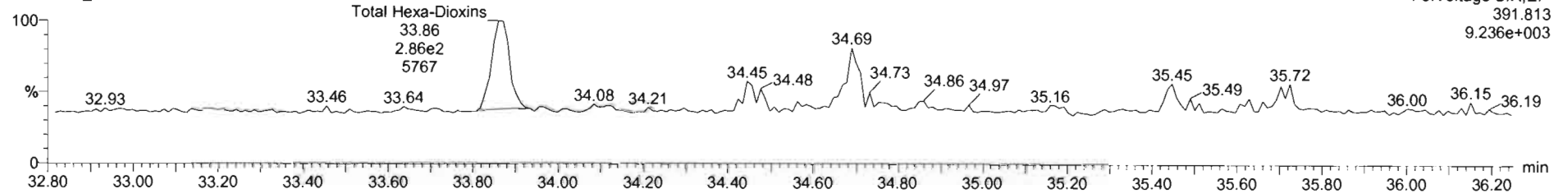
Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

1,2,3,4,7,8-HxCDD

200821R1\_14

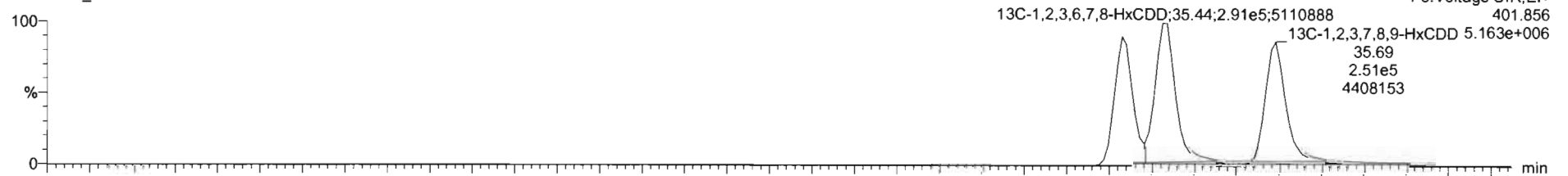


200821R1\_14

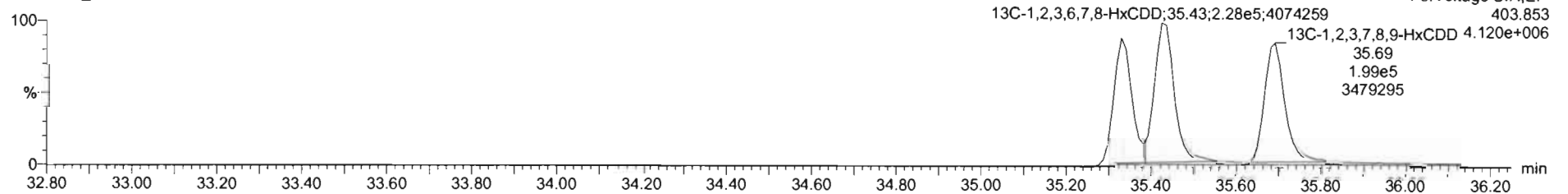


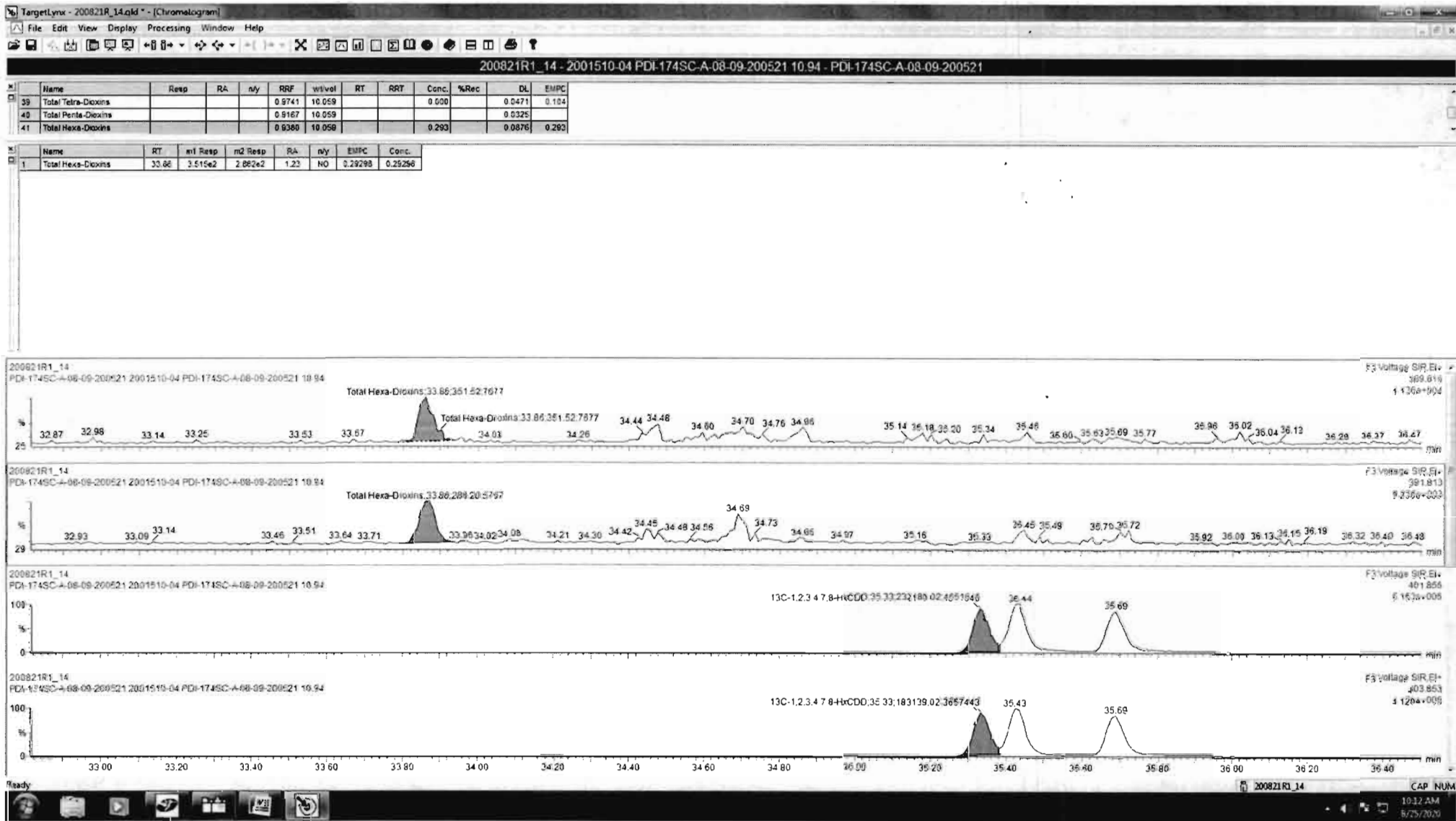
13C-1,2,3,4,7,8-HxCDD

200821R1\_14



200821R1\_14





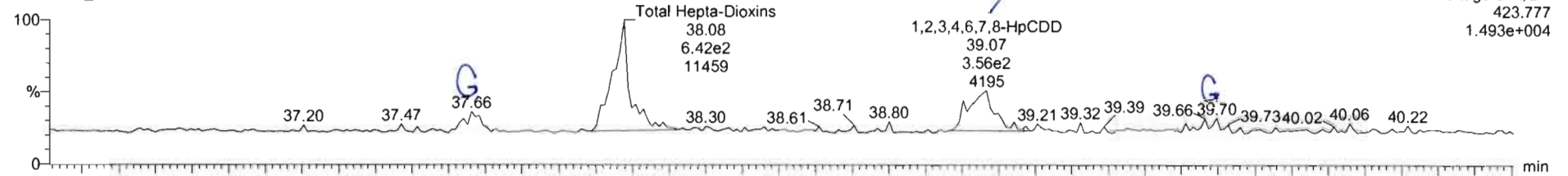
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

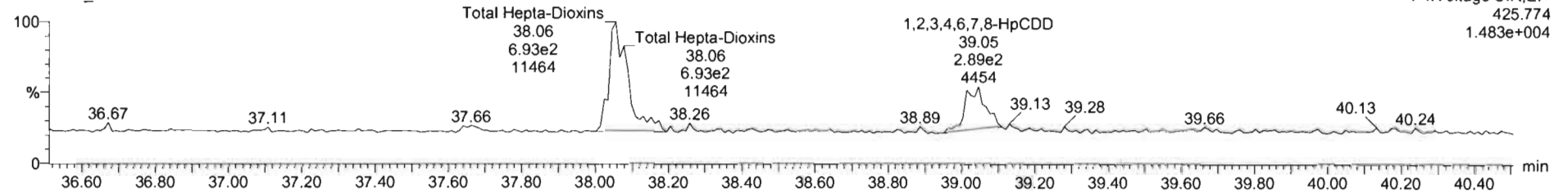
Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

1,2,3,4,6,7,8-HpCDD

200821R1\_14

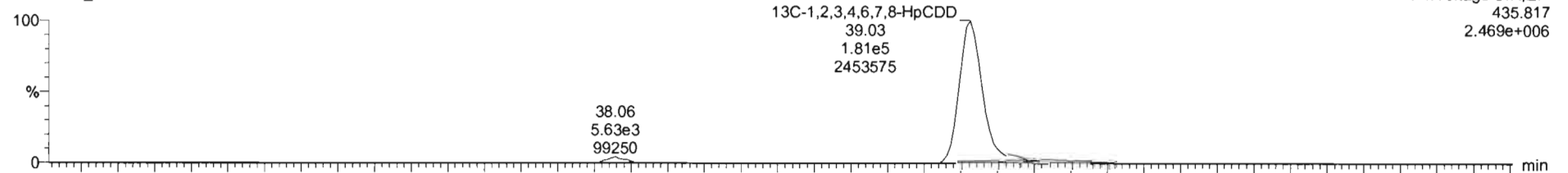


200821R1\_14

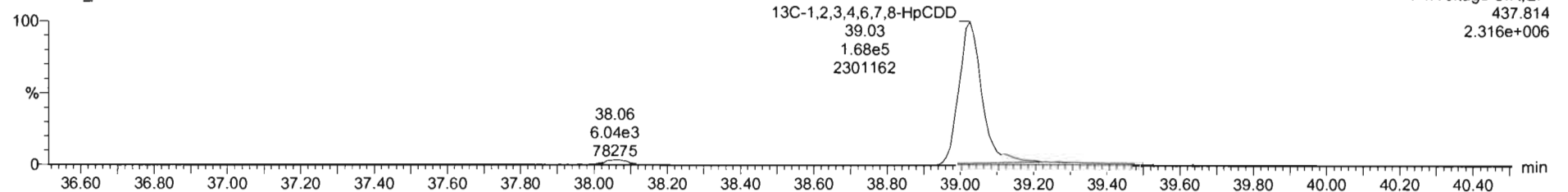


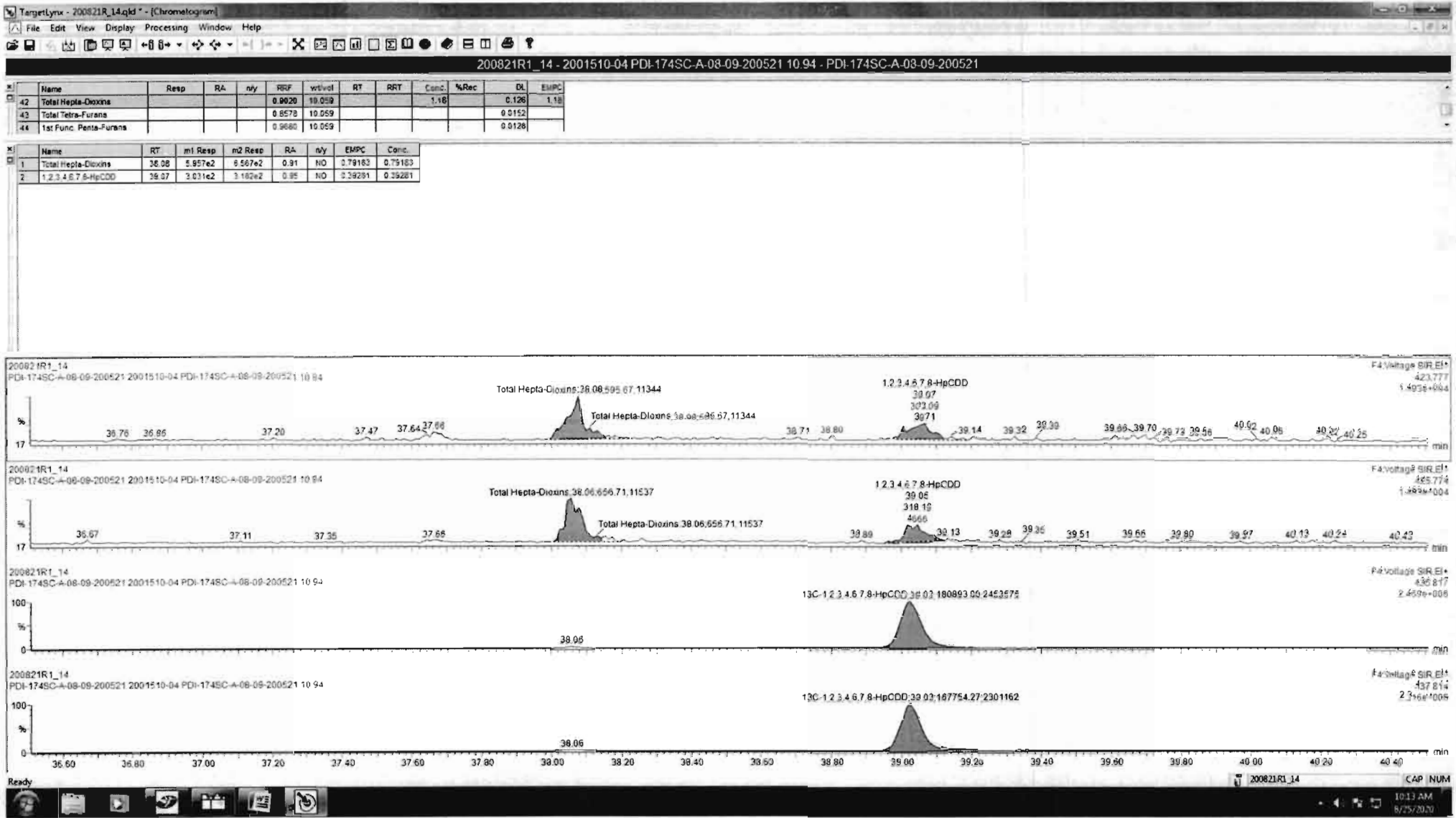
13C-1,2,3,4,6,7,8-HpCDD

200821R1\_14



200821R1\_14

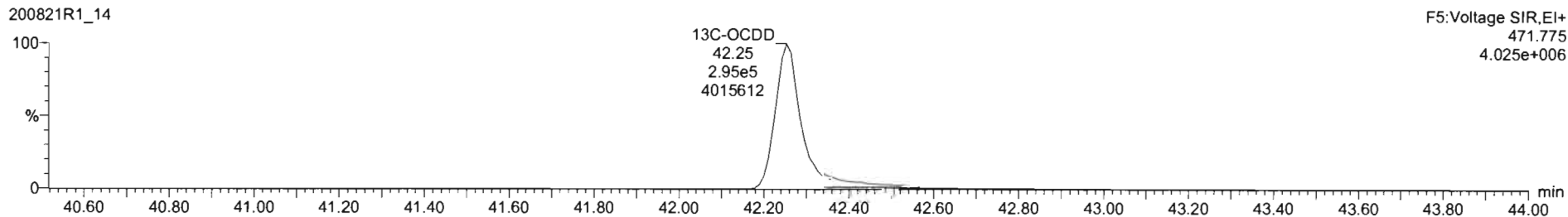
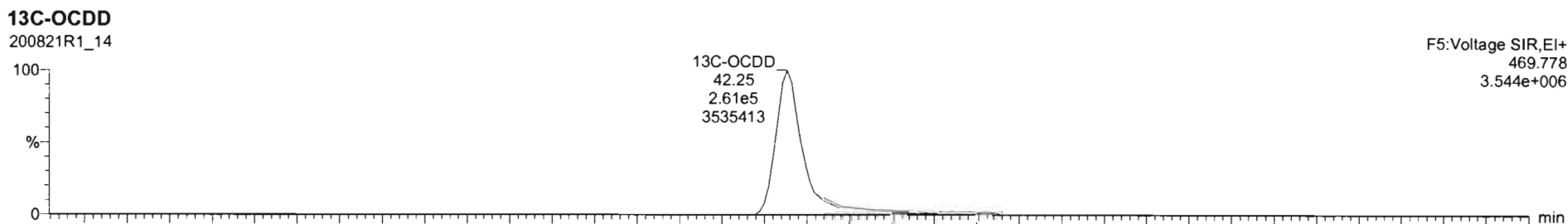
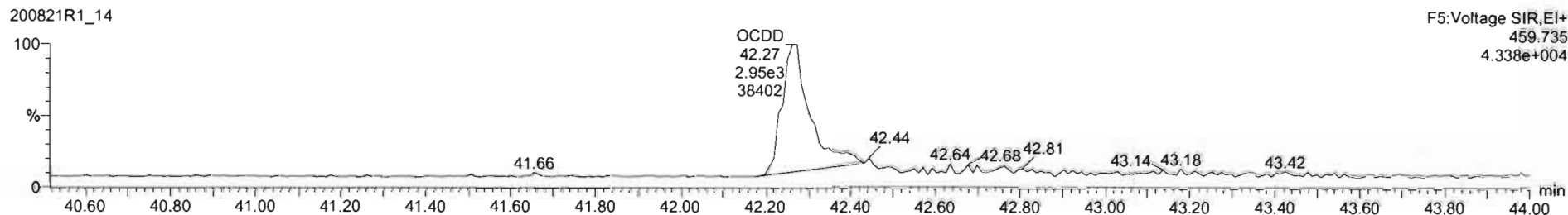
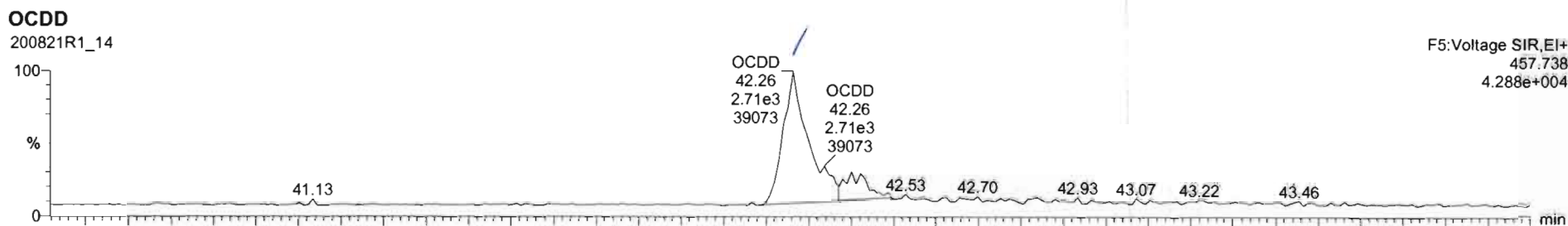


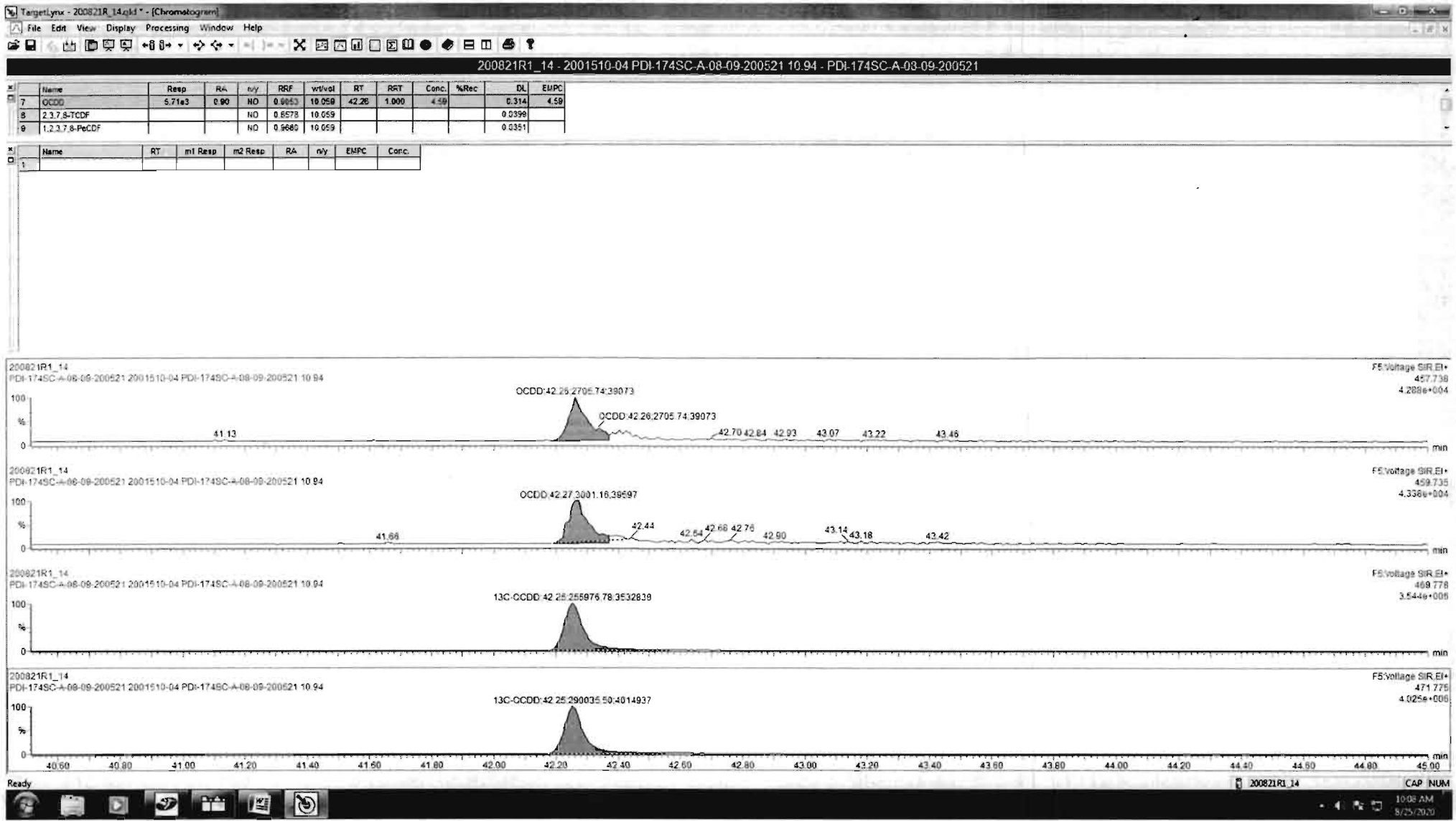


Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521



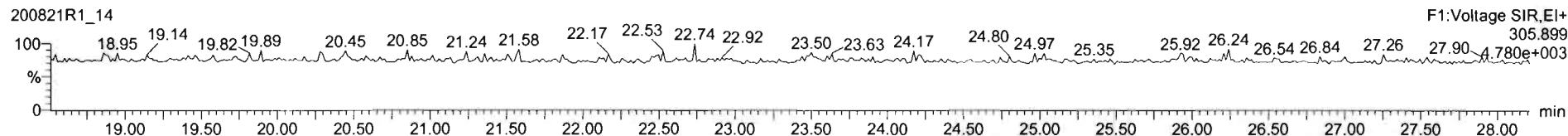
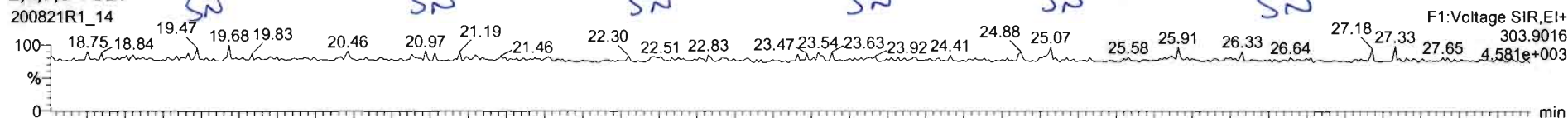


Dataset: Untitled

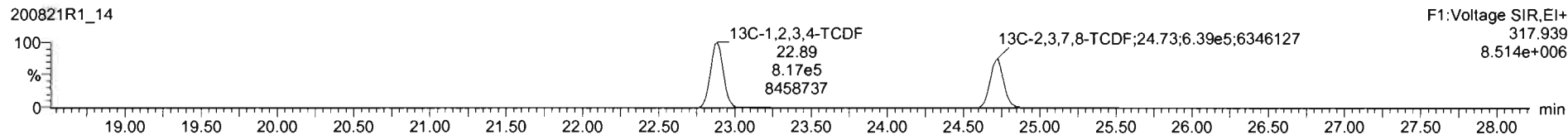
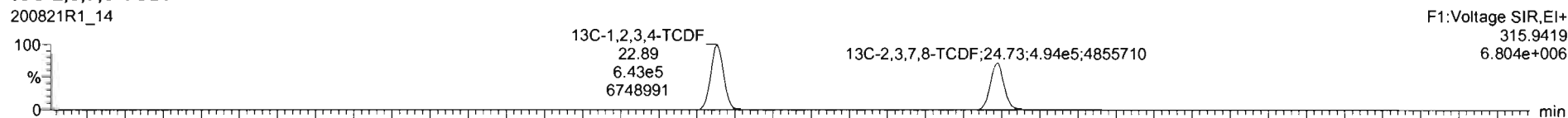
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

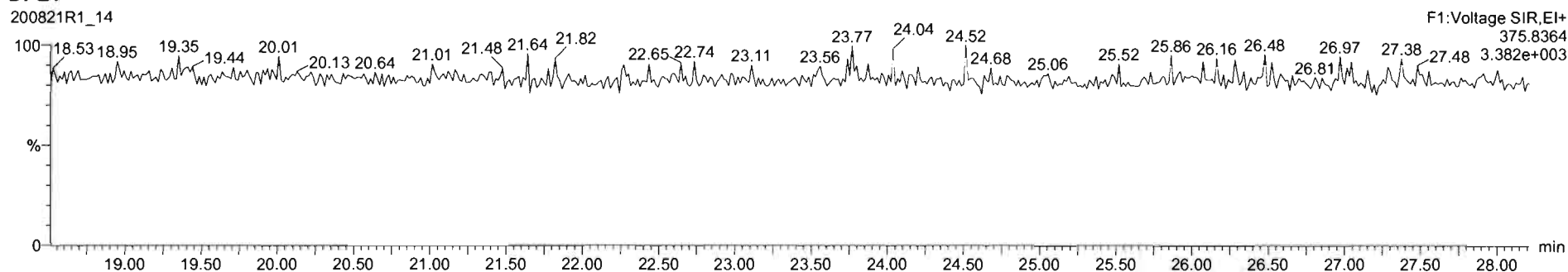
**2,3,7,8-TCDF**



**13C-2,3,7,8-TCDF**



**DPE1**





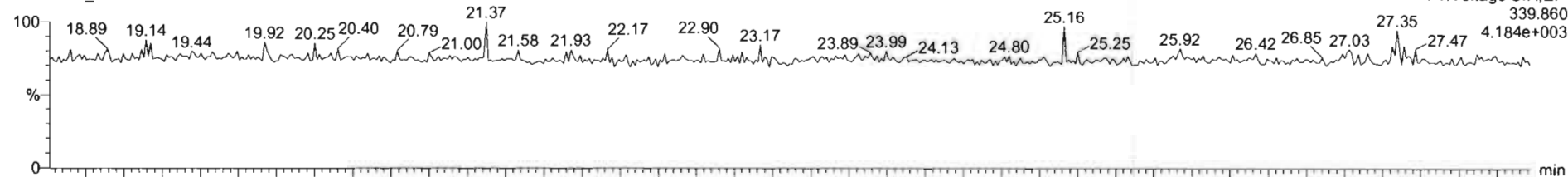
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

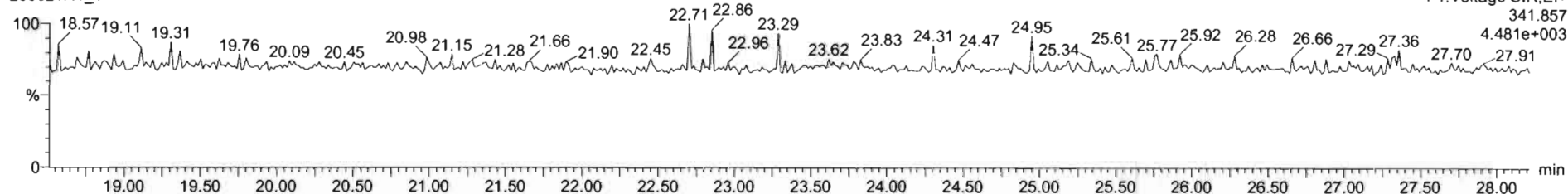
Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

1st Func. Penta-Furans

200821R1\_14

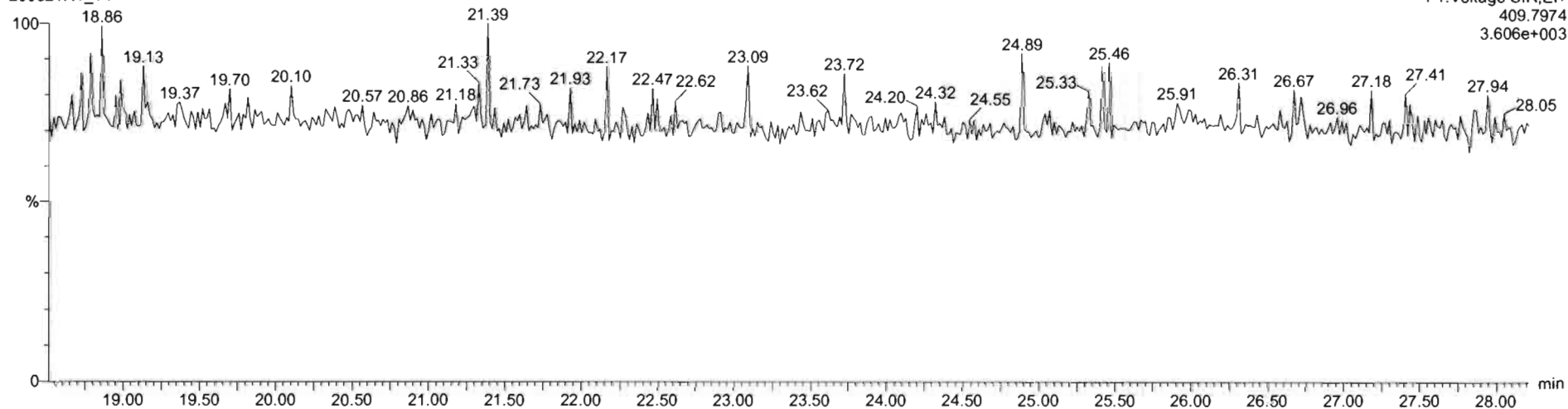


200821R1\_14



DPE6

200821R1\_14



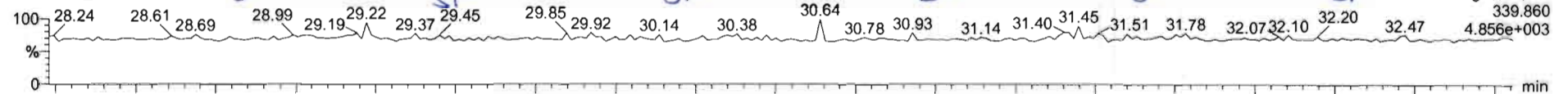
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

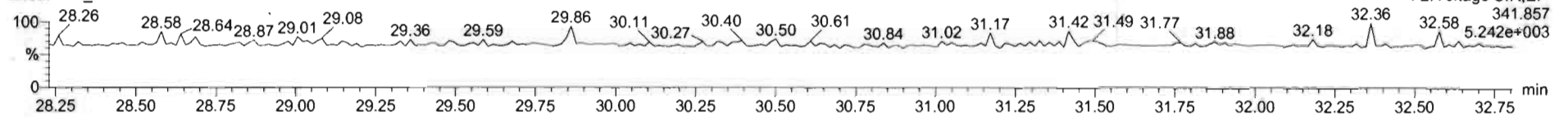
Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

**1,2,3,7,8-PeCDF**

200821R1\_14

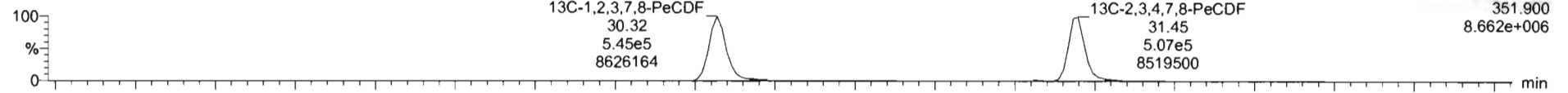


200821R1\_14

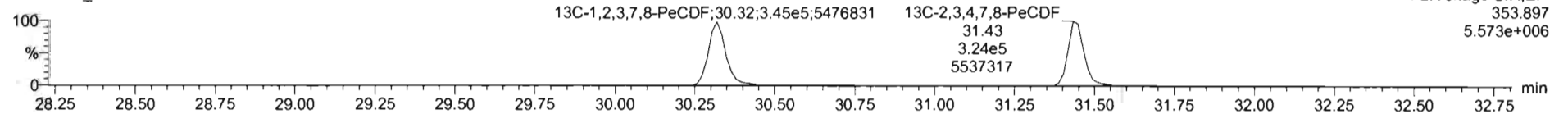


**13C-1,2,3,7,8-PeCDF**

200821R1\_14

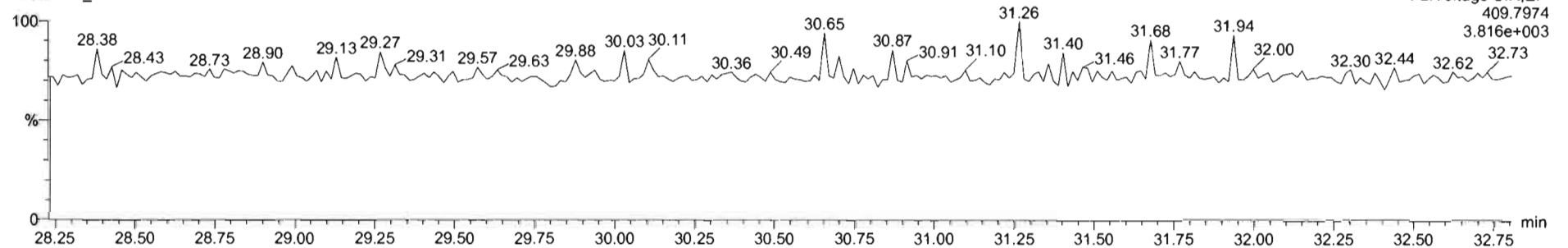


200821R1\_14



**DPE2**

200821R1\_14

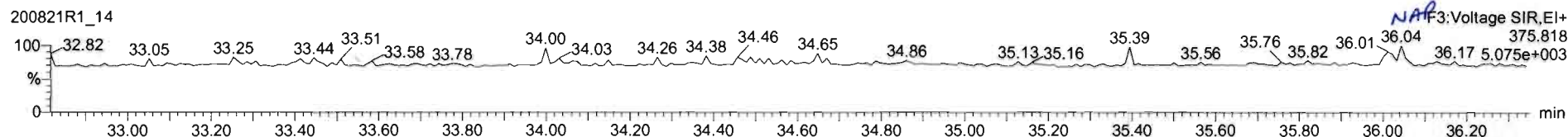
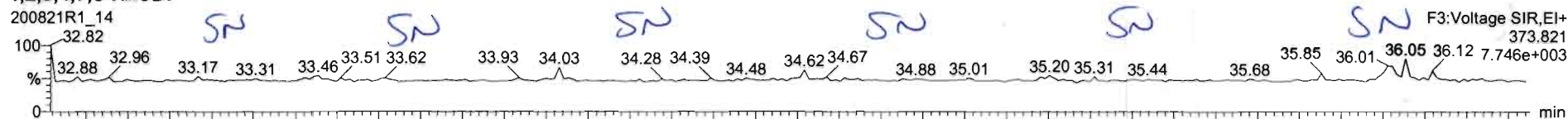


Dataset: Untitled

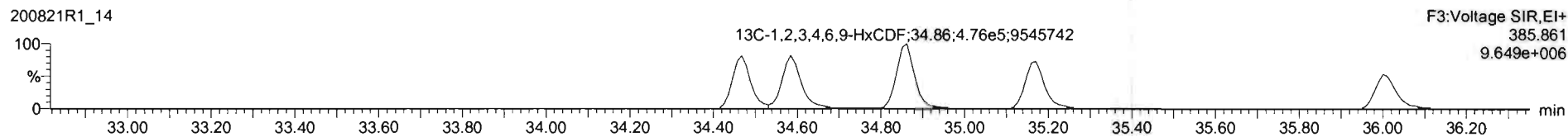
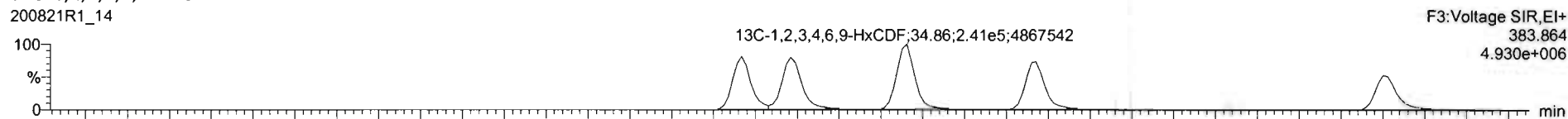
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

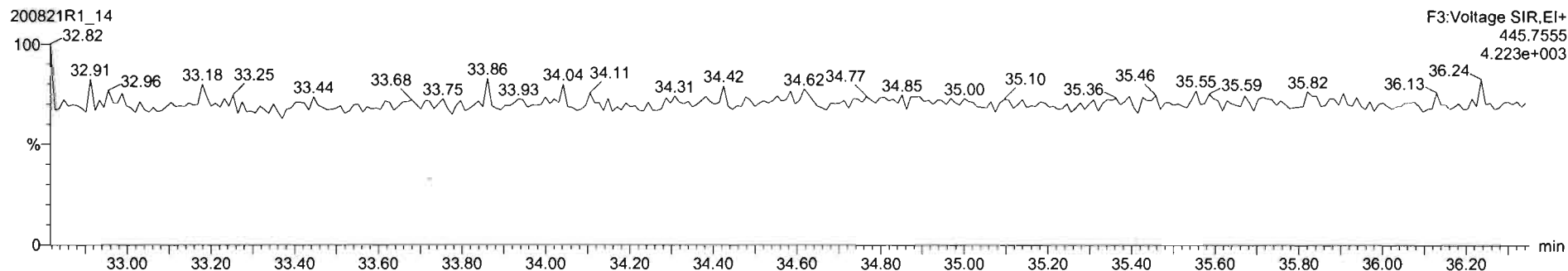
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**

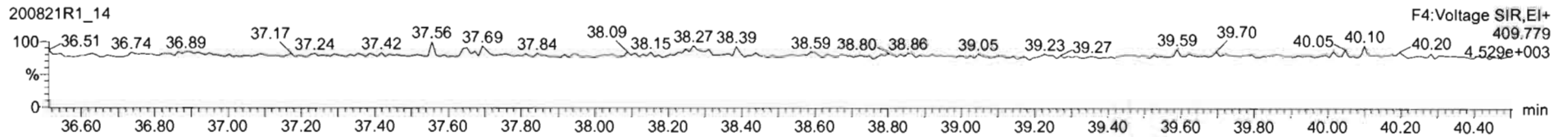
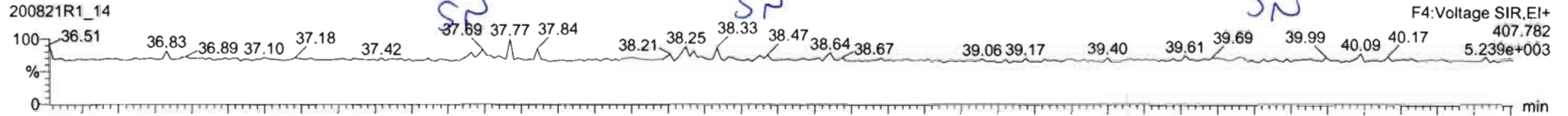


Dataset: Untitled

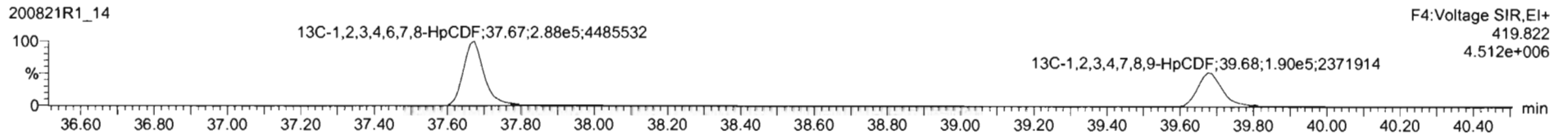
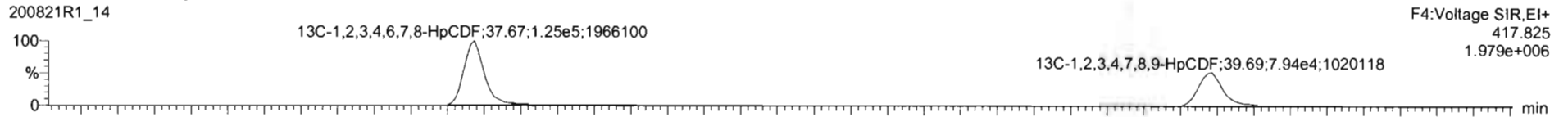
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

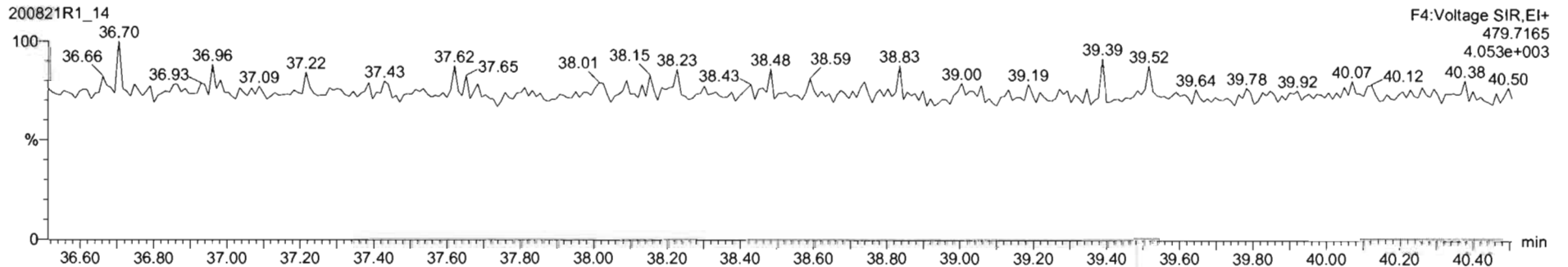
**1,2,3,4,6,7,8-HpCDF**



**13C-1,2,3,4,6,7,8-HpCDF**



**DPE4**

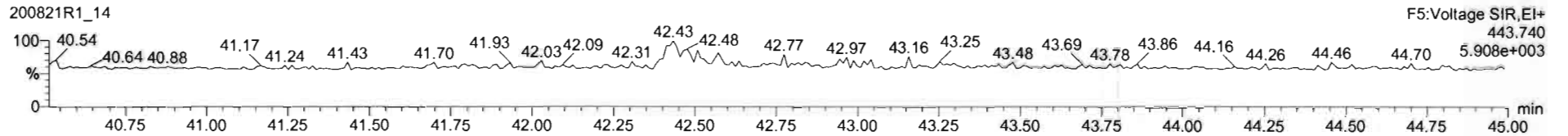
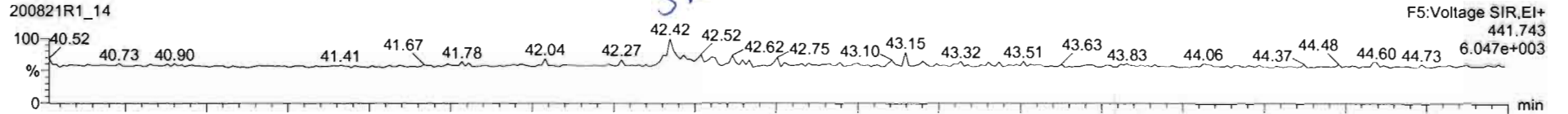


Dataset: Untitled

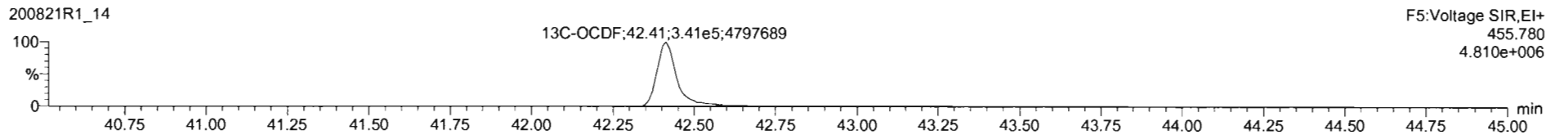
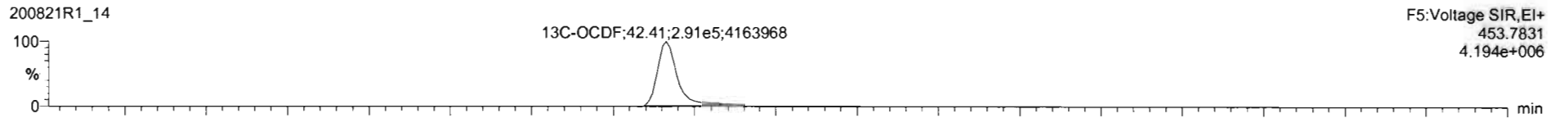
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521

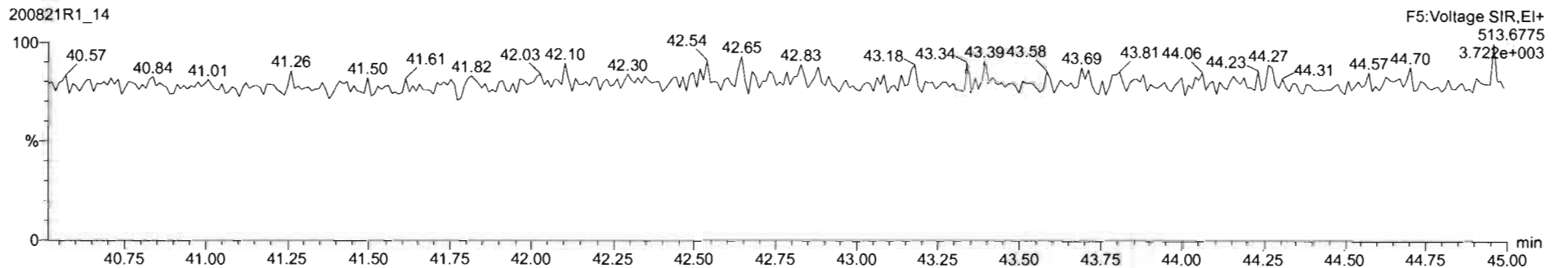
**OCDF**



**13C-OCDF**



**DPE5**

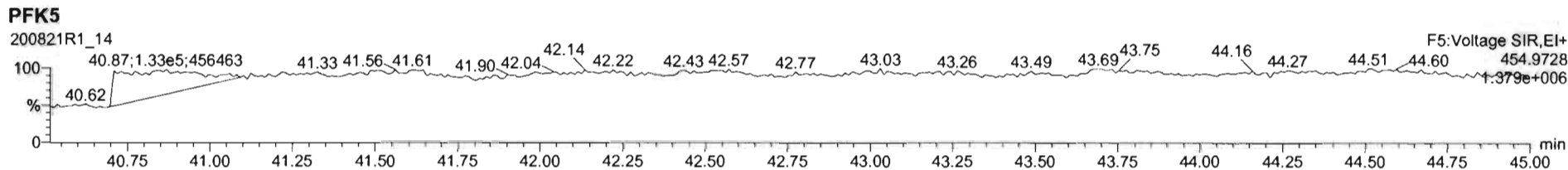
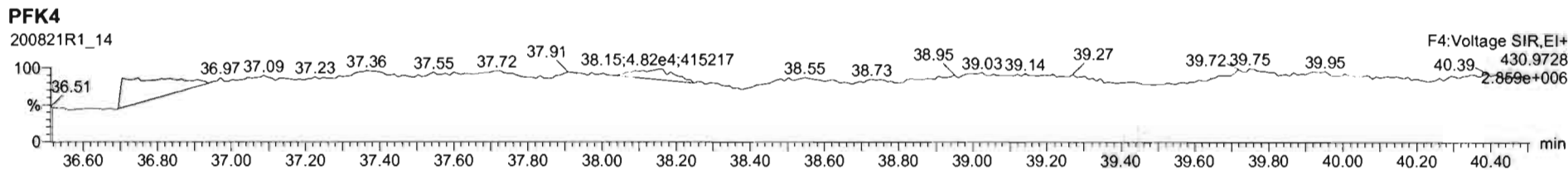
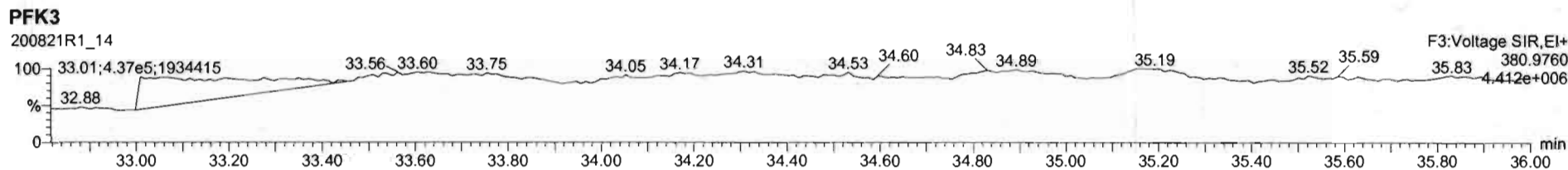
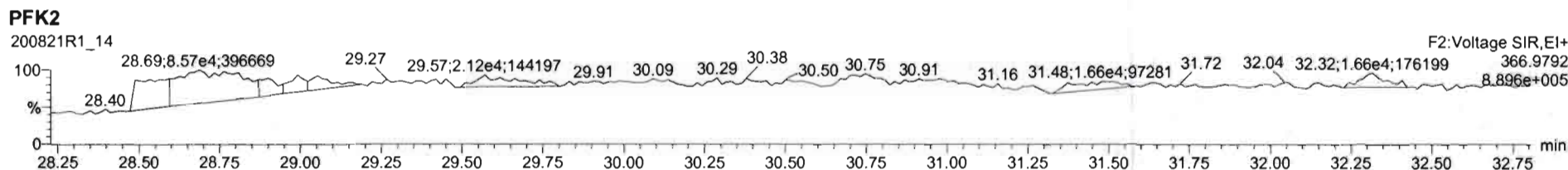
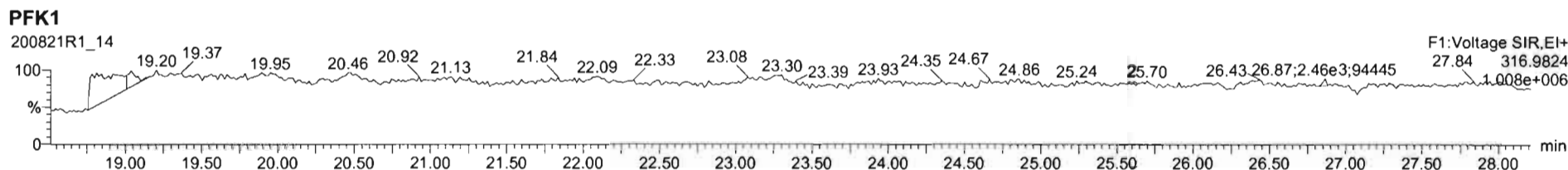


Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_14, Date: 21-Aug-2020, Time: 22:02:13, ID: 2001510-04 PDI-174SC-A-08-09-200521 10.94, Description: PDI-174SC-A-08-09-200521



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_15.qld

Last Altered: Tuesday, August 25, 2020 10:22:15 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:23:19 AM Pacific Daylight Time

*GPB 08/25/2020*

*CT 08/25/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	2,3,7,8-TCDD			NO	0.974	10.395	25.925		1.001				0.0735	
2	1,2,3,7,8-PeCDD			NO	0.917	10.395	31.806		1.001				0.114	
3	1,2,3,4,7,8-HxCDD			NO	1.04	10.395	35.352		1.000				0.0969	
4	1,2,3,6,7,8-HxCDD			NO	0.938	10.395	35.437		1.000				0.0931	
5	1,2,3,7,8,9-HxCDD			NO	0.964	10.395	35.704		1.000				0.107	
6	1,2,3,4,6,7,8-HpCDD	1.51e3	0.92	NO	0.902	10.395	39.038	39.04	1.000	1.000	0.90702		0.149	0.907
7	OCDD	1.51e4	0.93	NO	0.905	10.395	42.264	42.27	1.000	1.000	12.387		0.302	12.4
8	2,3,7,8-TCDF			NO	0.858	10.395	24.736		1.001				0.0443	
9	1,2,3,7,8-PeCDF			NO	0.968	10.395	30.340		1.001				0.0516	
10	2,3,4,7,8-PeCDF			NO	1.08	10.395	31.479		1.001				0.0443	
11	1,2,3,4,7,8-HxCDF			NO	0.968	10.395	34.468		1.000				0.0553	
12	1,2,3,6,7,8-HxCDF			NO	1.00	10.395	34.595		1.000				0.0547	
13	2,3,4,6,7,8-HxCDF			NO	0.997	10.395	35.206		1.001				0.0577	
14	1,2,3,7,8,9-HxCDF			NO	0.961	10.395	36.012		1.000				0.0814	
15	1,2,3,4,6,7,8-HpCDF			NO	1.00	10.395	37.711		1.001				0.0682	
16	1,2,3,4,7,8,9-HpCDF			NO	1.11	10.395	39.686		1.000				0.113	
17	OCDF			NO	0.896	10.395	42.424		1.000				0.121	
18	13C-2,3,7,8-TCDD	8.78e5	0.80	NO	1.10	10.395	25.835	25.89	1.032	1.034	178.11	92.6	0.388	
19	13C-1,2,3,7,8-PeCDD	5.94e5	0.62	NO	0.757	10.395	31.497	31.78	1.258	1.269	175.55	91.2	0.384	
20	13C-1,2,3,4,7,8-HxCDD	4.16e5	1.27	NO	0.647	10.395	35.343	35.34	1.014	1.014	177.65	92.3	0.622	
21	13C-1,2,3,6,7,8-HxCDD	5.30e5	1.25	NO	0.805	10.395	35.444	35.44	1.017	1.016	182.22	94.7	0.500	
22	13C-1,2,3,7,8,9-HxCDD	4.66e5	1.21	NO	0.726	10.395	35.716	35.69	1.025	1.024	177.63	92.3	0.555	
23	13C-1,2,3,4,6,7,8-HpCDD	3.56e5	1.09	NO	0.611	10.395	39.087	39.03	1.121	1.119	161.07	83.7	0.451	
24	13C-OCDD	5.18e5	0.88	NO	0.513	10.395	42.288	42.26	1.213	1.212	279.42	72.6	0.520	
25	13C-2,3,7,8-TCDF	1.11e6	0.81	NO	0.933	10.395	24.743	24.71	0.988	0.987	164.07	85.3	0.368	
26	13C-1,2,3,7,8-PeCDF	8.99e5	1.59	NO	0.696	10.395	30.302	30.32	1.210	1.211	178.90	93.0	0.619	
27	13C-2,3,4,7,8-PeCDF	8.68e5	1.60	NO	0.669	10.395	31.426	31.45	1.255	1.256	179.79	93.4	0.645	
28	13C-1,2,3,4,7,8-HxCDF	5.89e5	0.51	NO	0.886	10.395	34.482	34.47	0.989	0.989	183.76	95.5	0.650	
29	13C-1,2,3,6,7,8-HxCDF	6.20e5	0.53	NO	0.955	10.395	34.601	34.58	0.993	0.992	179.65	93.4	0.603	
30	13C-2,3,4,6,7,8-HxCDF	5.67e5	0.51	NO	0.882	10.395	35.172	35.17	1.009	1.009	177.92	92.5	0.653	
31	13C-1,2,3,7,8,9-HxCDF	4.53e5	0.51	NO	0.737	10.395	36.026	36.01	1.033	1.033	170.12	88.4	0.782	

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_15.qld

Last Altered: Tuesday, August 25, 2020 10:22:15 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:23:19 AM Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.16e5	0.43	NO	0.651	10.395	37.714	37.67	1.082	1.081	176.57	91.8	0.353	
33	33 13C-1,2,3,4,7,8,9-HpCDF	2.72e5	0.41	NO	0.459	10.395	39.739	39.69	1.140	1.138	163.52	85.0	0.500	
34	34 13C-OCDF	6.14e5	0.91	NO	0.609	10.395	42.448	42.42	1.218	1.217	279.25	72.6	0.524	
35	35 37Cl-2,3,7,8-TCDD	3.19e5			1.14	10.395	25.732	25.91	1.028	1.035	62.779	81.6	0.0995	
36	36 13C-1,2,3,4-TCDD	8.60e5	0.77	NO	1.00	10.395	25.070	25.04	1.000	1.000	192.40	100	0.428	
37	37 13C-1,2,3,4-TCDF	1.39e6	0.79	NO	1.00	10.395	23.080	22.87	1.000	1.000	192.40	100	0.344	
38	38 13C-1,2,3,4,6,9-HxCDF	6.96e5	0.51	NO	1.00	10.395	34.740	34.86	1.000	1.000	192.40	100	0.576	
39	39 Total Tetra-Dioxins				0.974	10.395	24.620		0.000		0.13592		0.0735	0.136
40	40 Total Penta-Dioxins				0.917	10.395	29.960		0.000				0.0503	
41	41 Total Hexa-Dioxins				0.938	10.395	33.635		0.000		0.61784		0.103	0.618
42	42 Total Hepta-Dioxins				0.902	10.395	37.640		0.000		2.4363		0.149	2.44
43	43 Total Tetra-Furans				0.858	10.395	23.610		0.000				0.0220	
44	44 1st Func. Penta-Furans				0.968	10.395	27.230		0.000				0.0137	
45	45 Total Penta-Furans				0.968	10.395	29.275		0.000				0.0214	
46	46 Total Hexa-Furans				0.997	10.395	33.555		0.000				0.0293	
47	47 Total Hepta-Furans				1.00	10.395	37.835		0.000				0.0495	



Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_15.qld

Last Altered: Tuesday, August 25, 2020 10:22:15 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:23:19 AM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	23.13	3.714e3	3.691e3	2.658e2	3.388e2	0.78	NO	6.045e2	0.13592	0.13592	0.0735

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.86	1.417e4	1.531e4	7.974e2	6.207e2	1.28	NO	1.418e3	0.61784	0.61784	0.103

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	38.07	2.201e4	1.934e4	1.285e3	1.265e3	1.02	NO	2.550e3	1.5293	1.5293	0.149
2	1,2,3,4,6,7,8-HpCDD	39.04	1.206e4	1.121e4	7.247e2	7.876e2	0.92	NO	1.512e3	0.90702	0.90702	0.149

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_15.qld

Last Altered: Tuesday, August 25, 2020 10:22:15 AM Pacific Daylight Time

Printed: Tuesday, August 25, 2020 10:23:19 AM Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

Penta-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Hexa-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Hepta-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1											

Dataset: Untitled

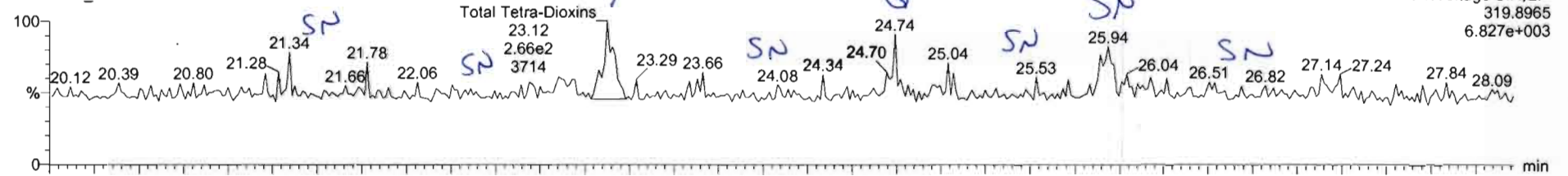
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

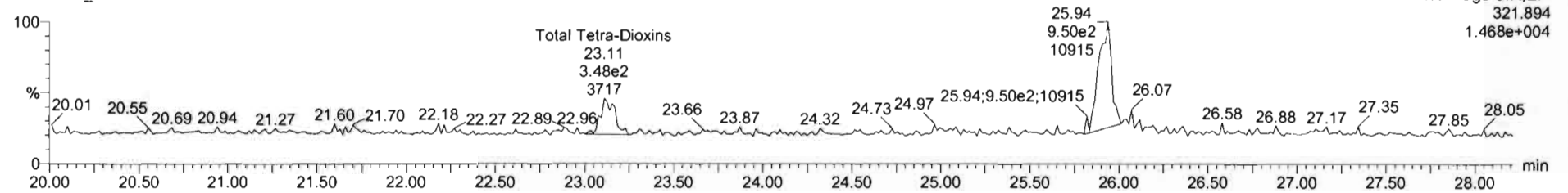
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

**2,3,7,8-TCDD**

200821R1\_15

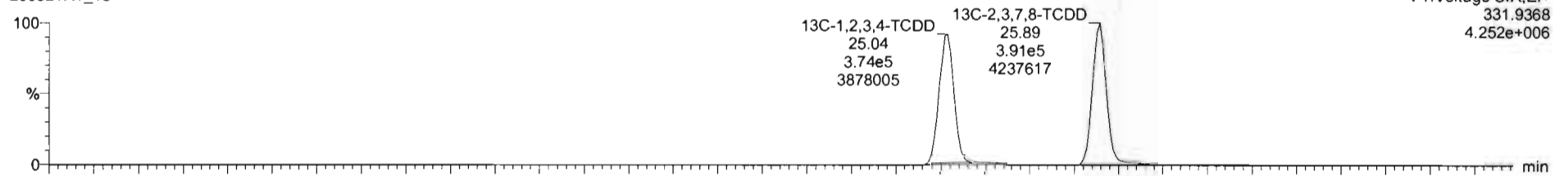


200821R1\_15

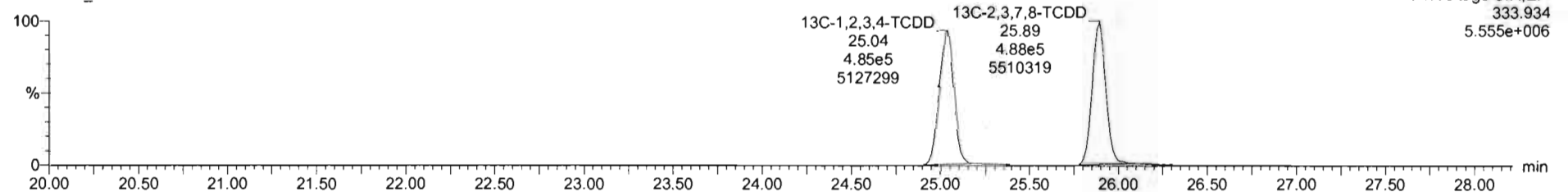


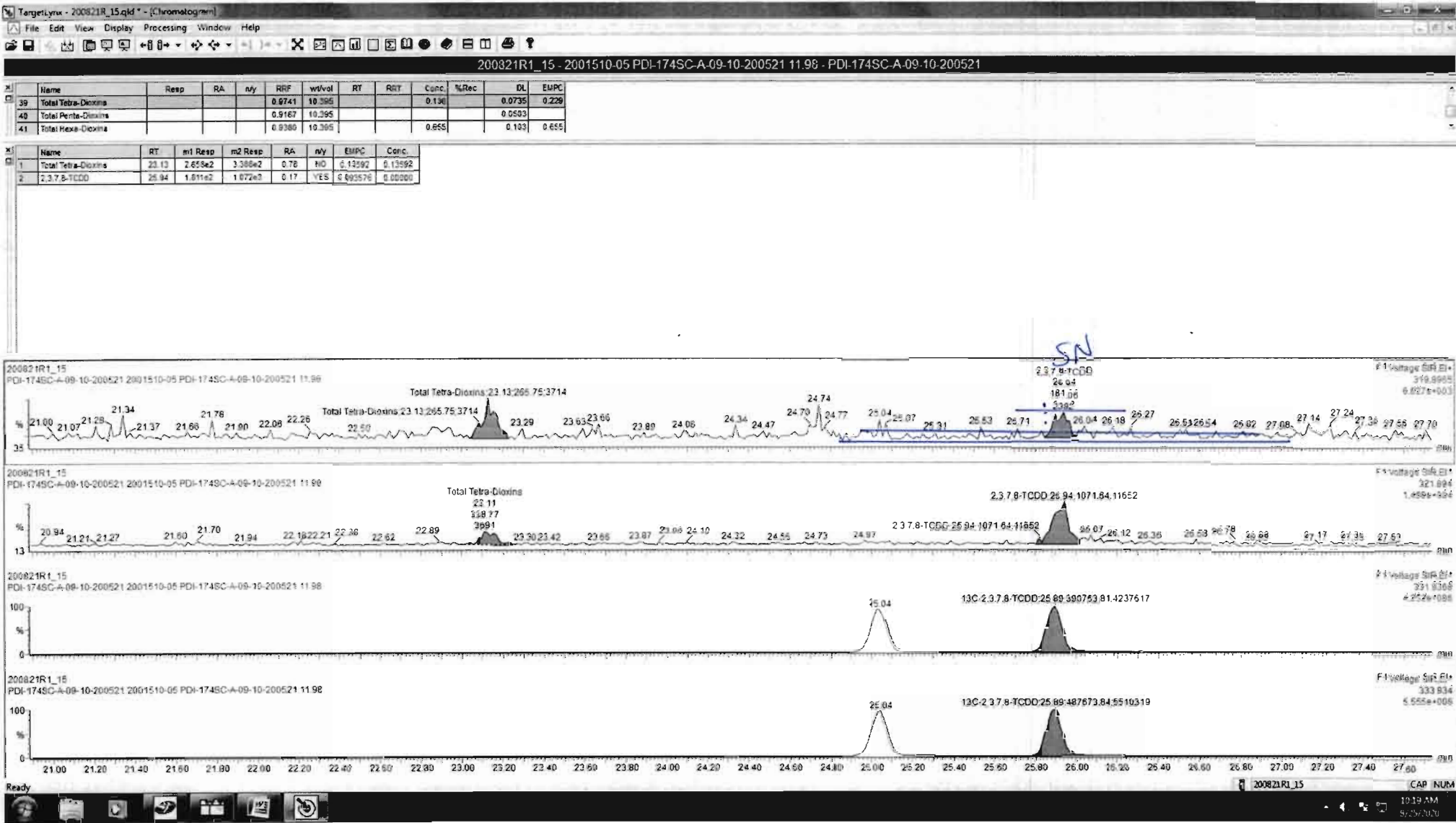
**13C-2,3,7,8-TCDD**

200821R1\_15



200821R1\_15





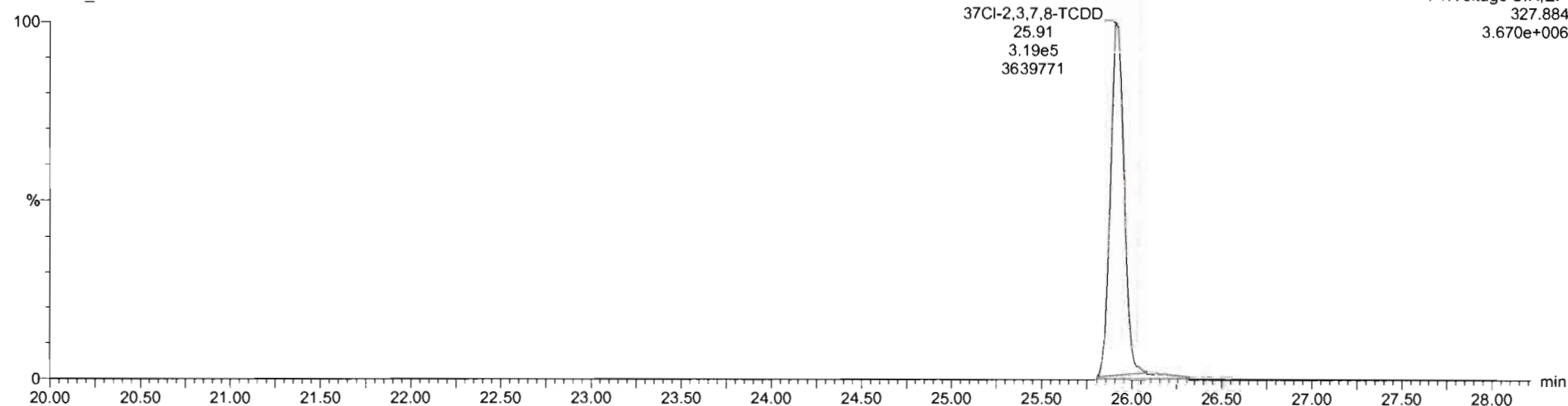
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

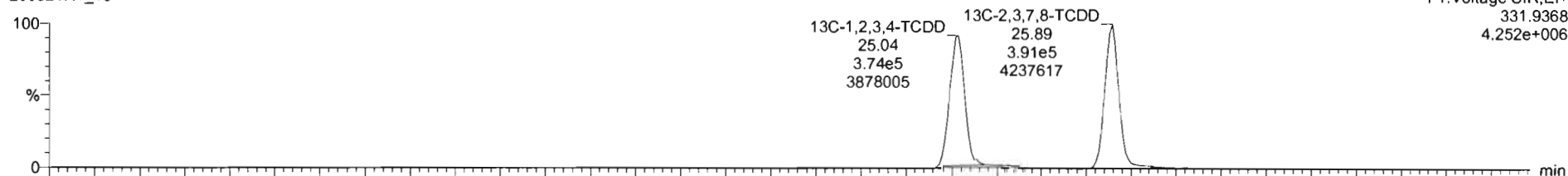
37Cl-2,3,7,8-TCDD

200821R1\_15

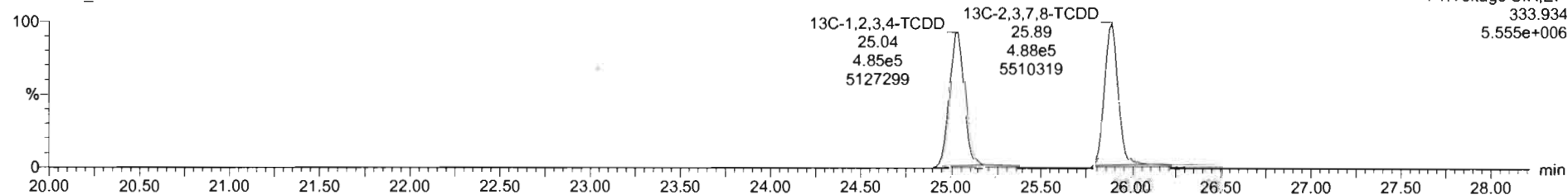


13C-1,2,3,4-TCDD

200821R1\_15



200821R1\_15



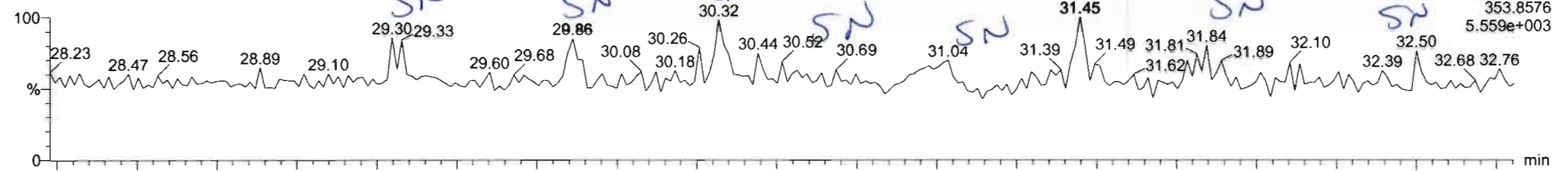
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

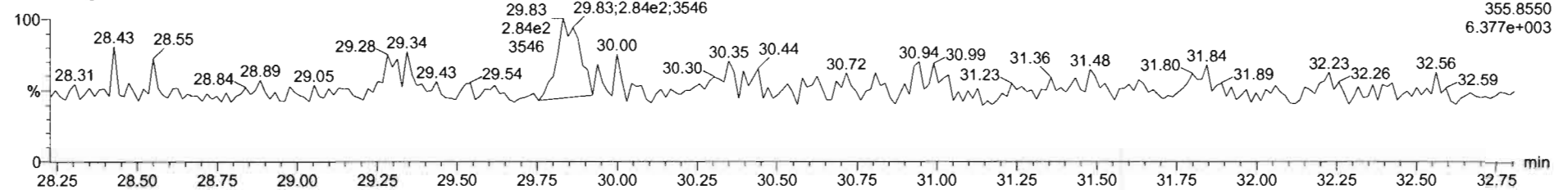
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

1,2,3,7,8-PeCDD

200821R1\_15

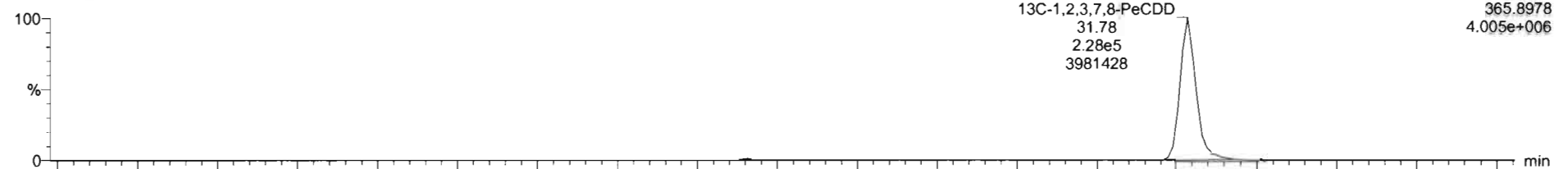


200821R1\_15

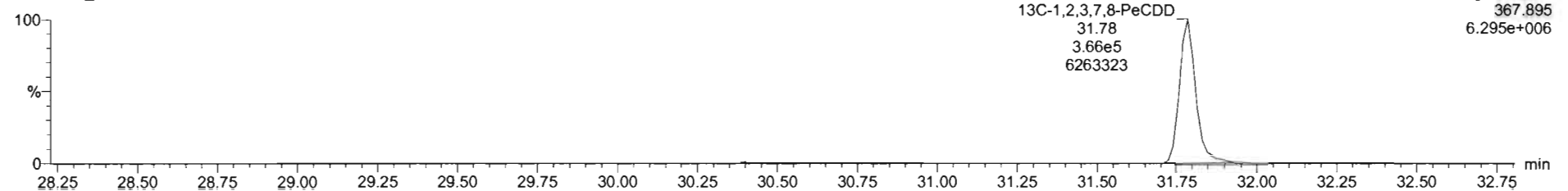


13C-1,2,3,7,8-PeCDD

200821R1\_15



200821R1\_15



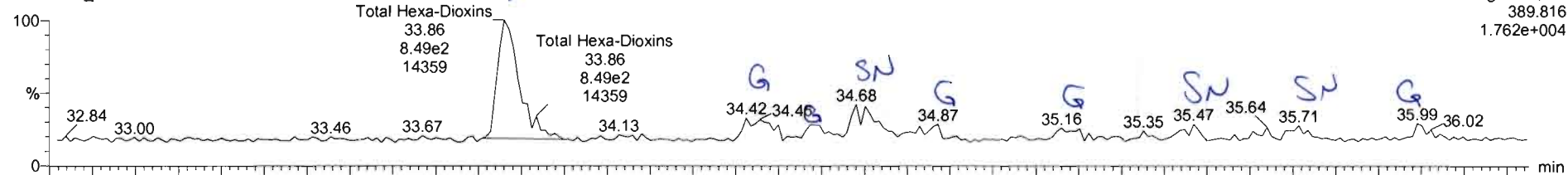
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

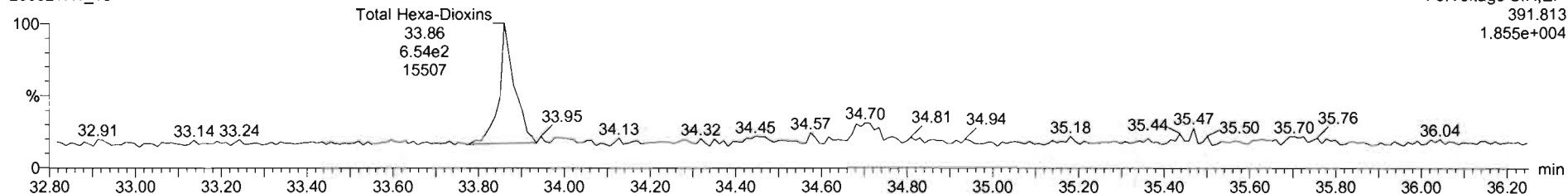
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

1,2,3,4,7,8-HxCDD

200821R1\_15

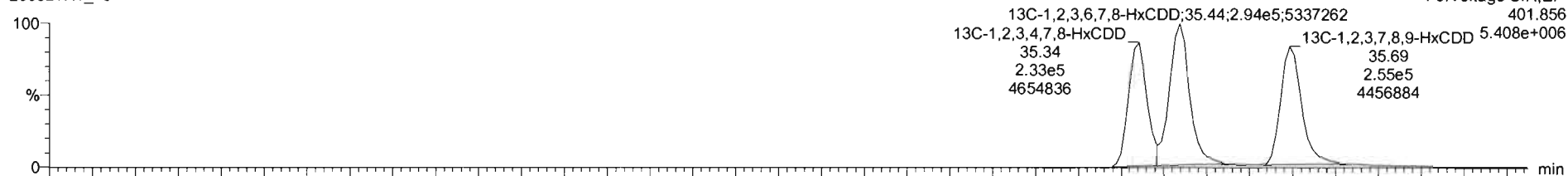


200821R1\_15

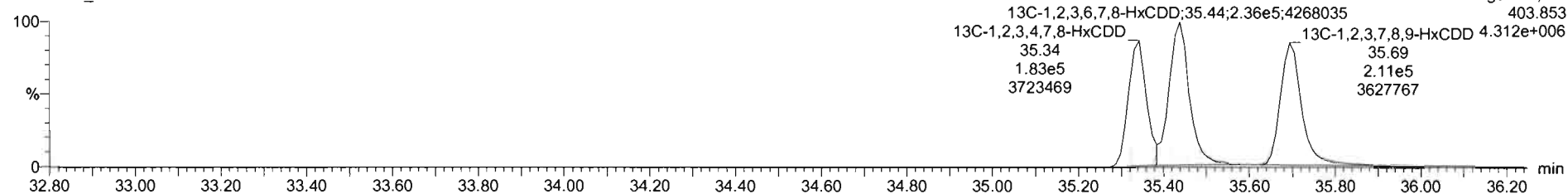


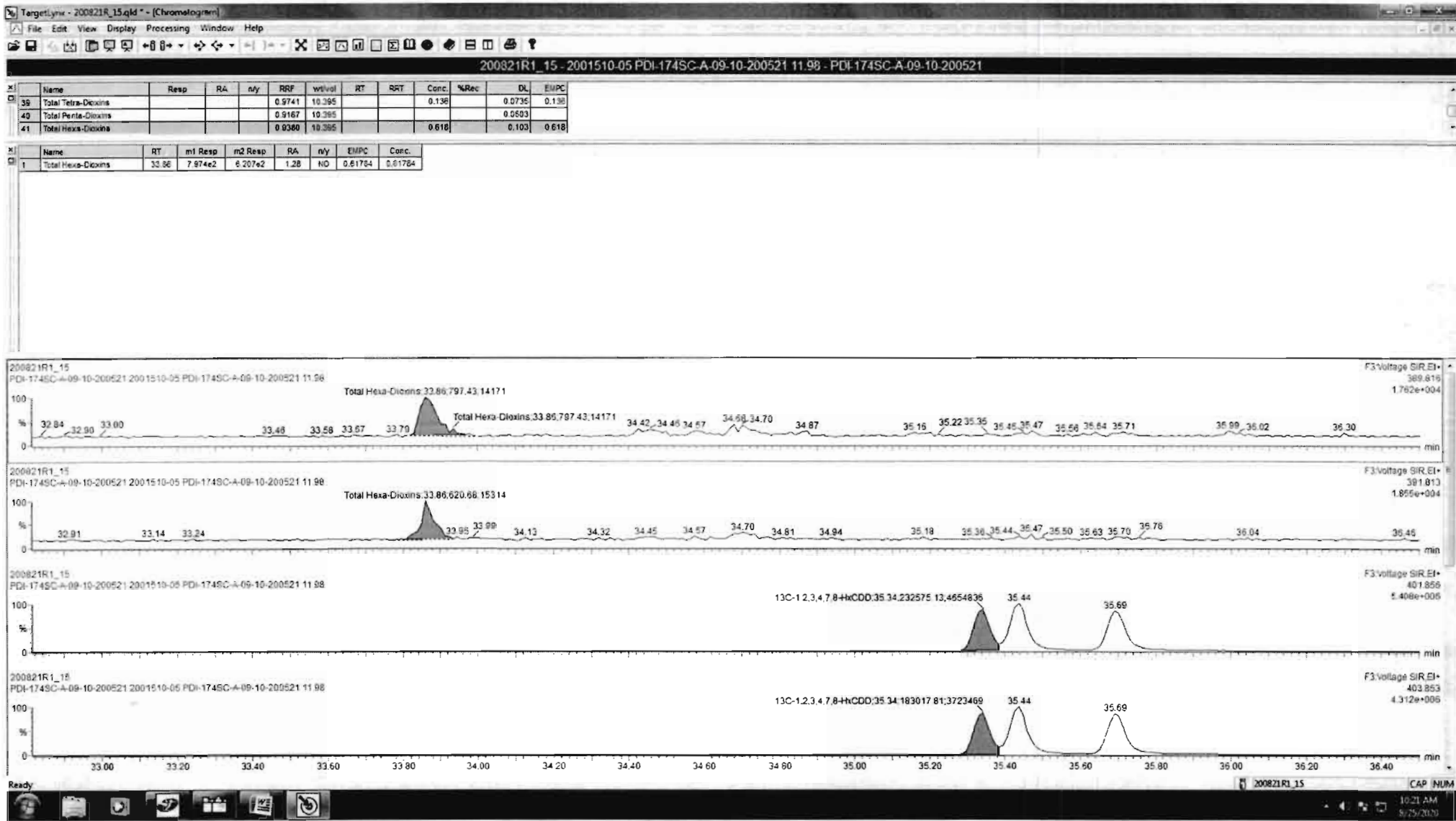
13C-1,2,3,4,7,8-HxCDD

200821R1\_15



200821R1\_15







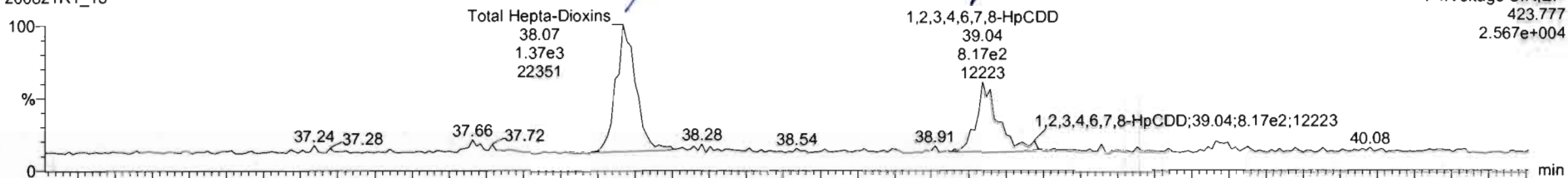
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

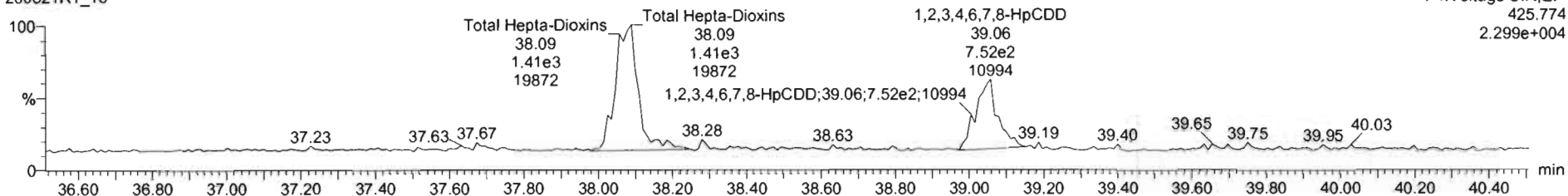
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

**1,2,3,4,6,7,8-HpCDD**

200821R1\_15

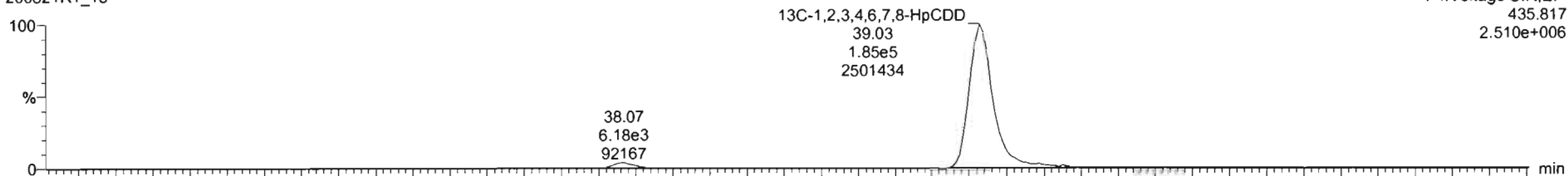


200821R1\_15

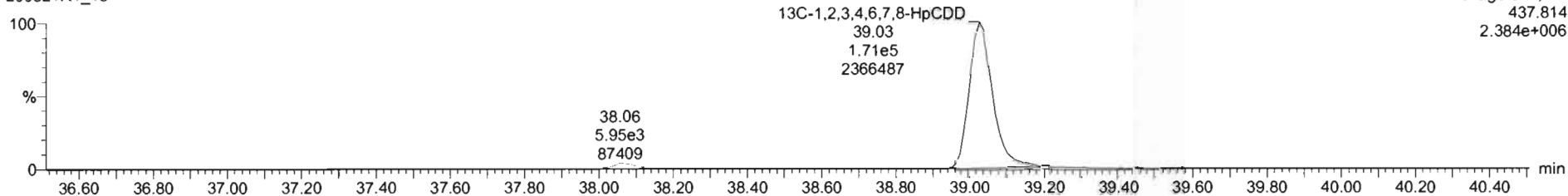


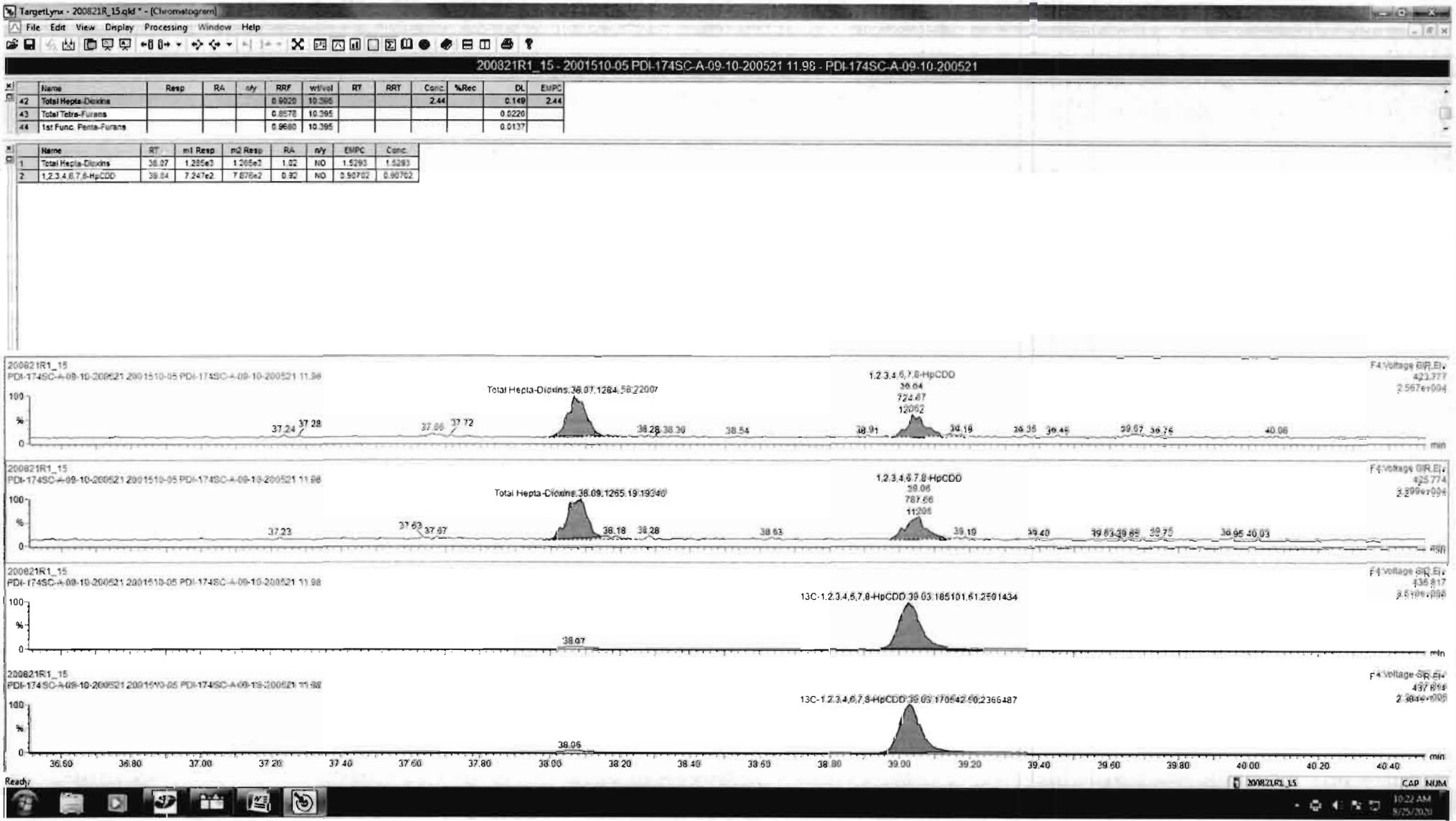
**13C-1,2,3,4,6,7,8-HpCDD**

200821R1\_15



200821R1\_15

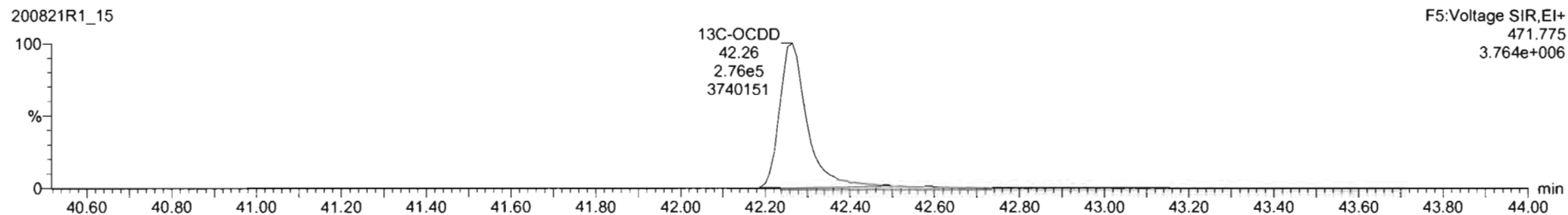
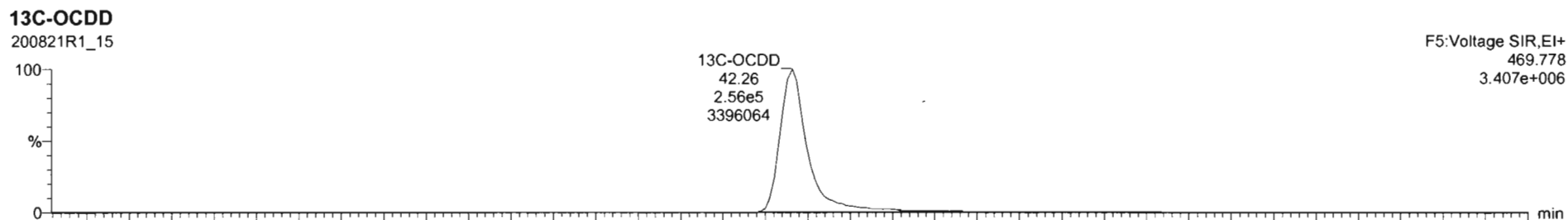
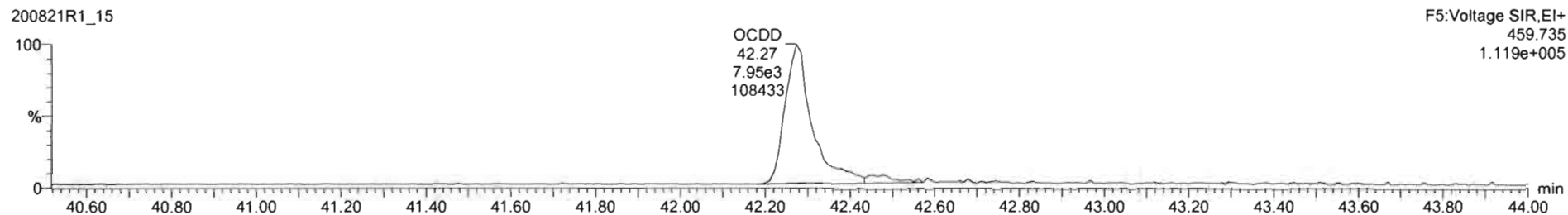
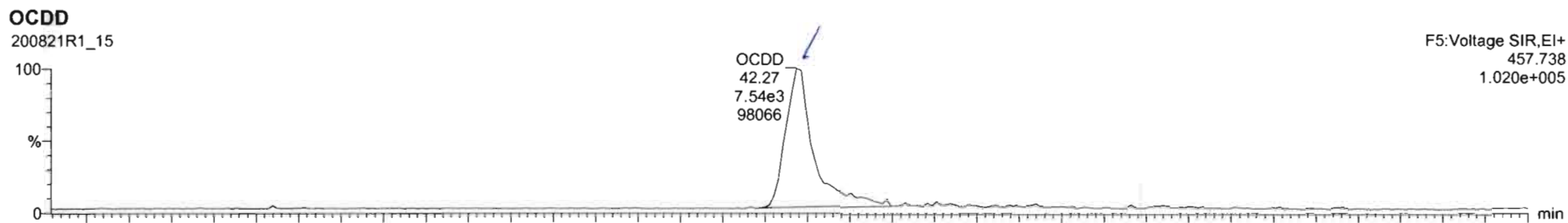


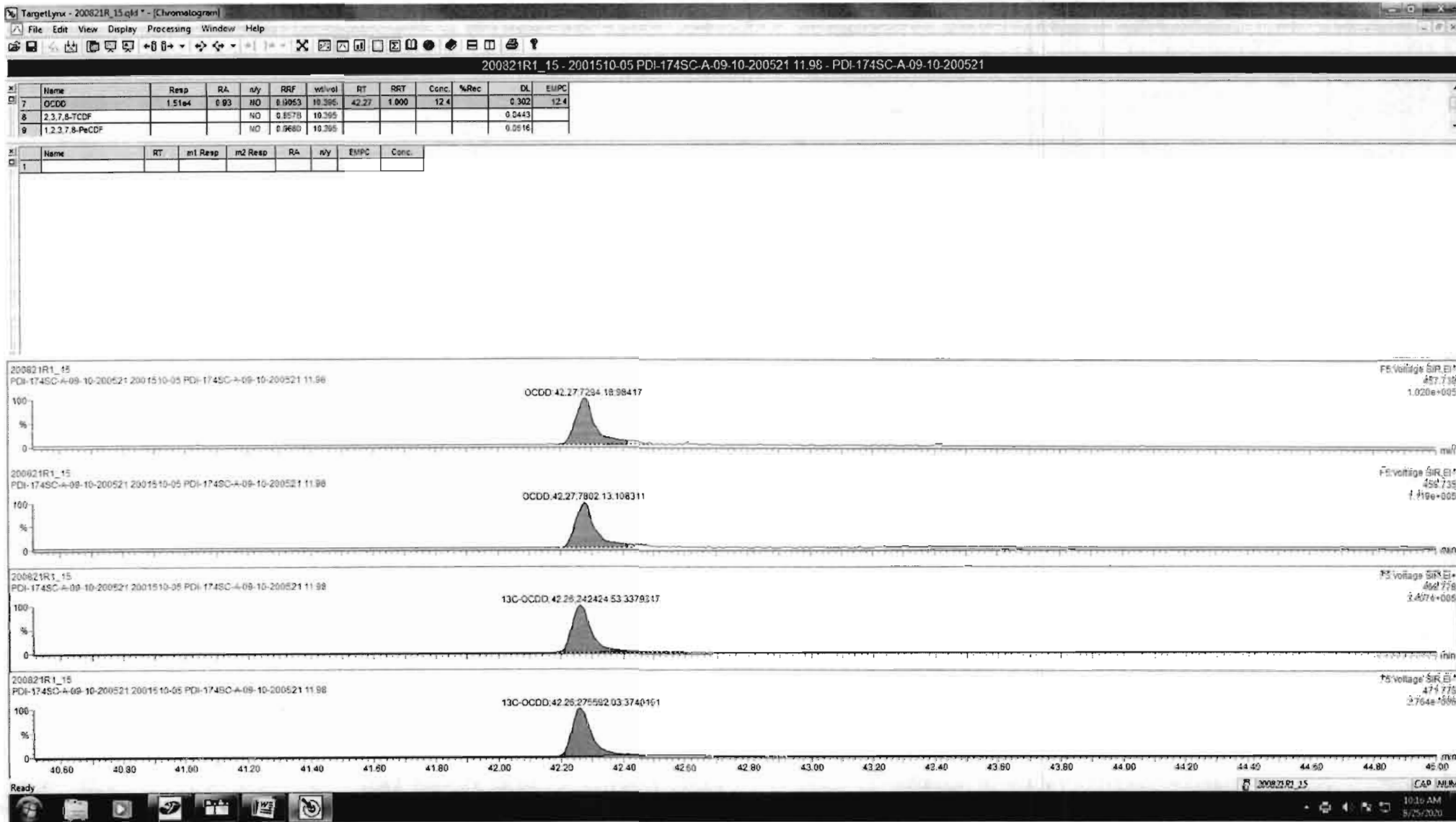


Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521





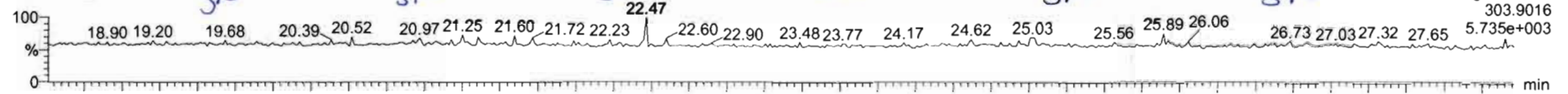
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

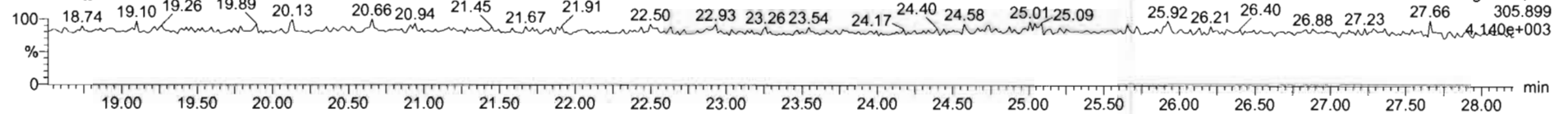
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

2,3,7,8-TCDF

200821R1\_15

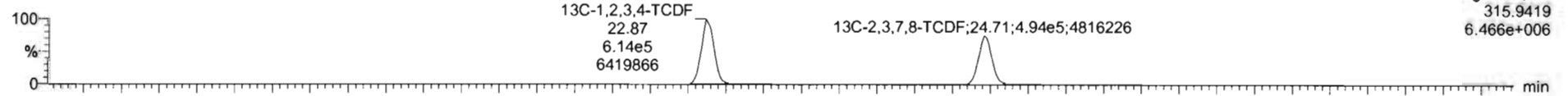


200821R1\_15

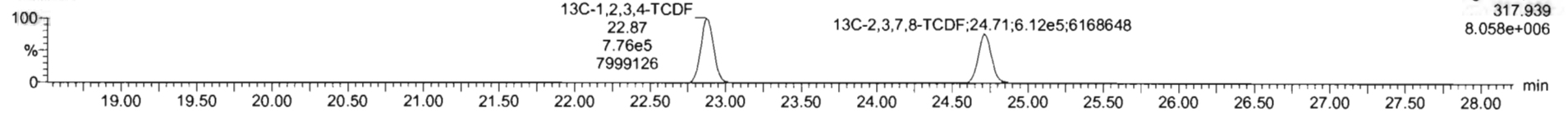


13C-2,3,7,8-TCDF

200821R1\_15

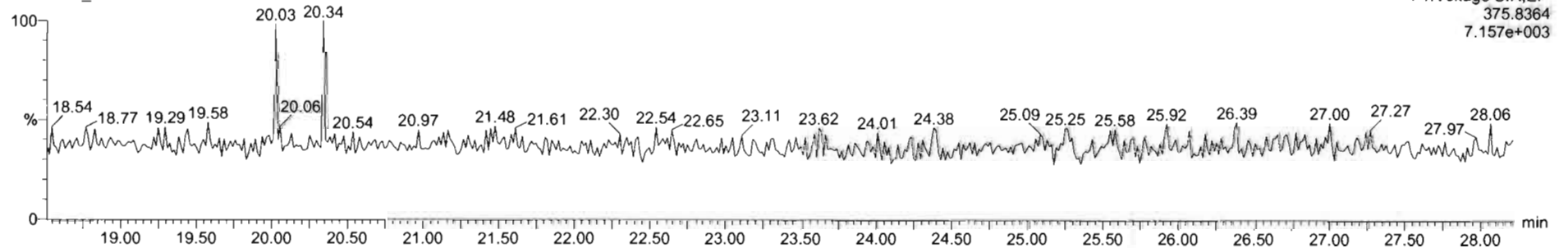


200821R1\_15



DPE1

200821R1\_15



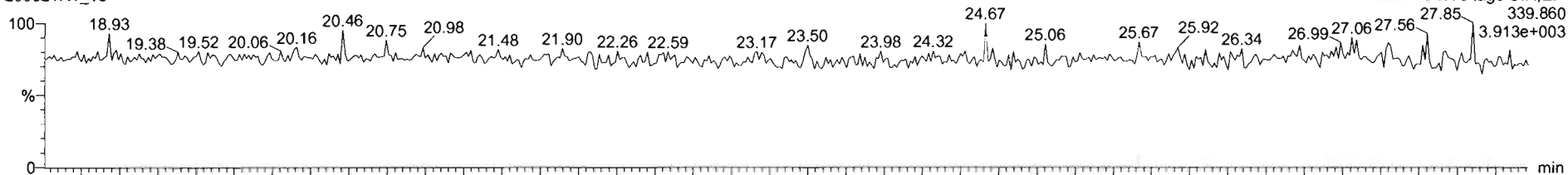
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

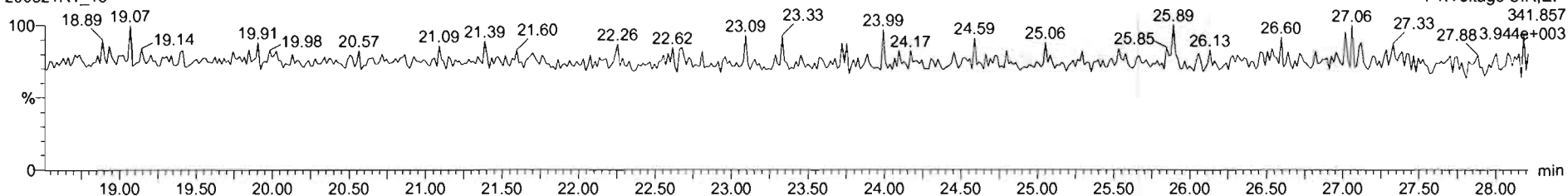
Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

1st Func. Penta-Furans

200821R1\_15

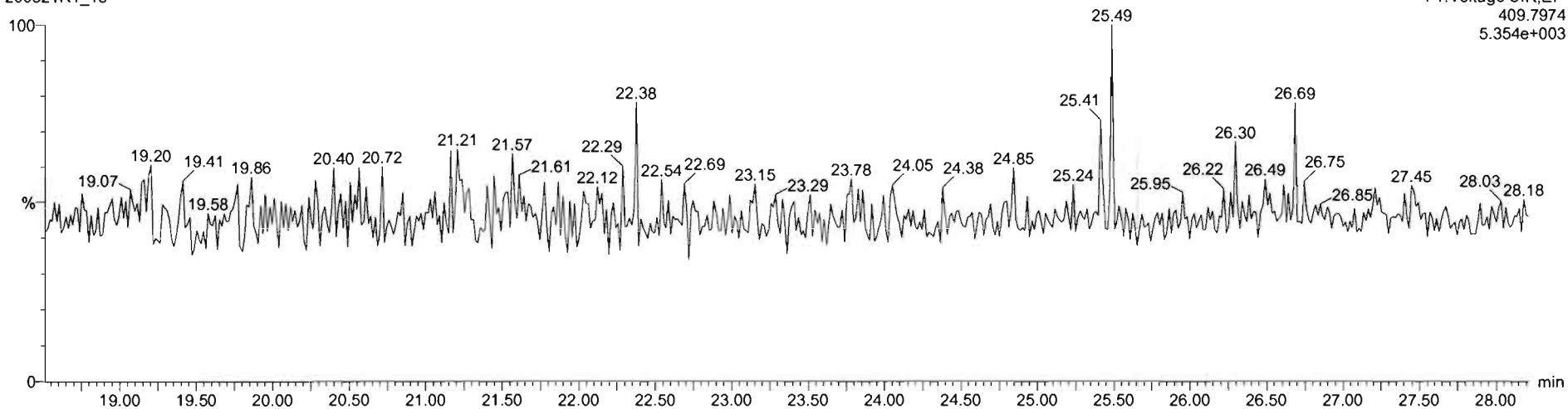


200821R1\_15



DPE6

200821R1\_15

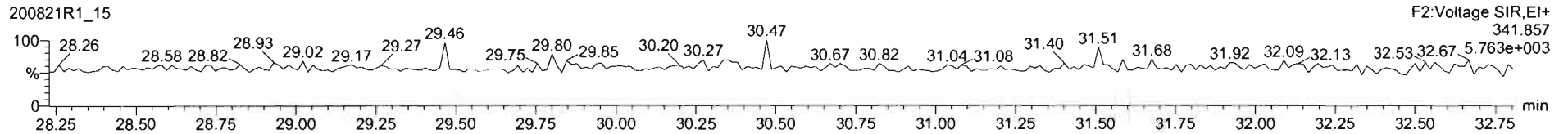
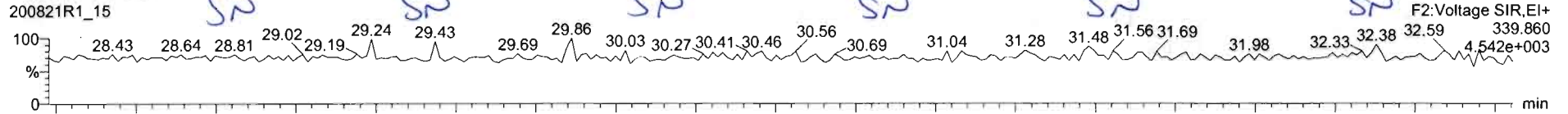


Dataset: Untitled

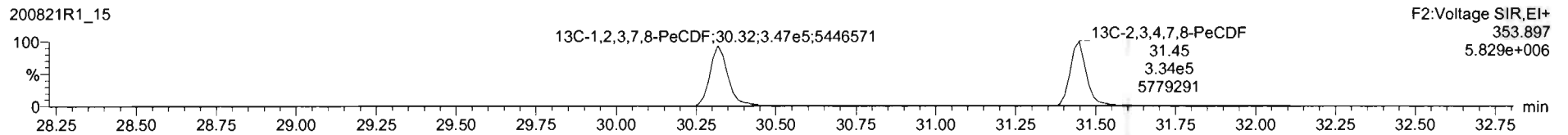
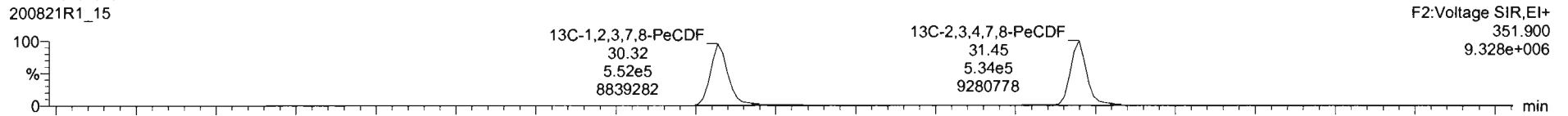
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

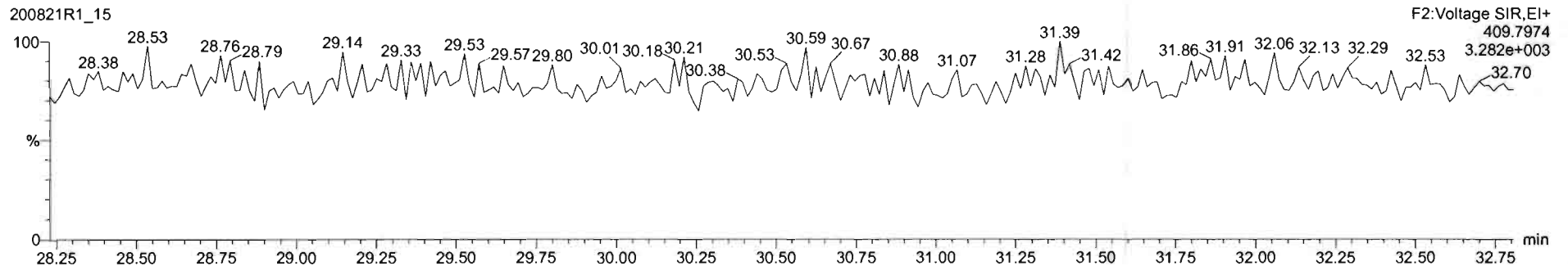
**1,2,3,7,8-PeCDF**



**13C-1,2,3,7,8-PeCDF**



**DPE2**



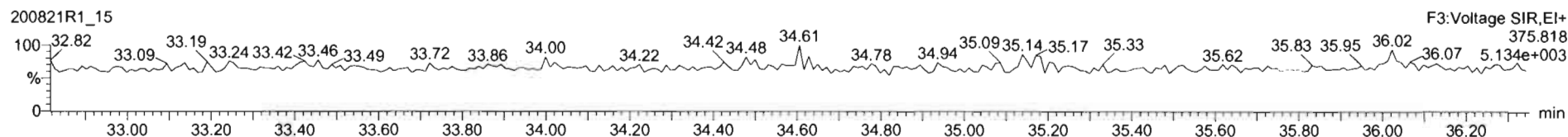
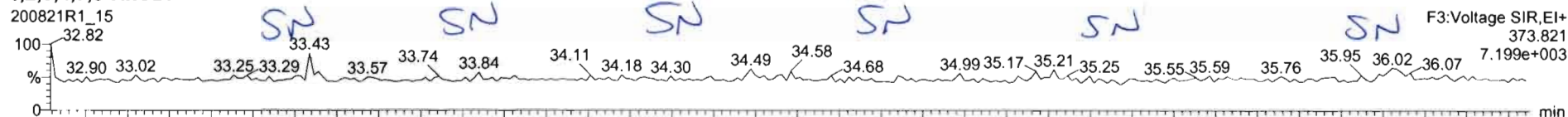
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

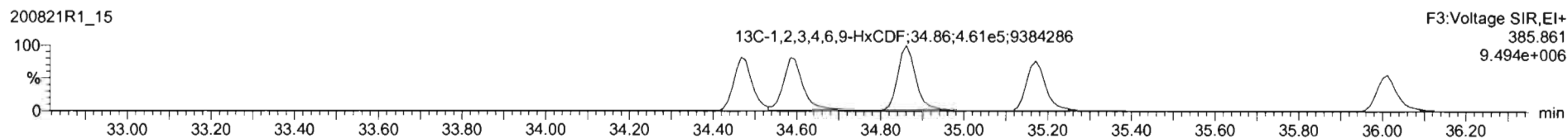
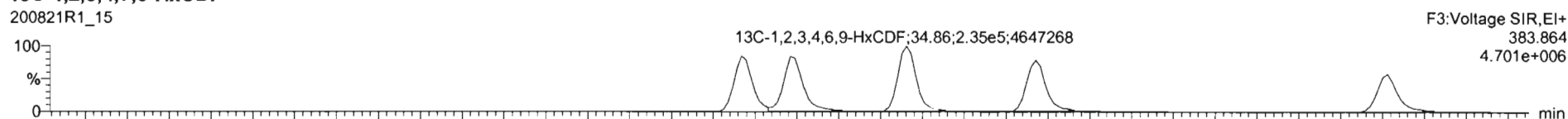
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

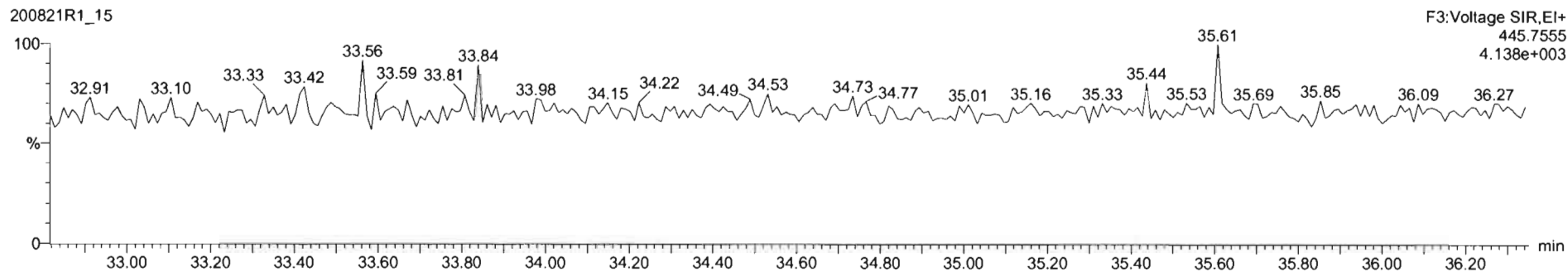
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



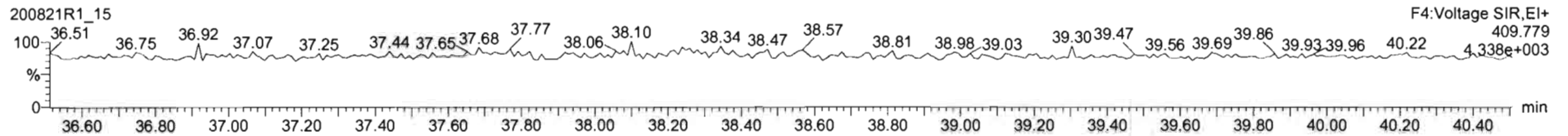
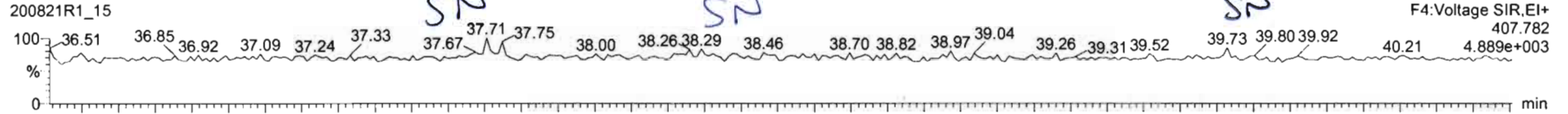


Dataset: Untitled

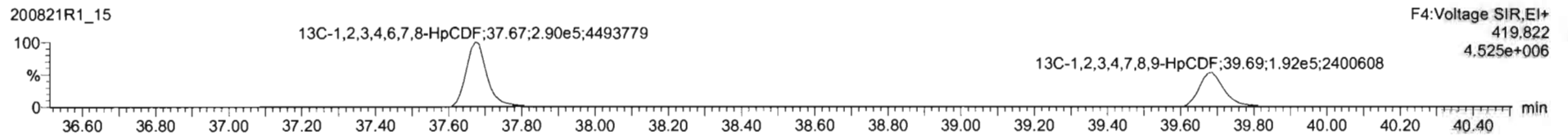
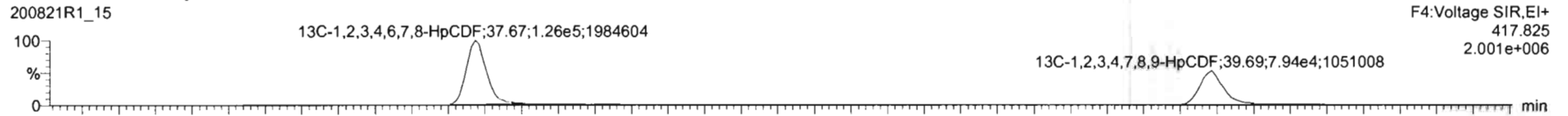
Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

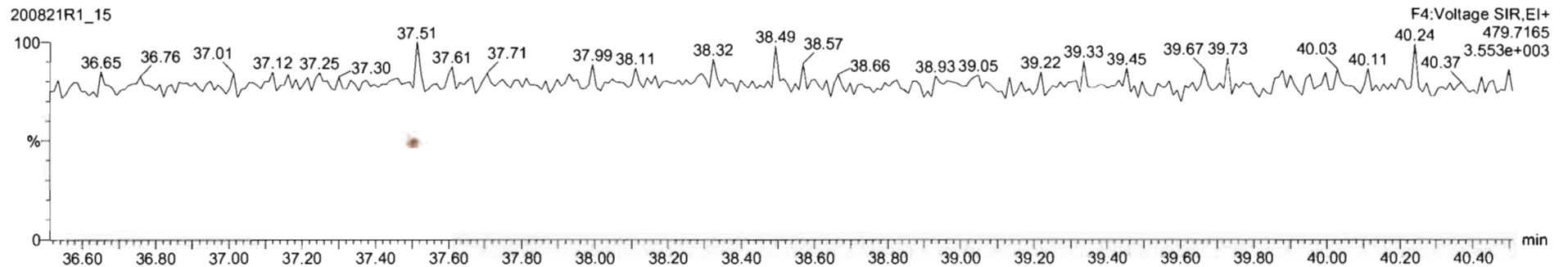
**1,2,3,4,6,7,8-HpCDF**



**13C-1,2,3,4,6,7,8-HpCDF**



**DPE4**

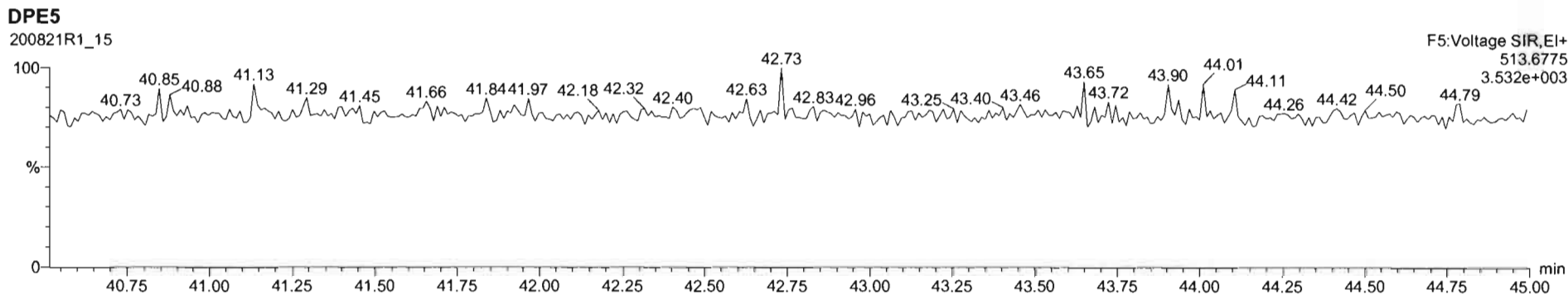
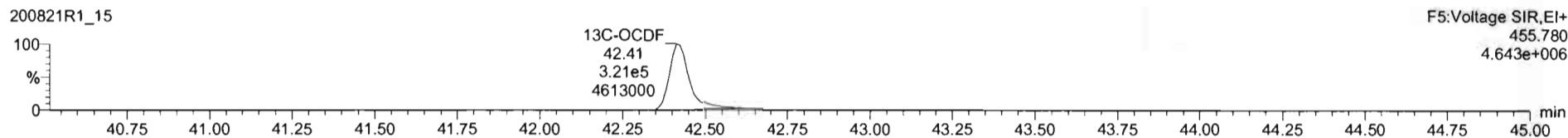
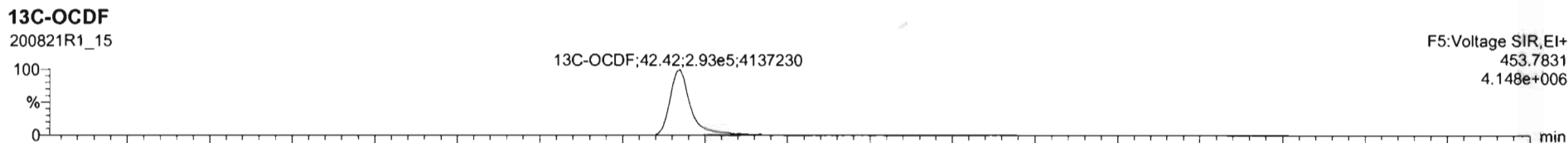
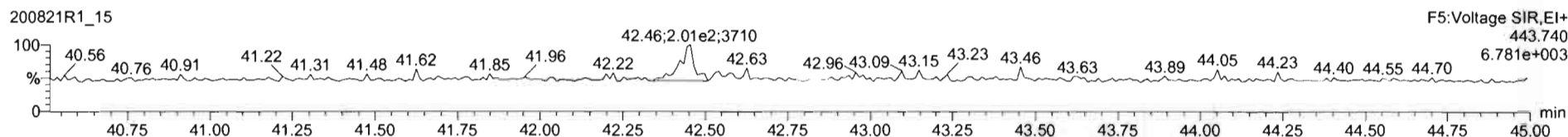
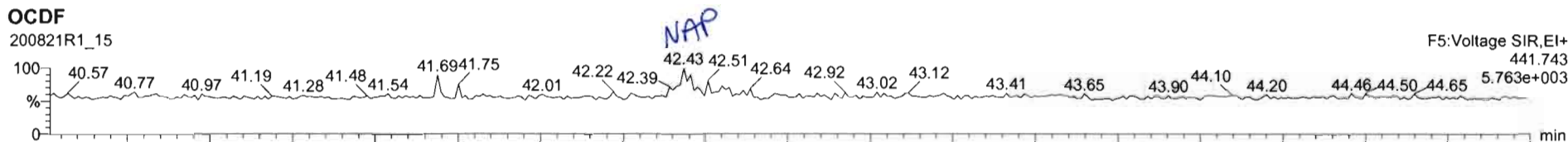


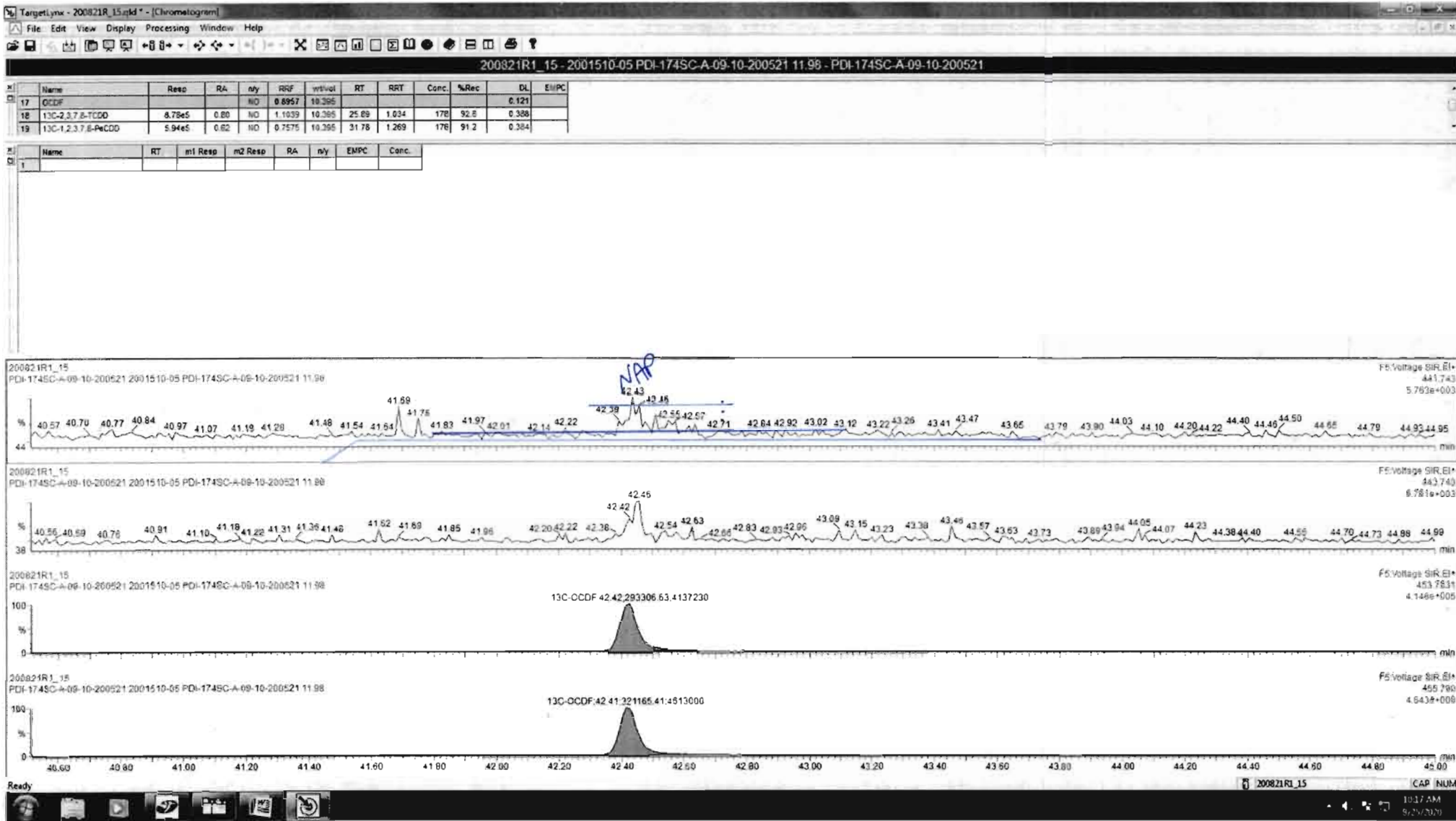
Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521

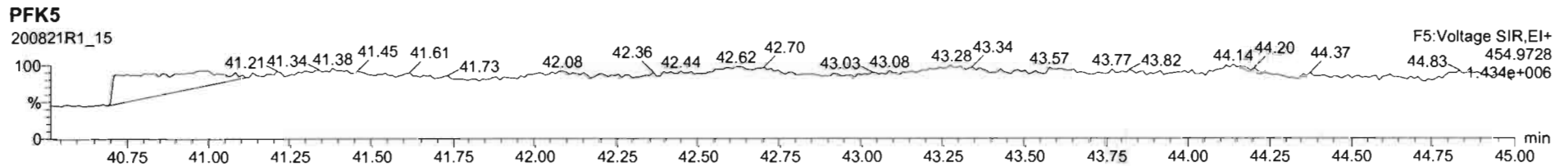
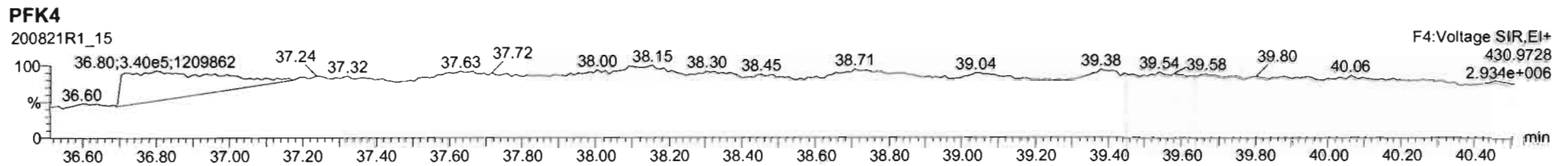
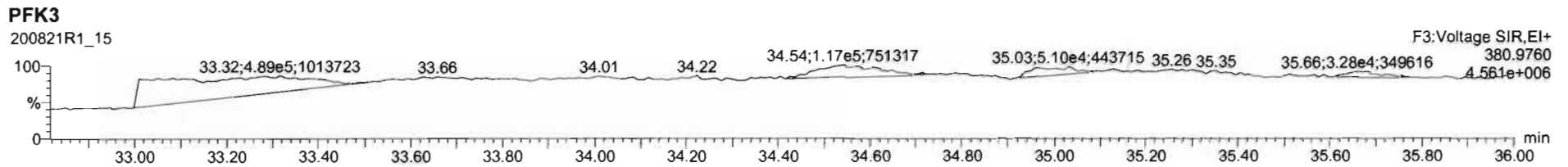
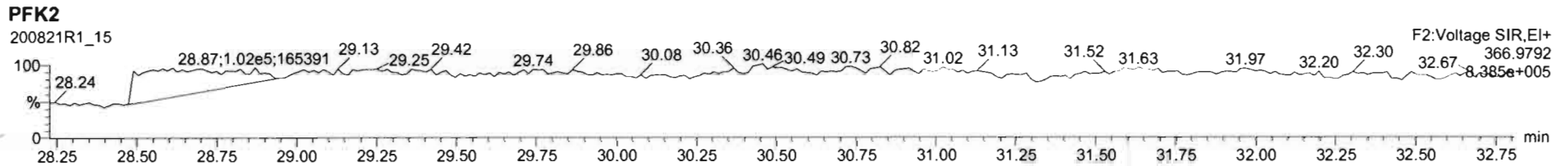
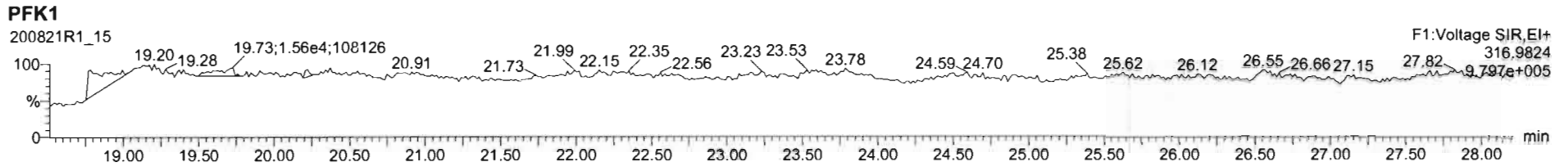




Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:18:05 Pacific Daylight Time  
Printed: Monday, August 24, 2020 07:18:31 Pacific Daylight Time

Name: 200821R1\_15, Date: 21-Aug-2020, Time: 22:49:04, ID: 2001510-05 PDI-174SC-A-09-10-200521 11.98, Description: PDI-174SC-A-09-10-200521



## CONFIRMATION

Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_10.qld

Last Altered: Wednesday, September 02, 2020 17:06:24 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 17:06:39 Pacific Daylight Time

*DB 9/2/20 0109/03/2020*

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200902D1\_10, Date: 02-Sep-2020, Time: 16:07:58, ID: 2001510-01RE1 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	1.70e3	0.84	NO	0.944	10.128	17.539	17.56	1.000	1.002	3.3650		0.358	3.37
2	2 13C-2,3,7,8-TCDF	1.06e5	0.75	NO	1.01	10.128	17.523	17.53	1.133	1.137	176.13	89.2	0.861	
3	3 13C-1,2,3,4-TCDF	1.18e5	0.75	NO	1.00	10.128	15.440	15.41	1.000	1.000	197.48	100	0.868	

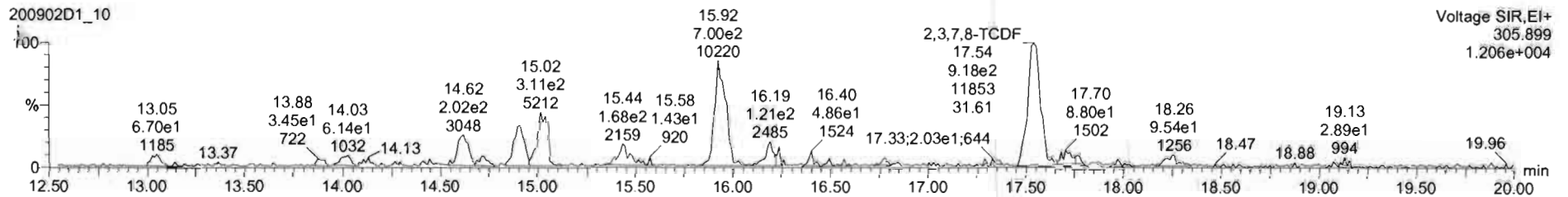
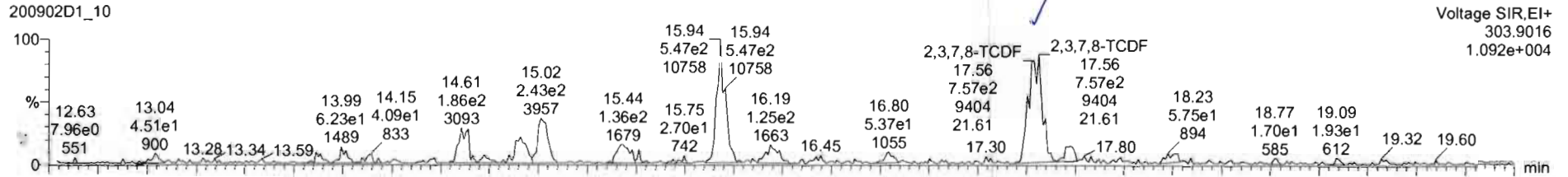
Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_10.qld

Last Altered: Wednesday, September 02, 2020 17:04:36 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 17:06:01 Pacific Daylight Time

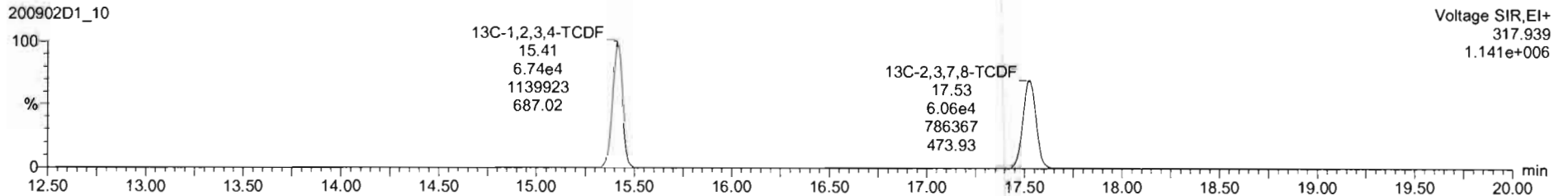
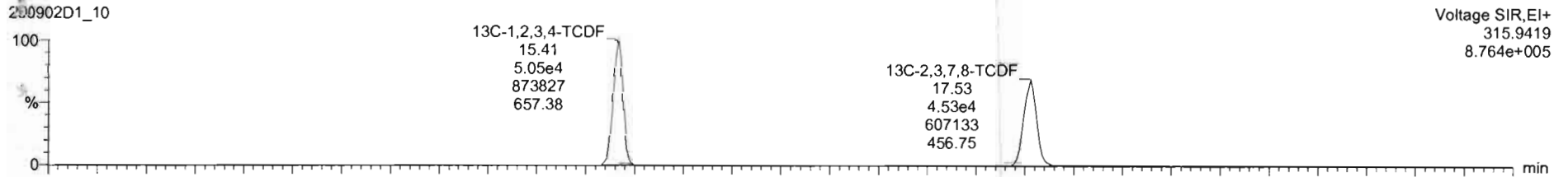
Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

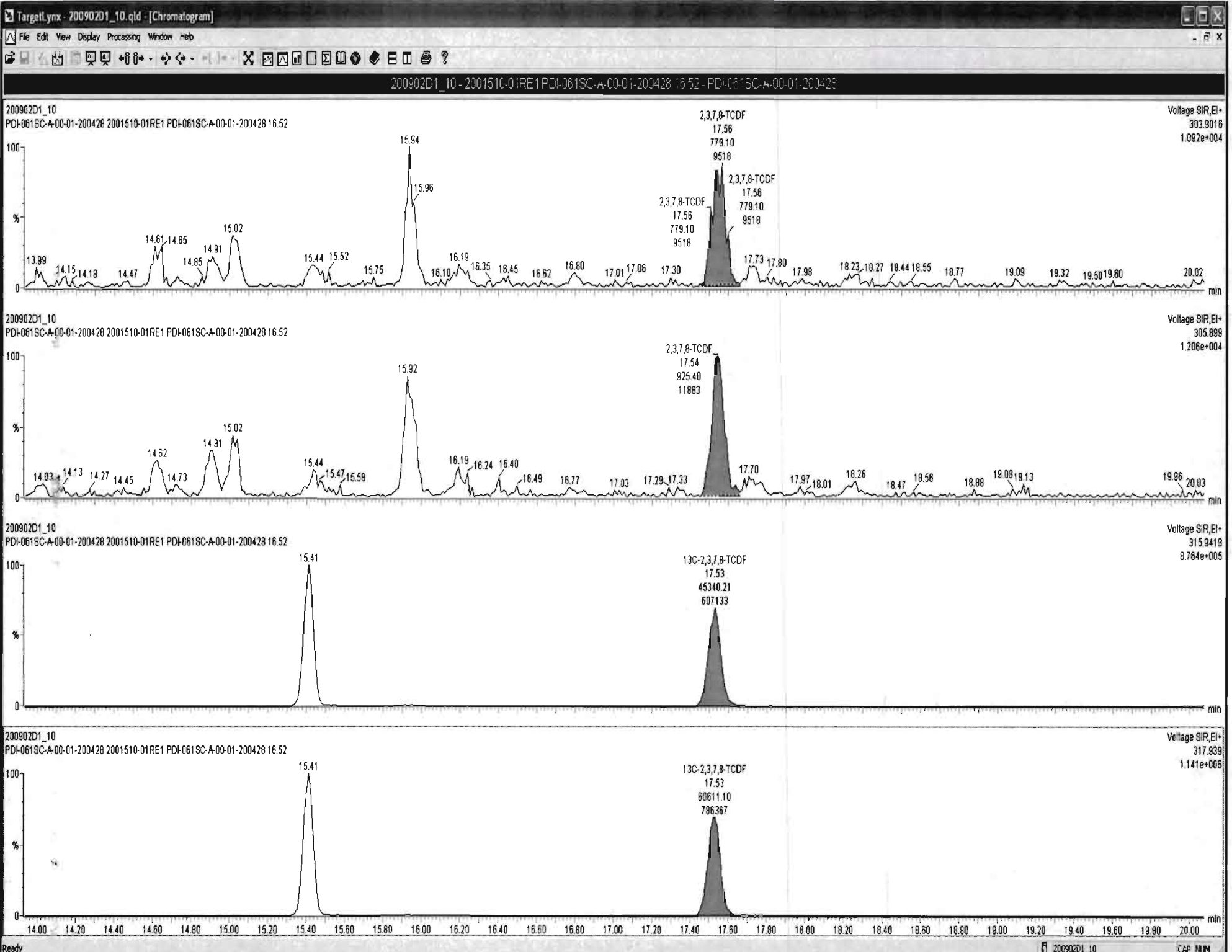
Name: 200902D1\_10, Date: 02-Sep-2020, Time: 16:07:58, ID: 2001510-01RE1 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

2,3,7,8-TCDF



13C-2,3,7,8-TCDF







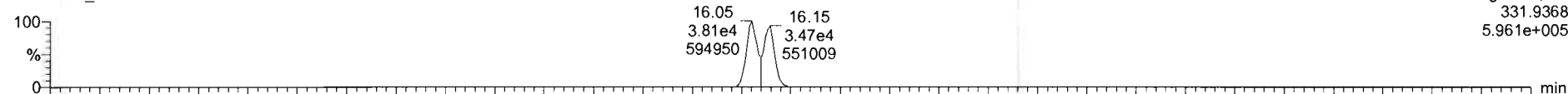
Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_10.qld

Last Altered: Wednesday, September 02, 2020 17:04:36 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 17:06:01 Pacific Daylight Time

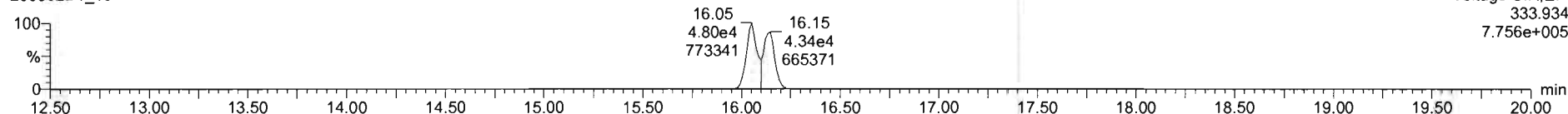
Name: 200902D1\_10, Date: 02-Sep-2020, Time: 16:07:58, ID: 2001510-01RE1 PDI-061SC-A-00-01-200428 16.52, Description: PDI-061SC-A-00-01-200428

**13C-1,2,3,4-TCDD**

200902D1\_10

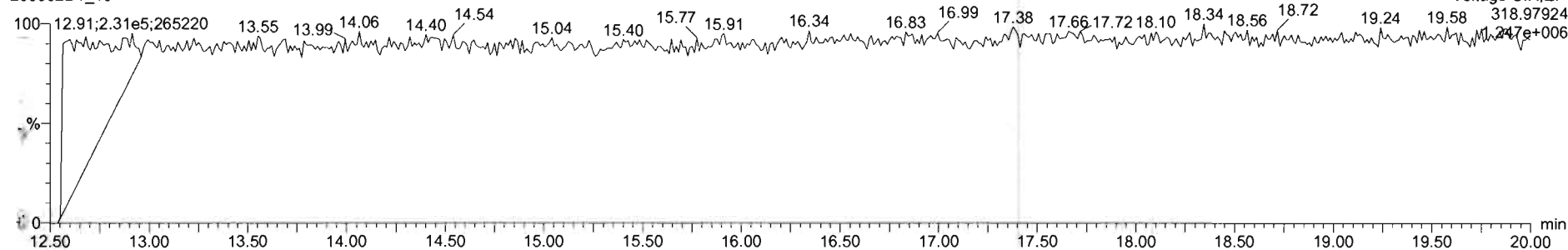


200902D1\_10



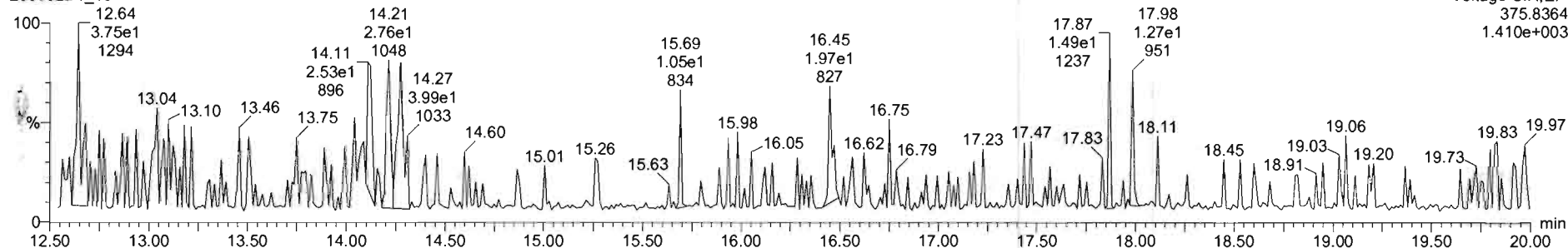
**PFK1**

200902D1\_10



**DPE1**

200902D1\_10



Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_9.qld

Last Altered: Wednesday, September 02, 2020 16:14:44 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 16:14:58 Pacific Daylight Time

*DB 9/2/20 CT 09/03/2020*

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200902D1\_9, Date: 02-Sep-2020, Time: 15:36:12, ID: B0G0186-DUP1RE1 Duplicate 10, Description: Duplicate

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	2.27e3	0.88	NO	0.944	10.171	17.539	17.54	1.000	1.001	4.1912		0.391	4.19
2	2 13C-2,3,7,8-TCDF	1.13e5	0.76	NO	1.01	10.171	17.523	17.53	1.133	1.137	177.46	90.2	0.781	
3	3 13C-1,2,3,4-TCDF	1.24e5	0.76	NO	1.00	10.171	15.440	15.41	1.000	1.000	196.65	100	0.787	

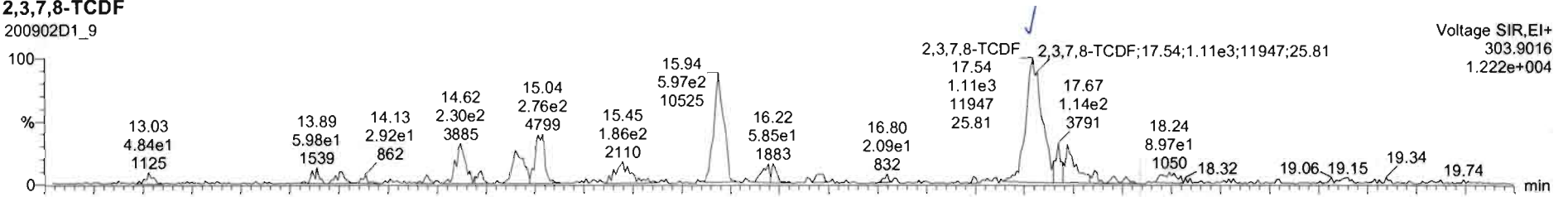
Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_9.qld

Last Altered: Wednesday, September 02, 2020 16:12:33 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 16:13:30 Pacific Daylight Time

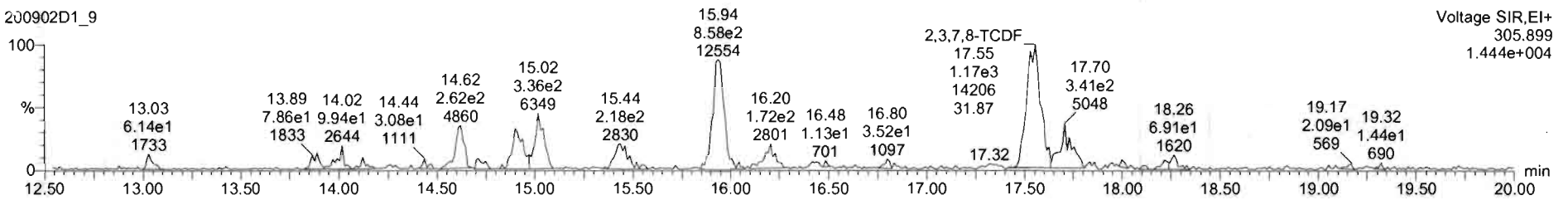
Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200902D1\_9, Date: 02-Sep-2020, Time: 15:36:12, ID: B0G0186-DUP1RE1 Duplicate 10, Description: Duplicate

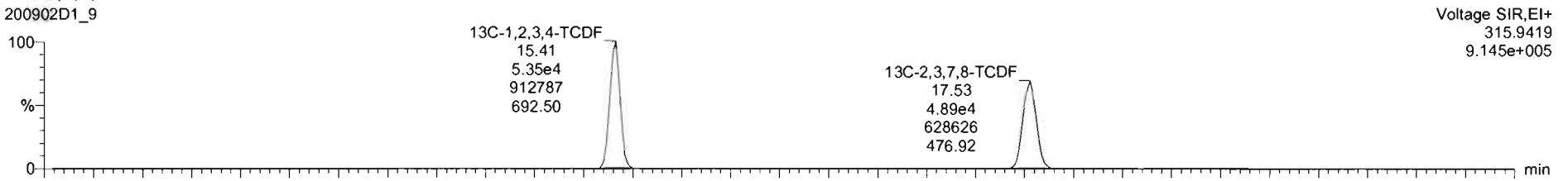
2,3,7,8-TCDF  
200902D1\_9



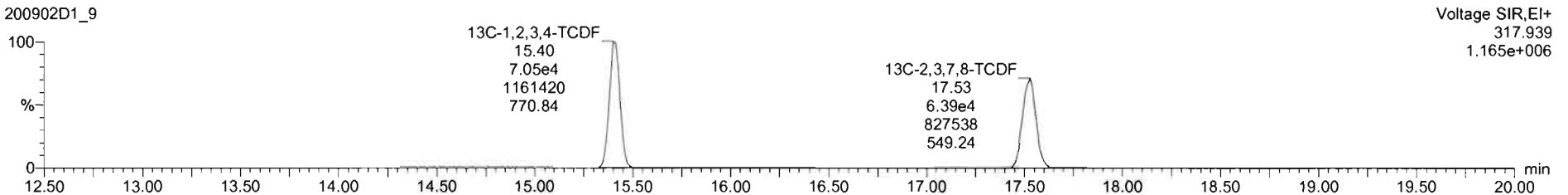
200902D1\_9

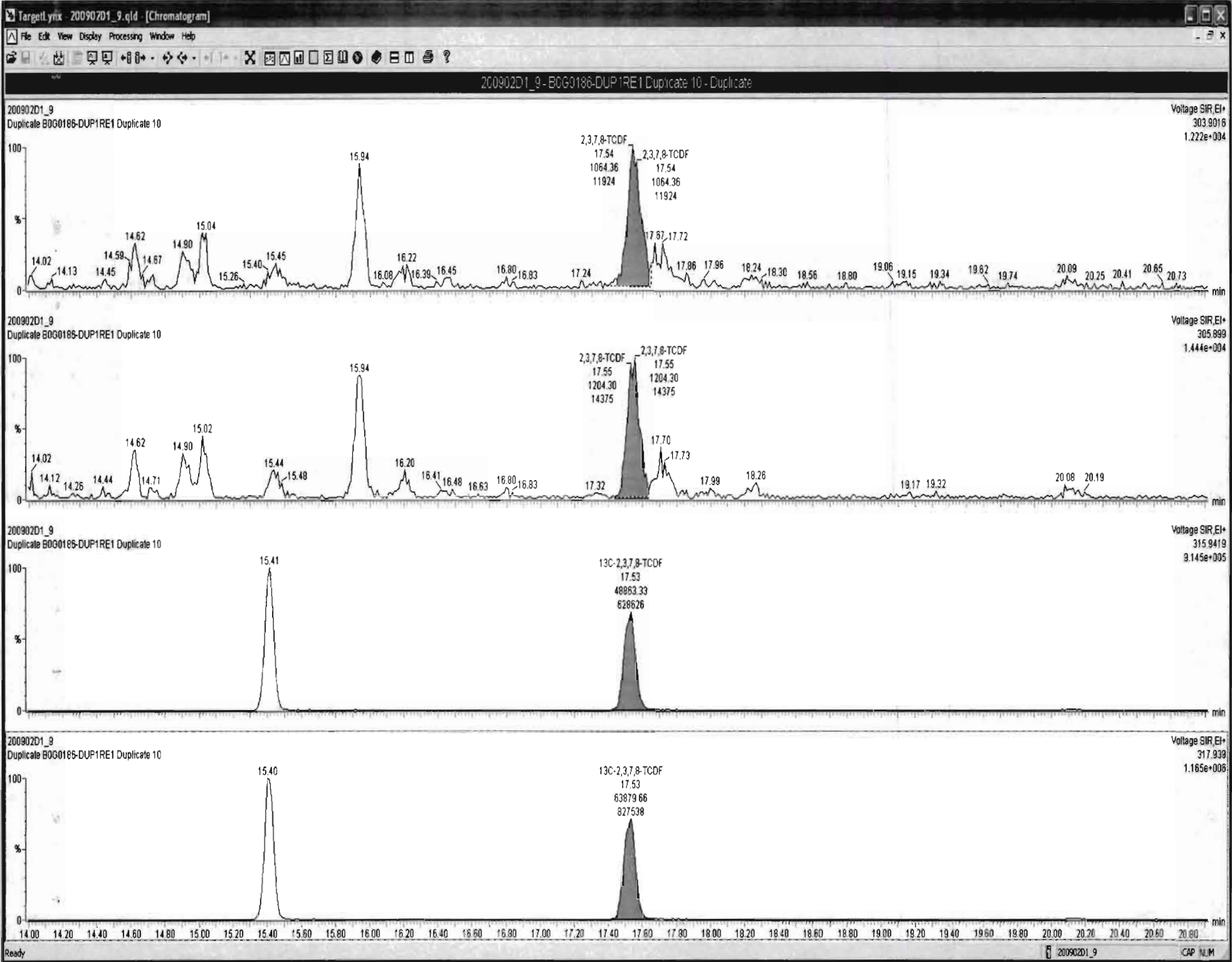


13C-2,3,7,8-TCDF  
200902D1\_9



200902D1\_9





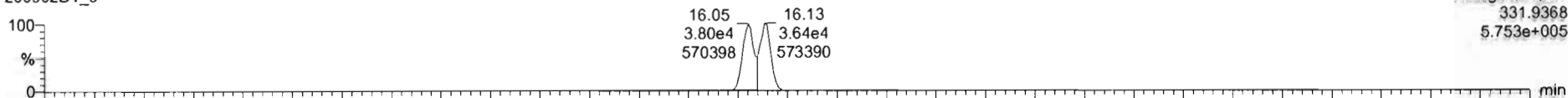
Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_9.qld

Last Altered: Wednesday, September 02, 2020 16:12:33 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 16:13:30 Pacific Daylight Time

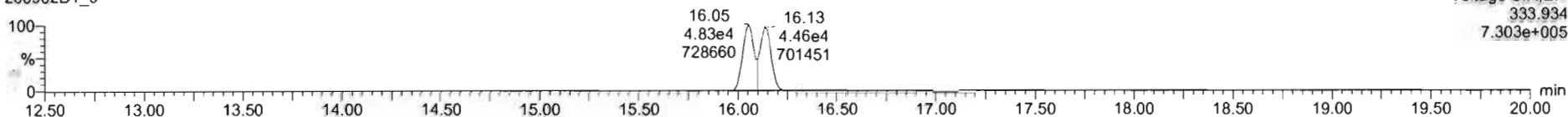
Name: 200902D1\_9, Date: 02-Sep-2020, Time: 15:36:12, ID: B0G0186-DUP1RE1 Duplicate 10, Description: Duplicate

### 13C-1,2,3,4-TCDD

200902D1\_9

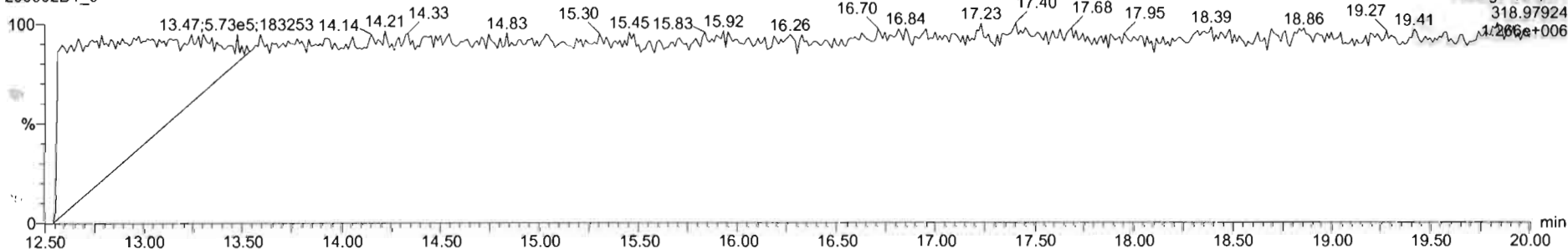


200902D1\_9



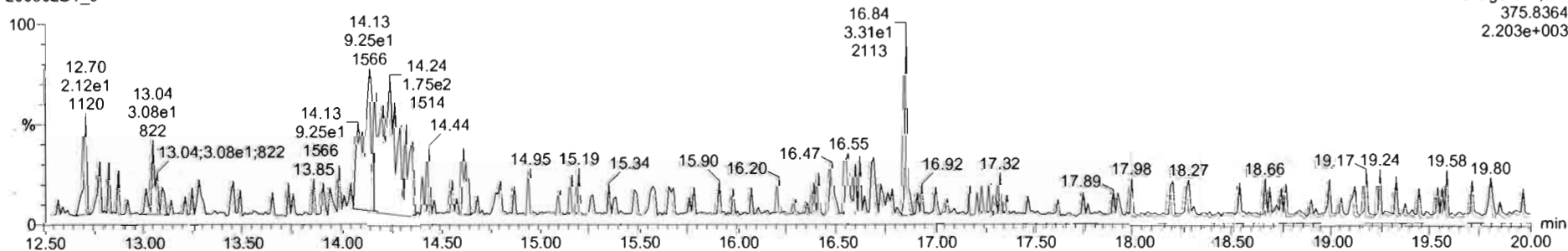
### PFK1

200902D1\_9



### DPE1

200902D1\_9



**CONTINUING CALIBRATION**

# HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

11  
**Beg. Calibration ID:** ST200727D2-1

**Reviewed By:** CT 07/28/2020  
*Initials & Date*

**End Calibration ID:** ST200727D2-2

	<u>Beg.</u>	<u>End</u>
<b>Ion abundance within QC limits?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Concentrations within criteria?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>TCDD/TCDF Valleys &lt;25%</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>First and last eluters present?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Retention Times within criteria?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Verification Std. named correctly?</b>  (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Forms signed and dated?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Correct ICAL referenced?</b>	<u>DB</u>	<u>DB</u>
<b><u>Run Log:</u></b>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Samples within 12 hour clock?	<u>(Y)</u>	N
- Bottle position verified?	<u>DB</u>	

	<u>Beg.</u>	<u>End</u>
<b>Mass resolution <math>\geq</math></b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614    1699    429    1613/1668/8280		
<b>Intergrated peaks display correctly?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>GC Break &lt;20%</b>		<input type="checkbox"/> NA
<b><u>8280 CS1 End Standard:</u></b>		
- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input type="checkbox"/> NA

**Comments:**

Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time

Printed: Monday, July 27, 2020 16:44:03 Pacific Daylight Time

*DB 7/27/20 CT 07/27/20*

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

*1613 8290*

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	7.47e3	0.71	NO	1.07	1.000	25.776	25.78	1.001	1.001	11.179	112 <i>82-123</i>	0.206 <i>80-120</i>	11.2
2	2 1,2,3,7,8-PeCDD	2.56e4	0.62	NO	0.988	1.000	30.509	30.51	1.001	1.001	50.711	101 <i>78-130</i>	0.472	50.7
3	3 1,2,3,4,7,8-HxCDD	2.50e4	1.22	NO	1.09	1.000	33.815	33.82	1.000	1.000	49.095	98.2 <i>78-128</i>	0.460	49.1
4	4 1,2,3,6,7,8-HxCDD	2.79e4	1.27	NO	0.938	1.000	33.915	33.93	1.000	1.000	51.245	102 <i>78-128</i>	0.505	51.2
5	5 1,2,3,7,8,9-HxCDD	2.81e4	1.24	NO	0.981	1.000	34.235	34.21	1.001	1.000	50.340	101 <i>82-122</i>	0.501	50.3
6	6 1,2,3,4,6,7,8-HpCDD	2.57e4	1.05	NO	0.965	1.000	37.734	37.74	1.000	1.001	50.886	102 <i>86-116</i>	0.508	50.9
7	7 OCDD	4.15e4	0.88	NO	0.900	1.000	40.938	40.95	1.000	1.000	99.353	99.4 <i>79-126</i>	0.426	99.4
8	8 2,3,7,8-TCDF	8.29e3	0.78	NO	0.859	1.000	24.929	24.92	1.001	1.001	10.228	102 <i>86-116</i>	0.213	10.2
9	9 1,2,3,7,8-PeCDF	4.31e4	1.69	NO	0.932	1.000	29.280	29.28	1.001	1.001	52.649	105 <i>82-120</i>	0.238	52.6
10	10 2,3,4,7,8-PeCDF	4.40e4	1.56	NO	1.05	1.000	30.236	30.21	1.001	1.000	49.420	98.8 <i>82-120</i>	0.204	49.4
11	11 1,2,3,4,7,8-HxCDF	3.67e4	1.25	NO	1.08	1.000	32.927	32.95	1.000	1.001	48.037	96.1 <i>90-112</i>	0.454	48.0
12	12 1,2,3,6,7,8-HxCDF	4.44e4	1.26	NO	1.14	1.000	33.069	33.07	1.000	1.000	49.269	98.5 <i>88-114</i>	0.396	49.3
13	13 2,3,4,6,7,8-HxCDF	3.97e4	1.26	NO	1.13	1.000	33.674	33.65	1.001	1.000	49.485	99.0 <i>88-114</i>	0.447	49.5
14	14 1,2,3,7,8,9-HxCDF	3.45e4	1.23	NO	1.14	1.000	34.563	34.57	1.000	1.000	47.524	95.0 <i>90-112</i>	0.605	47.5
15	15 1,2,3,4,6,7,8-HpCDF	3.67e4	1.00	NO	1.16	1.000	36.398	36.37	1.001	1.000	48.823	97.6 <i>90-110</i>	0.360	48.8
16	16 1,2,3,4,7,8,9-HpCDF	3.11e4	1.04	NO	1.28	1.000	38.249	38.27	1.000	1.001	48.994	98.0 <i>86-116</i>	0.379	49.0
17	17 OCDF	5.47e4	0.89	NO	1.02	1.000	41.146	41.16	1.000	1.000	97.122	97.1 <i>63-159</i>	0.393	97.1
18	18 13C-2,3,7,8-TCDD	6.24e4	0.76	NO	1.13	1.000	25.786	25.74	1.026	1.024	100.28	100 <i>82-121</i>	0.894 <i>70-130</i>	
19	19 13C-1,2,3,7,8-PeCDD	5.12e4	0.63	NO	0.817	1.000	30.210	30.49	1.202	1.213	114.16	114 <i>62-166</i>	0.646	
20	20 13C-1,2,3,4,7,8-HxCDD	4.67e4	1.28	NO	0.728	1.000	33.800	33.81	1.014	1.014	86.273	86.3 <i>85-117</i>	0.581	
21	21 13C-1,2,3,6,7,8-HxCDD	5.81e4	1.29	NO	0.842	1.000	33.910	33.92	1.017	1.017	92.665	92.7 <i>85-118</i>	0.502	
22	22 13C-1,2,3,7,8,9-HxCDD	5.69e4	1.33	NO	0.797	1.000	34.180	34.20	1.025	1.026	95.904	95.9 <i>85-118</i>	0.530	
23	23 13C-1,2,3,4,6,7,8-HpCDD	5.24e4	1.08	NO	0.666	1.000	37.634	37.72	1.129	1.132	105.74	106 <i>72-138</i>	0.803	
24	24 13C-OCDD	9.30e4	0.88	NO	0.613	1.000	40.647	40.94	1.219	1.228	203.68	102 <i>48-207</i>	0.916	
25	25 13C-2,3,7,8-TCDF	9.45e4	0.78	NO	1.03	1.000	24.882	24.90	0.990	0.991	97.079	97.1 <i>71-140</i>	0.522	
26	26 13C-1,2,3,7,8-PeCDF	8.78e4	1.65	NO	0.804	1.000	29.046	29.26	1.156	1.164	115.64	116 <i>76-130</i>	1.07	
27	27 13C-2,3,4,7,8-PeCDF	8.46e4	1.61	NO	0.790	1.000	29.933	30.21	1.191	1.202	113.42	113 <i>77-130</i>	1.09	
28	28 13C-1,2,3,4,7,8-HxCDF	7.05e4	0.51	NO	1.01	1.000	32.933	32.93	0.988	0.988	93.807	93.8 <i>76-131</i>	0.779	
29	29 13C-1,2,3,6,7,8-HxCDF	7.89e4	0.50	NO	1.03	1.000	33.067	33.06	0.992	0.992	103.05	103 <i>70-143</i>	0.764	
30	30 13C-2,3,4,6,7,8-HxCDF	7.11e4	0.50	NO	0.971	1.000	33.637	33.64	1.009	1.009	98.305	98.3 <i>73-137</i>	0.810	
31	31 13C-1,2,3,7,8,9-HxCDF	6.38e4	0.50	NO	0.833	1.000	34.534	34.56	1.036	1.037	103.03	103 <i>74-135</i>	0.945	



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time

Printed: Monday, July 27, 2020 16:44:03 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	6.46e4	0.43	NO	0.784	1.000	36.234	36.36	1.087	1.091	110.69	111 <sup>1613</sup> 78-129	0.806 <sup>8290</sup> 70-130	
33	33 13C-1,2,3,4,7,8,9-HpCDF	4.95e4	0.42	NO	0.592	1.000	38.234	38.25	1.147	1.147	112.27	112 77-129	1.07	
34	34 13C-OCDF	1.11e5	0.90	NO	0.703	1.000	40.800	41.15	1.224	1.234	211.53	106 48-207	0.568	
35	35 37Cl-2,3,7,8-TCDD	6.98e3			1.31	1.000	25.784	25.76	1.026	1.025	9.7078	97.1 29-127	0.168	
36	36 13C-1,2,3,4-TCDD	5.48e4	0.77	NO	1.00	1.000	25.130	25.13	1.000	1.000	100.00	100	1.01	
37	37 13C-1,2,3,4-TCDF	9.45e4	0.75	NO	1.00	1.000	23.560	23.56	1.000	1.000	100.00	100	0.538	
38	38 13C-1,2,3,4,6,9-HxCDF	7.44e4	0.51	NO	1.00	1.000	33.330	33.33	1.000	1.000	100.00	100	0.786	

Dataset: Untitled

Last Altered: Tuesday, July 28, 2020 09:18:01 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 09:18:27 Pacific Daylight Time

Method: C:\MassLynx\Default.pro\Methdb\CPSM.mdb 02 Jul 2020 11:09:09

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	RT
1	1,3,6,8-TCDD (First)	22.01
2	1,2,8,9-TCDD (Last)	26.68
3	1,2,4,7,9-PeCDD (First)	28.39
4	1,2,3,8,9-PeCDD (Last)	30.89
5	1,2,4,6,7,9-HxCDD (First)	32.32
6	1,2,3,7,8,9-HxCDD (Last)	34.21
7	1,2,3,4,6,7,9-HpCDD (First)	36.78
8	1,2,3,4,6,7,8-HpCDD (Last)	37.74
9	1,3,6,8-TCDF (First)	19.87
10	1,2,8,9-TCDF (Last)	26.83
11	1,3,4,6,8-PeCDF (First)	26.80
12	1,2,3,8,9-PeCDF (Last)	31.11
13	1,2,3,4,6,8-HxCDF (First)	31.79
14	1,2,3,7,8,9-HxCDF (Last)	34.57
15	1,2,3,4,6,7,8-HpCDF (First)	36.37
16	1,2,3,4,7,8,9-HpCDF (Last)	38.27

Dataset: Untitled

Last Altered: Tuesday, July 28, 2020 09:20:20 Pacific Daylight Time

Printed: Tuesday, July 28, 2020 09:20:34 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\CPSM.mdb 02 Jul 2020 11:09:09

Calibration: U:\VG7.PRO\CurveDB\db\_5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

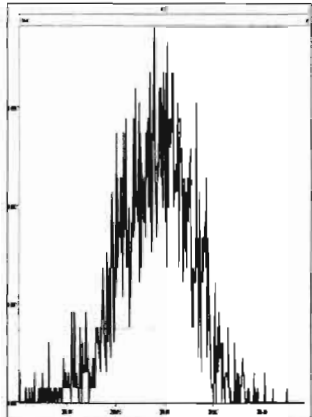
Compound name: 1,3,6,8-TCDD (First)

	Name	ID	Acq.Date	Acq.Time
1	200727D7_1	ST200727D2-1 1613 CS3 20F1105	27-Jul-20	15:51:27
2	200727D7_2	B0G0167-BS1 OPR 10	27-Jul-20	16:36:35
3	200727D7_3	B0G0161-BS1 OPR 10	27-Jul-20	17:21:48
4	200727D7_4	B0G0186-BS1 OPR 10	27-Jul-20	18:06:58
5	200727D7_5	SOLVENT BLANK	27-Jul-20	18:52:07
6	200727D7_6	B0G0167-BLK1 Method Blank 10	27-Jul-20	19:37:19
7	200727D7_7	B0G0161-BLK1 Method Blank 10	27-Jul-20	20:22:27
8	200727D7_8	B0G0186-BLK1 Method Blank 10	27-Jul-20	21:07:36
9	200727D7_9	2001139-15RE1 SO-DUP-05 3.29	27-Jul-20	21:52:43
10	200727D7_10	2001486-01RE1 071320S1-4 26.01	27-Jul-20	22:37:51
11	200727D7_11	2001459-03RE1 Dewatered Sludge 18.64	27-Jul-20	23:23:05
12	200727D7_12	2001484-02RE1@20X 20070613-02 1:20 61.53	28-Jul-20	00:08:13
13	200727D7_13	2001484-02RE1 20070613-02 61.53	28-Jul-20	00:53:25
14	200727D7_14	2001483-01@200X 2573719 1:200 6.76	28-Jul-20	01:38:39
15	200727D7_15	2001483-01@100X 2573719 1:100 6.76	28-Jul-20	02:23:52
16	200727D7_16	SOLVENT BLANK	28-Jul-20	03:08:58
17	200727D7_17	ST200727D2-2 1613 CS3 20F1105	28-Jul-20	03:54:13

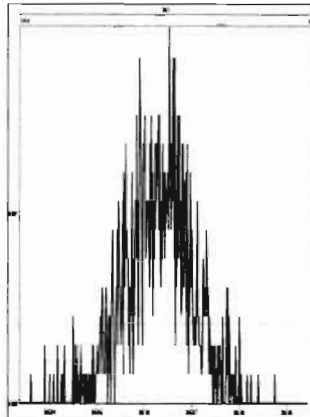
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, July 27, 2020 15:47:30 Pacific Daylight Time

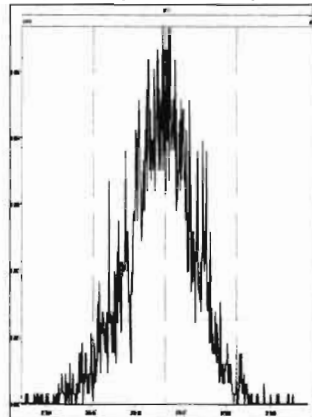
M 292.9824 R 11524



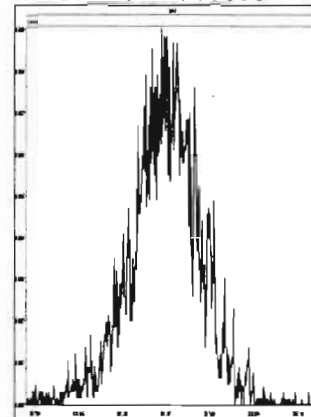
M 304.9824 R 12888



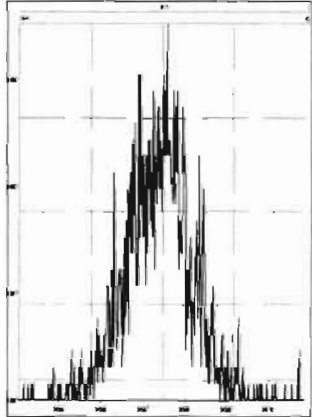
M 318.9792 R 10246



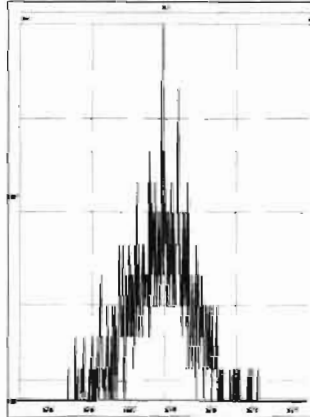
M 330.9792 R 10636



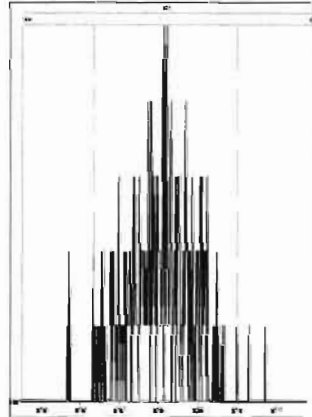
M 342.9792 R 11360



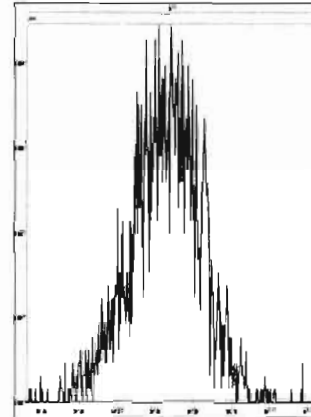
M 354.9792 R 12886



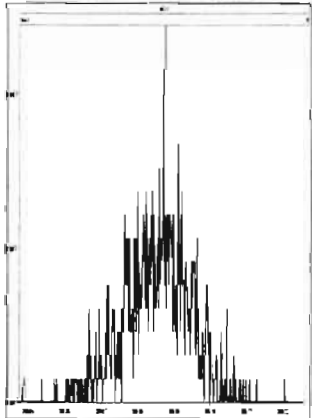
M 366.9792 R 17610



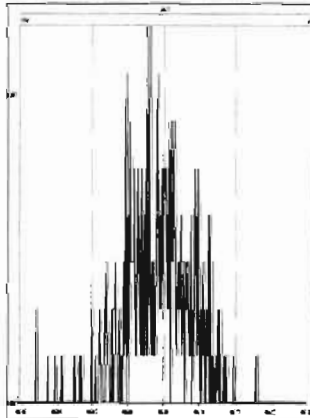
M 380.9760 R 11906



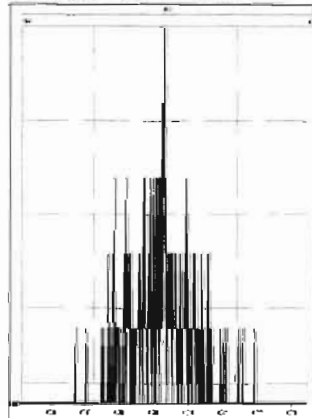
M 392.9760 R 11962



M 404.9760 R 15629



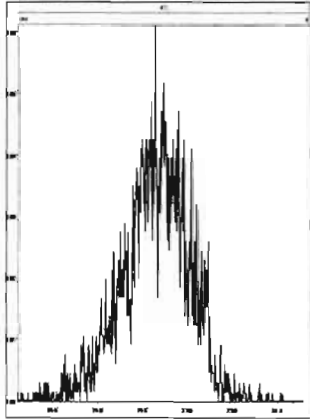
M 416.9760 R 30492



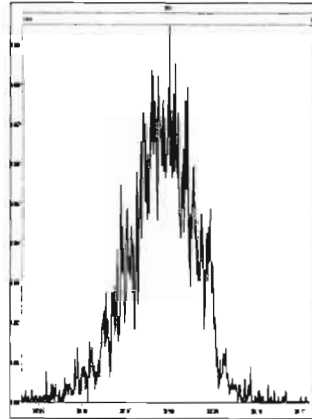
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, July 27, 2020 15:48:16 Pacific Daylight Time

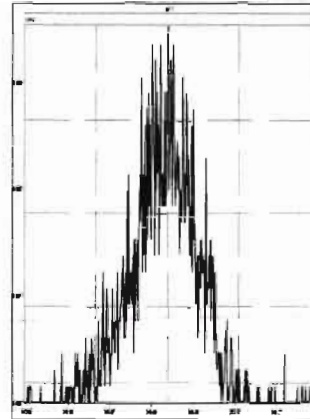
M 318.9792 R 10965



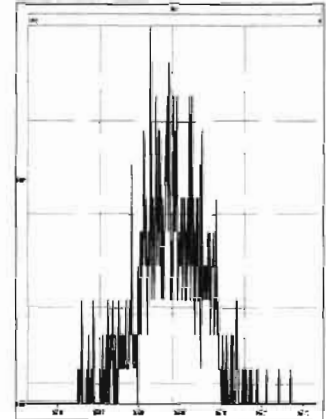
M 330.9792 R 10244



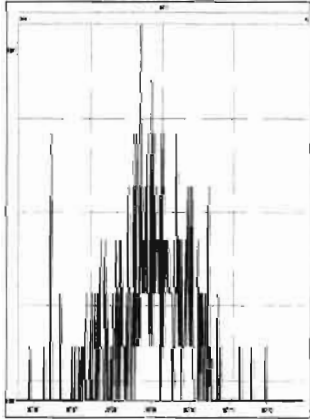
M 342.9792 R 11624



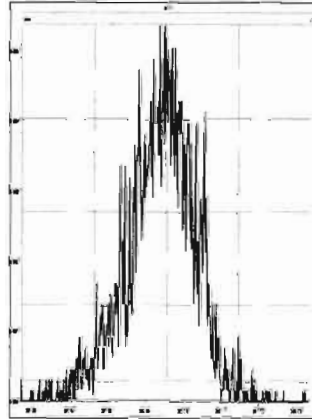
M 354.9792 R 11848



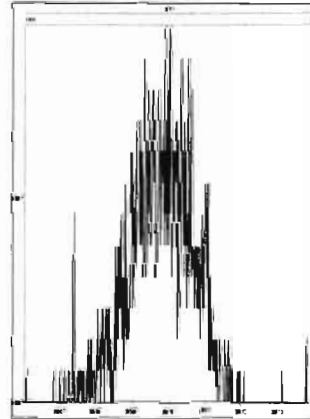
M 366.9792 R 39678



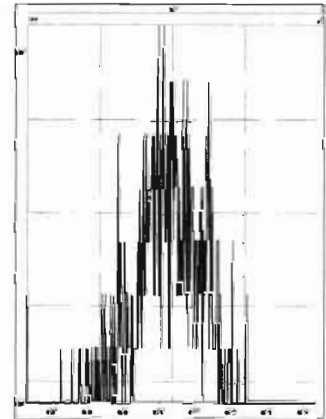
M 380.9760 R 11314



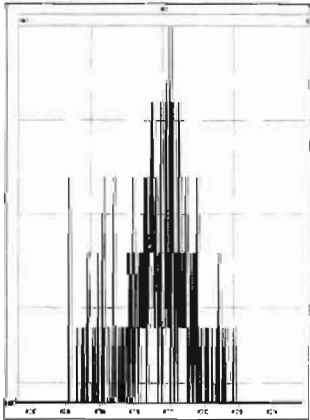
M 392.9760 R 11313



M 404.9760 R 14705



M 416.9760 R 18522



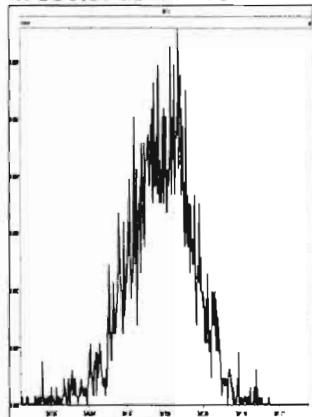
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, July 27, 2020 15:49:00 Pacific Daylight Time

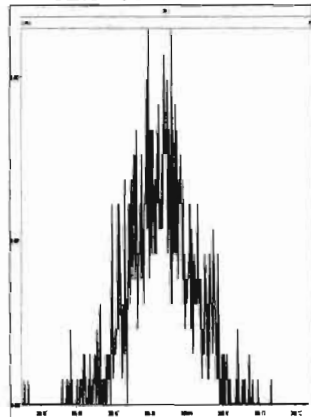
M 366.9792 R 29757



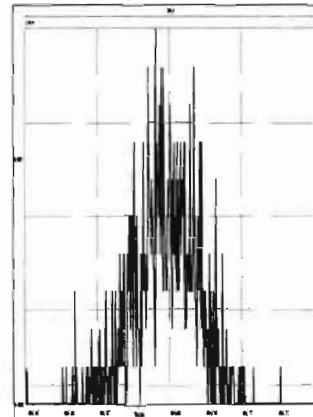
M 380.9760 R 11571



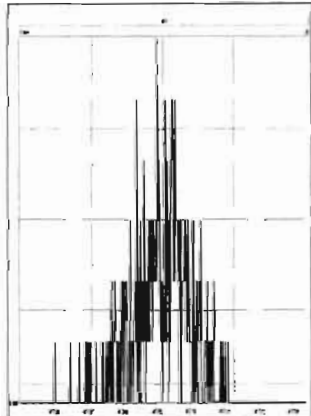
M 392.9760 R 11308



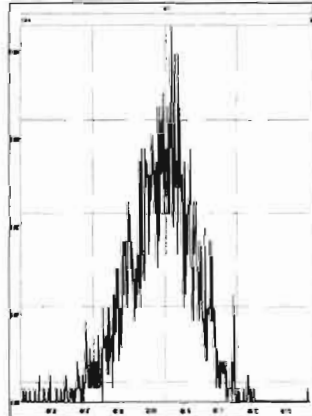
M 404.9760 R 15336



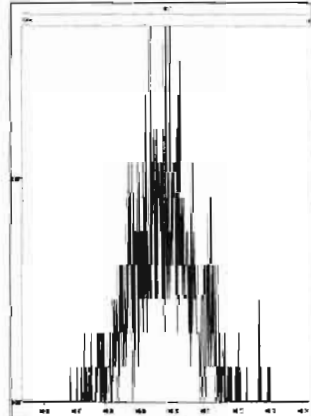
M 416.9760 R 16558



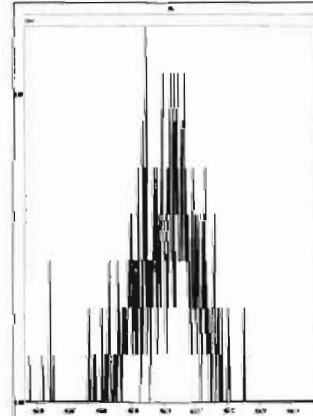
M 430.9728 R 11624



M 442.9728 R 12754



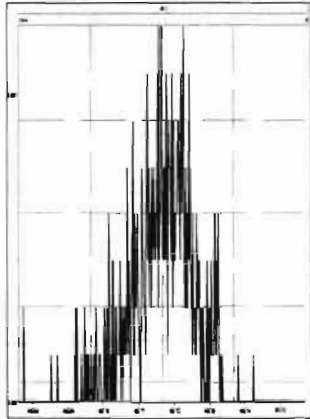
M 454.9728 R 12624



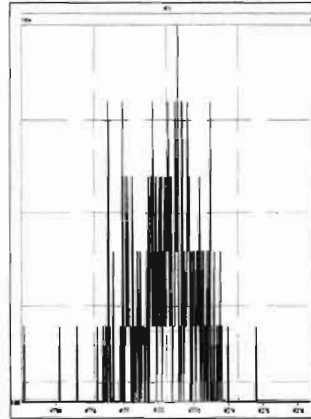
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, July 27, 2020 15:49:46 Pacific Daylight Time

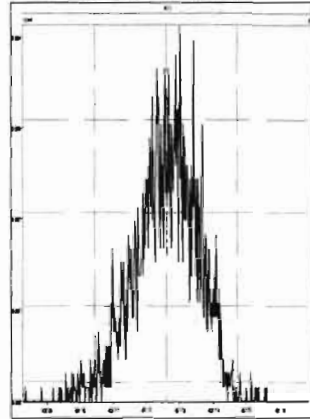
M 404.9760 R 16025



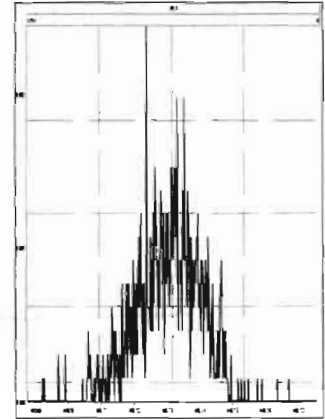
M 416.9760 R 30116



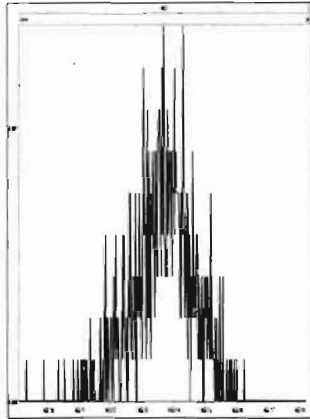
M 430.9728 R 11361



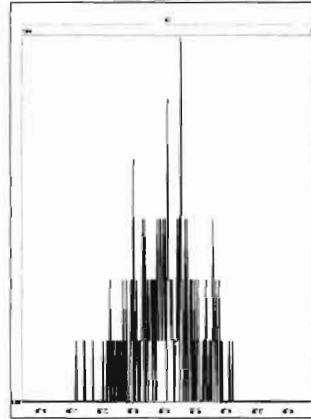
M 442.9728 R 12626



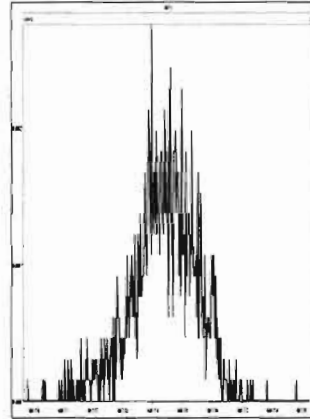
M 454.9728 R 12693



M 466.9728 R 21004



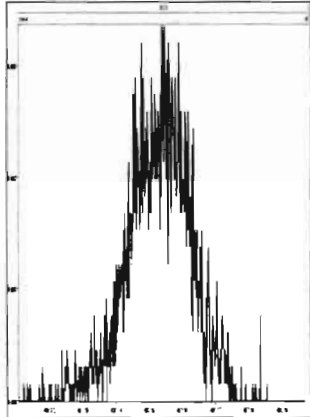
M 480.9696 R 12687



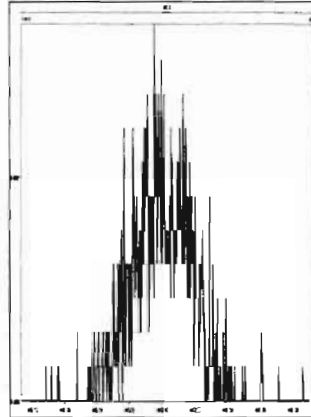
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, July 27, 2020 15:50:30 Pacific Daylight Time

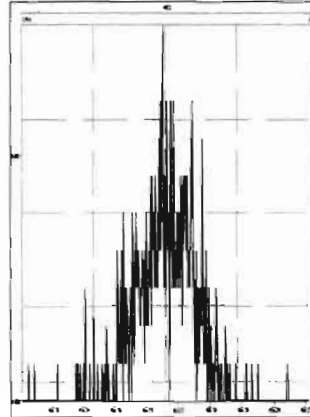
M 430.9728 R 14622



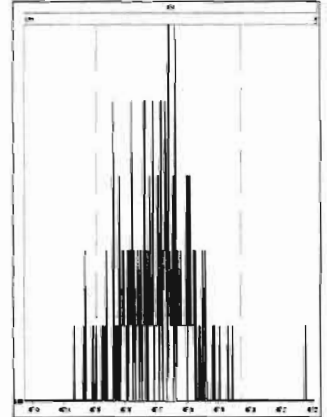
M 442.9728 R 15433



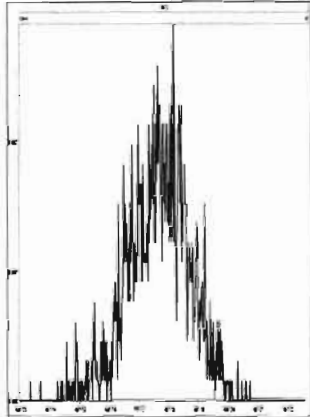
M 454.9728 R 13368



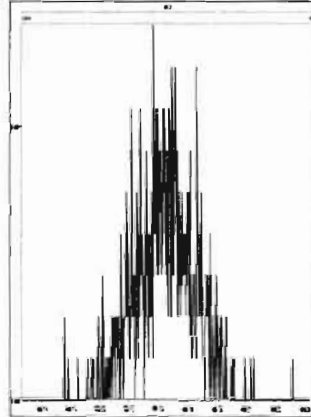
M 466.9728 R 33329



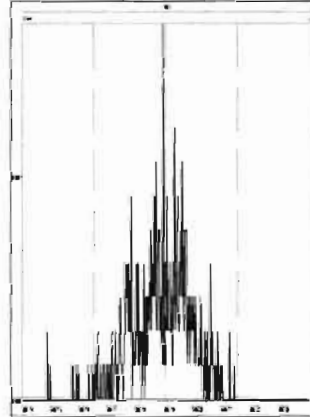
M 480.9696 R 13155



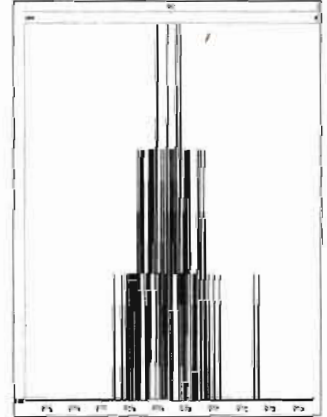
M 492.9696 R 16448



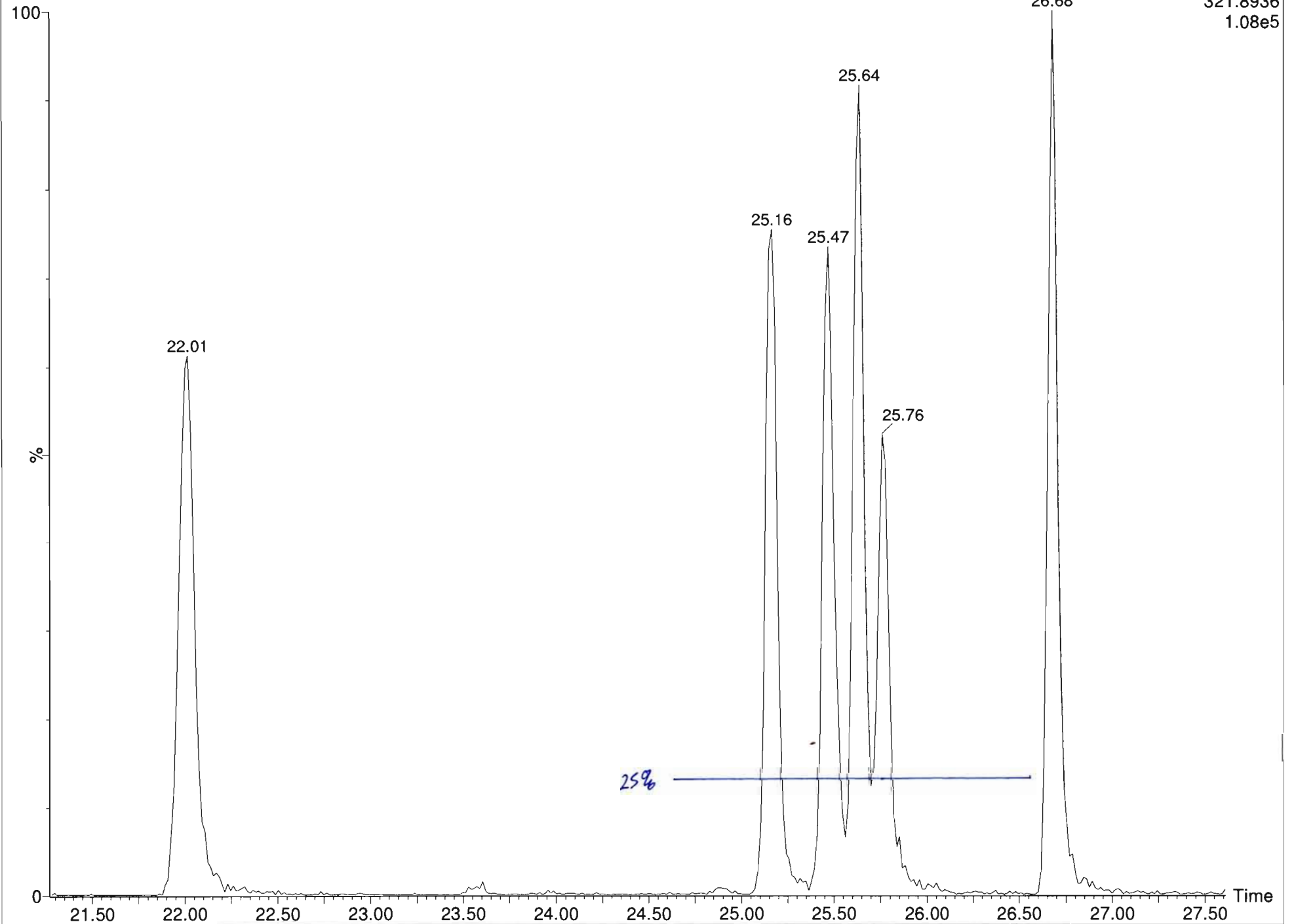
M 504.9696 R 23146



M 516.9697 R 31245







Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time

Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

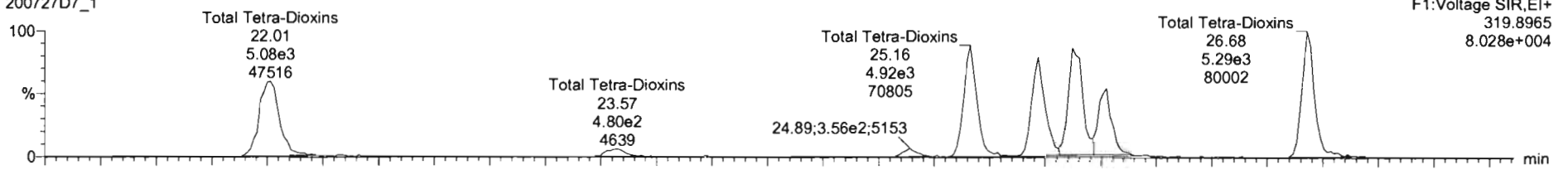
Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Jul 2020 16:39:14

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

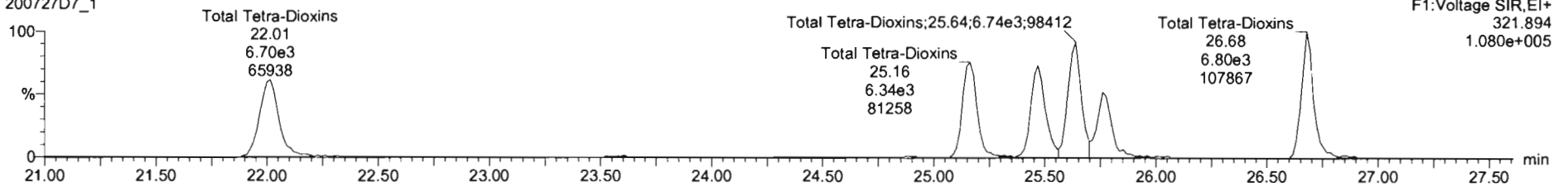
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

2,3,7,8-TCDD

200727D7\_1

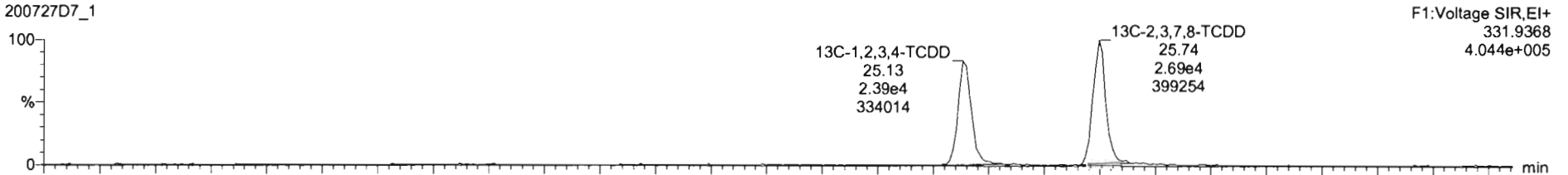


200727D7\_1

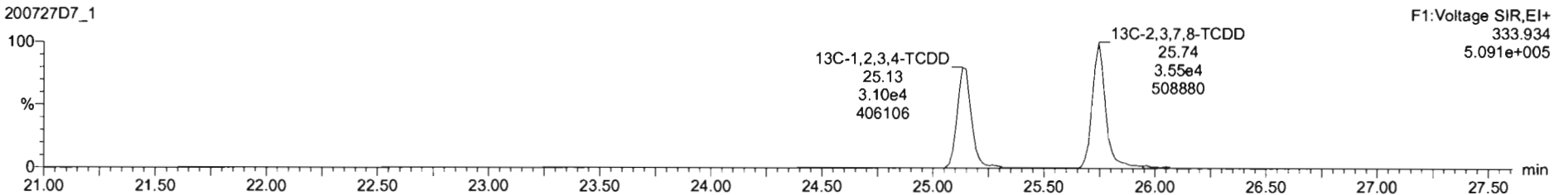


13C-2,3,7,8-TCDD

200727D7\_1



200727D7\_1



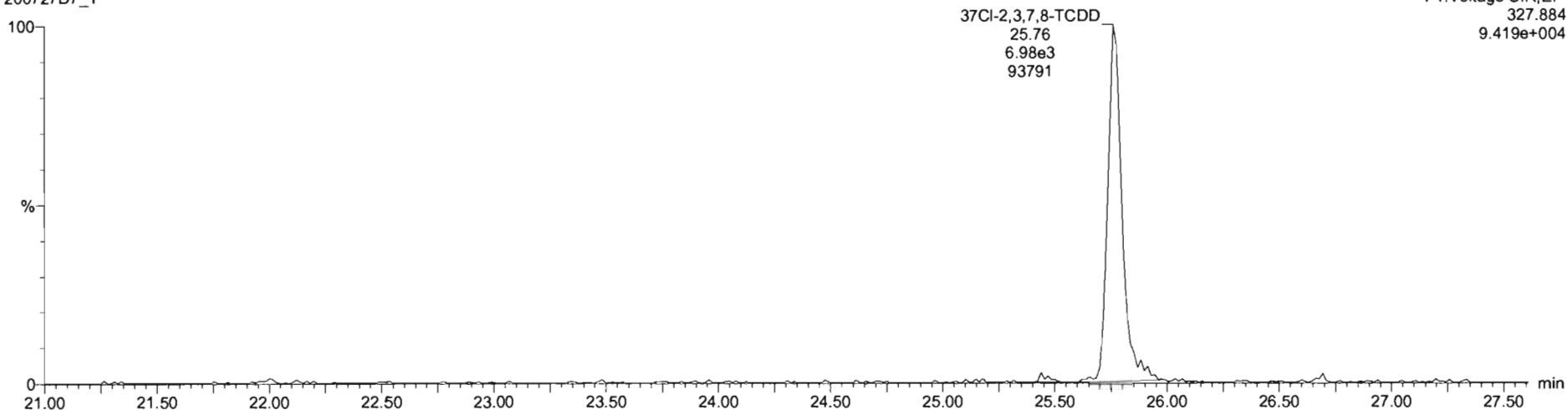
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

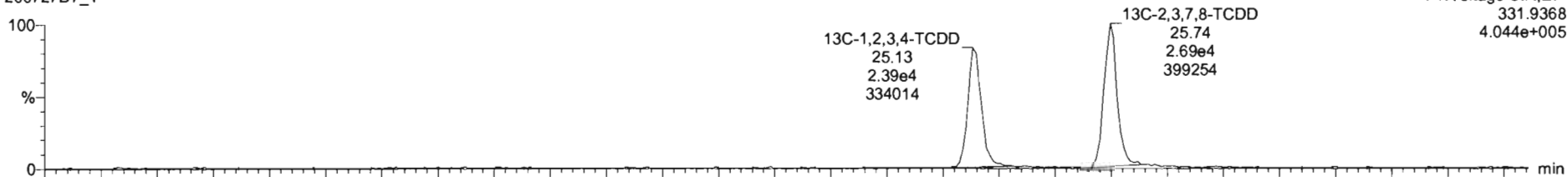
**37Cl-2,3,7,8-TCDD**

200727D7\_1

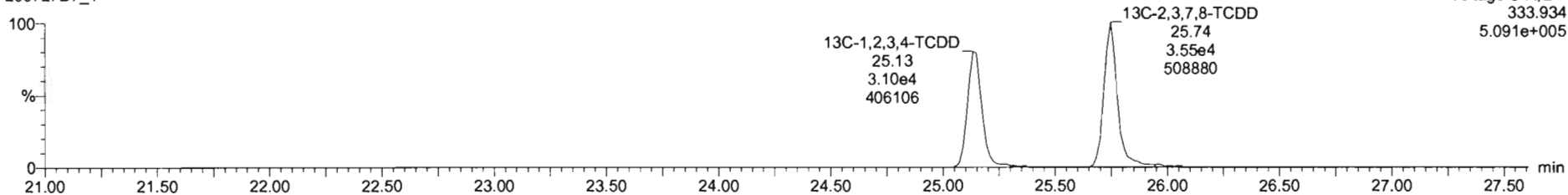


**13C-1,2,3,4-TCDD**

200727D7\_1



200727D7\_1



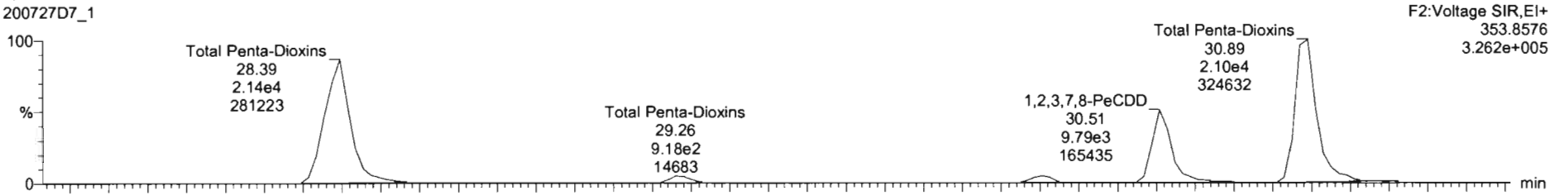
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

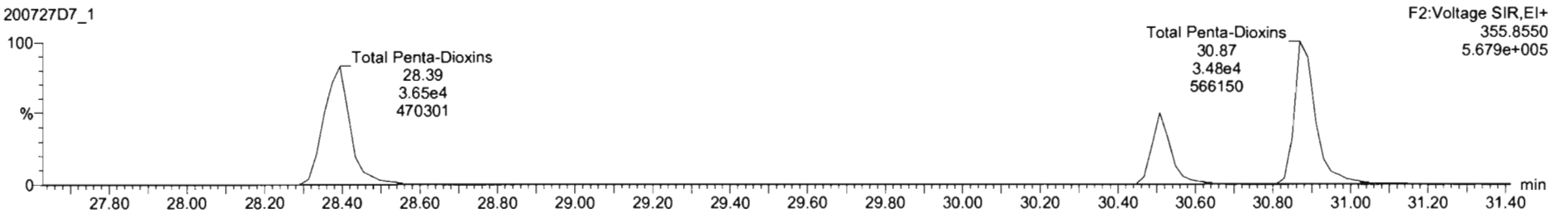
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,7,8-PeCDD**

200727D7\_1

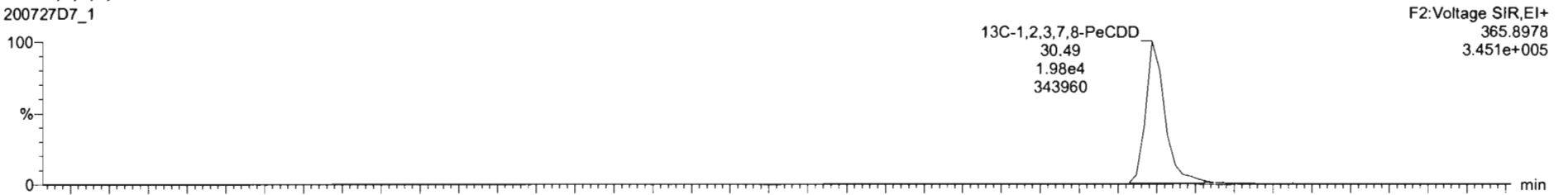


200727D7\_1

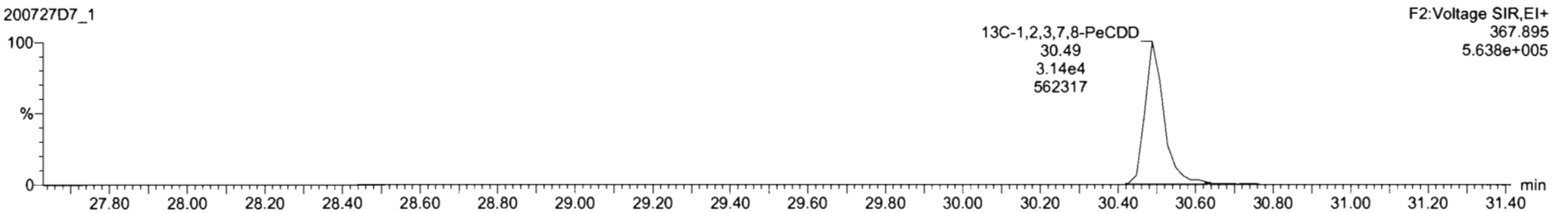


**13C-1,2,3,7,8-PeCDD**

200727D7\_1



200727D7\_1



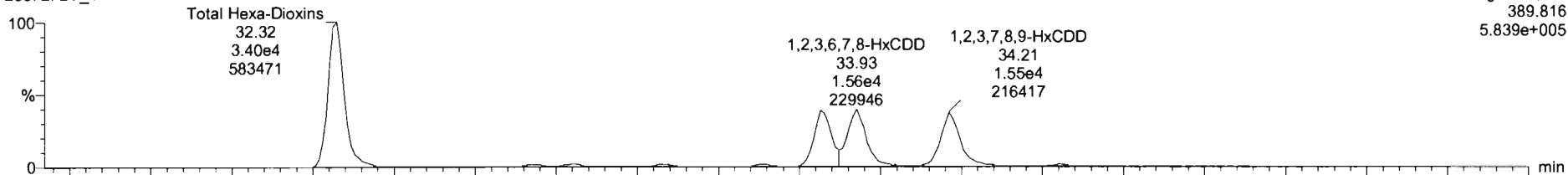
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

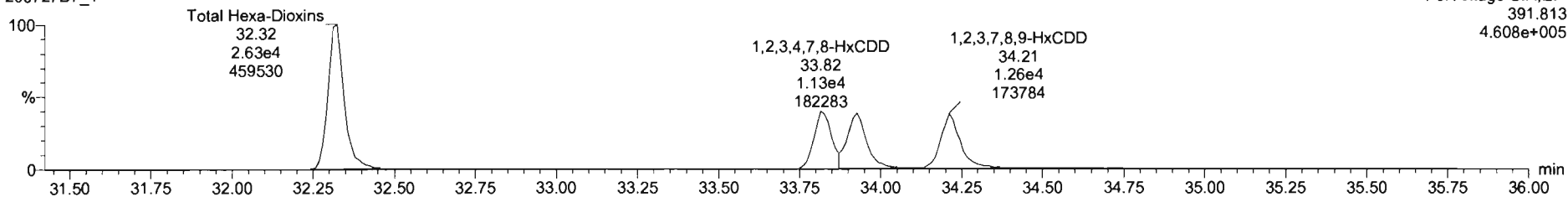
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,2,3,4,7,8-HxCDD

200727D7\_1

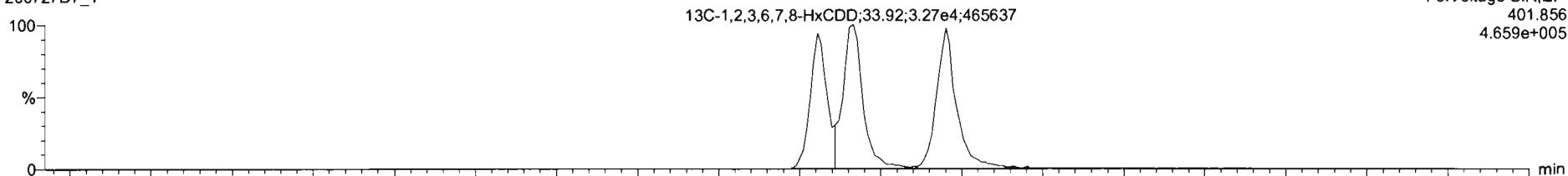


200727D7\_1

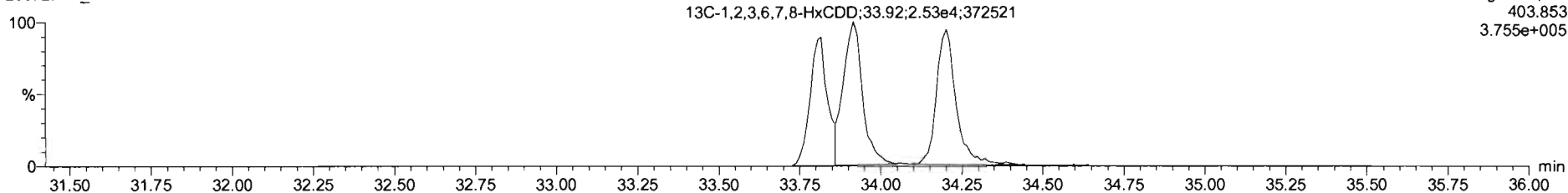


13C-1,2,3,4,7,8-HxCDD

200727D7\_1



200727D7\_1



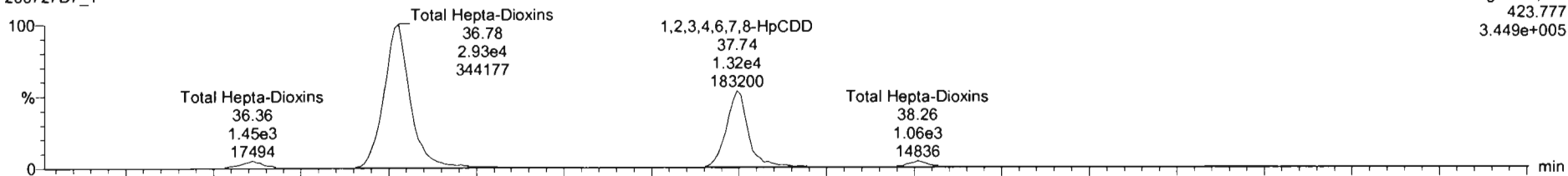
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

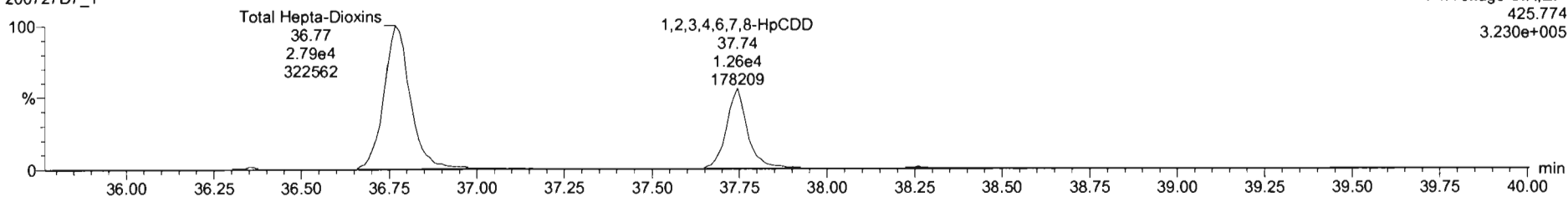
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,2,3,4,6,7,8-HpCDD

200727D7\_1

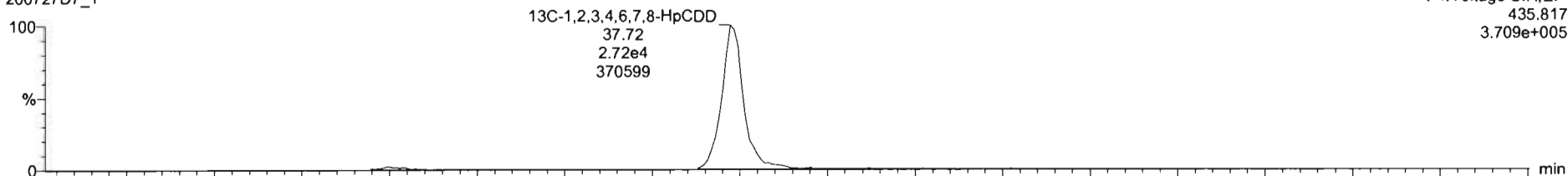


200727D7\_1

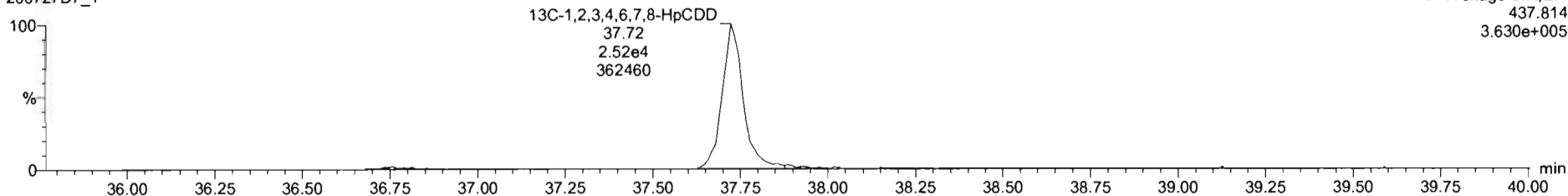


13C-1,2,3,4,6,7,8-HpCDD

200727D7\_1



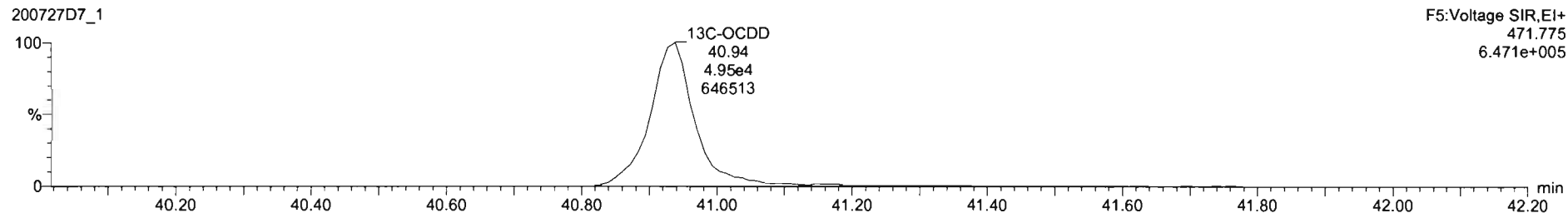
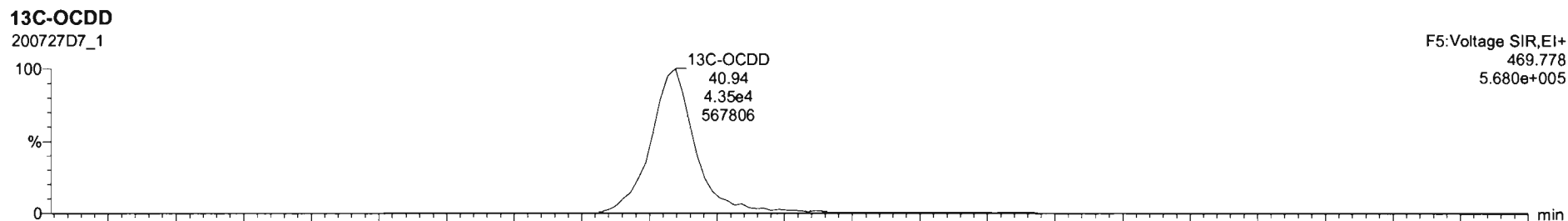
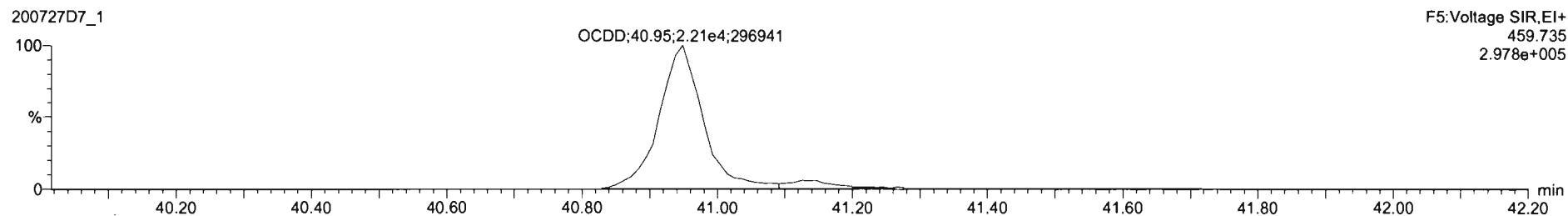
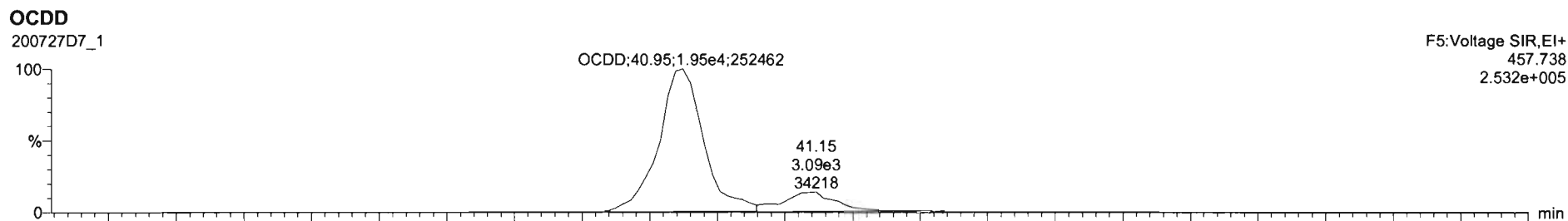
200727D7\_1



Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

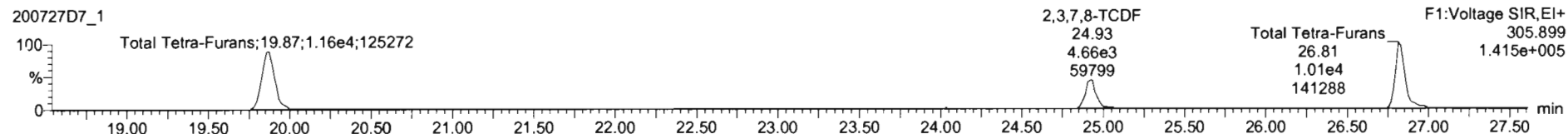
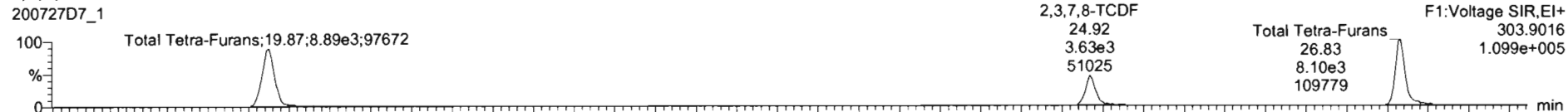


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

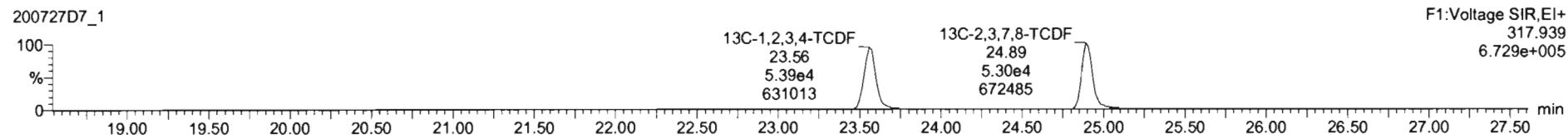
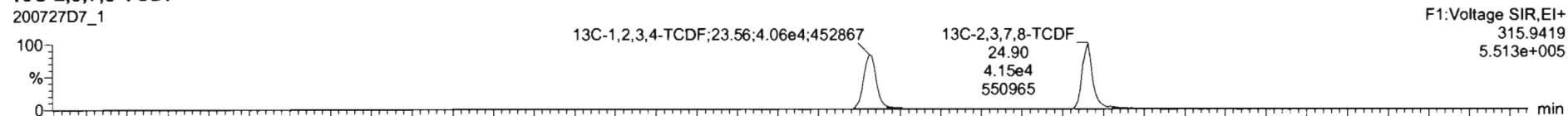
Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

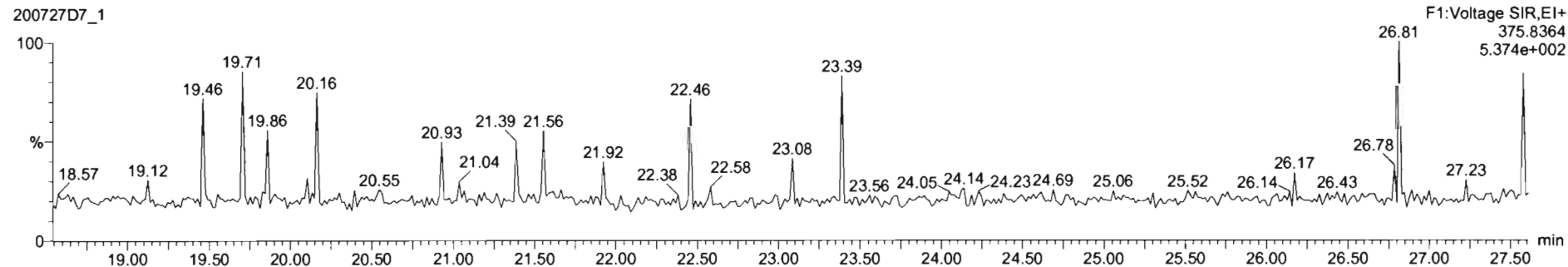
**2,3,7,8-TCDF**



**13C-2,3,7,8-TCDF**



**DPE1**





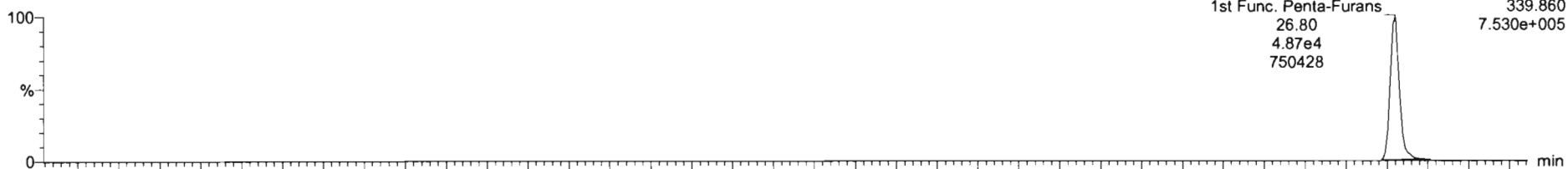
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

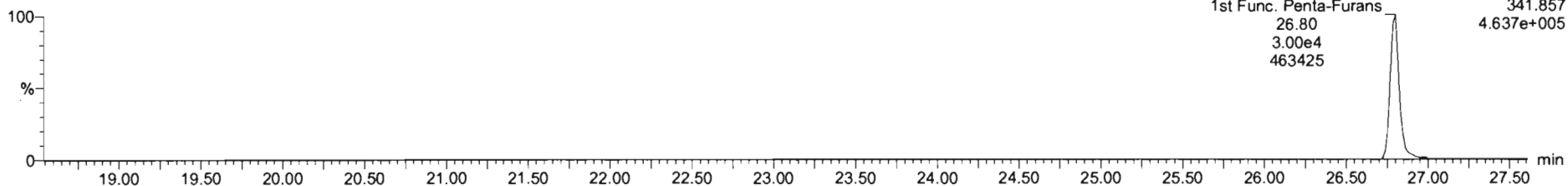
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1st Func. Penta-Furans

200727D7\_1

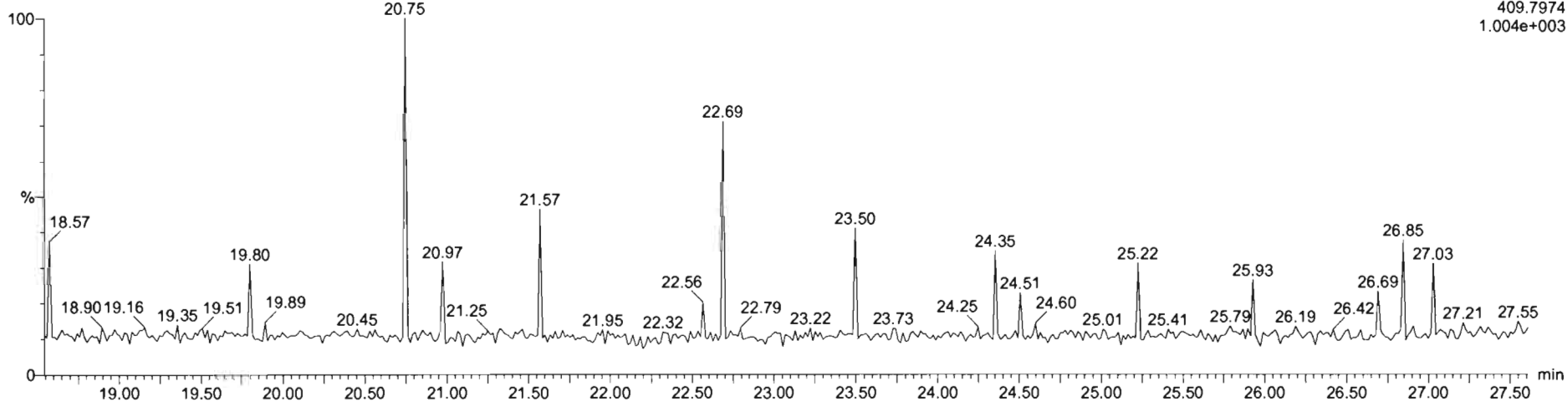


200727D7\_1



DPE6

200727D7\_1



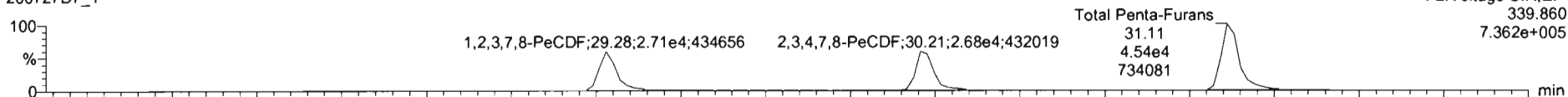
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

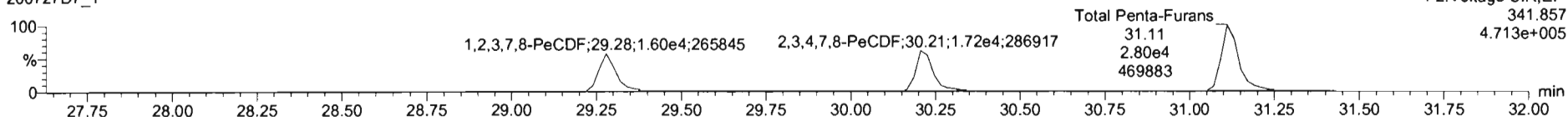
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,7,8-PeCDF**

200727D7\_1

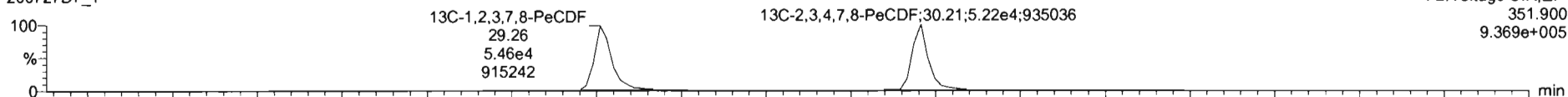


200727D7\_1

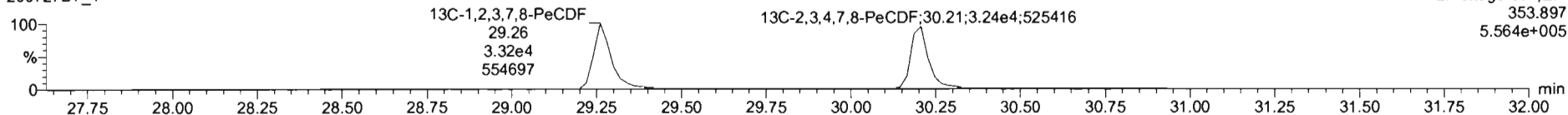


**13C-1,2,3,7,8-PeCDF**

200727D7\_1

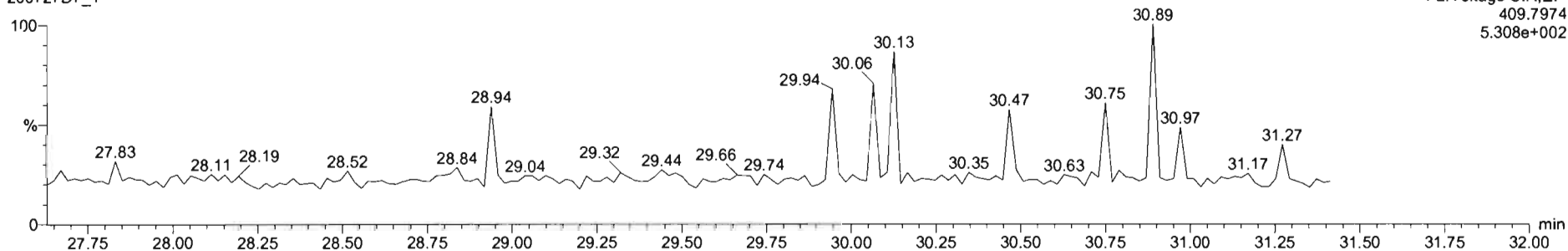


200727D7\_1



**DPE2**

200727D7\_1

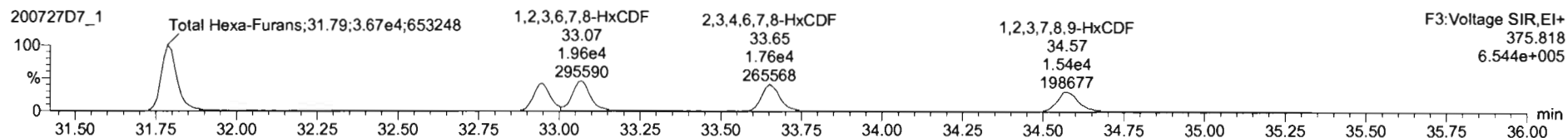
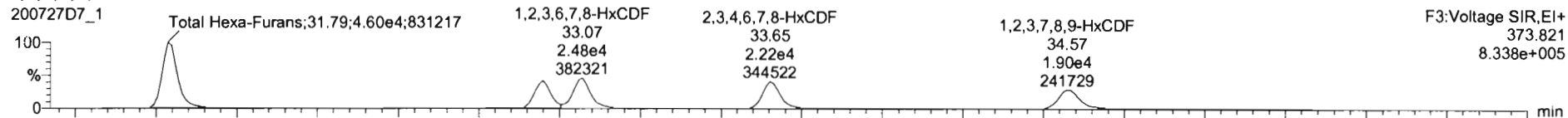


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

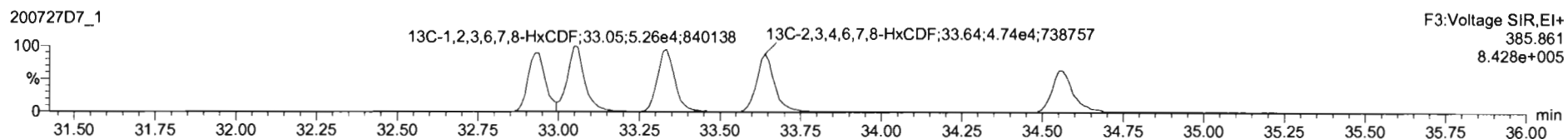
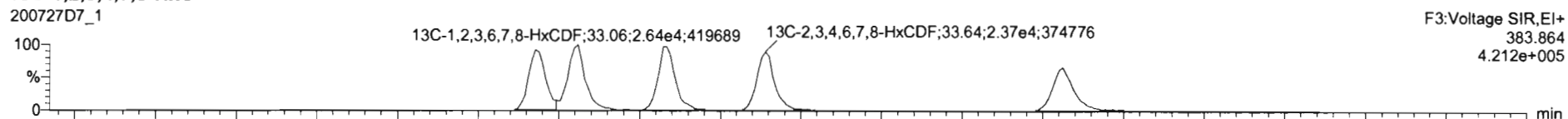
Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

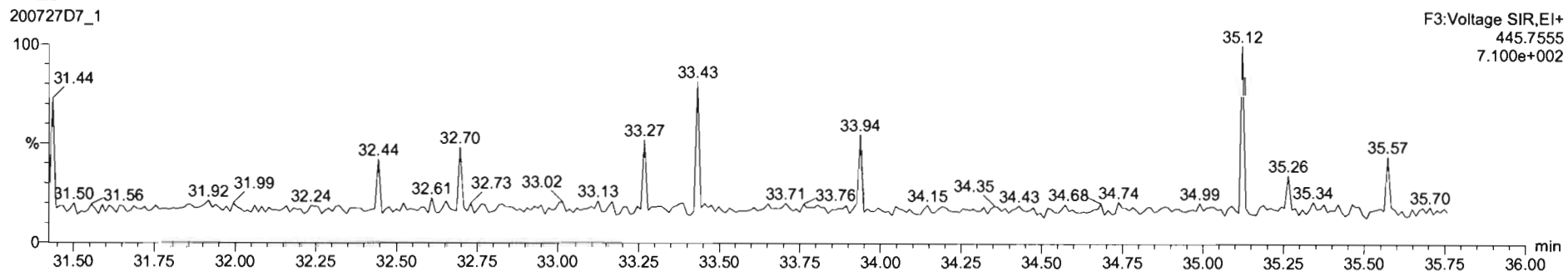
1,2,3,4,7,8-HxCDF



13C-1,2,3,4,7,8-HxCDF



DPE3

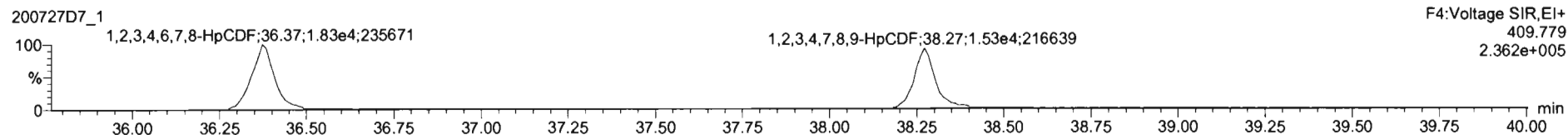
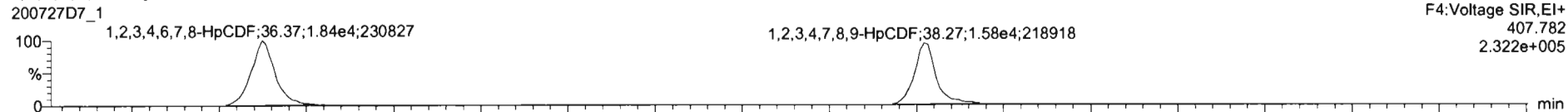


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

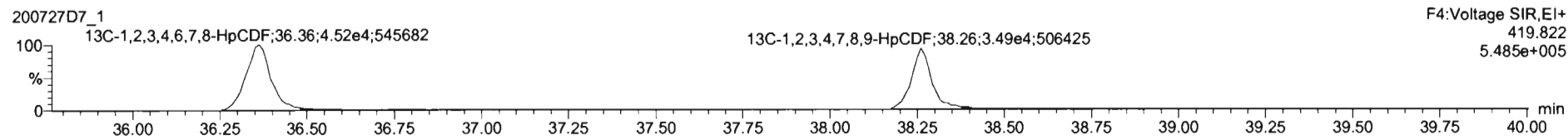
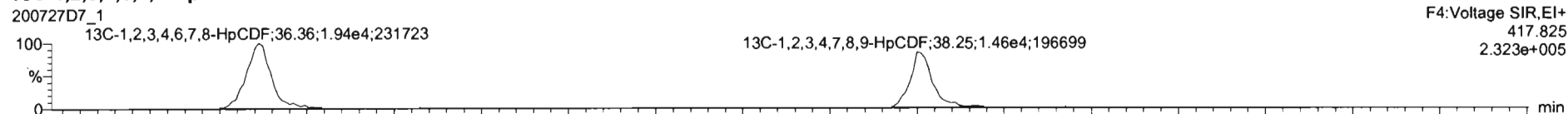
Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

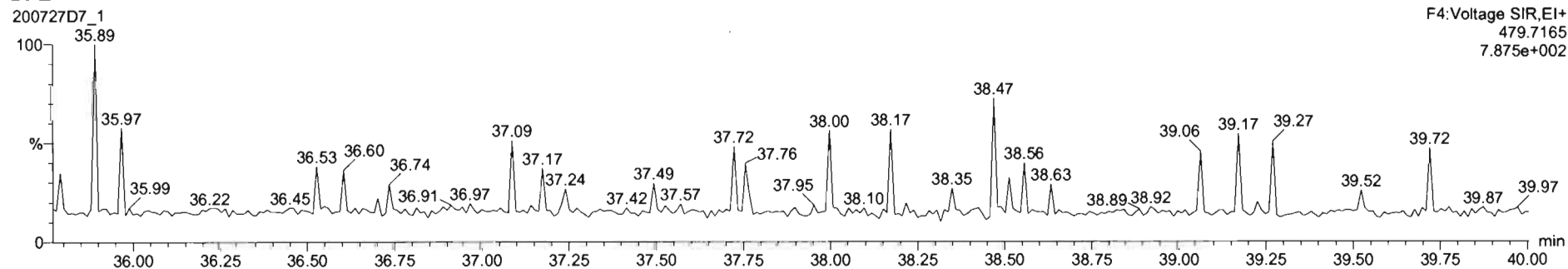
**1,2,3,4,6,7,8-HpCDF**



**13C-1,2,3,4,6,7,8-HpCDF**



**DPE4**



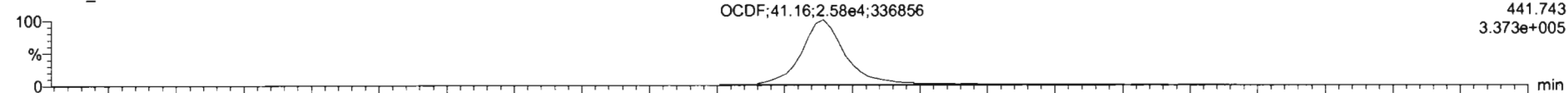
Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

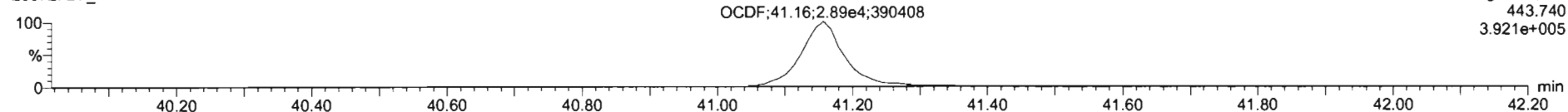
Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**OCDF**

200727D7\_1

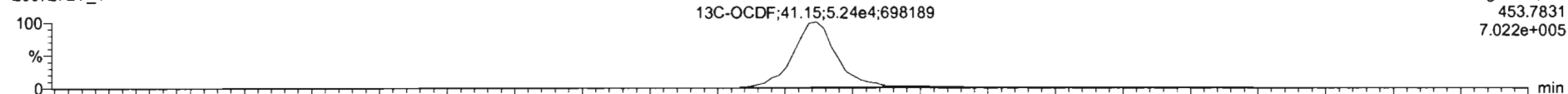


200727D7\_1

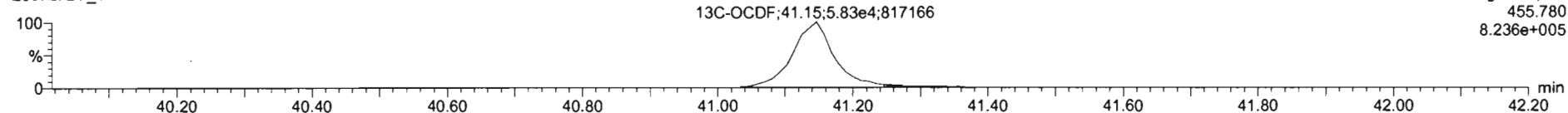


**13C-OCDF**

200727D7\_1

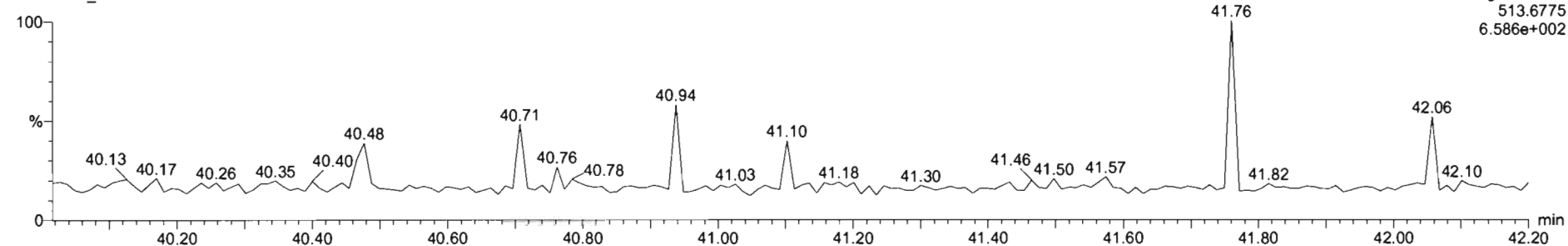


200727D7\_1



**DPE5**

200727D7\_1

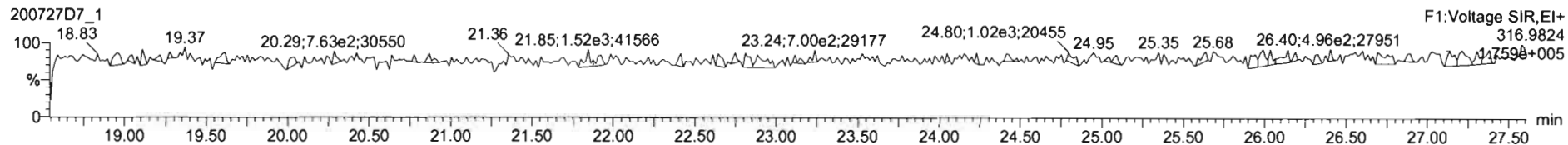


Dataset: U:\VG7.PRO\Results\200727D2\200727D2\_1.qld

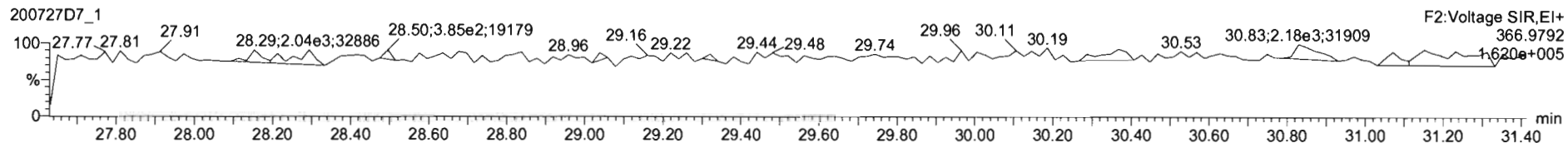
Last Altered: Monday, July 27, 2020 16:39:20 Pacific Daylight Time  
Printed: Monday, July 27, 2020 16:44:22 Pacific Daylight Time

Name: 200727D7\_1, Date: 27-Jul-2020, Time: 15:51:27, ID: ST200727D2-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

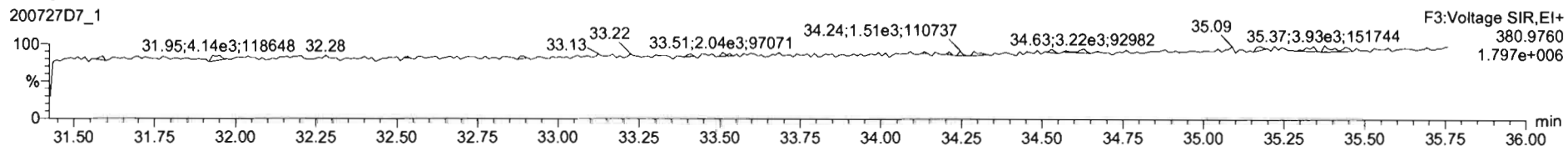
PFK1



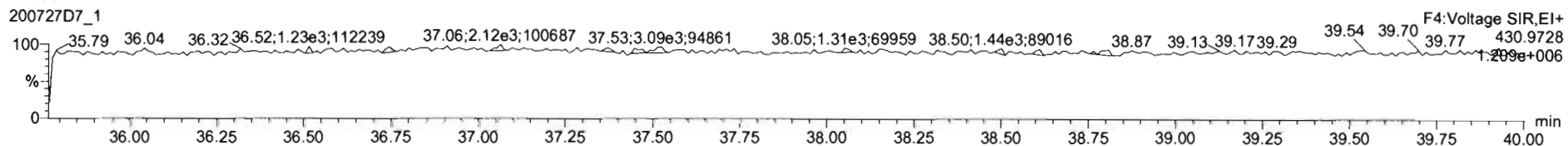
PFK2



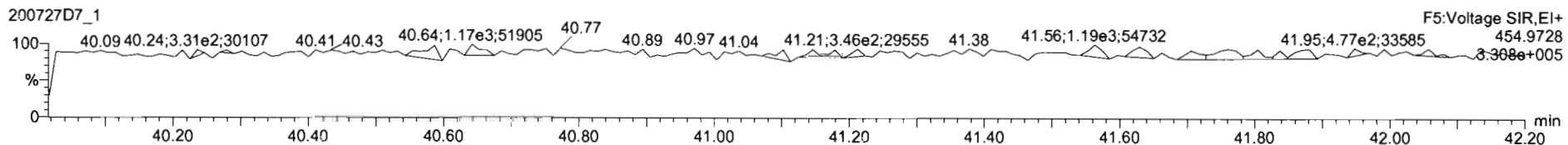
PFK3



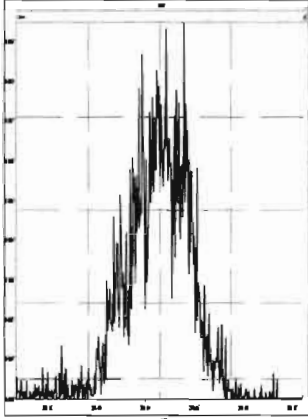
PFK4



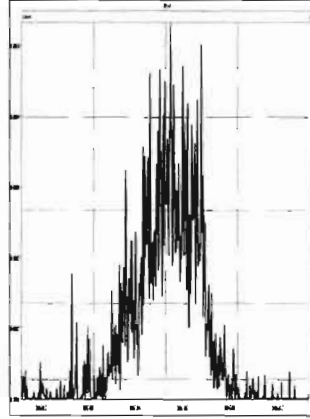
PFK5



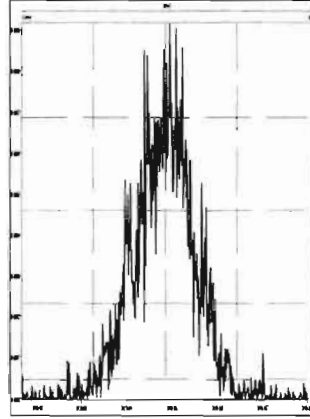
M 292.9824 R 12143



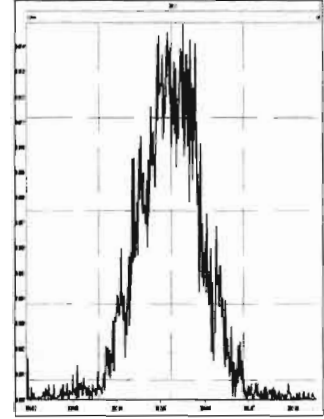
M 304.9824 R 15339



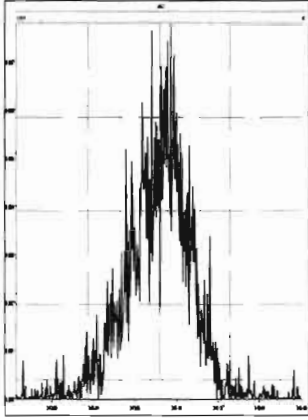
M 318.9792 R 13916



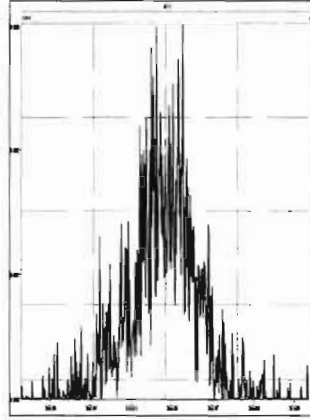
M 330.9792 R 11577



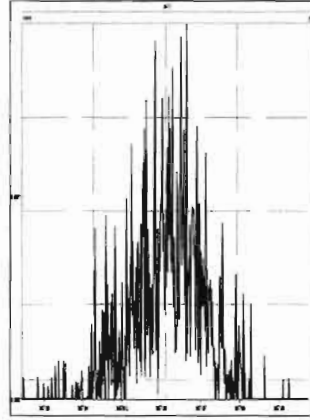
M 342.9792 R 12921



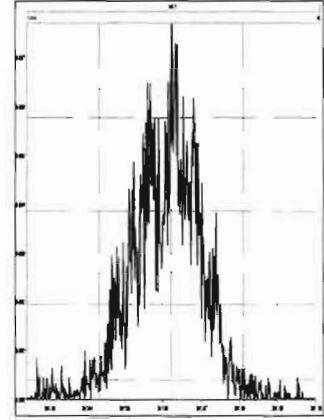
M 354.9792 R 16928



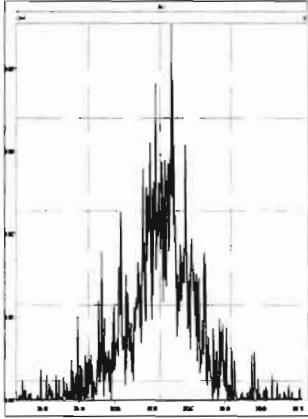
M 366.9792 R 23401



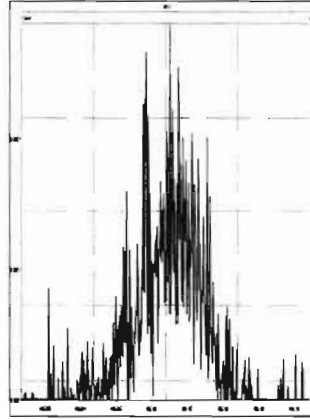
M 380.9760 R 11900



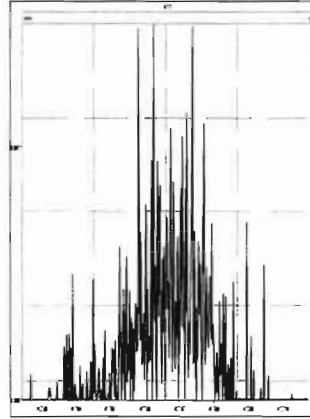
M 392.9760 R 14723



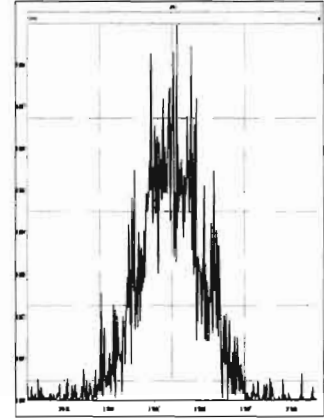
M 404.9760 R 20727



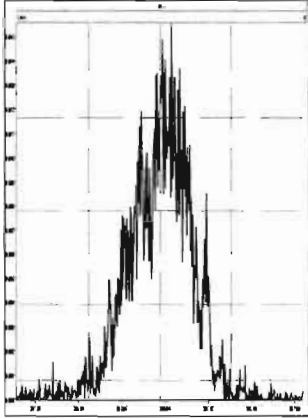
M 416.9760 R 92226



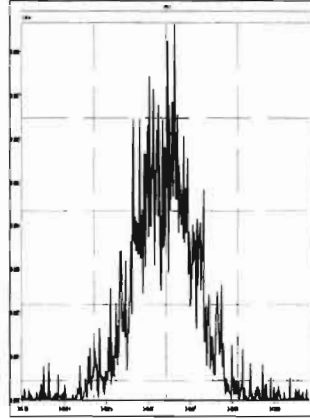
M 318.9792 R 13054



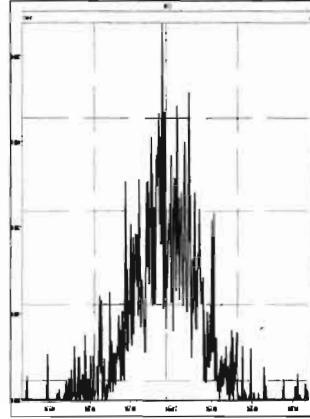
M 330.9792 R 12756



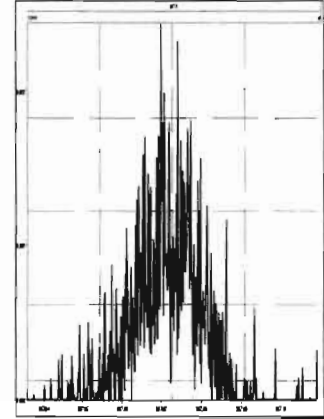
M 342.9792 R 11614



M 354.9792 R 14346

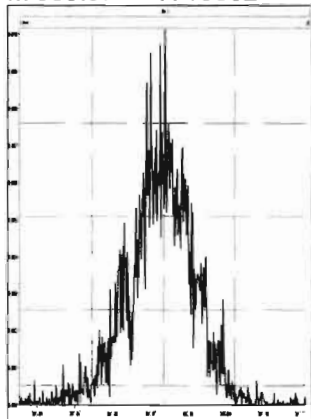


M 366.9792 R 22078

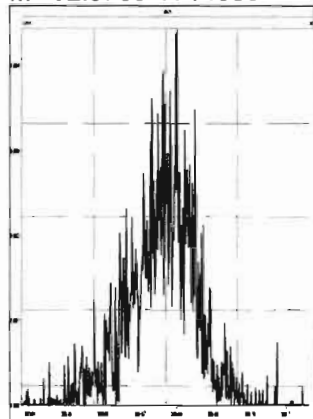


Printed: Tuesday, July 28, 2020 04:48:05 Pacific Daylight Time

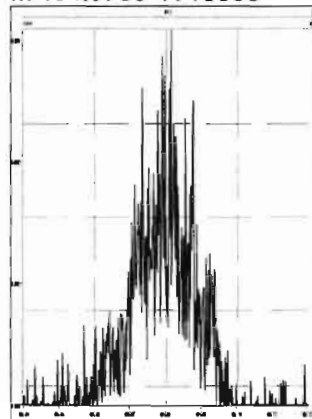
M 380.9760 R 13862



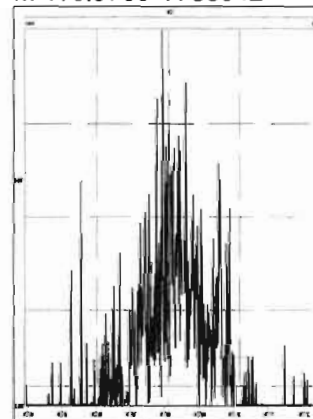
M 392.9760 R 14080



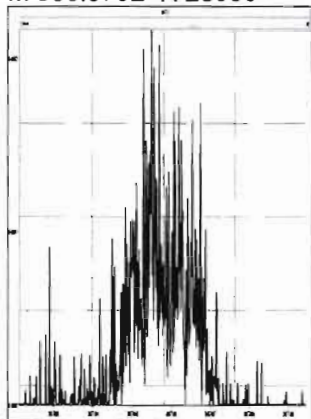
M 404.9760 R 13303



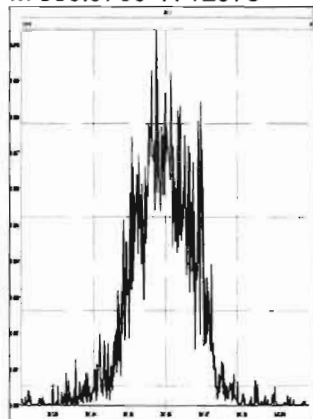
M 416.9760 R 35042



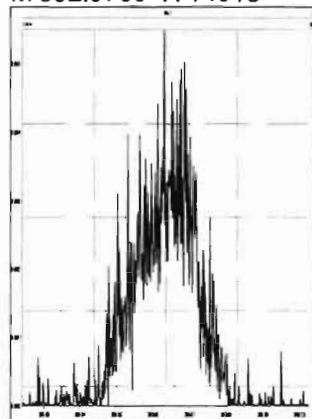
M 366.9792 R 28030



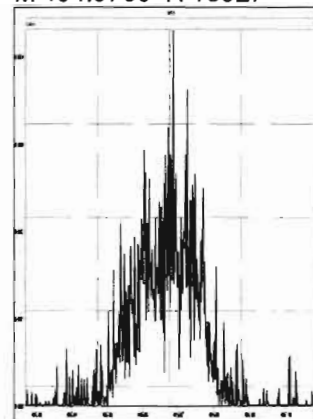
M 380.9760 R 12975



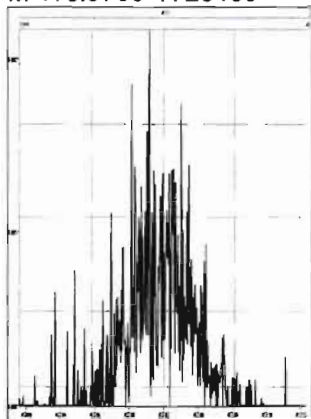
M 392.9760 R 14018



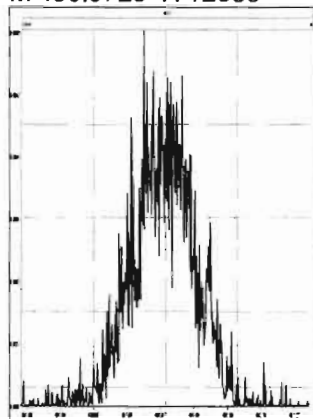
M 404.9760 R 13927



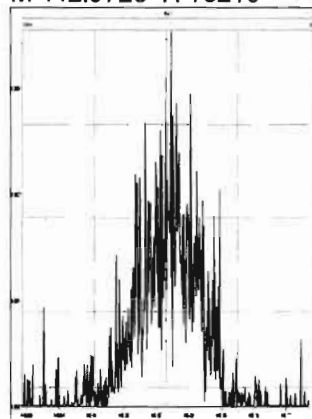
M 416.9760 R 25466



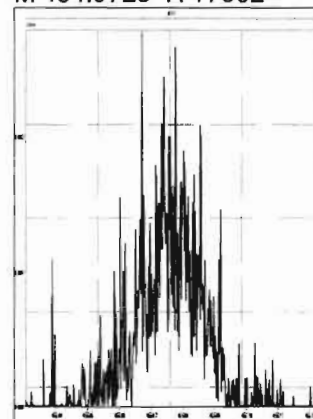
M 430.9728 R 12883



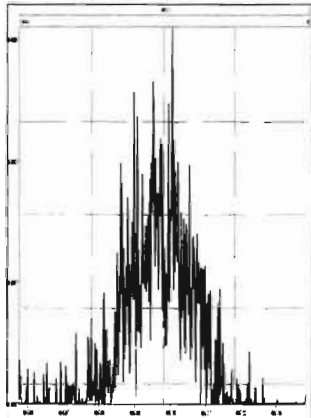
M 442.9728 R 15219



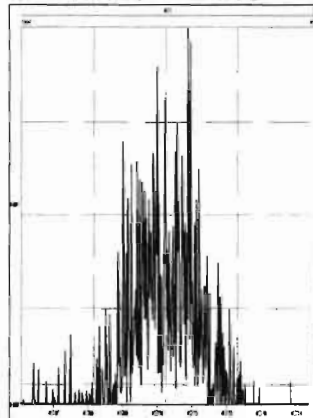
M 454.9728 R 17302



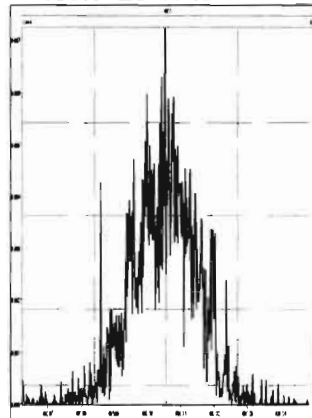
M 404.9760 R 19682



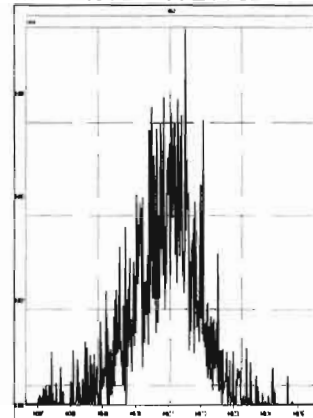
M 416.9760 R 24458



M 430.9728 R 12908

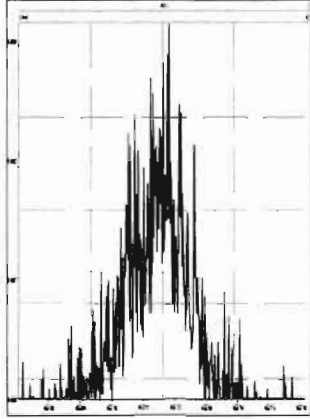


M 442.9728 R 21162

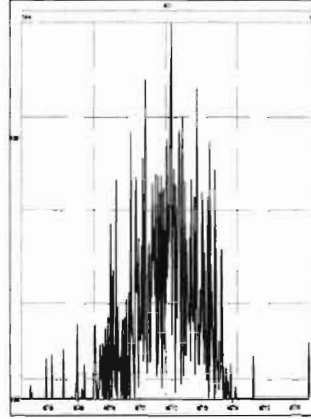




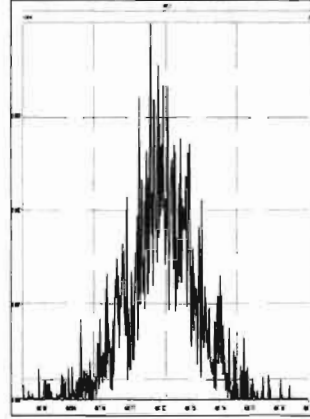
M 454.9728 R 15928



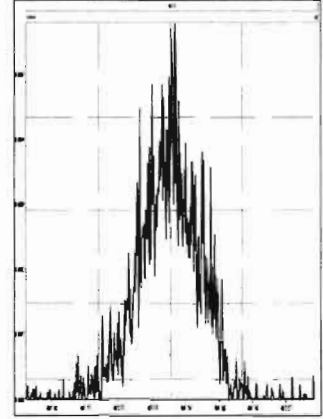
M 466.9728 R 80942



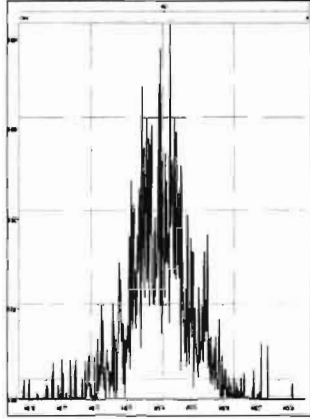
M 480.9696 R 17877



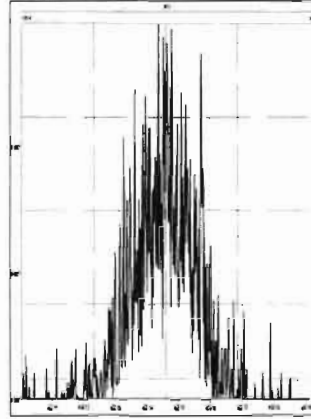
M 430.9728 R 14160



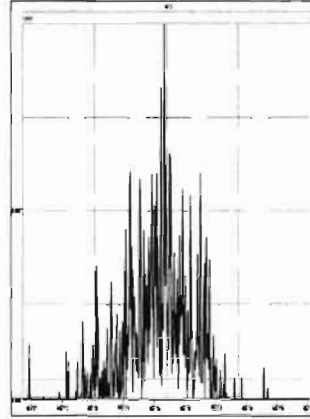
M 442.9728 R 15074



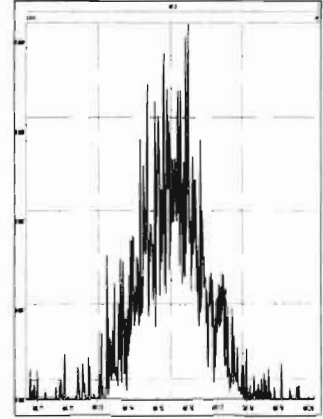
M 454.9728 R 18893



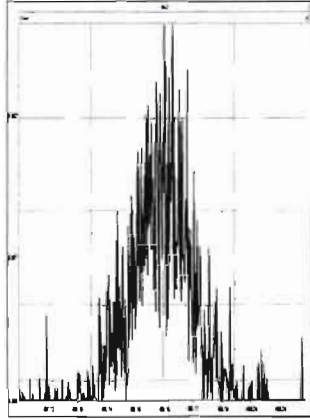
M 466.9728 R 54621



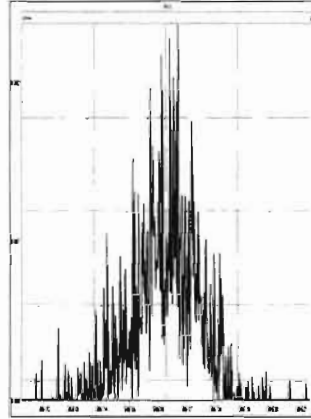
M 480.9696 R 14084



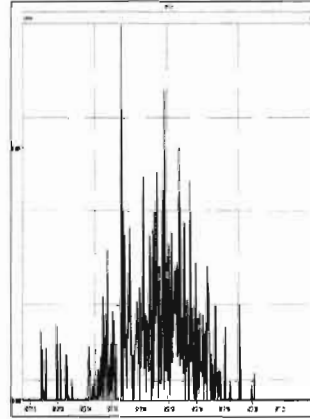
M 492.9696 R 17960



M 504.9696 R 17027



M 516.9697 R 131944



## HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

**Beg. Calibration ID:** ST200821R1-1

**Reviewed By:** CT 08/24/2020  
*Initials & Date*

**End Calibration ID:** NA

	<u>Beg.</u>	<u>End</u>
<b>Ion abundance within QC limits?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
<b>Concentrations within criteria?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>TCDD/TCDF Valleys &lt;25%</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>First and last eluters present?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Retention Times within criteria?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Verification Std. named correctly?</b> (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Forms signed and dated?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Correct ICAL referenced?</b>	<u>HN</u>	<input type="checkbox"/>
<b><u>Run Log:</u></b>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> ✓
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> (Y)	N
- Bottle position verified?	<u>GRB</u>	

**Mass resolution ≥**

5k    6-8K    8K    10K

1614   1699   429   1613/1668/8280

**Intergrated peaks display correctly?**       NA

**GC Break <20%**    NA

**8280 CS1 End Standard:**

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours    NA

**Comments:**

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:49:31 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:53:57 Pacific Daylight Time

HN 08/21/2020

CT 08/24/2020

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
1	1 2,3,7,8-TCDD	9.53e4	8.95e5	0.75	NO	0.974	25.94	25.94	NO	1.001	1.001	10.929	109	NO
2	2 1,2,3,7,8-PeCDD	3.02e5	6.34e5	0.63	NO	0.917	31.78	31.78	NO	1.001	1.001	51.982	104	NO
3	3 1,2,3,4,7,8-HxCDD	2.66e5	4.76e5	1.25	NO	1.04	35.32	35.32	NO	1.000	1.000	53.655	107	NO
4	4 1,2,3,6,7,8-HxCDD	2.75e5	5.96e5	1.23	NO	0.938	35.40	35.42	NO	1.000	1.000	49.175	98.4	NO
5	5 1,2,3,7,8,9-HxCDD	2.69e5	5.48e5	1.21	NO	0.964	35.67	35.67	NO	1.000	1.000	50.943	102	NO
6	6 1,2,3,4,6,7,8-HpCDD	2.18e5	4.72e5	1.00	NO	0.902	39.01	39.01	NO	1.000	1.000	51.106	102	NO
7	7 OCDD	3.76e5	7.72e5	0.89	NO	0.905	42.21	42.22	NO	1.000	1.000	107.72	108	NO
8	8 2,3,7,8-TCDF	1.02e5	1.17e6	0.76	NO	0.858	24.78	24.79	NO	1.001	1.001	10.157	102	NO
9	9 1,2,3,7,8-PeCDF	4.64e5	9.37e5	1.57	NO	0.968	30.33	30.32	NO	1.001	1.000	51.214	102	NO
10	10 2,3,4,7,8-PeCDF	4.77e5	8.76e5	1.54	NO	1.08	31.45	31.43	NO	1.001	1.000	50.575	101	NO
11	11 1,2,3,4,7,8-HxCDF	3.22e5	6.52e5	1.22	NO	0.968	34.44	34.46	NO	1.000	1.001	51.074	102	NO
12	12 1,2,3,6,7,8-HxCDF	3.55e5	6.97e5	1.24	NO	1.00	34.57	34.57	NO	1.000	1.000	50.811	102	NO
13	13 2,3,4,6,7,8-HxCDF	3.25e5	6.46e5	1.21	NO	0.997	35.17	35.15	NO	1.001	1.000	50.451	101	NO
14	14 1,2,3,7,8,9-HxCDF	2.52e5	5.09e5	1.20	NO	0.961	35.98	35.99	NO	1.000	1.000	51.572	103	NO
15	15 1,2,3,4,6,7,8-HpCDF	2.72e5	5.29e5	1.00	NO	1.00	37.67	37.65	NO	1.001	1.001	51.186	102	NO
16	16 1,2,3,4,7,8,9-HpCDF	1.91e5	3.31e5	1.01	NO	1.11	39.64	39.65	NO	1.000	1.000	52.038	104	NO
17	17 OCDF	3.81e5	8.40e5	0.85	NO	0.896	42.37	42.38	NO	1.000	1.000	101.31	101	NO
18	18 13C-2,3,7,8-TCDD	8.95e5	8.10e5	0.79	NO	1.10	25.87	25.91	NO	1.032	1.033	100.07	100	NO
19	19 13C-1,2,3,7,8-PeCDD	6.34e5	8.10e5	0.64	NO	0.757	31.53	31.75	NO	1.258	1.267	103.21	103	NO
20	20 13C-1,2,3,4,7,8-HxCDD	4.76e5	6.82e5	1.28	NO	0.647	35.31	35.31	NO	1.014	1.014	107.97	108	NO
21	21 13C-1,2,3,6,7,8-HxCDD	5.96e5	6.82e5	1.26	NO	0.805	35.41	35.40	NO	1.017	1.017	108.65	109	NO
22	22 13C-1,2,3,7,8,9-HxCDD	5.48e5	6.82e5	1.25	NO	0.726	35.68	35.66	NO	1.025	1.024	110.58	111	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	4.72e5	6.82e5	1.02	NO	0.611	39.05	38.99	NO	1.121	1.120	113.36	113	NO
24	24 13C-OCDD	7.72e5	6.82e5	0.89	NO	0.513	42.25	42.21	NO	1.213	1.212	220.80	110	NO
25	25 13C-2,3,7,8-TCDF	1.17e6	1.29e6	0.77	NO	0.933	24.77	24.76	NO	0.988	0.987	97.394	97.4	NO
26	26 13C-1,2,3,7,8-PeCDF	9.37e5	1.29e6	1.57	NO	0.696	30.34	30.30	NO	1.210	1.209	104.17	104	NO
27	27 13C-2,3,4,7,8-PeCDF	8.76e5	1.29e6	1.56	NO	0.669	31.46	31.42	NO	1.255	1.253	101.44	101	NO
28	28 13C-1,2,3,4,7,8-HxCDF	6.52e5	6.82e5	0.51	NO	0.886	34.45	34.44	NO	0.989	0.989	107.95	108	NO
29	29 13C-1,2,3,6,7,8-HxCDF	6.97e5	6.82e5	0.51	NO	0.955	34.57	34.56	NO	0.993	0.992	107.04	107	NO
30	30 13C-2,3,4,6,7,8-HxCDF	6.46e5	6.82e5	0.51	NO	0.882	35.14	35.14	NO	1.009	1.009	107.43	107	NO
31	31 13C-1,2,3,7,8,9-HxCDF	5.09e5	6.82e5	0.51	NO	0.737	35.99	35.98	NO	1.033	1.033	101.35	101	NO

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:49:31 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:53:57 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
32	32 13C-1,2,3,4,6,7,8-HpCDF	5.29e5	6.82e5	0.44	NO	0.651	37.68	37.63	NO	1.082	1.080	119.27	119	NO
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.31e5	6.82e5	0.45	NO	0.459	39.70	39.64	NO	1.140	1.138	105.78	106	NO
34	34 13C-OCDF	8.40e5	6.82e5	0.91	NO	0.609	42.41	42.37	NO	1.218	1.216	202.35	101	NO
35	35 37Cl-2,3,7,8-TCDD	8.98e4	8.10e5			1.14	25.76	25.94	NO	1.028	1.035	9.7362	97.4	NO
36	36 13C-1,2,3,4-TCDD	8.10e5	8.10e5	0.79	NO	1.00	25.07	25.07	NO	1.000	1.000	100.00	100	NO
37	37 13C-1,2,3,4-TCDF	1.29e6	1.29e6	0.79	NO	1.00	23.08	22.93	NO	1.000	1.000	100.00	100	NO
38	38 13C-1,2,3,4,6,9-HxCDF	6.82e5	6.82e5	0.51	NO	1.00	34.74	34.83	NO	1.000	1.000	100.00	100	YES

OK

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Monday, August 24, 2020 07:02:18 Pacific Daylight Time

Printed: Monday, August 24, 2020 07:03:35 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	200821R1_1	ST200821R1_1 1613 CS3 20F1105	21-Aug-20	11:46:45
2	200821R1_2	B0H0163-BS1 OPR 10	21-Aug-20	12:35:30
3	200821R1_3	B0G0217-BS1 OPR 1	21-Aug-20	13:21:44
4	200821R1_4	B0G0217-MS1 Matrix Spike 2.09	21-Aug-20	14:12:49
5	200821R1_5	B0G0217-MSD1 Matrix Spike Dup 1.78	21-Aug-20	14:59:01
6	200821R1_6	SOLVENT BLANK	21-Aug-20	15:47:56
7	200821R1_7	SOLVENT BLANK	21-Aug-20	16:34:06
8	200821R1_8	B0H0163-BLK1 Method Blank 10	21-Aug-20	17:20:58
9	200821R1_9	B0G0217-BLK1 Method Blank 1	21-Aug-20	18:07:50
10	200821R1_10	B0G0186-DUP1 Duplicate 16.59	21-Aug-20	18:54:42
11	200821R1_11	2001510-01 PDI-061SC-A-00-01-200428 16.52	21-Aug-20	19:41:36
12	200821R1_12	2001510-02 PDI-061SC-A-01-02-200428 13.93	21-Aug-20	20:28:28
13	200821R1_13	2001510-03 PDI-061SC-A-02-03-200428 14.93	21-Aug-20	21:15:20
14	200821R1_14	2001510-04 PDI-174SC-A-08-09-200521 10.94	21-Aug-20	22:02:13
15	200821R1_15	2001510-05 PDI-174SC-A-09-10-200521 11.98	21-Aug-20	22:49:04
16	200821R1_16	SOLVENT BLANK	21-Aug-20	23:44:52

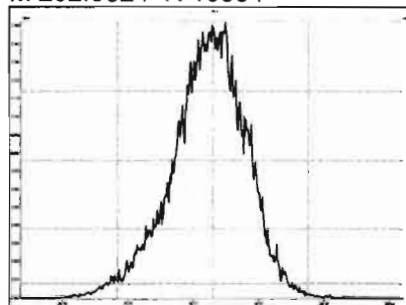
Experiment Calibration Report

MassLynx 4.1 SCN815

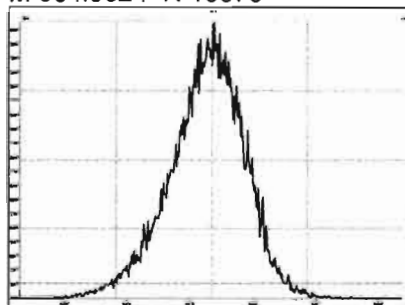
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 21, 2020 11:33:16 Pacific Daylight Time

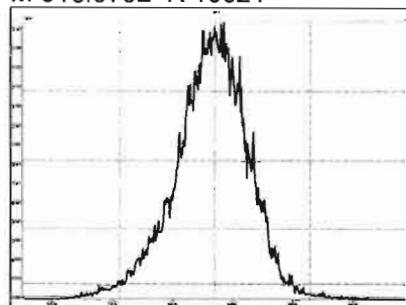
M 292.9824 R 10334



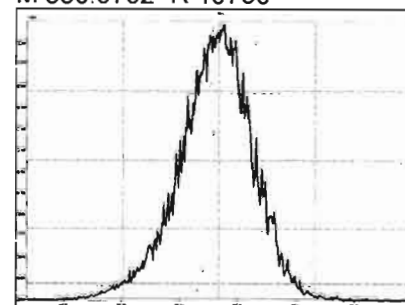
M 304.9824 R 10870



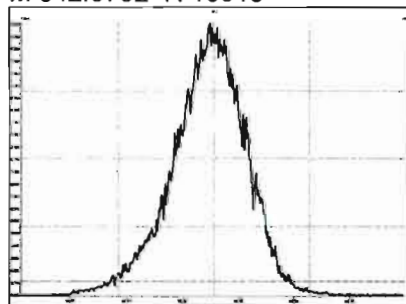
M 318.9792 R 10821



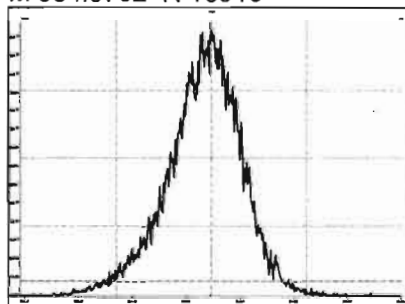
M 330.9792 R 10730



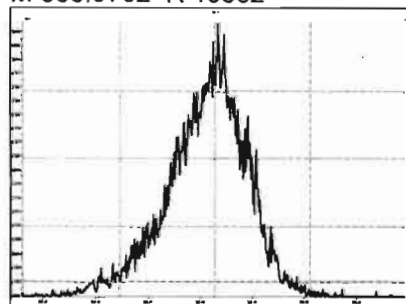
M 342.9792 R 10915



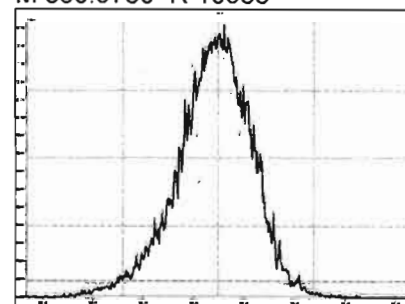
M 354.9792 R 10918



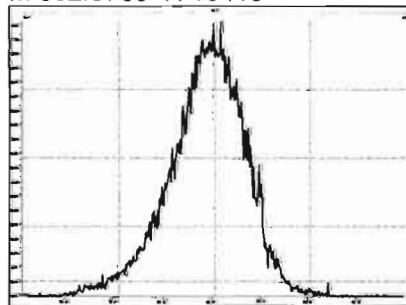
M 366.9792 R 10682



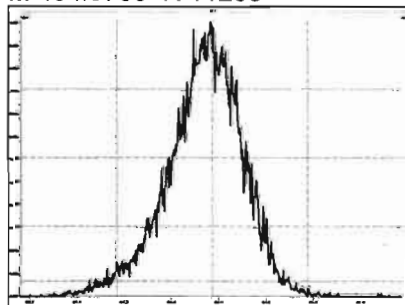
M 380.9760 R 10966



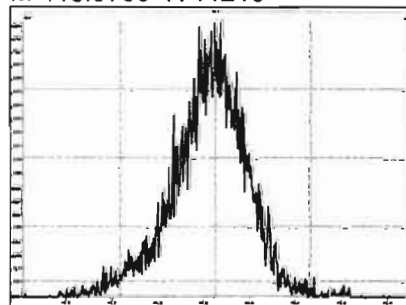
M 392.9760 R 10415



M 404.9760 R 11258



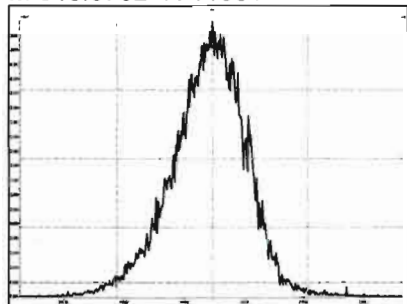
M 416.9760 R 11210



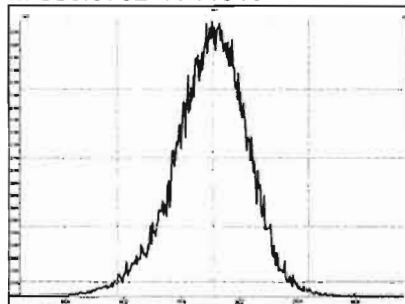
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, August 21, 2020 11:36:36 Pacific Daylight Time

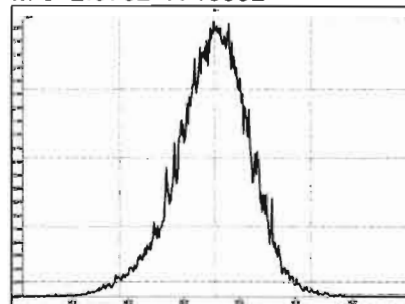
M 318.9792 R 11681



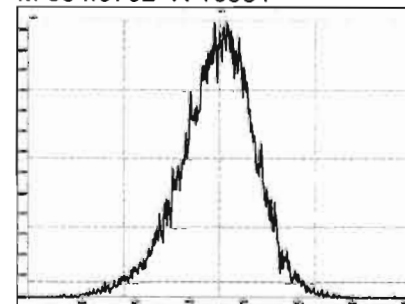
M 330.9792 R 11015



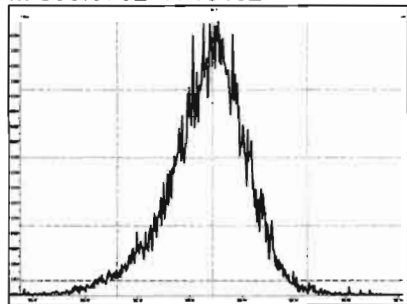
M 342.9792 R 10592



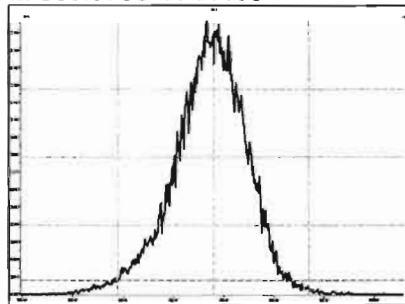
M 354.9792 R 10681



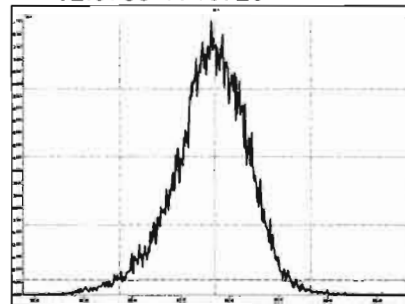
M 366.9792 R 10162



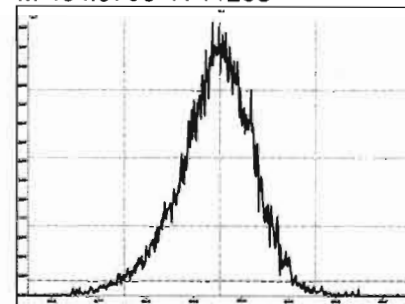
M 380.9760 R 11108



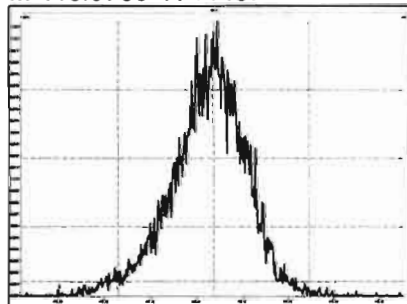
M 392.9760 R 10729



M 404.9760 R 11263



M 416.9760 R 11467



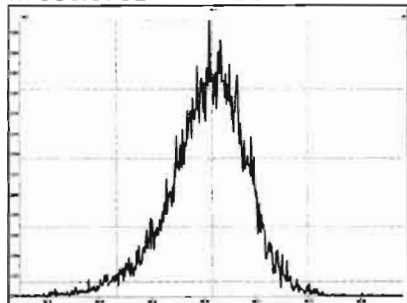
Experiment Calibration Report

MassLynx 4.1 SCN815

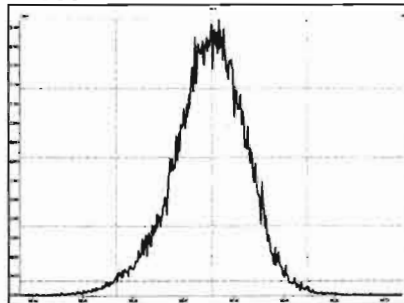
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, August 21, 2020 11:37:48 Pacific Daylight Time

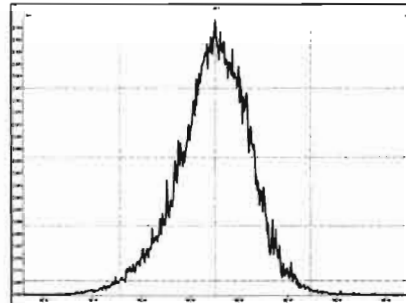
M 366.9792 R 11791



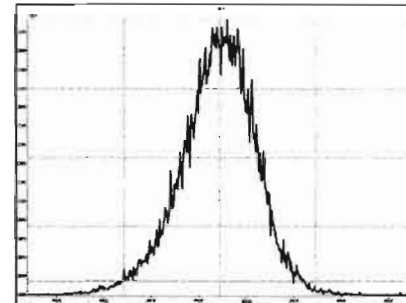
M 380.9760 R 10966



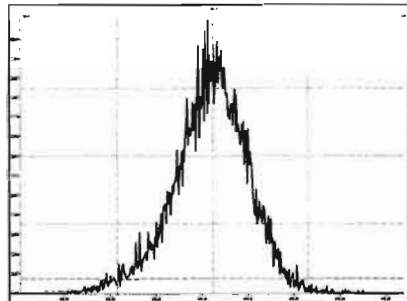
M 392.9760 R 10775



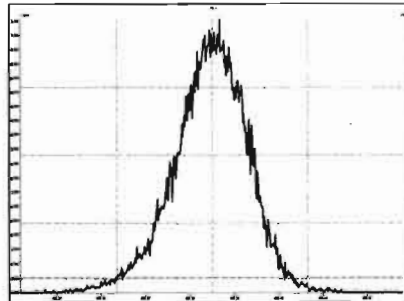
M 404.9760 R 11113



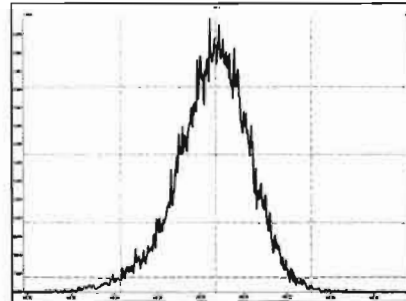
M 416.9760 R 11415



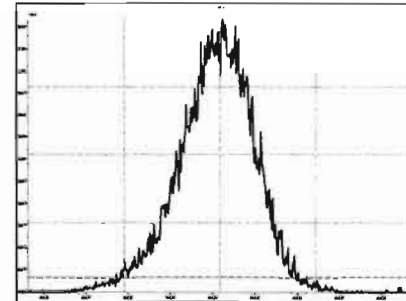
M 430.9728 R 10682



M 442.9728 R 11363



M 454.9728 R 10591

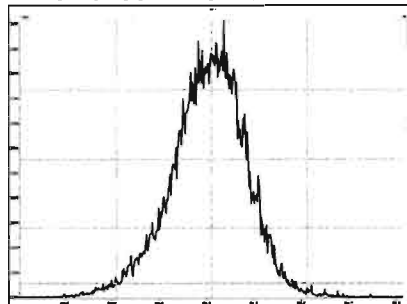




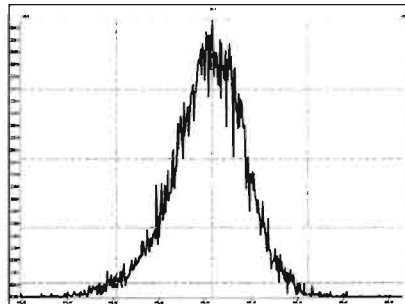
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, August 21, 2020 11:38:47 Pacific Daylight Time

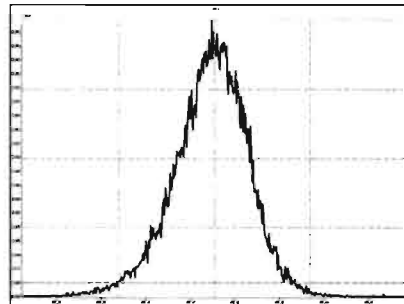
M 404.9760 R 10872



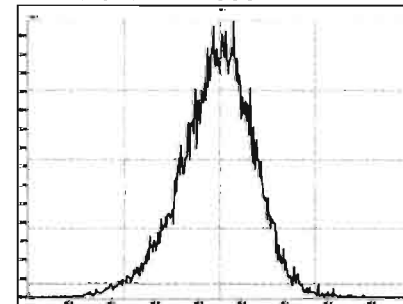
M 416.9760 R 11624



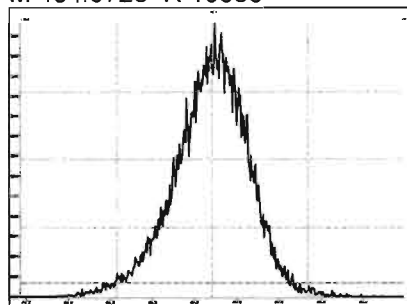
M 430.9728 R 11114



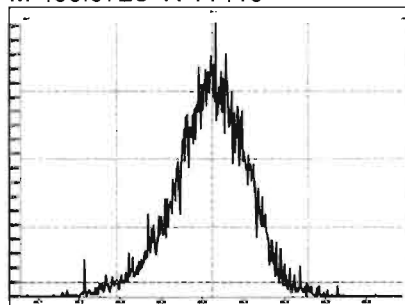
M 442.9728 R 10331



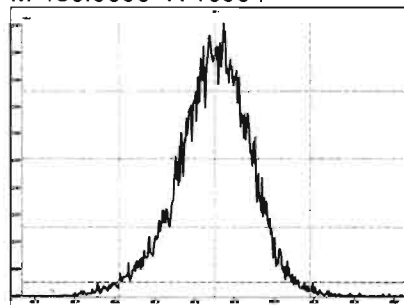
M 454.9728 R 10686



M 466.9728 R 11416



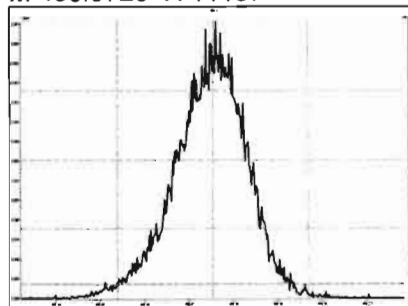
M 480.9696 R 10964



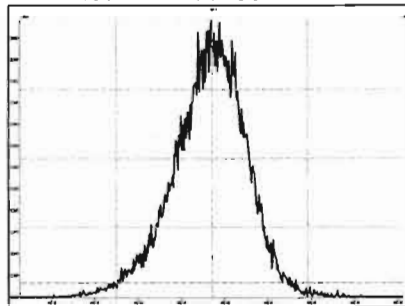
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, August 21, 2020 11:40:19 Pacific Daylight Time

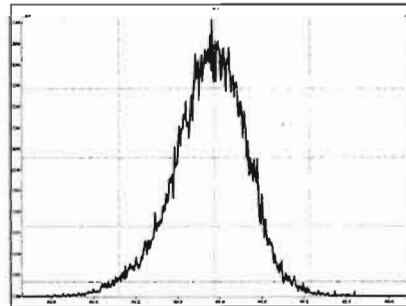
M 430.9728 R 11157



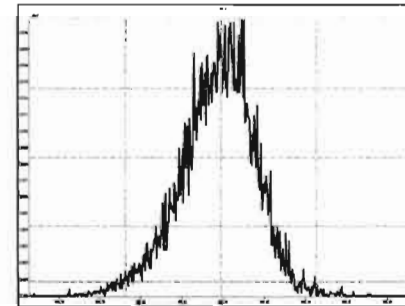
M 442.9728 R 11209



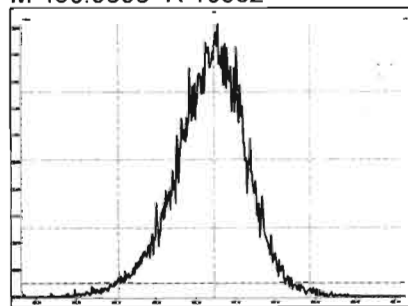
M 454.9728 R 10776



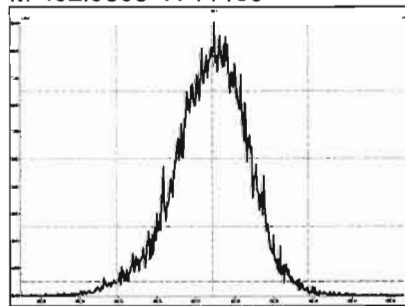
M 466.9728 R 11572



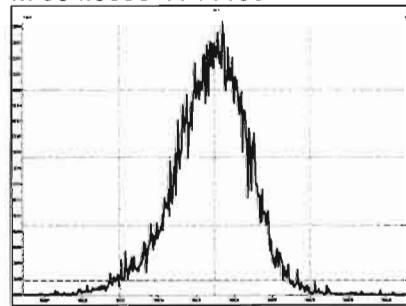
M 480.9696 R 10962



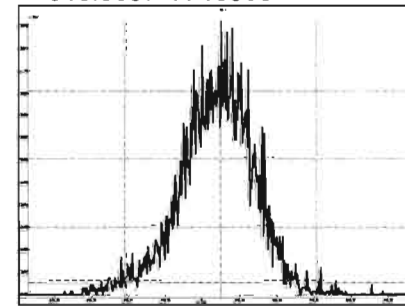
M 492.9696 R 11160



M 504.9696 R 11158



M 516.9697 R 13088



Dataset: Untitled

Last Altered: Friday, August 21, 2020 12:38:04 Pacific Daylight Time

Printed: Friday, August 21, 2020 12:38:18 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 13 Jul 2020 12:01:21

Calibration: U:\VG12.PRO\CurveDB\ldb5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	RT
1	1,3,6,8-TCDD (First)	21.39
2	1,2,8,9-TCDD (Last)	27.14
3	1,2,4,7,9-PeCDD (First)	29.31
4	1,2,3,8,9-PeCDD (Last)	32.20
5	1,2,4,6,7,9-HxCDD (First)	33.84
6	1,2,3,7,8,9-HxCDD (Last)	35.67
7	1,2,3,4,6,7,9-HpCDD (First)	38.04
8	1,2,3,4,6,7,8-HpCDD (Last)	39.00
9	1,3,6,8-TCDF (First)	19.49
10	1,2,8,9-TCDF (Last)	27.30
11	1,3,4,6,8-PeCDF (First)	27.30
12	1,2,3,8,9-PeCDF (Last)	32.44
13	1,2,3,4,6,8-HxCDF (First)	33.22
14	1,2,3,7,8,9-HxCDF (Last)	35.99
15	1,2,3,4,6,7,8-HpCDF (First)	37.65
16	1,2,3,4,7,8,9-HpCDF (Last)	39.65

Dataset: Untitled

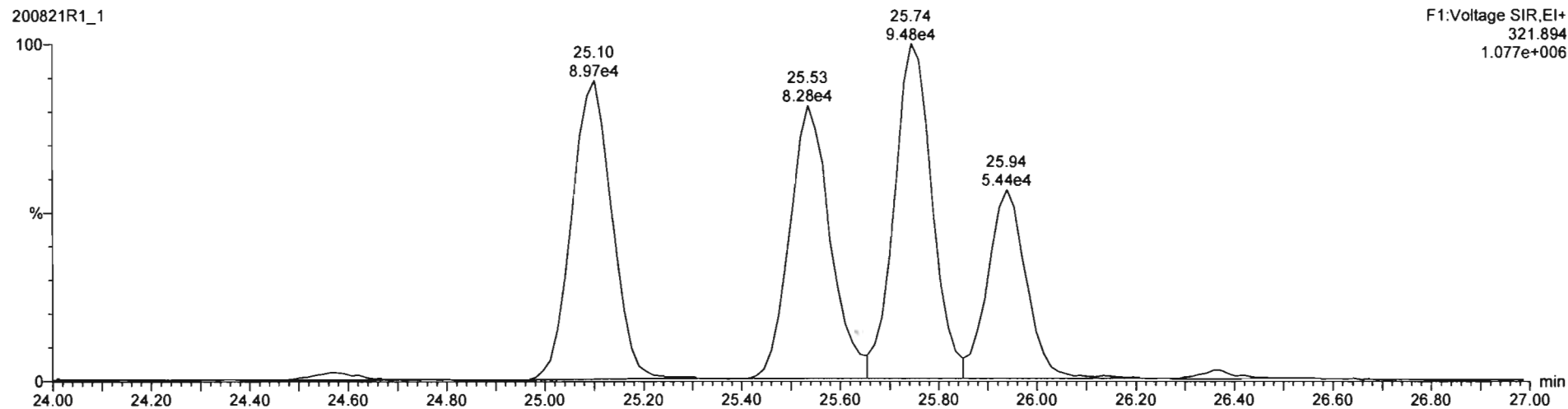
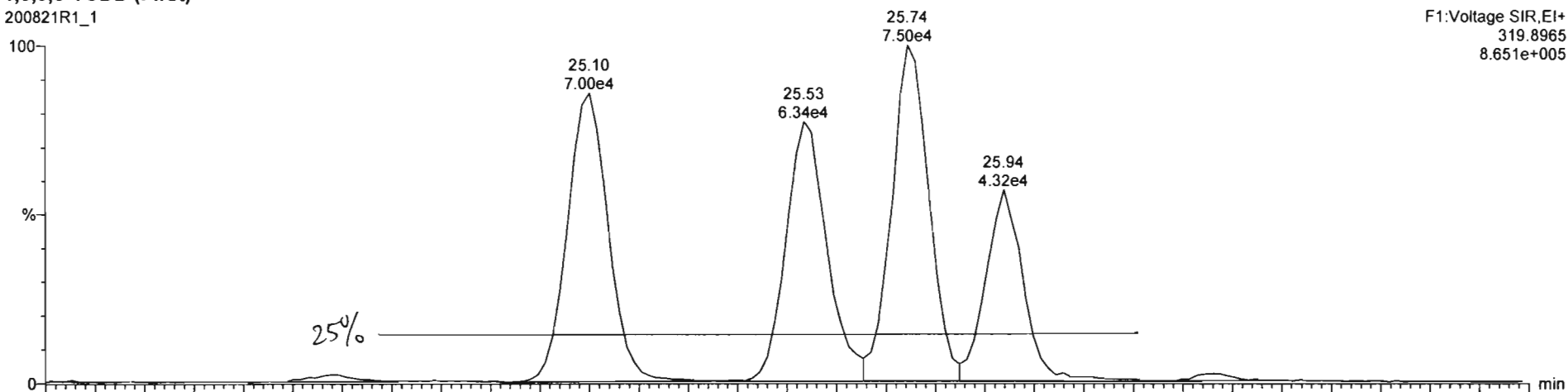
Last Altered: Friday, August 21, 2020 12:38:04 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:38:18 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 13 Jul 2020 12:01:21  
Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,3,6,8-TCDD (First)  
200821R1\_1

HN 08/21/2020



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

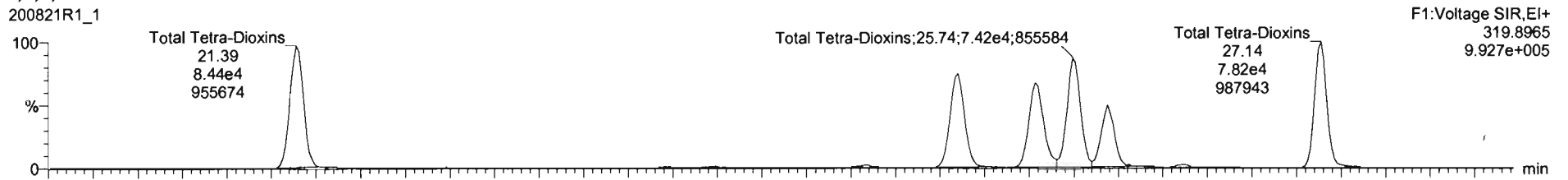
Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-08-21-20.mdb 21 Aug 2020 10:28:01  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

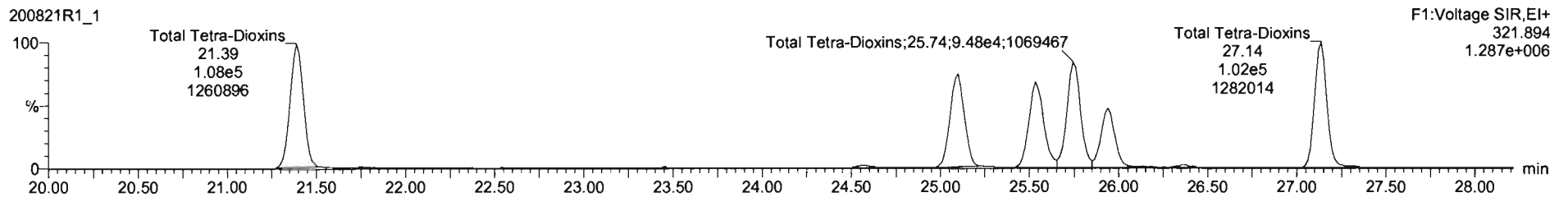
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

2,3,7,8-TCDD

200821R1\_1

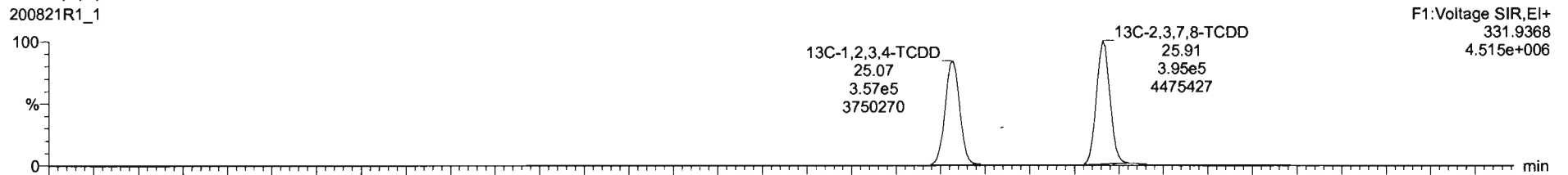


200821R1\_1

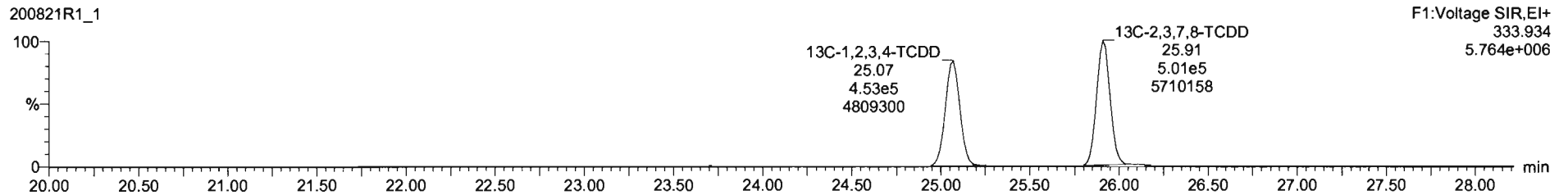


13C-2,3,7,8-TCDD

200821R1\_1



200821R1\_1



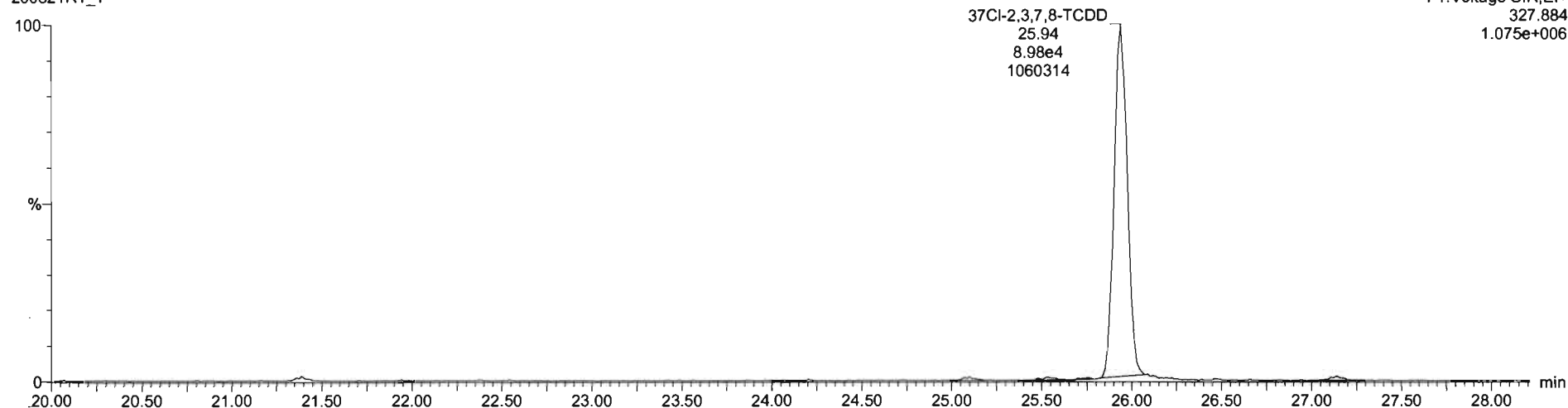
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

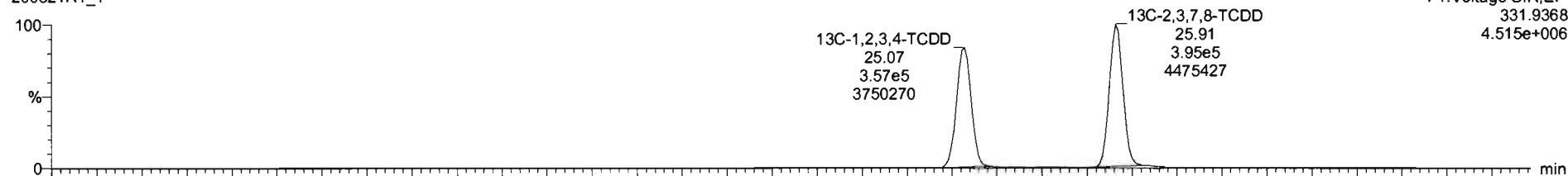
**37Cl-2,3,7,8-TCDD**

200821R1\_1

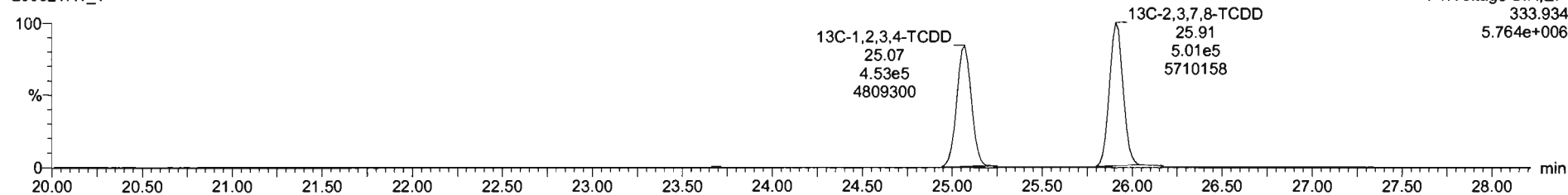


**13C-1,2,3,4-TCDD**

200821R1\_1



200821R1\_1



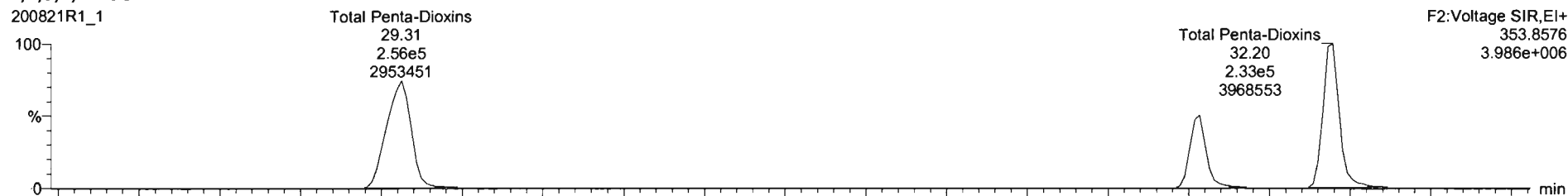
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

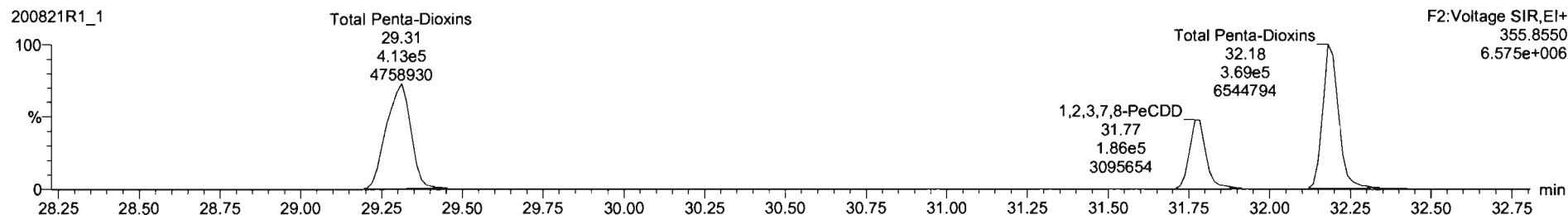
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,7,8-PeCDD**

200821R1\_1

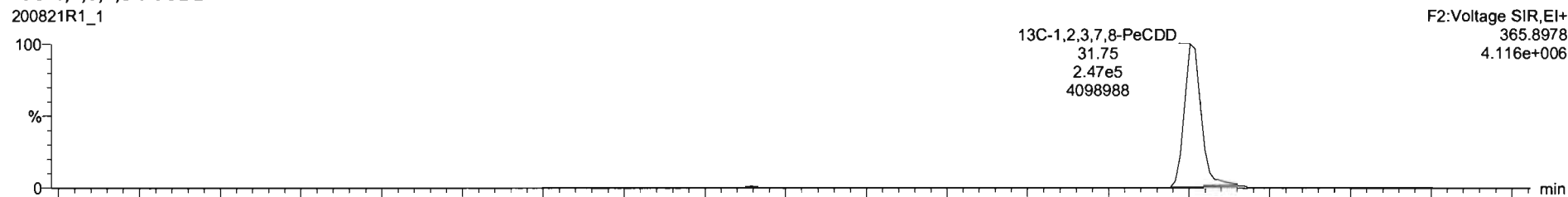


200821R1\_1

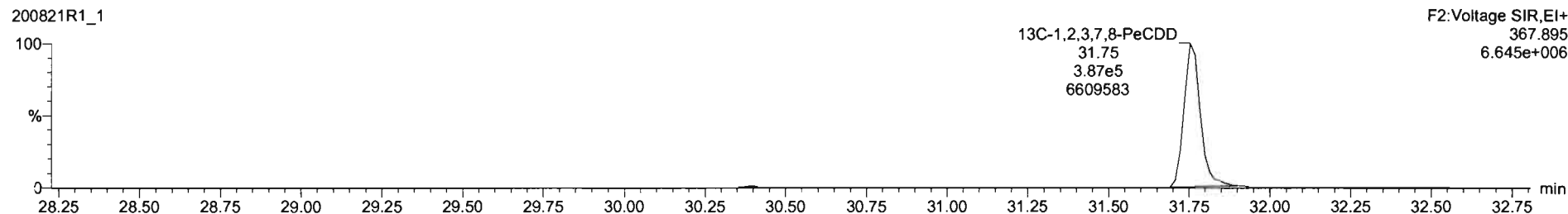


**13C-1,2,3,7,8-PeCDD**

200821R1\_1



200821R1\_1



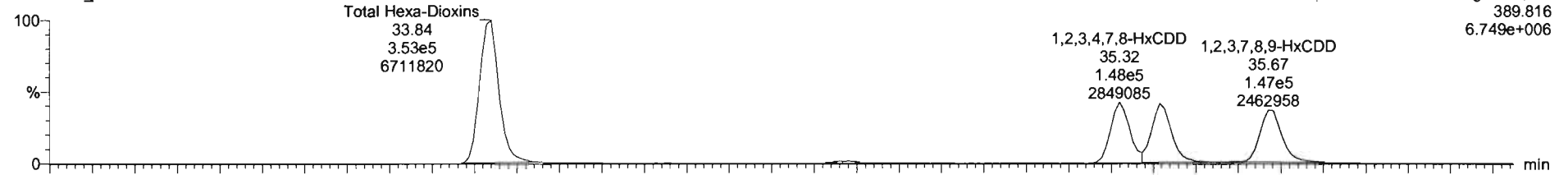
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

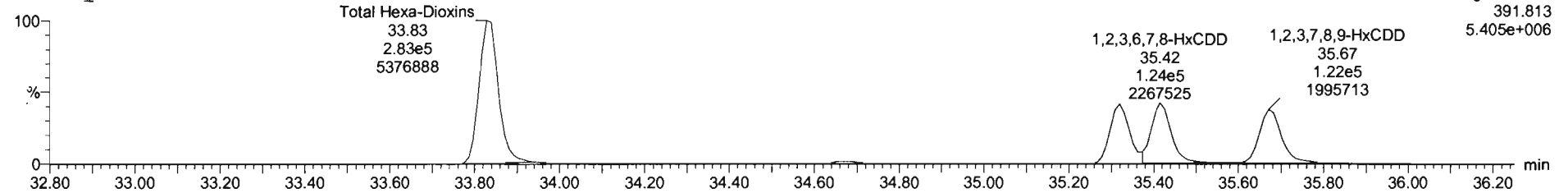
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,2,3,4,7,8-HxCDD

200821R1\_1

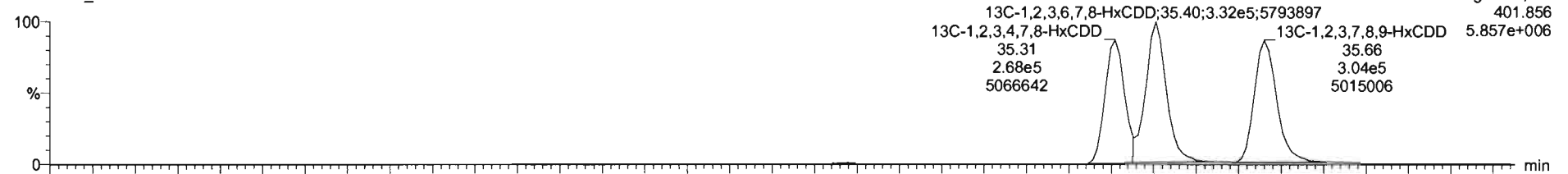


200821R1\_1

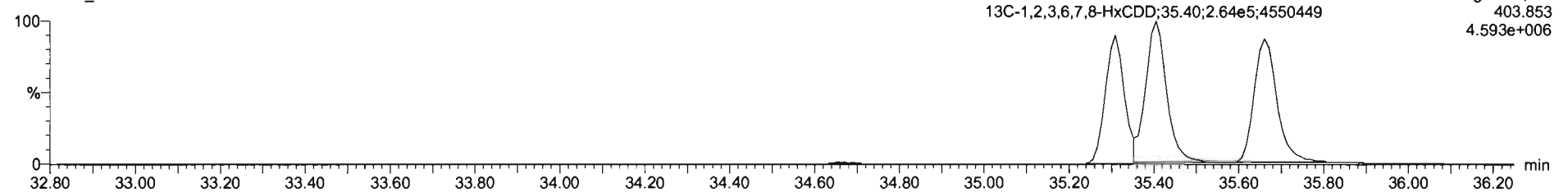


13C-1,2,3,4,7,8-HxCDD

200821R1\_1



200821R1\_1





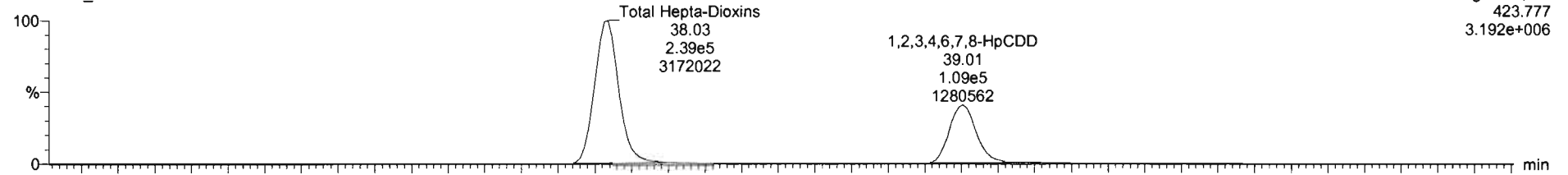
D: taset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

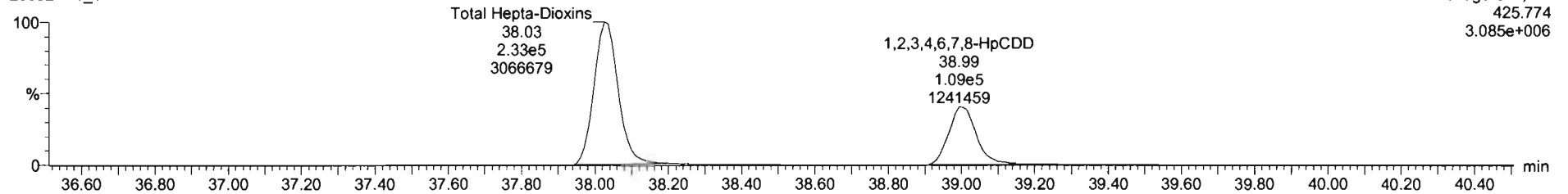
1,2,3,4,6,7,8-HpCDD

200821R1\_1



F4: Voltage SIR, EI+  
423.777  
3.192e+006

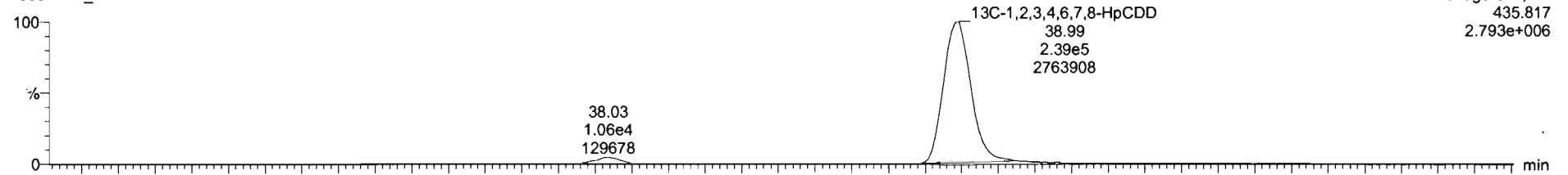
200821R1\_1



F4: Voltage SIR, EI+  
425.774  
3.085e+006

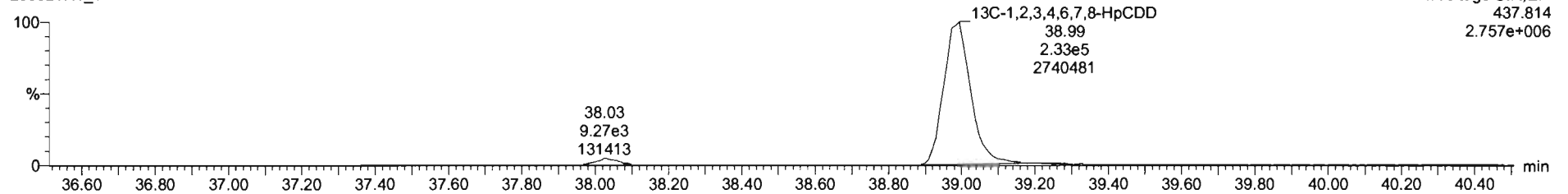
13C-1,2,3,4,6,7,8-HpCDD

200821R1\_1



F4: Voltage SIR, EI+  
435.817  
2.793e+006

200821R1\_1

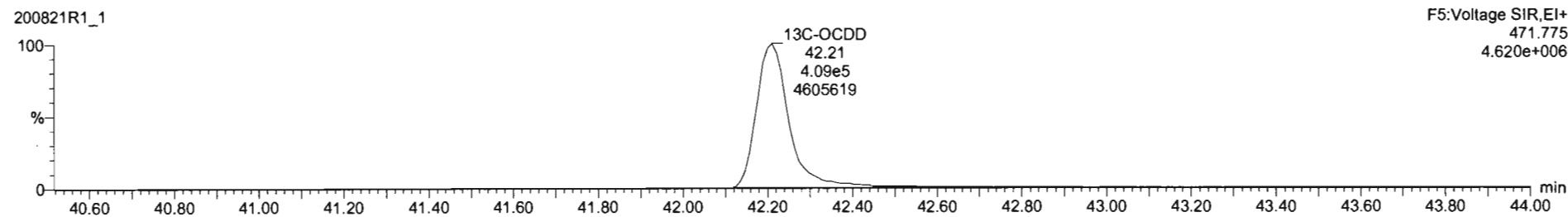
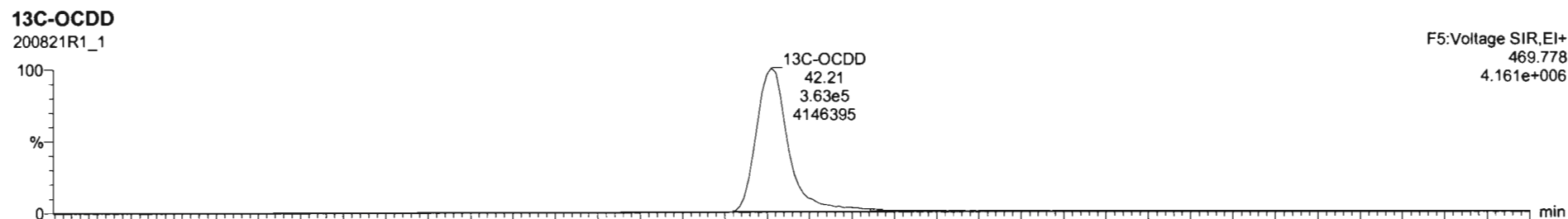
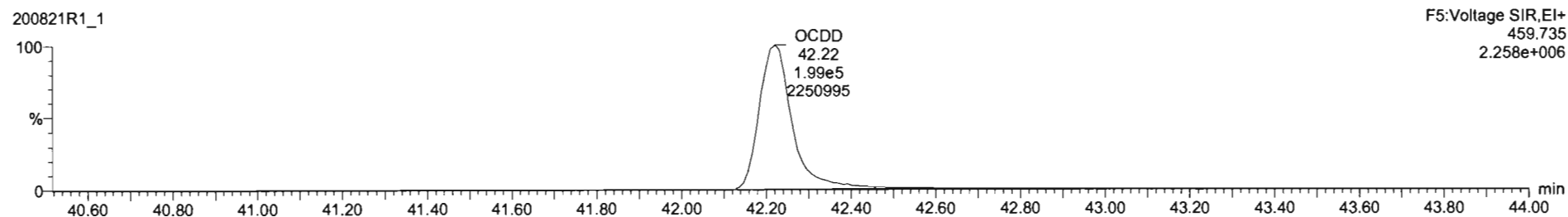
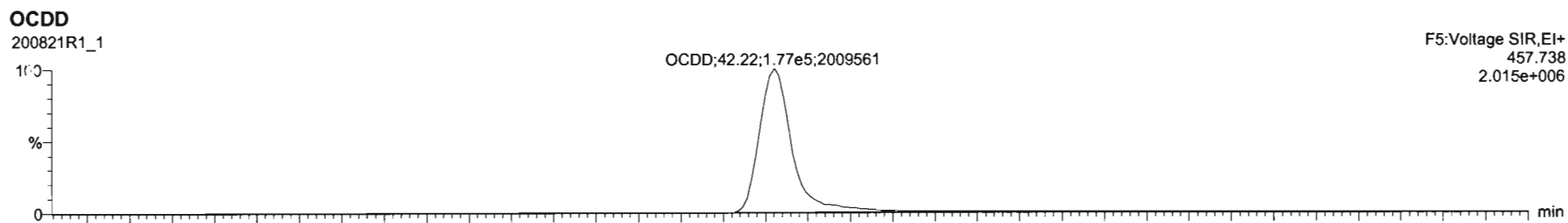


F4: Voltage SIR, EI+  
437.814  
2.757e+006

Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

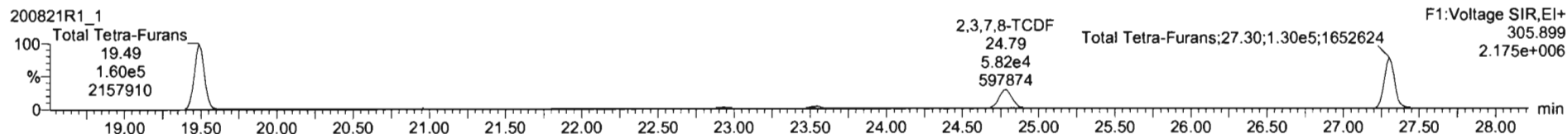
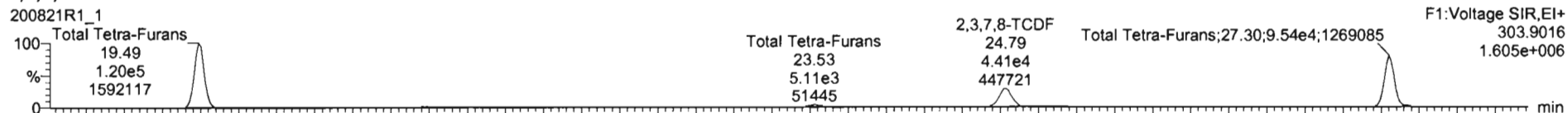


Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

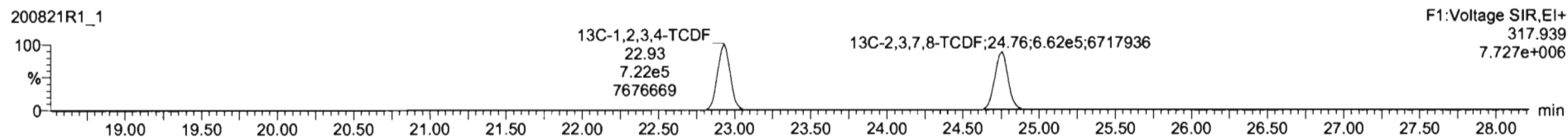
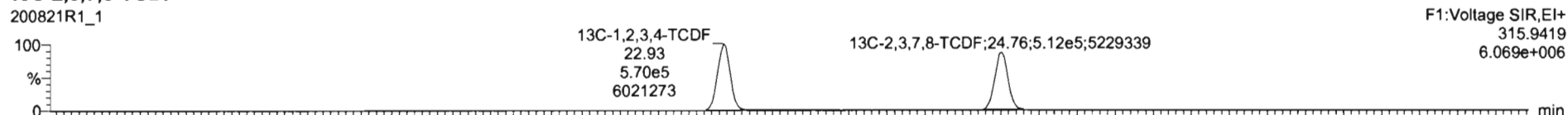
Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

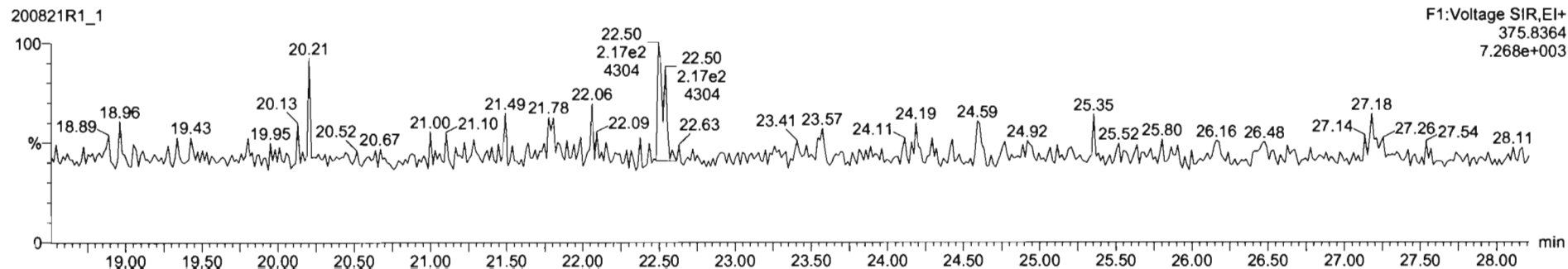
**2,3,7,8-TCDF**



**13C-2,3,7,8-TCDF**



**DPE1**



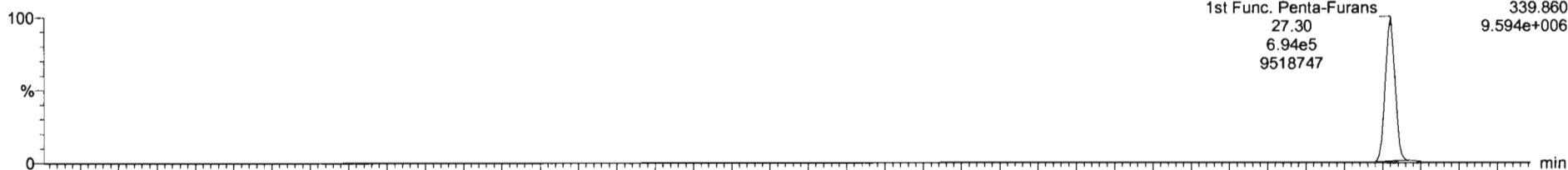
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

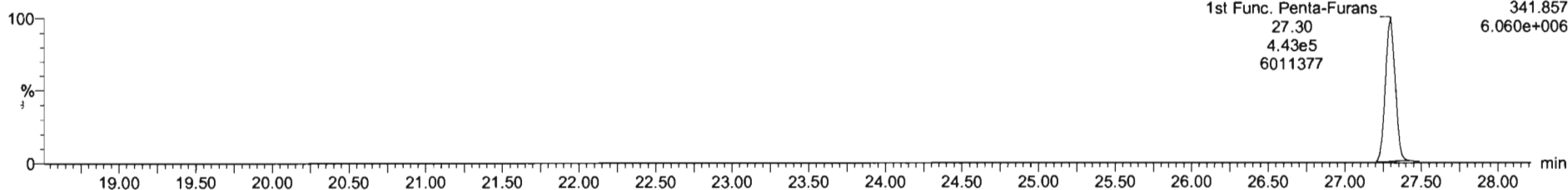
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1st Func. Penta-Furans

200821R1\_1

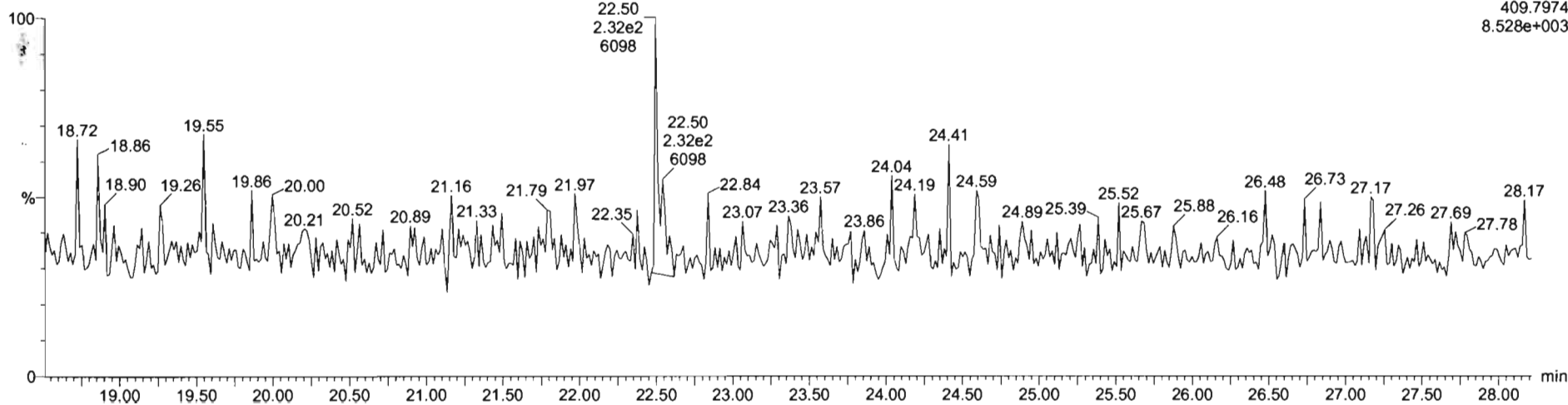


200821R1\_1



DPE6

200821R1\_1



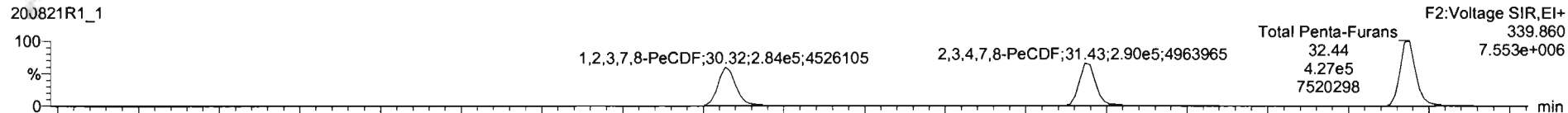
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

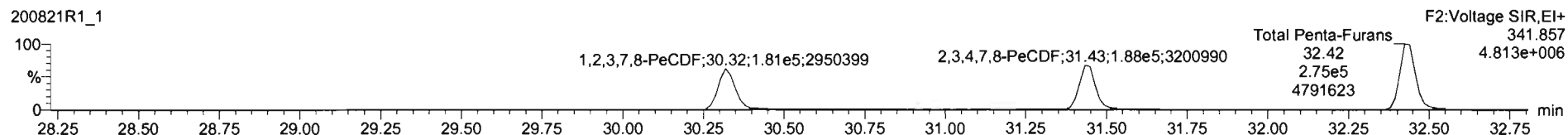
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,7,8-PeCDF**

200821R1\_1

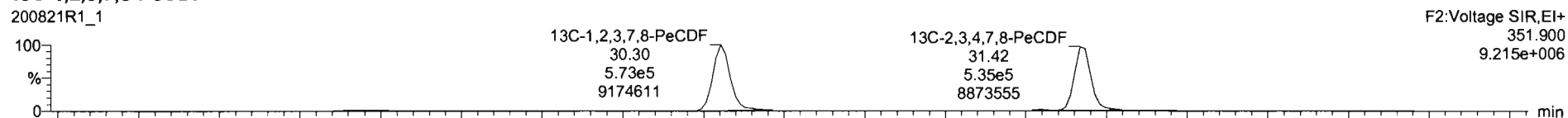


200821R1\_1

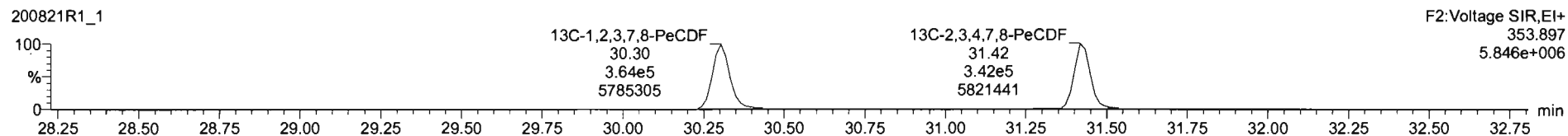


**13C-1,2,3,7,8-PeCDF**

200821R1\_1

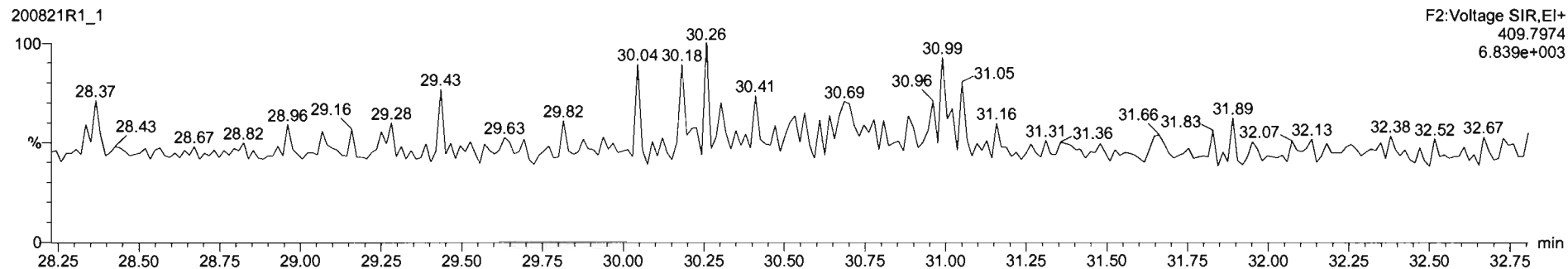


200821R1\_1



**DPE2**

200821R1\_1

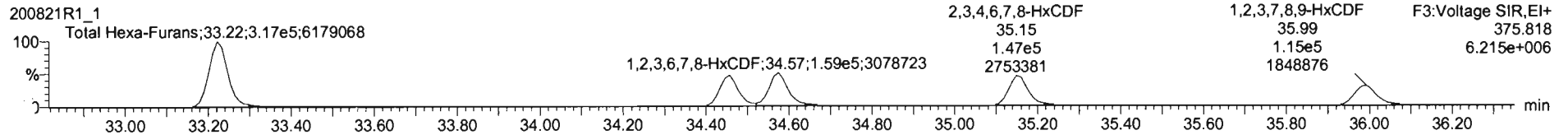
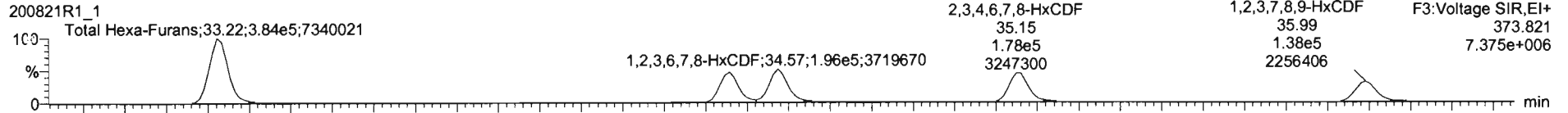


Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

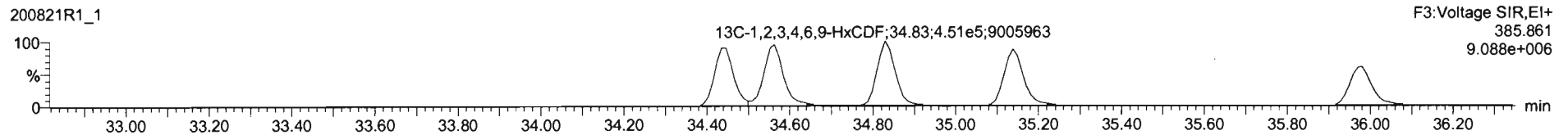
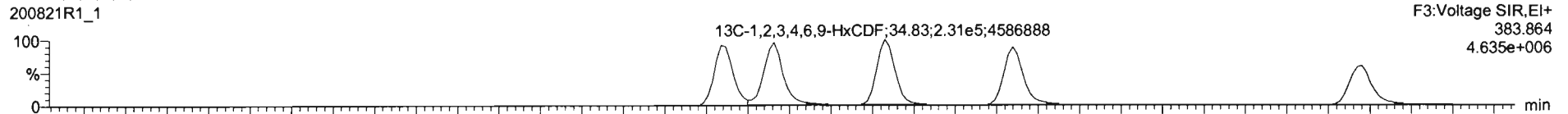
Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

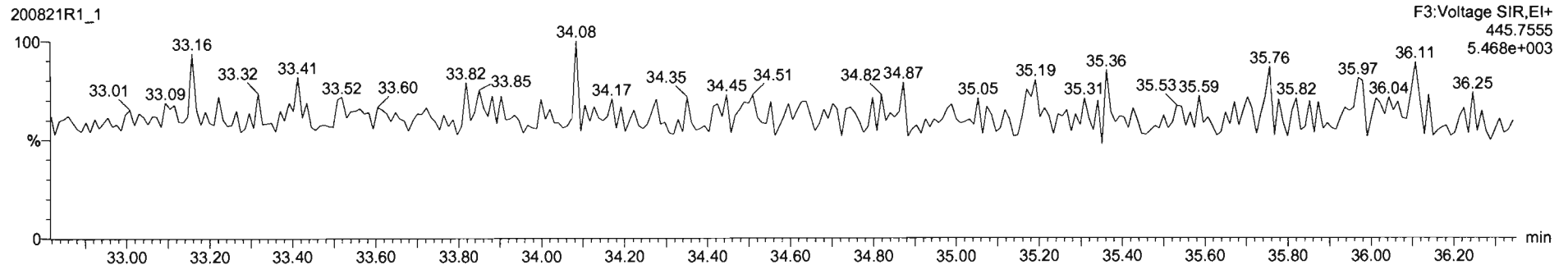
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



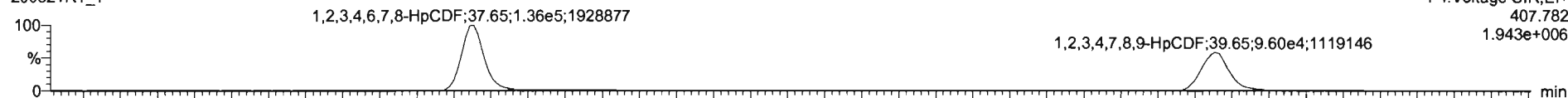
Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

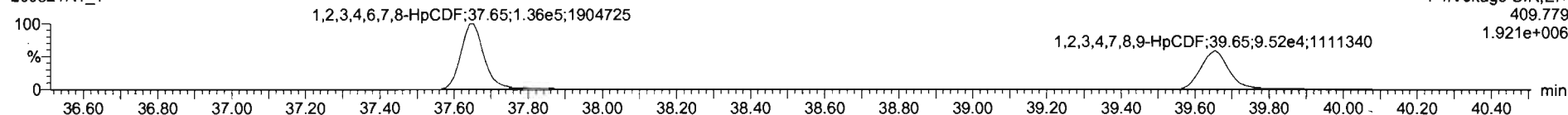
Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,4,6,7,8-HpCDF**

200821R1\_1

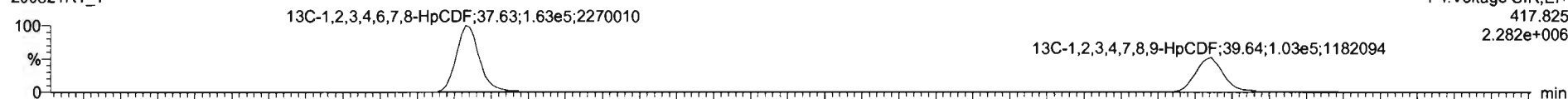


200821R1\_1

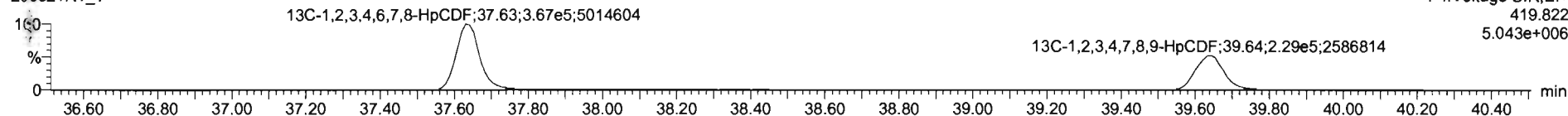


**13C-1,2,3,4,6,7,8-HpCDF**

200821R1\_1

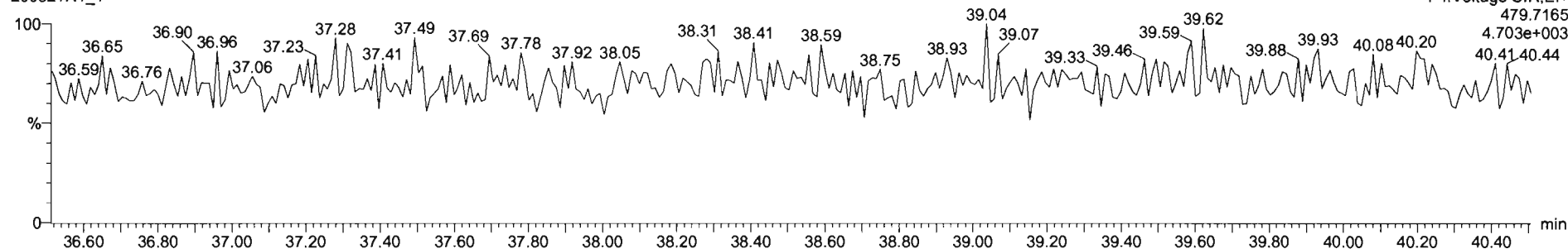


200821R1\_1



**DPE4**

200821R1\_1

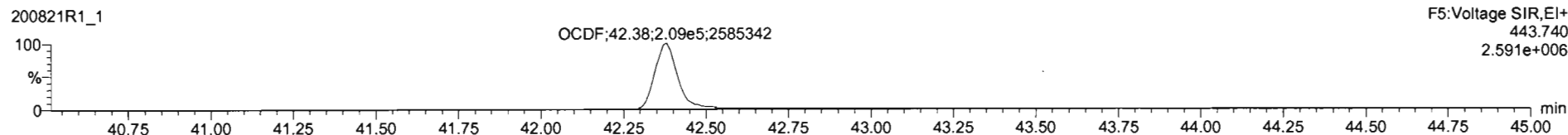
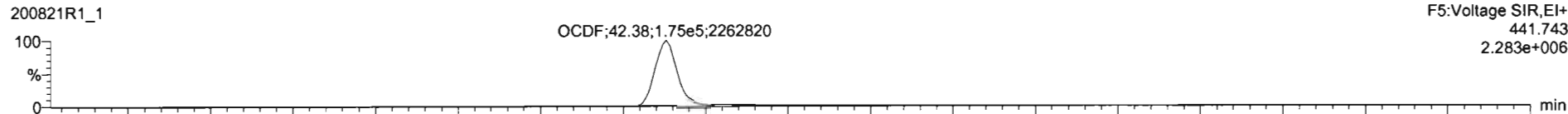


Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

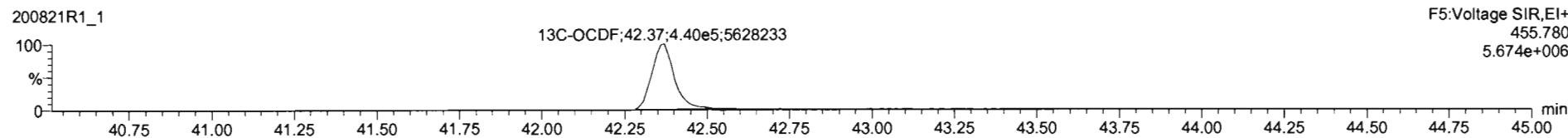
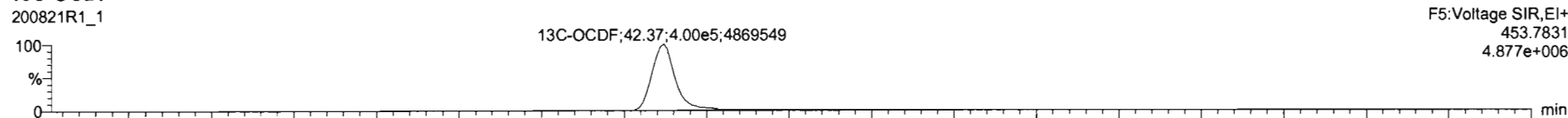
Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

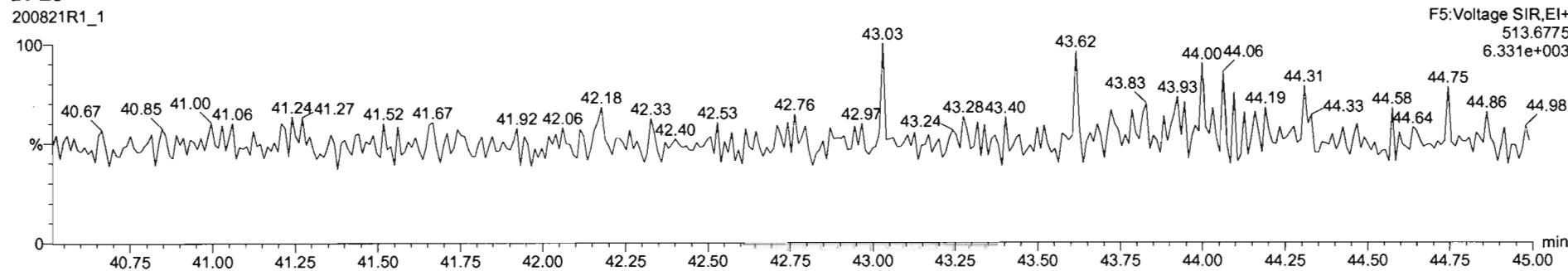
**OCDF**



**13C-OCDF**

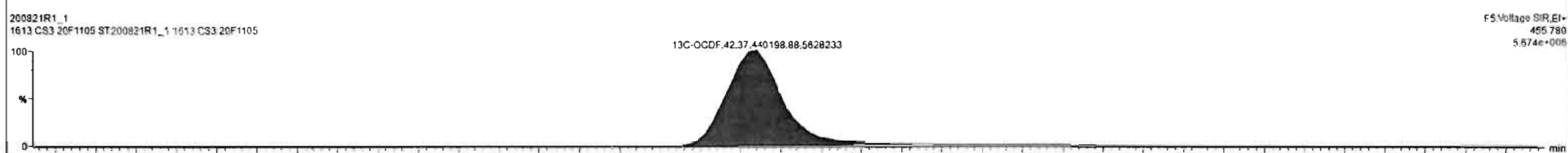
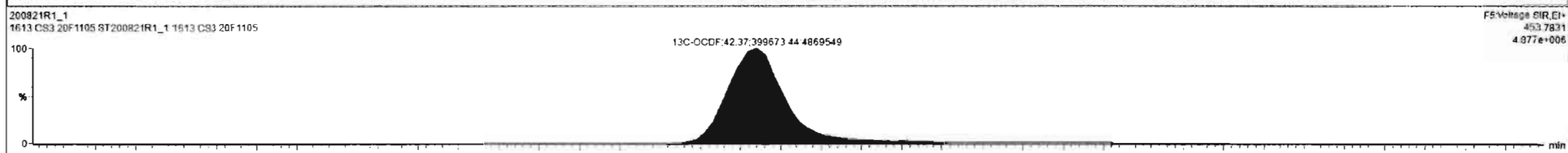
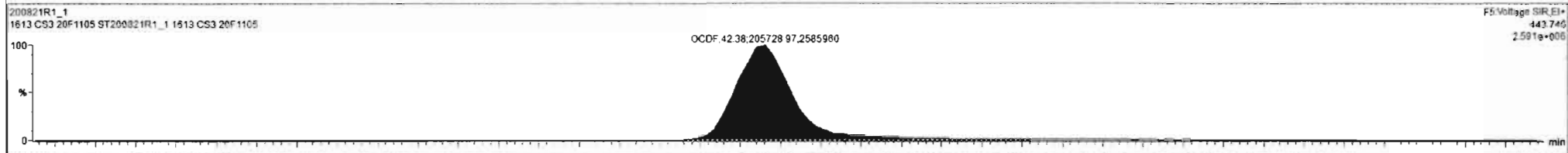
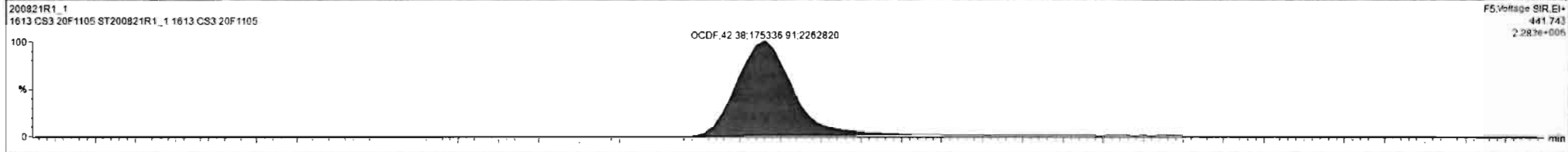


**DPE5**





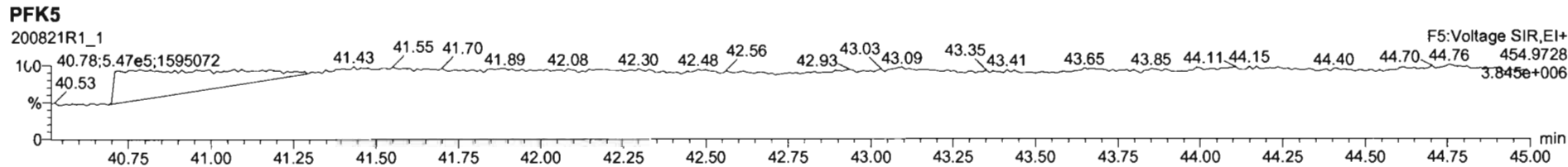
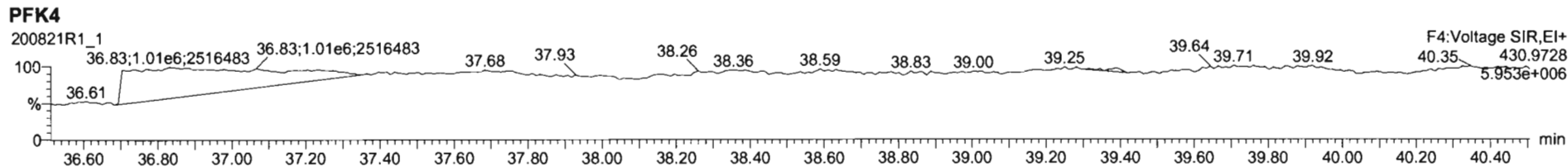
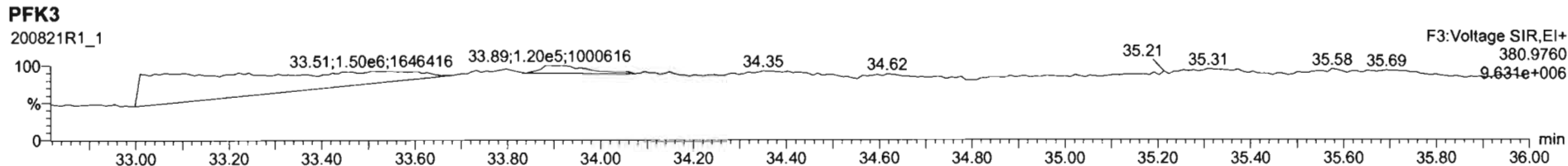
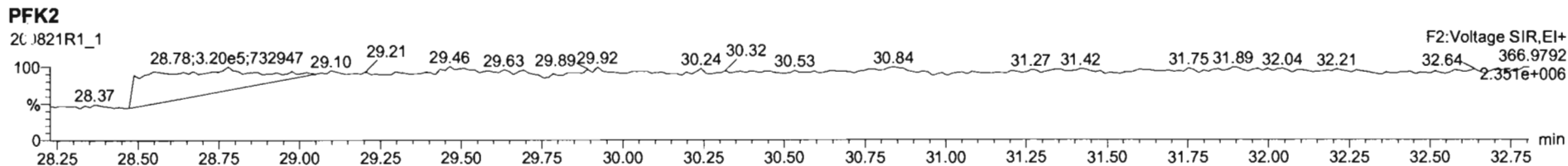
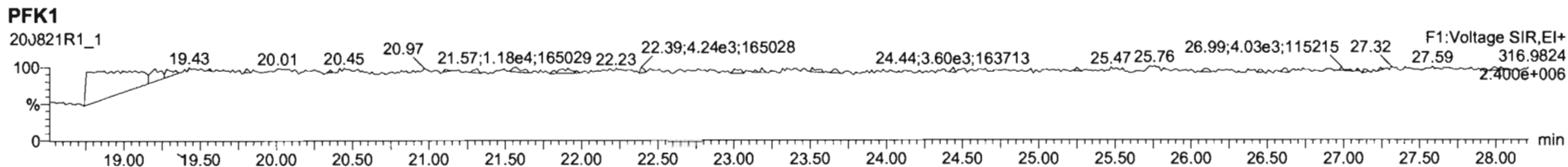
#	Name	Resp	IS Resp	Pred RA	RA	I/Y	R/R	Pred RT	RT	RT flag	Pred RRT	RRT	Conc.	%Rec	STD out	
17	17	CCDF	3.81e5	8.40e5	0.89	0.85	NO	0.8957	42.37	42.38	NO	1.000	1.000	101	101	NO
18	18	13C-2,3,7,8-TCDD	8.95e5	8.10e5	0.77	0.79	NO	1.1039	25.87	25.91	NO	1.032	1.033	100	100	NO
19	19	13C-1,2,3,7,8-PeCDD	8.34e5	8.10e5	0.63	0.64	NO	0.7575	31.53	31.75	NO	1.258	1.267	103	103	NO
20	20	13C-1,2,3,4,7,8-HxCDD	4.78e5	6.82e5	1.24	1.28	NO	0.8471	35.31	35.31	NO	1.014	1.014	108	108	NO
21	21	13C-1,2,3,6,7,8-HxCDD	5.96e5	6.82e5	1.24	1.28	NO	0.8050	35.41	35.40	NO	1.017	1.017	109	109	NO
22	22	13C-1,2,3,7,8,9-HxCDD	5.48e5	6.82e5	1.24	1.25	NO	0.7283	35.68	35.66	NO	1.025	1.024	111	111	NO
23	23	13C-1,2,3,4,6,7,8-HpCDD	4.72e5	6.82e5	1.04	1.02	NO	0.6108	39.05	38.99	NO	1.121	1.120	113	113	NO
24	24	13C-OCDD	7.72e5	6.82e5	0.89	0.89	NO	0.5128	42.25	42.21	NO	1.213	1.212	221	110	NO



Dataset: U:\VG12.PRO\Results\200821R1\200821R\_1.qld

Last Altered: Friday, August 21, 2020 12:33:18 Pacific Daylight Time  
Printed: Friday, August 21, 2020 12:47:51 Pacific Daylight Time

Name: 200821R1\_1, Date: 21-Aug-2020, Time: 11:46:45, ID: ST200821R1\_1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

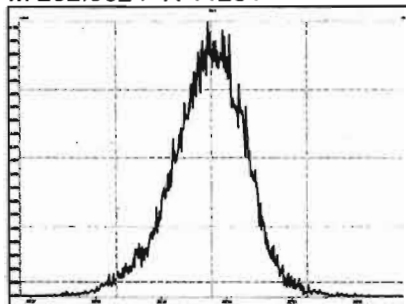


Resolution Check Report

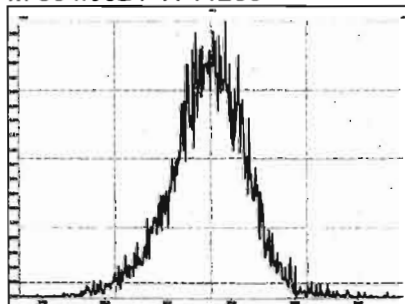
MassLynx 4.1 SCN815

Printed: Friday, August 21, 2020 23:44:49 Pacific Daylight Time

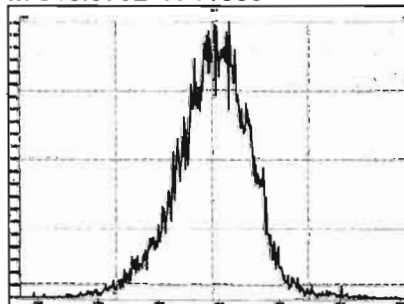
M 292.9824 R 11261



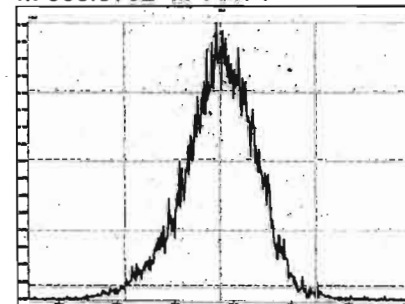
M 304.9824 R 11290



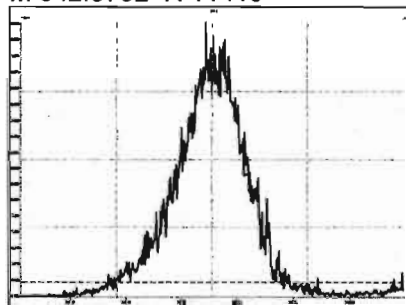
M 318.9792 R 11338



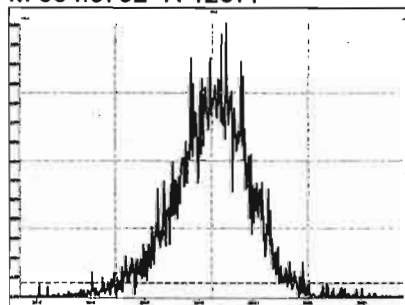
M 330.9792 R 11471



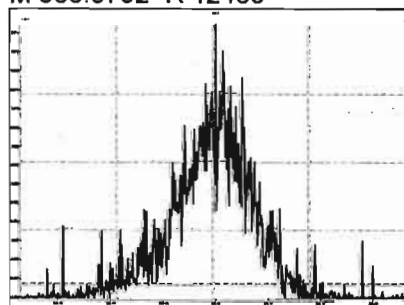
M 342.9792 R 11415



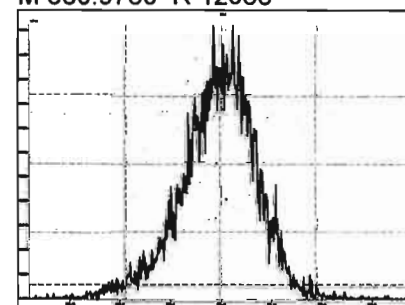
M 354.9792 R 12877



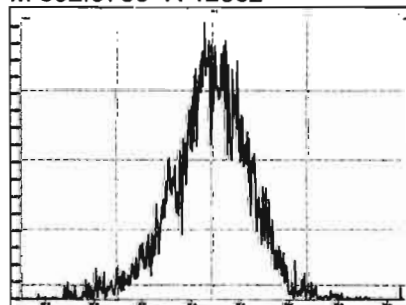
M 366.9792 R 12469



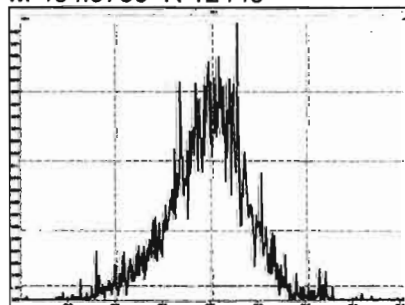
M 380.9760 R 12068



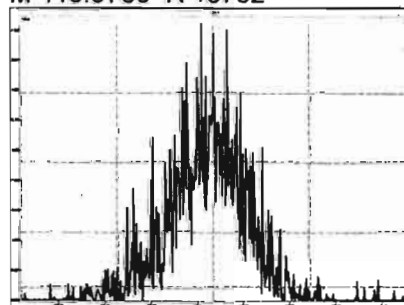
M 392.9760 R 12032



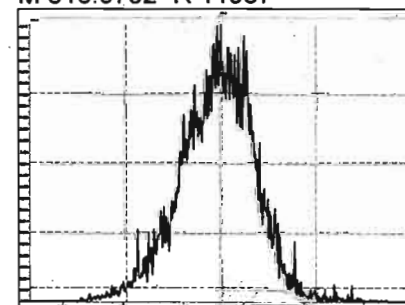
M 404.9760 R 12440



M 416.9760 R 13762

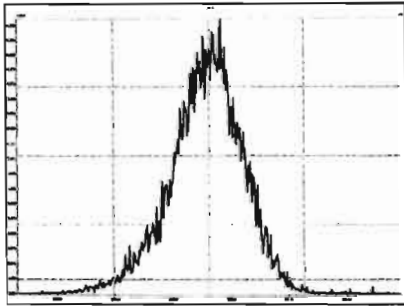


M 318.9792 R 11937

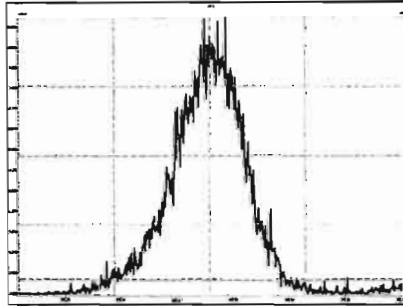


Printed: Friday, August 21, 2020 23:44:49 Pacific Daylight Time

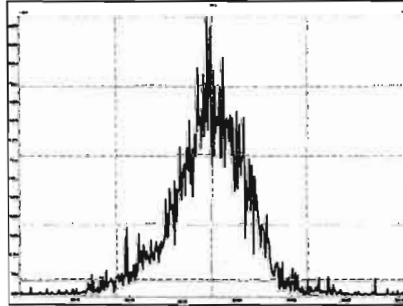
M 330.9792 R 11794



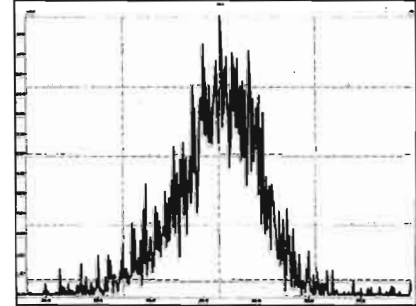
M 342.9792 R 11476



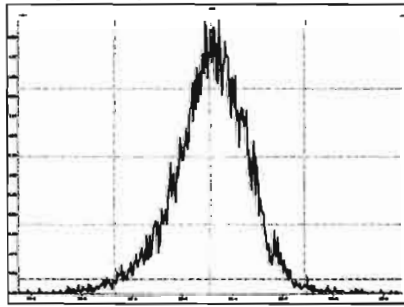
M 354.9792 R 12820



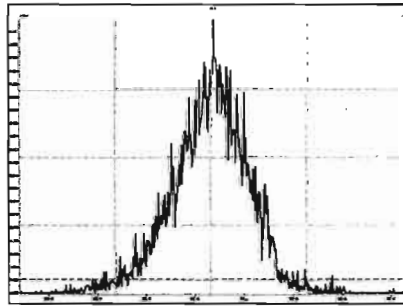
M 366.9792 R 12435



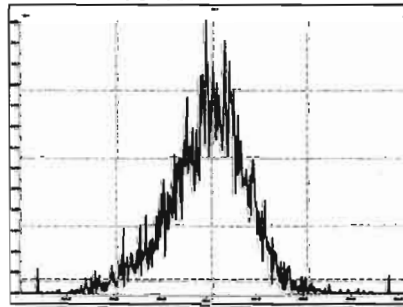
M 380.9760 R 11386



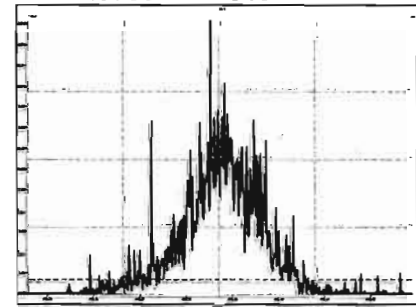
M 392.9760 R 11988



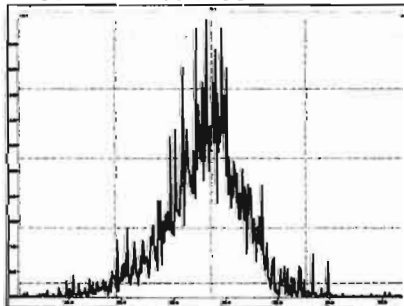
M 404.9760 R 12445



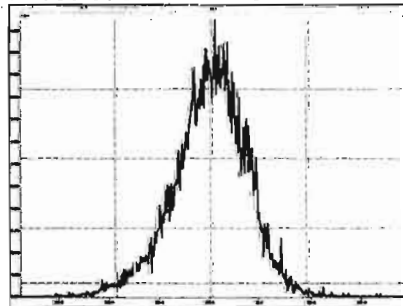
M 416.9760 R 15516



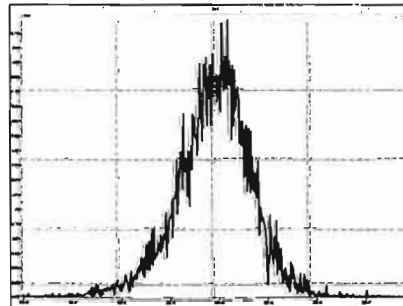
M 366.9792 R 11860



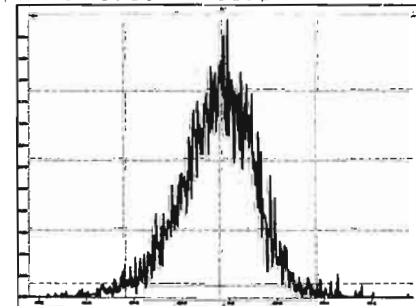
M 380.9760 R 11628



M 392.9760 R 12077

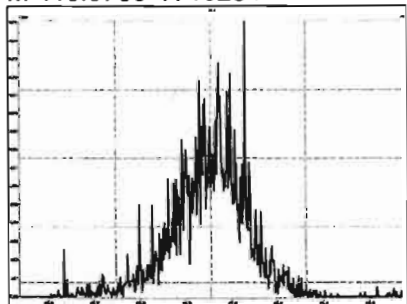


M 404.9760 R 13370

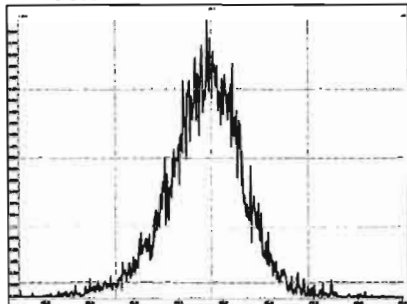


Printed: Friday, August 21, 2020 23:44:49 Pacific Daylight Time

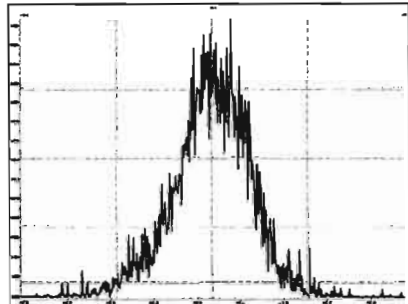
M 416.9760 R 13234



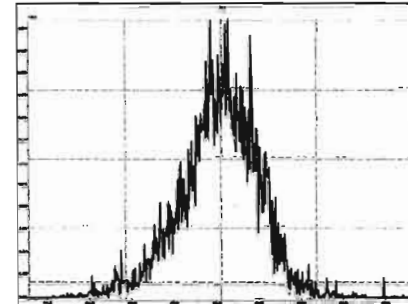
M 430.9728 R 12138



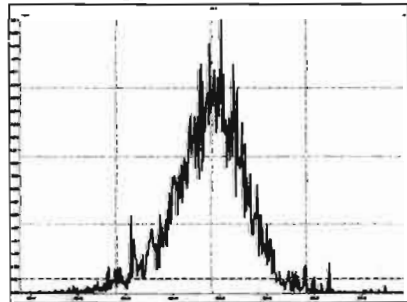
M 442.9728 R 11848



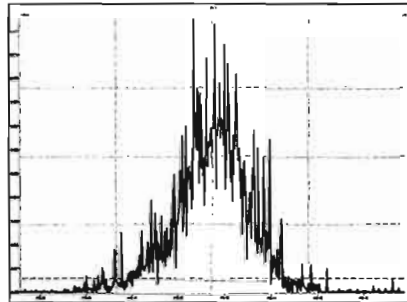
M 454.9728 R 12628



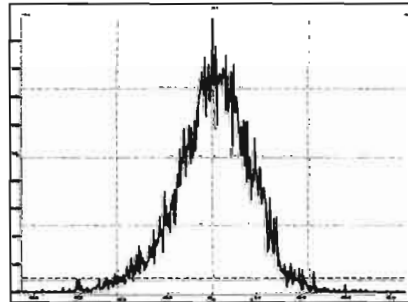
M 404.9760 R 12437



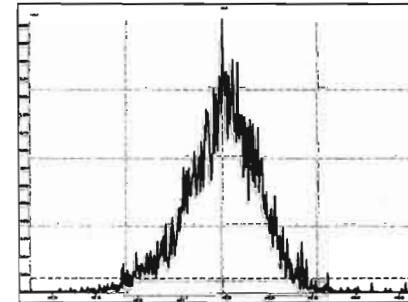
M 416.9760 R 15245



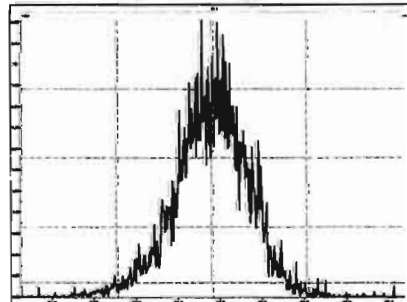
M 430.9728 R 11471



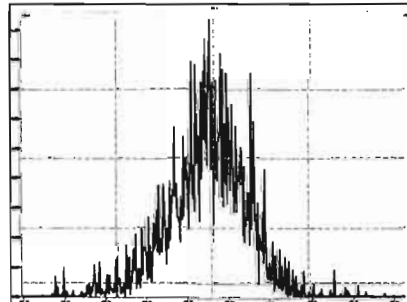
M 442.9728 R 11876



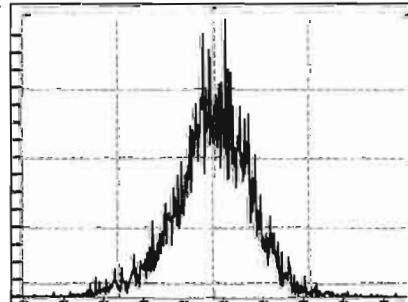
M 454.9728 R 12230



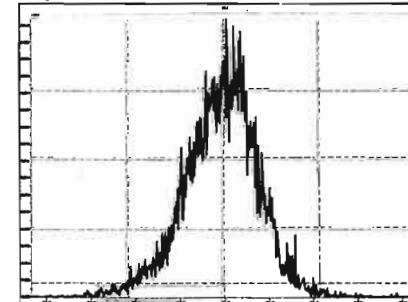
M 466.9728 R 14681



M 480.9696 R 11908

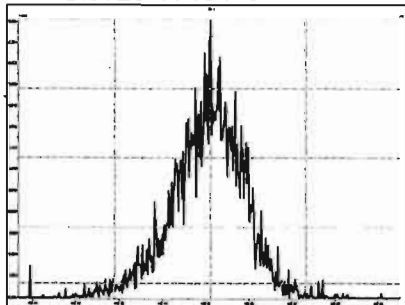


M 430.9728 R 12081

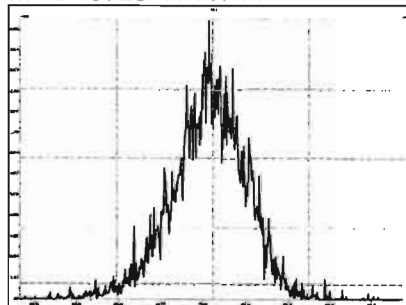


Printed: Friday, August 21, 2020 23:44:49 Pacific Daylight Time

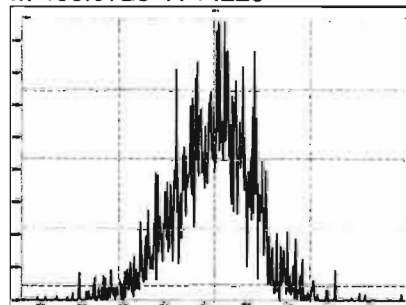
M 442.9728 R 13416



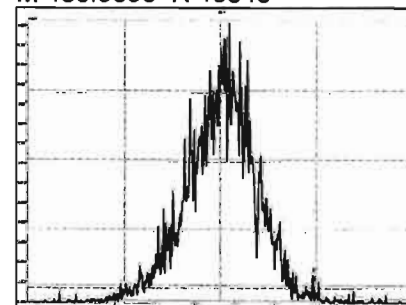
M 454.9728 R 11714



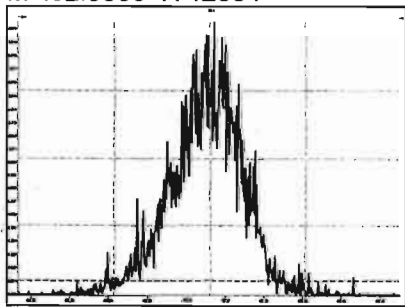
M 466.9728 R 14226



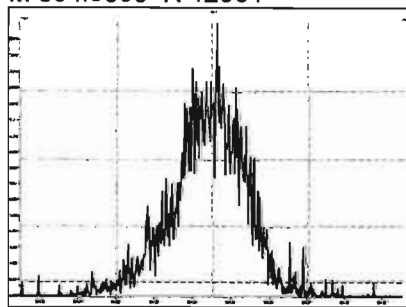
M 480.9696 R 13646



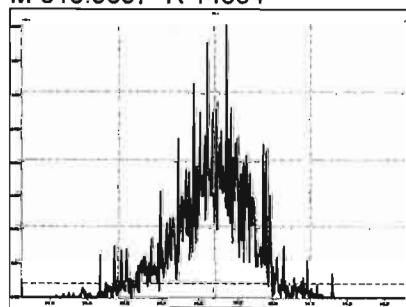
M 492.9696 R 12334



M 504.9696 R 12961



M 516.9697 R 14654



# HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

**Beg. Calibration ID:** ST200902D1-1

**Reviewed By:** CI 09/03/2020

*Initials & Date*

**End Calibration ID:** ST200902D1-3

	<u>Beg.</u>	<u>End</u>
<b>Ion abundance within QC limits?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Concentrations within criteria?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>TCDD/TCDF Valleys &lt;25%</b>	<input checked="" type="checkbox"/>	<input type="checkbox" value="NA"/>
<b>First and last eluters present?</b>	<input type="checkbox" value="NA"/>	<input type="checkbox" value="NA"/>
<b>Retention Times within criteria?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Verification Std. named correctly?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>(ST-Year-Month-Day-VG ID)</b>		
<b>Forms signed and dated?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Correct ICAL referenced?</b>	<u>DB</u>	<u>DB</u>
<b><u>Run Log:</u></b>		
<b>- Correct instrument listed?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>- Samples within 12 hour clock?</b>	<input type="checkbox" value="ψ"/>	<input type="checkbox" value="N"/>
<b>- Bottle position verified?</b>	<u>DB</u>	

	<u>Beg.</u>	<u>End</u>
<b>Mass resolution ≥</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614    1699    429    1613/1668/8280		
<b>Intergrated peaks display correctly?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>GC Break &lt;20%</b>	<input type="checkbox" value="NA"/>	
<b><u>8280 CS1 End Standard:</u></b>		
<b>- Ratios within limits, S/N &lt;2.5:1, CS1 within 12 hours</b>	<input type="checkbox" value="NA"/>	

**Comments:**

Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_2.qld

Last Altered: Wednesday, September 02, 2020 12:26:01 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 12:27:24 Pacific Daylight Time

*JB 9/2/20 C7 09/03/2020*

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200902D1\_2, Date: 02-Sep-2020, Time: 11:54:18, ID: ST200902D1-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	5.32e3	0.79	NO	0.944	1.000	17.551	17.55	1.000	1.001	9.0375	90.4	0.279	9.04
2	2 13C-2,3,7,8-TCDF	6.23e4	0.74	NO	1.01	1.000	17.546	17.54	1.133	1.136	96.810	96.8	0.832	
3	3 13C-1,2,3,4-TCDF	6.39e4	0.78	NO	1.00	1.000	15.440	15.44	1.000	1.000	100.00	100	0.839	

*1613 8290*

*84-120 80-120 71-140 70-130*



Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Thursday, September 03, 2020 12:05:17 Pacific Daylight Time

Printed: Thursday, September 03, 2020 12:05:30 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48

Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

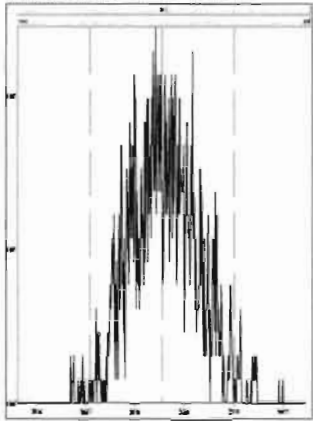
Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	200902D1_1	CP200902D1-1 DB-225 CPSM	02-Sep-20	11:24:09
2	200902D1_2	ST200902D1-1 1613 CS3 20F1105	02-Sep-20	11:54:18
3	200902D1_3	ST200902D1-2 M23 CS3 18C2612	02-Sep-20	12:25:56
4	200902D1_4	SOLVENT BLANK	02-Sep-20	12:57:39
5	200902D1_5	2001396-01RE2 GN03-M23-R1 0.25	02-Sep-20	13:29:25
6	200902D1_6	2001396-02RE2 GN03-M23-R2 0.25	02-Sep-20	14:01:05
7	200902D1_7	2001396-03RE2 GN03-M23-R3 0.25	02-Sep-20	14:32:47
8	200902D1_8	B0G0060-DUP1RE1 Duplicate 10	02-Sep-20	15:04:30
9	200902D1_9	B0G0186-DUP1RE1 Duplicate 10	02-Sep-20	15:36:12
10	200902D1_10	2001510-01RE1 PDI-061SC-A-00-01-200428 ...	02-Sep-20	16:07:58
11	200902D1_11	2001613-01RE1 GW-1167 0.96654	02-Sep-20	16:39:38
12	200902D1_12	2001683-02RE1 LS-3-20200804 0.40332	02-Sep-20	17:11:20
13	200902D1_13	2001683-05RE1 LS-6-20200804 0.40643	02-Sep-20	17:42:57
14	200902D1_14	2001683-06RE1 LS-7-20200804 0.40351	02-Sep-20	18:14:39
15	200902D1_15	2001683-10RE1 LS-109-20200805 0.40531	02-Sep-20	18:46:21
16	200902D1_16	2001683-07RE2 LS-7-20200804-FD 0.40193	02-Sep-20	19:17:56
17	200902D1_17	2001683-08RE1 LS-8-20200804 0.40672	02-Sep-20	19:49:39
18	200902D1_18	SOLVENT BLANK	02-Sep-20	20:21:20
19	200902D1_19	ST200902D1-3 1613 CS3 20F1105	02-Sep-20	20:51:29

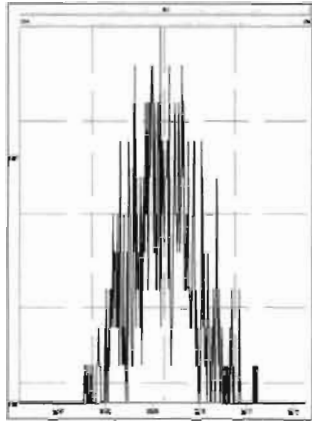
File: Experiment: tcdf\_db225.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, September 02, 2020 11:22:05 Pacific Daylight Time

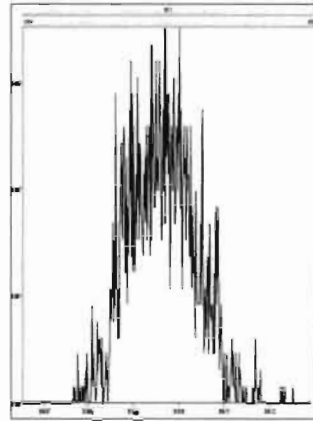
M 292.9824 R 12313



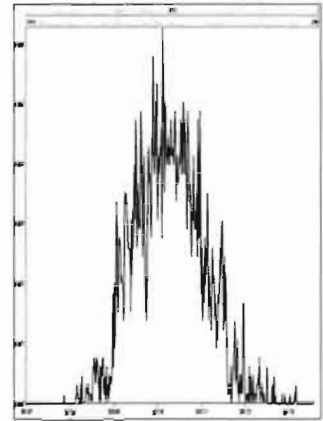
M 304.9824 R 13230



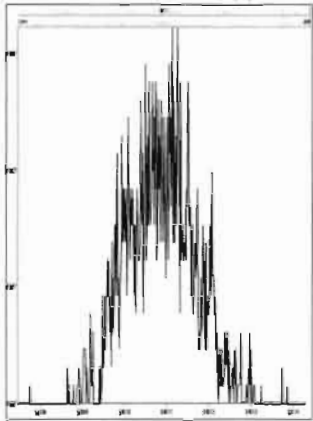
M 318.9792 R 12558



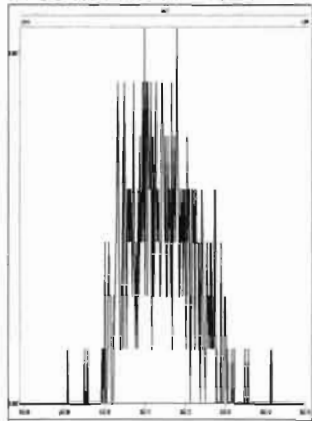
M 330.9792 R 12135



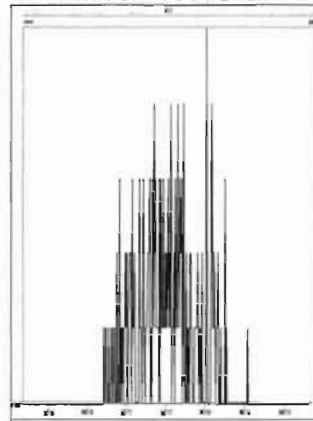
M 342.9792 R 11959



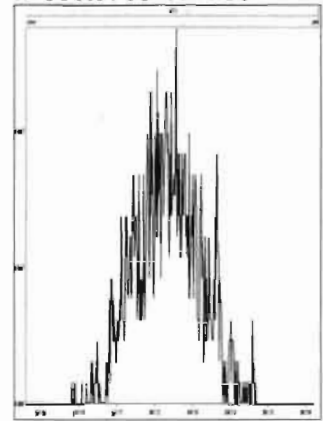
M 354.9792 R 14621

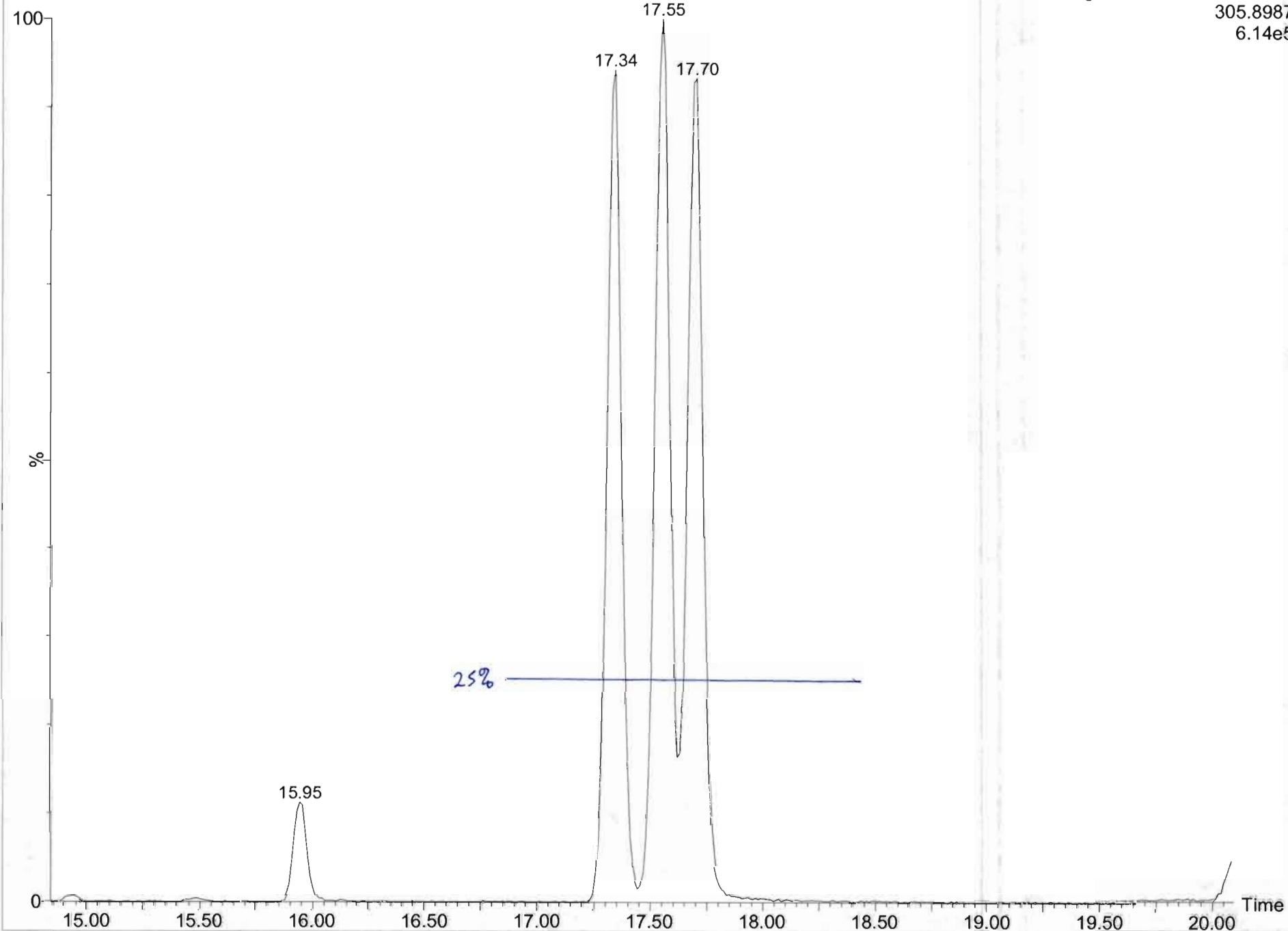


M 366.9792 R 37312



M 380.9760 R 12561





Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_1.qld

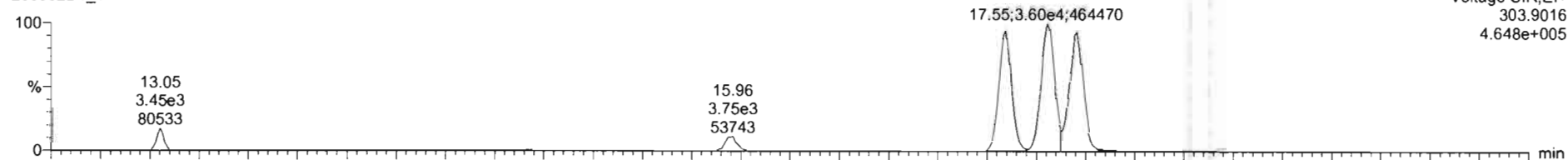
Last Altered: Wednesday, September 02, 2020 12:22:05 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 12:23:33 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\ldb-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

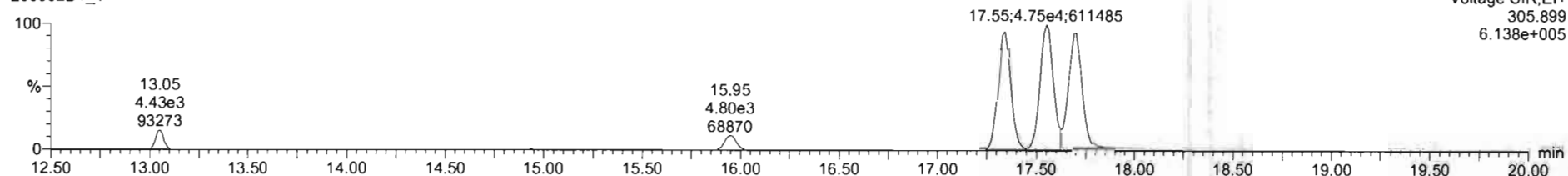
Name: 200902D1\_1, Date: 02-Sep-2020, Time: 11:24:09, ID: CP200902D1-1 DB-225 CPSM, Description: DB-225 CPSM

2,3,7,8-TCDF

200902D1\_1

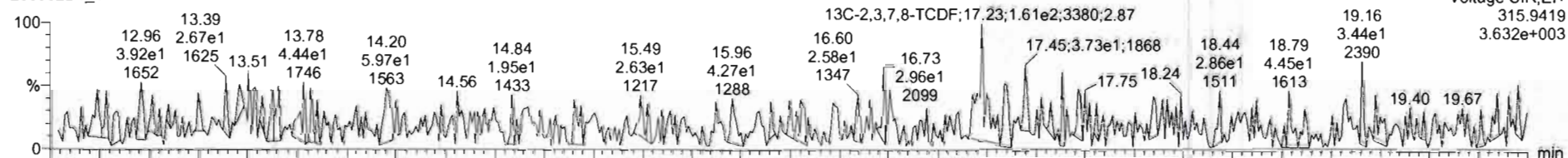


200902D1\_1

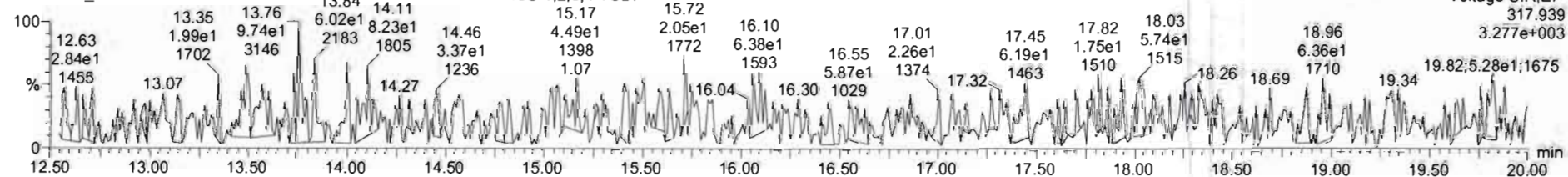


13C-2,3,7,8-TCDF

200902D1\_1



200902D1\_1

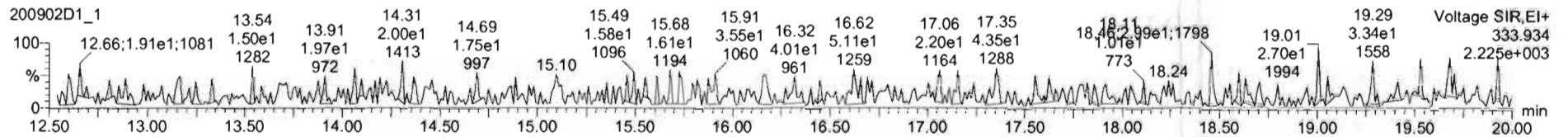
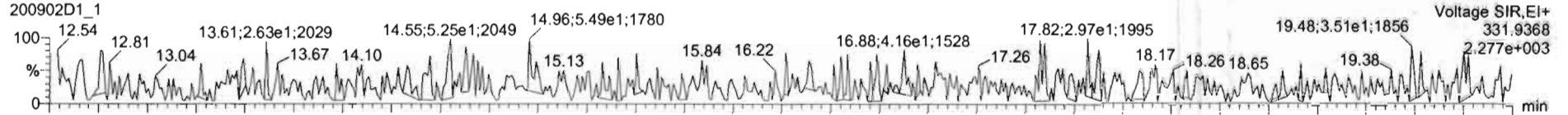


Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_1.qld

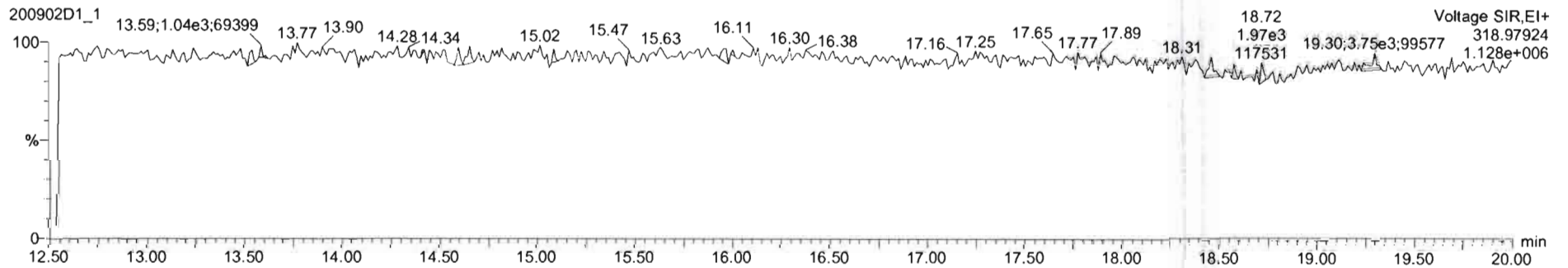
Last Altered: Wednesday, September 02, 2020 12:22:05 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 12:23:33 Pacific Daylight Time

Name: 200902D1\_1, Date: 02-Sep-2020, Time: 11:24:09, ID: CP200902D1-1 DB-225 CPSM, Description: DB-225 CPSM

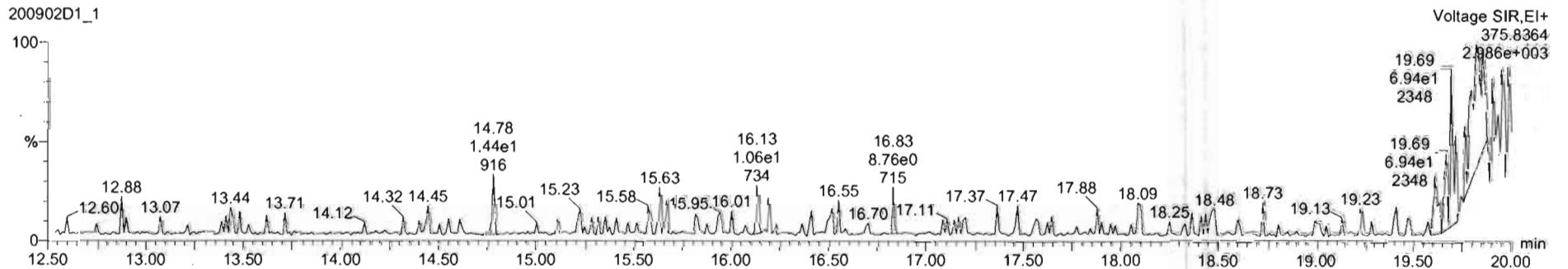
13C-1,2,3,4-TCDD



PFK1



DPE1



Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_2.qld

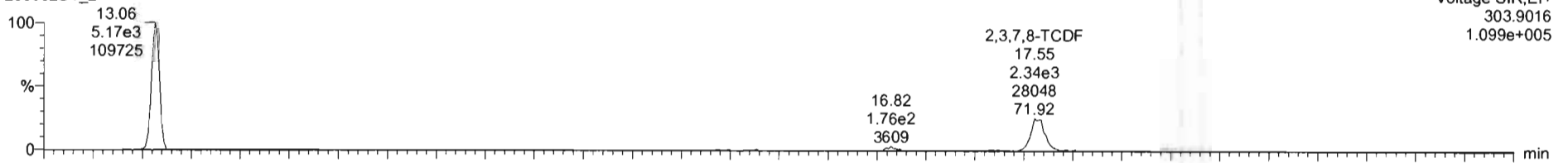
Last Altered: Wednesday, September 02, 2020 12:26:01 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 12:27:06 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 19 Aug 2020 10:43:48  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

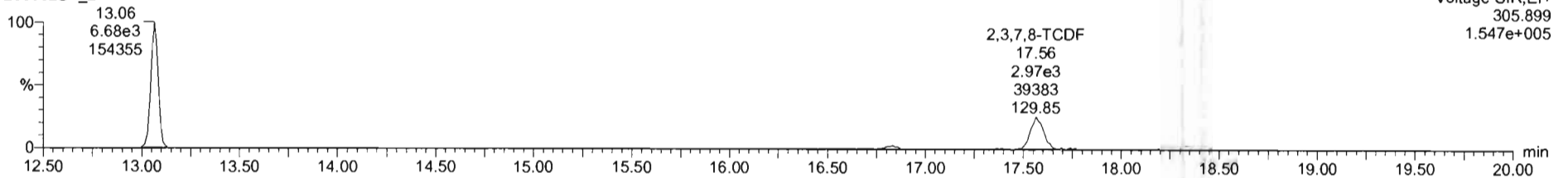
Name: 200902D1\_2, Date: 02-Sep-2020, Time: 11:54:18, ID: ST200902D1-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

2,3,7,8-TCDF

200902D1\_2

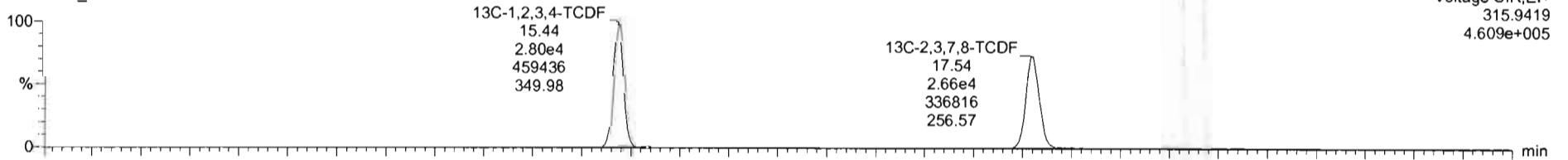


200902D1\_2

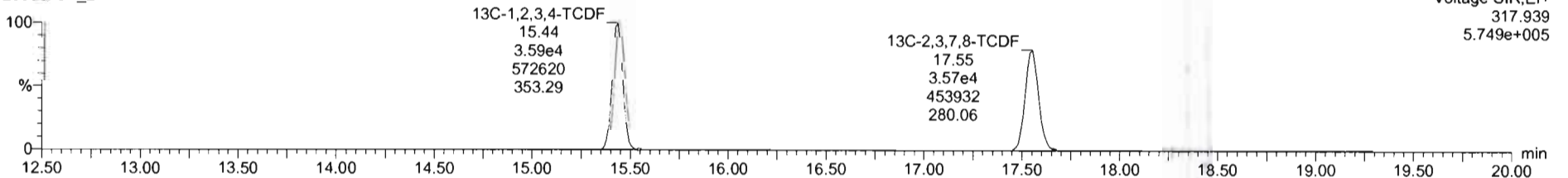


13C-2,3,7,8-TCDF

200902D1\_2



200902D1\_2



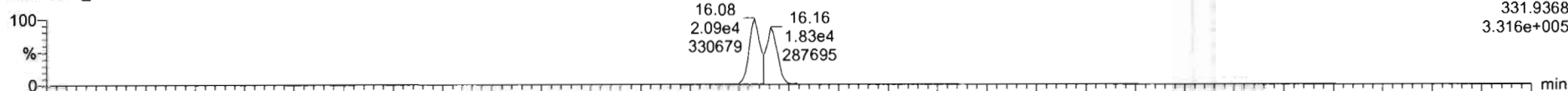
Dataset: U:\VG7.PRO\Results\200902D1\200902D1\_2.qld

Last Altered: Wednesday, September 02, 2020 12:26:01 Pacific Daylight Time  
Printed: Wednesday, September 02, 2020 12:27:06 Pacific Daylight Time

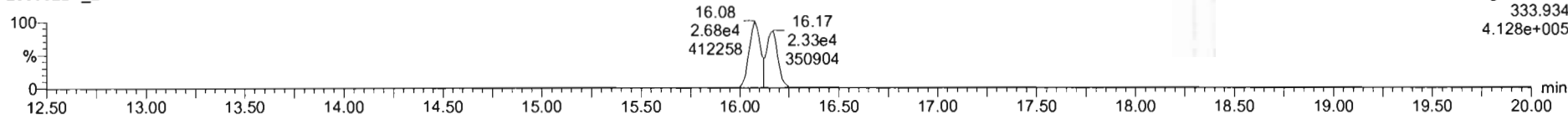
Name: 200902D1\_2, Date: 02-Sep-2020, Time: 11:54:18, ID: ST200902D1-1 1613 CS3 20F1105, Description: 1613 CS3 20F1105

13C-1,2,3,4-TCDD

200902D1\_2

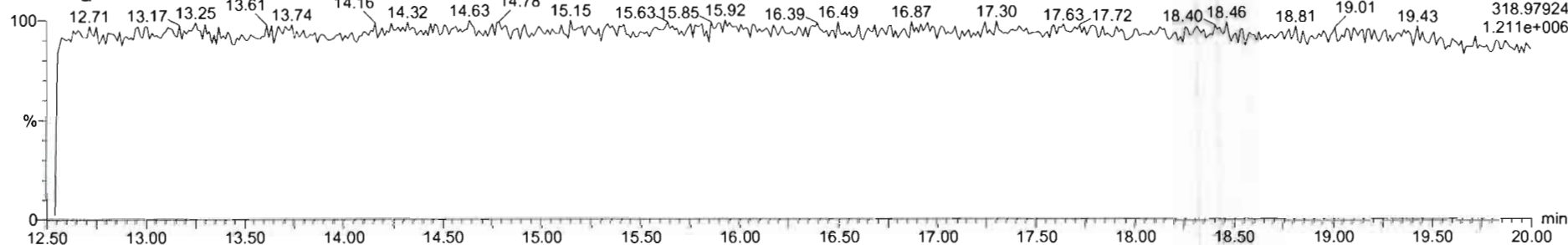


200902D1\_2



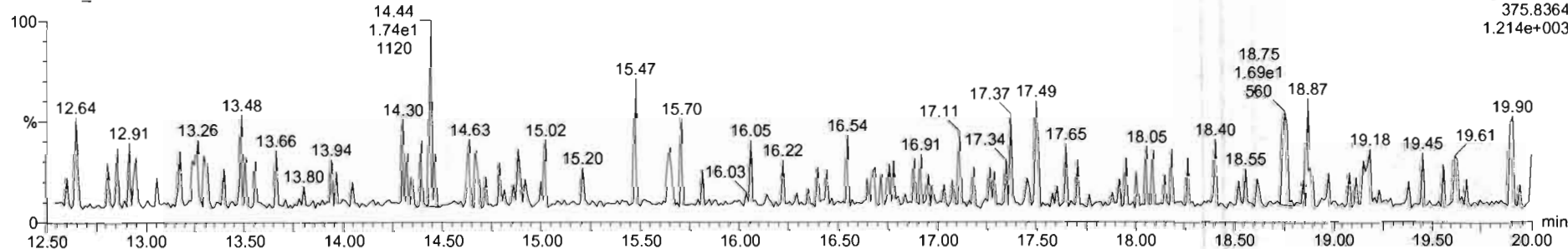
PFK1

200902D1\_2



DPE1

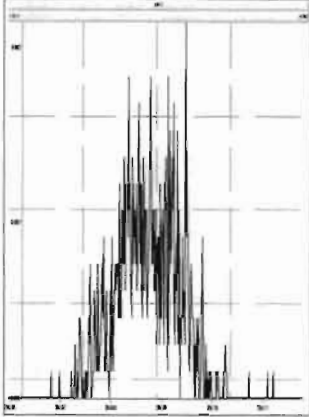
200902D1\_2



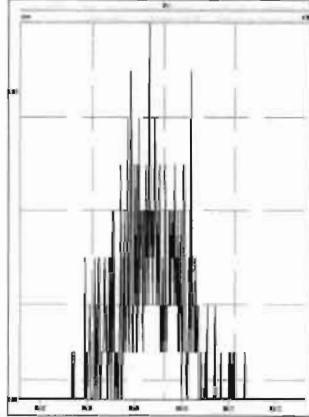
File: Experiment: tcdf\_db225.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, September 02, 2020 21:25:20 Pacific Daylight Time

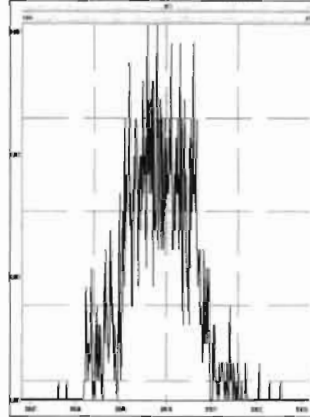
M 292.9824 R 17248



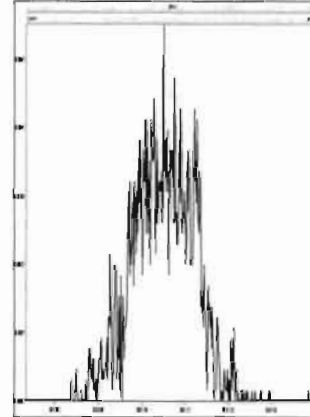
M 304.9824 R 17245



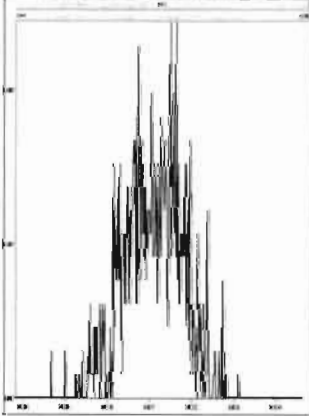
M 318.9792 R 15626



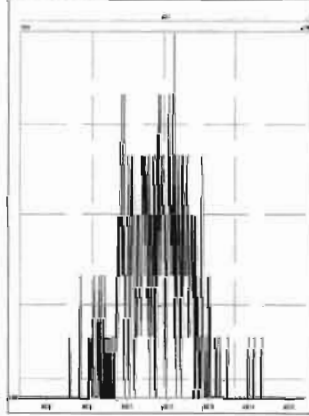
M 330.9792 R 17006



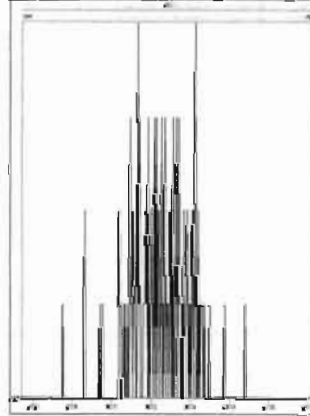
M 342.9792 R 16553



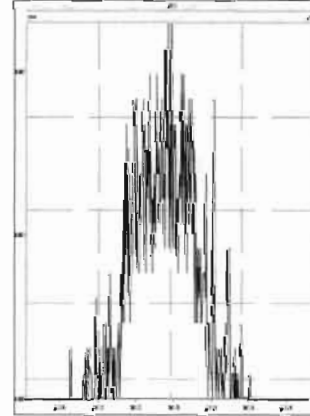
M 354.9792 R 16668



M 366.9792 R 34246



M 380.9760 R 15721





## **INITIAL CALIBRATION**

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

DB 6/24/20 C706/25/2020

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24  
 Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

**Compound name: 2,3,7,8-TCDD**

Response Factor: 1.07128  
 RRF SD: 0.0960181, Relative SD: 8.96291  
 Response type: Internal Std ( Ref 18 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	0.250	0.88	NO	26.07	1.001	2.77e2	1.04e5	0.248	-0.7	1.06	MM
2	200623D1_2	0.500	0.87	NO	26.07	1.001	4.06e2	7.85e4	0.482	-3.5	1.03	MM
3	200623D1_3	2.00	0.79	NO	26.05	1.001	1.42e3	7.13e4	1.85	-7.3	0.993	MM
4	200623D1_4	10.0	0.72	NO	26.08	1.001	7.32e3	7.25e4	9.43	-5.7	1.01	db
5	200623D1_5	40.0	0.79	NO	26.08	1.001	2.01e4	4.71e4	40.0	-0.1	1.07	bb
6	200623D1_6	300	0.78	NO	26.07	1.001	2.10e5	5.56e4	352	17.4	1.26	bb

**Compound name: 1,2,3,7,8-PeCDD**

Response Factor: 0.98834  
 RRF SD: 0.116168, Relative SD: 11.7538  
 Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	0.64	NO	30.61	1.000	8.38e2	7.46e4	1.14	-9.0	0.900	bd
2	200623D1_2	2.50	0.64	NO	30.63	1.001	1.23e3	5.49e4	2.26	-9.4	0.895	bb
3	200623D1_3	10.0	0.64	NO	30.63	1.001	4.56e3	5.00e4	9.22	-7.8	0.912	bb
4	200623D1_4	50.0	0.59	NO	30.63	1.001	2.41e4	4.95e4	49.2	-1.6	0.973	bb
5	200623D1_5	200	0.61	NO	30.65	1.001	7.22e4	3.39e4	216	7.9	1.07	bb
6	200623D1_6	1500	0.62	NO	30.63	1.001	7.91e5	4.45e4	1800	19.9	1.19	bb

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 1,2,3,4,7,8-HxCDD**

Response Factor: 1.0884

RRF SD: 0.108405, Relative SD: 9.96004

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.18	NO	33.92	1.000	7.92e2	5.88e4	1.24	-1.0	1.08	MM
2	200623D1_2	2.50	1.35	NO	33.94	1.001	1.07e3	4.19e4	2.35	-6.1	1.02	MM
3	200623D1_3	10.0	1.25	NO	33.94	1.001	3.87e3	3.83e4	9.28	-7.2	1.01	bd
4	200623D1_4	50.0	1.31	NO	33.94	1.000	2.00e4	3.88e4	47.3	-5.5	1.03	bd
5	200623D1_5	200	1.25	NO	33.94	1.000	6.24e4	2.86e4	201	0.4	1.09	bd
6	200623D1_6	1500	1.27	NO	33.93	1.000	7.21e5	3.70e4	1790	19.4	1.30	bd

**Compound name: 1,2,3,6,7,8-HxCDD**

Response Factor: 0.937588

RRF SD: 0.112031, Relative SD: 11.9489

Response type: Internal Std ( Ref 21 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.40	NO	34.03	1.000	7.52e2	6.92e4	1.16	-7.3	0.870	MM
2	200623D1_2	2.50	1.23	NO	34.03	1.000	1.13e3	4.81e4	2.51	0.4	0.941	MM
3	200623D1_3	10.0	1.36	NO	34.04	1.001	3.63e3	4.49e4	8.61	-13.9	0.808	db
4	200623D1_4	50.0	1.24	NO	34.05	1.001	2.04e4	4.55e4	47.8	-4.4	0.896	dd
5	200623D1_5	200	1.26	NO	34.05	1.000	6.38e4	3.26e4	209	4.4	0.979	db
6	200623D1_6	1500	1.20	NO	34.04	1.001	7.14e5	4.20e4	1810	20.7	1.13	db

**Compound name: 1,2,3,7,8,9-HxCDD**

Response Factor: 0.981225

RRF SD: 0.112738, Relative SD: 11.4895

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.31	NO	34.33	1.001	8.00e2	6.56e4	1.24	-0.5	0.977	MM
2	200623D1_2	2.50	1.28	NO	34.32	1.000	9.72e2	4.61e4	2.15	-14.1	0.843	MM

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 1,2,3,7,8,9-HxCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	10.0	1.26	NO	34.32	1.000	3.89e3	4.21e4	9.40	-6.0	0.923	bb
4	200623D1_4	50.0	1.26	NO	34.33	1.000	2.03e4	4.37e4	47.3	-5.5	0.927	db
5	200623D1_5	200	1.25	NO	34.34	1.001	6.22e4	2.94e4	215	7.7	1.06	bb
6	200623D1_6	1500	1.23	NO	34.32	1.000	7.12e5	4.09e4	1780	18.3	1.16	bb

**Compound name: 1,2,3,4,6,7,8-HpCDD**

Response Factor: 0.96458

RRF SD: 0.0975095, Relative SD: 10.109

Response type: Internal Std ( Ref 23 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.06	NO	37.79	1.000	6.49e2	5.96e4	1.13	-9.7	0.871	bb
2	200623D1_2	2.50	1.04	NO	37.80	1.000	7.57e2	3.11e4	2.52	1.0	0.974	MM
3	200623D1_3	10.0	1.03	NO	37.80	1.000	3.23e3	3.61e4	9.30	-7.0	0.897	bb
4	200623D1_4	50.0	1.09	NO	37.81	1.000	1.63e4	3.54e4	47.7	-4.5	0.921	bb
5	200623D1_5	200	1.05	NO	37.81	1.000	5.15e4	2.63e4	203	1.7	0.981	bb
6	200623D1_6	1500	1.04	NO	37.80	1.000	5.97e5	3.48e4	1780	18.5	1.14	bb

**Compound name: OCDD**

Response Factor: 0.899745

RRF SD: 0.132072, Relative SD: 14.6789

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	2.50	0.79	NO	41.05	1.001	1.05e3	1.05e5	2.22	-11.3	0.798	MM
2	200623D1_2	5.00	0.98	NO	41.03	1.000	1.45e3	6.93e4	4.64	-7.2	0.835	MM
3	200623D1_3	20.0	0.90	NO	41.06	1.001	5.10e3	6.26e4	18.1	-9.5	0.814	MM
4	200623D1_4	100	0.86	NO	41.06	1.000	2.61e4	6.19e4	93.9	-6.1	0.845	bd
5	200623D1_5	400	0.87	NO	41.06	1.000	9.08e4	4.70e4	429	7.3	0.966	bd
6	200623D1_6	3000	0.88	NO	41.06	1.001	1.12e6	6.57e4	3800	26.8	1.14	bd

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 2,3,7,8-TCDF**

Response Factor: 0.858517

RRF SD: 0.104794, Relative SD: 12.2064

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	0.250	0.81	NO	25.26	1.001	3.30e2	1.44e5	0.267	6.9	0.918	MM
2	200623D1_2	0.500	0.67	NO	25.29	1.001	3.81e2	1.07e5	0.415	-17.1	0.712	MM
3	200623D1_3	2.00	0.75	NO	25.26	1.001	1.59e3	1.00e5	1.85	-7.3	0.796	MM
4	200623D1_4	10.0	0.78	NO	25.29	1.001	8.62e3	1.02e5	9.80	-2.0	0.841	bb
5	200623D1_5	40.0	0.77	NO	25.29	1.001	2.49e4	7.20e4	40.3	0.8	0.865	bb
6	200623D1_6	300	0.77	NO	25.27	1.001	2.52e5	8.25e4	356	18.6	1.02	bb

**Compound name: 1,2,3,7,8-PeCDF**

Response Factor: 0.931627

RRF SD: 0.168586, Relative SD: 18.0959

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.53	NO	29.42	1.000	1.07e3	1.12e5	1.02	-18.5	0.760	bb
2	200623D1_2	2.50	1.52	NO	29.44	1.001	1.68e3	8.13e4	2.22	-11.3	0.826	bb
3	200623D1_3	10.0	1.63	NO	29.44	1.001	6.42e3	7.95e4	8.67	-13.3	0.808	bb
4	200623D1_4	50.0	1.61	NO	29.44	1.000	3.83e4	8.05e4	51.0	2.0	0.950	bd
5	200623D1_5	200	1.57	NO	29.46	1.001	1.11e5	5.32e4	224	12.0	1.04	bb
6	200623D1_6	1500	1.54	NO	29.44	1.001	1.23e6	6.80e4	1940	29.0	1.20	bd

**Compound name: 2,3,4,7,8-PeCDF**

Response Factor: 1.05193

RRF SD: 0.126183, Relative SD: 11.9954

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.67	NO	30.33	1.000	1.38e3	1.11e5	1.18	-5.9	0.990	bd
2	200623D1_2	2.50	1.35	NO	30.35	1.001	1.96e3	8.19e4	2.27	-9.1	0.956	MM

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 2,3,4,7,8-PeCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	10.0	1.67	NO	30.35	1.001	7.21e3	7.65e4	8.95	-10.5	0.941	bb
4	200623D1_4	50.0	1.58	NO	30.35	1.001	3.88e4	7.64e4	48.3	-3.4	1.02	bb
5	200623D1_5	200	1.62	NO	30.35	1.000	1.19e5	5.20e4	218	9.0	1.15	bb
6	200623D1_6	1500	1.53	NO	30.33	1.000	1.30e6	6.86e4	1800	19.9	1.26	bb

**Compound name: 1,2,3,4,7,8-HxCDF**

Response Factor: 1.08361  
 RRF SD: 0.1723, Relative SD: 15.9006  
 Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.16	NO	33.03	1.000	9.53e2	8.44e4	1.04	-16.6	0.904	bd
2	200623D1_2	2.50	1.35	NO	33.04	1.000	1.45e3	5.80e4	2.30	-7.8	0.999	bd
3	200623D1_3	10.0	1.17	NO	33.04	1.000	5.28e3	5.38e4	9.07	-9.3	0.982	bd
4	200623D1_4	50.0	1.24	NO	33.05	1.000	2.89e4	5.53e4	48.2	-3.5	1.05	bd
5	200623D1_5	200	1.25	NO	33.06	1.001	9.17e4	3.83e4	221	10.5	1.20	bd
6	200623D1_6	1500	1.24	NO	33.04	1.000	1.02e6	4.95e4	1900	26.8	1.37	dd

**Compound name: 1,2,3,6,7,8-HxCDF**

Response Factor: 1.14183  
 RRF SD: 0.181936, Relative SD: 15.9338  
 Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.34	NO	33.16	1.000	1.03e3	8.46e4	1.06	-14.9	0.972	db
2	200623D1_2	2.50	1.23	NO	33.17	1.001	1.49e3	5.91e4	2.21	-11.5	1.01	db
3	200623D1_3	10.0	1.28	NO	33.16	1.000	5.64e3	5.49e4	8.99	-10.1	1.03	db
4	200623D1_4	50.0	1.18	NO	33.17	1.000	3.19e4	5.72e4	48.8	-2.5	1.11	db
5	200623D1_5	200	1.23	NO	33.18	1.000	1.02e5	3.92e4	229	14.5	1.31	db
6	200623D1_6	1500	1.24	NO	33.16	1.000	1.08e6	5.05e4	1870	24.4	1.42	db

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 2,3,4,6,7,8-HxCDF**

Response Factor: 1.13035

RRF SD: 0.197743, Relative SD: 17.4939

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.37	NO	33.75	1.000	1.04e3	8.39e4	1.10	-12.3	0.992	bb
2	200623D1_2	2.50	1.14	NO	33.75	1.000	1.36e3	5.70e4	2.12	-15.3	0.958	bb
3	200623D1_3	10.0	1.39	NO	33.75	1.000	5.22e3	5.28e4	8.76	-12.4	0.990	bb
4	200623D1_4	50.0	1.26	NO	33.77	1.001	2.88e4	5.21e4	48.8	-2.3	1.10	bb
5	200623D1_5	200	1.24	NO	33.77	1.001	9.21e4	3.56e4	229	14.4	1.29	bb
6	200623D1_6	1500	1.24	NO	33.75	1.000	1.01e6	4.65e4	1920	27.9	1.45	bb

**Compound name: 1,2,3,7,8,9-HxCDF**

Response Factor: 1.13564

RRF SD: 0.152877, Relative SD: 13.4617

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	1.31	NO	34.70	1.001	9.19e2	7.23e4	1.12	-10.4	1.02	MM
2	200623D1_2	2.50	1.25	NO	34.70	1.000	1.27e3	4.79e4	2.34	-6.4	1.06	bb
3	200623D1_3	10.0	1.33	NO	34.70	1.000	4.43e3	4.44e4	8.77	-12.3	0.996	bb
4	200623D1_4	50.0	1.27	NO	34.71	1.000	2.40e4	4.33e4	48.9	-2.3	1.11	bb
5	200623D1_5	200	1.28	NO	34.72	1.001	7.69e4	3.13e4	216	8.2	1.23	bb
6	200623D1_6	1500	1.25	NO	34.70	1.000	8.66e5	4.13e4	1850	23.1	1.40	bb

**Compound name: 1,2,3,4,6,7,8-HpCDF**

Response Factor: 1.16479

RRF SD: 0.16887, Relative SD: 14.4979

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	0.98	NO	36.51	1.000	8.82e2	6.65e4	1.14	-8.9	1.06	bb
2	200623D1_2	2.50	1.01	NO	36.53	1.000	1.20e3	4.60e4	2.23	-10.7	1.04	bb

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 1,2,3,4,6,7,8-HpCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	10.0	0.95	NO	36.53	1.000	4.48e3	4.13e4	9.33	-6.7	1.09	bb
4	200623D1_4	50.0	1.01	NO	36.54	1.000	2.28e4	4.16e4	47.0	-5.9	1.10	bb
5	200623D1_5	200	1.04	NO	36.55	1.001	7.22e4	2.96e4	209	4.7	1.22	bb
6	200623D1_6	1500	1.02	NO	36.53	1.000	8.62e5	3.87e4	1910	27.5	1.49	bb

**Compound name: 1,2,3,4,7,8,9-HpCDF**

Response Factor: 1.28234

RRF SD: 0.245903, Relative SD: 19.176

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	1.25	0.93	NO	38.33	1.000	6.27e2	5.04e4	0.970	-22.4	0.995	bb
2	200623D1_2	2.50	1.10	NO	38.33	1.000	9.39e2	3.35e4	2.19	-12.6	1.12	bb
3	200623D1_3	10.0	1.02	NO	38.34	1.000	3.88e3	3.21e4	9.43	-5.7	1.21	bb
4	200623D1_4	50.0	1.01	NO	38.34	1.000	1.95e4	3.07e4	49.6	-0.9	1.27	bb
5	200623D1_5	200	1.05	NO	38.35	1.000	6.36e4	2.28e4	218	8.8	1.40	bd
6	200623D1_6	1500	1.02	NO	38.33	1.000	7.52e5	2.95e4	1990	32.7	1.70	bb

**Compound name: OCDF**

Response Factor: 1.01627

RRF SD: 0.112378, Relative SD: 11.0579

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	2.50	0.94	NO	41.26	1.001	1.39e3	1.19e5	2.29	-8.4	0.931	bb
2	200623D1_2	5.00	0.93	NO	41.27	1.001	1.82e3	7.92e4	4.52	-9.6	0.919	bb
3	200623D1_3	20.0	0.90	NO	41.27	1.000	6.54e3	7.02e4	18.3	-8.3	0.931	MM
4	200623D1_4	100	0.89	NO	41.28	1.000	3.48e4	6.89e4	99.4	-0.6	1.01	bb
5	200623D1_5	400	0.91	NO	41.28	1.000	1.22e5	5.42e4	442	10.5	1.12	bb
6	200623D1_6	3000	0.91	NO	41.28	1.000	1.40e6	7.87e4	3490	16.4	1.18	bb



Vista Analytical Laboratory

Data set: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-2,3,7,8-TCDD**

Response Factor: 1.13407

RRF SD: 0.0258038, Relative SD: 2.27533

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.78	NO	26.03	1.022	1.04e5	9.22e4	99.6	-0.4	1.13	bb
2	200623D1_2	100	0.77	NO	26.05	1.023	7.85e4	6.77e4	102	2.3	1.16	bb
3	200623D1_3	100	0.79	NO	26.03	1.022	7.13e4	6.31e4	99.6	-0.4	1.13	bb
4	200623D1_4	100	0.79	NO	26.05	1.022	7.25e4	6.40e4	99.8	-0.2	1.13	bb
5	200623D1_5	100	0.79	NO	26.05	1.022	4.71e4	4.31e4	96.2	-3.8	1.09	bb
6	200623D1_6	100	0.83	NO	26.05	1.022	5.56e4	4.78e4	102	2.5	1.16	bb

**Compound name: 13C-1,2,3,7,8-PeCDD**

Response Factor: 0.817096

RRF SD: 0.0574761, Relative SD: 7.03419

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.63	NO	30.61	1.202	7.46e4	9.22e4	99.0	-1.0	0.809	bb
2	200623D1_2	100	0.62	NO	30.61	1.202	5.49e4	6.77e4	99.3	-0.7	0.811	bb
3	200623D1_3	100	0.60	NO	30.61	1.202	5.00e4	6.31e4	97.0	-3.0	0.793	bb
4	200623D1_4	100	0.62	NO	30.61	1.201	4.95e4	6.40e4	94.7	-5.3	0.774	bb
5	200623D1_5	100	0.62	NO	30.63	1.202	3.39e4	4.31e4	96.1	-3.9	0.785	bb
6	200623D1_6	100	0.61	NO	30.61	1.201	4.45e4	4.78e4	114	13.9	0.931	bb

**Compound name: 13C-1,2,3,4,7,8-HxCDD**

Response Factor: 0.727536

RRF SD: 0.0533596, Relative SD: 7.33429

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.31	NO	33.91	1.014	5.88e4	7.41e4	109	9.1	0.794	bd
2	200623D1_2	100	1.23	NO	33.91	1.014	4.19e4	6.07e4	94.8	-5.2	0.690	bd

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8-HxCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	100	1.32	NO	33.92	1.014	3.83e4	5.63e4	93.5	-6.5	0.680	bd
4	200623D1_4	100	1.33	NO	33.93	1.014	3.88e4	5.70e4	93.5	-6.5	0.680	bd
5	200623D1_5	100	1.31	NO	33.93	1.014	2.86e4	3.91e4	100	0.5	0.731	bd
6	200623D1_6	100	1.29	NO	33.92	1.015	3.70e4	4.68e4	109	8.6	0.790	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDD**

Response Factor: 0.841931  
 RRF SD: 0.05994, Relative SD: 7.11935  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.28	NO	34.02	1.017	6.92e4	7.41e4	111	10.8	0.933	db
2	200623D1_2	100	1.28	NO	34.02	1.017	4.81e4	6.07e4	94.1	-5.9	0.792	dd
3	200623D1_3	100	1.29	NO	34.02	1.017	4.49e4	5.63e4	94.7	-5.3	0.797	db
4	200623D1_4	100	1.29	NO	34.03	1.017	4.55e4	5.70e4	94.7	-5.3	0.797	db
5	200623D1_5	100	1.35	NO	34.04	1.018	3.26e4	3.91e4	99.1	-0.9	0.834	db
6	200623D1_6	100	1.33	NO	34.02	1.018	4.20e4	4.68e4	107	6.7	0.898	dd

**Compound name: 13C-1,2,3,7,8,9-HxCDD**

Response Factor: 0.797493  
 RRF SD: 0.0635216, Relative SD: 7.96516  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.23	NO	34.30	1.026	6.56e4	7.41e4	111	10.9	0.885	bb
2	200623D1_2	100	1.27	NO	34.31	1.026	4.61e4	6.07e4	95.2	-4.8	0.760	dd
3	200623D1_3	100	1.29	NO	34.31	1.026	4.21e4	5.63e4	93.8	-6.2	0.748	bb
4	200623D1_4	100	1.27	NO	34.32	1.026	4.37e4	5.70e4	96.1	-3.9	0.767	bd
5	200623D1_5	100	1.33	NO	34.32	1.026	2.94e4	3.91e4	94.4	-5.6	0.753	bd
6	200623D1_6	100	1.32	NO	34.31	1.027	4.09e4	4.68e4	110	9.5	0.873	db

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-1,2,3,4,6,7,8-HpCDD**

Response Factor: 0.665755

RRF SD: 0.101484, Relative SD: 15.2434

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.03	NO	37.78	1.130	5.96e4	7.41e4	121	20.8	0.804	bb
2	200623D1_2	100	1.01	NO	37.79	1.130	3.11e4	6.07e4	77.0	-23.0	0.512	MM
3	200623D1_3	100	1.03	NO	37.79	1.130	3.61e4	5.63e4	96.1	-3.9	0.640	bb
4	200623D1_4	100	1.03	NO	37.80	1.130	3.54e4	5.70e4	93.4	-6.6	0.622	bd
5	200623D1_5	100	1.09	NO	37.80	1.130	2.63e4	3.91e4	101	1.0	0.672	bd
6	200623D1_6	100	1.07	NO	37.79	1.131	3.48e4	4.68e4	112	11.7	0.744	bb

**Compound name: 13C-OCDD**

Response Factor: 0.613111

RRF SD: 0.0731729, Relative SD: 11.9347

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	200	0.90	NO	41.03	1.227	1.05e5	7.41e4	231	15.3	0.707	bd
2	200623D1_2	200	0.90	NO	41.03	1.227	6.93e4	6.07e4	186	-6.9	0.571	bd
3	200623D1_3	200	0.89	NO	41.04	1.227	6.26e4	5.63e4	181	-9.3	0.556	bd
4	200623D1_4	200	0.86	NO	41.05	1.227	6.19e4	5.70e4	177	-11.5	0.543	bd
5	200623D1_5	200	0.91	NO	41.06	1.228	4.70e4	3.91e4	196	-1.9	0.601	bb
6	200623D1_6	200	0.89	NO	41.04	1.228	6.57e4	4.68e4	229	14.4	0.702	bb

**Compound name: 13C-2,3,7,8-TCDF**

Response Factor: 1.02985

RRF SD: 0.0204538, Relative SD: 1.9861

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.76	NO	25.24	0.991	1.44e5	1.38e5	101	0.9	1.04	bb
2	200623D1_2	100	0.76	NO	25.26	0.992	1.07e5	1.04e5	99.8	-0.2	1.03	bb

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-2,3,7,8-TCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	100	0.77	NO	25.24	0.991	1.00e5	9.64e4	101	0.9	1.04	bb
4	200623D1_4	100	0.78	NO	25.26	0.991	1.02e5	9.76e4	102	1.9	1.05	bb
5	200623D1_5	100	0.79	NO	25.26	0.991	7.20e4	6.97e4	100	0.3	1.03	bb
6	200623D1_6	100	0.78	NO	25.26	0.991	8.25e4	8.32e4	96.2	-3.8	0.991	bb

**Compound name: 13C-1,2,3,7,8-PeCDF**

Response Factor: 0.803913

RRF SD: 0.0259561, Relative SD: 3.22872

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.67	NO	29.42	1.155	1.12e5	1.38e5	101	1.2	0.814	bd
2	200623D1_2	100	1.66	NO	29.42	1.155	8.13e4	1.04e5	97.0	-3.0	0.780	bb
3	200623D1_3	100	1.68	NO	29.42	1.155	7.95e4	9.64e4	103	2.6	0.825	bb
4	200623D1_4	100	1.63	NO	29.44	1.155	8.05e4	9.76e4	103	2.6	0.825	bb
5	200623D1_5	100	1.72	NO	29.44	1.155	5.32e4	6.97e4	94.9	-5.1	0.763	bb
6	200623D1_6	100	1.65	NO	29.42	1.154	6.80e4	8.32e4	102	1.6	0.817	bb

**Compound name: 13C-2,3,4,7,8-PeCDF**

Response Factor: 0.789589

RRF SD: 0.0263073, Relative SD: 3.33177

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	1.62	NO	30.33	1.191	1.11e5	1.38e5	102	1.9	0.805	bb
2	200623D1_2	100	1.53	NO	30.33	1.191	8.19e4	1.04e5	99.5	-0.5	0.786	bb
3	200623D1_3	100	1.75	NO	30.33	1.191	7.65e4	9.64e4	101	0.6	0.794	bb
4	200623D1_4	100	1.71	NO	30.33	1.190	7.64e4	9.76e4	99.1	-0.9	0.783	bb
5	200623D1_5	100	1.55	NO	30.35	1.191	5.20e4	6.97e4	94.4	-5.6	0.746	db
6	200623D1_6	100	1.71	NO	30.33	1.190	6.86e4	8.32e4	104	4.4	0.825	bb

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8-HxCDF**

Response Factor: 1.00952

RRF SD: 0.0739508, Relative SD: 7.32534

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.51	NO	33.02	0.988	8.44e4	7.41e4	113	12.8	1.14	bd
2	200623D1_2	100	0.50	NO	33.03	0.988	5.80e4	6.07e4	94.7	-5.3	0.956	bd
3	200623D1_3	100	0.49	NO	33.03	0.988	5.38e4	5.63e4	94.6	-5.4	0.955	bd
4	200623D1_4	100	0.50	NO	33.04	0.988	5.53e4	5.70e4	96.0	-4.0	0.969	bd
5	200623D1_5	100	0.52	NO	33.04	0.988	3.83e4	3.91e4	97.1	-2.9	0.981	bd
6	200623D1_6	100	0.48	NO	33.03	0.988	4.95e4	4.68e4	105	4.8	1.06	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDF**

Response Factor: 1.02915

RRF SD: 0.0669477, Relative SD: 6.50517

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.51	NO	33.15	0.991	8.46e4	7.41e4	111	10.9	1.14	db
2	200623D1_2	100	0.50	NO	33.15	0.991	5.91e4	6.07e4	94.7	-5.3	0.974	db
3	200623D1_3	100	0.50	NO	33.15	0.991	5.49e4	5.63e4	94.7	-5.3	0.975	db
4	200623D1_4	100	0.50	NO	33.16	0.991	5.72e4	5.70e4	97.5	-2.5	1.00	db
5	200623D1_5	100	0.52	NO	33.17	0.992	3.92e4	3.91e4	97.4	-2.6	1.00	db
6	200623D1_6	100	0.50	NO	33.15	0.992	5.05e4	4.68e4	105	4.7	1.08	db

**Compound name: 13C-2,3,4,6,7,8-HxCDF**

Response Factor: 0.970987

RRF SD: 0.0836759, Relative SD: 8.61761

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.51	NO	33.74	1.009	8.39e4	7.41e4	116	16.5	1.13	bd
2	200623D1_2	100	0.48	NO	33.74	1.009	5.70e4	6.07e4	96.7	-3.3	0.939	bb

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-2,3,4,6,7,8-HxCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	100	0.50	NO	33.74	1.009	5.28e4	5.63e4	96.4	-3.6	0.936	bb
4	200623D1_4	100	0.53	NO	33.75	1.009	5.21e4	5.70e4	94.2	-5.8	0.914	bb
5	200623D1_5	100	0.54	NO	33.75	1.009	3.56e4	3.91e4	93.9	-6.1	0.912	bb
6	200623D1_6	100	0.51	NO	33.74	1.010	4.65e4	4.68e4	102	2.2	0.993	bb

**Compound name: 13C-1,2,3,7,8,9-HxCDF**

Response Factor: 0.832538

RRF SD: 0.081192, Relative SD: 9.75235

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.48	NO	34.67	1.037	7.23e4	7.41e4	117	17.1	0.975	bd
2	200623D1_2	100	0.49	NO	34.69	1.037	4.79e4	6.07e4	94.8	-5.2	0.789	bb
3	200623D1_3	100	0.51	NO	34.69	1.037	4.44e4	5.63e4	94.8	-5.2	0.789	bb
4	200623D1_4	100	0.51	NO	34.70	1.037	4.33e4	5.70e4	91.2	-8.8	0.759	bd
5	200623D1_5	100	0.51	NO	34.70	1.037	3.13e4	3.91e4	96.2	-3.8	0.801	bd
6	200623D1_6	100	0.50	NO	34.69	1.038	4.13e4	4.68e4	106	6.0	0.883	bb

**Compound name: 13C-1,2,3,4,6,7,8-HpCDF**

Response Factor: 0.783577

RRF SD: 0.0658543, Relative SD: 8.40432

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.42	NO	36.52	1.092	6.65e4	7.41e4	115	14.5	0.897	bd
2	200623D1_2	100	0.42	NO	36.52	1.092	4.60e4	6.07e4	96.6	-3.4	0.757	bd
3	200623D1_3	100	0.42	NO	36.52	1.092	4.13e4	5.63e4	93.5	-6.5	0.732	bb
4	200623D1_4	100	0.46	NO	36.53	1.092	4.16e4	5.70e4	93.2	-6.8	0.730	bb
5	200623D1_5	100	0.45	NO	36.53	1.092	2.96e4	3.91e4	96.7	-3.3	0.758	bb
6	200623D1_6	100	0.44	NO	36.52	1.093	3.87e4	4.68e4	106	5.5	0.827	bb

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8,9-HpCDF**

Response Factor: 0.592084  
 RRF SD: 0.0532163, Relative SD: 8.98796  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.43	NO	38.32	1.146	5.04e4	7.41e4	115	14.8	0.680	bb
2	200623D1_2	100	0.41	NO	38.32	1.146	3.35e4	6.07e4	93.3	-6.7	0.552	bd
3	200623D1_3	100	0.44	NO	38.33	1.146	3.21e4	5.63e4	96.2	-3.8	0.569	bd
4	200623D1_4	100	0.45	NO	38.33	1.146	3.07e4	5.70e4	90.9	-9.1	0.538	bd
5	200623D1_5	100	0.45	NO	38.34	1.146	2.28e4	3.91e4	98.6	-1.4	0.584	bb
6	200623D1_6	100	0.43	NO	38.33	1.147	2.95e4	4.68e4	106	6.3	0.630	bd

**Compound name: 13C-OCDF**

Response Factor: 0.703328  
 RRF SD: 0.0981159, Relative SD: 13.9502  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	200	0.94	NO	41.24	1.233	1.19e5	7.41e4	229	14.6	0.806	bd
2	200623D1_2	200	0.91	NO	41.25	1.234	7.92e4	6.07e4	186	-7.2	0.653	bd
3	200623D1_3	200	0.94	NO	41.26	1.234	7.02e4	5.63e4	177	-11.4	0.623	bd
4	200623D1_4	200	0.89	NO	41.27	1.234	6.89e4	5.70e4	172	-14.0	0.605	bd
5	200623D1_5	200	0.89	NO	41.27	1.234	5.42e4	3.91e4	197	-1.4	0.694	bb
6	200623D1_6	200	0.88	NO	41.27	1.235	7.87e4	4.68e4	239	19.5	0.840	bd

**Compound name: 37Cl-2,3,7,8-TCDD**

Response Factor: 1.31163  
 RRF SD: 0.214984, Relative SD: 16.3906  
 Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	0.250			26.07	1.023	3.70e2	9.22e4	0.306	22.4	1.61	bb
2	200623D1_2	0.500			26.07	1.023	4.04e2	6.77e4	0.455	-9.1	1.19	bb

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

**Compound name: 37Cl-2,3,7,8-TCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200623D1_3	2.00			26.07	1.023	1.33e3	6.31e4	1.61	-19.4	1.06	bb
4	200623D1_4	10.0			26.08	1.023	7.43e3	6.40e4	8.85	-11.5	1.16	bb
5	200623D1_5	40.0			26.08	1.023	2.30e4	4.31e4	40.7	1.8	1.34	bd
6	200623D1_6	200			26.07	1.023	1.45e5	4.78e4	231	15.7	1.52	bb

**Compound name: 13C-1,2,3,4-TCDD**

Response Factor: 1

RRF SD: 4.96507e-017, Relative SD: 4.96507e-015

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.78	NO	25.47	1.000	9.22e4	9.22e4	100	0.0	1.00	bb
2	200623D1_2	100	0.80	NO	25.47	1.000	6.77e4	6.77e4	100	-0.0	1.00	bd
3	200623D1_3	100	0.80	NO	25.47	1.000	6.31e4	6.31e4	100	0.0	1.00	bb
4	200623D1_4	100	0.79	NO	25.48	1.000	6.40e4	6.40e4	100	0.0	1.00	bb
5	200623D1_5	100	0.77	NO	25.48	1.000	4.31e4	4.31e4	100	0.0	1.00	bb
6	200623D1_6	100	0.83	NO	25.48	1.000	4.78e4	4.78e4	100	0.0	1.00	bb

**Compound name: 13C-1,2,3,4-TCDF**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.76	NO	24.00	1.000	1.38e5	1.38e5	100	0.0	1.00	bb
2	200623D1_2	100	0.80	NO	24.00	1.000	1.04e5	1.04e5	100	0.0	1.00	bb
3	200623D1_3	100	0.77	NO	24.00	1.000	9.64e4	9.64e4	100	0.0	1.00	bb
4	200623D1_4	100	0.79	NO	24.02	1.000	9.76e4	9.76e4	100	0.0	1.00	bb
5	200623D1_5	100	0.77	NO	24.02	1.000	6.97e4	6.97e4	100	0.0	1.00	bb
6	200623D1_6	100	0.79	NO	24.02	1.000	8.32e4	8.32e4	100	0.0	1.00	bb



Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:10:39 Pacific Daylight Time

Compound name: 13C-1,2,3,4,6,9-HxCDF

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200623D1_1	100	0.47	NO	33.43	1.000	7.41e4	7.41e4	100	0.0	1.00	MM
2	200623D1_2	100	0.49	NO	33.43	1.000	6.07e4	6.07e4	100	0.0	1.00	bb
3	200623D1_3	100	0.51	NO	33.43	1.000	5.63e4	5.63e4	100	0.0	1.00	bb
4	200623D1_4	100	0.51	NO	33.44	1.000	5.70e4	5.70e4	100	0.0	1.00	bb
5	200623D1_5	100	0.50	NO	33.44	1.000	3.91e4	3.91e4	100	0.0	1.00	bb
6	200623D1_6	100	0.52	NO	33.42	1.000	4.68e4	4.68e4	100	0.0	1.00	bb

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2.77e2	0.88	NO	1.07	1.000	26.066	26.07	1.001	1.001	0.24822	99.3	0.157	0.248
2	2 1,2,3,7,8-PeCDD	8.38e2	0.64	NO	0.988	1.000	30.630	30.61	1.001	1.000	1.1378	91.0	0.181	1.14
3	3 1,2,3,4,7,8-HxCDD	7.92e2	1.18	NO	1.09	1.000	33.916	33.92	1.000	1.000	1.2374	99.0	0.530	1.24
4	4 1,2,3,6,7,8-HxCDD	7.52e2	1.40	NO	0.938	1.000	34.016	34.03	1.000	1.000	1.1592	92.7	0.551	1.16
5	5 1,2,3,7,8,9-HxCDD	8.00e2	1.31	NO	0.981	1.000	34.335	34.33	1.001	1.001	1.2441	99.5	0.609	1.24
6	6 1,2,3,4,6,7,8-HpCDD	6.49e2	1.06	NO	0.965	1.000	37.791	37.79	1.000	1.000	1.1289	90.3	0.192	1.13
7	7 OCDD	1.05e3	0.79	NO	0.900	1.000	41.028	41.05	1.000	1.001	2.2183	88.7	0.197	2.22
8	8 2,3,7,8-TCDF	3.30e2	0.81	NO	0.859	1.000	25.265	25.26	1.001	1.001	0.26736	107	0.122	0.267
9	9 1,2,3,7,8-PeCDF	1.07e3	1.53	NO	0.932	1.000	29.442	29.42	1.001	1.000	1.0192	81.5	0.0818	1.02
10	10 2,3,4,7,8-PeCDF	1.38e3	1.67	NO	1.05	1.000	30.357	30.33	1.001	1.000	1.1765	94.1	0.0767	1.18
11	11 1,2,3,4,7,8-HxCDF	9.53e2	1.16	NO	1.08	1.000	33.017	33.03	1.000	1.000	1.0427	83.4	0.0784	1.04
12	12 1,2,3,6,7,8-HxCDF	1.03e3	1.34	NO	1.14	1.000	33.159	33.16	1.000	1.000	1.0636	85.1	0.0802	1.06
13	13 2,3,4,6,7,8-HxCDF	1.04e3	1.37	NO	1.13	1.000	33.775	33.75	1.001	1.000	1.0967	87.7	0.0908	1.10
14	14 1,2,3,7,8,9-HxCDF	9.19e2	1.31	NO	1.14	1.000	34.674	34.70	1.000	1.001	1.1204	89.6	0.107	1.12
15	15 1,2,3,4,6,7,8-HpCDF	8.82e2	0.98	NO	1.16	1.000	36.554	36.51	1.001	1.000	1.1387	91.1	0.139	1.14
16	16 1,2,3,4,7,8,9-HpCDF	6.27e2	0.93	NO	1.28	1.000	38.317	38.33	1.000	1.000	0.97015	77.6	0.150	0.970
17	17 OCDF	1.39e3	0.94	NO	1.02	1.000	41.236	41.26	1.000	1.001	2.2908	91.6	0.206	2.29
18	18 13C-2,3,7,8-TCDD	1.04e5	0.78	NO	1.13	1.000	26.132	26.03	1.026	1.022	99.554	99.6	0.702	
19	19 13C-1,2,3,7,8-PeCDD	7.46e4	0.63	NO	0.817	1.000	30.614	30.61	1.202	1.202	98.967	99.0	0.548	
20	20 13C-1,2,3,4,7,8-HxCDD	5.88e4	1.31	NO	0.728	1.000	33.902	33.91	1.014	1.014	109.08	109	0.611	
21	21 13C-1,2,3,6,7,8-HxCDD	6.92e4	1.28	NO	0.842	1.000	34.013	34.02	1.017	1.017	110.80	111	0.528	
22	22 13C-1,2,3,7,8,9-HxCDD	6.56e4	1.23	NO	0.797	1.000	34.283	34.30	1.025	1.026	110.92	111	0.557	
23	23 13C-1,2,3,4,6,7,8-HpCDD	5.96e4	1.03	NO	0.666	1.000	37.747	37.78	1.129	1.130	120.82	121	0.663	
24	24 13C-OCDD	1.05e5	0.90	NO	0.613	1.000	40.770	41.03	1.219	1.227	230.52	115	0.553	
25	25 13C-2,3,7,8-TCDF	1.44e5	0.76	NO	1.03	1.000	25.215	25.24	0.990	0.991	100.91	101	0.727	
26	26 13C-1,2,3,7,8-PeCDF	1.12e5	1.67	NO	0.804	1.000	29.435	29.42	1.156	1.155	101.22	101	0.601	
27	27 13C-2,3,4,7,8-PeCDF	1.11e5	1.62	NO	0.790	1.000	30.334	30.33	1.191	1.191	101.91	102	0.612	
28	28 13C-1,2,3,4,7,8-HxCDF	8.44e4	0.51	NO	1.01	1.000	33.033	33.02	0.988	0.988	112.77	113	27.6	
29	29 13C-1,2,3,6,7,8-HxCDF	8.46e4	0.51	NO	1.03	1.000	33.167	33.15	0.992	0.991	110.94	111	27.0	
30	30 13C-2,3,4,6,7,8-HxCDF	8.39e4	0.51	NO	0.971	1.000	33.738	33.74	1.009	1.009	116.50	116	28.6	
31	31 13C-1,2,3,7,8,9-HxCDF	7.23e4	0.48	NO	0.833	1.000	34.638	34.67	1.036	1.037	117.10	117	33.4	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	6.65e4	0.42	NO	0.784	1.000	36.343	36.52	1.087	1.092	114.53	115	0.766	
33	33 13C-1,2,3,4,7,8,9-HpCDF	5.04e4	0.43	NO	0.592	1.000	38.349	38.32	1.147	1.146	114.78	115	1.01	
34	34 13C-OCDF	1.19e5	0.94	NO	0.703	1.000	40.923	41.24	1.224	1.233	229.18	115	0.491	
35	35 37Cl-2,3,7,8-TCDD	3.70e2			1.31	1.000	26.129	26.07	1.026	1.023	0.30607	122	0.0602	
36	36 13C-1,2,3,4-TCDD	9.22e4	0.78	NO	1.00	1.000	25.480	25.47	1.000	1.000	100.00	100	0.796	
37	37 13C-1,2,3,4-TCDF	1.38e5	0.76	NO	1.00	1.000	24.020	24.00	1.000	1.000	100.00	100	0.749	
38	38 13C-1,2,3,4,6,9-HxCDF	7.41e4	0.47	NO	1.00	1.000	33.530	33.43	1.000	1.000	100.00	100	27.8	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	4.06e2	0.87	NO	1.07	1.000	26.082	26.07	1.001	1.001	0.48240	96.5	0.180	0.482
2	2 1,2,3,7,8-PeCDD	1.23e3	0.64	NO	0.988	1.000	30.630	30.63	1.001	1.001	2.2638	90.6	0.153	2.26
3	3 1,2,3,4,7,8-HxCDD	1.07e3	1.35	NO	1.09	1.000	33.916	33.94	1.000	1.001	2.3485	93.9	0.236	2.35
4	4 1,2,3,6,7,8-HxCDD	1.13e3	1.23	NO	0.938	1.000	34.016	34.03	1.000	1.000	2.5090	100	0.246	2.51
5	5 1,2,3,7,8,9-HxCDD	9.72e2	1.28	NO	0.981	1.000	34.346	34.32	1.001	1.000	2.1479	85.9	0.267	2.15
6	6 1,2,3,4,6,7,8-HpCDD	7.57e2	1.04	NO	0.965	1.000	37.802	37.80	1.000	1.000	2.5240	101	0.261	2.52
7	7 OCDD	1.45e3	0.98	NO	0.900	1.000	41.027	41.03	1.000	1.000	4.6385	92.8	0.298	4.64
8	8 2,3,7,8-TCDF	3.81e2	0.67	NO	0.859	1.000	25.281	25.29	1.001	1.001	0.41464	82.9	0.150	0.415
9	9 1,2,3,7,8-PeCDF	1.68e3	1.52	NO	0.932	1.000	29.442	29.44	1.001	1.001	2.2175	88.7	0.0902	2.22
10	10 2,3,4,7,8-PeCDF	1.96e3	1.35	NO	1.05	1.000	30.357	30.35	1.001	1.001	2.2717	90.9	0.0720	2.27
11	11 1,2,3,4,7,8-HxCDF	1.45e3	1.35	NO	1.08	1.000	33.028	33.04	1.000	1.000	2.3040	92.2	0.0894	2.30
12	12 1,2,3,6,7,8-HxCDF	1.49e3	1.23	NO	1.14	1.000	33.159	33.17	1.000	1.001	2.2125	88.5	0.0889	2.21
13	13 2,3,4,6,7,8-HxCDF	1.36e3	1.14	NO	1.13	1.000	33.775	33.75	1.001	1.000	2.1177	84.7	0.0921	2.12
14	14 1,2,3,7,8,9-HxCDF	1.27e3	1.25	NO	1.14	1.000	34.685	34.70	1.000	1.000	2.3397	93.6	0.129	2.34
15	15 1,2,3,4,6,7,8-HpCDF	1.20e3	1.01	NO	1.16	1.000	36.554	36.53	1.001	1.000	2.2332	89.3	0.123	2.23
16	16 1,2,3,4,7,8,9-HpCDF	9.39e2	1.10	NO	1.28	1.000	38.317	38.33	1.000	1.000	2.1858	87.4	0.139	2.19
17	17 OCDF	1.82e3	0.93	NO	1.02	1.000	41.247	41.27	1.000	1.001	4.5206	90.4	0.256	4.52
18	18 13C-2,3,7,8-TCDD	7.85e4	0.77	NO	1.13	1.000	26.132	26.05	1.026	1.023	102.25	102	1.08	
19	19 13C-1,2,3,7,8-PeCDD	5.49e4	0.62	NO	0.817	1.000	30.614	30.61	1.202	1.202	99.303	99.3	0.458	
20	20 13C-1,2,3,4,7,8-HxCDD	4.19e4	1.23	NO	0.728	1.000	33.902	33.91	1.014	1.014	94.803	94.8	0.530	
21	21 13C-1,2,3,6,7,8-HxCDD	4.81e4	1.28	NO	0.842	1.000	34.012	34.02	1.017	1.017	94.061	94.1	0.458	
22	22 13C-1,2,3,7,8,9-HxCDD	4.61e4	1.27	NO	0.797	1.000	34.283	34.31	1.025	1.026	95.243	95.2	0.484	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.11e4	1.01	NO	0.666	1.000	37.747	37.79	1.129	1.130	76.968	77.0	6.86	
24	24 13C-OCDD	6.93e4	0.90	NO	0.613	1.000	40.769	41.03	1.219	1.227	186.14	93.1	0.639	
25	25 13C-2,3,7,8-TCDF	1.07e5	0.76	NO	1.03	1.000	25.215	25.26	0.990	0.992	99.789	99.8	0.897	
26	26 13C-1,2,3,7,8-PeCDF	8.13e4	1.66	NO	0.804	1.000	29.435	29.42	1.156	1.155	97.045	97.0	0.801	
27	27 13C-2,3,4,7,8-PeCDF	8.19e4	1.53	NO	0.790	1.000	30.334	30.33	1.191	1.191	99.543	99.5	0.816	
28	28 13C-1,2,3,4,7,8-HxCDF	5.80e4	0.50	NO	1.01	1.000	33.033	33.03	0.988	0.988	94.725	94.7	0.758	
29	29 13C-1,2,3,6,7,8-HxCDF	5.91e4	0.50	NO	1.03	1.000	33.167	33.15	0.992	0.991	94.668	94.7	0.743	
30	30 13C-2,3,4,6,7,8-HxCDF	5.70e4	0.48	NO	0.971	1.000	33.738	33.74	1.009	1.009	96.730	96.7	0.788	
31	31 13C-1,2,3,7,8,9-HxCDF	4.79e4	0.49	NO	0.833	1.000	34.638	34.69	1.036	1.037	94.829	94.8	0.919	
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.60e4	0.42	NO	0.784	1.000	36.343	36.52	1.087	1.092	96.612	96.6	0.654	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.35e4	0.41	NO	0.592	1.000	38.349	38.32	1.147	1.146	93.255	93.3	0.866	
34	34 13C-OCDF	7.92e4	0.91	NO	0.703	1.000	40.923	41.25	1.224	1.234	185.55	92.8	0.784	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	4.04e2			1.31	1.000	26.129	26.07	1.026	1.023	0.45472	90.9	0.0796	
36	36 13C-1,2,3,4-TCDD	6.77e4	0.80	NO	1.00	1.000	25.480	25.47	1.000	1.000	100.00	100	1.23	
37	37 13C-1,2,3,4-TCDF	1.04e5	0.80	NO	1.00	1.000	24.020	24.00	1.000	1.000	100.00	100	0.924	
38	38 13C-1,2,3,4,6,9-HxCDF	6.07e4	0.49	NO	1.00	1.000	33.530	33.43	1.000	1.000	100.00	100	0.765	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.42e3	0.79	NO	1.07	1.000	26.066	26.05	1.001	1.001	1.8541	92.7	0.176	1.85
2	2 1,2,3,7,8-PeCDD	4.56e3	0.64	NO	0.988	1.000	30.630	30.63	1.001	1.001	9.2246	92.2	0.182	9.22
3	3 1,2,3,4,7,8-HxCDD	3.87e3	1.25	NO	1.09	1.000	33.927	33.94	1.000	1.001	9.2764	92.8	0.205	9.28
4	4 1,2,3,6,7,8-HxCDD	3.63e3	1.36	NO	0.938	1.000	34.016	34.04	1.000	1.001	8.6144	86.1	0.230	8.61
5	5 1,2,3,7,8,9-HxCDD	3.89e3	1.26	NO	0.981	1.000	34.346	34.32	1.001	1.000	9.4016	94.0	0.230	9.40
6	6 1,2,3,4,6,7,8-HpCDD	3.23e3	1.03	NO	0.965	1.000	37.802	37.80	1.000	1.000	9.3002	93.0	0.262	9.30
7	7 OCDD	5.10e3	0.90	NO	0.900	1.000	41.038	41.06	1.000	1.001	18.098	90.5	0.244	18.1
8	8 2,3,7,8-TCDF	1.59e3	0.75	NO	0.859	1.000	25.265	25.26	1.001	1.001	1.8543	92.7	0.153	1.85
9	9 1,2,3,7,8-PeCDF	6.42e3	1.63	NO	0.932	1.000	29.441	29.44	1.001	1.001	8.6689	86.7	0.0995	8.67
10	10 2,3,4,7,8-PeCDF	7.21e3	1.67	NO	1.05	1.000	30.357	30.35	1.001	1.001	8.9489	89.5	0.0937	8.95
11	11 1,2,3,4,7,8-HxCDF	5.28e3	1.17	NO	1.08	1.000	33.028	33.04	1.000	1.000	9.0659	90.7	0.177	9.07
12	12 1,2,3,6,7,8-HxCDF	5.64e3	1.28	NO	1.14	1.000	33.159	33.16	1.000	1.000	8.9943	89.9	0.172	8.99
13	13 2,3,4,6,7,8-HxCDF	5.22e3	1.39	NO	1.13	1.000	33.775	33.75	1.001	1.000	8.7596	87.6	0.178	8.76
14	14 1,2,3,7,8,9-HxCDF	4.43e3	1.33	NO	1.14	1.000	34.685	34.70	1.000	1.000	8.7724	87.7	0.245	8.77
15	15 1,2,3,4,6,7,8-HpCDF	4.48e3	0.95	NO	1.16	1.000	36.554	36.53	1.001	1.000	9.3308	93.3	0.176	9.33
16	16 1,2,3,4,7,8,9-HpCDF	3.88e3	1.02	NO	1.28	1.000	38.328	38.34	1.000	1.000	9.4338	94.3	0.179	9.43
17	17 OCDF	6.54e3	0.90	NO	1.02	1.000	41.258	41.27	1.000	1.000	18.330	91.7	0.388	18.3
18	18 13C-2,3,7,8-TCDD	7.13e4	0.79	NO	1.13	1.000	26.132	26.03	1.026	1.022	99.644	99.6	1.19	
19	19 13C-1,2,3,7,8-PeCDD	5.00e4	0.60	NO	0.817	1.000	30.614	30.61	1.202	1.202	97.005	97.0	0.643	
20	20 13C-1,2,3,4,7,8-HxCDD	3.83e4	1.32	NO	0.728	1.000	33.902	33.92	1.014	1.014	93.493	93.5	0.562	
21	21 13C-1,2,3,6,7,8-HxCDD	4.49e4	1.29	NO	0.842	1.000	34.012	34.02	1.017	1.017	94.677	94.7	0.486	
22	22 13C-1,2,3,7,8,9-HxCDD	4.21e4	1.29	NO	0.797	1.000	34.283	34.31	1.025	1.026	93.788	93.8	0.513	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.61e4	1.03	NO	0.666	1.000	37.747	37.79	1.129	1.130	96.113	96.1	0.639	
24	24 13C-OCDD	6.26e4	0.89	NO	0.613	1.000	40.769	41.04	1.219	1.227	181.30	90.7	0.661	
25	25 13C-2,3,7,8-TCDF	1.00e5	0.77	NO	1.03	1.000	25.215	25.24	0.990	0.991	100.87	101	0.910	
26	26 13C-1,2,3,7,8-PeCDF	7.95e4	1.68	NO	0.804	1.000	29.435	29.42	1.156	1.155	102.58	103	0.622	
27	27 13C-2,3,4,7,8-PeCDF	7.65e4	1.75	NO	0.790	1.000	30.334	30.33	1.191	1.191	100.56	101	0.633	
28	28 13C-1,2,3,4,7,8-HxCDF	5.38e4	0.49	NO	1.01	1.000	33.033	33.03	0.988	0.988	94.554	94.6	0.712	
29	29 13C-1,2,3,6,7,8-HxCDF	5.49e4	0.50	NO	1.03	1.000	33.167	33.15	0.992	0.991	94.707	94.7	0.699	
30	30 13C-2,3,4,6,7,8-HxCDF	5.28e4	0.50	NO	0.971	1.000	33.738	33.74	1.009	1.009	96.448	96.4	0.741	
31	31 13C-1,2,3,7,8,9-HxCDF	4.44e4	0.51	NO	0.833	1.000	34.638	34.69	1.036	1.037	94.750	94.8	0.864	
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.13e4	0.42	NO	0.784	1.000	36.343	36.52	1.087	1.092	93.461	93.5	0.682	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.21e4	0.44	NO	0.592	1.000	38.349	38.33	1.147	1.146	96.157	96.2	0.902	
34	34 13C-OCDF	7.02e4	0.94	NO	0.703	1.000	40.923	41.26	1.224	1.234	177.19	88.6	0.642	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

	# Name	Resp	RA	n/y	RRF	w/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	1.33e3			1.31	1.000	26.129	26.07	1.026	1.023	1.6119	80.6	0.0899	
36	36 13C-1,2,3,4-TCDD	6.31e4	0.80	NO	1.00	1.000	25.480	25.47	1.000	1.000	100.00	100	1.35	
37	37 13C-1,2,3,4-TCDF	9.64e4	0.77	NO	1.00	1.000	24.020	24.00	1.000	1.000	100.00	100	0.938	
38	38 13C-1,2,3,4,6,9-HxCDF	5.63e4	0.51	NO	1.00	1.000	33.530	33.43	1.000	1.000	100.00	100	0.719	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	7.32e3	0.72	NO	1.07	1.000	26.081	26.08	1.001	1.001	9.4256	94.3	0.187	9.43
2	2 1,2,3,7,8-PeCDD	2.41e4	0.59	NO	0.988	1.000	30.630	30.63	1.001	1.001	49.203	98.4	0.301	49.2
3	3 1,2,3,4,7,8-HxCDD	2.00e4	1.31	NO	1.09	1.000	33.938	33.94	1.000	1.000	47.271	94.5	0.442	47.3
4	4 1,2,3,6,7,8-HxCDD	2.04e4	1.24	NO	0.938	1.000	34.027	34.05	1.000	1.001	47.796	95.6	0.475	47.8
5	5 1,2,3,7,8,9-HxCDD	2.03e4	1.26	NO	0.981	1.000	34.357	34.33	1.001	1.000	47.256	94.5	0.513	47.3
6	6 1,2,3,4,6,7,8-HpCDD	1.63e4	1.09	NO	0.965	1.000	37.813	37.81	1.000	1.000	47.748	95.5	0.990	47.7
7	7 OCDD	2.61e4	0.86	NO	0.900	1.000	41.049	41.06	1.000	1.000	93.897	93.9	0.536	93.9
8	8 2,3,7,8-TCDF	8.62e3	0.78	NO	0.859	1.000	25.281	25.29	1.001	1.001	9.7984	98.0	0.227	9.80
9	9 1,2,3,7,8-PeCDF	3.83e4	1.61	NO	0.932	1.000	29.462	29.44	1.001	1.000	51.012	102	0.244	51.0
10	10 2,3,4,7,8-PeCDF	3.88e4	1.58	NO	1.05	1.000	30.357	30.35	1.001	1.001	48.279	96.6	0.212	48.3
11	11 1,2,3,4,7,8-HxCDF	2.89e4	1.24	NO	1.08	1.000	33.039	33.05	1.000	1.000	48.246	96.5	0.357	48.2
12	12 1,2,3,6,7,8-HxCDF	3.19e4	1.18	NO	1.14	1.000	33.170	33.17	1.000	1.000	48.760	97.5	0.348	48.8
13	13 2,3,4,6,7,8-HxCDF	2.88e4	1.26	NO	1.13	1.000	33.786	33.77	1.001	1.001	48.827	97.7	0.420	48.8
14	14 1,2,3,7,8,9-HxCDF	2.40e4	1.27	NO	1.14	1.000	34.696	34.71	1.000	1.000	48.875	97.7	0.530	48.9
15	15 1,2,3,4,6,7,8-HpCDF	2.28e4	1.01	NO	1.16	1.000	36.565	36.54	1.001	1.000	47.036	94.1	0.480	47.0
16	16 1,2,3,4,7,8,9-HpCDF	1.95e4	1.01	NO	1.28	1.000	38.328	38.34	1.000	1.000	49.559	99.1	0.453	49.6
17	17 OCDF	3.48e4	0.89	NO	1.02	1.000	41.269	41.28	1.000	1.000	99.389	99.4	0.430	99.4
18	18 13C-2,3,7,8-TCDD	7.25e4	0.79	NO	1.13	1.000	26.147	26.05	1.026	1.022	99.845	99.8	1.15	
19	19 13C-1,2,3,7,8-PeCDD	4.95e4	0.62	NO	0.817	1.000	30.633	30.61	1.202	1.201	94.724	94.7	0.449	
20	20 13C-1,2,3,4,7,8-HxCDD	3.88e4	1.33	NO	0.728	1.000	33.913	33.93	1.014	1.014	93.500	93.5	0.596	
21	21 13C-1,2,3,6,7,8-HxCDD	4.55e4	1.29	NO	0.842	1.000	34.023	34.03	1.017	1.017	94.699	94.7	0.515	
22	22 13C-1,2,3,7,8,9-HxCDD	4.37e4	1.27	NO	0.797	1.000	34.294	34.32	1.025	1.026	96.146	96.1	0.544	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.54e4	1.03	NO	0.666	1.000	37.759	37.80	1.129	1.130	93.367	93.4	0.699	
24	24 13C-OCDD	6.19e4	0.86	NO	0.613	1.000	40.783	41.05	1.219	1.227	177.00	88.5	0.573	
25	25 13C-2,3,7,8-TCDF	1.02e5	0.78	NO	1.03	1.000	25.230	25.26	0.990	0.991	101.90	102	0.853	
26	26 13C-1,2,3,7,8-PeCDF	8.05e4	1.63	NO	0.804	1.000	29.453	29.44	1.156	1.155	102.62	103	0.700	
27	27 13C-2,3,4,7,8-PeCDF	7.64e4	1.71	NO	0.790	1.000	30.352	30.33	1.191	1.190	99.123	99.1	0.712	
28	28 13C-1,2,3,4,7,8-HxCDF	5.53e4	0.50	NO	1.01	1.000	33.043	33.04	0.988	0.988	95.974	96.0	0.749	
29	29 13C-1,2,3,6,7,8-HxCDF	5.72e4	0.50	NO	1.03	1.000	33.177	33.16	0.992	0.991	97.487	97.5	0.735	
30	30 13C-2,3,4,6,7,8-HxCDF	5.21e4	0.53	NO	0.971	1.000	33.749	33.75	1.009	1.009	94.170	94.2	0.779	
31	31 13C-1,2,3,7,8,9-HxCDF	4.33e4	0.51	NO	0.833	1.000	34.649	34.70	1.036	1.037	91.161	91.2	0.908	
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.16e4	0.46	NO	0.784	1.000	36.355	36.53	1.087	1.092	93.190	93.2	0.683	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.07e4	0.45	NO	0.592	1.000	38.361	38.33	1.147	1.146	90.880	90.9	0.904	
34	34 13C-OCDF	6.89e4	0.89	NO	0.703	1.000	40.936	41.27	1.224	1.234	171.91	86.0	0.847	



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	7.43e3			1.31	1.000	26.145	26.08	1.026	1.023	8.8498	88.5	0.0990	
36	36 13C-1,2,3,4-TCDD	6.40e4	0.79	NO	1.00	1.000	25.480	25.48	1.000	1.000	100.00	100	1.30	
37	37 13C-1,2,3,4-TCDF	9.76e4	0.79	NO	1.00	1.000	24.020	24.02	1.000	1.000	100.00	100	0.878	
38	38 13C-1,2,3,4,6,9-HxCDF	5.70e4	0.51	NO	1.00	1.000	33.530	33.44	1.000	1.000	100.00	100	0.756	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2.01e4	0.79	NO	1.07	1.000	26.082	26.08	1.001	1.001	39.951	99.9	0.291	40.0
2	2 1,2,3,7,8-PeCDD	7.22e4	0.61	NO	0.988	1.000	30.650	30.65	1.001	1.001	215.72	108	0.303	216
3	3 1,2,3,4,7,8-HxCDD	6.24e4	1.25	NO	1.09	1.000	33.938	33.94	1.000	1.000	200.74	100	0.661	201
4	4 1,2,3,6,7,8-HxCDD	6.38e4	1.26	NO	0.938	1.000	34.037	34.05	1.000	1.000	208.86	104	0.660	209
5	5 1,2,3,7,8,9-HxCDD	6.22e4	1.25	NO	0.981	1.000	34.357	34.34	1.001	1.001	215.39	108	0.746	215
6	6 1,2,3,4,6,7,8-HpCDD	5.15e4	1.05	NO	0.965	1.000	37.813	37.81	1.000	1.000	203.37	102	0.849	203
7	7 OCDD	9.08e4	0.87	NO	0.900	1.000	41.060	41.06	1.000	1.000	429.36	107	0.986	429
8	8 2,3,7,8-TCDF	2.49e4	0.77	NO	0.859	1.000	25.281	25.29	1.001	1.001	40.316	101	0.240	40.3
9	9 1,2,3,7,8-PeCDF	1.11e5	1.57	NO	0.932	1.000	29.462	29.46	1.001	1.001	224.04	112	0.358	224
10	10 2,3,4,7,8-PeCDF	1.19e5	1.62	NO	1.05	1.000	30.377	30.35	1.001	1.000	218.04	109	0.343	218
11	11 1,2,3,4,7,8-HxCDF	9.17e4	1.25	NO	1.08	1.000	33.039	33.06	1.000	1.001	220.95	110	0.681	221
12	12 1,2,3,6,7,8-HxCDF	1.02e5	1.23	NO	1.14	1.000	33.181	33.18	1.000	1.000	229.07	115	0.629	229
13	13 2,3,4,6,7,8-HxCDF	9.21e4	1.24	NO	1.13	1.000	33.786	33.77	1.001	1.001	228.77	114	0.745	229
14	14 1,2,3,7,8,9-HxCDF	7.69e4	1.28	NO	1.14	1.000	34.696	34.72	1.000	1.001	216.38	108	0.952	216
15	15 1,2,3,4,6,7,8-HpCDF	7.22e4	1.04	NO	1.16	1.000	36.565	36.55	1.001	1.001	209.40	105	0.840	209
16	16 1,2,3,4,7,8,9-HpCDF	6.36e4	1.05	NO	1.28	1.000	38.339	38.35	1.000	1.000	217.61	109	0.844	218
17	17 OCDF	1.22e5	0.91	NO	1.02	1.000	41.269	41.28	1.000	1.000	442.12	111	0.840	442
18	18 13C-2,3,7,8-TCDD	4.71e4	0.79	NO	1.13	1.000	26.147	26.05	1.026	1.022	96.220	96.2	1.55	
19	19 13C-1,2,3,7,8-PeCDD	3.39e4	0.62	NO	0.817	1.000	30.633	30.63	1.202	1.202	96.084	96.1	0.635	
20	20 13C-1,2,3,4,7,8-HxCDD	2.86e4	1.31	NO	0.728	1.000	33.913	33.93	1.014	1.014	100.48	100	0.890	
21	21 13C-1,2,3,6,7,8-HxCDD	3.26e4	1.35	NO	0.842	1.000	34.024	34.04	1.017	1.018	99.109	99.1	0.769	
22	22 13C-1,2,3,7,8,9-HxCDD	2.94e4	1.33	NO	0.797	1.000	34.295	34.32	1.025	1.026	94.391	94.4	0.812	
23	23 13C-1,2,3,4,6,7,8-HpCDD	2.63e4	1.09	NO	0.666	1.000	37.759	37.80	1.129	1.130	100.99	101	0.908	
24	24 13C-OCDD	4.70e4	0.91	NO	0.613	1.000	40.783	41.06	1.219	1.228	196.19	98.1	0.887	
25	25 13C-2,3,7,8-TCDF	7.20e4	0.79	NO	1.03	1.000	25.230	25.26	0.990	0.991	100.32	100	1.23	
26	26 13C-1,2,3,7,8-PeCDF	5.32e4	1.72	NO	0.804	1.000	29.453	29.44	1.156	1.155	94.922	94.9	0.819	
27	27 13C-2,3,4,7,8-PeCDF	5.20e4	1.55	NO	0.790	1.000	30.352	30.35	1.191	1.191	94.436	94.4	0.834	
28	28 13C-1,2,3,4,7,8-HxCDF	3.83e4	0.52	NO	1.01	1.000	33.044	33.04	0.988	0.988	97.144	97.1	0.896	
29	29 13C-1,2,3,6,7,8-HxCDF	3.92e4	0.52	NO	1.03	1.000	33.177	33.17	0.992	0.992	97.448	97.4	0.879	
30	30 13C-2,3,4,6,7,8-HxCDF	3.56e4	0.54	NO	0.971	1.000	33.749	33.75	1.009	1.009	93.927	93.9	0.931	
31	31 13C-1,2,3,7,8,9-HxCDF	3.13e4	0.51	NO	0.833	1.000	34.649	34.70	1.036	1.037	96.160	96.2	1.09	
32	32 13C-1,2,3,4,6,7,8-HpCDF	2.96e4	0.45	NO	0.784	1.000	36.355	36.53	1.087	1.092	96.687	96.7	0.917	
33	33 13C-1,2,3,4,7,8,9-HpCDF	2.28e4	0.45	NO	0.592	1.000	38.361	38.34	1.147	1.146	98.594	98.6	1.21	
34	34 13C-OCDF	5.42e4	0.89	NO	0.703	1.000	40.937	41.27	1.224	1.234	197.25	98.6	0.894	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	2.30e4			1.31	1.000	26.145	26.08	1.026	1.023	40.738	102	0.119	
36	36 13C-1,2,3,4-TCDD	4.31e4	0.77	NO	1.00	1.000	25.480	25.48	1.000	1.000	100.00	100	1.75	
37	37 13C-1,2,3,4-TCDF	6.97e4	0.77	NO	1.00	1.000	24.020	24.02	1.000	1.000	100.00	100	1.26	
38	38 13C-1,2,3,4,6,9-HxCDF	3.91e4	0.50	NO	1.00	1.000	33.530	33.44	1.000	1.000	100.00	100	0.904	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2.10e5	0.78	NO	1.07	1.000	26.082	26.07	1.001	1.001	352.18	117	0.279	352
2	2 1,2,3,7,8-PeCDD	7.91e5	0.62	NO	0.988	1.000	30.630	30.63	1.001	1.001	1798.7	120	0.459	1800
3	3 1,2,3,4,7,8-HxCDD	7.21e5	1.27	NO	1.09	1.000	33.927	33.93	1.000	1.000	1790.9	119	0.864	1790
4	4 1,2,3,6,7,8-HxCDD	7.14e5	1.20	NO	0.938	1.000	34.016	34.04	1.000	1.001	1811.0	121	0.945	1810
5	5 1,2,3,7,8,9-HxCDD	7.12e5	1.23	NO	0.981	1.000	34.346	34.32	1.001	1.000	1775.1	118	0.966	1780
6	6 1,2,3,4,6,7,8-HpCDD	5.97e5	1.04	NO	0.965	1.000	37.802	37.80	1.000	1.000	1778.2	119	1.33	1780
7	7 OCDD	1.12e6	0.88	NO	0.900	1.000	41.038	41.06	1.000	1.001	3803.1	127	1.20	3800
8	8 2,3,7,8-TCDF	2.52e5	0.77	NO	0.859	1.000	25.281	25.27	1.001	1.001	355.92	119	0.242	356
9	9 1,2,3,7,8-PeCDF	1.23e6	1.54	NO	0.932	1.000	29.441	29.44	1.001	1.001	1935.5	129	0.887	1940
10	10 2,3,4,7,8-PeCDF	1.30e6	1.53	NO	1.05	1.000	30.357	30.33	1.001	1.000	1799.2	120	0.765	1800
11	11 1,2,3,4,7,8-HxCDF	1.02e6	1.24	NO	1.08	1.000	33.028	33.04	1.000	1.000	1902.0	127	1.17	1900
12	12 1,2,3,6,7,8-HxCDF	1.08e6	1.24	NO	1.14	1.000	33.159	33.16	1.000	1.000	1866.2	124	1.24	1870
13	13 2,3,4,6,7,8-HxCDF	1.01e6	1.24	NO	1.13	1.000	33.775	33.75	1.001	1.000	1918.8	128	1.25	1920
14	14 1,2,3,7,8,9-HxCDF	8.66e5	1.25	NO	1.14	1.000	34.685	34.70	1.000	1.000	1846.8	123	1.70	1850
15	15 1,2,3,4,6,7,8-HpCDF	8.62e5	1.02	NO	1.16	1.000	36.554	36.53	1.001	1.000	1912.4	127	1.76	1910
16	16 1,2,3,4,7,8,9-HpCDF	7.52e5	1.02	NO	1.28	1.000	38.328	38.33	1.000	1.000	1990.4	133	1.70	1990
17	17 OCDF	1.40e6	0.91	NO	1.02	1.000	41.269	41.28	1.000	1.000	3491.5	116	0.813	3490
18	18 13C-2,3,7,8-TCDD	5.56e4	0.83	NO	1.13	1.000	26.147	26.05	1.026	1.022	102.48	102	1.63	
19	19 13C-1,2,3,7,8-PeCDD	4.45e4	0.61	NO	0.817	1.000	30.633	30.61	1.202	1.201	113.92	114	0.631	
20	20 13C-1,2,3,4,7,8-HxCDD	3.70e4	1.29	NO	0.728	1.000	33.891	33.92	1.014	1.015	108.64	109	0.633	
21	21 13C-1,2,3,6,7,8-HxCDD	4.20e4	1.33	NO	0.842	1.000	34.001	34.02	1.017	1.018	106.65	107	0.547	
22	22 13C-1,2,3,7,8,9-HxCDD	4.09e4	1.32	NO	0.797	1.000	34.272	34.31	1.025	1.027	109.51	110	0.577	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.48e4	1.07	NO	0.666	1.000	37.735	37.79	1.129	1.131	111.74	112	0.912	
24	24 13C-OCDD	6.57e4	0.89	NO	0.613	1.000	40.756	41.04	1.219	1.228	228.85	114	0.732	
25	25 13C-2,3,7,8-TCDF	8.25e4	0.78	NO	1.03	1.000	25.230	25.26	0.990	0.991	96.209	96.2	0.935	
26	26 13C-1,2,3,7,8-PeCDF	6.80e4	1.65	NO	0.804	1.000	29.453	29.42	1.156	1.154	101.61	102	0.669	
27	27 13C-2,3,4,7,8-PeCDF	6.86e4	1.71	NO	0.790	1.000	30.352	30.33	1.191	1.190	104.43	104	0.682	
28	28 13C-1,2,3,4,7,8-HxCDF	4.95e4	0.48	NO	1.01	1.000	33.022	33.03	0.988	0.988	104.83	105	0.691	
29	29 13C-1,2,3,6,7,8-HxCDF	5.05e4	0.50	NO	1.03	1.000	33.156	33.15	0.992	0.992	104.75	105	0.678	
30	30 13C-2,3,4,6,7,8-HxCDF	4.65e4	0.51	NO	0.971	1.000	33.727	33.74	1.009	1.010	102.23	102	0.719	
31	31 13C-1,2,3,7,8,9-HxCDF	4.13e4	0.50	NO	0.833	1.000	34.626	34.69	1.036	1.038	106.00	106	0.838	
32	32 13C-1,2,3,4,6,7,8-HpCDF	3.87e4	0.44	NO	0.784	1.000	36.331	36.52	1.087	1.093	105.52	106	0.811	
33	33 13C-1,2,3,4,7,8,9-HpCDF	2.95e4	0.43	NO	0.592	1.000	38.336	38.33	1.147	1.147	106.34	106	1.07	
34	34 13C-OCDF	7.87e4	0.88	NO	0.703	1.000	40.910	41.27	1.224	1.235	238.92	119	0.940	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	1.45e5			1.31	1.000	26.145	26.07	1.026	1.023	231.38	116	0.200	
36	36 13C-1,2,3,4-TCDD	4.78e4	0.83	NO	1.00	1.000	25.480	25.48	1.000	1.000	100.00	100	1.85	
37	37 13C-1,2,3,4-TCDF	8.32e4	0.79	NO	1.00	1.000	24.020	24.02	1.000	1.000	100.00	100	0.963	
38	38 13C-1,2,3,4,6,9-HxCDF	4.68e4	0.52	NO	1.00	1.000	33.530	33.42	1.000	1.000	100.00	100	0.698	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24  
Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDD	26.07	3.022e3	2.369e3	1.297e2	1.471e2	0.88	NO	2.768e2	0.24822	0.24822	0.157

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.40	9.936e3	3.851e3	5.179e2	2.057e2	2.52	YES	0.000e0	0.00000	0.45502	0.181
2	Total Penta-Dioxins	30.33	9.823e3	2.800e3	4.899e2	2.089e2	2.35	YES	0.000e0	0.00000	0.46206	0.181
3	1,2,3,7,8-PeCDD	30.61	6.232e3	9.861e3	3.286e2	5.099e2	0.64	NO	8.385e2	1.1378	1.1378	0.181
4	Total Penta-Dioxins	30.87	7.023e3	1.204e4	9.734e2	1.884e3	0.52	YES	0.000e0	0.00000	3.4173	0.181

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.01	7.879e3	2.271e3	3.857e2	1.174e2	3.29	YES	0.000e0	0.00000	0.43474	0.600
2	Total Hexa-Dioxins	33.73	8.085e3	1.706e3	4.636e2	1.154e2	4.02	YES	0.000e0	0.00000	0.42721	0.600
3	1,2,3,4,7,8-HxCDD	33.92	8.095e3	6.553e3	4.295e2	3.628e2	1.18	NO	7.923e2	1.2374	1.2374	0.530
4	1,2,3,6,7,8-HxCDD	34.03	7.462e3	5.750e3	4.382e2	3.134e2	1.40	NO	7.516e2	1.1592	1.1592	0.551
5	1,2,3,7,8,9-HxCDD	34.33	8.060e3	5.127e3	4.538e2	3.466e2	1.31	NO	8.004e2	1.2441	1.2441	0.609
6	Total Hexa-Dioxins	34.67	6.238e3	1.747e3	3.959e2	1.168e2	3.39	YES	0.000e0	0.00000	0.43237	0.600

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.51	1.787e4	6.070e3	1.306e3	3.906e2	3.34	YES	0.000e0	0.00000	1.3856	0.192
2	1,2,3,4,6,7,8-HpCDD	37.79	5.952e3	5.256e3	3.336e2	3.157e2	1.06	NO	6.492e2	1.1289	1.1289	0.192
3	Total Hepta-Dioxins	38.31	1.695e4	5.507e3	1.022e3	3.087e2	3.31	YES	0.000e0	0.00000	1.0948	0.192

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDF	25.26	2.581e3	2.713e3	1.474e2	1.822e2	0.81	NO	3.296e2	0.26736	0.26736	0.122

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8-PeCDF	29.42	1.177e4	8.498e3	6.457e2	4.218e2	1.53	NO	1.067e3	1.0192	1.0192	0.0818
2	2,3,4,7,8-PeCDF	30.33	1.589e4	1.131e4	8.601e2	5.158e2	1.67	NO	1.376e3	1.1765	1.1765	0.0767
3	Total Penta-Furans	30.51	1.362e4	2.195e4	1.908e3	2.960e3	0.64	YES	0.000e0	0.00000	3.0138	0.0842

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,7,8-HxCDF	33.03	1.061e4	8.788e3	5.120e2	4.414e2	1.16	NO	9.535e2	1.0427	1.0427	0.0784
2	1,2,3,6,7,8-HxCDF	33.16	1.143e4	8.734e3	5.882e2	4.397e2	1.34	NO	1.028e3	1.0636	1.0636	0.0802
3	2,3,4,6,7,8-HxCDF	33.75	1.058e4	8.821e3	6.011e2	4.384e2	1.37	NO	1.039e3	1.0967	1.0967	0.0908
4	1,2,3,7,8,9-HxCDF	34.70	8.594e3	5.991e3	5.215e2	3.979e2	1.31	NO	9.195e2	1.1204	1.1204	0.107

**Hepta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.51	6.187e3	5.672e3	4.366e2	4.457e2	0.98	NO	8.824e2	1.1387	1.1387	0.139
2	1,2,3,4,7,8,9-HpCDF	38.33	5.892e3	5.509e3	3.016e2	3.251e2	0.93	NO	6.267e2	0.97015	0.97015	0.150

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDD	26.07	2.911e3	3.265e3	1.889e2	2.166e2	0.87	NO	4.055e2	0.48240	0.48240	0.180

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.42	1.247e4	4.414e3	7.415e2	2.132e2	3.48	YES	0.000e0	0.00000	0.64038	0.153
2	Total Penta-Dioxins	30.33	1.967e4	8.397e3	7.536e2	3.287e2	2.29	YES	0.000e0	0.00000	0.98731	0.153
3	1,2,3,7,8-PeCDD	30.63	9.829e3	1.305e4	4.800e2	7.484e2	0.64	NO	1.228e3	2.2638	2.2638	0.153

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.02	1.085e4	1.989e3	6.129e2	1.002e2	6.12	YES	0.000e0	0.00000	0.52788	0.266
2	Total Hexa-Dioxins	33.15	1.021e4	2.898e3	5.536e2	1.227e2	4.51	YES	0.000e0	0.00000	0.64629	0.266
3	Total Hexa-Dioxins	33.42	1.169e4	3.380e3	5.687e2	1.232e2	4.62	YES	0.000e0	0.00000	0.64886	0.266
4	1,2,3,4,7,8-HxCDD	33.94	1.106e4	8.165e3	6.144e2	4.558e2	1.35	NO	1.070e3	2.3485	2.3485	0.236
5	1,2,3,6,7,8-HxCDD	34.03	1.162e4	8.592e3	6.230e2	5.079e2	1.23	NO	1.131e3	2.5090	2.5090	0.246
6	1,2,3,7,8,9-HxCDD	34.32	8.394e3	7.668e3	5.455e2	4.262e2	1.28	NO	9.717e2	2.1479	2.1479	0.267

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.51	1.675e4	5.807e3	1.194e3	3.968e2	3.01	YES	0.000e0	0.00000	2.6983	0.261
2	1,2,3,4,6,7,8-HpCDD	37.80	6.582e3	9.119e3	3.868e2	3.705e2	1.04	NO	7.573e2	2.5240	2.5240	0.261
3	Total Hepta-Dioxins	38.32	1.635e4	4.668e3	9.429e2	2.548e2	3.70	YES	0.000e0	0.00000	1.7323	0.261

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDF	25.29	2.756e3	4.575e3	1.536e2	2.277e2	0.67	NO	3.813e2	0.41464	0.41464	0.150



Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

Penta-Furans function 1

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8-PeCDF	29.44	2.076e4	1.299e4	1.014e3	6.660e2	1.52	NO	1.680e3	2.2175	2.2175	0.0902
2	2,3,4,7,8-PeCDF	30.35	2.085e4	1.665e4	1.123e3	8.343e2	1.35	NO	1.958e3	2.2717	2.2717	0.0720

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,7,8-HxCDF	33.04	1.596e4	1.166e4	8.317e2	6.176e2	1.35	NO	1.449e3	2.3040	2.3040	0.0894
2	1,2,3,6,7,8-HxCDF	33.17	1.628e4	1.315e4	8.255e2	6.685e2	1.23	NO	1.494e3	2.2125	2.2125	0.0889
3	2,3,4,6,7,8-HxCDF	33.75	1.279e4	1.107e4	7.266e2	6.381e2	1.14	NO	1.365e3	2.1177	2.1177	0.0921
4	1,2,3,7,8,9-HxCDF	34.70	1.114e4	8.933e3	7.083e2	5.650e2	1.25	NO	1.273e3	2.3397	2.3397	0.129

Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.53	1.021e4	1.003e4	5.996e2	5.957e2	1.01	NO	1.195e3	2.2332	2.2332	0.123
2	1,2,3,4,7,8,9-HpCDF	38.33	8.285e3	8.090e3	4.915e2	4.479e2	1.10	NO	9.394e2	2.1858	2.1858	0.139

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDD	26.05	8.708e3	1.411e4	6.258e2	7.913e2	0.79	NO	1.417e3	1.8541	1.8541	0.176

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.42	2.054e4	6.603e3	1.143e3	3.469e2	3.30	YES	0.000e0	0.00000	1.1432	0.182
2	Total Penta-Dioxins	30.33	2.715e4	8.099e3	1.217e3	4.376e2	2.78	YES	0.000e0	0.00000	1.4422	0.182
3	1,2,3,7,8-PeCDD	30.63	3.551e4	5.369e4	1.780e3	2.782e3	0.64	NO	4.562e3	9.2246	9.2246	0.182

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.03	1.640e4	4.344e3	7.401e2	1.870e2	3.96	YES	0.000e0	0.00000	1.0692	0.236
2	Total Hexa-Dioxins	33.15	1.300e4	2.524e3	7.087e2	1.365e2	5.19	YES	0.000e0	0.00000	0.78005	0.236
3	Total Hexa-Dioxins	33.42	1.806e4	3.799e3	9.193e2	1.974e2	4.66	YES	0.000e0	0.00000	1.1283	0.236
4	1,2,3,4,7,8-HxCDD	33.94	3.708e4	2.839e4	2.149e3	1.721e3	1.25	NO	3.870e3	9.2764	9.2764	0.205
5	1,2,3,6,7,8-HxCDD	34.04	3.663e4	2.913e4	2.089e3	1.538e3	1.36	NO	3.628e3	8.6144	8.6144	0.230
6	1,2,3,7,8,9-HxCDD	34.32	3.720e4	2.962e4	2.169e3	1.718e3	1.26	NO	3.888e3	9.4016	9.4016	0.230
7	Total Hexa-Dioxins	34.69	1.011e4	2.894e3	6.309e2	1.756e2	3.59	YES	0.000e0	0.00000	1.0040	0.236

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.51	2.107e4	7.357e3	1.523e3	5.309e2	2.87	YES	0.000e0	0.00000	3.1141	0.262
2	1,2,3,4,6,7,8-HpCDD	37.80	3.009e4	3.119e4	1.638e3	1.596e3	1.03	NO	3.234e3	9.3002	9.3002	0.262
3	Total Hepta-Dioxins	38.32	2.092e4	7.147e3	1.316e3	3.744e2	3.51	YES	0.000e0	0.00000	2.1962	0.262

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDF	25.26	1.249e4	1.540e4	6.832e2	9.110e2	0.75	NO	1.594e3	1.8543	1.8543	0.153

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8-PeCDF	29.44	7.391e4	4.591e4	3.981e3	2.439e3	1.63	NO	6.420e3	8.6689	8.6689	0.0995
2	2,3,4,7,8-PeCDF	30.35	9.020e4	4.863e4	4.507e3	2.699e3	1.67	NO	7.205e3	8.9489	8.9489	0.0937

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,7,8-HxCDF	33.04	5.634e4	4.695e4	2.852e3	2.432e3	1.17	NO	5.284e3	9.0659	9.0659	0.177
2	1,2,3,6,7,8-HxCDF	33.16	5.427e4	4.819e4	3.163e3	2.477e3	1.28	NO	5.640e3	8.9943	8.9943	0.172
3	2,3,4,6,7,8-HxCDF	33.75	5.118e4	3.958e4	3.035e3	2.190e3	1.39	NO	5.225e3	8.7596	8.7596	0.178
4	1,2,3,7,8,9-HxCDF	34.70	3.931e4	3.047e4	2.527e3	1.901e3	1.33	NO	4.428e3	8.7724	8.7724	0.245

**Hepta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.53	3.099e4	3.215e4	2.180e3	2.305e3	0.95	NO	4.485e3	9.3308	9.3308	0.176
2	1,2,3,4,7,8,9-HpCDF	38.34	3.671e4	3.160e4	1.959e3	1.922e3	1.02	NO	3.881e3	9.4338	9.4338	0.179

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	22.61	7.283e4	9.005e4	5.714e3	7.507e3	0.76	NO	1.322e4	17.034	17.034	0.187
2	Total Tetra-Dioxins	25.27	6.664e3	1.955e3	5.269e2	1.415e2	3.72	YES	0.000e0	0.00000	0.32273	0.187
3	Total Tetra-Dioxins	25.52	7.920e4	1.053e5	5.131e3	7.140e3	0.72	NO	1.227e4	15.809	15.809	0.187
4	Total Tetra-Dioxins	25.79	7.122e4	1.050e5	4.929e3	7.055e3	0.70	NO	1.198e4	15.440	15.440	0.187
5	Total Tetra-Dioxins	25.96	8.896e4	1.194e5	5.815e3	7.556e3	0.77	NO	1.337e4	17.228	17.228	0.187
6	2,3,7,8-TCDD	26.08	4.841e4	6.875e4	3.059e3	4.256e3	0.72	NO	7.316e3	9.4256	9.4256	0.187
7	Total Tetra-Dioxins	26.95	9.765e4	1.269e5	5.568e3	7.553e3	0.74	NO	1.312e4	16.906	16.906	0.187

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.58	3.043e5	4.995e5	2.091e4	3.460e4	0.60	NO	5.552e4	113.43	113.43	0.301
2	Total Penta-Dioxins	29.44	2.102e4	7.219e3	1.281e3	4.183e2	3.06	YES	0.000e0	0.00000	1.3931	0.301
3	Total Penta-Dioxins	30.33	2.850e4	1.031e4	1.511e3	5.039e2	3.00	YES	0.000e0	0.00000	1.6780	0.301
4	1,2,3,7,8-PeCDD	30.63	1.790e5	3.007e5	8.901e3	1.518e4	0.59	NO	2.408e4	49.203	49.203	0.301
5	Total Penta-Dioxins	30.99	4.192e5	6.986e5	2.058e4	3.356e4	0.61	NO	5.414e4	110.62	110.62	0.301

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.41	5.402e5	4.283e5	2.755e4	2.198e4	1.25	NO	4.953e4	123.82	123.82	0.508
2	Total Hexa-Dioxins	33.04	1.772e4	3.737e3	9.414e2	2.700e2	3.49	YES	0.000e0	0.00000	1.5123	0.508
3	Total Hexa-Dioxins	33.17	1.399e4	4.462e3	9.299e2	2.024e2	4.59	YES	0.000e0	0.00000	1.1337	0.508
4	Total Hexa-Dioxins	33.24	4.317e3	4.164e3	1.676e2	2.713e2	0.62	YES	0.000e0	0.00000	0.75683	0.508
5	Total Hexa-Dioxins	33.44	1.765e4	3.401e3	9.830e2	1.969e2	4.99	YES	0.000e0	0.00000	1.1028	0.508
6	Total Hexa-Dioxins	33.75	1.642e4	3.923e3	8.312e2	1.958e2	4.24	YES	0.000e0	0.00000	1.0968	0.508
7	1,2,3,4,7,8-HxCDD	33.94	1.939e5	1.542e5	1.130e4	8.655e3	1.31	NO	1.996e4	47.271	47.271	0.442
8	1,2,3,6,7,8-HxCDD	34.05	1.777e5	1.448e5	1.126e4	9.112e3	1.24	NO	2.037e4	47.796	47.796	0.475
9	1,2,3,7,8,9-HxCDD	34.33	1.798e5	1.357e5	1.130e4	8.976e3	1.26	NO	2.027e4	47.256	47.256	0.513
10	Total Hexa-Dioxins	34.70	1.140e4	3.053e3	7.452e2	2.068e2	3.60	YES	0.000e0	0.00000	1.1581	0.508

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.54	2.222e4	8.198e3	1.866e3	5.084e2	3.67	YES	0.000e0	0.00000	3.0331	0.990
2	Total Hepta-Dioxins	36.93	2.422e5	2.290e5	1.810e4	1.719e4	1.05	NO	3.529e4	103.22	103.22	0.990
3	1,2,3,4,6,7,8-HpCDD	37.81	1.371e5	1.273e5	8.527e3	7.798e3	1.09	NO	1.633e4	47.748	47.748	0.990
4	Total Hepta-Dioxins	38.33	2.176e4	8.088e3	1.252e3	3.917e2	3.20	YES	0.000e0	0.00000	2.3369	0.990

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

## Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	20.45	9.862e4	1.335e5	8.569e3	1.098e4	0.78	NO	1.955e4	22.229	22.229	0.227
2	2,3,7,8-TCDF	25.29	5.652e4	7.223e4	3.786e3	4.829e3	0.78	NO	8.615e3	9.7984	9.7984	0.227
3	Total Tetra-Furans	27.09	1.258e5	1.659e5	7.445e3	9.669e3	0.77	NO	1.711e4	19.464	19.464	0.227

## Penta-Furans function 1

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1st Func. Penta-Furans	27.06	8.601e5	5.259e5	4.955e4	3.087e4	1.61	NO	8.043e4	110.05	110.05	0.103

## Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.50	1.681e3	2.164e3	2.236e2	1.579e2	1.42	NO	3.815e2	0.52200	0.52200	0.241
2	Total Penta-Furans	29.06	3.683e3	1.902e3	1.971e2	1.180e2	1.67	NO	3.152e2	0.43124	0.43124	0.241
3	1,2,3,7,8-PeCDF	29.44	4.634e5	2.950e5	2.358e4	1.468e4	1.61	NO	3.826e4	51.012	51.012	0.244
4	Total Penta-Furans	29.66	3.002e3	2.733e3	1.988e2	1.020e2	1.95	YES	0.000e0	0.00000	0.35583	0.241
5	2,3,4,7,8-PeCDF	30.35	4.837e5	3.071e5	2.378e4	1.501e4	1.58	NO	3.879e4	48.279	48.279	0.212
6	Total Penta-Furans	31.23	7.572e5	4.816e5	3.877e4	2.486e4	1.56	NO	6.363e4	87.066	87.066	0.241

## Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	31.88	7.793e5	6.309e5	3.624e4	2.958e4	1.23	NO	6.582e4	112.05	112.05	0.404
2	1,2,3,4,7,8-HxCDF	33.05	2.976e5	2.514e5	1.598e4	1.290e4	1.24	NO	2.888e4	48.246	48.246	0.357
3	1,2,3,6,7,8-HxCDF	33.17	3.021e5	2.543e5	1.727e4	1.459e4	1.18	NO	3.185e4	48.760	48.760	0.348
4	2,3,4,6,7,8-HxCDF	33.77	2.541e5	2.227e5	1.603e4	1.274e4	1.26	NO	2.878e4	48.827	48.827	0.420
5	1,2,3,7,8,9-HxCDF	34.71	1.997e5	1.591e5	1.343e4	1.059e4	1.27	NO	2.402e4	48.875	48.875	0.530

## Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.54	1.569e5	1.491e5	1.148e4	1.133e4	1.01	NO	2.281e4	47.036	47.036	0.480
2	1,2,3,4,7,8,9-HpCDF	38.34	1.391e5	1.454e5	9.802e3	9.698e3	1.01	NO	1.950e4	49.559	49.559	0.453

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	25.24	5.169e3	2.126e3	3.737e2	1.039e2	3.60	YES	0.000e0	0.00000	0.36481	0.291
2	Total Tetra-Dioxins	25.79	3.296e3	3.197e3	2.247e2	1.667e2	1.35	YES	0.000e0	0.00000	0.58534	0.291
3	2,3,7,8-TCDD	26.08	1.459e5	1.767e5	8.866e3	1.128e4	0.79	NO	2.014e4	39.951	39.951	0.291

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.44	1.659e4	7.051e3	9.496e2	3.870e2	2.45	YES	0.000e0	0.00000	1.8851	0.303
2	Total Penta-Dioxins	30.35	1.995e4	6.425e3	9.930e2	3.850e2	2.58	YES	0.000e0	0.00000	1.8752	0.303
3	1,2,3,7,8-PeCDD	30.65	5.036e5	8.637e5	2.747e4	4.472e4	0.61	NO	7.219e4	215.72	215.72	0.303

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.04	1.085e4	3.760e3	6.400e2	1.574e2	4.07	YES	0.000e0	0.00000	1.2453	0.733
2	Total Hexa-Dioxins	33.16	1.393e4	2.732e3	7.271e2	1.556e2	4.67	YES	0.000e0	0.00000	1.2315	0.733
3	Total Hexa-Dioxins	33.44	1.439e4	3.005e3	7.592e2	1.910e2	3.98	YES	0.000e0	0.00000	1.5112	0.733
4	Total Hexa-Dioxins	33.75	1.191e4	2.531e3	6.848e2	1.619e2	4.23	YES	0.000e0	0.00000	1.2813	0.733
5	1,2,3,4,7,8-HxCDD	33.94	6.372e5	5.188e5	3.467e4	2.773e4	1.25	NO	6.241e4	200.74	200.74	0.661
6	1,2,3,6,7,8-HxCDD	34.05	6.272e5	4.919e5	3.559e4	2.825e4	1.26	NO	6.384e4	208.86	208.86	0.660
7	1,2,3,7,8,9-HxCDD	34.34	5.535e5	4.433e5	3.452e4	2.764e4	1.25	NO	6.216e4	215.39	215.39	0.746
8	Total Hexa-Dioxins	34.71	1.065e4	2.977e3	6.834e2	1.677e2	4.07	YES	0.000e0	0.00000	1.3273	0.733

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.54	1.970e4	6.342e3	1.447e3	4.785e2	3.02	YES	0.000e0	0.00000	3.8526	0.849
2	1,2,3,4,6,7,8-HpCDD	37.81	4.630e5	4.479e5	2.636e4	2.517e4	1.05	NO	5.153e4	203.37	203.37	0.849
3	Total Hepta-Dioxins	38.33	1.955e4	7.147e3	1.196e3	4.744e2	2.52	YES	0.000e0	0.00000	3.8190	0.849

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	2,3,7,8-TCDF	25.29	1.709e5	2.121e5	1.082e4	1.410e4	0.77	NO	2.493e4	40.316	40.316	0.240

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.54	2.357e3	1.630e3	1.533e2	1.112e2	1.38	NO	2.646e2	0.54005	0.54005	0.372
2	1,2,3,7,8-PeCDF	29.46	1.241e6	7.588e5	6.790e4	4.312e4	1.57	NO	1.110e5	224.04	224.04	0.358
3	Total Penta-Furans	29.66	5.183e3	3.705e3	2.671e2	1.561e2	1.71	NO	4.232e2	0.86386	0.86386	0.372
4	2,3,4,7,8-PeCDF	30.35	1.512e6	9.331e5	7.364e4	4.558e4	1.62	NO	1.192e5	218.04	218.04	0.343
5	Total Penta-Furans	31.23	3.651e3	2.856e3	2.184e2	1.805e2	1.21	YES	0.000e0	0.00000	0.73359	0.372

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,7,8-HxCDF	33.06	9.761e5	7.639e5	5.103e4	4.071e4	1.25	NO	9.174e4	220.95	220.95	0.681
2	1,2,3,6,7,8-HxCDF	33.18	1.081e6	8.983e5	5.652e4	4.597e4	1.23	NO	1.025e5	229.07	229.07	0.629
3	2,3,4,6,7,8-HxCDF	33.77	9.317e5	7.650e5	5.101e4	4.114e4	1.24	NO	9.215e4	228.77	228.77	0.745
4	1,2,3,7,8,9-HxCDF	34.72	6.697e5	5.370e5	4.320e4	3.366e4	1.28	NO	7.686e4	216.38	216.38	0.952

**Hepta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.55	5.259e5	5.125e5	3.673e4	3.547e4	1.04	NO	7.220e4	209.40	209.40	0.840
2	1,2,3,4,7,8,9-HpCDF	38.35	5.013e5	4.992e5	3.264e4	3.101e4	1.05	NO	6.365e4	217.61	217.61	0.844

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	25.24	7.067e3	1.802e3	4.641e2	1.120e2	4.14	YES	0.000e0	0.00000	0.33283	0.279
2	Total Tetra-Dioxins	25.79	2.065e4	2.391e4	1.724e3	2.206e3	0.78	NO	3.930e3	6.5985	6.5985	0.279
3	2,3,7,8-TCDD	26.07	1.481e6	1.945e6	9.212e4	1.176e5	0.78	NO	2.097e5	352.18	352.18	0.279

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	29.42	3.356e4	1.218e4	1.758e3	7.765e2	2.26	YES	0.000e0	0.00000	2.8763	0.459
2	Total Penta-Dioxins	30.23	8.013e3	1.133e4	3.994e2	6.551e2	0.61	NO	1.055e3	2.3965	2.3965	0.459
3	Total Penta-Dioxins	30.33	2.726e4	7.969e3	1.448e3	4.650e2	3.11	YES	0.000e0	0.00000	1.7223	0.459
4	1,2,3,7,8-PeCDD	30.63	6.202e6	9.521e6	3.033e5	4.882e5	0.62	NO	7.915e5	1798.7	1798.7	0.459

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	33.03	2.137e4	6.725e3	1.014e3	3.471e2	2.92	YES	0.000e0	0.00000	2.0750	0.985
2	Total Hexa-Dioxins	33.15	1.913e4	4.338e3	9.464e2	2.362e2	4.01	YES	0.000e0	0.00000	1.4119	0.985
3	Total Hexa-Dioxins	33.42	1.649e4	4.163e3	9.253e2	2.311e2	4.00	YES	0.000e0	0.00000	1.3815	0.985
4	Total Hexa-Dioxins	33.74	1.721e4	4.473e3	9.022e2	2.443e2	3.69	YES	0.000e0	0.00000	1.4604	0.985
5	1,2,3,4,7,8-HxCDD	33.93	7.540e6	6.048e6	4.033e5	3.179e5	1.27	NO	7.211e5	1790.9	1790.9	0.864
6	1,2,3,6,7,8-HxCDD	34.04	6.792e6	5.435e6	3.900e5	3.237e5	1.20	NO	7.137e5	1811.0	1811.0	0.945
7	1,2,3,7,8,9-HxCDD	34.32	6.902e6	5.603e6	3.926e5	3.194e5	1.23	NO	7.120e5	1775.1	1775.1	0.966
8	Total Hexa-Dioxins	34.69	1.906e4	9.791e3	1.094e3	5.232e2	2.09	YES	0.000e0	0.00000	3.1273	0.985

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.52	3.065e4	1.007e4	1.798e3	5.808e2	3.10	YES	0.000e0	0.00000	3.5277	1.33
2	Total Hepta-Dioxins	36.93	7.685e3	9.194e3	5.134e2	5.712e2	0.90	NO	1.085e3	3.2291	3.2291	1.33
3	1,2,3,4,6,7,8-HpCDD	37.80	6.017e6	5.792e6	3.040e5	2.933e5	1.04	NO	5.972e5	1778.2	1778.2	1.33
4	Total Hepta-Dioxins	38.32	3.317e4	1.054e4	1.732e3	6.574e2	2.63	YES	0.000e0	0.00000	3.9930	1.33



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	24.48	7.518e3	8.897e3	5.161e2	6.182e2	0.83	NO	1.134e3	1.6022	1.6022	0.242
2	2,3,7,8-TCDF	25.27	1.733e6	2.238e6	1.094e5	1.426e5	0.77	NO	2.520e5	355.92	355.92	0.242
3	Total Tetra-Furans	26.08	1.516e3	2.014e3	1.196e2	1.335e2	0.90	YES	0.000e0	0.00000	0.33381	0.242

**Penta-Furans function 1**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1												

**Penta-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.52	1.818e4	1.208e4	1.440e3	1.039e3	1.39	NO	2.479e3	3.8962	3.8962	0.876
2	Total Penta-Furans	29.06	9.299e3	6.021e3	4.613e2	2.955e2	1.56	NO	7.569e2	1.1894	1.1894	0.876
3	Total Penta-Furans	29.14	6.618e3	5.536e3	3.254e2	1.991e2	1.63	NO	5.245e2	0.82424	0.82424	0.876
4	Total Penta-Furans	29.26	2.366e4	1.295e4	1.186e3	7.367e2	1.61	NO	1.923e3	3.0212	3.0212	0.876
5	1,2,3,7,8-PeCDF	29.44	1.448e7	9.296e6	7.432e5	4.826e5	1.54	NO	1.226e6	1935.5	1935.5	0.887
6	Total Penta-Furans	29.64	8.378e4	5.615e4	7.527e3	4.547e3	1.66	NO	1.207e4	18.974	18.974	0.876
7	2,3,4,7,8-PeCDF	30.33	1.469e7	9.860e6	7.854e5	5.134e5	1.53	NO	1.299e6	1799.2	1799.2	0.765
8	Total Penta-Furans	30.61	5.949e3	5.397e3	4.405e2	3.287e2	1.34	NO	7.692e2	1.2088	1.2088	0.876
9	Total Penta-Furans	31.23	2.728e4	2.076e4	1.792e3	1.091e3	1.64	NO	2.883e3	4.5311	4.5311	0.876

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 11:10:06 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 11:15:07 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	31.85	6.609e3	7.979e3	3.294e2	2.743e2	1.20	NO	6.037e2	1.1379	1.1379	1.32
2	Total Hexa-Furans	32.02	1.613e4	1.234e4	7.923e2	6.477e2	1.22	NO	1.440e3	2.7140	2.7140	1.32
3	Total Hexa-Furans	32.93	1.666e4	8.543e3	4.906e2	2.463e2	1.99	YES	0.000e0	0.00000	1.0400	1.32
4	1,2,3,4,7,8-HxCDF	33.04	1.136e7	9.294e6	5.647e5	4.561e5	1.24	NO	1.021e6	1902.0	1902.0	1.17
5	1,2,3,6,7,8-HxCDF	33.16	1.126e7	9.294e6	5.941e5	4.811e5	1.24	NO	1.075e6	1866.2	1866.2	1.24
6	2,3,4,6,7,8-HxCDF	33.75	1.041e7	8.377e6	5.585e5	4.491e5	1.24	NO	1.008e6	1918.8	1918.8	1.25
7	Total Hexa-Furans	34.03	7.097e3	7.385e3	3.589e2	3.273e2	1.10	NO	6.861e2	1.2932	1.2932	1.32
8	Total Hexa-Furans	34.37	6.756e3	6.182e3	3.603e2	2.859e2	1.26	NO	6.462e2	1.2180	1.2180	1.32
9	1,2,3,7,8,9-HxCDF	34.70	8.043e6	6.433e6	4.819e5	3.844e5	1.25	NO	8.663e5	1846.8	1846.8	1.70

Hepta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.53	6.508e6	6.418e6	4.346e5	4.275e5	1.02	NO	8.621e5	1912.4	1912.4	1.76
2	Total Hepta-Furans	37.12	1.292e4	1.157e4	8.131e2	8.630e2	0.94	NO	1.676e3	4.2219	4.2219	1.80
3	1,2,3,4,7,8,9-HpCDF	38.33	6.806e6	6.738e6	3.795e5	3.727e5	1.02	NO	7.522e5	1990.4	1990.4	1.70

Dataset: Untitled

Last Altered: Wednesday, June 24, 2020 11:32:06 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:32:36 Pacific Daylight Time

Method: C:\MassLynx\Default.pro\Methdb\CPSM.mdb 18 May 2020 14:57:34

Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	RT
1	1,3,6,8-TCDD (First)	22.61
2	1,2,8,9-TCDD (Last)	26.95
3	1,2,4,7,9-PeCDD (First)	28.58
4	1,2,3,8,9-PeCDD (Last)	30.99
5	1,2,4,6,7,9-HxCDD (First)	32.41
6	1,2,3,7,8,9-HxCDD (Last)	34.33
7	1,2,3,4,6,7,9-HpCDD (First)	36.93
8	1,2,3,4,6,7,8-HpCDD (Last)	37.81
9	1,3,6,8-TCDF (First)	20.45
10	1,2,8,9-TCDF (Last)	27.09
11	1,3,4,6,8-PeCDF (First)	27.06
12	1,2,3,8,9-PeCDF (Last)	31.23
13	1,2,3,4,6,8-HxCDF (First)	31.88
14	1,2,3,7,8,9-HxCDF (Last)	34.71
15	1,2,3,4,6,7,8-HpCDF (First)	36.54
16	1,2,3,4,7,8,9-HpCDF (Last)	38.34

Dataset: Untitled

Last Altered: Wednesday, June 24, 2020 11:34:30 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:34:46 Pacific Daylight Time

Method: C:\MassLynx\Default.pro\Methdb\1613\_rrt.mdb 27 Apr 2020 14:17:24  
Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

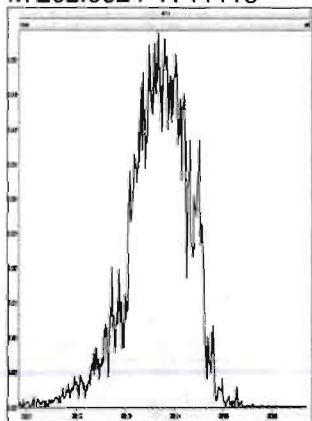
Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	200623D1_1	ST200623D1-1 1613 CS0 20F1102	23-Jun-20	15:09:18
2	200623D1_2	ST200623D1-2 1613 CS1 20F1103	23-Jun-20	15:54:30
3	200623D1_3	ST200623D1-3 1613 CS2 20F1104	23-Jun-20	16:45:40
4	200623D1_4	ST200623D1-4 1613 CS3 20F1105	23-Jun-20	17:30:52
5	200623D1_5	ST200623D1-5 1613 CS4 20F1106	23-Jun-20	18:16:00
6	200623D1_6	ST200623D1-6 1613 CS5 20F1107	23-Jun-20	19:01:07
7	200623D1_7	SOLVENT BLANK	23-Jun-20	19:46:16
8	200623D1_8	SS200623D1-1 1613 SSS 20F1108	23-Jun-20	20:31:24

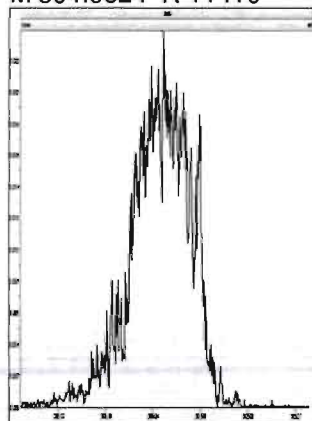
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, June 23, 2020 15:05:36 Pacific Daylight Time

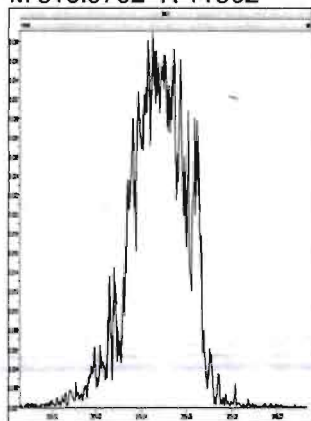
M 292.9824 R 11113



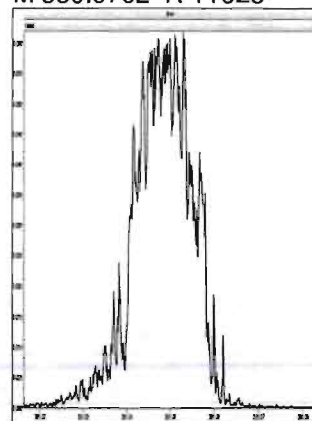
M 304.9824 R 11410



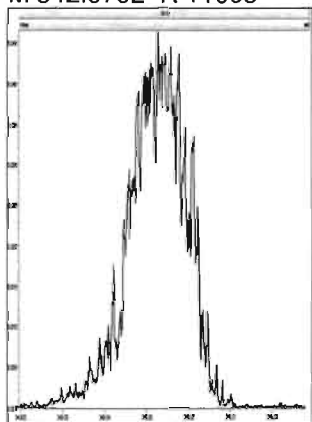
M 318.9792 R 11362



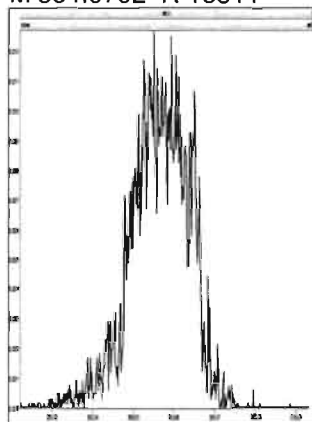
M 330.9792 R 11625



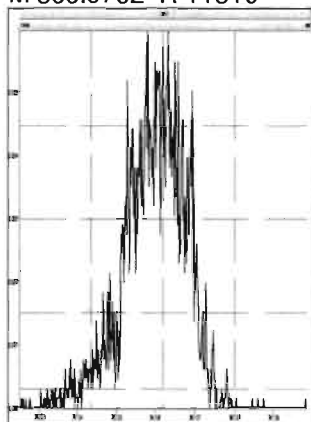
M 342.9792 R 11063



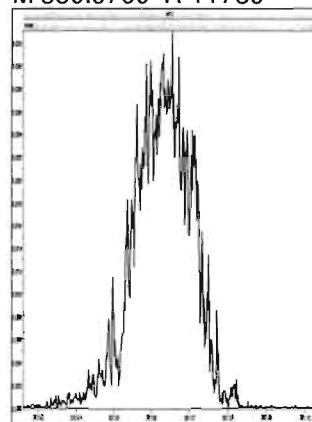
M 354.9792 R 13811



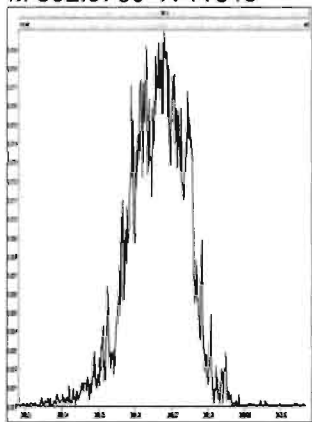
M 366.9792 R 11310



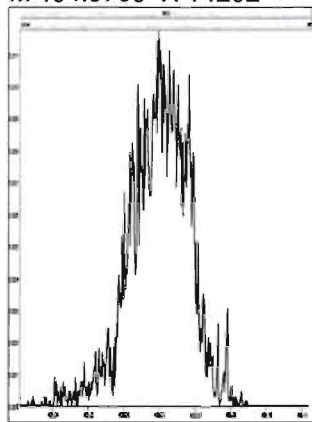
M 380.9760 R 11789



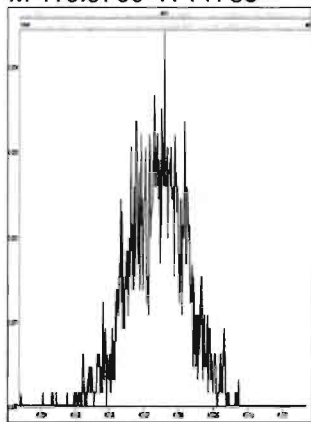
M 392.9760 R 11848



M 404.9760 R 14202



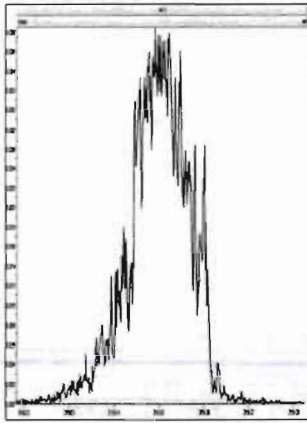
M 416.9760 R 11738



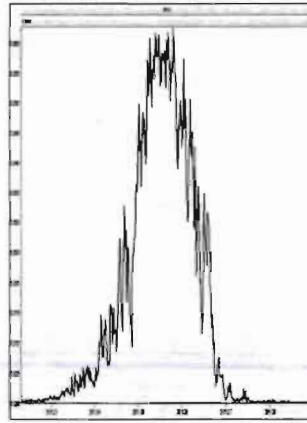
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, June 23, 2020 15:06:12 Pacific Daylight Time

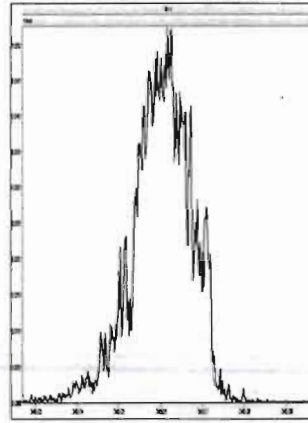
M 318.9792 R 11904



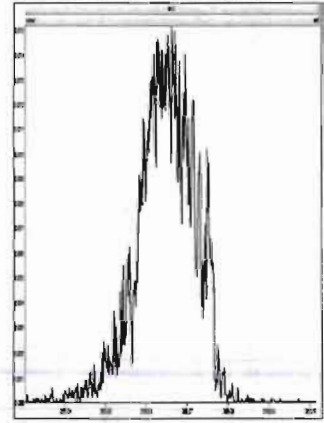
M 330.9792 R 11902



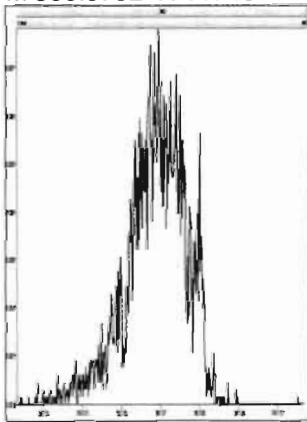
M 342.9792 R 12015



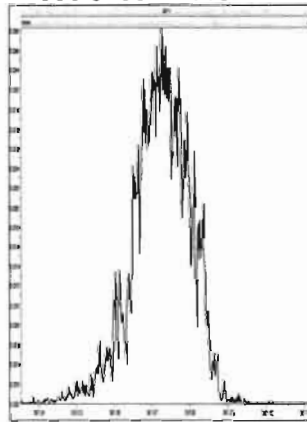
M 354.9792 R 12625



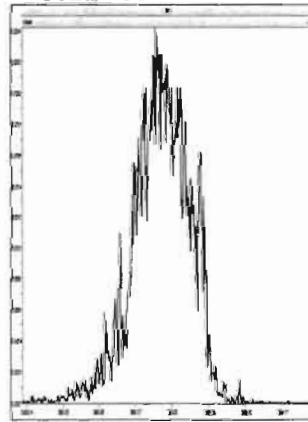
M 366.9792 R 11740



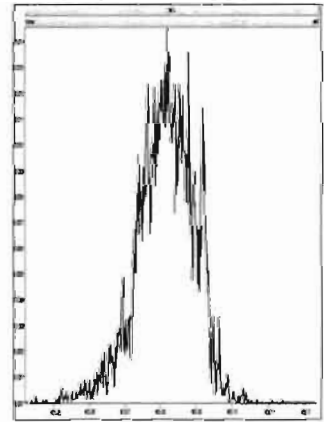
M 380.9760 R 11522



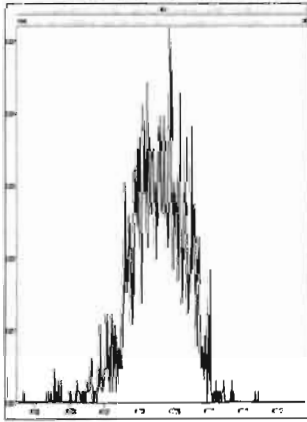
M 392.9760 R 11682



M 404.9760 R 13367



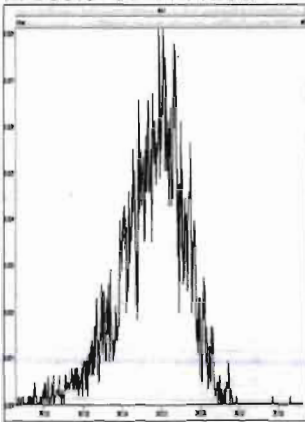
M 416.9760 R 16028



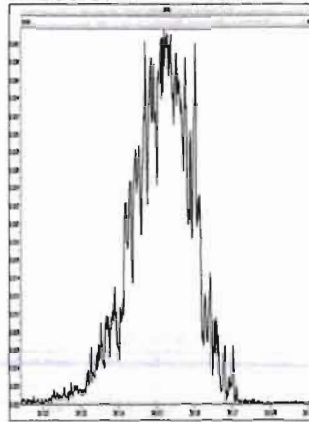
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, June 23, 2020 15:07:04 Pacific Daylight Time

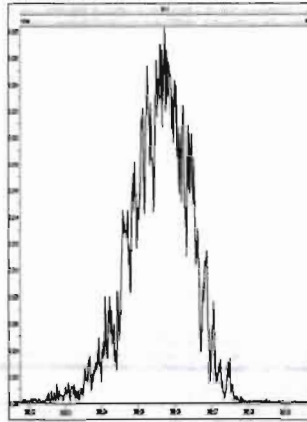
M 366.9792 R 11208



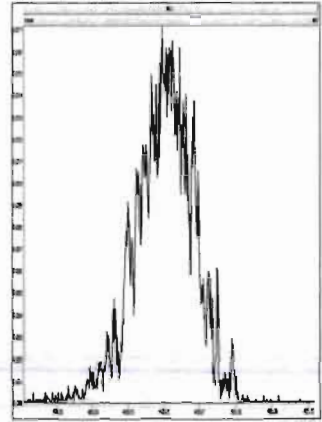
M 380.9760 R 10684



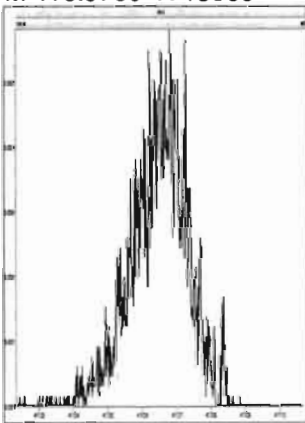
M 392.9760 R 10377



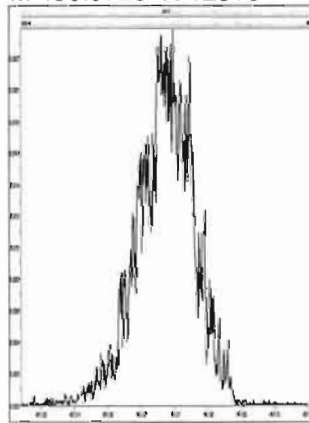
M 404.9760 R 12379



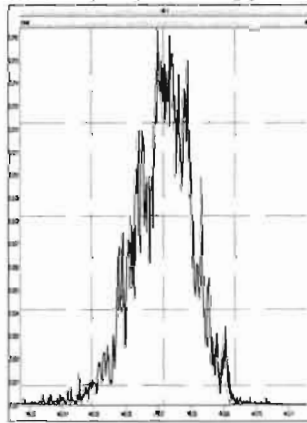
M 416.9760 R 13365



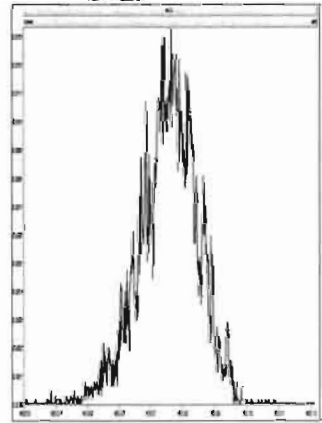
M 430.9728 R 12315



M 442.9728 R 11739



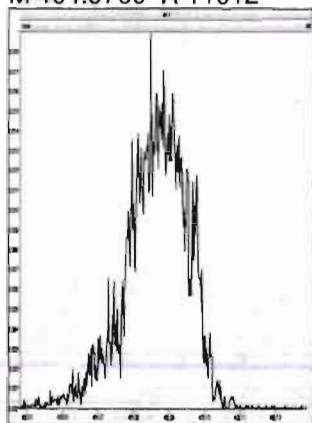
M 454.9728 R 11112



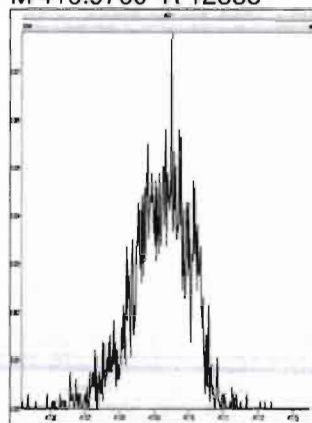
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, June 23, 2020 15:07:50 Pacific Daylight Time

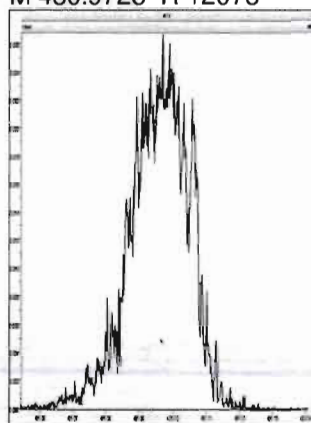
M 404.9760 R 11012



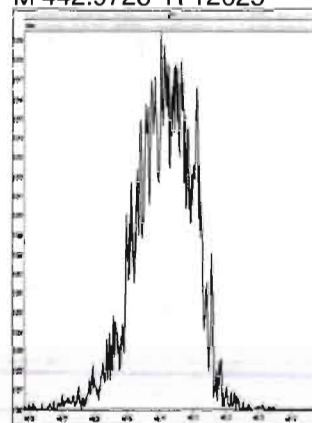
M 416.9760 R 12883



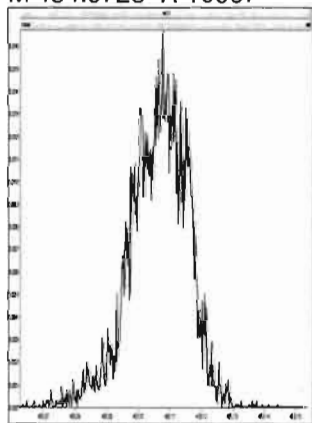
M 430.9728 R 12073



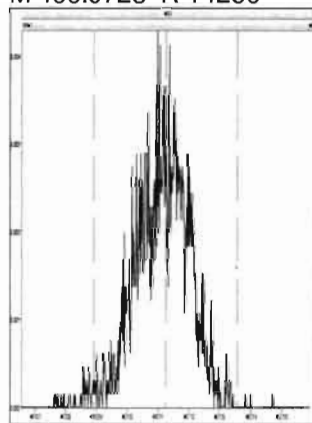
M 442.9728 R 12625



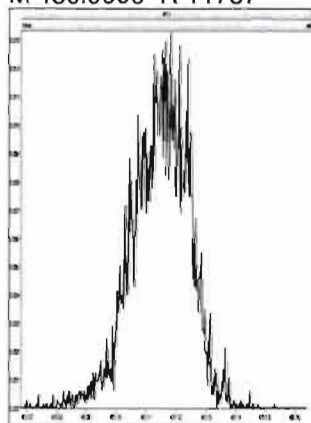
M 454.9728 R 10967



M 466.9728 R 14286



M 480.9696 R 11737

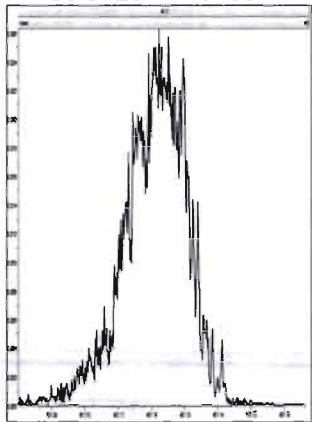




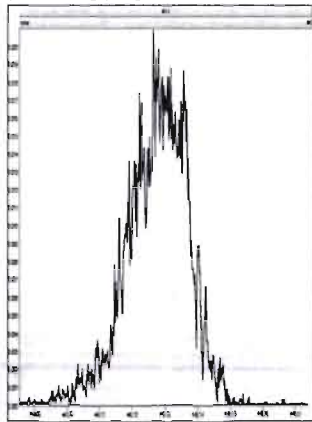
File: Experiment: ocdd\_db5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, June 23, 2020 15:08:26 Pacific Daylight Time

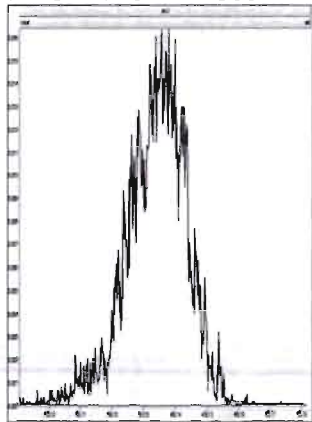
M 430.9728 R 10160



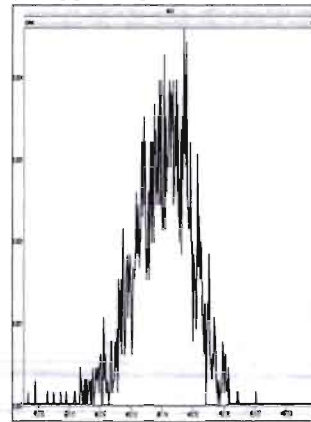
M 442.9728 R 11111



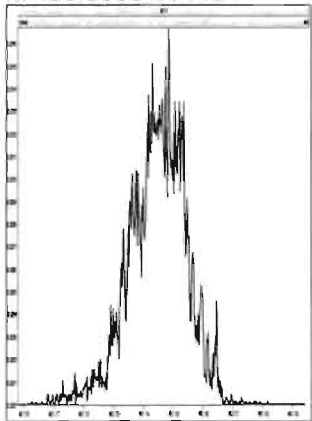
M 454.9728 R 14366



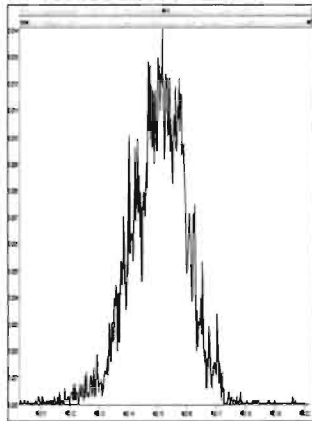
M 466.9728 R 14972



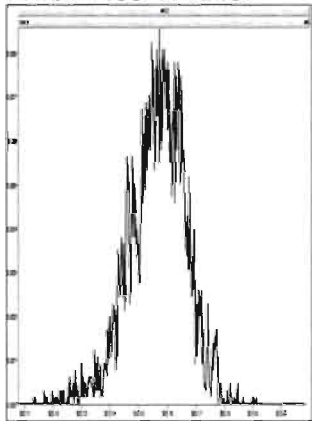
M 480.9696 R 11211



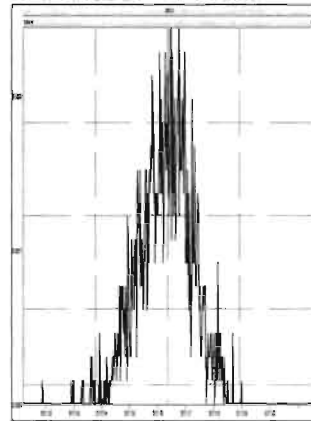
M 492.9696 R 12254

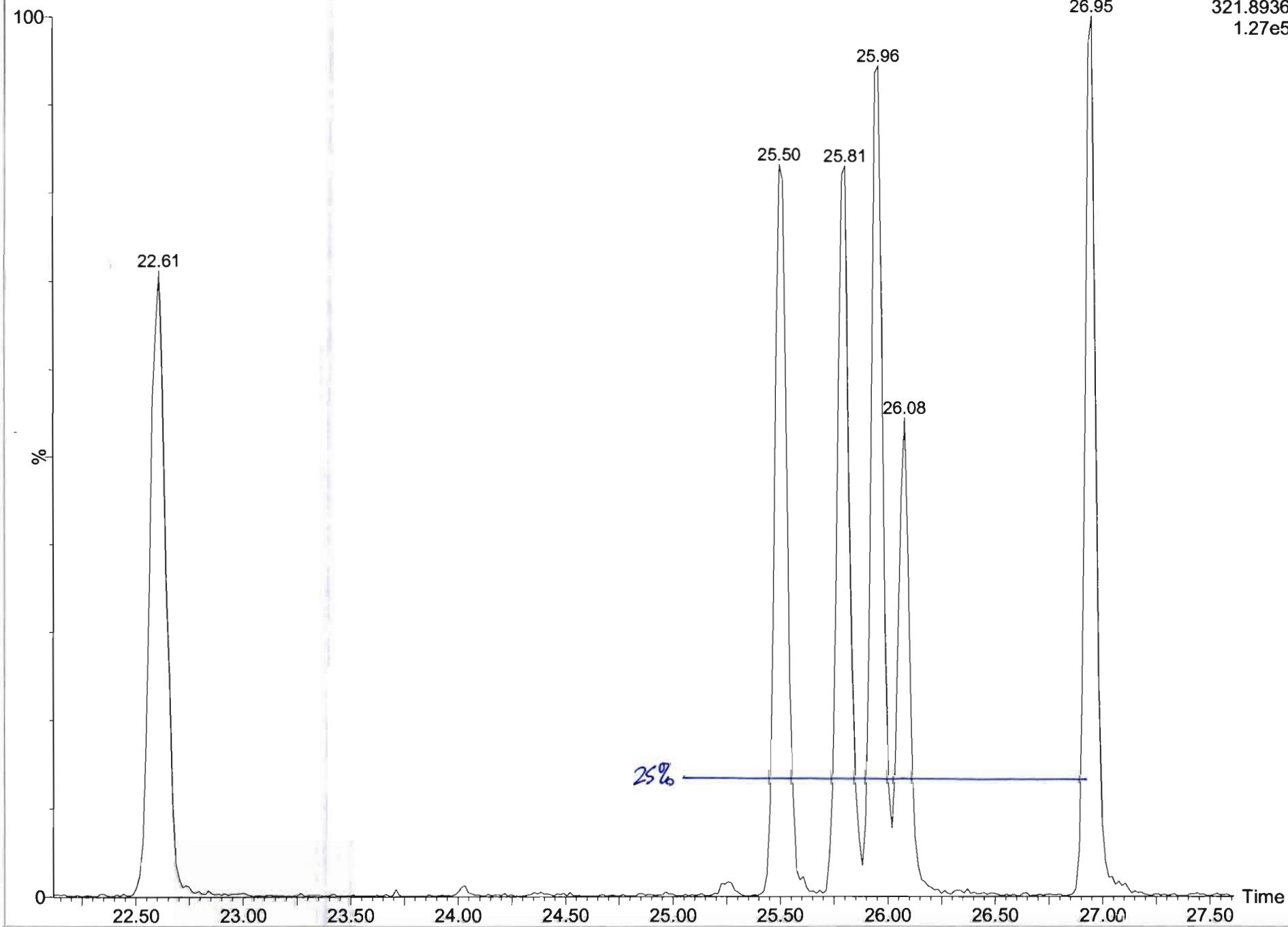


M 504.9696 R 13367



M 516.9697 R 12023





Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

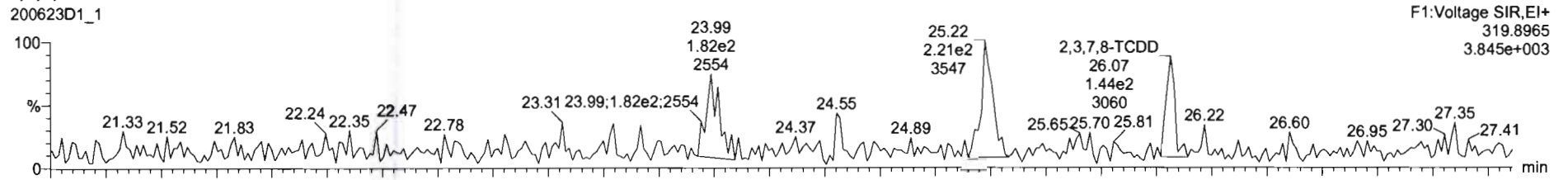
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24  
Calibration: 24 Jun 2020 10:46:07

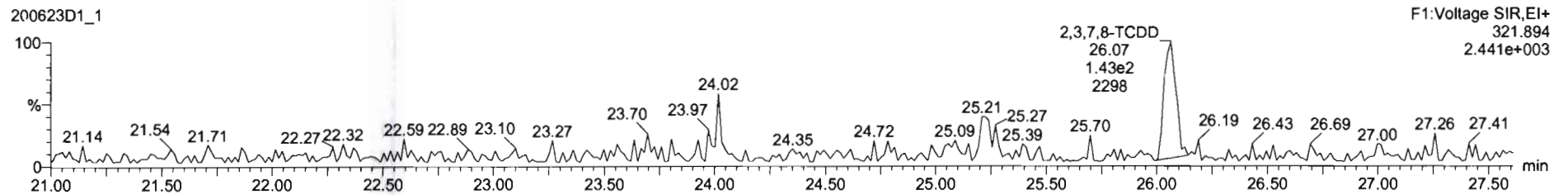
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

2,3,7,8-TCDD

200623D1\_1

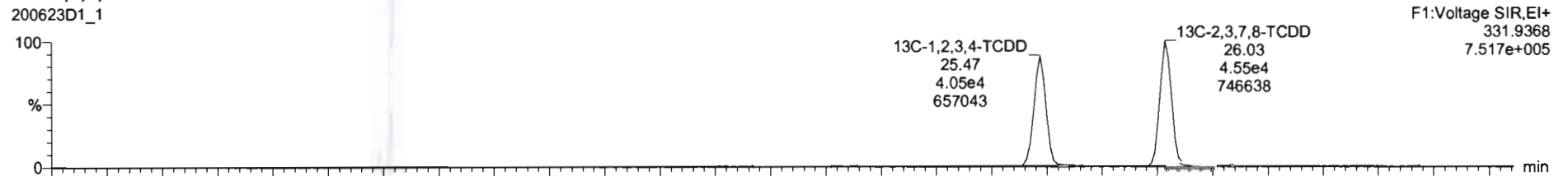


200623D1\_1

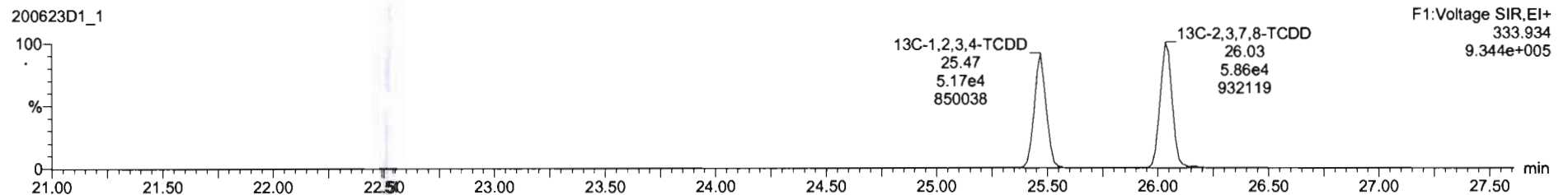


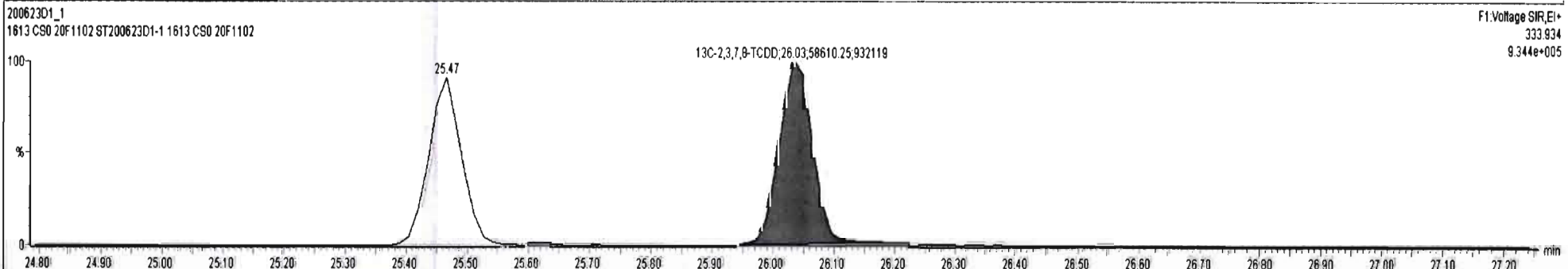
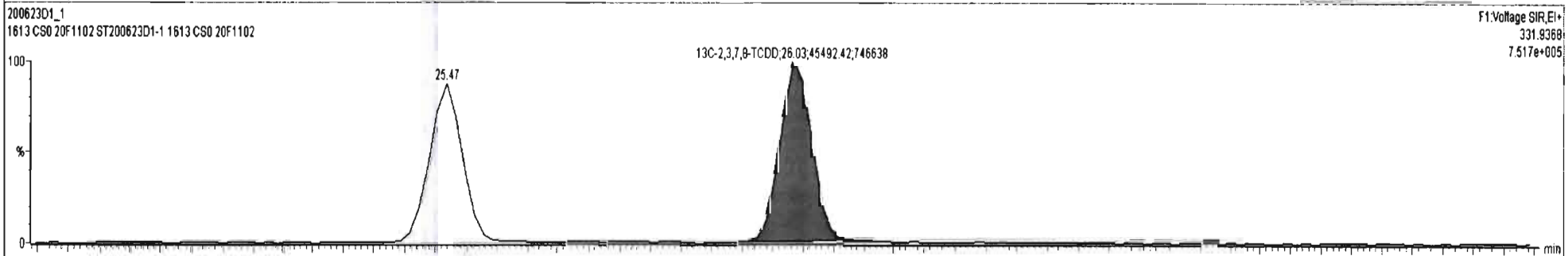
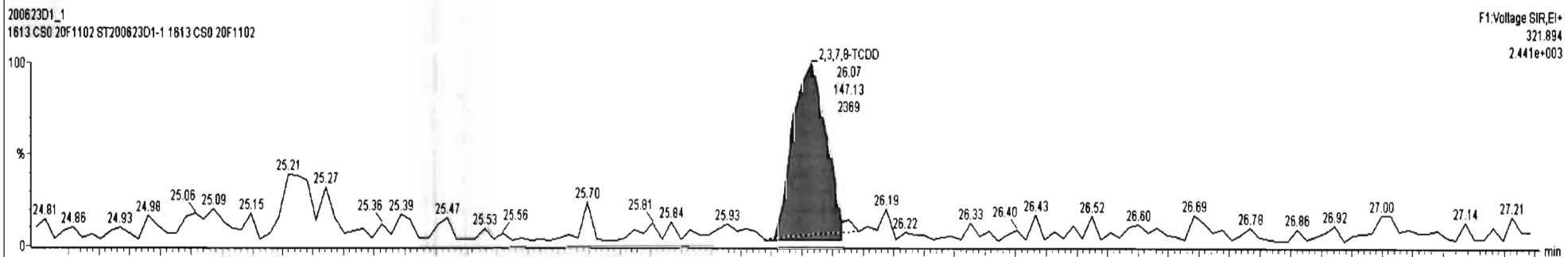
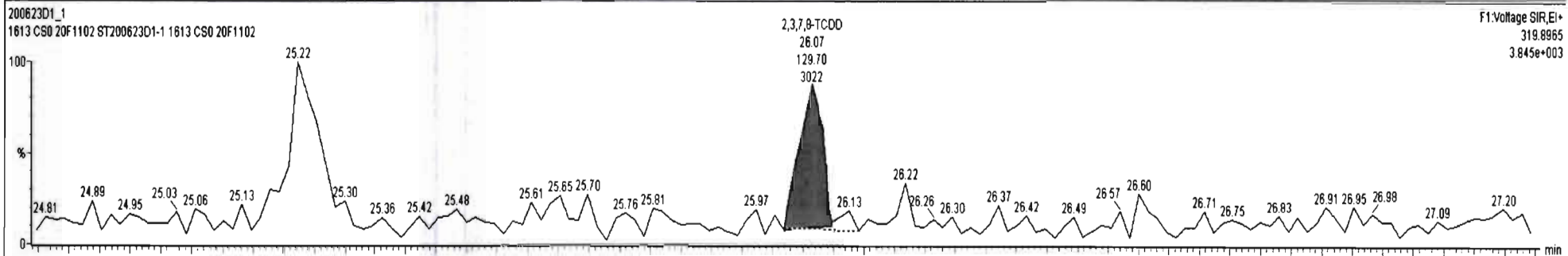
13C-2,3,7,8-TCDD

200623D1\_1



200623D1\_1





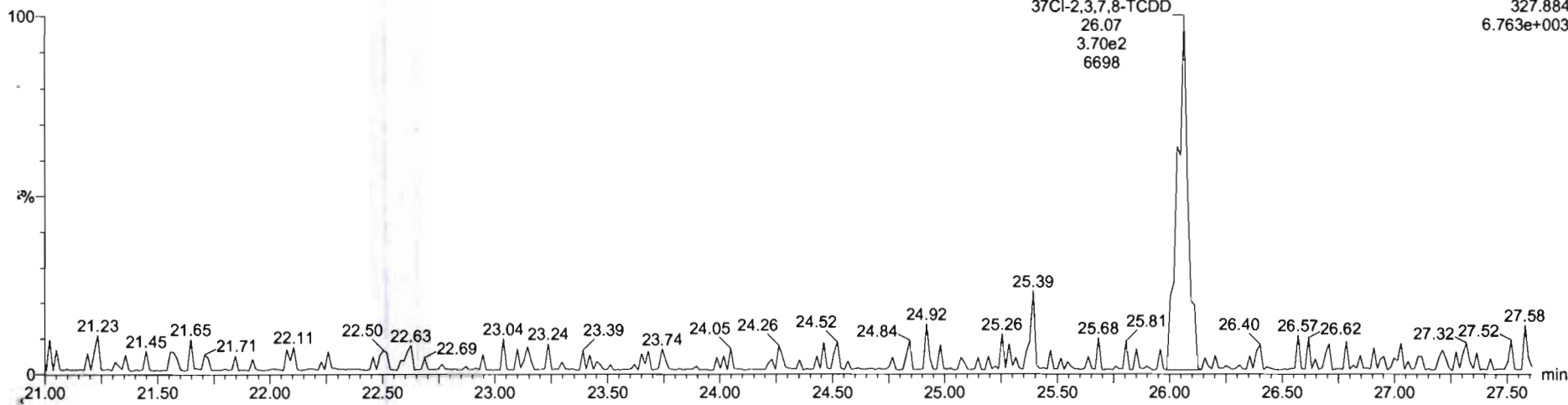
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

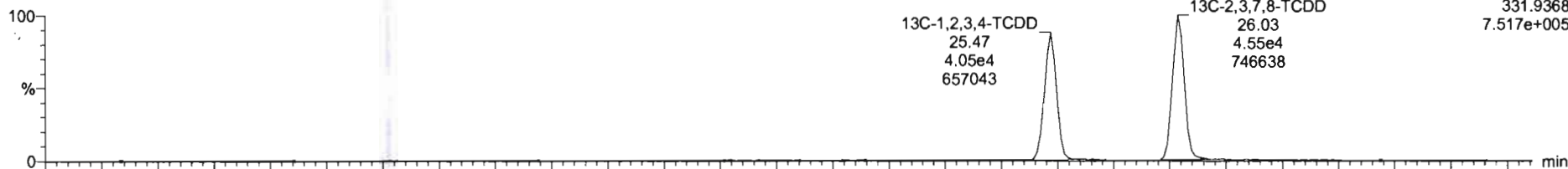
**37Cl-2,3,7,8-TCDD**

200623D1\_1

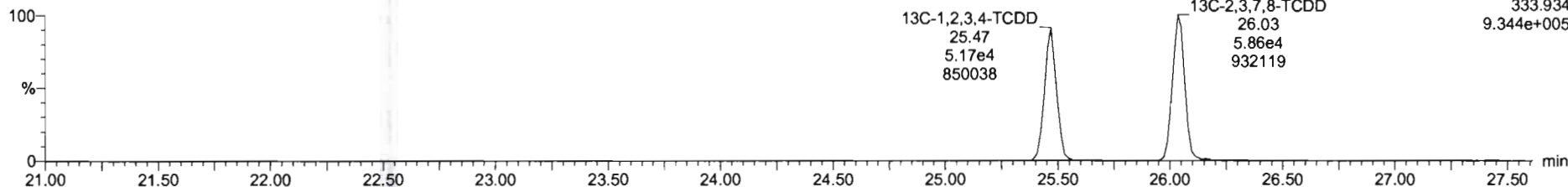


**13C-1,2,3,4-TCDD**

200623D1\_1



200623D1\_1



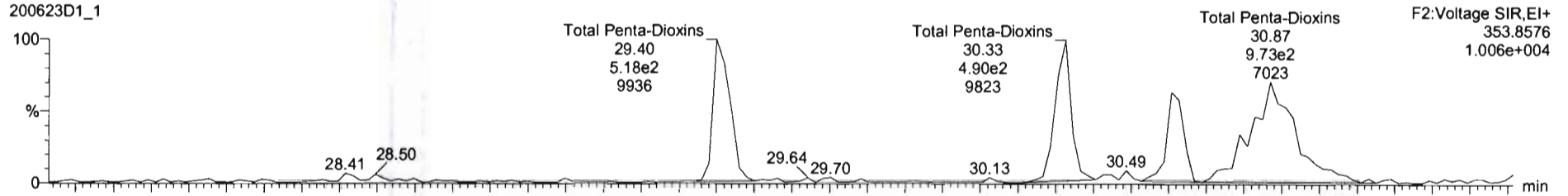
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

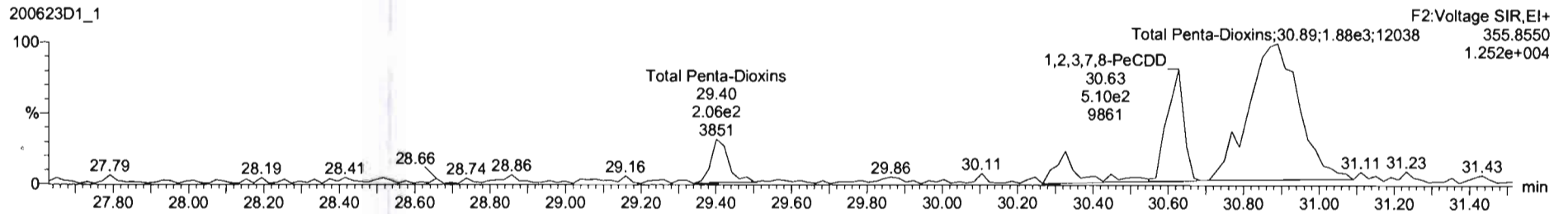
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

1,2,3,7,8-PeCDD

200623D1\_1

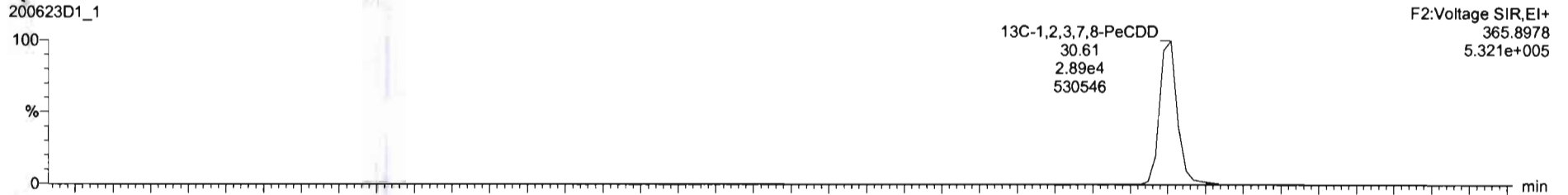


200623D1\_1

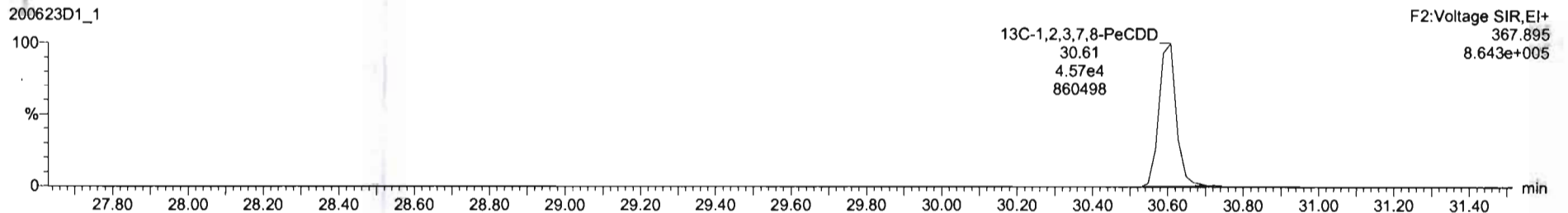


13C-1,2,3,7,8-PeCDD

200623D1\_1



200623D1\_1

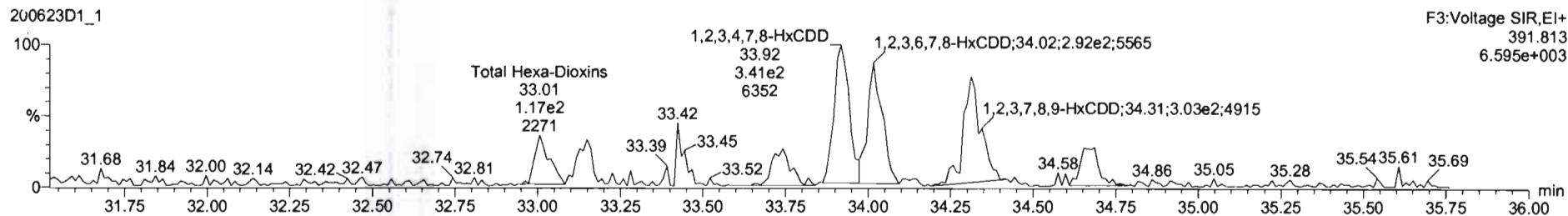
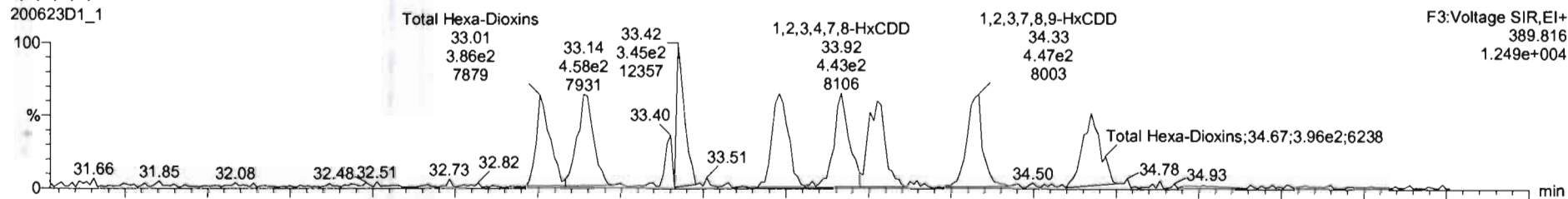


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

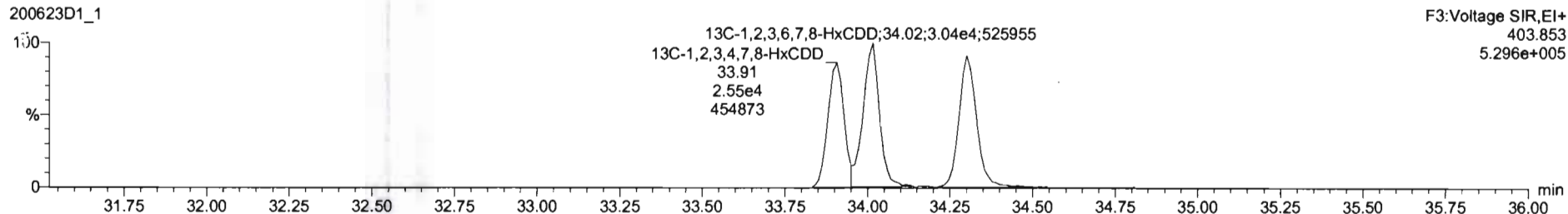
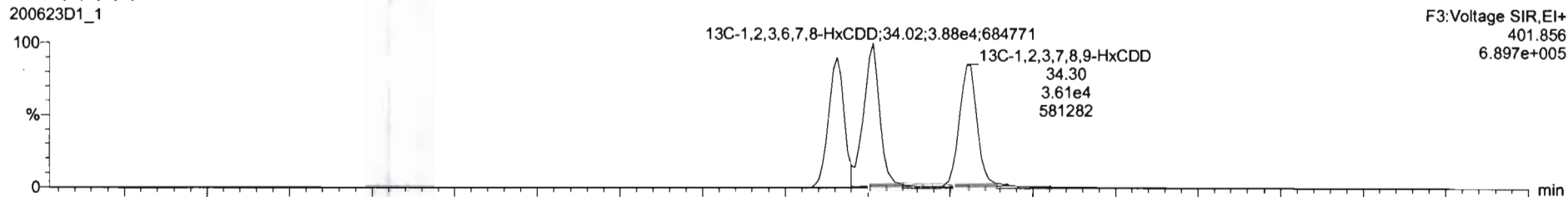
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

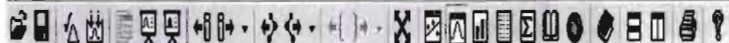
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

1,2,3,4,7,8-HxCDD

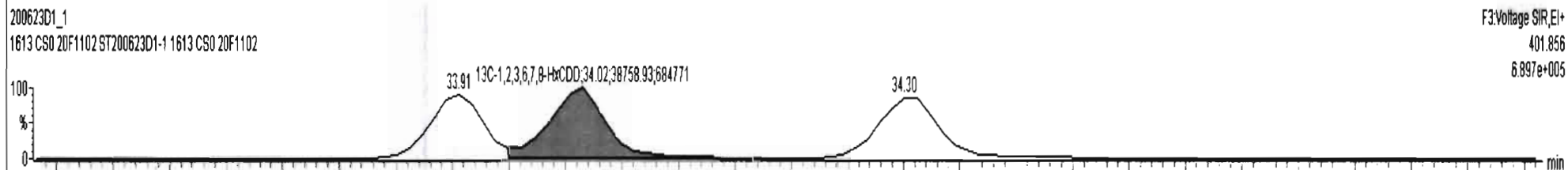
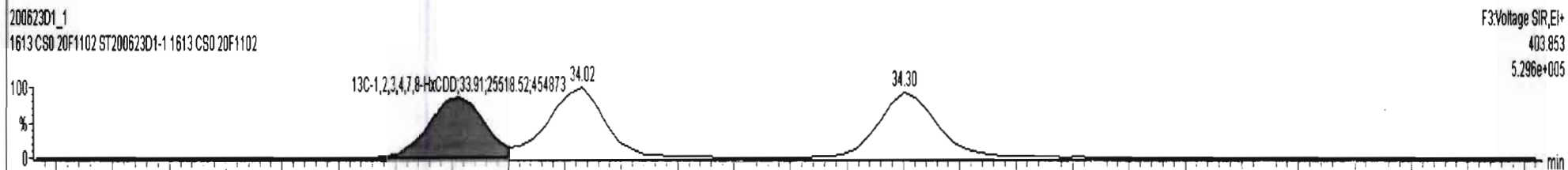
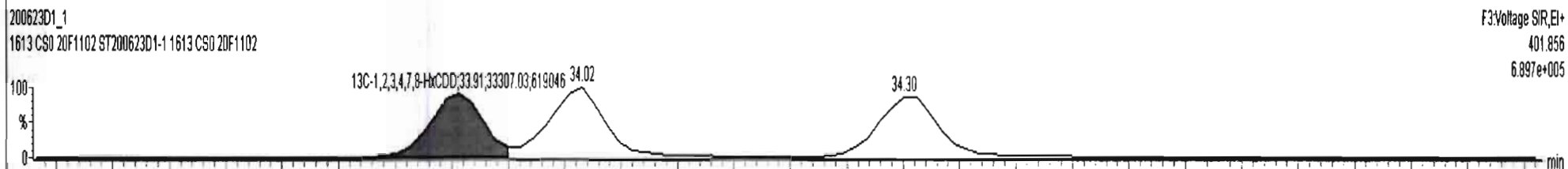
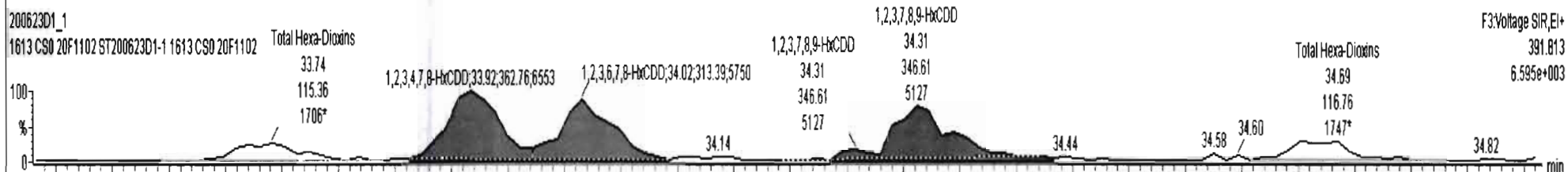
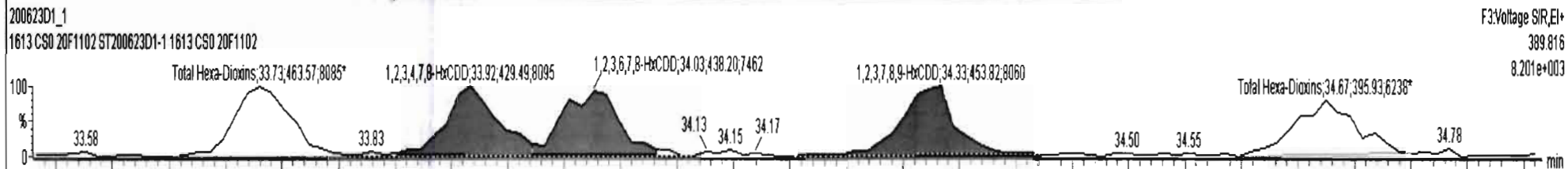


13C-1,2,3,4,7,8-HxCDD





200623D1\_1 - ST200623D1-1 1613 CSO 20F1102 - 1613 CSO 20F1102



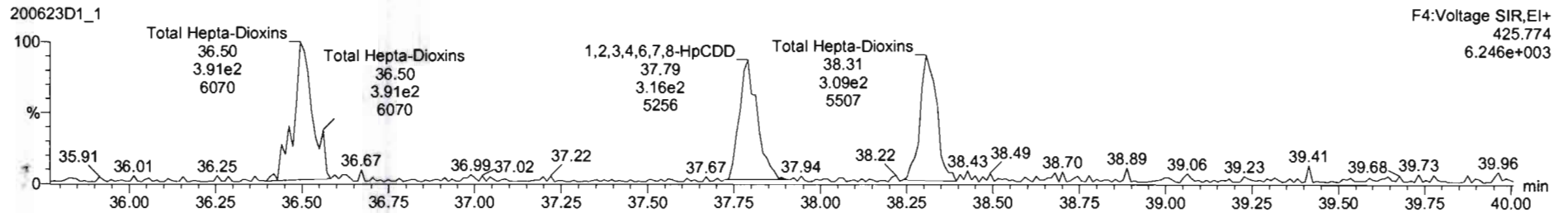
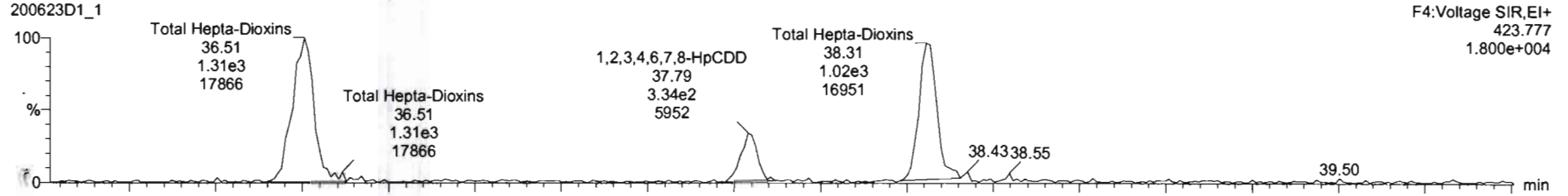


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

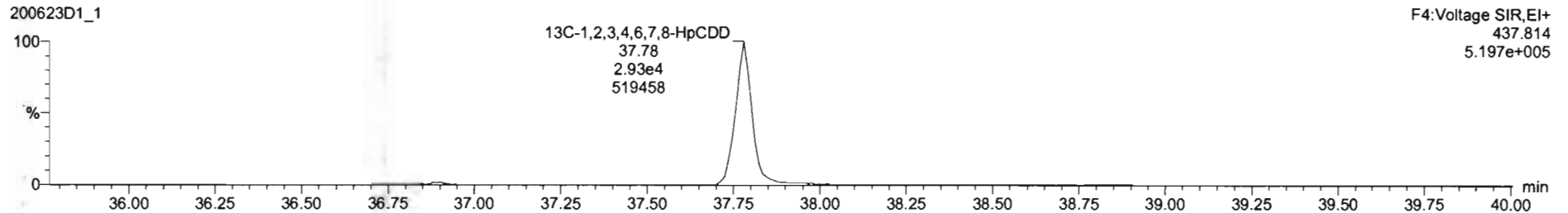
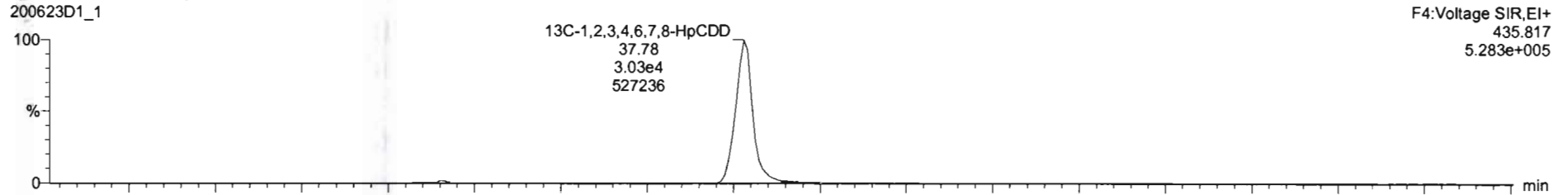
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

1,2,3,4,6,7,8-HpCDD



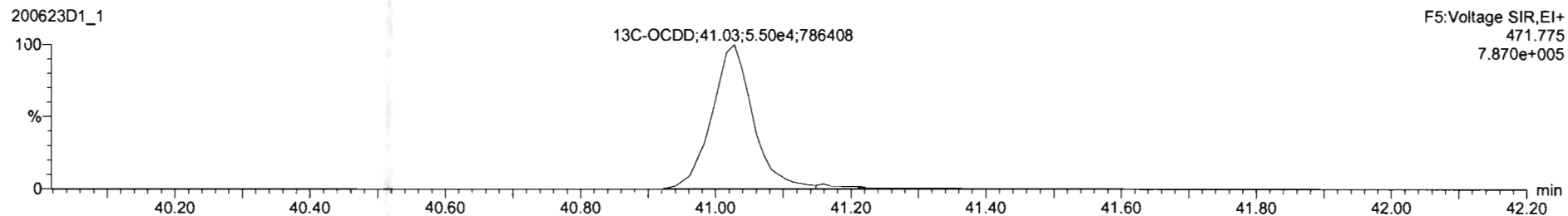
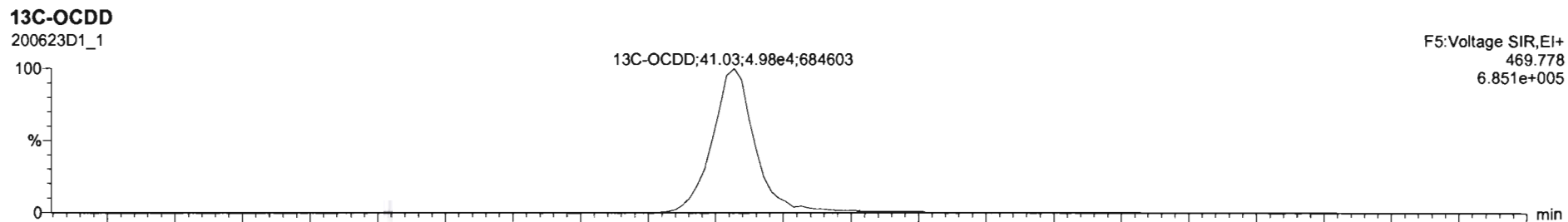
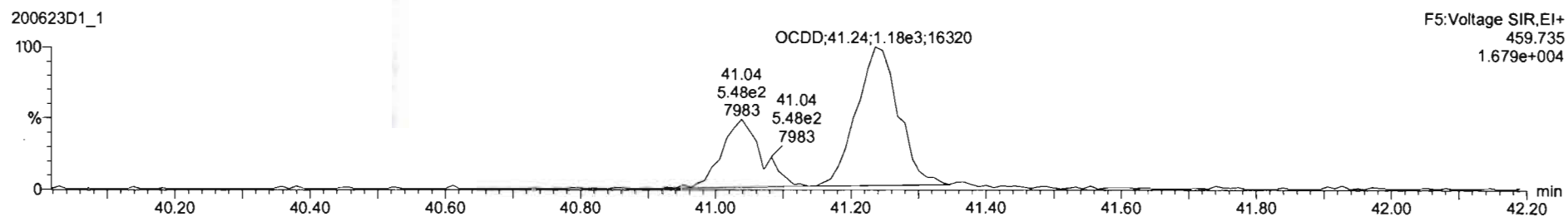
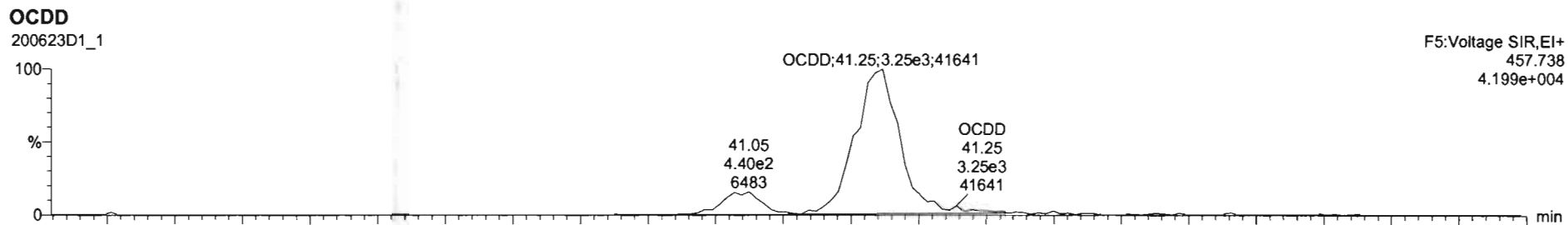
13C-1,2,3,4,6,7,8-HpCDD



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

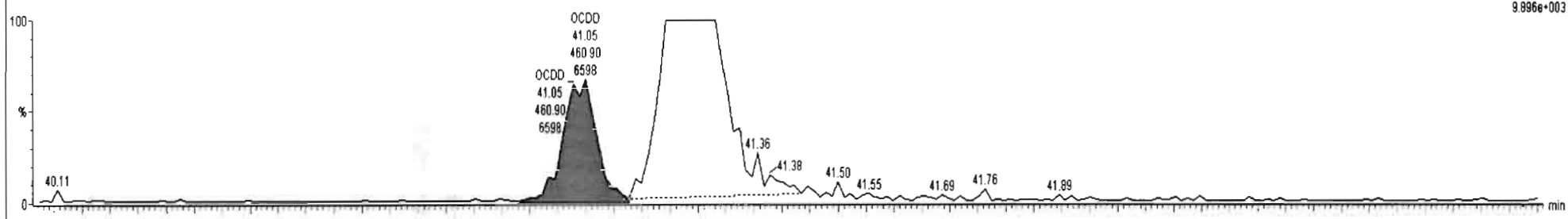
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102



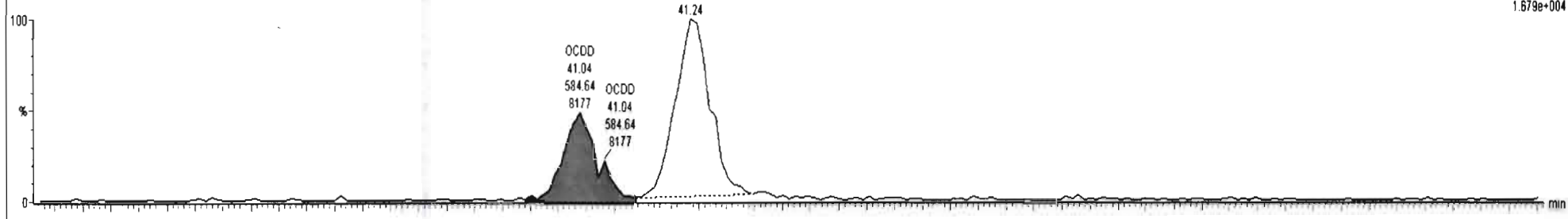
200623D1\_1  
1613 CS0 20F1102 ST200623D1-1 1613 CS0 20F1102

F5:Voltage SIR,EI+  
457.738  
9.896e+003



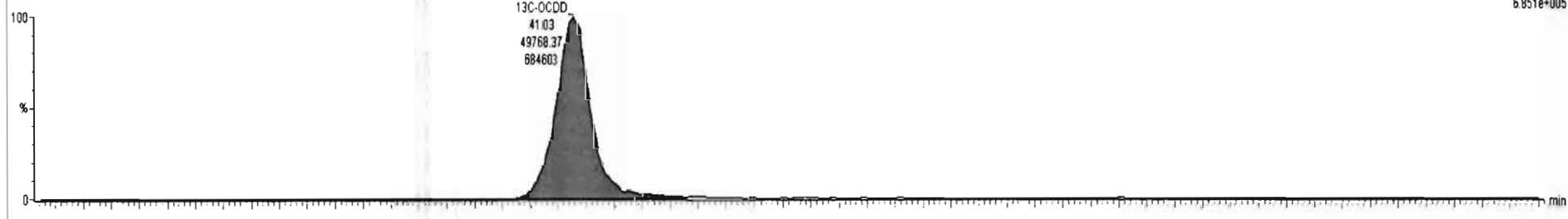
200623D1\_1  
1613 CS0 20F1102 ST200623D1-1 1613 CS0 20F1102

F5:Voltage SIR,EI+  
459.735  
1.679e+004



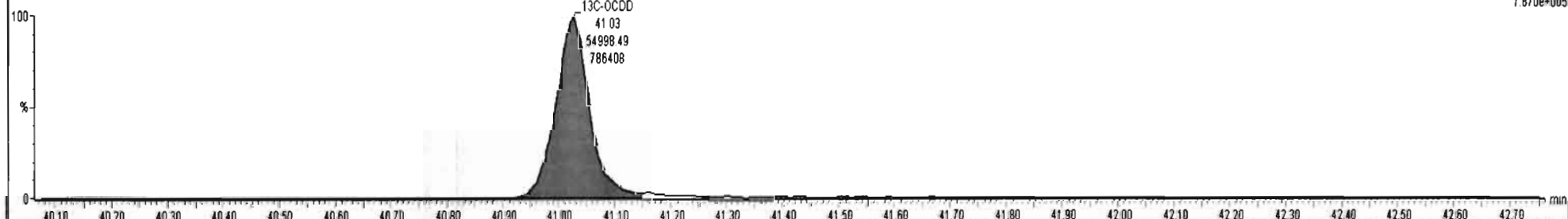
200623D1\_1  
1613 CS0 20F1102 ST200623D1-1 1613 CS0 20F1102

F5:Voltage SIR,EI+  
469.778  
6.851e+005



200623D1\_1  
1613 CS0 20F1102 ST200623D1-1 1613 CS0 20F1102

F5:Voltage SIR,EI+  
471.775  
7.870e+005



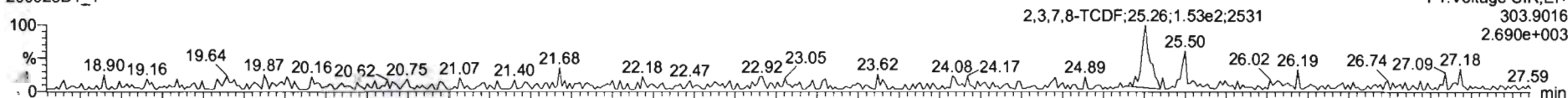
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

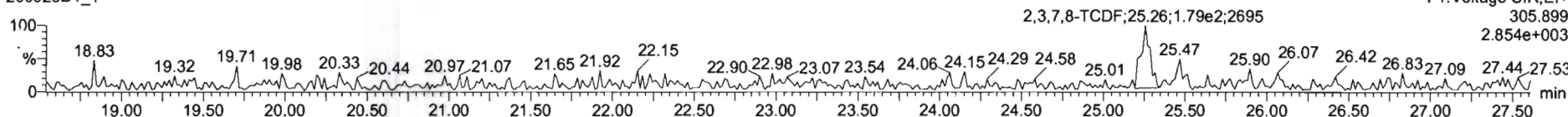
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

**2,3,7,8-TCDF**

200623D1\_1

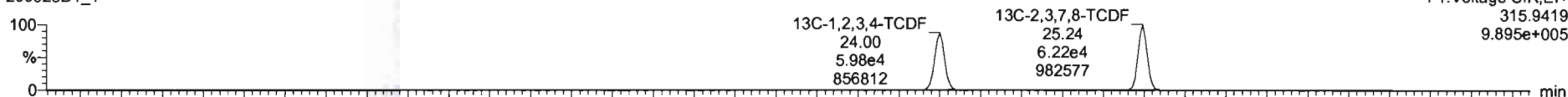


200623D1\_1

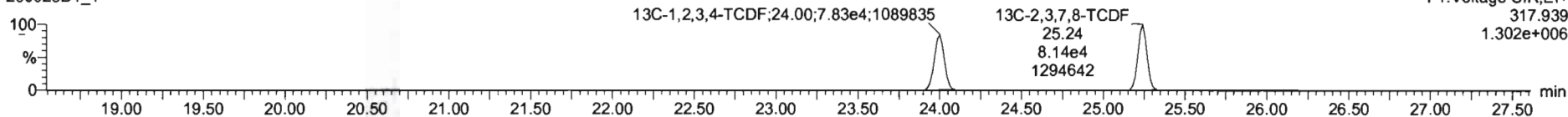


**13C-2,3,7,8-TCDF**

200623D1\_1

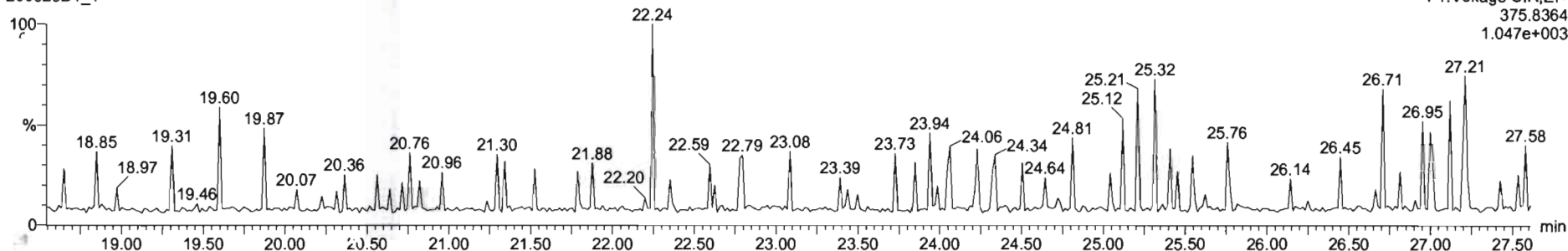


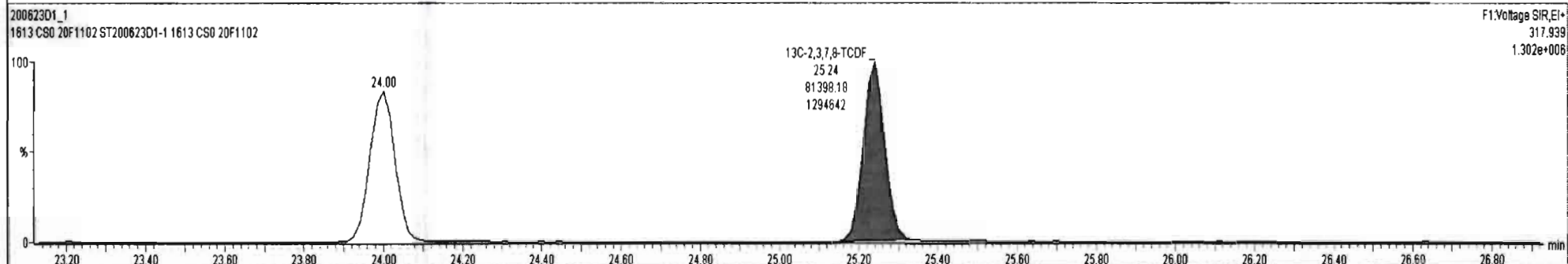
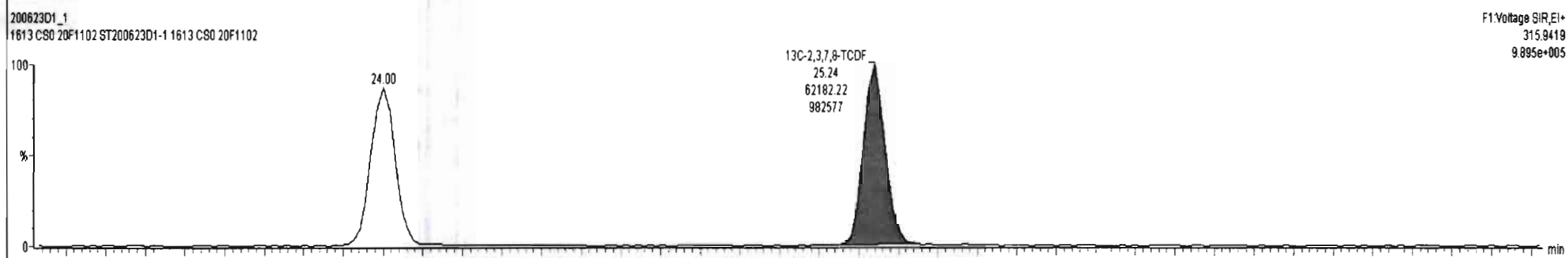
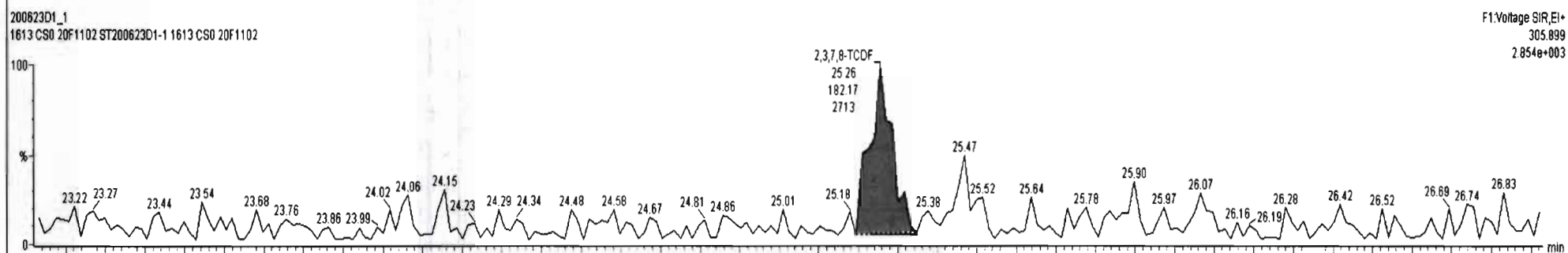
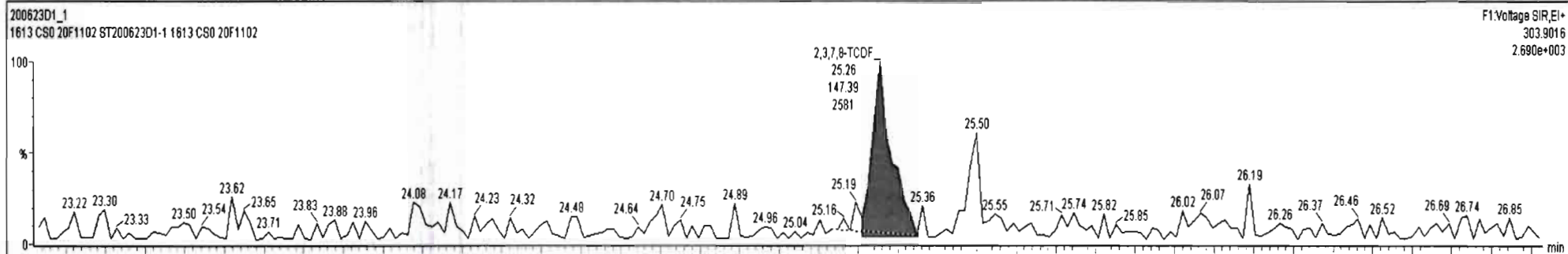
200623D1\_1



**DPE1**

200623D1\_1





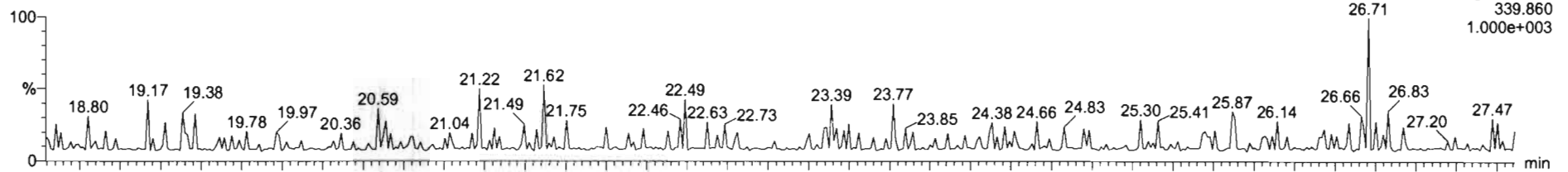
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

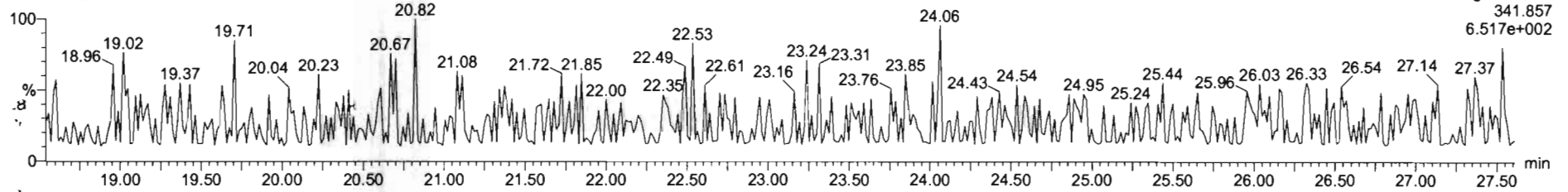
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

1st Func. Penta-Furans

200623D1\_1

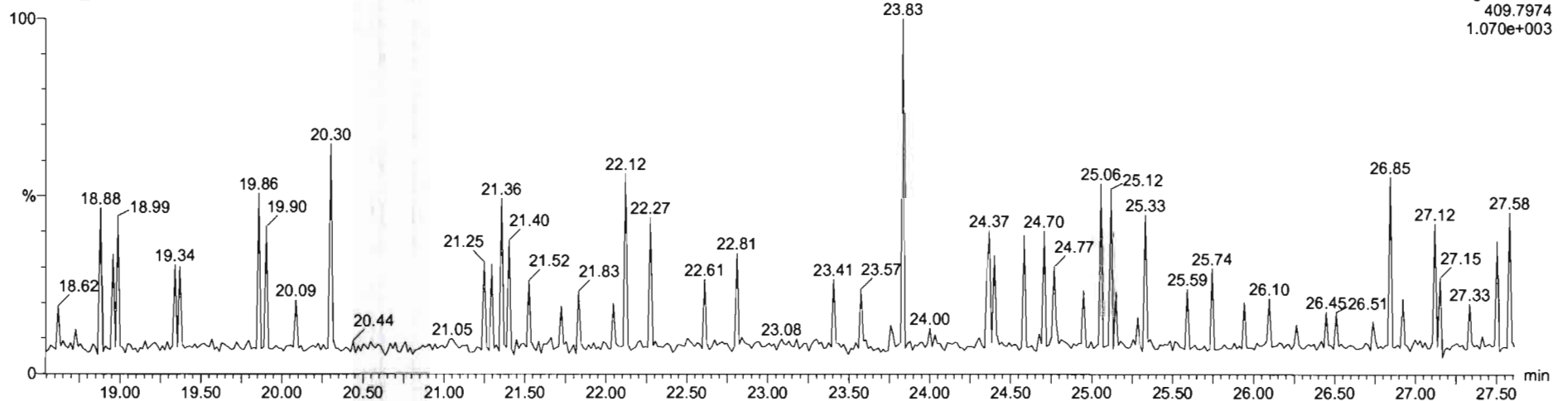


200623D1\_1



DPE6

200623D1\_1



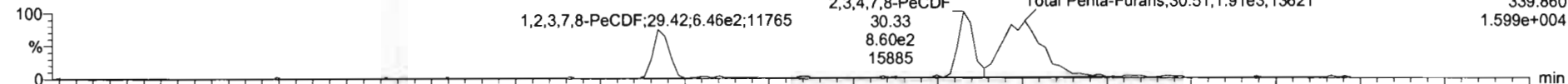
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

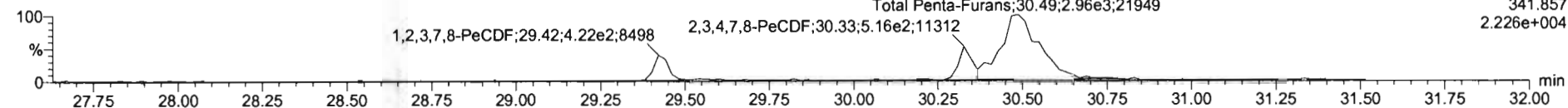
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

**1,2,3,7,8-PeCDF**

200623D1\_1

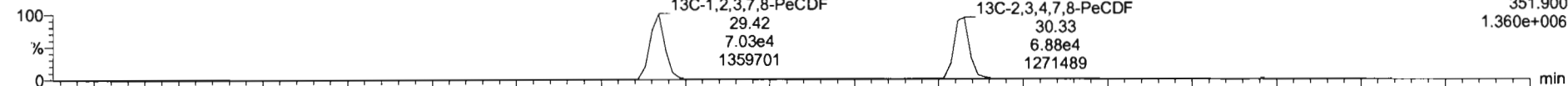


200623D1\_1

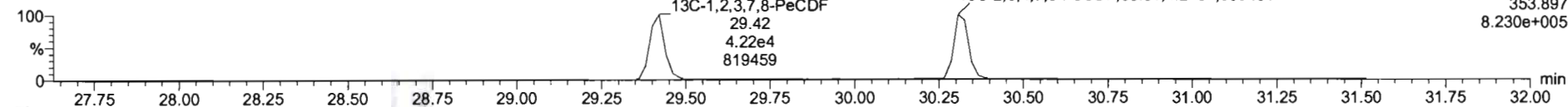


**13C-1,2,3,7,8-PeCDF**

200623D1\_1

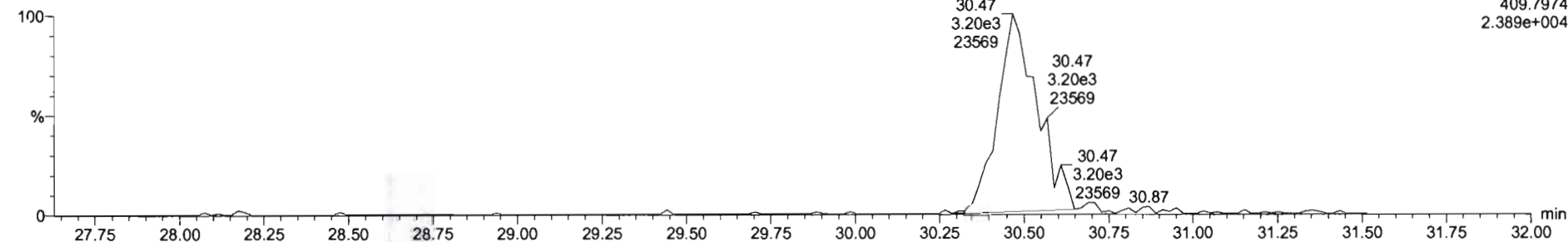


200623D1\_1



**DPE2**

200623D1\_1

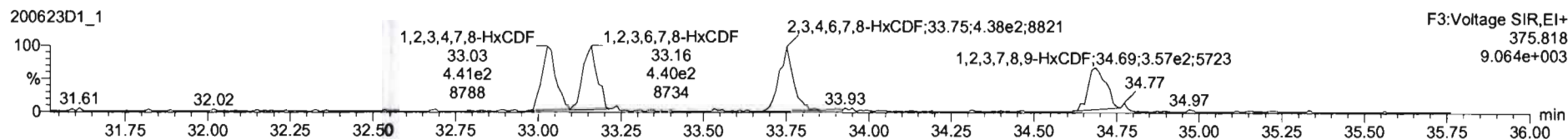
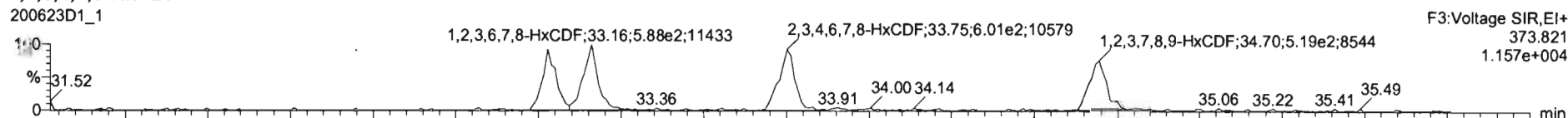


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

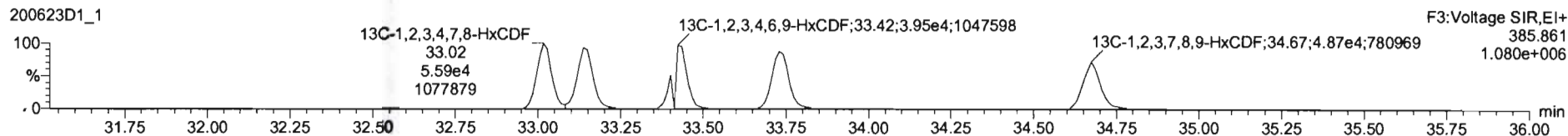
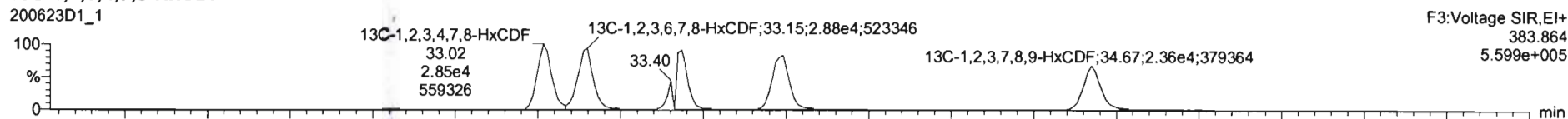
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

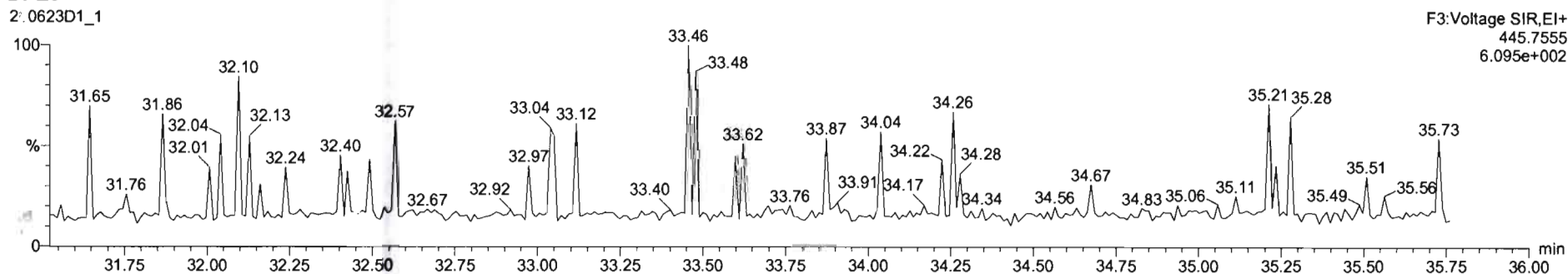
1,2,3,4,7,8-HxCDF



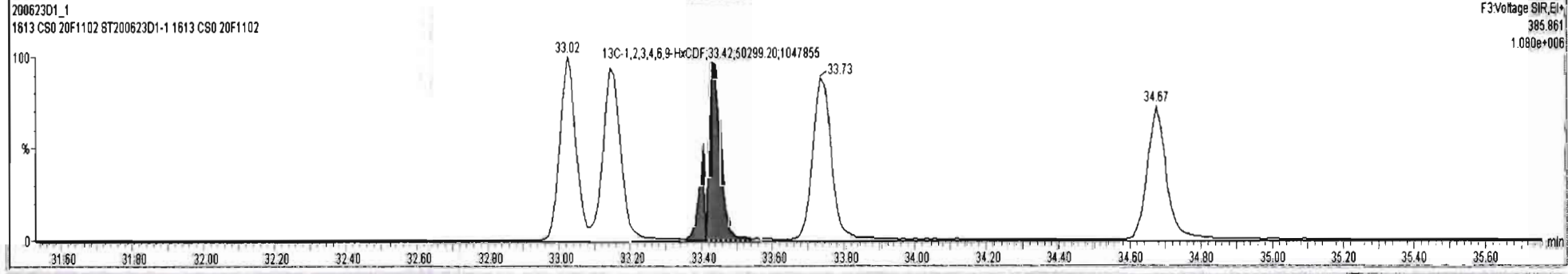
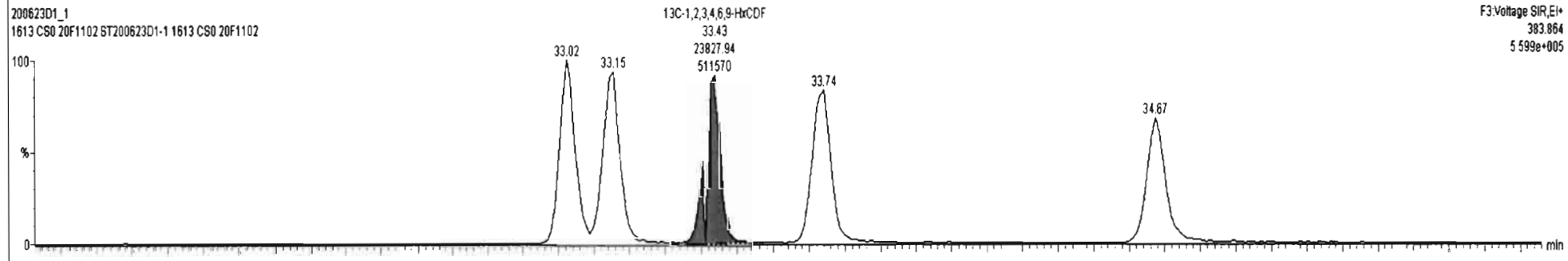
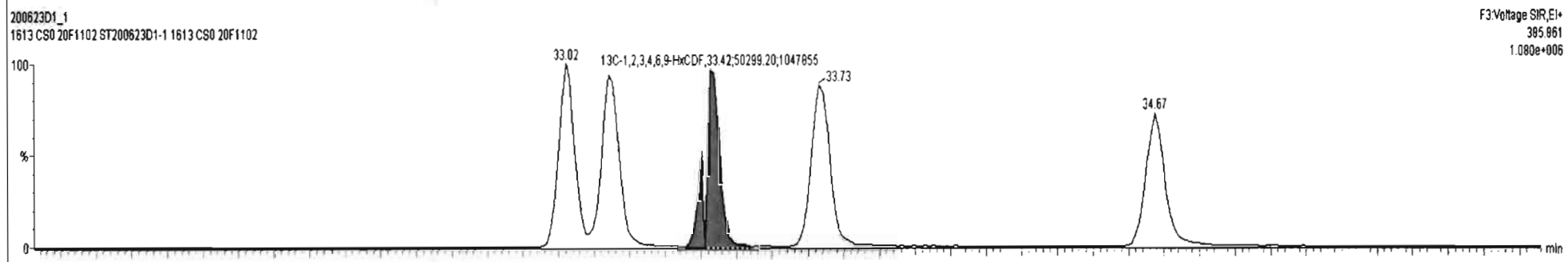
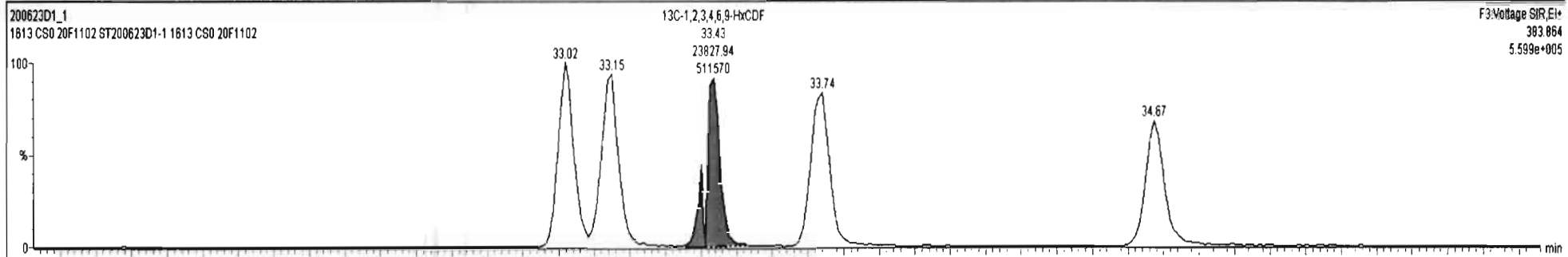
13C-1,2,3,4,7,8-HxCDF



DPE3





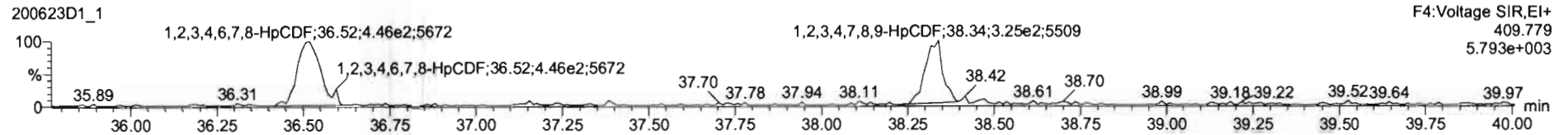


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

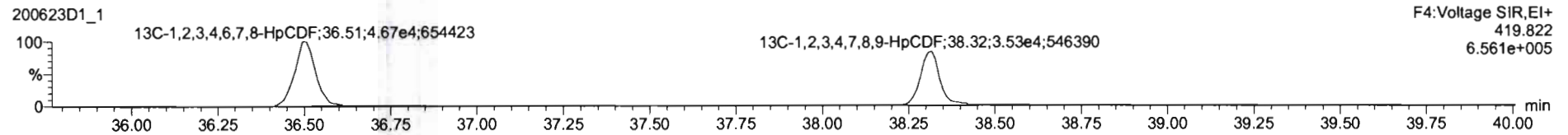
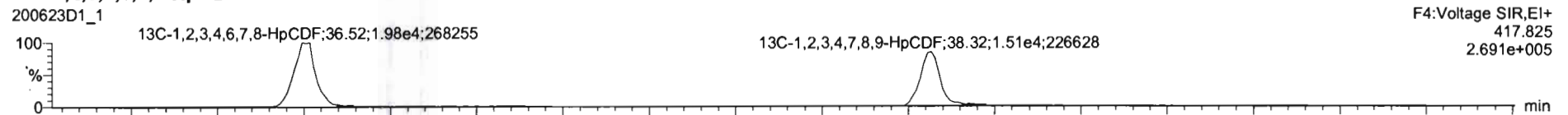
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

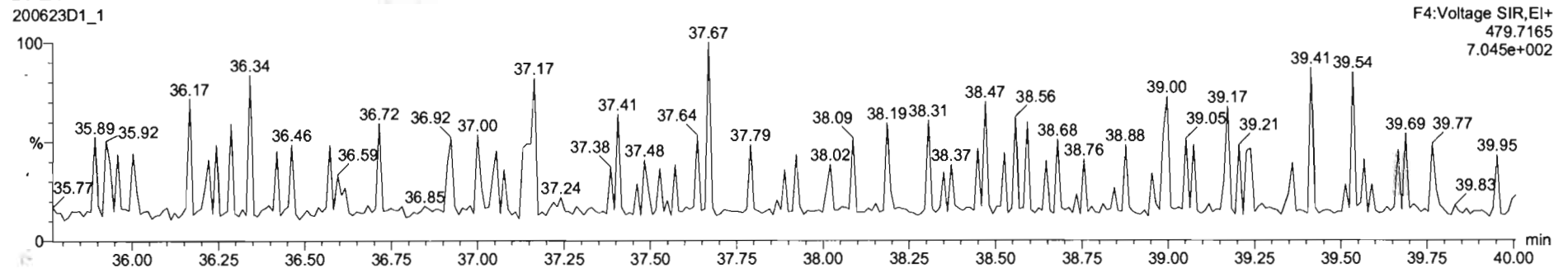
**1,2,3,4,6,7,8-HpCDF**

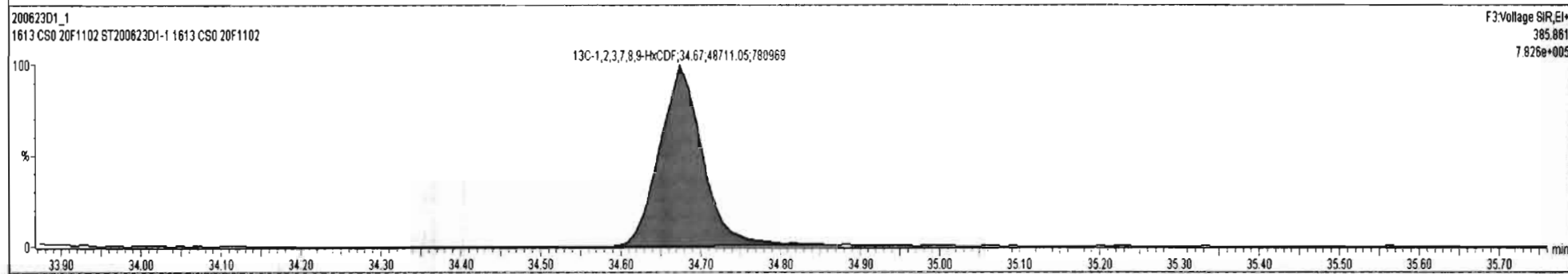
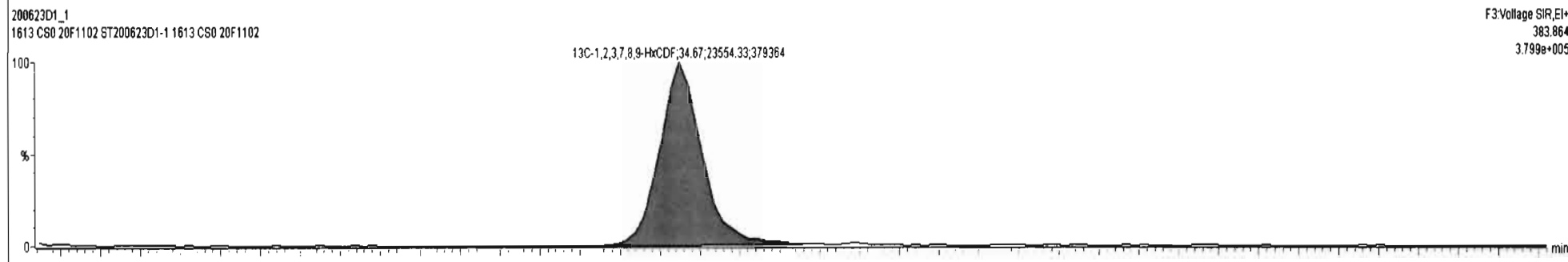
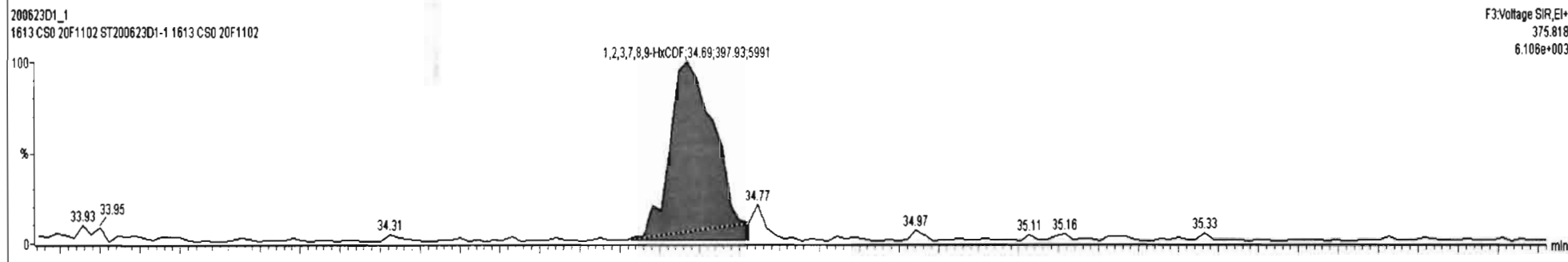
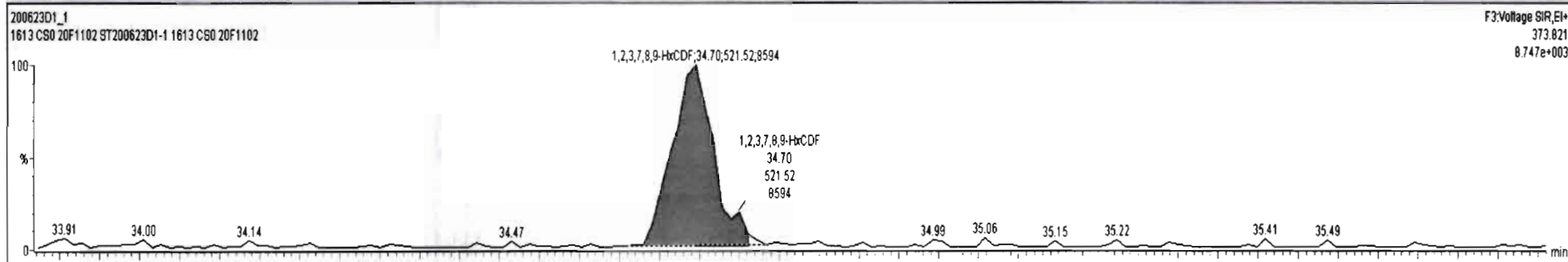


**<sup>13</sup>C-1,2,3,4,6,7,8-HpCDF**



**DPE4**





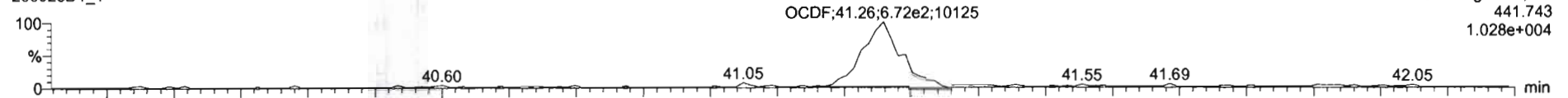
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

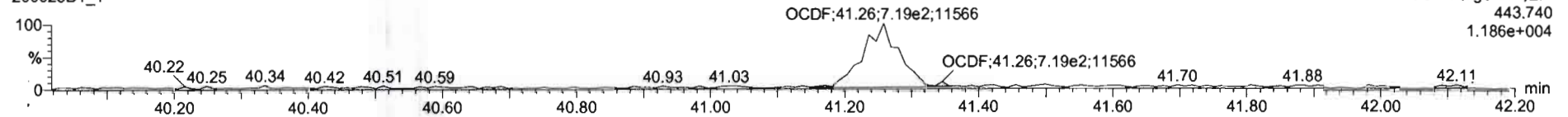
Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

**OCDF**

200623D1\_1

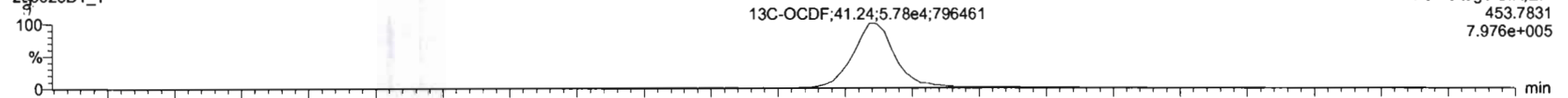


200623D1\_1

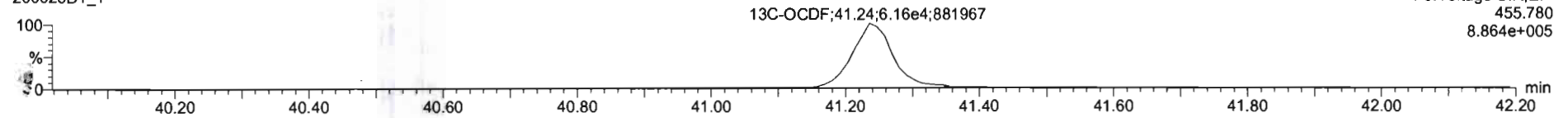


**13C-OCDF**

200623D1\_1

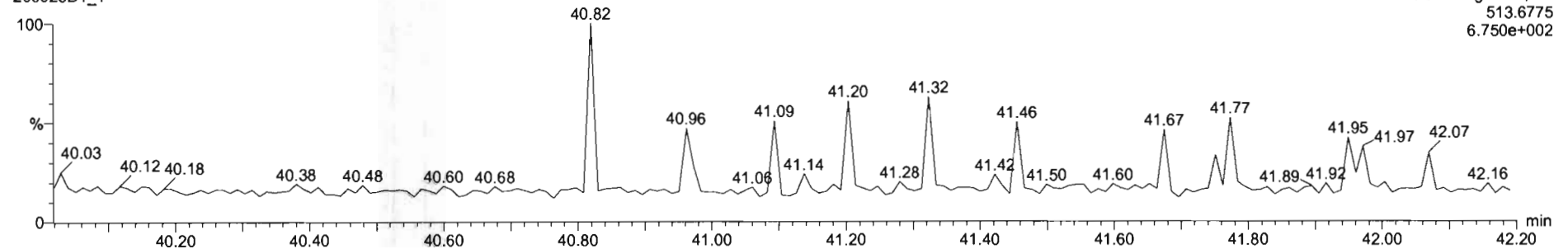


200623D1\_1



**DPE5**

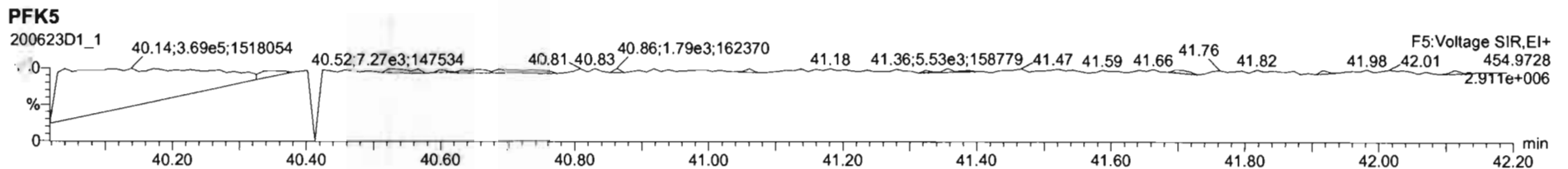
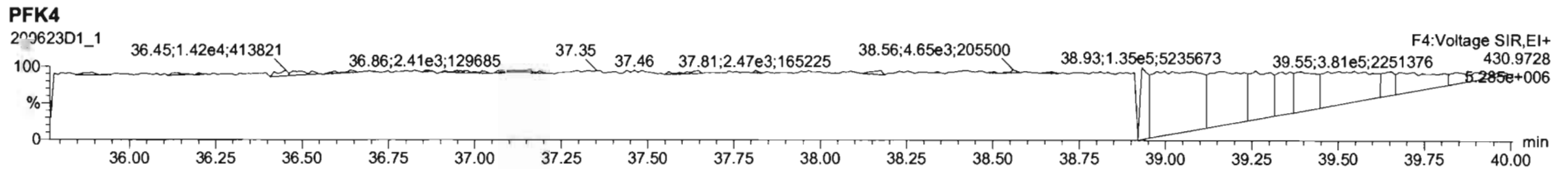
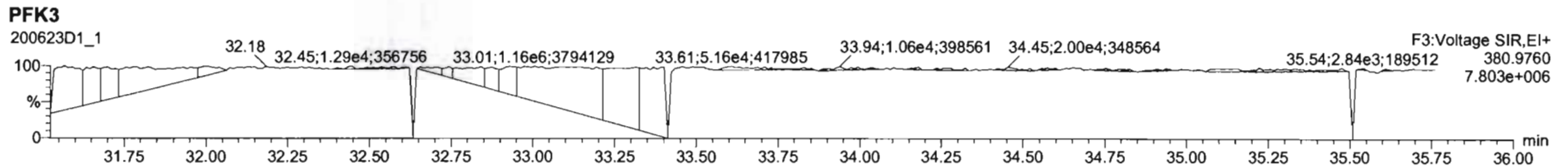
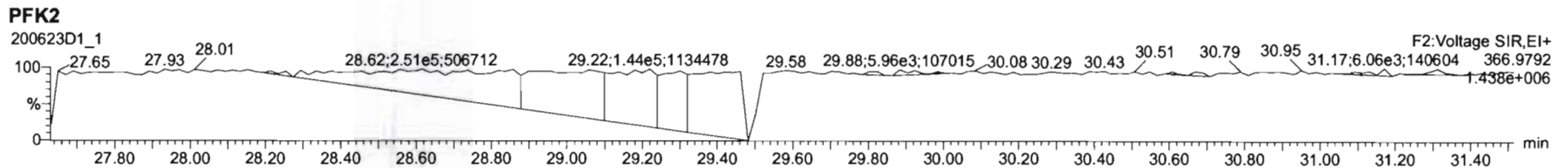
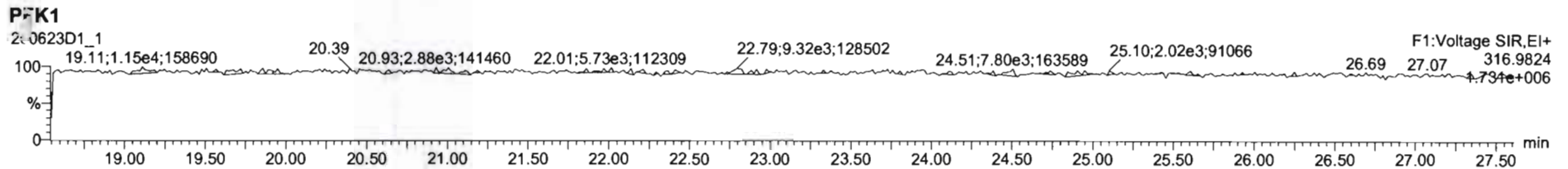
200623D1\_1



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_1, Date: 23-Jun-2020, Time: 15:09:18, ID: ST200623D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102



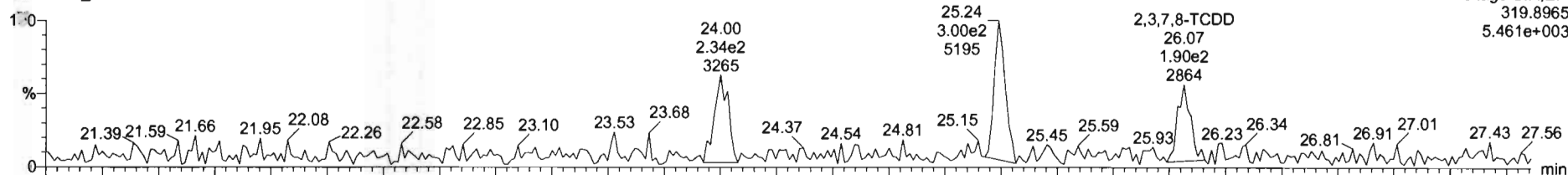
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

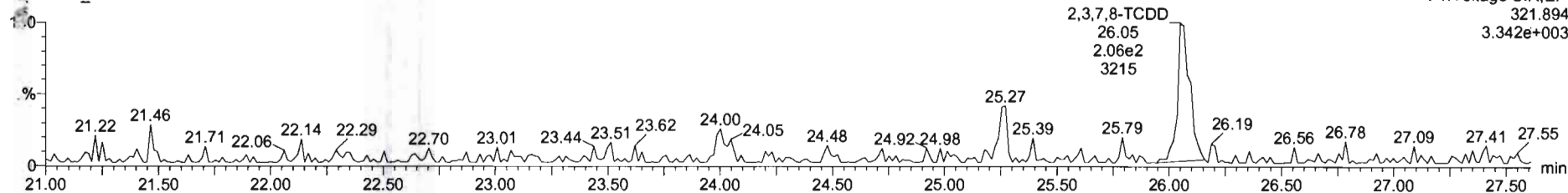
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**2,3,7,8-TCDD**

200623D1\_2

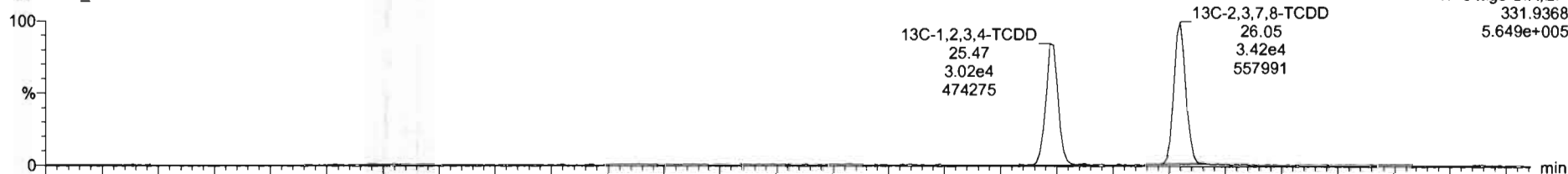


200623D1\_2

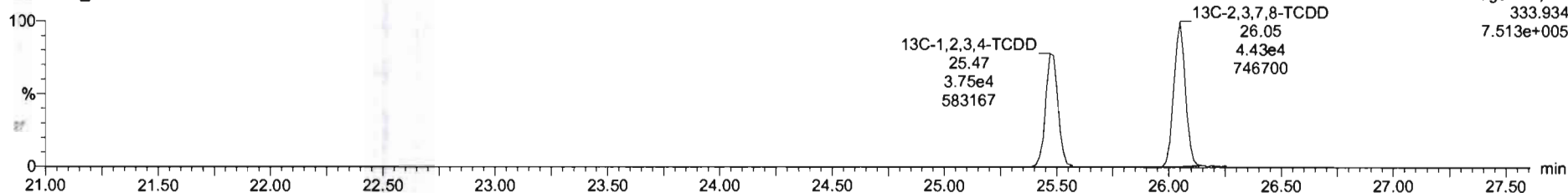


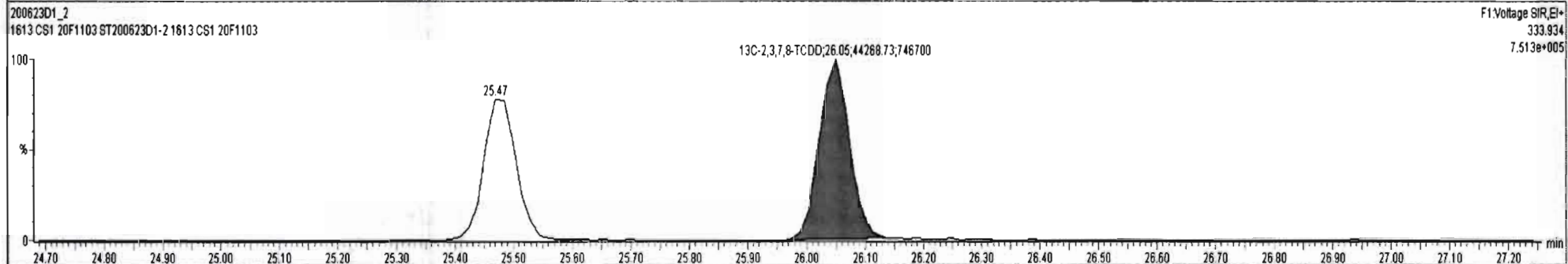
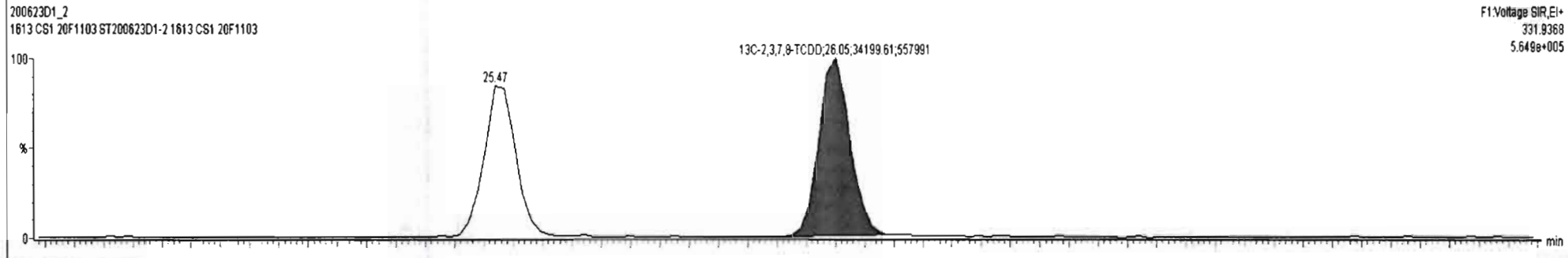
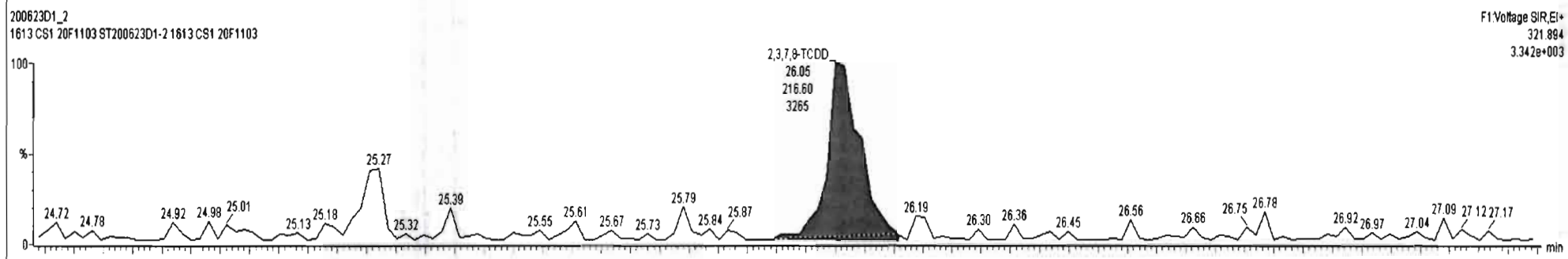
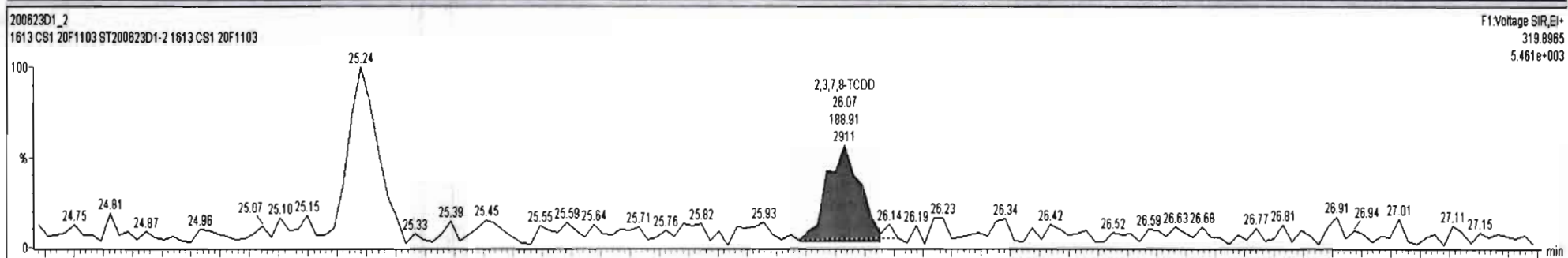
**13C-2,3,7,8-TCDD**

200623D1\_2



200623D1\_2





Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

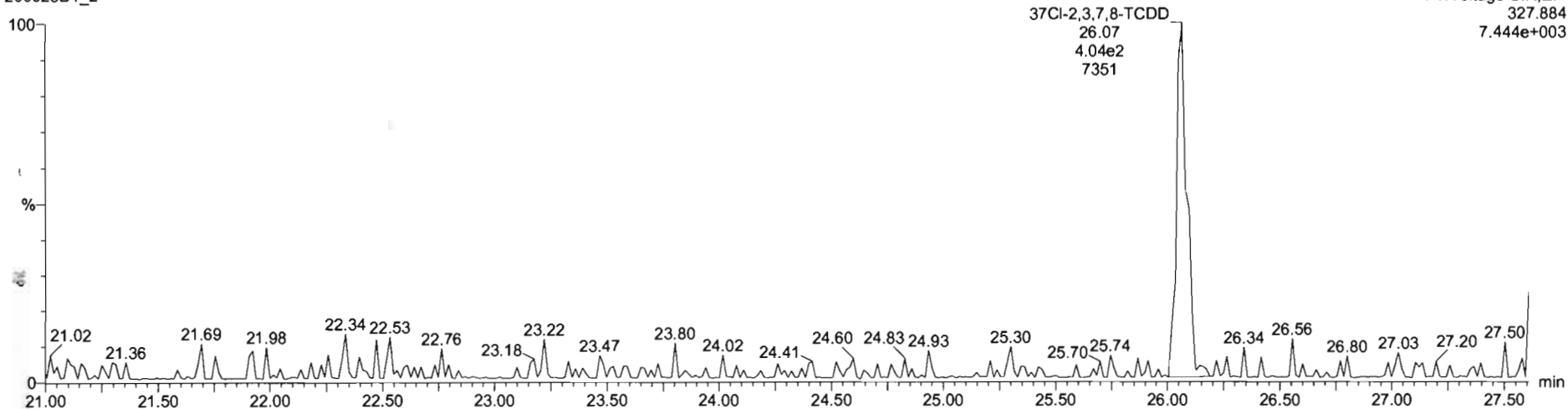
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**37Cl-2,3,7,8-TCDD**

200623D1\_2



F1: Voltage SIR, EI+  
327.884  
7.444e+003

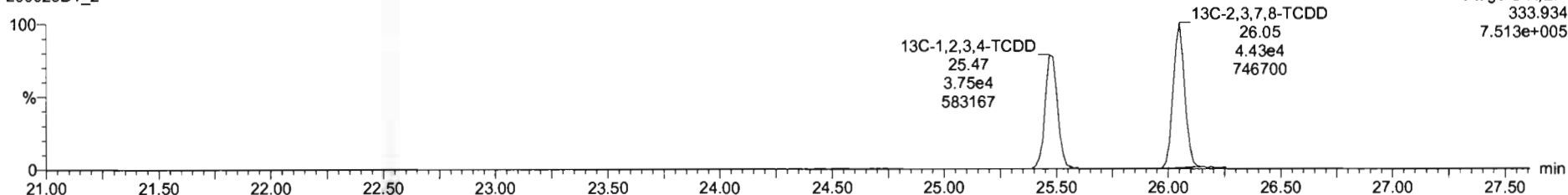
**13C-1,2,3,4-TCDD**

200623D1\_2



F1: Voltage SIR, EI+  
331.9368  
5.649e+005

200623D1\_2



F1: Voltage SIR, EI+  
333.934  
7.513e+005



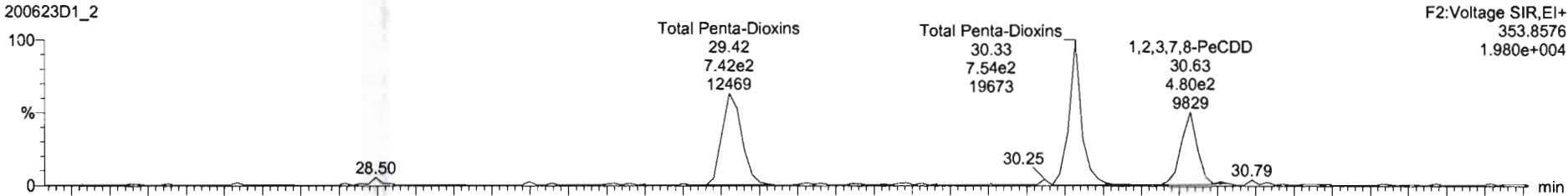
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

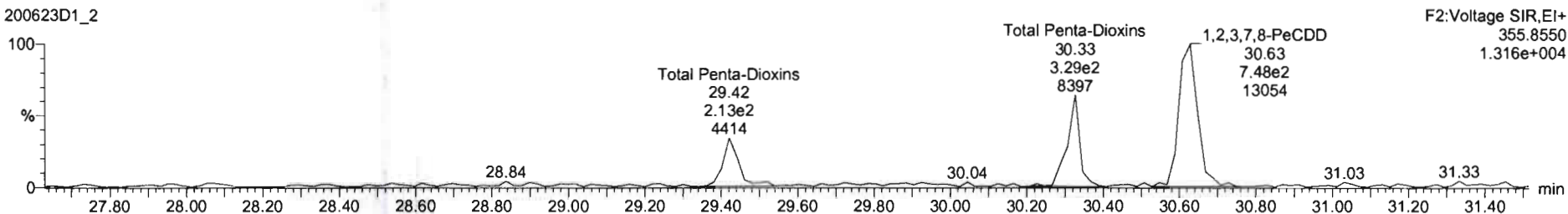
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

1,2,3,7,8-PeCDD

200623D1\_2

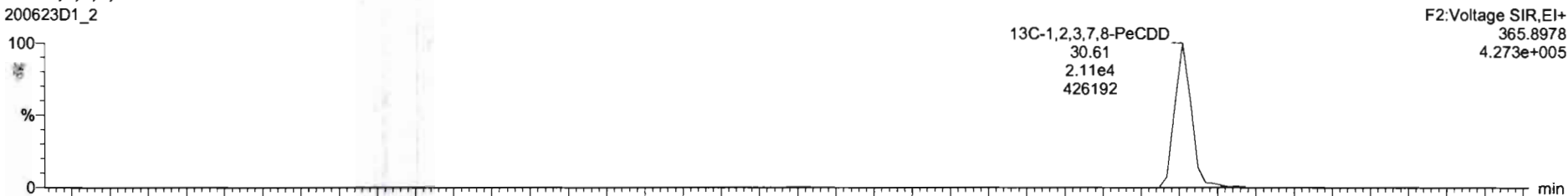


200623D1\_2

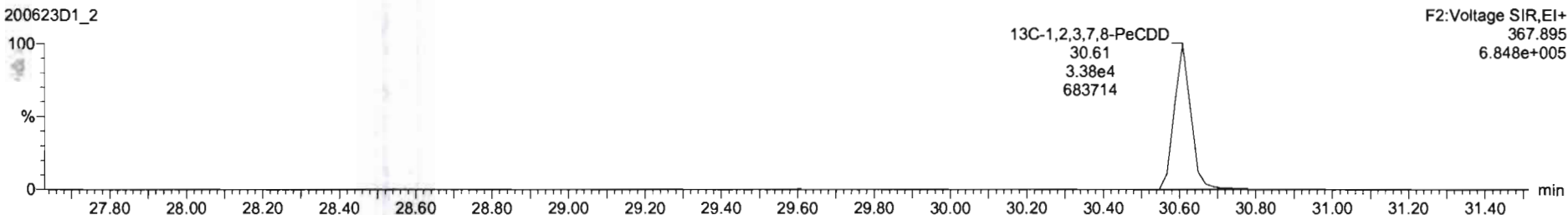


13C-1,2,3,7,8-PeCDD

200623D1\_2



200623D1\_2



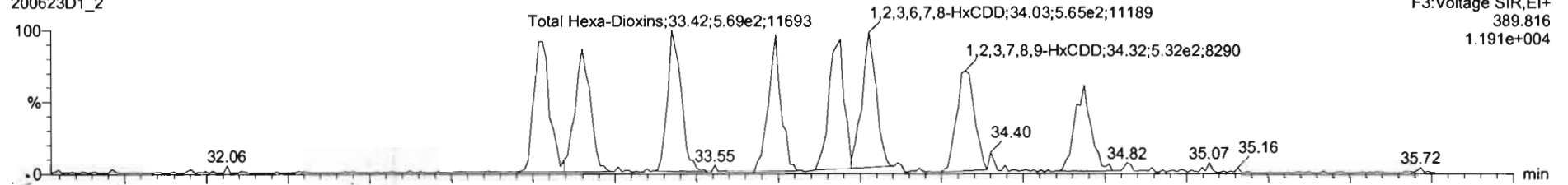
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

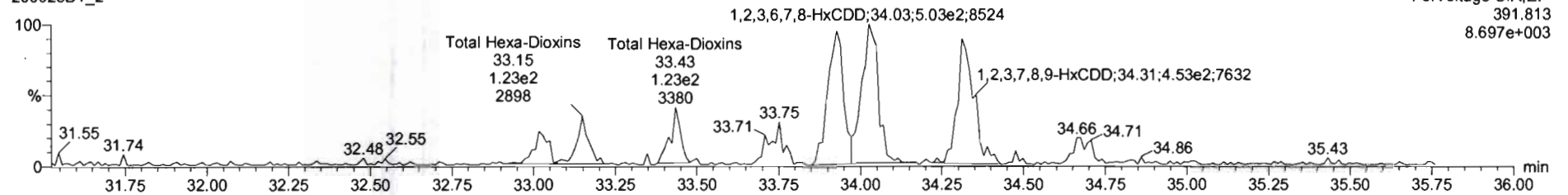
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

1,2,3,4,7,8-HxCDD

200623D1\_2

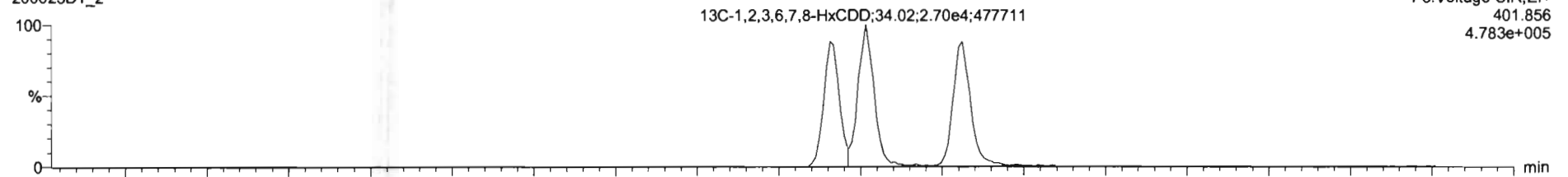


200623D1\_2

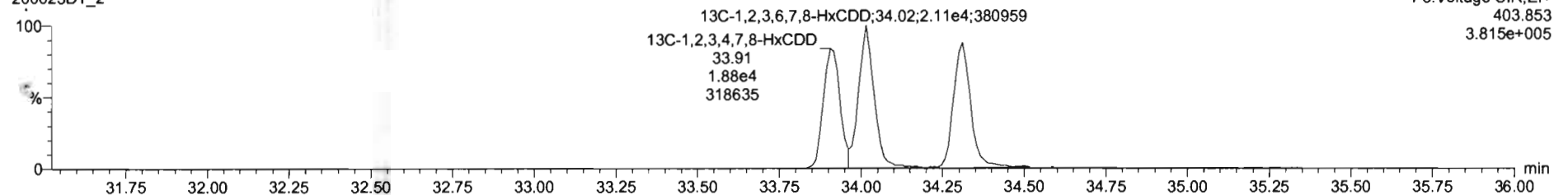


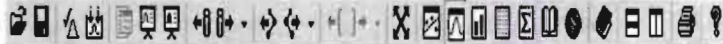
13C-1,2,3,4,7,8-HxCDD

200623D1\_2

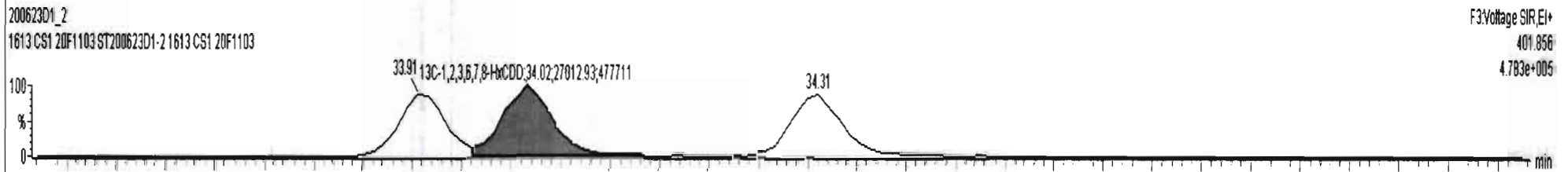
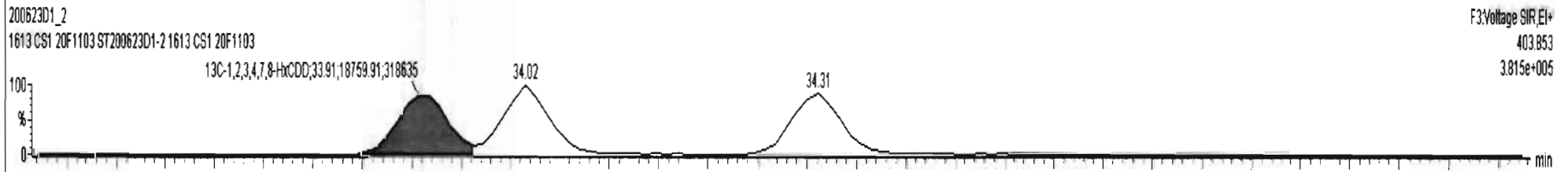
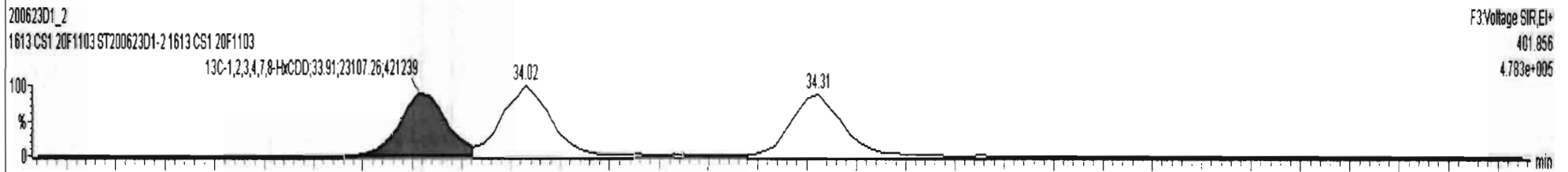
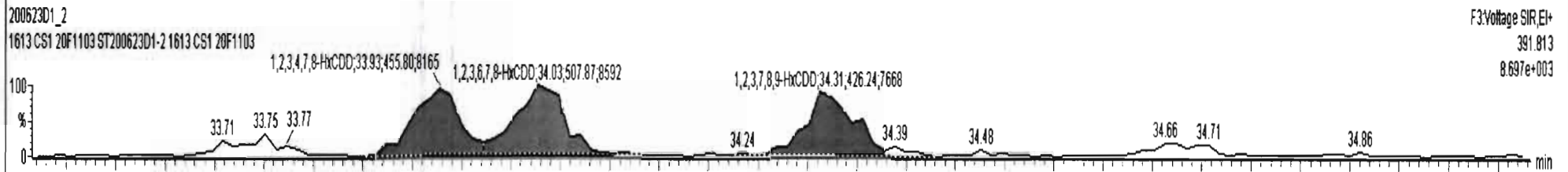
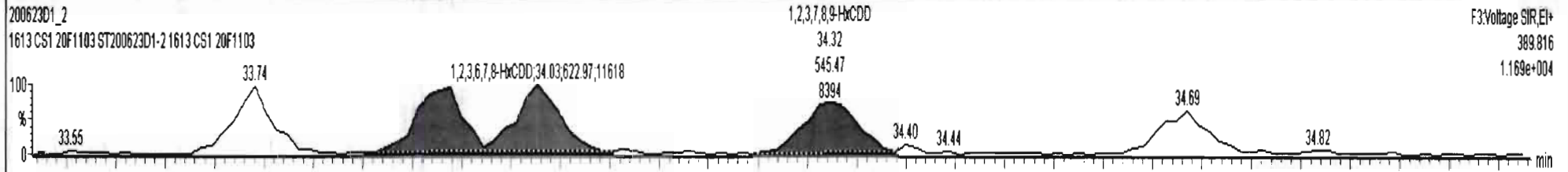


200623D1\_2





200623D1\_2 - ST200623D1-2 1613 CS1 20F1103 - 1613 CS1 20F1103

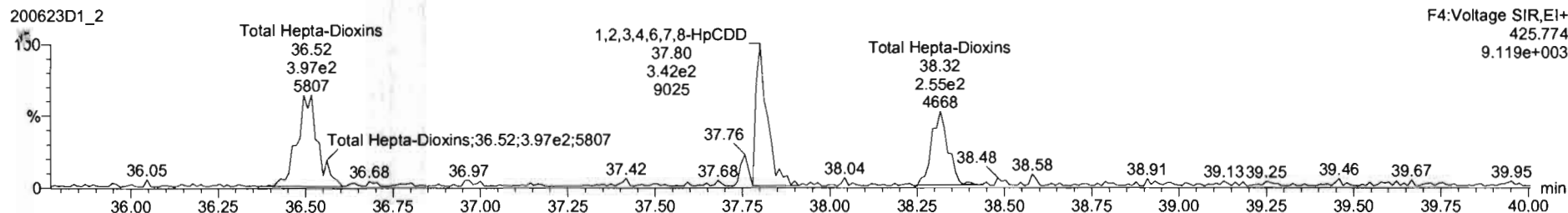
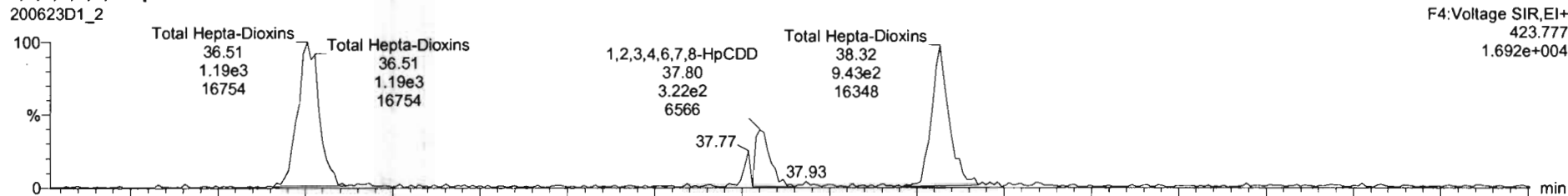


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

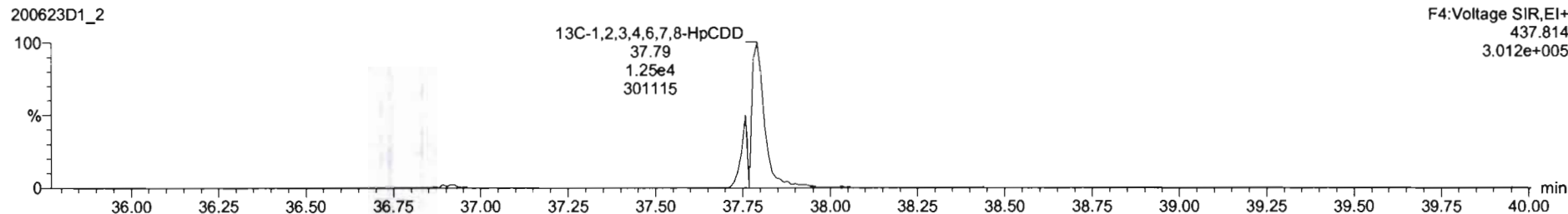
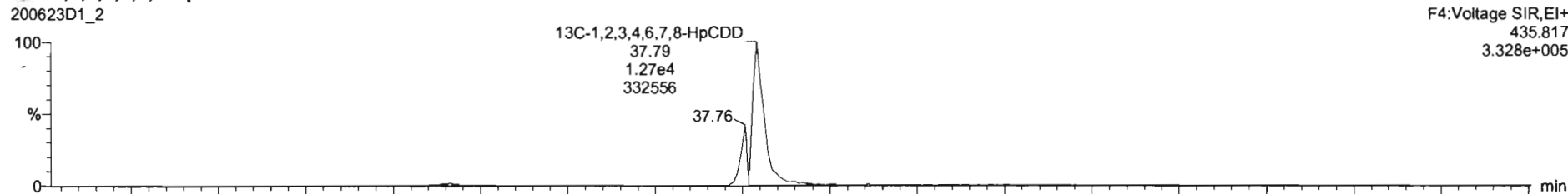
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

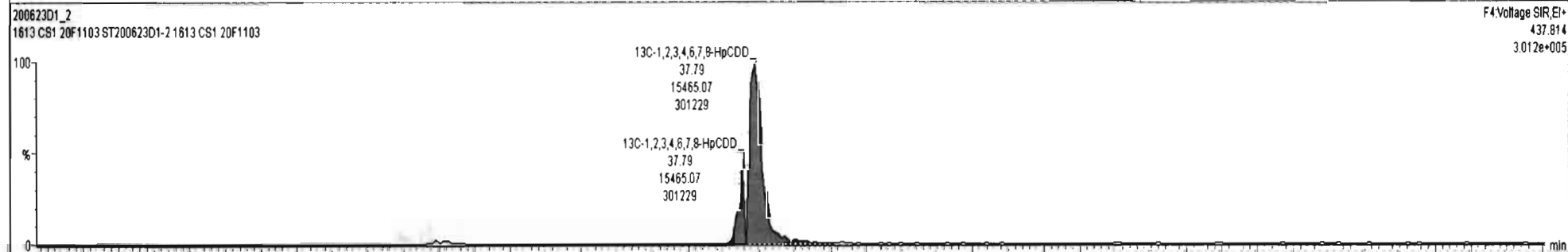
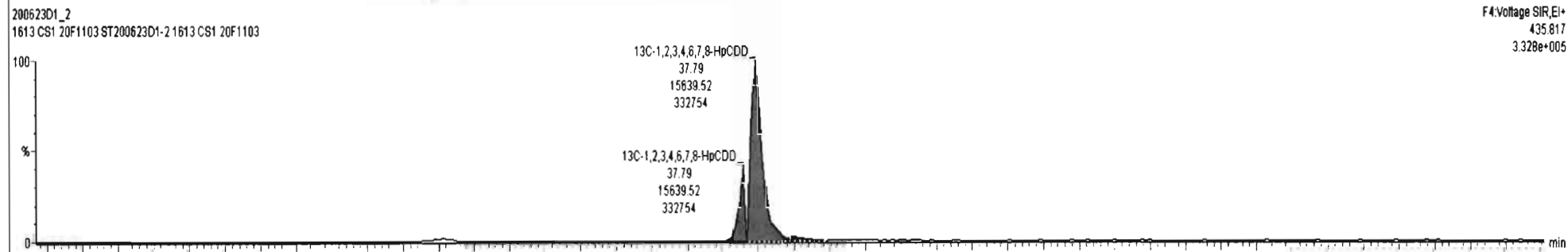
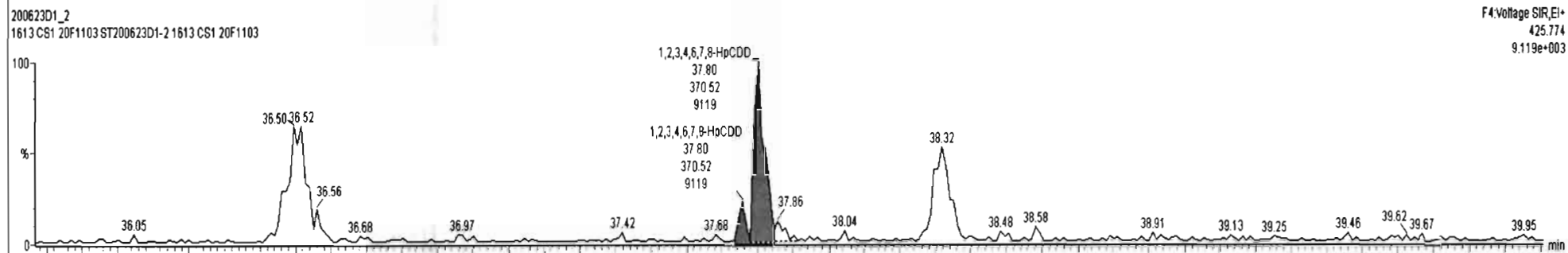
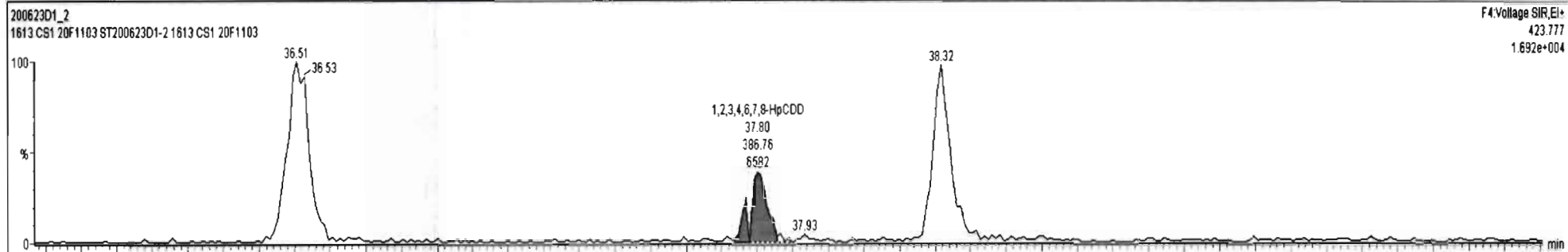
1,2,3,4,6,7,8-HpCDD



<sup>13</sup>C-1,2,3,4,6,7,8-HpCDD



200623D1\_2 - ST200623D1-2 1613 CS1 20F1103 - 1613 CS1 20F1103



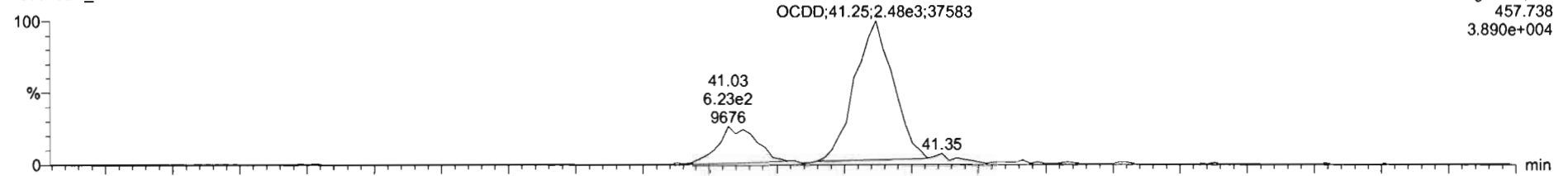
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

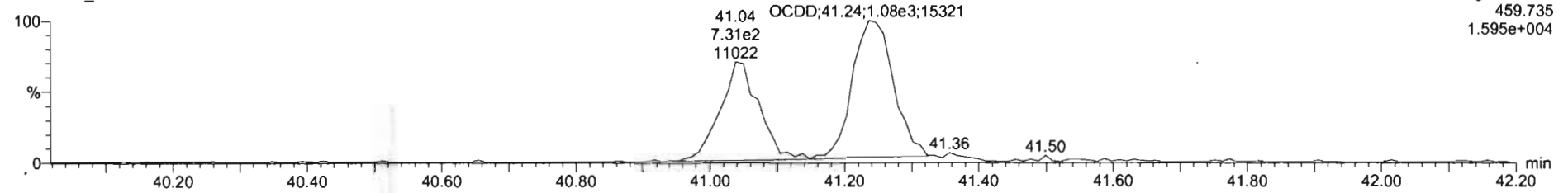
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**OCDD**

200623D1\_2

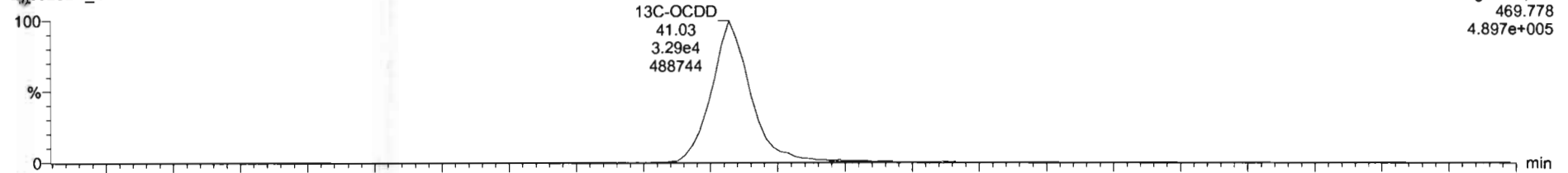


200623D1\_2

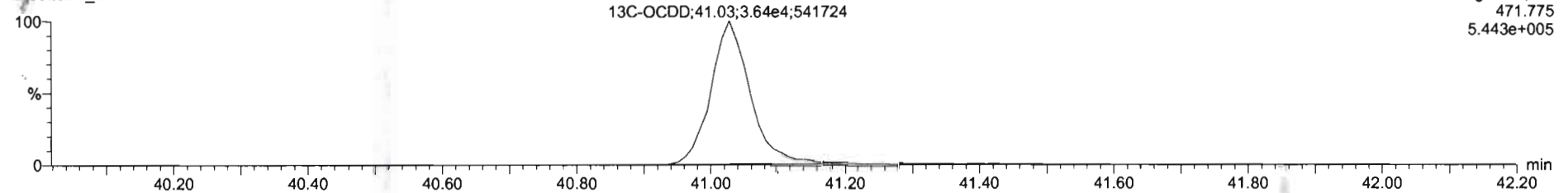


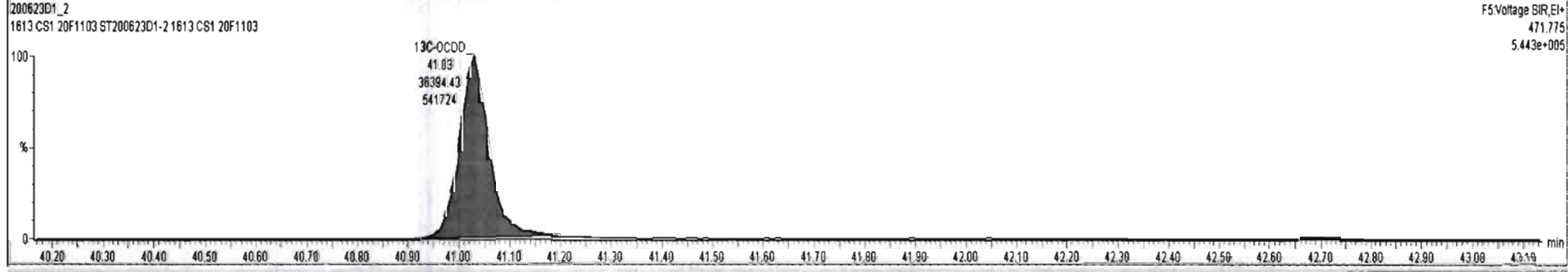
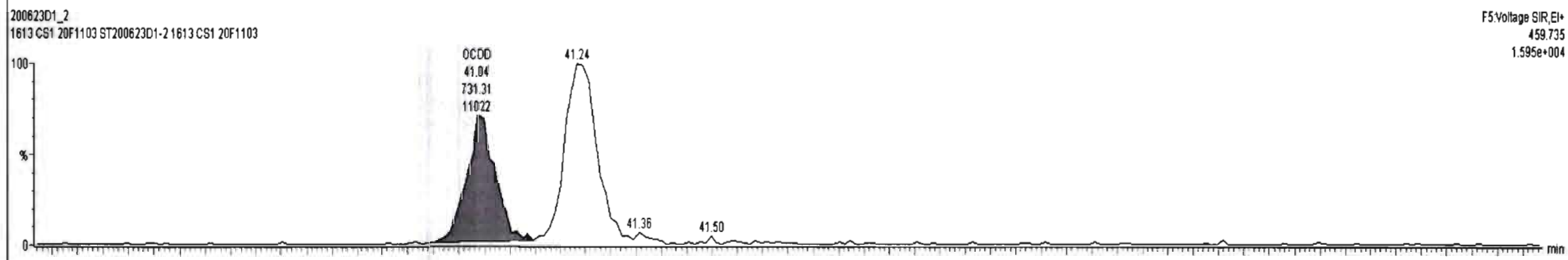
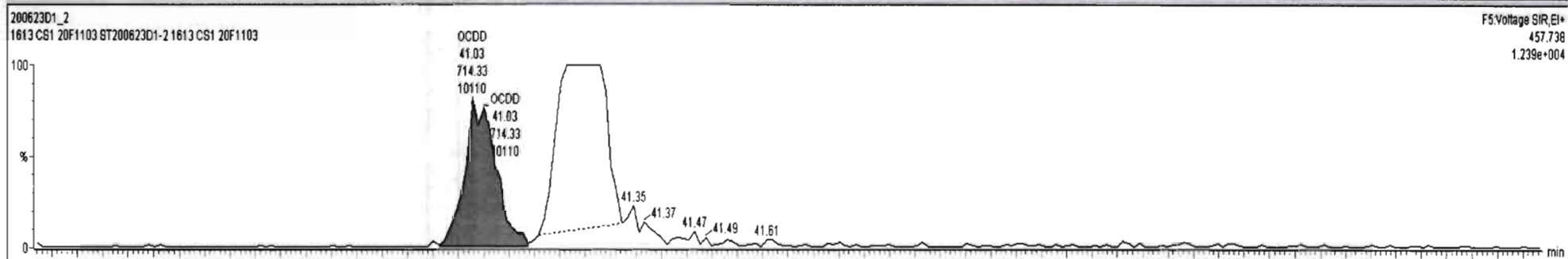
**13C-OCDD**

200623D1\_2



200623D1\_2





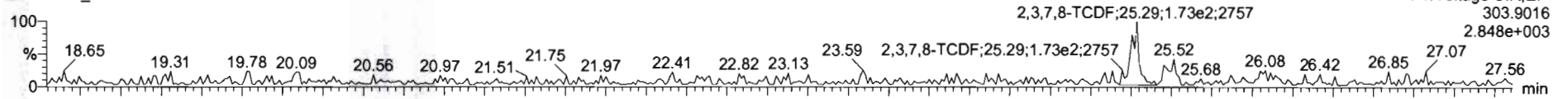
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

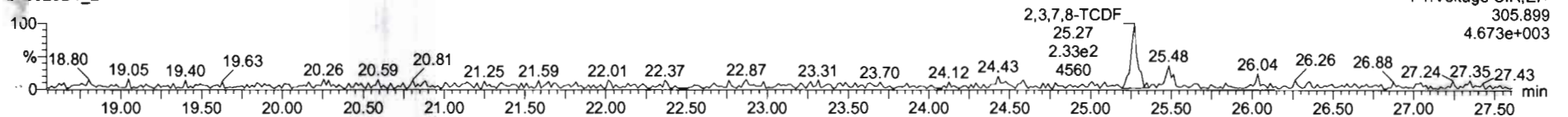
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**2,3,7,8-TCDF**

200623D1\_2

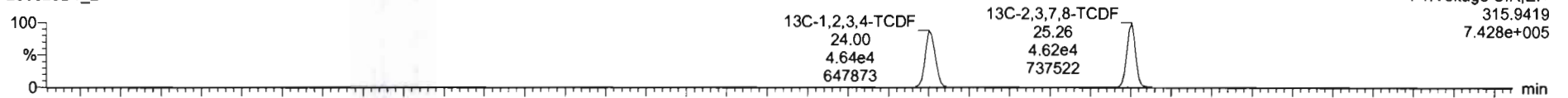


200623D1\_2

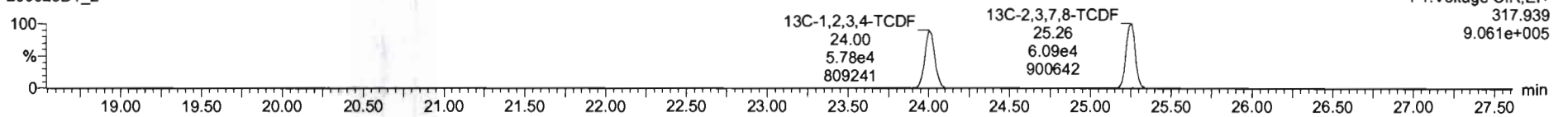


**13C-2,3,7,8-TCDF**

200623D1\_2

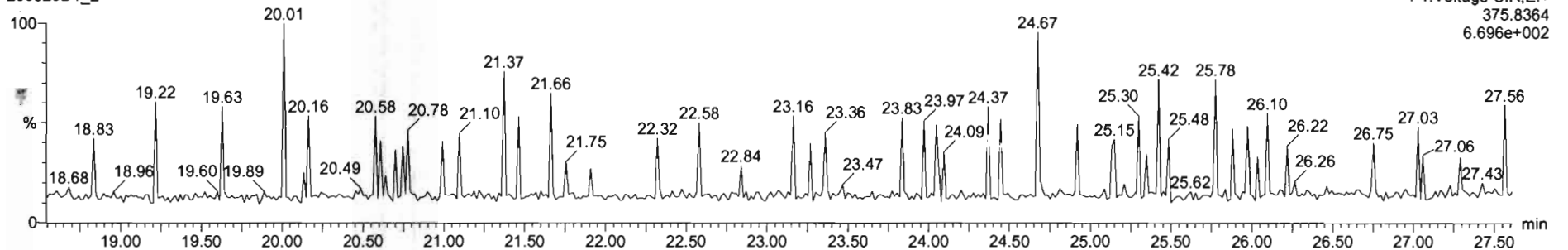


200623D1\_2

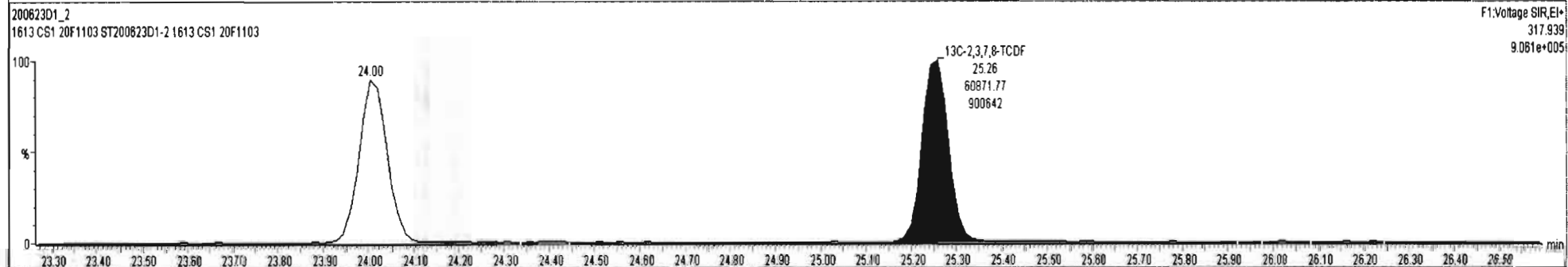
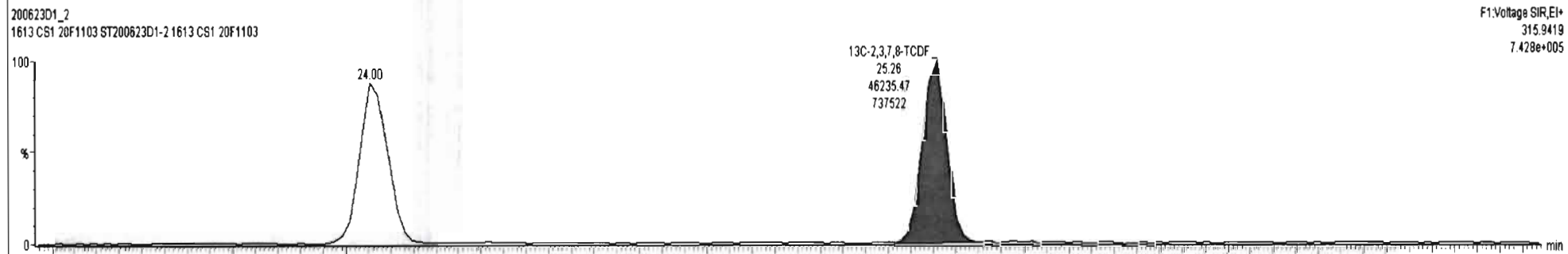
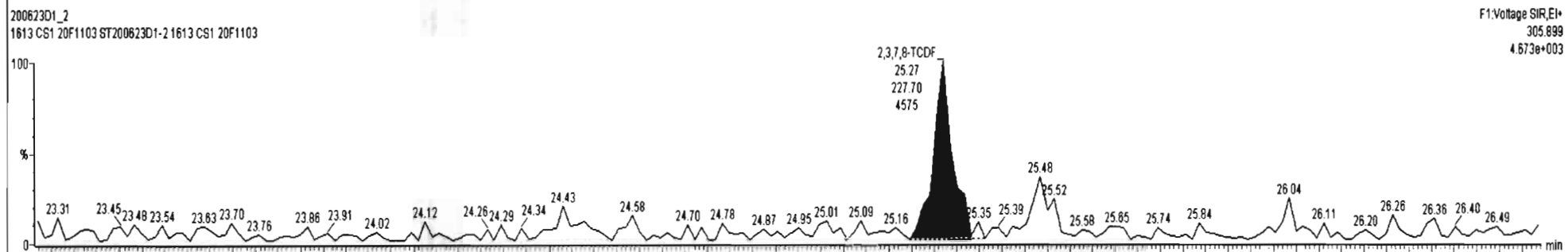
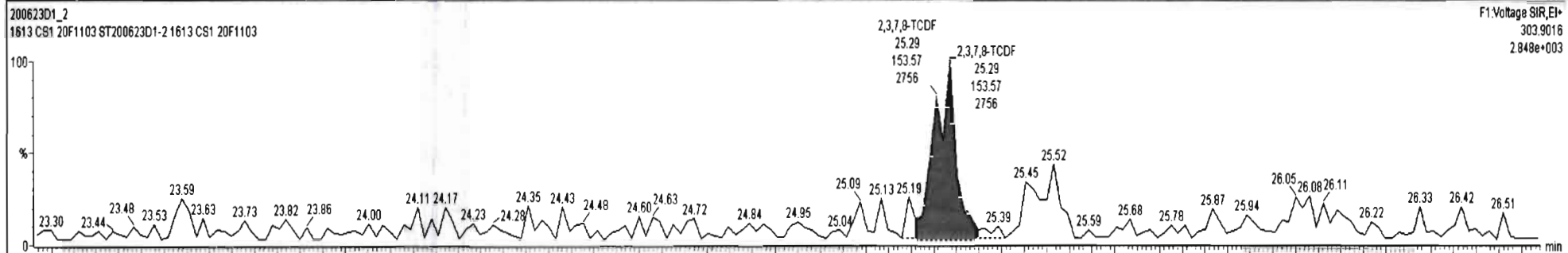


**DPE1**

200623D1\_2





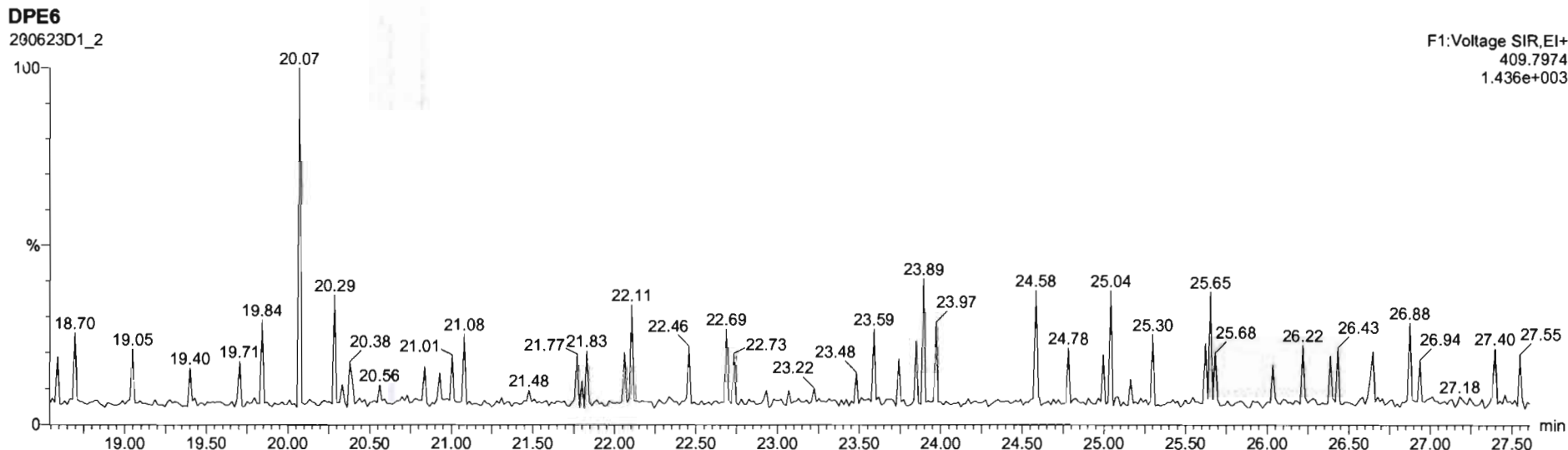
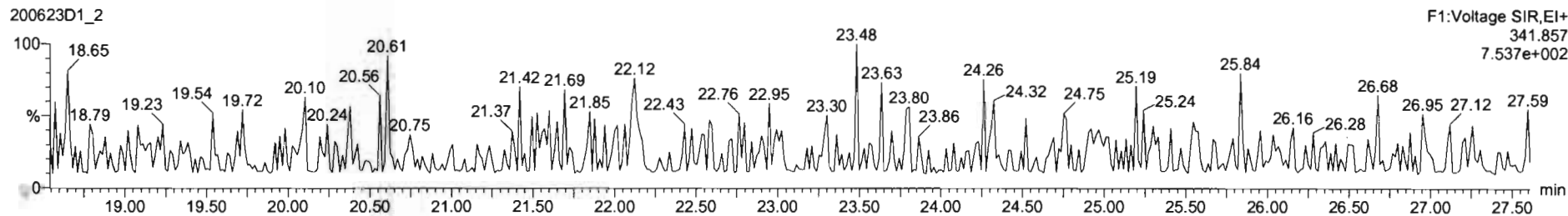
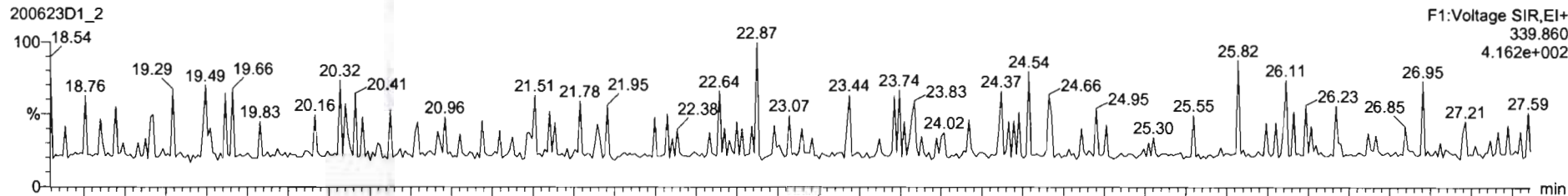


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

1st Func. Penta-Furans



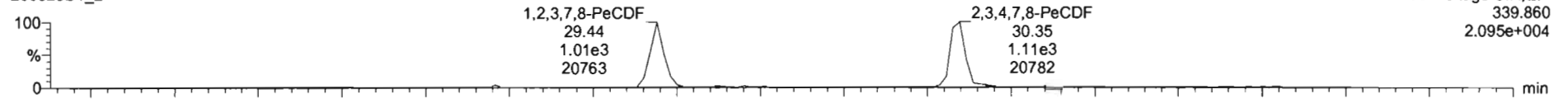
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

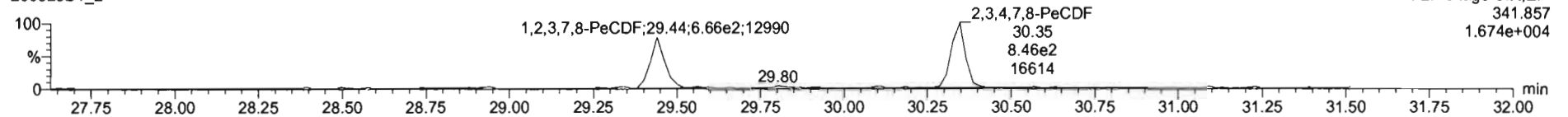
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**1,2,3,7,8-PeCDF**

200623D1\_2

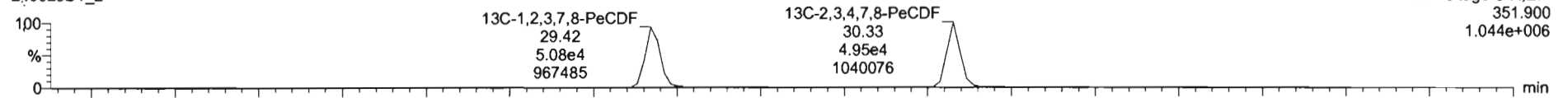


200623D1\_2

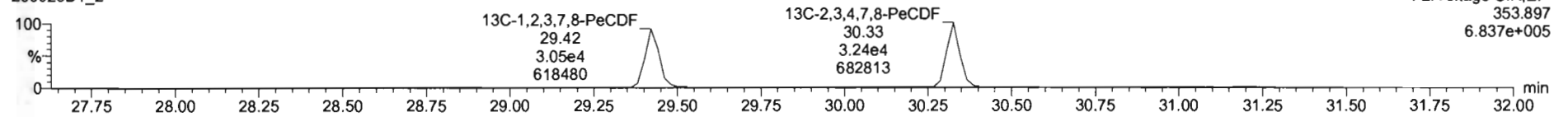


**13C-1,2,3,7,8-PeCDF**

200623D1\_2

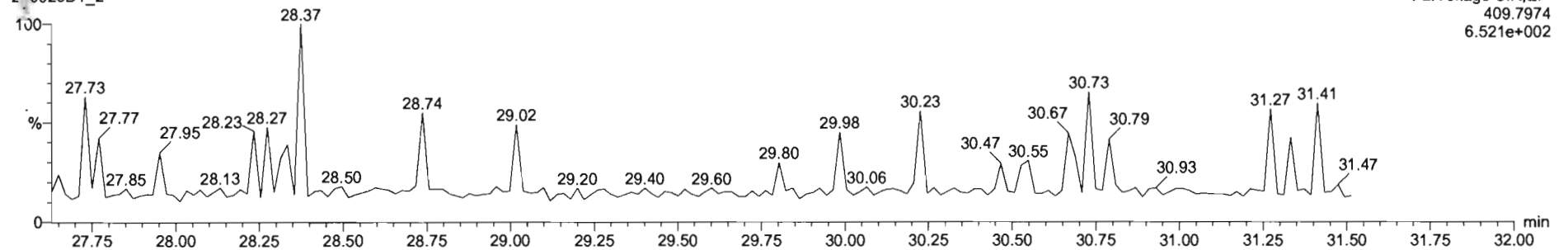


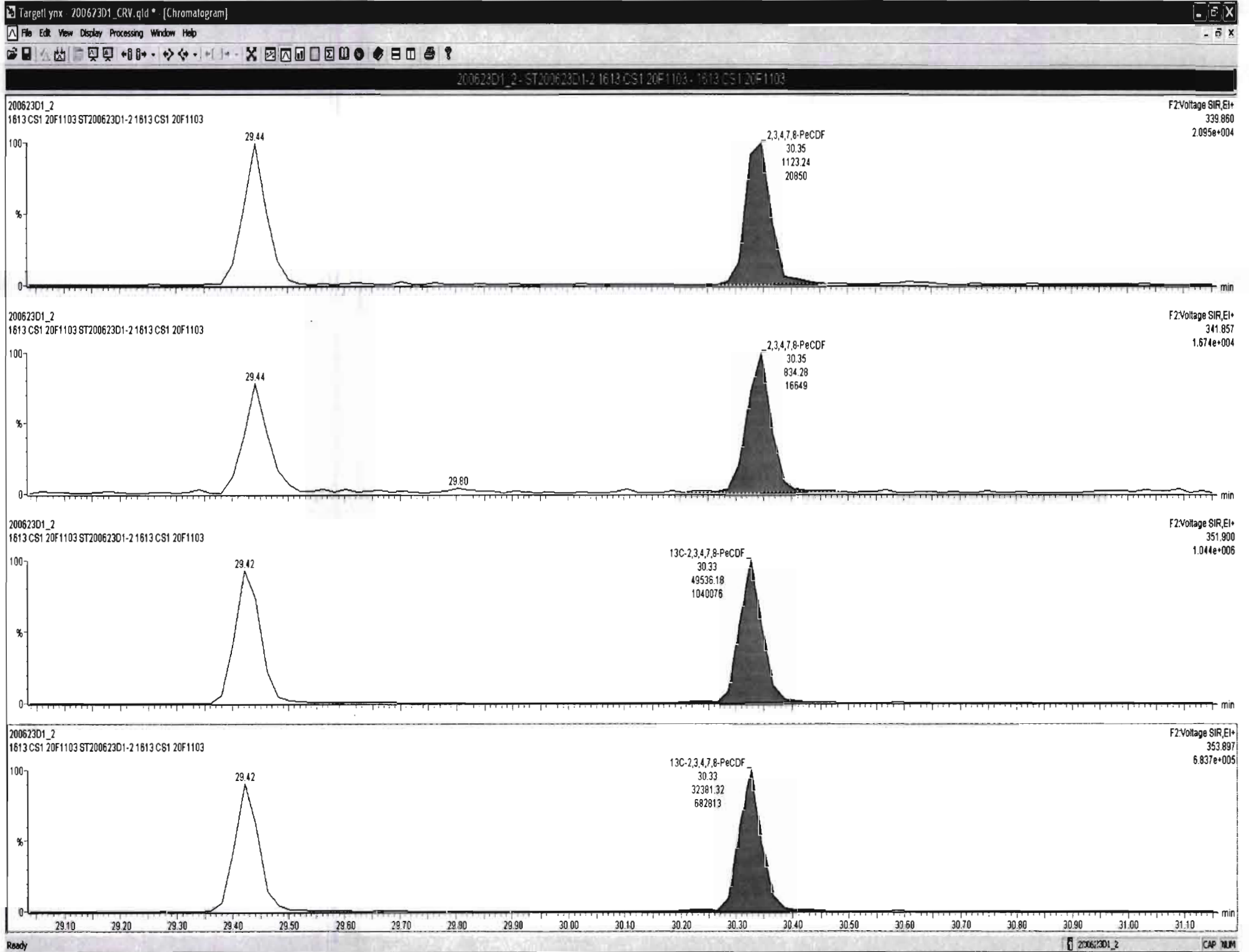
200623D1\_2



**DPE2**

200623D1\_2



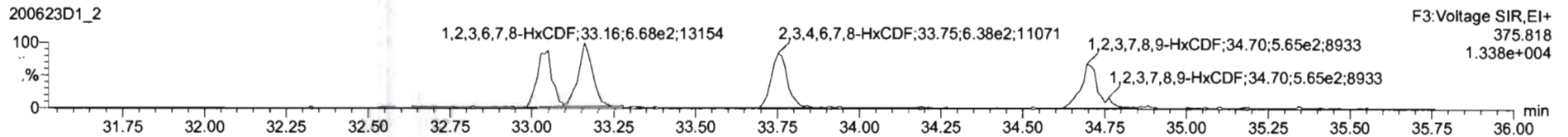
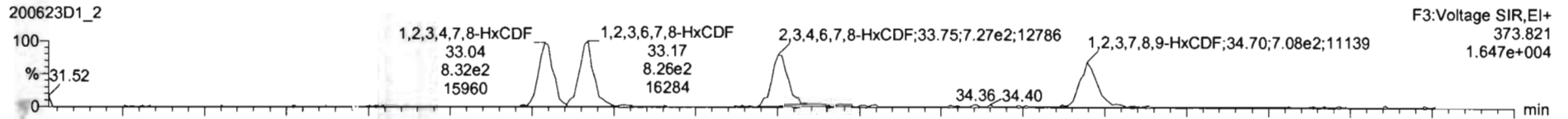


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

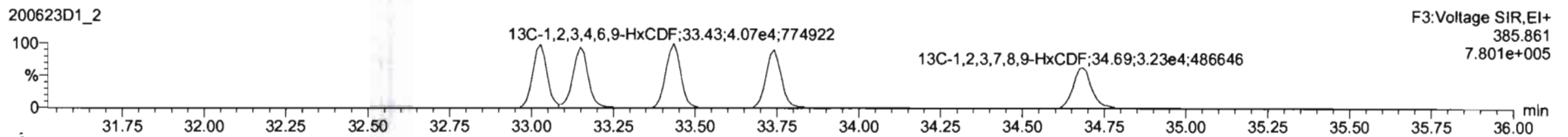
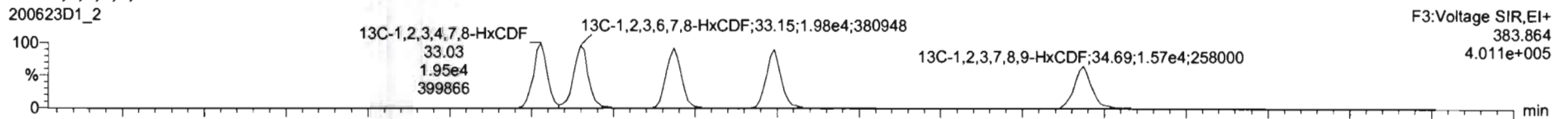
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

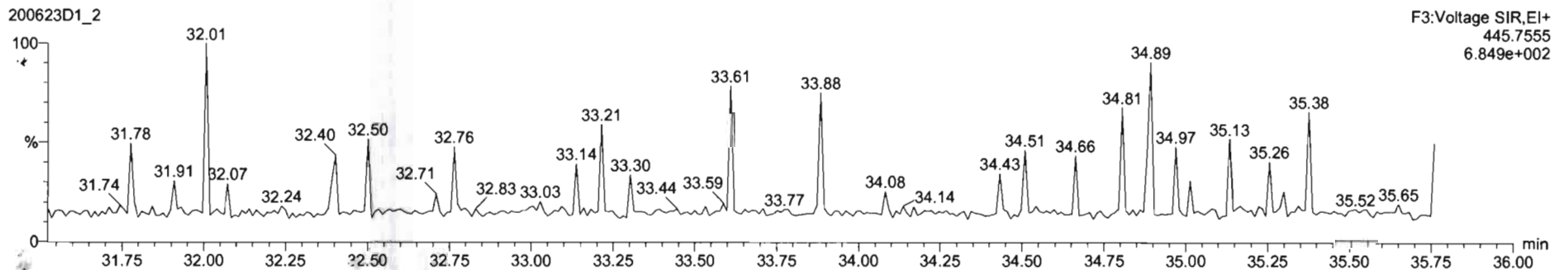
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



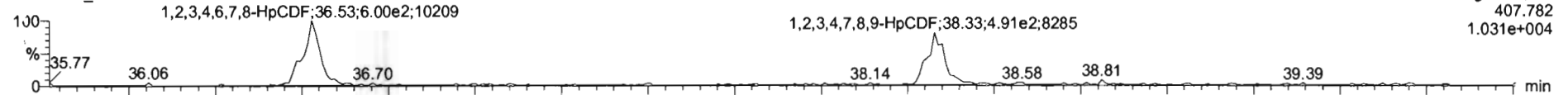
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

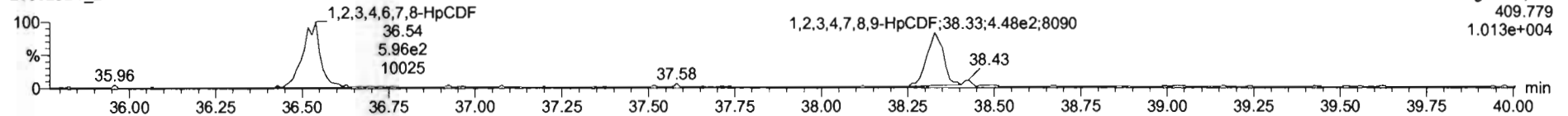
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

**1,2,3,4,6,7,8-HpCDF**

200623D1\_2

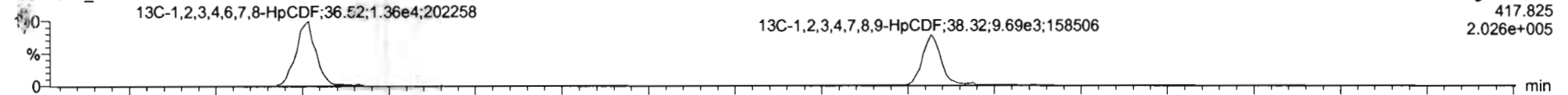


200623D1\_2

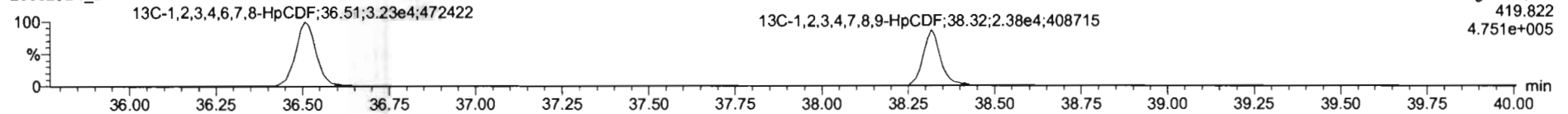


**13C-1,2,3,4,6,7,8-HpCDF**

200623D1\_2

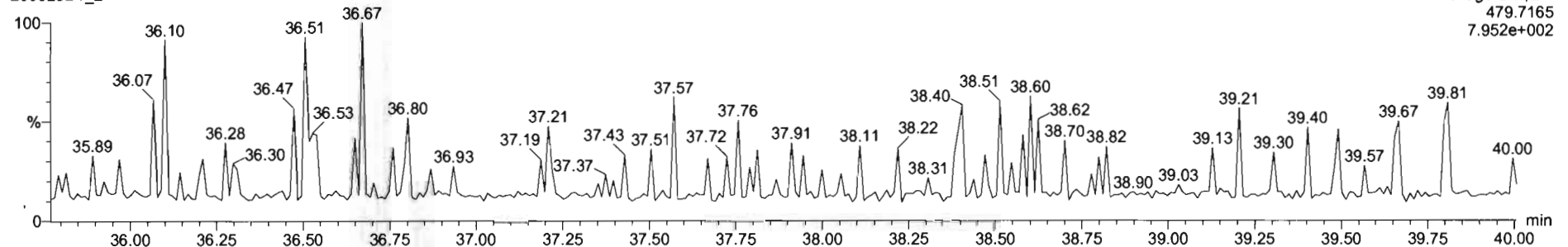


200623D1\_2



**DPE4**

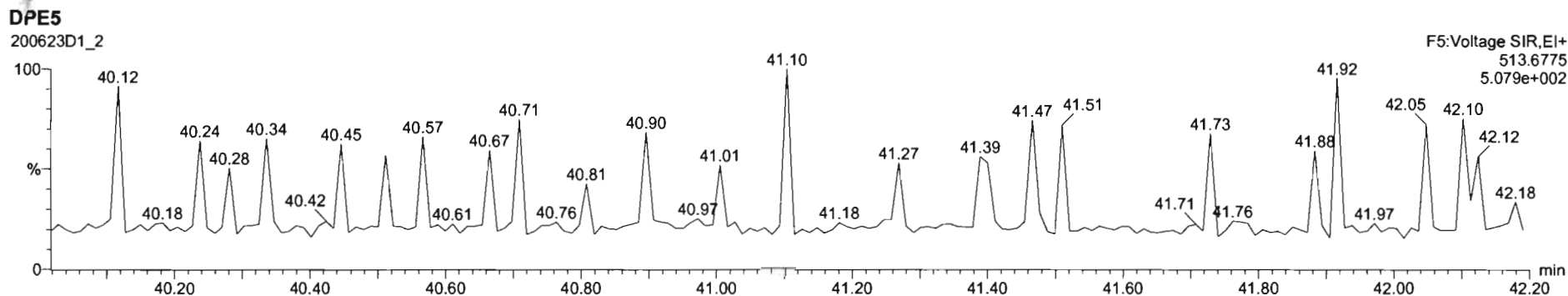
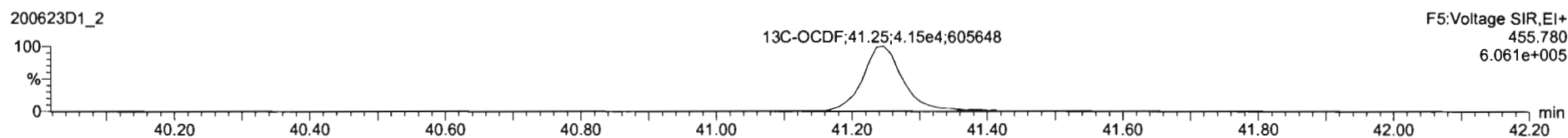
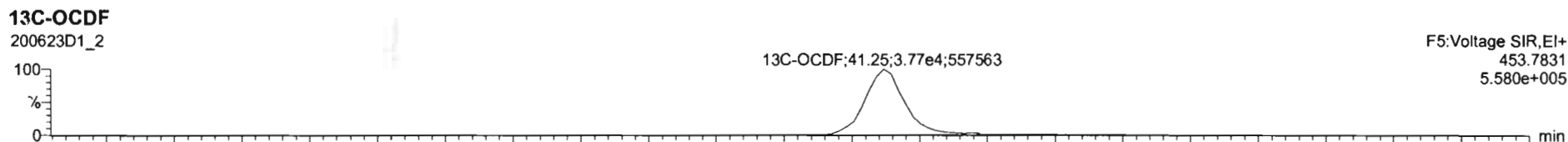
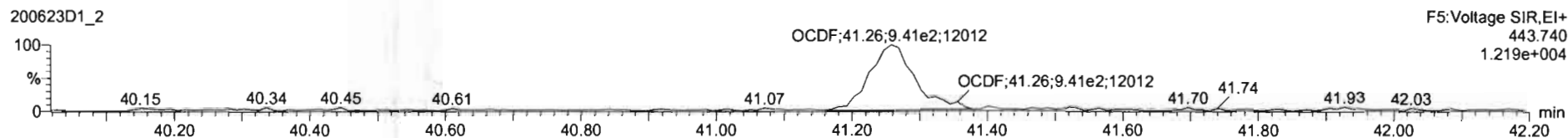
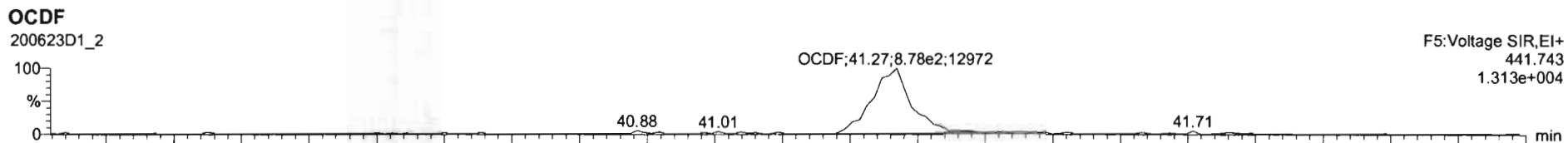
200623D1\_2



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

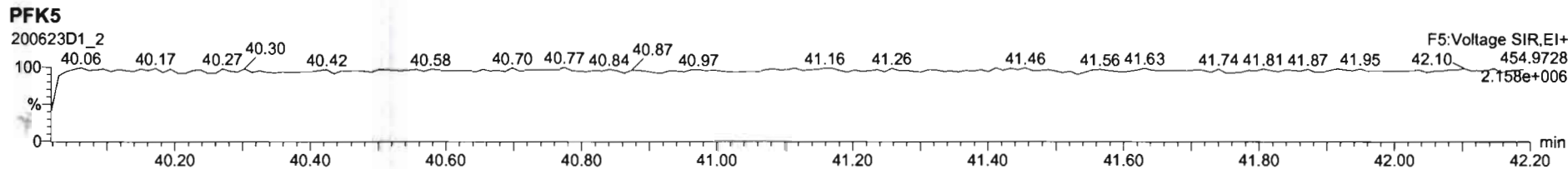
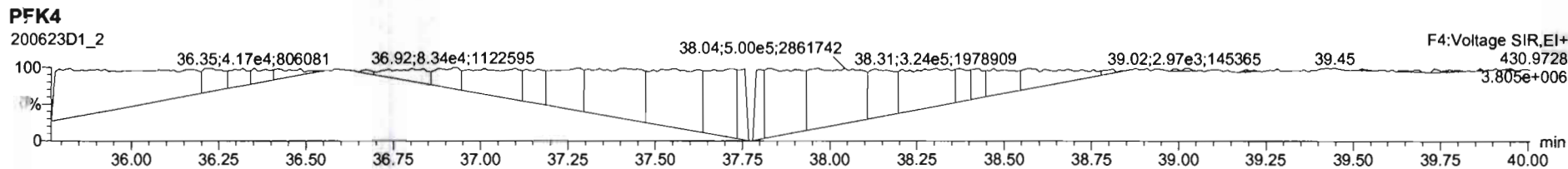
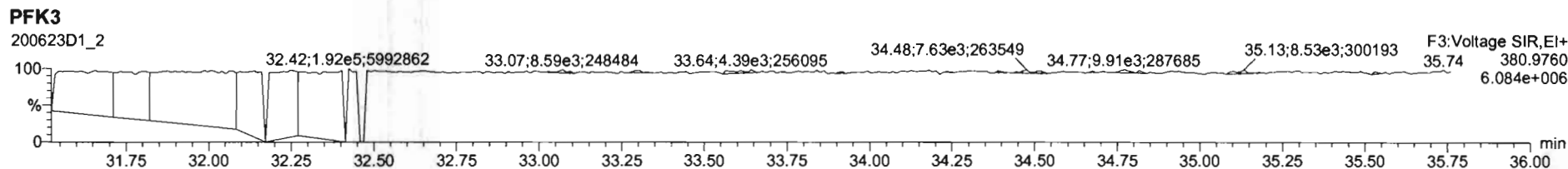
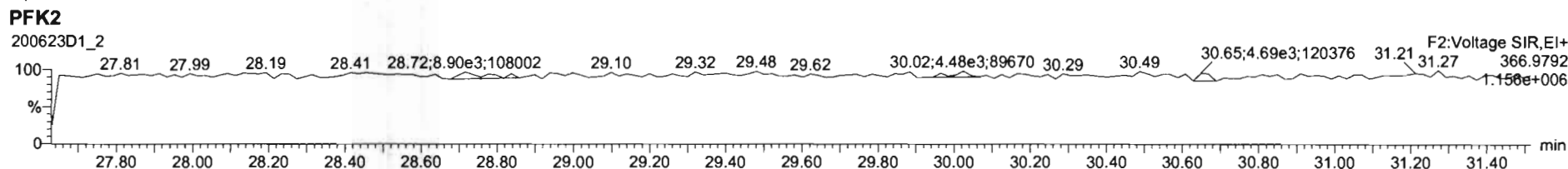
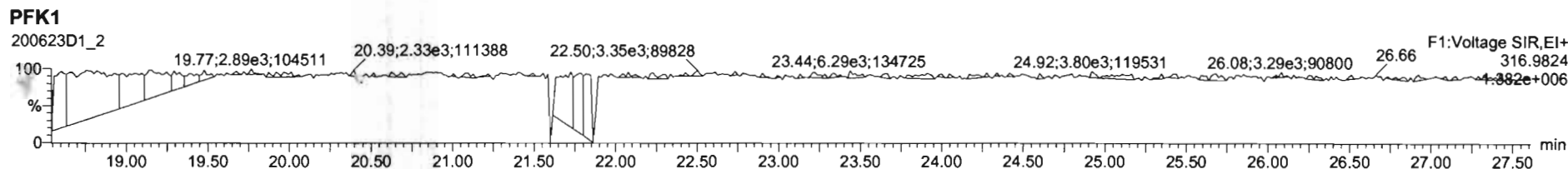
Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_2, Date: 23-Jun-2020, Time: 15:54:30, ID: ST200623D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103





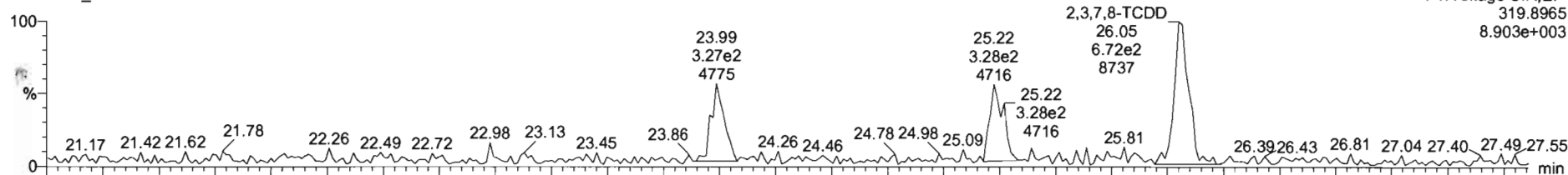
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

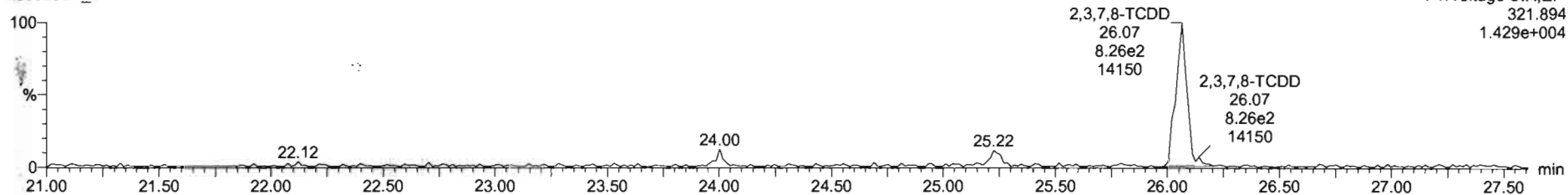
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**2,3,7,8-TCDD**

200623D1\_3

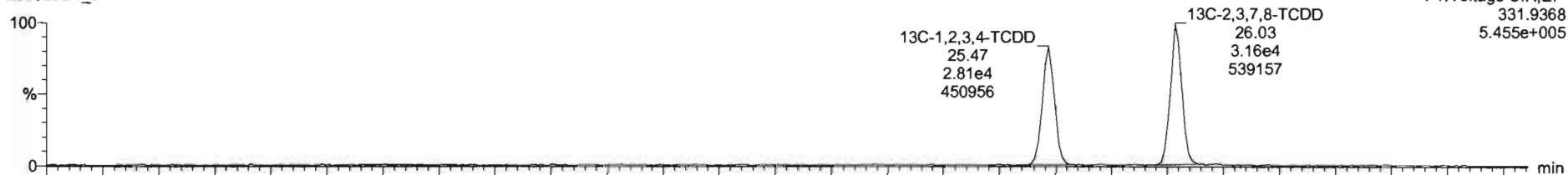


200623D1\_3

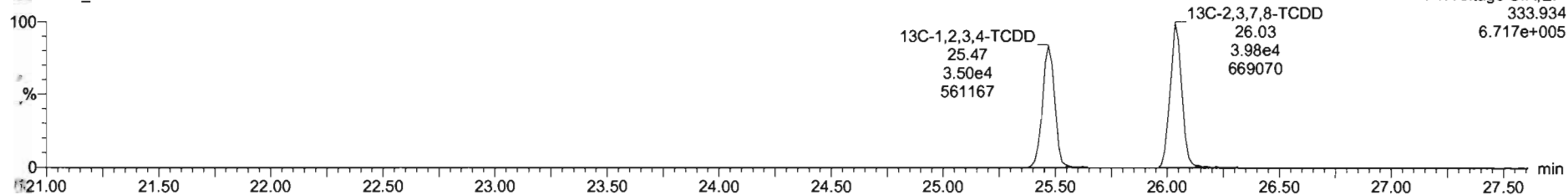


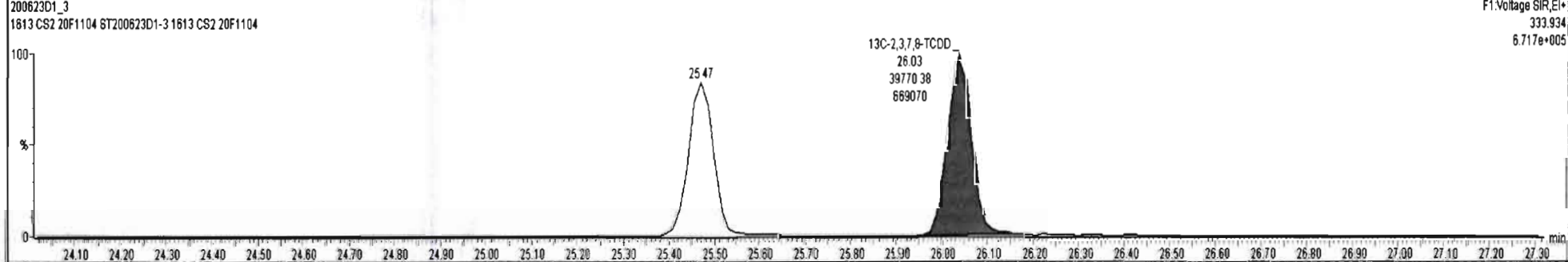
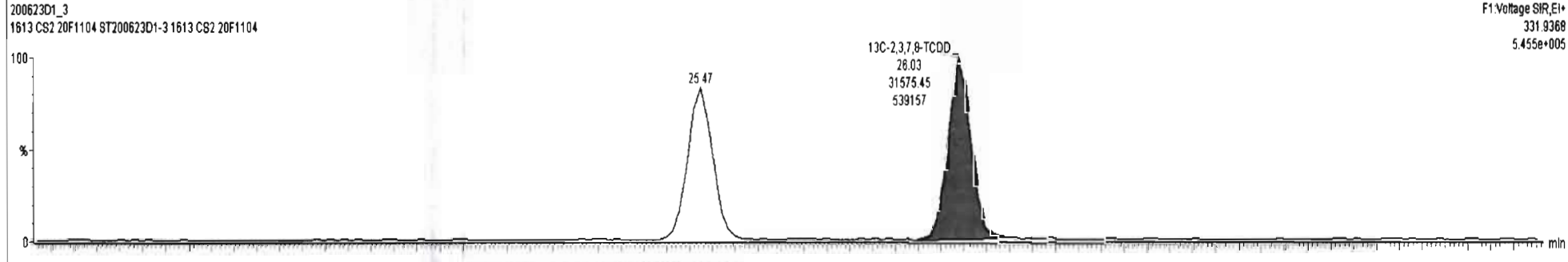
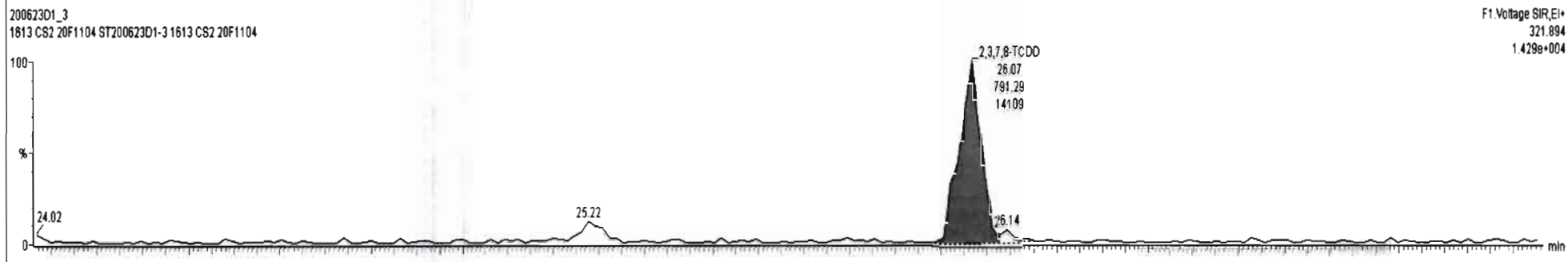
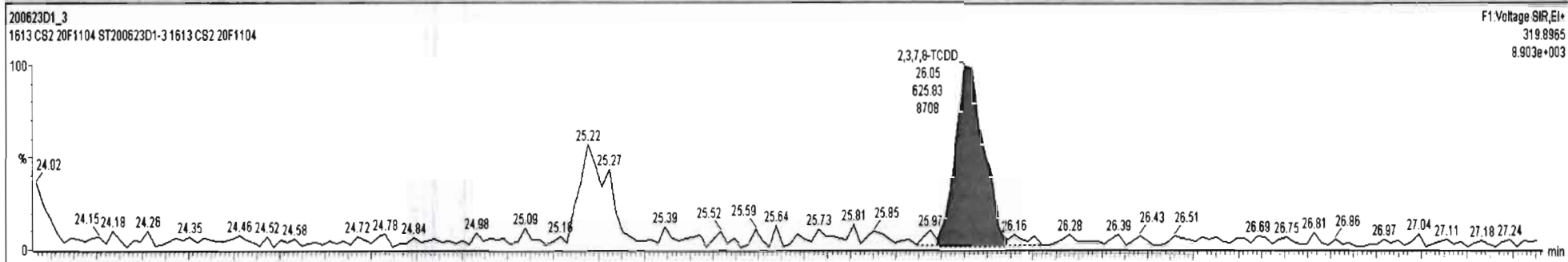
**13C-2,3,7,8-TCDD**

200623D1\_3



200623D1\_3



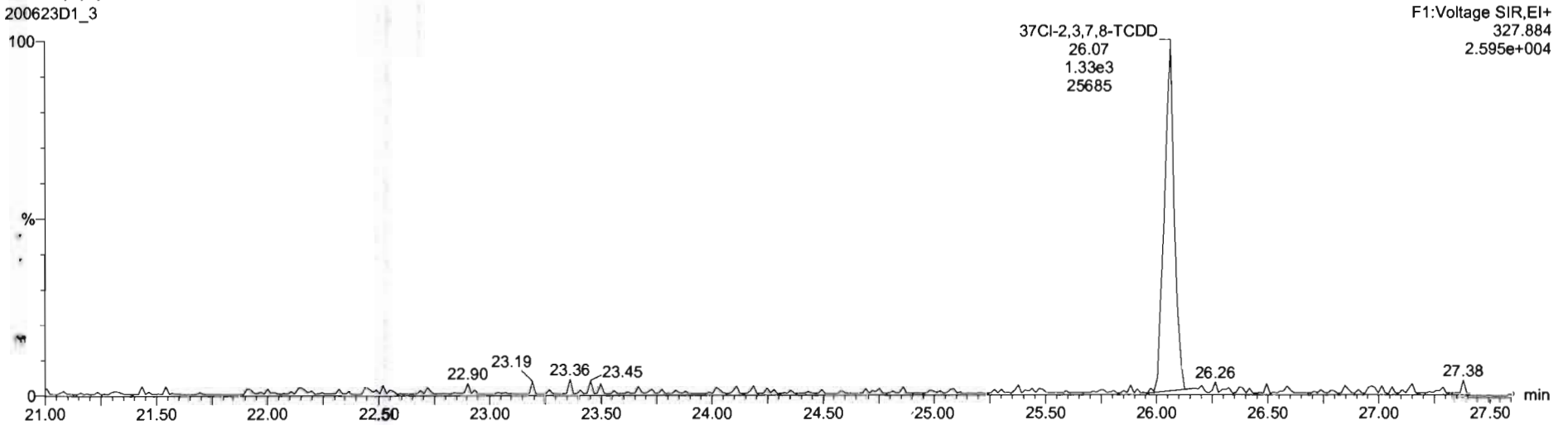


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

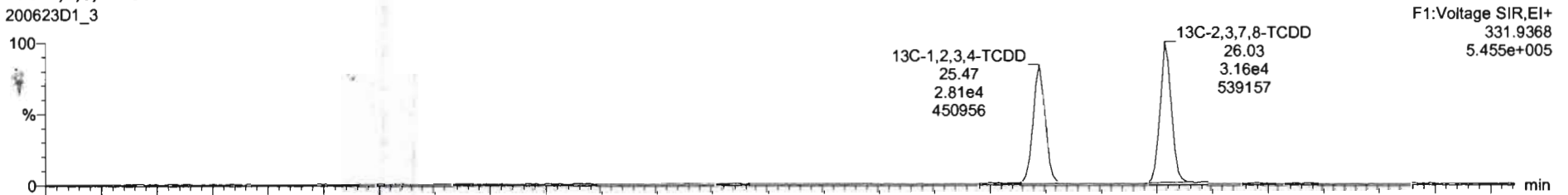
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

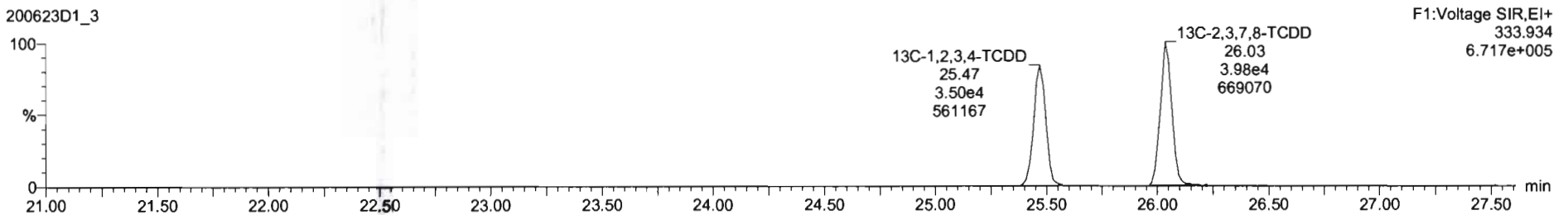
**37Cl-2,3,7,8-TCDD**  
200623D1\_3



**13C-1,2,3,4-TCDD**  
200623D1\_3



200623D1\_3



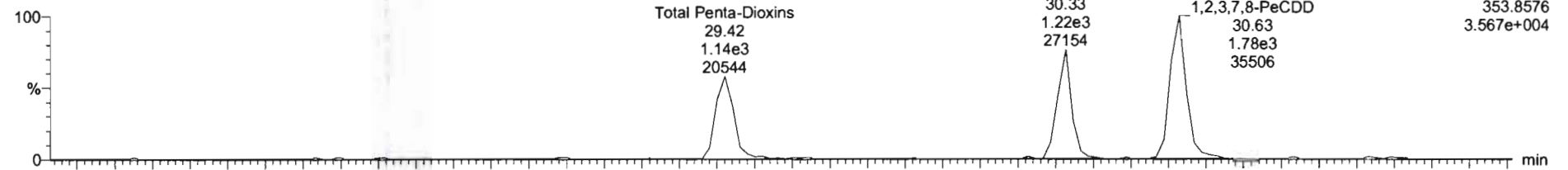
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

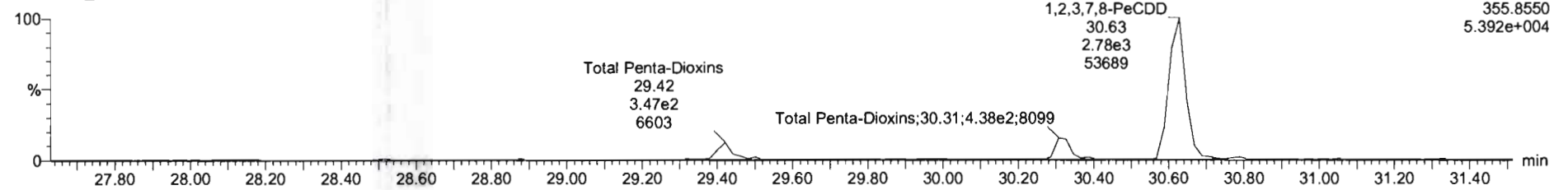
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**1,2,3,7,8-PeCDD**

200623D1\_3

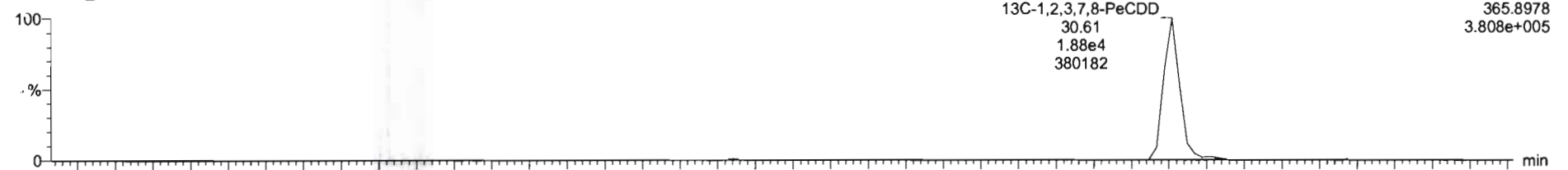


200623D1\_3

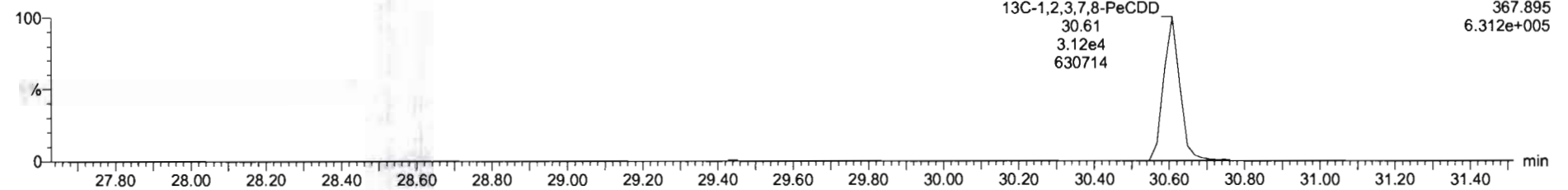


**13C-1,2,3,7,8-PeCDD**

200623D1\_3



200623D1\_3

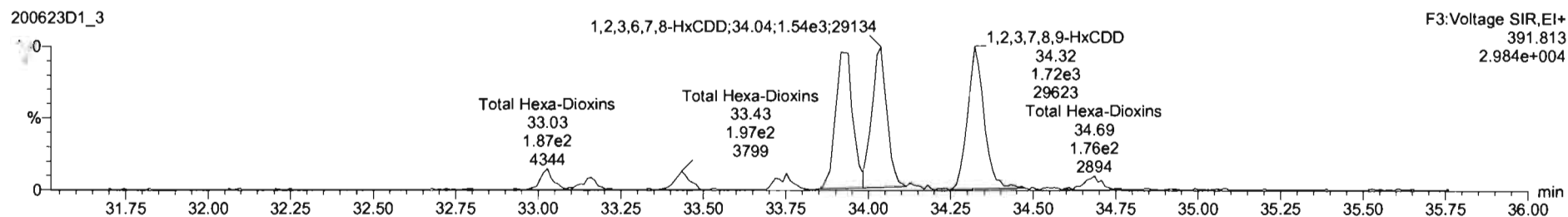
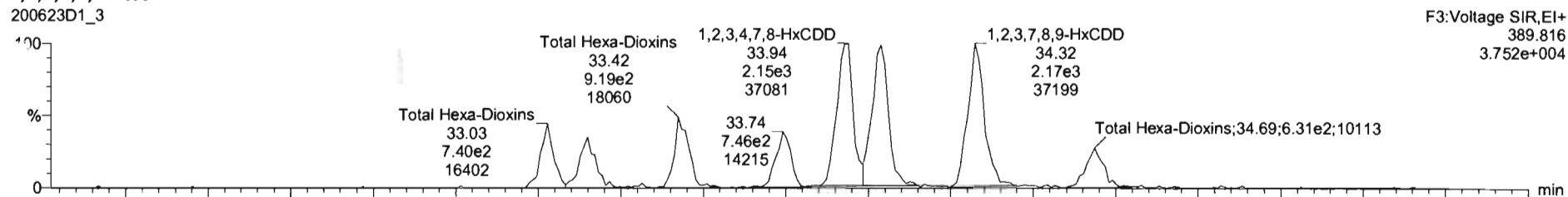


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

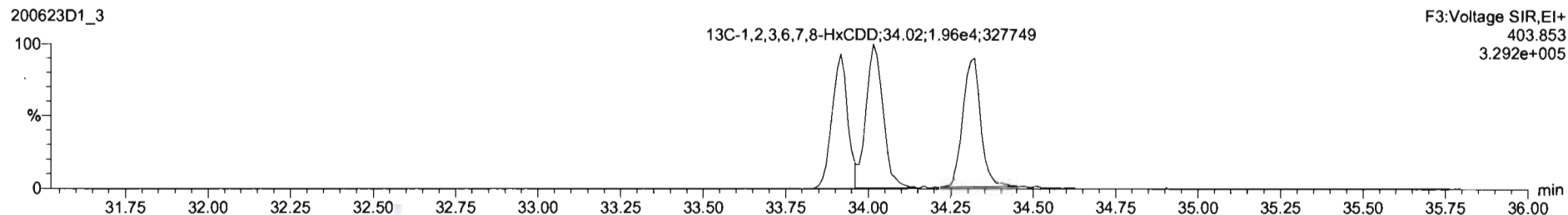
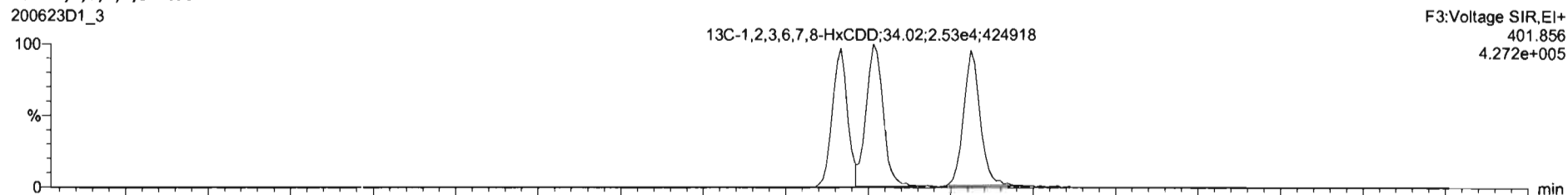
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
 Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**1,2,3,4,7,8-HxCDD**



**13C-1,2,3,4,7,8-HxCDD**

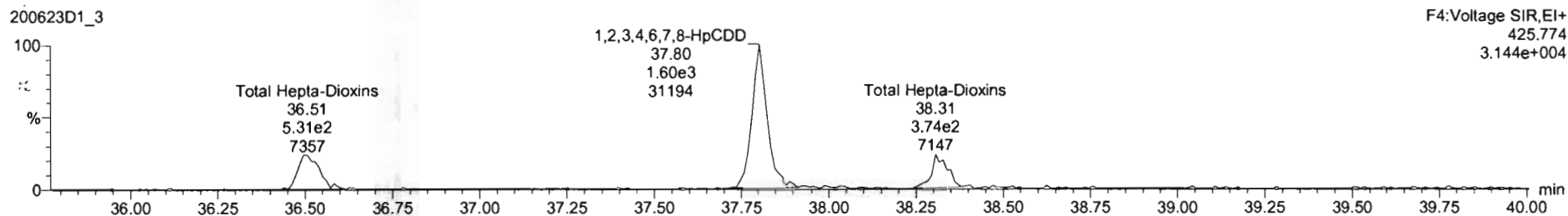
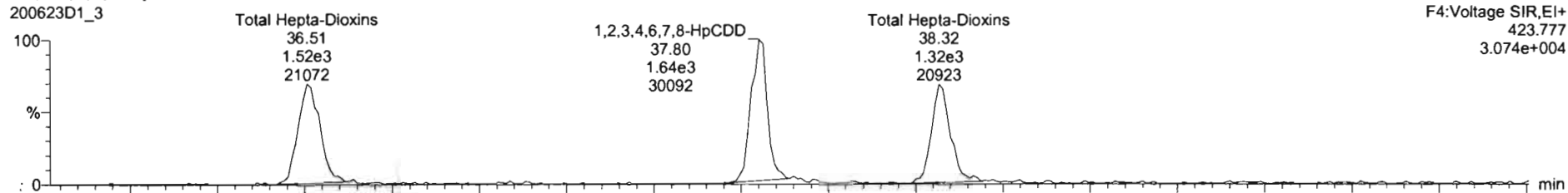


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

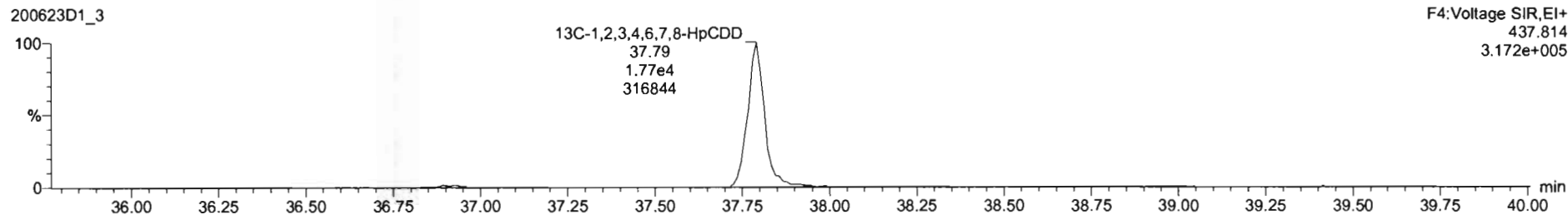
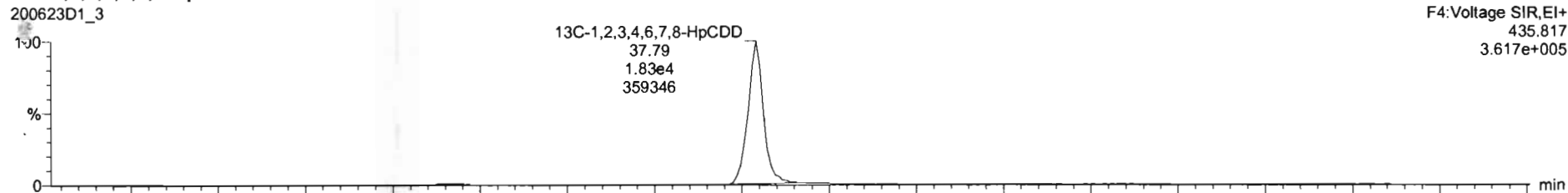
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

1,2,3,4,6,7,8-HpCDD



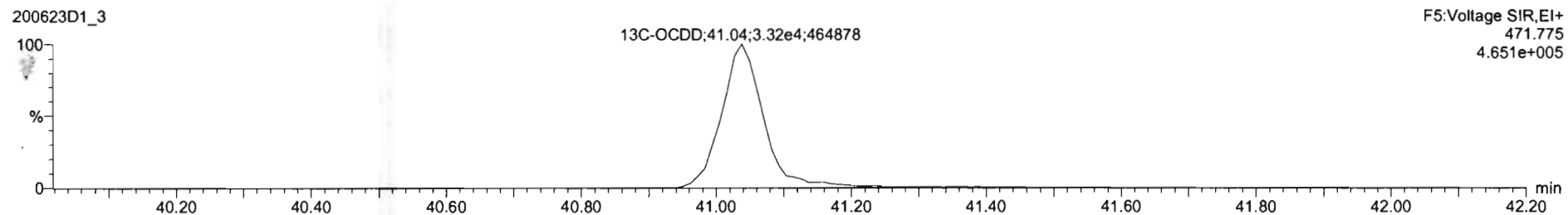
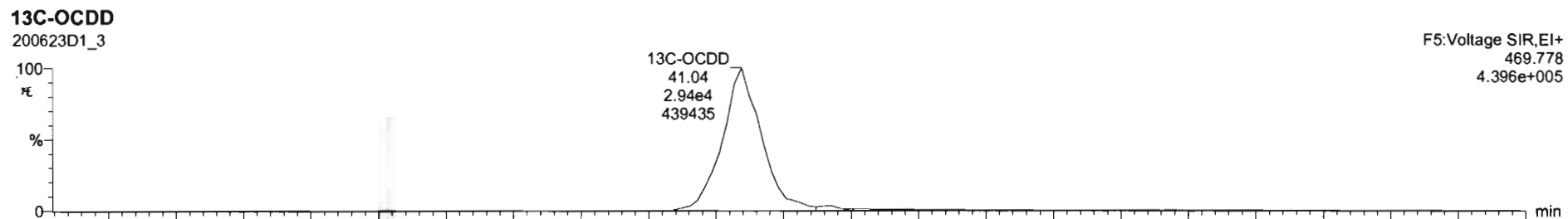
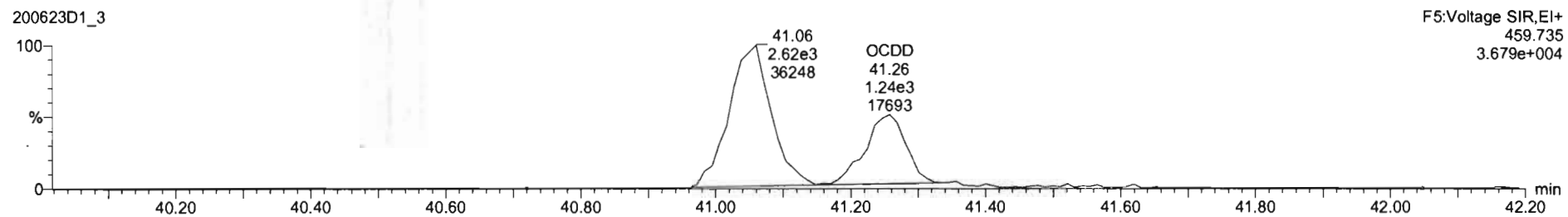
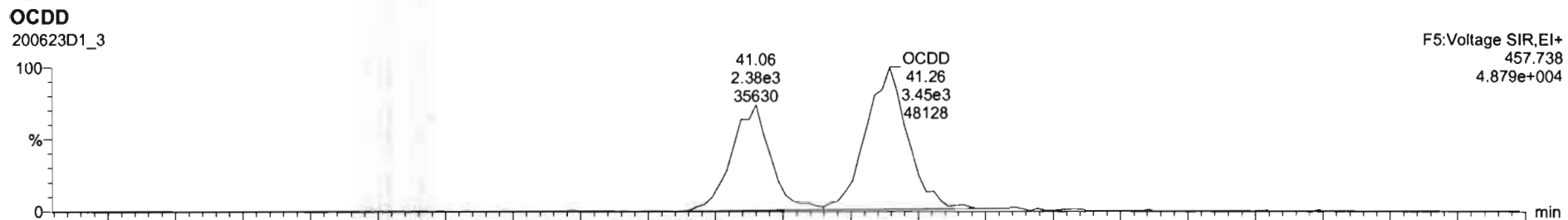
13C-1,2,3,4,6,7,8-HpCDD

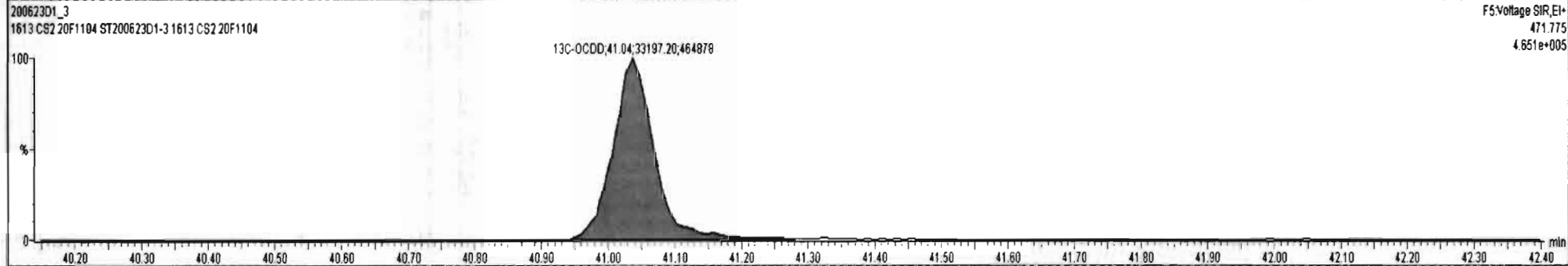
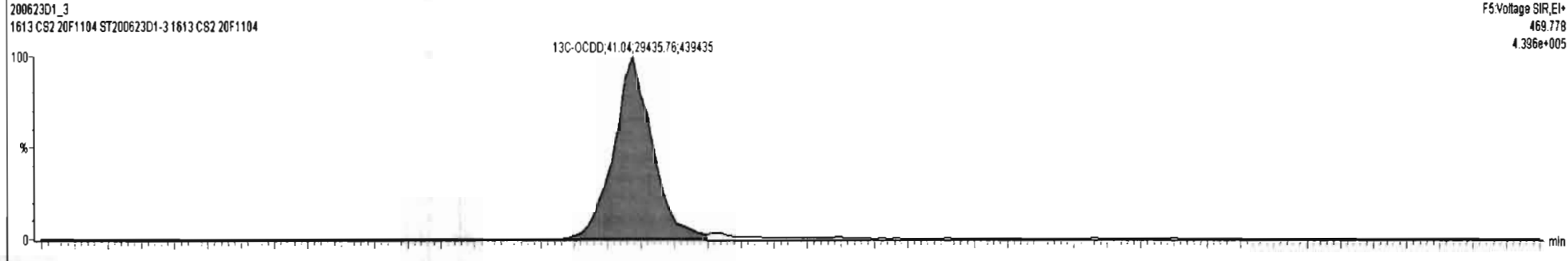
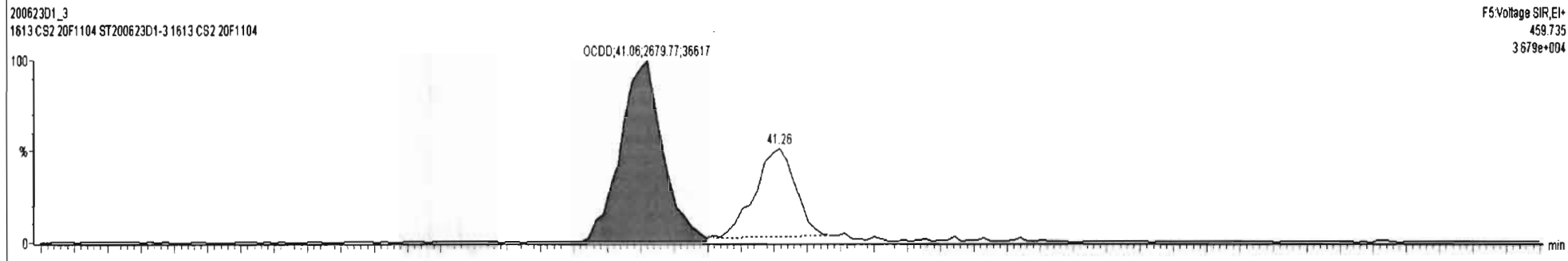
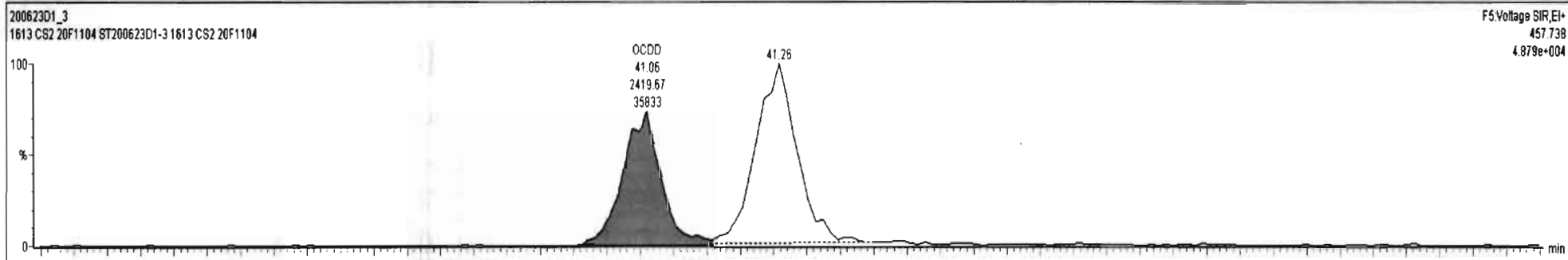


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104







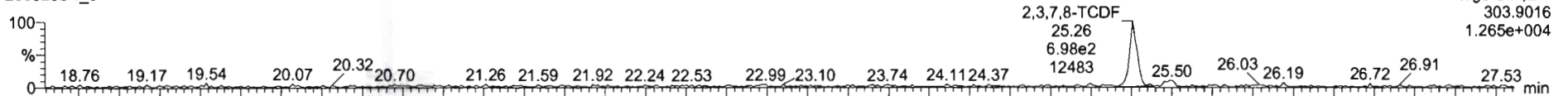
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

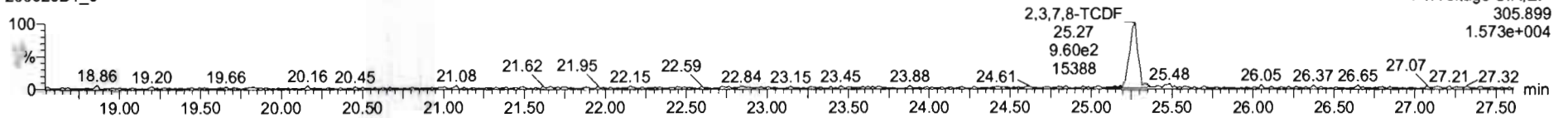
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**2,3,7,8-TCDF**

200623D1\_3

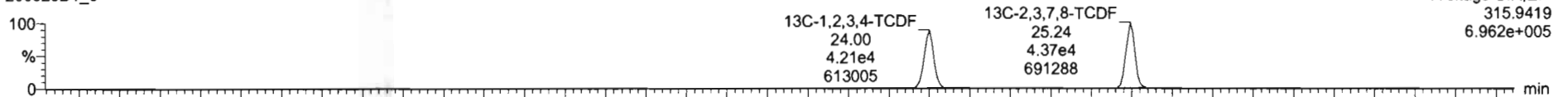


200623D1\_3

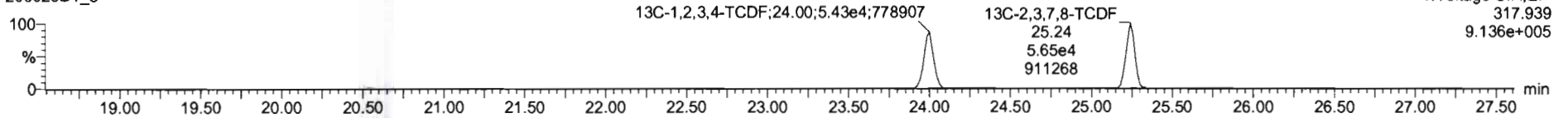


**13C-2,3,7,8-TCDF**

200623D1\_3

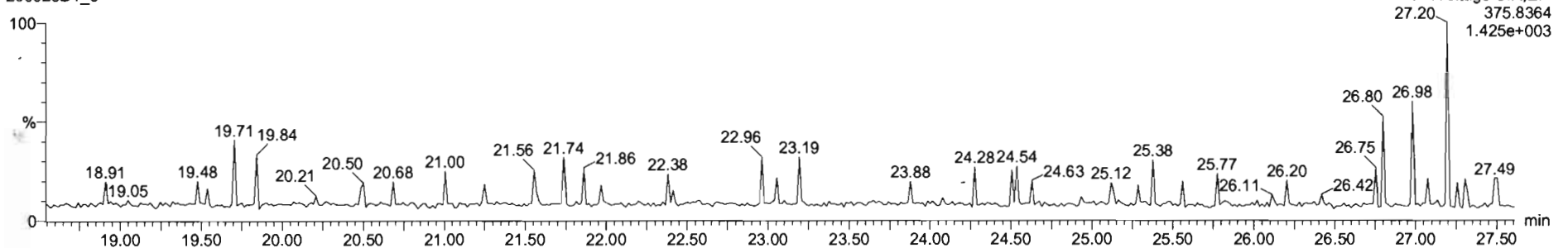


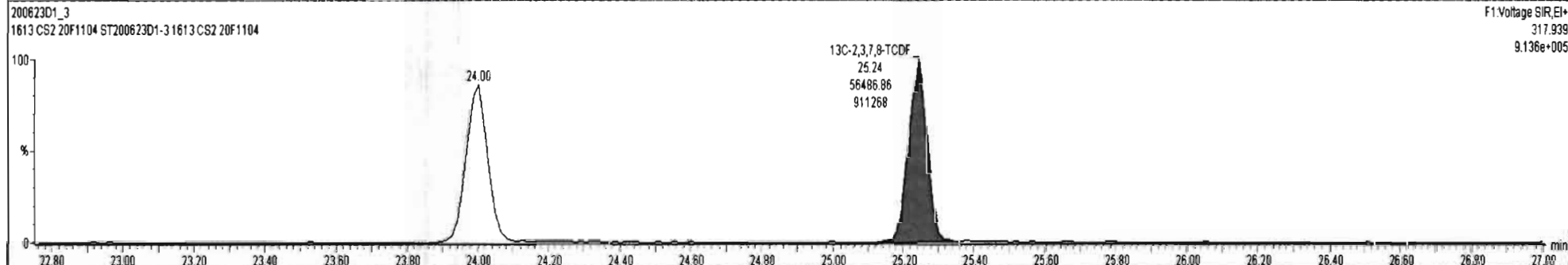
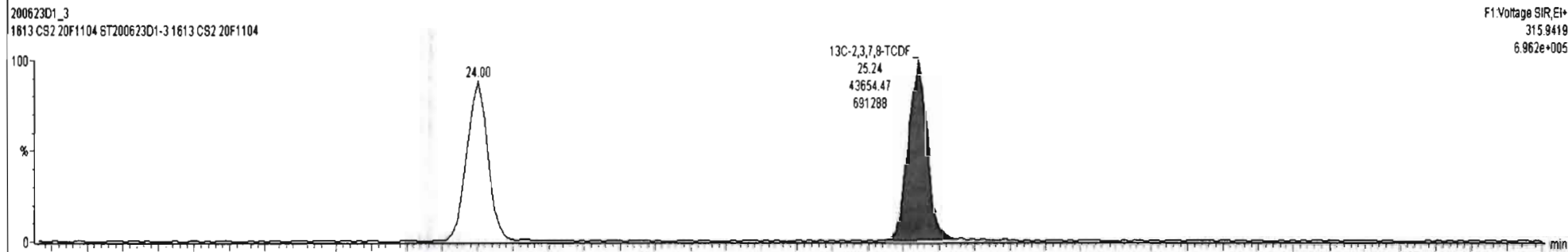
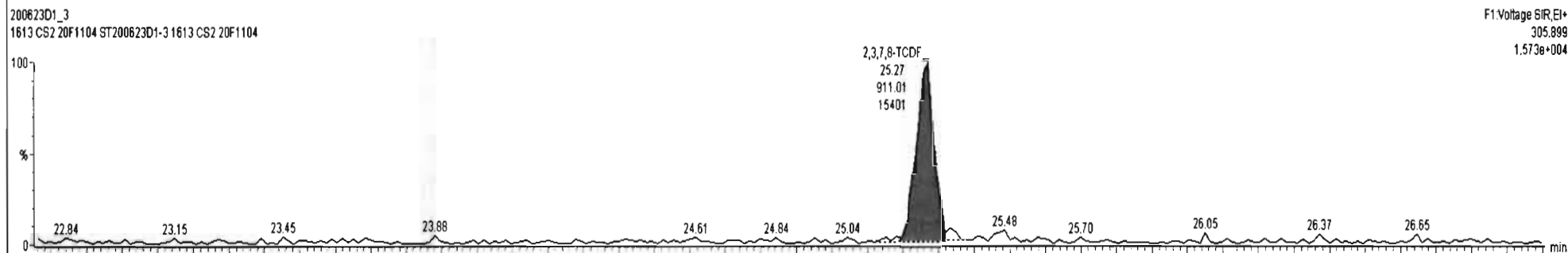
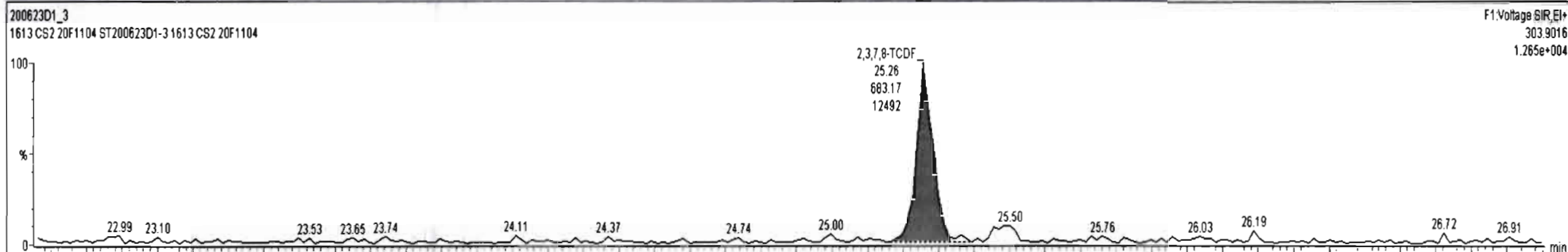
200623D1\_3



**DPE1**

200623D1\_3





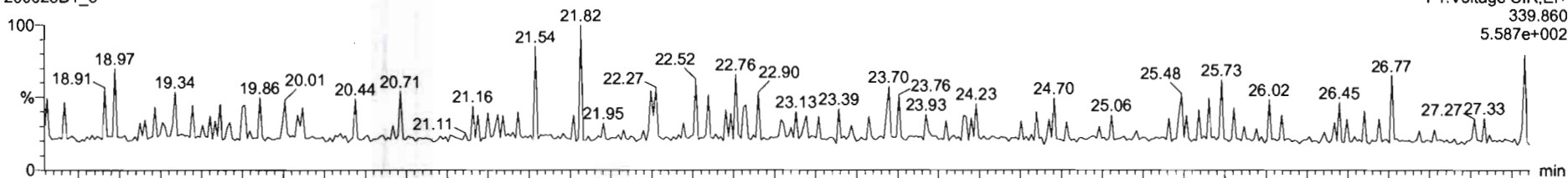
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

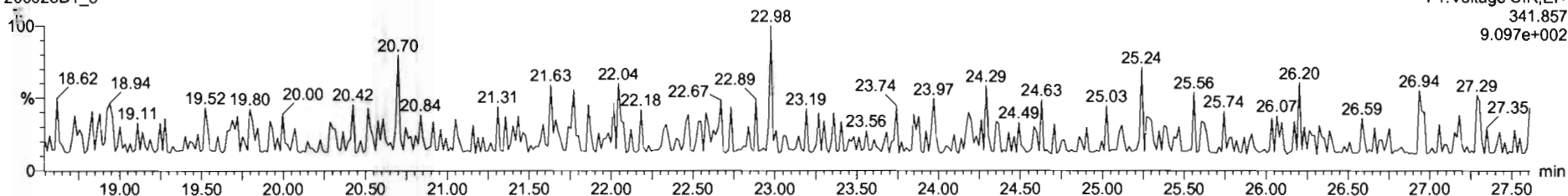
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

1st Func. Penta-Furans

200623D1\_3

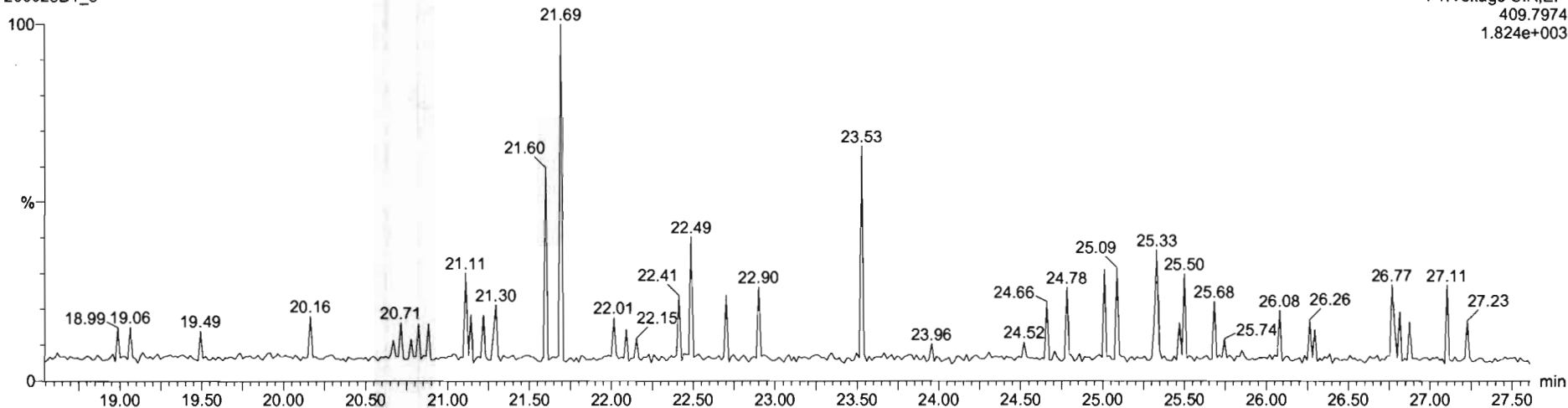


200623D1\_3



DPE6

200623D1\_3



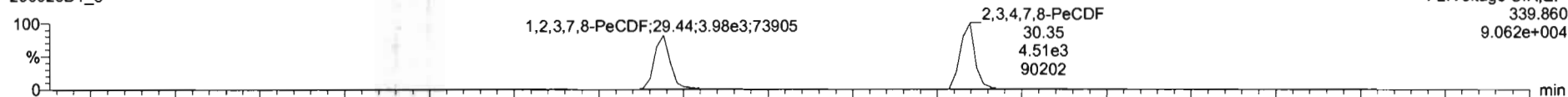
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

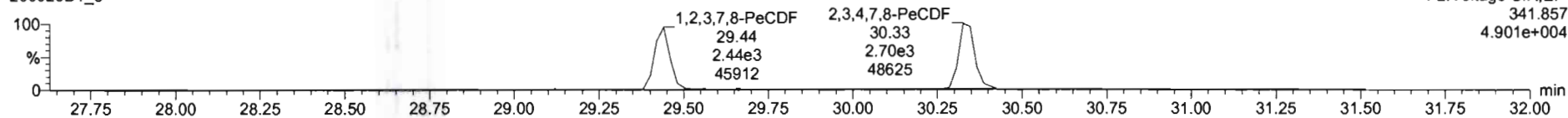
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**1,2,3,7,8-PeCDF**

200623D1\_3

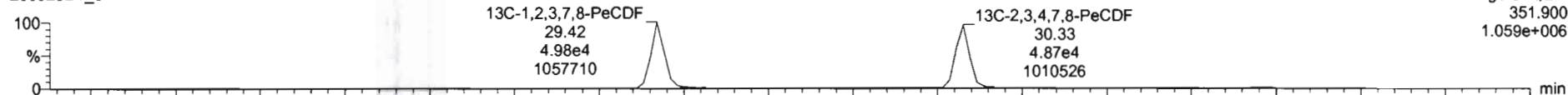


200623D1\_3

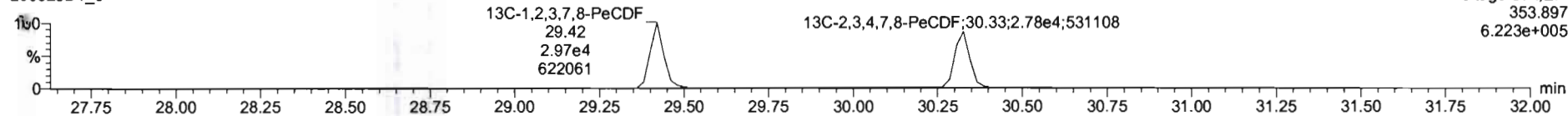


**13C-1,2,3,7,8-PeCDF**

200623D1\_3

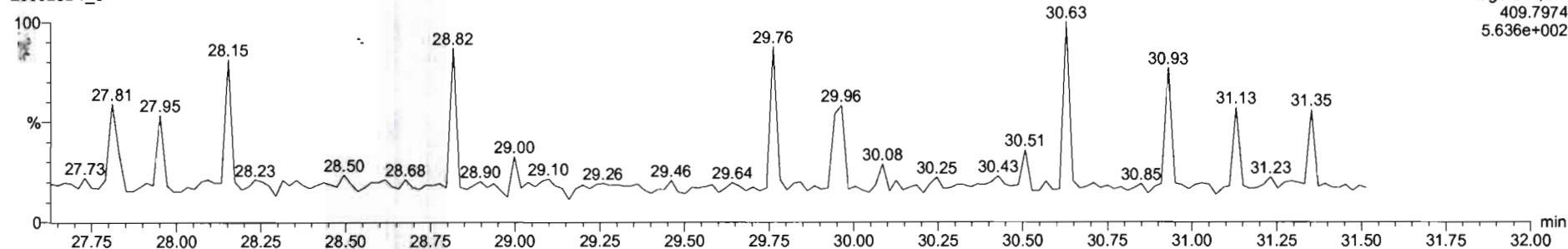


200623D1\_3



**DPE2**

200623D1\_3

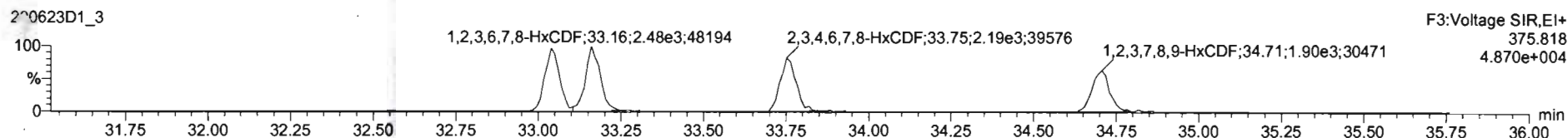
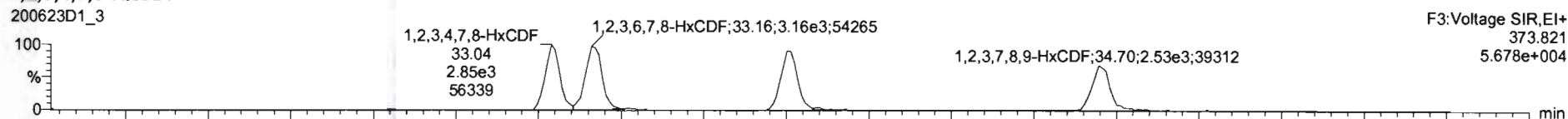


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

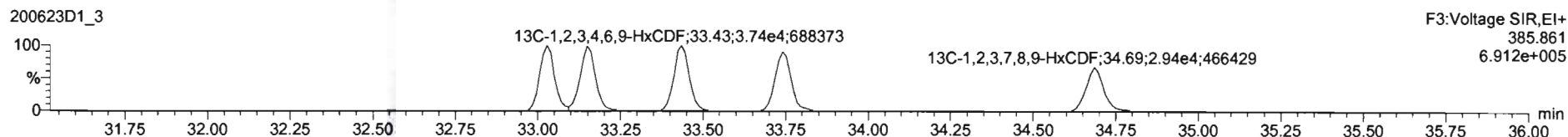
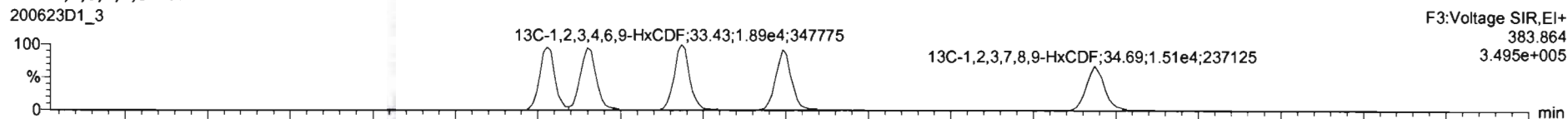
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

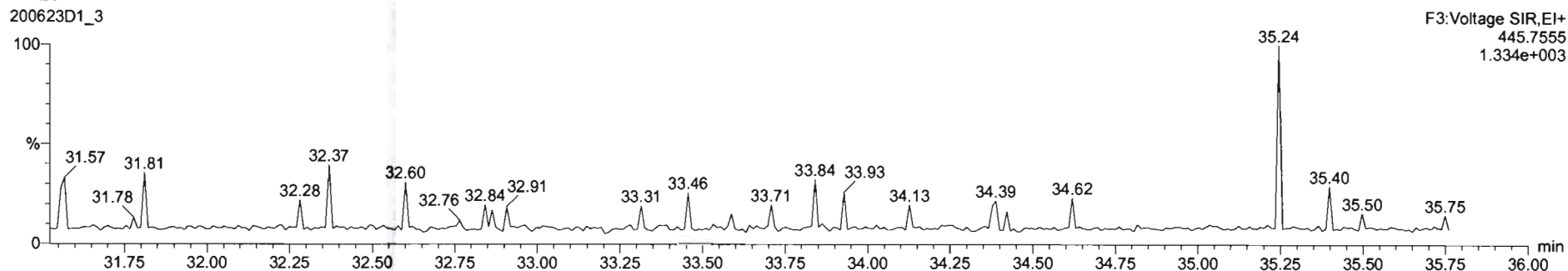
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



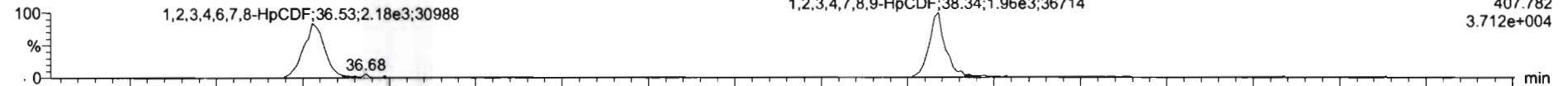
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

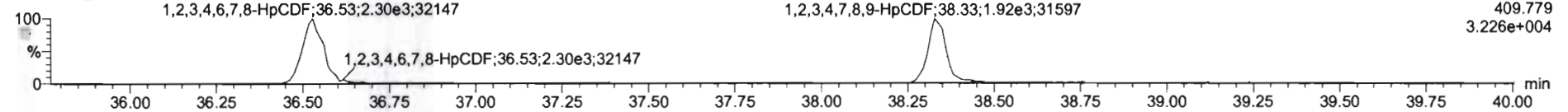
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

1,2,3,4,6,7,8-HpCDF

200623D1\_3

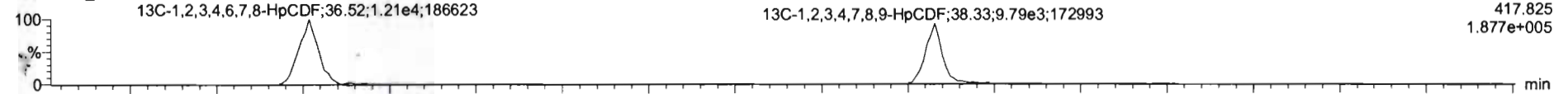


200623D1\_3

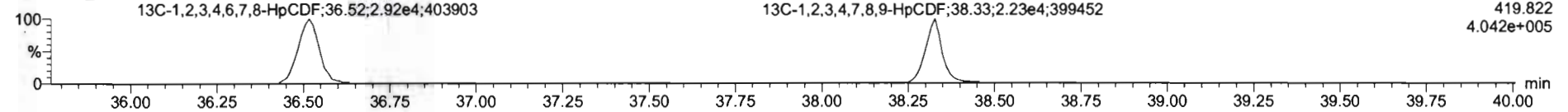


13C-1,2,3,4,6,7,8-HpCDF

200623D1\_3

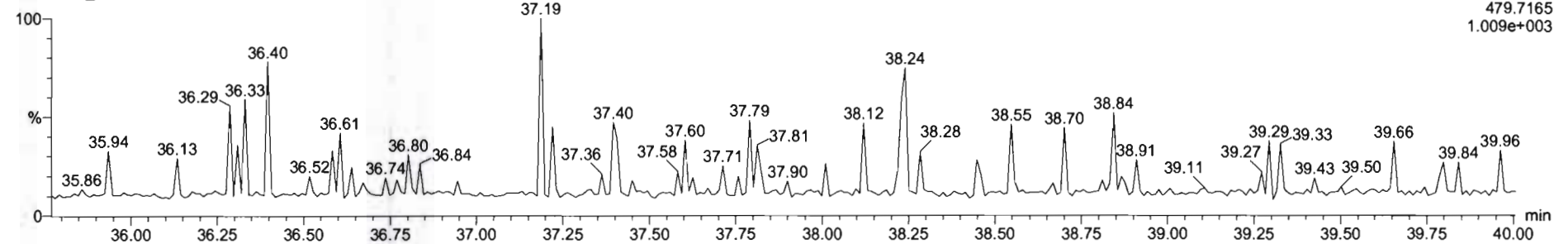


200623D1\_3



DPE4

200623D1\_3



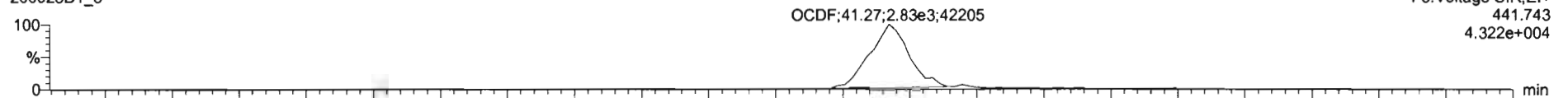
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

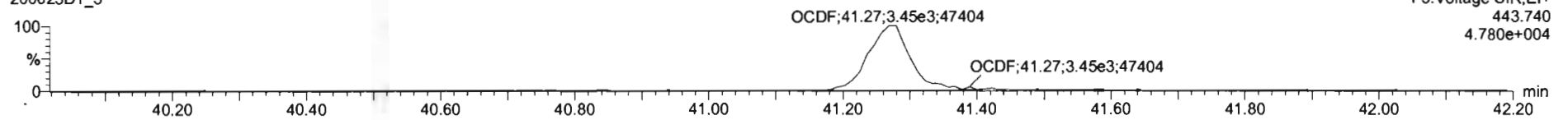
Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**OCDF**

200623D1\_3

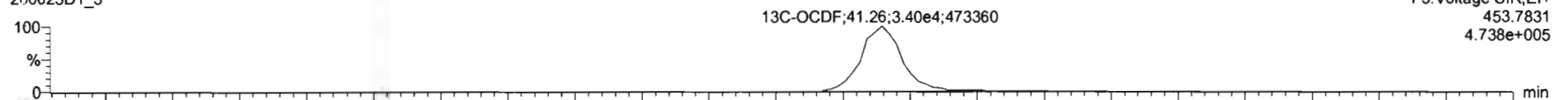


200623D1\_3

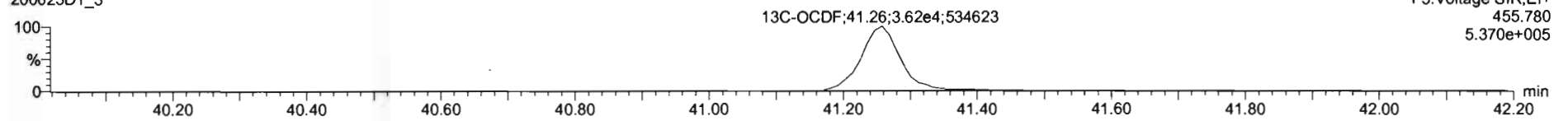


**13C-OCDF**

200623D1\_3

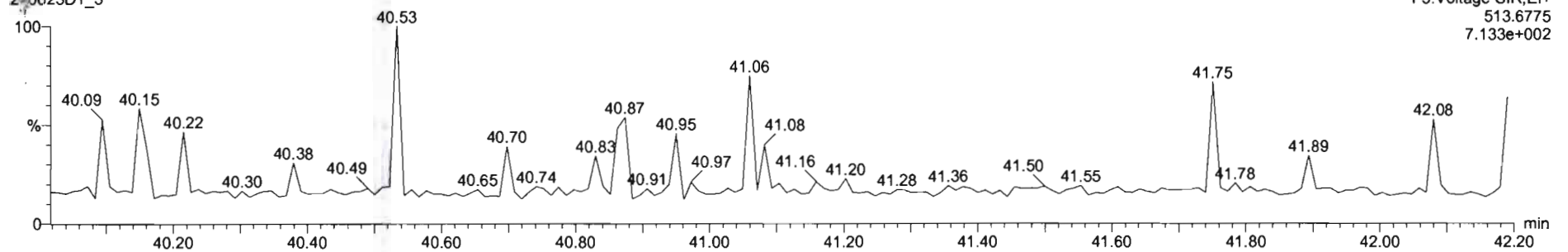


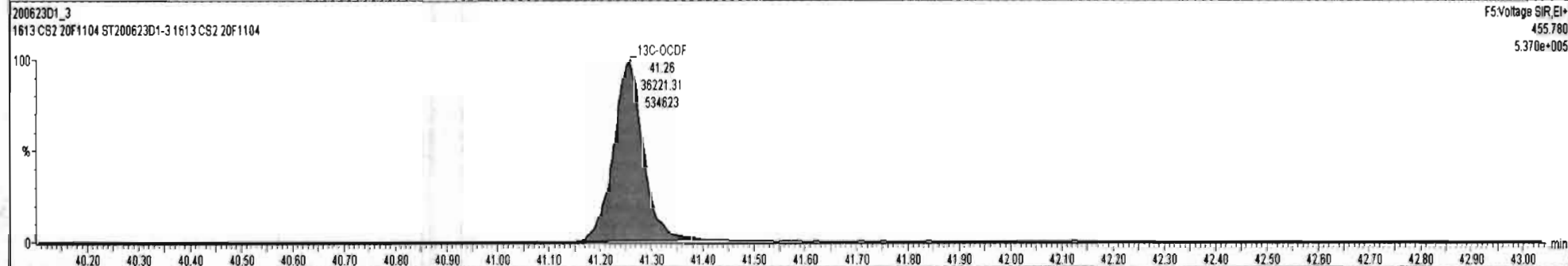
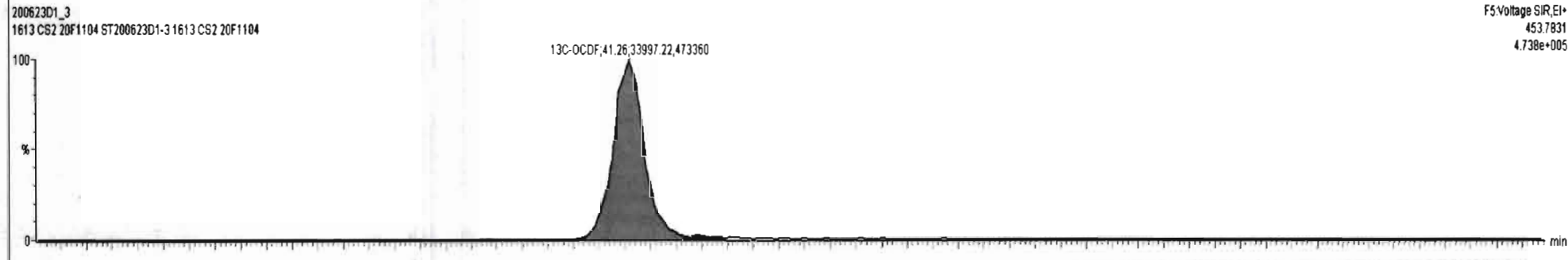
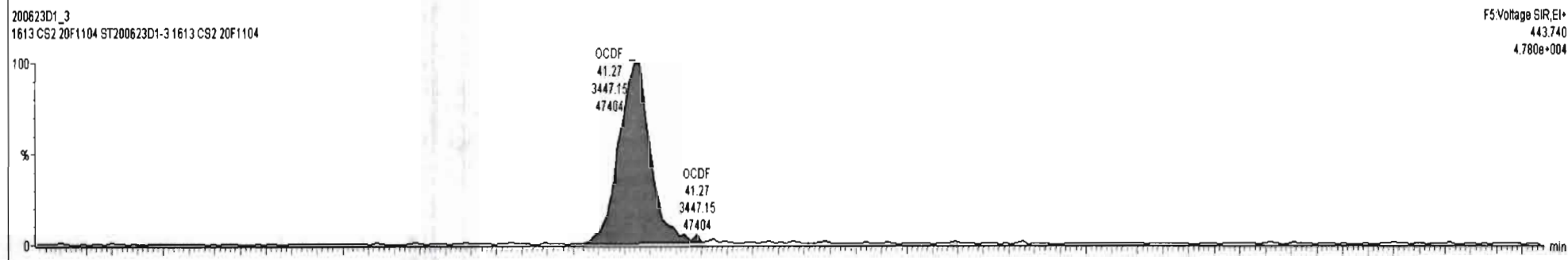
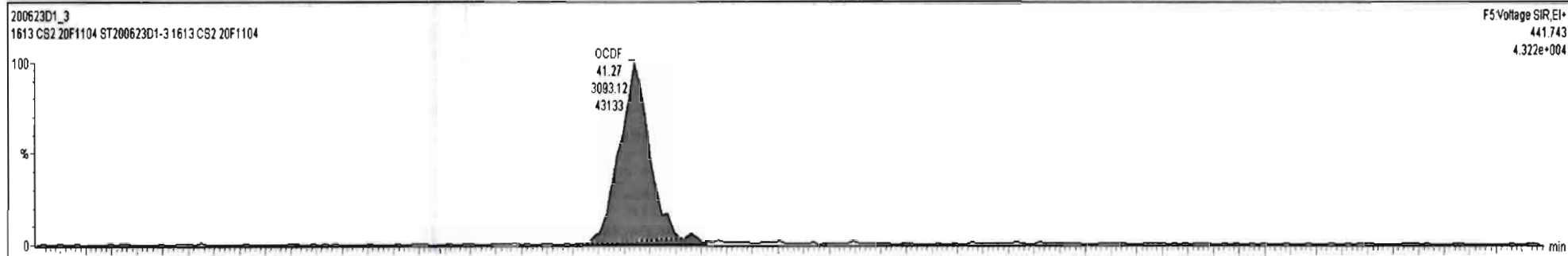
200623D1\_3



**DPE5**

200623D1\_3



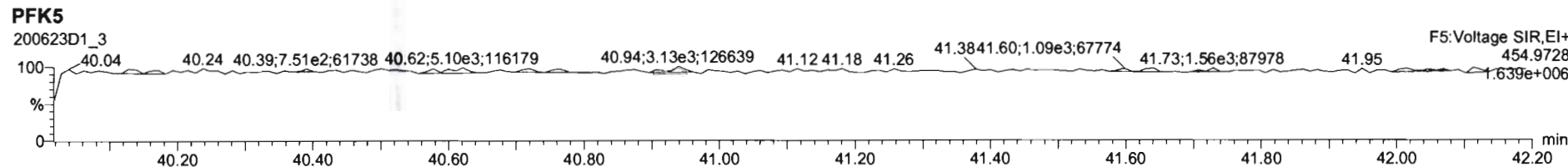
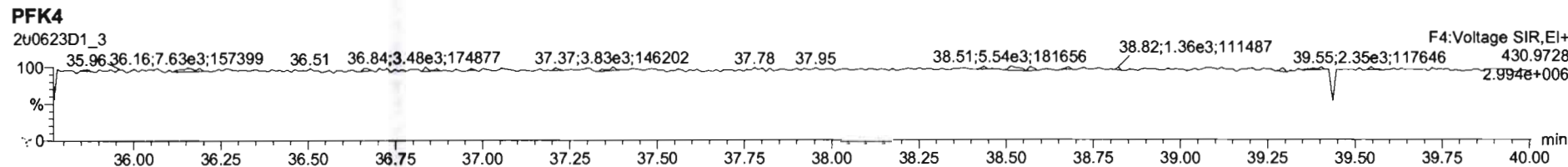
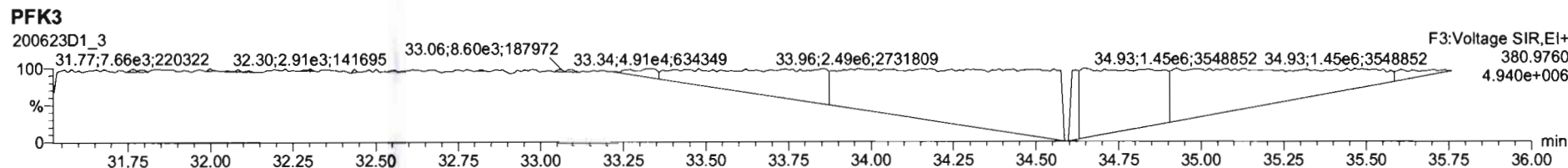
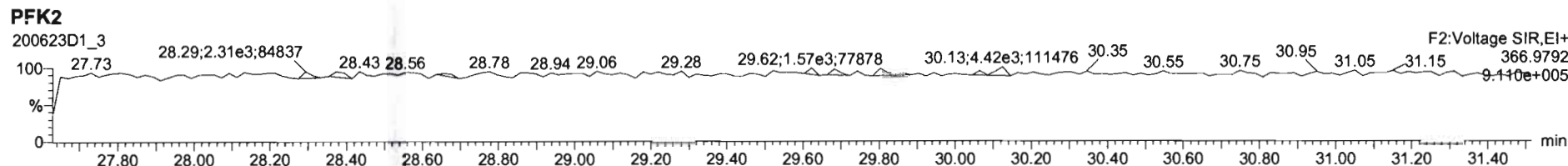
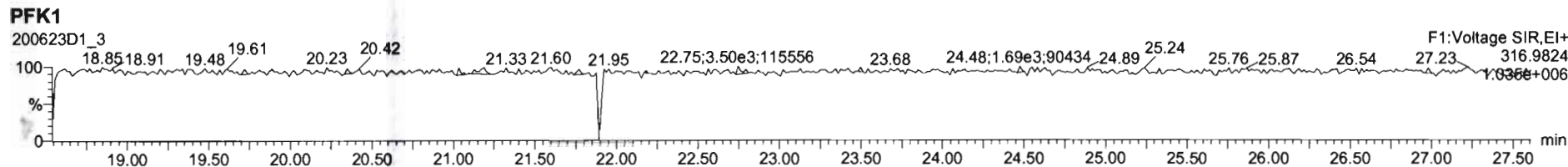




Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_3, Date: 23-Jun-2020, Time: 16:45:40, ID: ST200623D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

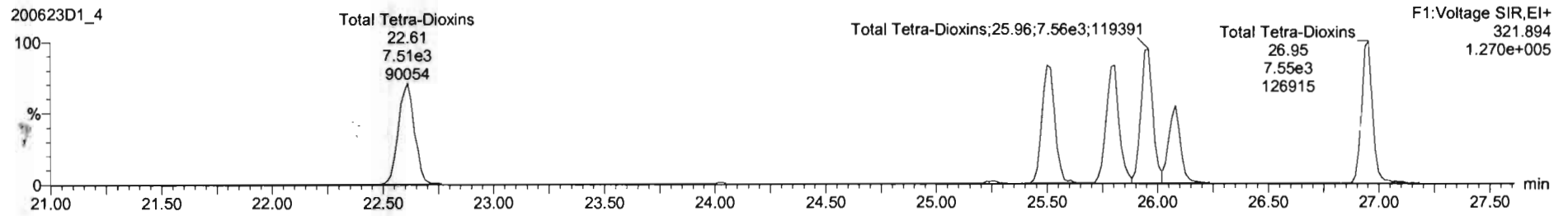
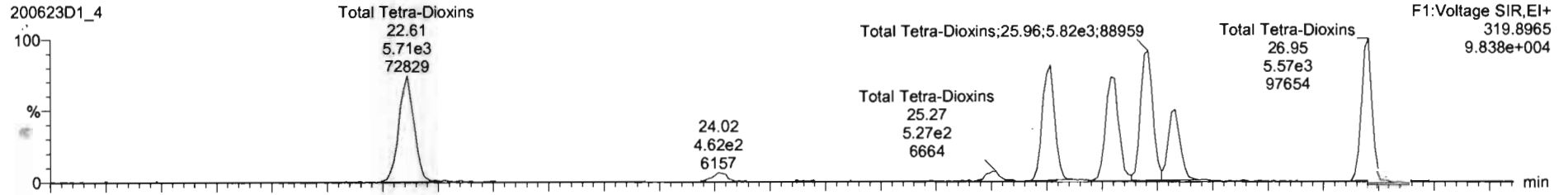


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

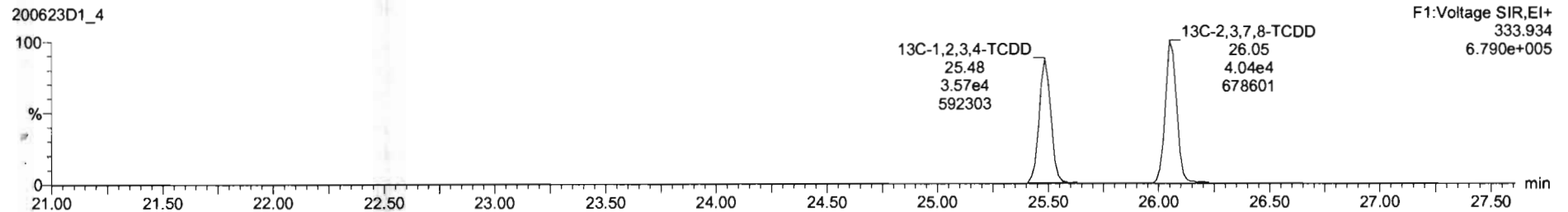
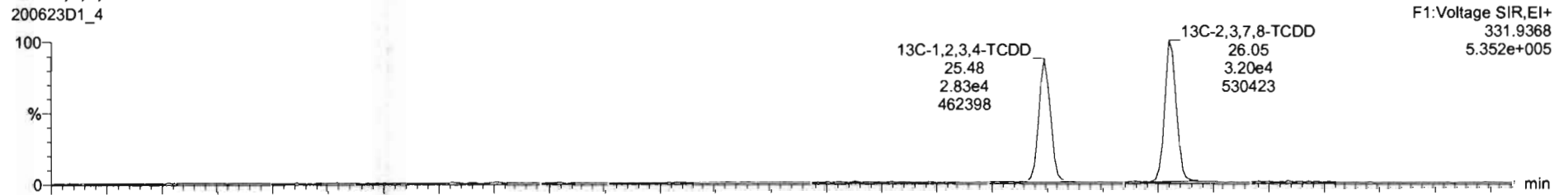
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**2,3,7,8-TCDD**



**13C-2,3,7,8-TCDD**



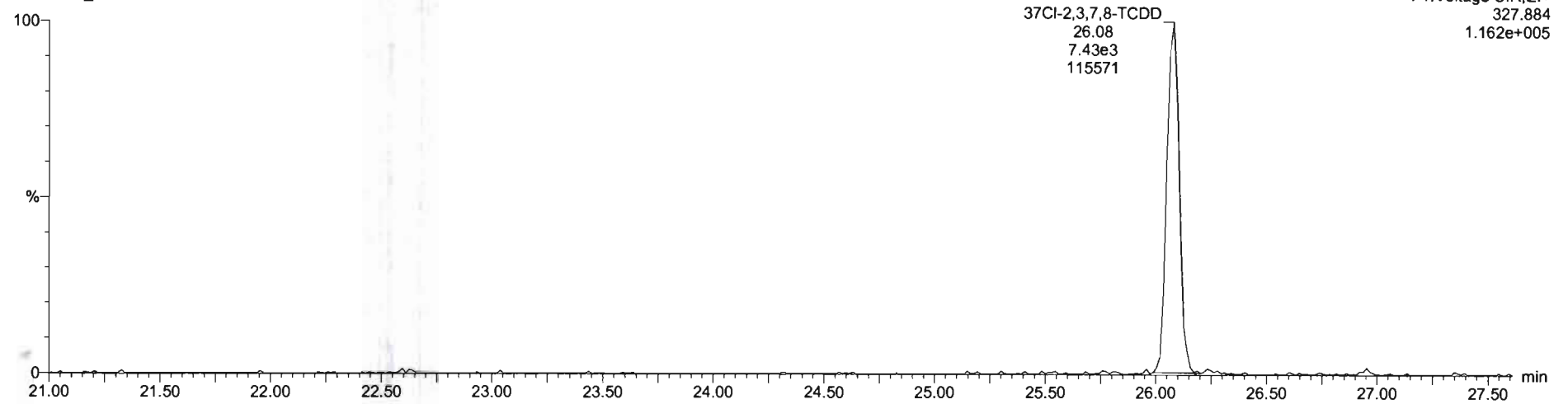
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

37Cl-2,3,7,8-TCDD

200623D1\_4

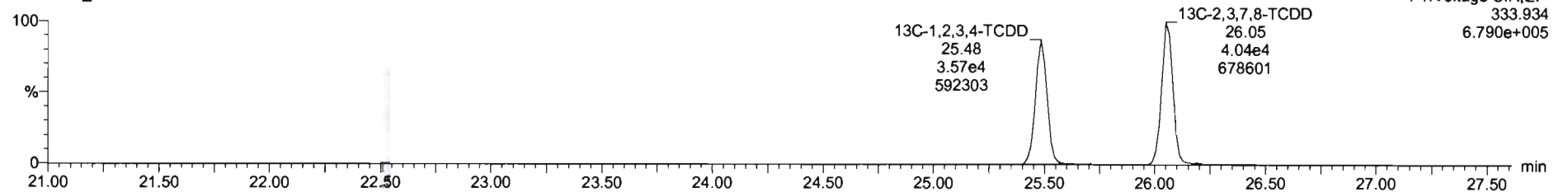


13C-1,2,3,4-TCDD

200623D1\_4



200623D1\_4



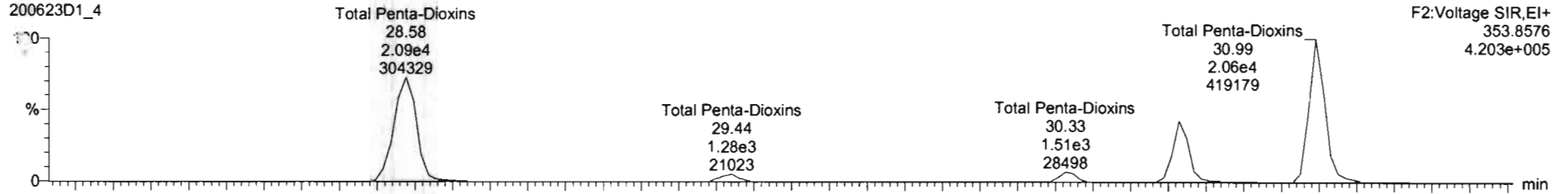
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

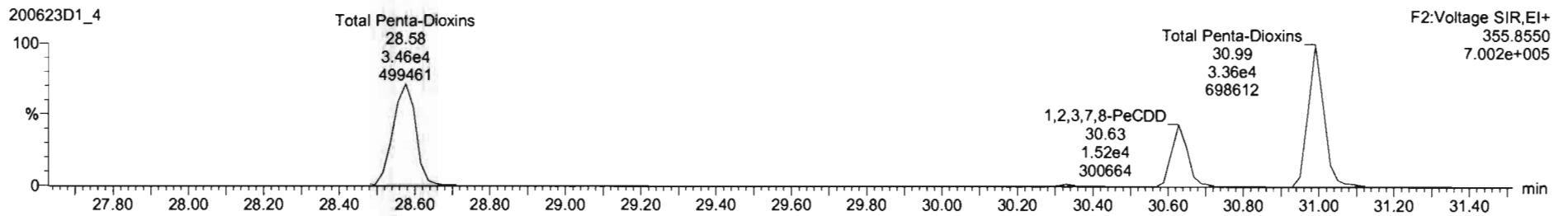
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**1,2,3,7,8-PeCDD**

200623D1\_4

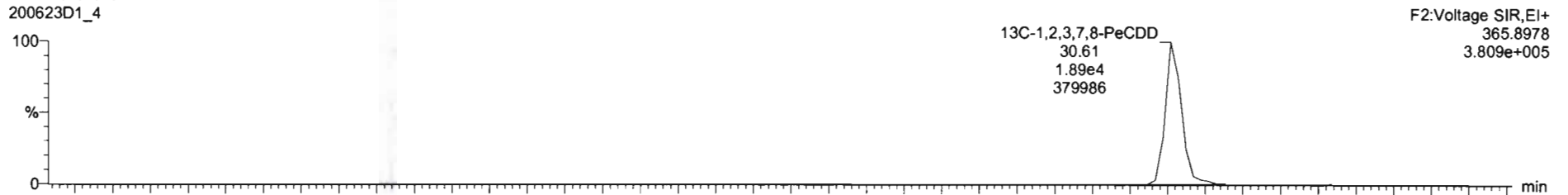


200623D1\_4

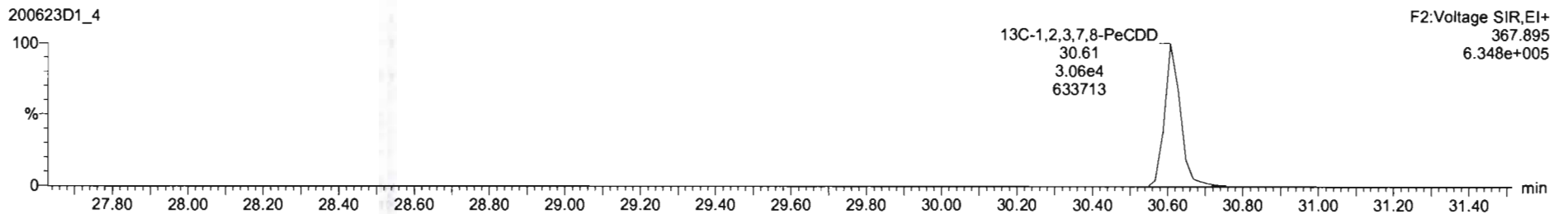


**13C-1,2,3,7,8-PeCDD**

200623D1\_4



200623D1\_4



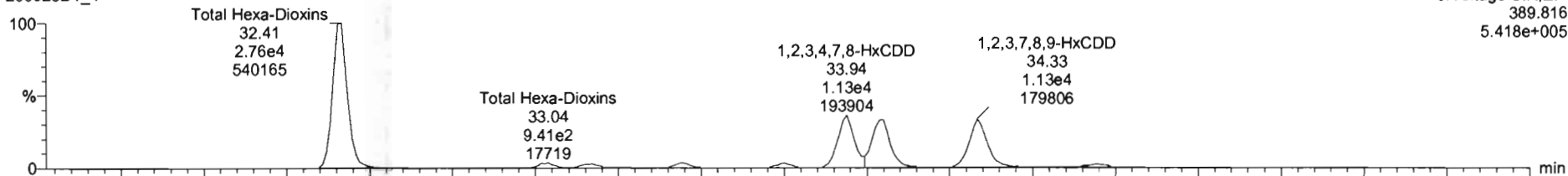
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

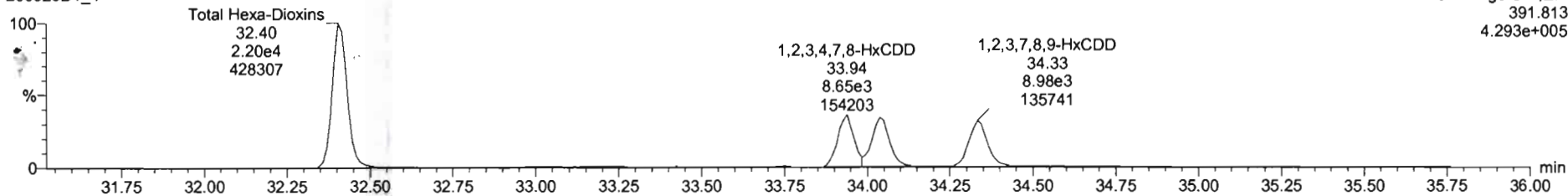
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,2,3,4,7,8-HxCDD

200623D1\_4

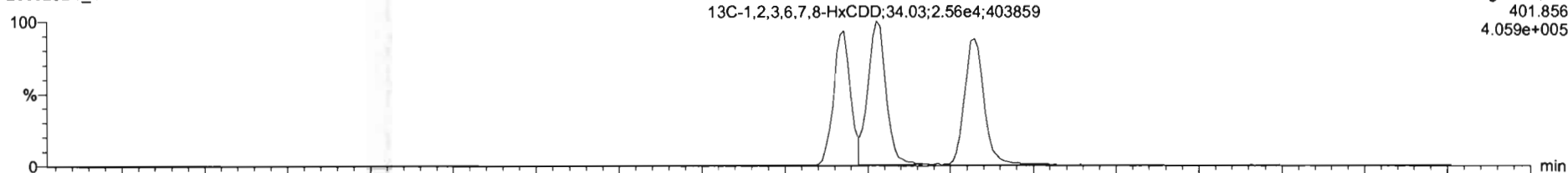


200623D1\_4

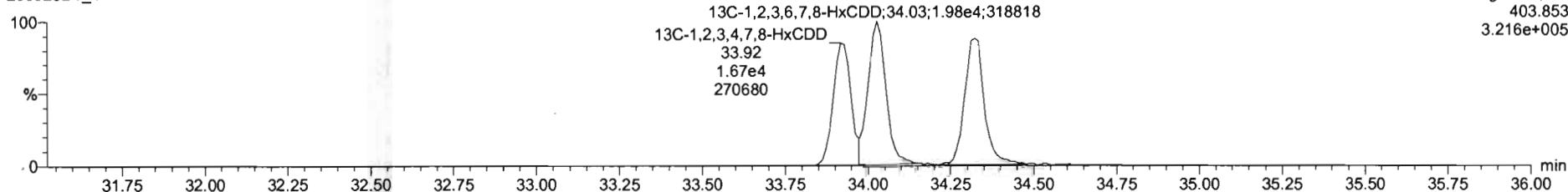


13C-1,2,3,4,7,8-HxCDD

200623D1\_4



200623D1\_4



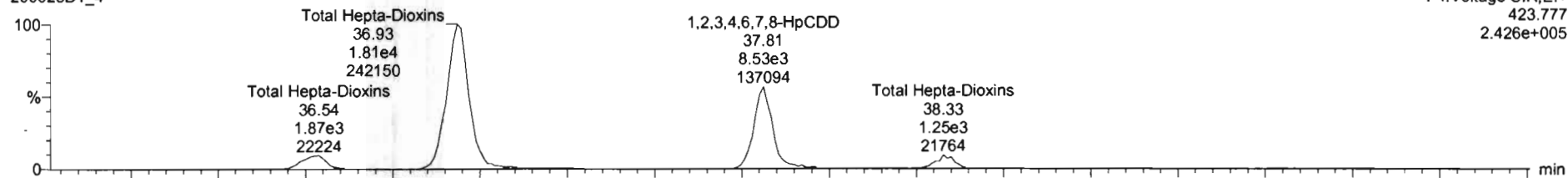
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

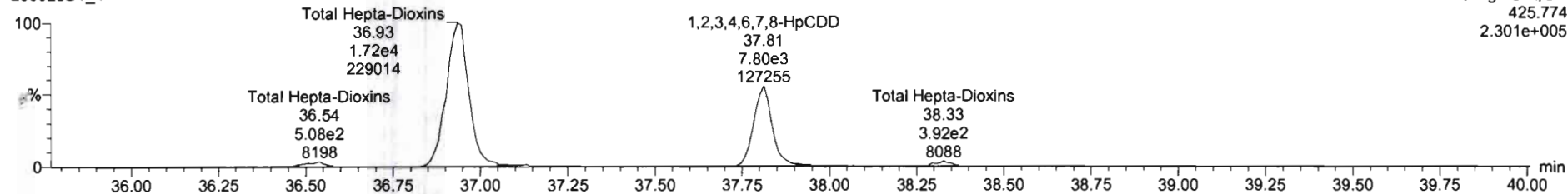
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1,2,3,4,6,7,8-HpCDD

200623D1\_4

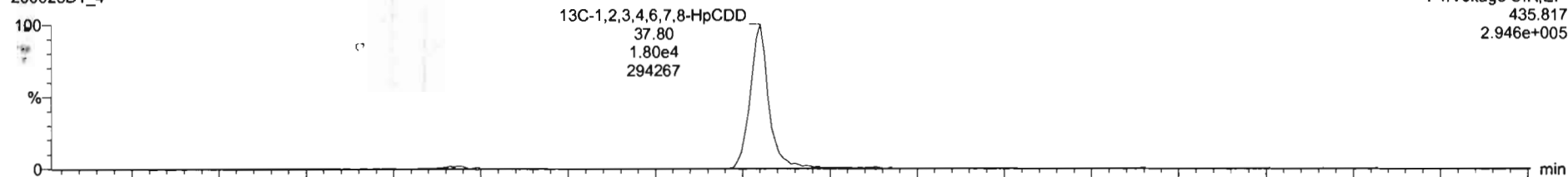


200623D1\_4

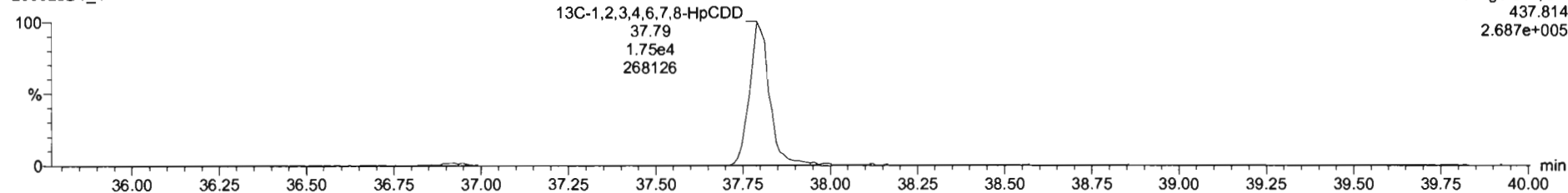


13C-1,2,3,4,6,7,8-HpCDD

200623D1\_4



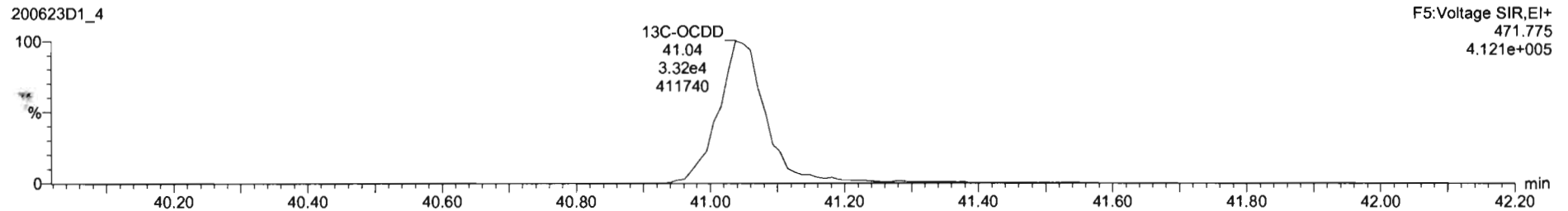
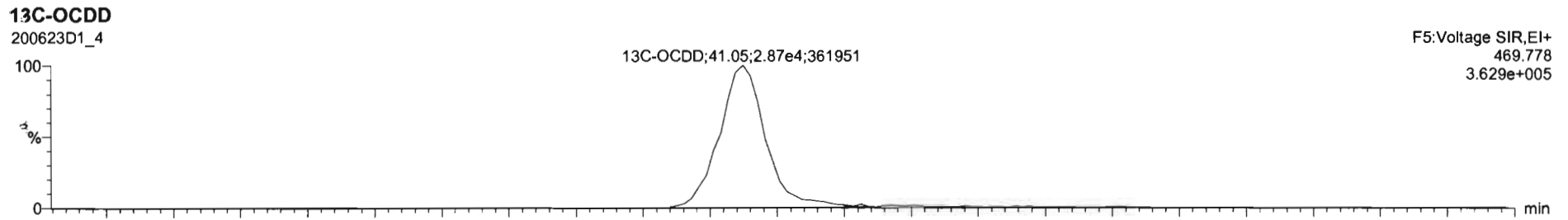
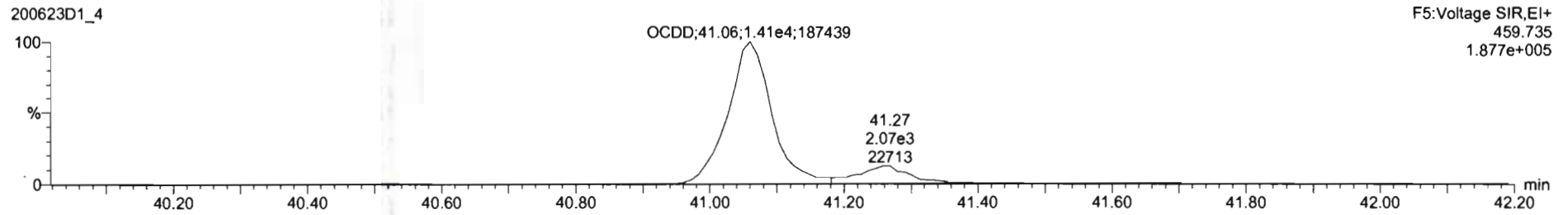
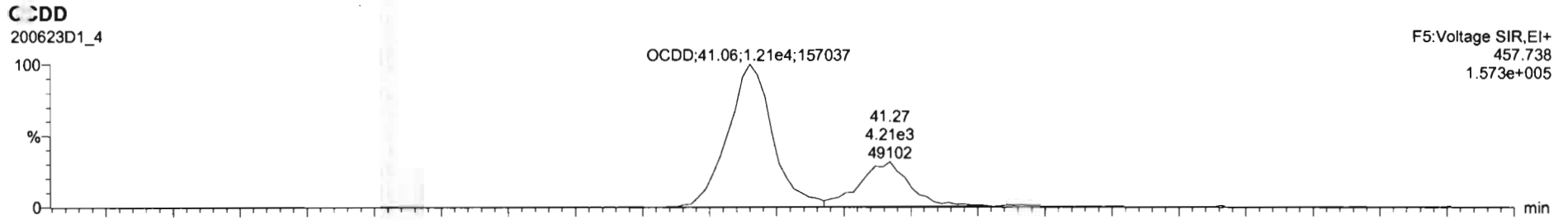
200623D1\_4



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105



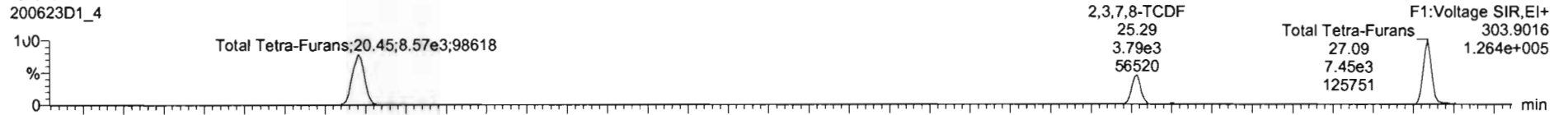
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

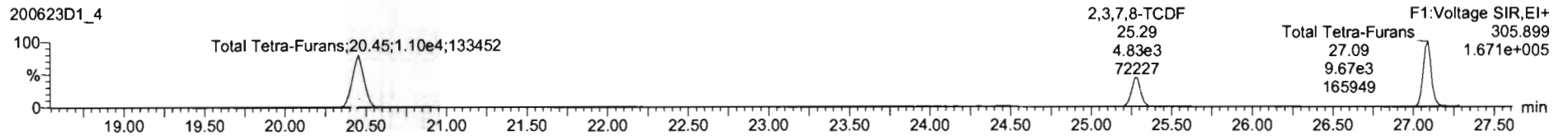
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**2,3,7,8-TCDF**

200623D1\_4

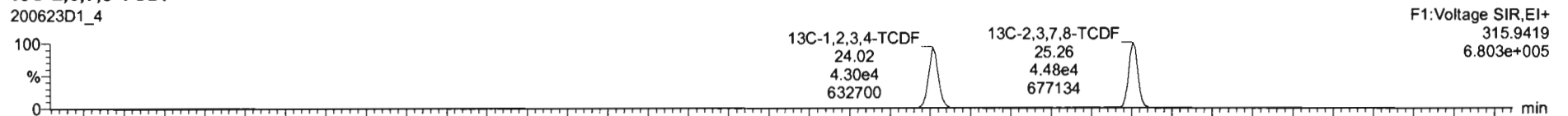


200623D1\_4

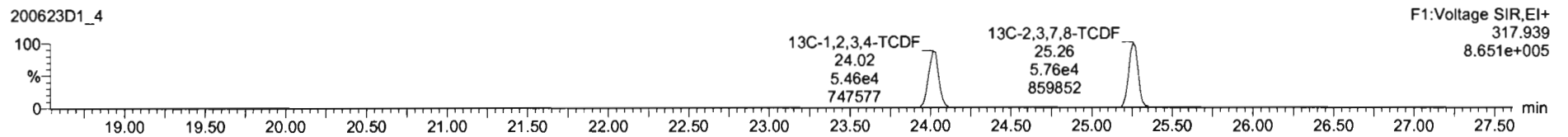


**13C-2,3,7,8-TCDF**

200623D1\_4

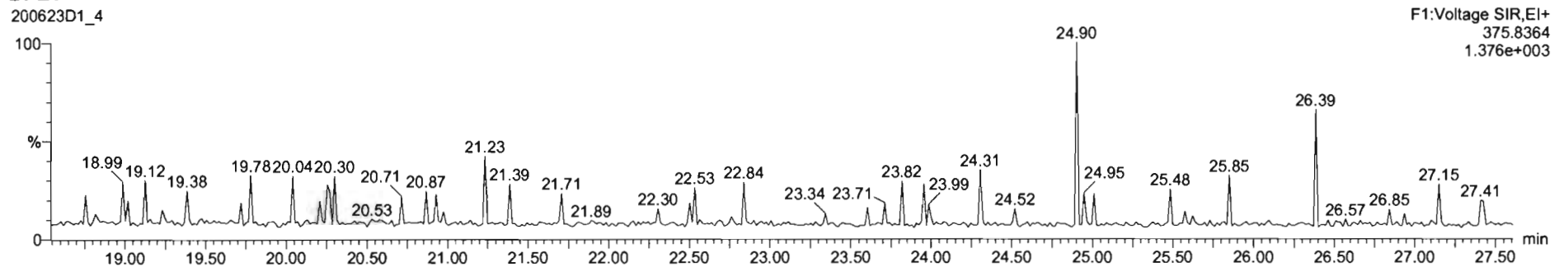


200623D1\_4



**DPE1**

200623D1\_4





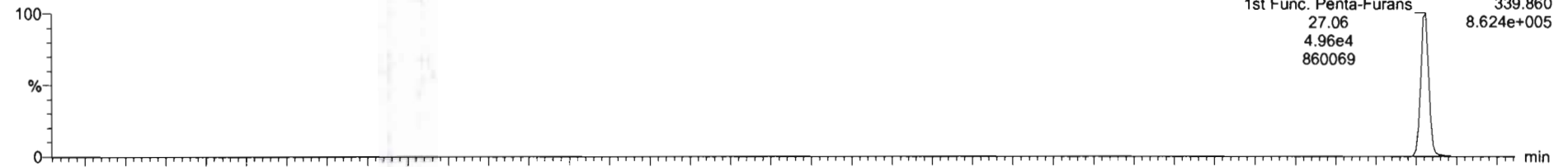
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

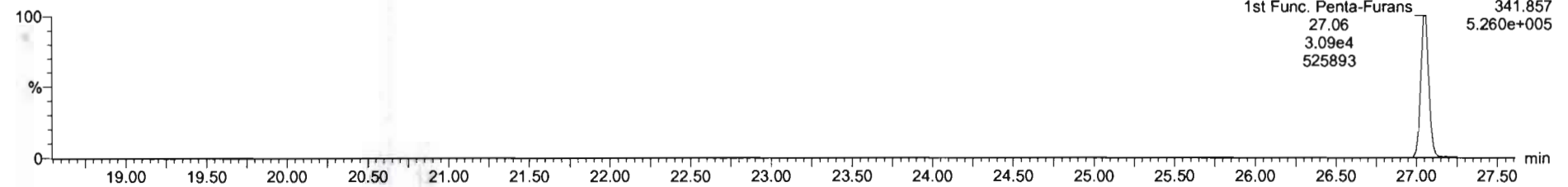
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1st Func. Penta-Furans

200623D1\_4

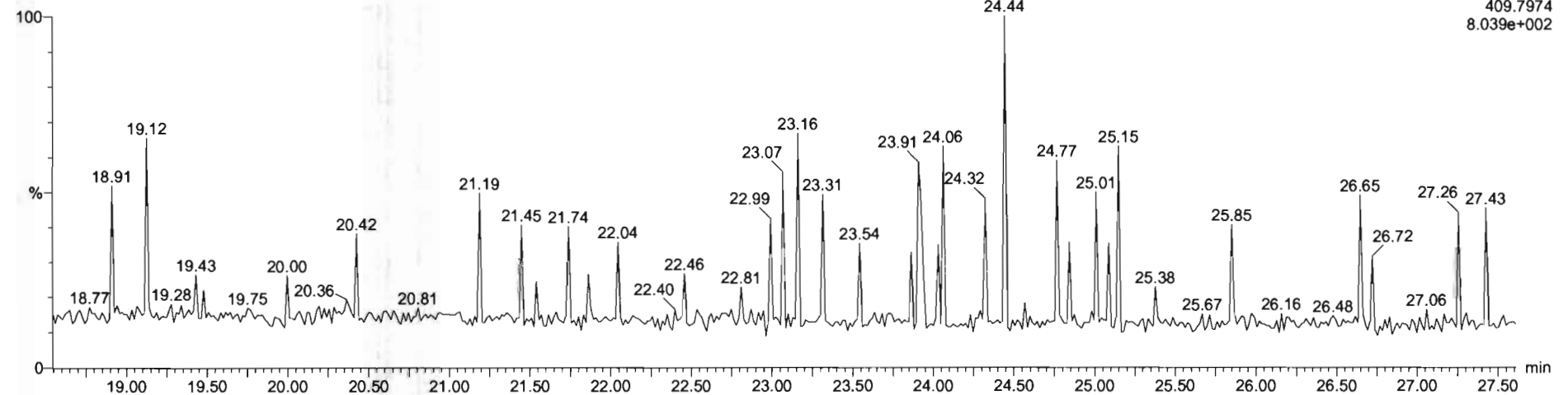


200623D1\_4



DPE6

200623D1\_4

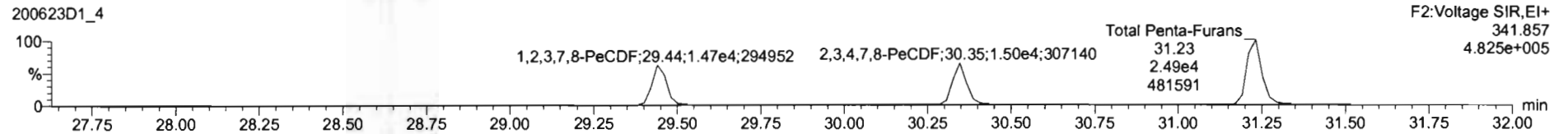
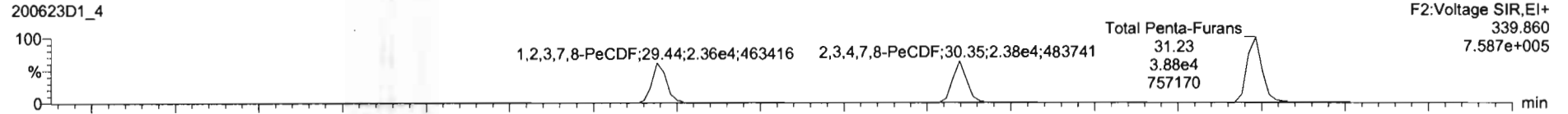


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

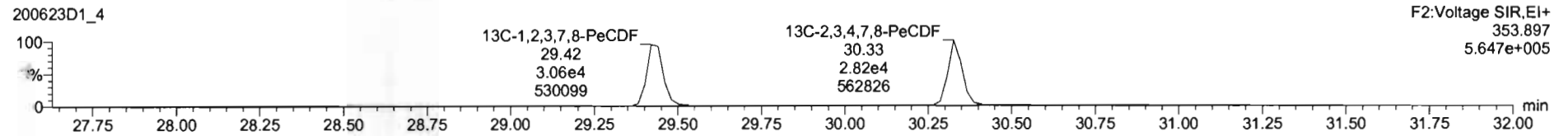
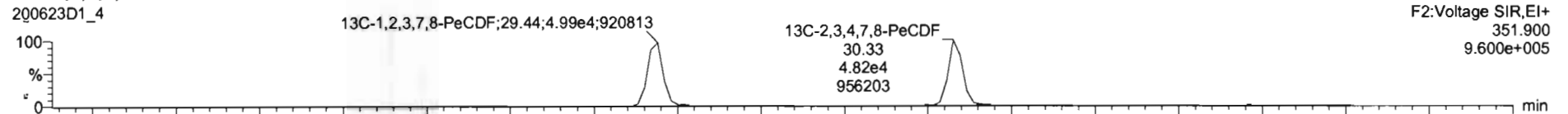
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

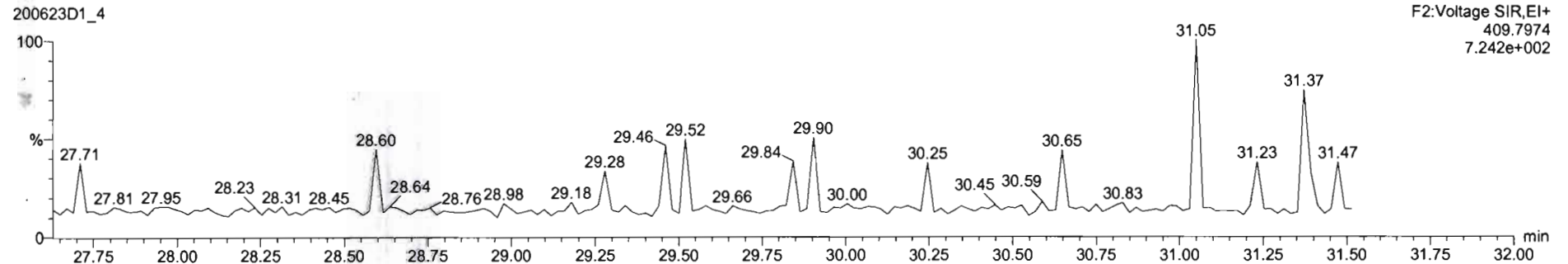
**1,2,3,7,8-PeCDF**



**13C-1,2,3,7,8-PeCDF**



**DPE2**

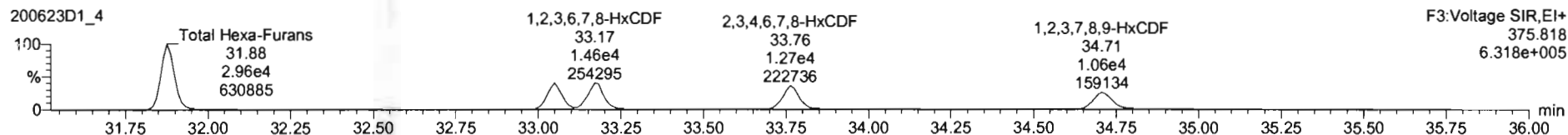
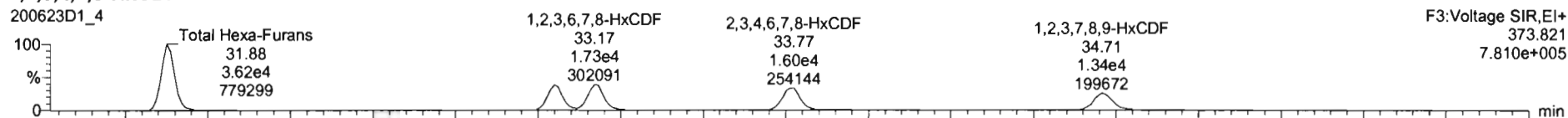


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

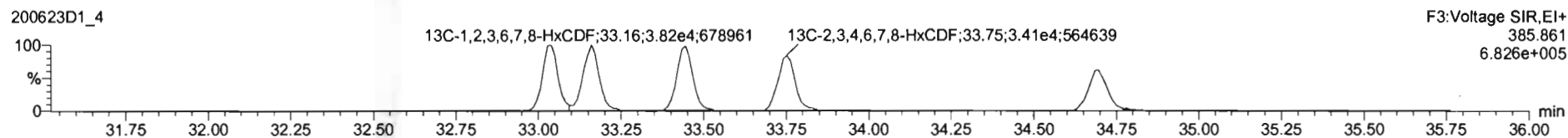
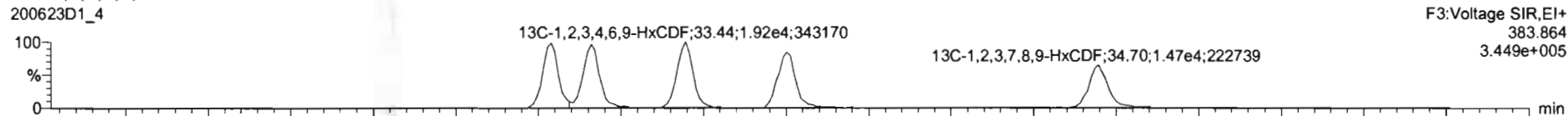
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

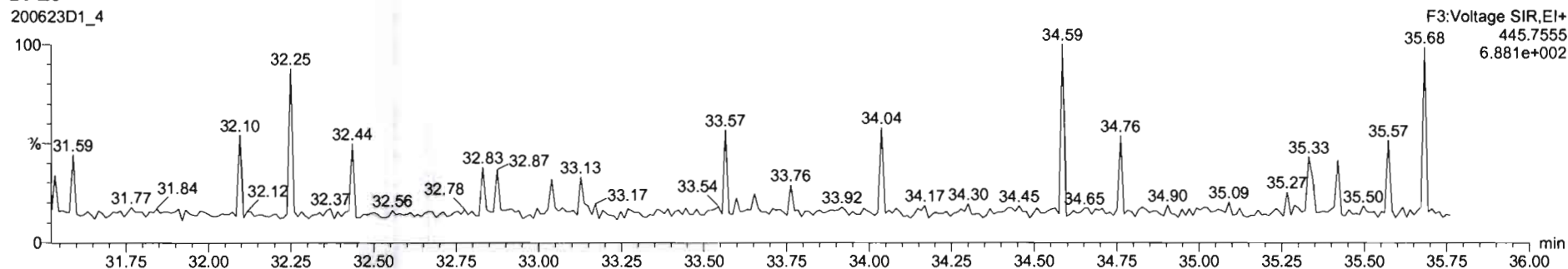
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**

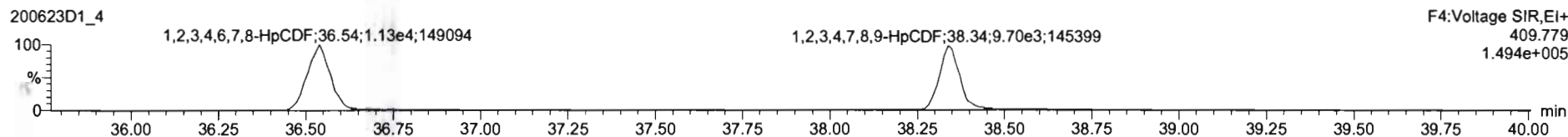
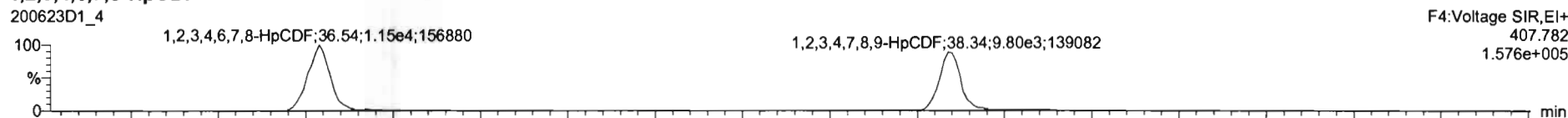


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

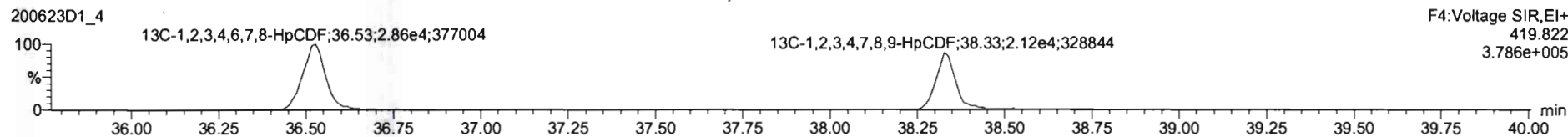
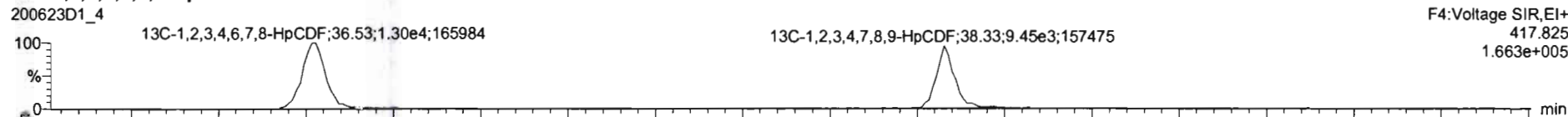
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

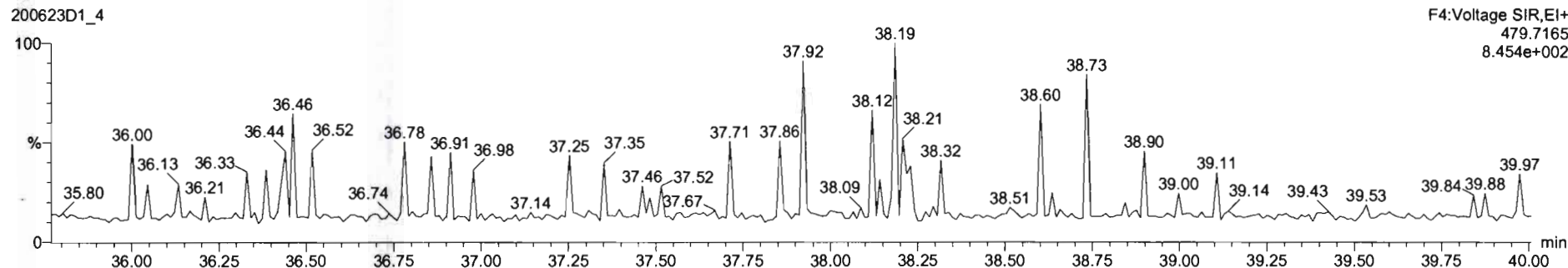
1,2,3,4,6,7,8-HpCDF



13C-1,2,3,4,6,7,8-HpCDF



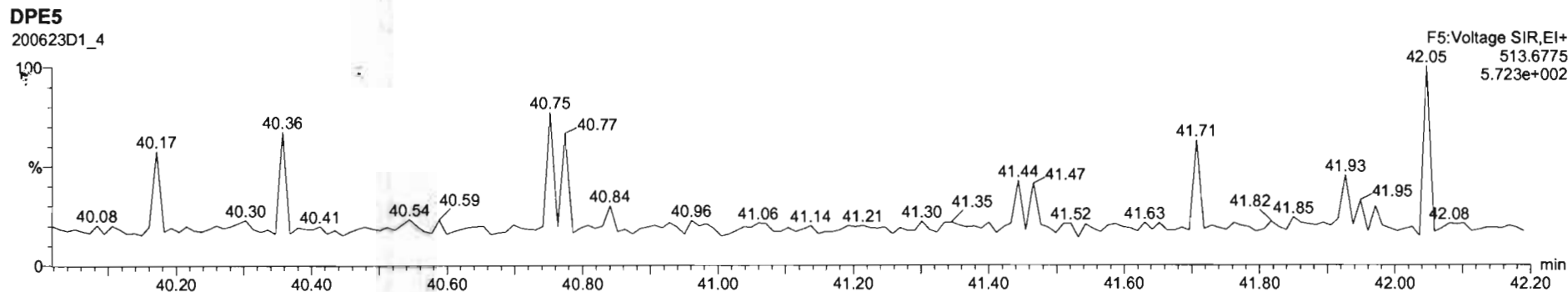
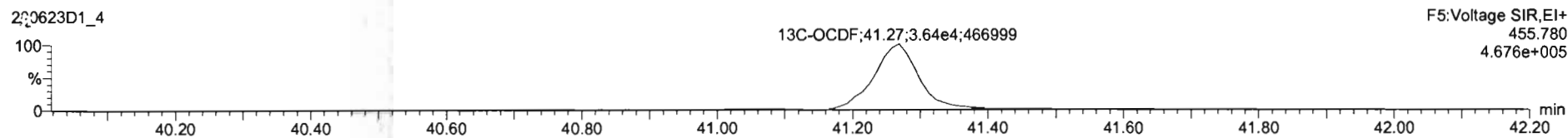
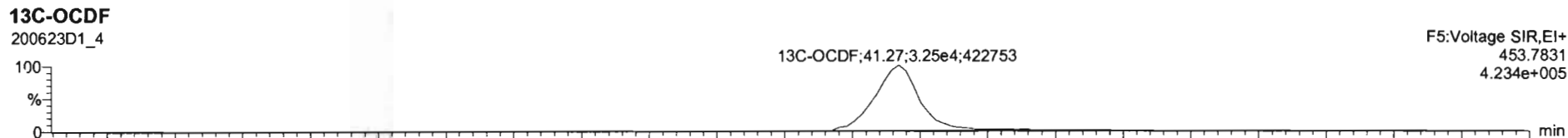
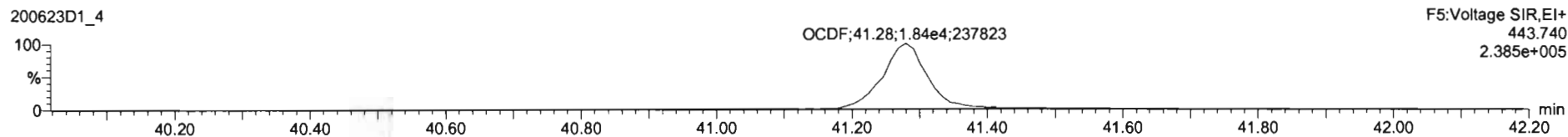
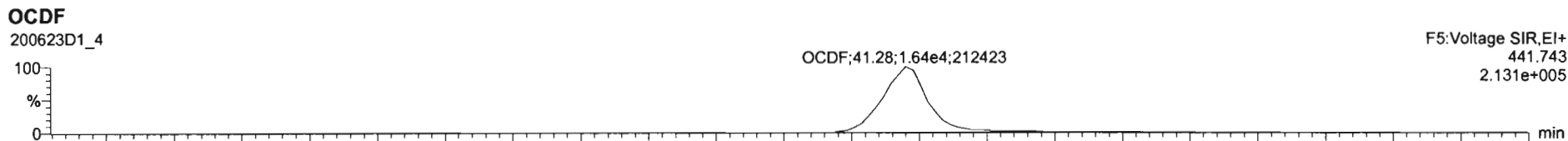
DPE4



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

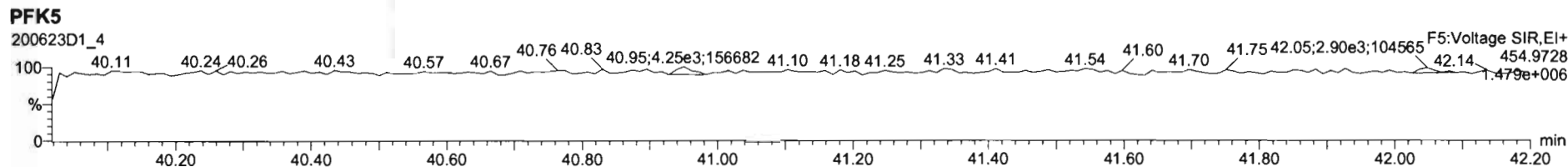
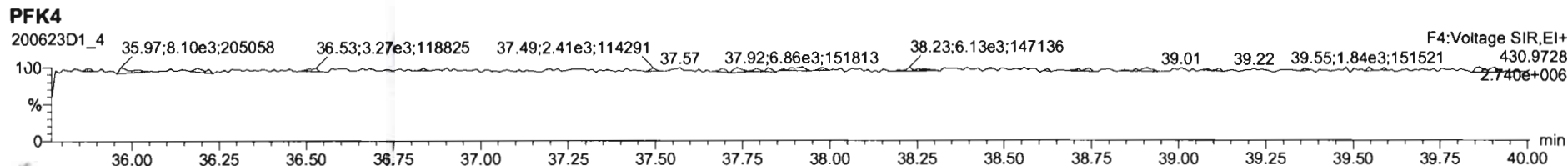
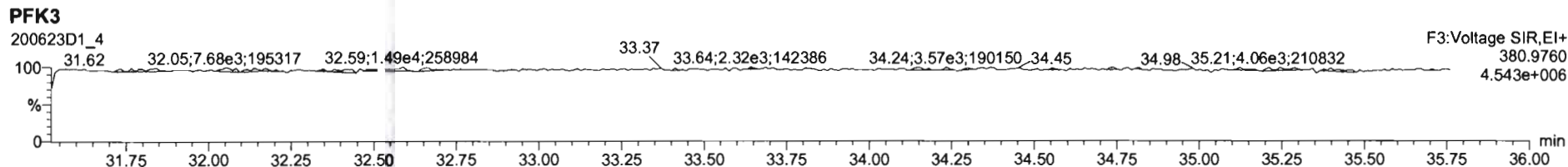
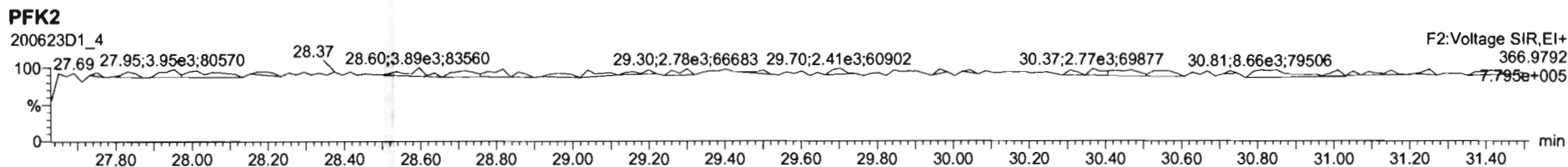
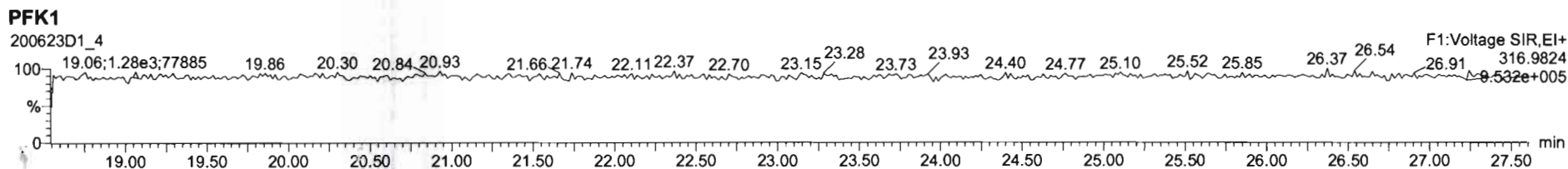
Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_4, Date: 23-Jun-2020, Time: 17:30:52, ID: ST200623D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

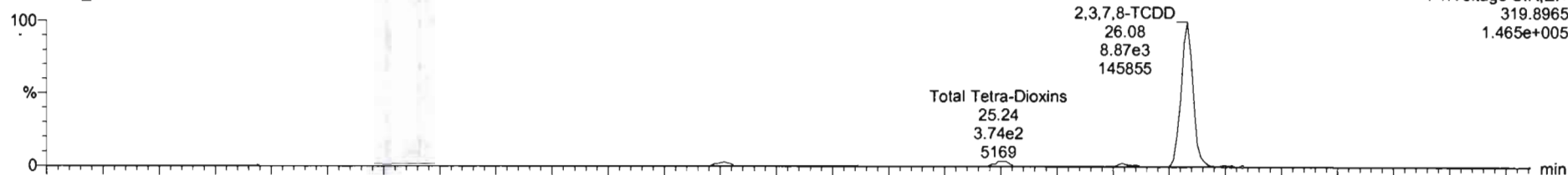
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

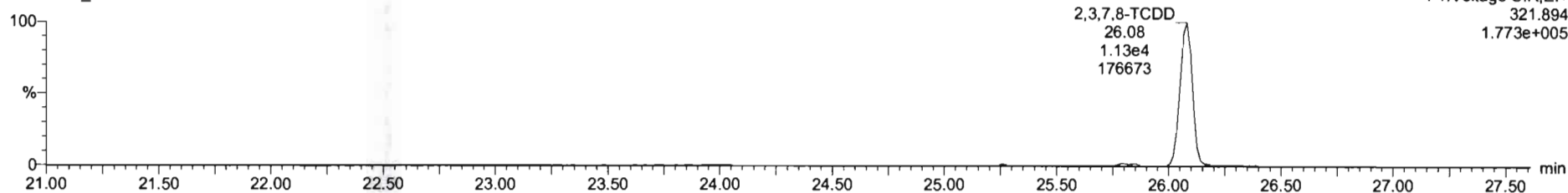
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

**2,3,7,8-TCDD**

200623D1\_5



200623D1\_5

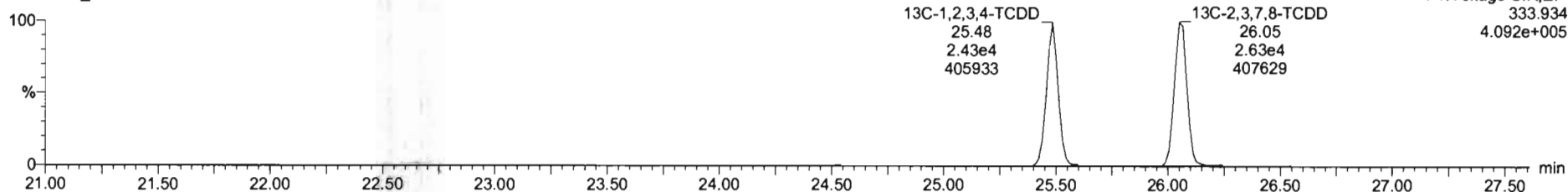


**13C-2,3,7,8-TCDD**

200623D1\_5



200623D1\_5

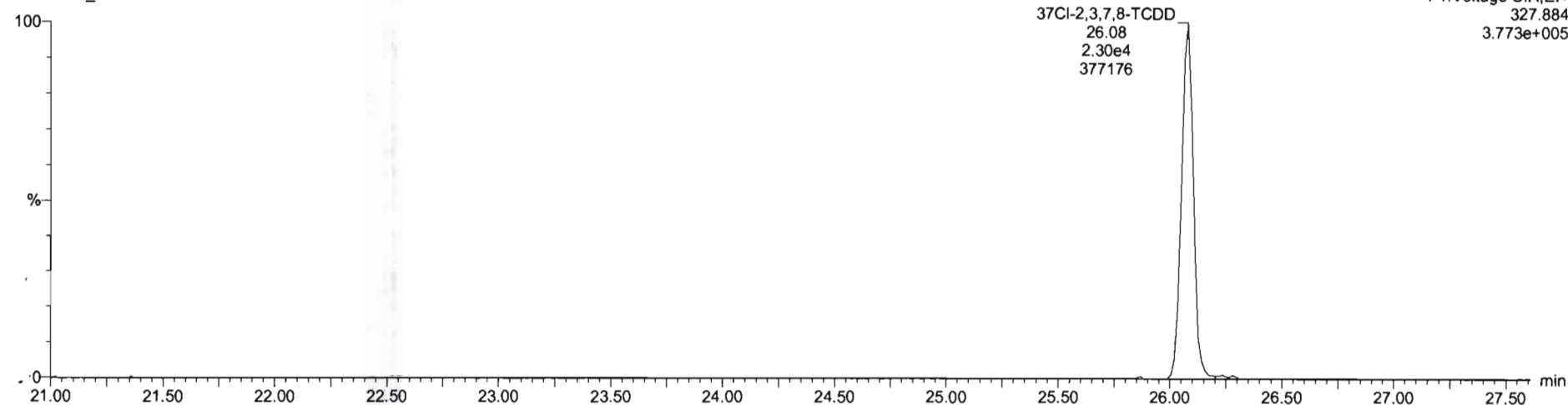


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

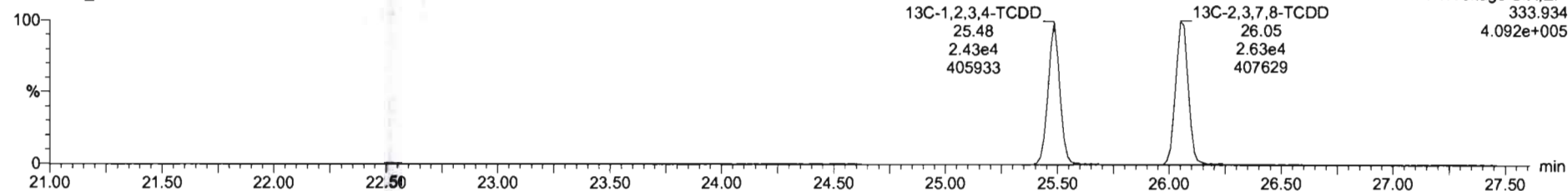
**37Cl-2,3,7,8-TCDD**  
200623D1\_5



**13C-1,2,3,4-TCDD**  
200623D1\_5



200623D1\_5





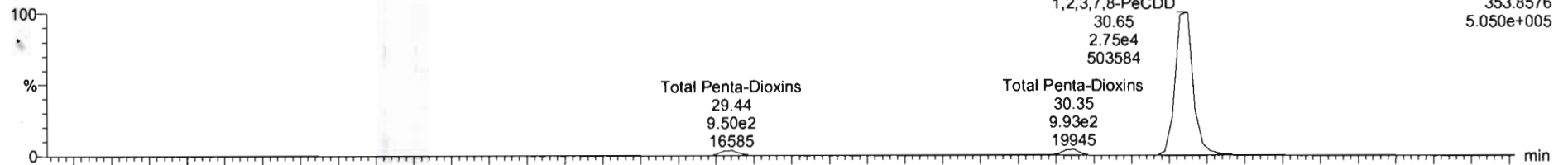
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

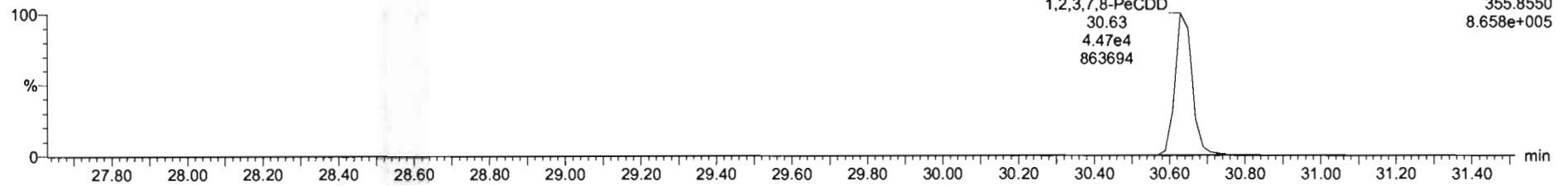
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

1,2,3,7,8-PeCDD

200623D1\_5

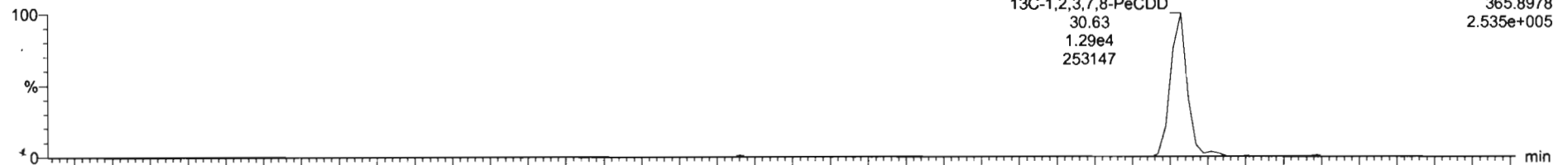


200623D1\_5

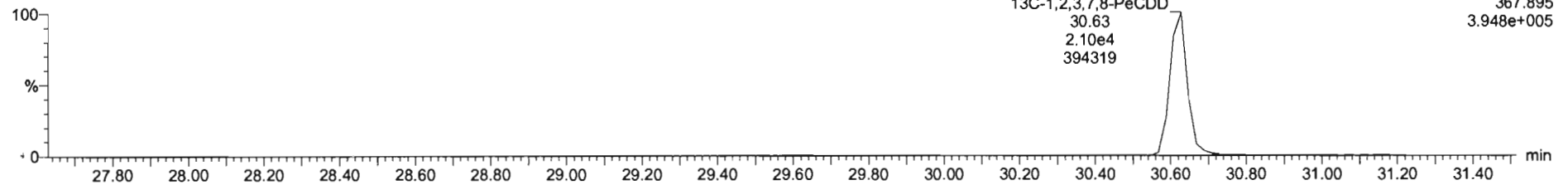


13C-1,2,3,7,8-PeCDD

200623D1\_5



200623D1\_5



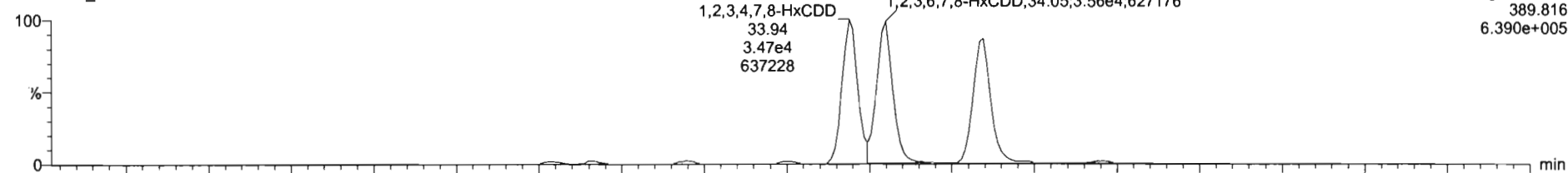
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

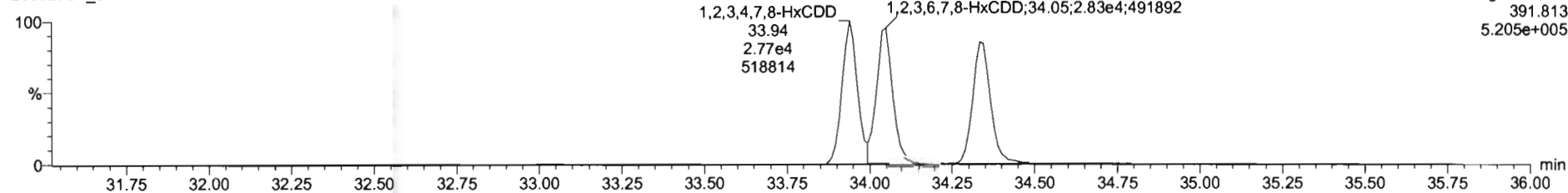
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

1,2,3,4,7,8-HxCDD

200623D1\_5

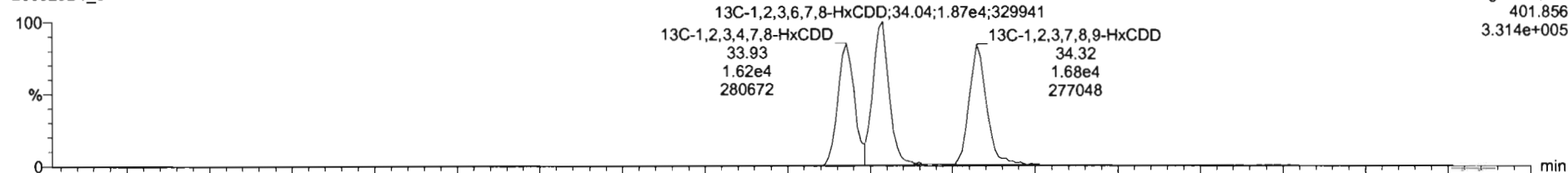


200623D1\_5

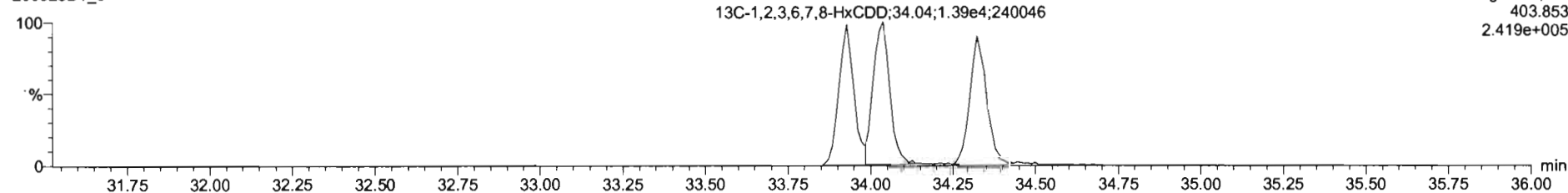


13C-1,2,3,4,7,8-HxCDD

200623D1\_5



200623D1\_5



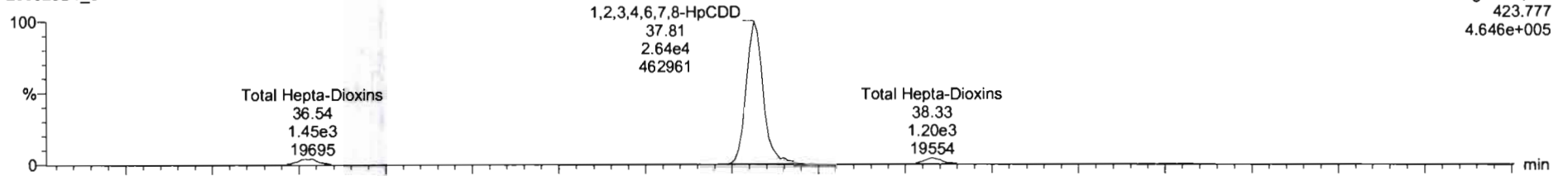
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

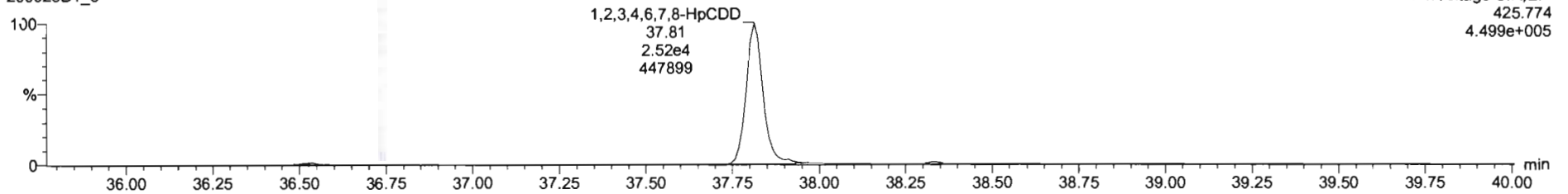
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

1,2,3,4,6,7,8-HpCDD

200623D1\_5

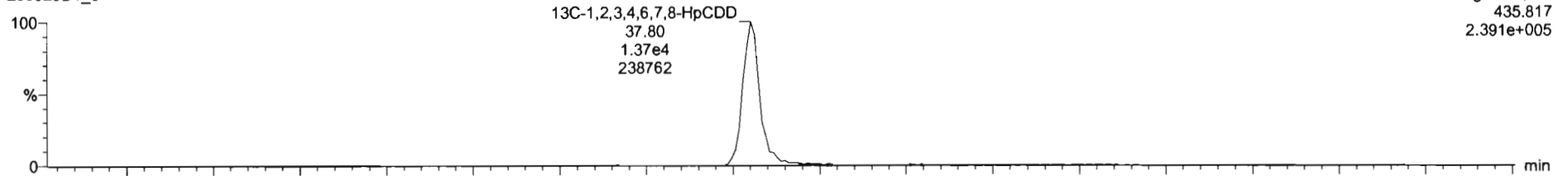


200623D1\_5

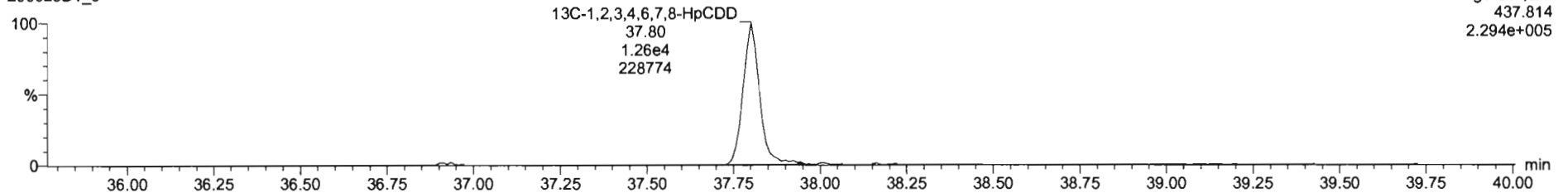


13C-1,2,3,4,6,7,8-HpCDD

200623D1\_5



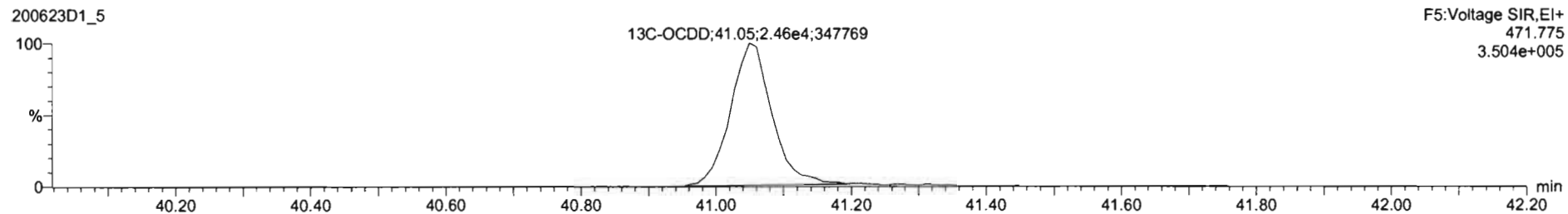
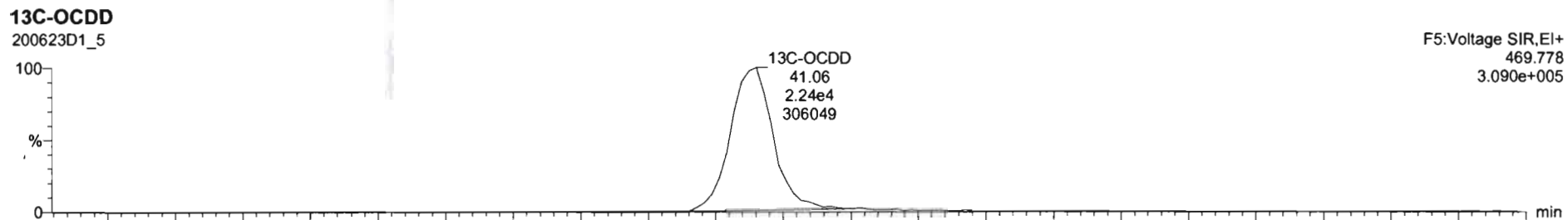
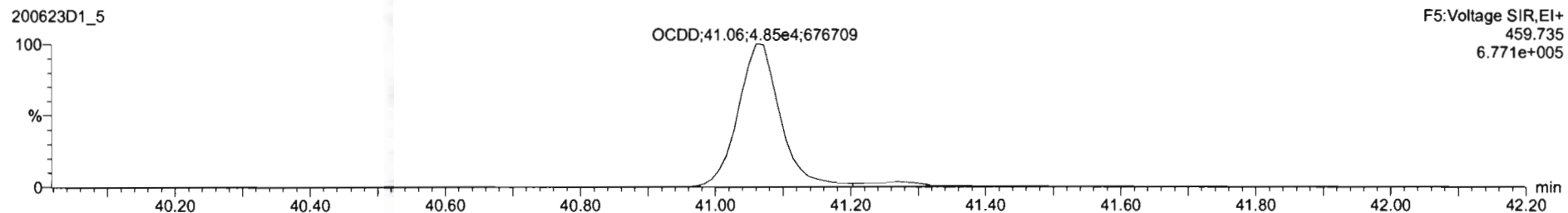
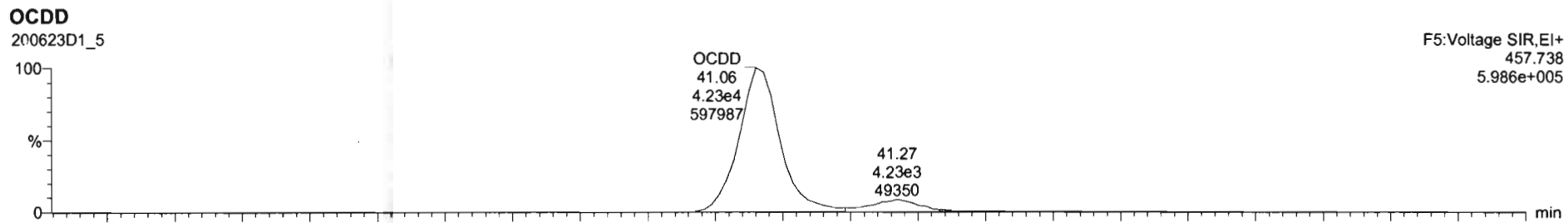
200623D1\_5



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106



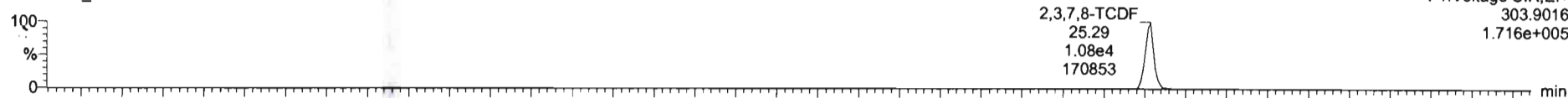
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

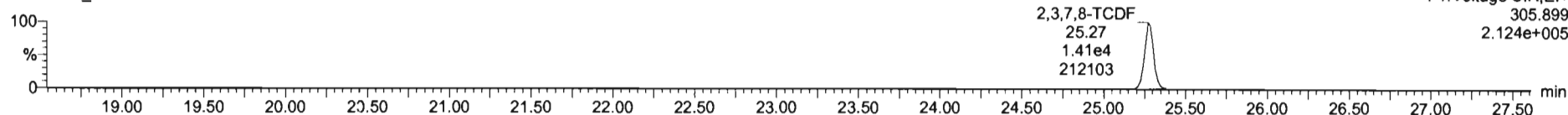
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

**2,3,7,8-TCDF**

200623D1\_5

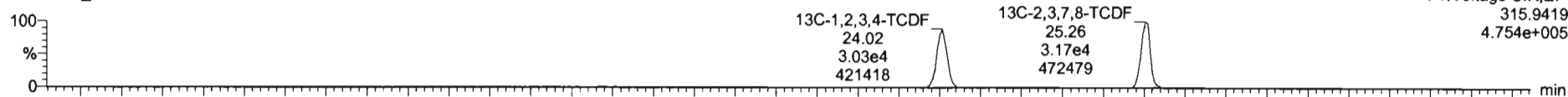


200623D1\_5

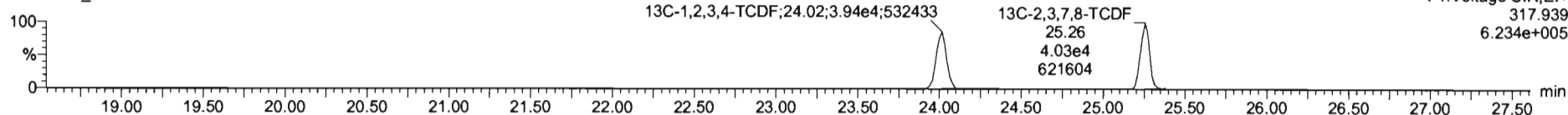


**13C-2,3,7,8-TCDF**

200623D1\_5

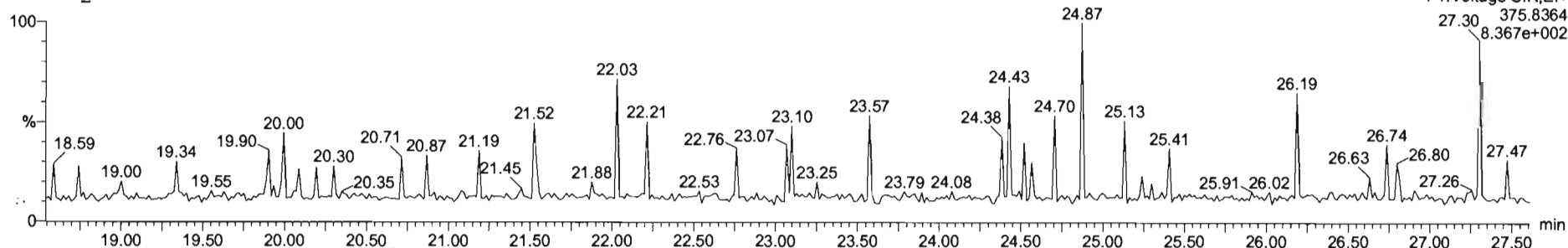


200623D1\_5



**DPE1**

200623D1\_5



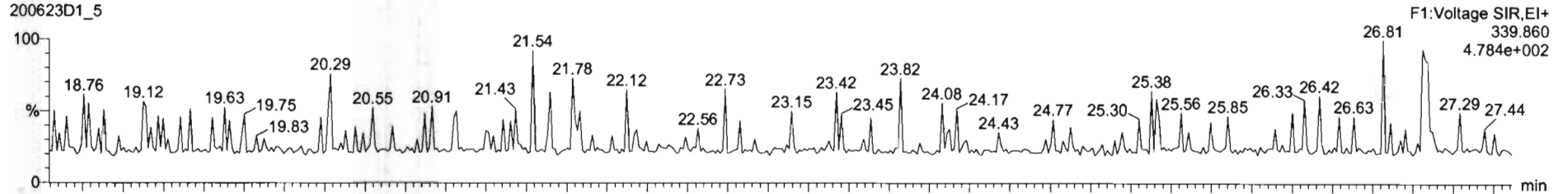
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

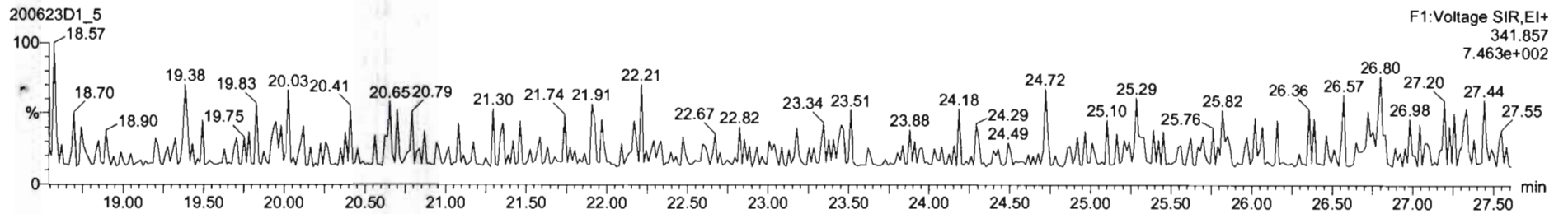
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

1st Func. Penta-Furans

200623D1\_5

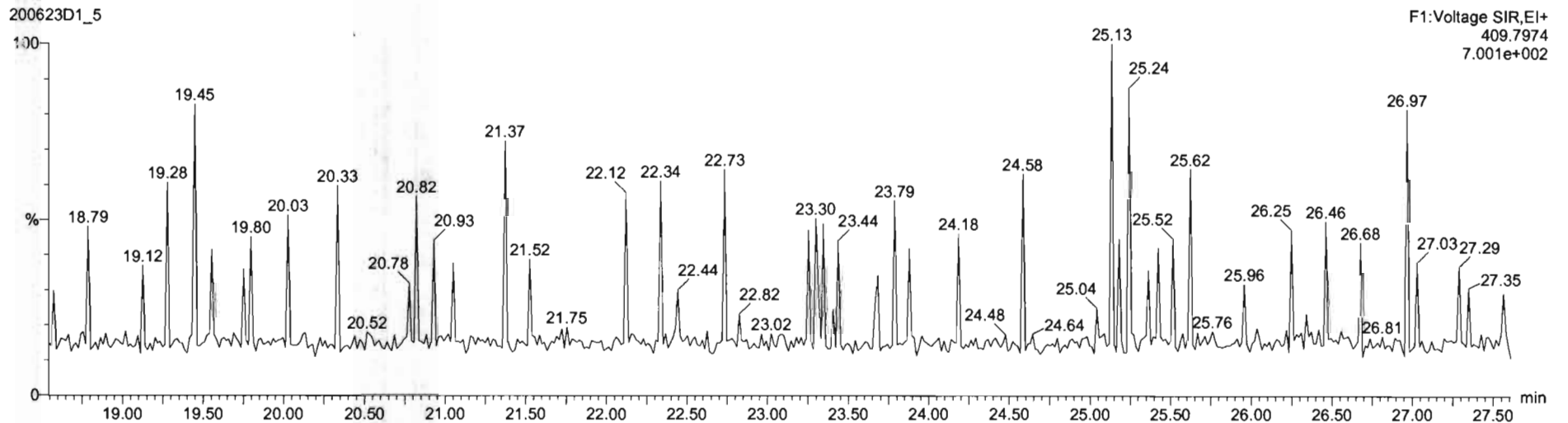


200623D1\_5



DPE6

200623D1\_5



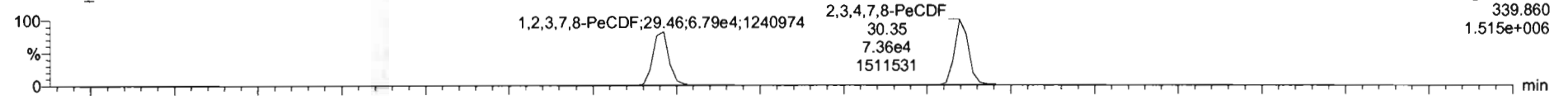
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

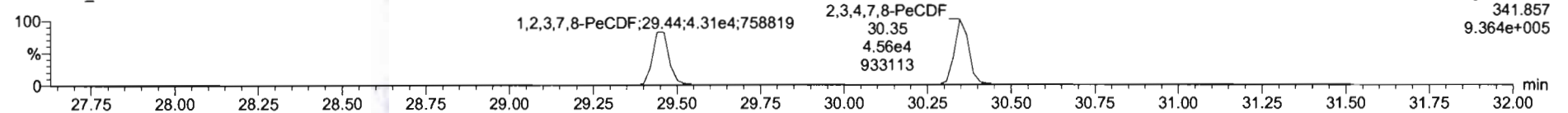
**1,2,3,7,8-PeCDF**

200623D1\_5



F2: Voltage SIR, EI+  
339.860  
1.515e+006

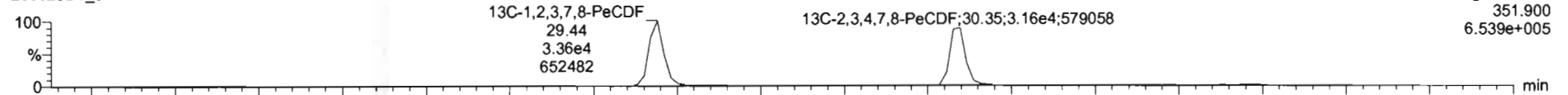
200623D1\_5



F2: Voltage SIR, EI+  
341.857  
9.364e+005

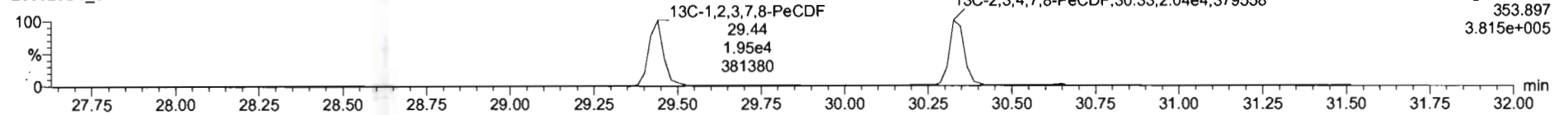
**13C-1,2,3,7,8-PeCDF**

200623D1\_5



F2: Voltage SIR, EI+  
351.900  
6.539e+005

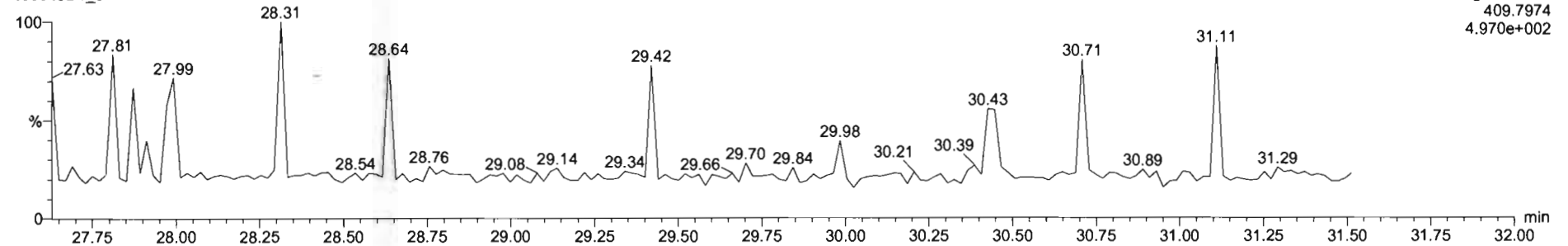
200623D1\_5



F2: Voltage SIR, EI+  
353.897  
3.815e+005

**DPE2**

200623D1\_5



F2: Voltage SIR, EI+  
409.7974  
4.970e+002

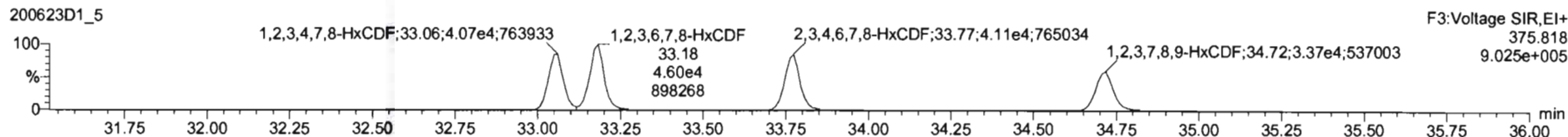
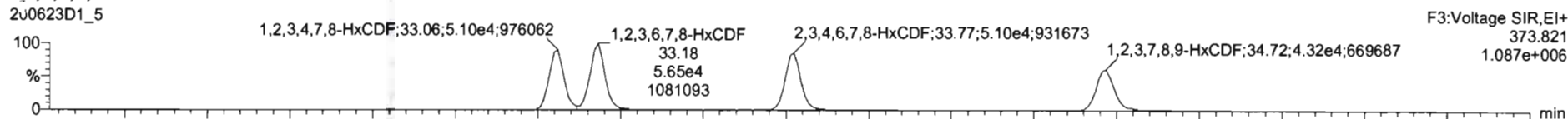
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time

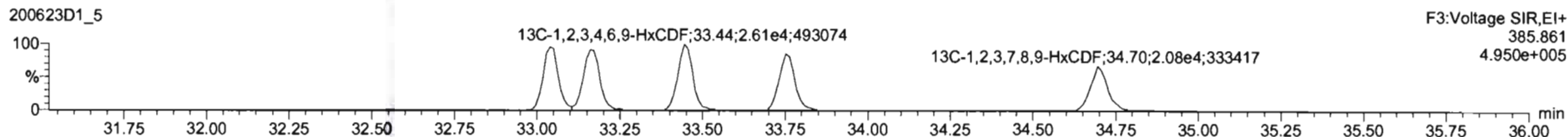
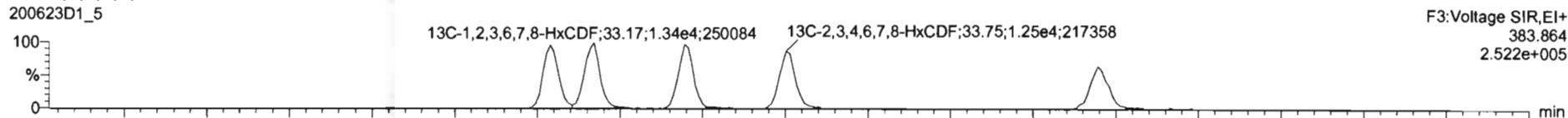
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

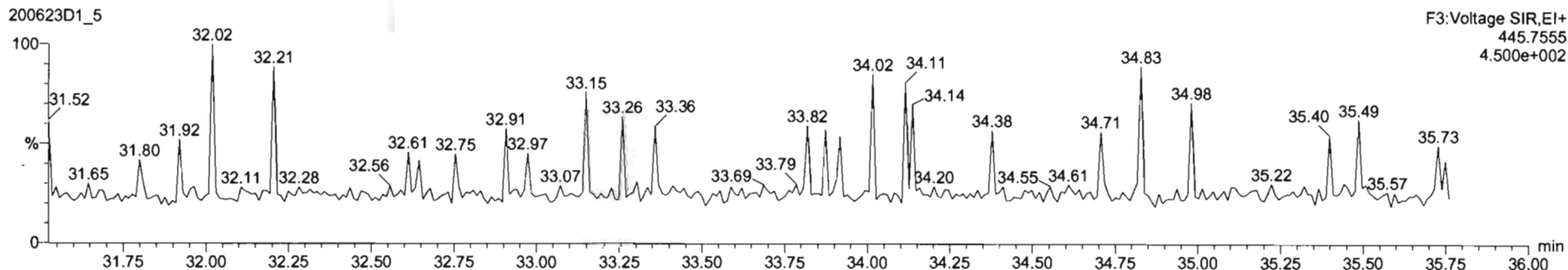
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



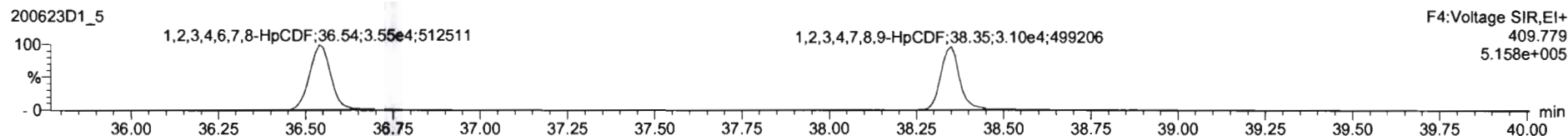
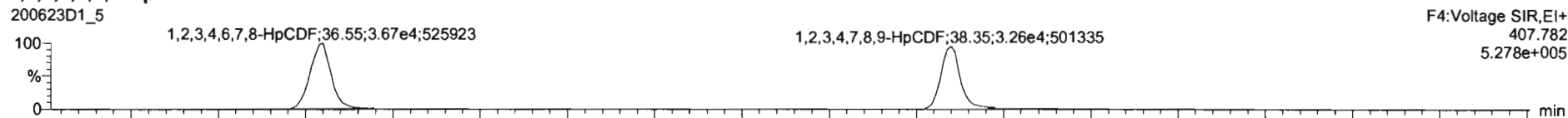


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

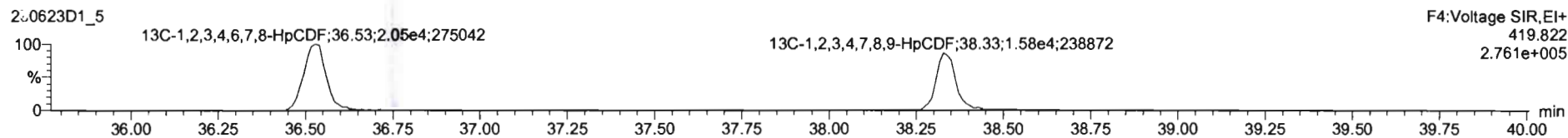
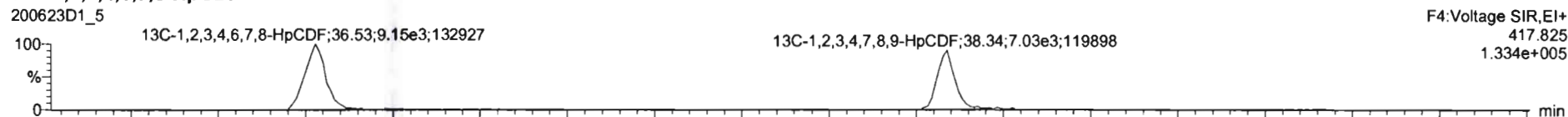
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

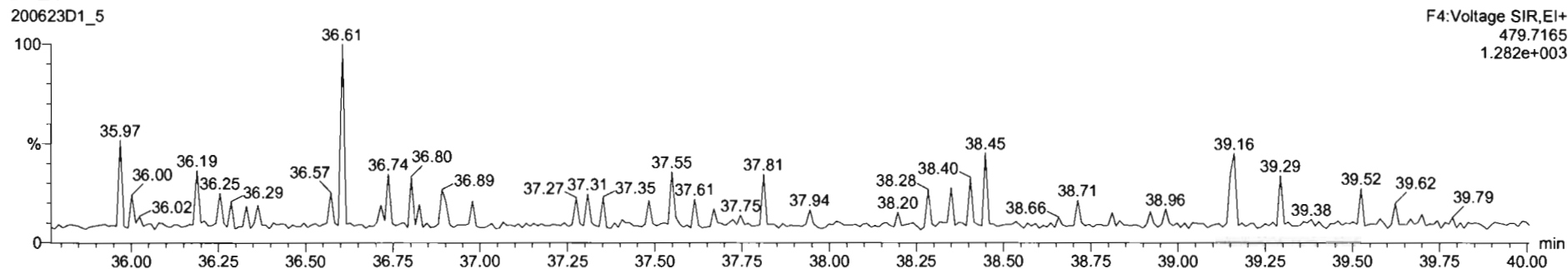
1,2,3,4,6,7,8-HpCDF



13C-1,2,3,4,6,7,8-HpCDF



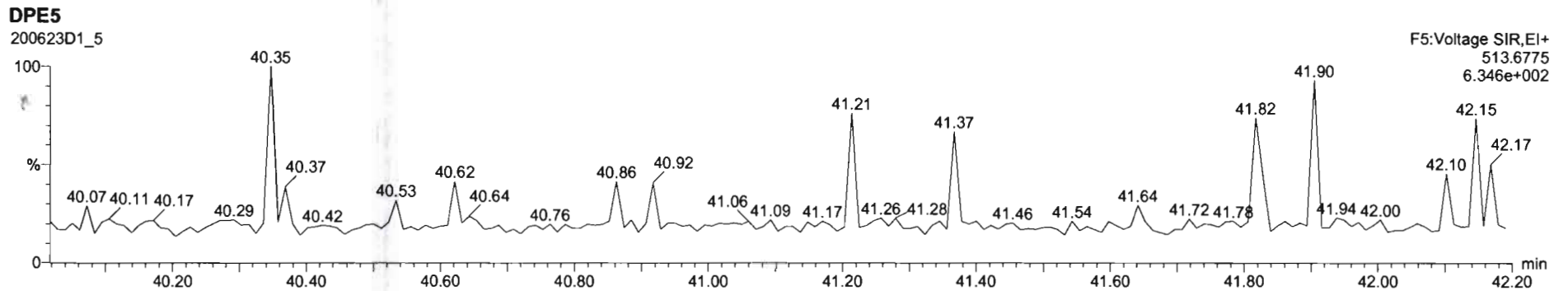
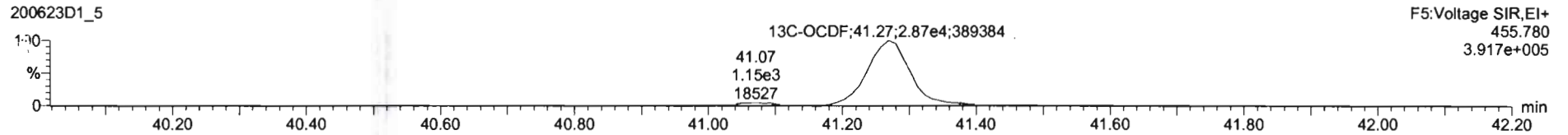
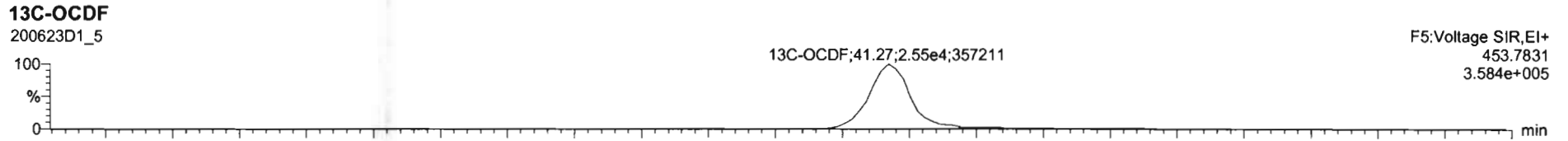
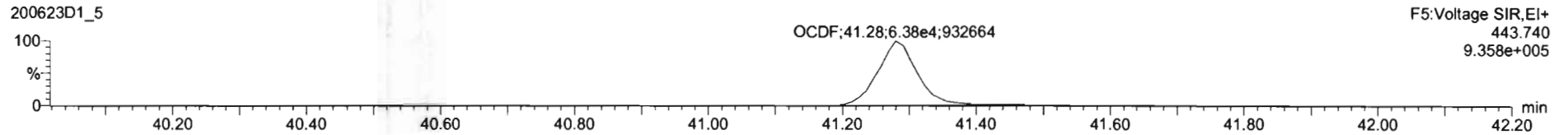
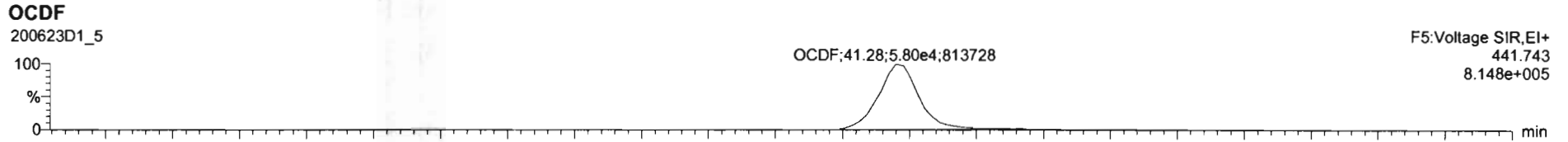
DPE4



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

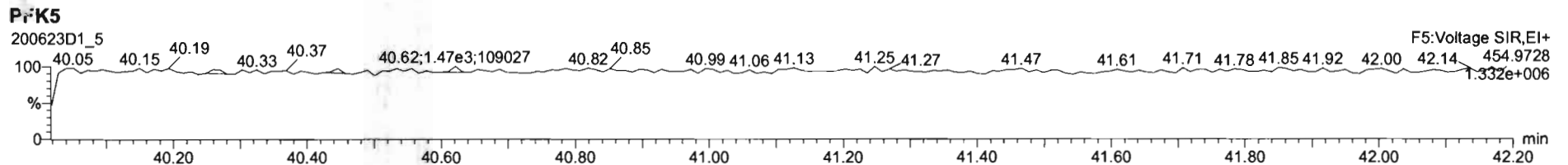
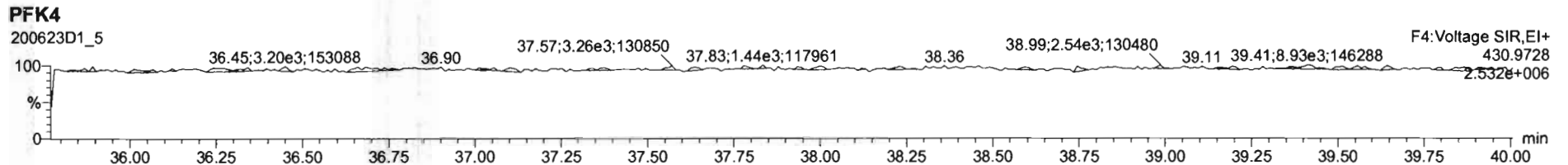
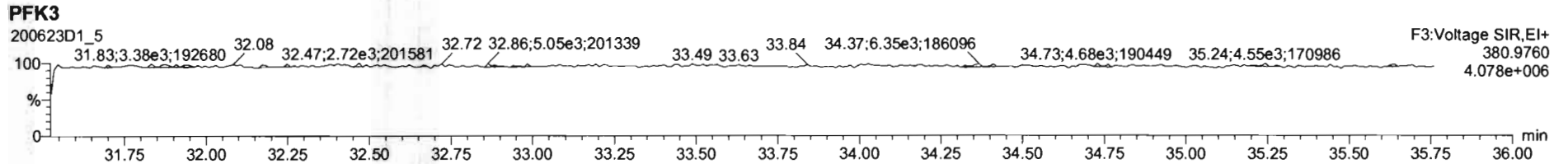
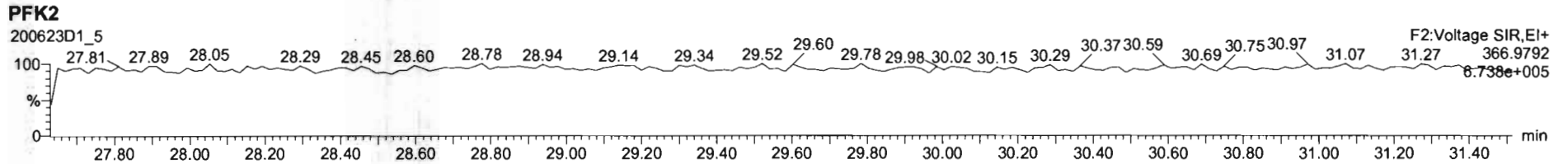
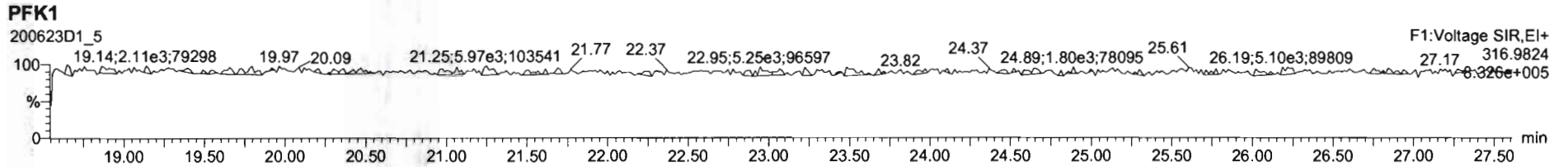
Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_5, Date: 23-Jun-2020, Time: 18:16:00, ID: ST200623D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106



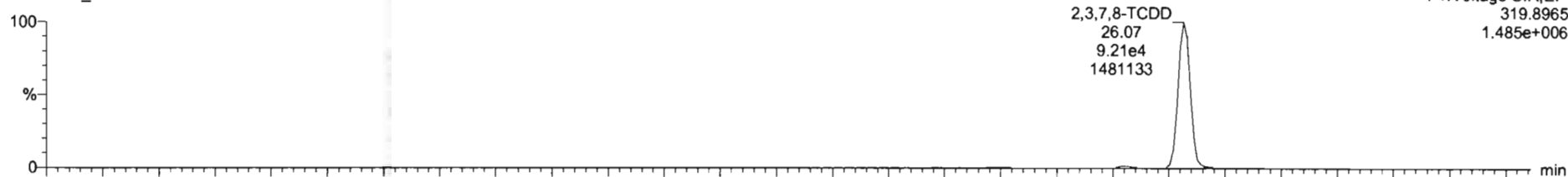
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

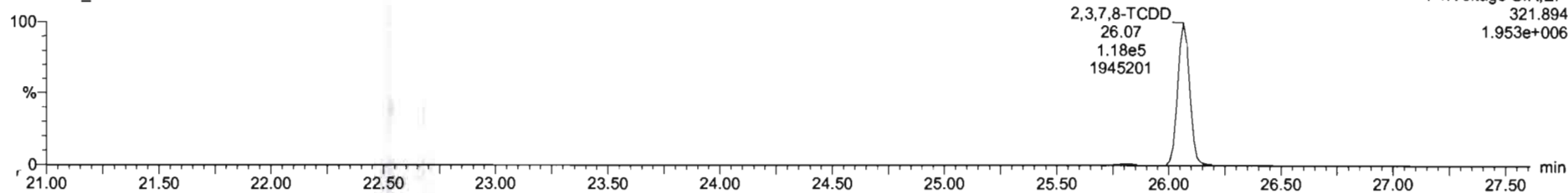
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**2,3,7,8-TCDD**

200623D1\_6



200623D1\_6

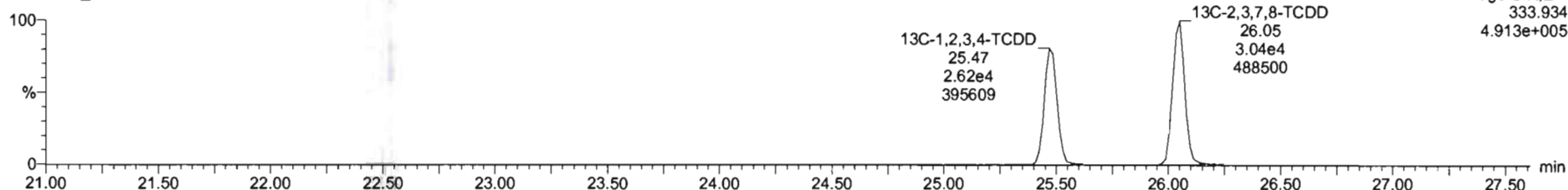


**13C-2,3,7,8-TCDD**

200623D1\_6



200623D1\_6



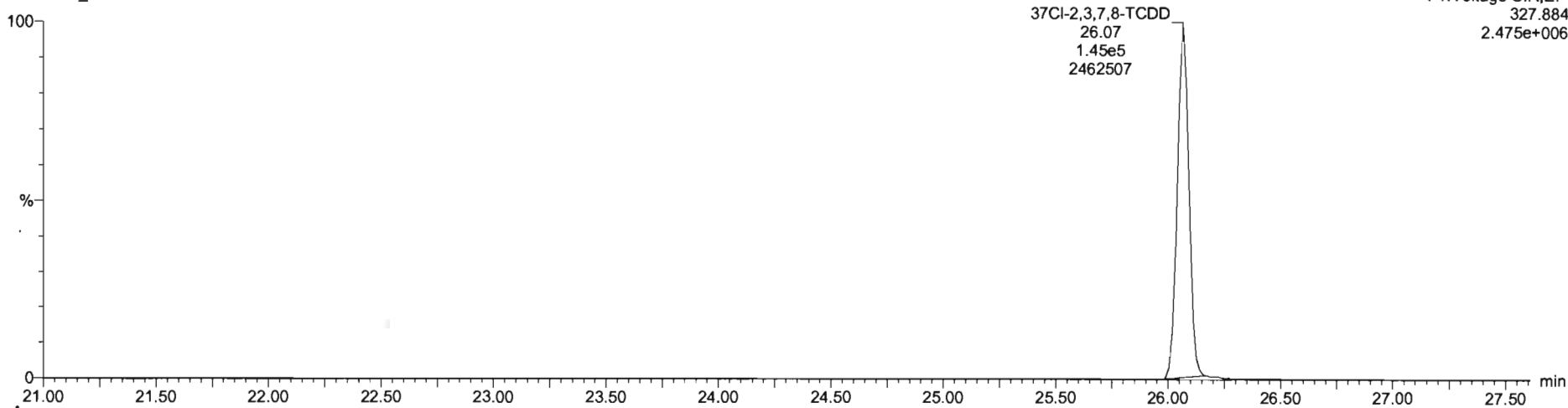
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**37Cl-2,3,7,8-TCDD**

200623D1\_6

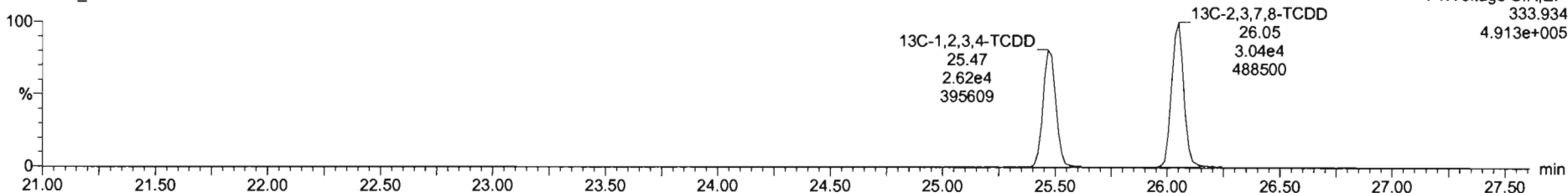


**13C-1,2,3,4-TCDD**

200623D1\_6



200623D1\_6



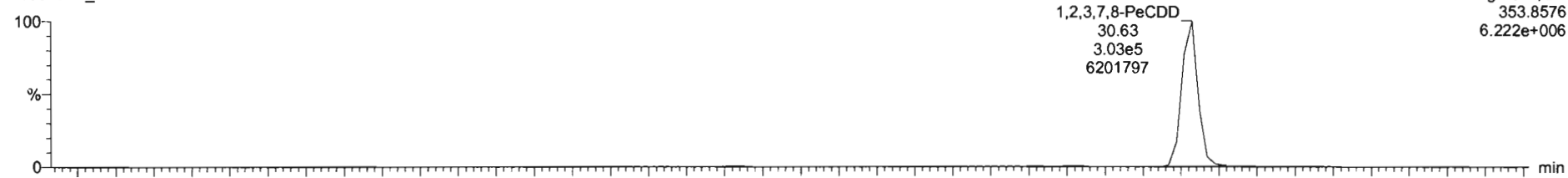
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

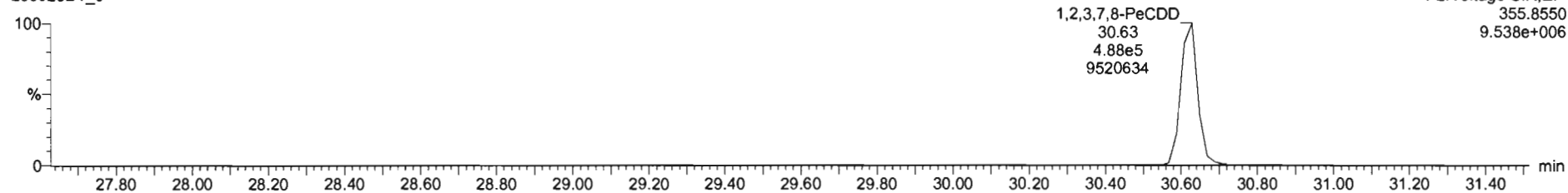
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**1,2,3,7,8-PeCDD**

200623D1\_6

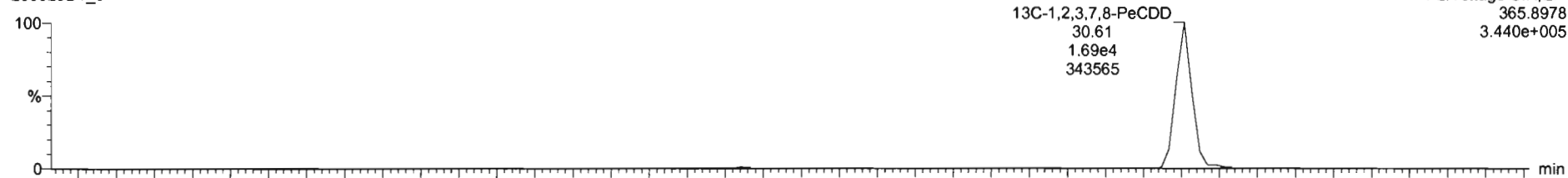


200623D1\_6

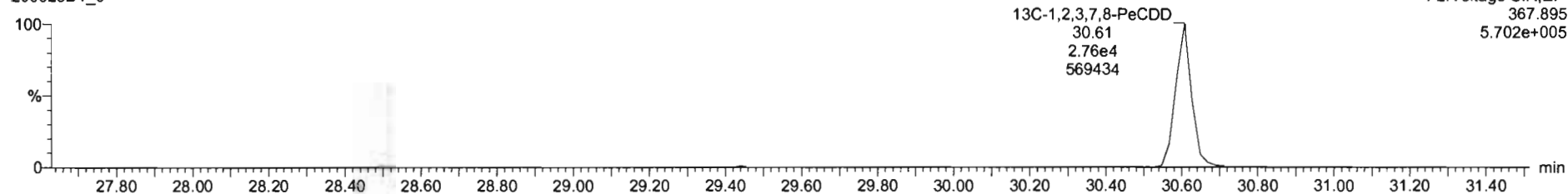


**13C-1,2,3,7,8-PeCDD**

200623D1\_6



200623D1\_6



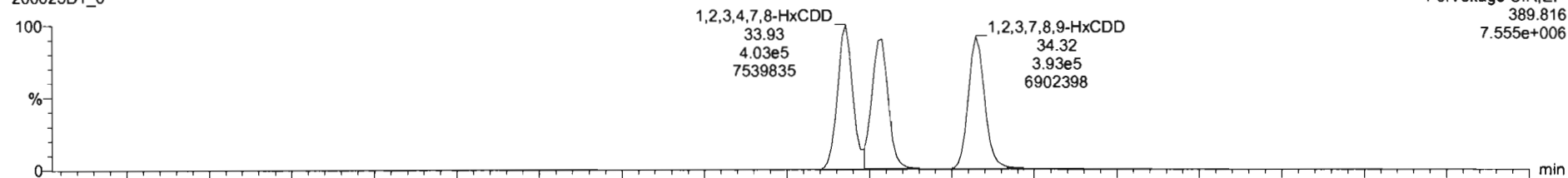
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

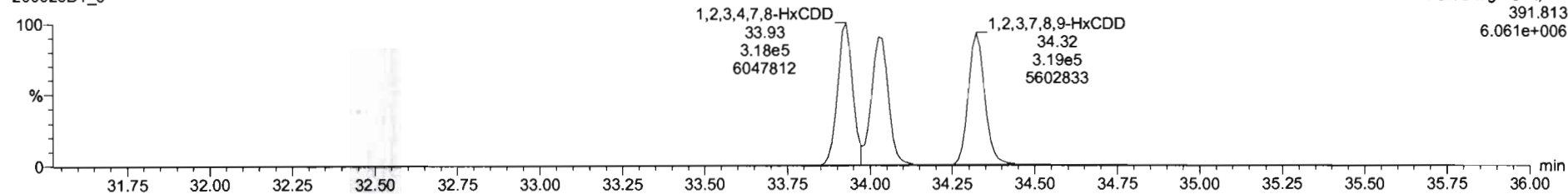
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

1,2,3,4,7,8-HxCDD

200623D1\_6

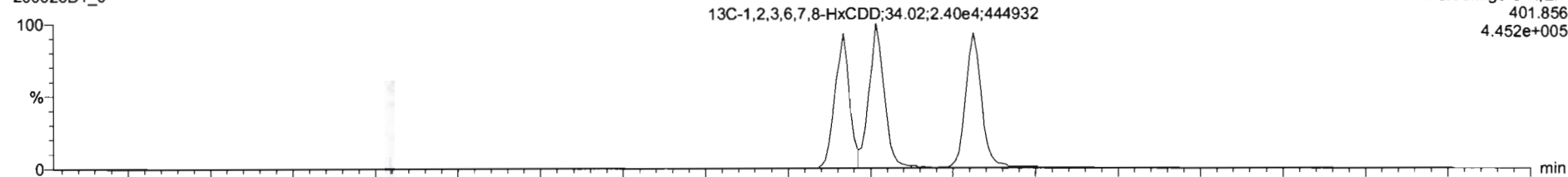


200623D1\_6

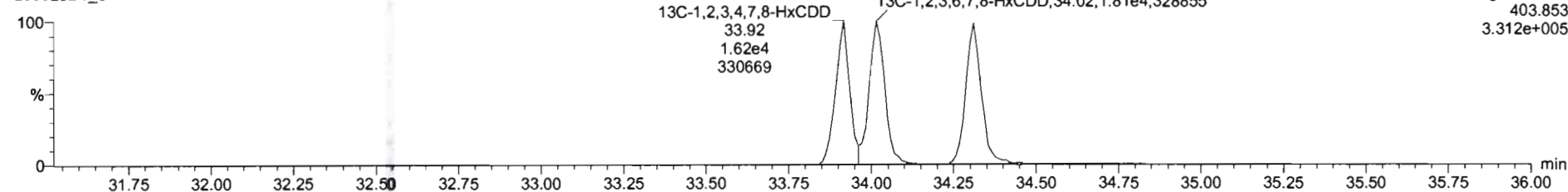


13C-1,2,3,4,7,8-HxCDD

200623D1\_6



200623D1\_6



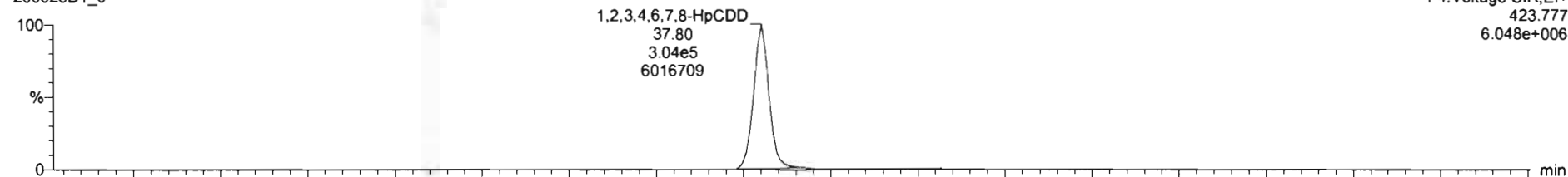
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

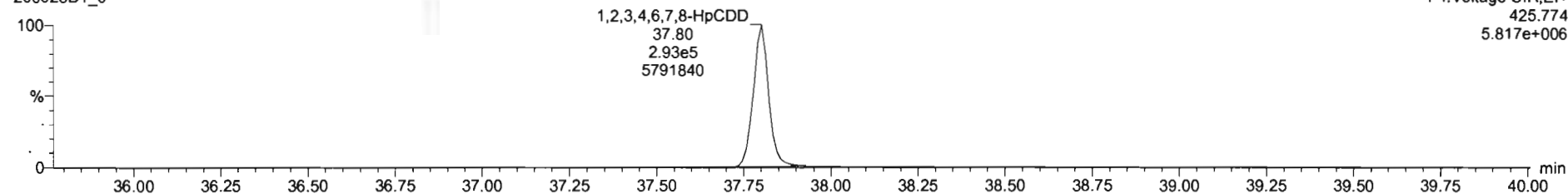
1,2,3,4,6,7,8-HpCDD

200623D1\_6



F4:Voltage SIR,El+  
423.777  
6.048e+006

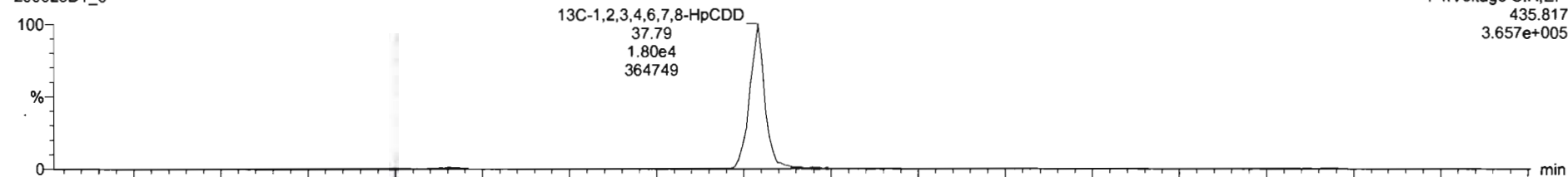
200623D1\_6



F4:Voltage SIR,El+  
425.774  
5.817e+006

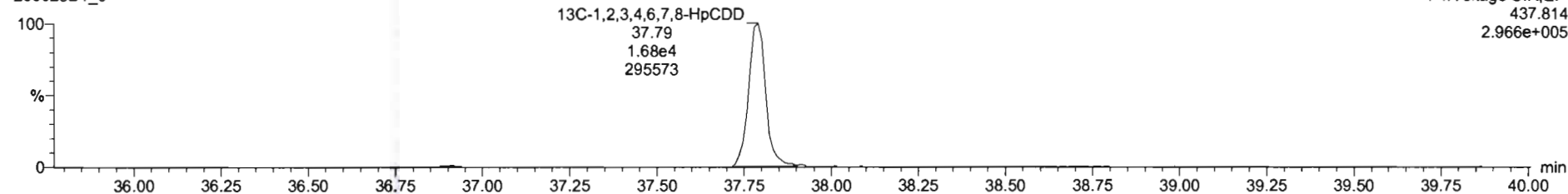
13C-1,2,3,4,6,7,8-HpCDD

200623D1\_6



F4:Voltage SIR,El+  
435.817  
3.657e+005

200623D1\_6



F4:Voltage SIR,El+  
437.814  
2.966e+005



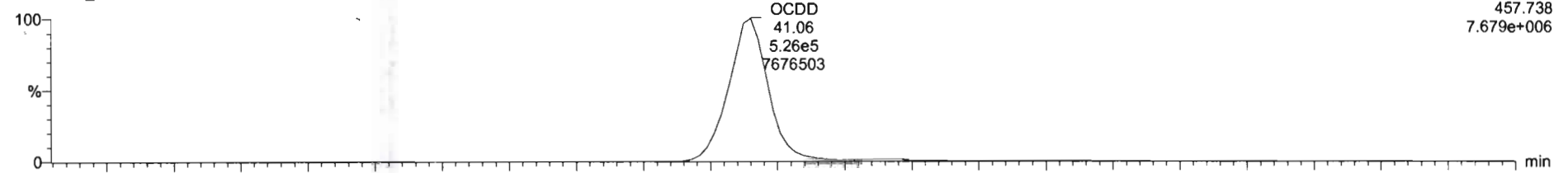
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

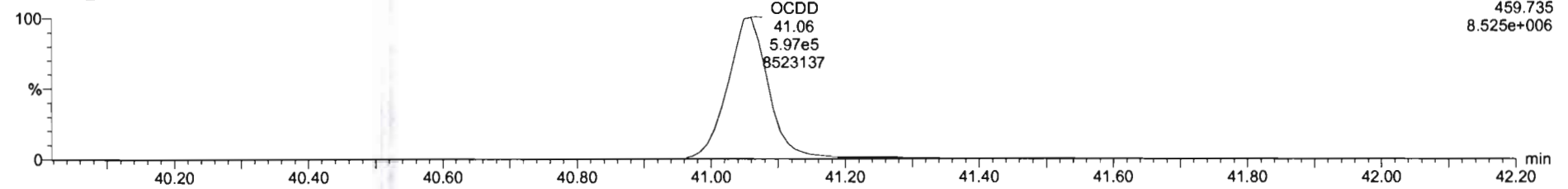
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**OCDD**

200623D1\_6

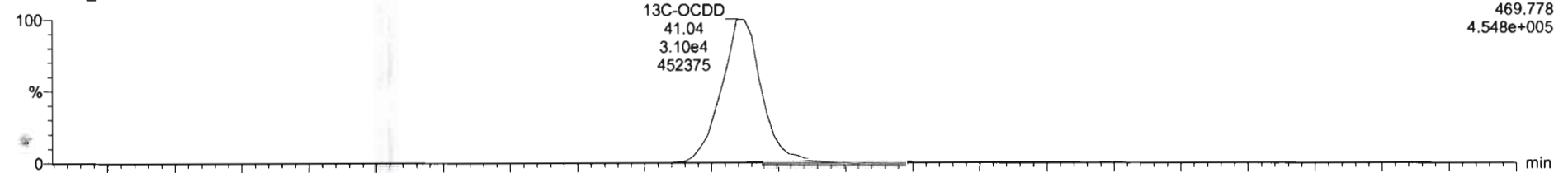


200623D1\_6

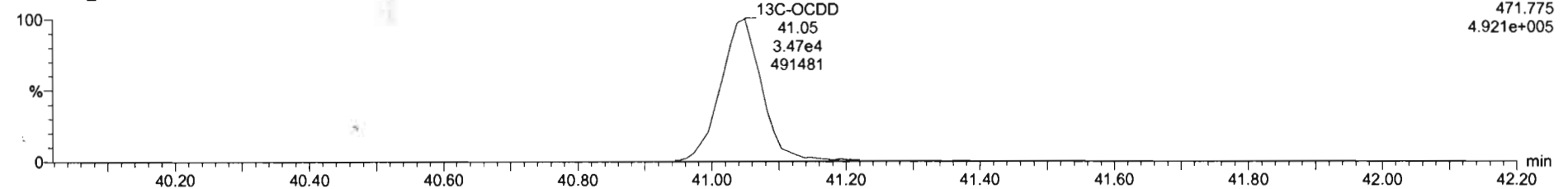


**13C-OCDD**

200623D1\_6



200623D1\_6

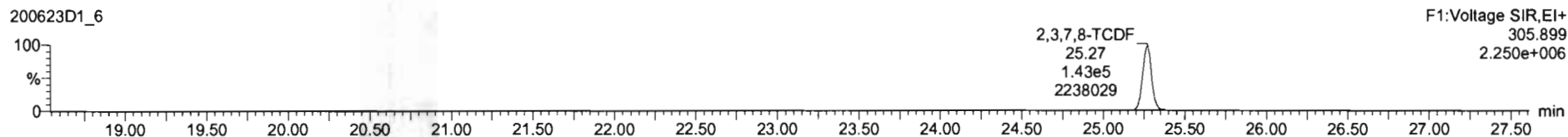
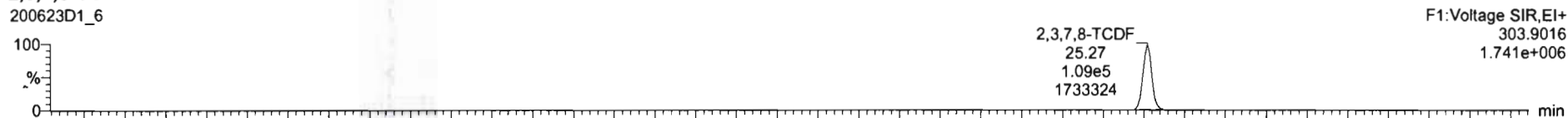


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

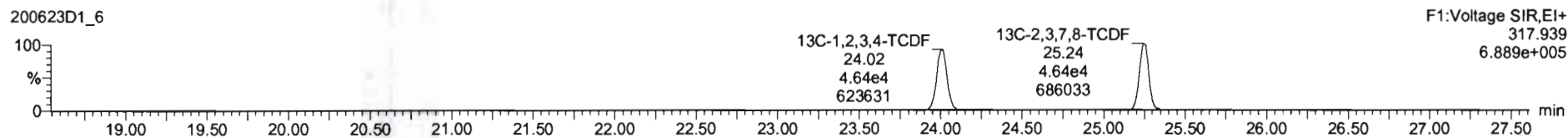
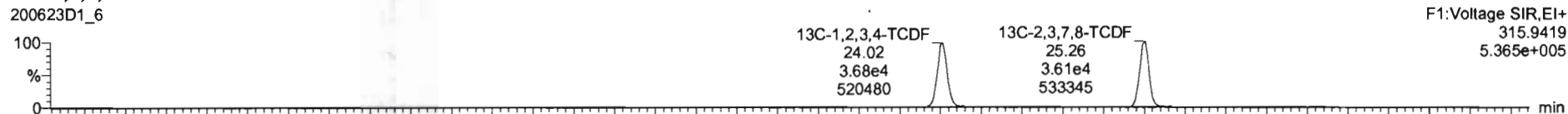
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

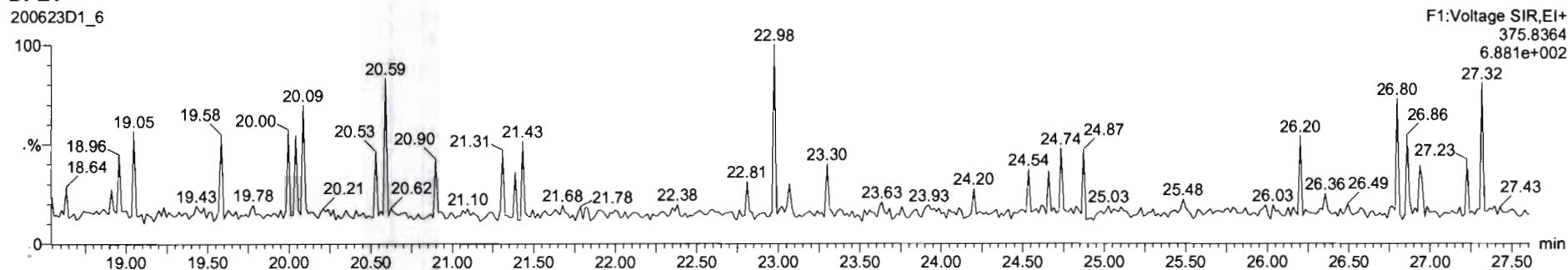
**2,3,7,8-TCDF**



**<sup>13</sup>C-2,3,7,8-TCDF**



**DPE1**



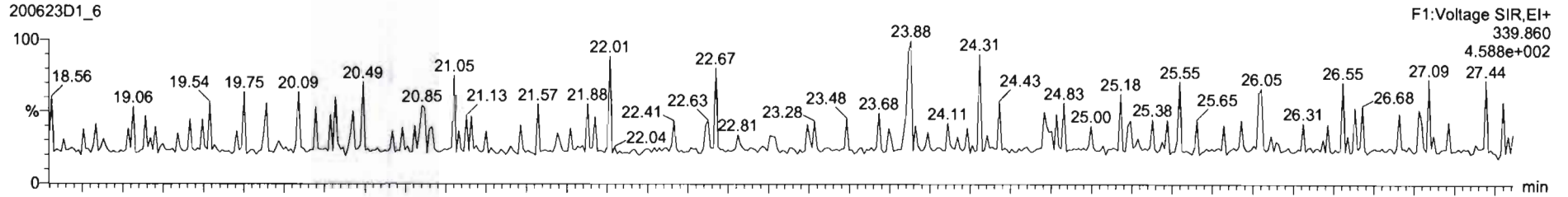
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

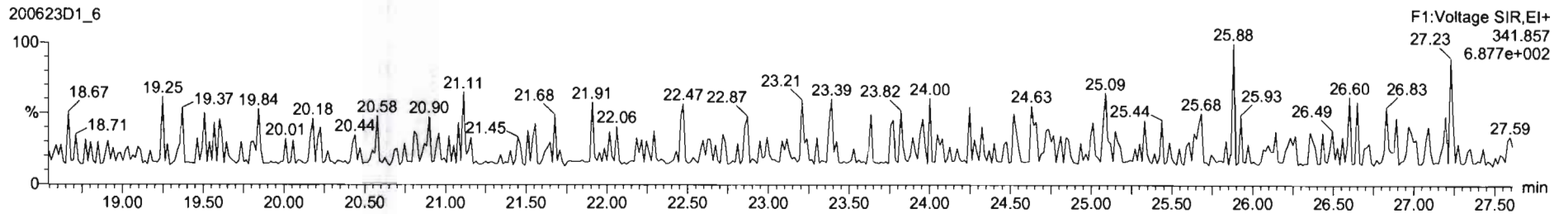
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

1st Func. Penta-Furans

200623D1\_6

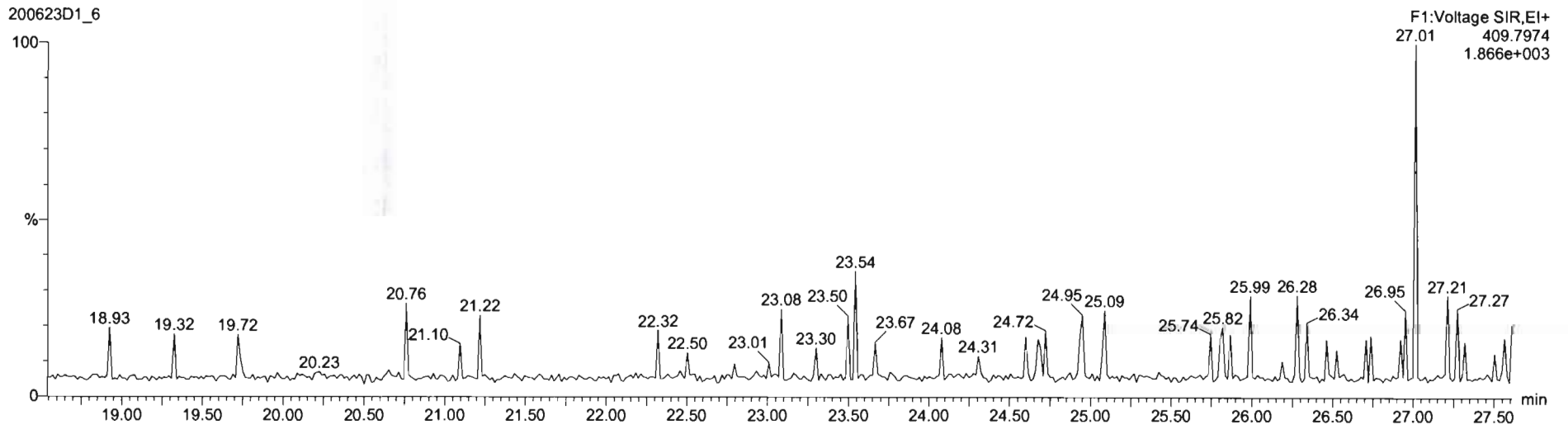


200623D1\_6



DPE6

200623D1\_6



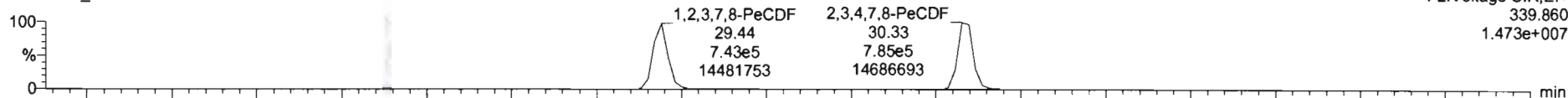
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

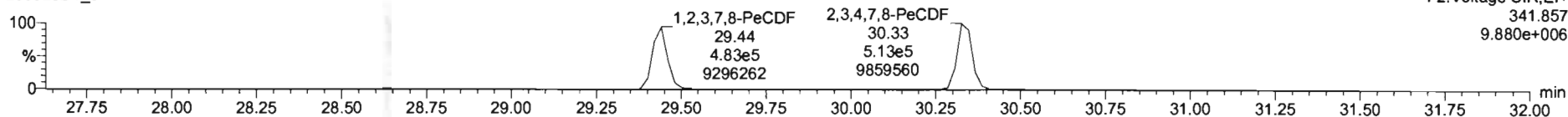
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

**1,2,3,7,8-PeCDF**

200623D1\_6

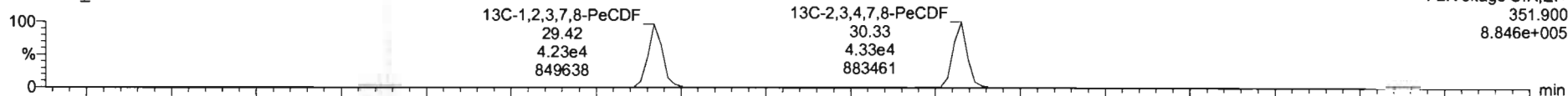


200623D1\_6

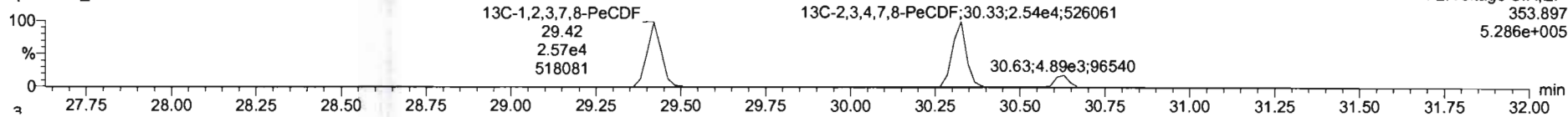


**13C-1,2,3,7,8-PeCDF**

200623D1\_6

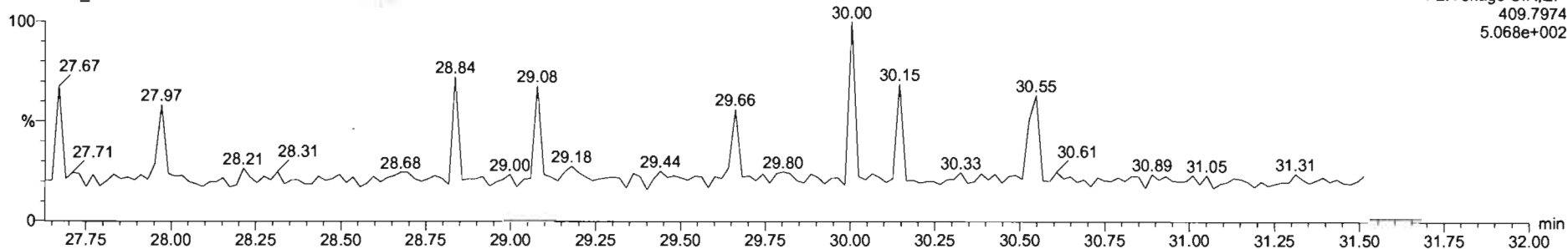


200623D1\_6



**DPE2**

200623D1\_6

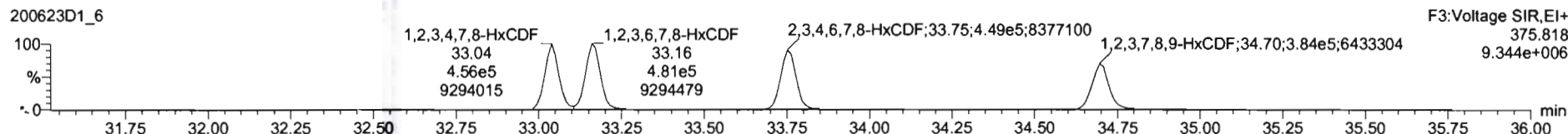
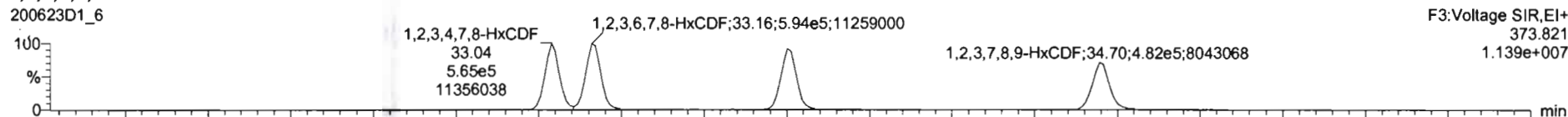


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

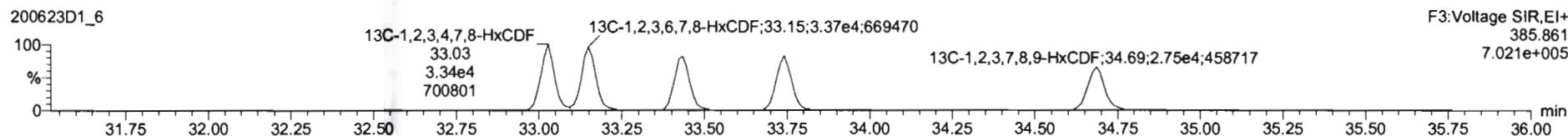
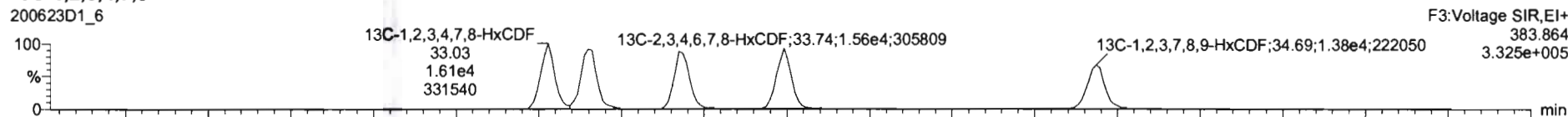
Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

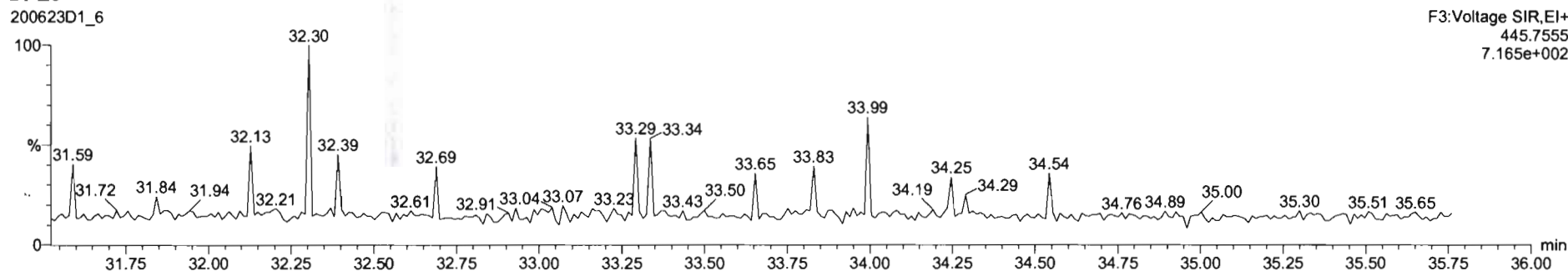
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



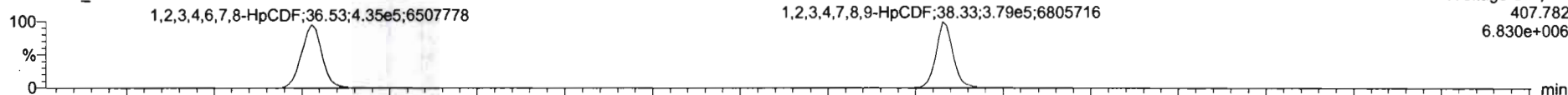
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

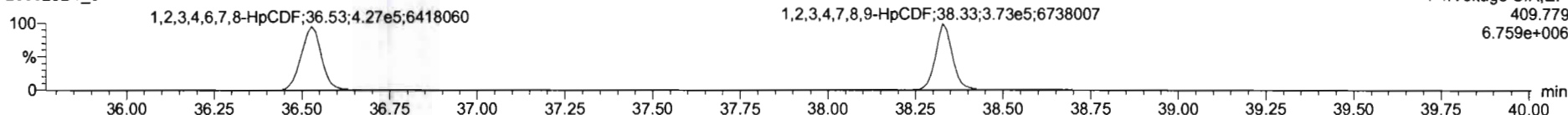
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

1,2,3,4,6,7,8-HpCDF

200623D1\_6

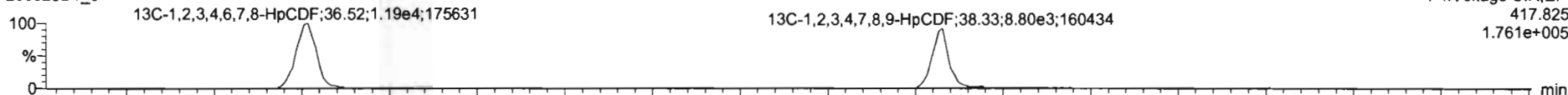


200623D1\_6

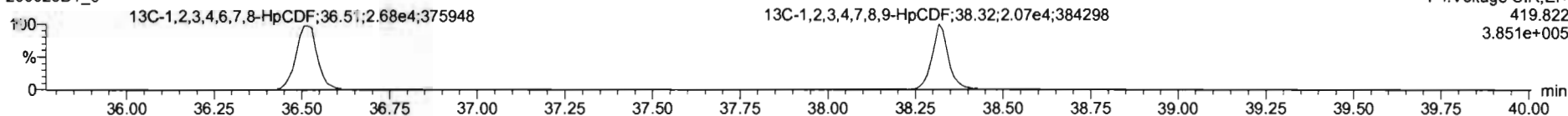


13C-1,2,3,4,6,7,8-HpCDF

200623D1\_6

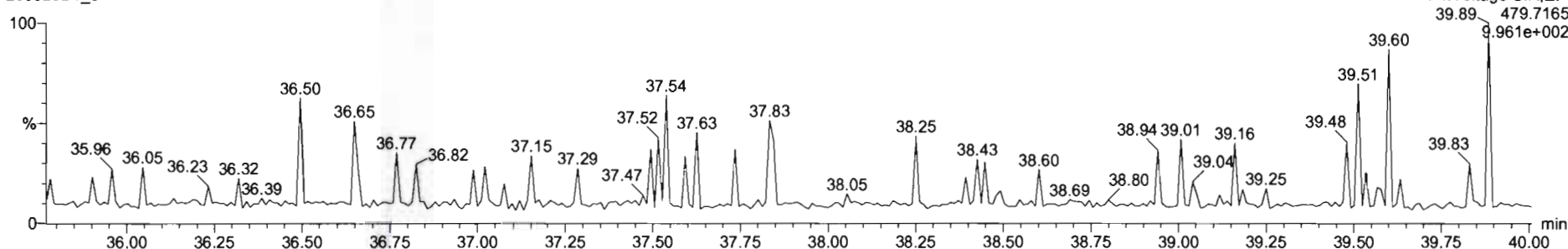


200623D1\_6



DPE4

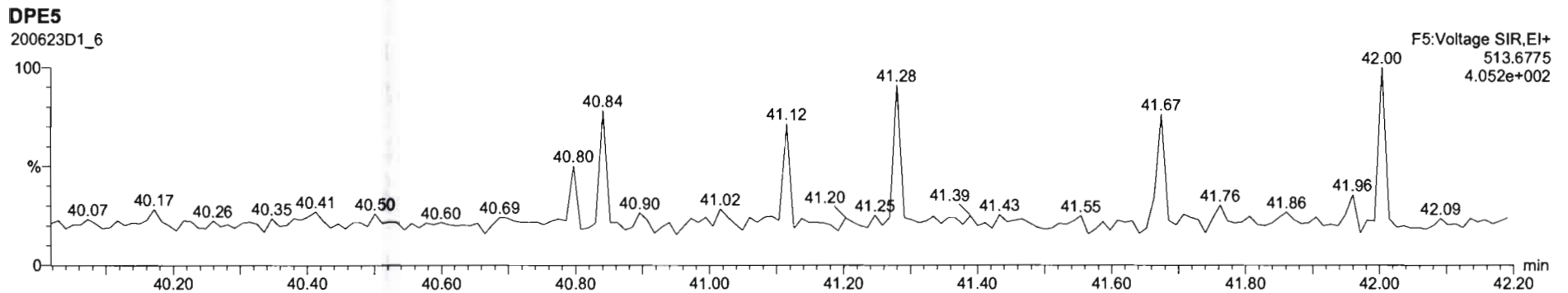
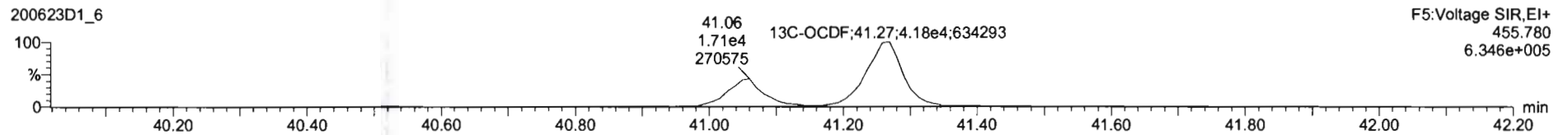
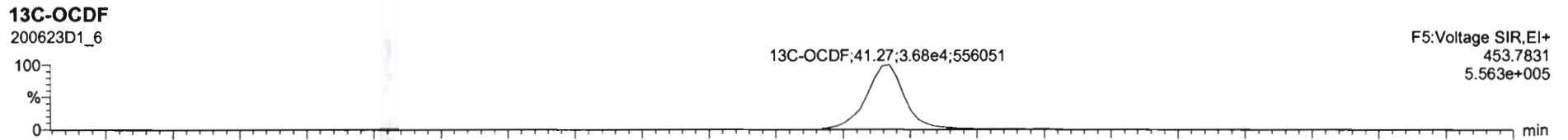
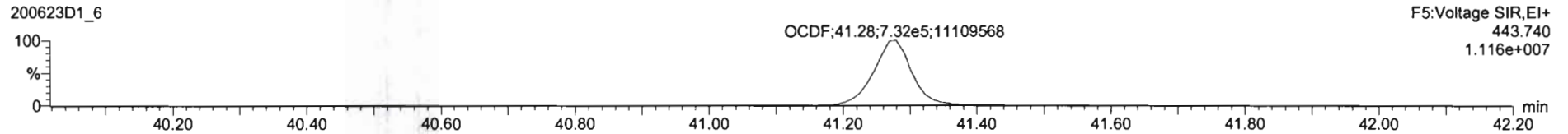
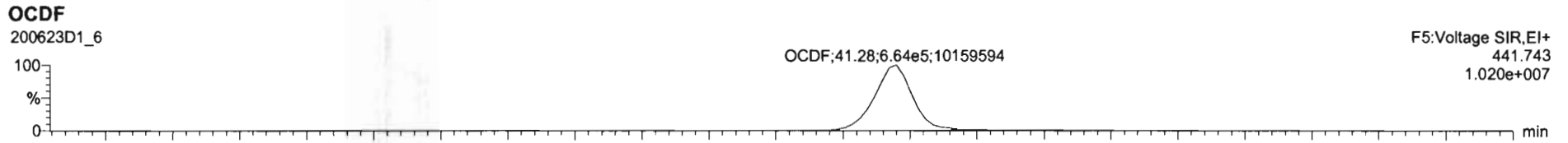
200623D1\_6



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

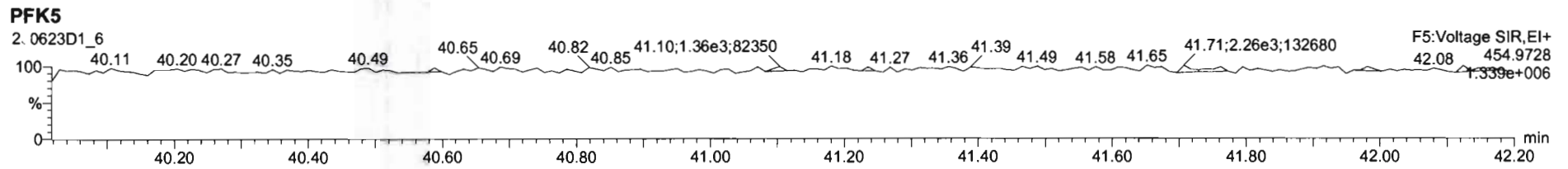
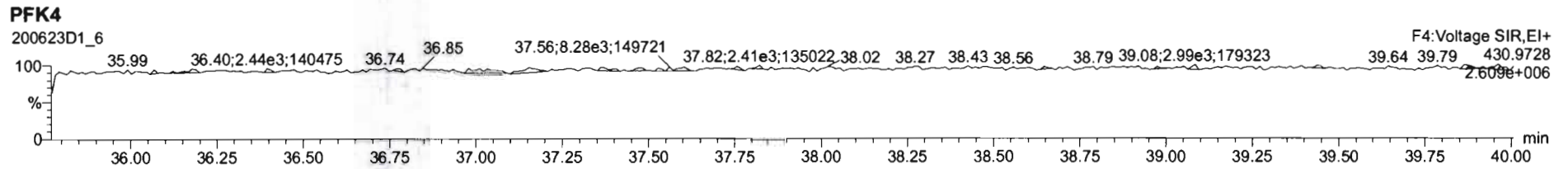
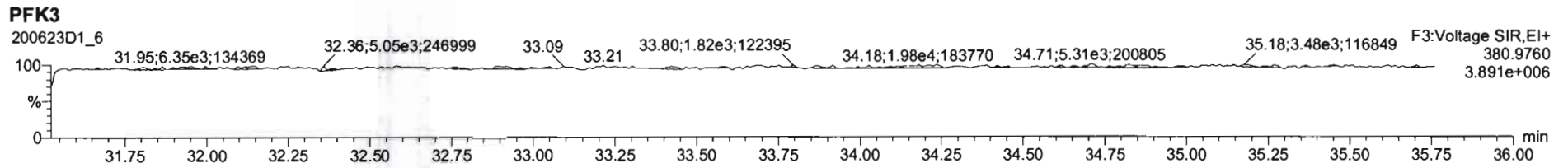
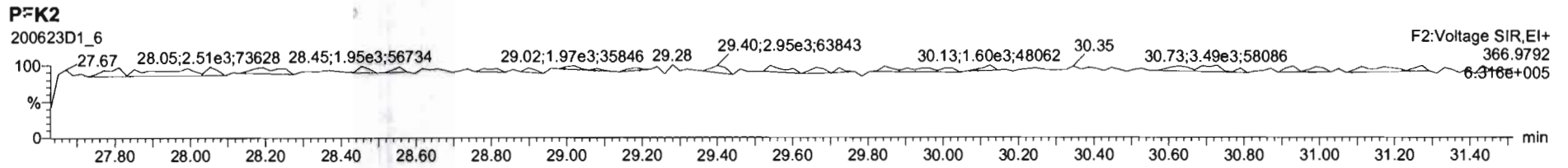
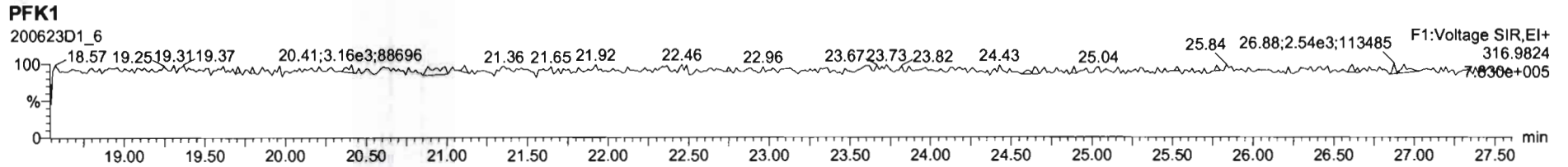
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_CRV.qld

Last Altered: Wednesday, June 24, 2020 10:46:07 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 10:47:25 Pacific Daylight Time

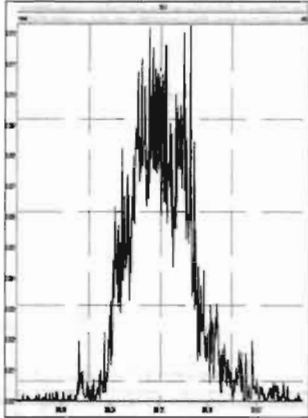
Name: 200623D1\_6, Date: 23-Jun-2020, Time: 19:01:07, ID: ST200623D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107



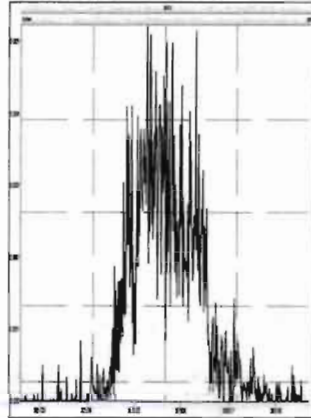


Printed: Tuesday, June 23, 2020 21:25:23 Pacific Daylight Time

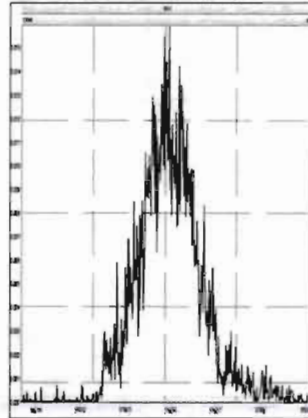
M 292.9824 R 12202



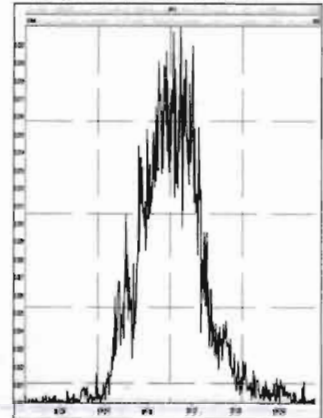
M 304.9824 R 14839



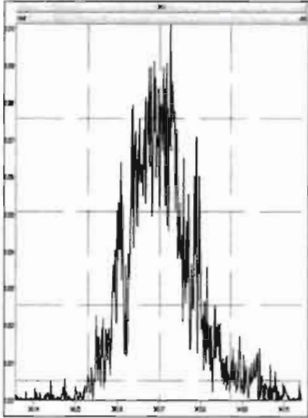
M 318.9792 R 12261



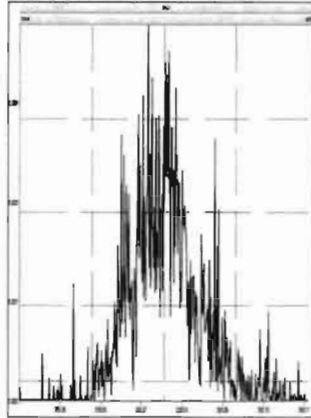
M 330.9792 R 11860



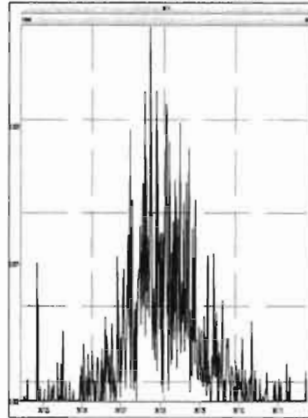
M 342.9792 R 13715



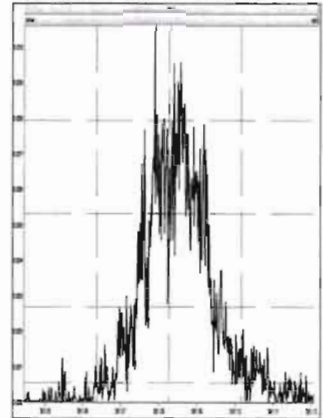
M 354.9792 R 14946



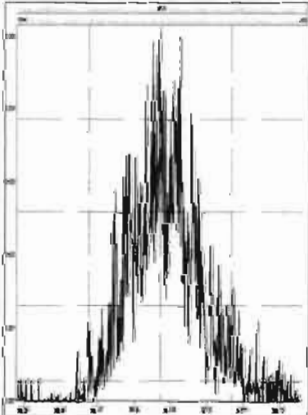
M 366.9792 R 21635



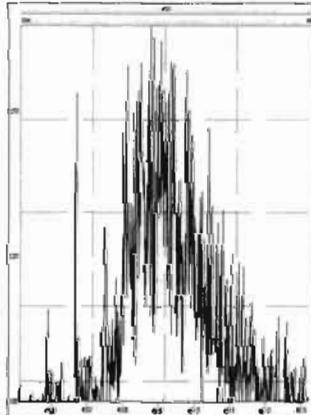
M 380.9760 R 11618



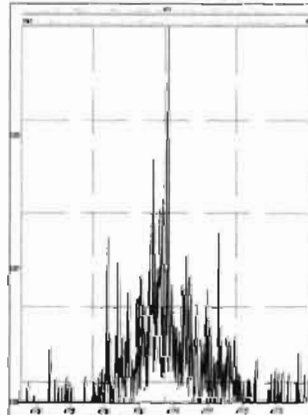
M 392.9760 R 12354



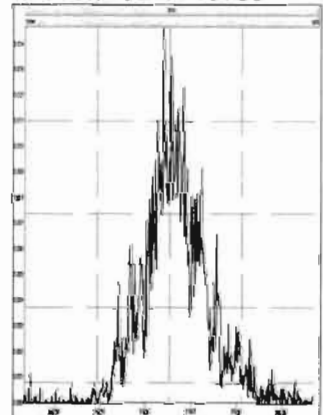
M 404.9760 R 15945



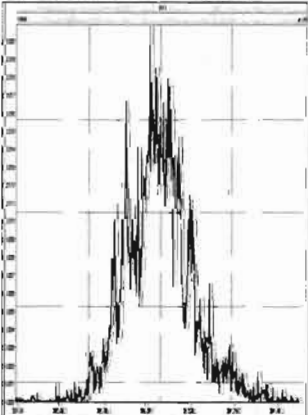
M 416.9760 R 28582



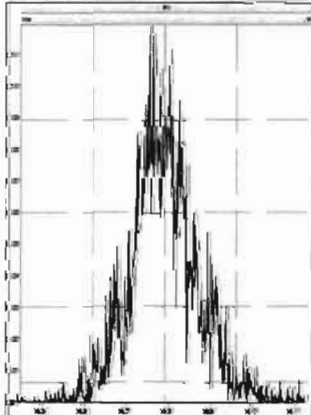
M 310.9792 R 10753



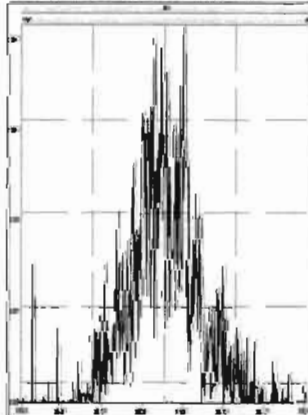
M 330.9792 R 10959



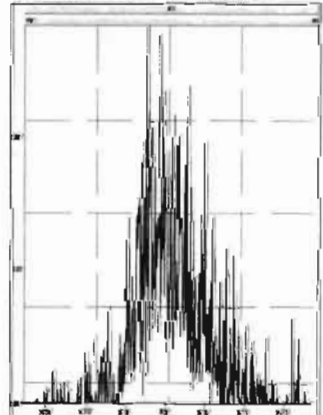
M 342.9792 R 10357



M 354.9792 R 15549

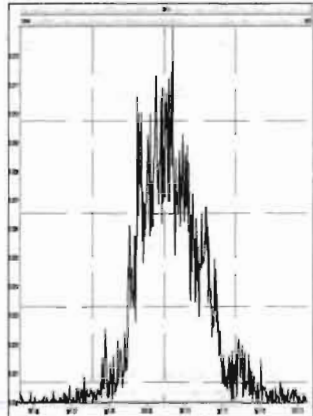


M 366.9792 R 18605

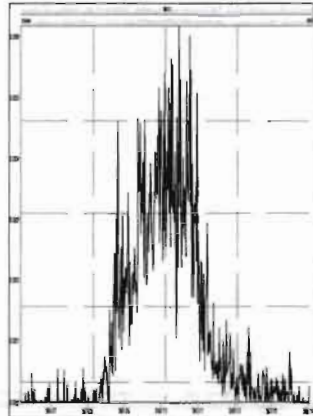


Printed: Tuesday, June 23, 2020 21:25:23 Pacific Daylight Time

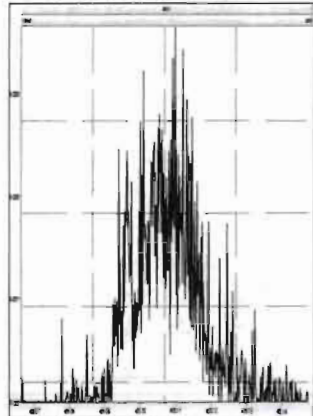
M 380.9760 R 12457



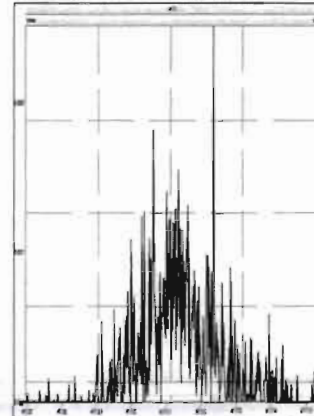
M 392.9760 R 14688



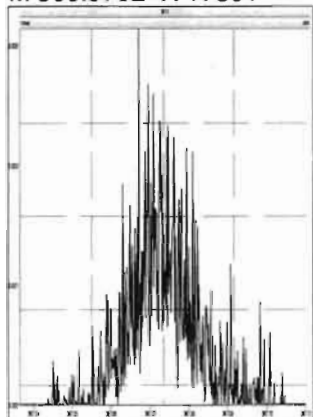
M 404.9760 R 14418



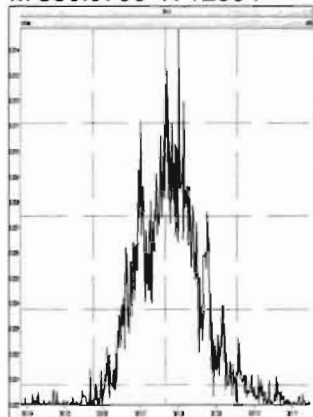
M 416.9760 R 31855



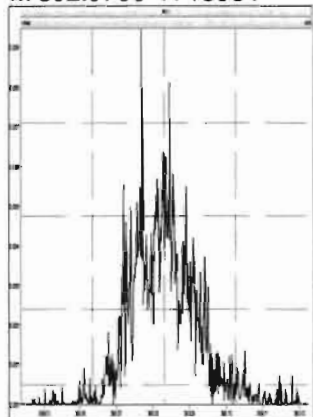
M 366.9792 R 17301



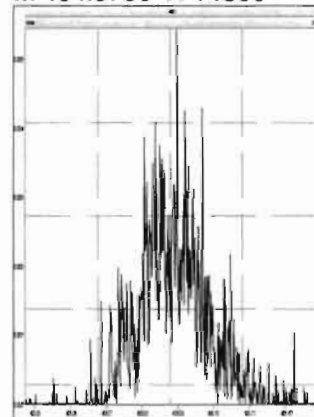
M 380.9760 R 12604



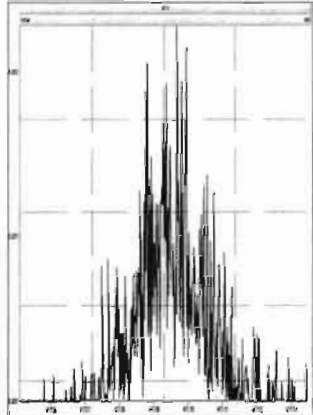
M 392.9760 R 13984



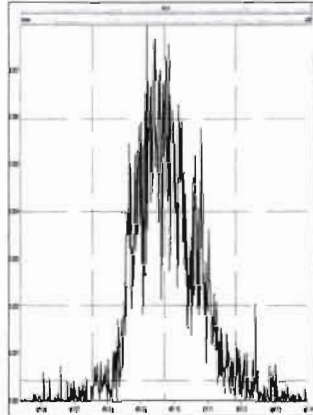
M 404.9760 R 14800



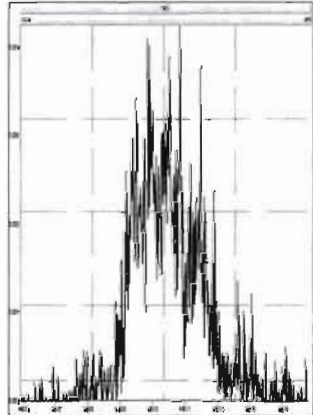
M 416.9760 R 39038



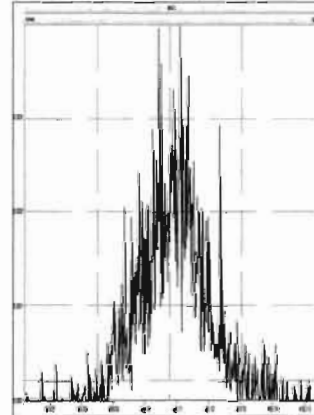
M 430.9728 R 13700



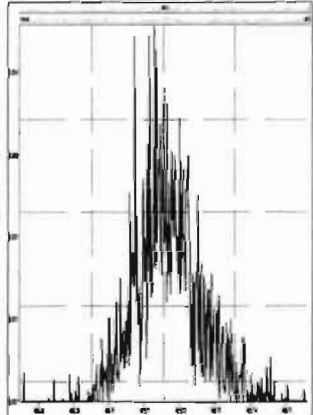
M 442.9728 R 14794



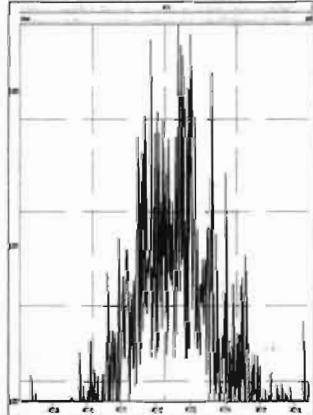
M 454.9728 R 14619



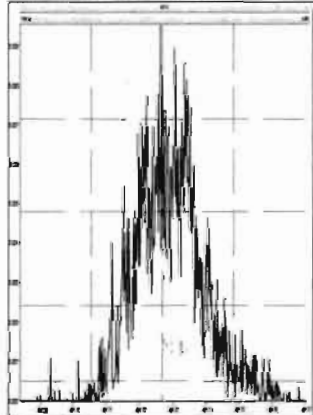
M 404.9760 R 13229



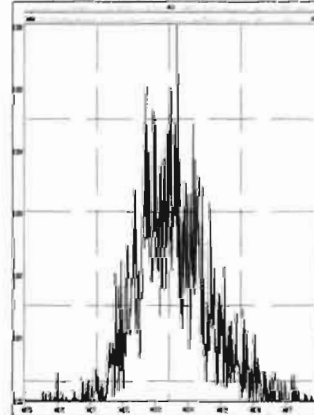
M 416.9760 R 17035



M 430.9728 R 12358

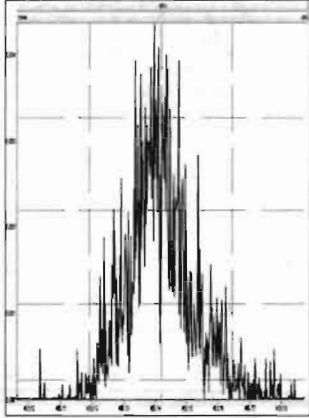


M 442.9728 R 11900

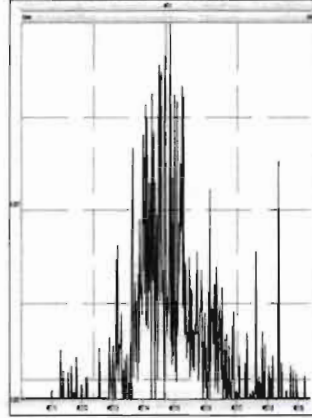


Printed: Tuesday, June 23, 2020 21:25:23 Pacific Daylight Time

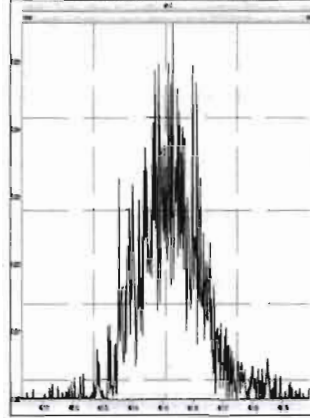
M 454.9728 R 16050



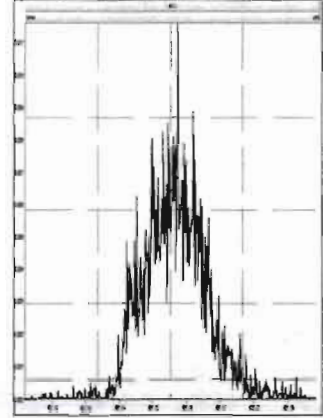
M 466.9728 R 30100



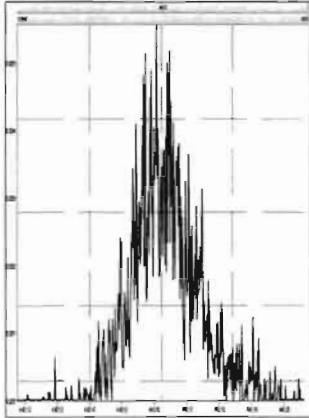
M 480.9696 R 14928



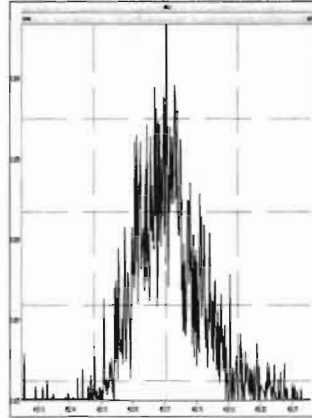
M 430.9728 R 13432



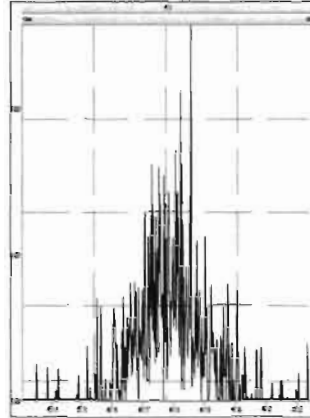
M 442.9728 R 12390



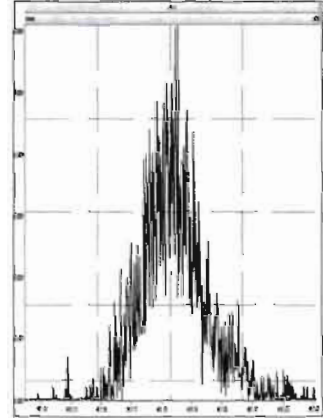
M 454.9728 R 14226



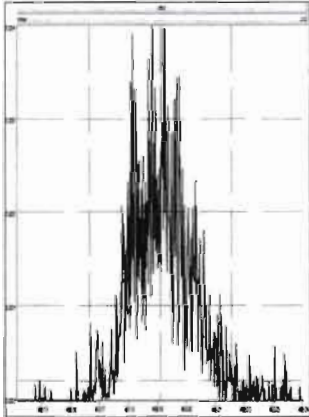
M 466.9728 R 35053



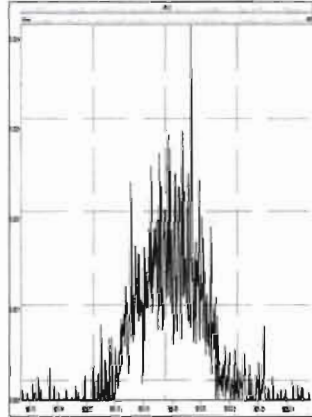
M 480.9696 R 13335



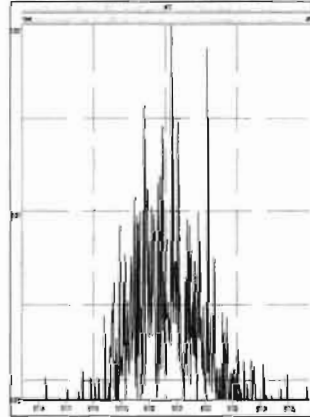
M 492.9696 R 13973



M 504.9696 R 14498



M 516.9697 R 36676



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:37:49 Pacific Daylight Time

*DB 6/24/20 CT 06/25/2020*

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24  
Calibration: U:\VG7.PRO\CurveDB\db-5\_1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	6.05e3	0.73	NO	1.07	1.000	26.082	26.08	1.001	1.001	9.6107	96.1	0.219	9.61
2	2 1,2,3,7,8-PeCDD	1.94e4	0.63	NO	0.988	1.000	30.630	30.63	1.001	1.001	48.318	96.6	0.249	48.3
3	3 1,2,3,4,7,8-HxCDD	1.76e4	1.26	NO	1.09	1.000	33.927	33.94	1.000	1.001	49.013	98.0	0.442	49.0
4	4 1,2,3,6,7,8-HxCDD	1.95e4	1.32	NO	0.938	1.000	34.027	34.04	1.000	1.000	53.477	107	0.503	53.5
5	5 1,2,3,7,8,9-HxCDD	1.73e4	1.25	NO	0.981	1.000	34.357	34.33	1.001	1.000	48.517	97.0	0.536	48.5
6	6 1,2,3,4,6,7,8-HpCDD	1.39e4	0.97	NO	0.965	1.000	37.802	37.80	1.000	1.000	46.385	92.8	0.792	46.4
7	7 OCDD	2.57e4	0.89	NO	0.900	1.000	41.049	41.05	1.000	1.000	103.17	103	0.657	103
8	8 2,3,7,8-TCDF	7.39e3	0.72	NO	0.859	1.000	25.281	25.29	1.001	1.001	9.7713	97.7	0.182	9.77
9	9 1,2,3,7,8-PeCDF	3.16e4	1.58	NO	0.932	1.000	29.442	29.44	1.001	1.001	51.802	104	0.210	51.8
10	10 2,3,4,7,8-PeCDF	3.55e4	1.60	NO	1.05	1.000	30.357	30.35	1.001	1.001	52.825	106	0.169	52.8
11	11 1,2,3,4,7,8-HxCDF	2.69e4	1.25	NO	1.08	1.000	33.039	33.05	1.000	1.000	54.573	109	0.369	54.6
12	12 1,2,3,6,7,8-HxCDF	3.01e4	1.25	NO	1.14	1.000	33.170	33.17	1.000	1.000	53.986	108	0.346	54.0
13	13 2,3,4,6,7,8-HxCDF	2.72e4	1.26	NO	1.13	1.000	33.775	33.76	1.001	1.001	54.438	109	0.402	54.4
14	14 1,2,3,7,8,9-HxCDF	2.12e4	1.23	NO	1.14	1.000	34.696	34.71	1.000	1.000	50.701	101	0.529	50.7
15	15 1,2,3,4,6,7,8-HpCDF	2.10e4	1.04	NO	1.16	1.000	36.554	36.54	1.001	1.001	52.958	106	0.549	53.0
16	16 1,2,3,4,7,8,9-HpCDF	1.76e4	1.01	NO	1.28	1.000	38.328	38.34	1.000	1.000	52.329	105	0.567	52.3
17	17 OCDF	3.19e4	0.95	NO	1.02	1.000	41.269	41.27	1.000	1.000	97.898	97.9	0.615	97.9
18	18 13C-2,3,7,8-TCDD	5.88e4	0.84	NO	1.13	1.000	26.147	26.05	1.026	1.022	98.581	98.6	1.46	
19	19 13C-1,2,3,7,8-PeCDD	4.06e4	0.61	NO	0.817	1.000	30.633	30.61	1.202	1.201	94.491	94.5	0.526	
20	20 13C-1,2,3,4,7,8-HxCDD	3.29e4	1.31	NO	0.728	1.000	33.902	33.92	1.014	1.014	92.989	93.0	0.694	
21	21 13C-1,2,3,6,7,8-HxCDD	3.90e4	1.31	NO	0.842	1.000	34.013	34.03	1.017	1.018	95.088	95.1	0.600	
22	22 13C-1,2,3,7,8,9-HxCDD	3.64e4	1.32	NO	0.797	1.000	34.283	34.32	1.025	1.027	93.852	93.9	0.633	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.11e4	1.03	NO	0.666	1.000	37.747	37.79	1.129	1.130	95.927	95.9	0.922	
24	24 13C-OCDD	5.53e4	0.87	NO	0.613	1.000	40.770	41.05	1.219	1.228	185.33	92.7	0.777	
25	25 13C-2,3,7,8-TCDF	8.81e4	0.77	NO	1.03	1.000	25.230	25.26	0.990	0.991	94.286	94.3	0.954	
26	26 13C-1,2,3,7,8-PeCDF	6.54e4	1.74	NO	0.804	1.000	29.453	29.42	1.156	1.154	89.704	89.7	0.837	
27	27 13C-2,3,4,7,8-PeCDF	6.38e4	1.64	NO	0.790	1.000	30.352	30.33	1.191	1.190	89.088	89.1	0.852	
28	28 13C-1,2,3,4,7,8-HxCDF	4.54e4	0.52	NO	1.01	1.000	33.033	33.04	0.988	0.988	92.418	92.4	0.858	
29	29 13C-1,2,3,6,7,8-HxCDF	4.89e4	0.50	NO	1.03	1.000	33.167	33.16	0.992	0.992	97.572	97.6	0.841	
30	30 13C-2,3,4,6,7,8-HxCDF	4.42e4	0.50	NO	0.971	1.000	33.738	33.74	1.009	1.009	93.516	93.5	0.892	
31	31 13C-1,2,3,7,8,9-HxCDF	3.68e4	0.50	NO	0.833	1.000	34.638	34.70	1.036	1.038	90.856	90.9	1.04	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:37:49 Pacific Daylight Time

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	3.40e4	0.44	NO	0.784	1.000	36.343	36.52	1.087	1.092	89.183	89.2	0.924	
33	13C-1,2,3,4,7,8,9-HpCDF	2.63e4	0.42	NO	0.592	1.000	38.349	38.33	1.147	1.146	91.148	91.1	1.22	
34	13C-OCDF	6.41e4	0.87	NO	0.703	1.000	40.923	41.27	1.224	1.234	187.38	93.7	0.726	
35	37Cl-2,3,7,8-TCDD	6.00e3			1.31	1.000	26.145	26.08	1.026	1.023	8.6905	86.9	0.115	
36	13C-1,2,3,4-TCDD	5.26e4	0.82	NO	1.00	1.000	25.480	25.48	1.000	1.000	100.00	100	1.66	
37	13C-1,2,3,4-TCDF	9.07e4	0.79	NO	1.00	1.000	24.020	24.02	1.000	1.000	100.00	100	0.982	
38	13C-1,2,3,4,6,9-HxCDF	4.87e4	0.50	NO	1.00	1.000	33.530	33.43	1.000	1.000	100.00	100	0.866	

Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

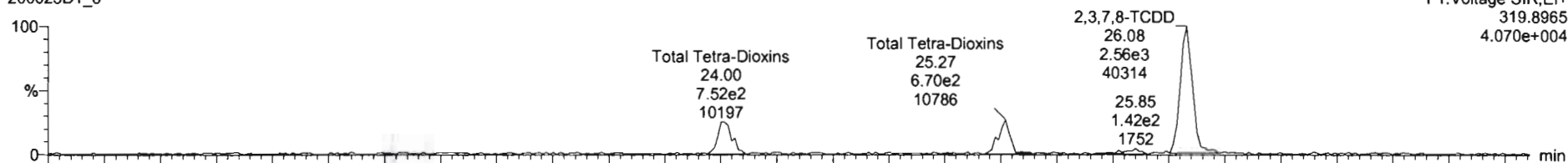
Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613\_rrt.mdb 27 Apr 2020 14:17:24  
Calibration: U:\VG7.PRO\CurveDB\1613vg7-6-23-20.cdb 24 Jun 2020 11:03:19

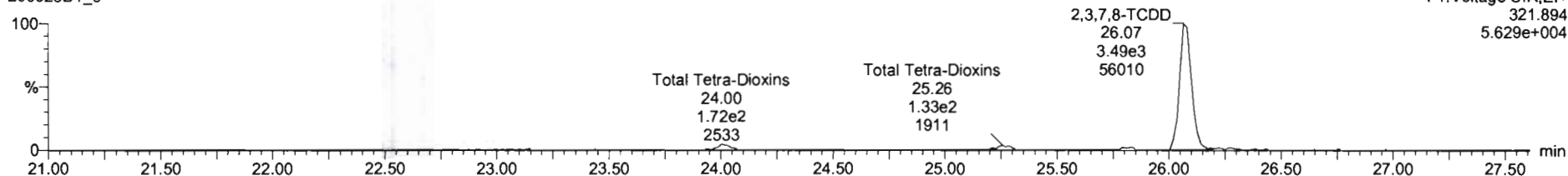
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**2,3,7,8-TCDD**

200623D1\_8

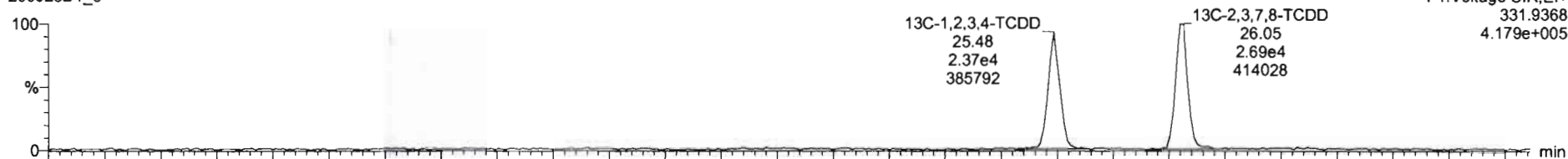


200623D1\_8

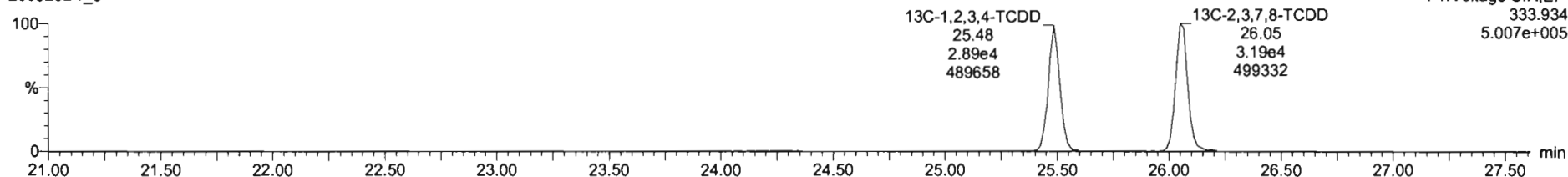


**13C-2,3,7,8-TCDD**

200623D1\_8



200623D1\_8



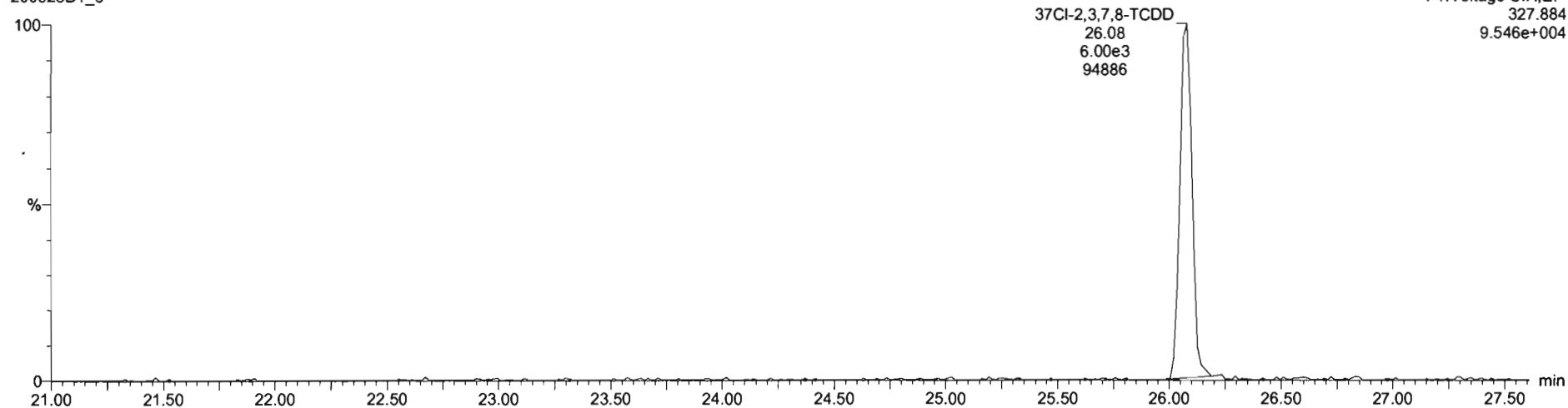
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

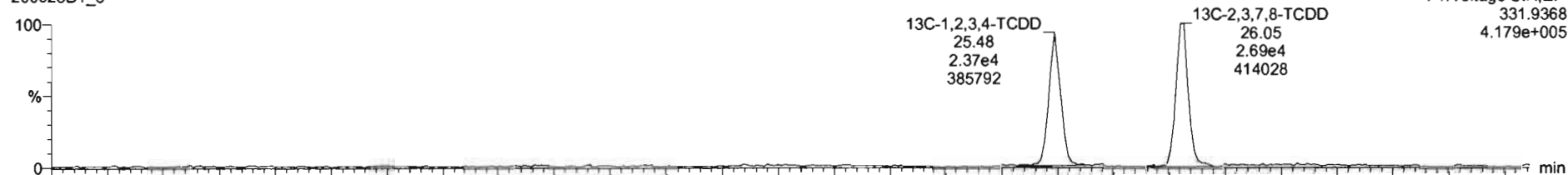
**37Cl-2,3,7,8-TCDD**

200623D1\_8

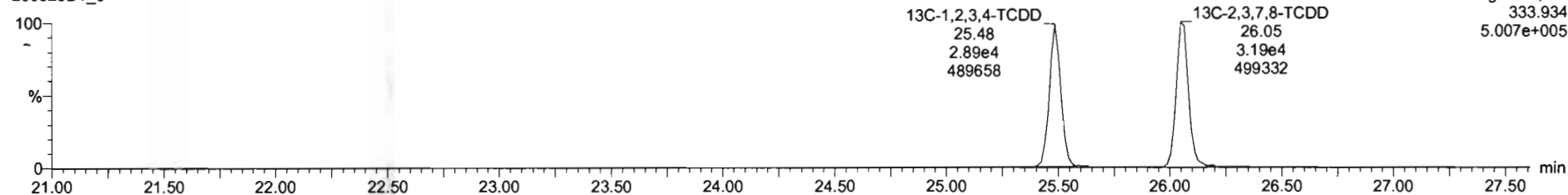


**13C-1,2,3,4-TCDD**

200623D1\_8



200623D1\_8



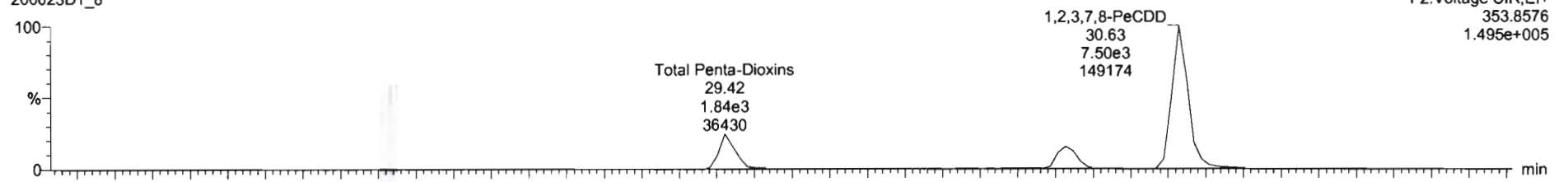
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

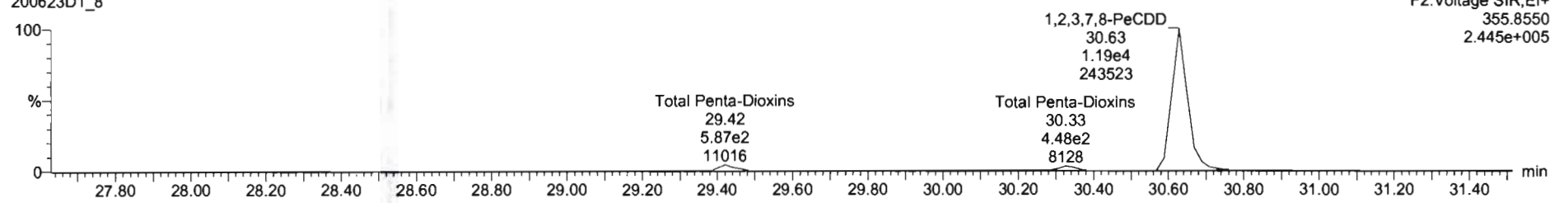
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**1,2,3,7,8-PeCDD**

200623D1\_8

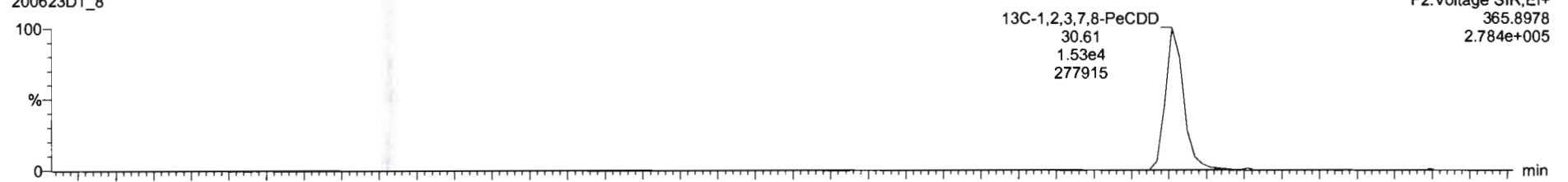


200623D1\_8

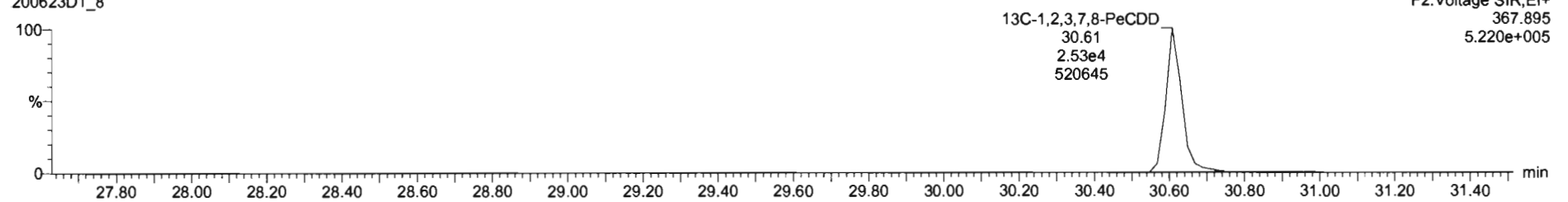


**13C-1,2,3,7,8-PeCDD**

200623D1\_8



200623D1\_8





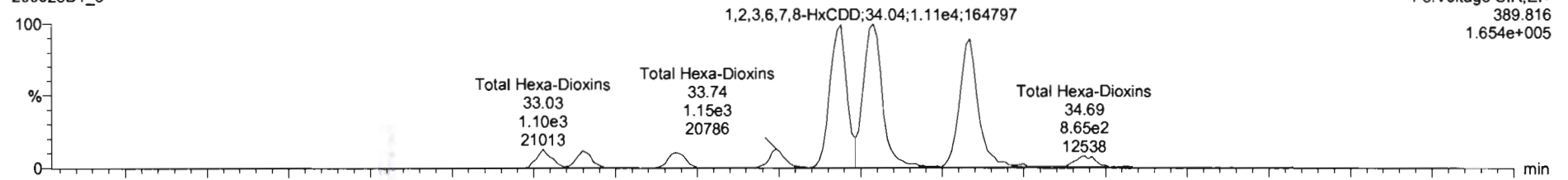
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

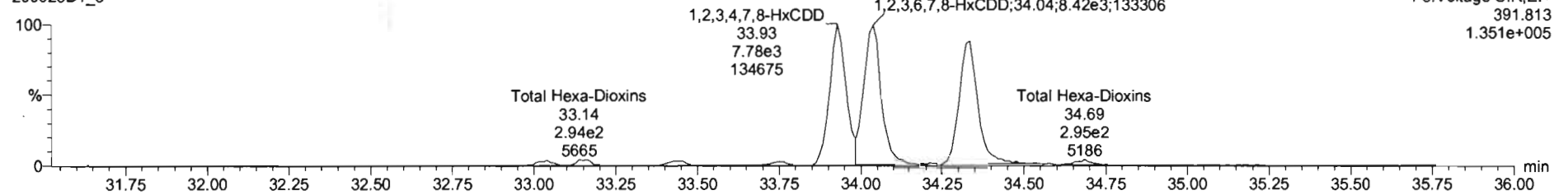
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

1,2,3,4,7,8-HxCDD

200623D1\_8

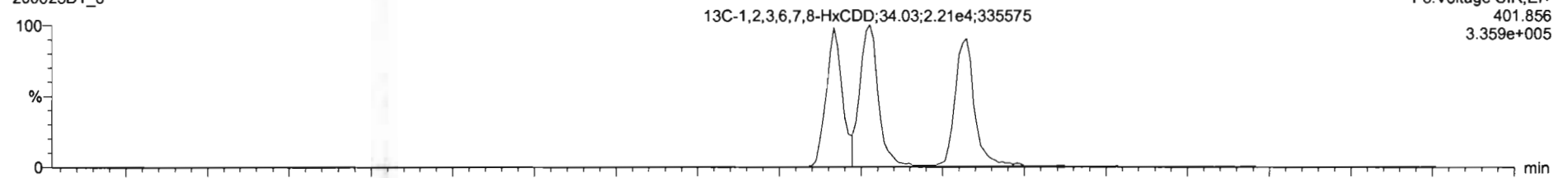


200623D1\_8

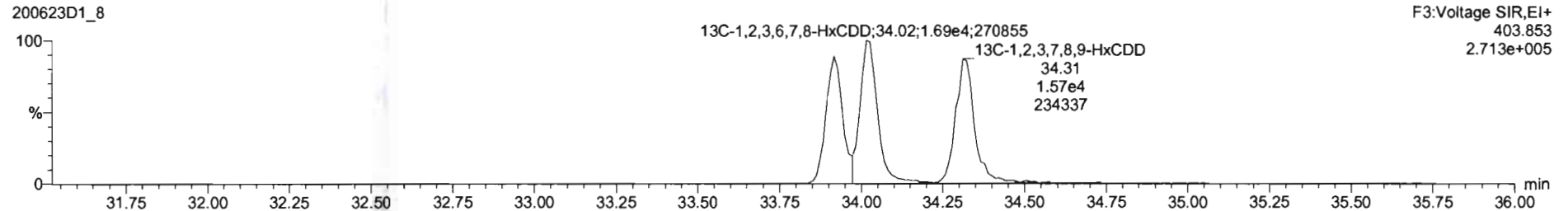


13C-1,2,3,4,7,8-HxCDD

200623D1\_8



200623D1\_8



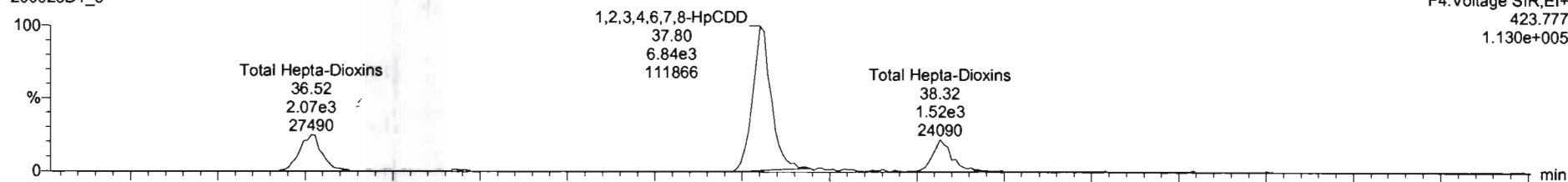
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

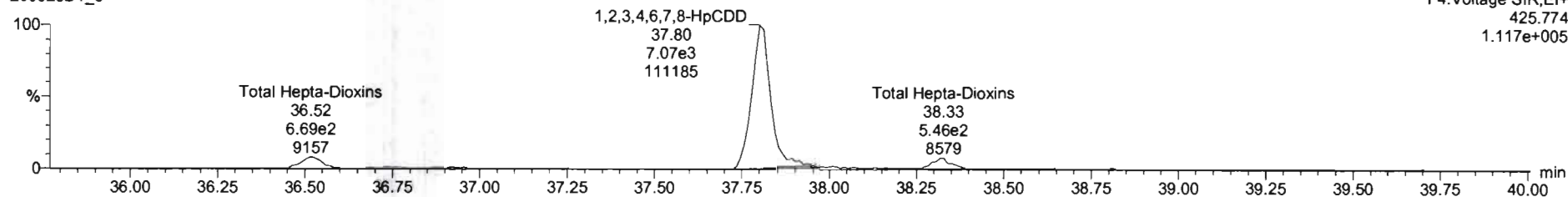
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

1,2,3,4,6,7,8-HpCDD

200623D1\_8

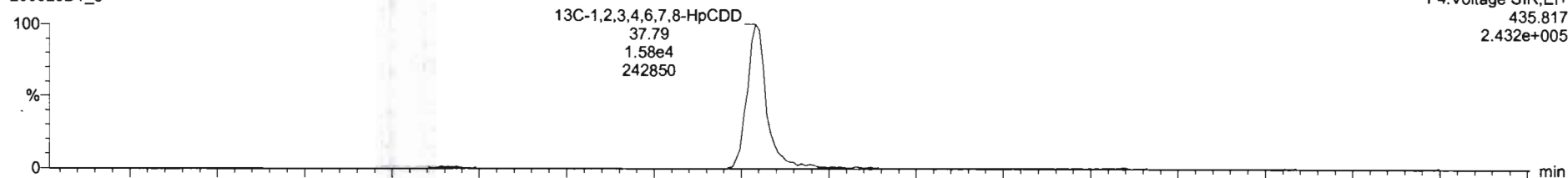


200623D1\_8

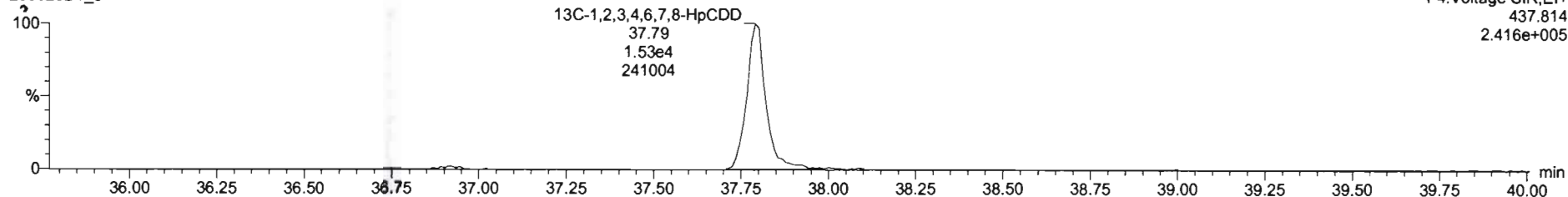


13C-1,2,3,4,6,7,8-HpCDD

200623D1\_8



200623D1\_8



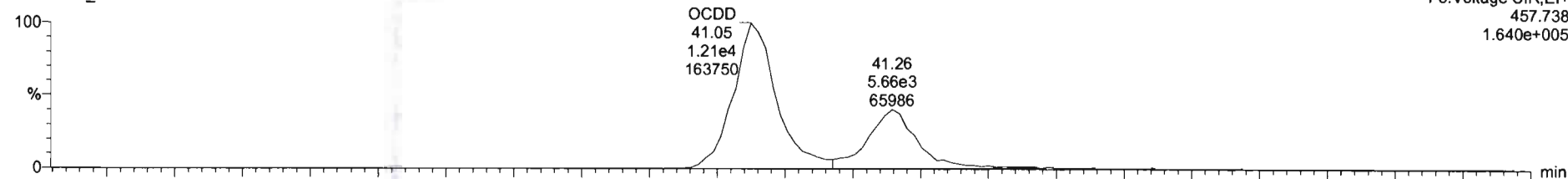
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

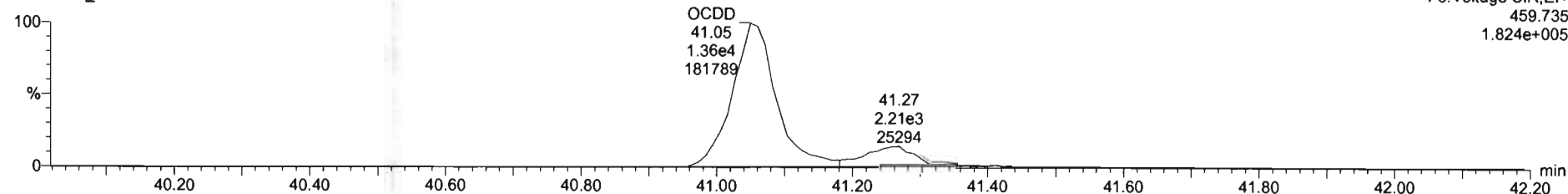
**OCDD**

200623D1\_8



F5:Voltage SIR,EI+  
457.738  
1.640e+005

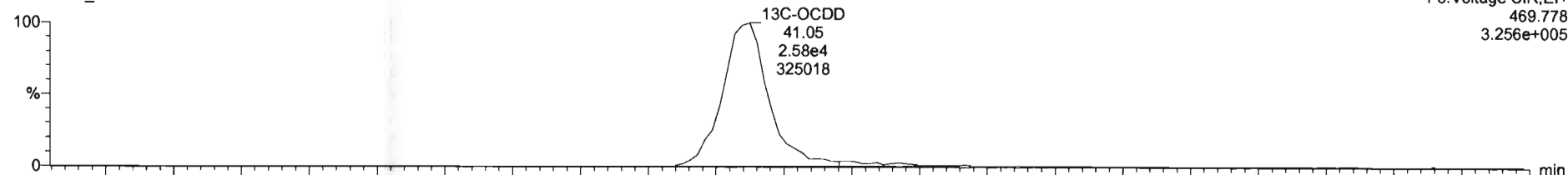
200623D1\_8



F5:Voltage SIR,EI+  
459.735  
1.824e+005

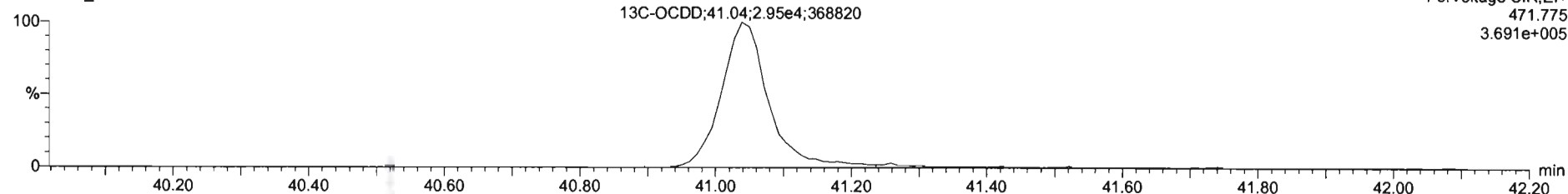
**13C-OCDD**

200623D1\_8



F5:Voltage SIR,EI+  
469.778  
3.256e+005

200623D1\_8



F5:Voltage SIR,EI+  
471.775  
3.691e+005

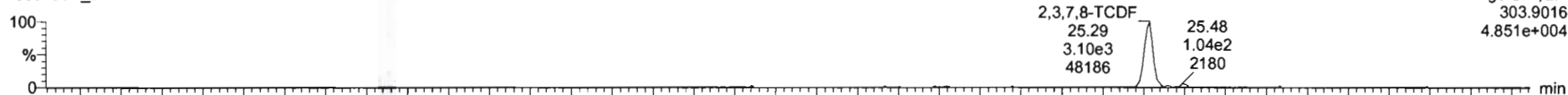
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

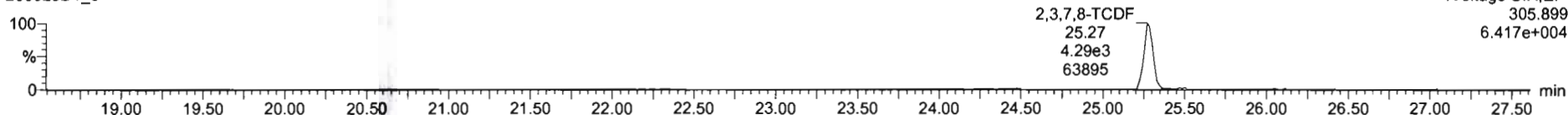
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**2,3,7,8-TCDF**

200623D1\_8

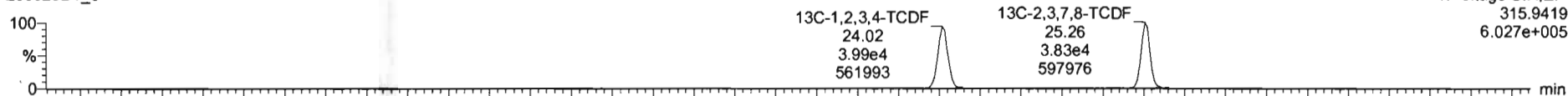


200623D1\_8

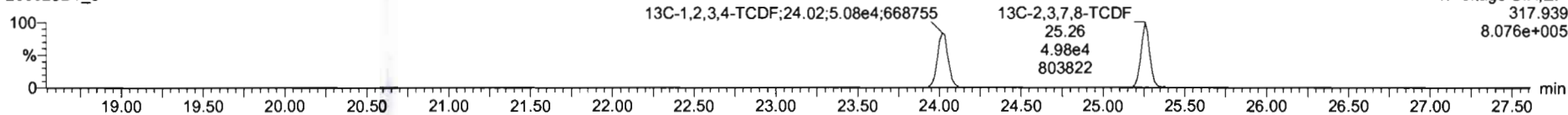


**13C-2,3,7,8-TCDF**

200623D1\_8

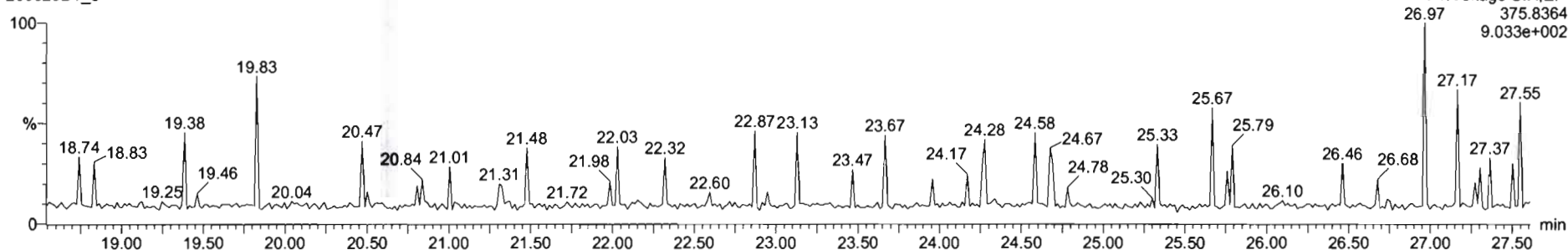


200623D1\_8



**DPE1**

200623D1\_8



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

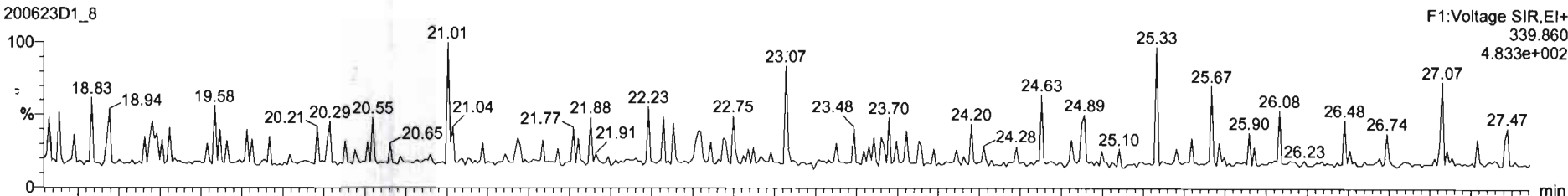
Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time

Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

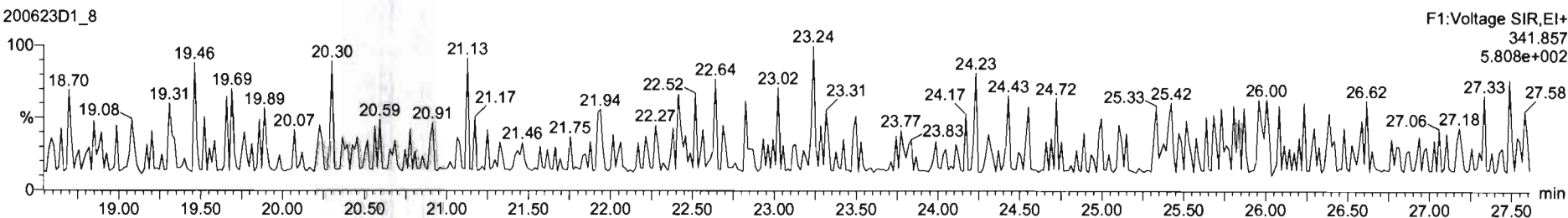
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

1st Func. Penta-Furans

200623D1\_8

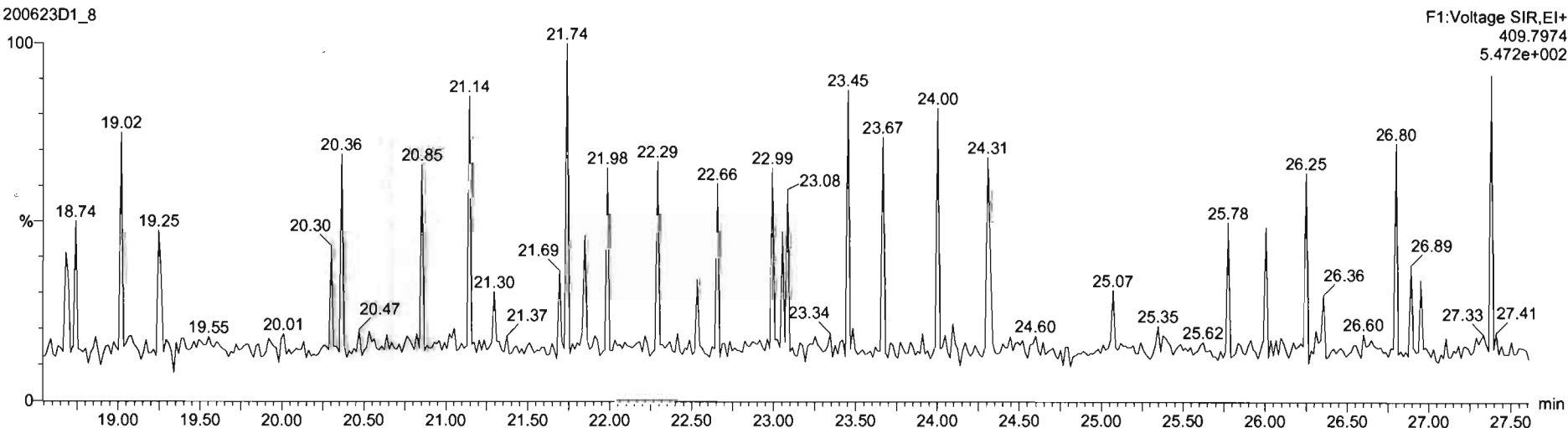


200623D1\_8



DPE6

200623D1\_8



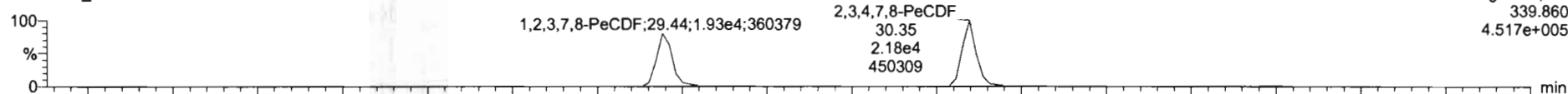
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

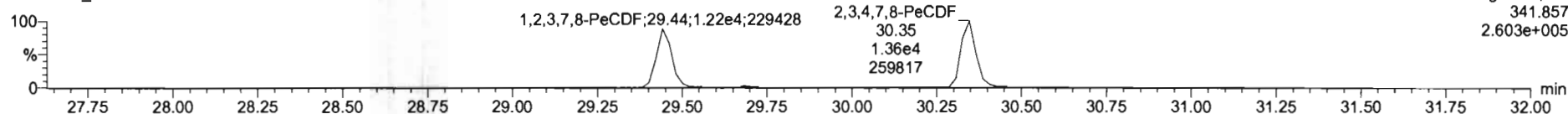
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**1,2,3,7,8-PeCDF**

200623D1\_8

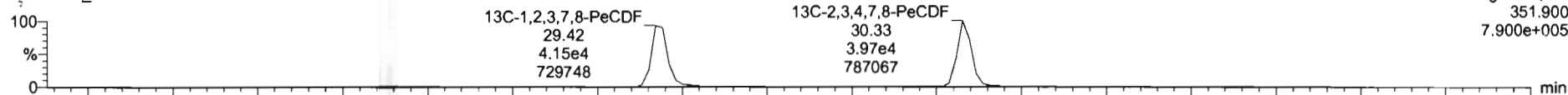


200623D1\_8

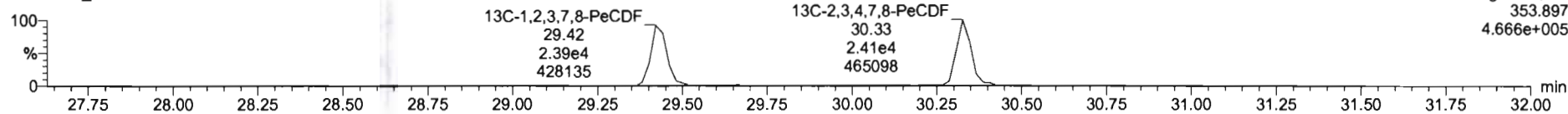


**13C-1,2,3,7,8-PeCDF**

200623D1\_8

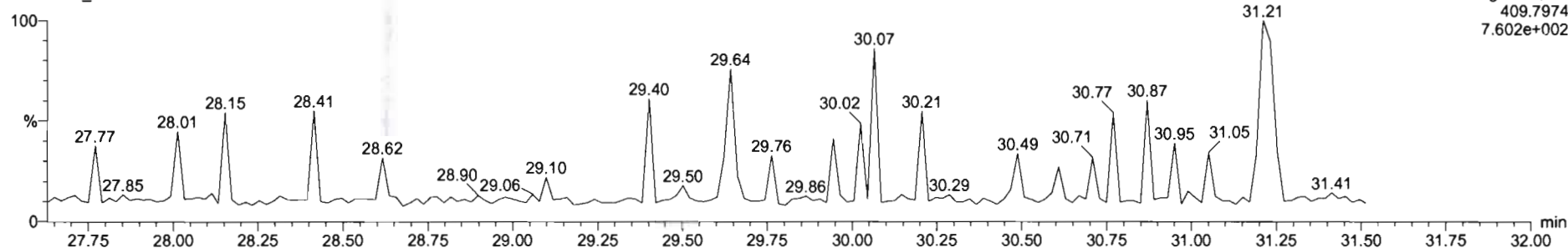


200623D1\_8



**DPE2**

200623D1\_8

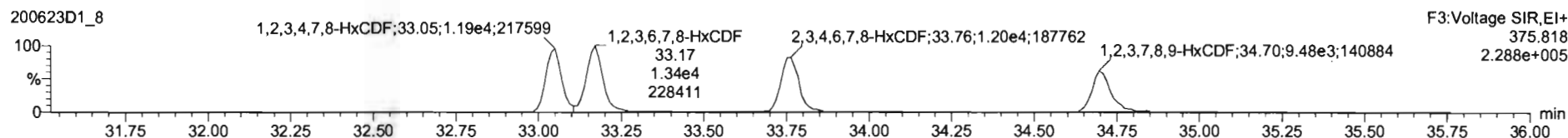
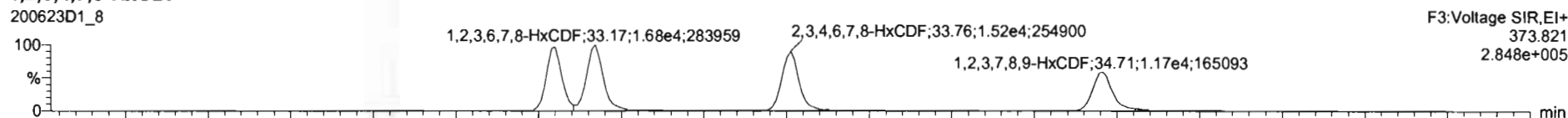


Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

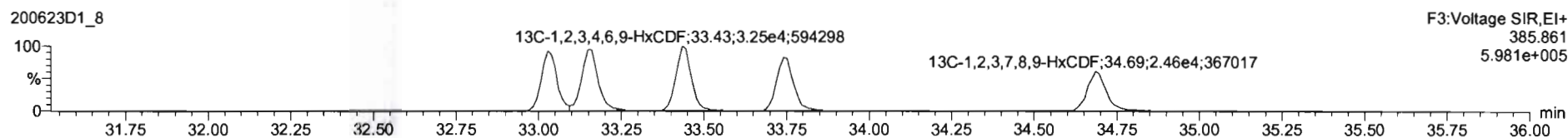
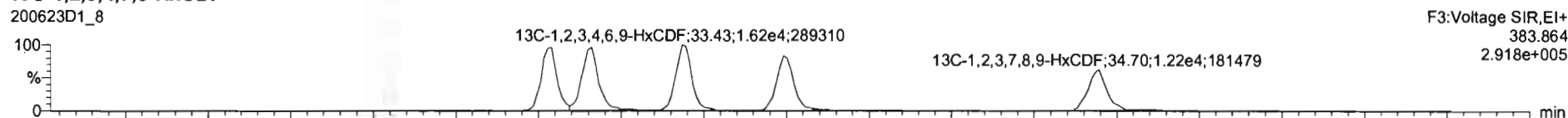
Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

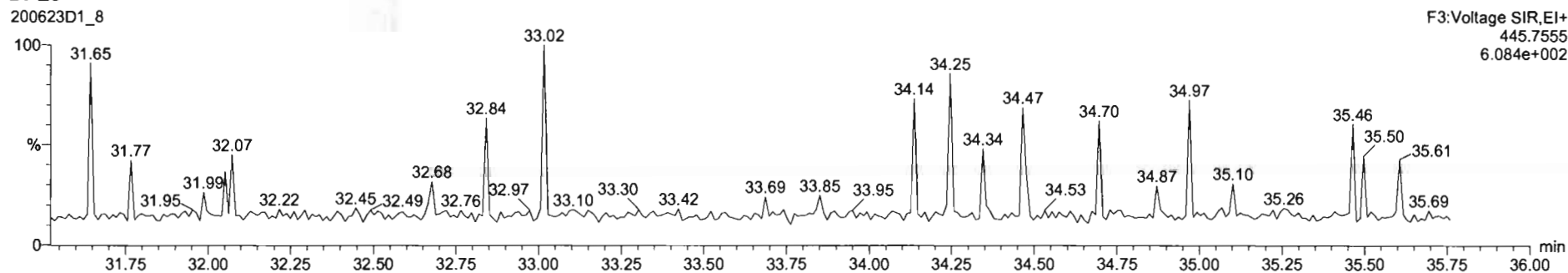
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**



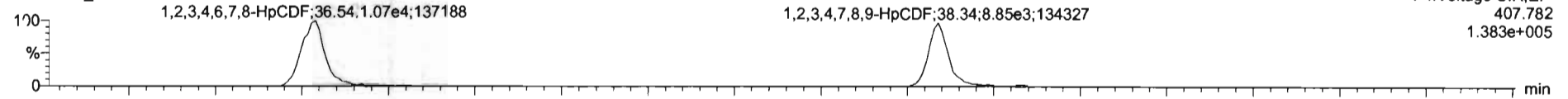
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

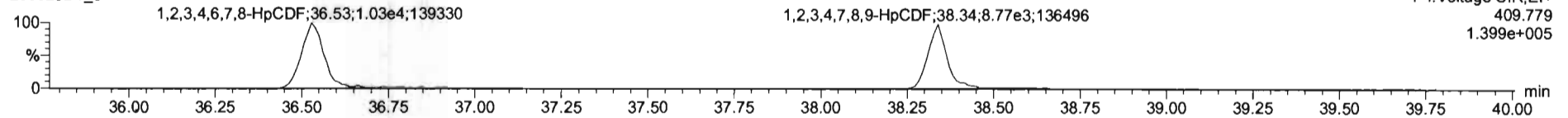
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

1,2,3,4,6,7,8-HpCDF

200623D1\_8

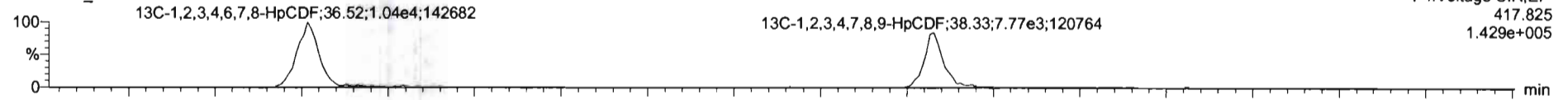


200623D1\_8

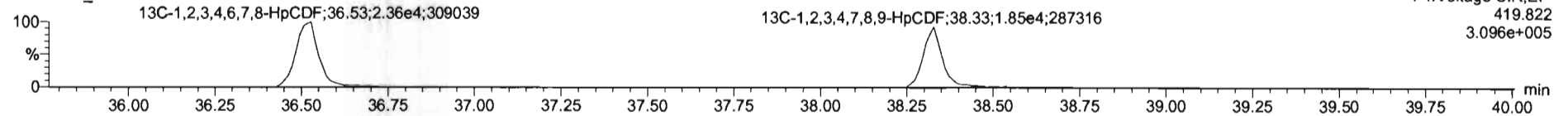


13C-1,2,3,4,6,7,8-HpCDF

200623D1\_8

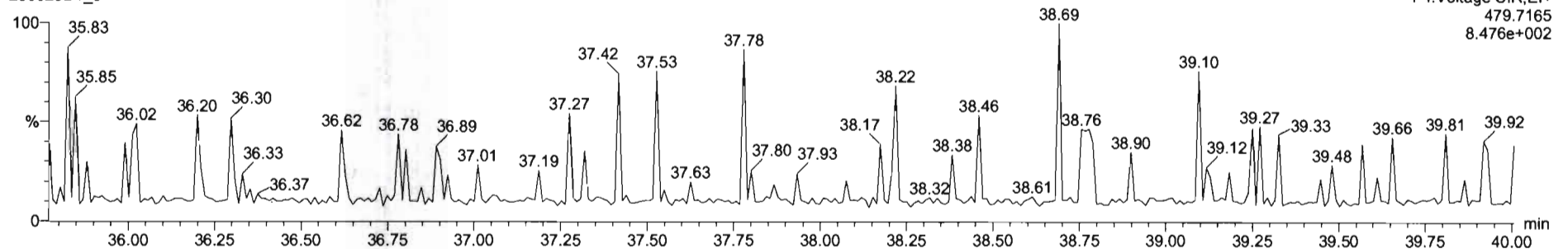


200623D1\_8



DE4

200623D1\_8





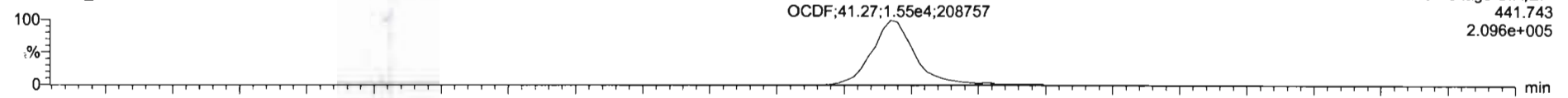
Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

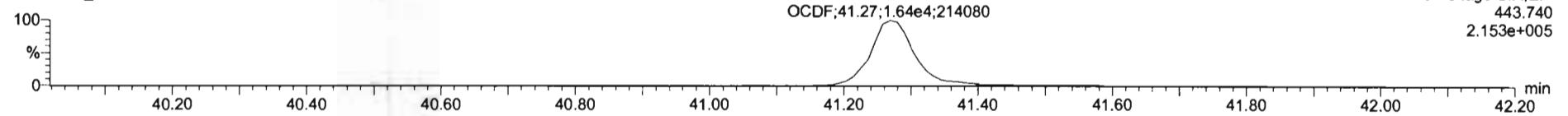
Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**OCDF**

200623D1\_8

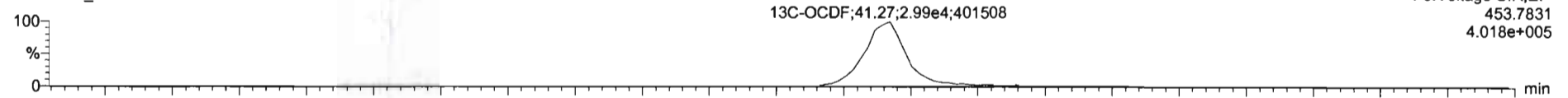


200623D1\_8

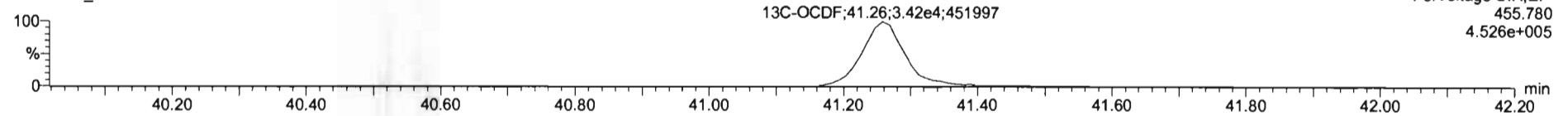


**<sup>13</sup>C-OCDF**

200623D1\_8

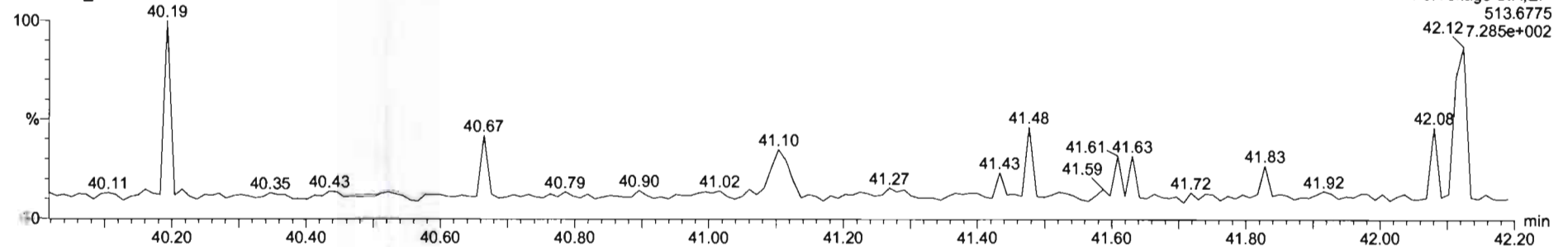


200623D1\_8



**DPE5**

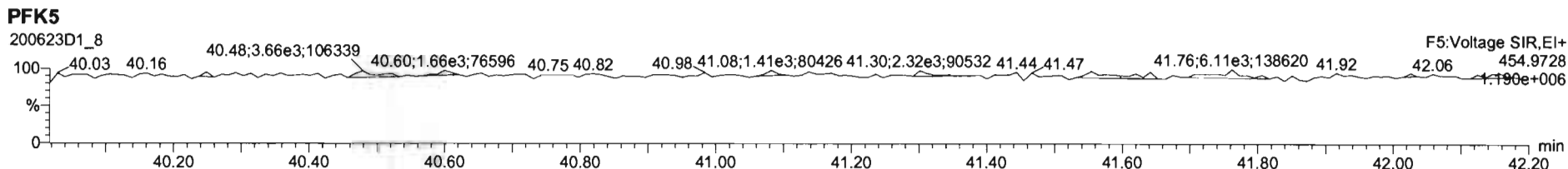
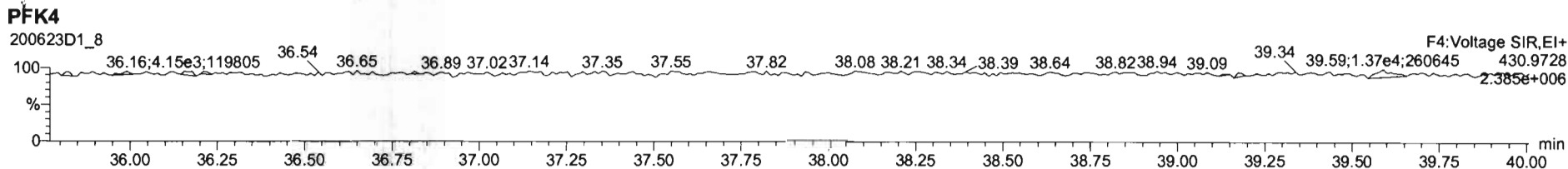
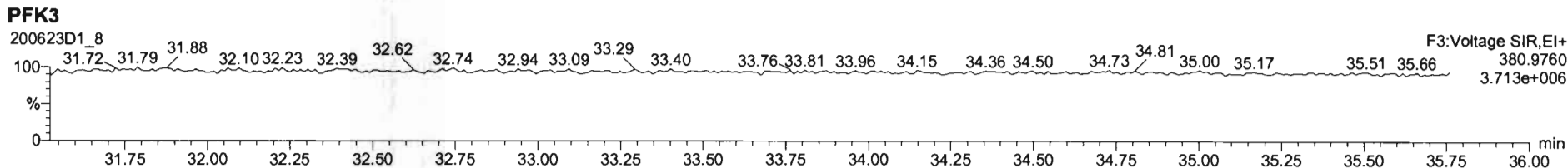
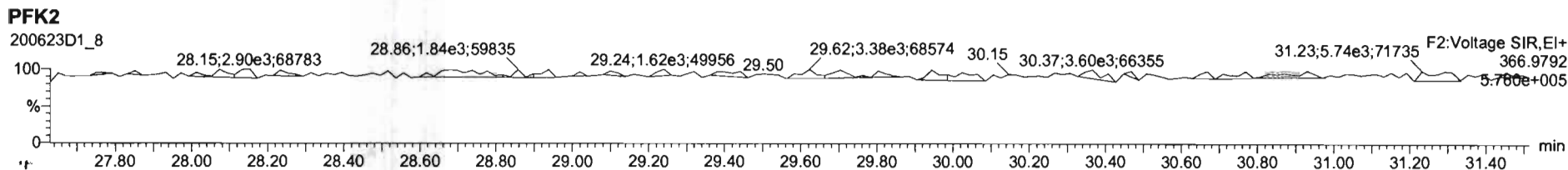
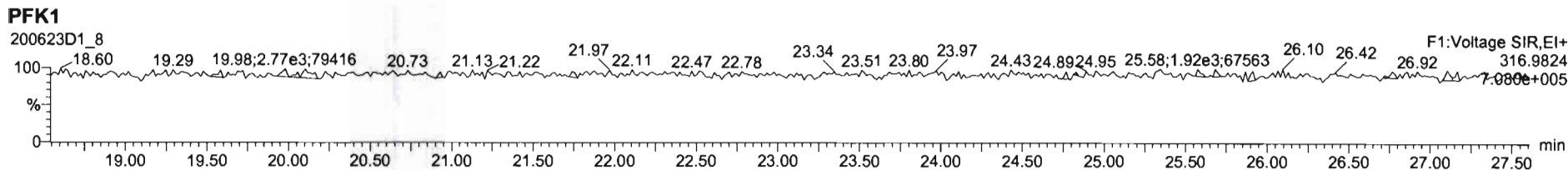
200623D1\_8



Dataset: U:\VG7.PRO\Results\200623D1\200623D1\_8.qld

Last Altered: Wednesday, June 24, 2020 11:36:39 Pacific Daylight Time  
Printed: Wednesday, June 24, 2020 11:38:12 Pacific Daylight Time

Name: 200623D1\_8, Date: 23-Jun-2020, Time: 20:31:24, ID: SS200623D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108



Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

GEB 07/13/2020

Method: U:\VG12.PRO\MethDB\1613rrt-07-10-20.mdb 10 Jul 2020 15:45:25  
Calibration: 13 Jul 2020 13:43:33

C707/14/2020

**Compound name: 2,3,7,8-TCDD**

Response Factor: 0.974136  
RRF SD: 0.0905953, Relative SD: 9.30006  
Response type: Internal Std ( Ref 18 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	0.250	0.86	NO	26.03	1.001	2.50e3	1.12e6	0.229	-8.2	0.894	bb
2	200713R1_3	0.500	0.88	NO	26.04	1.001	5.09e3	1.15e6	0.457	-8.7	0.889	bb
3	200713R1_4	2.00	0.81	NO	26.03	1.001	2.31e4	1.28e6	1.85	-7.5	0.901	bb
4	200713R1_5	10.0	0.78	NO	26.01	1.001	1.19e5	1.17e6	10.4	4.3	1.02	db
5	200713R1_6	40.0	0.79	NO	26.00	1.001	3.37e5	8.05e5	42.9	7.3	1.05	bb
6	200713R1_7	300	0.78	NO	26.01	1.001	3.91e6	1.19e6	338	12.7	1.10	bb

**Compound name: 1,2,3,7,8-PeCDD**

Response Factor: 0.916732  
RRF SD: 0.0615885, Relative SD: 6.71826  
Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	0.64	NO	31.71	1.000	7.90e3	7.59e5	1.14	-9.1	0.833	bb
2	200713R1_3	2.50	0.65	NO	31.72	1.000	1.59e4	7.24e5	2.39	-4.4	0.877	bb
3	200713R1_4	10.0	0.61	NO	31.72	1.000	7.58e4	8.55e5	9.67	-3.3	0.886	bb
4	200713R1_5	50.0	0.61	NO	31.72	1.000	3.68e5	7.78e5	51.5	3.0	0.945	bb
5	200713R1_6	200	0.62	NO	31.72	1.000	1.06e6	5.53e5	210	4.9	0.962	bb
6	200713R1_7	1500	0.62	NO	31.74	1.000	1.39e7	9.27e5	1630	8.9	0.998	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 1,2,3,4,7,8-HxCDD**

Response Factor: 1.04179

RRF SD: 0.0947197, Relative SD: 9.09198

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.19	NO	35.24	1.000	6.06e3	5.29e5	1.10	-12.1	0.916	bd
2	200713R1_3	2.50	1.22	NO	35.24	1.000	1.26e4	5.22e5	2.31	-7.5	0.964	bd
3	200713R1_4	10.0	1.24	NO	35.24	1.000	6.21e4	6.15e5	9.69	-3.1	1.01	bd
4	200713R1_5	50.0	1.24	NO	35.23	1.000	3.15e5	5.84e5	51.7	3.4	1.08	bd
5	200713R1_6	200	1.24	NO	35.24	1.000	9.40e5	4.17e5	216	8.2	1.13	bd
6	200713R1_7	1500	1.24	NO	35.26	1.000	1.27e7	7.30e5	1670	11.0	1.16	bd

**Compound name: 1,2,3,6,7,8-HxCDD**

Response Factor: 0.938046

RRF SD: 0.0680174, Relative SD: 7.25097

Response type: Internal Std ( Ref 21 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.23	NO	35.34	1.001	7.38e3	6.88e5	1.14	-8.6	0.857	db
2	200713R1_3	2.50	1.27	NO	35.34	1.000	1.43e4	6.54e5	2.34	-6.5	0.877	db
3	200713R1_4	10.0	1.24	NO	35.34	1.000	6.96e4	7.65e5	9.70	-3.0	0.910	db
4	200713R1_5	50.0	1.24	NO	35.33	1.000	3.39e5	7.01e5	51.5	3.0	0.967	db
5	200713R1_6	200	1.25	NO	35.34	1.000	1.02e6	5.16e5	210	4.9	0.984	db
6	200713R1_7	1500	1.24	NO	35.35	1.000	1.39e7	8.99e5	1650	10.2	1.03	db

**Compound name: 1,2,3,7,8,9-HxCDD**

Response Factor: 0.963646

RRF SD: 0.0739266, Relative SD: 7.67155

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.25	NO	35.59	1.000	6.96e3	6.35e5	1.14	-9.0	0.877	bb
2	200713R1_3	2.50	1.19	NO	35.61	1.001	1.28e4	5.79e5	2.29	-8.4	0.882	MM

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 1,2,3,7,8,9-HxCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	10.0	1.24	NO	35.60	1.000	6.52e4	6.77e5	10.0	0.0	0.964	bb
4	200713R1_5	50.0	1.26	NO	35.60	1.001	3.10e5	6.35e5	50.7	1.4	0.977	bb
5	200713R1_6	200	1.24	NO	35.60	1.000	9.55e5	4.69e5	211	5.6	1.02	bb
6	200713R1_7	1500	1.24	NO	35.61	1.000	1.30e7	8.15e5	1660	10.5	1.06	bb

**Compound name: 1,2,3,4,6,7,8-HpCDD**

Response Factor: 0.901959  
 RRF SD: 0.0794352, Relative SD: 8.80696  
 Response type: Internal Std ( Ref 23 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.01	NO	38.94	1.000	5.29e3	5.08e5	1.15	-7.6	0.833	bb
2	200713R1_3	2.50	1.04	NO	38.97	1.000	9.87e3	4.85e5	2.26	-9.7	0.815	bb
3	200713R1_4	10.0	1.05	NO	38.97	1.000	4.80e4	5.62e5	9.47	-5.3	0.854	bd
4	200713R1_5	50.0	1.01	NO	38.96	1.000	2.57e5	5.44e5	52.3	4.6	0.943	bb
5	200713R1_6	200	1.02	NO	38.97	1.000	7.48e5	3.93e5	211	5.4	0.951	bb
6	200713R1_7	1500	1.03	NO	38.97	1.000	1.09e7	7.16e5	1690	12.6	1.02	bb

**Compound name: OCDD**

Response Factor: 0.905302  
 RRF SD: 0.0589165, Relative SD: 6.50794  
 Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	2.50	0.89	NO	42.14	1.000	8.51e3	7.93e5	2.37	-5.2	0.858	MM
2	200713R1_3	5.00	0.95	NO	42.15	1.000	1.62e4	7.76e5	4.60	-8.0	0.833	bd
3	200713R1_4	20.0	0.85	NO	42.16	1.000	8.13e4	9.29e5	19.3	-3.3	0.876	bd
4	200713R1_5	100	0.88	NO	42.14	1.000	4.33e5	9.36e5	102	2.3	0.926	bb
5	200713R1_6	400	0.88	NO	42.15	1.000	1.23e6	6.44e5	423	5.7	0.957	bb
6	200713R1_7	3000	0.89	NO	42.17	1.000	1.97e7	1.34e6	3250	8.5	0.982	MM

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 2,3,7,8-TCDF**

Response Factor: 0.857843  
 RRF SD: 0.0608625, Relative SD: 7.09483  
 Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	0.250	0.75	NO	24.92	1.001	3.23e3	1.55e6	0.243	-2.8	0.833	bb
2	200713R1_3	0.500	0.76	NO	24.94	1.002	6.27e3	1.57e6	0.465	-6.9	0.799	bb
3	200713R1_4	2.00	0.75	NO	24.94	1.002	2.75e4	1.73e6	1.85	-7.5	0.794	bb
4	200713R1_5	10.0	0.74	NO	24.89	1.001	1.39e5	1.59e6	10.2	1.6	0.871	bb
5	200713R1_6	40.0	0.74	NO	24.88	1.001	3.93e5	1.09e6	42.0	5.0	0.901	bb
6	200713R1_7	300	0.76	NO	24.91	1.001	4.50e6	1.58e6	332	10.6	0.949	bb

**Compound name: 1,2,3,7,8-PeCDF**

Response Factor: 0.968005  
 RRF SD: 0.0833887, Relative SD: 8.61449  
 Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.55	NO	30.29	1.000	1.19e4	1.12e6	1.10	-12.1	0.850	bb
2	200713R1_3	2.50	1.69	NO	30.29	1.000	2.45e4	1.10e6	2.30	-8.0	0.891	bb
3	200713R1_4	10.0	1.54	NO	30.30	1.000	1.22e5	1.27e6	9.90	-1.0	0.958	bb
4	200713R1_5	50.0	1.57	NO	30.29	1.000	5.96e5	1.17e6	52.6	5.3	1.02	bb
5	200713R1_6	200	1.56	NO	30.29	1.000	1.66e6	8.06e5	213	6.3	1.03	bb
6	200713R1_7	1500	1.55	NO	30.30	1.000	2.11e7	1.33e6	1640	9.6	1.06	bb

**Compound name: 2,3,4,7,8-PeCDF**

Response Factor: 1.07702  
 RRF SD: 0.0747893, Relative SD: 6.94411  
 Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.62	NO	31.39	1.000	1.34e4	1.08e6	1.15	-8.1	0.990	bb
2	200713R1_3	2.50	1.64	NO	31.39	1.000	2.65e4	1.07e6	2.30	-7.8	0.993	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 2,3,4,7,8-PeCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	10.0	1.59	NO	31.40	1.000	1.30e5	1.22e6	9.90	-1.0	1.07	bb
4	200713R1_5	50.0	1.55	NO	31.39	1.000	6.15e5	1.12e6	51.2	2.4	1.10	bb
5	200713R1_6	200	1.55	NO	31.39	1.000	1.75e6	7.63e5	213	6.3	1.14	bb
6	200713R1_7	1500	1.53	NO	31.40	1.000	2.25e7	1.29e6	1620	8.3	1.17	bb

**Compound name: 1,2,3,4,7,8-HxCDF**

Response Factor: 0.967692  
 RRF SD: 0.0795444, Relative SD: 8.22001  
 Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.23	NO	34.36	1.000	8.48e3	7.64e5	1.15	-8.3	0.888	bd
2	200713R1_3	2.50	1.21	NO	34.37	1.000	1.58e4	7.24e5	2.26	-9.6	0.875	bd
3	200713R1_4	10.0	1.22	NO	34.38	1.001	8.08e4	8.66e5	9.64	-3.6	0.933	bd
4	200713R1_5	50.0	1.22	NO	34.37	1.001	3.95e5	7.82e5	52.2	4.5	1.01	bd
5	200713R1_6	200	1.21	NO	34.38	1.001	1.15e6	5.51e5	216	8.1	1.05	bd
6	200713R1_7	1500	1.20	NO	34.38	1.000	1.53e7	9.68e5	1630	8.9	1.05	bd

**Compound name: 1,2,3,6,7,8-HxCDF**

Response Factor: 1.00228  
 RRF SD: 0.0836023, Relative SD: 8.3412  
 Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.22	NO	34.48	1.000	9.31e3	8.36e5	1.11	-11.1	0.891	db
2	200713R1_3	2.50	1.25	NO	34.49	1.000	1.80e4	7.83e5	2.29	-8.3	0.919	MM
3	200713R1_4	10.0	1.27	NO	34.49	1.000	9.09e4	9.17e5	9.88	-1.2	0.990	db
4	200713R1_5	50.0	1.20	NO	34.49	1.001	4.40e5	8.41e5	52.2	4.4	1.05	db
5	200713R1_6	200	1.21	NO	34.50	1.000	1.28e6	5.98e5	213	6.4	1.07	db
6	200713R1_7	1500	1.21	NO	34.50	1.000	1.71e7	1.04e6	1650	9.7	1.10	db

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 2,3,4,6,7,8-HxCDF**

Response Factor: 0.997087

RRF SD: 0.0823927, Relative SD: 8.26334

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.19	NO	35.06	1.001	8.39e3	7.47e5	1.13	-9.9	0.898	bb
2	200713R1_3	2.50	1.17	NO	35.08	1.000	1.65e4	7.22e5	2.29	-8.6	0.912	bb
3	200713R1_4	10.0	1.21	NO	35.08	1.000	8.14e4	8.41e5	9.71	-2.9	0.968	bb
4	200713R1_5	50.0	1.21	NO	35.06	1.000	4.12e5	7.86e5	52.6	5.1	1.05	bb
5	200713R1_6	200	1.20	NO	35.08	1.000	1.21e6	5.65e5	215	7.6	1.07	bb
6	200713R1_7	1500	1.20	NO	35.08	1.001	1.57e7	9.66e5	1630	8.7	1.08	bb

**Compound name: 1,2,3,7,8,9-HxCDF**

Response Factor: 0.961409

RRF SD: 0.0852702, Relative SD: 8.8693

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	1.18	NO	35.90	1.000	6.88e3	6.25e5	1.15	-8.4	0.881	bb
2	200713R1_3	2.50	1.25	NO	35.92	1.000	1.27e4	5.90e5	2.24	-10.5	0.861	bb
3	200713R1_4	10.0	1.23	NO	35.92	1.000	6.42e4	6.95e5	9.61	-3.9	0.924	MM
4	200713R1_5	50.0	1.23	NO	35.90	1.000	3.27e5	6.49e5	52.4	4.9	1.01	bb
5	200713R1_6	200	1.21	NO	35.92	1.000	9.69e5	4.74e5	213	6.3	1.02	bb
6	200713R1_7	1500	1.21	NO	35.93	1.000	1.34e7	8.34e5	1670	11.6	1.07	bb

**Compound name: 1,2,3,4,6,7,8-HpCDF**

Response Factor: 1.0025

RRF SD: 0.0848965, Relative SD: 8.46848

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	0.96	NO	37.58	1.000	6.29e3	5.44e5	1.15	-7.8	0.925	bb
2	200713R1_3	2.50	1.01	NO	37.59	1.000	1.20e4	5.25e5	2.28	-8.9	0.913	bb



Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 1,2,3,4,6,7,8-HpCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	10.0	1.01	NO	37.59	1.000	5.76e4	6.07e5	9.46	-5.4	0.948	bb
4	200713R1_5	50.0	1.00	NO	37.59	1.000	3.04e5	5.84e5	51.9	3.8	1.04	bb
5	200713R1_6	200	1.00	NO	37.60	1.001	9.05e5	4.21e5	214	7.2	1.08	bb
6	200713R1_7	1500	1.00	NO	37.61	1.001	1.23e7	7.35e5	1670	11.1	1.11	bb

**Compound name: 1,2,3,4,7,8,9-HpCDF**

Response Factor: 1.10844

RRF SD: 0.100904, Relative SD: 9.10324

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	1.25	0.97	NO	39.60	1.000	4.72e3	3.81e5	1.12	-10.6	0.991	bb
2	200713R1_3	2.50	1.07	NO	39.62	1.000	9.00e3	3.55e5	2.29	-8.5	1.01	bb
3	200713R1_4	10.0	0.98	NO	39.61	1.000	4.42e4	4.20e5	9.51	-4.9	1.05	bb
4	200713R1_5	50.0	1.03	NO	39.61	1.000	2.38e5	4.07e5	52.7	5.4	1.17	bd
5	200713R1_6	200	1.00	NO	39.62	1.000	7.08e5	2.93e5	218	9.0	1.21	bb
6	200713R1_7	1500	0.99	NO	39.63	1.000	1.03e7	5.62e5	1650	9.7	1.22	bb

**Compound name: OCDF**

Response Factor: 0.895734

RRF SD: 0.070334, Relative SD: 7.85211

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	2.50	0.85	NO	42.30	1.000	9.66e3	9.53e5	2.26	-9.5	0.811	MM
2	200713R1_3	5.00	0.87	NO	42.31	1.000	1.89e4	9.17e5	4.60	-7.9	0.825	bb
3	200713R1_4	20.0	0.88	NO	42.31	1.000	9.60e4	1.10e6	19.5	-2.3	0.875	bd
4	200713R1_5	100	0.88	NO	42.30	1.000	5.10e5	1.10e6	103	3.4	0.926	bb
5	200713R1_6	400	0.89	NO	42.32	1.000	1.49e6	7.82e5	426	6.4	0.953	bb
6	200713R1_7	3000	0.89	NO	42.33	1.000	2.31e7	1.57e6	3300	9.9	0.984	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-2,3,7,8-TCDD**

Response Factor: 1.10394

RRF SD: 0.0371484, Relative SD: 3.36506

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.79	NO	26.01	1.032	1.12e6	1.07e6	94.4	-5.6	1.04	bb
2	200713R1_3	100	0.77	NO	26.01	1.032	1.15e6	1.03e6	101	0.6	1.11	bb
3	200713R1_4	100	0.80	NO	26.00	1.032	1.28e6	1.16e6	99.9	-0.1	1.10	bd
4	200713R1_5	100	0.79	NO	25.98	1.032	1.17e6	1.07e6	99.0	-1.0	1.09	bb
5	200713R1_6	100	0.77	NO	25.97	1.033	8.05e5	7.19e5	101	1.4	1.12	bb
6	200713R1_7	100	0.76	NO	25.98	1.032	1.19e6	1.03e6	105	4.7	1.16	bb

**Compound name: 13C-1,2,3,7,8-PeCDD**

Response Factor: 0.757498

RRF SD: 0.0748891, Relative SD: 9.88638

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.64	NO	31.71	1.258	7.59e5	1.07e6	93.3	-6.7	0.707	bb
2	200713R1_3	100	0.62	NO	31.71	1.258	7.24e5	1.03e6	92.6	-7.4	0.702	bb
3	200713R1_4	100	0.63	NO	31.71	1.259	8.55e5	1.16e6	97.2	-2.8	0.736	bb
4	200713R1_5	100	0.63	NO	31.71	1.260	7.78e5	1.07e6	96.2	-3.8	0.729	bb
5	200713R1_6	100	0.63	NO	31.71	1.261	5.53e5	7.19e5	102	1.5	0.769	bb
6	200713R1_7	100	0.64	NO	31.72	1.260	9.27e5	1.03e6	119	19.1	0.902	bb

**Compound name: 13C-1,2,3,4,7,8-HxCDD**

Response Factor: 0.647112

RRF SD: 0.0404624, Relative SD: 6.25277

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.28	NO	35.22	1.014	5.29e5	8.68e5	94.2	-5.8	0.609	bd
2	200713R1_3	100	1.26	NO	35.24	1.014	5.22e5	8.25e5	97.7	-2.3	0.633	bd

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8-HxCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	100	1.27	NO	35.24	1.014	6.15e5	9.59e5	99.1	-0.9	0.642	bd
4	200713R1_5	100	1.28	NO	35.22	1.014	5.84e5	9.28e5	97.4	-2.6	0.630	bd
5	200713R1_6	100	1.30	NO	35.24	1.014	4.17e5	6.48e5	99.4	-0.6	0.643	bd
6	200713R1_7	100	1.29	NO	35.24	1.014	7.30e5	1.01e6	112	12.2	0.726	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDD**

Response Factor: 0.805045  
 RRF SD: 0.0461451, Relative SD: 5.732  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.27	NO	35.32	1.016	6.88e5	8.68e5	98.5	-1.5	0.793	db
2	200713R1_3	100	1.27	NO	35.33	1.016	6.54e5	8.25e5	98.6	-1.4	0.794	db
3	200713R1_4	100	1.26	NO	35.33	1.016	7.65e5	9.59e5	99.1	-0.9	0.798	db
4	200713R1_5	100	1.26	NO	35.32	1.017	7.01e5	9.28e5	93.9	-6.1	0.756	db
5	200713R1_6	100	1.19	NO	35.33	1.016	5.16e5	6.48e5	98.9	-1.1	0.796	db
6	200713R1_7	100	1.27	NO	35.34	1.017	8.99e5	1.01e6	111	11.0	0.894	db

**Compound name: 13C-1,2,3,7,8,9-HxCDD**

Response Factor: 0.72634  
 RRF SD: 0.0445276, Relative SD: 6.1304  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.26	NO	35.58	1.024	6.35e5	8.68e5	101	0.7	0.731	bb
2	200713R1_3	100	1.25	NO	35.59	1.024	5.79e5	8.25e5	96.6	-3.4	0.702	bb
3	200713R1_4	100	1.24	NO	35.59	1.024	6.77e5	9.59e5	97.2	-2.8	0.706	bb
4	200713R1_5	100	1.27	NO	35.58	1.024	6.35e5	9.28e5	94.2	-5.8	0.684	bb
5	200713R1_6	100	1.25	NO	35.59	1.024	4.69e5	6.48e5	99.7	-0.3	0.724	bb
6	200713R1_7	100	1.27	NO	35.60	1.024	8.15e5	1.01e6	112	11.6	0.811	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-1,2,3,4,6,7,8-HpCDD**

Response Factor: 0.610782  
 RRF SD: 0.0501225, Relative SD: 8.20627  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.03	NO	38.93	1.120	5.08e5	8.68e5	95.8	-4.2	0.585	bb
2	200713R1_3	100	1.06	NO	38.95	1.121	4.85e5	8.25e5	96.2	-3.8	0.588	bd
3	200713R1_4	100	1.11	NO	38.96	1.121	5.62e5	9.59e5	96.0	-4.0	0.586	bd
4	200713R1_5	100	1.06	NO	38.94	1.121	5.44e5	9.28e5	96.1	-3.9	0.587	bb
5	200713R1_6	100	1.05	NO	38.95	1.121	3.93e5	6.48e5	99.3	-0.7	0.607	bd
6	200713R1_7	100	1.05	NO	38.96	1.121	7.16e5	1.01e6	117	16.5	0.712	bb

**Compound name: 13C-OCDD**

Response Factor: 0.512822  
 RRF SD: 0.0760455, Relative SD: 14.8288  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	200	0.88	NO	42.13	1.212	7.93e5	8.68e5	178	-10.9	0.457	bb
2	200713R1_3	200	0.94	NO	42.14	1.212	7.76e5	8.25e5	184	-8.2	0.471	MM
3	200713R1_4	200	0.89	NO	42.14	1.212	9.29e5	9.59e5	189	-5.5	0.484	bb
4	200713R1_5	200	0.92	NO	42.13	1.212	9.36e5	9.28e5	197	-1.6	0.504	MM
5	200713R1_6	200	0.86	NO	42.14	1.212	6.44e5	6.48e5	194	-3.2	0.497	bb
6	200713R1_7	200	0.89	NO	42.16	1.213	1.34e6	1.01e6	259	29.5	0.664	MM

**Compound name: 13C-2,3,7,8-TCDF**

Response Factor: 0.933224  
 RRF SD: 0.01796, Relative SD: 1.92451  
 Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.78	NO	24.89	0.988	1.55e6	1.70e6	97.8	-2.2	0.912	bb
2	200713R1_3	100	0.78	NO	24.89	0.988	1.57e6	1.68e6	100	-0.0	0.933	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-2,3,7,8-TCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	100	0.78	NO	24.89	0.988	1.73e6	1.84e6	101	1.0	0.943	bb
4	200713R1_5	100	0.78	NO	24.86	0.988	1.59e6	1.71e6	99.8	-0.2	0.932	bb
5	200713R1_6	100	0.78	NO	24.85	0.988	1.09e6	1.19e6	98.3	-1.7	0.917	bb
6	200713R1_7	100	0.78	NO	24.88	0.988	1.58e6	1.64e6	103	3.1	0.962	bb

**Compound name: 13C-1,2,3,7,8-PeCDF**

Response Factor: 0.696078  
 RRF SD: 0.0563451, Relative SD: 8.09465  
 Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.60	NO	30.27	1.201	1.12e6	1.70e6	95.0	-5.0	0.661	bb
2	200713R1_3	100	1.58	NO	30.29	1.202	1.10e6	1.68e6	93.9	-6.1	0.654	bb
3	200713R1_4	100	1.58	NO	30.29	1.202	1.27e6	1.84e6	99.6	-0.4	0.693	bb
4	200713R1_5	100	1.59	NO	30.27	1.202	1.17e6	1.71e6	98.2	-1.8	0.683	bb
5	200713R1_6	100	1.61	NO	30.27	1.204	8.06e5	1.19e6	97.3	-2.7	0.677	bb
6	200713R1_7	100	1.57	NO	30.29	1.203	1.33e6	1.64e6	116	16.0	0.807	bb

**Compound name: 13C-2,3,4,7,8-PeCDF**

Response Factor: 0.668591  
 RRF SD: 0.05702, Relative SD: 8.52838  
 Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	1.60	NO	31.37	1.245	1.08e6	1.70e6	95.4	-4.6	0.638	bb
2	200713R1_3	100	1.59	NO	31.39	1.245	1.07e6	1.68e6	94.8	-5.2	0.634	db
3	200713R1_4	100	1.60	NO	31.39	1.246	1.22e6	1.84e6	99.3	-0.7	0.664	db
4	200713R1_5	100	1.59	NO	31.37	1.246	1.12e6	1.71e6	97.5	-2.5	0.652	db
5	200713R1_6	100	1.61	NO	31.37	1.248	7.63e5	1.19e6	95.9	-4.1	0.641	db
6	200713R1_7	100	1.59	NO	31.39	1.247	1.29e6	1.64e6	117	17.1	0.783	bb

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8-HxCDF**

Response Factor: 0.886102

RRF SD: 0.0430455, Relative SD: 4.85785

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.51	NO	34.35	0.989	7.64e5	8.68e5	99.3	-0.7	0.880	bd
2	200713R1_3	100	0.50	NO	34.36	0.989	7.24e5	8.25e5	99.1	-0.9	0.878	bd
3	200713R1_4	100	0.51	NO	34.36	0.989	8.66e5	9.59e5	102	2.0	0.903	bd
4	200713R1_5	100	0.51	NO	34.35	0.989	7.82e5	9.28e5	95.1	-4.9	0.843	bd
5	200713R1_6	100	0.50	NO	34.36	0.989	5.51e5	6.48e5	96.0	-4.0	0.851	bd
6	200713R1_7	100	0.51	NO	34.37	0.989	9.68e5	1.01e6	109	8.6	0.962	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDF**

Response Factor: 0.955066

RRF SD: 0.0432424, Relative SD: 4.52769

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.51	NO	34.47	0.992	8.36e5	8.68e5	101	0.8	0.963	db
2	200713R1_3	100	0.52	NO	34.48	0.992	7.83e5	8.25e5	99.4	-0.6	0.949	db
3	200713R1_4	100	0.52	NO	34.48	0.992	9.17e5	9.59e5	100	0.2	0.957	db
4	200713R1_5	100	0.52	NO	34.47	0.992	8.41e5	9.28e5	94.9	-5.1	0.907	db
5	200713R1_6	100	0.50	NO	34.49	0.992	5.98e5	6.48e5	96.7	-3.3	0.923	db
6	200713R1_7	100	0.51	NO	34.49	0.992	1.04e6	1.01e6	108	8.0	1.03	db

**Compound name: 13C-2,3,4,6,7,8-HxCDF**

Response Factor: 0.882226

RRF SD: 0.0401065, Relative SD: 4.54606

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.53	NO	35.04	1.009	7.47e5	8.68e5	97.5	-2.5	0.860	bd
2	200713R1_3	100	0.53	NO	35.06	1.009	7.22e5	8.25e5	99.2	-0.8	0.875	bd

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-2,3,4,6,7,8-HxCDF**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	100	0.52	NO	35.06	1.009	8.41e5	9.59e5	99.4	-0.6	0.877	bb
4	200713R1_5	100	0.52	NO	35.05	1.009	7.86e5	9.28e5	96.0	-4.0	0.847	bb
5	200713R1_6	100	0.51	NO	35.06	1.009	5.65e5	6.48e5	98.9	-1.1	0.872	bb
6	200713R1_7	100	0.51	NO	35.06	1.009	9.66e5	1.01e6	109	8.9	0.961	bb

**Compound name: 13C-1,2,3,7,8,9-HxCDF**

Response Factor: 0.736556

RRF SD: 0.0463918, Relative SD: 6.29848

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.53	NO	35.90	1.033	6.25e5	8.68e5	97.7	-2.3	0.719	MM
2	200713R1_3	100	0.52	NO	35.90	1.033	5.90e5	8.25e5	97.1	-2.9	0.715	MM
3	200713R1_4	100	0.50	NO	35.91	1.033	6.95e5	9.59e5	98.5	-1.5	0.725	bb
4	200713R1_5	100	0.51	NO	35.90	1.033	6.49e5	9.28e5	94.9	-5.1	0.699	bb
5	200713R1_6	100	0.51	NO	35.91	1.033	4.74e5	6.48e5	99.3	-0.7	0.731	bb
6	200713R1_7	100	0.51	NO	35.92	1.033	8.34e5	1.01e6	112	12.5	0.829	bb

**Compound name: 13C-1,2,3,4,6,7,8-HpCDF**

Response Factor: 0.651008

RRF SD: 0.0398874, Relative SD: 6.12702

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.45	NO	37.57	1.081	5.44e5	8.68e5	96.2	-3.8	0.626	bd
2	200713R1_3	100	0.44	NO	37.58	1.081	5.25e5	8.25e5	97.7	-2.3	0.636	bd
3	200713R1_4	100	0.44	NO	37.58	1.081	6.07e5	9.59e5	97.2	-2.8	0.633	bb
4	200713R1_5	100	0.45	NO	37.58	1.082	5.84e5	9.28e5	96.8	-3.2	0.630	bd
5	200713R1_6	100	0.44	NO	37.58	1.081	4.21e5	6.48e5	99.8	-0.2	0.650	bb
6	200713R1_7	100	0.44	NO	37.59	1.082	7.35e5	1.01e6	112	12.3	0.731	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-1,2,3,4,7,8,9-HpCDF**

Response Factor: 0.459486  
 RRF SD: 0.0491661, Relative SD: 10.7002  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.42	NO	39.59	1.140	3.81e5	8.68e5	95.5	-4.5	0.439	bb
2	200713R1_3	100	0.44	NO	39.61	1.140	3.55e5	8.25e5	93.7	-6.3	0.431	bb
3	200713R1_4	100	0.43	NO	39.61	1.140	4.20e5	9.59e5	95.3	-4.7	0.438	bd
4	200713R1_5	100	0.45	NO	39.59	1.140	4.07e5	9.28e5	95.5	-4.5	0.439	bd
5	200713R1_6	100	0.43	NO	39.61	1.140	2.93e5	6.48e5	98.4	-1.6	0.452	bb
6	200713R1_7	100	0.44	NO	39.62	1.140	5.62e5	1.01e6	122	21.6	0.559	bd

**Compound name: 13C-OCDF**

Response Factor: 0.608671  
 RRF SD: 0.0858307, Relative SD: 14.1013  
 Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	200	0.91	NO	42.28	1.217	9.53e5	8.68e5	180	-9.9	0.549	bd
2	200713R1_3	200	0.88	NO	42.30	1.217	9.17e5	8.25e5	183	-8.7	0.556	bb
3	200713R1_4	200	0.88	NO	42.30	1.217	1.10e6	9.59e5	188	-6.1	0.572	bb
4	200713R1_5	200	0.90	NO	42.28	1.217	1.10e6	9.28e5	195	-2.4	0.594	bd
5	200713R1_6	200	0.88	NO	42.31	1.217	7.82e5	6.48e5	198	-0.8	0.604	bb
6	200713R1_7	200	0.89	NO	42.32	1.218	1.57e6	1.01e6	256	27.9	0.778	bb

**Compound name: 37Cl-2,3,7,8-TCDD**

Response Factor: 1.13765  
 RRF SD: 0.158904, Relative SD: 13.9677  
 Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	0.250			26.03	1.033	2.61e3	1.07e6	0.214	-14.4	0.974	bb
2	200713R1_3	0.500			26.06	1.034	4.94e3	1.03e6	0.421	-15.8	0.958	bb



Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
 Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 37Cl-2,3,7,8-TCDD**

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200713R1_4	2.00			26.03	1.033	2.52e4	1.16e6	1.91	-4.6	1.09	bd
4	200713R1_5	10.0			26.01	1.033	1.26e5	1.07e6	10.4	4.0	1.18	bd
5	200713R1_6	40.0			26.00	1.034	3.71e5	7.19e5	45.3	13.3	1.29	bd
6	200713R1_7	200			26.01	1.033	2.75e6	1.03e6	235	17.5	1.34	bb

**Compound name: 13C-1,2,3,4-TCDD**

Response Factor: 1  
 RRF SD: 0, Relative SD: 0  
 Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.77	NO	25.20	1.000	1.07e6	1.07e6	100	0.0	1.00	bb
2	200713R1_3	100	0.79	NO	25.20	1.000	1.03e6	1.03e6	100	0.0	1.00	bb
3	200713R1_4	100	0.79	NO	25.19	1.000	1.16e6	1.16e6	100	0.0	1.00	bb
4	200713R1_5	100	0.79	NO	25.17	1.000	1.07e6	1.07e6	100	0.0	1.00	bb
5	200713R1_6	100	0.79	NO	25.15	1.000	7.19e5	7.19e5	100	0.0	1.00	bb
6	200713R1_7	100	0.79	NO	25.17	1.000	1.03e6	1.03e6	100	0.0	1.00	bb

**Compound name: 13C-1,2,3,4-TCDF**

Response Factor: 1  
 RRF SD: 0, Relative SD: 0  
 Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.80	NO	23.08	1.000	1.70e6	1.70e6	100	0.0	1.00	bb
2	200713R1_3	100	0.79	NO	23.08	1.000	1.68e6	1.68e6	100	0.0	1.00	bb
3	200713R1_4	100	0.80	NO	23.08	1.000	1.84e6	1.84e6	100	0.0	1.00	bb
4	200713R1_5	100	0.79	NO	23.05	1.000	1.71e6	1.71e6	100	0.0	1.00	bb
5	200713R1_6	100	0.80	NO	23.02	1.000	1.19e6	1.19e6	100	0.0	1.00	bb
6	200713R1_7	100	0.80	NO	23.05	1.000	1.64e6	1.64e6	100	0.0	1.00	bb

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-CRV.qld

Last Altered: Monday, July 13, 2020 1:43:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 2:02:43 PM Pacific Daylight Time

**Compound name: 13C-1,2,3,4,6,9-HxCDF**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200713R1_2	100	0.51	NO	34.74	1.000	8.68e5	8.68e5	100	0.0	1.00	bb
2	200713R1_3	100	0.51	NO	34.76	1.000	8.25e5	8.25e5	100	0.0	1.00	bb
3	200713R1_4	100	0.52	NO	34.76	1.000	9.59e5	9.59e5	100	0.0	1.00	bb
4	200713R1_5	100	0.51	NO	34.74	1.000	9.28e5	9.28e5	100	0.0	1.00	bb
5	200713R1_6	100	0.51	NO	34.76	1.000	6.48e5	6.48e5	100	0.0	1.00	bb
6	200713R1_7	100	0.51	NO	34.76	1.000	1.01e6	1.01e6	100	0.0	1.00	bb

Dataset: Untitled

Last Altered: Monday, July 13, 2020 12:03:03 Pacific Daylight Time

Printed: Monday, July 13, 2020 12:04:27 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 13 Jul 2020 12:01:21

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-5-28-20.cdb 28 May 2020 16:52:08

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

#	Name	RT
1	1,3,6,8-TCDD (First)	21.48
2	1,2,8,9-TCDD (Last)	27.17
3	1,2,4,7,9-PeCDD (First)	29.30
4	1,2,3,8,9-PeCDD (Last)	32.12
5	1,2,4,6,7,9-HxCDD (First)	33.75
6	1,2,3,7,8,9-HxCDD (Last)	35.60
7	1,2,3,4,6,7,9-HpCDD (First)	37.97
8	1,2,3,4,6,7,8-HpCDD (Last)	38.96
9	1,3,6,8-TCDF (First)	19.55
10	1,2,8,9-TCDF (Last)	27.33
11	1,3,4,6,8-PeCDF (First)	27.33
12	1,2,3,8,9-PeCDF (Last)	32.36
13	1,2,3,4,6,8-HxCDF (First)	33.15
14	1,2,3,7,8,9-HxCDF (Last)	35.91
15	1,2,3,4,6,7,8-HpCDF (First)	37.59
16	1,2,3,4,7,8,9-HpCDF (Last)	39.61

Dataset: Untitled

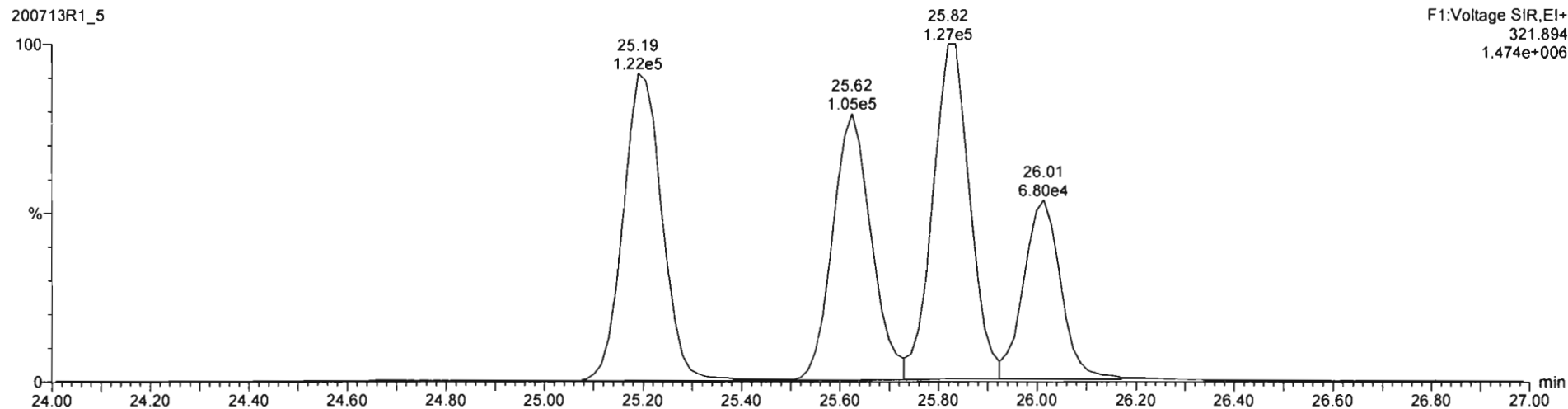
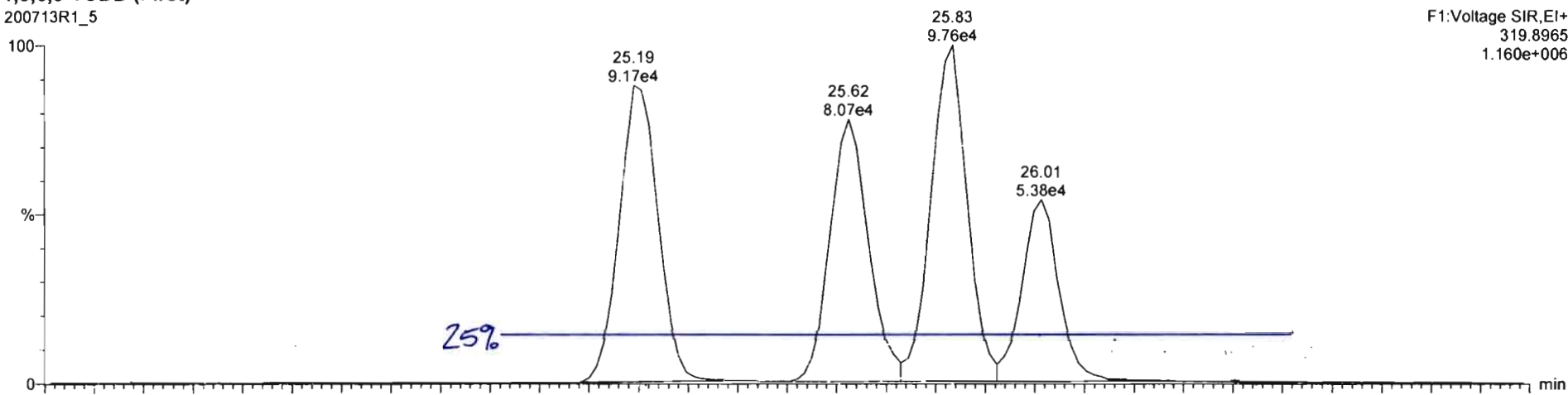
Last Altered: Monday, July 13, 2020 12:03:03 Pacific Daylight Time  
Printed: Monday, July 13, 2020 12:04:27 Pacific Daylight Time

GPB 07/13/2020

Method: U:\VG12.PRO\MethDB\CPSM.mdb 13 Jul 2020 12:01:21  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-5-28-20.cdb 28 May 2020 16:52:08

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

1,3,6,8-TCDD (First)  
200713R1\_5



Dataset: Untitled

Last Altered: Tuesday, July 14, 2020 7:09:48 AM Pacific Daylight Time  
Printed: Tuesday, July 14, 2020 7:10:06 AM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-07-10-20.mdb 10 Jul 2020 15:45:25  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	200713R1_1	ST200713R1_1 1613 CS0 20F1102	13-Jul-20	07:59:55
2	200713R1_2	ST200713R1_1 1613 CS0 20F1102	13-Jul-20	08:48:02
3	200713R1_3	ST200713R1_2 1613 CS1 20F1103	13-Jul-20	09:35:33
4	200713R1_4	ST200713R1_3 1613 CS2 20F1104	13-Jul-20	10:22:43
5	200713R1_5	ST200713R1_4 1613 CS3 20F1105	13-Jul-20	11:09:55
6	200713R1_6	ST200713R1_5 1613 CS4 20F1106	13-Jul-20	11:58:02
7	200713R1_7	ST200713R1_6 1613 CS5 20F1107	13-Jul-20	12:45:28
8	200713R1_8	SOLVENT BLANK	13-Jul-20	13:33:02
9	200713R1_9	SOLVENT BLANK	13-Jul-20	14:21:06
10	200713R1_10	SS200713R1_1 1613 SSS 20F1108	13-Jul-20	15:07:19
11	200713R1_11	SOLVENT BLANK	13-Jul-20	16:02:56
12	200713R1_12	B0G0020-BS2 OPR 1	13-Jul-20	16:49:11
13	200713R1_13	B0G0020-BS5 OPR 1	13-Jul-20	17:35:53
14	200713R1_14	B0G0082-BS1 OPR 1	13-Jul-20	18:22:30
15	200713R1_15	SOLVENT BLANK	13-Jul-20	19:09:12
16	200713R1_16	B0G0082-BLK1 Method Blank 1	13-Jul-20	19:55:54
17	200713R1_17	2001461-01 OF-031A BiWeekly Composite D/...	13-Jul-20	20:42:36
18	200713R1_18	2001081-02RE1 B 108-20200514-FD 0.2	13-Jul-20	21:29:19
19	200713R1_19	SOLVENT BLANK	13-Jul-20	22:15:55
20	200713R1_20	ST200713R1_7 1613 CS3 20F1105	13-Jul-20	23:02:32

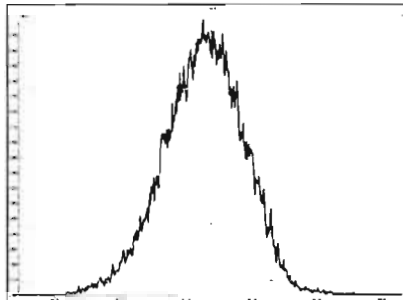
Experiment Calibration Report

MassLynx 4.1 SCN815

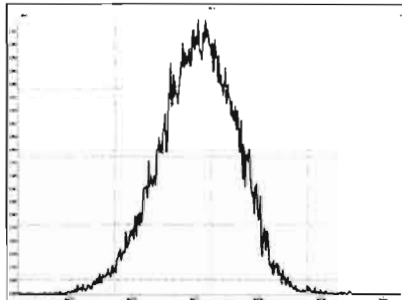
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, July 13, 2020 07:53:52 Pacific Daylight Time

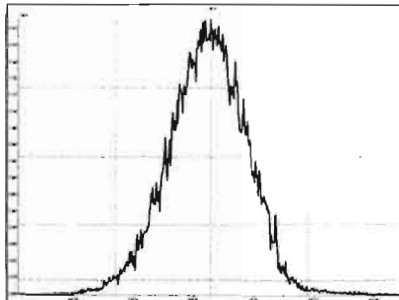
M 292.9824 R 10688



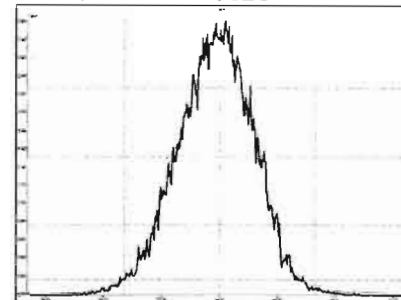
M 304.9824 R 10731



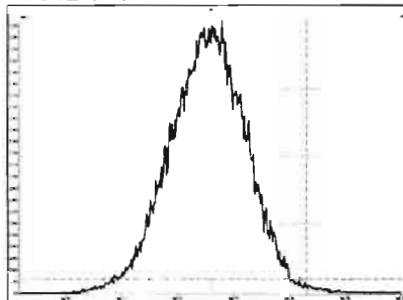
M 318.9792 R 11160



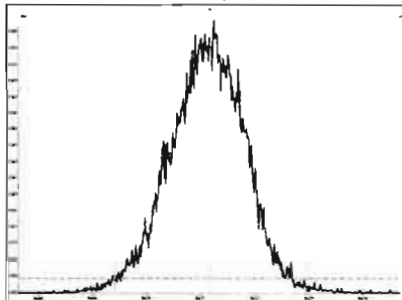
M 330.9792 R 10328



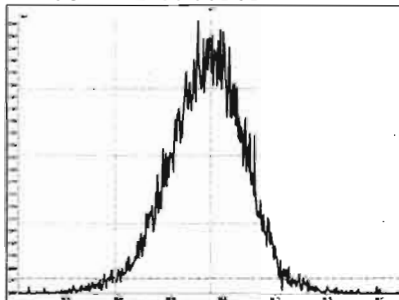
M 342.9792 R 11161



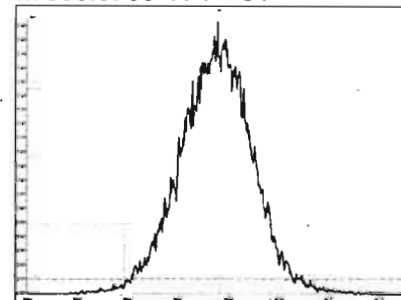
M 354.9792 R 11016



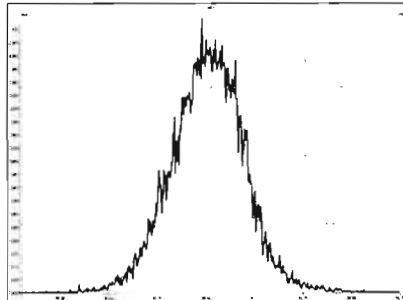
M 366.9792 R 11313



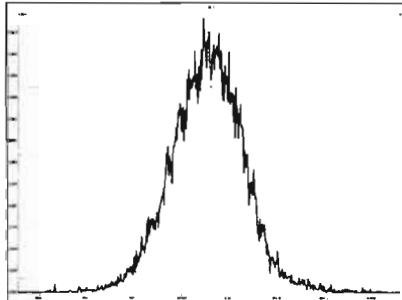
M 380.9760 R 11791



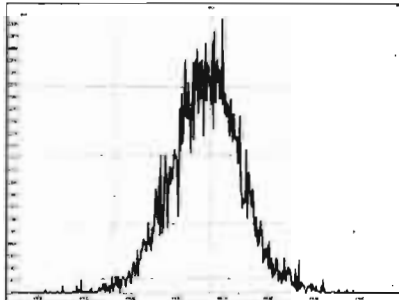
M 392.9760 R 11906



M 404.9760 R 11573



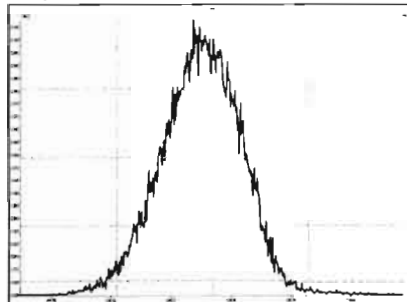
M 416.9760 R 12317



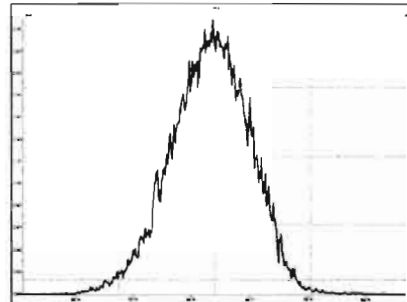
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, July 13, 2020 07:54:45 Pacific Daylight Time

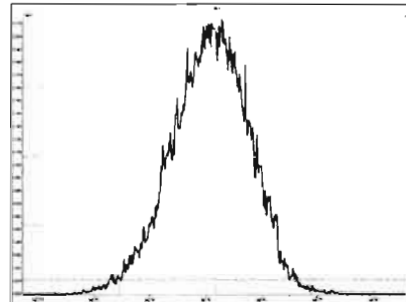
M 318.9792 R 10633



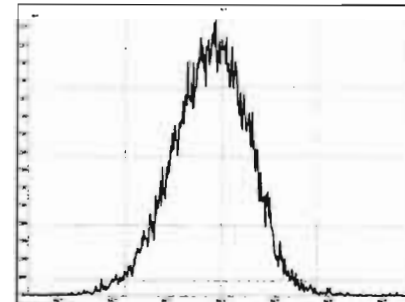
M 330.9792 R 10419



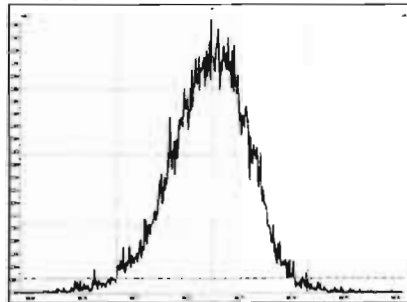
M 342.9792 R 10777



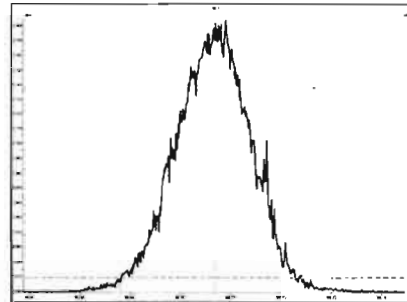
M 354.9792 R 10868



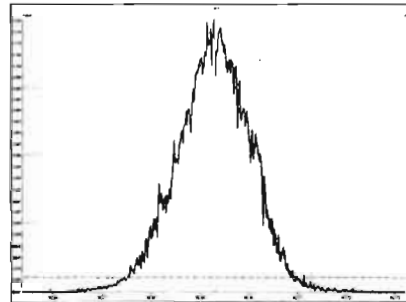
M 366.9792 R 10680



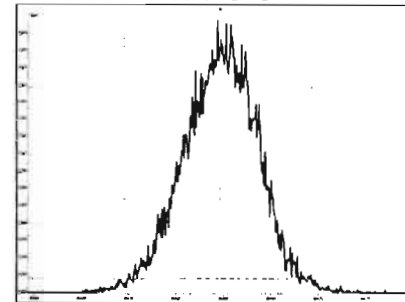
M 380.9760 R 11061



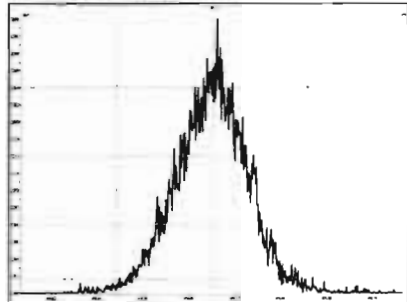
M 392.9760 R 10967



M 404.9760 R 11516



M 416.9760 R 12818



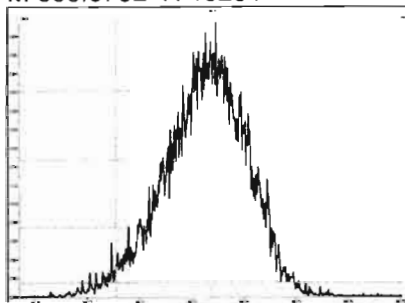
Experiment Calibration Report

MassLynx 4.1 SCN815

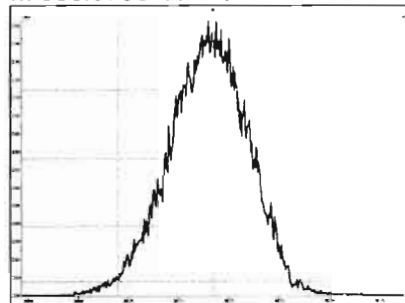
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, July 13, 2020 07:56:18 Pacific Daylight Time

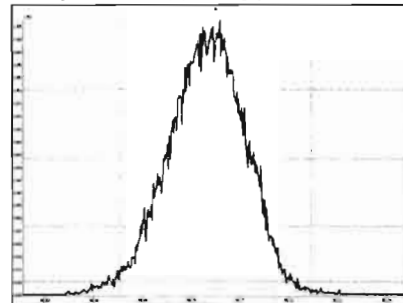
M 366.9792 R 10201



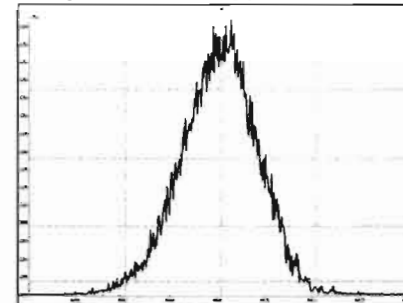
M 380.9760 R 10634



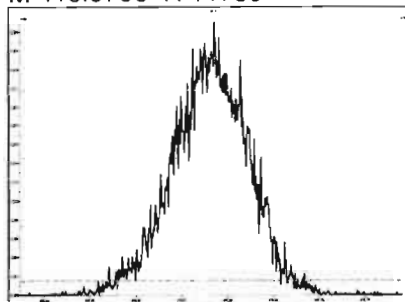
M 392.9760 R 11159



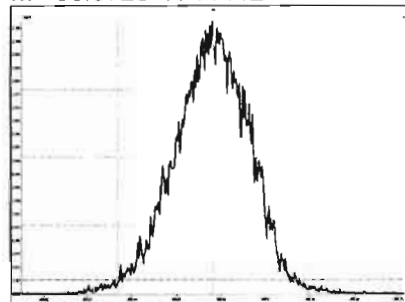
M 404.9760 R 10593



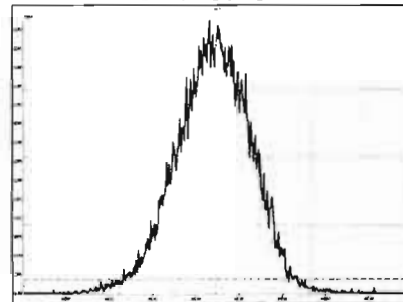
M 416.9760 R 11735



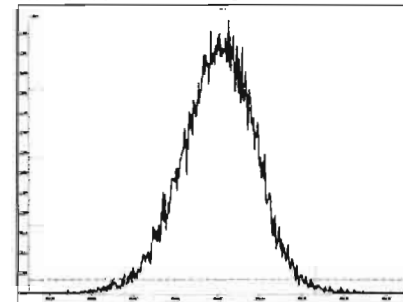
M 430.9728 R 11412



M 442.9728 R 10916



M 454.9728 R 11522





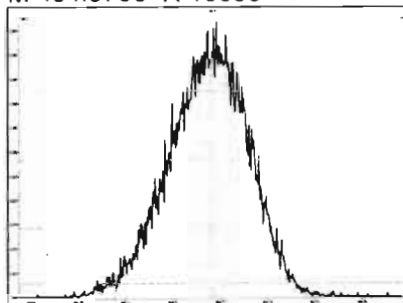
Experiment Calibration Report

MassLynx 4.1 SCN815

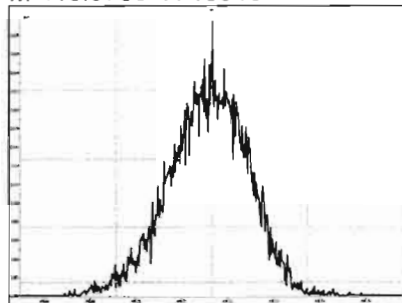
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, July 13, 2020 07:56:44 Pacific Daylight Time

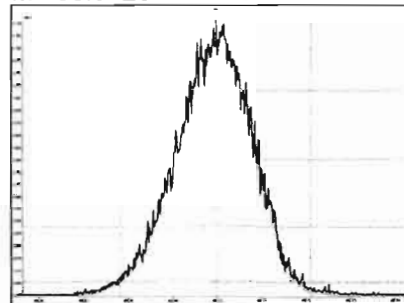
M 404.9760 R 10639



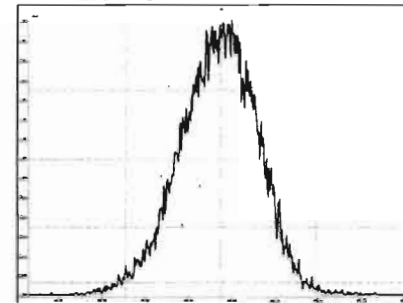
M 416.9760 R 10916



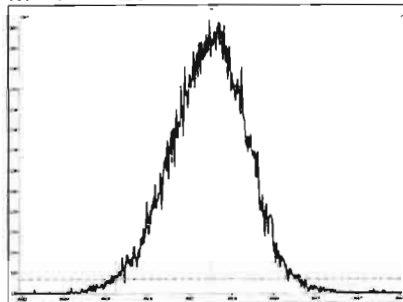
M 430.9728 R 10636



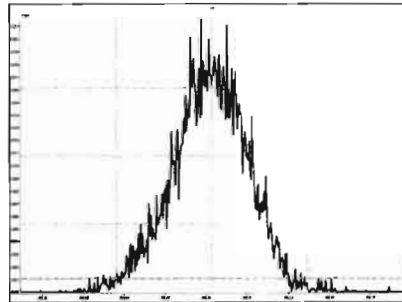
M 442.9728 R 10680



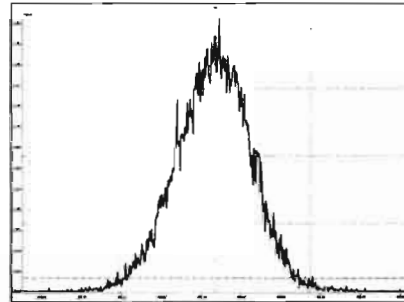
M 454.9728 R 11736



M 466.9728 R 11416



M 480.9696 R 11363



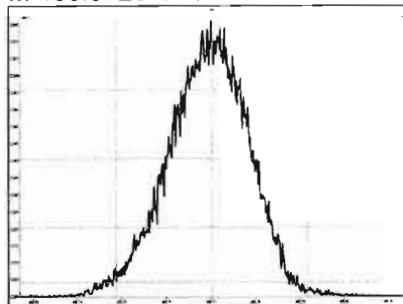
Experiment Calibration Report

MassLynx 4.1 SCN815

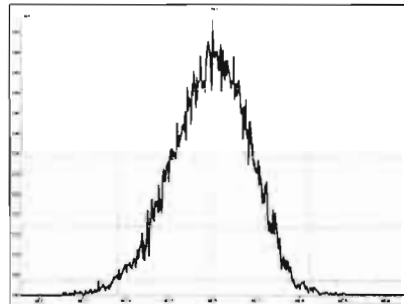
File: Experiment: OCDD\_DB5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, July 13, 2020 07:57:17 Pacific Daylight Time

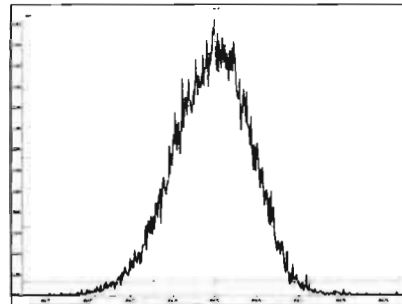
M 430.9728 R 11111



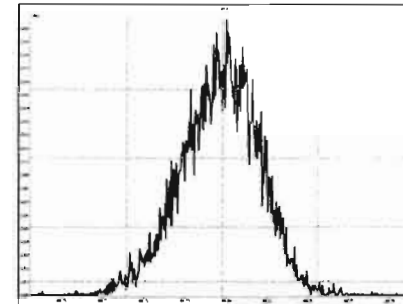
M 442.9728 R 10502



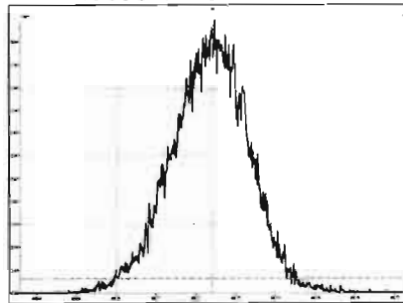
M 454.9728 R 11364



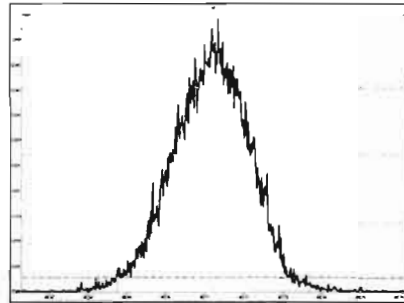
M 466.9728 R 11160



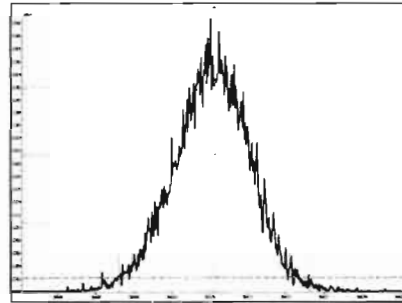
M 480.9696 R 10871



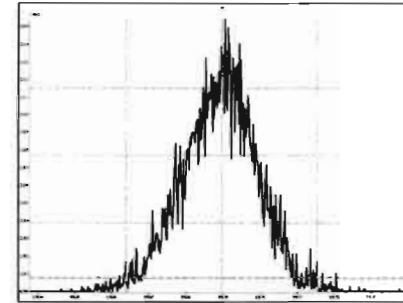
M 492.9696 R 10917



M 504.9696 R 11212



M 516.9697 R 12077



Dataset: Untitled

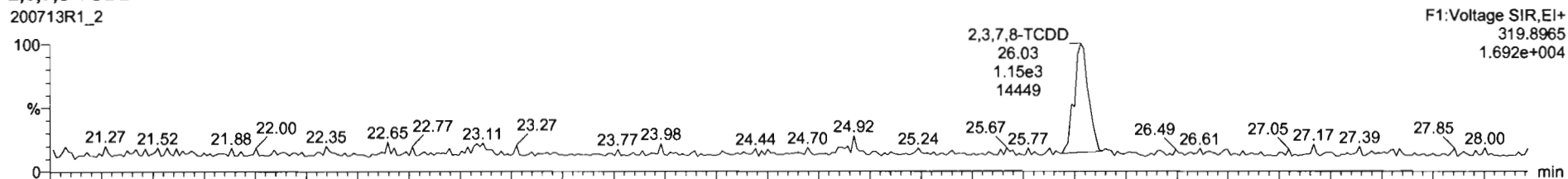
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-07-10-20.mdb 10 Jul 2020 15:45:25  
Calibration: 13 Jul 2020 13:44:33

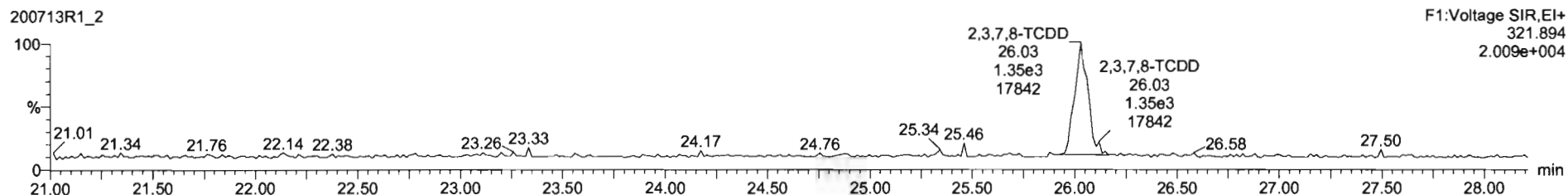
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**2,3,7,8-TCDD**

200713R1\_2

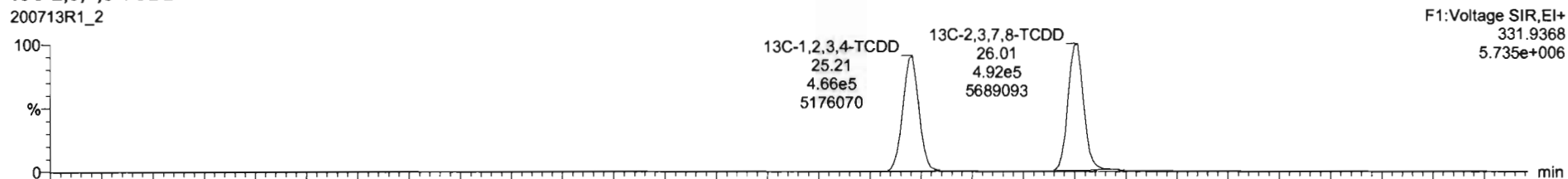


200713R1\_2

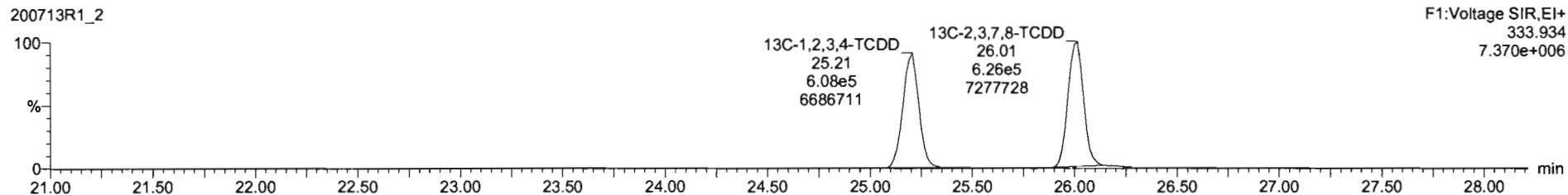


**13C-2,3,7,8-TCDD**

200713R1\_2



200713R1\_2



Dataset: Untitled

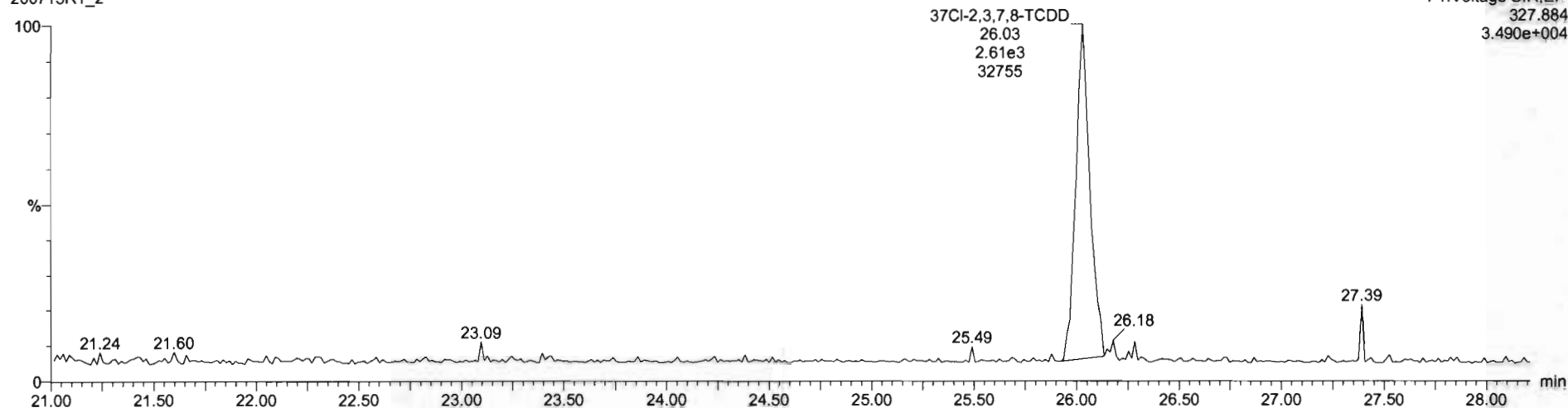
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

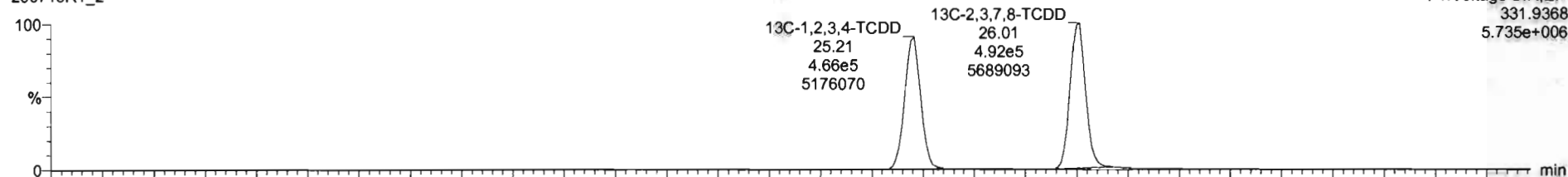
**37Cl-2,3,7,8-TCDD**

200713R1\_2

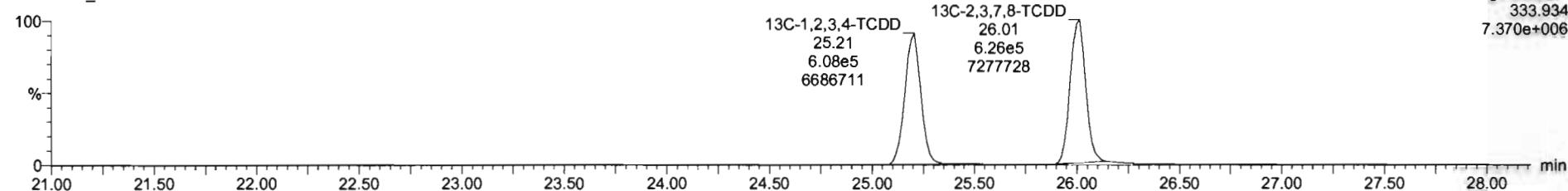


**13C-1,2,3,4-TCDD**

200713R1\_2



200713R1\_2



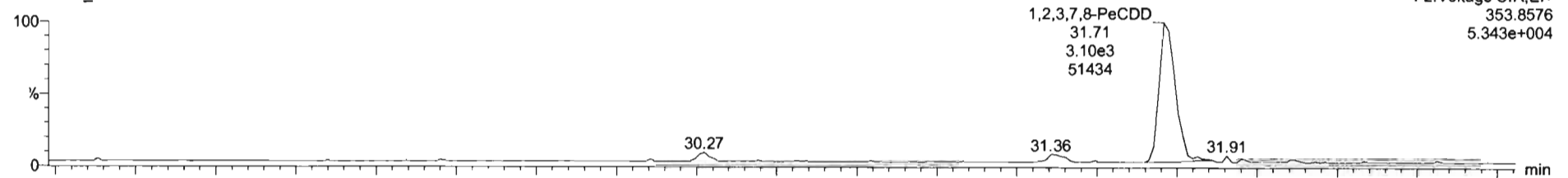
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

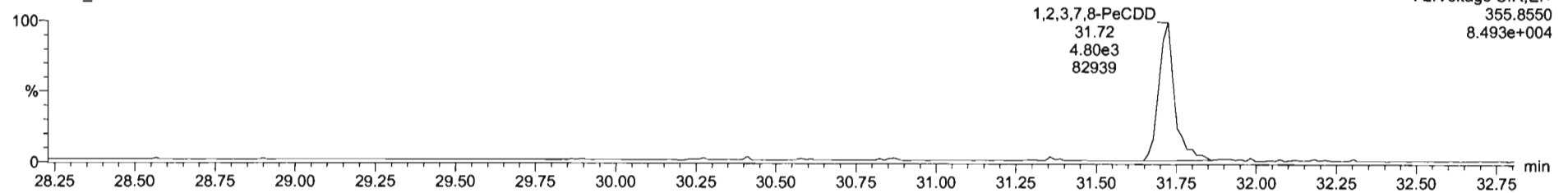
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**1,2,3,7,8-PeCDD**

200713R1\_2

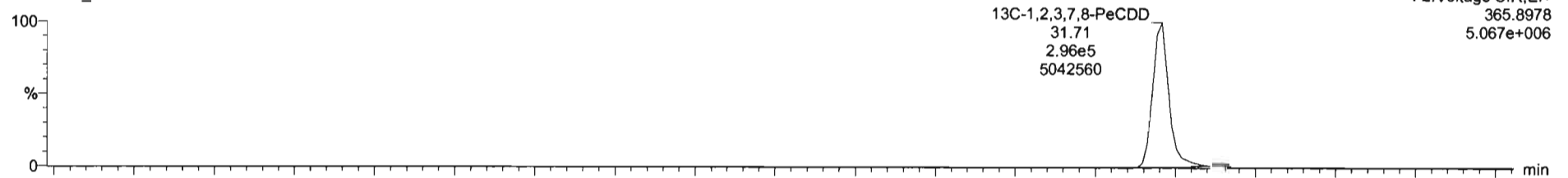


200713R1\_2

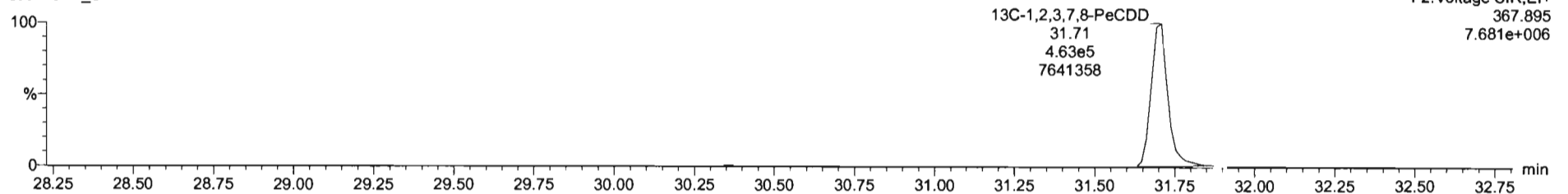


**13C-1,2,3,7,8-PeCDD**

200713R1\_2



200713R1\_2



Dataset: Untitled

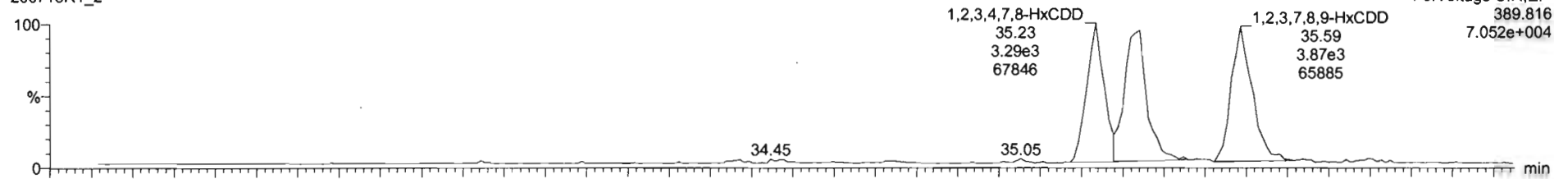
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

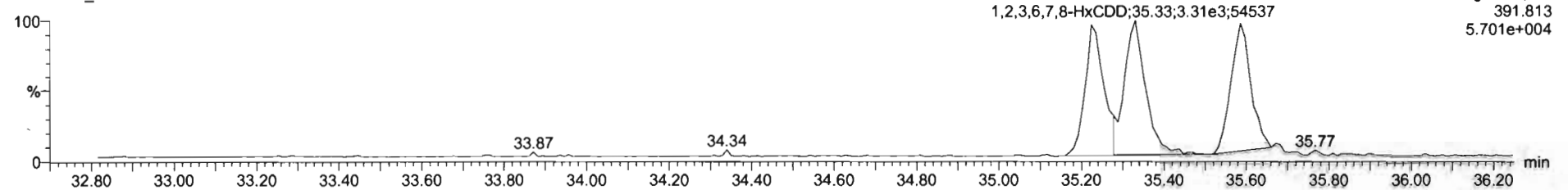
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**1,2,3,4,7,8-HxCDD**

200713R1\_2

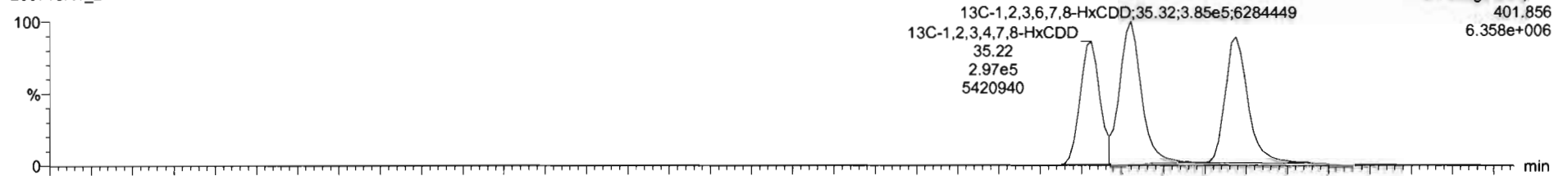


200713R1\_2

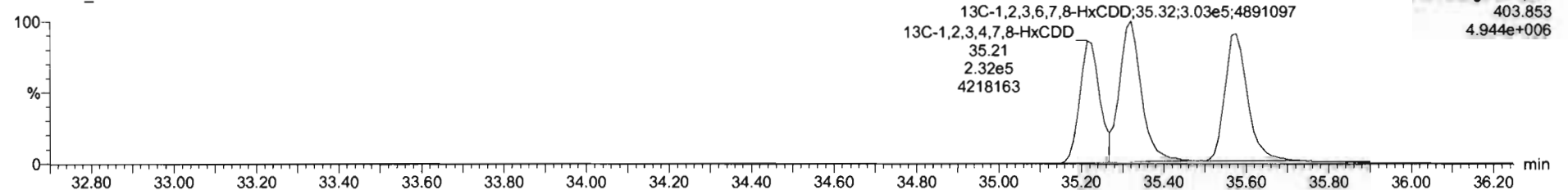


**13C-1,2,3,4,7,8-HxCDD**

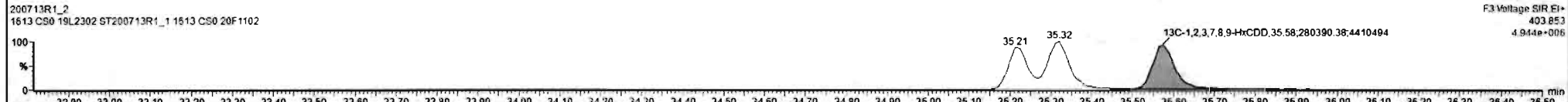
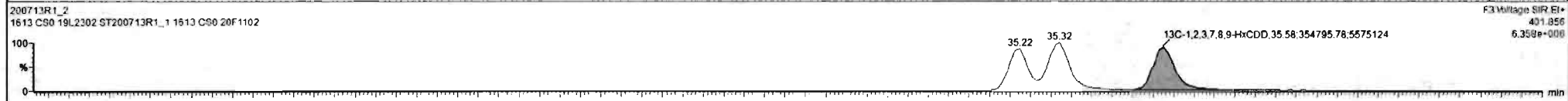
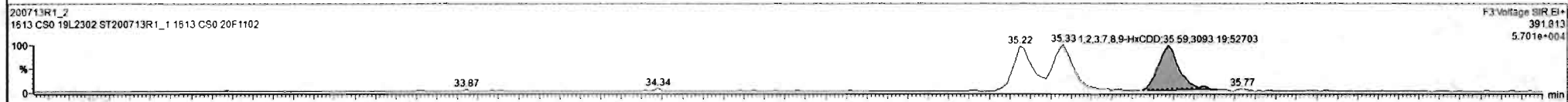
200713R1\_2



200713R1\_2



F.	Name	RT	RA	Y/N	Area	IS Area	Std. Conc.	%Dev	%RSD	RRF II	RRF SD
1	1,2,3,7,8-TCDD	26.03	0.857	NO	2.4999e3	1.1183e6	0.250	-8.2	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.71	0.645	NO	7.8978e3	7.5857e5	1.250	-9.1	6.72	0.917	0.0816
3	1,2,3,4,7,8-HxCDD	35.23	1.186	NO	6.0569e3	5.2914e5	1.250	-12.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.226	NO	7.3759e3	6.8843e5	1.250	-8.6	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.59	1.251	NO	6.9831e3	6.3519e5	1.250	-8.6	6.63	0.960	0.0638
6	1,2,3,4,6,7,8-HpCDD	36.94	1.114	NO	5.0575e3	5.0825e5	1.250	-11.1	9.71	0.896	0.0870
7	OCDF	42.14	0.853	NO	7.9593e3	7.9325e5	2.500	-10.1	8.21	0.893	0.0733
8	2,3,7,8-TCDF	24.92	0.755	NO	3.2301e3	1.5501e6	0.250	-2.8	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.546	NO	1.1947e4	1.1238e6	1.250	-12.1	8.51	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.615	NO	1.3405e4	1.0835e6	1.250	-8.1	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.36	1.228	NO	8.4799e3	7.6410e5	1.250	-8.3	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.48	1.219	NO	9.3138e3	8.3599e5	1.250	-11.2	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.06	1.189	NO	8.3871e3	7.4724e5	1.250	-9.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.91	1.178	NO	6.8795e3	6.2954e5	1.250	-8.9	8.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.58	0.957	NO	6.2884e3	5.4386e5	1.250	-7.8	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.60	0.972	NO	4.7205e3	3.8114e5	1.250	-10.6	9.10	1.11	0.1011
17	OCDF	42.30	0.883	NO	9.6441e3	9.5279e5	2.500	-9.8	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.01	0.786	NO	1.1183e6	1.0733e6	100.000	-5.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.639	NO	7.5857e5	1.0733e6	100.000	-6.7	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.22	1.280	NO	5.2914e5	8.8841e5	100.000	-5.8	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.32	1.269	NO	6.8843e5	8.8841e5	100.000	-1.5	5.73	0.895	0.0461



Dataset: Untitled

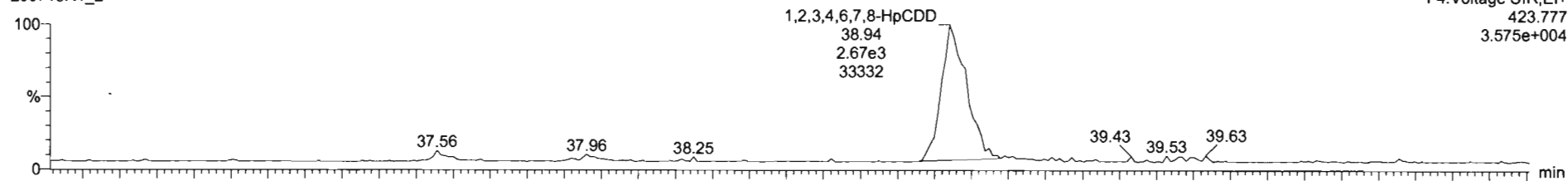
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

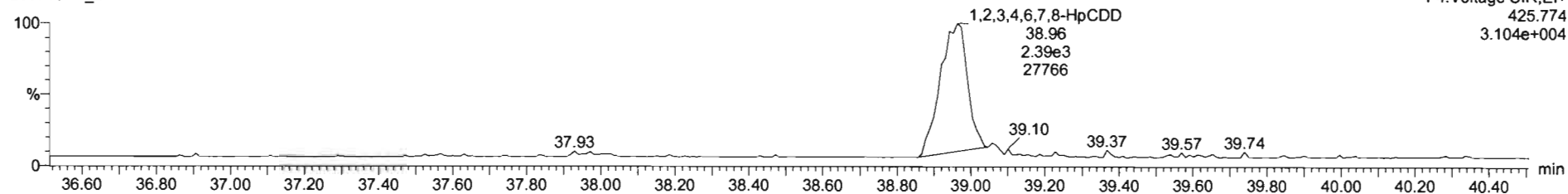
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**1,2,3,4,6,7,8-HpCDD**

200713R1\_2

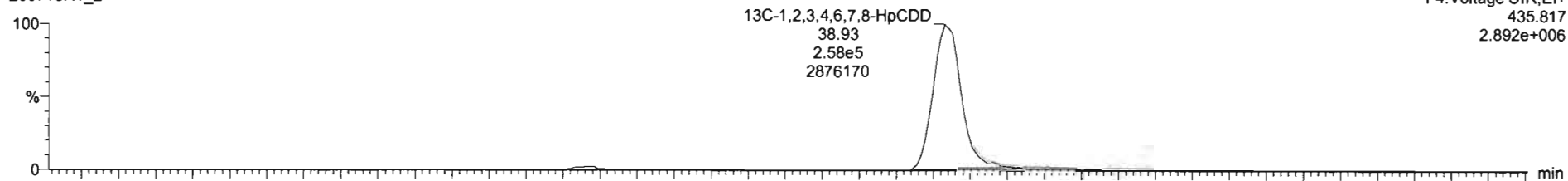


200713R1\_2

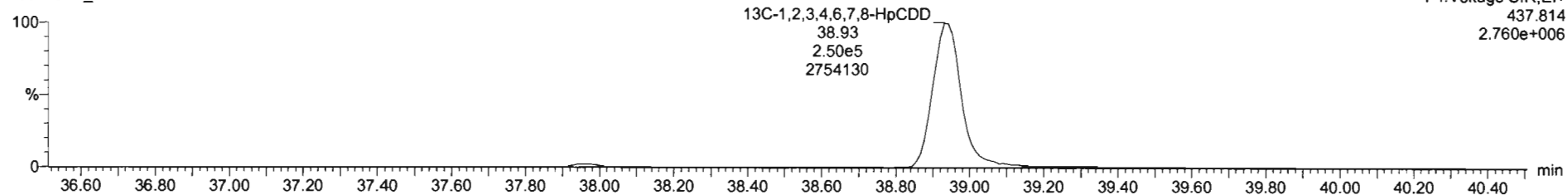


**13C-1,2,3,4,6,7,8-HpCDD**

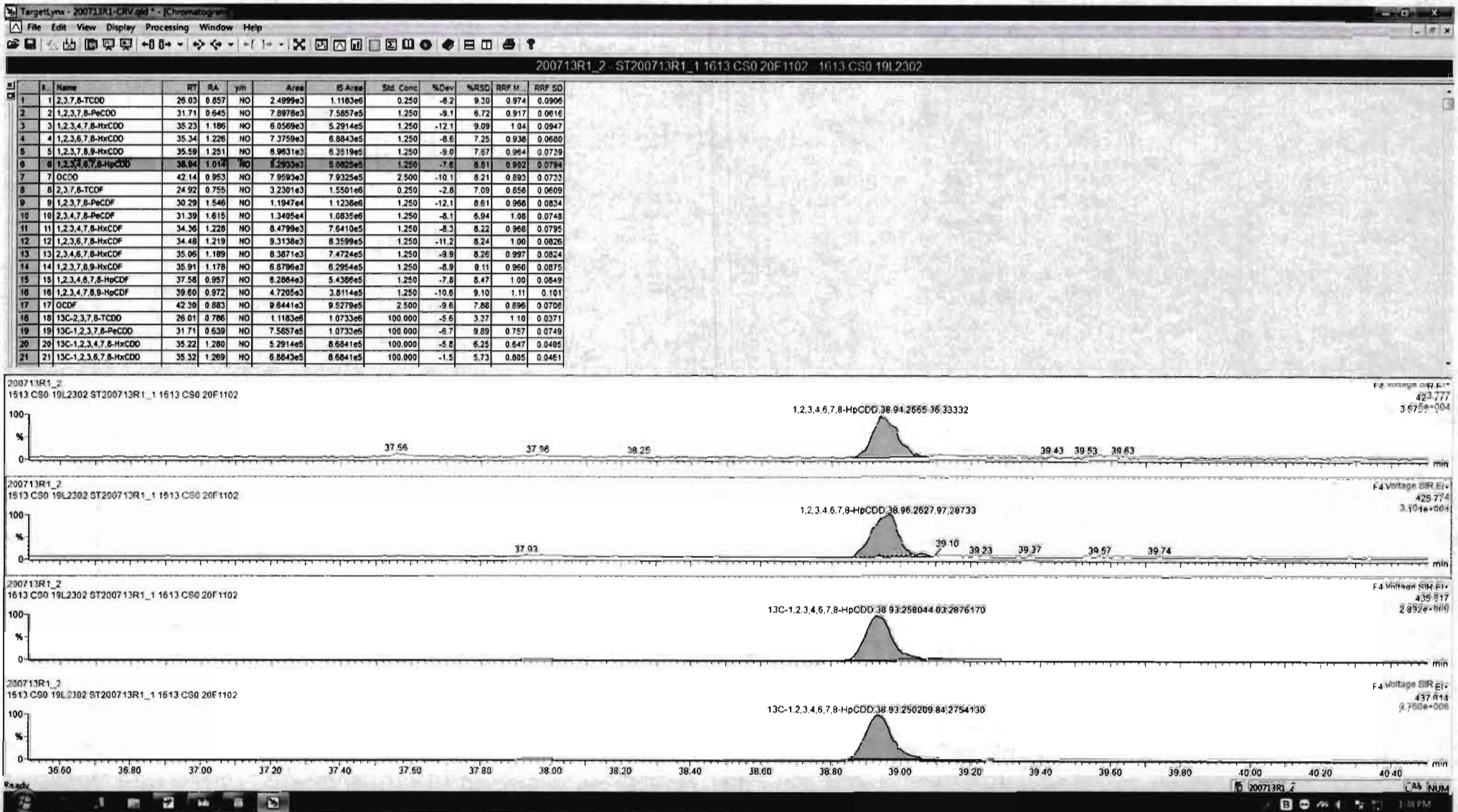
200713R1\_2



200713R1\_2







Dataset: Untitled

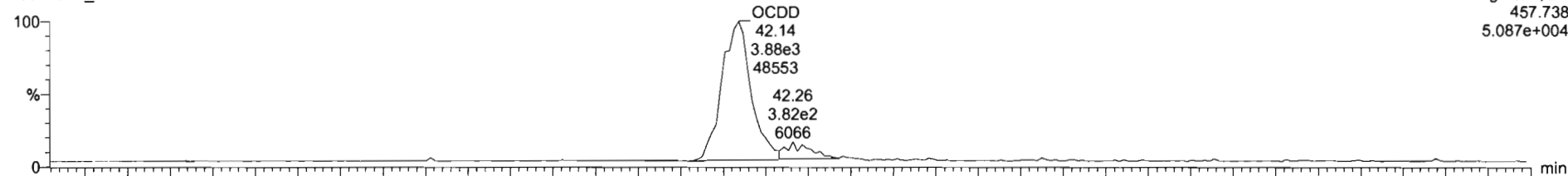
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

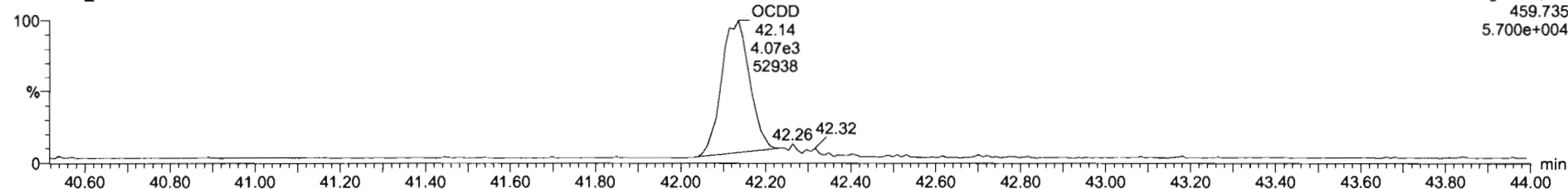
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**OCDD**

200713R1\_2

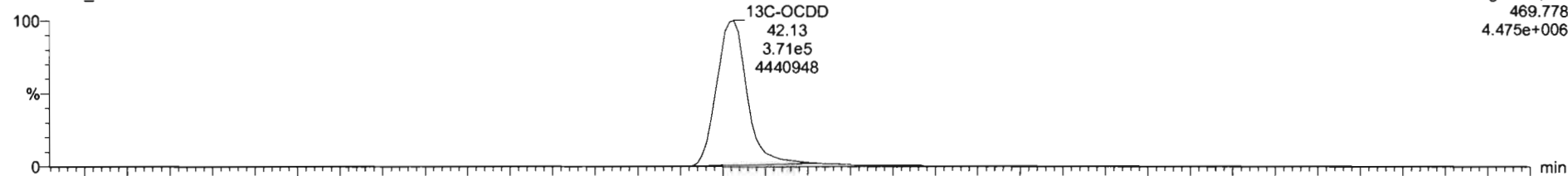


200713R1\_2

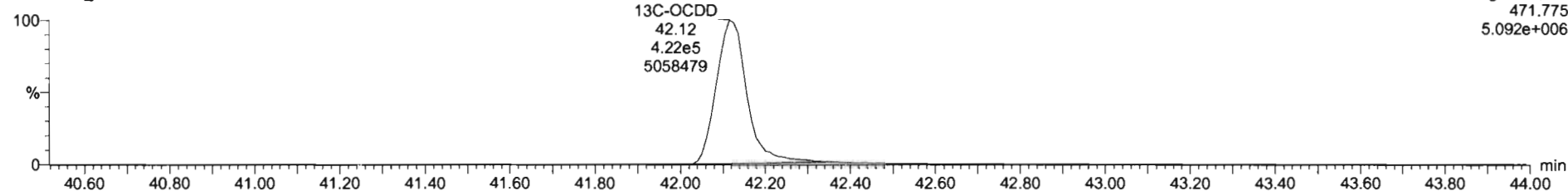


**13C-OCDD**

200713R1\_2



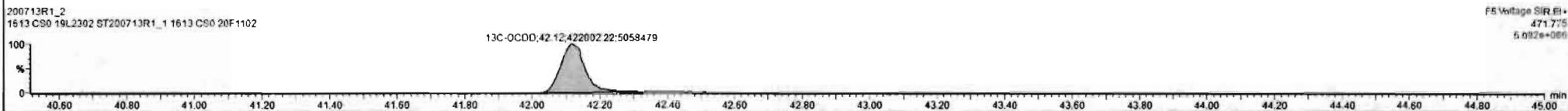
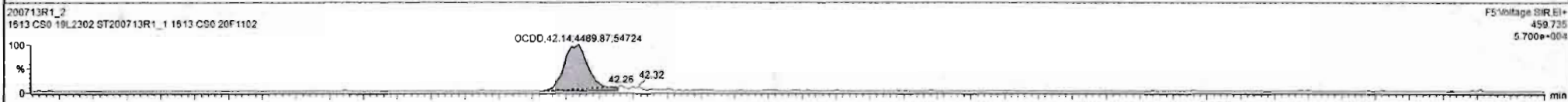
200713R1\_2



TargetLynx - 200713R1-CRV.qld - Chromatogram

200713R1\_2 - ST200713R1\_1 1613 CS0 20F1102 - 1613 CS0 19L2302

#	Name	RT	RA	y/n	Area	IS Area	Std Conc	%Dev	%RSD	RRF M	RRF SD
1	2,3,7,8-TCDD	26.03	0.857	NO	2.4999e3	1.1183e6	0.250	-8.2	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.71	0.645	NO	7.8978e3	7.5857e5	1.250	-9.1	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.23	1.186	NO	6.0509e3	5.2914e5	1.250	-12.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.226	NO	7.3759e3	6.8843e5	1.250	-8.6	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.59	1.251	NO	6.9631e3	6.3519e5	1.250	-9.0	7.87	0.984	0.0739
6	1,2,3,4,6,7,8-HpCDD	38.94	1.014	NO	5.2933e3	5.0825e5	1.250	-7.8	8.81	0.902	0.0794
7	OCDD	42.14	0.895	NO	8.5675e3	7.9325e5	2.500	-4.9	6.91	0.902	0.0624
8	2,3,7,8-TCDF	24.92	0.755	NO	3.2301e3	1.5501e6	0.250	-2.8	7.09	0.856	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.548	NO	1.1947e4	1.1238e6	1.250	-12.1	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.615	NO	1.3405e4	1.0835e6	1.250	-8.1	8.94	1.06	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.228	NO	8.4799e3	7.6410e5	1.250	-8.3	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.48	1.219	NO	9.3138e3	8.3599e5	1.250	-11.2	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.06	1.189	NO	8.3871e3	7.4724e5	1.250	-9.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.91	1.178	NO	6.8796e3	6.2954e5	1.250	-8.9	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.58	0.957	NO	8.2864e3	5.4386e5	1.250	-7.8	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.60	0.972	NO	4.7205e3	3.8114e5	1.250	-10.6	9.10	1.11	0.101
17	OCDF	42.30	0.883	NO	9.8441e3	9.5279e5	2.500	-9.8	7.88	0.898	0.0766
18	13C-2,3,7,8-TCDD	26.01	0.786	NO	1.1183e6	1.0733e6	100.000	-5.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.639	NO	7.5857e5	1.0733e6	100.000	-6.7	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.22	1.280	NO	5.2914e5	8.6841e5	100.000	-5.8	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.32	1.269	NO	6.8843e5	8.6841e5	100.000	-1.5	5.73	0.805	0.0461



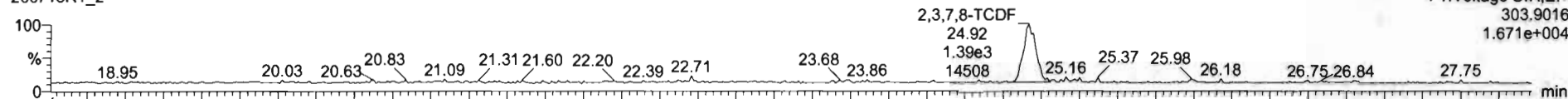
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

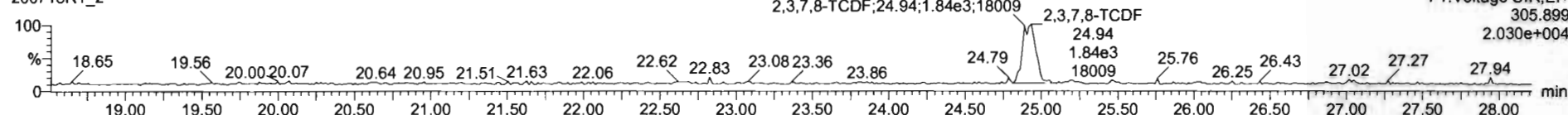
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**2,3,7,8-TCDF**

200713R1\_2

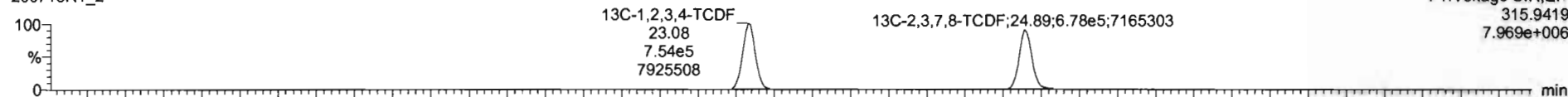


200713R1\_2

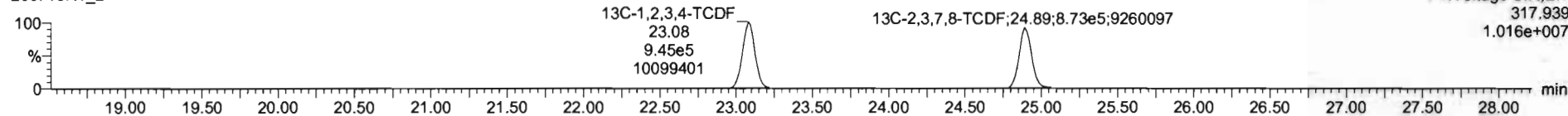


**13C-2,3,7,8-TCDF**

200713R1\_2

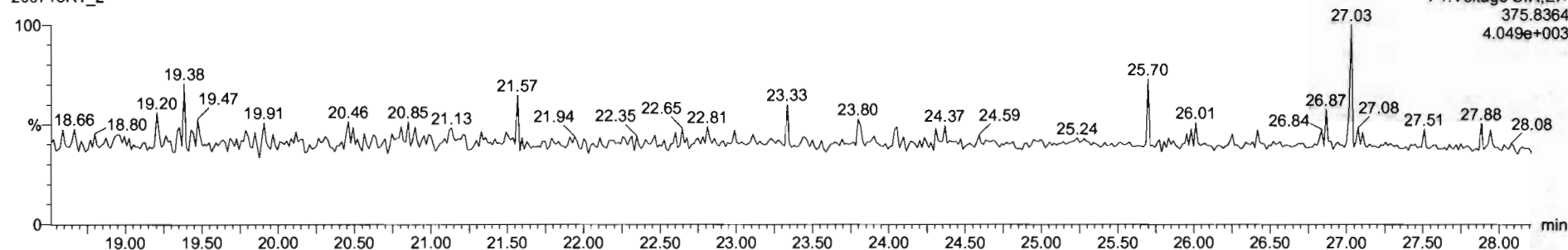


200713R1\_2



**DPE1**

200713R1\_2



Dataset: Untitled

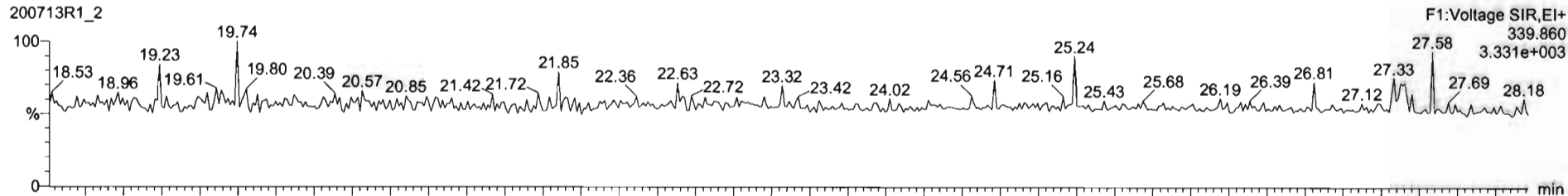
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

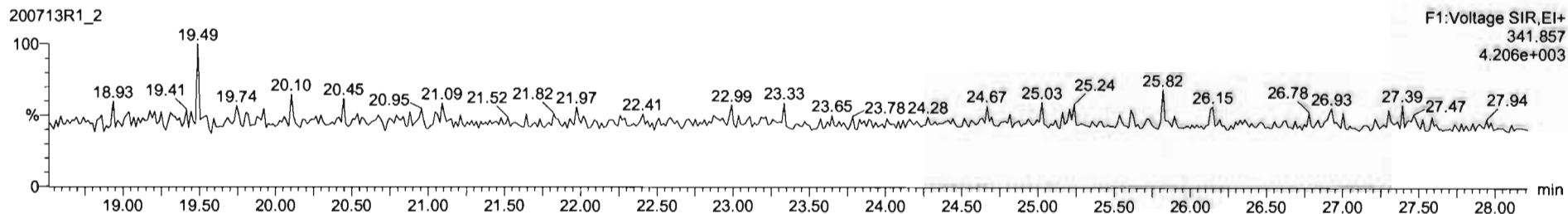
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

1st Func. Penta-Furans

200713R1\_2

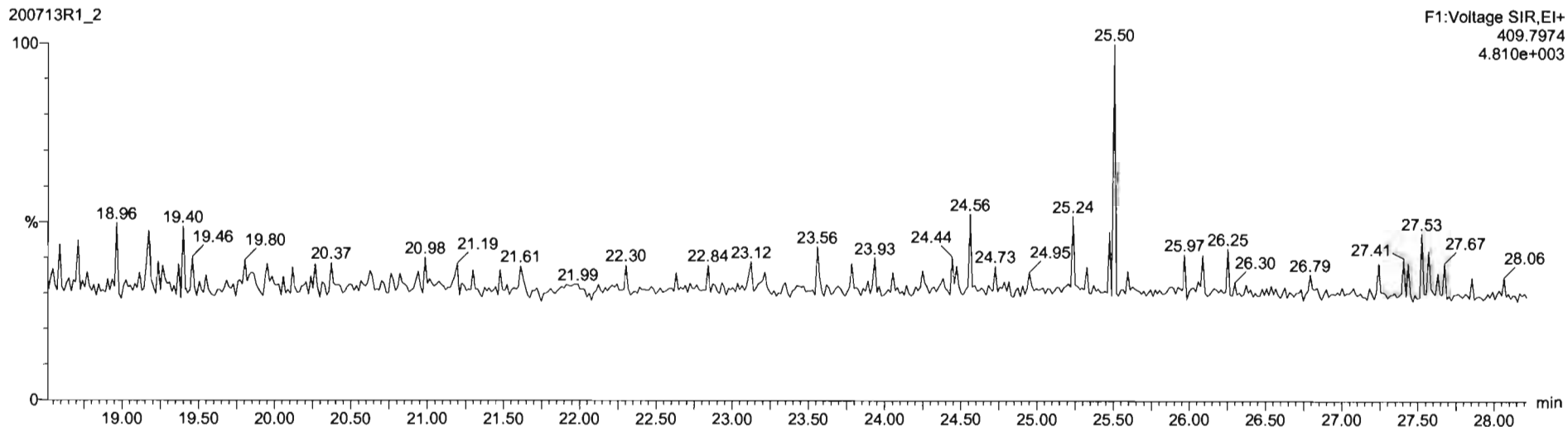


200713R1\_2



DPE6

200713R1\_2



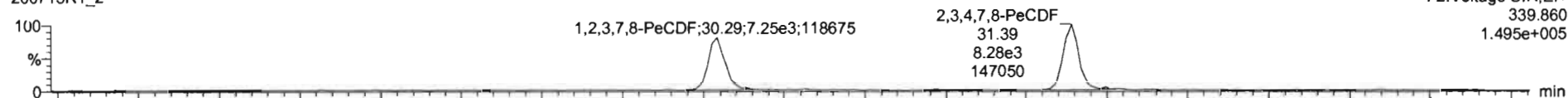
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

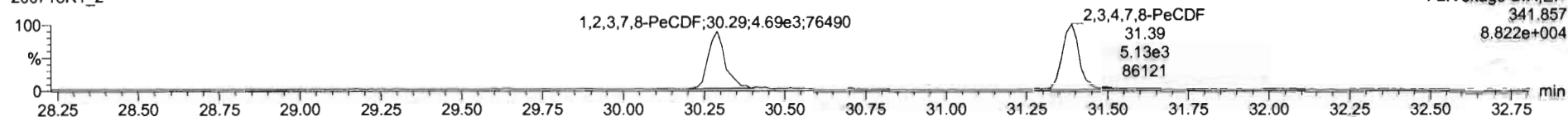
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**1,2,3,7,8-PeCDF**

200713R1\_2

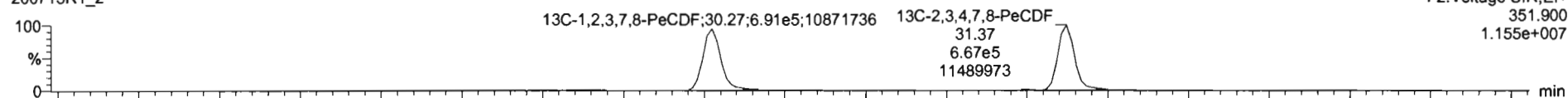


200713R1\_2

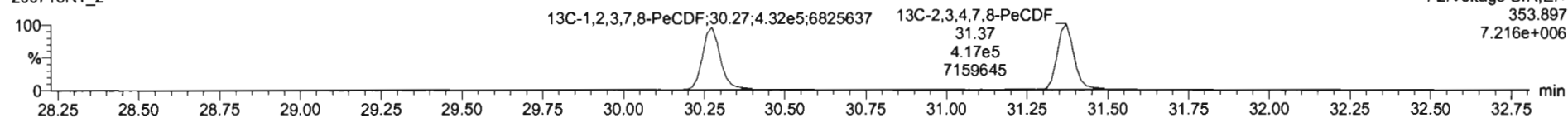


**13C-1,2,3,7,8-PeCDF**

200713R1\_2

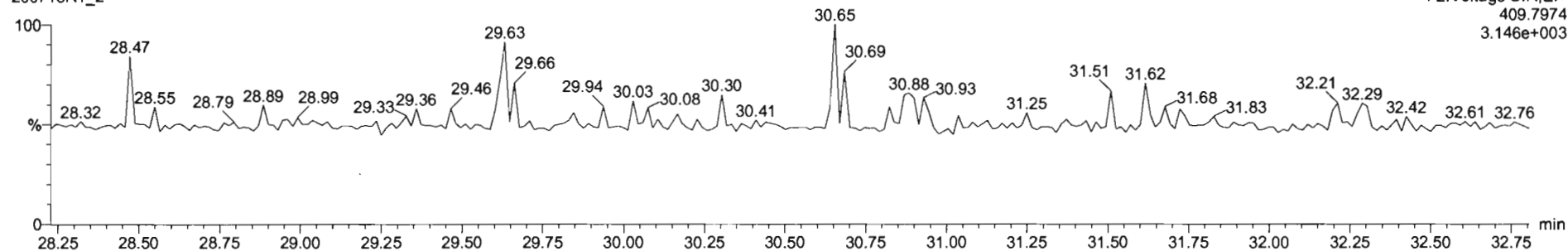


200713R1\_2



**DPE2**

200713R1\_2



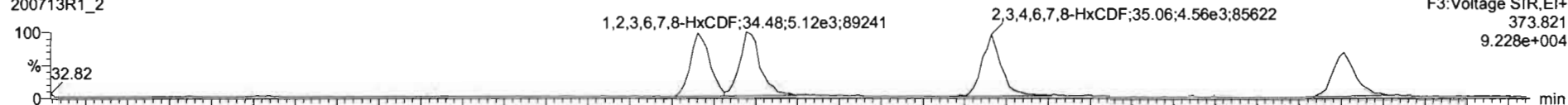
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

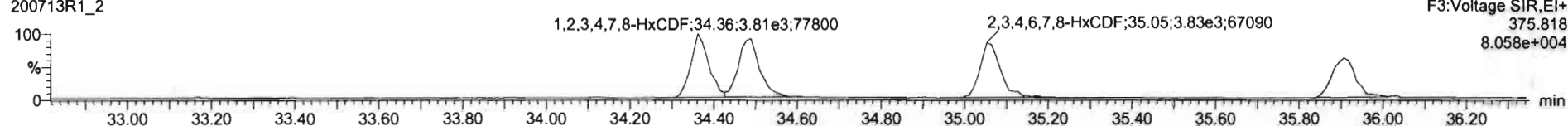
Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

**1,2,3,4,7,8-HxCDF**

200713R1\_2

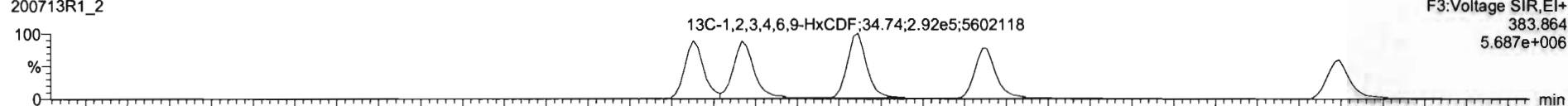


200713R1\_2

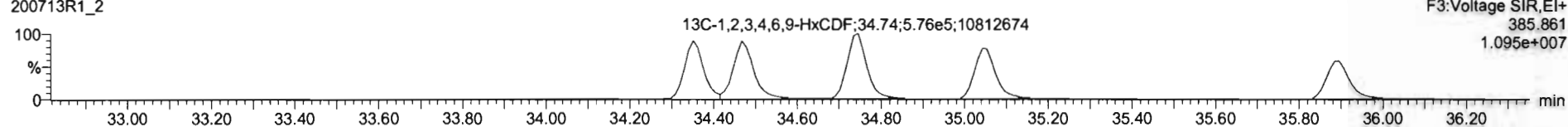


**13C-1,2,3,4,7,8-HxCDF**

200713R1\_2

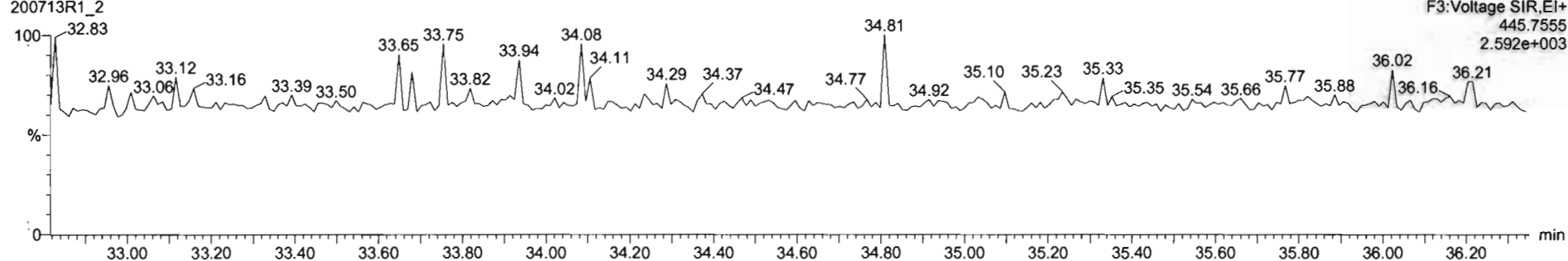


200713R1\_2



**DPE3**

200713R1\_2

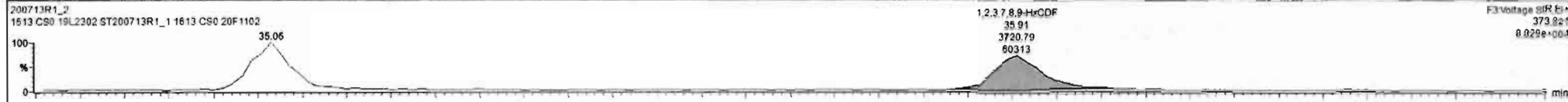


TargetLyra - 200713R1-CRV.qtd - Chromatogram

File Edit View Display Processing Window Help

200713R1\_2 - ST200713R1\_1 1613 CS0 20F 1102 1613 CS0 19L2302

#	Name	RT	RA	Yln	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.03	0.857	NO	2.4999e3	1.1183e6	0.250	-8.2	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.71	0.645	NO	7.8978e3	7.5857e5	1.250	-9.1	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.23	1.186	NO	6.0569e3	5.2914e5	1.250	-12.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.226	NO	7.3759e3	6.8843e5	1.250	-8.6	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.59	1.251	NO	6.9631e3	6.3519e5	1.250	-9.0	7.87	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	38.94	1.014	NO	5.2933e3	5.0825e5	1.250	-7.6	8.81	0.902	0.0794
7	OCDD	42.14	0.895	NO	6.5075e3	7.9325e5	2.500	-5.2	6.51	0.905	0.0589
8	1,2,3,7,8-TCDF	24.92	0.755	NO	3.2301e3	1.5501e6	0.250	-2.8	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.546	NO	1.1947e4	1.1238e6	1.250	-12.1	8.61	0.968	0.0834
10	1,2,3,4,7,8-PeCDF	31.39	1.615	NO	1.3405e4	1.0835e6	1.250	-8.1	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.36	1.228	NO	8.4799e3	7.6410e5	1.250	-8.3	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.48	1.219	NO	9.3138e3	8.3599e5	1.250	-11.1	8.34	1.00	0.0836
13	1,2,3,4,6,7,8-HxCDF	35.06	1.189	NO	8.3671e3	7.4724e5	1.250	-9.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.91	1.178	NO	6.8796e3	6.2478e5	1.250	-8.3	8.97	0.961	0.0882
15	1,2,3,4,6,7,8-HpCDF	37.58	0.957	NO	6.2084e3	5.4386e5	1.250	-7.8	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HxCDF	39.60	0.972	NO	4.7205e3	3.8114e5	1.250	-10.6	9.10	1.11	0.101
17	OCDF	42.30	0.883	NO	9.6441e3	9.5279e5	2.500	-9.6	7.88	0.896	0.0708
18	13C-1,2,3,7,8-TCDD	26.01	0.786	NO	1.1183e6	1.0733e6	100.000	-5.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.639	NO	7.5857e5	1.0733e6	100.000	-6.7	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.22	1.280	NO	5.2914e5	6.6841e5	100.000	-5.8	6.25	0.647	0.0495
21	13C-1,2,3,6,7,8-HxCDD	35.32	1.269	NO	6.8642e5	8.6841e5	100.000	-1.5	5.73	0.805	0.0461





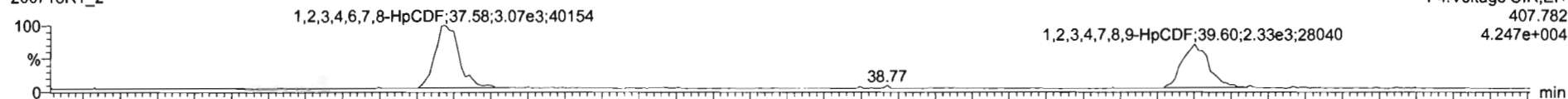
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

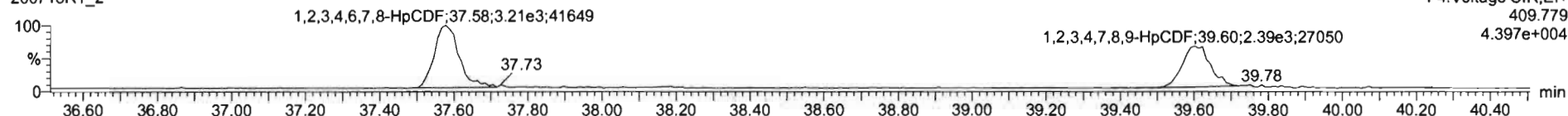
### 1,2,3,4,6,7,8-HpCDF

200713R1\_2



F4:Voltage SIR,EI+  
407.782  
4.247e+004

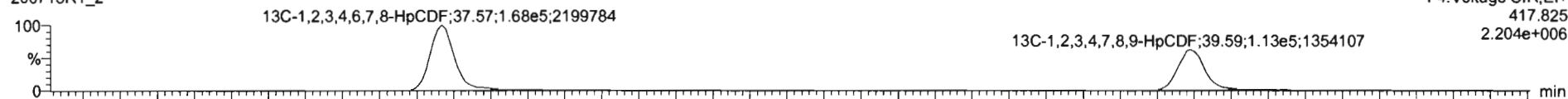
200713R1\_2



F4:Voltage SIR,EI+  
409.779  
4.397e+004

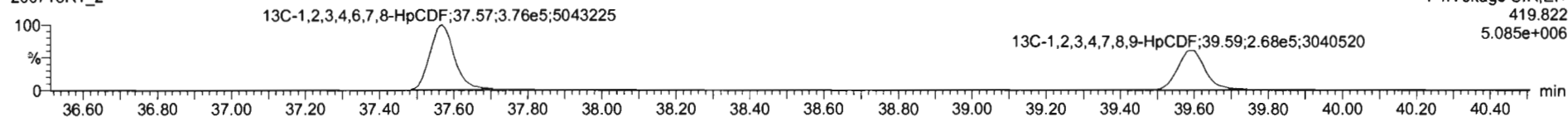
### 13C-1,2,3,4,6,7,8-HpCDF

200713R1\_2



F4:Voltage SIR,EI+  
417.825  
2.204e+006

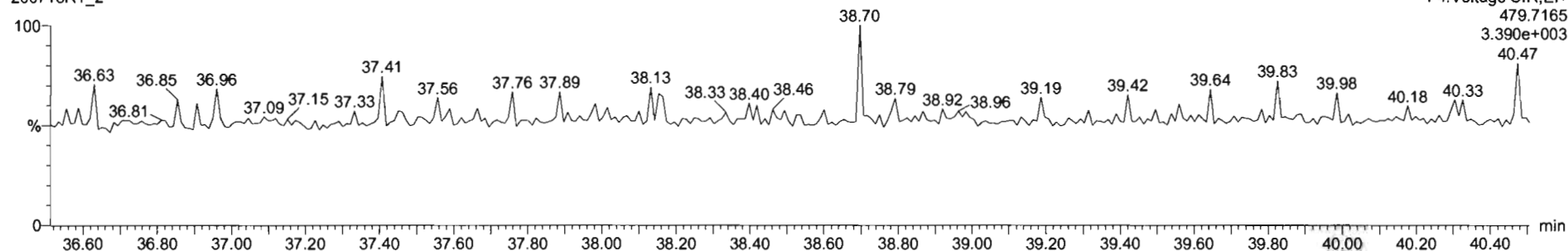
200713R1\_2



F4:Voltage SIR,EI+  
419.822  
5.085e+006

### DPE4

200713R1\_2



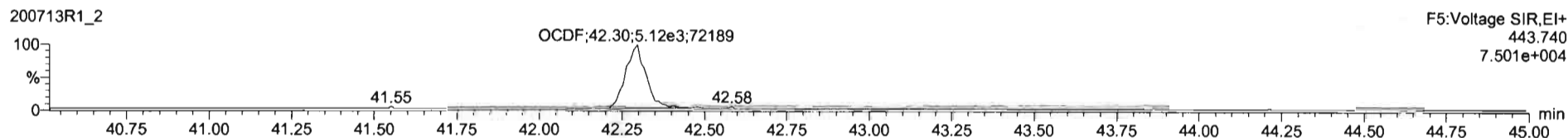
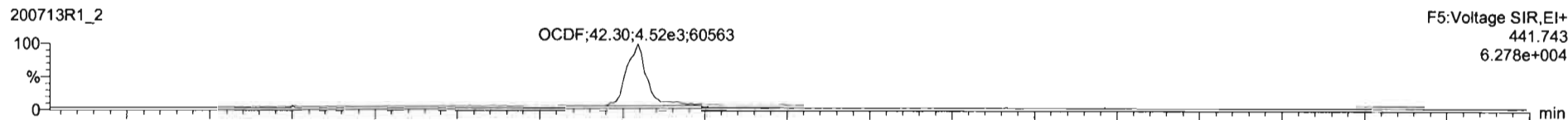
F4:Voltage SIR,EI+  
479.7165  
3.390e+003  
40.47

Dataset: Untitled

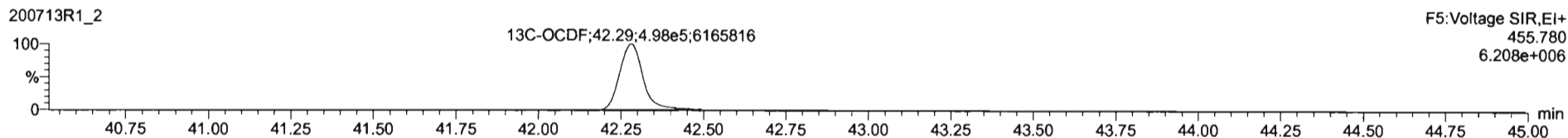
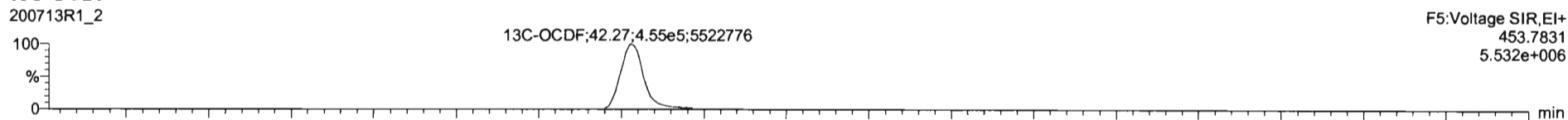
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302

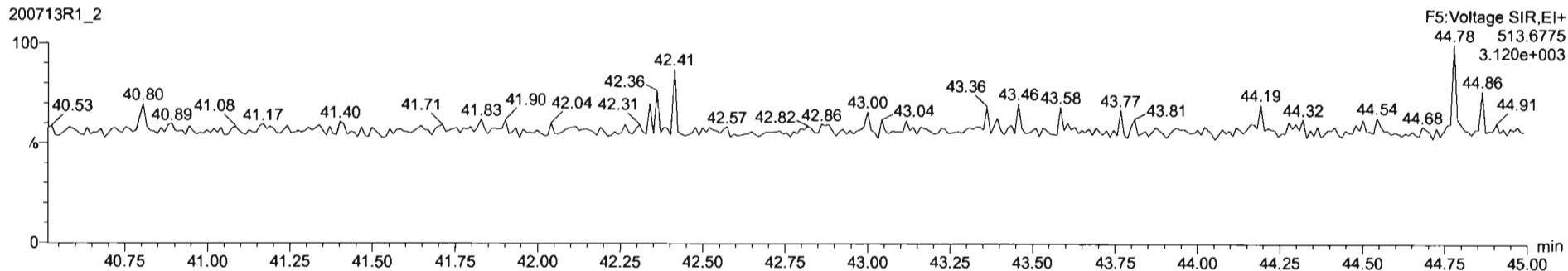
**OCDF**



**13C-OCDF**



**DPE5**

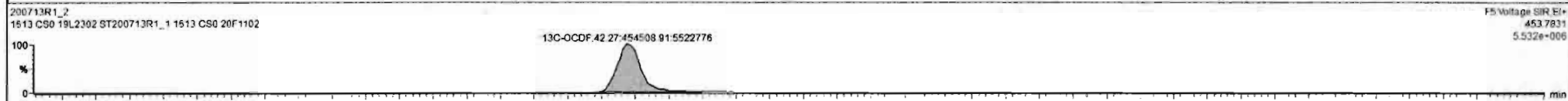


Targetlynx - 200713R1-ORV.qld - [Chromatogram]

File Edit View Display Processing Window Help

200713R1\_2 - ST200713R1\_1 1613 CS0 20F1102 - 1613 CS0 19L2302

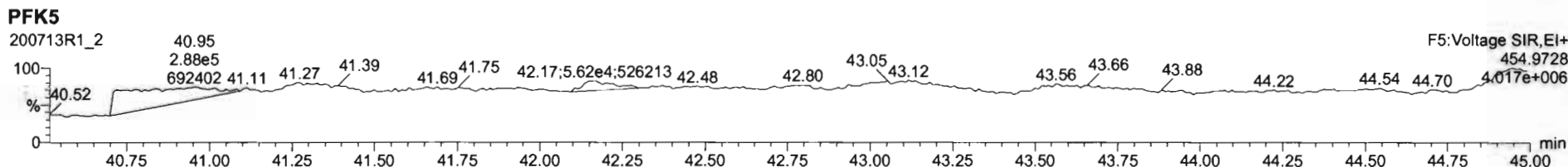
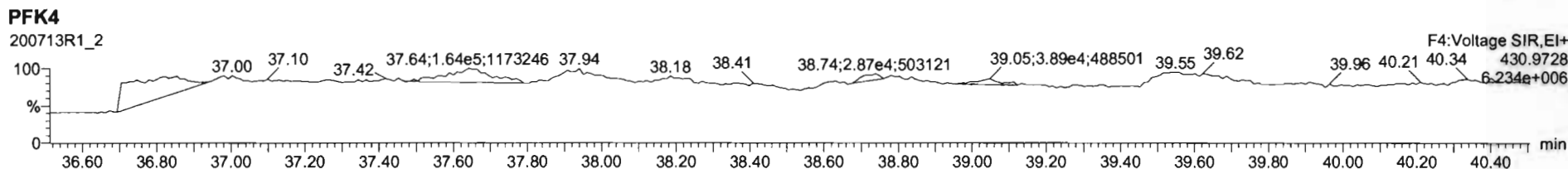
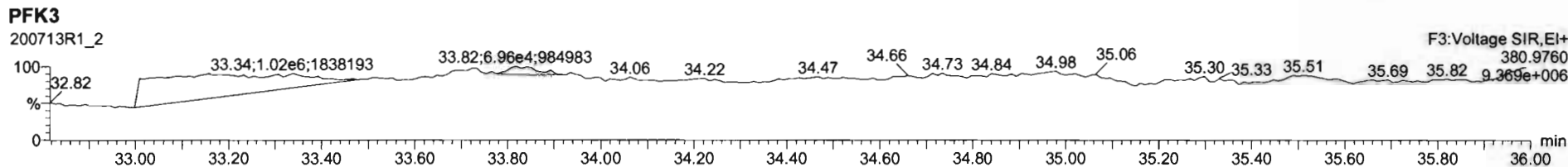
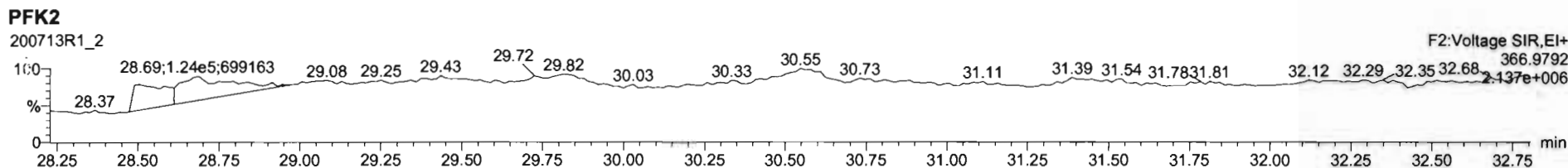
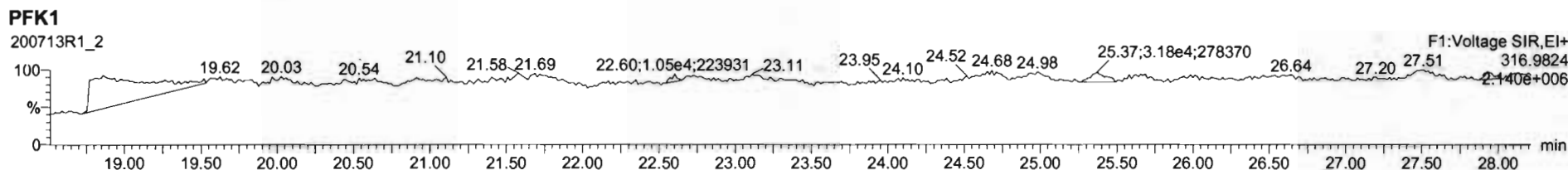
#	RT	RA	Yth	Area	IS Area	Std. Conc	NDev	%SD	RRF M	RRF SD	
1	2.3,7,8-TCDD	26.03	0.857	NO	2.4999e3	1.1133e5	0.250	-8.2	9.30	0.974	0.0905
2	1,2,3,7,8-PeCDD	31.71	0.645	NO	7.8978e3	7.5857e5	1.250	-9.1	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.23	1.186	NO	6.0569e3	5.2914e5	1.250	-12.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.226	NO	7.3759e3	6.8843e5	1.250	-8.6	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.59	1.251	NO	6.9631e3	8.3519e5	1.250	-9.0	7.87	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	38.94	1.014	NO	5.2933e3	5.0825e5	1.250	-7.6	8.81	0.902	0.0794
7	OCDD	42.14	0.895	NO	8.5075e3	7.9325e5	2.500	-5.2	6.51	0.905	0.0589
8	2,3,7,8-TCDF	24.92	0.755	NO	3.2301e3	1.5501e6	0.250	-2.8	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.546	NO	1.1947e4	1.1238e6	1.250	-12.1	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.615	NO	1.3405e4	1.0835e6	1.250	-8.1	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.36	1.228	NO	8.4799e3	7.6410e5	1.250	-8.3	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.48	1.219	NO	9.3138e3	8.3599e5	1.250	-11.1	8.24	1.00	0.0836
13	2,3,4,6,7,8-HxCDF	35.06	1.189	NO	8.3871e3	7.4724e5	1.250	-9.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.91	1.178	NO	6.8796e3	6.2476e5	1.250	-8.4	8.87	0.961	0.0853
15	1,2,3,4,6,7,8-HpCDF	37.58	0.957	NO	6.2884e3	5.4388e5	1.250	-7.8	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HxCDF	39.60	0.972	NO	4.7205e3	3.6114e5	1.250	-10.6	9.10	1.11	0.101
17	OCDF	42.30	0.847	NO	9.8577e3	9.5279e5	2.500	-9.5	7.85	0.896	0.0703
18	13C-2,3,7,8-TCDD	26.01	0.786	NO	1.1183e6	1.0733e6	100.000	-5.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.639	NO	7.5857e5	1.0733e6	100.000	-6.7	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.22	1.280	NO	5.2914e5	8.8841e5	100.000	-5.8	6.25	0.547	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.32	1.269	NO	6.8843e5	8.8841e5	100.000	-1.5	5.73	0.805	0.0461



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_2, Date: 13-Jul-2020, Time: 08:48:02, ID: ST200713R1\_1 1613 CS0 20F1102, Description: 1613 CS0 19L2302



Dataset: Untitled

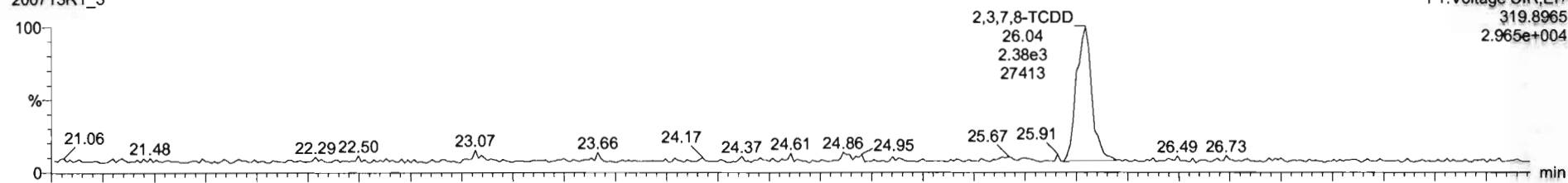
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

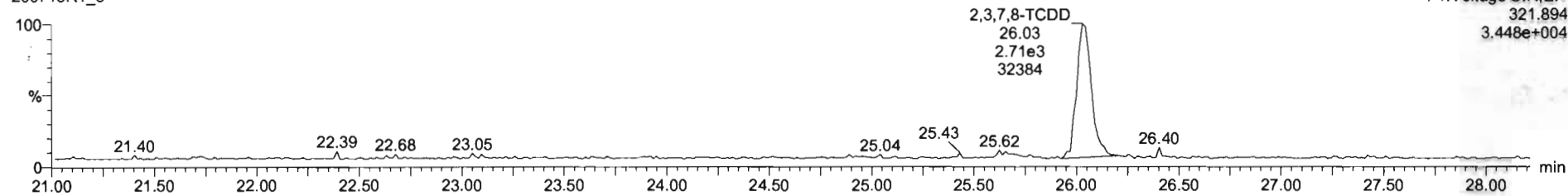
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**2,3,7,8-TCDD**

200713R1\_3

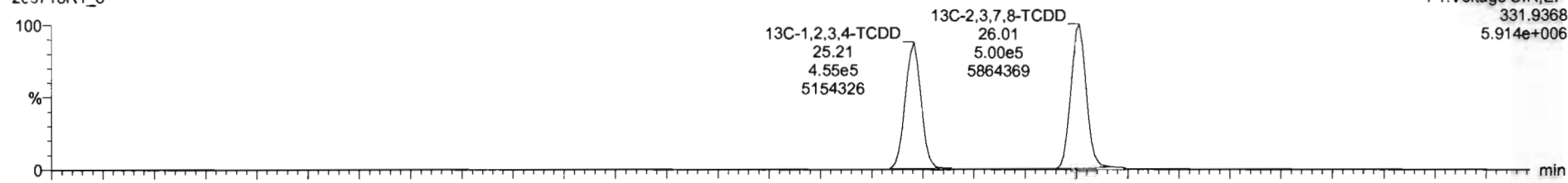


200713R1\_3

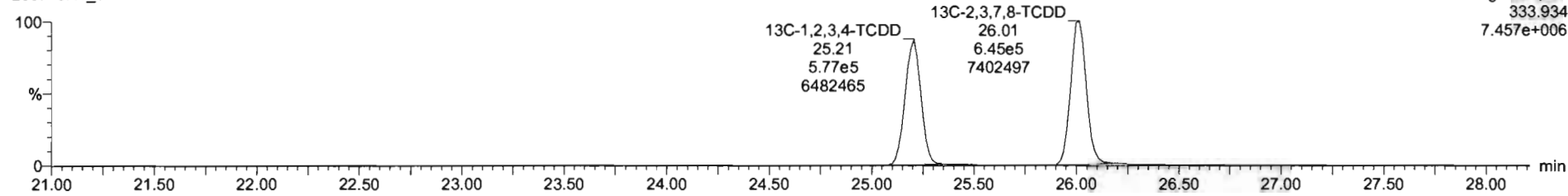


**13C-2,3,7,8-TCDD**

200713R1\_3



200713R1\_3



Dataset: Untitled

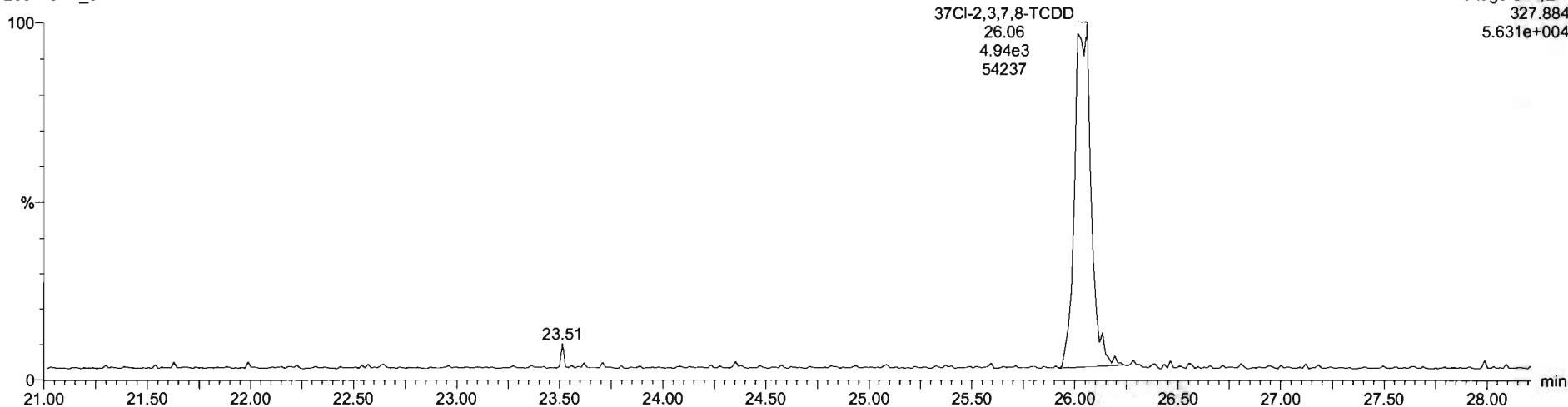
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

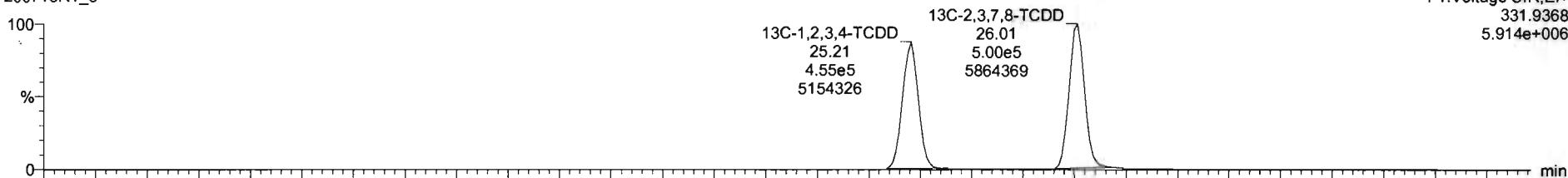
37Cl-2,3,7,8-TCDD

200713R1\_3

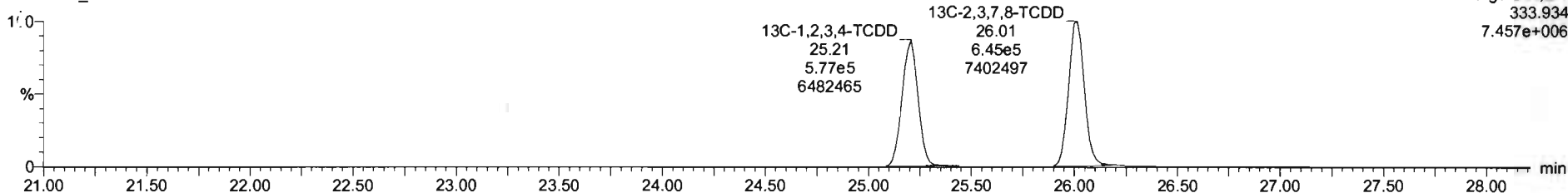


13C-1,2,3,4-TCDD

200713R1\_3



200713R1\_3



Dataset: Untitled

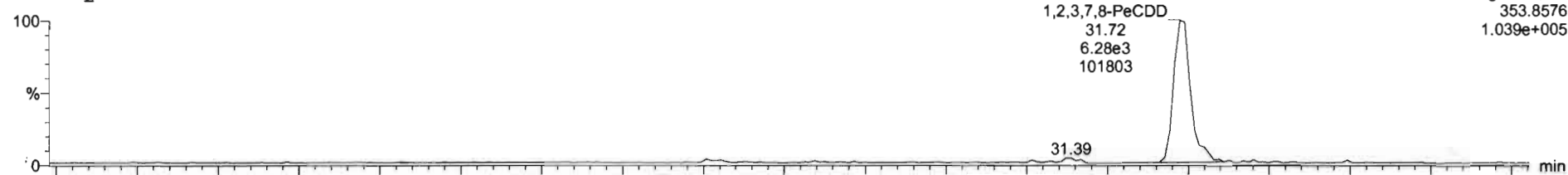
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

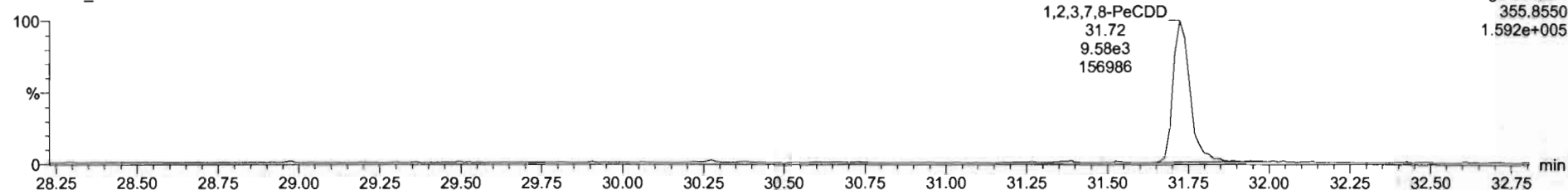
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,7,8-PeCDD**

200713R1\_3

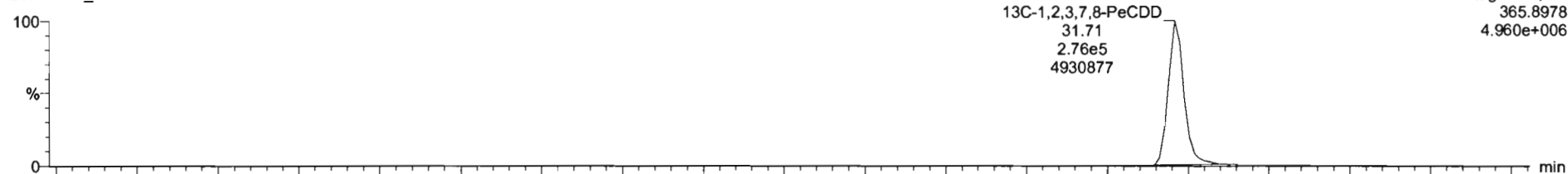


200713R1\_3

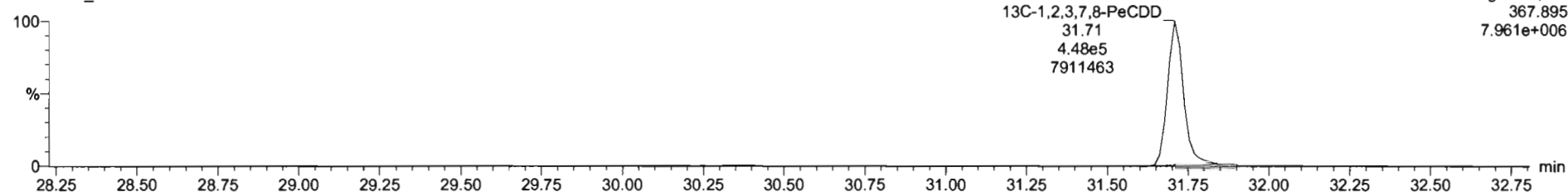


**<sup>13</sup>C-1,2,3,7,8-PeCDD**

200713R1\_3



200713R1\_3



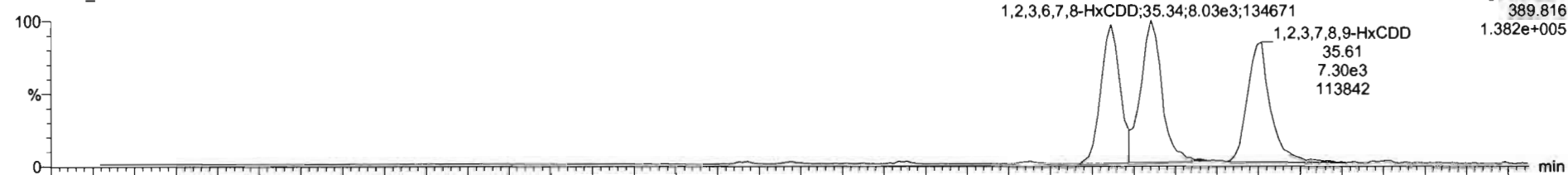
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

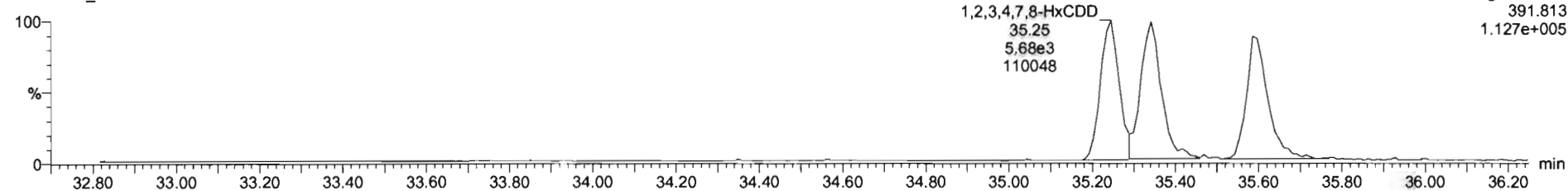
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,4,7,8-HxCDD**

200713R1\_3

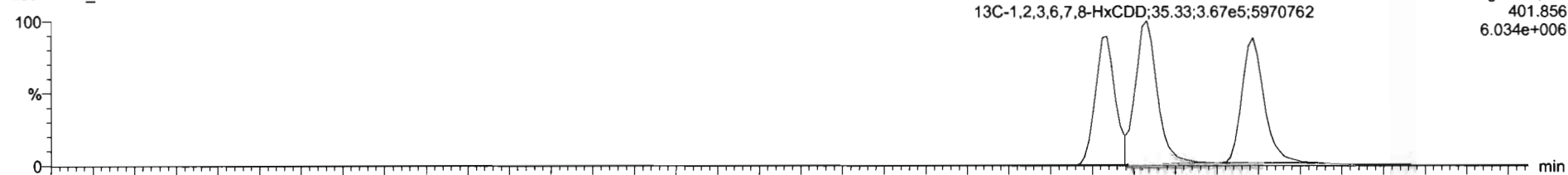


200713R1\_3

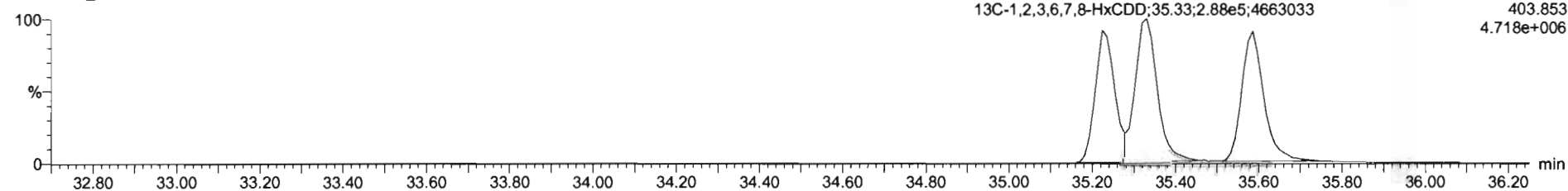


**13C-1,2,3,4,7,8-HxCDD**

200713R1\_3

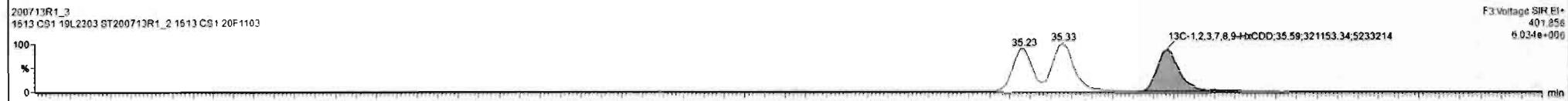
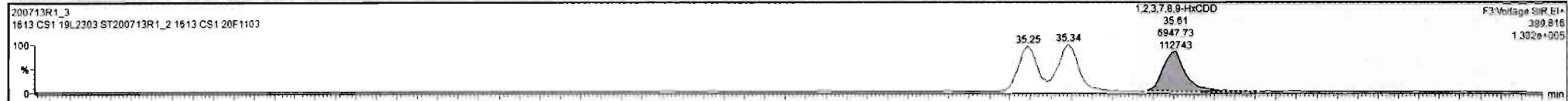


200713R1\_3





#	Name	RT	RA	Y/N	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.04	0.877	NO	5.0936e3	1.1454e6	0.500	-8.7	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.655	NO	1.5865e4	7.2382e5	2.500	-4.4	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.215	NO	1.2572e4	5.2162e5	2.500	-7.5	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.271	NO	1.4347e4	6.5443e5	2.500	-6.5	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.61	1.194	NO	1.2789e4	5.7880e5	2.500	-7.7	7.15	0.956	0.0683
6	1,2,3,4,6,7,8-HpCDD	38.97	1.045	NO	9.8707e3	4.8453e5	2.500	-9.0	9.71	0.896	0.0870
7	OCDD	42.15	0.943	NO	1.6234e4	7.8291e5	5.000	-7.1	8.21	0.893	0.0733
8	2,3,7,8-TCDF	24.94	0.756	NO	6.2654e3	1.5693e6	0.500	-6.9	7.09	0.856	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.668	NO	2.4493e4	1.0996e6	2.500	-8.0	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.640	NO	2.6486e4	1.0662e6	2.500	-7.8	8.94	1.06	0.0748
11	1,2,3,4,7,8-HxCDF	34.37	1.208	NO	1.5827e4	7.2383e5	2.500	-9.6	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.264	NO	1.8084e4	7.8267e5	2.500	-7.9	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.07	1.173	NO	1.6453e4	7.2199e5	2.500	-8.6	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.248	NO	1.2685e4	5.9323e5	2.500	-10.8	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.59	1.009	NO	1.1979e4	5.2472e5	2.500	-8.9	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.62	1.098	NO	9.0001e3	3.5514e5	2.500	-8.5	9.10	1.11	0.101
17	OCDF	42.31	0.885	NO	1.8901e4	9.1677e5	5.000	-7.9	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.01	0.775	NO	1.1454e6	1.0315e6	100.000	0.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.617	NO	7.2382e5	1.0315e6	100.000	-7.4	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.258	NO	5.2162e5	8.2467e5	100.000	-2.3	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.274	NO	6.5443e5	8.2467e5	100.000	-1.4	5.73	0.695	0.0461



Dataset: Untitled

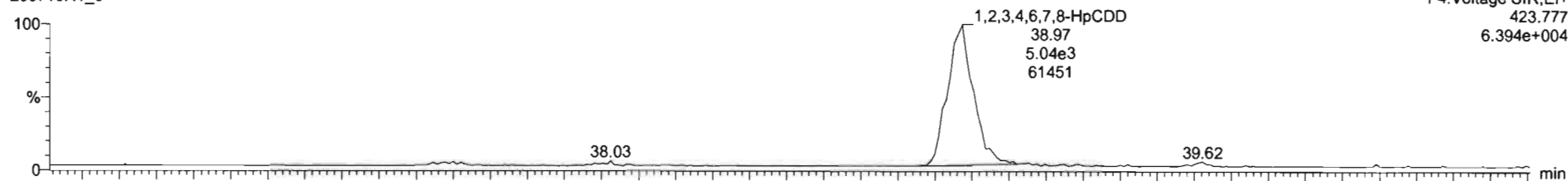
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

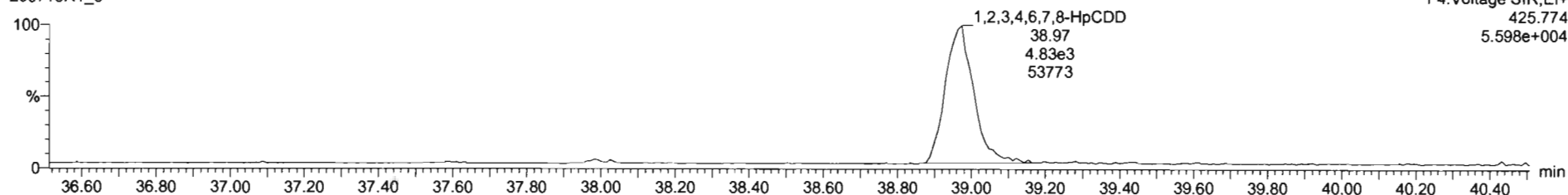
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,4,6,7,8-HpCDD**

200713R1\_3

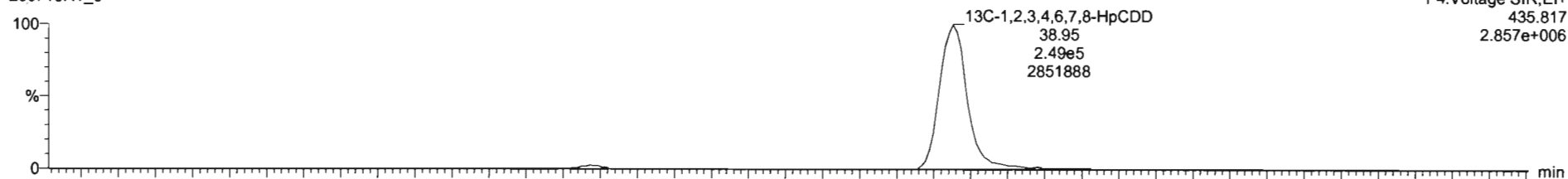


200713R1\_3

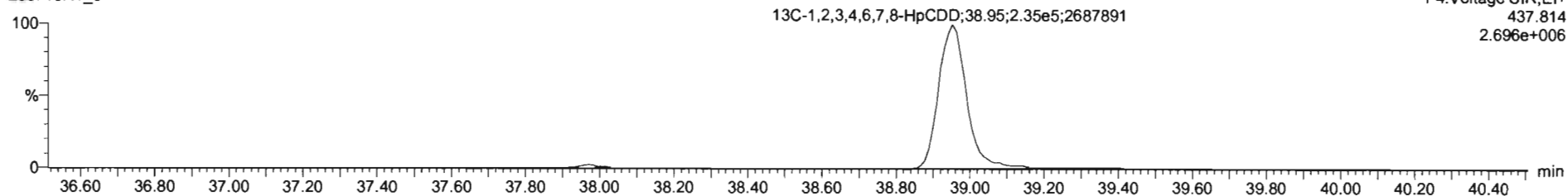


**13C-1,2,3,4,6,7,8-HpCDD**

200713R1\_3



200713R1\_3



Dataset: Untitled

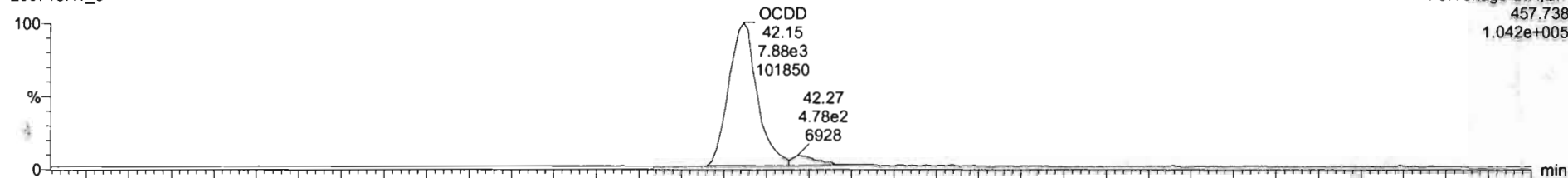
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

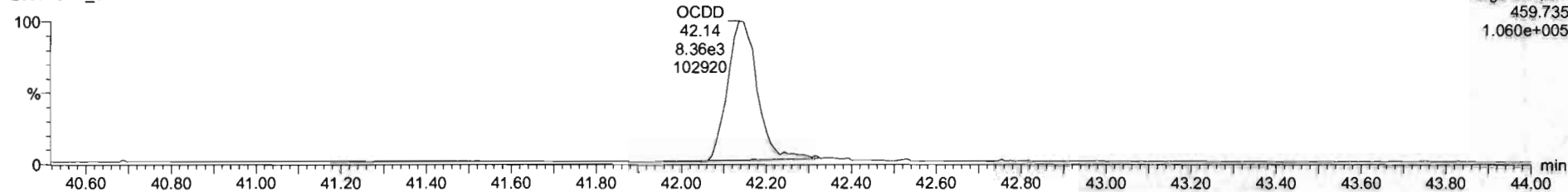
**OCDD**

200713R1\_3



F5:Voltage SIR,EI+  
457.738  
1.042e+005

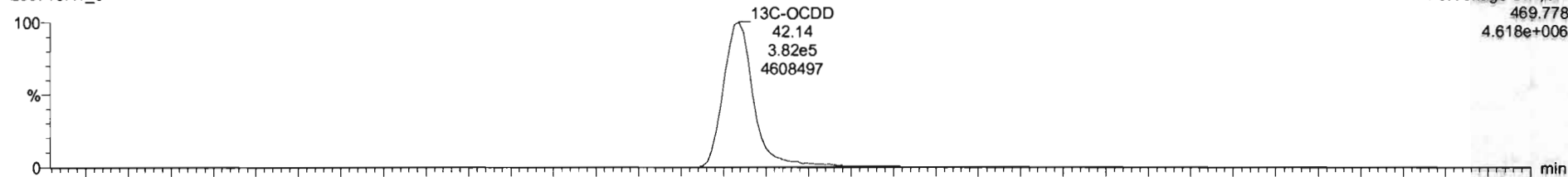
200713R1\_3



F5:Voltage SIR,EI+  
459.735  
1.060e+005

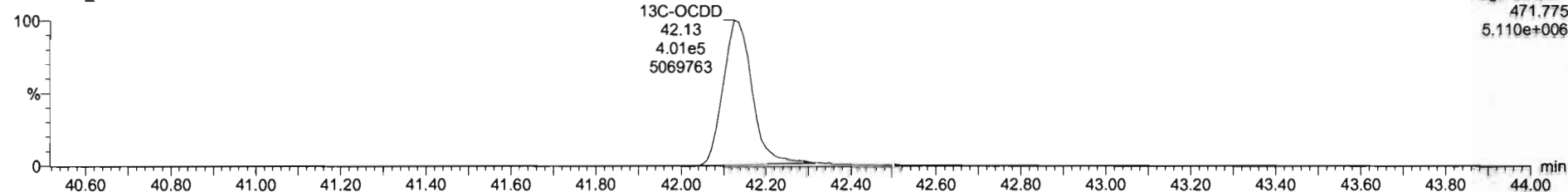
**13C-OCDD**

200713R1\_3



F5:Voltage SIR,EI+  
469.778  
4.618e+006

200713R1\_3



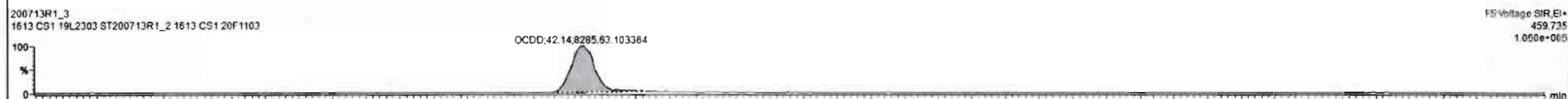
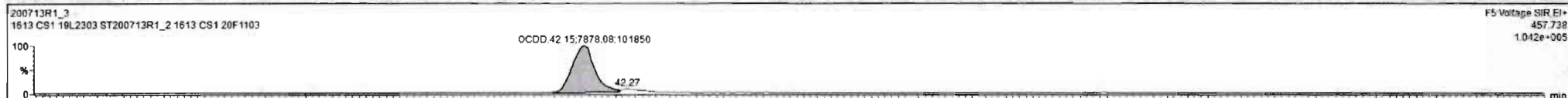
F5:Voltage SIR,EI+  
471.775  
5.110e+006

TargetLynx - 200713R1-ORV.qld - [Chromatogram]

File Edit View Display Processing Window Help

200713R1\_3 - ST200713R1\_2 1613 CS1 20F1103 1613 CS1 19L2303

#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	N.RSD	RRF M...	RRF SD
1	1,2,3,7,8-TCDD	26.04	0.877	NO	5.0936e3	1.1454e6	0.500	-8.7	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.655	NO	1.5865e4	7.2382e5	2.500	-4.4	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.215	NO	1.2572e4	5.2162e5	2.500	-7.5	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.271	NO	1.4347e4	6.5443e5	2.500	-6.5	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.61	1.194	NO	1.2765e4	5.7860e5	2.500	-8.4	7.87	0.984	0.0739
6	1,2,3,4,6,7,8-HpCDD	36.97	1.045	NO	9.8707e3	4.8453e5	2.500	-9.7	8.81	0.902	0.0794
7	OCDD	42.15	0.951	NO	1.6194e4	7.7624e5	5.000	-7.7	6.82	0.903	0.0618
8	2,3,7,8-TCDF	24.94	0.756	NO	6.2654e3	1.5693e6	0.500	-6.9	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.688	NO	2.4493e4	1.0996e6	2.500	-8.0	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.640	NO	2.6466e4	1.0662e6	2.500	-7.8	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.37	1.208	NO	1.5827e4	7.2383e5	2.500	-9.6	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.264	NO	1.8084e4	7.6267e5	2.500	-7.9	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.07	1.173	NO	1.6453e4	7.2199e5	2.500	-8.6	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.248	NO	1.2695e4	5.9323e5	2.500	-10.8	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.59	1.009	NO	1.1976e4	5.2472e5	2.500	-8.9	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.62	1.088	NO	9.0001e3	3.5514e5	2.500	-8.5	9.10	1.11	0.101
17	OCDF	42.31	0.885	NO	1.8901e4	9.1677e5	5.000	-7.9	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.01	0.775	NO	1.1454e6	1.0315e6	100.000	0.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.617	NO	7.2382e5	1.0315e6	100.000	-7.4	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.258	NO	5.2162e5	8.2467e5	100.000	-2.3	6.25	0.547	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.274	NO	6.5443e5	8.2467e5	100.000	-1.4	5.73	0.805	0.0461



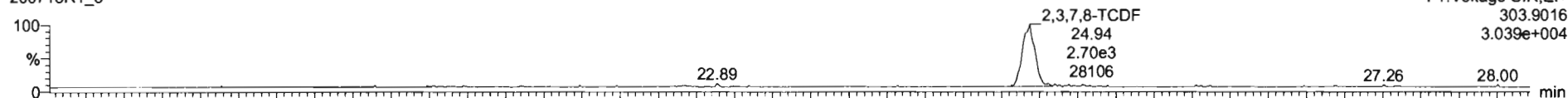
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

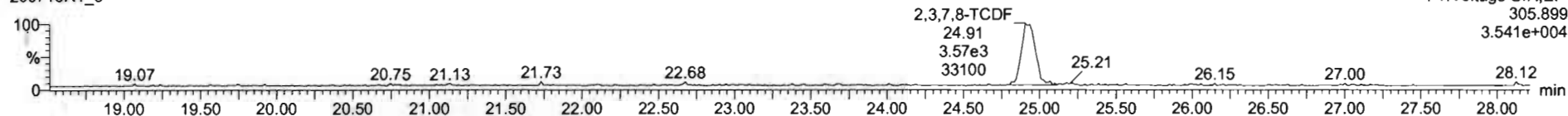
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**2,3,7,8-TCDF**

200713R1\_3

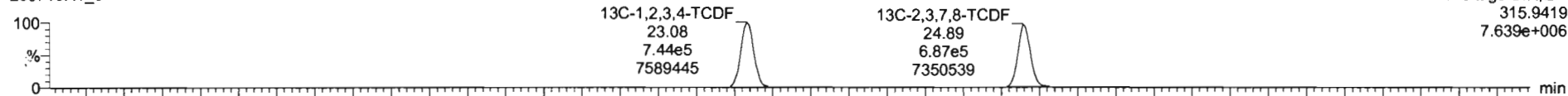


200713R1\_3

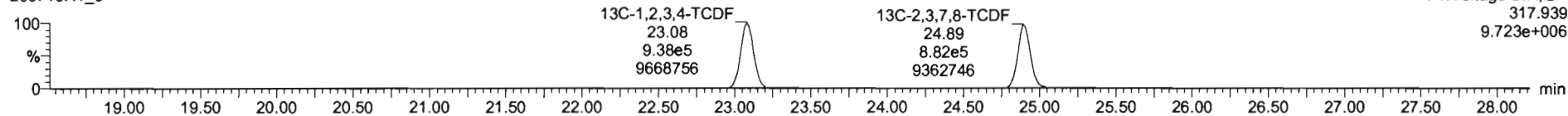


**13C-2,3,7,8-TCDF**

200713R1\_3

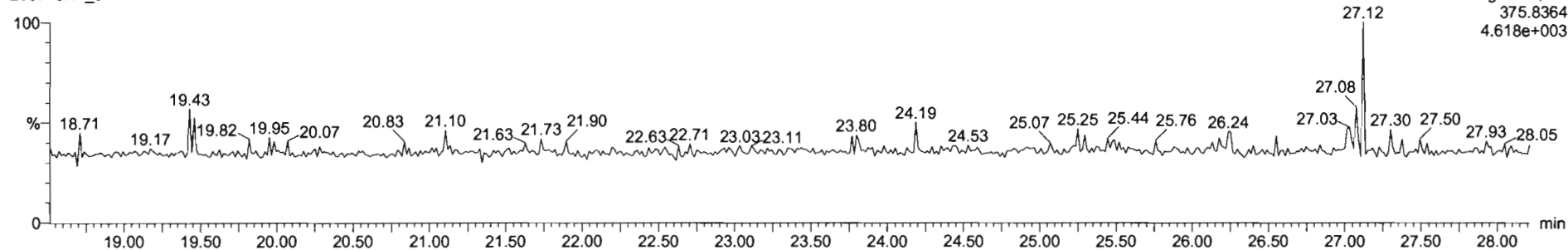


200713R1\_3



**DPE1**

200713R1\_3



Dataset: Untitled

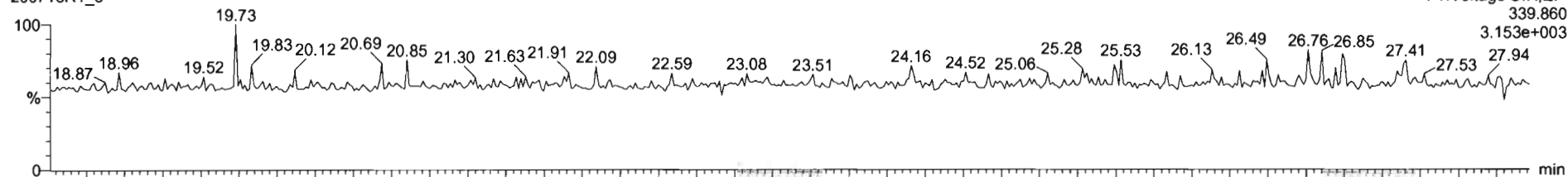
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

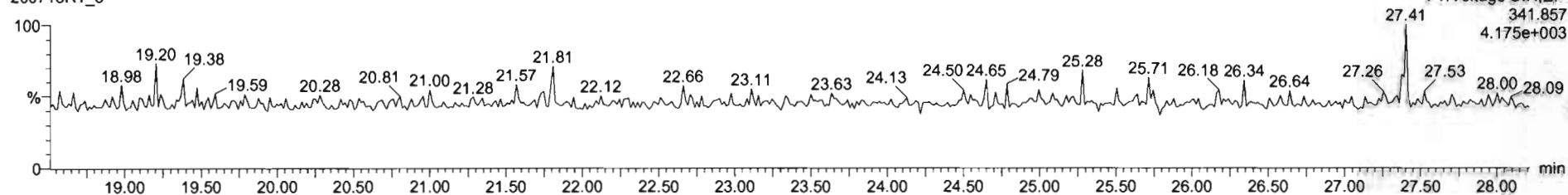
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

1st Func. Penta-Furans

200713R1\_3

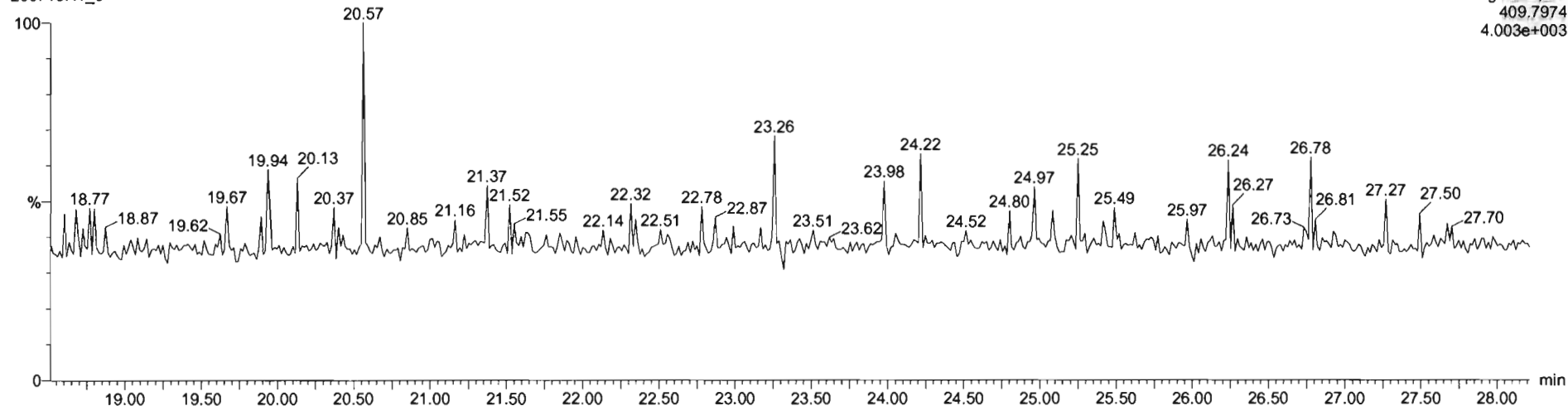


200713R1\_3



DPE6

200713R1\_3



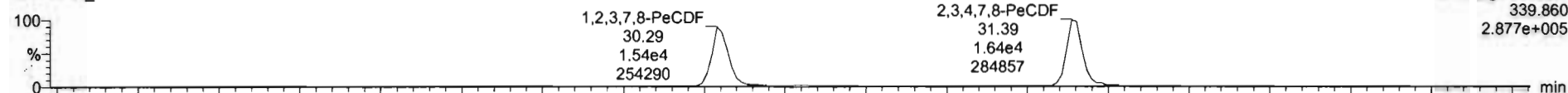
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

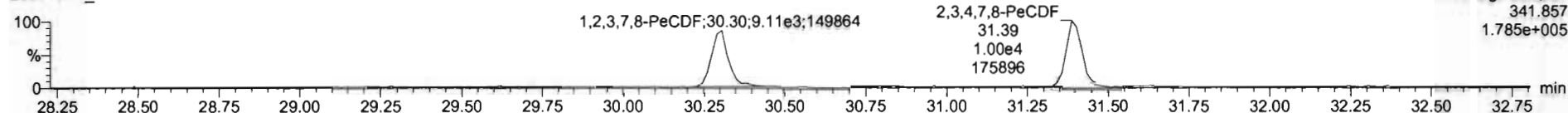
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,7,8-PeCDF**

200713R1\_3

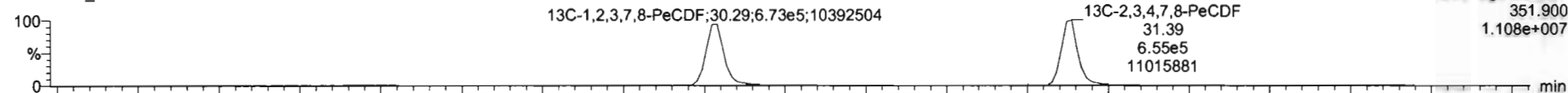


200713R1\_3

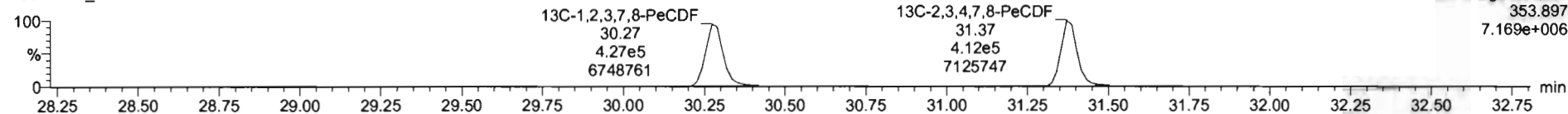


**13C-1,2,3,7,8-PeCDF**

200713R1\_3

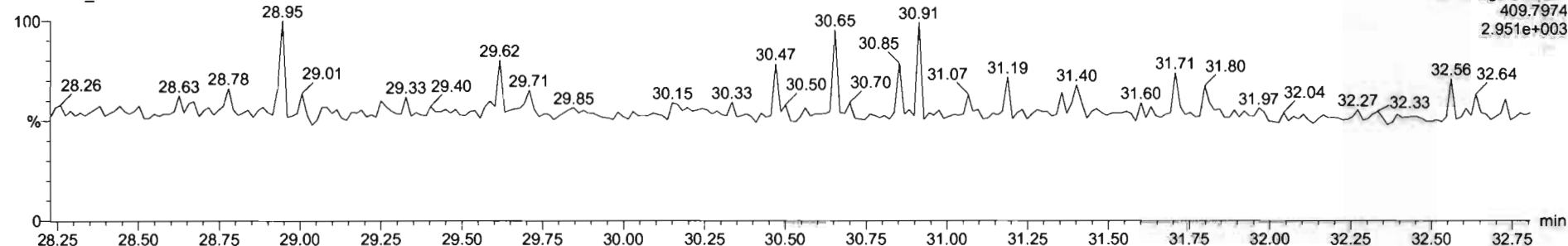


200713R1\_3



**DPE2**

200713R1\_3



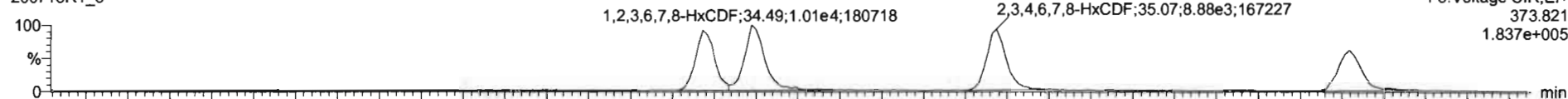
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

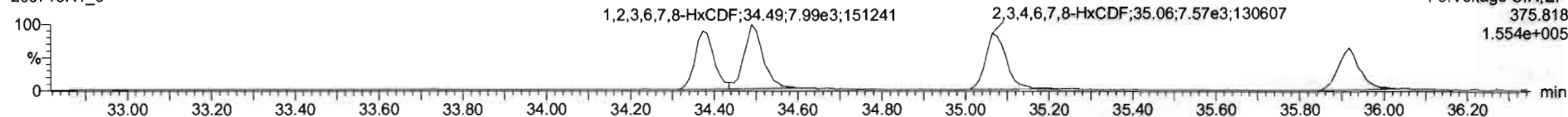
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,4,7,8-HxCDF**

200713R1\_3

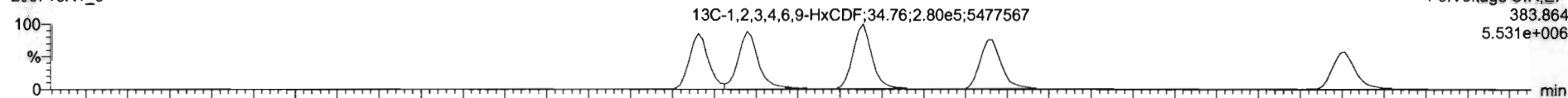


200713R1\_3

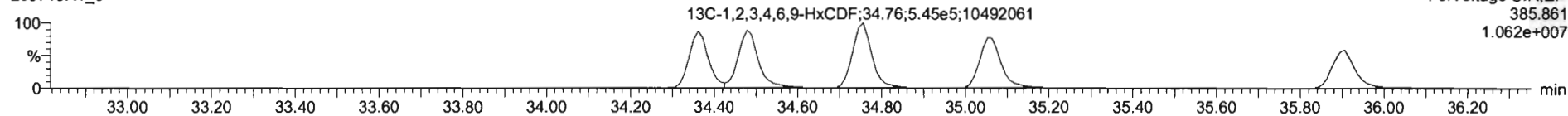


**13C-1,2,3,4,7,8-HxCDF**

200713R1\_3

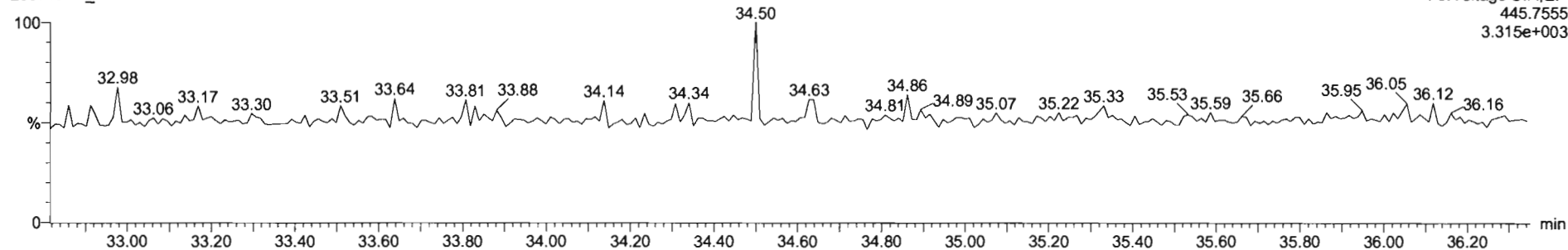


200713R1\_3



**DPE3**

200713R1\_3

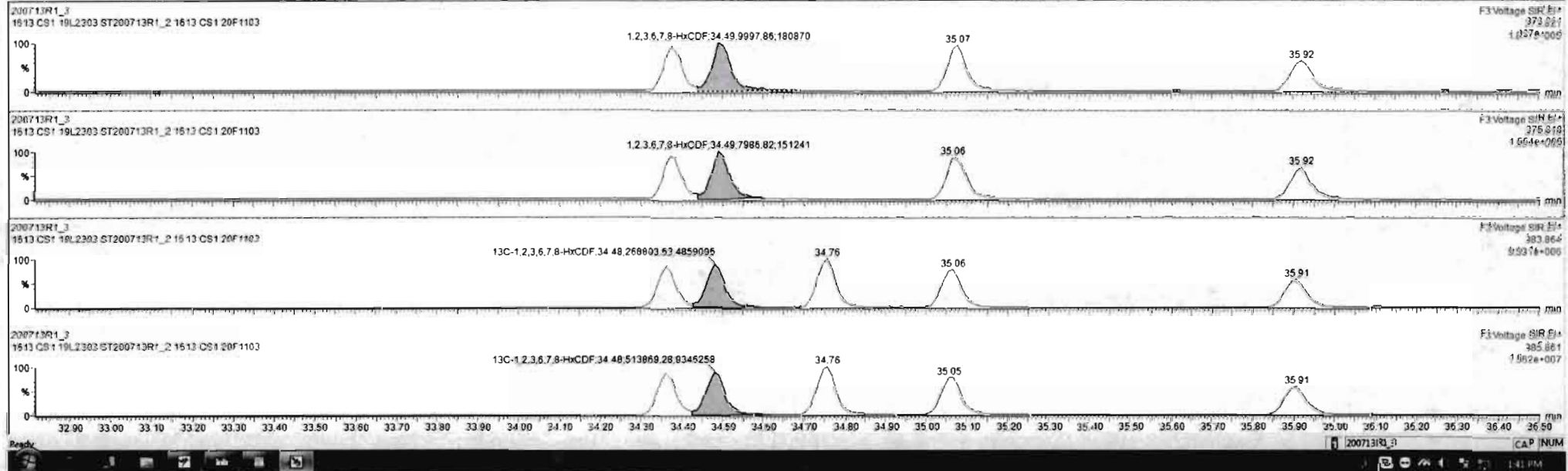




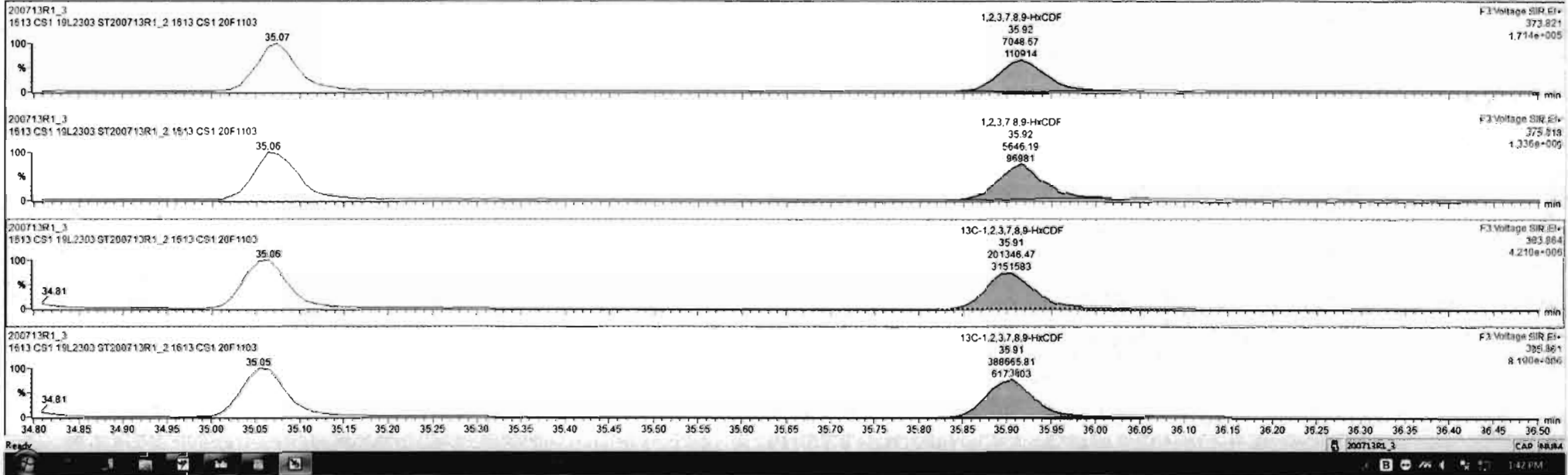
TargetLynx - 200713R1-CRV.qtd - [Chromatogram]

200713R1\_3 - ST200713R1\_2 1613 CS1 20F1103 1613 CS1 19L2303

#	Name	RT	RA	Yln	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
1	1,2,3,7,8-TCDD	26.04	0.877	NO	5.0936e3	1.1454e6	0.500	-8.7	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.855	NO	1.5865e4	7.2382e5	2.500	-4.4	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.215	NO	1.2572e4	5.2162e5	2.500	-7.5	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.271	NO	1.4347e4	6.5443e5	2.500	-6.5	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.61	1.194	NO	1.2785e4	5.7860e5	2.500	-8.4	7.67	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	36.97	1.045	NO	9.8707e3	4.8453e5	2.500	-9.7	8.81	0.902	0.0794
7	OCDD	42.15	0.951	NO	1.8184e4	7.7824e5	5.000	-8.0	6.51	0.905	0.0589
8	1,2,3,7,8-TCDF	24.94	0.756	NO	6.2654e3	1.5693e6	0.500	-6.9	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.688	NO	2.4493e4	1.0996e6	2.500	-8.0	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.640	NO	2.6466e4	1.0662e6	2.500	-7.8	6.94	1.06	0.0748
11	1,2,3,4,7,8-HxCDF	34.37	1.208	NO	1.5827e4	7.2383e5	2.500	-9.6	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.252	NO	1.7985e4	7.8267e5	2.500	-8.3	8.34	1.00	0.0838
13	1,2,3,4,6,7,8-HxCDF	35.07	1.173	NO	1.6453e4	7.2199e5	2.500	-8.6	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.248	NO	1.2695e4	5.8323e5	2.500	-10.8	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.59	1.009	NO	1.1978e4	5.2472e5	2.500	-8.9	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.62	1.098	NO	9.0001e3	3.5514e5	2.500	-6.5	9.10	1.11	0.101
17	OCDF	42.31	0.965	NO	1.8901e4	9.1677e5	5.000	-7.9	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.01	0.775	NO	1.1454e6	1.0315e6	100.000	0.6	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.617	NO	7.2382e5	1.0315e6	100.000	-7.4	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.258	NO	5.2162e5	8.2467e5	100.000	-2.3	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.274	NO	6.5443e5	8.2467e5	100.000	-1.4	5.73	0.805	0.0461



#	Name	RT	RA	Y/N	Area	IS Area	Std Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.04	0.877	NO	5.0936e3	1.1454e6	0.500	-8.7	9.30	0.974	0.090E
2	1,2,3,7,8-PeCDD	31.72	0.655	NO	1.5865e4	7.2382e5	2.500	-4.4	6.72	0.917	0.061E
3	1,2,3,4,7,8-HxCDD	35.25	1.215	NO	1.2572e4	5.2162e5	2.500	-7.5	9.09	1.04	0.094E
4	1,2,3,6,7,8-HxCDD	35.34	1.271	NO	1.4347e4	6.5443e5	2.500	-5.5	7.25	0.938	0.068E
5	1,2,3,7,8,9-HxCDD	35.61	1.194	NO	1.2785e4	5.7880e5	2.500	-6.4	7.87	0.954	0.073E
6	1,2,3,4,6,7,8-HpCDD	38.87	1.045	NO	9.8707e3	4.8453e5	2.500	-9.7	8.81	0.902	0.079E
7	OCDD	42.15	0.951	NO	1.6184e4	7.7824e5	5.000	-8.0	6.51	0.905	0.058E
8	2,3,7,8-TCDF	24.94	0.756	NO	6.2654e3	1.5693e6	0.500	-5.9	7.09	0.858	0.060E
9	1,2,3,7,8-PeCDF	30.29	1.688	NO	2.4493e4	1.0996e6	2.500	-8.0	8.61	0.968	0.083E
10	1,2,3,4,7,8-PeCDF	31.39	1.640	NO	2.8489e4	1.0662e6	2.500	-7.8	6.94	1.06	0.074E
11	1,2,3,4,7,8-HxCDF	34.37	1.208	NO	1.5827e4	7.2383e5	2.500	-9.8	8.22	0.958	0.079E
12	1,2,3,6,7,8-HxCDF	34.49	1.252	NO	1.7985e4	7.8267e5	2.500	-8.3	8.34	1.00	0.082E
13	1,2,3,4,6,7,8-HxCDF	35.07	1.173	NO	1.6453e4	7.2199e5	2.500	-6.6	8.26	0.997	0.082E
14	1,2,3,7,8,9-HxCDF	35.82	1.248	NO	1.2895e4	5.9001e5	2.500	-10.5	8.84	0.962	0.085E
15	1,2,3,4,6,7,8-HpCDF	37.59	1.009	NO	1.1979e4	5.2472e5	2.500	-5.9	8.47	1.00	0.084E
16	1,2,3,4,7,8,9-HpCDF	39.62	1.068	NO	9.0001e3	3.5514e5	2.500	-6.5	9.10	1.11	0.101E
17	OCDF	42.31	0.885	NO	1.8901e4	9.1677e5	5.000	-7.9	7.88	0.896	0.070E
18	13C-2,3,7,8-TCDD	26.01	0.775	NO	1.1454e6	1.0315e6	100.000	0.6	3.37	1.10	0.037E
19	13C-1,2,3,7,8-PeCDD	31.71	0.617	NO	7.2382e5	1.0315e6	100.000	-7.4	9.89	0.757	0.074E
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.258	NO	5.2162e5	8.2467e5	100.000	-2.3	6.25	0.647	0.040E
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.274	NO	6.5443e5	8.2467e5	100.000	-1.4	5.73	0.805	0.046E



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

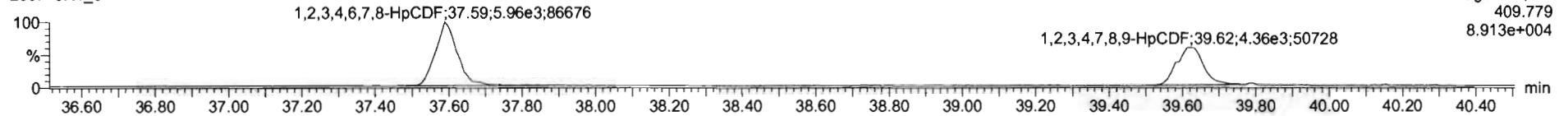
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**1,2,3,4,6,7,8-HpCDF**

200713R1\_3

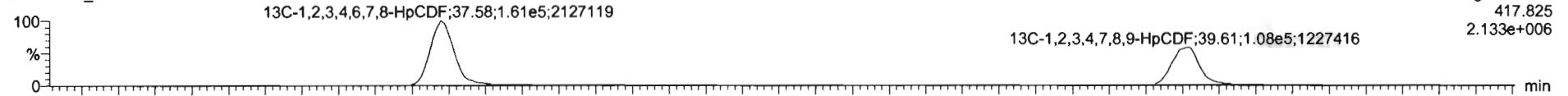


200713R1\_3

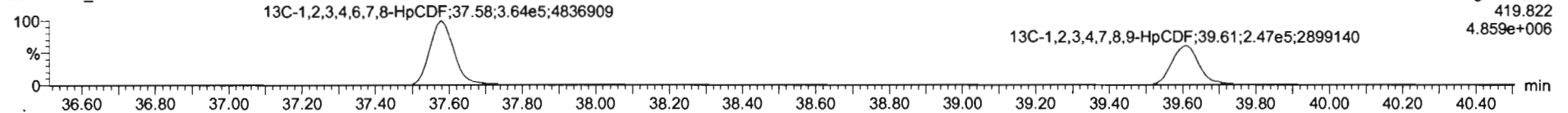


**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_3

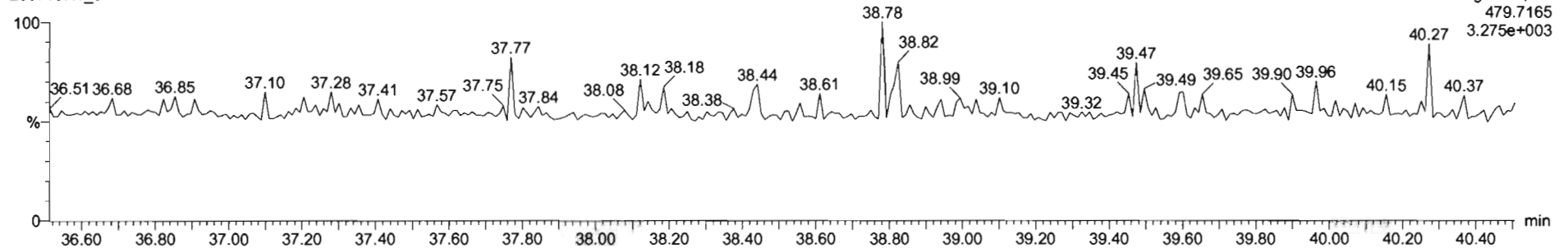


200713R1\_3



**DPE4**

200713R1\_3



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

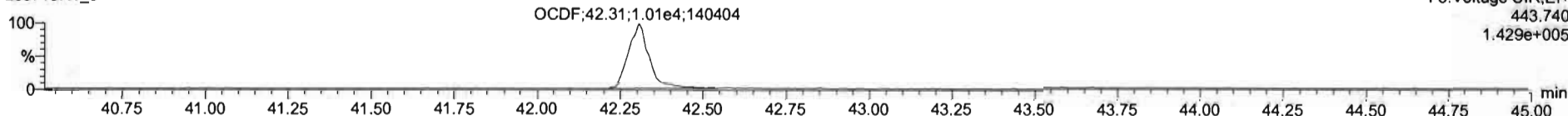
Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303

**OCDF**

200713R1\_3

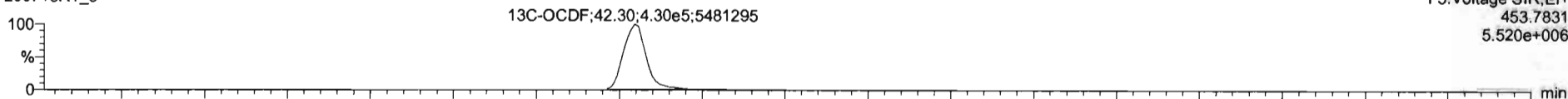


200713R1\_3

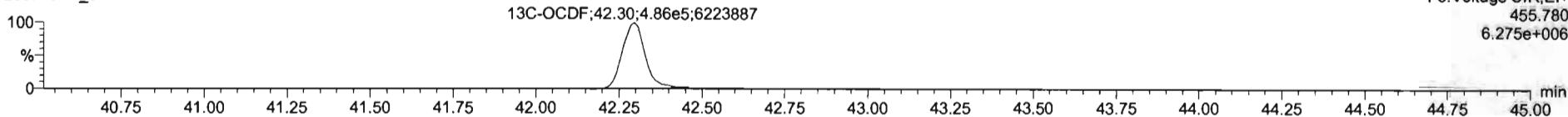


**13C-OCDF**

200713R1\_3

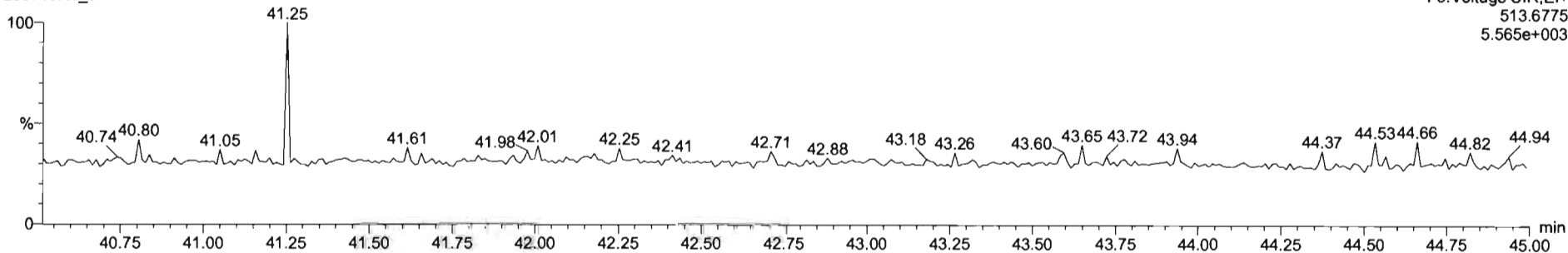


200713R1\_3



**DPE5**

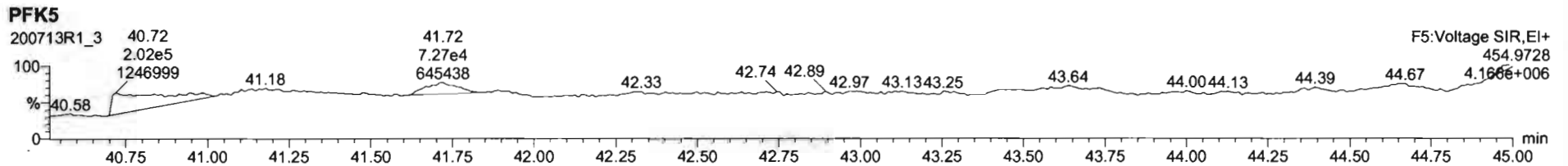
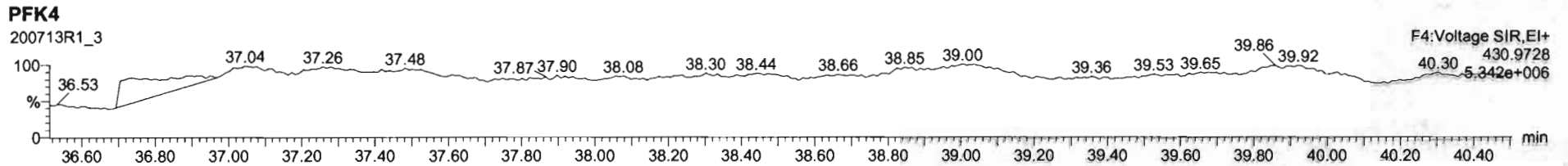
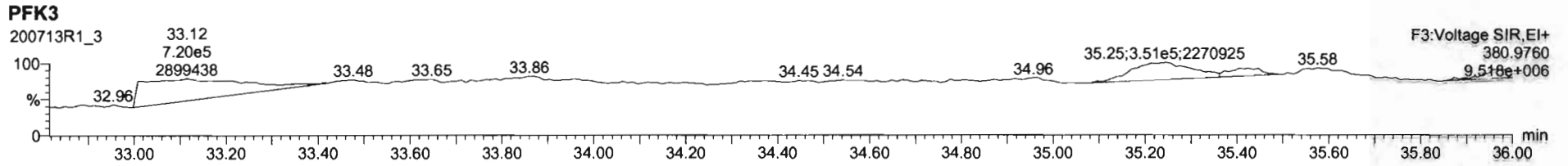
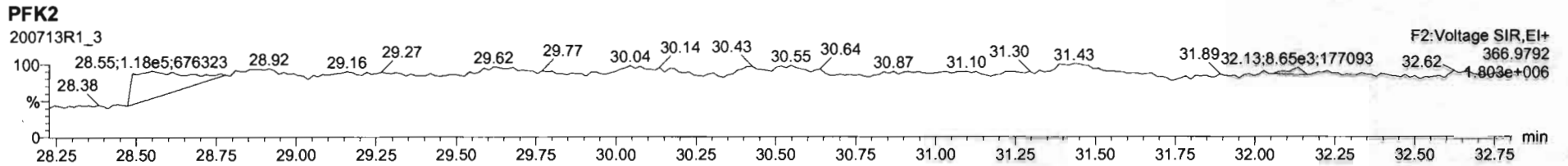
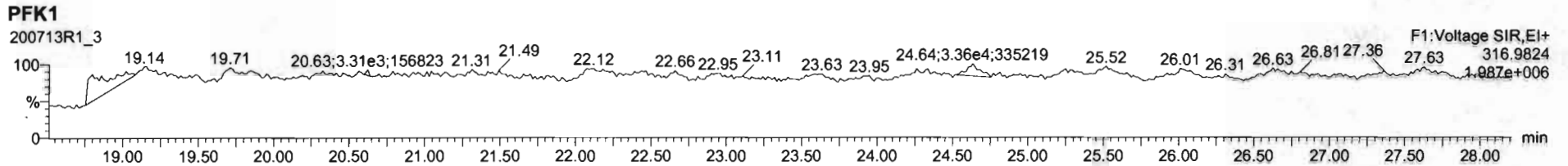
200713R1\_3



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_3, Date: 13-Jul-2020, Time: 09:35:33, ID: ST200713R1\_2 1613 CS1 20F1103, Description: 1613 CS1 19L2303



Dataset: Untitled

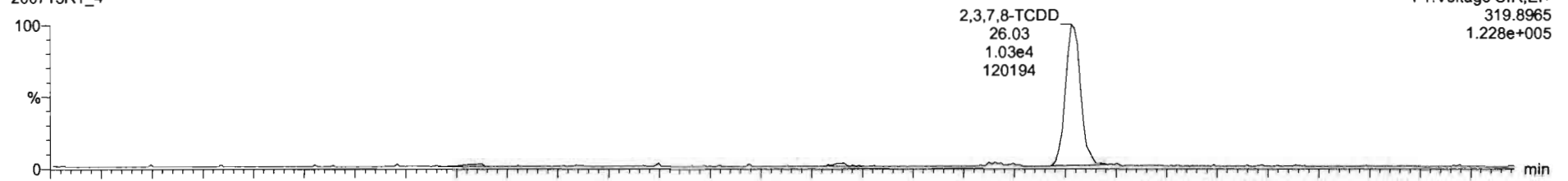
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

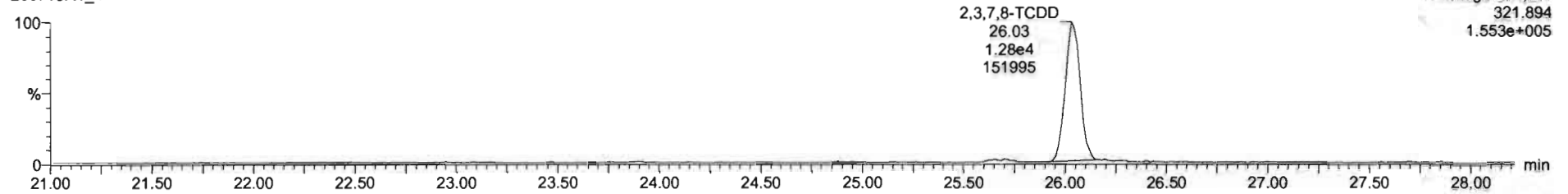
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**2,3,7,8-TCDD**

200713R1\_4

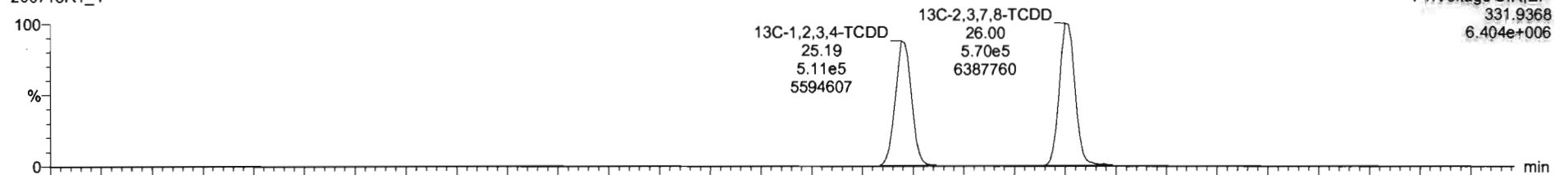


200713R1\_4

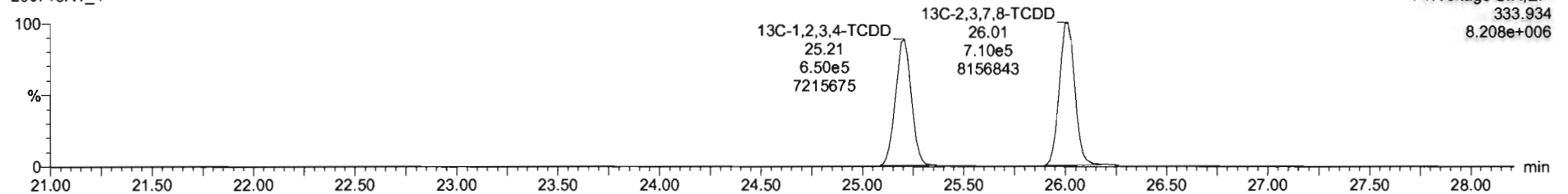


**13C-2,3,7,8-TCDD**

200713R1\_4



200713R1\_4



Dataset: Untitled

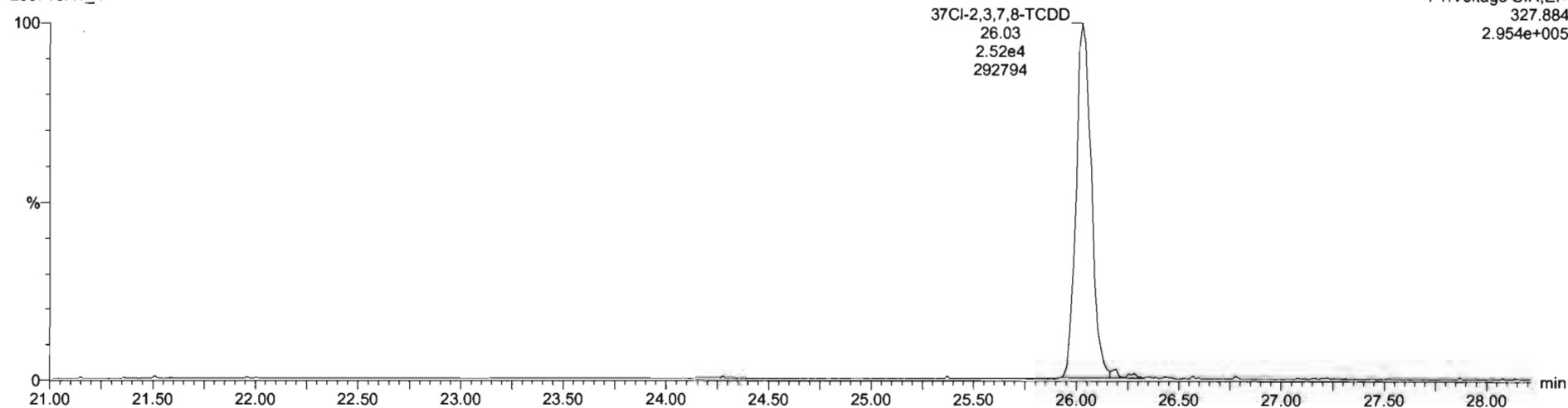
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

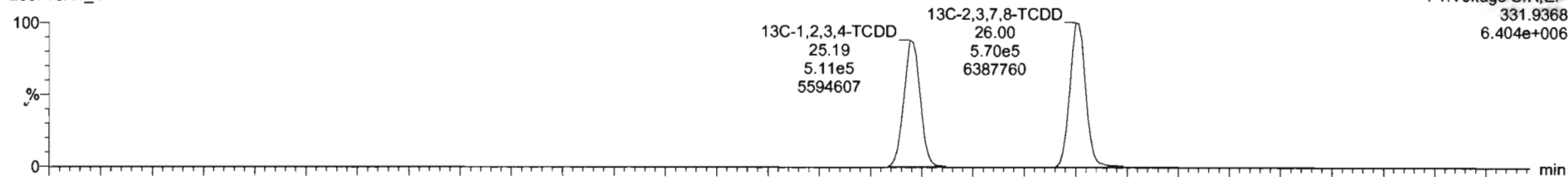
37Cl-2,3,7,8-TCDD

200713R1\_4

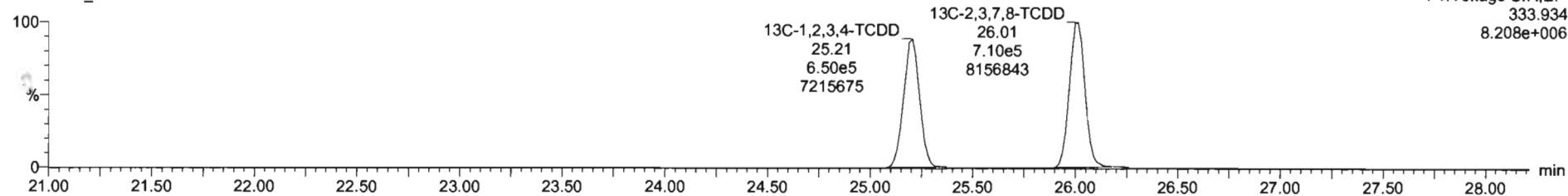


13C-1,2,3,4-TCDD

200713R1\_4



200713R1\_4



Dataset: Untitled

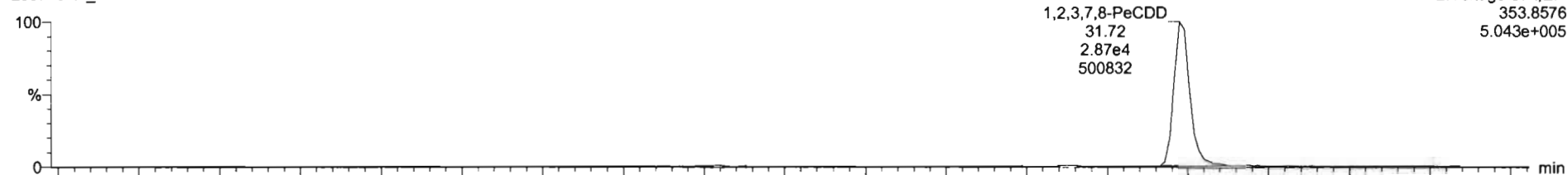
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

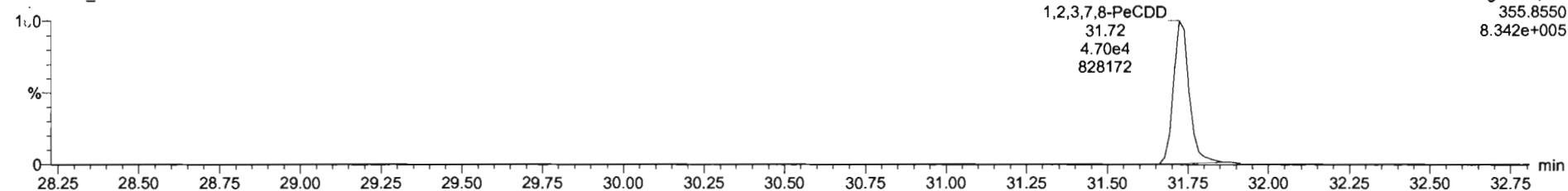
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,7,8-PeCDD**

200713R1\_4

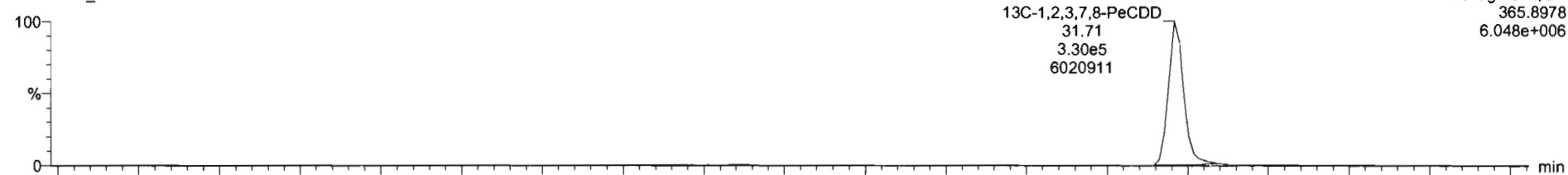


200713R1\_4

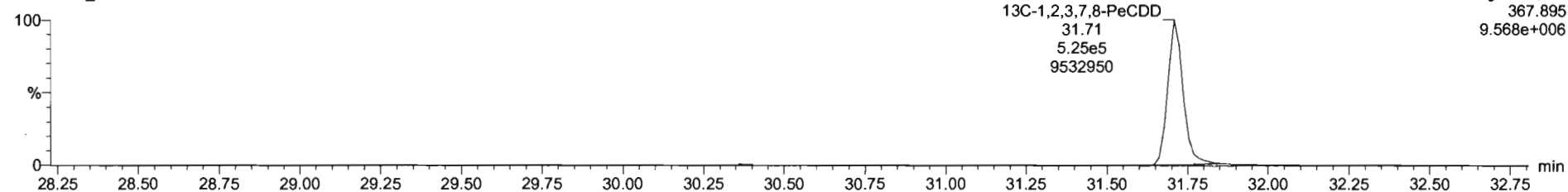


**13C-1,2,3,7,8-PeCDD**

200713R1\_4



200713R1\_4





Dataset: Untitled

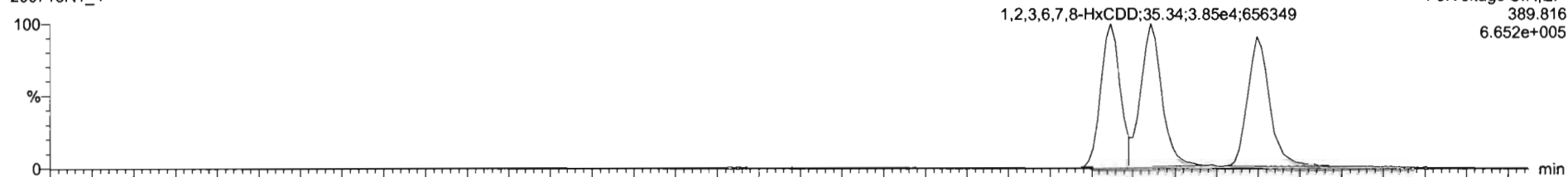
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

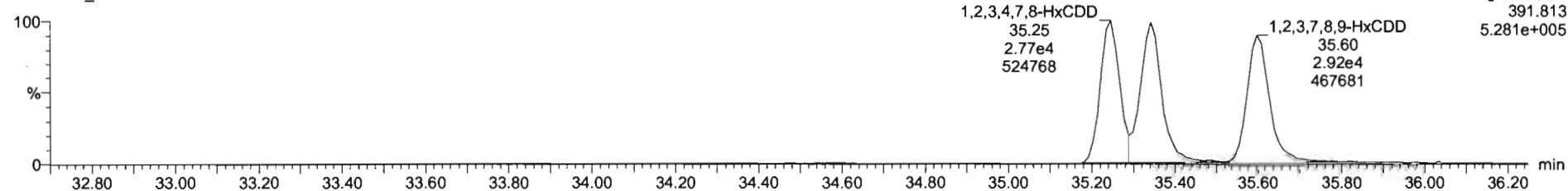
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,4,7,8-HxCDD**

200713R1\_4

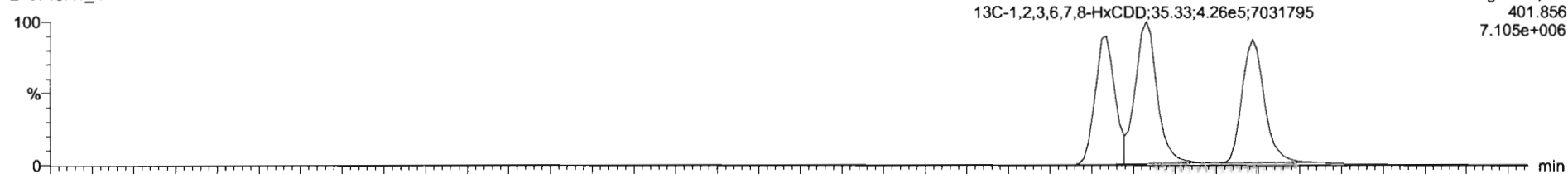


200713R1\_4

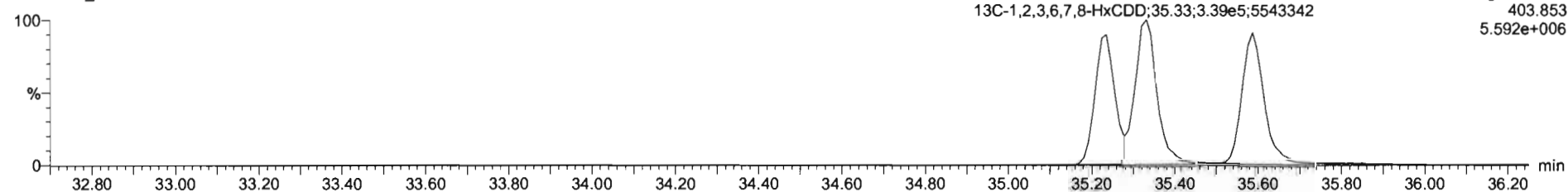


**13C-1,2,3,4,7,8-HxCDD**

200713R1\_4



200713R1\_4

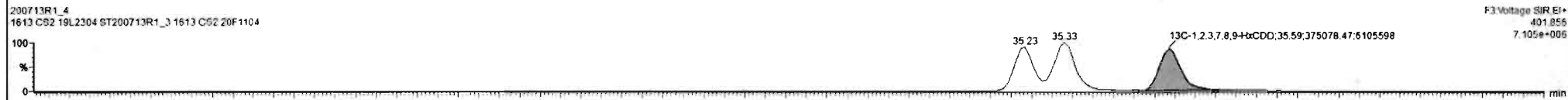


TargetLyn - 200713R1\_4 - Chromatogram

File Edit View Display Processing Window Help

200713R1\_4 - ST200713R1\_3 1613 CS2 20F1104 - 1613 CS2 19L2304

#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.03	0.806	NO	2.3092e4	1.2808e6	2.000	-7.5	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.611	NO	7.5785e4	8.5505e5	10.000	-3.3	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.241	NO	6.2070e4	8.1503e5	10.000	-3.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.235	NO	6.9512e4	7.6505e5	10.000	-3.0	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.60	1.237	NO	6.8221e4	8.7879e5	10.000	0.8	7.13	0.958	0.0683
6	1,2,3,4,6,7,8-HpCDD	36.97	1.049	NO	4.8023e4	5.6219e5	10.000	-4.6	9.71	0.895	0.0870
7	OCDD	42.16	0.854	NO	8.1346e4	9.3764e5	20.000	-2.8	8.21	0.893	0.0733
8	2,3,7,8-TCDF	24.94	0.746	NO	2.7521e4	1.7333e6	2.000	-7.5	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.30	1.543	NO	1.2212e5	1.2749e6	10.000	-1.0	8.81	0.968	0.0834
10	1,2,3,4,7,8-PeCDF	31.40	1.585	NO	1.3020e5	1.2212e6	10.000	-1.0	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.223	NO	8.0807e4	8.6604e5	10.000	-3.6	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.269	NO	9.0860e4	9.1744e5	10.000	-1.3	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.07	1.214	NO	8.1372e4	8.4080e5	10.000	-2.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.259	NO	6.4960e4	7.0152e5	10.000	-3.5	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.58	1.010	NO	5.7551e4	8.0687e5	10.000	-5.4	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.61	0.980	NO	4.4210e4	4.1960e5	10.000	-4.9	9.10	1.11	0.101
17	OCDF	42.31	0.881	NO	9.5951e4	1.0961e6	20.000	-2.3	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.00	0.803	NO	1.2808e6	1.1611e6	100.000	-0.1	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.629	NO	8.5505e5	1.1611e6	100.000	-2.8	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.267	NO	6.1503e5	9.5858e5	100.000	-0.9	8.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.258	NO	7.6506e5	9.5858e5	100.000	-0.9	5.73	0.605	0.0461



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

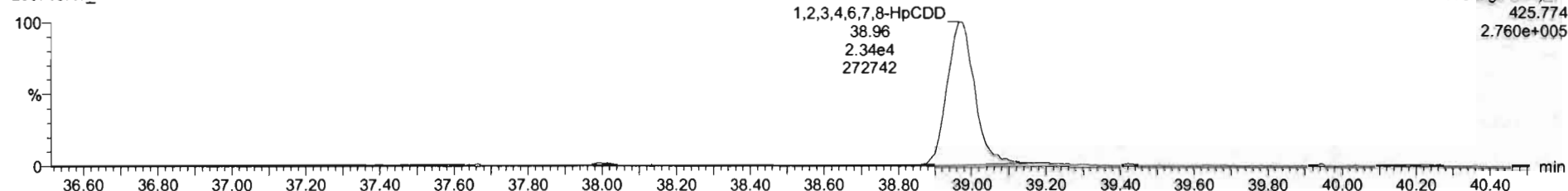
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,4,6,7,8-HpCDD**

200713R1\_4

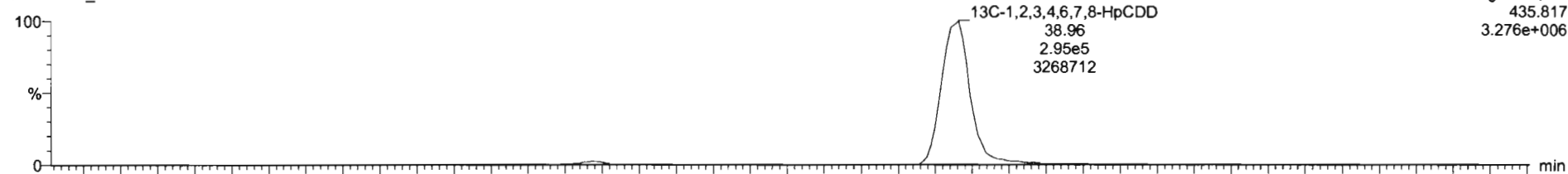


200713R1\_4

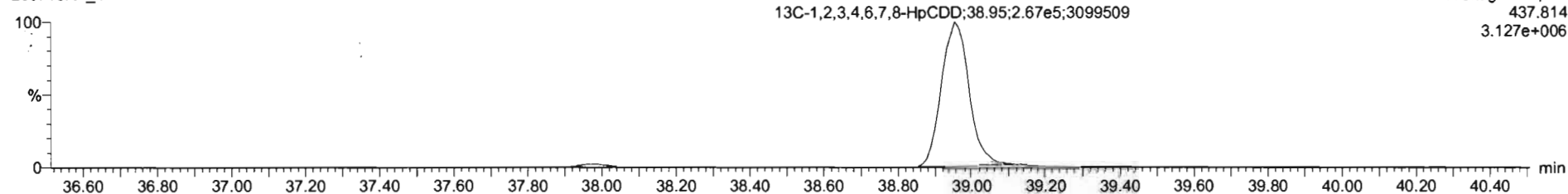


**13C-1,2,3,4,6,7,8-HpCDD**

200713R1\_4



200713R1\_4



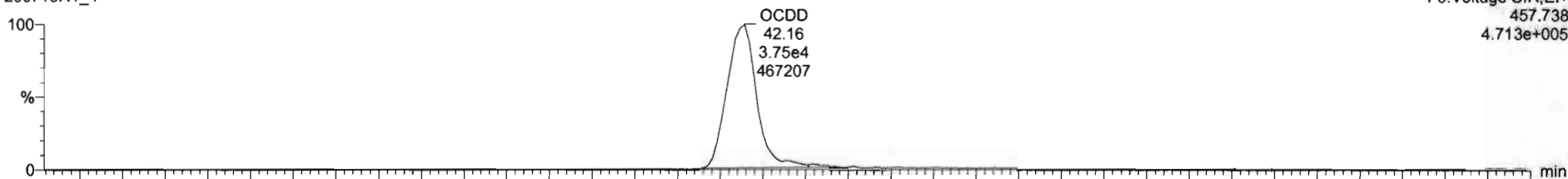
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

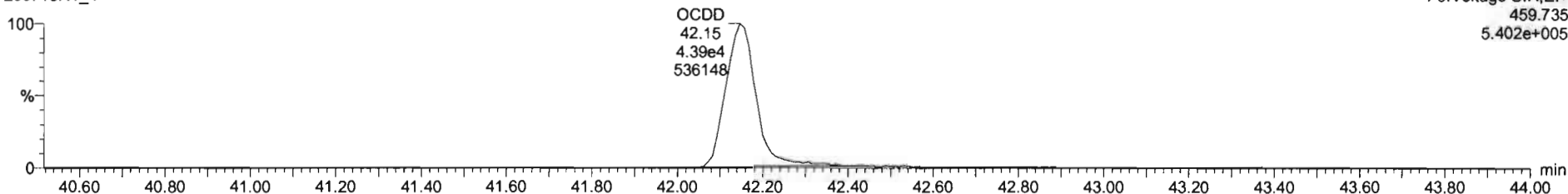
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**OCDD**

200713R1\_4

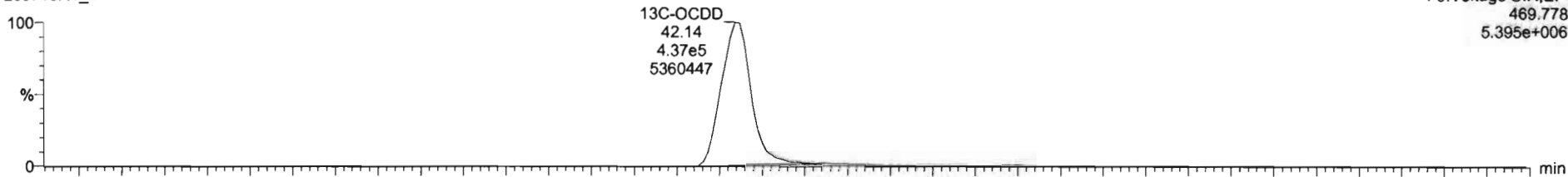


200713R1\_4

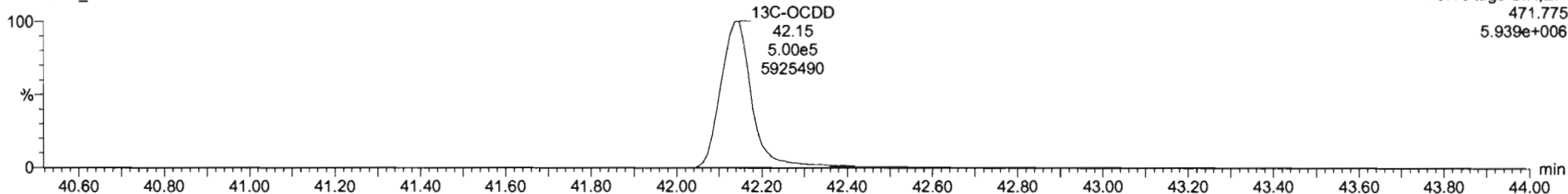


**13C-OCDD**

200713R1\_4



200713R1\_4



#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF U...	RRF SD
1	1,2,3,7,8-TCDD	26.03	0.806	NO	2.3092e4	1.2808e6	2.000	-7.5	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.611	NO	7.5785e4	8.5505e5	10.000	-3.3	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.241	NO	6.2070e4	6.1503e5	10.000	-3.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.235	NO	6.9612e4	7.6506e5	10.000	-3.0	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.80	1.237	NO	6.5221e4	6.7879e5	10.000	0.0	7.67	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	38.97	1.048	NO	4.8023e4	5.6219e5	10.000	-5.3	8.81	0.902	0.0794
7	OCDD	42.16	0.854	NO	8.1348e4	9.2884e5	20.000	-3.1	6.72	0.934	0.0607
8	2,3,7,8-TCDF	24.94	0.746	NO	2.7521e4	1.7333e6	2.000	-7.5	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.30	1.543	NO	1.2212e5	1.2749e6	10.000	-1.0	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.40	1.585	NO	1.3020e5	1.2212e6	10.000	-1.0	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.223	NO	8.0807e4	8.6604e5	10.000	-3.8	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.269	NO	9.0860e4	9.1744e5	10.000	-1.3	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.07	1.214	NO	8.1372e4	8.4080e5	10.000	-2.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.269	NO	6.4960e4	7.0152e5	10.000	-3.5	8.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.59	1.010	NO	5.7551e4	6.0687e5	10.000	-5.4	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HxCDF	39.61	0.980	NO	4.4210e4	4.1980e5	10.000	-4.9	9.10	1.11	0.101
17	OCDF	42.31	0.881	NO	9.5951e4	1.0961e6	20.000	-2.3	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.00	0.803	NO	1.2808e6	1.1611e6	100.000	-0.1	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.629	NO	8.5505e5	1.1611e6	100.000	-2.8	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.287	NO	6.1503e5	9.5858e5	100.000	-0.9	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.258	NO	7.6506e5	9.5858e5	100.000	-0.9	5.73	0.895	0.0461



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

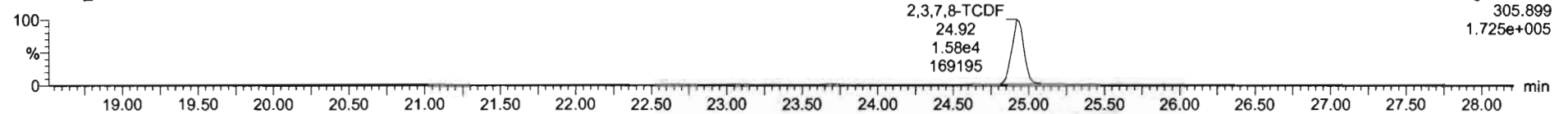
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**2,3,7,8-TCDF**

200713R1\_4

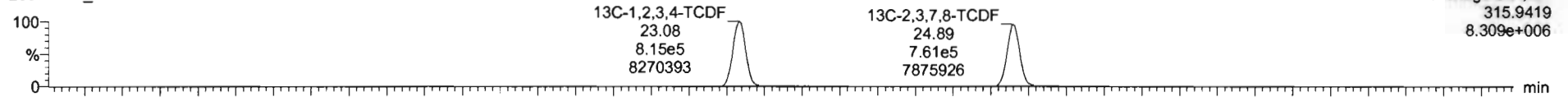


200713R1\_4

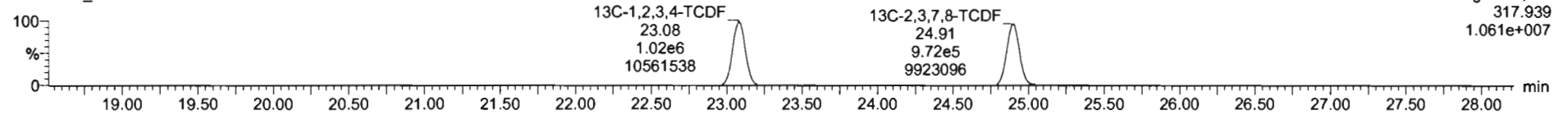


**13C-2,3,7,8-TCDF**

200713R1\_4

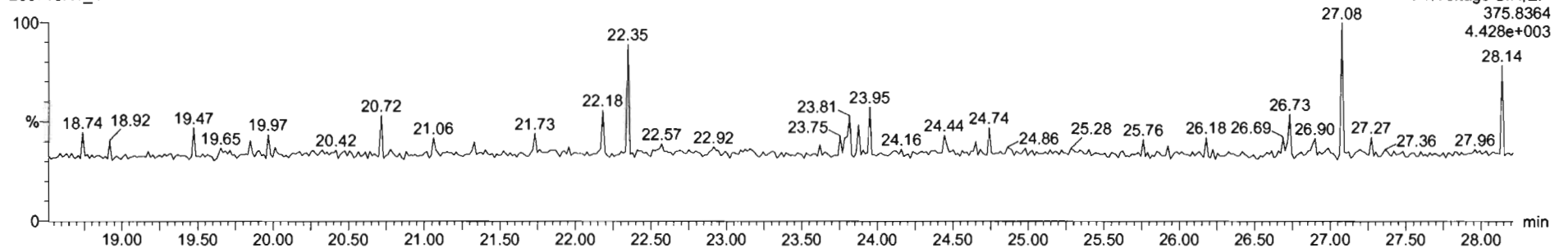


200713R1\_4



**DPE1**

200713R1\_4



Dataset: Untitled

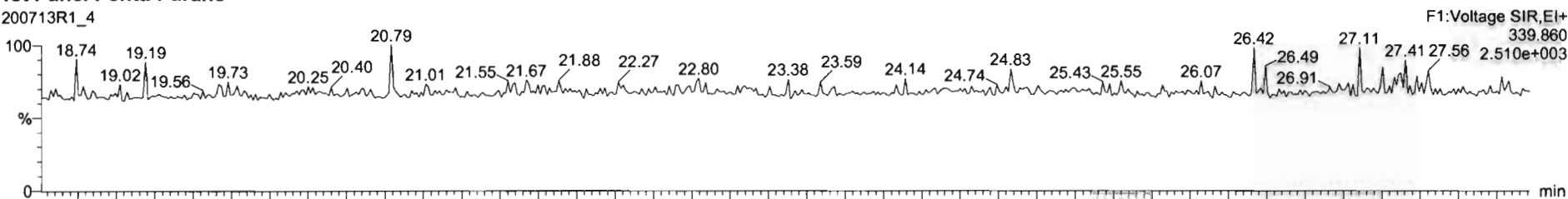
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

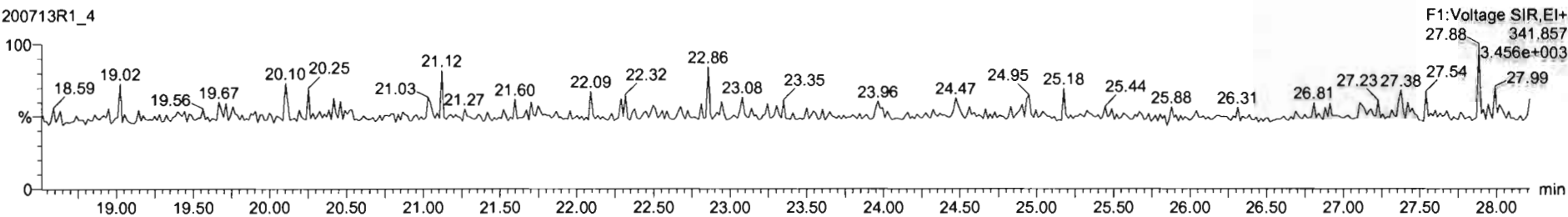
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

1st Func. Penta-Furans

200713R1\_4

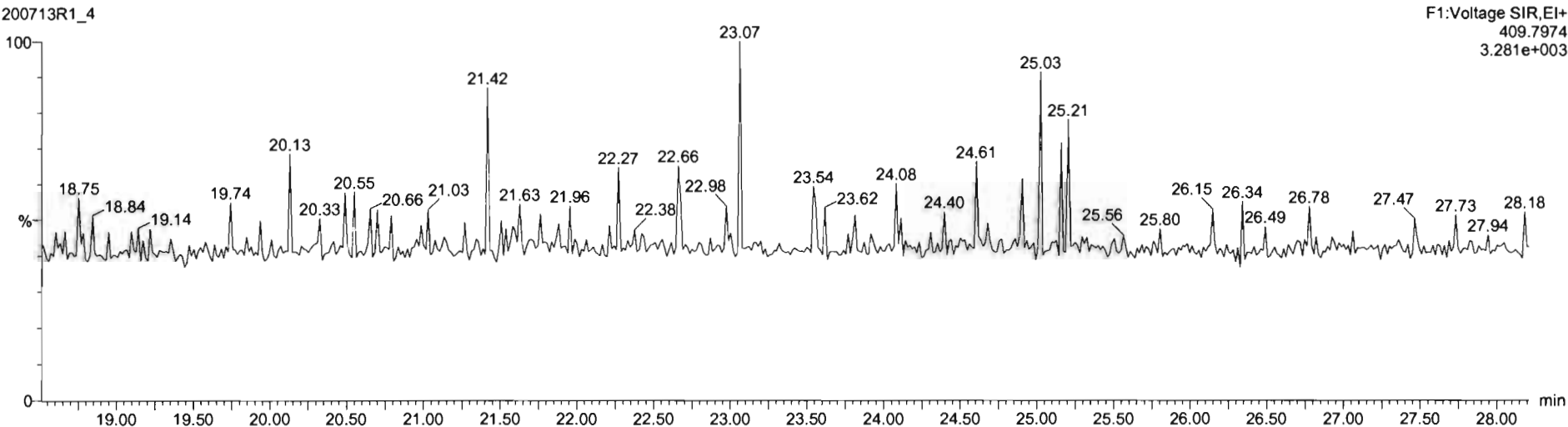


200713R1\_4



DPE6

200713R1\_4



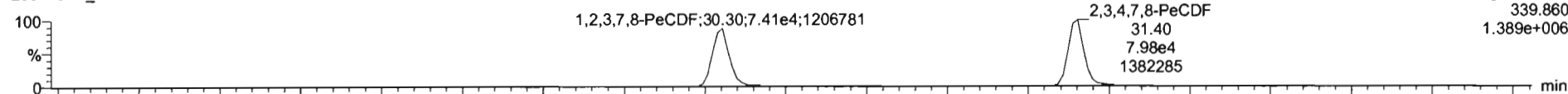
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

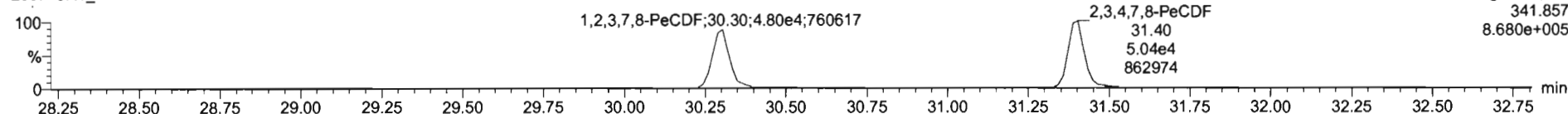
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,7,8-PeCDF**

200713R1\_4

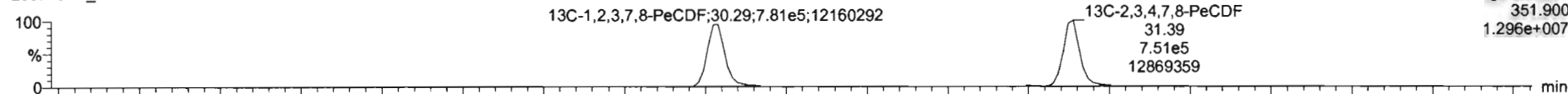


200713R1\_4

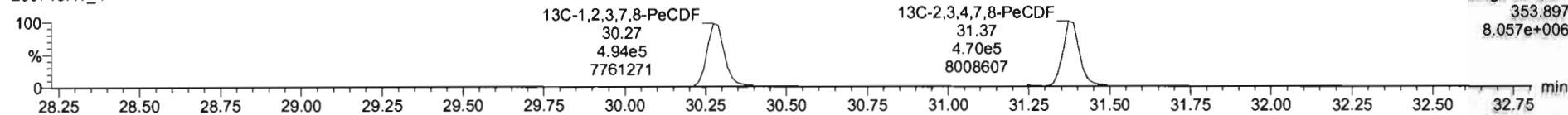


**13C-1,2,3,7,8-PeCDF**

200713R1\_4

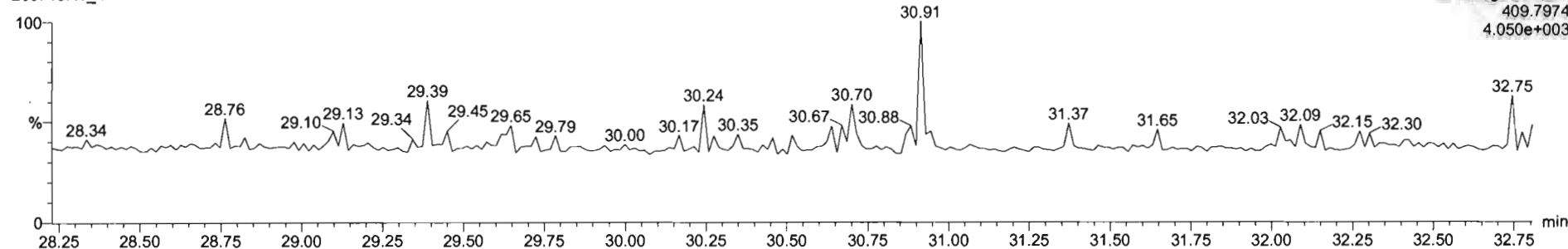


200713R1\_4



**DPE2**

200713R1\_4





Dataset: Untitled

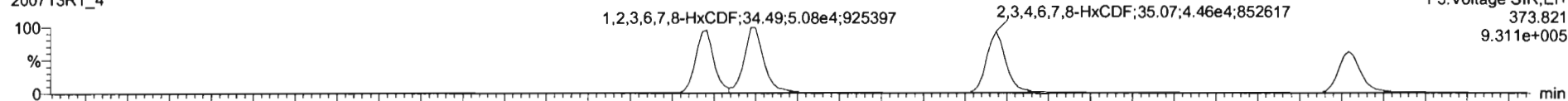
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

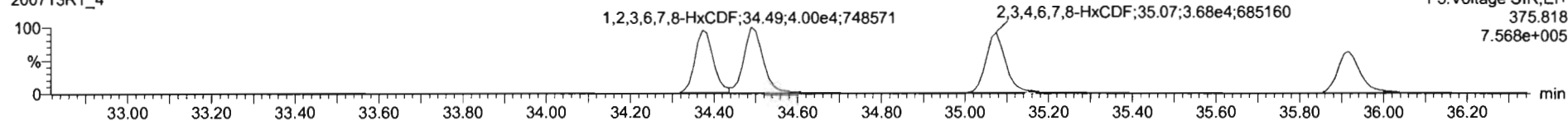
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,4,7,8-HxCDF**

200713R1\_4

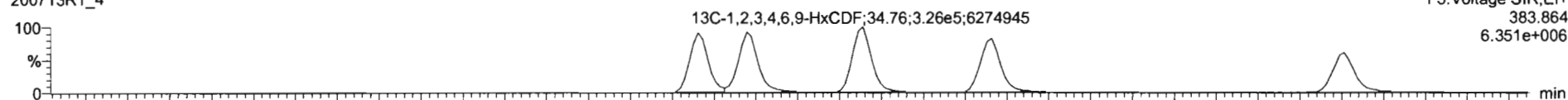


200713R1\_4

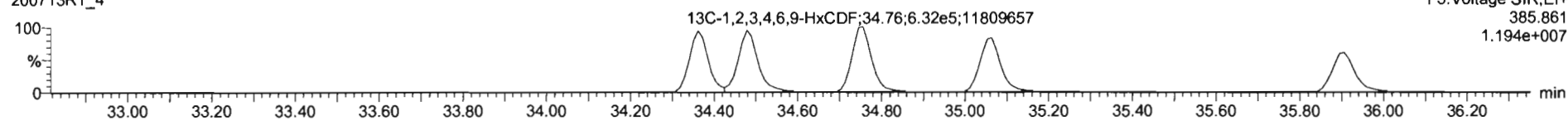


**13C-1,2,3,4,7,8-HxCDF**

200713R1\_4

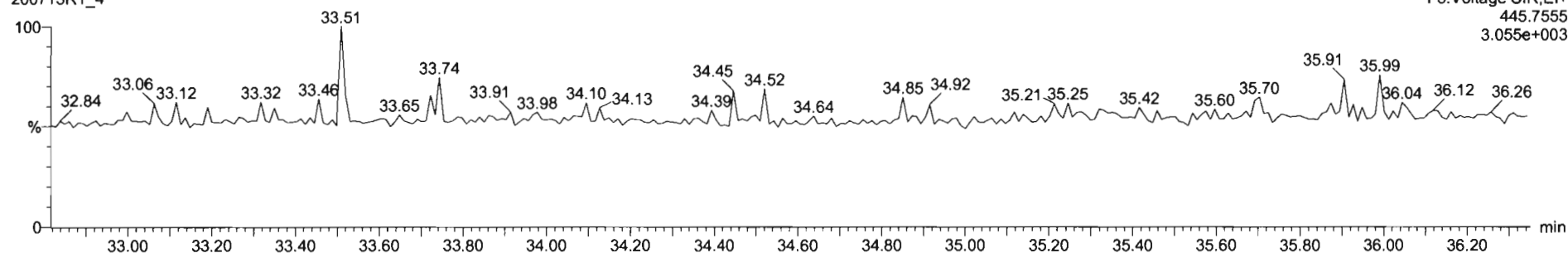


200713R1\_4



**DPE3**

200713R1\_4

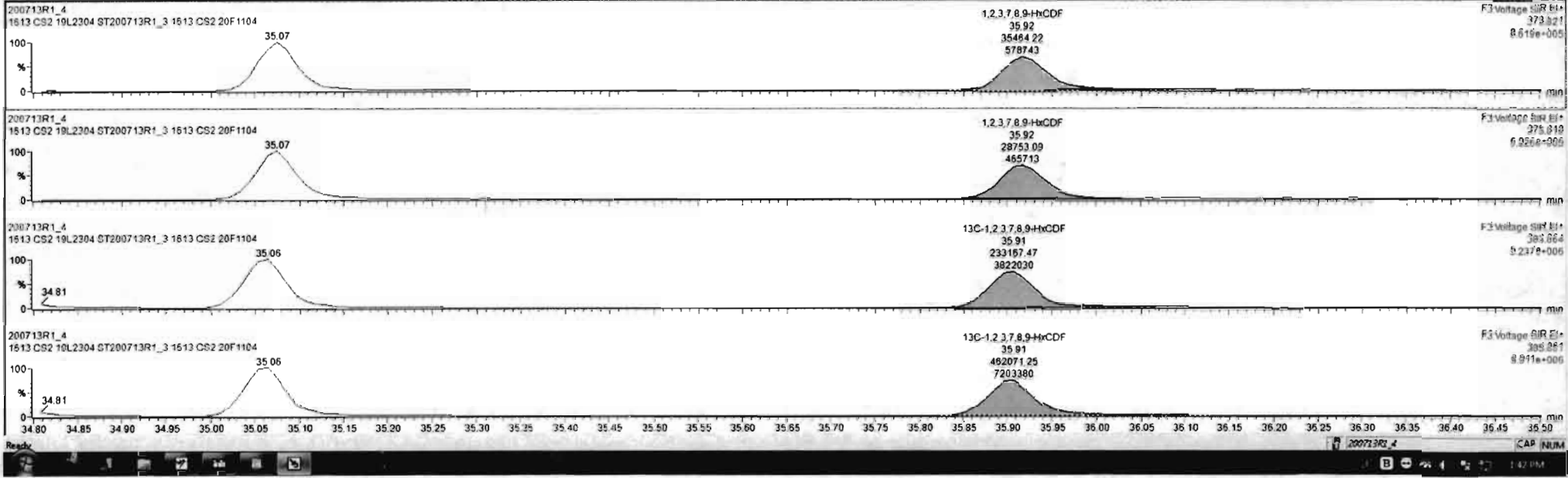


TargetLynx - 200713R1-CHV.qld - Chromatogram

File Edit View Display Processing Window Help

200713R1\_4 - ST200713R1\_3 1613 CS2 20F1104 1613 CS2 19L2304

#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.03	0.806	NO	2.3092e4	1.2808e5	2.000	-7.5	9.30	0.974	0.0902
2	1,2,3,7,8-PeCDD	31.72	0.611	NO	7.5785e4	8.5505e5	10.000	-3.3	6.72	0.917	0.0618
3	1,2,3,4,7,8-HxCDD	35.25	1.241	NO	6.2070e4	6.1503e5	10.000	-3.1	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.235	NO	6.9612e4	7.6505e5	10.000	-2.0	7.25	0.938	0.0660
5	1,2,3,7,8,9-HxCDD	35.60	1.237	NO	8.5221e4	8.7679e5	10.000	0.0	7.67	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	38.97	1.049	NO	4.8023e4	5.6219e5	10.000	-5.3	8.81	0.902	0.0794
7	OCDD	42.18	0.854	NO	8.1348e4	9.2884e5	20.000	-3.3	6.51	0.905	0.0589
8	2,3,7,8-TCDF	24.94	0.746	NO	2.7521e4	1.7333e5	2.000	-7.5	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.30	1.543	NO	1.2212e5	1.2749e5	10.000	-1.0	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.40	1.585	NO	1.3020e5	1.2212e5	10.000	-1.0	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.223	NO	8.0807e4	8.6804e5	10.000	-3.6	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.49	1.269	NO	9.0880e4	9.1744e5	10.000	-1.2	8.34	1.00	0.0836
13	2,3,4,6,7,8-HxCDF	35.07	1.214	NO	8.1372e4	8.4080e5	10.000	-2.9	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.233	NO	6.4217e4	6.9524e5	10.000	-3.9	8.87	0.961	0.0853
15	1,2,3,4,6,7,8-HpCDF	37.59	1.010	NO	5.7551e4	6.0687e5	10.000	-5.4	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.61	0.980	NO	4.4210e4	4.1960e5	10.000	-4.9	9.10	1.11	0.101
17	OCDF	42.31	0.881	NO	9.5951e4	1.0961e5	20.000	-2.3	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	26.00	0.803	NO	1.2508e5	1.1611e6	100.000	-0.1	3.37	1.10	0.0271
19	13C-1,2,3,7,8-PeCDD	31.71	0.629	NO	8.5505e5	1.1611e6	100.000	-2.8	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.267	NO	8.1503e5	9.5858e5	100.000	-0.9	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.258	NO	7.6506e5	9.5858e5	100.000	-0.9	5.73	0.805	0.0461



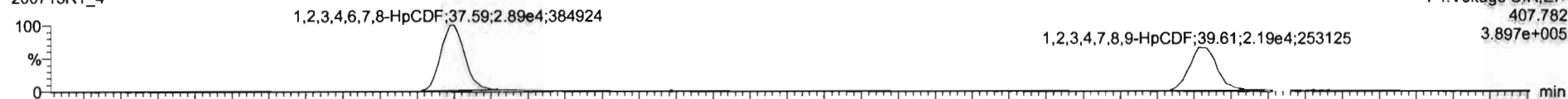
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

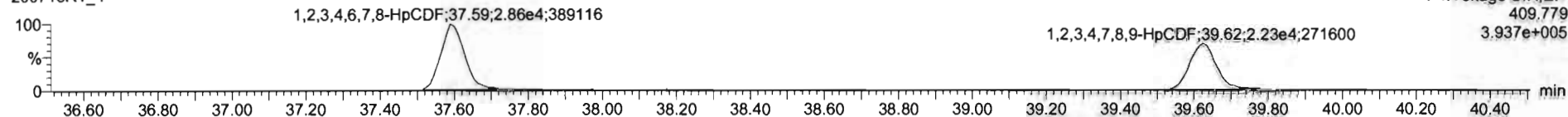
Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

**1,2,3,4,6,7,8-HpCDF**

200713R1\_4

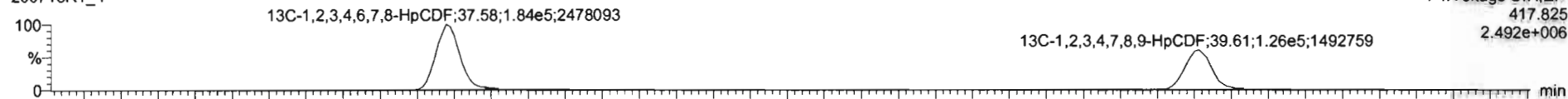


200713R1\_4

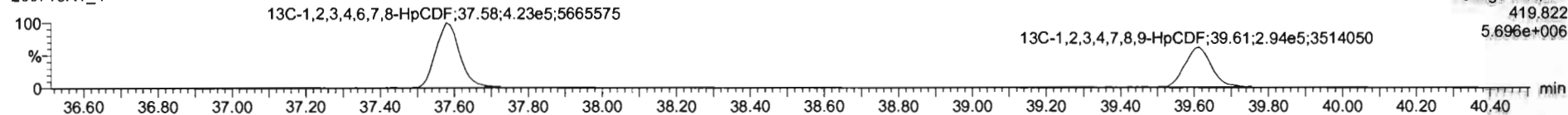


**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_4

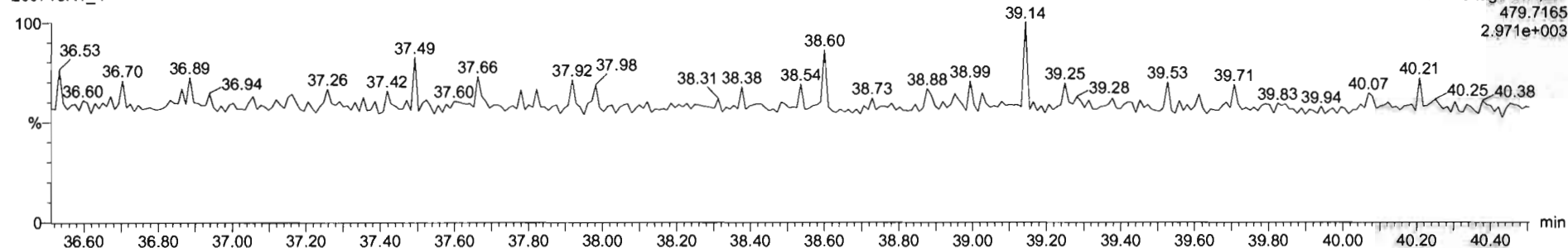


200713R1\_4



**DPE4**

200713R1\_4

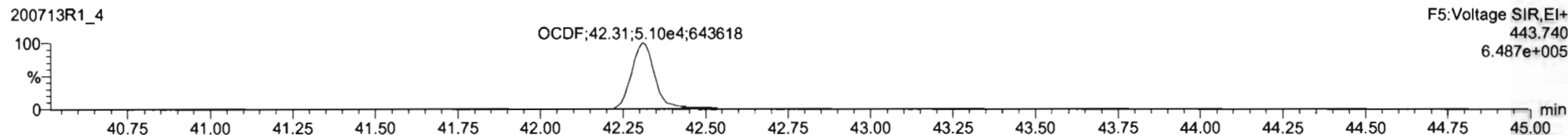
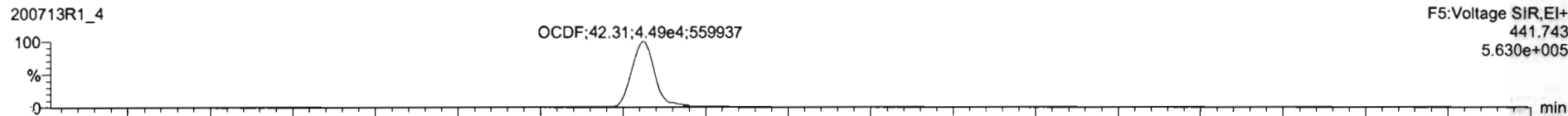


Dataset: Untitled

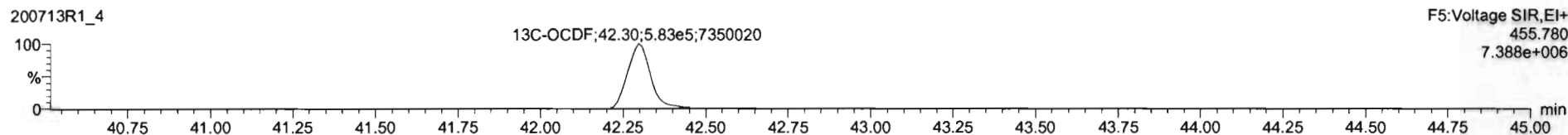
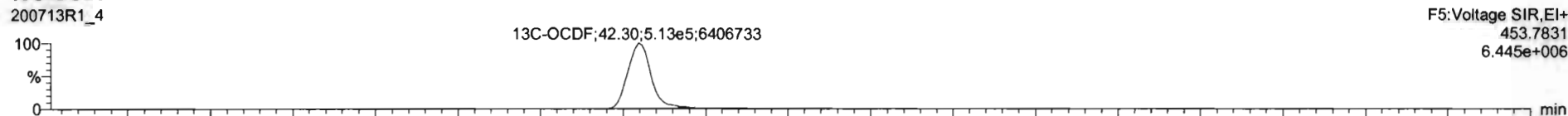
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304

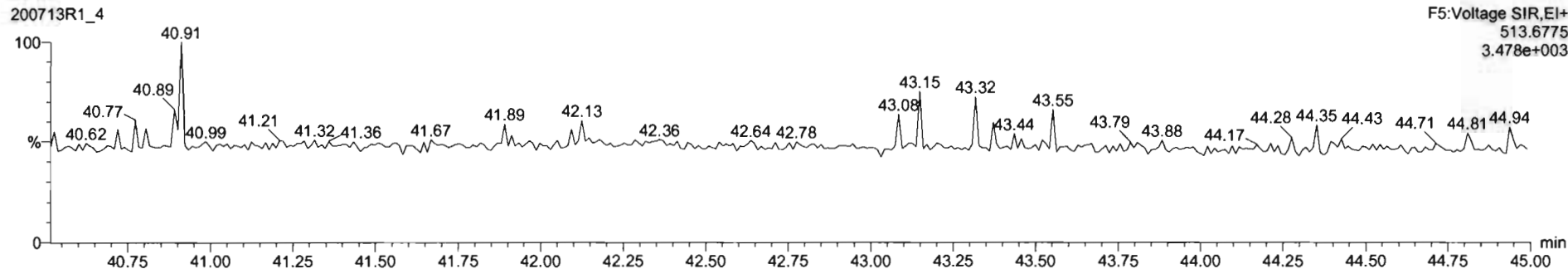
**OCDF**



**13C-OCDF**



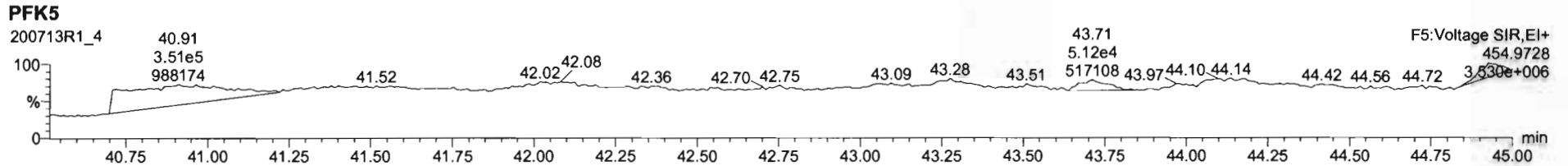
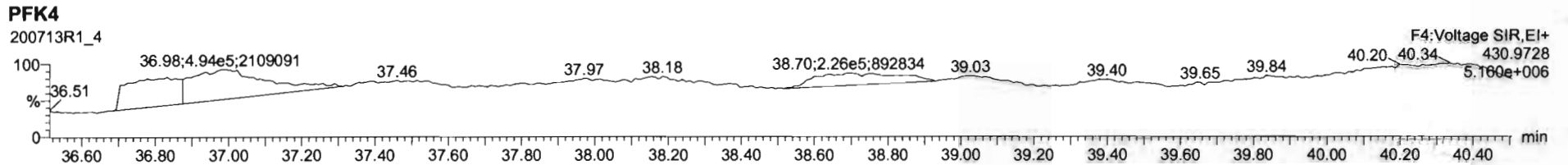
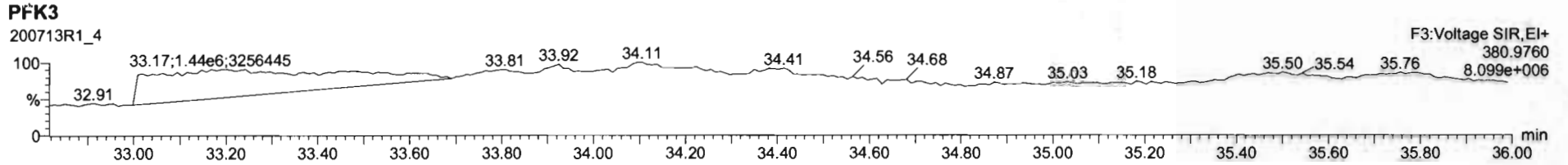
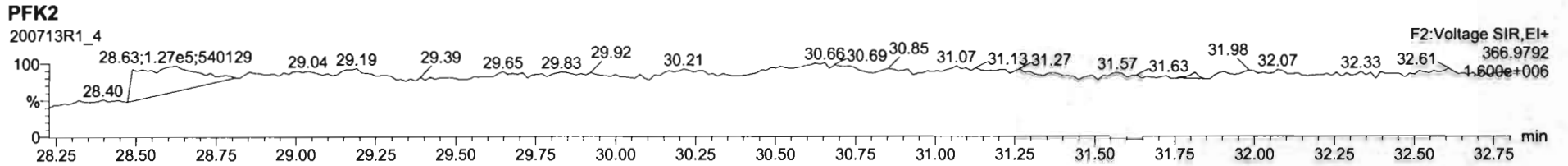
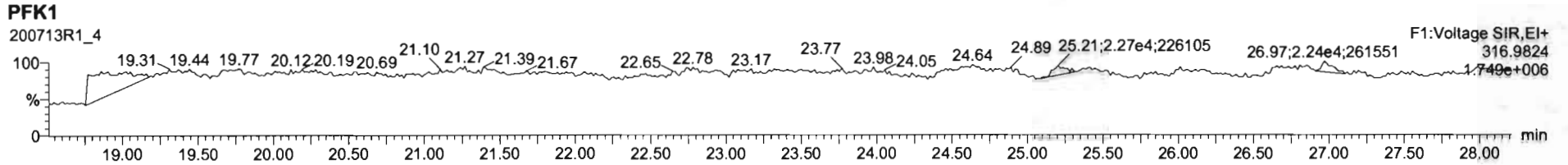
**DPE5**



Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_4, Date: 13-Jul-2020, Time: 10:22:43, ID: ST200713R1\_3 1613 CS2 20F1104, Description: 1613 CS2 19L2304



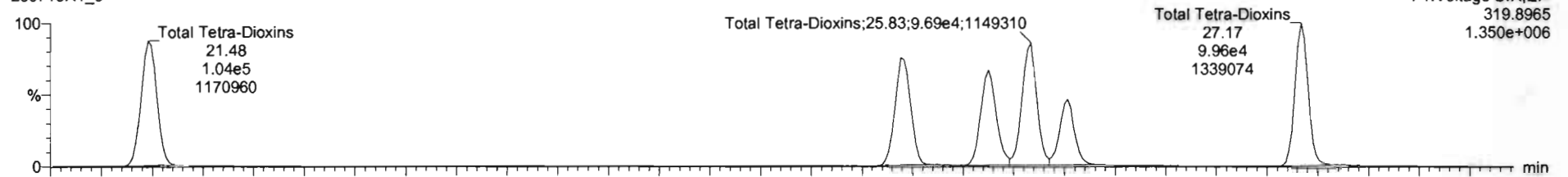
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

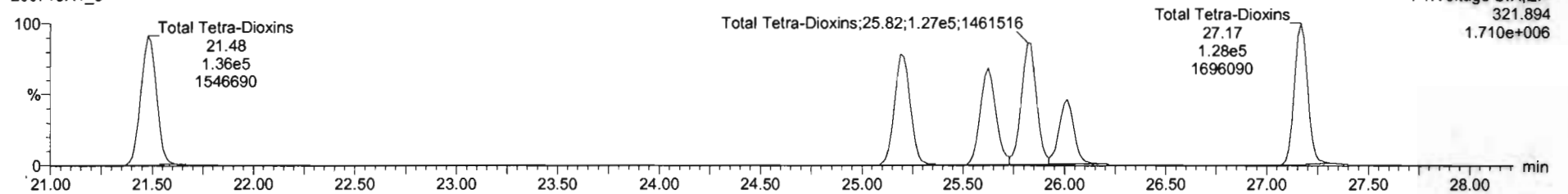
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**2,3,7,8-TCDD**

200713R1\_5

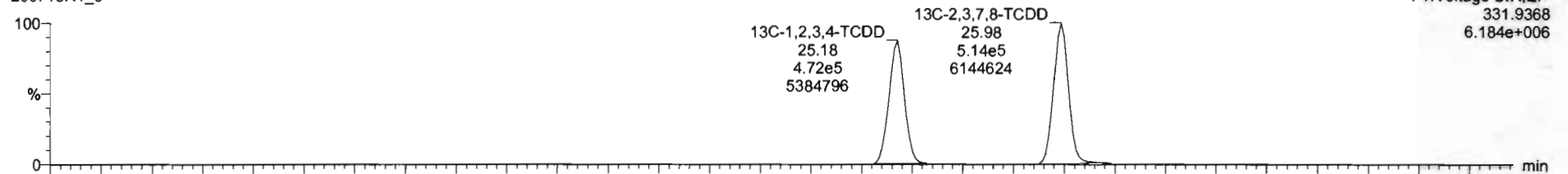


200713R1\_5

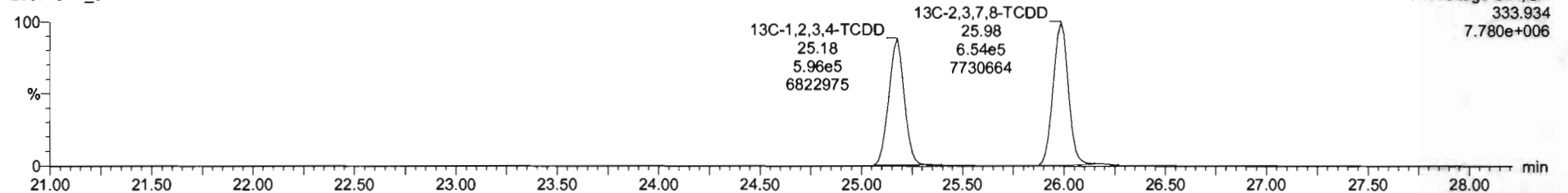


**13C-2,3,7,8-TCDD**

200713R1\_5



200713R1\_5



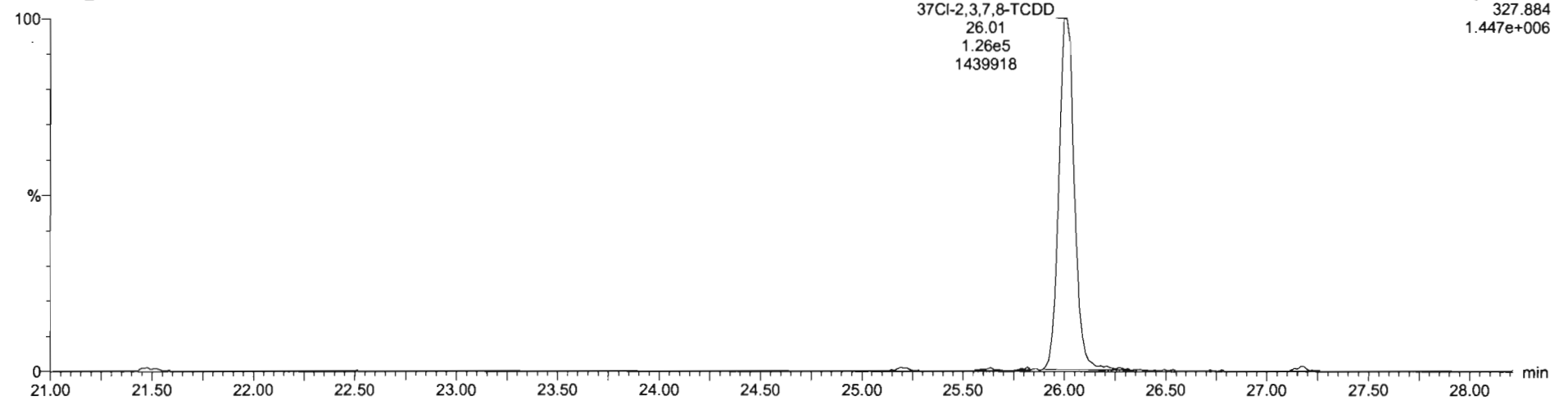
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

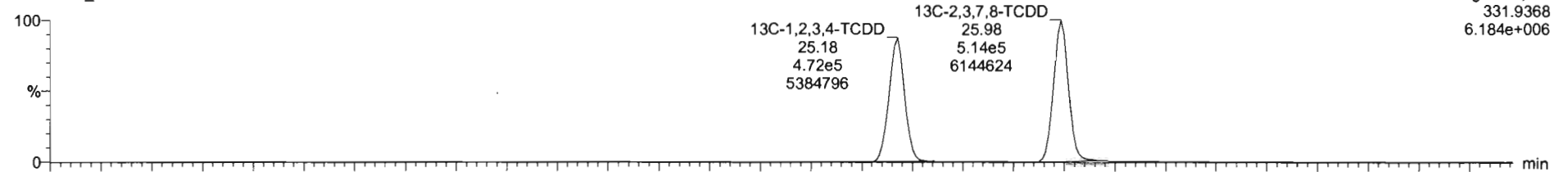
**37Cl-2,3,7,8-TCDD**

200713R1\_5

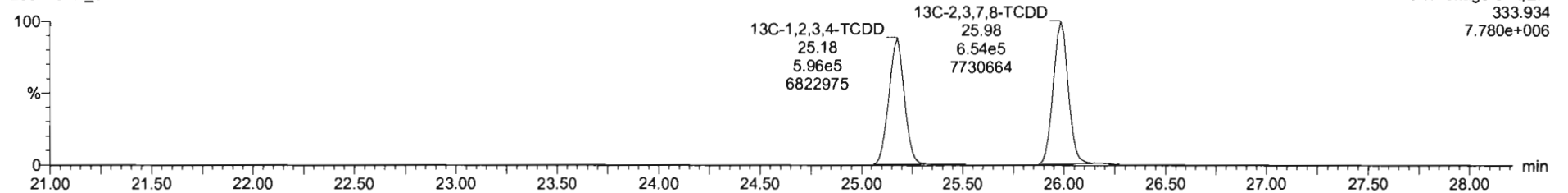


**13C-1,2,3,4-TCDD**

200713R1\_5



200713R1\_5



Dataset: Untitled

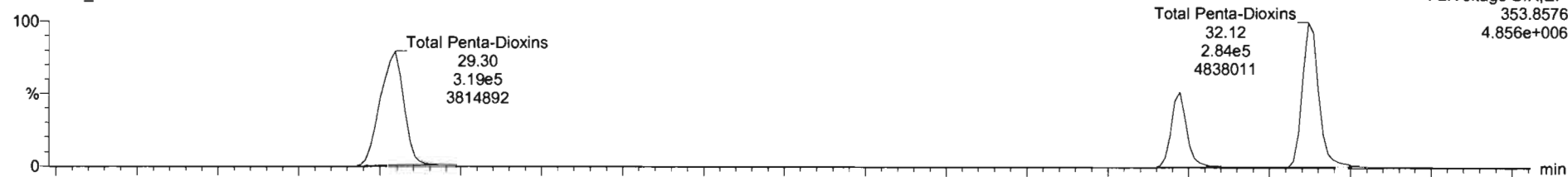
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

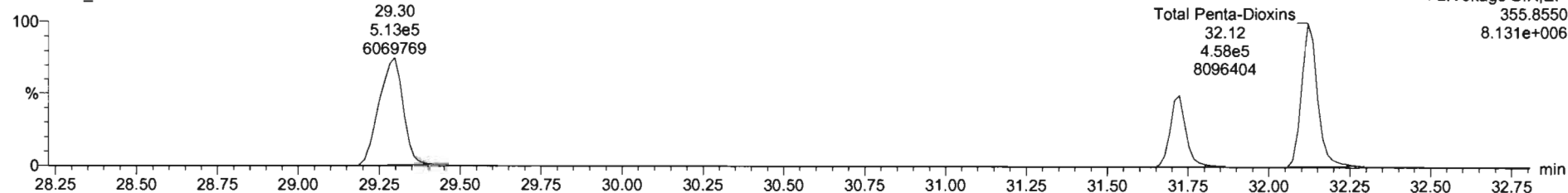
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**1,2,3,7,8-PeCDD**

200713R1\_5

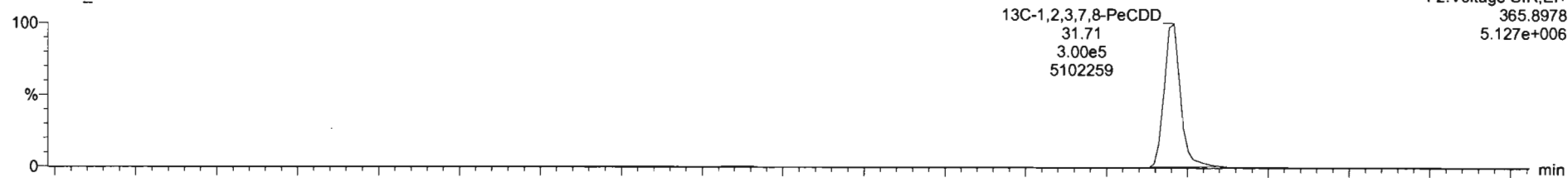


200713R1\_5

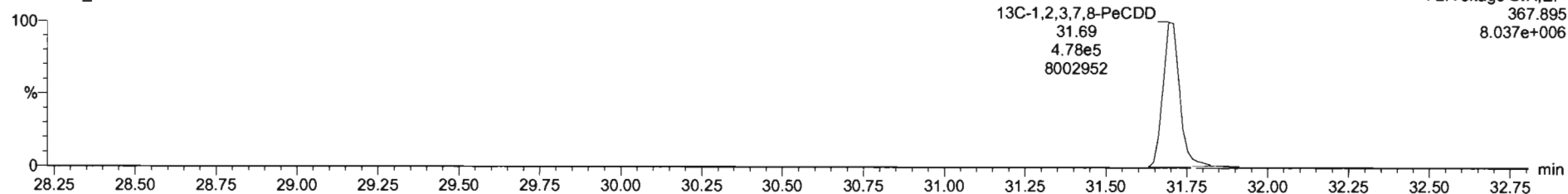


**13C-1,2,3,7,8-PeCDD**

200713R1\_5



200713R1\_5





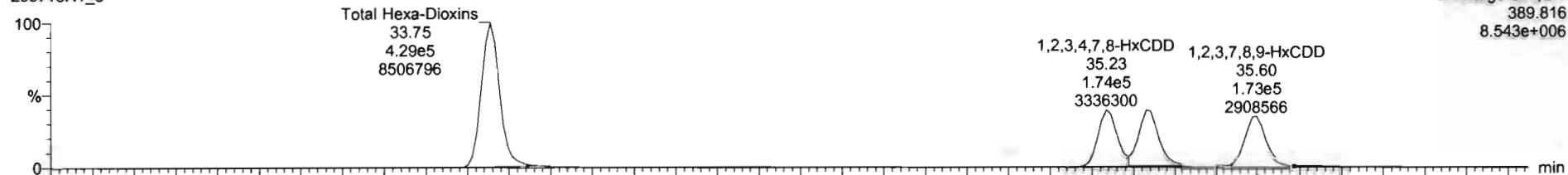
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

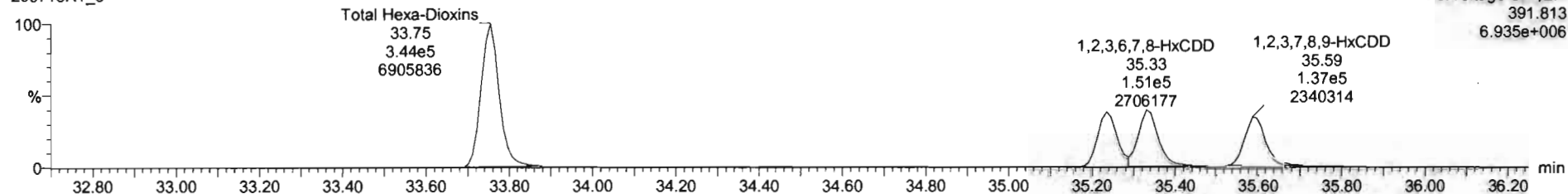
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

1,2,3,4,7,8-HxCDD

200713R1\_5

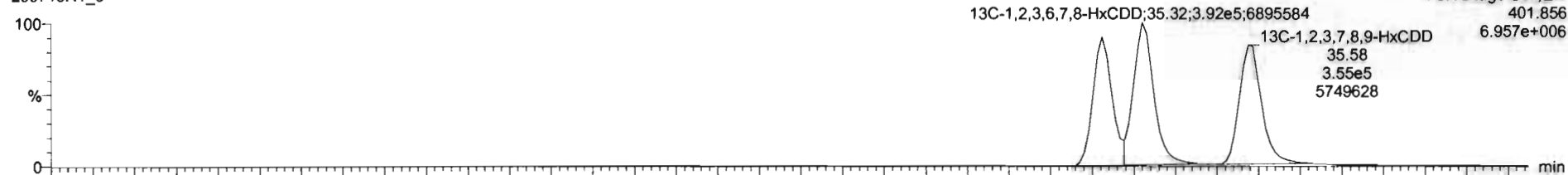


200713R1\_5

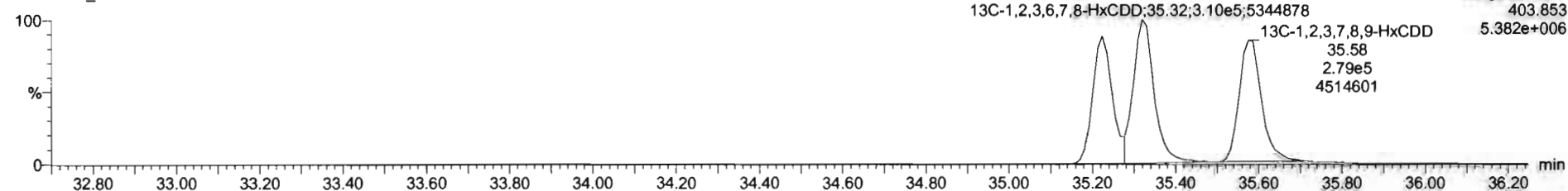


13C-1,2,3,4,7,8-HxCDD

200713R1\_5



200713R1\_5



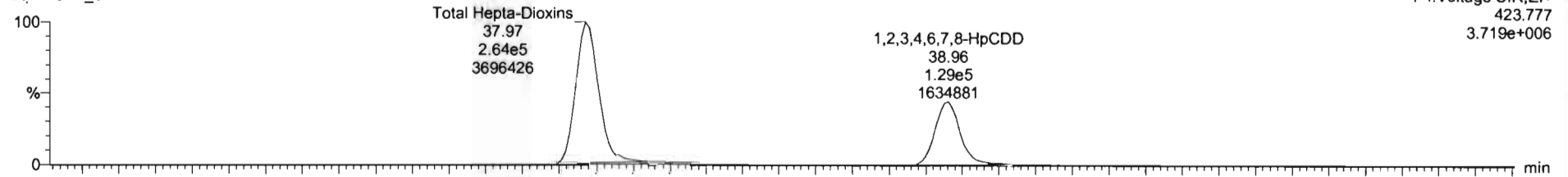
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

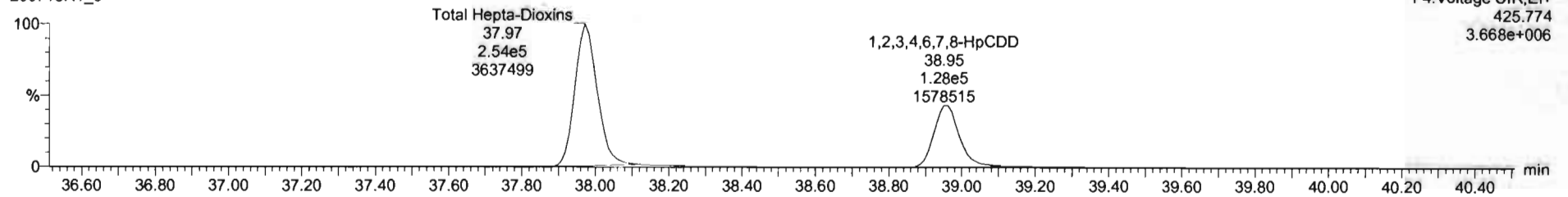
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**1,2,3,4,6,7,8-HpCDD**

200713R1\_5

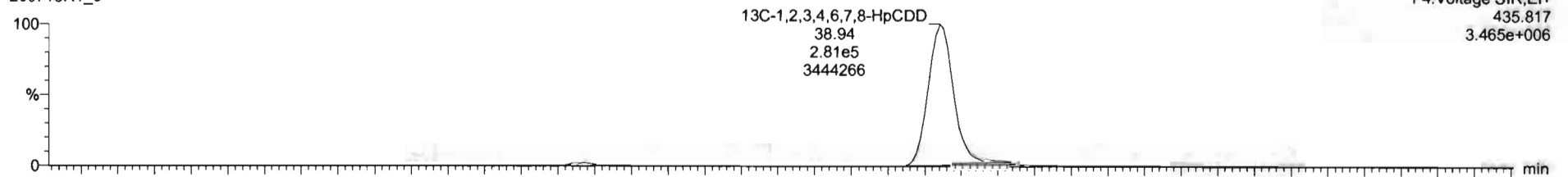


200713R1\_5

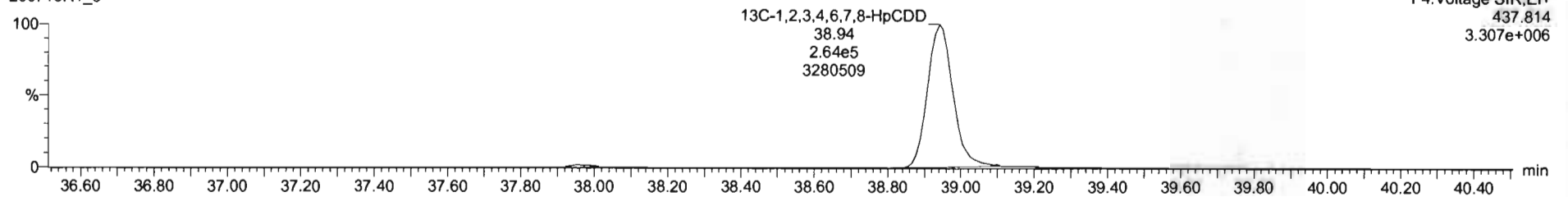


**13C-1,2,3,4,6,7,8-HpCDD**

200713R1\_5



200713R1\_5



Dataset: Untitled

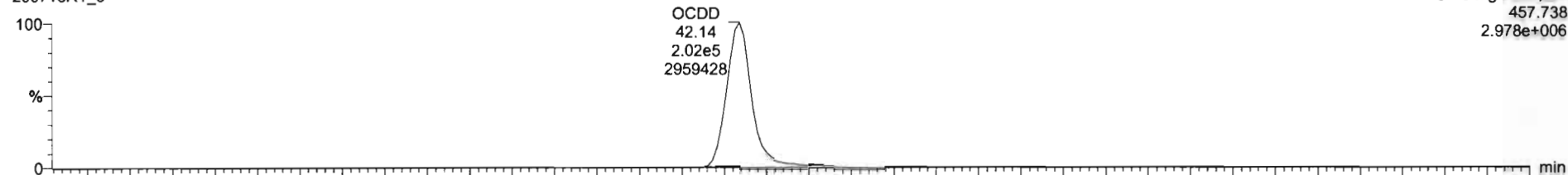
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

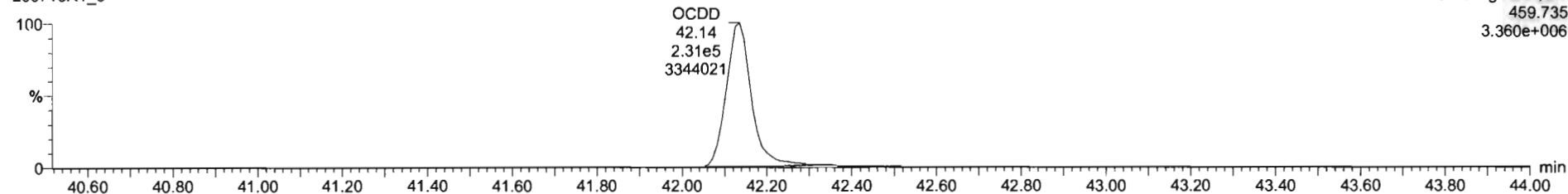
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**OCDD**

200713R1\_5

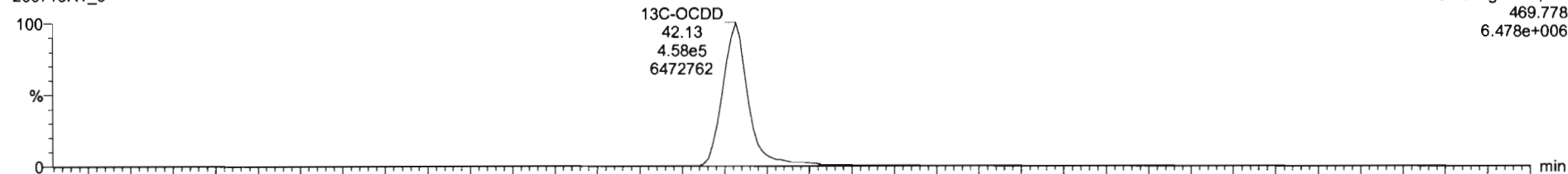


200713R1\_5

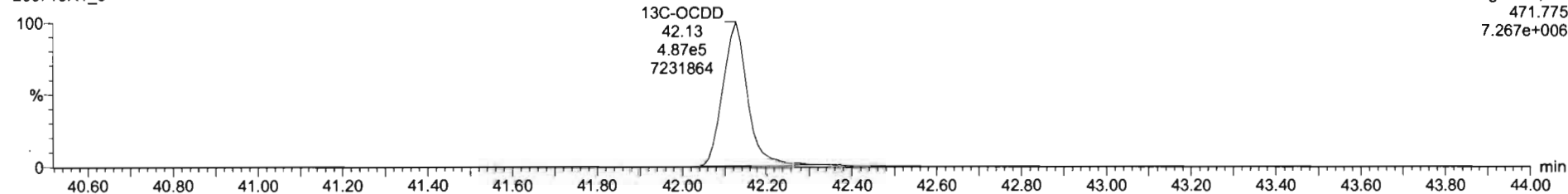


**13C-OCDD**

200713R1\_5



200713R1\_5

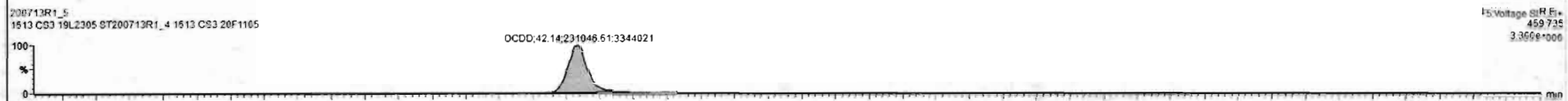


TargetLynx - 200713R1-ORV.gd - [Chromatogram]

File Edit View Display Processing Window Help

200713R1\_5 ST200713R1\_4 1613 CS3 20F1105 1613 CS3 19L2305

#	I	Name	RT	RA	ym	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1	2,3,7,8-TCDD	28.01	0.782	NO	1.1865e5	1.1676e8	10.000	4.3	9.30	0.974	0.0906
2	2	1,2,3,7,8-PeCDD	31.72	0.614	NO	3.6757e5	7.7828e5	50.000	3.0	6.72	0.917	0.0616
3	3	1,2,3,4,7,8-HxCDD	35.23	1.235	NO	3.1477e5	5.8437e5	50.000	3.4	9.09	1.04	0.0947
4	4	1,2,3,6,7,8-HxCDD	35.33	1.240	NO	3.3902e5	7.0149e5	50.000	3.0	7.25	0.938	0.0680
5	5	1,2,3,7,8,9-HxCDD	35.60	1.281	NO	3.1010e5	8.3485e5	50.000	1.4	7.67	0.964	0.0739
6	6	1,2,3,4,6,7,8-HpCDD	38.96	1.009	NO	2.5878e5	5.4447e5	50.000	4.8	8.81	0.902	0.0794
7	7	OCDD	42.14	0.675	NO	4.3326e5	9.3590e5	100.000	2.3	6.76	0.905	0.0612
8	8	2,3,7,8-TCDF	24.89	0.735	NO	1.3896e5	1.5948e6	10.000	1.6	7.09	0.856	0.0609
9	9	1,2,3,7,8-PeCDF	30.29	1.568	NO	5.9611e5	1.1700e6	50.000	5.3	8.61	0.968	0.0834
10	10	2,3,4,7,8-PeCDF	31.39	1.550	NO	6.1514e5	1.1159e6	50.000	2.4	8.94	1.08	0.0748
11	11	1,2,3,4,7,8-HxCDF	34.37	1.224	NO	3.9531e5	7.6207e5	50.000	4.5	8.22	0.968	0.0795
12	12	1,2,3,6,7,8-HxCDF	34.48	1.196	NO	4.4016e5	8.4091e5	50.000	4.4	8.24	1.00	0.0826
13	13	2,3,4,6,7,8-HxCDF	35.06	1.205	NO	4.1189e5	7.8579e5	50.000	5.1	8.26	0.997	0.0824
14	14	1,2,3,7,8,9-HxCDF	35.91	1.229	NO	3.2690e5	6.4850e5	50.000	5.0	9.11	0.960	0.0875
15	15	1,2,3,4,6,7,8-HpCDF	37.59	1.005	NO	3.0405e5	5.8440e5	50.000	3.8	8.47	1.00	0.0849
16	16	1,2,3,4,7,8,9-HpCDF	39.61	1.032	NO	2.3774e5	4.0695e5	50.000	5.4	9.10	1.11	0.101
17	17	OCDF	42.30	0.878	NO	5.0996e5	1.1016e6	100.000	3.4	7.88	0.896	0.0708
18	18	13C-2,3,7,8-TCDD	25.98	0.786	NO	1.1676e6	1.0680e6	100.000	-1.0	3.37	1.10	0.0371
19	19	13C-1,2,3,7,8-PeCDD	31.71	0.627	NO	7.7828e5	1.0680e6	100.000	-3.6	9.89	0.757	0.0749
20	20	13C-1,2,3,4,7,8-HxCDD	35.22	1.284	NO	5.8437e5	9.2760e5	100.000	-2.6	6.25	0.647	0.0405
21	21	13C-1,2,3,6,7,8-HxCDD	35.32	1.264	NO	7.0149e5	9.2760e5	100.000	-6.1	5.73	0.805	0.0461



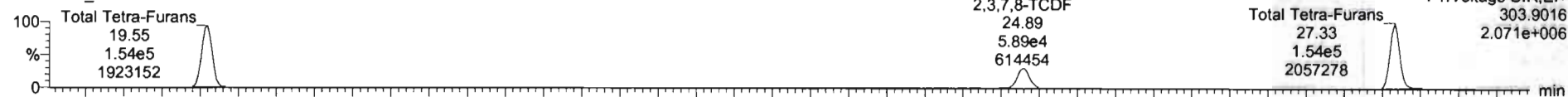
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

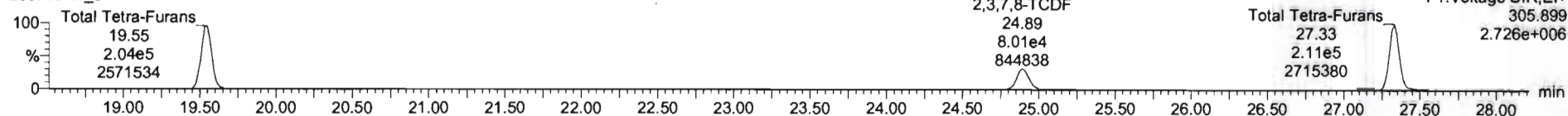
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**2,3,7,8-TCDF**

200713R1\_5

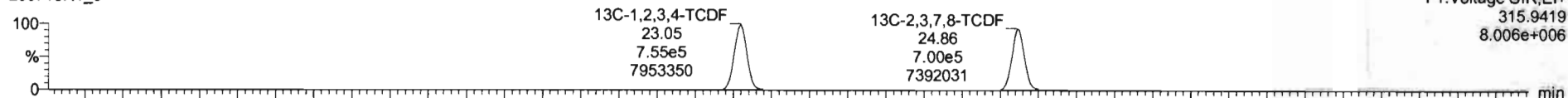


200713R1\_5

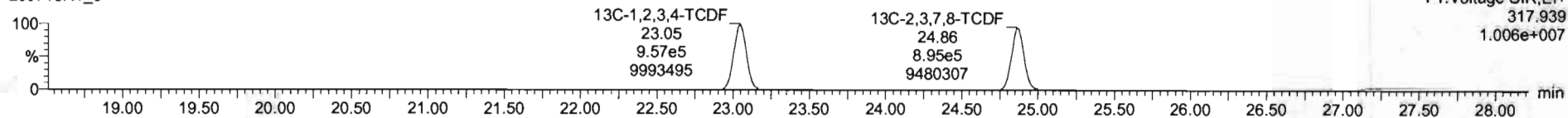


**13C-2,3,7,8-TCDF**

200713R1\_5

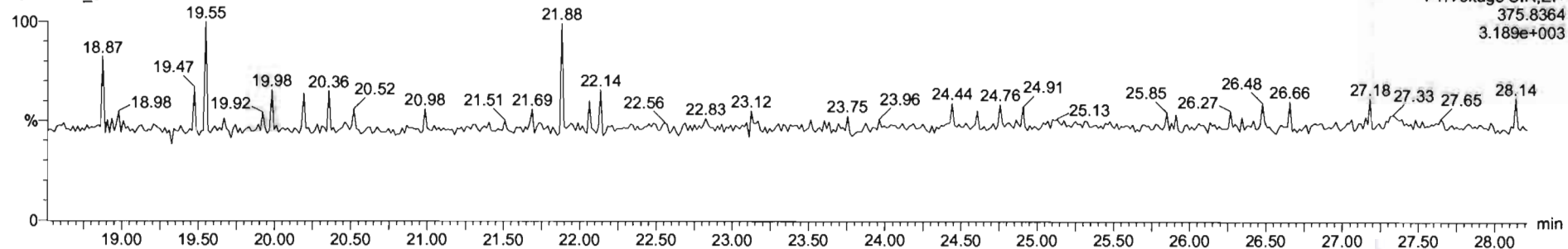


200713R1\_5



**DPE1**

200713R1\_5



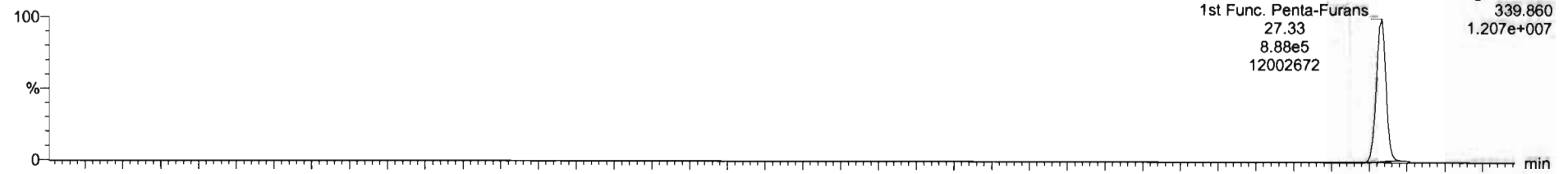
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

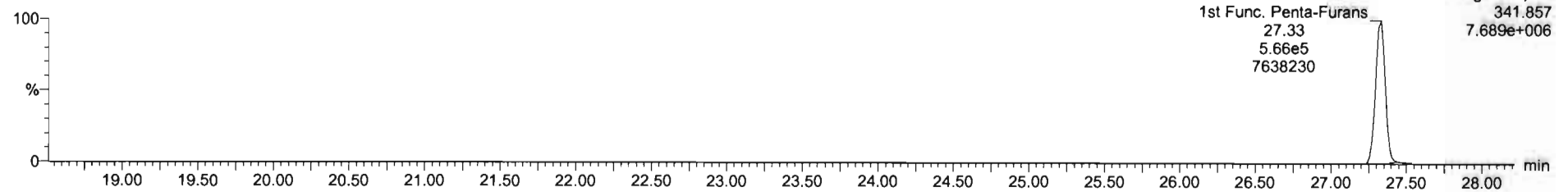
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

1st Func. Penta-Furans

200713R1\_5

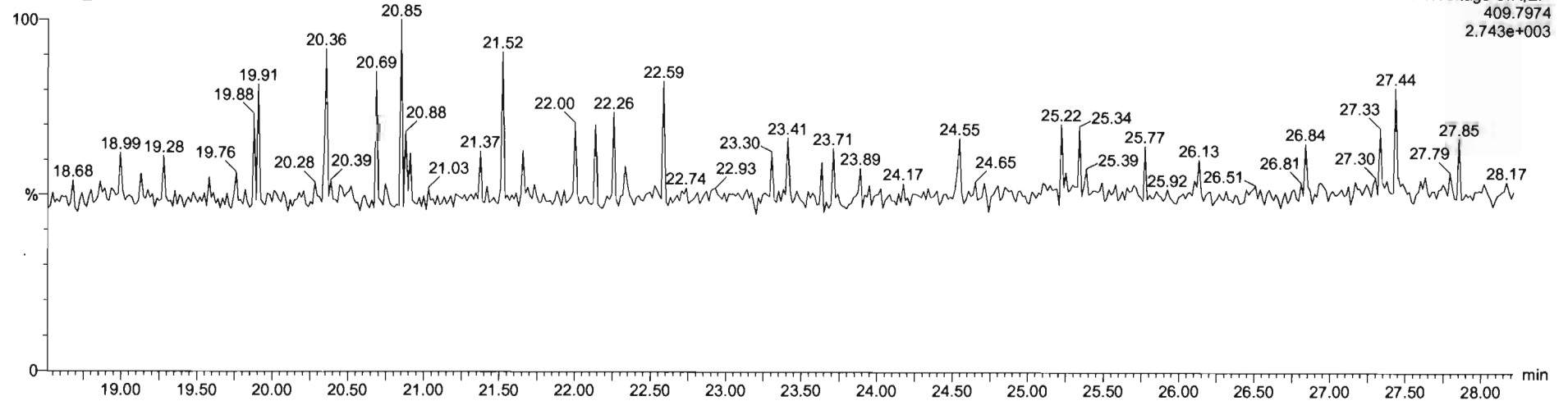


200713R1\_5



DPE6

200713R1\_5



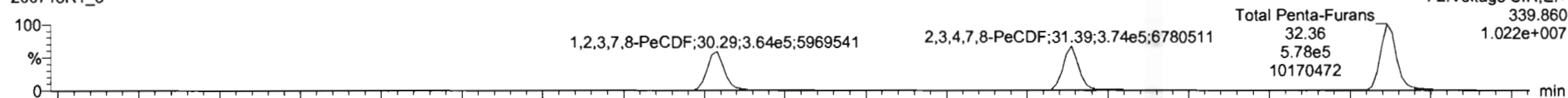
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

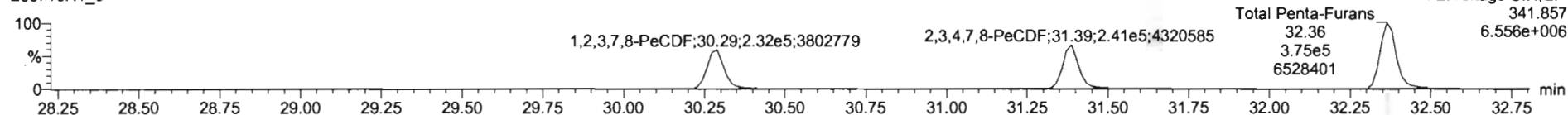
Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

**1,2,3,7,8-PeCDF**

200713R1\_5

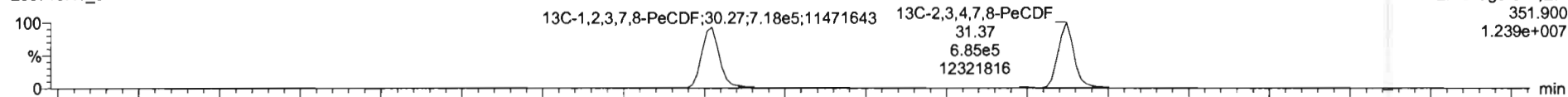


200713R1\_5

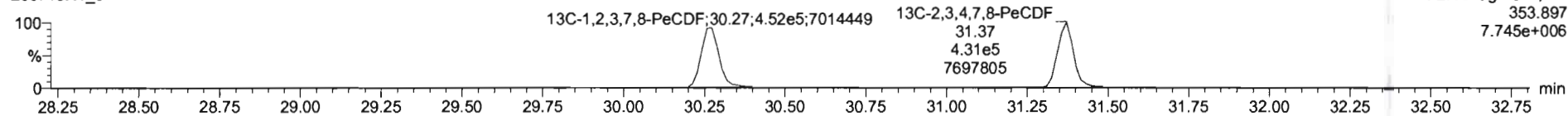


**13C-1,2,3,7,8-PeCDF**

200713R1\_5

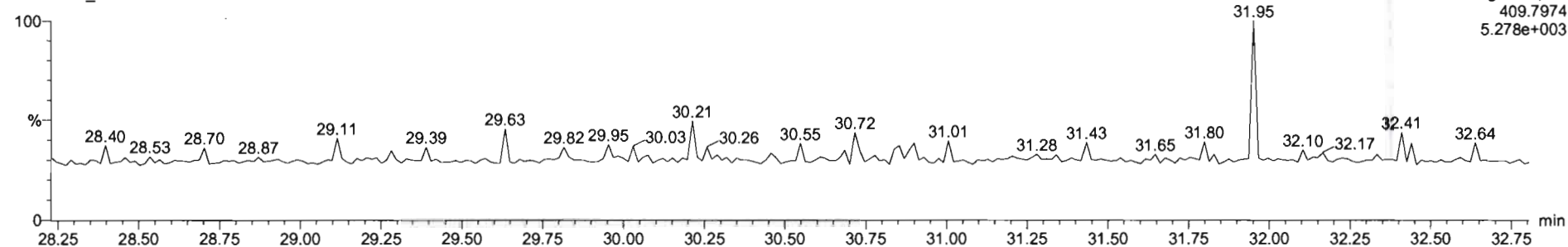


200713R1\_5



**DPE2**

200713R1\_5

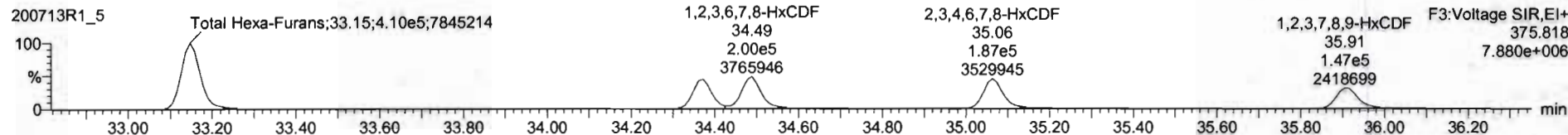
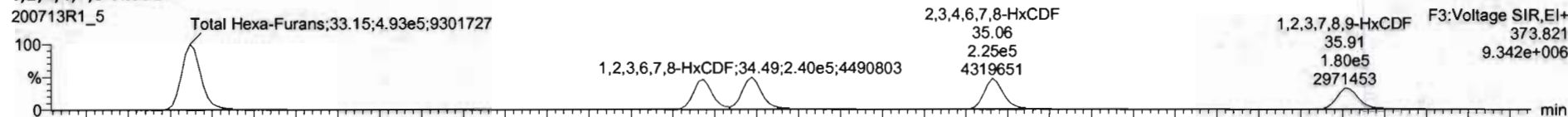


Dataset: Untitled

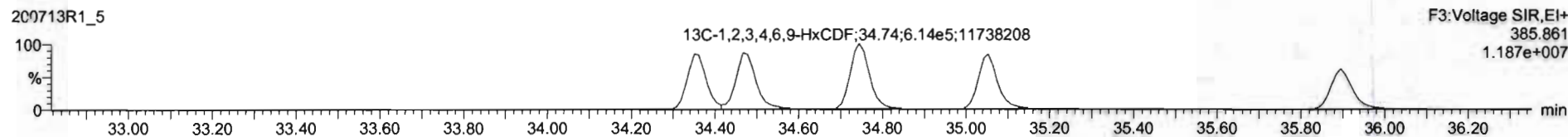
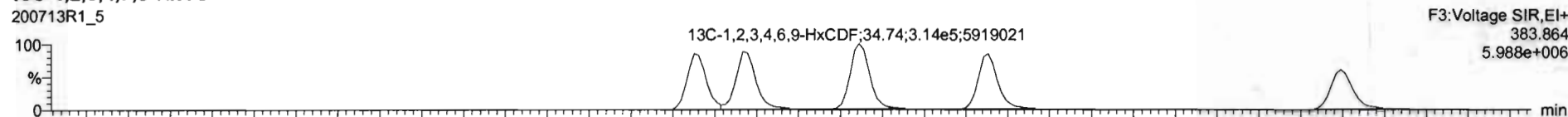
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

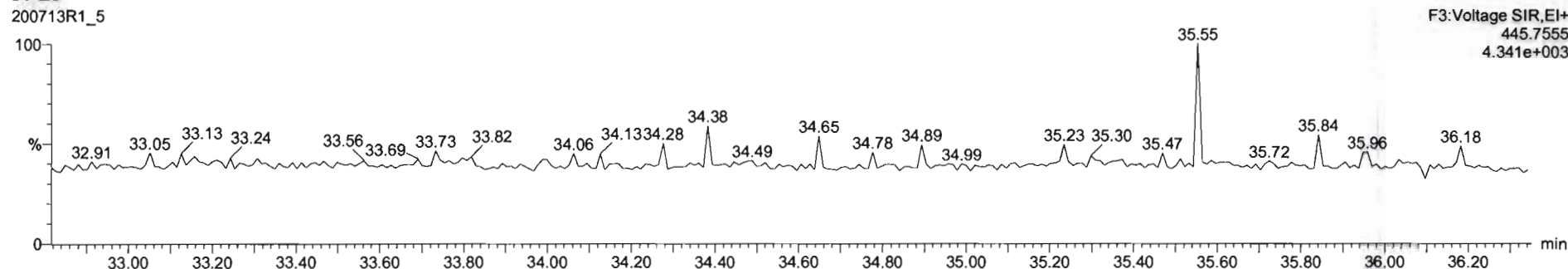
**1,2,3,4,7,8-HxCDF**



**13C-1,2,3,4,7,8-HxCDF**



**DPE3**





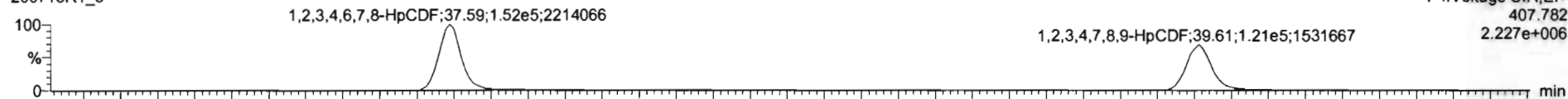
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

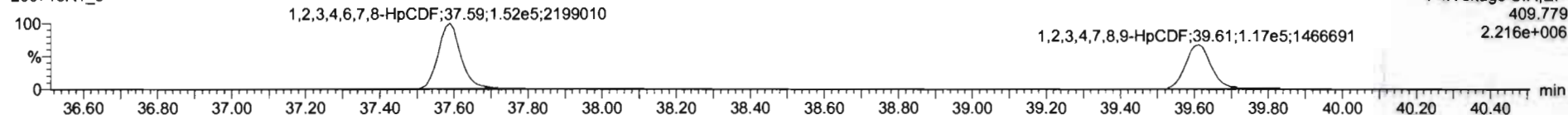
**1,2,3,4,6,7,8-HpCDF**

200713R1\_5



F4:Voltage SIR,EI+  
407.782  
2.227e+006

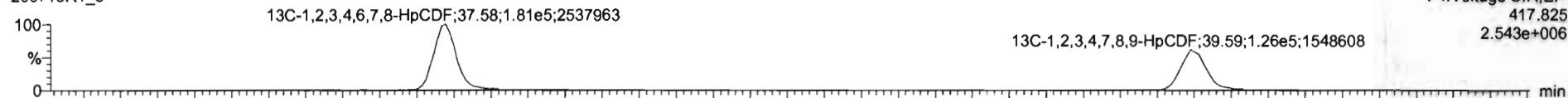
200713R1\_5



F4:Voltage SIR,EI+  
409.779  
2.216e+006

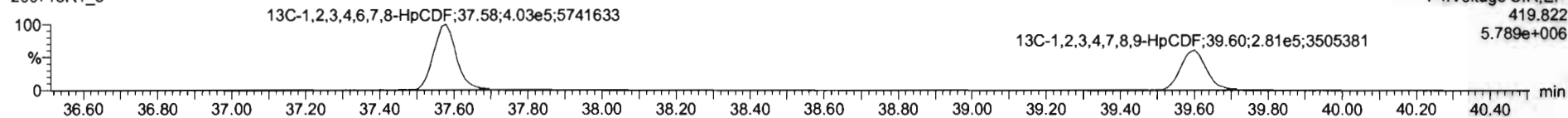
**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_5



F4:Voltage SIR,EI+  
417.825  
2.543e+006

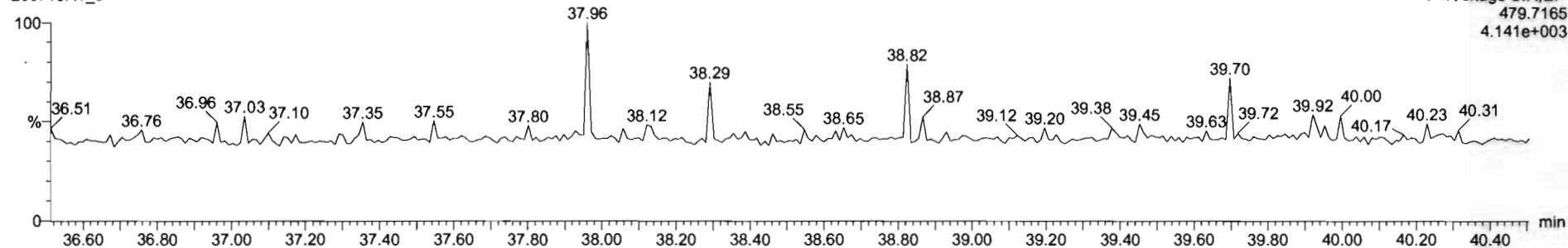
200713R1\_5



F4:Voltage SIR,EI+  
419.822  
5.789e+006

**DPE4**

200713R1\_5



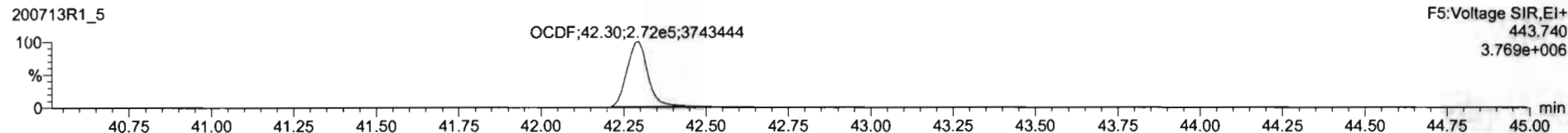
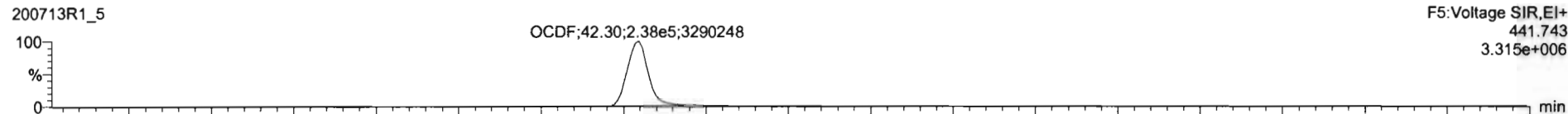
F4:Voltage SIR,EI+  
479.7165  
4.141e+003

Dataset: Untitled

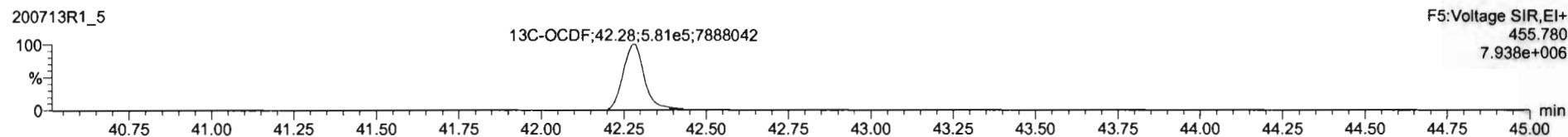
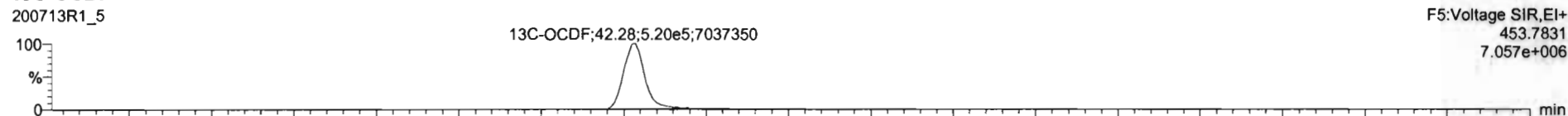
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305

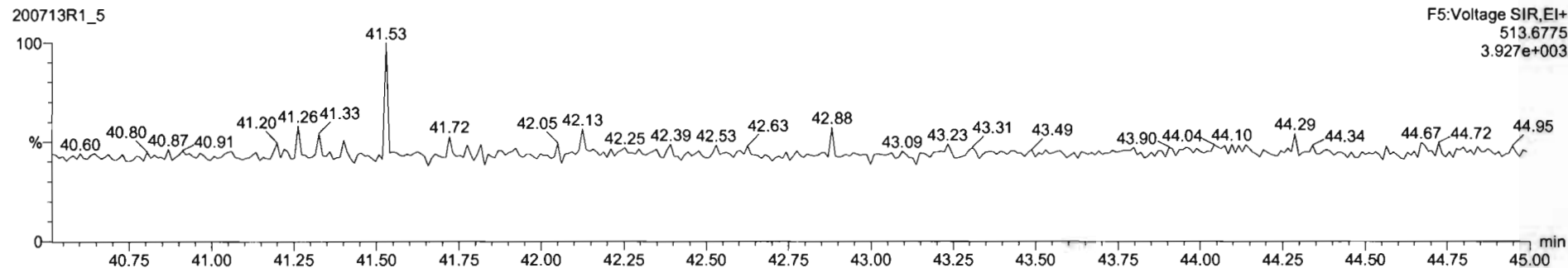
**OCDF**



**13C-OCDF**



**DPE5**

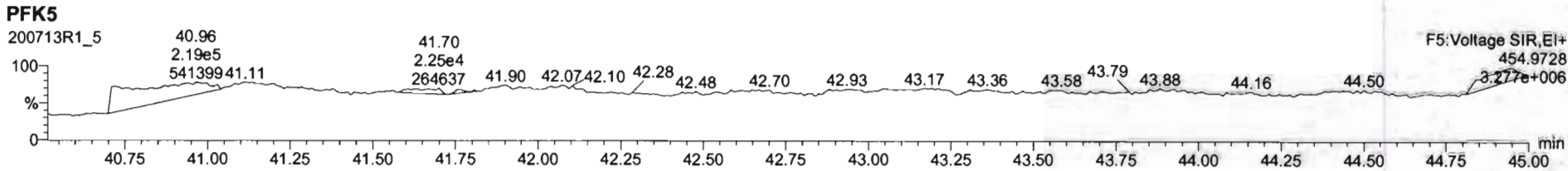
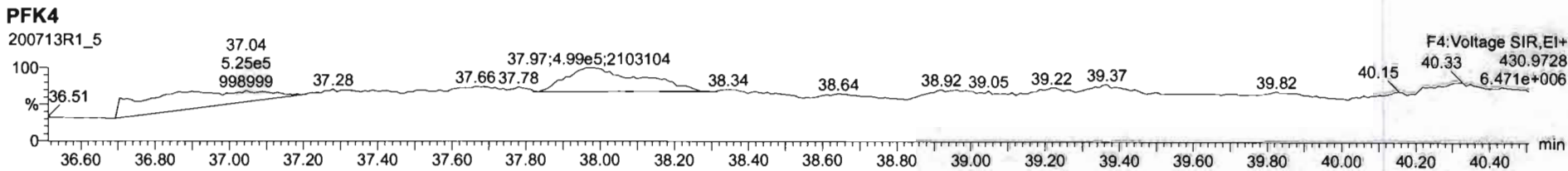
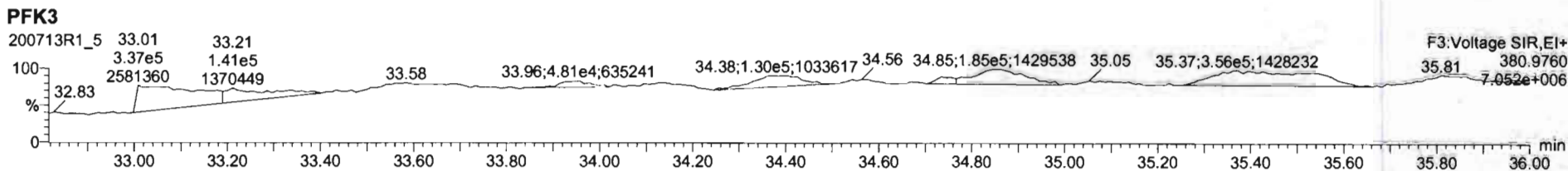
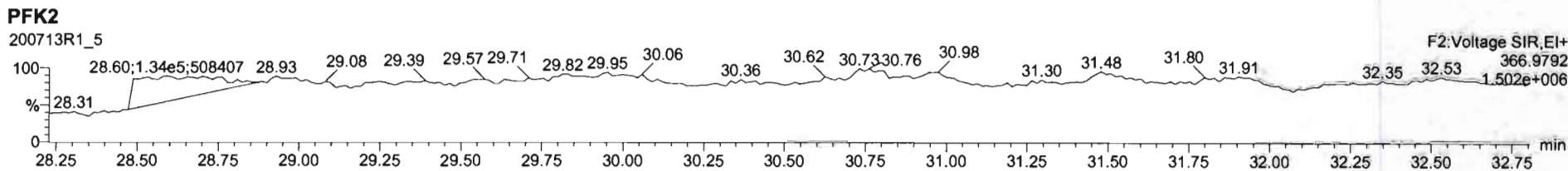
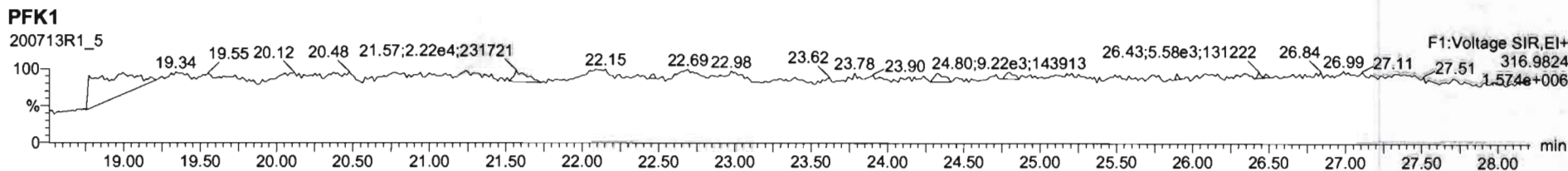


Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_5, Date: 13-Jul-2020, Time: 11:09:55, ID: ST200713R1\_4 1613 CS3 20F1105, Description: 1613 CS3 19L2305



Dataset: Untitled

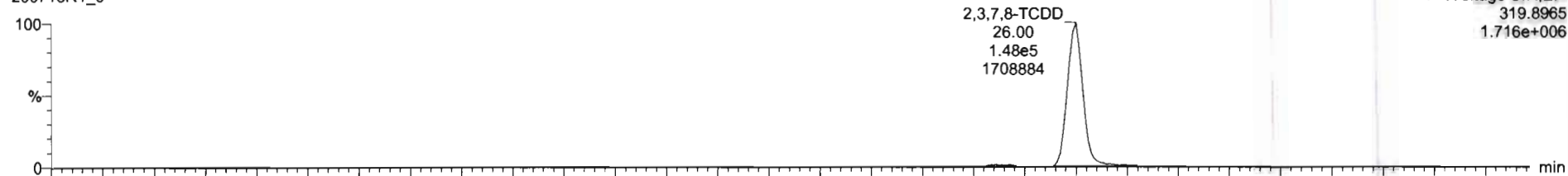
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

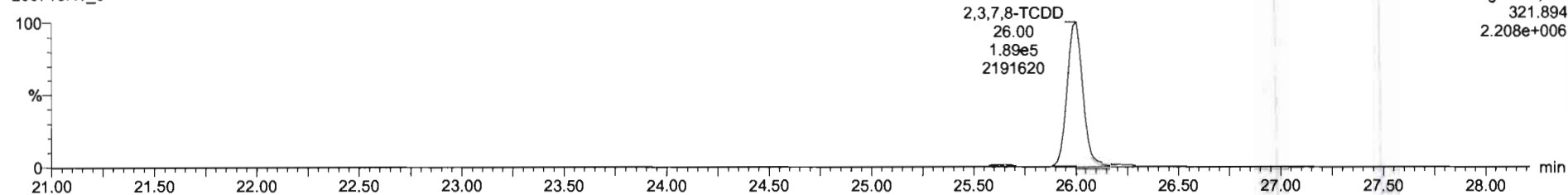
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**2,3,7,8-TCDD**

200713R1\_6

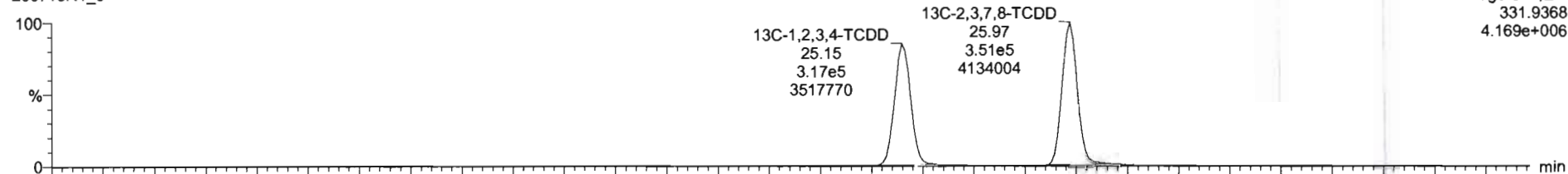


200713R1\_6

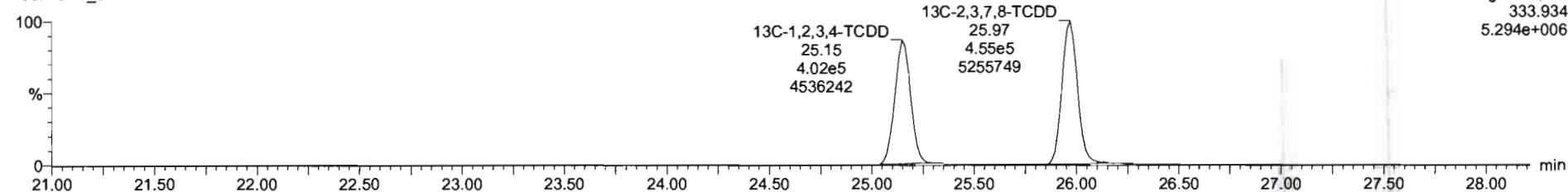


**13C-2,3,7,8-TCDD**

200713R1\_6



200713R1\_6



Dataset: Untitled

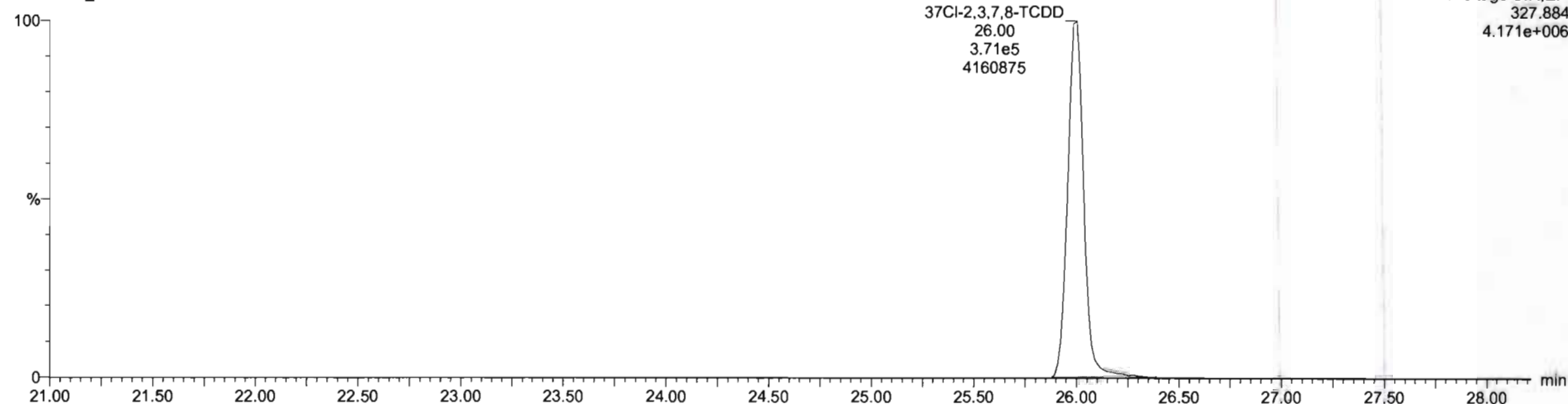
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

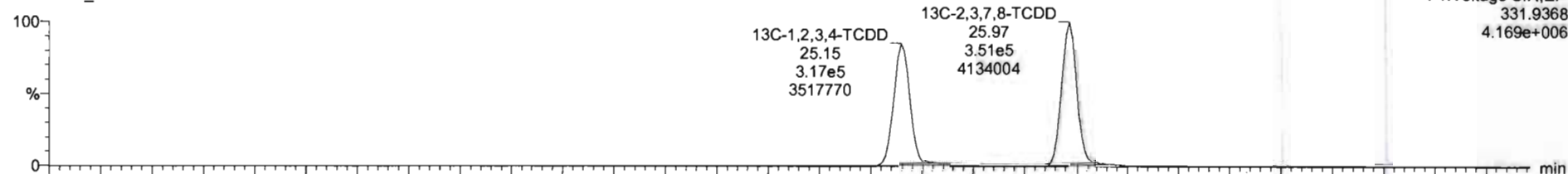
**37Cl-2,3,7,8-TCDD**

200713R1\_6

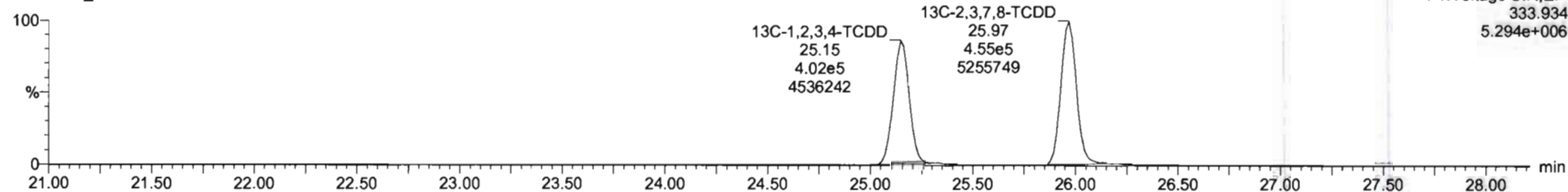


**13C-1,2,3,4-TCDD**

200713R1\_6



200713R1\_6



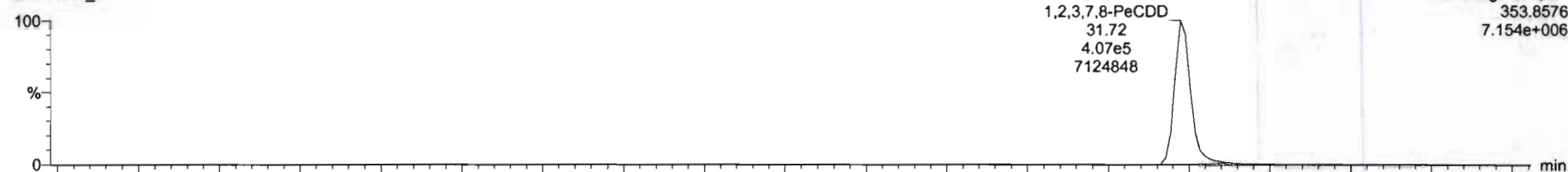
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

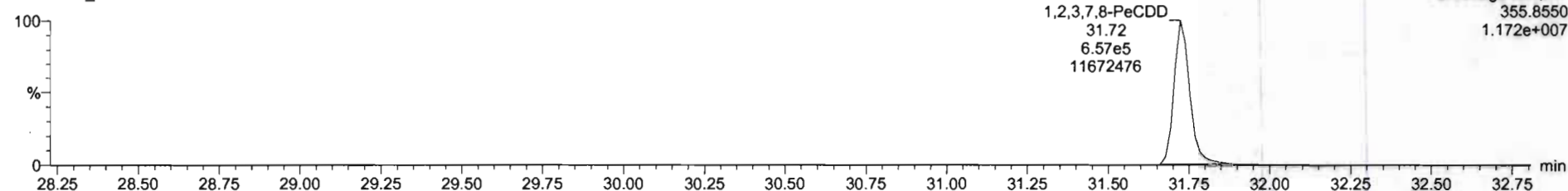
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**1,2,3,7,8-PeCDD**

200713R1\_6

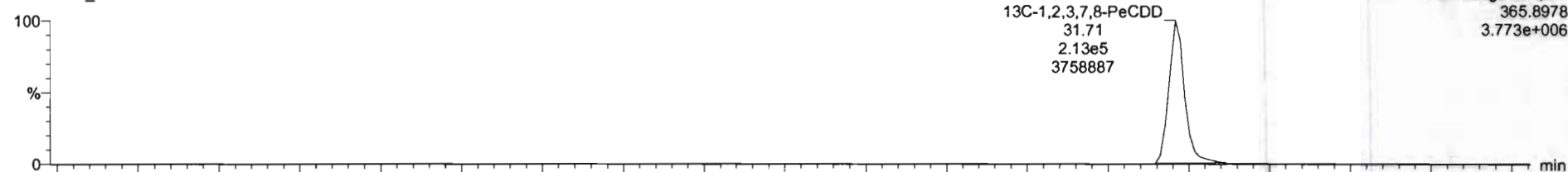


200713R1\_6

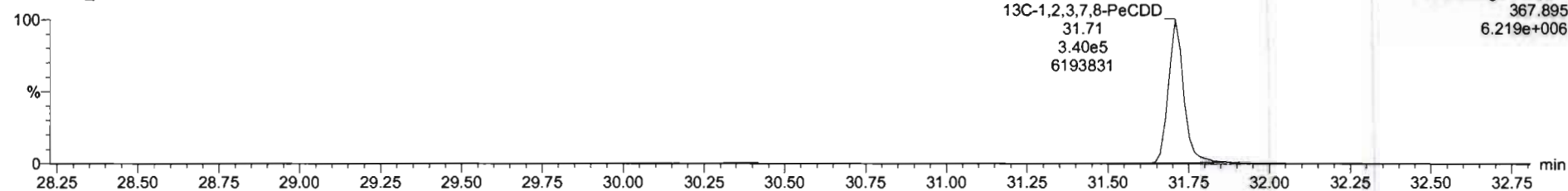


**13C-1,2,3,7,8-PeCDD**

200713R1\_6



200713R1\_6



Dataset: Untitled

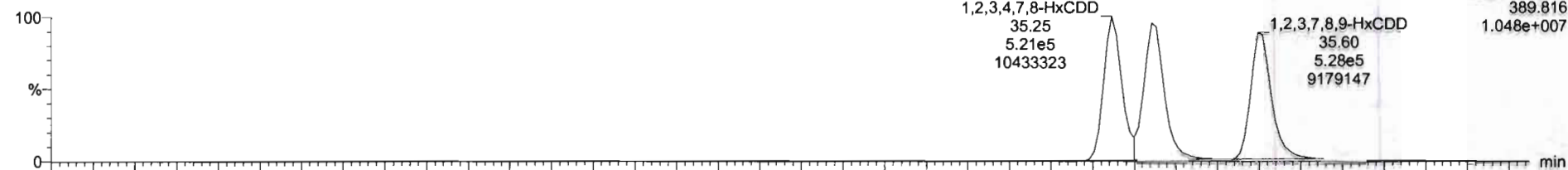
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

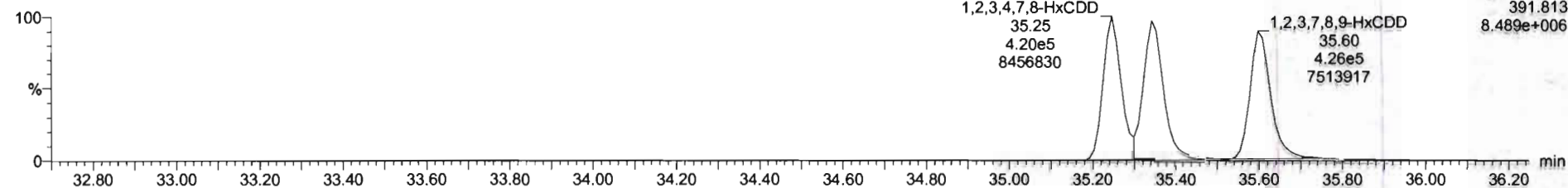
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**1,2,3,4,7,8-HxCDD**

200713R1\_6

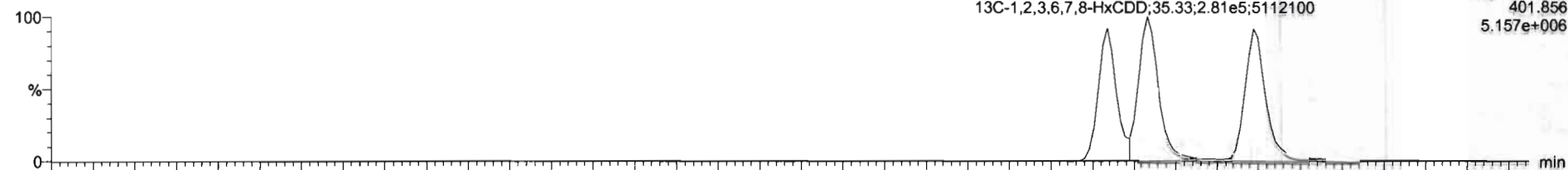


200713R1\_6

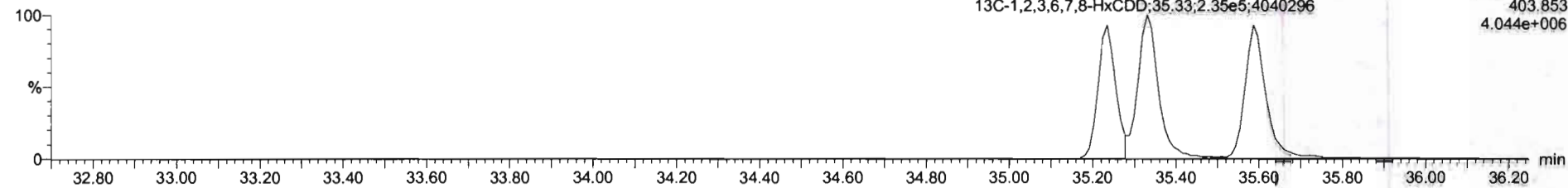


**13C-1,2,3,4,7,8-HxCDD**

200713R1\_6



200713R1\_6



TargetLynx - 200713R1-CRV.qld - [Chromatogram]

File Edit View Display Processing Window Help

200713R1\_6 - ST200713R1\_5 1613 CS4 20F1106 1613 CS4 19L2306

#	F <sub>1</sub>	Name	RT	RA	yh	Area	IS Area	Std Conc	%Dev	NRSD	RRF M	RRF SD
1	1	2,3,7,8-TCDD	26.00	0.706	NO	3.3679e5	8.0527e5	40.000	7.3	9.30	0.974	0.0906
2	2	1,2,3,7,8-PeCDD	31.72	0.618	NO	1.0639e6	5.5313e5	200.000	4.9	6.72	0.917	0.0616
3	3	1,2,3,4,7,8-HxCDD	35.25	1.240	NO	9.4032e5	4.1692e5	200.000	8.2	9.09	1.04	0.0947
4	4	1,2,3,6,7,8-HxCDD	35.34	1.245	NO	1.0155e6	5.1562e5	200.000	4.9	7.25	0.976	0.0680
5	5	1,2,3,7,8,9-HxCDD	35.60	1.239	NO	9.5488e5	4.8015e5	200.000	5.7	7.45	0.982	0.0717
6	6	1,2,3,4,6,7,8-HpCDD	38.97	1.021	NO	7.4777e5	3.9316e5	200.000	6.2	9.71	0.896	0.0870
7	7	OCDD	42.15	0.883	NO	1.2321e6	8.5441e5	400.000	5.4	8.21	0.893	0.0733
8	8	2,3,7,8-TCDF	24.88	0.744	NO	3.9344e5	1.0917e6	40.000	5.0	7.09	0.858	0.0609
9	9	1,2,3,7,8-PeCDF	30.29	1.559	NO	1.6562e6	8.0584e5	200.000	6.3	8.61	0.966	0.0834
10	10	2,3,4,7,8-PeCDF	31.39	1.553	NO	1.7484e6	7.6287e5	200.000	6.3	8.94	1.00	0.0748
11	11	1,2,3,4,7,8-HxCDF	34.38	1.210	NO	1.1527e6	5.5120e5	200.000	8.1	8.22	0.966	0.0795
12	12	1,2,3,6,7,8-HxCDF	34.50	1.208	NO	1.2762e6	5.9831e5	200.000	6.3	8.24	1.00	0.0826
13	13	2,3,4,6,7,8-HxCDF	35.07	1.203	NO	1.2135e6	5.6534e5	200.000	7.6	8.26	0.997	0.0824
14	14	1,2,3,7,8,9-HxCDF	35.92	1.205	NO	9.6903e5	4.7404e5	200.000	6.5	9.11	0.960	0.0875
15	15	1,2,3,4,6,7,8-HpCDF	37.60	1.001	NO	9.0519e5	4.2098e5	200.000	7.2	8.47	1.00	0.0849
16	16	1,2,3,4,7,8,9-HpCDF	39.62	1.001	NO	7.0783e5	2.9296e5	200.000	9.0	9.10	1.11	0.101
17	17	OCDF	42.32	0.894	NO	1.4914e6	7.8240e5	400.000	6.4	7.88	0.896	0.0706
18	18	13C-2,3,7,8-TCDD	25.97	0.771	NO	8.0527e5	7.1912e5	100.000	1.4	3.37	1.10	0.0371
19	19	13C-1,2,3,7,8-PeCDD	31.71	0.628	NO	5.5313e5	7.1912e5	100.000	1.5	9.89	0.757	0.0749
20	20	13C-1,2,3,4,7,8-HxCDD	35.23	1.300	NO	4.1692e5	6.4804e5	100.000	-0.6	6.25	0.647	0.0405
21	21	13C-1,2,3,6,7,8-HxCDD	35.33	1.192	NO	5.1562e5	6.4804e5	100.000	-1.1	5.73	0.805	0.0461





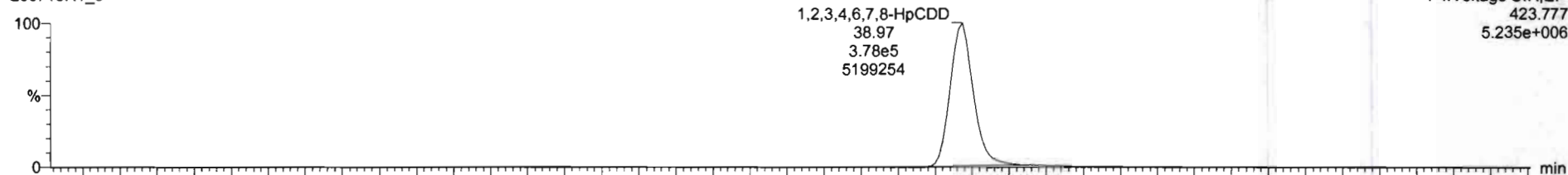
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

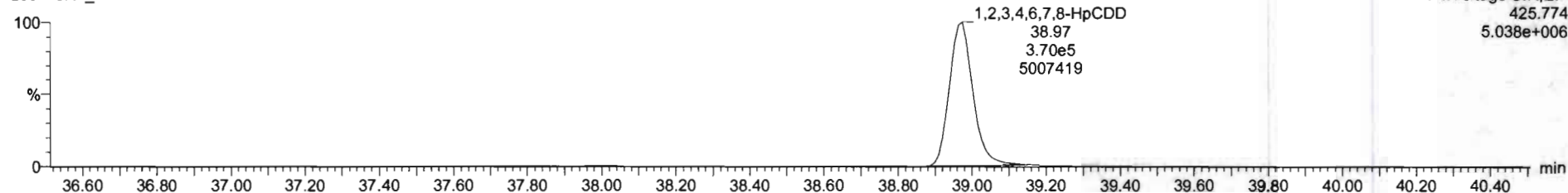
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

1,2,3,4,6,7,8-HpCDD

200713R1\_6

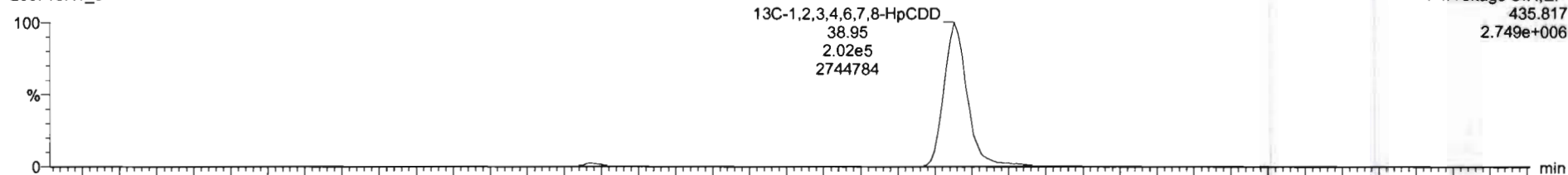


200713R1\_6

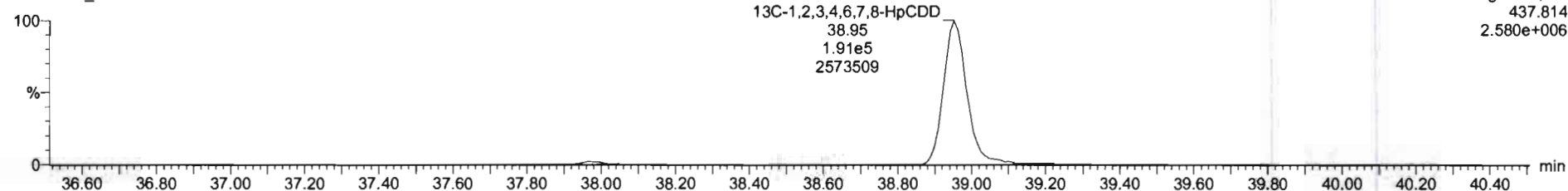


13C-1,2,3,4,6,7,8-HpCDD

200713R1\_6



200713R1\_6



Dataset: Untitled

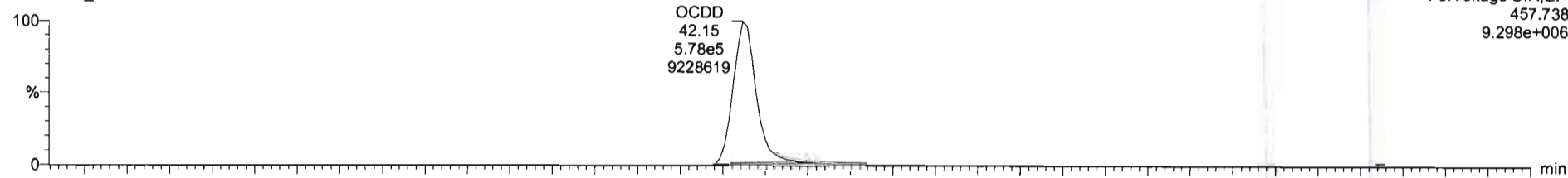
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

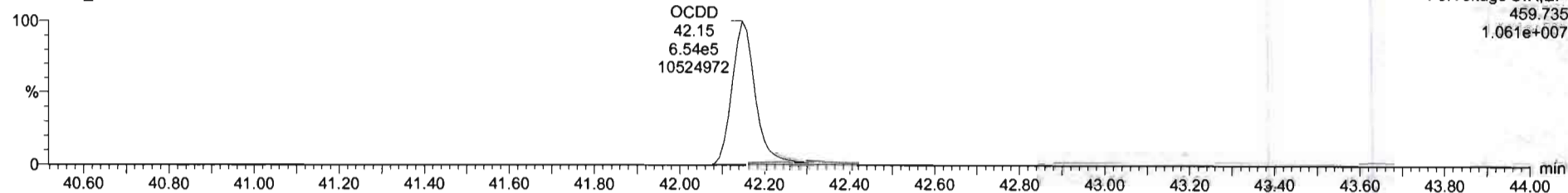
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**OCDD**

200713R1\_6

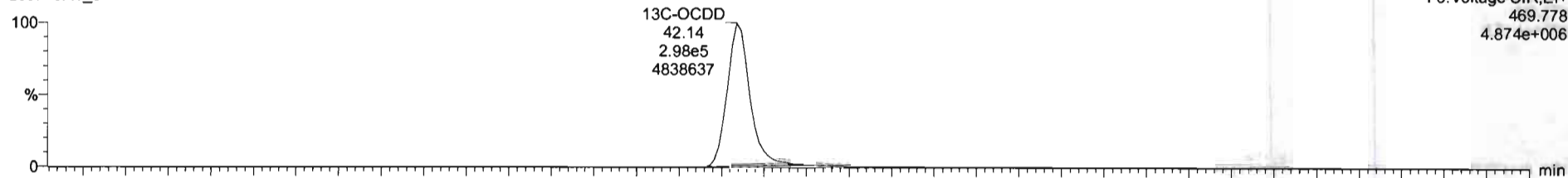


200713R1\_6

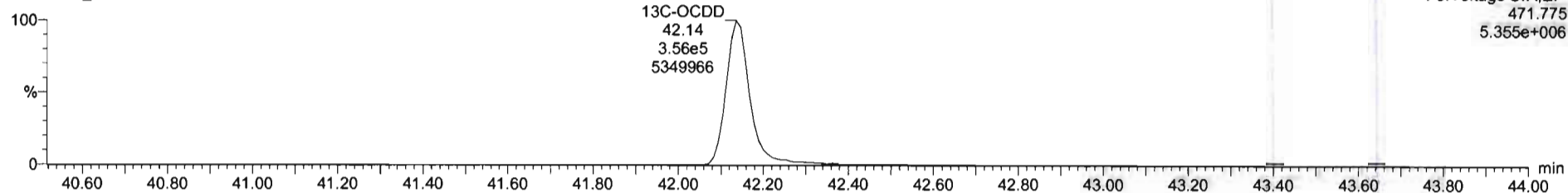


**13C-OCDD**

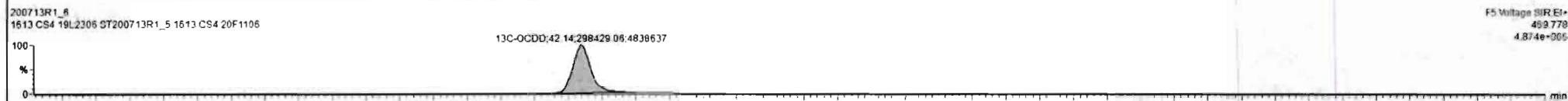
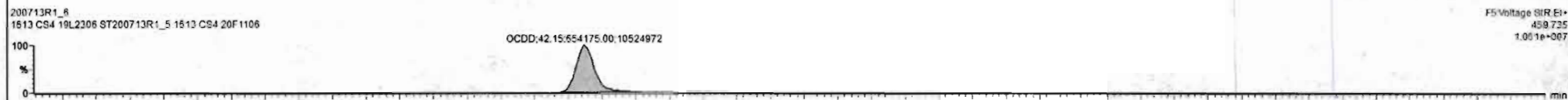
200713R1\_6



200713R1\_6



#	Name	RT	RA	y/n	Area	IS Area	Std. Conc.	NDev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.00	0.796	NO	3.3679e5	8.0527e5	40.000	7.3	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.72	0.618	NO	1.0639e6	5.5313e5	200.000	4.9	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.25	1.240	NO	9.4032e5	4.1692e5	200.000	8.2	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.34	1.245	NO	1.0155e6	5.1582e5	200.000	4.9	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.60	1.239	NO	9.5468e5	4.8915e5	200.000	5.6	7.87	0.964	0.0739
6	1,2,3,4,6,7,8-HpCDD	36.97	1.021	NO	7.4777e5	3.9215e5	200.000	5.4	8.81	0.992	0.0794
7	OCDD	42.15	0.863	NO	1.2321e6	6.4395e5	400.000	5.4	6.96	0.996	0.0834
8	2,3,7,8-TCDF	24.88	0.744	NO	3.9344e5	1.0917e6	40.000	5.0	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.29	1.559	NO	1.6582e6	8.0584e5	200.000	6.3	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.39	1.553	NO	1.7464e6	7.6287e5	200.000	6.3	6.94	1.06	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.210	NO	1.1527e6	5.5120e5	200.000	8.1	8.22	0.966	0.0795
12	1,2,3,6,7,8-HxCDF	34.50	1.208	NO	1.2762e6	5.9831e5	200.000	6.3	8.24	1.00	0.0826
13	2,3,4,6,7,8-HxCDF	35.07	1.203	NO	1.2135e6	5.6534e5	200.000	7.6	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.92	1.205	NO	8.6903e5	4.7404e5	200.000	6.5	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.60	1.001	NO	9.0519e5	4.2098e5	200.000	7.2	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.62	1.001	NO	7.0783e5	2.9296e5	200.000	9.0	9.10	1.11	0.101
17	OCDF	42.32	0.894	NO	1.4914e6	7.8240e5	400.000	8.4	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	25.97	0.771	NO	8.0527e5	7.1912e5	100.000	1.4	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.71	0.628	NO	5.5313e5	7.1912e5	100.000	1.5	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.23	1.390	NO	4.1692e5	6.4894e5	100.000	-0.6	6.25	0.547	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.33	1.192	NO	5.1582e5	6.4894e5	100.000	-1.1	5.73	0.895	0.0461



Dataset: Untitled

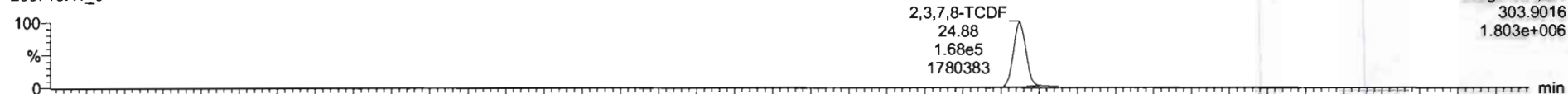
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

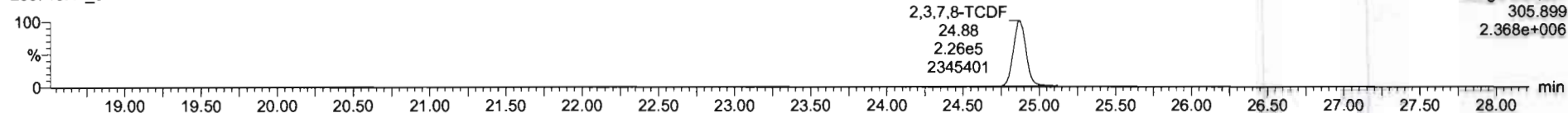
**2,3,7,8-TCDF**

200713R1\_6



F1: Voltage SIR, EI+  
303.9016  
1.803e+006

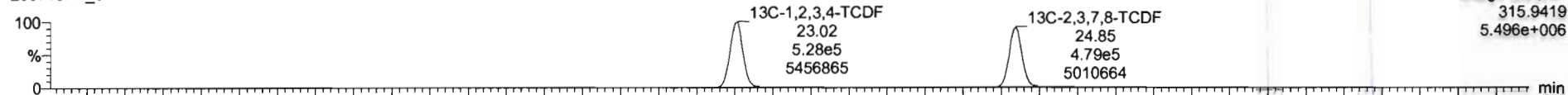
200713R1\_6



F1: Voltage SIR, EI+  
305.899  
2.368e+006

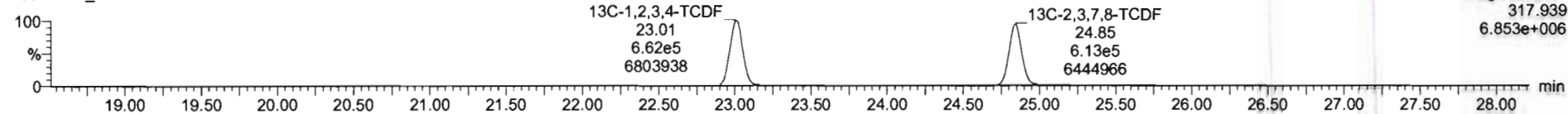
**13C-2,3,7,8-TCDF**

200713R1\_6



F1: Voltage SIR, EI+  
315.9419  
5.496e+006

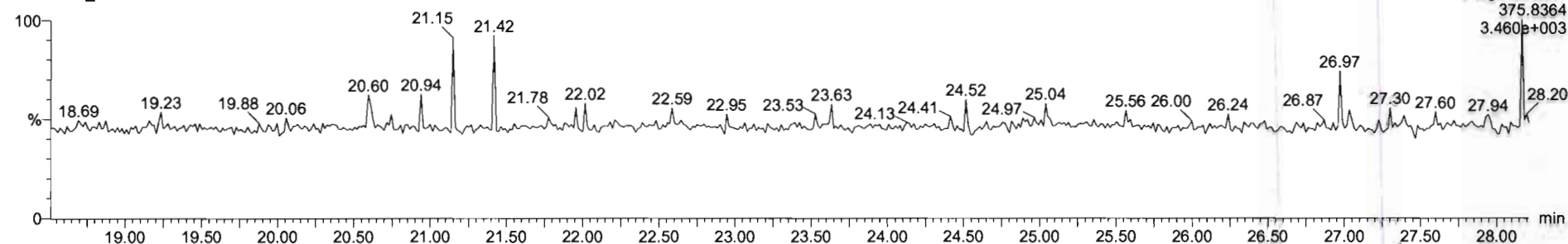
200713R1\_6



F1: Voltage SIR, EI+  
317.939  
6.853e+006

**DPE1**

200713R1\_6



F1: Voltage SIR, EI+  
375.8364  
3.460e+003

Dataset: Untitled

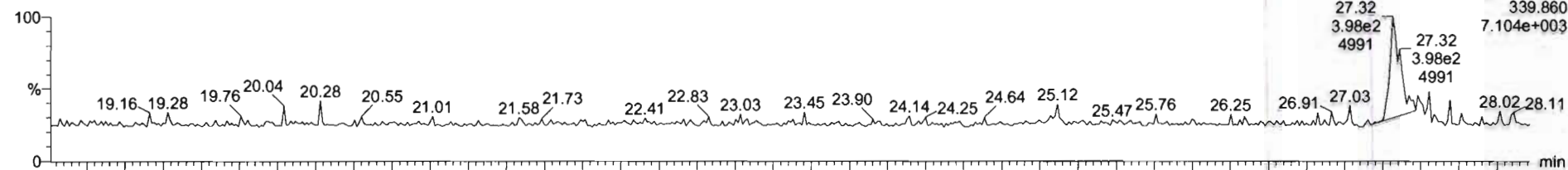
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

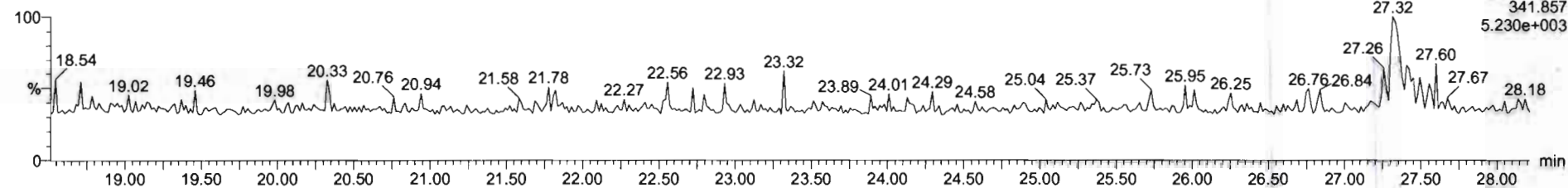
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

1st Func. Penta-Furans

200713R1\_6

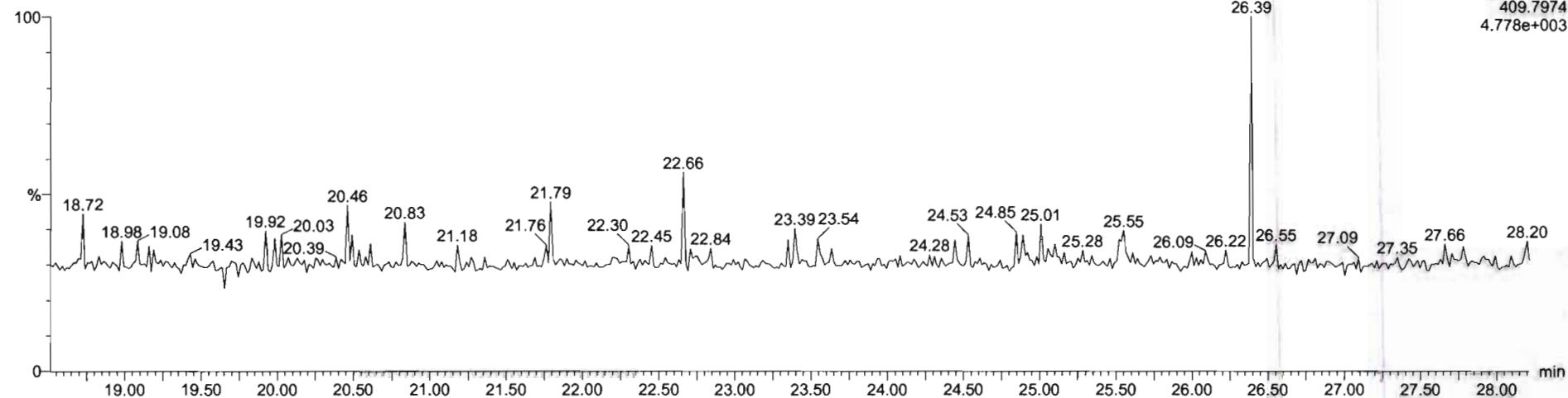


200713R1\_6



DPE6

200713R1\_6



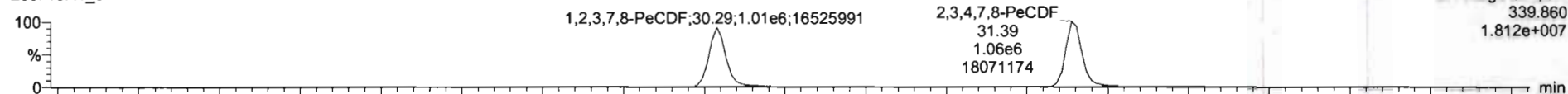
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

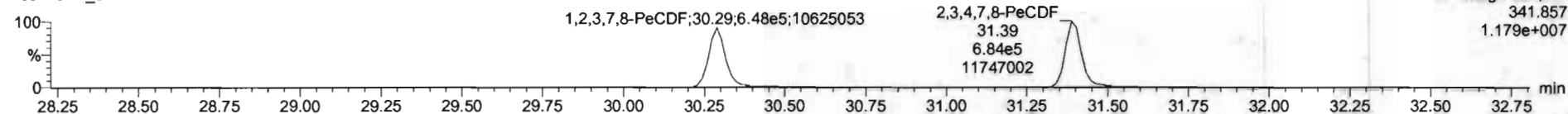
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**1,2,3,7,8-PeCDF**

200713R1\_6

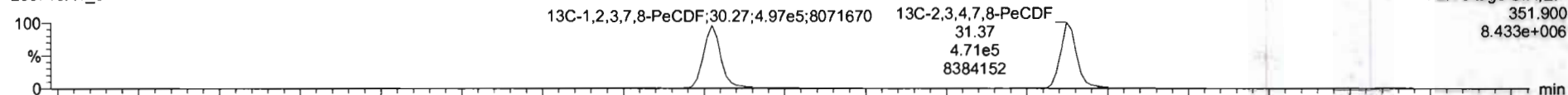


200713R1\_6

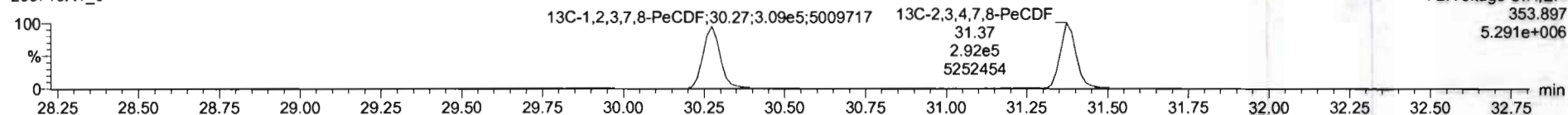


**13C-1,2,3,7,8-PeCDF**

200713R1\_6

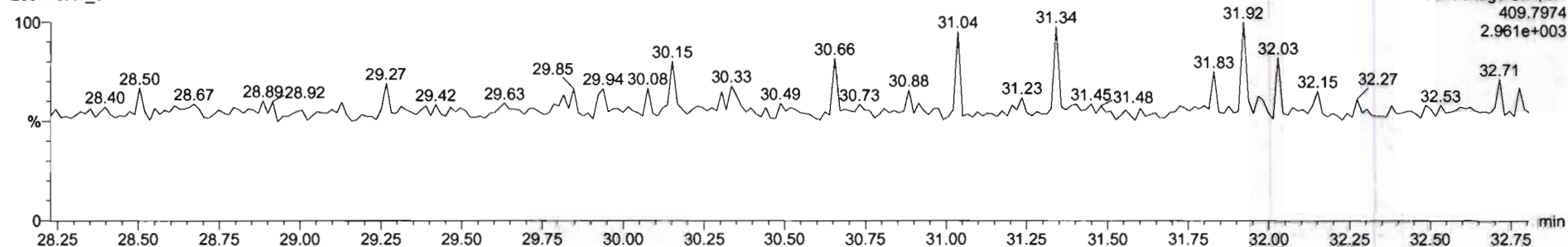


200713R1\_6



**DPE2**

200713R1\_6



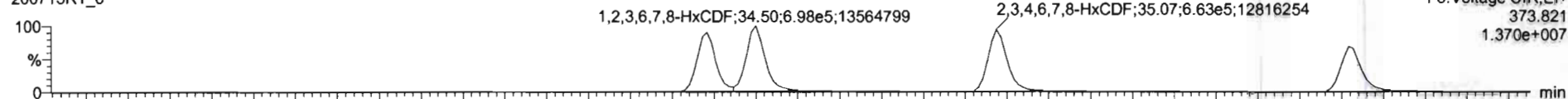
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

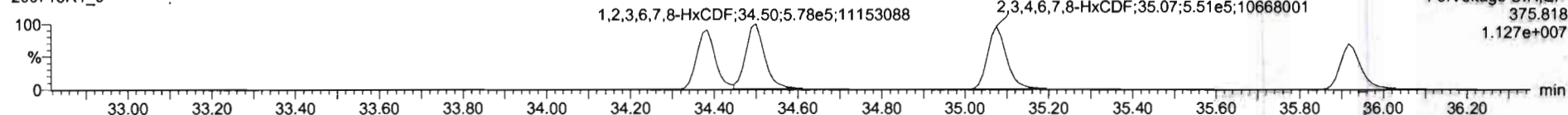
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**1,2,3,4,7,8-HxCDF**

200713R1\_6

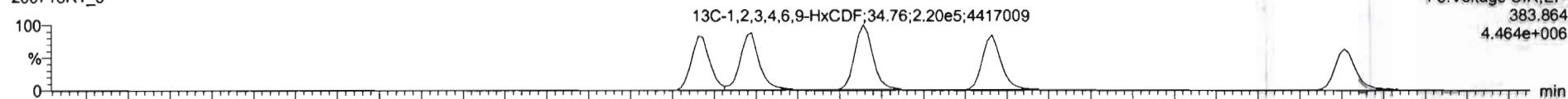


200713R1\_6

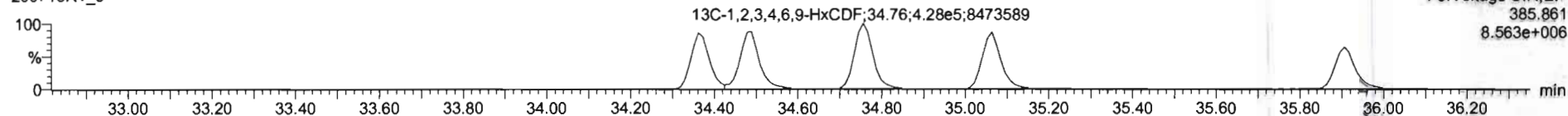


**13C-1,2,3,4,7,8-HxCDF**

200713R1\_6

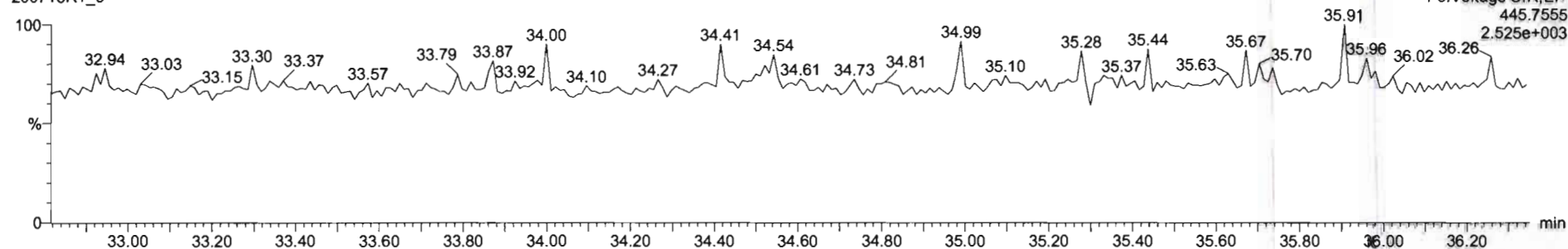


200713R1\_6



**DPE3**

200713R1\_6



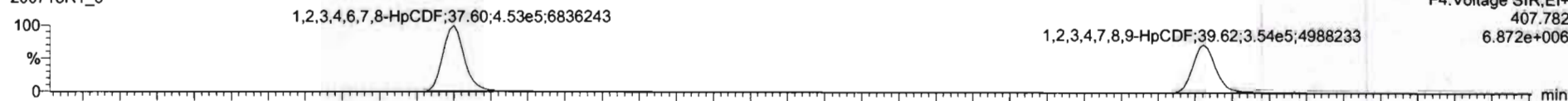
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

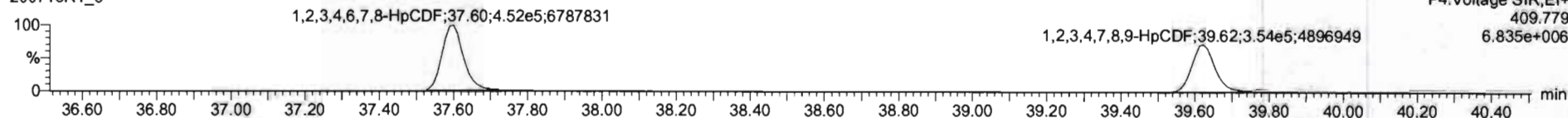
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**1,2,3,4,6,7,8-HpCDF**

200713R1\_6

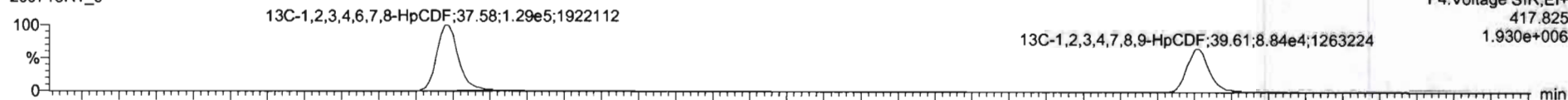


200713R1\_6

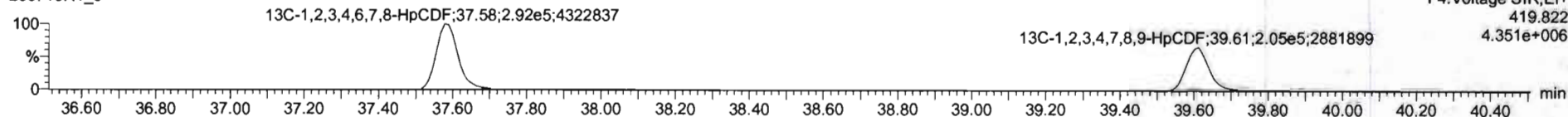


**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_6

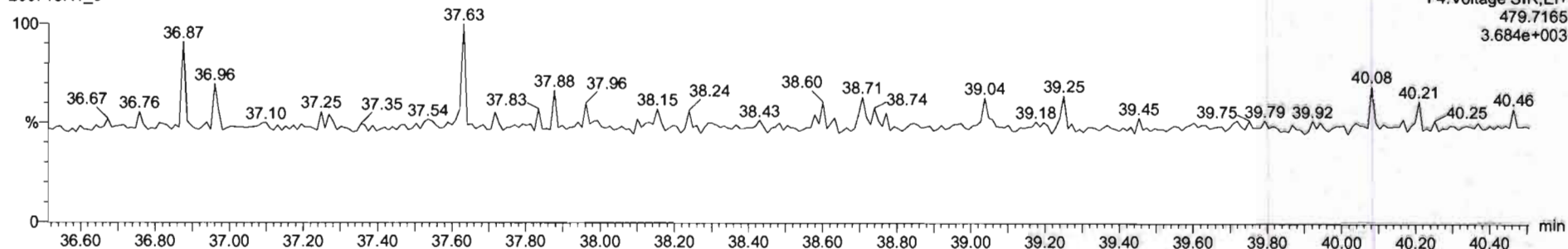


200713R1\_6



**DPE4**

200713R1\_6





Dataset: Untitled

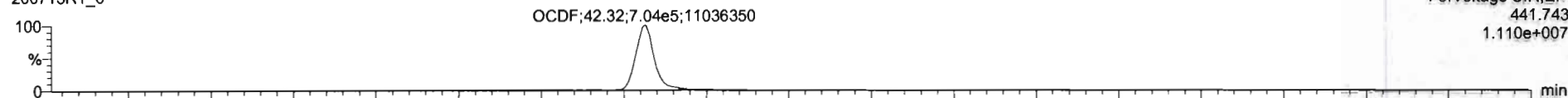
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

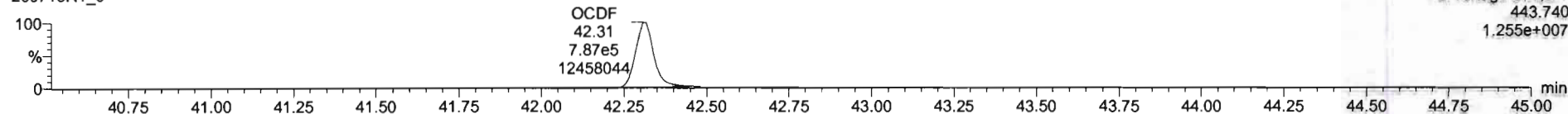
Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306

**OCDF**

200713R1\_6

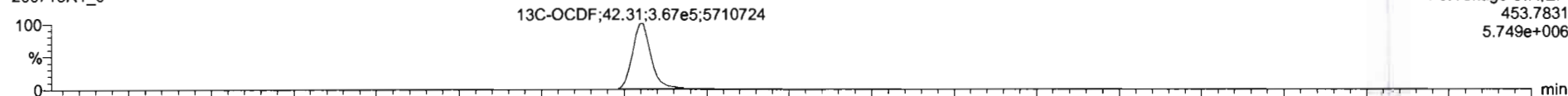


200713R1\_6

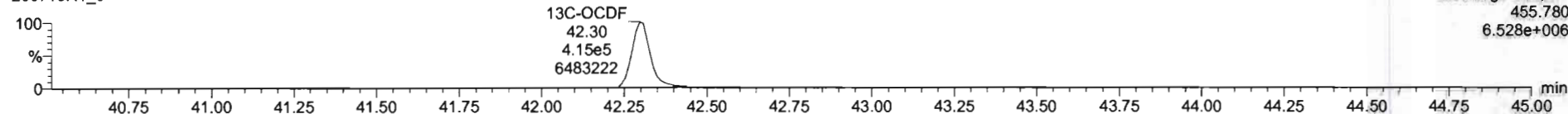


**13C-OCDF**

200713R1\_6

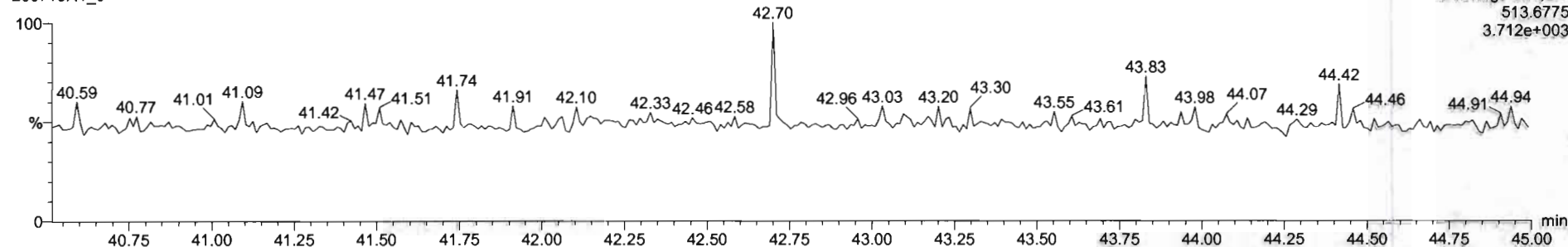


200713R1\_6



**DPE5**

200713R1\_6

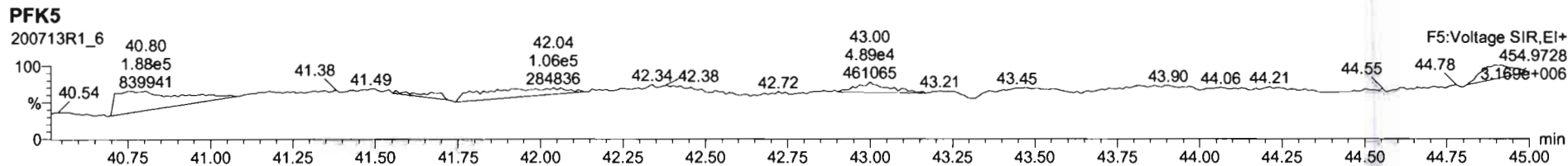
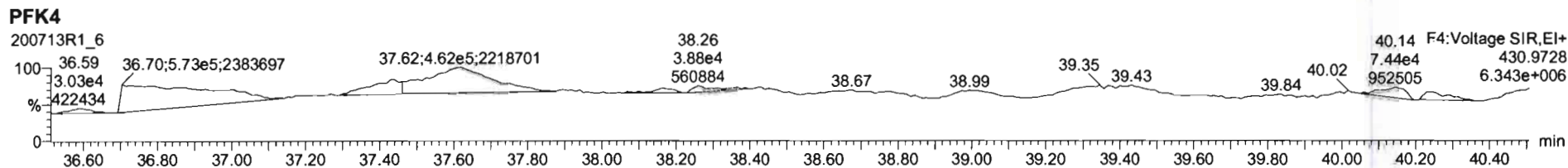
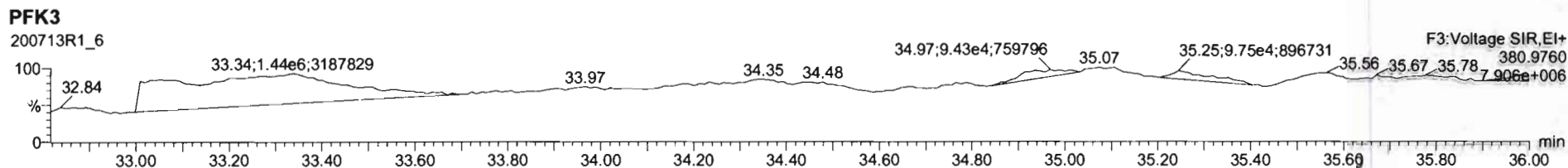
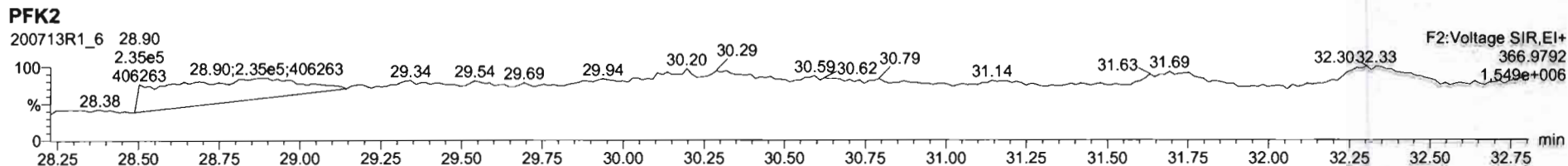
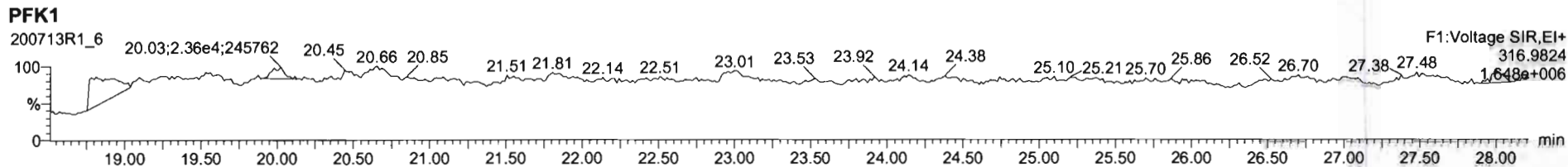


Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_6, Date: 13-Jul-2020, Time: 11:58:02, ID: ST200713R1\_5 1613 CS4 20F1106, Description: 1613 CS4 19L2306



Dataset: Untitled

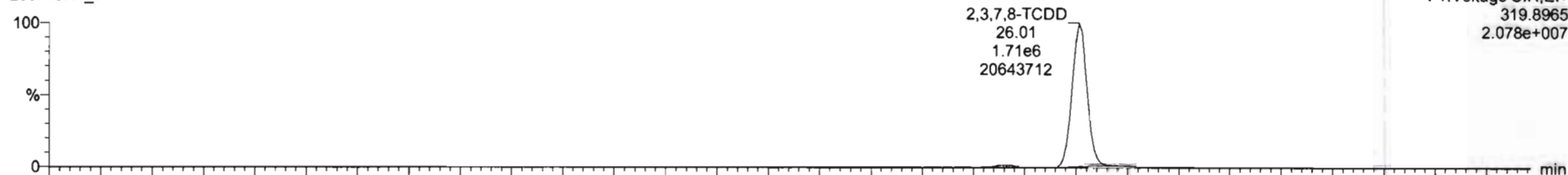
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

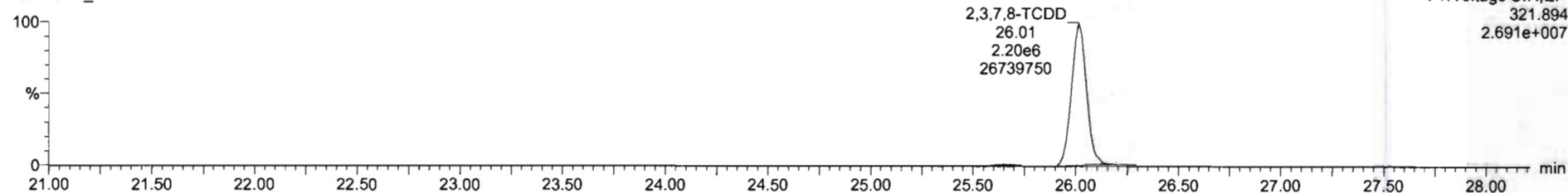
Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

**2,3,7,8-TCDD**

200713R1\_7

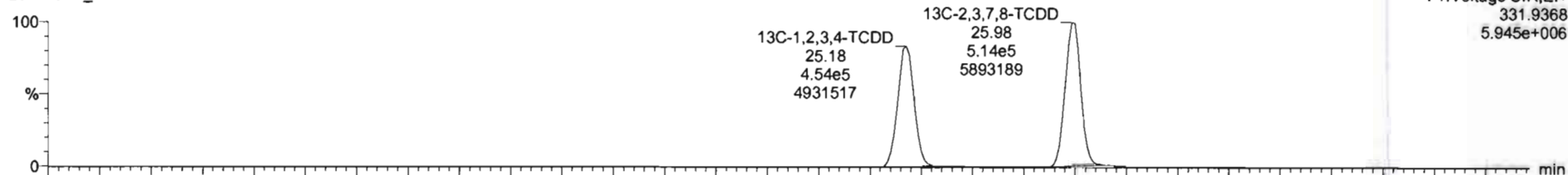


200713R1\_7

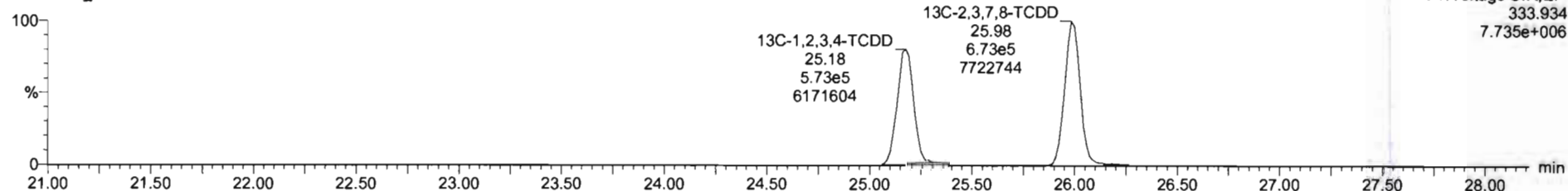


**13C-2,3,7,8-TCDD**

200713R1\_7



200713R1\_7



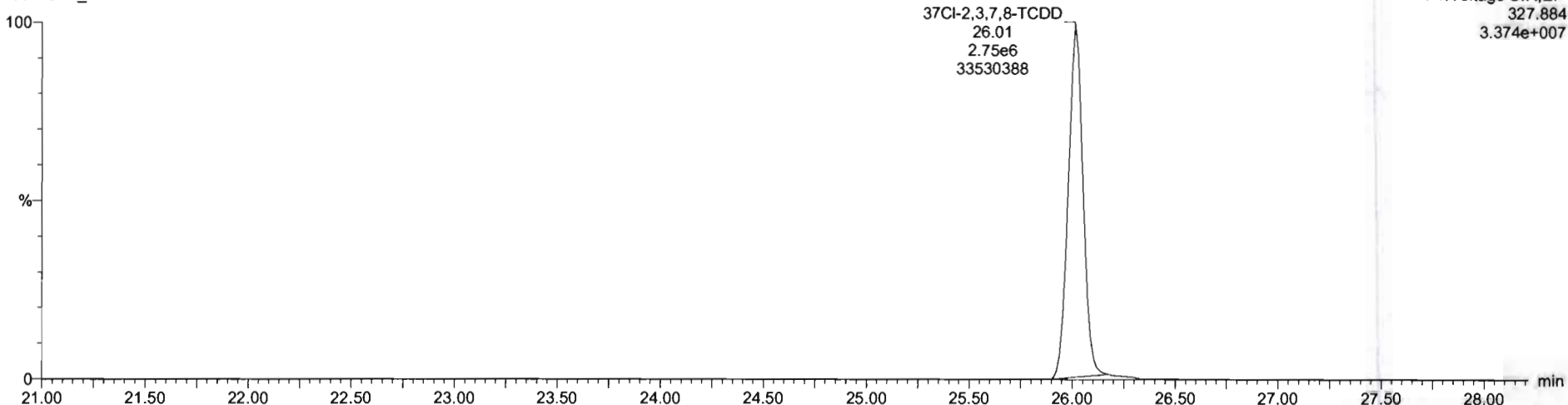
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

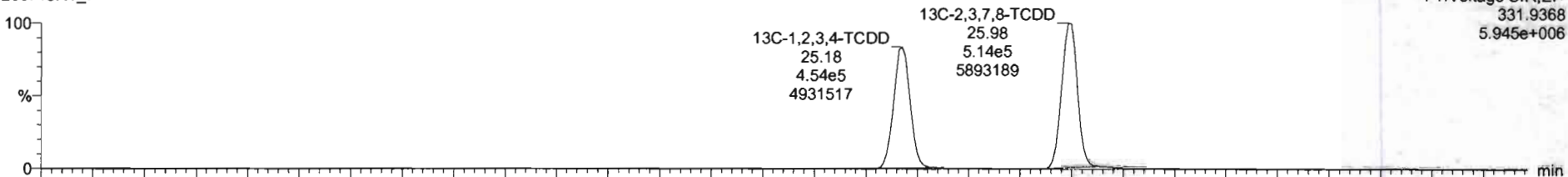
37Cl-2,3,7,8-TCDD

200713R1\_7

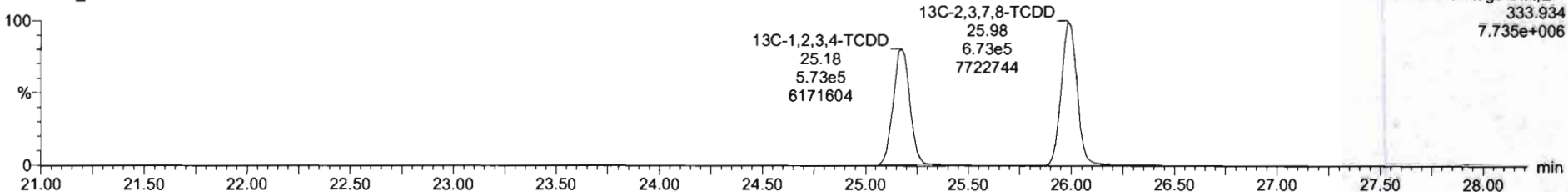


13C-1,2,3,4-TCDD

200713R1\_7



200713R1\_7



Dataset: Untitled

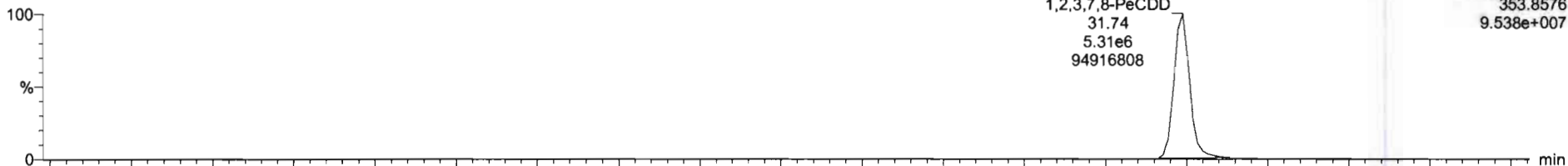
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

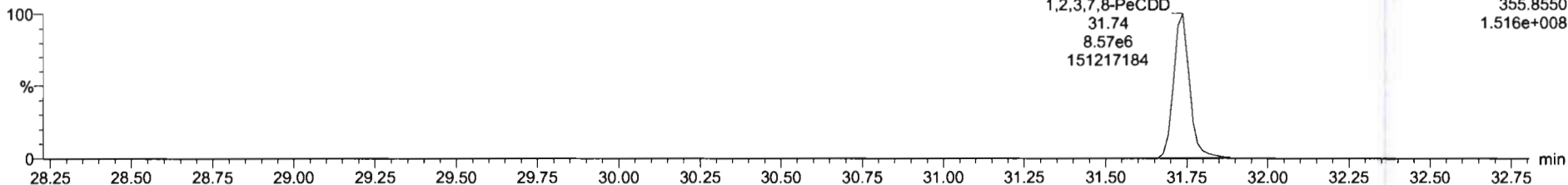
**1,2,3,7,8-PeCDD**

200713R1\_7



F2:Voltage SIR,EI+  
353.8576  
9.538e+007

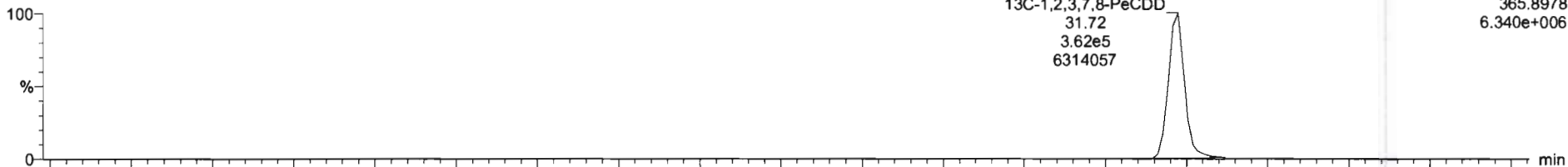
200713R1\_7



F2:Voltage SIR,EI+  
355.8550  
1.516e+008

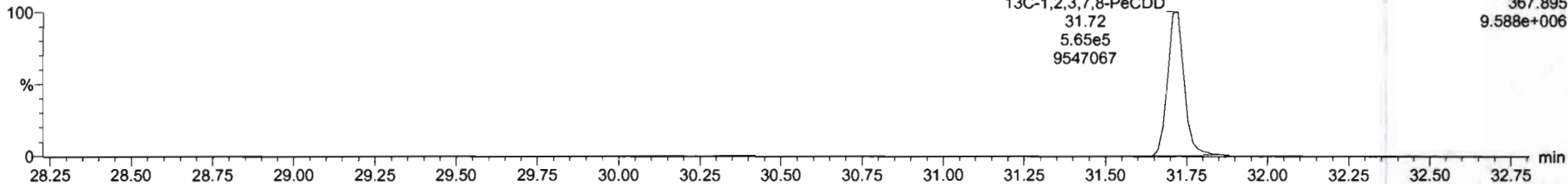
**13C-1,2,3,7,8-PeCDD**

200713R1\_7



F2:Voltage SIR,EI+  
365.8978  
6.340e+006

200713R1\_7



F2:Voltage SIR,EI+  
367.895  
9.588e+006

Dataset: Untitled

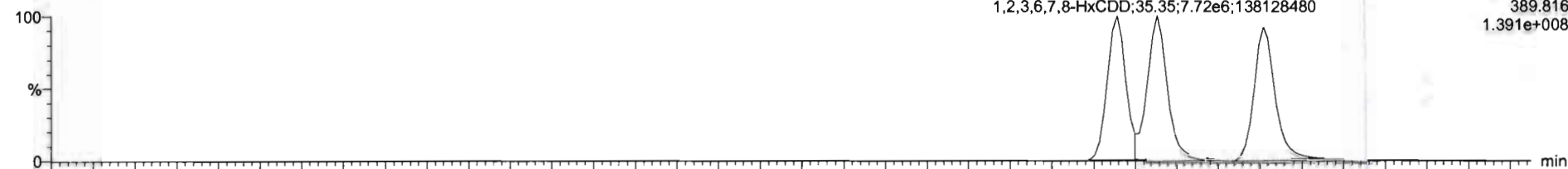
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

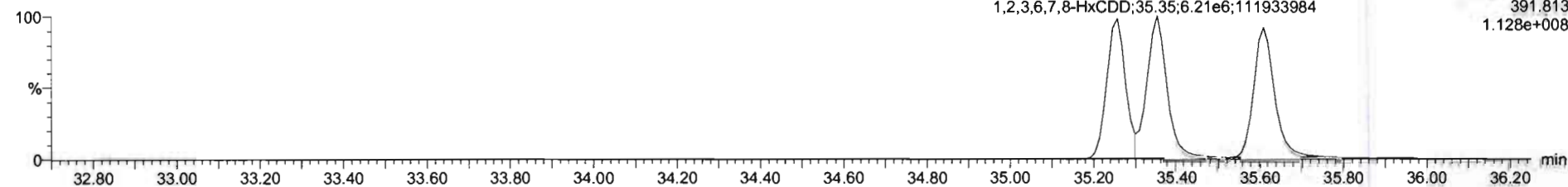
Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

1,2,3,4,7,8-HxCDD

200713R1\_7

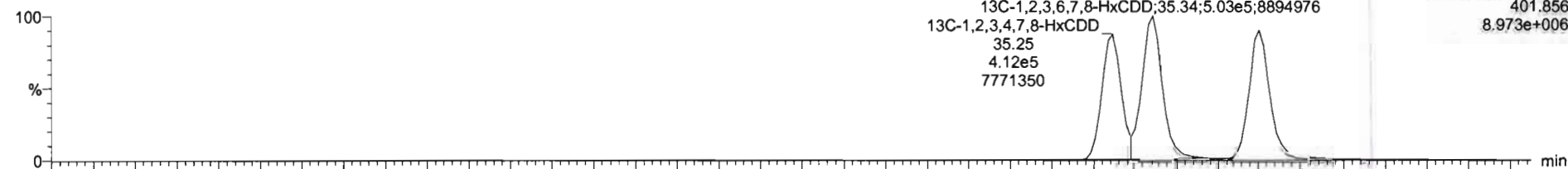


200713R1\_7

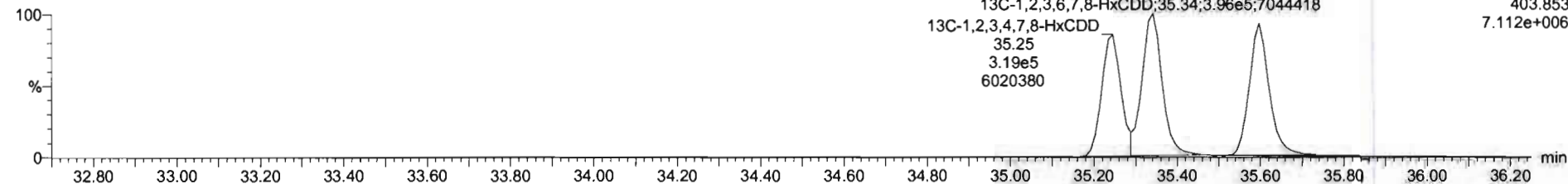


13C-1,2,3,4,7,8-HxCDD

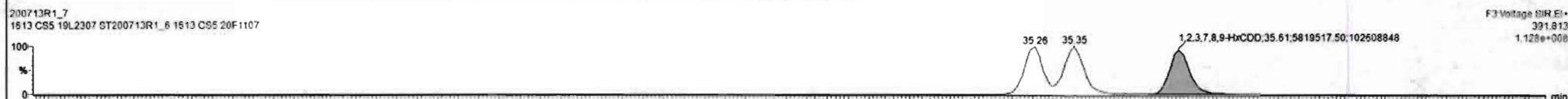
200713R1\_7



200713R1\_7



#	F..Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M	RRF SD
1	1,2,3,7,8-TCDD	26.01	0.778	NO	3.9090e6	1.1668e6	300.000	12.7	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.74	0.619	NO	1.3876e7	9.2685e5	1500.000	8.9	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.26	1.242	NO	1.2671e7	7.3023e5	1500.000	11.0	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.35	1.243	NO	1.3935e7	8.9898e5	1500.000	10.2	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	36.61	1.237	NO	1.3019e7	8.1543e5	1500.000	10.9	7.67	0.964	0.0738
6	1,2,3,4,6,7,8-HpCDD	38.97	1.033	NO	1.0995e7	7.1600e5	1500.000	13.3	9.71	0.896	0.0870
7	OCDD	42.17	0.889	NO	2.0534e7	1.3712e6	3000.000	11.8	8.21	0.893	0.0733
8	2,3,7,8-TCDF	24.91	0.757	NO	4.5040e6	1.5824e6	300.000	10.6	7.09	0.858	0.0609
9	1,2,3,7,8-PeCDF	30.30	1.555	NO	2.1125e7	1.3276e6	1500.000	9.6	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.40	1.534	NO	2.2518e7	1.2874e6	1500.000	8.3	6.94	1.06	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.204	NO	1.5296e7	9.6762e5	1500.000	8.9	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.50	1.207	NO	1.7119e7	1.0379e6	1500.000	9.6	8.24	1.00	0.0825
13	2,3,4,6,7,8-HxCDF	35.09	1.200	NO	1.5711e7	9.6650e5	1500.000	8.7	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.93	1.212	NO	1.3414e7	8.3352e5	1500.000	11.8	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.61	1.002	NO	1.2278e7	7.3513e5	1500.000	11.1	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.63	0.991	NO	1.0255e7	5.6217e5	1500.000	9.7	9.10	1.11	0.101
17	OCDF	42.33	0.886	NO	2.3128e7	1.5662e6	3000.000	9.9	7.88	0.896	0.0706
18	13C-2,3,7,8-TCDD	25.98	0.764	NO	1.1868e6	1.0273e6	100.000	4.7	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.72	0.641	NO	9.2685e5	1.0273e6	100.000	19.1	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.25	1.292	NO	7.3023e5	1.0060e6	100.000	12.2	6.26	0.547	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.34	1.268	NO	8.9898e5	1.0060e6	100.000	11.0	5.73	0.695	0.0461



Dataset: Untitled

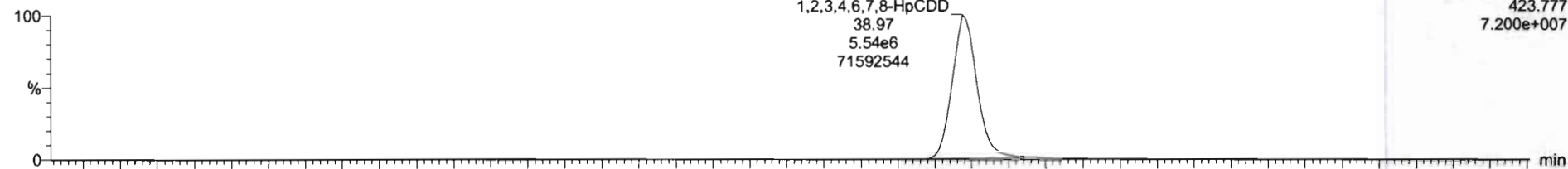
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

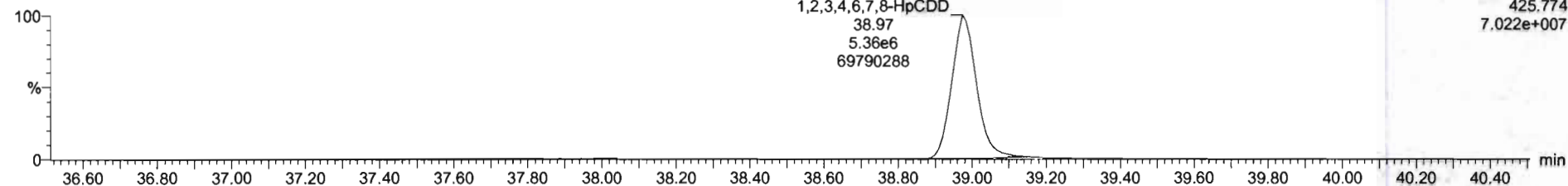
**1,2,3,4,6,7,8-HpCDD**

200713R1\_7



F4:Voltage SIR,EI+  
423.777  
7.200e+007

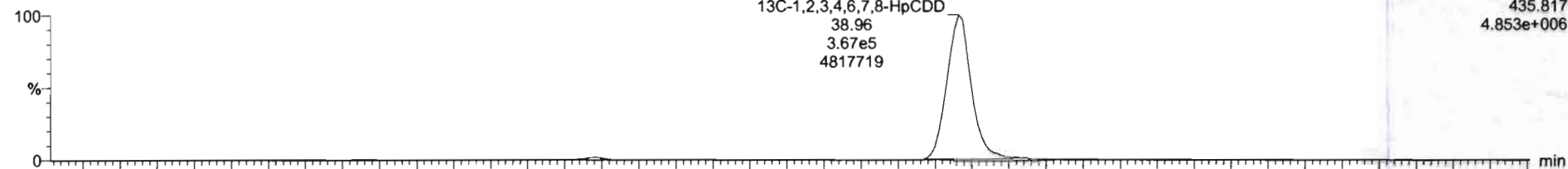
200713R1\_7



F4:Voltage SIR,EI+  
425.774  
7.022e+007

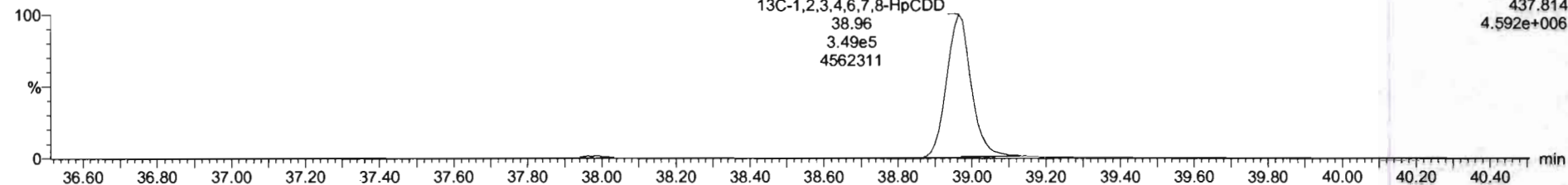
**13C-1,2,3,4,6,7,8-HpCDD**

200713R1\_7



F4:Voltage SIR,EI+  
435.817  
4.853e+006

200713R1\_7



F4:Voltage SIR,EI+  
437.814  
4.592e+006



Dataset: Untitled

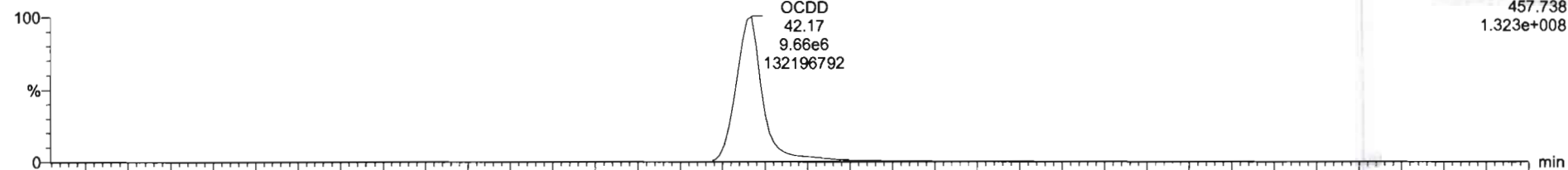
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

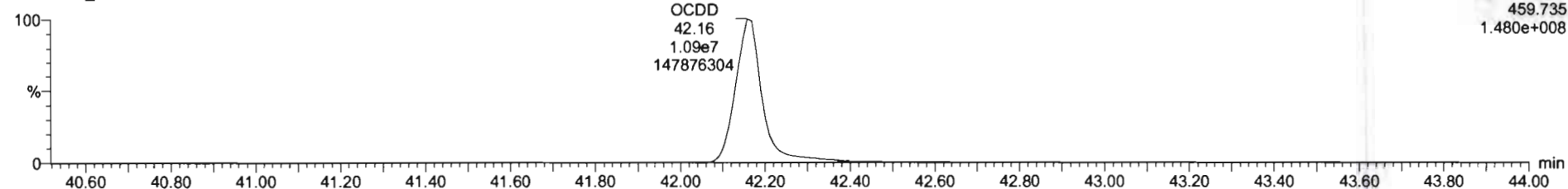
**OCDD**

200713R1\_7



F5:Voltage SIR,EI+  
457.738  
1.323e+008

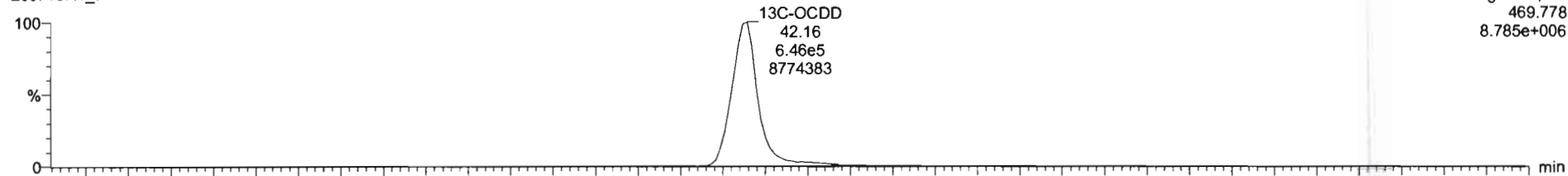
200713R1\_7



F5:Voltage SIR,EI+  
459.735  
1.480e+008

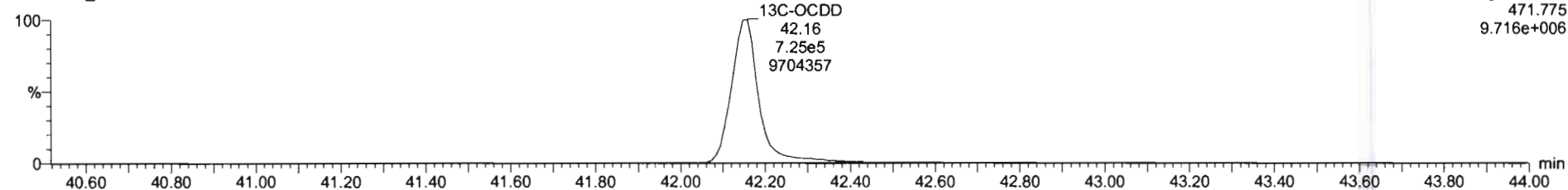
**13C-OCDD**

200713R1\_7



F5:Voltage SIR,EI+  
469.778  
8.785e+006

200713R1\_7



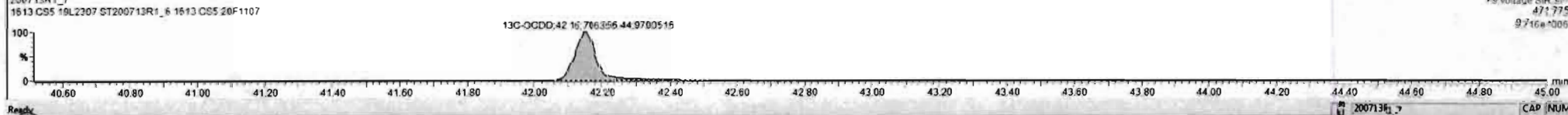
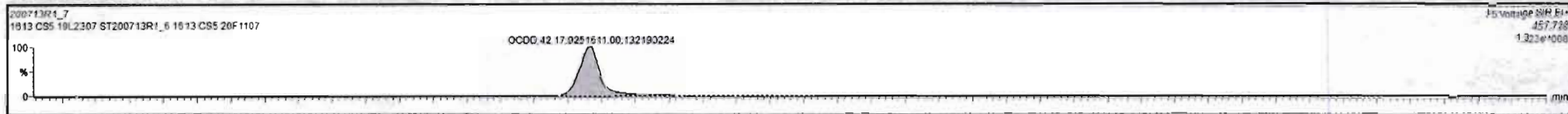
F5:Voltage SIR,EI+  
471.775  
9.716e+006

TargetLynx - 200713R1-CRV.qtd - [Chromatogram]

File Edit View Display Processing Window Help

200713R1\_7 - ST200713R1\_6 1613 CS5 20F 1107 1613 CS5 19L 2307

#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF U...	RRF SD
1	2,3,7,8-TCDD	26.01	0.778	NO	3.9090e6	1.1868e6	300.000	12.7	9.30	0.974	0.0906
2	1,2,3,7,8-PeCDD	31.74	0.619	NO	1.3876e7	9.2685e5	1500.000	8.9	6.72	0.917	0.0616
3	1,2,3,4,7,8-HxCDD	35.26	1.242	NO	1.2671e7	7.3023e5	1500.000	11.0	9.09	1.04	0.0947
4	1,2,3,6,7,8-HxCDD	35.35	1.243	NO	1.3935e7	8.9896e5	1500.000	10.2	7.25	0.938	0.0680
5	1,2,3,7,8,9-HxCDD	35.61	1.237	NO	1.3019e7	8.1543e5	1500.000	10.5	7.87	0.964	0.0738
6	1,2,3,4,6,7,8-HpCDD	38.97	1.033	NO	1.0905e7	7.1600e5	1500.000	12.6	8.81	0.902	0.0794
7	OCDD	42.17	0.887	NO	1.9688e7	1.3368e6	3000.000	8.5	6.51	0.905	0.0589
8	2,3,7,8-TCDF	24.91	0.757	NO	4.5040e6	1.5824e6	300.000	10.6	7.09	0.856	0.0609
9	1,2,3,7,8-PeCDF	30.30	1.555	NO	2.1125e7	1.3278e6	1500.000	9.6	8.61	0.968	0.0834
10	2,3,4,7,8-PeCDF	31.40	1.534	NO	2.2518e7	1.2874e6	1500.000	8.3	6.94	1.08	0.0748
11	1,2,3,4,7,8-HxCDF	34.38	1.204	NO	1.5298e7	9.6762e5	1500.000	8.9	8.22	0.968	0.0795
12	1,2,3,6,7,8-HxCDF	34.50	1.207	NO	1.7119e7	1.0379e6	1500.000	9.6	8.24	1.00	0.0828
13	2,3,4,6,7,8-HxCDF	35.09	1.200	NO	1.5711e7	9.6650e5	1500.000	8.7	8.26	0.997	0.0824
14	1,2,3,7,8,9-HxCDF	35.93	1.212	NO	1.3414e7	8.3352e5	1500.000	11.6	9.11	0.960	0.0875
15	1,2,3,4,6,7,8-HpCDF	37.61	1.002	NO	1.2278e7	7.3513e5	1500.000	11.1	8.47	1.00	0.0849
16	1,2,3,4,7,8,9-HpCDF	39.63	0.991	NO	1.0255e7	5.6217e5	1500.000	9.7	9.10	1.11	0.101
17	OCDF	42.33	0.886	NO	2.3128e7	1.5662e6	3000.000	9.9	7.88	0.896	0.0708
18	13C-2,3,7,8-TCDD	25.98	0.764	NO	1.1868e6	1.0273e6	100.000	4.7	3.37	1.10	0.0371
19	13C-1,2,3,7,8-PeCDD	31.72	0.641	NO	9.2685e5	1.0273e6	100.000	19.1	9.89	0.757	0.0749
20	13C-1,2,3,4,7,8-HxCDD	35.25	1.292	NO	7.3023e5	1.0060e6	100.000	12.2	6.25	0.647	0.0405
21	13C-1,2,3,6,7,8-HxCDD	35.34	1.268	NO	8.9896e5	1.0060e6	100.000	11.0	5.73	0.805	0.0461



Dataset: Untitled

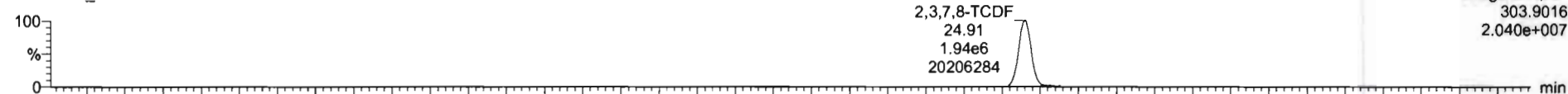
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

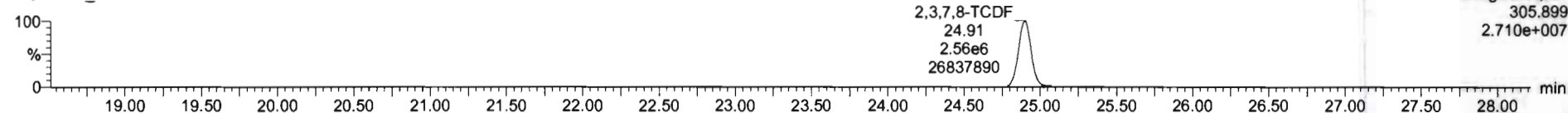
Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

**2,3,7,8-TCDF**

200713R1\_7

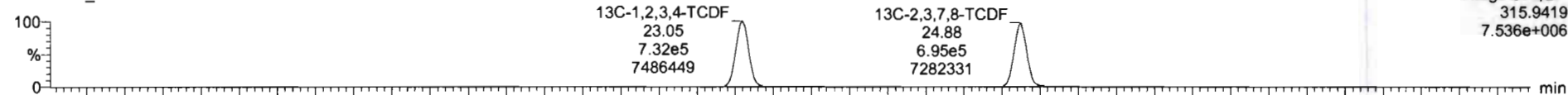


200713R1\_7

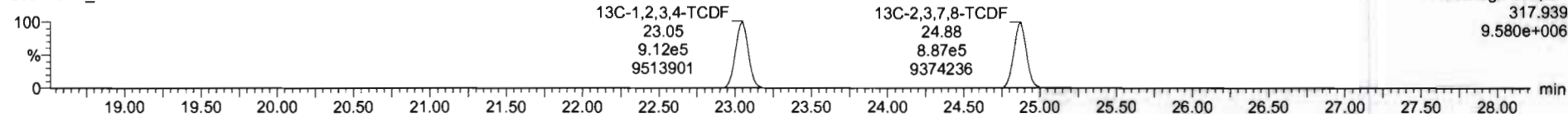


**13C-2,3,7,8-TCDF**

200713R1\_7

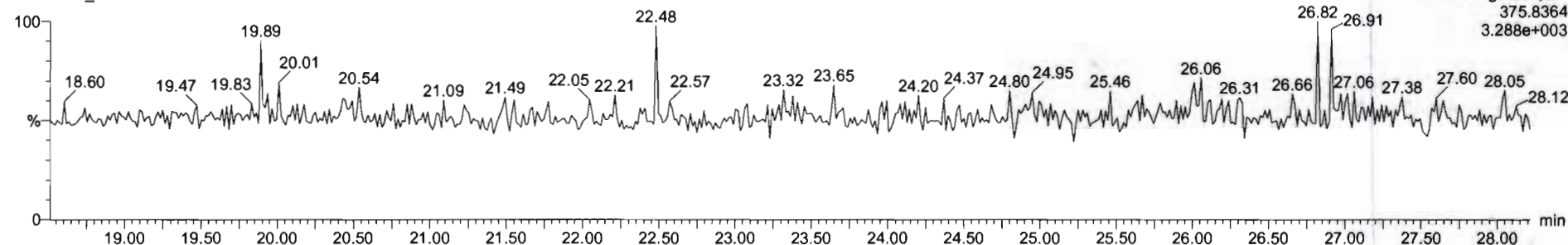


200713R1\_7



**DPE1**

200713R1\_7



Dataset: Untitled

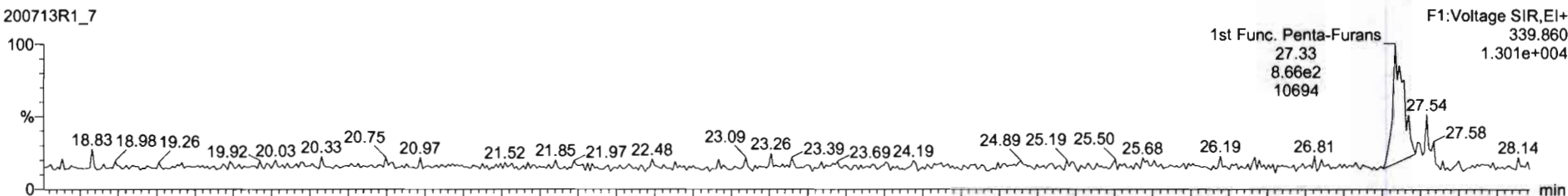
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

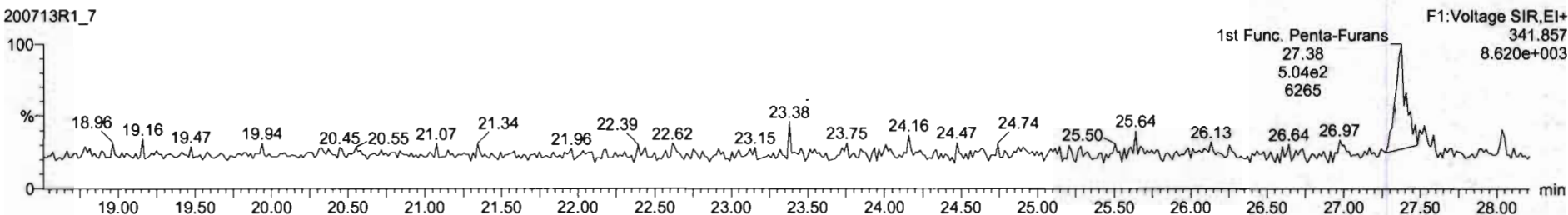
1st Func. Penta-Furans

200713R1\_7



F1:Voltage SIR,EI+  
339.860  
1.301e+004

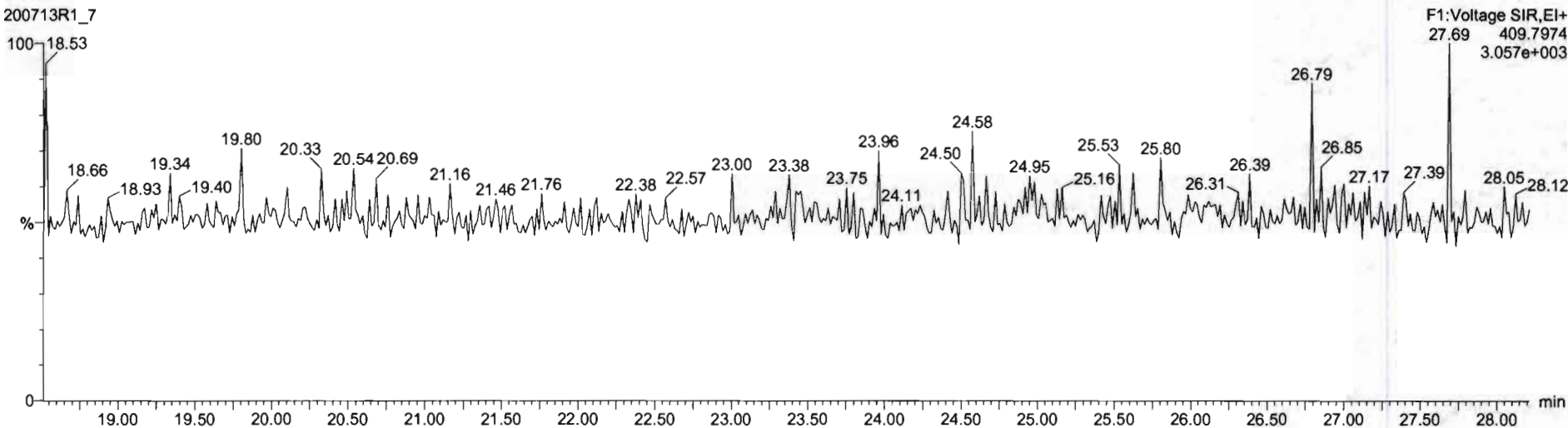
200713R1\_7



F1:Voltage SIR,EI+  
341.857  
8.620e+003

DPE6

200713R1\_7



F1:Voltage SIR,EI+  
27.69 409.7974  
3.057e+003

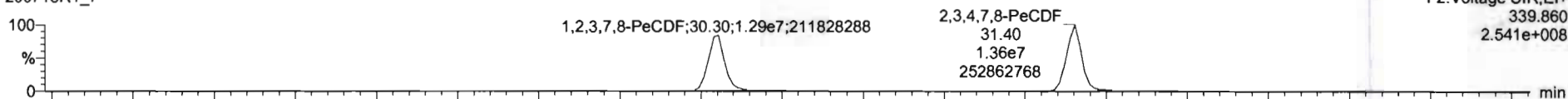
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

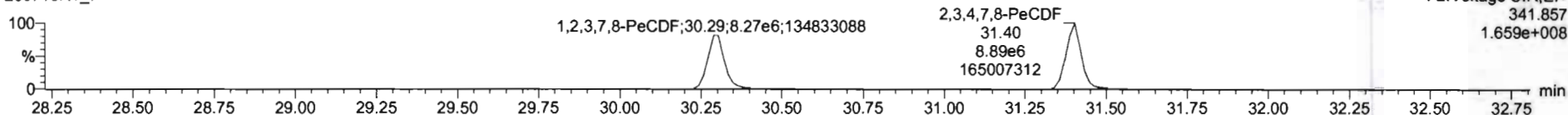
**1,2,3,7,8-PeCDF**

200713R1\_7



F2: Voltage SIR, EI+  
339.860  
2.541e+008

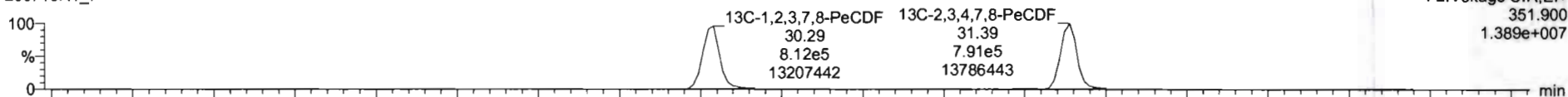
200713R1\_7



F2: Voltage SIR, EI+  
341.857  
1.659e+008

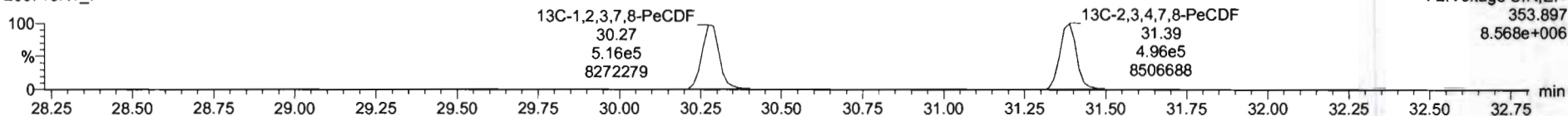
**13C-1,2,3,7,8-PeCDF**

200713R1\_7



F2: Voltage SIR, EI+  
351.900  
1.389e+007

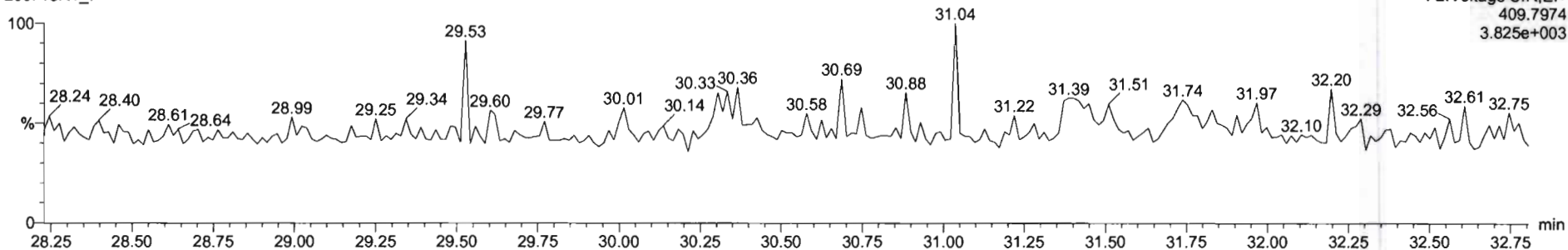
200713R1\_7



F2: Voltage SIR, EI+  
353.897  
8.568e+006

**DPE2**

200713R1\_7



F2: Voltage SIR, EI+  
409.7974  
3.825e+003

Dataset: Untitled

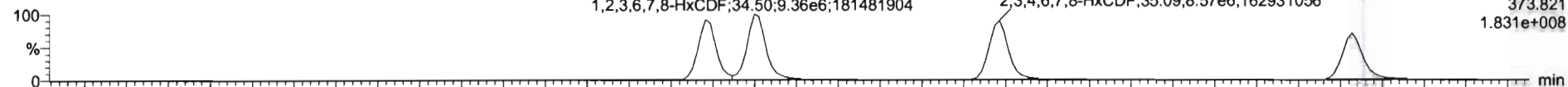
Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

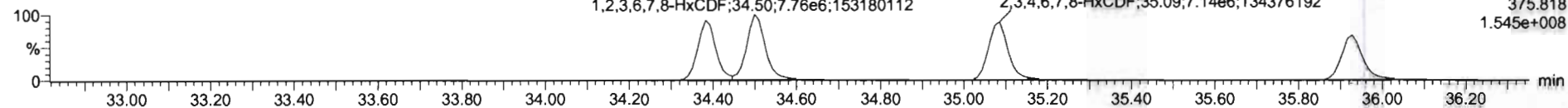
**1,2,3,4,7,8-HxCDF**

200713R1\_7



F3:Voltage SIR,EI+  
373.821  
1.831e+008

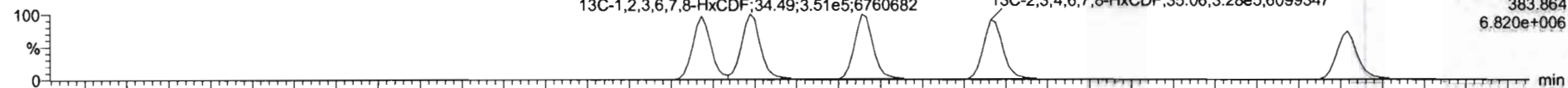
200713R1\_7



F3:Voltage SIR,EI+  
375.818  
1.545e+008

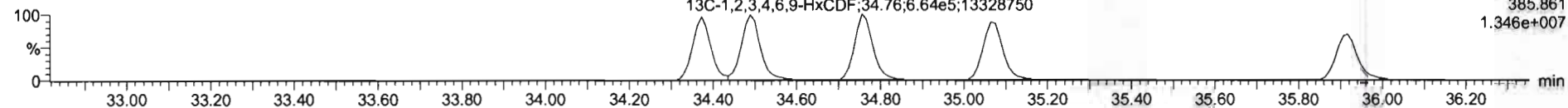
**13C-1,2,3,4,7,8-HxCDF**

200713R1\_7



F3:Voltage SIR,EI+  
383.864  
6.820e+006

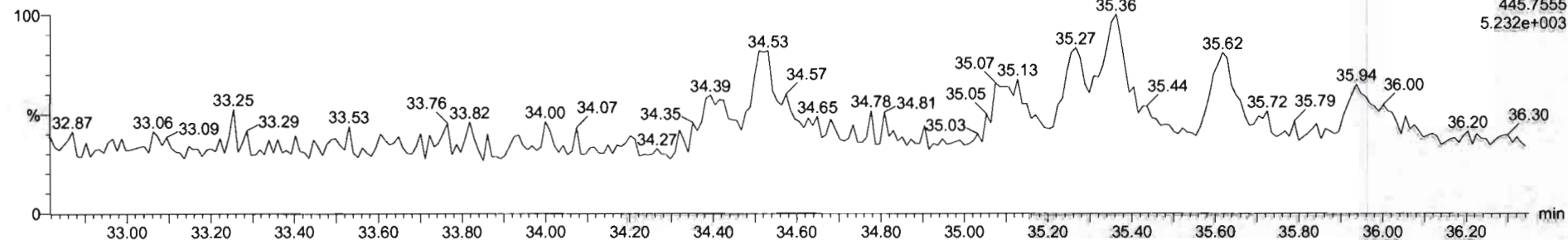
200713R1\_7



F3:Voltage SIR,EI+  
385.861  
1.346e+007

**DPE3**

200713R1\_7



F3:Voltage SIR,EI+  
445.7555  
5.232e+003

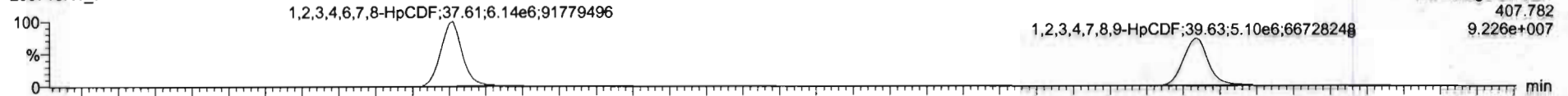
Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

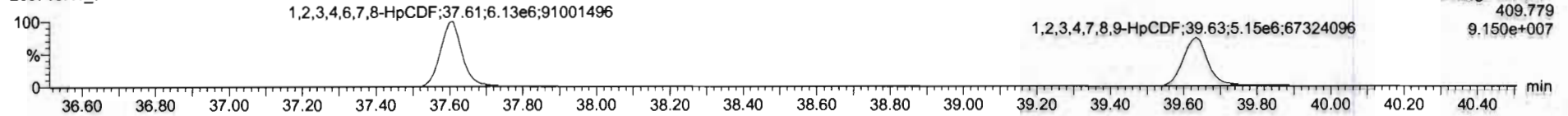
Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

**1,2,3,4,6,7,8-HpCDF**

200713R1\_7

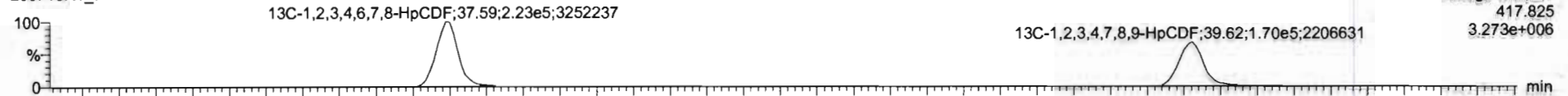


200713R1\_7

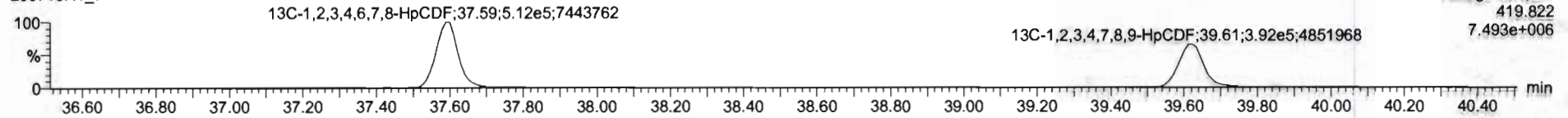


**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_7

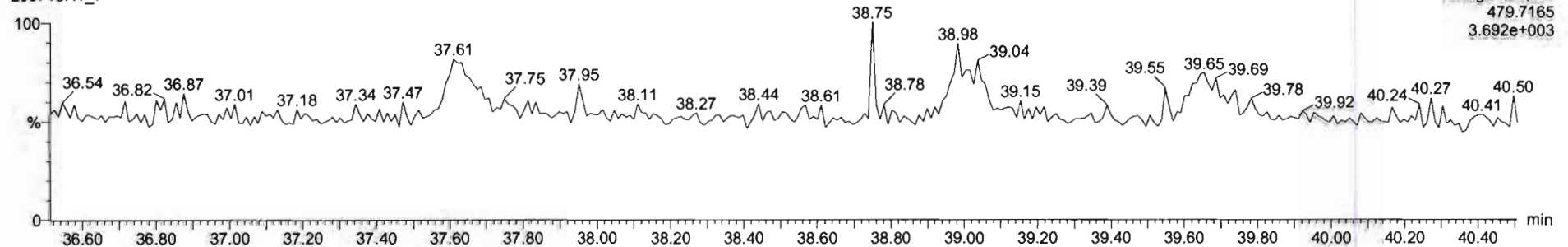


200713R1\_7



**DPE4**

200713R1\_7

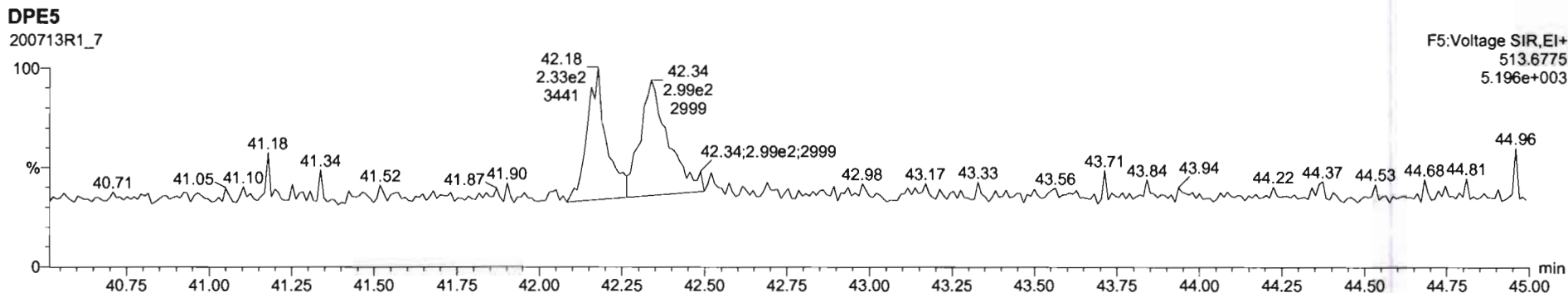
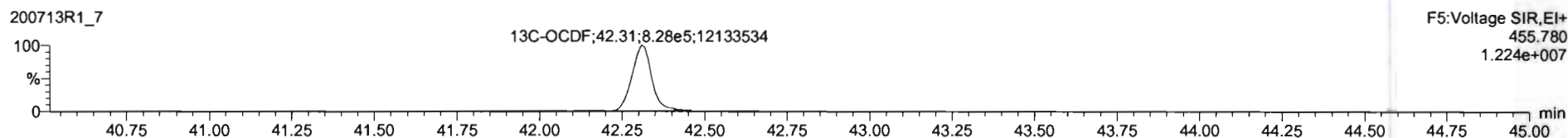
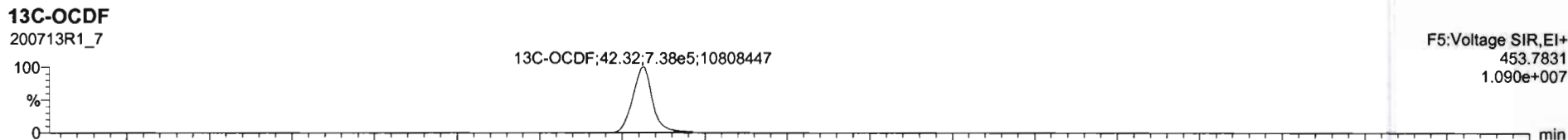
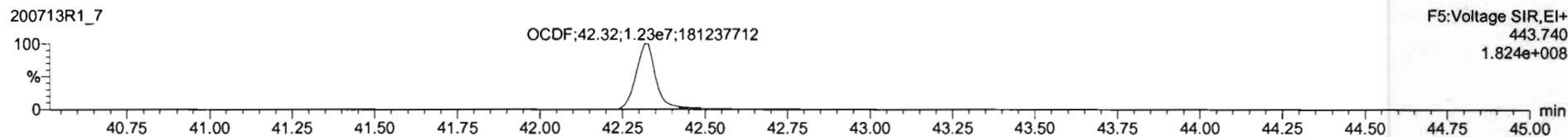
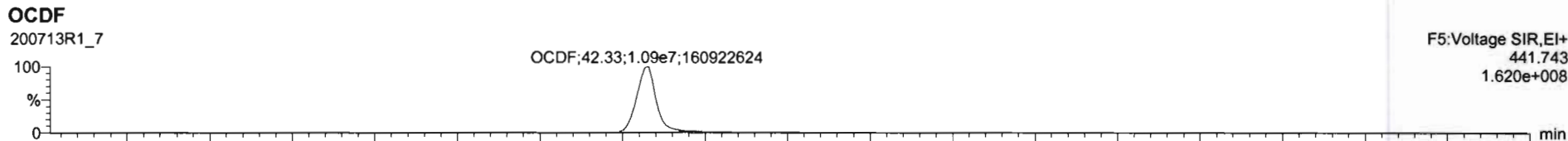


Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307

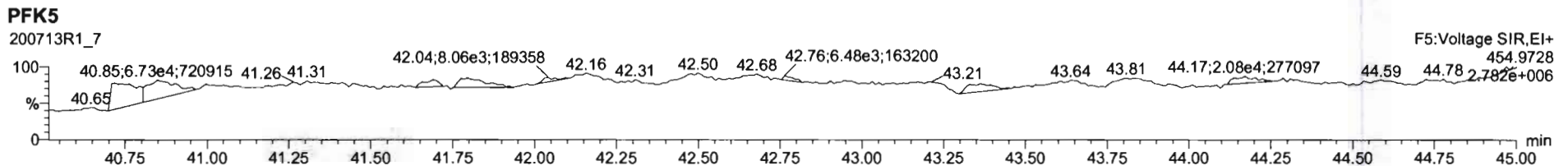
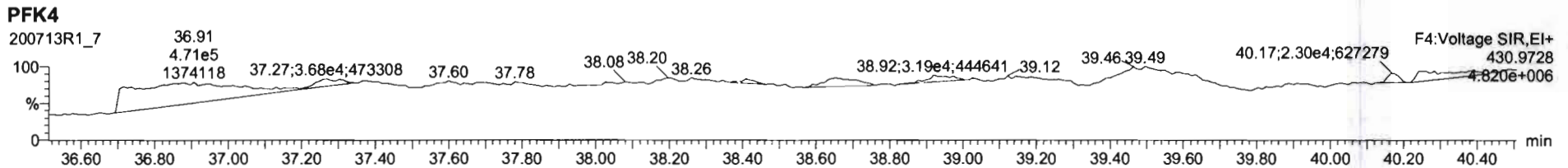
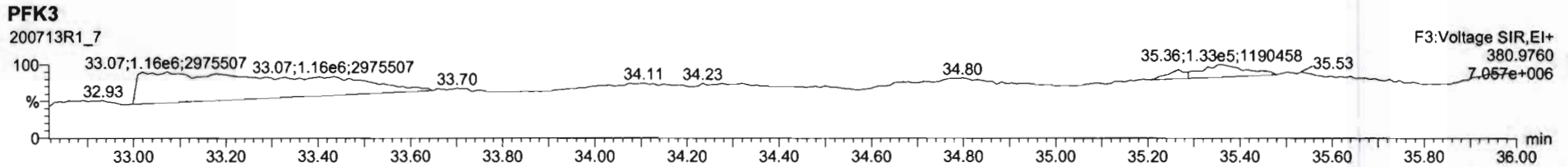
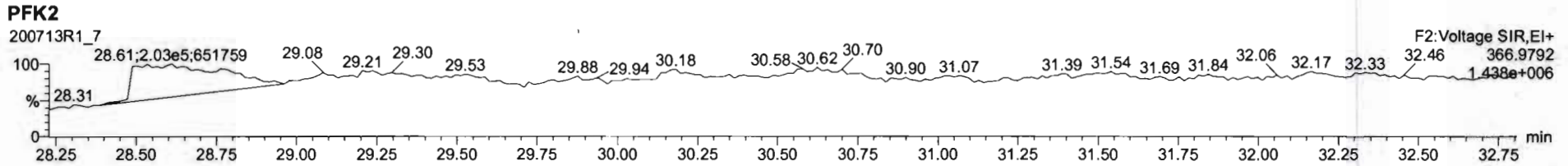
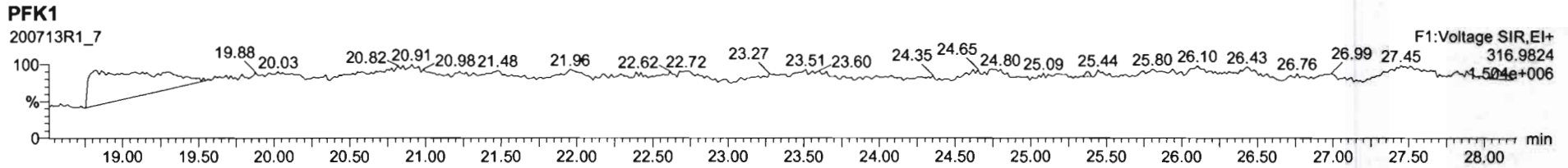




Dataset: Untitled

Last Altered: Monday, July 13, 2020 1:44:33 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 1:50:14 PM Pacific Daylight Time

Name: 200713R1\_7, Date: 13-Jul-2020, Time: 12:45:28, ID: ST200713R1\_6 1613 CS5 20F1107, Description: 1613 CS5 19L2307



Dataset: U:\VG12.PRO\Results\200713R1\200713R1-10.qld

Last Altered: Monday, July 13, 2020 4:05:14 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:05:47 PM Pacific Daylight Time

*GPB 07/13/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-07-10-20.mdb 10 Jul 2020 15:45:25

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

*GPB 07/14/2020*

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.28e5	0.74	NO	0.974	1.000	26.030	26.03	1.001	1.001	10.537	105	0.0436	10.5
2	2 1,2,3,7,8-PeCDD	3.98e5	0.61	NO	0.917	1.000	31.730	31.72	1.001	1.000	51.961	104	0.0535	52.0
3	3 1,2,3,4,7,8-HxCDD	3.33e5	1.25	NO	1.04	1.000	35.234	35.24	1.000	1.001	52.416	105	0.0898	52.4
4	4 1,2,3,6,7,8-HxCDD	3.84e5	1.26	NO	0.938	1.000	35.330	35.34	1.000	1.000	55.469	111	0.0880	55.5
5	5 1,2,3,7,8,9-HxCDD	3.36e5	1.25	NO	0.964	1.000	35.597	35.60	1.000	1.000	52.019	104	0.0937	52.0
6	6 1,2,3,4,6,7,8-HpCDD	2.60e5	1.05	NO	0.902	1.000	38.963	38.96	1.000	1.000	51.907	104	0.138	51.9
7	7 OCDD	4.57e5	0.88	NO	0.905	1.000	42.157	42.17	1.000	1.000	107.36	107	0.150	107
8	8 2,3,7,8-TCDF	1.50e5	0.74	NO	0.858	1.000	24.916	24.92	1.001	1.001	10.183	102	0.0308	10.2
9	9 1,2,3,7,8-PeCDF	6.02e5	1.54	NO	0.968	1.000	30.295	30.29	1.001	1.001	51.166	102	0.0683	51.2
10	10 2,3,4,7,8-PeCDF	6.81e5	1.55	NO	1.08	1.000	31.403	31.39	1.001	1.000	53.857	108	0.0587	53.9
11	11 1,2,3,4,7,8-HxCDF	4.41e5	1.20	NO	0.968	1.000	34.361	34.37	1.000	1.000	54.486	109	0.110	54.5
12	12 1,2,3,6,7,8-HxCDF	4.83e5	1.22	NO	1.00	1.000	34.489	34.49	1.000	1.000	54.663	109	0.104	54.7
13	13 2,3,4,6,7,8-HxCDF	4.47e5	1.22	NO	0.997	1.000	35.088	35.06	1.001	1.000	54.449	109	0.113	54.4
14	14 1,2,3,7,8,9-HxCDF	3.43e5	1.23	NO	0.961	1.000	35.895	35.92	1.000	1.001	52.517	105	0.164	52.5
15	15 1,2,3,4,6,7,8 HpCDF	3.25e5	1.00	NO	1.00	1.000	37.615	37.60	1.001	1.001	54.120	108	0.125	54.1
16	16 1,2,3,4,7,8,9-HpCDF	2.50e5	0.98	NO	1.11	1.000	39.612	39.62	1.000	1.000	53.748	107	0.187	53.7
17	17 OCDF	5.29e5	0.90	NO	0.896	1.000	42.317	42.33	1.000	1.000	105.33	105	0.180	105
18	18 13C-2,3,7,8-TCDD	1.25e6	0.78	NO	1.10	1.000	25.989	26.00	1.032	1.032	98.716	98.7	0.102	
19	19 13C-1,2,3,7,8-PeCDD	8.36e5	0.62	NO	0.757	1.000	31.684	31.71	1.258	1.259	96.346	96.3	0.103	
20	20 13C-1,2,3,4,7,8-HxCDD	6.10e5	1.28	NO	0.647	1.000	35.224	35.22	1.014	1.014	100.02	100	0.142	
21	21 13C-1,2,3,6,7,8-HxCDD	7.37e5	1.26	NO	0.805	1.000	35.325	35.33	1.017	1.017	97.146	97.1	0.114	
22	22 13C-1,2,3,7,8,9-HxCDD	6.71e5	1.24	NO	0.726	1.000	35.596	35.59	1.025	1.024	97.994	98.0	0.127	
23	23 13C-1,2,3,4,6,7,8-HpCDD	5.55e5	1.05	NO	0.611	1.000	38.956	38.95	1.121	1.121	96.301	96.3	0.152	
24	24 13C-OCDD	9.41e5	0.87	NO	0.513	1.000	42.145	42.16	1.213	1.213	194.62	97.3	0.183	
25	25 13C-2,3,7,8-TCDF	1.71e6	0.78	NO	0.933	1.000	24.890	24.89	0.988	0.988	100.41	100	0.138	
26	26 13C-1,2,3,7,8-PeCDF	1.22e6	1.57	NO	0.696	1.000	30.246	30.27	1.201	1.202	95.552	95.6	0.199	
27	27 13C-2,3,4,7,8-PeCDF	1.17e6	1.59	NO	0.669	1.000	31.344	31.37	1.244	1.245	96.033	96.0	0.207	
28	28 13C-1,2,3,4,7,8-HxCDF	8.36e5	0.52	NO	0.886	1.000	34.366	34.36	0.989	0.989	100.12	100	0.229	
29	29 13C-1,2,3,6,7,8-HxCDF	8.81e5	0.51	NO	0.955	1.000	34.484	34.48	0.993	0.992	97.810	97.8	0.212	
30	30 13C-2,3,4,6,7,8-HxCDF	8.24e5	0.51	NO	0.882	1.000	35.054	35.05	1.009	1.009	99.028	99.0	0.230	

Dataset: U:\VG12.PRO\Results\200713R1\200713R1-10.qld

Last Altered: Monday, July 13, 2020 4:05:14 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:05:47 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
31	31 13C-1,2,3,7,8,9-HxCDF	6.79e5	0.51	NO	0.737	1.000	35.905	35.89	1.033	1.033	97.718	97.7	0.275	
32	32 13C-1,2,3,4,6,7,8-HpCDF	5.99e5	0.45	NO	0.651	1.000	37.587	37.58	1.082	1.082	97.618	97.6	0.187	
33	33 13C-1,2,3,4,7,8,9-HpCDF	4.19e5	0.45	NO	0.459	1.000	39.605	39.61	1.140	1.140	96.816	96.8	0.265	
34	34 13C-OCDF	1.12e6	0.85	NO	0.609	1.000	42.305	42.32	1.218	1.218	195.23	97.6	0.225	
35	35 37Cl-2,3,7,8-TCDD	1.36e5			1.14	1.000	25.885	26.03	1.028	1.033	10.451	105	0.0254	
36	36 13C-1,2,3,4-TCDD	1.15e6	0.80	NO	1.00	1.000	25.210	25.19	1.000	1.000	100.00	100	0.112	
37	37 13C-1,2,3,4-TCDF	1.83e6	0.80	NO	1.00	1.000	23.080	23.08	1.000	1.000	100.00	100	0.129	
38	38 13C-1,2,3,4,6,9-HxCDF	9.43e5	0.51	NO	1.00	1.000	34.740	34.74	1.000	1.000	100.00	100	0.203	

Dataset: Untitled

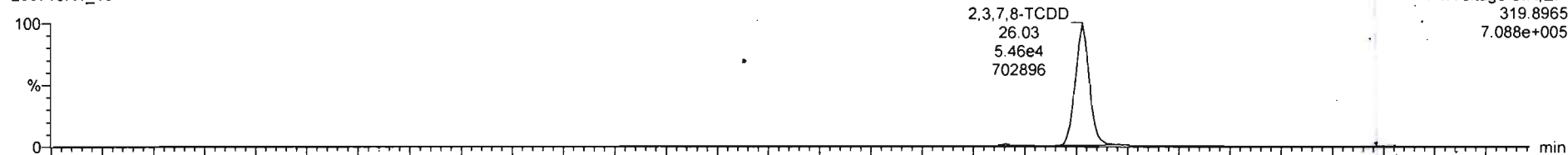
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\1613rrt-07-10-20.mdb 10 Jul 2020 15:45:25  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-7-13-20.cdb 13 Jul 2020 13:43:33

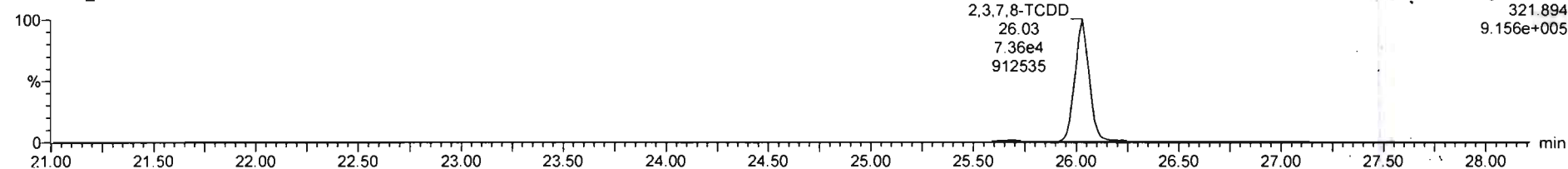
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**2,3,7,8-TCDD**

200713R1\_10

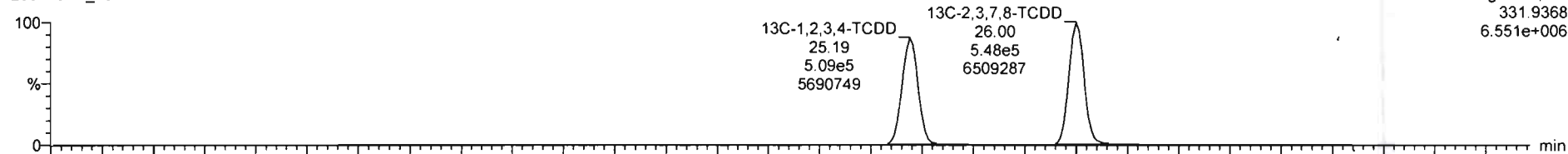


200713R1\_10

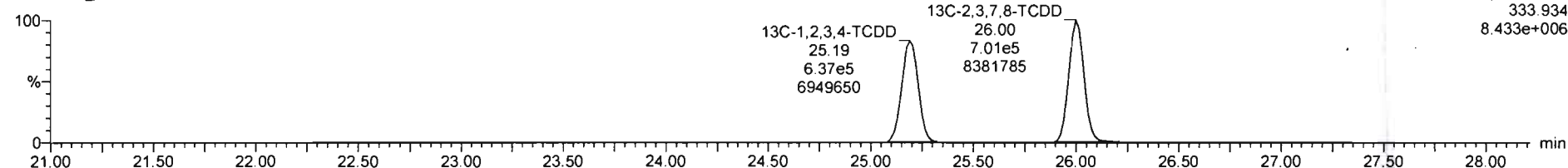


**13C-2,3,7,8-TCDD**

200713R1\_10



200713R1\_10



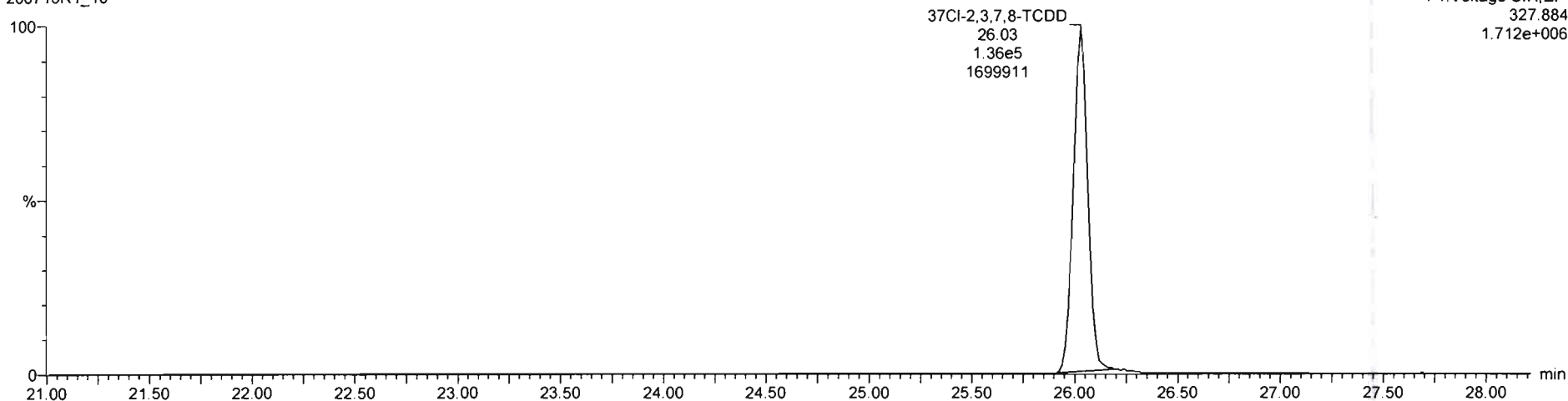
Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**37Cl-2,3,7,8-TCDD**

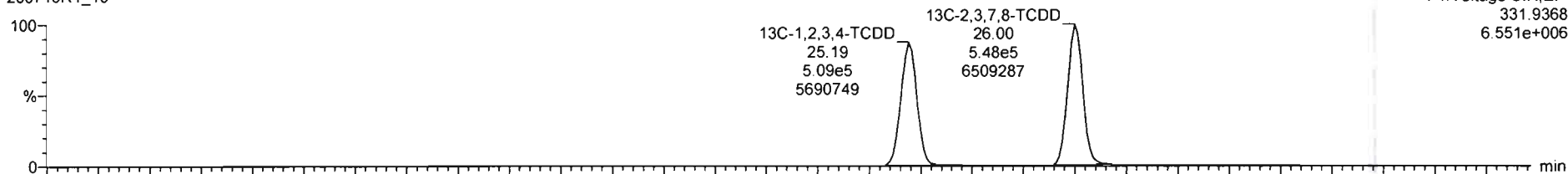
200713R1\_10



F1:Voltage SIR,EI+  
327.884  
1.712e+006

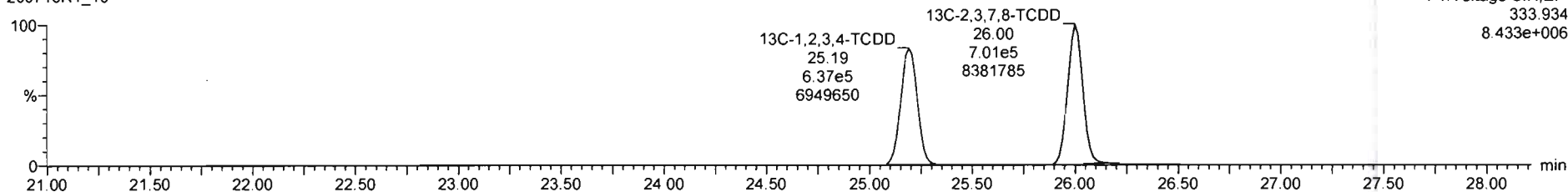
**13C-1,2,3,4-TCDD**

200713R1\_10



F1:Voltage SIR,EI+  
331.9368  
6.551e+006

200713R1\_10



F1:Voltage SIR,EI+  
333.934  
8.433e+006

Dataset: Untitled

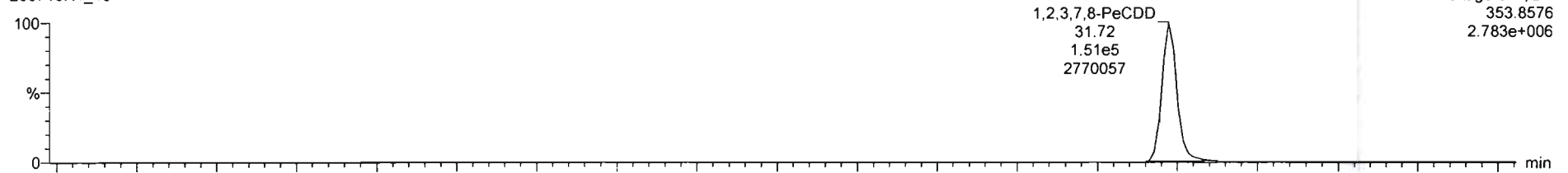
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

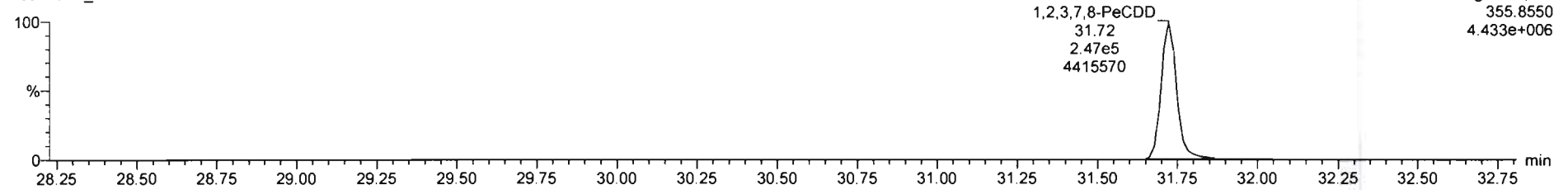
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**1,2,3,7,8-PeCDD**

200713R1\_10

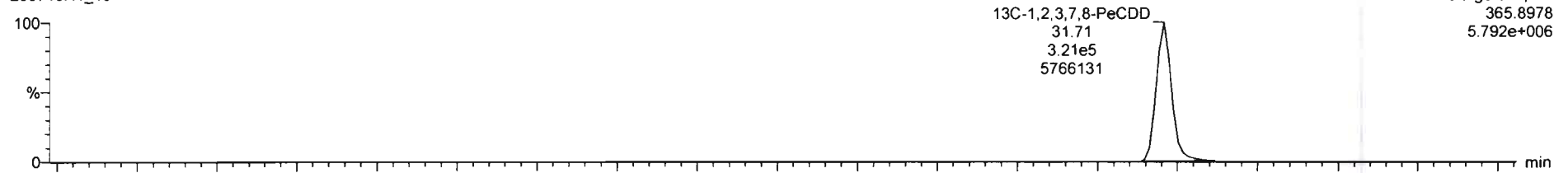


200713R1\_10

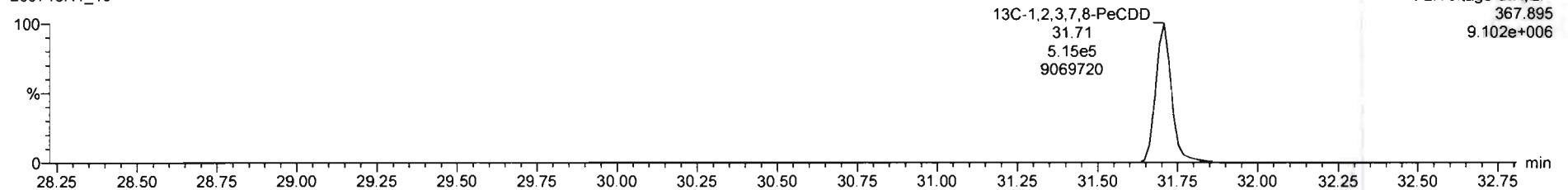


**13C-1,2,3,7,8-PeCDD**

200713R1\_10



200713R1\_10



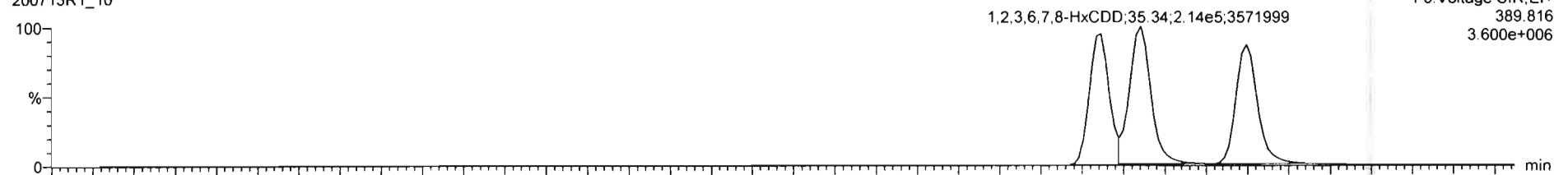
Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

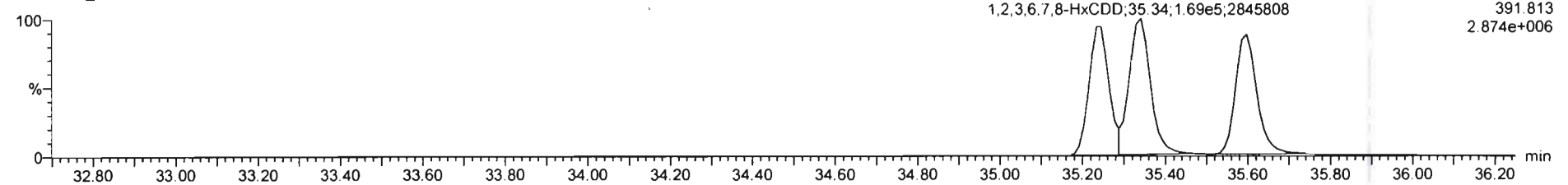
1,2,3,4,7,8-HxCDD

200713R1\_10



F3:Voltage SIR,EI+  
389.816  
3.600e+006

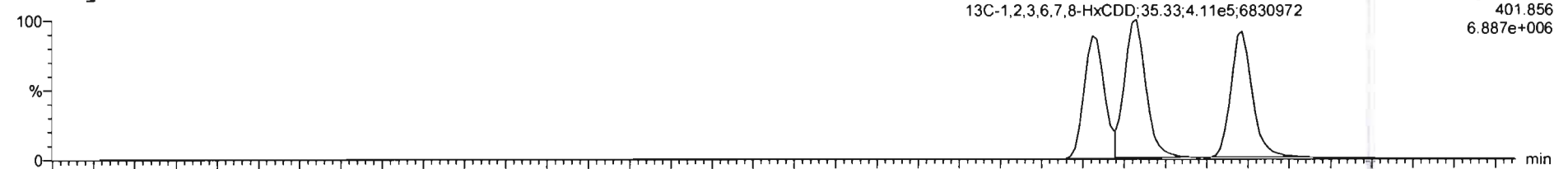
200713R1\_10



F3:Voltage SIR,EI+  
391.813  
2.874e+006

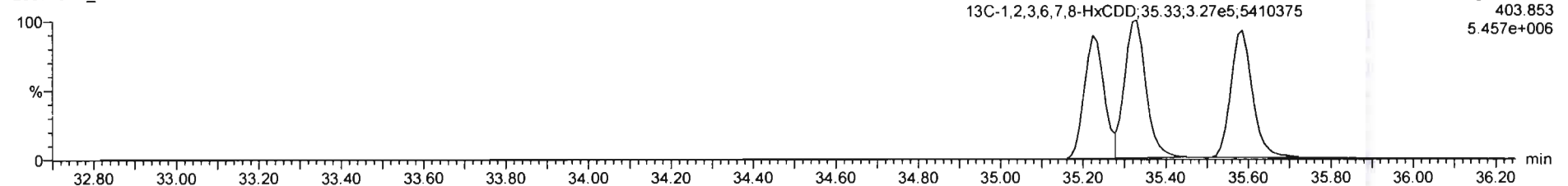
13C-1,2,3,4,7,8-HxCDD

200713R1\_10

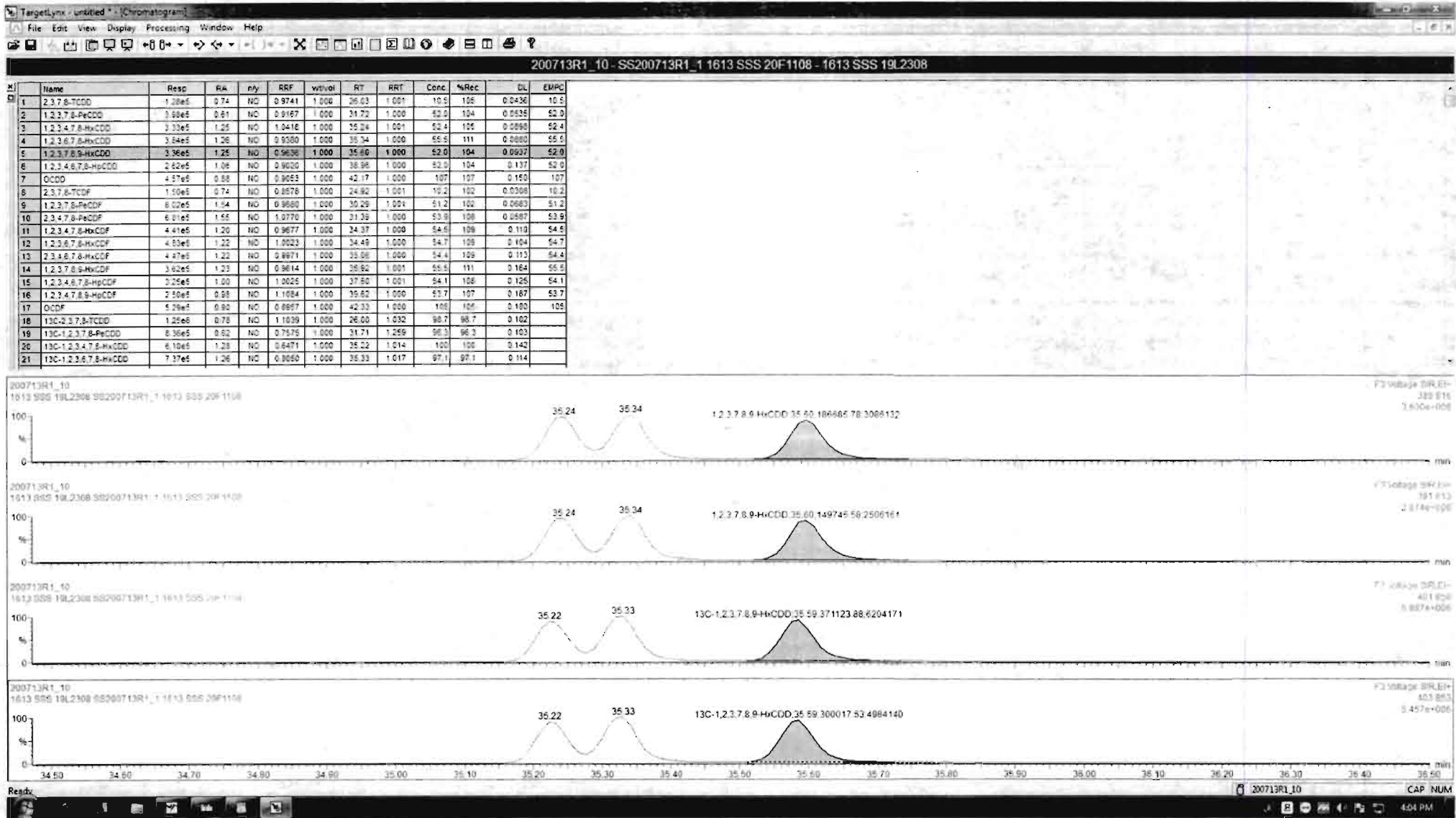


F3:Voltage SIR,EI+  
401.856  
6.887e+006

200713R1\_10



F3:Voltage SIR,EI+  
403.853  
5.457e+006





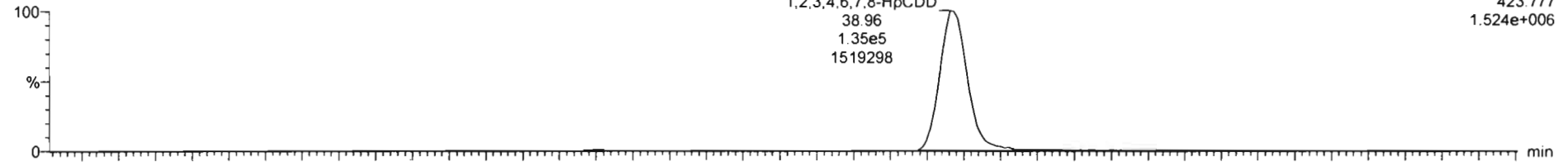
Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

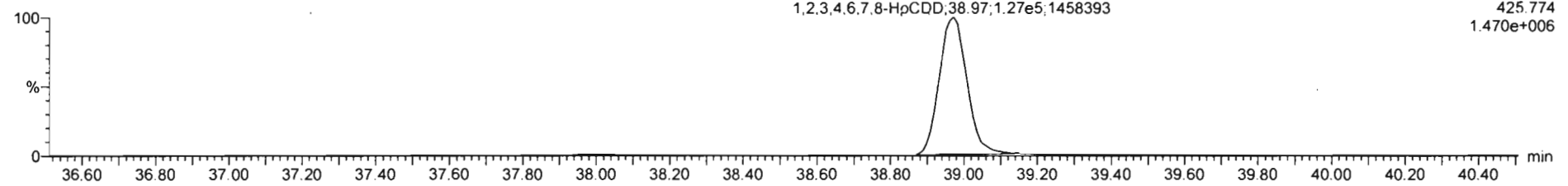
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**1,2,3,4,6,7,8-HpCDD**

200713R1\_10

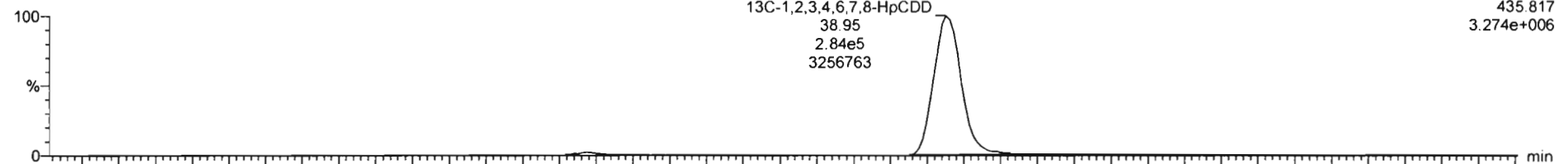


200713R1\_10

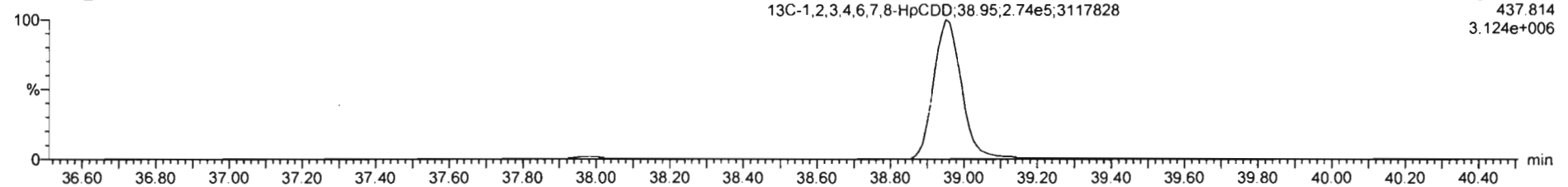


**13C-1,2,3,4,6,7,8-HpCDD**

200713R1\_10

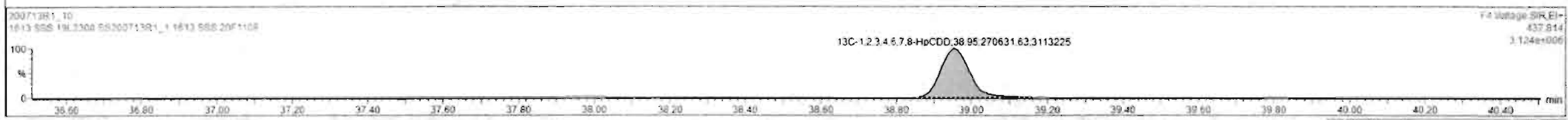
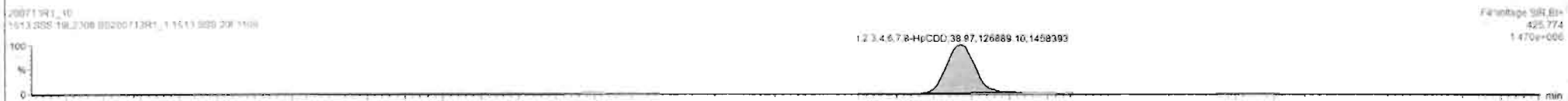
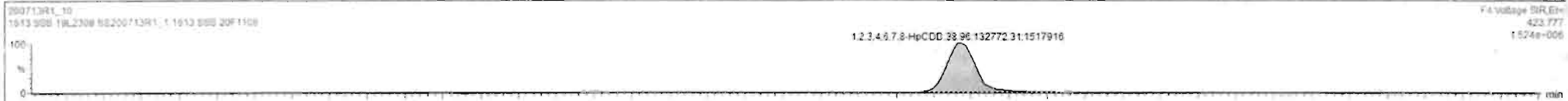


200713R1\_10



200713R1\_10 - SS200713R1\_1 1613 SSS 20F1108 - 1613 SSS 19L2308

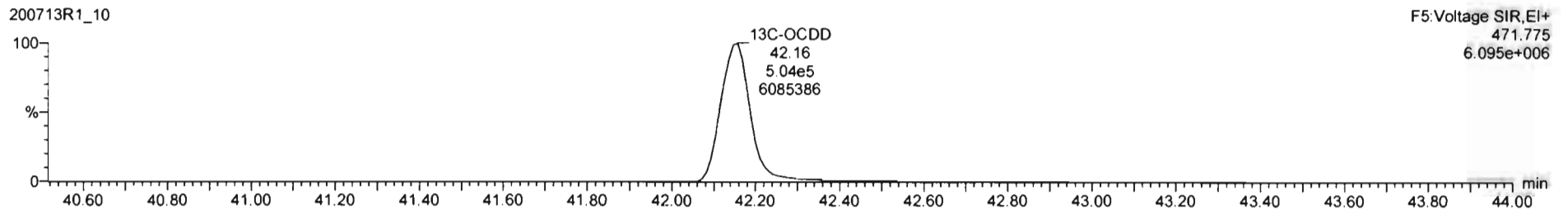
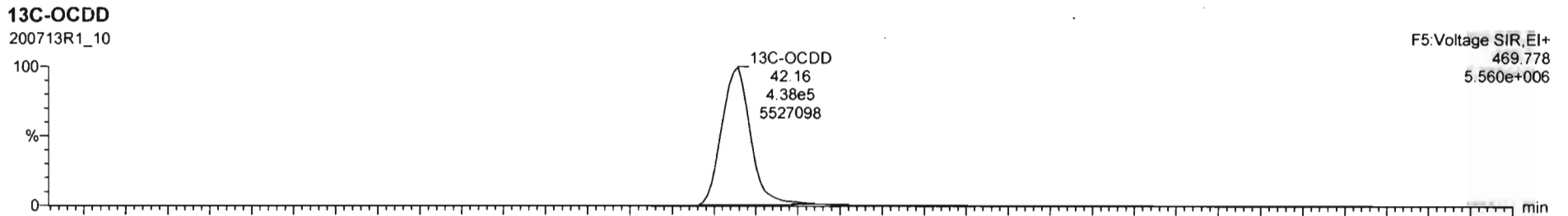
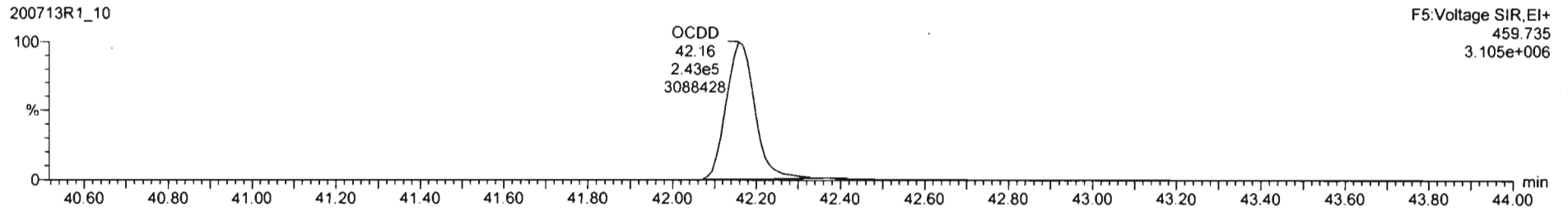
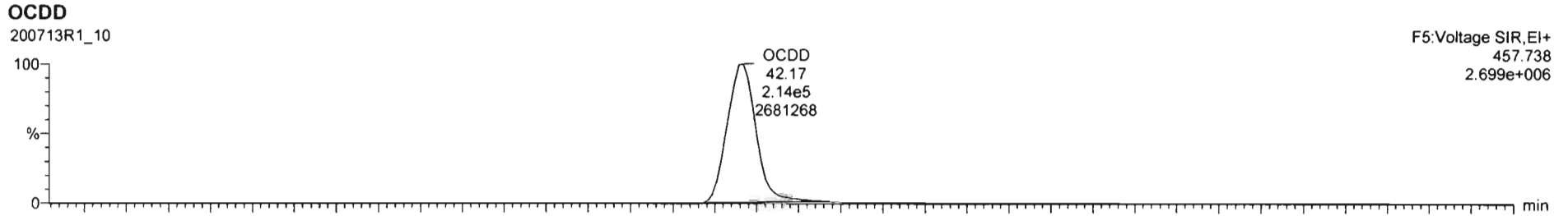
#	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc	%Rec	DL	EMPC
1	2,3,7,8-TCDD	1.28e5	0.74	NO	0.9741	1.000	26.03	1.001	10.5	105	0.0436	10.5
2	1,2,3,7,8-PeCDD	3.88e5	0.81	NO	0.9187	1.000	31.72	1.000	52.0	104	0.0535	52.0
3	1,2,3,4,7,8-HxCDD	3.33e5	1.25	NO	1.0416	1.000	35.24	1.001	52.4	105	0.0690	52.4
4	1,2,3,6,7,8-HxCDD	3.84e5	1.26	NO	0.9380	1.000	35.34	1.000	55.5	111	0.0860	55.5
5	1,2,3,7,8,9-HxCDD	3.39e5	1.25	NO	0.9696	1.000	35.60	1.000	52.0	104	0.0937	52.0
6	1,2,3,4,6,7,8-HpCDD	2.60e5	1.05	NO	0.9020	1.000	38.95	1.000	51.9	104	0.136	51.9
7	OCDD	4.97e5	0.95	NO	0.9053	1.000	42.17	1.000	107	107	0.155	107
8	2,3,7,8-TCDF	1.50e5	0.74	NO	0.8576	1.000	24.62	1.001	16.2	102	0.0308	16.2
9	1,2,3,7,8-PeCDF	6.02e5	1.54	NO	0.9680	1.000	30.29	1.001	51.2	102	0.0660	51.2
10	2,3,4,7,8-PeCDF	6.81e5	1.55	NO	1.0770	1.000	31.39	1.000	52.9	108	0.0587	52.9
11	1,2,3,4,7,8-HxCDF	4.41e5	1.20	NO	0.9677	1.000	34.37	1.000	54.5	109	0.110	54.5
12	1,2,3,6,7,8-HxCDF	4.83e5	1.22	NO	1.0023	1.000	34.49	1.000	54.7	109	0.104	54.7
13	2,3,4,6,7,8-HxCDF	4.47e5	1.22	NO	0.9971	1.000	35.06	1.000	54.4	109	0.113	54.4
14	1,2,3,7,8,9-HxCDF	3.62e5	1.23	NO	0.9604	1.000	35.92	1.001	55.5	111	0.164	55.5
15	1,2,3,4,6,7,8-HpCDF	3.29e5	1.00	NO	1.0025	1.000	37.60	1.001	54.1	108	0.125	54.1
16	1,2,3,4,7,8,9-HpCDF	2.50e5	0.98	NO	1.1584	1.000	39.62	1.000	62.7	107	0.187	62.7
17	OCDF	5.29e5	0.80	NO	0.8957	1.000	42.33	1.000	105	105	0.180	105
18	13C-2,3,7,8-TCDD	1.25e6	0.78	NO	1.1005	1.000	26.00	1.032	98.7	98.7	0.102	
19	13C-1,2,3,7,8-PeCDD	8.36e5	0.82	NO	0.7575	1.000	31.71	1.259	86.2	96.2	0.103	
20	13C-1,2,3,4,7,8-HxCDD	6.19e5	1.28	NO	0.6471	1.000	35.22	1.014	100	100	0.142	
21	13C-1,2,3,6,7,8-HxCDD	7.37e5	1.26	NO	0.8950	1.000	35.33	1.017	97.1	97.1	0.114	



Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308



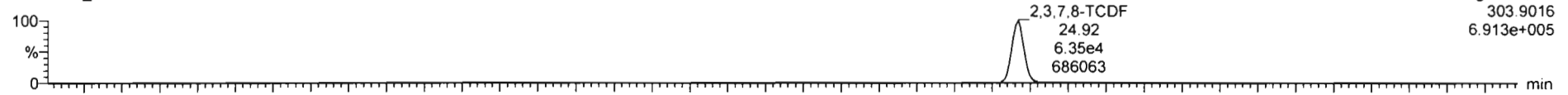
Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

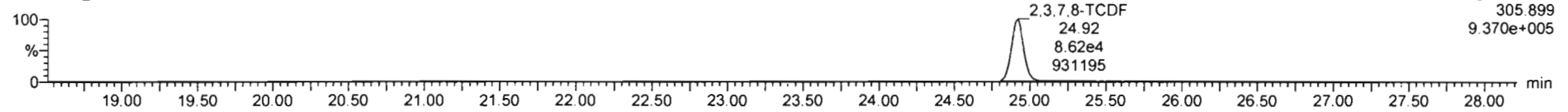
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**2,3,7,8-TCDF**

200713R1\_10

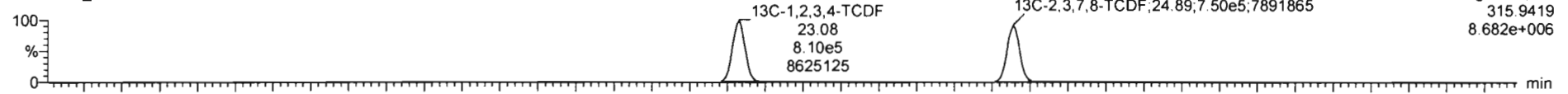


200713R1\_10

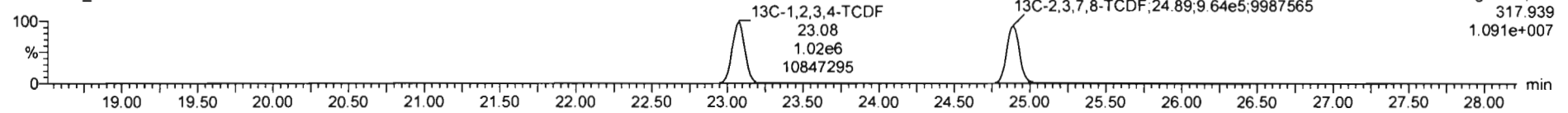


**13C-2,3,7,8-TCDF**

200713R1\_10

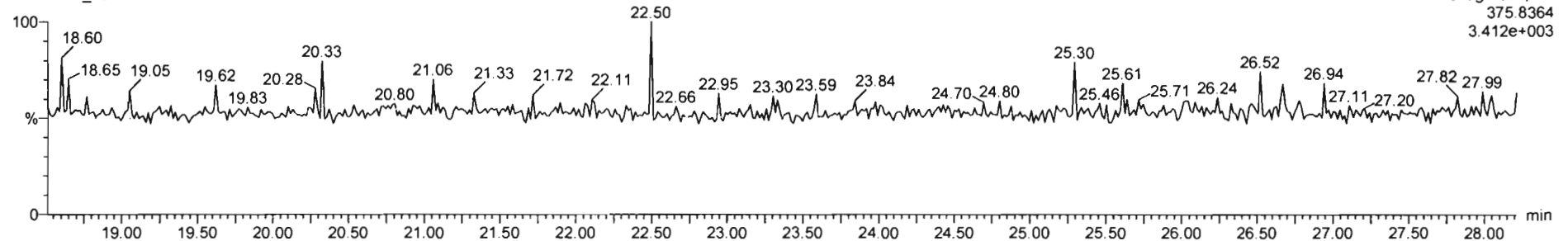


200713R1\_10



**DPE1**

200713R1\_10



Dataset: Untitled

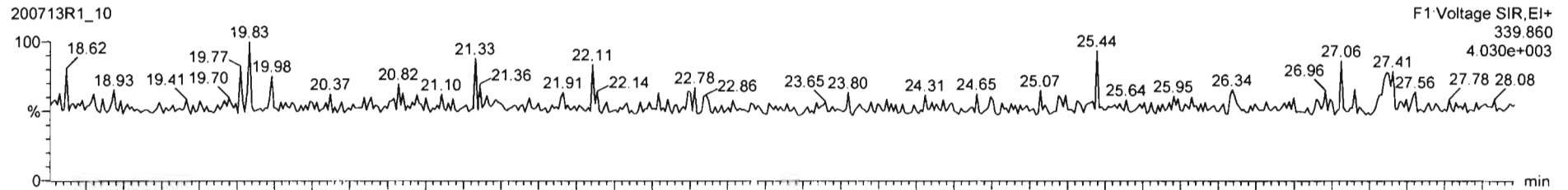
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

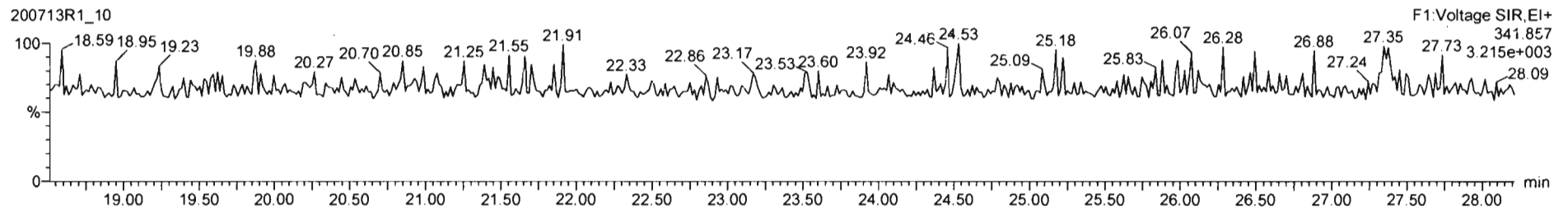
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

1st Func. Penta-Furans

200713R1\_10

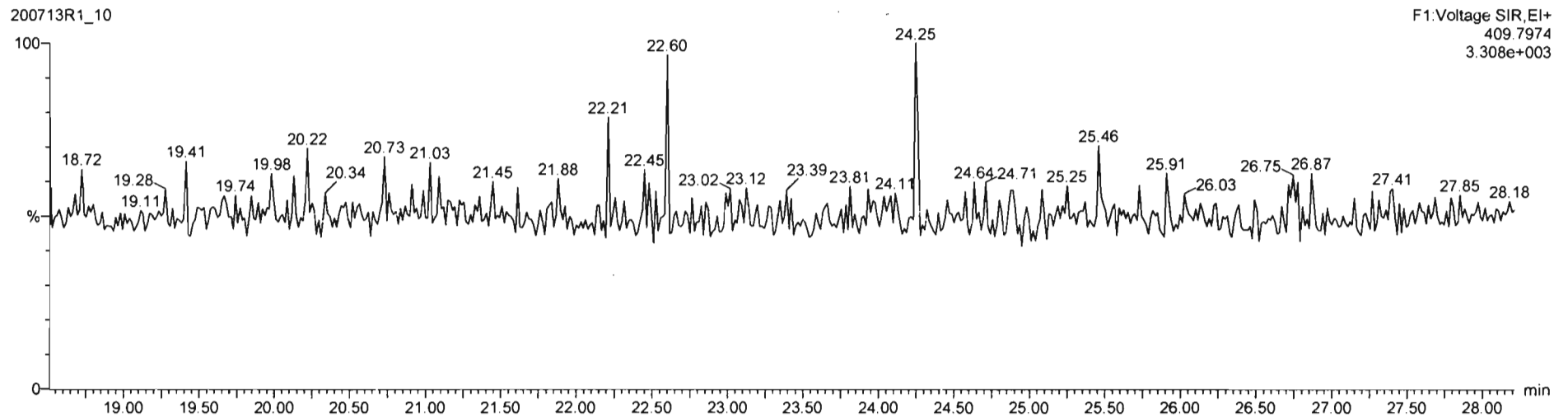


200713R1\_10



DPE6

200713R1\_10



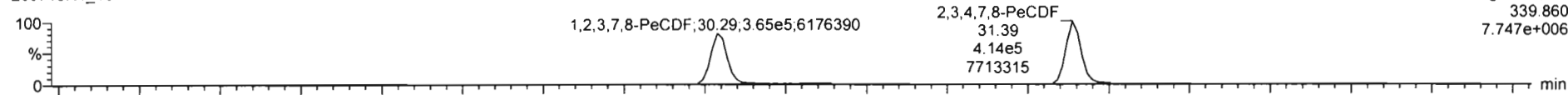
Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

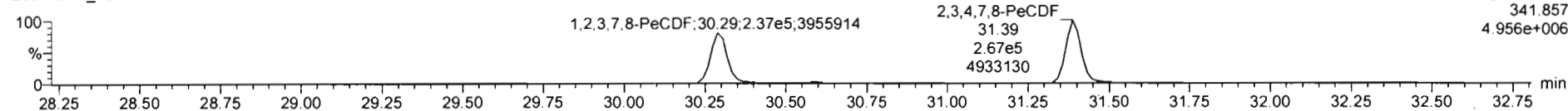
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**1,2,3,7,8-PeCDF**

200713R1\_10

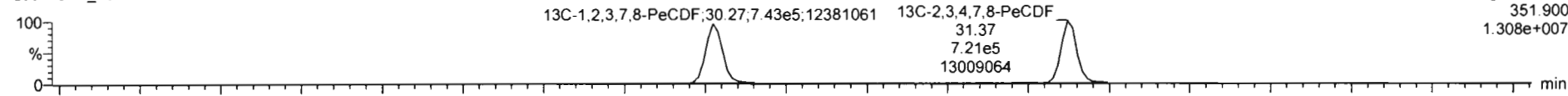


200713R1\_10

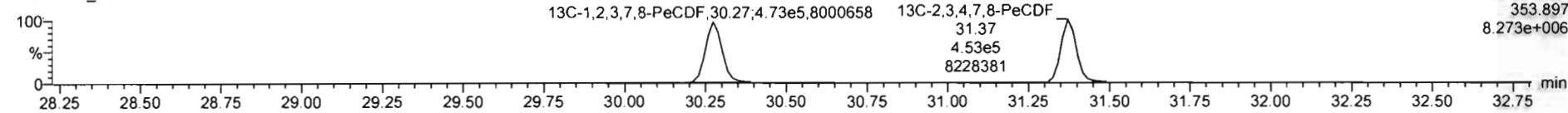


**13C-1,2,3,7,8-PeCDF**

200713R1\_10

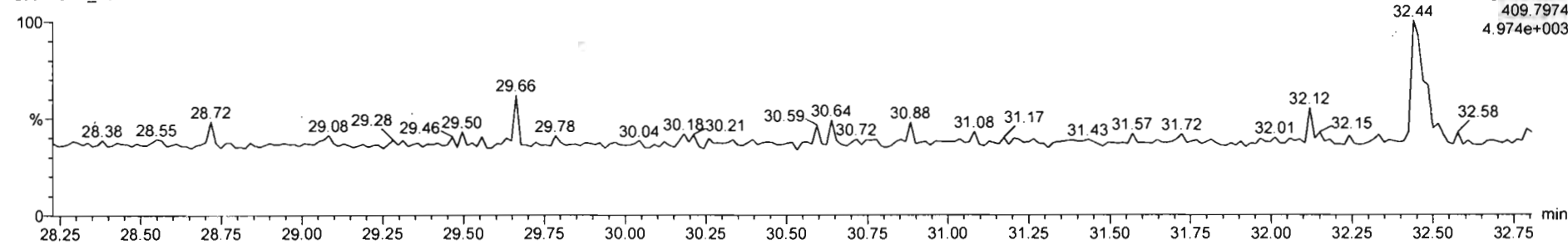


200713R1\_10



**DPE2**

200713R1\_10



Dataset: Untitled

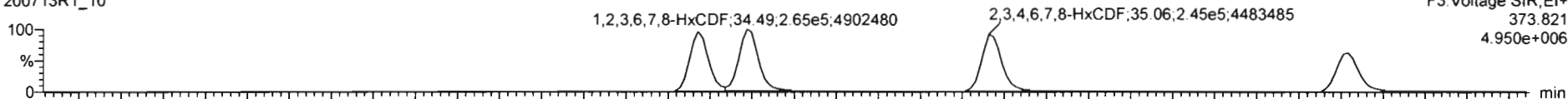
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

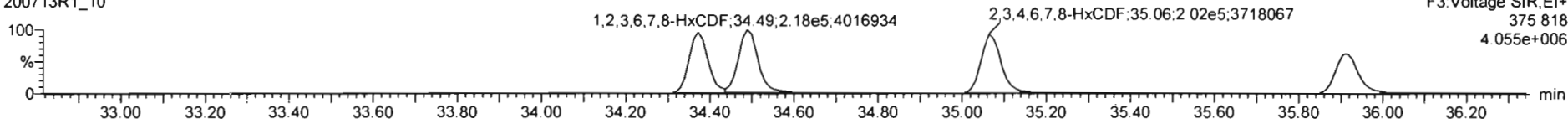
**1,2,3,4,7,8-HxCDF**

200713R1\_10



F3:Voltage SIR,EI+  
373.821  
4.950e+006

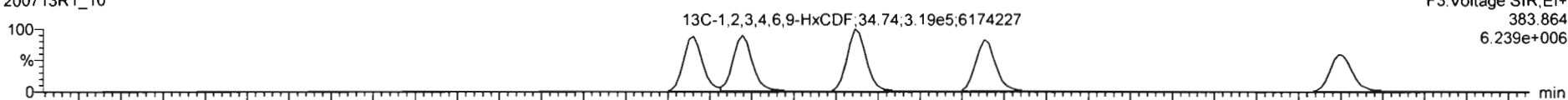
200713R1\_10



F3:Voltage SIR,EI+  
375.818  
4.055e+006

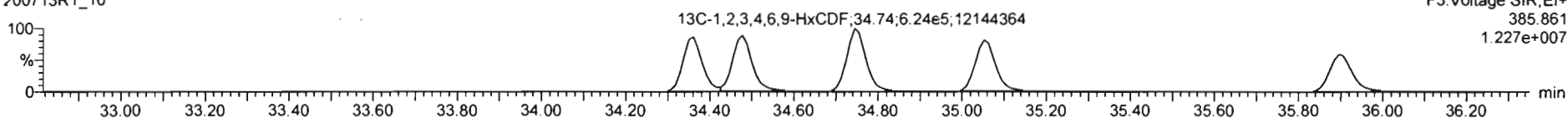
**13C-1,2,3,4,7,8-HxCDF**

200713R1\_10



F3:Voltage SIR,EI+  
383.864  
6.239e+006

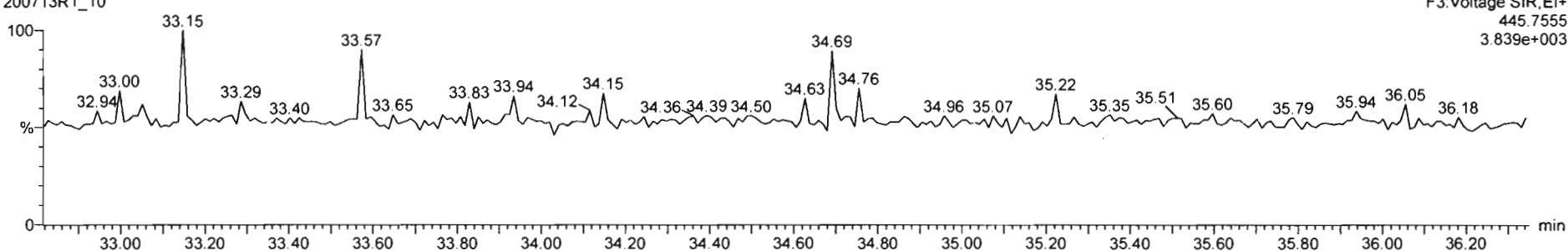
200713R1\_10



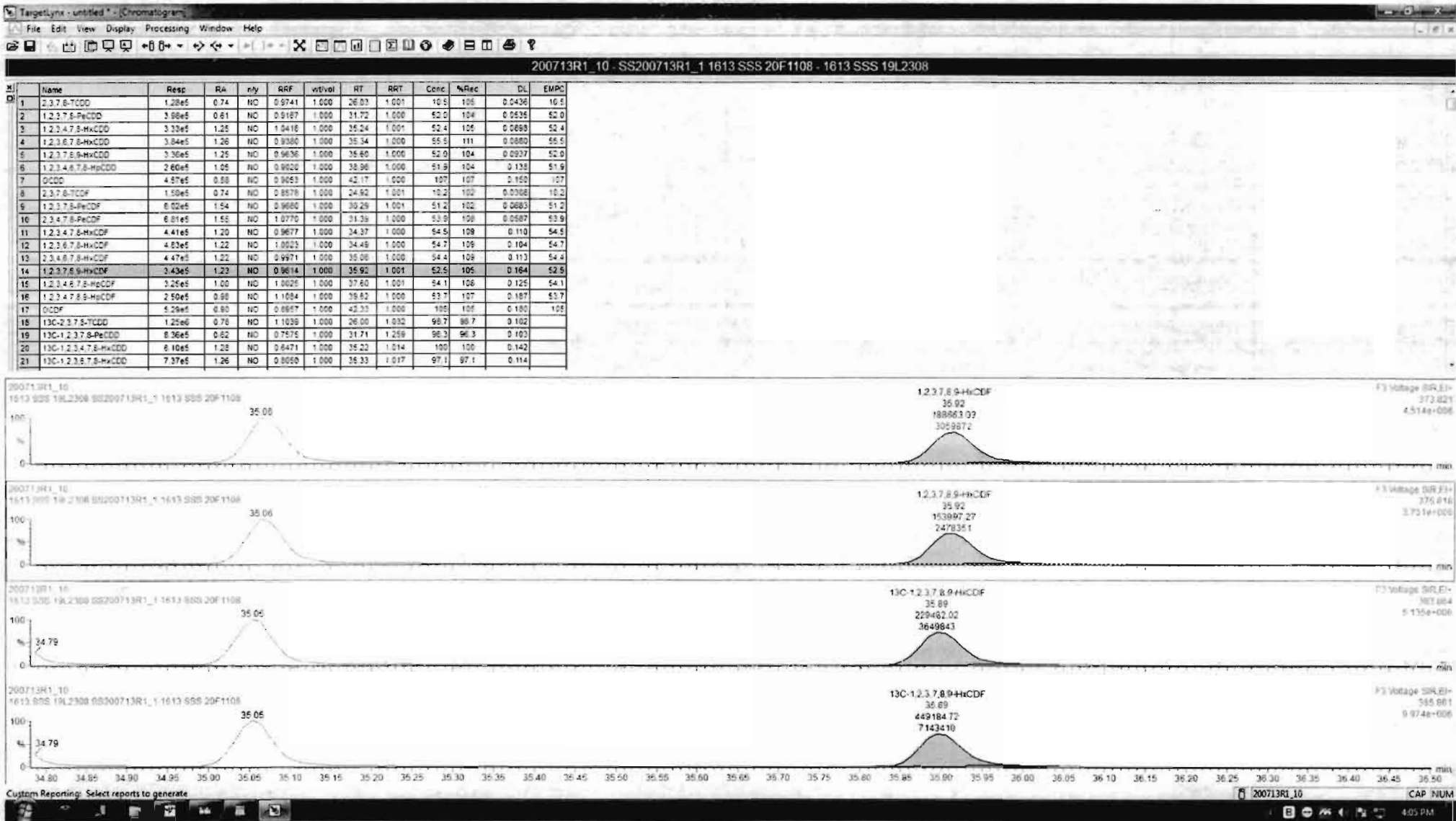
F3:Voltage SIR,EI+  
385.861  
1.227e+007

**DPE3**

200713R1\_10



F3:Voltage SIR,EI+  
445.7555  
3.839e+003





Dataset: Untitled

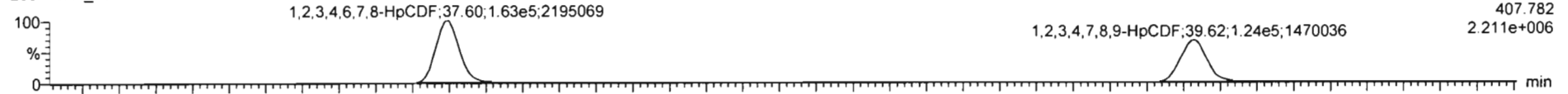
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time

Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

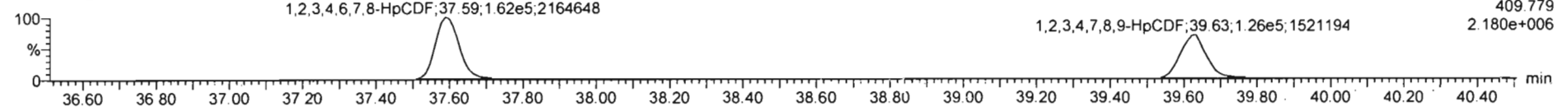
Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

**1,2,3,4,6,7,8-HpCDF**

200713R1\_10

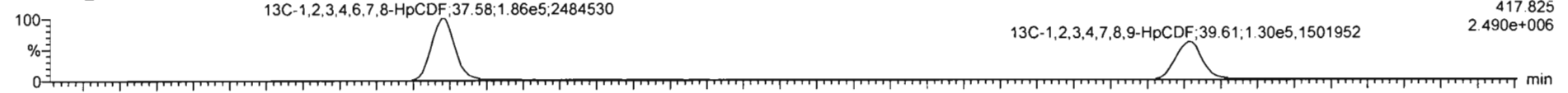


200713R1\_10

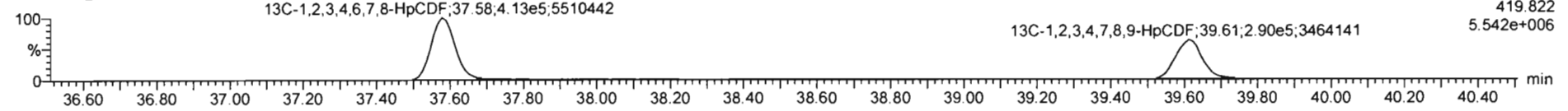


**13C-1,2,3,4,6,7,8-HpCDF**

200713R1\_10

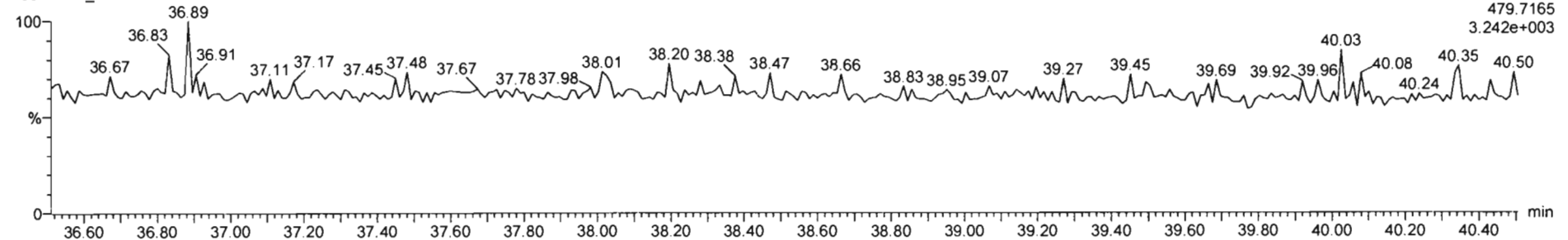


200713R1\_10



**DPE4**

200713R1\_10

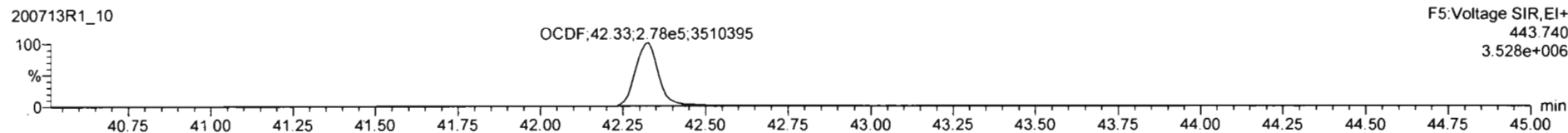
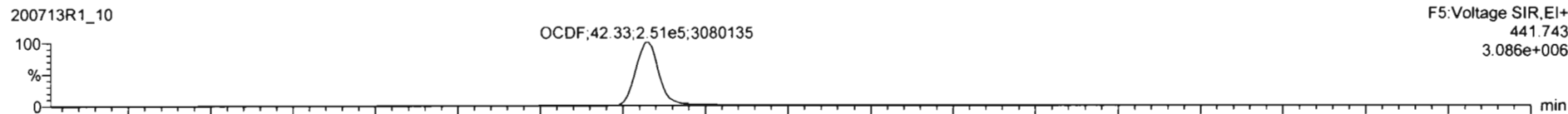


Dataset: Untitled

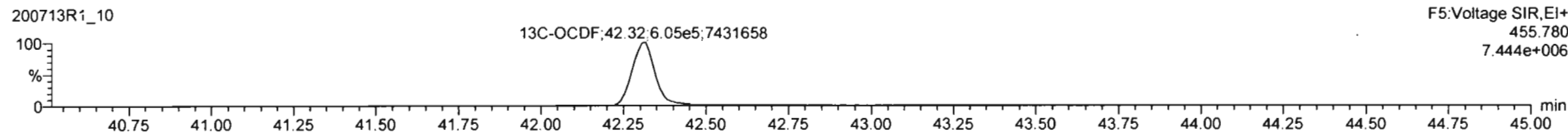
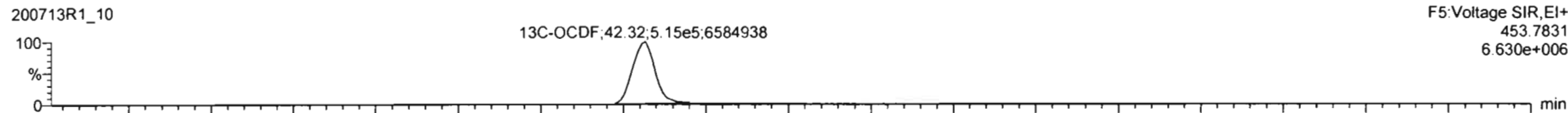
Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time  
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

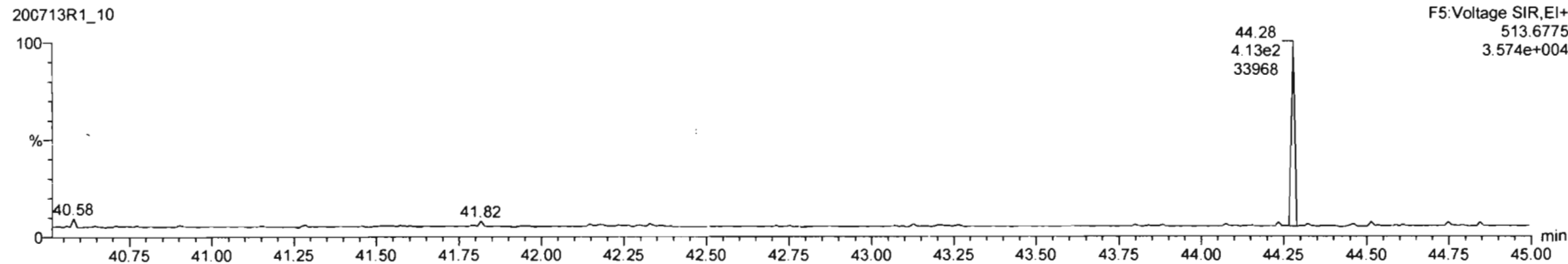
**OCDF**



**13C-OCDF**



**DPE5**

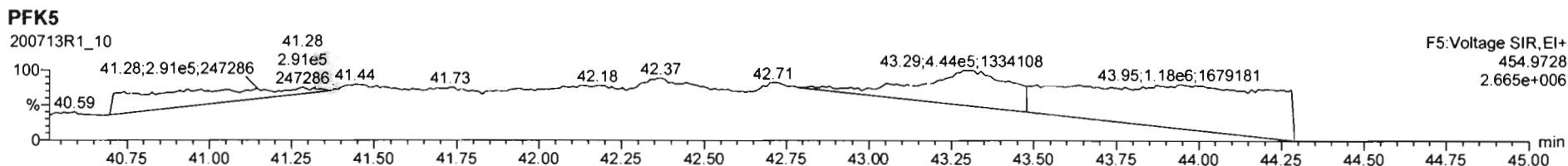
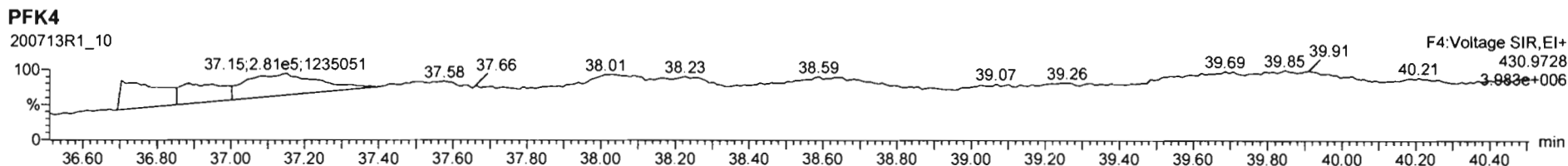
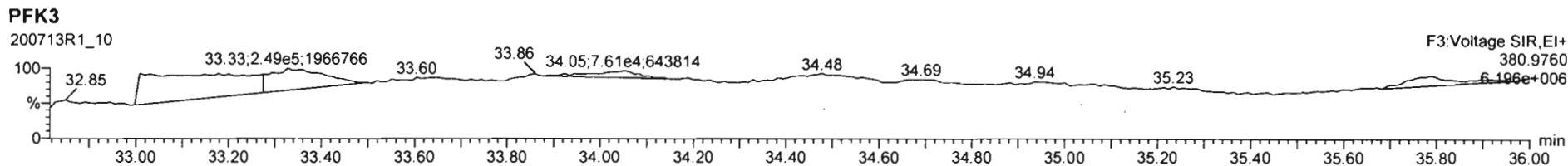
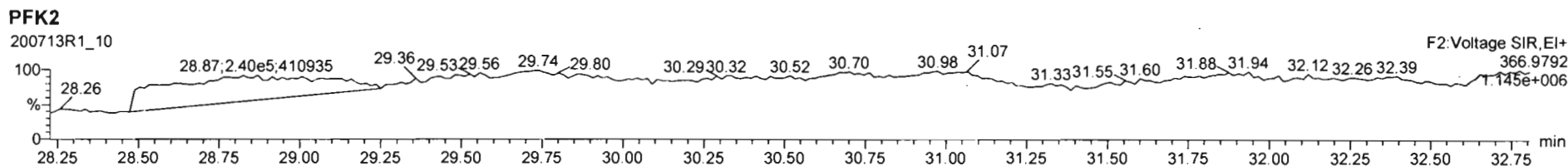
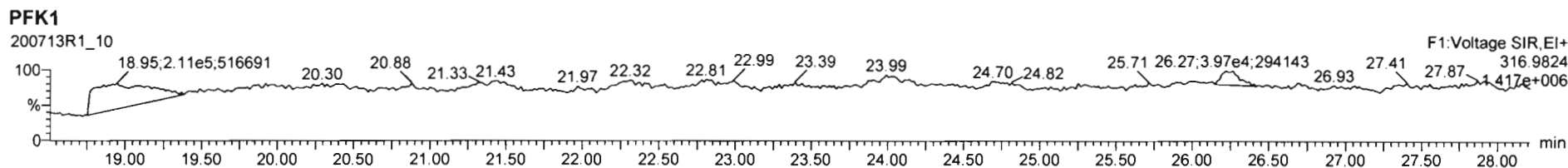


Dataset: Untitled

Last Altered: Monday, July 13, 2020 4:05:54 PM Pacific Daylight Time

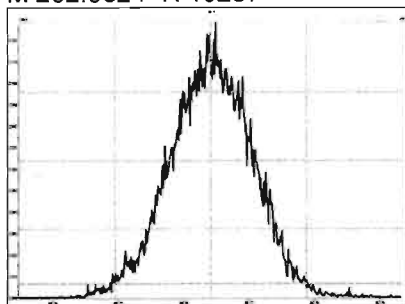
Printed: Monday, July 13, 2020 4:08:25 PM Pacific Daylight Time

Name: 200713R1\_10, Date: 13-Jul-2020, Time: 15:07:19, ID: SS200713R1\_1 1613 SSS 20F1108, Description: 1613 SSS 19L2308

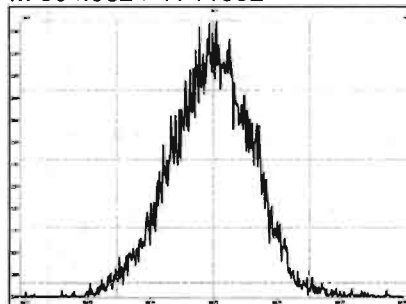


Printed: Monday, July 13, 2020 16:02:50 Pacific Daylight Time

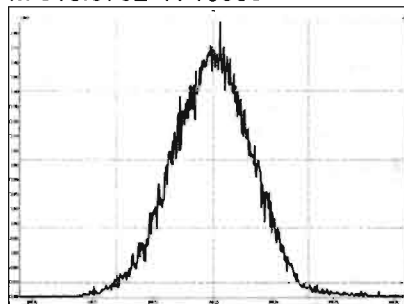
M 292.9824 R 10237



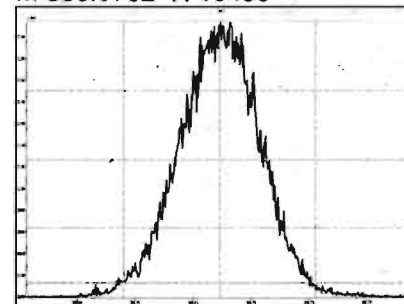
M 304.9824 R 11062



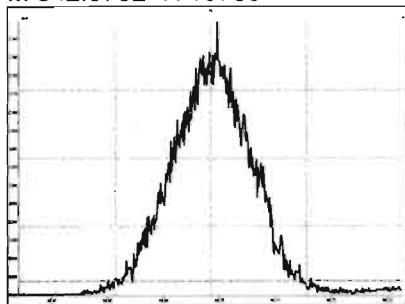
M 318.9792 R 10683



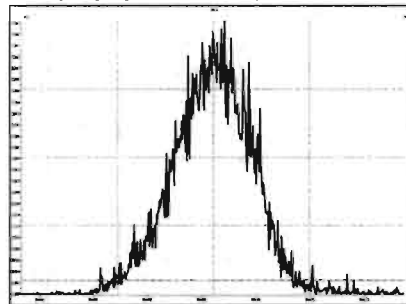
M 330.9792 R 10495



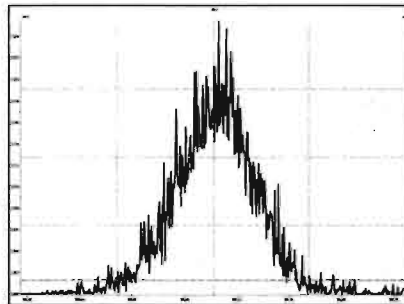
M 342.9792 R 10788



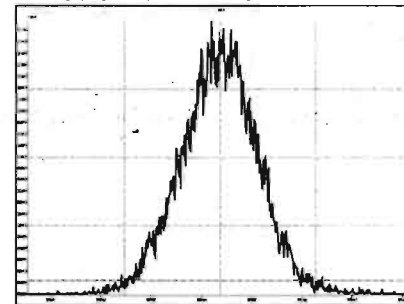
M 354.9792 R 11210



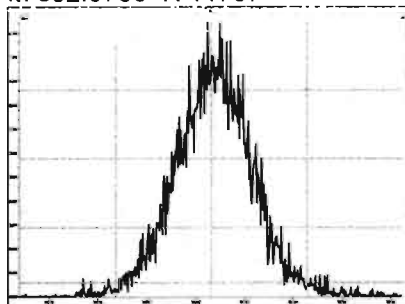
M 366.9792 R 11446



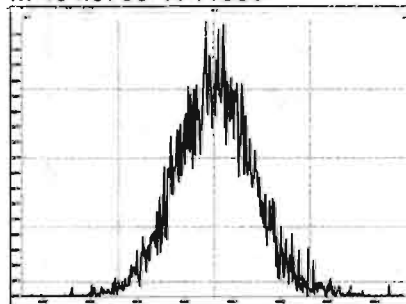
M 380.9760 R 11494



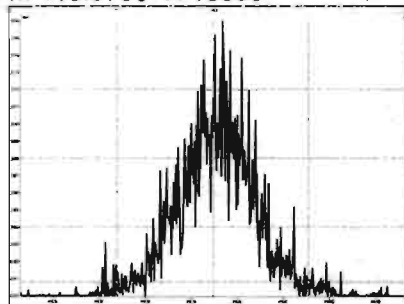
M 392.9760 R 11787



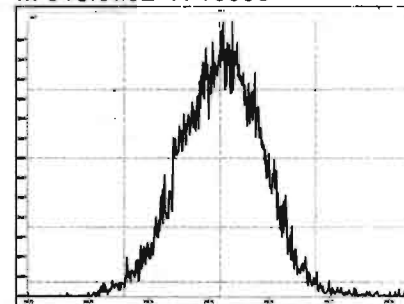
M 404.9760 R 11865



M 416.9760 R 13858



M 318.9792 R 10593

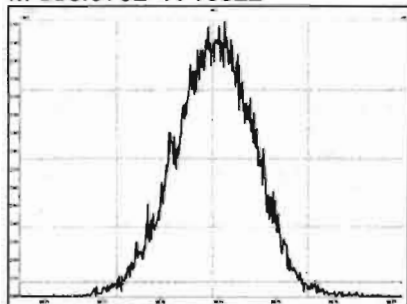


Resolution Check Report

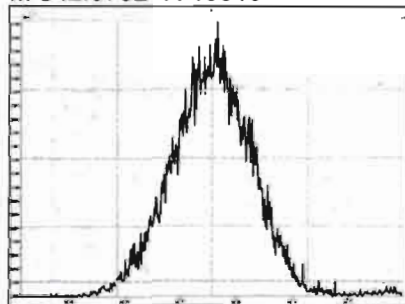
MassLynx 4.1 SCN815

Printed: Monday, July 13, 2020 16:02:50 Pacific Daylight Time

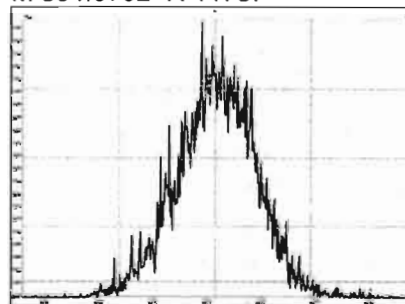
M 330.9792 R 10822



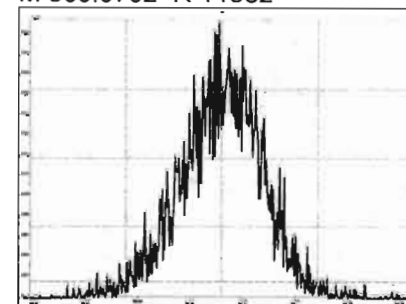
M 342.9792 R 10619



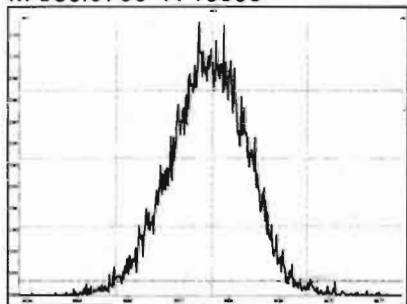
M 354.9792 R 11737



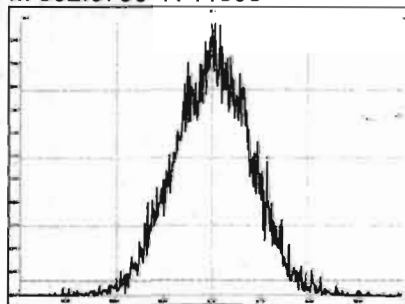
M 366.9792 R 11382



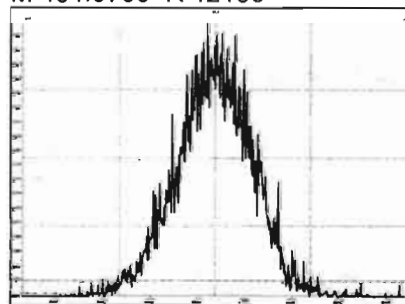
M 380.9760 R 10895



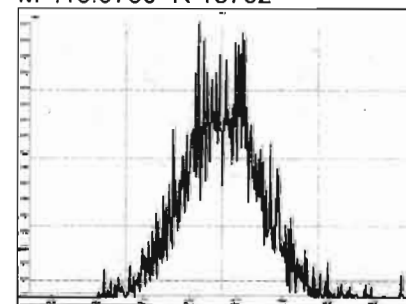
M 392.9760 R 11363



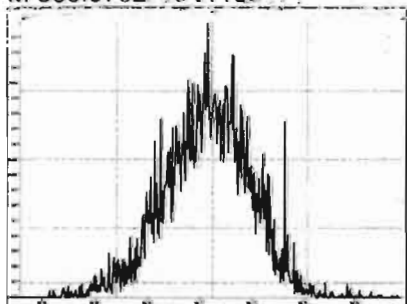
M 404.9760 R 12165



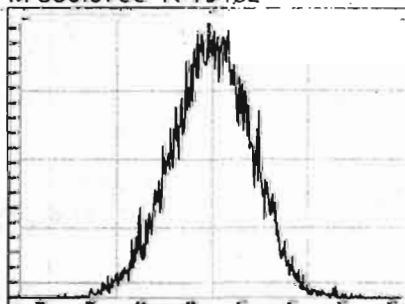
M 416.9760 R 13752



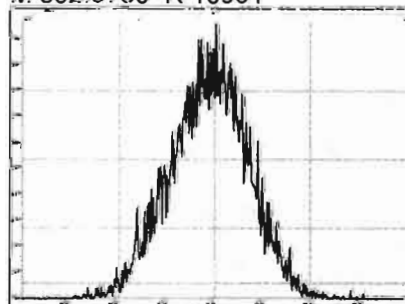
M 366.9792 R 11188



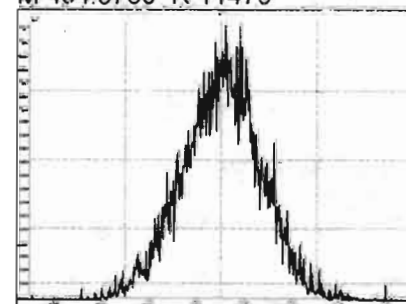
M 380.9760 R-10482



M 392.9760 R 10991

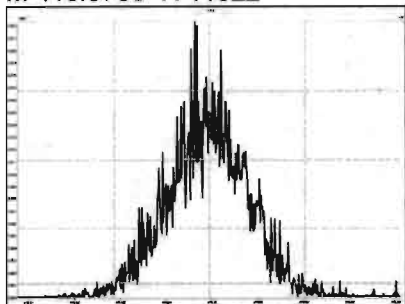


M 404.9760 R 11479

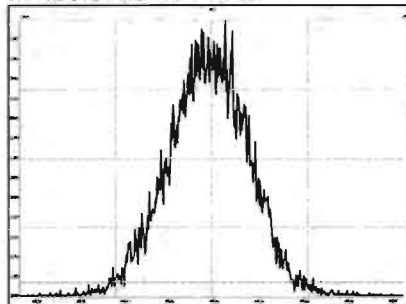


Printed: Monday, July 13, 2020 16:02:50 Pacific Daylight Time

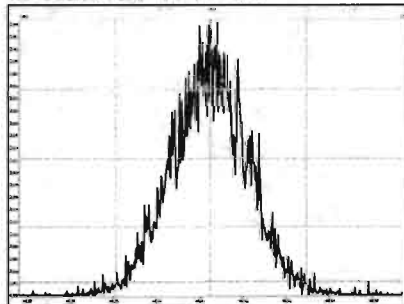
M 416.9760 R 11522



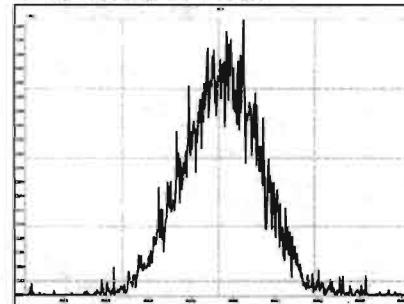
M 430.9728 R 11142



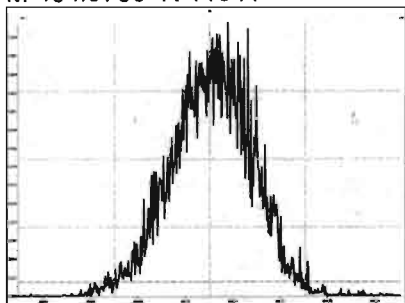
M 442.9728 R 11709



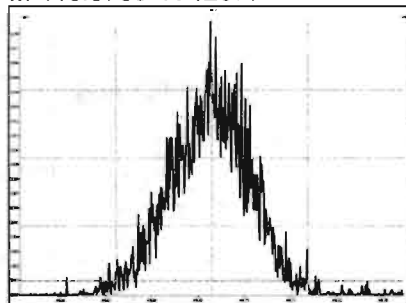
M 454.9728 R 11827



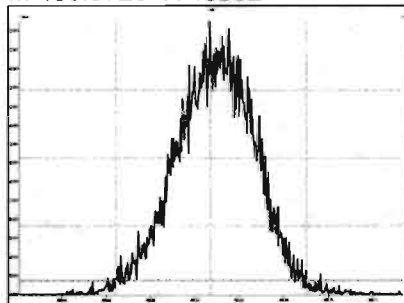
M 404.9760 R 11041



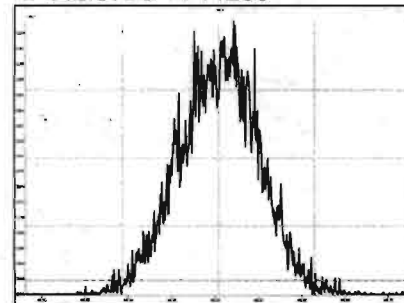
M 416.9760 R 12577



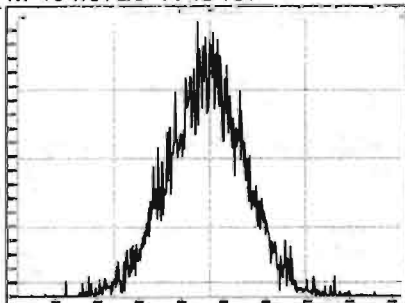
M 430.9728 R 10952



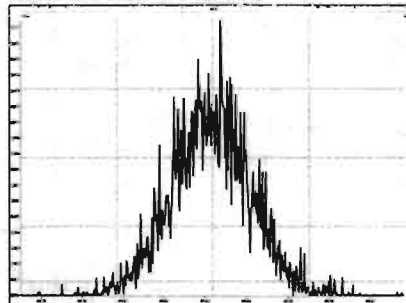
M 442.9728 R 11266



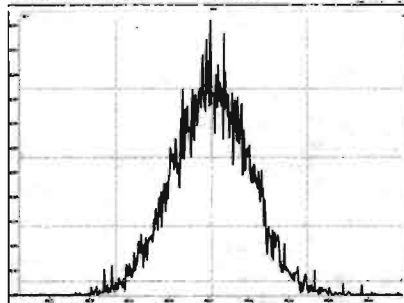
M 454.9728 R 12197



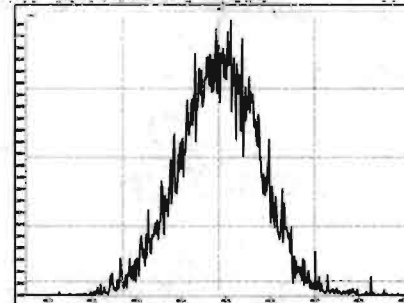
M 466.9728 R 12410



M 480.9696 R 10916

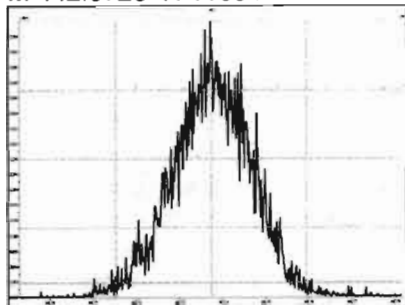


M 430.9728 R 10482

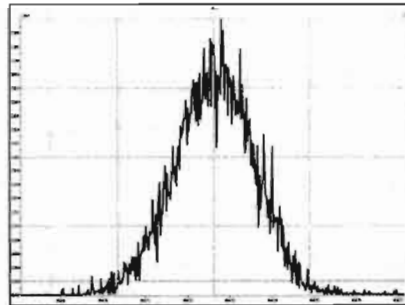


Printed: Monday, July 13, 2020 16:02:50 Pacific Daylight Time

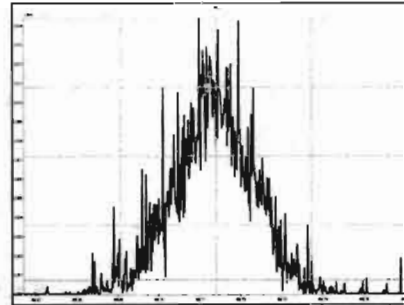
M 442.9728 R 11684



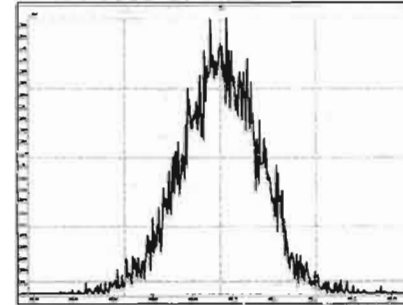
M 454.9728 R 11441



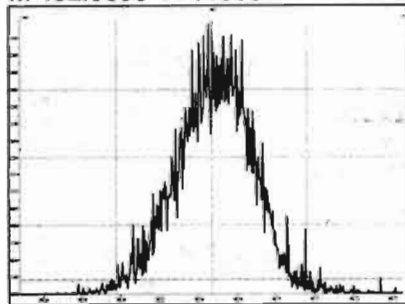
M 466.9728 R 13062



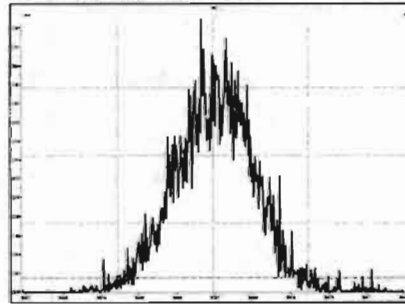
M 480.9696 R 11221



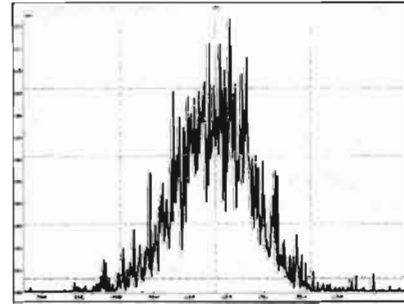
M 492.9696 R 11968



M 504.9696 R 11998



M 516.9697 R 13210



Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:30 Pacific Daylight Time

*DB 7/15/20 CT 07/16/2020*

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31

Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Compound name: 2,3,7,8-TCDF

Response Factor: 0.944113

RRF SD: 0.105704, Relative SD: 11.1961

Response type: Internal Std ( Ref 2 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200715D1_2	0.250	0.75	NO	16.95	1.001	5.53e2	2.25e5	0.260	4.0	0.981	MM
2	200715D1_3	0.500	0.79	NO	16.94	1.001	8.85e2	2.04e5	0.458	-8.3	0.866	MM
3	200715D1_4	2.00	0.81	NO	16.96	1.002	3.63e3	2.16e5	1.78	-11.1	0.840	MM
4	200715D1_5	10.0	0.76	NO	16.94	1.001	1.49e4	1.69e5	9.33	-6.7	0.881	MM
5	200715D1_6	40.0	0.75	NO	16.94	1.001	7.15e4	1.84e5	41.2	3.0	0.973	MM
6	200715D1_7	300	0.77	NO	16.94	1.001	6.96e5	2.06e5	357	19.1	1.12	MM

Compound name: 13C-2,3,7,8-TCDF

Response Factor: 1.00773

RRF SD: 0.019266, Relative SD: 1.91182

Response type: Internal Std ( Ref 3 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200715D1_2	100	0.76	NO	16.92	1.135	2.25e5	2.21e5	101	1.5	1.02	bb
2	200715D1_3	100	0.79	NO	16.92	1.136	2.04e5	2.00e5	101	1.3	1.02	bb
3	200715D1_4	100	0.78	NO	16.92	1.135	2.16e5	2.14e5	100	0.2	1.01	bb
4	200715D1_5	100	0.76	NO	16.91	1.135	1.69e5	1.67e5	101	0.7	1.01	bb
5	200715D1_6	100	0.78	NO	16.91	1.135	1.84e5	1.82e5	100	0.2	1.01	bb
6	200715D1_7	100	0.79	NO	16.91	1.135	2.06e5	2.13e5	96.3	-3.7	0.970	bd



Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:30 Pacific Daylight Time

**Compound name: 13C-1,2,3,4-TCDF**

Response Factor: 1

RRF SD: 1.40433e-016, Relative SD: 1.40433e-014

Response type: Internal Std ( Ref 3 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200715D1_2	100	0.77	NO	14.91	1.000	2.21e5	2.21e5	100	0.0	1.00	bb
2	200715D1_3	100	0.78	NO	14.90	1.000	2.00e5	2.00e5	100	0.0	1.00	bb
3	200715D1_4	100	0.78	NO	14.91	1.000	2.14e5	2.14e5	100	0.0	1.00	bb
4	200715D1_5	100	0.78	NO	14.90	1.000	1.67e5	1.67e5	100	0.0	1.00	bb
5	200715D1_6	100	0.80	NO	14.90	1.000	1.82e5	1.82e5	100	0.0	1.00	bb
6	200715D1_7	100	0.78	NO	14.90	1.000	2.13e5	2.13e5	100	0.0	1.00	bb

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31

Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200715D1\_2, Date: 15-Jul-2020, Time: 11:09:04, ID: ST200715D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	5.53e2	0.75	NO	0.944	1.000	16.945	16.95	1.000	1.001	0.25989	104	0.102	0.260
2	2 13C-2,3,7,8-TCDF	2.25e5	0.76	NO	1.01	1.000	16.943	16.92	1.133	1.135	101.46	101	0.307	
3	3 13C-1,2,3,4-TCDF	2.21e5	0.77	NO	1.00	1.000	14.920	14.91	1.000	1.000	100.00	100	0.309	

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Name: 200715D1\_3, Date: 15-Jul-2020, Time: 11:40:40, ID: ST200715D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	8.85e2	0.79	NO	0.944	1.000	16.945	16.94	1.000	1.001	0.45845	91.7	0.103	0.458
2	2 13C-2,3,7,8-TCDF	2.04e5	0.79	NO	1.01	1.000	16.931	16.92	1.133	1.136	101.27	101	0.370	
3	3 13C-1,2,3,4-TCDF	2.00e5	0.78	NO	1.00	1.000	14.920	14.90	1.000	1.000	100.00	100	0.373	

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Name: 200715D1\_4, Date: 15-Jul-2020, Time: 12:12:22, ID: ST200715D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	3.63e3	0.81	NO	0.944	1.000	16.945	16.96	1.000	1.002	1.7786	88.9	0.105	1.78
2	2 13C-2,3,7,8-TCDF	2.16e5	0.78	NO	1.01	1.000	16.943	16.92	1.133	1.135	100.18	100	0.306	
3	3 13C-1,2,3,4-TCDF	2.14e5	0.78	NO	1.00	1.000	14.920	14.91	1.000	1.000	100.00	100	0.309	

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Name: 200715D1\_5, Date: 15-Jul-2020, Time: 12:44:03, ID: ST200715D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	1.49e4	0.76	NO	0.944	1.000	16.933	16.94	1.000	1.001	9.3284	93.3	0.172	9.33
2	2 13C-2,3,7,8-TCDF	1.69e5	0.76	NO	1.01	1.000	16.931	16.91	1.133	1.135	100.68	101	0.380	
3	3 13C-1,2,3,4-TCDF	1.67e5	0.78	NO	1.00	1.000	14.920	14.90	1.000	1.000	100.00	100	0.383	

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Name: 200715D1\_6, Date: 15-Jul-2020, Time: 13:15:44, ID: ST200715D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	7.15e4	0.75	NO	0.944	1.000	16.933	16.94	1.000	1.001	41.211	103	0.175	41.2
2	2 13C-2,3,7,8-TCDF	1.84e5	0.78	NO	1.01	1.000	16.931	16.91	1.133	1.135	100.15	100	0.369	
3	3 13C-1,2,3,4-TCDF	1.82e5	0.80	NO	1.00	1.000	14.920	14.90	1.000	1.000	100.00	100	0.372	

Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:38:56 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 14:39:55 Pacific Daylight Time

Name: 200715D1\_7, Date: 15-Jul-2020, Time: 13:47:26, ID: ST200715D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	6.96e5	0.77	NO	0.944	1.000	16.933	16.94	1.000	1.001	357.33	119	0.360	357
2	2 13C-2,3,7,8-TCDF	2.06e5	0.79	NO	1.01	1.000	16.931	16.91	1.133	1.135	96.256	96.3	0.310	
3	3 13C-1,2,3,4-TCDF	2.13e5	0.78	NO	1.00	1.000	14.920	14.90	1.000	1.000	100.00	100	0.312	

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Thursday, July 16, 2020 09:43:16 Pacific Daylight Time

Printed: Thursday, July 16, 2020 09:44:46 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31

Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	200715D1_1	CP200715D1-1 DB-225 CPSM	15-Jul-20	10:39:41
2	200715D1_2	ST200715D1-1 1613 CS0 20F1102	15-Jul-20	11:09:04
3	200715D1_3	ST200715D1-2 1613 CS1 20F1103	15-Jul-20	11:40:40
4	200715D1_4	ST200715D1-3 1613 CS2 20F1104	15-Jul-20	12:12:22
5	200715D1_5	ST200715D1-4 1613 CS3 20F1105	15-Jul-20	12:44:03
6	200715D1_6	ST200715D1-5 1613 CS4 20F1106	15-Jul-20	13:15:44
7	200715D1_7	ST200715D1-6 1613 CS5 20F1107	15-Jul-20	13:47:26
8	200715D1_8	SOLVENT BLANK	15-Jul-20	14:19:08
9	200715D1_9	SS200715D1-1 1613 SSS 20F1108	15-Jul-20	14:50:49
10	200715D1_10	SOLVENT BLANK	15-Jul-20	15:22:31
11	200715D1_11	2001242-01RE1 ISUXO20SS340001 12.78	15-Jul-20	15:54:22
12	200715D1_12	2001242-02RE1 ISUXO20SS380001 15.64	15-Jul-20	16:25:58
13	200715D1_13	2001242-03RE1 ISUXO20SS410001 12.09	15-Jul-20	16:57:39
14	200715D1_14	2001242-04RE1 ISUXO20SS420001 13.01	15-Jul-20	17:29:20
15	200715D1_15	2001242-05RE1 ISUXO20SB420102 16.11	15-Jul-20	18:01:00
16	200715D1_16	2001242-07RE1 ISUXO20SS430001 13.93	15-Jul-20	18:32:42
17	200715D1_17	2001242-08RE1 ISUXO20SS440001 15.55	15-Jul-20	19:04:24
18	200715D1_18	ST200715D1-7 1613 CS3 20F1105	16-Jul-20	09:18:49 *

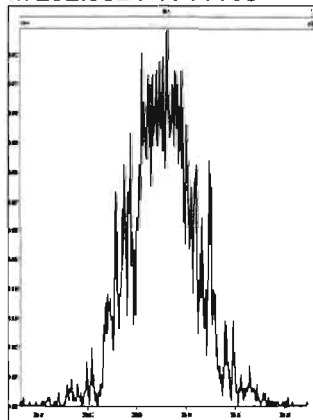
\* INSTRUMENT WENT INTO PAUSE AFTER SAMPLE #17  
 (M) STANDARD & (M) RES CHECK RUN THE NEXT MORNING.



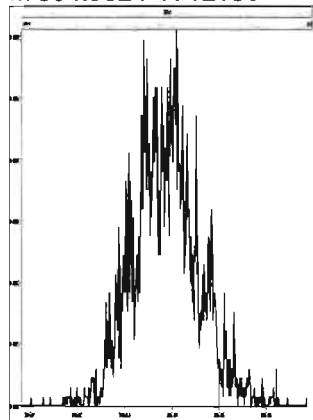
File: Experiment: tcdf\_db225.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, July 15, 2020 10:38:42 Pacific Daylight Time

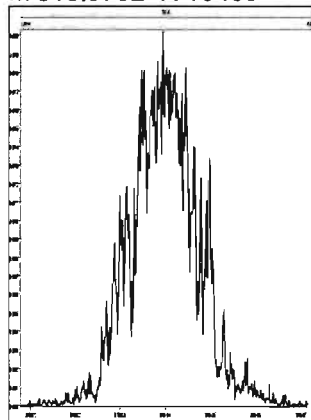
M 292.9824 R 11163



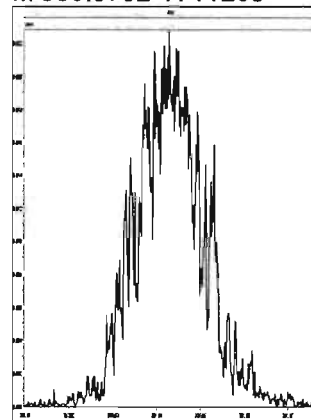
M 304.9824 R 12136



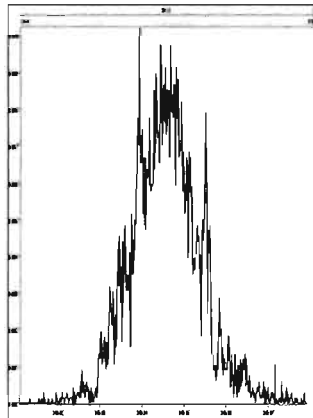
M 318.9792 R 10459



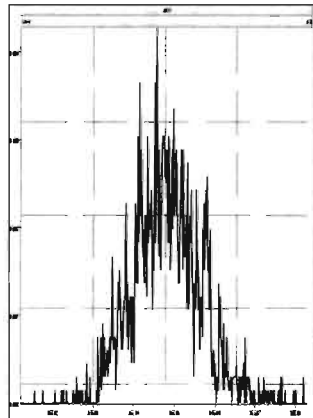
M 330.9792 R 11263



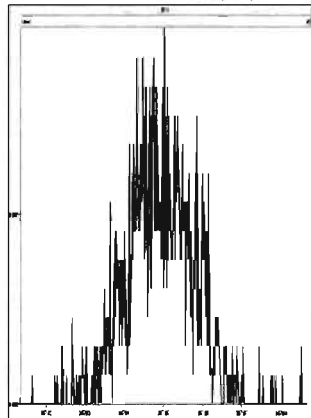
M 342.9792 R 10594



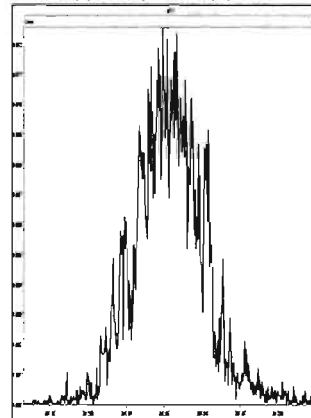
M 354.9792 R 12314

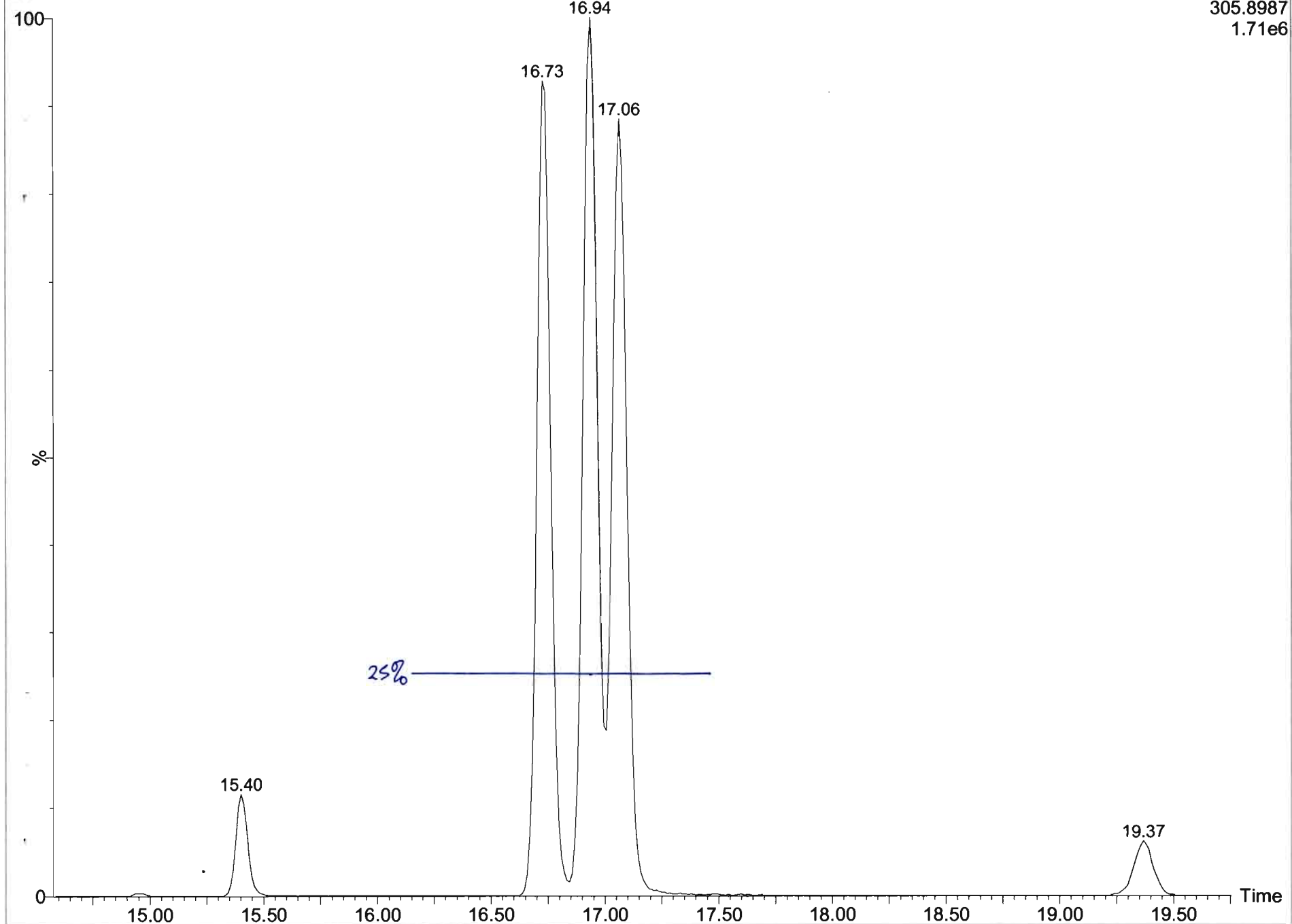


M 366.9792 R 12373



M 380.9760 R 10549





Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_1.qld

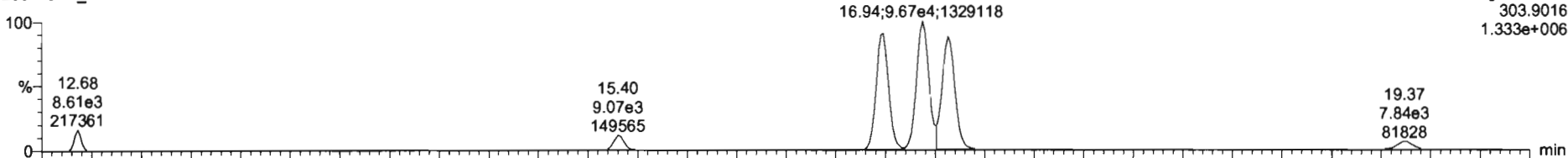
Last Altered: Wednesday, July 15, 2020 14:40:57 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:42:03 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

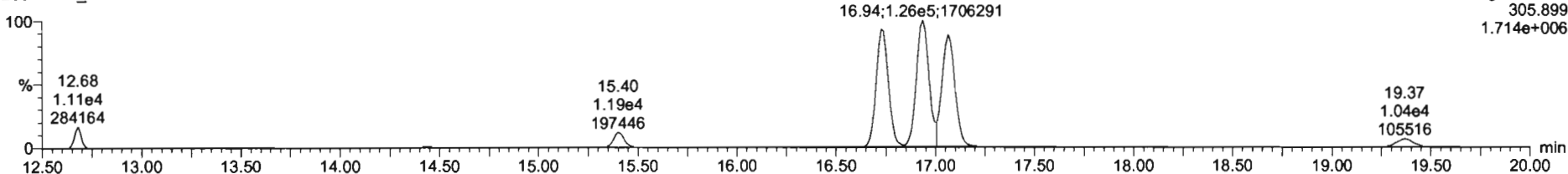
Name: 200715D1\_1, Date: 15-Jul-2020, Time: 10:39:41, ID: CP200715D1-1 DB-225 CPSM, Description: DB-225 CPSM

2,3,7,8-TCDF

200715D1\_1

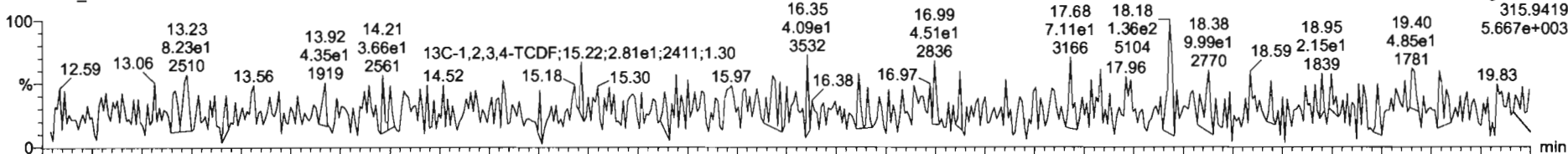


200715D1\_1

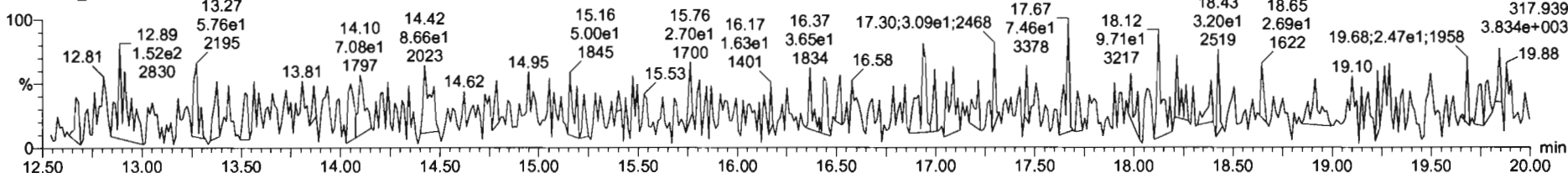


13C-2,3,7,8-TCDF

200715D1\_1



200715D1\_1

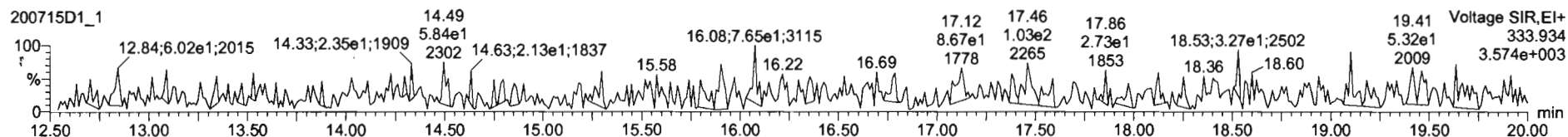
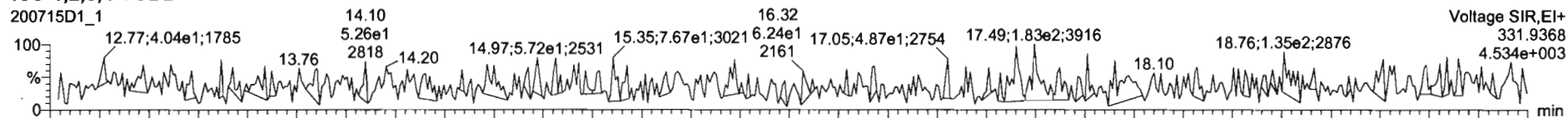


Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_1.qld

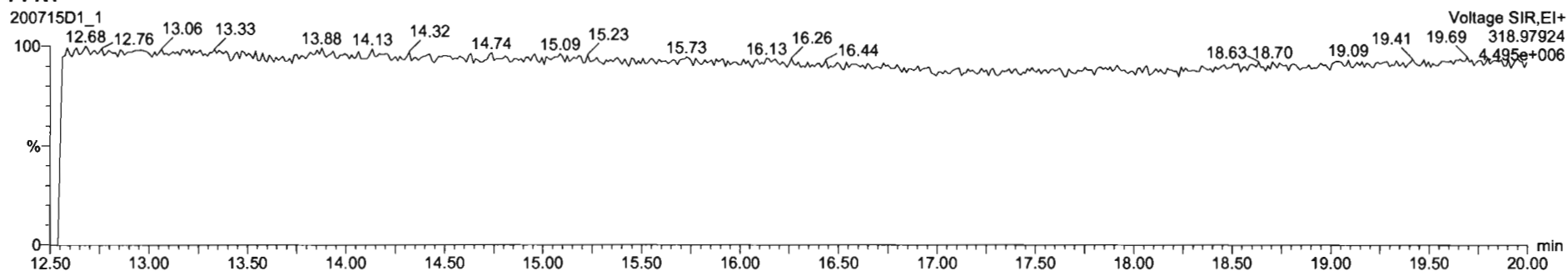
Last Altered: Wednesday, July 15, 2020 14:40:57 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:42:03 Pacific Daylight Time

Name: 200715D1\_1, Date: 15-Jul-2020, Time: 10:39:41, ID: CP200715D1-1 DB-225 CPSM, Description: DB-225 CPSM

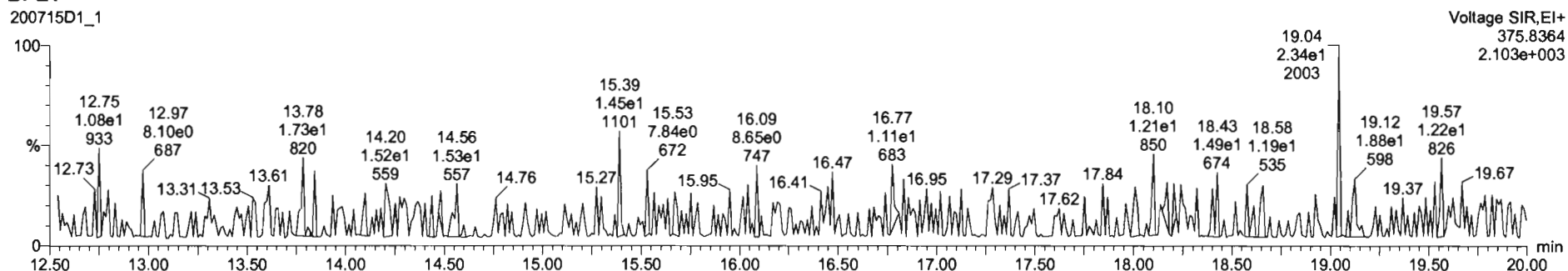
13C-1,2,3,4-TCDD



PFK1



DPE1



Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

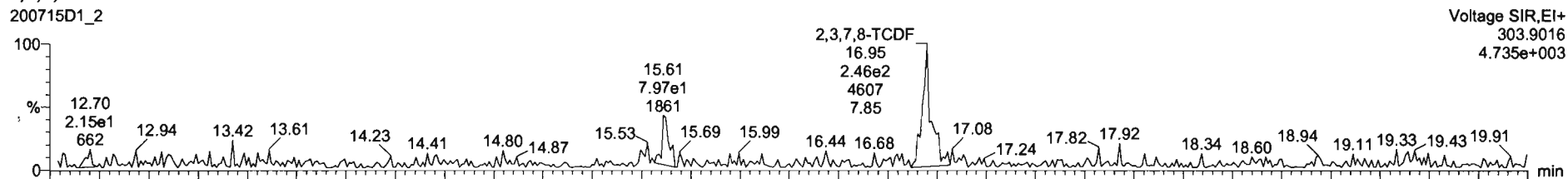
Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31  
Calibration: 15 Jul 2020 14:25:25

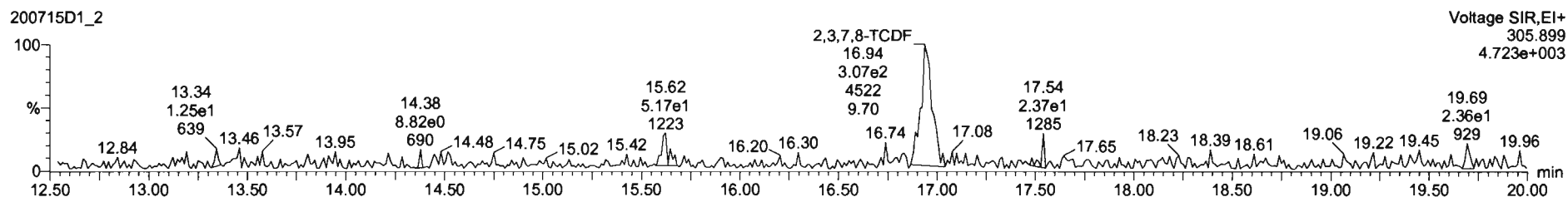
Name: 200715D1\_2, Date: 15-Jul-2020, Time: 11:09:04, ID: ST200715D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

2,3,7,8-TCDF

200715D1\_2

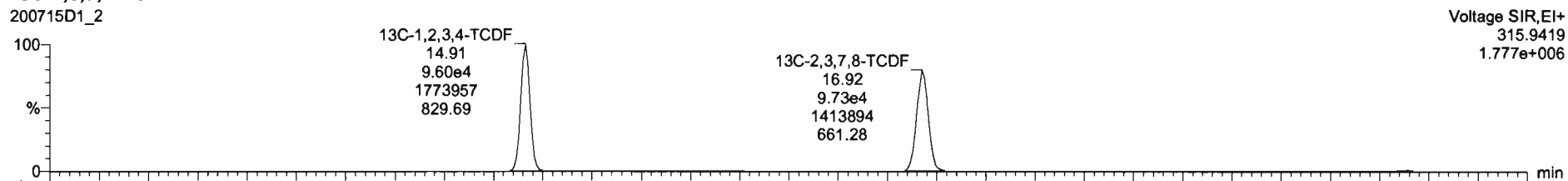


200715D1\_2

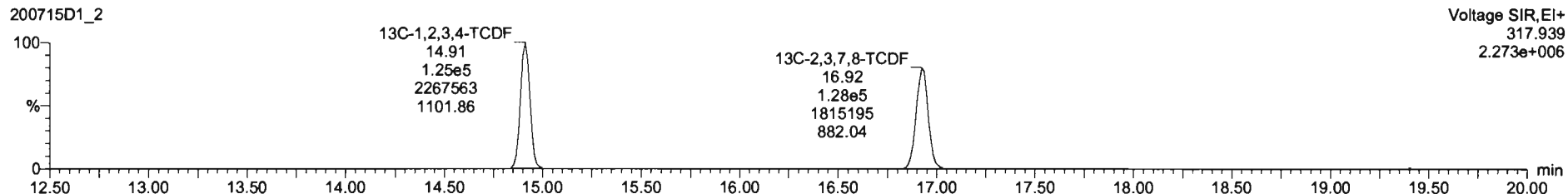


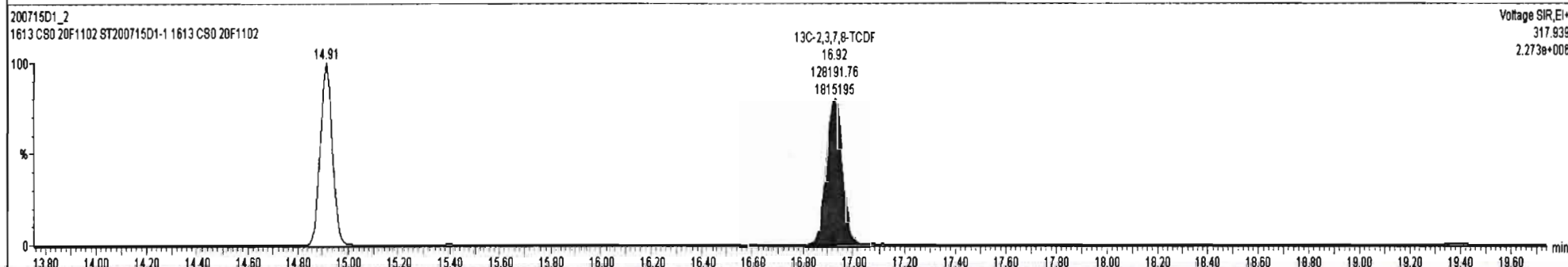
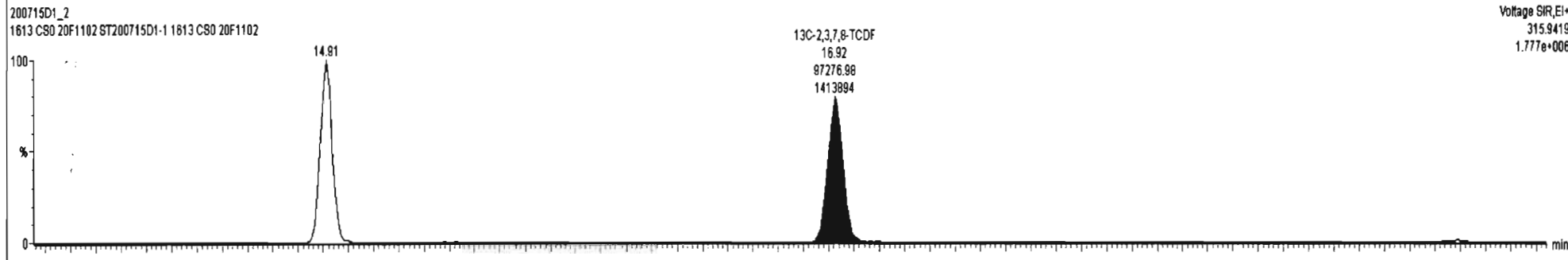
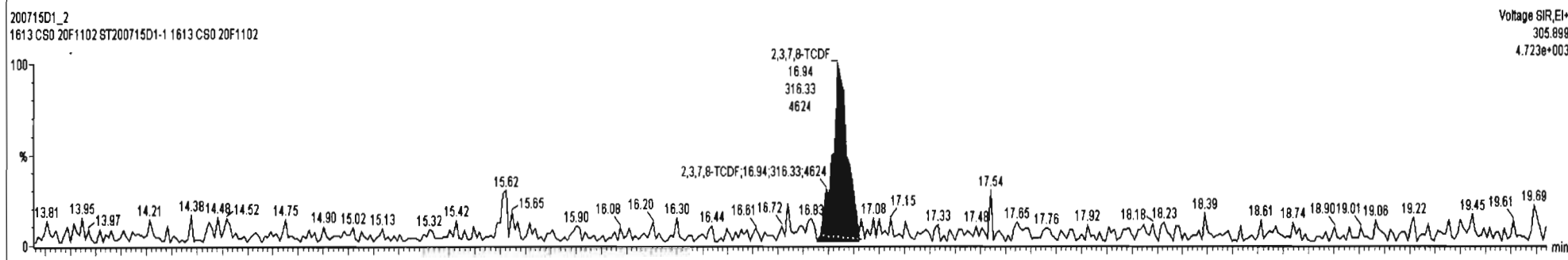
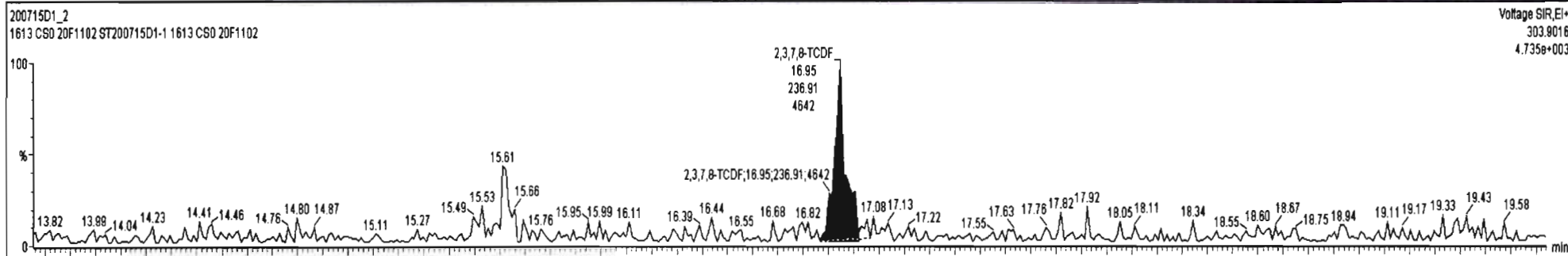
13C-2,3,7,8-TCDF

200715D1\_2



200715D1\_2





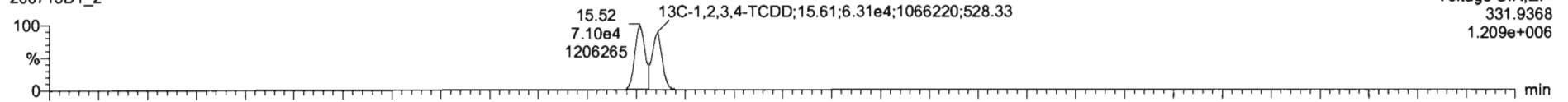
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

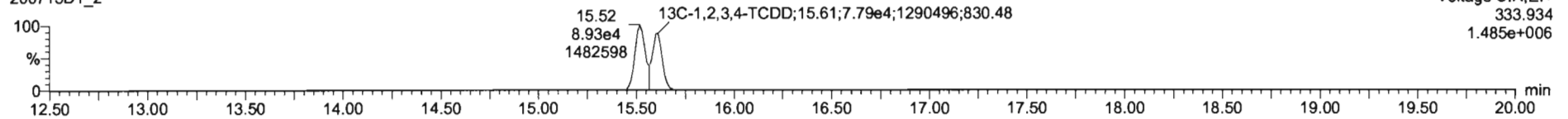
Name: 200715D1\_2, Date: 15-Jul-2020, Time: 11:09:04, ID: ST200715D1-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

13C-1,2,3,4-TCDD

200715D1\_2

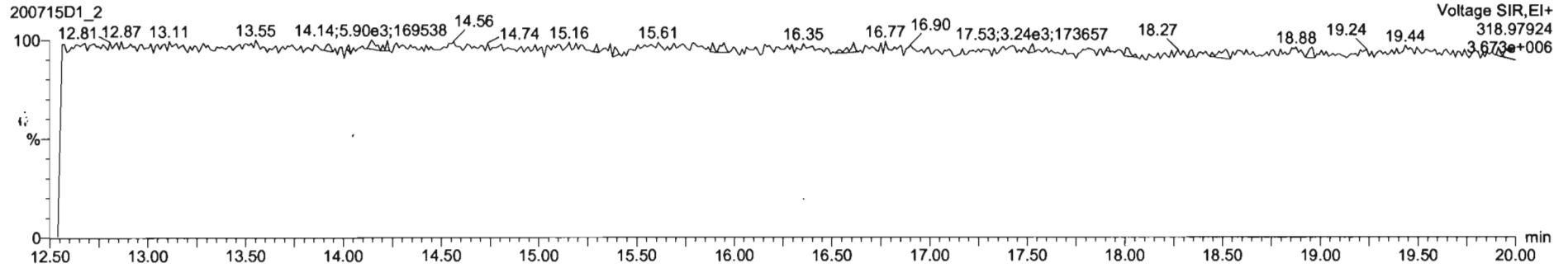


200715D1\_2



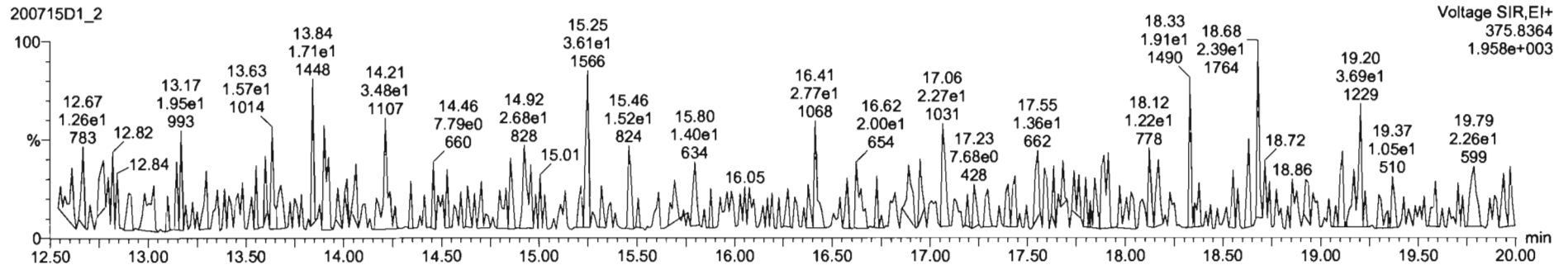
PFK1

200715D1\_2



DPE1

200715D1\_2



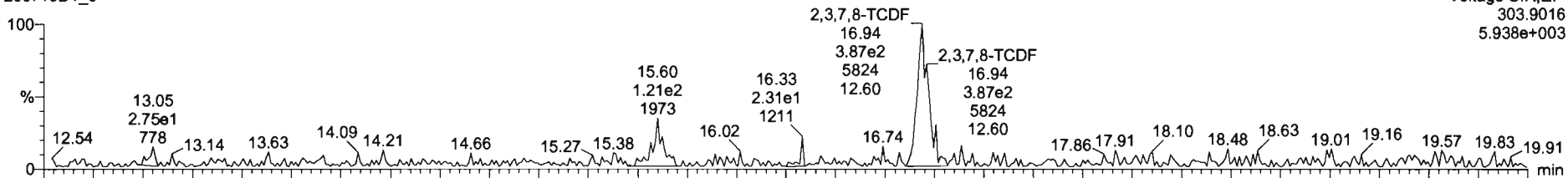
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

Name: 200715D1\_3, Date: 15-Jul-2020, Time: 11:40:40, ID: ST200715D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

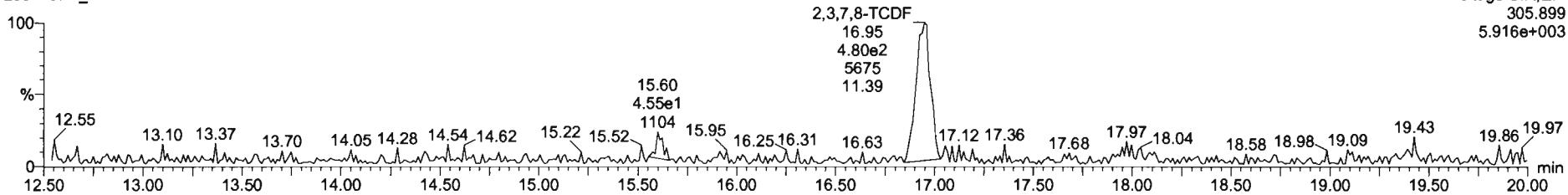
2,3,7,8-TCDF

200715D1\_3



Voltage SIR,EI+  
303.9016  
5.938e+003

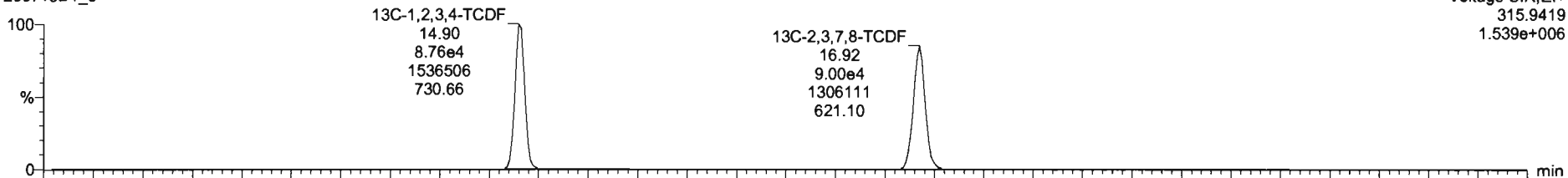
200715D1\_3



Voltage SIR,EI+  
305.899  
5.916e+003

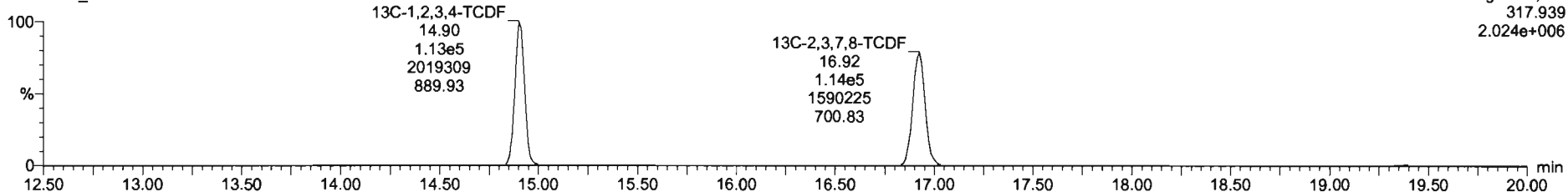
13C-2,3,7,8-TCDF

200715D1\_3



Voltage SIR,EI+  
315.9419  
1.539e+006

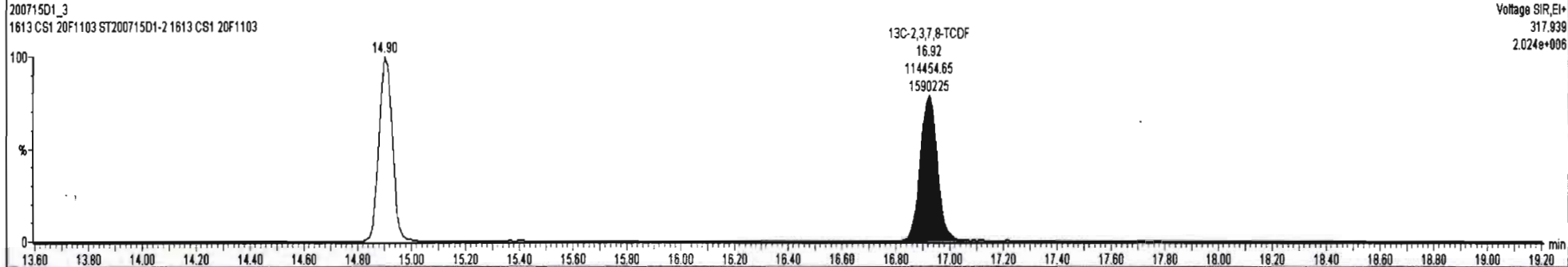
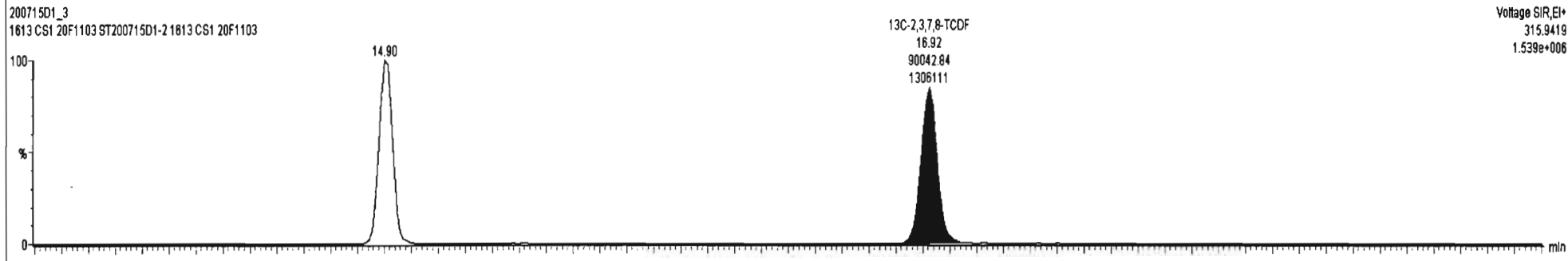
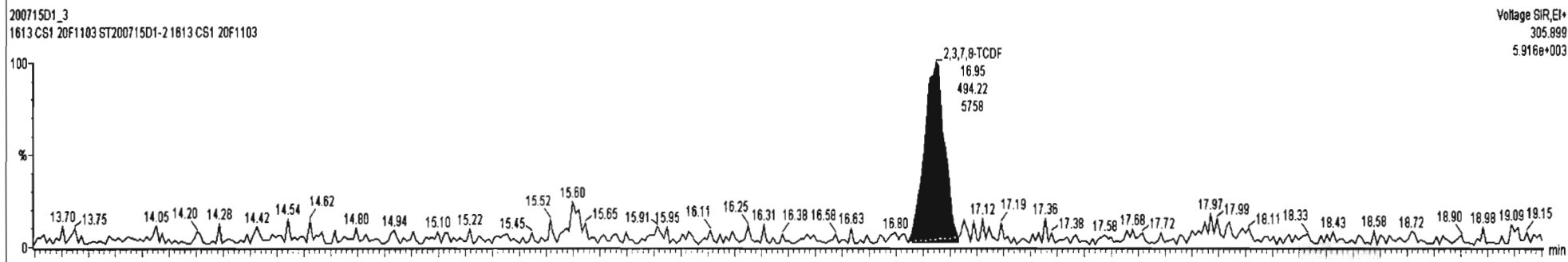
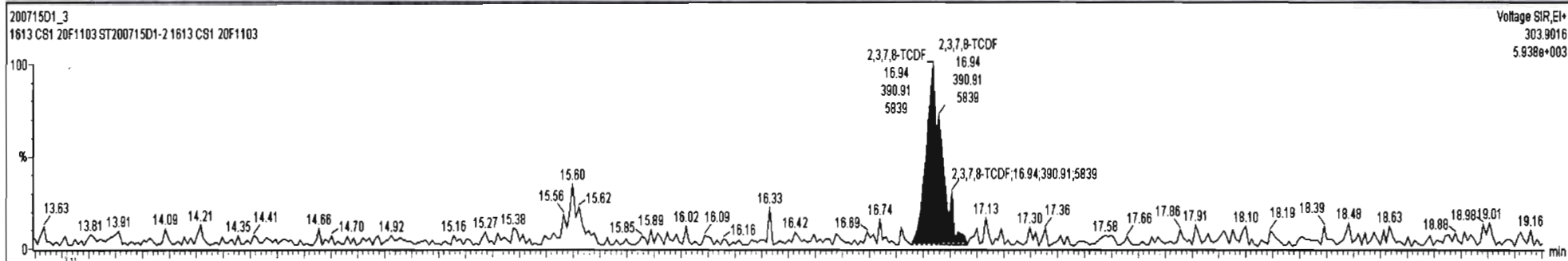
200715D1\_3



Voltage SIR,EI+  
317.939  
2.024e+006



200715D1\_3- ST200715D1-2 1613 CS1 20F1103



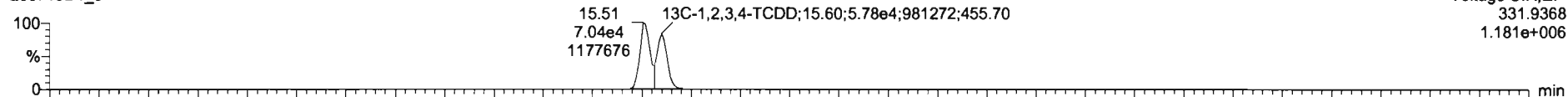
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

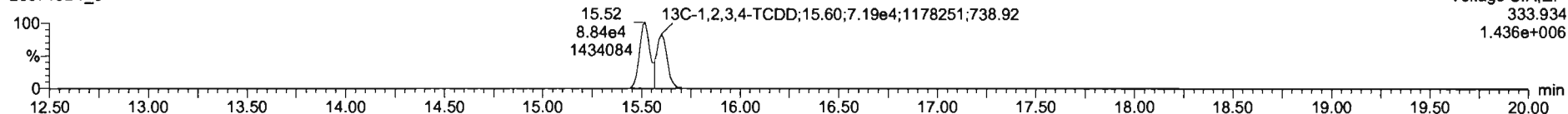
Name: 200715D1\_3, Date: 15-Jul-2020, Time: 11:40:40, ID: ST200715D1-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

13C-1,2,3,4-TCDD

200715D1\_3

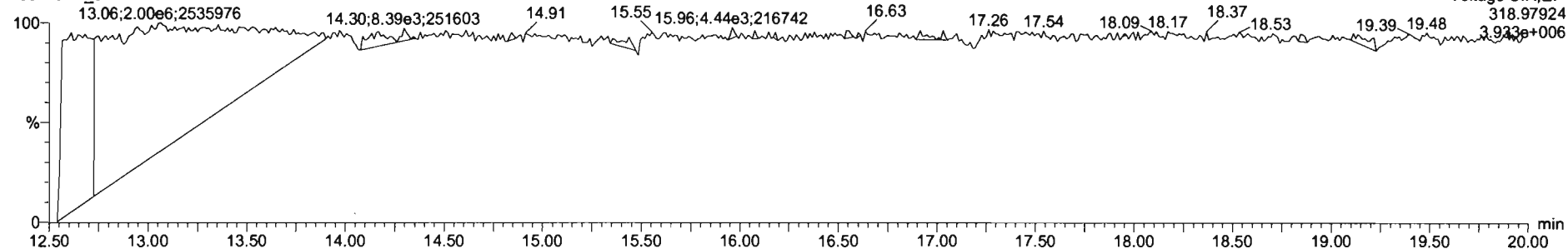


200715D1\_3



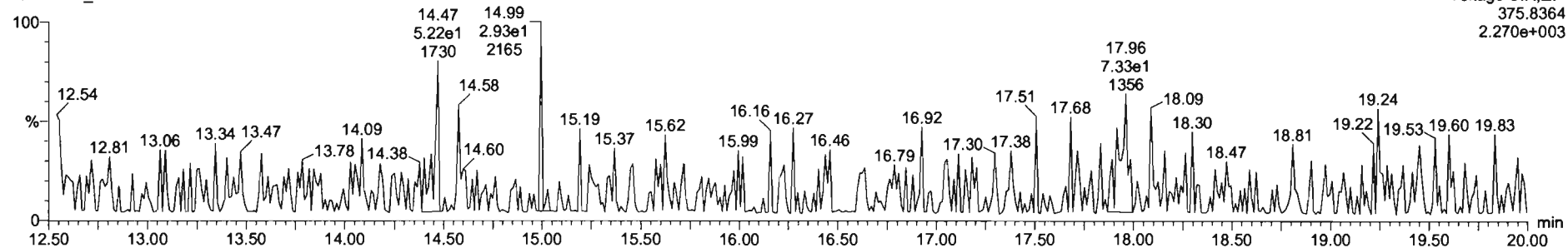
PFK1

200715D1\_3



DPE1

200715D1\_3



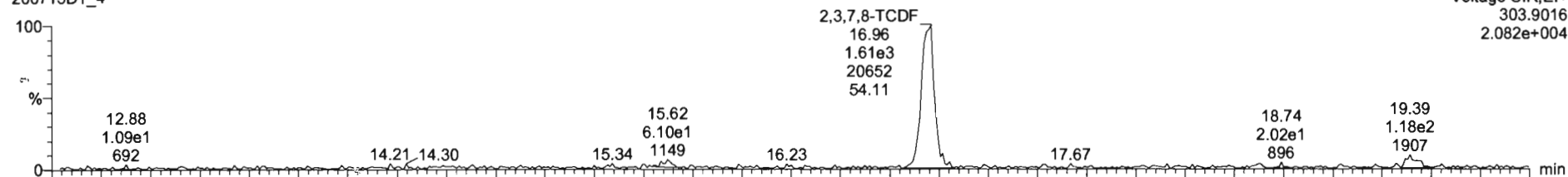
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

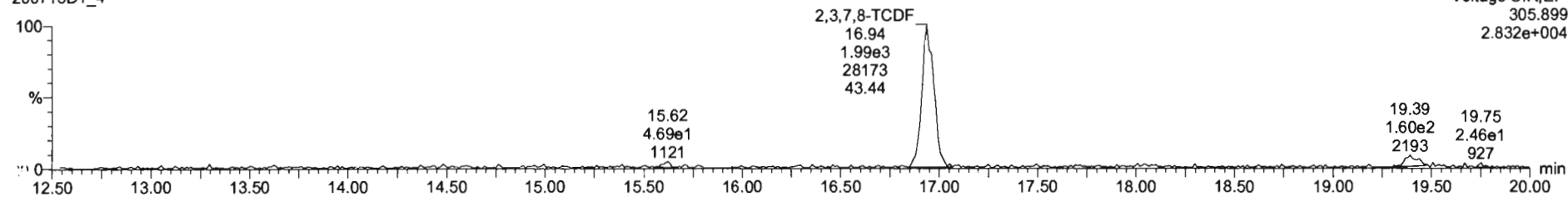
Name: 200715D1\_4, Date: 15-Jul-2020, Time: 12:12:22, ID: ST200715D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

**2,3,7,8-TCDF**

200715D1\_4

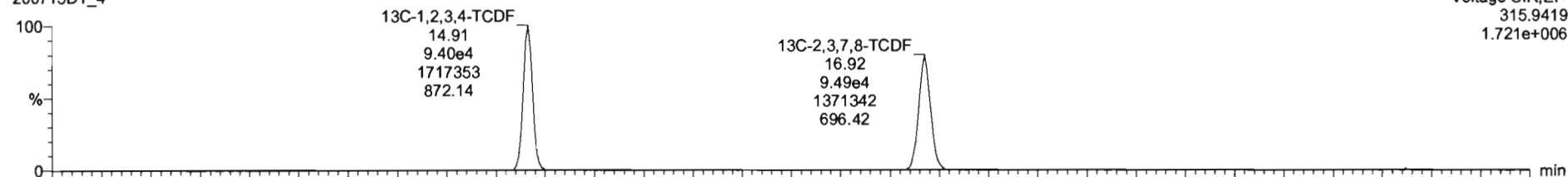


200715D1\_4

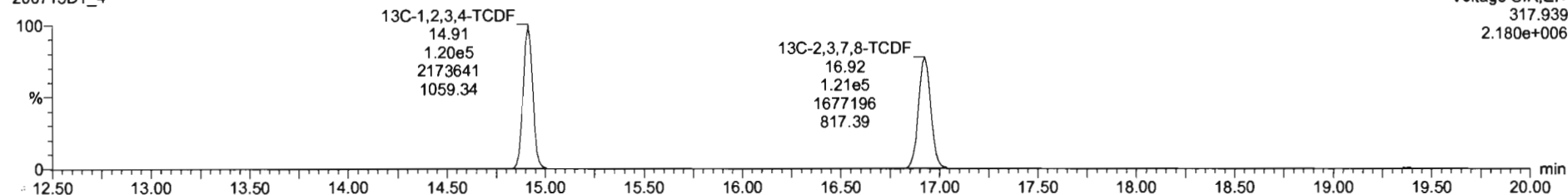


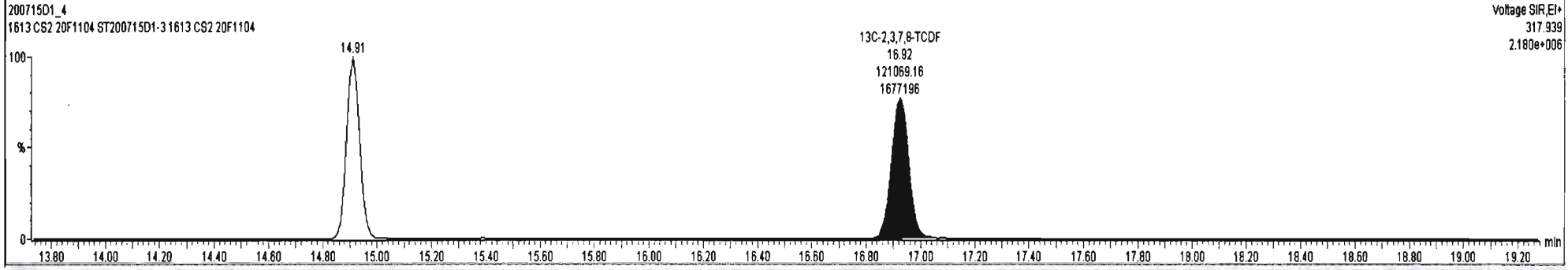
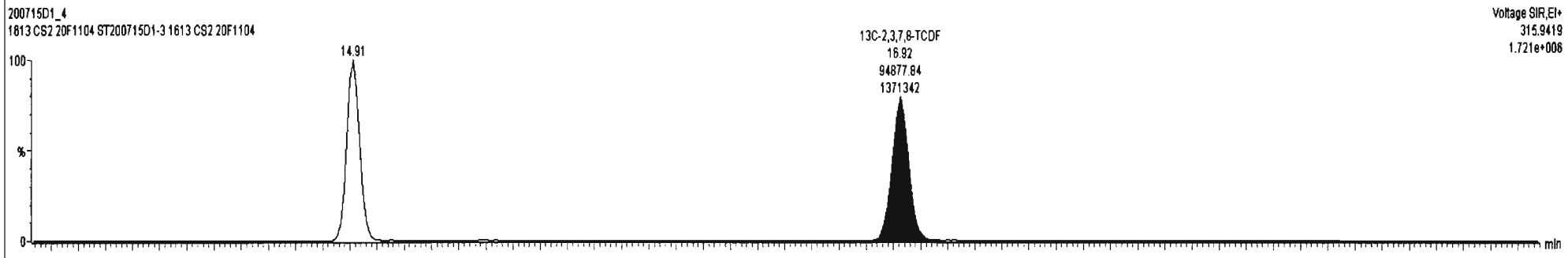
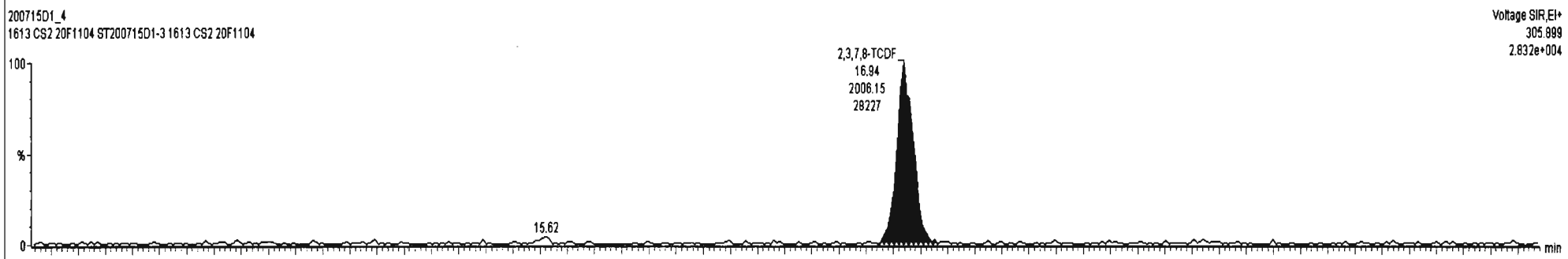
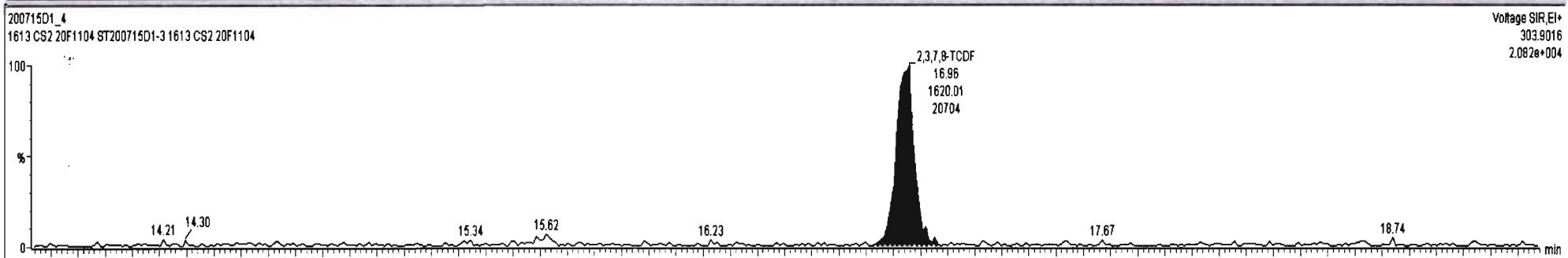
**13C-2,3,7,8-TCDF**

200715D1\_4



200715D1\_4





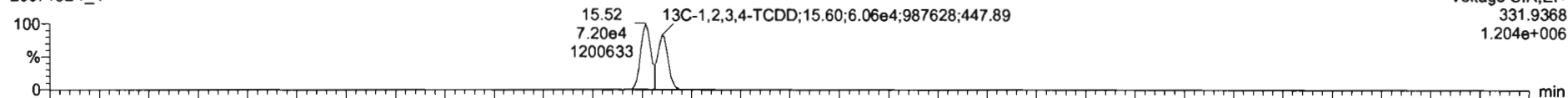
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

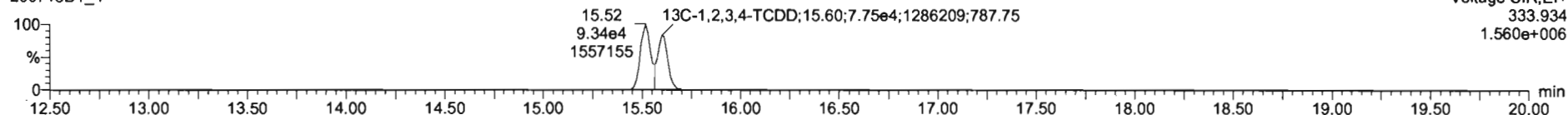
Name: 200715D1\_4, Date: 15-Jul-2020, Time: 12:12:22, ID: ST200715D1-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

13C-1,2,3,4-TCDD

200715D1\_4

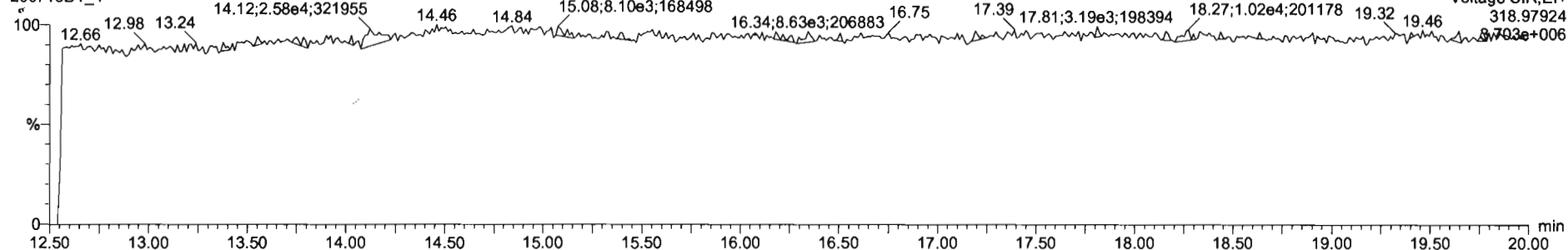


200715D1\_4



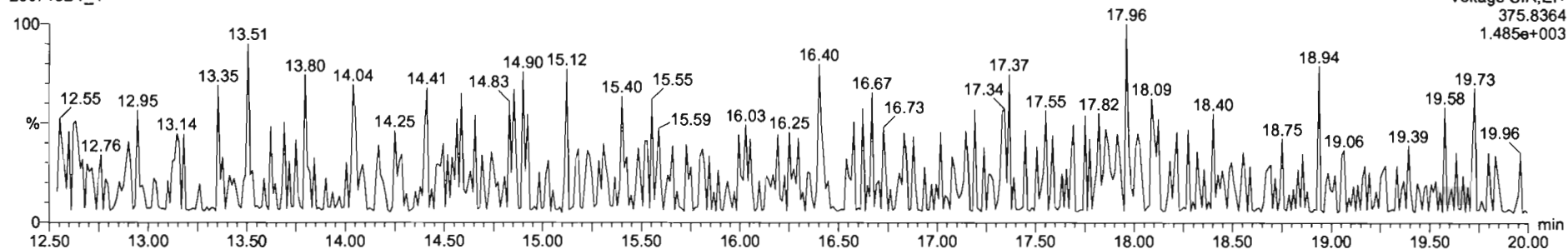
PFK1

200715D1\_4



DPE1

200715D1\_4

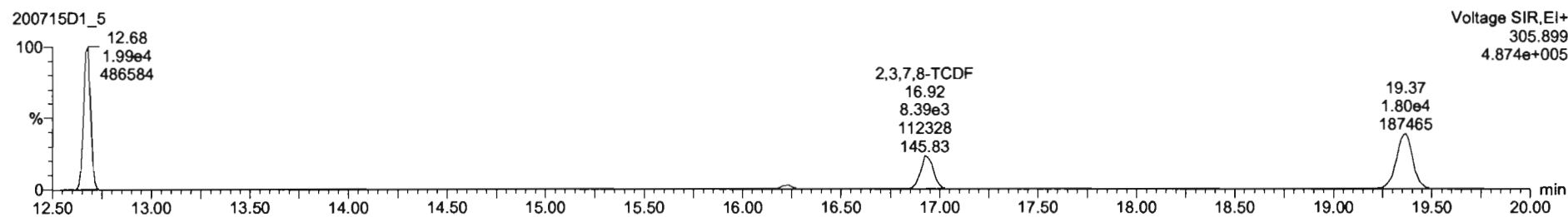
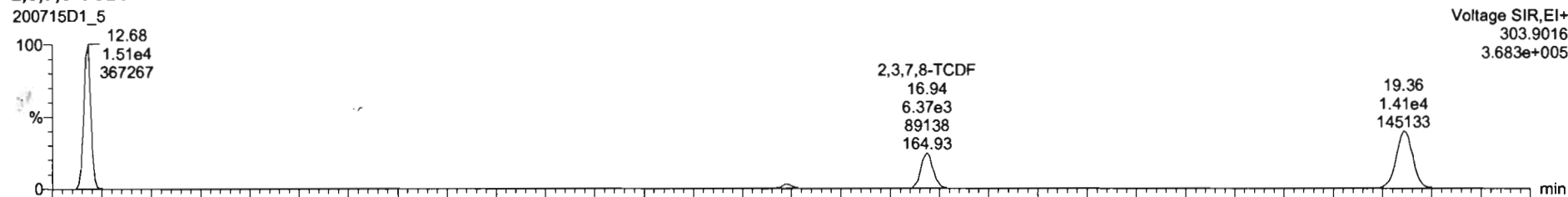


Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

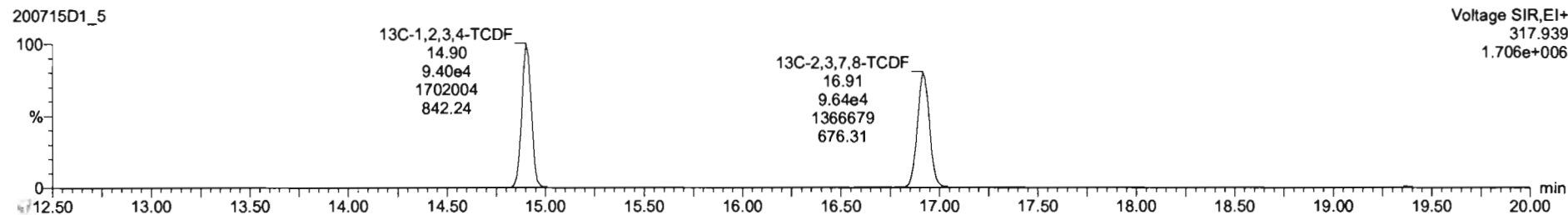
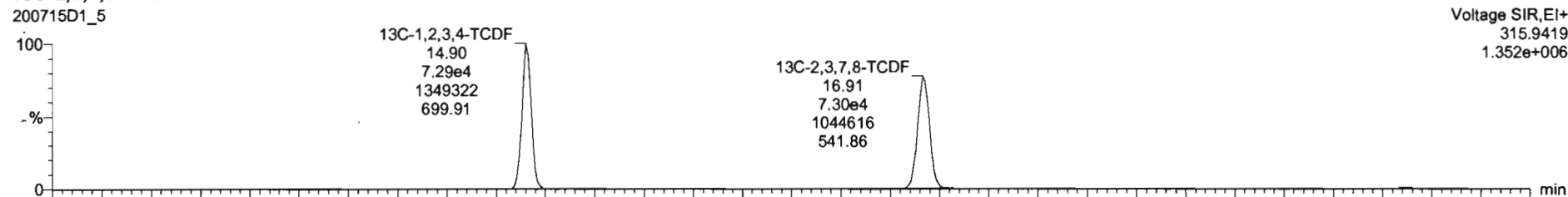
Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

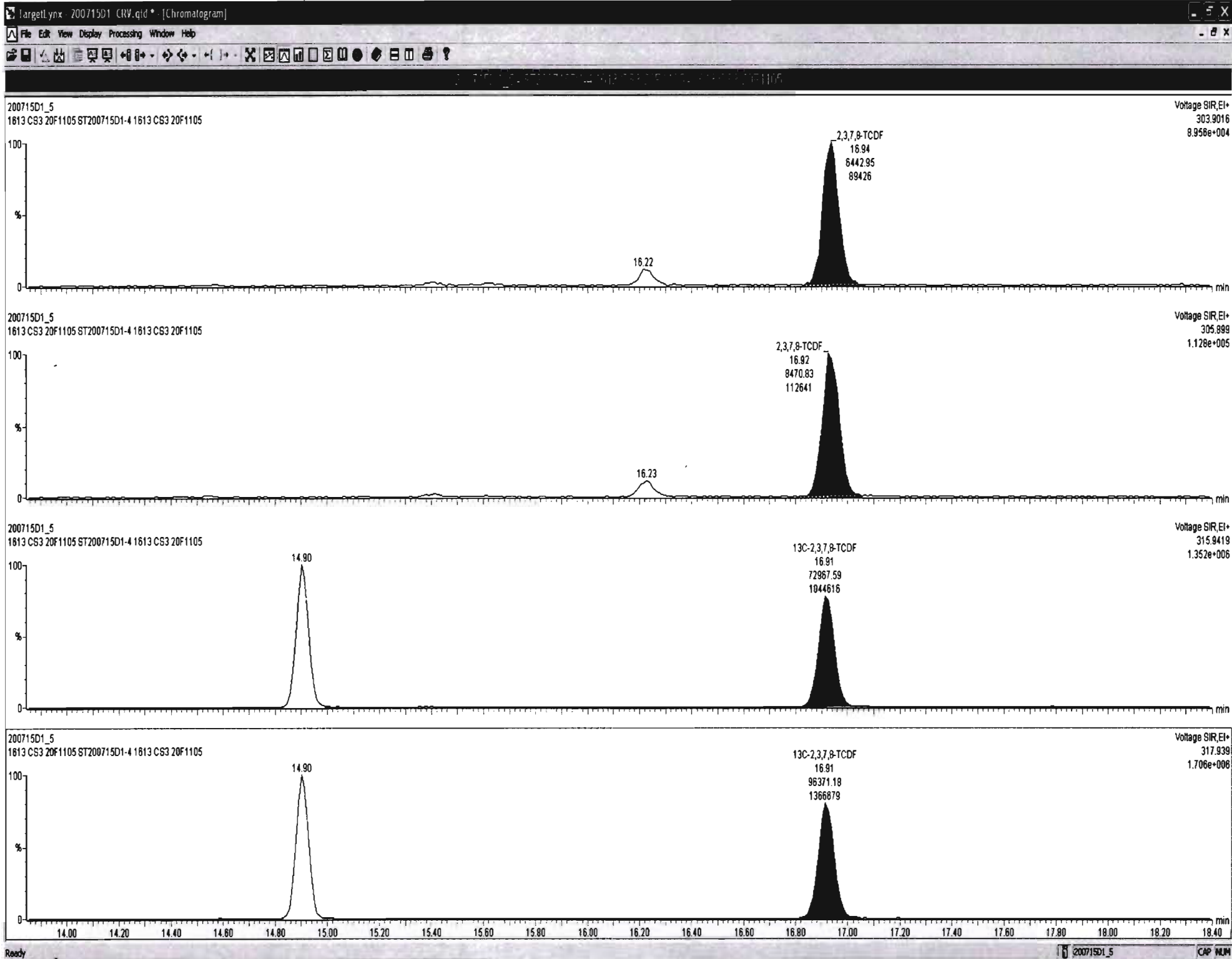
Name: 200715D1\_5, Date: 15-Jul-2020, Time: 12:44:03, ID: ST200715D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**2,3,7,8-TCDF**



**13C-2,3,7,8-TCDF**





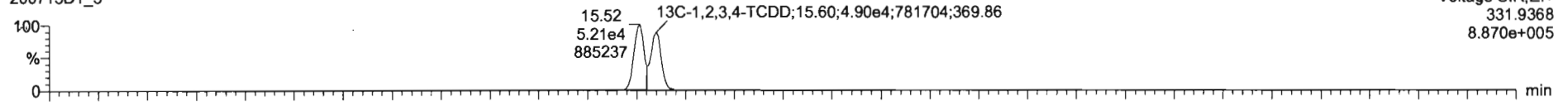
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

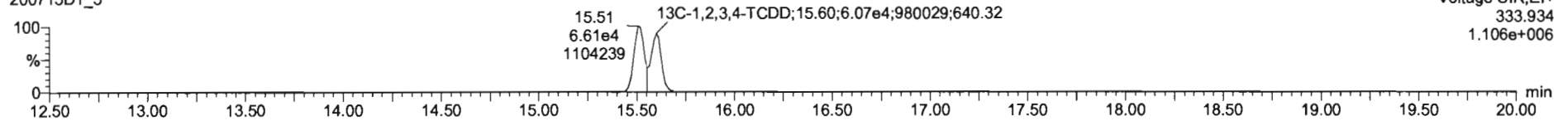
Name: 200715D1\_5, Date: 15-Jul-2020, Time: 12:44:03, ID: ST200715D1-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

**13C-1,2,3,4-TCDD**

200715D1\_5

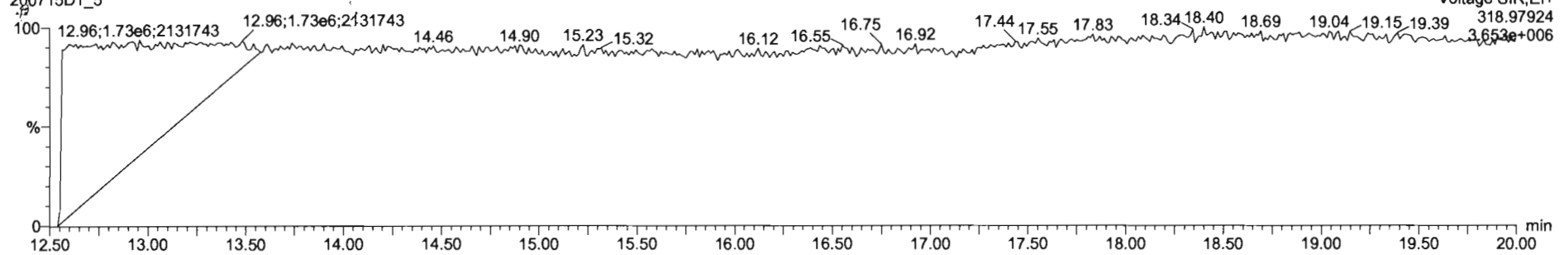


200715D1\_5



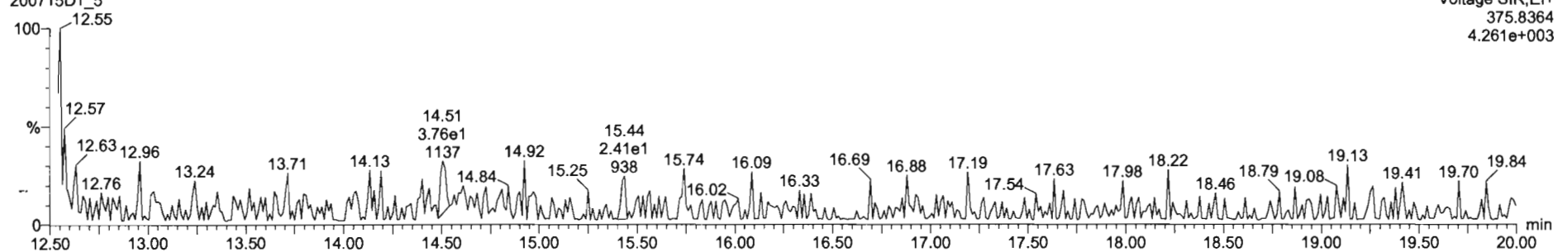
**PFK1**

200715D1\_5



**DPE1**

200715D1\_5





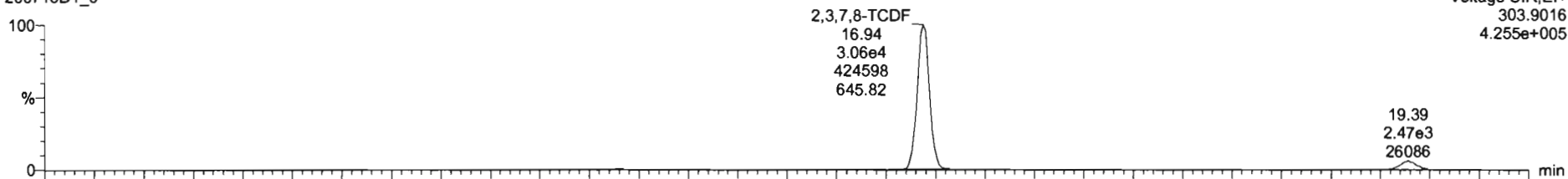
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

Name: 200715D1\_6, Date: 15-Jul-2020, Time: 13:15:44, ID: ST200715D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

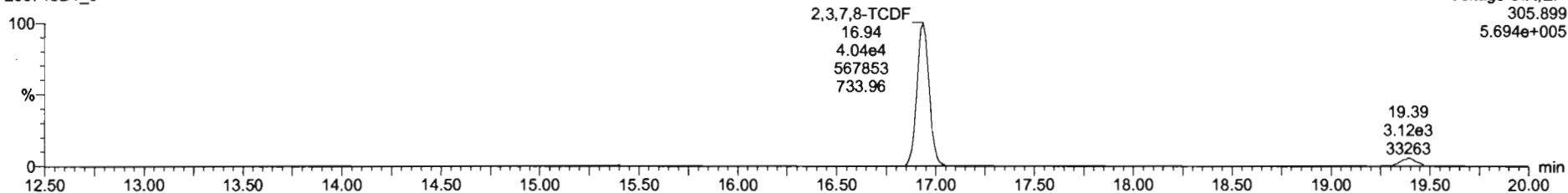
**2,3,7,8-TCDF**

200715D1\_6



Voltage SIR, EI+  
303.9016  
4.255e+005

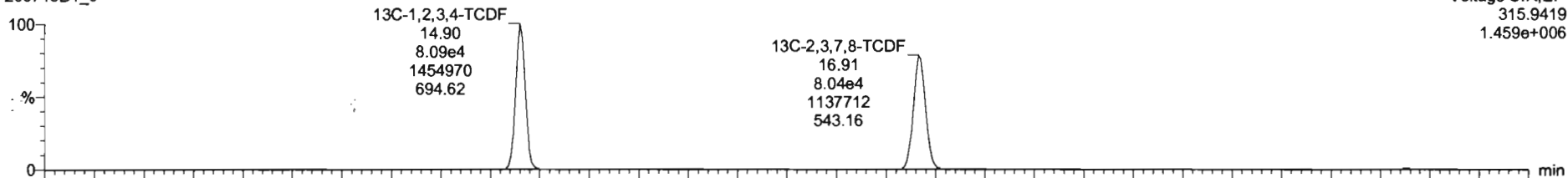
200715D1\_6



Voltage SIR, EI+  
305.899  
5.694e+005

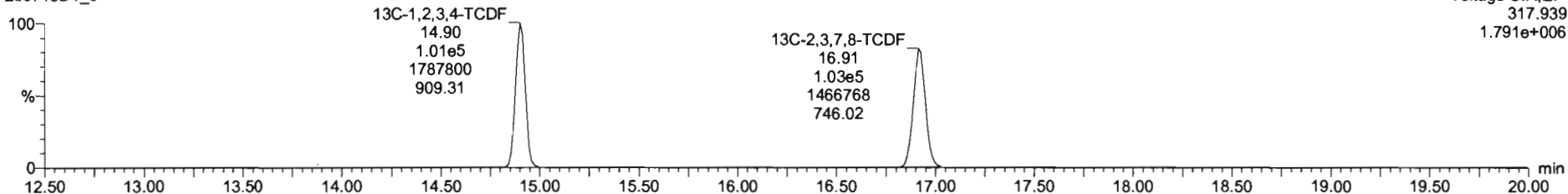
**13C-2,3,7,8-TCDF**

200715D1\_6

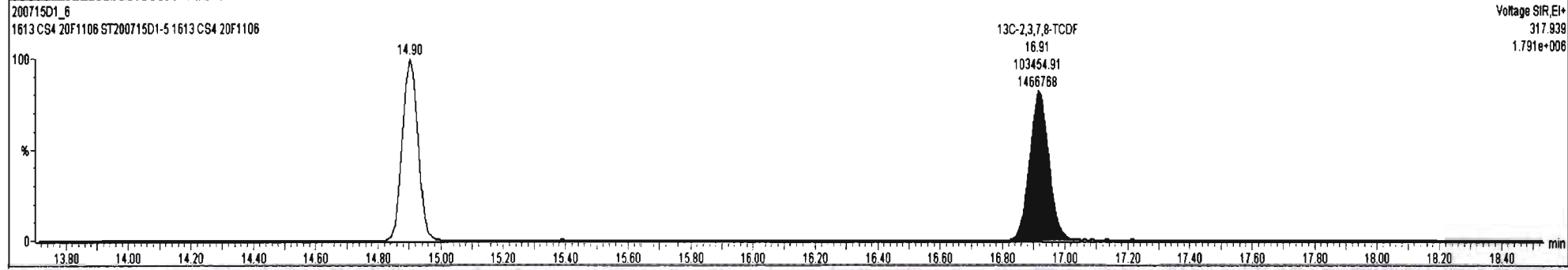
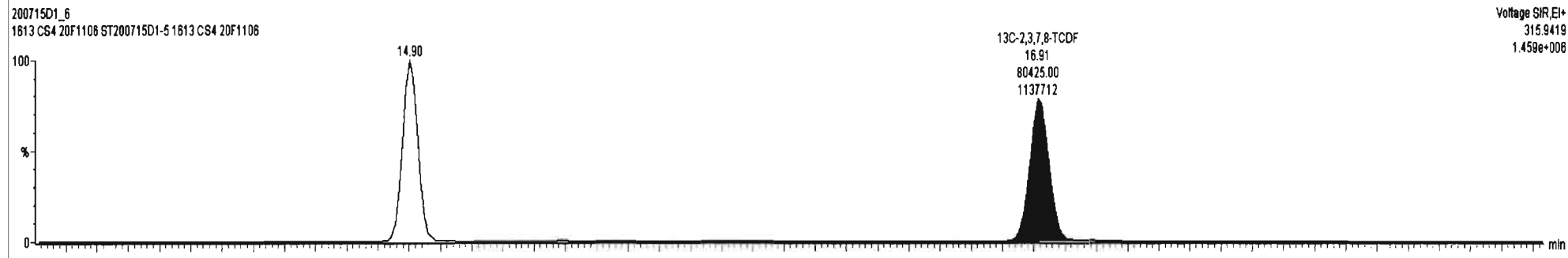
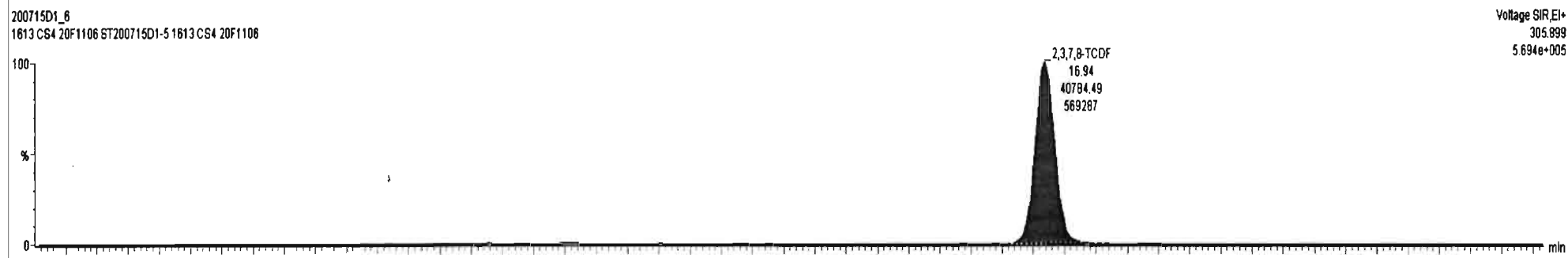
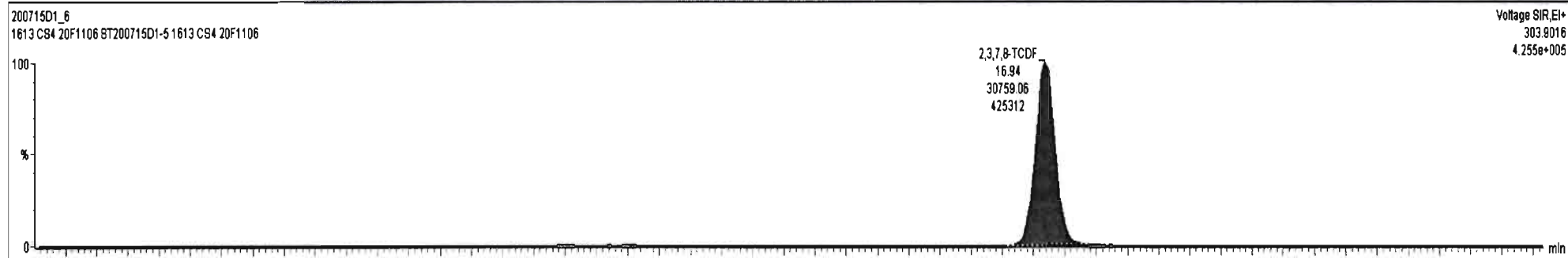


Voltage SIR, EI+  
315.9419  
1.459e+006

200715D1\_6



Voltage SIR, EI+  
317.939  
1.791e+006



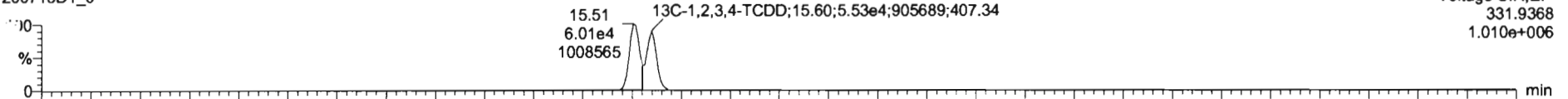
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

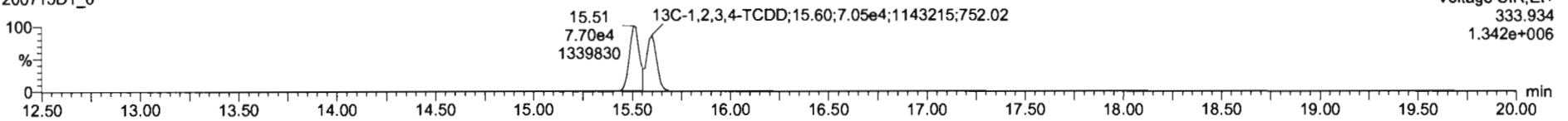
Name: 200715D1\_6, Date: 15-Jul-2020, Time: 13:15:44, ID: ST200715D1-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

13C-1,2,3,4-TCDD

200715D1\_6

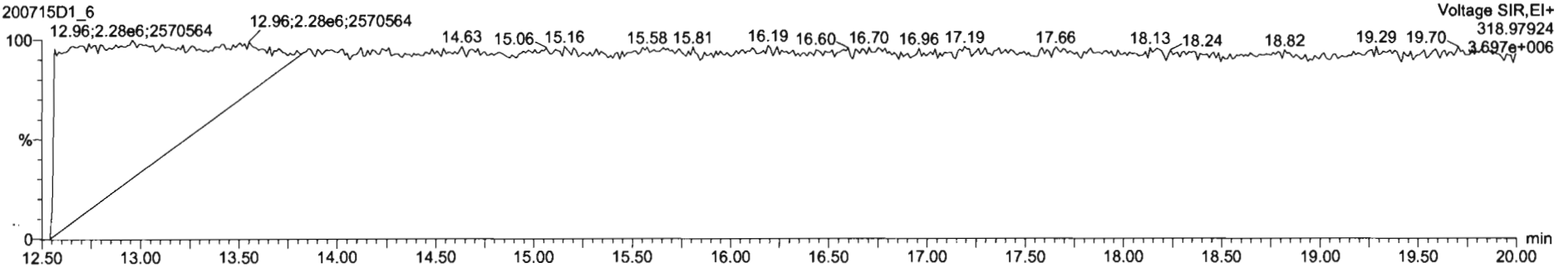


200715D1\_6



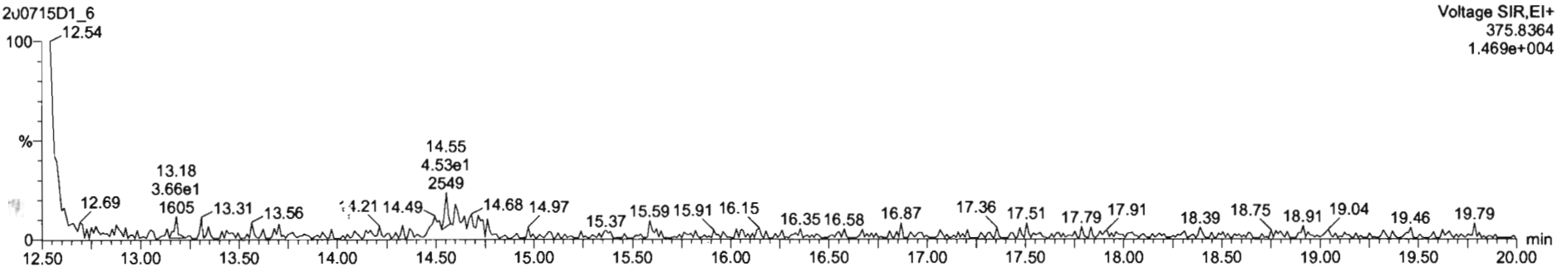
PFK1

200715D1\_6



DPE1

200715D1\_6



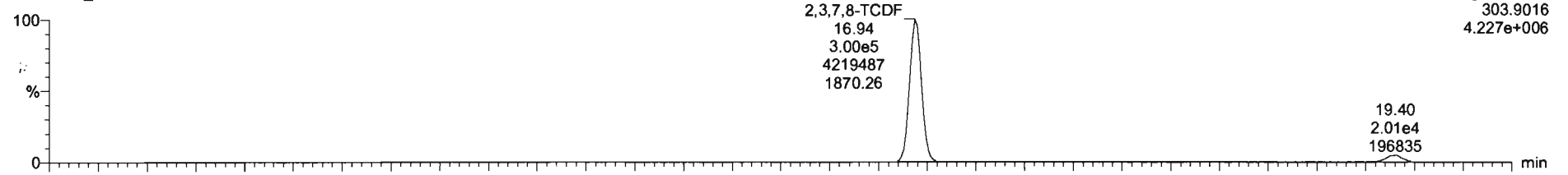
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

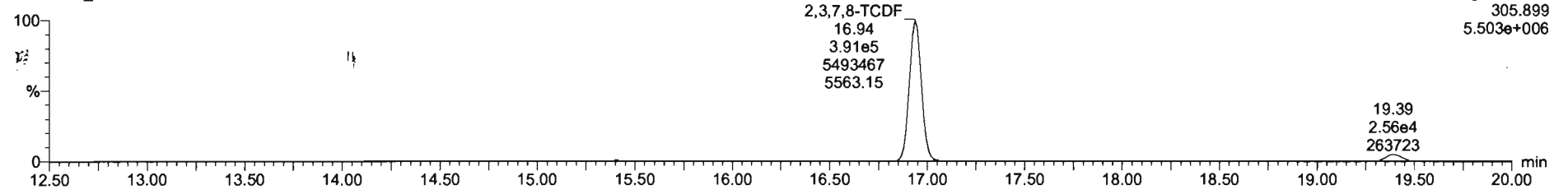
Name: 200715D1\_7, Date: 15-Jul-2020, Time: 13:47:26, ID: ST200715D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

2,3,7,8-TCDF

200715D1\_7

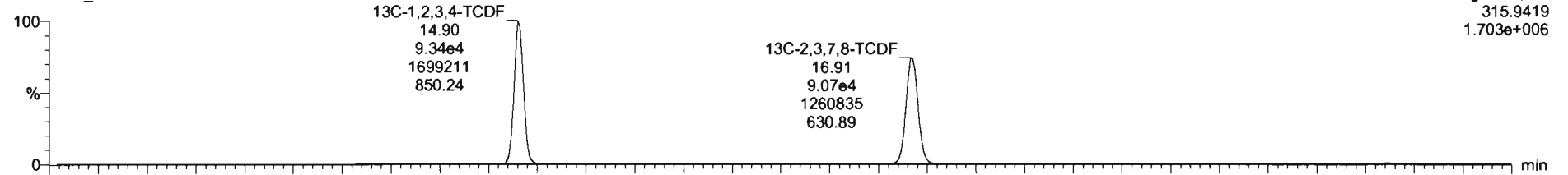


200715D1\_7

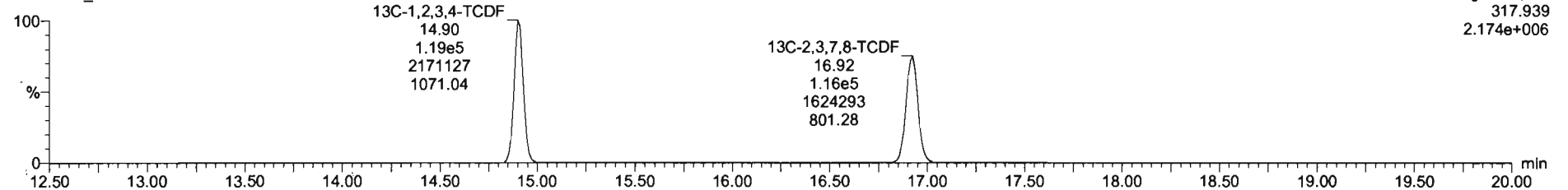


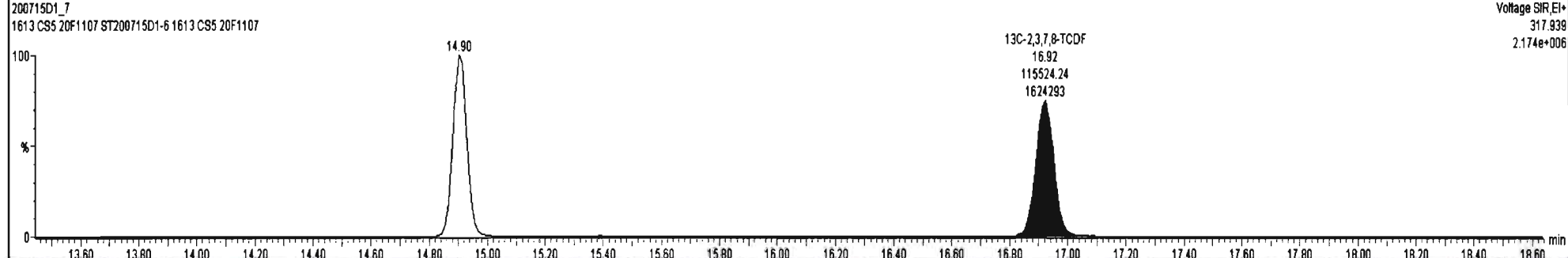
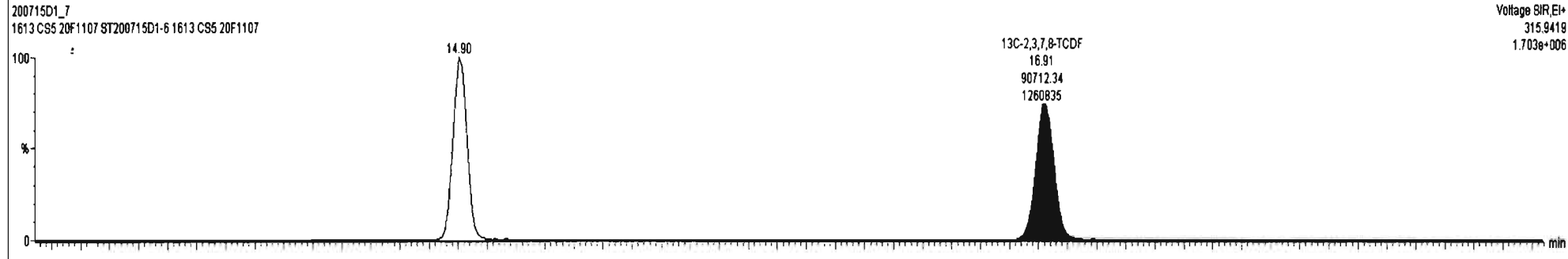
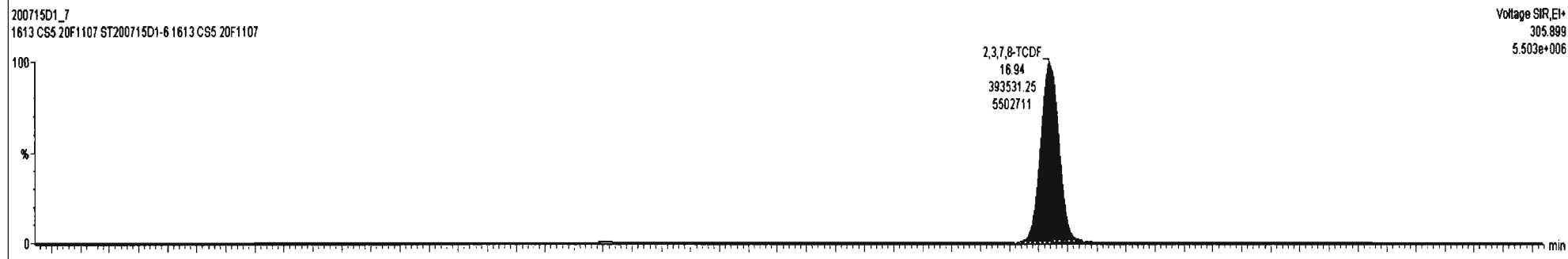
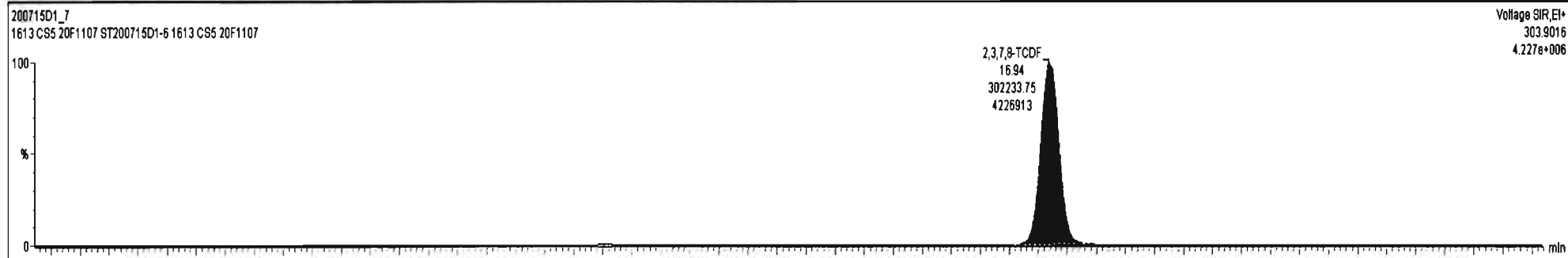
13C-2,3,7,8-TCDF

200715D1\_7



200715D1\_7





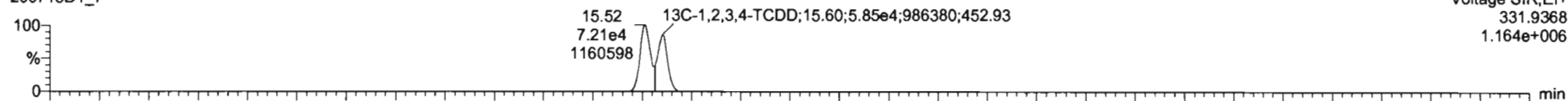
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_CRV.qld

Last Altered: Wednesday, July 15, 2020 14:25:25 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 14:28:10 Pacific Daylight Time

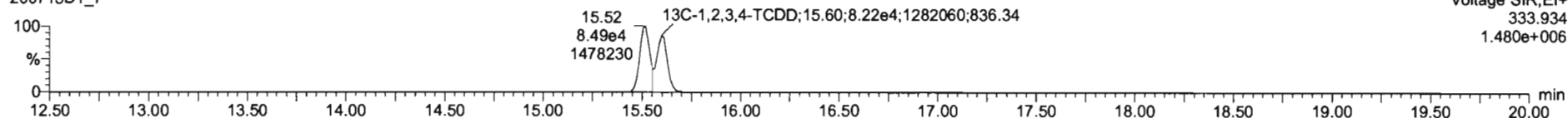
Name: 200715D1\_7, Date: 15-Jul-2020, Time: 13:47:26, ID: ST200715D1-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

13C-1,2,3,4-TCDD

200715D1\_7

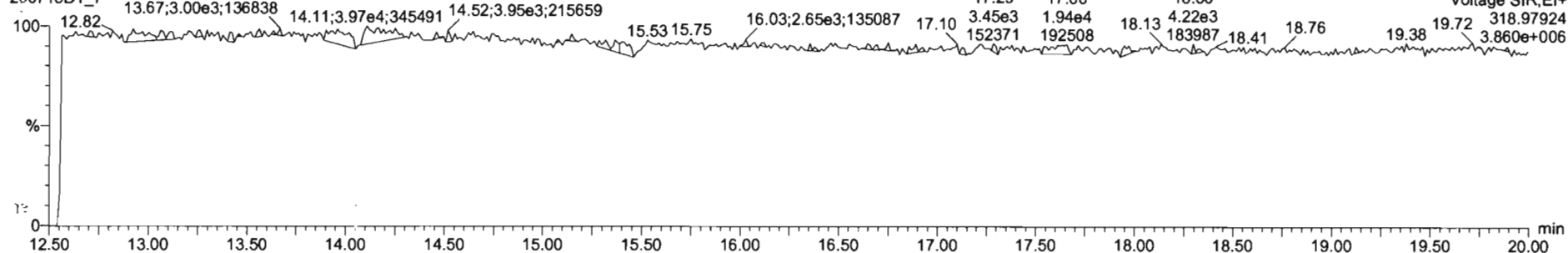


200715D1\_7



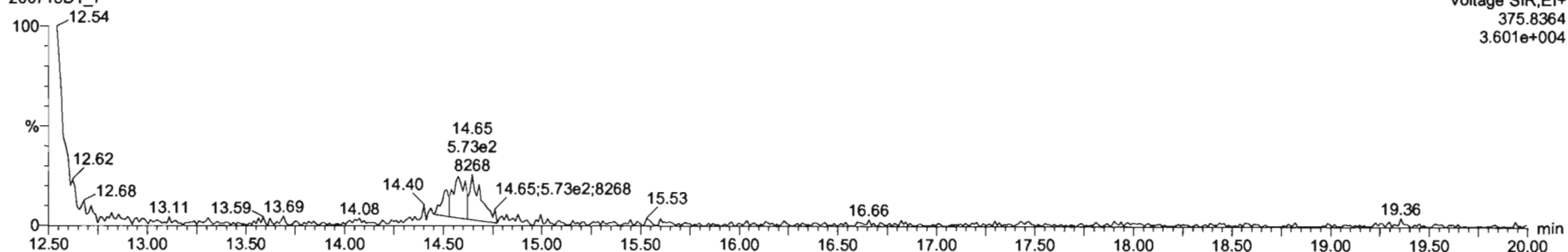
PFK1

200715D1\_7



DPE1

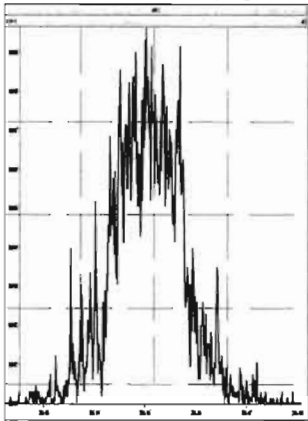
200715D1\_7



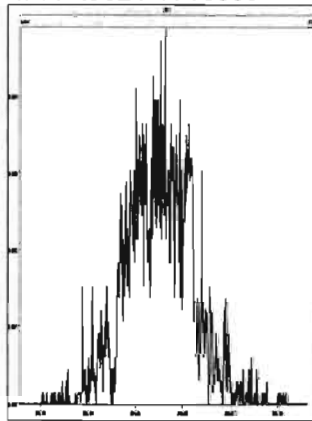
File: Experiment: tcdf\_db225.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Thursday, July 16, 2020 09:54:06 Pacific Daylight Time

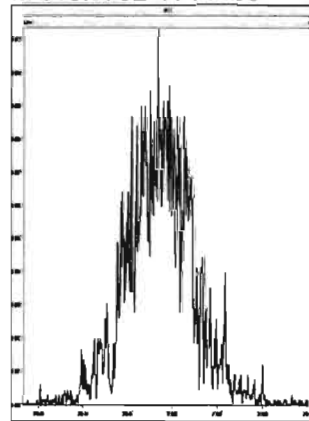
M 292.9824 R 12318



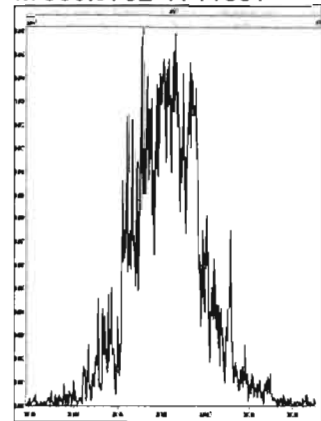
M 304.9824 R 15339



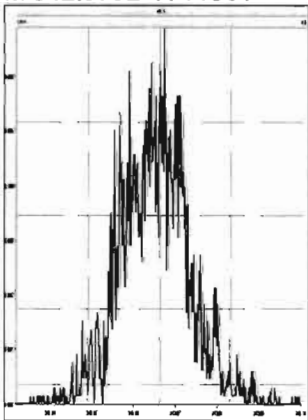
M 318.9792 R 10638



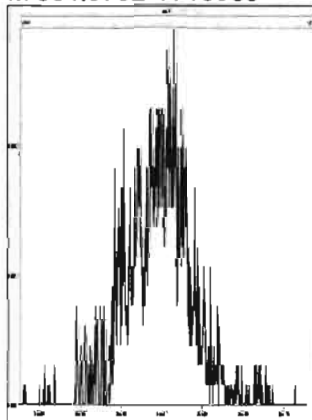
M 330.9792 R 11851



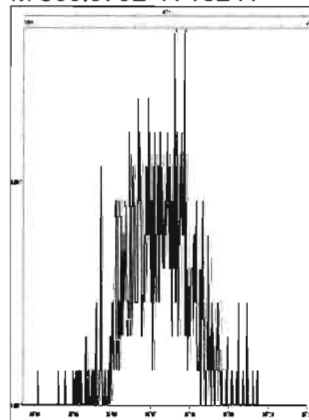
M 342.9792 R 11901



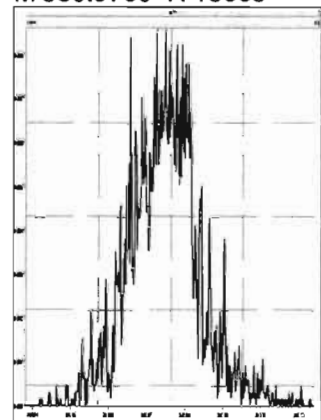
M 354.9792 R 13966



M 366.9792 R 15241



M 380.9760 R 13663



Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_9.qld

Last Altered: Wednesday, July 15, 2020 15:49:39 Pacific Daylight Time

Printed: Wednesday, July 15, 2020 15:50:45 Pacific Daylight Time

*DB 7/15/20 C1 07/16/2020*

Method: C:\MassLynx\Default.pro\Methdb\tcdf.mdb 03 Jul 2020 09:08:31

Calibration: U:\VG7.PRO\CurveDB\d\b-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200715D1\_9, Date: 15-Jul-2020, Time: 14:50:49, ID: SS200715D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	1.91e4	0.75	NO	0.944	1.000	16.945	16.95	1.000	1.001	9.3890	93.9	0.103	9.39
2	2 13C-2,3,7,8-TCDF	2.15e5	0.79	NO	1.01	1.000	16.954	16.92	1.133	1.134	100.19	100	0.301	
3	3 13C-1,2,3,4-TCDF	2.13e5	0.80	NO	1.00	1.000	14.920	14.92	1.000	1.000	100.00	100	0.304	



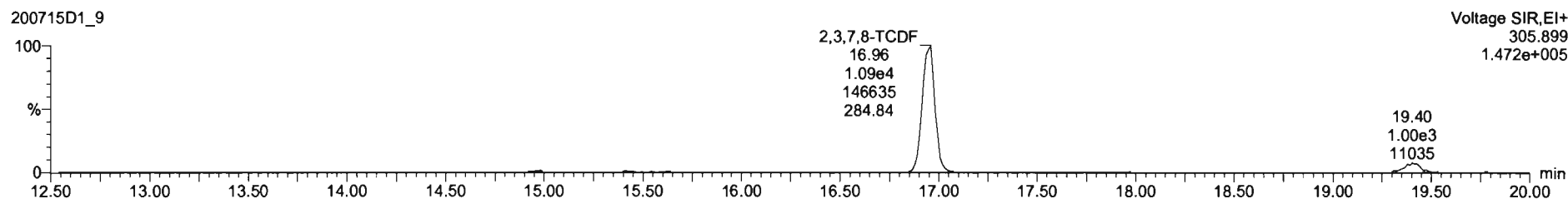
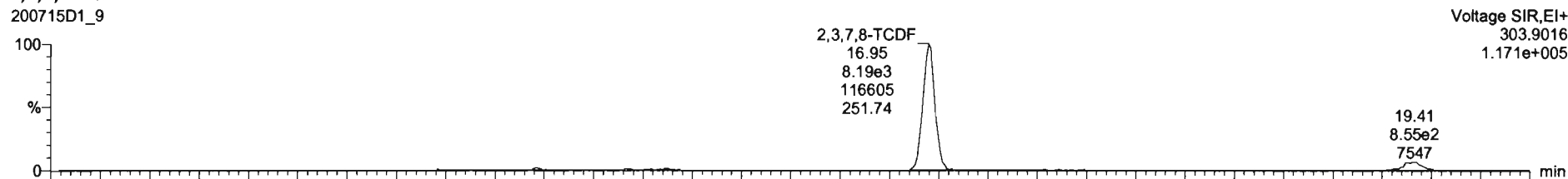
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_9.qld

Last Altered: Wednesday, July 15, 2020 15:49:39 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 15:50:59 Pacific Daylight Time

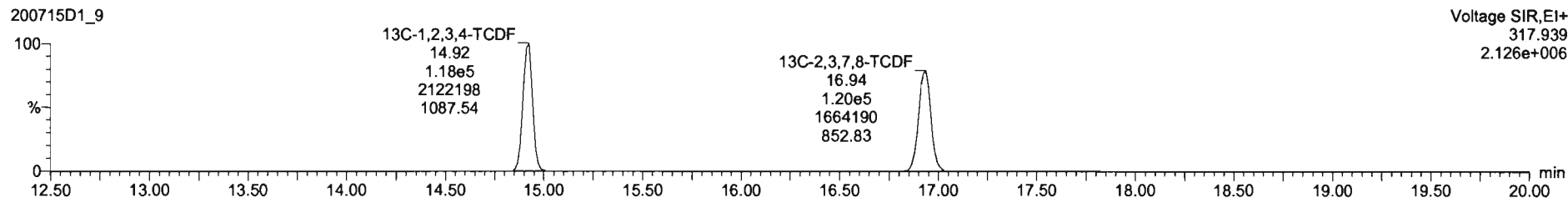
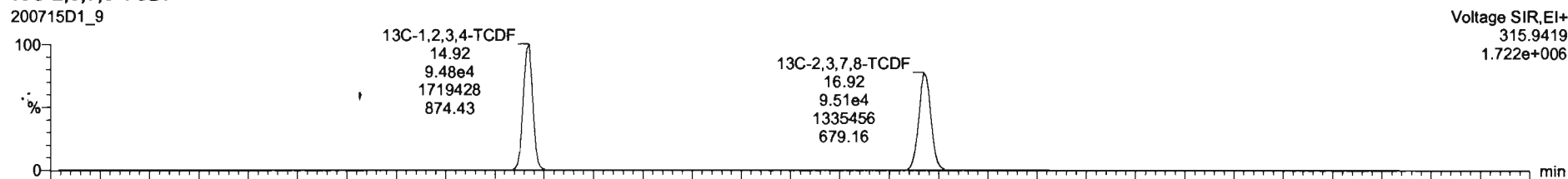
Method: C:\MassLynx\Default.pro\Methdb\tcdf.mdb 03 Jul 2020 09:08:31  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200715D1\_9, Date: 15-Jul-2020, Time: 14:50:49, ID: SS200715D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

2,3,7,8-TCDF



13C-2,3,7,8-TCDF



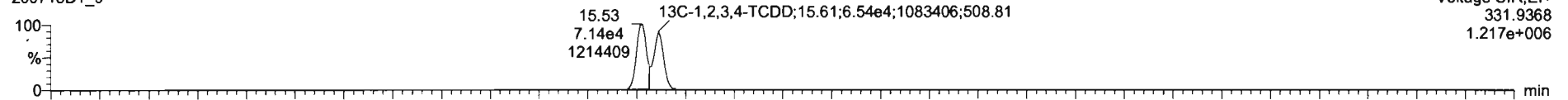
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_9.qld

Last Altered: Wednesday, July 15, 2020 15:49:39 Pacific Daylight Time  
Printed: Wednesday, July 15, 2020 15:50:59 Pacific Daylight Time

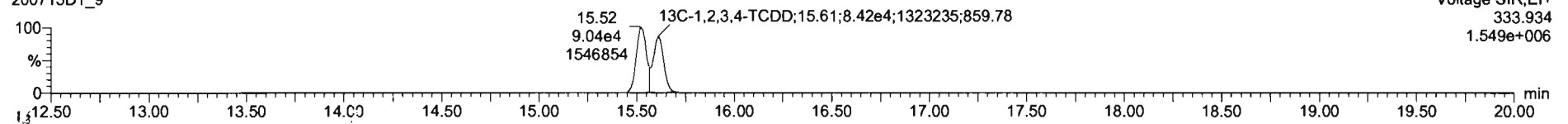
Name: 200715D1\_9, Date: 15-Jul-2020, Time: 14:50:49, ID: SS200715D1-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

**13C-1,2,3,4-TCDD**

200715D1\_9

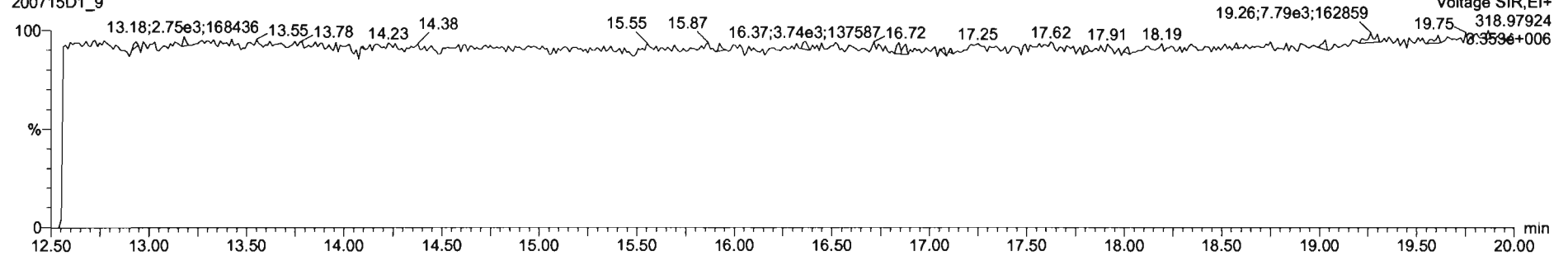


200715D1\_9



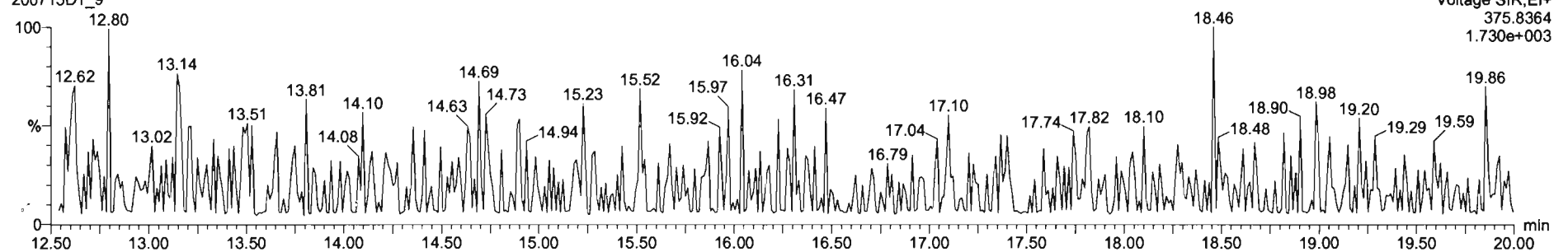
**PFK1**

200715D1\_9



**DPE1**

200715D1\_9



Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_18.qld

Last Altered: Thursday, July 16, 2020 09:41:46 Pacific Daylight Time  
Printed: Thursday, July 16, 2020 09:42:47 Pacific Daylight Time

DB 7/16/20

CT 07/16/2020

Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200715D1\_18, Date: 16-Jul-2020, Time: 09:18:49, ID: ST200715D1-7 1613 CS3 20F1105, Description: 1613 CS3 20F1105

#	Name	Resp	RA	n/y	RRF	w/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDF	1.43e4	0.78	NO	0.944	1.000	16.933	16.92	1.000	1.001	8.9676	89.780 -120	0.117	8.97
2	2 13C-2,3,7,8-TCDF	1.68e5	0.77	NO	1.01	1.000	16.931	16.91	1.133	1.135	101.05	10170-130	0.360	
3	3 13C-1,2,3,4-TCDF	1.65e5	0.78	NO	1.00	1.000	14.920	14.90	1.000	1.000	100.00	100	0.363	

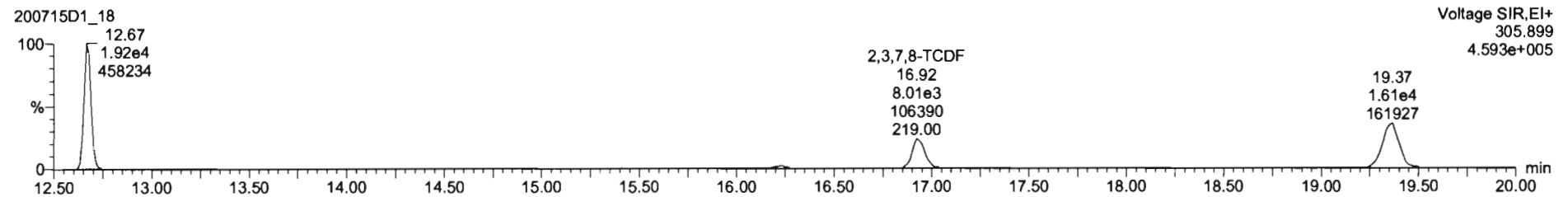
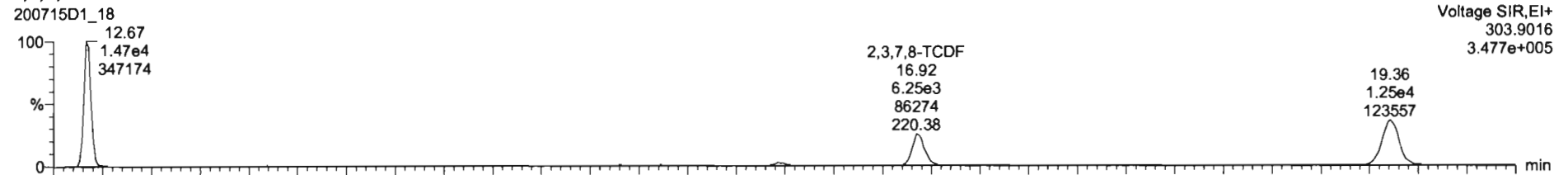
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_18.qld

Last Altered: Thursday, July 16, 2020 09:41:46 Pacific Daylight Time  
Printed: Thursday, July 16, 2020 09:43:01 Pacific Daylight Time

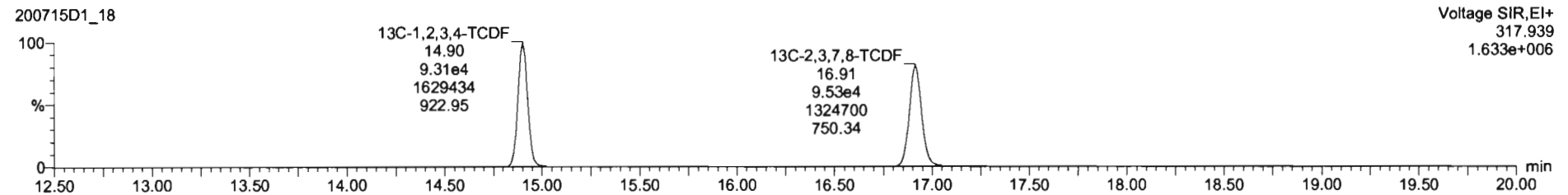
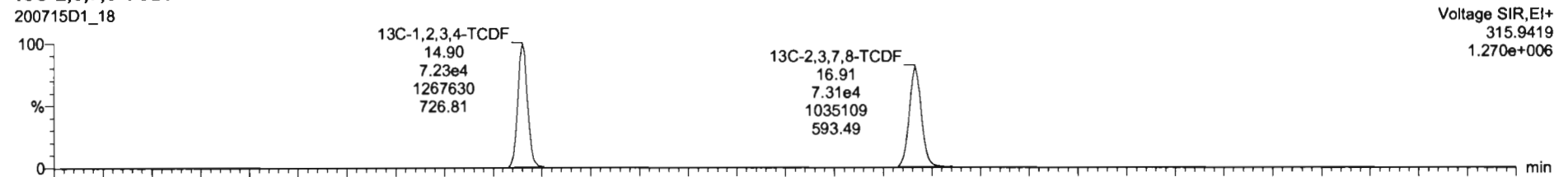
Method: C:\MassLynx\Default.PRO\MethDB\tcdf.mdb 03 Jul 2020 09:08:31  
Calibration: U:\VG7.PRO\CurveDB\db-225\_1613tcdfvg7-7-15-20.cdb 15 Jul 2020 14:34:27

Name: 200715D1\_18, Date: 16-Jul-2020, Time: 09:18:49, ID: ST200715D1-7 1613 CS3 20F1105, Description: 1613 CS3 20F1105

2,3,7,8-TCDF



13C-2,3,7,8-TCDF



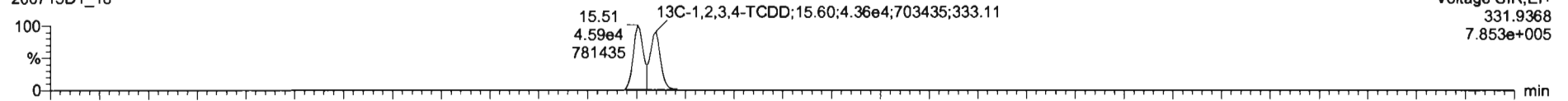
Dataset: U:\VG7.PRO\Results\200715D1\200715D1\_18.qld

Last Altered: Thursday, July 16, 2020 09:41:46 Pacific Daylight Time  
Printed: Thursday, July 16, 2020 09:43:01 Pacific Daylight Time

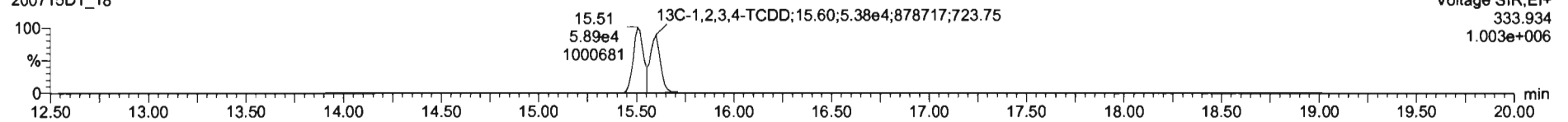
Name: 200715D1\_18, Date: 16-Jul-2020, Time: 09:18:49, ID: ST200715D1-7 1613 CS3 20F1105, Description: 1613 CS3 20F1105

13C-1,2,3,4-TCDD

200715D1\_18

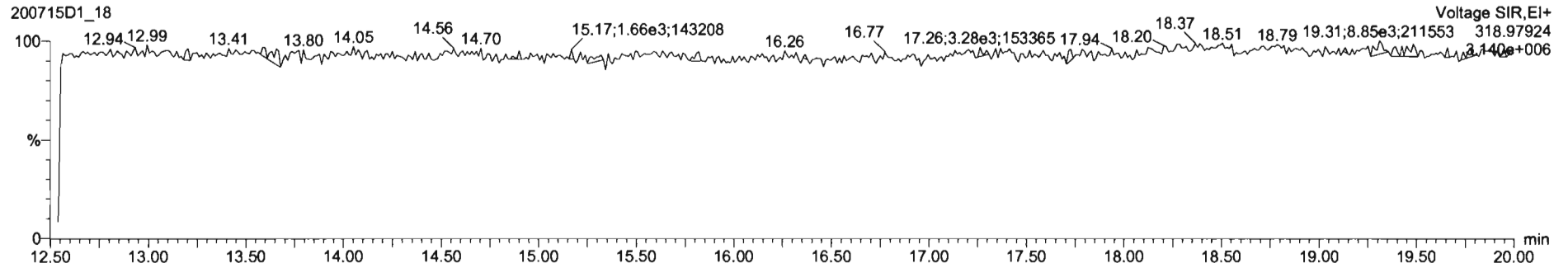


200715D1\_18



PFK1

200715D1\_18



DPE1

200715D1\_18

