



March 10, 2020

**Vista Work Order No. 2000407**

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 February 27, 2020 under your Project Name 'Gasco PDI 000029-02.59'.

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. 2000407**

**Case Narrative**

**Sample Condition on Receipt:**

Ten 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**

These 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. The concentration of 1,2,3,4,6,7,8-HpCDF was detected at 0.283 pg/g in the Method Blank. No other analytes were detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

As requested, a Duplicate was performed on sample "PDI-084SC-A-05-06-191002". The RPDs were out of the acceptance criteria for 2,3,7,8-TCDF, 2,3,4,7,8-PeCDF and 1,2,3,7,8,9-HxCDF.

The labeled standard recoveries outside the method acceptance criteria are listed in the table below:



## QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-2,3,7,8-TCDD	H	13.2
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,7,8-PeCDD	H	13.1
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,4,7,8-HxCDD	H	10.3
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,6,7,8-HxCDD	H	10.1
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,7,8,9-HxCDD	H	10.1
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,4,6,7,8-HpCDD	H	10.3
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-OCDD	H	10.0
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-2,3,7,8-TCDF	H	13.4
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,7,8-PeCDF	H	13.6
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-2,3,4,7,8-PeCDF	H	13.5
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,4,7,8-HxCDF	H	11.3
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,6,7,8-HxCDF	H	10.9
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-2,3,4,6,7,8-HxCDF	H	10.8
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,7,8,9-HxCDF	H	11.2
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,4,6,7,8-HpCDF	H	11.6
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-1,2,3,4,7,8,9-HpCDF	H	11.9
2000407-02	PDI-084SC-A-06-07-191002	EPA Method 1613B	13C-OCDF	H	10.4

H = Recovery was outside laboratory acceptance criteria.

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# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2000407-01	PDI-084SC-A-05-06-191002	DUP02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-02	PDI-084SC-A-06-07-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-03	PDI-084SC-A-07-08-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-04	PDI-084SC-A-08-09-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-05	PDI-084SC-A-09-10-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-06	PDI-084SC-A-10-11-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-07	PDI-084SC-A-11-12-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-08	PDI-084SC-A-12-13-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-09	PDI-084SC-A-13-14-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL
2000407-10	PDI-084SC-A-14-15-191002	02-Oct-19 11:23	27-Feb-20 08:43	Amber Glass, 120 mL

## **ANALYTICAL RESULTS**

Sample ID: Method Blank					EPA Method 1613B			
Matrix: Solid Sample Size: 10.0 g		QC Batch: B0B0291 Date Extracted: 28-Feb-2020 7:25		Lab Sample: B0B0291-BLK1 Date Analyzed: 03-Mar-20 16:59 Column: ZB-5MS				
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.165			IS 13C-2,3,7,8-TCDD	95.3	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0663			13C-1,2,3,7,8-PeCDD	108	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0946			13C-1,2,3,4,7,8-HxCDD	77.3	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0899			13C-1,2,3,6,7,8-HxCDD	85.5	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.112			13C-1,2,3,7,8,9-HxCDD	79.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	0.487			13C-1,2,3,4,6,7,8-HpCDD	79.8	23 - 140	
OCDD	ND	0.313			13C-OCDD	72.0	17 - 157	
2,3,7,8-TCDF	ND	0.516			13C-2,3,7,8-TCDF	100	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0715			13C-1,2,3,7,8-PeCDF	100	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0648			13C-2,3,4,7,8-PeCDF	104	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0828			13C-1,2,3,4,7,8-HxCDF	86.9	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0820			13C-1,2,3,6,7,8-HxCDF	89.7	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0900			13C-2,3,4,6,7,8-HxCDF	88.2	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.127			13C-1,2,3,7,8,9-HxCDF	83.1	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.283			J	13C-1,2,3,4,6,7,8-HpCDF	93.5	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.327			13C-1,2,3,4,7,8,9-HpCDF	89.4	26 - 138	
OCDF	ND	0.218			13C-OCDF	76.8	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	94.6	35 - 197	
					<b>Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)</b>			
					TEQMinWHO2005Dioxin 0.00283			
<b>TOTALS</b>								
Total TCDD	ND	0.165						
Total PeCDD	ND	0.0663						
Total HxCDD	ND	0.112						
Total HpCDD	ND	0.487						
Total TCDF	ND	0.516						
Total PeCDF	ND	0.0715						
Total HxCDF	ND		0.184					
Total HpCDF	0.283							

DL - 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.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: OPR					EPA Method 1613B		
Matrix: Solid Sample Size: 10.0 g		QC Batch: B0B0291 Date Extracted: 28-Feb-2020 7:25			Lab Sample: B0B0291-BS1 Date Analyzed: 03-Mar-20 15:25 Column: ZB-5MS		
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	16.4	20.0	81.8	67 - 158	IS 13C-2,3,7,8-TCDD	57.0	20 - 175
1,2,3,7,8-PeCDD	80.5	100	80.5	70 - 142	13C-1,2,3,7,8-PeCDD	64.6	21 - 227
1,2,3,4,7,8-HxCDD	94.6	100	94.6	70 - 164	13C-1,2,3,4,7,8-HxCDD	44.7	21 - 193
1,2,3,6,7,8-HxCDD	88.8	100	88.8	76 - 134	13C-1,2,3,6,7,8-HxCDD	52.6	25 - 163
1,2,3,7,8,9-HxCDD	94.9	100	94.9	64 - 162	13C-1,2,3,7,8,9-HxCDD	49.2	21 - 193
1,2,3,4,6,7,8-HpCDD	93.5	100	93.5	70 - 140	13C-1,2,3,4,6,7,8-HpCDD	46.9	26 - 166
OCDD	178	200	89.1	78 - 144	13C-OCDD	45.4	13 - 199
2,3,7,8-TCDF	18.6	20.0	93.1	75 - 158	13C-2,3,7,8-TCDF	59.1	22 - 152
1,2,3,7,8-PeCDF	87.0	100	87.0	80 - 134	13C-1,2,3,7,8-PeCDF	62.3	21 - 192
2,3,4,7,8-PeCDF	91.8	100	91.8	68 - 160	13C-2,3,4,7,8-PeCDF	62.5	13 - 328
1,2,3,4,7,8-HxCDF	102	100	102	72 - 134	13C-1,2,3,4,7,8-HxCDF	51.6	19 - 202
1,2,3,6,7,8-HxCDF	109	100	109	84 - 130	13C-1,2,3,6,7,8-HxCDF	51.1	21 - 159
2,3,4,6,7,8-HxCDF	106	100	106	70 - 156	13C-2,3,4,6,7,8-HxCDF	51.8	22 - 176
1,2,3,7,8,9-HxCDF	101	100	101	78 - 130	13C-1,2,3,7,8,9-HxCDF	50.8	17 - 205
1,2,3,4,6,7,8-HpCDF	105	100	105	82 - 122	13C-1,2,3,4,6,7,8-HpCDF	52.8	21 - 158
1,2,3,4,7,8,9-HpCDF	107	100	107	78 - 138	13C-1,2,3,4,7,8,9-HpCDF	50.1	20 - 186
OCDF	203	200	101	63 - 170	13C-OCDF	47.0	13 - 199
					CRS 37Cl-2,3,7,8-TCDD	90.3	31 - 191

LCL-UCL - Lower control limit - upper control limit

**Sample ID: PDI-084SC-A-05-06-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-01      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 18.5 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 54.3	Date Analyzed : 03-Mar-20 17:47      Column: ZB-5MS 10-Mar-20 00:30      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	1.20				IS 13C-2,3,7,8-TCDD	90.6	25 - 164	
1,2,3,7,8-PeCDD	2.27			J	13C-1,2,3,7,8-PeCDD	93.8	25 - 181	
1,2,3,4,7,8-HxCDD	3.85				13C-1,2,3,4,7,8-HxCDD	72.9	32 - 141	
1,2,3,6,7,8-HxCDD	24.6				13C-1,2,3,6,7,8-HxCDD	85.5	28 - 130	
1,2,3,7,8,9-HxCDD	10.6				13C-1,2,3,7,8,9-HxCDD	75.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	859				13C-1,2,3,4,6,7,8-HpCDD	84.6	23 - 140	
OCDD	12700			D	13C-OCDD	73.1	17 - 157	D
2,3,7,8-TCDF	207				13C-2,3,7,8-TCDF	94.8	24 - 169	
1,2,3,7,8-PeCDF	448				13C-1,2,3,7,8-PeCDF	92.4	24 - 185	
2,3,4,7,8-PeCDF	41.2				13C-2,3,4,7,8-PeCDF	93.7	21 - 178	
1,2,3,4,7,8-HxCDF	940				13C-1,2,3,4,7,8-HxCDF	83.4	26 - 152	
1,2,3,6,7,8-HxCDF	323				13C-1,2,3,6,7,8-HxCDF	82.3	26 - 123	
2,3,4,6,7,8-HxCDF	68.6				13C-2,3,4,6,7,8-HxCDF	81.9	28 - 136	
1,2,3,7,8,9-HxCDF	10.8				13C-1,2,3,7,8,9-HxCDF	83.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	727			B	13C-1,2,3,4,6,7,8-HpCDF	88.1	28 - 143	
1,2,3,4,7,8,9-HpCDF	185				13C-1,2,3,4,7,8,9-HpCDF	91.0	26 - 138	
OCDF	1480				13C-OCDF	84.5	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	92.9	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**

TEQMinWHO2005Dioxin      210

<b>TOTALS</b>								
Total TCDD	19.8		20.8					
Total PeCDD	25.9							
Total HxCDD	227							
Total HpCDD	2060							
Total TCDF	609		629	P				
Total PeCDF	1210							
Total HxCDF	1980							
Total HpCDF	2080			B				

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: Duplicate					EPA Method 1613B				
Source Client ID: PDI-084SC-A-05-06-191002		QC Batch: B0B0291		Lab Sample: B0B0291-DUP1					
Source LabNumber: 2000407-01		Date Extracted: 28-Feb-2020 7:25		Date Analyzed: 03-Mar-20 18:34 Column: ZB-5MS					
Matrix: Solid				10-Mar-20 00:00 Column: ZB-5MS					
Sample Size: 18.5 g									
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers	
2,3,7,8-TCDD	1.31				IS 13C-2,3,7,8-TCDD	89.9	25 - 164		
1,2,3,7,8-PeCDD	2.29			J	13C-1,2,3,7,8-PeCDD	96.1	25 - 181		
1,2,3,4,7,8-HxCDD	3.79				13C-1,2,3,4,7,8-HxCDD	72.1	32 - 141		
1,2,3,6,7,8-HxCDD	25.7				13C-1,2,3,6,7,8-HxCDD	84.6	28 - 130		
1,2,3,7,8,9-HxCDD	10.3				13C-1,2,3,7,8,9-HxCDD	80.3	32 - 141		
1,2,3,4,6,7,8-HpCDD	876				13C-1,2,3,4,6,7,8-HpCDD	84.2	23 - 140		
OCDD	12900			D	13C-OCDD	67.4	17 - 157	D	
2,3,7,8-TCDF	271				13C-2,3,7,8-TCDF	92.2	24 - 169		
1,2,3,7,8-PeCDF	518				13C-1,2,3,7,8-PeCDF	94.1	24 - 185		
2,3,4,7,8-PeCDF	83.1				13C-2,3,4,7,8-PeCDF	94.3	21 - 178		
1,2,3,4,7,8-HxCDF	922				13C-1,2,3,4,7,8-HxCDF	84.3	26 - 152		
1,2,3,6,7,8-HxCDF	307				13C-1,2,3,6,7,8-HxCDF	81.3	26 - 123		
2,3,4,6,7,8-HxCDF	71.8				13C-2,3,4,6,7,8-HxCDF	79.8	28 - 136		
1,2,3,7,8,9-HxCDF	27.3				13C-1,2,3,7,8,9-HxCDF	82.2	29 - 147		
1,2,3,4,6,7,8-HpCDF	739			B	13C-1,2,3,4,6,7,8-HpCDF	88.7	28 - 143		
1,2,3,4,7,8,9-HpCDF	186				13C-1,2,3,4,7,8,9-HpCDF	89.4	26 - 138		
OCDF	1590				13C-OCDF	82.6	17 - 157		
					CRS 37Cl-2,3,7,8-TCDD	88.5	35 - 197		
					<b>Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)</b>				
					TEQMinWHO2005Dioxin		230		
<b>TOTALS</b>									
Total TCDD	21.7		22.3						
Total PeCDD	28.2								
Total HxCDD	229								
Total HpCDD	2120								
Total TCDF	799		824	P					
Total PeCDF	1390								
Total HxCDF	1940								
Total HpCDF	2140			B					

DL - 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: Duplicate					EPA Method 1613B				
Source Client ID: PDI-084SC-A-05-06-191002					Duplicate Lab Sample: B0B0291-DUP1				
Source LabNumber: 2000407-01									
Matrix: Solid									
Analyte	Dup Conc. (pg/g )	Source Conc.	RPD	RPD Limits	Labeled Standard	Dup %R	Source %R	LCL-UCL	
2,3,7,8-TCDD	1.31	1.20	8.74	25	IS 13C-2,3,7,8-TCDD	89.9	90.6	25 - 164	
1,2,3,7,8-PeCDD	2.29	2.27	1.08	25	13C-1,2,3,7,8-PeCDD	96.1	93.8	25 - 181	
1,2,3,4,7,8-HxCDD	3.79	3.85	1.60	25	13C-1,2,3,4,7,8-HxCDD	72.1	72.9	32 - 141	
1,2,3,6,7,8-HxCDD	25.7	24.6	4.32	25	13C-1,2,3,6,7,8-HxCDD	84.6	85.5	28 - 130	
1,2,3,7,8,9-HxCDD	10.3	10.6	3.01	25	13C-1,2,3,7,8,9-HxCDD	80.3	75.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	876	859	2.02	25	13C-1,2,3,4,6,7,8-HpCDD	84.2	84.6	23 - 140	
OCDD	12900	12700	0.922	25	13C-OCDD	67.4	73.1	17 - 157	
2,3,7,8-TCDF	271	207	<b>26.9</b>	25	13C-2,3,7,8-TCDF	92.2	94.8	24 - 169	
1,2,3,7,8-PeCDF	518	448	14.6	25	13C-1,2,3,7,8-PeCDF	94.1	92.4	24 - 185	
2,3,4,7,8-PeCDF	83.1	41.2	<b>67.4</b>	25	13C-2,3,4,7,8-PeCDF	94.3	93.7	21 - 178	
1,2,3,4,7,8-HxCDF	922	940	1.96	25	13C-1,2,3,4,7,8-HxCDF	84.3	83.4	26 - 152	
1,2,3,6,7,8-HxCDF	307	323	5.35	25	13C-1,2,3,6,7,8-HxCDF	81.3	82.3	26 - 123	
2,3,4,6,7,8-HxCDF	71.8	68.6	4.54	25	13C-2,3,4,6,7,8-HxCDF	79.8	81.9	28 - 136	
1,2,3,7,8,9-HxCDF	27.3	10.8	<b>86.2</b>	25	13C-1,2,3,7,8,9-HxCDF	82.2	83.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	739	727	1.75	25	13C-1,2,3,4,6,7,8-HpCDF	88.7	88.1	28 - 143	
1,2,3,4,7,8,9-HpCDF	186	185	0.698	25	13C-1,2,3,4,7,8,9-HpCDF	89.4	91.0	26 - 138	
OCDF	1590	1480	7.46	25	13C-OCDF	82.6	84.5	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	88.5	92.9	35 - 197	

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

**Sample ID: PDI-084SC-A-06-07-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-02      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 16.5 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 60.9	Date Analyzed : 03-Mar-20 19:21      Column: ZB-5MS 10-Mar-20 10:56      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.608			IS 13C-2,3,7,8-TCDD	13.2	25 - 164	H
1,2,3,7,8-PeCDD	1.15			J	13C-1,2,3,7,8-PeCDD	13.1	25 - 181	H
1,2,3,4,7,8-HxCDD	1.20			J	13C-1,2,3,4,7,8-HxCDD	10.3	32 - 141	H
1,2,3,6,7,8-HxCDD	6.80				13C-1,2,3,6,7,8-HxCDD	10.1	28 - 130	H
1,2,3,7,8,9-HxCDD	ND		2.36		13C-1,2,3,7,8,9-HxCDD	10.1	32 - 141	H
1,2,3,4,6,7,8-HpCDD	298				13C-1,2,3,4,6,7,8-HpCDD	10.3	23 - 140	H
OCDD	4200				13C-OCDD	10.0	17 - 157	H
2,3,7,8-TCDF	85.8				13C-2,3,7,8-TCDF	13.4	24 - 169	H
1,2,3,7,8-PeCDF	111				13C-1,2,3,7,8-PeCDF	13.6	24 - 185	H
2,3,4,7,8-PeCDF	65.0				13C-2,3,4,7,8-PeCDF	13.5	21 - 178	H
1,2,3,4,7,8-HxCDF	313				13C-1,2,3,4,7,8-HxCDF	11.3	26 - 152	H
1,2,3,6,7,8-HxCDF	90.5				13C-1,2,3,6,7,8-HxCDF	10.9	26 - 123	H
2,3,4,6,7,8-HxCDF	20.8				13C-2,3,4,6,7,8-HxCDF	10.8	28 - 136	H
1,2,3,7,8,9-HxCDF	ND		29.9		13C-1,2,3,7,8,9-HxCDF	11.2	29 - 147	H
1,2,3,4,6,7,8-HpCDF	158			B	13C-1,2,3,4,6,7,8-HpCDF	11.6	28 - 143	H
1,2,3,4,7,8,9-HpCDF	51.7				13C-1,2,3,4,7,8,9-HpCDF	11.9	26 - 138	H
OCDF	259				13C-OCDF	10.4	17 - 157	H
					CRS 37Cl-2,3,7,8-TCDD	88.5	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**

TEQMinWHO2005Dioxin      82.2

<b>TOTALS</b>			
Total TCDD	3.78		
Total PeCDD	4.49	10.0	
Total HxCDD	68.0	72.1	
Total HpCDD	715		
Total TCDF	265	274	P
Total PeCDF	355	360	
Total HxCDF	561	599	
Total HpCDF	419		B

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-07-08-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-03      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 17.5 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 57.6	Date Analyzed : 03-Mar-20 20:09      Column: ZB-5MS 10-Mar-20 11:27      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0983			IS 13C-2,3,7,8-TCDD	95.2	25 - 164	
1,2,3,7,8-PeCDD	0.175			J	13C-1,2,3,7,8-PeCDD	101	25 - 181	
1,2,3,4,7,8-HxCDD	ND		0.164		13C-1,2,3,4,7,8-HxCDD	75.9	32 - 141	
1,2,3,6,7,8-HxCDD	1.15			J	13C-1,2,3,6,7,8-HxCDD	85.7	28 - 130	
1,2,3,7,8,9-HxCDD	0.455			J	13C-1,2,3,7,8,9-HxCDD	78.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	40.0				13C-1,2,3,4,6,7,8-HpCDD	86.2	23 - 140	
OCDD	362				13C-OCDD	84.8	17 - 157	
2,3,7,8-TCDF	10.4				13C-2,3,7,8-TCDF	95.1	24 - 169	
1,2,3,7,8-PeCDF	26.6				13C-1,2,3,7,8-PeCDF	94.5	24 - 185	
2,3,4,7,8-PeCDF	11.6				13C-2,3,4,7,8-PeCDF	98.5	21 - 178	
1,2,3,4,7,8-HxCDF	49.6				13C-1,2,3,4,7,8-HxCDF	85.3	26 - 152	
1,2,3,6,7,8-HxCDF	13.5				13C-1,2,3,6,7,8-HxCDF	82.9	26 - 123	
2,3,4,6,7,8-HxCDF	3.84				13C-2,3,4,6,7,8-HxCDF	84.5	28 - 136	
1,2,3,7,8,9-HxCDF	4.90				13C-1,2,3,7,8,9-HxCDF	87.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	24.2			B	13C-1,2,3,4,6,7,8-HpCDF	94.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	7.87				13C-1,2,3,4,7,8,9-HpCDF	98.6	26 - 138	
OCDF	42.5				13C-OCDF	87.6	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	96.0	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**  
TEQMinWHO2005Dioxin      13.7

<b>TOTALS</b>								
Total TCDD	2.10							
Total PeCDD	0.965		2.01					
Total HxCDD	11.7		12.3					
Total HpCDD	89.7							
Total TCDF	23.6		41.8	P				
Total PeCDF	81.3		82.8	P				
Total HxCDF	95.4		95.8					
Total HpCDF	59.4			B				

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-08-09-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-04      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 16.9 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 59.4	Date Analyzed : 03-Mar-20 20:56      Column: ZB-5MS 10-Mar-20 11:57      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	0.878				IS 13C-2,3,7,8-TCDD	95.7	25 - 164	
1,2,3,7,8-PeCDD	1.22			J	13C-1,2,3,7,8-PeCDD	101	25 - 181	
1,2,3,4,7,8-HxCDD	1.13			J	13C-1,2,3,4,7,8-HxCDD	81.4	32 - 141	
1,2,3,6,7,8-HxCDD	7.97				13C-1,2,3,6,7,8-HxCDD	90.9	28 - 130	
1,2,3,7,8,9-HxCDD	3.86				13C-1,2,3,7,8,9-HxCDD	84.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	174				13C-1,2,3,4,6,7,8-HpCDD	91.0	23 - 140	
OCDD	2470				13C-OCDD	91.0	17 - 157	
2,3,7,8-TCDF	67.5				13C-2,3,7,8-TCDF	99.5	24 - 169	
1,2,3,7,8-PeCDF	69.6				13C-1,2,3,7,8-PeCDF	97.5	24 - 185	
2,3,4,7,8-PeCDF	42.2				13C-2,3,4,7,8-PeCDF	100	21 - 178	
1,2,3,4,7,8-HxCDF	114				13C-1,2,3,4,7,8-HxCDF	91.6	26 - 152	
1,2,3,6,7,8-HxCDF	34.1				13C-1,2,3,6,7,8-HxCDF	89.5	26 - 123	
2,3,4,6,7,8-HxCDF	11.3				13C-2,3,4,6,7,8-HxCDF	92.0	28 - 136	
1,2,3,7,8,9-HxCDF	11.5				13C-1,2,3,7,8,9-HxCDF	94.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	110			B	13C-1,2,3,4,6,7,8-HpCDF	96.7	28 - 143	
1,2,3,4,7,8,9-HpCDF	24.4				13C-1,2,3,4,7,8,9-HpCDF	104	26 - 138	
OCDF	249				13C-OCDF	93.7	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	92.3	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**

TEQMinWHO2005Dioxin      45.9

<b>TOTALS</b>				
Total TCDD	22.6		23.4	
Total PeCDD	18.3			
Total HxCDD	78.4		80.1	
Total HpCDD	442			
Total TCDF	230		239	P
Total PeCDF	285			P
Total HxCDF	292			
Total HpCDF	336			B

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-09-10-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-05      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 16.7 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 60.1	Date Analyzed : 03-Mar-20 21:44      Column: ZB-5MS 10-Mar-20 12:28      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.684		IS 13C-2,3,7,8-TCDD	95.5	25 - 164	
1,2,3,7,8-PeCDD	0.854			J	13C-1,2,3,7,8-PeCDD	108	25 - 181	
1,2,3,4,7,8-HxCDD	0.989			J	13C-1,2,3,4,7,8-HxCDD	78.2	32 - 141	
1,2,3,6,7,8-HxCDD	6.77				13C-1,2,3,6,7,8-HxCDD	90.7	28 - 130	
1,2,3,7,8,9-HxCDD	3.26				13C-1,2,3,7,8,9-HxCDD	88.4	32 - 141	
1,2,3,4,6,7,8-HpCDD	202				13C-1,2,3,4,6,7,8-HpCDD	90.2	23 - 140	
OCDD	2560				13C-OCDD	92.6	17 - 157	
2,3,7,8-TCDF	36.9				13C-2,3,7,8-TCDF	96.9	24 - 169	
1,2,3,7,8-PeCDF	64.2				13C-1,2,3,7,8-PeCDF	99.2	24 - 185	
2,3,4,7,8-PeCDF	21.4				13C-2,3,4,7,8-PeCDF	102	21 - 178	
1,2,3,4,7,8-HxCDF	197				13C-1,2,3,4,7,8-HxCDF	87.3	26 - 152	
1,2,3,6,7,8-HxCDF	61.8				13C-1,2,3,6,7,8-HxCDF	86.5	26 - 123	
2,3,4,6,7,8-HxCDF	12.1				13C-2,3,4,6,7,8-HxCDF	87.1	28 - 136	
1,2,3,7,8,9-HxCDF	6.48				13C-1,2,3,7,8,9-HxCDF	88.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	169			B	13C-1,2,3,4,6,7,8-HpCDF	97.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	34.6				13C-1,2,3,4,7,8,9-HpCDF	102	26 - 138	
OCDF	320				13C-OCDF	94.0	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	95.2	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**

TEQMinWHO2005Dioxin      46.6

<b>TOTALS</b>			
Total TCDD	10.8	12.0	
Total PeCDD	10.3	11.1	
Total HxCDD	64.0		
Total HpCDD	470		
Total TCDF	129	134	P
Total PeCDF	200	215	
Total HxCDF	397	406	
Total HpCDF	439		B

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-10-11-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-06      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 16.8 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 59.8	Date Analyzed : 03-Mar-20 22:31      Column: ZB-5MS 10-Mar-20 12:58      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	0.464			J	IS 13C-2,3,7,8-TCDD	95.3	25 - 164	
1,2,3,7,8-PeCDD	1.50			J	13C-1,2,3,7,8-PeCDD	105	25 - 181	
1,2,3,4,7,8-HxCDD	1.01			J	13C-1,2,3,4,7,8-HxCDD	85.2	32 - 141	
1,2,3,6,7,8-HxCDD	9.11				13C-1,2,3,6,7,8-HxCDD	89.7	28 - 130	
1,2,3,7,8,9-HxCDD	3.29				13C-1,2,3,7,8,9-HxCDD	88.0	32 - 141	
1,2,3,4,6,7,8-HpCDD	230				13C-1,2,3,4,6,7,8-HpCDD	97.0	23 - 140	
OCDD	2890				13C-OCDD	101	17 - 157	
2,3,7,8-TCDF	2.45				13C-2,3,7,8-TCDF	101	24 - 169	
1,2,3,7,8-PeCDF	2.87				13C-1,2,3,7,8-PeCDF	98.9	24 - 185	
2,3,4,7,8-PeCDF	10.8				13C-2,3,4,7,8-PeCDF	102	21 - 178	
1,2,3,4,7,8-HxCDF	9.10				13C-1,2,3,4,7,8-HxCDF	90.6	26 - 152	
1,2,3,6,7,8-HxCDF	9.35				13C-1,2,3,6,7,8-HxCDF	90.4	26 - 123	
2,3,4,6,7,8-HxCDF	9.59				13C-2,3,4,6,7,8-HxCDF	91.7	28 - 136	
1,2,3,7,8,9-HxCDF	0.799			J	13C-1,2,3,7,8,9-HxCDF	91.7	29 - 147	
1,2,3,4,6,7,8-HpCDF	163			B	13C-1,2,3,4,6,7,8-HpCDF	102	28 - 143	
1,2,3,4,7,8,9-HpCDF	4.92				13C-1,2,3,4,7,8,9-HpCDF	104	26 - 138	
OCDF	333				13C-OCDF	103	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	97.1	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**  
TEQMinWHO2005Dioxin      14.7

<b>TOTALS</b>								
Total TCDD	9.83							
Total PeCDD	22.1							
Total HxCDD	79.0							
Total HpCDD	520							
Total TCDF	83.6			P				
Total PeCDF	179			P				
Total HxCDF	191							
Total HpCDF	481			B				

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-11-12-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-07      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 16.0 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 63.1	Date Analyzed : 03-Mar-20 23:19      Column: ZB-5MS 10-Mar-20 13:29      Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.202		IS 13C-2,3,7,8-TCDD	91.8	25 - 164	
1,2,3,7,8-PeCDD	0.508			J	13C-1,2,3,7,8-PeCDD	98.3	25 - 181	
1,2,3,4,7,8-HxCDD	0.390			J	13C-1,2,3,4,7,8-HxCDD	81.6	32 - 141	
1,2,3,6,7,8-HxCDD	2.30			J	13C-1,2,3,6,7,8-HxCDD	85.4	28 - 130	
1,2,3,7,8,9-HxCDD	0.935			J	13C-1,2,3,7,8,9-HxCDD	84.4	32 - 141	
1,2,3,4,6,7,8-HpCDD	33.3				13C-1,2,3,4,6,7,8-HpCDD	92.4	23 - 140	
OCDD	408				13C-OCDD	93.5	17 - 157	
2,3,7,8-TCDF	7.43				13C-2,3,7,8-TCDF	97.4	24 - 169	
1,2,3,7,8-PeCDF	32.2				13C-1,2,3,7,8-PeCDF	94.4	24 - 185	
2,3,4,7,8-PeCDF	11.5				13C-2,3,4,7,8-PeCDF	95.5	21 - 178	
1,2,3,4,7,8-HxCDF	41.2				13C-1,2,3,4,7,8-HxCDF	85.1	26 - 152	
1,2,3,6,7,8-HxCDF	18.5				13C-1,2,3,6,7,8-HxCDF	85.3	26 - 123	
2,3,4,6,7,8-HxCDF	6.95				13C-2,3,4,6,7,8-HxCDF	85.8	28 - 136	
1,2,3,7,8,9-HxCDF	2.15			J	13C-1,2,3,7,8,9-HxCDF	89.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	74.5			B	13C-1,2,3,4,6,7,8-HpCDF	100	28 - 143	
1,2,3,4,7,8,9-HpCDF	5.06				13C-1,2,3,4,7,8,9-HpCDF	102	26 - 138	
OCDF	57.3				13C-OCDF	94.4	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	92.8	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**

TEQMinWHO2005Dioxin      14.2

<b>TOTALS</b>			
Total TCDD	3.84	4.04	
Total PeCDD	7.25		
Total HxCDD	25.8		
Total HpCDD	91.9		
Total TCDF	51.4	52.6	P
Total PeCDF	136	144	P
Total HxCDF	150		
Total HpCDF	166		B

DL - 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.  
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-12-13-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-08      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 14.8 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 68.3	Date Analyzed : 04-Mar-20 00:06      Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.247		IS 13C-2,3,7,8-TCDD	89.7	25 - 164	
1,2,3,7,8-PeCDD	0.115			J	13C-1,2,3,7,8-PeCDD	102	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0702			13C-1,2,3,4,7,8-HxCDD	83.3	32 - 141	
1,2,3,6,7,8-HxCDD	ND		0.0590		13C-1,2,3,6,7,8-HxCDD	87.8	28 - 130	
1,2,3,7,8,9-HxCDD	0.131			J	13C-1,2,3,7,8,9-HxCDD	85.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.19			J	13C-1,2,3,4,6,7,8-HpCDD	90.9	23 - 140	
OCDD	10.6				13C-OCDD	88.3	17 - 157	
2,3,7,8-TCDF	ND	0.0493			13C-2,3,7,8-TCDF	93.7	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0444			13C-1,2,3,7,8-PeCDF	95.5	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0397			13C-2,3,4,7,8-PeCDF	97.4	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0514			13C-1,2,3,4,7,8-HxCDF	88.5	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0496			13C-1,2,3,6,7,8-HxCDF	87.8	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0520			13C-2,3,4,6,7,8-HxCDF	89.3	28 - 136	
1,2,3,7,8,9-HxCDF	ND		0.0806		13C-1,2,3,7,8,9-HxCDF	90.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.178			J, B	13C-1,2,3,4,6,7,8-HpCDF	99.2	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0952			13C-1,2,3,4,7,8,9-HpCDF	105	26 - 138	
OCDF	ND		0.177		13C-OCDF	92.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	90.1	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**  
 TEQMinWHO2005Dioxin      0.145

<b>TOTALS</b>								
Total TCDD	1.09		1.67					
Total PeCDD	0.838		0.939					
Total HxCDD	1.58		1.64					
Total HpCDD	3.35							
Total TCDF	0.322		0.397	P				
Total PeCDF	ND		0.0803	P				
Total HxCDF	ND		0.102					
Total HpCDF	0.178			B				

DL - 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.  
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.



**Sample ID: PDI-084SC-A-13-14-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-09      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 17.3 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 58.5	Date Analyzed : 04-Mar-20 00:54      Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.0935		IS 13C-2,3,7,8-TCDD	91.4	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0870			13C-1,2,3,7,8-PeCDD	103	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0719			13C-1,2,3,4,7,8-HxCDD	80.8	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0715			13C-1,2,3,6,7,8-HxCDD	88.1	28 - 130	
1,2,3,7,8,9-HxCDD	0.113			J	13C-1,2,3,7,8,9-HxCDD	83.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	0.916			J	13C-1,2,3,4,6,7,8-HpCDD	87.2	23 - 140	
OCDD	7.71				13C-OCDD	86.1	17 - 157	
2,3,7,8-TCDF	ND	0.0497			13C-2,3,7,8-TCDF	97.9	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0355			13C-1,2,3,7,8-PeCDF	98.9	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0345			13C-2,3,4,7,8-PeCDF	100	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0454			13C-1,2,3,4,7,8-HxCDF	89.8	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0462			13C-1,2,3,6,7,8-HxCDF	85.9	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0483			13C-2,3,4,6,7,8-HxCDF	87.4	28 - 136	
1,2,3,7,8,9-HxCDF	0.0486			J	13C-1,2,3,7,8,9-HxCDF	92.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.0828			13C-1,2,3,4,6,7,8-HpCDF	96.6	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0939			13C-1,2,3,4,7,8,9-HpCDF	102	26 - 138	
OCDF	ND		0.169		13C-OCDF	86.4	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	92.9	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**  
 TEQMinWHO2005Dioxin      0.0276

<b>TOTALS</b>								
Total TCDD	1.52		1.61					
Total PeCDD	0.393		0.499					
Total HxCDD	1.59							
Total HpCDD	2.64							
Total TCDF	0.474							
Total PeCDF	ND	0.0355						
Total HxCDF	0.0649							
Total HpCDF	ND	0.0939						

DL - 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.  
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

**Sample ID: PDI-084SC-A-14-15-191002** **EPA Method 1613B**

<b>Client Data</b>	<b>Sample Data</b>	<b>Laboratory Data</b>
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 2000407-10      Date Received: 27-Feb-2020 8:43
Project: Gasco PDI 000029-02.59	Sample Size: 17.8 g	QC Batch: B0B0291      Date Extracted: 28-Feb-2020 7:25
Date Collected: 02-Oct-2019 11:23	% Solids: 56.5	Date Analyzed : 04-Mar-20 01:41      Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0626			IS 13C-2,3,7,8-TCDD	93.3	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0631			13C-1,2,3,7,8-PeCDD	105	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0657			13C-1,2,3,4,7,8-HxCDD	86.1	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0645			13C-1,2,3,6,7,8-HxCDD	87.9	28 - 130	
1,2,3,7,8,9-HxCDD	ND		0.108		13C-1,2,3,7,8,9-HxCDD	85.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.23			J	13C-1,2,3,4,6,7,8-HpCDD	90.7	23 - 140	
OCDD	12.1				13C-OCDD	81.6	17 - 157	
2,3,7,8-TCDF	ND	0.0493			13C-2,3,7,8-TCDF	98.1	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0448			13C-1,2,3,7,8-PeCDF	101	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0424			13C-2,3,4,7,8-PeCDF	105	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0499			13C-1,2,3,4,7,8-HxCDF	91.0	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0503			13C-1,2,3,6,7,8-HxCDF	88.5	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0497			13C-2,3,4,6,7,8-HxCDF	90.3	28 - 136	
1,2,3,7,8,9-HxCDF	ND		0.0404		13C-1,2,3,7,8,9-HxCDF	89.7	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.120			J, B	13C-1,2,3,4,6,7,8-HpCDF	96.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0945			13C-1,2,3,4,7,8,9-HpCDF	102	26 - 138	
OCDF	ND		0.133		13C-OCDF	84.9	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	91.9	35 - 197	

**Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)**  
 TEQMinWHO2005Dioxin      0.0171

<b>TOTALS</b>								
Total TCDD	0.713		0.793					
Total PeCDD	0.391							
Total HxCDD	1.31		1.83					
Total HpCDD	3.56							
Total TCDF	0.483							
Total PeCDF	ND		0.0431					
Total HxCDF	ND		0.0755					
Total HpCDF	0.120			B				

DL - 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.  
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

## 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)
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



## Sample Log-In Checklist

Page # 1 of 2

Vista Work Order #: 2000407

TAT 7

Samples Arrival:	Date/Time <u>02/21/20 0843</u>	Initials: <u>JP</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>MA</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
	<input type="checkbox"/> GLS	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered
	<input type="checkbox"/> Other		
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C: <u>3.0</u> (uncorrected)	Probe used: Y / <input checked="" type="checkbox"/> N		Thermometer ID: <u>IF-4</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 checked="" type="checkbox"/>	<input type="checkbox"/>
Airbill <u>1 of 2</u> Trk # <u>7778 6671 1399</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 type="checkbox"/> Vista	<input checked="" type="checkbox"/> Client	<input type="checkbox"/> Retain
	<input type="checkbox"/> Return	<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>02/27/20</u> <u>1031</u>	Initials: <u>CM</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:



## Sample Log-In Checklist

Page # <sup>02/27/20</sup> 12 of 2

Vista Work Order #: 2000407

TAT 7

Samples Arrival:	Date/Time <u>02/27/20 0843</u>		Initials: <u>KP</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"/> Dry Ice		<input type="radio"/> None
Temp °C: <u>2.1</u> (uncorrected)	Probe used: Y / <input checked="" type="radio"/> N				Thermometer ID: <u>IR-4</u>		
Temp °C: <u>2.1</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 checked="" type="checkbox"/>	<input type="checkbox"/>
Airbill <u>2 of 2</u> Trk # <u>778 6671 1414</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 type="checkbox"/> Vista	<input checked="" type="checkbox"/> Client	<input type="checkbox"/> Retain
	<input type="checkbox"/>	<input checked="" type="checkbox"/> Return	<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>02/27/20</u> <u>1031</u>		Initials: <u>CM</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# 2000407

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2000407-01	A PDI-084SC-A-05-06-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/> C1	Amber Glass, 120 mL	Solid DUP
2000407-02	A PDI-084SC-A-06-07-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-03	A PDI-084SC-A-07-08-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-04	A PDI-084SC-A-08-09-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-05	A PDI-084SC-A-09-10-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-06	A PDI-084SC-A-10-11-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-07	A PDI-084SC-A-11-12-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-08	A PDI-084SC-A-12-13-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-09	A PDI-084SC-A-13-14-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/>	Amber Glass, 120 mL	Solid
2000407-10	A PDI-084SC-A-14-15-191002	<input checked="" type="checkbox"/>	02-Oct-19 11:23	<input checked="" type="checkbox"/> C2	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
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		
Preservation Documented: Na2S2O3 Trizma None Other		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:

C1 = cooler 1  
C2 = cooler 2

Verified by/Date: UM 02/27/20

## **EXTRACTION INFORMATION**



PREPARATION BENCH SHEET

Matrix: Solid

B0B0291

Chemist: 

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 28-Feb-20 07:25

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisol CHEM/ DATE	RS CHEM/WIT DATE
<input type="checkbox"/>	B0B0291-BLK1	NA	(10.00)	RR 02-28-20	AZ 03/02/20	NA	AO 03/02/20	RR 03/02/20	AO 03/02/20	DF AZ 03/03/20
<input type="checkbox"/>	B0B0291-BS1 (A/B)	NA	(10.00)							
<input type="checkbox"/>	B0B0291-DUP1	18.41	18.51							
<input type="checkbox"/>	2000407-01	18.41	18.52				orange			
<input type="checkbox"/>	2000407-02	16.42	16.48				yellow			
<input type="checkbox"/>	2000407-03	17.36	17.50							
<input type="checkbox"/>	2000407-04 (C)	16.85	16.93							
<input type="checkbox"/>	2000407-05	*16.65	16.69							
<input type="checkbox"/>	2000407-06	16.73	16.77							
<input type="checkbox"/>	2000407-07	15.85	15.98							
<input type="checkbox"/>	2000407-08	14.64	14.75							
<input type="checkbox"/>	2000407-09	17.10	17.30							
<input type="checkbox"/>	2000407-10	17.69	17.75							

\*16.65 RR 02/28/20

(C) Transferred to new RB bc original RB cracked AZ 03/02/20

(A) Glassware malfunction, stopped soxhlet @ 16:22 HN 02/28/2020  
 (B) Replaced Switched glassware and restarted extraction @ 16:46 HN 02/28/2020

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date: RR 02-28-20
PCDD/F 19L230, 10mL	PCDD/F 18F1913, 10mL	PCDD/F 19S1602, 10mL	PCDD/F 19 I1603, 10mL	Start Date/Time 02-28-20 14:36	SOLV: Toluene	Check In: Chemist/Date: RR 02-28-20
PCB	PCB	PCB	PCB	Stop Date/Time 02-29-20 0800	Other NA	Balance ID: HRMS-8
PAH	PAH	PAH	PAH		Final Volume(s) C14 20mL	

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

Percent Moisture/ Percent Solids

D2216-90

BATCH ID BOB0283

Analyst: RR ✓	Test Code: %Moist/%Solids	Data Entry Verified by: (Initial and Date) RR 02/28/20 ✓
Analyte: Dried at 110°C +/-5°C	Units: %	
Oven ID: 01_02 ✓		

Inst-HRMS-09 ✓

Date/Time IN: 02-27-20/1355 ✓ Date/Time OUT: 02-28-20/0641 ✓

Particle Size	SampID	SampType	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*
			RR 02-27-20 ✓	RR 02-28-20 ✓										
	2000407-01	A ✓	Sample	1.2600 ✓	5.5500 ✓	3.5900 ✓	2.3300	54.31	MUD ✓	NA ✓	NA ✓	NA ✓	NA ✓	X ✓
	2000407-02	A	Sample	1.2800 ✓	5.5000 ✓	3.8500 ✓	2.5700	60.90	MUD	NA	NA	NA	NA	X
	2000407-03	A	Sample	1.2700 ✓	6.2000 ✓	4.1100 ✓	2.8400	57.61	MUD	NA	NA	NA	NA	X
	2000407-04	A	Sample	1.2600 ✓	5.6400 ✓	3.8600 ✓	2.6000	59.36	MUD	NA	NA	NA	NA	X
	2000407-05	A	Sample	1.2600 ✓	8.2700 ✓	5.4700 ✓	4.2100	60.06	MUD	NA	NA	NA	NA	X
	2000407-06	A	Sample	1.2600 ✓	7.0500 ✓	4.7200 ✓	3.4600	59.76	MUD	NA	NA	NA	NA	X
	2000407-07	A	Sample	1.2500 ✓	5.8000 ✓	4.1200 ✓	2.8700	63.08	MUD	NA	NA	NA	NA	X
	2000407-08	A	Sample	1.2800 ✓	5.1900 ✓	3.9500 ✓	2.6700	68.29	MUD	NA	NA	NA	NA	X
	2000407-09	A	Sample	1.2600 ✓	6.0300 ✓	4.0500 ✓	2.7900	58.49	DIRT ✓	NA	NA	NA	NA	X
	2000407-10	A	Sample	1.2700 ✓	6.1700 ✓	4.0400 ✓	2.7700	56.53	MUD ✓	NA	NA	NA	NA	X

\*Sample homogenized in sample container unless otherwise noted.



Percent Moisture/ Percent Solids

D2216-90

BATCH ID B0B0283

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

Inst **HRMS-9**

Date/Time IN: 02-27-20 1355  
Date/Time OUT: 02-28-20 0641

Particle Size	SampID	SampType	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)	RR 02-27-20										
	A	Sample	1.26	RR 02-27-20	5.55	3.59		Mud					X	
		Sample	1.28	RR 02-27-20	5.50	3.85							X	
		Sample	1.27	RR 02-27-20	6.20	4.11							X	
		Sample	1.26	RR 02-27-20	5.64	3.86							X	
		Sample	1.26	RR 02-27-20	8.27	5.47							X	
		Sample	1.26	RR 02-27-20	7.05	4.72							X	
		Sample	1.25	RR 02-27-20	5.80	4.12							X	
		Sample	1.28	RR 02-27-20	5.19	3.95							X	
		Sample	1.26	RR 02-27-20	6.03	4.05							X	
		Sample	1.27	RR 02-27-20	6.17	4.07							X	

\*Sample homogenized in sample container unless otherwise noted.

Batch: B0B0291

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
2000407-01	18.52 ✓	54.31235	10.0586	20 ✓	28-Feb-20 07:25 ✓	MSD ✓			Sediment	1613 Full List
2000407-02	16.48 ✓	60.90047	10.0364	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-03	17.5 ✓	57.60649	10.0811	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-04	16.93 ✓	59.36073	10.0498	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-05	16.69 ✓	60.05705	10.0235	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-06	16.77 ✓	59.7582	10.0215	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-07	15.98 ✓	63.07692	10.0797	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-08	14.75 ✓	68.28645	10.0723	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-09	17.3 ✓	58.49057	10.1189	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
2000407-10	17.75 ✓	56.53061	10.0342	20	28-Feb-20 07:25	MSD			Sediment	1613 Full List
<b>B0B0291-BLK1</b>	10 ✓			20	28-Feb-20 07:25	MSD				QC
<b>B0B0291-BS1</b>	10 ✓			20	28-Feb-20 07:25	MSD	18F1913 ✓	10 ✓		QC
<b>B0B0291-DUP1</b>	18.51 ✓	54.31235	10.0532	20 ✓	28-Feb-20 07:25 ✓	MSD ✓				QC

All bolded data on report verified against written benchsheet by (initial/date) AZ 03/03/20



SAMPLE DATA – EPA METHOD 1613

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-5.qld

Last Altered: Friday, March 06, 2020 13:57:27 Pacific Standard Time

Printed: Friday, March 06, 2020 13:57:40 Pacific Standard Time

*dy* 03-06-2020

C1 03/06/2020

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD													0.165	
2	2 1,2,3,7,8-PeCDD				0.972	10.000	30.86		1.00		NO			0.0663	
3	3 1,2,3,4,7,8-HxCDD				1.07	10.000	34.21		1.00		NO			0.0946	
4	4 1,2,3,6,7,8-HxCDD				0.921	10.000	34.31		1.00		NO			0.0899	
5	5 1,2,3,7,8,9-HxCDD				0.918	10.000	34.61		1.00		NO			0.112	
6	6 1,2,3,4,6,7,8-HpCDD				0.923	10.000	38.06		1.00		NO			0.487	
7	7 OCDD				0.975	10.000	41.15		1.00		NO			0.313	
8	8 2,3,7,8-TCDF				0.802	10.000	24.79		1.00		NO			0.516	
9	9 1,2,3,7,8-PeCDF				0.907	10.000	29.53		1.00		NO			0.0715	
10	10 2,3,4,7,8-PeCDF				0.952	10.000	30.55		1.00		NO			0.0648	
11	11 1,2,3,4,7,8-HxCDF				0.862	10.000	33.35		1.00		NO			0.0828	
12	12 1,2,3,6,7,8-HxCDF				0.841	10.000	33.48		1.00		NO			0.0820	
13	13 2,3,4,6,7,8-HxCDF				0.898	10.000	34.06		1.00		NO			0.0900	
14	14 1,2,3,7,8,9-HxCDF				0.858	10.000	34.91		1.00		NO			0.127	
15	15 1,2,3,4,6,7,8-HpCDF	1110.814	1.163	NO	0.851	10.000	36.67	36.65	1.00	1.00	NO	0.2835		0.249	0.2835
16	16 1,2,3,4,7,8,9-HpCDF				0.980	10.000	38.72		1.00		NO			0.327	
17	17 OCDF				0.806	10.000	41.34		1.00		NO			0.218	
18	18 13C-2,3,7,8-TCDD	1414945.3...	0.778	NO	1.20	10.000	25.66	25.70	1.03	1.03	NO	190.6	95.3	0.489	
19	19 13C-1,2,3,7,8-PeCDD	1295270.5...	0.619	NO	0.967	10.000	30.78	30.83	1.23	1.23	NO	216.3	108	0.410	
20	20 13C-1,2,3,4,7,8-HxCDD	867181.907	1.375	NO	0.874	10.000	34.20	34.20	1.01	1.01	NO	154.5	77.3	0.550	
21	21 13C-1,2,3,6,7,8-HxCDD	1149019.6...	1.192	NO	1.05	10.000	34.31	34.31	1.02	1.02	NO	171.1	85.5	0.460	
22	22 13C-1,2,3,7,8,9-HxCDD	989785.063	1.269	NO	0.974	10.000	34.61	34.57	1.03	1.02	NO	158.2	79.1	0.493	
23	23 13C-1,2,3,4,6,7,8-HpCDD	765580.126	1.109	NO	0.747	10.000	38.18	38.04	1.13	1.13	NO	159.5	79.8	0.554	
24	24 13C-OCDD	1307232.8...	0.901	NO	0.707	10.000	41.09	41.15	1.22	1.22	NO	288.1	72.0	0.640	
25	25 13C-2,3,7,8-TCDF	1840341.8...	0.780	NO	1.07	10.000	24.84	24.76	0.99	0.99	NO	200.7	100	0.526	
26	26 13C-1,2,3,7,8-PeCDF	1731617.0...	1.572	NO	1.00	10.000	29.42	29.51	1.18	1.18	NO	200.8	100	0.739	
27	27 13C-2,3,4,7,8-PeCDF	1717275.9...	1.572	NO	0.962	10.000	30.39	30.51	1.21	1.22	NO	207.5	104	0.770	
28	28 13C-1,2,3,4,7,8-HxCDF	1170749.7...	0.506	NO	1.05	10.000	33.33	33.35	0.99	0.99	NO	173.8	86.9	0.626	
29	29 13C-1,2,3,6,7,8-HxCDF	1370606.1...	0.494	NO	1.19	10.000	33.43	33.47	0.99	0.99	NO	179.4	89.7	0.552	
30	30 13C-2,3,4,6,7,8-HxCDF	1208546.7...	0.518	NO	1.07	10.000	34.04	34.03	1.01	1.01	NO	176.5	88.2	0.616	
31	31 13C-1,2,3,7,8,9-HxCDF	984392.407	0.522	NO	0.922	10.000	34.95	34.91	1.04	1.04	NO	166.2	83.1	0.712	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-5.qld

Last Altered: Friday, March 06, 2020 13:57:27 Pacific Standard Time

Printed: Friday, March 06, 2020 13:57:40 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	920846.032	0.440	NO	0.767	10.000	36.70	36.63	1.09	1.09	NO	186.9	93.5	0.599	
33	33 13C-1,2,3,4,7,8,9-HpCDF	634211.266	0.432	NO	0.552	10.000	38.72	38.72	1.15	1.15	NO	178.8	89.4	0.832	
34	34 13C-OCDF	1557765.2...	0.830	NO	0.789	10.000	41.32	41.34	1.23	1.23	NO	307.3	76.8	0.425	
35	35 37Cl-2,3,7,8-TCDD	551707.563			1.18	10.000	25.69	25.74	1.03	1.03	NO	75.71	94.6	0.173	
36	36 13C-1,2,3,4-TCDD	1239108.6...	0.798	NO	1.00	10.000	25.11	25.02	1.00	1.00	NO	200.0	100	0.587	
37	37 13C-1,2,3,4-TCDF	1721355.6...	0.789	NO	1.00	10.000	23.37	23.22	1.00	1.00	NO	200.0	100	0.561	
38	38 13C-1,2,3,4,6,9-HxCDF	1284422.6...	0.506	NO	1.00	10.000	33.71	33.73	1.00	1.00	NO	200.0	100	0.657	
39	39 Total Tetra-Dioxins				0.988	10.000	24.62		0.00		NO			0.165	
40	40 Total Penta-Dioxins				0.972	10.000	29.96		0.00		NO			0.0265	
41	41 Total Hexa-Dioxins				0.921	10.000	33.63		0.00		NO			0.0480	
42	42 Total Hepta-Dioxins				0.923	10.000	37.64		0.00		NO			0.258	
43	43 Total Tetra-Furans				0.802	10.000	23.61		0.00		NO			0.220	
44	44 1st Func. Penta-Furans				0.907	10.000	27.09		0.00		NO			0.179	
45	45 Total Penta-Furans				0.907	10.000	29.27		0.00		NO			0.0364	
46	46 Total Hexa-Furans				0.898	10.000	33.56		0.00		NO	0.0000		0.0380	0.1838
47	47 Total Hepta-Furans				0.851	10.000	37.83		0.00		NO	0.2835		0.301	0.2835

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-5.qld

Last Altered: Friday, March 06, 2020 13:57:27 Pacific Standard Time

Printed: Friday, March 06, 2020 13:57:57 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

**Tetra-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Penta-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Hexa-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Hepta-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Tetra-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Penta-Furans function 1**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-5.qld

Last Altered: Friday, March 06, 2020 13:57:27 Pacific Standard Time

Printed: Friday, March 06, 2020 13:57:57 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

**Penta-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Hexa-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	46 Total Hexa-Furans	0.00e0	0.00e0	1.052	YES	33.56	32.35	0.0000	0.1838

**Hepta-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	15 1,2,3,4,6,7,8-HpCDF	1.11e3	9.21e5	1.163	NO	36.67	36.65	0.2835	0.2835

Dataset: Untitled

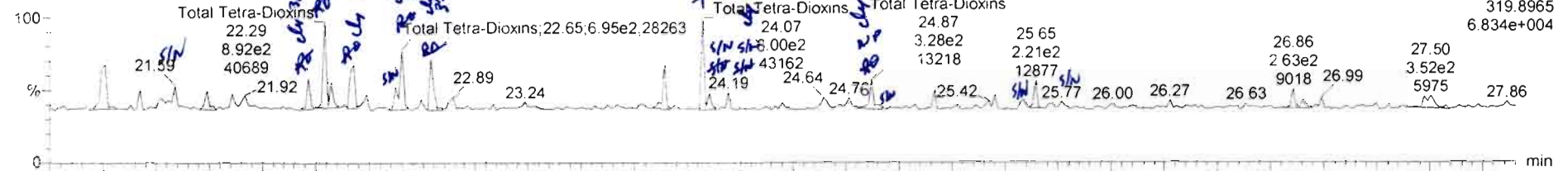
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

*dy 03-04-2020*

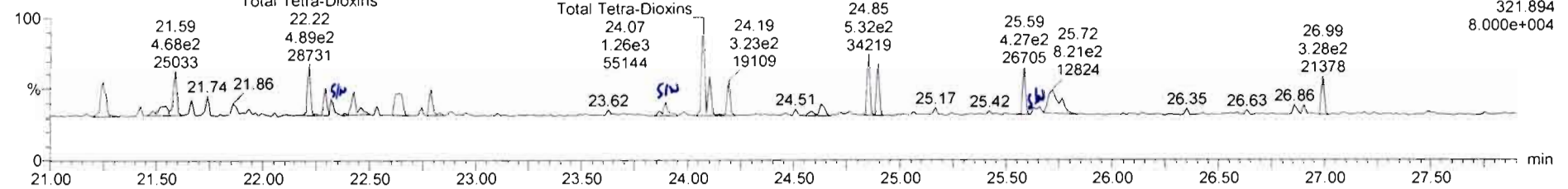
Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

2,3,7,8-TCDD

200303R2\_5

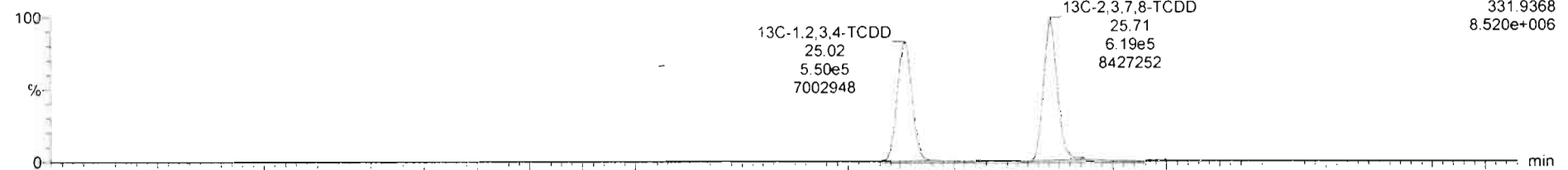


200303R2\_5

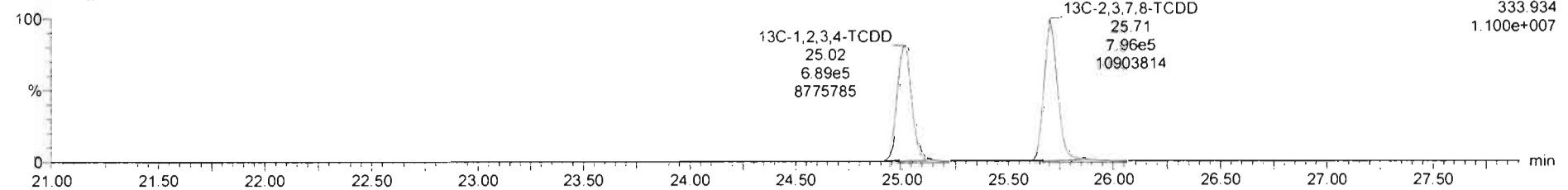


13C-2,3,7,8-TCDD

200303R2\_5



200303R2\_5



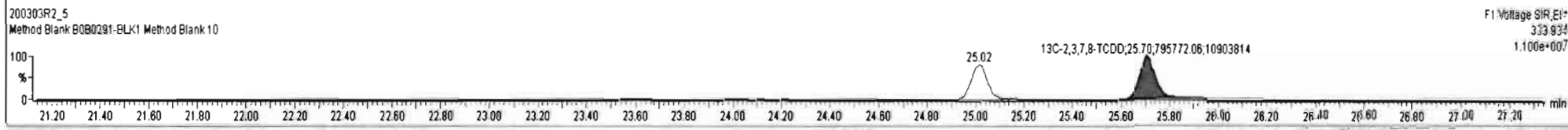
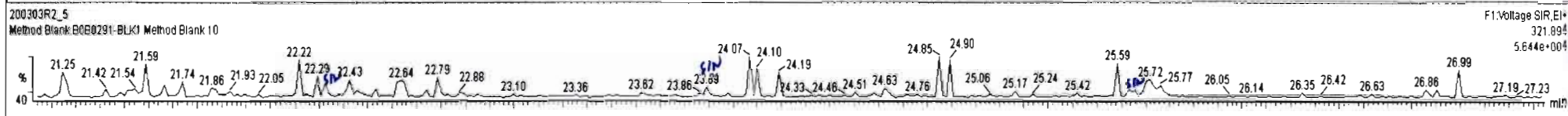
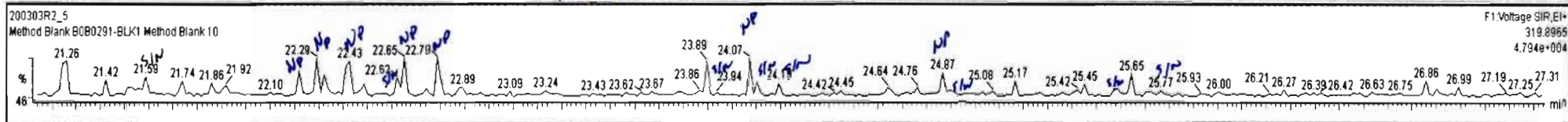


200303R2\_5 - BL00291-BLK1 Method Blank 10 - Method Blank

#	Name	Resp	RA	n/y	RRF	wtVol	Pred.RT	RT	Pred.RT	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.000	24.52		0.000		NO			0.185	
40	Total Penta-Dioxins				0.9723	10.000	29.96		0.000		NO			0.0265	
41	Total Hexa-Dioxins				0.9211	10.000	33.63		0.000		NO			0.0480	
42	Total Hepta-Dioxins				0.9231	10.000	37.64		0.000		NO			0.258	
43	Total Tetra-Furans				0.8020	10.000	23.61		0.000		NO	0.3765		0.516	1.481
44	1st Func. Penta-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Penta-Furans				0.9074	10.000	29.27		0.000		NO			0.0384	
46	Total Hexa-Furans				0.8982	10.000	33.56		0.000		NO	0.0000		0.0380	0.1838
47	Total Hepta-Furans				0.8511	10.000	37.83		0.000		NO	0.2835		0.301	0.3484

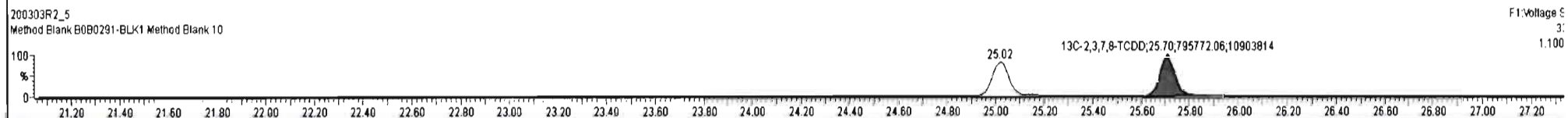
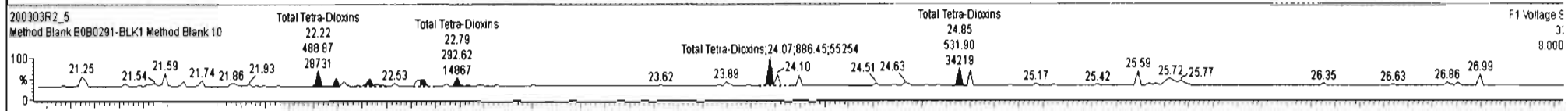
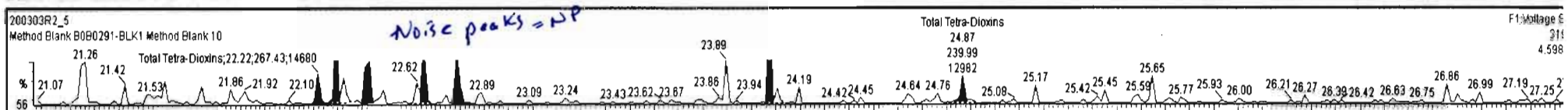
#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	n/y	EMPC	Conc.
1										

Noise Peaks = NP

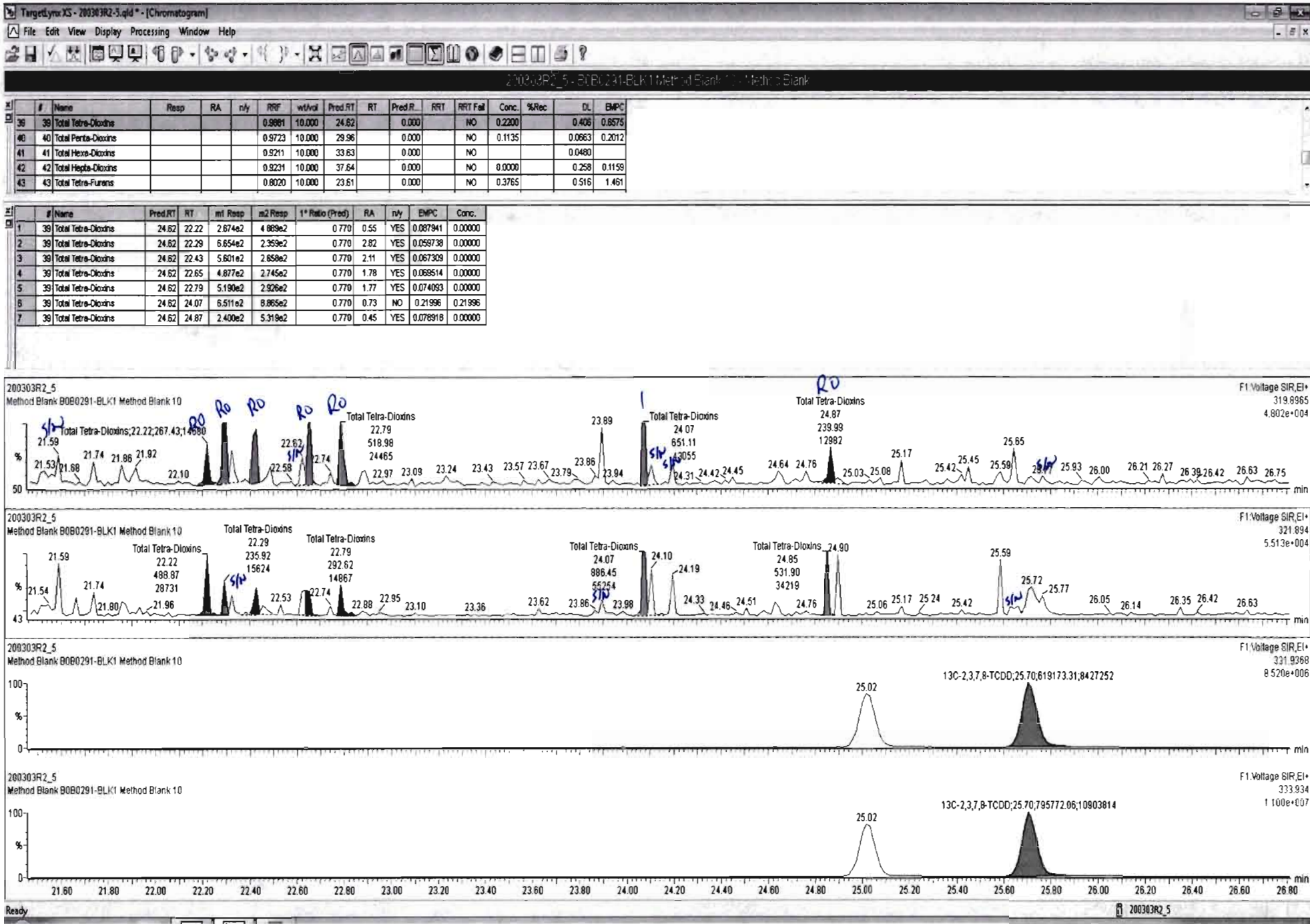


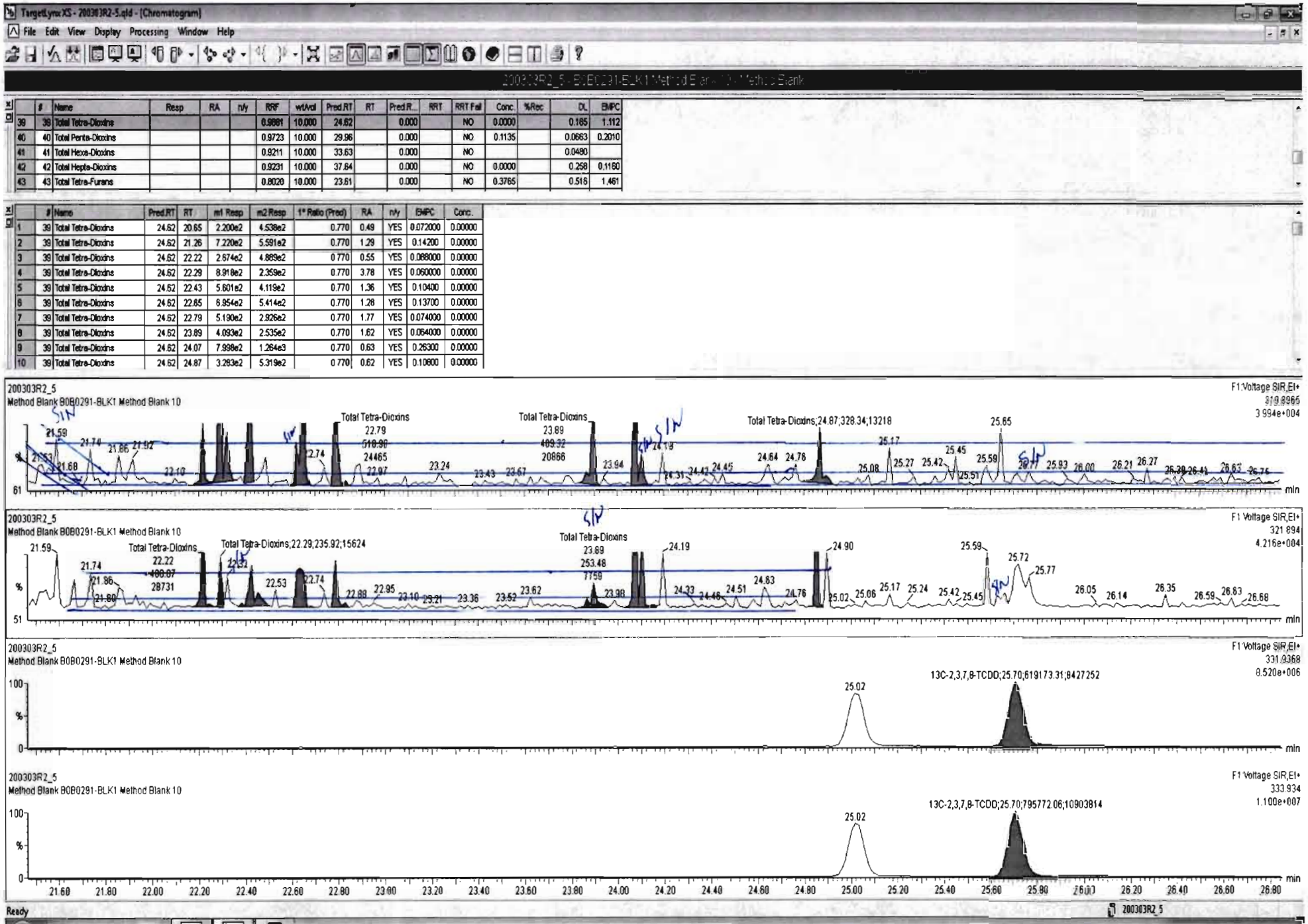
#	Name	Resp	RA	nly	RRF	wVcl	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9681	10.000	24.62		0.000		NO	0.2200		0.406	0.6570
40	Total Penta-Dioxins				0.9723	10.000	29.86		0.000		NO			0.0265	
41	Total Hexa-Dioxins				0.9211	10.000	33.63		0.000		NO			0.0480	
42	Total Hepta-Dioxins				0.9231	10.000	37.64		0.000		NO			0.258	
43	Total Tetra-Furans				0.8020	10.000	23.61		0.000		NO	0.3765		0.516	1.461
44	1st Func. Penta-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Penta-Furans				0.9074	10.000	28.27		0.000		NO			0.0364	
46	Total Hexa-Furans				0.8962	10.000	33.58		0.000		NO	0.0000		0.0380	0.1840
47	Total Hepta-Furans				0.8511	10.000	37.83		0.000		NO	0.2835		0.301	0.3480

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	nly	EMPC	Conc.
1	39 Total Tetra-Dioxins	24.62	22.22	2.674e2	4.889e2	0.770	0.55	YES	0.068000	0.00000
2	39 Total Tetra-Dioxins	24.62	22.29	6.854e2	2.359e2	0.770	2.82	YES	0.060000	0.00000
3	39 Total Tetra-Dioxins	24.62	22.43	5.601e2	2.658e2	0.770	2.11	YES	0.067000	0.00000
4	39 Total Tetra-Dioxins	24.62	22.65	4.877e2	2.745e2	0.770	1.78	YES	0.070000	0.00000
5	39 Total Tetra-Dioxins	24.62	22.79	5.190e2	2.926e2	0.770	1.77	YES	0.074000	0.00000
6	39 Total Tetra-Dioxins	24.62	24.07	6.511e2	8.865e2	0.770	0.73	NO	0.22000	0.21996
7	39 Total Tetra-Dioxins	24.62	24.87	2.400e2	5.319e2	0.770	0.45	YES	0.079000	0.00000









Dataset: Untitled

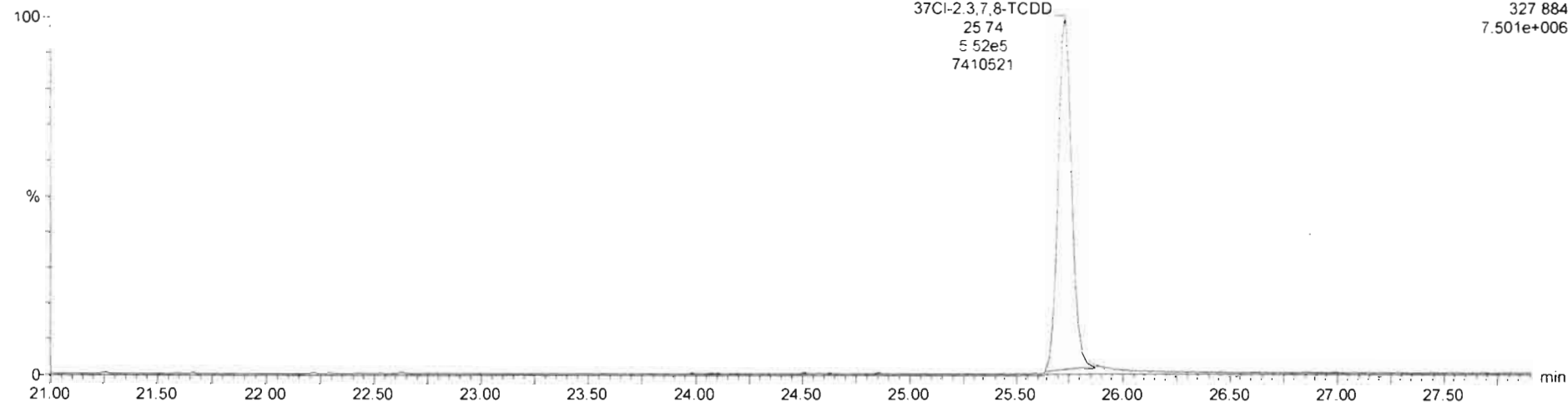
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

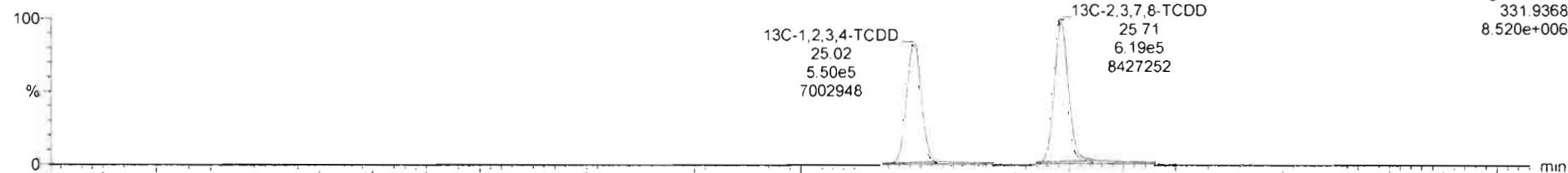
37Cl-2,3,7,8-TCDD

200303R2\_5

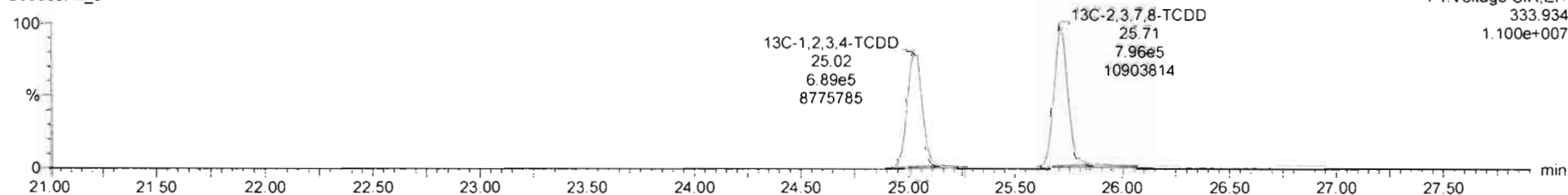


13C-1,2,3,4-TCDD

200303R2\_5



200303R2\_5



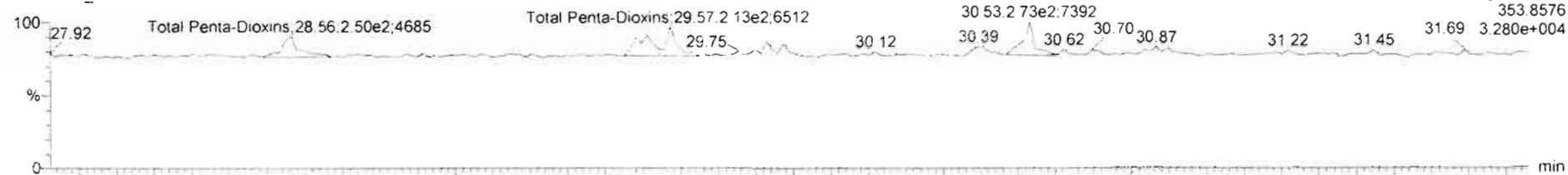
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

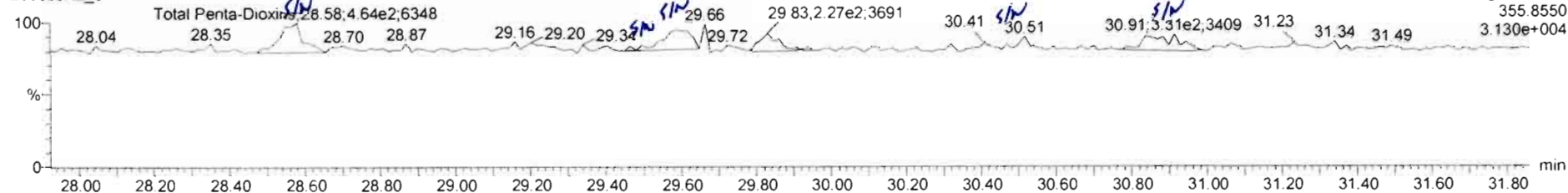
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1,2,3,7,8-PeCDD

200303R2\_5

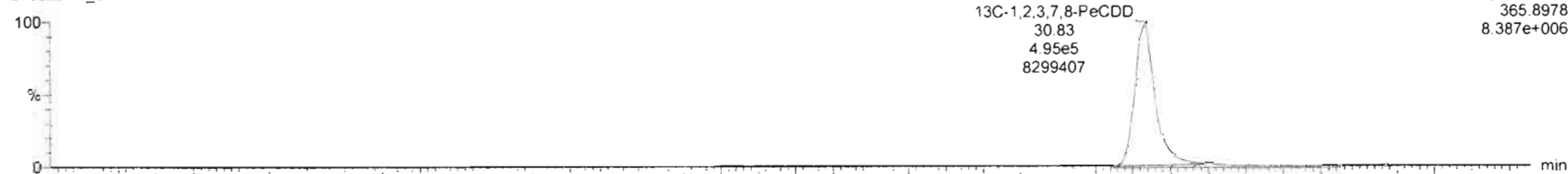


200303R2\_5

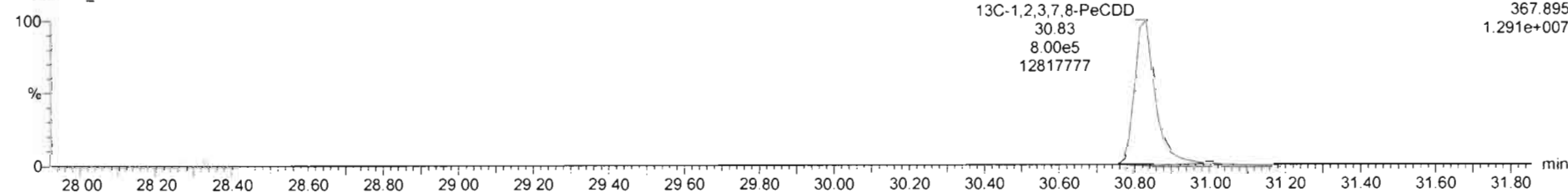


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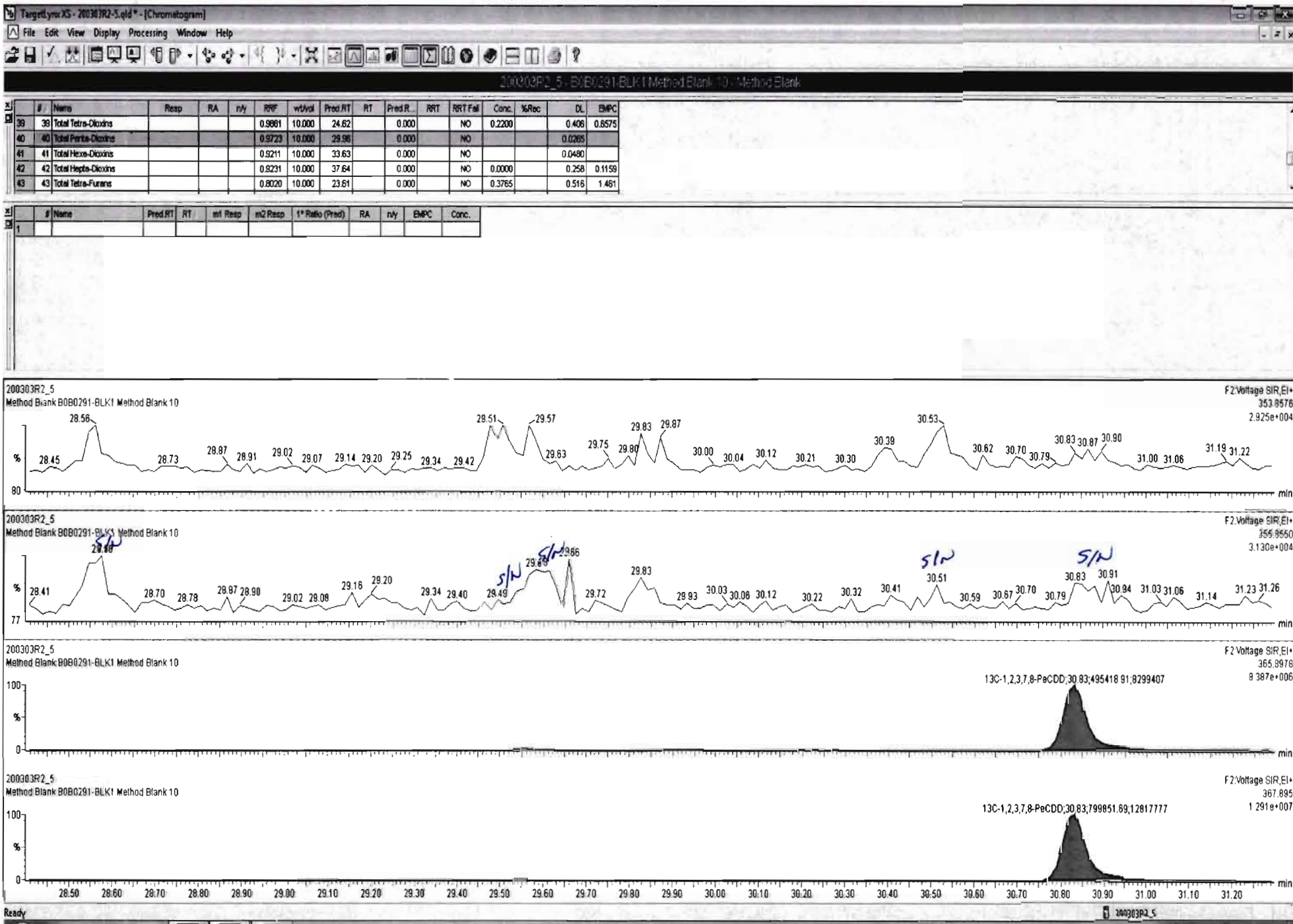
200303R2\_5

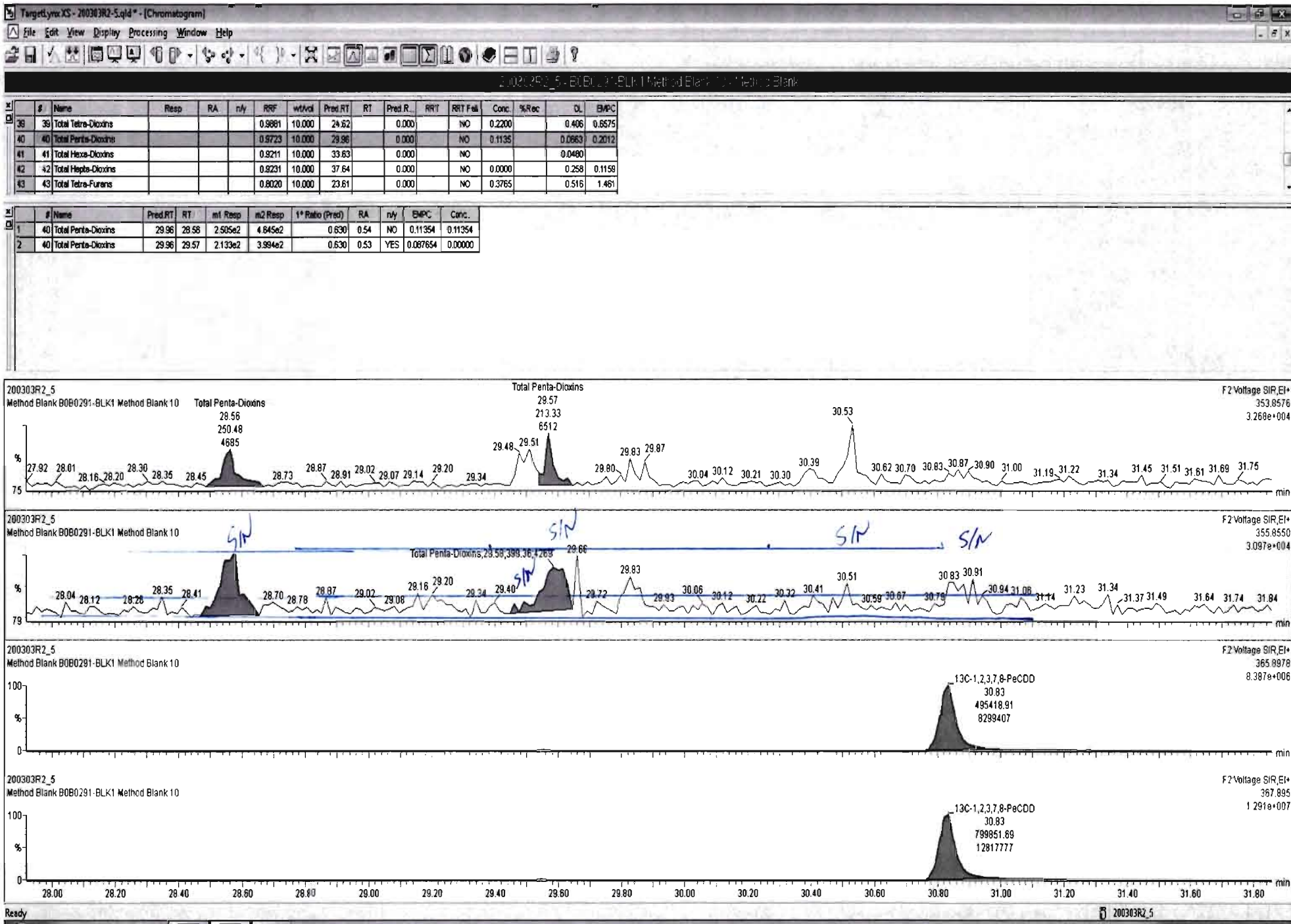


200303R2\_5









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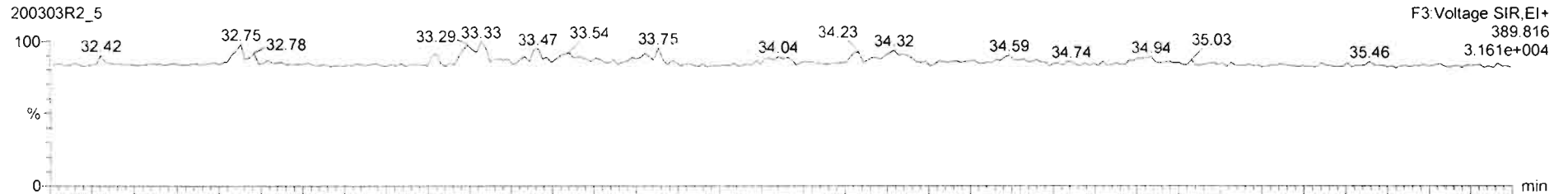
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

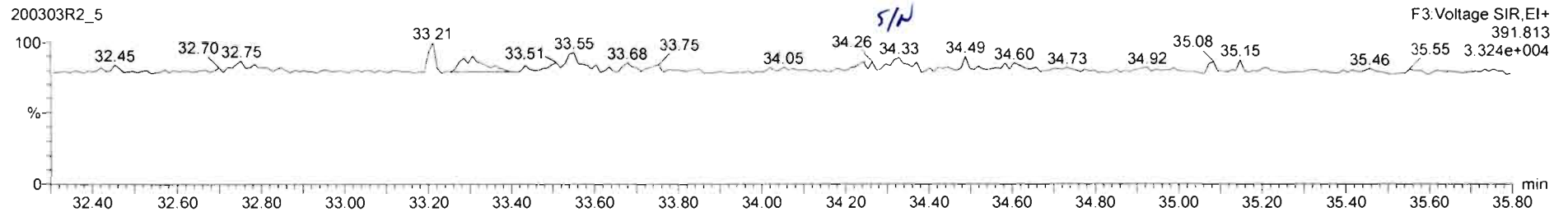
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1,2,3,4,7,8-HxCDD

200303R2\_5

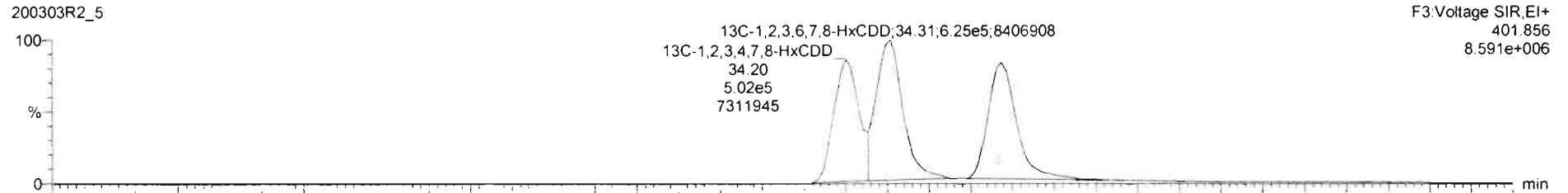


200303R2\_5

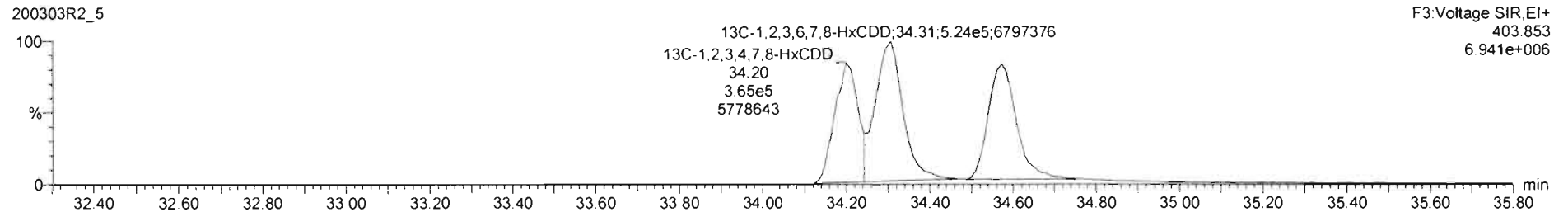


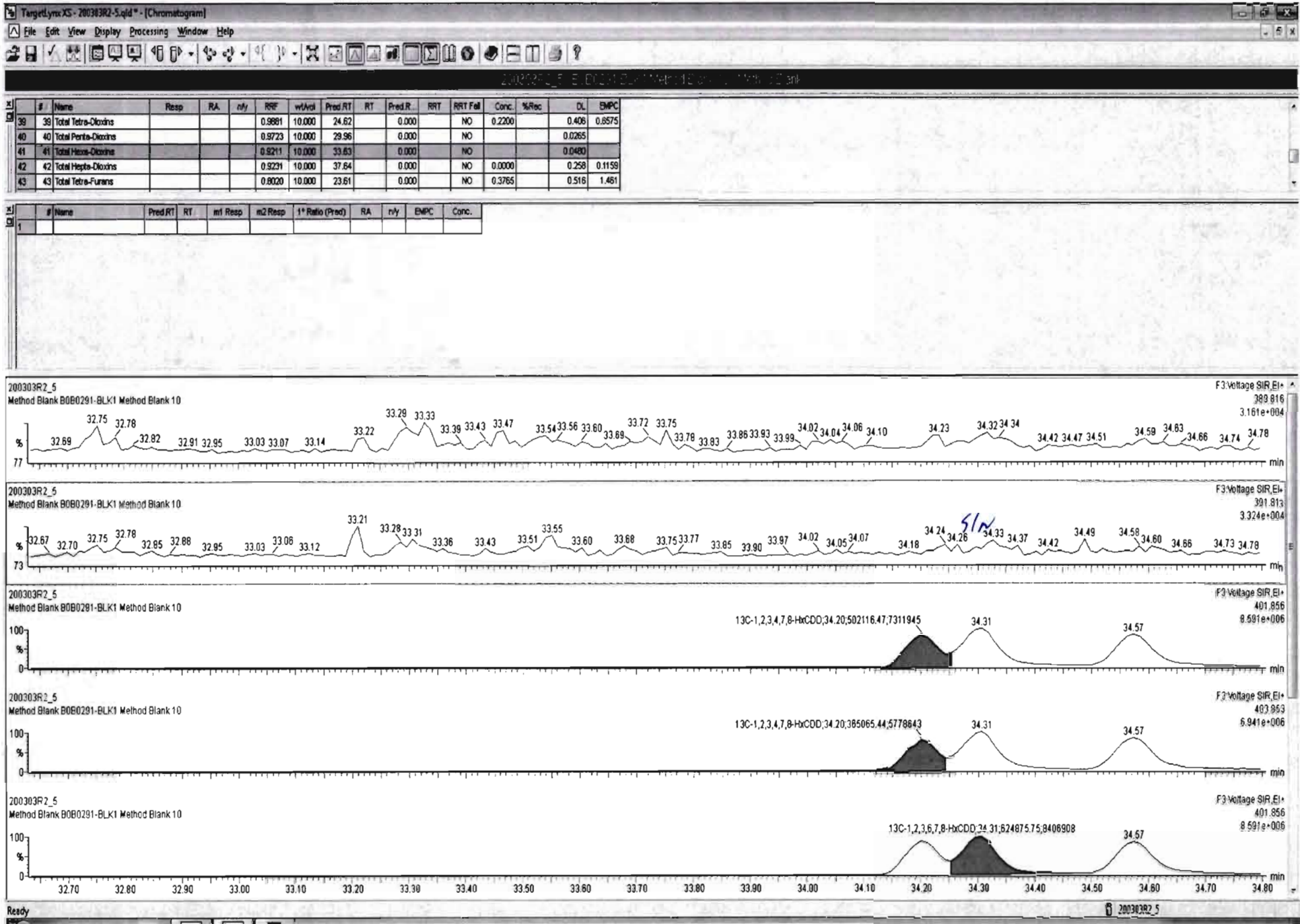
13C-1,2,3,4,7,8-HxCDD

200303R2\_5



200303R2\_5





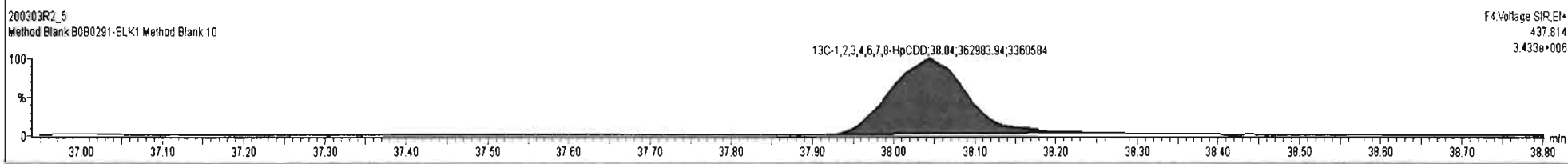
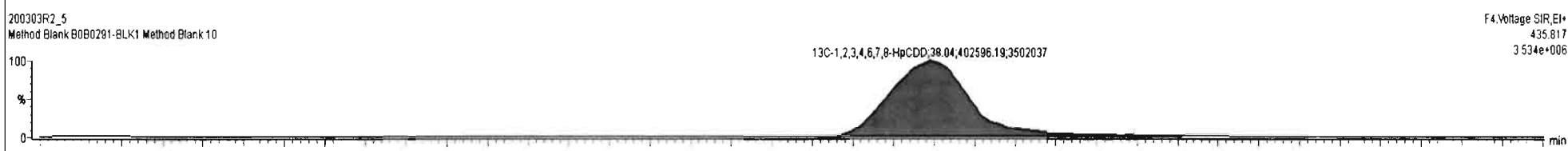
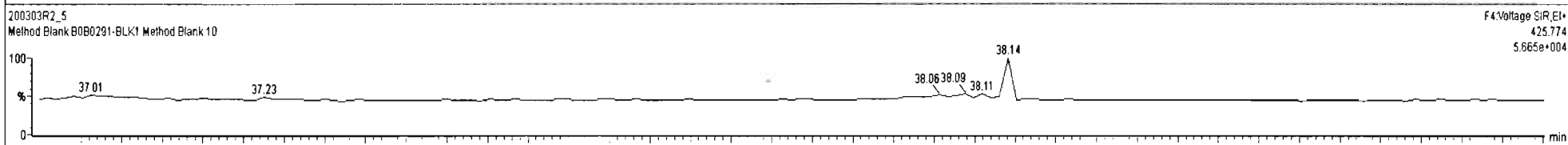
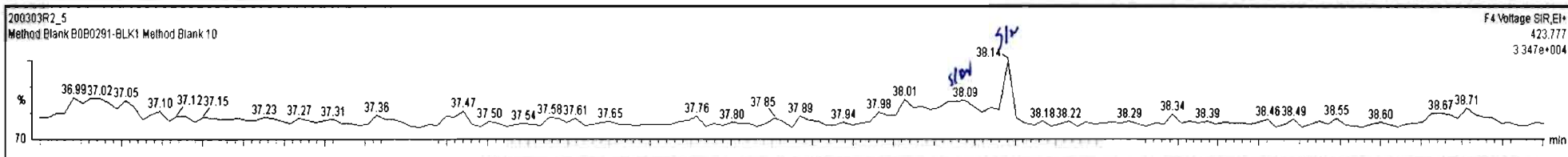


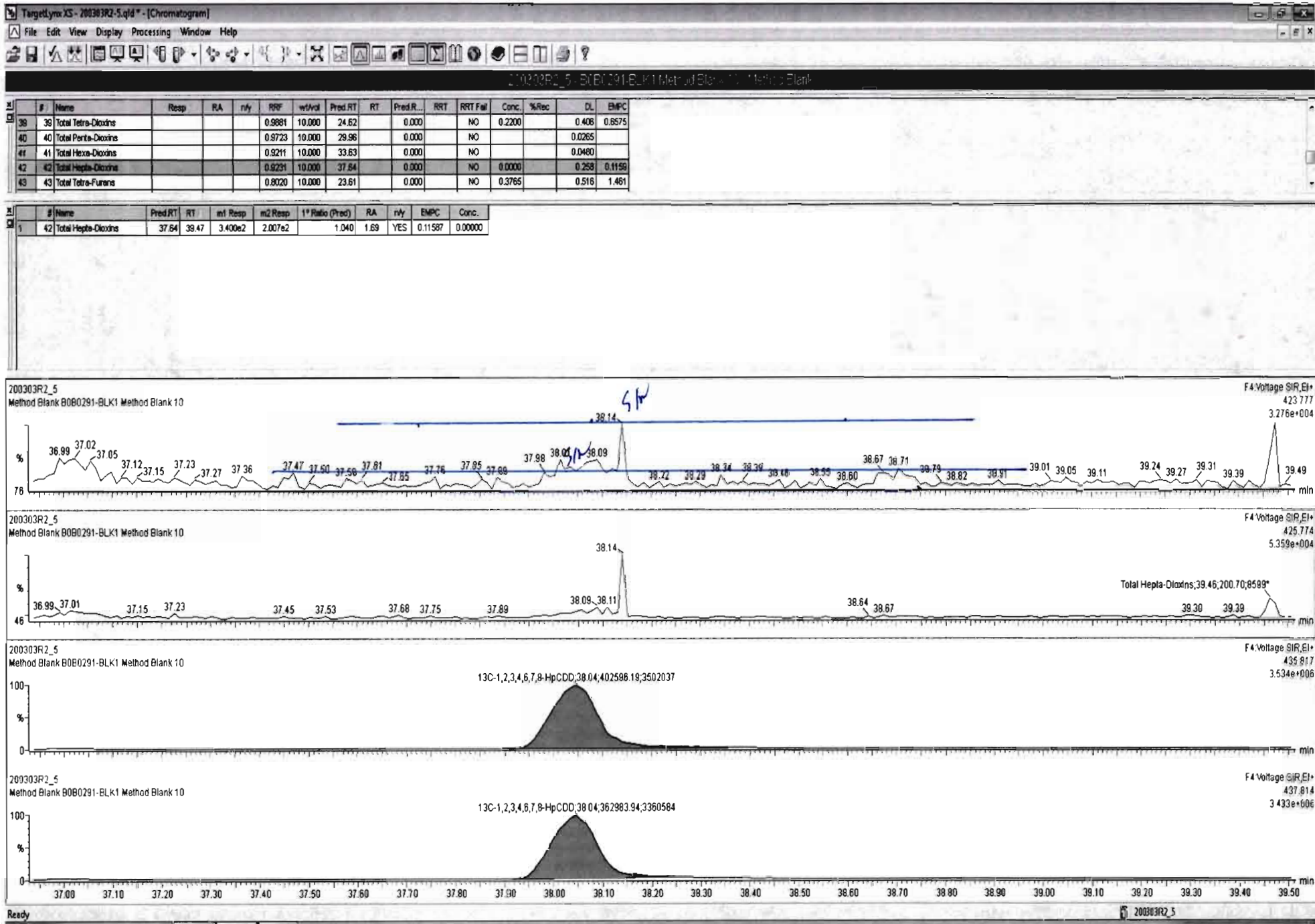


200303R2\_5 - EUB0291-BLK1 Method Blank 10 - Method Blank

#	Name	Resp	RA	n/y	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
38	Total Tetra-Dioxins				0.9981	10.000	24.62		0.000		NO	0.2200		0.406	0.6575
40	Total Penta-Dioxins				0.9723	10.000	29.96		0.000		NO			0.0265	
41	Total Hexa-Dioxins				0.9211	10.000	33.63		0.000		NO			0.0480	
42	Total Hepta-Dioxins				0.9221	10.000	37.84		0.000		NO			0.259	
43	Total Tetra-Furens				0.8020	10.000	23.61		0.000		NO	0.3765		0.516	1.461

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	n/y	EMPC	Conc.
1										





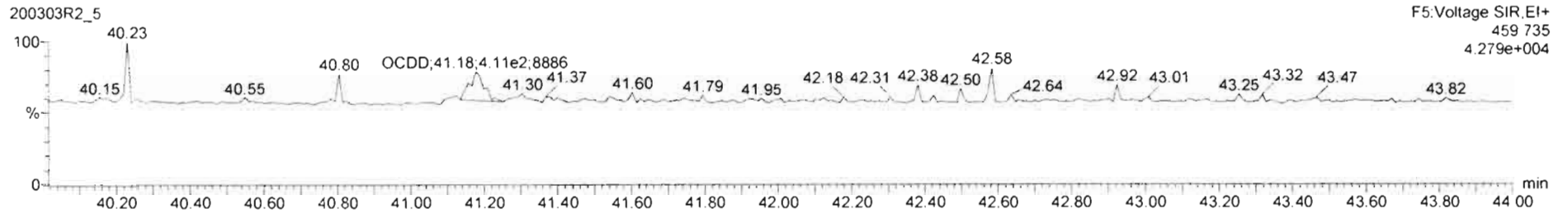
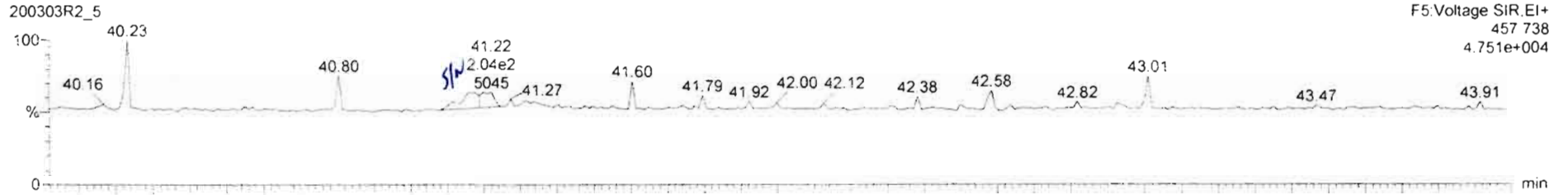
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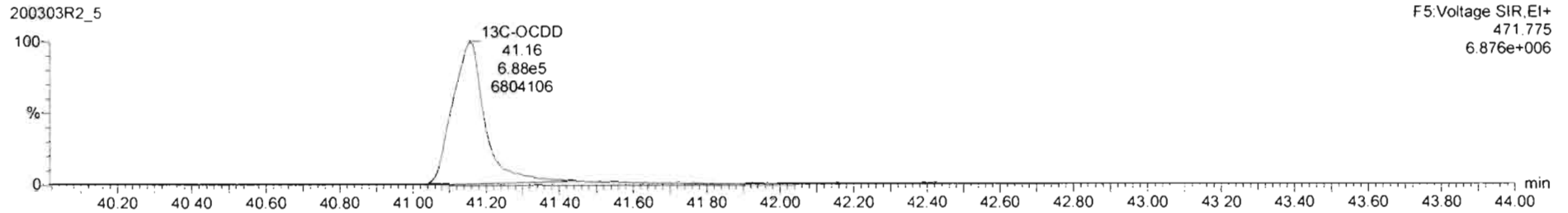
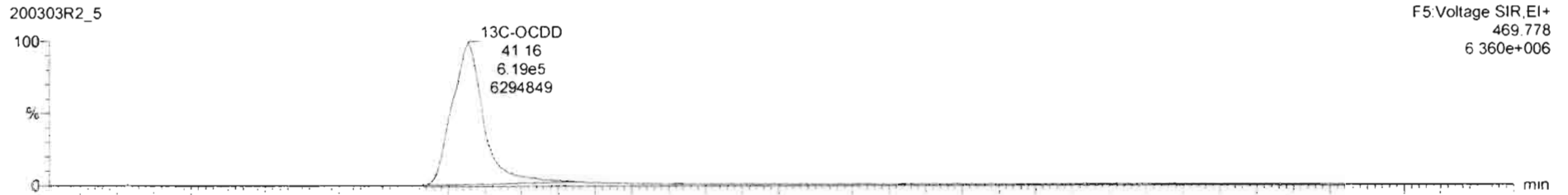
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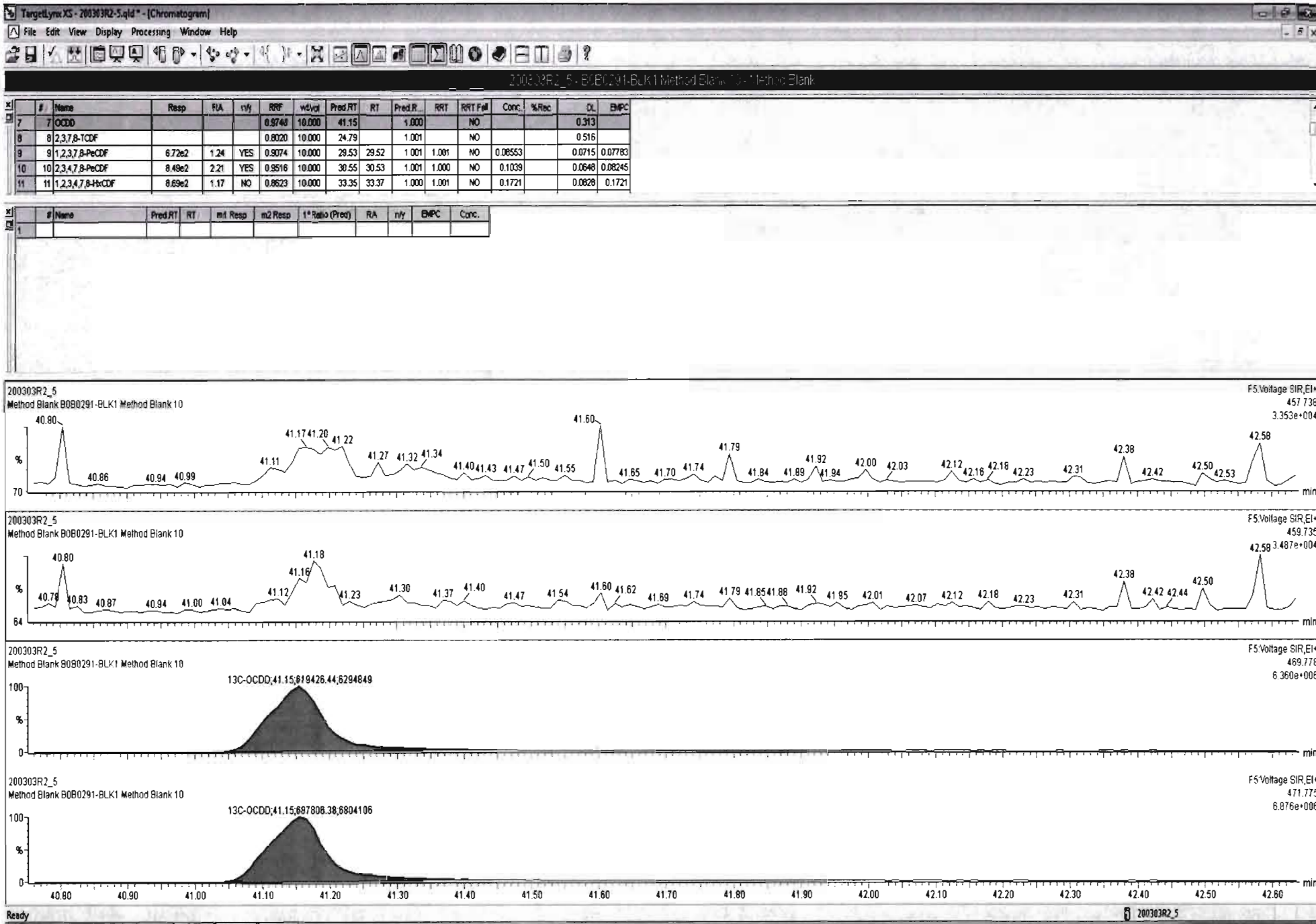
Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

OCDD

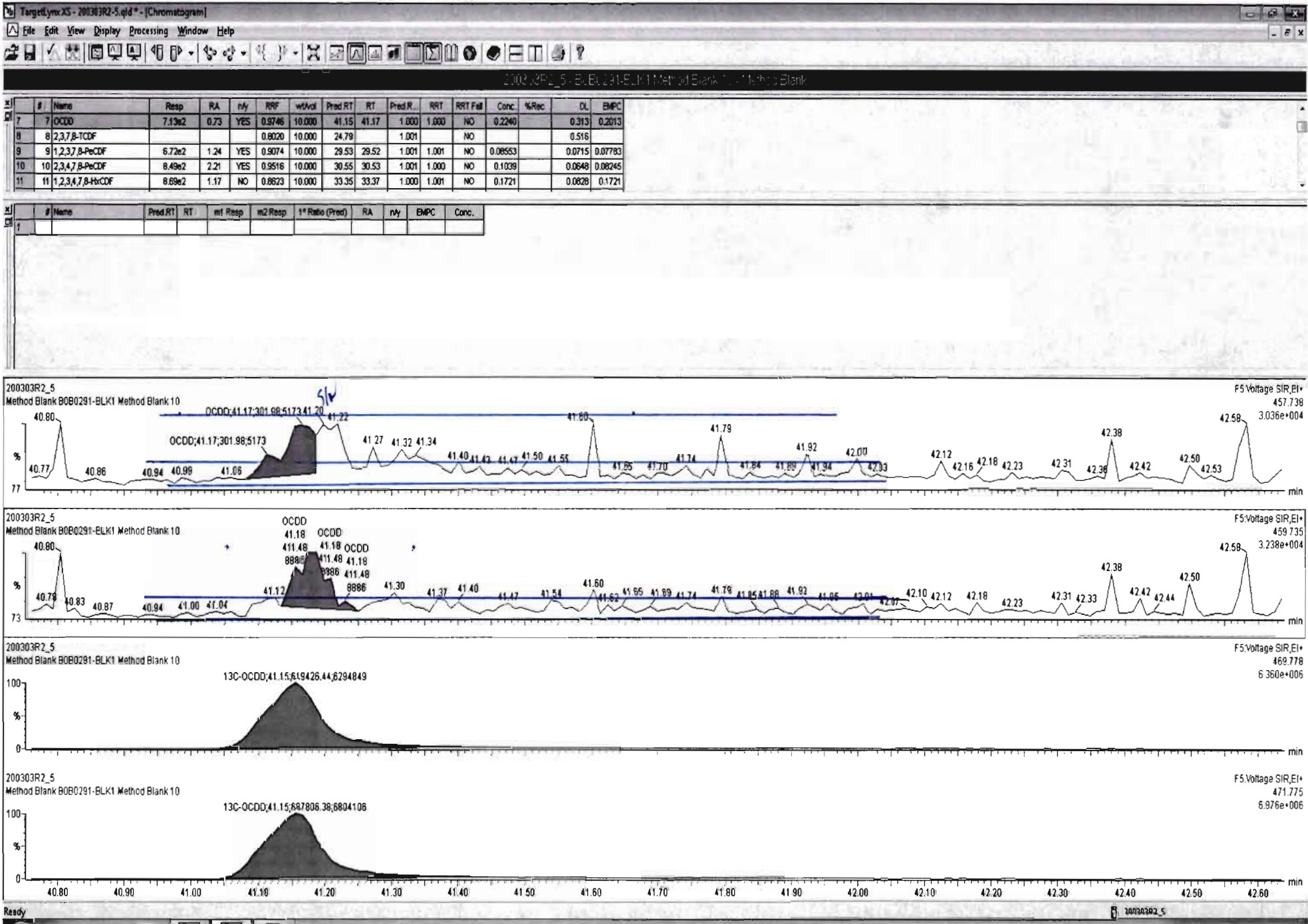


13C-OCDD









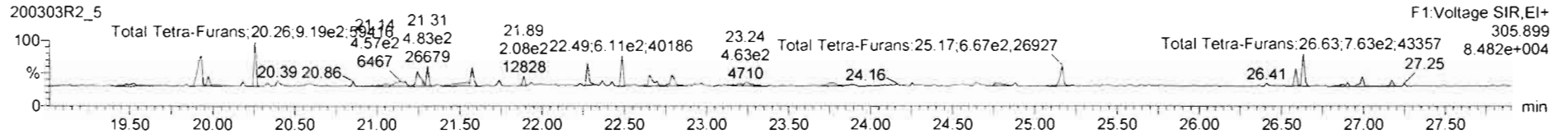
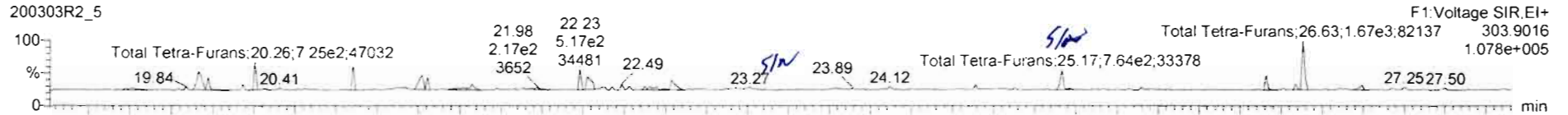
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

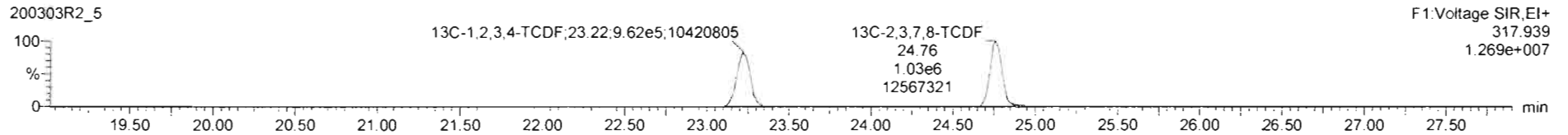
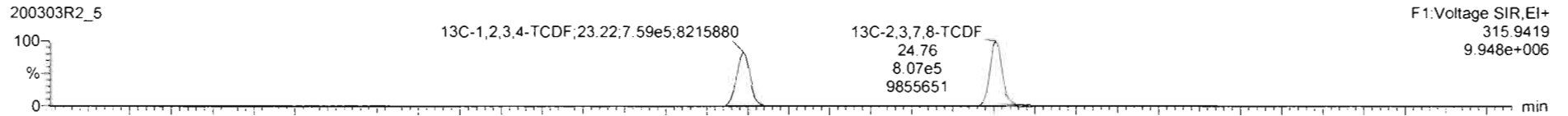
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Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

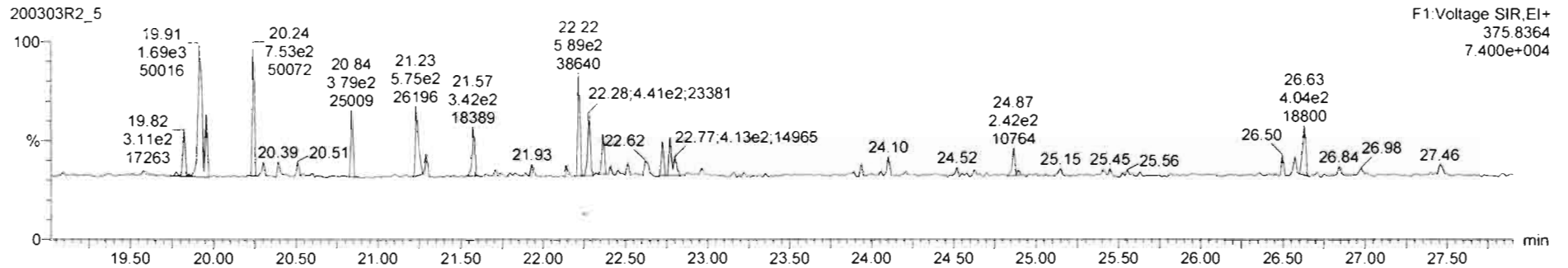
2,3,7,8-TCDF

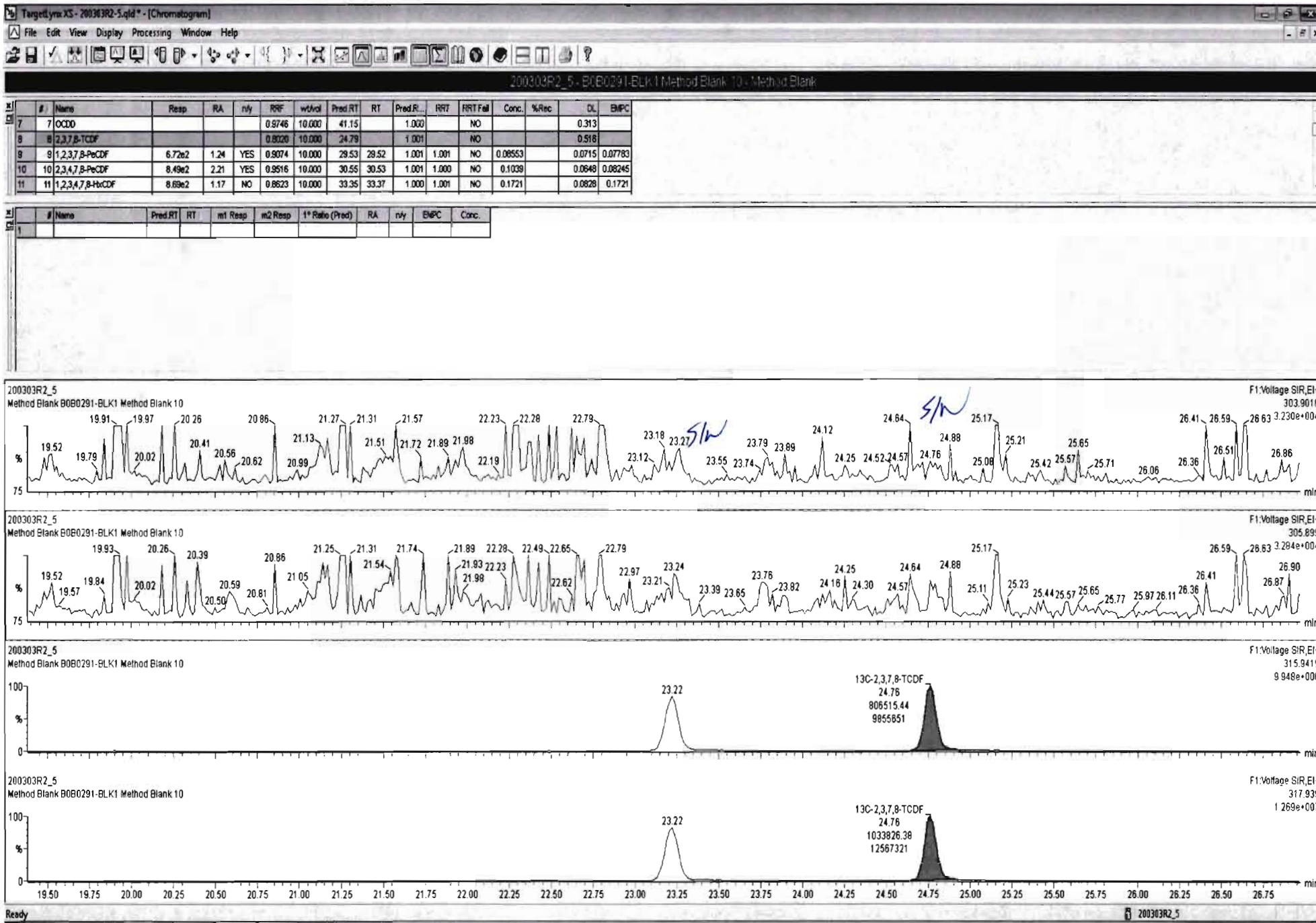


13C-2,3,7,8-TCDF



DPE1







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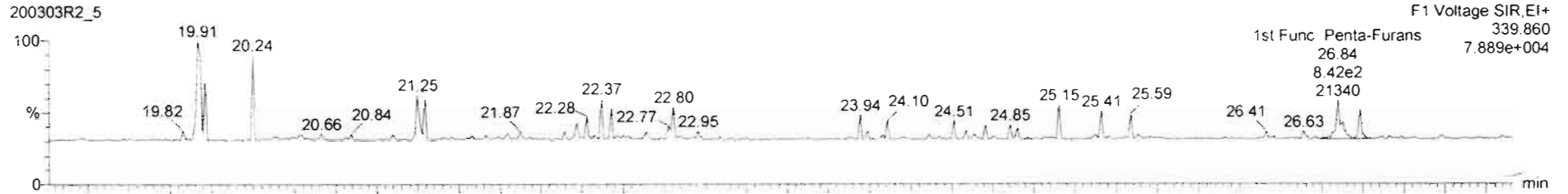
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

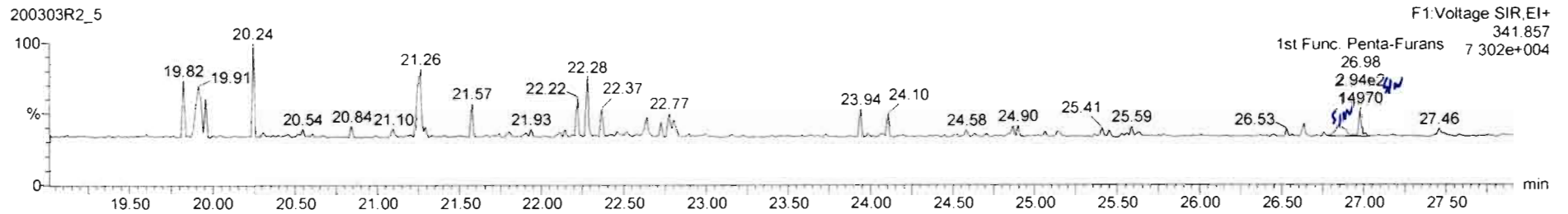
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1st Func. Penta-Furans

200303R2\_5

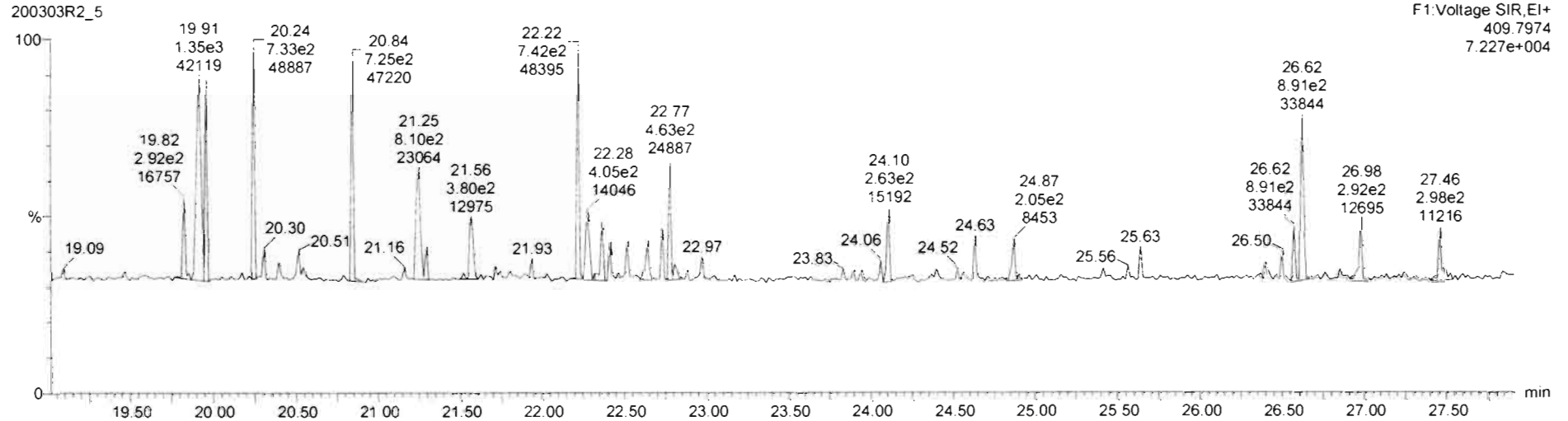


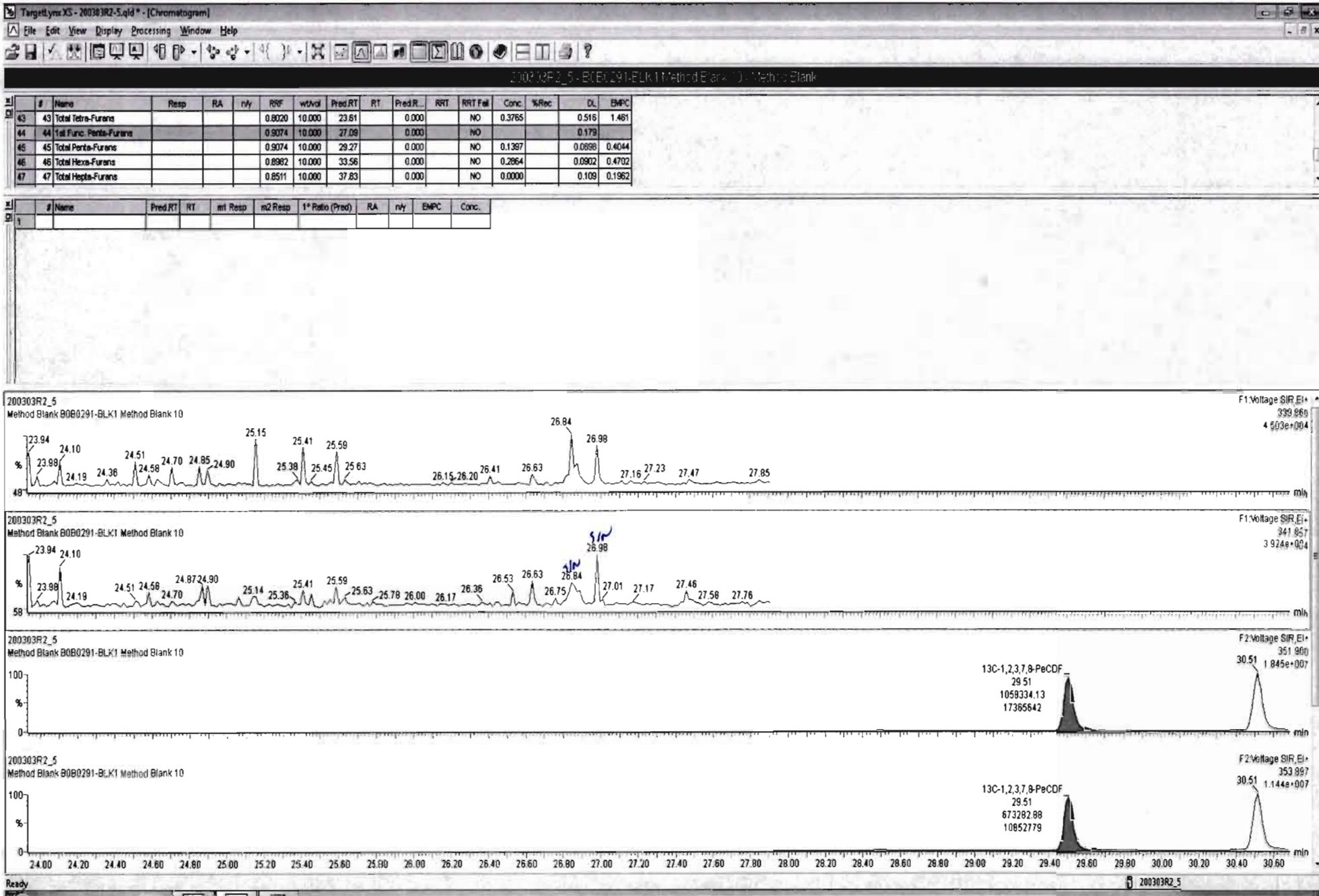
200303R2\_5

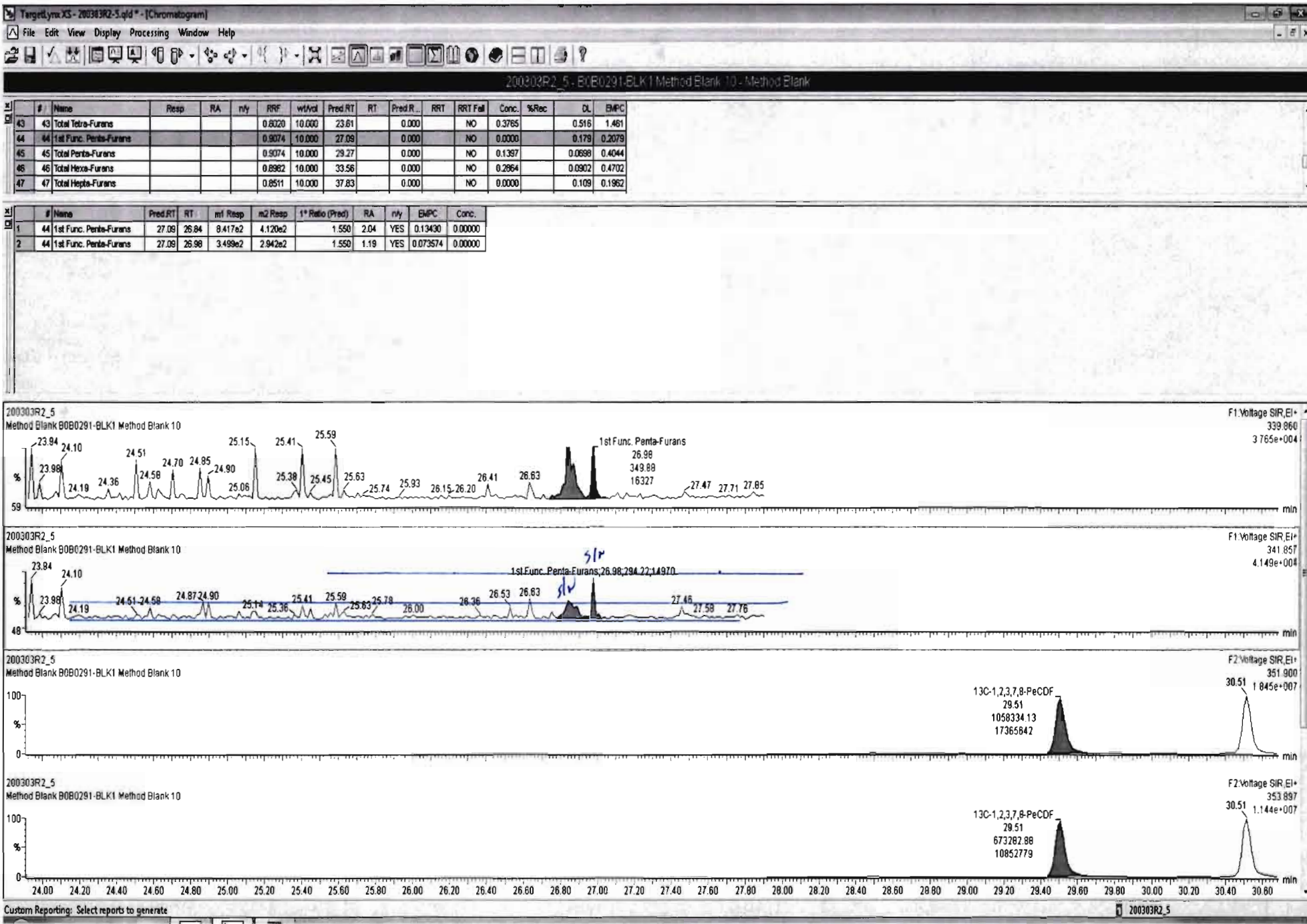


DPE6

200303R2\_5





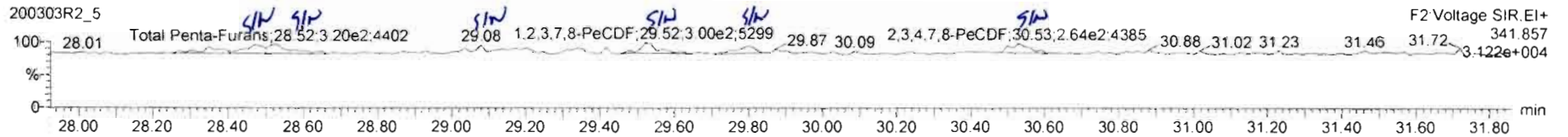
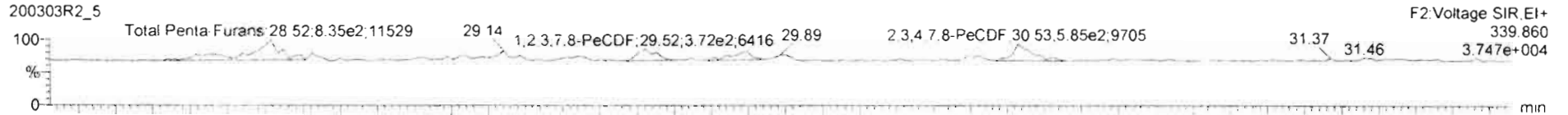


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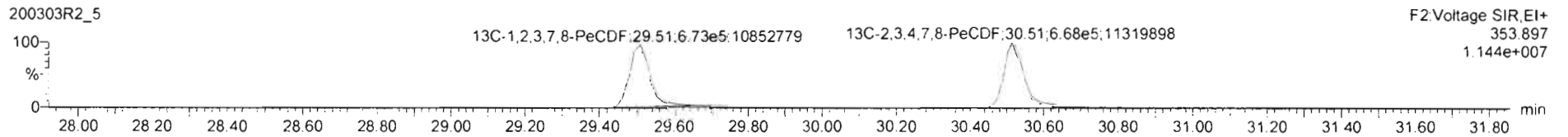
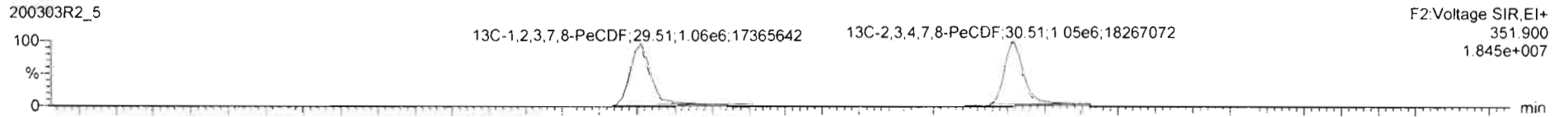
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

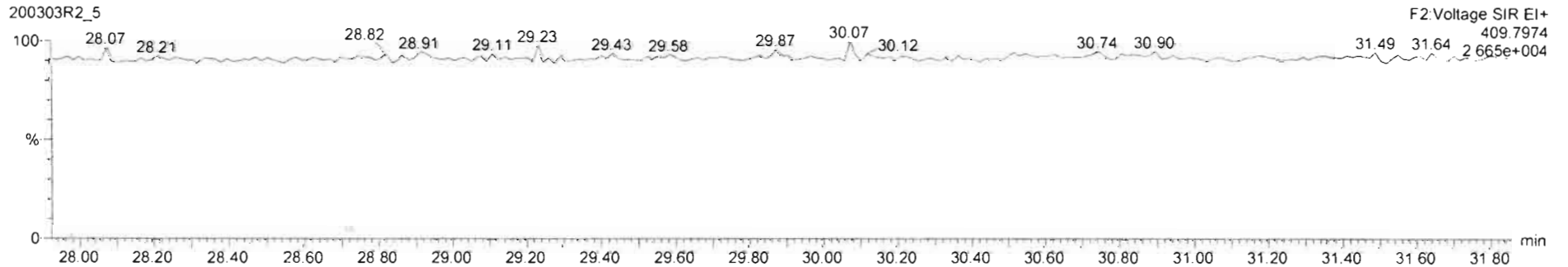
1,2,3,7,8-PeCDF



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



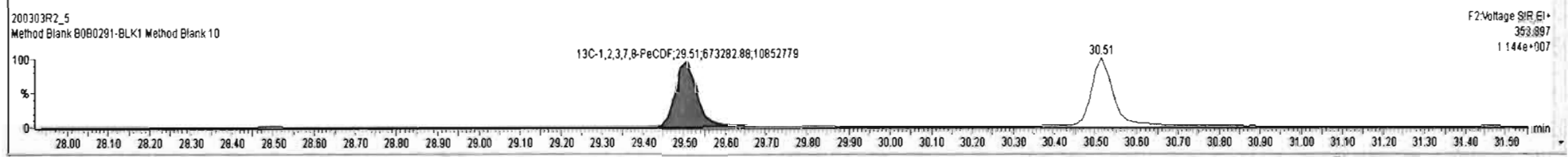
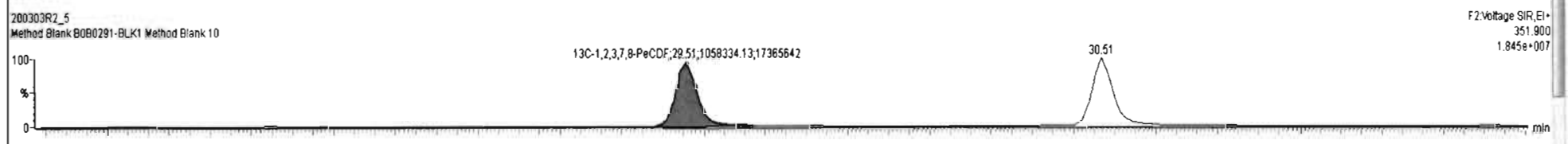
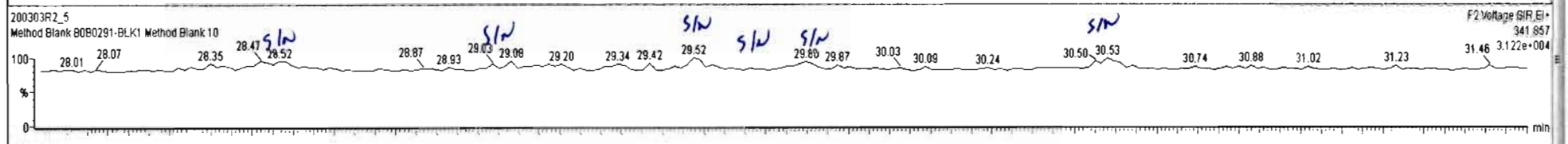
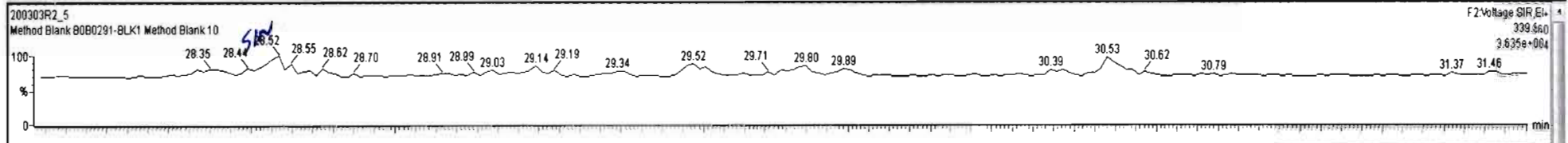
DPE2





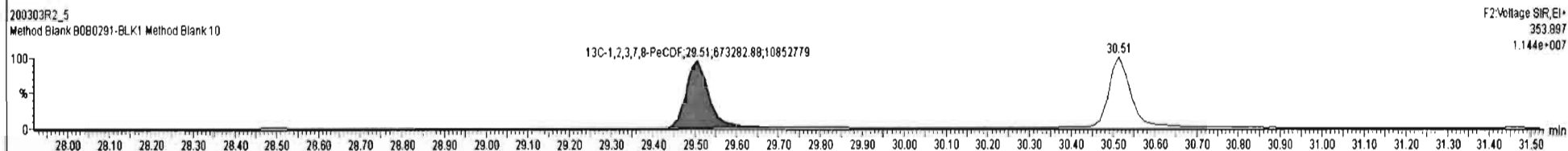
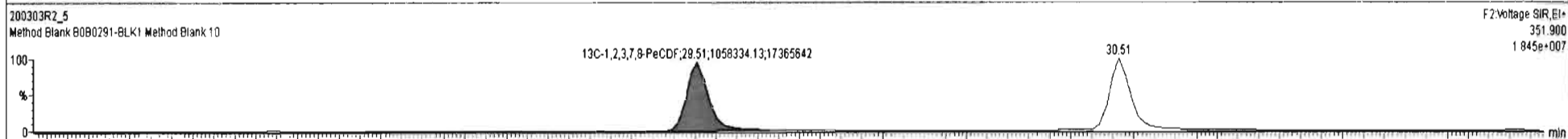
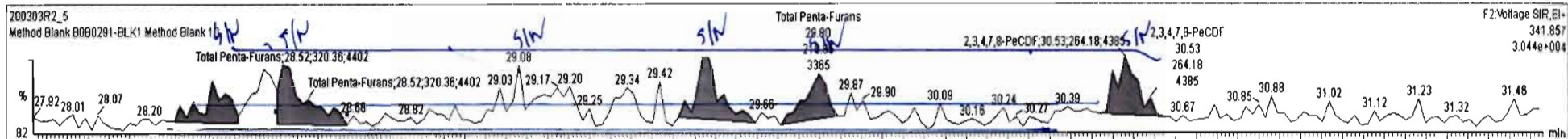
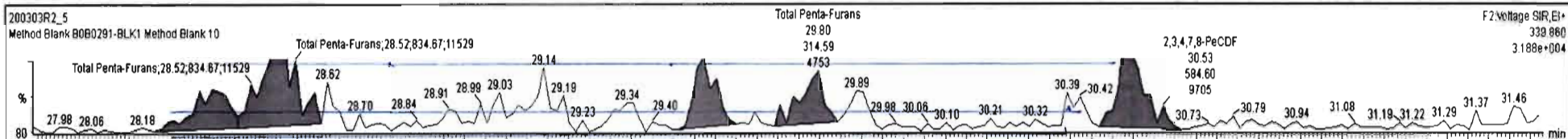
#	Name	Resp	RA	n/y	RRF	wtAvol	Pred RT	RT	Pred R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.000	23.61		0.000		NO	0.3765		0.516	1.461
44	1st Func. Penta-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Penta-Furans				0.9074	10.000	29.27		0.000		NO			0.0364	
46	Total Hexa-Furans				0.8962	10.000	33.56		0.000		NO	0.2864		0.0902	0.4702
47	Total Hepta-Furans				0.8511	10.000	37.83		0.000		NO	0.0000		0.109	0.1962

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1										



#	Name	Resp	RA	nly	RRF	wAcid	Pred.RT	RT	Pred.R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.000	23.81		0.000		NO	0.3765		0.516	1.461
44	1st Func. Penta-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Penta-Furans				0.9074	10.000	29.27		0.000		NO	0.1367		0.0696	0.4044
46	Total Hexa-Furans				0.8982	10.000	33.56		0.000		NO	0.2864		0.0902	0.4702
47	Total Hepta-Furans				0.8511	10.000	37.83		0.000		NO	0.0000		0.109	0.1962

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	nly	EMPC	Conc.
1	45 Total Penta-Furans	29.27	28.35	3.574e2	2.105e2	1.550	1.70	NO	0.072584	0.072584
2	45 Total Penta-Furans	29.27	28.52	8.347e2	3.204e2	1.550	2.61	YES	0.10442	0.00000
3	9 1,2,3,7,8-PeCDF	29.53	29.52	3.717e2	3.003e2	1.550	1.24	YES	0.077833	0.00000
4	45 Total Penta-Furans	29.27	29.80	3.146e2	2.108e2	1.550	1.49	NO	0.067161	0.067161
5	10 2,3,4,7,8-PeCDF	30.55	30.53	5.846e2	2.642e2	1.550	2.21	YES	0.082449	0.00000



Custom Reporting: Select reports to generate

200303R2\_5

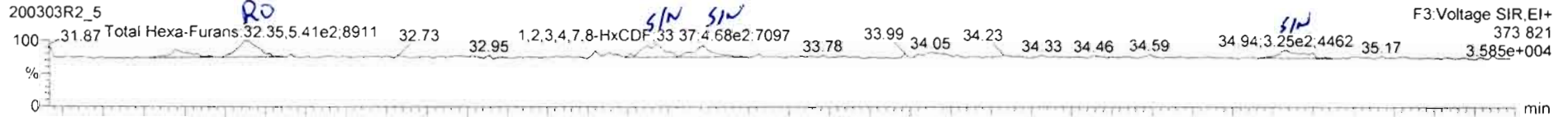
Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

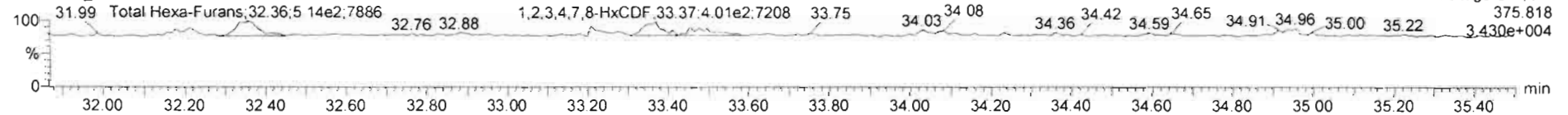
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Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

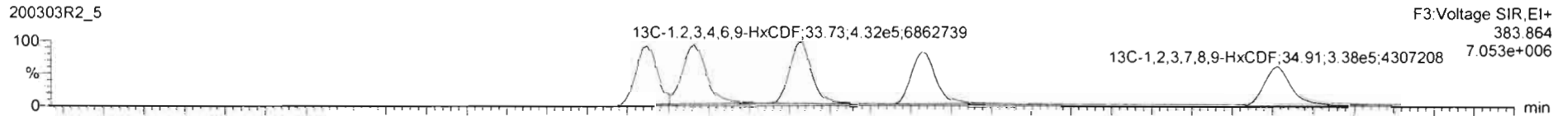
1,2,3,4,7,8-HxCDF



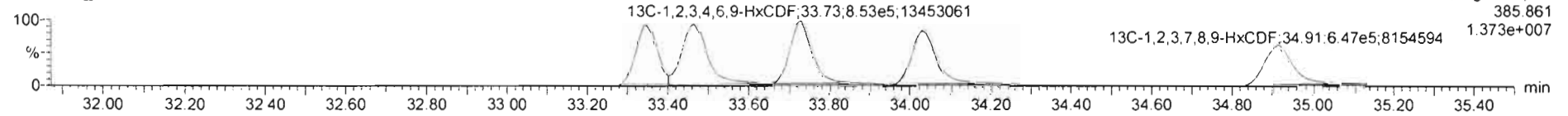
200303R2\_5



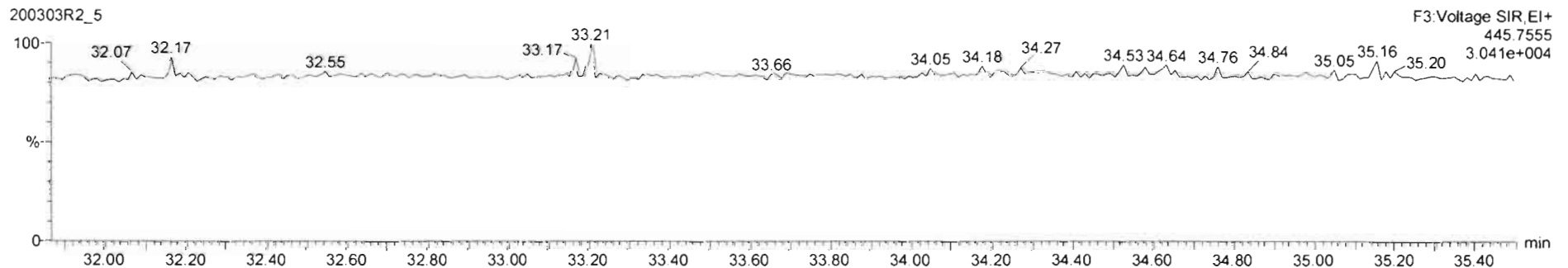
13C-1,2,3,4,7,8-HxCDF



200303R2\_5



DPE3

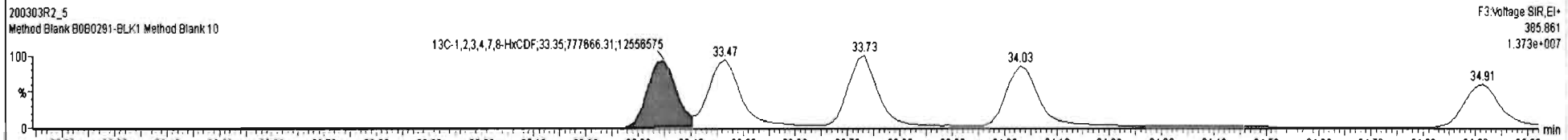
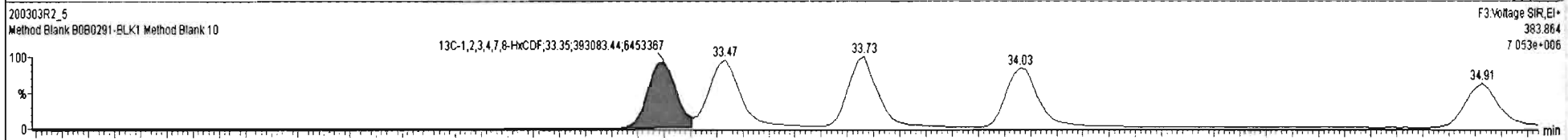
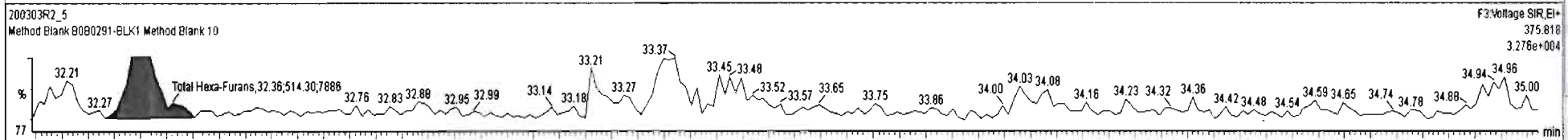
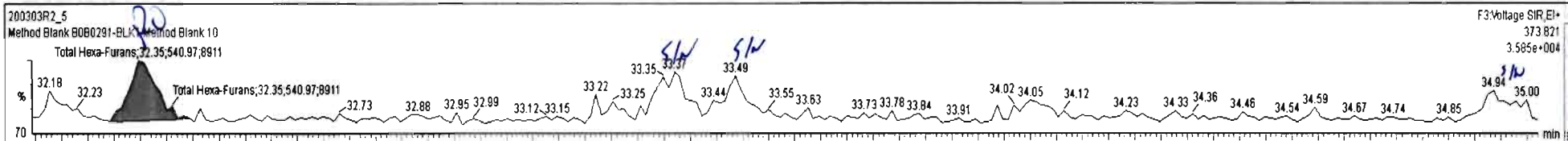




200303R2\_5 - BLK1 Method Blank 10 - Method Blank

#	Name	Resp	RA	n/y	RRF	wt/wd	Pred RT	RT	Pred R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.000	23.81		0.000		NO	0.3785		0.516	1.461
44	1st Func. Pente-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Pente-Furans				0.9074	10.000	29.27		0.000		NO			0.0364	
46	Total Hexa-Furans				0.8982	10.000	33.56		0.000		NO	0.0000		0.0380	0.1838
47	Total Hepte-Furans				0.8511	10.000	37.83		0.000		NO	0.0000		0.109	0.1962

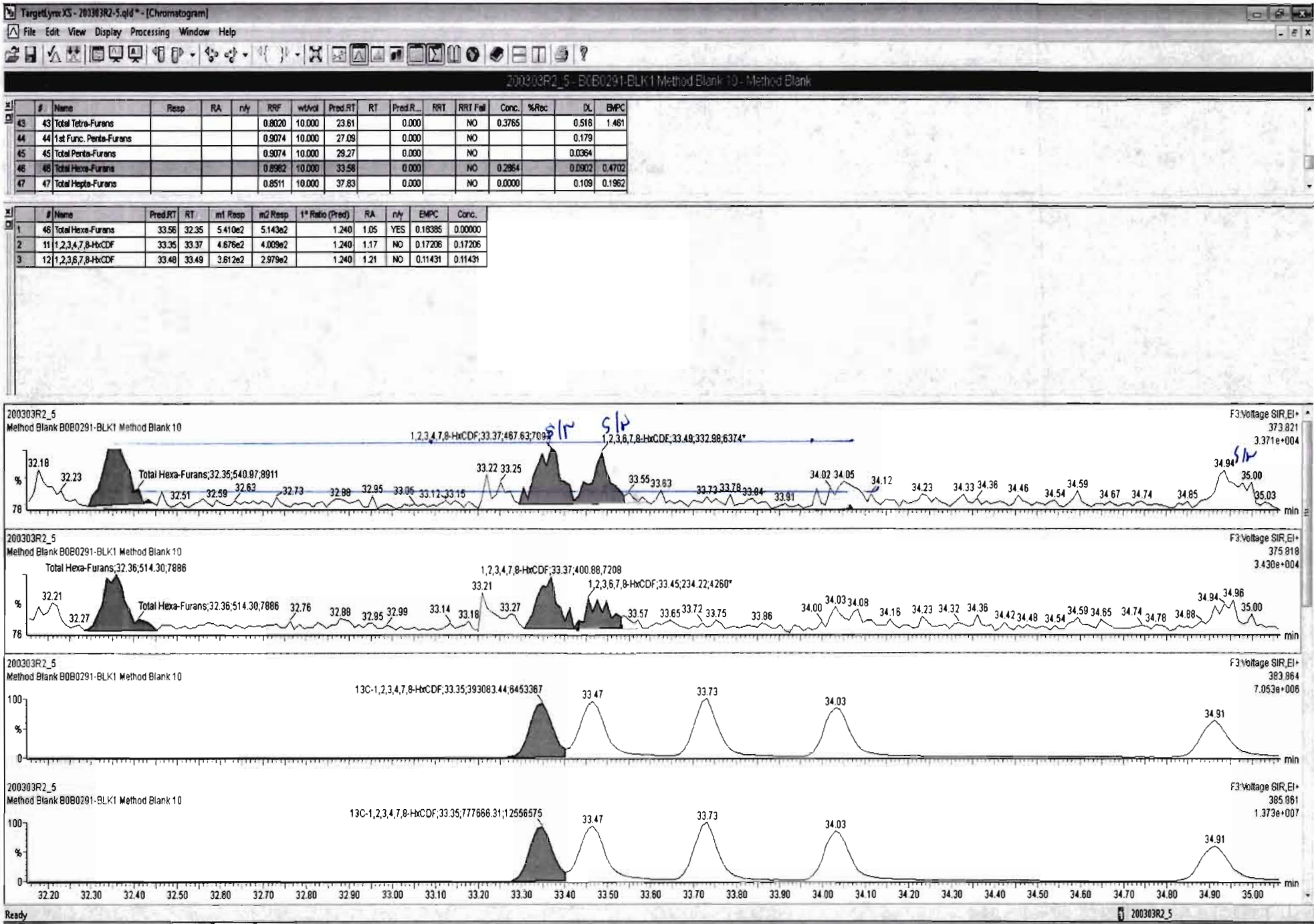
#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	46 Total Hexa-Furans	33.56	32.35	5.410e2	5.143e2	1.240	1.05	YES	0.18385	0.00000



Ready

200303R2\_5



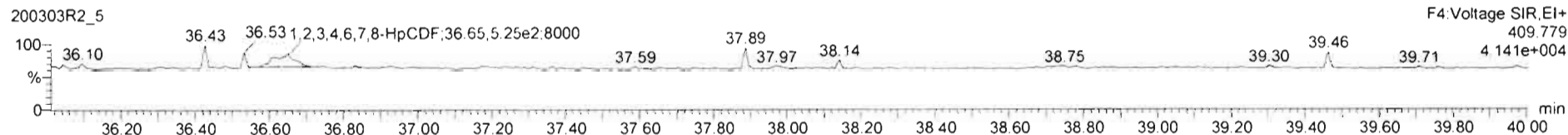
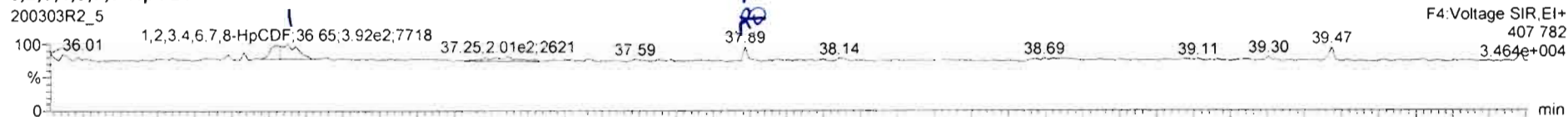


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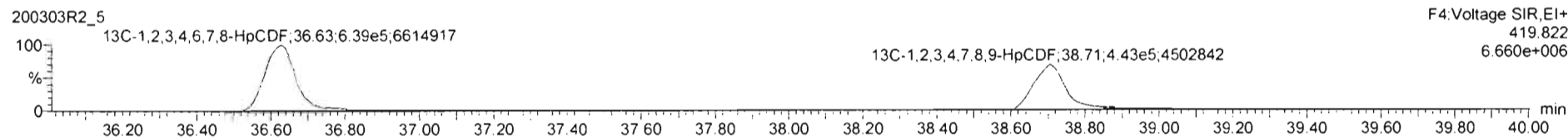
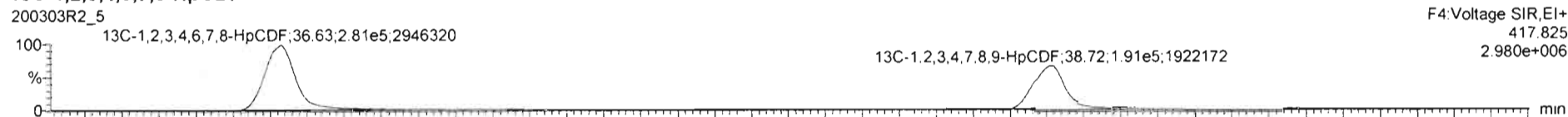
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

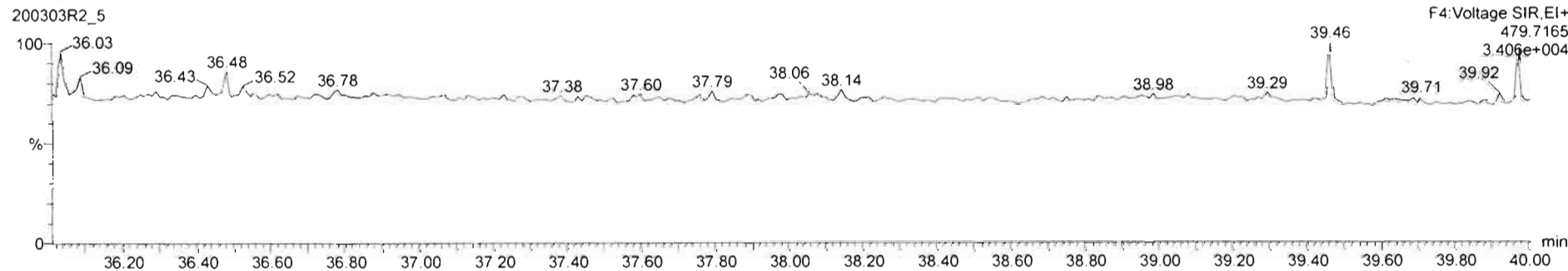
1,2,3,4,6,7,8-HpCDF



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



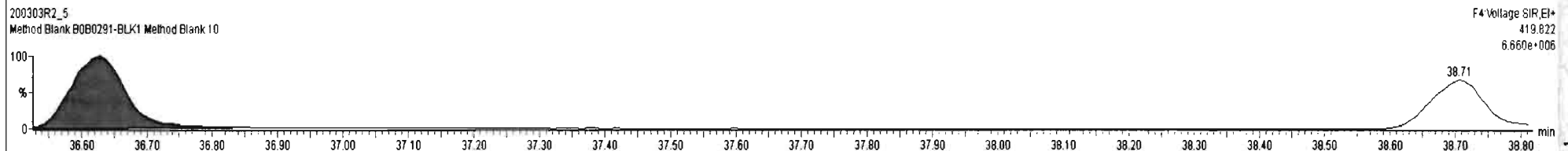
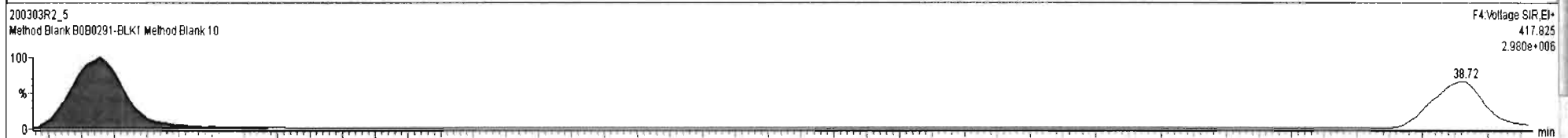
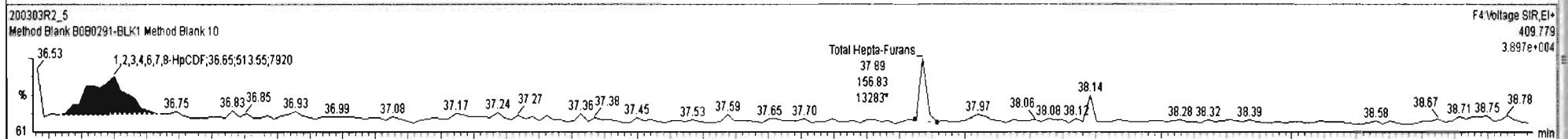
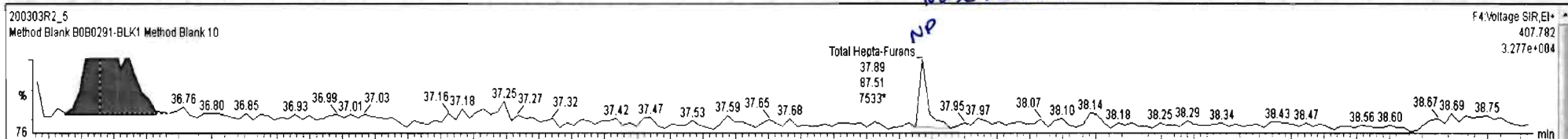
DPE4



200303R2\_5 - B: B0B0291-BLK1 Method Blank 10 - Method Blank

#	Name	Resp	RA	nly	RRF	wt/Std	Pred.RT	RT	Pred.R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.000	24.62		0.000		NO			0.165	
40	Total Penta-Dioxins				0.9723	10.000	29.96		0.000		NO			0.0265	
41	Total Hexa-Dioxins				0.9211	10.000	33.63		0.000		NO			0.0480	
42	Total Hepta-Dioxins				0.9231	10.000	37.64		0.000		NO			0.258	
43	Total Tetra-Furans				0.8020	10.000	23.61		0.000		NO	0.3765		0.516	1.461
44	1st Func. Penta-Furans				0.9074	10.000	27.09		0.000		NO			0.179	
45	Total Penta-Furans				0.9074	10.000	29.27		0.000		NO			0.0364	
46	Total Hexa-Furans				0.8982	10.000	33.56		0.000		NO	0.0000		0.0380	0.1638
47	Total Hepta-Furans				0.8511	10.000	37.63		0.000		NO	0.2835		0.301	0.3484

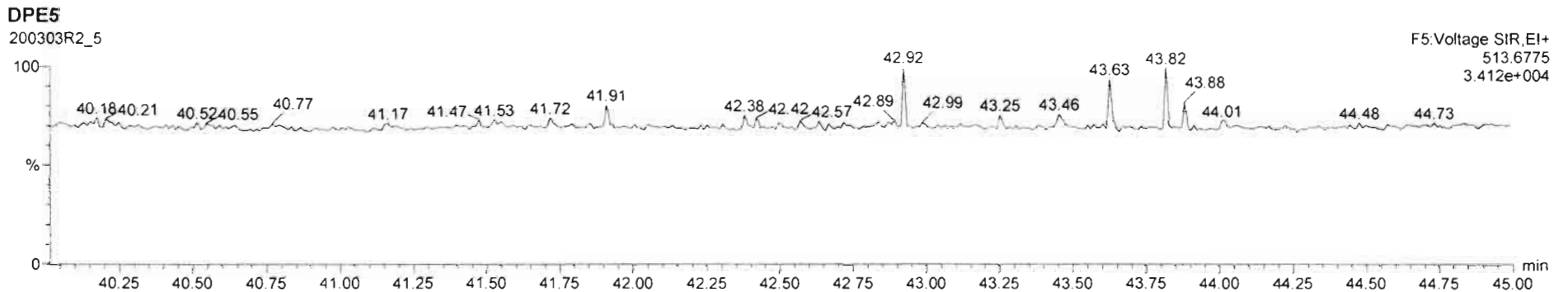
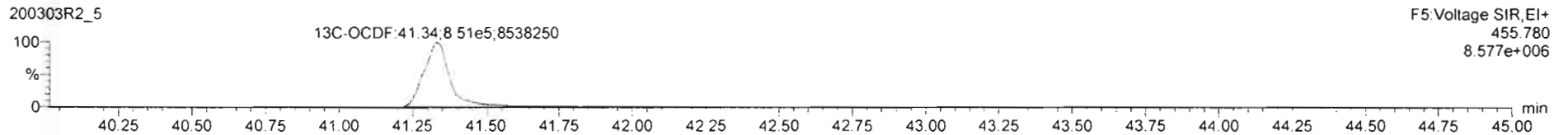
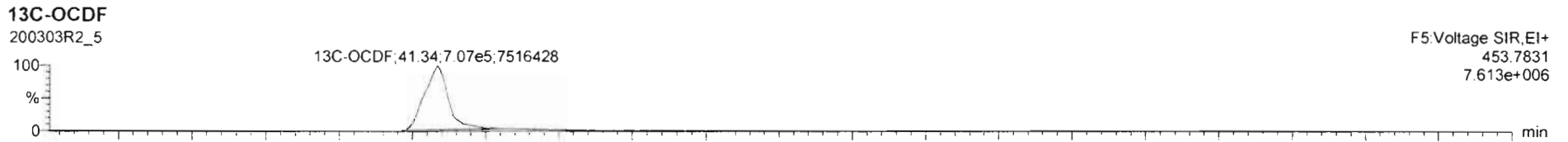
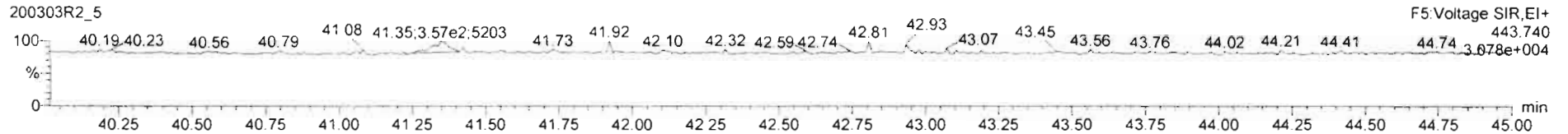
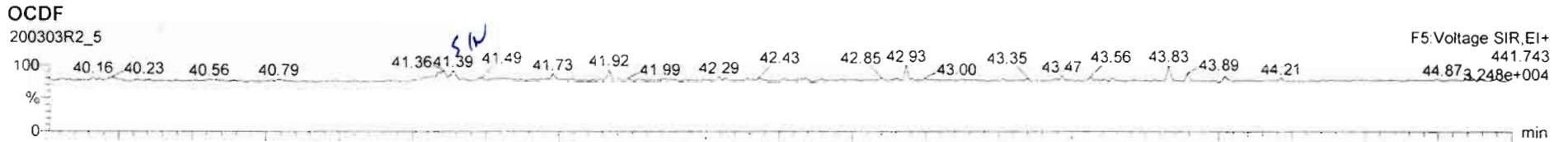
#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1° Ratio (Pred)	RA	nly	EMPC	Conc.
1	1,2,3,4,6,7,8-HpCDF	36.67	36.65	5.973e2	5.136e2	1.040	1.16	NO	0.28348	0.28348
2	Total Hepta-Furans	37.83	37.89	1.094e2	1.568e2	1.040	0.70	YES	0.064886	0.00000



Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank





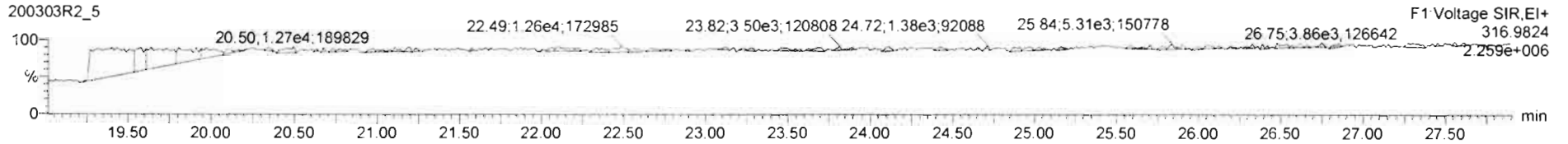
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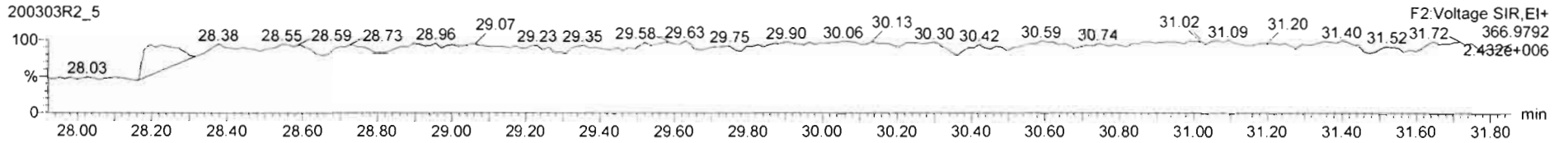
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_5, Date: 03-Mar-2020, Time: 16:59:39, ID: B0B0291-BLK1 Method Blank 10, Description: Method Blank

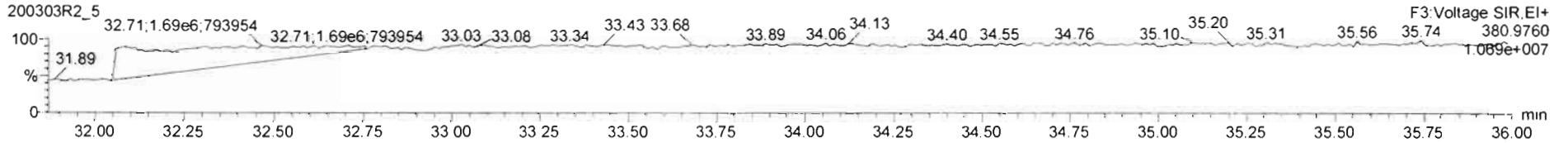
PFK1



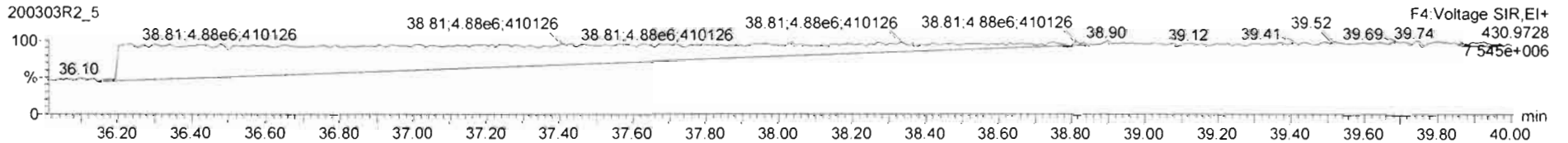
PFK2



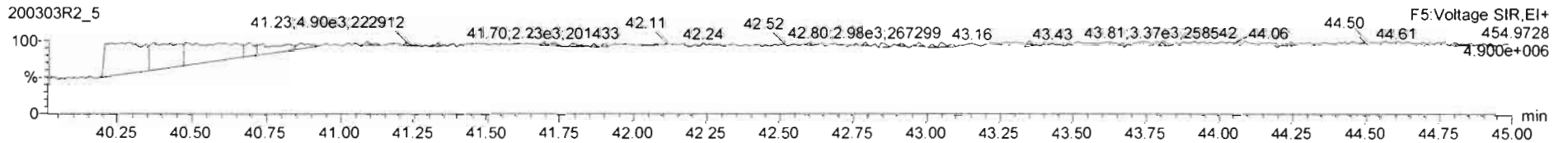
PFK3



PFK4



PFK5



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-3.qld

Last Altered: Wednesday, March 04, 2020 09:26:35 Pacific Standard Time

Printed: Wednesday, March 04, 2020 14:10:30 Pacific Standard Time

*dy 03-04-2020*

*CT 03/06/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_3, Date: 03-Mar-2020, Time: 15:25:54, ID: B0B0291-BS1 OPR 10, Description: OPR

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	67977.086	0.799	NO	0.988	10.000	25.72	25.72	1.00	1.00	NO	16.37		0.307	16.37
2	2 1,2,3,7,8-PeCDD	300930.453	0.620	NO	0.972	10.000	30.84	30.83	1.00	1.00	NO	80.51		0.206	80.51
3	3 1,2,3,4,7,8-HxCDD	249436.539	1.267	NO	1.07	10.000	34.21	34.21	1.00	1.00	NO	94.62		0.353	94.62
4	4 1,2,3,6,7,8-HxCDD	283324.500	1.350	NO	0.921	10.000	34.30	34.32	1.00	1.00	NO	88.79		0.356	88.79
5	5 1,2,3,7,8,9-HxCDD	262816.602	1.357	NO	0.918	10.000	34.61	34.58	1.00	1.00	NO	94.86		0.404	94.86
6	6 1,2,3,4,6,7,8-HpCDD	190343.766	1.018	NO	0.923	10.000	38.06	38.07	1.00	1.00	NO	93.52		0.637	93.52
7	7 OCDD	350690.376	0.877	NO	0.975	10.000	41.15	41.15	1.00	1.00	NO	178.2		0.624	178.2
8	8 2,3,7,8-TCDF	80814.261	0.763	NO	0.802	10.000	24.77	24.76	1.00	1.00	NO	18.63		0.210	18.63
9	9 1,2,3,7,8-PeCDF	423454.219	1.568	NO	0.907	10.000	29.51	29.51	1.00	1.00	NO	87.05		0.384	87.05
10	10 2,3,4,7,8-PeCDF	451286.563	1.558	NO	0.952	10.000	30.55	30.51	1.00	1.00	NO	91.79		0.357	91.79
11	11 1,2,3,4,7,8-HxCDF	298822.766	1.201	NO	0.862	10.000	33.34	33.35	1.00	1.00	NO	101.6		0.481	101.6
12	12 1,2,3,6,7,8-HxCDF	350576.563	1.121	NO	0.841	10.000	33.47	33.48	1.00	1.00	NO	108.7		0.491	108.7
13	13 2,3,4,6,7,8-HxCDF	330566.438	1.185	NO	0.898	10.000	34.06	34.04	1.00	1.00	NO	105.9		0.515	105.9
14	14 1,2,3,7,8,9-HxCDF	256559.610	1.252	NO	0.858	10.000	34.91	34.92	1.00	1.00	NO	101.4		0.754	101.4
15	15 1,2,3,4,6,7,8-HpCDF	227716.156	0.973	NO	0.851	10.000	36.67	36.64	1.00	1.00	NO	104.9		0.671	104.9
16	16 1,2,3,4,7,8,9-HpCDF	183235.750	1.016	NO	0.980	10.000	38.71	38.72	1.00	1.00	NO	107.3		0.892	107.3
17	17 OCDF	381979.734	0.856	NO	0.806	10.000	41.33	41.34	1.00	1.00	NO	202.8		0.750	202.8
18	18 13C-2,3,7,8-TCDD	840719.313	0.783	NO	1.20	10.000	25.64	25.69	1.03	1.03	NO	114.0	57.0	0.255	
19	19 13C-1,2,3,7,8-PeCDD	768867.907	0.632	NO	0.967	10.000	30.76	30.82	1.23	1.23	NO	129.3	64.6	0.329	
20	20 13C-1,2,3,4,7,8-HxCDD	492380.969	1.227	NO	0.874	10.000	34.19	34.20	1.01	1.01	NO	89.47	44.7	0.453	
21	21 13C-1,2,3,6,7,8-HxCDD	692836.719	1.152	NO	1.05	10.000	34.29	34.30	1.02	1.02	NO	105.2	52.6	0.378	
22	22 13C-1,2,3,7,8,9-HxCDD	603485.656	1.064	NO	0.974	10.000	34.60	34.57	1.03	1.03	NO	98.35	49.2	0.406	
23	23 13C-1,2,3,4,6,7,8-HpCDD	441016.547	1.010	NO	0.747	10.000	38.17	38.04	1.13	1.13	NO	93.72	46.9	0.358	
24	24 13C-OCDD	807883.594	0.890	NO	0.707	10.000	41.07	41.15	1.22	1.22	NO	181.6	45.4	0.518	
25	25 13C-2,3,7,8-TCDF	1081903.6...	0.810	NO	1.07	10.000	24.83	24.75	0.99	0.99	NO	118.2	59.1	0.356	
26	26 13C-1,2,3,7,8-PeCDF	1072275.2...	1.617	NO	1.00	10.000	29.40	29.49	1.18	1.18	NO	124.5	62.3	0.568	
27	27 13C-2,3,4,7,8-PeCDF	1033375.5...	1.572	NO	0.962	10.000	30.37	30.51	1.21	1.22	NO	125.0	62.5	0.591	
28	28 13C-1,2,3,4,7,8-HxCDF	682121.422	0.516	NO	1.05	10.000	33.32	33.34	0.99	0.99	NO	103.2	51.6	0.534	
29	29 13C-1,2,3,6,7,8-HxCDF	766304.297	0.509	NO	1.19	10.000	33.42	33.46	0.99	0.99	NO	102.3	51.1	0.471	
30	30 13C-2,3,4,6,7,8-HxCDF	695128.890	0.503	NO	1.07	10.000	34.03	34.03	1.01	1.01	NO	103.5	51.8	0.525	
31	31 13C-1,2,3,7,8,9-HxCDF	590015.610	0.521	NO	0.922	10.000	34.94	34.91	1.04	1.04	NO	101.6	50.8	0.607	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-3.qld

Last Altered: Wednesday, March 04, 2020 09:26:35 Pacific Standard Time

Printed: Wednesday, March 04, 2020 14:10:30 Pacific Standard Time

Name: 200303R2\_3, Date: 03-Mar-2020, Time: 15:25:54, ID: B0B0291-BS1 OPR 10, Description: OPR

	# Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	509997.109	0.456	NO	0.767	10.000	36.69	36.63	1.09	1.09	NO	105.6	52.8	0.501	
33	33 13C-1,2,3,4,7,8,9-HpCDF	348471.774	0.435	NO	0.552	10.000	38.71	38.71	1.15	1.15	NO	100.2	50.1	0.696	
34	34 13C-OCDF	935055.344	0.913	NO	0.789	10.000	41.31	41.33	1.23	1.23	NO	188.1	47.0	0.362	
35	35 37Cl-2,3,7,8-TCDD	522778.781			1.18	10.000	25.68	25.72	1.03	1.03	NO	72.23	90.3	0.101	
36	36 13C-1,2,3,4-TCDD	1230592.5...	0.790	NO	1.00	10.000	25.11	25.00	1.00	1.00	NO	200.0	100	0.306	
37	37 13C-1,2,3,4-TCDF	1719133.7...	0.790	NO	1.00	10.000	23.37	23.19	1.00	1.00	NO	200.0	100	0.379	
38	38 13C-1,2,3,4,6,9-HxCDF	1259493.1...	0.513	NO	1.00	10.000	33.71	33.72	1.00	1.00	NO	200.0	100	0.560	
39	39 Total Tetra-Dioxins				0.988	10.000	24.62		0.00		NO	16.80		0.307	17.15
40	40 Total Penta-Dioxins				0.972	10.000	29.96		0.00		NO	80.66		0.206	80.91
41	41 Total Hexa-Dioxins				0.921	10.000	33.63		0.00		NO	278.3		0.387	278.9
42	42 Total Hepta-Dioxins				0.923	10.000	37.64		0.00		NO	94.45		0.637	94.45
43	43 Total Tetra-Furans				0.802	10.000	23.61		0.00		NO	18.63		0.210	18.78
44	44 1st Func. Penta-Furans				0.907	10.000	27.09		0.00		NO			0.0447	
45	45 Total Penta-Furans				0.907	10.000	29.27		0.00		NO	180.2		0.379	180.5
46	46 Total Hexa-Furans				0.898	10.000	33.56		0.00		NO	418.3		0.530	418.3
47	47 Total Hepta-Furans				0.851	10.000	37.83		0.00		NO	212.3		0.815	212.3

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-3.qld

Last Altered: Wednesday, March 04, 2020 09:26:35 Pacific Standard Time

Printed: Wednesday, March 04, 2020 14:10:49 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_3, Date: 03-Mar-2020, Time: 15:25:54, ID: B0B0291-BS1 OPR 10, Description: OPR

**Tetra-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	1 2,3,7,8-TCDD	6.80e4	8.41e5	0.799	NO	25.72	25.72	16.37	16.37
2	39 Total Tetra-Dioxins	1.80e3	8.41e5	0.838	NO	24.62	25.39	0.4326	0.4330
3	39 Total Tetra-Dioxins	0.00e0	8.41e5	0.569	YES	24.62	24.15	0.0000	0.1870
4	39 Total Tetra-Dioxins	0.00e0	8.41e5	1.500	YES	24.62	24.07	0.0000	0.1610

**Penta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	5.60e2	7.69e5	0.696	NO	29.96	30.38	0.1500	0.1500
2	40 Total Penta-Dioxins	0.00e0	7.69e5	0.890	YES	29.96	29.55	0.0000	0.1450
3	40 Total Penta-Dioxins	0.00e0	7.69e5	0.855	YES	29.96	31.54	0.0000	0.1040
4	2 1,2,3,7,8-PeCDD	3.01e5	7.69e5	0.620	NO	30.84	30.83	80.51	80.51

**Hexa-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	41 Total Hexa-Dioxins	0.00e0	0.00e0	1.706	YES	33.63	35.05	0.0000	0.1790
2	41 Total Hexa-Dioxins	0.00e0	0.00e0	7.470	YES	33.63	34.90	0.0000	0.2050
3	5 1,2,3,7,8,9-HxCDD	2.63e5	6.03e5	1.357	NO	34.61	34.58	94.86	94.86
4	4 1,2,3,6,7,8-HxCDD	2.83e5	6.93e5	1.350	NO	34.30	34.32	88.79	88.79
5	3 1,2,3,4,7,8-HxCDD	2.49e5	4.92e5	1.267	NO	34.21	34.21	94.62	94.62
6	41 Total Hexa-Dioxins	0.00e0	0.00e0	1.622	YES	33.63	35.10	0.0000	0.2120

**Hepta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	6 1,2,3,4,6,7,8-HpCDD	1.90e5	4.41e5	1.018	NO	38.06	38.07	93.52	93.52
2	42 Total Hepta-Dioxins	1.90e3	4.41e5	1.040	NO	37.64	37.02	0.9340	0.9340



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-3.qld

Last Altered: Wednesday, March 04, 2020 09:26:35 Pacific Standard Time

Printed: Wednesday, March 04, 2020 14:10:49 Pacific Standard Time

Name: 200303R2\_3, Date: 03-Mar-2020, Time: 15:25:54, ID: B0B0291-BS1 OPR 10, Description: OPR

**Tetra-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	8 2,3,7,8-TCDF	8.08e4	1.08e6	0.763	NO	24.77	24.76	18.63	18.63
2	43 Total Tetra-Furans	0.00e0	1.08e6	0.577	YES	23.61	23.75	0.0000	0.1540

**Penta-Furans function 1**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1									

**Penta-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	4.53e3	0.00e0	1.734	NO	29.27	29.75	0.9480	0.9480
2	9 1,2,3,7,8-PeCDF	4.23e5	1.07e6	1.568	NO	29.51	29.51	87.05	87.05
3	45 Total Penta-Furans	0.00e0	0.00e0	2.069	YES	29.27	29.32	0.0000	0.2000
4	45 Total Penta-Furans	0.00e0	0.00e0	3.115	YES	29.27	28.49	0.0000	0.1490
5	45 Total Penta-Furans	1.82e3	0.00e0	1.411	NO	29.27	31.48	0.3817	0.3820
6	10 2,3,4,7,8-PeCDF	4.51e5	1.03e6	1.558	NO	30.55	30.51	91.79	91.79

**Hexa-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	46 Total Hexa-Furans	7.90e2	0.00e0	1.251	NO	33.56	32.18	0.2575	0.2580
2	14 1,2,3,7,8,9-HxCDF	2.57e5	5.90e5	1.252	NO	34.91	34.92	101.4	101.4
3	13 2,3,4,6,7,8-HxCDF	3.31e5	6.95e5	1.185	NO	34.06	34.04	105.9	105.9
4	12 1,2,3,6,7,8-HxCDF	3.51e5	7.66e5	1.121	NO	33.47	33.48	108.7	108.7
5	11 1,2,3,4,7,8-HxCDF	2.99e5	6.82e5	1.201	NO	33.34	33.35	101.6	101.6
6	46 Total Hexa-Furans	1.28e3	0.00e0	1.165	NO	33.56	32.34	0.4176	0.4180

**Hepta-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	16 1,2,3,4,7,8,9-HpCDF	1.83e5	3.48e5	1.016	NO	38.71	38.72	107.3	107.3
2	15 1,2,3,4,6,7,8-HpCDF	2.28e5	5.10e5	0.973	NO	36.67	36.64	104.9	104.9

Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

*chy 03-07-2020*

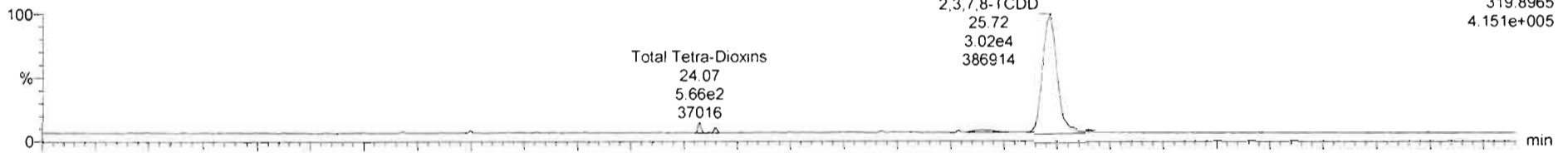
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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

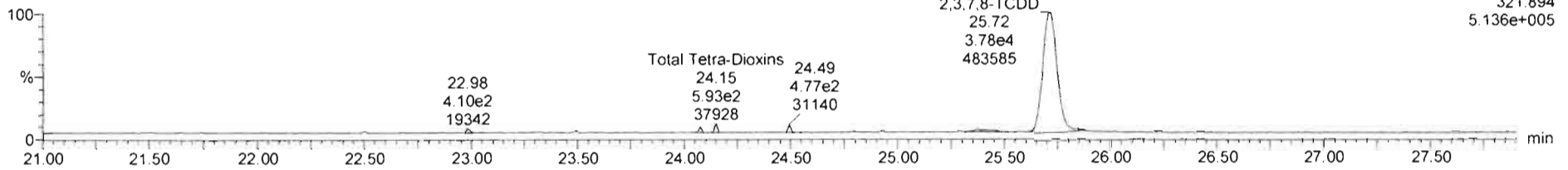
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**2,3,7,8-TCDD**

200303R2\_3

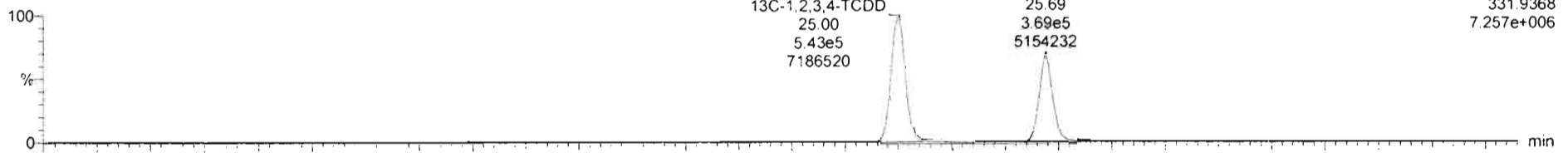


200303R2\_3

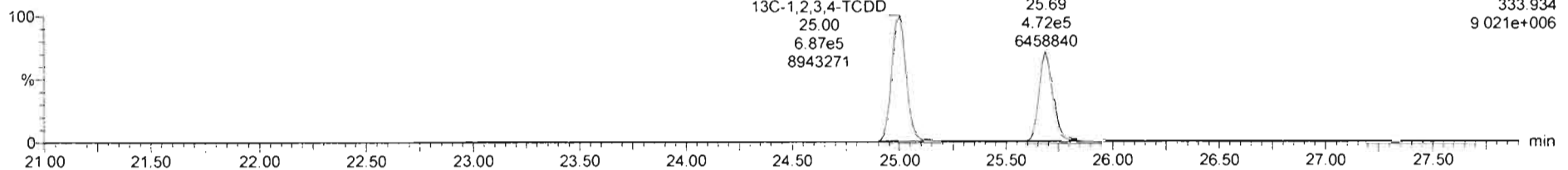


**13C-2,3,7,8-TCDD**

200303R2\_3



200303R2\_3



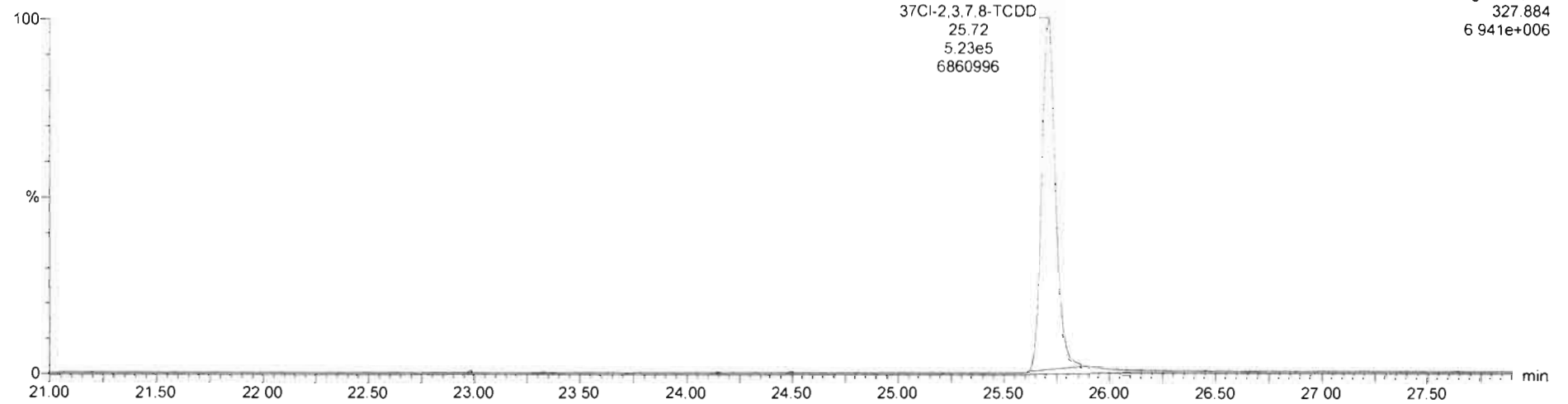
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

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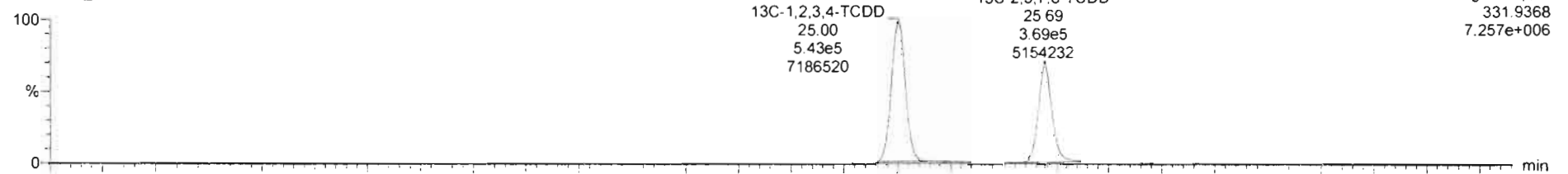
37Cl-2,3,7,8-TCDD

200303R2\_3

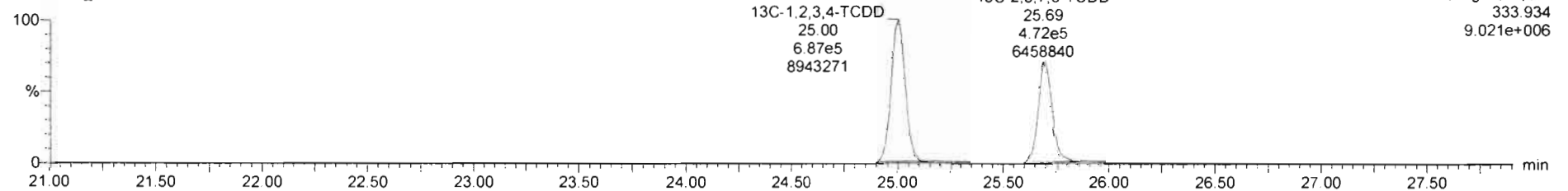


13C-1,2,3,4-TCDD

200303R2\_3



200303R2\_3



Dataset: Untitled

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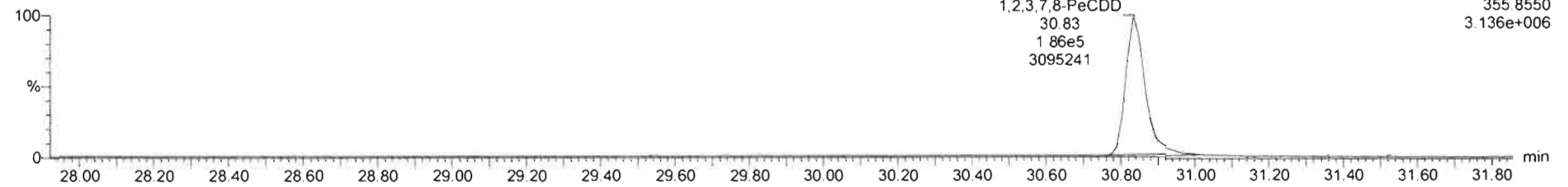
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**1,2,3,7,8-PeCDD**

200303R2\_3

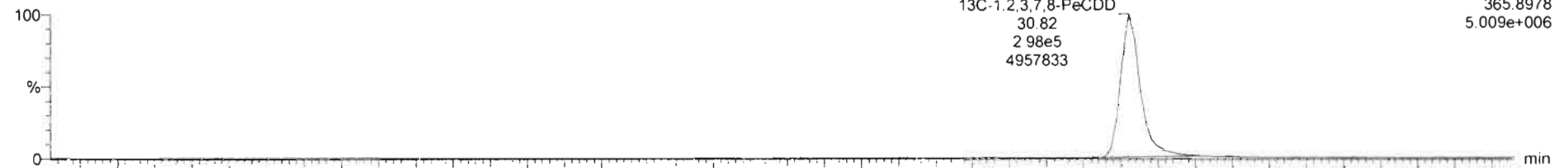


200303R2\_3

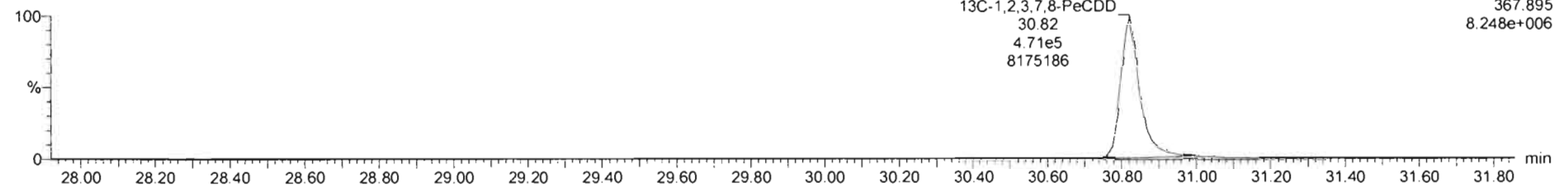


**13C-1,2,3,7,8-PeCDD**

200303R2\_3



200303R2\_3



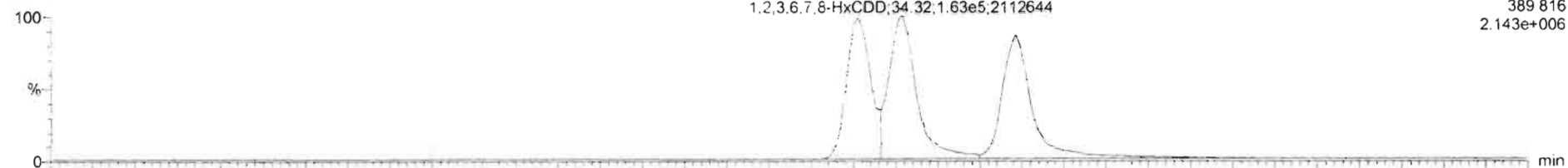
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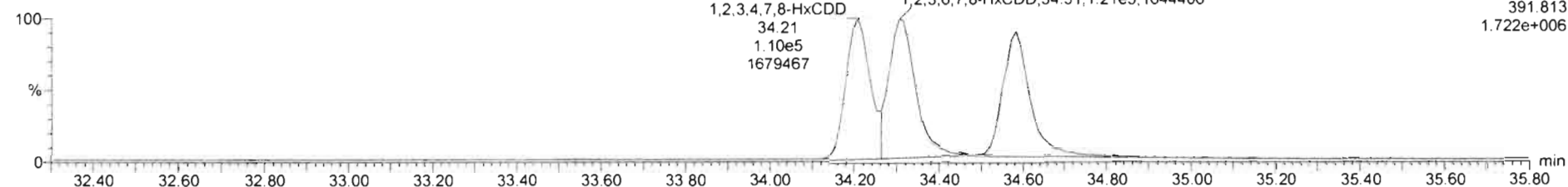
1,2,3,4,7,8-HxCDD

200303R2\_3



F3: Voltage SIR, EI+  
389 816  
2.143e+006

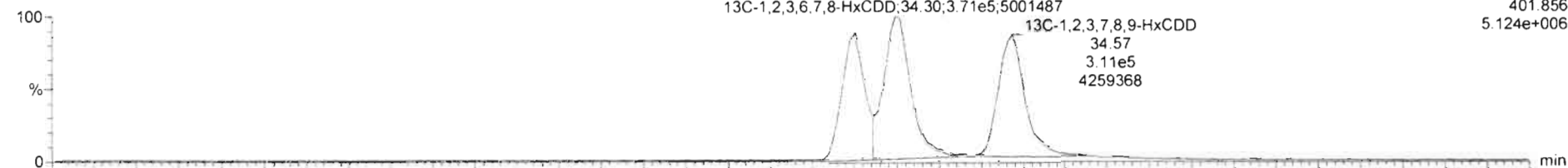
200303R2\_3



F3: Voltage SIR, EI+  
391.813  
1.722e+006

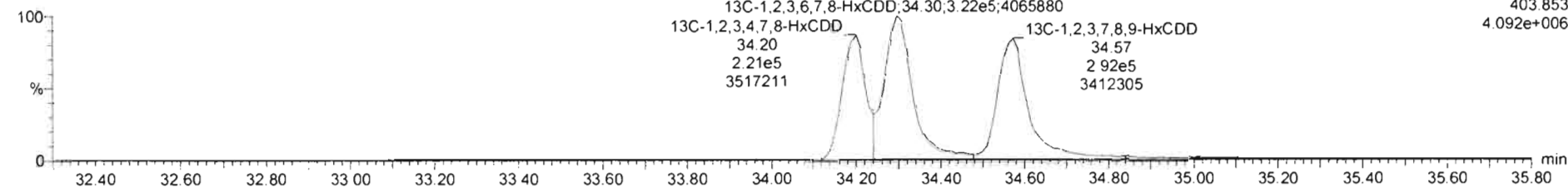
13C-1,2,3,4,7,8-HxCDD

200303R2\_3



F3: Voltage SIR, EI+  
401.856  
5.124e+006

200303R2\_3



F3: Voltage SIR, EI+  
403.853  
4.092e+006

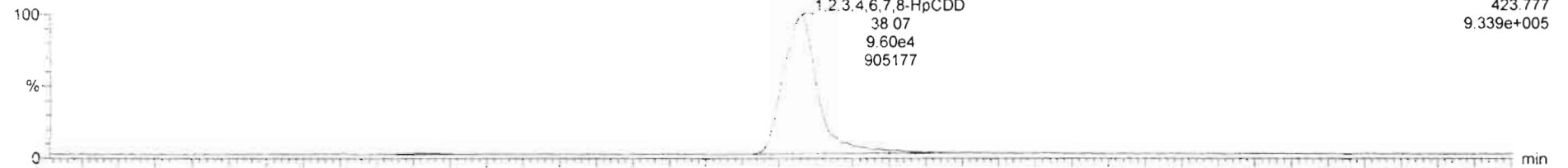
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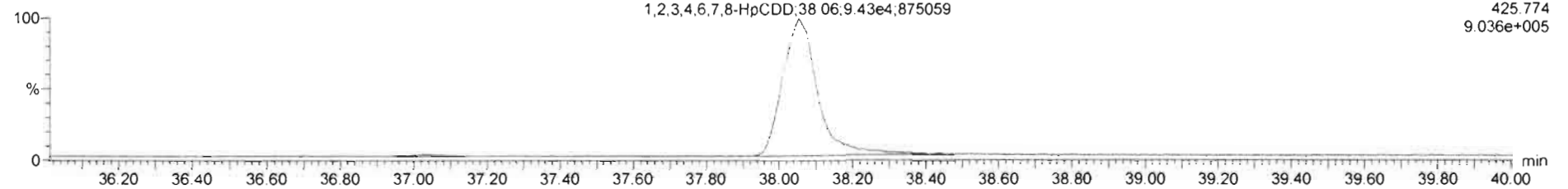
1,2,3,4,6,7,8-HpCDD

200303R2\_3



F4: Voltage SIR, EI+  
423.777  
9.339e+005

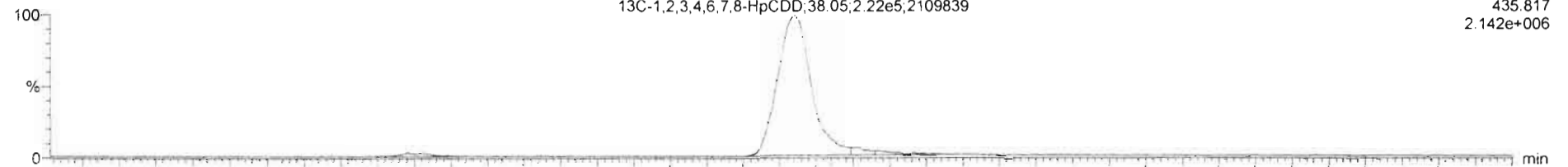
200303R2\_3



F4: Voltage SIR, EI+  
425.774  
9.036e+005

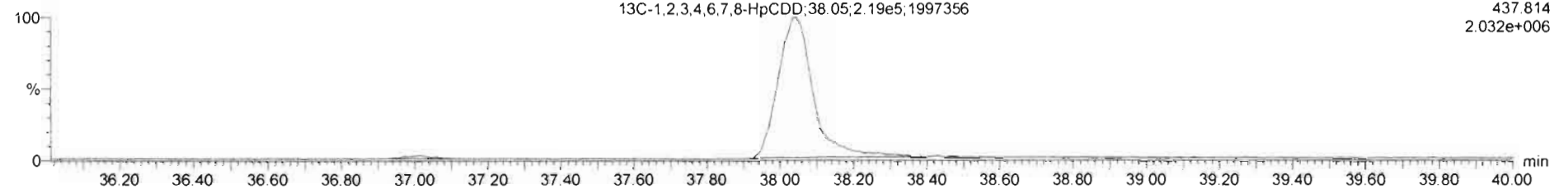
13C-1,2,3,4,6,7,8-HpCDD

200303R2\_3



F4: Voltage SIR, EI+  
435.817  
2.142e+006

200303R2\_3



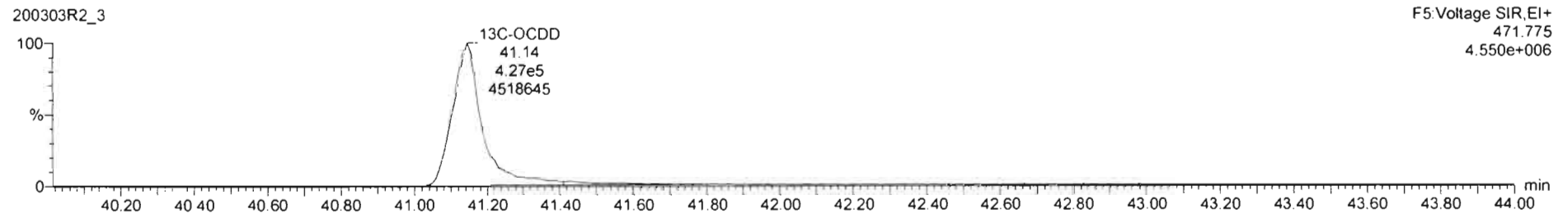
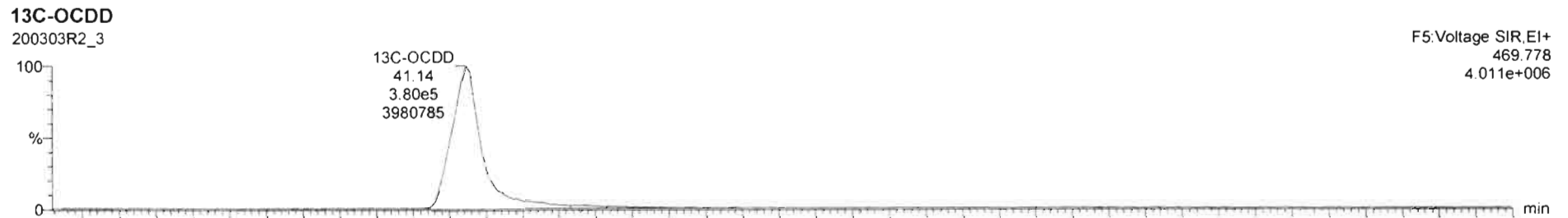
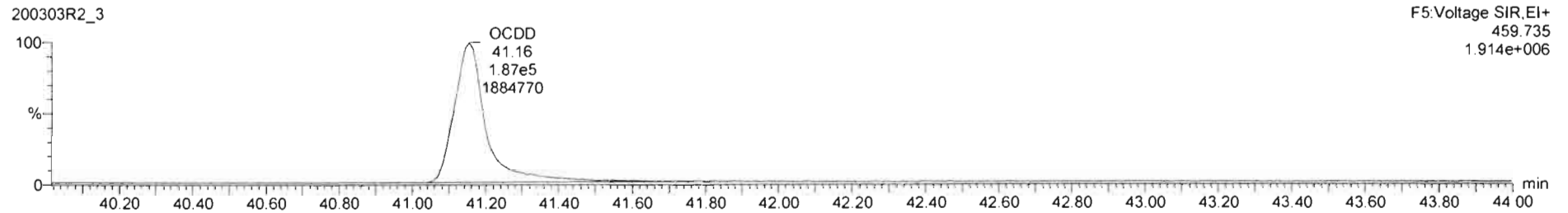
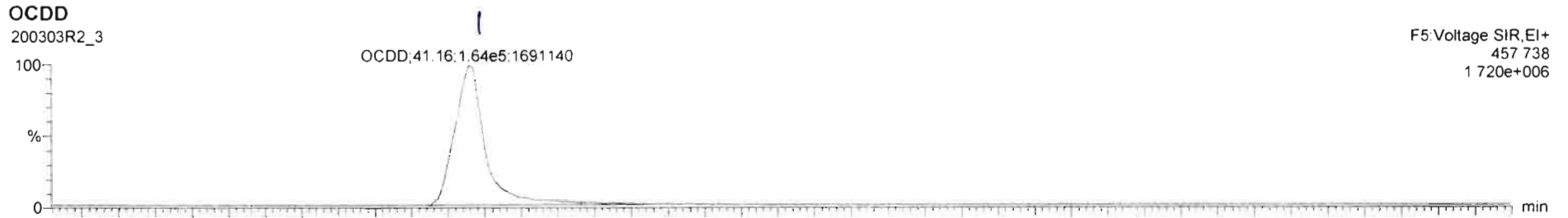
F4: Voltage SIR, EI+  
437.814  
2.032e+006

Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

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Dataset: Untitled

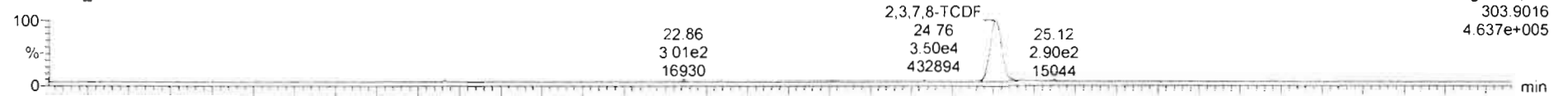
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

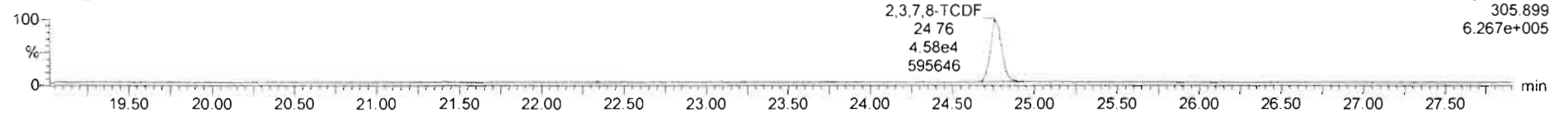
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**2,3,7,8-TCDF**

200303R2\_3



200303R2\_3

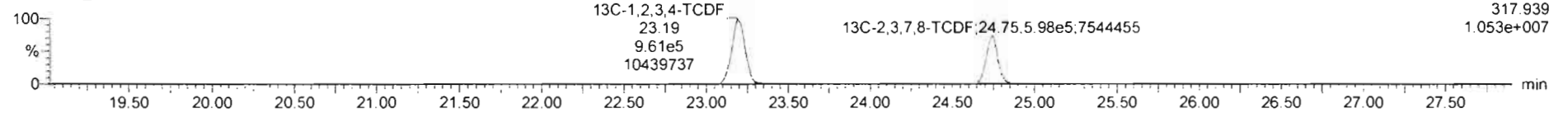


**13C-2,3,7,8-TCDF**

200303R2\_3

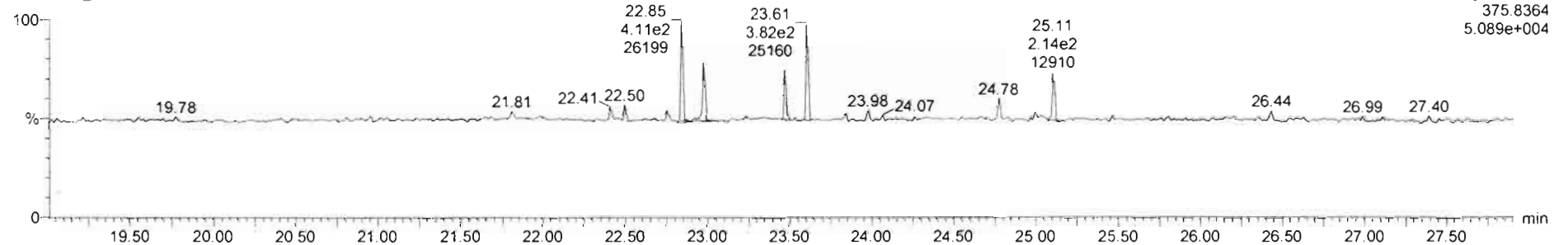


200303R2\_3



**DPE1**

200303R2\_3





Dataset: Untitled

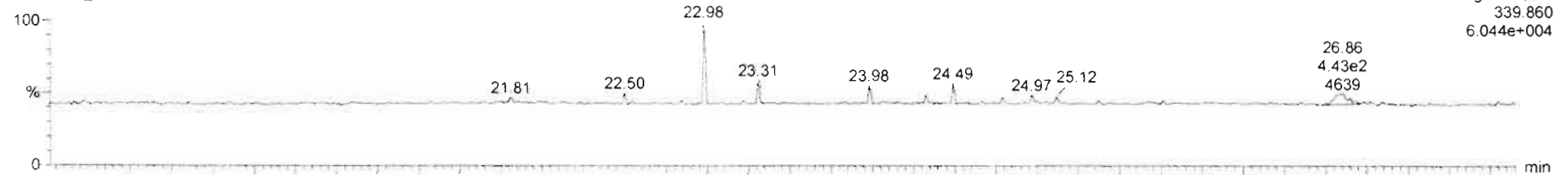
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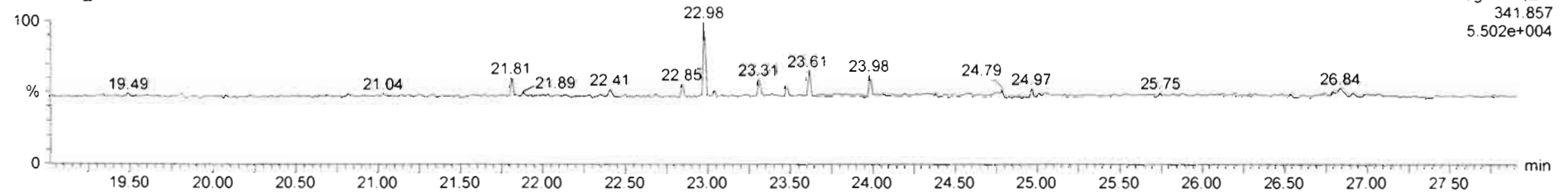
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1st Func. Penta-Furans

200303R2\_3

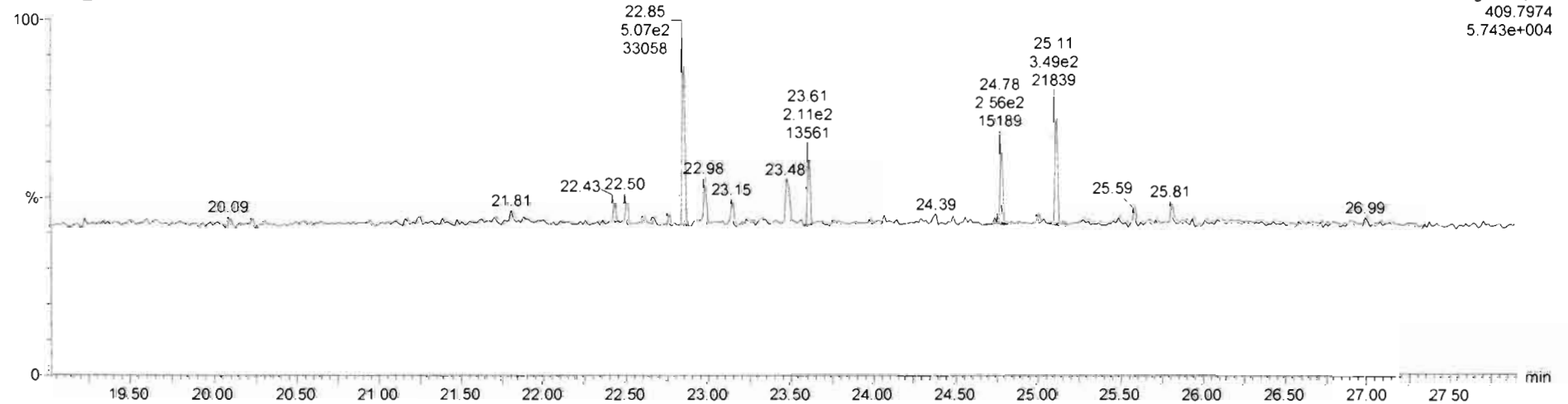


200303R2\_3



DPE6

200303R2\_3



Dataset: Untitled

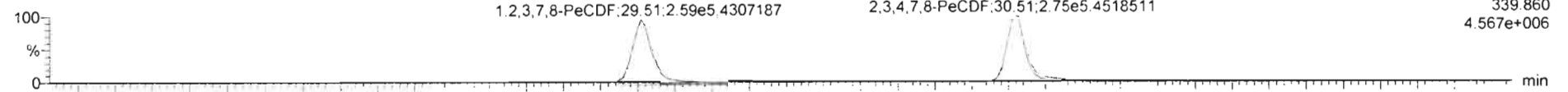
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

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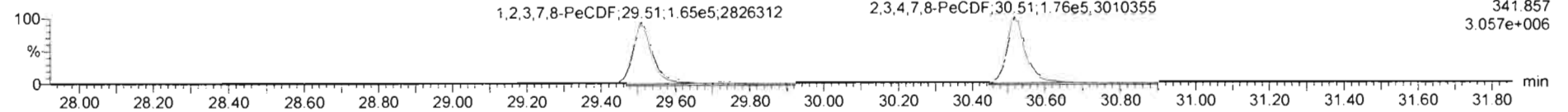
**1,2,3,7,8-PeCDF**

200303R2\_3



F2: Voltage SIR, EI+  
339.860  
4.567e+006

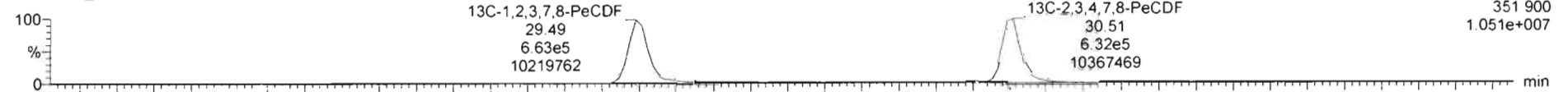
200303R2\_3



F2: Voltage SIR, EI+  
341.857  
3.057e+006

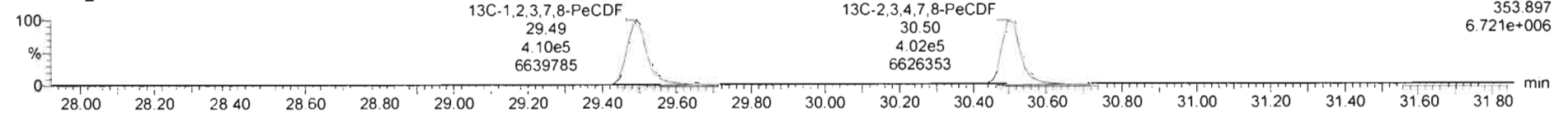
**13C-1,2,3,7,8-PeCDF**

200303R2\_3



F2: Voltage SIR, EI+  
351.900  
1.051e+007

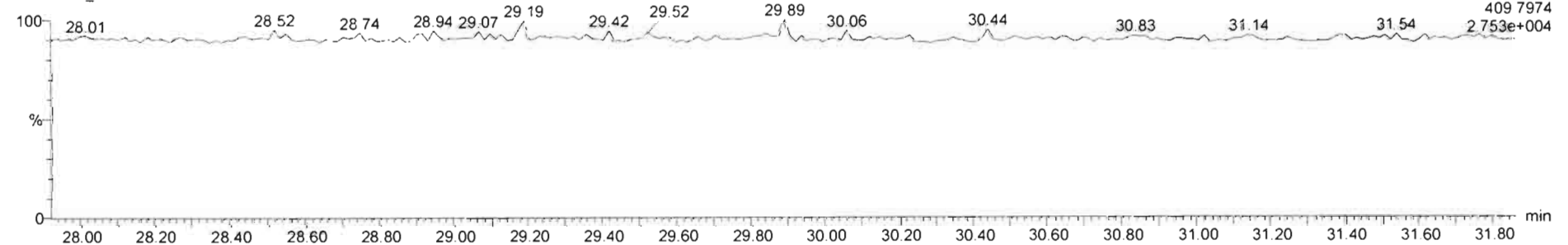
200303R2\_3



F2: Voltage SIR, EI+  
353.897  
6.721e+006

**DPE2**

200303R2\_3



F2: Voltage SIR, EI+  
409.7974  
2.753e+004

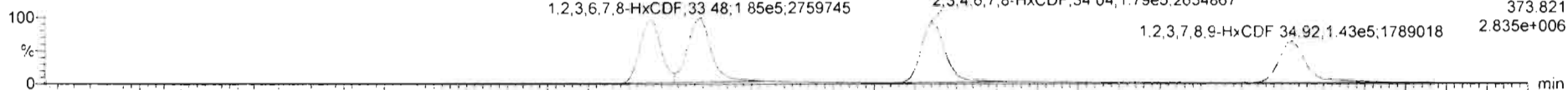
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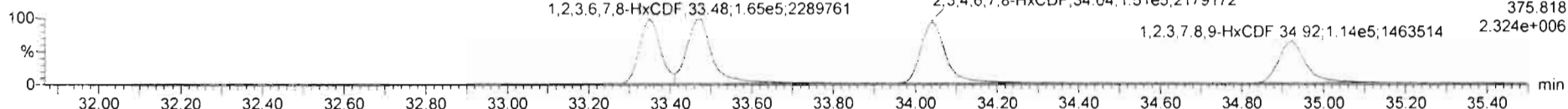
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**1,2,3,4,7,8-HxCDF**

200303R2\_3

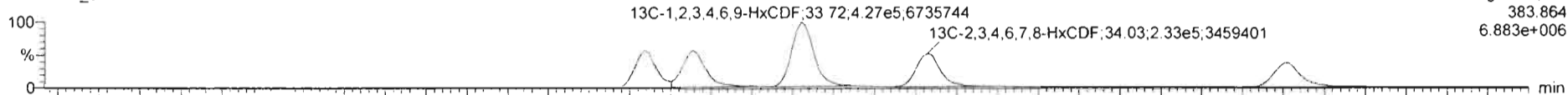


200303R2\_3

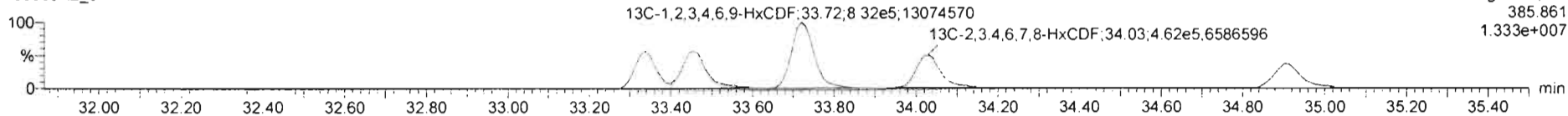


**13C-1,2,3,4,7,8-HxCDF**

200303R2\_3

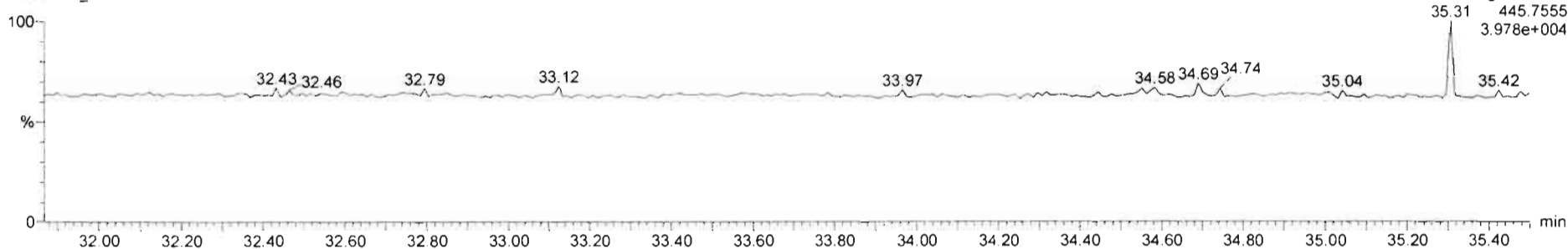


200303R2\_3



**DPE3**

200303R2\_3



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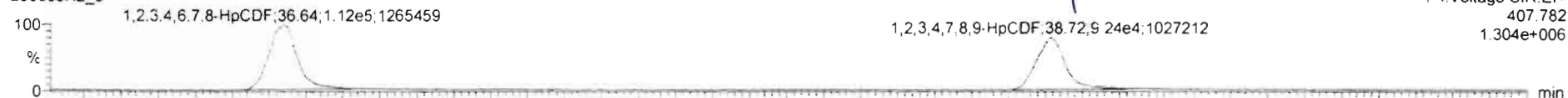
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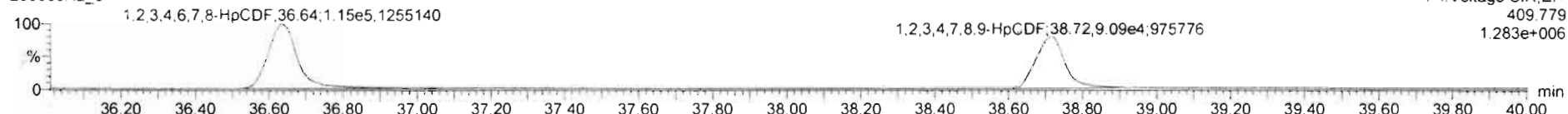
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**1,2,3,4,6,7,8-HpCDF**

200303R2\_3

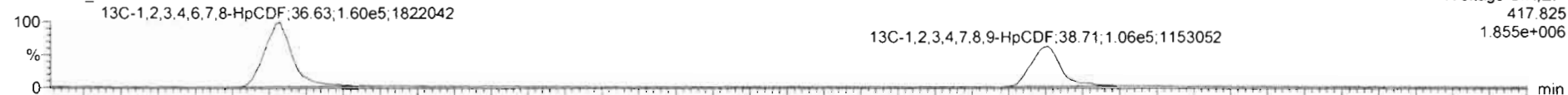


200303R2\_3

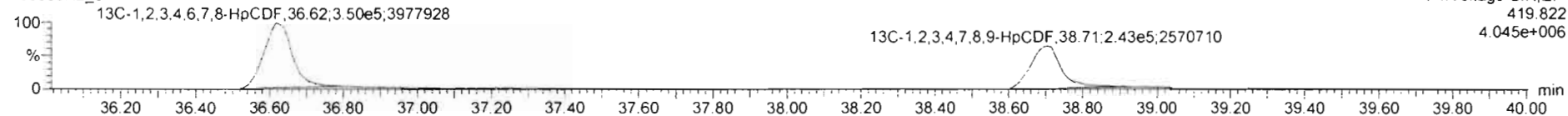


**13C-1,2,3,4,6,7,8-HpCDF**

200303R2\_3

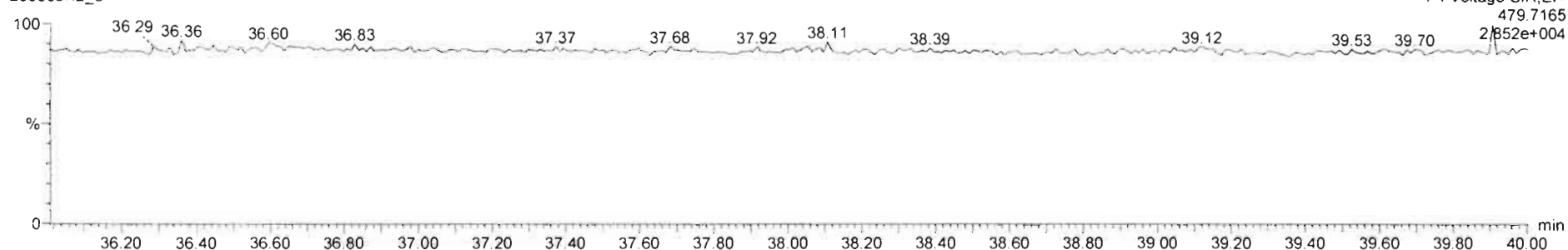


200303R2\_3



**DPE4**

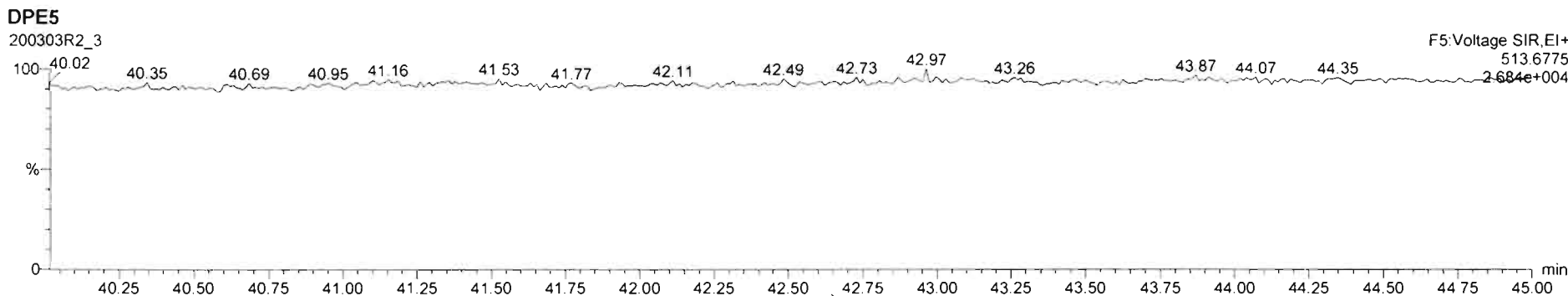
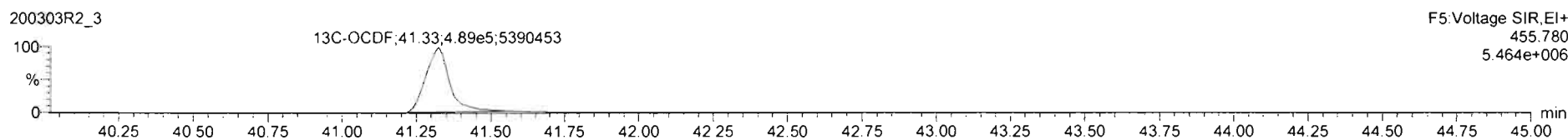
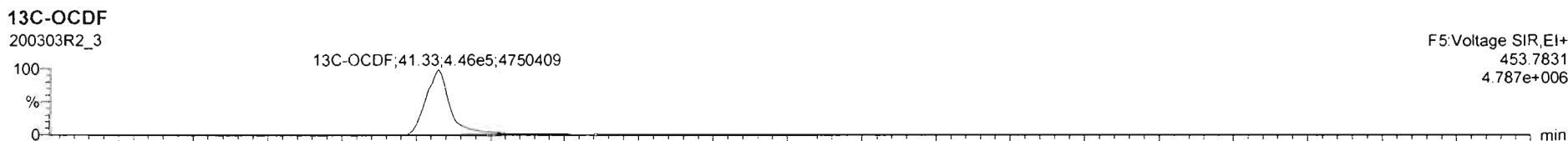
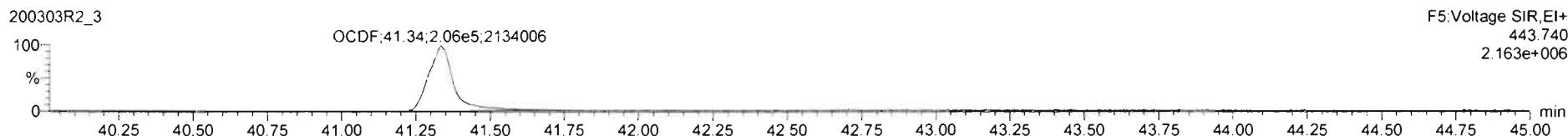
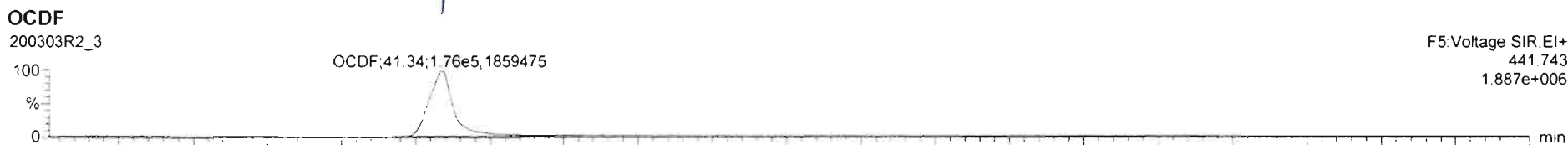
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

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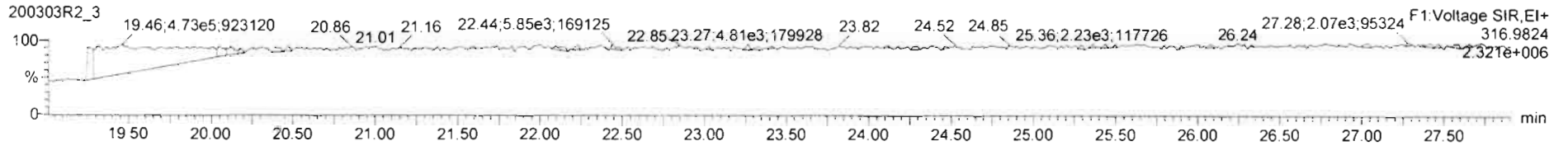


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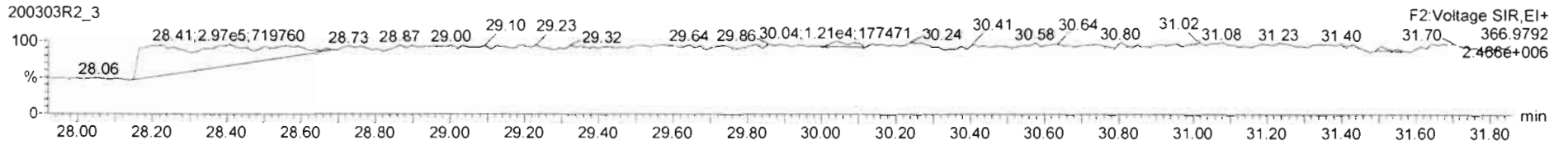
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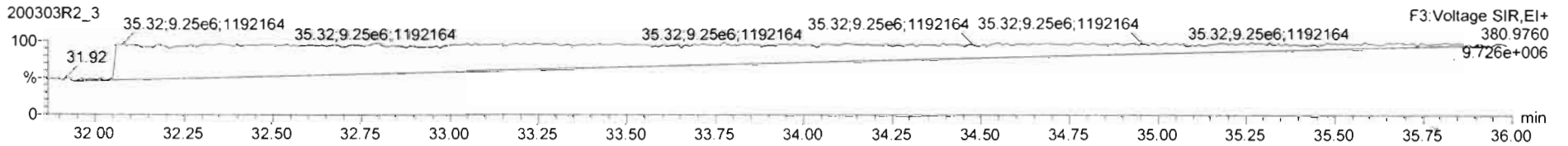
PFK1



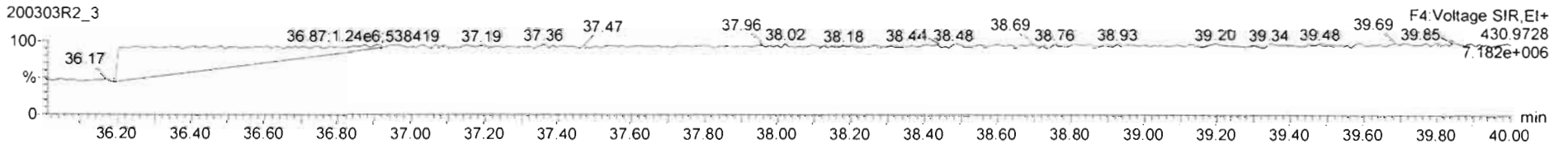
PFK2



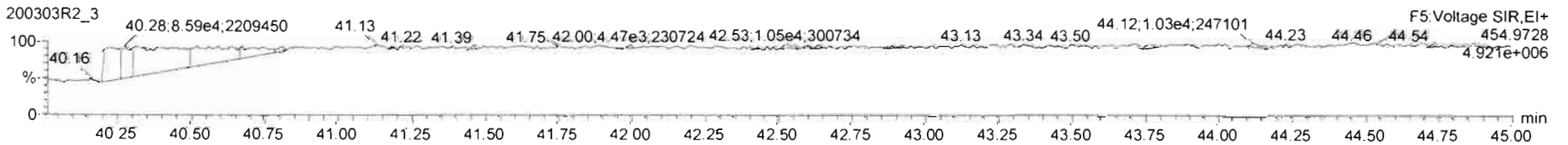
PFK3



PFK4



PFK5





Dataset: U:\VG12.PRO\Results\200303R2\200303R2-6a.qld

Last Altered: Friday, March 06, 2020 12:13:40 Pacific Standard Time

Printed: Friday, March 06, 2020 12:18:36 Pacific Standard Time

*dy 03-06-2020* *CT03/09/2020*  
*E\*: see dilution*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

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#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	6215.831	0.683	NO	0.988	10.059	25.72	25.72	1.00	1.00	NO	1.203		0.142	1.203
2	2 1,2,3,7,8-PeCDD	9633.742	0.666	NO	0.972	10.059	30.86	30.85	1.00	1.00	NO	2.268		0.154	2.268
3	3 1,2,3,4,7,8-HxCDD	12414.147	1.157	NO	1.07	10.059	34.21	34.21	1.00	1.00	NO	3.850		0.524	3.850
4	4 1,2,3,6,7,8-HxCDD	95998.281	1.215	NO	0.921	10.059	34.30	34.32	1.00	1.00	NO	24.64		0.505	24.64
5	5 1,2,3,7,8,9-HxCDD	33952.421	1.177	NO	0.918	10.059	34.61	34.58	1.00	1.00	NO	10.60		0.611	10.60
6	6 1,2,3,4,6,7,8-HpCDD	2368289.1...	1.024	NO	0.923	10.059	38.06	38.07	1.00	1.00	NO	858.7		2.57	858.7
7	7 OCDD	34405523....	0.884	NO	0.975	10.059	41.15	41.17	1.00	1.00	NO	11530	<i>E*</i>	2.35	11530
8	8 2,3,7,8-TCDF	1182444.2...	0.757	NO	0.802	10.059	24.77	24.76	1.00	1.00	NO	221.0	<i>(207)</i>	0.299	221.0
9	9 1,2,3,7,8-PeCDF	2481664.8...	1.533	NO	0.907	10.059	29.53	29.52	1.00	1.00	NO	447.6		0.902	447.6
10	10 2,3,4,7,8-PeCDF	233368.672	1.475	NO	0.952	10.059	30.51	30.51	1.00	1.00	NO	41.19		0.809	41.19
11	11 1,2,3,4,7,8-HxCDF	3352781.3...	1.214	NO	0.862	10.059	33.34	33.36	1.00	1.00	NO	940.0		0.694	940.0
12	12 1,2,3,6,7,8-HxCDF	1260926.6...	1.230	NO	0.841	10.059	33.48	33.48	1.00	1.00	NO	323.5		0.721	323.5
13	13 2,3,4,6,7,8-HxCDF	254234.704	1.211	NO	0.898	10.059	34.06	34.04	1.00	1.00	NO	68.57		0.755	68.57
14	14 1,2,3,7,8,9-HxCDF	34030.041	1.093	NO	0.858	10.059	34.90	34.92	1.00	1.00	NO	10.85		1.02	10.85
15	15 1,2,3,4,6,7,8-HpCDF	1975285.4...	0.996	NO	0.851	10.059	36.67	36.64	1.00	1.00	NO	726.5		1.14	726.5
16	16 1,2,3,4,7,8,9-HpCDF	430672.281	1.009	NO	0.980	10.059	38.71	38.72	1.00	1.00	NO	184.9		1.33	184.9
17	17 OCDF	3750270.6...	0.865	NO	0.806	10.059	41.34	41.35	1.00	1.00	NO	1475		1.12	1475
18	18 13C-2,3,7,8-TCDD	1039478.3...	0.768	NO	1.20	10.059	25.64	25.69	1.03	1.03	NO	180.1	90.6	0.322	
19	19 13C-1,2,3,7,8-PeCDD	868502.844	0.627	NO	0.967	10.059	30.76	30.83	1.23	1.23	NO	186.5	93.8	0.425	
20	20 13C-1,2,3,4,7,8-HxCDD	598800.157	1.353	NO	0.874	10.059	34.19	34.20	1.01	1.01	NO	144.9	72.9	0.591	
21	21 13C-1,2,3,6,7,8-HxCDD	841156.626	1.289	NO	1.05	10.059	34.29	34.30	1.02	1.02	NO	170.1	85.5	0.494	
22	22 13C-1,2,3,7,8,9-HxCDD	693523.813	1.274	NO	0.974	10.059	34.60	34.57	1.03	1.03	NO	150.5	75.7	0.530	
23	23 13C-1,2,3,4,6,7,8-HpCDD	594073.063	1.046	NO	0.747	10.059	38.17	38.04	1.13	1.13	NO	168.1	84.6	0.554	
24	24 13C-OCDD	1217599.3...	0.886	NO	0.707	10.059	41.07	41.15	1.22	1.22	NO	364.4	91.6	0.701	
25	25 13C-2,3,7,8-TCDF	1326238.2...	0.740	NO	1.07	10.059	24.83	24.75	0.99	0.99	NO	188.5	94.8	0.454	
26	26 13C-1,2,3,7,8-PeCDF	1214963.7...	1.565	NO	1.00	10.059	29.40	29.51	1.18	1.18	NO	183.6	92.4	0.660	
27	27 13C-2,3,4,7,8-PeCDF	1183868.8...	1.506	NO	0.962	10.059	30.37	30.51	1.21	1.22	NO	186.4	93.7	0.688	
28	28 13C-1,2,3,4,7,8-HxCDF	822469.781	0.516	NO	1.05	10.059	33.32	33.34	0.99	0.99	NO	165.8	83.4	0.839	
29	29 13C-1,2,3,6,7,8-HxCDF	921162.126	0.525	NO	1.19	10.059	33.42	33.47	0.99	0.99	NO	163.7	82.3	0.739	
30	30 13C-2,3,4,6,7,8-HxCDF	820777.282	0.513	NO	1.07	10.059	34.03	34.03	1.01	1.01	NO	162.8	81.9	0.825	
31	31 13C-1,2,3,7,8,9-HxCDF	727124.219	0.507	NO	0.922	10.059	34.93	34.90	1.04	1.04	NO	166.7	83.8	0.954	



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-6a.qld

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#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	635170.750	0.440	NO	0.767	10.059	36.69	36.63	1.09	1.09	NO	175.1	88.1	0.719	
33	33 13C-1,2,3,4,7,8,9-HpCDF	472592.907	0.438	NO	0.552	10.059	38.71	38.71	1.15	1.15	NO	180.9	91.0	0.999	
34	34 13C-OCDF	1254860.7...	0.874	NO	0.789	10.059	41.31	41.34	1.23	1.23	NO	336.2	84.5	0.606	
35	35 37Cl-2,3,7,8-TCDD	418839.938			1.18	10.059	25.68	25.72	1.03	1.03	NO	73.92	92.9	0.0997	
36	36 13C-1,2,3,4-TCDD	957761.313	0.777	NO	1.00	10.059	25.11	25.00	1.00	1.00	NO	198.8	100	0.385	
37	37 13C-1,2,3,4-TCDF	1313235.8...	0.788	NO	1.00	10.059	23.37	23.19	1.00	1.00	NO	198.8	100	0.483	
38	38 13C-1,2,3,4,6,9-HxCDF	940237.938	0.518	NO	1.00	10.059	33.71	33.72	1.00	1.00	NO	198.8	100	0.880	
39	39 Total Tetra-Dioxins				0.988	10.059	24.62		0.00		NO	19.84		0.142	20.80
40	40 Total Penta-Dioxins				0.972	10.059	29.96		0.00		NO	25.87		0.154	25.87
41	41 Total Hexa-Dioxins				0.921	10.059	33.63		0.00		NO	227.0		0.568	227.0
42	42 Total Hepta-Dioxins				0.923	10.059	37.64		0.00		NO	2055		2.57	2055
43	43 Total Tetra-Furans				0.802	10.059	23.61		0.00		NO	609.4		0.299	628.7
44	44 1st Func. Penta-Furans				0.907	10.059	27.09		0.00		NO	87.07		0.0581	87.07
45	45 Total Penta-Furans				0.907	10.059	29.27		0.00		NO	1121		0.876	1121
46	46 Total Hexa-Furans				0.898	10.059	33.56		0.00		NO	1980		0.759	1980
47	47 Total Hepta-Furans				0.851	10.059	37.83		0.00		NO	2079		1.31	2079

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-6a.qld

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Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_6, Date: 03-Mar-2020, Time: 17:47:03, ID: 2000407-01 PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

**Tetra-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	39 Total Tetra-Dioxins	1.55e3	1.04e6	0.865	NO	24.62	26.06	0.3009	0.3009
2	1 2,3,7,8-TCDD	6.22e3	1.04e6	0.683	NO	25.72	25.72	1.203	1.203
3	39 Total Tetra-Dioxins	4.94e3	1.04e6	0.833	NO	24.62	25.47	0.9569	0.9569
4	39 Total Tetra-Dioxins	1.83e3	1.04e6	0.801	NO	24.62	24.99	0.3549	0.3549
5	39 Total Tetra-Dioxins	1.59e3	1.04e6	0.799	NO	24.62	24.58	0.3086	0.3086
6	39 Total Tetra-Dioxins	1.51e3	1.04e6	0.799	NO	24.62	24.40	0.2928	0.2928
7	39 Total Tetra-Dioxins	0.00e0	1.04e6	0.910	YES	24.62	24.15	0.0000	0.2660
8	39 Total Tetra-Dioxins	0.00e0	1.04e6	1.026	YES	24.62	23.92	0.0000	0.6914
9	39 Total Tetra-Dioxins	3.51e3	1.04e6	0.817	NO	24.62	23.68	0.6803	0.6803
10	39 Total Tetra-Dioxins	1.87e3	1.04e6	0.827	NO	24.62	23.40	0.3617	0.3617
11	39 Total Tetra-Dioxins	4.13e3	1.04e6	0.860	NO	24.62	22.43	0.7989	0.7989
12	39 Total Tetra-Dioxins	1.12e4	1.04e6	0.865	NO	24.62	21.92	2.163	2.163
13	39 Total Tetra-Dioxins	6.41e4	1.04e6	0.794	NO	24.62	21.51	12.42	12.42

**Penta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	2.54e3	8.69e5	0.716	NO	29.96	31.25	0.5974	0.5974
2	40 Total Penta-Dioxins	2.55e3	8.69e5	0.586	NO	29.96	30.93	0.6007	0.6007
3	2 1,2,3,7,8-PeCDD	9.63e3	8.69e5	0.666	NO	30.86	30.85	2.268	2.268
4	40 Total Penta-Dioxins	2.48e3	8.69e5	0.657	NO	29.96	30.41	0.5833	0.5833
5	40 Total Penta-Dioxins	1.36e4	8.69e5	0.680	NO	29.96	30.06	3.210	3.210
6	40 Total Penta-Dioxins	7.39e3	8.69e5	0.626	NO	29.96	29.84	1.740	1.740
7	40 Total Penta-Dioxins	1.01e4	8.69e5	0.633	NO	29.96	29.74	2.388	2.388
8	40 Total Penta-Dioxins	2.01e4	8.69e5	0.624	NO	29.96	29.57	4.740	4.740
9	40 Total Penta-Dioxins	7.71e3	8.69e5	0.691	NO	29.96	29.07	1.816	1.816
10	40 Total Penta-Dioxins	3.37e4	8.69e5	0.602	NO	29.96	28.58	7.924	7.924

Vista Analytical Laboratory

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**Hexa-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	41 Total Hexa-Dioxins	2.80e5	0.00e0	1.227	NO	33.63	32.74	85.00	85.00
2	5 1,2,3,7,8,9-HxCDD	3.40e4	6.94e5	1.177	NO	34.61	34.58	10.60	10.60
3	41 Total Hexa-Dioxins	9.45e3	0.00e0	1.391	NO	33.63	34.49	2.867	2.867
4	4 1,2,3,6,7,8-HxCDD	9.60e4	8.41e5	1.215	NO	34.30	34.32	24.64	24.64
5	3 1,2,3,4,7,8-HxCDD	1.24e4	5.99e5	1.157	NO	34.21	34.21	3.850	3.850
6	41 Total Hexa-Dioxins	3.00e5	0.00e0	1.273	NO	33.63	33.55	91.15	91.15
7	41 Total Hexa-Dioxins	2.91e4	0.00e0	1.268	NO	33.63	33.29	8.846	8.846

**Hepta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	6 1,2,3,4,6,7,8-HpCDD	2.37e6	5.94e5	1.024	NO	38.06	38.07	858.7	858.7
2	42 Total Hepta-Dioxins	3.30e6	5.94e5	1.020	NO	37.64	37.03	1197	1197

Vista Analytical Laboratory

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**Tetra-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	43 Total Tetra-Furans	6.60e3	1.33e6	0.814	NO	23.61	19.46	1.234	1.234
2	43 Total Tetra-Furans	8.11e4	1.33e6	0.759	NO	23.61	24.66	15.16	15.16
3	43 Total Tetra-Furans	8.86e3	1.33e6	0.839	NO	23.61	24.52	1.656	1.656
4	43 Total Tetra-Furans	5.92e3	1.33e6	0.881	NO	23.61	24.34	1.106	1.106
5	43 Total Tetra-Furans	4.43e4	1.33e6	0.818	NO	23.61	24.07	8.280	8.280
6	43 Total Tetra-Furans	1.05e6	1.33e6	0.763	NO	23.61	23.76	196.7	196.7
7	43 Total Tetra-Furans	1.16e5	1.33e6	0.758	NO	23.61	23.19	21.71	21.71
8	43 Total Tetra-Furans	9.10e3	1.33e6	0.747	NO	23.61	22.76	1.701	1.701
9	43 Total Tetra-Furans	4.28e4	1.33e6	0.735	NO	23.61	22.29	8.007	8.007
10	43 Total Tetra-Furans	7.47e3	1.33e6	0.835	NO	23.61	22.10	1.397	1.397
11	43 Total Tetra-Furans	1.20e5	1.33e6	0.762	NO	23.61	21.95	22.50	22.50
12	43 Total Tetra-Furans	3.03e5	1.33e6	0.748	NO	23.61	21.47	56.57	56.57
13	43 Total Tetra-Furans	6.52e4	1.33e6	0.748	NO	23.61	21.10	12.18	12.18
14	43 Total Tetra-Furans	7.18e4	1.33e6	0.739	NO	23.61	20.56	13.43	13.43
15	43 Total Tetra-Furans	1.74e4	1.33e6	0.726	NO	23.61	19.97	3.257	3.257
16	43 Total Tetra-Furans	0.00e0	1.33e6	0.939	YES	23.61	26.87	0.0000	19.35
17	43 Total Tetra-Furans	8.05e3	1.33e6	0.868	NO	23.61	26.62	1.505	1.505
18	43 Total Tetra-Furans	5.70e3	1.33e6	0.770	NO	23.61	26.45	1.066	1.066
19	43 Total Tetra-Furans	9.54e3	1.33e6	0.664	NO	23.61	25.42	1.784	1.784
20	43 Total Tetra-Furans	4.91e4	1.33e6	0.798	NO	23.61	25.17	9.177	9.177
21	8 2,3,7,8-TCDF	1.18e6	1.33e6	0.757	NO	24.77	24.76	221.0	221.0
22	43 Total Tetra-Furans	3.82e3	1.33e6	0.860	NO	23.61	22.91	0.7144	0.7144
23	43 Total Tetra-Furans	4.94e4	1.33e6	0.742	NO	23.61	23.12	9.241	9.241

**Penta-Furans function 1**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	44 1st Func. Penta-Fura...	4.77e5	0.00e0	1.572	NO	27.09	26.86	87.07	87.07



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**Penta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	8.14e5	0.00e0	1.525	NO	29.27	29.80	148.6	148.6
2	9 1,2,3,7,8-PeCDF	2.48e6	1.21e6	1.533	NO	29.53	29.52	447.6	447.6
3	45 Total Penta-Furans	1.96e5	0.00e0	1.541	NO	29.27	29.32	35.84	35.84
4	45 Total Penta-Furans	9.12e4	0.00e0	1.569	NO	29.27	29.11	16.67	16.67
5	45 Total Penta-Furans	1.25e6	0.00e0	1.543	NO	29.27	28.52	229.1	229.1
6	45 Total Penta-Furans	2.80e4	0.00e0	1.609	NO	29.27	28.36	5.122	5.122
7	45 Total Penta-Furans	5.59e4	0.00e0	1.545	NO	29.27	31.48	10.21	10.21
8	10 2,3,4,7,8-PeCDF	2.33e5	1.18e6	1.475	NO	30.51	30.51	41.19	41.19
9	45 Total Penta-Furans	1.02e6	0.00e0	1.549	NO	29.27	30.53	186.6	186.6

**Hexa-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	14 1,2,3,7,8,9-HxCDF	3.40e4	7.27e5	1.093	NO	34.90	34.92	10.85	10.85
2	13 2,3,4,6,7,8-HxCDF	2.54e5	8.21e5	1.211	NO	34.06	34.04	68.57	68.57
3	46 Total Hexa-Furans	5.34e4	0.00e0	1.332	NO	33.56	33.74	14.38	14.38
4	12 1,2,3,6,7,8-HxCDF	1.26e6	9.21e5	1.230	NO	33.48	33.48	323.5	323.5
5	11 1,2,3,4,7,8-HxCDF	3.35e6	8.22e5	1.214	NO	33.34	33.36	940.0	940.0
6	46 Total Hexa-Furans	2.65e4	0.00e0	1.373	NO	33.56	33.25	7.127	7.127
7	46 Total Hexa-Furans	1.02e6	0.00e0	1.211	NO	33.56	32.90	273.1	273.1
8	46 Total Hexa-Furans	1.40e4	0.00e0	1.222	NO	33.56	32.71	3.773	3.773
9	46 Total Hexa-Furans	7.65e5	0.00e0	1.208	NO	33.56	32.35	205.7	205.7
10	46 Total Hexa-Furans	1.95e5	0.00e0	1.223	NO	33.56	32.18	52.35	52.35
11	46 Total Hexa-Furans	3.01e5	0.00e0	1.232	NO	33.56	34.97	81.05	81.05

**Hepta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	16 1,2,3,4,7,8,9-HpCDF	4.31e5	4.73e5	1.009	NO	38.71	38.72	184.9	184.9
2	47 Total Hepta-Furans	2.74e6	0.00e0	0.995	NO	37.83	37.24	1158	1158
3	47 Total Hepta-Furans	2.29e4	0.00e0	1.011	NO	37.83	37.02	9.660	9.660
4	15 1,2,3,4,6,7,8-HpCDF	1.98e6	6.35e5	0.996	NO	36.67	36.64	726.5	726.5

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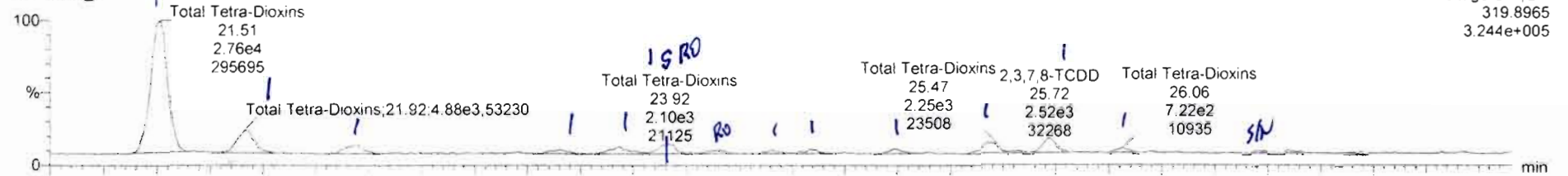
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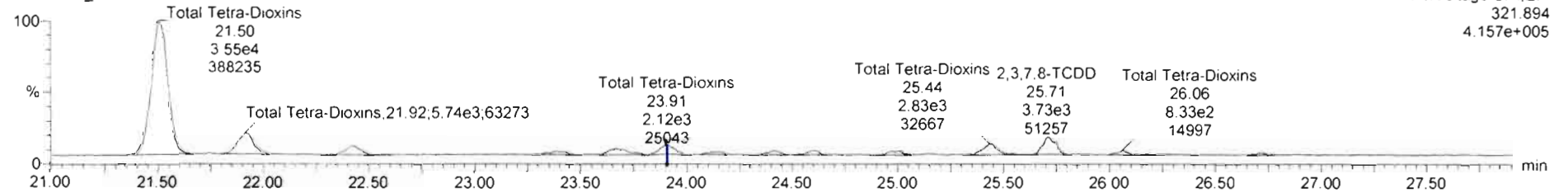
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2,3,7,8-TCDD

200303R2\_6

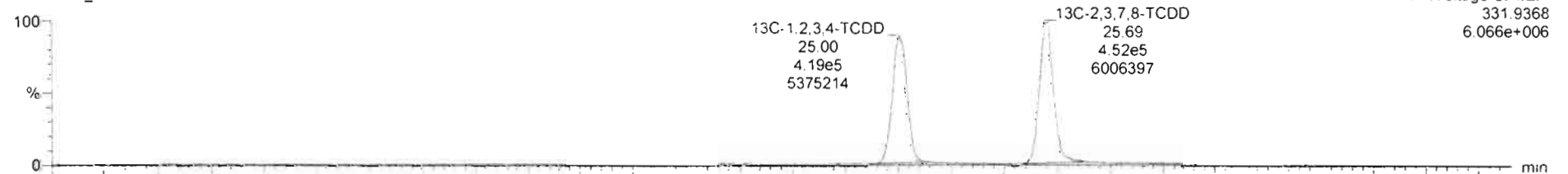


200303R2\_6

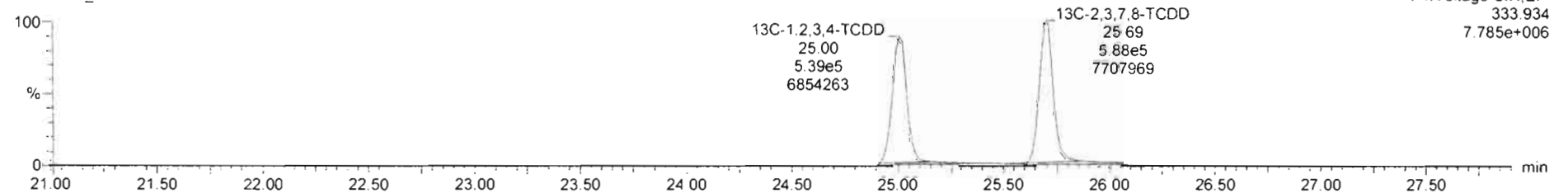


13C-2,3,7,8-TCDD

200303R2\_6



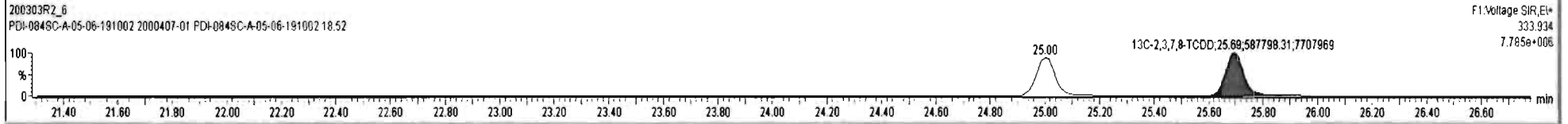
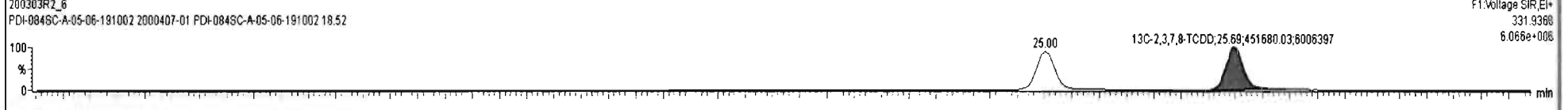
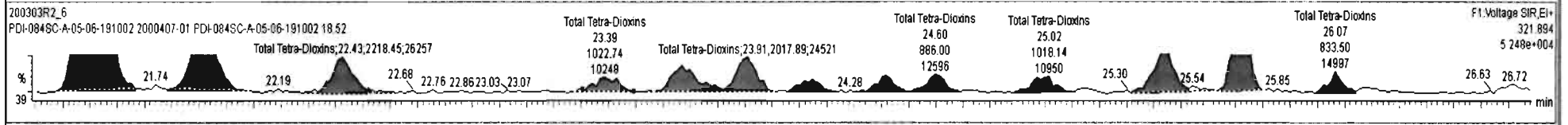
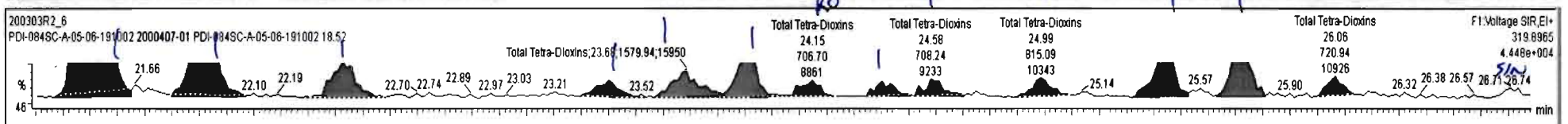
200303R2\_6





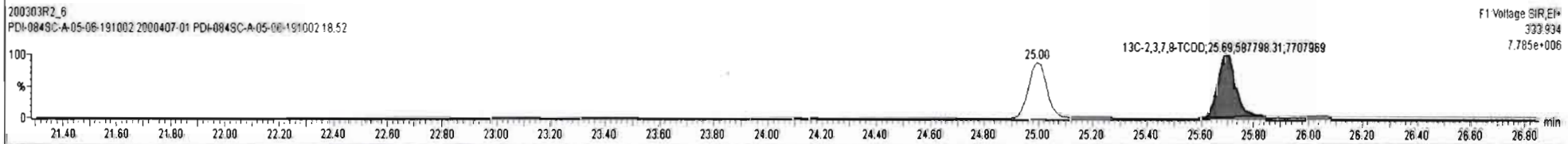
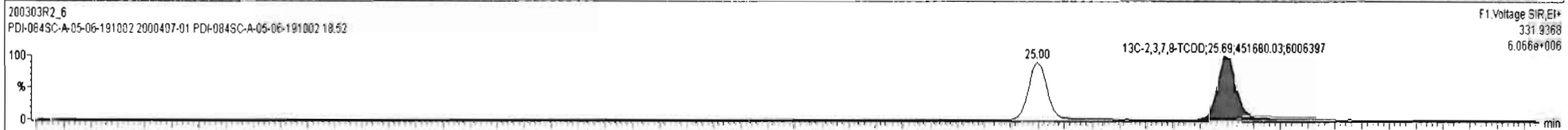
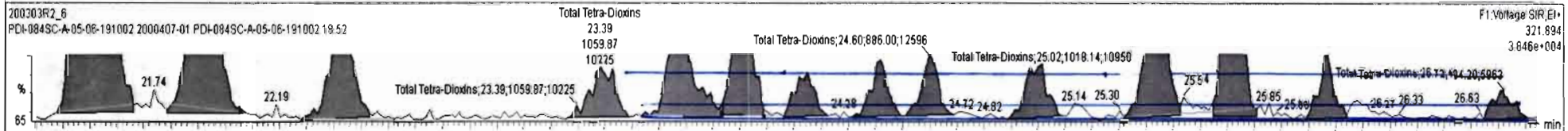
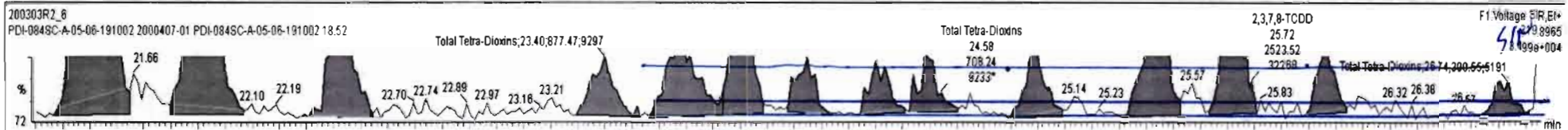
#	Name	Resp	RA	n/y	R/F	wAval	Pred.RT	RT	Pred.R.	RRT	RRT Fal	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.059	24.62		0.000		NO	19.84		0.142	20.80
40	Total Penta-Dioxins				0.9723	10.059	29.96		0.000		NO	25.87		0.154	25.87
41	Total Hexa-Dioxins				0.9211	10.059	33.63		0.000		NO	227.0		0.568	227.0
42	Total Hepta-Dioxins				0.9231	10.059	37.64		0.000		NO	2055		2.57	2055
43	Total Tetra-Furans				0.9020	10.059	23.61		0.000		NO	609.4		0.299	626.7
44	1st Func. Penta-Furans				0.9074	10.059	27.09		0.000		NO	87.07		0.0581	87.07
45	Total Penta-Furans				0.9074	10.059	29.27		0.000		NO	1121		0.876	1121
46	Total Hexa-Furans				0.8982	10.059	33.56		0.000		NO	1960		0.759	1960
47	Total Hepta-Furans				0.8511	10.059	37.83		0.000		NO	2079		1.31	2079

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	39 Total Tetra-Dioxins	24.62	21.51	2.838e4	3.578e4	0.770	0.79	NO	12.416	12.416
2	39 Total Tetra-Dioxins	24.62	21.92	5.180e3	5.992e3	0.770	0.86	NO	2.1628	2.1628
3	39 Total Tetra-Dioxins	24.62	22.43	1.908e3	2.218e3	0.770	0.86	NO	0.79890	0.79890
4	39 Total Tetra-Dioxins	24.62	23.40	8.458e2	1.023e3	0.770	0.83	NO	0.36169	0.36169
5	39 Total Tetra-Dioxins	24.62	23.68	1.580e3	1.934e3	0.770	0.82	NO	0.68029	0.68029
6	39 Total Tetra-Dioxins	24.62	23.92	2.071e3	2.018e3	0.770	1.03	YES	0.89145	0.00000
7	39 Total Tetra-Dioxins	24.62	24.15	7.067e2	7.764e2	0.770	0.91	YES	0.26605	0.00000
8	39 Total Tetra-Dioxins	24.62	24.40	6.718e2	8.405e2	0.770	0.80	NO	0.29277	0.29277
9	39 Total Tetra-Dioxins	24.62	24.58	7.082e2	8.860e2	0.770	0.80	NO	0.30863	0.30863
10	39 Total Tetra-Dioxins	24.62	24.99	8.151e2	1.018e3	0.770	0.80	NO	0.35490	0.35490
11	39 Total Tetra-Dioxins	24.62	25.47	2.247e3	2.697e3	0.770	0.83	NO	0.95685	0.95685
12	1 2,3,7,8-TCDD	25.72	25.72	2.524e3	3.692e3	0.770	0.68	NO	1.2033	1.2033
13	39 Total Tetra-Dioxins	24.62	26.06	7.209e2	8.335e2	0.770	0.87	NO	0.30093	0.30093



#	Name	Resp	RA	ry	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.058	24.62		0.000		NO	19.81		0.142	20.81
40	Total Penta-Dioxins				0.9723	10.059	29.96		0.000		NO	22.17		0.154	26.04
41	Total Hexa-Dioxins				0.9211	10.059	33.63		0.000		NO	221.0		0.577	221.5
42	Total Menthyl Chlorine				0.9711	10.060	37.64		0.000		NO	200.1		1.471	200.1

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	ry	EMPC	Conc.
1	39 Total Tetra-Dioxins	24.62	21.51	2.764e4	3.553e4	0.770	0.78	NO	12.229	12.229
2	39 Total Tetra-Dioxins	24.62	21.92	4.880e3	5.741e3	0.770	0.85	NO	2.0560	2.0562
3	39 Total Tetra-Dioxins	24.62	22.43	1.979e3	2.418e3	0.770	0.82	NO	0.85100	0.85133
4	39 Total Tetra-Dioxins	24.62	23.40	8.775e2	1.060e3	0.770	0.83	NO	0.37500	0.37505
5	39 Total Tetra-Dioxins	24.62	23.68	1.596e3	2.016e3	0.770	0.79	NO	0.69900	0.69929
6	39 Total Tetra-Dioxins	24.62	23.92	2.099e3	2.124e3	0.770	0.99	YES	0.72800	0.00000
7	39 Total Tetra-Dioxins	24.62	24.15	7.304e2	7.764e2	0.770	0.94	YES	0.26600	0.00000
8	39 Total Tetra-Dioxins	24.62	24.40	6.181e2	8.405e2	0.770	0.74	NO	0.28200	0.28237
9	39 Total Tetra-Dioxins	24.62	24.58	6.604e2	8.860e2	0.770	0.75	NO	0.29900	0.29938
10	39 Total Tetra-Dioxins	24.62	24.99	8.057e2	1.019e3	0.770	0.79	NO	0.35300	0.35308
11	39 Total Tetra-Dioxins	24.62	25.47	2.247e3	2.829e3	0.770	0.79	NO	0.98300	0.98255
12	1 2,3,7,8-TCDD	25.72	25.72	2.524e3	3.730e3	0.770	0.88	NO	1.2110	1.2106
13	39 Total Tetra-Dioxins	24.62	26.07	7.223e2	8.335e2	0.770	0.87	NO	0.30100	0.30119
14	39 Total Tetra-Dioxins	24.62	26.74	3.905e2	4.947e2	0.770	0.79	NO	0.17100	0.17128



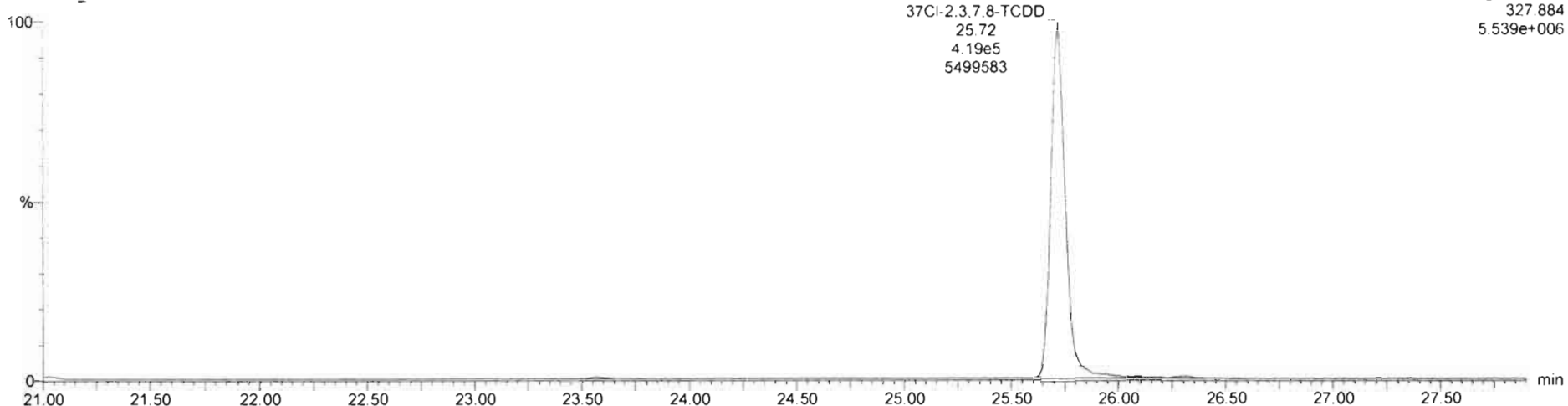
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_6, Date: 03-Mar-2020, Time: 17:47:03, ID: 2000407-01 PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

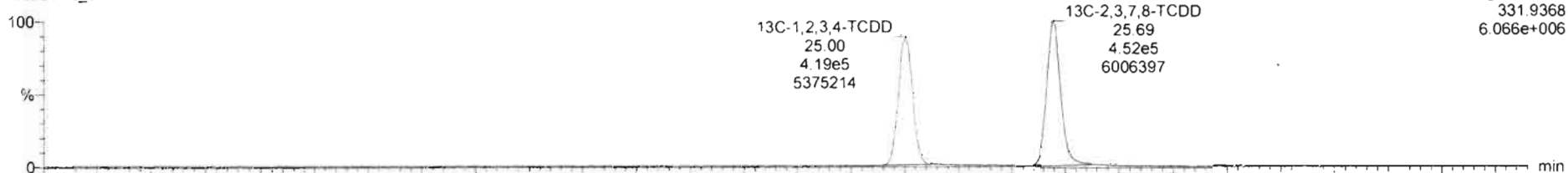
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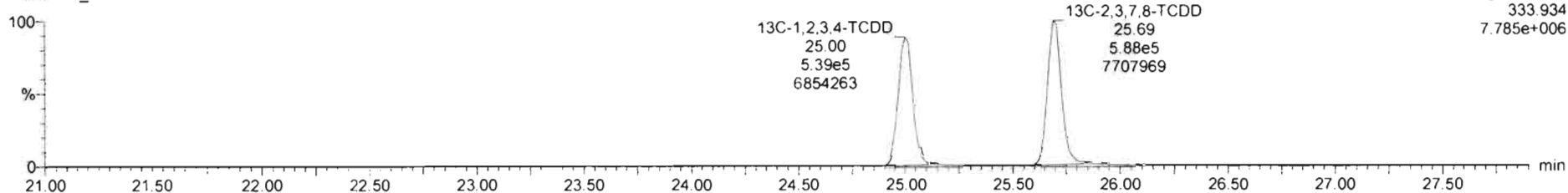


13C-1,2,3,4-TCDD

200303R2\_6



200303R2\_6



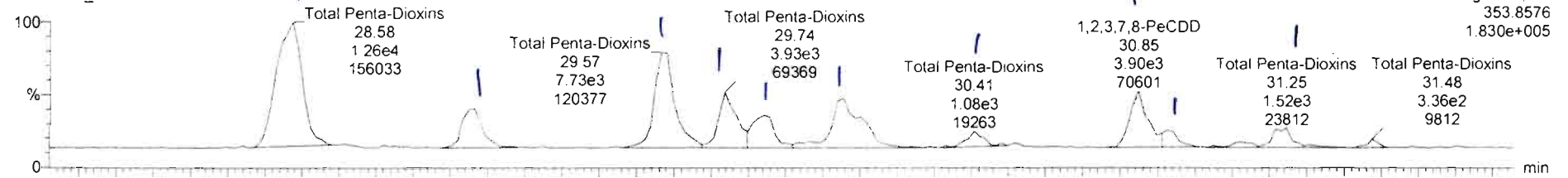
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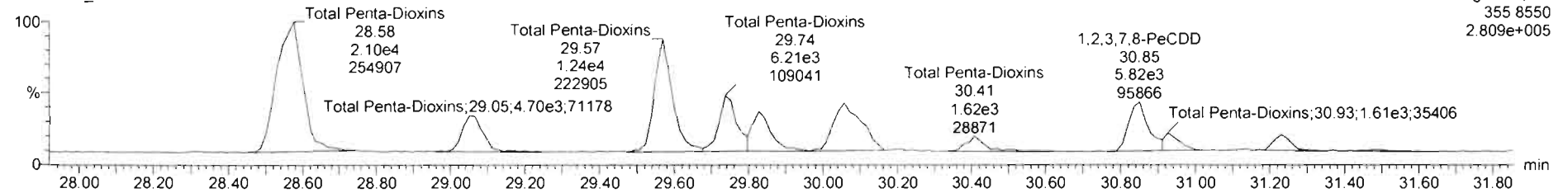
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1,2,3,7,8-PeCDD

200303R2\_6

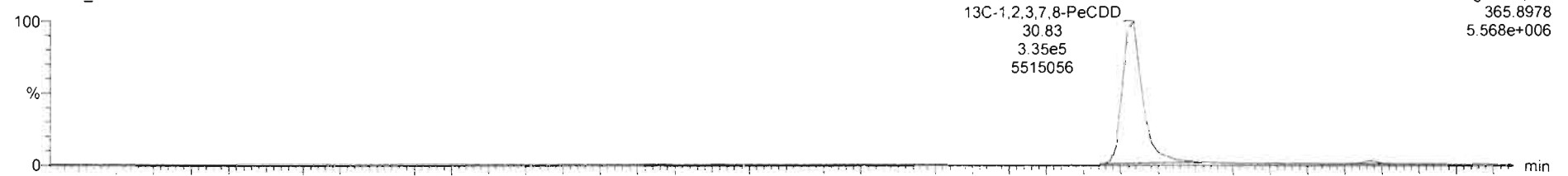


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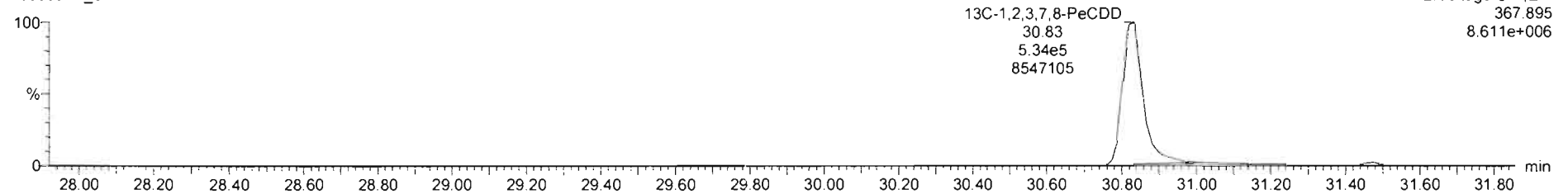


13C-1,2,3,7,8-PeCDD

200303R2\_6



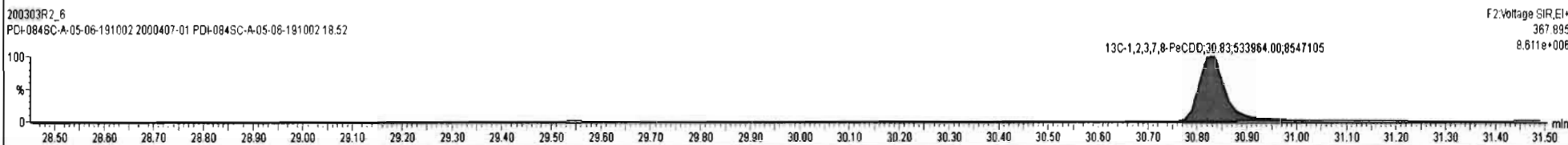
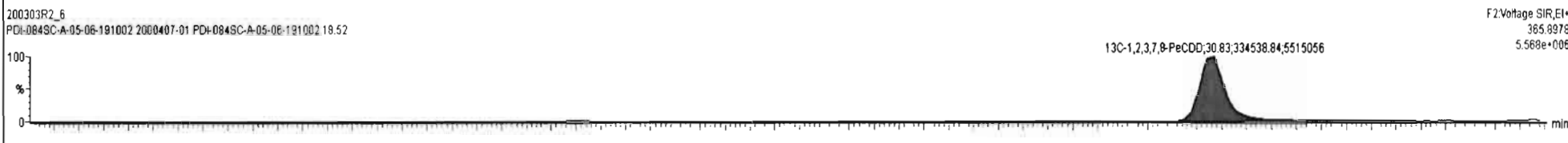
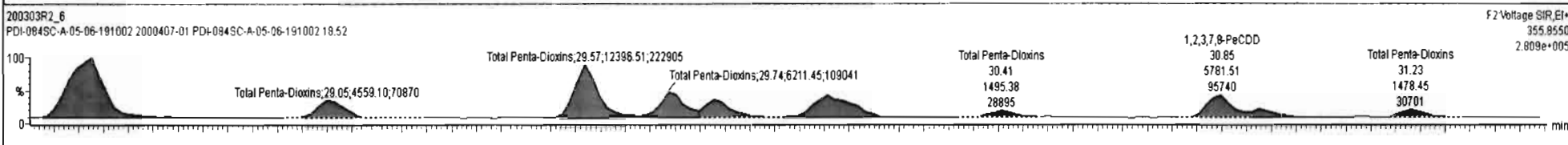
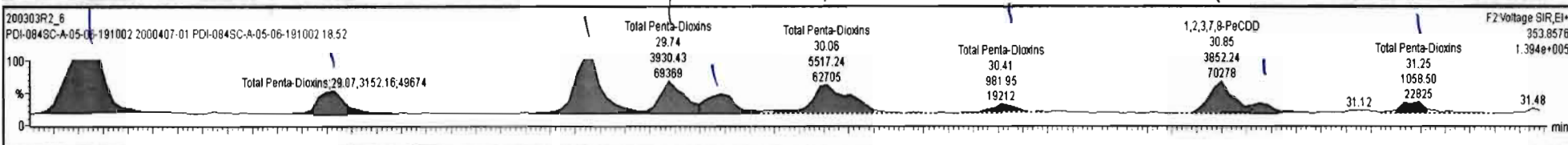
200303R2\_6





#	Name	Resp	RA	n/y	R/R	w/Vol	Pred RT	RT	Pred R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.059	24.62		0.000		NO	19.84		0.142	20.81
40	Total Penta-Dioxins				0.8723	10.059	29.98		0.000		NO	25.87		0.154	25.87
41	Total Hexa-Dioxins				0.9211	10.059	33.63		0.000		NO	221.0		0.577	221.5
42	Total Mamba, Flavivir				0.0724	10.059	37.64		0.000		NO	0.000		0.67	0.000

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Penta-Dioxins	29.96	28.58	1.264e4	2.101e4	0.630	0.60	NO	7.9241	7.9241
2	Total Penta-Dioxins	29.96	29.07	3.152e3	4.559e3	0.630	0.69	NO	1.8157	1.8157
3	Total Penta-Dioxins	29.96	29.57	7.733e3	1.240e4	0.630	0.62	NO	4.7399	4.7399
4	Total Penta-Dioxins	29.96	29.74	3.930e3	6.211e3	0.630	0.63	NO	2.3881	2.3881
5	Total Penta-Dioxins	29.96	29.84	2.843e3	4.545e3	0.630	0.63	NO	1.7396	1.7396
6	Total Penta-Dioxins	29.96	30.06	5.517e3	8.116e3	0.630	0.68	NO	3.2101	3.2101
7	Total Penta-Dioxins	29.96	30.41	9.819e2	1.485e3	0.630	0.66	NO	0.58332	0.58332
8	1,2,3,7,8-PeCDD	30.86	30.85	3.852e3	5.782e3	0.630	0.67	NO	2.2684	2.2684
9	Total Penta-Dioxins	29.96	30.93	9.429e2	1.808e3	0.630	0.59	NO	0.60074	0.60074
10	Total Penta-Dioxins	29.96	31.25	1.059e3	1.478e3	0.630	0.72	NO	0.59736	0.59736



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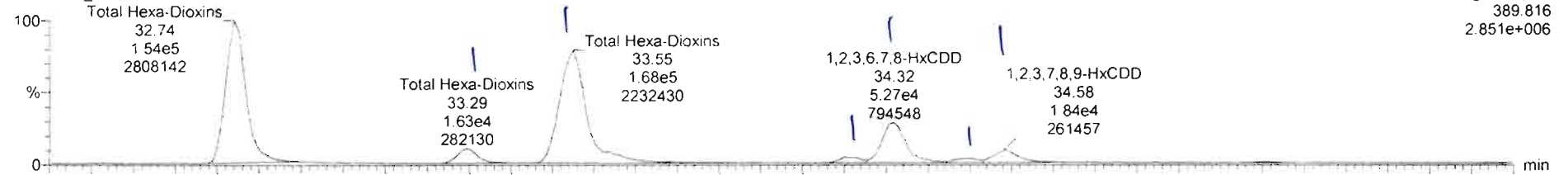
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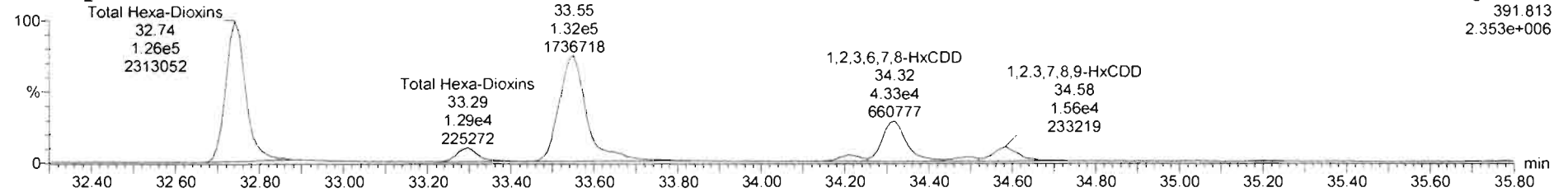
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1,2,3,4,7,8-HxCDD

200303R2\_6

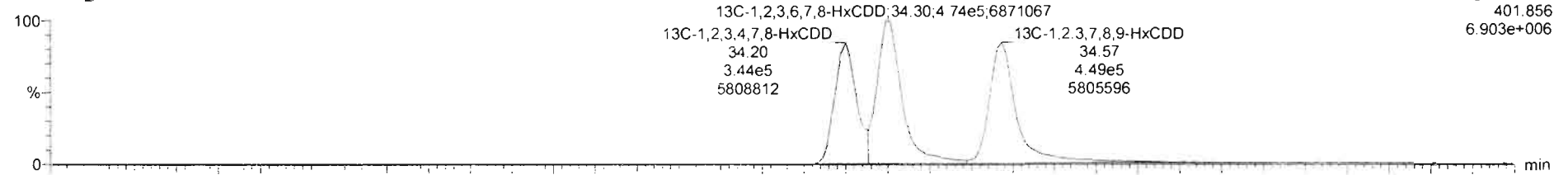


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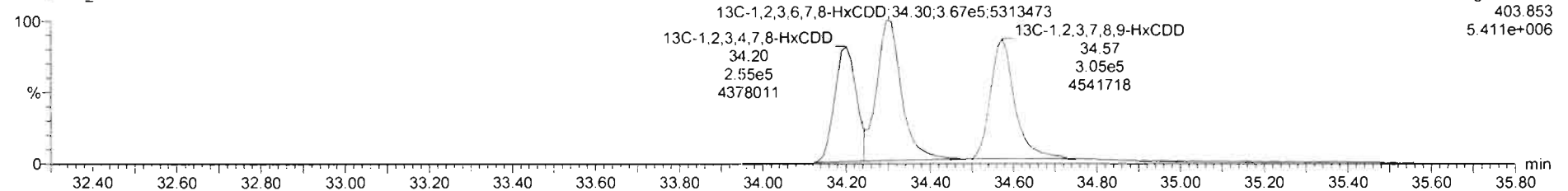


13C-1,2,3,4,7,8-HxCDD

200303R2\_6



200303R2\_6





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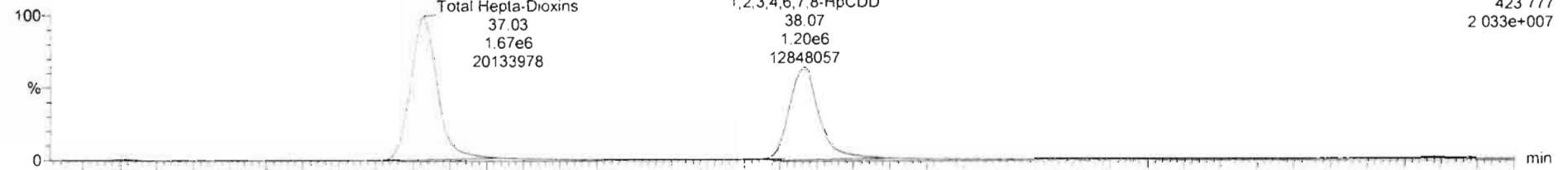
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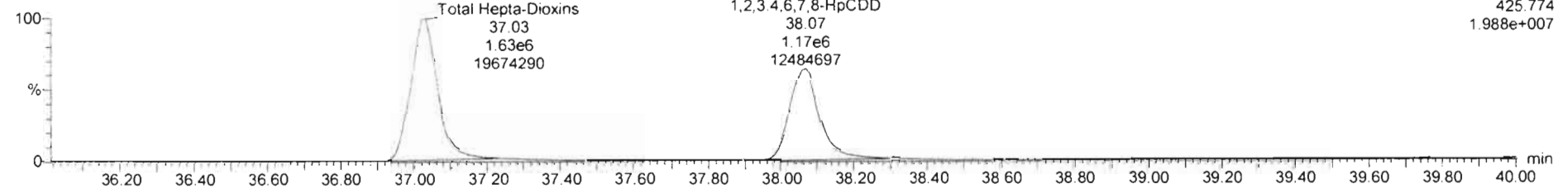
1,2,3,4,6,7,8-HpCDD

200303R2\_6



F4: Voltage SIR, EI+  
423.777  
2.033e+007

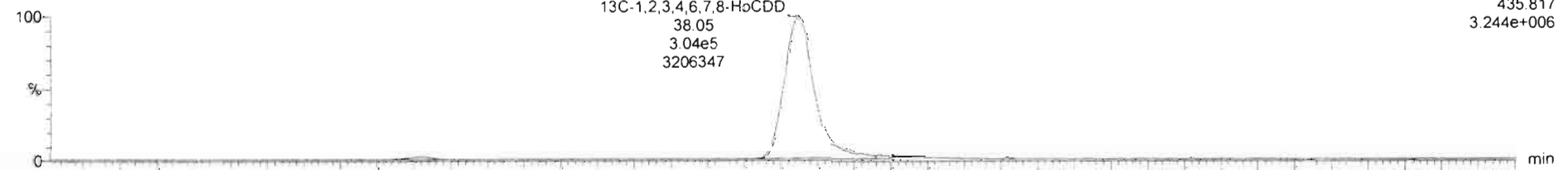
200303R2\_6



F4: Voltage SIR, EI+  
425.774  
1.988e+007

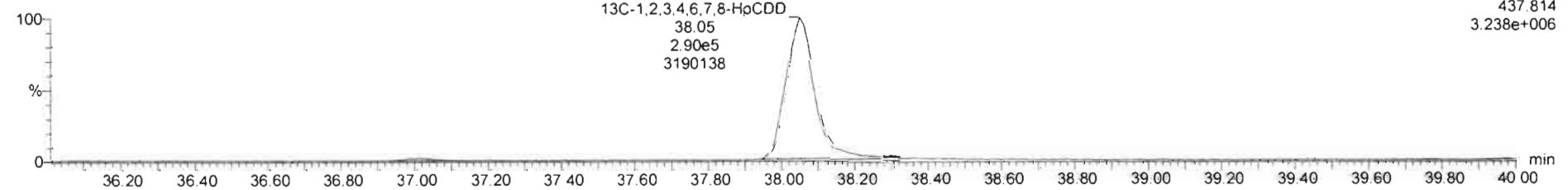
13C-1,2,3,4,6,7,8-HpCDD

200303R2\_6



F4: Voltage SIR, EI+  
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3.244e+006

200303R2\_6



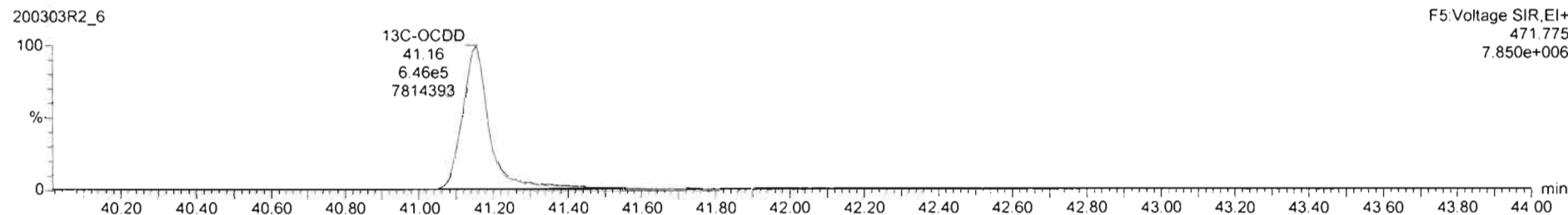
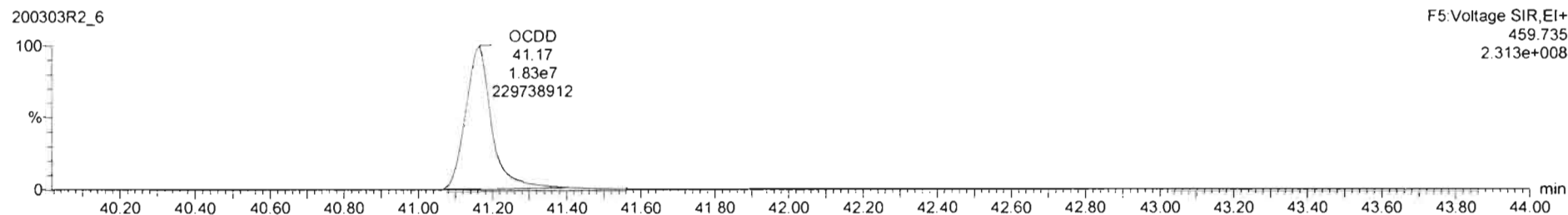
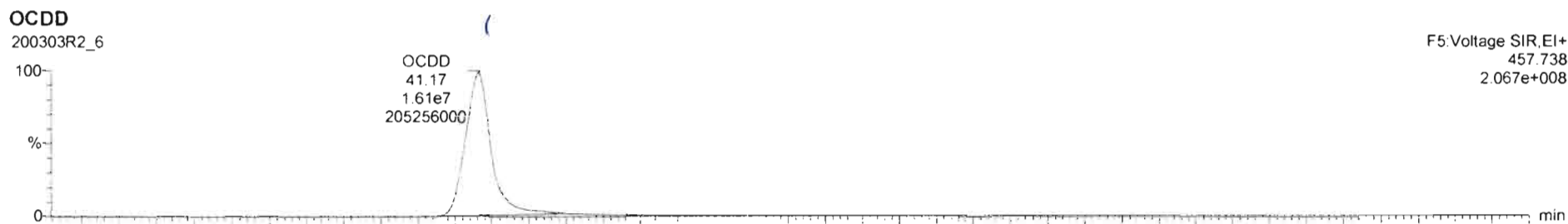
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437.814  
3.238e+006

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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

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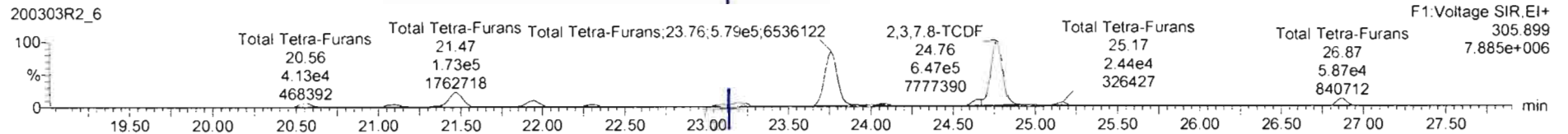
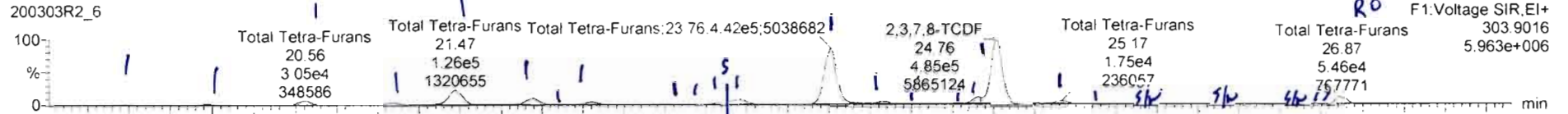
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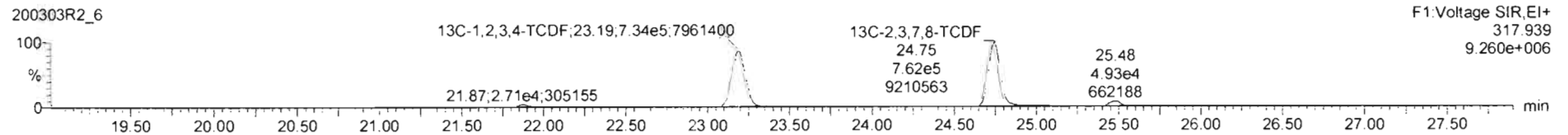
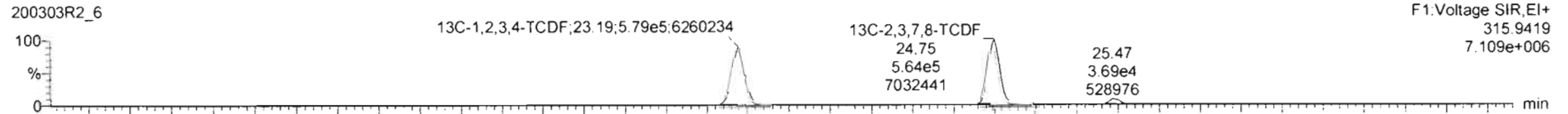
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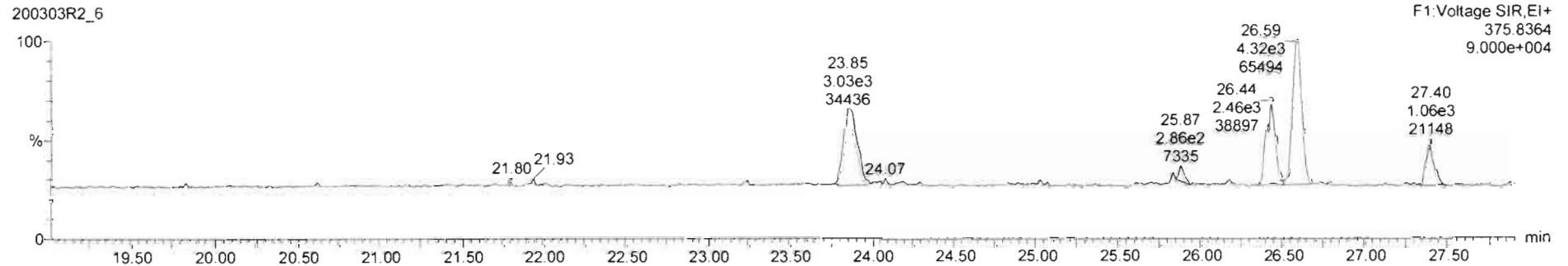
2,3,7,8-TCDF



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

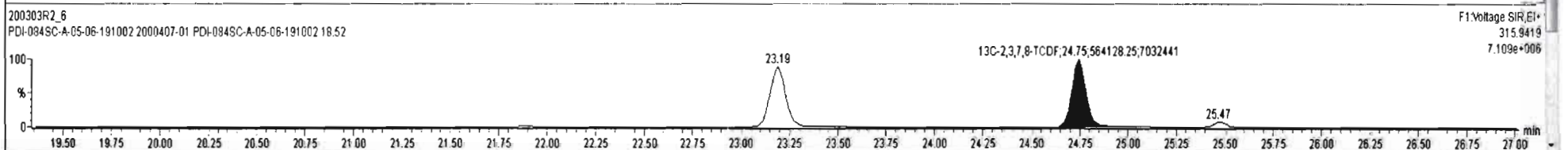
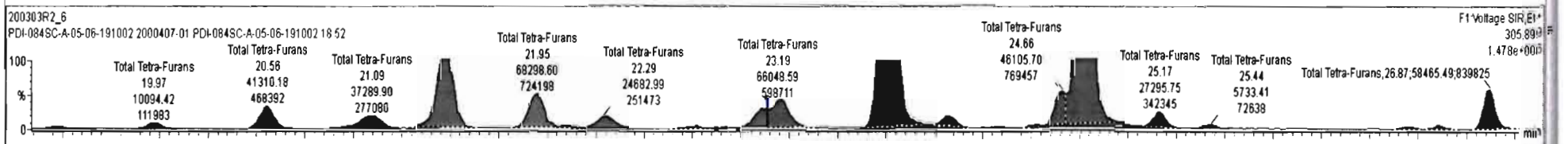
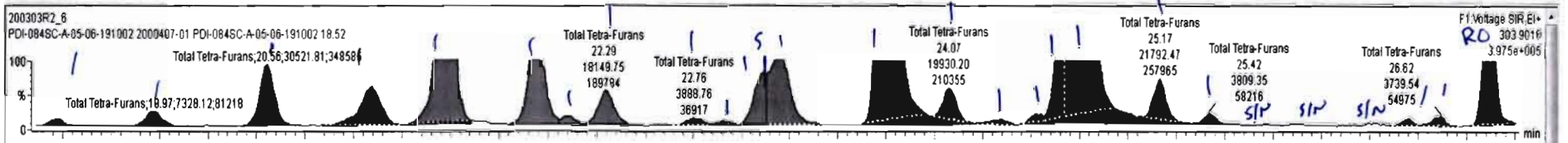


DPE1



#	Name	Resp	RA	n/y	R/R	wArd	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.059	23.81		0.000		NO	609.4		0.299	628.7
44	1st Func. Penta-Furans				0.9074	10.059	27.09		0.000		NO	87.07		0.0581	87.14
45	Total Penta-Furans				0.9074	10.059	29.27		0.000		NO	1087		0.876	1087
46	Total Hexa-Furans				0.9089	10.060	22.05		0.000		NO	1084		0.760	1084

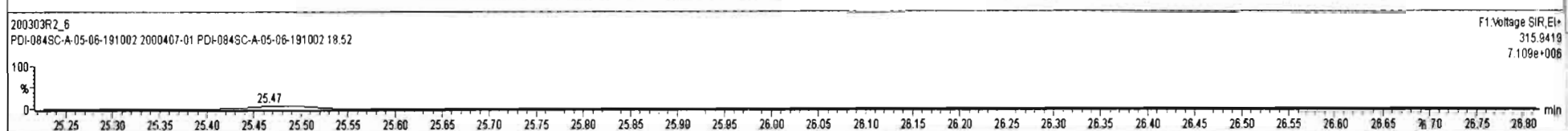
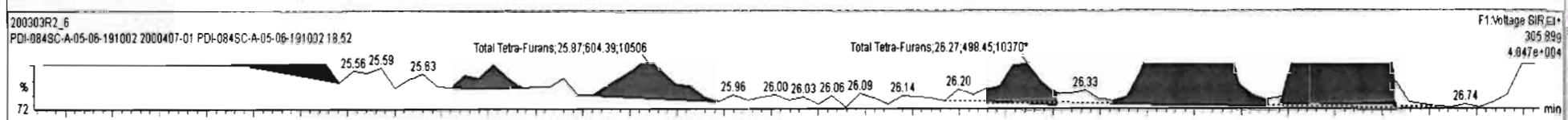
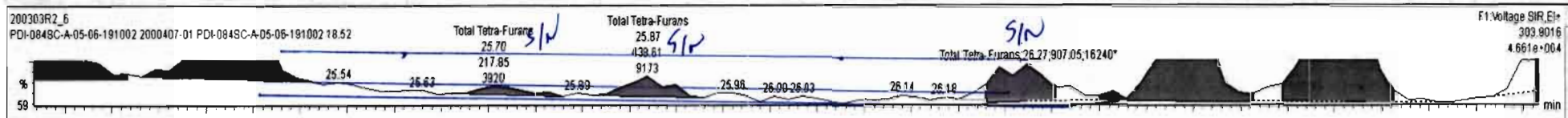
#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Tetra-Furans	23.61	19.46	2.961e3	3.639e3	0.770	0.81	NO	1.2337	1.2337
2	Total Tetra-Furans	23.61	19.97	7.329e3	1.009e4	0.770	0.73	NO	3.2570	3.2570
3	Total Tetra-Furans	23.61	20.56	3.052e4	4.131e4	0.770	0.74	NO	13.428	13.428
4	Total Tetra-Furans	23.61	21.10	2.788e4	3.729e4	0.770	0.75	NO	12.182	12.182
5	Total Tetra-Furans	23.61	21.47	1.295e5	1.731e5	0.770	0.75	NO	56.572	56.572
6	Total Tetra-Furans	23.61	21.95	5.203e4	6.830e4	0.770	0.76	NO	22.495	22.495
7	Total Tetra-Furans	23.61	22.10	3.401e3	4.072e3	0.770	0.84	NO	1.3970	1.3970
8	Total Tetra-Furans	23.61	22.29	1.615e4	2.468e4	0.770	0.74	NO	8.0073	8.0073
9	Total Tetra-Furans	23.61	22.76	3.889e3	5.209e3	0.770	0.75	NO	1.7008	1.7008
10	Total Tetra-Furans	23.61	22.91	1.767e3	2.055e3	0.770	0.86	NO	0.71444	0.71444
11	Total Tetra-Furans	23.61	23.12	2.106e4	2.838e4	0.770	0.74	NO	9.2414	9.2414
12	Total Tetra-Furans	23.61	23.19	5.008e4	6.605e4	0.770	0.76	NO	21.710	21.710
13	Total Tetra-Furans	23.61	23.78	4.552e5	5.969e5	0.770	0.76	NO	196.68	196.68
14	Total Tetra-Furans	23.61	24.07	1.993e4	2.436e4	0.770	0.82	NO	8.2802	8.2802
15	Total Tetra-Furans	23.61	24.34	2.771e3	3.146e3	0.770	0.88	NO	1.1062	1.1062
16	Total Tetra-Furans	23.61	24.52	4.041e3	4.819e3	0.770	0.84	NO	1.6562	1.6562
17	Total Tetra-Furans	23.61	24.66	3.499e4	4.811e4	0.770	0.76	NO	15.161	15.161
18	2,3,7,8-TCDF	24.77	24.76	5.096e5	6.728e5	0.770	0.76	NO	221.05	221.05
19	Total Tetra-Furans	23.61	25.17	2.179e4	2.730e4	0.770	0.80	NO	9.1767	9.1767
20	Total Tetra-Furans	23.61	25.42	3.809e3	5.733e3	0.770	0.86	NO	1.7839	1.7839
21	Total Tetra-Furans	23.61	26.45	2.481e3	3.223e3	0.770	0.77	NO	1.0665	1.0665
22	Total Tetra-Furans	23.61	26.62	3.740e3	4.310e3	0.770	0.87	NO	1.5048	1.5048





#	Name	Resp	RA	rly	RRF	wtvol	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
42	42 Total Hepta-Dioxins				0.9231	10.058	37.64		0.000		NO	2055		2.57	2055
43	43 Total Tetra-Furans				0.8020	10.058	23.81		0.000		NO	698.8		0.299	526.3
44	44 1st Func. Penta-Furans				0.9074	10.058	27.09		0.000		NO	87.07		0.0581	87.14
45	45 Total Dioxin Furans				0.9074	10.058	27.09		0.000		NO	87.07		0.0581	87.14

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	rly	EMPC	Conc.
1	43 Total Tetra-Furans	23.81	19.46	2.961e3	3.639e3	0.770	0.81	NO	1.2337	1.2337
2	43 Total Tetra-Furans	23.81	19.97	7.328e3	1.009e4	0.770	0.73	NO	3.2570	3.2570
3	43 Total Tetra-Furans	23.81	20.56	3.052e4	4.131e4	0.770	0.74	NO	13.428	13.428
4	43 Total Tetra-Furans	23.81	21.10	2.798e4	3.729e4	0.770	0.75	NO	12.182	12.182
5	43 Total Tetra-Furans	23.81	21.47	1.295e5	1.731e5	0.770	0.75	NO	56.572	56.572
6	43 Total Tetra-Furans	23.81	21.95	5.203e4	6.830e4	0.770	0.76	NO	22.495	22.495
7	43 Total Tetra-Furans	23.81	22.10	3.401e3	4.072e3	0.770	0.84	NO	1.3970	1.3970
8	43 Total Tetra-Furans	23.81	22.29	1.815e4	2.468e4	0.770	0.74	NO	8.0073	8.0073
9	43 Total Tetra-Furans	23.81	22.78	3.768e3	5.172e3	0.770	0.73	NO	1.8714	1.8714
10	43 Total Tetra-Furans	23.81	23.12	2.106e4	2.839e4	0.770	0.74	NO	9.2414	9.2414
11	43 Total Tetra-Furans	23.81	23.19	5.004e4	6.605e4	0.770	0.76	NO	21.703	21.703
12	43 Total Tetra-Furans	23.81	23.76	4.552e5	5.969e5	0.770	0.76	NO	196.68	196.68
13	43 Total Tetra-Furans	23.81	24.07	1.993e4	2.439e4	0.770	0.82	NO	8.2802	8.2802
14	43 Total Tetra-Furans	23.81	24.34	2.771e3	3.148e3	0.770	0.88	NO	1.1062	1.1062
15	43 Total Tetra-Furans	23.81	24.52	4.041e3	4.819e3	0.770	0.84	NO	1.8562	1.8562
16	43 Total Tetra-Furans	23.81	24.68	3.499e4	4.611e4	0.770	0.76	NO	15.181	15.181
17	8 2,3,7,8-TCDF	24.77	24.76	5.090e5	6.728e5	0.770	0.76	NO	220.93	220.93
18	43 Total Tetra-Furans	23.81	25.17	2.179e4	2.730e4	0.770	0.80	NO	9.1767	9.1767
19	43 Total Tetra-Furans	23.81	25.42	3.809e3	5.733e3	0.770	0.66	NO	1.7839	1.7839
20	43 Total Tetra-Furans	23.81	25.70	2.179e2	2.211e2	0.770	0.99	YES	0.073148	0.00000
21	43 Total Tetra-Furans	23.81	25.87	4.386e2	6.044e2	0.770	0.73	NO	0.19498	0.19498
22	43 Total Tetra-Furans	23.81	26.27	9.648e2	4.221e2	0.770	2.29	YES	0.13986	0.00000
23	43 Total Tetra-Furans	23.81	26.45	2.819e3	3.371e3	0.770	0.78	NO	1.1195	1.1195
24	43 Total Tetra-Furans	23.81	26.62	3.283e3	3.840e3	0.770	0.86	NO	1.3317	1.3317
25	43 Total Tetra-Furans	23.81	26.87	5.298e4	5.293e4	0.770	0.99	YES	17.513	0.00000



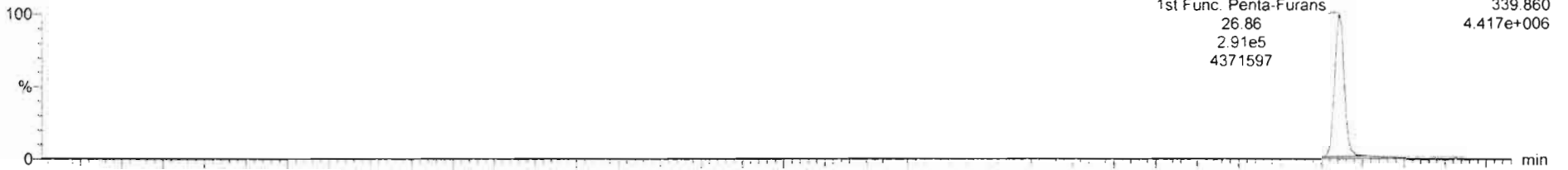
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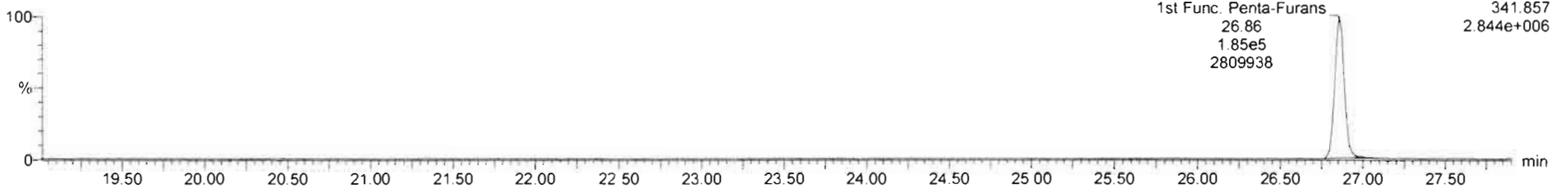
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1st Func. Penta-Furans

200303R2\_6

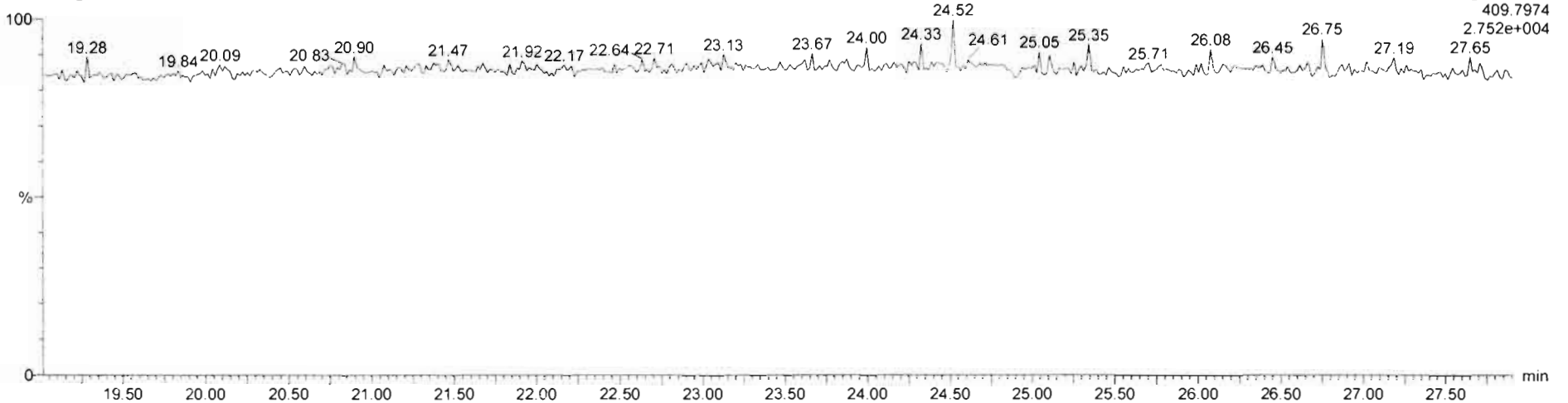


200303R2\_6



DPE6

200303R2\_6





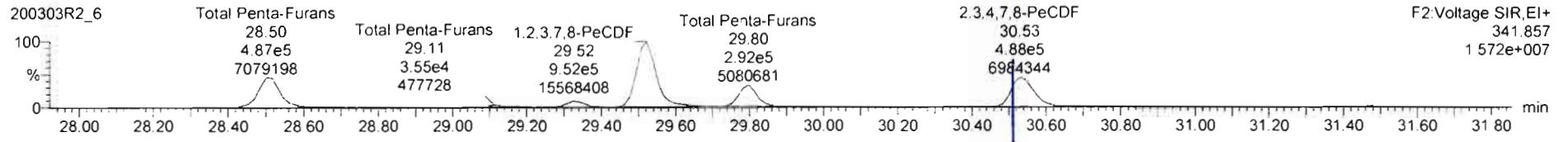
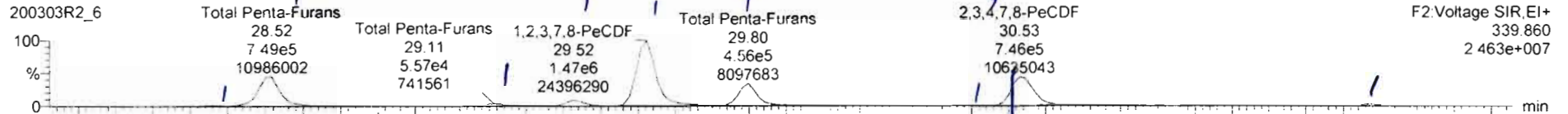
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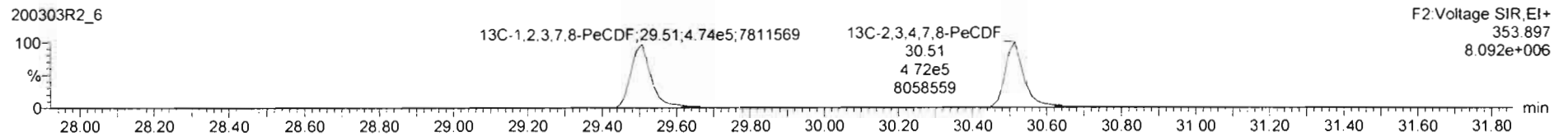
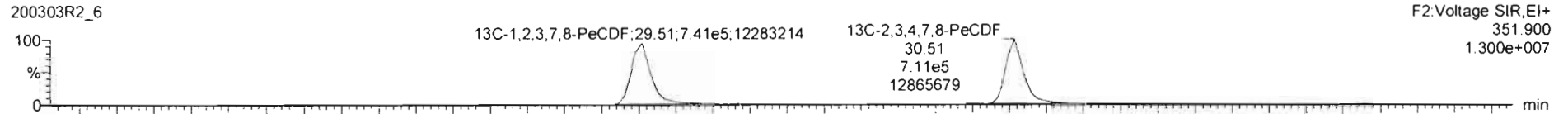
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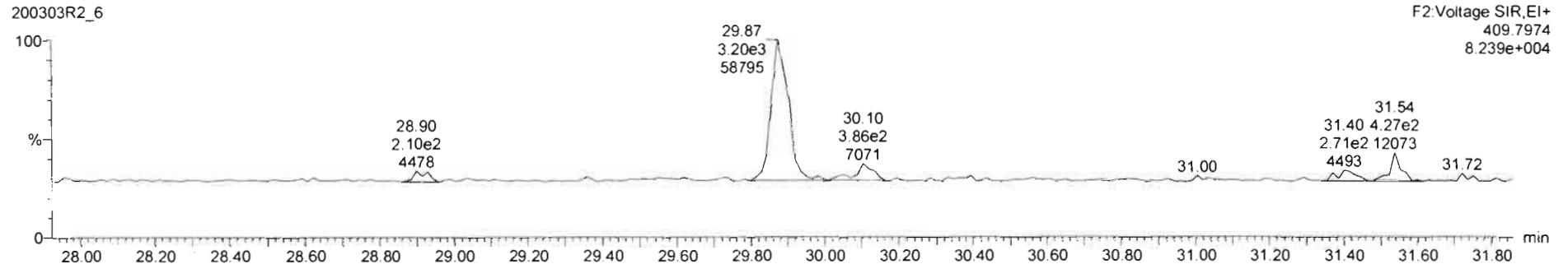
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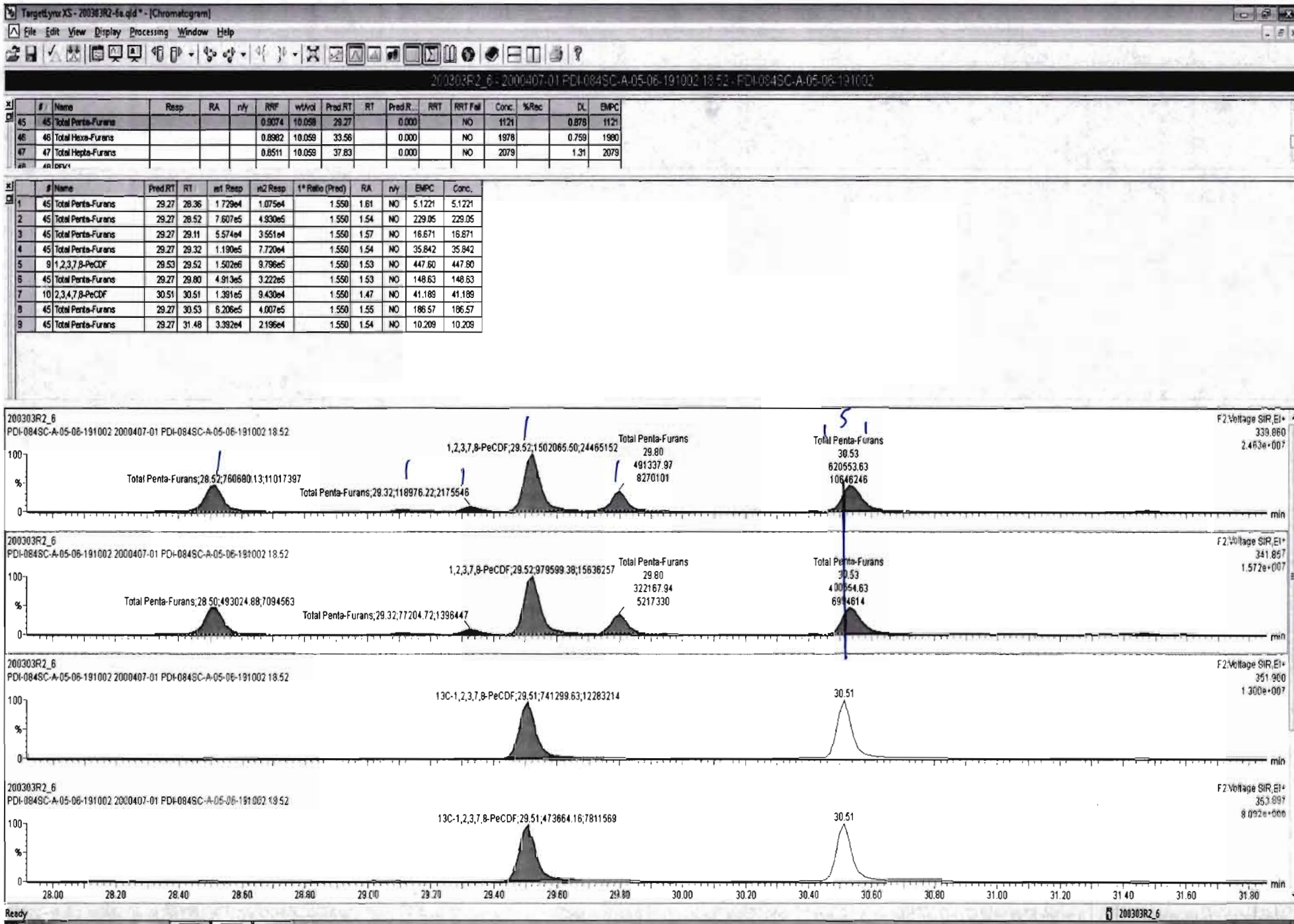


13C-1,2,3,7,8-PeCDF



DPE2





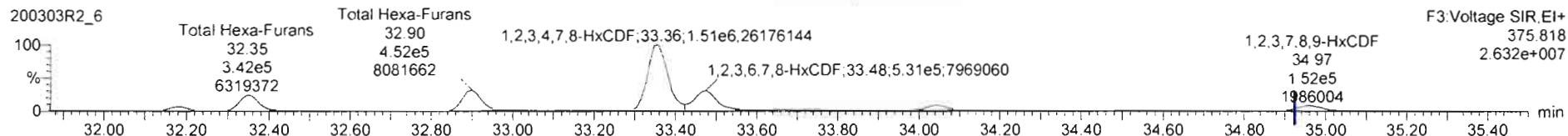
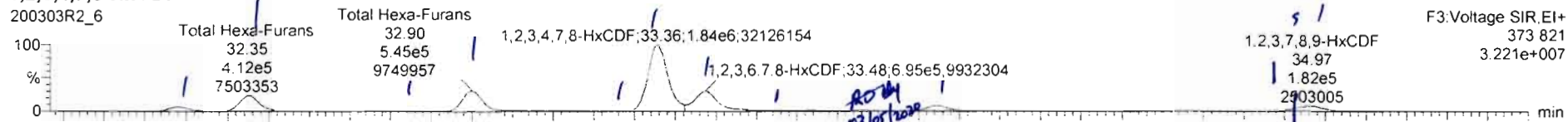
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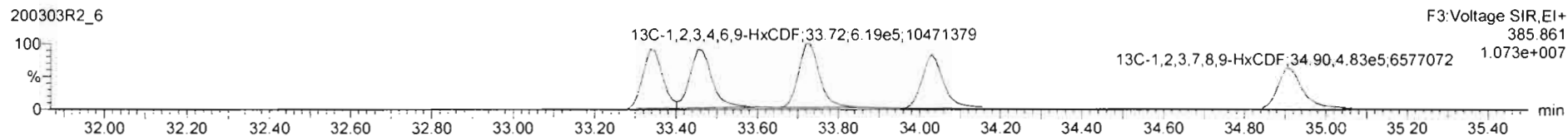
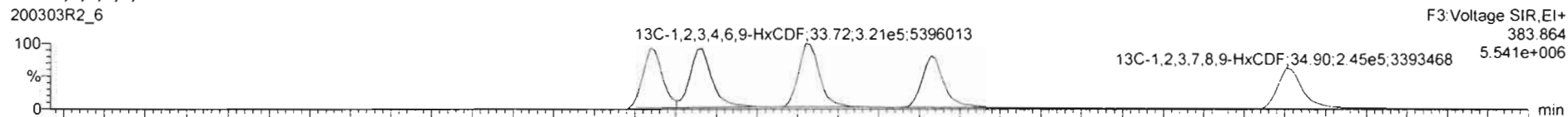
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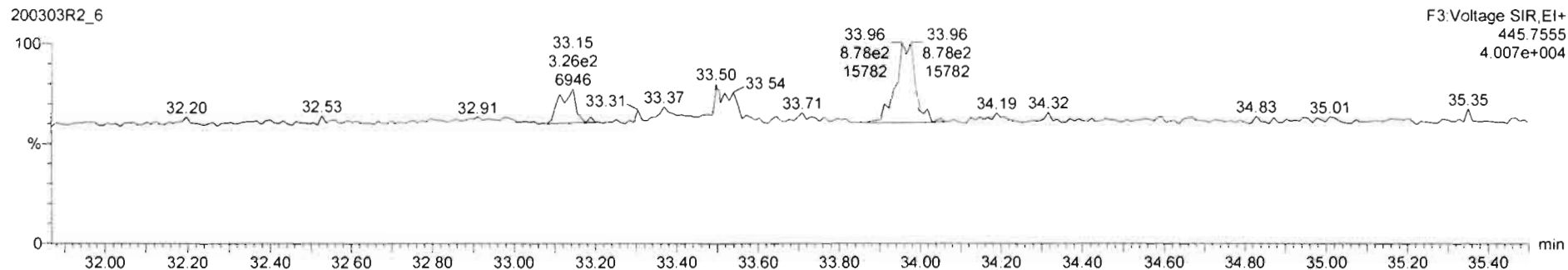
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13C-1,2,3,4,7,8-HxCDF



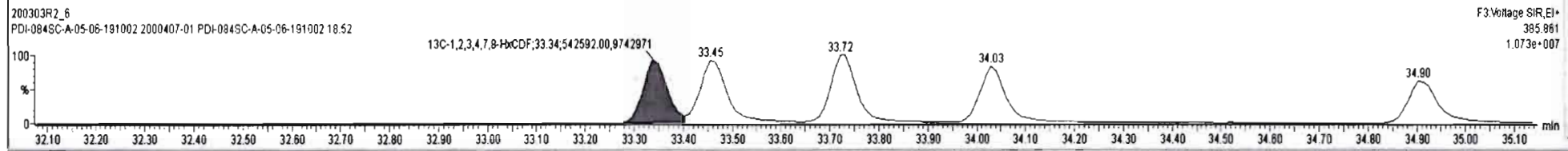
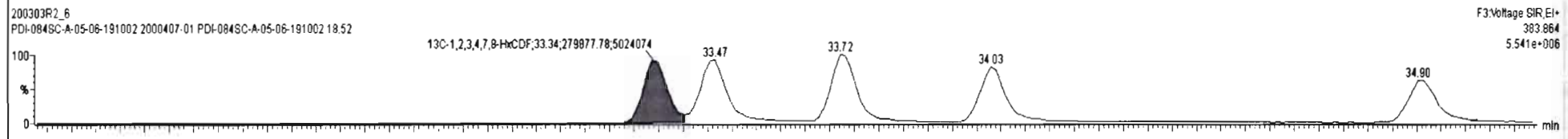
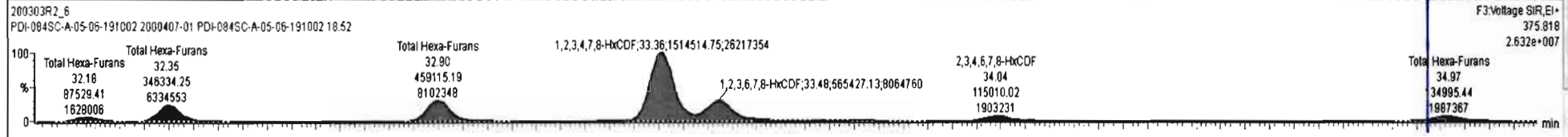
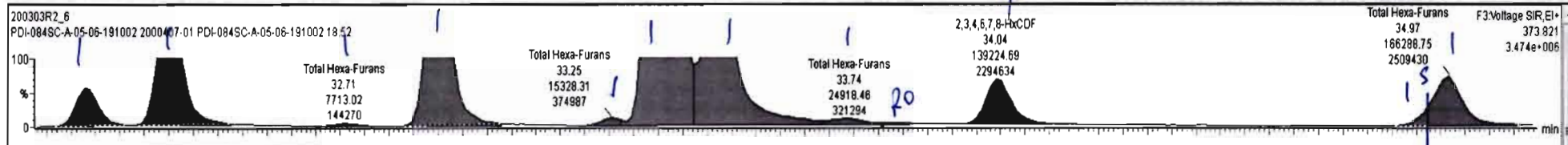
DPE3





#	Name	Resp	RA	nly	RF	wtAval	Pred.RT	RT	Pred.R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
44	1st Func. Penta-Furans				0.9074	10.059	27.09		0.000		NO	67.07		0.0561	87.07
45	Total Penta-Furans				0.9074	10.059	29.27		0.000		NO	1086		0.876	1086
46	Total Hexa-Furans				0.8962	10.059	33.56		0.000		NO	1978		0.759	1980
47	Total Hepta-Furans				0.8611	10.059	37.81		0.000		NO	3070		1.31	3081

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	nly	EMPC	Conc.
1	Total Hexa-Furans	33.56	32.18	1.071e5	9.753e4	1.240	1.22	NO	52.349	52.349
2	Total Hexa-Furans	33.56	32.35	4.185e5	3.463e5	1.240	1.21	NO	205.75	205.75
3	Total Hexa-Furans	33.56	32.71	7.713e3	6.310e3	1.240	1.22	NO	3.7726	3.7726
4	Total Hexa-Furans	33.56	32.90	5.559e5	4.591e5	1.240	1.21	NO	273.07	273.07
5	Total Hexa-Furans	33.56	33.25	1.533e4	1.116e4	1.240	1.37	NO	7.1267	7.1267
6	1,2,3,4,7,8-HxCDF	33.34	33.36	1.839e6	1.515e6	1.240	1.21	NO	939.98	939.98
7	1,2,3,6,7,8-HxCDF	33.48	33.48	6.955e5	5.654e5	1.240	1.23	NO	323.48	323.48
8	Total Hexa-Furans	33.56	33.74	2.492e4	1.932e4	1.240	1.29	NO	11.901	11.901
9	Total Hexa-Furans	33.56	33.83	5.979e3	3.840e3	1.240	1.56	YES	2.3142	0.00000
10	1,2,3,4,6,7,8-HxCDF	34.06	34.04	1.392e5	1.150e5	1.240	1.21	NO	68.569	68.569
11	1,2,3,7,8,9-HxCDF	34.90	34.92	1.777e4	1.626e4	1.240	1.09	NO	10.848	10.848
12	Total Hexa-Furans	33.56	34.97	1.663e5	1.350e5	1.240	1.23	NO	81.051	81.051



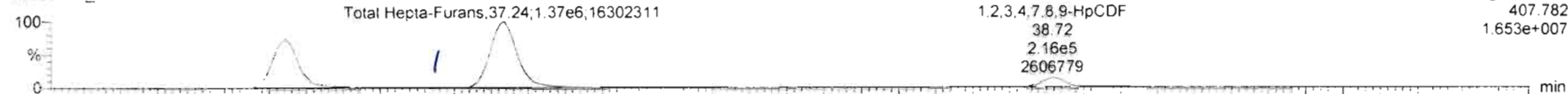
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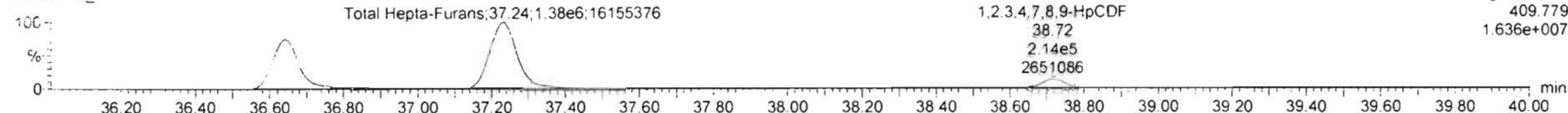
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1,2,3,4,6,7,8-HpCDF

200303R2\_6

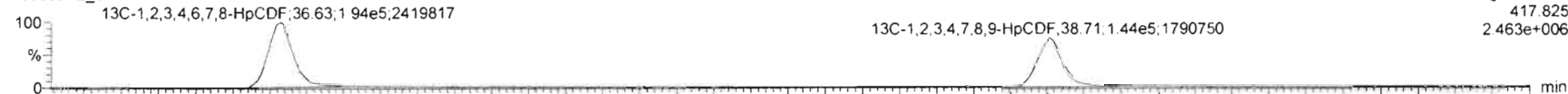


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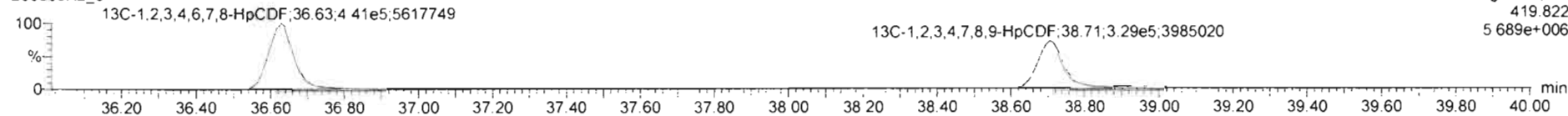


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200303R2\_6

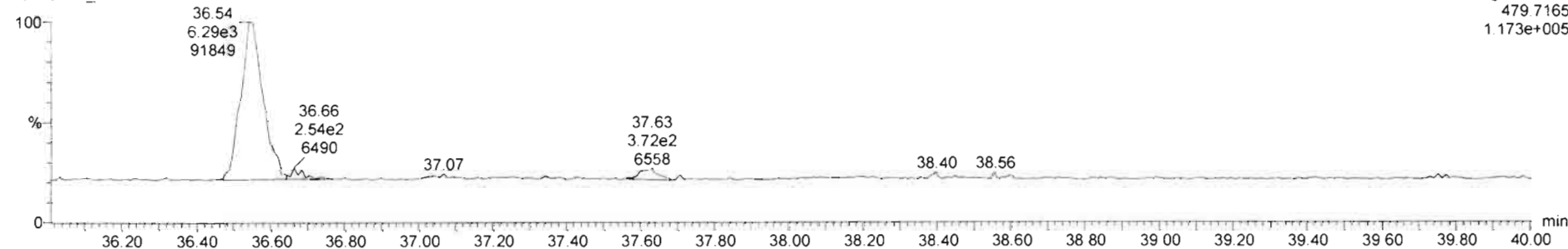


200303R2\_6



DPE4

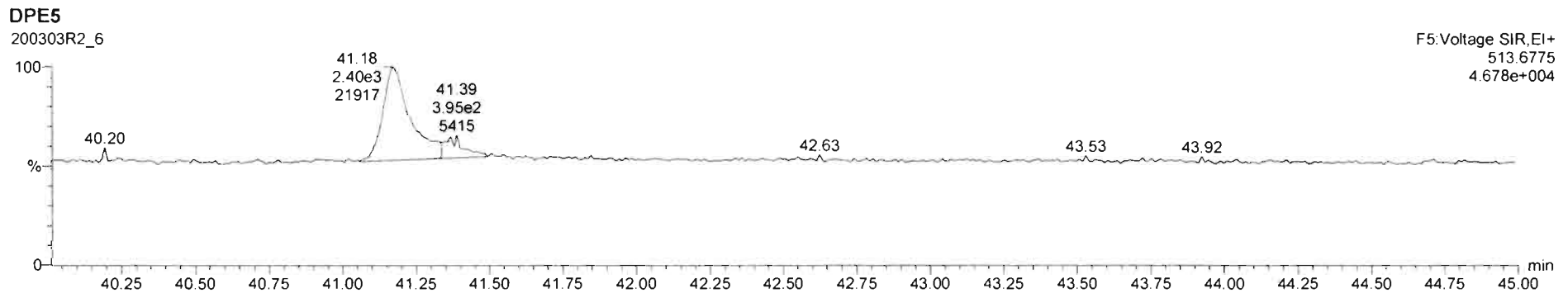
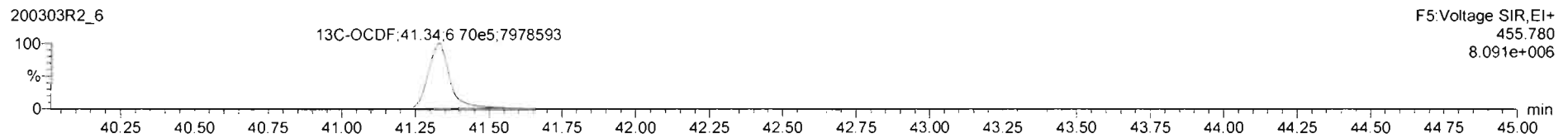
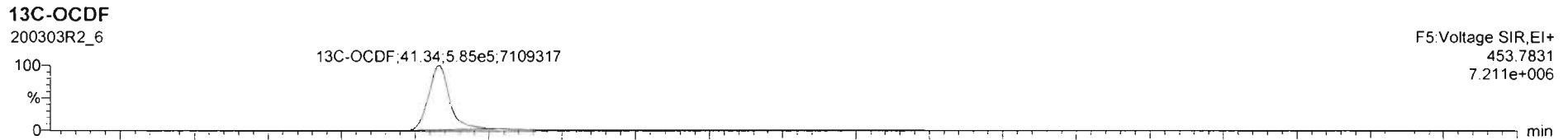
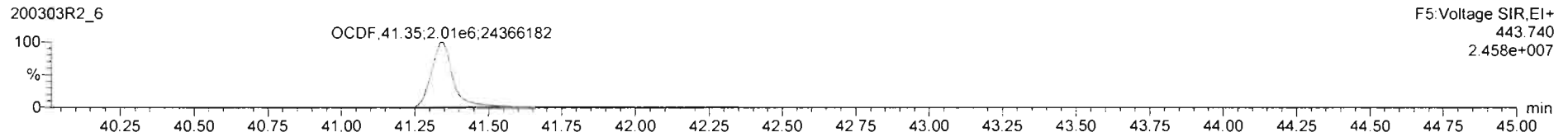
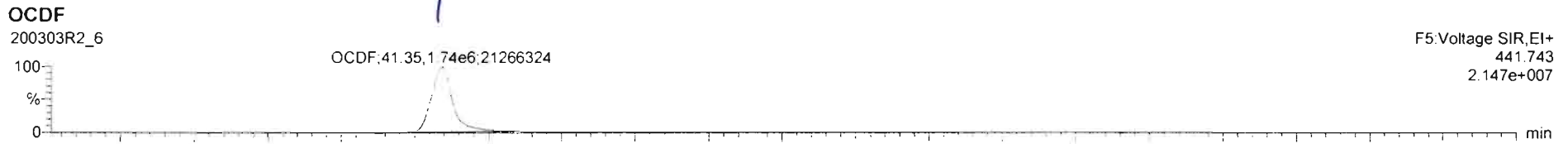
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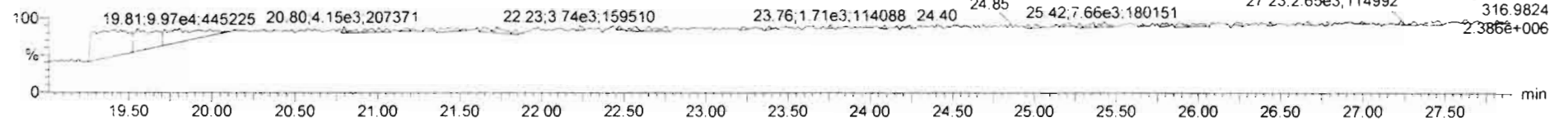
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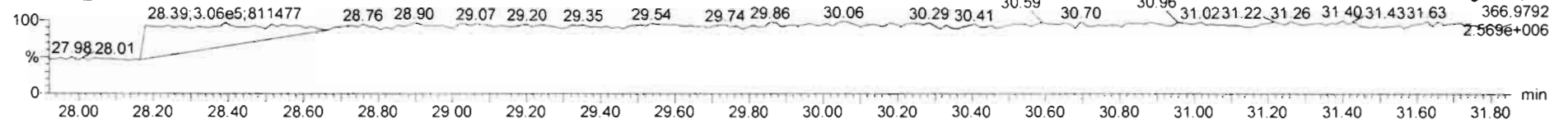
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200303R2\_6



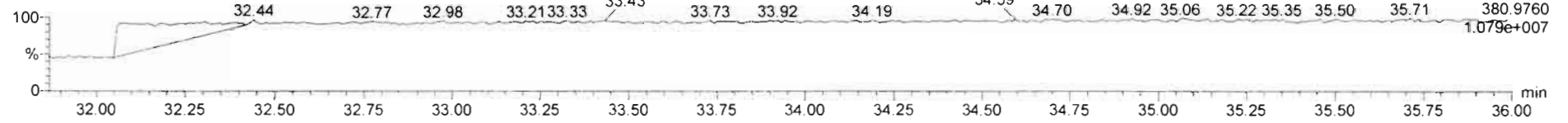
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200303R2\_6



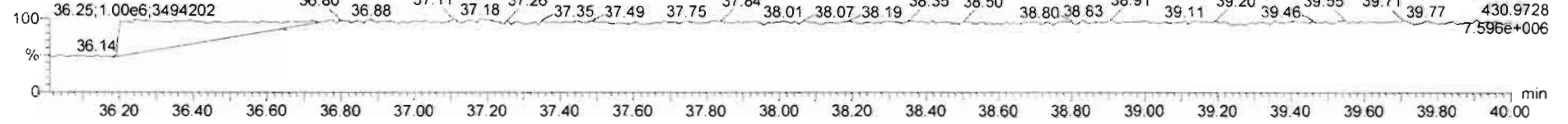
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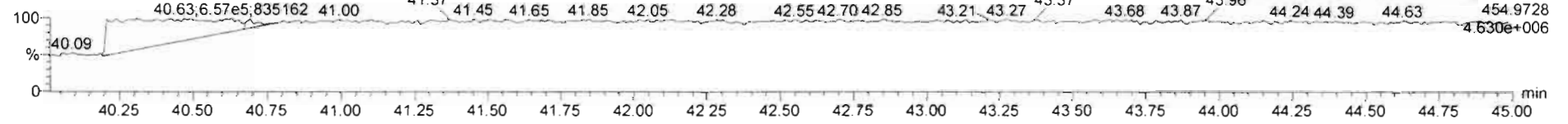
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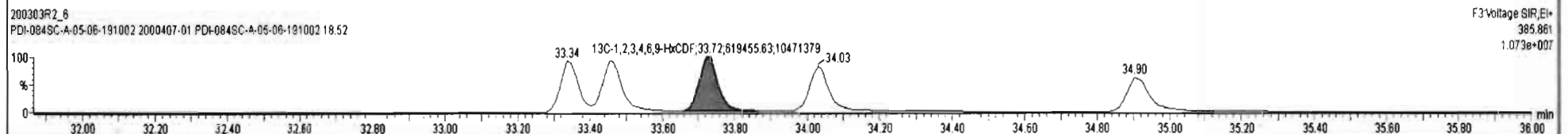
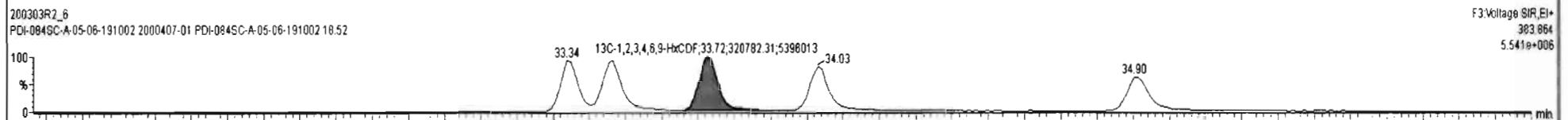
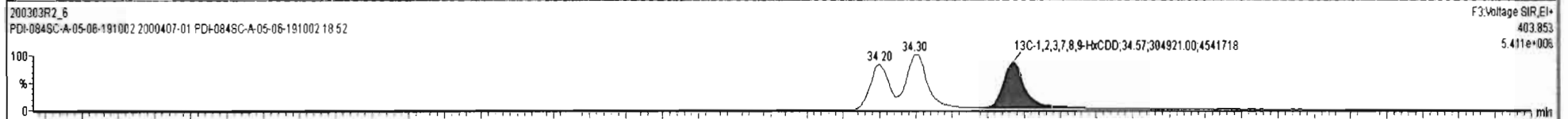
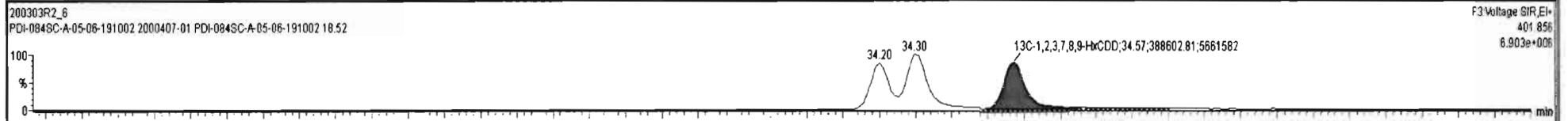
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200303R2\_6 - 2000407-01 PDI-0845C-A-05-06-191002 18:52 - FDI-0945C-A-05-06-191002

#	Name	Resp	RA	nV	RRF	wtAvl	RT	RRT	Conc.	%Rec	DL	EMPC
22	13C-1,2,3,7,8,9-HxCDD	6.94e5	1.27	NO	4.97	10.059	34.57	1.025	190.5	75.7	0.530	
23	13C-1,2,3,4,6,7,8-HxCDD	5.94e5	1.05	NO	0.75	10.059	38.04	1.128	168.1	94.6	0.554	
24	13C-OCDD	1.22e6	0.89	NO	0.71	10.059	41.15	1.220	364.4	91.6	0.701	
25	13C-2,3,7,8-TCDF	1.33e6	0.74	NO	1.07	10.059	24.75	0.990	198.5	94.8	0.454	
26	13C-1,2,3,7,8-PeCDF	1.21e6	1.57	NO	1.00	10.059	29.51	1.180	183.6	92.4	0.680	
27	13C-2,3,4,7,8-PeCDF	1.18e6	1.51	NO	0.96	10.059	30.51	1.220	196.4	93.7	0.688	
28	13C-1,2,3,4,7,8-HxCDF	8.22e5	0.52	NO	1.05	10.059	33.34	0.989	165.8	83.4	0.839	
29	13C-1,2,3,6,7,8-HxCDF	9.21e5	0.52	NO	1.19	10.059	33.47	0.992	163.7	82.3	0.739	
30	13C-2,3,4,6,7,8-HxCDF	8.21e5	0.51	NO	1.07	10.059	34.03	1.009	162.8	81.9	0.825	

#	Name	RT	m1 Resp	m2 Resp	RA	nV	EMPC	Conc.
1								



Custom Reporting: Select reports to generate

200303R2\_6

Dataset: U:\VG12.PRO\Results\200305R2\200305R2-14.qld

Last Altered: Friday, March 06, 2020 15:15:31 Pacific Standard Time

Printed: Friday, March 06, 2020 15:16:23 Pacific Standard Time

*ely 03-06-2020 @ 15:16:23*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	7 OCDD	4541847.0...	0.887	NO	0.975	10.059	41.24	41.24	1.00	1.00	NO	12750		4.08	12750
2	24 13C-OCDD	145388.094	0.901	NO	0.707	10.059	41.18	41.24	1.22	1.22	NO	290.9	73.1	1.45	
3	38 13C-1,2,3,4,6,9-HxCDF	140661.004	0.506	NO	1.00	10.059	33.71	33.81	1.00	1.00	NO	198.8	100	1.29	

Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

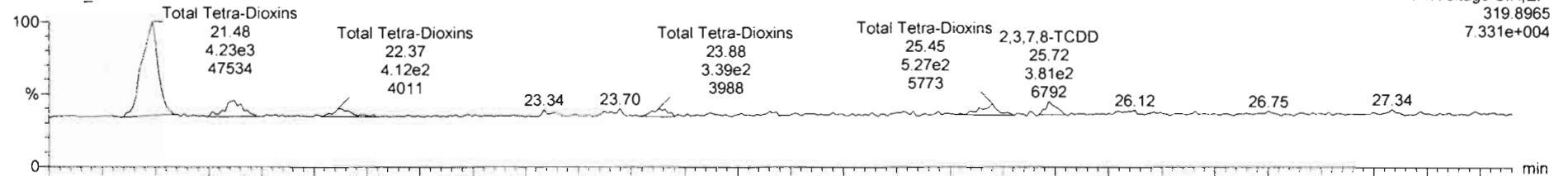
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

*dy 03-06-2020*

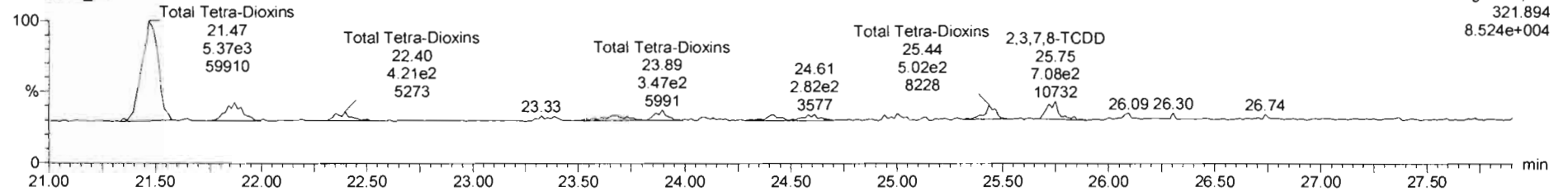
Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

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

200305R2\_14

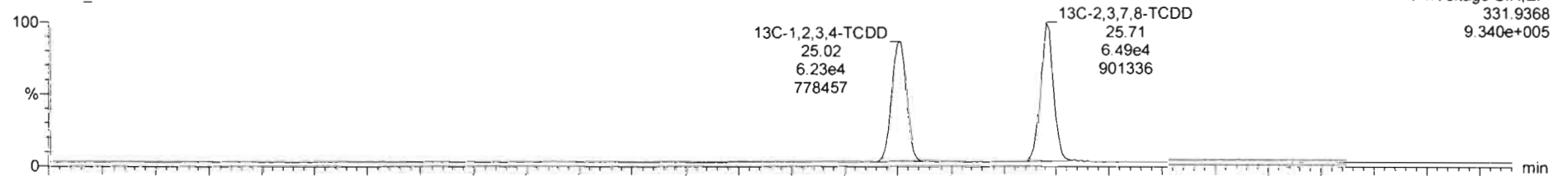


200305R2\_14

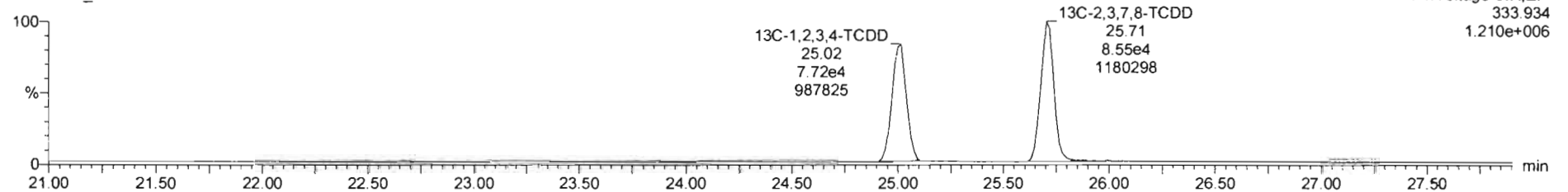


**13C-2,3,7,8-TCDD**

200305R2\_14



200305R2\_14



Dataset: Untitled

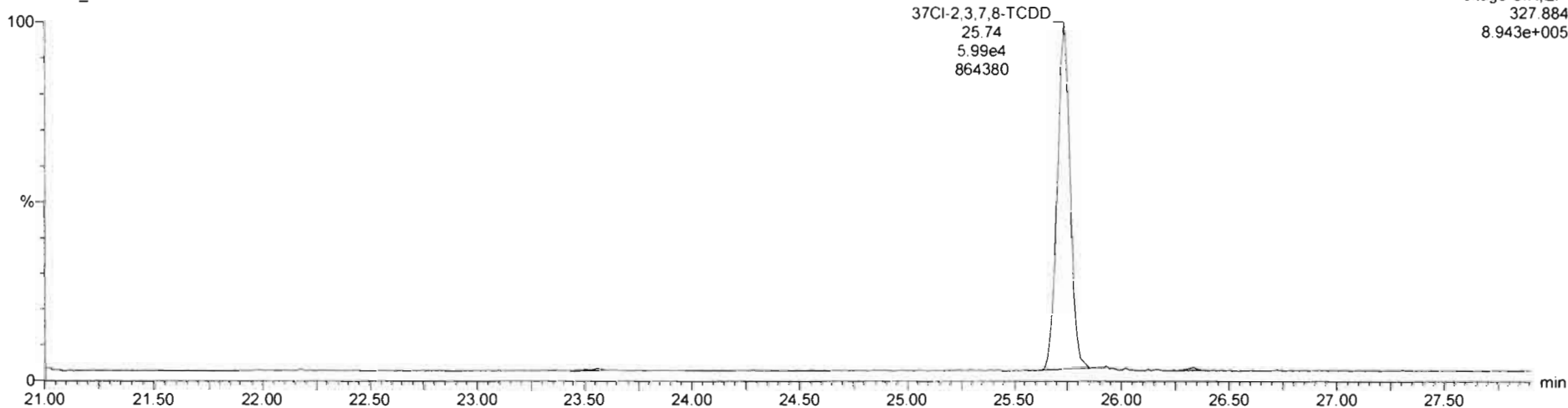
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

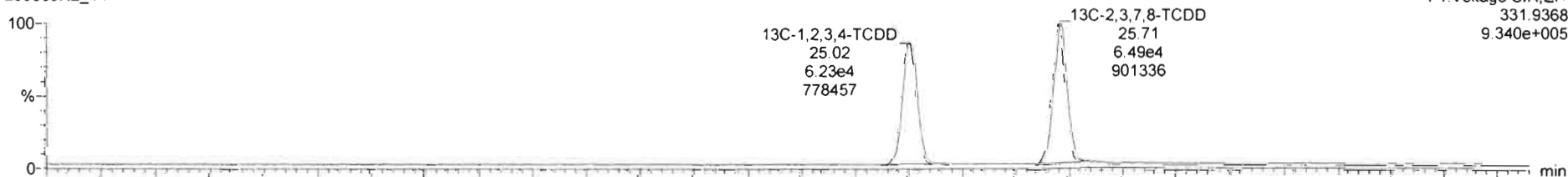
37Cl-2,3,7,8-TCDD

200305R2\_14

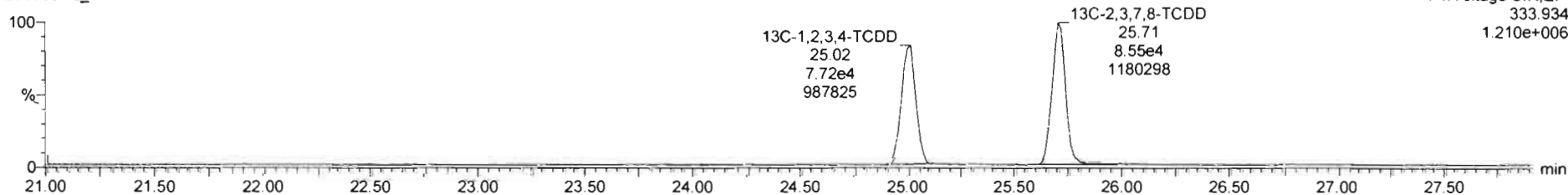


13C-1,2,3,4-TCDD

200305R2\_14



200305R2\_14





Dataset: Untitled

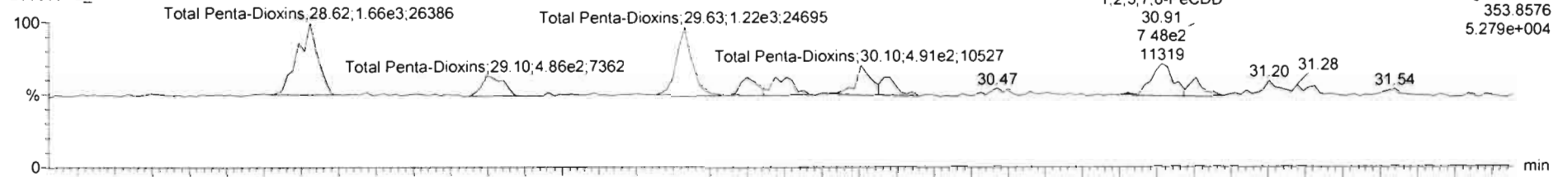
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

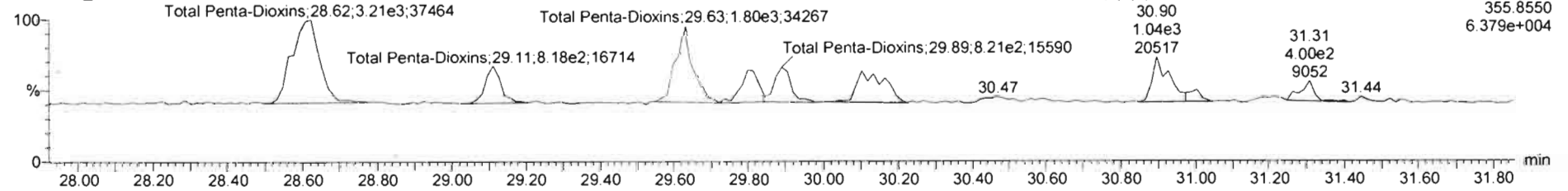
Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

1,2,3,7,8-PeCDD

200305R2\_14

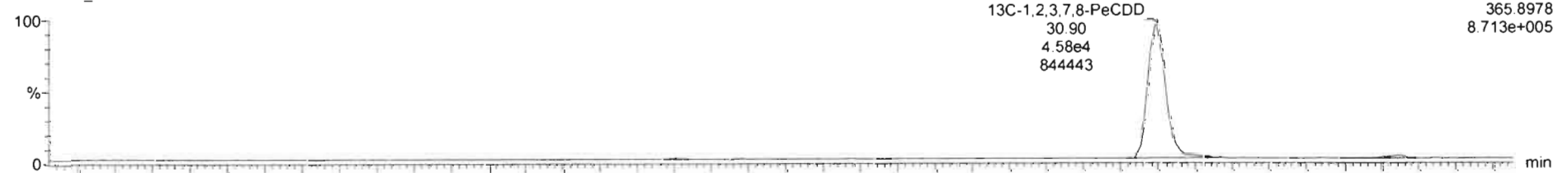


200305R2\_14

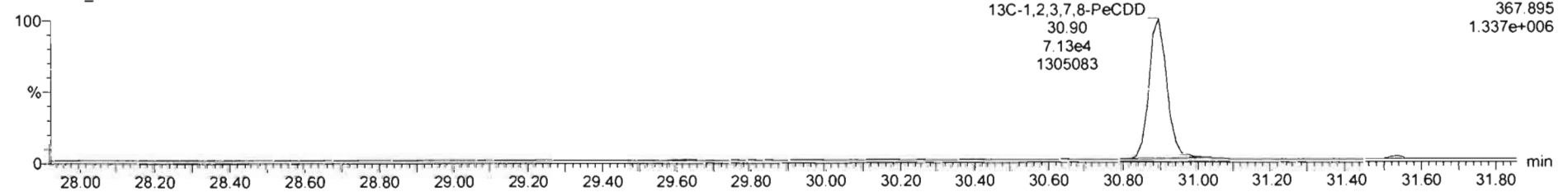


13C-1,2,3,7,8-PeCDD

200305R2\_14



200305R2\_14



Dataset: Untitled

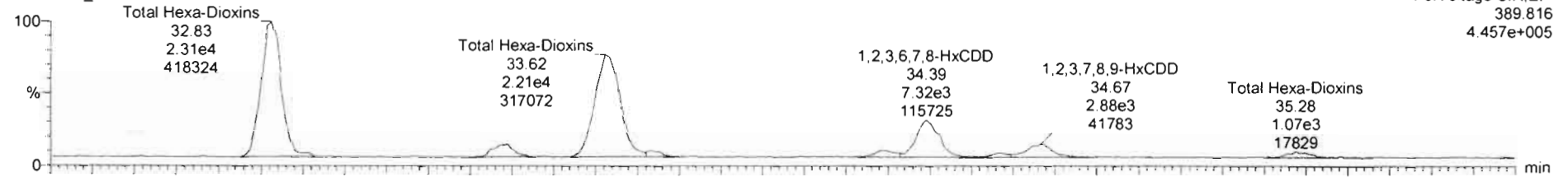
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Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

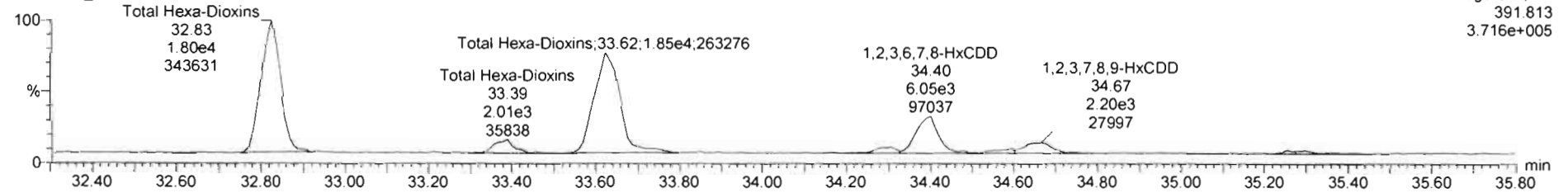
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1,2,3,4,7,8-HxCDD

200305R2\_14

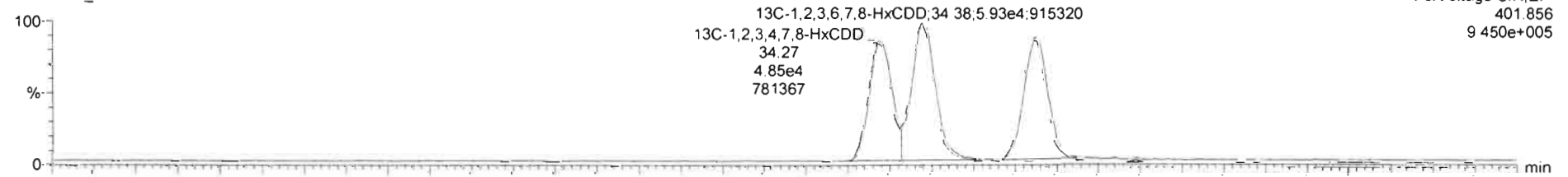


200305R2\_14

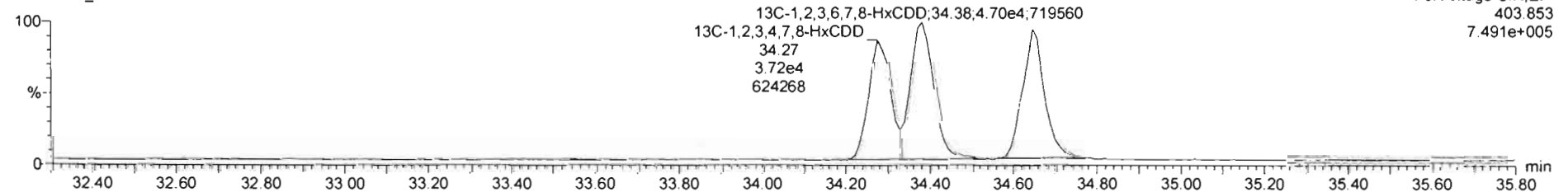


13C-1,2,3,4,7,8-HxCDD

200305R2\_14



200305R2\_14



Dataset: Untitled

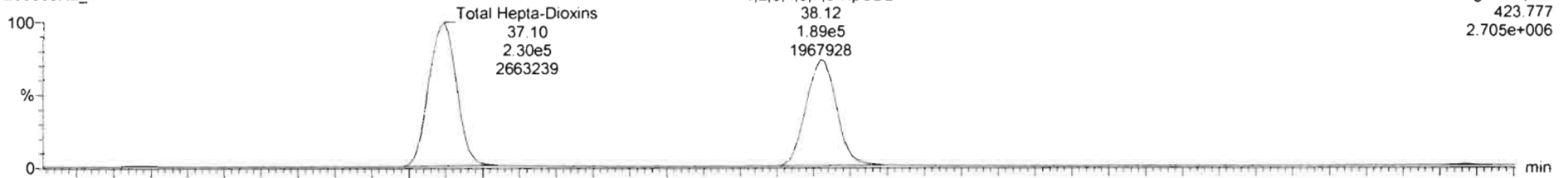
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

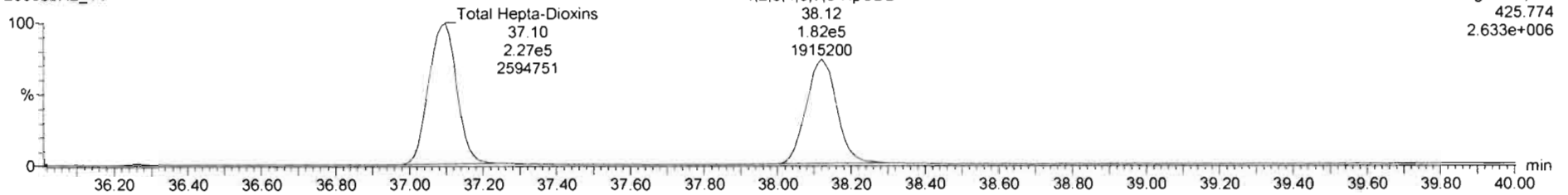
Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

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

200305R2\_14

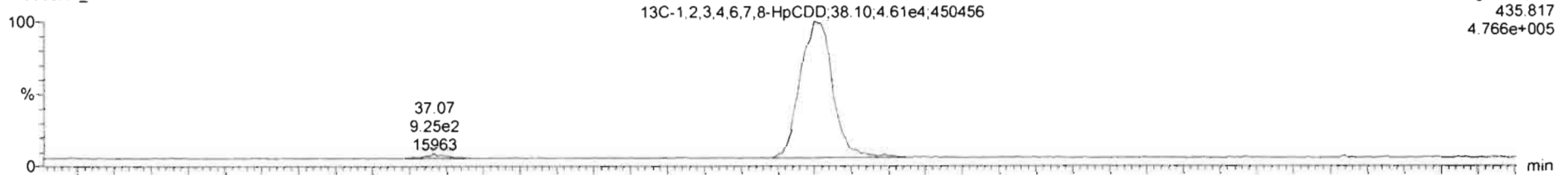


200305R2\_14

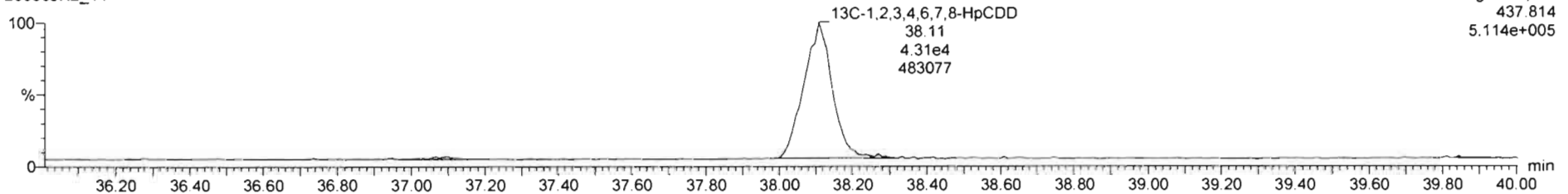


13C-1,2,3,4,6,7,8-HpCDD

200305R2\_14



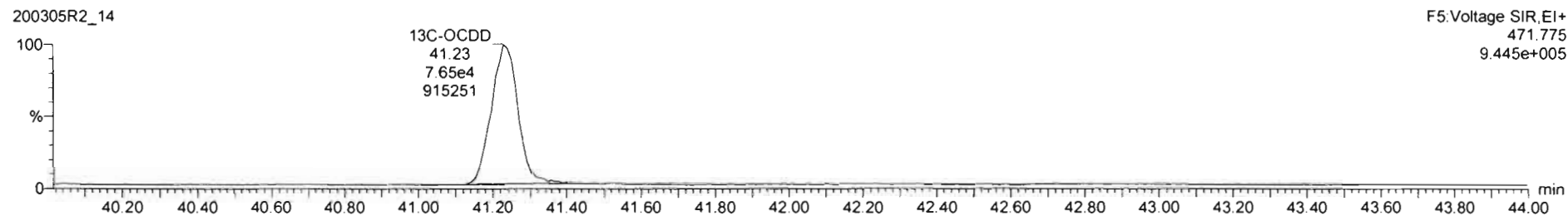
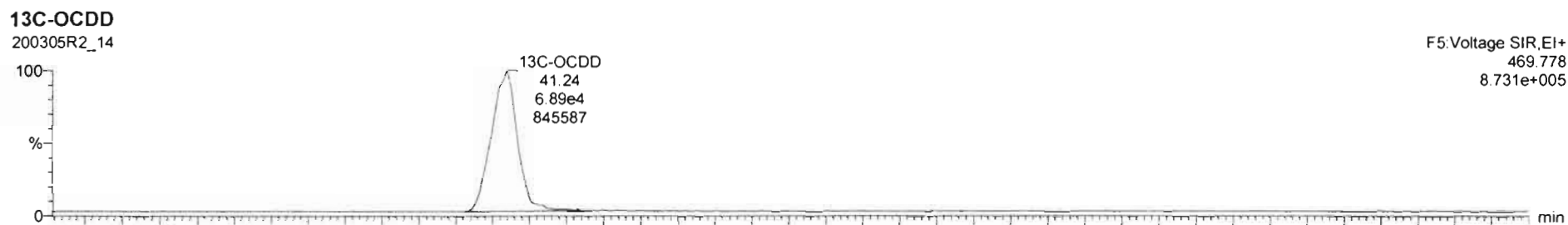
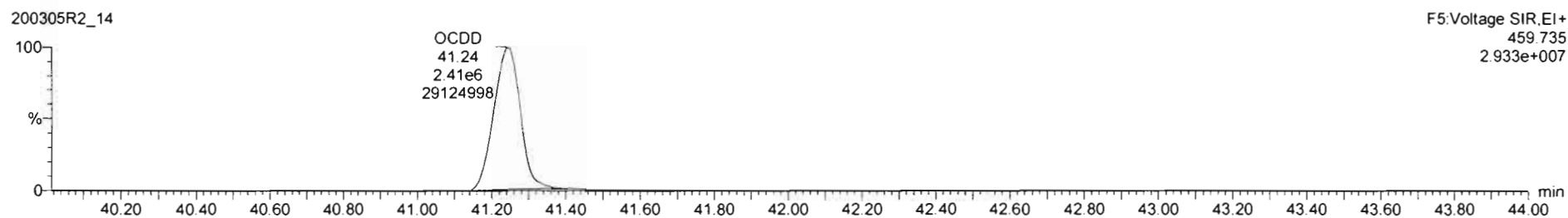
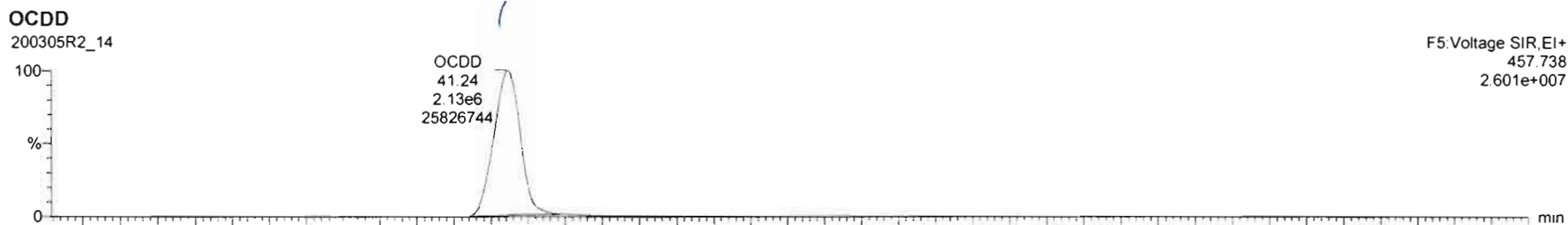
200305R2\_14



Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52; Description: PDI-084SC-A-05-06-191002



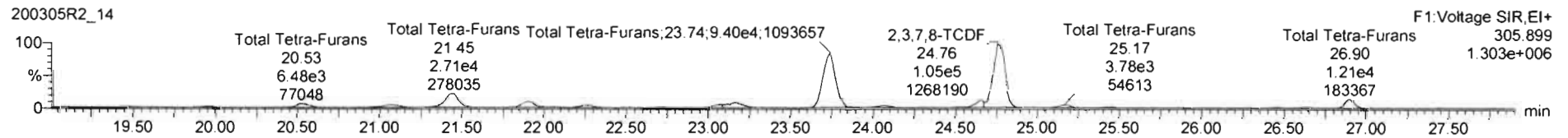
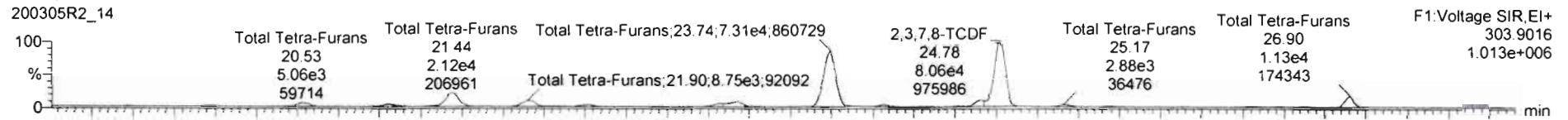
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Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

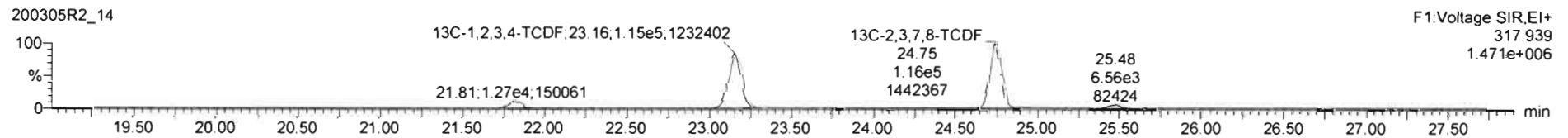
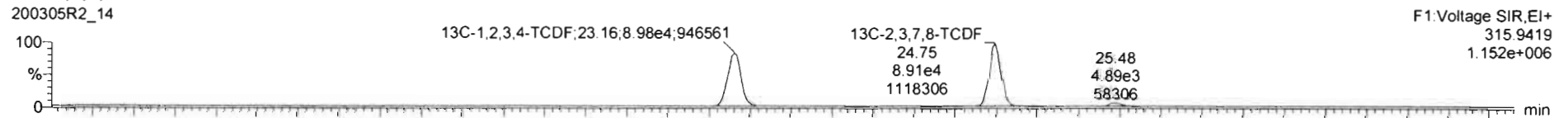
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

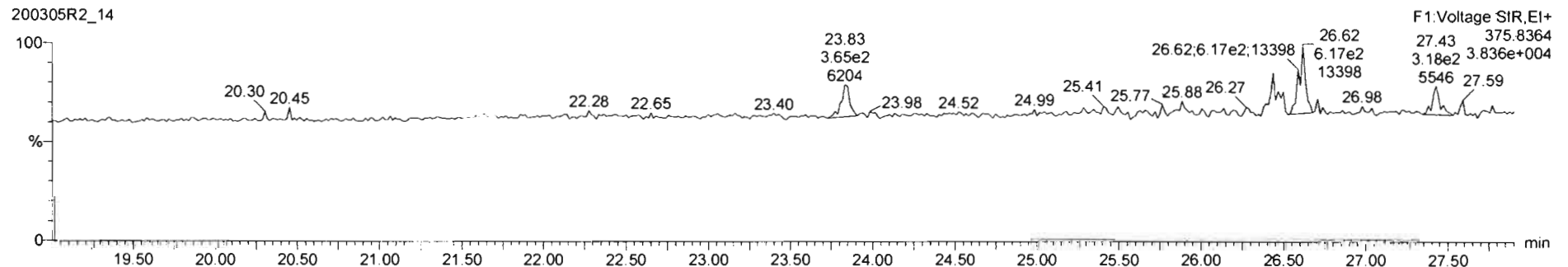
2,3,7,8-TCDF



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



DPE1





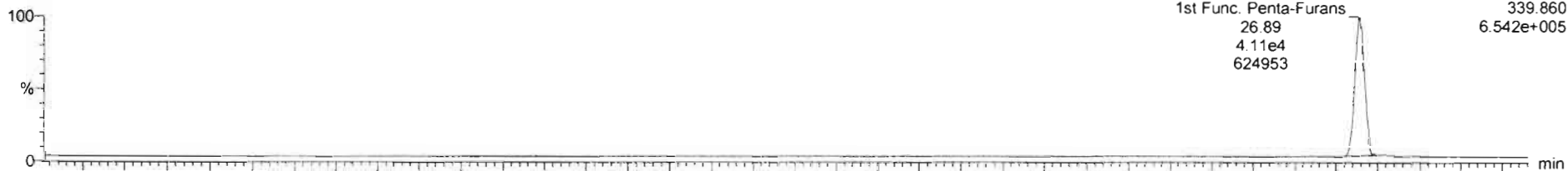
Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

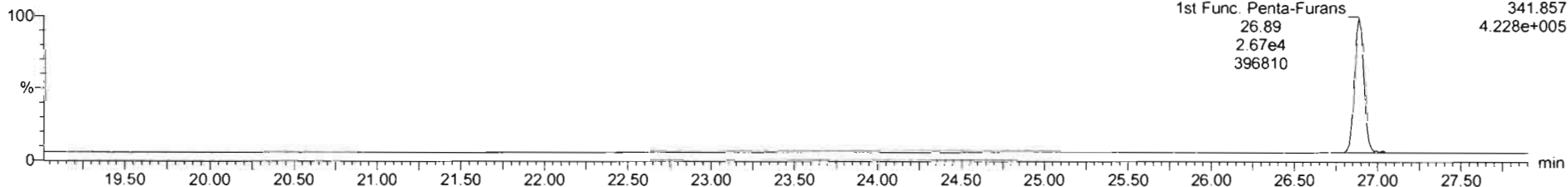
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200305R2\_14

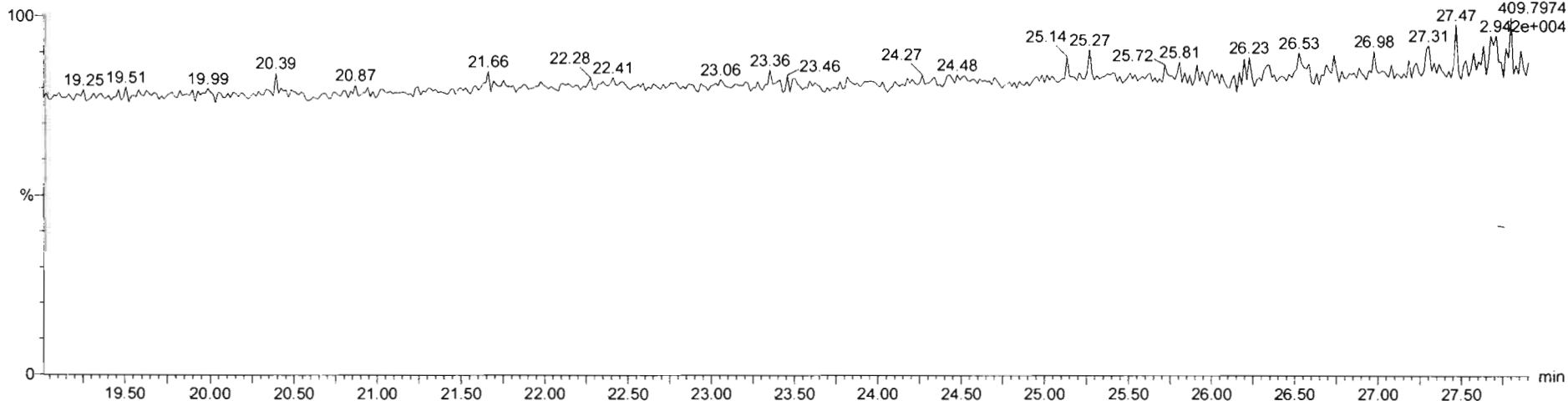


200305R2\_14



DPE6

200305R2\_14



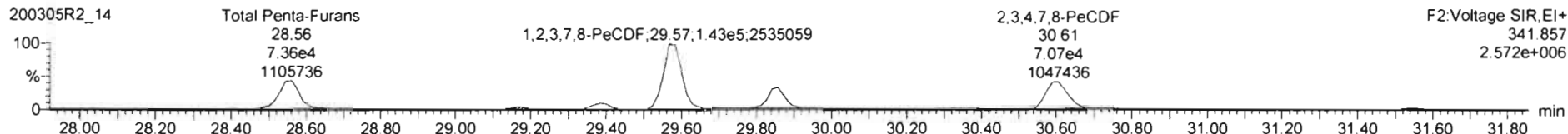
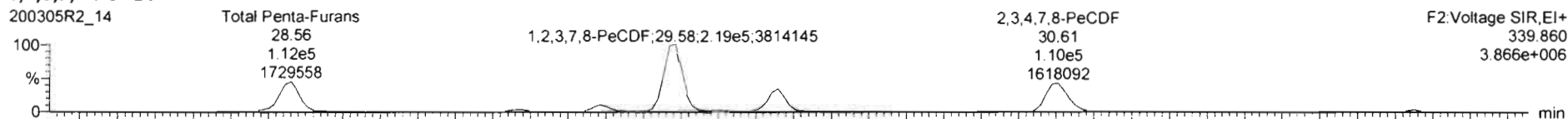
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Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

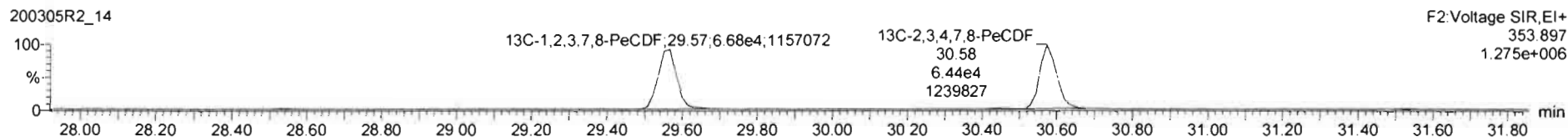
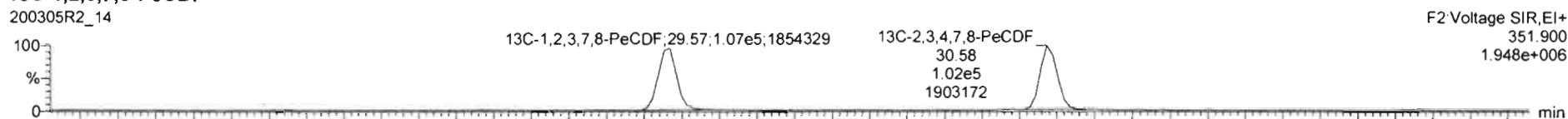
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Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

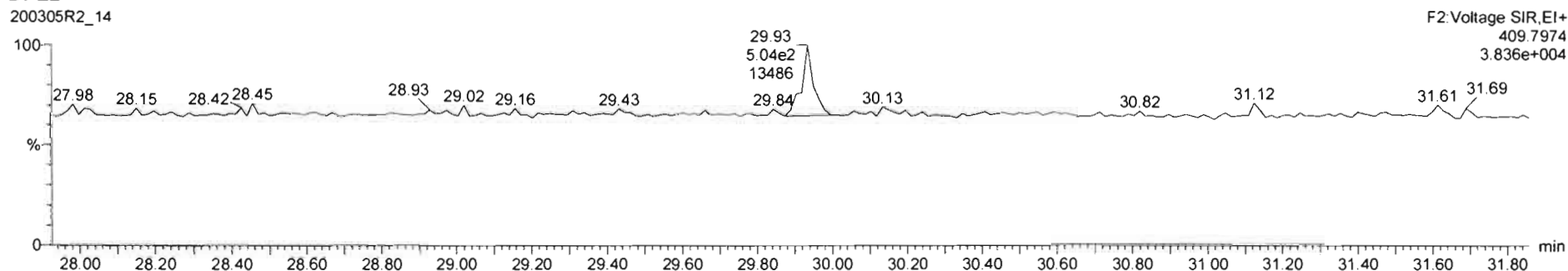
**1,2,3,7,8-PeCDF**



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



**DPE2**



Dataset: Untitled

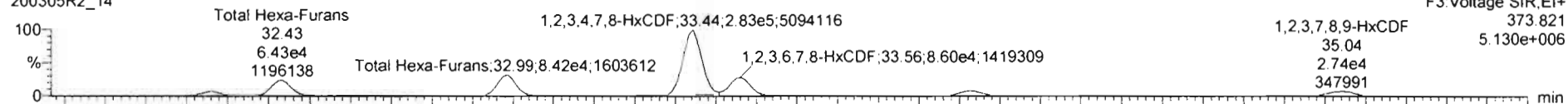
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

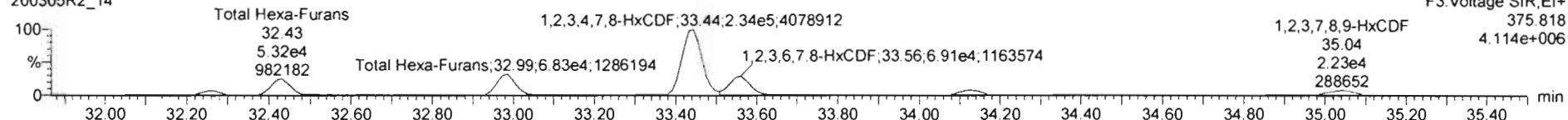
Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

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

200305R2\_14

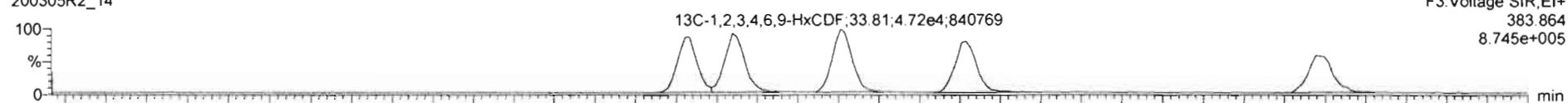


200305R2\_14

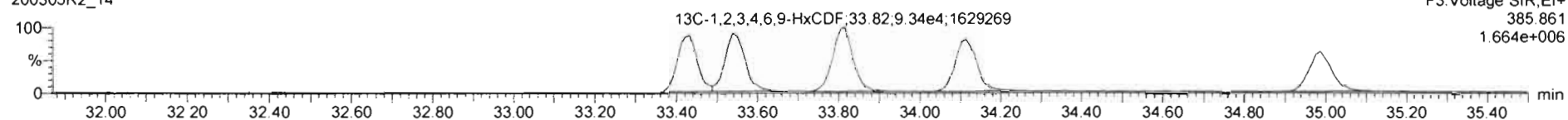


### 13C-1,2,3,4,7,8-HxCDF

200305R2\_14

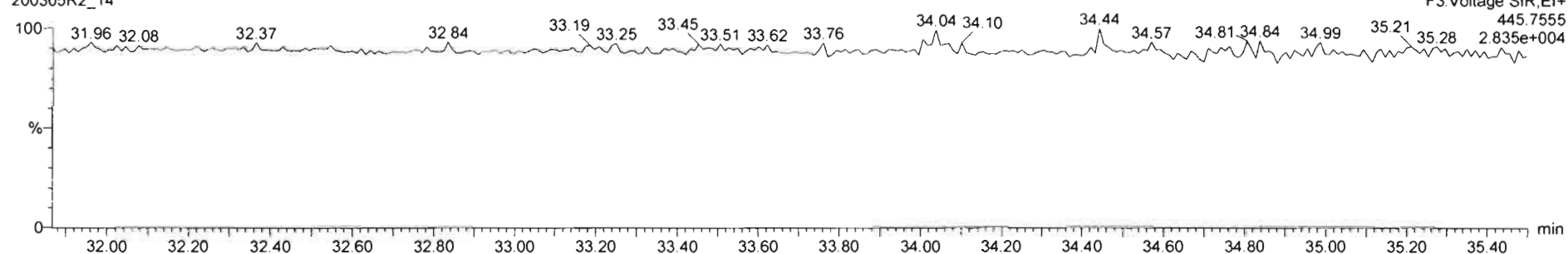


200305R2\_14



### DPE3

200305R2\_14



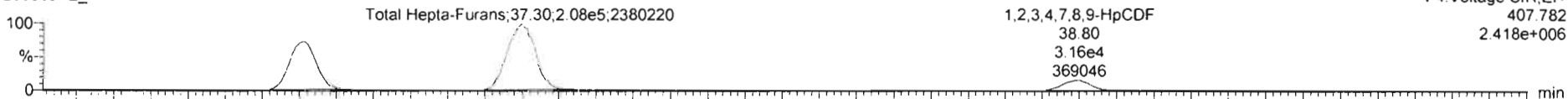
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Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

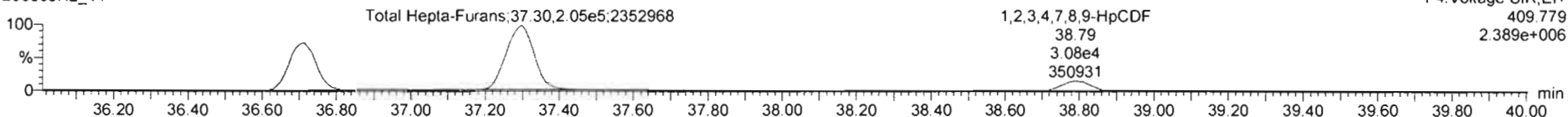
Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

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

200305R2\_14



200305R2\_14

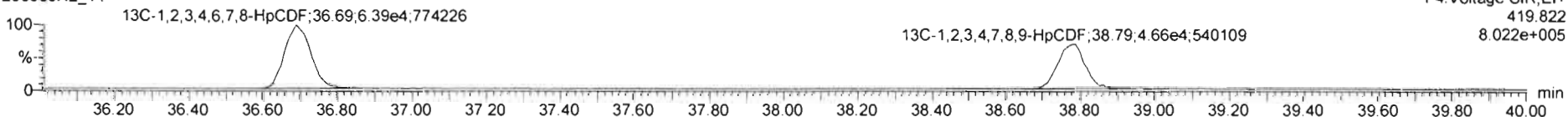


**13C-1,2,3,4,6,7,8-HpCDF**

200305R2\_14

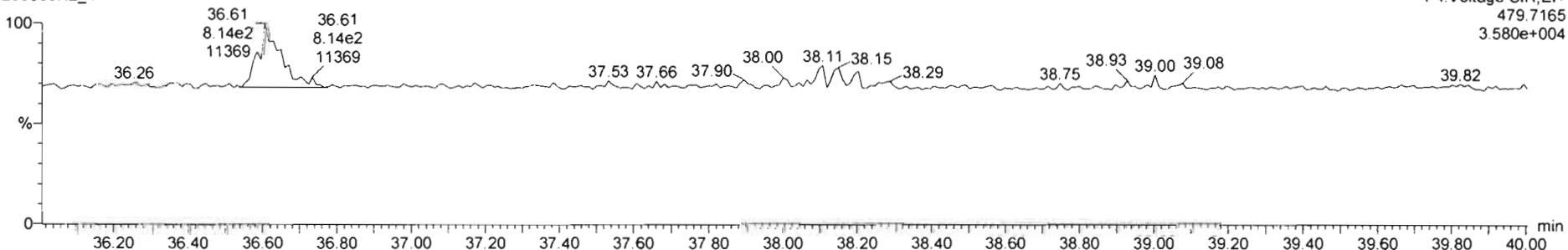


200305R2\_14



**DPE4**

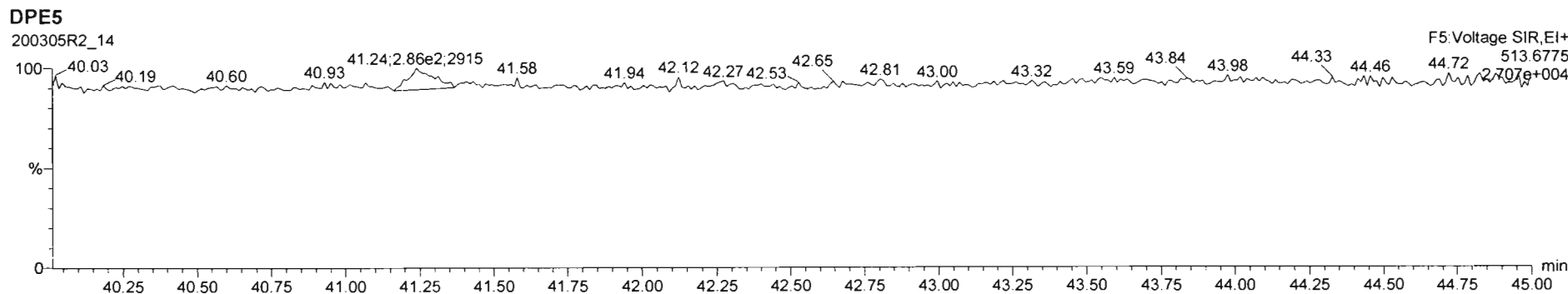
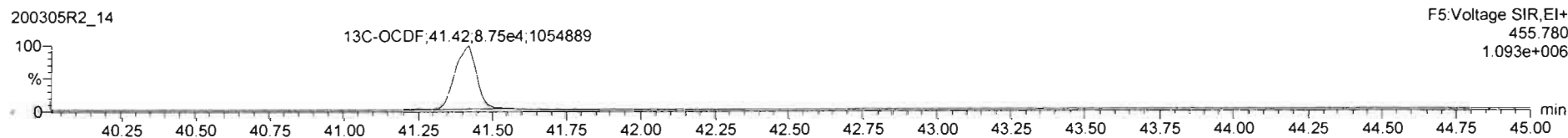
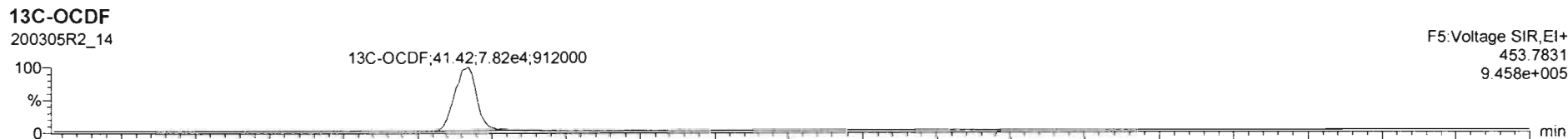
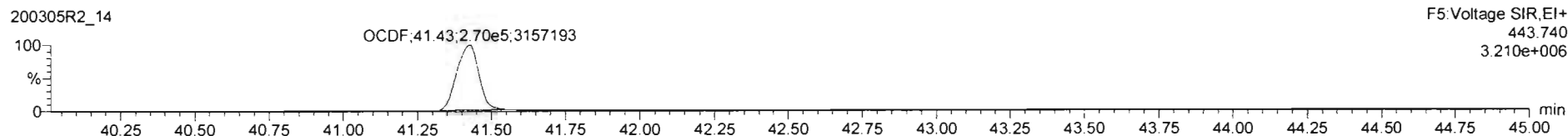
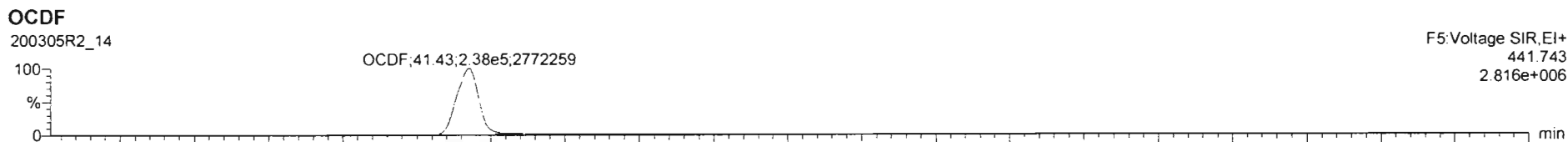
200305R2\_14



Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002



Dataset: Untitled

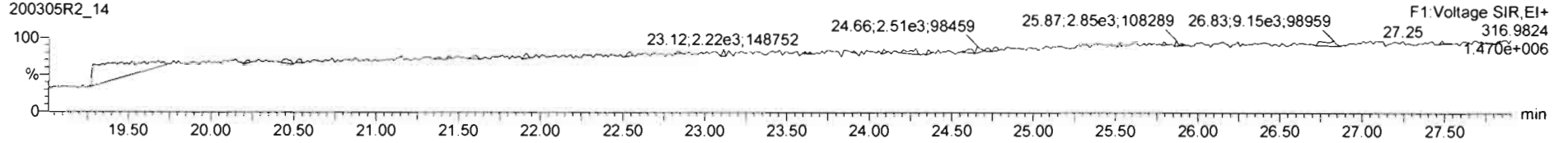
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_14, Date: 05-Mar-2020, Time: 21:01:41, ID: 2000407-01@5X PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

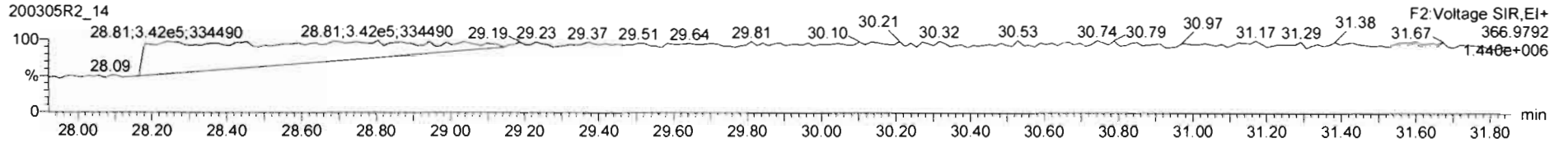
**PFK1**

200305R2\_14



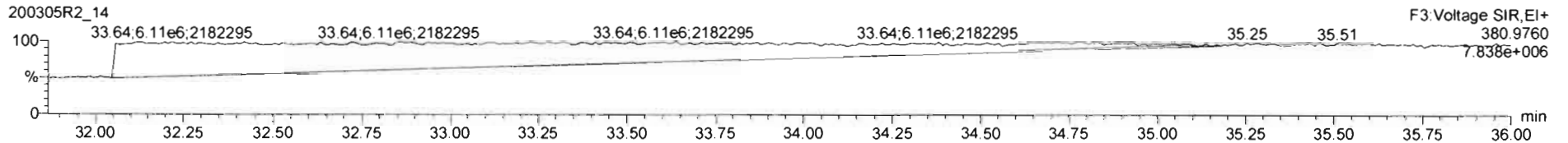
**PFK2**

200305R2\_14



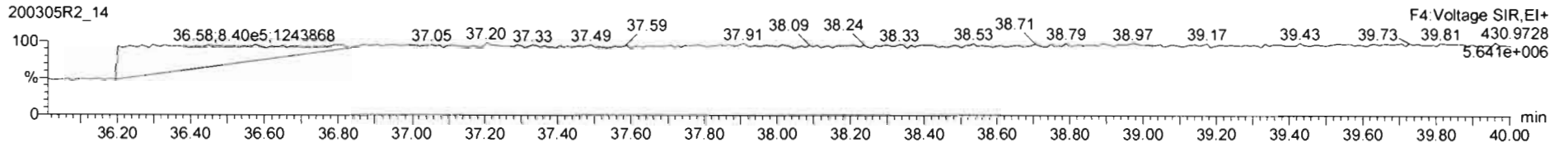
**PFK3**

200305R2\_14



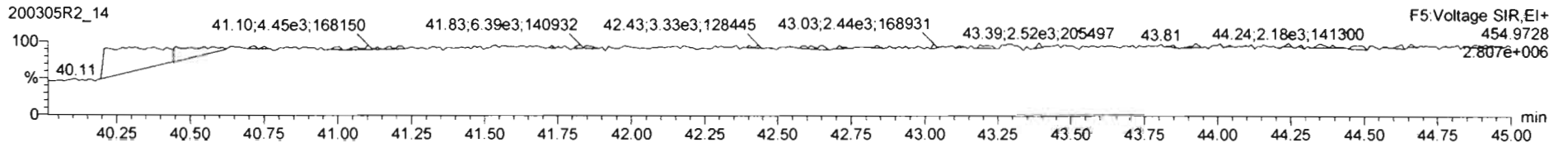
**PFK4**

200305R2\_14



**PFK5**

200305R2\_14





Dataset: U:\VG12.PRO\Results\200303R2\200303R2-7a.qld

Last Altered: Friday, March 06, 2020 11:45:02 Pacific Standard Time

Printed: Friday, March 06, 2020 11:45:22 Pacific Standard Time

*dy 03-06-2020*  
*Ex: see dilution*

*C7 03/06/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	9667.065	0.709	NO	0.988	10.053	25.74	25.74	1.00	1.00	NO	1.313		0.110	1.313
2	2 1,2,3,7,8-PeCDD	14322.292	0.585	NO	0.972	10.053	30.86	30.85	1.00	1.00	NO	2.293		0.125	2.293
3	3 1,2,3,4,7,8-HxCDD	17923.428	1.239	NO	1.07	10.053	34.21	34.22	1.00	1.00	NO	3.788		0.439	3.788
4	4 1,2,3,6,7,8-HxCDD	147135.524	1.255	NO	0.921	10.053	34.31	34.32	1.00	1.00	NO	25.72		0.421	25.72
5	5 1,2,3,7,8,9-HxCDD	51871.793	1.238	NO	0.918	10.053	34.61	34.58	1.00	1.00	NO	10.29		0.523	10.29
6	6 1,2,3,4,6,7,8-HpCDD	3570950.5...	1.023	NO	0.923	10.053	38.07	38.07	1.00	1.00	NO	876.2		2.34	876.2
7	7 OCDD	48910426....	0.880	NO	0.975	10.053	41.17	41.18	1.00	1.00	NO	1177 <i>Ex</i>		1.81	11770
8	8 2,3,7,8-TCDF	2240350.4...	0.758	NO	0.802	10.053	24.79	24.79	1.00	1.00	NO	302.6 (271)		0.241	302.6
9	9 1,2,3,7,8-PeCDF	4163838.8...	1.557	NO	0.907	10.053	29.53	29.52	1.00	1.00	NO	518.1		0.587	518.1
10	10 2,3,4,7,8-PeCDF	674036.688	1.510	NO	0.952	10.053	30.53	30.53	1.00	1.00	NO	83.07		0.584	83.07
11	11 1,2,3,4,7,8-HxCDF	4930739.2...	1.203	NO	0.862	10.053	33.35	33.36	1.00	1.00	NO	921.7		0.602	921.7
12	12 1,2,3,6,7,8-HxCDF	1750620.0...	1.209	NO	0.841	10.053	33.48	33.48	1.00	1.00	NO	306.6		0.600	306.6
13	13 2,3,4,6,7,8-HxCDF	384782.797	1.196	NO	0.898	10.053	34.08	34.05	1.00	1.00	NO	71.75		0.701	71.75
14	14 1,2,3,7,8,9-HxCDF	124595.484	1.153	NO	0.858	10.053	34.92	34.95	1.00	1.00	NO	27.30		0.957	27.30
15	15 1,2,3,4,6,7,8-HpCDF	3004339.6...	1.013	NO	0.851	10.053	36.68	36.65	1.00	1.00	NO	739.3		1.25	739.3
16	16 1,2,3,4,7,8,9-HpCDF	631821.844	1.017	NO	0.980	10.053	38.72	38.73	1.00	1.00	NO	186.2		1.47	186.2
17	17 OCDF	5857496.0...	0.876	NO	0.806	10.053	41.35	41.36	1.00	1.00	NO	1590		0.787	1590
18	18 13C-2,3,7,8-TCDD	1482076.6...	0.810	NO	1.20	10.053	25.66	25.70	1.03	1.03	NO	178.8	89.9	0.224	
19	19 13C-1,2,3,7,8-PeCDD	1277947.6...	0.620	NO	0.967	10.053	30.78	30.83	1.23	1.23	NO	191.2	96.1	0.243	
20	20 13C-1,2,3,4,7,8-HxCDD	878991.094	1.289	NO	0.874	10.053	34.20	34.20	1.01	1.01	NO	143.4	72.1	0.713	
21	21 13C-1,2,3,6,7,8-HxCDD	1235420.6...	1.341	NO	1.05	10.053	34.31	34.31	1.02	1.02	NO	168.4	84.6	0.596	
22	22 13C-1,2,3,7,8,9-HxCDD	1092509.4...	1.416	NO	0.974	10.053	34.61	34.57	1.03	1.02	NO	159.8	80.3	0.640	
23	23 13C-1,2,3,4,6,7,8-HpCDD	878348.563	1.016	NO	0.747	10.053	38.18	38.06	1.13	1.13	NO	167.5	84.2	0.676	
24	24 13C-OCDD	1695937.3...	0.909	NO	0.707	10.053	41.09	41.17	1.22	1.22	NO	342.1	86.0	0.603	
25	25 13C-2,3,7,8-TCDF	1836404.8...	0.777	NO	1.07	10.053	24.84	24.76	0.99	0.99	NO	183.4	92.2	0.379	
26	26 13C-1,2,3,7,8-PeCDF	1761999.1...	1.573	NO	1.00	10.053	29.42	29.51	1.18	1.18	NO	187.1	94.1	0.628	
27	27 13C-2,3,4,7,8-PeCDF	1696315.5...	1.598	NO	0.962	10.053	30.39	30.51	1.21	1.22	NO	187.6	94.3	0.654	
28	28 13C-1,2,3,4,7,8-HxCDF	1234167.8...	0.512	NO	1.05	10.053	33.33	33.35	0.99	0.99	NO	167.7	84.3	0.630	
29	29 13C-1,2,3,6,7,8-HxCDF	1349902.9...	0.509	NO	1.19	10.053	33.43	33.47	0.99	0.99	NO	161.7	81.3	0.556	
30	30 13C-2,3,4,6,7,8-HxCDF	1187763.2...	0.528	NO	1.07	10.053	34.04	34.04	1.01	1.01	NO	158.8	79.8	0.620	
31	31 13C-1,2,3,7,8,9-HxCDF	1058518.2...	0.528	NO	0.922	10.053	34.95	34.92	1.04	1.04	NO	163.6	82.2	0.717	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-7a.qld

Last Altered: Friday, March 06, 2020 11:45:02 Pacific Standard Time

Printed: Friday, March 06, 2020 11:45:22 Pacific Standard Time

Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	13C-1,2,3,4,6,7,8-HpCDF	949872.844	0.450	NO	0.767	10.053	36.70	36.64	1.09	1.09	NO	176.5	88.7	0.654	
33	13C-1,2,3,4,7,8,9-HpCDF	688872.750	0.431	NO	0.552	10.053	38.72	38.72	1.15	1.15	NO	177.8	89.4	0.908	
34	13C-OCDF	1819931.8...	0.858	NO	0.789	10.053	41.32	41.35	1.23	1.23	NO	328.6	82.6	0.465	
35	37Cl-2,3,7,8-TCDD	572957.688			1.18	10.053	25.69	25.74	1.03	1.03	NO	70.44	88.5	0.137	
36	13C-1,2,3,4-TCDD	1375667.5...	0.793	NO	1.00	10.053	25.11	25.02	1.00	1.00	NO	198.9	100	0.269	
37	13C-1,2,3,4-TCDF	1870164.1...	0.812	NO	1.00	10.053	23.37	23.22	1.00	1.00	NO	198.9	100	0.403	
38	13C-1,2,3,4,6,9-HxCDF	1395833.2...	0.511	NO	1.00	10.053	33.71	33.73	1.00	1.00	NO	198.9	100	0.662	
39	39 Total Tetra-Dioxins				0.988	10.053	24.62		0.00		NO	21.72		0.110	22.32
40	40 Total Penta-Dioxins				0.972	10.053	29.96		0.00		NO	28.16		0.125	28.16
41	41 Total Hexa-Dioxins				0.921	10.053	33.63		0.00		NO	229.5		0.480	229.5
42	42 Total Hepta-Dioxins				0.923	10.053	37.64		0.00		NO	2118		2.34	2118
43	43 Total Tetra-Furans				0.802	10.053	23.61		0.00		NO	798.9		0.241	824.4
44	44 1st Func. Penta-Furans				0.907	10.053	27.09		0.00		NO	89.37		0.0592	89.37
45	45 Total Penta-Furans				0.907	10.053	29.27		0.00		NO	1300		0.599	1300
46	46 Total Hexa-Furans				0.898	10.053	33.56		0.00		NO	1944		0.677	1944
47	47 Total Hepta-Furans				0.851	10.053	37.83		0.00		NO	2138		1.43	2138

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-7a.qld

Last Altered: Friday, March 06, 2020 11:45:02 Pacific Standard Time

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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

**Tetra-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	39 Total Tetra-Dioxins	2.68e3	1.48e6	0.707	NO	24.62	26.08	0.3647	0.3647
2	1 2,3,7,8-TCDD	9.67e3	1.48e6	0.709	NO	25.74	25.74	1.313	1.313
3	39 Total Tetra-Dioxins	8.79e3	1.48e6	0.786	NO	24.62	25.45	1.194	1.194
4	39 Total Tetra-Dioxins	0.00e0	1.48e6	0.911	YES	24.62	25.00	0.0000	0.2088
5	39 Total Tetra-Dioxins	2.64e3	1.48e6	0.660	NO	24.62	24.61	0.3592	0.3592
6	39 Total Tetra-Dioxins	0.00e0	1.48e6	0.937	YES	24.62	24.43	0.0000	0.2675
7	39 Total Tetra-Dioxins	1.84e3	1.48e6	0.848	NO	24.62	24.15	0.2494	0.2494
8	39 Total Tetra-Dioxins	6.54e3	1.48e6	0.830	NO	24.62	23.92	0.8879	0.8879
9	39 Total Tetra-Dioxins	5.56e3	1.48e6	0.796	NO	24.62	23.68	0.7557	0.7557
10	39 Total Tetra-Dioxins	2.75e3	1.48e6	0.878	NO	24.62	23.42	0.3733	0.3733
11	39 Total Tetra-Dioxins	5.97e3	1.48e6	0.801	NO	24.62	22.46	0.8111	0.8111
12	39 Total Tetra-Dioxins	1.65e4	1.48e6	0.799	NO	24.62	21.96	2.240	2.240
13	39 Total Tetra-Dioxins	9.69e4	1.48e6	0.786	NO	24.62	21.54	13.17	13.17
14	39 Total Tetra-Dioxins	0.00e0	1.48e6	1.232	YES	24.62	25.03	0.0000	0.1231

**Penta-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	1.01e3	1.28e6	0.558	NO	29.96	31.13	0.1624	0.1624
2	2 1,2,3,7,8-PeCDD	1.43e4	1.28e6	0.585	NO	30.86	30.85	2.293	2.293
3	40 Total Penta-Dioxins	3.67e3	1.28e6	0.619	NO	29.96	30.41	0.5884	0.5884
4	40 Total Penta-Dioxins	2.01e4	1.28e6	0.605	NO	29.96	30.06	3.220	3.220
5	40 Total Penta-Dioxins	1.26e4	1.28e6	0.665	NO	29.96	29.84	2.020	2.020
6	40 Total Penta-Dioxins	1.55e4	1.28e6	0.599	NO	29.96	29.75	2.475	2.475
7	40 Total Penta-Dioxins	3.25e4	1.28e6	0.662	NO	29.96	29.57	5.202	5.202
8	40 Total Penta-Dioxins	1.17e4	1.28e6	0.636	NO	29.96	29.07	1.866	1.866
9	40 Total Penta-Dioxins	5.46e4	1.28e6	0.622	NO	29.96	28.58	8.742	8.742
10	40 Total Penta-Dioxins	5.43e3	1.28e6	0.556	NO	29.96	31.23	0.8699	0.8699
11	40 Total Penta-Dioxins	4.49e3	1.28e6	0.605	NO	29.96	30.93	0.7185	0.7185

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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-7a.qld

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Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

**Hexa-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	5 1,2,3,7,8,9-HxCDD	5.19e4	1.09e6	1.238	NO	34.61	34.58	10.29	10.29
2	41 Total Hexa-Dioxins	1.05e4	0.00e0	1.256	NO	33.63	34.49	2.127	2.127
3	4 1,2,3,6,7,8-HxCDD	1.47e5	1.24e6	1.255	NO	34.31	34.32	25.72	25.72
4	3 1,2,3,4,7,8-HxCDD	1.79e4	8.79e5	1.239	NO	34.21	34.22	3.788	3.788
5	41 Total Hexa-Dioxins	4.54e5	0.00e0	1.222	NO	33.63	33.55	91.64	91.64
6	41 Total Hexa-Dioxins	4.66e4	0.00e0	1.218	NO	33.63	33.29	9.408	9.408
7	41 Total Hexa-Dioxins	4.28e5	0.00e0	1.231	NO	33.63	32.75	86.51	86.51

**Hepta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	6 1,2,3,4,6,7,8-HpCDD	3.57e6	8.78e5	1.023	NO	38.07	38.07	876.2	876.2
2	42 Total Hepta-Dioxins	5.06e6	8.78e5	1.021	NO	37.64	37.03	1242	1242

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Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

Tetra-Furans

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	43 Total Tetra-Furans	7.40e4	1.84e6	0.767	NO	23.61	22.34	9.996	9.996
2	43 Total Tetra-Furans	1.18e4	1.84e6	0.761	NO	23.61	22.14	1.594	1.594
3	43 Total Tetra-Furans	1.98e5	1.84e6	0.744	NO	23.61	21.98	26.75	26.75
4	43 Total Tetra-Furans	5.34e5	1.84e6	0.750	NO	23.61	21.51	72.07	72.07
5	43 Total Tetra-Furans	9.81e4	1.84e6	0.765	NO	23.61	21.13	13.25	13.25
6	43 Total Tetra-Furans	1.07e5	1.84e6	0.739	NO	23.61	20.59	14.42	14.42
7	43 Total Tetra-Furans	2.53e4	1.84e6	0.767	NO	23.61	20.02	3.415	3.415
8	43 Total Tetra-Furans	1.07e4	1.84e6	0.821	NO	23.61	19.49	1.442	1.442
9	43 Total Tetra-Furans	1.32e4	1.84e6	0.848	NO	23.61	26.45	1.781	1.781 F
10	43 Total Tetra-Furans	1.60e4	1.84e6	0.688	NO	23.61	25.44	2.158	2.158
11	43 Total Tetra-Furans	9.12e4	1.84e6	0.729	NO	23.61	25.18	12.32	12.32
12	8 2,3,7,8-TCDF	2.24e6	1.84e6	0.758	NO	24.79	24.79	302.6	302.6
13	43 Total Tetra-Furans	1.22e5	1.84e6	0.772	NO	23.61	24.67	16.52	16.52
14	43 Total Tetra-Furans	1.63e4	1.84e6	0.714	NO	23.61	24.55	2.198	2.198
15	43 Total Tetra-Furans	9.95e3	1.84e6	0.816	NO	23.61	24.34	1.344	1.344
16	43 Total Tetra-Furans	8.65e4	1.84e6	0.843	NO	23.61	24.10	11.68	11.68
17	43 Total Tetra-Furans	1.96e6	1.84e6	0.760	NO	23.61	23.79	264.3	264.3
18	43 Total Tetra-Furans	2.06e5	1.84e6	0.788	NO	23.61	23.24	27.86	27.86
19	43 Total Tetra-Furans	6.76e3	1.84e6	0.830	NO	23.61	22.95	0.9131	0.9131
20	43 Total Tetra-Furans	1.40e4	1.84e6	0.805	NO	23.61	22.80	1.887	1.887
21	43 Total Tetra-Furans	0.00e0	1.84e6	0.968	YES	23.61	26.87	0.0000	25.43
22	43 Total Tetra-Furans	1.57e4	1.84e6	0.759	NO	23.61	26.62	2.122	2.122 F
23	43 Total Tetra-Furans	6.14e4	1.84e6	0.752	NO	23.61	23.13	8.291	8.291

Penta-Furans function 1

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	44 1st Func. Penta-Fura...	7.05e5	0.00e0	1.562	NO	27.09	26.87	89.37	89.37



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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-7a.qld

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**Penta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	1.34e6	0.00e0	1.563	NO	29.27	29.80	169.6	169.6
2	9 1,2,3,7,8-PeCDF	4.16e6	1.76e6	1.557	NO	29.53	29.52	518.1	518.1
3	45 Total Penta-Furans	3.59e5	0.00e0	1.570	NO	29.27	29.34	45.49	45.49
4	45 Total Penta-Furans	1.43e5	0.00e0	1.485	NO	29.27	29.13	18.12	18.12
5	45 Total Penta-Furans	2.06e6	0.00e0	1.545	NO	29.27	28.52	261.2	261.2
6	45 Total Penta-Furans	4.87e4	0.00e0	1.397	NO	29.27	28.36	6.180	6.180
7	45 Total Penta-Furans	9.83e4	0.00e0	1.580	NO	29.27	31.48	12.46	12.46
8	10 2,3,4,7,8-PeCDF	6.74e5	1.70e6	1.510	NO	30.53	30.53	83.07	83.07
9	45 Total Penta-Furans	1.47e6	0.00e0	1.575	NO	29.27	30.55	186.3	186.3

**Hexa-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	13 2,3,4,6,7,8-HxCDF	3.85e5	1.19e6	1.196	NO	34.08	34.05	71.75	71.75
2	46 Total Hexa-Furans	7.91e4	0.00e0	1.130	NO	33.56	33.74	14.51	14.51
3	12 1,2,3,6,7,8-HxCDF	1.75e6	1.35e6	1.209	NO	33.48	33.48	306.6	306.6
4	11 1,2,3,4,7,8-HxCDF	4.93e6	1.23e6	1.203	NO	33.35	33.36	921.7	921.7
5	46 Total Hexa-Furans	3.73e4	0.00e0	1.164	NO	33.56	33.26	6.843	6.843
6	46 Total Hexa-Furans	1.43e6	0.00e0	1.212	NO	33.56	32.90	263.1	263.1
7	46 Total Hexa-Furans	2.08e4	0.00e0	1.120	NO	33.56	32.72	3.818	3.818
8	46 Total Hexa-Furans	1.11e6	0.00e0	1.210	NO	33.56	32.36	203.0	203.0
9	46 Total Hexa-Furans	2.82e5	0.00e0	1.198	NO	33.56	32.19	51.73	51.73
10	14 1,2,3,7,8,9-HxCDF	1.25e5	1.06e6	1.153	NO	34.92	34.95	27.30	27.30
11	46 Total Hexa-Furans	4.00e5	0.00e0	1.253	NO	33.56	34.97	73.33	73.33

**Hepta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	16 1,2,3,4,7,8,9-HpCDF	6.32e5	6.89e5	1.017	NO	38.72	38.73	186.2	186.2
2	47 Total Hepta-Furans	4.22e6	0.00e0	1.011	NO	37.83	37.24	1203	1203
3	47 Total Hepta-Furans	3.10e4	0.00e0	0.970	NO	37.83	37.03	8.837	8.837
4	15 1,2,3,4,6,7,8-HpCDF	3.00e6	9.50e5	1.013	NO	36.68	36.65	739.3	739.3



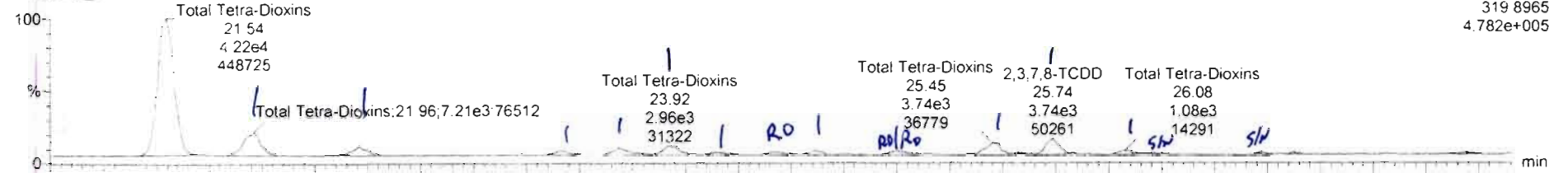
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

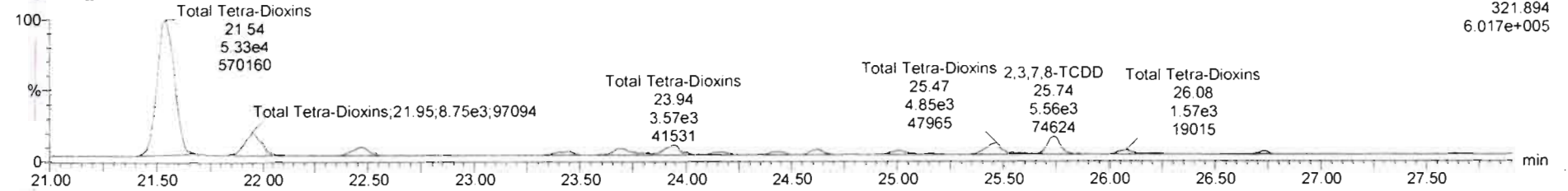
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2,3,7,8-TCDD

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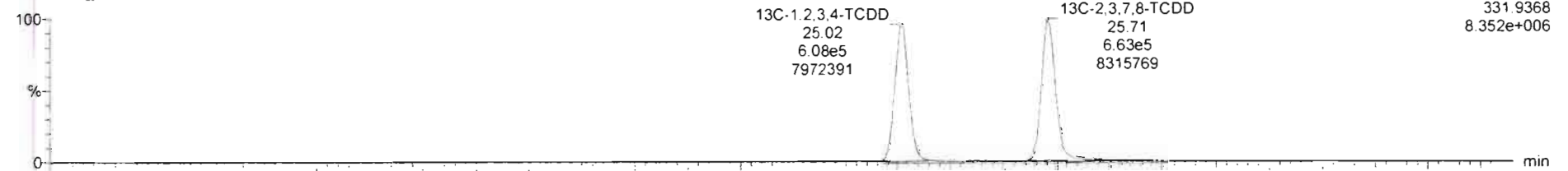


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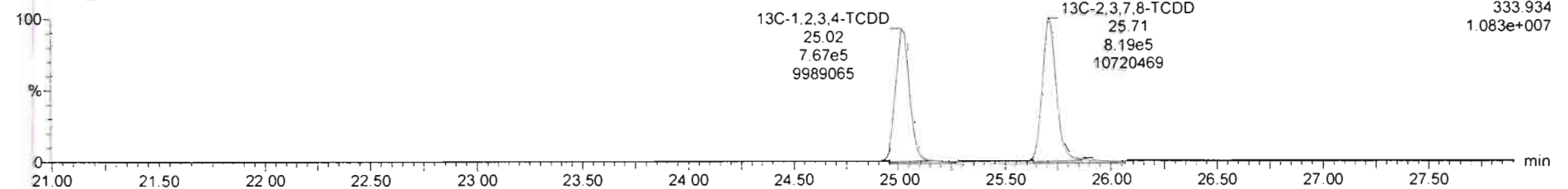


13C-2,3,7,8-TCDD

200303R2\_7

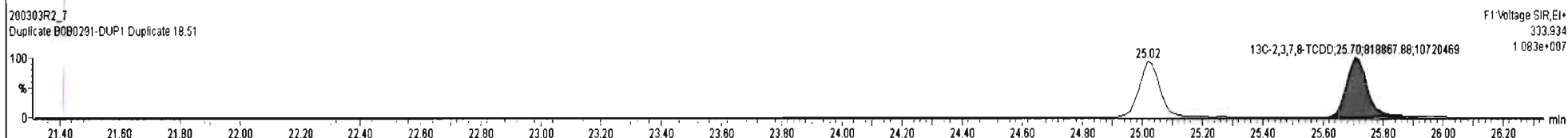
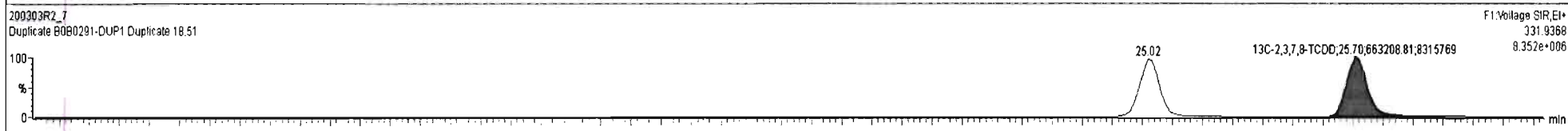
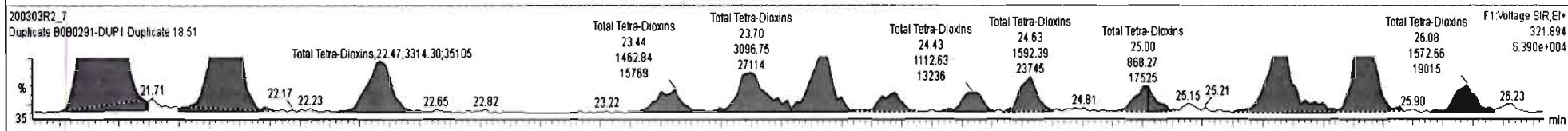
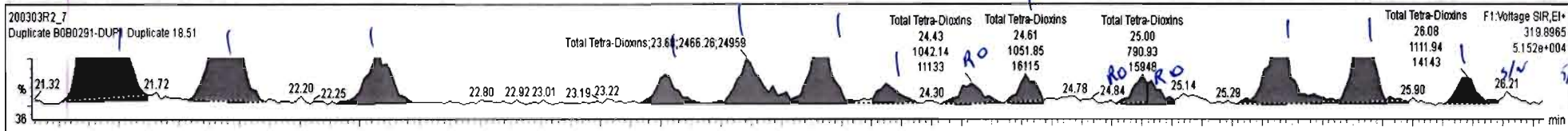


200303R2\_7



#	Name	Resp	RA	n/y	RRF	wtVol	Pred RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
36	13C-1,2,3,4,6,8-HxCDF	1.40e6	0.51	NO	1.0000	10.053	33.71	33.73	1.000	1.000	NO	198.9	100	0.662	
36	Total Tetra-Dioxins				0.8881	10.053	24.62		0.000		NO	21.72		0.110	22.32
40	Total Penta-Dioxins				0.9723	10.053	29.96		0.000		NO	27.26		0.125	28.90

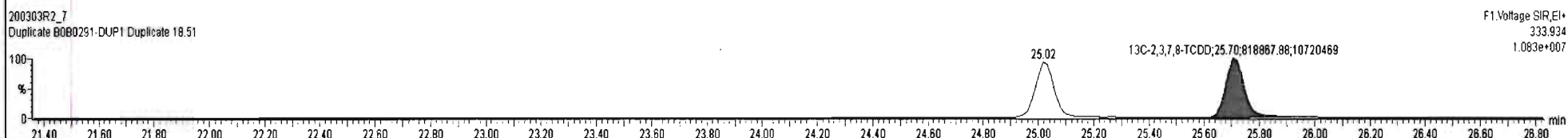
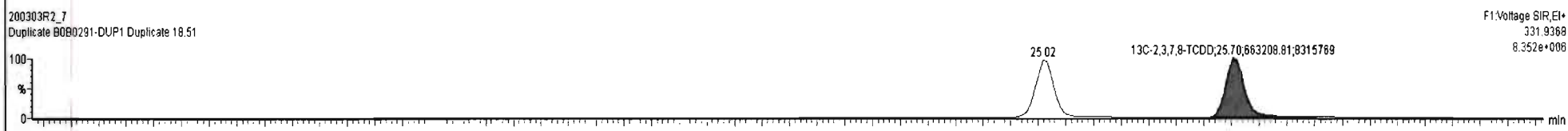
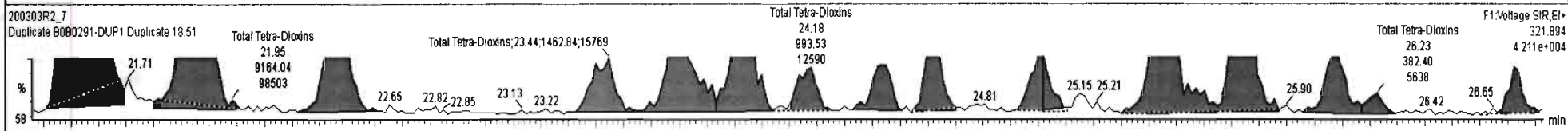
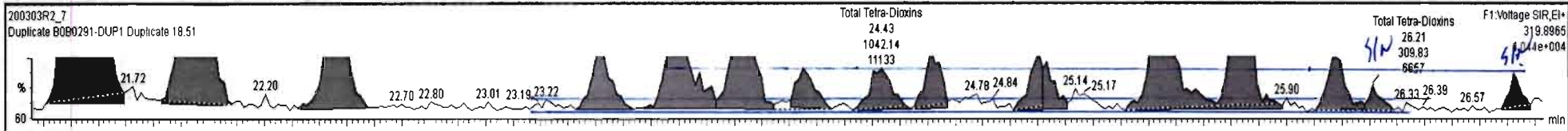
#	Name	Pred RT	RT	m1 Resp	m2 Resp	* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	39 Total Tetra-Dioxins	24.62	21.54	4.265e4	5.428e4	0.770	0.79	NO	13.168	13.168
2	39 Total Tetra-Dioxins	24.62	21.96	7.322e3	9.164e3	0.770	0.80	NO	2.2397	2.2397
3	39 Total Tetra-Dioxins	24.62	22.46	2.656e3	3.314e3	0.770	0.80	NO	0.81105	0.81105
4	39 Total Tetra-Dioxins	24.62	23.42	1.285e3	1.463e3	0.770	0.88	NO	0.37329	0.37329
5	39 Total Tetra-Dioxins	24.62	23.68	2.466e3	3.097e3	0.770	0.80	NO	0.75575	0.75575
6	39 Total Tetra-Dioxins	24.62	23.92	2.963e3	3.572e3	0.770	0.83	NO	0.88796	0.88796
7	39 Total Tetra-Dioxins	24.62	24.15	8.426e2	9.935e2	0.770	0.85	NO	0.24944	0.24944
8	39 Total Tetra-Dioxins	24.62	24.43	1.042e3	1.113e3	0.770	0.94	YES	0.26754	0.00000
9	39 Total Tetra-Dioxins	24.62	24.61	1.052e3	1.592e3	0.770	0.66	NO	0.35923	0.35923
10	39 Total Tetra-Dioxins	24.62	25.00	7.909e2	8.683e2	0.770	0.91	YES	0.20878	0.00000
11	39 Total Tetra-Dioxins	24.62	25.03	6.304e2	5.118e2	0.770	1.23	YES	0.12307	0.00000
12	39 Total Tetra-Dioxins	24.62	25.45	3.869e3	4.920e3	0.770	0.79	NO	1.1941	1.1941
13	1,2,3,7,8-TCDD	25.74	25.74	4.010e3	5.657e3	0.770	0.71	NO	1.3133	1.3133
14	39 Total Tetra-Dioxins	24.62	26.08	1.112e3	1.573e3	0.770	0.71	NO	0.36471	0.36471



200303R2\_7 - B0B0291-DUP1 Dup date 18.51 - Dup date

#	Name	Resp	RA	n/y	RRF	wt/Vol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
36	13C-1,2,3,4,6,8-HxCDF	1.40e6	0.51	NO	1.0000	10.053	33.71	33.73	1.000	1.000	NO	198.9	100	0.662	
39	Total Tetra-Dioxins				0.9881	10.053	24.62		0.000		NO	21.99		0.110	22.99
40	Total Penta-Dioxins				0.9723	10.053	29.96		0.000		NO	27.26		0.125	26.80

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Tetra-Dioxins	24.62	21.54	4.265e4	5.428e4	0.770	0.79	NO	13.168	13.168
2	Total Tetra-Dioxins	24.62	21.96	7.322e3	9.164e3	0.770	0.80	NO	2.2397	2.2397
3	Total Tetra-Dioxins	24.62	22.46	2.656e3	3.314e3	0.770	0.80	NO	0.81105	0.81105
4	Total Tetra-Dioxins	24.62	23.42	1.285e3	1.463e3	0.770	0.68	NO	0.37329	0.37329
5	Total Tetra-Dioxins	24.62	23.68	2.466e3	3.097e3	0.770	0.80	NO	0.75575	0.75575
6	Total Tetra-Dioxins	24.62	23.92	2.963e3	3.572e3	0.770	0.83	NO	0.88796	0.88796
7	Total Tetra-Dioxins	24.62	24.15	8.426e2	9.835e2	0.770	0.85	NO	0.24944	0.24944
8	Total Tetra-Dioxins	24.62	24.43	1.042e3	1.113e3	0.770	0.94	YES	0.26754	0.00000
9	Total Tetra-Dioxins	24.62	24.61	1.052e3	1.592e3	0.770	0.66	NO	0.35923	0.35923
10	Total Tetra-Dioxins	24.62	25.00	7.909e2	8.683e2	0.770	0.91	YES	0.20878	0.00000
11	Total Tetra-Dioxins	24.62	25.03	6.083e2	5.118e2	0.770	1.19	YES	0.12307	0.00000
12	Total Tetra-Dioxins	24.62	25.45	3.869e3	4.920e3	0.770	0.79	NO	1.1941	1.1941
13	1,2,3,7,8-TCDD	25.74	25.74	4.010e3	5.657e3	0.770	0.71	NO	1.3133	1.3133
14	Total Tetra-Dioxins	24.62	26.08	1.112e3	1.573e3	0.770	0.71	NO	0.36471	0.36471
15	Total Tetra-Dioxins	24.62	26.21	3.098e2	3.824e2	0.770	0.61	NO	0.094041	0.094041
16	Total Tetra-Dioxins	24.62	26.72	5.121e2	7.814e2	0.770	0.66	NO	0.17573	0.17573



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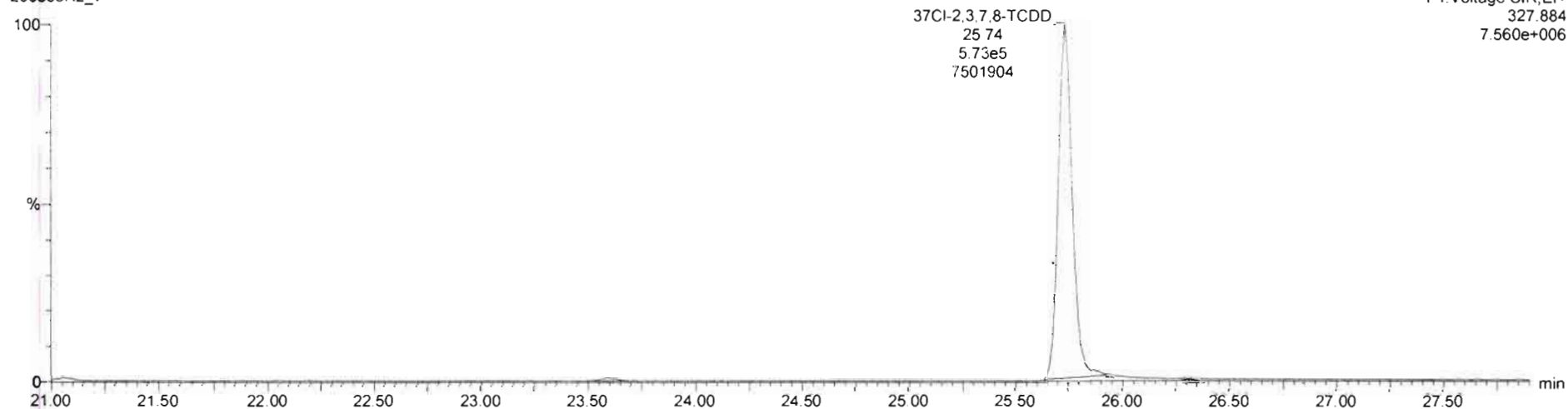
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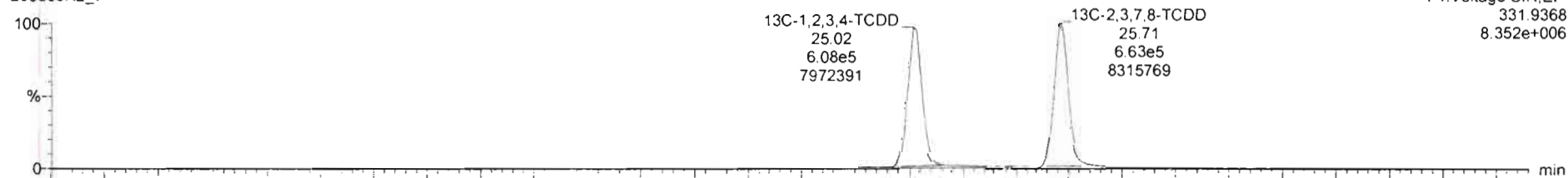
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200303R2\_7

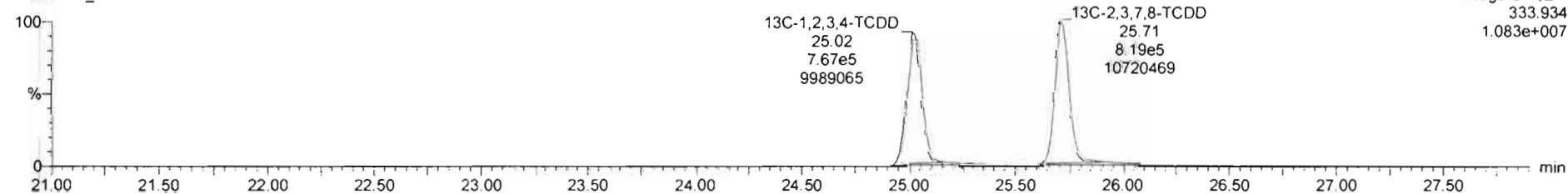


13C-1,2,3,4-TCDD

200303R2\_7



200303R2\_7





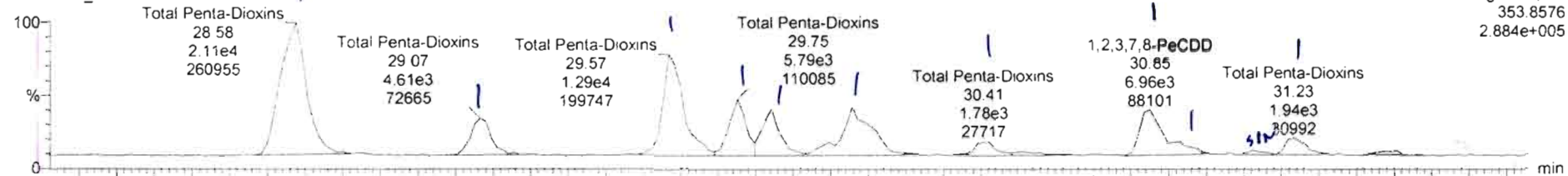
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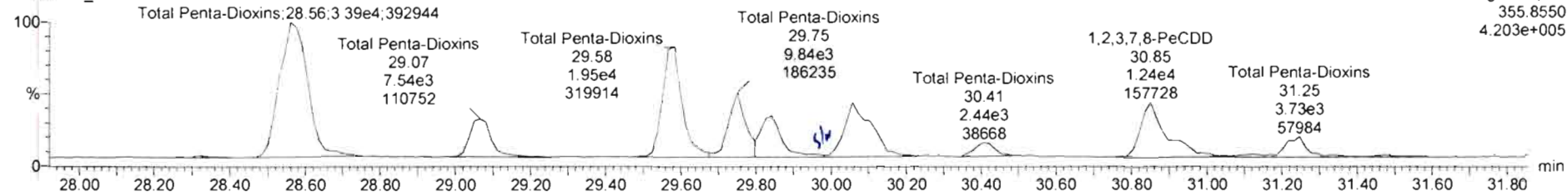
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1,2,3,7,8-PeCDD

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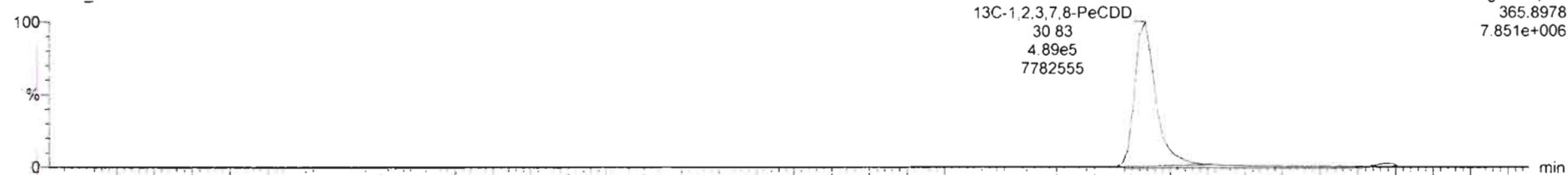


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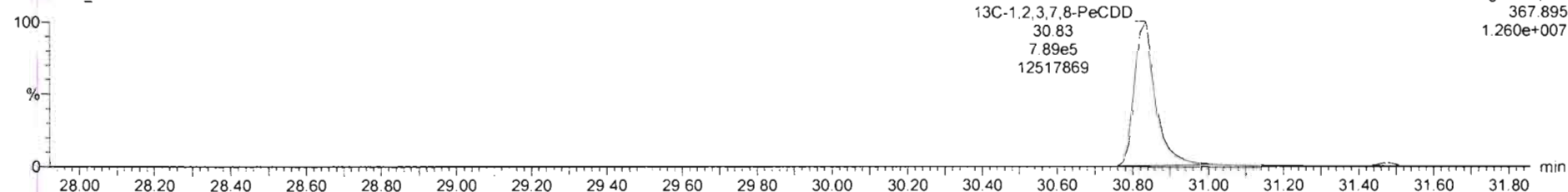


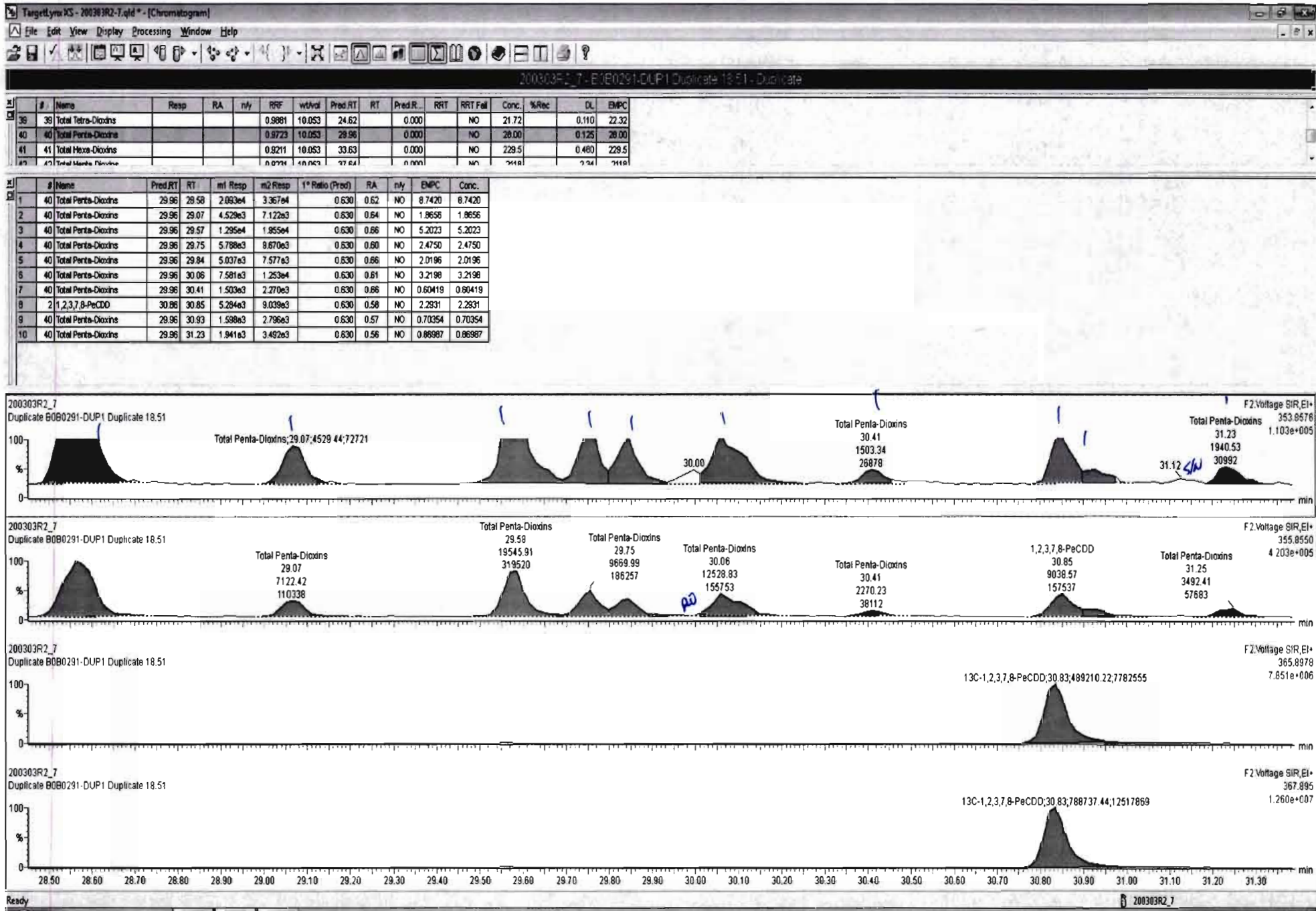
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200303R2\_7



200303R2\_7



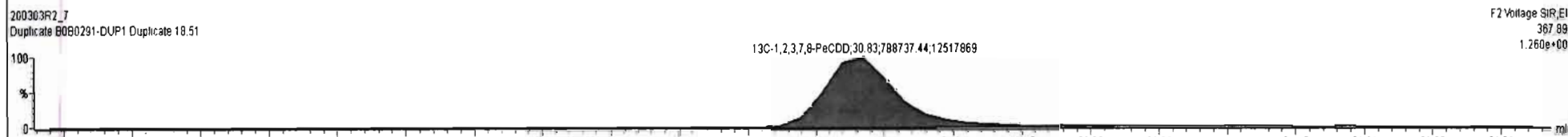
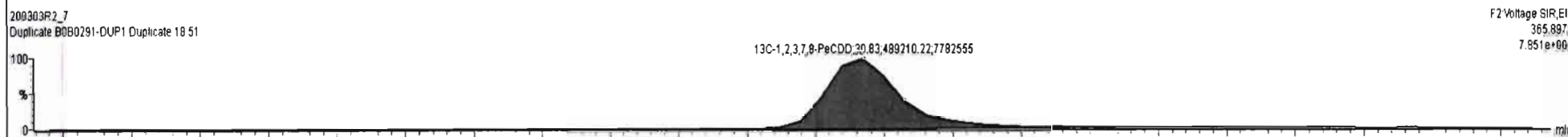
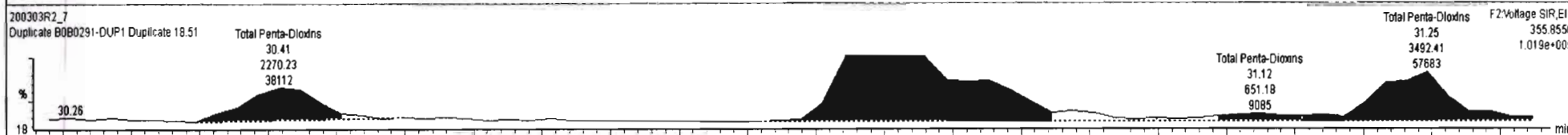
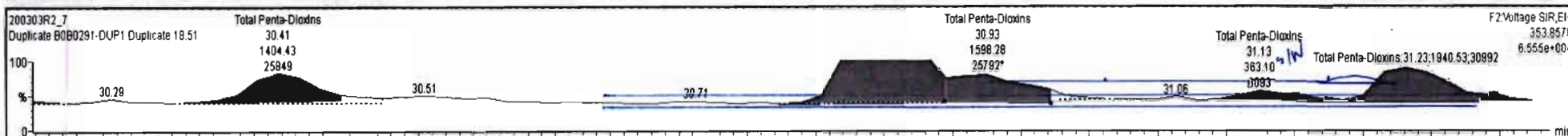




200303R2\_7 - E160291-DUP1 Duplicate 18.51 - Duplicate

#	Name	Resp	RA	n/y	RRF	wt/rd	Prod RT	RT	Pred.R.	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins				0.9881	10.053	24.62		0.000		NO	21.72		0.110	22.32
40	Total Penta-Dioxins				0.9723	10.053	29.96		0.000		NO	28.16		0.125	28.16
41	Total Hexa-Dioxins				0.8211	10.053	33.63		0.000		NO	229.5		0.480	229.5
42	Total Hepta-Dioxins				0.0794	10.053	37.64		0.000		NO	2418		2.34	2418

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Penta-Dioxins	29.96	29.58	2.093e4	3.367e4	0.630	0.62	NO	8.7420	8.7420
2	Total Penta-Dioxins	29.96	29.07	4.529e3	7.122e3	0.630	0.64	NO	1.8660	1.8656
3	Total Penta-Dioxins	29.96	29.57	1.295e4	1.955e4	0.630	0.66	NO	5.2020	5.2023
4	Total Penta-Dioxins	29.96	29.75	5.788e3	9.670e3	0.630	0.60	NO	2.4750	2.4750
5	Total Penta-Dioxins	29.96	29.84	5.037e3	7.577e3	0.630	0.66	NO	2.0200	2.0196
6	Total Penta-Dioxins	29.96	30.06	7.581e3	1.253e4	0.630	0.61	NO	3.2200	3.2198
7	Total Penta-Dioxins	29.96	30.41	1.404e3	2.270e3	0.630	0.62	NO	0.58600	0.58635
8	1,2,3,7,8-PeCDD	30.86	30.85	5.284e3	9.038e3	0.630	0.58	NO	2.2830	2.2831
9	Total Penta-Dioxins	29.96	30.93	1.692e3	2.796e3	0.630	0.61	NO	0.71900	0.71852
10	Total Penta-Dioxins	29.96	31.13	3.631e2	6.512e2	0.630	0.56	NO	0.16200	0.16240
11	Total Penta-Dioxins	29.96	31.23	1.941e3	3.492e3	0.630	0.56	NO	0.87000	0.86987



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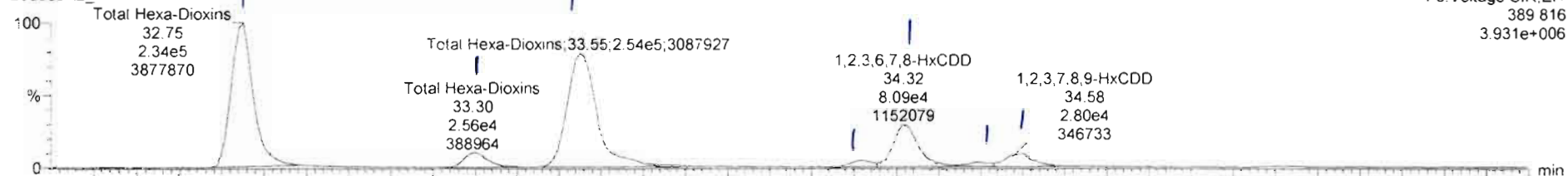
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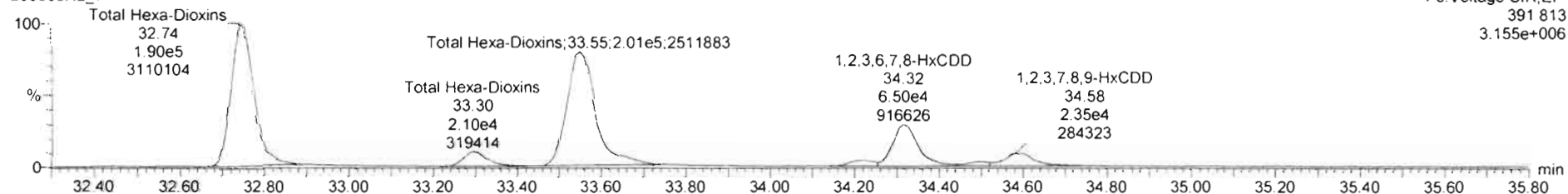
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1,2,3,4,7,8-HxCDD

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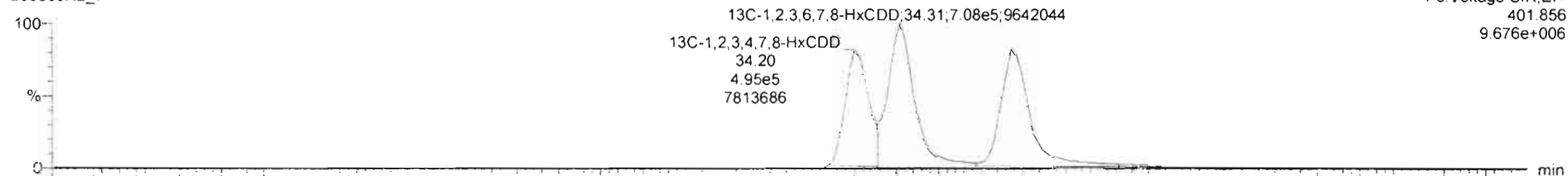


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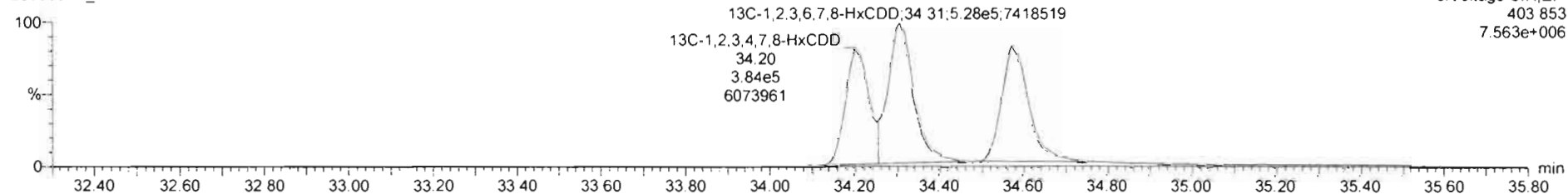


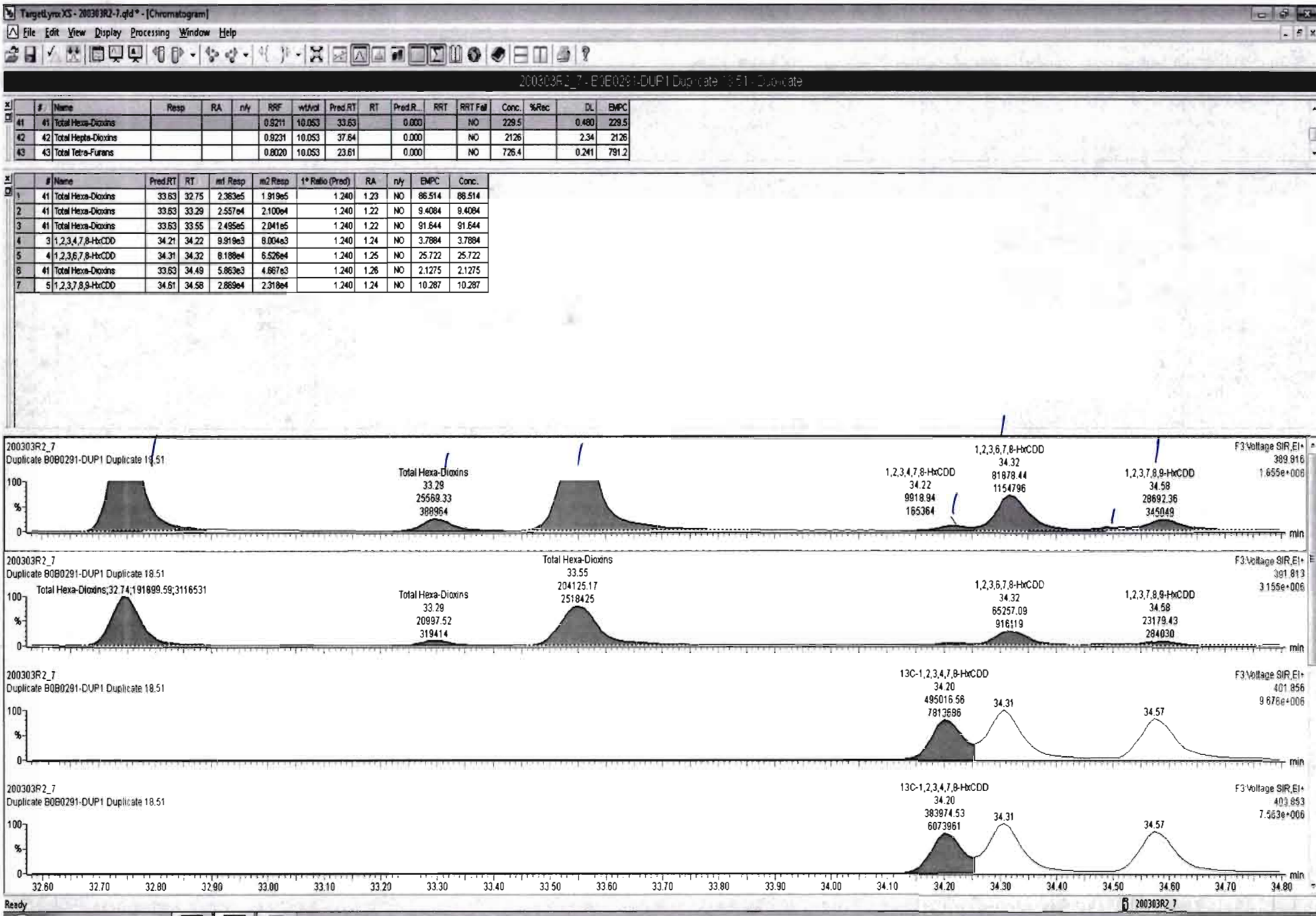
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200303R2\_7



200303R2\_7



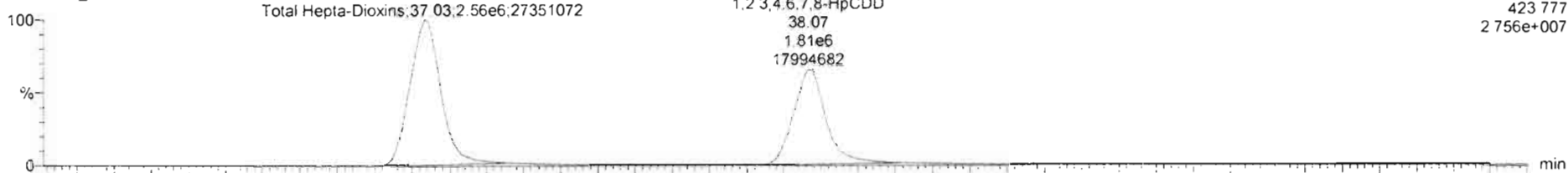


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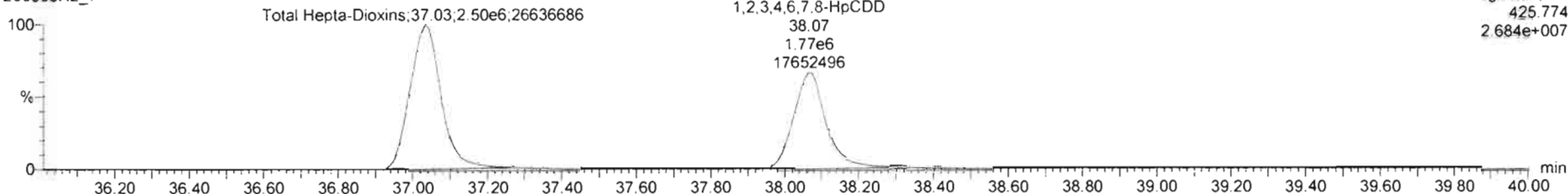
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1,2,3,4,6,7,8-HpCDD  
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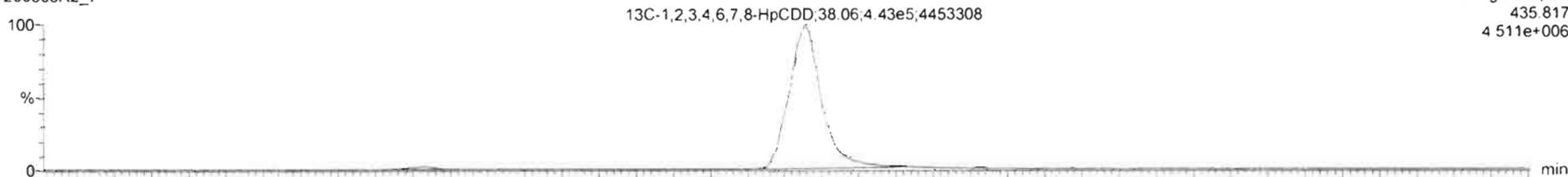


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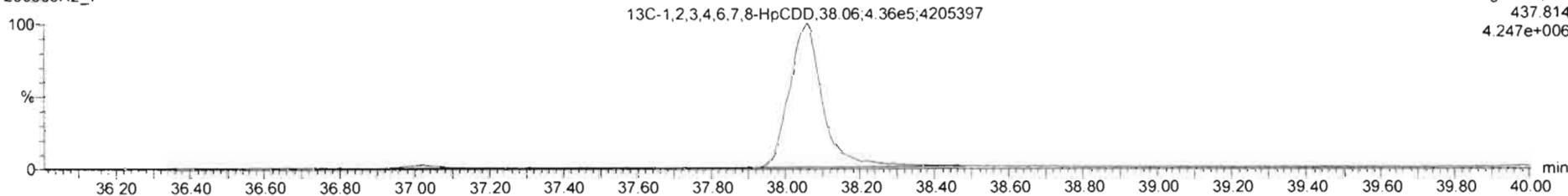


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200303R2\_7



200303R2\_7



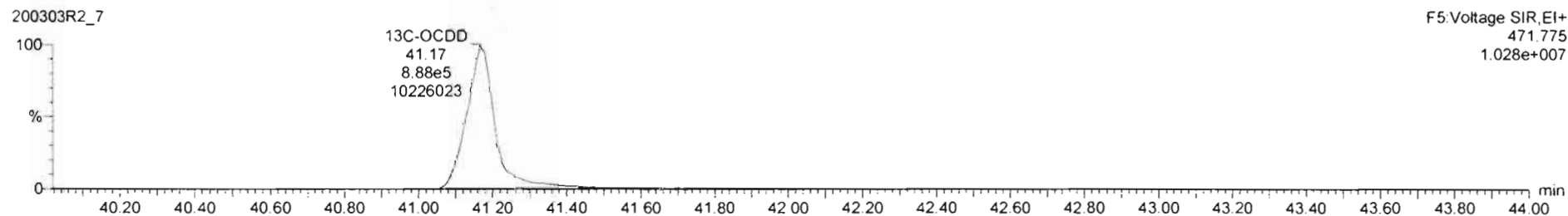
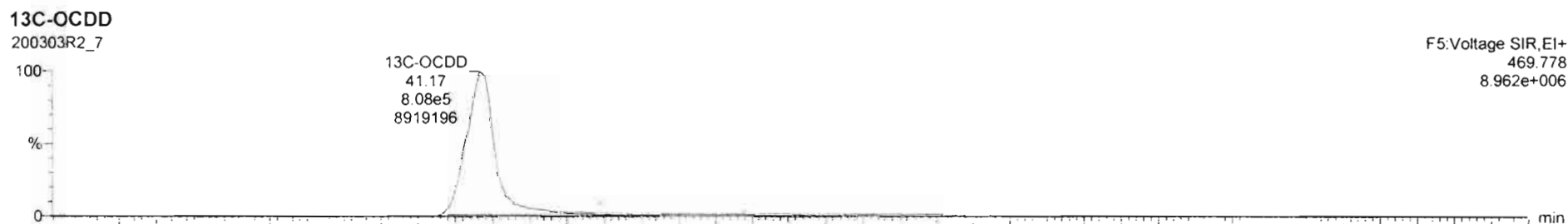
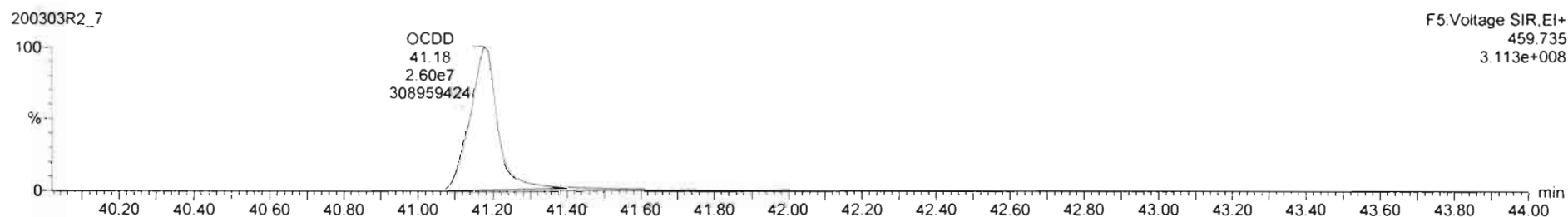
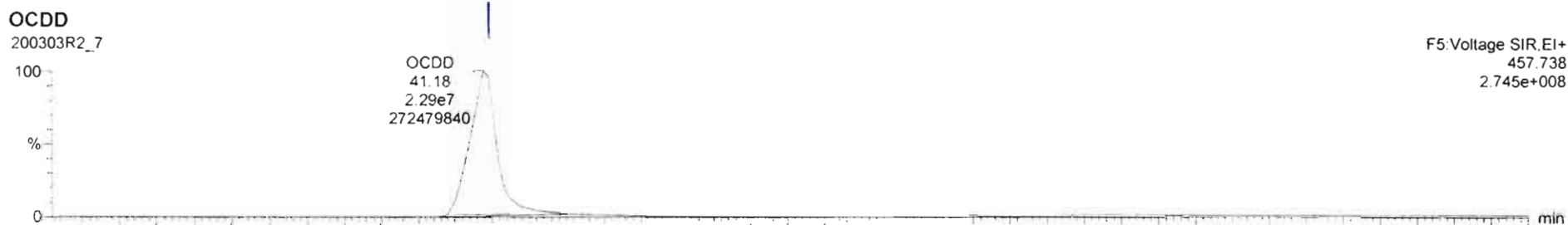


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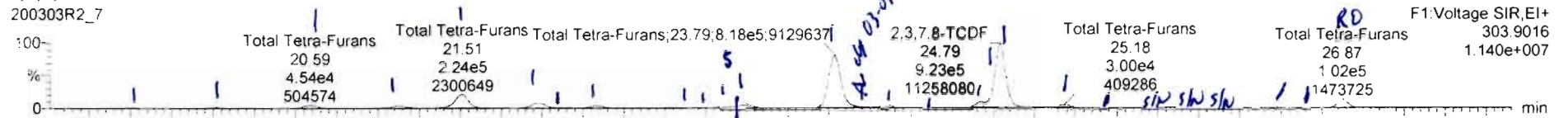
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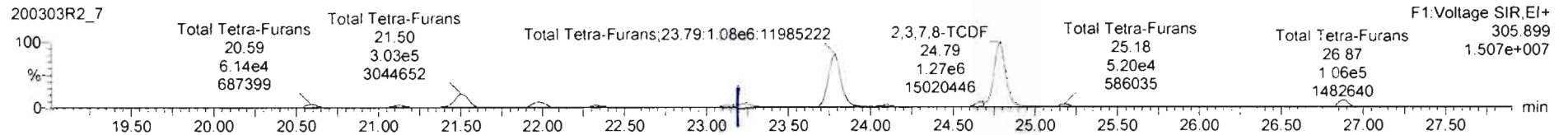
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2,3,7,8-TCDF

200303R2\_7

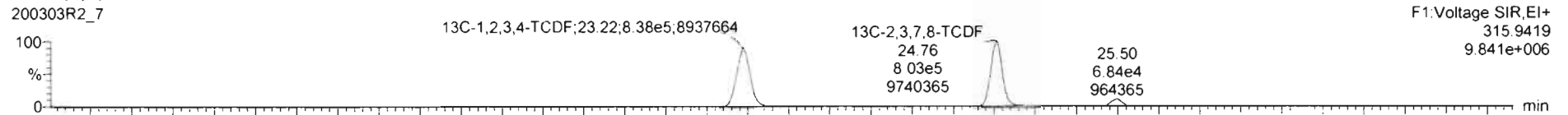


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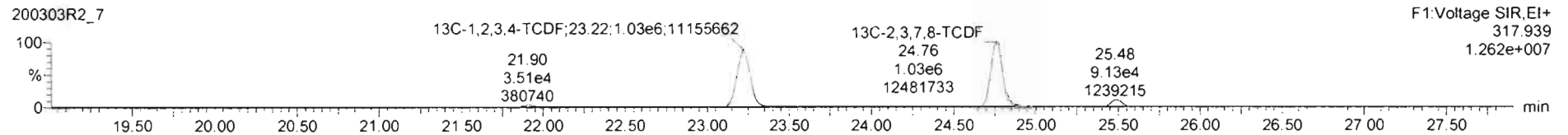


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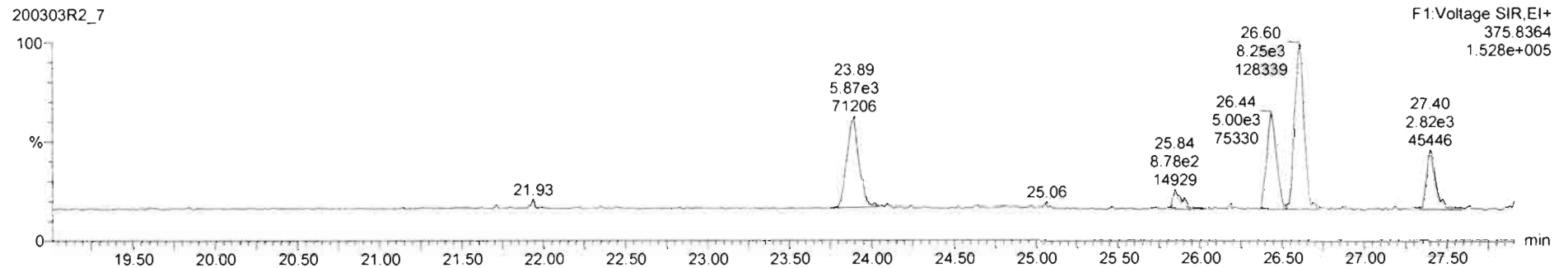


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DPE1

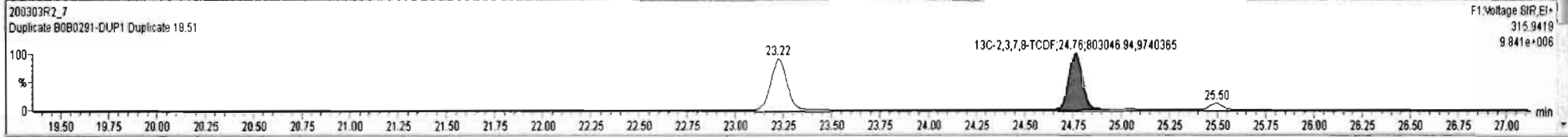
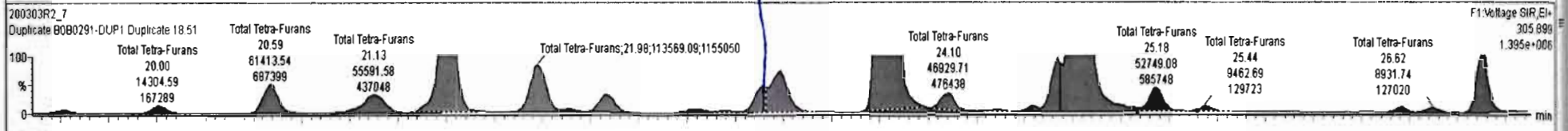
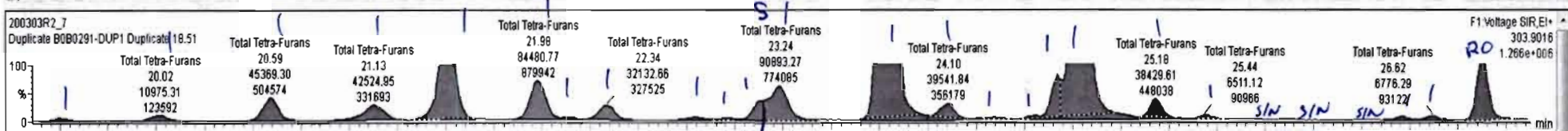
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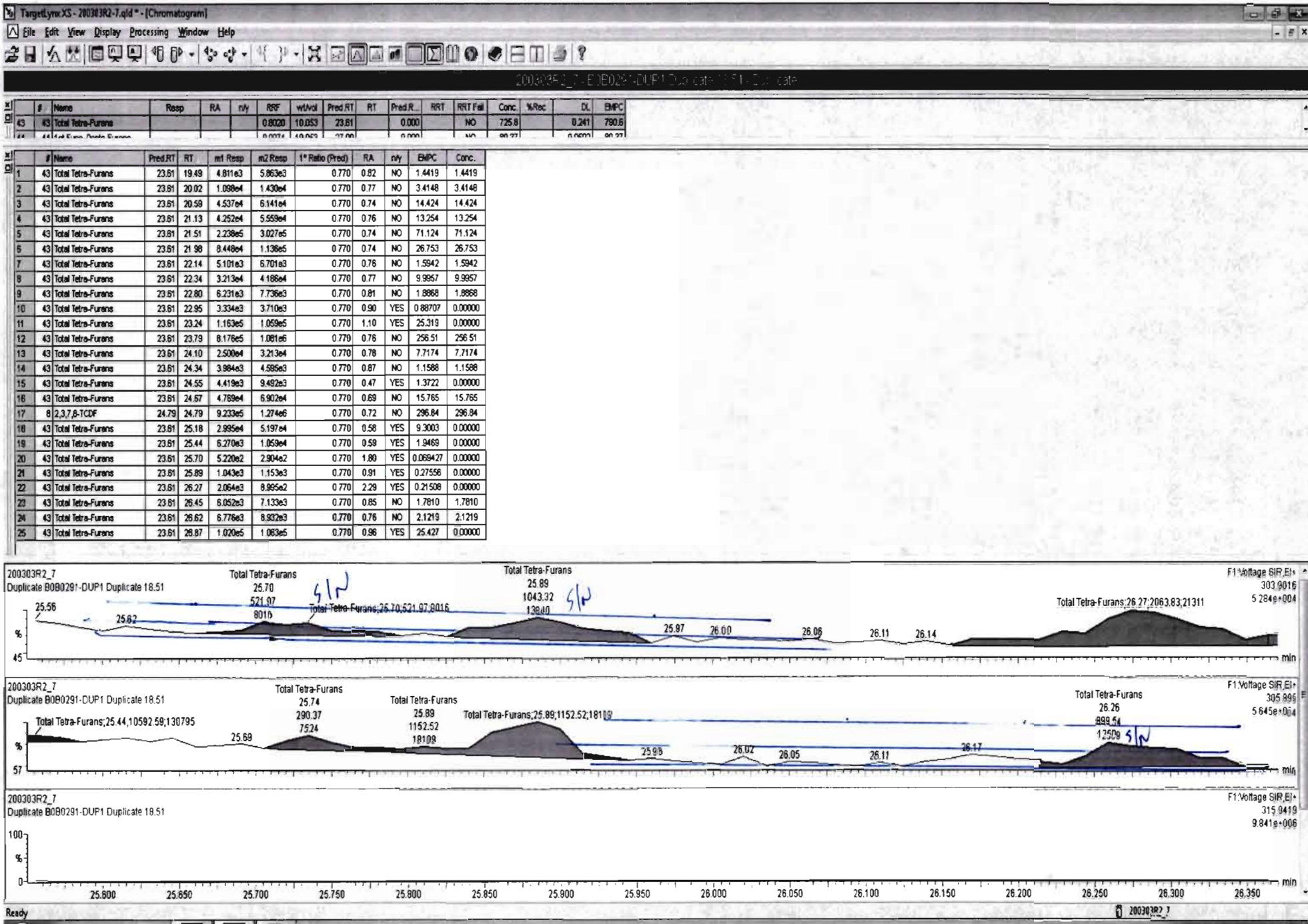




#	Name	Resp	RA	n/y	R/R	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.053	23.61		0.000		NO	798.9		0.241	824.4

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1 <sup>o</sup> Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Tetra-Furans	23.61	19.49	4.811e3	5.863e3	0.770	0.82	NO	1.4419	1.4419
2	Total Tetra-Furans	23.61	20.02	1.088e4	1.430e4	0.770	0.77	NO	3.4148	3.4148
3	Total Tetra-Furans	23.61	20.59	4.537e4	8.141e4	0.770	0.74	NO	14.424	14.424
4	Total Tetra-Furans	23.61	21.13	4.252e4	5.559e4	0.770	0.76	NO	13.254	13.254
5	Total Tetra-Furans	23.61	21.51	2.286e5	3.049e5	0.770	0.75	NO	72.067	72.067
6	Total Tetra-Furans	23.61	21.98	8.448e4	1.136e5	0.770	0.74	NO	26.753	26.753
7	Total Tetra-Furans	23.61	22.14	5.101e3	6.701e3	0.770	0.76	NO	1.5942	1.5942
8	Total Tetra-Furans	23.61	22.34	3.213e4	4.186e4	0.770	0.77	NO	9.9957	9.9957
9	Total Tetra-Furans	23.61	22.80	6.231e3	7.736e3	0.770	0.81	NO	1.8868	1.8868
10	Total Tetra-Furans	23.61	22.95	3.065e3	3.895e3	0.770	0.83	NO	0.91306	0.91306
11	Total Tetra-Furans	23.61	23.13	2.634e4	3.504e4	0.770	0.75	NO	8.2907	8.2907
12	Total Tetra-Furans	23.61	23.24	9.089e4	1.154e5	0.770	0.79	NO	27.862	27.862
13	Total Tetra-Furans	23.61	23.79	9.448e5	1.112e6	0.770	0.78	NO	264.28	264.28
14	Total Tetra-Furans	23.61	24.10	3.954e4	4.893e4	0.770	0.84	NO	11.681	11.681
15	Total Tetra-Furans	23.61	24.34	4.472e3	5.479e3	0.770	0.82	NO	1.3443	1.3443
16	Total Tetra-Furans	23.61	24.55	8.781e3	9.492e3	0.770	0.71	NO	2.1981	2.1981
17	Total Tetra-Furans	23.61	24.67	5.329e4	6.902e4	0.770	0.77	NO	16.522	16.522
18	2,3,7,8-TCDF	24.78	24.79	9.661e5	1.274e6	0.770	0.76	NO	302.63	302.63
19	Total Tetra-Furans	23.61	25.18	3.843e4	5.275e4	0.770	0.73	NO	12.317	12.317
20	Total Tetra-Furans	23.61	25.44	6.511e3	9.483e3	0.770	0.89	NO	2.1578	2.1578
21	Total Tetra-Furans	23.61	26.45	8.052e3	7.133e3	0.770	0.85	NO	1.7810	1.7810
22	Total Tetra-Furans	23.61	26.82	6.776e3	8.832e3	0.770	0.76	NO	2.1219	2.1219
23	Total Tetra-Furans	23.61	26.87	1.029e5	1.063e5	0.770	0.97	YES	25.427	0.00000





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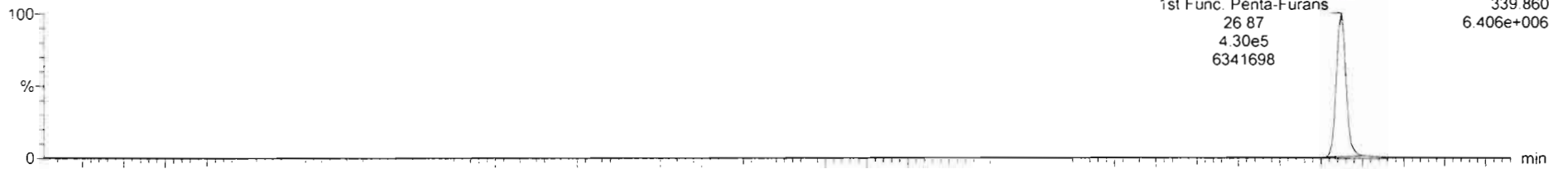
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

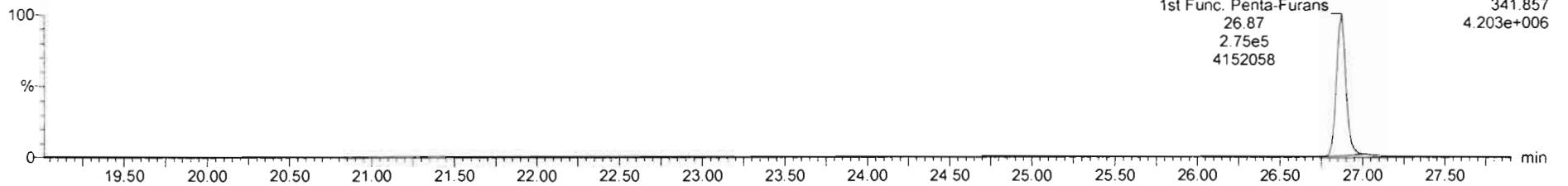
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1st Func. Penta-Furans

200303R2\_7

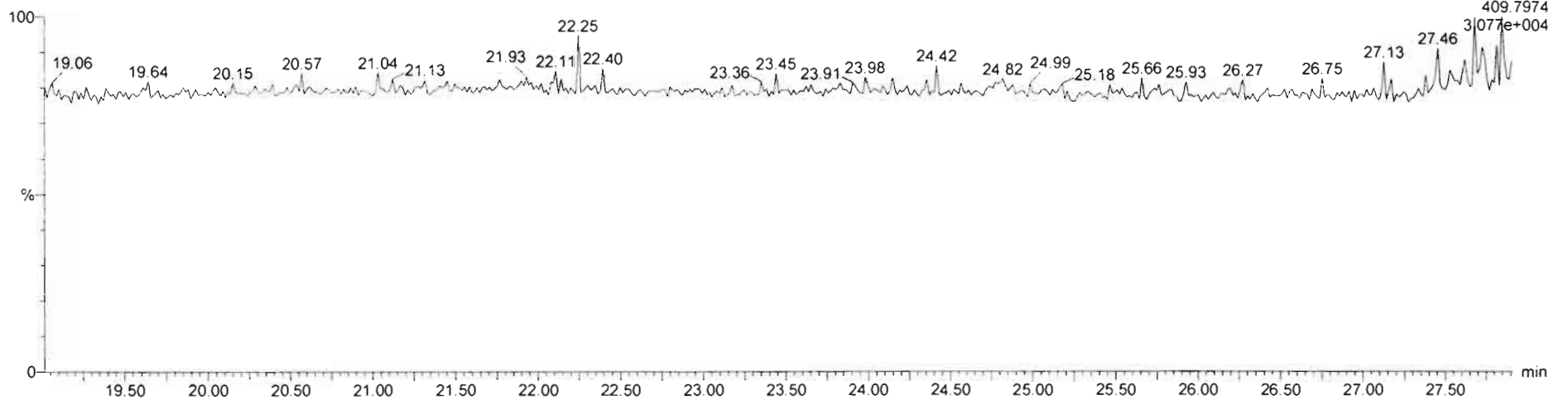


200303R2\_7



DPE6

200303R2\_7





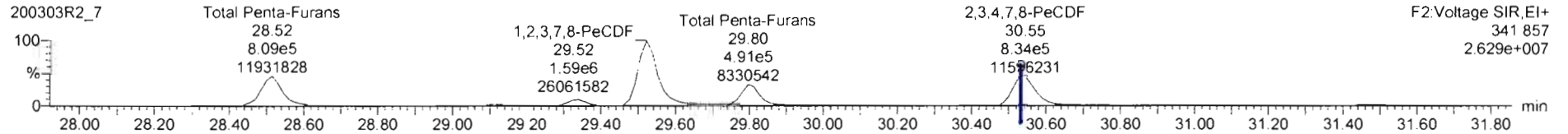
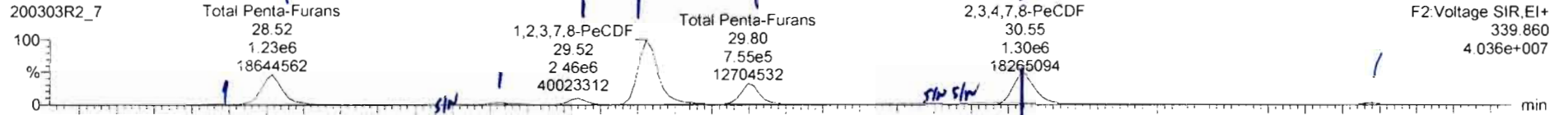
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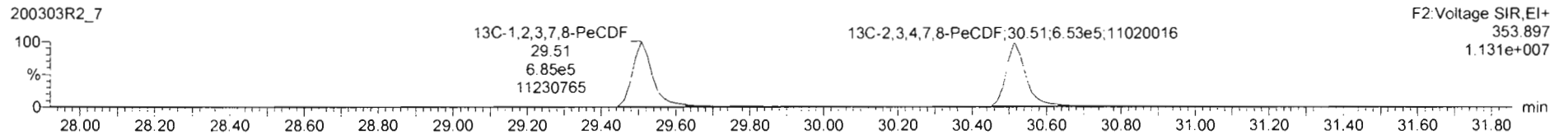
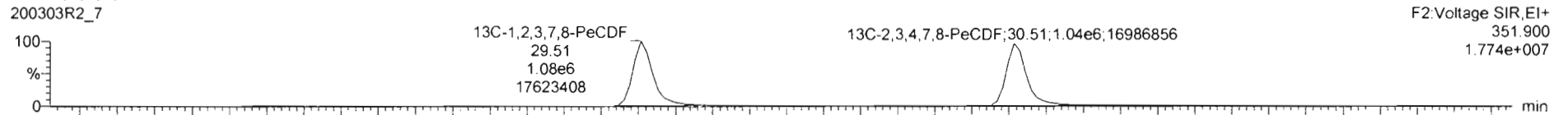
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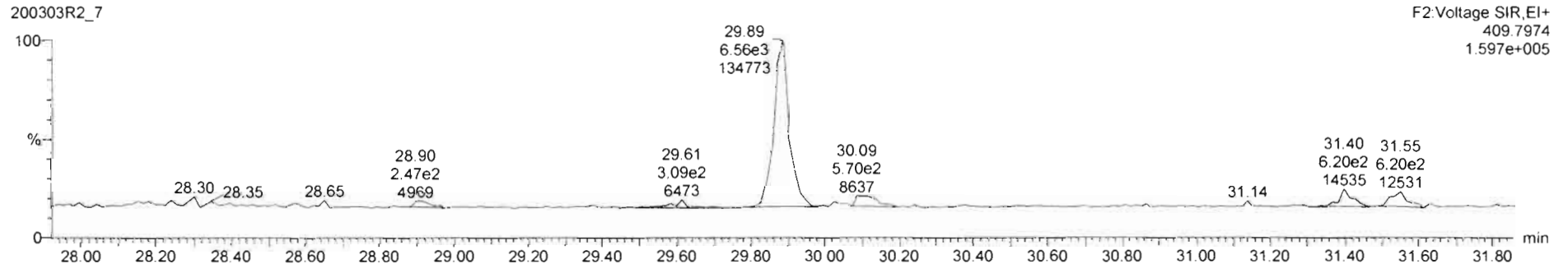
1,2,3,7,8-PeCDF



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

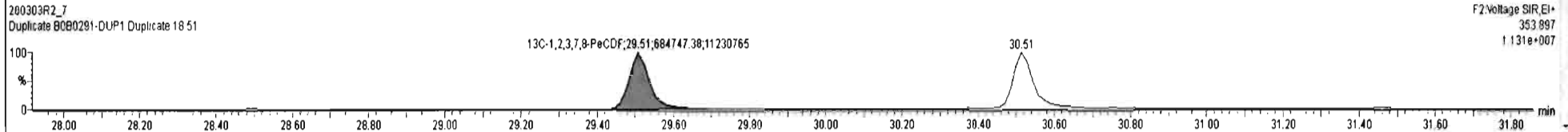
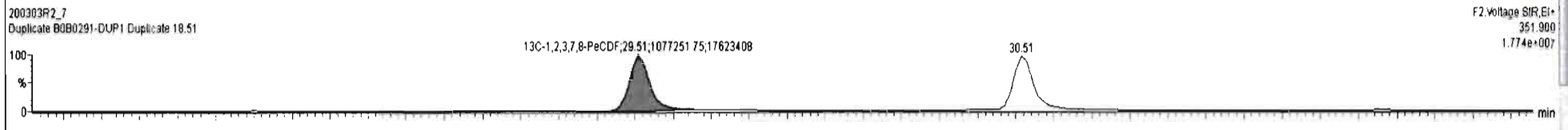
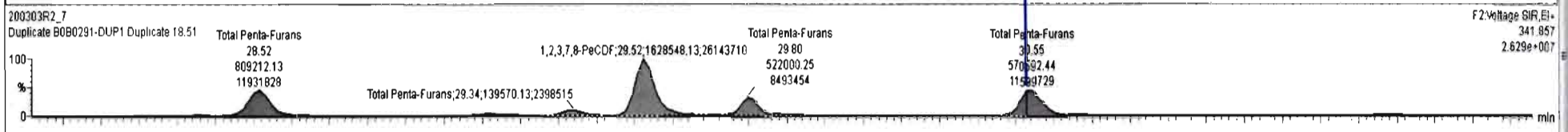
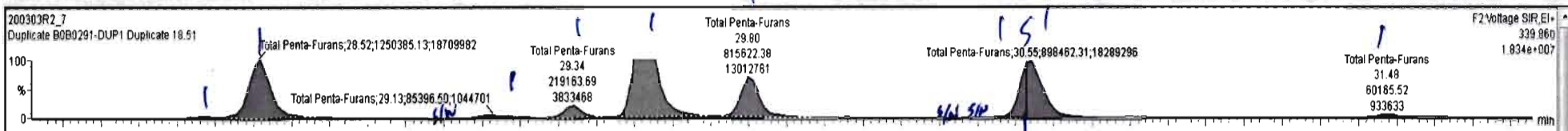


DPE2



#	Name	Resp	RA	nly	RRF	wtMol	Pred RT	RT	Pred R...	RRT	RRT Fal	Conc.	%Rec	DL	EMPC
44	1st Func. Penta-Furans				0.9074	10.053	27.09		0.000		NO	89.37		0.0592	89.37
45	Total Penta-Furans				0.9074	10.053	29.27		0.000		NO	1300		0.599	1300
46	Total Hexa-Furans				0.8982	10.053	33.56		0.000		NO	1946		0.577	1946
47	Total Hepta-Furans				0.8844	10.053	37.83		0.000		NO	2417		1.43	2417

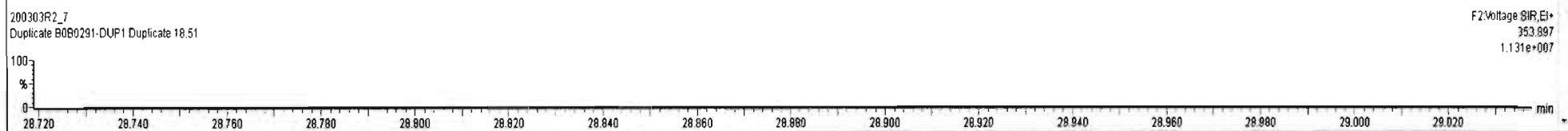
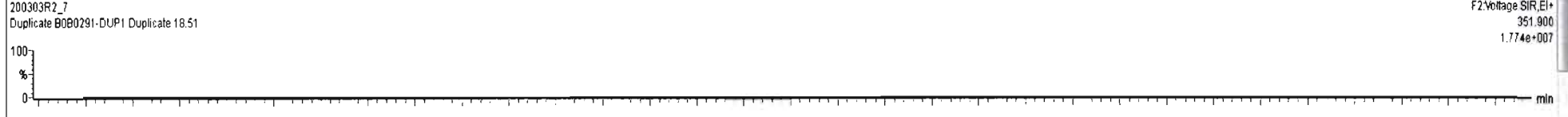
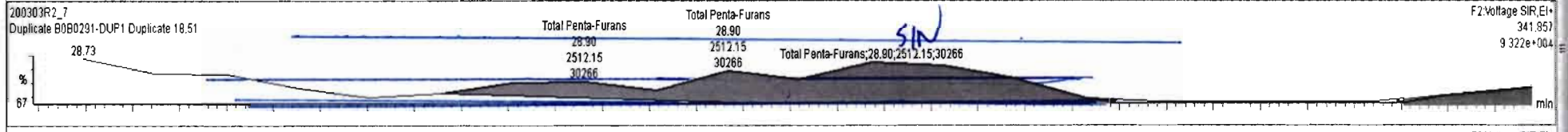
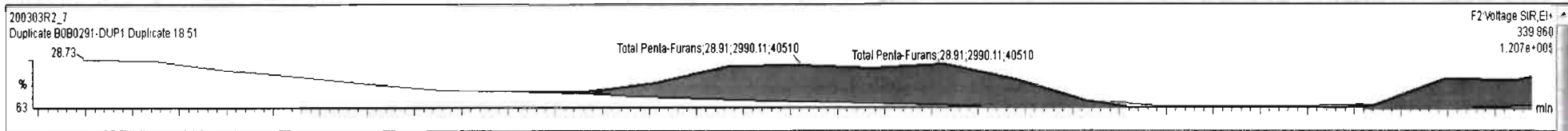
#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	nly	EMPC	Conc.
1	Total Penta-Furans	29.27	28.36	2.841e4	2.033e4	1.550	1.40	NO	6.1797	6.1797
2	Total Penta-Furans	29.27	28.52	1.250e6	8.092e5	1.550	1.55	NO	261.15	261.15
3	Total Penta-Furans	29.27	29.13	8.540e4	5.749e4	1.550	1.49	NO	18.118	18.118
4	Total Penta-Furans	29.27	29.34	2.192e5	1.396e5	1.550	1.57	NO	45.486	45.486
5	1,2,3,7,8-PeCDF	29.53	29.52	2.535e6	1.629e6	1.550	1.56	NO	518.12	518.12
6	Total Penta-Furans	29.27	29.80	8.156e5	5.220e5	1.550	1.56	NO	169.61	169.61
7	1,2,3,4,7,8-PeCDF	30.53	30.53	4.055e5	2.686e5	1.550	1.51	NO	83.072	83.072
8	Total Penta-Furans	29.27	30.55	8.985e5	5.706e5	1.550	1.57	NO	186.27	186.27
9	Total Penta-Furans	29.27	31.48	6.017e4	3.809e4	1.550	1.58	NO	12.458	12.458





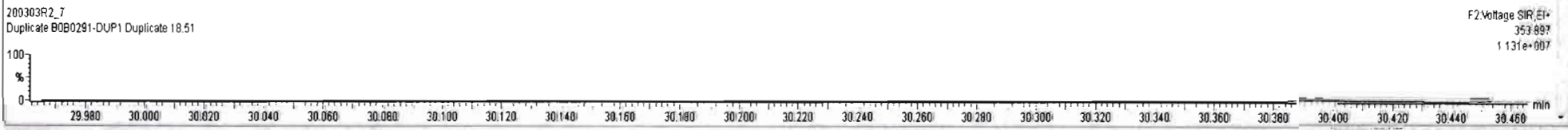
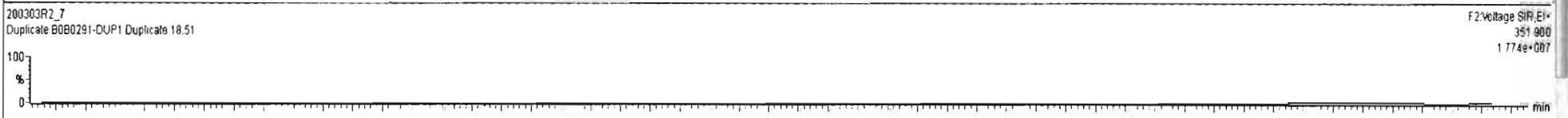
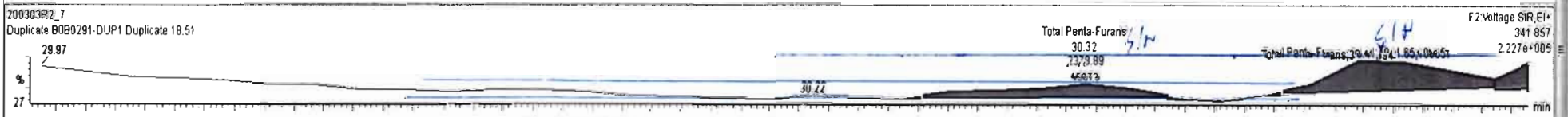
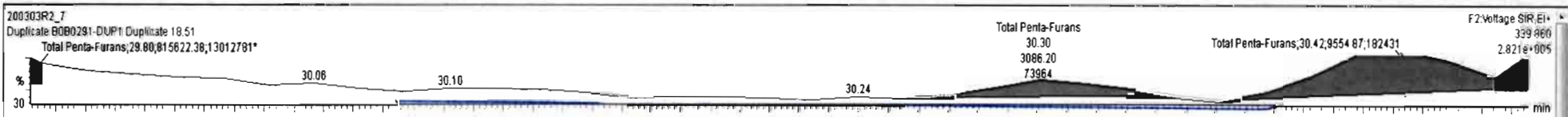
#	Name	Resp	RA	n/y	RRF	wt/Vol	Pred.RT	RT	Pred.R...	RRT	RRT/Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.053	23.61		0.000		NO	798.9		0.241	824.4
44	1st Func. Penta-Furans				0.9074	10.053	27.09		0.000		NO	89.37		0.0592	89.37
45	Total Penta-Furans				0.9074	10.053	29.27		0.000		NO	1258		0.599	1301
46	Total Hexa-Furans				n none	n none	23.68		n none		NO	1046		0.677	1046

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Penta-Furans	29.27	28.38	2.841e4	2.033e4	1.550	1.40	NO	6.1797	6.1797
2	Total Penta-Furans	29.27	28.52	1.250e6	8.082e5	1.550	1.55	NO	261.15	261.15
3	Total Penta-Furans	29.27	28.91	2.990e3	2.512e3	1.550	1.19	YES	0.62374	0.00000
4	Total Penta-Furans	29.27	29.13	8.540e4	5.749e4	1.550	1.49	NO	18.118	18.118
5	Total Penta-Furans	29.27	29.34	2.192e5	1.386e5	1.550	1.57	NO	45.486	45.486
6	1,2,3,7,8-PeCDF	29.53	29.52	2.535e6	1.629e6	1.550	1.56	NO	518.12	518.12
7	Total Penta-Furans	29.27	29.80	8.158e5	5.220e5	1.550	1.56	NO	169.81	169.81
8	Total Penta-Furans	29.27	30.30	3.088e3	2.379e3	1.550	1.30	YES	0.64378	0.00000
9	Total Penta-Furans	29.27	30.42	9.555e3	4.942e3	1.550	1.83	YES	1.5978	0.00000
10	2,3,4,7,8-PeCDF	30.54	30.55	1.320e6	8.474e5	1.550	1.56	NO	267.07	267.07
11	Total Penta-Furans	29.27	31.48	6.017e4	3.809e4	1.550	1.58	NO	12.458	12.458



#	Name	Resp	RA	n/y	RRF	wt/vol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.053	23.61		0.000		NO	798.9		0.241	824.4
44	1st Func. Penta-Furans				0.9074	10.053	27.09		0.000		NO	89.37		0.0592	89.37
45	Total Penta-Furans				0.9074	10.053	29.27		0.000		NO	1263		0.559	1267
46	Total Hexa-Furans				0.9077	10.053	31.45		0.000		NO	1048		0.577	1048

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	45 Total Penta-Furans	29.27	29.36	2.841e4	2.033e4	1.550	1.40	NO	6.1797	6.1797
2	45 Total Penta-Furans	29.27	28.52	1.226e6	8.092e5	1.550	1.51	NO	258.05	258.05
3	45 Total Penta-Furans	29.27	28.91	2.990e3	2.512e3	1.550	1.19	YES	0.62374	0.00000
4	45 Total Penta-Furans	29.27	29.13	8.540e4	5.749e4	1.550	1.49	NO	18.118	18.118
5	45 Total Penta-Furans	29.27	29.34	2.069e5	1.358e5	1.550	1.52	NO	43.455	43.455
6	9 1,2,3,7,8-PeCDF	29.53	29.52	2.456e6	1.589e6	1.550	1.55	NO	503.33	503.33
7	45 Total Penta-Furans	29.27	29.80	7.549e5	4.911e5	1.550	1.54	NO	157.98	157.98
8	45 Total Penta-Furans	29.27	30.30	3.086e3	2.379e3	1.550	1.30	YES	0.64378	0.00000
9	45 Total Penta-Furans	29.27	30.42	9.555e3	4.942e3	1.550	1.93	YES	1.5878	0.00000
10	10 2,3,4,7,8-PeCDF	30.54	30.55	1.301e6	8.341e5	1.550	1.56	NO	263.11	263.11
11	45 Total Penta-Furans	29.27	31.48	6.017e4	3.809e4	1.550	1.58	NO	12.458	12.458
12	45 Total Penta-Furans	29.27	31.60	1.706e4	6.004e3	1.550	2.84	YES	1.9411	0.00000



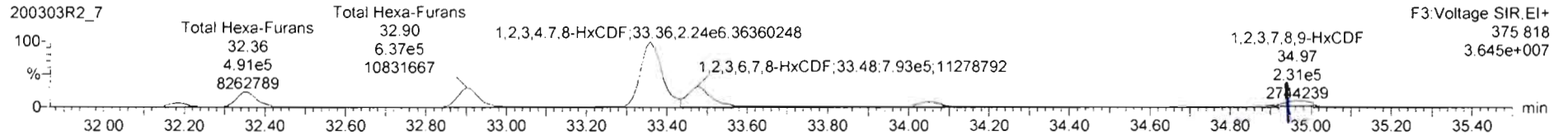
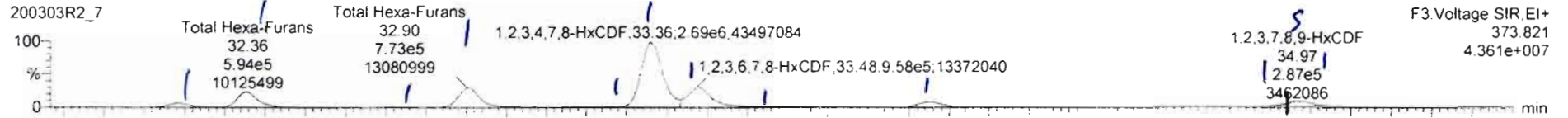
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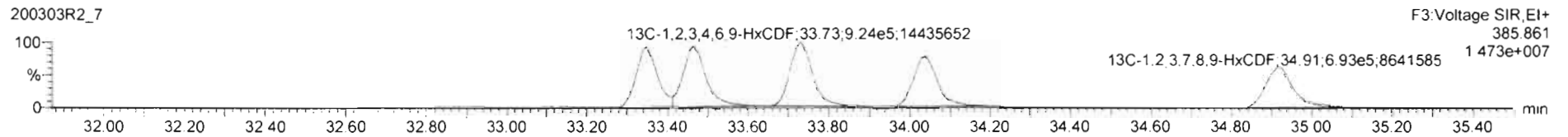
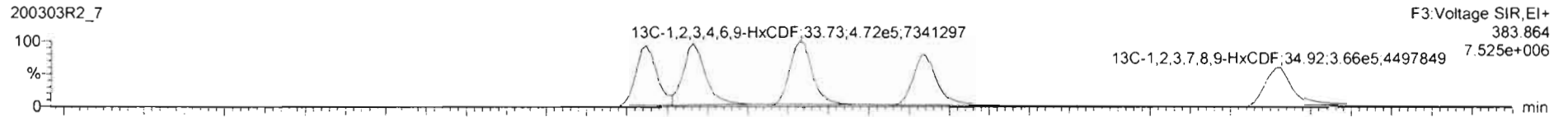
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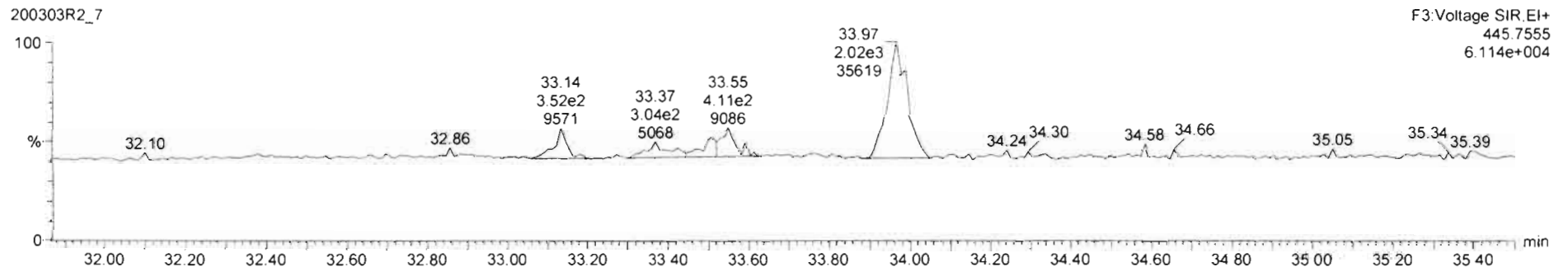
1,2,3,4,7,8-HxCDF



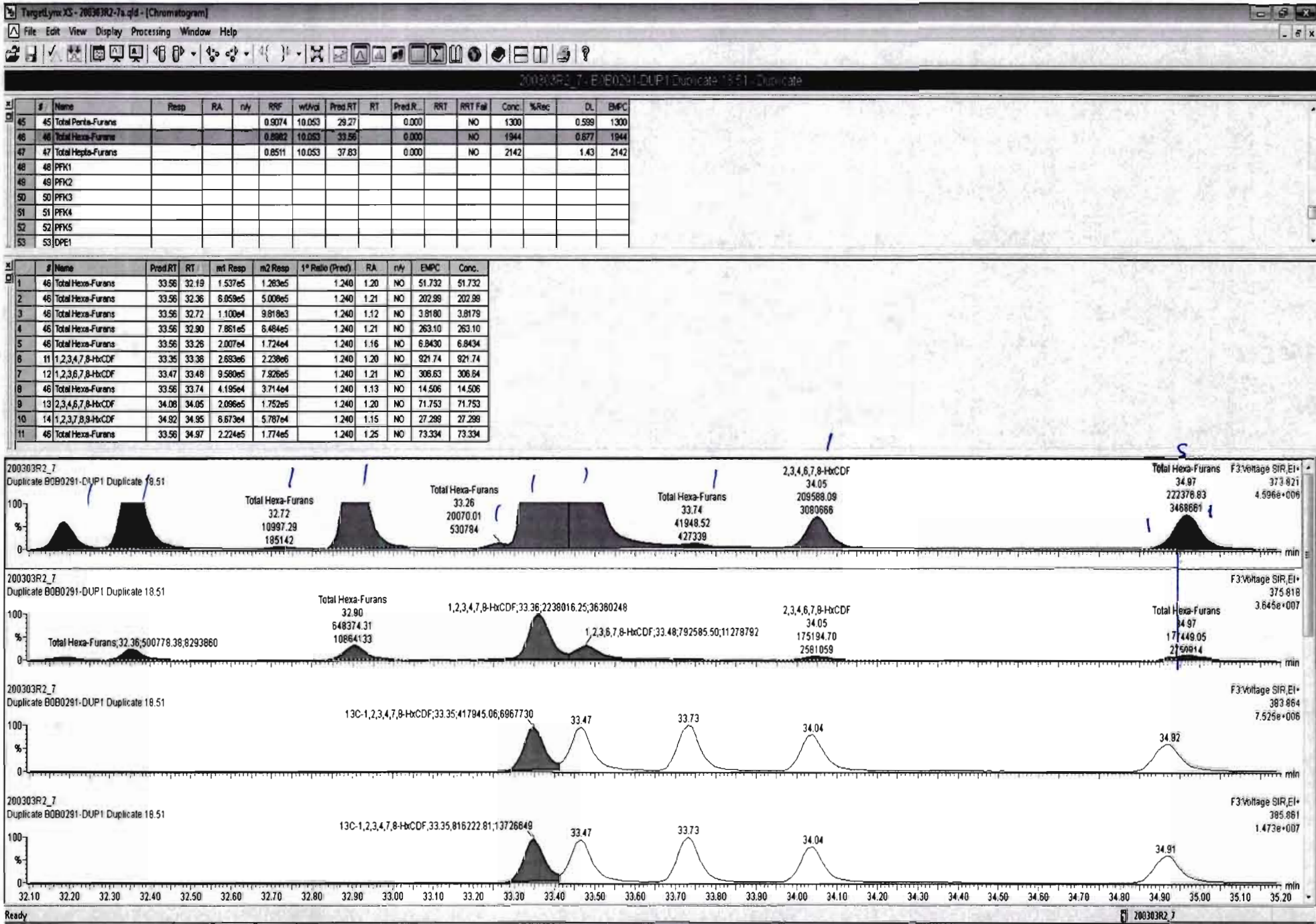
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DPE3







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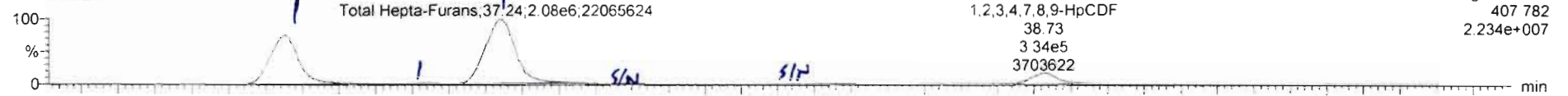
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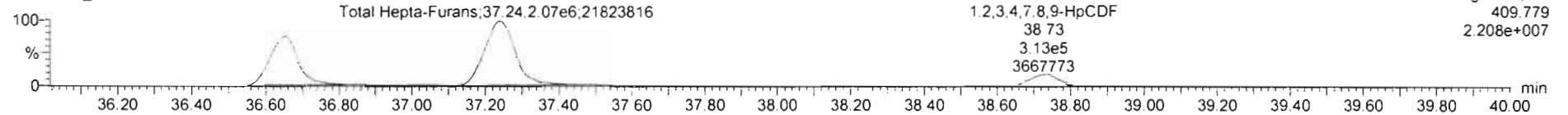
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1,2,3,4,6,7,8-HpCDF

200303R2\_7

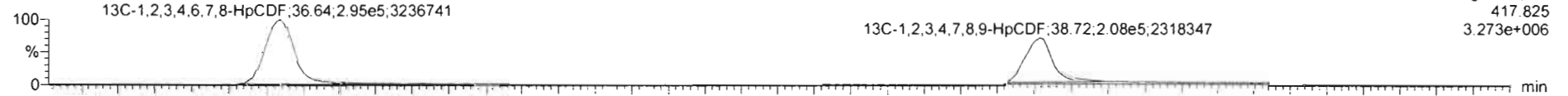


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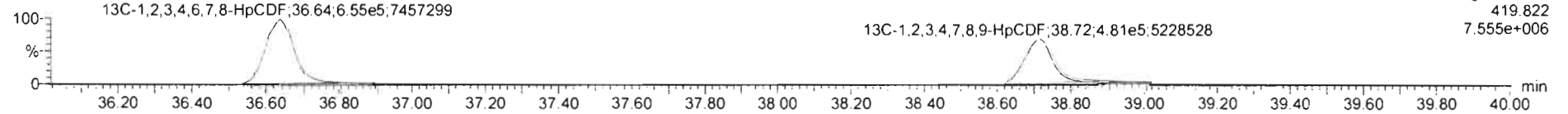


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200303R2\_7

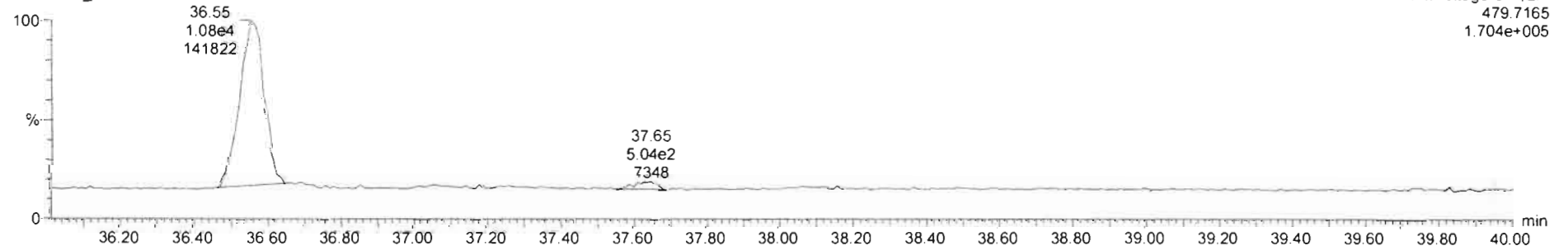


200303R2\_7



DPE4

200303R2\_7





TargetLynx.XS - 200303R2-7a.qld\* - [Chromatogram]

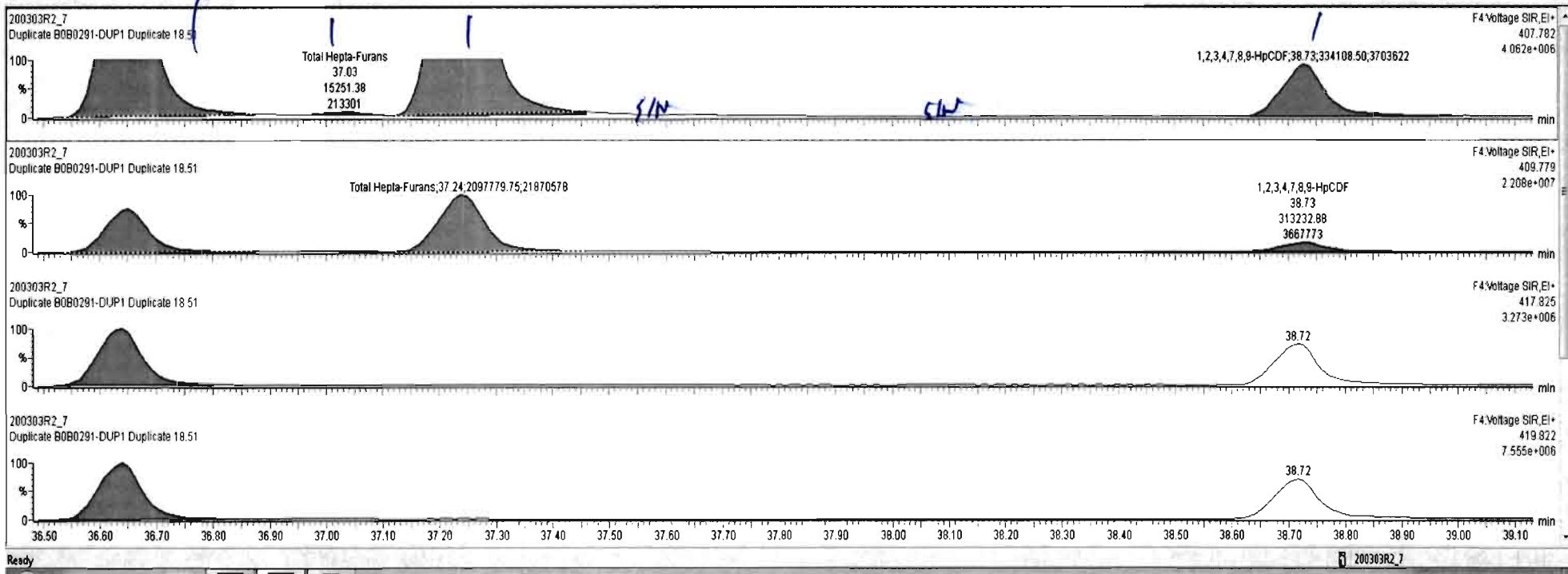
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200303R2\_7 - E1B0291-DUP1 Duplicate 18.51 - Duplicate

#	Name	Resp	RA	n/y	RRF	wtAvd	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
47	Total Hepta-Furans				0.6511	10.053	37.63		0.000		NO	2142		1.43	2142
48	PFK1														
49	PFK2														
en	enlopx														

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	1,2,3,4,6,7,8-HpCDF	36.68	36.65	1.512e6	1.492e6	1.040	1.01	NO	739.34	739.34
2	Total Hepta-Furans	37.83	37.03	1.525e4	1.573e4	1.040	0.97	NO	8.8374	8.8374
3	Total Hepta-Furans	37.83	37.24	2.120e6	2.089e6	1.040	1.01	NO	1203.3	1203.3
4	1,2,3,4,7,8,9-HpCDF	38.72	38.73	3.341e5	3.132e5	1.040	1.07	NO	190.78	190.78



TargetLynx XS - 200303R2\_7a.qld\* - [Chromatogram]

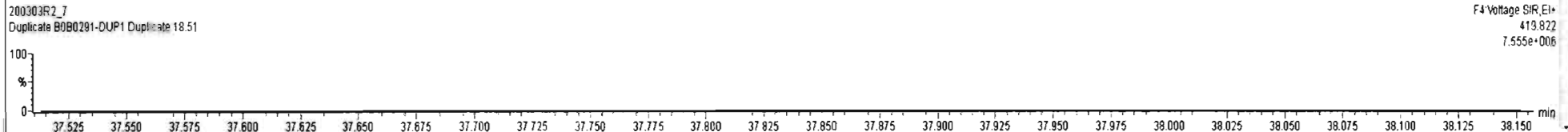
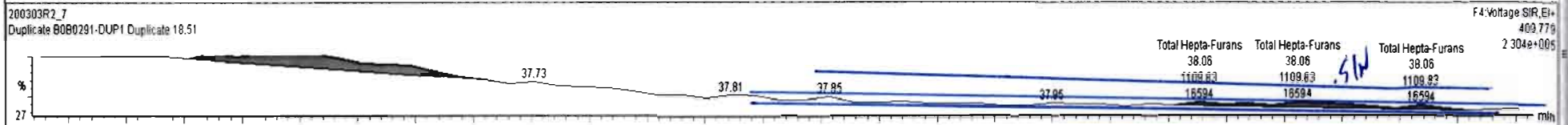
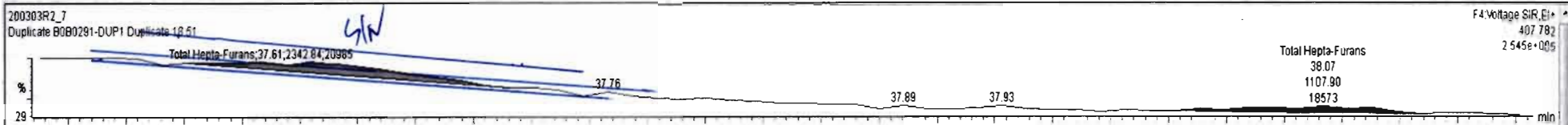
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200303R2\_7 - B0B0291-DUP1 Duplicate 18.51 - Duplicate

#	Name	Resp	RA	n/y	RRF	wtVcl	Pred RT	RT	Pred R...	RR1	RRT Fail	Conc.	%Rec	DL	EMPC
44	1st Func. Penta-Furans				0.9074	10.053	27.09		0.000		NO	89.37		0.0582	89.37
45	Total Penta-Furans				0.9074	10.053	29.27		0.000		NO	1300		0.599	1300
46	Total Hexa-Furans				0.8982	10.053	33.56		0.000		NO	1944		0.577	1944
47	Total Hepta-Furans				0.8844	10.053	37.81		0.000		NO	2413		0.473	2413

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	1,2,3,4,8,7,8-HpCDF	36.88	36.65	1.496e6	1.475e6	1.040	1.01	NO	731.22	731.22
2	Total Hepta-Furans	37.83	37.03	1.525e4	1.573e4	1.040	0.97	NO	8.8374	8.8374
3	Total Hepta-Furans	37.83	37.24	2.081e6	2.075e6	1.040	1.00	NO	1185.6	1185.6
4	Total Hepta-Furans	37.83	37.61	2.343e3	2.778e3	1.040	0.84	YES	1.3110	0.00000
5	Total Hepta-Furans	37.83	38.07	1.108e3	1.110e3	1.040	1.00	NO	0.63268	0.63268
9	1,2,3,4,7,8,9-HpCDF	38.72	38.73	3.341e5	3.132e5	1.040	1.07	NO	190.78	190.78



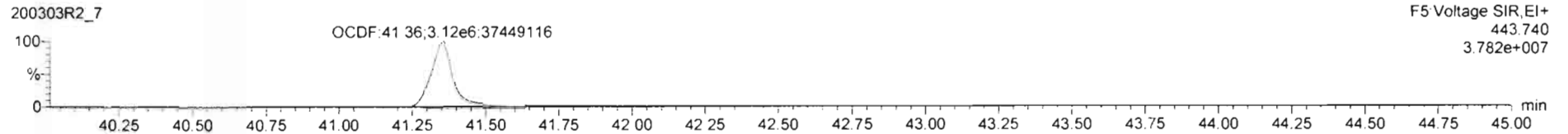
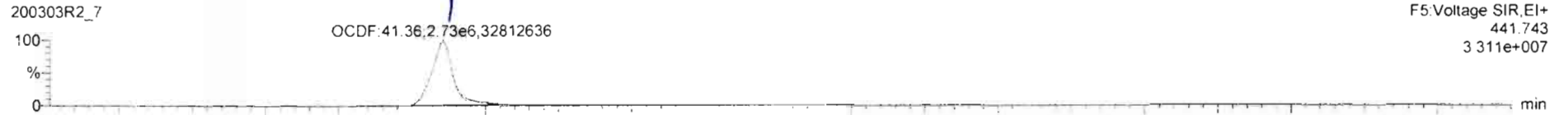
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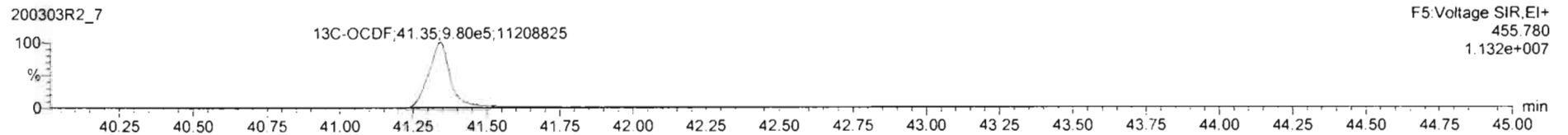
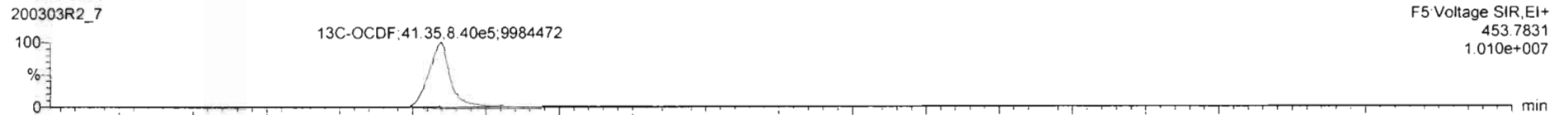
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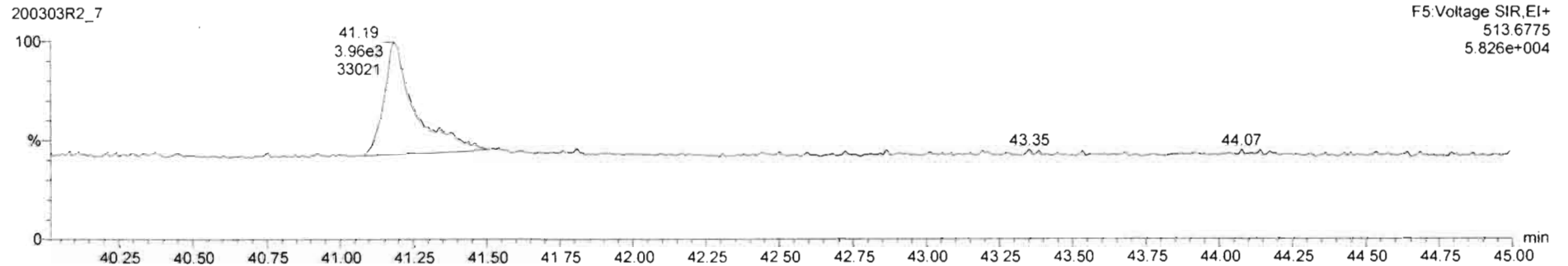
OCDF



13C-OCDF



DPES



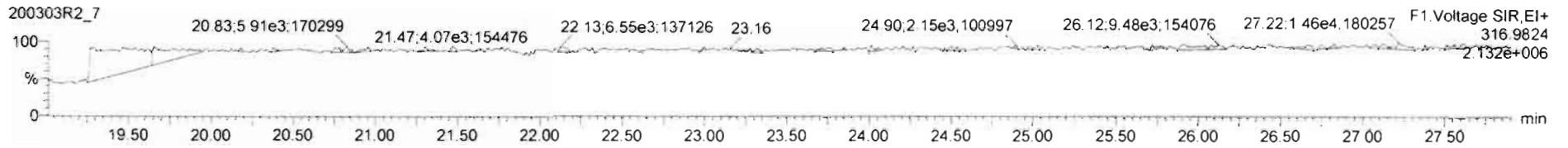
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

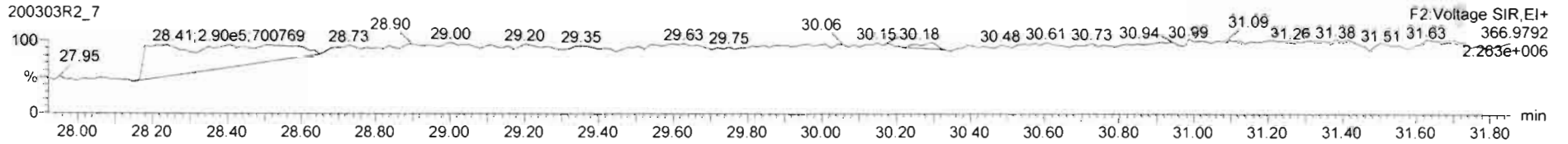
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_7, Date: 03-Mar-2020, Time: 18:34:28, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

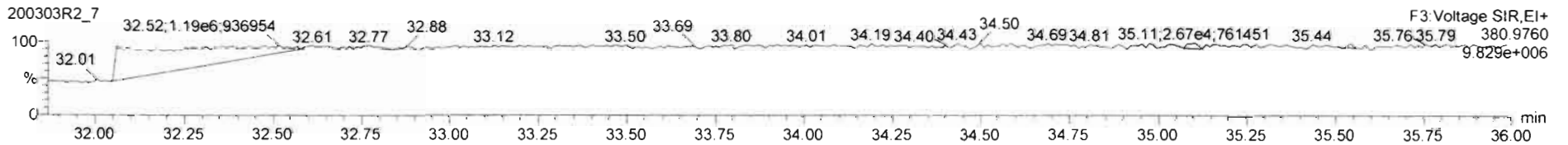
PFK1



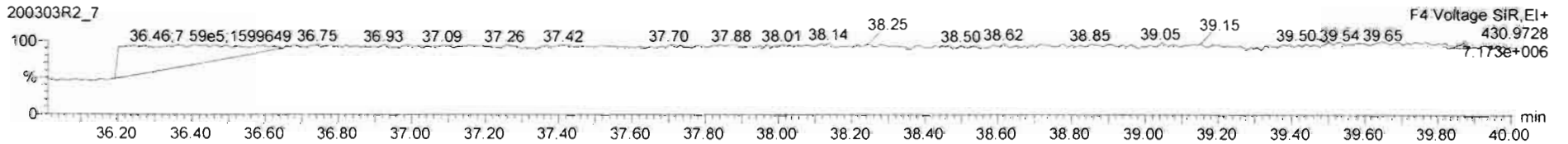
PFK2



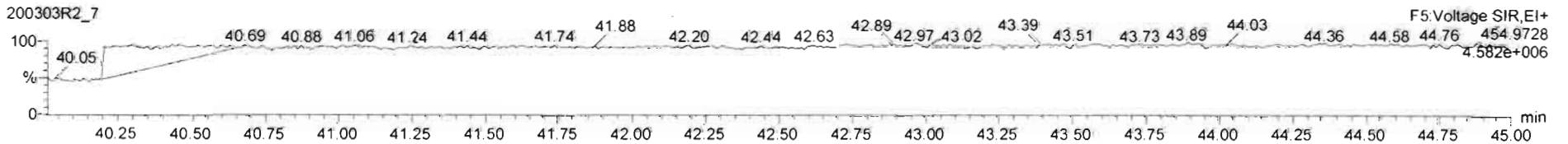
PFK3



PFK4



PFK5



Dataset: U:\VG12.PRO\Results\200305R2\200305R2-15.qld

Last Altered: Friday, March 06, 2020 09:55:25 Pacific Standard Time  
Printed: Monday, March 09, 2020 09:17:13 Pacific Daylight Time

*PL 03/09/2020*

*C709/09/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

	# Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	7 OCDD	5316449.5...	0.888	NO	0.975	10.053	41.24	41.25	1.00	1.00	NO	12870		4.07	12870
2	24 13C-OCDD	168712.164	0.887	NO	0.707	10.053	41.18	41.24	1.22	1.22	NO	268.3	67.4	1.08	
3	35 37Cl-2,3,7,8-TCDD	72094.945			1.18	10.053	25.66	25.72	1.03	1.03	NO	70.60	88.7	0.602	
4	36 13C-1,2,3,4-TCDD	172722.586	0.817	NO	1.00	10.053	25.11	24.99	1.00	1.00	NO	198.9	100	1.13	
5	37 13C-1,2,3,4-TCDF	254182.211	0.814	NO	1.00	10.053	23.37	23.13	1.00	1.00	NO	198.9	100	1.94	
6	38 13C-1,2,3,4,6,9-HxCDF	177078.043	0.523	NO	1.00	10.053	33.71	33.81	1.00	1.00	NO	198.9	100	1.35	



Dataset: Untitled

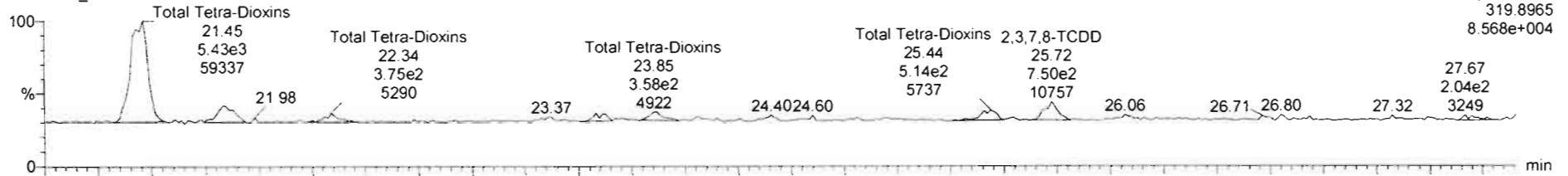
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

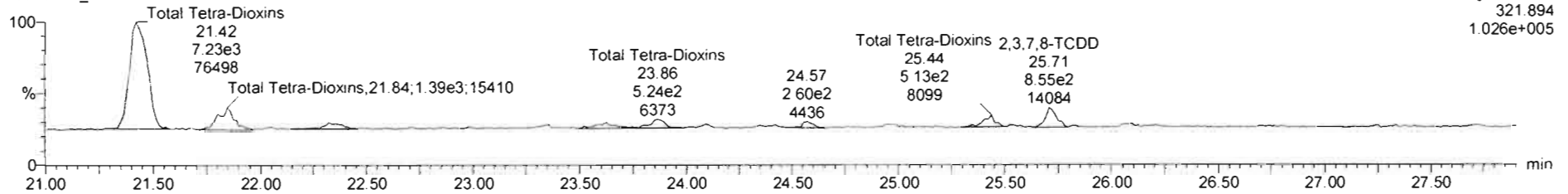
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

2,3,7,8-TCDD

200305R2\_15

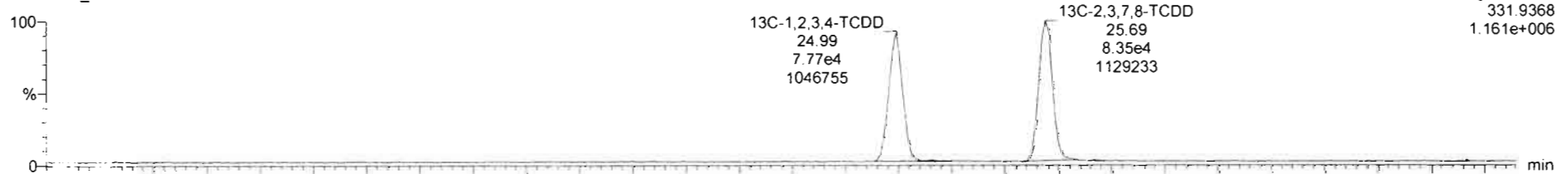


200305R2\_15

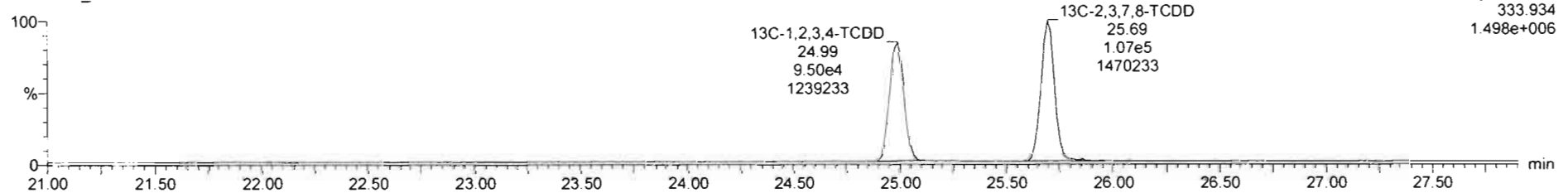


13C-2,3,7,8-TCDD

200305R2\_15



200305R2\_15



Dataset: Untitled

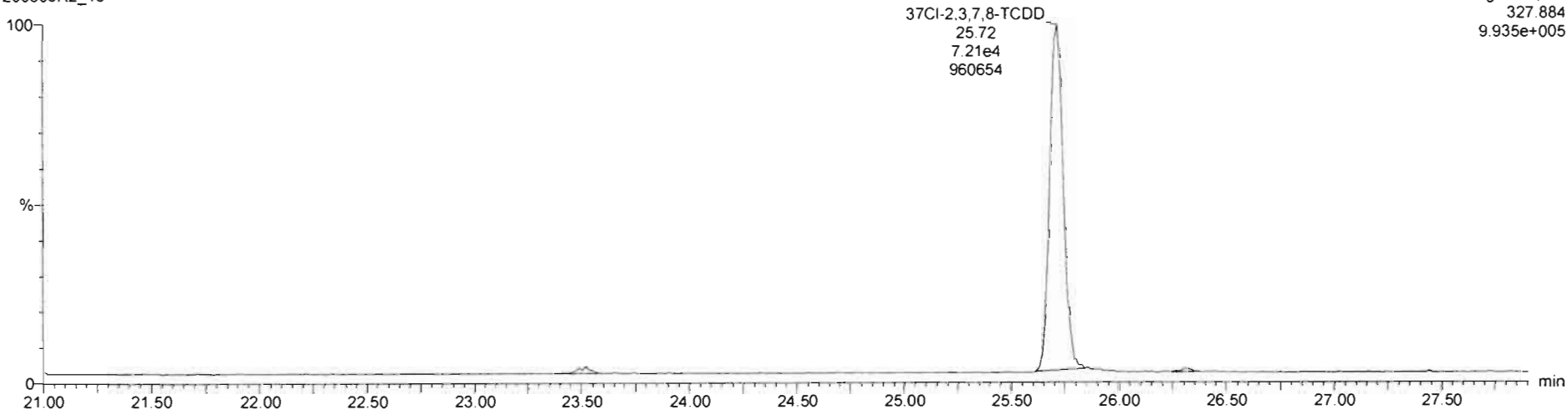
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

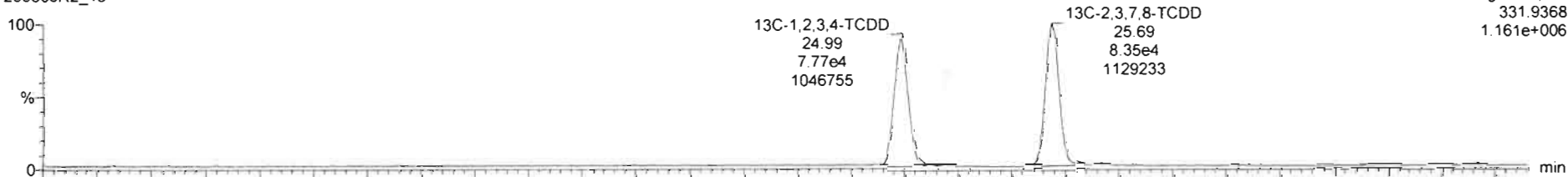
**37Cl-2,3,7,8-TCDD**

200305R2\_15

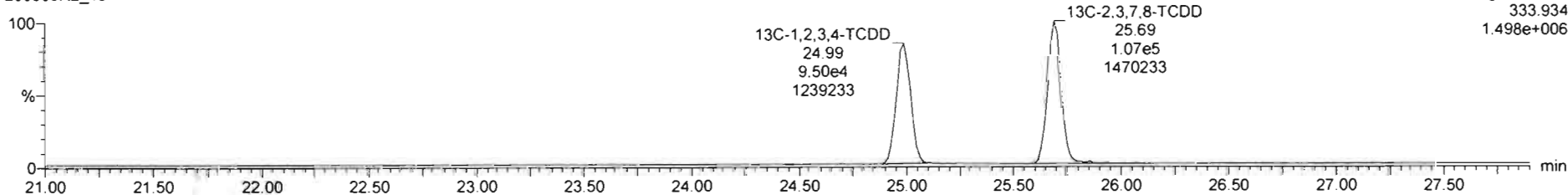


**13C-1,2,3,4-TCDD**

200305R2\_15



200305R2\_15



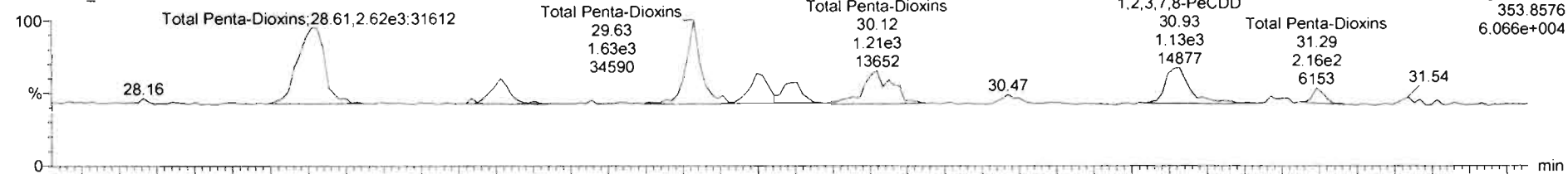
Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

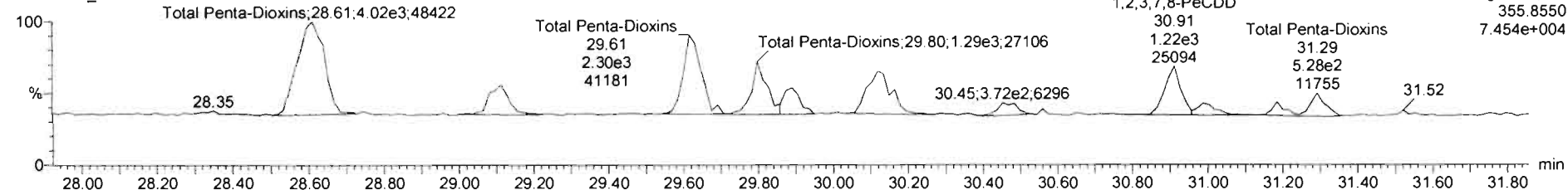
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

1,2,3,7,8-PeCDD

200305R2\_15

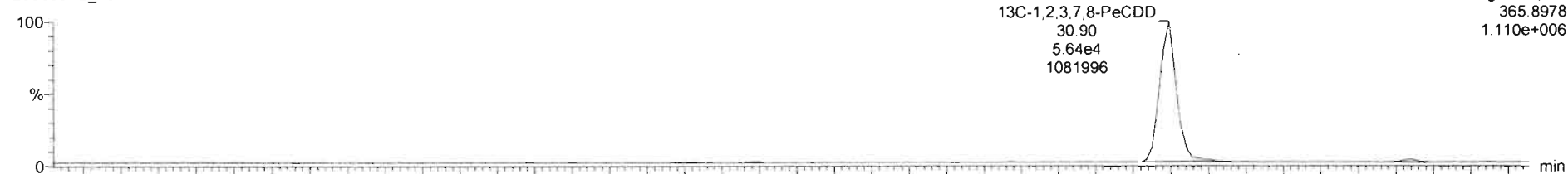


200305R2\_15

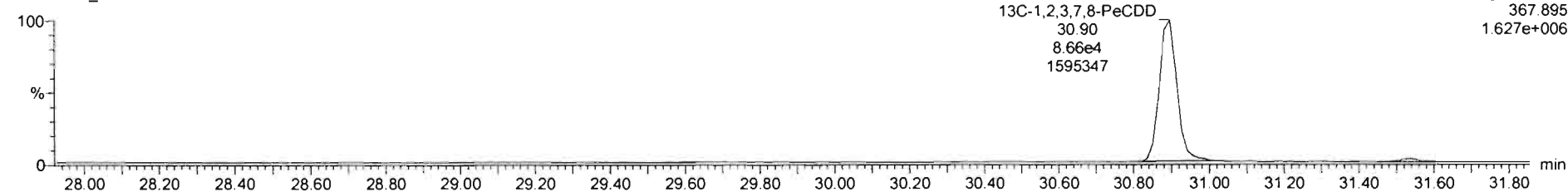


13C-1,2,3,7,8-PeCDD

200305R2\_15



200305R2\_15



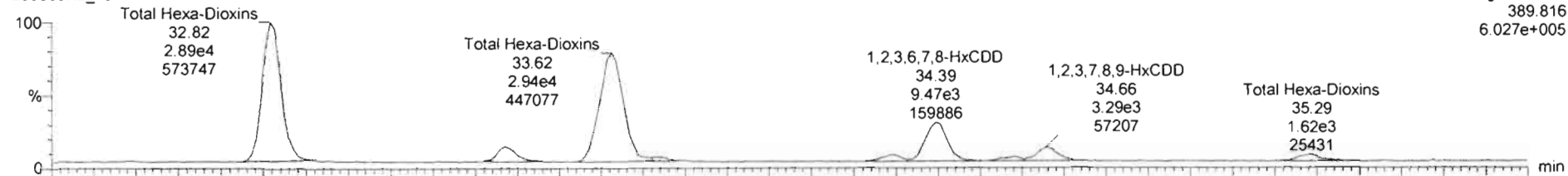
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Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

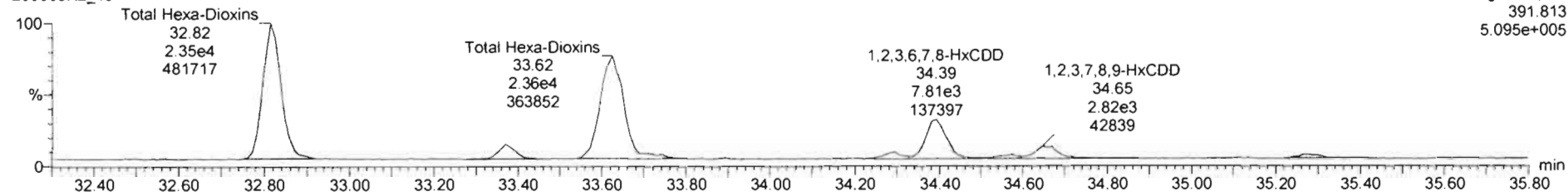
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

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

200305R2\_15

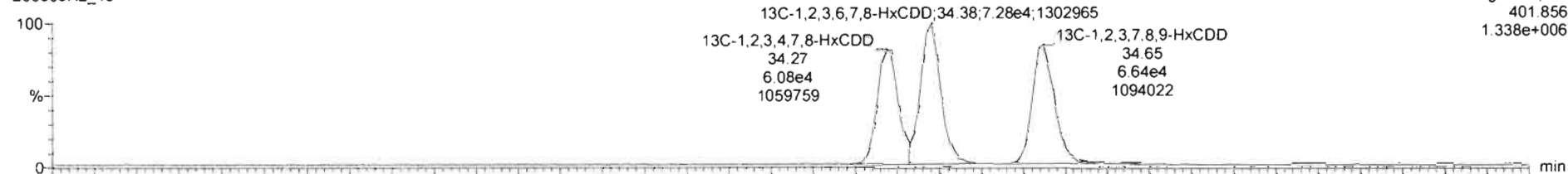


200305R2\_15

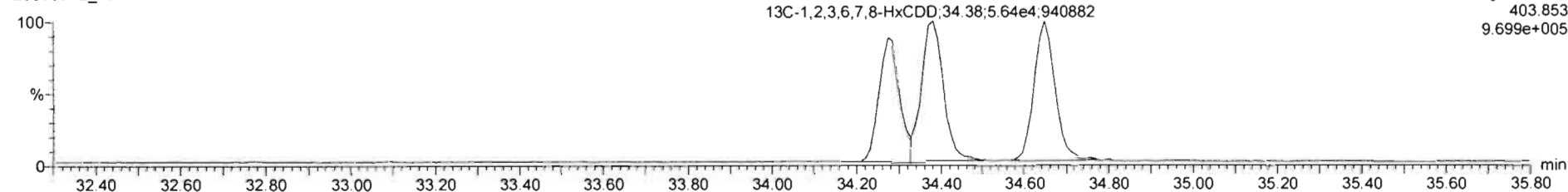


13C-1,2,3,4,7,8-HxCDD

200305R2\_15



200305R2\_15



Dataset: Untitled

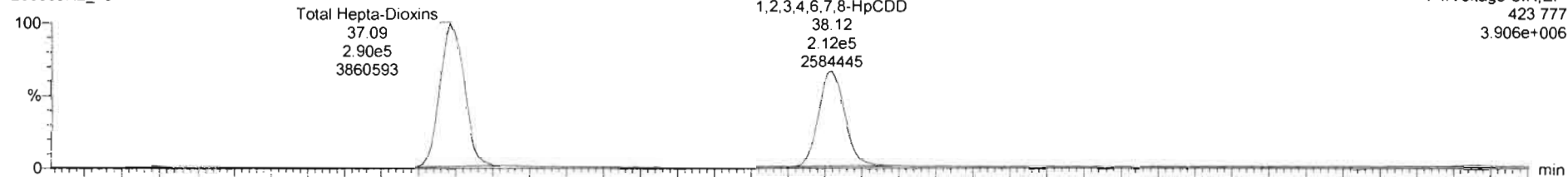
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

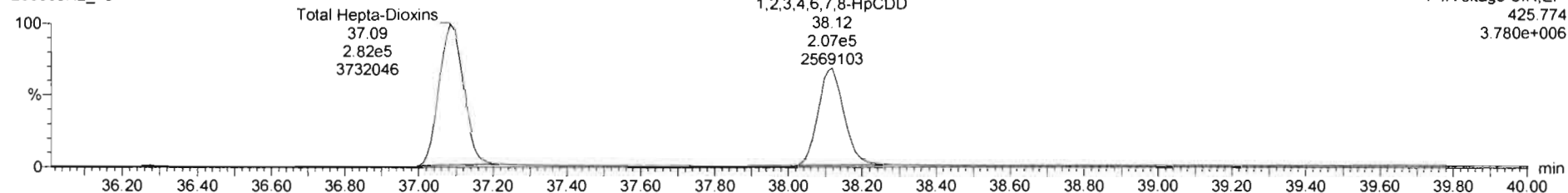
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

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

200305R2\_15

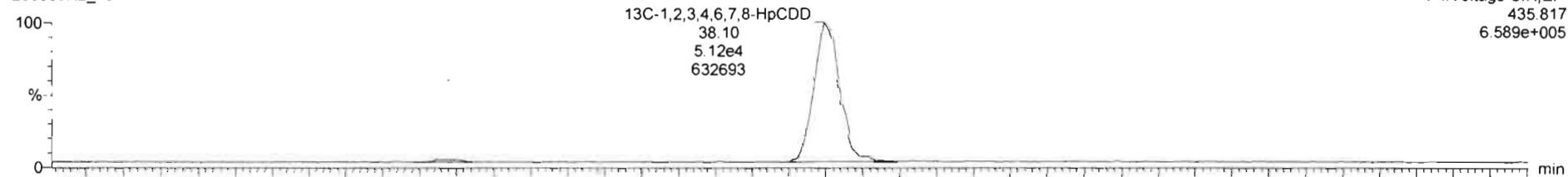


200305R2\_15

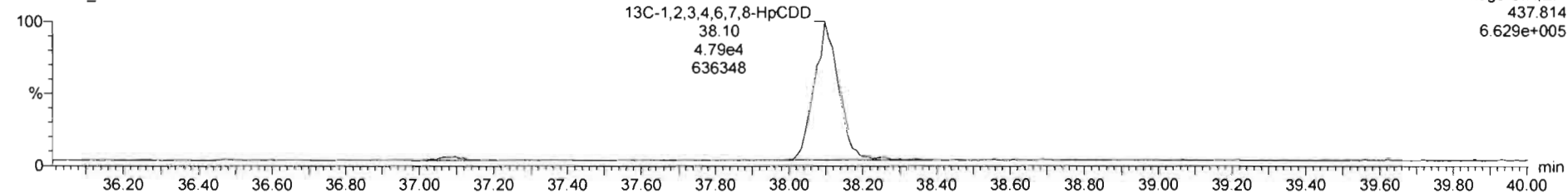


13C-1,2,3,4,6,7,8-HpCDD

200305R2\_15



200305R2\_15



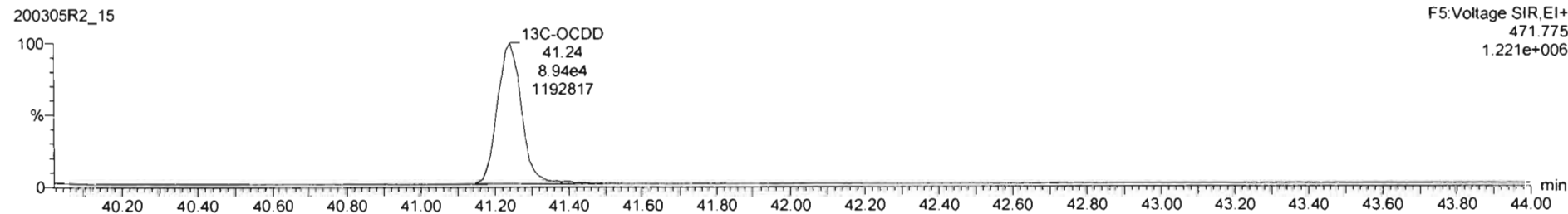
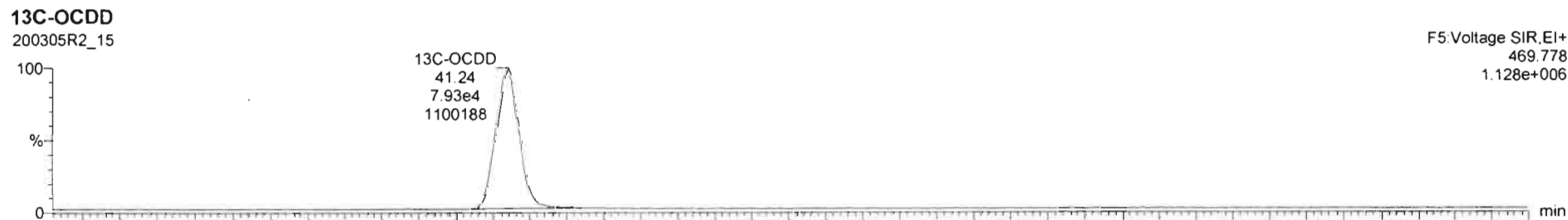
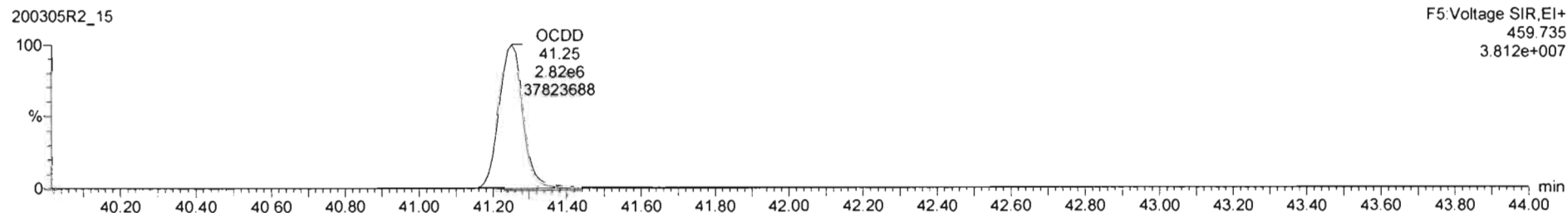
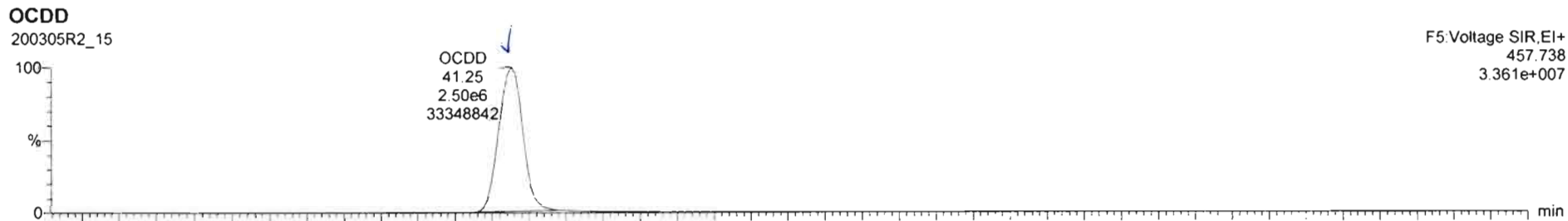


Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate



Dataset: Untitled

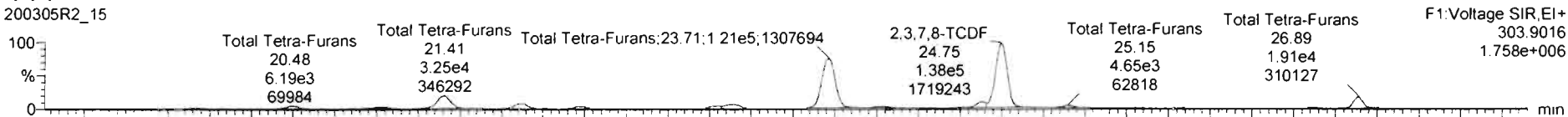
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

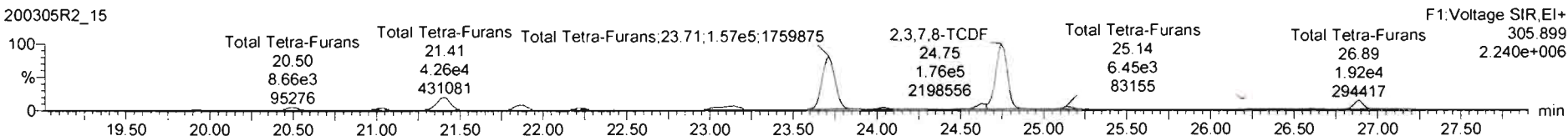
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

2,3,7,8-TCDF

200305R2\_15

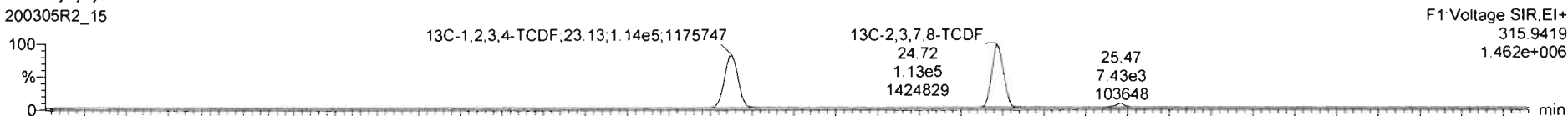


200305R2\_15

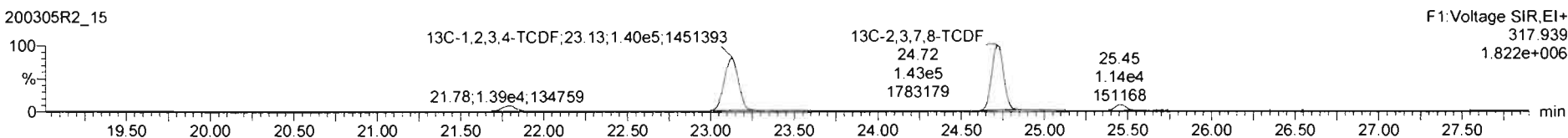


13C-2,3,7,8-TCDF

200305R2\_15

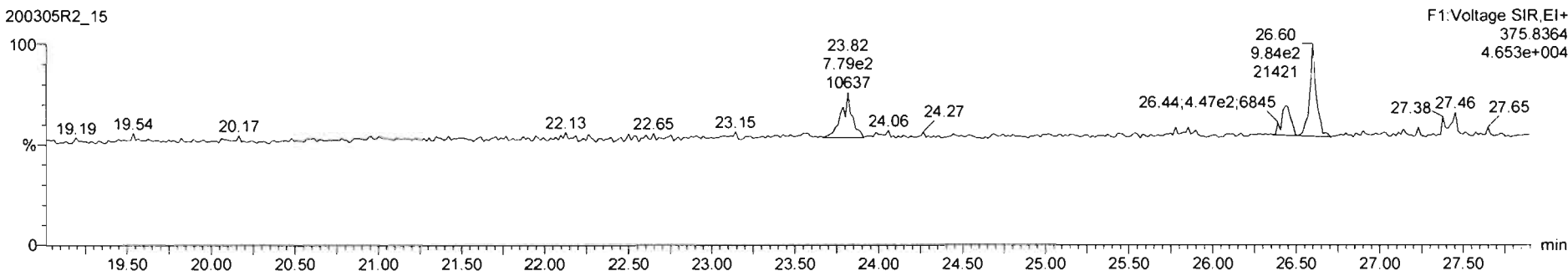


200305R2\_15



DPE1

200305R2\_15



Dataset: Untitled

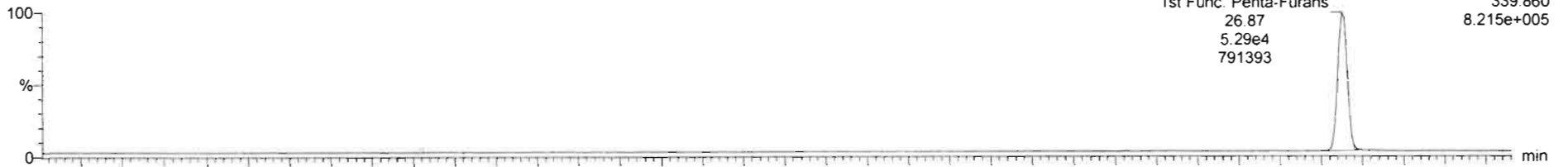
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

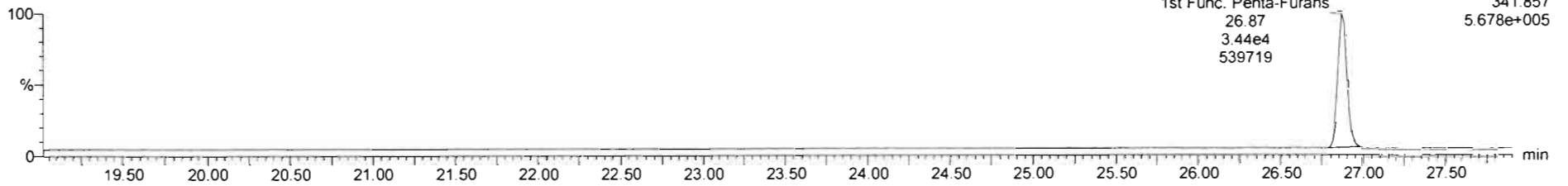
Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

1st Func. Penta-Furans

200305R2\_15

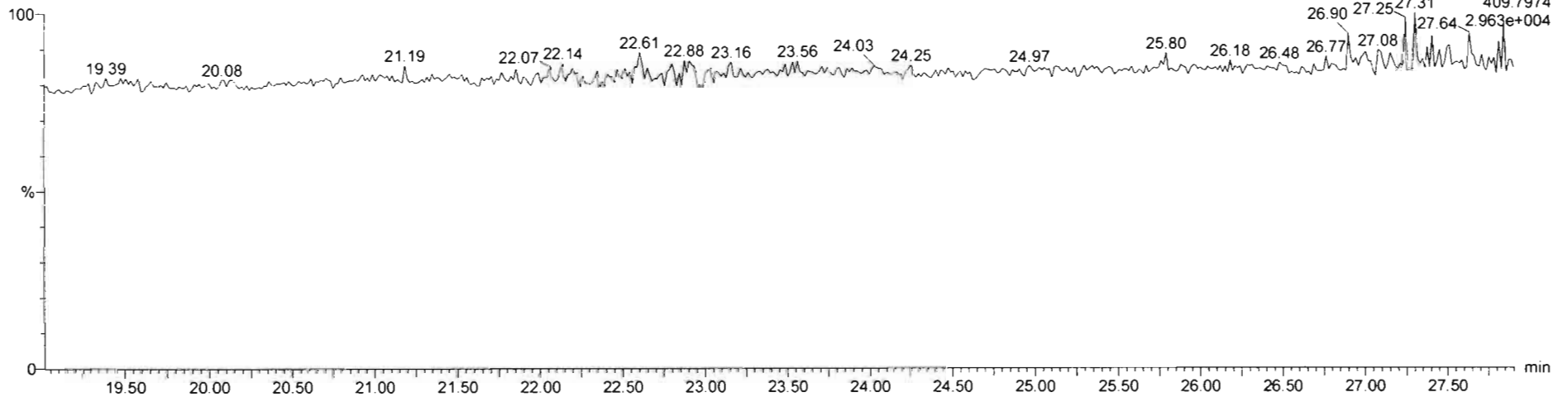


200305R2\_15



DPE6

200305R2\_15

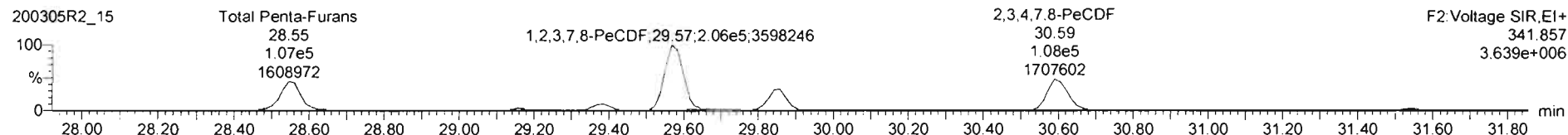
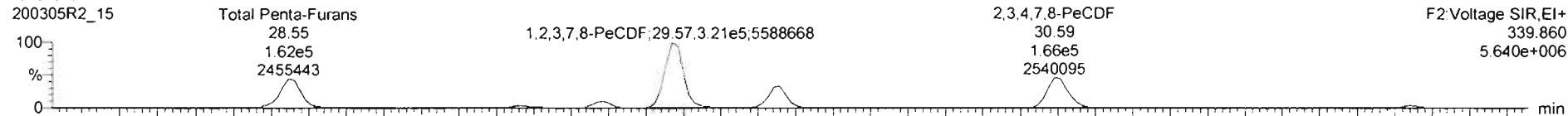


Dataset: Untitled

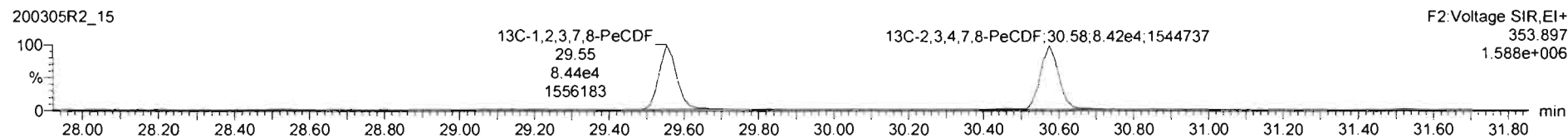
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

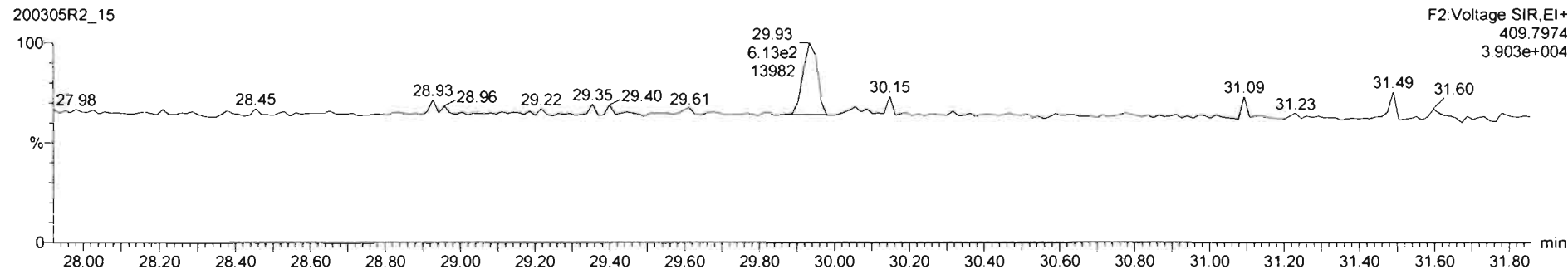
**1,2,3,7,8-PeCDF**



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



**DPE2**

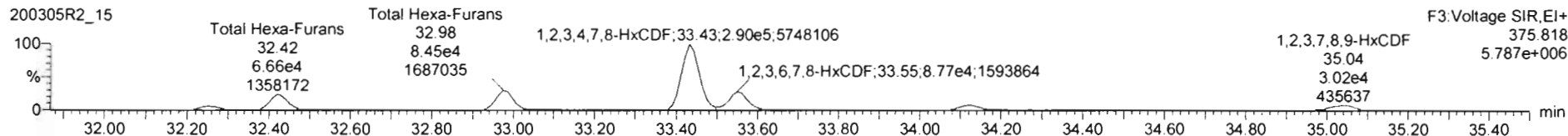
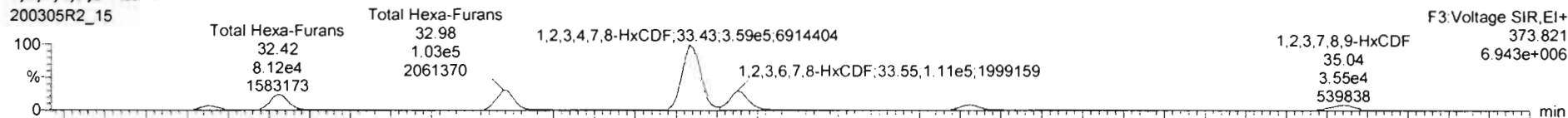


Dataset: Untitled

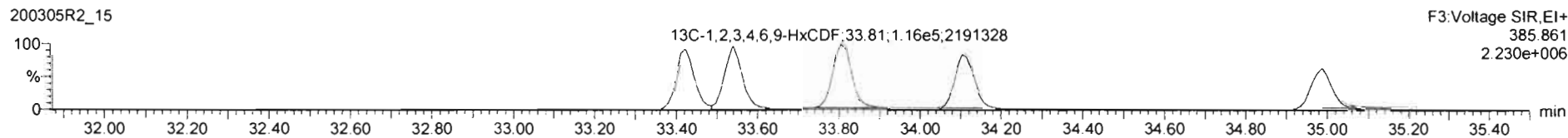
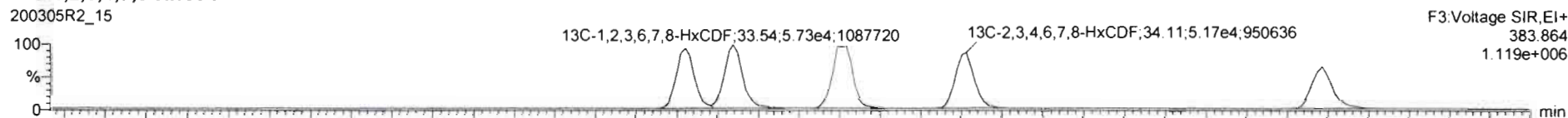
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

Name: 200305R2\_15, Date: 05-Mar-2020, Time: 21:49:22, ID: B0B0291-DUP1@5X Duplicate 18.51, Description: Duplicate

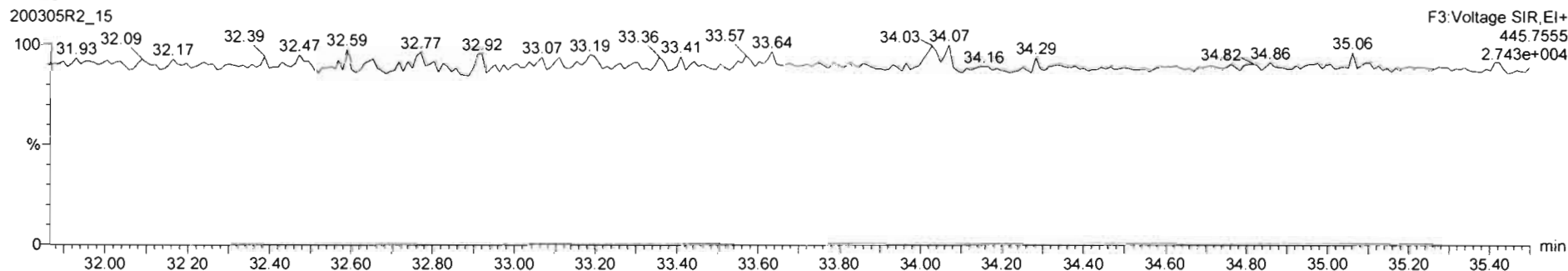
**1,2,3,4,7,8-HxCDF**



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



**DPE3**





Dataset: Untitled

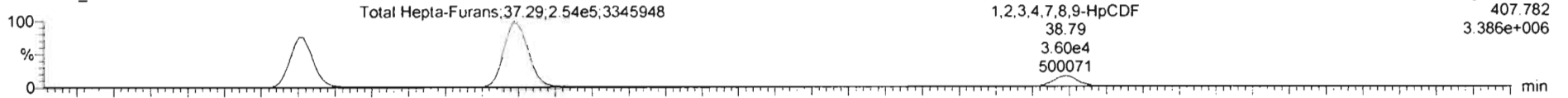
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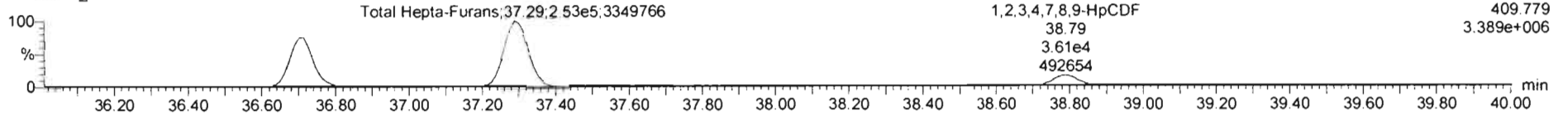
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1,2,3,4,6,7,8-HpCDF

200305R2\_15



200305R2\_15

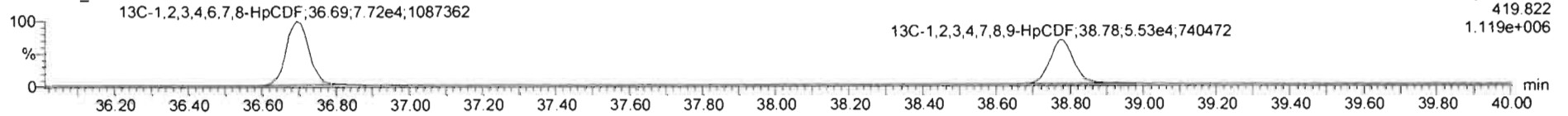


13C-1,2,3,4,6,7,8-HpCDF

200305R2\_15

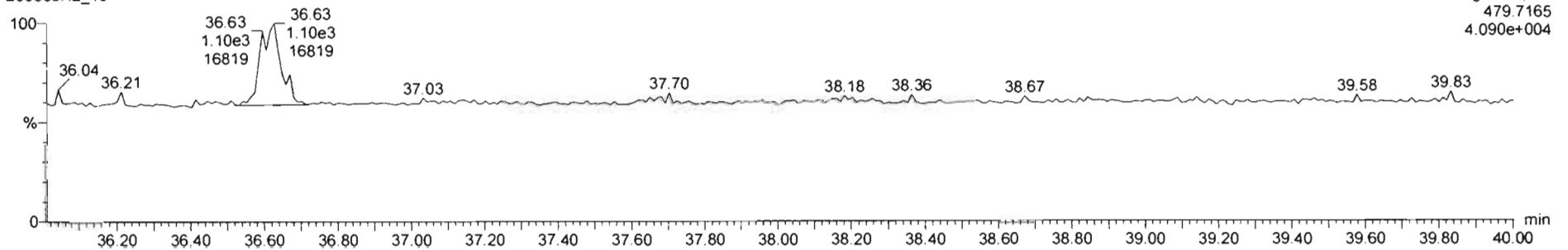


200305R2\_15



DPE4

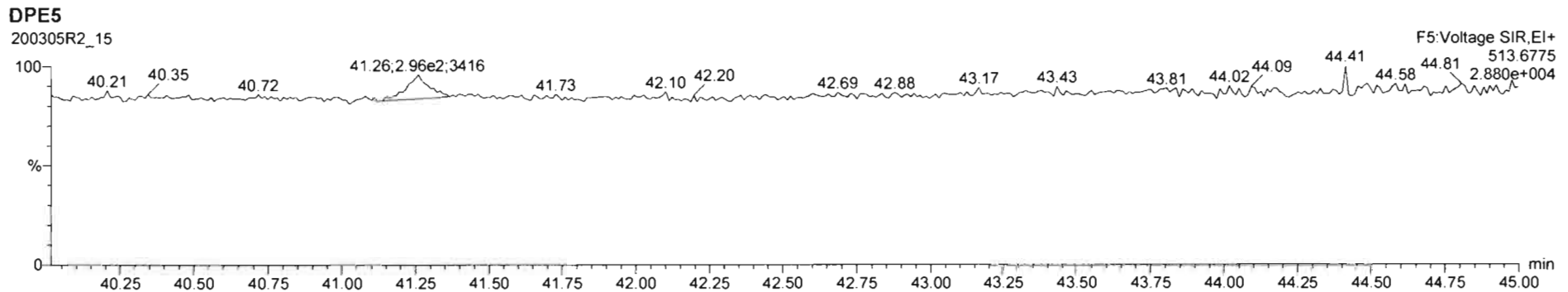
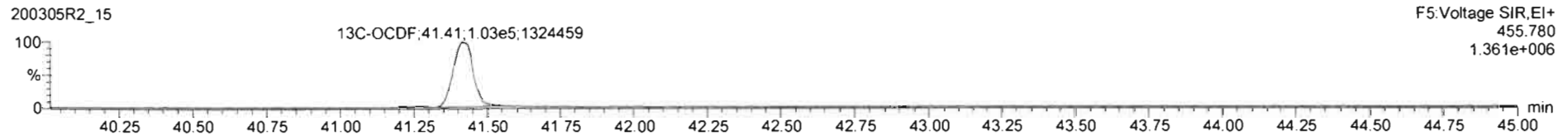
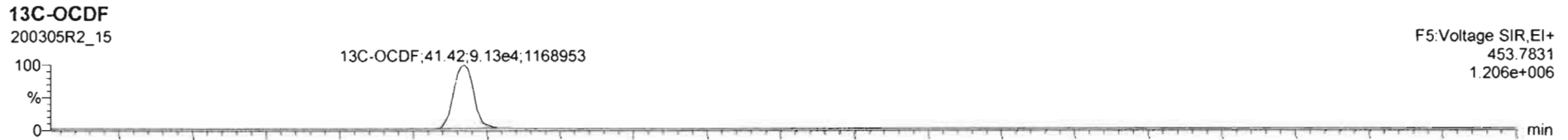
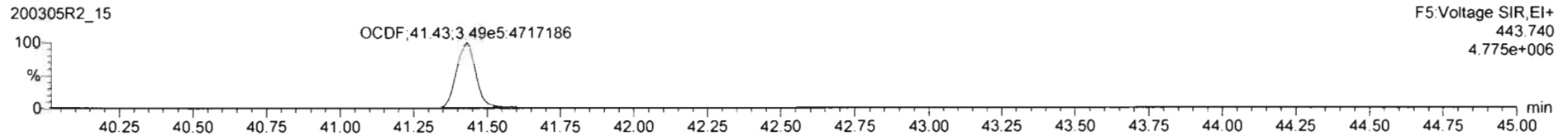
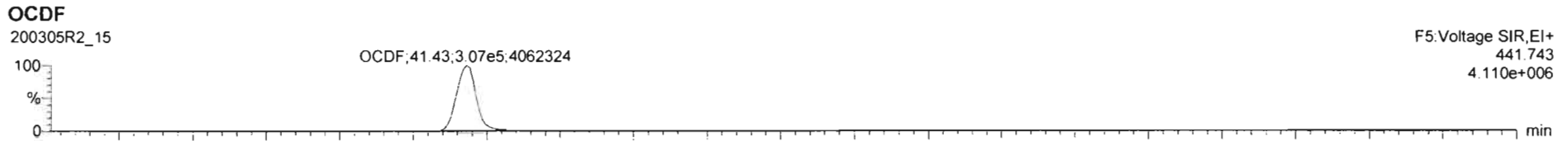
200305R2\_15



Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time  
Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

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Dataset: Untitled

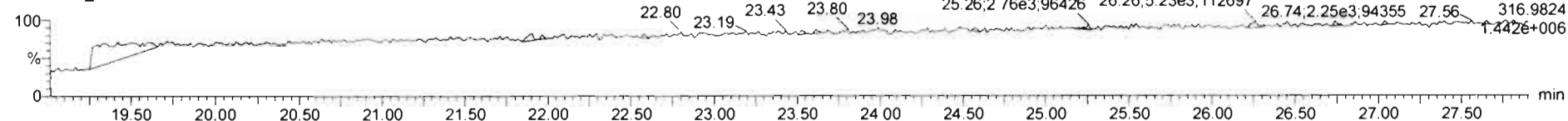
Last Altered: Friday, March 06, 2020 08:57:37 Pacific Standard Time

Printed: Friday, March 06, 2020 08:57:59 Pacific Standard Time

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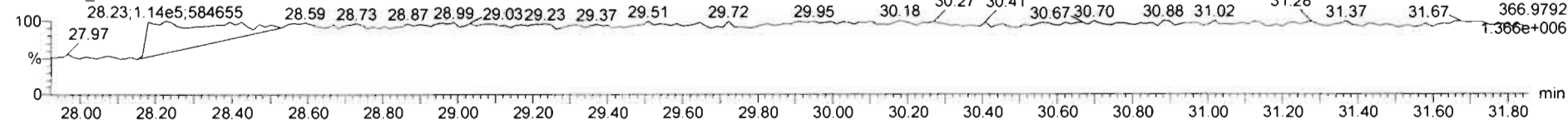
PFK1

200305R2\_15



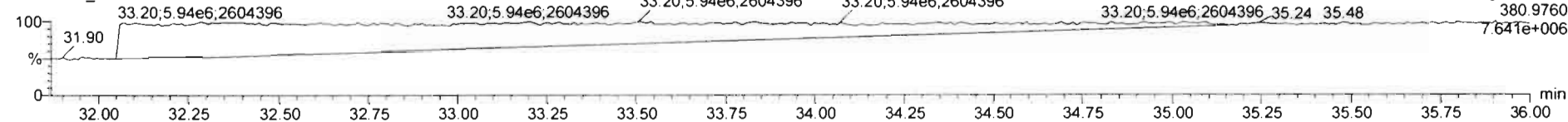
PFK2

200305R2\_15



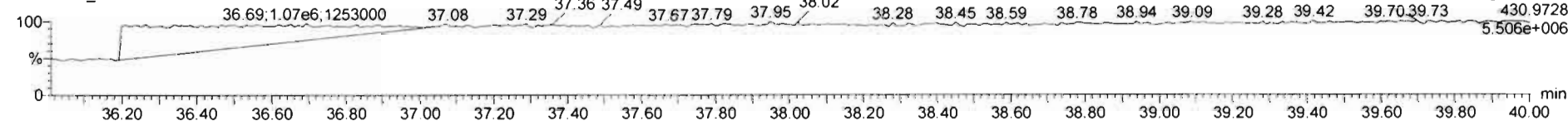
PFK3

200305R2\_15



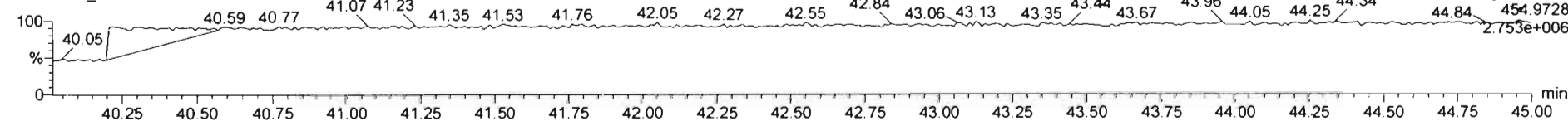
PFK4

200305R2\_15



PFK5

200305R2\_15



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-8.qld

Last Altered: Friday, March 06, 2020 17:22:49 Pacific Standard Time

Printed: Friday, March 06, 2020 17:23:17 Pacific Standard Time

MN 03/06/2020

C7 03/09/2020

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD														
2	2 1,2,3,7,8-PeCDD	953.859	0.669	NO	0.972	10.036	30.86	30.85	1.00	1.00	NO	1.155		0.608 0.875	1.155
3	3 1,2,3,4,7,8-HxCDD	800.097	1.288	NO	1.07	10.036	34.21	34.23	1.00	1.00	NO	1.196		1.09	1.196
4	4 1,2,3,6,7,8-HxCDD	4600.481	1.280	NO	0.921	10.036	34.32	34.32	1.00	1.00	NO	6.799		1.08	6.799
5	5 1,2,3,7,8,9-HxCDD	1739.965	0.896	YES	0.918	10.036	34.61	34.57	1.00	1.00	NO	2.764		1.20	2.359
6	6 1,2,3,4,6,7,8-HpCDD	147984.617	1.009	NO	0.923	10.036	38.06	38.07	1.00	1.00	NO	298.2		3.89	298.2
7	7 OCDD	2023169.2...	0.887	NO	0.975	10.036	41.14	41.16	1.00	1.00	NO	4201		3.85	4201
8	8 2,3,7,8-TCDF	96722.379	0.729	NO	0.802	10.036	24.79	24.79	1.00	1.00	NO	91.56	(85.78)	0.713	91.56
9	9 1,2,3,7,8-PeCDF	127094.215	1.541	NO	0.907	10.036	29.53	29.52	1.00	1.00	NO	111.5		1.06	111.5
10	10 2,3,4,7,8-PeCDF	73726.373	1.606	NO	0.952	10.036	30.55	30.53	1.00	1.00	NO	65.05		1.08	65.05
11	11 1,2,3,4,7,8-HxCDF	223279.789	1.238	NO	0.862	10.036	33.35	33.36	1.00	1.00	NO	312.9		1.14	312.9
12	12 1,2,3,6,7,8-HxCDF	68510.053	1.227	NO	0.841	10.036	33.48	33.48	1.00	1.00	NO	90.55		1.08	90.55
13	13 2,3,4,6,7,8-HxCDF	14932.915	1.173	NO	0.898	10.036	34.07	34.05	1.00	1.00	NO	20.83		1.26	20.83
14	14 1,2,3,7,8,9-HxCDF	19968.039	1.428	YES	0.858	10.036	34.91	34.97	1.00	1.00	NO	32.39		1.68	29.89
15	15 1,2,3,4,6,7,8-HpCDF	83765.281	1.018	NO	0.851	10.036	36.67	36.64	1.00	1.00	NO	158.3		1.87	158.3
16	16 1,2,3,4,7,8,9-HpCDF	23228.586	0.970	NO	0.980	10.036	38.72	38.73	1.00	1.00	NO	51.65		2.32	51.65
17	17 OCDF	119314.773	0.853	NO	0.806	10.036	41.33	41.34	1.00	1.00	NO	258.9		1.42	258.9
18	18 13C-2,3,7,8-TCDD	211856.453	0.791	NO	1.20	10.036	25.66	25.70	1.03	1.03	NO	26.34	13.2	0.163	
19	19 13C-1,2,3,7,8-PeCDD	169301.618	0.632	NO	0.967	10.036	30.78	30.83	1.23	1.23	NO	26.09	13.1	0.211	
20	20 13C-1,2,3,4,7,8-HxCDD	124461.765	1.253	NO	0.874	10.036	34.20	34.20	1.01	1.01	NO	20.46	10.3	0.292	
21	21 13C-1,2,3,6,7,8-HxCDD	146377.320	1.264	NO	1.05	10.036	34.31	34.32	1.02	1.02	NO	20.11	10.1	0.244	
22	22 13C-1,2,3,7,8,9-HxCDD	136629.028	1.260	NO	0.974	10.036	34.61	34.57	1.03	1.02	NO	20.14	10.1	0.262	
23	23 13C-1,2,3,4,6,7,8-HpCDD	107149.305	1.076	NO	0.747	10.036	38.18	38.05	1.13	1.13	NO	20.60	10.3	0.327	
24	24 13C-OCDD	196944.070	0.892	NO	0.707	10.036	41.09	41.14	1.22	1.22	NO	40.05	10.0	0.266	
25	25 13C-2,3,7,8-TCDF	262485.430	0.766	NO	1.07	10.036	24.84	24.76	0.99	0.99	NO	26.78	13.4	0.281	
26	26 13C-1,2,3,7,8-PeCDF	250404.711	1.584	NO	1.00	10.036	29.42	29.51	1.18	1.18	NO	27.17	13.6	0.491	
27	27 13C-2,3,4,7,8-PeCDF	237361.055	1.591	NO	0.962	10.036	30.39	30.51	1.21	1.22	NO	26.82	13.5	0.512	
28	28 13C-1,2,3,4,7,8-HxCDF	164883.062	0.496	NO	1.05	10.036	33.33	33.35	0.99	0.99	NO	22.58	11.3	0.285	
29	29 13C-1,2,3,6,7,8-HxCDF	179201.168	0.515	NO	1.19	10.036	33.43	33.47	0.99	0.99	NO	21.64	10.9	0.251	
30	30 13C-2,3,4,6,7,8-HxCDF	159067.426	0.495	NO	1.07	10.036	34.04	34.04	1.01	1.01	NO	21.43	10.8	0.280	
31	31 13C-1,2,3,7,8,9-HxCDF	143197.461	0.501	NO	0.922	10.036	34.95	34.91	1.04	1.04	NO	22.30	11.2	0.324	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-8.qld

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Printed: Friday, March 06, 2020 17:23:17 Pacific Standard Time

Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	123919.368	0.432	NO	0.767	10.036	36.70	36.63	1.09	1.09	NO	23.21	11.6	0.236	
33	33 13C-1,2,3,4,7,8,9-HpCDF	91455.607	0.442	NO	0.552	10.036	38.72	38.72	1.15	1.15	NO	23.79	11.9	0.328	
34	34 13C-OCDF	228018.820	0.873	NO	0.789	10.036	41.32	41.33	1.23	1.23	NO	41.50	10.4	0.273	
35	35 37Cl-2,3,7,8-TCDD	557015.750			1.18	10.036	25.69	25.74	1.03	1.03	NO	70.55	88.5	0.0558	
36	36 13C-1,2,3,4-TCDD	1337526.7...	0.792	NO	1.00	10.036	25.11	25.02	1.00	1.00	NO	199.3	100	0.195	
37	37 13C-1,2,3,4-TCDF	1833727.4...	0.782	NO	1.00	10.036	23.37	23.22	1.00	1.00	NO	199.3	100	0.299	
38	38 13C-1,2,3,4,6,9-HxCDF	1387100.9...	0.517	NO	1.00	10.036	33.71	33.73	1.00	1.00	NO	199.3	100	0.299	
39	39 Total Tetra-Dioxins				0.988	10.036	24.62		0.00		NO	3.782		0.608	3.782
40	40 Total Penta-Dioxins				0.972	10.036	29.96		0.00		NO	4.487		0.875	10.03
41	41 Total Hexa-Dioxins				0.921	10.036	33.63		0.00		NO	68.00		1.17	72.09
42	42 Total Hepta-Dioxins				0.923	10.036	37.64		0.00		NO	714.5		3.89	714.5
43	43 Total Tetra-Furans				0.802	10.036	23.61		0.00		NO	264.8		0.713	274.2
44	44 1st Func. Penta-Furans				0.907	10.036	27.09		0.00		NO	26.08		0.298	26.08
45	45 Total Penta-Furans				0.907	10.036	29.27		0.00		NO	329.0		1.10	334.3
46	46 Total Hexa-Furans				0.898	10.036	33.56		0.00		NO	561.4		1.22	598.8
47	47 Total Hepta-Furans				0.851	10.036	37.83		0.00		NO	419.1		2.21	419.1



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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-8.qld

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Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

**Tetra-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	39 Total Tetra-Dioxins	3.97e3	2.12e5	0.754	NO	24.62	21.53	3.782	3.782

**Penta-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	0.00e0	1.69e5	0.813	YES	29.96	29.07	0.0000	0.8007
2	40 Total Penta-Dioxins	2.75e3	1.69e5	0.664	NO	29.96	28.53	3.332	3.332
3	40 Total Penta-Dioxins	0.00e0	1.69e5	0.878	YES	29.96	30.93	0.0000	0.6594
4	2 1,2,3,7,8-PeCDD	9.54e2	1.69e5	0.669	NO	30.86	30.85	1.155	1.155
5	40 Total Penta-Dioxins	0.00e0	1.69e5	0.764	YES	29.96	30.06	0.0000	0.9948
6	40 Total Penta-Dioxins	0.00e0	1.69e5	0.725	YES	29.96	29.84	0.0000	0.4986
7	40 Total Penta-Dioxins	0.00e0	1.69e5	0.779	YES	29.96	29.77	0.0000	0.8785
8	40 Total Penta-Dioxins	0.00e0	1.69e5	0.513	YES	29.96	29.60	0.0000	1.708

**Hexa-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	5 1,2,3,7,8,9-HxCDD	1.74e3	1.37e5	0.896	YES	34.61	34.57	0.0000	2.359
2	4 1,2,3,6,7,8-HxCDD	4.60e3	1.46e5	1.280	NO	34.32	34.32	6.799	6.799
3	3 1,2,3,4,7,8-HxCDD	8.00e2	1.24e5	1.288	NO	34.21	34.23	1.196	1.196
4	41 Total Hexa-Dioxins	0.00e0	0.00e0	1.623	YES	33.63	33.64	0.0000	1.731
5	41 Total Hexa-Dioxins	1.76e4	0.00e0	1.287	NO	33.63	33.54	28.00	28.00
6	41 Total Hexa-Dioxins	1.79e3	0.00e0	1.259	NO	33.63	33.31	2.848	2.848
7	41 Total Hexa-Dioxins	1.83e4	0.00e0	1.301	NO	33.63	32.75	29.15	29.15

**Hepta-Dioxins**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	6 1,2,3,4,6,7,8-HpCDD	1.48e5	1.07e5	1.009	NO	38.06	38.07	298.2	298.2
2	42 Total Hepta-Dioxins	2.07e5	1.07e5	1.030	NO	37.64	37.03	416.4	416.4

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-8.qld

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**Tetra-Furans**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	43 Total Tetra-Furans	3.54e3	2.62e5	0.872	NO	23.61	24.12	3.352	3.352
2	43 Total Tetra-Furans	9.36e4	2.62e5	0.754	NO	23.61	23.79	88.63	88.63
3	43 Total Tetra-Furans	1.50e4	2.62e5	0.726	NO	23.61	23.22	14.22	14.22
4	43 Total Tetra-Furans	3.89e3	2.62e5	0.666	NO	23.61	22.32	3.682	3.682
5	43 Total Tetra-Furans	9.45e3	2.62e5	0.694	NO	23.61	21.98	8.947	8.947
6	43 Total Tetra-Furans	2.70e4	2.62e5	0.716	NO	23.61	21.51	25.52	25.52
7	43 Total Tetra-Furans	5.37e3	2.62e5	0.766	NO	23.61	21.14	5.085	5.085
8	43 Total Tetra-Furans	7.97e3	2.62e5	0.768	NO	23.61	20.59	7.545	7.545
9	43 Total Tetra-Furans	1.65e3	2.62e5	0.787	NO	23.61	20.02	1.564	1.564
10	43 Total Tetra-Furans	7.78e2	2.62e5	0.715	NO	23.61	19.48	0.7361	0.7361
11	43 Total Tetra-Furans	0.00e0	2.62e5	1.048	YES	23.61	26.87	0.0000	8.656
12	43 Total Tetra-Furans	1.27e3	2.62e5	0.803	NO	23.61	26.60	1.202	1.202
13	43 Total Tetra-Furans	0.00e0	2.62e5	1.073	YES	23.61	26.47	0.0000	0.7617
14	43 Total Tetra-Furans	4.22e3	2.62e5	0.717	NO	23.61	25.18	3.996	3.996
15	8 2,3,7,8-TCDF	9.67e4	2.62e5	0.729	NO	24.79	24.79	91.56	91.56
16	43 Total Tetra-Furans	9.29e3	2.62e5	0.790	NO	23.61	24.67	8.790	8.790

P

**Penta-Furans function 1**

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	44 1st Func. Penta-Fura...	2.90e4	0.00e0	1.654	NO	27.09	26.87	26.08	26.08

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-8.qld

Last Altered: Friday, March 06, 2020 17:22:49 Pacific Standard Time

Printed: Friday, March 06, 2020 17:23:28 Pacific Standard Time

Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

**Penta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	4.35e3	0.00e0	1.658	NO	29.27	31.48	3.917	3.917
2	10 2,3,4,7,8-PeCDF	7.37e4	2.37e5	1.606	NO	30.55	30.53	65.05	65.05
3	45 Total Penta-Furans	5.08e4	0.00e0	1.518	NO	29.27	29.80	45.71	45.71
4	9 1,2,3,7,8-PeCDF	1.27e5	2.50e5	1.541	NO	29.53	29.52	111.5	111.5
5	45 Total Penta-Furans	1.53e4	0.00e0	1.426	NO	29.27	29.32	13.80	13.80
6	45 Total Penta-Furans	0.00e0	0.00e0	1.987	YES	29.27	29.11	0.0000	5.304
7	45 Total Penta-Furans	7.64e4	0.00e0	1.481	NO	29.27	28.52	68.79	68.79
8	45 Total Penta-Furans	8.34e3	0.00e0	1.524	NO	29.27	30.58	7.512	7.512
9	45 Total Penta-Furans	1.42e4	0.00e0	1.676	NO	29.27	29.55	12.79	12.79

**Hexa-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	46 Total Hexa-Furans	2.34e3	0.00e0	1.350	NO	33.56	33.26	3.214	3.214
2	46 Total Hexa-Furans	4.46e4	0.00e0	1.217	NO	33.56	32.90	61.17	61.17
3	46 Total Hexa-Furans	4.23e4	0.00e0	1.210	NO	33.56	32.36	58.14	58.14
4	46 Total Hexa-Furans	1.06e4	0.00e0	1.275	NO	33.56	32.19	14.58	14.58
5	14 1,2,3,7,8,9-HxCDF	2.00e4	1.43e5	1.428	YES	34.91	34.97	0.0000	29.89
6	13 2,3,4,6,7,8-HxCDF	1.49e4	1.59e5	1.173	NO	34.07	34.05	20.83	20.83
7	12 1,2,3,6,7,8-HxCDF	6.85e4	1.79e5	1.227	NO	33.48	33.48	90.55	90.55
8	11 1,2,3,4,7,8-HxCDF	2.23e5	1.65e5	1.238	NO	33.35	33.36	312.9	312.9
9	46 Total Hexa-Furans	0.00e0	0.00e0	1.607	YES	33.56	34.99	0.0000	7.442

**Hepta-Furans**

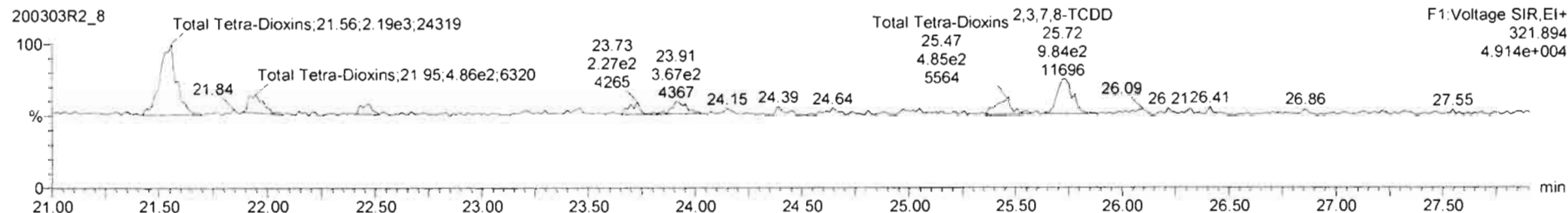
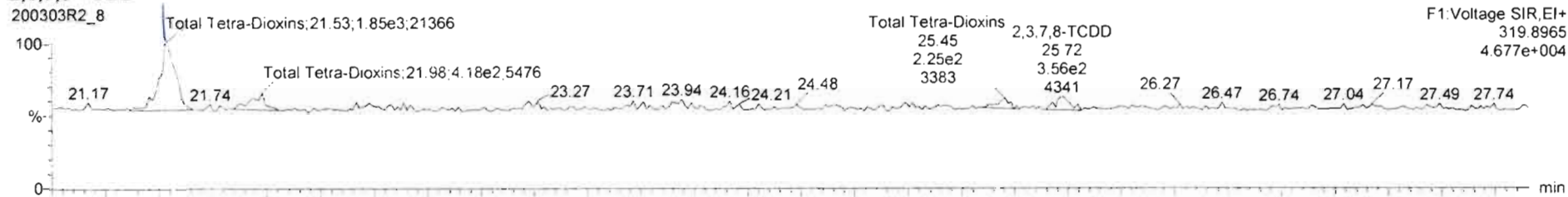
	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	16 1,2,3,4,7,8,9-HpCDF	2.32e4	9.15e4	0.970	NO	38.72	38.73	51.65	51.65
2	47 Total Hepta-Furans	9.62e4	0.00e0	1.007	NO	37.83	37.24	209.2	209.2
3	15 1,2,3,4,6,7,8-HpCDF	8.38e4	1.24e5	1.018	NO	36.67	36.64	158.3	158.3

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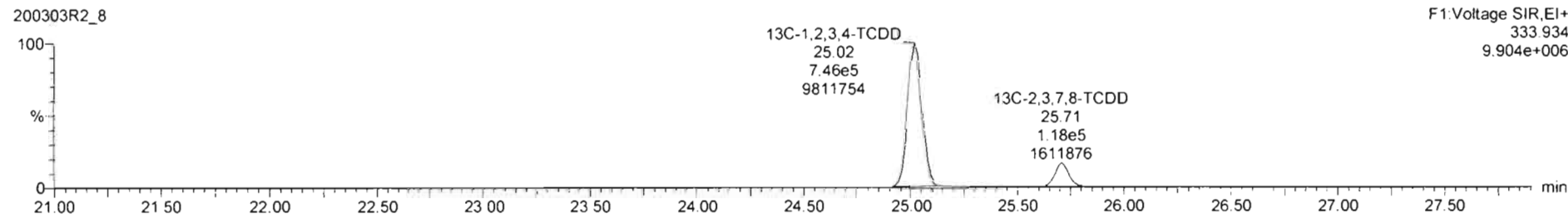
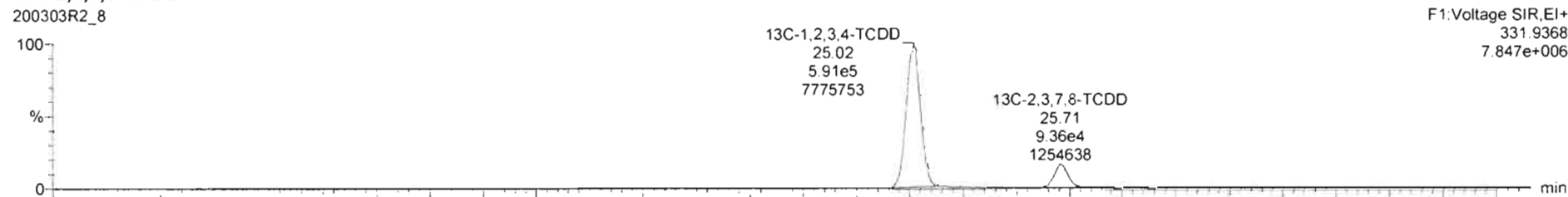
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Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

### 2,3,7,8-TCDD



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

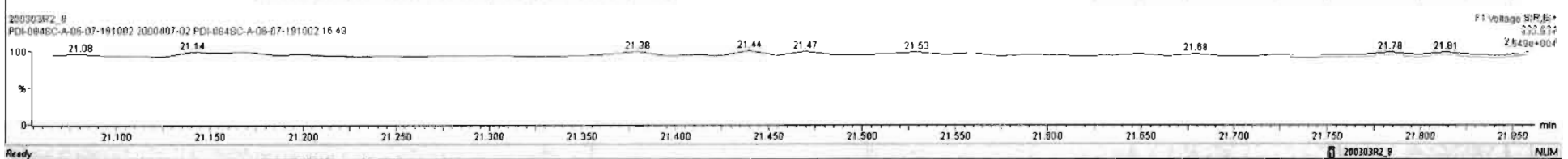
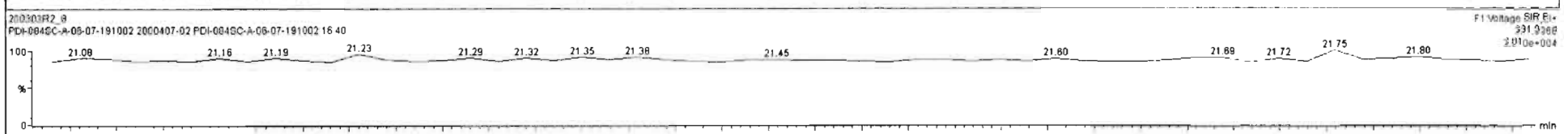
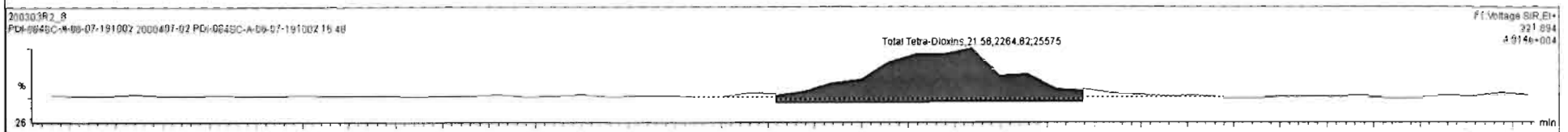
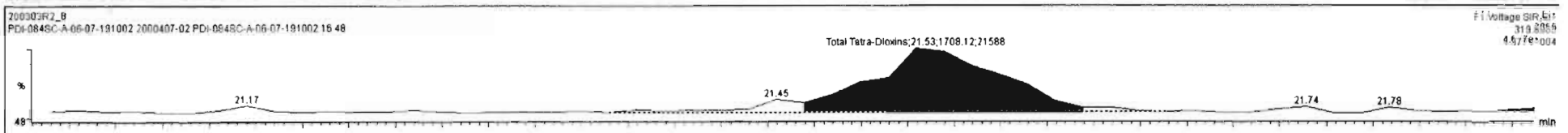




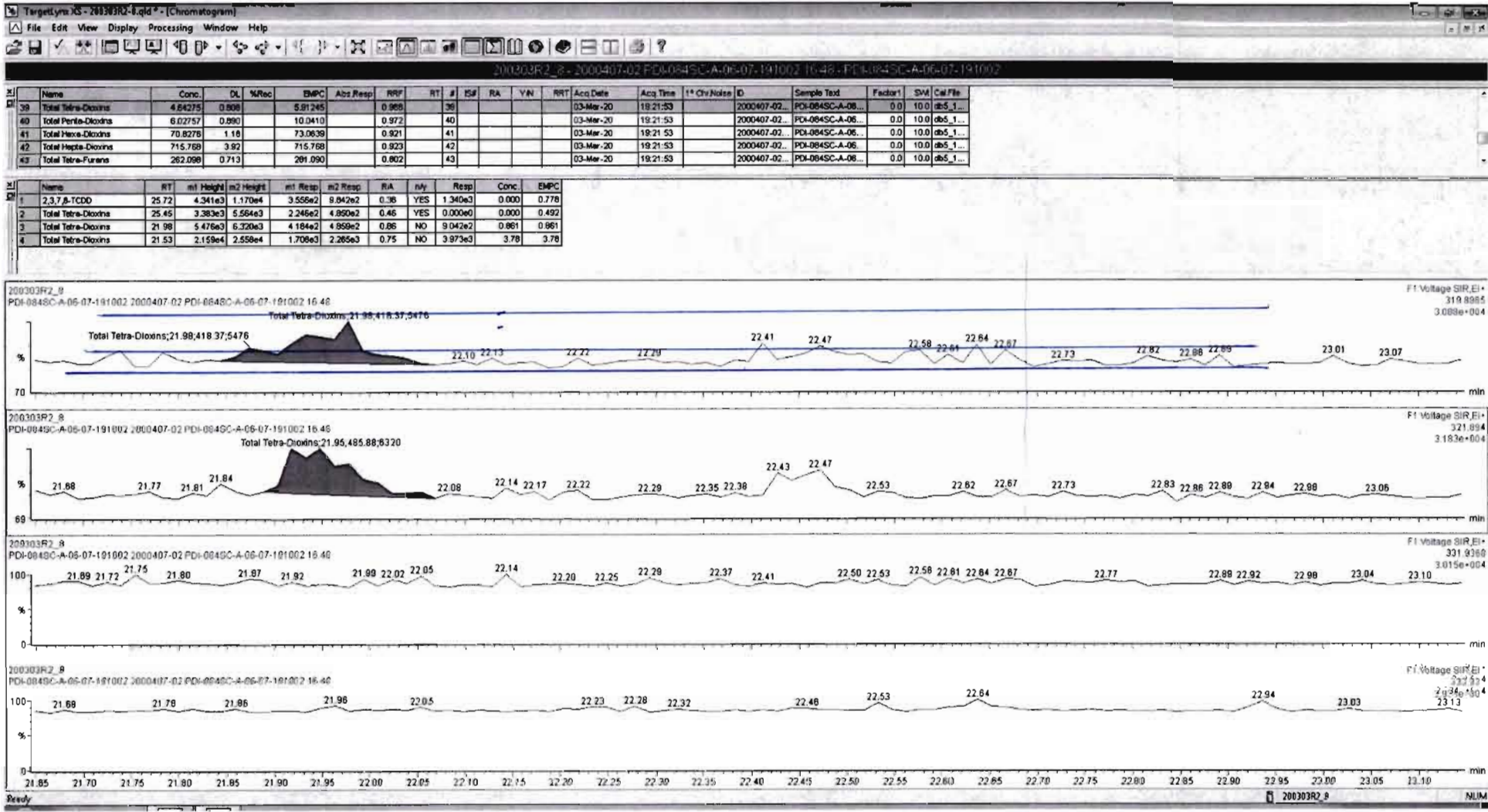
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Name	Conc.	DL	%Rec	EMPC	Abs Resp	R/P	RT	#	ISI	RA	V/N	RRT	Acq Date	Acq Time	1 <sup>st</sup> Chr Noise ID	Sample Text	Factor1	SW	Cal File
38 Total Tetra-Dioxins	4.54275	0.806		5.91245		0.989	39						03-Mar-20	19:21:53	2000407-02	PCI-084SC-A-06...	0.0	10.0	db5_1...
40 Total Penta-Dioxins	6.02757	0.890		10.0410		0.972	40						03-Mar-20	19:21:53	2000407-02	PCI-084SC-A-06...	0.0	10.0	db5_1...
41 Total Hexa-Dioxins	70.8278	1.18		73.0639		0.921	41						03-Mar-20	19:21:53	2000407-02	PCI-084SC-A-06...	0.0	10.0	db5_1...
42 Total Hepta-Dioxins	715.768	3.92		715.768		0.923	42						03-Mar-20	19:21:53	2000407-02	PCI-084SC-A-06...	0.0	10.0	db5_1...
43 Total Tetra-Furans	262.098	0.713		261.090		0.902	43						03-Mar-20	19:21:53	2000407-02	PCI-084SC-A-06...	0.0	10.0	db5_1...

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC
1 2,3,7,8-TCDD	25.72	4.341e3	1.170e4	3.556e2	9.842e2	0.36	YES	1.340e3	0.000	0.778
2 Total Tetra-Dioxins	25.45	3.383e3	5.584e3	2.246e2	4.850e2	0.46	YES	0.000e0	0.000	0.492
3 Total Tetra-Dioxins	21.88	5.476e3	6.320e3	4.184e2	4.859e2	0.86	NO	9.042e2	0.861	0.861
4 Total Tetra-Dioxins	21.53	2.159e4	2.559e4	1.709e3	2.265e3	0.75	NO	3.973e3	3.78	3.78



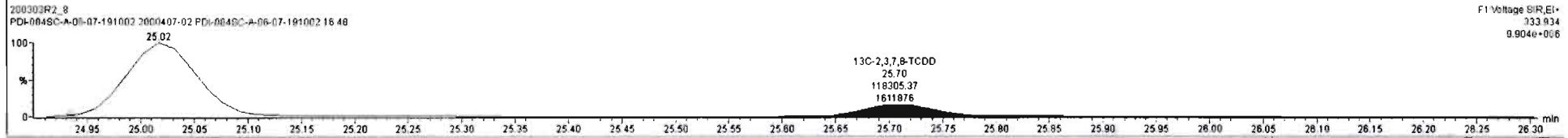
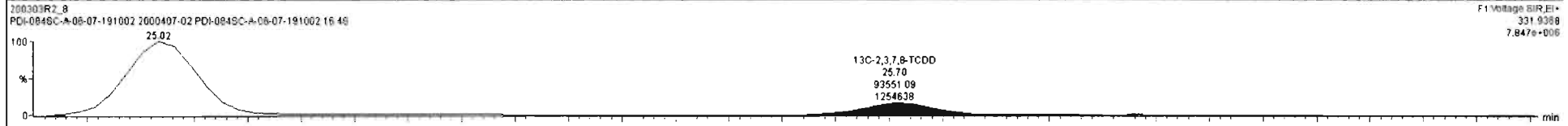
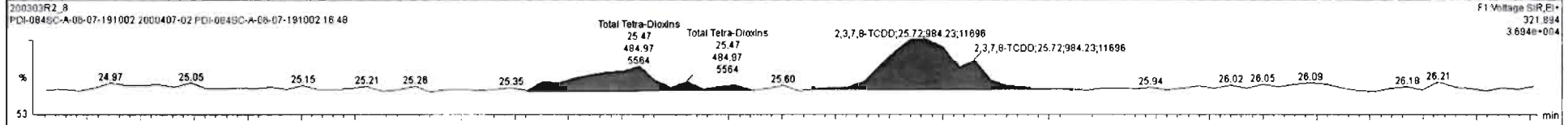
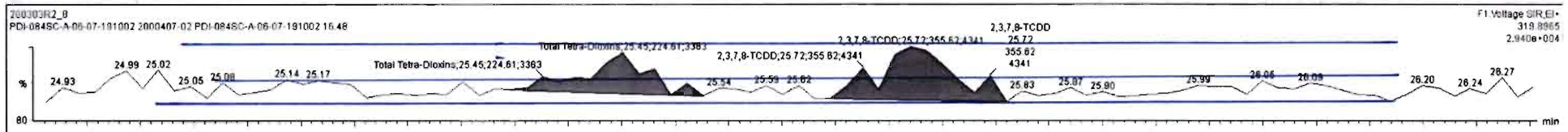




200303R2\_8 - 2000407-02 PDI-084SC-A-06-07-191002 16 48 - PDI-084SC-A-06-07-191002

Name	Conc.	DL	%Rec	EMPC	Abs Resp	RRF	RT	#	IS#	RA	Y/N	RRT	Acq Date	Acq Time	* Chr Noise	ID	Sample Text	Factor1	SM	Cal File
39 Total Tetra-Dioxins	4.84278	0.808		5.91245		0.808	38						03-Mar-20	19:21:53		2000407-02...	PDI-084SC-A-06...	0.0	10.0	obs_1...
40 Total Penta-Dioxins	6.02757	0.890		10.0410		0.972	40						03-Mar-20	19:21:53		2000407-02...	PDI-084SC-A-06...	0.0	10.0	obs_1...
41 Total Hexa-Dioxins	70.8276	1.18		73.0639		0.921	41						03-Mar-20	19:21:53		2000407-02...	PDI-084SC-A-06...	0.0	10.0	obs_1...
42 Total Hepta-Dioxins	715.798	3.92		715.798		0.923	42						03-Mar-20	19:21:53		2000407-02...	PDI-084SC-A-06...	0.0	10.0	obs_1...
43 Total Tetra-Furans	262.098	0.713		281.090		0.802	43						03-Mar-20	19:21:53		2000407-02...	PDI-084SC-A-06...	0.0	10.0	obs_1...

Name	RT	int Height	int Height	int Resp	int Resp	RA	intY	Resp	Conc	EMPC
1 2,3,7,8-TCDD	25.72	4.341e3	1.170e4	3.558e2	9.942e2	0.38	YES	1.340e3	0.000	0.778
2 Total Tetra-Dioxins	25.45	3.383e3	5.564e3	2.246e2	4.850e2	0.45	YES	0.000e0	0.000	0.492
3 Total Tetra-Dioxins	21.98	5.476e3	6.320e3	4.184e2	4.859e2	0.86	NO	9.042e2	0.861	0.861
4 Total Tetra-Dioxins	21.53	2.159e4	2.559e4	1.708e3	2.265e3	0.75	NO	3.973e3	3.78	3.78



Dataset: Untitled

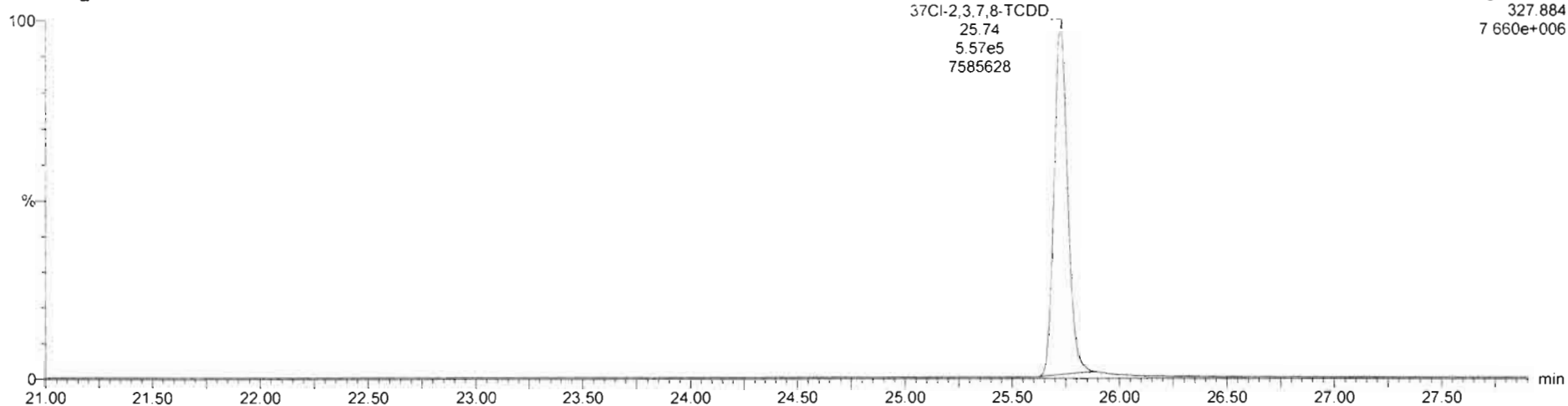
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

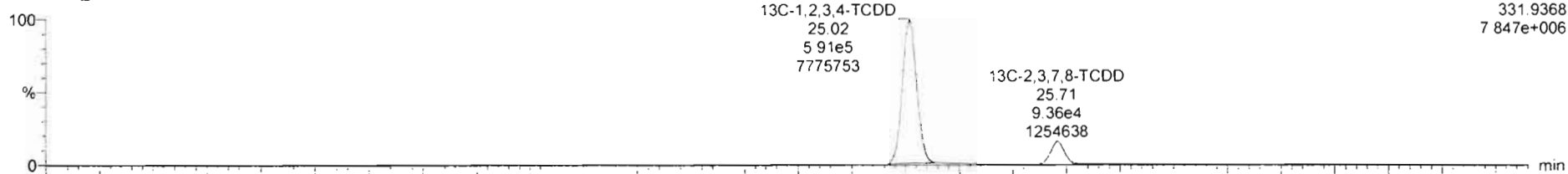
**37Cl-2,3,7,8-TCDD**

200303R2\_8

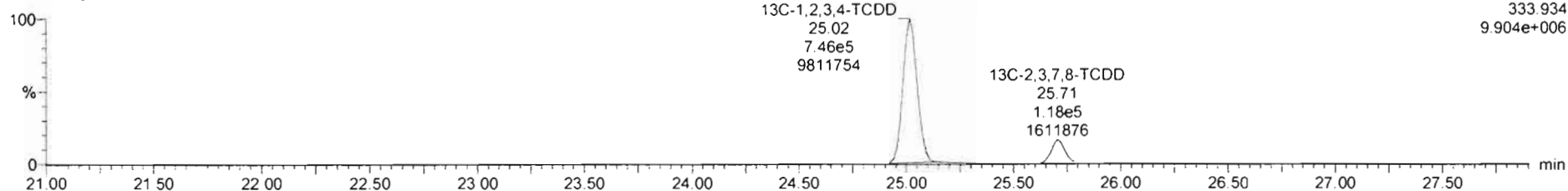


**13C-1,2,3,4-TCDD**

200303R2\_8



200303R2\_8

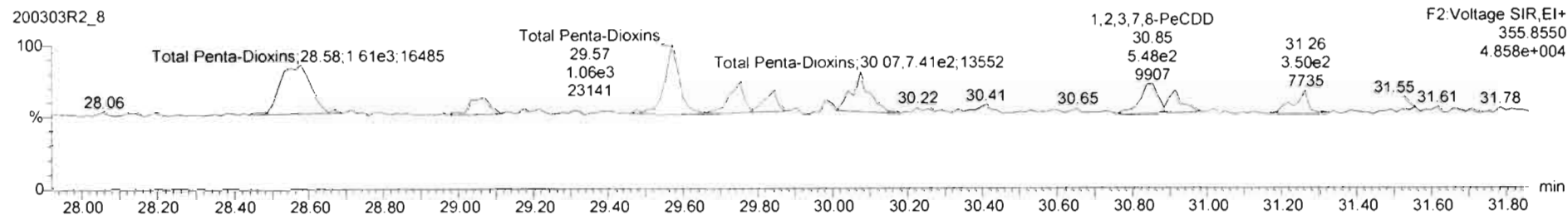
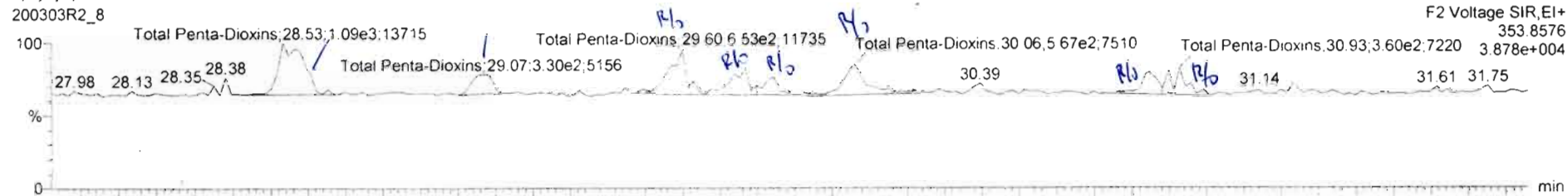


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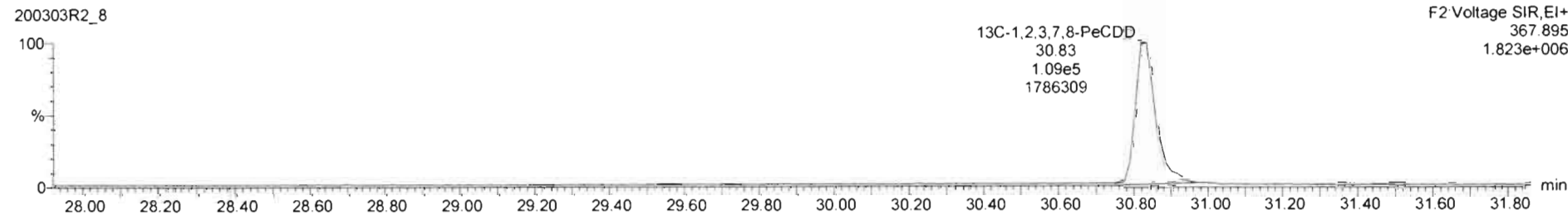
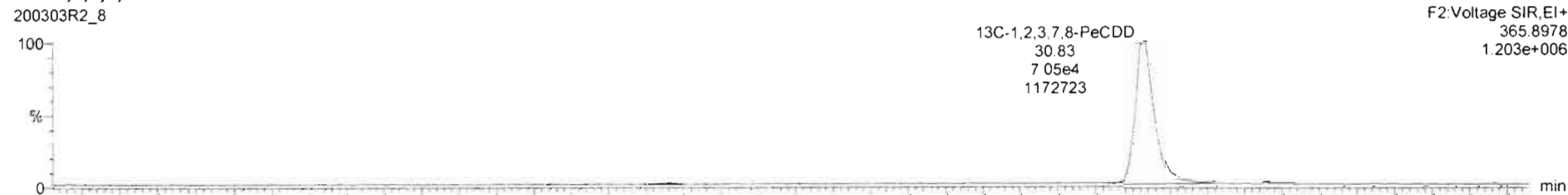
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
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Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

1,2,3,7,8-PeCDD



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



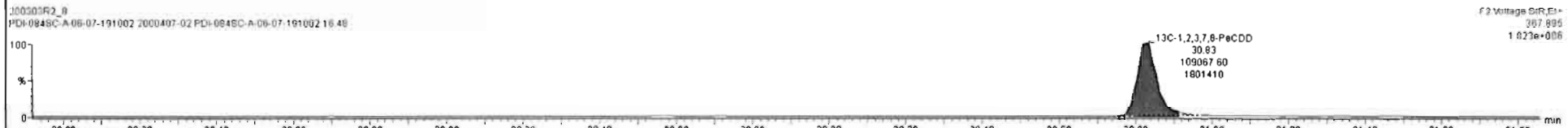
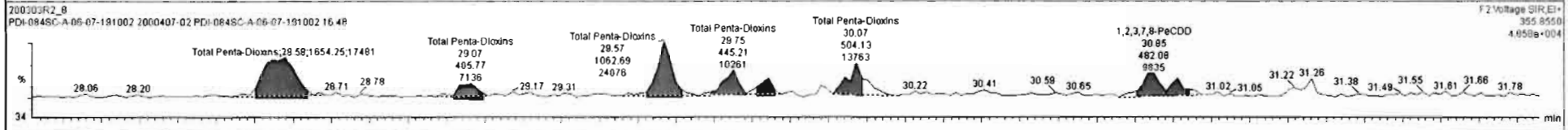
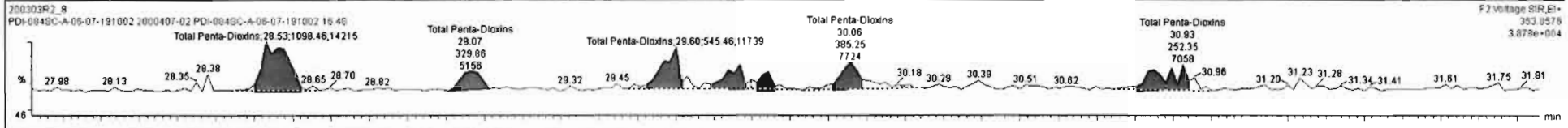


TargetLynx.XS - 200303R2\_8.qld - [Chromatogram]  
 File Edit View Display Processing Window Help

200303R2\_8 - 2000407-02 PDI-084SC-A-06-07-191002 16 48 - PDI-084SC-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wt/Vol	Pred RT	RT	Pred.R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
40	Total Penta-Dioxins				0.9723	10.036	28.96		0.000		NO	4.062	0.873	9.225	
41	Total Hexa-Dioxins				0.9211	10.036	33.63		0.000		NO	70.83	1.18	73.06	
42	Total Hepta-Dioxins				0.9231	10.036	37.64		0.000		NO	715.8	3.92	715.8	
43	Total Tetra-Furans				0.8020	10.036	23.61		0.000		NO	262.1	0.713	261.1	
44	1al Func. Penta-Furans				0.8074	10.036	27.09		0.000		NO	25.39	0.289	25.39	

#	Name	Pred RT	RT	wt Resp	st2 Resp	* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	2,3,7,8-PeCDD	30.86	30.85	3.062e2	4.821e2	0.630	0.84	NO	0.80678	0.90878
2	Total Penta-Dioxins	29.96	28.53	1.096e3	1.854e3	0.630	0.66	NO	3.1736	3.1736
3	Total Penta-Dioxins	29.96	29.07	3.299e2	4.058e2	0.630	0.81	YES	0.76254	0.00000
4	Total Penta-Dioxins	29.96	28.80	5.455e2	1.063e3	0.630	0.51	YES	1.6270	0.00000
5	Total Penta-Dioxins	29.96	28.77	3.470e2	4.452e2	0.630	0.78	YES	0.83696	0.00000
6	Total Penta-Dioxins	29.96	28.94	1.832e2	2.527e2	0.630	0.73	YES	0.47495	0.00000



Ready 200303R2\_8 NUM



Dataset: Untitled

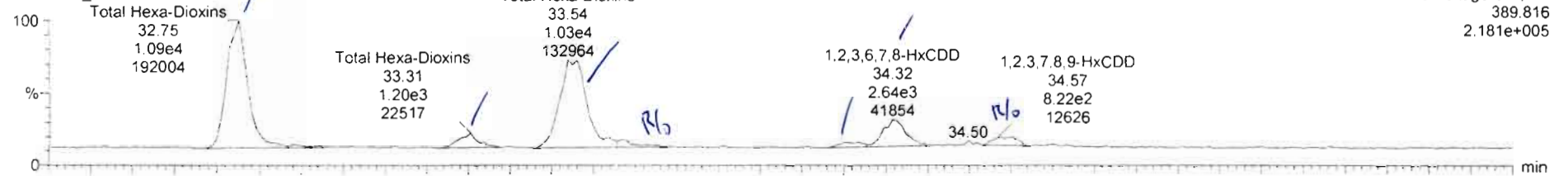
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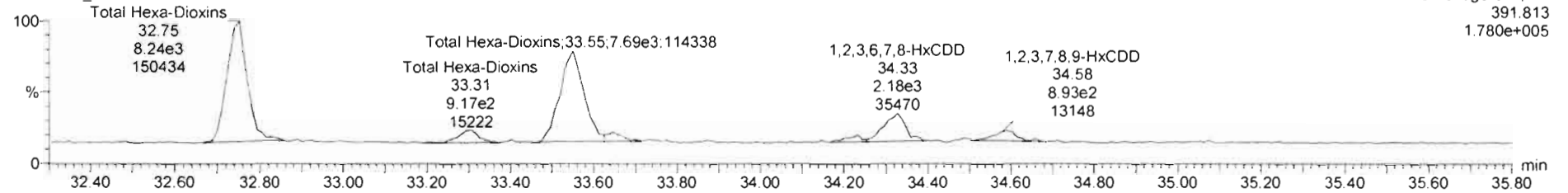
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1,2,3,4,7,8-HxCDD

200303R2\_8

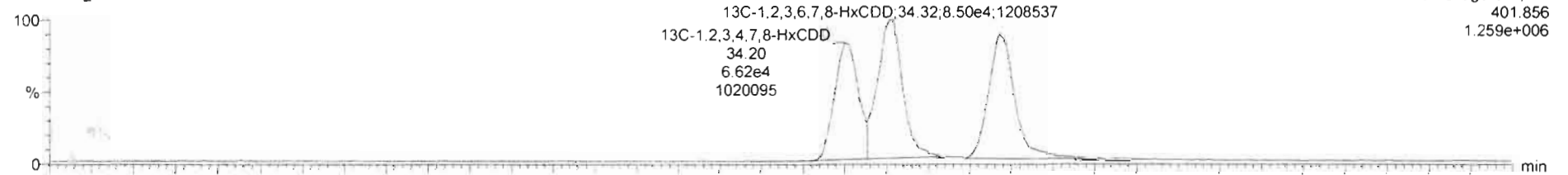


200303R2\_8

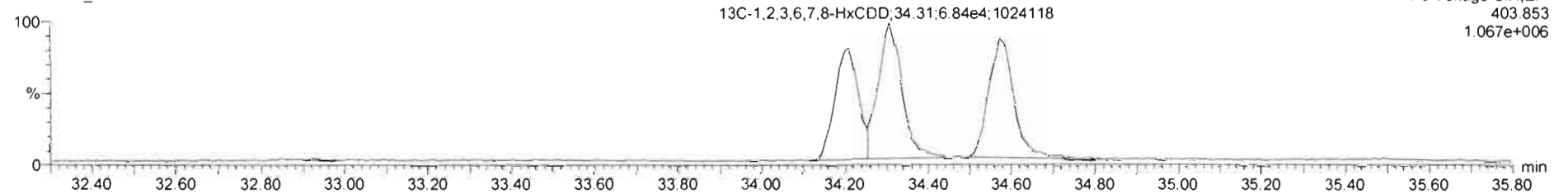


13C-1,2,3,4,7,8-HxCDD

200303R2\_8

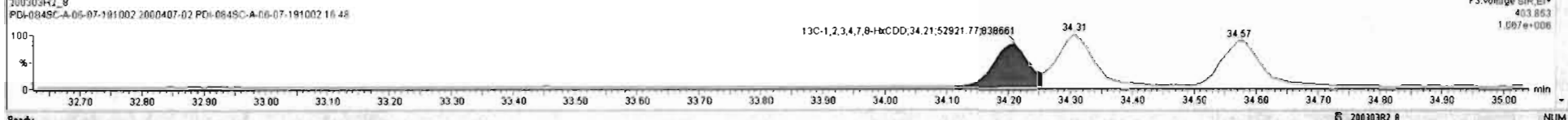
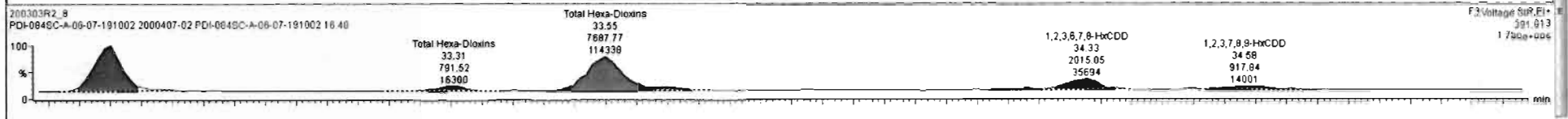
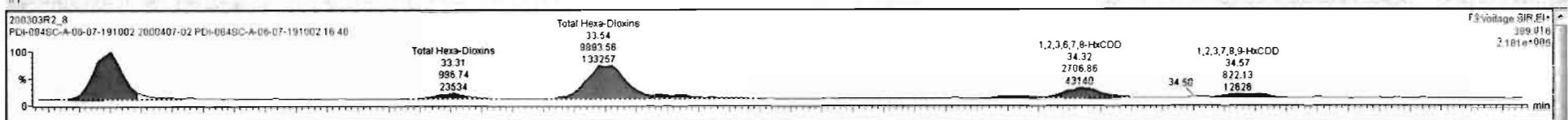


200303R2\_8



#	Name	Resp	RA	n/y	RRF	wt/col	Pred RT	RT	Prod.R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
40	Total Penta-Dioxins				0.9723	10.036	28.96		0.000		NO	4.412		0.877	9.795
41	Total Hexa-Dioxins				0.9211	10.036	33.63		0.000		NO	68.59		1.18	70.52
42	Total Hepta-Dioxins				0.9231	10.036	37.84		0.000		NO	715.8		3.92	715.8
43	Total Tetra-Furans				0.8020	10.036	23.61		0.000		NO	262.1		0.713	261.1
44	1st Func. Penta-Furans				0.9074	10.036	27.09		0.000		NO	25.39		0.299	25.39
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	338.0		1.10	338.7
46	Total Hexa-Furans				0.9982	10.036	33.56		0.000		NO	601.0		1.23	602.5
47	Total Hepta-Furans				0.9511	10.036	37.83		0.000		NO	421.0		2.23	421.0

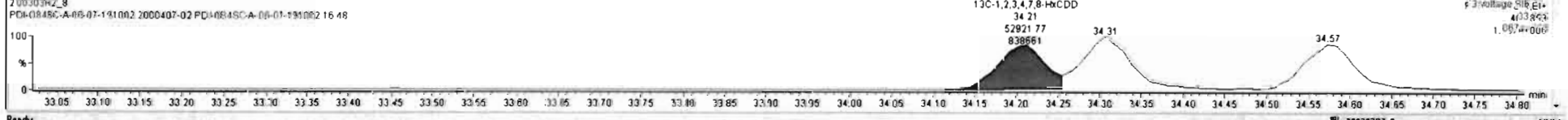
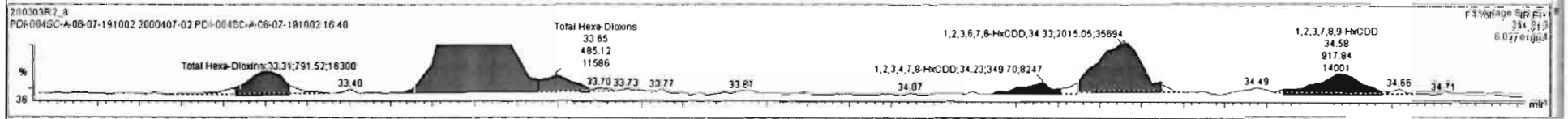
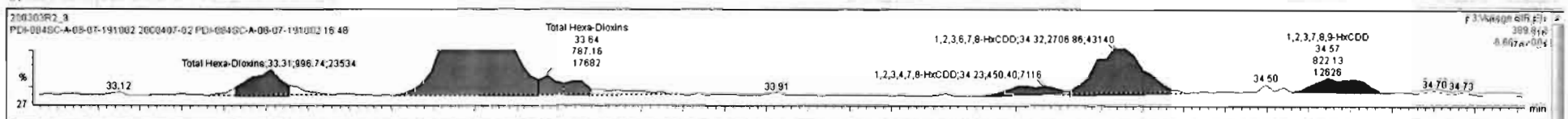
#	Name	Pred RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	n/y	EMPC	Conc
1	41 Total Hexa-Dioxins	33.63	32.76	1.036e4	7.952e3	1.240	1.30	NO	28.508	28.508
2	41 Total Hexa-Dioxins	33.63	33.31	9.967e2	7.915e2	1.240	1.28	NO	2.7858	2.7858
3	41 Total Hexa-Dioxins	33.63	33.54	9.894e3	7.886e3	1.240	1.28	NO	27.386	27.386
4	41 Total Hexa-Dioxins	33.63	33.84	7.872e2	4.851e2	1.240	1.82	YES	1.6927	0.00000
5	3 1,2,3,4,7,8-HxCDD	34.21	34.23	4.504e2	3.497e2	1.240	1.29	NO	1.2498	1.2498
6	4 1,2,3,6,7,8-HxCDD	34.32	34.32	2.707e3	2.015e3	1.240	1.34	NO	6.6599	6.6599
7	5 1,2,3,7,8,9-HxCDD	34.61	34.57	8.221e2	9.178e2	1.240	0.90	YES	2.2363	0.00000



Targetlynx.XS - 200303R2-8.pld\* - [Chromatogram]  
 File Edit View Display Processing Window Help

#	Name	Resp	RA	rvj	RRF	wt/wt	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
40	Total Penta-Dioxins				0.9723	10.036	29.96		0.000		NO	4.412		0.877	9.795
41	Total Hexa-Dioxins				0.9211	10.036	33.83		0.000		NO	66.56		1.18	70.52
42	Total Hepta-Dioxins				0.9231	10.036	37.64		0.000		NO	715.8		3.92	715.8
43	Total Tetra-Furans				0.9020	10.036	23.61		0.000		NO	262.1		0.713	261.1
44	1st Func. Penta-Furans				0.9074	10.036	27.09		0.000		NO	25.36		0.299	25.39
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	336.0		1.10	338.7
46	Total Hexa-Furans				0.9982	10.036	33.56		0.000		NO	601.0		1.23	602.5
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	421.0		2.23	421.0

#	Name	Pred RT	RT	mt Resp	rt2 Resp	1* Ratio (Pred)	RA	rvj	EMPC	Conc.
1	Total Hexa-Dioxins	33.83	33.75	1.035e4	7.952e3	1.240	1.30	NO	28.508	28.508
2	Total Hexa-Dioxins	33.83	33.31	9.987e2	7.915e2	1.240	1.26	NO	2.7855	2.7856
3	Total Hexa-Dioxins	33.83	33.54	9.894e3	7.898e3	1.240	1.29	NO	27.366	27.366
4	Total Hexa-Dioxins	33.83	33.84	7.872e2	4.851e2	1.240	1.62	YES	1.6927	0.00000
5	1,2,3,4,7,8-HxCDD	34.21	34.23	4.504e2	3.497e2	1.240	1.29	NO	1.2498	1.2498
6	1,2,3,6,7,8-HxCDD	34.32	34.32	2.707e3	2.015e3	1.240	1.34	NO	6.6599	6.6599
7	1,2,3,7,8,9-HxCDD	34.81	34.57	8.221e2	9.178e2	1.240	0.90	YES	2.2363	0.00000



Dataset: Untitled

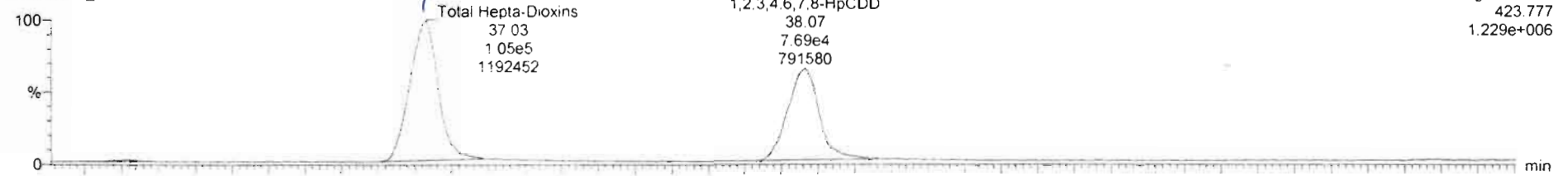
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

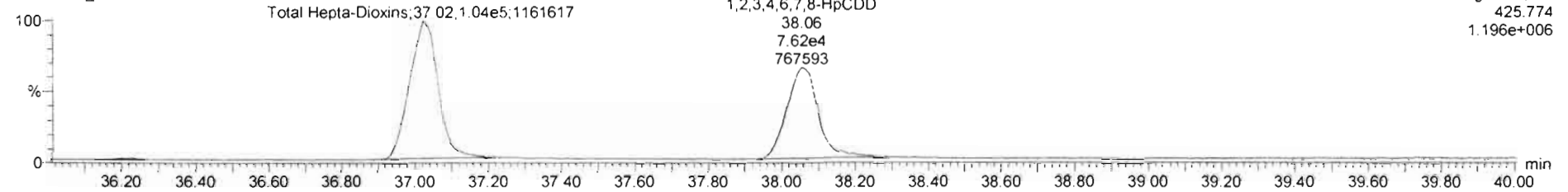
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1,2,3,4,6,7,8-HpCDD

200303R2\_8

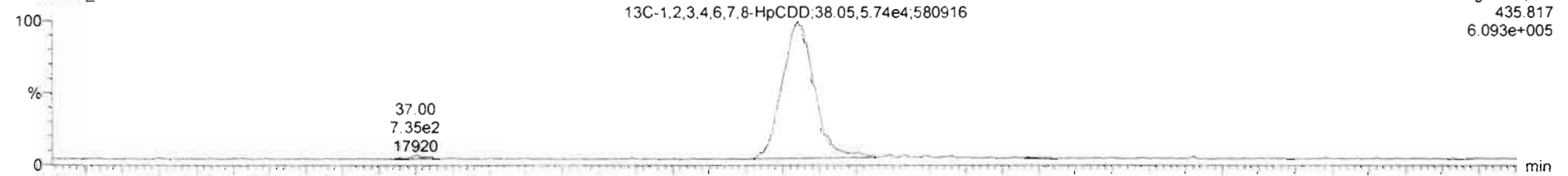


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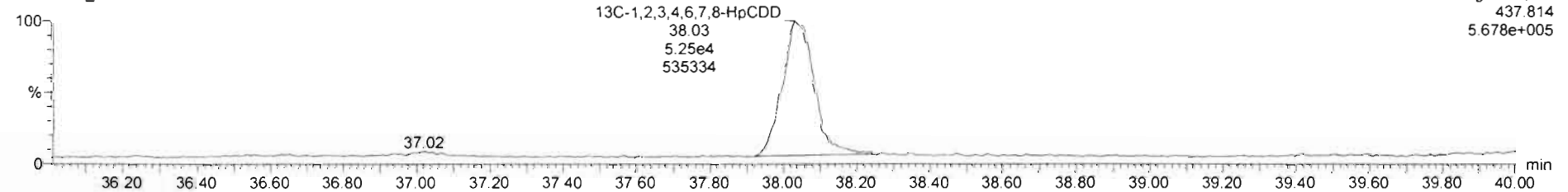


13C-1,2,3,4,6,7,8-HpCDD

200303R2\_8



200303R2\_8

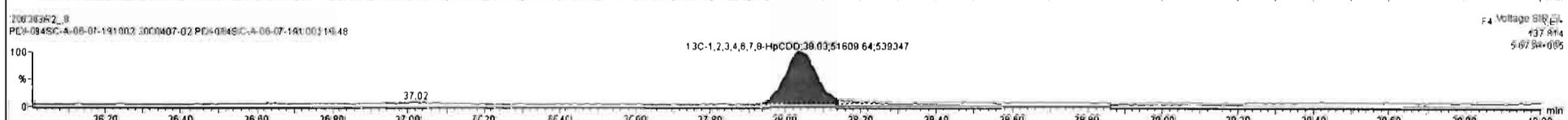
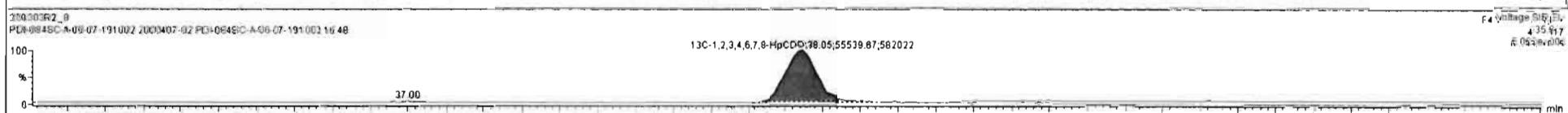
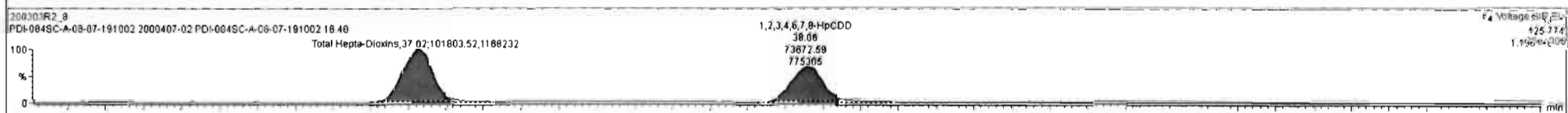
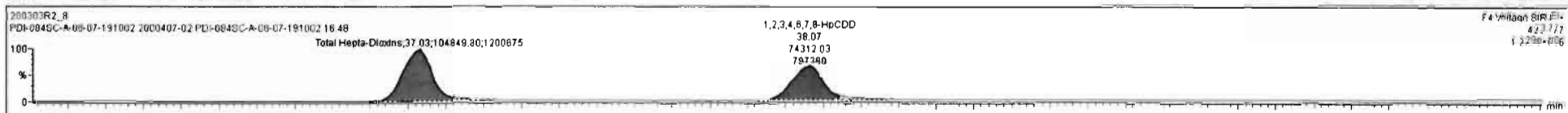




200303R2\_8 - 20030407-02 PDI-084SC-A-06-07-191002 16:48 FID-084SC-A-05-07-191002

#	Name	Resp	RA	n/y	RRF	w/wot	Pred RT	RT	Pred.R.	RRT	RRT Fail	Conc	%Rec	DL	EMPC
41	Total Hexa-Dioxins				0.9211	10.036	33.63		0.000		NO	88.04		1.18	72.13
42	Total Hepta-Dioxins				0.8221	10.036	37.64		0.000		NO	714.5		3.59	714.5
43	Total Tetra-Furans				0.8020	10.036	23.61		0.000		NO	262.1		0.713	281.1
44	1st Func. Penta-Furans				0.9074	10.036	27.09		0.000		NO	25.39		0.299	25.39
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	338.0		1.10	338.7
46	Total Hexa-Furans				0.8962	10.036	33.56		0.000		NO	601.0		1.23	602.5
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	421.0		2.23	421.0
48	PPK1														

#	Name	Pred RT	RT	m1 Ratio	m2 Ratio	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	42 Total Hepta-Dioxins	37.64	37.03	1.048e5	1.019e5	1.040	1.03	NO	416.36	416.36
2	8 1,2,3,4,6,7,8-HpCDD	38.06	38.07	7.431e4	7.387e4	1.040	1.01	NO	298.18	298.16



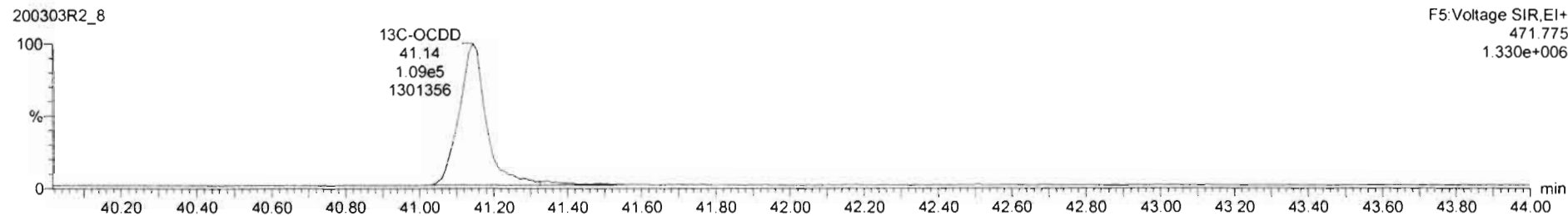
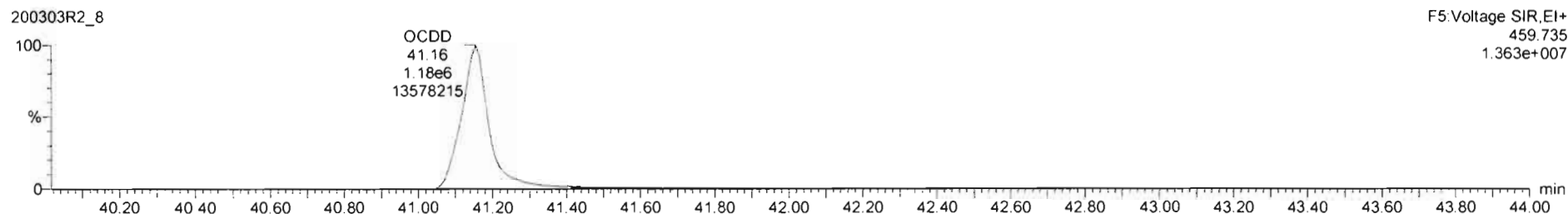
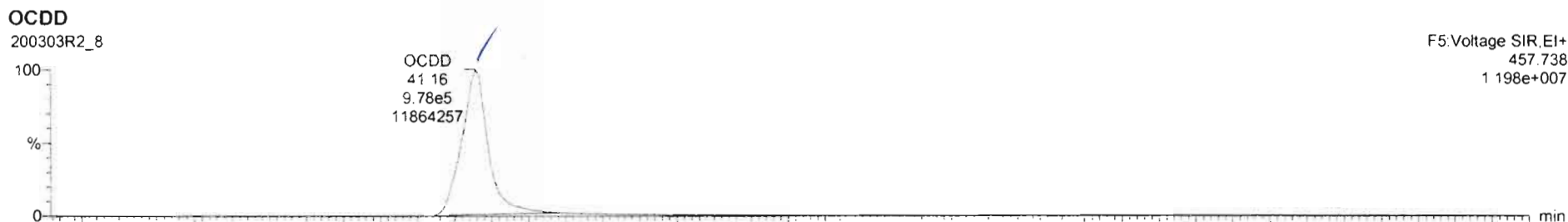


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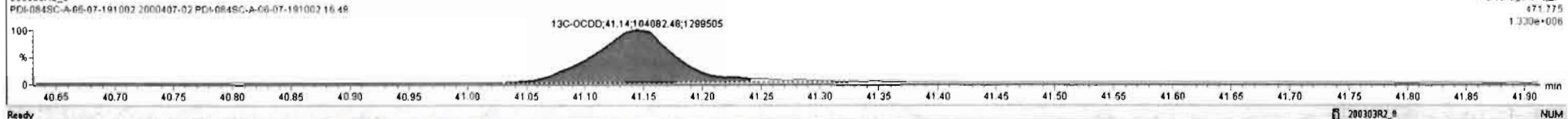
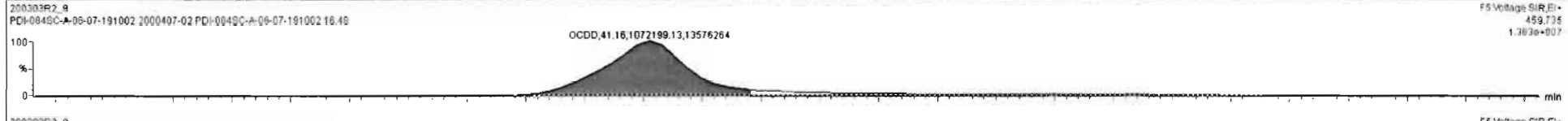
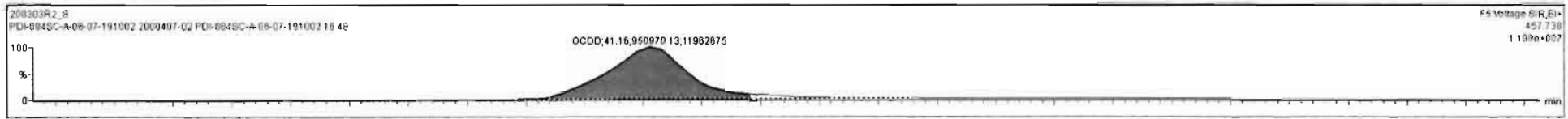
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200303R2\_8 - 2000407-02 PDI-0845C-A-06-07-191002 16.48 - FLD-0-45C-A-06-07-191002

#	Name	Resp	RA	rvj	RRF	wVoi	Pred RT	RT	Pred R <sub>t</sub>	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
5	5 1,2,3,7,8,9-HxCDD	1.74e3	0.90	YES	0.9182	10.036	34.61	34.57	1.001	1.000	NO	2.784		1.20	2.359
6	6 1,2,3,4,6,7,8-HpCDD	1.49e5	1.01	NO	0.9231	10.036	36.06	36.07	1.000	1.001	NO	298.2		3.99	298.2
7	7 OCDD	2.02e8	0.99	NO	0.9746	10.036	41.14	41.16	1.000	1.000	NO	4201		3.85	4201
8	8 2,3,7,8-TCDF	9.89e4	0.75	NO	0.9020	10.036	24.79	24.79	1.001	1.001	NO	93.60		0.713	93.60
9	9 1,2,3,7,8-PeCDF	1.48e5	1.55	NO	0.9074	10.036	29.53	29.52	1.001	1.001	NO	124.9		1.07	124.9
10	10 2,3,4,7,8-PeCDF	8.37e4	1.54	NO	0.9516	10.036	30.54	30.53	1.001	1.001	NO	71.62		1.07	71.62
11	11 1,2,3,4,7,8-HxCDF	2.23e5	1.25	NO	0.9623	10.036	33.35	33.36	1.000	1.000	NO	315.5		1.14	315.5
12	12 1,2,3,6,7,8-HxCDF	7.12e4	1.18	NO	0.9414	10.036	33.48	33.48	1.000	1.000	NO	90.45		1.09	90.45

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	rvj	EMPC	Conc.
1										

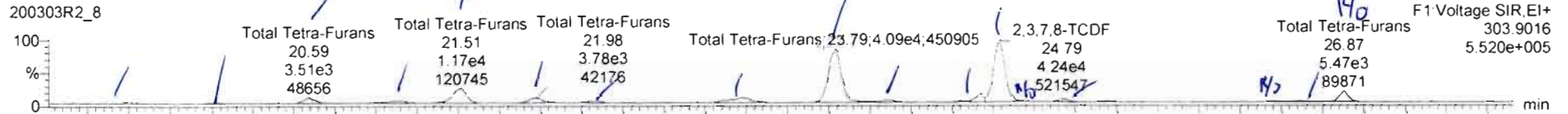


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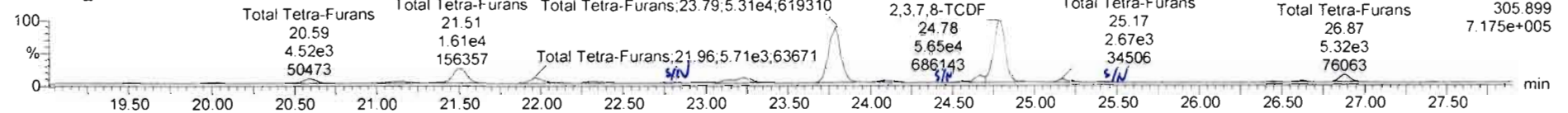
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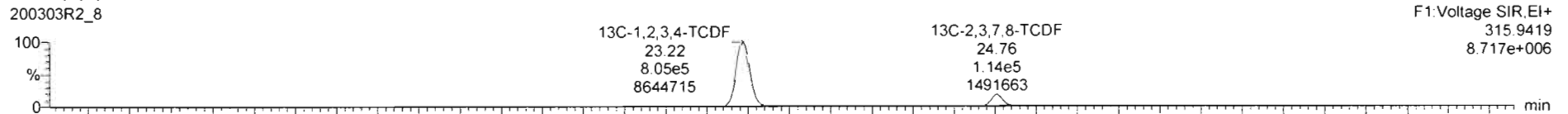
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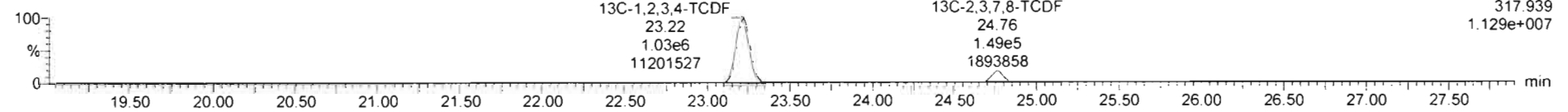
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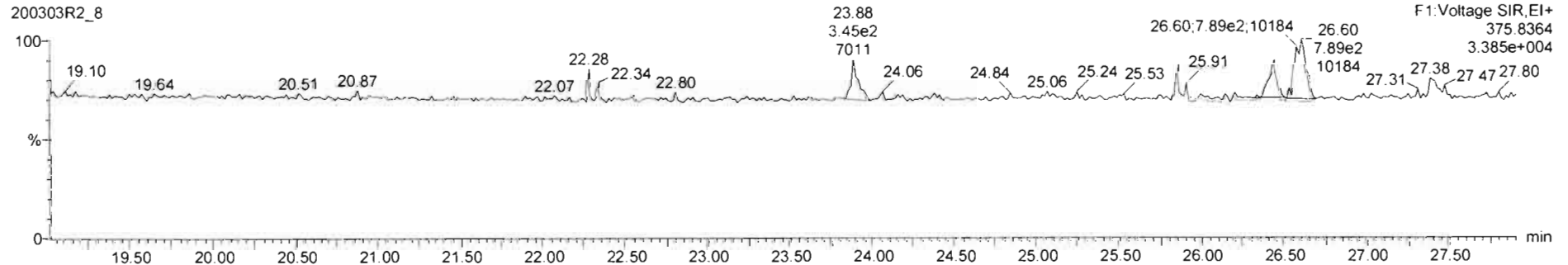
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200303R2\_8



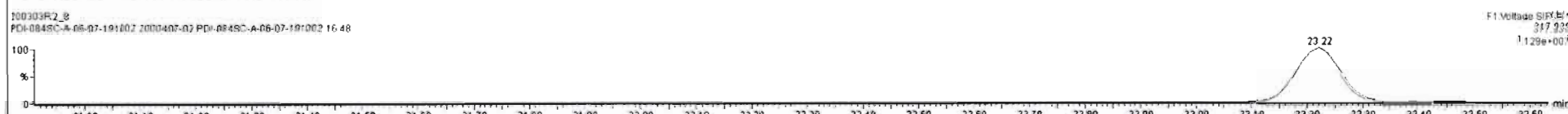
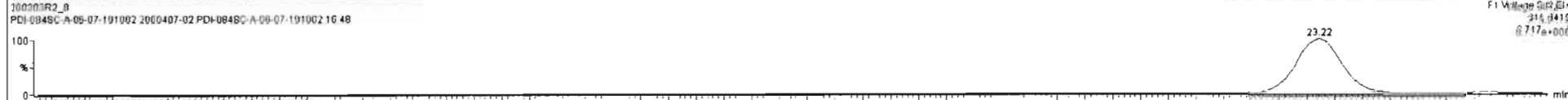
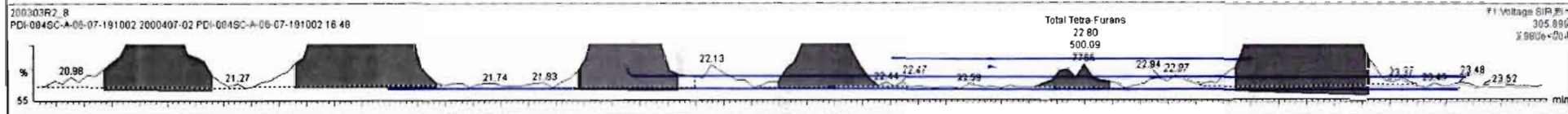
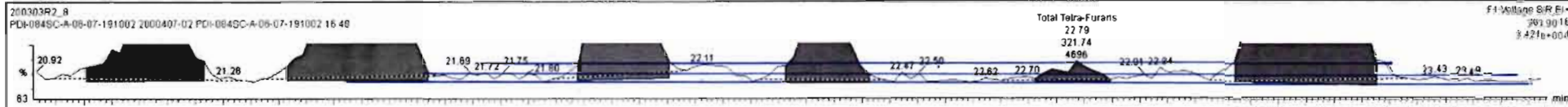
**DPE1**



200303R2\_8 - 2000407-02 PDI-0845C-A-06-07-191002 16:48 - PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
16	1,2,3,4,7,8,9-HxCDF	2.45e4	0.98	NO	0.9799	10.036	36.72	36.73	1.000	1.000	NO	51.91		2.34	51.91
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.66	25.70	1.026	1.026	NO	26.34	13.2	0.163	
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.64	NO	0.9667	10.036	30.78	30.83	1.230	1.230	NO	26.86	13.5	0.211	
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.58	9.80	0.292	
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4	0.244	
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.9744	10.036	34.61	34.57	1.026	1.026	NO	20.14	10.1	0.262	
23	13C-1,2,3,4,6,7,8-HxCDD	1.07e5	1.08	NO	0.7472	10.036	36.19	36.05	1.132	1.128	NO	20.60	10.3	0.327	

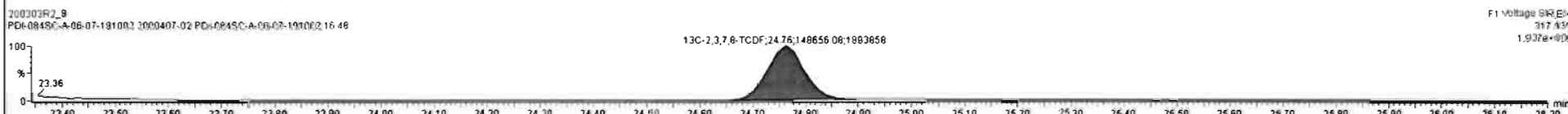
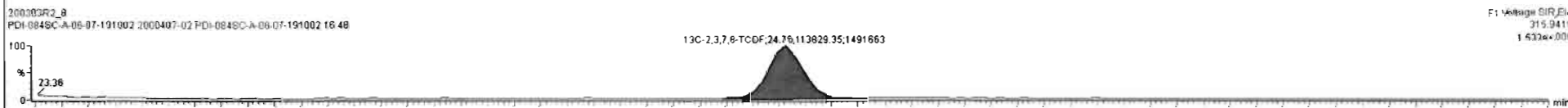
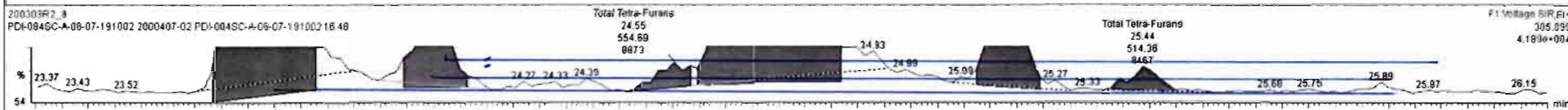
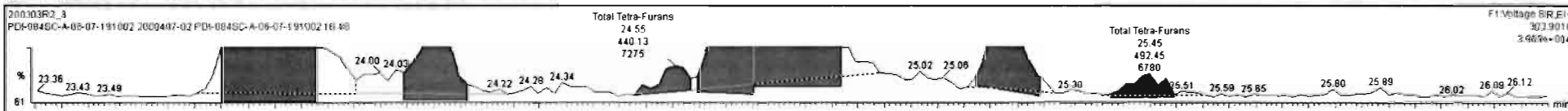
#	Name	Pred RT	RT	m1 Resp	m2 Resp	1 <sup>st</sup> Ratio (Pred)	RA	n/y	EMPC	Conc.
1	43 Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
2	43 Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5839	1.5839
3	43 Total Tetra-Furans	23.61	20.58	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	43 Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	43 Total Tetra-Furans	23.61	21.51	1.181e4	1.593e4	0.770	0.74	NO	26.258	26.258
6	43 Total Tetra-Furans	23.61	21.98	3.871e3	5.590e3	0.770	0.69	NO	8.9466	8.9466
7	43 Total Tetra-Furans	23.61	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
8	43 Total Tetra-Furans	23.61	22.79	3.217e2	5.001e2	0.770	0.84	YES	0.70011	0.00000



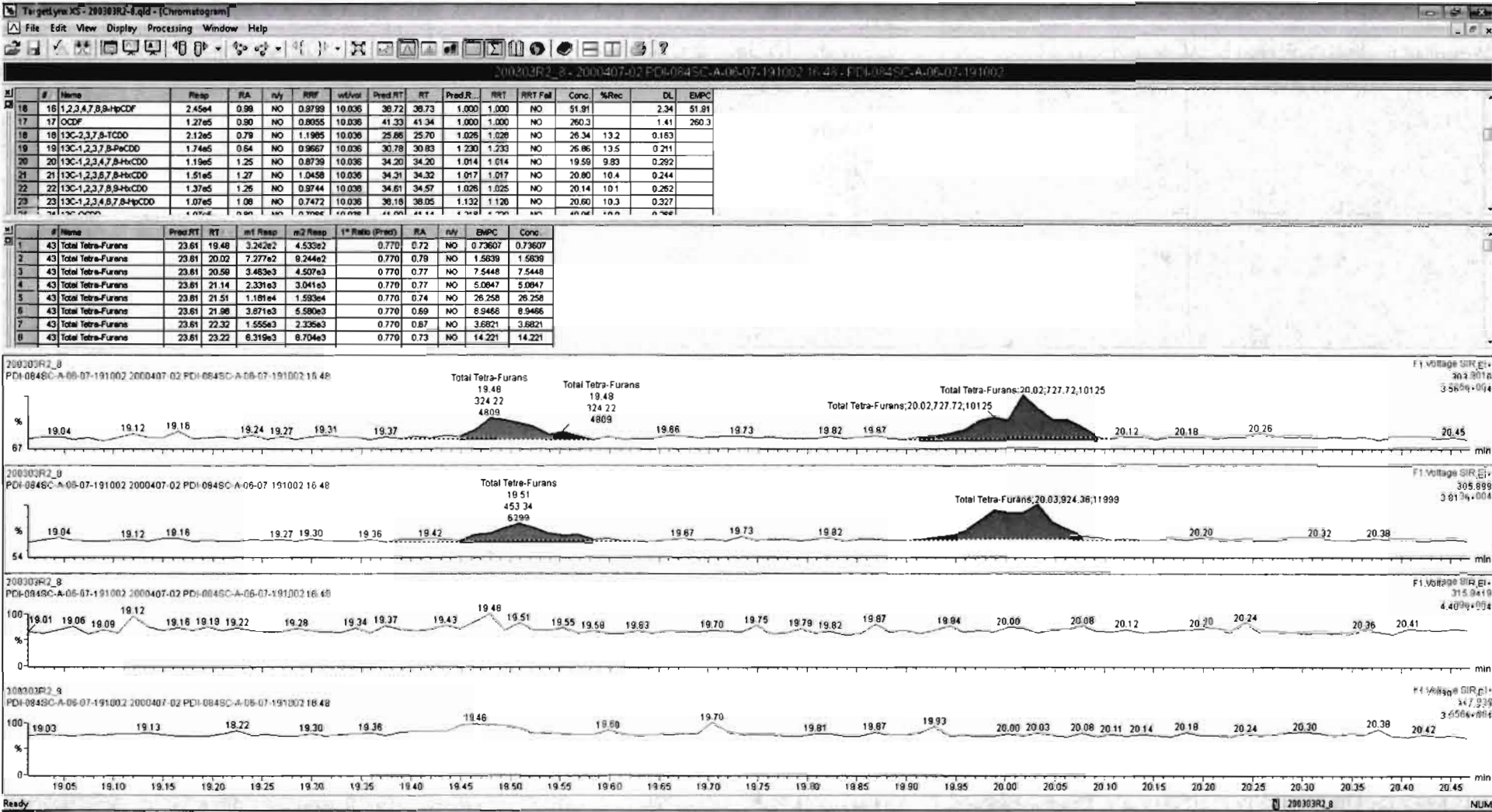


#	Name	Resp	RA	n/y	RRF	wVol	Pred RT	RT	Prod R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
16	1,2,3,4,7,8,9-HpCDF	2.45e4	0.89	NO	0.9798	10.036	36.72	36.73	1.000	1.000	NO	51.81		2.34	51.81
17	OCDF	1.27e5	0.80	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.66	25.70	1.026	1.028	NO	26.34	13.2		0.183
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.84	NO	0.9667	10.036	30.78	30.83	1.230	1.233	NO	26.86	13.5		0.211
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.58	9.83		0.292
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4		0.244
22	13C-1,2,3,7,8-HxCDD	1.37e5	1.26	NO	0.9744	10.036	34.81	34.57	1.026	1.026	NO	20.14	10.1		0.262
23	13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.06	NO	0.7472	10.036	36.18	36.05	1.132	1.128	NO	20.80	10.3		0.327

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc
1	43 Total Tetra-Furans	23.61	19.48	3.242e2	4.530e2	0.770	0.72	NO	0.73607	0.73607
2	43 Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
3	43 Total Tetra-Furans	23.61	20.59	3.483e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	43 Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	43 Total Tetra-Furans	23.61	21.51	1.181e4	1.593e4	0.770	0.74	NO	26.258	26.258
6	43 Total Tetra-Furans	23.61	21.98	3.871e3	5.590e3	0.770	0.69	NO	8.9466	8.9466
7	43 Total Tetra-Furans	23.61	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
8	43 Total Tetra-Furans	23.61	22.79	3.217e2	5.001e2	0.770	0.64	YES	0.70011	0.00000



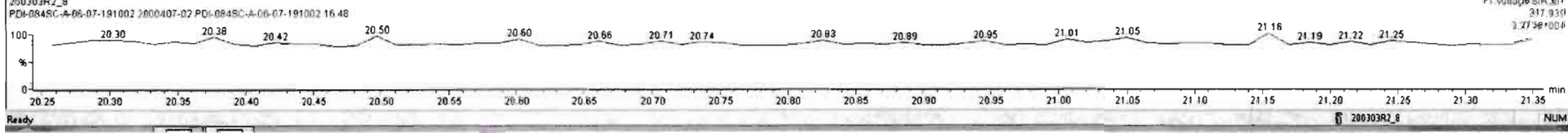
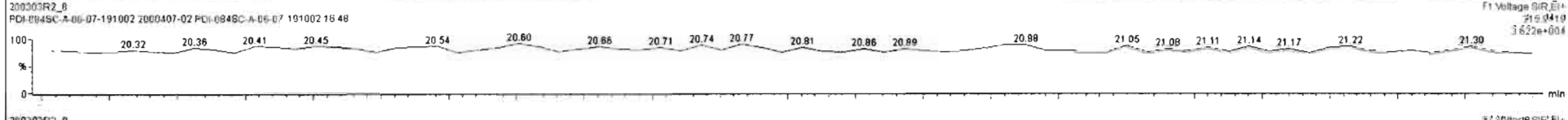
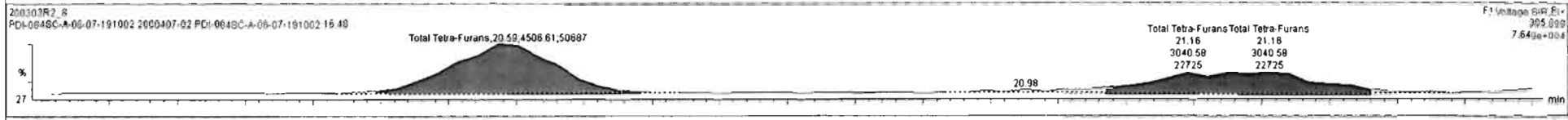
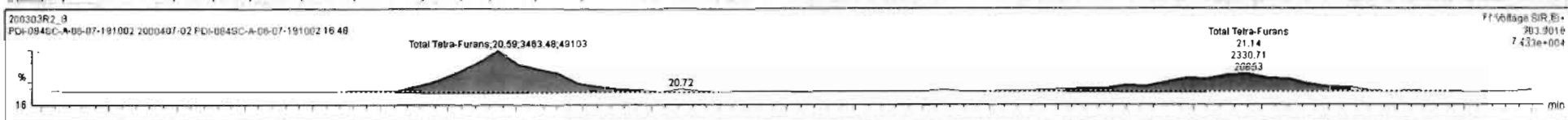




200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8 200303R2\_8

#	Name	Resp	RA	n/y	R/R	wt/wt	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
18	1,2,3,4,7,8,9-HpCDF	2.45e4	0.90	NO	0.9789	10.036	36.72	36.73	1.000	1.000	NO	51.91		2.34	51.91
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.69	25.70	1.028	1.028	NO	26.34	13.2	0.163	
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.84	NO	0.9667	10.036	30.78	30.83	1.230	1.233	NO	26.86	13.5	0.211	
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83	0.292	
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4	0.244	
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.8744	10.036	34.61	34.57	1.026	1.025	NO	20.14	10.1	0.262	
23	13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.08	NO	0.7472	10.036	36.18	36.05	1.132	1.128	NO	20.60	10.3	0.327	

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc
1	43 Total Tetra-Furans	23.61	19.48	3.242e2	4.532e2	0.770	0.72	NO	0.73607	0.73607
2	43 Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5839	1.5839
3	43 Total Tetra-Furans	23.61	20.59	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	43 Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	43 Total Tetra-Furans	23.61	21.51	1.181e4	1.593e4	0.770	0.74	NO	26.258	26.258
6	43 Total Tetra-Furans	23.61	21.98	3.871e3	5.580e3	0.770	0.89	NO	8.9466	8.9466
7	43 Total Tetra-Furans	23.61	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
8	43 Total Tetra-Furans	23.61	23.22	6.319e3	8.704e3	0.770	0.73	NO	14.221	14.221

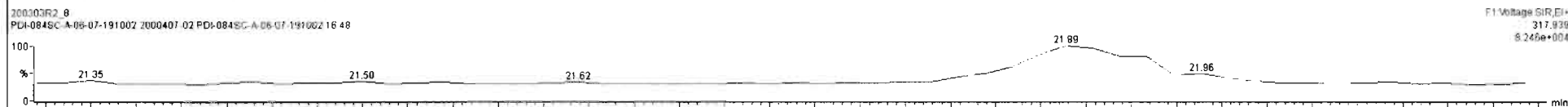
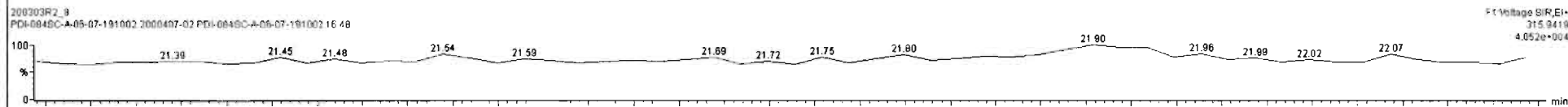
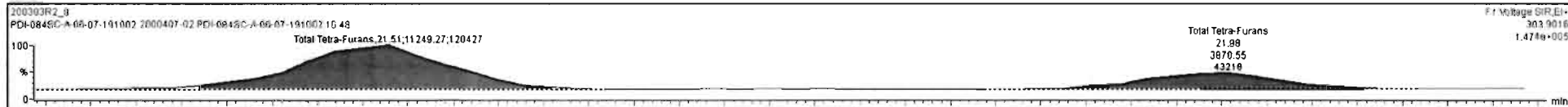


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 File Edit View Display Processing Window Help

200303R2\_0 - 2000407-02 PDI-0845C-A-06-07-191002 16 48 - PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
16	1,2,3,4,7,8,9-HpCDF	2.45e4	0.99	NO	0.9799	10.036	36.72	36.73	1.000	1.000	NO	51.91		2.34	51.91
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.66	25.70	1.026	1.026	NO	26.34	13.2	0.163	
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.64	NO	0.9667	10.036	30.78	30.83	1.230	1.230	NO	26.86	13.5	0.211	
20	13C-1,2,3,4,7,8-HbCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83	0.292	
21	13C-1,2,3,8,7,9-HbCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4	0.244	
22	13C-1,2,3,7,8,9-HbCDD	1.37e5	1.26	NO	0.9744	10.036	34.61	34.57	1.026	1.026	NO	20.14	10.1	0.262	
23	13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.08	NO	0.7472	10.036	38.18	38.05	1.132	1.128	NO	20.60	10.3	0.327	

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
43	Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
43	Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
43	Total Tetra-Furans	23.61	20.59	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
43	Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
43	Total Tetra-Furans	23.61	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
43	Total Tetra-Furans	23.61	21.98	3.871e3	5.590e3	0.770	0.69	NO	8.9466	8.9466
43	Total Tetra-Furans	23.61	22.32	1.555e3	2.326e3	0.770	0.67	NO	3.6821	3.6821
43	Total Tetra-Furans	23.61	23.22	8.319e3	8.704e3	0.770	0.73	NO	14.221	14.221



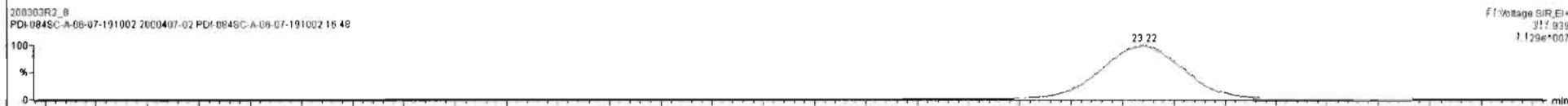
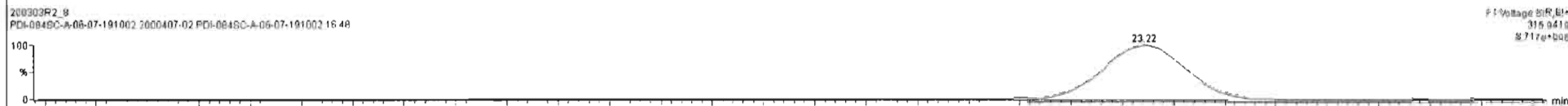
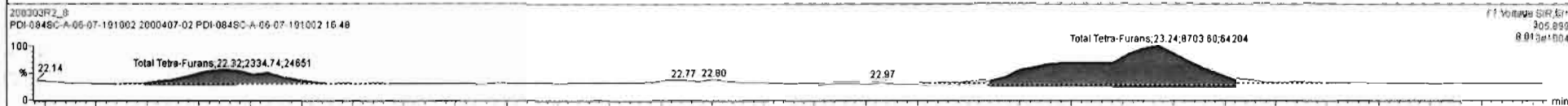
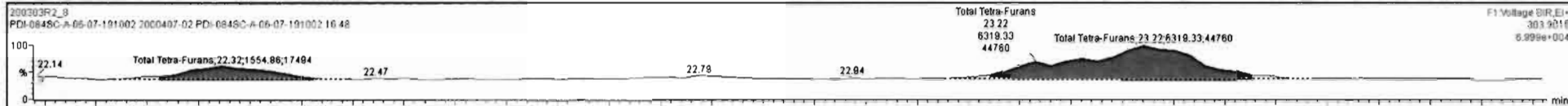
Ready 200303R2\_0 NUM



200303R2\_S - 2000407-02 PDI-0845C-A-06-07-191002 16:48 - PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtAvcl	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
16	1,2,3,4,7,8,9-HpCDF	2.45e4	0.98	NO	0.9789	10.036	36.72	36.73	1.000	1.000	NO	51.91		2.34	51.81
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1865	10.036	25.66	25.70	1.026	1.026	NO	26.34	13.2	0.163	
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.64	NO	0.9667	10.036	30.78	30.83	1.200	1.230	NO	26.86	13.5	0.211	
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83	0.292	
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4	0.244	
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.9744	10.036	34.61	34.57	1.026	1.025	NO	20.14	10.1	0.252	
23	13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.08	NO	0.7472	10.036	36.18	36.05	1.122	1.128	NO	20.60	10.3	0.327	

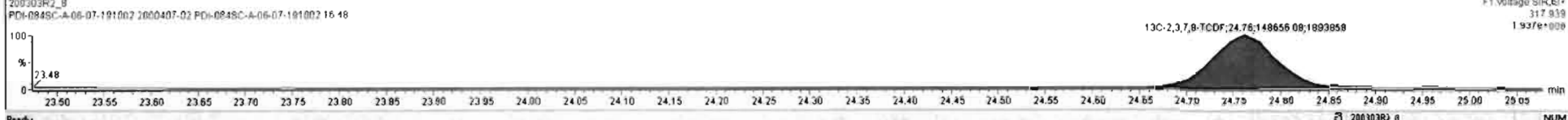
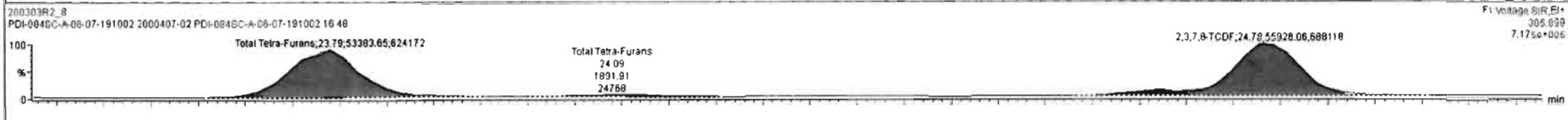
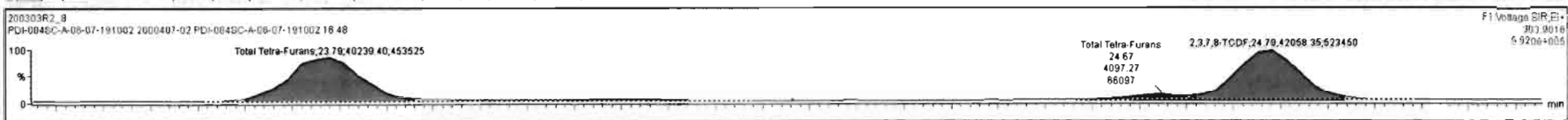
#	Name	Pred RT	RT	m1 Resp	m2 Resp	f* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	43 Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
2	43 Total Tetra-Furans	23.61	20.02	7.277e2	8.244e2	0.770	0.79	NO	1.5638	1.5639
3	43 Total Tetra-Furans	23.61	20.59	3.483e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	43 Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	43 Total Tetra-Furans	23.61	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
6	43 Total Tetra-Furans	23.61	21.98	3.871e3	5.590e3	0.770	0.69	NO	8.9466	8.9466
7	43 Total Tetra-Furans	23.61	22.32	1.555e3	2.326e3	0.770	0.67	NO	3.6821	3.6821
8	43 Total Tetra-Furans	23.61	23.22	6.319e3	8.704e3	0.770	0.73	NO	14.221	14.221



200303R2\_8 - 2000407-02 PDI-0848C-A-06-07-191002 16 48 - F1 Voltage SIR, E1+

#	Name	Resp	RA	n/r	RRF	wt/wt	Pred RT	RT	Pred R	RRT	RRT Fail	Conc.	%Rec	DL	ELPC
16	1,2,3,4,7,8-HpCDF	2.45e4	0.98	NO	0.9799	10.036	38.72	38.73	1.000	1.000	NO	51.91		2.34	51.91
17	OCDF	1.27e5	0.90	NO	0.9055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.66	25.70	1.028	1.028	NO	26.34	13.2		0.163
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.84	NO	0.9667	10.036	30.78	30.83	1.230	1.233	NO	26.86	13.5		0.211
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83		0.292
21	13C-1,2,3,8,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4		0.244
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.8744	10.036	34.81	34.57	1.026	1.025	NO	20.14	10.1		0.262
23	13C-1,2,3,4,8,7,8-HpCDD	1.07e5	1.06	NO	0.7472	10.036	36.18	36.05	1.132	1.128	NO	20.80	10.3		0.327

#	Name	Pred RT	RT	Int Resp	Int2 Resp	* Ratio (Pred)	RA	n/r	ELPC	Conc.
1	Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
2	Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
3	Total Tetra-Furans	23.61	20.58	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	Total Tetra-Furans	23.61	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
6	Total Tetra-Furans	23.61	21.96	3.871e3	5.580e3	0.770	0.69	NO	8.9466	8.9466
7	Total Tetra-Furans	23.61	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
8	Total Tetra-Furans	23.61	23.22	6.319e3	8.704e3	0.770	0.73	NO	14.221	14.221

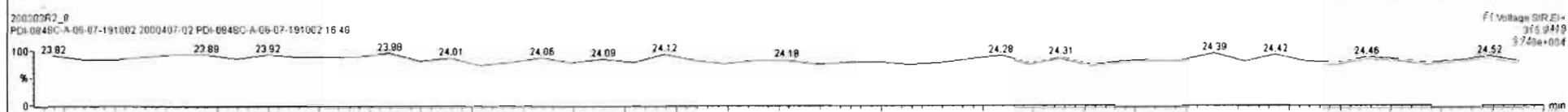
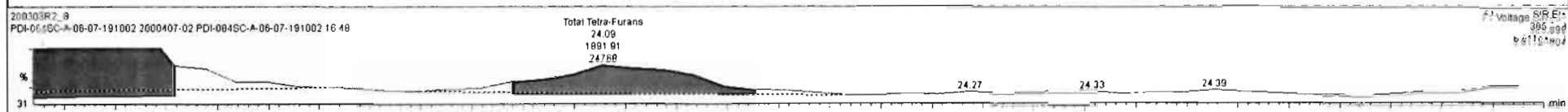
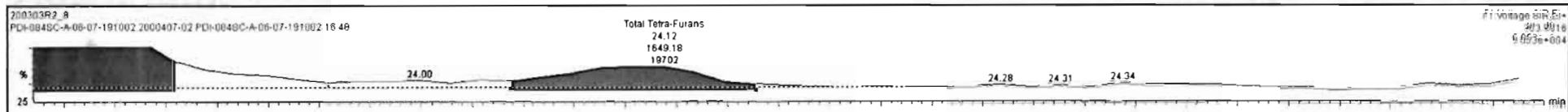




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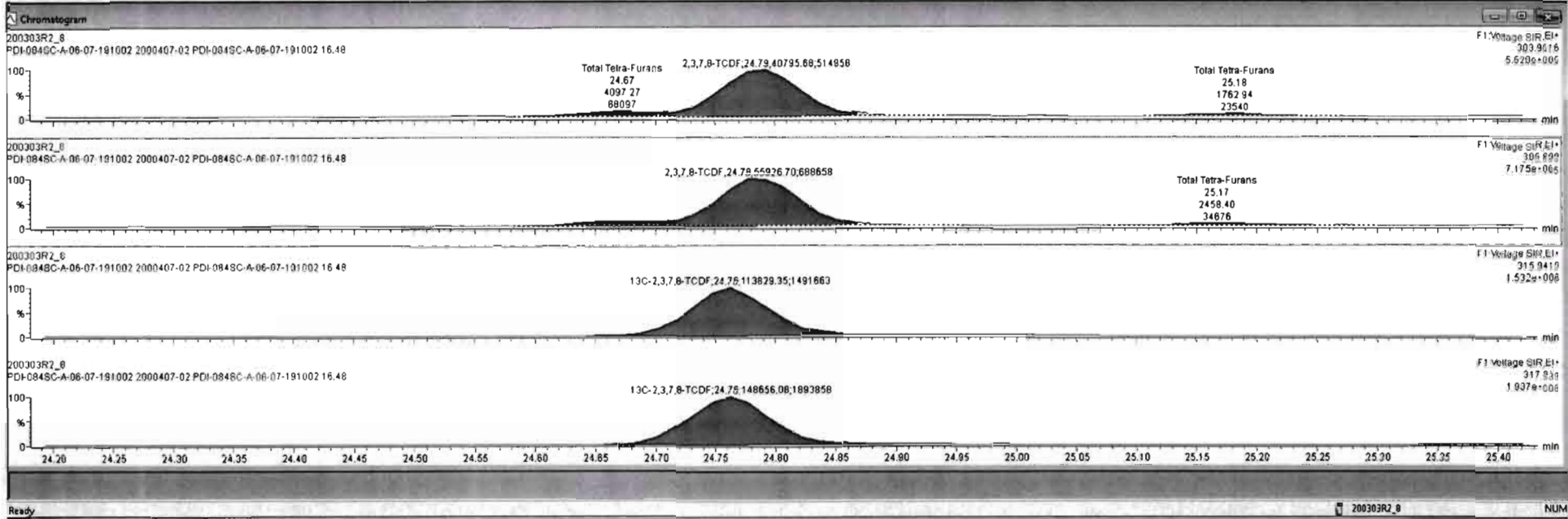
#	Name	Resp	RA	rvly	RRF	wt/Vol	Pred.RT	RT	Pred.R...	RRT	RRT/Fat	Conc.	%Rec	DL	EMPC
16	1,2,3,4,7,8,9-HpCDF	2.45e4	0.98	NO	0.9799	10.036	36.72	36.73	1.000	1.000	NO	51.91		2.34	51.91
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDD	2.12e5	0.78	NO	1.1985	10.036	25.68	25.70	1.026	1.026	NO	26.34	13.2		0.163
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.64	NO	0.9667	10.036	30.78	30.83	1.230	1.233	NO	26.86	13.5		0.211
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8738	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83		0.292
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4		0.244
22	13C-1,2,3,7,8-HxCDD	1.37e5	1.28	NO	0.9744	10.036	34.61	34.57	1.026	1.025	NO	20.14	10.1		0.262
23	13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.08	NO	0.7472	10.036	36.18	36.05	1.132	1.128	NO	20.60	10.3		0.327

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	* Ratio (Pred)	RA	rvly	EMPC	Conc.
43	Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
43	Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
43	Total Tetra-Furans	23.61	20.56	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
43	Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
43	Total Tetra-Furans	23.61	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
43	Total Tetra-Furans	23.61	21.98	3.871e3	5.580e3	0.770	0.89	NO	8.9466	8.9466
43	Total Tetra-Furans	23.61	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
43	Total Tetra-Furans	23.61	23.22	6.319e3	8.704e3	0.770	0.73	NO	14.221	14.221



#	Name	Resp	RA	nLy	RRF	wVol	Pred.RT	RT	Pred.R.	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.6020	10.036	23.81		0.000		NO	264.8		0.713	274.2
44	1st Func. Penta-Furans				0.9074	10.036	27.09		0.000		NO	26.08		0.298	26.08
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	329.0		1.10	334.3
46	Total Hexa-Furans				0.0982	10.036	33.56		0.000		NO	561.4		1.22	598.8
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	419.1		2.21	419.1

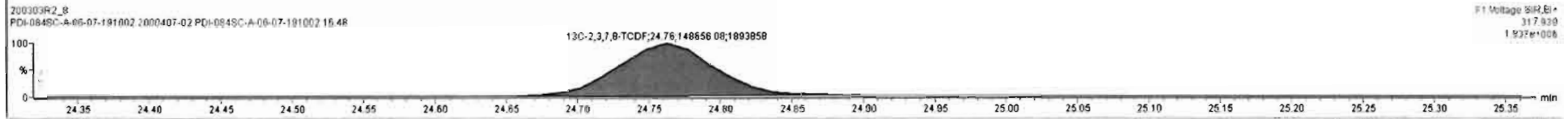
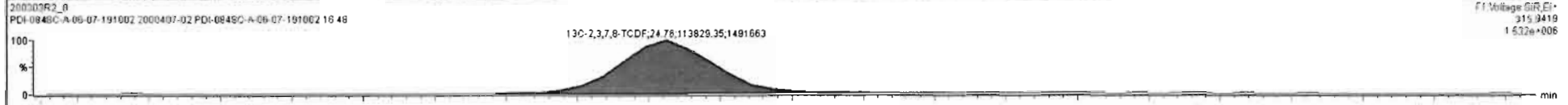
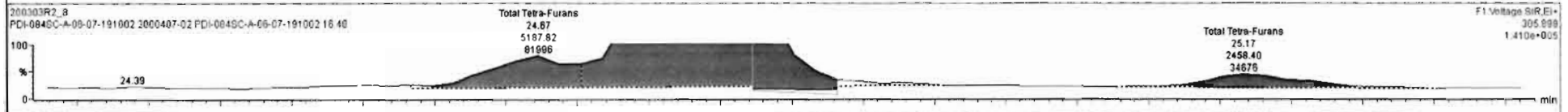
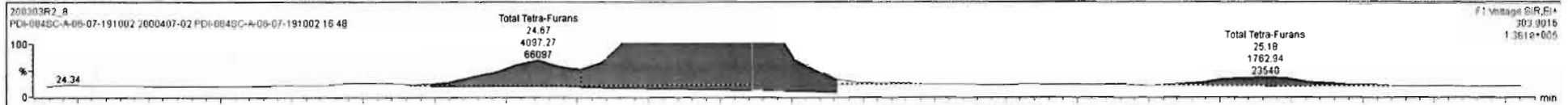
#	Name	Pred.RT	RT	int Resp	int Resp	** Ratio (Pred)	RA	nLy	EMPC	Conc.
1	Total Tetra-Furans	23.81	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73807	0.73807
2	Total Tetra-Furans	23.81	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
3	Total Tetra-Furans	23.81	20.58	3.483e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	Total Tetra-Furans	23.81	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	Total Tetra-Furans	23.81	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
6	Total Tetra-Furans	23.81	21.98	3.871e3	5.800e3	0.770	0.88	NO	8.9466	8.9466
7	Total Tetra-Furans	23.81	22.32	1.555e3	2.335e3	0.770	0.67	NO	3.6821	3.6821
8	Total Tetra-Furans	23.81	23.22	8.319e3	8.704e3	0.770	0.73	NO	14.221	14.221
9	Total Tetra-Furans	23.81	23.79	4.024e4	5.338e4	0.770	0.75	NO	88.628	88.628



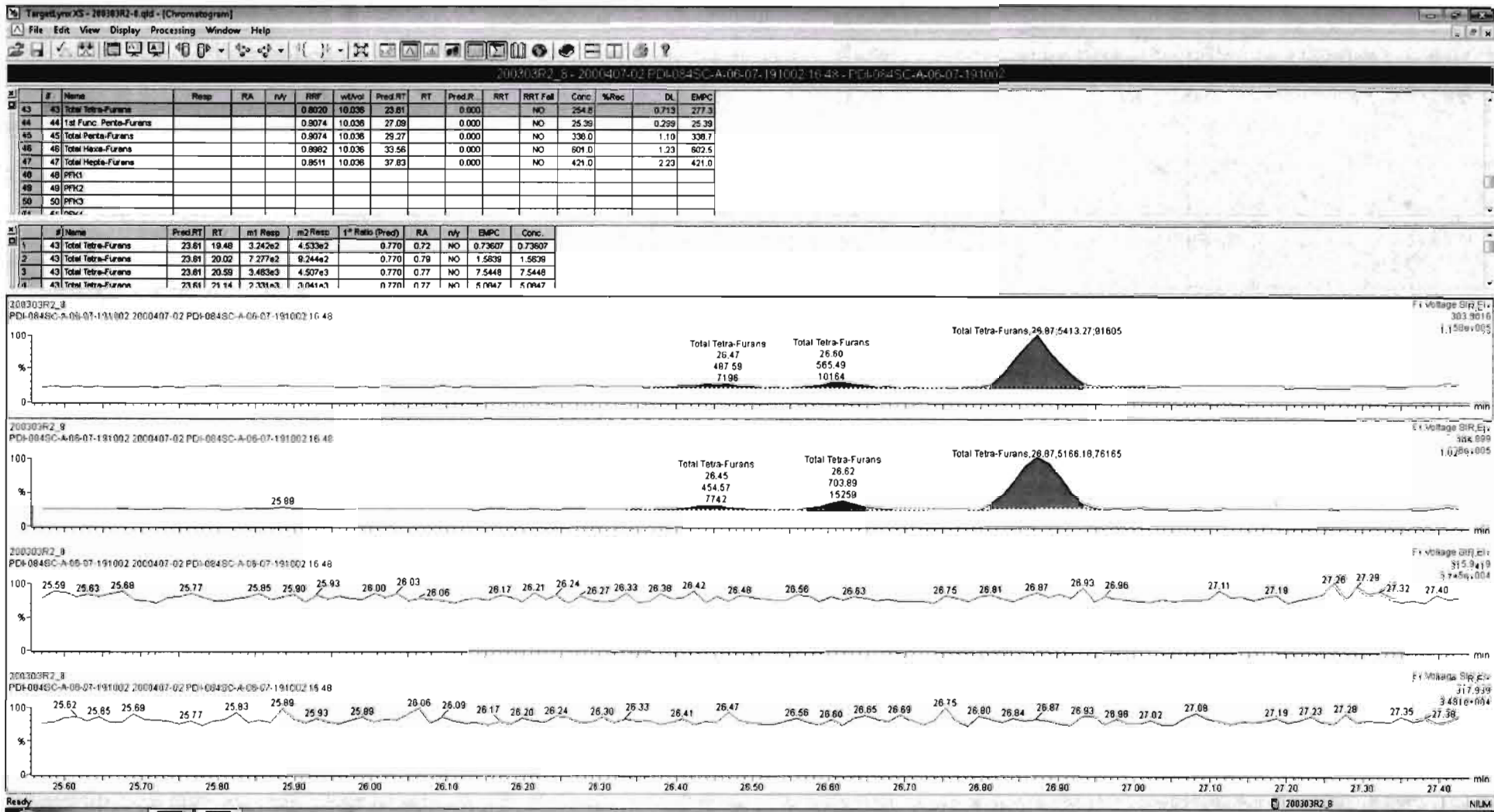
200303R2\_8 - 2000407-02 PDI-0845C-A-06-07-191002 16 43 - FID-0845C-A-06-07-191002

#	Name	Resp	RA	nVv	RRF	wtAvol	Pred.RT	RT	Pred.R.	RRT	RRT Fat	Conc.	%Rec	DL	EMPC
16	1,2,3,4,7,8-HpCDF	2.45e4	0.99	NO	0.9799	10.036	36.72	36.73	1.000	1.000	NO	51.81		2.34	51.81
17	OCDF	1.27e5	0.90	NO	0.8055	10.036	41.33	41.34	1.000	1.000	NO	260.3		1.41	260.3
18	13C-2,3,7,8-TCDF	2.12e5	0.79	NO	1.1965	10.036	25.66	25.70	1.026	1.026	NO	26.34	13.2		0.163
19	13C-1,2,3,7,8-PeCDD	1.74e5	0.64	NO	0.9667	10.036	30.78	30.83	1.200	1.233	NO	26.86	13.5		0.211
20	13C-1,2,3,4,7,8-HxCDD	1.19e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	19.59	9.83		0.292
21	13C-1,2,3,6,7,8-HxCDD	1.51e5	1.27	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.80	10.4		0.244
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.9744	10.036	34.61	34.57	1.026	1.026	NO	20.14	10.1		0.262
23	13C-1,2,3,4,8,7,8-HpCDD	1.07e5	1.08	NO	0.7472	10.036	38.18	38.05	1.132	1.128	NO	20.80	10.3		0.327

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	* Ratio (Pred)	RA	nVv	EMPC	Conc.
1	43 Total Tetra-Furans	23.61	19.48	3.242e2	4.533e2	0.770	0.72	NO	0.73607	0.73607
2	43 Total Tetra-Furans	23.61	20.02	7.277e2	9.244e2	0.770	0.79	NO	1.5639	1.5639
3	43 Total Tetra-Furans	23.61	20.59	3.463e3	4.507e3	0.770	0.77	NO	7.5448	7.5448
4	43 Total Tetra-Furans	23.61	21.14	2.331e3	3.041e3	0.770	0.77	NO	5.0847	5.0847
5	43 Total Tetra-Furans	23.61	21.51	1.125e4	1.571e4	0.770	0.72	NO	25.522	25.522
6	43 Total Tetra-Furans	23.61	21.98	3.871e3	5.580e3	0.770	0.69	NO	8.9466	8.9466
7	43 Total Tetra-Furans	23.61	22.32	1.555e3	2.336e3	0.770	0.67	NO	3.6821	3.6821
8	43 Total Tetra-Furans	23.61	23.22	6.319e3	8.704e3	0.770	0.73	NO	14.221	14.221







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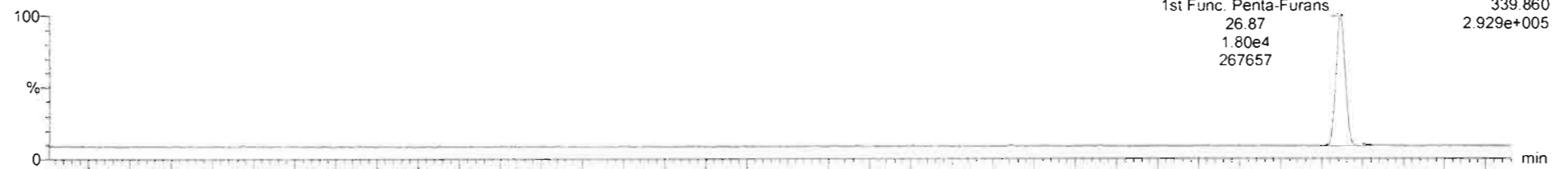
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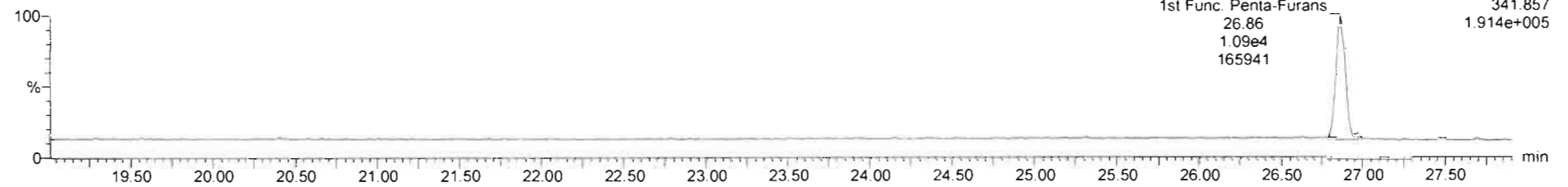
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1st Func. Penta-Furans

200303R2\_8

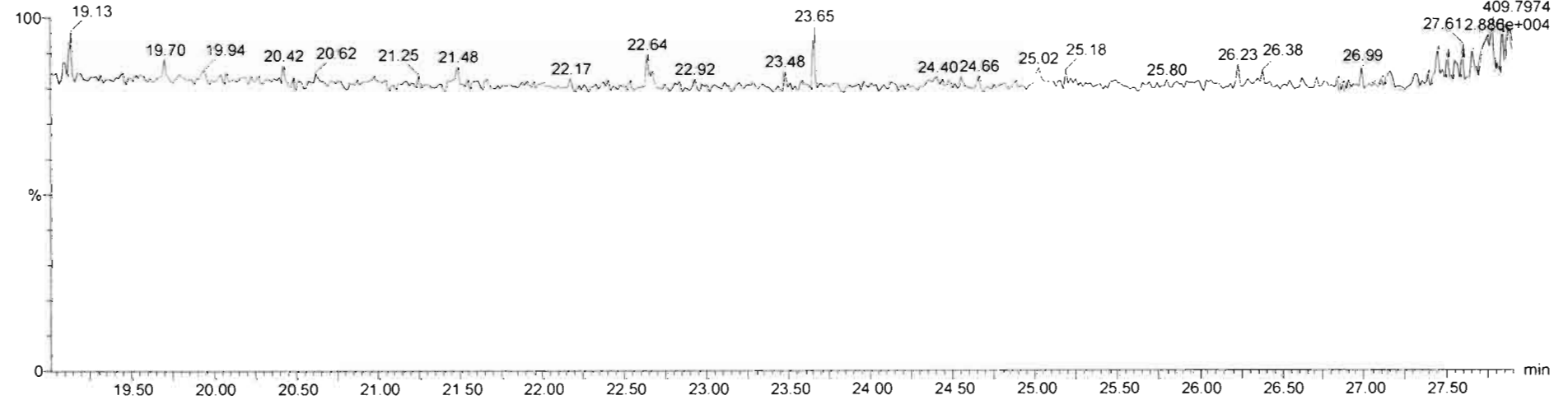


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200303R2\_8



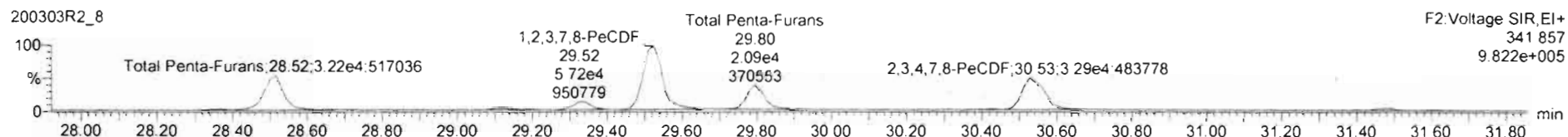
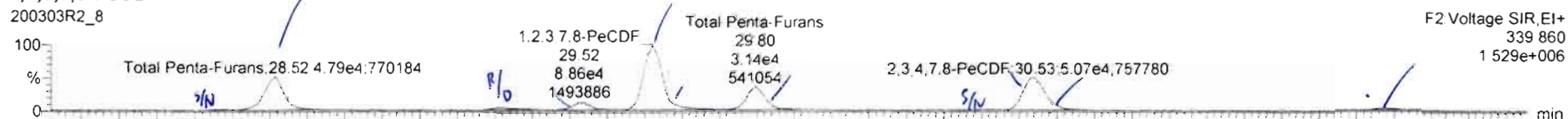


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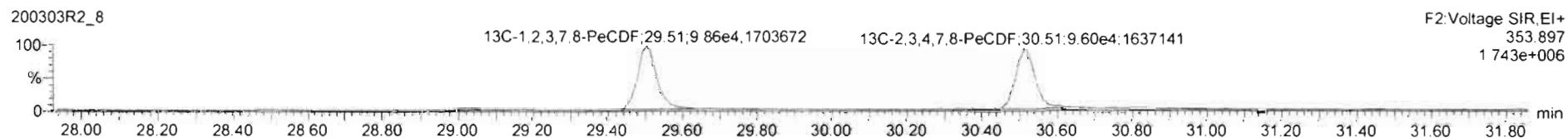
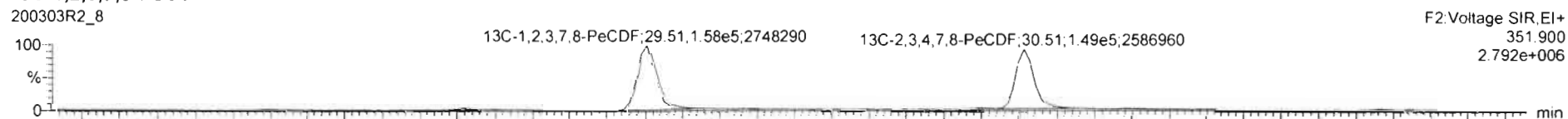
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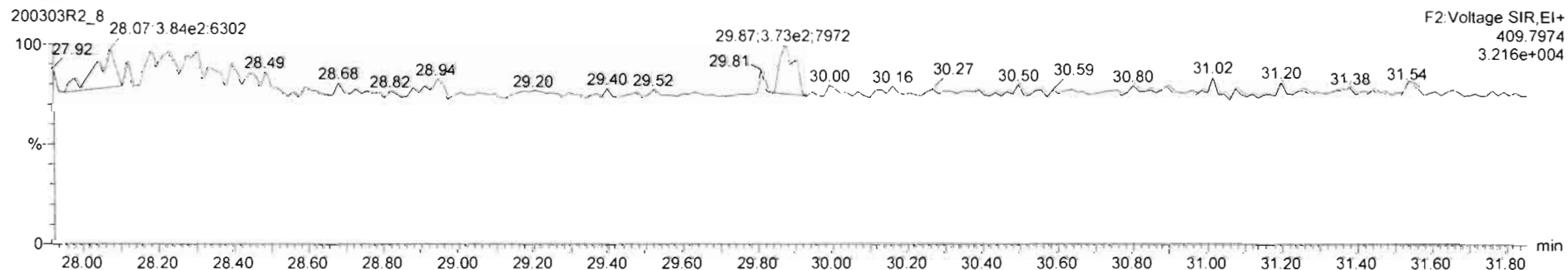
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13C-1,2,3,7,8-PeCDF



DPE2

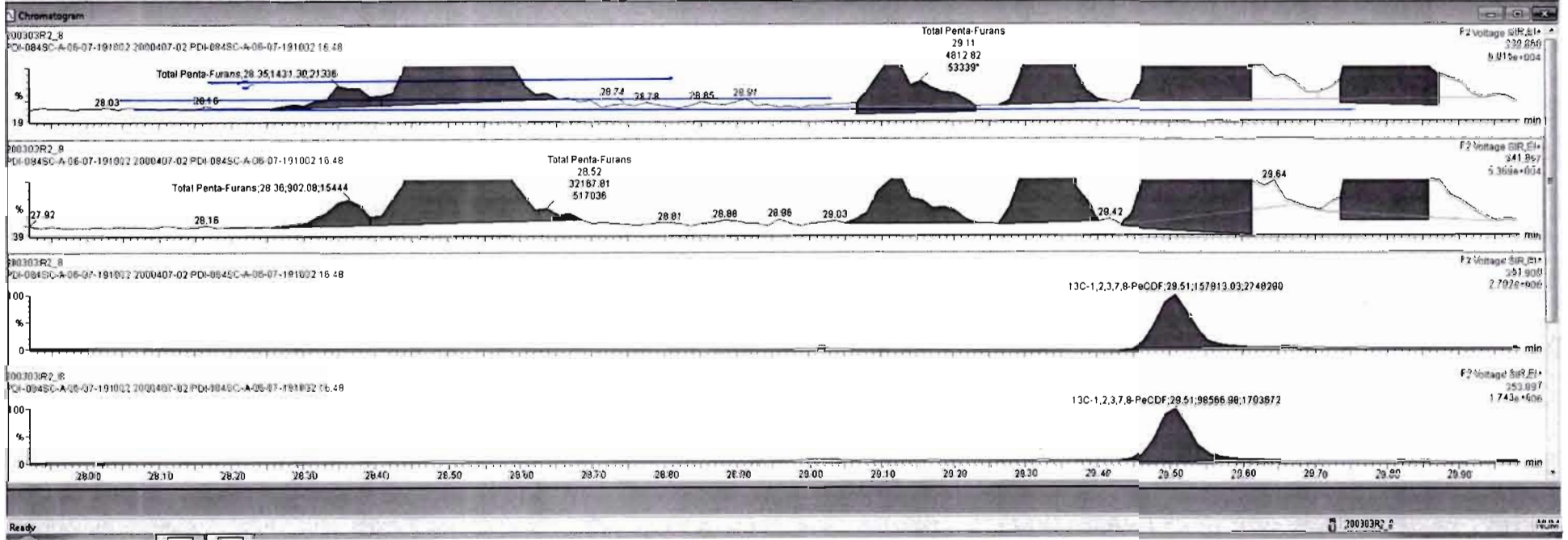


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200303R2\_8 - 2000407-02 PDI-0845C-A-06-07-191002-16-48 PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtVol	Pred.RT	RT	Pred.R	RRT	RRT Fail	Conc	DL	EMPC
43	Total Tetra-Furans				0.8020	10.036	23.81		0.000		NO	254.8	0.713	277.3
44	1st Func. Penta-Furans				0.9074	10.036	27.09		0.000		NO	25.36	0.299	25.39
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	336.0	1.16	336.7
46	Total Hexa-Furans				0.9982	10.036	33.56		0.000		NO	601.0	1.23	602.5
47	Total Hepta-Furans				0.9511	10.036	37.83		0.000		NO	421.0	2.23	421.0
48	PFK1													
49	PFK2													
50	PFK3													

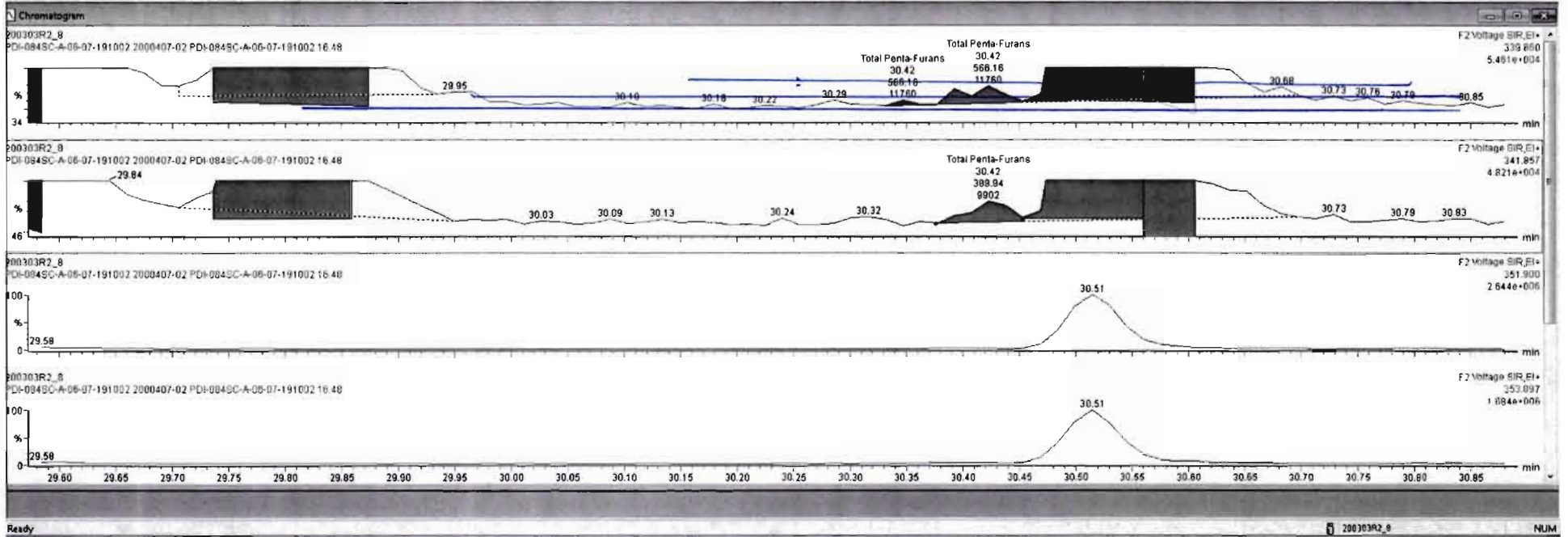
#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Penta-Furans	29.27	29.35	1.431e3	9.021e2	1.550	1.59	NO	2.0457	2.0457
2	Total Penta-Furans	29.27	29.52	4.791e4	3.217e4	1.550	1.49	NO	70.203	70.203
3	Total Penta-Furans	29.27	29.11	3.814e3	2.197e3	1.550	1.78	NO	5.3584	5.3584
4	Total Penta-Furans	29.27	29.32	8.950e3	6.310e3	1.550	1.42	NO	13.387	13.387



200303R2\_8 - 2000407-02 PDI-084SC-A-06-07-191002 16:48 - PDI-084SC-A-05-07-191002

#	Name	Resp	RA	nVY	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.8074	10.036	29.27		0.000		NO	331.3		1.10	336.8
46	Total Hexa-Furans				0.8982	10.036	33.56		0.000		NO	557.9		1.22	597.4
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	425.1		2.21	425.1
48	PFK1														
49	PFK2														
50	PFK3														
51	PFK4														
52	PFK5														

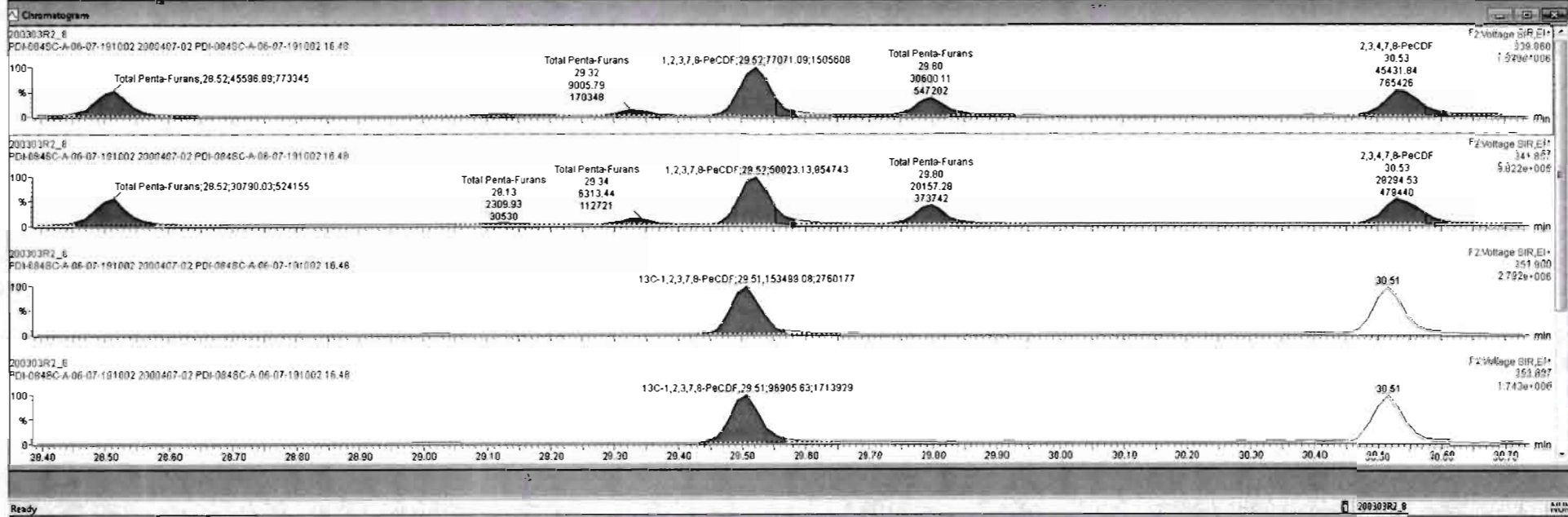
#	Name	Pred RT	RT	m1 Resp	m2 Resp	* Ratio (Pred)	RA	nVY	EMPC	Conc
1	45 Total Penta-Furans	29.27	29.52	4.560e4	3.079e4	1.550	1.48	NO	68.787	68.787
2	45 Total Penta-Furans	29.27	29.11	4.591e3	2.310e3	1.550	1.89	YES	5.3043	0.00000
3	45 Total Penta-Furans	29.27	29.32	9.006e3	6.313e3	1.550	1.43	NO	13.795	13.795
4	9 1,2,3,7,8-PeCDF	29.53	29.52	7.707e4	5.002e4	1.550	1.54	NO	111.47	111.47





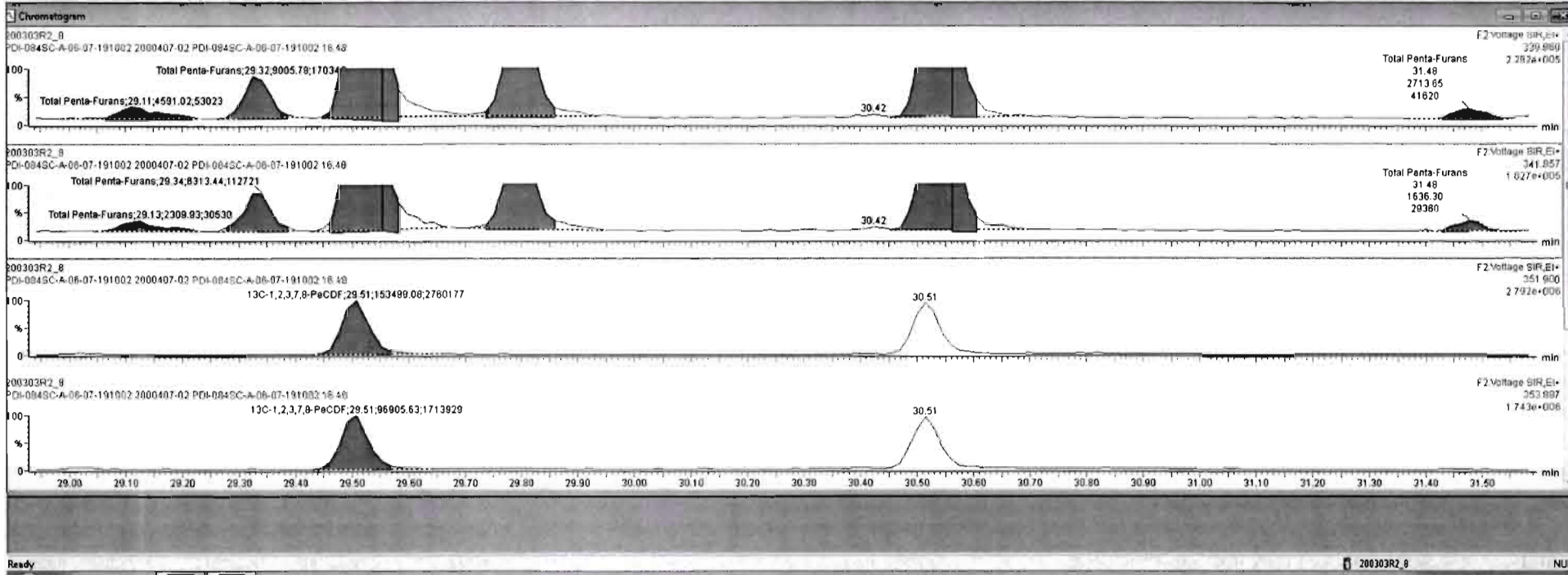
#	Name	Resp	RA	n/y	R/R	wAval	Prod RT	RT	Prod R.	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	1,2,3,7,8-TCDD														
2	1,2,3,7,8-PeCDD	9.54e2	0.87	NO	0.9723	10.036	30.86	30.85	1.001	1.000	NO	1.155		0.875	1.155
3	1,2,3,4,7,8-HxCDD	8.00e2	1.28	NO	1.0708	10.036	34.21	34.23	1.000	1.001	NO	1.196		1.09	1.196
4	1,2,3,6,7,8-HxCDD	4.89e3	1.28	NO	0.9211	10.036	34.32	34.32	1.000	1.000	NO	6.799		1.08	6.799
5	1,2,3,7,8,9-HxCDD	1.74e3	0.90	YES	0.9182	10.036	34.81	34.57	1.001	1.000	NO	2.784		1.20	2.359

#	Name	Prod RT	RT	int Resp	m2 Resp	1* Ratio (Prod)	RA	n/y	EMPC	Conc.
1	45 Total Penta-Furans	29.27	28.52	4.580e4	3.079e4	1.550	1.48	NO	88.787	88.787
2	45 Total Penta-Furans	29.27	29.11	4.591e3	2.310e3	1.550	1.99	YES	5.3043	0.00000
3	45 Total Penta-Furans	29.27	29.32	9.008e3	6.313e3	1.550	1.43	NO	13.795	13.795
4	9 1,2,3,7,8-PeCDF	29.53	29.52	7.707e4	5.002e4	1.550	1.54	NO	111.47	111.47
5	45 Total Penta-Furans	29.27	29.55	8.897e3	5.307e3	1.550	1.88	NO	12.791	12.791
6	45 Total Penta-Furans	29.27	29.80	3.060e4	2.016e4	1.550	1.52	NO	45.707	45.707
7	10 2,3,4,7,8-PeCDF	30.55	30.53	4.543e4	2.829e4	1.550	1.81	NO	65.046	65.046
8	45 Total Penta-Furans	29.27	30.58	5.037e3	3.305e3	1.550	1.52	NO	7.5120	7.5120
9	45 Total Penta-Furans	29.27	31.48	2.714e3	1.636e3	1.550	1.86	NO	3.9172	3.9172



#	Name	Resp	RA	n/y	RRF	wt/Vol	Pred.RT	RT	Pred.R	RRT	RRT Fnd	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.8074	10.036	29.27		0.000		NO	329.5		1.10	334.8
46	Total Hexa-Furans				0.8982	10.036	33.56		0.000		NO	567.9		1.22	597.4
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	425.1		2.21	425.1
48	PFK1														
49	PFK2														
50	PFK3														

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	1,2,3,7,8-PeCDF	29.53	29.52	7.707e4	5.002e4	1.550	1.54	NO	111.47	111.47
2	2,3,4,7,8-PeCDF	30.55	30.56	1.091e4	7.313e3	1.550	1.49	NO	16.090	16.090
3	45 Total Penta-Furans	29.27	29.52	4.500e4	3.079e4	1.550	1.48	NO	68.787	68.787
4	45 Total Penta-Furans	29.27	29.11	4.591e3	2.310e3	1.550	1.99	YES	5.3043	0.00000



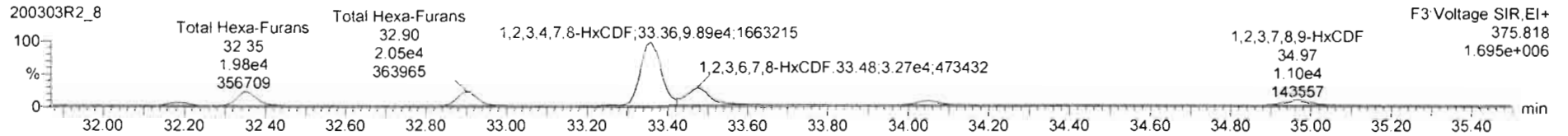
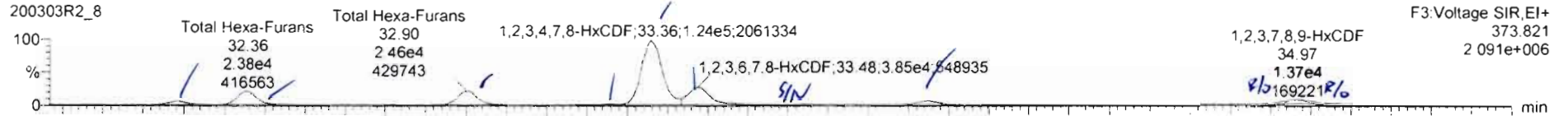


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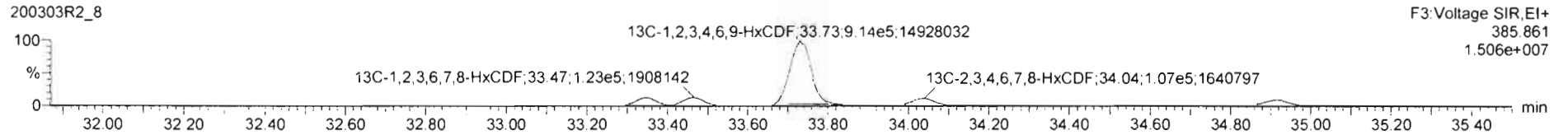
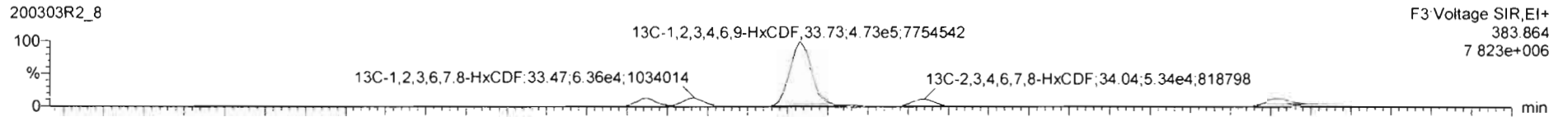
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Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

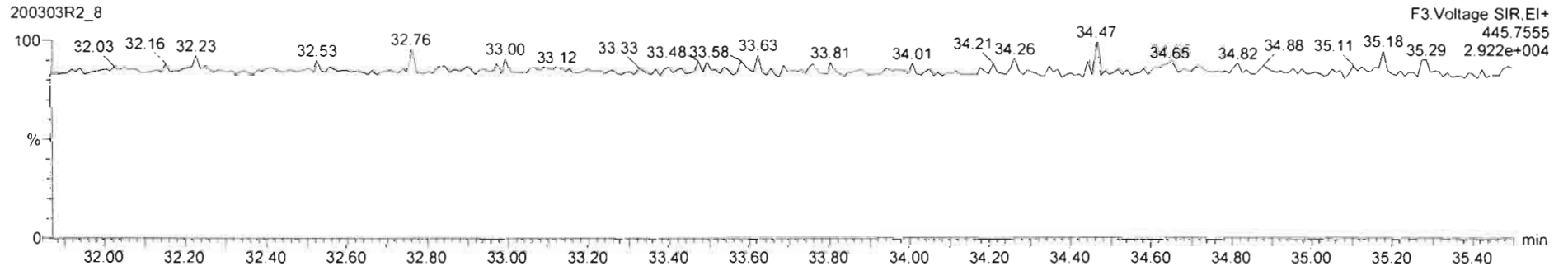
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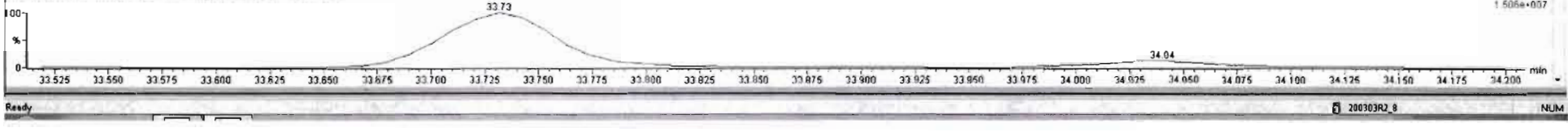
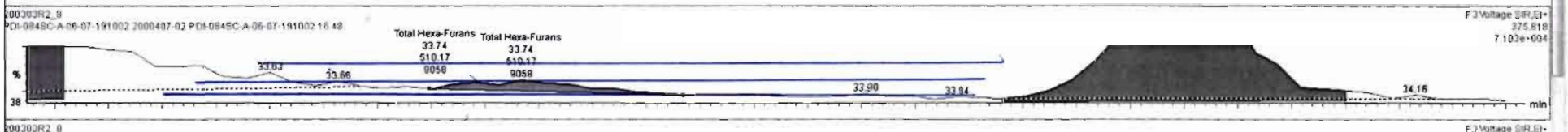
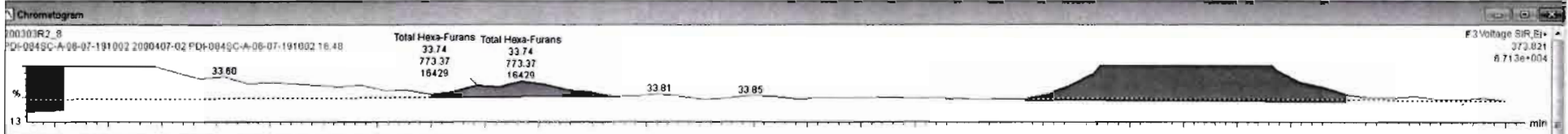
DPE3



200303R2\_8 - 2001401912 PDI-0845C-A-06-07-191002 16.48 PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtAvr	PredRT	RT	Pred.R	RRT	RRT Fail	Conc.	%Rec	CL	EMPC
45	Total Penta-Furans				0.9074	10.036	28.27		0.000		NO	329.5	1.10		334.8
46	Total Hexa-Furans				0.8982	10.036	33.56		0.000		NO	561.8	1.22		601.3
47	Total Hepta-Furans				0.9511	10.036	37.83		0.000		NO	425.1	2.21		425.1
48	PFK1														
49	PFK2														
50	PFK3														

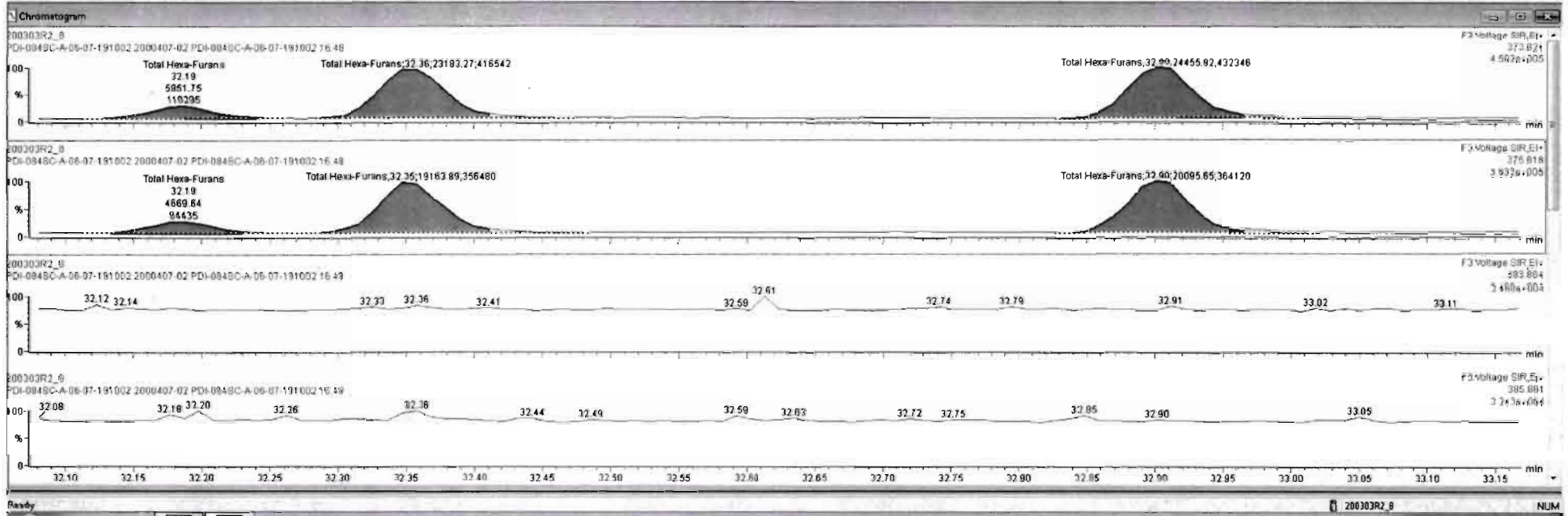
#	Name	Pred RT	RT	m1 Resp	m2 Resp	I* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Hexa-Furans	33.56	32.19	5.814e3	4.715e3	1.240	1.23	NO	14.456	14.456
2	Total Hexa-Furans	33.56	32.36	2.367e4	1.904e4	1.240	1.21	NO	59.463	59.463
3	Total Hexa-Furans	33.56	32.90	2.457e4	2.052e4	1.240	1.20	NO	61.896	61.896
4	Total Hexa-Furans	33.56	33.26	1.007e3	8.302e2	1.240	1.21	NO	2.5228	2.5228
5	1,2,3,4,7,8-HxCDF	33.35	33.36	1.225e5	9.958e4	1.240	1.23	NO	311.18	311.18
8	1,2,3,6,7,8-HxCDF	33.48	33.48	3.775e4	3.076e4	1.240	1.23	NO	90.547	90.547
7	Total Hexa-Furans	33.56	33.74	7.734e2	5.102e2	1.240	1.52	YES	1.5690	0.00000
13	1,2,3,4,8,7,8-HxCDF	34.07	34.05	6.343e3	7.208e3	1.240	1.16	NO	21.692	21.692



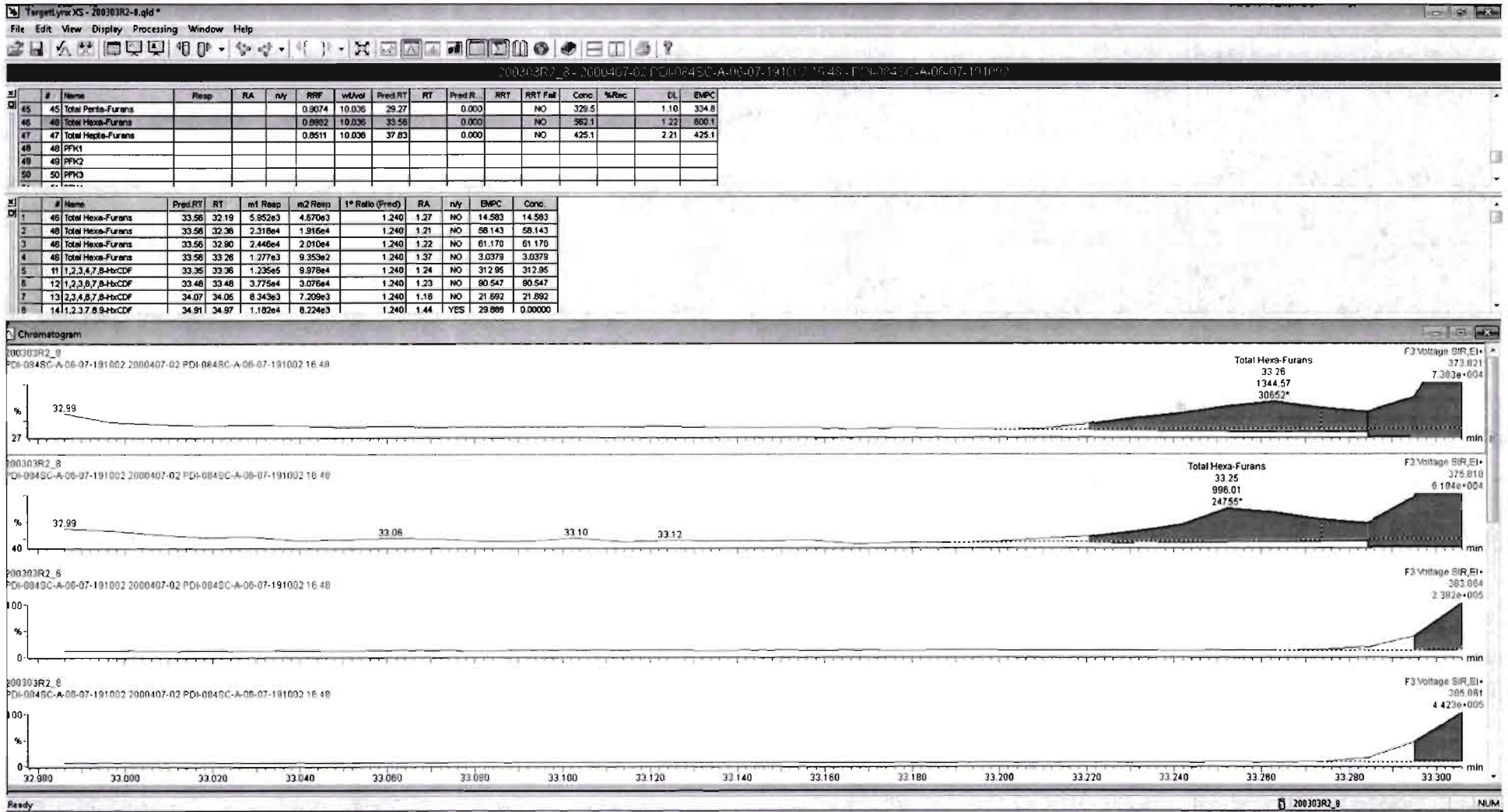
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#	Name	Resp	RA	n/y	RRF	wt/Vol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	329.5		1.10	334.8
46	Total Hexa-Furans				0.8982	10.036	33.58		0.000		NO	556.8		1.22	597.8
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	425.1		2.21	425.1
48	PFK1														
49	PFK2														
50	PFK3														

#	Name	Pred RT	RT	m1 Resp	m2 Resp	I* Ratio (Pred)	RA	n/y	EMPC	Conc
1	46 Total Hexa-Furans	33.56	32.19	5.952e3	4.870e3	1.240	1.27	NO	14.583	14.583
2	46 Total Hexa-Furans	33.56	32.36	2.319e4	1.916e4	1.240	1.21	NO	58.143	58.143
3	46 Total Hexa-Furans	33.56	32.90	2.446e4	2.010e4	1.240	1.22	NO	61.170	61.170
4	46 Total Hexa-Furans	33.56	33.26	1.007e3	8.302e2	1.240	1.21	NO	2.5228	2.5228
5	11 1,2,3,4,7,8-HxCDF	33.35	33.36	1.225e5	9.956e4	1.240	1.23	NO	311.18	311.18
6	12 1,2,3,6,7,8-HxCDF	33.48	33.48	3.775e4	3.076e4	1.240	1.23	NO	90.547	90.547
7	13 2,3,4,6,7,8-HxCDF	34.07	34.05	8.343e3	7.209e3	1.240	1.16	NO	21.692	21.692
8	14 1,2,3,7,8-HxCDF	34.91	34.97	1.182e4	6.224e3	1.240	1.44	YES	29.688	0.00000





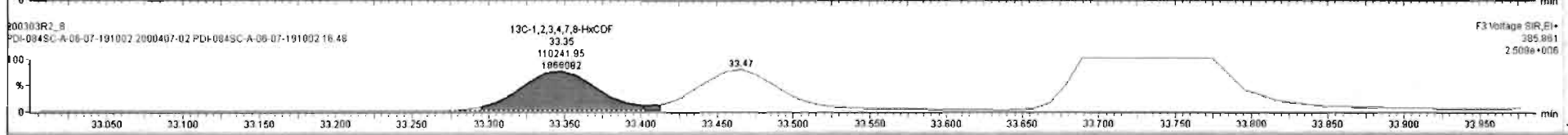
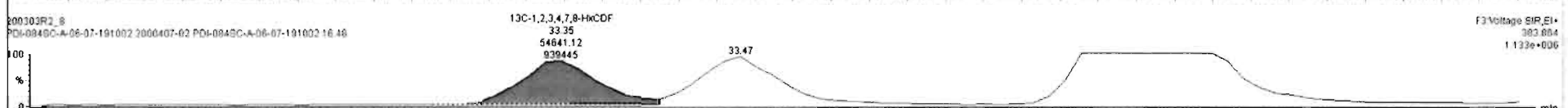
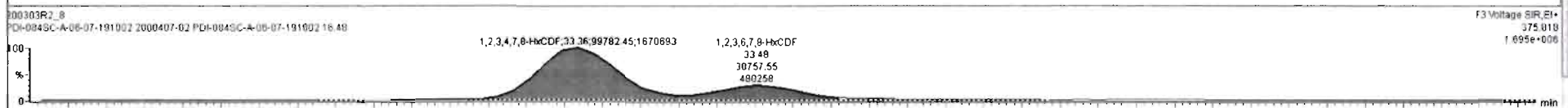
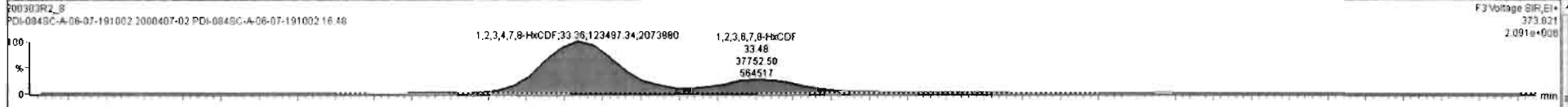


200303R2\_8 - 2000407-02 PDI-0845C-A-06-07-191002 16:48 PDI-0845C-A-06-07-191002

#	Name	Resp	RA	n/y	RRF	wtVol	Pred RT	RT	Pred R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	329.5		1.10	334.8
46	Total Hexa-Furans				0.8922	10.036	33.58		0.000		NO	562.1		1.22	600.1
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	425.1		2.21	425.1
48	PFK1														
49	PFK2														
50	PFK3														

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1° Ratio (Pred)	RA	n/y	EMPC	Conc.
1	Total Hexa-Furans	33.56	32.19	5.952e3	4.670e3	1.240	1.27	NO	14.593	14.593
2	Total Hexa-Furans	33.56	32.36	2.318e4	1.916e4	1.240	1.21	NO	58.143	58.143

Chromatogram

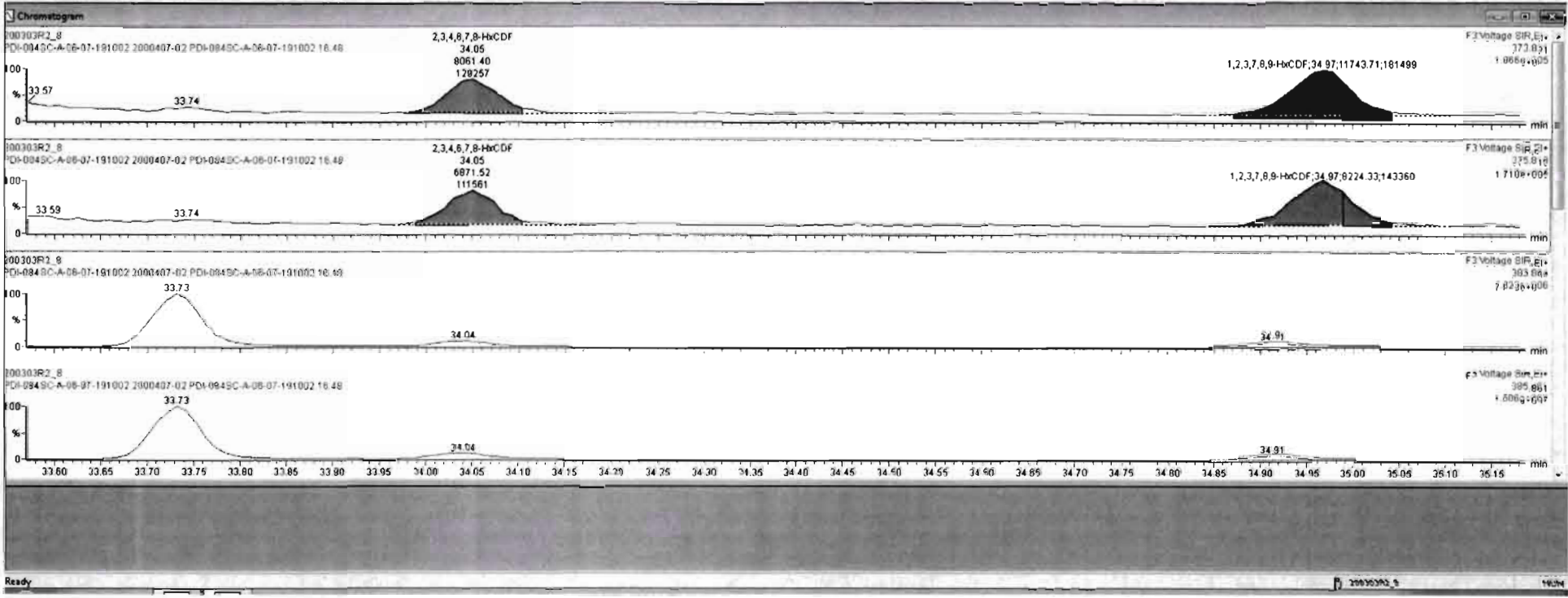




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#	Name	Resp	RA	n/y	RRF	w/Mol	Pred RT	RT	Pred R...	RRT	RRT Fal	Conc	%Rec	DL	EMPC
45	45 Total Penta-Furans				0.9074	10.036	28.27		0.000		NO	329.5	1.10	334.5	
46	46 Total Hexa-Furans				0.8992	10.036	33.56		0.000		NO	561.4	1.22	598.8	
47	47 Total Hepta-Furans				0.8511	10.036	37.63		0.000		NO	425.1	2.21	425.1	
48	48 PFK1														
49	49 PFK2														
50	50 PFK3														

#	Name	Pred RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc
1	46 Total Hexa-Furans	33.56	32.19	6.952e3	4.670e3	1.240	1.27	NO	14.583	14.583
2	46 Total Hexa-Furans	33.56	32.36	2.316e4	1.916e4	1.240	1.21	NO	58.143	58.143



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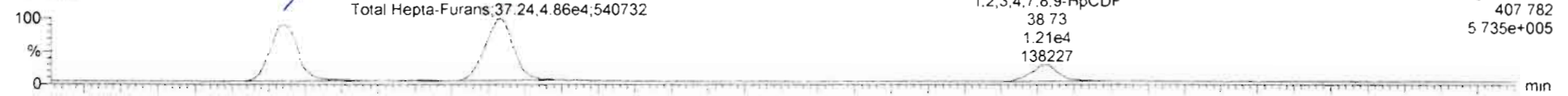
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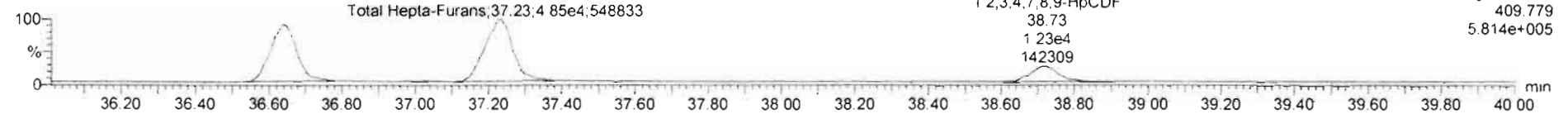
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1,2,3,4,6,7,8-HpCDF

200303R2\_8



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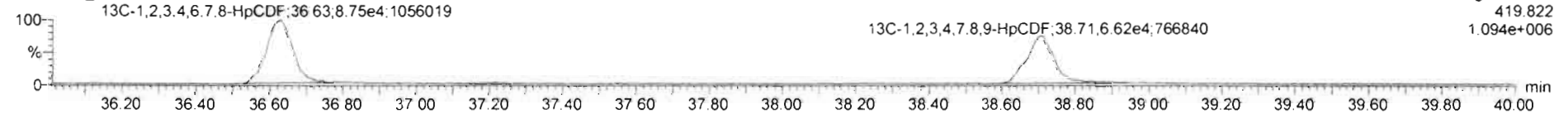


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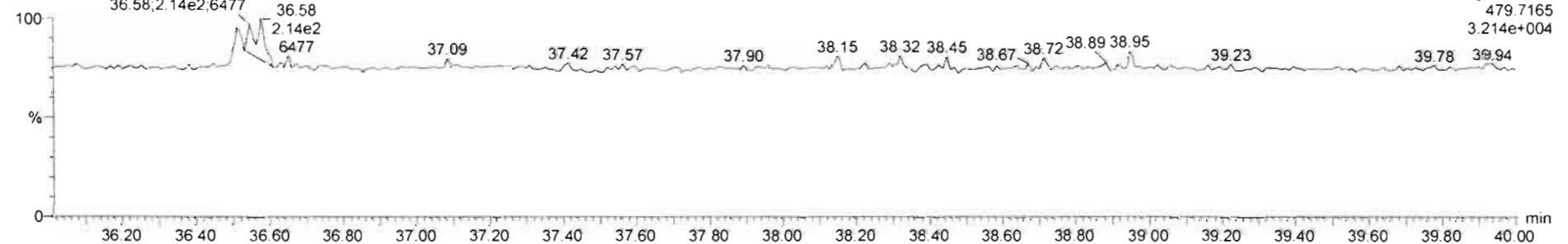


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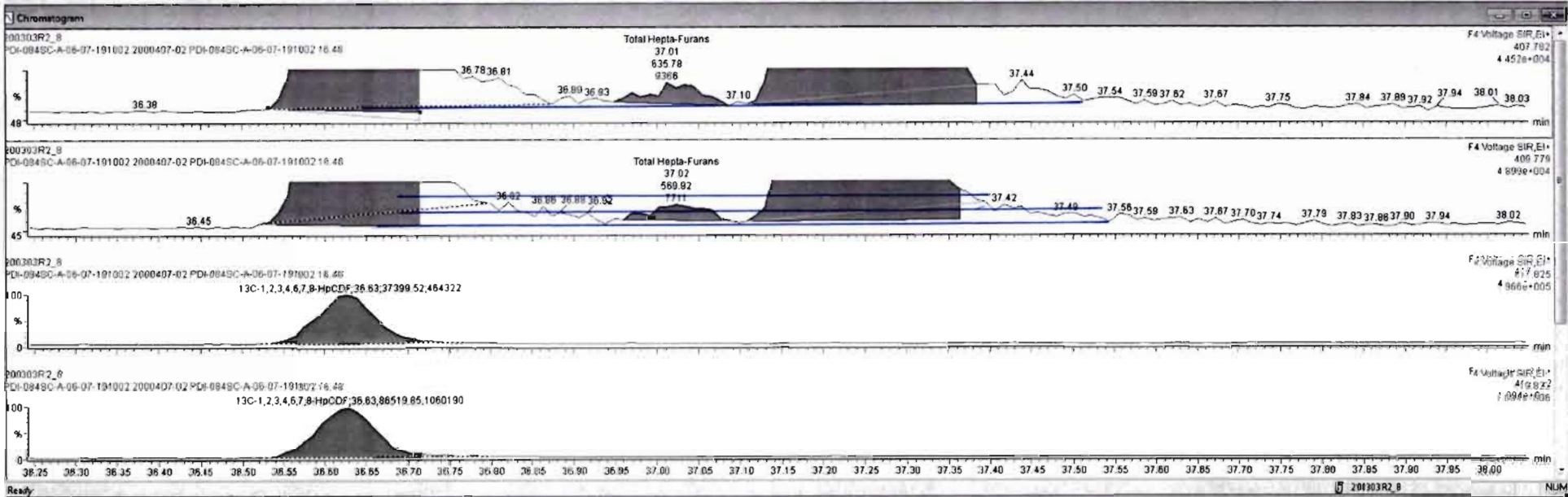
DPE4

200303R2\_8



#	Name	Resp	RA	n/y	RRF	wt/col	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	329.5		1.10	334.8
46	Total Hexa-Furans				0.8982	10.036	33.56		0.000		NO	561.4		1.22	588.8
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	425.1		2.21	425.1
48	PFK1														
49	PFK2														
50	PFK3														

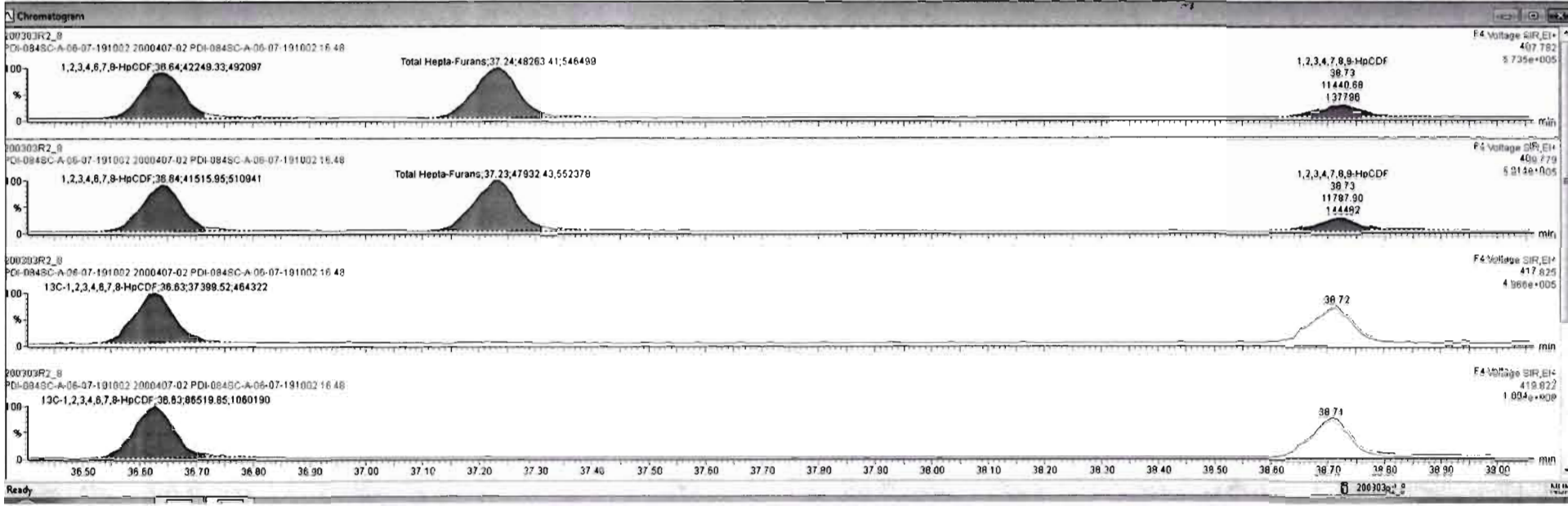
#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc
1	1,2,3,4,6,7,8-HpCDF	36.67	36.64	4.252e4	4.164e4	1.040	1.02	NO	159.03	159.03
2	Total Hepta-Furans	37.83	37.01	6.358e2	5.698e2	1.040	1.12	NO	2.6218	2.6216
3	Total Hepta-Furans	37.83	37.24	4.882e4	4.854e4	1.040	1.00	NO	211.25	211.25
4	1,2,3,4,7,8,9-HpCDF	38.72	38.73	1.182e4	1.185e4	1.040	0.98	NO	52.201	52.201



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#	Name	Resp	RA	n/y	RRF	wtAvol	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
45	Total Penta-Furans				0.9074	10.036	29.27		0.000		NO	329.5		1.10	334.8
46	Total Hexa-Furans				0.8982	10.036	33.56		0.000		NO	561.4		1.22	598.8
47	Total Hepta-Furans				0.8511	10.036	37.83		0.000		NO	418.1		2.21	419.1
48	PFK1														
49	PFK2														
50	PFK3														

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1	1,2,3,4,6,7,8-HpCDF	36.67	36.84	4.225e4	4.152e4	1.040	1.02	NO	158.27	158.27
2	47 Total Hepta-Furans	37.83	37.24	4.626e4	4.793e4	1.040	1.01	NO	209.16	209.16
3	16 1,2,3,4,7,8,9-HpCDF	38.72	38.73	1.144e4	1.179e4	1.040	0.97	NO	51.652	51.652



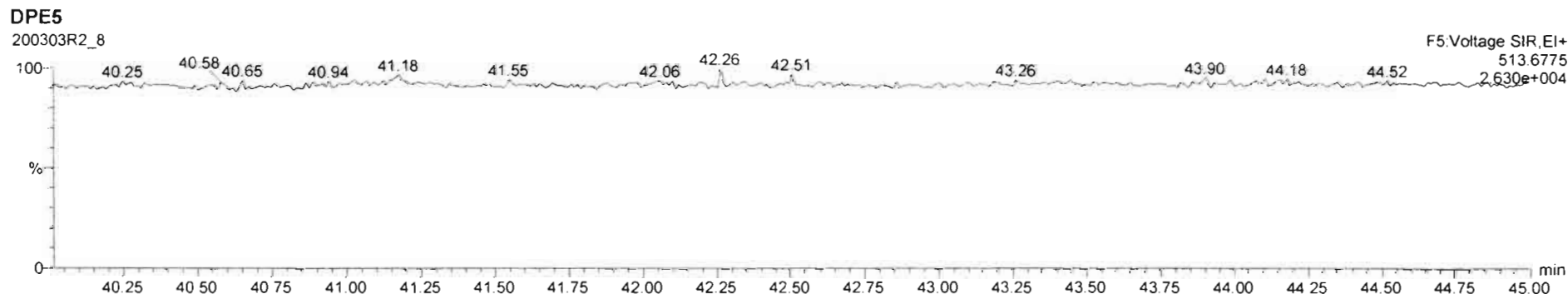
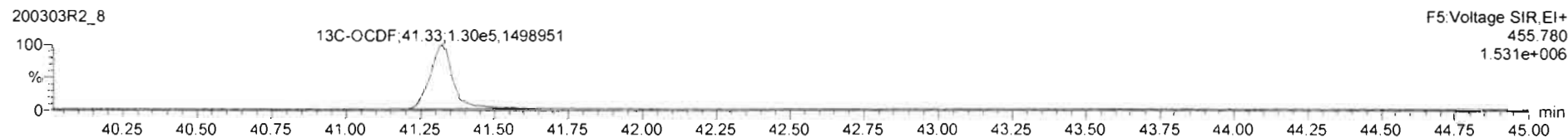
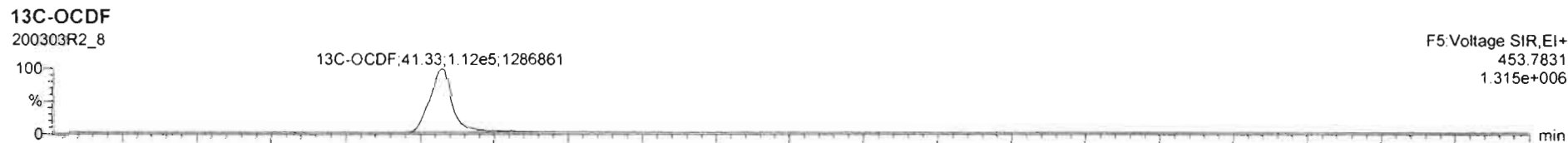
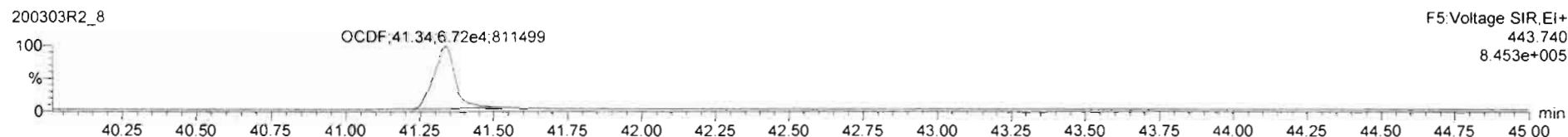
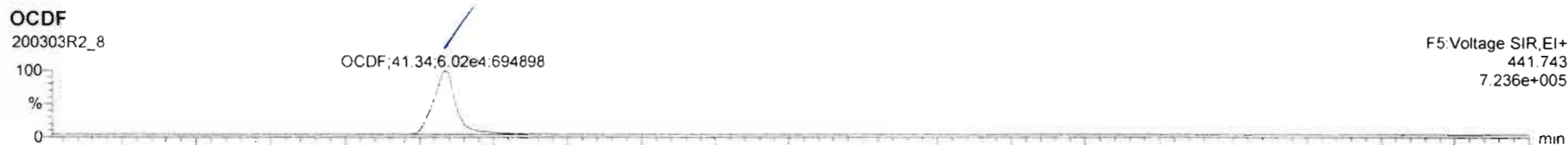


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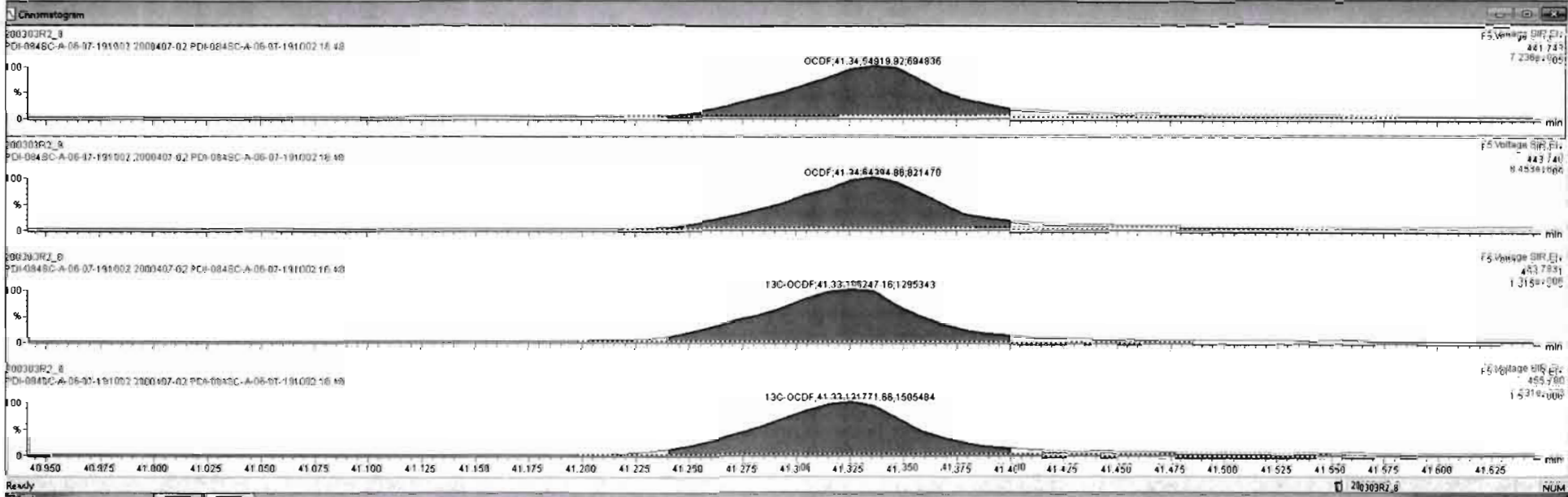




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#	Name	Resp	RA	n/y	RRF	wtVol	Pred.RT	RT	Pred.R	RRT	RRT Fail	Conc	%Rec	DL	EMPC
17	OCDP	1.19e5	0.85	NO	0.8655	10.036	41.33	41.34	1.000	1.000	NO	258.9		1.42	258.8
18	13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.1985	10.036	25.66	25.70	1.026	1.026	NO	26.34	13.2		0.163
19	13C-1,2,3,7,8-PeCDD	1.88e5	0.63	NO	0.9687	10.036	30.78	30.83	1.230	1.233	NO	26.08	13.1		0.211
20	13C-1,2,3,4,7,8-HxCDD	1.24e5	1.25	NO	0.8739	10.036	34.20	34.20	1.014	1.014	NO	20.46	10.3		0.292
21	13C-1,2,3,6,7,8-HxCDD	1.46e5	1.26	NO	1.0458	10.036	34.31	34.32	1.017	1.017	NO	20.11	10.1		0.244
22	13C-1,2,3,7,8,9-HxCDD	1.37e5	1.26	NO	0.9744	10.036	34.61	34.57	1.028	1.025	NO	20.14	10.1		0.262

#	Name	Pred.RT	RT	m1 Resp	m2 Resp	1* Ratio (Pred)	RA	n/y	EMPC	Conc.
1										

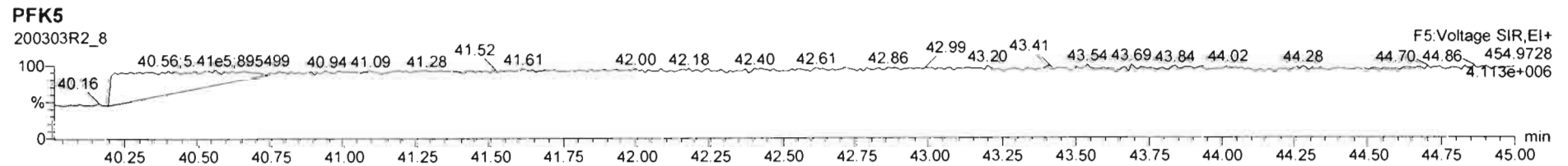
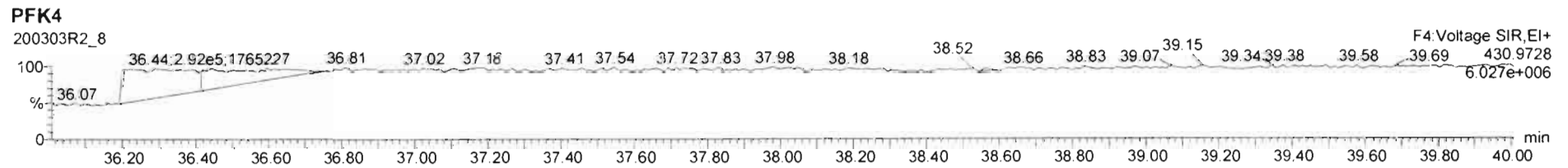
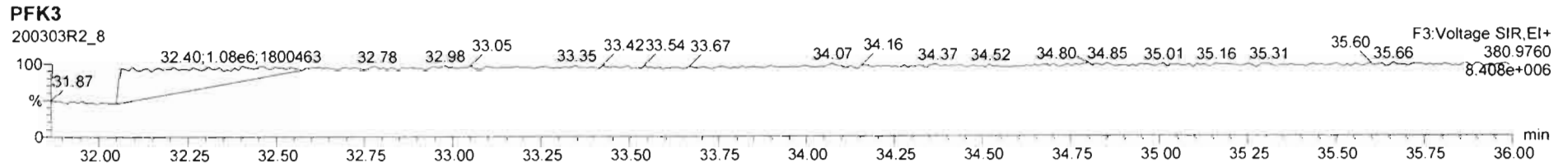
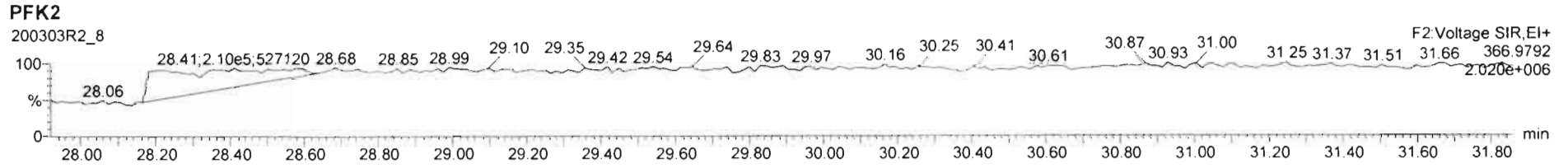
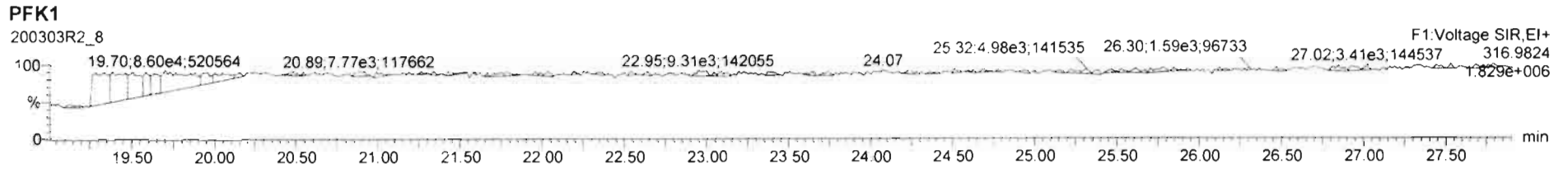


Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

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Name: 200303R2\_8, Date: 03-Mar-2020, Time: 19:21:53, ID: 2000407-02 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-9.qld

Last Altered: Wednesday, March 04, 2020 13:20:35 Pacific Standard Time

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C- 03/06/2020

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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

#	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	0.9881	10.081							0.0983	
2	2 1,2,3,7,8-PeCDD	1.07e3	0.67	NO	0.972	10.081	30.826	30.83	1.001	1.001	0.17523		0.0859	0.175
3	3 1,2,3,4,7,8-HxCDD	8.99e2	1.61	YES	1.07	10.081	34.200	34.23	1.000	1.001	0.19137		0.127	0.164
4	4 1,2,3,6,7,8-HxCDD	6.29e3	1.24	NO	0.921	10.081	34.296	34.31	1.000	1.000	1.1514		0.124	1.15
5	5 1,2,3,7,8,9-HxCDD	2.13e3	1.12	NO	0.918	10.081	34.587	34.57	1.001	1.001	0.45544		0.156	0.455
6	6 1,2,3,4,6,7,8-HpCDD	1.57e5	1.03	NO	0.923	10.081	38.046	38.06	1.000	1.001	39.962		0.512	40.0
7	7 OCDD	1.40e6	0.89	NO	0.975	10.081	41.145	41.15	1.000	1.000	361.73		0.565	362
8	8 2,3,7,8-TCDF	8.45e4	0.75	NO	0.802	10.081	24.772	24.76	1.001	1.001	11.621	(10.384)	0.150	11.6
9	9 1,2,3,7,8-PeCDF	2.04e5	1.53	NO	0.907	10.081	29.513	29.51	1.001	1.001	26.578		0.185	26.6
10	10 2,3,4,7,8-PeCDF	9.35e4	1.55	NO	0.952	10.081	30.530	30.51	1.001	1.001	11.591		0.169	11.6
11	11 1,2,3,4,7,8-HxCDF	2.53e5	1.20	NO	0.862	10.081	33.327	33.34	1.000	1.000	49.561		0.185	49.6
12	12 1,2,3,6,7,8-HxCDF	7.43e4	1.24	NO	0.841	10.081	33.465	33.45	1.000	1.000	13.525		0.186	13.5
13	13 2,3,4,6,7,8-HxCDF	2.05e4	1.26	NO	0.898	10.081	34.053	34.04	1.001	1.001	3.8359		0.205	3.84
14	14 1,2,3,7,8,9-HxCDF	2.24e4	1.15	NO	0.858	10.081	34.903	34.95	1.000	1.001	4.9019		0.285	4.90
15	15 1,2,3,4,6,7,8-HpCDF	9.86e4	1.00	NO	0.851	10.081	36.655	36.64	1.001	1.001	24.205		0.271	24.2
16	16 1,2,3,4,7,8,9-HpCDF	2.78e4	0.99	NO	0.980	10.081	38.706	38.71	1.000	1.000	7.8673		0.317	7.87
17	17 OCDF	1.56e5	0.87	NO	0.806	10.081	41.326	41.34	1.000	1.000	42.489		0.267	42.5
18	18 13C-2,3,7,8-TCDD	1.46e6	0.77	NO	1.20	10.081	25.645	25.69	1.026	1.028	188.88	95.2	0.229	
19	19 13C-1,2,3,7,8-PeCDD	1.25e6	0.62	NO	0.967	10.081	30.765	30.80	1.230	1.232	200.23	101	0.285	
20	20 13C-1,2,3,4,7,8-HxCDD	8.71e5	1.27	NO	0.874	10.081	34.182	34.19	1.014	1.014	150.64	75.9	0.412	
21	21 13C-1,2,3,6,7,8-HxCDD	1.18e6	1.26	NO	1.05	10.081	34.283	34.30	1.017	1.017	170.00	85.7	0.344	
22	22 13C-1,2,3,7,8,9-HxCDD	1.01e6	1.23	NO	0.974	10.081	34.586	34.55	1.026	1.025	156.44	78.9	0.369	
23	23 13C-1,2,3,4,6,7,8-HpCDD	8.45e5	1.02	NO	0.747	10.081	38.160	38.03	1.132	1.128	171.02	86.2	0.621	
24	24 13C-OCDD	1.57e6	0.89	NO	0.707	10.081	41.059	41.15	1.218	1.221	336.34	84.8	0.601	
25	25 13C-2,3,7,8-TCDF	1.80e6	0.77	NO	1.07	10.081	24.827	24.75	0.993	0.990	188.69	95.1	0.343	
26	26 13C-1,2,3,7,8-PeCDF	1.68e6	1.60	NO	1.00	10.081	29.402	29.49	1.176	1.180	187.48	94.5	0.585	
27	27 13C-2,3,4,7,8-PeCDF	1.68e6	1.56	NO	0.962	10.081	30.370	30.50	1.215	1.220	195.46	98.5	0.610	
28	28 13C-1,2,3,4,7,8-HxCDF	1.17e6	0.51	NO	1.05	10.081	33.305	33.33	0.988	0.989	169.15	85.3	0.567	
29	29 13C-1,2,3,6,7,8-HxCDF	1.29e6	0.50	NO	1.19	10.081	33.407	33.46	0.991	0.992	164.50	82.9	0.500	
30	30 13C-2,3,4,6,7,8-HxCDF	1.18e6	0.51	NO	1.07	10.081	34.017	34.02	1.009	1.009	167.69	84.5	0.558	
31	31 13C-1,2,3,7,8,9-HxCDF	1.06e6	0.53	NO	0.922	10.081	34.924	34.90	1.036	1.035	173.46	87.4	0.645	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-9.qld

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Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

#	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	9.49e5	0.43	NO	0.767	10.081	36.676	36.62	1.088	1.086	187.06	94.3	0.699	
33	33 13C-1,2,3,4,7,8,9-HpCDF	7.15e5	0.43	NO	0.552	10.081	38.699	38.71	1.148	1.148	195.64	98.6	0.971	
34	34 13C-OCDF	1.81e6	0.88	NO	0.789	10.081	41.295	41.33	1.225	1.226	347.38	87.6	0.472	
35	35 37Cl-2,3,7,8-TCDD	5.78e5			1.18	10.081	25.677	25.72	1.027	1.029	76.156	96.0	0.0727	
36	36 13C-1,2,3,4-TCDD	1.28e6	0.78	NO	1.00	10.081	25.110	25.00	1.000	1.000	198.39	100	0.275	
37	37 13C-1,2,3,4-TCDF	1.77e6	0.79	NO	1.00	10.081	23.370	23.21	1.000	1.000	198.39	100	0.365	
38	38 13C-1,2,3,4,6,9-HxCDF	1.31e6	0.51	NO	1.00	10.081	33.710	33.71	1.000	1.000	198.39	100	0.595	
39	39 Total Tetra-Dioxins				0.988	10.081	24.620		0.000		2.0978		0.0983	2.10
40	40 Total Penta-Dioxins				0.972	10.081	29.960		0.000		0.96541		0.0859	2.01
41	41 Total Hexa-Dioxins				0.921	10.081	33.635		0.000		11.710		0.141	12.2
42	42 Total Hepta-Dioxins				0.923	10.081	37.640		0.000		89.728		0.512	89.7
43	43 Total Tetra-Furans				0.802	10.081	23.610		0.000		23.578		0.150	41.8 P
44	44 1st Func. Penta-Furans				0.907	10.081	27.090		0.000		8.5592		0.0384	8.56 P
45	45 Total Penta-Furans				0.907	10.081	29.275		0.000		72.705		0.181	74.2
46	46 Total Hexa-Furans				0.898	10.081	33.555		0.000		95.374		0.205	95.8
47	47 Total Hepta-Furans				0.851	10.081	37.835		0.000		59.438		0.311	59.4

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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.53	6.367e4	7.364e4	5.697e3	6.937e3	0.82	NO	1.263e4	1.7358	1.7358	0.0983
2	Total Tetra-Dioxins	21.96	7.717e3	1.210e4	7.464e2	9.032e2	0.83	NO	1.650e3	0.22666	0.22666	0.0983
3	Total Tetra-Dioxins	25.42	5.886e3	9.051e3	4.625e2	5.224e2	0.89	NO	9.848e2	0.13531	0.13531	0.0983

Penta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.56	2.975e4	3.082e4	1.691e3	2.569e3	0.66	NO	4.260e3	0.69564	0.69564	0.0859
2	Total Penta-Dioxins	29.05	5.827e3	6.937e3	2.390e2	3.399e2	0.70	NO	5.789e2	0.094540	0.094540	0.0859
3	Total Penta-Dioxins	29.55	2.708e4	3.598e4	1.378e3	2.078e3	0.66	NO	0.000e0	0.00000	0.56430	0.0859
4	Total Penta-Dioxins	29.74	7.357e3	1.130e4	3.715e2	4.916e2	0.76	YES	0.000e0	0.00000	0.13086	0.0859
5	Total Penta-Dioxins	29.81	5.444e3	1.292e4	3.629e2	7.149e2	0.51	YES	0.000e0	0.00000	0.15333	0.0859
6	Total Penta-Dioxins	30.03	6.438e3	8.963e3	5.574e2	7.483e2	0.74	YES	0.000e0	0.00000	0.19919	0.0859
7	1,2,3,7,8-PeCDD	30.83	7.117e3	9.681e3	4.292e2	6.439e2	0.67	NO	1.073e3	0.17523	0.17523	0.0859

Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.72	1.924e5	1.551e5	1.176e4	9.822e3	1.20	NO	2.159e4	4.5659	4.5659	0.141
2	Total Hexa-Dioxins	33.27	2.712e4	2.629e4	1.796e3	1.409e3	1.27	NO	3.205e3	0.67793	0.67793	0.141
3	Total Hexa-Dioxins	33.53	1.634e5	1.377e5	1.207e4	9.678e3	1.25	NO	2.175e4	4.5997	4.5997	0.141
4	Total Hexa-Dioxins	33.59	2.432e4	1.711e4	1.336e3	7.920e2	1.69	YES	0.000e0	0.00000	0.37522	0.141
5	1,2,3,4,7,8-HxCDD	34.23	8.549e3	7.202e3	5.543e2	3.450e2	1.61	YES	8.993e2	0.00000	0.16446	0.127
6	1,2,3,6,7,8-HxCDD	34.31	4.384e4	3.805e4	3.478e3	2.809e3	1.24	NO	6.286e3	1.1514	1.1514	0.124
7	Total Hexa-Dioxins	34.48	8.141e3	7.260e3	6.458e2	5.820e2	1.11	NO	1.228e3	0.25971	0.25971	0.141
8	1,2,3,7,8,9-HxCDD	34.57	1.653e4	1.402e4	1.125e3	1.000e3	1.12	NO	2.125e3	0.45544	0.45544	0.156



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Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.02	1.035e6	1.029e6	9.831e4	9.739e4	1.01	NO	1.957e5	49.766	49.766	0.512
2	1,2,3,4,6,7,8-HpCDD	38.06	7.328e5	7.345e5	7.983e4	7.732e4	1.03	NO	1.572e5	39.962	39.962	0.512

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.49	9.391e3	1.056e4	6.062e2	7.920e2	0.77	NO	1.398e3	0.19233	0.19233	0.150
2	Total Tetra-Furans	20.02	1.567e4	2.472e4	1.310e3	1.870e3	0.70	NO	3.179e3	0.43733	0.43733	0.150
3	Total Tetra-Furans	20.59	7.399e4	1.018e5	6.589e3	8.584e3	0.77	NO	1.517e4	2.0871	2.0871	0.150
4	Total Tetra-Furans	21.13	2.080e4	2.835e4	2.859e3	3.648e3	0.78	NO	6.507e3	0.89509	0.89509	0.150
5	Total Tetra-Furans	21.50	1.189e5	1.611e5	1.194e4	1.627e4	0.73	NO	2.821e4	3.8808	3.8808	0.150
6	Total Tetra-Furans	21.96	7.588e4	8.917e4	6.958e3	8.985e3	0.77	NO	0.000e0	0.00000	2.1932	0.150
7	Total Tetra-Furans	22.11	4.190e3	5.581e3	3.196e2	4.475e2	0.71	NO	0.000e0	0.00000	0.10552	0.150
8	Total Tetra-Furans	22.34	1.896e4	1.974e4	1.785e3	2.065e3	0.86	NO	3.850e3	0.52955	0.52955	0.150
9	Total Tetra-Furans	22.79	3.511e3	7.133e3	3.040e2	5.605e2	0.54	YES	0.000e0	0.00000	0.096121	0.150
10	Total Tetra-Furans	22.95	5.151e3	5.614e3	3.981e2	4.420e2	0.90	YES	0.000e0	0.00000	0.10761	0.150
11	Total Tetra-Furans	23.12	4.888e4	5.853e4	4.378e3	5.665e3	0.77	NO	1.004e4	1.3814	1.3814	0.150
12	Total Tetra-Furans	23.21	4.514e4	5.881e4	4.379e3	5.582e3	0.78	NO	9.961e3	1.3701	1.3701	0.150
13	Total Tetra-Furans	23.77	4.056e5	5.388e5	3.558e4	4.750e4	0.75	NO	0.000e0	0.00000	11.428	0.150
14	Total Tetra-Furans	23.89	2.943e4	3.748e4	1.656e3	1.931e3	0.86	NO	0.000e0	0.00000	0.49348	0.150
15	Total Tetra-Furans	24.10	1.842e4	2.310e4	1.554e3	1.937e3	0.80	NO	3.491e3	0.48026	0.48026	0.150
16	Total Tetra-Furans	24.58	7.783e3	7.588e3	5.091e2	6.187e2	0.82	NO	0.000e0	0.00000	0.15514	0.150
17	Total Tetra-Furans	24.67	5.209e4	7.402e4	3.759e3	4.742e3	0.79	NO	0.000e0	0.00000	1.1694	0.150
18	2,3,7,8-TCDF	24.76	4.480e5	6.111e5	3.626e4	4.822e4	0.75	NO	8.448e4	11.621	11.621	0.150
19	Total Tetra-Furans	25.18	2.026e4	2.666e4	1.727e3	2.163e3	0.80	NO	3.890e3	0.53508	0.53508	0.150
20	Total Tetra-Furans	25.44	6.996e3	1.139e4	4.992e2	7.186e2	0.69	NO	1.218e3	0.16751	0.16751	0.150
21	Total Tetra-Furans	26.42	2.116e4	2.820e4	1.381e3	1.874e3	0.74	NO	0.000e0	0.00000	0.44768	0.150
22	Total Tetra-Furans	26.59	2.740e4	3.677e4	1.892e3	2.280e3	0.83	NO	0.000e0	0.00000	0.57375	0.150
23	Total Tetra-Furans	26.86	8.191e4	8.956e4	5.670e3	6.074e3	0.93	YES	0.000e0	0.00000	1.4788	0.150

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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	26.86	5.892e5	3.891e5	4.023e4	2.558e4	1.57	NO	6.581e4	8.5592	8.5592	0.0384

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.35	3.947e4	2.931e4	2.258e3	1.703e3	1.33	NO	3.961e3	0.51515	0.51515	0.181
2	Total Penta-Furans	28.49	1.096e6	7.162e5	7.007e4	4.492e4	1.56	NO	1.150e5	14.957	14.957	0.181
3	Total Penta-Furans	28.55	1.246e5	8.112e4	3.910e3	2.655e3	1.47	NO	6.564e3	0.85382	0.85382	0.181
4	Total Penta-Furans	29.10	9.993e4	6.862e4	5.963e3	4.238e3	1.41	NO	0.000e0	0.00000	1.3269	0.181
5	Total Penta-Furans	29.14	2.715e4	2.635e4	8.909e2	6.599e2	1.35	NO	0.000e0	0.00000	0.20172	0.181
6	Total Penta-Furans	29.31	2.127e5	1.308e5	1.196e4	7.587e3	1.58	NO	1.955e4	2.5430	2.5430	0.181
7	1,2,3,7,8-PeCDF	29.51	2.153e6	1.413e6	1.235e5	8.075e4	1.53	NO	2.042e5	26.578	26.578	0.185
8	Total Penta-Furans	29.58	8.662e4	5.105e4	3.464e3	2.370e3	1.46	NO	5.834e3	0.75880	0.75880	0.181
9	Total Penta-Furans	29.78	8.183e5	5.254e5	4.952e4	3.166e4	1.56	NO	8.118e4	10.559	10.559	0.181
10	Total Penta-Furans	29.87	7.847e4	5.346e4	4.344e3	2.760e3	1.57	NO	7.105e3	0.92407	0.92407	0.181
11	2,3,4,7,8-PeCDF	30.51	1.056e6	6.795e5	5.690e4	3.660e4	1.55	NO	9.350e4	11.591	11.591	0.169
12	Total Penta-Furans	30.55	7.157e5	4.809e5	1.668e4	9.658e3	1.73	NO	2.634e4	3.4257	3.4257	0.181

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	32.17	1.073e5	1.045e5	6.331e3	5.553e3	1.14	NO	1.188e4	2.2296	2.2296	0.205
2	Total Hexa-Furans	32.34	4.566e5	3.850e5	2.679e4	2.213e4	1.21	NO	4.893e4	9.1789	9.1789	0.205
3	Total Hexa-Furans	32.89	4.337e5	3.649e5	2.684e4	2.142e4	1.25	NO	4.827e4	9.0552	9.0552	0.205
4	Total Hexa-Furans	33.25	2.622e4	2.036e4	1.171e3	1.058e3	1.11	NO	0.000e0	0.00000	0.41816	0.205
5	1,2,3,4,7,8-HxCDF	33.34	2.228e6	1.849e6	1.379e5	1.150e5	1.20	NO	2.529e5	49.561	49.561	0.185
6	1,2,3,6,7,8-HxCDF	33.45	6.204e5	4.858e5	4.115e4	3.310e4	1.24	NO	7.426e4	13.525	13.525	0.186
7	Total Hexa-Furans	33.53	6.992e4	5.560e4	3.548e3	3.133e3	1.13	NO	6.681e3	1.2533	1.2533	0.205
8	2,3,4,6,7,8-HxCDF	34.04	1.569e5	1.303e5	1.143e4	9.103e3	1.26	NO	2.054e4	3.8359	3.8359	0.205
9	1,2,3,7,8,9-HxCDF	34.95	2.069e5	1.785e5	1.200e4	1.043e4	1.15	NO	2.243e4	4.9019	4.9019	0.285
10	Total Hexa-Furans	34.97	1.733e5	1.443e5	5.444e3	4.325e3	1.26	NO	9.768e3	1.8327	1.8327	0.205

Vista Analytical Laboratory

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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	36.64	5.512e5	5.493e5	4.936e4	4.920e4	1.00	NO	9.856e4	24.205	24.205	0.271
2	Total Hepta-Furans	37.24	4.834e5	4.886e5	4.893e4	4.873e4	1.00	NO	9.767e4	27.366	27.366	0.311
3	1,2,3,4,7,8,9-HpCDF	38.71	1.552e5	1.518e5	1.384e4	1.394e4	0.99	NO	2.777e4	7.8673	7.8673	0.317

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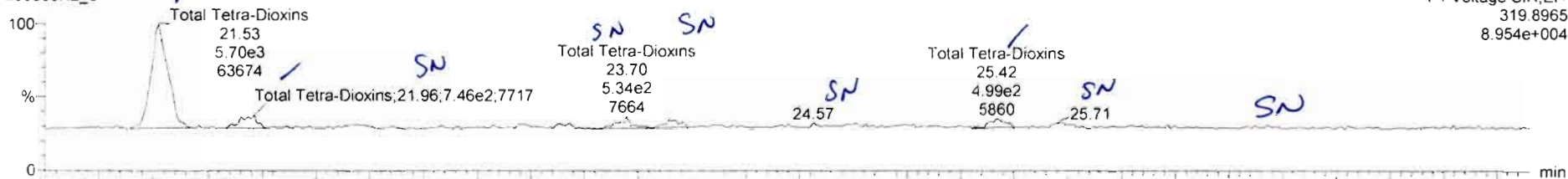
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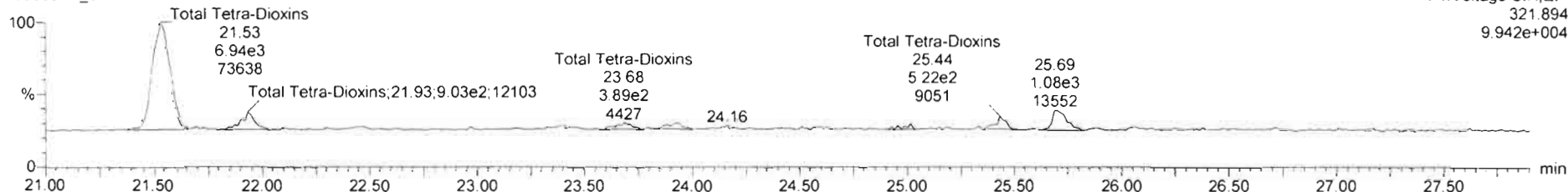
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2,3,7,8-TCDD

200303R2\_9

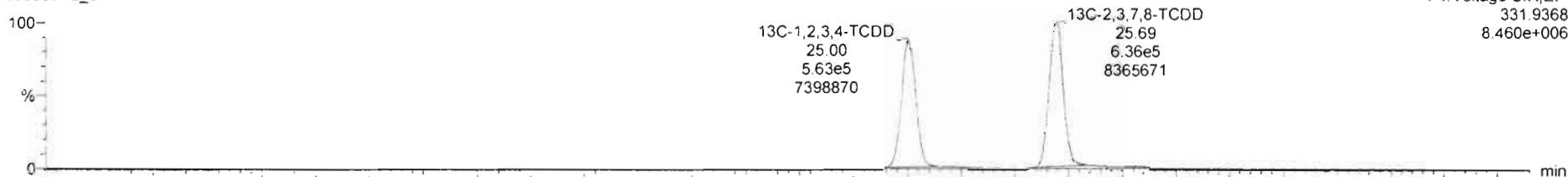


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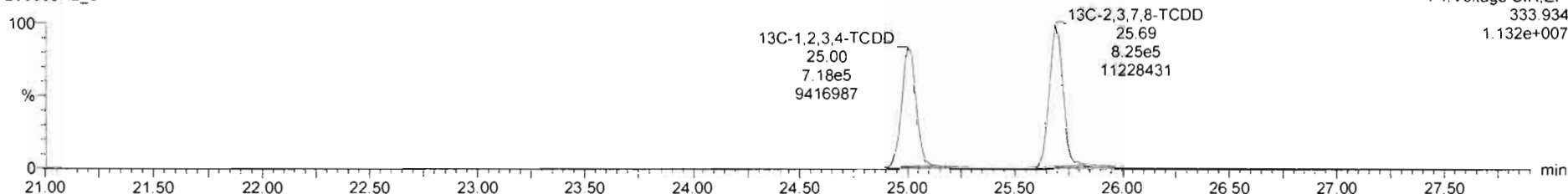


13C-2,3,7,8-TCDD

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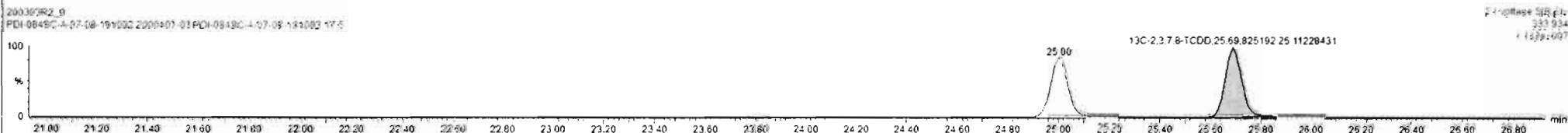
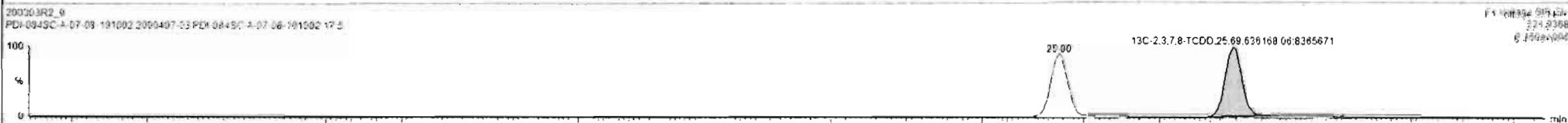
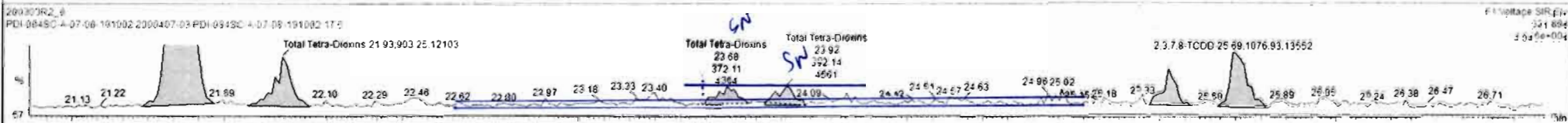
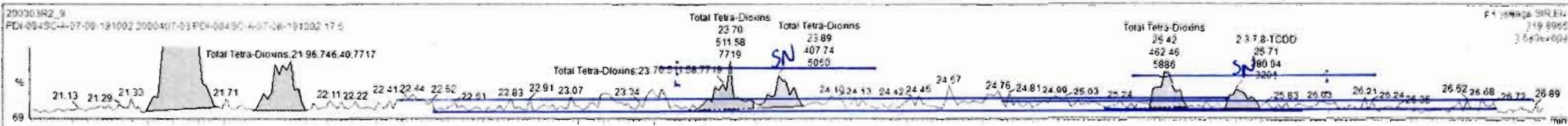


200303R2\_9



Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9861	10.081			2.10	0.0963	2.37	
40 Total Penta-Dioxins				0.9723	10.081			0.716	0.0659	1.84	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Tetra-Dioxins	21.53	5.697e2	6.937e3	0.82	NO	1.7358	1.7358
2 Total Tetra-Dioxins	21.96	7.464e2	6.032e2	0.63	NO	0.22686	0.22686
3 Total Tetra-Dioxins	23.70	5.116e2	3.721e2	1.37	YES	0.090494	0.09000
4 Total Tetra-Dioxins	23.89	4.077e2	3.921e2	1.04	YES	0.095366	0.00000
5 Total Tetra-Dioxins	25.42	4.625e2	5.224e2	0.89	NO	0.13521	0.13521
6 2,3,7,8-TCDD	25.71	2.800e2	1.077e3	0.26	YES	0.058446	0.00000





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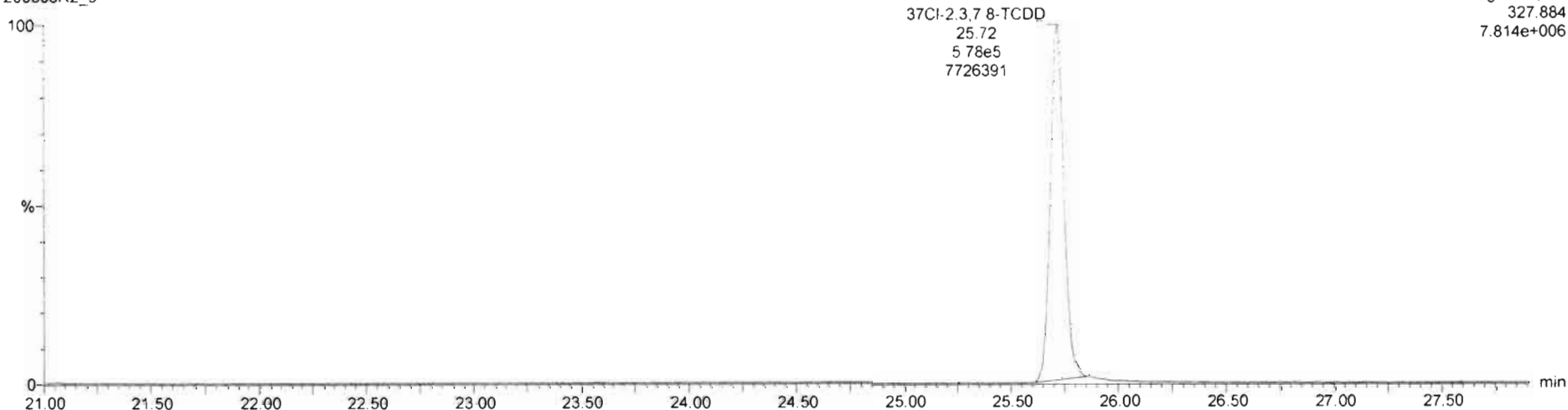
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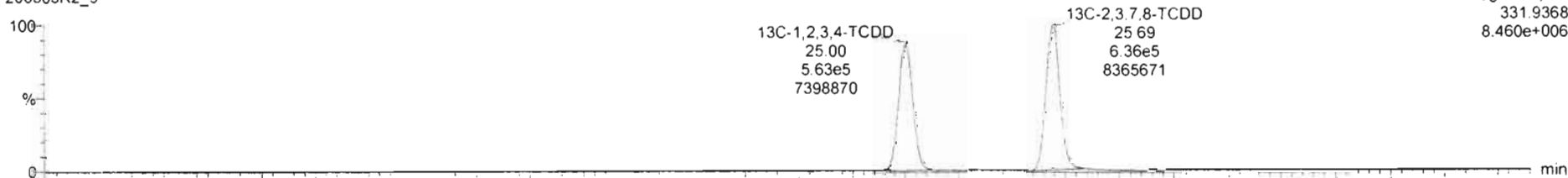
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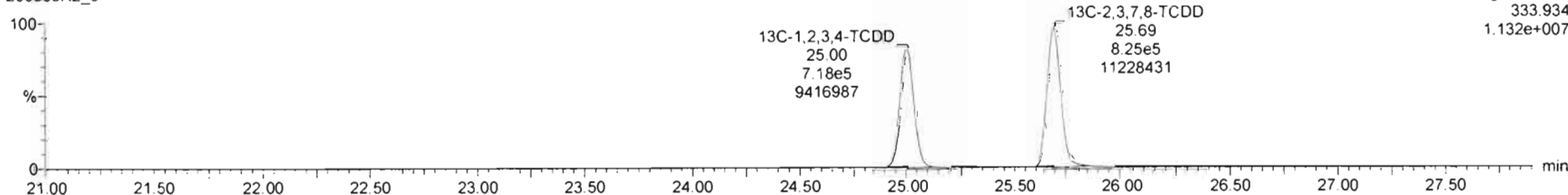


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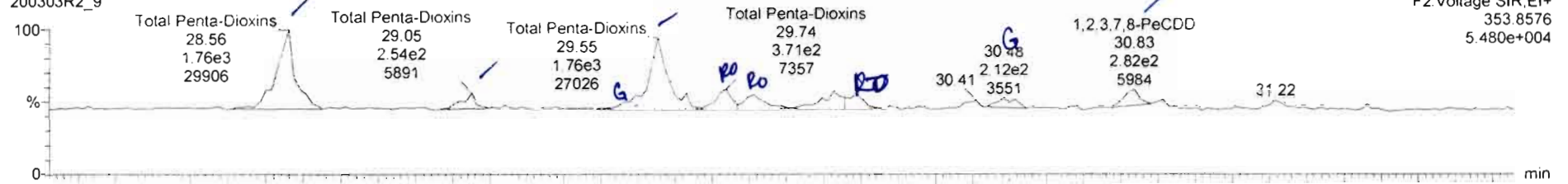
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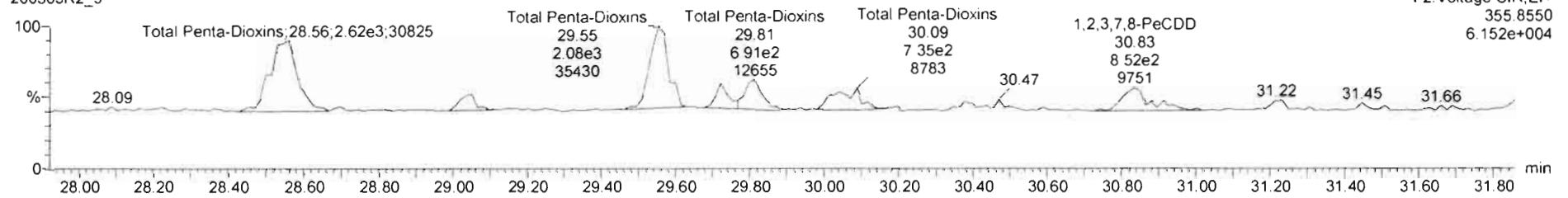
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1,2,3,7,8-PeCDD

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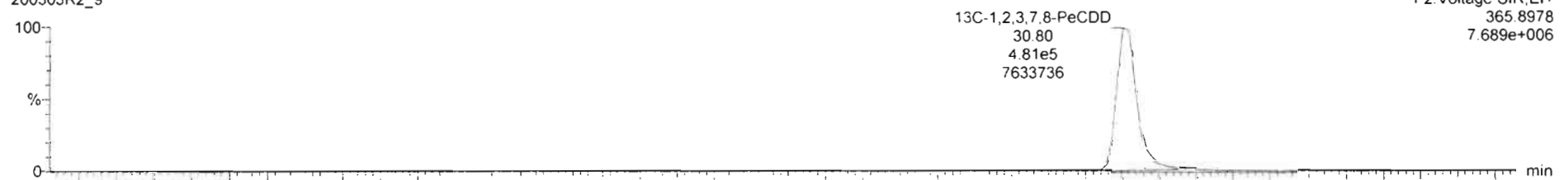


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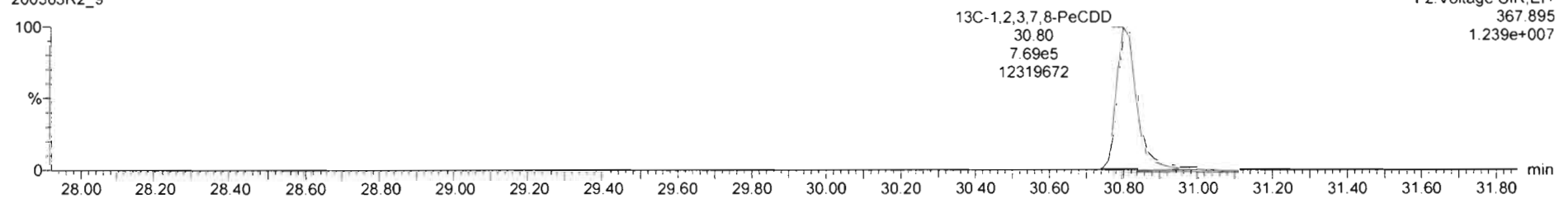


13C-1,2,3,7,8-PeCDD

200303R2\_9



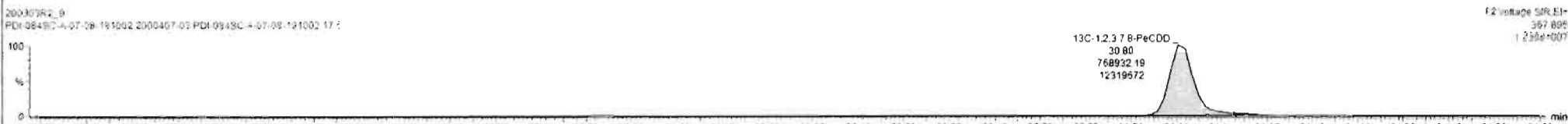
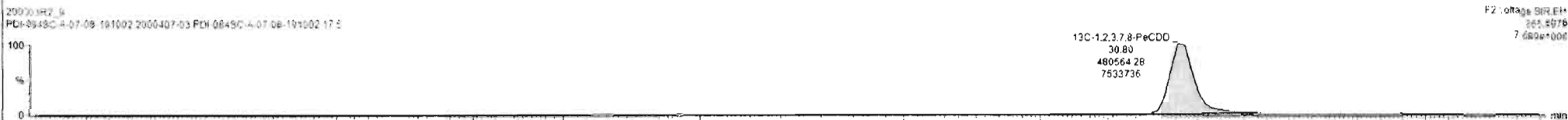
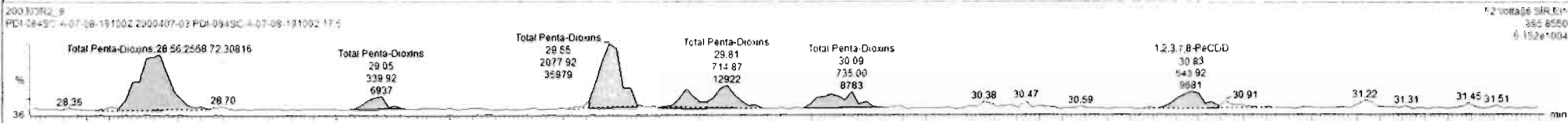
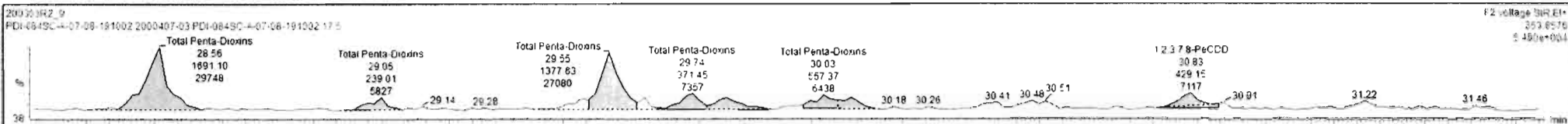
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200303R2\_9 2000407-03 PDI084SC-A-07-08-191002 17 5 - PDI084SC-A-07-08-191002

Name	Resp	RA	nly	RRF	wtHol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9821	19.061			2.10		0.6663	2.10
40 Total Penta-Dioxins				0.9723	10.081			0.965		0.0859	2.01

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Penta-Dioxins	28.56	1.691e3	2.569e3	0.66	NO	0.69564	0.29564
2 Total Penta-Dioxins	29.05	2.390e2	3.399e2	0.70	NO	0.094540	0.094540
3 Total Penta-Dioxins	29.55	1.375e3	2.075e3	0.66	NO	0.56430	0.00000
4 Total Penta-Dioxins	29.74	3.715e2	4.916e2	0.76	YES	0.12086	0.00090
5 Total Penta-Dioxins	29.81	3.629e2	7.149e2	0.51	YES	0.15333	0.00000
6 Total Penta-Dioxins	30.03	5.574e2	7.350e2	0.76	YES	0.19564	0.00000
7 1,2,3,7,8-PeCDD	30.83	4.292e2	6.436e2	0.67	NO	0.17523	0.17523



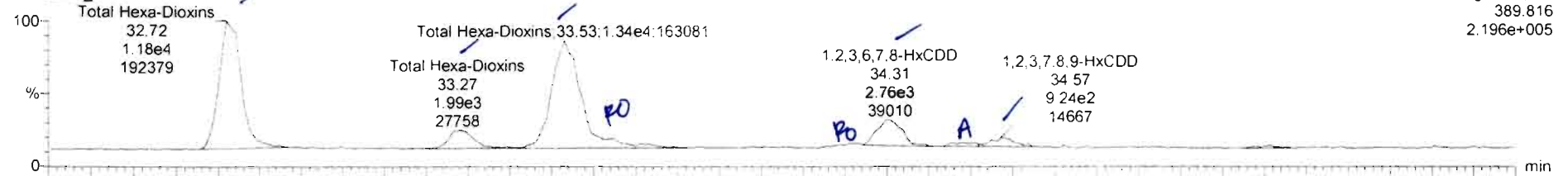
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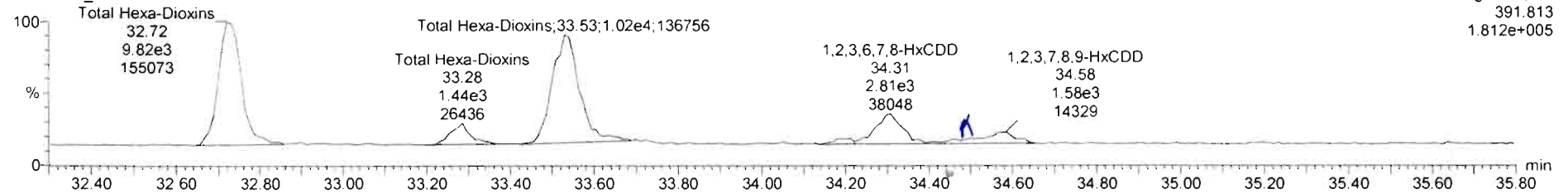
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1,2,3,4,7,8-HxCDD

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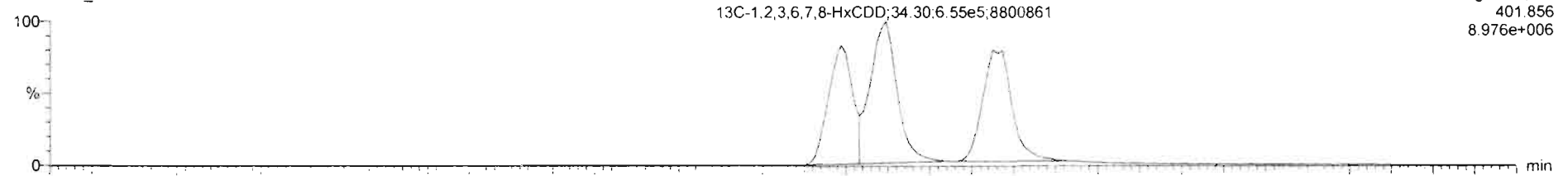


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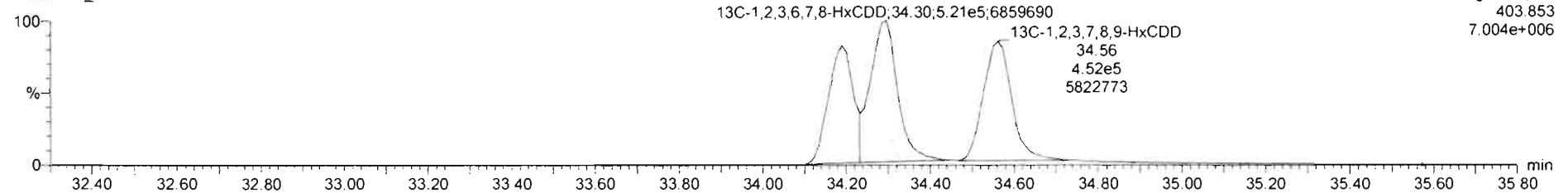


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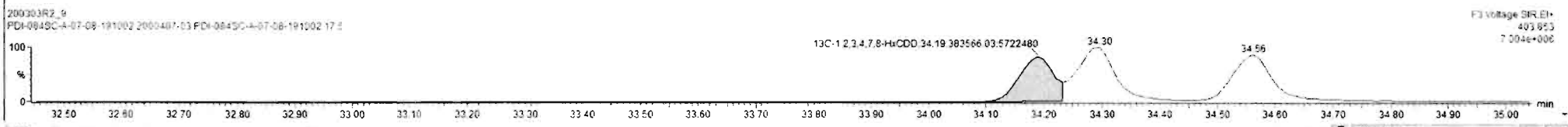
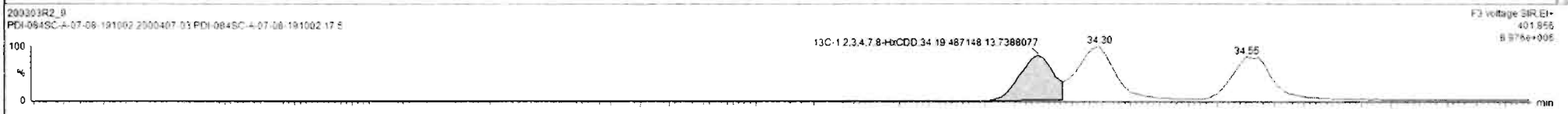
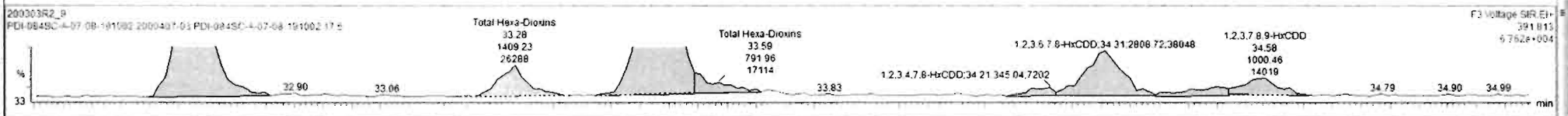
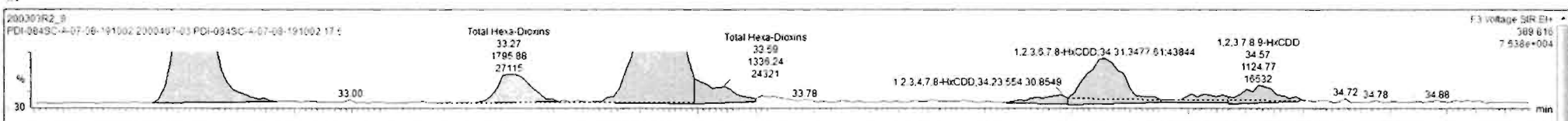
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200303R2\_9 - 2000407-03 PDI-084SC-A-07-08-191002 17 5 - PDI-084SC-A-07-08-191002

Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc.	%Rec	DL	EMPC
39	Total Tetra-Dioxins			0.9681	10.061			2.10	0.0663	2.10	
40	Total Penta-Dioxins			0.9723	10.061			0.965	0.0659	2.01	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1	Total Hexa-Dioxins	32.72	1.175e4	9.622e3	1.20	NO	4.5659
2	Total Hexa-Dioxins	32.27	1.795e3	1.409e3	1.27	NO	0.67793
3	Total Hexa-Dioxins	33.53	1.207e4	9.678e3	1.25	NO	4.9967
4	Total Hexa-Dioxins	33.59	1.336e3	7.920e2	1.69	YES	0.37522
5	1,2,3,4,7,8-HxCDD	34.23	5.543e2	3.450e2	1.61	YES	0.16446
6	1,2,3,6,7,8-HxCDD	34.31	5.478e3	2.809e2	1.24	NO	1.1514
7	Total Hexa-Dioxins	34.46	6.458e2	5.620e2	1.11	NO	0.25971
8	1,2,3,7,8,9-HxCDD	34.57	1.125e3	1.000e3	1.12	NO	0.45544





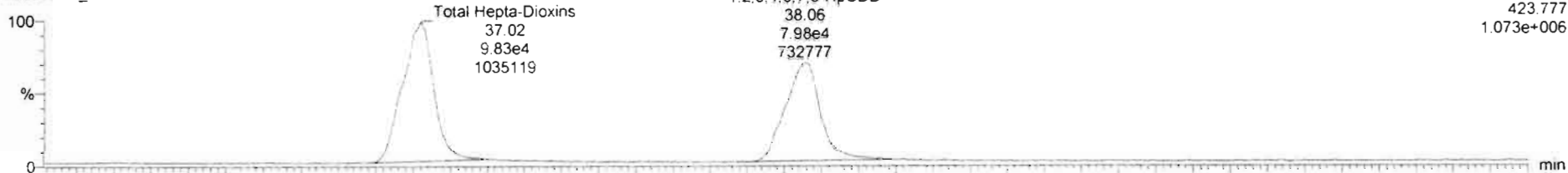
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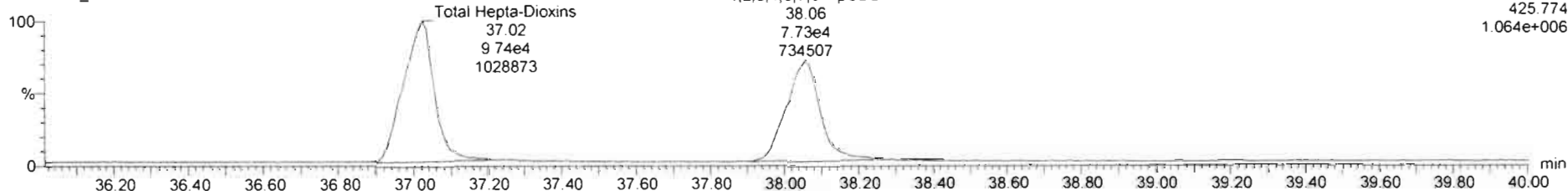
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1,2,3,4,6,7,8-HpCDD

200303R2\_9

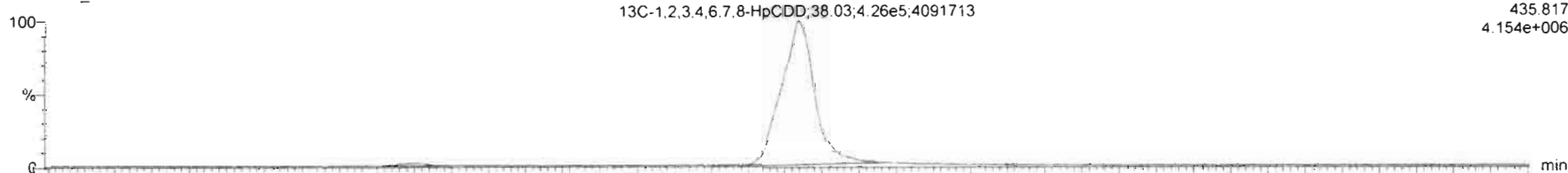


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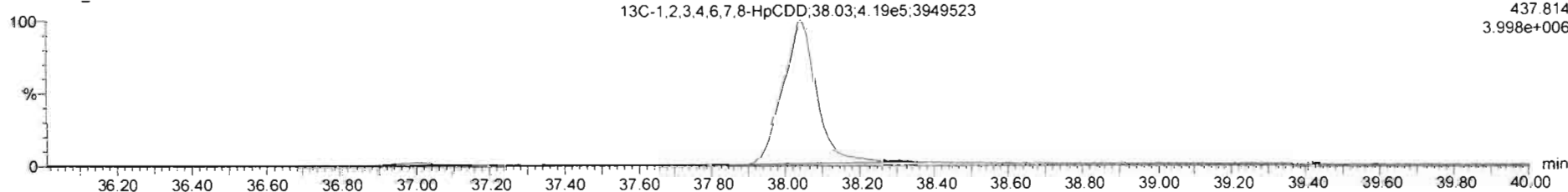


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200303R2\_9



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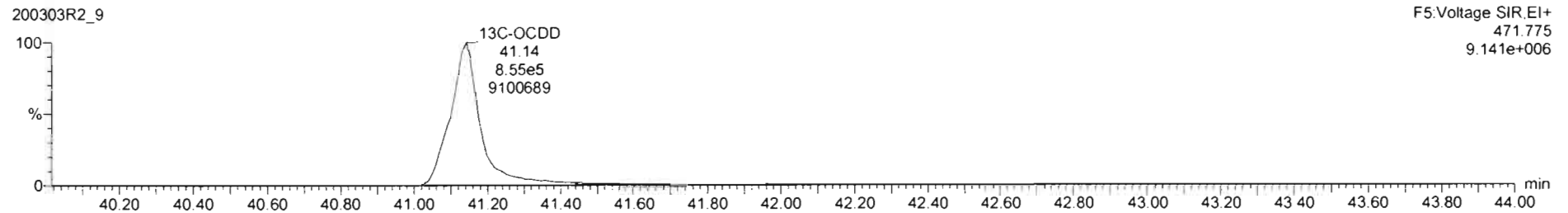
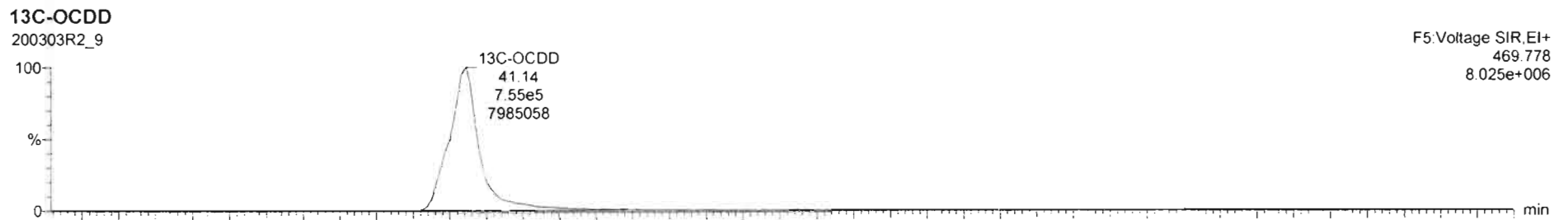
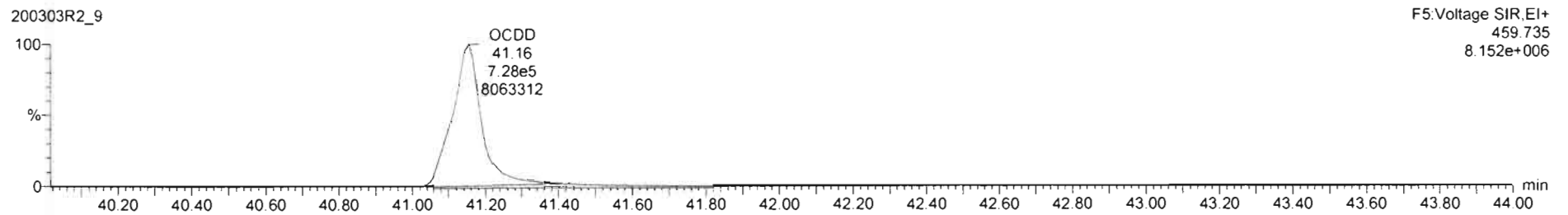
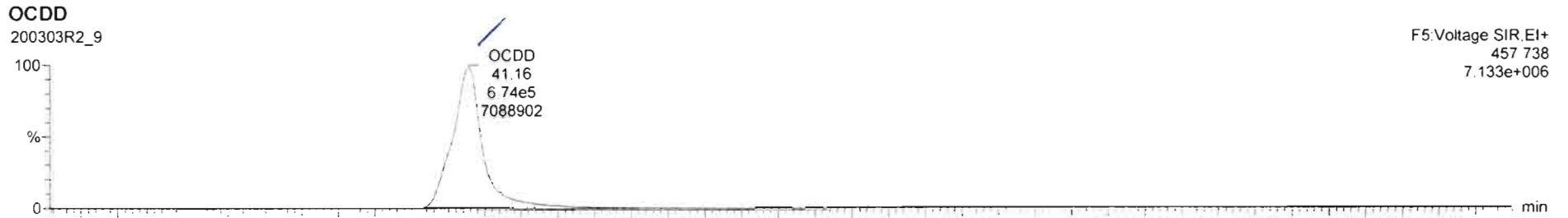


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200303R2\_9 - 2000407-03 PDI-084SC-A-07-08 191002 17 5 - PDI-084SC-A-07-08-191002

#	Name	Resp	RA	ntv	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
1	2,3,7,8-TCDD			NO	0.9881	10.061					0.0983	
2	1,2,3,7,8-PeCDD	1.13e3	0.33	YES	0.8723	10.061	30.83	1.001	0.185		0.0859	0.119
3	1,2,3,4,7,8-HxCDD			NO	1.0798	10.061					0.127	
4	1,2,3,6,7,8-HxCDD	5.57e3	0.98	YES	0.9211	10.061	34.31	1.000	1.02		0.124	0.914
5	1,2,3,7,8,9-HxCDD	2.50e3	0.59	YES	0.9182	10.061	34.57	1.001	0.536		0.156	0.358
6	1,2,3,4,6,7,8-HpCDD	1.57e5	1.03	NO	0.9231	10.061	38.06	1.001	40.0		0.512	40.0
7	OCDD	1.40e6	0.89	NO	0.9746	10.061	41.16	1.000	362		0.565	362
8	2,3,7,8-TCDF	6.46e4	0.77	NO	0.8020	10.061	24.76	1.001	11.6		0.150	11.6
9	1,2,3,7,8-PeCDF	2.07e5	1.55	NO	0.9074	10.061	29.51	1.001	26.9		0.165	26.9
10	2,3,4,7,8-PeCDF	1.21e5	1.53	NO	0.9516	10.061	30.51	1.000	15.0		0.168	15.0
11	1,2,3,4,7,8-HxCDF	2.54e5	1.20	NO	0.8623	10.061	33.34	1.000	49.9		0.185	49.9

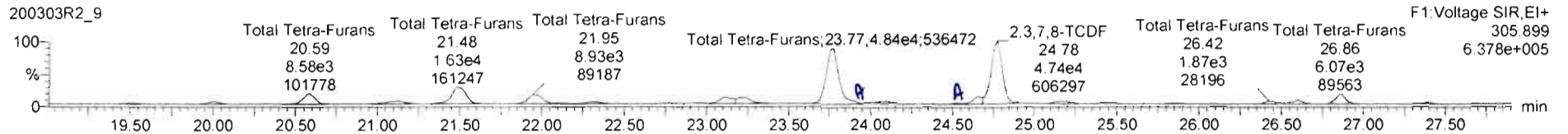
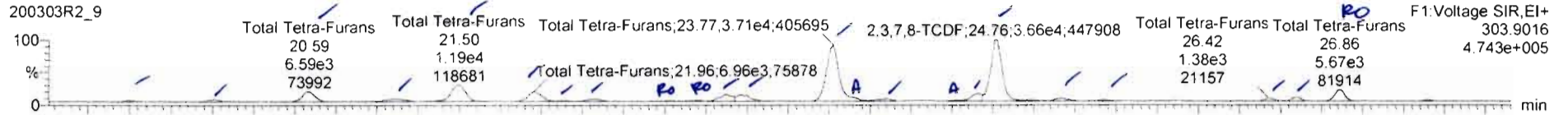


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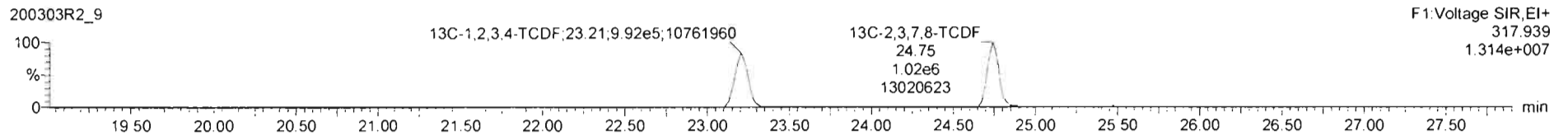
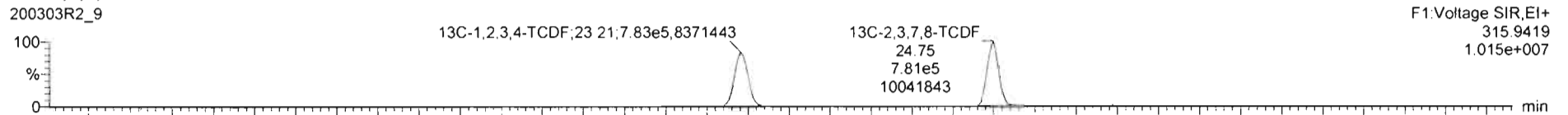
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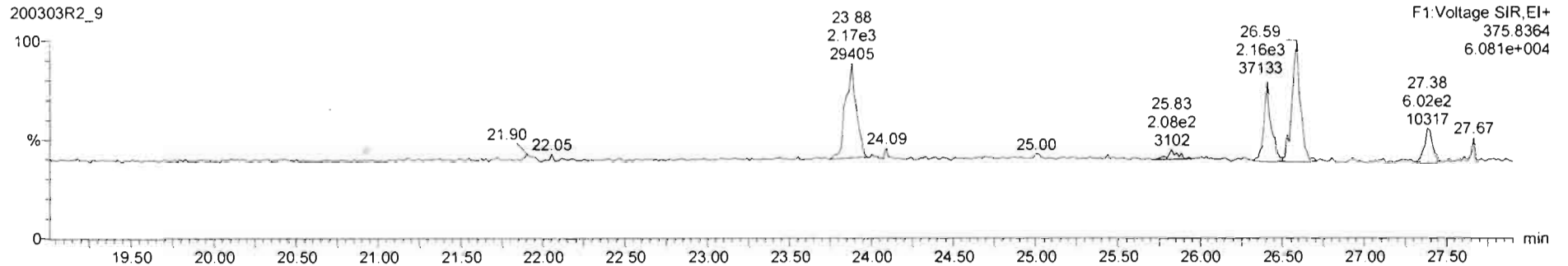
2,3,7,8-TCDF

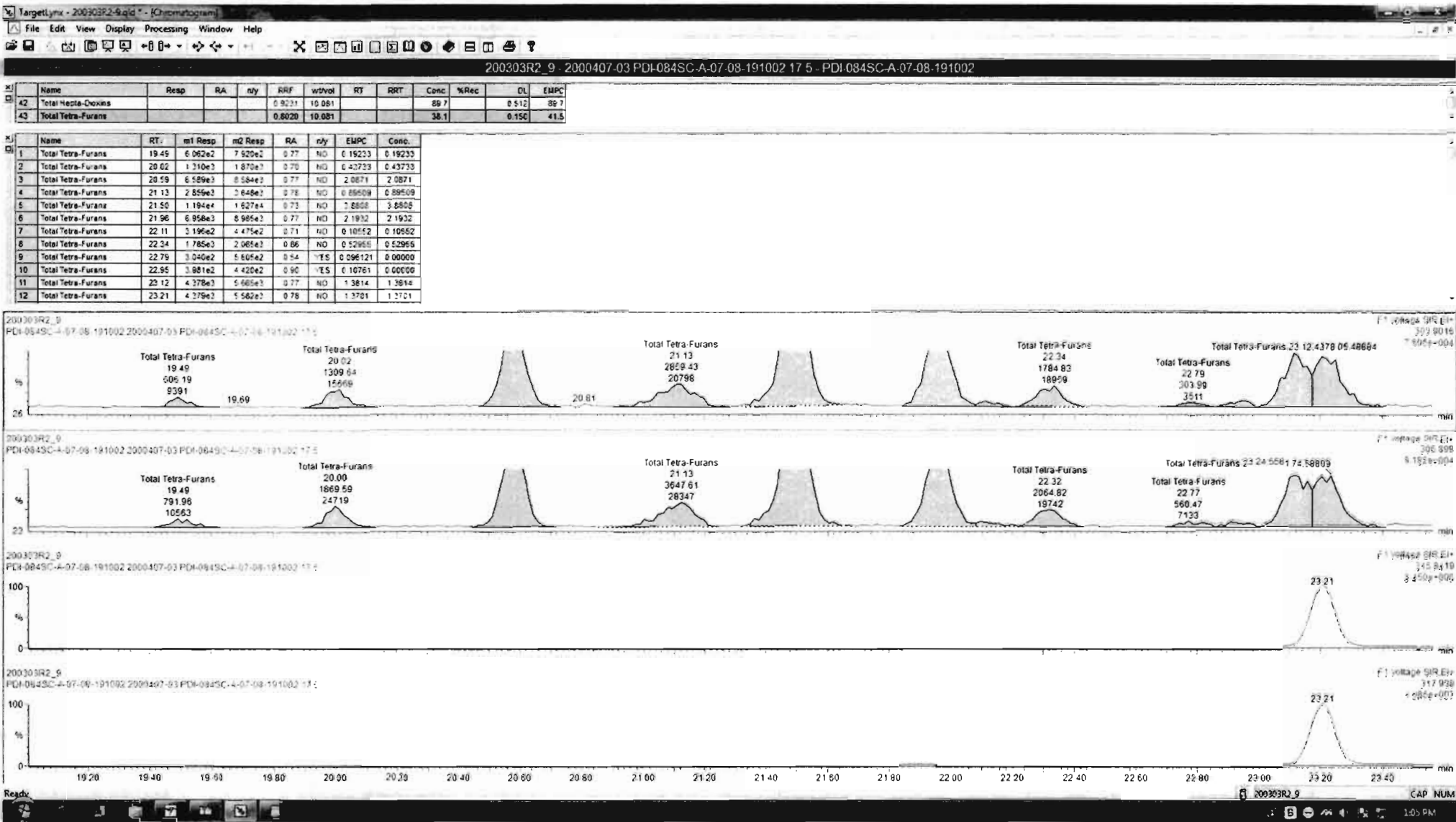


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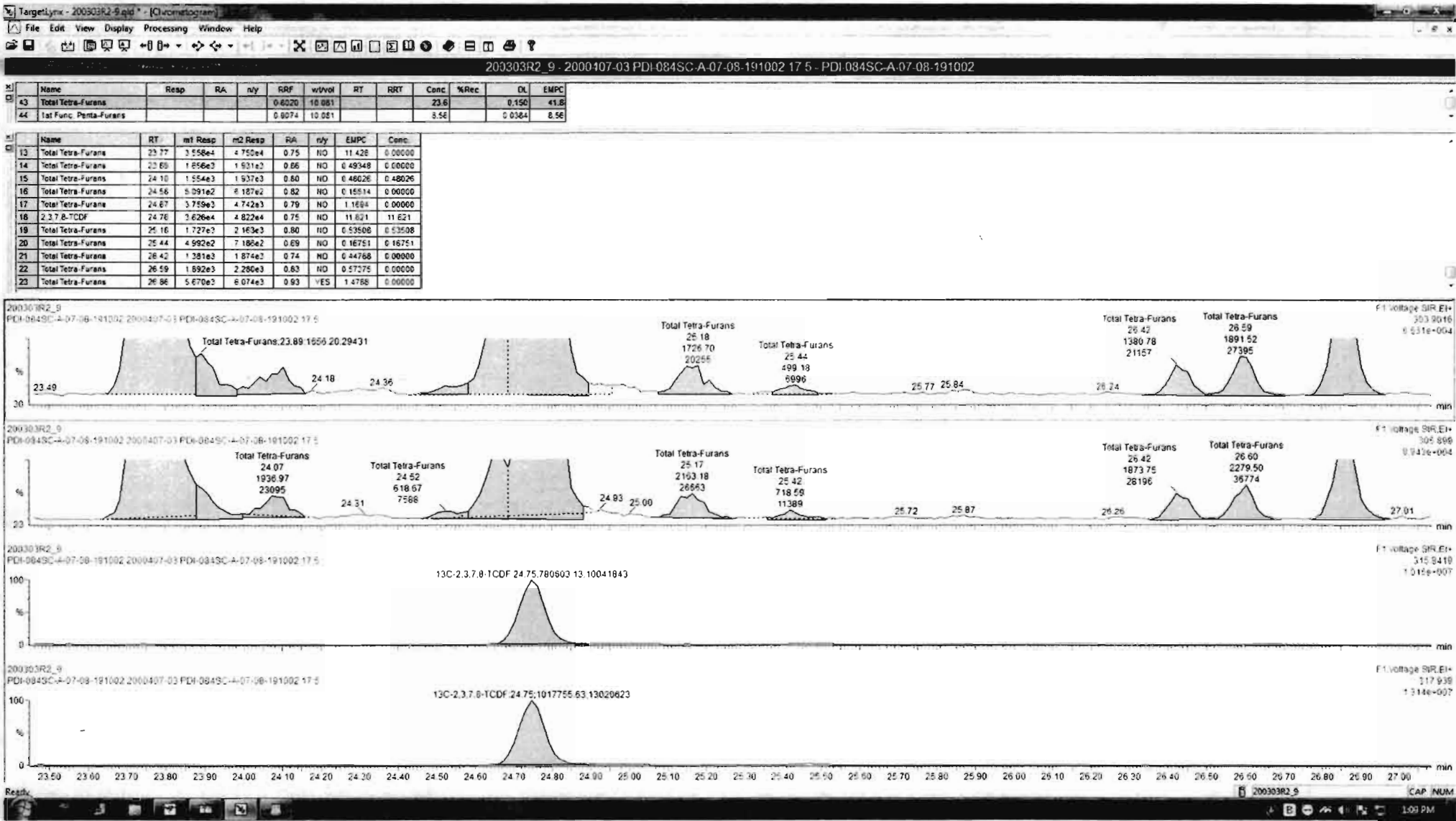


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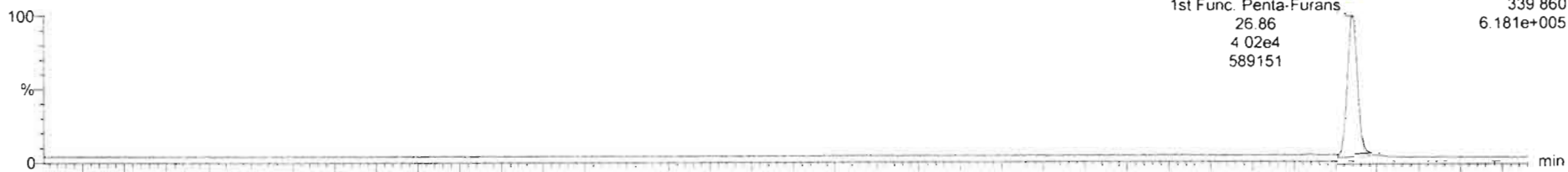
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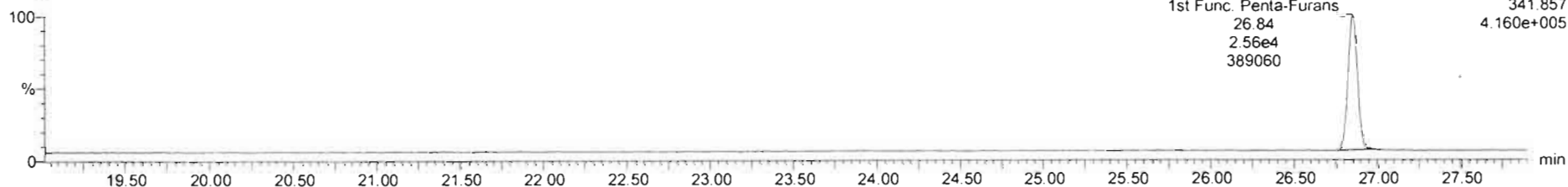
Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

1st Func. Penta-Furans

200303R2\_9

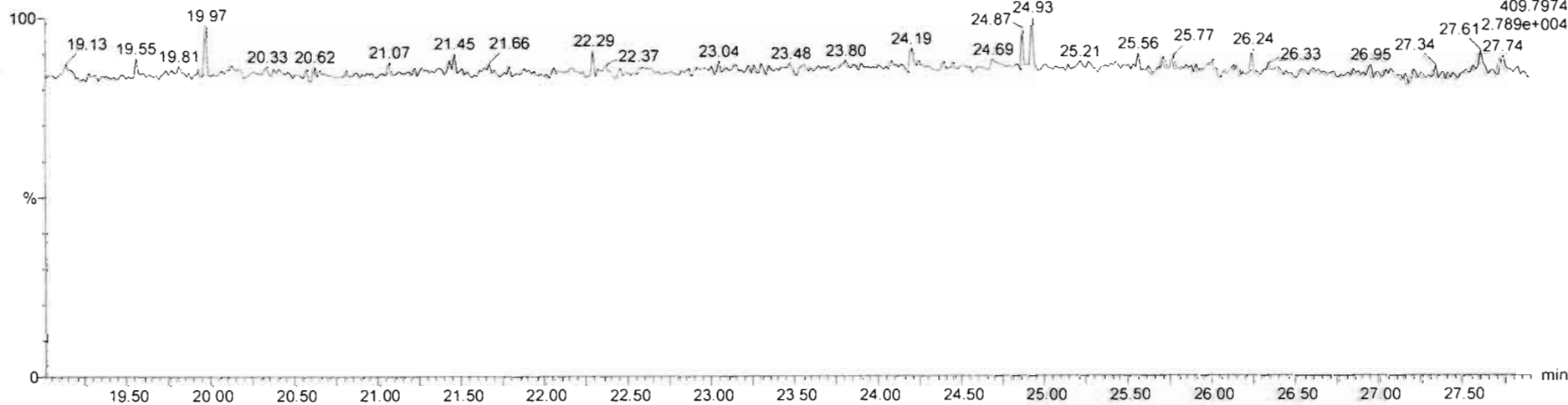


200303R2\_9



DPE6

200303R2\_9



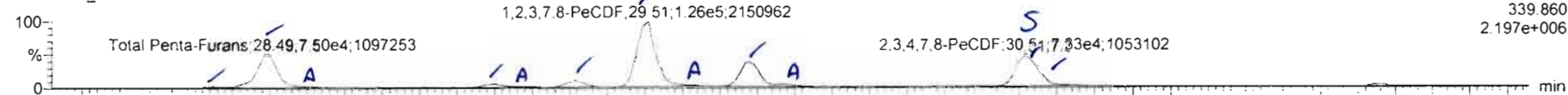
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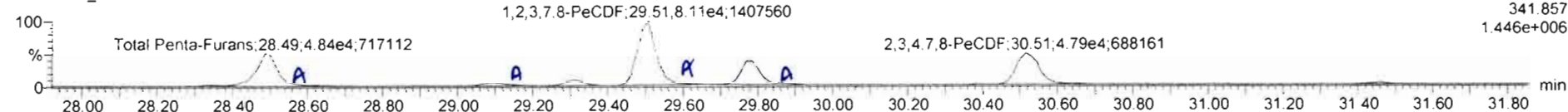
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1,2,3,7,8-PeCDF

200303R2\_9

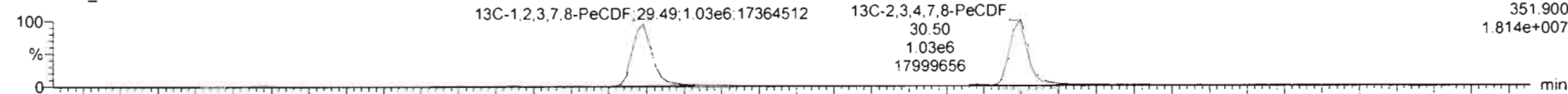


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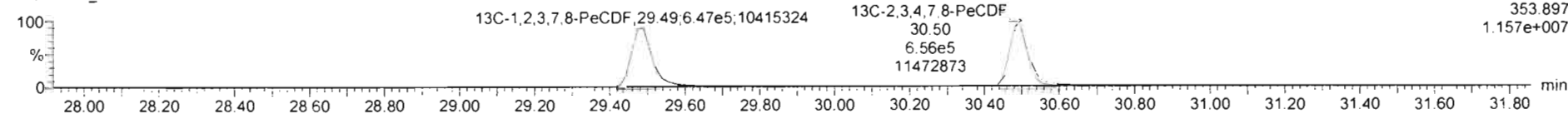


13C-1,2,3,7,8-PeCDF

200303R2\_9

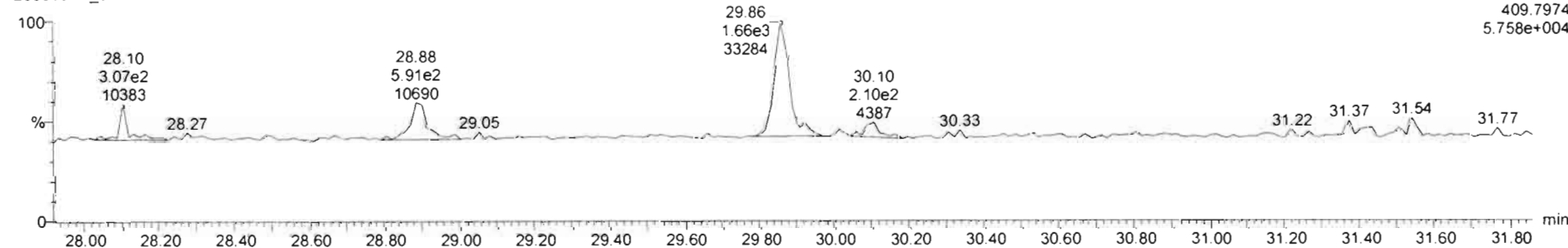


200303R2\_9



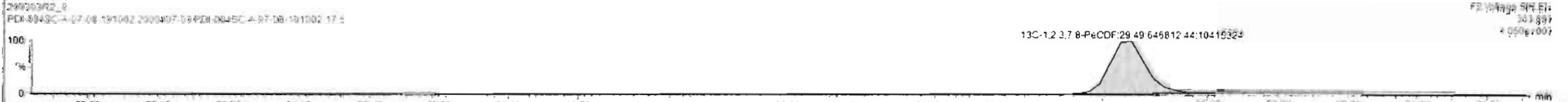
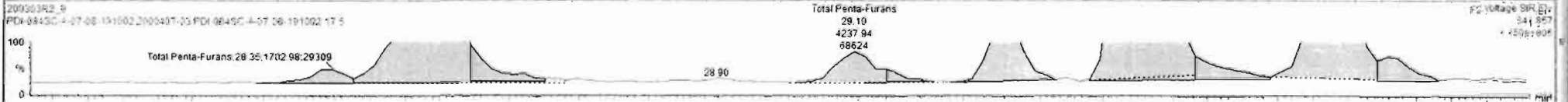
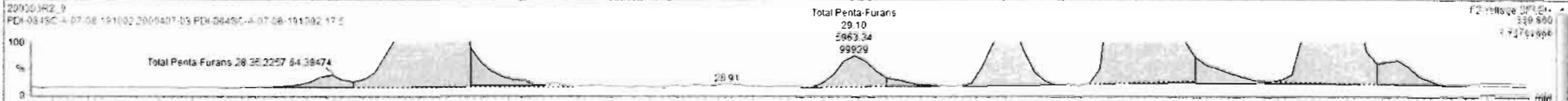
DPE2

200303R2\_9



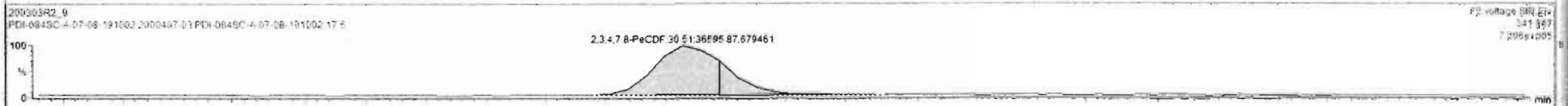
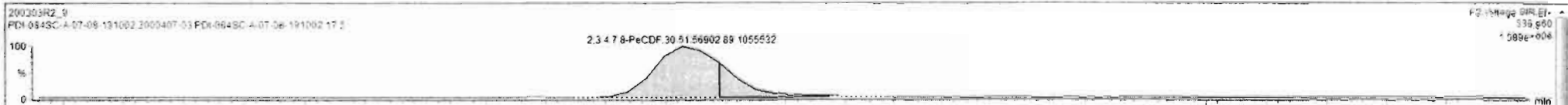
Name	Resp	RA	n/y	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
43 Total Tetra-Furans				0.8020	10.061			23.6		0.150	41.8
44 Tot Func. Penta-Furans				0.8074	10.081			8.56		0.0384	6.56

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Penta-Furans	28.35	2.258e3	1.703e3	1.33	NO	0.51515	0.51515
2 Total Penta-Furans	28.49	7.007e4	4.492e4	1.56	NO	14.957	14.657
3 Total Penta-Furans	28.55	3.910e3	2.655e3	1.47	NO	0.85382	0.85382
4 Total Penta-Furans	28.10	5.983e3	4.238e3	1.41	NO	1.3289	0.00000
5 Total Penta-Furans	29.14	8.699e2	6.599e2	1.35	NO	0.28172	0.00000
6 Total Penta-Furans	29.31	1.196e4	7.587e3	1.58	NO	2.5430	2.5430
7 1,2,3,7,8-PeCDF	29.51	1.235e5	8.075e4	1.52	NO	26.578	26.578
8 Total Penta-Furans	29.58	3.464e3	2.370e3	1.46	NO	0.75680	0.75680
9 Total Penta-Furans	29.78	4.952e4	3.166e4	1.56	NO	10.559	10.559
10 Total Penta-Furans	29.87	4.344e3	2.760e3	1.57	NO	0.92467	0.92467
11 Total Penta-Furans	30.35	5.559e2	2.191e2	2.54	YES	0.072666	0.00000
12 2,3,4,7,8-PeCDF	30.51	7.331e4	4.789e4	1.53	NO	15.025	15.025



#1	Name	Resp	RA	n/y	RRF	wtAvol	RT	RRT	Conc.	%Rec	DL	EMPC
43	Total Tetra-Furans				0.8020	10.081			23.6		0.150	41.8
44	1st Func. Penta-Furans				0.9074	10.081			6.56		0.0384	8.56

#2	Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1	Total Penta-Furans	28.35	2.258e3	1.703e3	1.33	NO	0.51515	0.51515
2	Total Penta-Furans	28.49	7.007e4	4.492e4	1.56	NO	14.957	14.957
3	Total Penta-Furans	28.55	3.910e3	2.655e3	1.47	NO	0.85362	0.85362
4	Total Penta-Furans	29.10	5.963e3	4.236e3	1.41	NO	1.3269	0.00000
5	Total Penta-Furans	29.14	6.909e2	6.599e2	1.25	NO	0.20172	0.00000
6	Total Penta-Furans	29.31	1.196e4	7.587e3	1.58	NO	2.5430	2.5430
7	1,2,3,7,8-PeCDF	29.51	1.236e5	8.075e4	1.50	NO	26.578	26.578
8	Total Penta-Furans	29.58	3.464e3	2.370e3	1.46	NO	0.75860	0.75860
9	Total Penta-Furans	29.78	4.952e4	3.166e4	1.56	NO	10.559	10.555
10	Total Penta-Furans	29.87	4.344e3	2.760e3	1.57	NO	0.92407	0.92407
11	2,3,4,7,8-PeCDF	30.51	5.690e4	3.660e4	1.55	NO	11.591	11.591
12	Total Penta-Furans	30.55	1.666e4	9.658e3	1.73	NO	3.4257	3.4257



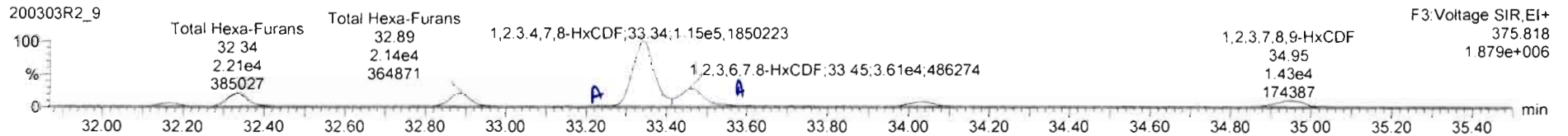
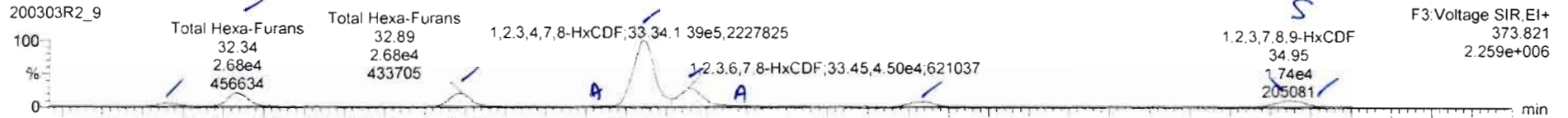


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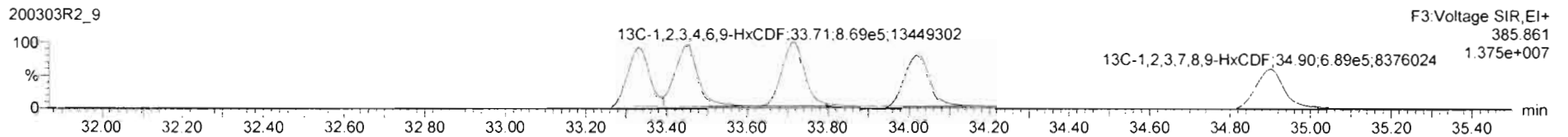
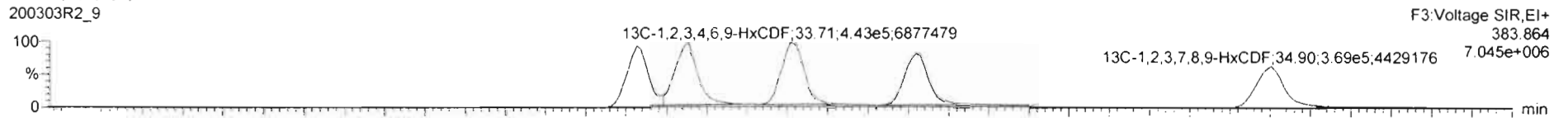
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

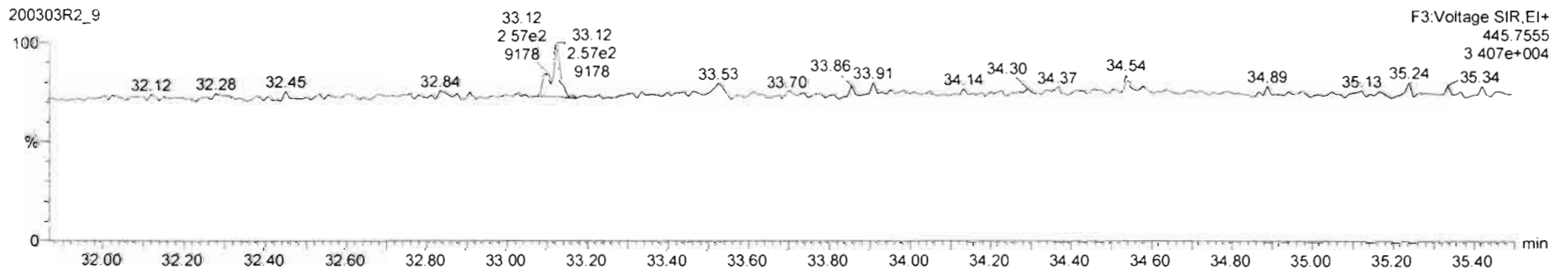
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13C-1,2,3,4,7,8-HxCDF

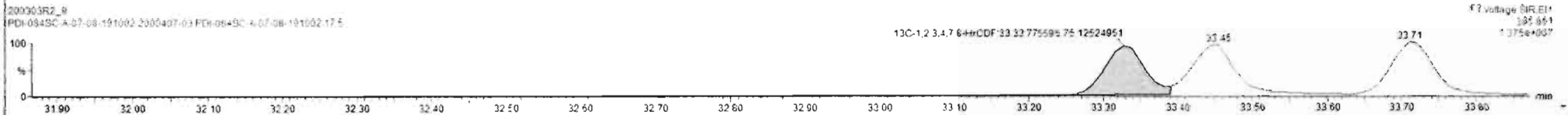
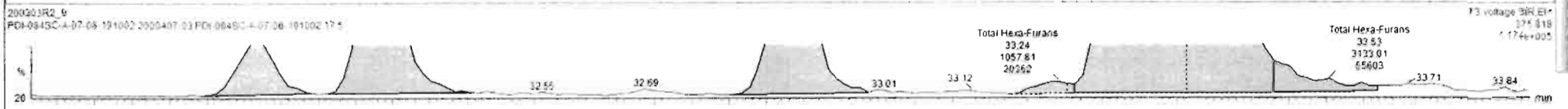
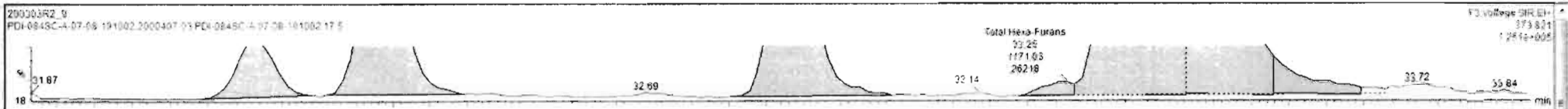


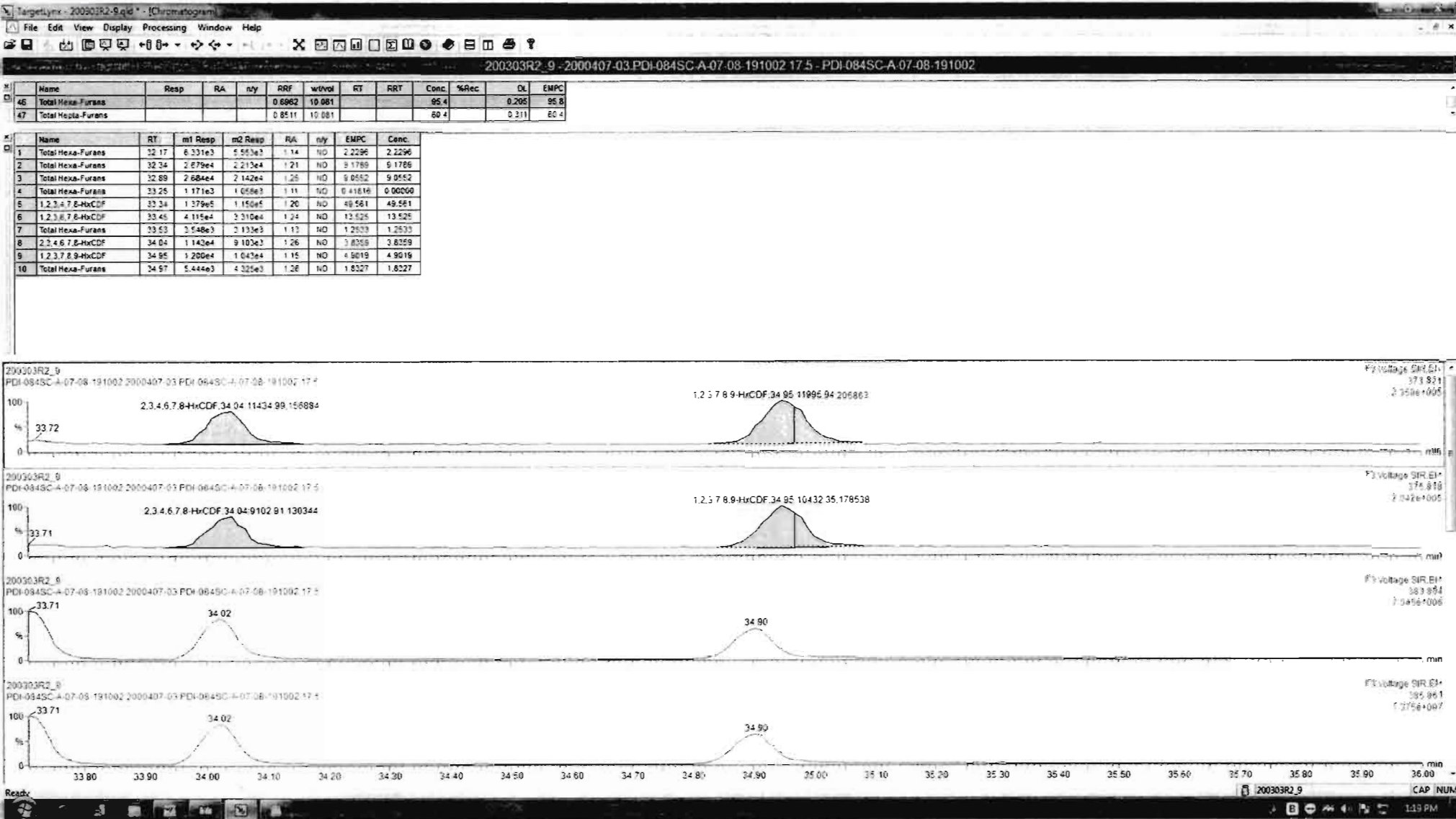
DPE3



Name	Resp	RA	n/y	RRF	wProt	RT	RRT	Conc	%Rec	DL	EMPC
46 Total Hexa-Furans				0.6962	10.061			95.6		0.285	95.0
47 Total Hepta-Furans				0.8511	10.081			60.4		0.311	60.4

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Hexa-Furans	32.17	6.331e3	5.553e3	1.14	NQ	2.2296	2.2296
2 Total Hexa-Furans	32.34	2.679e4	2.213e4	1.21	NQ	9.1789	9.1789
3 Total Hexa-Furans	32.89	2.684e4	2.142e4	1.25	NQ	9.0552	9.0552
4 Total Hexa-Furans	33.25	1.171e3	1.056e3	1.11	NQ	0.41816	0.00060
5 1,2,3,4,7,8-HxCDF	33.24	1.379e5	1.150e5	1.20	NQ	49.561	49.561
6 1,2,3,6,7,8-HxCDF	33.45	4.115e4	3.310e4	1.24	NQ	13.525	13.525
7 Total Hexa-Furans	33.53	1.548e3	1.133e3	1.13	NQ	1.2573	1.2533
8 2,3,4,6,7,8-HxCDF	34.04	1.142e4	8.103e3	1.26	NQ	3.8369	3.8369
9 1,2,3,7,8,9-HxCDF	34.95	1.737e4	1.433e4	1.21	NQ	6.9291	6.9291



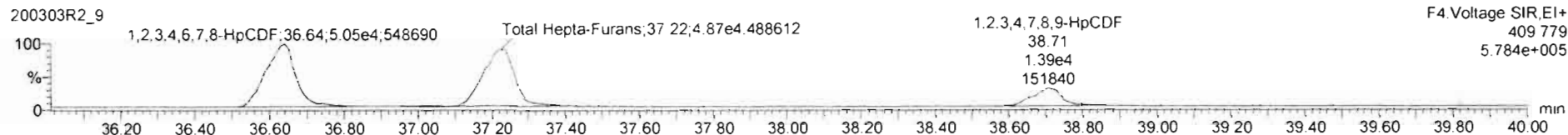
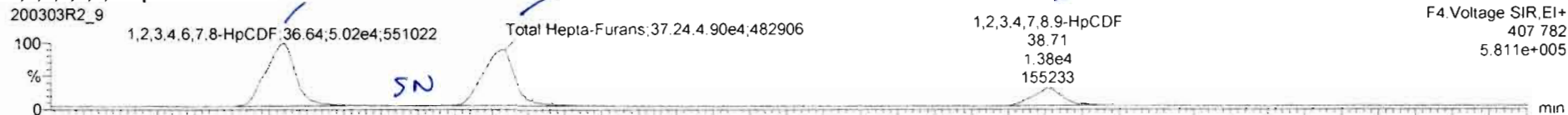


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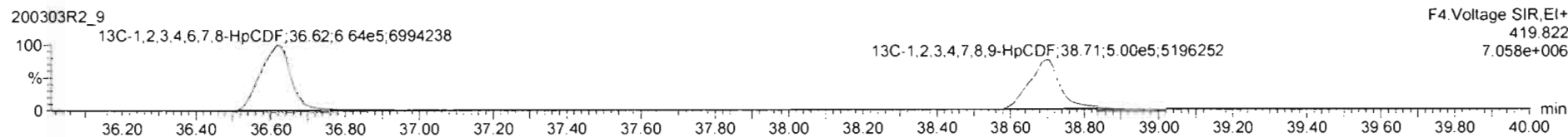
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Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

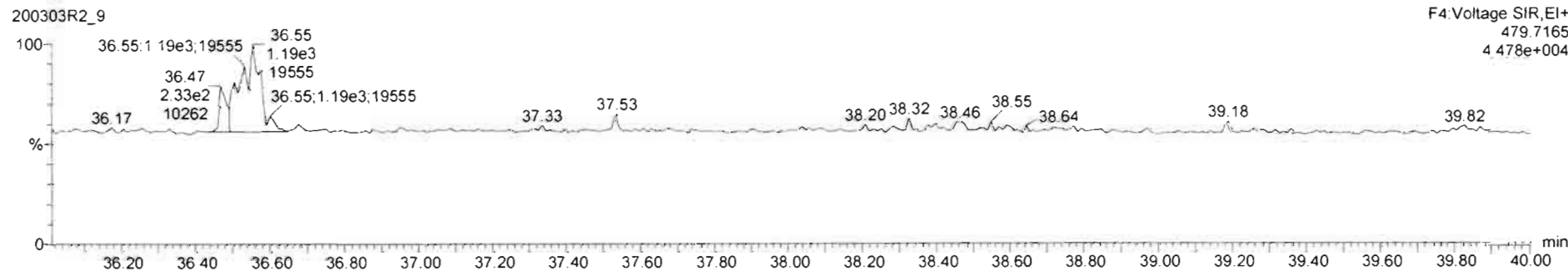
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13C-1,2,3,4,6,7,8-HpCDF

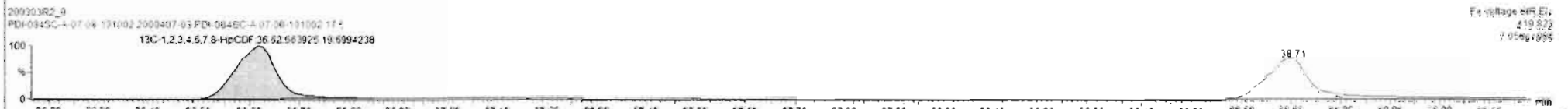
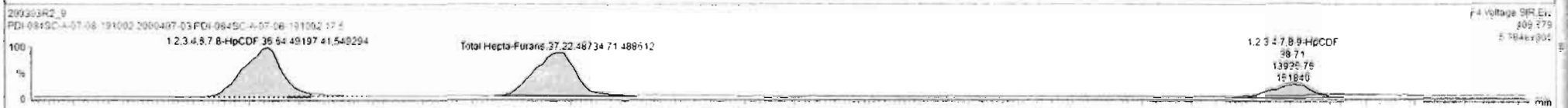
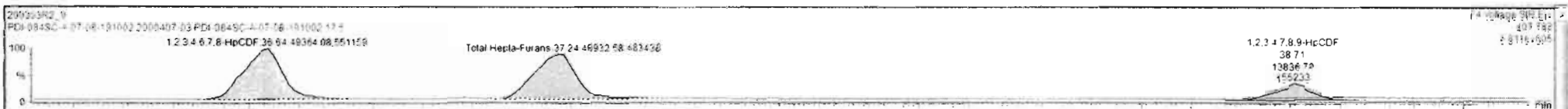


DPE4



Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
46 Total Hexa-Furans				0.8562	10.061			95.4	0.205	95.8	
47 Total Hepta-Furans				0.8511	10.081			59.4	0.311	59.4	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 1,2,3,4,6,7,8-HpCDF	36.64	4.536e4	4.520e4	1.00	NO	24.205	24.205
2 Total Hepta-Furans	37.24	4.853e4	4.877e4	1.00	NO	27.396	27.396
3 1,2,3,4,7,8,9-HpCDF	38.71	1.384e4	1.394e4	0.99	NO	7.8673	7.8673

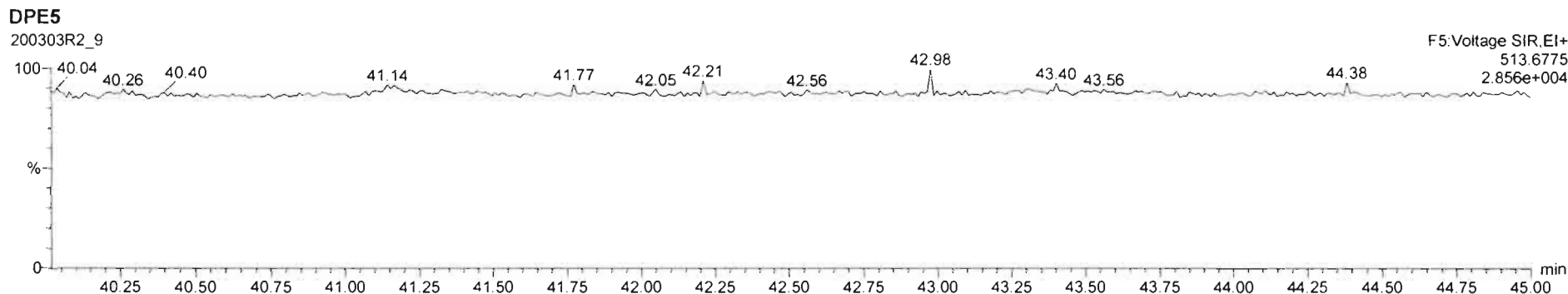
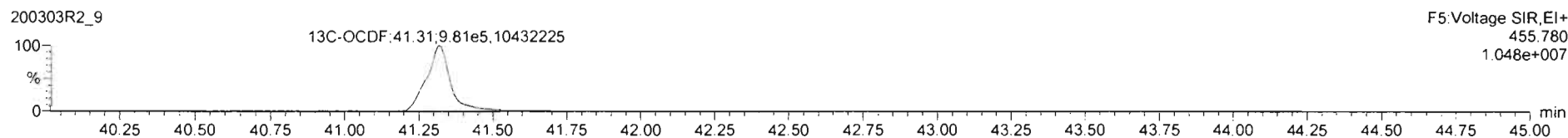
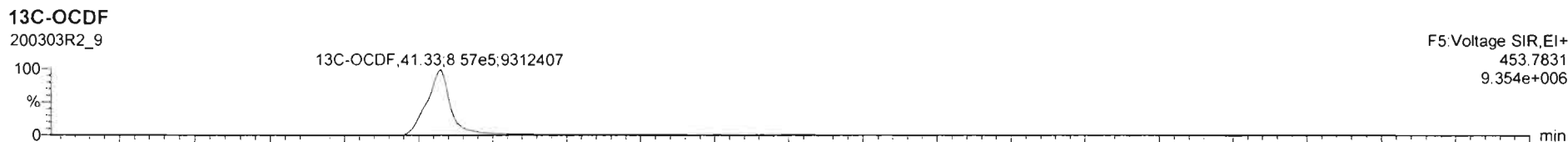
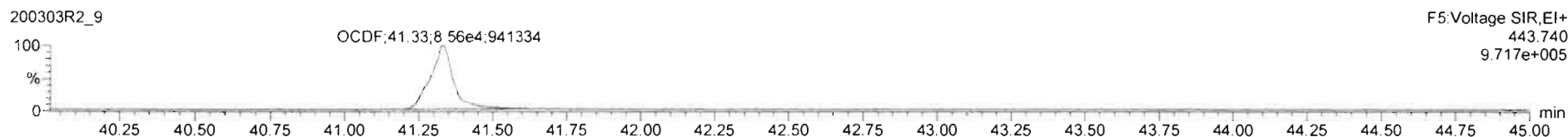
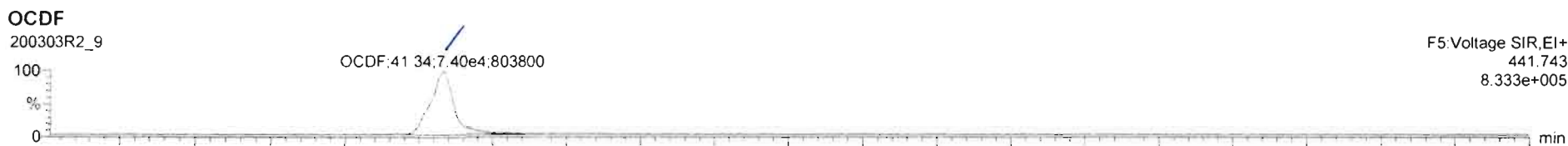


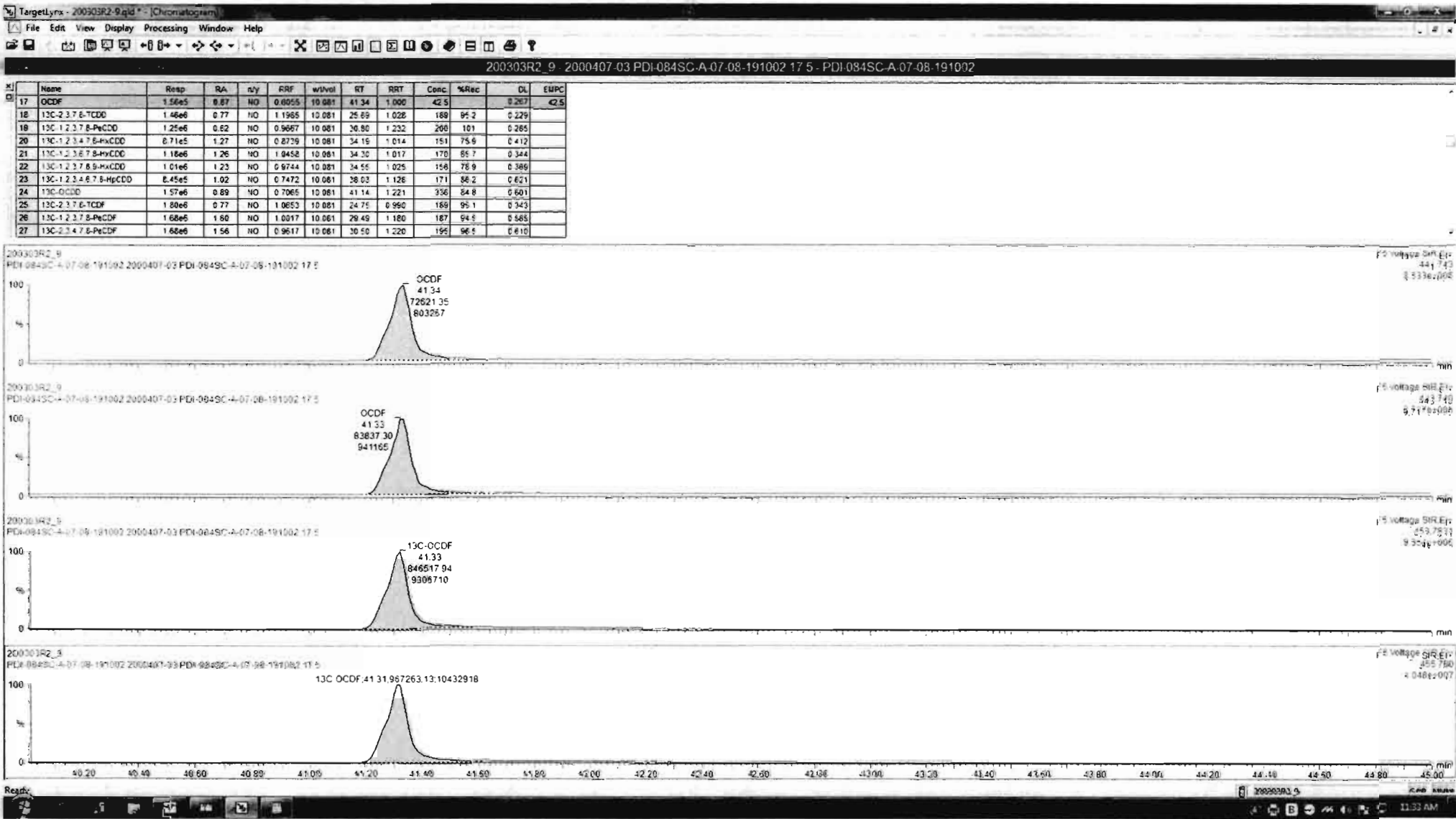


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Name: 200303R2\_9, Date: 03-Mar-2020, Time: 20:09:18, ID: 2000407-03 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002





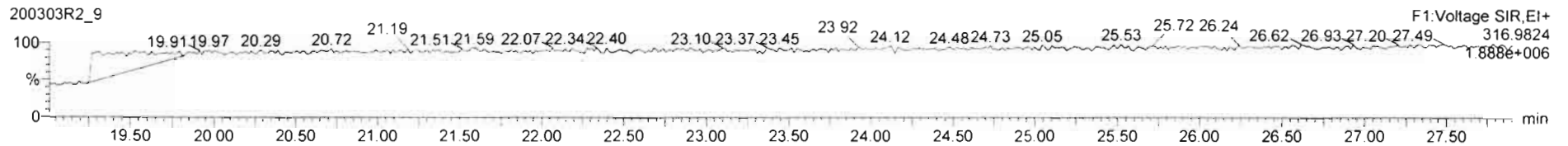
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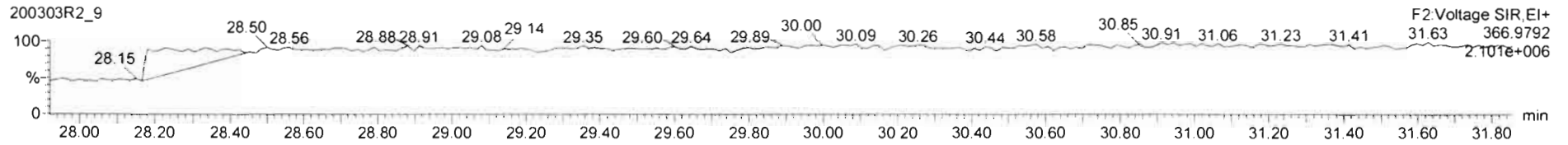
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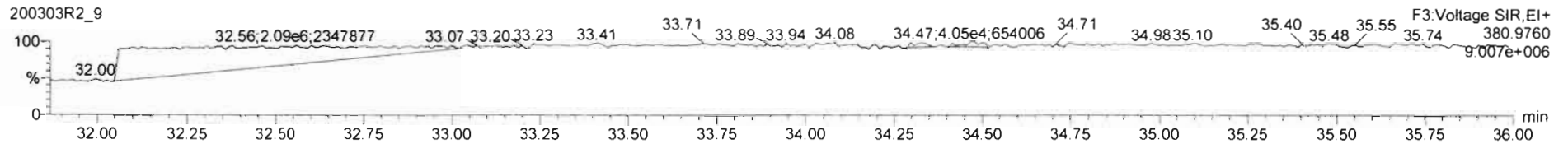
PFK1



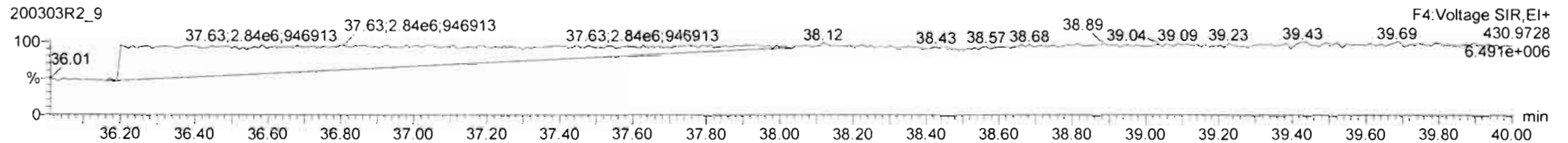
PFK2



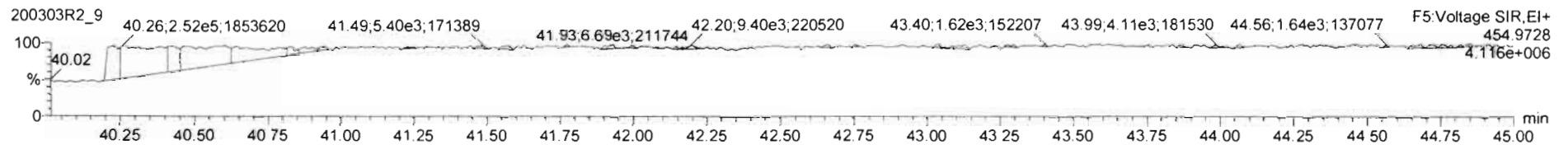
PFK3



PFK4



PFK5



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Printed: Wednesday, March 04, 2020 13:59:55 Pacific Standard Time

GRB 03/04/2020

C7 03/06/2020

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#	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	6.11e3	0.72	NO	0.988	10.050	25.751	25.74	1.001	1.001	0.87848		0.0967	0.878
2	2 1,2,3,7,8-PeCDD	7.11e3	0.57	NO	0.972	10.050	30.872	30.87	1.001	1.001	1.2185		0.107	1.22
3	3 1,2,3,4,7,8-HxCDD	5.18e3	1.24	NO	1.07	10.050	34.221	34.23	1.000	1.001	1.1337		0.227	1.13
4	4 1,2,3,6,7,8-HxCDD	4.19e4	1.18	NO	0.921	10.050	34.318	34.33	1.000	1.000	7.9710		0.237	7.97
5	5 1,2,3,7,8,9-HxCDD	1.76e4	1.11	NO	0.918	10.050	34.619	34.59	1.001	1.000	3.8584		0.276	3.86
6	6 1,2,3,4,6,7,8-HpCDD	6.55e5	1.03	NO	0.923	10.050	38.067	38.08	1.000	1.001	173.86		0.887	174
7	7 OCDD	9.28e6	0.88	NO	0.975	10.050	41.155	41.17	1.000	1.000	2468.2		1.01	2470
8	8 2,3,7,8-TCDF	4.85e5	0.76	NO	0.802	10.050	24.802	24.79	1.001	1.001	69.591	(67.532)	0.206	69.6
9	9 1,2,3,7,8-PeCDF	5.05e5	1.55	NO	0.907	10.050	29.544	29.54	1.001	1.001	69.604		0.304	69.6
10	10 2,3,4,7,8-PeCDF	3.16e5	1.55	NO	0.952	10.050	30.561	30.55	1.001	1.000	42.158		0.272	42.2
11	11 1,2,3,4,7,8-HxCDF	5.67e5	1.22	NO	0.862	10.050	33.359	33.37	1.000	1.000	114.00		0.262	114
12	12 1,2,3,6,7,8-HxCDF	1.84e5	1.21	NO	0.841	10.050	33.486	33.49	1.000	1.000	34.130		0.249	34.1
13	13 2,3,4,6,7,8-HxCDF	5.95e4	1.22	NO	0.898	10.050	34.075	34.05	1.001	1.000	11.268		0.279	11.3
14	14 1,2,3,7,8,9-HxCDF	5.14e4	1.22	NO	0.858	10.050	34.924	34.98	1.000	1.002	11.486		0.370	11.5
15	15 1,2,3,4,6,7,8-HpCDF	4.17e5	0.99	NO	0.851	10.050	36.676	36.65	1.001	1.000	110.19		0.472	110
16	16 1,2,3,4,7,8,9-HpCDF	8.22e4	1.01	NO	0.980	10.050	38.716	38.73	1.000	1.000	24.385		0.579	24.4
17	17 OCDF	8.90e5	0.87	NO	0.806	10.050	41.336	41.35	1.000	1.000	248.89		0.400	249
18	18 13C-2,3,7,8-TCDD	1.40e6	0.76	NO	1.20	10.050	25.675	25.72	1.026	1.027	190.51	95.7	0.279	
19	19 13C-1,2,3,7,8-PeCDD	1.20e6	0.62	NO	0.967	10.050	30.802	30.85	1.230	1.232	201.65	101	0.230	
20	20 13C-1,2,3,4,7,8-HxCDD	8.49e5	1.28	NO	0.874	10.050	34.214	34.21	1.014	1.014	161.96	81.4	0.503	
21	21 13C-1,2,3,6,7,8-HxCDD	1.13e6	1.27	NO	1.05	10.050	34.316	34.32	1.017	1.017	180.85	90.9	0.421	
22	22 13C-1,2,3,7,8,9-HxCDD	9.88e5	1.26	NO	0.974	10.050	34.619	34.58	1.026	1.025	168.95	84.9	0.451	
23	23 13C-1,2,3,4,6,7,8-HpCDD	8.12e5	0.99	NO	0.747	10.050	38.196	38.06	1.132	1.128	181.15	91.0	0.430	
24	24 13C-OCDD	1.54e6	0.88	NO	0.707	10.050	41.098	41.15	1.218	1.220	362.27	91.0	0.415	
25	25 13C-2,3,7,8-TCDF	1.73e6	0.77	NO	1.07	10.050	24.857	24.78	0.993	0.990	197.93	99.5	0.387	
26	26 13C-1,2,3,7,8-PeCDF	1.59e6	1.56	NO	1.00	10.050	29.438	29.52	1.176	1.179	193.95	97.5	0.642	
27	27 13C-2,3,4,7,8-PeCDF	1.57e6	1.58	NO	0.962	10.050	30.406	30.53	1.215	1.220	198.92	100	0.668	
28	28 13C-1,2,3,4,7,8-HxCDF	1.15e6	0.52	NO	1.05	10.050	33.337	33.36	0.988	0.989	182.26	91.6	0.482	
29	29 13C-1,2,3,6,7,8-HxCDF	1.27e6	0.51	NO	1.19	10.050	33.438	33.48	0.991	0.992	178.15	89.5	0.425	
30	30 13C-2,3,4,6,7,8-HxCDF	1.17e6	0.53	NO	1.07	10.050	34.049	34.04	1.009	1.009	183.02	92.0	0.475	
31	31 13C-1,2,3,7,8,9-HxCDF	1.04e6	0.51	NO	0.922	10.050	34.957	34.92	1.036	1.035	187.80	94.4	0.549	

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#	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	8.85e5	0.44	NO	0.767	10.050	36.711	36.64	1.088	1.086	192.38	96.7	0.522	
33	33 13C-1,2,3,4,7,8,9-HpCDF	6.84e5	0.45	NO	0.552	10.050	38.736	38.72	1.148	1.147	206.49	104	0.725	
34	34 13C-OCDF	1.77e6	0.83	NO	0.789	10.050	41.334	41.34	1.225	1.225	373.14	93.7	0.396	
35	35 37Cl-2,3,7,8-TCDD	5.30e5			1.18	10.050	25.708	25.74	1.027	1.028	73.514	92.3	0.136	
36	36 13C-1,2,3,4-TCDD	1.22e6	0.79	NO	1.00	10.050	25.110	25.03	1.000	1.000	199.01	100	0.334	
37	37 13C-1,2,3,4-TCDF	1.63e6	0.78	NO	1.00	10.050	23.370	23.22	1.000	1.000	199.01	100	0.412	
38	38 13C-1,2,3,4,6,9-HxCDF	1.19e6	0.52	NO	1.00	10.050	33.710	33.74	1.000	1.000	199.01	100	0.506	
39	39 Total Tetra-Dioxins				0.988	10.050	24.620		0.000		22.550		0.0967	23.4
40	40 Total Penta-Dioxins				0.972	10.050	29.960		0.000		18.280		0.107	18.3
41	41 Total Hexa-Dioxins				0.921	10.050	33.635		0.000		78.428		0.257	80.1
42	42 Total Hepta-Dioxins				0.923	10.050	37.640		0.000		442.15		0.887	442
43	43 Total Tetra-Furans				0.802	10.050	23.610		0.000		230.43		0.206	239
44	44 1st Func. Penta-Furans				0.907	10.050	27.090		0.000		47.063		0.0463	47.1
45	45 Total Penta-Furans				0.907	10.050	29.275		0.000		237.66		0.295	238
46	46 Total Hexa-Furans				0.898	10.050	33.555		0.000		291.98		0.276	292
47	47 Total Hepta-Furans				0.851	10.050	37.835		0.000		336.33		0.557	336



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Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

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Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.54	4.444e5	6.272e5	4.540e4	5.907e4	0.77	NO	1.045e5	15.032	15.032	0.0967
2	Total Tetra-Dioxins	21.69	2.444e4	1.864e4	1.520e3	1.306e3	1.16	YES	0.000e0	0.00000	0.33269	0.0967
3	Total Tetra-Dioxins	21.96	5.605e4	6.844e4	6.337e3	7.358e3	0.86	NO	1.369e4	1.9704	1.9704	0.0967
4	Total Tetra-Dioxins	22.46	1.670e4	2.275e4	1.767e3	2.101e3	0.84	NO	3.868e3	0.55655	0.55655	0.0967
5	Total Tetra-Dioxins	23.42	1.113e4	1.474e4	8.995e2	1.159e3	0.78	NO	2.059e3	0.29621	0.29621	0.0967
6	Total Tetra-Dioxins	23.71	1.966e4	2.477e4	1.576e3	1.926e3	0.82	NO	0.000e0	0.00000	0.50384	0.0967
7	Total Tetra-Dioxins	23.79	5.969e3	8.623e3	3.983e2	4.918e2	0.81	NO	8.901e2	0.12807	0.12807	0.0967
8	Total Tetra-Dioxins	23.94	2.760e4	3.241e4	2.385e3	2.829e3	0.84	NO	5.215e3	0.75029	0.75029	0.0967
9	Total Tetra-Dioxins	24.16	9.103e3	9.356e3	7.755e2	9.437e2	0.82	NO	1.719e3	0.24736	0.24736	0.0967
10	Total Tetra-Dioxins	24.45	8.749e3	1.452e4	7.372e2	9.946e2	0.74	NO	1.732e3	0.24917	0.24917	0.0967
11	Total Tetra-Dioxins	24.63	1.042e4	1.237e4	7.515e2	1.122e3	0.67	NO	1.874e3	0.26960	0.26960	0.0967
12	Total Tetra-Dioxins	25.02	1.236e4	1.273e4	1.056e3	1.328e3	0.79	NO	2.384e3	0.34304	0.34304	0.0967
13	Total Tetra-Dioxins	25.47	5.306e4	6.653e4	4.102e3	5.016e3	0.82	NO	9.118e3	1.3119	1.3119	0.0967
14	Total Tetra-Dioxins	25.57	7.122e3	1.011e4	4.934e2	6.315e2	0.78	NO	1.125e3	0.16185	0.16185	0.0967
15	2,3,7,8-TCDD	25.74	2.929e4	4.741e4	2.555e3	3.551e3	0.72	NO	6.106e3	0.87848	0.87848	0.0967
16	Total Tetra-Dioxins	26.09	9.807e3	1.568e4	6.521e2	9.881e2	0.66	NO	1.640e3	0.23599	0.23599	0.0967
17	Total Tetra-Dioxins	26.74	6.287e3	7.948e3	3.640e2	4.680e2	0.78	NO	8.319e2	0.11970	0.11970	0.0967

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**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.59	1.345e5	2.198e5	1.115e4	1.780e4	0.63	NO	2.895e4	4.9581	4.9581	0.107
2	Total Penta-Dioxins	28.67	9.587e3	1.460e4	5.143e2	8.141e2	0.63	NO	1.328e3	0.22752	0.22752	0.107
3	Total Penta-Dioxins	29.08	4.572e4	8.070e4	2.944e3	4.310e3	0.68	NO	7.254e3	1.2424	1.2424	0.107
4	Total Penta-Dioxins	29.58	1.551e5	2.544e5	9.008e3	1.438e4	0.63	NO	2.339e4	4.0052	4.0052	0.107
5	Total Penta-Dioxins	29.64	2.939e4	2.799e4	1.040e3	1.501e3	0.69	NO	2.540e3	0.43506	0.43506	0.107
6	Total Penta-Dioxins	29.77	5.564e4	8.189e4	3.314e3	4.682e3	0.71	NO	7.995e3	1.3693	1.3693	0.107
7	Total Penta-Dioxins	29.86	4.416e4	8.102e4	2.728e3	4.148e3	0.66	NO	6.876e3	1.1777	1.1777	0.107
8	Total Penta-Dioxins	30.07	5.451e4	7.323e4	5.118e3	7.391e3	0.69	NO	1.251e4	2.1425	2.1425	0.107
9	Total Penta-Dioxins	30.41	1.402e4	1.898e4	9.324e2	1.287e3	0.72	NO	2.219e3	0.38009	0.38009	0.107
10	1,2,3,7,8-PeCDD	30.87	4.663e4	8.344e4	2.597e3	4.518e3	0.57	NO	7.115e3	1.2185	1.2185	0.107
11	Total Penta-Dioxins	30.93	2.218e4	3.070e4	1.155e3	1.789e3	0.65	NO	2.944e3	0.50417	0.50417	0.107
12	Total Penta-Dioxins	31.16	8.275e3	7.006e3	3.128e2	4.377e2	0.71	NO	7.505e2	0.12854	0.12854	0.107
13	Total Penta-Dioxins	31.25	2.031e4	3.157e4	1.126e3	1.739e3	0.65	NO	2.865e3	0.49069	0.49069	0.107

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.76	1.379e6	1.106e6	6.970e4	5.522e4	1.26	NO	1.249e5	27.249	27.249	0.257
2	Total Hexa-Dioxins	32.82	1.638e5	1.209e5	4.917e3	3.377e3	1.46	YES	0.000e0	0.00000	1.6502	0.257
3	Total Hexa-Dioxins	33.31	1.670e5	1.430e5	9.286e3	7.342e3	1.26	NO	1.663e4	3.6272	3.6272	0.257
4	Total Hexa-Dioxins	33.56	1.147e6	9.643e5	7.782e4	6.321e4	1.23	NO	1.410e5	30.763	30.763	0.257
5	Total Hexa-Dioxins	33.64	1.218e5	9.918e4	7.023e3	5.518e3	1.27	NO	1.254e4	2.7357	2.7357	0.257
6	1,2,3,4,7,8-HxCDD	34.23	5.841e4	4.359e4	2.864e3	2.316e3	1.24	NO	5.180e3	1.1337	1.1337	0.227
7	1,2,3,6,7,8-HxCDD	34.33	3.789e5	3.053e5	2.267e4	1.920e4	1.18	NO	4.186e4	7.9710	7.9710	0.237
8	Total Hexa-Dioxins	34.51	4.694e4	3.577e4	2.721e3	2.275e3	1.20	NO	4.996e3	1.0897	1.0897	0.257
9	1,2,3,7,8,9-HxCDD	34.59	1.442e5	1.175e5	9.242e3	8.340e3	1.11	NO	1.758e4	3.8584	3.8584	0.276

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.03	6.579e6	6.389e6	5.092e5	5.014e5	1.02	NO	1.011e6	268.30	268.30	0.887
2	1,2,3,4,6,7,8-HpCDD	38.08	3.779e6	3.724e6	3.316e5	3.233e5	1.03	NO	6.549e5	173.86	173.86	0.887

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**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.51	3.416e4	3.915e4	2.513e3	3.195e3	0.79	NO	5.709e3	0.81984	0.81984	0.206
2	Total Tetra-Furans	20.02	7.760e4	1.000e5	6.859e3	8.532e3	0.80	NO	1.539e4	2.2105	2.2105	0.206
3	Total Tetra-Furans	20.59	3.541e5	4.760e5	3.319e4	4.408e4	0.75	NO	7.728e4	11.098	11.098	0.206
4	Total Tetra-Furans	21.02	2.925e4	4.642e4	1.721e3	2.817e3	0.61	YES	0.000e0	0.00000	0.56813	0.206
5	Total Tetra-Furans	21.11	1.051e5	1.386e5	1.252e4	1.722e4	0.73	NO	2.974e4	4.2711	4.2711	0.206
6	Total Tetra-Furans	21.50	6.899e5	8.715e5	6.490e4	8.424e4	0.77	NO	1.491e5	21.419	21.419	0.206
7	Total Tetra-Furans	21.60	4.909e4	5.508e4	2.322e3	2.643e3	0.88	NO	4.966e3	0.71316	0.71316	0.206
8	Total Tetra-Furans	21.98	3.351e5	4.580e5	3.280e4	4.303e4	0.76	NO	7.583e4	10.890	10.890	0.206
9	Total Tetra-Furans	22.08	3.587e4	4.585e4	3.002e3	4.114e3	0.73	NO	7.115e3	1.0219	1.0219	0.206
10	Total Tetra-Furans	22.34	8.130e4	1.120e5	8.660e3	1.139e4	0.76	NO	2.005e4	2.8797	2.8797	0.206
11	Total Tetra-Furans	22.79	2.551e4	2.667e4	2.250e3	2.942e3	0.76	NO	5.193e3	0.74575	0.74575	0.206
12	Total Tetra-Furans	22.95	2.038e4	3.135e4	1.930e3	2.552e3	0.76	NO	4.482e3	0.64371	0.64371	0.206
13	Total Tetra-Furans	23.13	2.113e5	2.739e5	1.812e4	2.414e4	0.75	NO	4.226e4	6.0698	6.0698	0.206
14	Total Tetra-Furans	23.24	2.631e5	3.252e5	2.811e4	3.646e4	0.77	NO	6.458e4	9.2747	9.2747	0.206
15	Total Tetra-Furans	23.79	2.143e6	2.819e6	1.912e5	2.548e5	0.75	NO	4.461e5	64.061	64.061	0.206
16	Total Tetra-Furans	23.89	1.557e5	2.115e5	1.045e4	1.368e4	0.76	NO	2.413e4	3.4657	3.4657	0.206
17	Total Tetra-Furans	24.10	1.114e5	1.586e5	9.878e3	1.418e4	0.70	NO	2.406e4	3.4554	3.4554	0.206
18	Total Tetra-Furans	24.57	3.830e4	5.417e4	2.505e3	2.875e3	0.87	NO	5.380e3	0.77265	0.77265	0.206
19	Total Tetra-Furans	24.67	3.336e5	4.206e5	1.996e4	2.625e4	0.76	NO	4.621e4	6.6367	6.6367	0.206
20	2,3,7,8-TCDF	24.79	2.516e6	3.264e6	2.087e5	2.759e5	0.76	NO	4.846e5	69.591	69.591	0.206
21	Total Tetra-Furans	24.88	2.095e5	2.832e5	1.408e4	1.625e4	0.87	NO	3.033e4	4.3559	4.3559	0.206
22	Total Tetra-Furans	25.18	1.227e5	1.663e5	9.536e3	1.302e4	0.73	NO	2.256e4	3.2396	3.2396	0.206
23	Total Tetra-Furans	25.45	2.199e4	3.170e4	1.660e3	2.379e3	0.70	NO	4.039e3	0.58014	0.58014	0.206
24	Total Tetra-Furans	26.47	4.476e4	5.701e4	3.256e3	4.109e3	0.79	NO	7.365e3	1.0577	1.0577	0.206
25	Total Tetra-Furans	26.63	4.661e4	6.266e4	3.530e3	4.512e3	0.78	NO	8.043e3	1.1551	1.1551	0.206
26	Total Tetra-Furans	26.89	5.077e5	4.819e5	3.622e4	3.341e4	1.08	YES	0.000e0	0.00000	8.4935	0.206

**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	26.87	2.852e6	1.855e6	2.065e5	1.325e5	1.56	NO	3.390e5	47.063	47.063	0.0463

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Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.38	1.414e5	9.130e4	9.059e3	5.621e3	1.61	NO	1.468e4	2.0381	2.0381	0.295
2	Total Penta-Furans	28.53	3.010e6	1.936e6	2.170e5	1.379e5	1.57	NO	3.549e5	49.270	49.270	0.295
3	Total Penta-Furans	28.59	4.134e5	2.307e5	2.042e4	1.182e4	1.73	NO	3.223e4	4.4747	4.4747	0.295
4	Total Penta-Furans	29.13	5.847e5	3.829e5	3.661e4	2.402e4	1.52	NO	6.063e4	8.4173	8.4173	0.295
5	Total Penta-Furans	29.20	1.709e5	1.098e5	7.550e3	4.959e3	1.52	NO	1.251e4	1.7367	1.7367	0.295
6	Total Penta-Furans	29.34	7.506e5	4.872e5	4.219e4	2.820e4	1.50	NO	7.039e4	9.7728	9.7728	0.295
7	Total Penta-Furans	29.40	1.075e5	5.495e4	3.520e3	2.406e3	1.46	NO	5.926e3	0.82269	0.82269	0.295
8	1,2,3,7,8-PeCDF	29.54	5.124e6	3.320e6	3.070e5	1.982e5	1.55	NO	5.052e5	69.604	69.604	0.304
9	Total Penta-Furans	29.63	3.671e5	2.166e5	1.535e4	9.693e3	1.58	NO	2.505e4	3.4773	3.4773	0.295
10	Total Penta-Furans	29.81	2.206e6	1.393e6	1.290e5	8.223e4	1.57	NO	2.113e5	29.329	29.329	0.295
11	Total Penta-Furans	29.87	2.795e5	1.780e5	1.440e4	9.223e3	1.56	NO	2.363e4	3.2801	3.2801	0.295
12	Total Penta-Furans	30.44	7.367e4	4.197e4	3.469e3	2.020e3	1.72	NO	5.489e3	0.76202	0.76202	0.295
13	2,3,4,7,8-PeCDF	30.55	3.116e6	1.968e6	1.922e5	1.238e5	1.55	NO	3.160e5	42.158	42.158	0.272
14	Total Penta-Furans	30.59	1.479e6	8.967e5	4.272e4	2.865e4	1.49	NO	7.137e4	9.9077	9.9077	0.295
15	Total Penta-Furans	31.49	1.948e5	1.156e5	1.136e4	7.407e3	1.53	NO	1.877e4	2.6052	2.6052	0.295

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	32.22	3.684e5	3.018e5	2.873e4	2.360e4	1.22	NO	5.233e4	10.019	10.019	0.276
2	Total Hexa-Furans	32.43	2.877e6	2.307e6	1.132e5	9.306e4	1.22	NO	2.063e5	39.500	39.500	0.276
3	Total Hexa-Furans	32.73	5.599e4	4.976e4	2.730e3	2.392e3	1.14	NO	5.122e3	0.98063	0.98063	0.276
4	Total Hexa-Furans	32.92	3.344e6	2.786e6	1.661e5	1.399e5	1.19	NO	3.060e5	58.596	58.596	0.276
5	Total Hexa-Furans	33.27	9.987e4	7.741e4	4.553e3	3.647e3	1.25	NO	8.200e3	1.5700	1.5700	0.276
6	1,2,3,4,7,8-HxCDF	33.37	5.668e6	4.703e6	3.112e5	2.555e5	1.22	NO	5.667e5	114.00	114.00	0.262
7	1,2,3,6,7,8-HxCDF	33.49	1.662e6	1.415e6	1.007e5	8.285e4	1.21	NO	1.835e5	34.130	34.130	0.249
8	Total Hexa-Furans	33.56	1.800e5	1.484e5	9.493e3	8.201e3	1.16	NO	1.769e4	3.3877	3.3877	0.276
9	Total Hexa-Furans	33.75	9.074e4	7.881e4	6.172e3	5.007e3	1.23	NO	1.118e4	2.1403	2.1403	0.276
10	2,3,4,6,7,8-HxCDF	34.05	5.433e5	4.464e5	3.269e4	2.685e4	1.22	NO	5.954e4	11.268	11.268	0.279
11	1,2,3,7,8,9-HxCDF	34.98	6.167e5	5.025e5	2.826e4	2.318e4	1.22	NO	5.145e4	11.486	11.486	0.370
12	Total Hexa-Furans	34.99	5.293e5	4.309e5	1.487e4	1.069e4	1.39	NO	2.557e4	4.8948	4.8948	0.276

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Printed: Wednesday, March 04, 2020 13:59:55 Pacific Standard Time

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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	36.65	2.759e6	2.720e6	2.080e5	2.092e5	0.99	NO	4.172e5	110.19	110.19	0.472
2	Total Hepta-Furans	37.04	5.002e4	4.607e4	3.739e3	3.175e3	1.18	NO	6.914e3	2.0599	2.0599	0.557
3	Total Hepta-Furans	37.25	4.211e6	4.214e6	3.352e5	3.350e5	1.00	NO	6.702e5	199.69	199.69	0.557
4	1,2,3,4,7,8,9-HpCDF	38.73	5.538e5	5.618e5	4.131e4	4.084e4	1.01	NO	8.215e4	24.385	24.385	0.579



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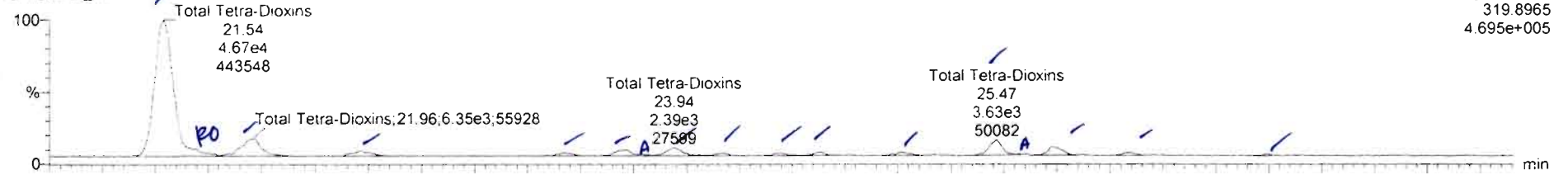
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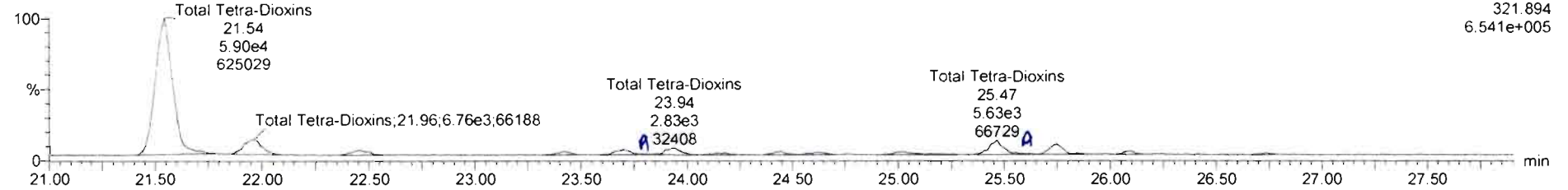
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2,3,7,8-TCDD

200303R2\_10

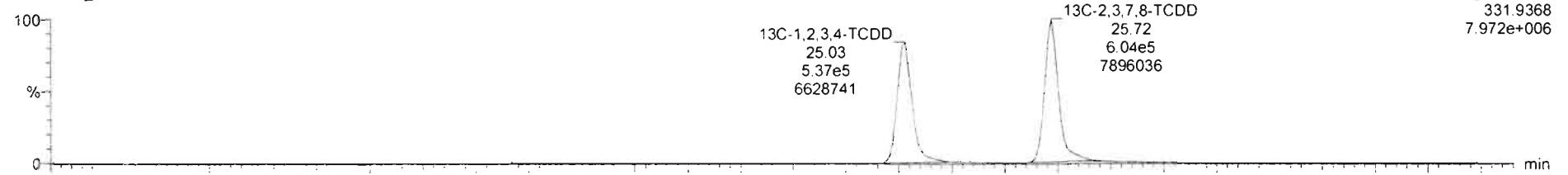


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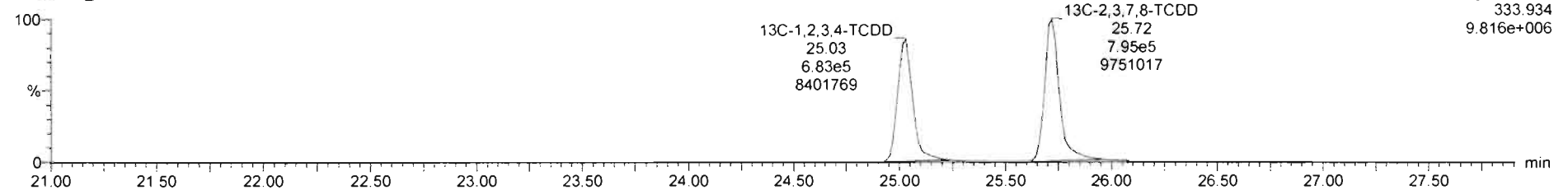


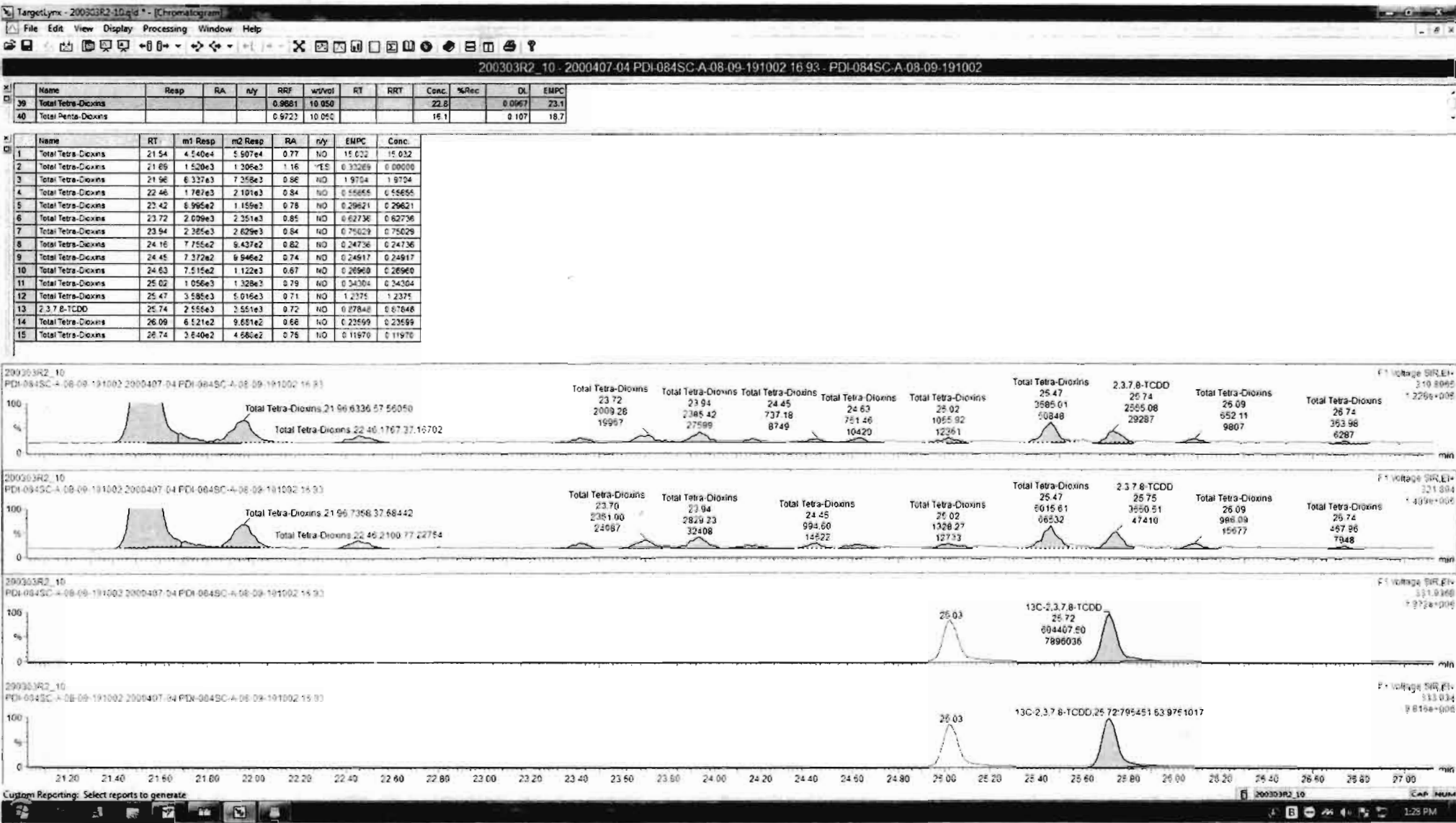
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200303R2\_10



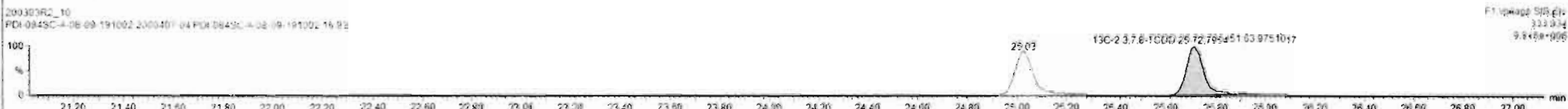
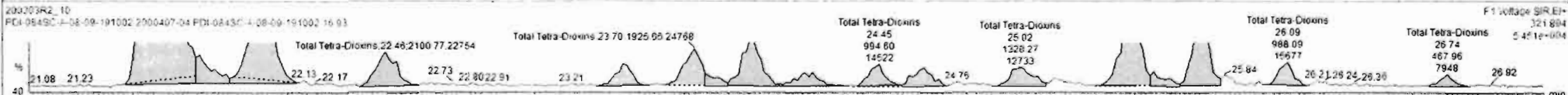
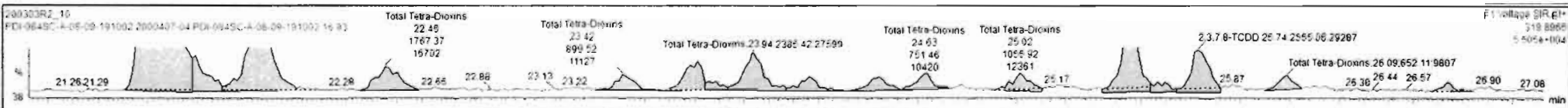
200303R2\_10





Name	Resp	RA	n/y	RRF	wVol	RT	RRT	Conc	%Rec	DL	EMPC
35 Total Tetra-Dioxins				0.9881	10.050			22.6		0.0967	23.4
40 Total Penta-Dioxins				0.9723	10.050			16.1		0.107	18.7

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Tetra-Dioxins	21.54	4.540e4	5.907e4	0.77	NO	15.032	15.032
2 Total Tetra-Dioxins	21.89	1.520e3	1.306e3	1.16	ES	0.33289	0.00000
3 Total Tetra-Dioxins	21.96	6.337e3	7.358e3	0.86	NO	1.9704	1.9704
4 Total Tetra-Dioxins	22.46	1.767e3	2.101e3	0.84	NO	0.55655	0.55655
5 Total Tetra-Dioxins	22.42	8.995e2	1.159e3	0.78	NO	0.29621	0.29621
6 Total Tetra-Dioxins	23.71	1.576e3	1.926e3	0.82	NO	0.50384	0.00000
7 Total Tetra-Dioxins	23.79	3.923e2	4.918e2	0.81	NO	0.12607	0.12607
8 Total Tetra-Dioxins	23.94	2.385e2	2.829e2	0.84	NO	0.75029	0.75029
9 Total Tetra-Dioxins	24.16	7.755e2	9.437e2	0.82	NO	0.24736	0.24736
10 Total Tetra-Dioxins	24.45	7.372e2	9.646e2	0.74	NO	0.24917	0.24917
11 Total Tetra-Dioxins	24.63	7.515e2	1.122e3	0.67	NO	0.26960	0.26960
12 Total Tetra-Dioxins	25.02	1.056e3	1.328e3	0.75	NO	0.34304	0.34304
13 Total Tetra-Dioxins	25.47	4.102e3	5.016e3	0.82	NO	1.3119	1.3119
14 Total Tetra-Dioxins	25.57	4.934e2	6.315e2	0.76	NO	0.16185	0.16185
15 2,3,7,8-TCDD	25.74	2.555e3	3.551e3	0.72	NO	0.87848	0.87848
16 Total Tetra-Dioxins	26.09	6.521e2	9.881e2	0.66	NO	0.23599	0.23599
17 Total Tetra-Dioxins	26.74	3.640e2	4.680e2	0.76	NO	0.11970	0.11970



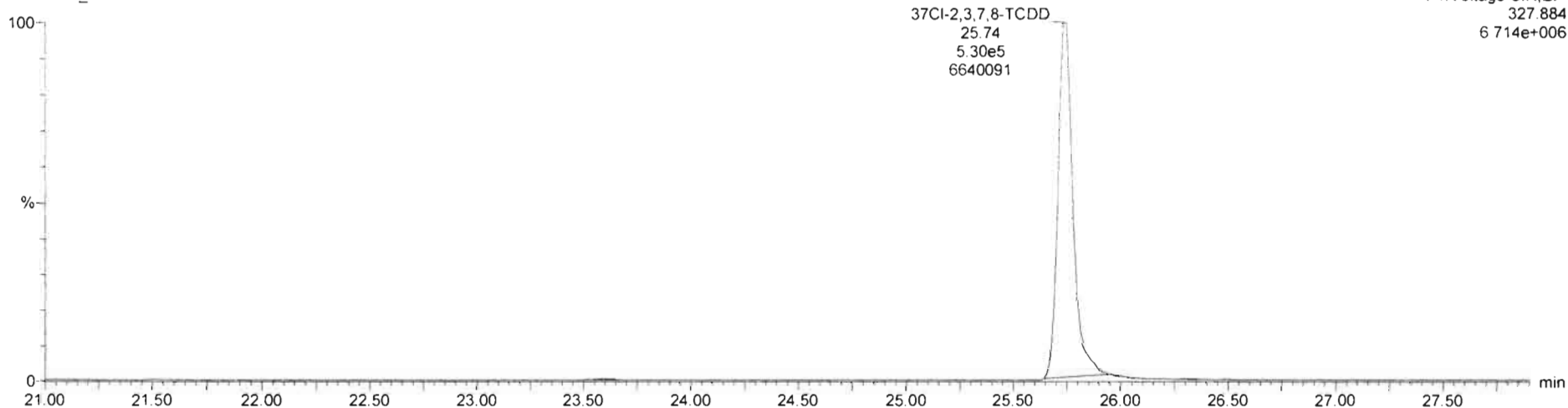
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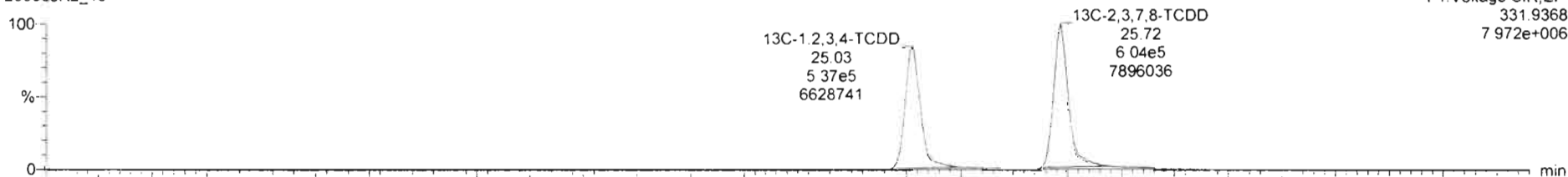
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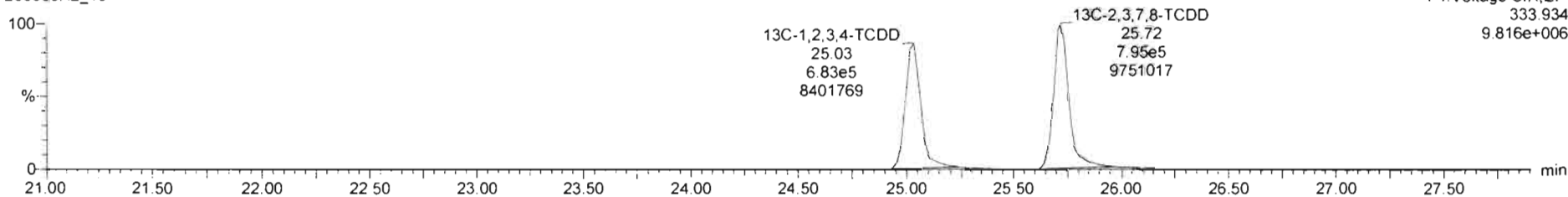


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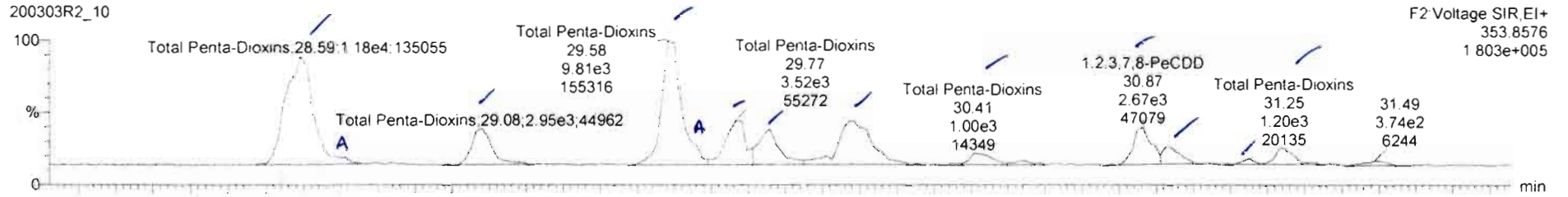
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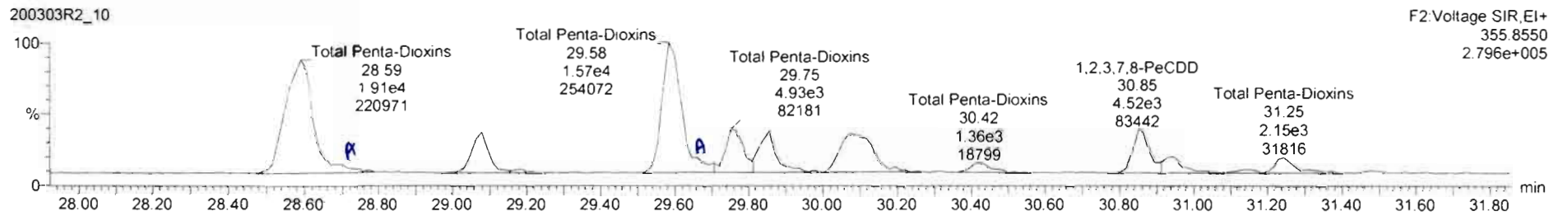
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1,2,3,7,8-PeCDD

200303R2\_10

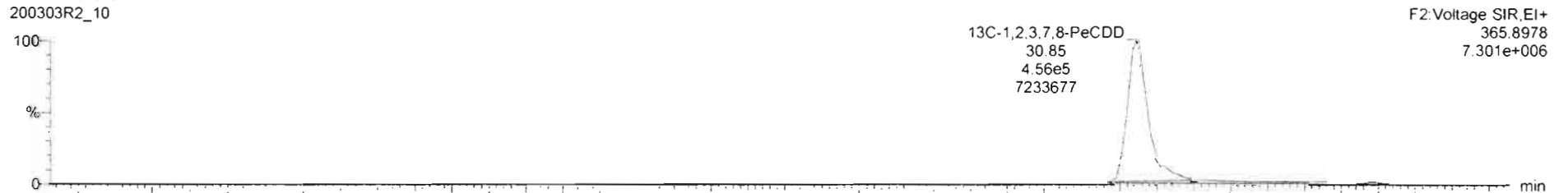


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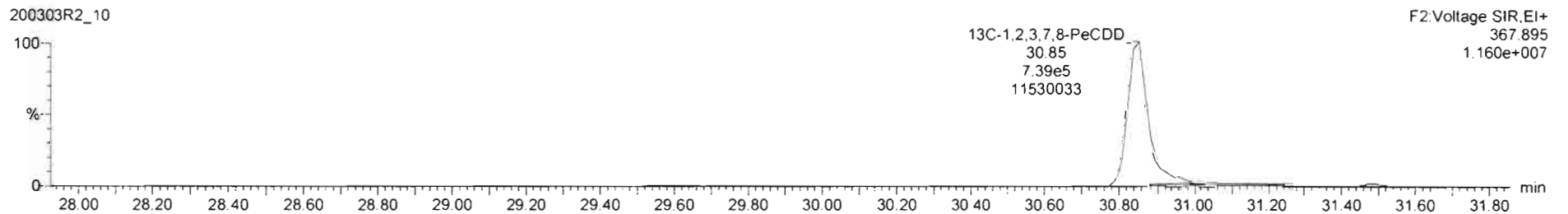


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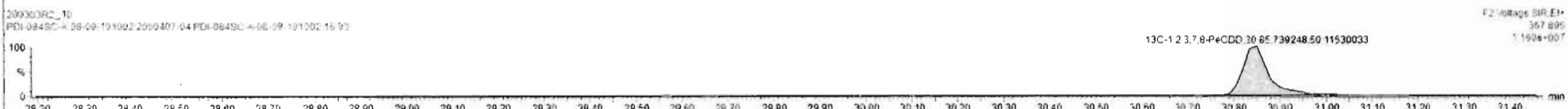
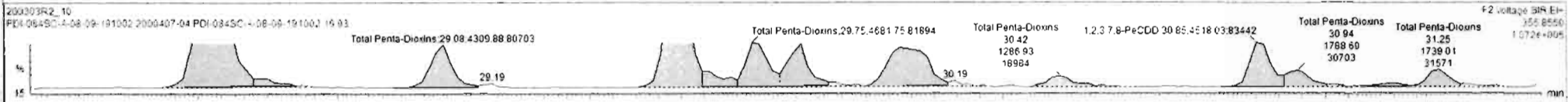
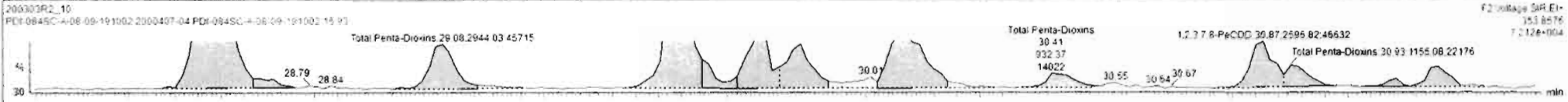
200303R2\_10





Name	Resp	RA	n/y	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9581	10.950			22.8	0.0967	23.4	
40 Total Penta-Dioxins				0.9723	10.050			18.3	0.107	18.3	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Penta-Dioxins	28.59	1.115e4	1.782e4	0.63	NO	4.9521	4.9521
2 Total Penta-Dioxins	28.87	5.143e2	8.141e2	0.63	NO	0.22752	0.22752
3 Total Penta-Dioxins	29.08	2.944e3	4.310e3	0.68	NO	1.2424	1.2424
4 Total Penta-Dioxins	29.58	9.038e3	1.438e4	0.63	NO	4.9052	4.9052
5 Total Penta-Dioxins	29.84	1.040e2	1.501e3	0.69	NO	0.43506	0.43506
6 Total Penta-Dioxins	29.77	3.314e3	4.882e3	0.71	NO	1.3693	1.3693
7 Total Penta-Dioxins	29.86	2.728e3	4.148e3	0.66	NO	1.1777	1.1777
8 Total Penta-Dioxins	30.07	5.116e3	7.391e3	0.69	NO	2.1425	2.1425
9 Total Penta-Dioxins	30.41	9.324e2	1.267e3	0.72	NO	0.38009	0.38009
10 1,2,3,7,8-PeCDD	30.87	2.597e3	4.518e3	0.57	NO	1.2165	1.2165
11 Total Penta-Dioxins	30.93	1.155e2	1.785e3	0.65	NO	0.50417	0.50417
12 Total Penta-Dioxins	31.16	3.106e2	4.377e2	0.71	NO	0.12854	0.12854
13 Total Penta-Dioxins	31.25	1.126e3	1.739e3	0.65	NO	0.49029	0.49029



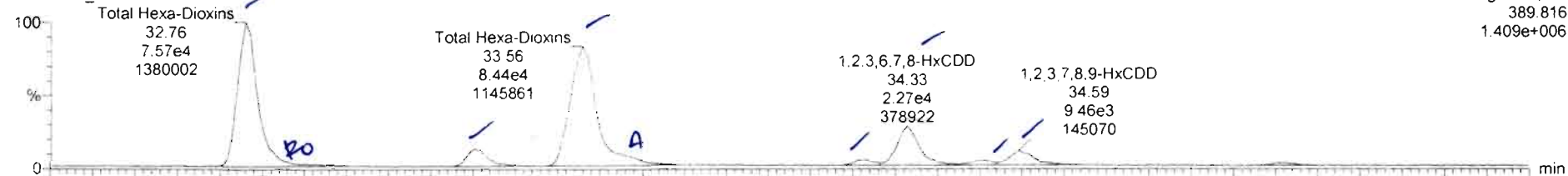
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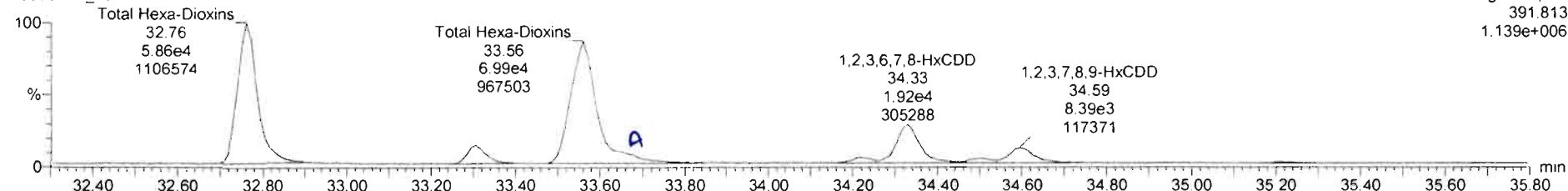
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1,2,3,4,7,8-HxCDD

200303R2\_10

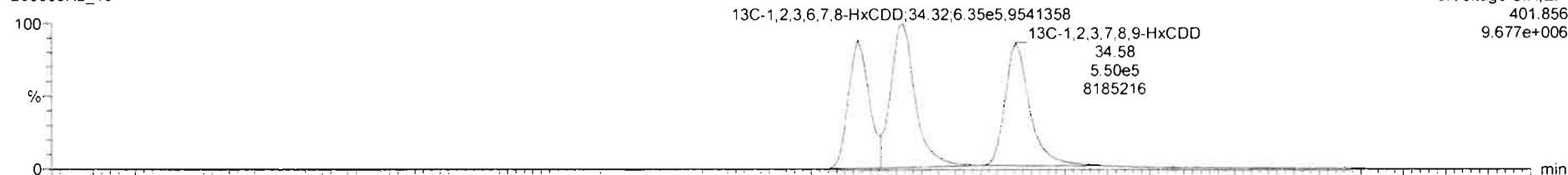


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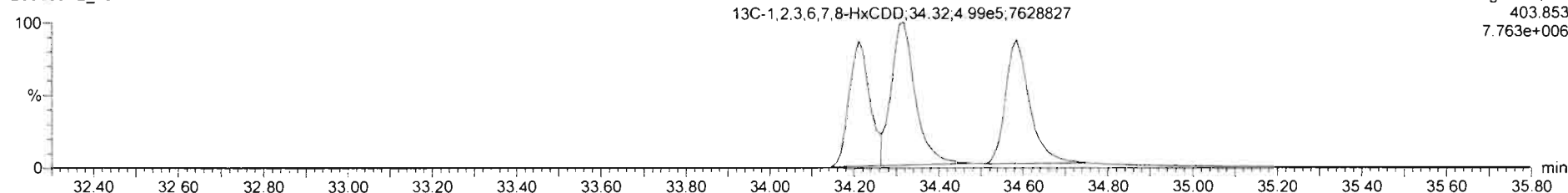


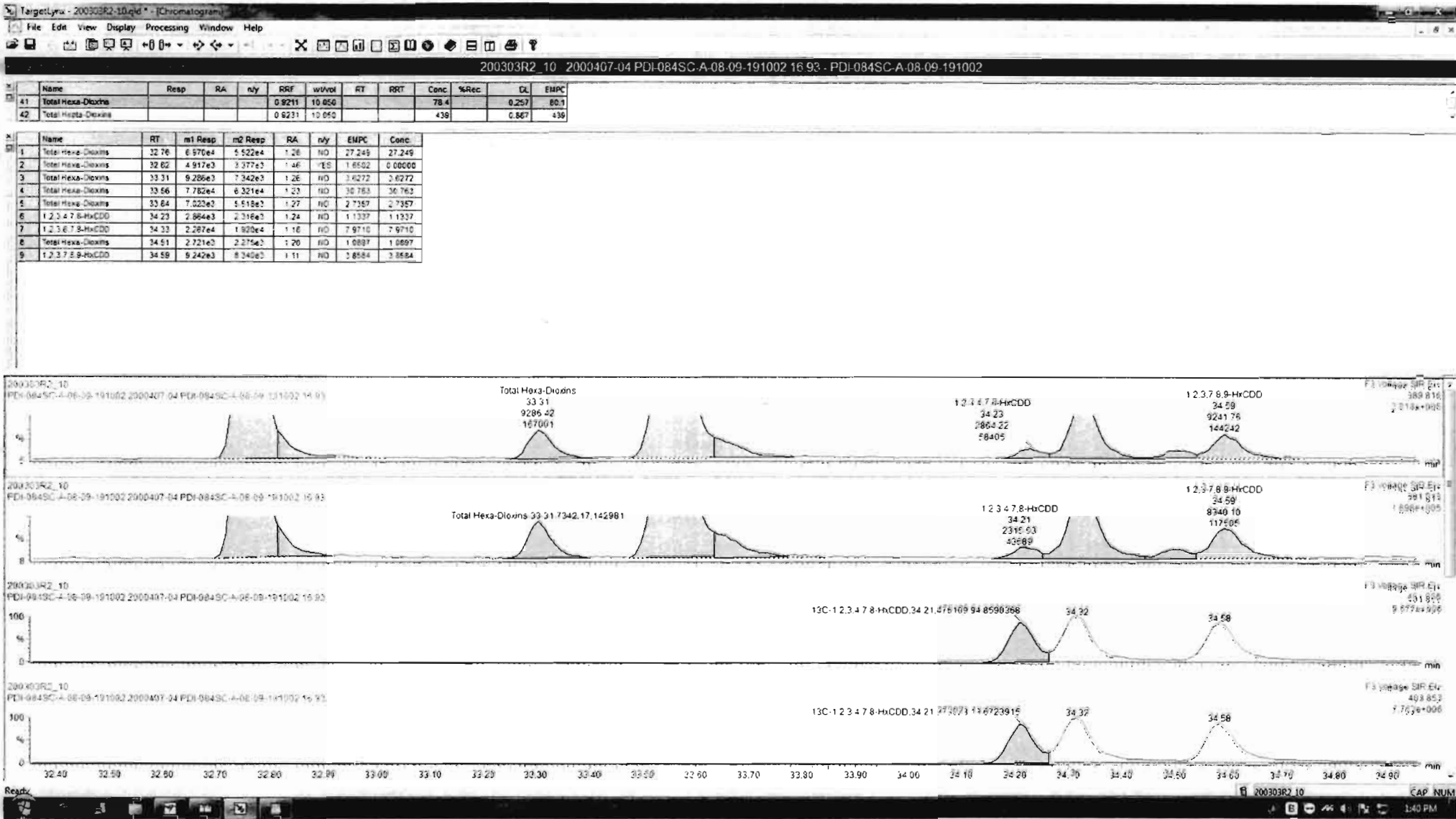
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200303R2\_10





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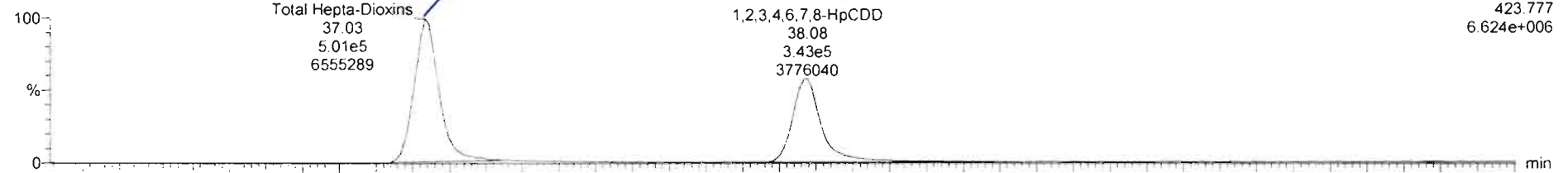
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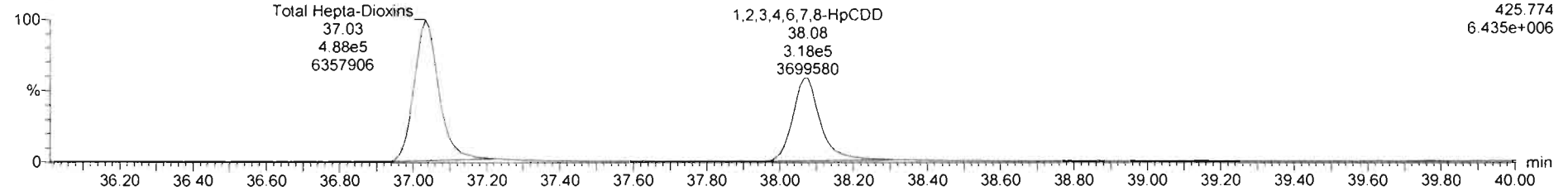
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**1,2,3,4,6,7,8-HpCDD**

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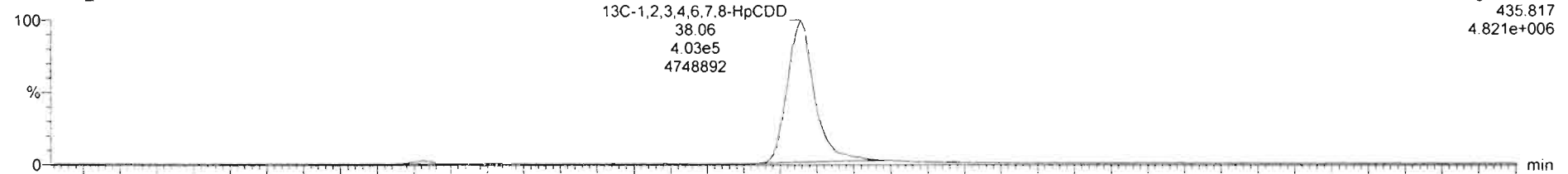


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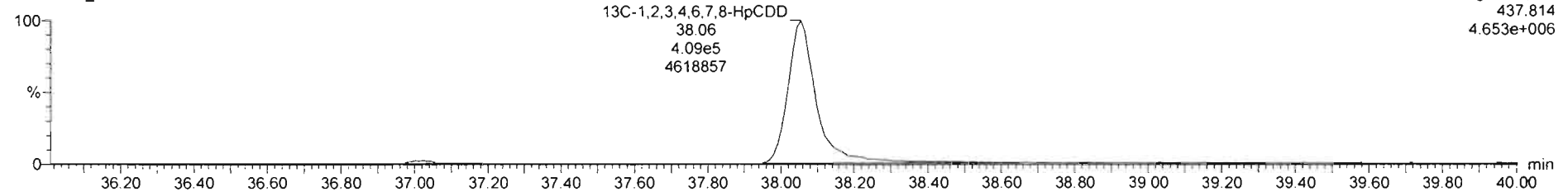


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200303R2\_10



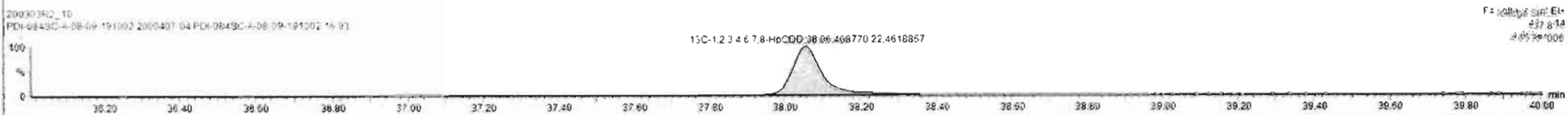
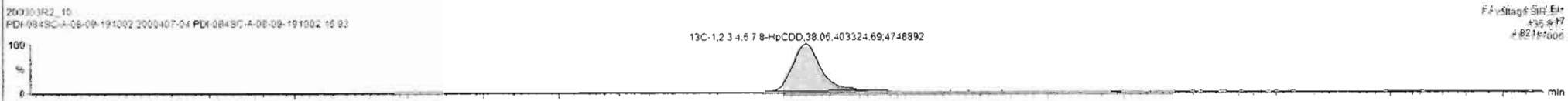
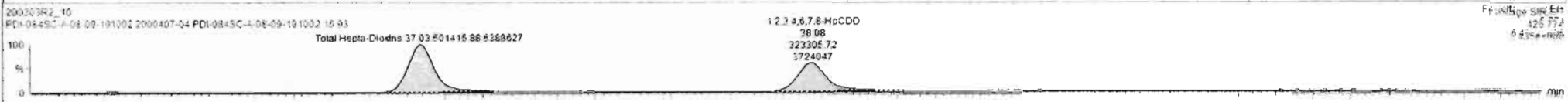
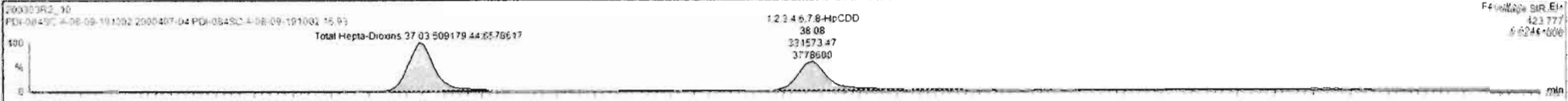
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200303R2\_10 - 2000407-04 PDI-084SC-A-08-09-191002 16 93 - PDI-084SC-A-08-09-191002

Name	Resp	RA	nly	RRF	wVvol	RT	RRT	Conc.	%Rec	DL	EMPC
41 Total Hexa-Dioxins				0.9211	10.050			78.4	0.257	86.1	
42 Total Hepta-Dioxins				0.9231	10.050			442	0.887	442	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
1 Total Hepta-Dioxins	37.03	5.092e5	5.014e5	1.02	NO	268.30	268.30
2 1,2,3,4,6,7,8-HpCDD	38.08	3.316e5	3.233e5	1.03	NO	173.86	173.86

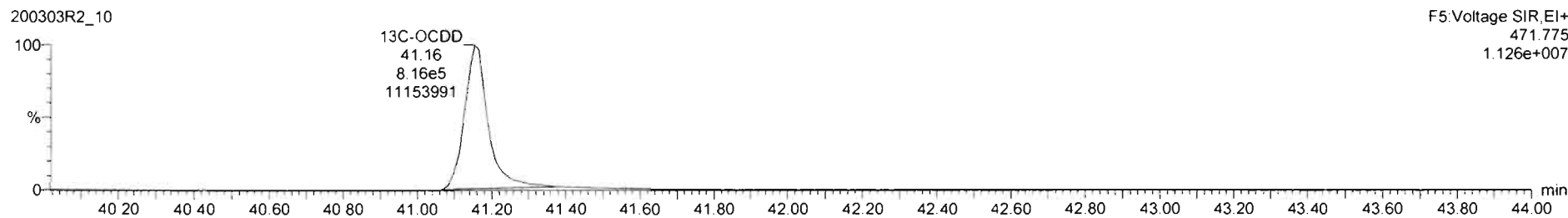
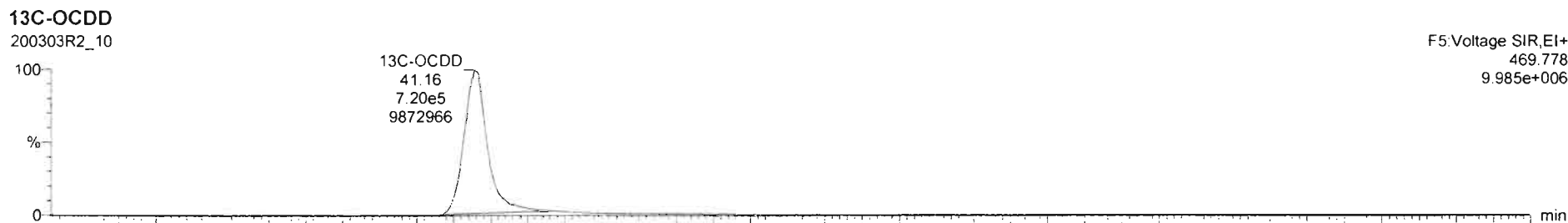
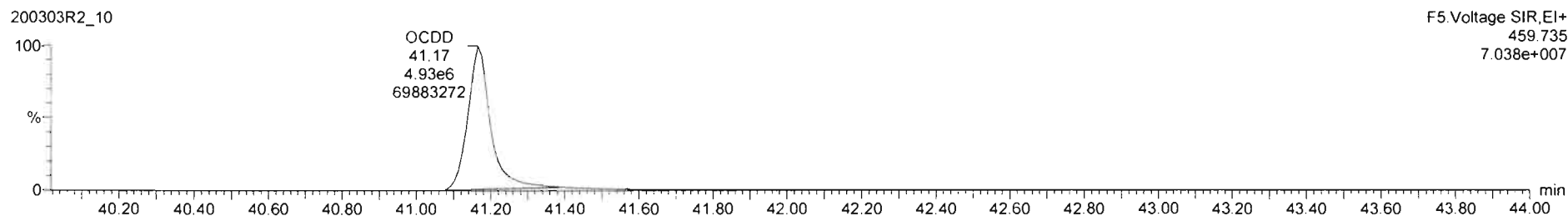
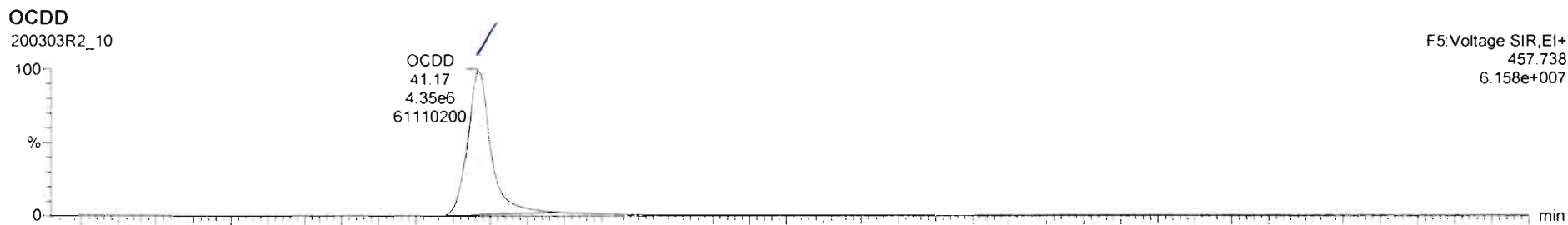




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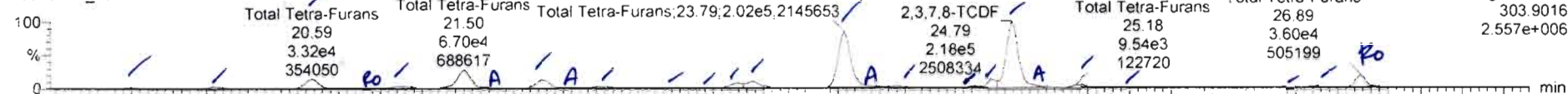
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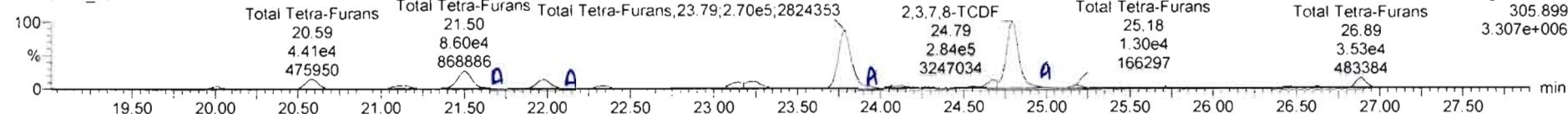
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2,3,7,8-TCDF

200303R2\_10

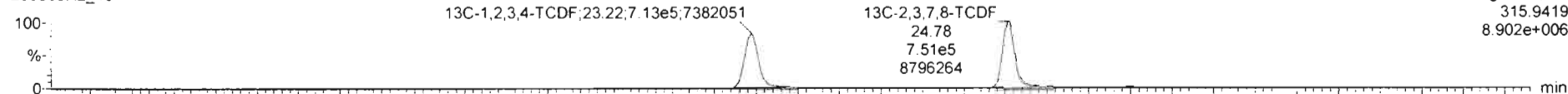


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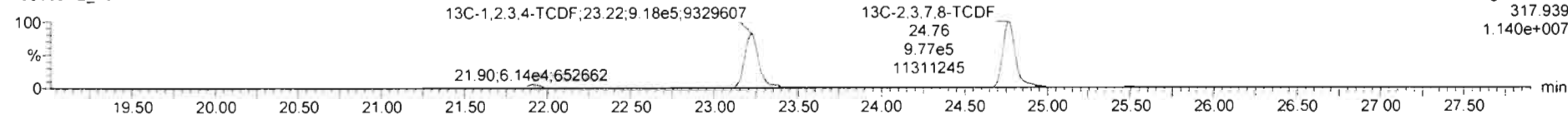


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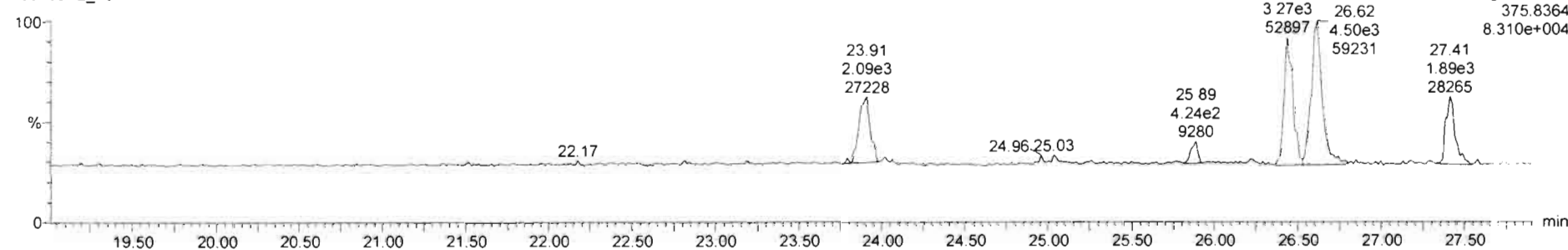


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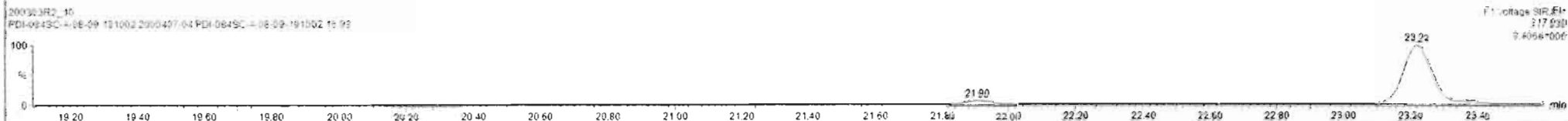
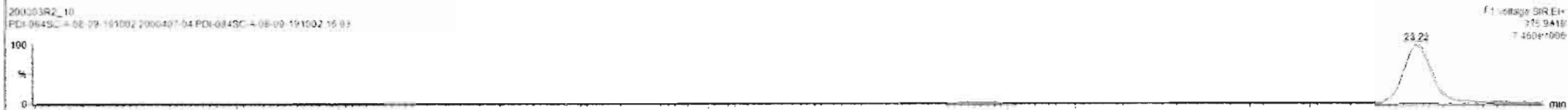
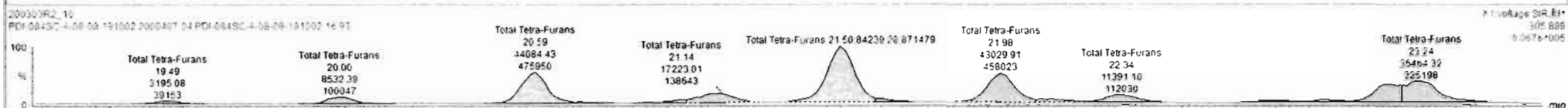
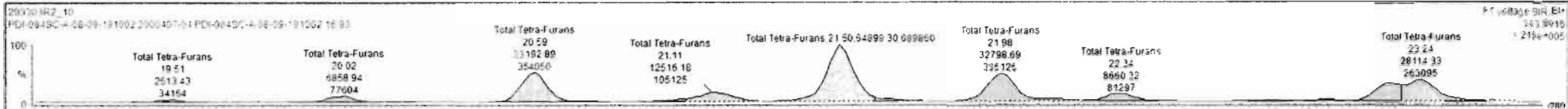
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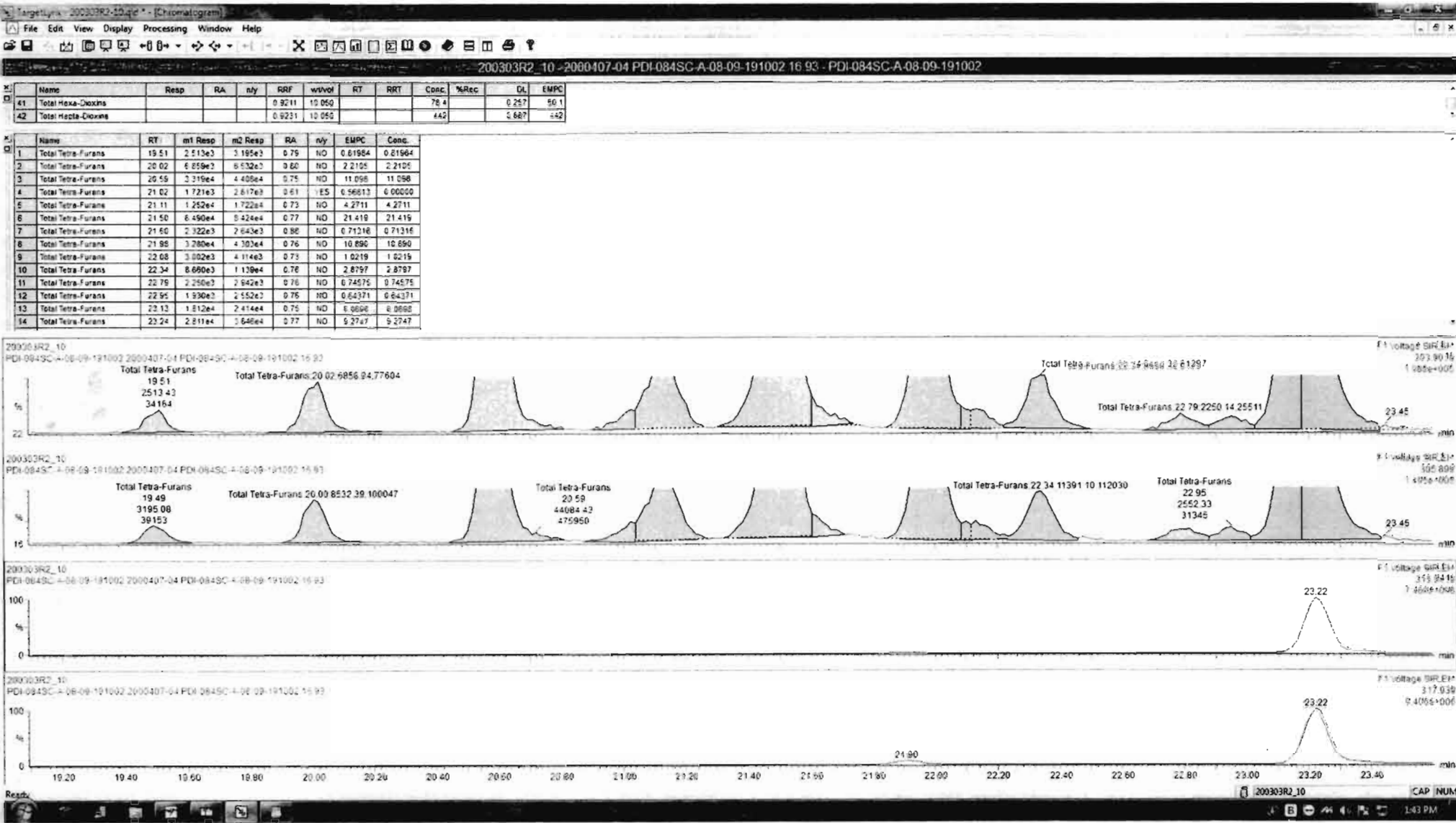


200303R2\_10 - 2000407-04 PDI-0843C-A-08-09-191002 16 93 - PDI-0843C-A-08-09-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
41 Total Hexa-Dioxins				0.9211	10.050			76.4	0.257	80.1	
42 Total Hepta-Dioxins				0.9231	10.050			442	0.687	442	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Furans	19.51	2.512e3	3.195e3	0.79	NO	0.21984	0.21964
2 Total Tetra-Furans	20.02	6.059e3	8.530e3	0.60	NO	2.2105	2.2105
3 Total Tetra-Furans	20.59	3.319e4	4.408e4	0.75	NO	11.098	11.098
4 Total Tetra-Furans	21.02	1.721e3	2.817e3	0.61	ES	0.56813	0.00000
5 Total Tetra-Furans	21.11	1.252e4	1.722e4	0.73	NO	4.2711	4.2711
6 Total Tetra-Furans	21.50	6.490e4	8.424e4	0.77	NO	21.419	21.419
7 Total Tetra-Furans	21.80	2.322e3	2.642e3	0.88	NO	0.71316	0.71316
8 Total Tetra-Furans	21.98	3.280e4	4.303e4	0.76	NO	10.880	10.880
9 Total Tetra-Furans	22.08	3.002e3	4.114e3	0.73	NO	1.0219	1.0219
10 Total Tetra-Furans	22.34	8.060e3	1.139e4	0.78	NO	2.8757	2.8757
11 Total Tetra-Furans	22.75	2.250e3	2.942e3	0.76	NO	0.74575	0.74575
12 Total Tetra-Furans	22.95	1.930e3	2.552e3	0.76	NO	0.64371	0.64371
13 Total Tetra-Furans	23.13	1.812e4	2.414e4	0.75	NO	6.0698	6.0698
14 Total Tetra-Furans	23.24	2.811e4	3.646e4	0.77	NO	9.2747	9.2747

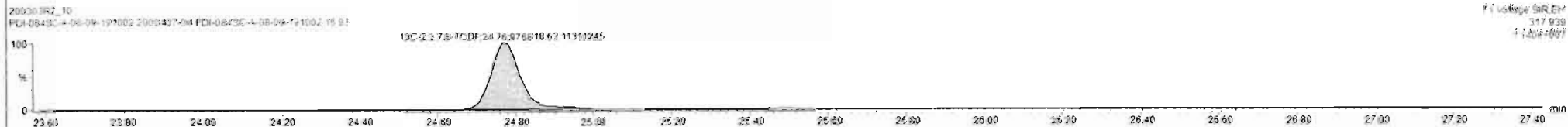




200303R2\_10 - 2000407-04 PDI-084SC-A-08-09-191002 16 93 - PDI-084SC-A-08-09-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
41 Total Hexa-Dioxins				0.9211	10.050			78.4		0.257	86.1
42 Total Hepta-Dioxins				0.9231	10.050			442		0.887	442

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
15 Total Tetra-Furans	23.79	1.912e5	2.548e5	0.75	NQ	64.061	64.061
16 Total Tetra-Furans	23.86	1.045e4	1.368e4	0.76	NQ	3.4657	3.4657
17 Total Tetra-Furans	24.10	9.678e3	1.418e4	0.70	NQ	3.4554	3.4554
18 Total Tetra-Furans	24.57	2.505e3	2.675e3	0.87	NQ	0.77265	0.77265
19 Total Tetra-Furans	24.67	1.996e4	2.625e4	0.76	NQ	6.6367	6.6367
20 2,3,7,8-TCDF	24.78	2.087e5	2.759e5	0.76	NQ	69.591	69.591
21 Total Tetra-Furans	24.86	1.485e4	1.625e4	0.87	NQ	4.3555	4.3559
22 Total Tetra-Furans	25.18	9.536e3	1.302e4	0.73	NQ	3.2396	3.2396
23 Total Tetra-Furans	25.45	1.660e3	2.379e3	0.70	NQ	0.58014	0.58014
24 Total Tetra-Furans	26.47	3.256e3	4.109e3	0.79	NQ	1.0577	1.0577
25 Total Tetra-Furans	26.63	3.530e3	4.512e3	0.76	NQ	1.1551	1.1551
26 Total Tetra-Furans	26.89	3.622e4	3.341e4	1.08	ES	8.4935	0.00000

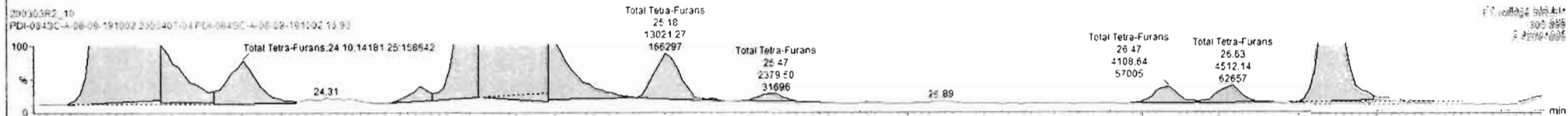




200303R2\_10 - 2000407-04 PDI-084SC-A-08-09-191002 16 93 - PDI-084SC-A-08-09-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
41 Total Hexa-Dioxine				0.9211	10.050			78.4		0.257	80.1
42 Total Hspita-Dioxine				0.9231	10.050			442		0.887	442

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
15 Total Tetra-Furans	23.75	1.912e5	2.548e5	0.75	NO	64.061	64.061
16 Total Tetra-Furans	23.86	1.045e4	1.382e4	0.76	NO	2.4657	3.4657
17 Total Tetra-Furans	24.10	9.878e3	1.418e4	0.70	NO	3.4554	2.4554
18 Total Tetra-Furans	24.57	2.505e3	2.875e3	0.87	NO	0.77265	0.77265
19 Total Tetra-Furans	24.67	1.996e4	2.525e4	0.76	NO	6.6367	6.6367
20 2,3,7,8-TCDF	24.79	2.087e5	2.759e5	0.76	NO	69.591	69.591
21 Total Tetra-Furans	24.86	1.408e4	1.825e4	0.87	NO	4.3559	4.3559
22 Total Tetra-Furans	25.18	9.536e3	1.302e4	0.73	NO	3.2396	3.2396
23 Total Tetra-Furans	25.45	1.660e3	2.379e3	0.70	NO	0.58014	0.58014
24 Total Tetra-Furans	26.47	3.256e3	4.108e3	0.79	NO	1.9577	1.9577
25 Total Tetra-Furans	26.83	3.550e3	4.512e3	0.76	NO	1.1551	1.1551
26 Total Tetra-Furans	26.89	3.622e4	3.241e4	1.08	YES	8.4935	0.00000



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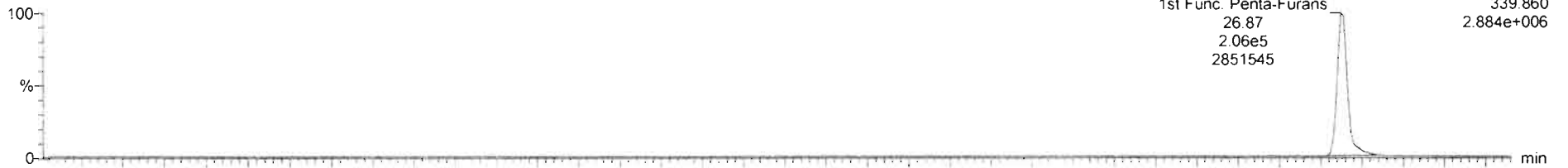
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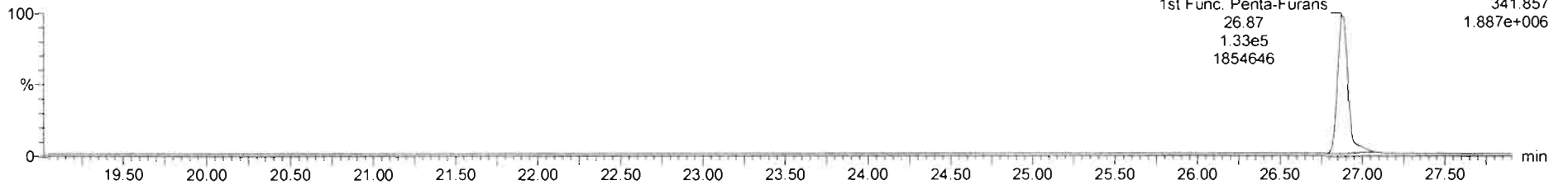
Name: 200303R2\_10, Date: 03-Mar-2020, Time: 20:56:52, ID: 2000407-04 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

1st Func. Penta-Furans

200303R2\_10

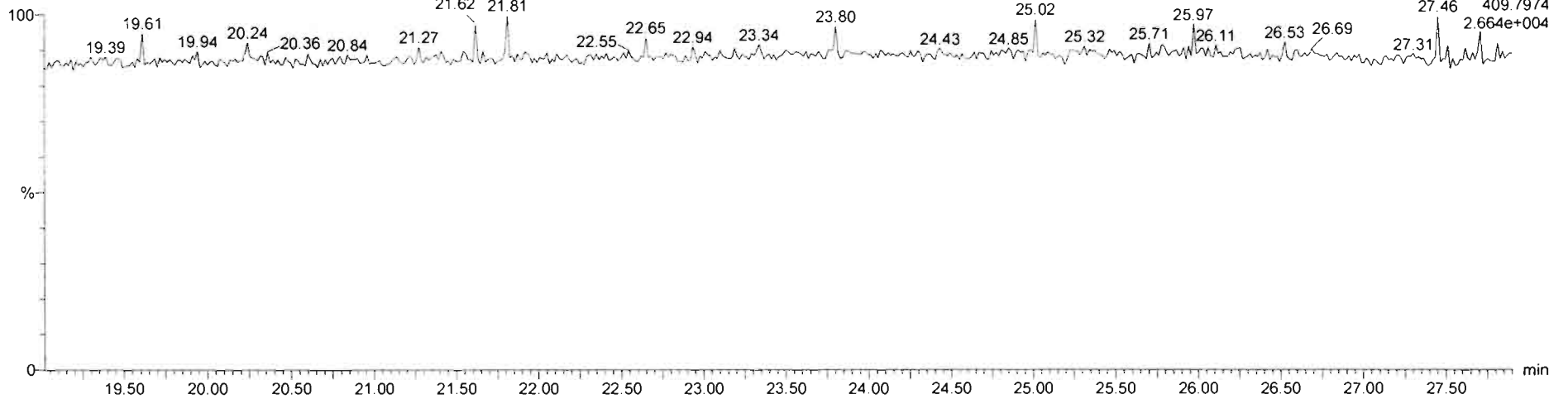


200303R2\_10



DPE6

200303R2\_10



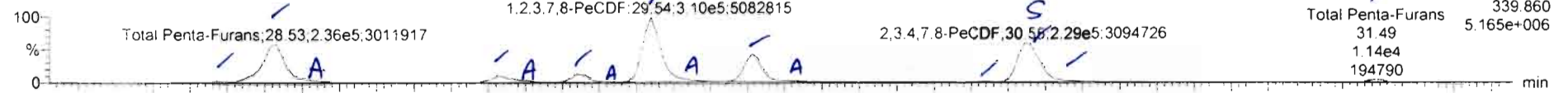
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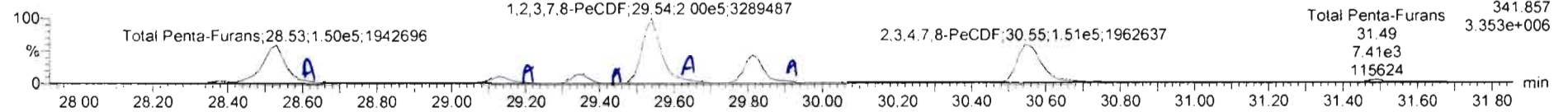
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1,2,3,7,8-PeCDF

200303R2\_10

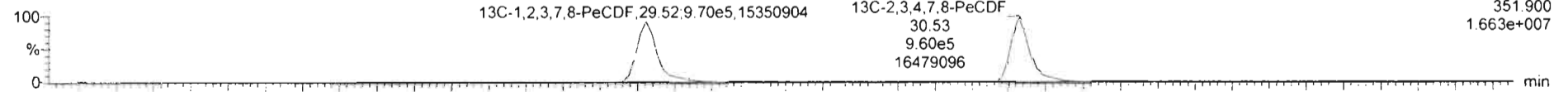


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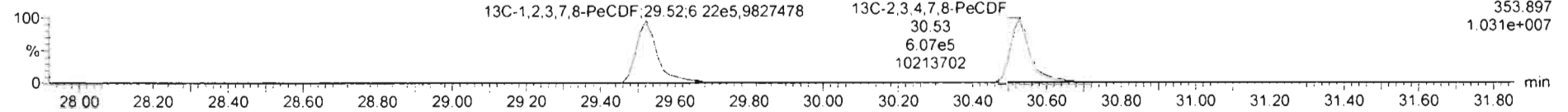


13C-1,2,3,7,8-PeCDF

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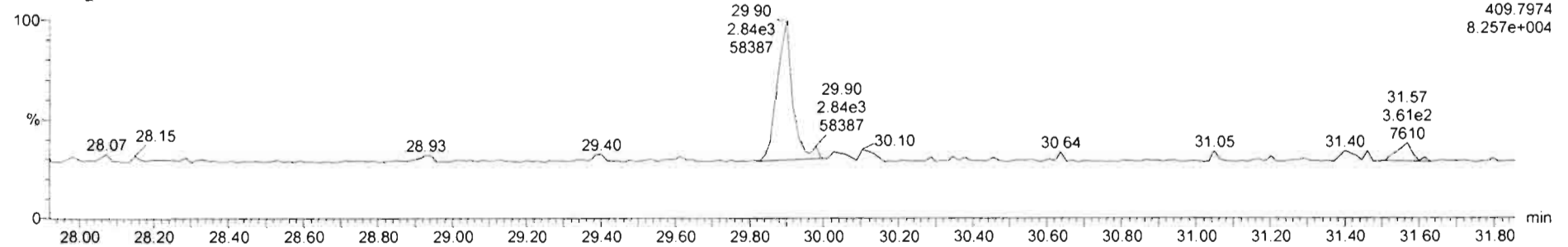


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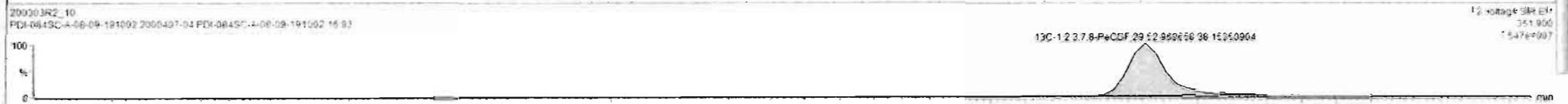
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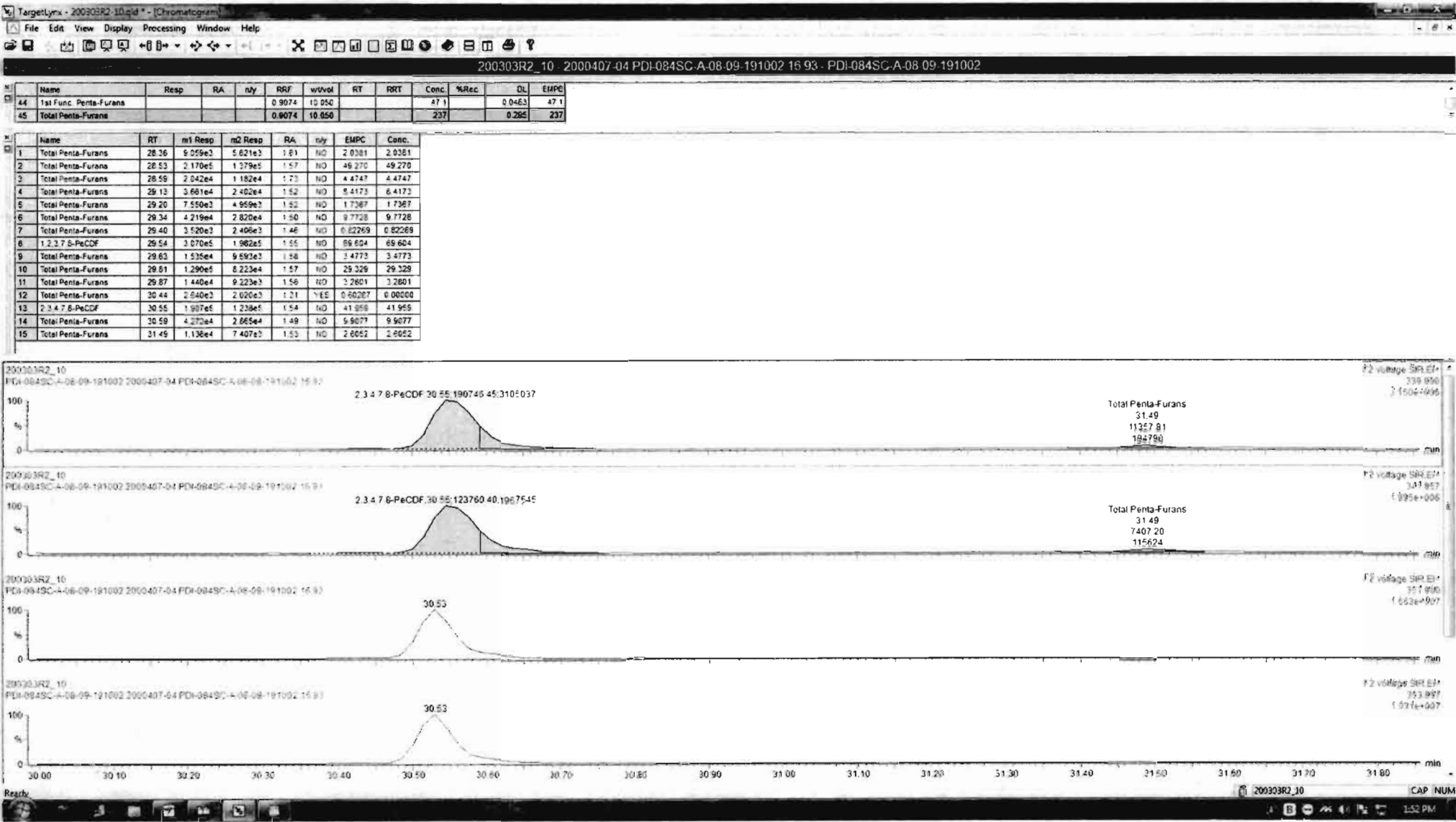
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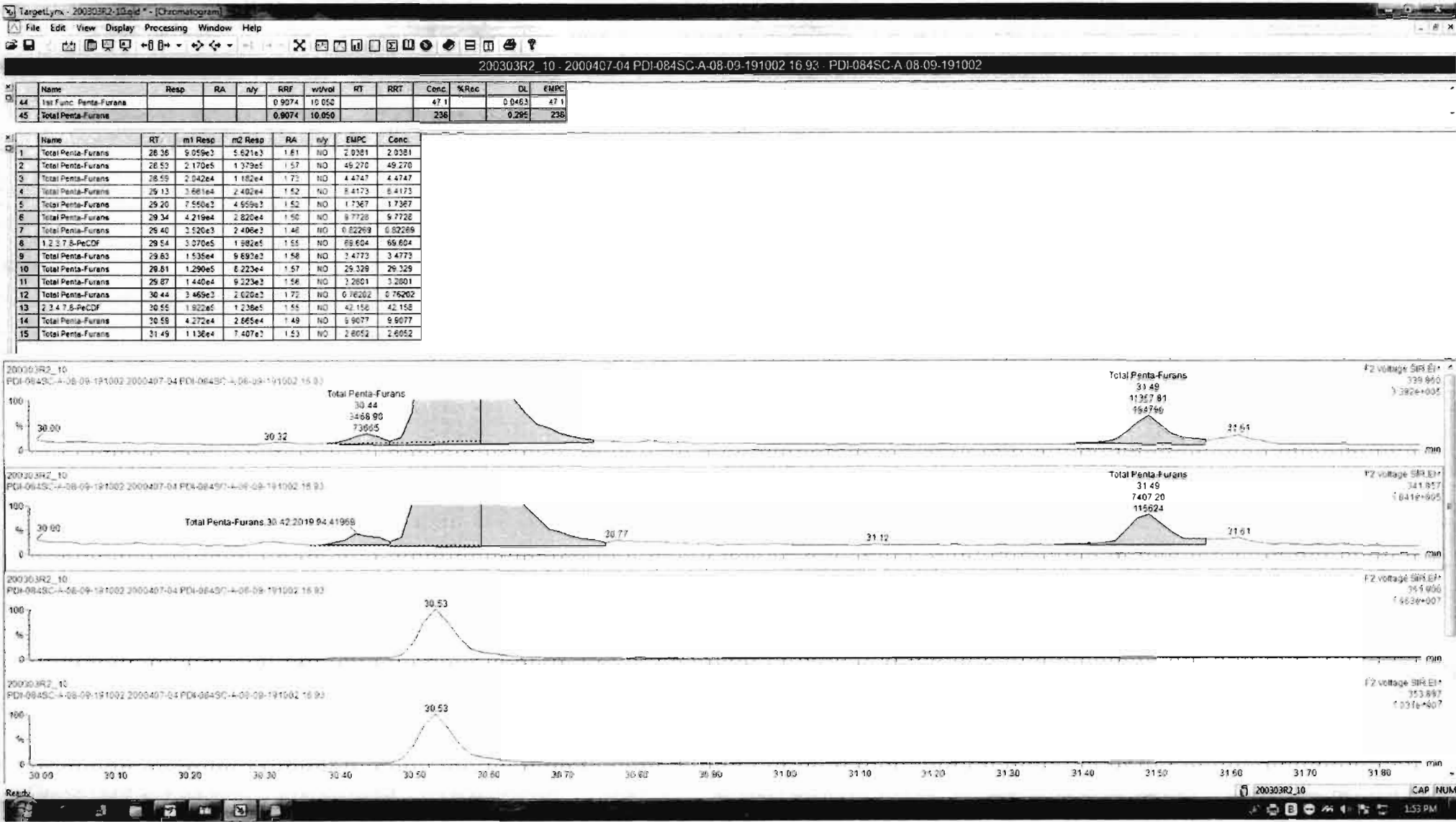
Name	Resp	RA	nly	RRF	wsvol	RT	RRT	Conc	%Rec	DL	EMPC
44 1st Func. Penta-Furans				0.9074	10.050			47.1		0.0463	47.1
45 Total Penta-Furans				0.9074	10.050			236		0.295	237

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
1 Total Penta-Furans	26.36	9.059e3	5.621e3	1.61	NO	2.0381	2.0381
2 Total Penta-Furans	26.53	2.170e5	1.379e5	1.57	NO	45.270	49.270
3 Total Penta-Furans	26.59	2.042e4	1.182e4	1.73	NO	4.4747	4.4747
4 Total Penta-Furans	26.13	3.661e4	2.402e4	1.52	NO	8.4173	6.4173
5 Total Penta-Furans	29.20	7.550e3	4.959e3	1.52	NO	1.7367	1.7367
6 Total Penta-Furans	26.34	4.219e4	2.820e4	1.50	NO	9.7728	9.7728
7 Total Penta-Furans	26.40	3.520e3	2.400e3	1.46	NO	0.82269	0.82269
8 1,2,3,7,8-PeCDF	29.54	3.070e5	1.982e5	1.55	NO	69.604	69.604
9 Total Penta-Furans	29.63	1.535e4	9.693e3	1.58	NO	3.4773	3.4773
10 Total Penta-Furans	29.61	1.290e5	8.223e4	1.57	NO	25.329	26.329
11 Total Penta-Furans	25.67	1.440e4	8.223e3	1.56	NO	3.2801	3.2801
12 Total Penta-Furans	30.32	5.335e2	6.927e2	0.77	YES	0.12165	0.08000
13 Total Penta-Furans	30.44	2.640e3	2.259e3	1.17	YES	0.60267	0.08000
14 2,3,4,7,8-PeCDF	30.55	2.280e5	1.515e5	1.51	NO	50.760	50.760
15 Total Penta-Furans	30.82	4.610e2	1.546e3	0.30	YES	0.10529	0.00000
16 Total Penta-Furans	31.45	1.136e4	7.407e3	1.53	NO	2.6052	2.6052







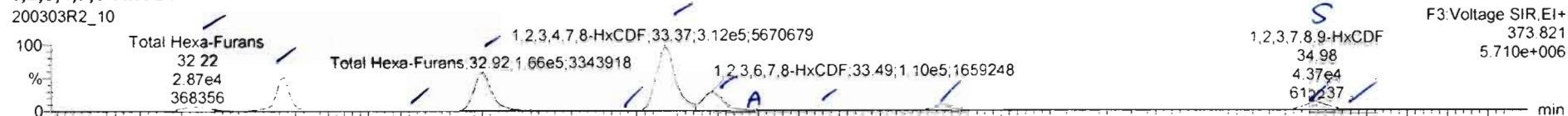


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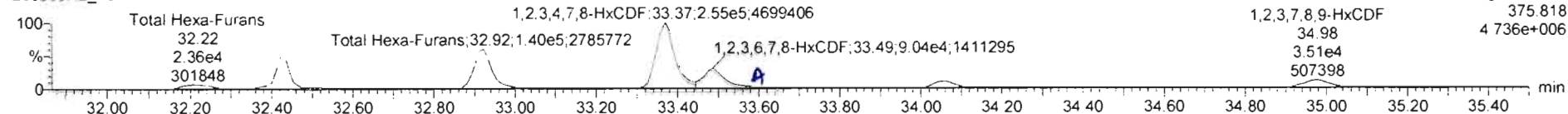
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Name: 200303R2\_10, Date: 03-Mar-2020, Time: 20:56:52, ID: 2000407-04 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

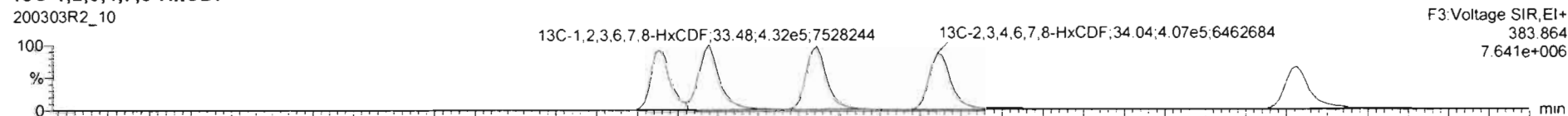
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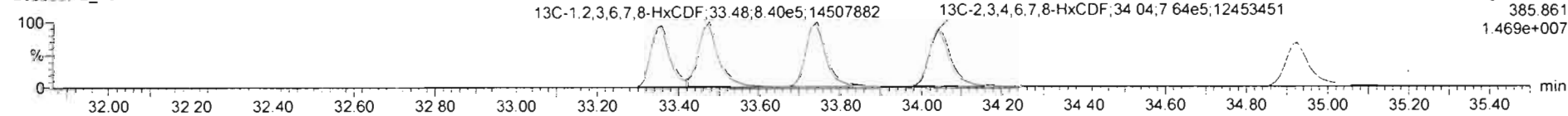
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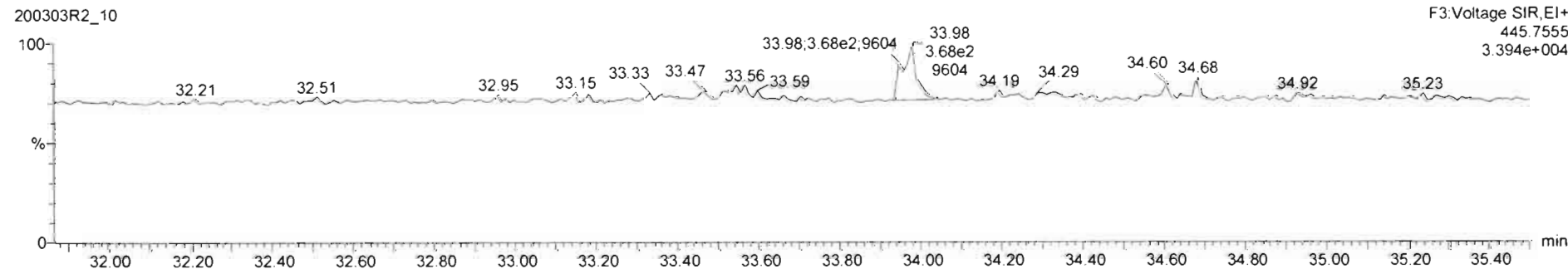
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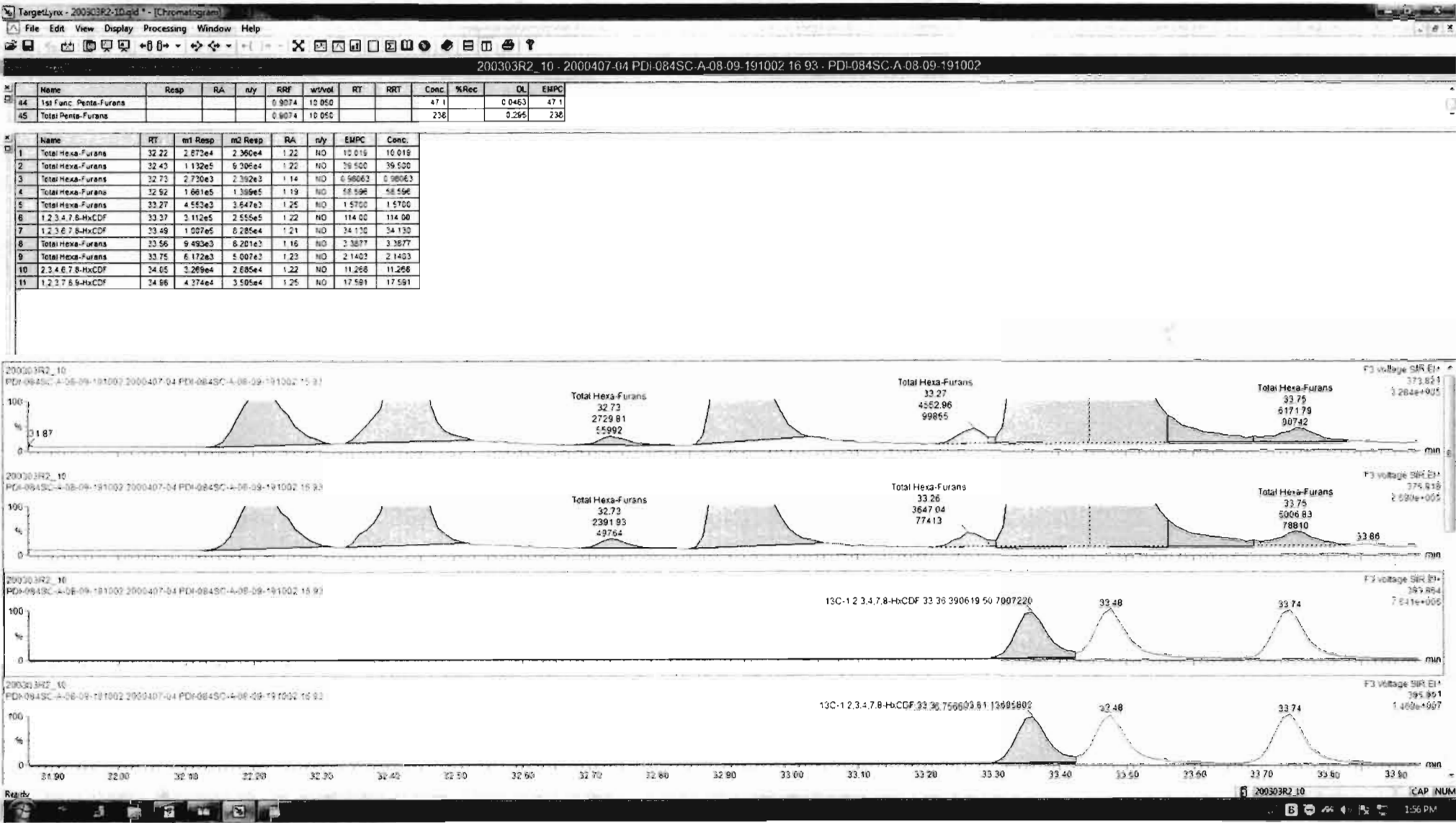


200303R2\_10



DPE3

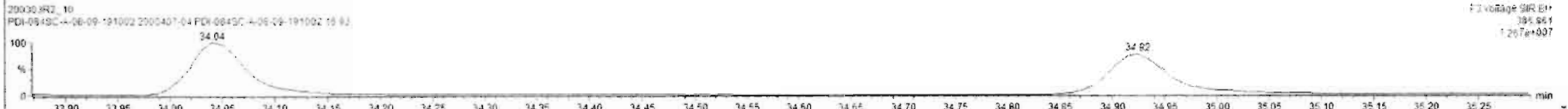




200303R2\_10 - 2000407-04 PDI-084SC-A-08-09-191002 16 93 - PDI-084SC-A-08-09-191002

Name	Resp	RA	n/y	RRF	w/wol	RT	RRT	Conc	%Rec	EMPC
44 1st Func. Penta-Furans				0.9074	10.050			47.1	0.0483	47.1
45 Total Penta-Furans				0.9074	10.050			258	0.091	238

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Hexa-Furans	32.22	2.873e4	2.360e4	1.22	NO	10.019	10.019
2 Total Hexa-Furans	32.43	1.132e5	9.306e4	1.22	NO	39.500	39.500
3 Total Hexa-Furans	32.73	2.730e3	2.192e3	1.14	NO	0.98063	0.98063
4 Total Hexa-Furans	32.92	1.661e5	1.390e5	1.19	NO	58.598	58.598
5 Total Hexa-Furans	33.27	4.553e2	3.647e2	1.25	NO	1.5700	1.5700
6 1,2,3,4,7,8-HxCDF	33.37	3.112e5	2.556e5	1.22	NO	114.00	114.00
7 1,2,3,6,7,8-HxCDF	33.49	1.007e5	8.285e4	1.21	NO	34.130	34.130
8 Total Hexa-Furans	33.56	9.492e3	8.201e3	1.16	NO	3.3877	3.3877
9 Total Hexa-Furans	33.75	6.172e3	5.007e3	1.23	NO	2.1403	2.1403
10 2,3,4,6,7,8-HxCDF	34.05	3.289e4	2.685e4	1.22	NO	11.268	11.268
11 1,2,3,7,8,9-HxCDF	34.96	2.826e4	2.318e4	1.22	NO	11.488	11.488
12 Total Hexa-Furans	34.96	1.487e4	1.069e4	1.20	NO	4.6948	4.6948



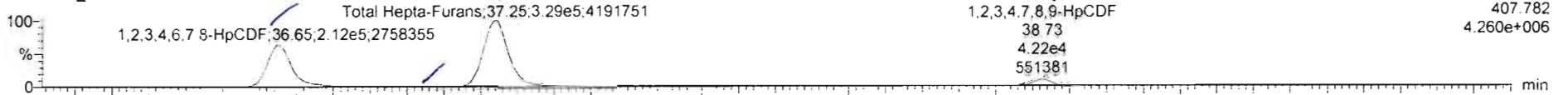
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Name: 200303R2\_10, Date: 03-Mar-2020, Time: 20:56:52, ID: 2000407-04 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

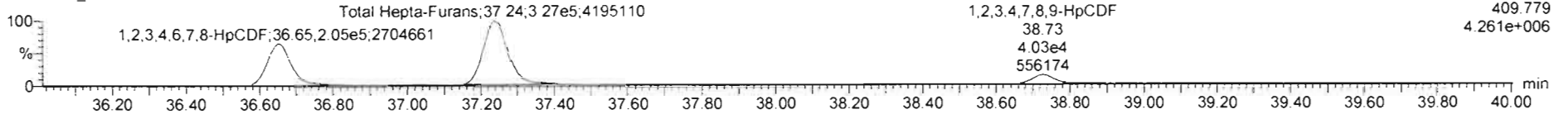
1,2,3,4,6,7,8-HpCDF

200303R2\_10



F4: Voltage SIR, EI+  
407.782  
4.260e+006

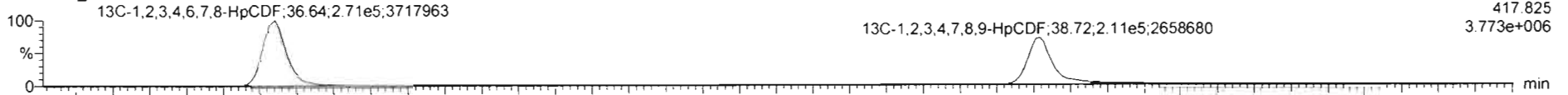
200303R2\_10



F4: Voltage SIR, EI+  
409.779  
4.261e+006

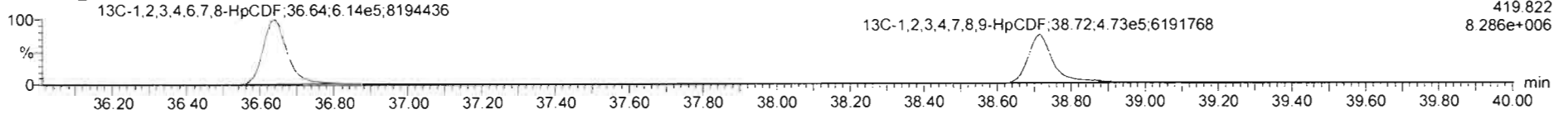
13C-1,2,3,4,6,7,8-HpCDF

200303R2\_10



F4: Voltage SIR, EI+  
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3.773e+006

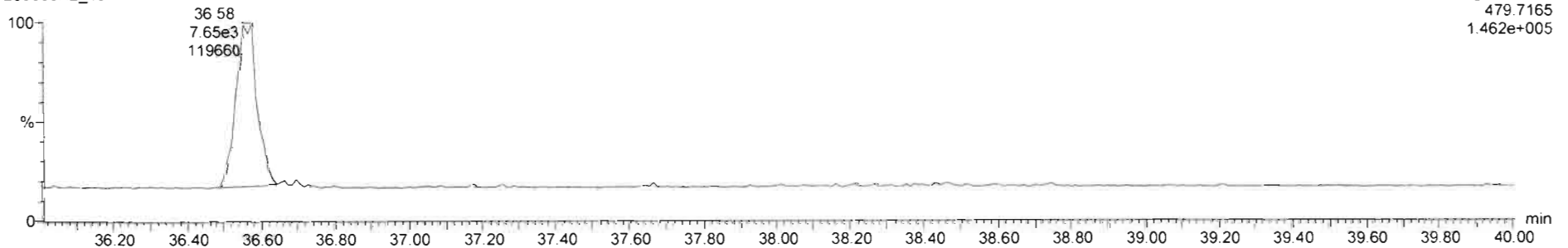
200303R2\_10



F4: Voltage SIR, EI+  
419.822  
8.286e+006

DPE4

200303R2\_10

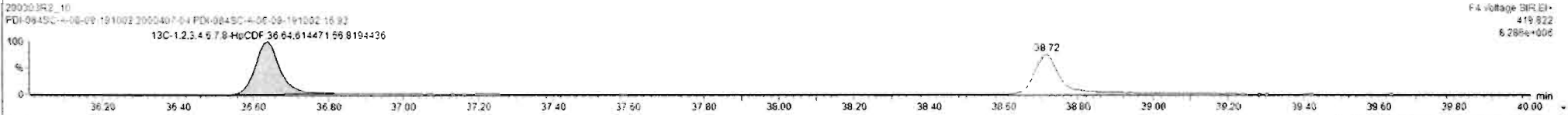
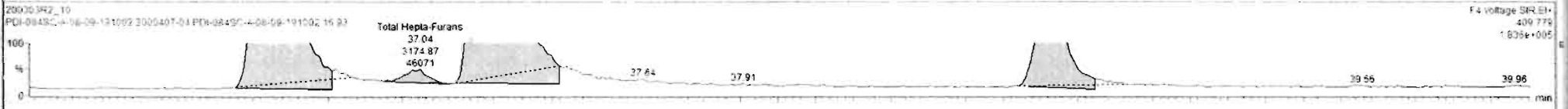
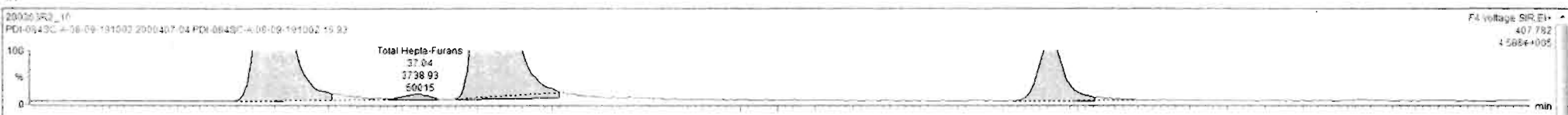


F4: Voltage SIR, EI+  
479.7165  
1.462e+005



Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
47 Total Hepta-Furans				0.6511	10.050			336		0.557	336
48 PFK1											

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 1,2,3,4,6,7,8-HpCDF	36.65	2.080e5	2.092e5	0.99	NO	110.15	110.15
2 Total Hepta-Furans	37.64	3.739e3	3.175e2	1.18	NO	2.0559	2.0596
3 Total hepta-Furans	37.25	3.352e5	3.350e5	1.00	NO	199.69	199.69
4 1,2,3,4,7,8,9-HpCDF	38.72	4.131e4	4.084e4	1.01	NO	24.385	24.385

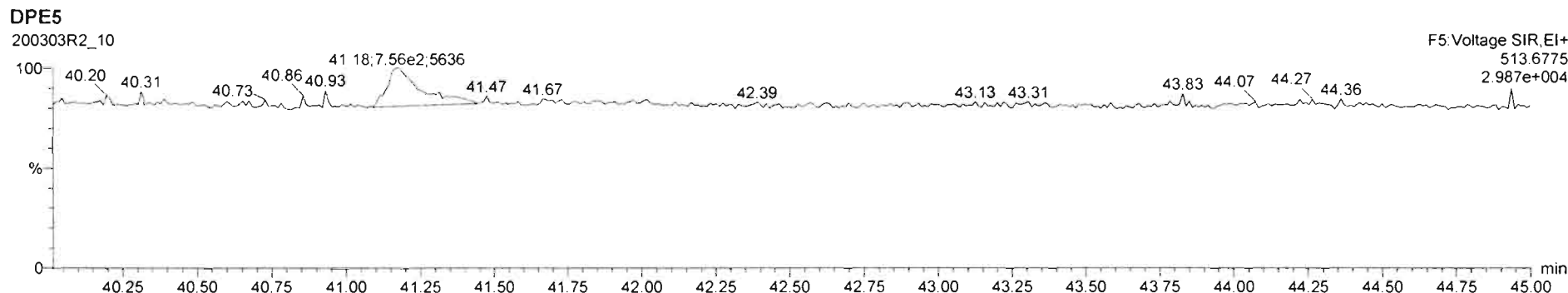
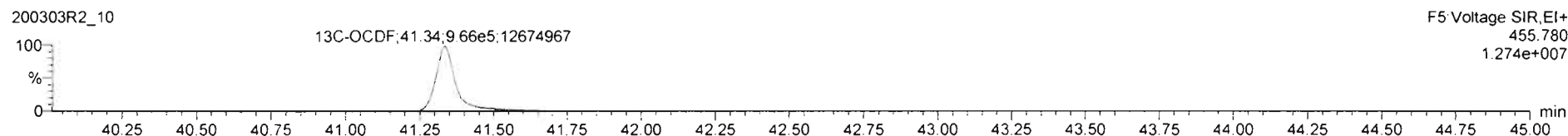
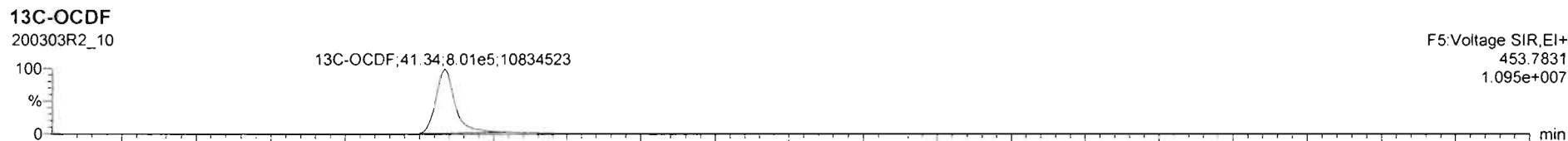
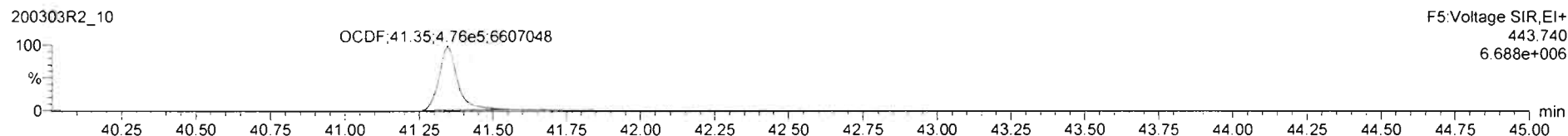
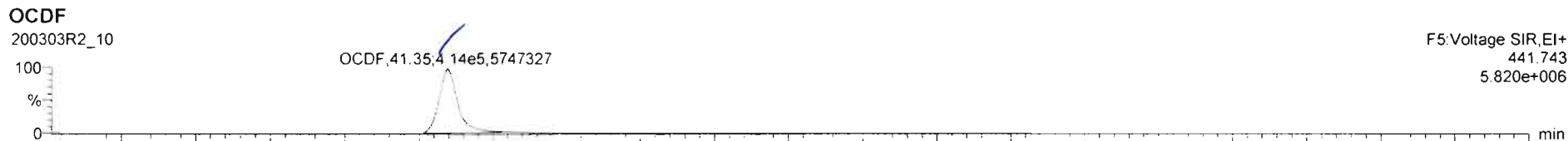


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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_10, Date: 03-Mar-2020, Time: 20:56:52, ID: 2000407-04 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002



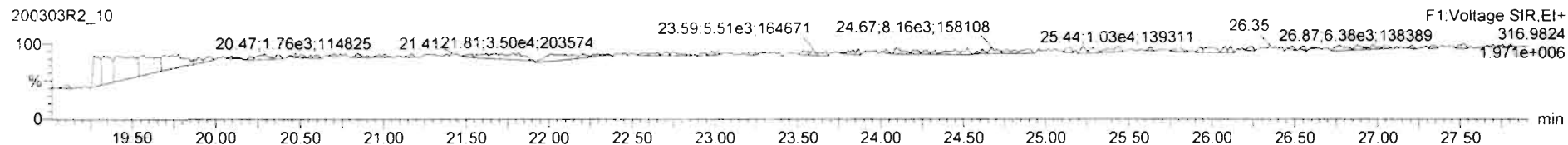
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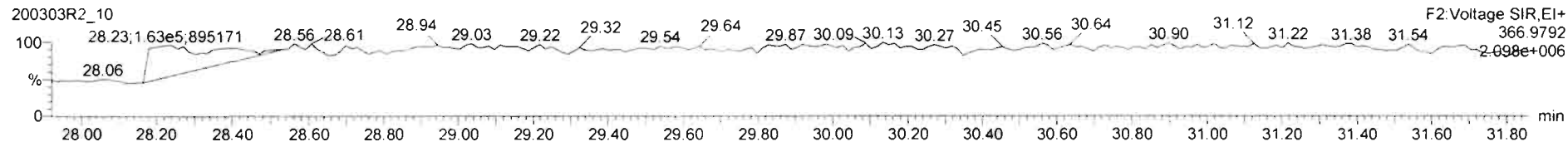
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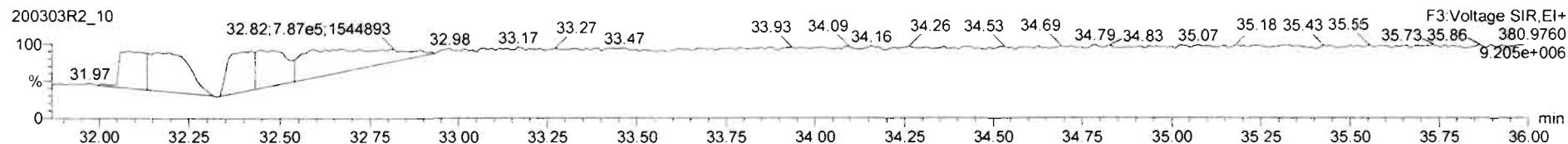
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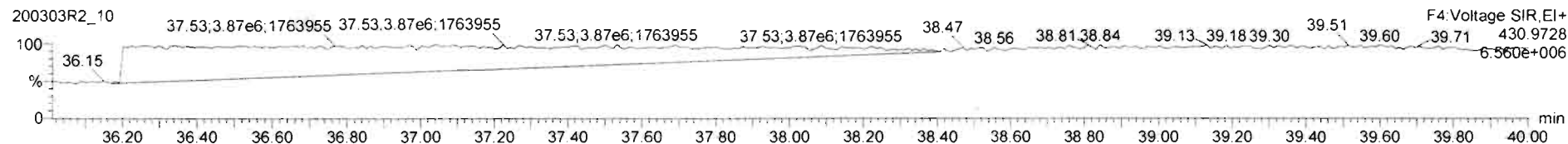
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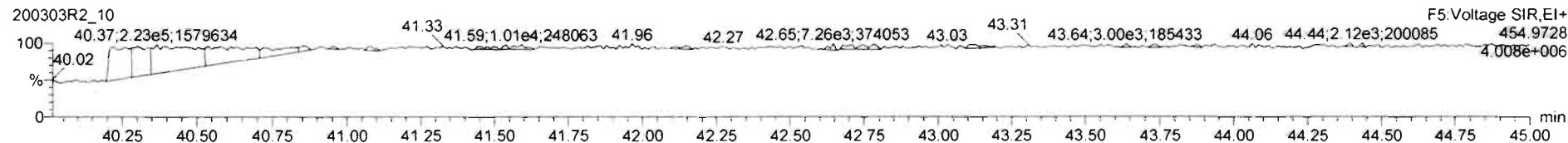
**PFK3**



**PFK4**



**PFK5**



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Printed: Wednesday, March 04, 2020 14:55:52 Pacific Standard Time

*BL 03/04/2020*  
*C 03/06/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_11, Date: 03-Mar-2020, Time: 21:44:17, ID: 2000407-05 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	6070.102	0.598	YES	0.988	10.024	25.74	25.74	1.00	1.00	NO	0.7853		0.0271	0.6838
2	2 1,2,3,7,8-PeCDD	5865.230	0.662	NO	0.972	10.024	30.84	30.83	1.00	1.00	NO	0.8539		0.125	0.8539
3	3 1,2,3,4,7,8-HxCDD	5099.550	1.257	NO	1.07	10.024	34.21	34.22	1.00	1.00	NO	0.9894		0.215	0.9894
4	4 1,2,3,6,7,8-HxCDD	41631.211	1.214	NO	0.921	10.024	34.30	34.32	1.00	1.00	NO	6.771		0.226	6.771
5	5 1,2,3,7,8,9-HxCDD	18149.859	1.275	NO	0.918	10.024	34.61	34.58	1.00	1.00	NO	3.260		0.253	3.260
6	6 1,2,3,4,6,7,8-HpCDD	884626.156	1.010	NO	0.923	10.024	38.06	38.07	1.00	1.00	NO	202.0		1.15	202.0
7	7 OCDD	11508760....	0.885	NO	0.975	10.024	41.17	41.18	1.00	1.00	NO	2564		1.02	2564
8	8 2,3,7,8-TCDF	300938.625	0.748	NO	0.802	10.024	24.79	24.78	1.00	1.00	NO	39.35	(36.90)	0.157	39.35
9	9 1,2,3,7,8-PeCDF	534766.297	1.590	NO	0.907	10.024	29.53	29.52	1.00	1.00	NO	64.20		0.220	64.20
10	10 2,3,4,7,8-PeCDF	184813.758	1.515	NO	0.952	10.024	30.51	30.53	1.00	1.00	NO	21.45		0.199	21.45
11	11 1,2,3,4,7,8-HxCDF	1094943.4...	1.212	NO	0.862	10.024	33.34	33.36	1.00	1.00	NO	196.8		0.295	196.8
12	12 1,2,3,6,7,8-HxCDF	377101.313	1.232	NO	0.841	10.024	33.47	33.48	1.00	1.00	NO	61.84		0.289	61.84
13	13 2,3,4,6,7,8-HxCDF	71150.541	1.179	NO	0.898	10.024	34.06	34.04	1.00	1.00	NO	12.12		0.299	12.12
14	14 1,2,3,7,8,9-HxCDF	31767.127	1.259	NO	0.858	10.024	34.91	34.95	1.00	1.00	NO	6.479		0.435	6.479
15	15 1,2,3,4,6,7,8-HpCDF	757130.750	1.010	NO	0.851	10.024	36.67	36.64	1.00	1.00	NO	169.3		0.595	169.3
16	16 1,2,3,4,7,8,9-HpCDF	134111.094	0.986	NO	0.980	10.024	38.71	38.72	1.00	1.00	NO	34.58		0.714	34.58
17	17 OCDF	1346958.5...	0.924	NO	0.806	10.024	41.34	41.36	1.00	1.00	NO	320.0		0.440	320.0
18	18 13C-2,3,7,8-TCDD	1541375.4...	0.775	NO	1.20	10.024	25.66	25.71	1.03	1.03	NO	190.5	95.5	0.219	
19	19 13C-1,2,3,7,8-PeCDD	1409675.8...	0.648	NO	0.967	10.024	30.78	30.82	1.23	1.23	NO	216.0	108	0.225	
20	20 13C-1,2,3,4,7,8-HxCDD	960382.001	1.278	NO	0.874	10.024	34.19	34.20	1.01	1.01	NO	156.1	78.2	0.460	
21	21 13C-1,2,3,6,7,8-HxCDD	1331916.3...	1.326	NO	1.05	10.024	34.29	34.30	1.02	1.02	NO	180.9	90.7	0.384	
22	22 13C-1,2,3,7,8,9-HxCDD	1209890.5...	1.369	NO	0.974	10.024	34.60	34.57	1.03	1.03	NO	176.4	88.4	0.412	
23	23 13C-1,2,3,4,6,7,8-HpCDD	946648.250	0.994	NO	0.747	10.024	38.17	38.04	1.13	1.13	NO	179.9	90.2	0.547	
24	24 13C-OCDD	1837986.3...	0.843	NO	0.707	10.024	41.07	41.17	1.22	1.22	NO	369.5	92.6	0.593	
25	25 13C-2,3,7,8-TCDF	1902811.8...	0.779	NO	1.07	10.024	24.84	24.76	0.99	0.99	NO	193.3	96.9	0.288	
26	26 13C-1,2,3,7,8-PeCDF	1831690.5...	1.571	NO	1.00	10.024	29.42	29.51	1.18	1.18	NO	197.9	99.2	0.605	
27	27 13C-2,3,4,7,8-PeCDF	1806824.8...	1.559	NO	0.962	10.024	30.39	30.51	1.21	1.22	NO	203.3	102	0.631	
28	28 13C-1,2,3,4,7,8-HxCDF	1287322.4...	0.513	NO	1.05	10.024	33.32	33.34	0.99	0.99	NO	174.3	87.3	0.497	
29	29 13C-1,2,3,6,7,8-HxCDF	1446235.7...	0.521	NO	1.19	10.024	33.42	33.46	0.99	0.99	NO	172.6	86.5	0.439	
30	30 13C-2,3,4,6,7,8-HxCDF	1304622.4...	0.507	NO	1.07	10.024	34.03	34.03	1.01	1.01	NO	173.8	87.1	0.490	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-11.qld

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Name: 200303R2\_11, Date: 03-Mar-2020, Time: 21:44:17, ID: 2000407-05 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

	# Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
31	31 13C-1,2,3,7,8,9-HxCDF	1140570.3...	0.526	NO	0.922	10.024	34.93	34.91	1.04	1.04	NO	175.6	88.0	0.566	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1048583.8...	0.448	NO	0.767	10.024	36.69	36.63	1.09	1.09	NO	194.1	97.3	0.600	
33	33 13C-1,2,3,4,7,8,9-HpCDF	789625.297	0.441	NO	0.552	10.024	38.71	38.71	1.15	1.15	NO	203.1	102	0.834	
34	34 13C-OCDF	2085231.8...	0.888	NO	0.789	10.024	41.31	41.34	1.23	1.23	NO	375.2	94.0	0.507	
35	35 37Cl-2,3,7,8-TCDD	603521.500			1.18	10.024	25.69	25.72	1.03	1.03	NO	75.99	95.2	0.0802	
36	36 13C-1,2,3,4-TCDD	1347172.7...	0.778	NO	1.00	10.024	25.11	25.02	1.00	1.00	NO	199.5	100	0.262	
37	37 13C-1,2,3,4-TCDF	1844061.1...	0.781	NO	1.00	10.024	23.37	23.22	1.00	1.00	NO	199.5	100	0.307	
38	38 13C-1,2,3,4,6,9-HxCDF	1404790.3...	0.522	NO	1.00	10.024	33.71	33.72	1.00	1.00	NO	199.5	100	0.522	
39	39 Total Tetra-Dioxins				0.988	10.024	24.62		0.00		NO	10.79		0.0871	12.03
40	40 Total Penta-Dioxins				0.972	10.024	29.96		0.00		NO	10.29		0.125	11.08
41	41 Total Hexa-Dioxins				0.921	10.024	33.63		0.00		NO	63.96		0.242	63.96
42	42 Total Hepta-Dioxins				0.923	10.024	37.64		0.00		NO	470.4		1.15	470.4
43	43 Total Tetra-Furans				0.802	10.024	23.61		0.00		NO	128.5		0.157	133.5
44	44 1st Func. Penta-Furans				0.907	10.024	27.09		0.00		NO	36.08		0.0379	36.08
45	45 Total Penta-Furans				0.907	10.024	29.27		0.00		NO	163.9		0.214	178.8
46	46 Total Hexa-Furans				0.898	10.024	33.56		0.00		NO	396.7		0.313	405.9
47	47 Total Hepta-Furans				0.851	10.024	37.83		0.00		NO	439.2		0.692	439.2



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Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_11, Date: 03-Mar-2020, Time: 21:44:17, ID: 2000407-05 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

**Tetra-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	39 Total Tetra-Dioxins	5.15e4	1.54e6	0.764	NO	24.62	21.54	6.747	6.747
2	39 Total Tetra-Dioxins	7.47e3	1.54e6	0.861	NO	24.62	21.96	0.9781	0.9781
3	39 Total Tetra-Dioxins	3.30e3	1.54e6	0.830	NO	24.62	22.44	0.4324	0.4324
4	39 Total Tetra-Dioxins	2.19e3	1.54e6	0.845	NO	24.62	23.42	0.2874	0.2874
5	39 Total Tetra-Dioxins	3.50e3	1.54e6	0.825	NO	24.62	23.70	0.4586	0.4586
6	39 Total Tetra-Dioxins	3.98e3	1.54e6	0.851	NO	24.62	23.94	0.5214	0.5214
7	39 Total Tetra-Dioxins	1.38e3	1.54e6	0.728	NO	24.62	24.15	0.1806	0.1806
8	39 Total Tetra-Dioxins	0.00e0	1.54e6	0.957	YES	24.62	24.45	0.0000	0.1990
9	39 Total Tetra-Dioxins	0.00e0	1.54e6	0.895	YES	24.62	24.61	0.0000	0.2320
10	39 Total Tetra-Dioxins	1.35e3	1.54e6	0.733	NO	24.62	24.97	0.1775	0.1775
11	39 Total Tetra-Dioxins	5.88e3	1.54e6	0.763	NO	24.62	25.47	0.7707	0.7707
12	1 2,3,7,8-TCDD	6.07e3	1.54e6	0.598	YES	25.74	25.74	0.0000	0.6838
13	39 Total Tetra-Dioxins	1.79e3	1.54e6	0.834	NO	24.62	26.06	0.2350	0.2350
14	39 Total Tetra-Dioxins	0.00e0	1.54e6	0.919	YES	24.62	26.71	0.0000	0.1232

**Penta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	2.24e4	1.41e6	0.621	NO	29.96	28.56	3.254	3.254
2	40 Total Penta-Dioxins	5.13e3	1.41e6	0.611	NO	29.96	29.05	0.7466	0.7466
3	40 Total Penta-Dioxins	1.71e4	1.41e6	0.600	NO	29.96	29.57	2.492	2.492
4	40 Total Penta-Dioxins	5.88e3	1.41e6	0.623	NO	29.96	29.74	0.8562	0.8562
5	40 Total Penta-Dioxins	4.71e3	1.41e6	0.662	NO	29.96	29.83	0.6863	0.6863
6	40 Total Penta-Dioxins	9.63e3	1.41e6	0.601	NO	29.96	30.06	1.402	1.402
7	40 Total Penta-Dioxins	0.00e0	1.41e6	0.779	YES	29.96	30.41	0.0000	0.2418
8	2 1,2,3,7,8-PeCDD	5.87e3	1.41e6	0.662	NO	30.84	30.83	0.8539	0.8539
9	40 Total Penta-Dioxins	0.00e0	1.41e6	0.524	YES	29.96	30.91	0.0000	0.2269
10	40 Total Penta-Dioxins	0.00e0	1.41e6	0.745	YES	29.96	31.23	0.0000	0.3232

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Hexa-Dioxins

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	41 Total Hexa-Dioxins	1.21e5	0.00e0	1.234	NO	33.63	32.75	22.39	22.39
2	41 Total Hexa-Dioxins	1.62e4	0.00e0	1.222	NO	33.63	33.29	2.997	2.997
3	41 Total Hexa-Dioxins	1.45e5	0.00e0	1.226	NO	33.63	33.55	26.84	26.84
4	3 1,2,3,4,7,8-HxCDD	5.10e3	9.60e5	1.257	NO	34.21	34.22	0.9894	0.9894
5	4 1,2,3,6,7,8-HxCDD	4.16e4	1.33e6	1.214	NO	34.30	34.32	6.771	6.771
6	41 Total Hexa-Dioxins	3.83e3	0.00e0	1.211	NO	33.63	34.48	0.7105	0.7105
7	5 1,2,3,7,8,9-HxCDD	1.81e4	1.21e6	1.275	NO	34.61	34.58	3.260	3.260

Hepta-Dioxins

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	42 Total Hepta-Dioxins	1.18e6	9.47e5	1.025	NO	37.64	37.02	268.4	268.4
2	6 1,2,3,4,6,7,8-HpCDD	8.85e5	9.47e5	1.010	NO	38.06	38.07	202.0	202.0

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**Tetra-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	43 Total Tetra-Furans	5.43e3	1.90e6	0.841	NO	23.61	19.51	0.7102	0.7102
2	43 Total Tetra-Furans	1.26e4	1.90e6	0.770	NO	23.61	20.02	1.648	1.648
3	43 Total Tetra-Furans	6.21e4	1.90e6	0.755	NO	23.61	20.60	8.114	8.114
4	43 Total Tetra-Furans	2.44e4	1.90e6	0.747	NO	23.61	21.13	3.197	3.197
5	43 Total Tetra-Furans	9.37e4	1.90e6	0.765	NO	23.61	21.51	12.26	12.26
6	43 Total Tetra-Furans	5.87e4	1.90e6	0.743	NO	23.61	21.98	7.670	7.670
7	43 Total Tetra-Furans	2.96e3	1.90e6	0.783	NO	23.61	22.13	0.3866	0.3866
8	43 Total Tetra-Furans	1.33e4	1.90e6	0.733	NO	23.61	22.32	1.736	1.736
9	43 Total Tetra-Furans	3.07e3	1.90e6	0.772	NO	23.61	22.79	0.4015	0.4015
10	43 Total Tetra-Furans	3.78e3	1.90e6	0.823	NO	23.61	22.95	0.4938	0.4938
11	43 Total Tetra-Furans	3.20e4	1.90e6	0.729	NO	23.61	23.13	4.187	4.187
12	43 Total Tetra-Furans	3.57e4	1.90e6	0.741	NO	23.61	23.21	4.665	4.665
13	43 Total Tetra-Furans	2.74e5	1.90e6	0.761	NO	23.61	23.77	35.81	35.81
14	43 Total Tetra-Furans	8.69e3	1.90e6	0.729	NO	23.61	24.09	1.136	1.136
15	43 Total Tetra-Furans	3.17e3	1.90e6	0.655	NO	23.61	24.34	0.4149	0.4149
16	43 Total Tetra-Furans	0.00e0	1.90e6	0.536	YES	23.61	24.55	0.0000	0.3125
17	43 Total Tetra-Furans	2.28e4	1.90e6	0.666	NO	23.61	24.67	2.983	2.983
18	8 2,3,7,8-TCDF	3.01e5	1.90e6	0.748	NO	24.79	24.78	39.35	39.35
19	43 Total Tetra-Furans	1.23e4	1.90e6	0.877	NO	23.61	25.17	1.613	1.613
20	43 Total Tetra-Furans	3.35e3	1.90e6	0.757	NO	23.61	25.45	0.4385	0.4385
21	43 Total Tetra-Furans	5.42e3	1.90e6	0.746	NO	23.61	26.44	0.7091	0.7091
22	43 Total Tetra-Furans	4.83e3	1.90e6	0.731	NO	23.61	26.62	0.6320	0.6320
23	43 Total Tetra-Furans	0.00e0	1.90e6	0.956	YES	23.61	26.87	0.0000	4.654

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**Penta-Furans function 1**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	44 1st Func. Penta-Fura...	2.98e5	0.00e0	1.552	NO	27.09	26.86	36.08	36.08

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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-11.qld

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**Penta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	1.33e4	0.00e0	1.355	NO	29.27	28.35	1.608	1.608
2	45 Total Penta-Furans	3.41e5	0.00e0	1.532	NO	29.27	28.50	41.20	41.20
3	45 Total Penta-Furans	5.59e4	0.00e0	1.511	NO	29.27	29.11	6.761	6.761
4	45 Total Penta-Furans	4.59e4	0.00e0	1.495	NO	29.27	29.32	5.544	5.544
5	9 1,2,3,7,8-PeCDF	5.35e5	1.83e6	1.590	NO	29.53	29.52	64.20	64.20
6	45 Total Penta-Furans	1.73e5	0.00e0	1.675	NO	29.27	29.78	20.91	20.91
7	45 Total Penta-Furans	4.38e3	0.00e0	1.624	NO	29.27	30.42	0.5292	0.5292
8	10 2,3,4,7,8-PeCDF	1.85e5	1.81e6	1.515	NO	30.51	30.53	21.45	21.45
9	45 Total Penta-Furans	1.44e4	0.00e0	1.614	NO	29.27	31.46	1.738	1.738
10	45 Total Penta-Furans	0.00e0	0.00e0	1.563	NO	29.27	30.55	0.0000	14.88

**Hexa-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	46 Total Hexa-Furans	7.16e4	0.00e0	1.224	NO	33.56	32.18	12.29	12.29
2	46 Total Hexa-Furans	2.75e5	0.00e0	1.225	NO	33.56	32.35	47.22	47.22
3	46 Total Hexa-Furans	3.38e5	0.00e0	1.225	NO	33.56	32.90	58.01	58.01
4	11 1,2,3,4,7,8-HxCDF	1.09e6	1.29e6	1.212	NO	33.34	33.36	196.8	196.8
5	12 1,2,3,6,7,8-HxCDF	3.77e5	1.45e6	1.232	NO	33.47	33.48	61.84	61.84
6	46 Total Hexa-Furans	1.11e4	0.00e0	1.211	NO	33.56	33.72	1.898	1.898
7	13 2,3,4,6,7,8-HxCDF	7.12e4	1.30e6	1.179	NO	34.06	34.04	12.12	12.12
8	14 1,2,3,7,8,9-HxCDF	3.18e4	1.14e6	1.259	NO	34.91	34.95	6.479	6.479
9	46 Total Hexa-Furans	0.00e0	0.00e0	1.296	NO	33.56	34.96	0.0000	9.275

**Hepta-Furans**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	15 1,2,3,4,6,7,8-HpCDF	7.57e5	1.05e6	1.010	NO	36.67	36.64	169.3	169.3
2	47 Total Hepta-Furans	5.52e3	0.00e0	1.110	NO	37.83	37.02	1.408	1.408
3	47 Total Hepta-Furans	9.17e5	0.00e0	1.008	NO	37.83	37.24	233.9	233.9
4	16 1,2,3,4,7,8,9-HpCDF	1.34e5	7.90e5	0.986	NO	38.71	38.72	34.58	34.58



Dataset: Untitled

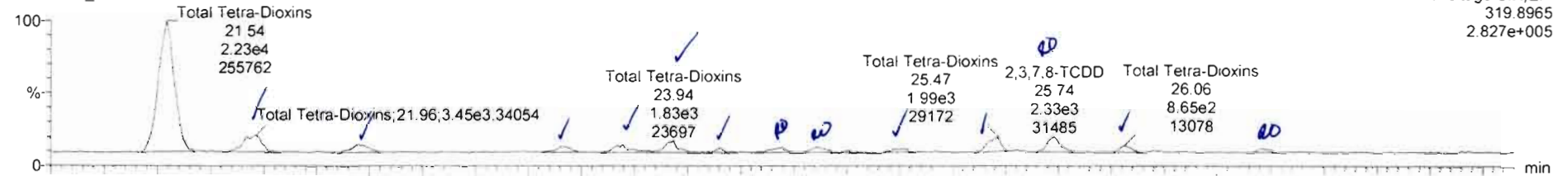
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

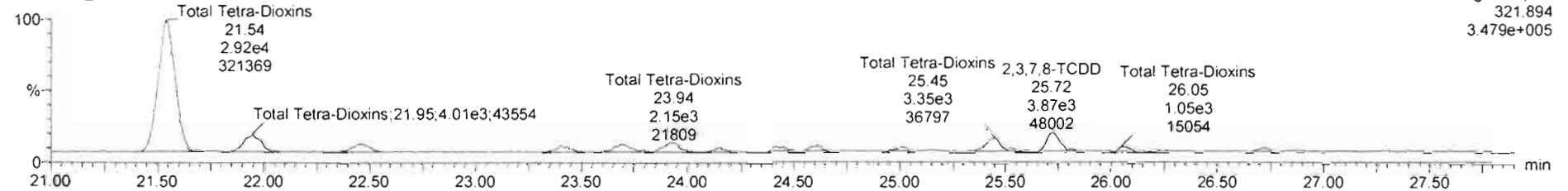
Name: 200303R2\_11, Date: 03-Mar-2020, Time: 21:44:17, ID: 2000407-05 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

2,3,7,8-TCDD

200303R2\_11

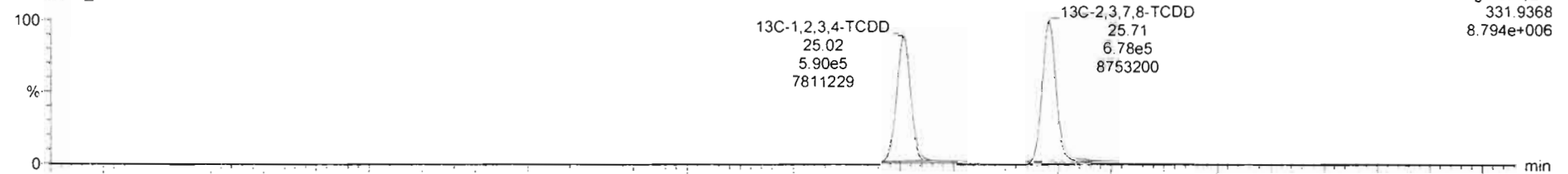


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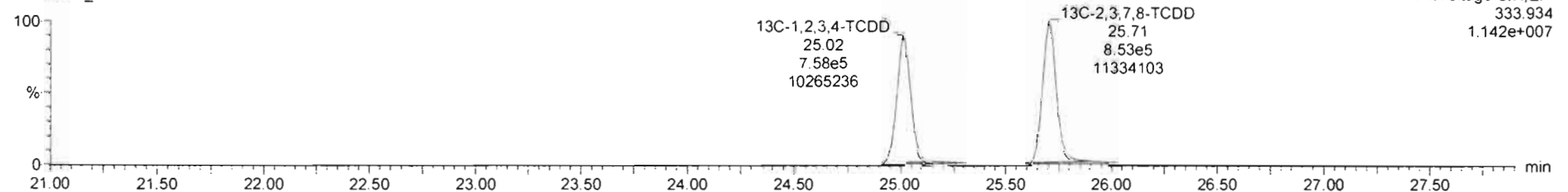


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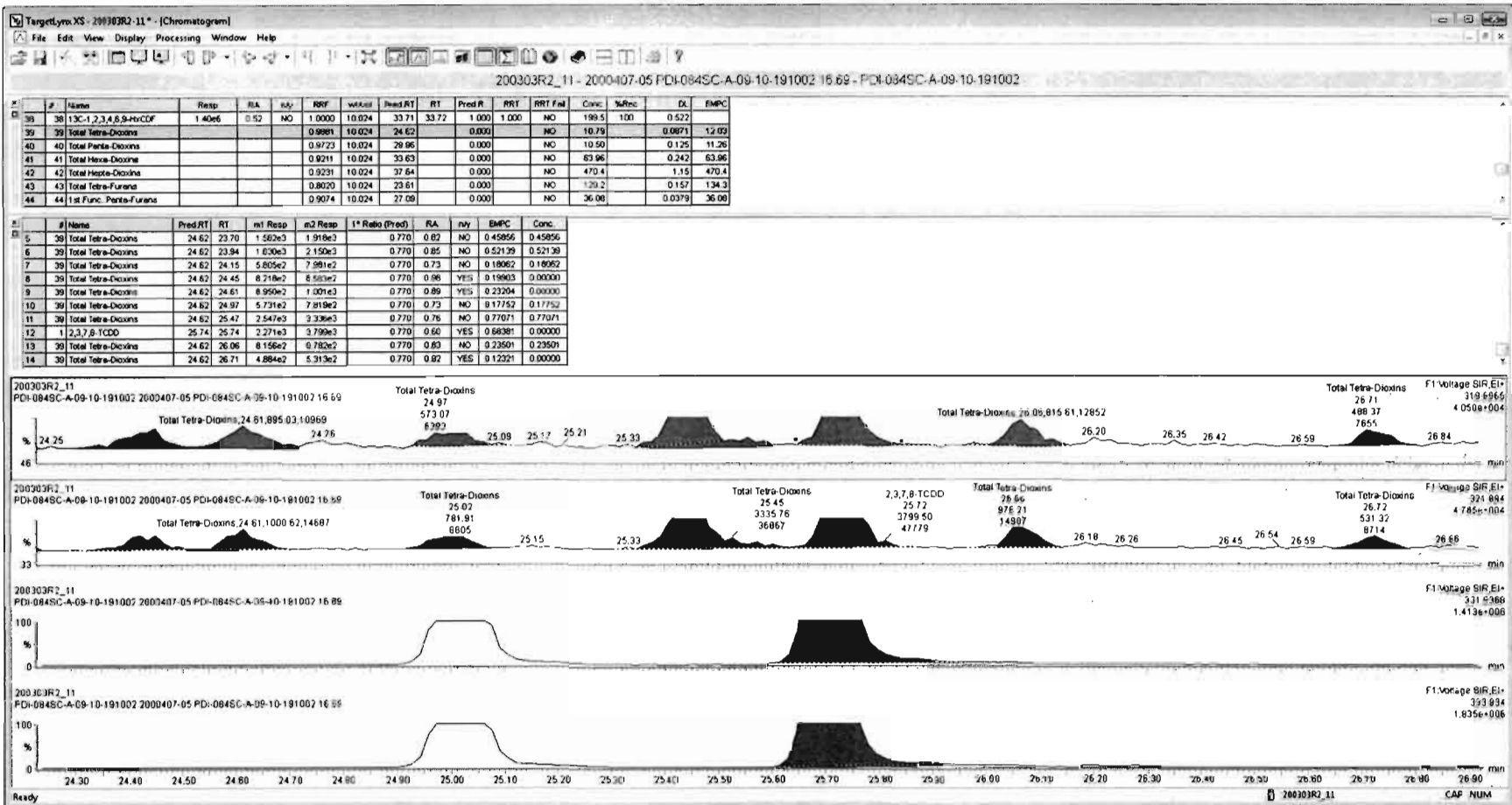
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200303R2\_11







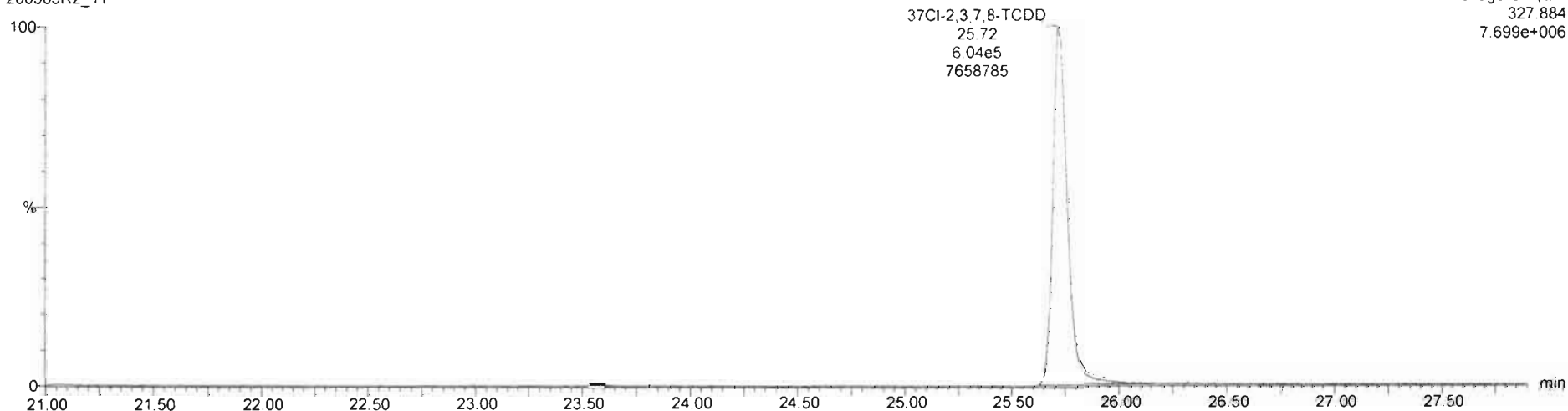
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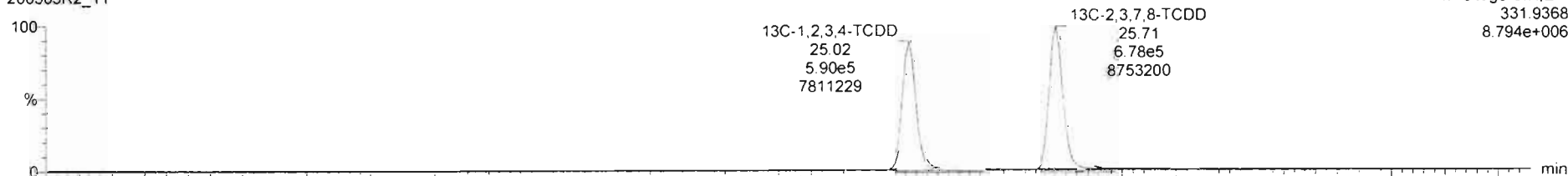
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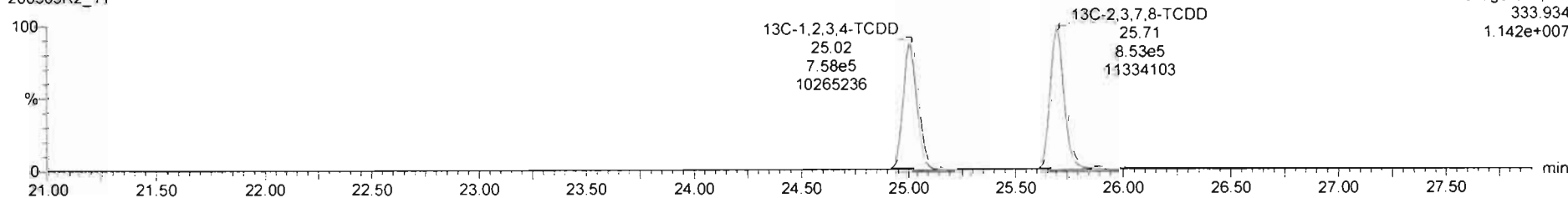


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200303R2\_11



200303R2\_11



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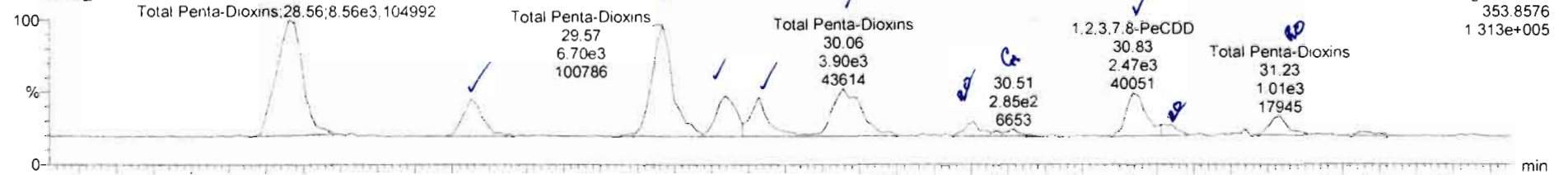
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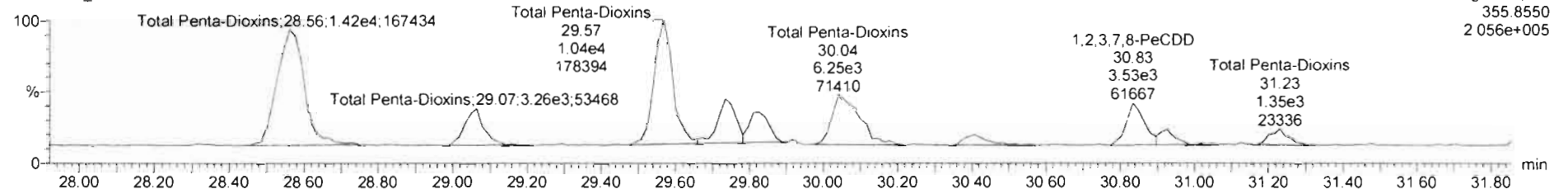
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1,2,3,7,8-PeCDD

200303R2\_11

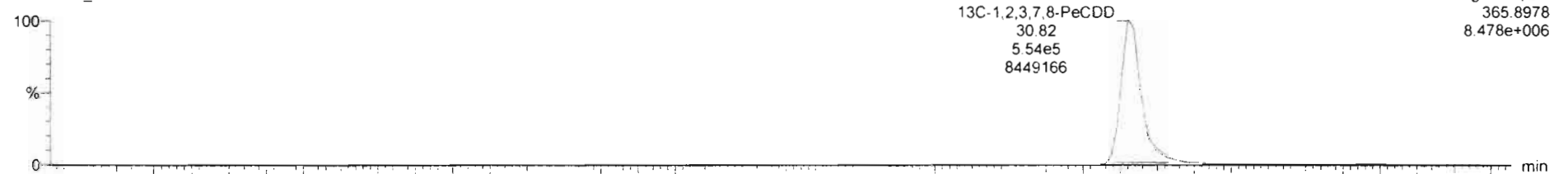


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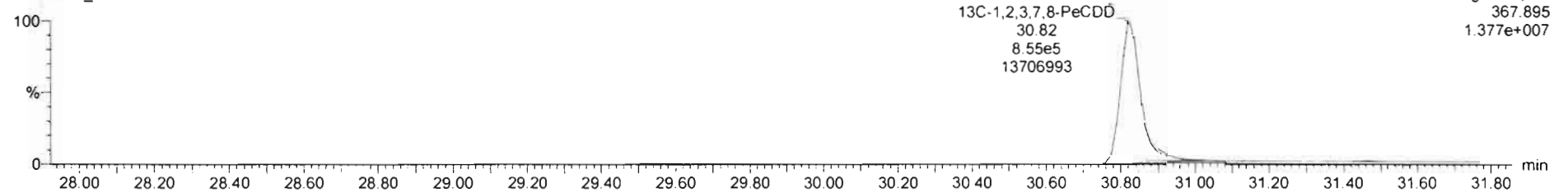


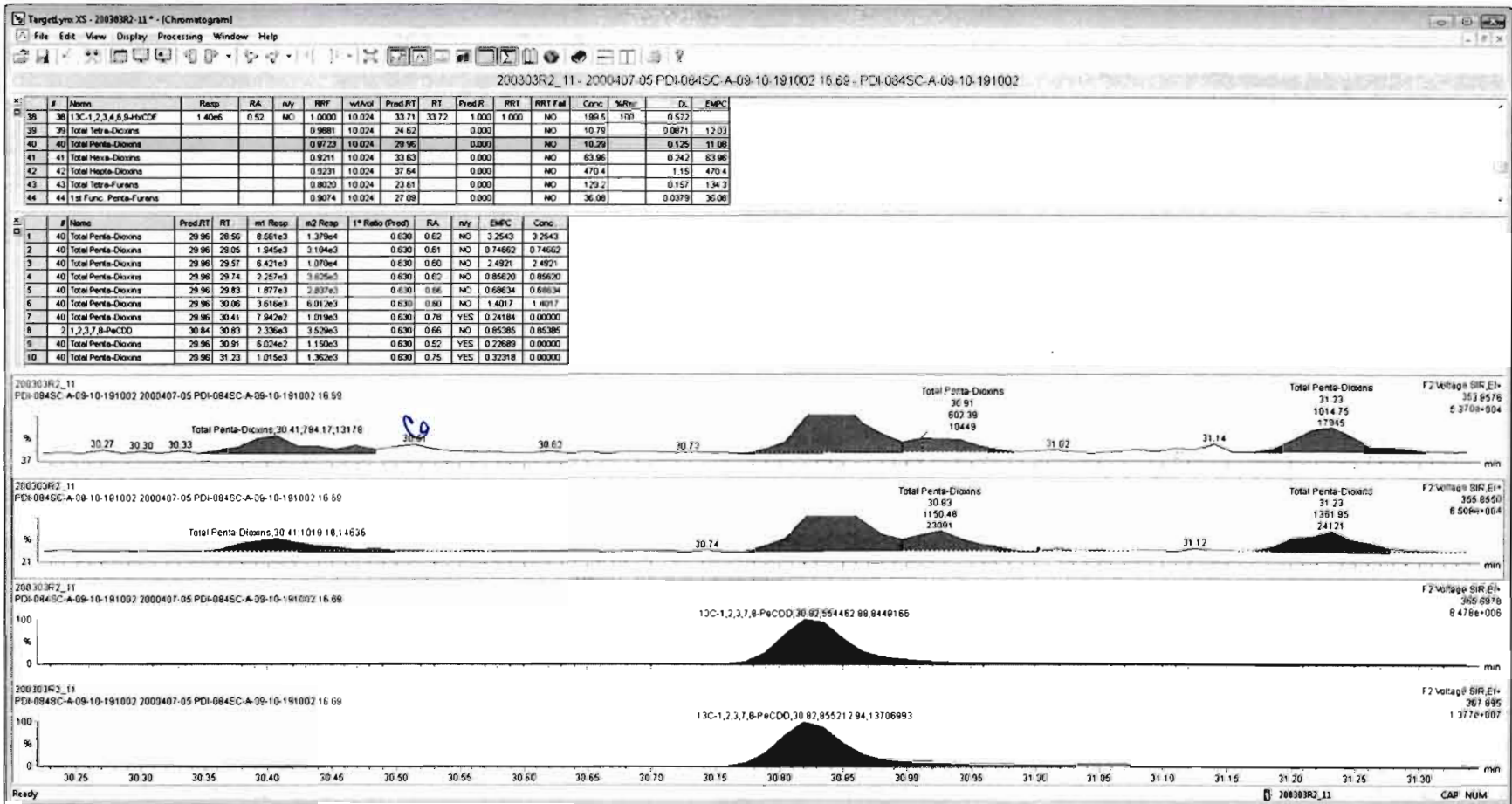
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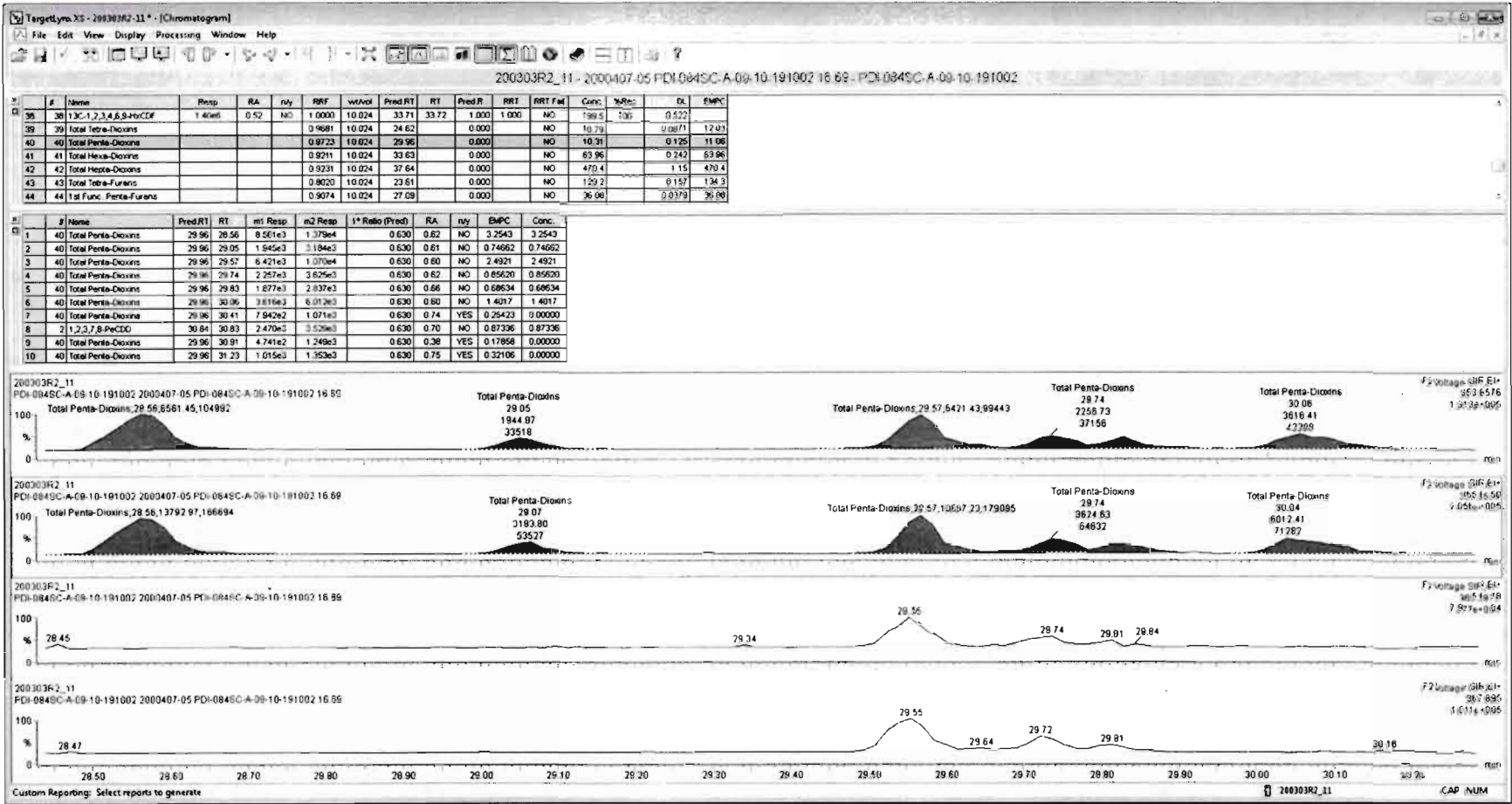
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200303R2\_11









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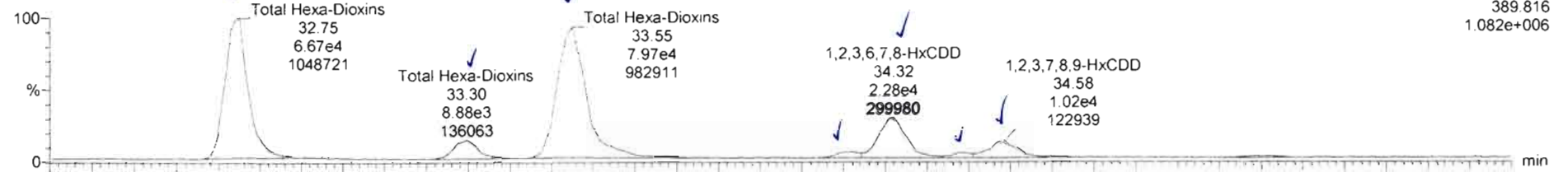
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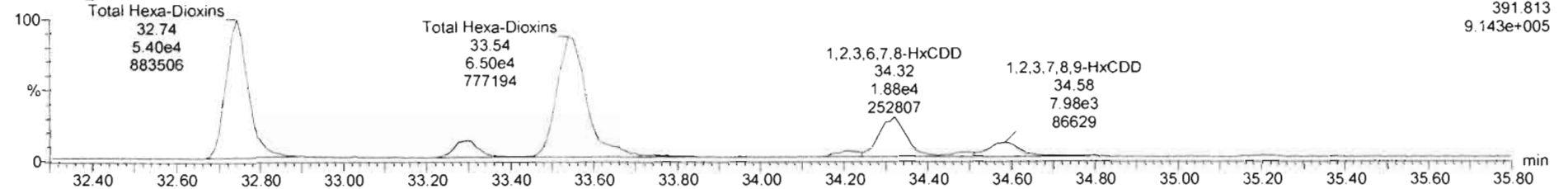
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1,2,3,4,7,8-HxCDD

200303R2\_11

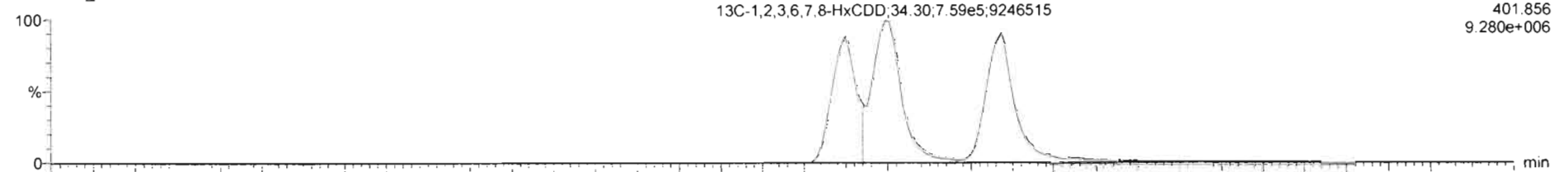


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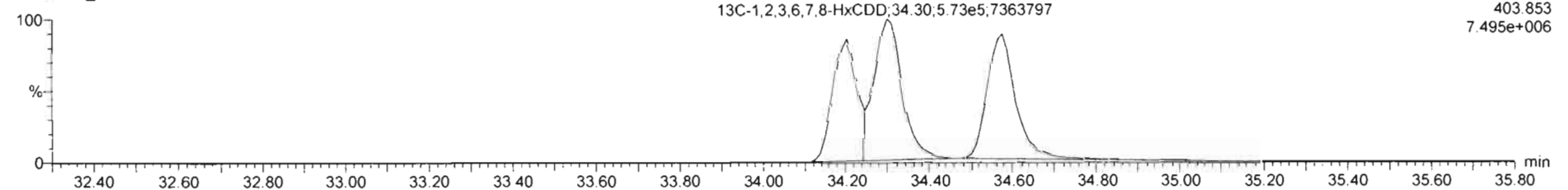


13C-1,2,3,4,7,8-HxCDD

200303R2\_11



200303R2\_11



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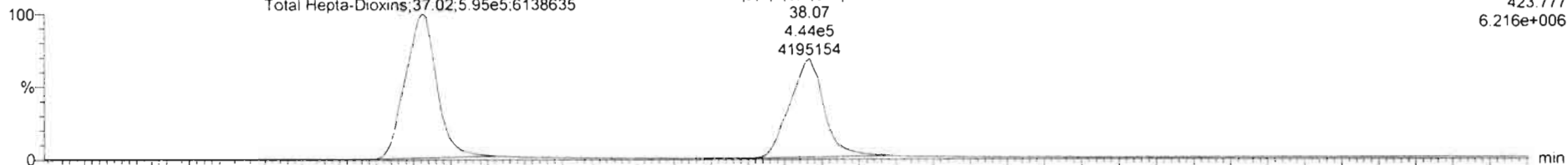
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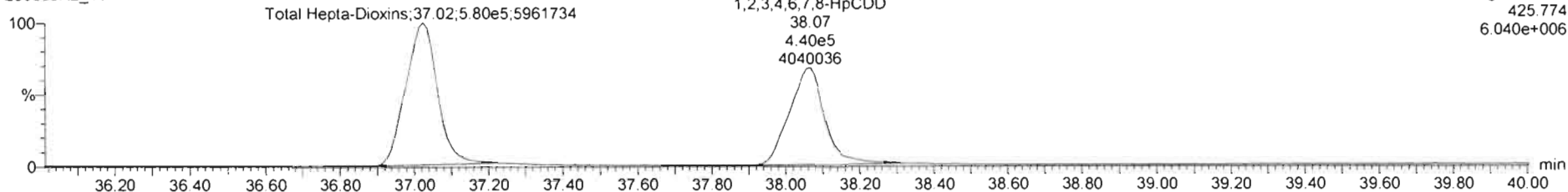
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1,2,3,4,6,7,8-HpCDD

200303R2\_11

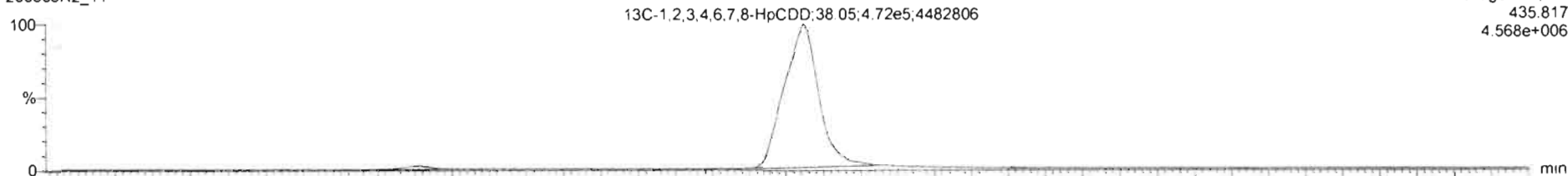


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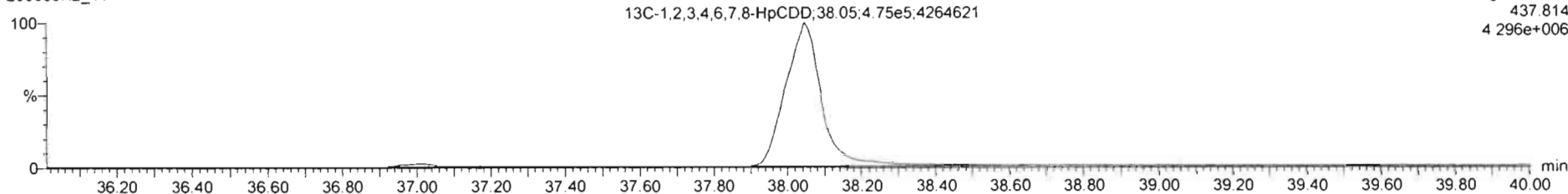


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200303R2\_11



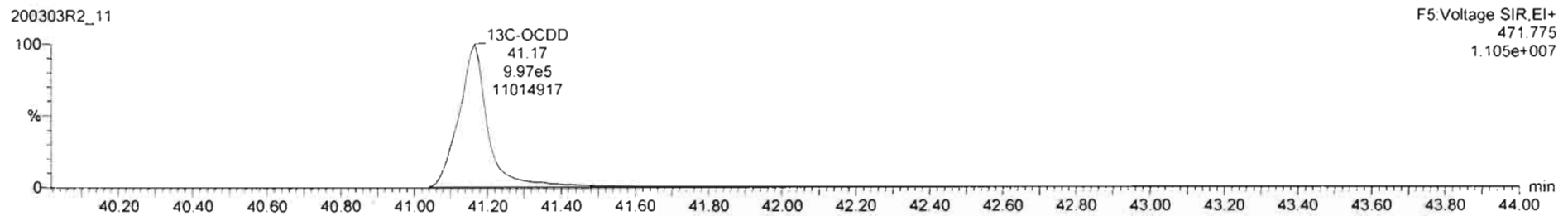
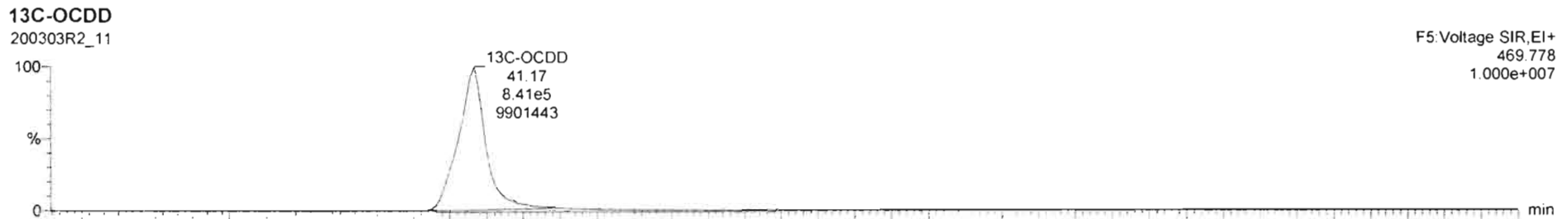
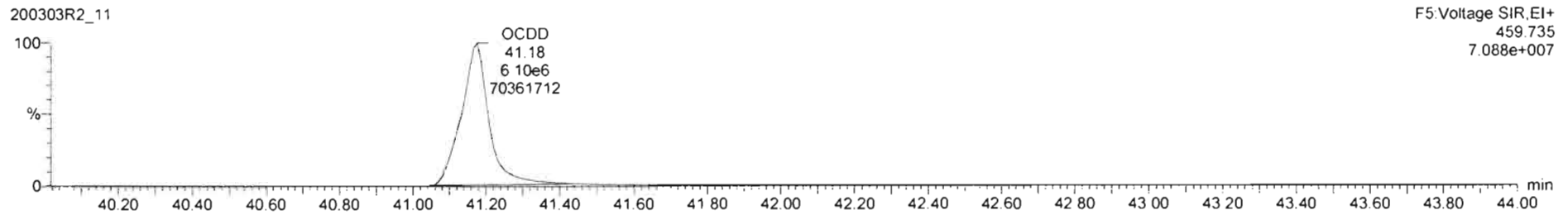
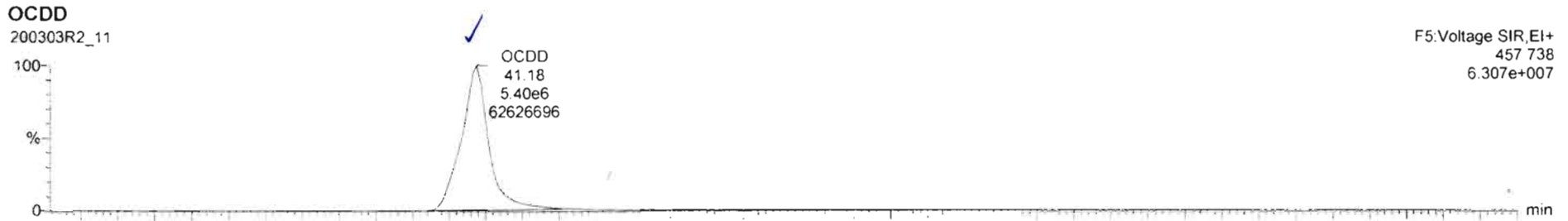
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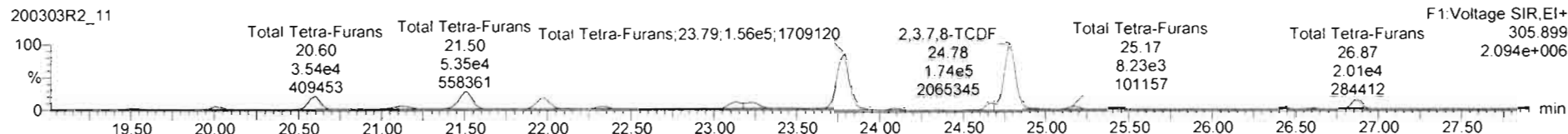
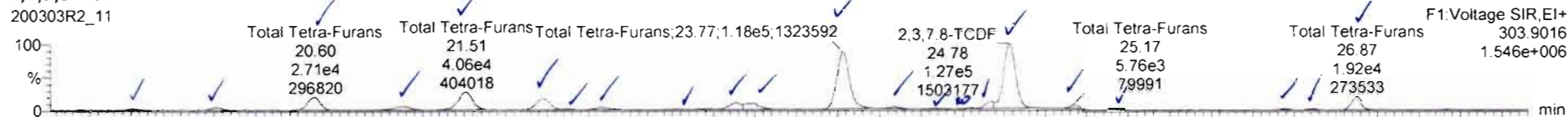
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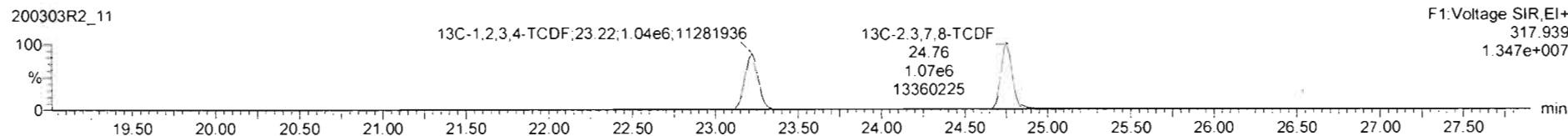
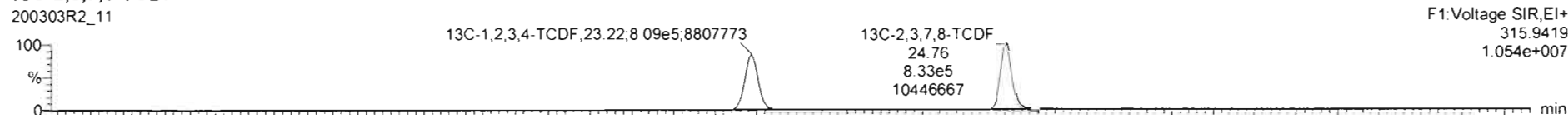
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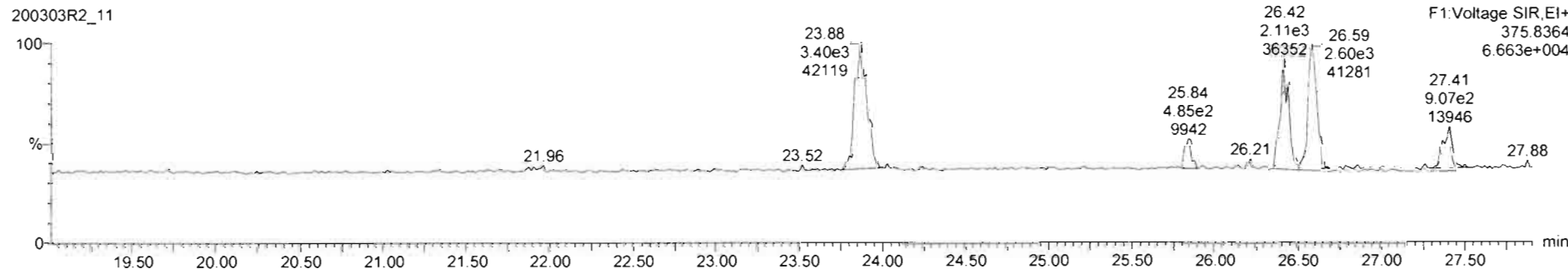
2,3,7,8-TCDF

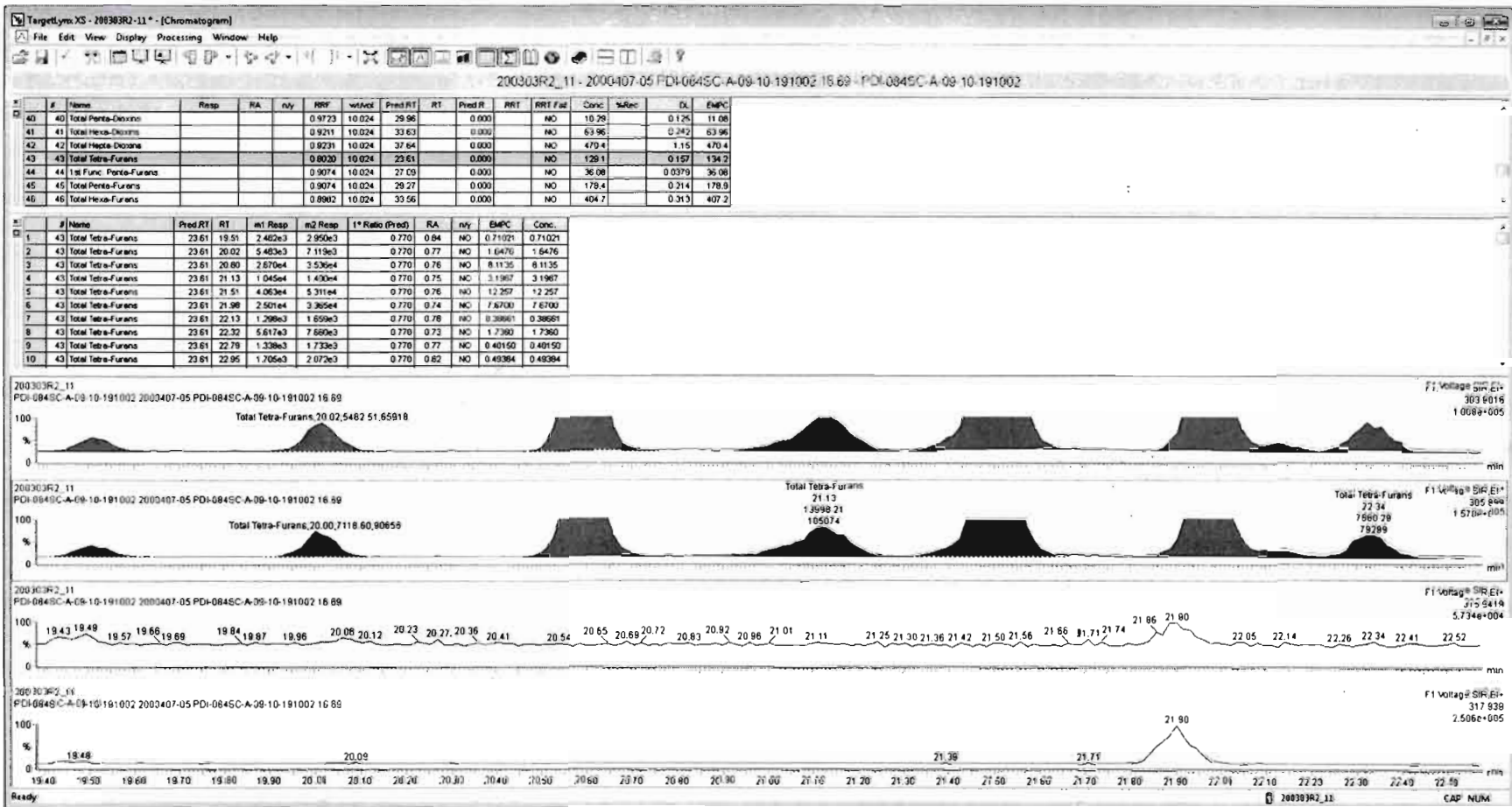


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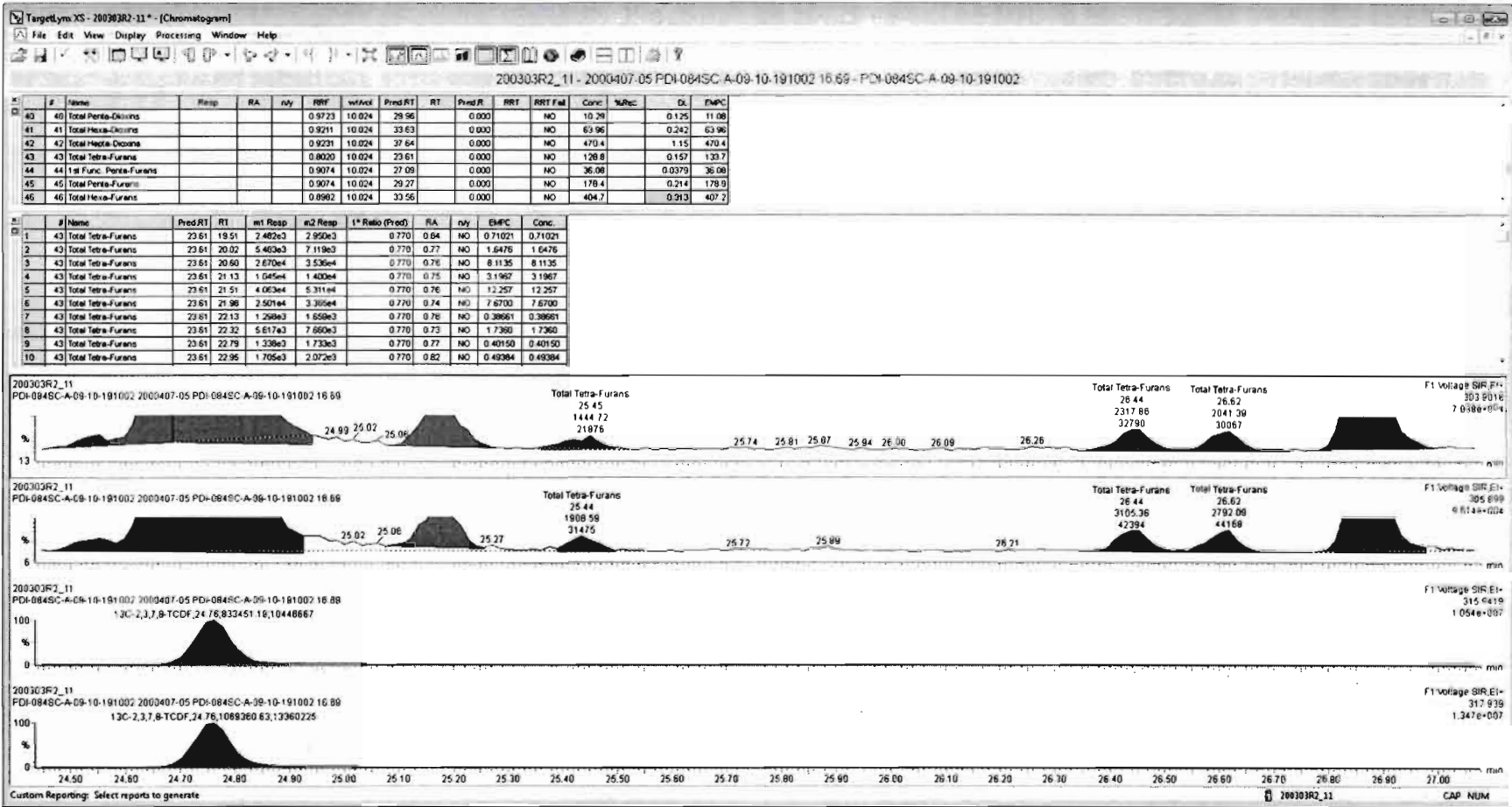


DPE1









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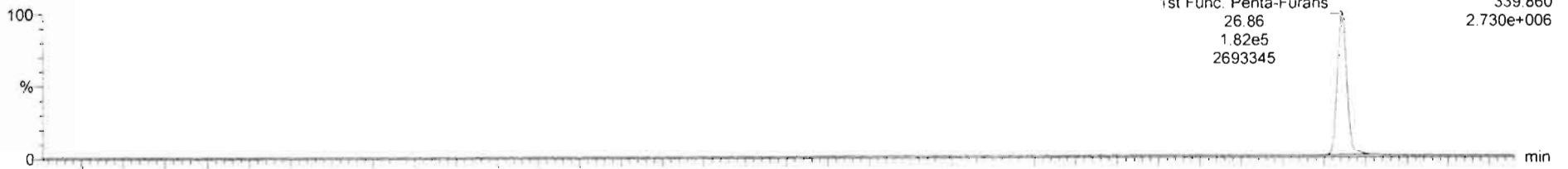
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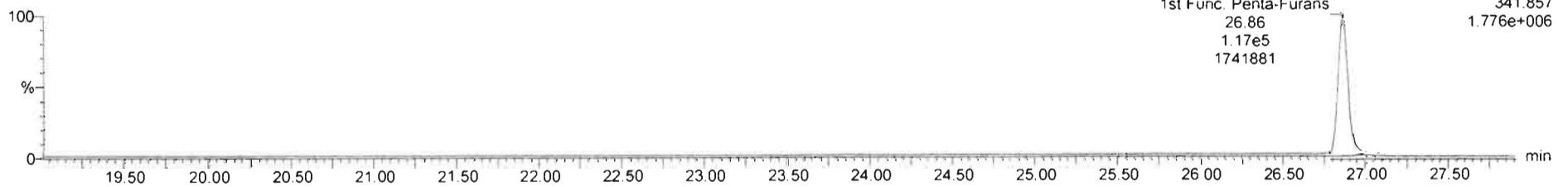
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1st Func. Penta-Furans

200303R2\_11

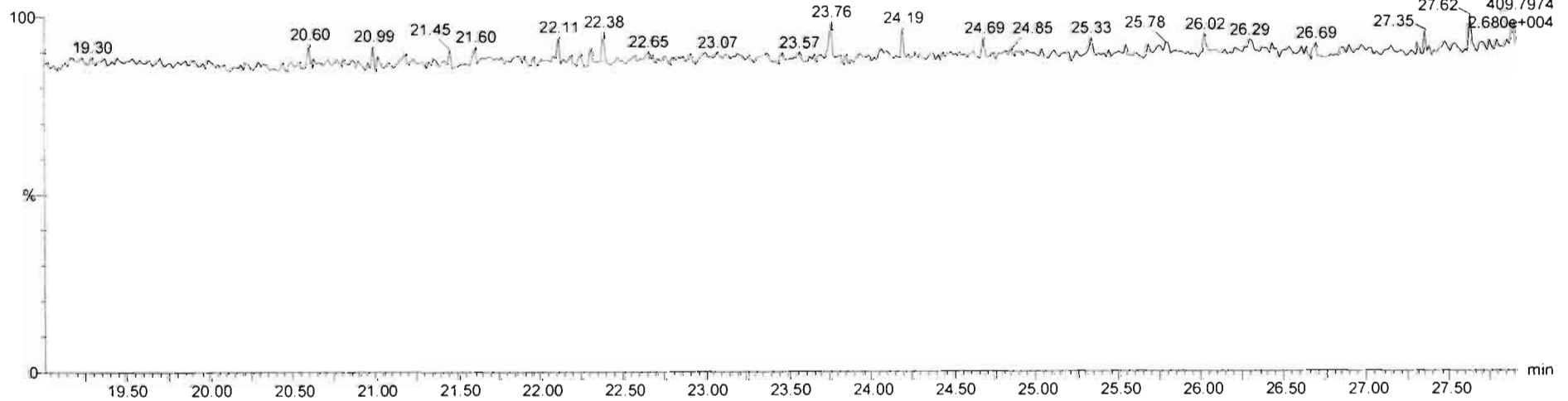


200303R2\_11



DPE6

200303R2\_11



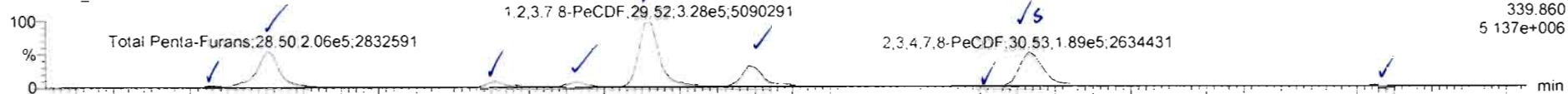
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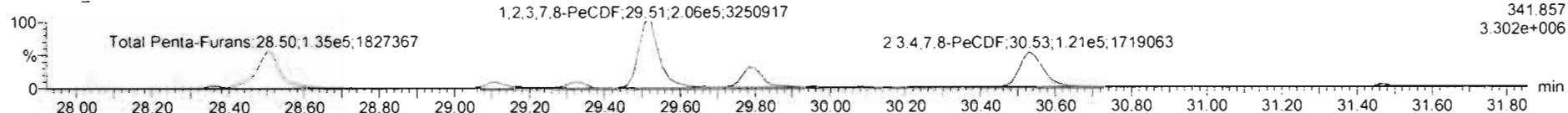
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1,2,3,7,8-PeCDF

200303R2\_11

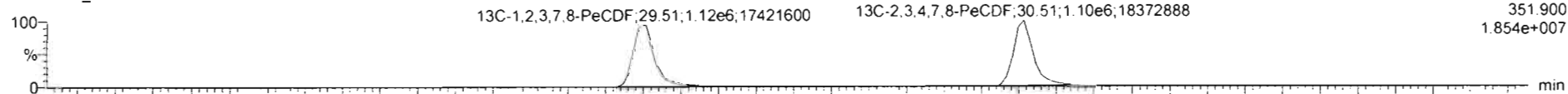


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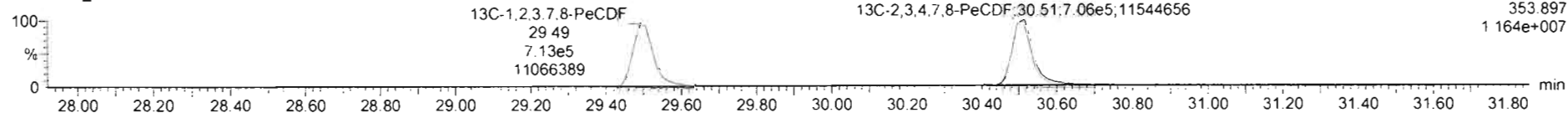


13C-1,2,3,7,8-PeCDF

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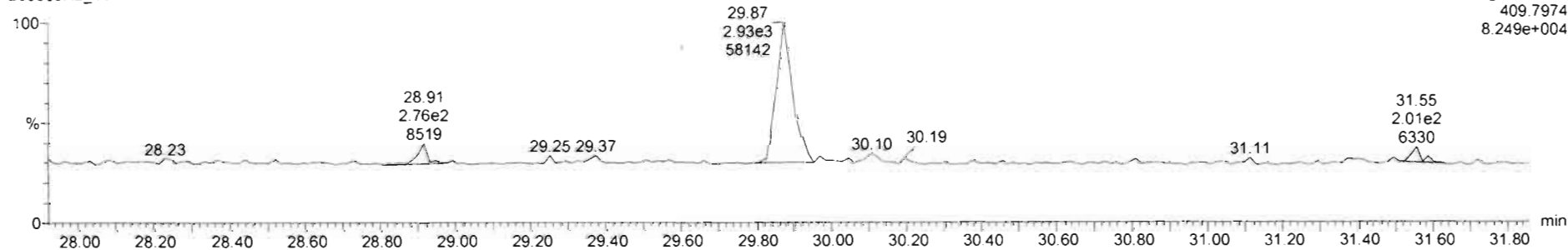


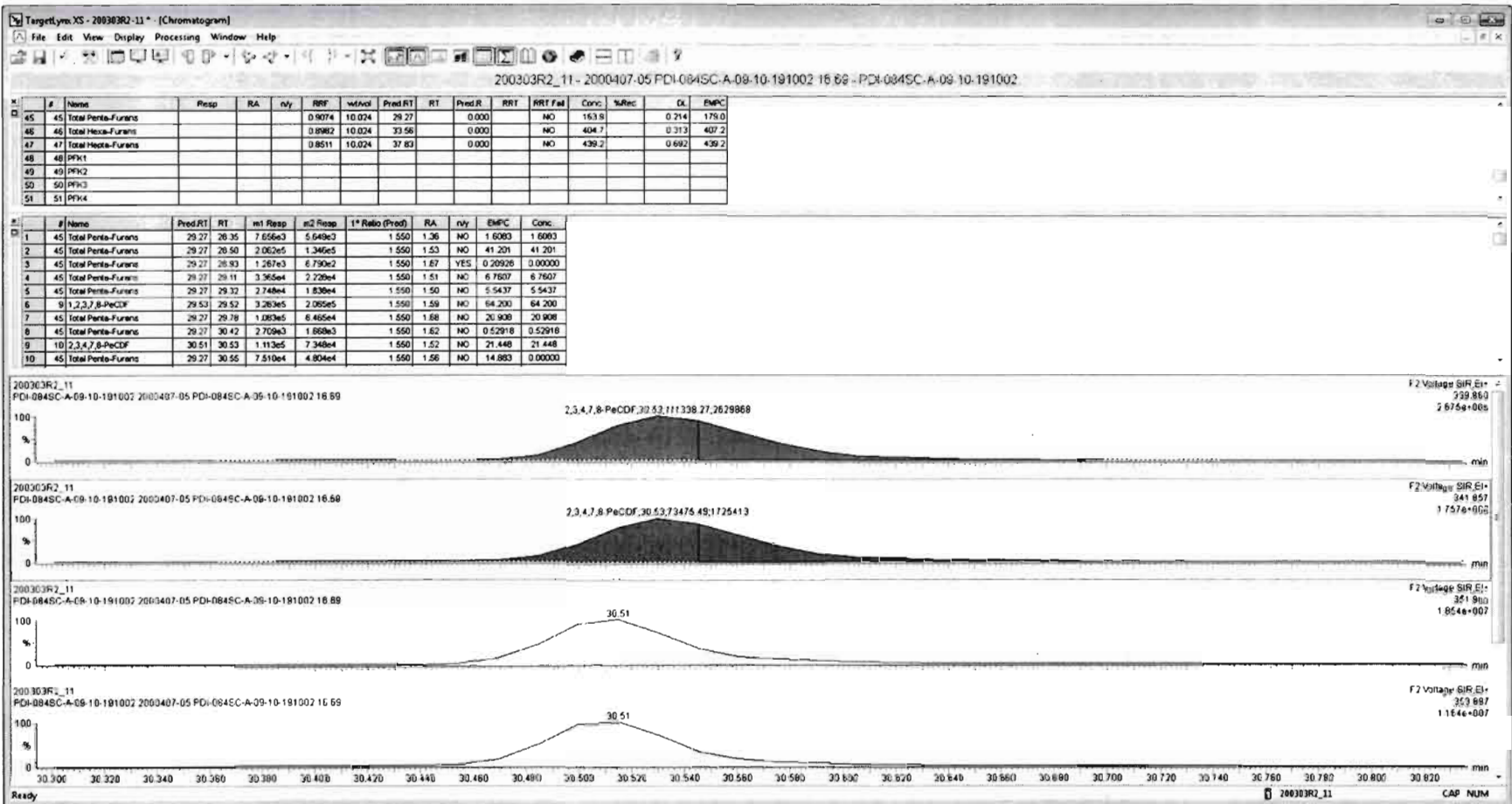
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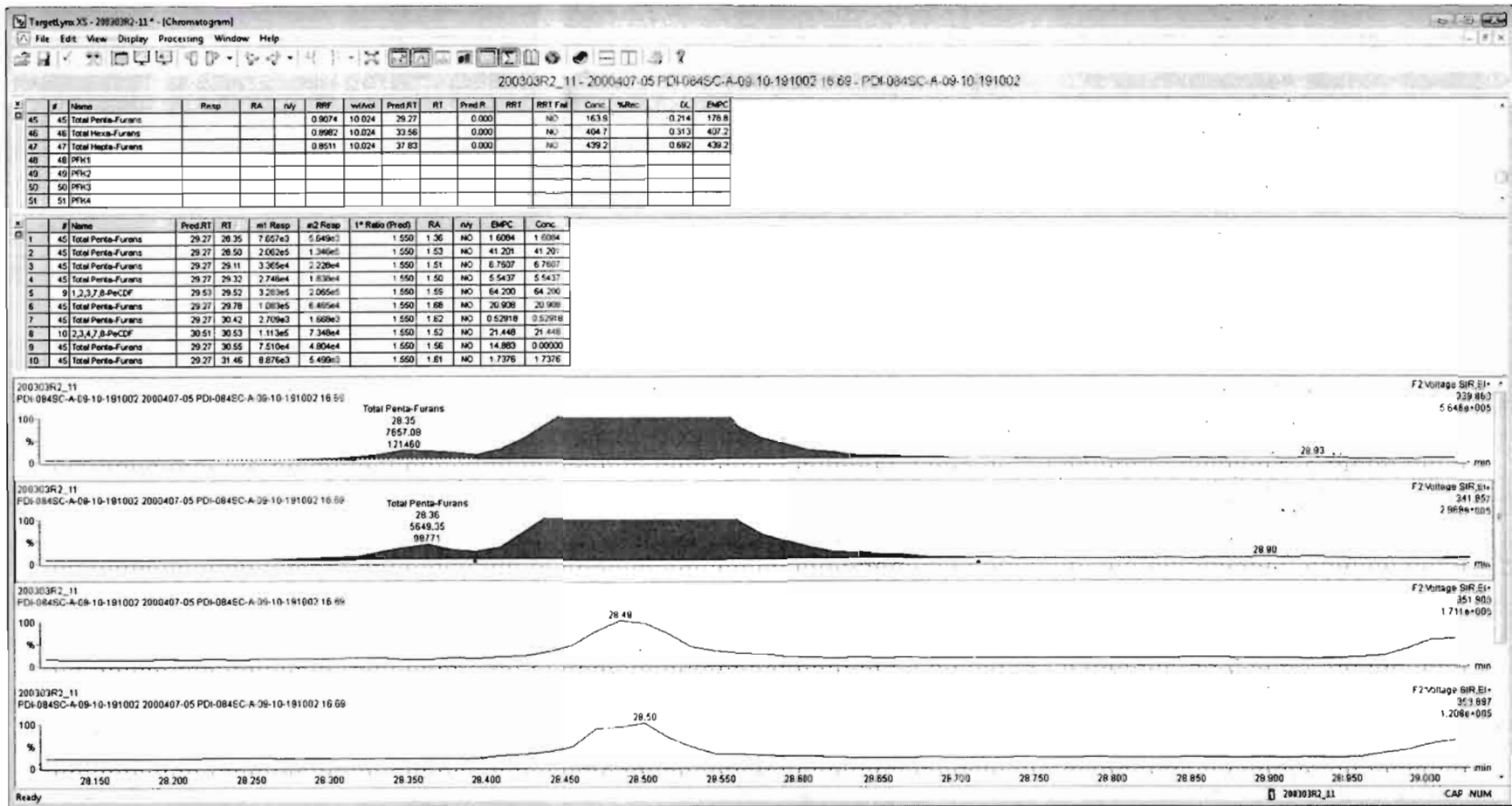


DPE2

200303R2\_11









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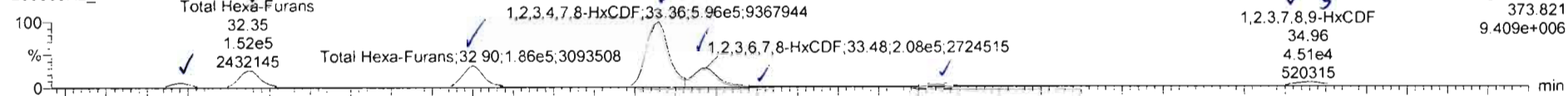
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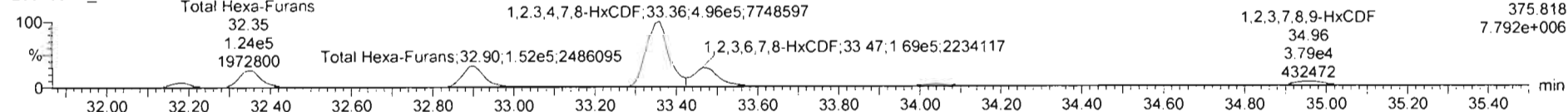
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**1,2,3,4,7,8-HxCDF**

200303R2\_11

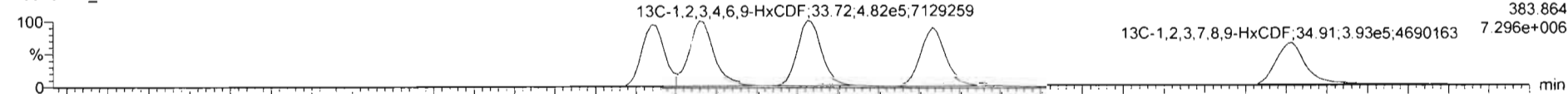


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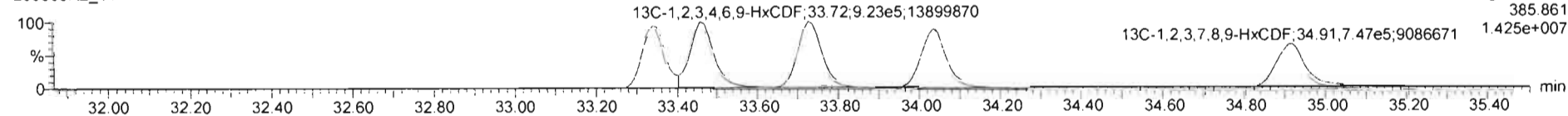


**13C-1,2,3,4,7,8-HxCDF**

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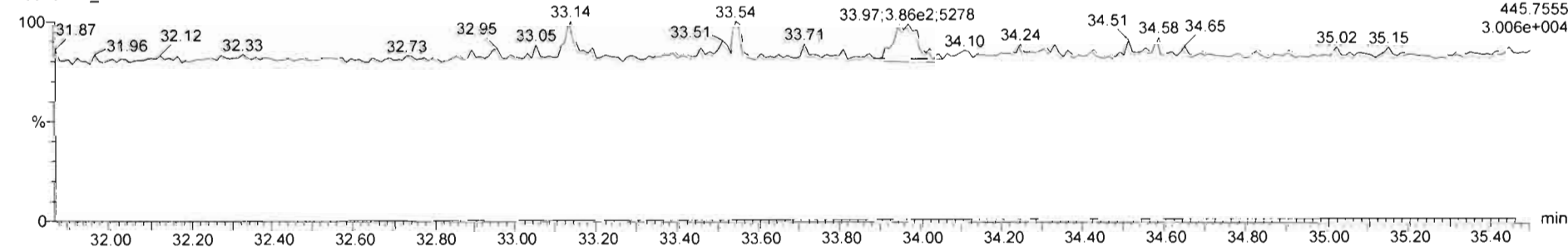


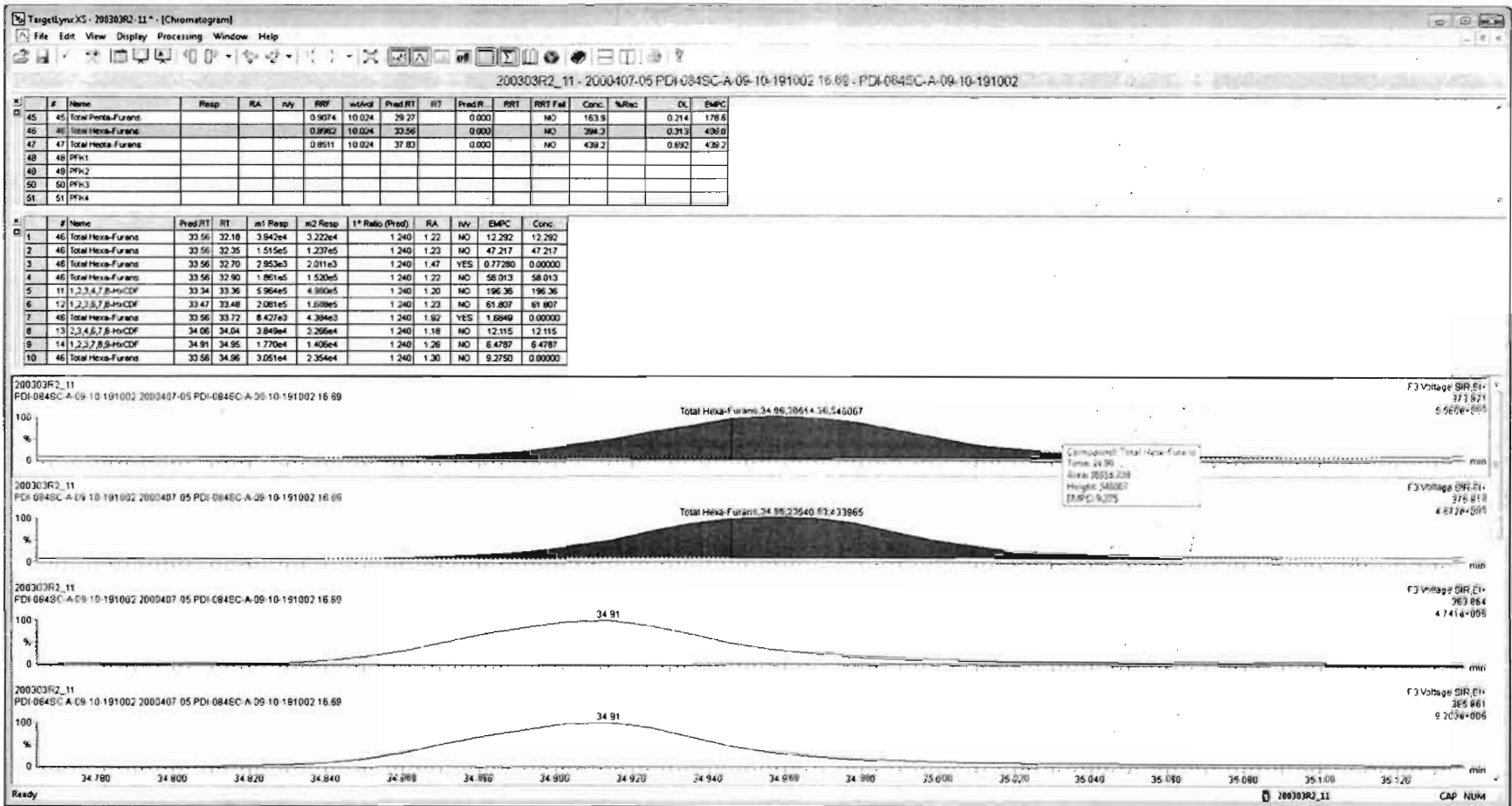
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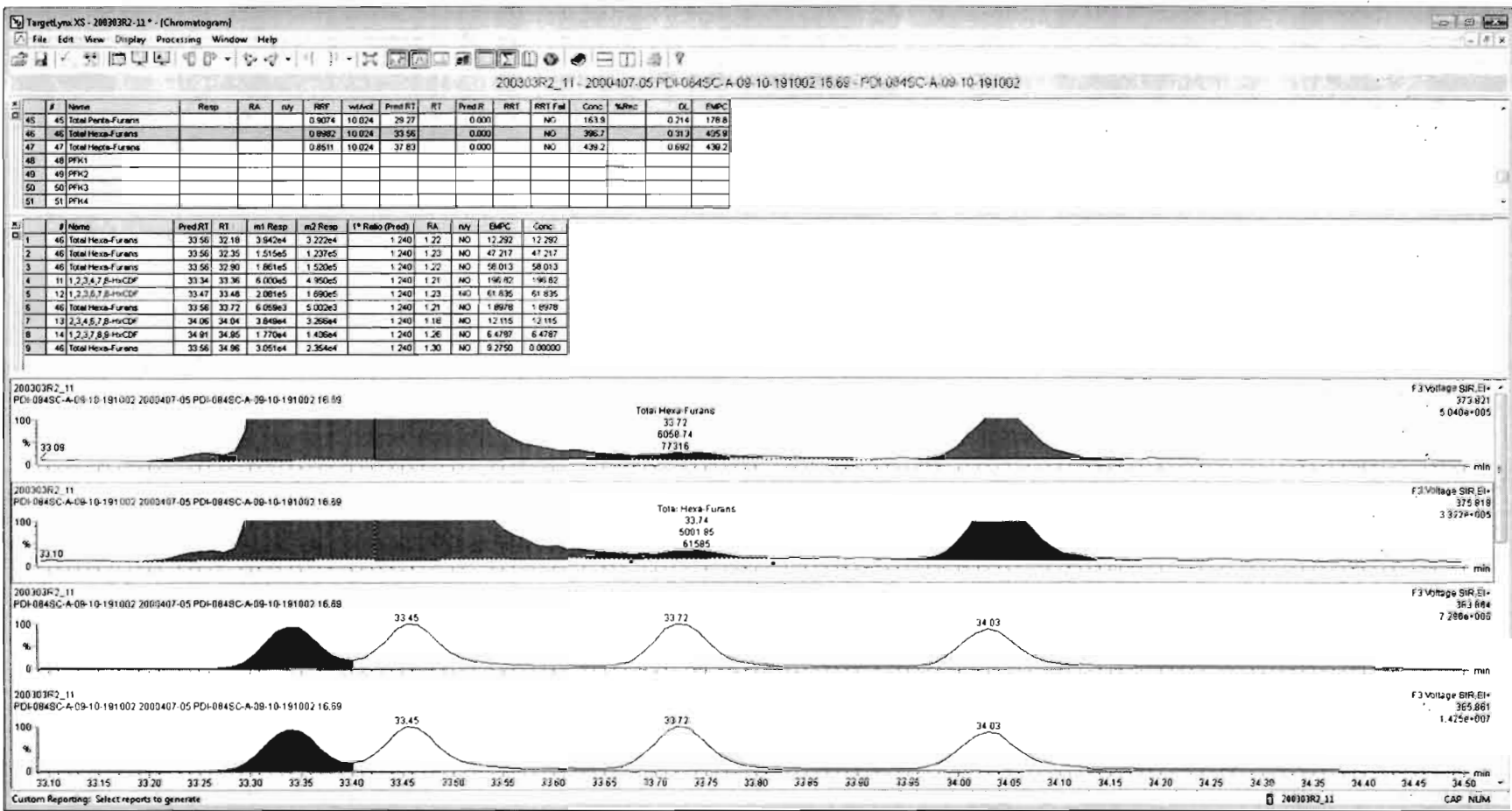


**DPE3**

200303R2\_11







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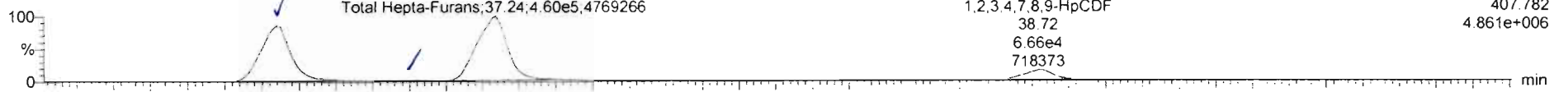
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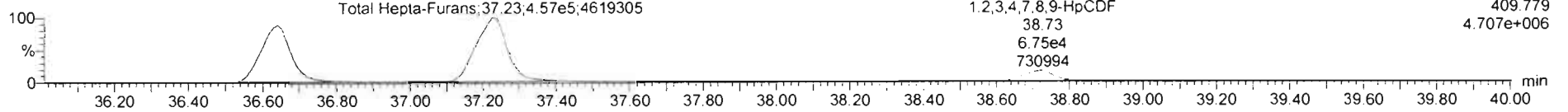
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1,2,3,4,6,7,8-HpCDF

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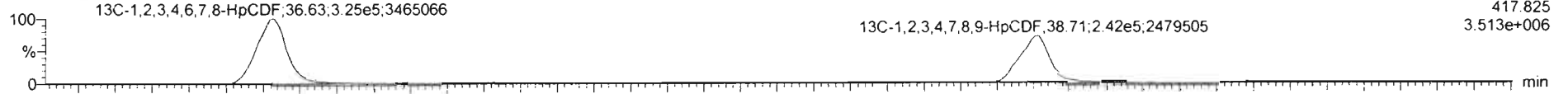


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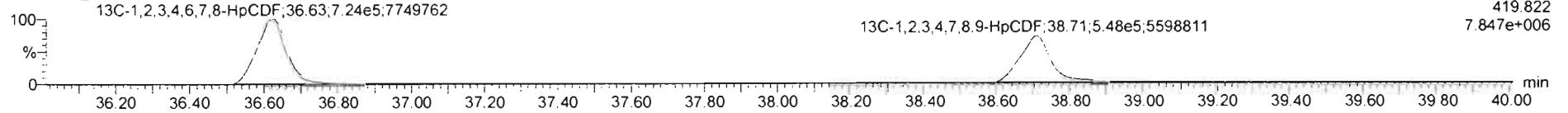


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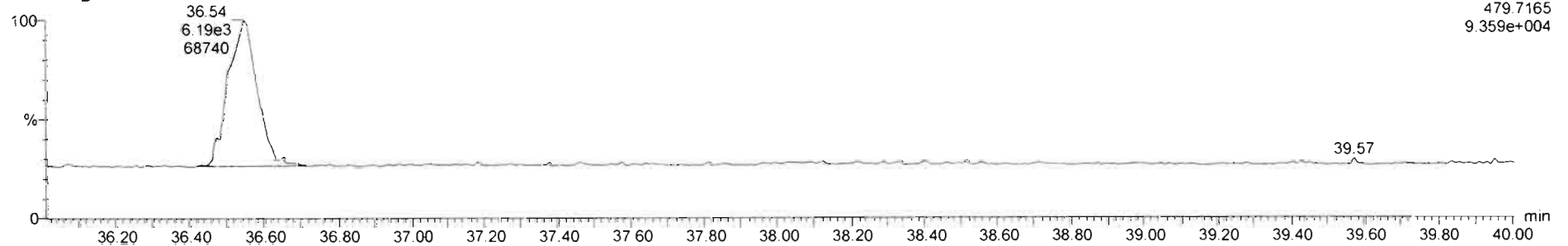


200303R2\_11



DPE4

200303R2\_11



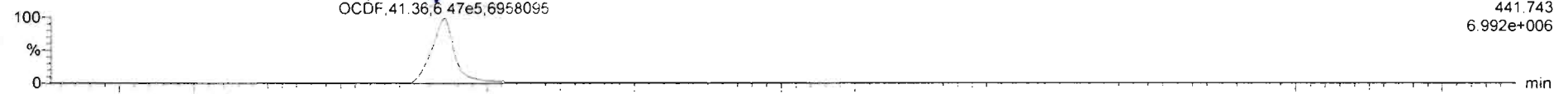
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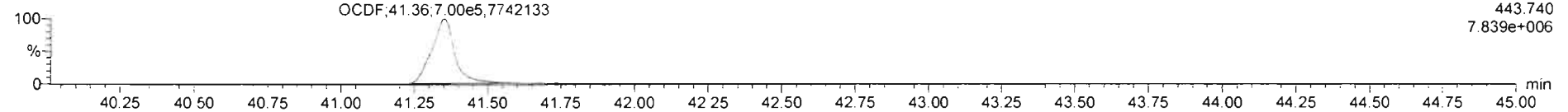
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**OCDF**

200303R2\_11

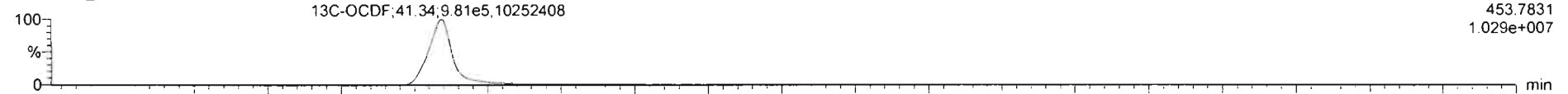


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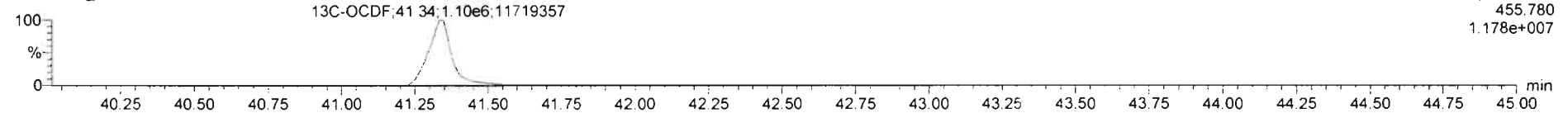


**13C-OCDF**

200303R2\_11

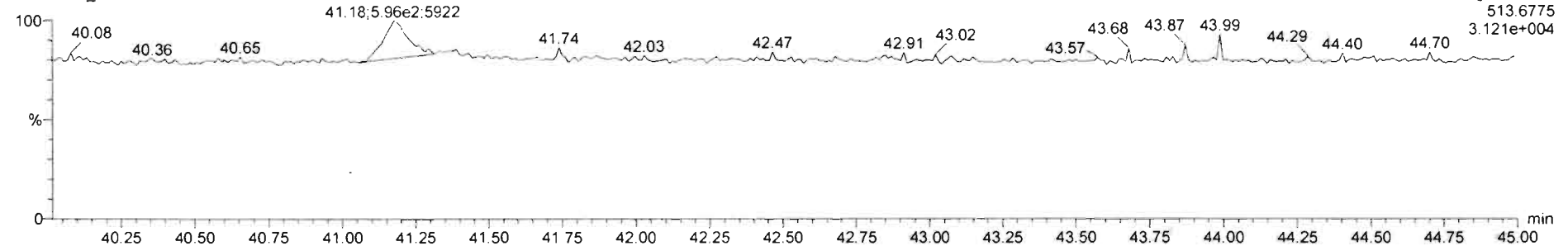


200303R2\_11



**DPE5**

200303R2\_11



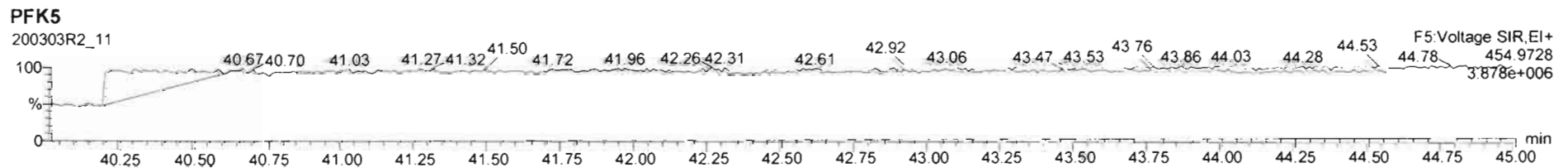
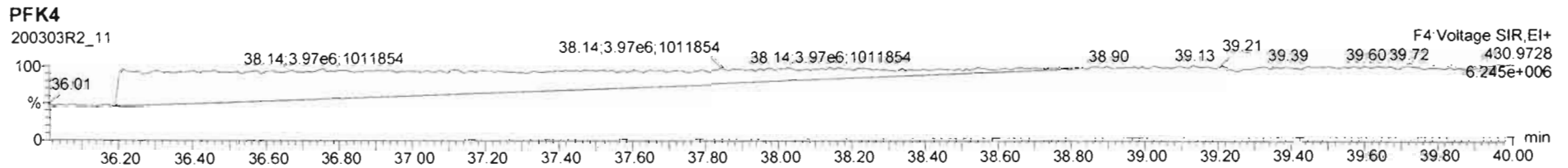
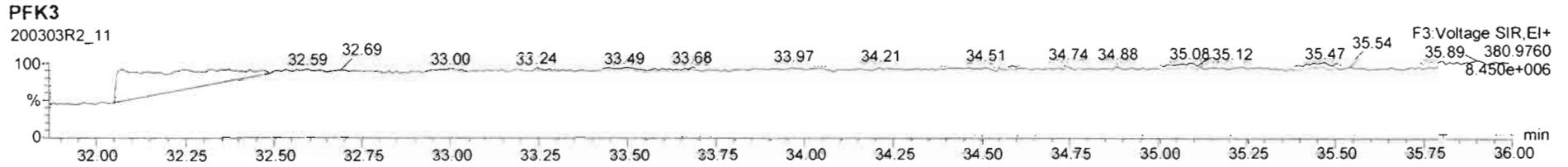
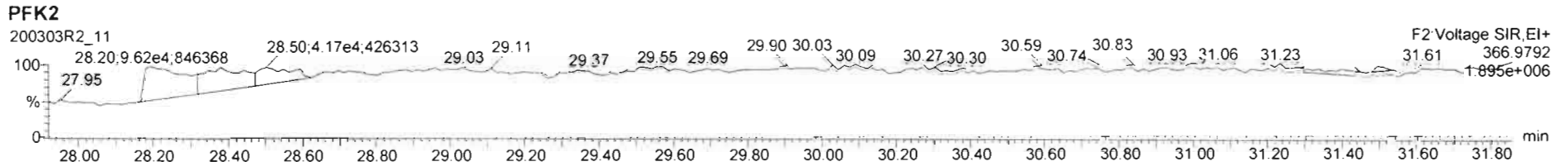
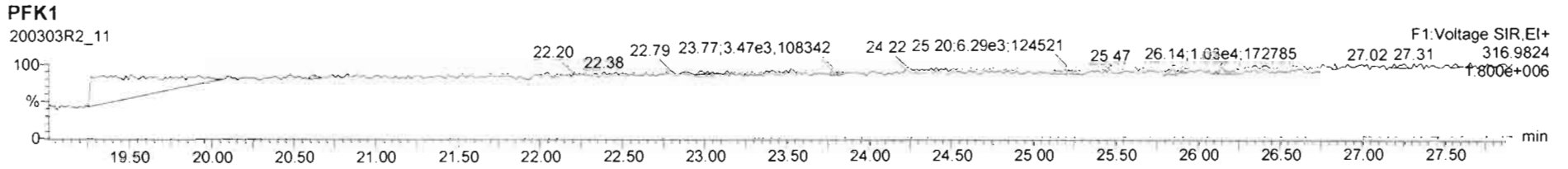


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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_11, Date: 03-Mar-2020, Time: 21:44:17, ID: 2000407-05 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002



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Printed: Wednesday, March 04, 2020 4:02:21 PM Pacific Standard Time

*GRB 03/04/2020*

*0703/06/2020*

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Calibration: U:\VG12.PRO\CurveDB\vb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

#	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	3.17e3	0.67	NO	0.988	10.021	25.721	25.70	1.001	1.001	0.46400		0.0891	0.464
2	2 1,2,3,7,8-PeCDD	8.95e3	0.63	NO	0.972	10.021	30.841	30.85	1.001	1.001	1.4952		0.119	1.50
3	3 1,2,3,4,7,8-HxCDD	4.98e3	1.30	NO	1.07	10.021	34.200	34.20	1.000	1.000	1.0096		0.209	1.01
4	4 1,2,3,6,7,8-HxCDD	4.87e4	1.22	NO	0.921	10.021	34.296	34.31	1.000	1.000	9.1083		0.208	9.11
5	5 1,2,3,7,8,9-HxCDD	1.60e4	1.20	NO	0.918	10.021	34.597	34.58	1.001	1.001	3.2887		0.238	3.29
6	6 1,2,3,4,6,7,8-HpCDD	9.53e5	1.03	NO	0.923	10.021	38.046	38.06	1.000	1.001	230.50		1.03	230
7	7 OCDD	1.24e7	0.89	NO	0.975	10.021	41.144	41.15	1.000	1.000	2885.4		0.824	2890
8	8 2,3,7,8-TCDF	1.89e4	0.73	NO	0.802	10.021	24.772	24.78	1.001	1.001	2.6887	(2.4470)	0.169	2.69
9	9 1,2,3,7,8-PeCDF	2.11e4	1.48	NO	0.907	10.021	29.513	29.51	1.001	1.001	2.8653		0.272	2.87
10	10 2,3,4,7,8-PeCDF	8.23e4	1.49	NO	0.952	10.021	30.545	30.54	1.001	1.001	10.828		0.264	10.8
11	11 1,2,3,4,7,8-HxCDF	4.61e4	1.22	NO	0.862	10.021	33.338	33.35	1.000	1.000	9.0957		0.207	9.10
12	12 1,2,3,6,7,8-HxCDF	5.23e4	1.20	NO	0.841	10.021	33.465	33.47	1.000	1.000	9.3483		0.216	9.35
13	13 2,3,4,6,7,8-HxCDF	5.21e4	1.19	NO	0.898	10.021	34.053	34.04	1.001	1.001	9.5901		0.231	9.59
14	14 1,2,3,7,8,9-HxCDF	3.59e3	1.39	NO	0.858	10.021	34.903	34.92	1.000	1.001	0.79866		0.314	0.799
15	15 1,2,3,4,6,7,8-HpCDF	6.71e5	1.00	NO	0.851	10.021	36.655	36.63	1.001	1.000	163.33		0.515	163
16	16 1,2,3,4,7,8,9-HpCDF	1.71e4	0.90	NO	0.980	10.021	38.695	38.71	1.000	1.000	4.9185		0.588	4.92
17	17 OCDF	1.35e6	0.88	NO	0.806	10.021	41.315	41.33	1.000	1.000	332.79		0.409	333
18	18 13C-2,3,7,8-TCDD	1.38e6	0.77	NO	1.20	10.021	25.645	25.69	1.026	1.028	190.19	95.3	0.229	
19	19 13C-1,2,3,7,8-PeCDD	1.23e6	0.63	NO	0.967	10.021	30.765	30.82	1.230	1.233	209.89	105	0.332	
20	20 13C-1,2,3,4,7,8-HxCDD	9.19e5	1.26	NO	0.874	10.021	34.193	34.19	1.014	1.014	170.13	85.2	0.463	
21	21 13C-1,2,3,6,7,8-HxCDD	1.16e6	1.25	NO	1.05	10.021	34.294	34.30	1.017	1.017	178.99	89.7	0.387	
22	22 13C-1,2,3,7,8,9-HxCDD	1.06e6	1.22	NO	0.974	10.021	34.598	34.56	1.026	1.025	175.53	88.0	0.415	
23	23 13C-1,2,3,4,6,7,8-HpCDD	8.94e5	1.01	NO	0.747	10.021	38.172	38.03	1.132	1.128	193.50	97.0	0.520	
24	24 13C-OCDD	1.75e6	0.85	NO	0.707	10.021	41.072	41.14	1.218	1.220	401.28	101	0.526	
25	25 13C-2,3,7,8-TCDF	1.75e6	0.78	NO	1.07	10.021	24.827	24.75	0.993	0.990	201.12	101	0.326	
26	26 13C-1,2,3,7,8-PeCDF	1.62e6	1.58	NO	1.00	10.021	29.402	29.49	1.176	1.180	197.38	98.9	0.514	
27	27 13C-2,3,4,7,8-PeCDF	1.59e6	1.56	NO	0.962	10.021	30.370	30.51	1.215	1.220	202.71	102	0.535	
28	28 13C-1,2,3,4,7,8-HxCDF	1.17e6	0.51	NO	1.05	10.021	33.316	33.34	0.988	0.989	180.86	90.6	0.405	
29	29 13C-1,2,3,6,7,8-HxCDF	1.33e6	0.51	NO	1.19	10.021	33.418	33.46	0.991	0.992	180.32	90.4	0.357	
30	30 13C-2,3,4,6,7,8-HxCDF	1.21e6	0.51	NO	1.07	10.021	34.028	34.02	1.009	1.009	183.07	91.7	0.399	
31	31 13C-1,2,3,7,8,9-HxCDF	1.04e6	0.52	NO	0.922	10.021	34.935	34.90	1.036	1.035	183.10	91.7	0.461	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-12.qld

Last Altered: Wednesday, March 04, 2020 4:01:32 PM Pacific Standard Time  
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Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

#	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	9.64e5	0.44	NO	0.767	10.021	36.688	36.62	1.088	1.086	203.10	102	0.503	
33	33 13C-1,2,3,4,7,8,9-HpCDF	7.08e5	0.43	NO	0.552	10.021	38.712	38.69	1.148	1.148	207.19	104	0.699	
34	34 13C-OCDF	2.00e6	0.87	NO	0.789	10.021	41.308	41.31	1.225	1.225	410.41	103	0.435	
35	35 37Cl-2,3,7,8-TCDD	5.52e5			1.18	10.021	25.677	25.72	1.027	1.029	77.540	97.1	0.0928	
36	36 13C-1,2,3,4-TCDD	1.21e6	0.80	NO	1.00	10.021	25.110	25.00	1.000	1.000	199.57	100	0.274	
37	37 13C-1,2,3,4-TCDF	1.63e6	0.77	NO	1.00	10.021	23.370	23.21	1.000	1.000	199.57	100	0.347	
38	38 13C-1,2,3,4,6,9-HxCDF	1.23e6	0.51	NO	1.00	10.021	33.710	33.72	1.000	1.000	199.57	100	0.425	
39	39 Total Tetra-Dioxins				0.988	10.021	24.620		0.000		9.8342		0.0891	9.83
40	40 Total Penta-Dioxins				0.972	10.021	29.960		0.000		22.089		0.119	22.1
41	41 Total Hexa-Dioxins				0.921	10.021	33.635		0.000		78.999		0.228	79.0
42	42 Total Hepta-Dioxins				0.923	10.021	37.640		0.000		519.80		1.03	520
43	43 Total Tetra-Furans				0.802	10.021	23.610		0.000		83.584		0.169	83.6 <i>f</i>
44	44 1st Func. Penta-Furans				0.907	10.021	27.090		0.000		101.91		0.0519	102 <i>f</i>
45	45 Total Penta-Furans				0.907	10.021	29.275		0.000		76.607		0.275	76.6
46	46 Total Hexa-Furans				0.898	10.021	33.555		0.000		191.17		0.230	191
47	47 Total Hepta-Furans				0.851	10.021	37.835		0.000		481.12		0.584	481

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-12.qld

Last Altered: Wednesday, March 04, 2020 4:01:32 PM Pacific Standard Time

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Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.53	1.086e5	1.417e5	9.566e3	1.292e4	0.74	NO	2.249e4	3.2911	3.2911	0.0891
2	Total Tetra-Dioxins	21.92	2.287e4	3.384e4	2.144e3	2.628e3	0.82	NO	4.772e3	0.69836	0.69836	0.0891
3	Total Tetra-Dioxins	22.43	1.762e4	2.396e4	1.677e3	2.067e3	0.81	NO	3.743e3	0.54778	0.54778	0.0891
4	Total Tetra-Dioxins	23.42	7.257e3	1.180e4	6.926e2	1.022e3	0.68	NO	1.715e3	0.25097	0.25097	0.0891
5	Total Tetra-Dioxins	23.67	3.967e4	4.381e4	3.262e3	4.085e3	0.80	NO	7.348e3	1.0752	1.0752	0.0891
6	Total Tetra-Dioxins	23.92	4.687e4	5.493e4	3.975e3	4.693e3	0.85	NO	8.668e3	1.2683	1.2683	0.0891
7	Total Tetra-Dioxins	24.16	1.134e4	1.543e4	8.942e2	1.123e3	0.80	NO	2.017e3	0.29513	0.29513	0.0891
8	Total Tetra-Dioxins	24.43	1.095e4	1.430e4	7.887e2	1.057e3	0.75	NO	1.846e3	0.27009	0.27009	0.0891
9	Total Tetra-Dioxins	24.60	1.850e4	2.218e4	1.204e3	1.711e3	0.70	NO	2.914e3	0.42644	0.42644	0.0891
10	Total Tetra-Dioxins	25.00	9.967e3	1.082e4	6.080e2	8.150e2	0.75	NO	1.423e3	0.20822	0.20822	0.0891
11	Total Tetra-Dioxins	25.44	1.958e4	2.063e4	1.724e3	2.189e3	0.79	NO	3.913e3	0.57260	0.57260	0.0891
12	2,3,7,8-TCDD	25.70	1.832e4	2.324e4	1.274e3	1.897e3	0.67	NO	3.171e3	0.46400	0.46400	0.0891
13	Total Tetra-Dioxins	26.05	1.567e4	1.979e4	9.150e2	1.391e3	0.66	NO	2.306e3	0.33746	0.33746	0.0891
14	Total Tetra-Dioxins	26.71	6.826e3	6.488e3	4.014e2	4.761e2	0.84	NO	8.775e2	0.12841	0.12841	0.0891

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.56	2.247e5	3.941e5	1.729e4	2.798e4	0.62	NO	4.528e4	7.5642	7.5642	0.119
2	Total Penta-Dioxins	29.05	2.865e4	4.482e4	1.614e3	2.757e3	0.59	NO	4.371e3	0.73021	0.73021	0.119
3	Total Penta-Dioxins	29.57	1.843e5	3.234e5	1.206e4	1.947e4	0.62	NO	3.153e4	5.2669	5.2669	0.119
4	Total Penta-Dioxins	29.74	8.468e4	1.462e5	4.623e3	7.462e3	0.62	NO	1.208e4	2.0189	2.0189	0.119
5	Total Penta-Dioxins	29.83	4.232e4	8.496e4	3.011e3	5.057e3	0.60	NO	8.068e3	1.3478	1.3478	0.119
6	Total Penta-Dioxins	30.06	6.140e4	9.031e4	5.672e3	8.179e3	0.69	NO	1.385e4	2.3139	2.3139	0.119
7	Total Penta-Dioxins	30.39	1.668e4	2.329e4	9.171e2	1.504e3	0.61	NO	2.421e3	0.40441	0.40441	0.119
8	1,2,3,7,8-PeCDD	30.85	5.658e4	1.002e5	3.443e3	5.507e3	0.63	NO	8.950e3	1.4952	1.4952	0.119
9	Total Penta-Dioxins	30.91	2.056e4	2.598e4	1.015e3	1.417e3	0.72	NO	2.432e3	0.40636	0.40636	0.119
10	Total Penta-Dioxins	31.22	2.240e4	2.971e4	1.242e3	1.998e3	0.62	NO	3.241e3	0.54142	0.54142	0.119

Vista Analytical Laboratory

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Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.74	1.431e6	1.174e6	7.174e4	5.736e4	1.25	NO	1.291e5	26.770	26.770	0.228
2	Total Hexa-Dioxins	33.29	1.968e5	1.601e5	1.137e4	9.040e3	1.26	NO	2.041e4	4.2316	4.2316	0.228
3	Total Hexa-Dioxins	33.54	1.233e6	1.002e6	8.689e4	7.055e4	1.23	NO	1.574e5	32.648	32.648	0.228
4	Total Hexa-Dioxins	33.65	6.516e4	5.513e4	3.391e3	2.635e3	1.29	NO	6.025e3	1.2494	1.2494	0.228
5	1,2,3,4,7,8-HxCDD	34.20	4.304e4	3.915e4	2.819e3	2.162e3	1.30	NO	4.980e3	1.0096	1.0096	0.209
6	1,2,3,6,7,8-HxCDD	34.31	3.874e5	3.153e5	2.670e4	2.196e4	1.22	NO	4.866e4	9.1083	9.1083	0.208
7	Total Hexa-Dioxins	34.49	3.114e4	2.866e4	1.820e3	1.528e3	1.19	NO	3.348e3	0.69421	0.69421	0.228
8	1,2,3,7,8,9-HxCDD	34.58	1.192e5	9.166e4	8.720e3	7.283e3	1.20	NO	1.600e4	3.2887	3.2887	0.238

Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.01	6.851e6	6.536e6	6.039e5	5.925e5	1.02	NO	1.196e6	289.30	289.30	1.03
2	1,2,3,4,6,7,8-HpCDD	38.06	4.941e6	4.818e6	4.826e5	4.706e5	1.03	NO	9.532e5	230.50	230.50	1.03



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Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.49	2.641e4	4.010e4	2.614e3	3.615e3	0.72	NO	6.229e3	0.88429	0.88429	0.169
2	Total Tetra-Furans	20.00	1.278e5	1.670e5	9.899e3	1.302e4	0.76	NO	2.292e4	3.2542	3.2542	0.169
3	Total Tetra-Furans	20.59	7.428e5	1.000e6	6.491e4	8.522e4	0.76	NO	1.501e5	21.314	21.314	0.169
4	Total Tetra-Furans	21.05	3.687e4	4.494e4	3.632e3	4.146e3	0.88	NO	7.779e3	1.1044	1.1044	0.169
5	Total Tetra-Furans	21.09	3.771e4	4.515e4	3.745e3	5.023e3	0.75	NO	8.768e3	1.2448	1.2448	0.169
6	Total Tetra-Furans	21.50	3.004e5	3.938e5	2.800e4	3.680e4	0.76	NO	6.480e4	9.2002	9.2002	0.169
7	Total Tetra-Furans	21.96	4.409e5	5.851e5	4.291e4	5.550e4	0.77	NO	9.841e4	13.972	13.972	0.169
8	Total Tetra-Furans	22.10	1.408e4	1.751e4	1.174e3	1.472e3	0.80	NO	2.646e3	0.37573	0.37573	0.169
9	Total Tetra-Furans	22.29	2.675e4	3.380e4	2.399e3	2.849e3	0.84	NO	5.248e3	0.74512	0.74512	0.169
10	Total Tetra-Furans	22.77	5.043e3	7.709e3	4.198e2	5.592e2	0.75	NO	9.790e2	0.13899	0.13899	0.169
11	Total Tetra-Furans	22.94	3.306e4	3.805e4	2.832e3	3.753e3	0.75	NO	6.585e3	0.93491	0.93491	0.169
12	Total Tetra-Furans	23.12	3.187e5	4.238e5	3.120e4	4.163e4	0.75	NO	7.283e4	10.340	10.340	0.169
13	Total Tetra-Furans	23.21	6.037e4	7.412e4	3.565e3	4.477e3	0.80	NO	8.042e3	1.1417	1.1417	0.169
14	Total Tetra-Furans	23.77	1.263e5	1.585e5	1.036e4	1.403e4	0.74	NO	2.438e4	3.4619	3.4619	0.169
15	Total Tetra-Furans	23.86	4.127e4	5.454e4	3.180e3	4.120e3	0.77	NO	7.300e3	1.0364	1.0364	0.169
16	Total Tetra-Furans	24.10	1.216e4	2.204e4	1.123e3	1.701e3	0.66	NO	2.824e3	0.40096	0.40096	0.169
17	Total Tetra-Furans	24.30	1.686e4	2.179e4	1.754e3	2.351e3	0.75	NO	4.104e3	0.58271	0.58271	0.169
18	Total Tetra-Furans	24.52	1.475e4	1.966e4	1.135e3	1.620e3	0.70	NO	2.755e3	0.39108	0.39108	0.169
19	Total Tetra-Furans	24.66	4.655e4	7.343e4	3.310e3	4.804e3	0.69	NO	8.114e3	1.1519	1.1519	0.169
20	2,3,7,8-TCDF	24.78	9.451e4	1.265e5	7.962e3	1.098e4	0.73	NO	1.894e4	2.6887	2.6887	0.169
21	Total Tetra-Furans	25.18	2.304e4	3.304e4	1.755e3	2.537e3	0.69	NO	4.293e3	0.60942	0.60942	0.169
22	Total Tetra-Furans	25.42	1.344e4	1.637e4	8.003e2	1.093e3	0.73	NO	1.893e3	0.26873	0.26873	0.169
23	Total Tetra-Furans	25.87	1.659e4	1.830e4	1.036e3	1.328e3	0.78	NO	2.364e3	0.33564	0.33564	0.169
24	Total Tetra-Furans	26.44	1.074e5	1.277e5	6.913e3	8.664e3	0.80	NO	1.558e4	2.2116	2.2116	0.169
25	Total Tetra-Furans	26.60	1.158e5	1.319e5	6.986e3	8.815e3	0.79	NO	1.580e4	2.2433	2.2433	0.169
26	Total Tetra-Furans	26.86	1.526e5	2.033e5	1.111e4	1.390e4	0.80	NO	2.501e4	3.5513	3.5513	0.169

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	26.86	6.899e6	4.488e6	4.530e5	2.913e5	1.56	NO	7.442e5	101.91	101.91	0.0519

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-12.qld

Last Altered: Wednesday, March 04, 2020 4:01:32 PM Pacific Standard Time  
 Printed: Wednesday, March 04, 2020 4:02:21 PM Pacific Standard Time

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.35	1.739e5	1.022e5	9.091e3	5.857e3	1.55	NO	1.495e4	2.0469	2.0469	0.275
2	Total Penta-Furans	28.50	1.952e6	1.249e6	1.518e5	9.809e4	1.55	NO	2.499e5	34.219	34.219	0.275
3	Total Penta-Furans	28.56	2.015e5	1.452e5	8.218e3	5.299e3	1.55	NO	1.352e4	1.8509	1.8509	0.275
4	Total Penta-Furans	29.11	7.936e5	5.579e5	5.167e4	3.441e4	1.50	NO	8.609e4	11.788	11.788	0.275
5	Total Penta-Furans	29.32	8.143e4	6.283e4	4.803e3	3.377e3	1.42	NO	8.180e3	1.1201	1.1201	0.275
6	1,2,3,7,8-PeCDF	29.51	1.944e5	1.359e5	1.259e4	8.483e3	1.48	NO	2.107e4	2.8653	2.8653	0.272
7	Total Penta-Furans	29.80	3.613e5	2.547e5	2.015e4	1.362e4	1.48	NO	3.377e4	4.6248	4.6248	0.275
8	Total Penta-Furans	29.87	1.594e5	1.002e5	9.093e3	5.483e3	1.66	NO	1.458e4	1.9959	1.9959	0.275
9	Total Penta-Furans	30.42	3.346e4	2.616e4	1.987e3	1.474e3	1.35	NO	3.460e3	0.47382	0.47382	0.275
10	2,3,4,7,8-PeCDF	30.54	1.105e6	7.285e5	4.931e4	3.303e4	1.49	NO	8.234e4	10.828	10.828	0.264
11	Total Penta-Furans	30.56	9.078e5	5.671e5	2.129e4	1.373e4	1.55	NO	3.501e4	4.7946	4.7946	0.275

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	32.19	4.292e5	3.601e5	4.669e4	3.808e4	1.23	NO	8.477e4	15.855	15.855	0.230
2	Total Hexa-Furans	32.42	4.880e6	3.866e6	1.740e5	1.414e5	1.23	NO	3.154e5	58.990	58.990	0.230
3	Total Hexa-Furans	32.72	6.562e4	5.352e4	2.920e3	2.648e3	1.10	NO	5.568e3	1.0415	1.0415	0.230
4	Total Hexa-Furans	32.90	4.838e6	3.895e6	2.458e5	2.032e5	1.21	NO	4.490e5	83.986	83.986	0.230
5	Total Hexa-Furans	33.25	3.136e4	2.387e4	1.335e3	1.177e3	1.13	NO	2.512e3	0.46979	0.46979	0.230
6	1,2,3,4,7,8-HxCDF	33.35	4.778e5	3.774e5	2.534e4	2.077e4	1.22	NO	4.612e4	9.0957	9.0957	0.207
7	1,2,3,6,7,8-HxCDF	33.47	4.745e5	3.815e5	2.850e4	2.380e4	1.20	NO	5.229e4	9.3483	9.3483	0.216
8	Total Hexa-Furans	33.74	1.909e4	1.799e4	1.086e3	9.993e2	1.09	NO	2.086e3	0.39009	0.39009	0.230
9	2,3,4,6,7,8-HxCDF	34.04	4.533e5	3.790e5	2.834e4	2.375e4	1.19	NO	5.210e4	9.5901	9.5901	0.231
10	1,2,3,7,8,9-HxCDF	34.92	6.421e4	5.669e4	2.086e3	1.499e3	1.39	NO	3.585e3	0.79866	0.79866	0.314
11	Total Hexa-Furans	34.96	9.515e4	7.034e4	4.647e3	3.923e3	1.18	NO	8.570e3	1.6030	1.6030	0.230

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-12.qld

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Printed: Wednesday, March 04, 2020 4:02:21 PM Pacific Standard Time

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

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	36.63	3.780e6	3.808e6	3.356e5	3.355e5	1.00	NO	6.711e5	163.33	163.33	0.515
2	Total Hepta-Furans	37.22	6.054e6	5.973e6	5.587e5	5.562e5	1.00	NO	1.115e6	312.88	312.88	0.584
3	1,2,3,4,7,8,9-HpCDF	38.71	1.032e5	1.077e5	8.118e3	8.972e3	0.90	NO	1.709e4	4.9185	4.9185	0.588

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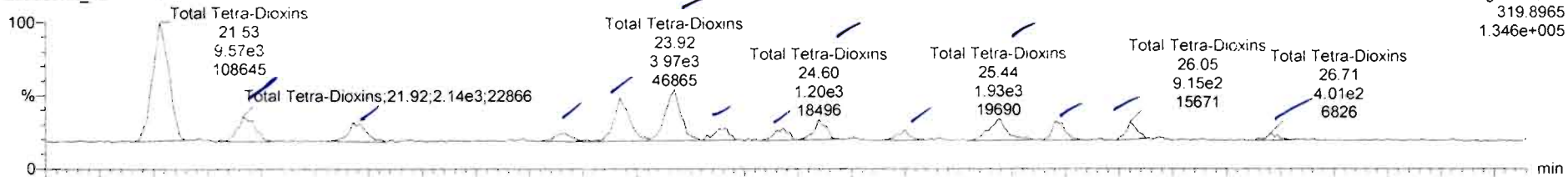
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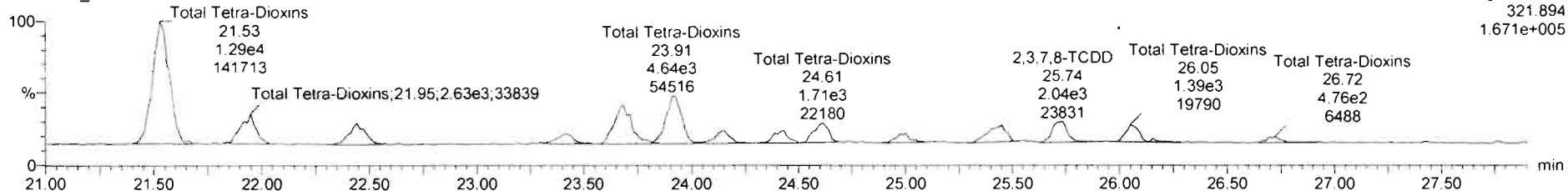
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2,3,7,8-TCDD

200303R2\_12

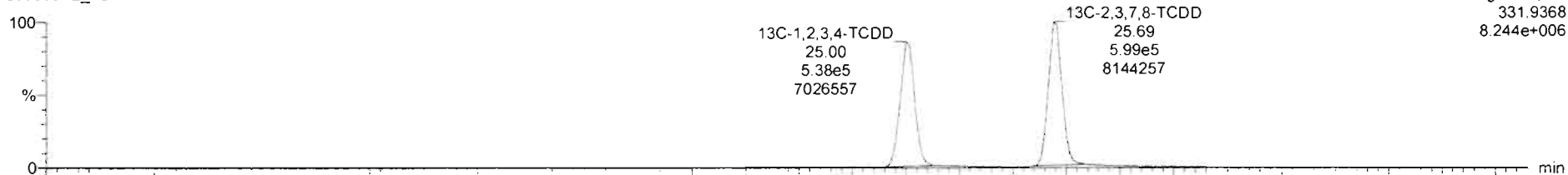


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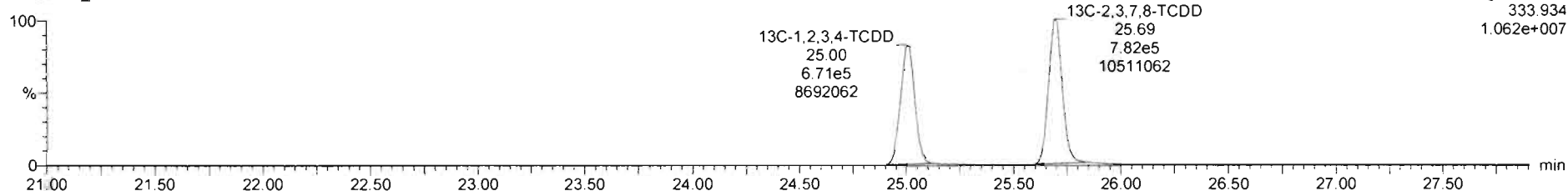


13C-2,3,7,8-TCDD

200303R2\_12



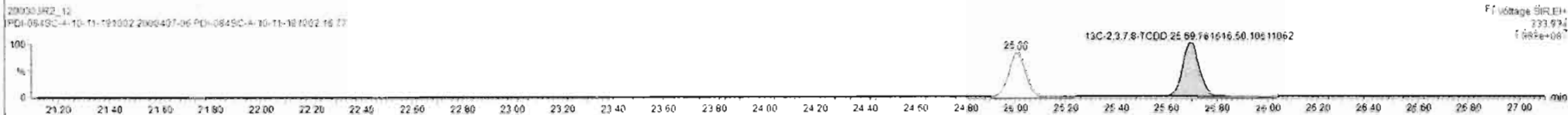
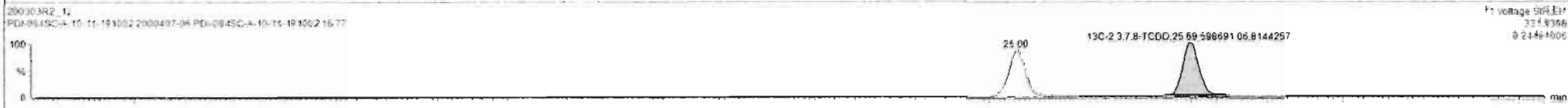
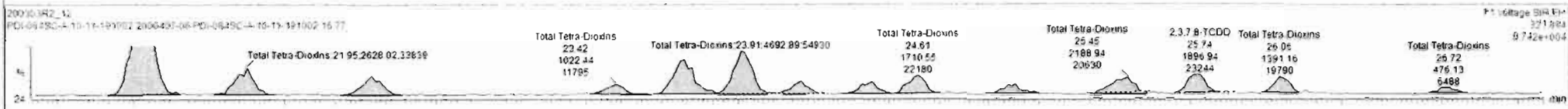
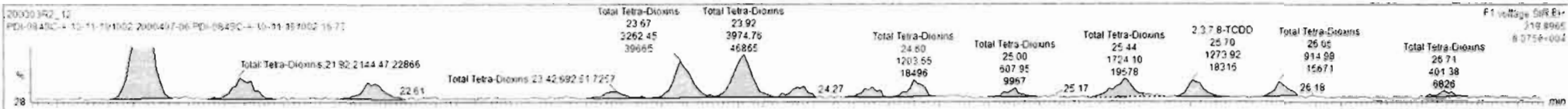
200303R2\_12



200303R2\_12 - 2000407-06 PDI-084SC-A-10-11-191002 16 77 - PDI-084SC-A-10-11-191002

Name	Resp	RA	nly	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9861	10.021			9.83		0.0691	0.83
40 Total Penta-Dioxins				0.9723	10.021			19.6		0.119	21.6

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Dioxins	21.53	9.596e3	1.392e4	0.74	NO	3.2911	3.2911
2 Total Tetra-Dioxins	21.62	3.144e3	2.629e3	0.82	NO	0.69936	0.69636
3 Total Tetra-Dioxins	22.43	1.677e3	7.067e3	0.61	NO	0.54778	0.54778
4 Total Tetra-Dioxins	23.42	6.526e2	1.022e3	0.66	NO	0.25097	0.25097
5 Total Tetra-Dioxins	23.67	3.262e3	4.085e3	0.80	NO	1.0752	1.0752
6 Total Tetra-Dioxins	23.92	3.975e3	4.893e3	0.85	NO	1.2683	1.2683
7 Total Tetra-Dioxins	24.18	6.542e2	1.123e3	0.80	NO	0.29513	0.29513
8 Total Tetra-Dioxins	24.43	7.887e2	1.057e3	0.75	NO	0.27009	0.27009
9 Total Tetra-Dioxins	24.60	1.204e3	1.711e3	0.70	NO	0.42644	0.42644
10 Total Tetra-Dioxins	25.00	8.080e2	8.150e2	0.75	NO	0.20822	0.20822
11 Total Tetra-Dioxins	25.44	1.724e3	2.189e3	0.79	NO	0.57260	0.57260
12 2,3,7,8-TCDD	25.70	1.274e3	1.897e3	0.67	NO	0.46400	0.46400
13 Total Tetra-Dioxins	26.05	9.150e2	1.391e3	0.66	NO	0.33746	0.33746
14 Total Tetra-Dioxins	26.71	4.014e2	4.761e2	0.84	NO	0.12641	0.12641





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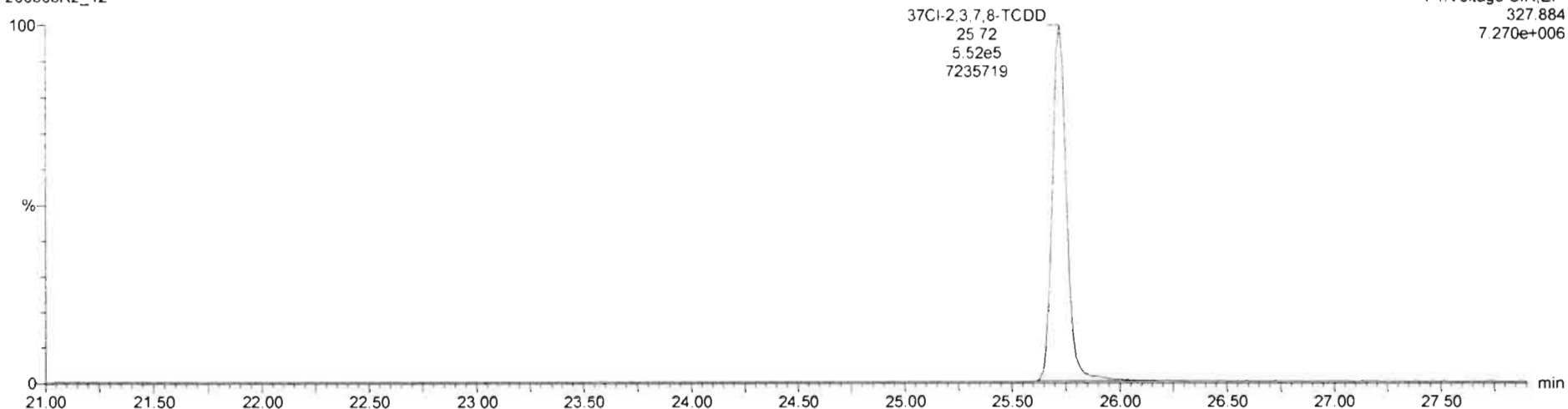
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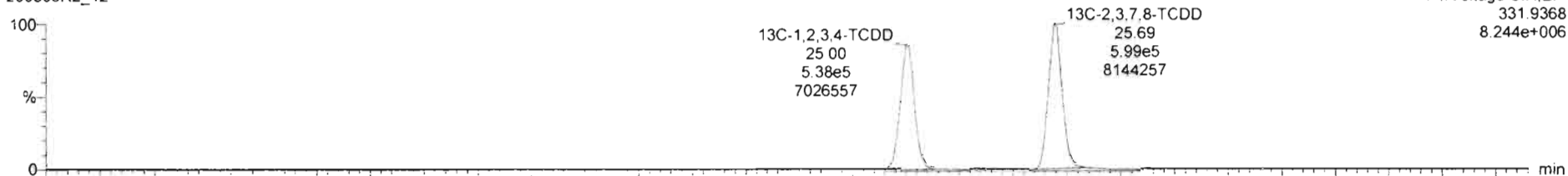
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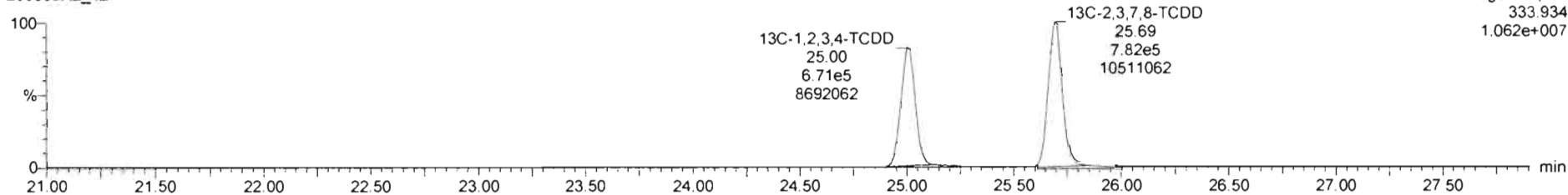


13C-1,2,3,4-TCDD

200303R2\_12



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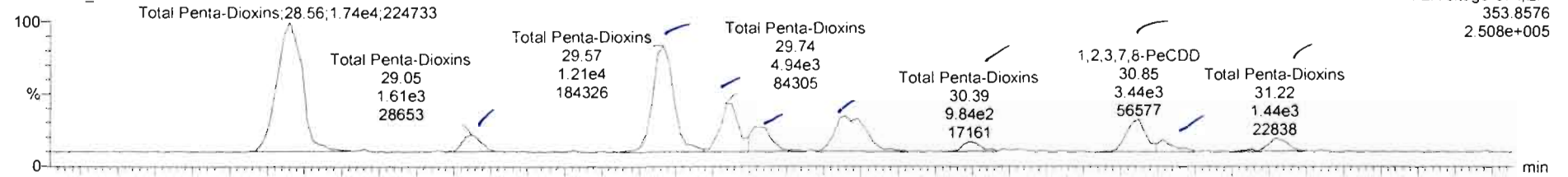
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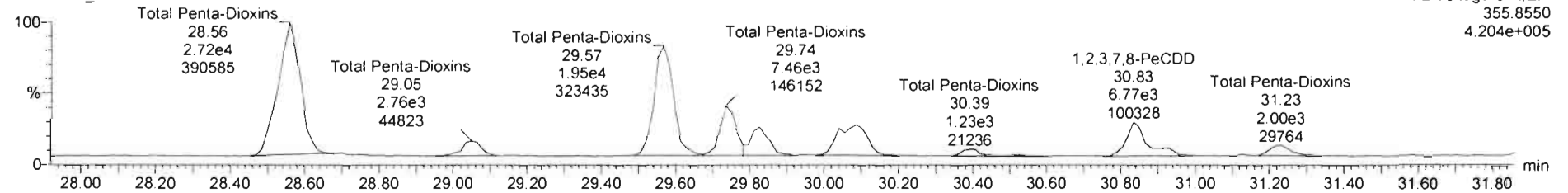
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1,2,3,7,8-PeCDD

200303R2\_12

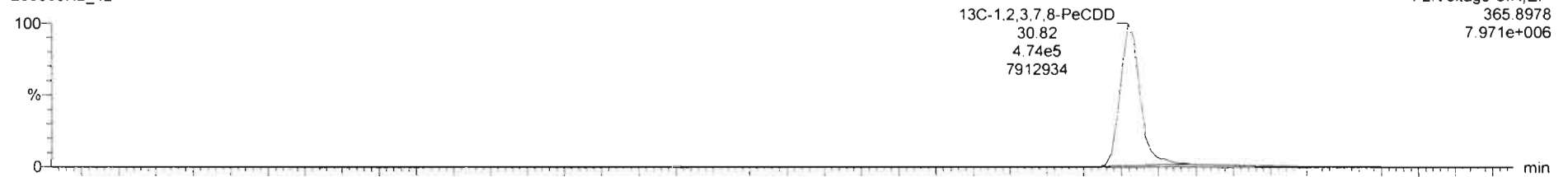


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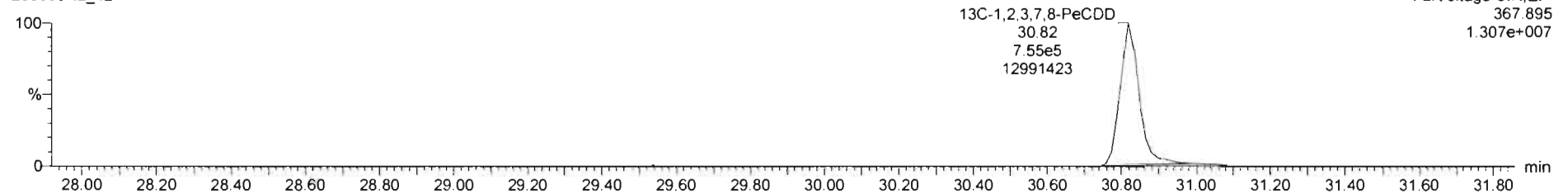


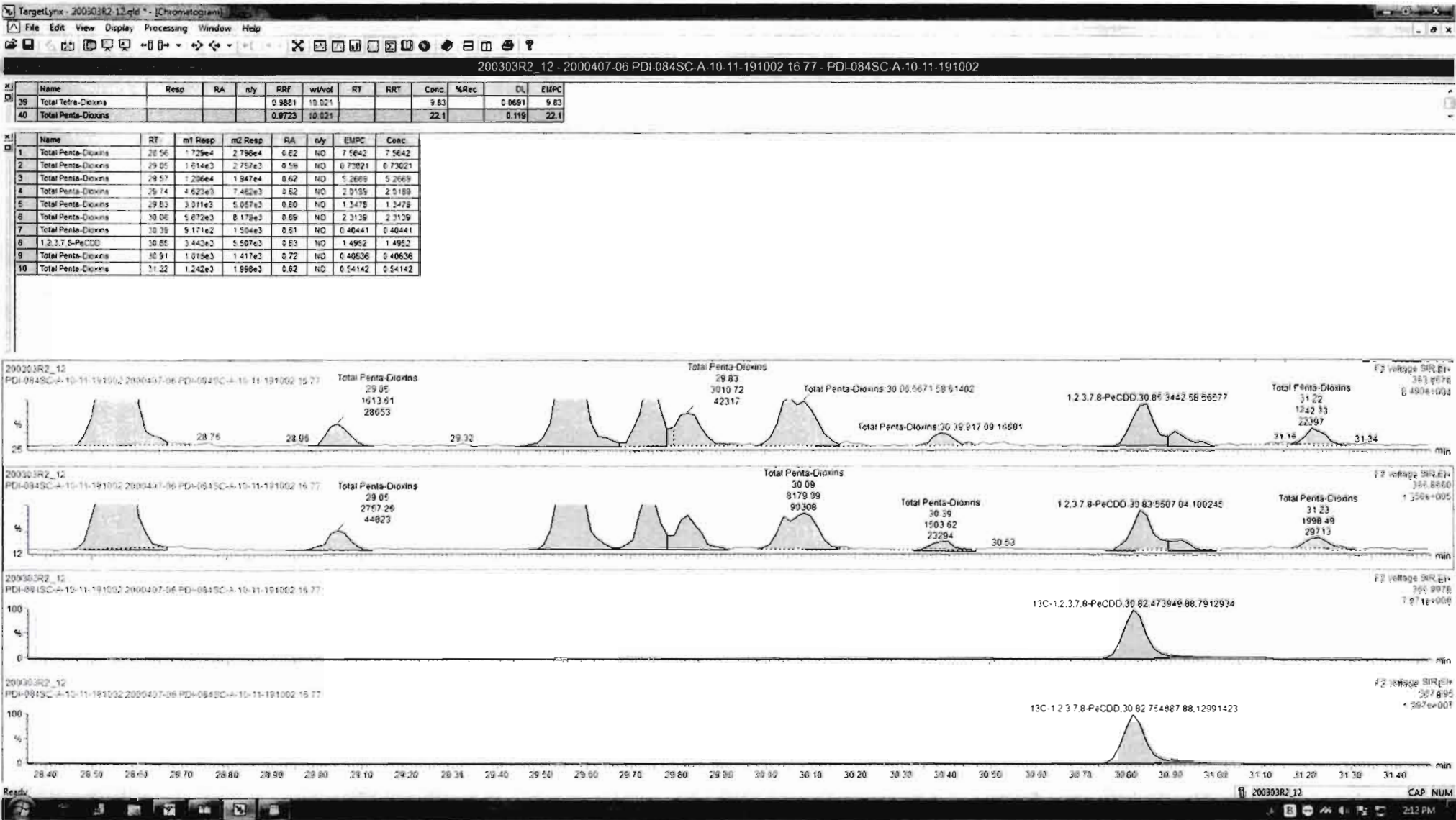
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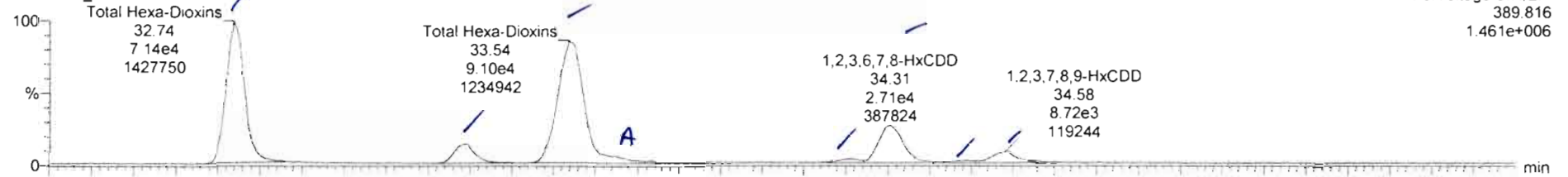
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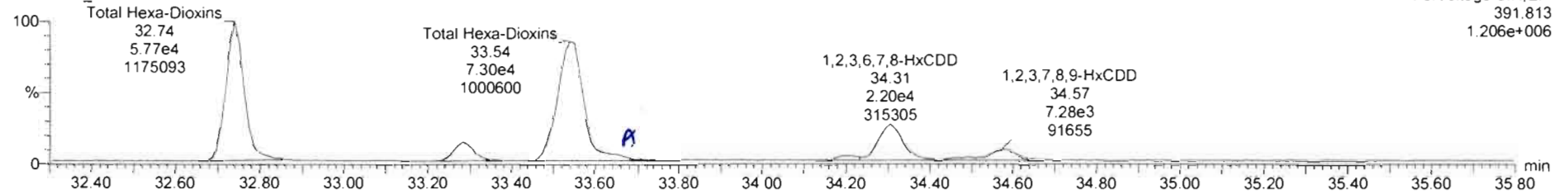
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**1,2,3,4,7,8-HxCDD**

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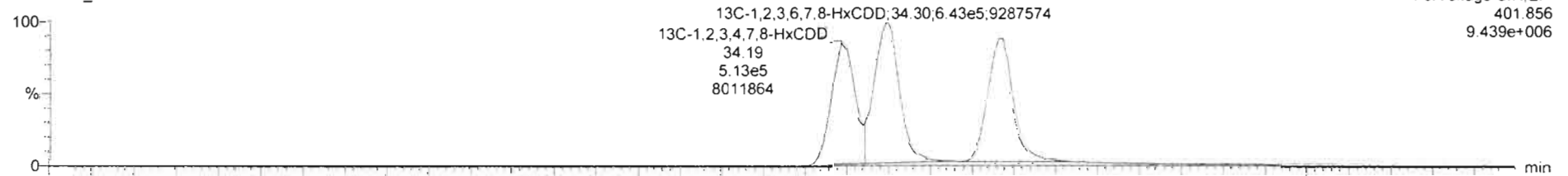


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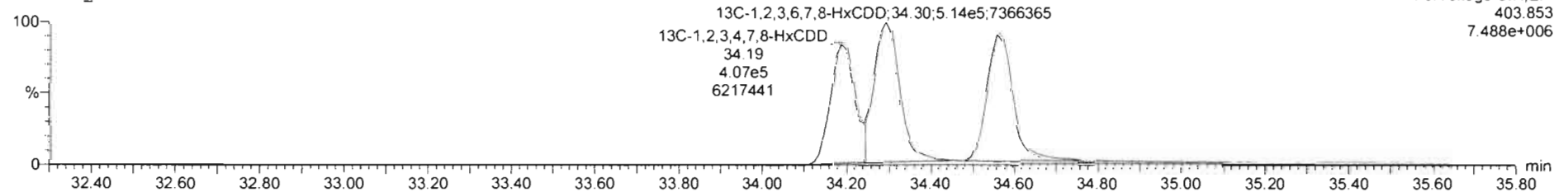


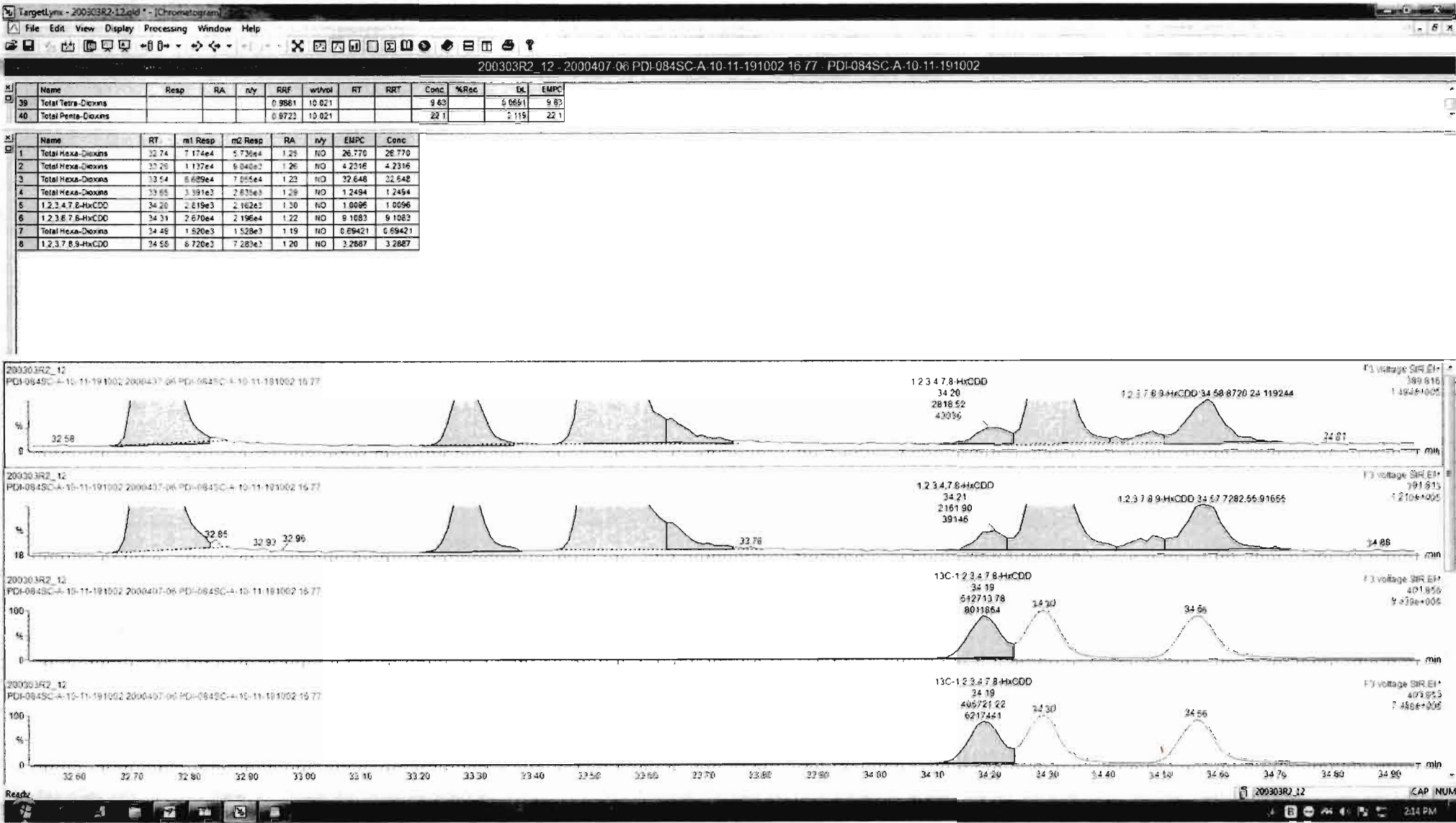
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200303R2\_12







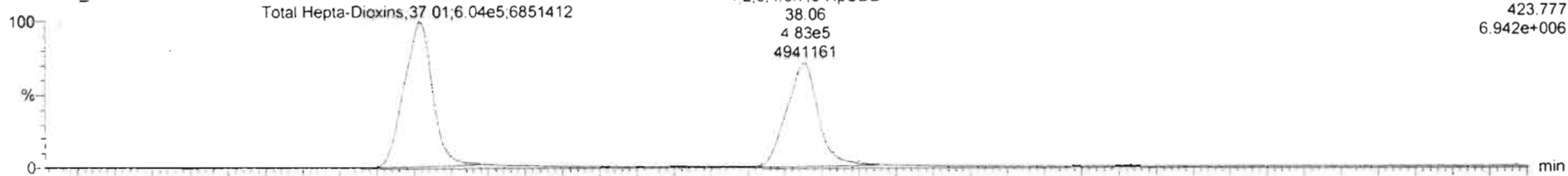
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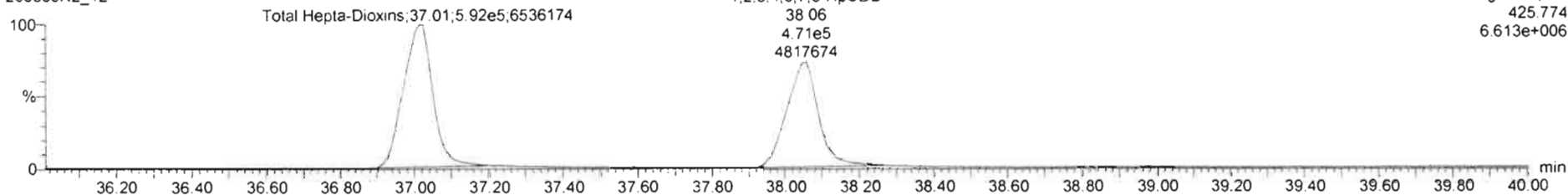
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1,2,3,4,6,7,8-HpCDD

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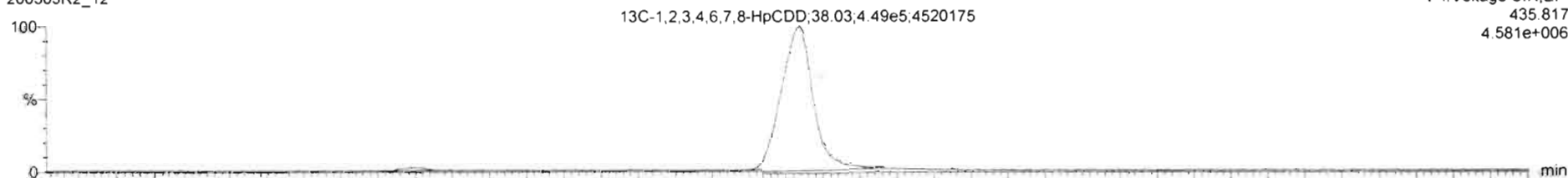


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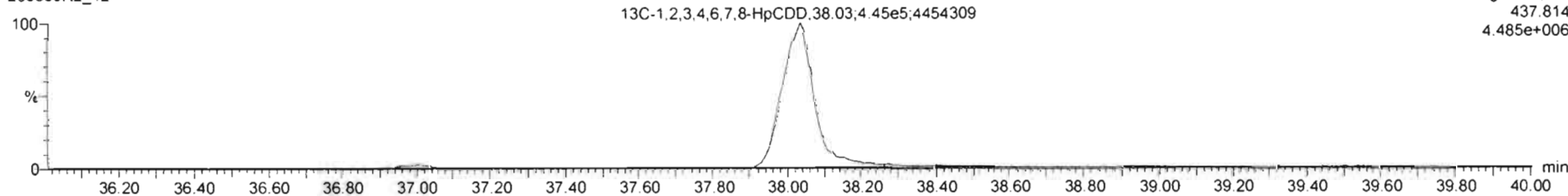


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200303R2\_12



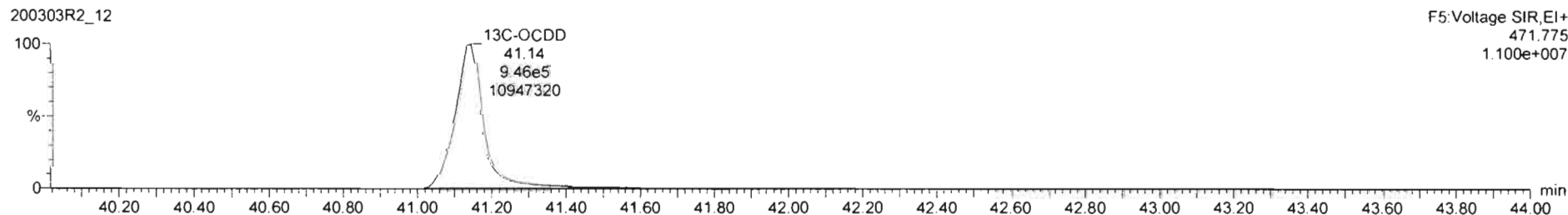
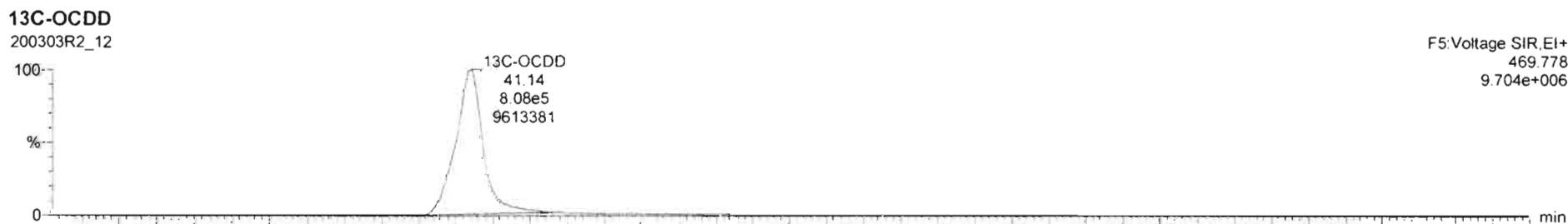
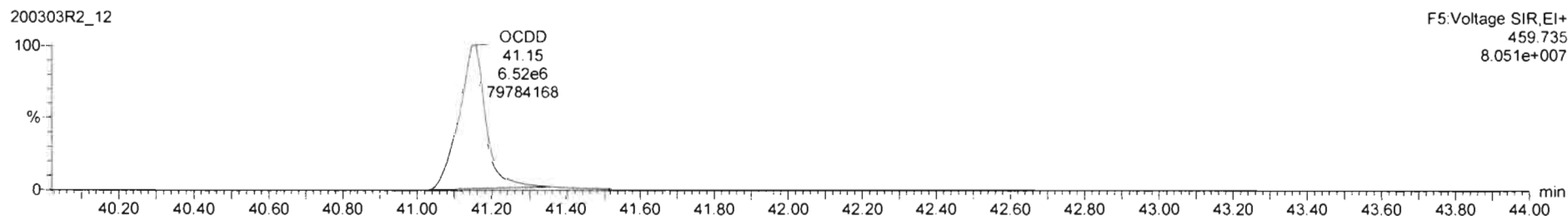
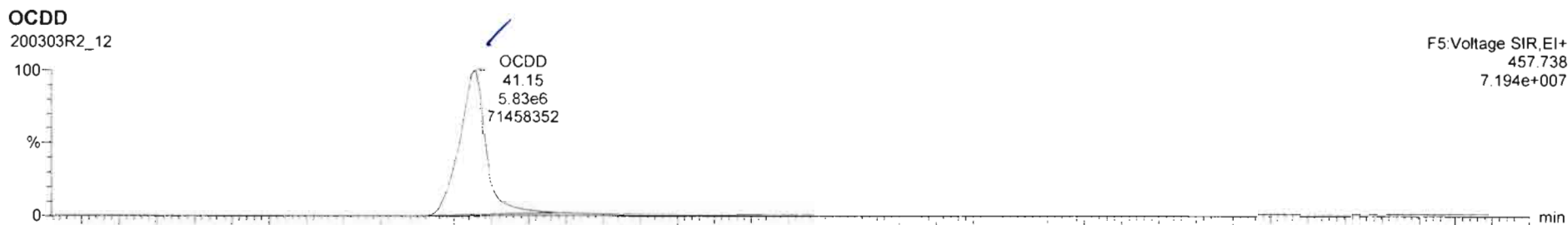
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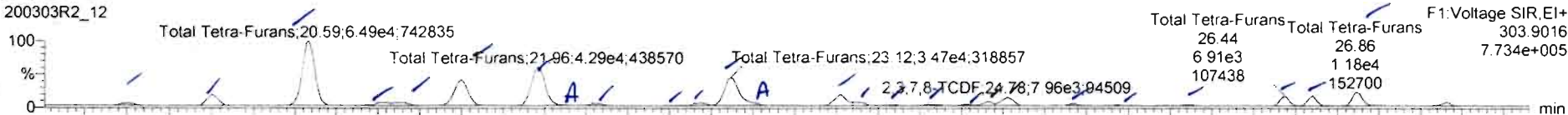
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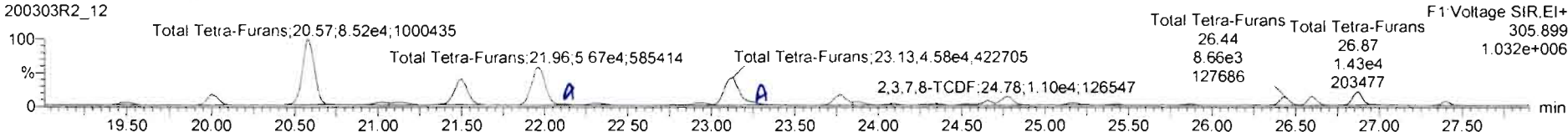
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2,3,7,8-TCDF

200303R2\_12

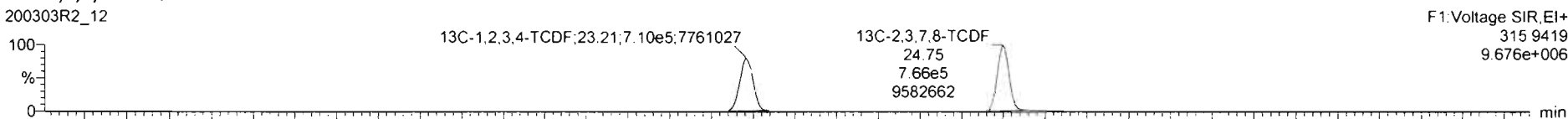


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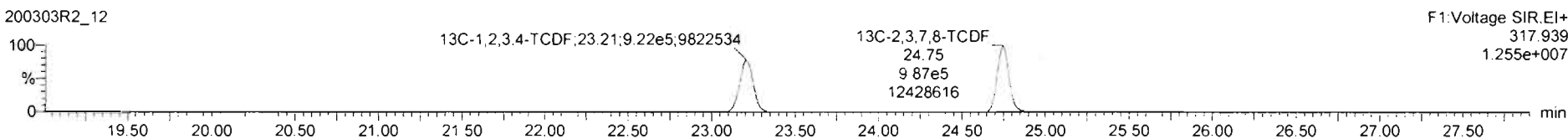


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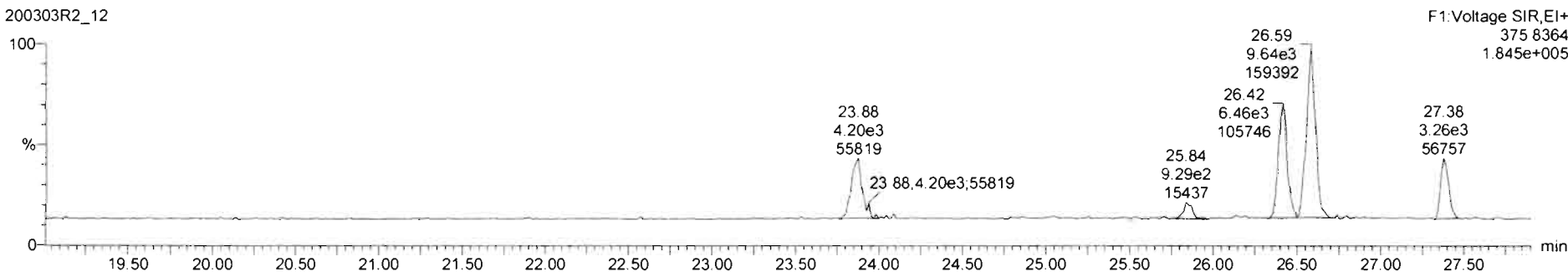


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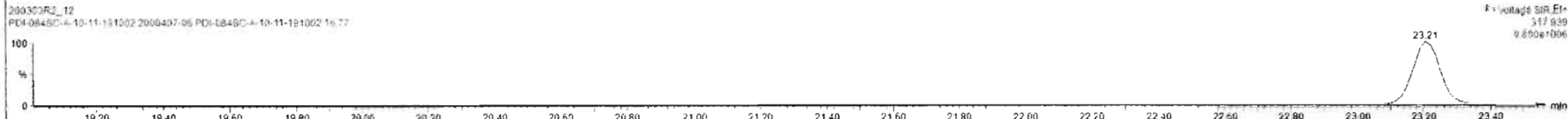
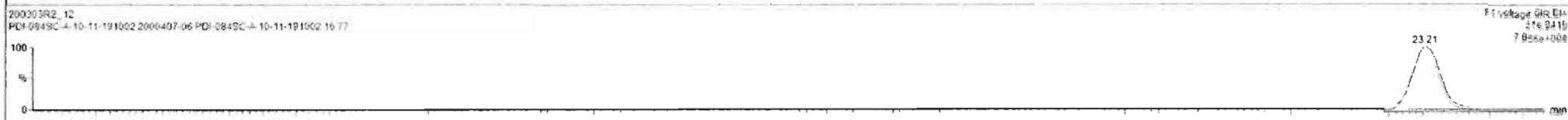
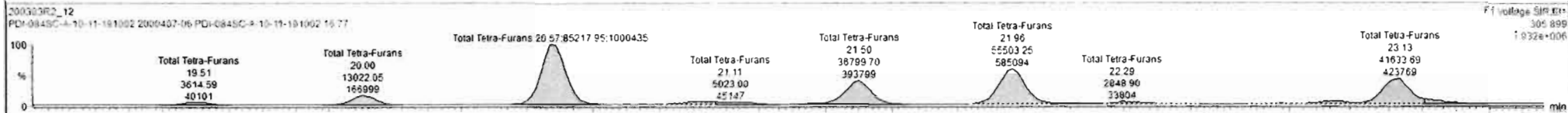
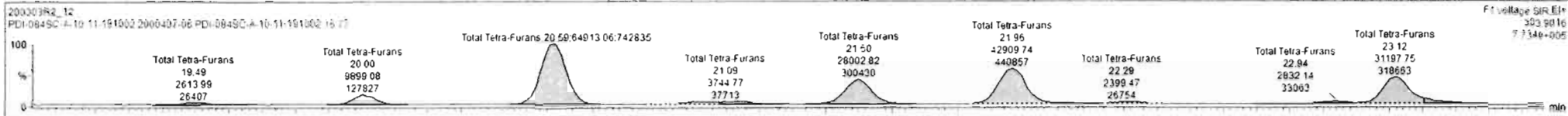
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200303R2\_12



Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
42 Total Hepta-Dioxans				0.9231	10.021			520		1.03	520
43 Total Tetra-Furans				0.8020	10.021			83.0		0.169	84.2

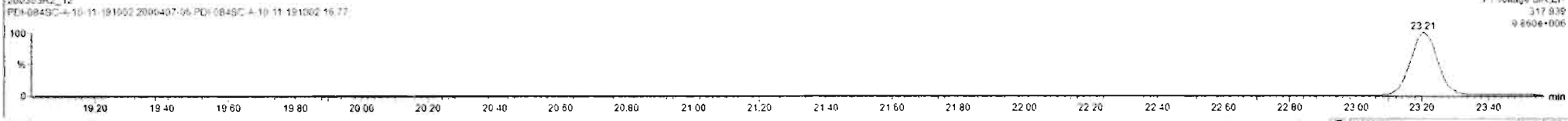
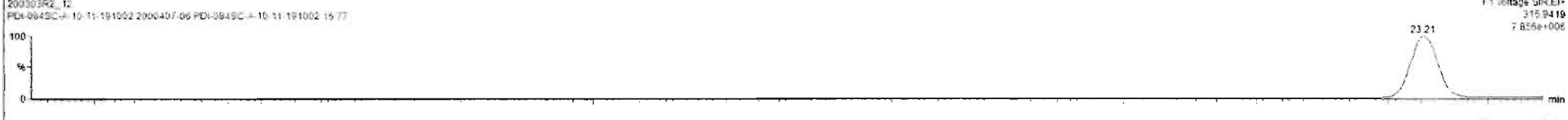
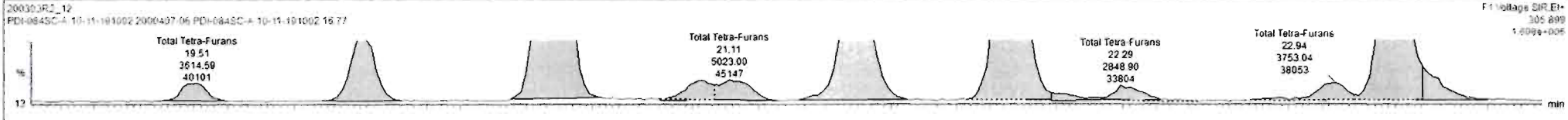
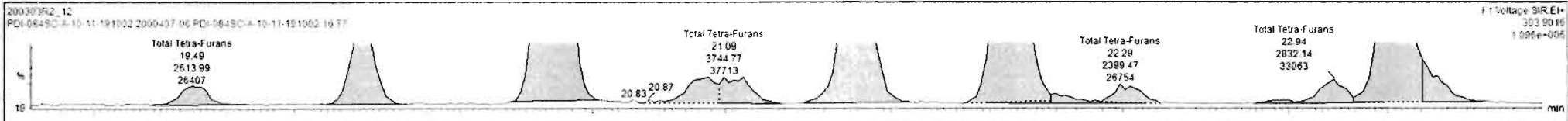
Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Furans	19.49	2.614e3	3.015e3	0.72	NO	0.88429	0.88429
2 Total Tetra-Furans	20.00	9.699e3	1.302e4	0.76	NO	2.2542	3.2542
3 Total Tetra-Furans	20.59	6.491e4	8.522e4	0.76	NO	21.314	21.314
4 Total Tetra-Furans	21.05	3.632e3	4.146e3	0.86	NO	1.1044	1.1044
5 Total Tetra-Furans	21.09	3.745e3	5.023e3	0.75	NO	1.2448	1.2448
6 Total Tetra-Furans	21.50	2.800e4	3.680e4	0.76	NO	9.2002	9.2002
7 Total Tetra-Furans	21.96	4.291e4	5.560e4	0.77	NO	13.972	13.972
8 Total Tetra-Furans	22.10	1.174e3	1.472e3	0.80	NO	0.37573	0.37573
9 Total Tetra-Furans	22.29	2.399e3	2.849e3	0.84	NO	0.74512	0.74512
10 Total Tetra-Furans	22.77	4.198e2	5.592e2	0.75	NO	0.13699	0.13699
11 Total Tetra-Furans	22.94	2.832e3	3.793e3	0.76	NO	0.92491	0.92491
12 Total Tetra-Furans	23.12	3.120e4	4.163e4	0.75	NO	10.340	10.340
13 Total Tetra-Furans	23.21	3.566e3	4.477e3	0.80	NO	1.1417	1.1417



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Name	Resp	RA	n/y	RRF	wt/ol	RT	RRT	Conc	%Rec	DL	EMPC
42 Total Hexa-Chlorins				0.9231	10.021			520		1.03	520
43 Total Tetra-Furans				0.8020	10.021			83.0		0.168	84.2

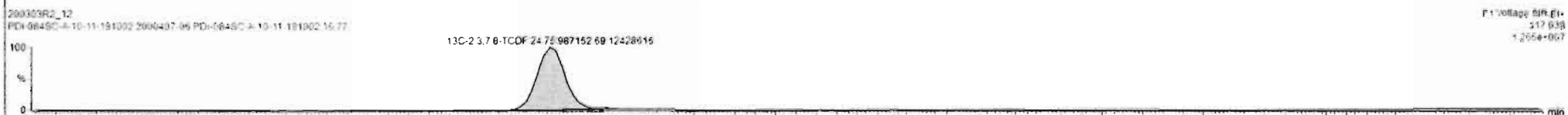
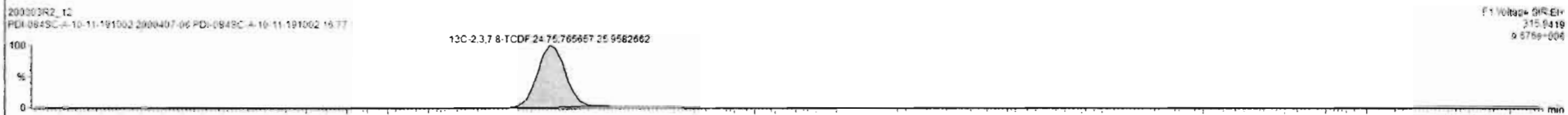
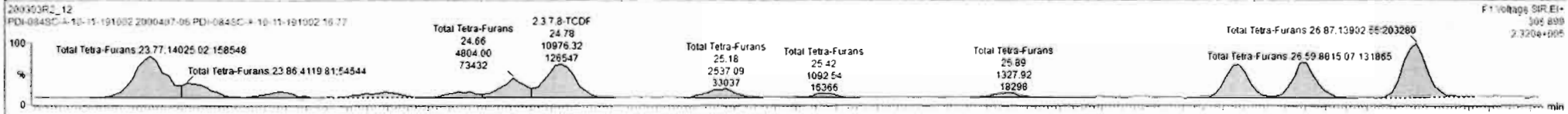
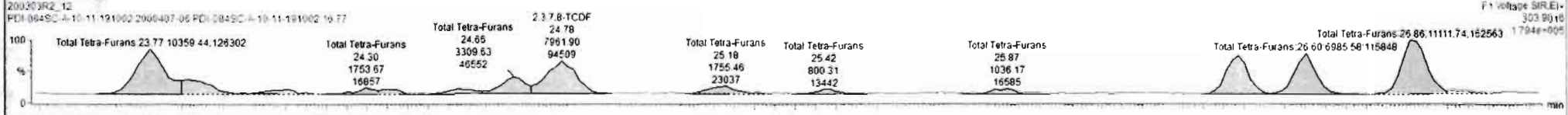
Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Tetra-Furans	19.49	2.614e3	3.615e3	0.72	NO	0.88429	0.86428
2 Total Tetra-Furans	20.00	9.899e3	1.302e4	0.76	NO	2.2542	2.2542
3 Total Tetra-Furans	20.59	6.491e4	8.522e4	0.76	NO	21.314	21.314
4 Total Tetra-Furans	21.05	3.632e3	4.149e3	0.88	NO	1.1044	1.1044
5 Total Tetra-Furans	21.09	3.745e3	5.023e3	0.75	NO	1.2448	1.2448
6 Total Tetra-Furans	21.90	2.800e4	3.680e4	0.76	NO	9.2002	9.2002
7 Total Tetra-Furans	21.96	4.291e4	5.550e4	0.77	NO	13.972	13.972
8 Total Tetra-Furans	22.10	1.174e3	1.472e3	0.80	NO	0.37573	0.37573
9 Total Tetra-Furans	22.29	2.399e3	2.849e3	0.84	NO	0.74512	0.74512
10 Total Tetra-Furans	22.77	4.198e2	5.592e2	0.75	NO	0.13899	0.13899
11 Total Tetra-Furans	22.94	2.833e3	3.753e3	0.75	NO	0.92491	0.93491
12 Total Tetra-Furans	23.12	3.120e4	4.163e4	0.75	NO	10.340	10.340
13 Total Tetra-Furans	23.21	3.565e3	4.477e3	0.80	NO	1.1417	1.1417

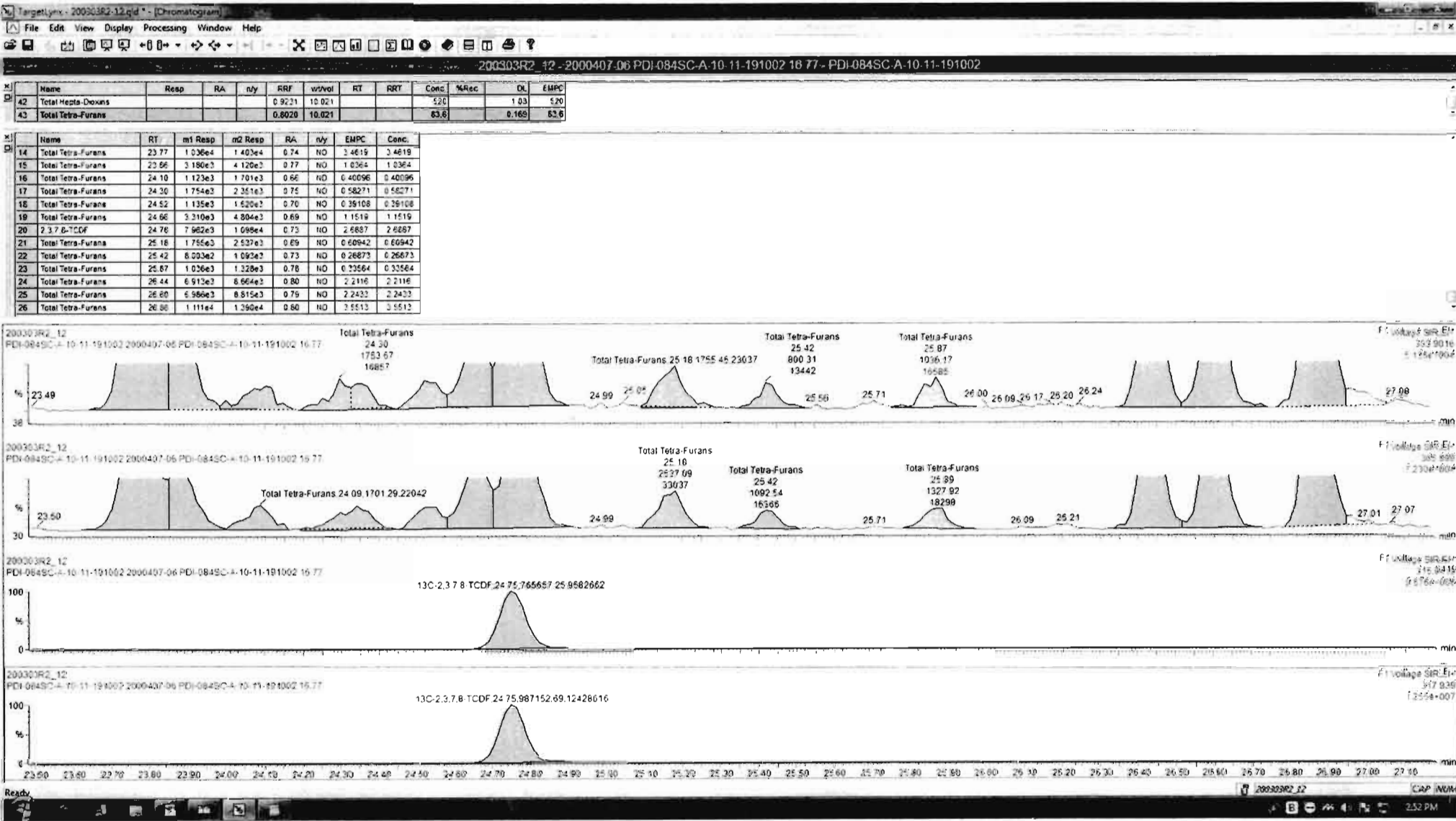




Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
42 Total Hepta-Dioxins				0.9231	10.021			520		1.03	520
43 Total Tetra-Furans				0.8020	10.021			83.6		0.169	83.6

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
14 Total Tetra-Furans	23.77	1.036e4	1.403e4	0.74	NO	3.4619	3.4619
15 Total Tetra-Furans	23.86	3.180e3	4.120e3	0.77	NO	1.0364	1.0364
16 Total Tetra-Furans	24.10	1.123e3	1.701e3	0.66	NO	0.40096	0.40096
17 Total Tetra-Furans	24.30	1.754e3	2.351e3	0.75	NO	0.58271	0.58271
18 Total Tetra-Furans	24.52	1.135e3	1.620e3	0.70	NO	0.39108	0.39108
19 Total Tetra-Furans	24.86	3.310e3	4.804e3	0.69	NO	1.1519	1.1519
20 2,3,7,8-TCDF	24.78	7.562e3	1.098e4	0.73	NO	2.6887	2.6887
21 Total Tetra-Furans	25.18	1.755e3	2.537e3	0.69	NO	0.60942	0.60942
22 Total Tetra-Furans	25.42	8.003e2	1.092e3	0.73	NO	0.26873	0.26873
23 Total Tetra-Furans	25.87	1.036e3	1.328e3	0.78	NO	0.33564	0.33564
24 Total Tetra-Furans	26.44	6.913e2	8.564e2	0.80	NO	2.2116	2.2116
25 Total Tetra-Furans	26.80	6.986e2	8.815e2	0.79	NO	2.2433	2.2433
26 Total Tetra-Furans	26.86	1.111e4	1.390e4	0.80	NO	3.5513	3.5513





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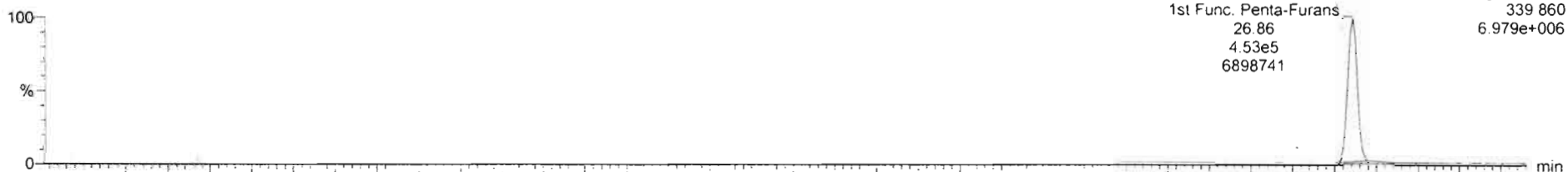
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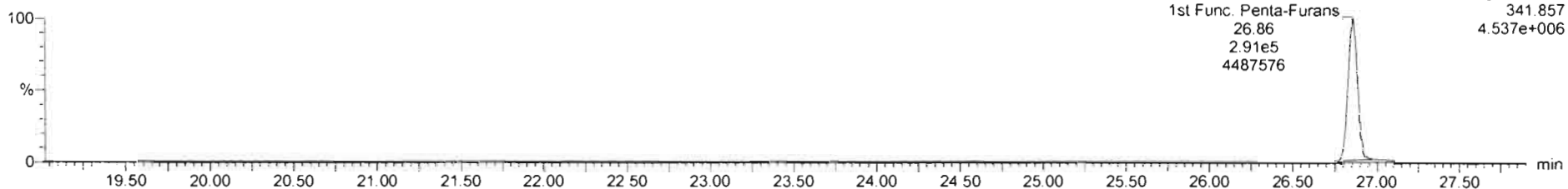
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1st Func. Penta-Furans

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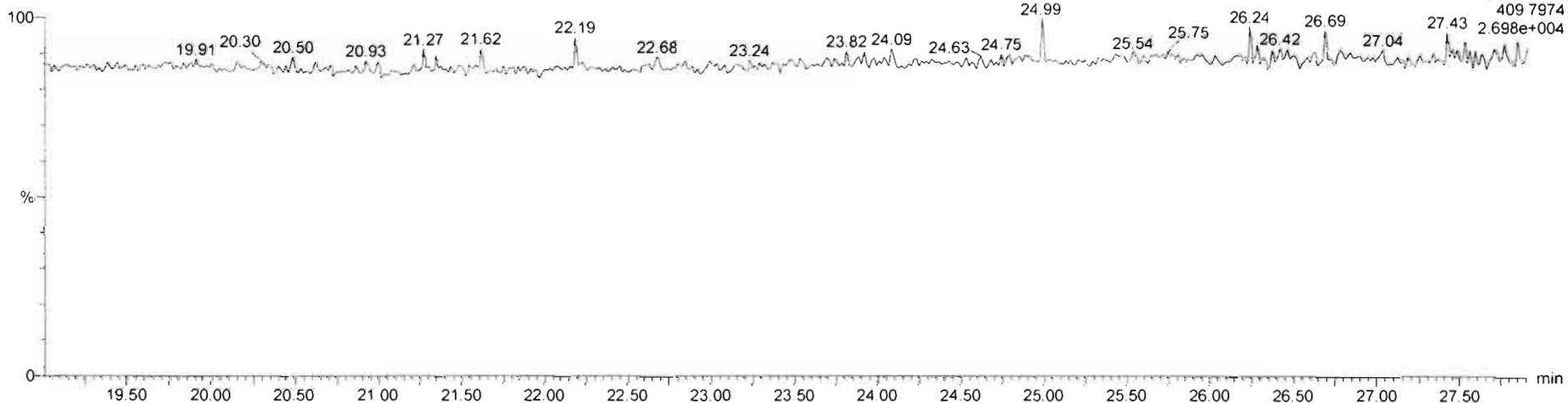


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DPE6

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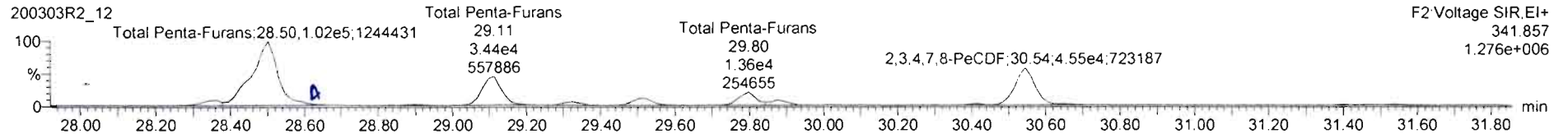
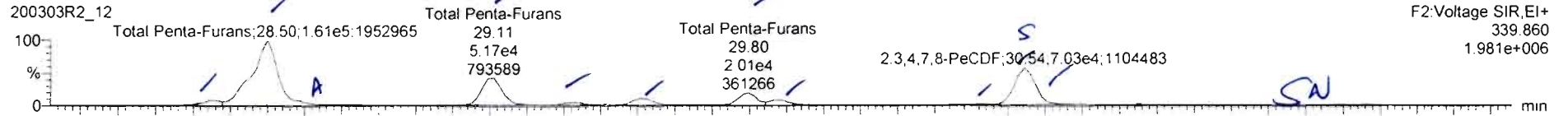


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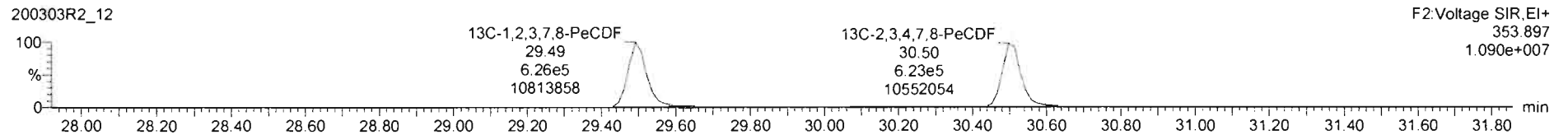
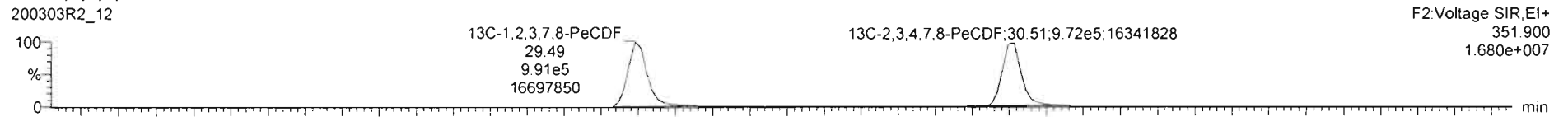
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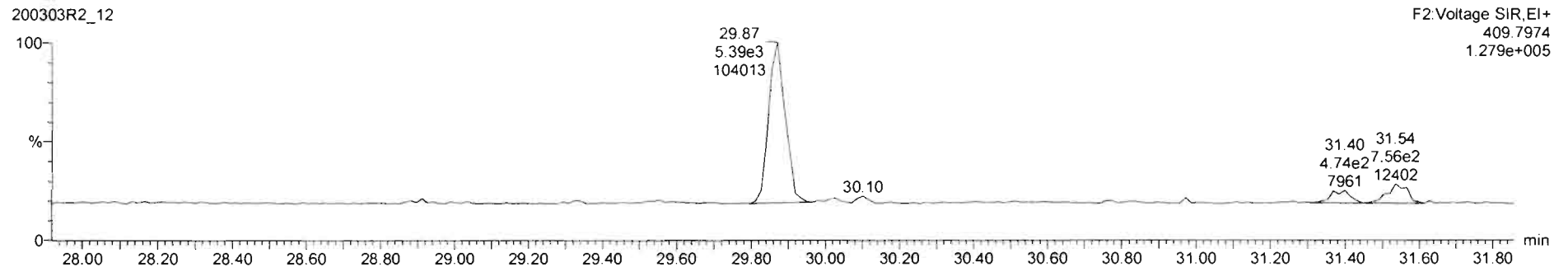
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13C-1,2,3,7,8-PeCDF

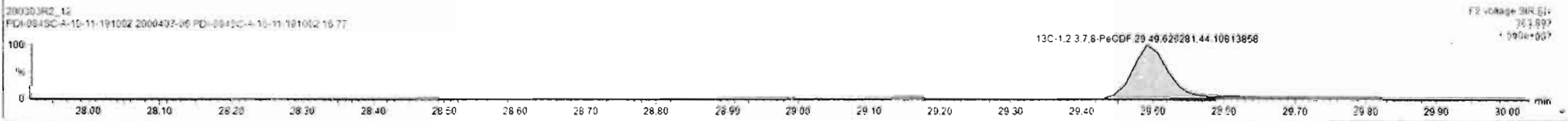
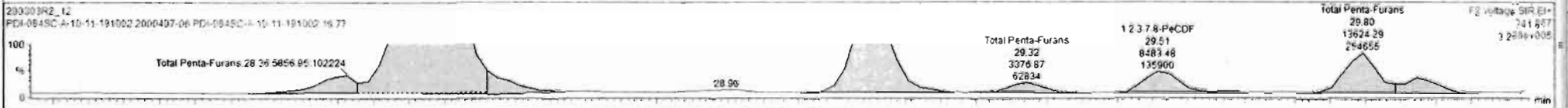
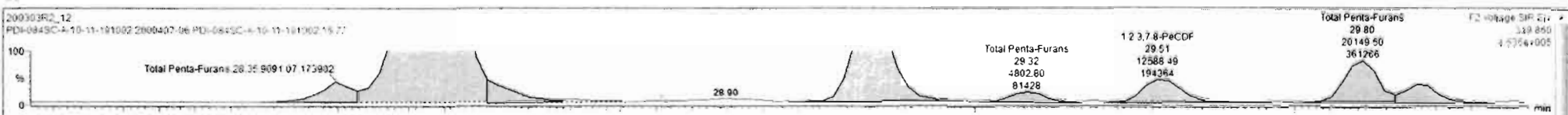


DPE2



Name	Resp	RA	nly	RRF	wt/vol	RT	RRT	Conc	%Rec	DL	EMPC
45 Total Penta-Furans				0.9074	10.021			76.0		0.275	77.0
46 Total Hexa-Furans				0.8962	10.021			186		0.230	186

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Penta-Furans	28.25	9.091e3	5.657e3	1.55	NO	2.0469	2.0469
2 Total Penta-Furans	28.50	1.516e5	9.809e4	1.55	NO	34.219	34.219
3 Total Penta-Furans	28.56	8.216e3	5.299e3	1.55	NO	1.8509	1.8509
4 Total Penta-Furans	28.11	5.167e4	3.441e4	1.50	NO	11.788	11.788
5 Total Penta-Furans	29.32	4.803e3	3.377e3	1.42	NO	1.1201	1.1201
6 1,2,3,7,8-PeCDF	29.51	1.259e4	8.483e3	1.48	NO	2.8653	2.8653
7 Total Penta-Furans	29.80	2.015e4	1.362e4	1.46	NO	4.6248	4.6248
8 Total Penta-Furans	29.87	9.090e3	5.483e3	1.68	NO	1.9959	1.9959
9 Total Penta-Furans	30.28	2.720e2	2.031e2	1.34	NO	0.065058	0.065058
10 Total Penta-Furans	30.42	2.175e3	1.293e3	1.65	NO	0.48941	0.48941
11 2,3,4,7,8-PeCDF	30.55	7.034e4	4.550e4	1.55	NO	16.234	16.234
12 Total Penta-Furans	31.40	7.538e2	5.189e2	1.45	NO	0.17427	0.17427
13 Total Penta-Furans	31.46	8.317e2	5.366e2	1.55	NO	0.18737	0.18737
14 Total Penta-Furans	31.54	1.786e3	9.531e2	1.86	YES	0.33282	0.00060

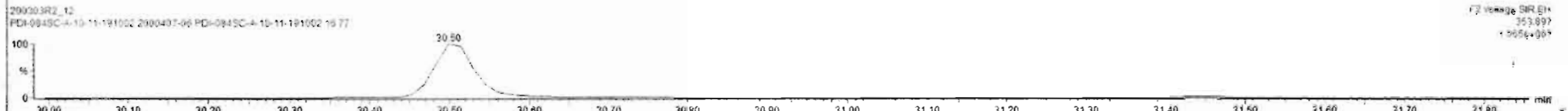
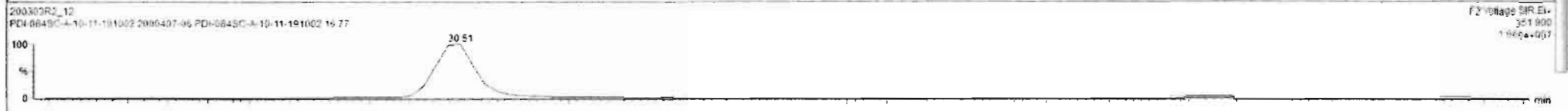
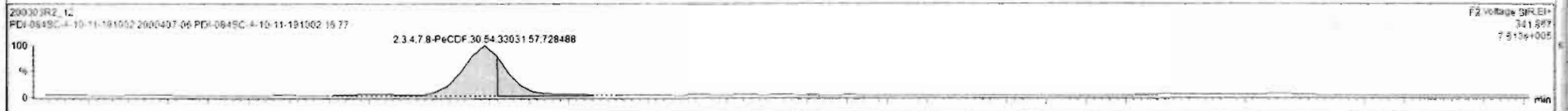




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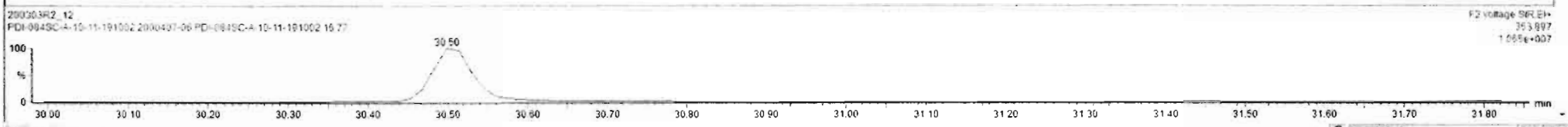
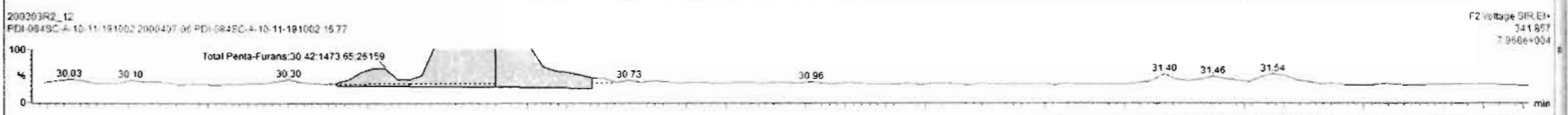
Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc	%Rec	CL	EMPC
45 Total Penta-Furans				0.8074	10.021			76.6	0.275	76.6	
46 Total Hexa-Furans				0.8982	10.021			18E	0.230	18E	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Penta-Furans	28.25	9.091e3	5.657e3	1.55	NO	2.0469	2.0469
2 Total Penta-Furans	28.50	1.518e5	9.809e4	1.55	NO	34.219	34.219
3 Total Penta-Furans	28.56	8.218e3	5.299e3	1.55	NO	1.8509	1.8509
4 Total Penta-Furans	29.11	5.167e4	3.441e4	1.50	NO	11.758	11.758
5 Total Penta-Furans	29.32	4.603e3	3.377e2	1.42	NO	1.1201	1.1201
6 2,3,4,7,8-PeCDF	29.51	1.259e4	8.483e3	1.48	NO	2.8653	2.8653
7 Total Penta-Furans	29.80	2.015e4	1.362e4	1.48	NO	4.6245	4.6245
8 Total Penta-Furans	29.87	9.093e3	5.483e3	1.66	NO	1.9959	1.9959
9 Total Penta-Furans	30.42	1.987e3	1.474e3	1.3E	NO	0.47382	0.47382
10 2,3,4,7,8-PeCDF	30.54	4.921e4	3.392e4	1.49	NO	10.828	10.828
11 Total Penta-Furans	30.56	2.129e4	1.372e4	1.55	NO	4.7946	4.7946



Name	Resp	RA	n/y	RRF	w9vol	RT	RRT	Conc	%Rec	DL	EMPC
45 Total Penta-Furans				0.9074	10.021			76.6		0.275	76.6
46 Total Hexa-Furans				0.8982	10.021			186		0.230	186

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Penta-Furans	28.35	9.091e3	5.657e3	1.55	NO	2.0469	2.0469
2 Total Penta-Furans	28.50	1.510e5	9.609e4	1.55	NO	34.219	34.219
3 Total Penta-Furans	28.56	8.218e3	5.299e3	1.55	NO	1.8509	1.8509
4 Total Penta-Furans	29.11	5.167e4	3.441e4	1.50	NO	11.785	11.785
5 Total Penta-Furans	29.32	4.202e3	3.377e3	1.42	NO	1.1201	1.1201
6 1,2,3,7,8-PeCDF	29.51	1.259e4	8.483e3	1.48	NO	2.8653	2.8653
7 Total Penta-Furans	29.80	2.015e4	1.362e4	1.46	NO	4.6248	4.6248
8 Total Penta-Furans	29.87	9.092e3	5.483e3	1.66	NO	1.9959	1.9959
9 Total Penta-Furans	30.42	1.987e3	1.474e3	1.35	NO	0.47382	0.47382
10 2,3,4,7,8-PeCDF	30.54	4.931e4	3.303e4	1.49	NO	10.828	10.828
11 Total Penta-Furans	30.56	2.129e4	1.373e4	1.55	NO	4.7946	4.7946

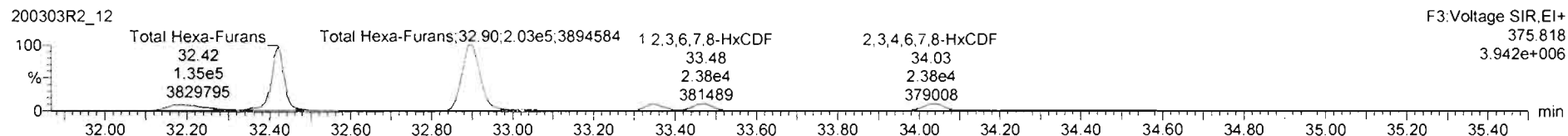
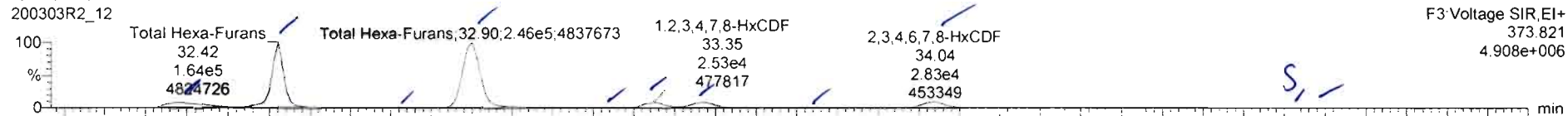


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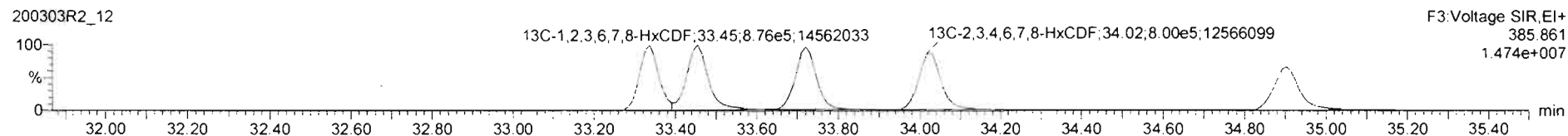
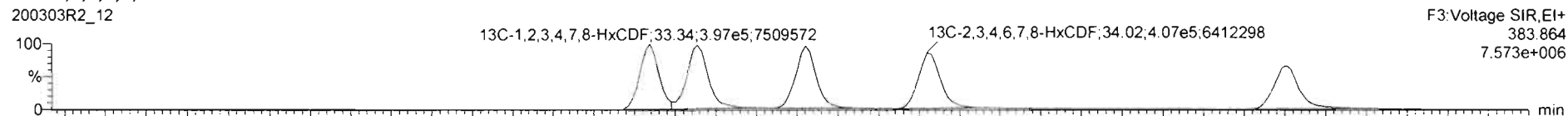
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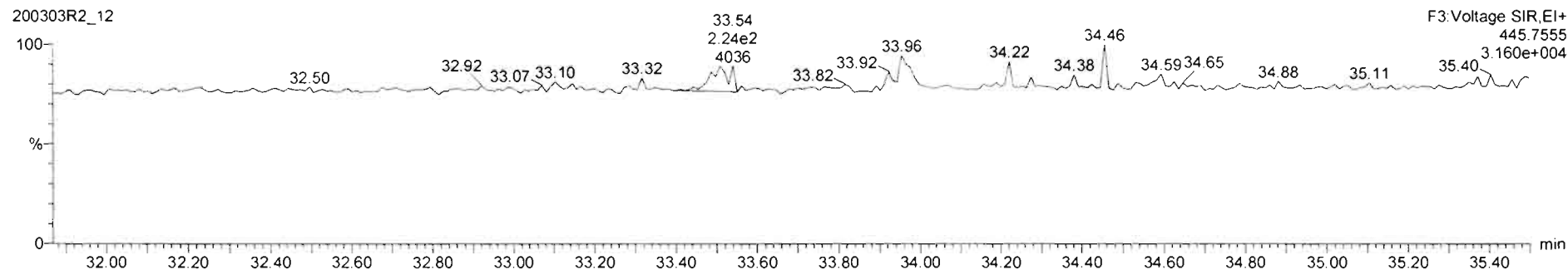
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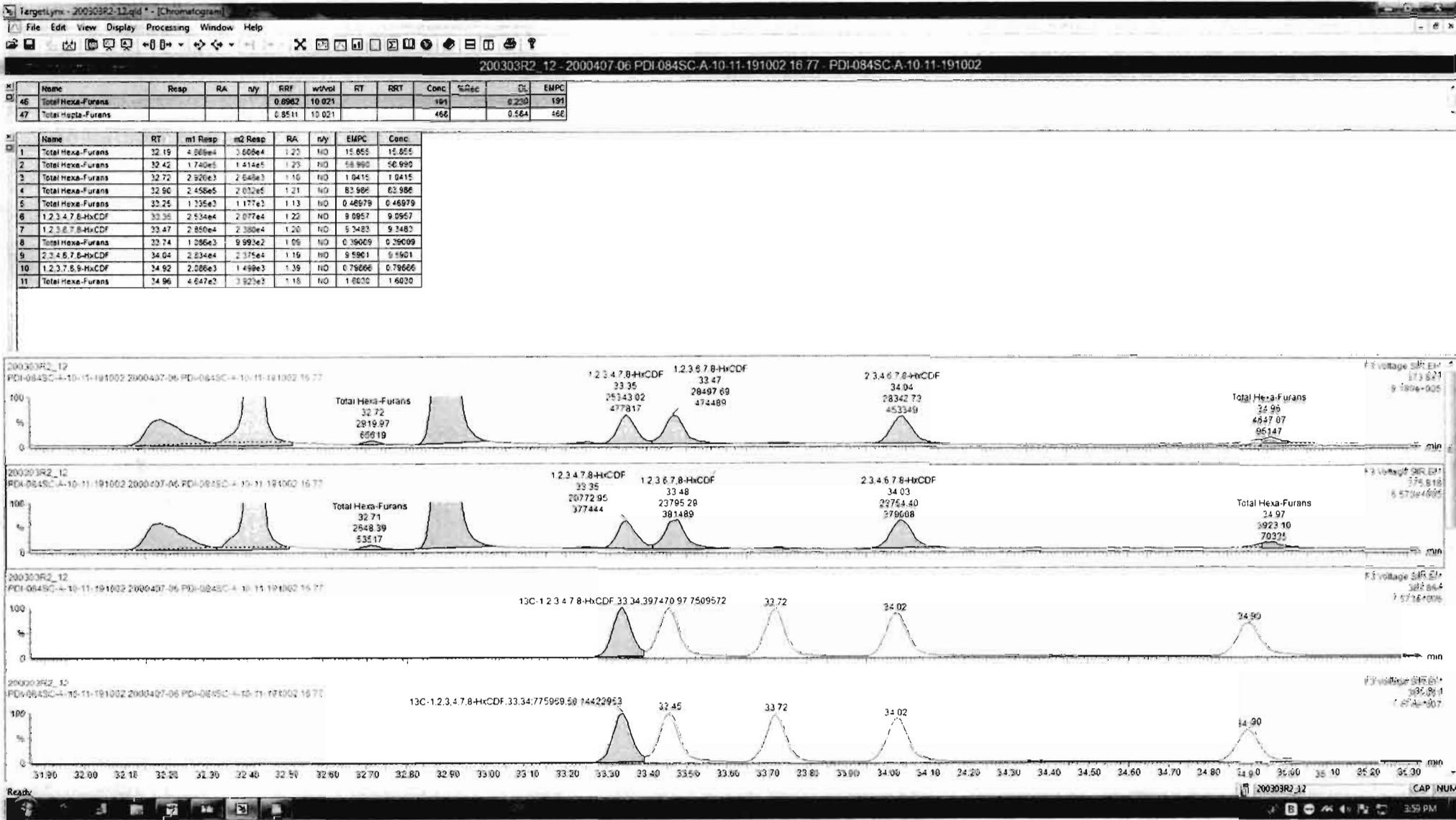


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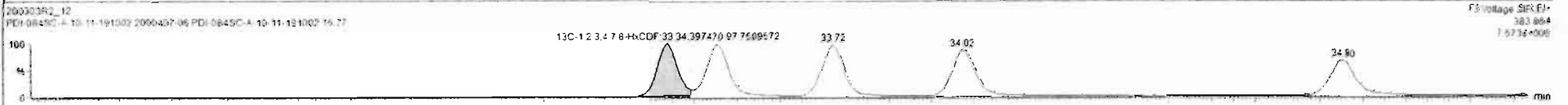
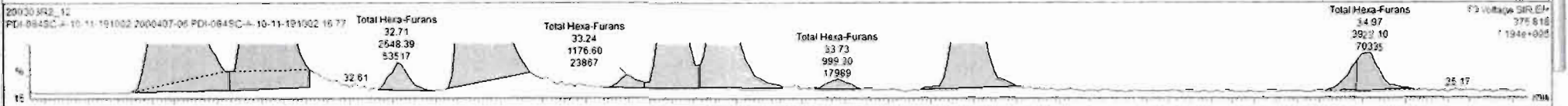
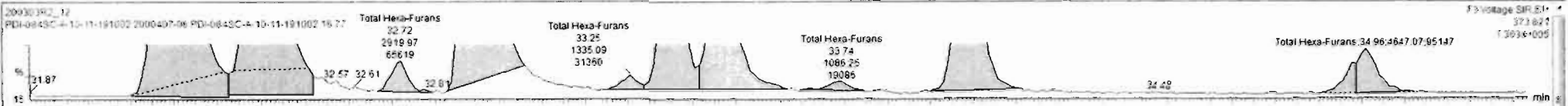
DPE3





Name	Resp	RA	nHy	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
46 Total Hexa-Furans				0.6962	10.021			191		0.230	191
47 Total Hepta-Furans				0.8511	10.021			468		0.564	468

Name	RT	m1 Resp	m2 Resp	RA	nHy	EMPC	Conc
1 Total Hexa-Furans	32.19	4.669e4	3.606e4	1.23	NO	15.855	15.855
2 Total Hexa-Furans	32.42	1.740e5	1.414e5	1.23	NO	58.960	58.960
3 Total Hexa-Furans	32.72	2.920e3	2.648e3	1.10	NO	1.0415	1.0415
4 Total Hexa-Furans	32.90	2.456e5	2.032e5	1.21	NO	52.986	52.986
5 Total Hexa-Furans	33.25	1.335e3	1.177e3	1.13	NO	0.46979	0.46979
6 1,2,3,4,7,8-HxCDF	33.35	2.534e4	2.077e4	1.22	NO	9.0957	9.0957
7 1,2,3,6,7,8-HxCDF	33.47	2.850e4	2.380e4	1.20	NO	5.2483	5.2483
8 Total Hexa-Furans	33.74	1.086e3	9.593e2	1.09	NO	0.39009	0.39009
9 2,3,4,6,7,8-HxCDF	34.04	2.834e4	2.375e4	1.15	NO	9.5901	9.5901
10 1,2,3,7,8,9-HxCDF	34.92	2.086e3	1.499e3	1.39	NO	0.79666	0.79666
11 Total Hexa-Furans	34.96	4.647e2	3.523e2	1.18	NO	1.6030	1.6030





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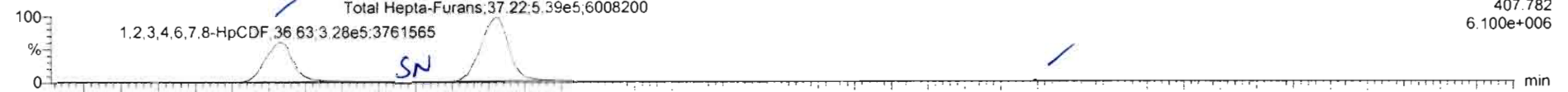
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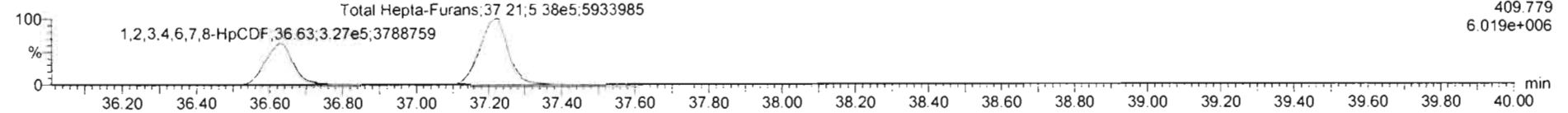
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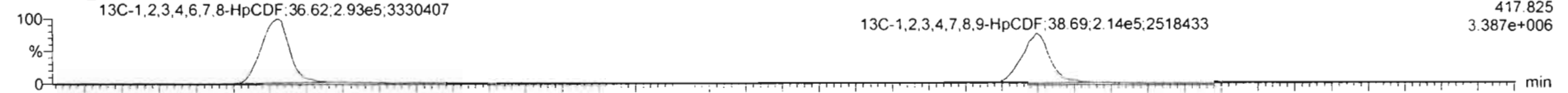


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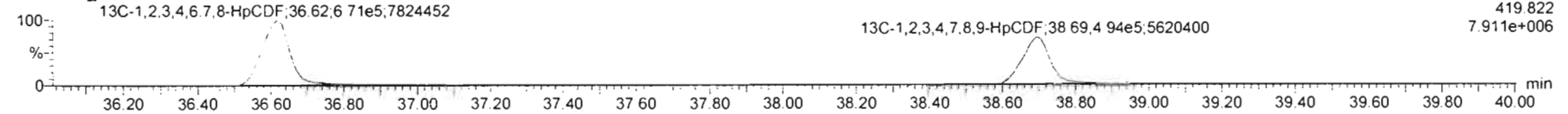


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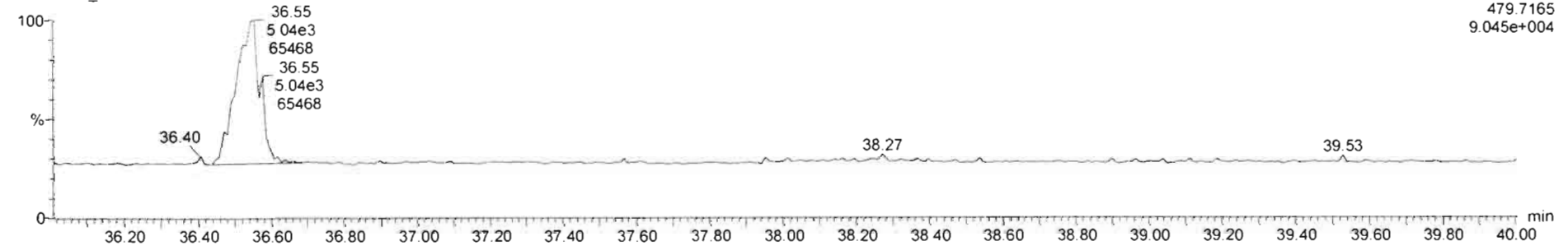


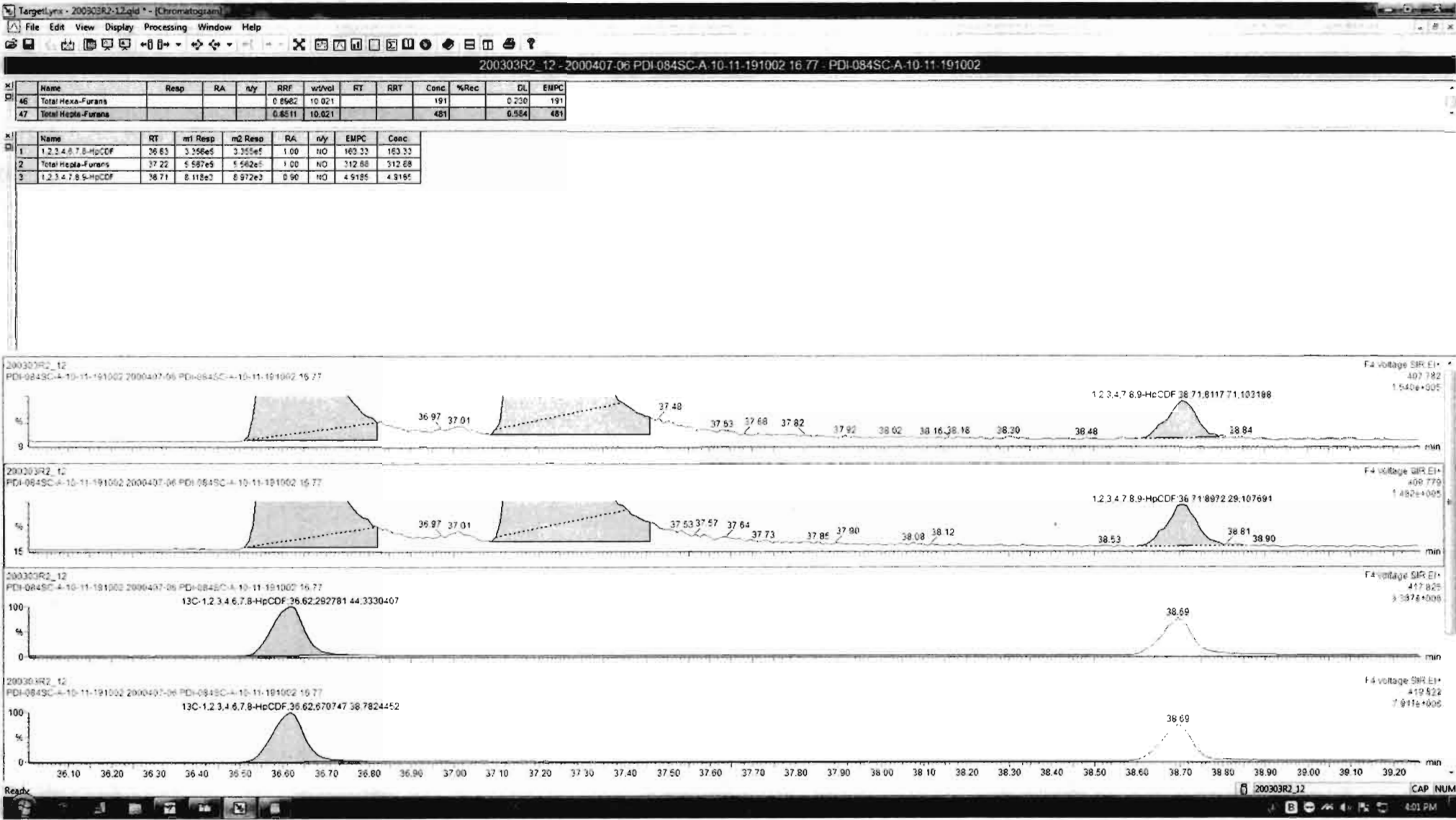
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DPE4

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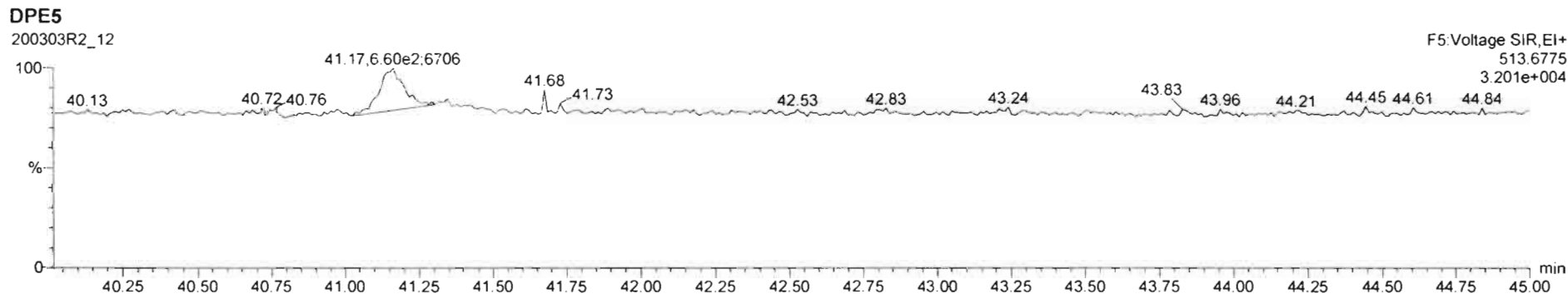
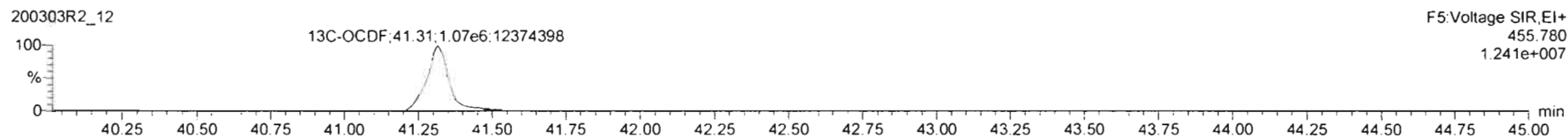
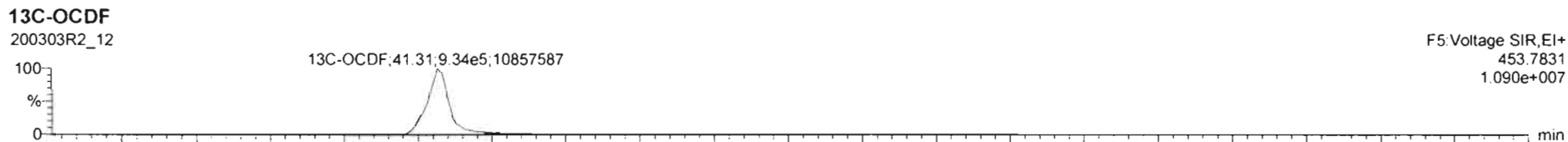
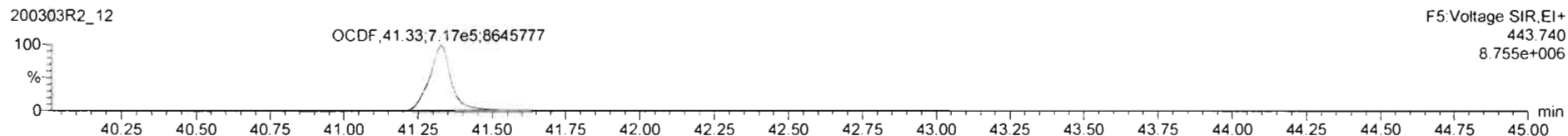
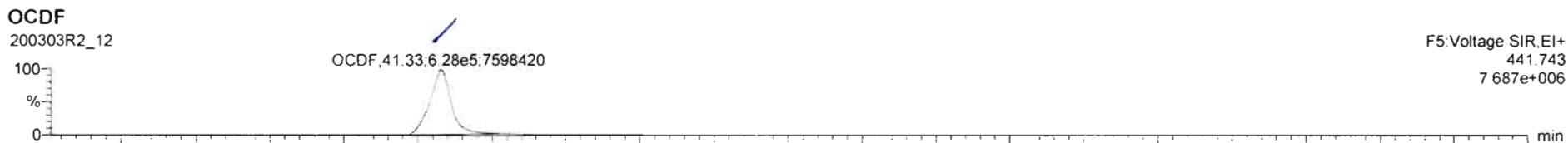




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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

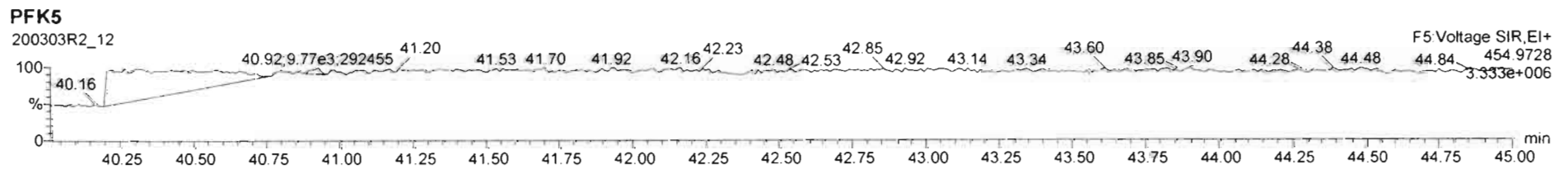
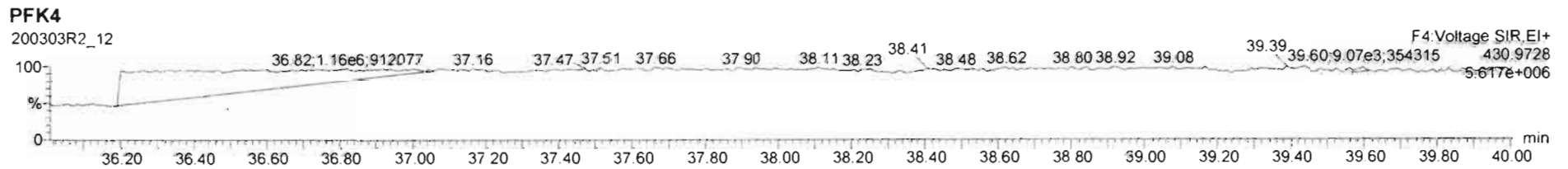
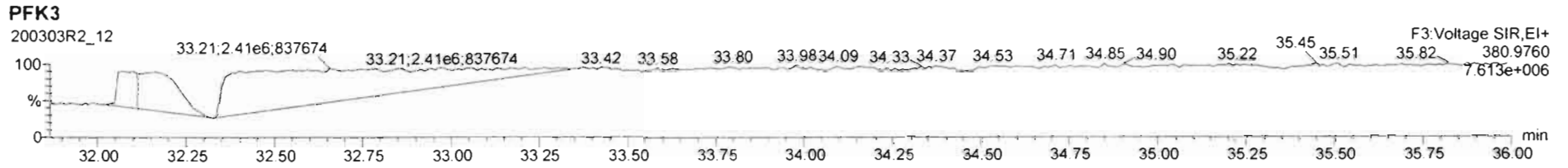
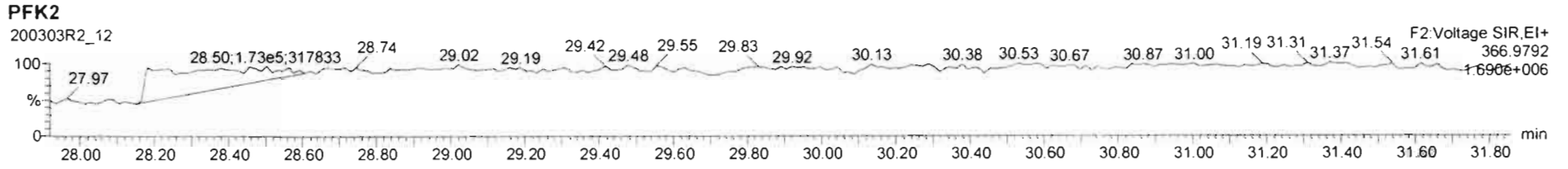
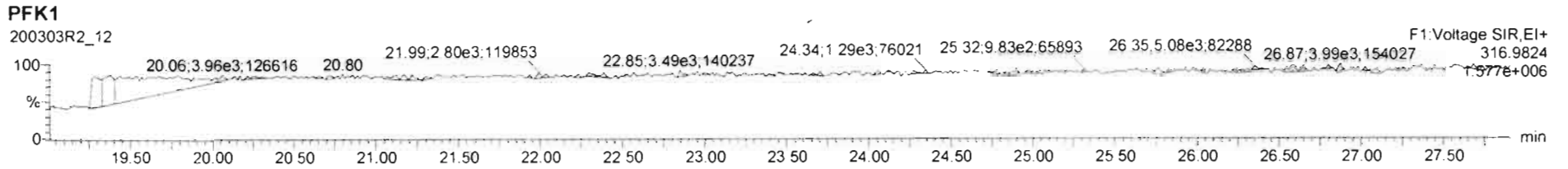


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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_12, Date: 03-Mar-2020, Time: 22:31:41, ID: 2000407-06 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

Last Altered: Friday, March 06, 2020 11:16:47 Pacific Standard Time

Printed: Friday, March 06, 2020 11:21:07 Pacific Standard Time

*03/06/2020*  
*03/06/2020*

Method: U:\VG12.PRO\MethDB\1613rt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2181.883	0.437	YES	0.988	10.080	25.71	25.70	1.00	1.00	NO	0.2868		0.0757	0.2019
2	2 1,2,3,7,8-PeCDD	3261.188	0.624	NO	0.972	10.080	30.83	30.82	1.00	1.00	NO	0.5077		0.102	0.5077
3	3 1,2,3,4,7,8-HxCDD	2106.582	1.174	NO	1.07	10.080	34.19	34.24	1.00	1.00	NO	0.3898		0.154	0.3898
4	4 1,2,3,6,7,8-HxCDD	13394.399	1.208	NO	0.921	10.080	34.29	34.30	1.00	1.00	NO	2.300		0.152	2.300
5	5 1,2,3,7,8,9-HxCDD	4997.442	1.216	NO	0.918	10.080	34.59	34.57	1.00	1.00	NO	0.9350		0.172	0.9350
6	6 1,2,3,4,6,7,8-HpCDD	150403.656	0.993	NO	0.923	10.080	38.05	38.04	1.00	1.00	NO	33.34		0.526	33.34
7	7 OCDD	1861561.5...	0.914	NO	0.975	10.080	41.15	41.15	1.00	1.00	NO	408.4		0.498	408.4
8	8 2,3,7,8-TCDF	62835.705	0.761	NO	0.802	10.080	24.76	24.76	1.00	1.00	NO	8.038	(7.435)	0.113	8.038
9	9 1,2,3,7,8-PeCDF	259060.180	1.512	NO	0.907	10.080	29.50	29.49	1.00	1.00	NO	32.15		0.255	32.15
10	10 2,3,4,7,8-PeCDF	94371.266	1.524	NO	0.952	10.080	30.50	30.51	1.00	1.00	NO	11.50		0.245	11.50
11	11 1,2,3,4,7,8-HxCDF	224513.516	1.198	NO	0.862	10.080	33.33	33.34	1.00	1.00	NO	41.21		0.177	41.21
12	12 1,2,3,6,7,8-HxCDF	112184.602	1.238	NO	0.841	10.080	33.45	33.46	1.00	1.00	NO	18.55		0.176	18.55
13	13 2,3,4,6,7,8-HxCDF	40411.697	1.264	NO	0.898	10.080	34.05	34.03	1.00	1.00	NO	6.947		0.193	6.947
14	14 1,2,3,7,8,9-HxCDF	10807.012	1.400	NO	0.858	10.080	34.89	34.92	1.00	1.00	NO	2.146		0.264	2.146
15	15 1,2,3,4,6,7,8-HpCDF	344967.281	1.020	NO	0.851	10.080	36.64	36.62	1.00	1.00	NO	74.52		0.342	74.52
16	16 1,2,3,4,7,8,9-HpCDF	19706.213	1.005	NO	0.980	10.080	38.69	38.71	1.00	1.00	NO	5.064		0.431	5.064
17	17 OCDF	243539.070	0.859	NO	0.806	10.080	41.33	41.34	1.00	1.00	NO	57.29		0.246	57.29
18	18 13C-2,3,7,8-TCDD	1517115.0...	0.781	NO	1.20	10.080	25.63	25.67	1.03	1.03	NO	182.2	91.8	0.177	
19	19 13C-1,2,3,7,8-PeCDD	1310857.9...	0.631	NO	0.967	10.080	30.75	30.81	1.23	1.23	NO	195.1	98.3	0.223	
20	20 13C-1,2,3,4,7,8-HxCDD	1001338.4...	1.276	NO	0.874	10.080	34.18	34.18	1.01	1.01	NO	161.8	81.6	0.451	
21	21 13C-1,2,3,6,7,8-HxCDD	1254591.0...	1.310	NO	1.05	10.080	34.28	34.29	1.02	1.02	NO	169.5	85.4	0.377	
22	22 13C-1,2,3,7,8,9-HxCDD	1154962.3...	1.277	NO	0.974	10.080	34.59	34.55	1.03	1.02	NO	167.4	84.4	0.404	
23	23 13C-1,2,3,4,6,7,8-HpCDD	969633.938	1.060	NO	0.747	10.080	38.16	38.03	1.13	1.13	NO	183.3	92.4	0.439	
24	24 13C-OCDD	1855981.6...	0.897	NO	0.707	10.080	41.06	41.15	1.22	1.22	NO	371.1	93.5	0.477	
25	25 13C-2,3,7,8-TCDF	1934214.4...	0.765	NO	1.07	10.080	24.81	24.73	0.99	0.99	NO	193.3	97.4	0.293	
26	26 13C-1,2,3,7,8-PeCDF	1761866.9...	1.591	NO	1.00	10.080	29.38	29.48	1.18	1.18	NO	187.2	94.4	0.608	
27	27 13C-2,3,4,7,8-PeCDF	1711188.938	1.577	NO	0.962	10.080	30.35	30.50	1.21	1.22	NO	189.4	95.5	0.633	
28	28 13C-1,2,3,4,7,8-HxCDF	1253683.7...	0.511	NO	1.05	10.080	33.31	33.33	0.99	0.99	NO	168.8	85.1	0.531	
29	29 13C-1,2,3,6,7,8-HxCDF	1426506.5...	0.529	NO	1.19	10.080	33.41	33.44	0.99	0.99	NO	169.3	85.3	0.468	
30	30 13C-2,3,4,6,7,8-HxCDF	1285124.5...	0.524	NO	1.07	10.080	34.02	34.02	1.01	1.01	NO	170.3	85.8	0.523	



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

Last Altered: Friday, March 06, 2020 11:16:47 Pacific Standard Time

Printed: Friday, March 06, 2020 11:21:07 Pacific Standard Time

Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

#	Name	Abs.Resp	RA	n/y	RRF	wt./vol.	Pred.RT	RT	Pred.RRT	RRT	Check RRT	Conc.	%Rec	DL	EMPC
31	31 13C-1,2,3,7,8,9-HxCDF	1164887.1...	0.522	NO	0.922	10.080	34.92	34.89	1.04	1.04	NO	178.4	89.9	0.604	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1079301.1...	0.433	NO	0.767	10.080	36.68	36.61	1.09	1.09	NO	198.7	100	0.568	
33	33 13C-1,2,3,4,7,8,9-HpCDF	787983.625	0.449	NO	0.552	10.080	38.70	38.69	1.15	1.15	NO	201.5	102	0.789	
34	34 13C-OCDF	2094223.6...	0.914	NO	0.789	10.080	41.29	41.33	1.23	1.23	NO	374.7	94.4	0.505	
35	35 37Cl-2,3,7,8-TCDD	601791.000			1.18	10.080	25.66	25.70	1.03	1.03	NO	73.62	92.8	0.0780	
36	36 13C-1,2,3,4-TCDD	1378852.1...	0.792	NO	1.00	10.080	25.11	24.99	1.00	1.00	NO	198.4	100	0.212	
37	37 13C-1,2,3,4-TCDF	1864089.0...	0.783	NO	1.00	10.080	23.37	23.19	1.00	1.00	NO	198.4	100	0.312	
38	38 13C-1,2,3,4,6,9-HxCDF	1404714.4...	0.519	NO	1.00	10.080	33.71	33.71	1.00	1.00	NO	198.4	100	0.557	
39	39 Total Tetra-Dioxins				0.988	10.080	24.62		0.00		NO	3.843		0.0757	4.045
40	40 Total Penta-Dioxins				0.972	10.080	29.96		0.00		NO	7.254		0.102	7.254
41	41 Total Hexa-Dioxins				0.921	10.080	33.63		0.00		NO	25.79		0.167	25.79
42	42 Total Hepta-Dioxins				0.923	10.080	37.64		0.00		NO	91.85		0.526	91.85
43	43 Total Tetra-Furans				0.802	10.080	23.61		0.00		NO	51.42		0.113	52.56
44	44 1st Func. Penta-Furans				0.907	10.080	27.09		0.00		NO	41.48		0.0759	41.48
45	45 Total Penta-Furans				0.907	10.080	29.27		0.00		NO	94.59		0.256	102.7
46	46 Total Hexa-Furans				0.898	10.080	33.56		0.00		NO	150.2		0.193	150.2
47	47 Total Hepta-Furans				0.851	10.080	37.83		0.00		NO	165.6		0.407	166.3

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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

Last Altered: Friday, March 06, 2020 11:16:47 Pacific Standard Time

Printed: Friday, March 06, 2020 11:19:13 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

**Tetra-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	39 Total Tetra-Dioxins	1.09e3	1.52e6	0.816	NO	24.62	26.03	0.1447	0.1447
2	1 2,3,7,8-TCDD	2.18e3	1.52e6	0.437	YES	25.71	25.70	0.0000	0.2019
3	39 Total Tetra-Dioxins	1.30e3	1.52e6	0.724	NO	24.62	25.42	0.1725	0.1725
4	39 Total Tetra-Dioxins	1.38e3	1.52e6	0.775	NO	24.62	24.97	0.1824	0.1824
5	39 Total Tetra-Dioxins	1.50e3	1.52e6	0.851	NO	24.62	24.60	0.1987	0.1987
6	39 Total Tetra-Dioxins	1.44e3	1.52e6	0.698	NO	24.62	24.39	0.1907	0.1907
7	39 Total Tetra-Dioxins	9.40e2	1.52e6	0.858	NO	24.62	24.16	0.1244	0.1244
8	39 Total Tetra-Dioxins	3.15e3	1.52e6	0.884	NO	24.62	23.91	0.4163	0.4163
9	39 Total Tetra-Dioxins	2.32e3	1.52e6	0.876	NO	24.62	23.66	0.3066	0.3066
10	39 Total Tetra-Dioxins	2.18e3	1.52e6	0.676	NO	24.62	23.39	0.2882	0.2882
11	39 Total Tetra-Dioxins	2.93e3	1.52e6	0.765	NO	24.62	22.43	0.3880	0.3880
12	39 Total Tetra-Dioxins	3.29e3	1.52e6	0.847	NO	24.62	21.90	0.4348	0.4348
13	39 Total Tetra-Dioxins	7.52e3	1.52e6	0.709	NO	24.62	21.50	0.9957	0.9957

**Penta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	40 Total Penta-Dioxins	1.68e4	1.31e6	0.616	NO	29.96	28.55	2.622	2.622
2	40 Total Penta-Dioxins	1.34e3	1.31e6	0.720	NO	29.96	31.22	0.2092	0.2092
3	40 Total Penta-Dioxins	7.40e2	1.31e6	0.620	NO	29.96	30.91	0.1152	0.1152
4	2 1,2,3,7,8-PeCDD	3.26e3	1.31e6	0.624	NO	30.83	30.82	0.5077	0.5077
5	40 Total Penta-Dioxins	9.65e2	1.31e6	0.587	NO	29.96	30.38	0.1503	0.1503
6	40 Total Penta-Dioxins	6.03e3	1.31e6	0.670	NO	29.96	30.06	0.9388	0.9388
7	40 Total Penta-Dioxins	3.02e3	1.31e6	0.623	NO	29.96	29.81	0.4698	0.4698
8	40 Total Penta-Dioxins	4.36e3	1.31e6	0.723	NO	29.96	29.72	0.6790	0.6790
9	40 Total Penta-Dioxins	7.42e3	1.31e6	0.602	NO	29.96	29.54	1.155	1.155
10	40 Total Penta-Dioxins	2.61e3	1.31e6	0.668	NO	29.96	29.03	0.4066	0.4066

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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

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Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

**Hexa-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	5 1,2,3,7,8,9-HxCDD	5.00e3	1.15e6	1.216	NO	34.59	34.57	0.9350	0.9350
2	4 1,2,3,6,7,8-HxCDD	1.34e4	1.25e6	1.208	NO	34.29	34.30	2.300	2.300
3	41 Total Hexa-Dioxins	5.54e4	0.00e0	1.256	NO	33.63	33.53	10.50	10.50
4	41 Total Hexa-Dioxins	7.86e3	0.00e0	1.255	NO	33.63	33.27	1.489	1.489
5	41 Total Hexa-Dioxins	5.23e4	0.00e0	1.283	NO	33.63	32.73	9.901	9.901
6	41 Total Hexa-Dioxins	1.45e3	0.00e0	1.156	NO	33.63	34.49	0.2745	0.2745
7	3 1,2,3,4,7,8-HxCDD	2.11e3	1.00e6	1.174	NO	34.19	34.24	0.3898	0.3898

**Hepta-Dioxins**

	# Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	6 1,2,3,4,6,7,8-HpCDD	1.50e5	9.70e5	0.993	NO	38.05	38.04	33.34	33.34
2	42 Total Hepta-Dioxins	2.64e5	9.70e5	1.033	NO	37.64	37.00	58.51	58.51

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

Last Altered: Friday, March 06, 2020 11:16:47 Pacific Standard Time

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Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

Tetra-Furans

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	43 Total Tetra-Furans	1.26e4	1.93e6	0.774	NO	23.61	20.00	1.614	1.614
2	43 Total Tetra-Furans	6.01e3	1.93e6	0.790	NO	23.61	19.48	0.7687	0.7687
3	43 Total Tetra-Furans	1.03e3	1.93e6	0.725	NO	23.61	24.16	0.1313	0.1313
4	43 Total Tetra-Furans	0.00e0	1.93e6	0.912	YES	23.61	24.07	0.0000	0.2391
5	43 Total Tetra-Furans	6.05e4	1.93e6	0.750	NO	23.61	23.74	7.740	7.740
6	43 Total Tetra-Furans	3.71e4	1.93e6	0.808	NO	23.61	23.10	4.742	4.742
7	43 Total Tetra-Furans	0.00e0	1.93e6	0.981	YES	23.61	22.91	0.0000	0.2976
8	43 Total Tetra-Furans	4.60e3	1.93e6	0.775	NO	23.61	22.29	0.5878	0.5878
9	43 Total Tetra-Furans	4.97e4	1.93e6	0.754	NO	23.61	21.95	6.357	6.357
10	43 Total Tetra-Furans	4.01e4	1.93e6	0.774	NO	23.61	21.47	5.127	5.127
11	43 Total Tetra-Furans	1.03e4	1.93e6	0.769	NO	23.61	21.10	1.318	1.318
12	43 Total Tetra-Furans	6.62e4	1.93e6	0.769	NO	23.61	20.56	8.468	8.468
13	43 Total Tetra-Furans	0.00e0	1.93e6	1.084	YES	23.61	20.29	0.0000	0.1111
14	43 Total Tetra-Furans	1.52e4	1.93e6	0.745	NO	23.61	26.84	1.942	1.942
15	43 Total Tetra-Furans	1.24e4	1.93e6	0.756	NO	23.61	26.57	1.585	1.585
16	43 Total Tetra-Furans	1.08e4	1.93e6	0.735	NO	23.61	26.42	1.384	1.384
17	43 Total Tetra-Furans	2.16e3	1.93e6	0.806	NO	23.61	25.84	0.2759	0.2759
18	43 Total Tetra-Furans	0.00e0	1.93e6	0.624	YES	23.61	25.42	0.0000	0.2056
19	43 Total Tetra-Furans	0.00e0	1.93e6	0.638	YES	23.61	25.14	0.0000	0.2887
20	8 2,3,7,8-TCDF	6.28e4	1.93e6	0.761	NO	24.76	24.76	8.038	8.038
21	43 Total Tetra-Furans	6.43e3	1.93e6	0.780	NO	23.61	24.66	0.8228	0.8228
22	43 Total Tetra-Furans	1.21e3	1.93e6	0.778	NO	23.61	24.52	0.1542	0.1542
23	43 Total Tetra-Furans	2.88e3	1.93e6	0.805	NO	23.61	24.34	0.3679	0.3679

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Penta-Furans function 1

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	44 1st Func. Penta-Fura...	3.29e5	0.00e0	1.565	NO	27.09	26.84	41.48	41.48



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Dataset: U:\VG12.PRO\Results\200303R2\200303R2-13B.qld

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Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

## Penta-Furans

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	45 Total Penta-Furans	1.64e4	0.00e0	1.573	NO	29.27	29.31	2.068	2.068
2	45 Total Penta-Furans	3.80e4	0.00e0	1.508	NO	29.27	29.10	4.788	4.788
3	45 Total Penta-Furans	2.37e5	0.00e0	1.523	NO	29.27	28.49	29.85	29.85
4	45 Total Penta-Furans	7.87e3	0.00e0	1.468	NO	29.27	28.35	0.9909	0.9909
5	10 2,3,4,7,8-PeCDF	9.44e4	1.71e6	1.524	NO	30.50	30.51	11.50	11.50
6	45 Total Penta-Furans	1.04e4	0.00e0	1.556	NO	29.27	29.86	1.307	1.307
7	45 Total Penta-Furans	9.47e4	0.00e0	1.494	NO	29.27	29.77	11.93	11.93
8	9 1,2,3,7,8-PeCDF	2.59e5	1.76e6	1.512	NO	29.50	29.49	32.15	32.15
9	45 Total Penta-Furans	0.00e0	0.00e0	1.754	NO	29.27	30.53	0.0000	8.144

## Hexa-Furans

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	46 Total Hexa-Furans	1.95e3	0.00e0	1.246	NO	33.56	33.24	0.3361	0.3361
2	46 Total Hexa-Furans	2.30e5	0.00e0	1.218	NO	33.56	32.88	39.60	39.60
3	46 Total Hexa-Furans	1.69e5	0.00e0	1.235	NO	33.56	32.34	29.05	29.05
4	46 Total Hexa-Furans	4.72e4	0.00e0	1.222	NO	33.56	32.17	8.136	8.136
5	14 1,2,3,7,8,9-HxCDF	1.08e4	1.16e6	1.400	NO	34.89	34.92	2.146	2.146
6	13 2,3,4,6,7,8-HxCDF	4.04e4	1.29e6	1.264	NO	34.05	34.03	6.947	6.947
7	12 1,2,3,6,7,8-HxCDF	1.12e5	1.43e6	1.238	NO	33.45	33.46	18.55	18.55
8	11 1,2,3,4,7,8-HxCDF	2.25e5	1.25e6	1.198	NO	33.33	33.34	41.21	41.21
9	46 Total Hexa-Furans	2.45e4	0.00e0	1.343	NO	33.56	34.95	4.218	4.218

## Hepta-Furans

#	Name	Area	IS Area	RA	Y/N	Pred.RT	RT	Conc.	EMPC
1	16 1,2,3,4,7,8,9-HpCDF	1.97e4	7.88e5	1.005	NO	38.69	38.71	5.064	5.064
2	47 Total Hepta-Furans	3.45e5	0.00e0	0.999	NO	37.83	37.22	86.05	86.05
3	47 Total Hepta-Furans	0.00e0	0.00e0	1.316	YES	37.83	37.00	0.0000	0.6573
4	15 1,2,3,4,6,7,8-HpCDF	3.45e5	1.08e6	1.020	NO	36.64	36.62	74.52	74.52



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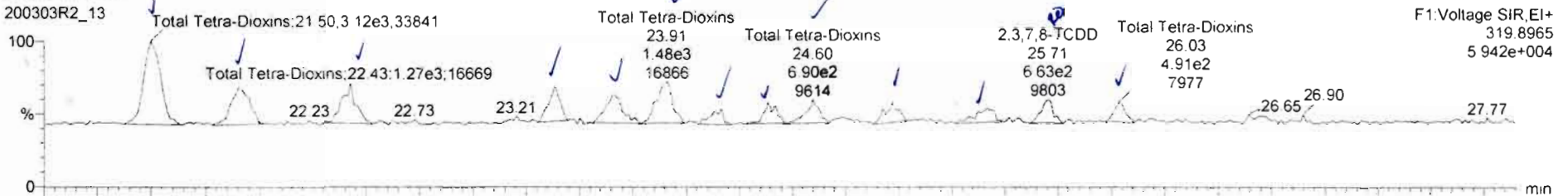
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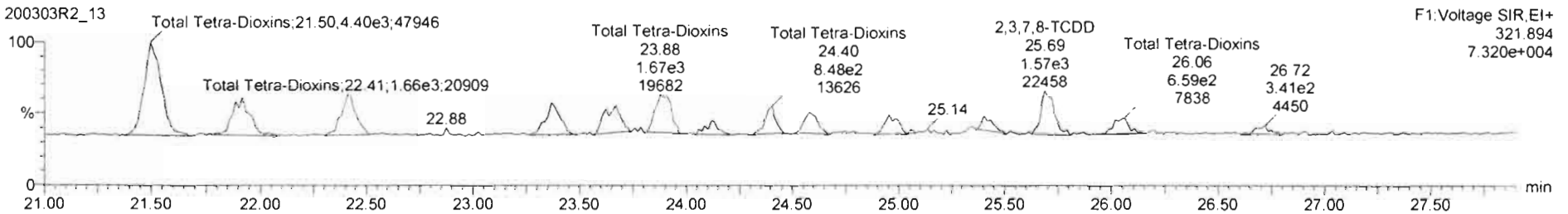
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2,3,7,8-TCDD

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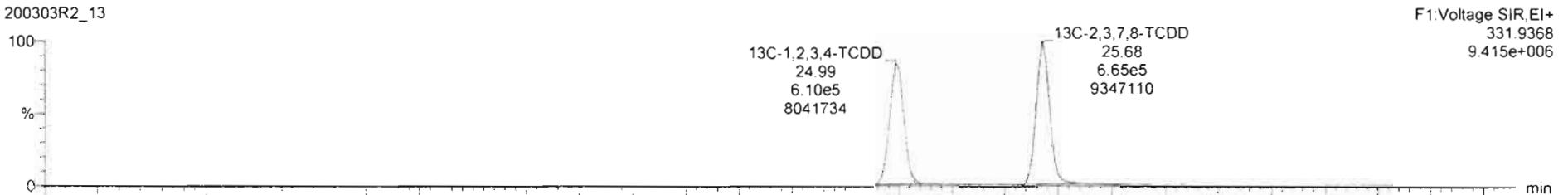


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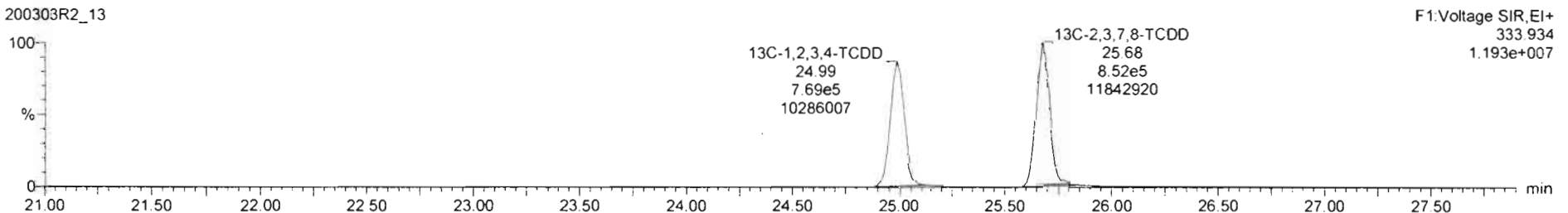


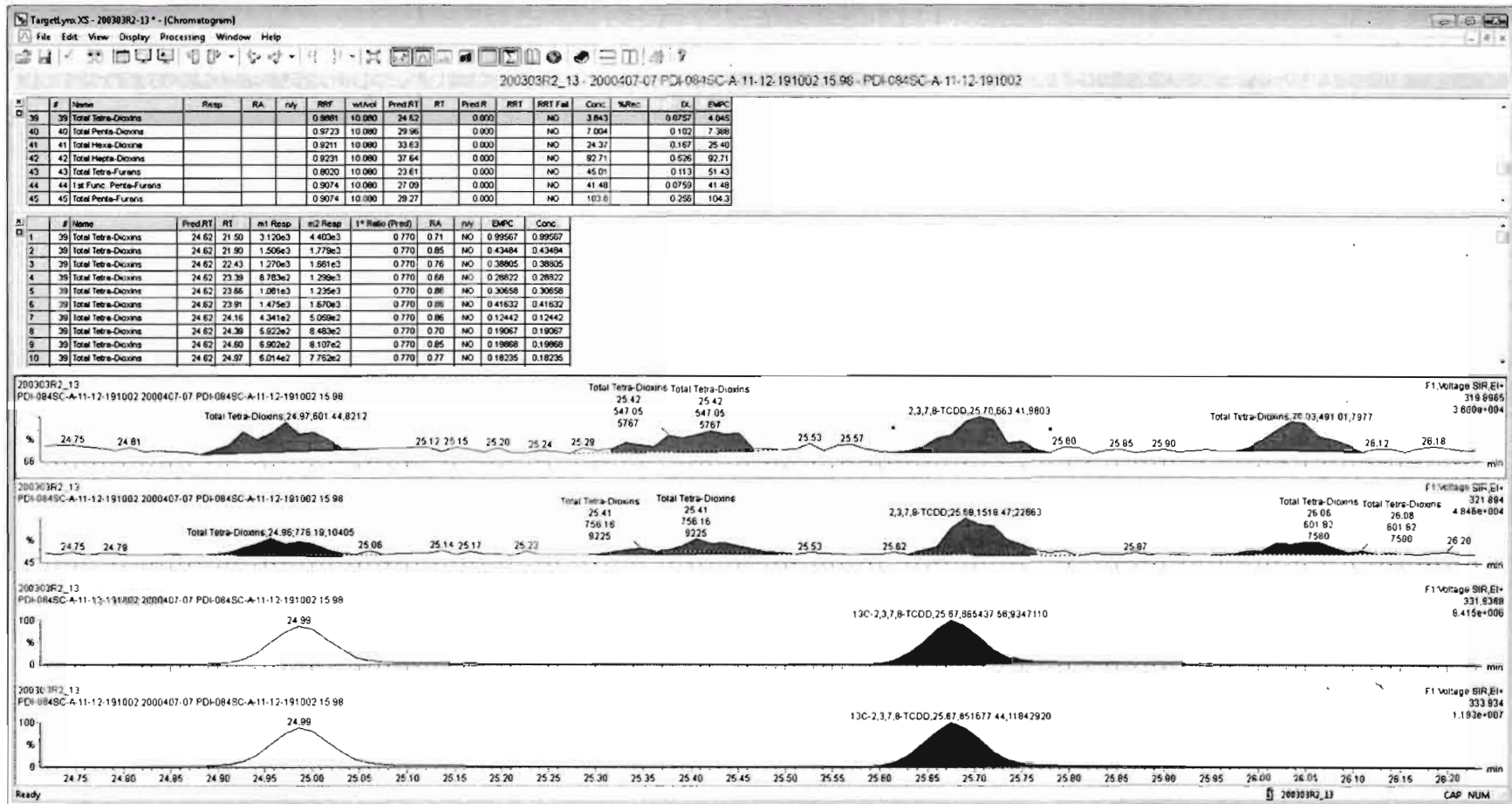
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200303R2\_13



200303R2\_13





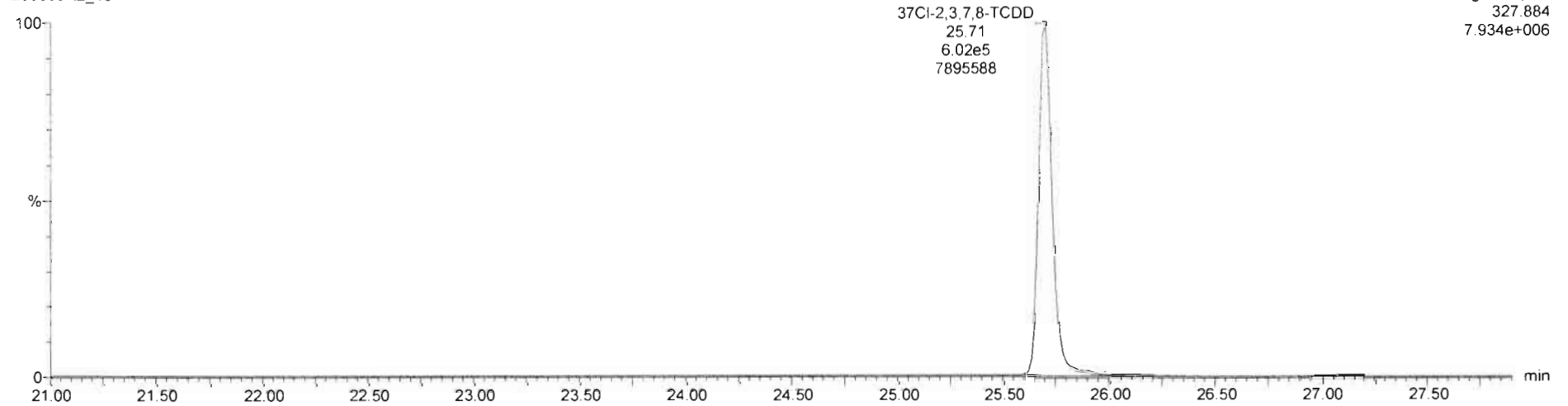
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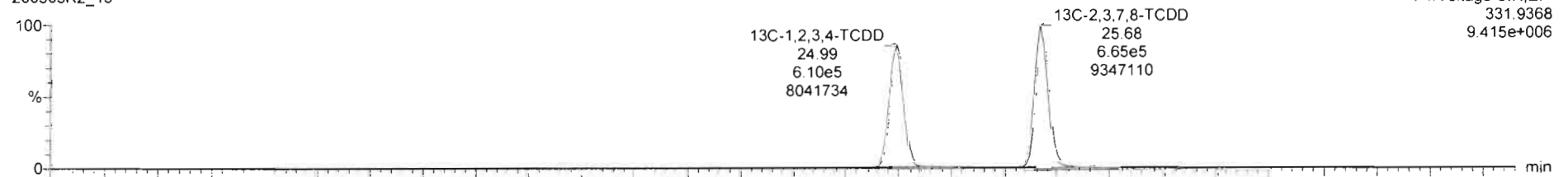
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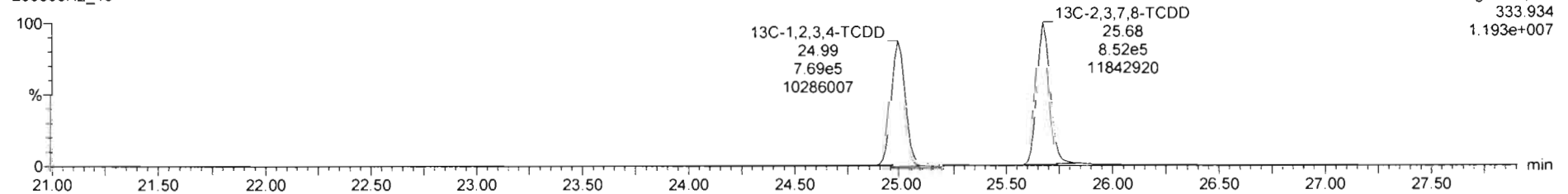


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200303R2\_13



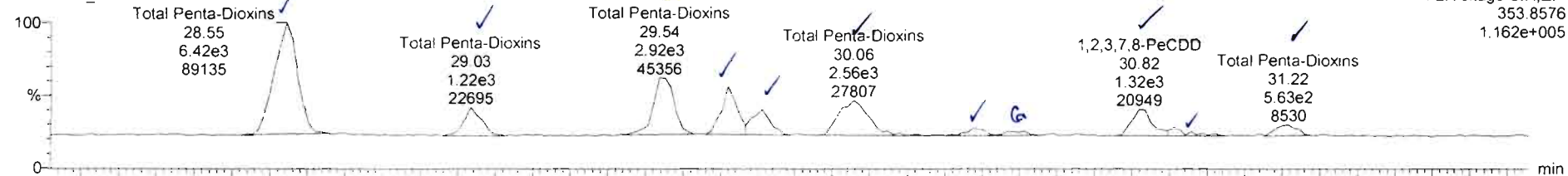
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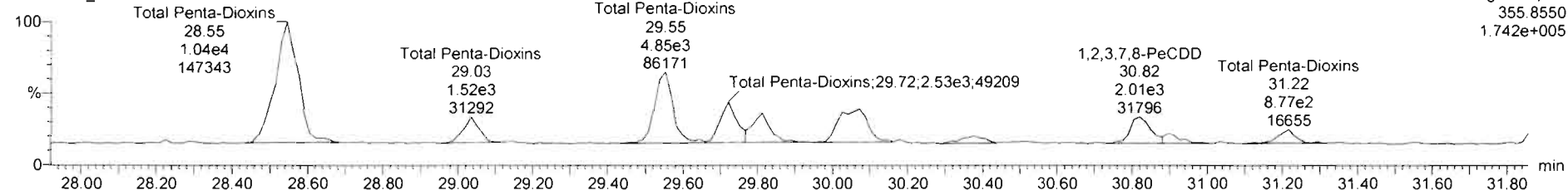
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1,2,3,7,8-PeCDD

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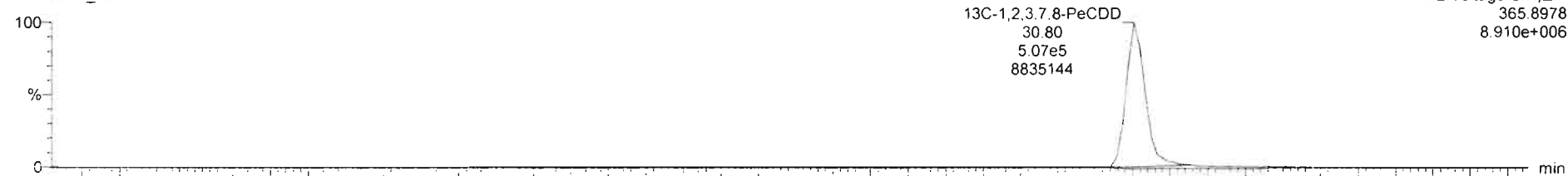


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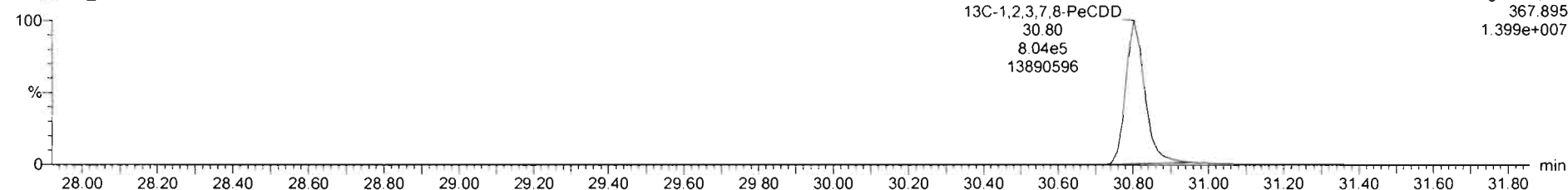


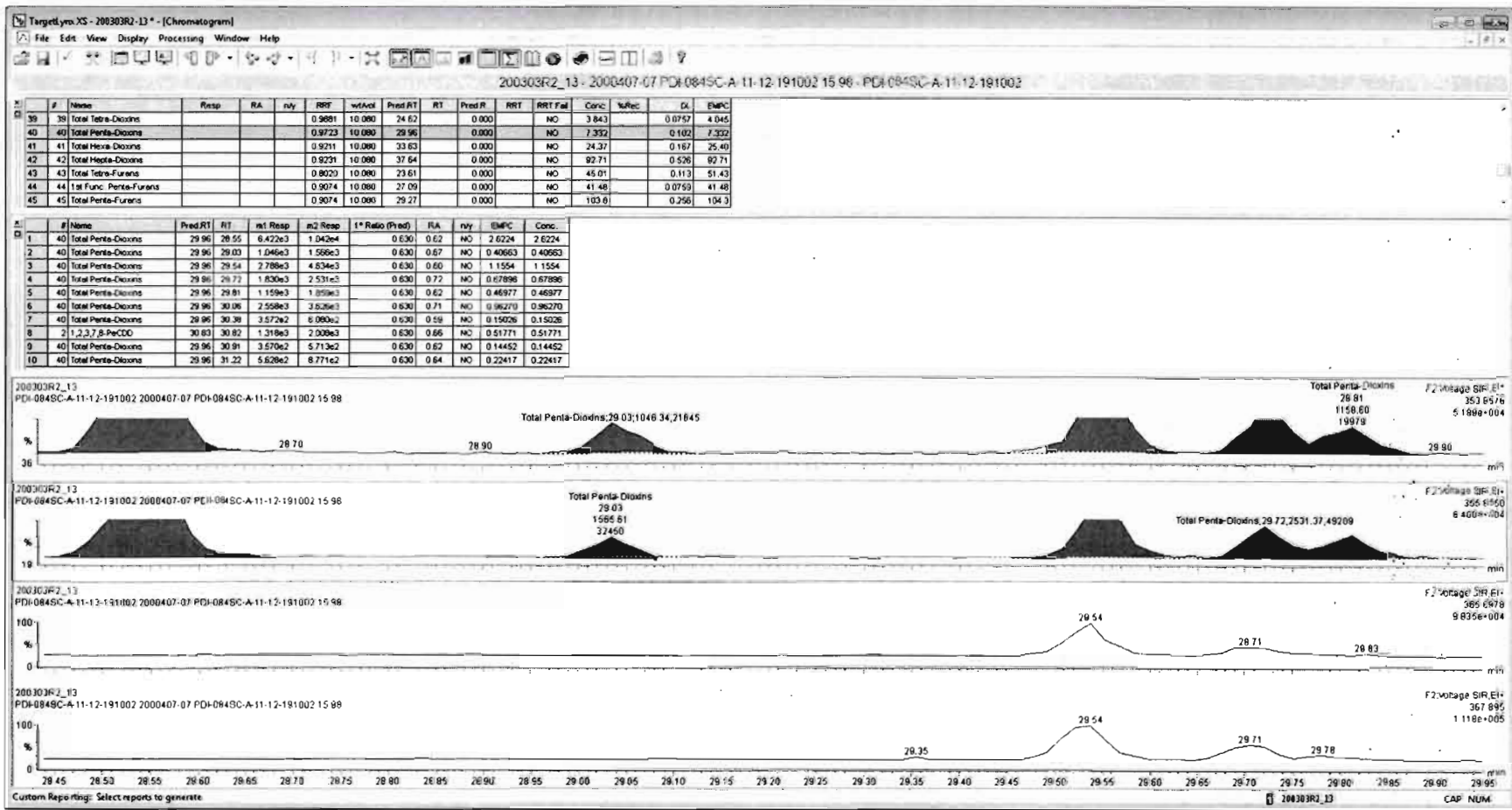
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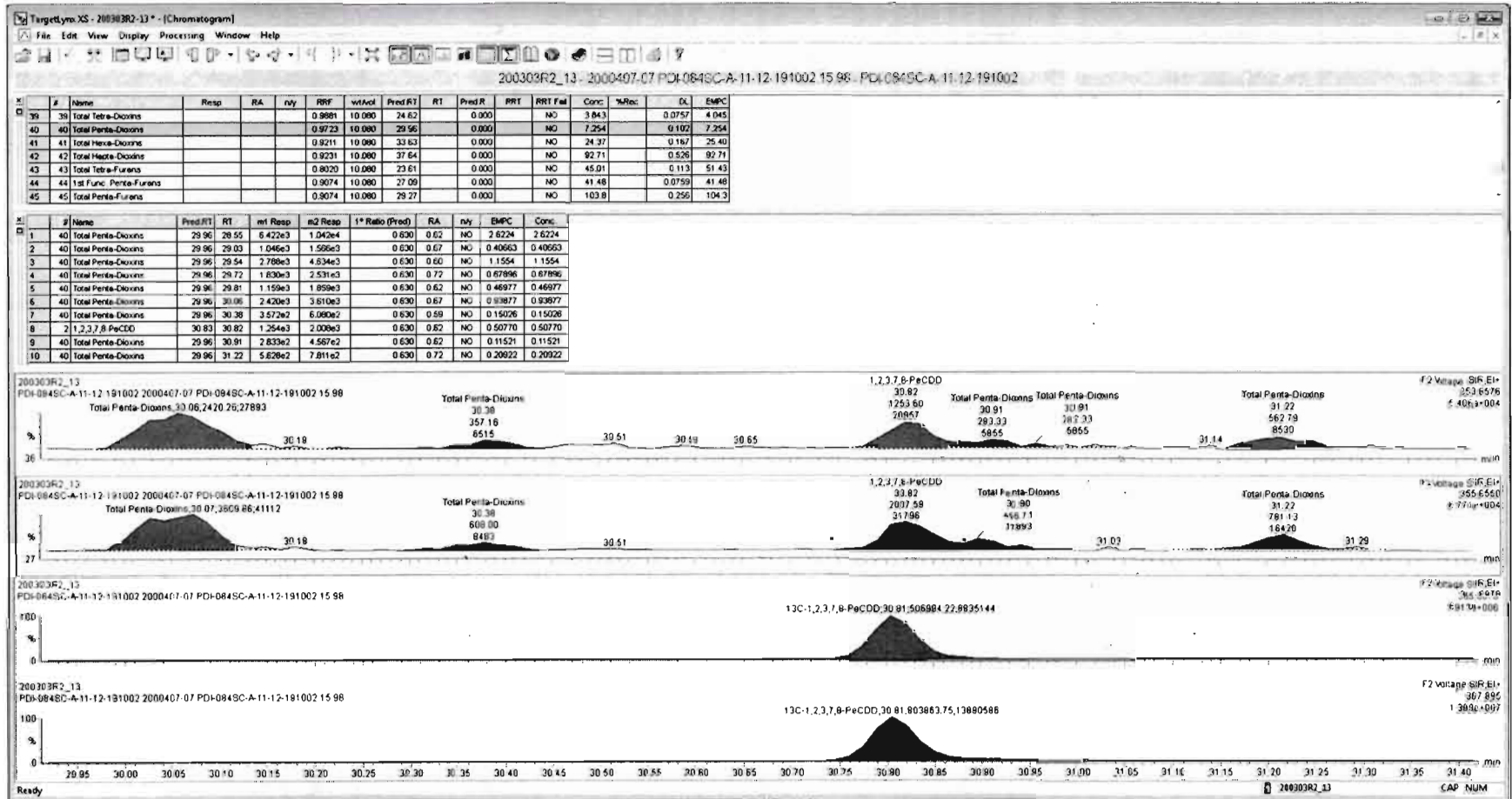


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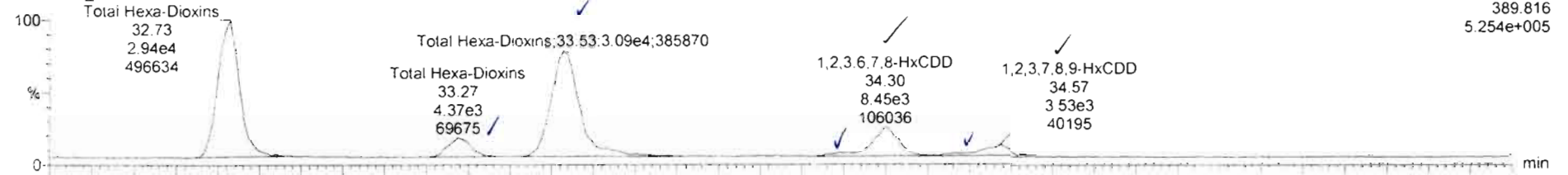
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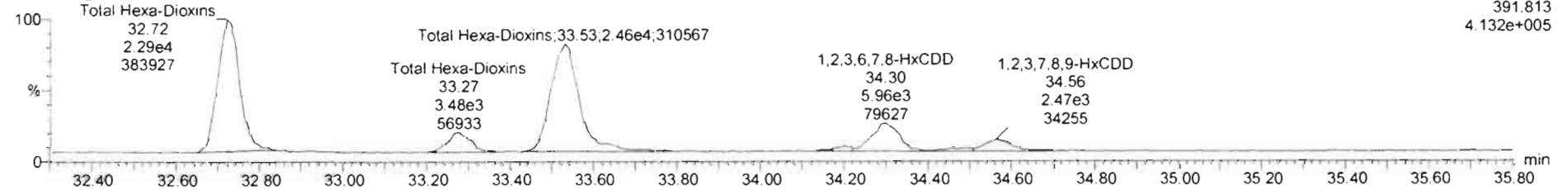
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**1,2,3,4,7,8-HxCDD**

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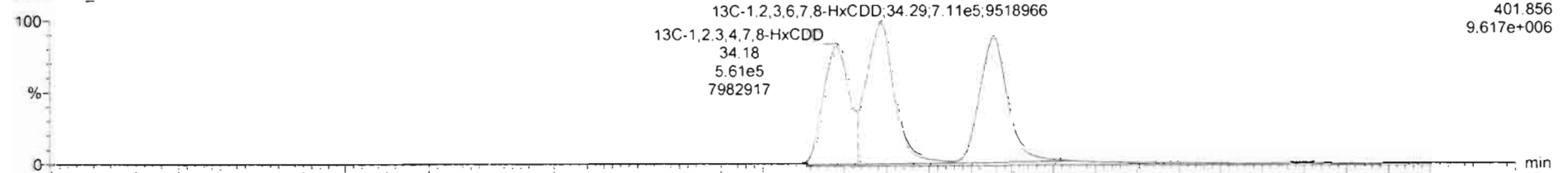


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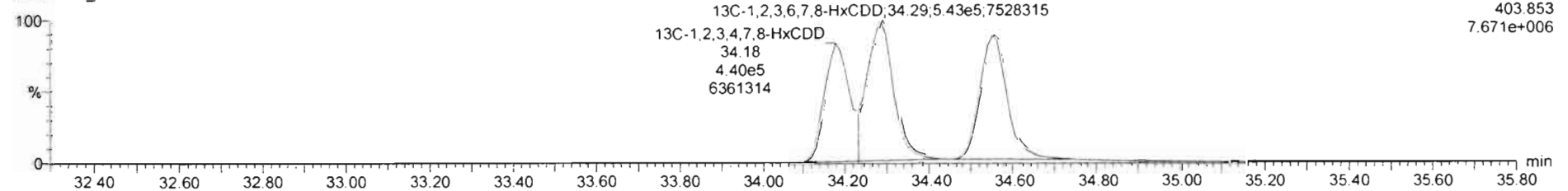


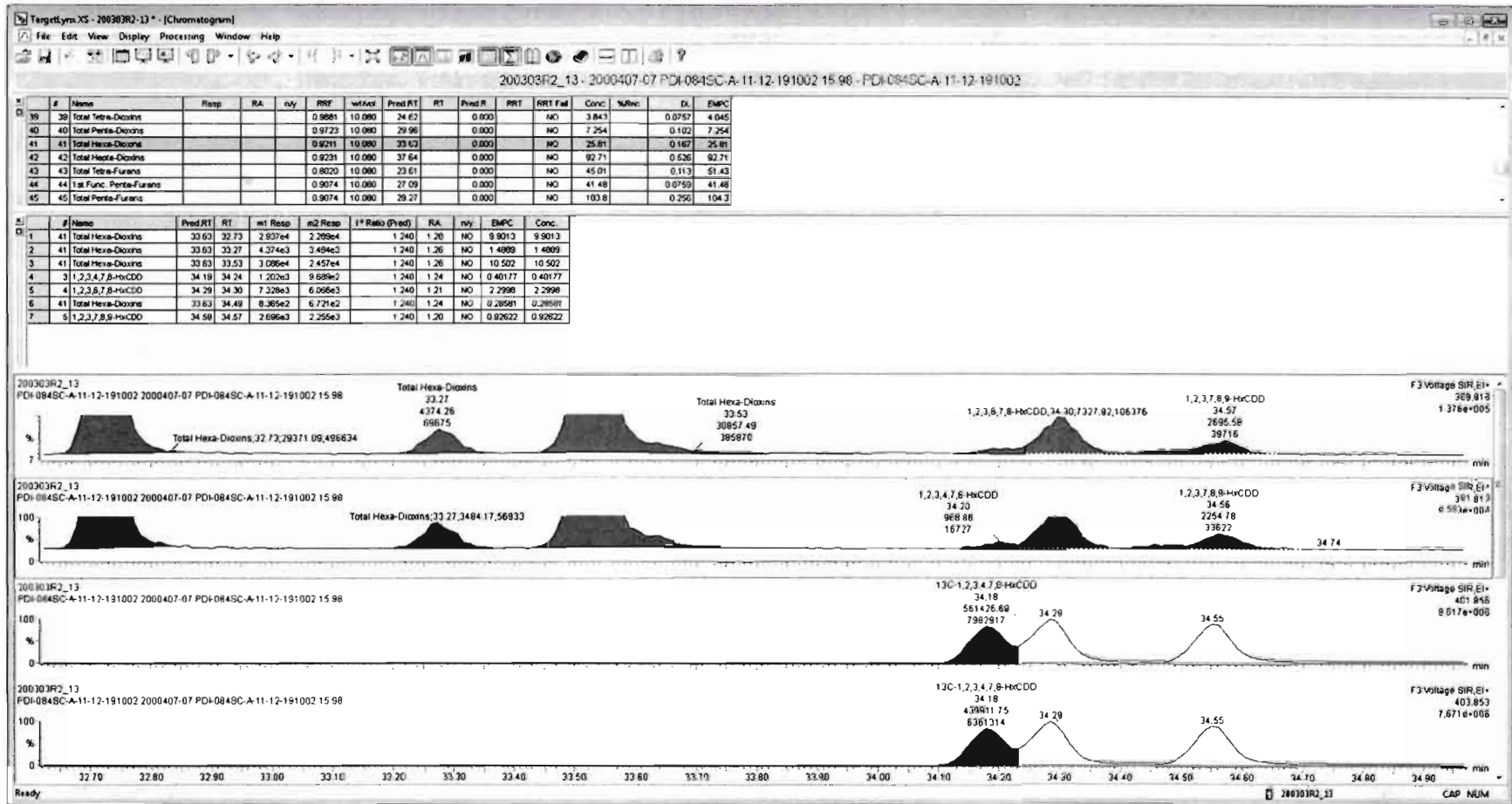
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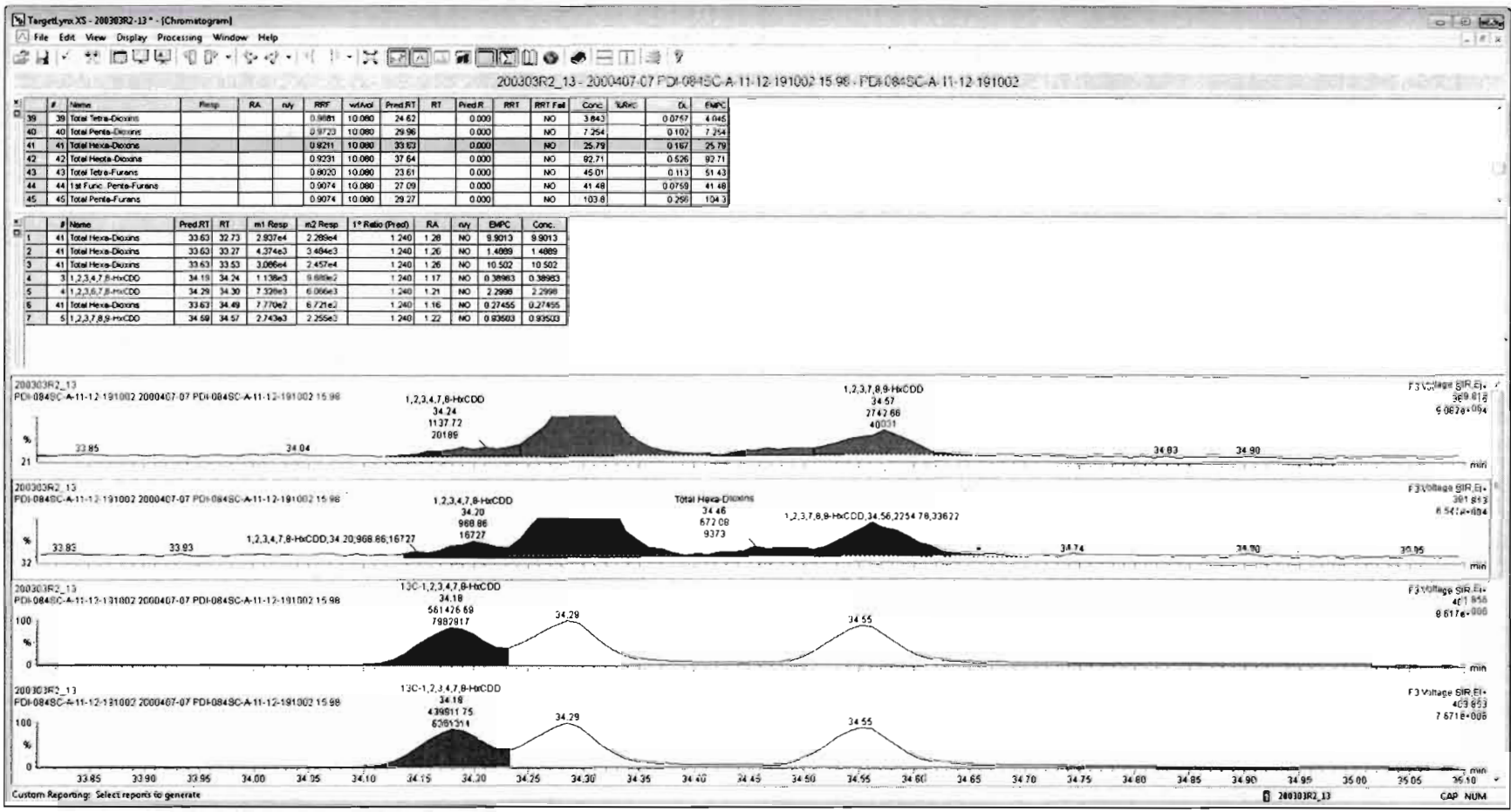
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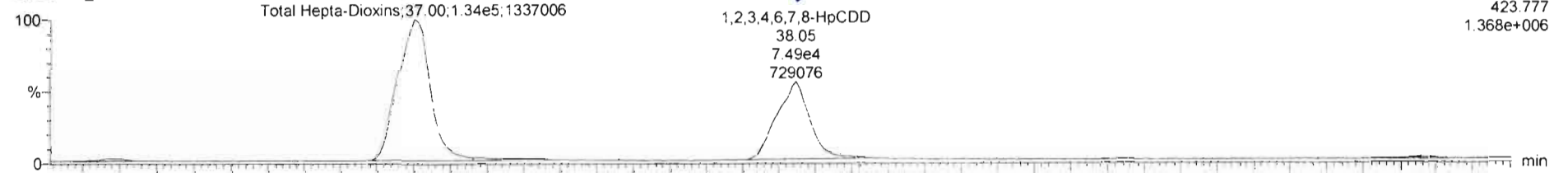
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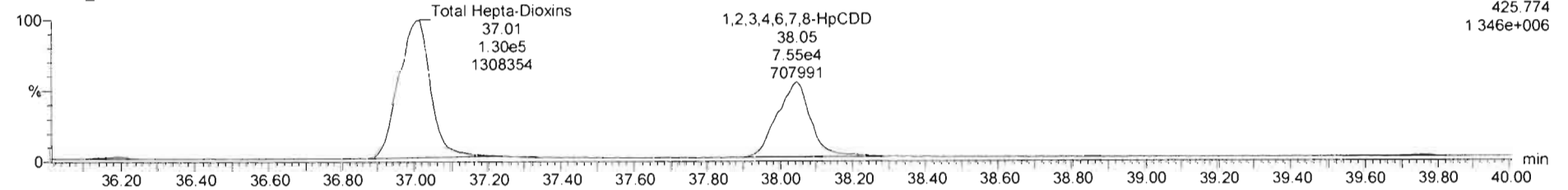
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1,2,3,4,6,7,8-HpCDD

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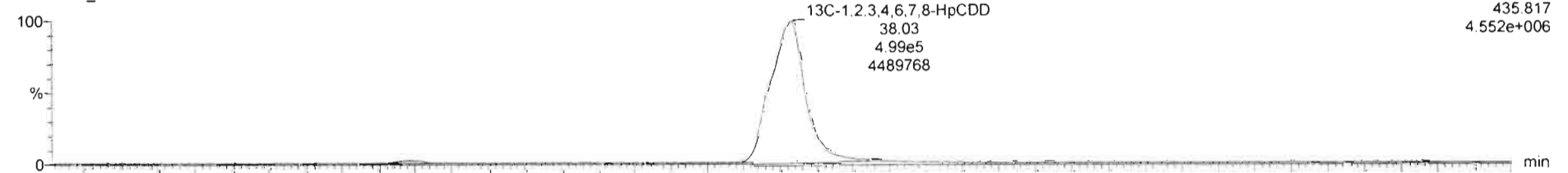


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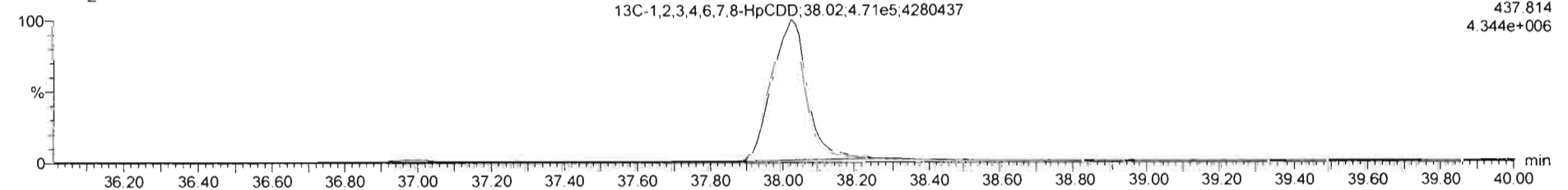


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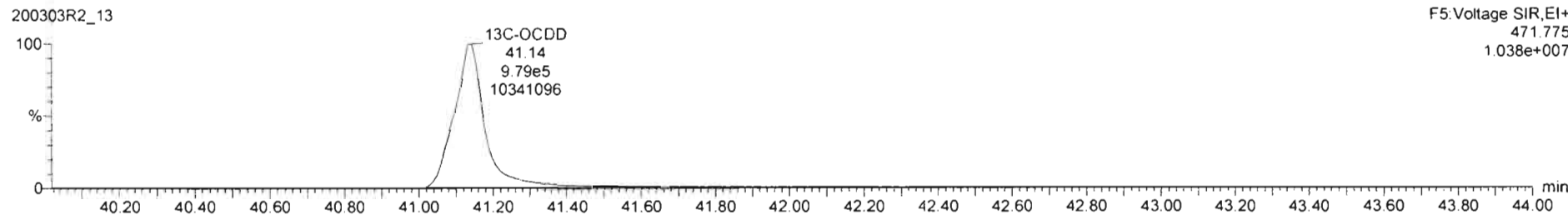
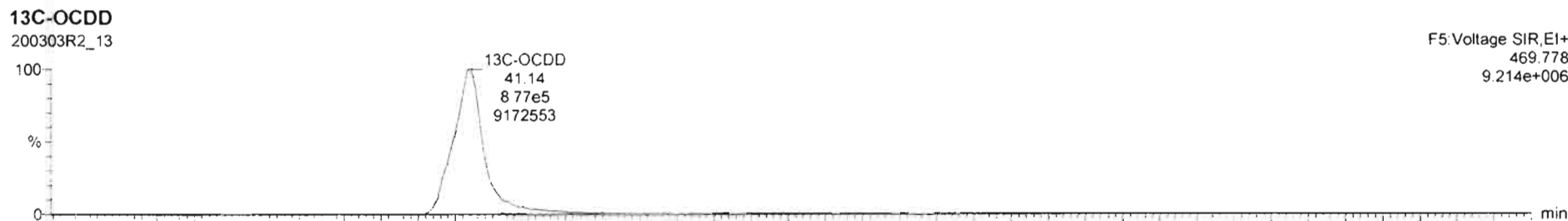
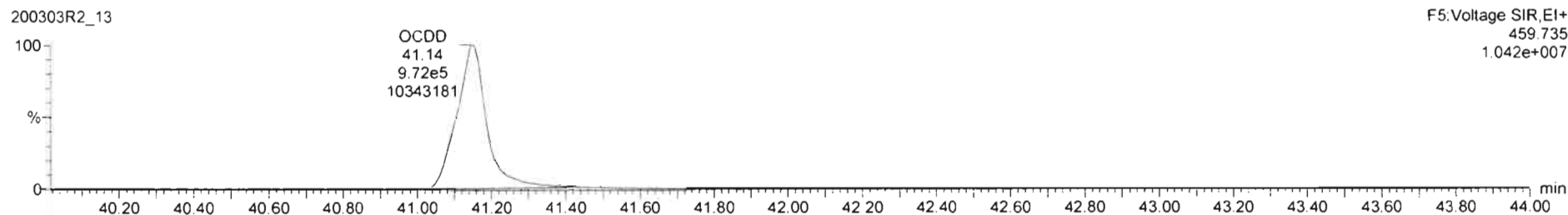
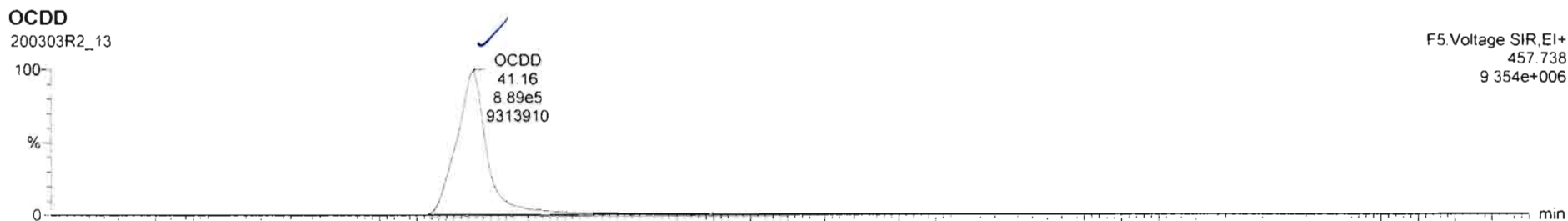


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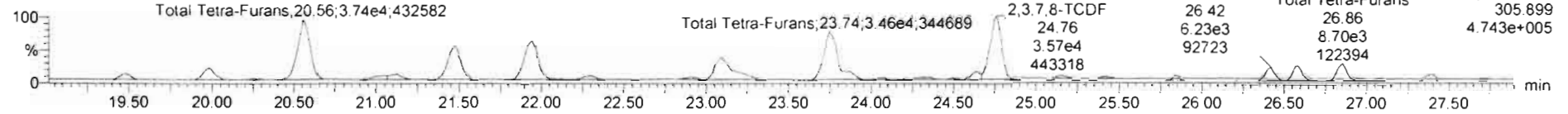
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2,3,7,8-TCDF

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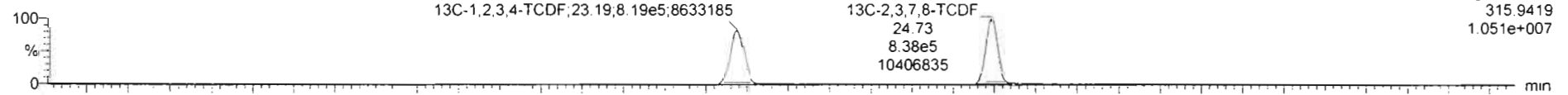


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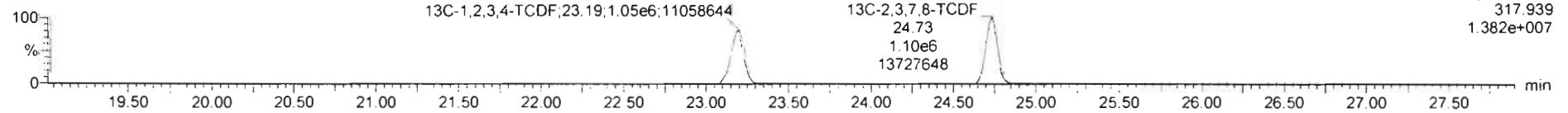


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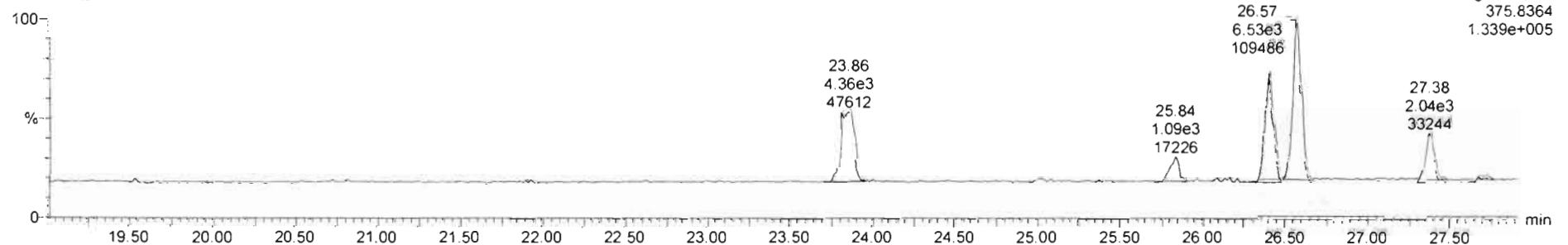


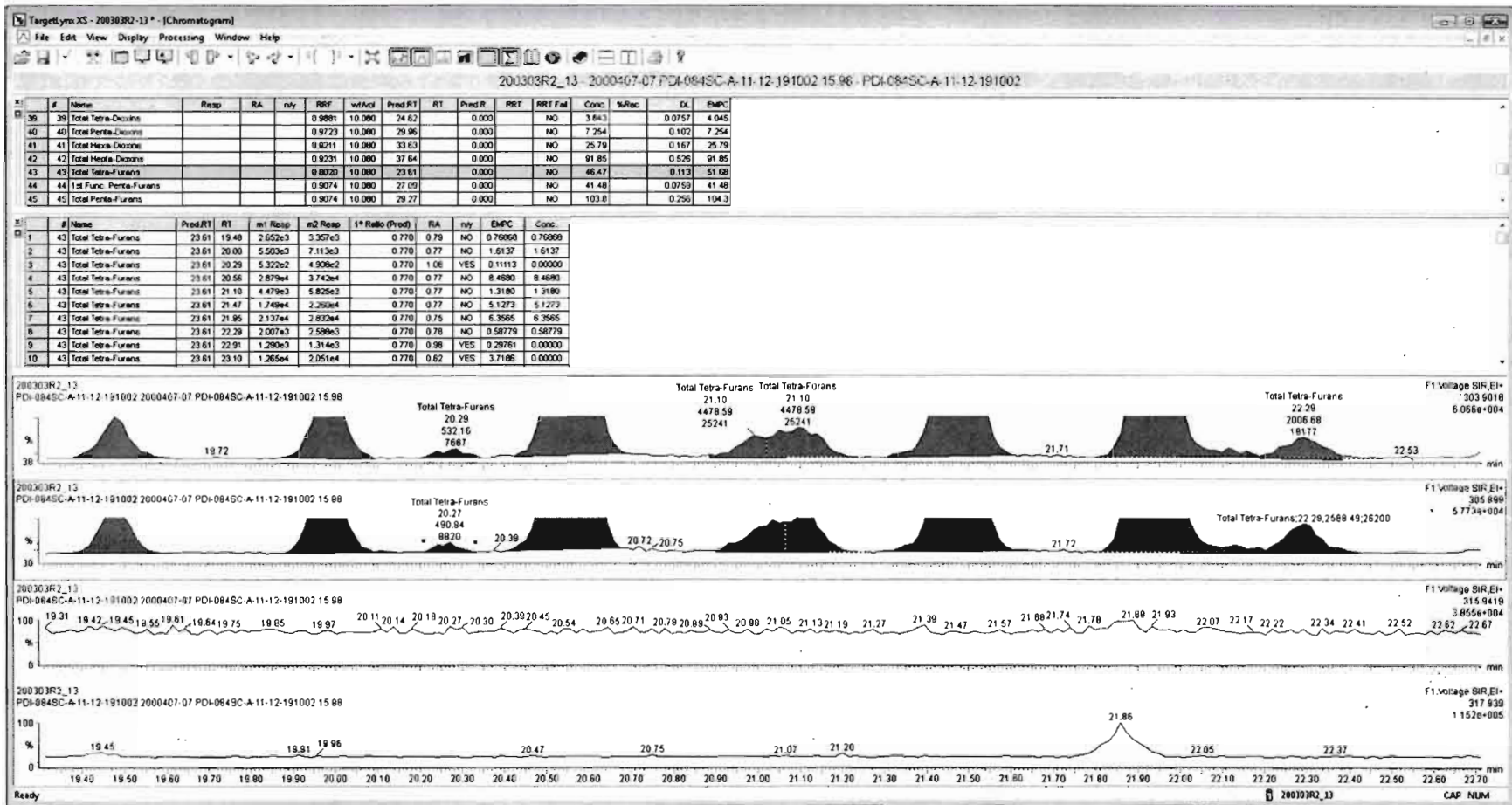
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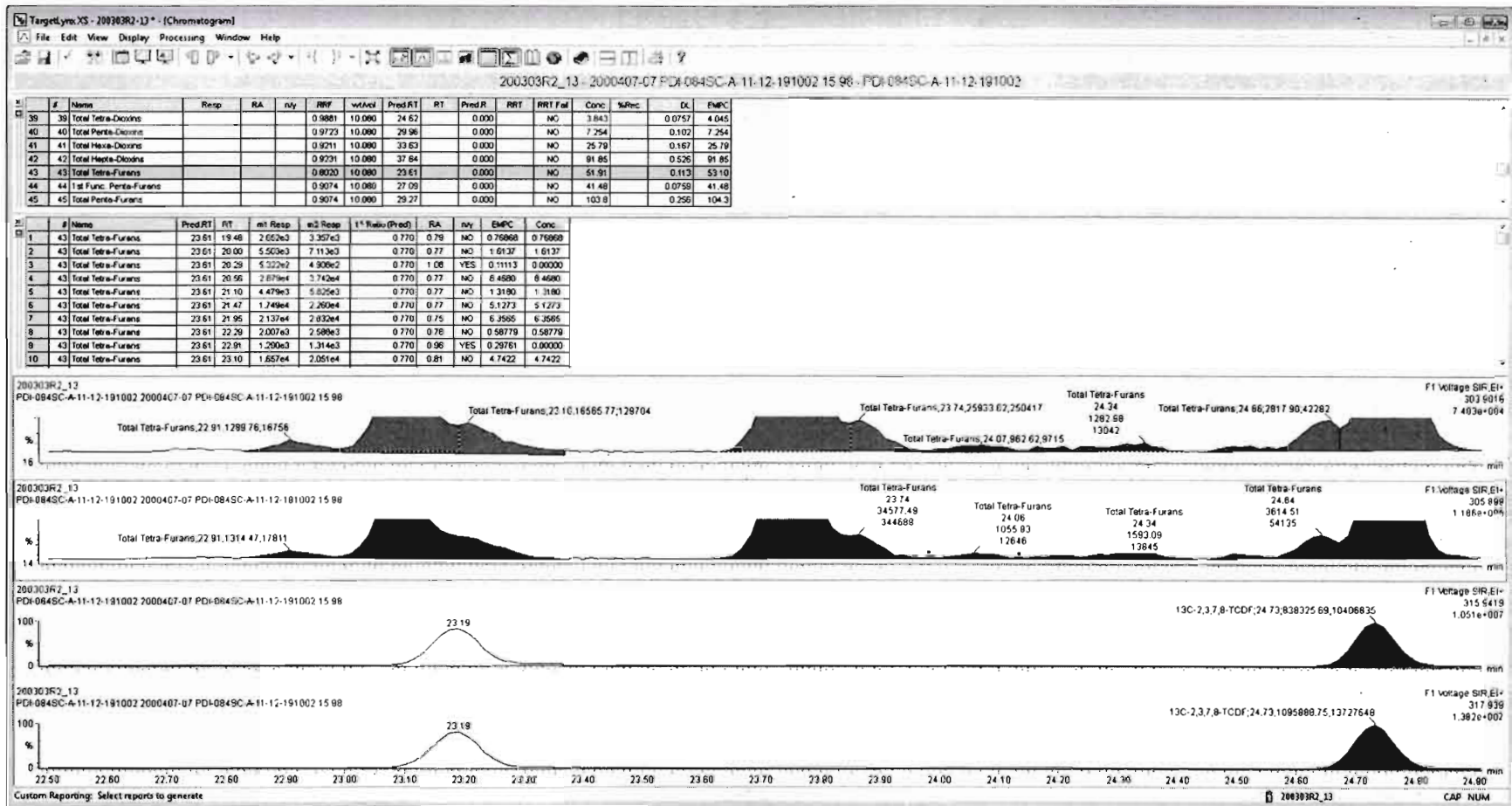


DPE1

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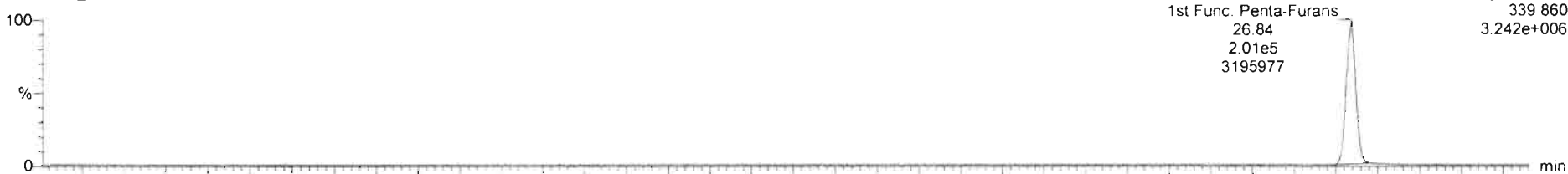
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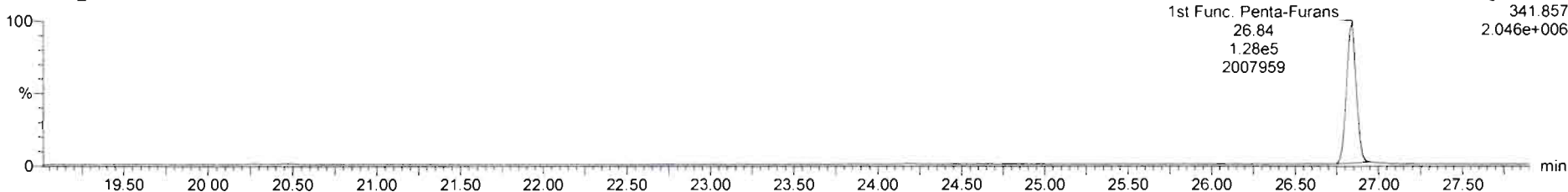
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1st Func. Penta-Furans

200303R2\_13

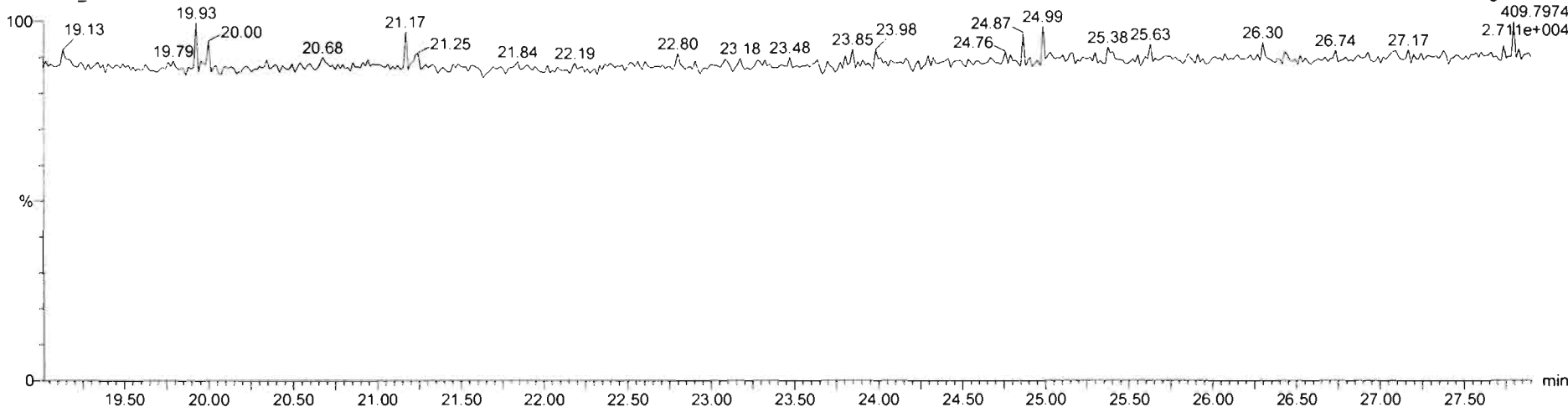


200303R2\_13



DPE6

200303R2\_13





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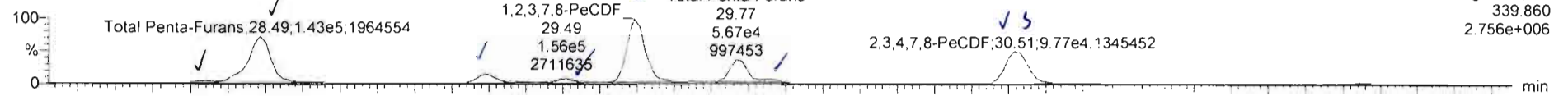
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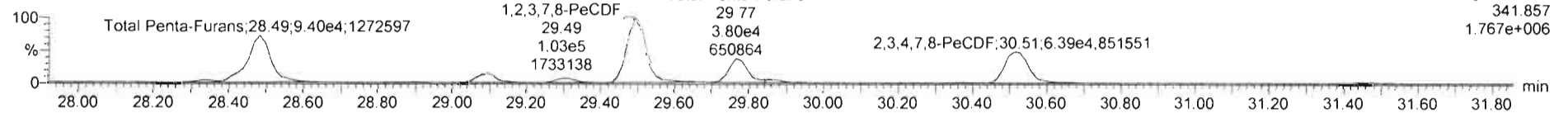
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**1,2,3,7,8-PeCDF**

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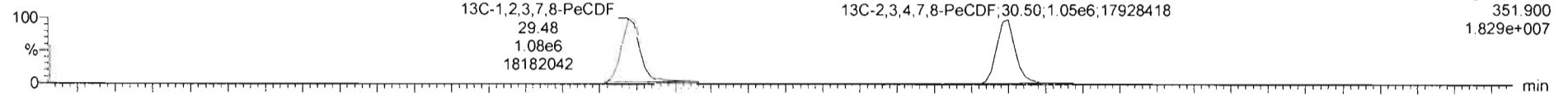


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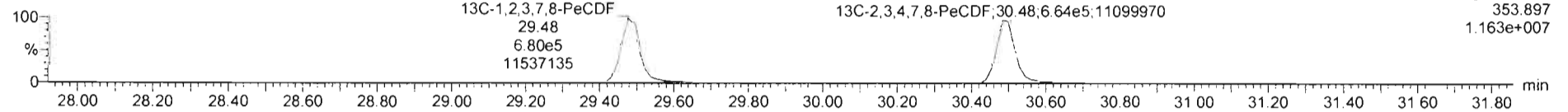


**13C-1,2,3,7,8-PeCDF**

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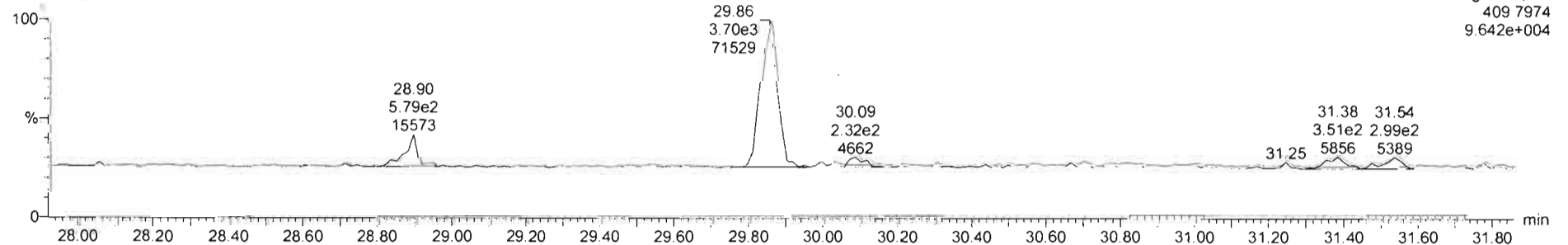


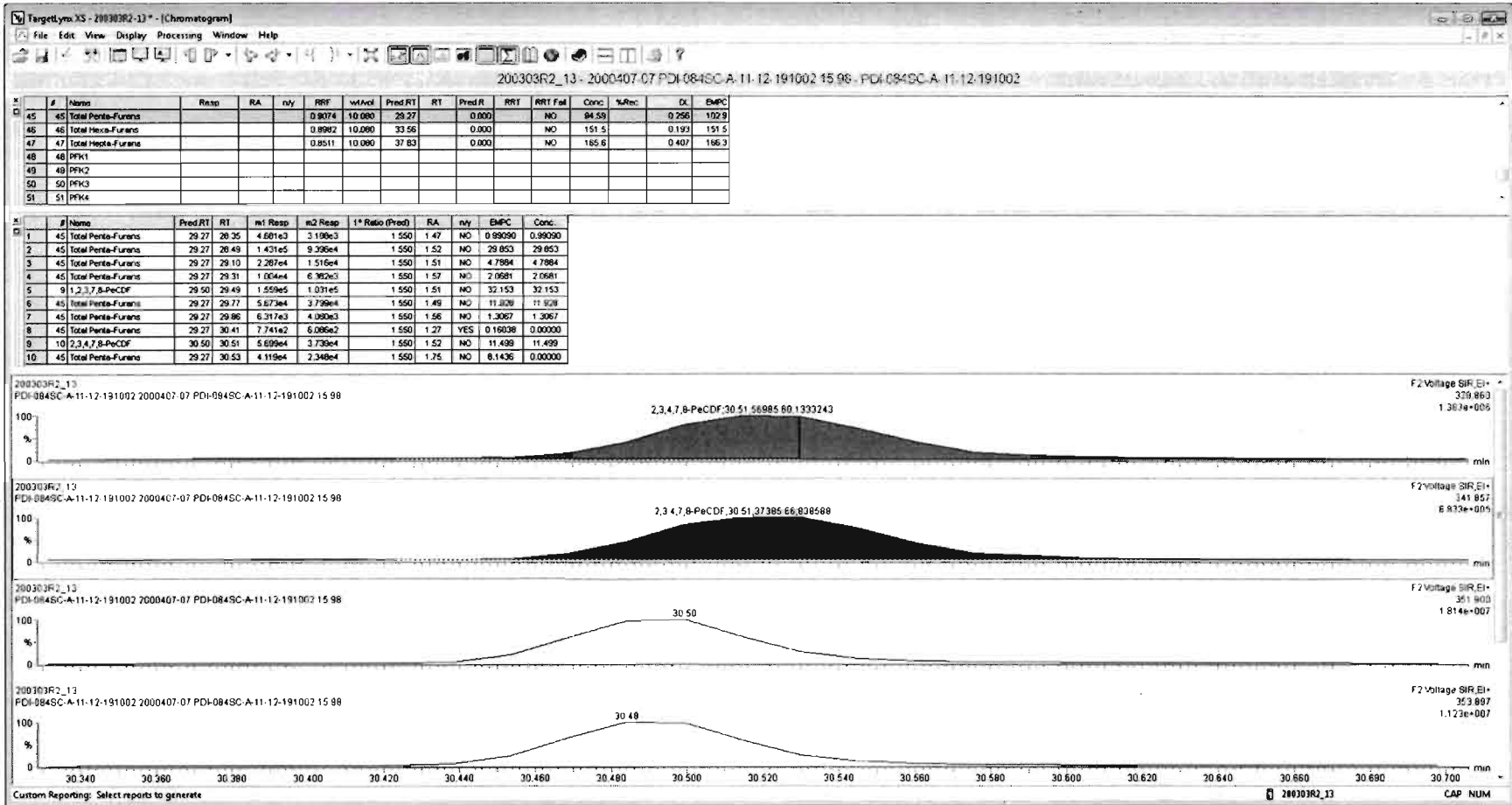
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**DPE2**

200303R2\_13





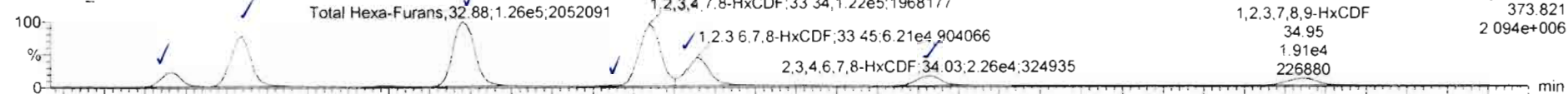
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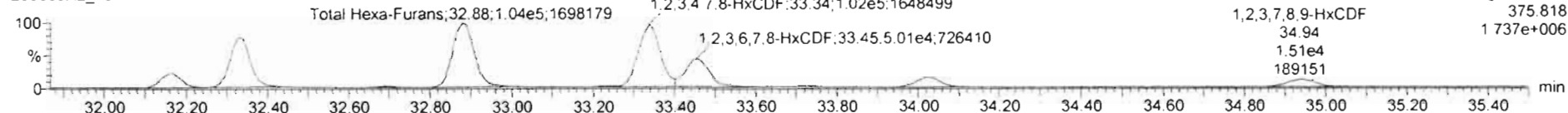
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1,2,3,4,7,8-HxCDF

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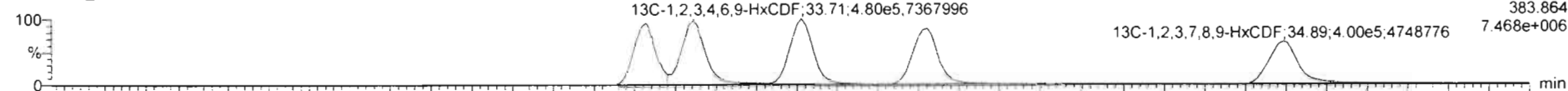


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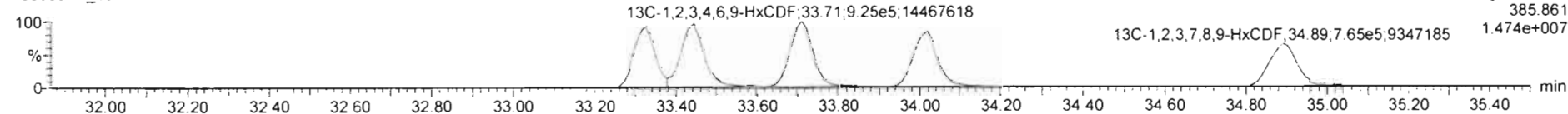


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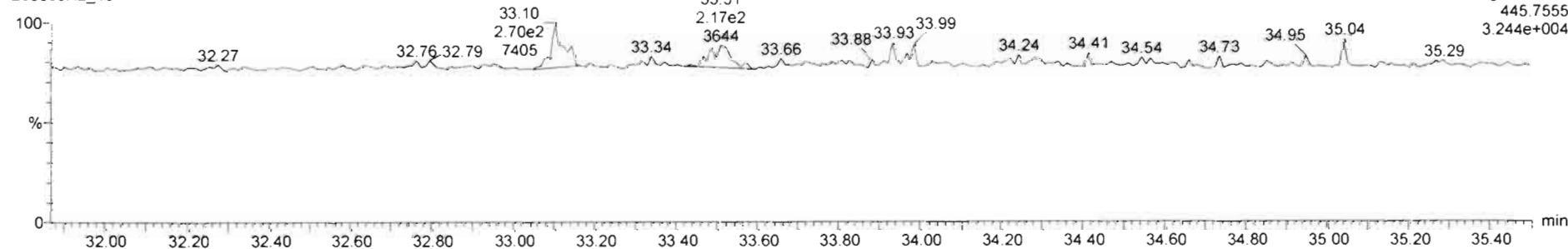


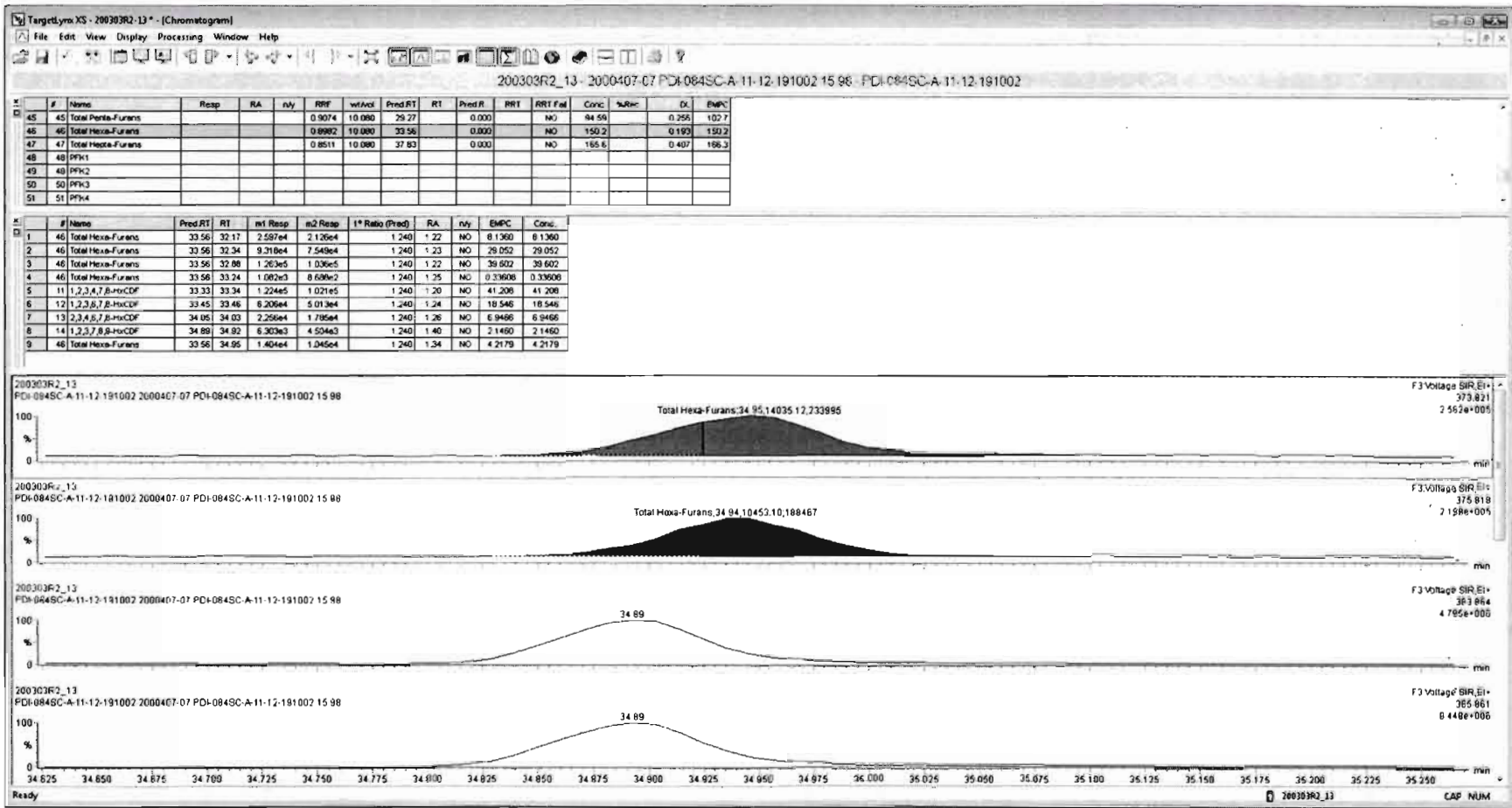
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DPE3

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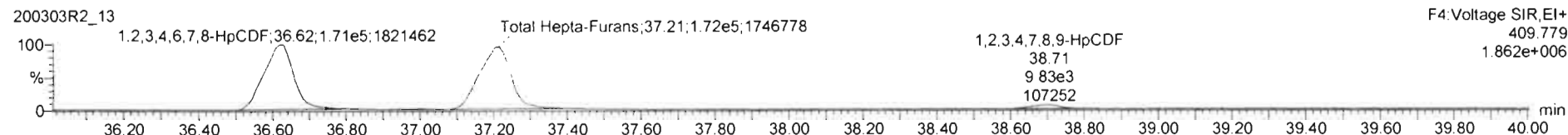
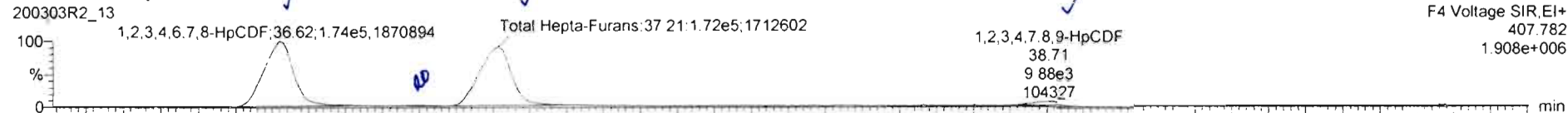


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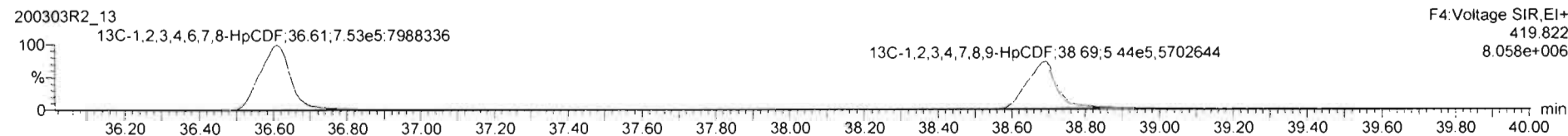
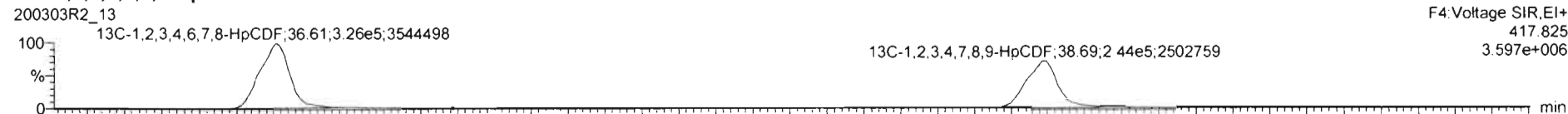
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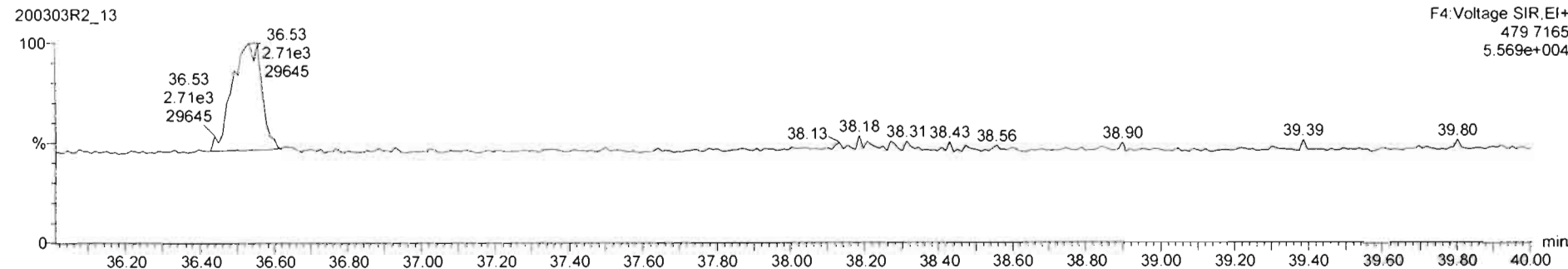
1,2,3,4,6,7,8-HpCDF



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



DPE4





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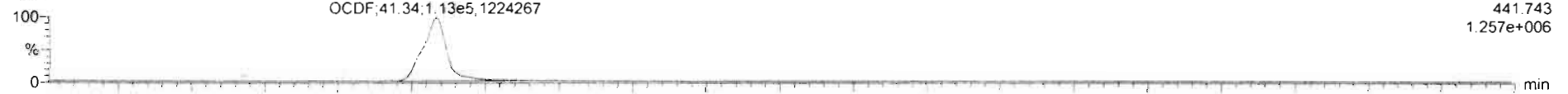
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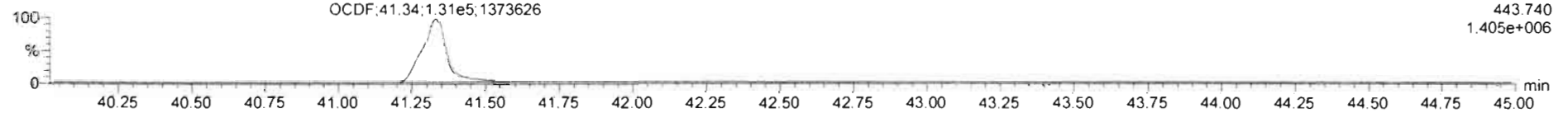
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OCDF

200303R2\_13

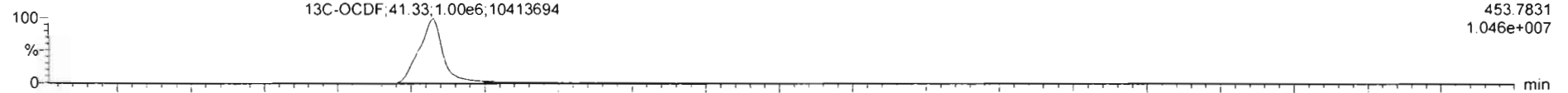


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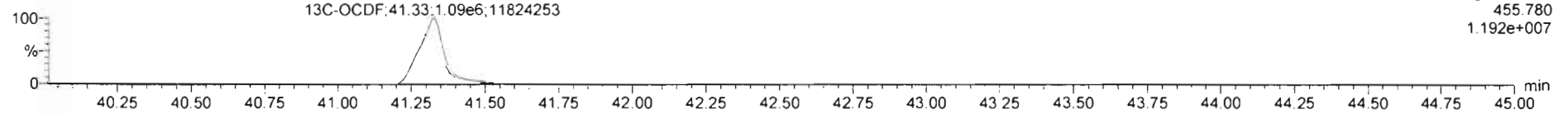


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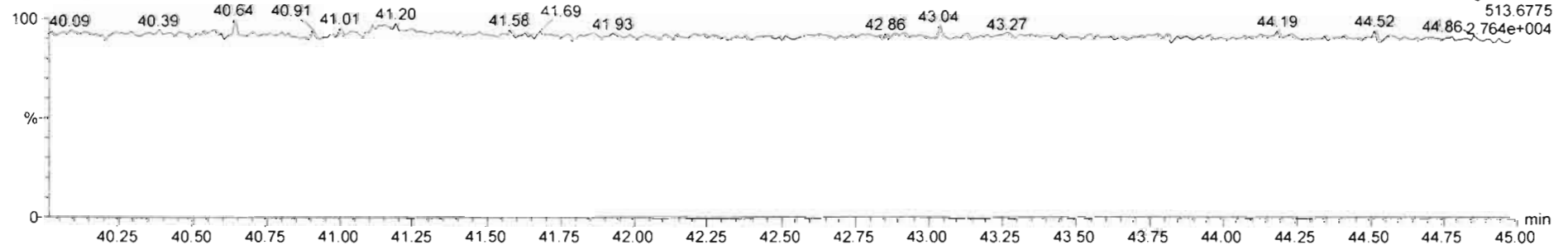


200303R2\_13



DPE5

200303R2\_13



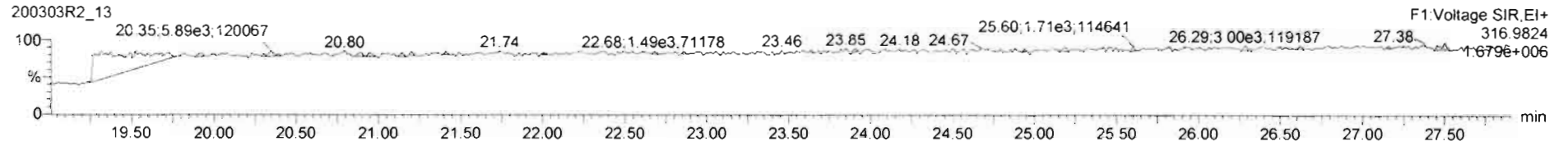
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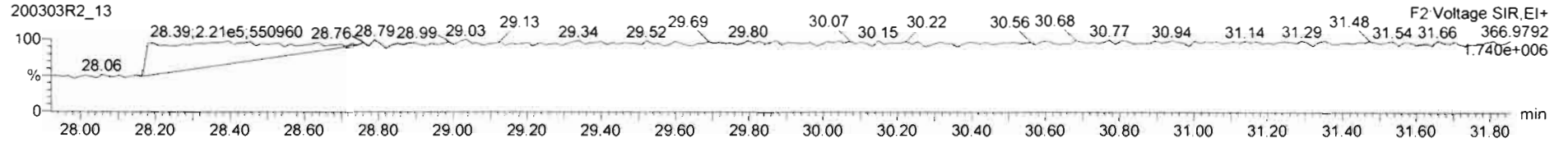
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Name: 200303R2\_13, Date: 03-Mar-2020, Time: 23:19:15, ID: 2000407-07 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

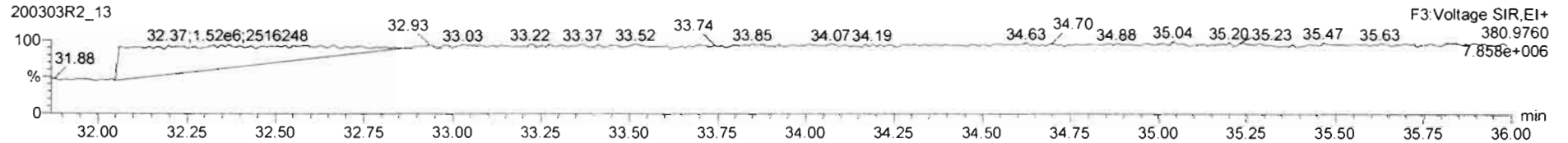
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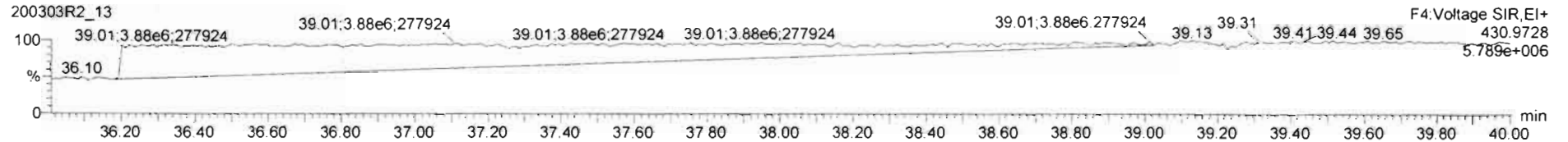
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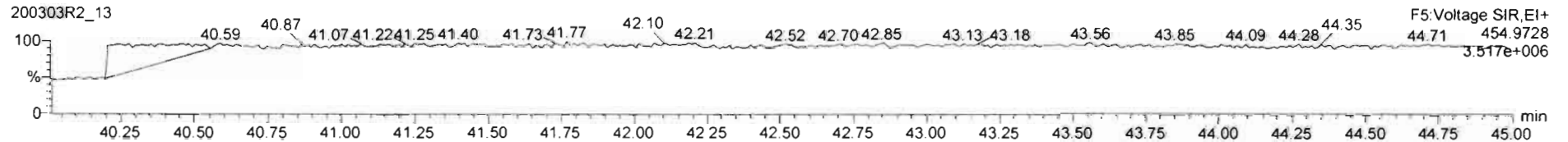
PFK3



PFK4



PFK5



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-14.qld

Last Altered: Wednesday, March 04, 2020 4:58:41 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 4:59:20 PM Pacific Standard Time

GPB 03/04/2020

C7 03/06/2020

Method: Untitled 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

#	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	2.42e3	0.52	YES	0.988	10.072	25.721	25.72	1.001	1.001	0.31895		0.0711	0.247
2	2 1,2,3,7,8-PeCDD	7.94e2	0.68	NO	0.972	10.072	30.857	30.85	1.001	1.000	0.11485		0.0674	0.115
3	3 1,2,3,4,7,8-HxCDD			NO	1.07	10.072	34.210		1.000				0.0702	
4	4 1,2,3,6,7,8-HxCDD	4.14e2	0.94	YES	0.921	10.072	34.307	34.33	1.000	1.001	0.067461		0.0727	0.0590
5	5 1,2,3,7,8,9-HxCDD	7.25e2	1.38	NO	0.918	10.072	34.608	34.58	1.001	1.000	0.13096		0.0803	0.131
6	6 1,2,3,4,6,7,8-HpCDD	5.43e3	0.89	NO	0.923	10.072	38.056	38.07	1.000	1.001	1.1938		0.140	1.19
7	7 OCDD	4.70e4	0.87	NO	0.975	10.072	41.155	41.17	1.000	1.000	10.636		0.148	10.6
8	8 2,3,7,8-TCDF			NO	0.802	10.072	24.772		1.001				0.0493	
9	9 1,2,3,7,8-PeCDF			NO	0.907	10.072	29.528		1.001				0.0444	
10	10 2,3,4,7,8-PeCDF			NO	0.952	10.072	30.545		1.001				0.0397	
11	11 1,2,3,4,7,8-HxCDF			NO	0.862	10.072	33.348		1.000				0.0514	
12	12 1,2,3,6,7,8-HxCDF			NO	0.841	10.072	33.475		1.000				0.0496	
13	13 2,3,4,6,7,8-HxCDF			NO	0.898	10.072	34.064		1.001				0.0520	
14	14 1,2,3,7,8,9-HxCDF	4.66e2	1.51	YES	0.858	10.072	34.914	34.94	1.000	1.001	0.090172		0.0369	0.0806
15	15 1,2,3,4,6,7,8-HpCDF	8.37e2	1.03	NO	0.851	10.072	36.666	36.65	1.001	1.001	0.17813		0.0818	0.178
16	16 1,2,3,4,7,8,9-HpCDF			NO	0.980	10.072	38.706		1.000				0.0952	
17	17 OCDF	8.59e2	1.16	YES	0.806	10.072	41.336	41.38	1.000	1.001	0.20187		0.0717	0.177
18	18 13C-2,3,7,8-TCDD	1.55e6	0.77	NO	1.20	10.072	25.645	25.69	1.026	1.028	178.20	89.7	0.208	
19	19 13C-1,2,3,7,8-PeCDD	1.41e6	0.63	NO	0.967	10.072	30.765	30.83	1.230	1.233	201.48	101	0.281	
20	20 13C-1,2,3,4,7,8-HxCDD	1.05e6	1.27	NO	0.874	10.072	34.204	34.20	1.014	1.014	165.40	83.3	0.449	
21	21 13C-1,2,3,6,7,8-HxCDD	1.32e6	1.26	NO	1.05	10.072	34.305	34.31	1.017	1.017	174.37	87.8	0.375	
22	22 13C-1,2,3,7,8,9-HxCDD	1.20e6	1.21	NO	0.974	10.072	34.609	34.57	1.026	1.025	169.24	85.2	0.403	
23	23 13C-1,2,3,4,6,7,8-HpCDD	9.79e5	1.05	NO	0.747	10.072	38.185	38.04	1.132	1.128	180.48	90.9	0.469	
24	24 13C-OCDD	1.80e6	0.91	NO	0.707	10.072	41.086	41.16	1.218	1.220	350.78	88.3	0.471	
25	25 13C-2,3,7,8-TCDF	1.97e6	0.78	NO	1.07	10.072	24.827	24.75	0.993	0.990	186.07	93.7	0.298	
26	26 13C-1,2,3,7,8-PeCDF	1.89e6	1.57	NO	1.00	10.072	29.402	29.51	1.176	1.180	189.73	95.5	0.447	
27	27 13C-2,3,4,7,8-PeCDF	1.85e6	1.57	NO	0.962	10.072	30.370	30.51	1.215	1.220	193.36	97.4	0.466	
28	28 13C-1,2,3,4,7,8-HxCDF	1.34e6	0.51	NO	1.05	10.072	33.327	33.35	0.988	0.989	175.68	88.5	0.499	
29	29 13C-1,2,3,6,7,8-HxCDF	1.51e6	0.51	NO	1.19	10.072	33.428	33.47	0.991	0.992	174.35	87.8	0.440	
30	30 13C-2,3,4,6,7,8-HxCDF	1.37e6	0.51	NO	1.07	10.072	34.039	34.03	1.009	1.009	177.32	89.3	0.491	
31	31 13C-1,2,3,7,8,9-HxCDF	1.20e6	0.55	NO	0.922	10.072	34.946	34.91	1.036	1.035	178.80	90.0	0.568	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-14.qld

Last Altered: Wednesday, March 04, 2020 4:58:41 PM Pacific Standard Time

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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

#	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	1.10e6	0.43	NO	0.767	10.072	36.700	36.63	1.088	1.086	196.97	99.2	0.530	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.37e5	0.42	NO	0.552	10.072	38.724	38.71	1.148	1.147	208.73	105	0.736	
34	34 13C-OCDF	2.10e6	0.89	NO	0.789	10.072	41.322	41.34	1.225	1.225	365.98	92.2	0.348	
35	35 37Cl-2,3,7,8-TCDD	6.10e5			1.18	10.072	25.677	25.72	1.027	1.029	71.544	90.1	0.0687	
36	36 13C-1,2,3,4-TCDD	1.44e6	0.78	NO	1.00	10.072	25.110	25.00	1.000	1.000	198.57	100	0.250	
37	37 13C-1,2,3,4-TCDF	1.97e6	0.78	NO	1.00	10.072	23.370	23.21	1.000	1.000	198.57	100	0.318	
38	38 13C-1,2,3,4,6,9-HxCDF	1.44e6	0.52	NO	1.00	10.072	33.710	33.73	1.000	1.000	198.57	100	0.524	
39	39 Total Tetra-Dioxins				0.988	10.072	24.620		0.000		1.0884		0.0711	1.67
40	40 Total Penta-Dioxins				0.972	10.072	29.960		0.000		0.83823		0.0674	0.939
41	41 Total Hexa-Dioxins				0.921	10.072	33.635		0.000		1.5801		0.0778	1.64
42	42 Total Hepta-Dioxins				0.923	10.072	37.640		0.000		3.3541		0.140	3.35
43	43 Total Tetra-Furans				0.802	10.072	23.610		0.000		0.32230		0.0493	0.397
44	44 1st Func. Penta-Furans				0.907	10.072	27.090		0.000				0.0153	
45	45 Total Penta-Furans				0.907	10.072	29.275		0.000		0.00000		0.0201	0.0803
46	46 Total Hexa-Furans				0.898	10.072	33.555		0.000		0.00000		0.0269	0.102
47	47 Total Hepta-Furans				0.851	10.072	37.835		0.000		0.17813		0.0938	0.178

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-14.qld

Last Altered: Wednesday, March 04, 2020 4:58:41 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 4:59:20 PM Pacific Standard Time

Method: Untitled 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.90	4.775e3	5.041e3	3.038e2	4.164e2	0.73	NO	7.201e2	0.093512	0.093512	0.0711
2	Total Tetra-Dioxins	22.44	4.231e3	5.153e3	3.103e2	4.678e2	0.66	NO	7.781e2	0.10104	0.10104	0.0711
3	Total Tetra-Dioxins	23.39	1.691e4	3.273e4	1.491e3	1.945e3	0.77	NO	3.436e3	0.44623	0.44623	0.0711
4	Total Tetra-Dioxins	23.91	7.457e3	9.916e3	4.718e2	6.716e2	0.70	NO	1.143e3	0.14848	0.14848	0.0711
5	Total Tetra-Dioxins	24.61	5.427e3	7.755e3	3.976e2	6.364e2	0.62	YES	0.000e0	0.00000	0.11869	0.0711
6	Total Tetra-Dioxins	24.99	6.200e3	7.634e3	5.213e2	5.902e2	0.88	NO	1.111e3	0.14433	0.14433	0.0711
7	2,3,7,8-TCDD	25.72	1.041e4	2.020e4	8.264e2	1.591e3	0.52	YES	2.418e3	0.00000	0.24668	0.0711
8	Total Tetra-Dioxins	26.06	1.288e4	1.071e4	9.013e2	9.224e2	0.98	YES	0.000e0	0.00000	0.21201	0.0711
9	Total Tetra-Dioxins	26.72	7.882e3	9.877e3	4.952e2	6.974e2	0.71	NO	1.193e3	0.15486	0.15486	0.0711

**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	4.911e3	9.664e3	3.665e2	6.117e2	0.60	NO	9.781e2	0.14154	0.14154	0.0674
2	Total Penta-Dioxins	29.07	1.455e4	1.830e4	5.822e2	9.191e2	0.63	NO	1.501e3	0.21724	0.21724	0.0674
3	Total Penta-Dioxins	29.74	4.901e3	7.958e3	2.510e2	3.872e2	0.65	NO	6.382e2	0.092359	0.092359	0.0674
4	Total Penta-Dioxins	29.83	2.784e3	4.673e3	2.293e2	3.539e2	0.65	NO	5.831e2	0.084386	0.084386	0.0674
5	Total Penta-Dioxins	30.10	5.947e3	8.522e3	5.225e2	7.757e2	0.67	NO	1.298e3	0.18785	0.18785	0.0674
6	1,2,3,7,8-PeCDD	30.85	5.750e3	8.724e3	3.224e2	4.713e2	0.68	NO	7.937e2	0.11485	0.11485	0.0674
7	Total Penta-Dioxins	31.23	4.916e3	6.661e3	3.267e2	4.255e2	0.77	YES	0.000e0	0.00000	0.10035	0.0674

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.74	5.621e4	4.964e4	2.877e3	2.640e3	1.09	NO	5.517e3	0.99951	0.99951	0.0778
2	Total Hexa-Dioxins	33.54	2.096e4	1.525e4	1.351e3	1.131e3	1.20	NO	2.482e3	0.44964	0.44964	0.0778
3	1,2,3,6,7,8-HxCDD	34.33	3.007e3	4.631e3	2.004e2	2.138e2	0.94	YES	4.142e2	0.00000	0.058957	0.0727
4	1,2,3,7,8,9-HxCDD	34.58	1.002e4	5.966e3	4.202e2	3.046e2	1.38	NO	7.249e2	0.13096	0.13096	0.0803



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-14.qld

Last Altered: Wednesday, March 04, 2020 4:58:41 PM Pacific Standard Time

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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

Hepta-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.03	6.494e4	6.395e4	5.102e3	4.728e3	1.08	NO	9.830e3	2.1603	2.1603	0.140
2	1,2,3,4,6,7,8-HpCDD	38.07	3.149e4	3.324e4	2.554e3	2.878e3	0.89	NO	5.432e3	1.1938	1.1938	0.140

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	20.56	7.536e3	1.010e4	6.538e2	8.007e2	0.82	NO	1.455e3	0.18296	0.18296	0.0493
2	Total Tetra-Furans	23.89	3.705e3	6.558e3	2.587e2	4.312e2	0.60	YES	0.000e0	0.00000	0.074803	0.0493
3	Total Tetra-Furans	26.42	3.847e3	4.920e3	2.069e2	2.927e2	0.71	NO	4.996e2	0.062844	0.062844	0.0493
4	Total Tetra-Furans	26.60	3.808e3	4.972e3	2.689e2	3.392e2	0.79	NO	6.081e2	0.076495	0.076495	0.0493

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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	29.87	9.546e3	7.036e3	4.165e2	3.199e2	1.30	YES	0.000e0	0.00000	0.080313	0.0430

P

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8,9-HxCDF	34.94	8.716e3	3.949e3	2.802e2	1.861e2	1.51	YES	4.663e2	0.00000	0.080608	0.0369
2	Total Hexa-Furans	34.98	3.202e3	1.723e3	1.056e2	5.738e1	1.84	YES	0.000e0	0.00000	0.021000	0.0269

Hepta-Furans

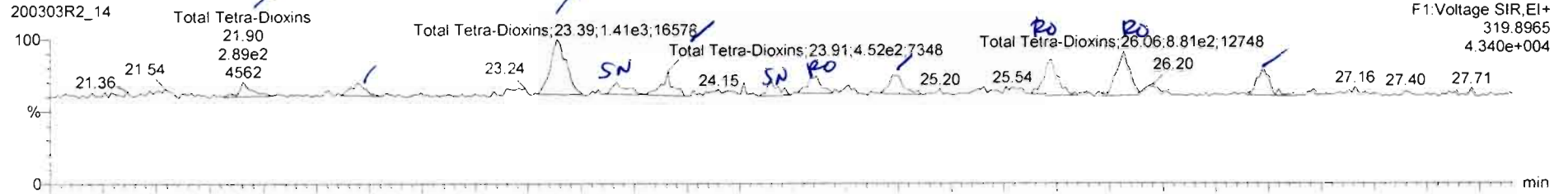
	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.65	5.629e3	7.765e3	4.254e2	4.120e2	1.03	NO	8.374e2	0.17813	0.17813	0.0818

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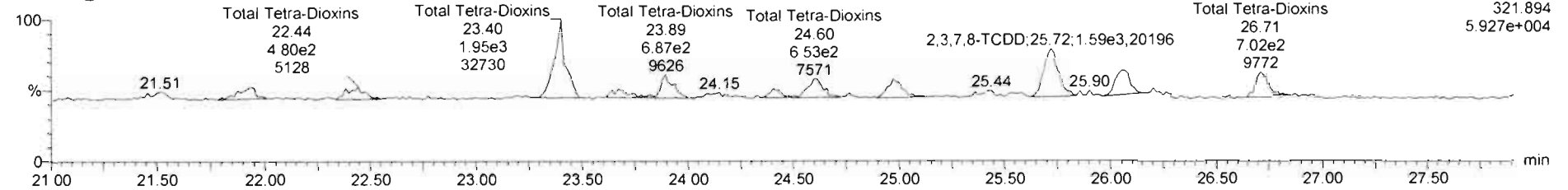
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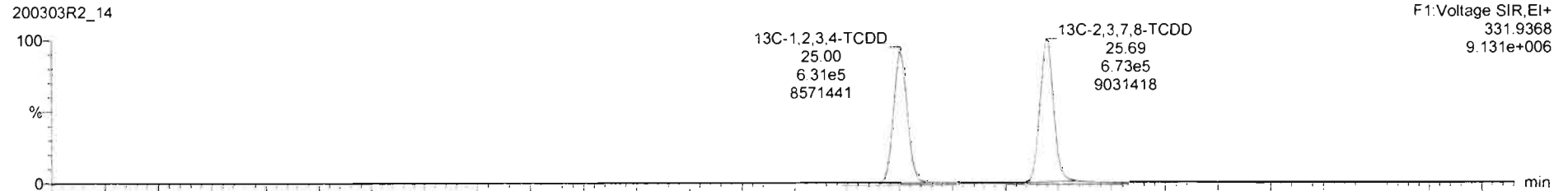
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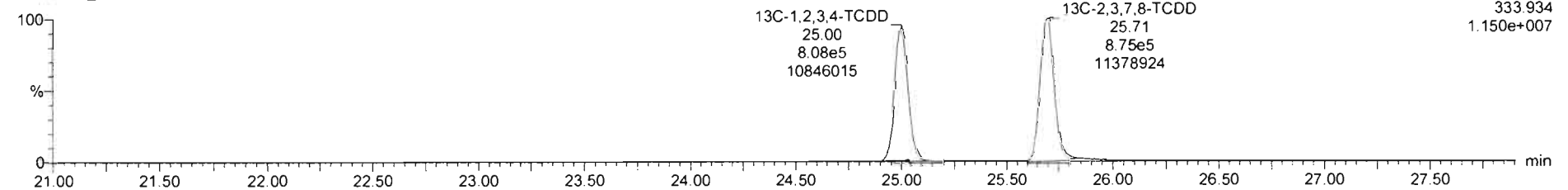
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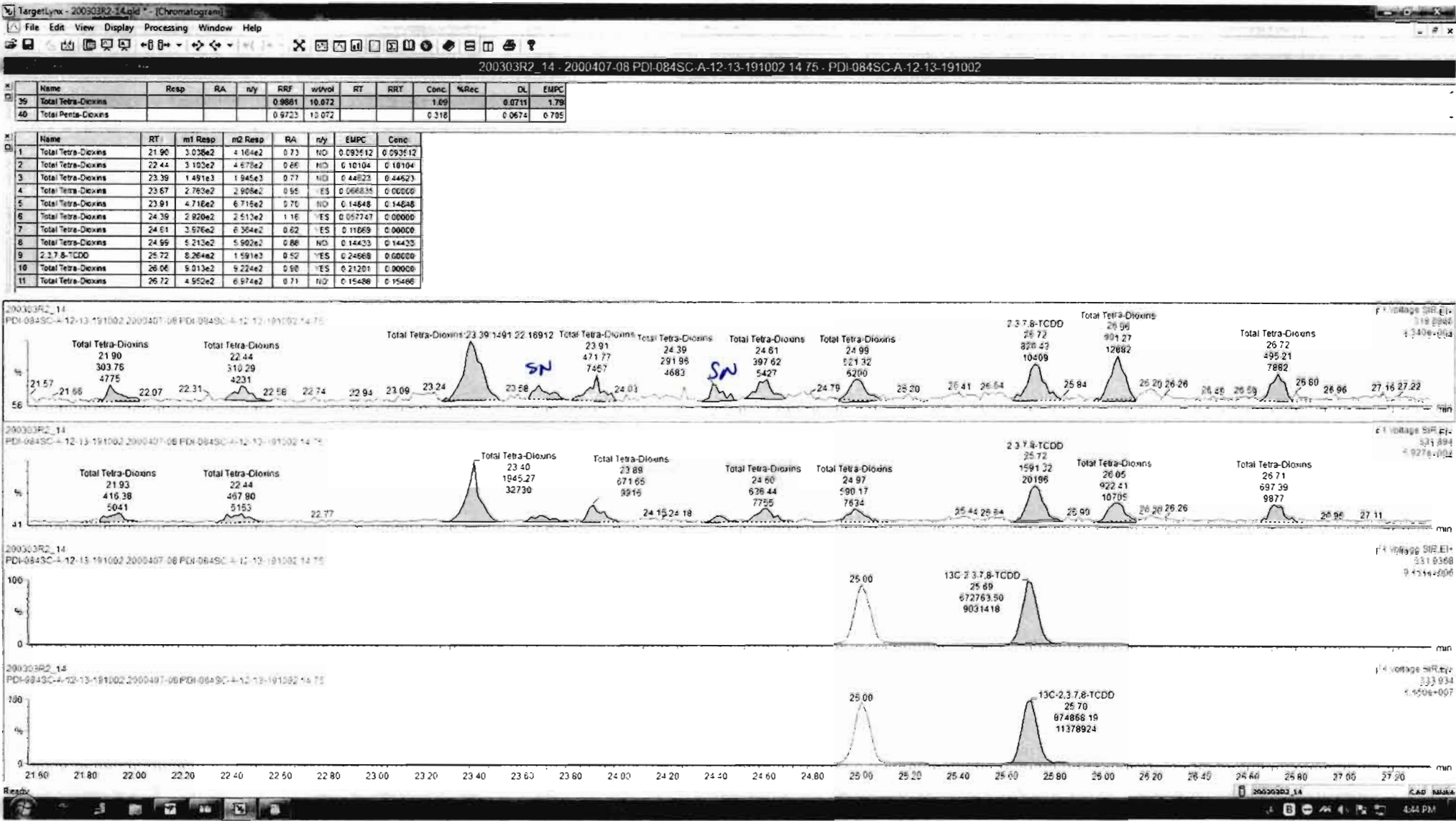


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200303R2\_14

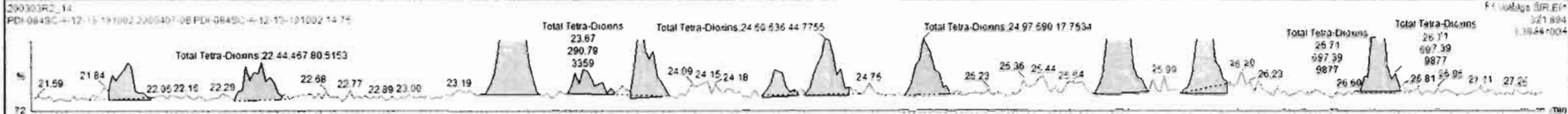
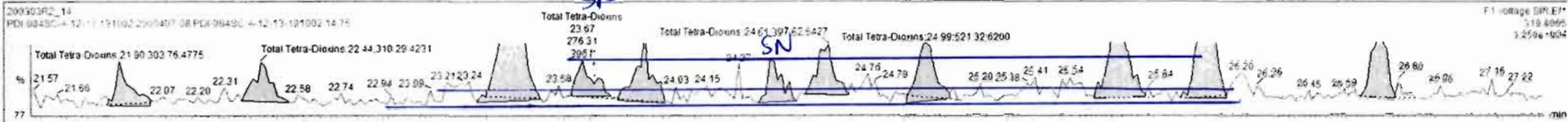




200303R2\_14 - 2000407-08 PDI-084SC-A-12-13-191002 14 75 - PDI-084SC-A-12-13-191002

Name	Resp	RA	n/y	RRF	w/Vol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9561	10.072			1.09	0.0711	1.79	
40 Total Penta-Dioxins				0.9723	10.072			0.318	0.0674	0.705	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Tetra-Dioxins	21.96	3.038e2	4.164e2	0.73	NO	0.093512	0.093512
2 Total Tetra-Dioxins	22.44	3.103e2	4.678e2	0.66	NO	0.10104	0.10104
3 Total Tetra-Dioxins	23.39	1.451e3	1.945e3	0.77	NO	0.44623	0.44623
4 Total Tetra-Dioxins	23.67	2.783e2	2.908e2	0.95	YES	0.066835	0.066835
5 Total Tetra-Dioxins	23.91	4.716e2	6.715e2	0.70	NO	0.14848	0.14848
6 Total Tetra-Dioxins	24.39	2.920e2	2.513e2	1.16	YES	0.057747	0.057747
7 Total Tetra-Dioxins	24.61	3.576e2	6.354e2	0.62	YES	0.11669	0.060000
8 Total Tetra-Dioxins	24.95	5.213e2	5.502e2	0.88	NO	0.14433	0.14433
9 2,3,7,8-TCDD	25.72	8.264e2	1.581e3	0.52	YES	0.24668	0.060000
10 Total Tetra-Dioxins	26.06	9.013e2	9.224e2	0.96	YES	0.21201	0.060000
11 Total Tetra-Dioxins	26.72	4.952e2	6.974e2	0.71	NO	0.15466	0.15466



Dataset: Untitled

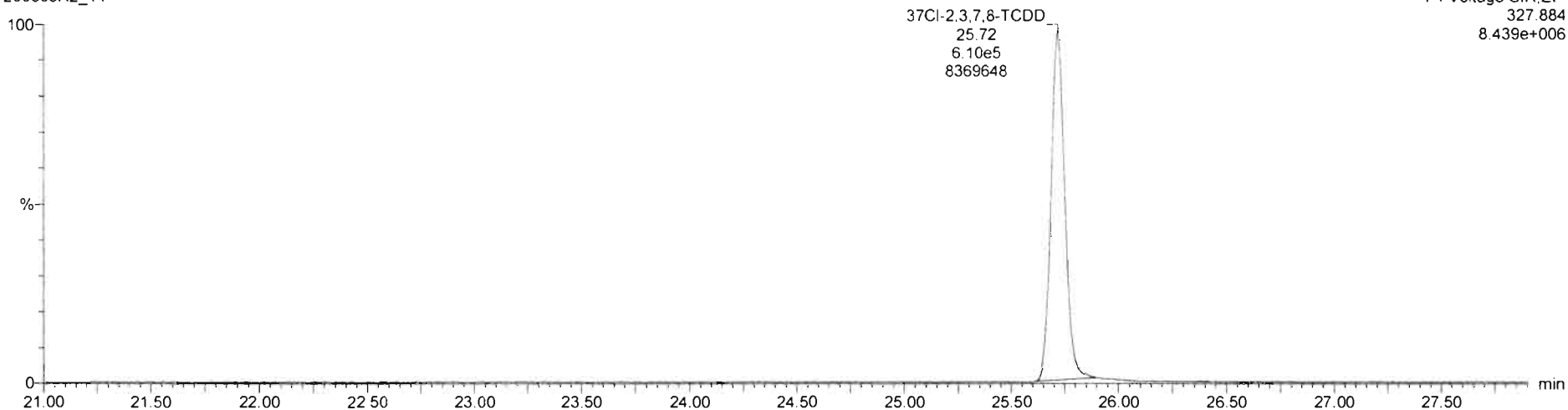
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

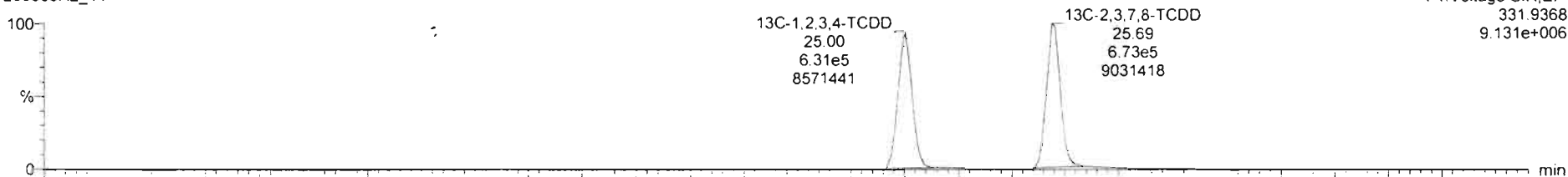
**37Cl-2,3,7,8-TCDD**

200303R2\_14

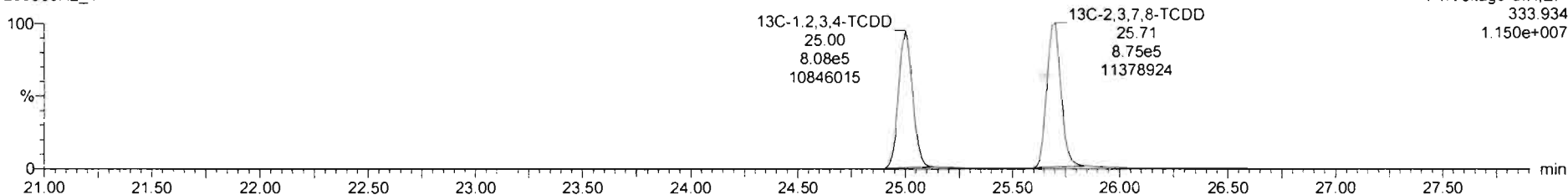


**13C-1,2,3,4-TCDD**

200303R2\_14



200303R2\_14





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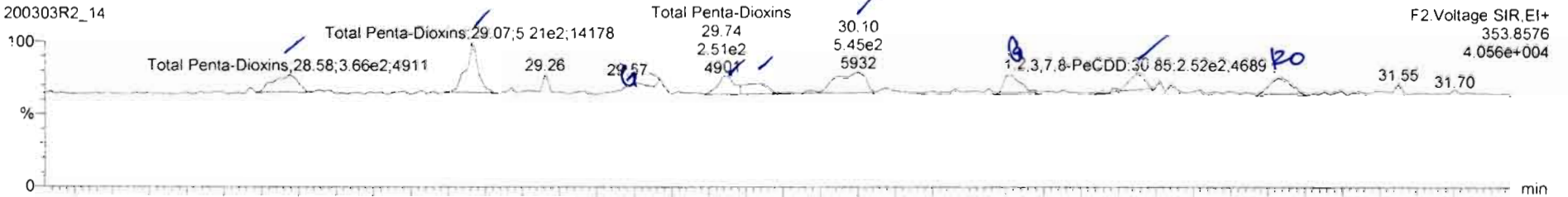
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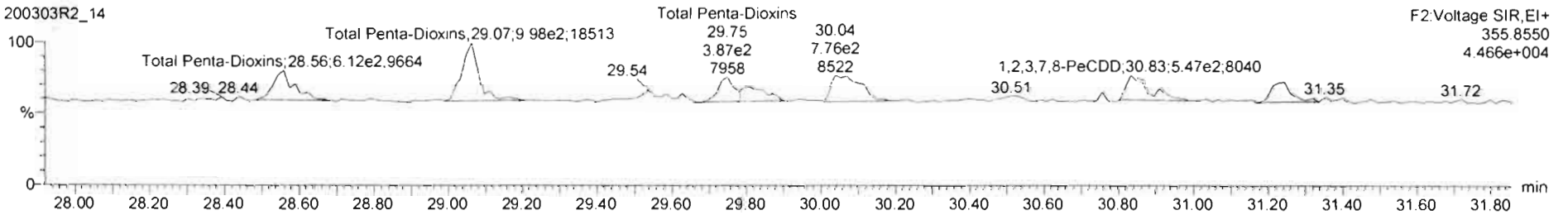
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1,2,3,7,8-PeCDD

200303R2\_14

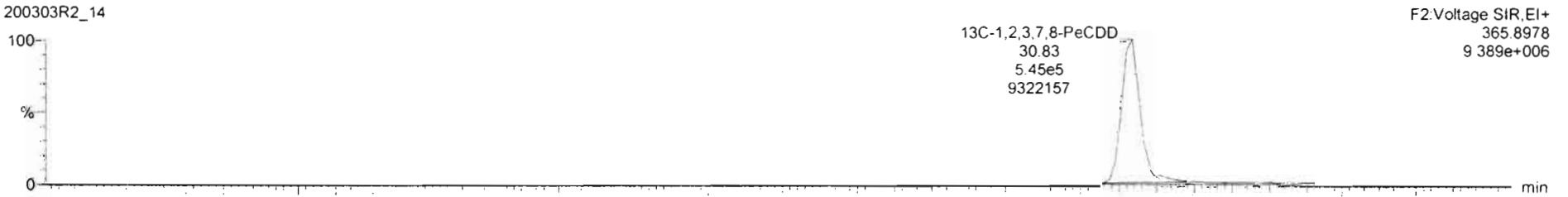


200303R2\_14

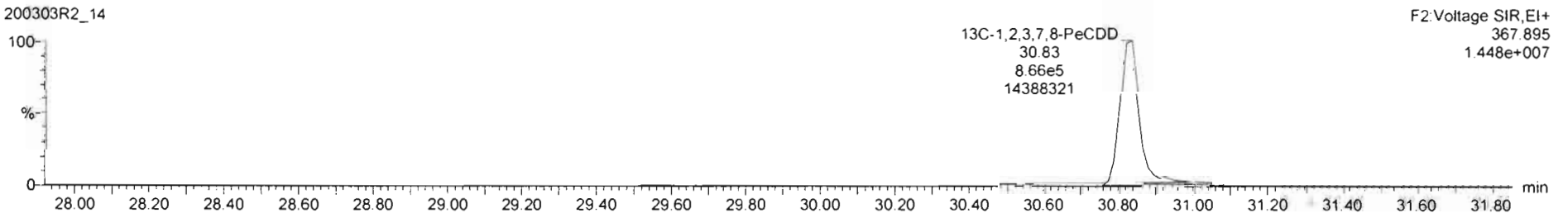


13C-1,2,3,7,8-PeCDD

200303R2\_14



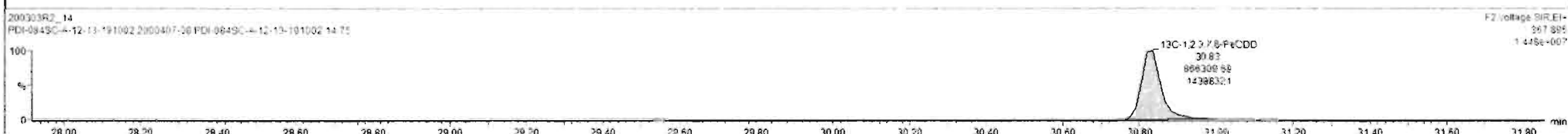
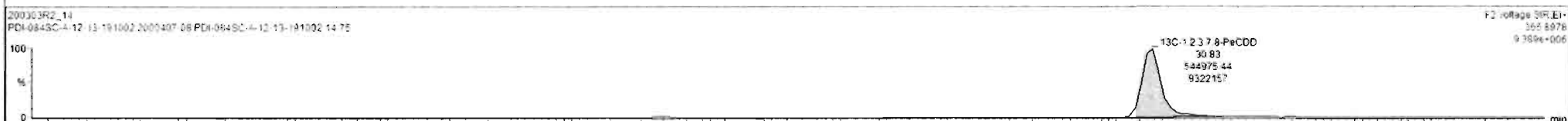
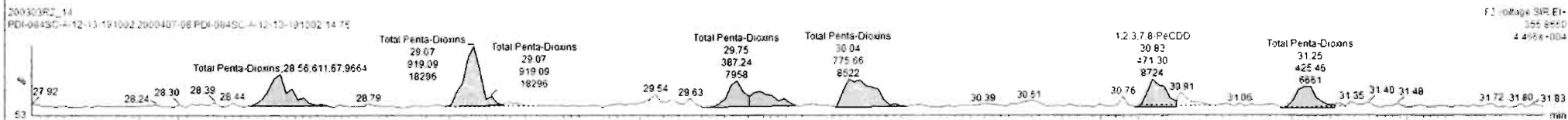
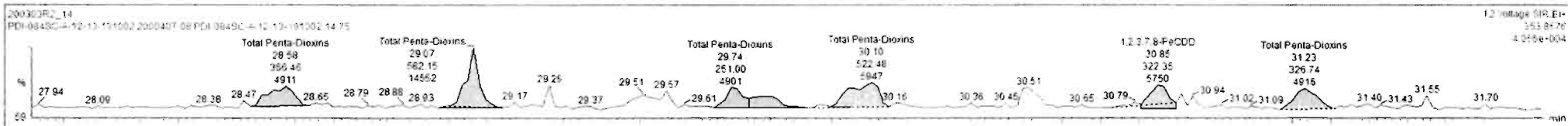
200303R2\_14



200303R2\_14 - 2000407-08 PDI-084SC-A-12-13-191002 14 75 - PDI-084SC-A-12-13-191002

Name	Resp	RA	ny	RF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
40 Total Penta-Dioxins				0.9723	10.072			0.838	0.0674	0.939	
41 Total Hexa-Dioxins				0.9211	10.072			0.585	0.0778	1.59	

Name	RT	m1 Resp	m2 Resp	RA	ny	EMPC	Conc
1 Total Penta-Dioxins	28.58	3.665e2	6.117e2	0.60	NO	0.14154	0.14154
2 Total Penta-Dioxins	29.07	5.822e2	5.191e2	0.83	NO	0.21724	0.21724
3 Total Penta-Dioxins	29.74	2.510e2	3.872e2	0.65	NO	0.092359	0.092359
4 Total Penta-Dioxins	29.83	2.293e2	3.539e2	0.65	NO	0.084386	0.084386
5 Total Penta-Dioxins	30.10	5.225e2	7.757e2	0.67	NO	0.18785	0.18785
6 1,2,3,7,8-PeCDD	30.85	3.224e2	4.713e2	0.68	NO	0.11485	0.11485
7 Total Penta-Dioxins	31.23	3.287e2	4.255e2	0.77	YES	0.10035	0.00000

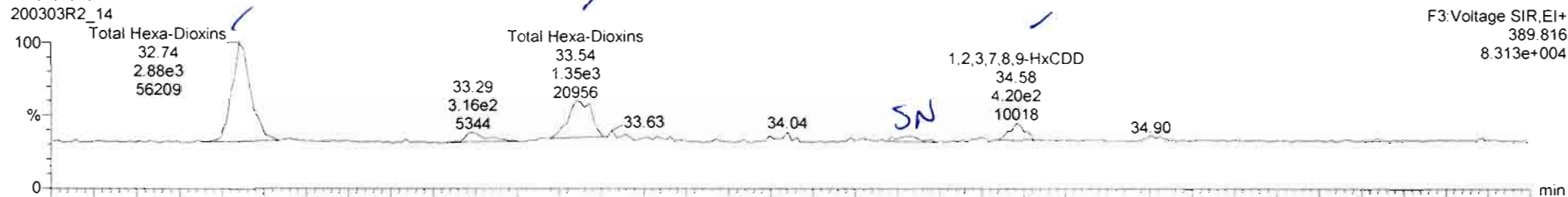


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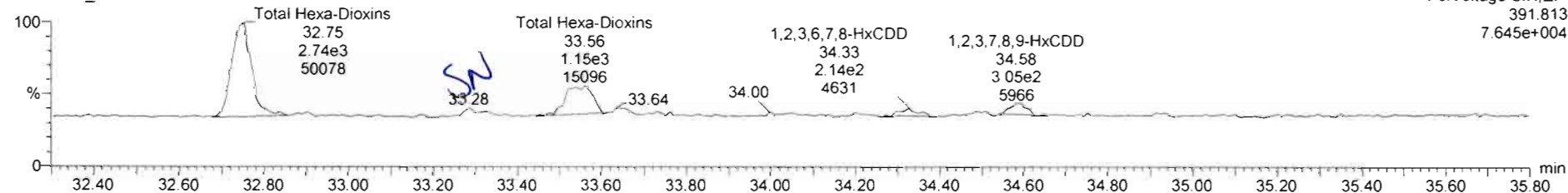
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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

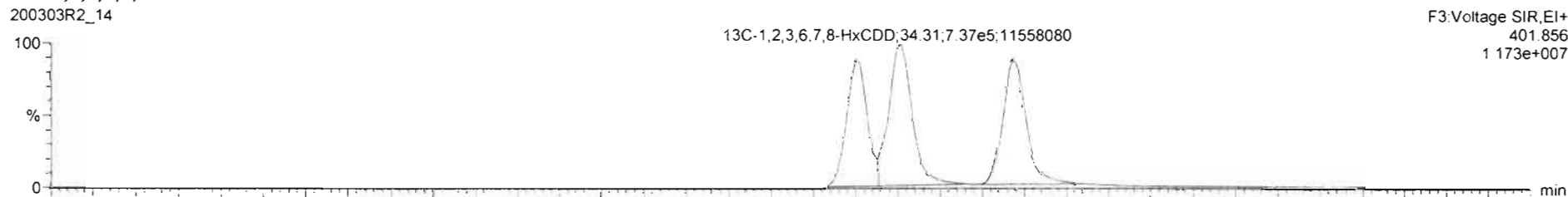
1,2,3,4,7,8-HxCDD



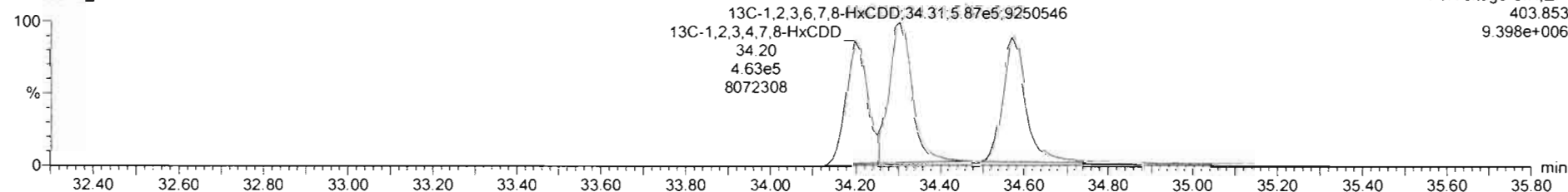
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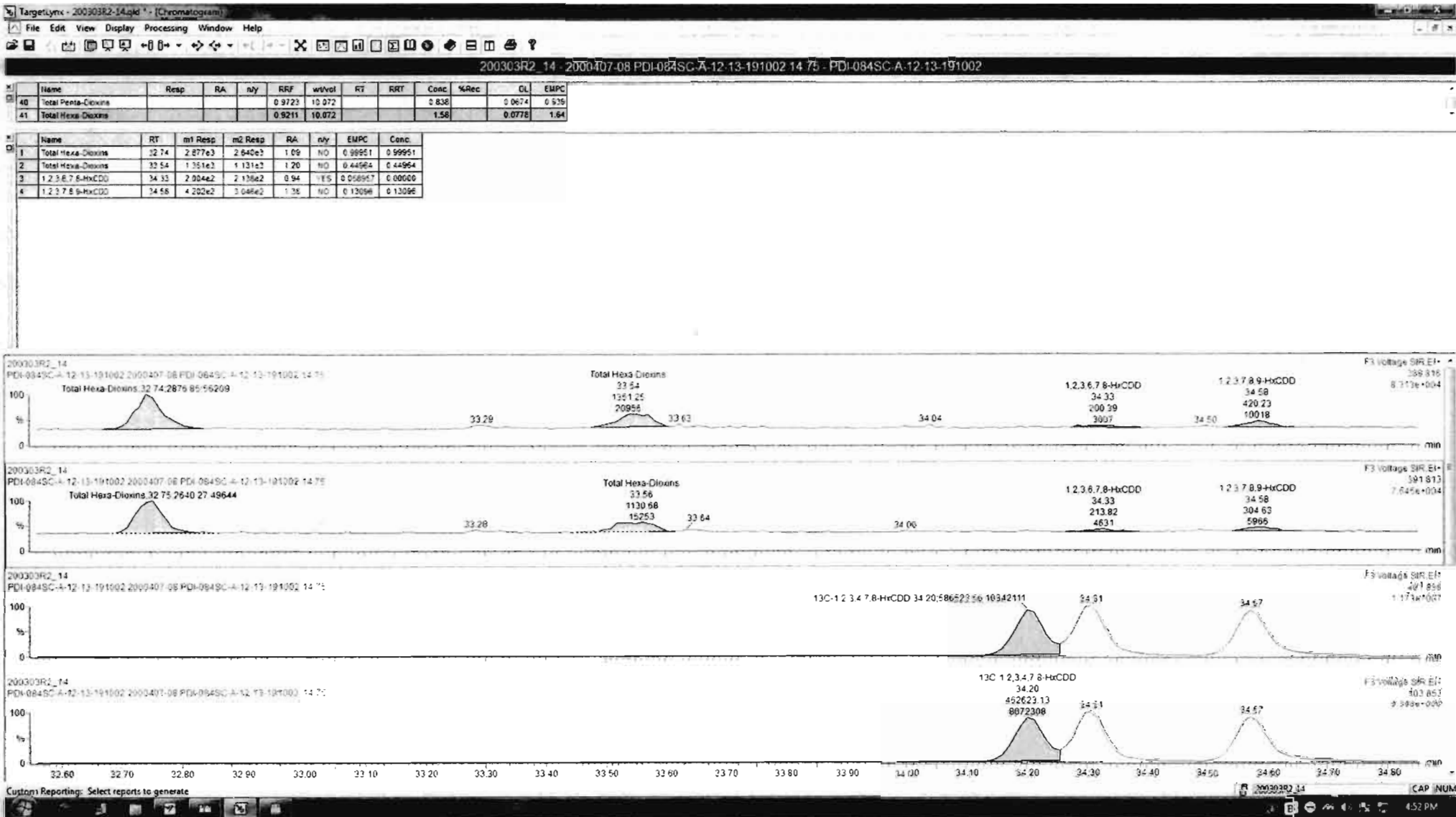


13C-1,2,3,4,7,8-HxCDD



200303R2\_14

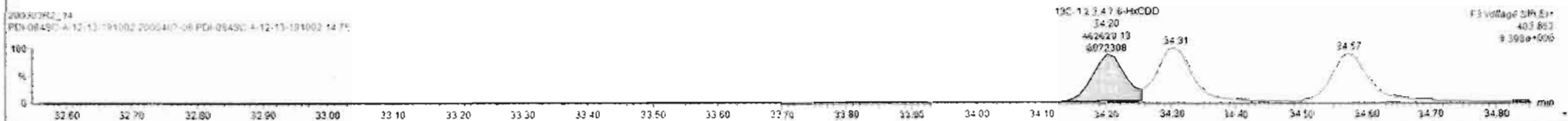
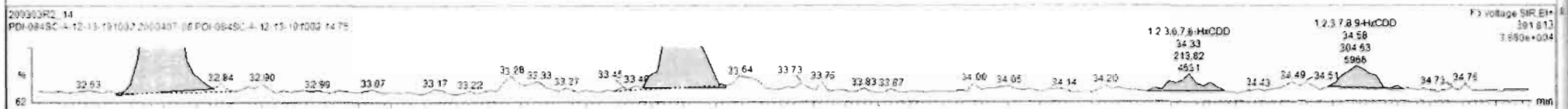
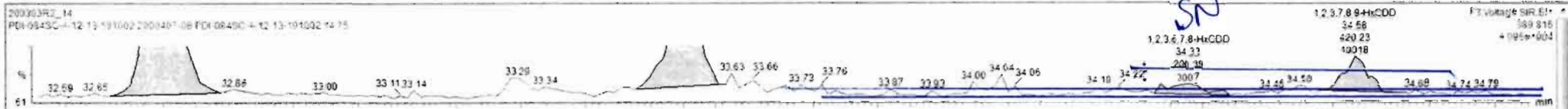




200303R2\_14 - 2000407-08 PDI-084SC-A-12-13-191002 14.75 - PDI-084SC-A-12-13-191002

#	Name	Resp	RA	n/y	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
40	Total Penta-Dioxins				0.9723	10.072			0.838	0.0674	6.526	
41	Total Hexa-Dioxins				0.9211	10.072			1.58	0.0778	1.64	

#	Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1	Total Hexa-Dioxins	32.74	2.877e3	2.640e3	1.09	NO	0.99951	0.99951
2	Total Hexa-Dioxins	33.54	1.251e3	1.131e3	1.20	NO	0.44964	0.44964
3	1,2,3,6,7,8-HxCDD	34.33	2.004e2	2.138e2	0.94	YES	0.058957	0.00900
4	1,2,3,7,8,9-HxCDD	34.58	4.202e2	3.048e2	1.38	NO	0.13056	0.13056





Dataset: Untitled

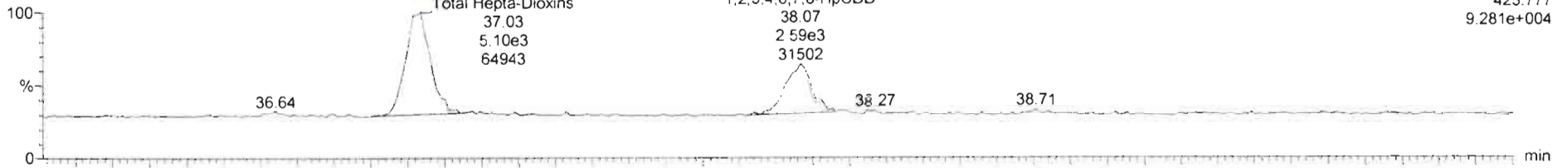
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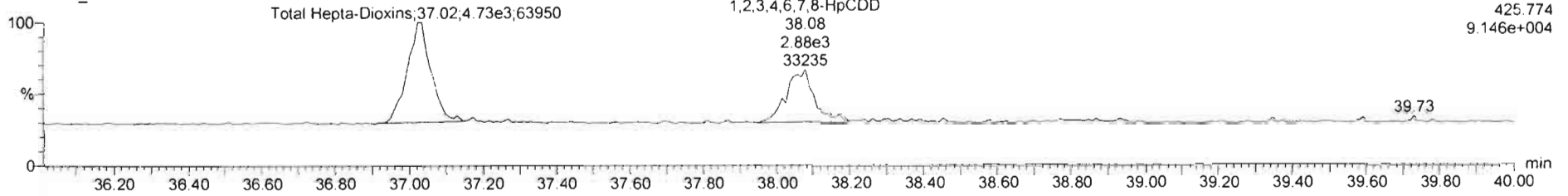
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1,2,3,4,6,7,8-HpCDD

200303R2\_14

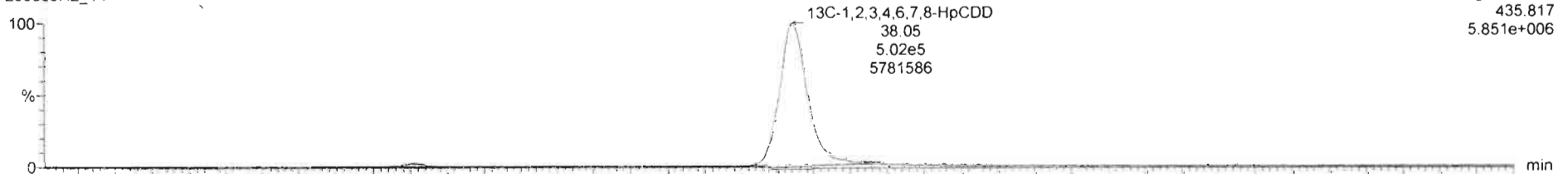


200303R2\_14

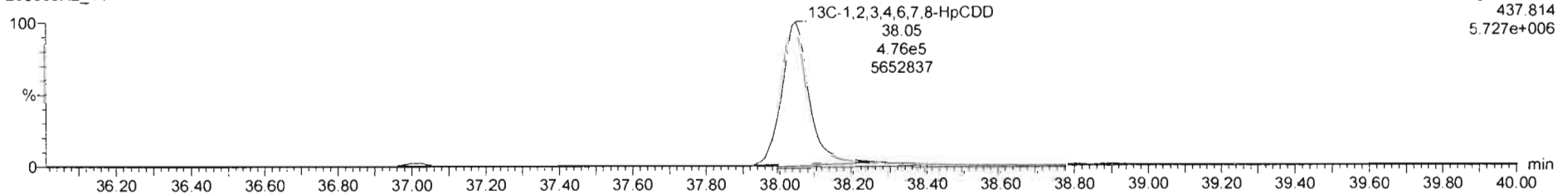


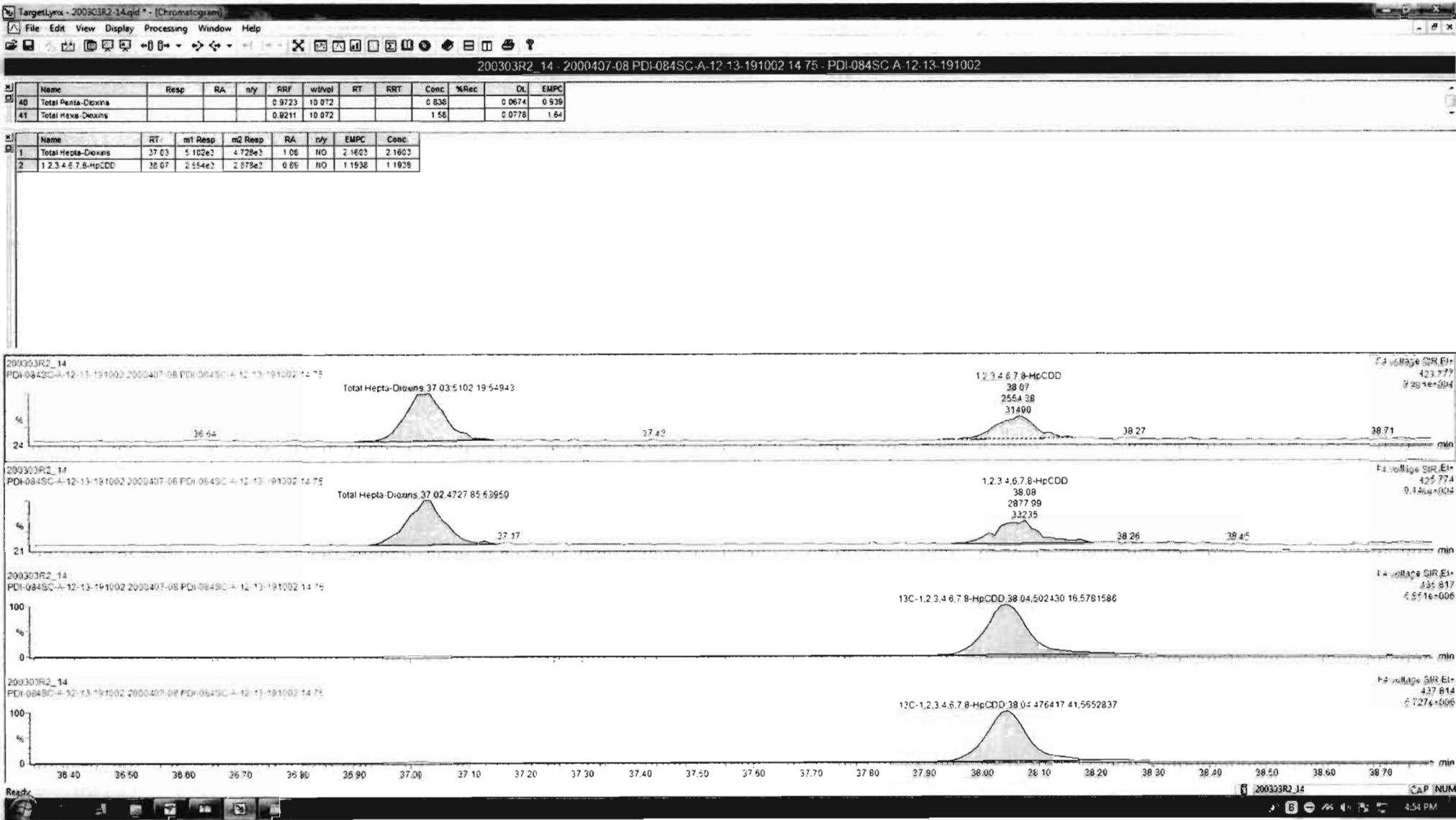
13C-1,2,3,4,6,7,8-HpCDD

200303R2\_14



200303R2\_14



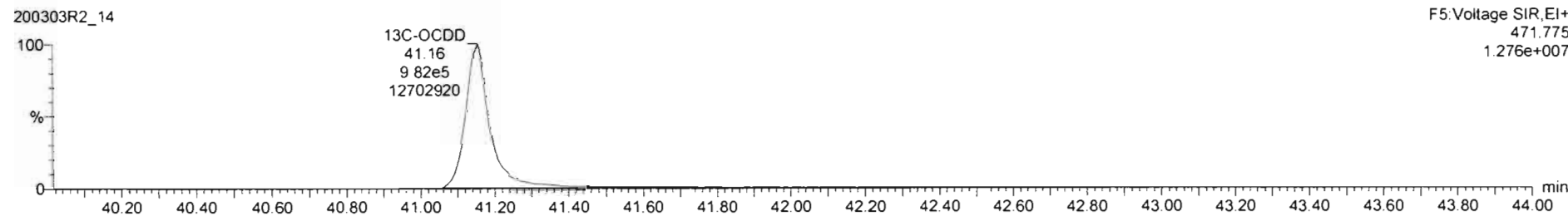
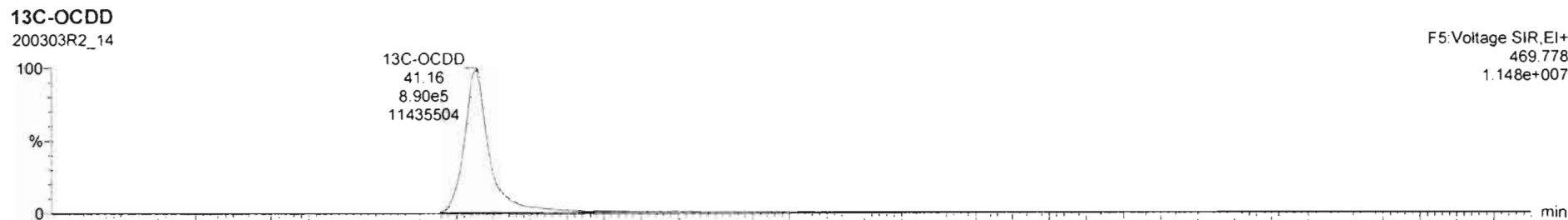
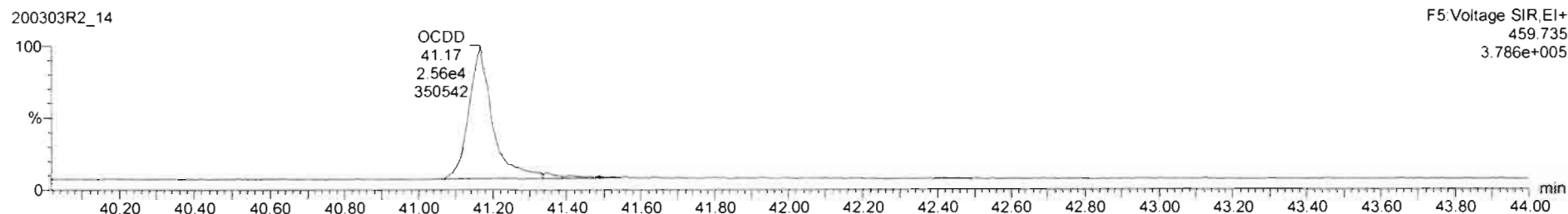
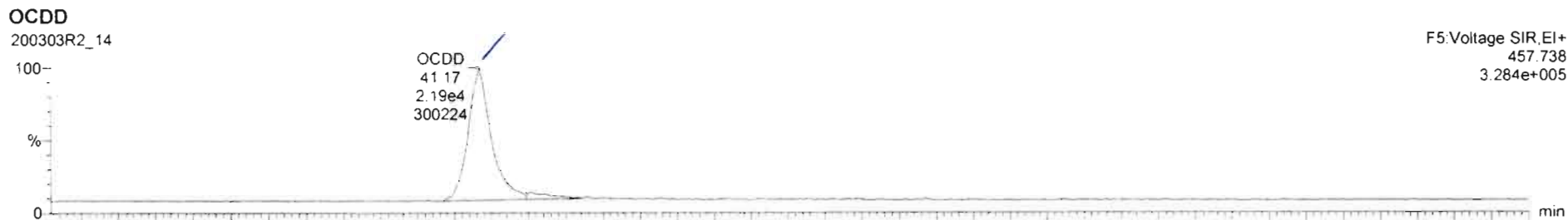


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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002



Targetlynx - 200303R2\_14.qld - (Chromatogram)

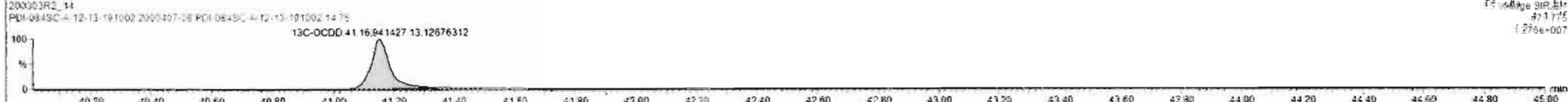
File Edit View Display Processing Window Help

200303R2\_14 - 2000407-08 PDI-084SC-A-12-13-1910d2 14 75 - PDI-084SC-A-12-13-191002

Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc	%Rec	DL	EMPC
7	OCDD	4.70e4	0.87	NO	0.8746	10.072	41.17	1.000	10.8	0.148	10.8
8	2,3,7,8-TCDF			NO	0.8020	10.072				0.0452	

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



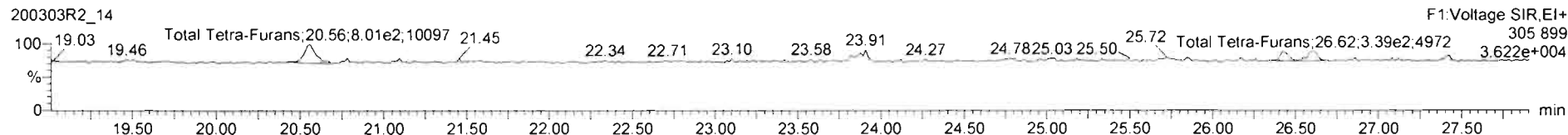
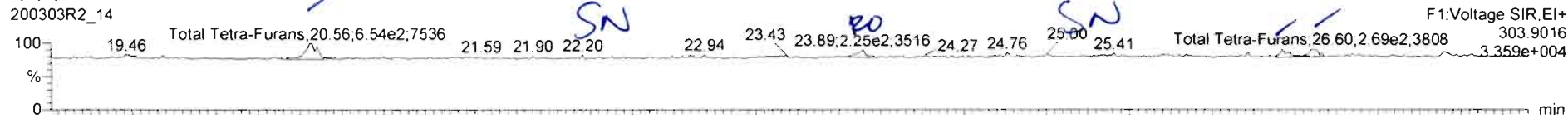
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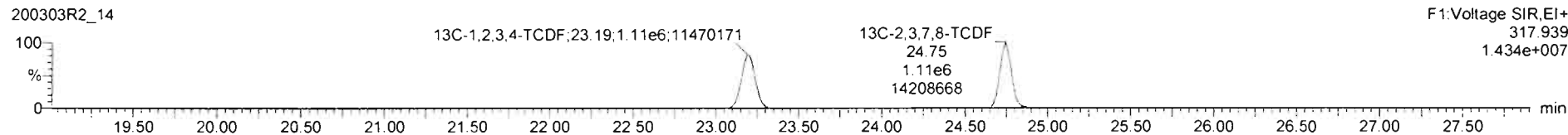
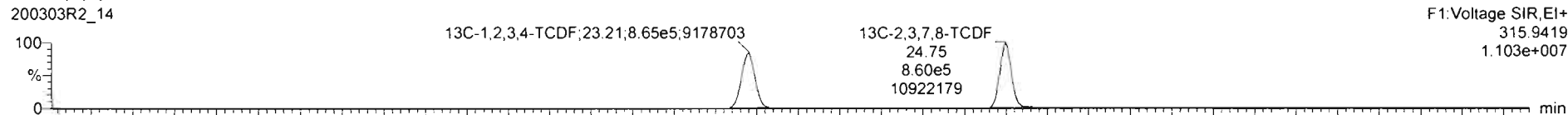
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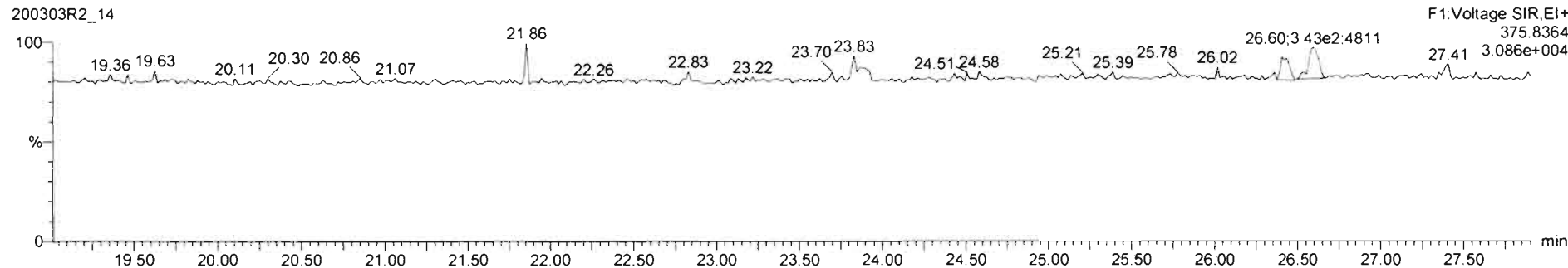
**2,3,7,8-TCDF**



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



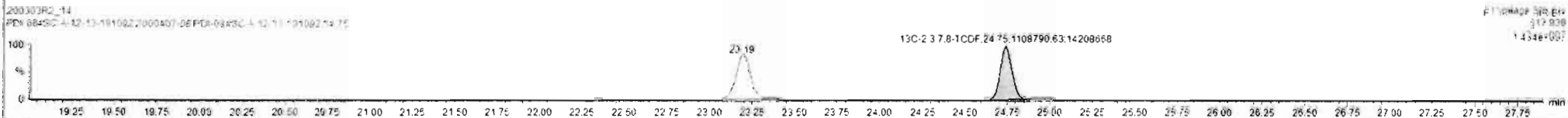
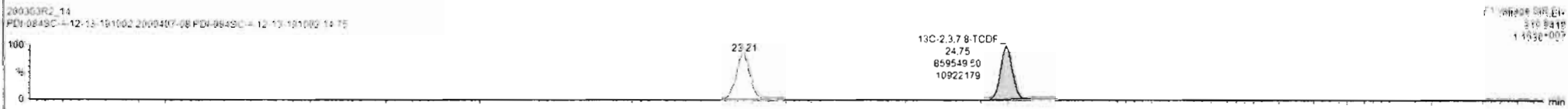
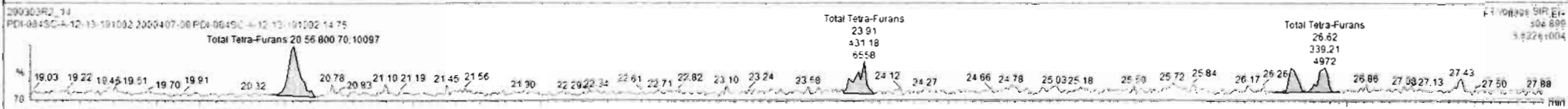
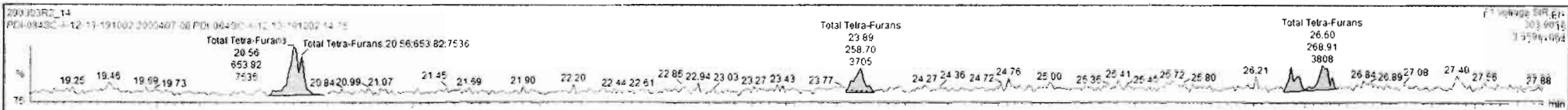
**DPE1**





Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
43 Total Tetra-Furans				0.6020	10.072			0.322		0.0493	0.397
44 1st Func Penta-Furans				0.9074	10.072					0.0153	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Furans	20.56	6.538e2	6.007e2	0.82	NO	0.18296	0.18296
2 Total Tetra-Furans	23.89	2.587e2	4.712e2	0.80	YES	0.074803	0.00000
3 Total Tetra-Furans	26.42	2.069e2	2.927e2	0.71	NO	0.062844	0.062844
4 Total Tetra-Furans	26.60	2.685e2	1.362e2	0.79	NO	0.076495	0.076495

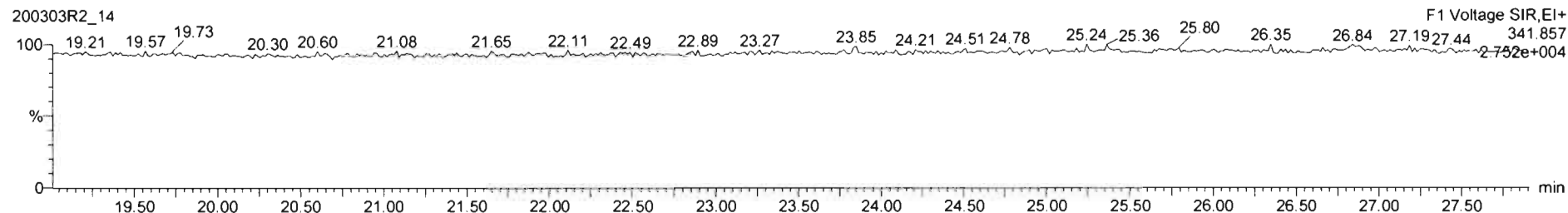
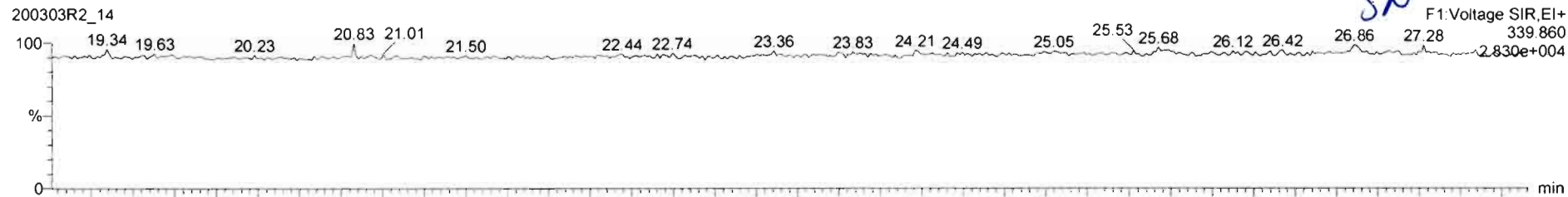


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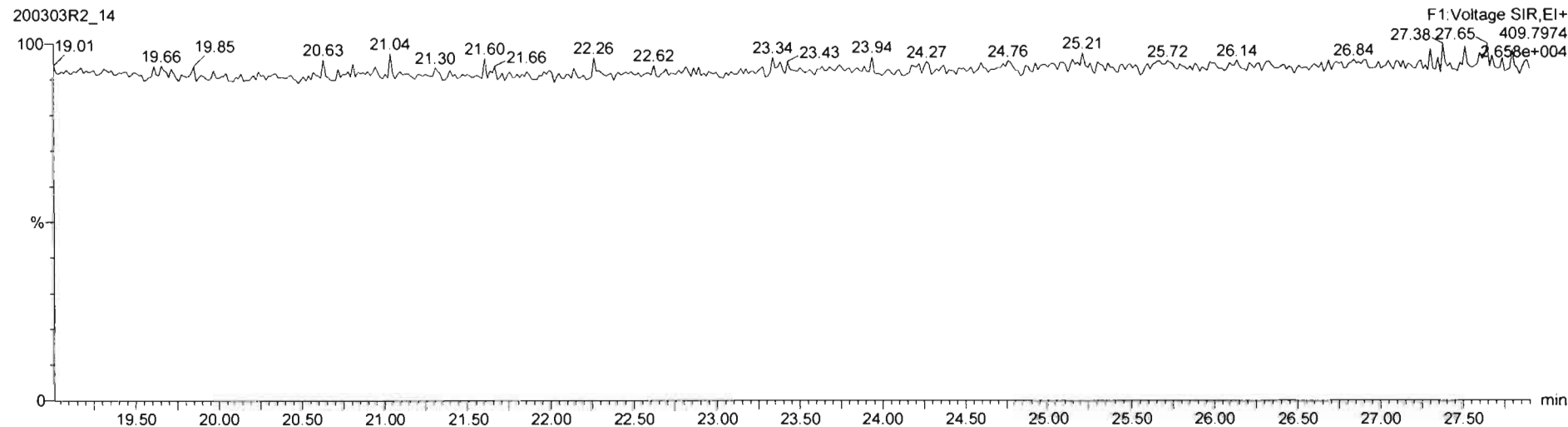
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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

1st Func. Penta-Furans



DPE6

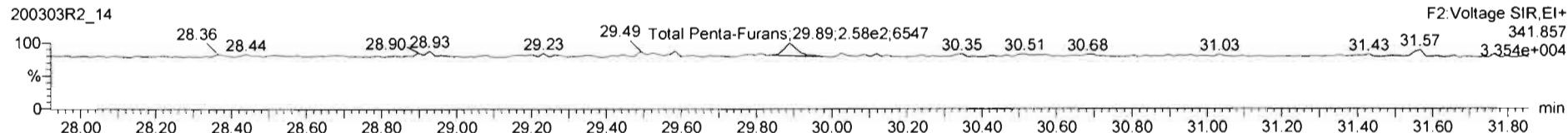
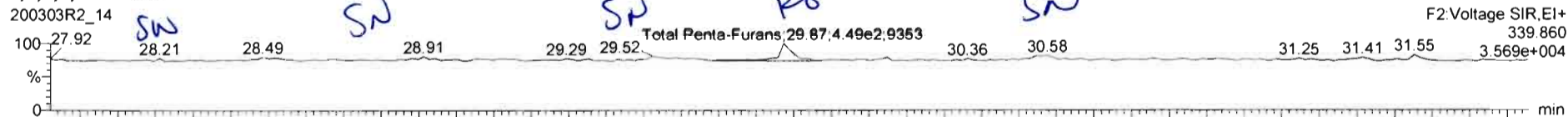


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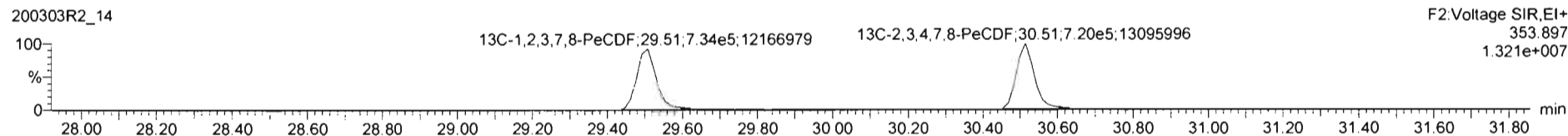
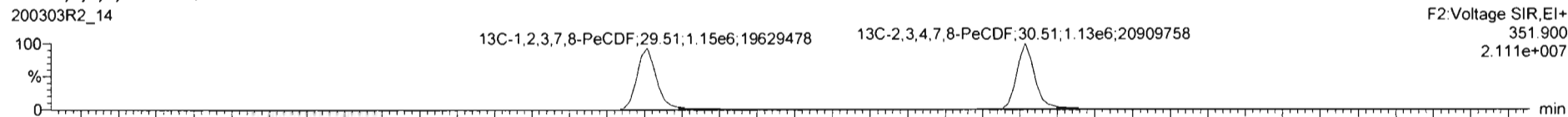
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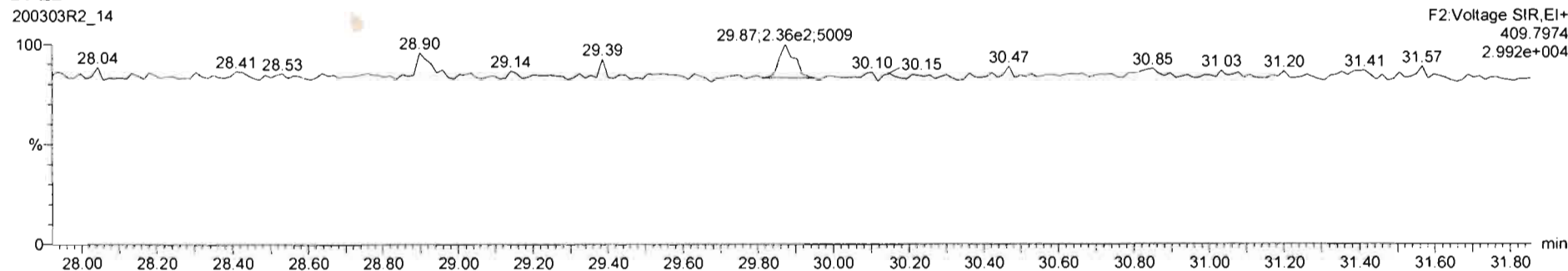
1,2,3,7,8-PeCDF



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



DPE2



TargetLynx - 200303R2\_14.qld - [Chromatogram]

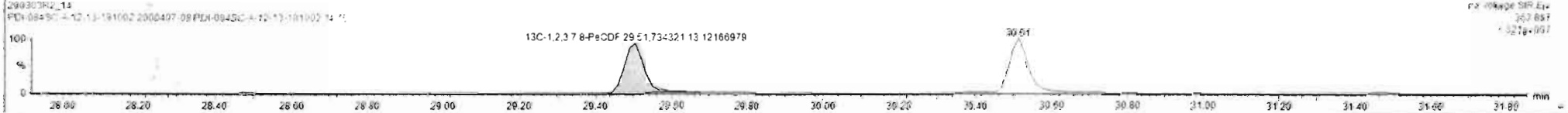
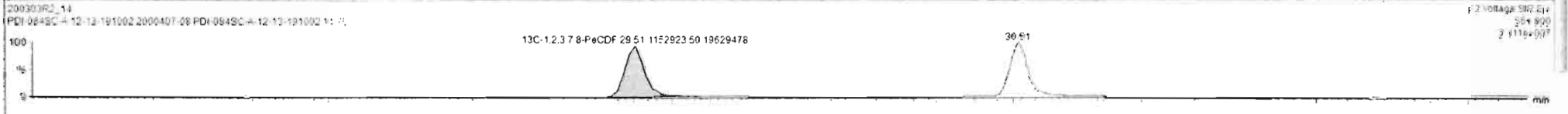
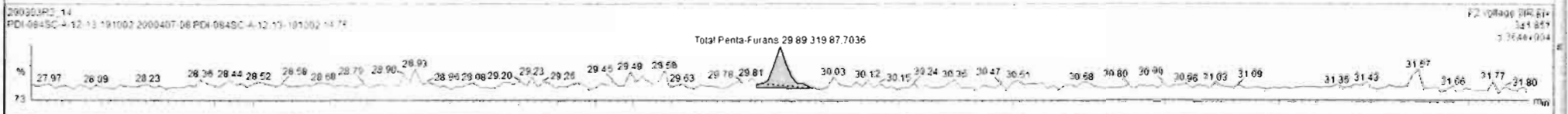
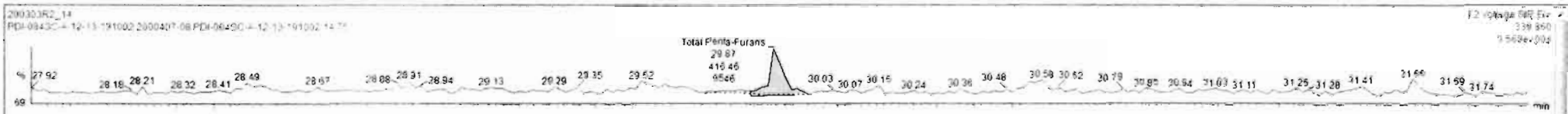
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200303R2\_14 - 2000407-08 PDI-084SC-A-12-13-191002 14 75 - PDI-084SC-A-12-13-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
43	Total Tetra-Furans			0.8029	10.072			0.322	0.0493	0.397	
44	1st Func. Penta-Furans			0.9074	10.072				0.0153		

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
1	Total Penta-Furans	29.87	4.165e2	3.195e2	1.30	1.5	0.080313



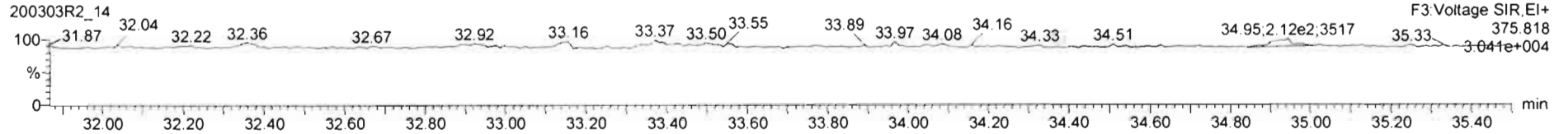
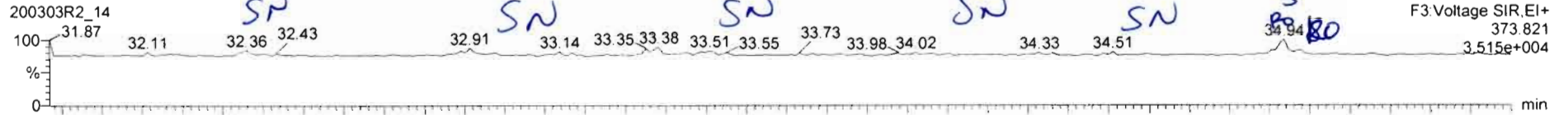
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

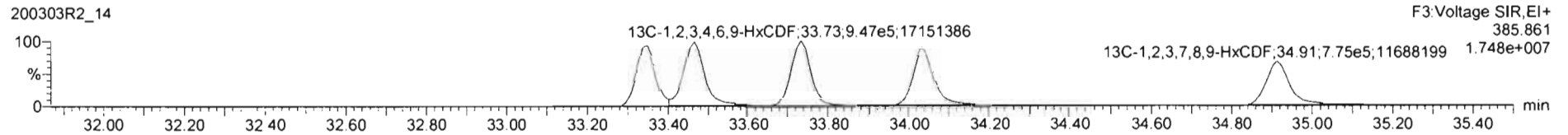
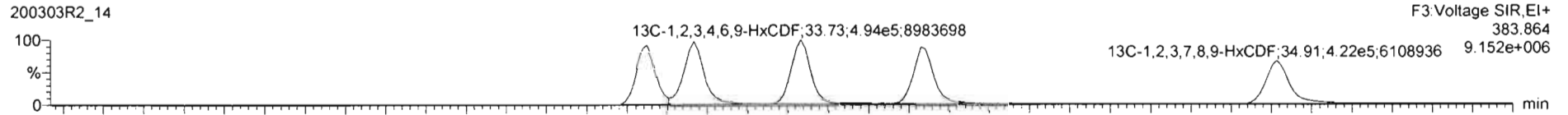
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

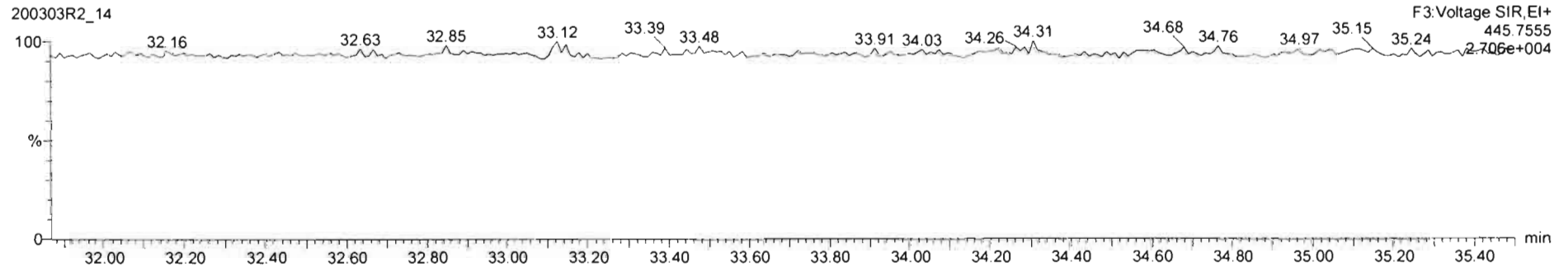
1,2,3,4,7,8-HxCDF



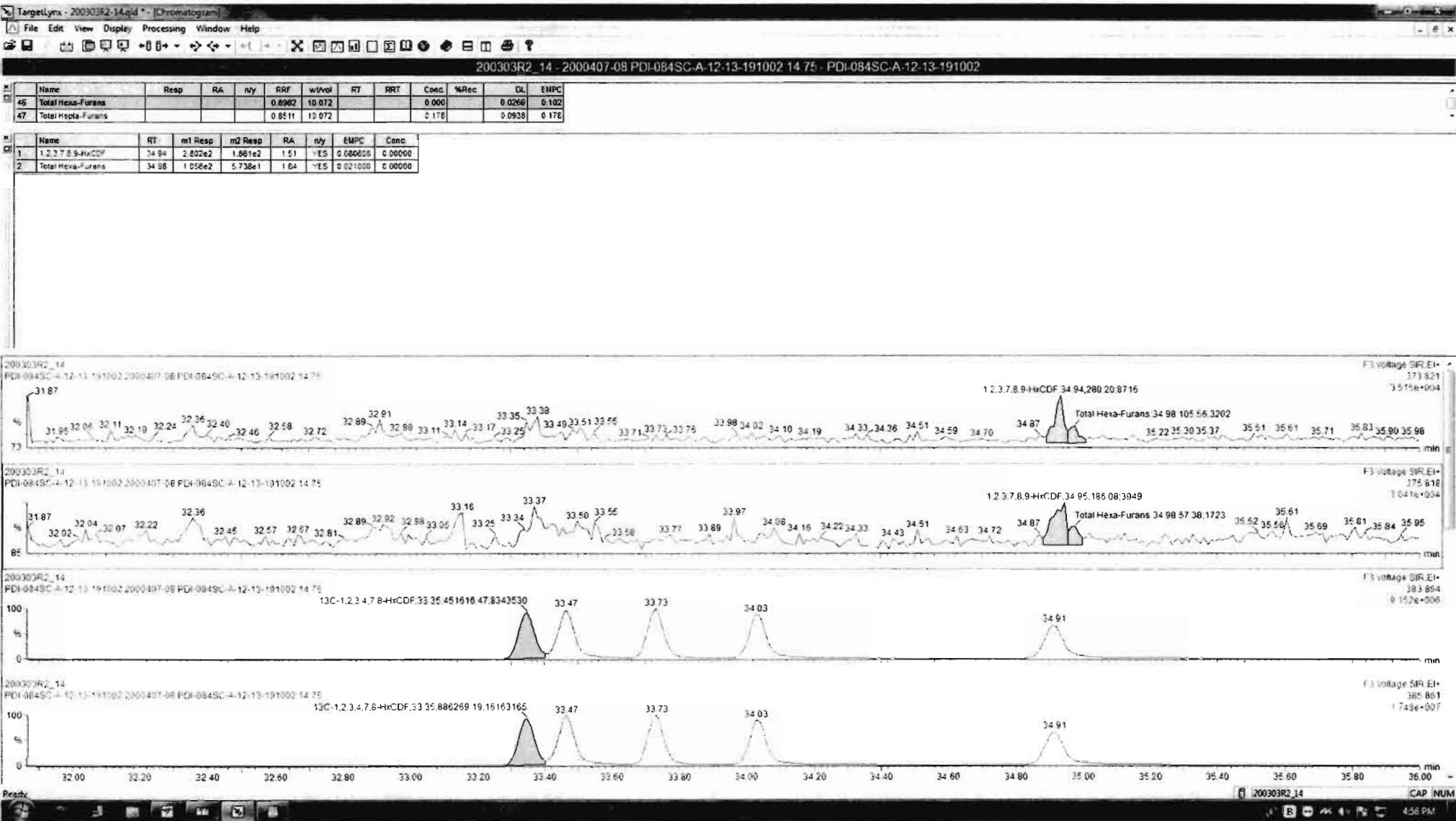
13C-1,2,3,4,7,8-HxCDF



DPE3







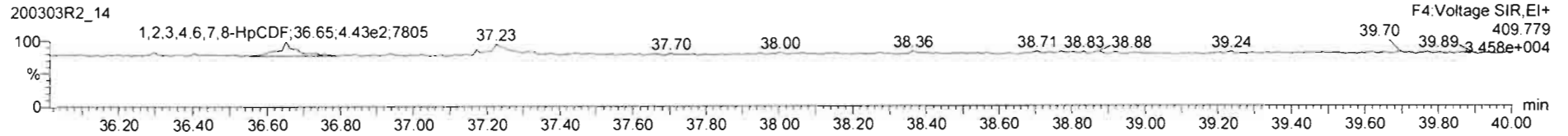
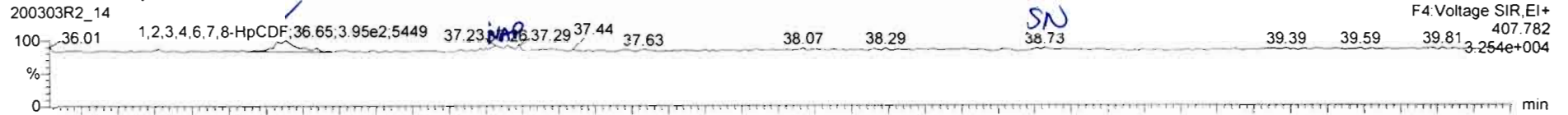
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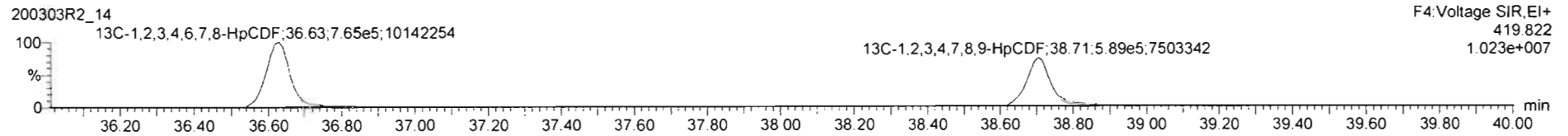
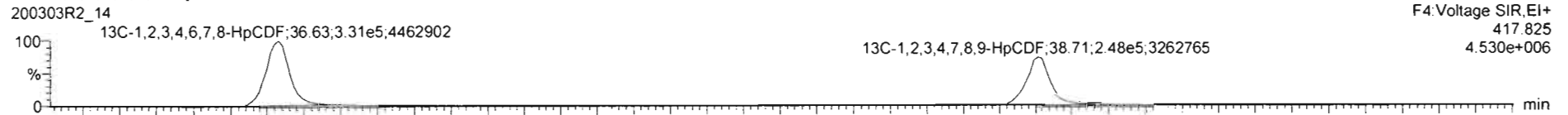
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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

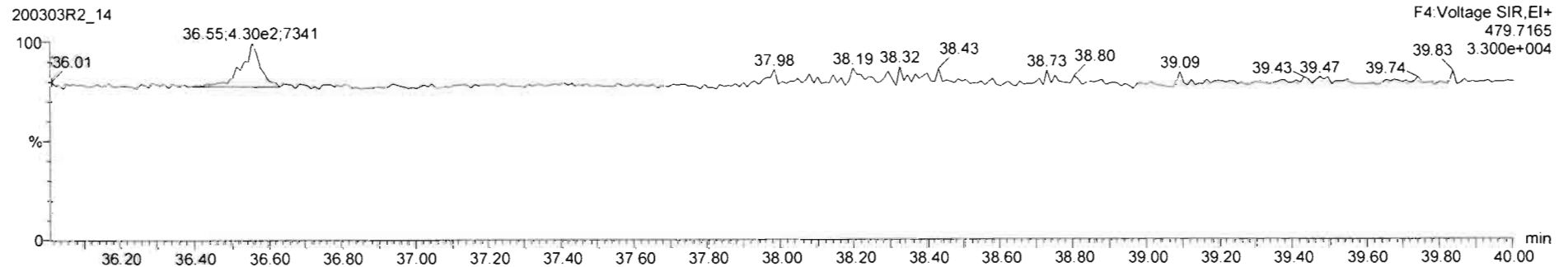
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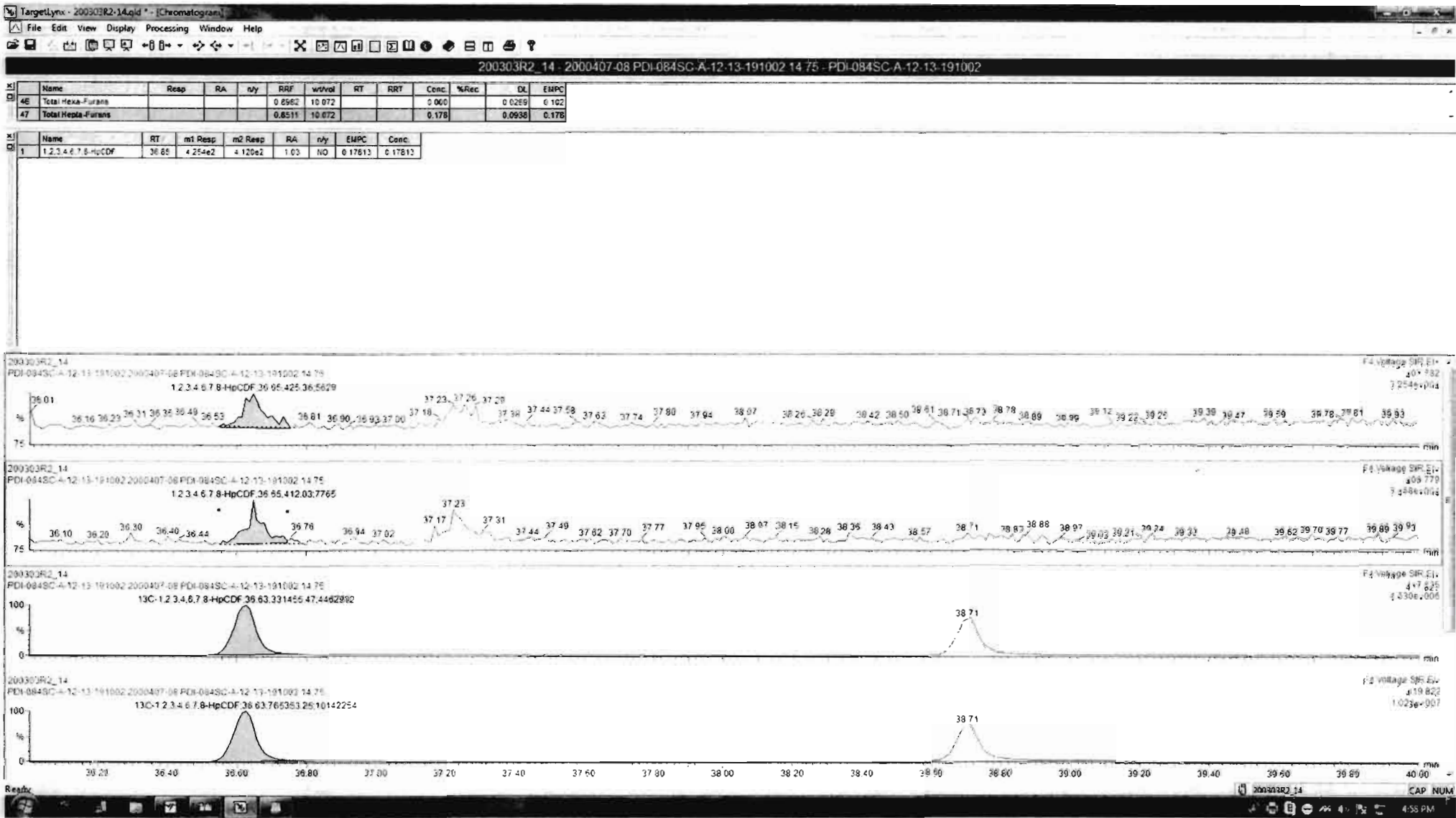


13C-1,2,3,4,6,7,8-HpCDF



DPE4

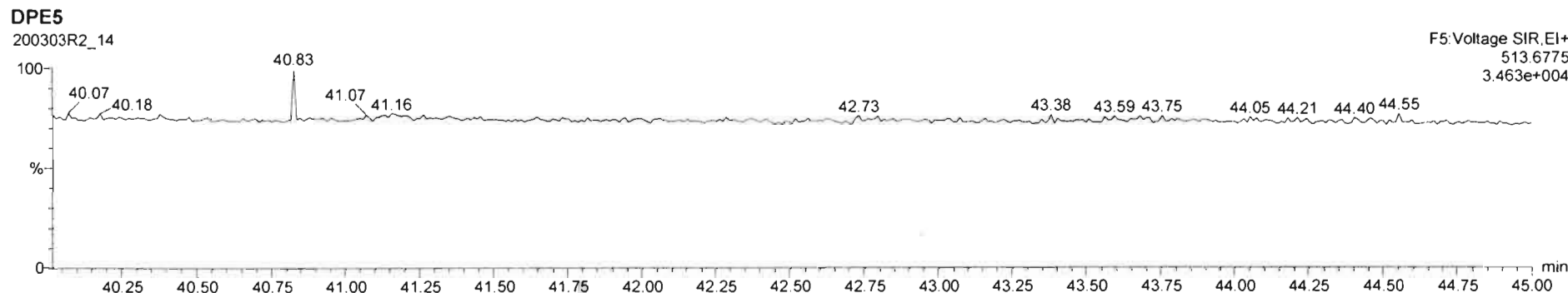
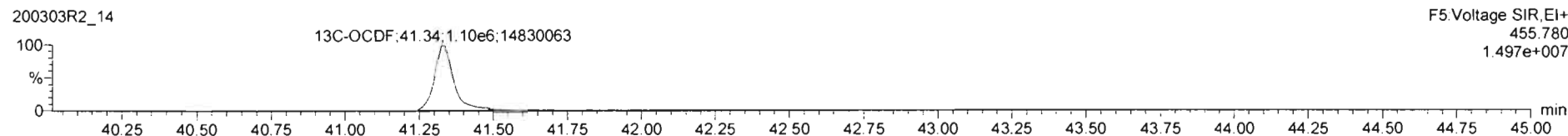
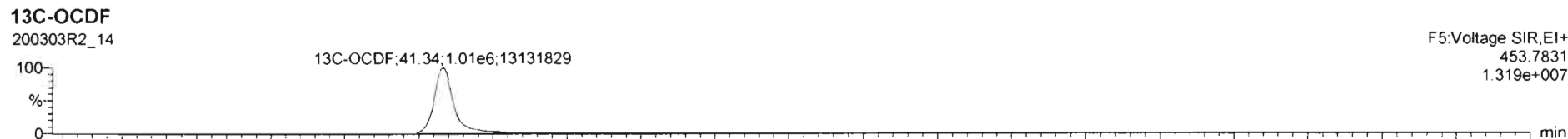
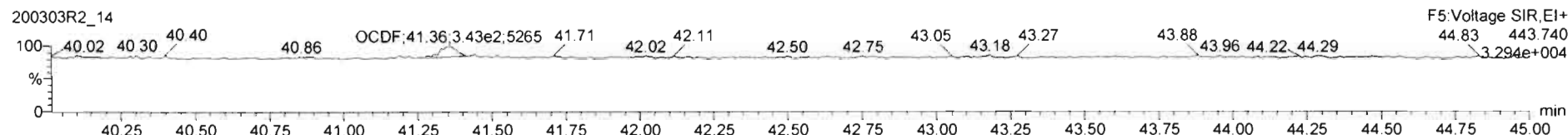
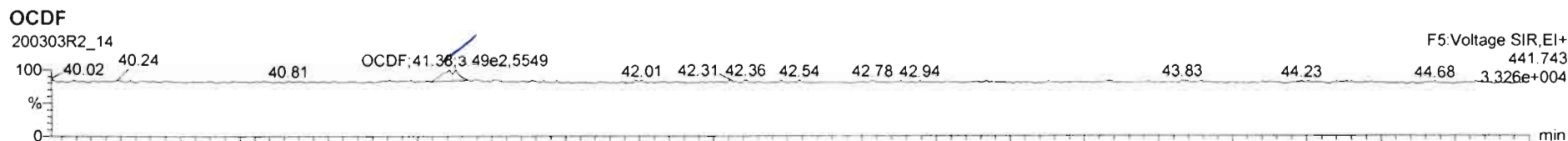




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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002



TargetLynx - 2000303R2\_14.qld - [Chromatogram]

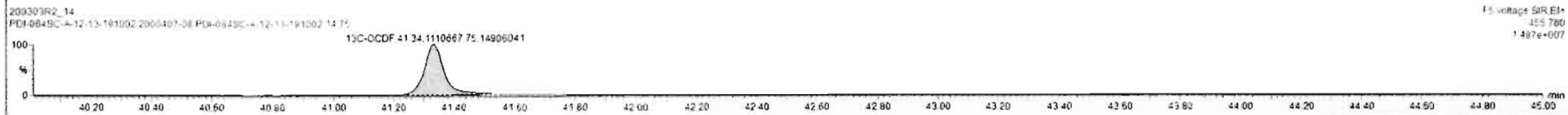
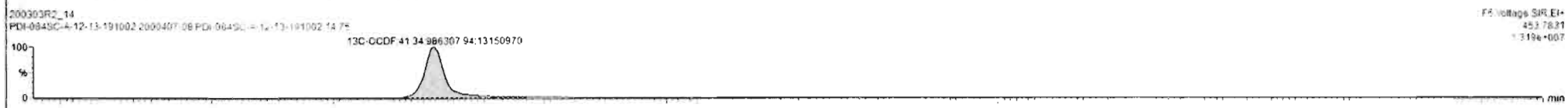
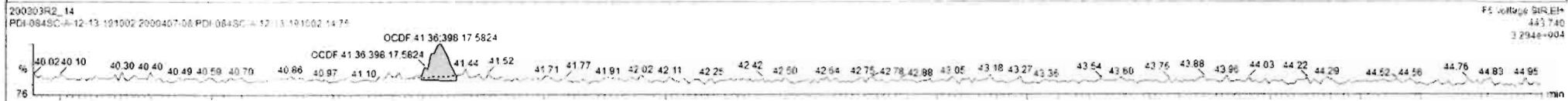
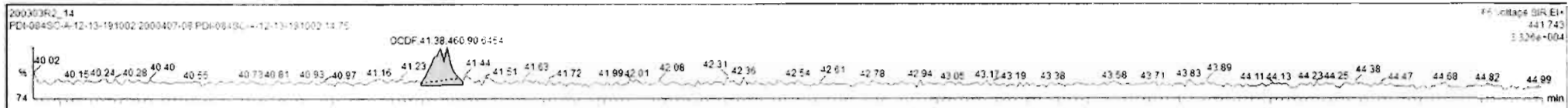
File Edit View Display Processing Window Help

2000303R2\_14 - 2000407-08 PDI-084SC-A-12-13-191002 14 75 - PDI-084SC-A-12-13-191002

Name	Resp	RA	n/y	RRF	wVol	RT	RRT	Conc	%Rec	DL	EMPC
17	OCDF	6.58e2	1.16	YES	0.6055	10.972	41.38	1.001	0.202	0.0777	0.177
18	13C-2,3,7,8-TCDD	1.55e6	0.77	NO	1.1985	10.972	25.69	1.028	17E	89.7	0.208

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



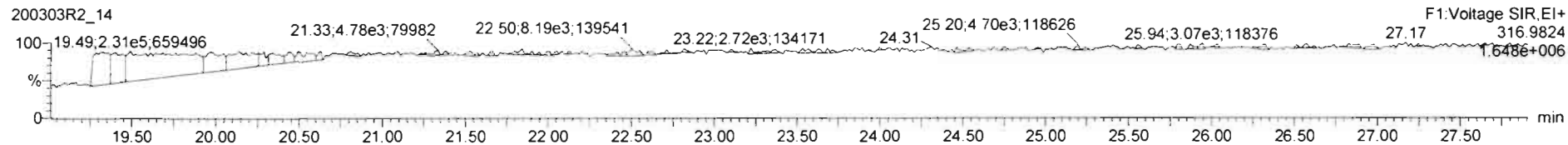


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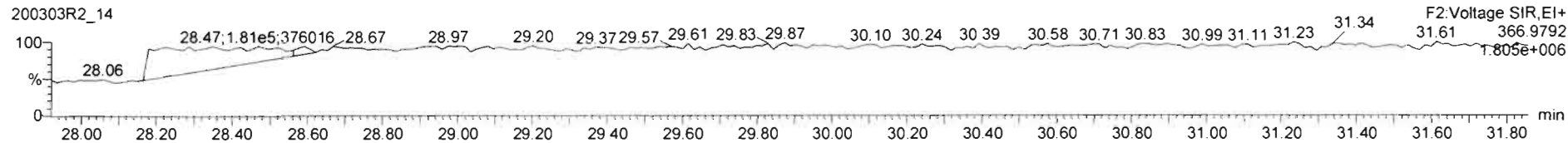
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Name: 200303R2\_14, Date: 04-Mar-2020, Time: 00:06:41, ID: 2000407-08 PDI-084SC-A-12-13-191002 14.75, Description: PDI-084SC-A-12-13-191002

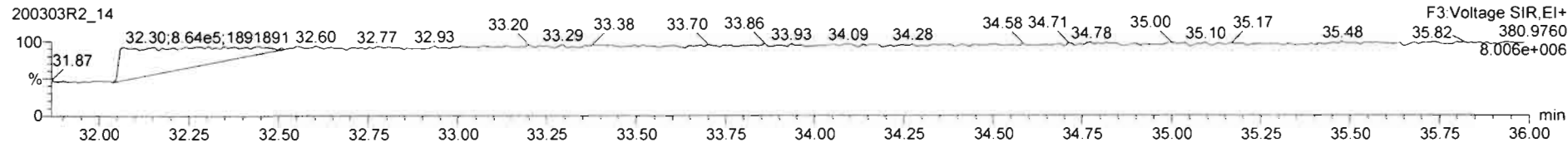
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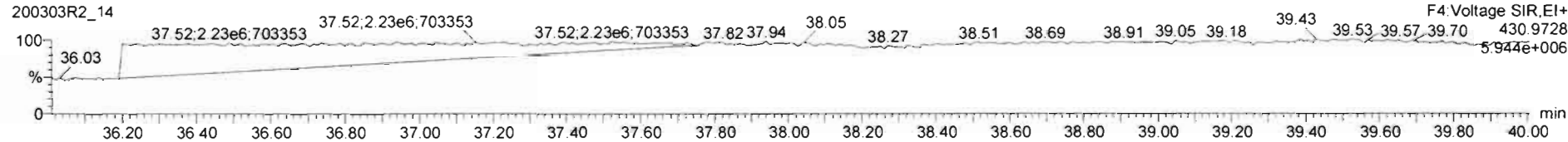
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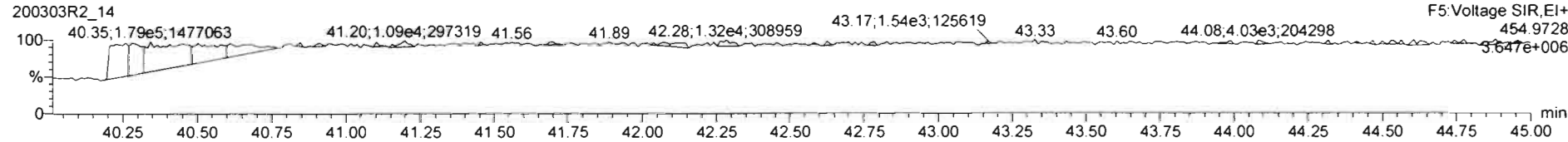
PFK3



PFK4



PFK5



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-15.qld

Last Altered: Wednesday, March 04, 2020 5:18:38 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 5:20:32 PM Pacific Standard Time

*GPB 03/04/2020*

*CT 03/04/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

#	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	1.19e3	0.37	YES	0.988	10.119	25.721	25.71	1.001	1.001	0.15031		0.092	0.0935
2	2 1,2,3,7,8-PeCDD			NO	0.972	10.119	30.842		1.001				0.0870	
3	3 1,2,3,4,7,8-HxCDD			NO	1.07	10.119	34.210		1.000				0.0719	
4	4 1,2,3,6,7,8-HxCDD			NO	0.921	10.119	34.296		1.000				0.0715	
5	5 1,2,3,7,8,9-HxCDD	6.22e2	1.11	NO	0.918	10.119	34.608	34.60	1.001	1.001	0.11342		0.0834	0.113
6	6 1,2,3,4,6,7,8-HpCDD	4.04e3	1.11	NO	0.923	10.119	38.045	38.07	1.000	1.001	0.91583		0.115	0.916
7	7 OCDD	3.35e4	0.90	NO	0.975	10.119	41.134	41.14	1.000	1.000	7.7109		0.123	7.71
8	8 2,3,7,8-TCDF			NO	0.802	10.119	24.757		1.001				0.0497	
9	9 1,2,3,7,8-PeCDF			NO	0.907	10.119	29.513		1.001				0.0355	
10	10 2,3,4,7,8-PeCDF			NO	0.952	10.119	30.530		1.001				0.0345	
11	11 1,2,3,4,7,8-HxCDF			NO	0.862	10.119	33.338		1.000				0.0454	
12	12 1,2,3,6,7,8-HxCDF			NO	0.841	10.119	33.465		1.000				0.0462	
13	13 2,3,4,6,7,8-HxCDF			NO	0.898	10.119	34.064		1.001				0.0483	
14	14 1,2,3,7,8,9-HxCDF	2.59e2	1.41	NO	0.858	10.119	34.914	34.92	1.000	1.000	0.048606		0.0348	0.0486
15	15 1,2,3,4,6,7,8-HpCDF			NO	0.851	10.119	36.666		1.001				0.0828	
16	16 1,2,3,4,7,8,9-HpCDF			NO	0.980	10.119	38.695		1.000				0.0939	
17	17 OCDF	7.34e2	1.03	YES	0.806	10.119	41.315	41.33	1.000	1.000	0.18220		0.110	0.169
18	18 13C-2,3,7,8-TCDD	1.58e6	0.79	NO	1.20	10.119	25.629	25.69	1.026	1.028	180.60	91.4	0.345	
19	19 13C-1,2,3,7,8-PeCDD	1.43e6	0.63	NO	0.967	10.119	30.747	30.82	1.230	1.233	202.87	103	0.240	
20	20 13C-1,2,3,4,7,8-HxCDD	1.02e6	1.26	NO	0.874	10.119	34.193	34.20	1.014	1.014	159.62	80.8	0.296	
21	21 13C-1,2,3,6,7,8-HxCDD	1.34e6	1.25	NO	1.05	10.119	34.294	34.30	1.017	1.017	174.15	88.1	0.247	
22	22 13C-1,2,3,7,8,9-HxCDD	1.18e6	1.22	NO	0.974	10.119	34.598	34.57	1.026	1.025	165.16	83.6	0.265	
23	23 13C-1,2,3,4,6,7,8-HpCDD	9.45e5	1.05	NO	0.747	10.119	38.172	38.03	1.132	1.128	172.40	87.2	0.414	
24	24 13C-OCDD	1.76e6	0.90	NO	0.707	10.119	41.072	41.13	1.218	1.220	340.32	86.1	0.446	
25	25 13C-2,3,7,8-TCDF	2.02e6	0.76	NO	1.07	10.119	24.812	24.73	0.993	0.990	193.52	97.9	0.347	
26	26 13C-1,2,3,7,8-PeCDF	1.92e6	1.56	NO	1.00	10.119	29.385	29.49	1.176	1.180	195.56	98.9	0.519	
27	27 13C-2,3,4,7,8-PeCDF	1.87e6	1.58	NO	0.962	10.119	30.352	30.50	1.215	1.221	198.22	100	0.541	
28	28 13C-1,2,3,4,7,8-HxCDF	1.37e6	0.52	NO	1.05	10.119	33.316	33.34	0.988	0.989	177.46	89.8	0.477	
29	29 13C-1,2,3,6,7,8-HxCDF	1.48e6	0.52	NO	1.19	10.119	33.418	33.46	0.991	0.992	169.80	85.9	0.421	
30	30 13C-2,3,4,6,7,8-HxCDF	1.35e6	0.53	NO	1.07	10.119	34.028	34.03	1.009	1.009	172.83	87.4	0.469	
31	31 13C-1,2,3,7,8,9-HxCDF	1.23e6	0.52	NO	0.922	10.119	34.935	34.91	1.036	1.035	181.89	92.0	0.543	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-15.qld

Last Altered: Wednesday, March 04, 2020 5:18:38 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 5:20:32 PM Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

#	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	1.07e6	0.44	NO	0.767	10.119	36.688	36.63	1.088	1.086	190.90	96.6	0.521	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.20e5	0.42	NO	0.552	10.119	38.712	38.69	1.148	1.148	202.46	102	0.723	
34	34 13C-OCDF	1.98e6	0.91	NO	0.789	10.119	41.308	41.31	1.225	1.225	341.64	86.4	0.376	
35	35 37Cl-2,3,7,8-TCDD	6.32e5			1.18	10.119	25.662	25.70	1.027	1.029	73.477	92.9	0.0474	
36	36 13C-1,2,3,4-TCDD	1.45e6	0.78	NO	1.00	10.119	25.110	24.99	1.000	1.000	197.65	100	0.413	
37	37 13C-1,2,3,4-TCDF	1.94e6	0.77	NO	1.00	10.119	23.370	23.18	1.000	1.000	197.65	100	0.370	
38	38 13C-1,2,3,4,6,9-HxCDF	1.45e6	0.51	NO	1.00	10.119	33.710	33.72	1.000	1.000	197.65	100	0.500	
39	39 Total Tetra-Dioxins				0.988	10.119	24.620		0.000		1.5175		0.0692	1.61
40	40 Total Penta-Dioxins				0.972	10.119	29.960		0.000		0.39259		0.0870	0.499
41	41 Total Hexa-Dioxins				0.921	10.119	33.635		0.000		1.5853		0.0789	1.59
42	42 Total Hepta-Dioxins				0.923	10.119	37.640		0.000		2.6379		0.115	2.64
43	43 Total Tetra-Furans				0.802	10.119	23.610		0.000		0.47429		0.0497	0.474
44	44 1st Func. Penta-Furans				0.907	10.119	27.090		0.000				0.0131	
45	45 Total Penta-Furans				0.907	10.119	29.275		0.000				0.0175	
46	46 Total Hexa-Furans				0.898	10.119	33.555		0.000		0.064875		0.0253	0.0649
47	47 Total Hepta-Furans				0.851	10.119	37.835		0.000				0.0441	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-15.qld

Last Altered: Wednesday, March 04, 2020 5:18:38 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 5:20:32 PM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	21.50	8.918e3	6.717e3	4.876e2	5.939e2	0.82	NO	1.082e3	0.13671	0.13671	0.0692
2	Total Tetra-Dioxins	21.87	4.350e3	5.903e3	4.112e2	5.733e2	0.72	NO	9.845e2	0.12444	0.12444	0.0692
3	Total Tetra-Dioxins	22.41	6.368e3	8.688e3	6.652e2	8.174e2	0.81	NO	1.483e3	0.18739	0.18739	0.0692
4	Total Tetra-Dioxins	23.39	3.341e4	4.116e4	2.988e3	3.737e3	0.80	NO	6.726e3	0.85013	0.85013	0.0692
5	Total Tetra-Dioxins	24.97	6.765e3	7.409e3	5.448e2	6.428e2	0.85	NO	1.188e3	0.15011	0.15011	0.0692
6	2,3,7,8-TCDD	25.71	3.238e3	1.404e4	3.218e2	8.674e2	0.37	YES	1.189e3	0.00000	0.093509	0.0692
7	Total Tetra-Dioxins	26.71	4.248e3	5.774e3	2.285e2	3.151e2	0.73	NO	5.436e2	0.068710	0.068710	0.0692

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.53	7.038e3	6.225e3	4.155e2	4.606e2	0.90	YES	0.000e0	0.00000	0.10644	0.0870
2	Total Penta-Dioxins	29.05	8.421e3	1.753e4	5.746e2	9.720e2	0.59	NO	1.547e3	0.21929	0.21929	0.0870
3	Total Penta-Dioxins	30.06	7.086e3	8.990e3	4.424e2	7.798e2	0.57	NO	1.222e3	0.17329	0.17329	0.0870

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.73	5.987e4	5.193e4	3.318e3	2.759e3	1.20	NO	6.077e3	1.1056	1.1056	0.0789
2	Total Hexa-Dioxins	33.54	1.816e4	1.827e4	1.034e3	9.794e2	1.06	NO	2.013e3	0.36629	0.36629	0.0789
3	1,2,3,7,8,9-HxCDD	34.60	6.118e3	5.330e3	3.275e2	2.942e2	1.11	NO	6.218e2	0.11342	0.11342	0.0834

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.02	5.283e4	4.901e4	3.983e3	3.613e3	1.10	NO	7.597e3	1.7221	1.7221	0.115
2	1,2,3,4,6,7,8-HpCDD	38.07	2.541e4	2.177e4	2.123e3	1.917e3	1.11	NO	4.040e3	0.91583	0.91583	0.115

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-15.qld

Last Altered: Wednesday, March 04, 2020 5:18:38 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 5:20:32 PM Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.48	4.653e3	4.443e3	2.544e2	3.376e2	0.75	NO	5.920e2	0.072239	0.072239	0.0497
2	Total Tetra-Furans	20.54	1.613e4	2.284e4	1.318e3	1.976e3	0.67	NO	3.295e3	0.40205	0.40205	0.0497

**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												

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8,9-HxCDF	34.92	4.739e3	5.236e3	1.519e2	1.076e2	1.41	NO	2.595e2	0.048606	0.048606	0.0348
2	Total Hexa-Furans	34.95	2.436e3	3.295e3	5.756e1	4.277e1	1.35	NO	1.003e2	0.016269	0.016269	0.0253

**Hepta-Furans**

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



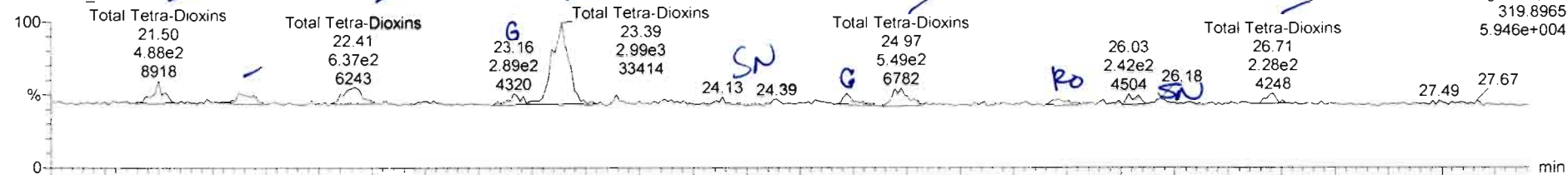
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

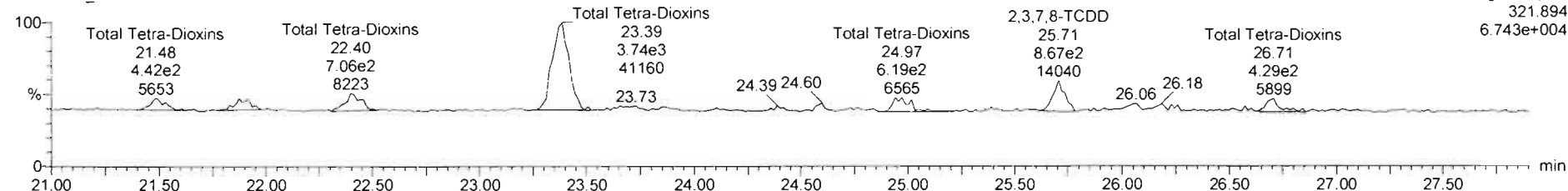
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2,3,7,8-TCDD

200303R2\_15

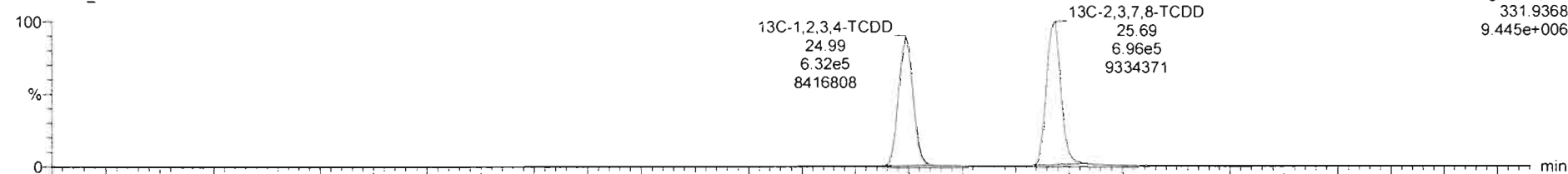


200303R2\_15

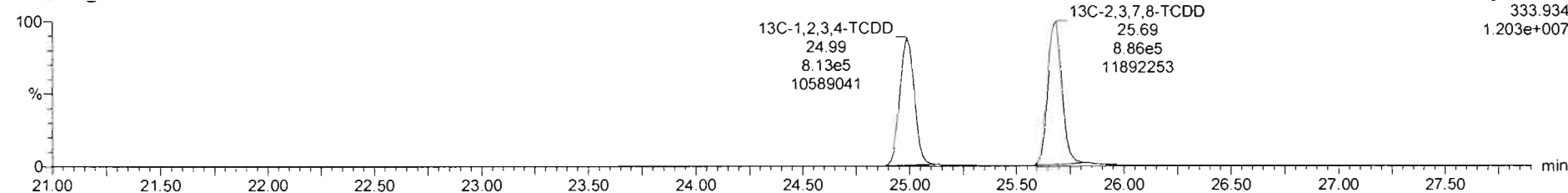


13C-2,3,7,8-TCDD

200303R2\_15



200303R2\_15



TargetLynx - 200303R2-15.qld - [Chromatogram]

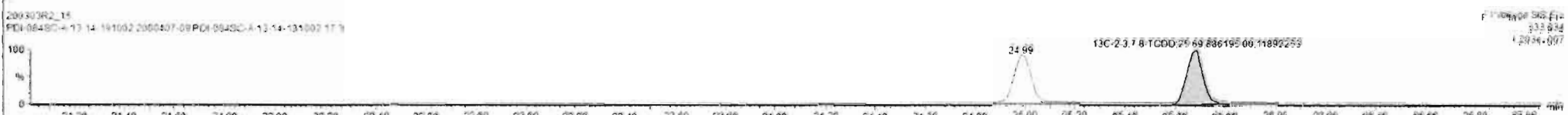
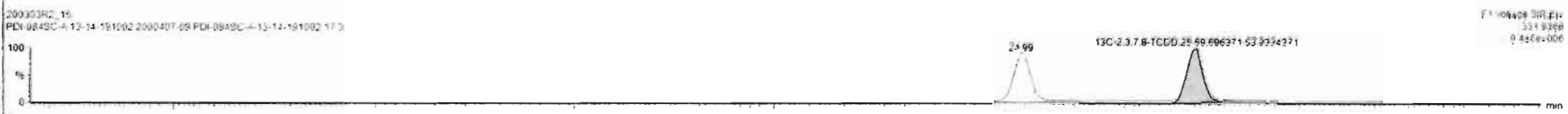
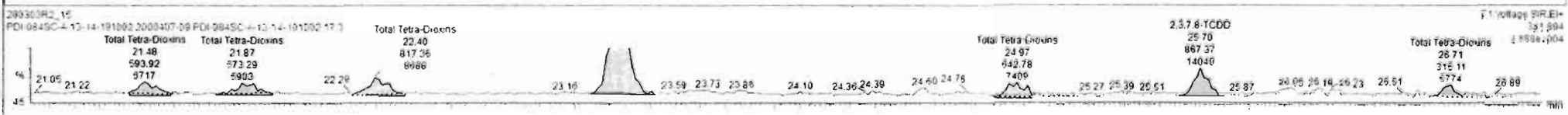
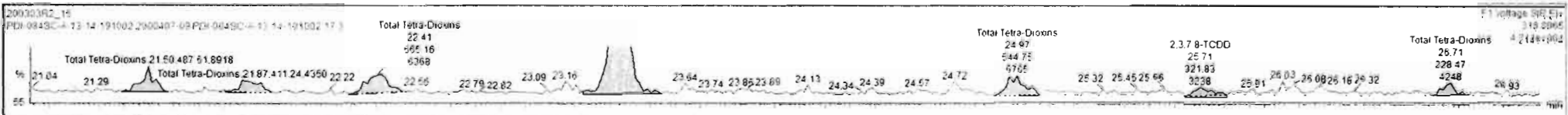
File Edit View Display Processing Window Help

200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17 3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
25 Total Tetra-Dioxins				0.9561	10.119			1.52		0.0692	1.61
40 Total Penta-Dioxins				0.8723	10.119			0.409		0.0870	0.504

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Tetra-Dioxins	21.50	4.876e2	5.939e2	0.82	NO	0.13671	0.13671
2 Total Tetra-Dioxins	21.67	4.112e2	5.733e2	0.72	NO	0.12444	0.12444
3 Total Tetra-Dioxins	22.41	6.652e2	8.174e2	0.81	NO	0.18739	0.18739
4 Total Tetra-Dioxins	23.39	2.968e3	3.737e3	0.86	NO	0.85013	0.85013
5 Total Tetra-Dioxins	24.97	5.446e2	6.428e2	0.85	NO	0.15011	0.15011
6 2,3,7,8-TCDD	25.71	3.216e2	8.674e2	0.37	YES	0.09305	0.0000
7 Total Tetra-Dioxins	26.71	2.285e2	3.151e2	0.73	NO	0.06871	0.06871



Dataset: Untitled

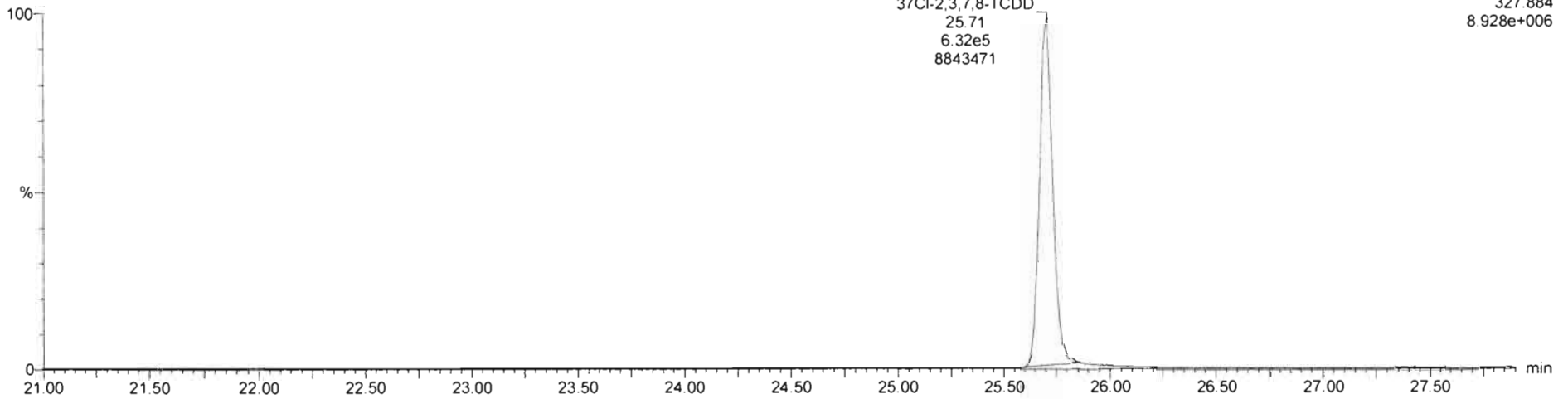
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

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

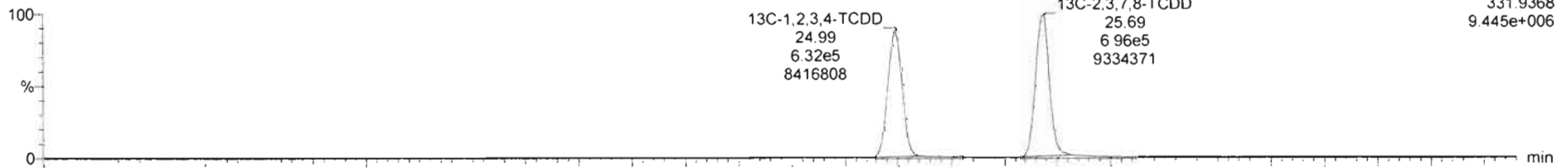
200303R2\_15



F1: Voltage SIR, EI+  
327.884  
8.928e+006

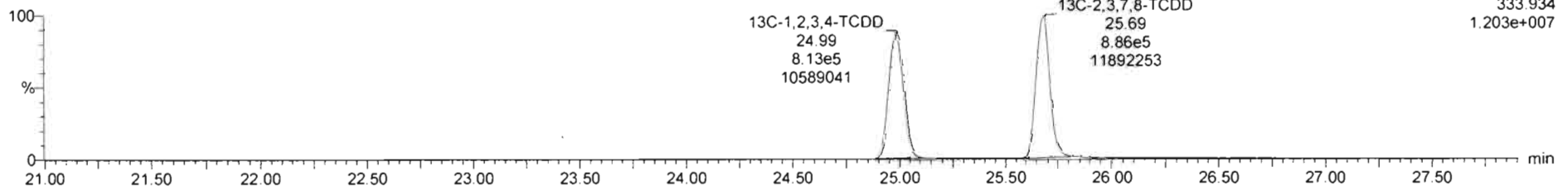
13C-1,2,3,4-TCDD

200303R2\_15



F1: Voltage SIR, EI+  
331.9368  
9.445e+006

200303R2\_15



F1: Voltage SIR, EI+  
333.934  
1.203e+007

Dataset: Untitled

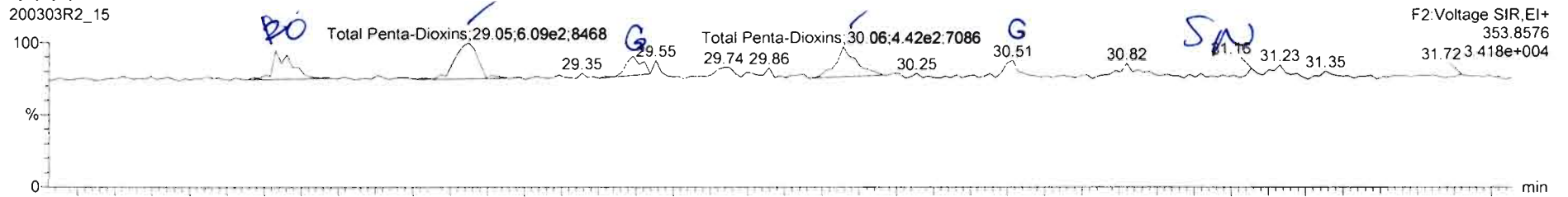
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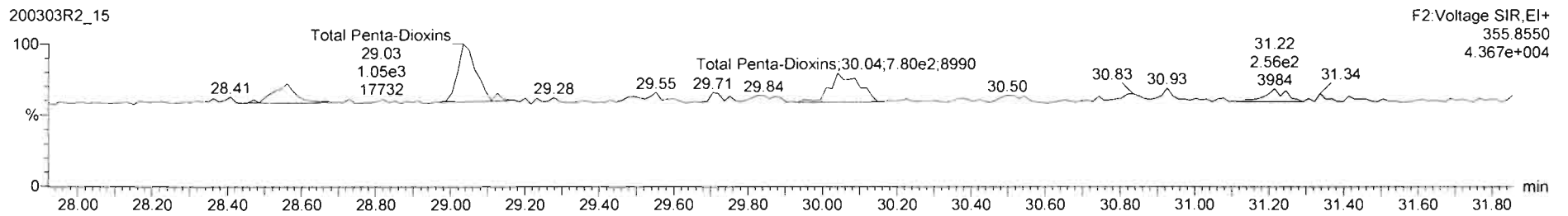
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1,2,3,7,8-PeCDD

200303R2\_15

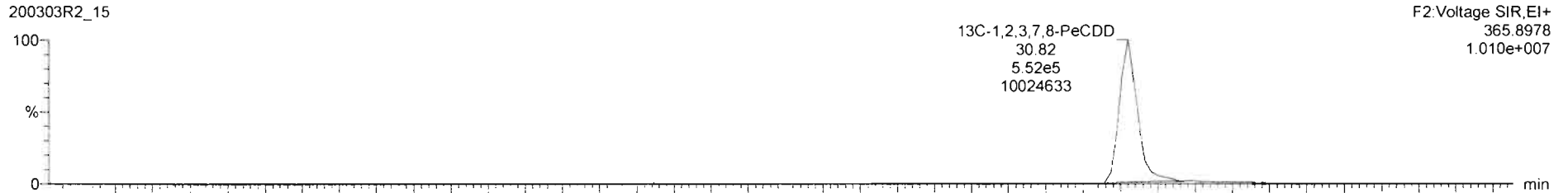


200303R2\_15

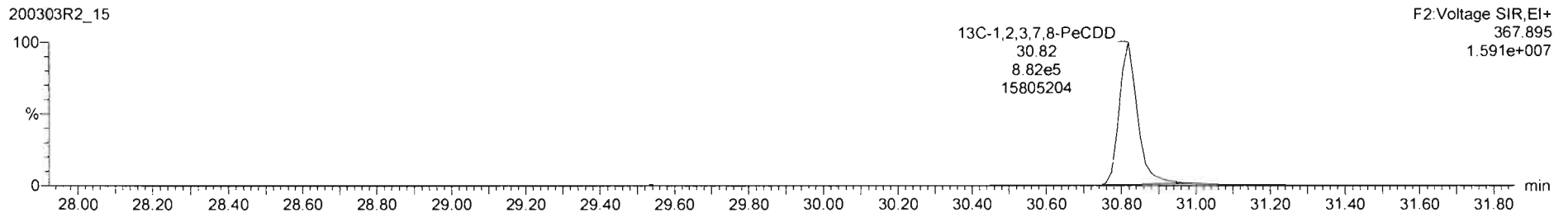


13C-1,2,3,7,8-PeCDD

200303R2\_15



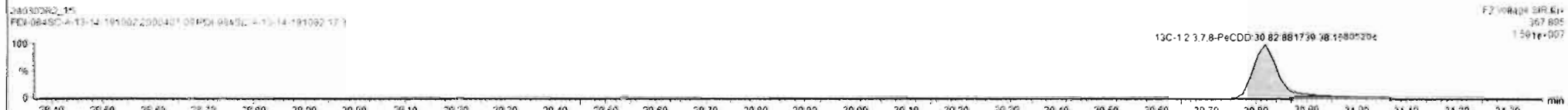
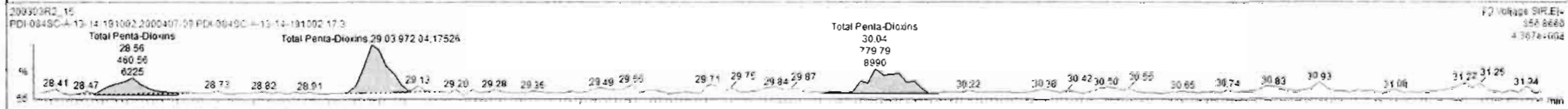
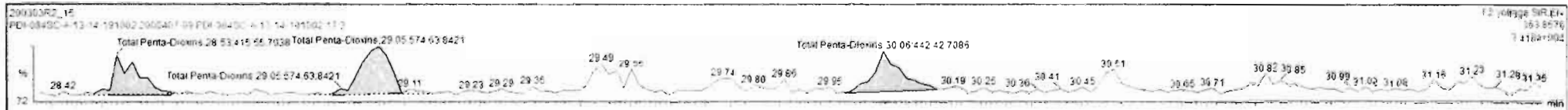
200303R2\_15



200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17.3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9881	10.119			1.52		0.0652	1.61
40 Total Penta-Dioxins				0.9723	10.119			0.363		0.0870	0.490

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Penta-Dioxins	28.53	4.155e2	4.602e2	0.50	YES	0.10544	0.00000
2 Total Penta-Dioxins	29.05	5.746e2	6.720e2	0.55	NO	0.21929	0.21929
3 Total Penta-Dioxins	30.06	4.424e2	7.756e2	0.57	NO	0.17329	0.17329





Dataset: Untitled

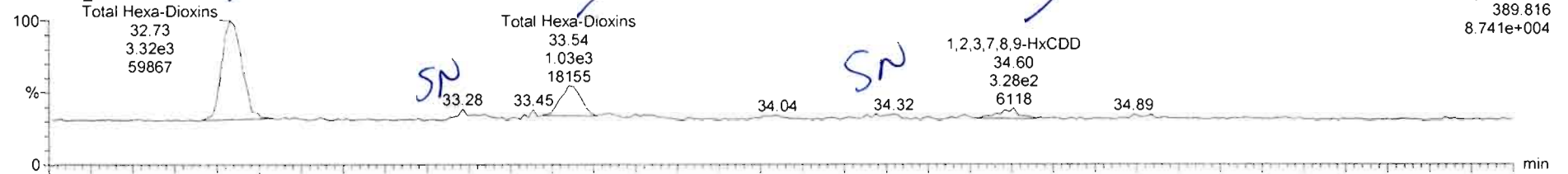
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

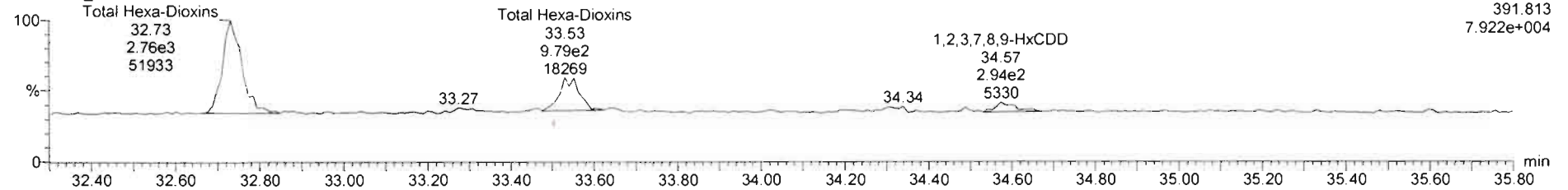
Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

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

200303R2\_15

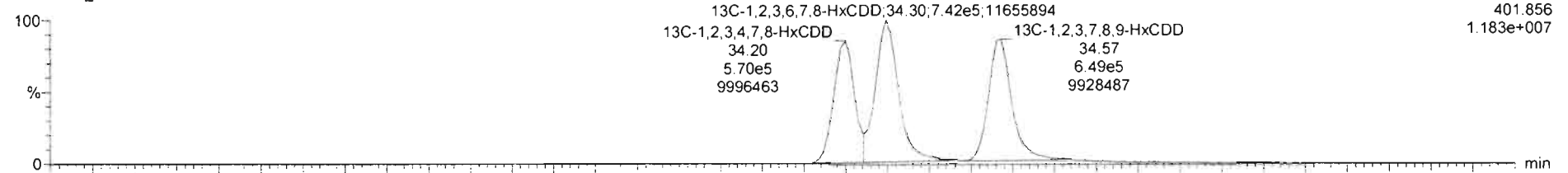


200303R2\_15

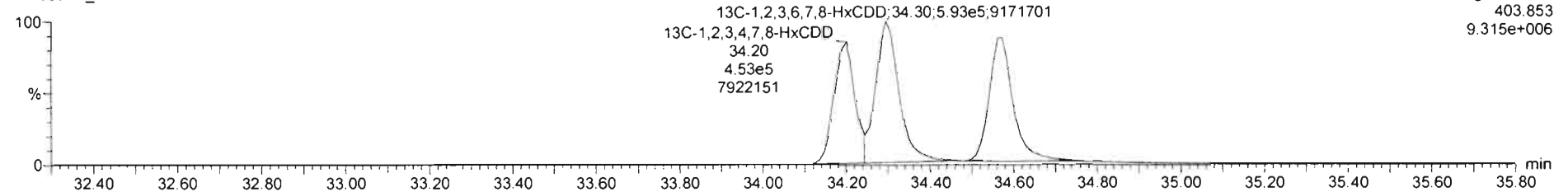


13C-1,2,3,4,7,8-HxCDD

200303R2\_15



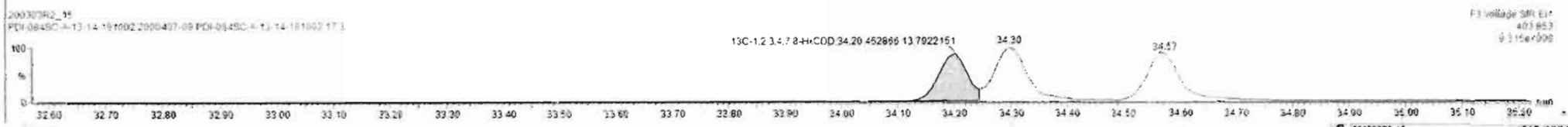
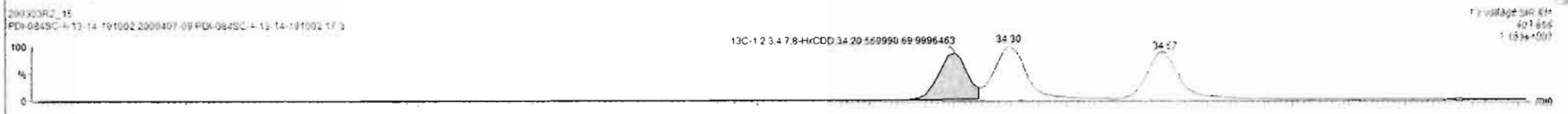
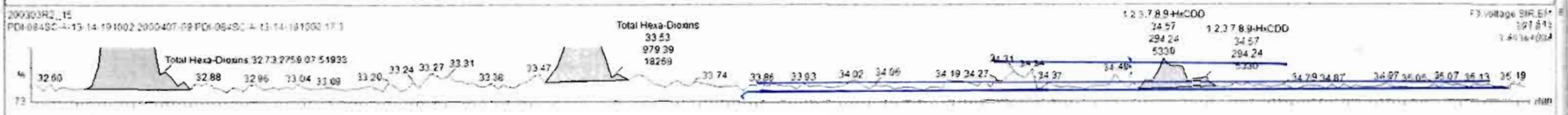
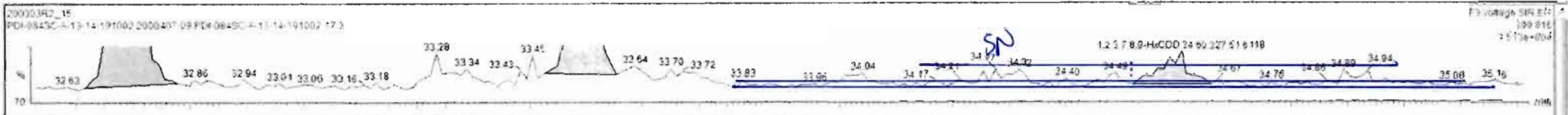
200303R2\_15



200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17 3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9861	10.119			1.52	0.0652	1.61	
40 Total Penta-Dioxins				0.9723	10.119			0.393	0.0670	0.499	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Hexa-Dioxins	32.73	3.318e3	2.759e3	1.20	NO	1.1056	1.1056
2 Total Hexa-Dioxins	33.54	1.034e3	5.794e2	1.06	NO	0.36629	0.36629
3 1,2,3,7,8,9-HxCDD	34.60	3.275e2	2.942e2	1.11	NO	0.11342	0.11342



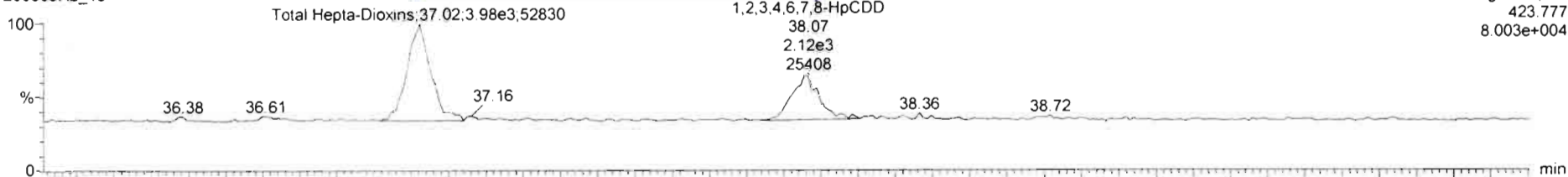
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

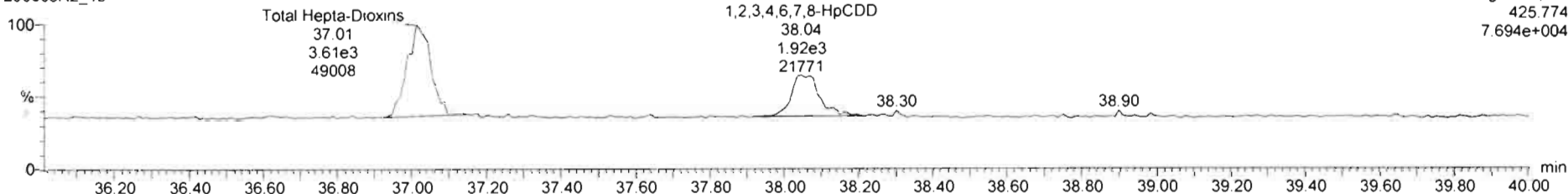
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1,2,3,4,6,7,8-HpCDD

200303R2\_15

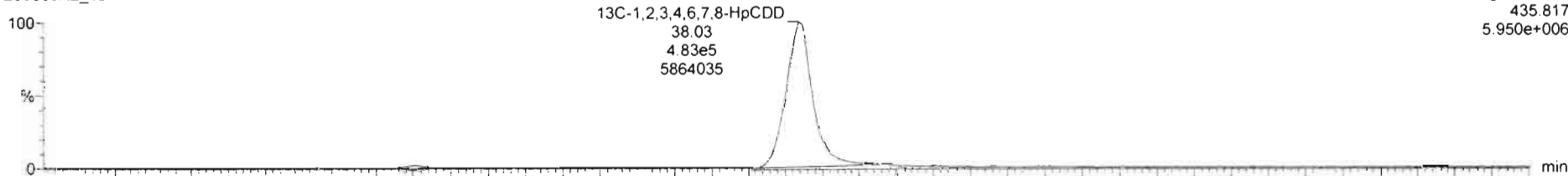


200303R2\_15

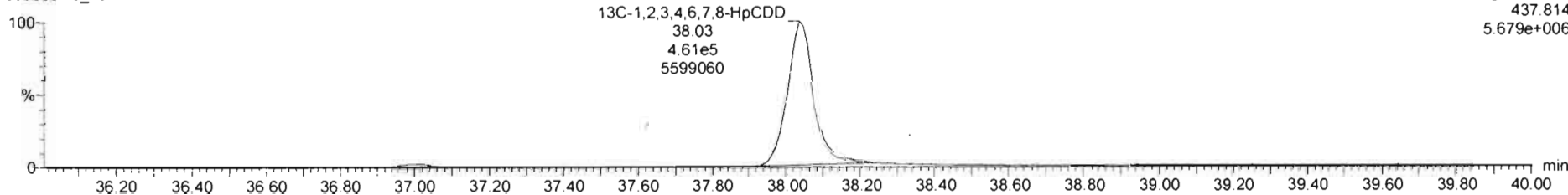


13C-1,2,3,4,6,7,8-HpCDD

200303R2\_15



200303R2\_15



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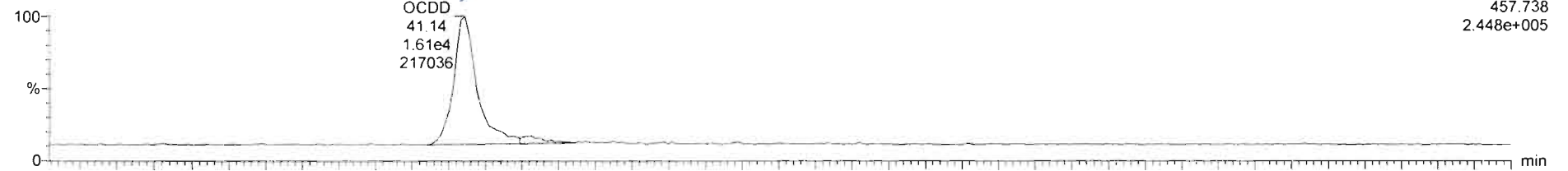
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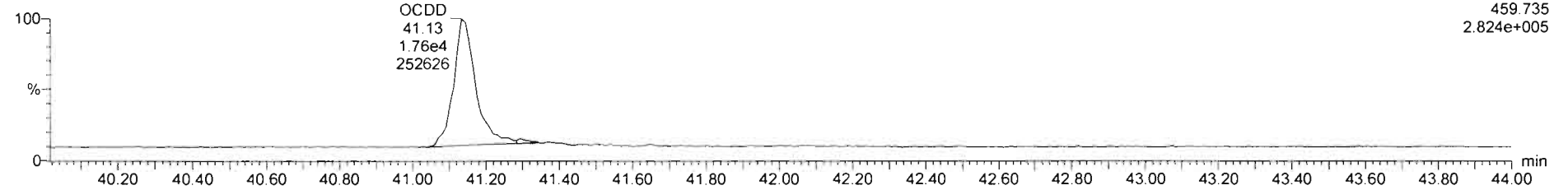
Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

OCDD

200303R2\_15

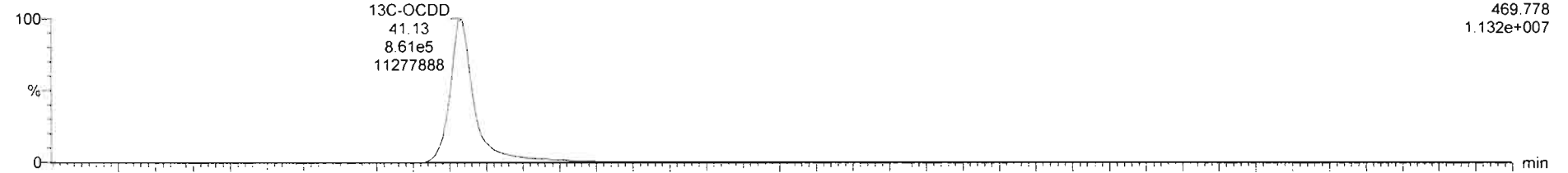


200303R2\_15

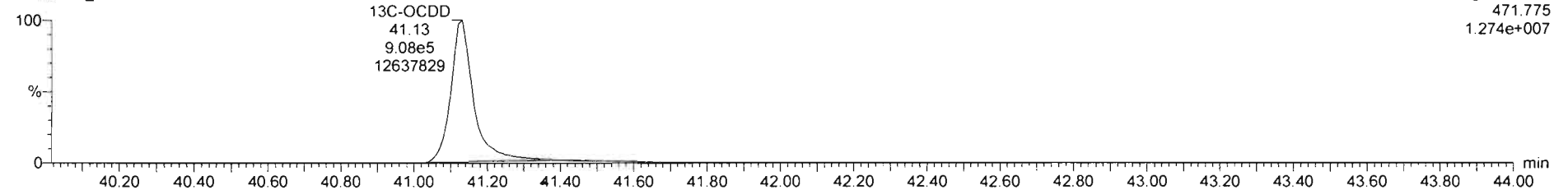


13C-OCDD

200303R2\_15



200303R2\_15



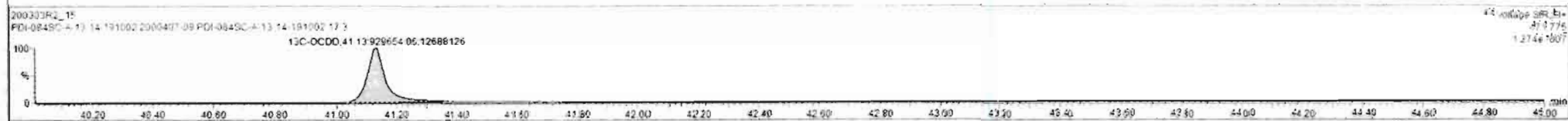
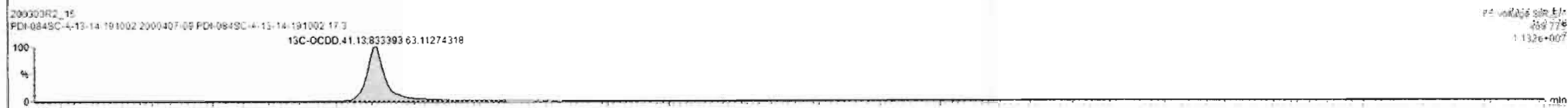
TargetLynx - 200303R2\_15.qld - (Chromatogram)

File Edit View Display Processing Window Help

200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17.3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	w%vol	RT	RRT	Conc	%Rec	CL	EMPC
7	OCDD	3.35e4	0.90	NO	0.8746	10.119	41.14	1.000	7.71	0.122	7.71
8	2,3,7,8-TCDF			NO	0.8020	10.119				0.497	

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



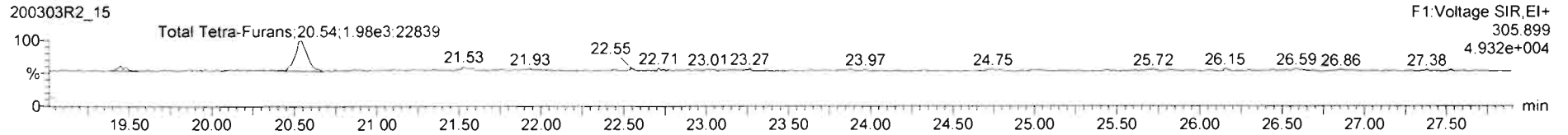
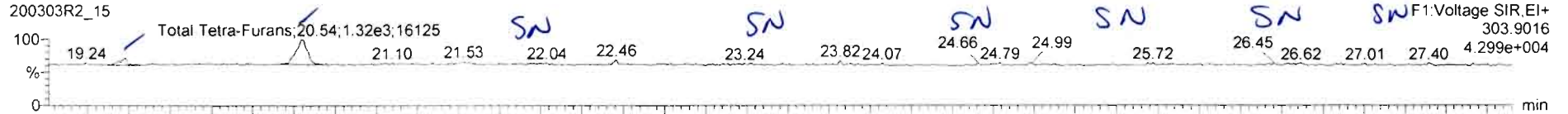


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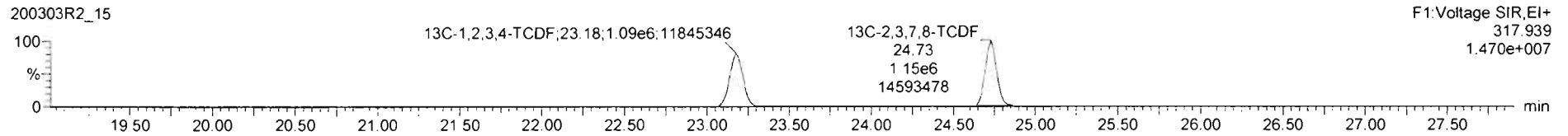
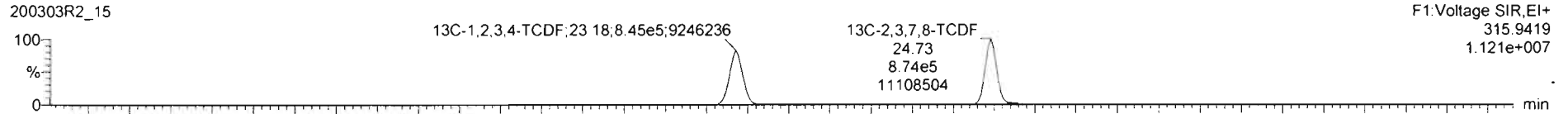
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

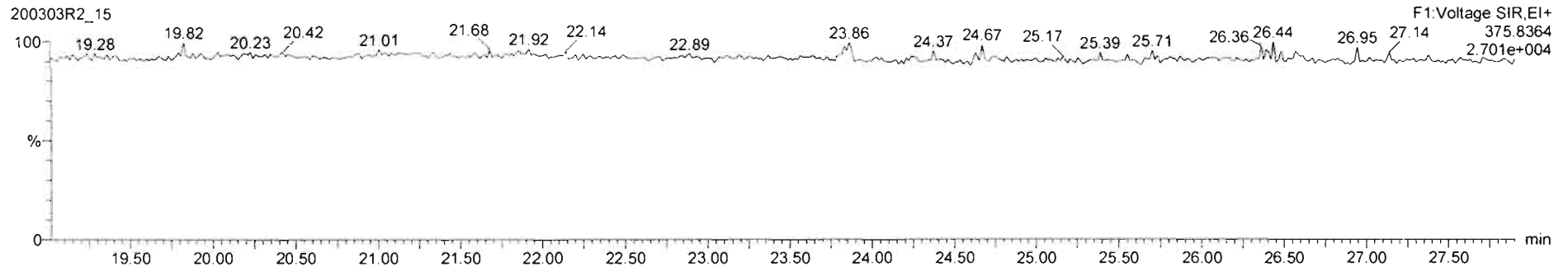
2,3,7,8-TCDF



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



DPE1



TargetLynx - 200303R2\_15.qid \* - (Chromatogram)

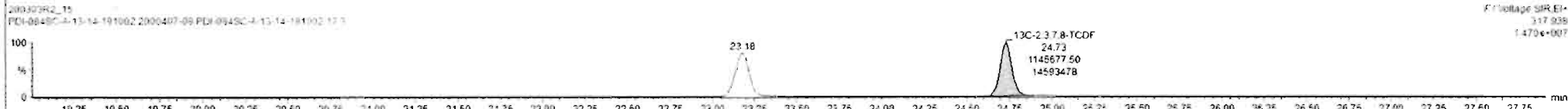
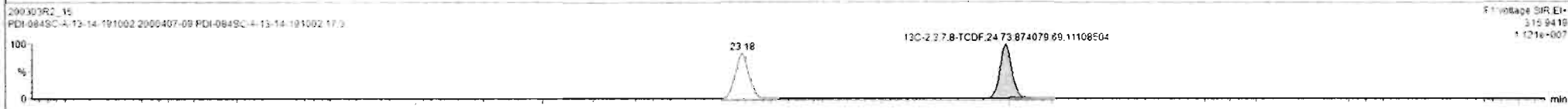
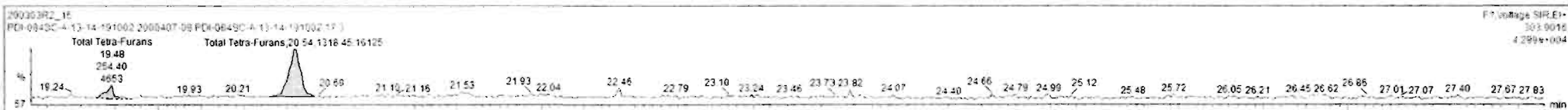
File Edit View Display Processing Window Help

200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17.3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc	%Rec	DL	EMPC
42 Total Hepta-Dioxins				0.9221	10.119			2.64		3.115	2.64
43 Total Tetra-Furans				0.8020	10.119			0.474		0.6487	0.474

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1 Total Tetra-Furans	19.48	2.544e2	3.376e2	0.75	NO	0.072239	0.072239
2 Total Tetra-Furans	20.54	1.316e3	1.676e3	0.87	NO	0.40205	0.40205



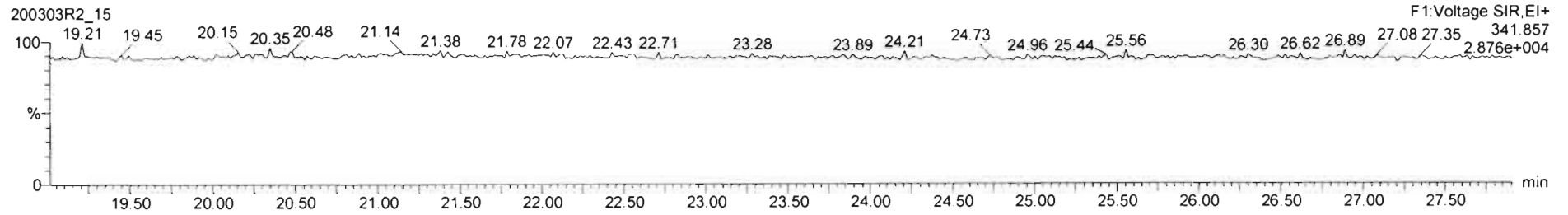
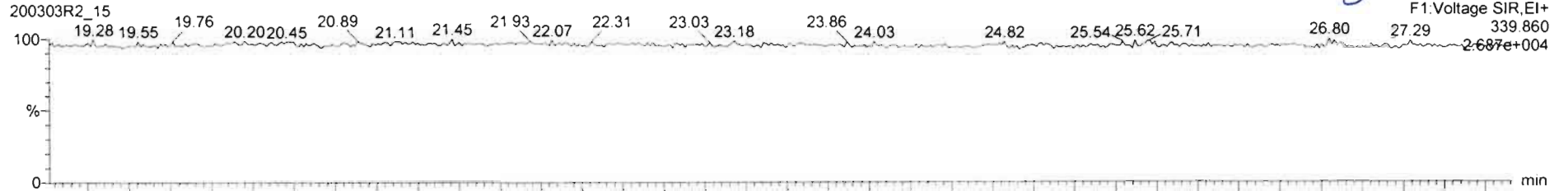
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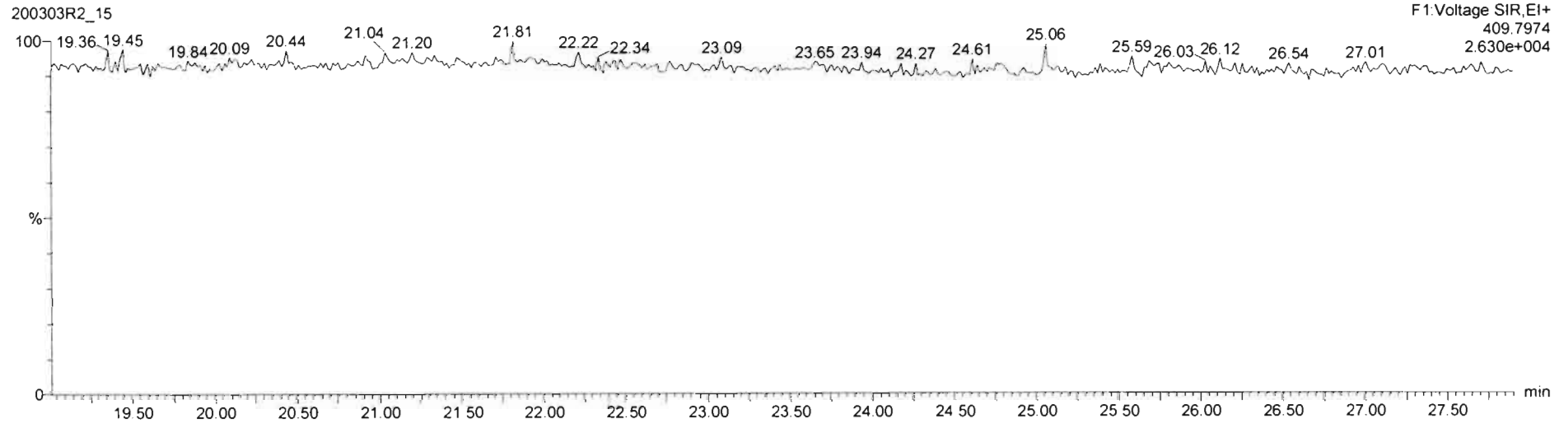
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Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

1st Func. Penta-Furans



DPE6



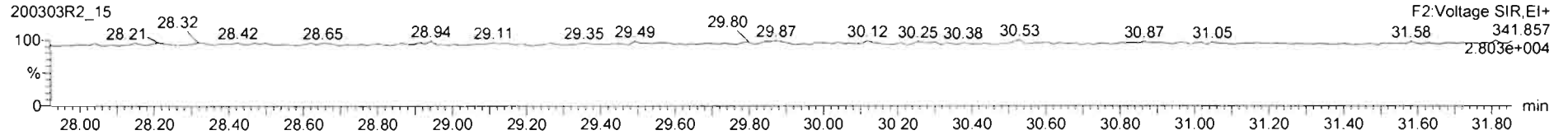
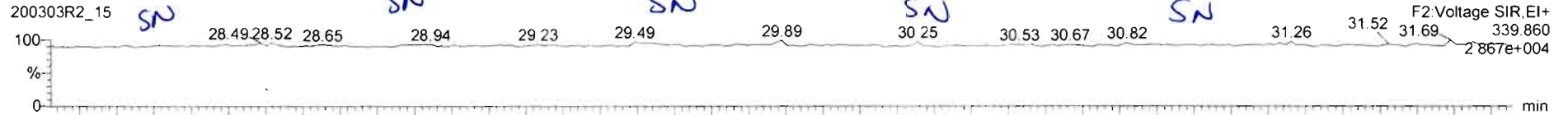
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

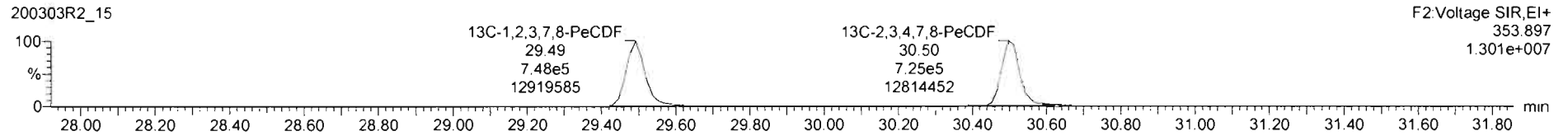
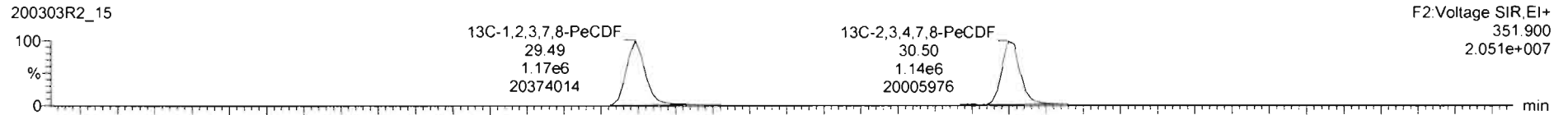
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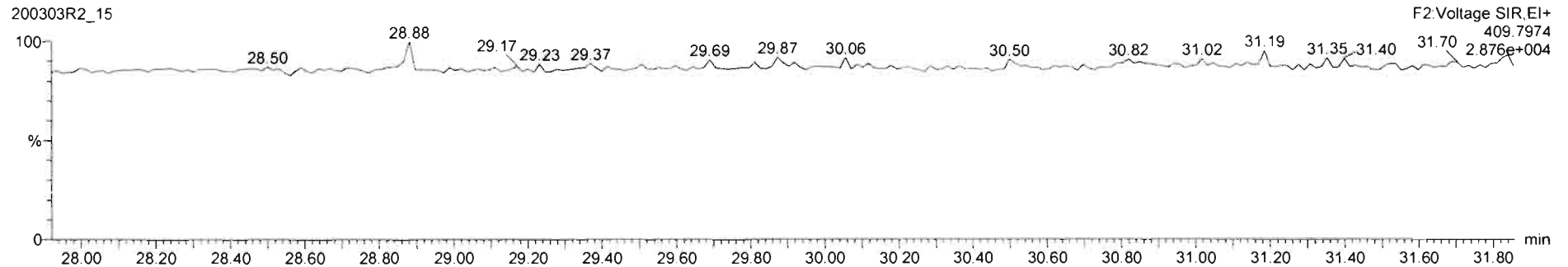
1,2,3,7,8-PeCDF



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

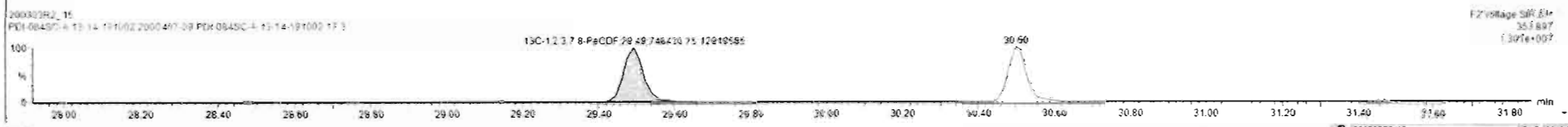
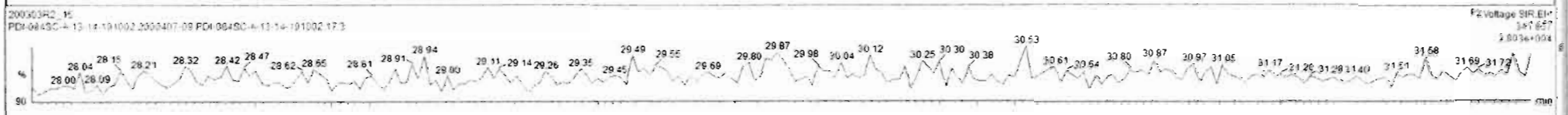
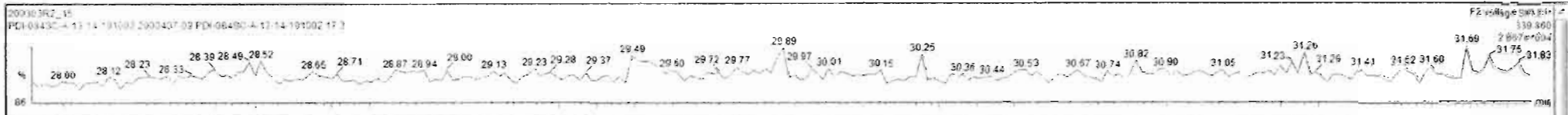


DPE2



#1	Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
45	Total Penta-Furans				0.9074	10.119					0.0175	
46	Total Hexa-Furans				0.8952	10.119					0.0253	

#1	Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1								





Dataset: Untitled

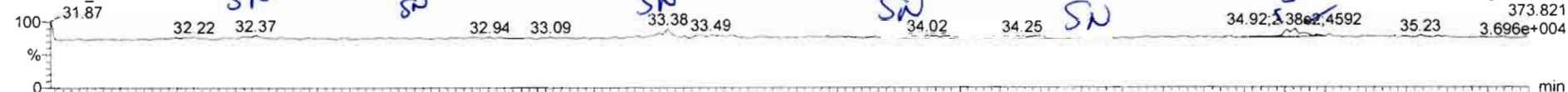
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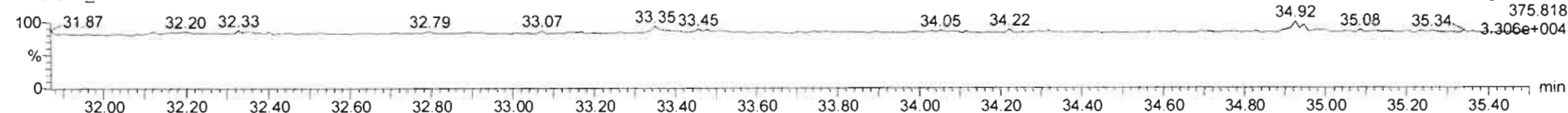
Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

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

200303R2\_15

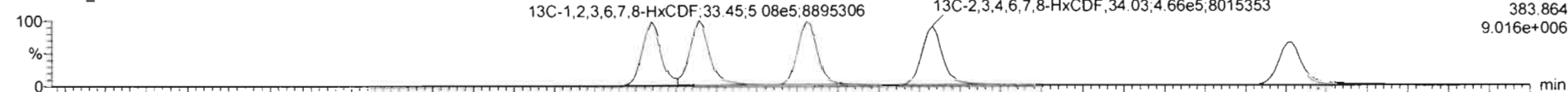


200303R2\_15

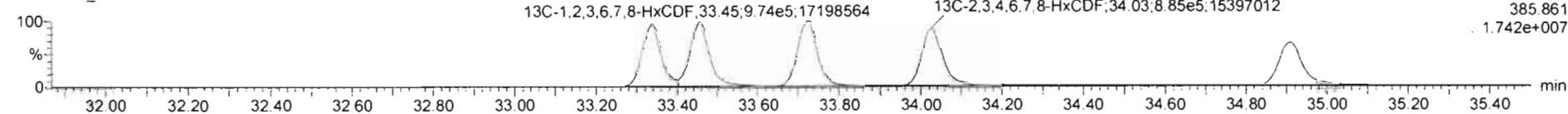


**13C-1,2,3,4,7,8-HxCDF**

200303R2\_15

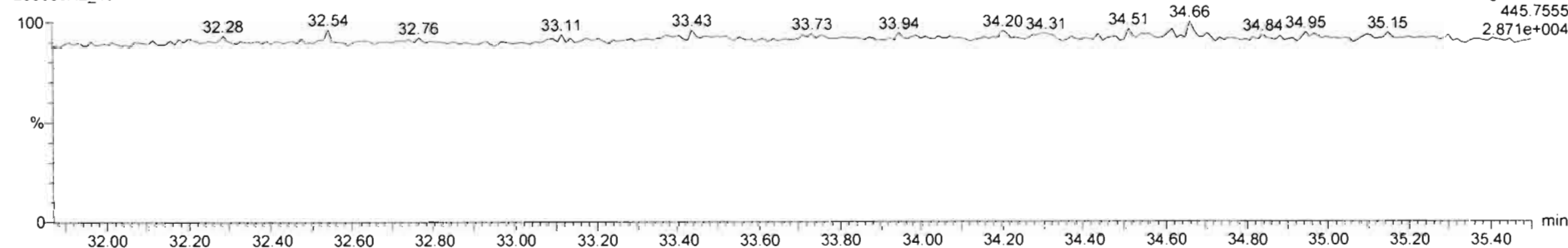


200303R2\_15



**DPE3**

200303R2\_15



TargetLynx - 200303R2\_15.qld - [Chromatogram]

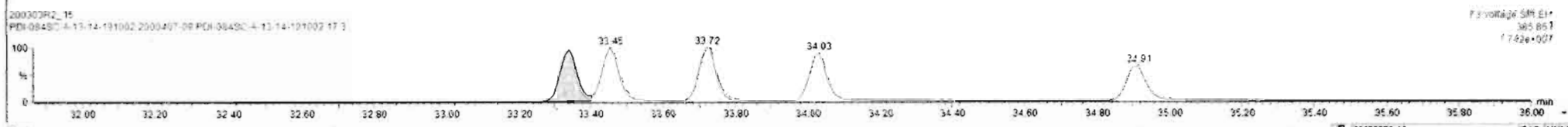
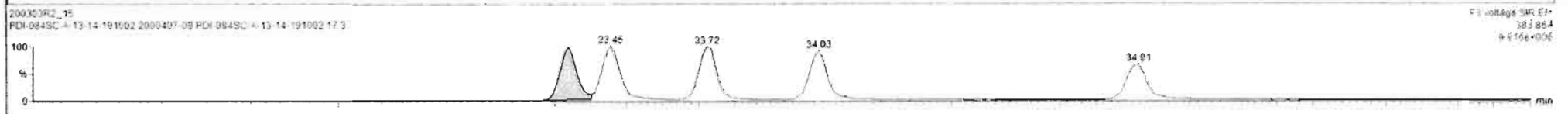
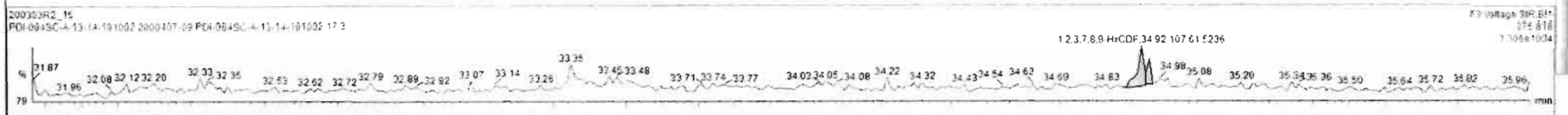
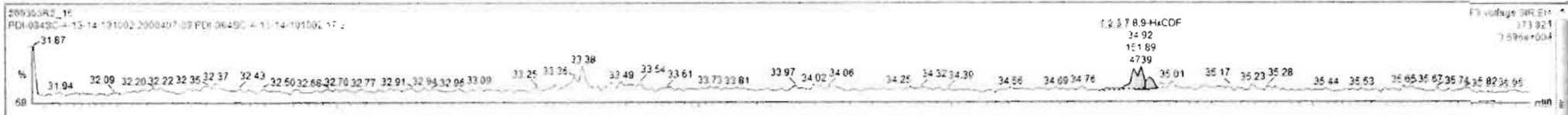
File Edit View Display Processing Window Help

200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17 3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
45 Total Penta-Furans				0.9074	10.119				0.0172		
46 Total Hexa-Furans				0.8952	10.119			0.0649	0.0253	0.0649	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 1,2,3,7,8,9-HxCOF	34.92	1.519e2	1.076e2	1.41	NO	0.046606	0.046606
2 Total Hexa-Furans	34.95	5.756e1	4.277e1	1.35	NO	0.016269	0.016269

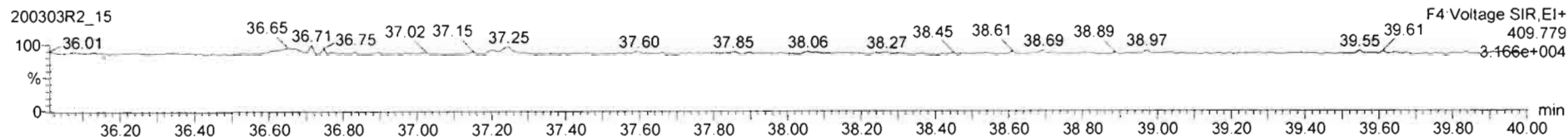
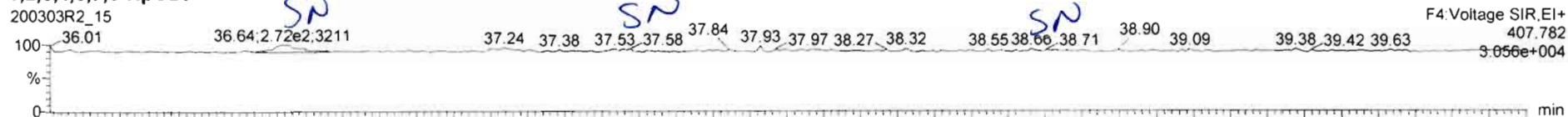


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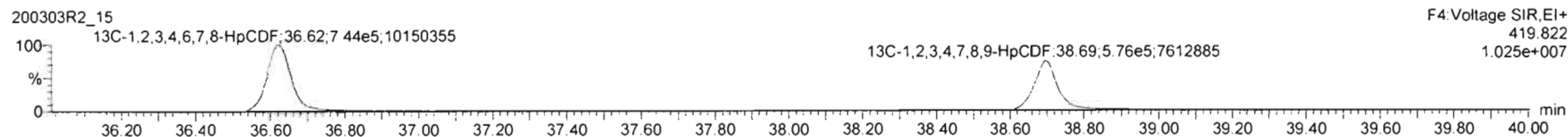
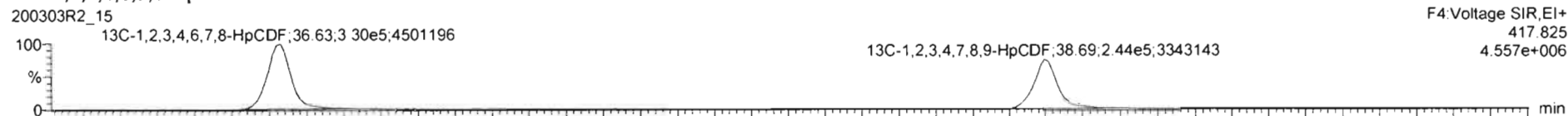
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

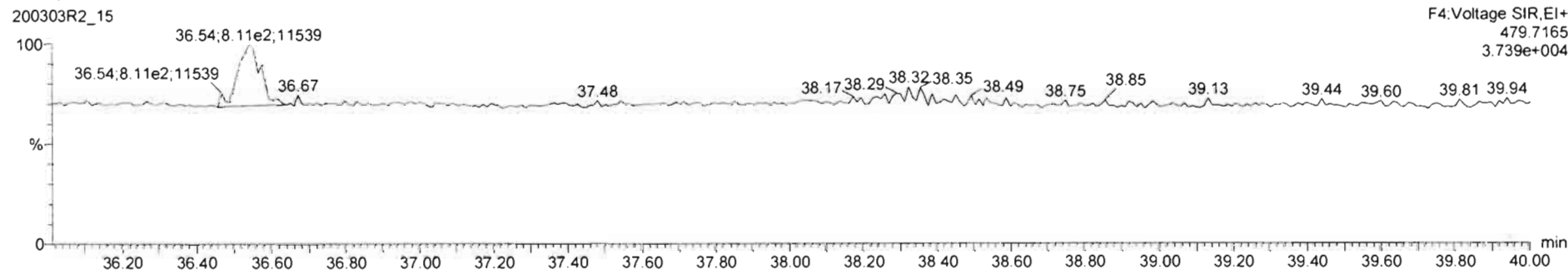
1,2,3,4,6,7,8-HpCDF



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



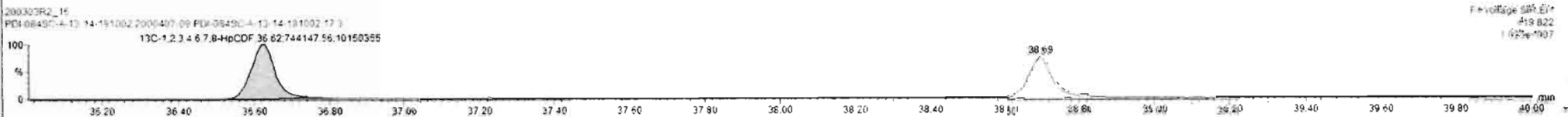
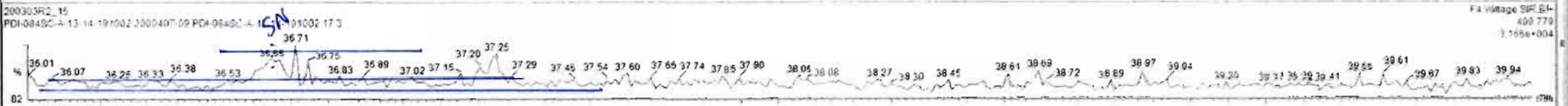
DPE4



200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17 3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc	%Rec	DL	EMPC
45 Total Penta-Furans				0.9074	10.119				0.0175		
46 Total Hexa-Furans				0.8982	10.119			0.0649	0.0253	0.0649	

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



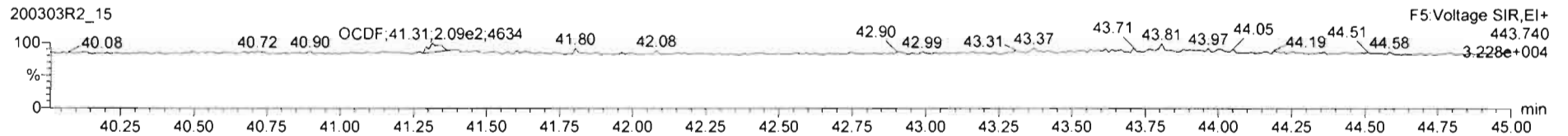
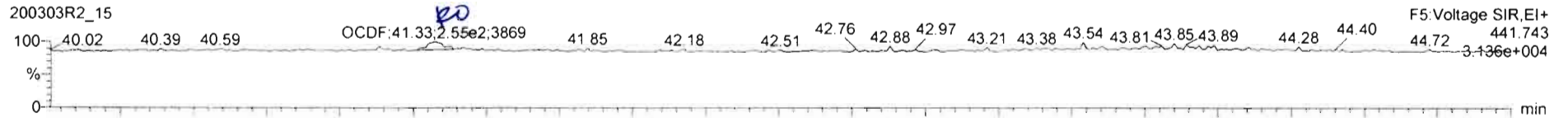
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

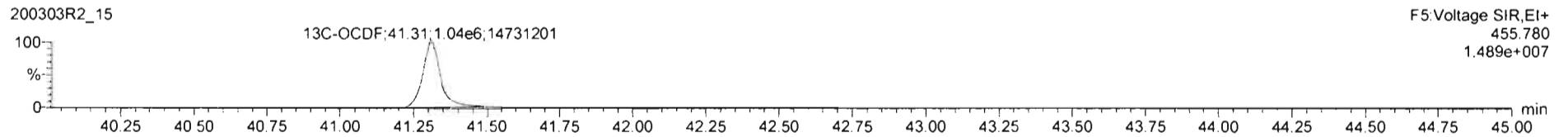
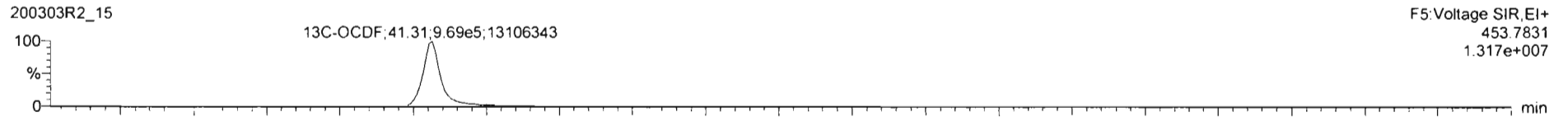
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Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002

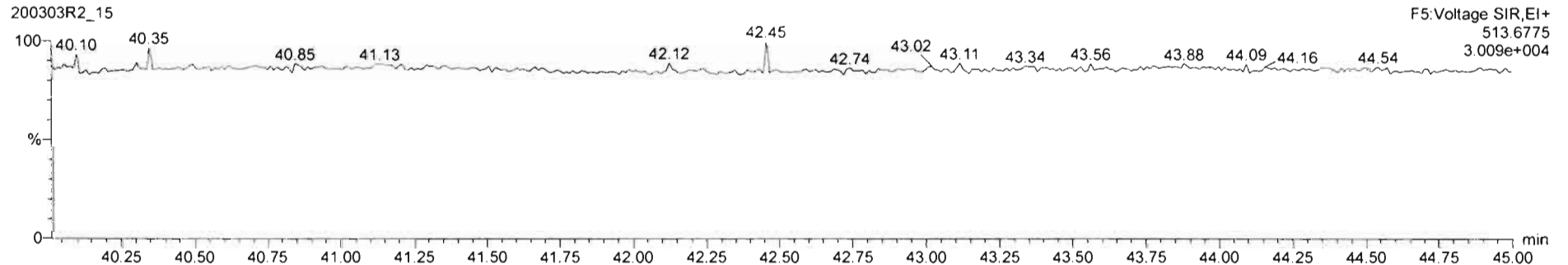
OCDF



13C-OCDF



DPE5





TargetLynx - 200303R2\_15.qld - [Chromatogram]

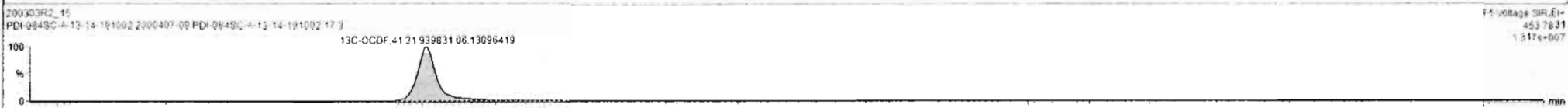
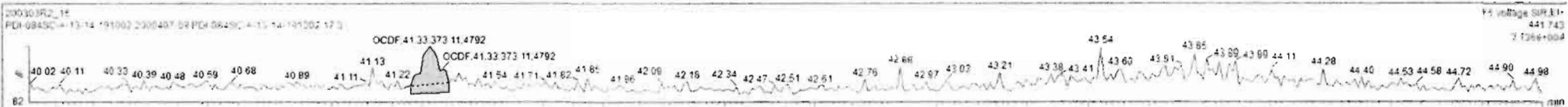
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200303R2\_15 - 2000407-09 PDI-084SC-A-13-14-191002 17.3 - PDI-084SC-A-13-14-191002

Name	Resp	RA	n/y	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
17	OCDF	7.34e2	1.03	YES	0.8055	10.119	41.33	1.000	0.162	0.110	0.169
18	13C-2,3,7,8-TCDD	1.58e6	0.79	NO	1.1985	10.119	25.89	1.028	181	91.4	0.345

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

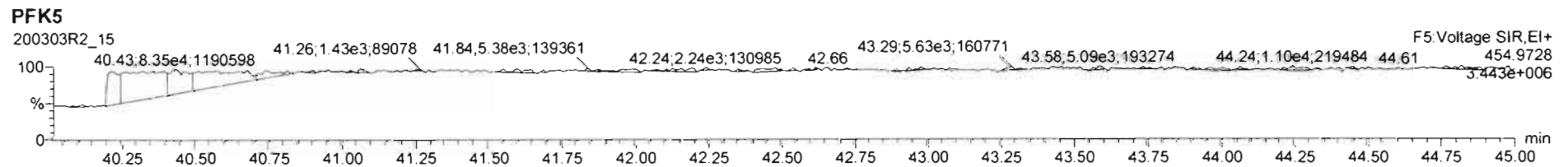
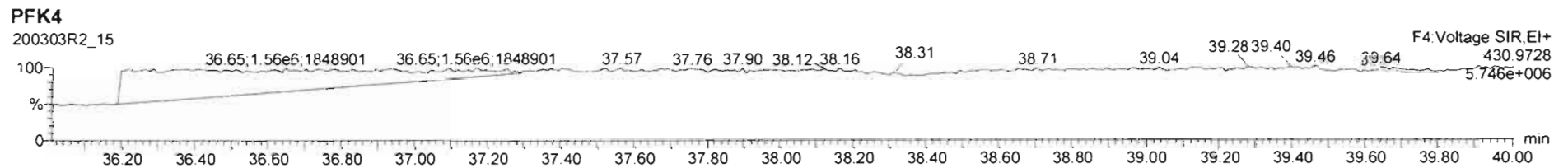
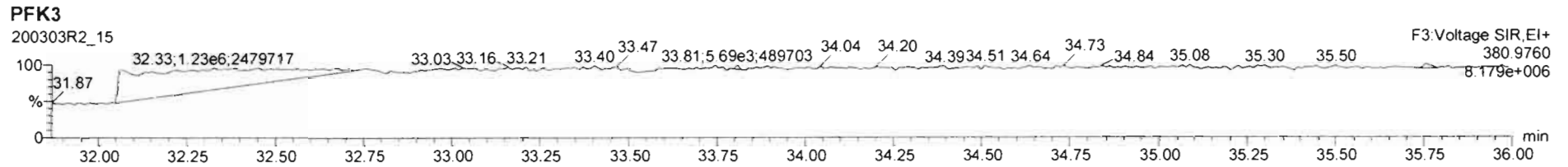
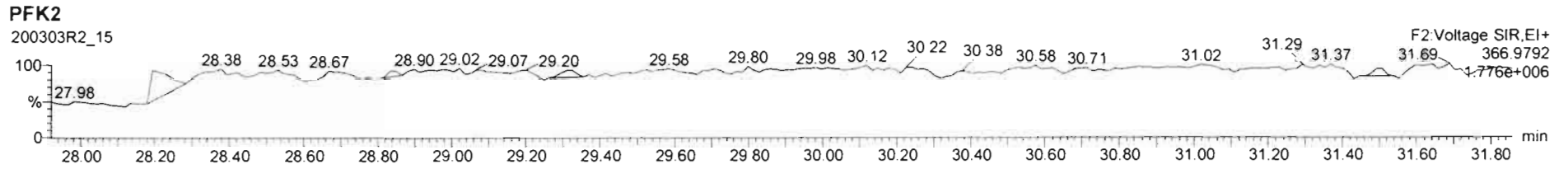
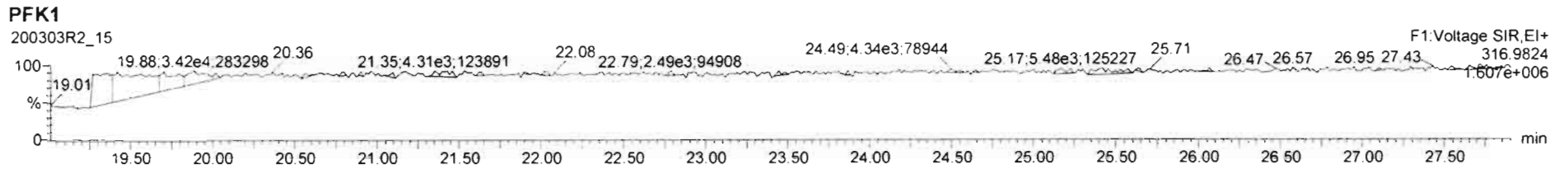


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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_15, Date: 04-Mar-2020, Time: 00:54:05, ID: 2000407-09 PDI-084SC-A-13-14-191002 17.3, Description: PDI-084SC-A-13-14-191002



Dataset: U:\VG12.PRO\Results\200303R2\200303R2-16.qld

Last Altered: Wednesday, March 04, 2020 6:24:41 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 6:25:12 PM Pacific Standard Time

*GPB 03/04/2020*

*C1 03/06/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\lb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

#	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	0.988	10.034	25.721		1.001				0.0626	
2	2 1,2,3,7,8-PeCDD			NO	0.972	10.034	30.842		1.001				0.0631	
3	3 1,2,3,4,7,8-HxCDD			NO	1.07	10.034	34.210		1.000				0.0657	
4	4 1,2,3,6,7,8-HxCDD			NO	0.921	10.034	34.296		1.000				0.0645	
5	5 1,2,3,7,8,9-HxCDD	7.46e2	1.76	YES	0.918	10.034	34.608	34.57	1.001	1.000	0.13239		0.0726	0.108
6	6 1,2,3,4,6,7,8-HpCDD	5.62e3	1.03	NO	0.923	10.034	38.056	38.06	1.000	1.000	1.2341		0.111	1.23
7	7 OCDD	4.96e4	0.88	NO	0.975	10.034	41.145	41.15	1.000	1.000	12.115		0.143	12.1
8	8 2,3,7,8-TCDF			NO	0.802	10.034	24.757		1.001				0.0493	
9	9 1,2,3,7,8-PeCDF			NO	0.907	10.034	29.513		1.001				0.0448	
10	10 2,3,4,7,8-PeCDF			NO	0.952	10.034	30.545		1.001				0.0424	
11	11 1,2,3,4,7,8-HxCDF			NO	0.862	10.034	33.338		1.000				0.0499	
12	12 1,2,3,6,7,8-HxCDF			NO	0.841	10.034	33.465		1.000				0.0503	
13	13 2,3,4,6,7,8-HxCDF			NO	0.898	10.034	34.064		1.001				0.0497	
14	14 1,2,3,7,8,9-HxCDF	2.26e2	1.04	YES	0.858	10.034	34.914	34.90	1.000	1.000	0.043828		0.0440	0.0404
15	15 1,2,3,4,6,7,8-HpCDF	5.52e2	0.97	NO	0.851	10.034	36.666	36.64	1.001	1.000	0.12044		0.0797	0.120
16	16 1,2,3,4,7,8,9-HpCDF			NO	0.980	10.034	38.706		1.000				0.0945	
17	17 OCDF	5.81e2	0.73	YES	0.806	10.034	41.326	41.34	1.000	1.000	0.14776		0.0999	0.133
18	18 13C-2,3,7,8-TCDD	1.61e6	0.77	NO	1.20	10.034	25.645	25.69	1.026	1.028	185.94	93.3	0.192	
19	19 13C-1,2,3,7,8-PeCDD	1.46e6	0.62	NO	0.967	10.034	30.765	30.82	1.230	1.233	209.89	105	0.279	
20	20 13C-1,2,3,4,7,8-HxCDD	1.09e6	1.26	NO	0.874	10.034	34.193	34.20	1.014	1.014	171.69	86.1	0.359	
21	21 13C-1,2,3,6,7,8-HxCDD	1.33e6	1.29	NO	1.05	10.034	34.294	34.30	1.017	1.017	175.16	87.9	0.300	
22	22 13C-1,2,3,7,8,9-HxCDD	1.21e6	1.21	NO	0.974	10.034	34.598	34.57	1.026	1.025	171.09	85.8	0.322	
23	23 13C-1,2,3,4,6,7,8-HpCDD	9.84e5	1.00	NO	0.747	10.034	38.172	38.04	1.132	1.128	180.80	90.7	0.435	
24	24 13C-OCDD	1.67e6	0.88	NO	0.707	10.034	41.072	41.15	1.218	1.220	325.26	81.6	0.445	
25	25 13C-2,3,7,8-TCDF	2.01e6	0.78	NO	1.07	10.034	24.827	24.73	0.993	0.989	195.50	98.1	0.290	
26	26 13C-1,2,3,7,8-PeCDF	1.96e6	1.58	NO	1.00	10.034	29.402	29.49	1.176	1.180	202.00	101	0.425	
27	27 13C-2,3,4,7,8-PeCDF	1.94e6	1.60	NO	0.962	10.034	30.370	30.51	1.215	1.220	208.93	105	0.442	
28	28 13C-1,2,3,4,7,8-HxCDF	1.39e6	0.51	NO	1.05	10.034	33.316	33.34	0.988	0.989	181.33	91.0	0.424	
29	29 13C-1,2,3,6,7,8-HxCDF	1.53e6	0.51	NO	1.19	10.034	33.418	33.46	0.991	0.992	176.44	88.5	0.374	
30	30 13C-2,3,4,6,7,8-HxCDF	1.40e6	0.50	NO	1.07	10.034	34.028	34.03	1.009	1.009	179.94	90.3	0.417	
31	31 13C-1,2,3,7,8,9-HxCDF	1.20e6	0.52	NO	0.922	10.034	34.935	34.91	1.036	1.035	178.75	89.7	0.482	

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-16.qld

Last Altered: Wednesday, March 04, 2020 6:24:41 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 6:25:12 PM Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

#	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	1.07e6	0.44	NO	0.767	10.034	36.688	36.63	1.088	1.086	192.07	96.4	0.493	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.15e5	0.42	NO	0.552	10.034	38.712	38.71	1.148	1.148	202.52	102	0.685	
34	34 13C-OCDF	1.95e6	0.88	NO	0.789	10.034	41.308	41.33	1.225	1.226	338.35	84.9	0.324	
35	35 37Cl-2,3,7,8-TCDD	6.21e5			1.18	10.034	25.677	25.70	1.027	1.028	73.233	91.9	0.0691	
36	36 13C-1,2,3,4-TCDD	1.44e6	0.78	NO	1.00	10.034	25.110	25.00	1.000	1.000	199.32	100	0.230	
37	37 13C-1,2,3,4-TCDF	1.93e6	0.79	NO	1.00	10.034	23.370	23.19	1.000	1.000	199.32	100	0.309	
38	38 13C-1,2,3,4,6,9-HxCDF	1.45e6	0.51	NO	1.00	10.034	33.710	33.72	1.000	1.000	199.32	100	0.445	
39	39 Total Tetra-Dioxins				0.988	10.034	24.620		0.000		0.71267		0.0626	0.793
40	40 Total Penta-Dioxins				0.972	10.034	29.960		0.000		0.39087		0.0631	0.391
41	41 Total Hexa-Dioxins				0.921	10.034	33.635		0.000		1.3088		0.0711	1.83
42	42 Total Hepta-Dioxins				0.923	10.034	37.640		0.000		3.5647		0.111	3.56
43	43 Total Tetra-Furans				0.802	10.034	23.610		0.000		0.48337		0.0493	0.483
44	44 1st Func. Penta-Furans				0.907	10.034	27.090		0.000				0.0128	
45	45 Total Penta-Furans				0.907	10.034	29.275		0.000		0.00000		0.0217	0.0431
46	46 Total Hexa-Furans				0.898	10.034	33.555		0.000		0.00000		0.0330	0.0755
47	47 Total Hepta-Furans				0.851	10.034	37.835		0.000		0.12044		0.0923	0.120

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-16.qld

Last Altered: Wednesday, March 04, 2020 6:24:41 PM Pacific Standard Time  
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Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

**Tetra-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	23.39	2.812e4	3.793e4	2.437e3	3.235e3	0.75	NO	5.673e3	0.71267	0.71267	0.0626
2	Total Tetra-Dioxins	24.99	4.147e3	5.326e3	3.345e2	3.605e2	0.93	YES	0.000e0	0.00000	0.080161	0.0626

**Penta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.56	6.823e3	1.011e4	4.830e2	7.321e2	0.66	NO	1.215e3	0.17040	0.17040	0.0631
2	Total Penta-Dioxins	29.05	1.035e4	1.602e4	6.222e2	9.500e2	0.65	NO	1.572e3	0.22047	0.22047	0.0631

**Hexa-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.74	8.148e4	5.677e4	4.165e3	3.176e3	1.31	NO	7.341e3	1.3088	1.3088	0.0711
2	Total Hexa-Dioxins	33.56	2.522e4	1.774e4	1.616e3	1.039e3	1.56	YES	0.000e0	0.00000	0.41497	0.0711
3	1,2,3,7,8,9-HxCDD	34.57	7.010e3	6.142e3	4.758e2	2.703e2	1.76	YES	7.461e2	0.00000	0.10823	0.0738

**Hepta-Dioxins**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	37.01	8.266e4	7.497e4	5.424e3	5.196e3	1.04	NO	1.062e4	2.3306	2.3306	0.111
2	1,2,3,4,6,7,8-HpCDD	38.06	3.532e4	3.564e4	2.856e3	2.767e3	1.03	NO	5.623e3	1.2341	1.2341	0.111

**Tetra-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	19.45	3.110e3	4.400e3	2.633e2	3.518e2	0.75	NO	6.151e2	0.075936	0.075936	0.0493
2	Total Tetra-Furans	20.56	1.545e4	2.445e4	1.360e3	1.940e3	0.70	NO	3.300e3	0.40743	0.40743	0.0493



Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-16.qld

Last Altered: Wednesday, March 04, 2020 6:24:41 PM Pacific Standard Time

Printed: Wednesday, March 04, 2020 6:25:12 PM Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

**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	29.87	5.701e3	4.512e3	2.323e2	2.333e2	1.00	YES	0.000e0	0.00000	0.043072	0.0217

**Hexa-Furans**

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,7,8,9-HxCDF	34.90	4.047e3	3.650e3	1.155e2	1.110e2	1.04	YES	2.265e2	0.00000	0.040385	0.0440
2	Total Hexa-Furans	34.95	4.929e3	2.715e3	1.751e2	9.733e1	1.80	YES	0.000e0	0.00000	0.035106	0.0330

**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	36.64	3.920e3	4.512e3	2.718e2	2.801e2	0.97	NO	5.519e2	0.12044	0.12044	0.0797

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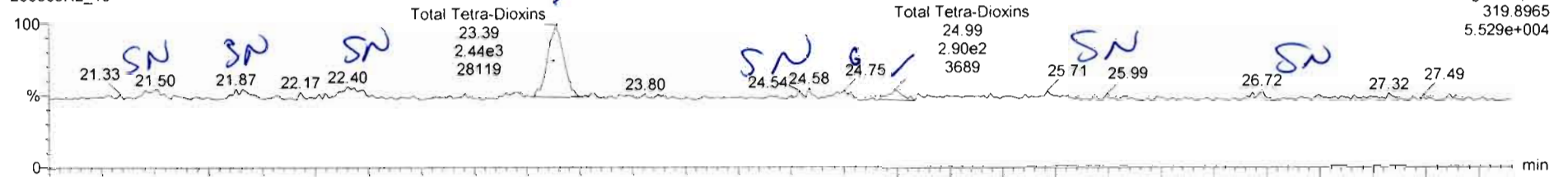
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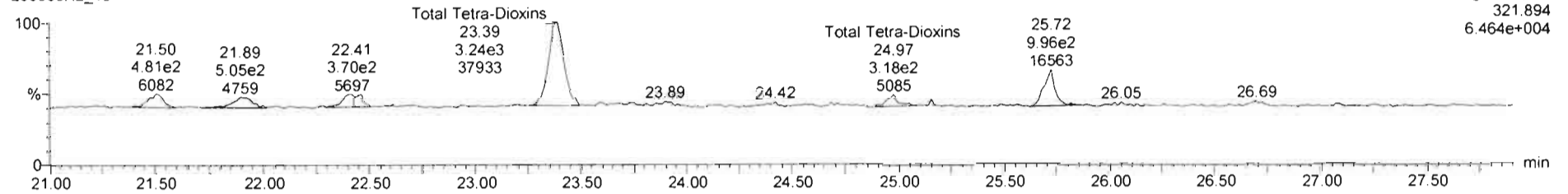
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2,3,7,8-TCDD

200303R2\_16

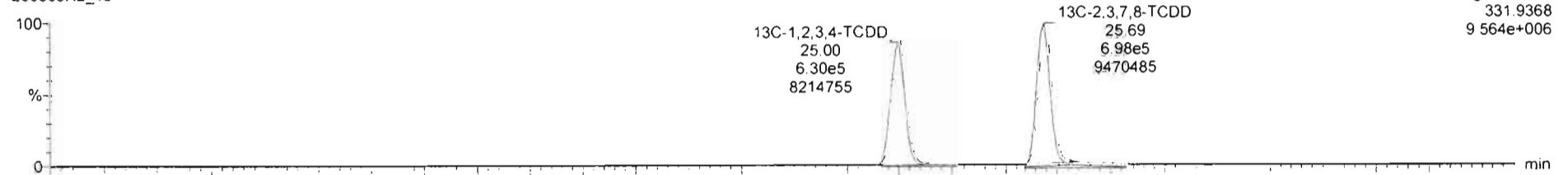


200303R2\_16

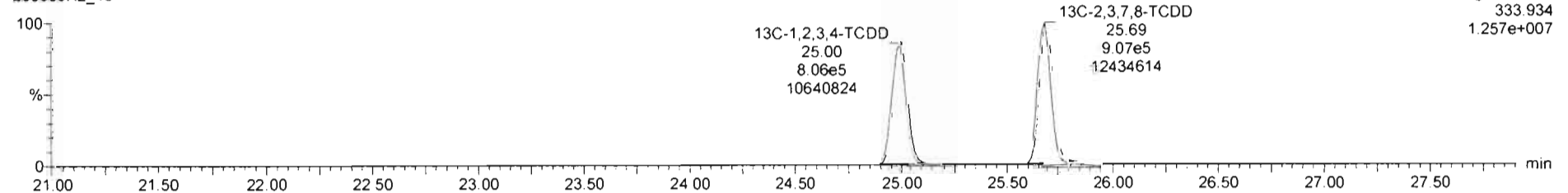


13C-2,3,7,8-TCDD

200303R2\_16



200303R2\_16



TargetLynx - 200303R2\_16.qld - [Chromatogram]

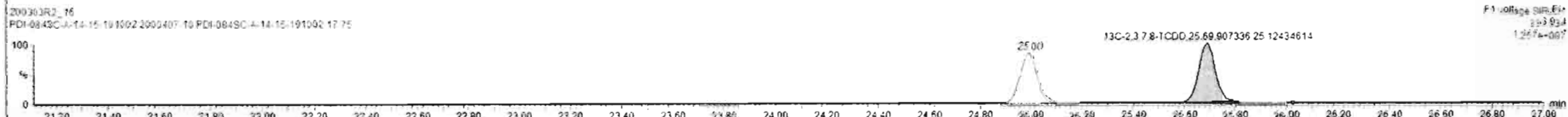
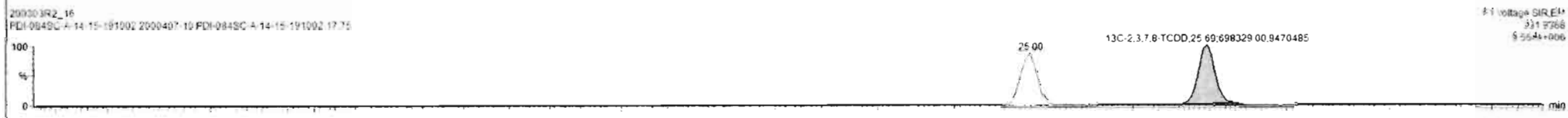
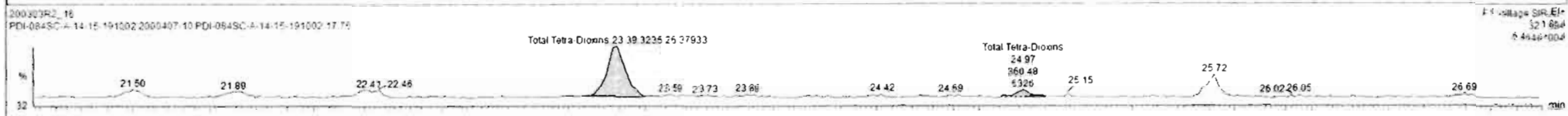
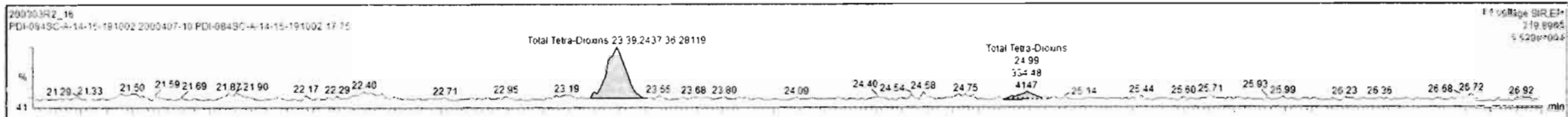
File Edit View Display Processing Window Help

200303R2\_16 - 2000407-10 PDI-084SC-A-14-15-191002 17.75 - PDI-084SC-A-14-15-191002

Name	Resp	RA	n/y	RRF	wVol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9561	10.034			0.713	0.0626	0.793	
40 Total Penta-Dioxins				0.9723	10.034			0.179	0.0631	0.367	
41 Total Hexa-Dioxins				0.9211	10.034			1.31	0.0711	1.84	

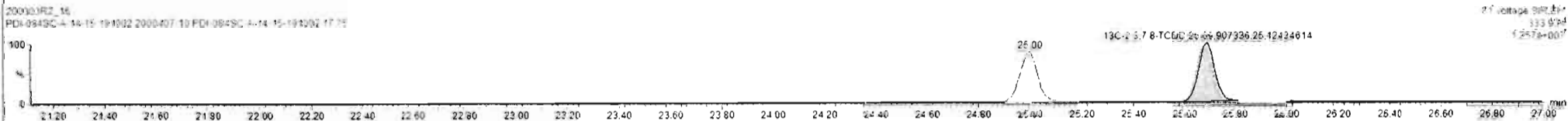
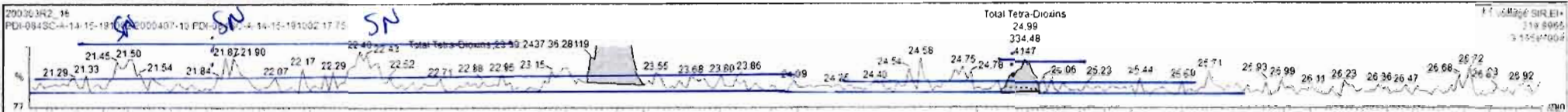
  

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Tetra-Dioxins	23.39	2.437e3	3.235e3	0.75	NO	0.71267	0.71267
2 Total Tetra-Dioxins	24.99	3.345e2	3.605e2	0.93	YES	0.080181	0.00000



Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
39 Total Tetra-Dioxins				0.9861	10.034			0.713	0.0626	0.793	
40 Total Penta-Dioxins				0.9723	10.034			0.179	0.0631	0.367	
41 Total Hexa-Dioxins				0.9211	10.034			1.311	0.0711	1.84	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Dioxins	23.39	2.437e3	3.235e3	0.75	NO	0.71267	0.71267
2 Total Tetra-Dioxins	24.99	3.345e2	2.605e2	0.93	YES	0.080161	0.00000



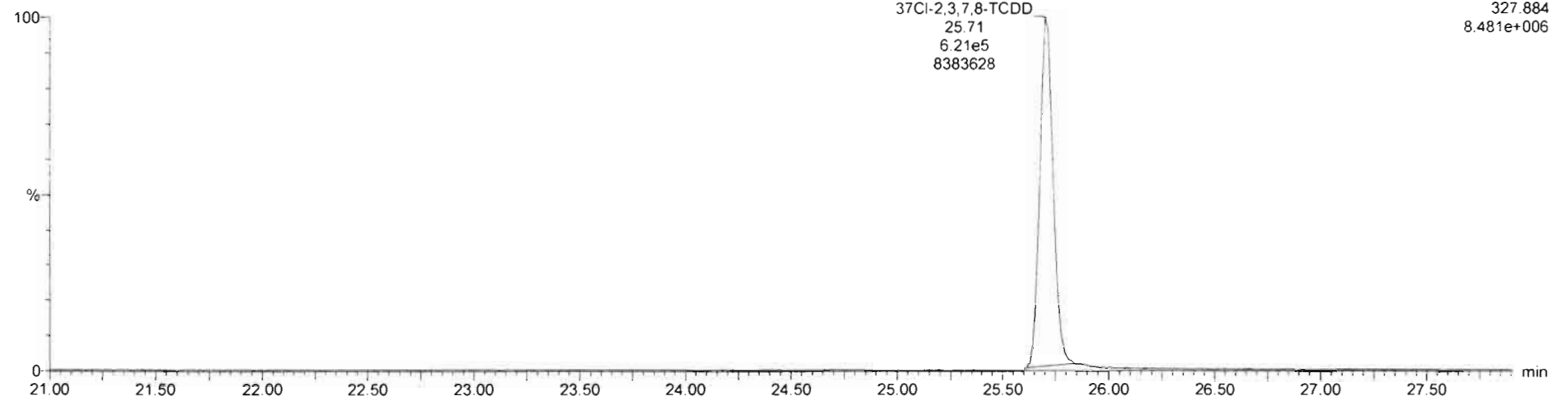
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

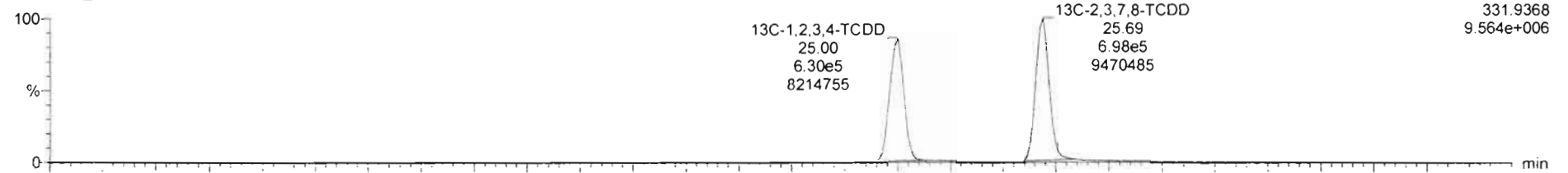
37Cl-2,3,7,8-TCDD

200303R2\_16

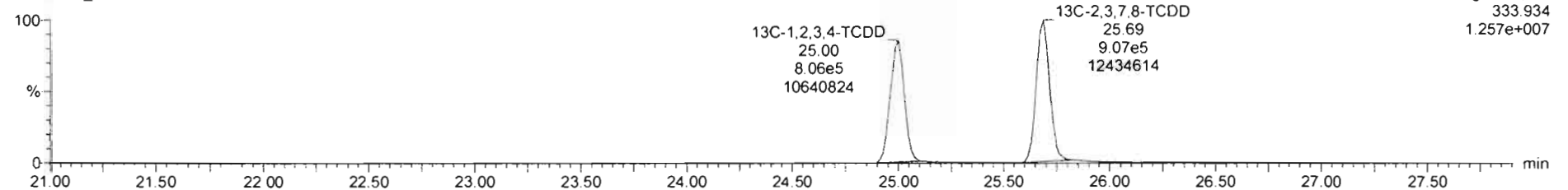


13C-1,2,3,4-TCDD

200303R2\_16



200303R2\_16





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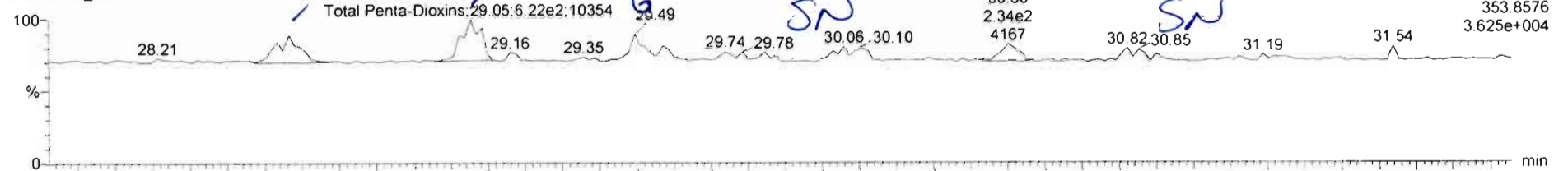
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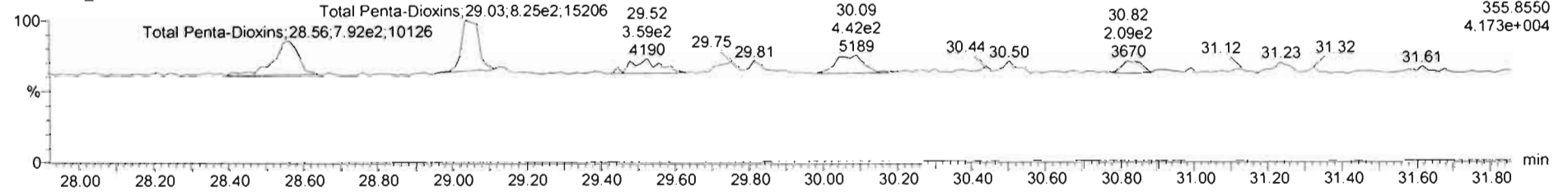
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1,2,3,7,8-PeCDD

200303R2\_16

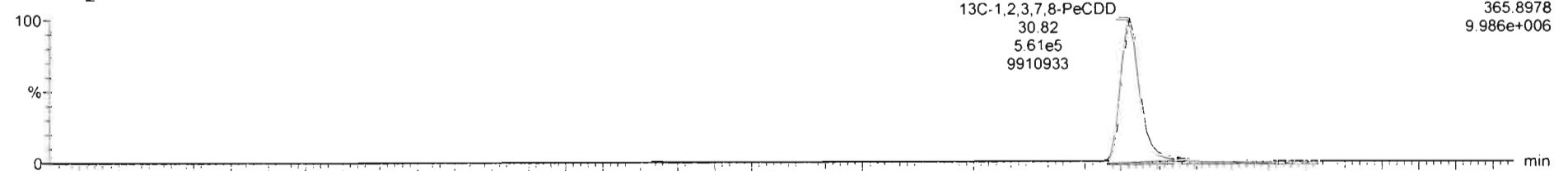


200303R2\_16

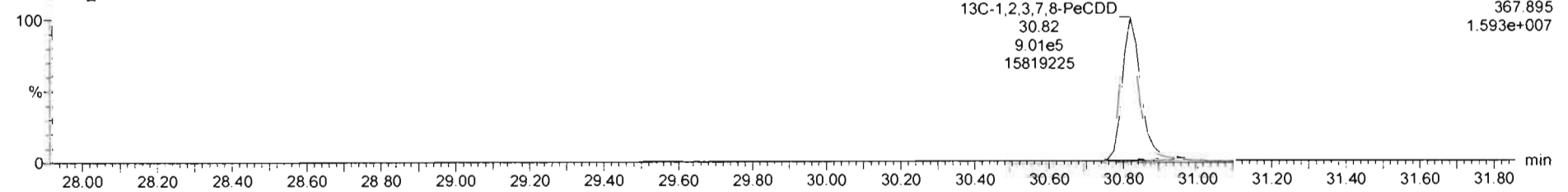


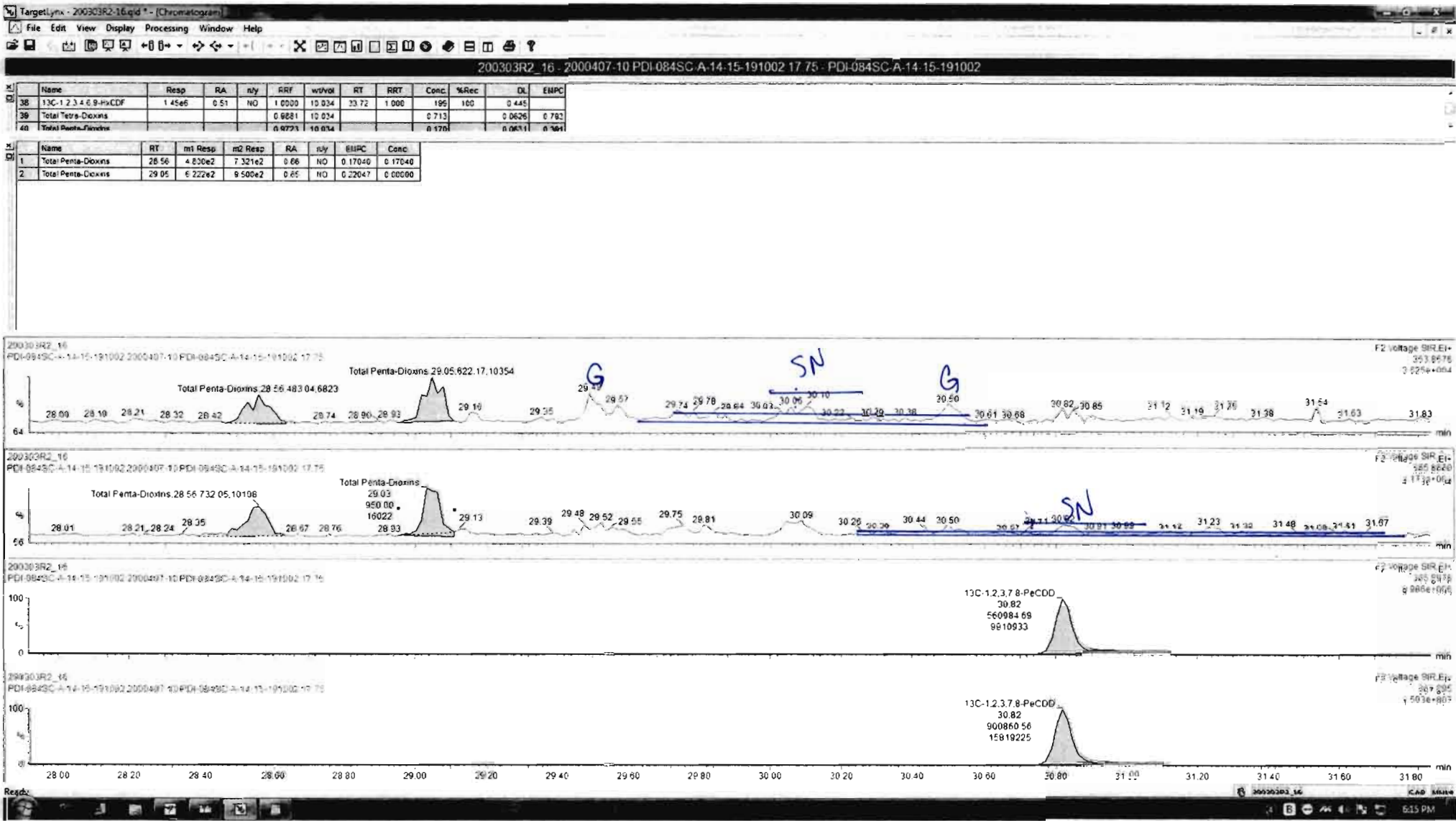
13C-1,2,3,7,8-PeCDD

200303R2\_16



200303R2\_16



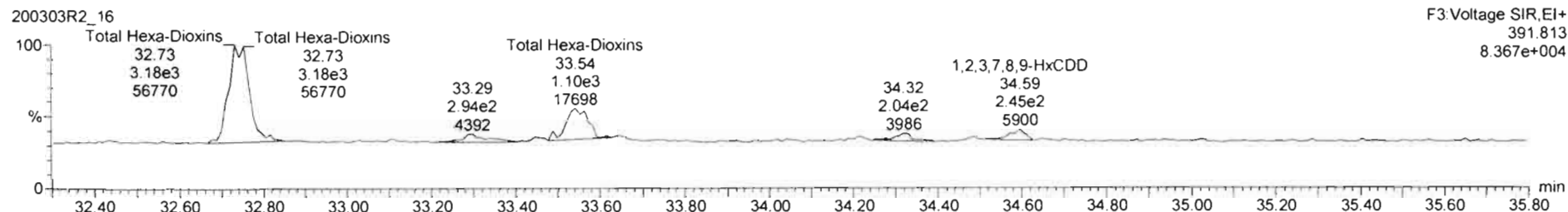
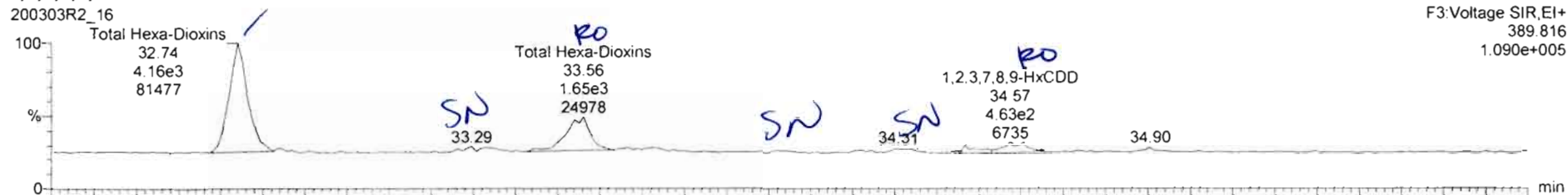


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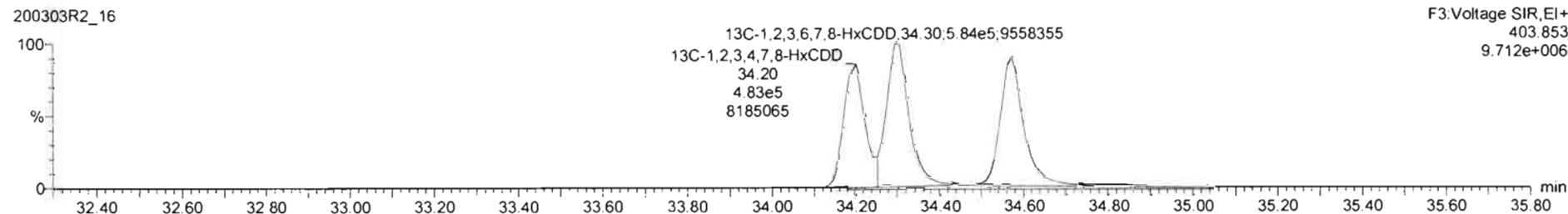
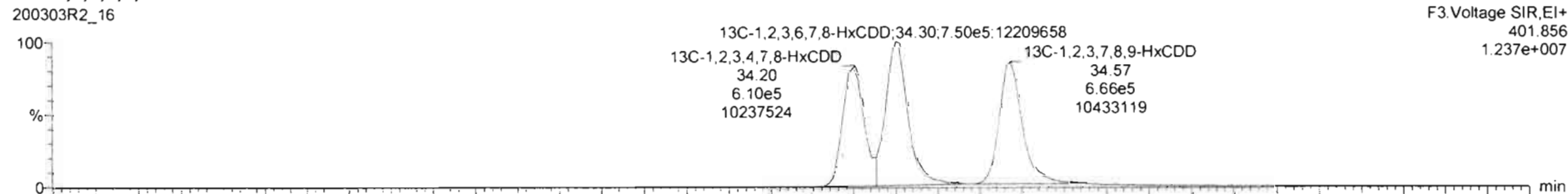
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Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

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



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



TargetLynx - 200903R2\_16.qld - [Chromatogram]

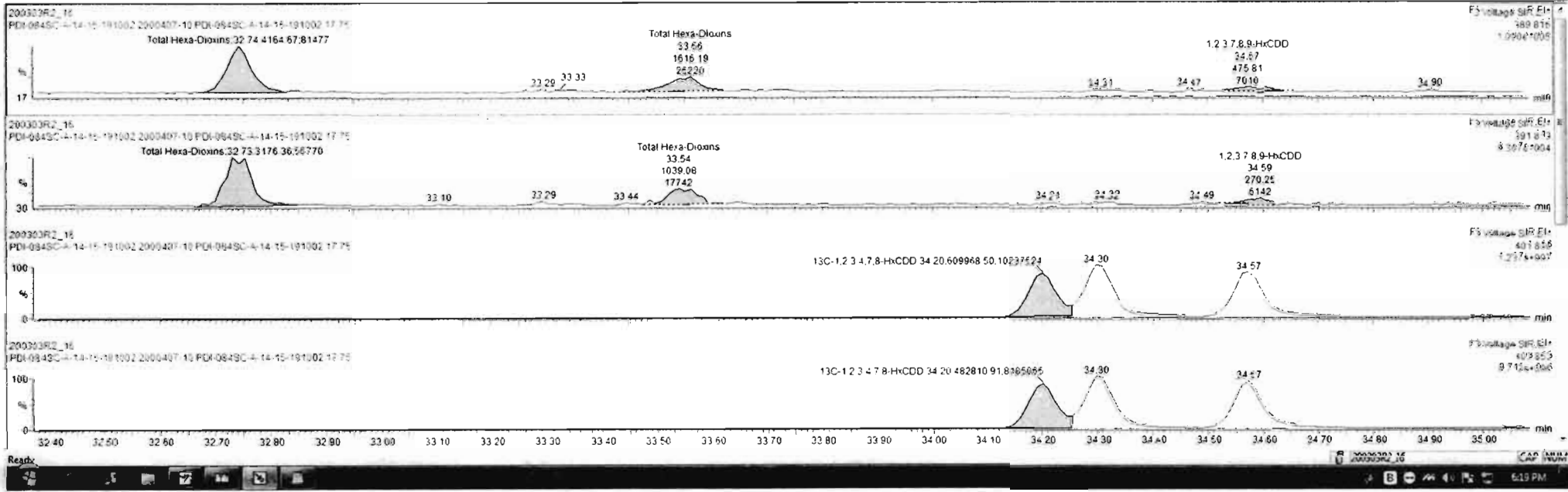
File Edit View Display Processing Window Help

200303R2\_16 - 2000407-10 PDI-084SC-A-14-15-191002 17.75 - PDI-084SC-A-14-15-191002

Name	Resp	RA	nly	RAF	wt/vol	RT	RRT	Conc	%Rec	DL	EMPC
41 Total Hexa-Dioxins				0.9211	10.034			1.31	0.0711	1.83	
42 Total Hepta-Dioxins				0.9231	10.034			1.56	0.111	2.56	
43 Total Tetra-Furans				0.8020	10.014			0.48%	0.045%	0.48%	

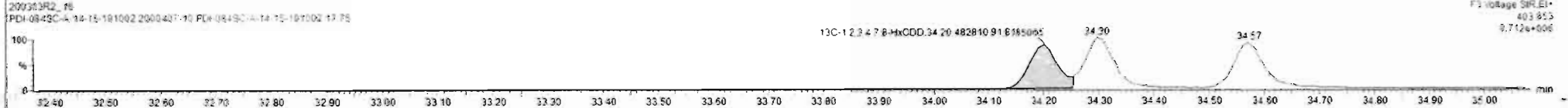
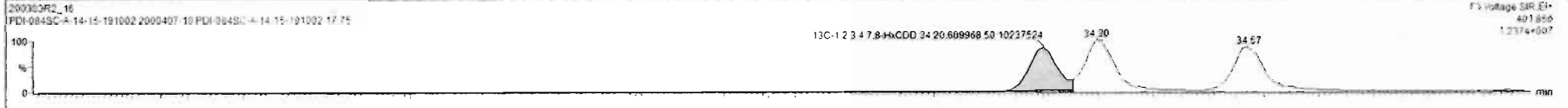
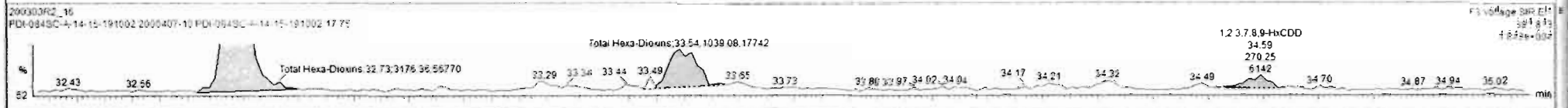
Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Hexa-Dioxins	32.74	4.16E3	3.176E3	1.31	NO	1.3085	1.3085
2 Total Hexa-Dioxins	33.56	1.618E3	1.039E3	1.56	YES	0.41497	0.00000
3 1,2,3,7,8-HxCDD	34.57	4.758E2	2.703E2	1.76	YES	0.10823	0.00000



200303R2\_16 - 2000407-10 PDI-084SC-A-14-15-191002 17.75 - PDI-084SC-A-14-15-191002

Name	Resp	RA	nly	RRF	wtVol	RT	RRT	Conc	%Rec	DL	EMPC
41 Total Hexa-Dioxins				0.9211	10.034			1.31	0.0711	1.83	
42 Total Hepta-Dioxins				0.9231	10.034			2.56	0.111	2.56	
43 Total Tetra-Furans				0.8020	10.034			0.481	0.0461	0.481	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc.
1 Total Hexa-Dioxins	32.74	4.165e3	2.176e3	1.31	NO	1.3088	1.3088
2 Total Hexa-Dioxins	33.56	1.216e3	1.039e3	1.56	YES	0.41497	0.00000
3 1,2,3,7,8,9-HxCDD	34.57	4.759e2	2.703e2	1.76	YES	0.10823	0.00000





Dataset: Untitled

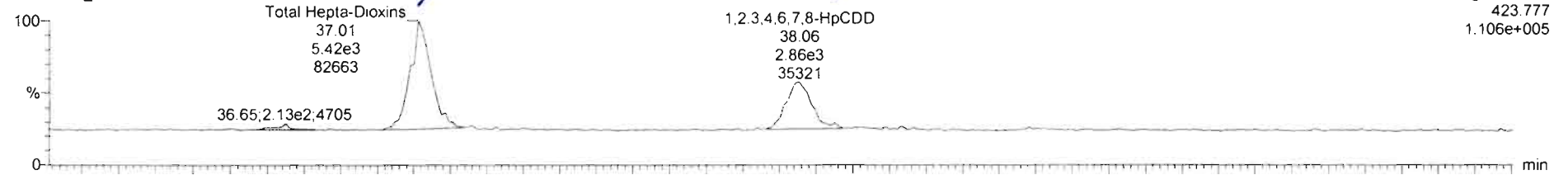
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Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

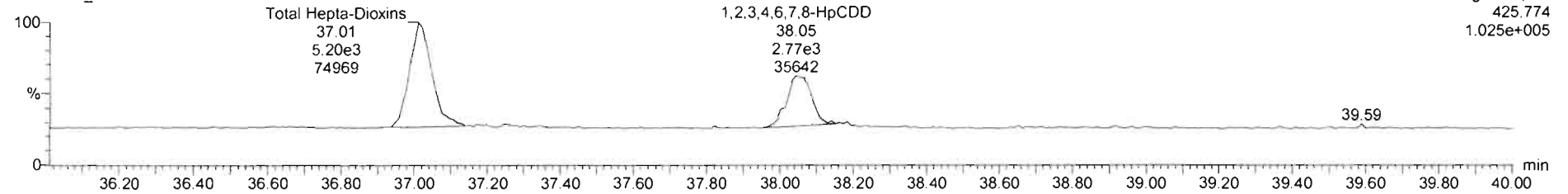
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1,2,3,4,6,7,8-HpCDD

200303R2\_16

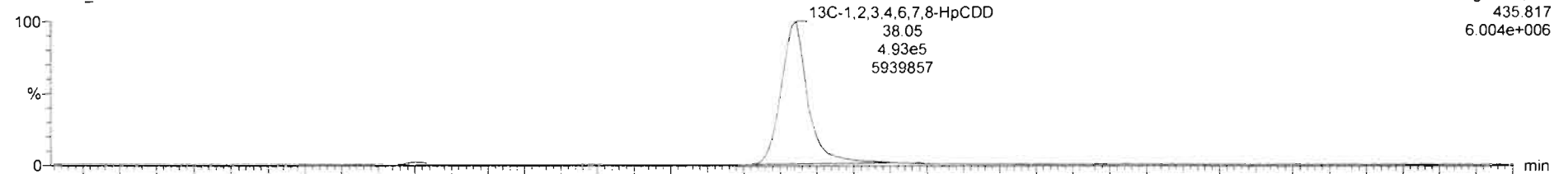


200303R2\_16

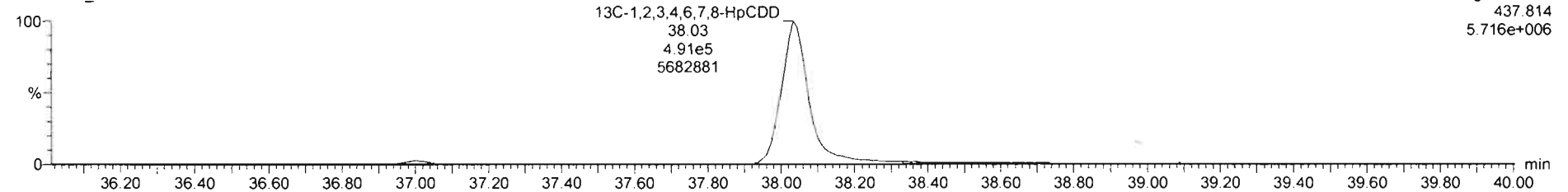


13C-1,2,3,4,6,7,8-HpCDD

200303R2\_16



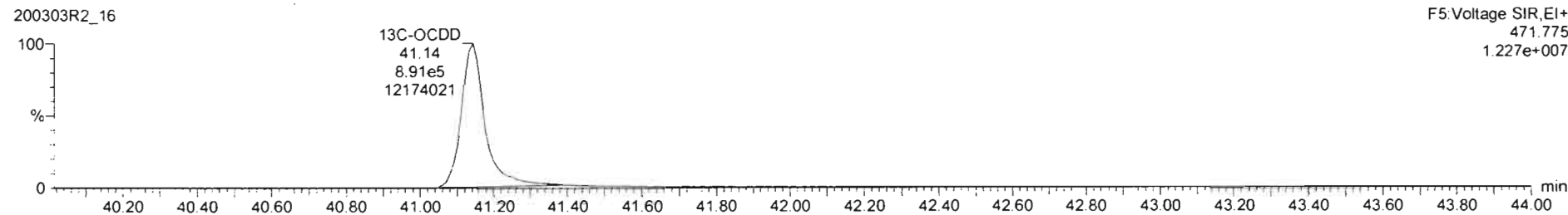
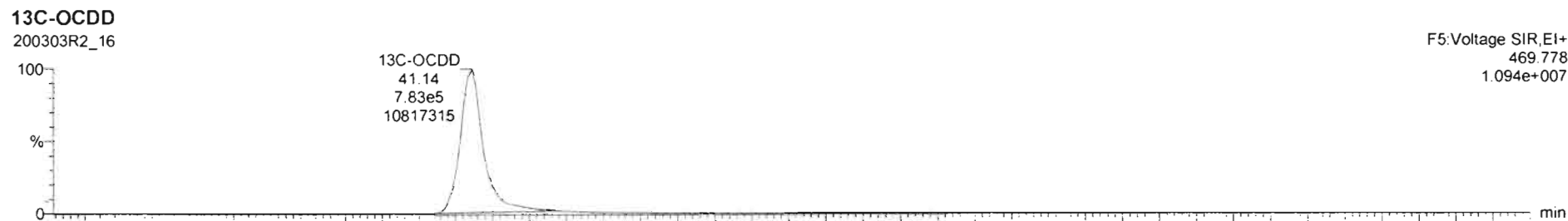
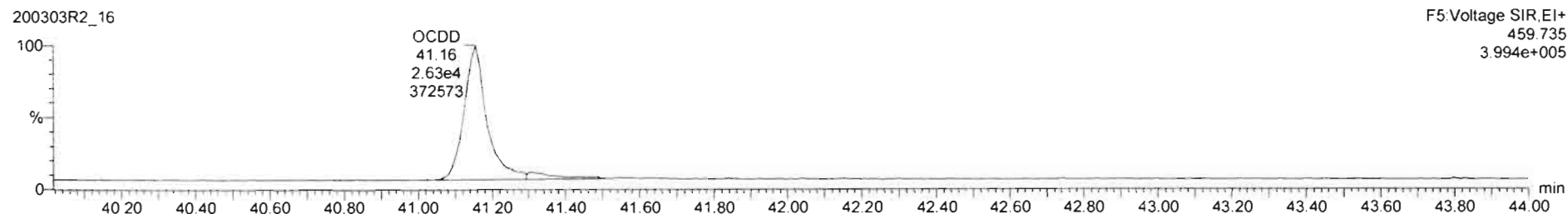
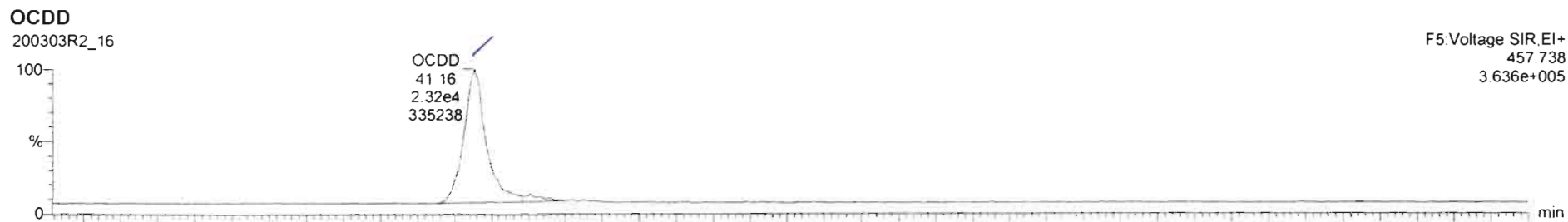
200303R2\_16



Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002



Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

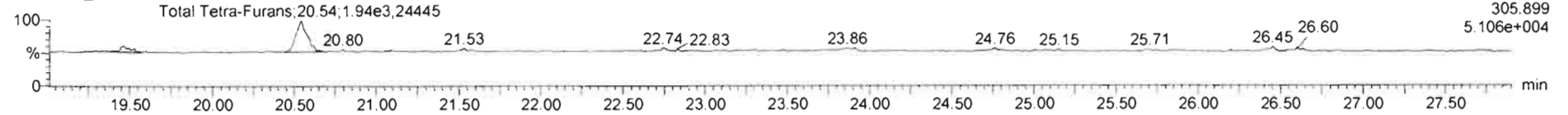
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2,3,7,8-TCDF

200303R2\_16

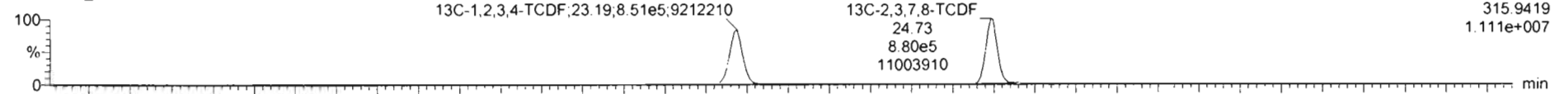


200303R2\_16

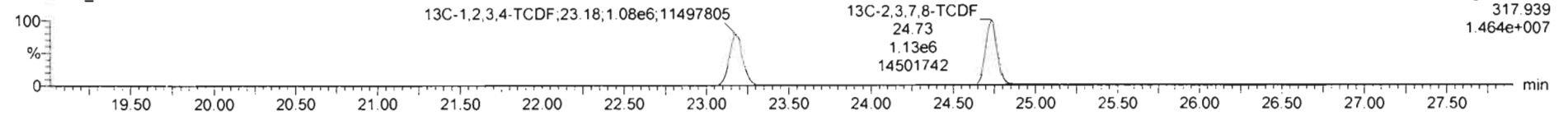


13C-2,3,7,8-TCDF

200303R2\_16

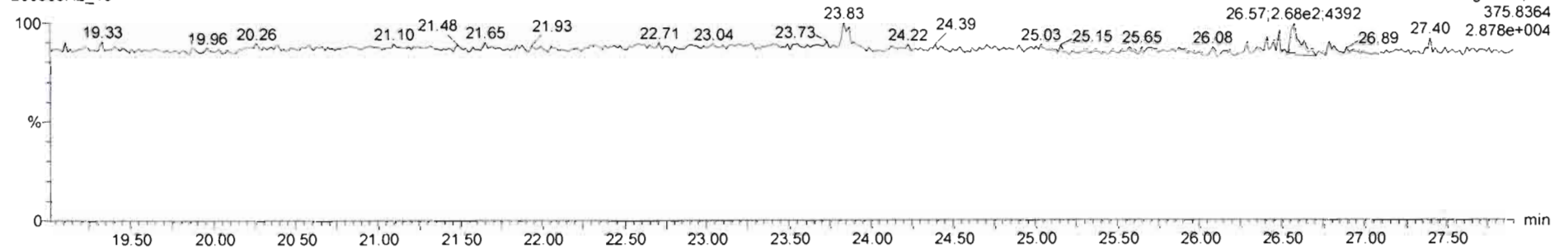


200303R2\_16



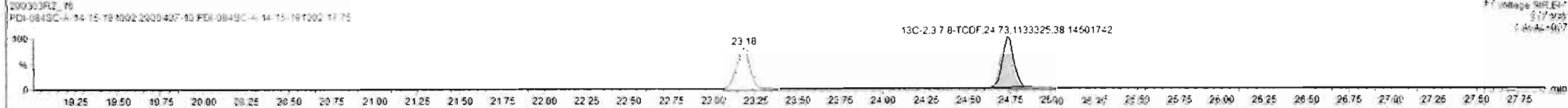
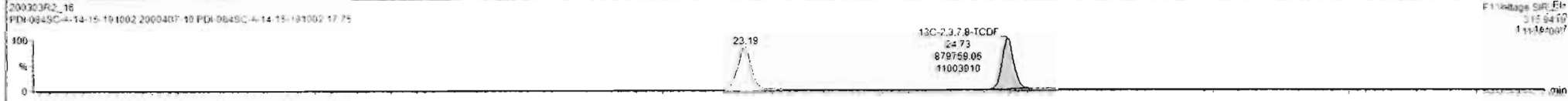
DPE1

200303R2\_16



Name	Resp	RA	nly	RAF	wVvol	RT	RRT	Conc	%Rec	DL	EMPC
61 Total Hexa-Dioxins				0.9211	10.034			1.31	0.0711	1.83	
42 Total Hepta-Dioxins				0.9231	10.034			3.56	0.111	3.56	
41 Total Tetra-Furans				0.8090	10.014			0.48	0.045	0.48	

Name	RT	m1 Resp	m2 Resp	RA	nly	EMPC	Conc
1 Total Tetra-Furans	19.45	2.632e2	3.515e2	0.75	NO	0.075936	0.075636
2 Total Tetra-Furans	20.56	1.360e2	1.945e2	0.70	NO	0.40743	0.40743



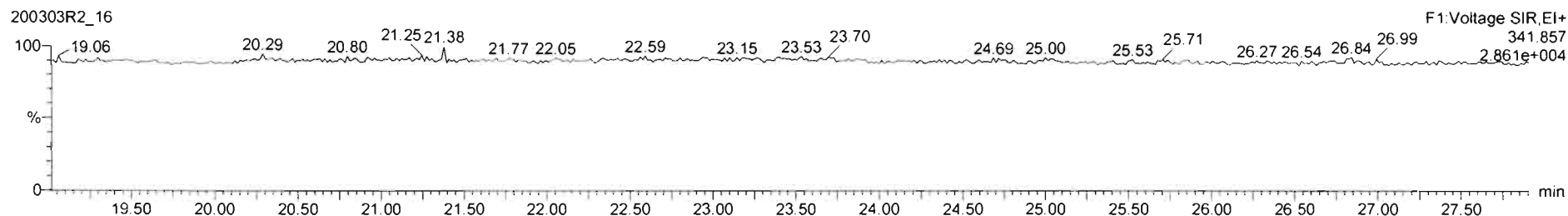
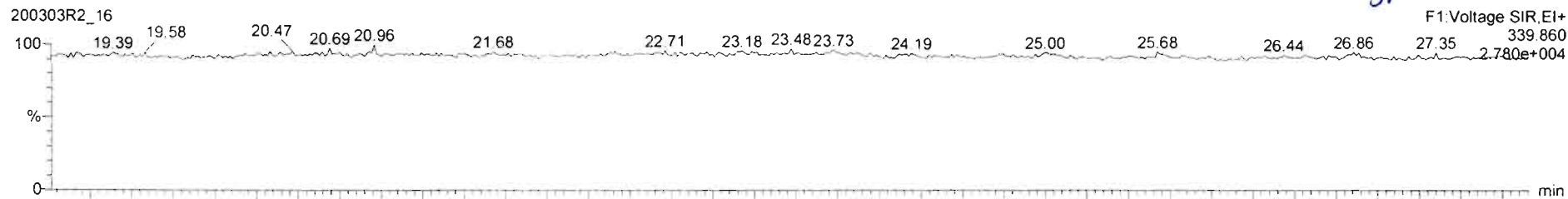
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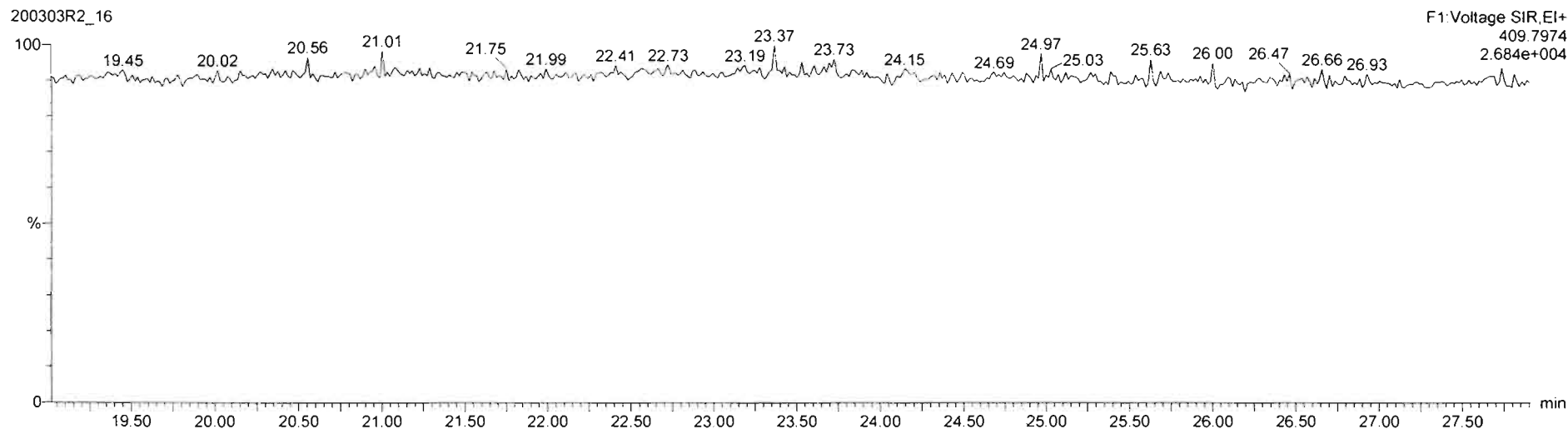
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Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

1st Func. Penta-Furans



DPE6



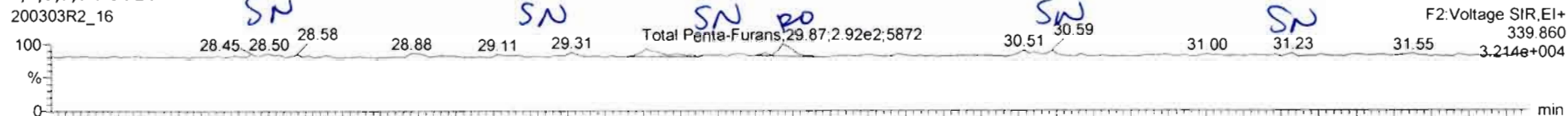


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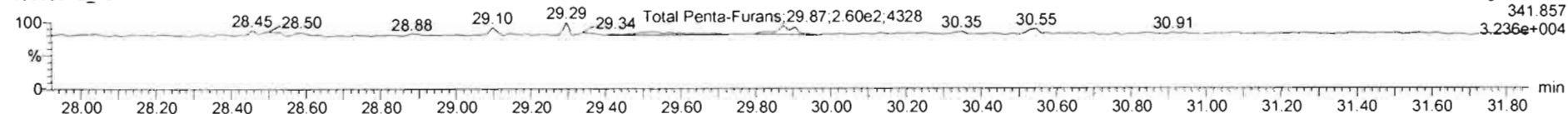
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1,2,3,7,8-PeCDF



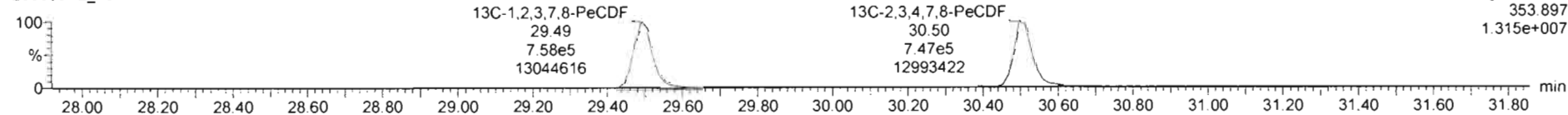
200303R2\_16



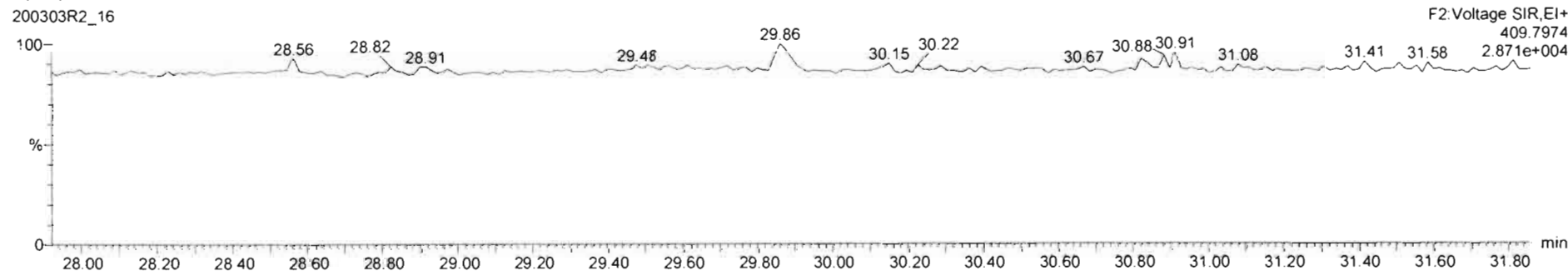
13C-1,2,3,7,8-PeCDF



200303R2\_16

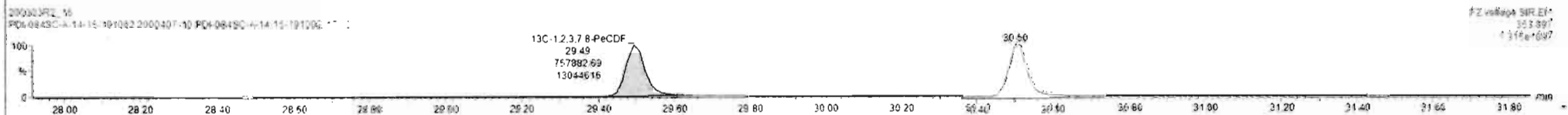
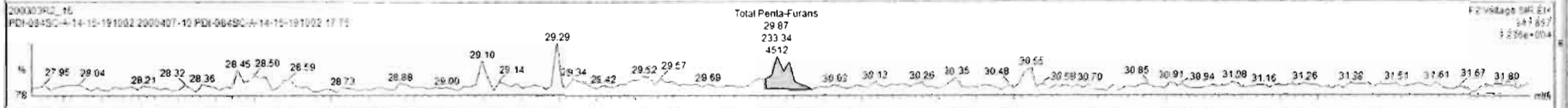
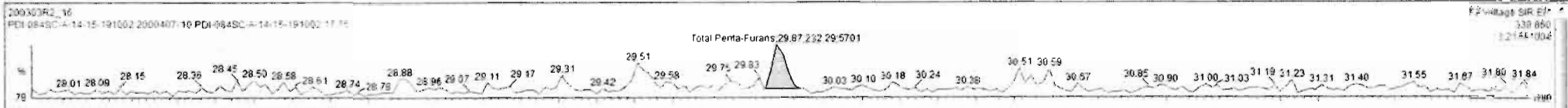


DPE2



Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc	%Rec	DL	EMPC
44 1st Func. Penta-Furans				0.9074	10.034					0.0128	
45 Total Penta-Furans				0.9074	10.034			0.000		0.0217	0.0431
46 Total Hexa-Furans				0.8987	10.034					0.0330	

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 Total Penta-Furans	29.87	2.325e2	2.332e2	1.00	ES	0.043072	0.00000



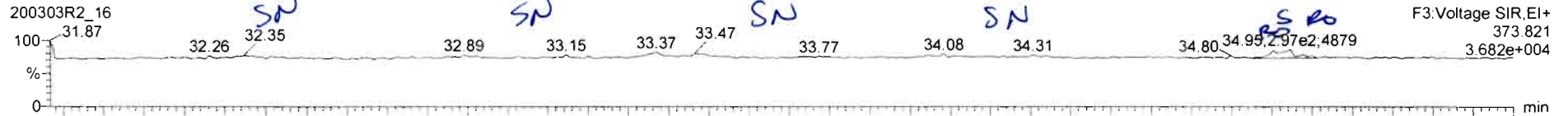
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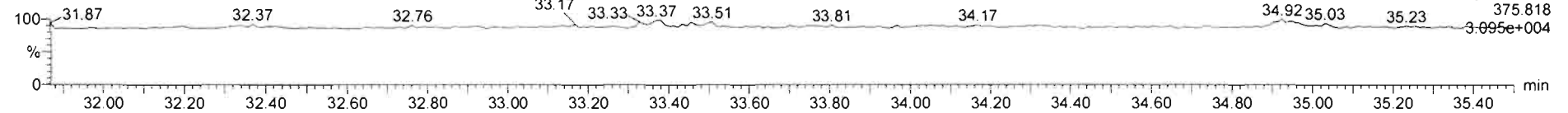
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Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

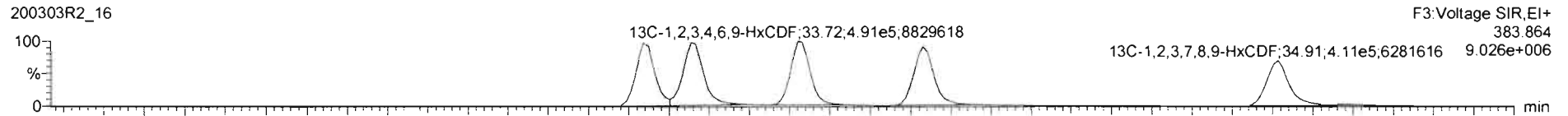
1,2,3,4,7,8-HxCDF



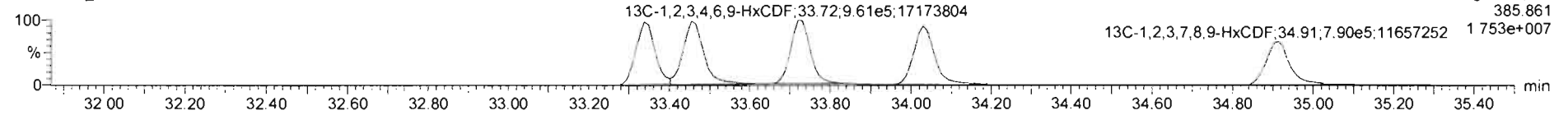
200303R2\_16



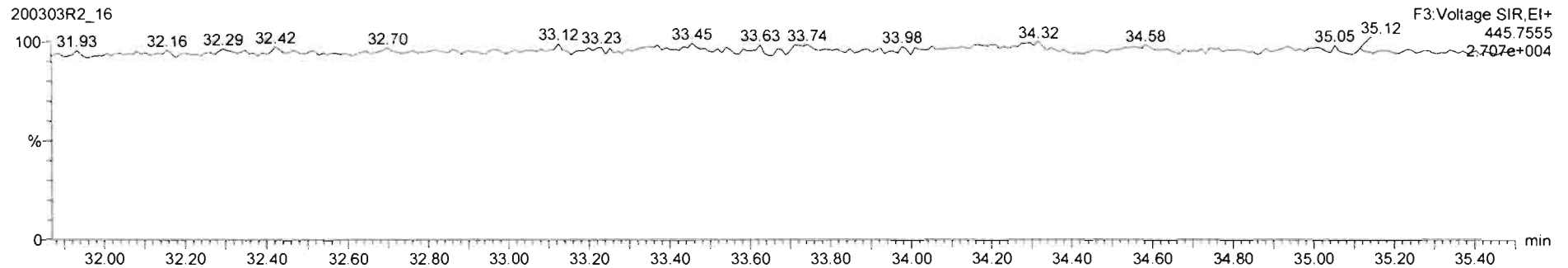
13C-1,2,3,4,7,8-HxCDF

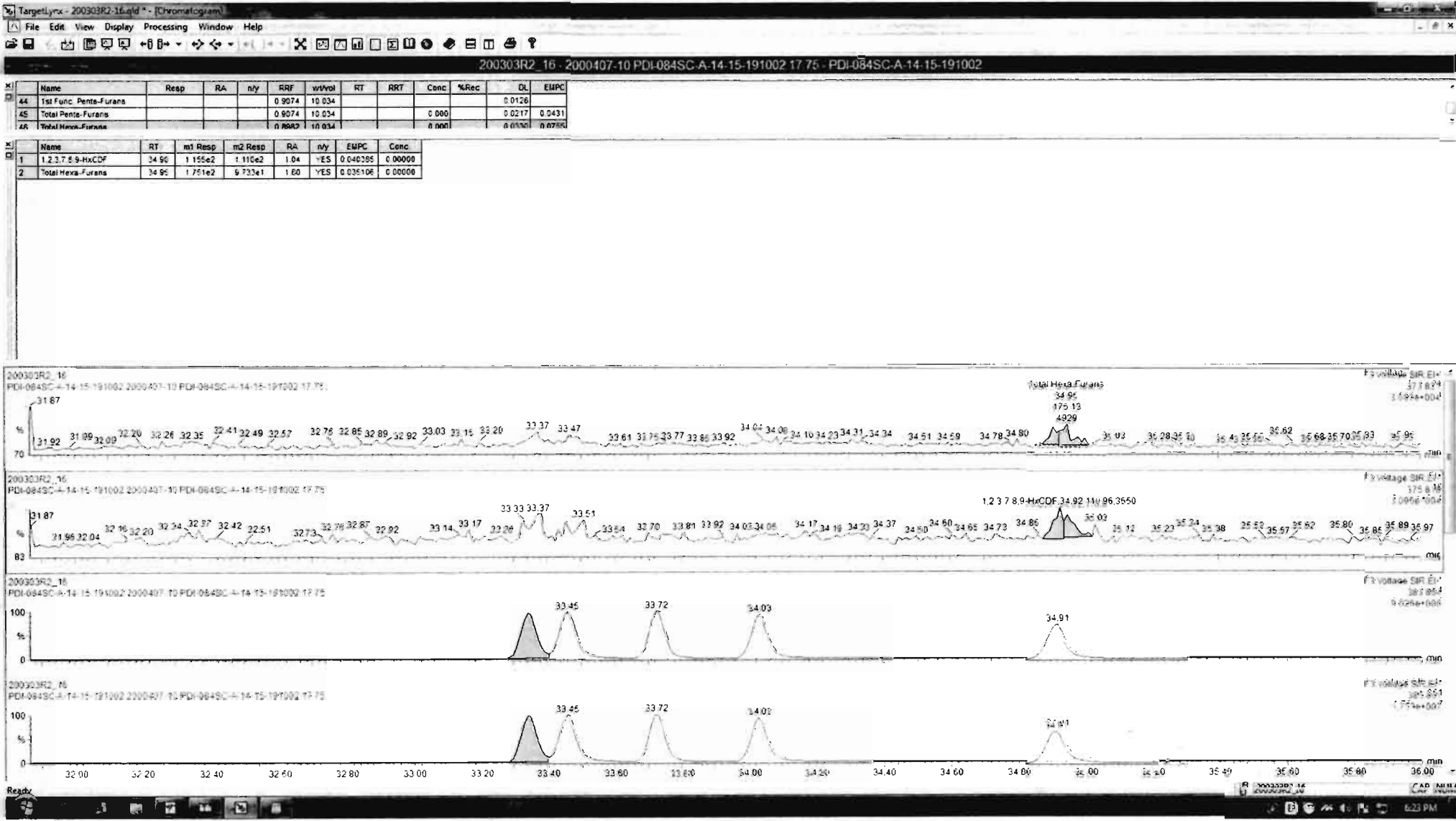


200303R2\_16



DPE3





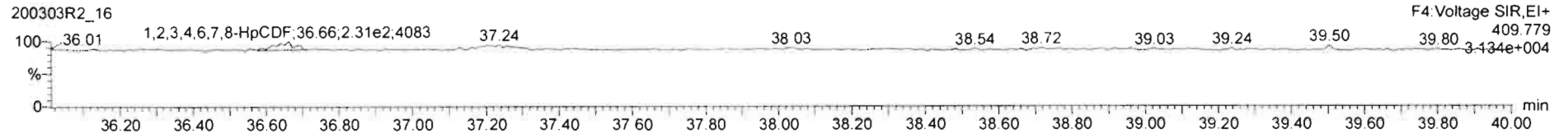
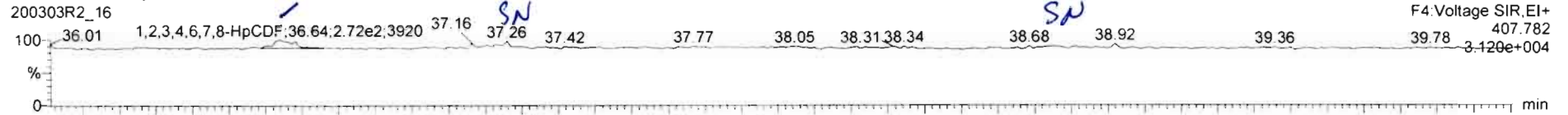
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Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

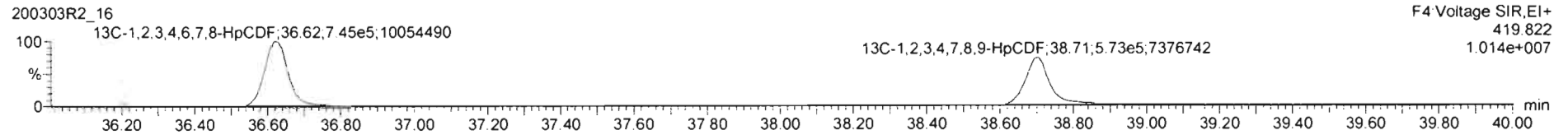
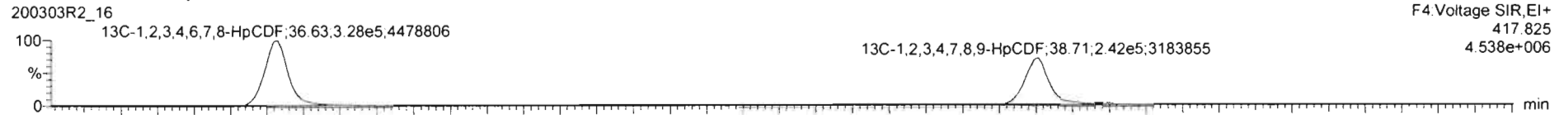
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

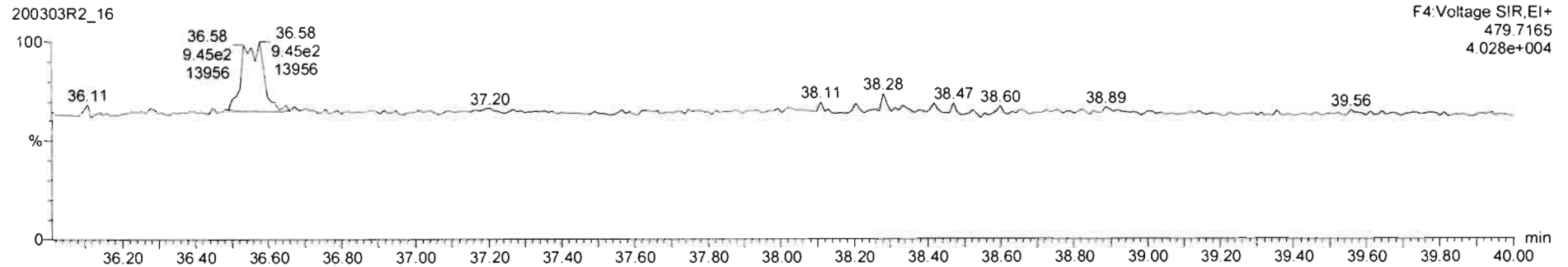
1,2,3,4,6,7,8-HpCDF



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



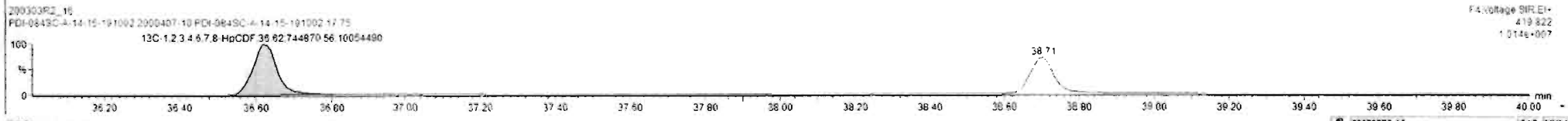
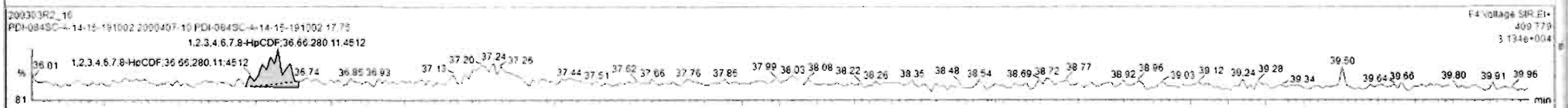
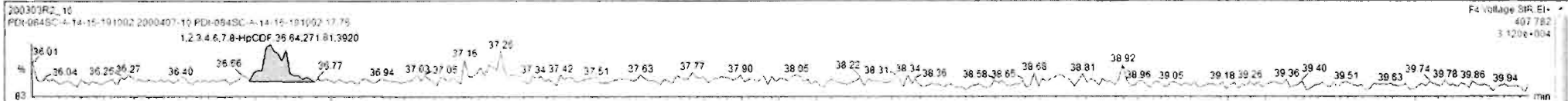
DPE4





Name	Resp	RA	n/y	RRF	w/vol	RT	RRT	Conc.	%Rec	DL	EMPC
47 Total Hepta-Furans				0.8511	10.034			0.120		0.0923	0.120
48 PFK1											
49 PFK2											

Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc
1 1,2,3,4,6,7,8-HpCDF	36.64	2.718e2	2.601e2	0.97	NO	0.12044	0.12044



Dataset: Untitled

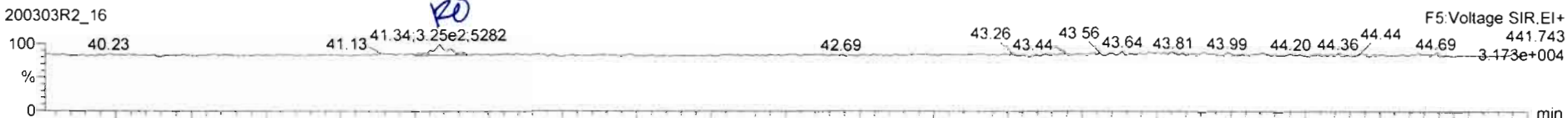
Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

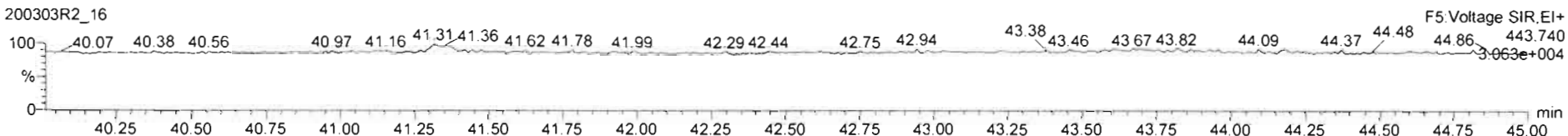
Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

OCDF

200303R2\_16

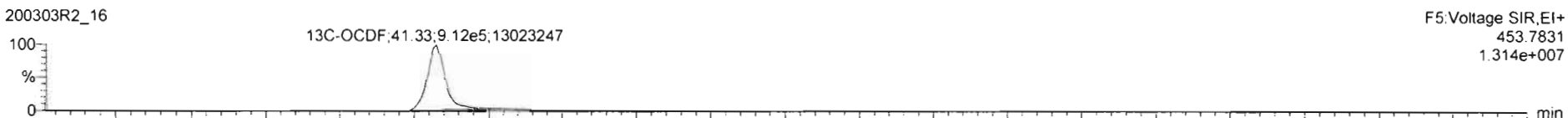


200303R2\_16

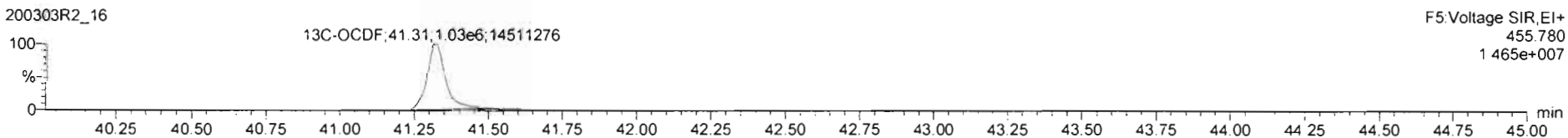


13C-OCDF

200303R2\_16

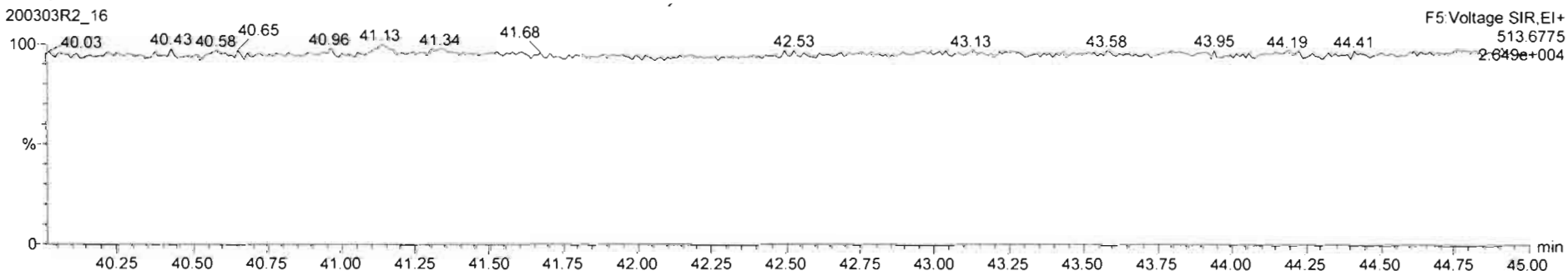


200303R2\_16

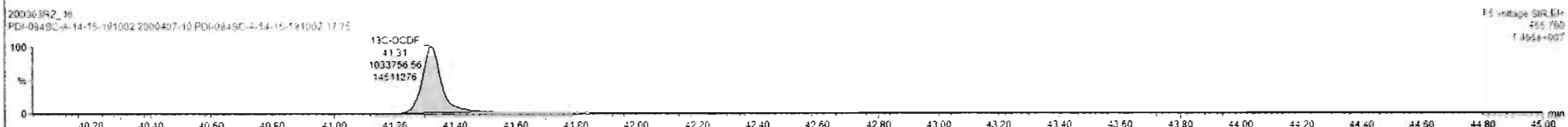
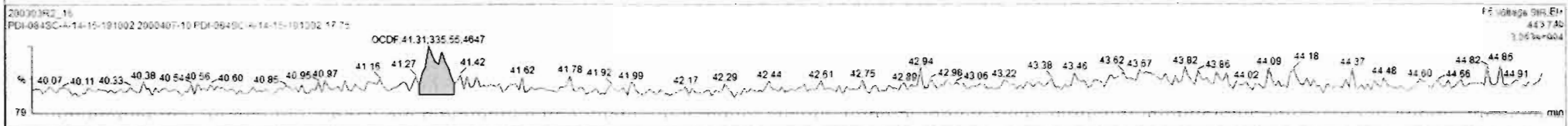
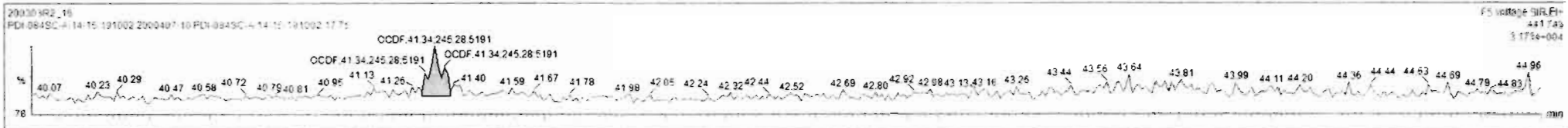


DPE5

200303R2\_16



SI	Name	Resp	RA	ny	RRF	wtvol	RT	RRT	Conc	%Rec	DL	EMPC
17	OCDF	5.81e2	0.73	YES	0.8055	10.034	41.34	1.000	0.148		0.0889	0.133
18	13C-2,3,7,8-TCDD	1.61e6	0.77	NO	1.1985	10.034	25.69	1.026	186	93.3	0.192	
19	13C-1,2,3,7,8-PeCDD	1.46e6	0.62	NO	0.9667	10.034	30.82	1.233	210	105	0.279	
20	13C-1,2,3,4,7,8-HxCDD	1.09e6	1.26	NO	0.8735	10.034	34.20	1.014	172	86.1	0.359	
21	13C-1,2,3,6,7,8-HxCDD	1.13e6	1.29	NO	1.0458	10.034	34.30	1.017	175	87.5	0.300	
22	13C-1,2,3,7,8,9-HxCDD	1.21e6	1.21	NO	0.9744	10.034	34.57	1.025	171	85.6	0.322	
23	13C-1,2,3,4,6,7,8-HpCDD	9.84e5	1.00	NO	0.7472	10.034	38.04	1.126	181	90.7	0.435	
24	13C-OCDF	1.67e6	0.86	NO	0.7065	10.034	41.15	1.220	325	81.6	0.445	
25	13C-2,3,7,8-TCDF	2.01e6	0.78	NO	1.0853	10.034	24.72	0.989	156	96.1	0.290	
26	13C-1,2,3,7,8-PeCDF	1.95e6	1.58	NO	1.0017	10.034	29.49	1.160	202	101	0.425	
27	13C-2,3,4,7,8-PeCDF	1.54e6	1.60	NO	0.9617	10.034	30.51	1.220	205	105	0.442	
28	13C-1,2,3,4,7,8-HxCDF	1.39e6	0.51	NO	1.0492	10.034	32.24	0.989	181	91.0	0.424	
29	13C-1,2,3,6,7,8-HxCDF	1.53e6	0.51	NO	1.1899	10.034	33.48	0.992	178	88.5	0.374	
30	13C-2,3,4,6,7,8-HxCDF	1.40e6	0.50	NO	1.0662	10.034	34.03	1.009	160	90.3	0.417	
31	13C-1,2,3,7,8,9-HxCDF	1.20e6	0.52	NO	0.9224	10.034	34.91	1.035	179	89.7	0.482	
32	13C-1,2,3,4,6,7,8-HpCDF	1.07e6	0.44	NO	0.7672	10.034	36.63	1.086	152	96.4	0.493	



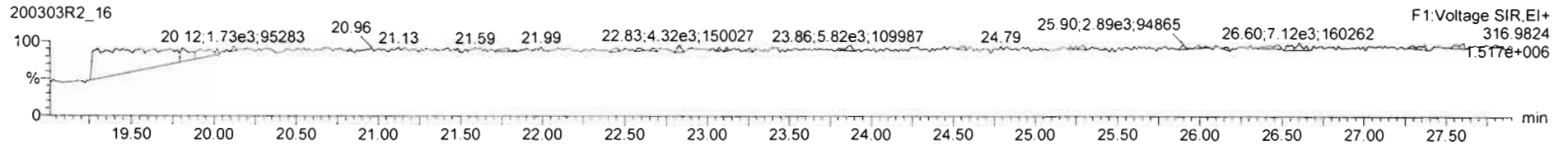
Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:22:33 Pacific Standard Time

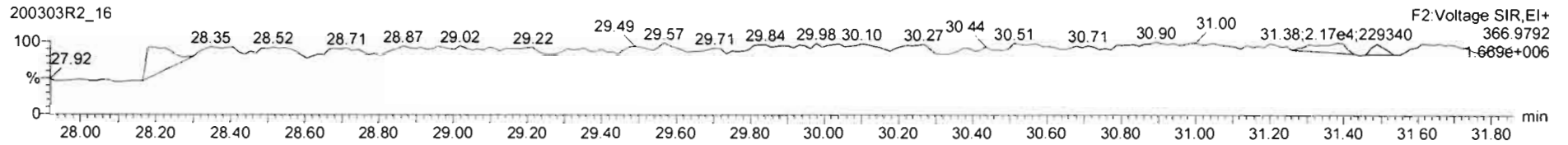
Printed: Wednesday, March 04, 2020 08:31:06 Pacific Standard Time

Name: 200303R2\_16, Date: 04-Mar-2020, Time: 01:41:31, ID: 2000407-10 PDI-084SC-A-14-15-191002 17.75, Description: PDI-084SC-A-14-15-191002

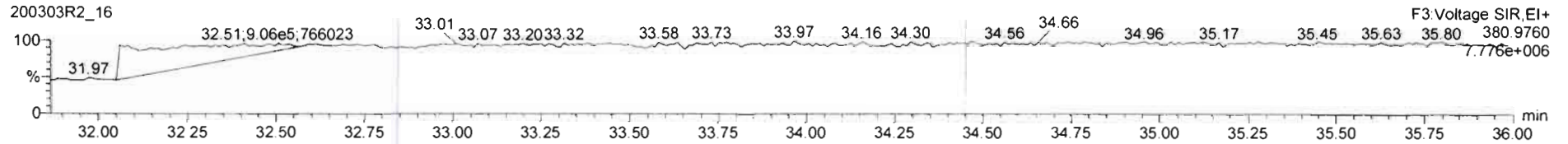
**PFK1**



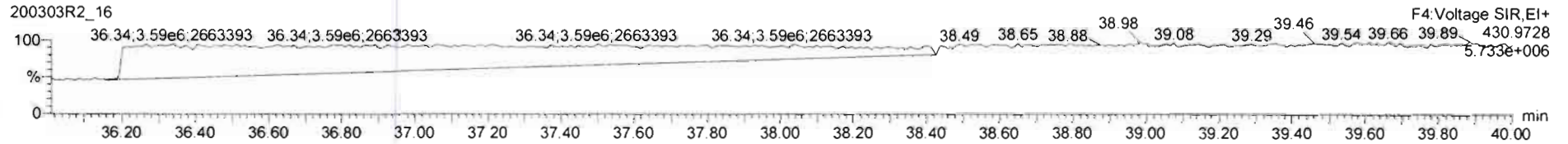
**PFK2**



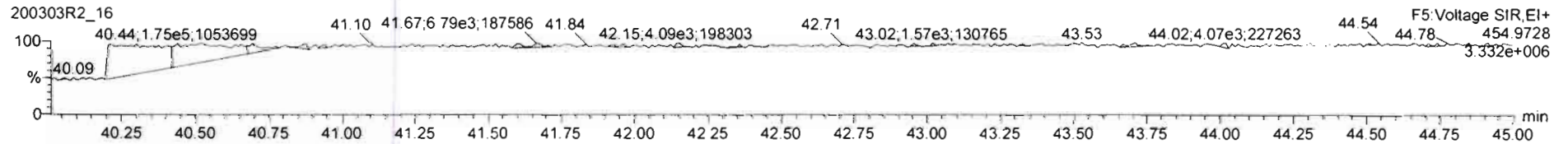
**PFK3**



**PFK4**



**PFK5**



## CONFIRMATION



Dataset: U:\VG12.PRO\Results\200309R2\200309R2-14.qld

Last Altered: Tuesday, March 10, 2020 8:32:35 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:32:55 AM Pacific Daylight Time

*GRB 03/10/2020*

*u 3/10/20*

*CT 03/10/2020*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200309R2\_14, Date: 10-Mar-2020, Time: 00:30:51, ID: 2000407-01RE1 PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	8.32e5	0.75	NO	0.821	10.059	16.54	206.59		0.335
2	2 13C-2,3,7,8-TCDF	9.75e5	0.77	NO	1.10	10.059	16.53	179.14	90.1	0.609
3	3 13C-1,2,3,4-TCDF	9.83e5	0.78	NO	1.00	10.059	14.42	198.83	100	0.671

Dataset: Untitled

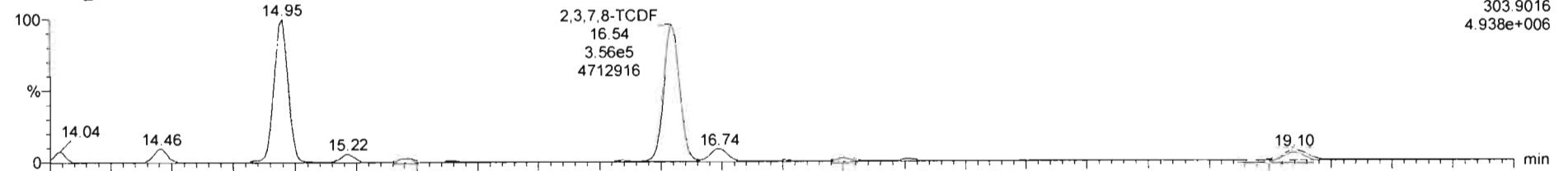
Last Altered: Tuesday, March 10, 2020 8:20:35 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:22:31 AM Pacific Daylight Time

Name: 200309R2\_14, Date: 19-Mar-2020, Time: 00:30:51, ID: 2000407-01RE1 PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

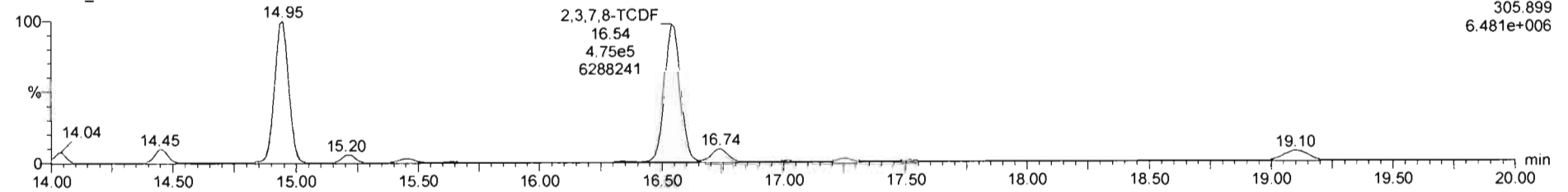
2,3,7,8-TCDF

200309R2\_14



Voltage SIR,EI+  
303.9016  
4.938e+006

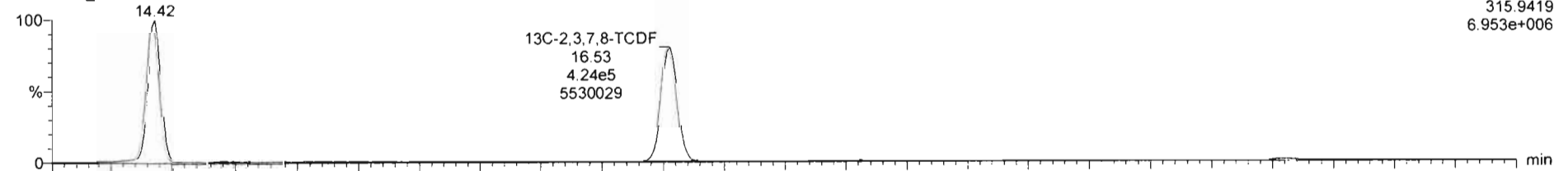
200309R2\_14



Voltage SIR,EI+  
305.899  
6.481e+006

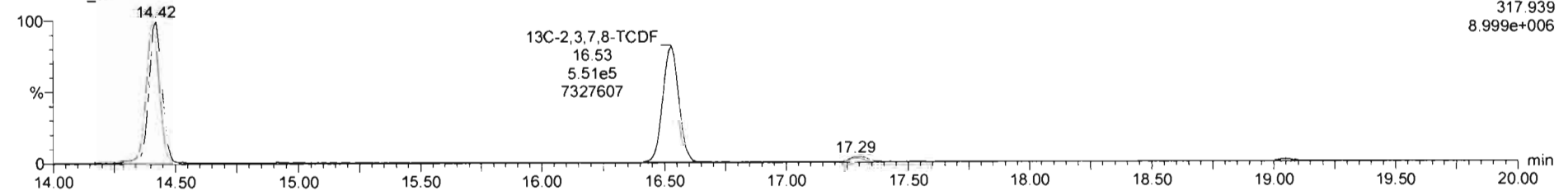
13C-2,3,7,8-TCDF

200309R2\_14



Voltage SIR,EI+  
315.9419  
6.953e+006

200309R2\_14



Voltage SIR,EI+  
317.939  
8.999e+006

Dataset: Untitled

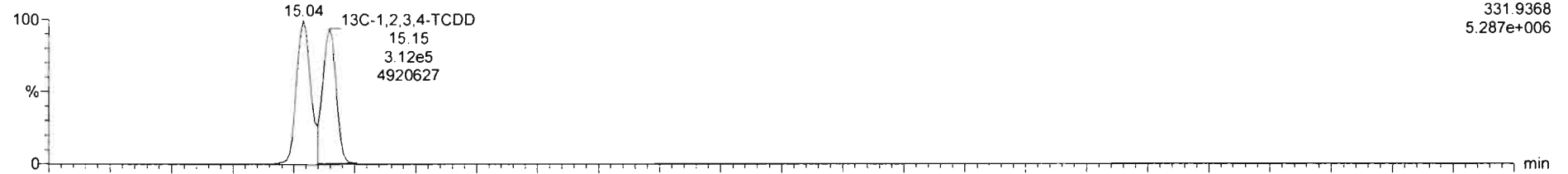
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Printed: Tuesday, March 10, 2020 8:22:31 AM Pacific Daylight Time

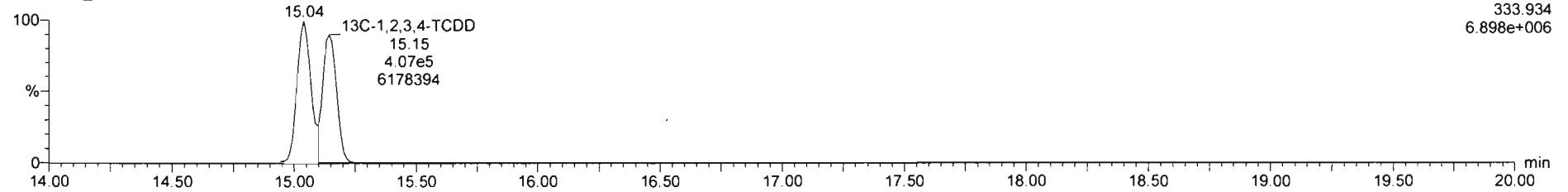
Name: 200309R2\_14, Date: 10-Mar-2020, Time: 00:30:51, ID: 2000407-01RE1 PDI-084SC-A-05-06-191002 18.52, Description: PDI-084SC-A-05-06-191002

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

200309R2\_14

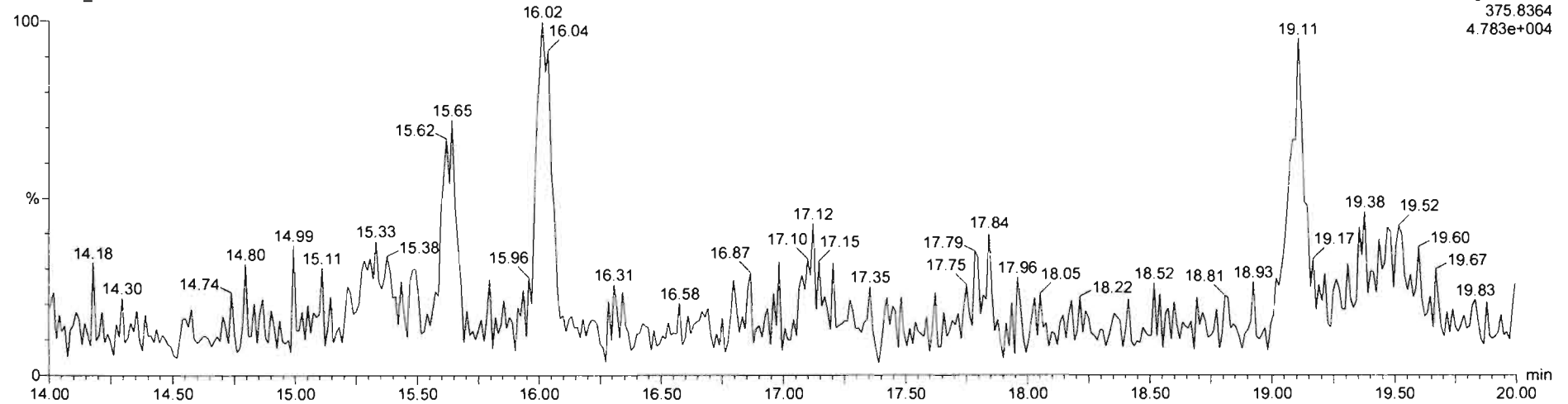


200309R2\_14



DPE1

200309R2\_14



Dataset: U:\VG12.PRO\Results\200309R2\200309R2-13.qld

Last Altered: Tuesday, March 10, 2020 8:26:20 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:29:56 AM Pacific Daylight Time

GFB 03/10/2020

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

3/10/20

Name: 200309R2\_13, Date: 10-Mar-2020, Time: 00:00:21, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

CT 03/10/2020

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.32e6	0.76	NO	0.821	10.053	16.55	270.79		0.260
2	2 13C-2,3,7,8-TCDF	1.18e6	0.76	NO	1.10	10.053	16.53	182.28	91.6	0.755
3	3 13C-1,2,3,4-TCDF	1.17e6	0.77	NO	1.00	10.053	14.42	198.94	100	0.831

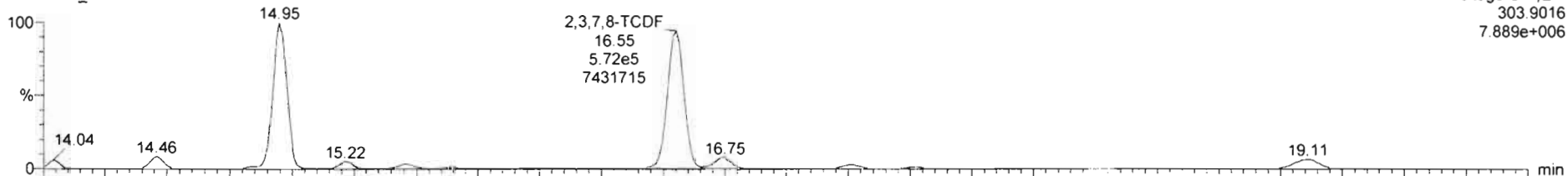
Dataset: Untitled

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Printed: Tuesday, March 10, 2020 8:22:31 AM Pacific Daylight Time

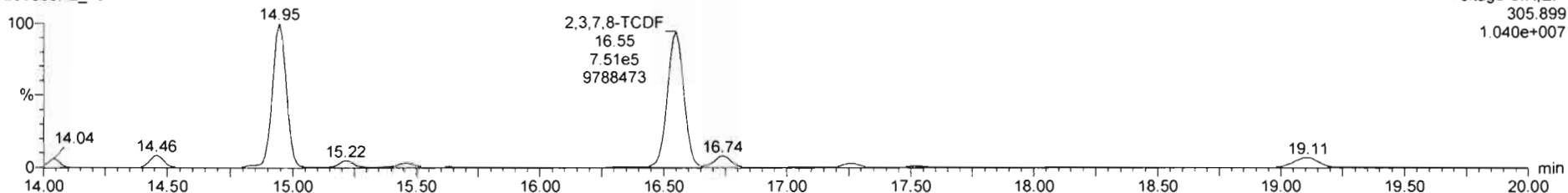
Name: 200309R2\_13, Date: 10-Mar-2020, Time: 00:00:21, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

2,3,7,8-TCDF

200309R2\_13

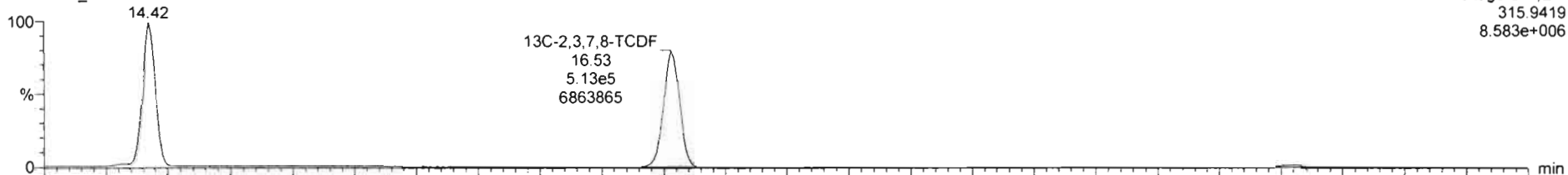


200309R2\_13

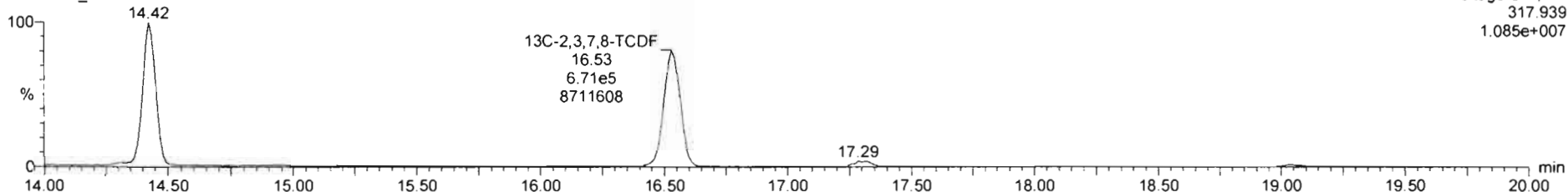


13C-2,3,7,8-TCDF

200309R2\_13



200309R2\_13





Dataset: Untitled

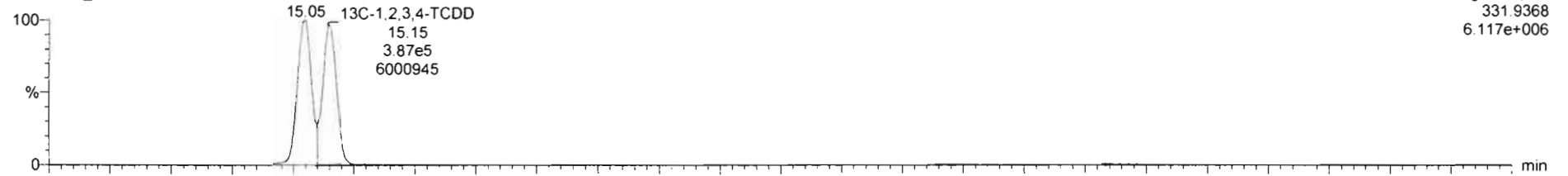
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Printed: Tuesday, March 10, 2020 8:22:31 AM Pacific Daylight Time

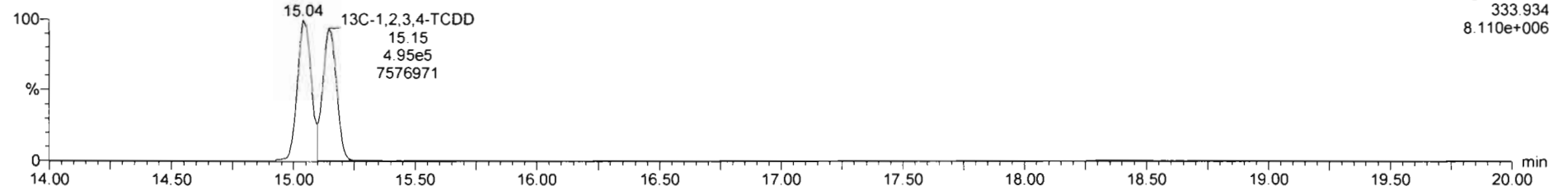
Name: 200309R2\_13, Date: 10-Mar-2020, Time: 00:00:21, ID: B0B0291-DUP1 Duplicate 18.51, Description: Duplicate

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

200309R2\_13

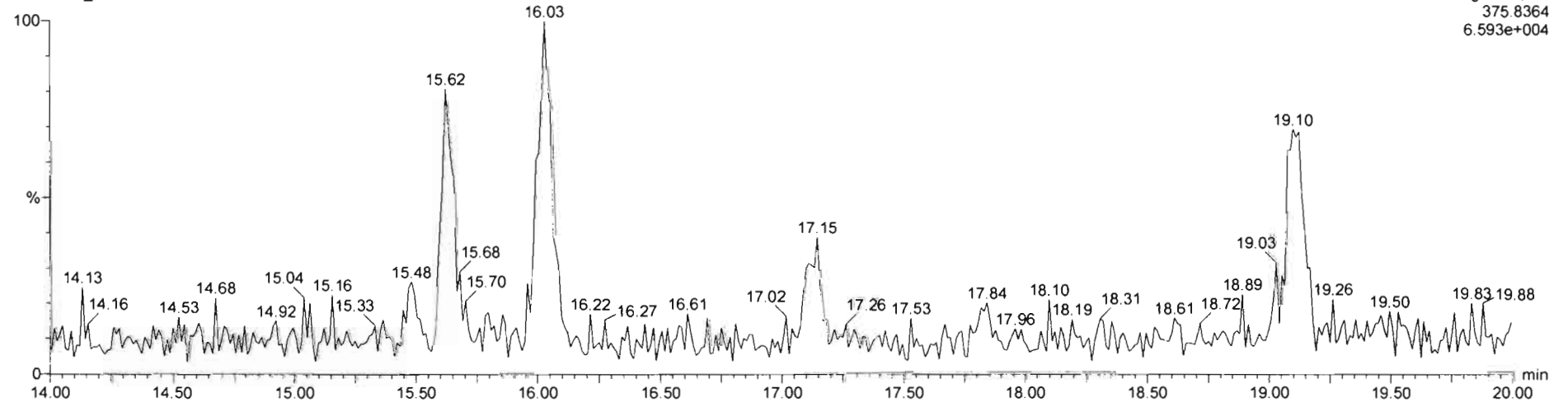


200309R2\_13



DPE1

200309R2\_13



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-5.qld

Last Altered: Tuesday, March 10, 2020 1:04:38 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:04:57 PM Pacific Daylight Time

*GPS 03/10/2020*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

*3/10/20*  
*03/10/2020*

Name: 200310R1\_5, Date: 10-Mar-2020, Time: 10:56:48, ID: 2000407-02RE1 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol ✓	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.33e5	0.75	NO	0.821	10.036 ✓	16.54	85.778		2.83
2	2 13C-2,3,7,8-TCDF	3.77e5	0.77	NO	1.10	10.036	16.53	25.862	13.0	1.08
3	3 13C-1,2,3,4-TCDF	2.64e6	0.79	NO	1.00	10.036	14.42	199.27 ✓	100	1.19

Dataset: Untitled

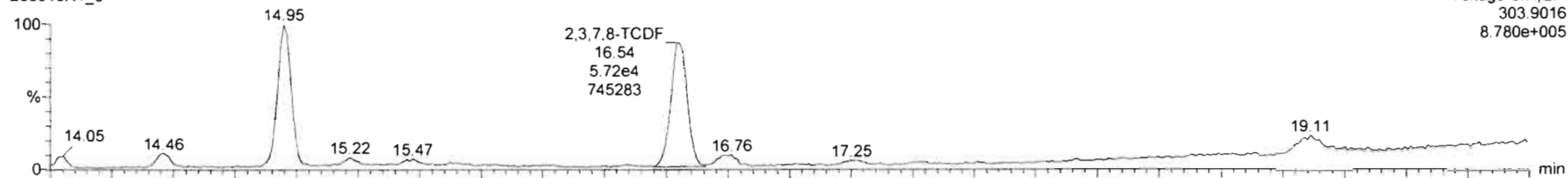
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

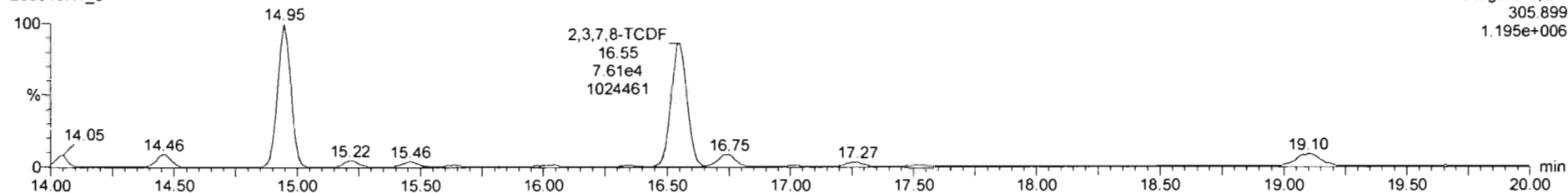
Name: 200310R1\_5, Date: 10-Mar-2020, Time: 10:56:48, ID: 2000407-02RE1 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

2,3,7,8-TCDF

200310R1\_5

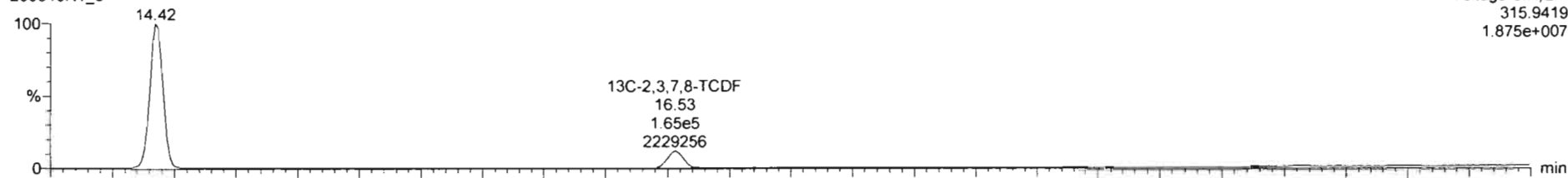


200310R1\_5

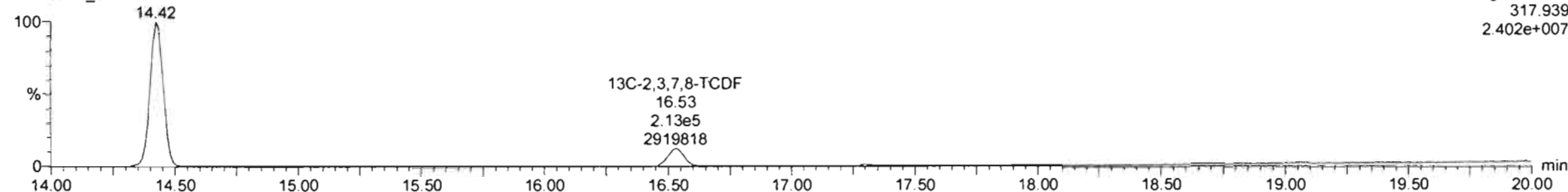


13C-2,3,7,8-TCDF

200310R1\_5



200310R1\_5



Dataset: Untitled

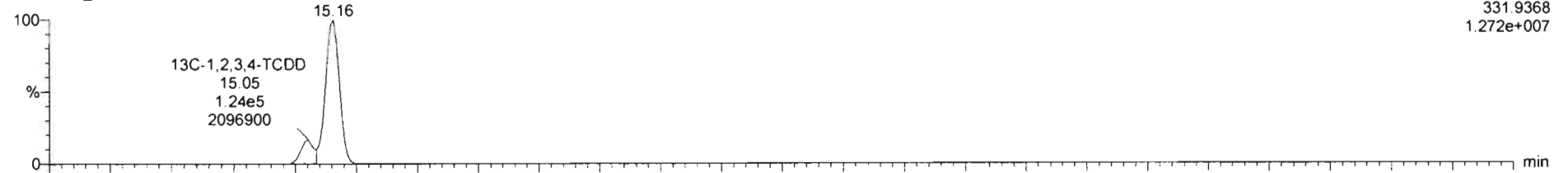
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

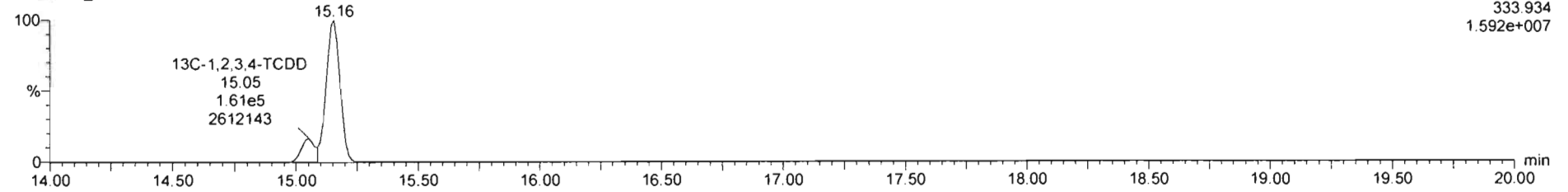
Name: 200310R1\_5, Date: 10-Mar-2020, Time: 10:56:48, ID: 2000407-02RE1 PDI-084SC-A-06-07-191002 16.48, Description: PDI-084SC-A-06-07-191002

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

200310R1\_5

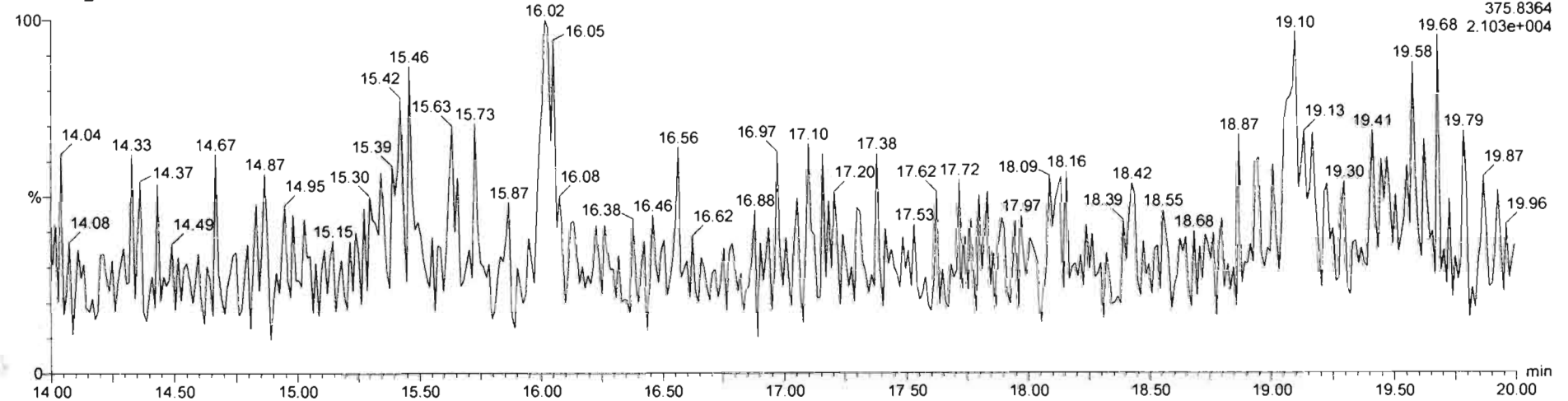


200310R1\_5



DPE1

200310R1\_5



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-6.qld

Last Altered: Tuesday, March 10, 2020 1:05:01 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:05:15 PM Pacific Daylight Time

*GPE 03/10/2020*

*J 3/10/20*

*CT 03/10/2020*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R1\_6, Date: 10-Mar-2020, Time: 11:27:16, ID: 2000407-03RE1 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.05e5	0.76	NO	0.821	10.081	16.56	10.384		0.203
2	2 13C-2,3,7,8-TCDF	2.44e6	0.78	NO	1.10	10.081	16.54	182.45	92.0	0.690
3	3 13C-1,2,3,4-TCDF	2.41e6	0.79	NO	1.00	10.081	14.44	198.39	100	0.760



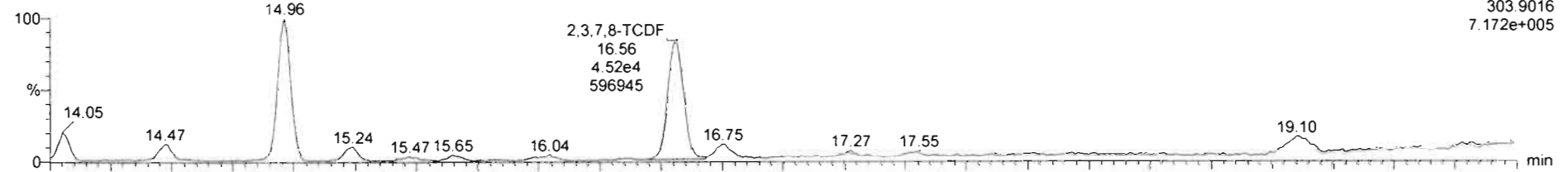
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

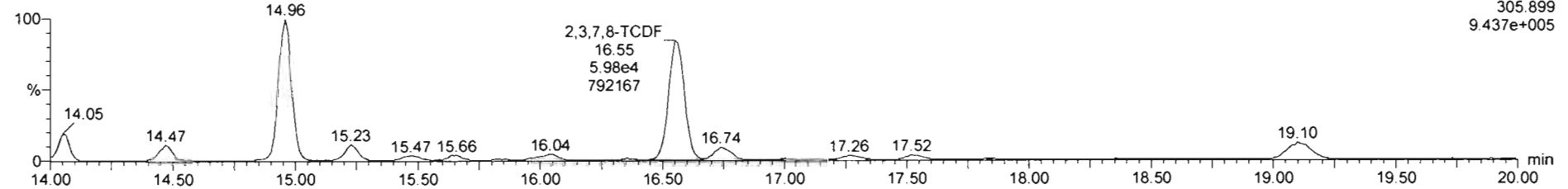
Name: 200310R1\_6, Date: 10-Mar-2020, Time: 11:27:16, ID: 2000407-03RE1 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

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

200310R1\_6

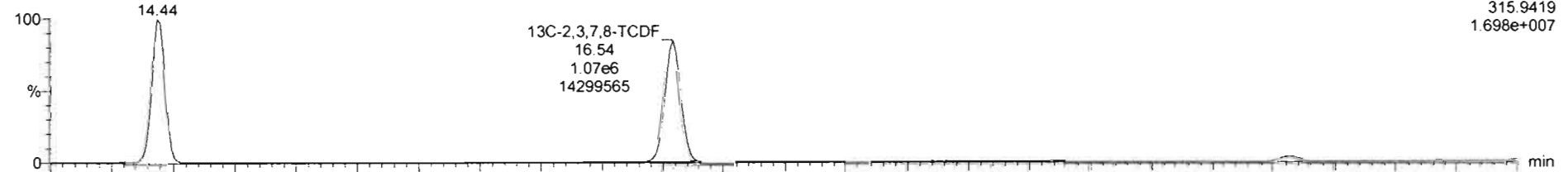


200310R1\_6

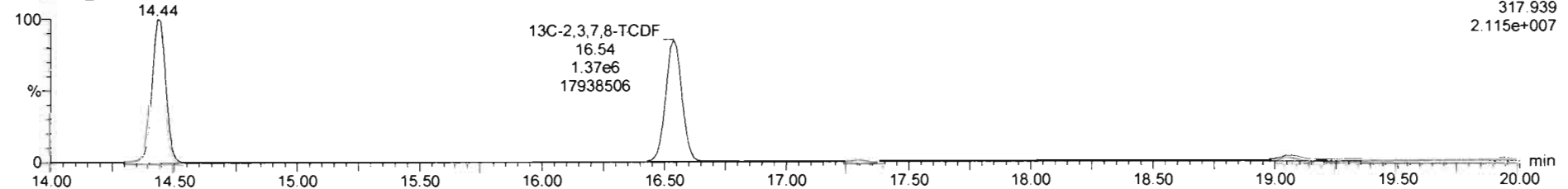


**13C-2,3,7,8-TCDF**

200310R1\_6



200310R1\_6



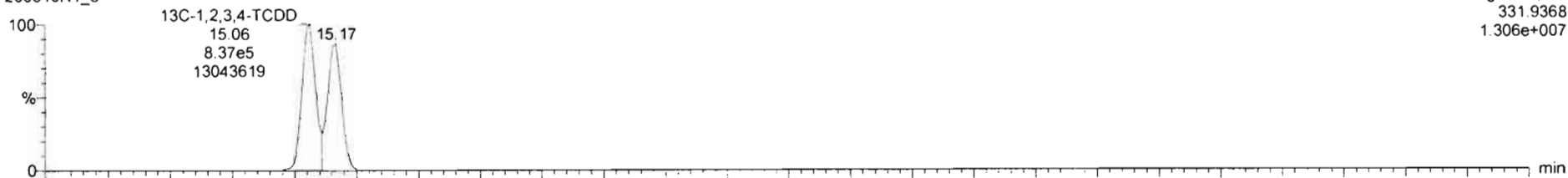
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

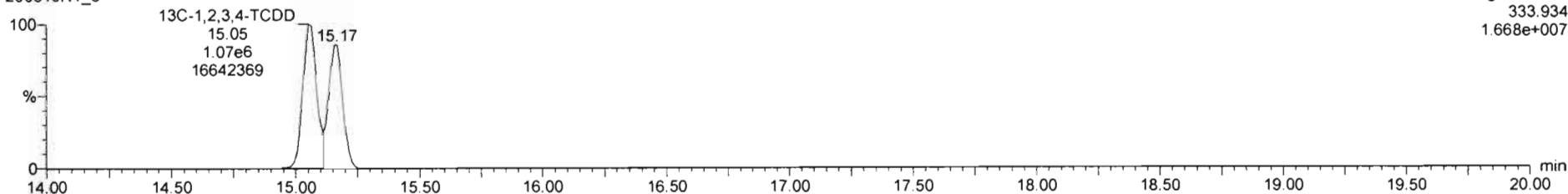
Name: 200310R1\_6, Date: 10-Mar-2020, Time: 11:27:16, ID: 2000407-03RE1 PDI-084SC-A-07-08-191002 17.5, Description: PDI-084SC-A-07-08-191002

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

200310R1\_6

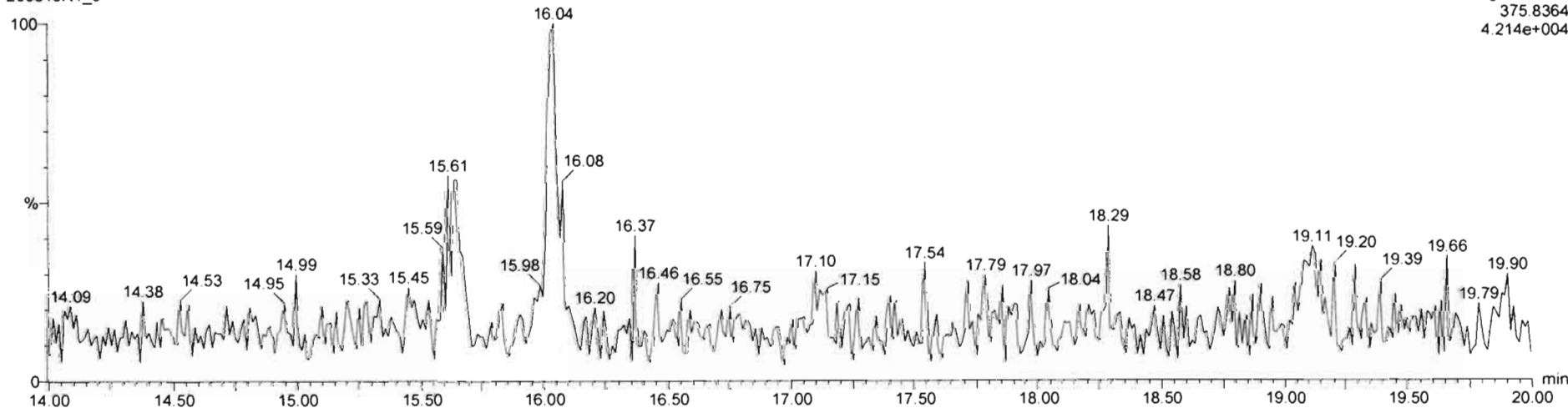


200310R1\_6



DPE1

200310R1\_6



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-7.qld

Last Altered: Tuesday, March 10, 2020 1:05:18 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:05:32 PM Pacific Daylight Time

*GRB 03/10/2020*

*J 3/10/20*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

*07 03/10/2020*

Name: 200310R1\_7, Date: 10-Mar-2020, Time: 11:57:43, ID: 2000407-04RE1 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	7.24e5	0.76	NO	0.821	10.050	16.53	67.532		0.167
2	2 13C-2,3,7,8-TCDF	2.60e6	0.78	NO	1.10	10.050	16.52	182.97	91.9	0.642
3	3 13C-1,2,3,4-TCDF	2.57e6	0.77	NO	1.00	10.050	14.41	199.01	100	0.707

Dataset: Untitled

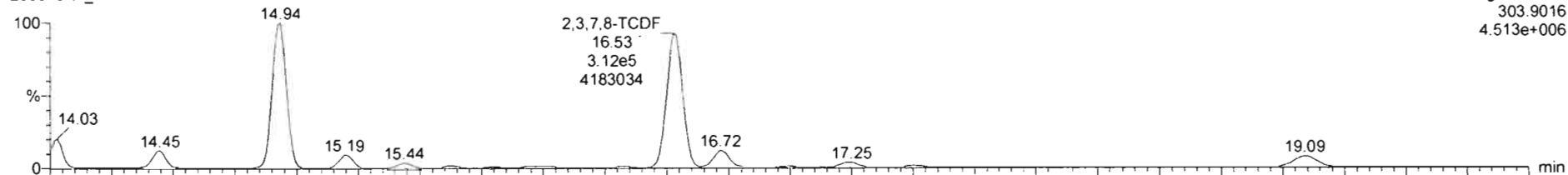
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

Name: 200310R1\_7, Date: 10-Mar-2020, Time: 11:57:43, ID: 2000407-04RE1 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

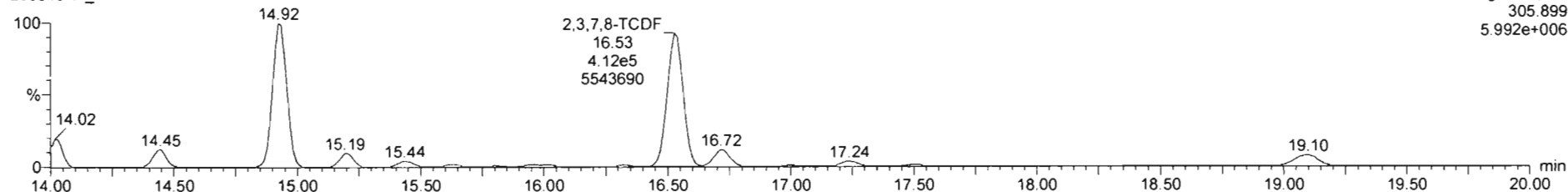
2,3,7,8-TCDF

200310R1\_7



Voltage SIR,EI+  
303.9016  
4.513e+006

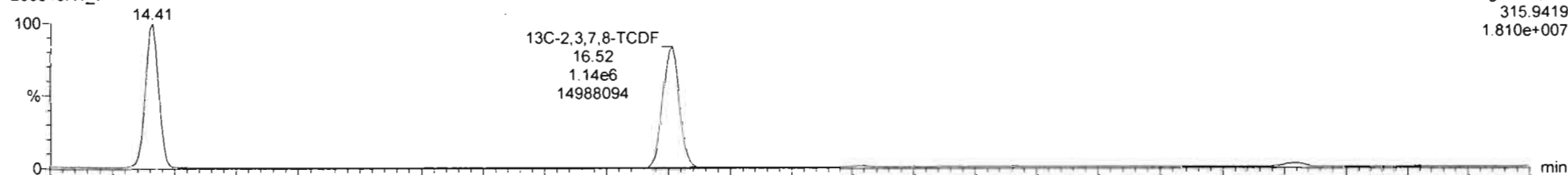
200310R1\_7



Voltage SIR,EI+  
305.899  
5.992e+006

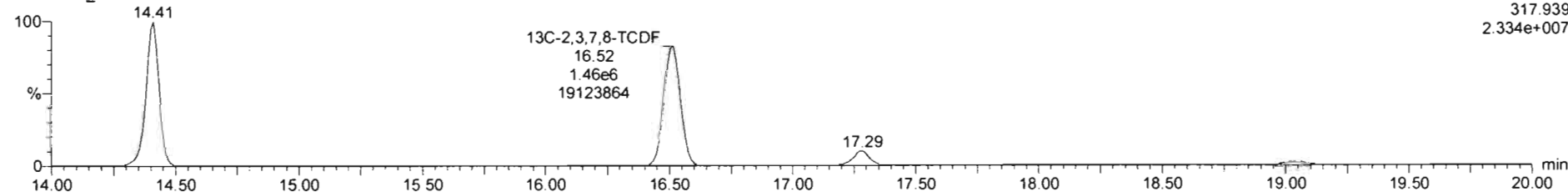
13C-2,3,7,8-TCDF

200310R1\_7



Voltage SIR,EI+  
315.9419  
1.810e+007

200310R1\_7



Voltage SIR,EI+  
317.939  
2.334e+007

Dataset: Untitled

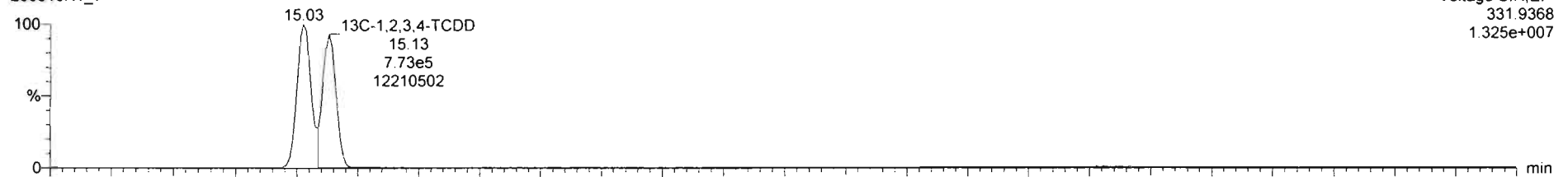
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

Name: 200310R1\_7, Date: 10-Mar-2020, Time: 11:57:43, ID: 2000407-04RE1 PDI-084SC-A-08-09-191002 16.93, Description: PDI-084SC-A-08-09-191002

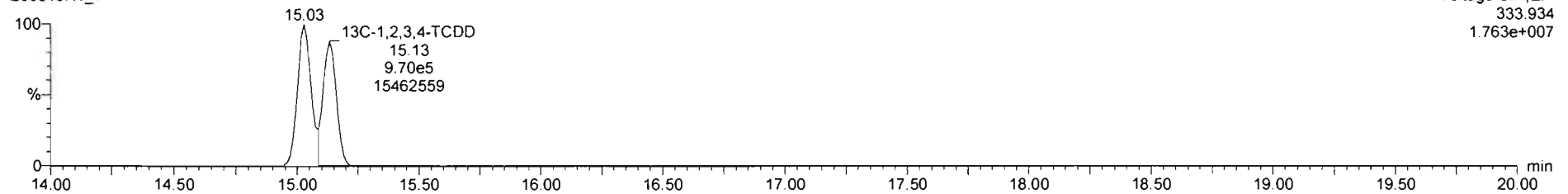
**13C-1,2,3,4-TCDD**

200310R1\_7



Voltage SIR,EI+  
331.9368  
1.325e+007

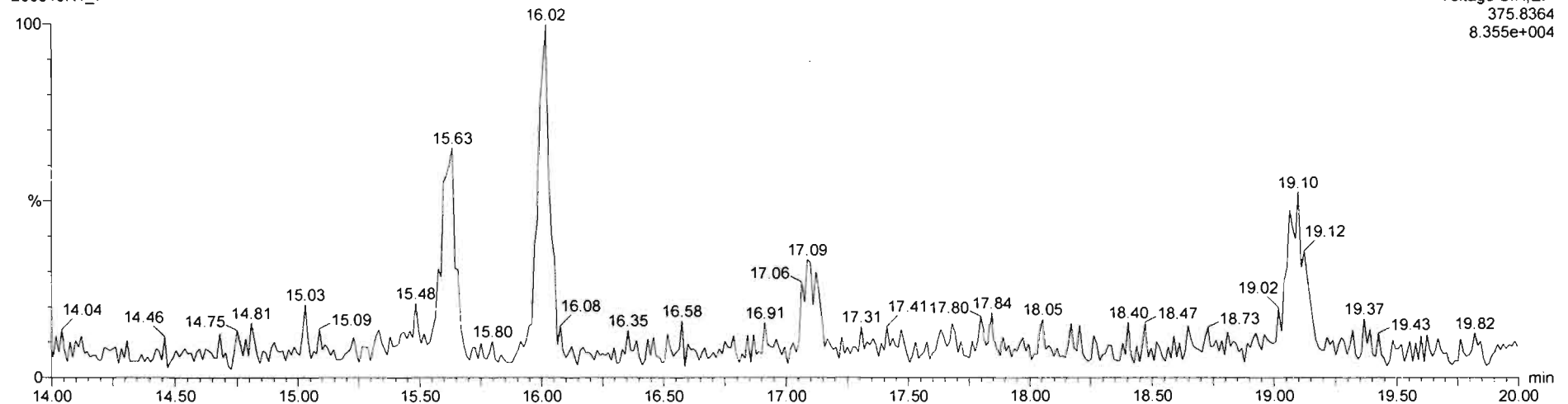
200310R1\_7



Voltage SIR,EI+  
333.934  
1.763e+007

**DPE1**

200310R1\_7



Voltage SIR,EI+  
375.8364  
8.355e+004



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-8.qld

Last Altered: Tuesday, March 10, 2020 1:05:36 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:05:55 PM Pacific Daylight Time

*GRB 03/10/2020*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

*3/10/20*

*Gr 03/10/2020*

Name: 200310R1\_8, Date: 10-Mar-2020, Time: 12:28:10, ID: 2000407-05RE1 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	4.24e5	0.75	NO	0.821	10.024	16.54	36.903		0.128
2	2 13C-2,3,7,8-TCDF	2.79e6	0.79	NO	1.10	10.024	16.53	184.96	92.7	0.364
3	3 13C-1,2,3,4-TCDF	2.74e6	0.79	NO	1.00	10.024	14.42	199.53	100	0.401

Dataset: Untitled

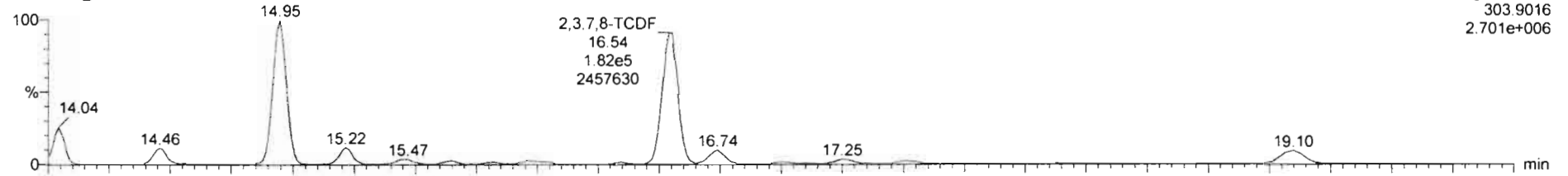
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

Name: 200310R1\_8, Date: 10-Mar-2020, Time: 12:28:10, ID: 2000407-05RE1 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

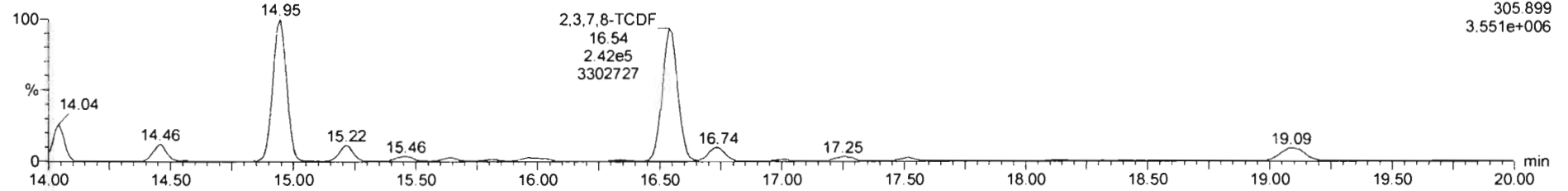
2,3,7,8-TCDF

200310R1\_8



Voltage SIR,EI+  
303.9016  
2.701e+006

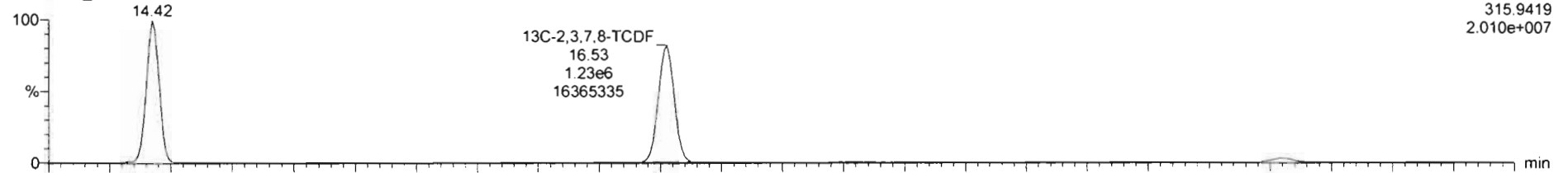
200310R1\_8



Voltage SIR,EI+  
305.899  
3.551e+006

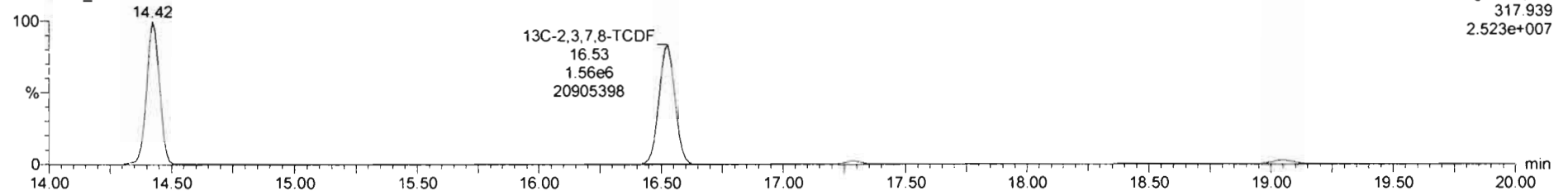
13C-2,3,7,8-TCDF

200310R1\_8



Voltage SIR,EI+  
315.9419  
2.010e+007

200310R1\_8



Voltage SIR,EI+  
317.939  
2.523e+007

Dataset: Untitled

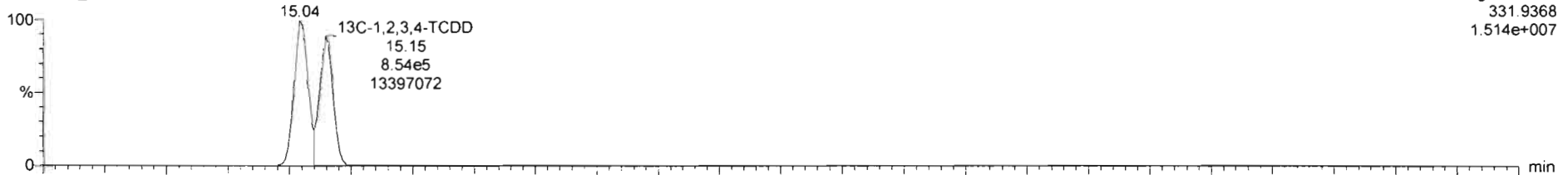
Last Altered: Tuesday, March 10, 2020 12:58:51 PM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 1:01:24 PM Pacific Daylight Time

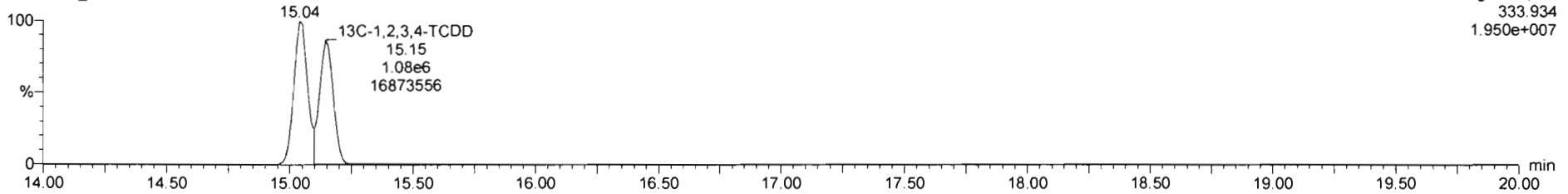
Name: 200310R1\_8, Date: 10-Mar-2020, Time: 12:28:10, ID: 2000407-05RE1 PDI-084SC-A-09-10-191002 16.69, Description: PDI-084SC-A-09-10-191002

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

200310R1\_8

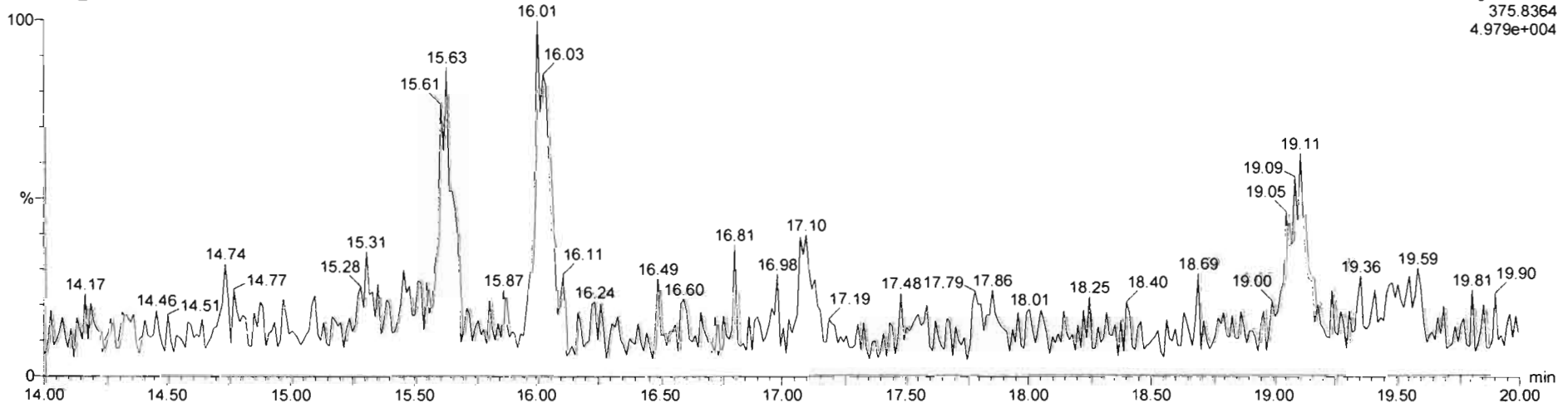


200310R1\_8



DPE1

200310R1\_8



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-9.qld

Last Altered: Tuesday, March 10, 2020 13:52:09 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 13:52:58 Pacific Daylight Time

*GRB 03/10/2020*

*SA 3/10/20*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

*C1 03/10/2020*

Name: 200310R1\_9, Date: 10-Mar-2020, Time: 12:58:38, ID: 2000407-06RE1 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.84e4	0.85	NO	0.821	10.021	16.55	2.4470		0.134
2	2 13C-2,3,7,8-TCDF	2.82e6	0.78	NO	1.10	10.021	16.53	192.19	96.3	0.430
3	3 13C-1,2,3,4-TCDF	2.66e6	0.79	NO	1.00	10.021	14.42	199.57	100	0.473

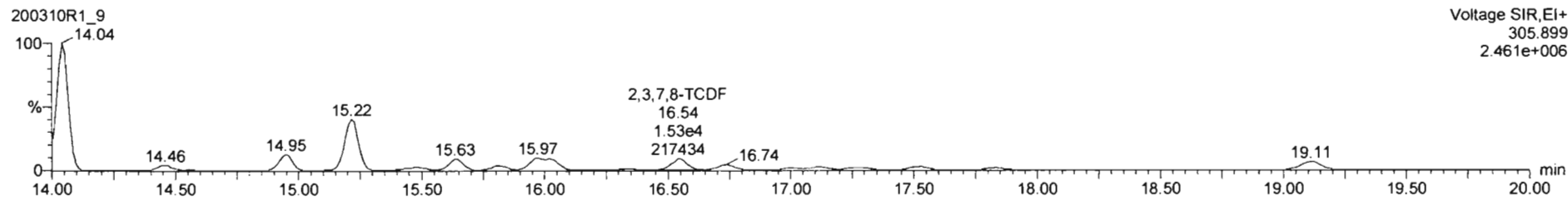
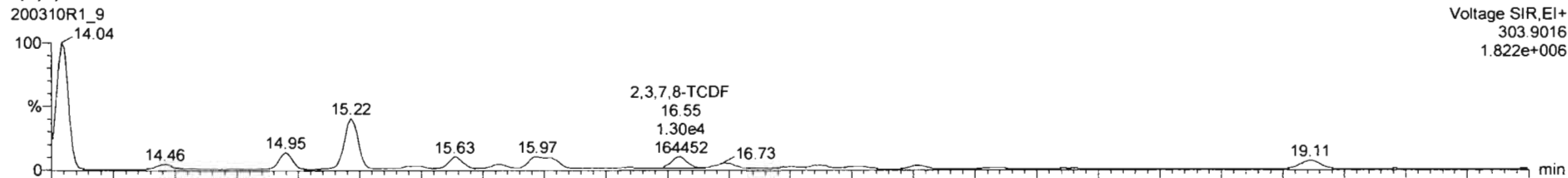
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 13:52:09 Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 13:52:27 Pacific Daylight Time

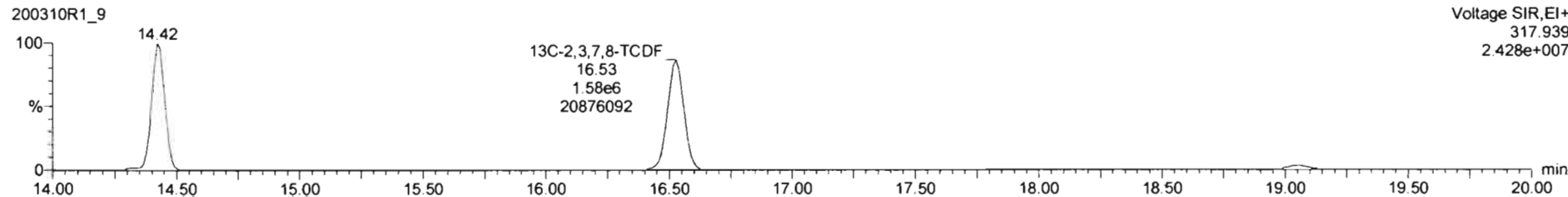
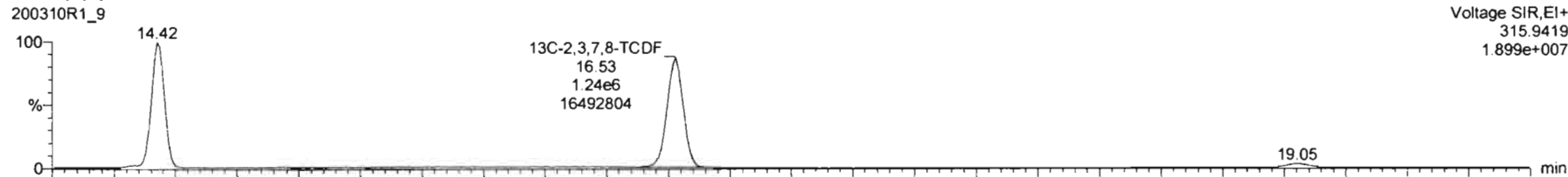
Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49  
Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R1\_9, Date: 10-Mar-2020, Time: 12:58:38, ID: 2000407-06RE1 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

2,3,7,8-TCDF



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





Dataset: Untitled

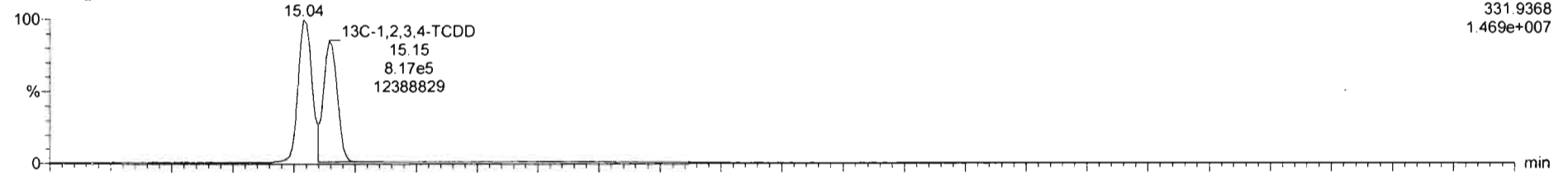
Last Altered: Tuesday, March 10, 2020 13:52:09 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 13:52:27 Pacific Daylight Time

Name: 200310R1\_9, Date: 10-Mar-2020, Time: 12:58:38, ID: 2000407-06RE1 PDI-084SC-A-10-11-191002 16.77, Description: PDI-084SC-A-10-11-191002

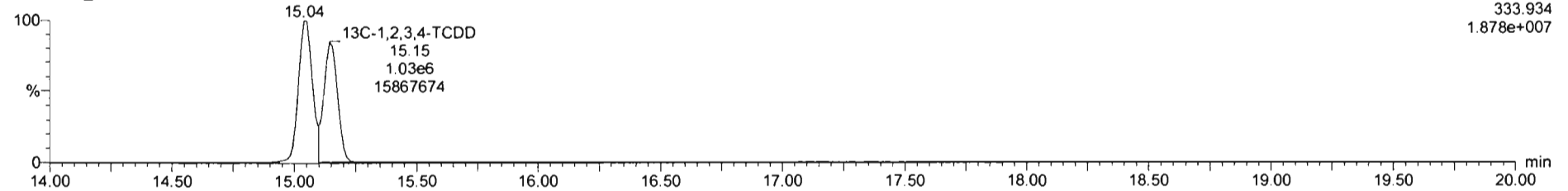
13C-1,2,3,4-TCDD

200310R1\_9



Voltage SIR,EI+  
331.9368  
1.469e+007

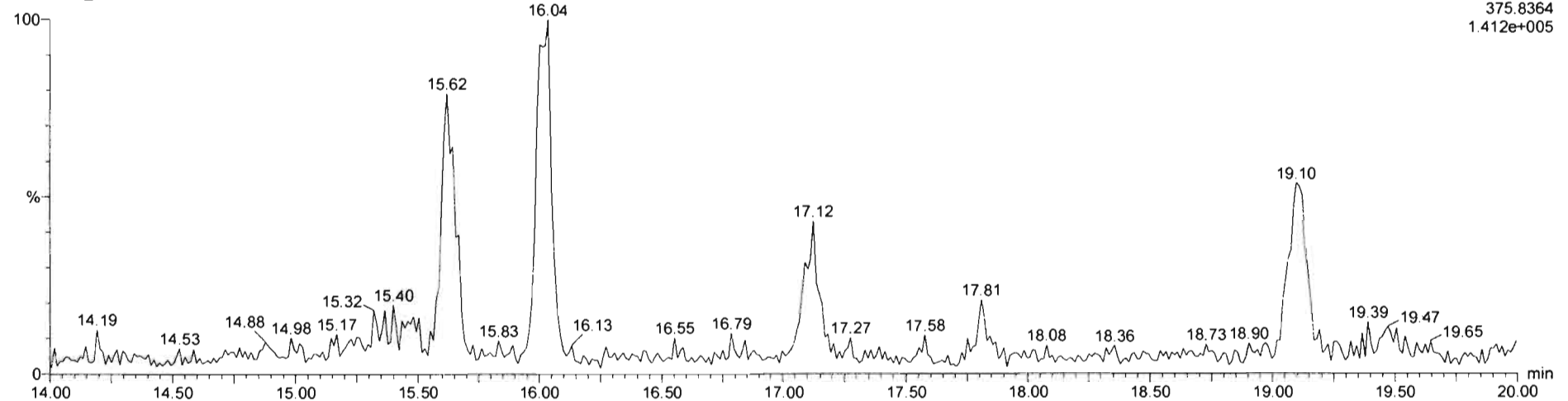
200310R1\_9



Voltage SIR,EI+  
333.934  
1.878e+007

DPE1

200310R1\_9



Voltage SIR,EI+  
375.8364  
1.412e+005

Dataset: U:\VG12.PRO\Results\200310R1\200310R1-10.qld

Last Altered: Tuesday, March 10, 2020 13:59:37 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 14:00:10 Pacific Daylight Time

GRB 03/10/2020

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

3/10/20

07 03/10/2020

Name: 200310R1\_10, Date: 10-Mar-2020, Time: 13:29:06, ID: 2000407-07RE1 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	8.68e4	0.76	NO	0.821	10.080	16.55	7.4349		0.118
2	2 13C-2,3,7,8-TCDF	2.82e6	0.79	NO	1.10	10.080	16.53	186.82	94.2	0.290
3	3 13C-1,2,3,4-TCDF	2.72e6	0.80	NO	1.00	10.080	14.44	198.42	100	0.319

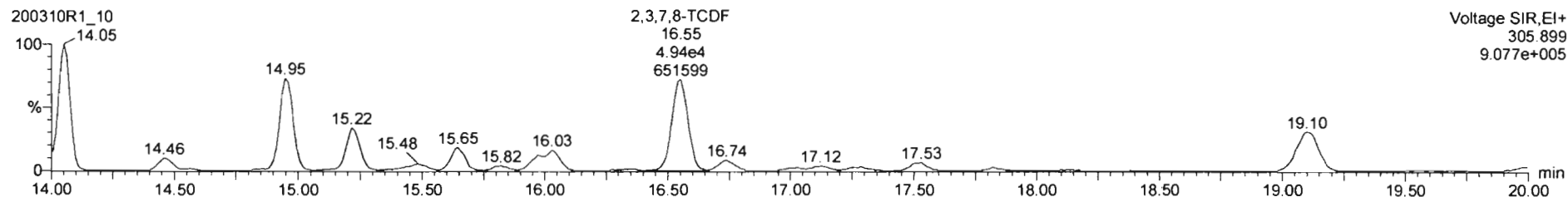
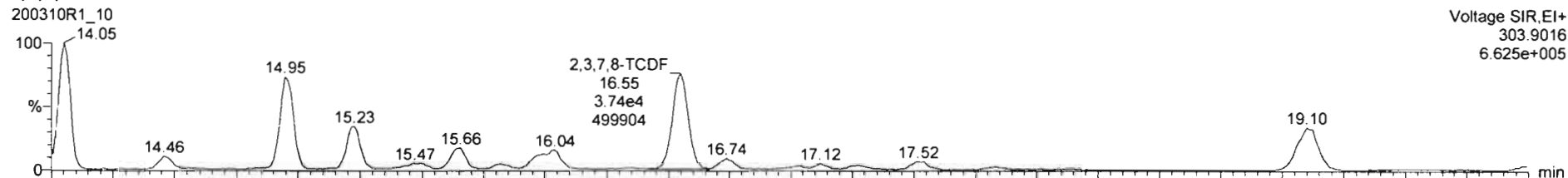
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 13:59:37 Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 13:59:46 Pacific Daylight Time

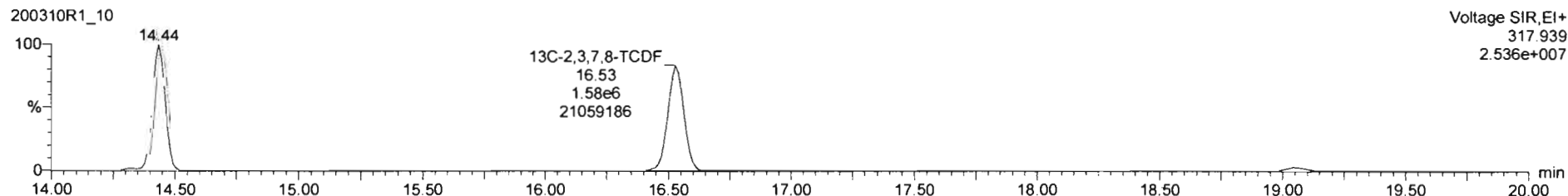
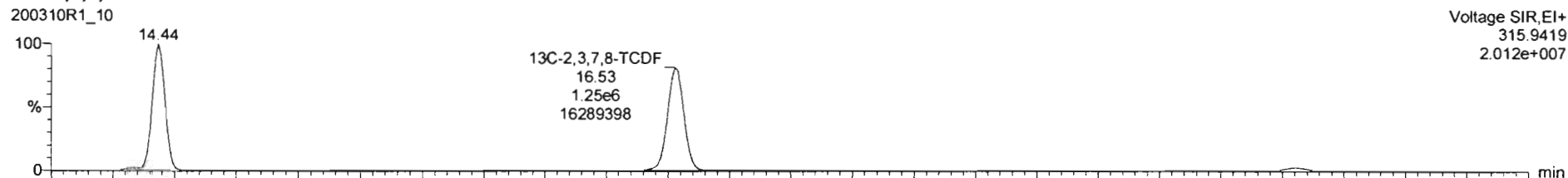
Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49  
Calibration: U:\VG12.PRO\CurveDB\vb225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R1\_10, Date: 10-Mar-2020, Time: 13:29:06, ID: 2000407-07RE1 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

2,3,7,8-TCDF



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



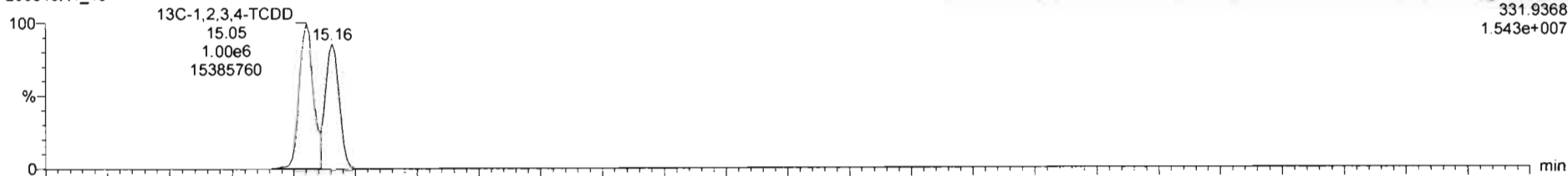
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 13:59:37 Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 13:59:46 Pacific Daylight Time

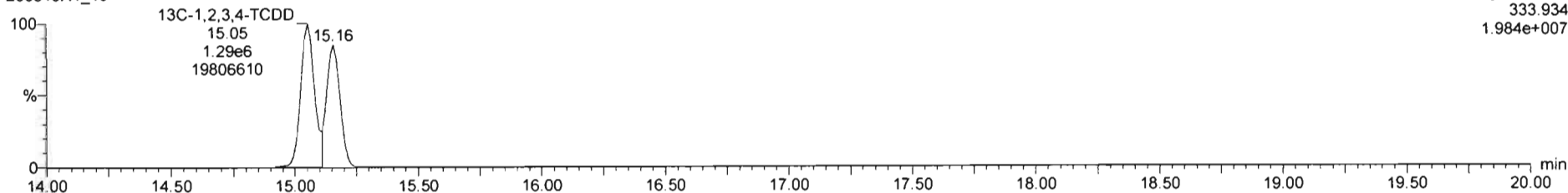
Name: 200310R1\_10, Date: 10-Mar-2020, Time: 13:29:06, ID: 2000407-07RE1 PDI-084SC-A-11-12-191002 15.98, Description: PDI-084SC-A-11-12-191002

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

200310R1\_10

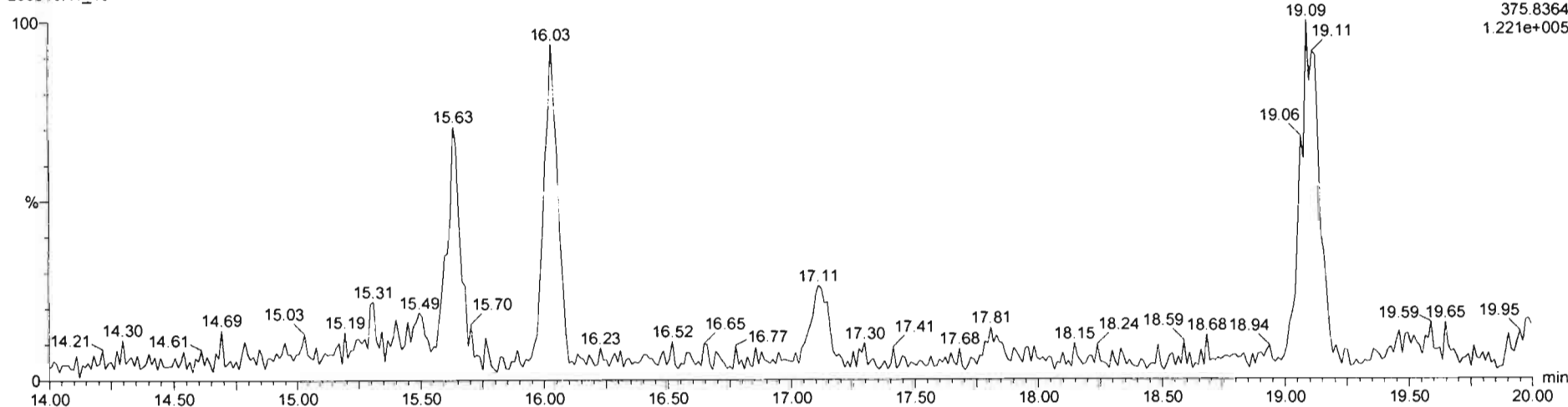


200310R1\_10



DPE1

200310R1\_10



**CONTINUING CALIBRATION**



## HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST200303R2-2

Reviewed By: CT 03/04/2020  
*Initials & Date*

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mass resolution $\geq$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentrations within criteria?	<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		
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GC Break <20% <input checked="" type="checkbox"/>		
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>8280 CS1 End Standard:</b>		
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input checked="" type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Comments:</b>    		
Correct ICAL referenced?	<u>GRB</u>	<u>GRB</u>			
<b>Run Log:</b>					
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
- Samples within 12 hour clock?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
- Bottle position verified?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-2.qld

Last Altered: Wednesday, March 04, 2020 08:16:08 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:16:50 Pacific Standard Time

*GRB 03/04/2020*

*C7 03/04/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

	# 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	1.10e5	1.17e6	0.78	NO	0.988	25.74	25.74	NO	1.001	1.001	9.5736	95.7	NO
2	2 1,2,3,7,8-PeCDD	4.21e5	1.02e6	0.62	NO	0.972	30.87	30.86	NO	1.001	1.000	42.283	84.6	NO
3	3 1,2,3,4,7,8-HxCDD	3.63e5	7.19e5	1.25	NO	1.07	34.23	34.23	NO	1.000	1.000	47.195	94.4	NO
4	4 1,2,3,6,7,8-HxCDD	3.99e5	8.77e5	1.22	NO	0.921	34.32	34.34	NO	1.000	1.001	49.319	98.6	NO
5	5 1,2,3,7,8,9-HxCDD	3.22e5	8.00e5	1.24	NO	0.918	34.62	34.60	NO	1.001	1.001	43.831	87.7	NO
6	6 1,2,3,4,6,7,8-HpCDD	2.80e5	6.11e5	1.03	NO	0.923	38.07	38.08	NO	1.000	1.001	49.708	99.4	NO
7	7 OCDD	5.34e5	1.18e6	0.89	NO	0.975	41.17	41.19	NO	1.000	1.001	92.809	92.8	NO
8	8 2,3,7,8-TCDF	1.27e5	1.55e6	0.77	NO	0.802	24.79	24.78	NO	1.001	1.001	10.208	102	NO
9	9 1,2,3,7,8-PeCDF	6.42e5	1.47e6	1.49	NO	0.907	29.54	29.54	NO	1.001	1.001	48.265	96.5	NO
10	10 2,3,4,7,8-PeCDF	6.59e5	1.41e6	1.56	NO	0.952	30.56	30.55	NO	1.001	1.000	49.024	98.0	NO
11	11 1,2,3,4,7,8-HxCDF	4.39e5	9.28e5	1.21	NO	0.862	33.36	33.37	NO	1.000	1.000	54.878	110	NO
12	12 1,2,3,6,7,8-HxCDF	5.03e5	1.06e6	1.23	NO	0.841	33.49	33.49	NO	1.000	1.000	56.437	113	NO
13	13 2,3,4,6,7,8-HxCDF	4.68e5	9.62e5	1.22	NO	0.898	34.09	34.06	NO	1.001	1.000	54.201	108	NO
14	14 1,2,3,7,8,9-HxCDF	3.76e5	8.07e5	1.19	NO	0.858	34.92	34.95	NO	1.000	1.001	54.289	109	NO
15	15 1,2,3,4,6,7,8-HpCDF	3.55e5	7.65e5	1.00	NO	0.851	36.68	36.66	NO	1.001	1.001	54.630	109	NO
16	16 1,2,3,4,7,8,9-HpCDF	2.79e5	5.01e5	1.01	NO	0.980	38.72	38.73	NO	1.000	1.000	56.858	114	NO
17	17 OCDF	6.00e5	1.40e6	0.88	NO	0.806	41.35	41.36	NO	1.000	1.000	106.08	106	NO
18	18 13C-2,3,7,8-TCDD	1.17e6	1.04e6	0.79	NO	1.20	25.66	25.70	NO	1.026	1.028	93.490	93.5	NO
19	19 13C-1,2,3,7,8-PeCDD	1.02e6	1.04e6	0.63	NO	0.967	30.78	30.85	NO	1.230	1.233	101.75	102	NO
20	20 13C-1,2,3,4,7,8-HxCDD	7.19e5	9.50e5	1.27	NO	0.874	34.22	34.22	NO	1.014	1.014	86.598	86.6	NO
21	21 13C-1,2,3,6,7,8-HxCDD	8.77e5	9.50e5	1.25	NO	1.05	34.32	34.32	NO	1.017	1.017	88.307	88.3	NO
22	22 13C-1,2,3,7,8,9-HxCDD	8.00e5	9.50e5	1.24	NO	0.974	34.62	34.58	NO	1.026	1.025	86.395	86.4	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	6.11e5	9.50e5	1.03	NO	0.747	38.20	38.06	NO	1.132	1.128	86.073	86.1	NO
24	24 13C-OCDD	1.18e6	9.50e5	0.91	NO	0.707	41.10	41.17	NO	1.218	1.220	175.81	87.9	NO
25	25 13C-2,3,7,8-TCDF	1.55e6	1.47e6	0.77	NO	1.07	24.84	24.76	NO	0.993	0.990	98.947	98.9	NO
26	26 13C-1,2,3,7,8-PeCDF	1.47e6	1.47e6	1.64	NO	1.00	29.42	29.52	NO	1.176	1.180	99.529	99.5	NO
27	27 13C-2,3,4,7,8-PeCDF	1.41e6	1.47e6	1.60	NO	0.962	30.39	30.53	NO	1.215	1.220	99.763	99.8	NO
28	28 13C-1,2,3,4,7,8-HxCDF	9.28e5	9.50e5	0.51	NO	1.05	33.34	33.36	NO	0.988	0.989	93.083	93.1	NO
29	29 13C-1,2,3,6,7,8-HxCDF	1.06e6	9.50e5	0.50	NO	1.19	33.44	33.48	NO	0.991	0.992	93.708	93.7	NO
30	30 13C-2,3,4,6,7,8-HxCDF	9.62e5	9.50e5	0.51	NO	1.07	34.05	34.05	NO	1.009	1.009	94.928	94.9	NO
31	31 13C-1,2,3,7,8,9-HxCDF	8.07e5	9.50e5	0.52	NO	0.922	34.96	34.92	NO	1.036	1.035	92.095	92.1	NO

Dataset: U:\VG12.PRO\Results\200303R2\200303R2-2.qld

Last Altered: Wednesday, March 04, 2020 08:16:08 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:16:50 Pacific Standard Time

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	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	7.65e5	9.50e5	0.44	NO	0.767	36.71	36.64	NO	1.088	1.086	104.89	105	NO
33	33 13C-1,2,3,4,7,8,9-HpCDF	5.01e5	9.50e5	0.43	NO	0.552	38.74	38.72	NO	1.148	1.147	95.556	95.6	NO
34	34 13C-OCDF	1.40e6	9.50e5	0.88	NO	0.789	41.34	41.35	NO	1.225	1.225	187.11	93.6	NO
35	35 37Cl-2,3,7,8-TCDD	1.17e5	1.04e6			1.18	25.69	25.74	NO	1.027	1.029	9.5100	95.1	NO
36	36 13C-1,2,3,4-TCDD	1.04e6	1.04e6	0.78	NO	1.00	25.11	25.02	NO	1.000	1.000	100.00	100	NO
37	37 13C-1,2,3,4-TCDF	1.47e6	1.47e6	0.79	NO	1.00	23.37	23.21	NO	1.000	1.000	100.00	100	NO
38	38 13C-1,2,3,4,6,9-HxCDF	9.50e5	9.50e5	0.51	NO	1.00	33.71	33.74	NO	1.000	1.000	100.00	100	YES <sup>ok</sup>
39	39 Total Tetra-Dioxins		1.17e6			0.988	24.62		NO	0.000		83.503		NO
40	40 Total Penta-Dioxins		1.02e6			0.972	29.96		NO	0.000		186.99		NO
41	41 Total Hexa-Dioxins		0.00e0			0.921	33.63		NO	0.000		237.30		NO
42	42 Total Hepta-Dioxins		6.11e5			0.923	37.64		NO	0.000		138.48		NO
43	43 Total Tetra-Furans		1.55e6			0.802	23.61		NO	0.000		50.036		NO
44	44 1st Func. Penta-Furans		0.00e0			0.907	27.09		NO	0.000		90.273		NO
45	45 Total Penta-Furans		0.00e0			0.907	29.27		NO	0.000		164.84		NO
46	46 Total Hexa-Furans		0.00e0			0.898	33.56		NO	0.000		317.99		NO
47	47 Total Hepta-Furans		0.00e0			0.851	37.83		NO	0.000		111.57		NO

Dataset: Untitled

Last Altered: Tuesday, March 03, 2020 15:24:36 Pacific Standard Time

Printed: Tuesday, March 03, 2020 15:24:46 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 27 Feb 2020 10:59:03

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

	# Name	RT
1	1 1,3,6,8-TCDD (First)	21.51
2	2 1,2,8,9-TCDD (Last)	26.74
3	3 1,2,4,7,9-PeCDD (First)	28.59
4	4 1,2,3,8,9-PeCDD (Last)	31.25
5	5 1,2,4,6,7,9-HxCDD (First)	32.76
6	6 1,2,3,7,8,9-HxCDD (Last)	34.61
7	7 1,2,3,4,6,7,9-HpCDD (First)	37.04
8	8 1,2,3,4,6,7,8-HpCDD (Last)	38.08
9	9 1,3,6,8-TCDF (First)	19.48
10	10 1,2,8,9-TCDF (Last)	26.87
11	11 1,3,4,6,8-PeCDF (First)	26.84
12	12 1,2,3,8,9-PeCDF (Last)	31.49
13	13 1,2,3,4,6,8-HxCDF (First)	32.20
14	14 1,2,3,7,8,9-HxCDF (Last)	34.95
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.66
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.73

Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:20:26 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:21:00 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	(A) 200303R2_1	ST200303R2_1 1613 CS3 19L2305	03-Mar-20	13:41:24
2	(B) 200303R2_2	ST200303R2_2 1613 CS3 19L2305	03-Mar-20	14:34:40
3	200303R2_3	B0B0291-BS1 OPR 10	03-Mar-20	15:25:54
4	200303R2_4	SOLVENT BLANK	03-Mar-20	16:12:08
5	200303R2_5	B0B0291-BLK1 Method Blank 10	03-Mar-20	16:59:39
6	200303R2_6	2000407-01 PDI-084SC-A-05-06-191002 18.52	03-Mar-20	17:47:03
7	200303R2_7	B0B0291-DUP1 Duplicate 18.51	03-Mar-20	18:34:28
8	200303R2_8	2000407-02 PDI-084SC-A-06-07-191002 16.48	03-Mar-20	19:21:53
9	200303R2_9	2000407-03 PDI-084SC-A-07-08-191002 17.5	03-Mar-20	20:09:18
10	200303R2_10	2000407-04 PDI-084SC-A-08-09-191002 16.93	03-Mar-20	20:56:52
11	200303R2_11	2000407-05 PDI-084SC-A-09-10-191002 16.69	03-Mar-20	21:44:17
12	200303R2_12	2000407-06 PDI-084SC-A-10-11-191002 16.77	03-Mar-20	22:31:41
13	200303R2_13	2000407-07 PDI-084SC-A-11-12-191002 15.98	03-Mar-20	23:19:15
14	200303R2_14	2000407-08 PDI-084SC-A-12-13-191002 14.75	04-Mar-20	00:06:41
15	200303R2_15	2000407-09 PDI-084SC-A-13-14-191002 17.3	04-Mar-20	00:54:05
16	200303R2_16	2000407-10 PDI-084SC-A-14-15-191002 17.75	04-Mar-20	01:41:31

(A) FIRST CCAL USED TO ADJUST WINDOWS

(B) CCAL USED TO PROCESS SAMPLES

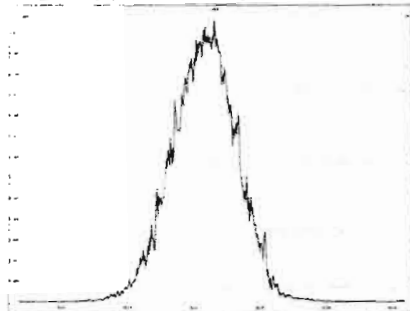
Experiment Calibration Report

MassLynx 4.1 SCN815

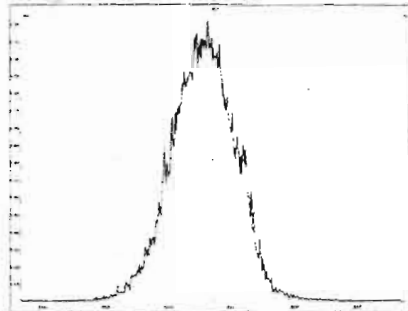
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, March 03, 2020 13:37:58 Pacific Standard Time

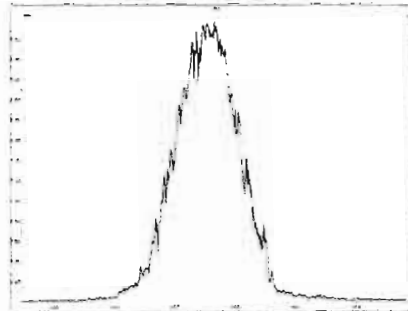
M 292.9824 R 13364



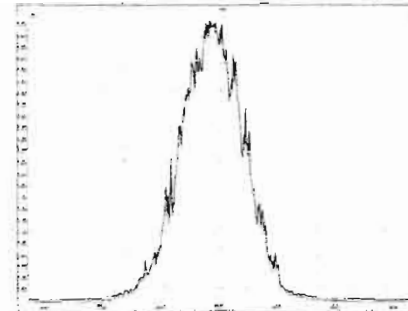
M 304.9824 R 13513



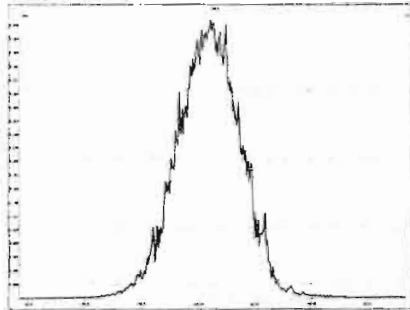
M 318.9792 R 14042



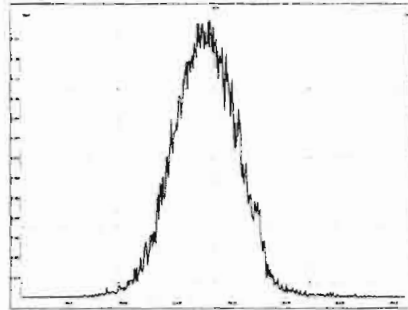
M 330.9792 R 13442



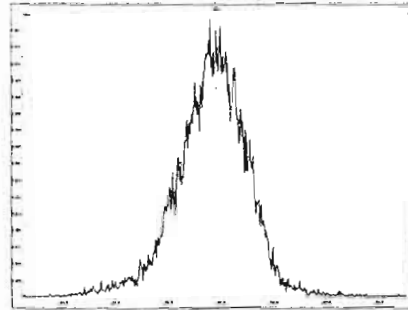
M 342.9792 R 13296



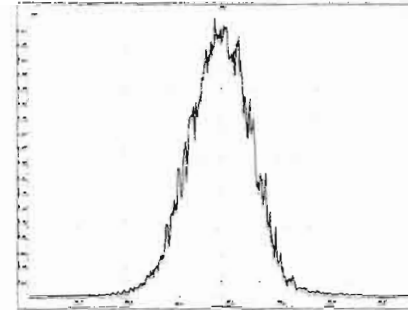
M 354.9792 R 13230



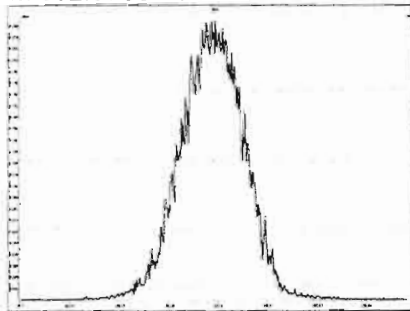
M 366.9792 R 13513



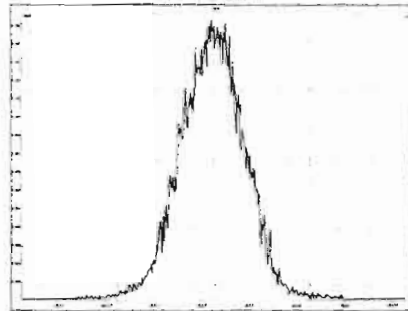
M 380.9760 R 13734



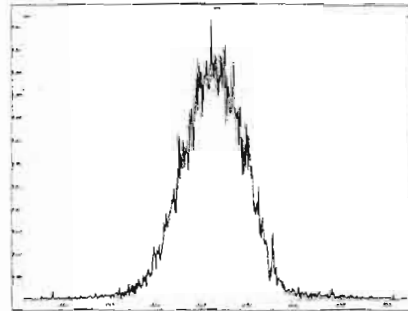
M 392.9760 R 13515



M 404.9760 R 13591



M 416.9760 R 13155





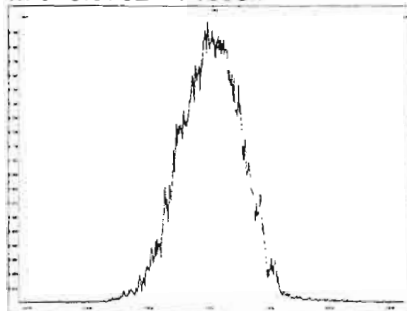
Experiment Calibration Report

MassLynx 4.1 SCN815

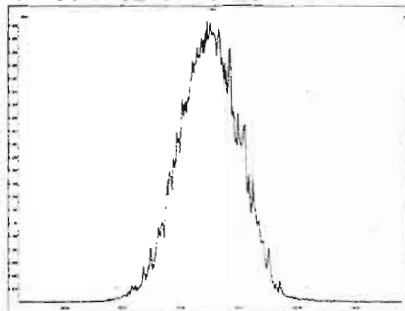
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, March 03, 2020 13:38:23 Pacific Standard Time

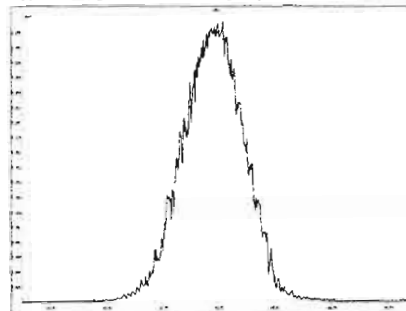
M 318.9792 R 13964



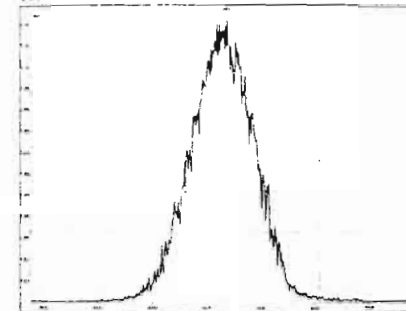
M 330.9792 R 14126



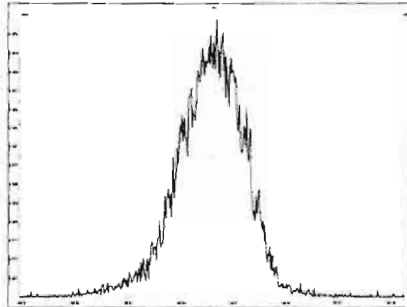
M 342.9792 R 13660



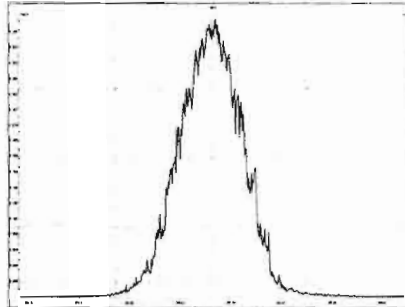
M 354.9792 R 13963



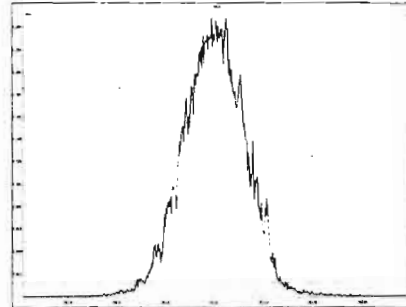
M 366.9792 R 12821



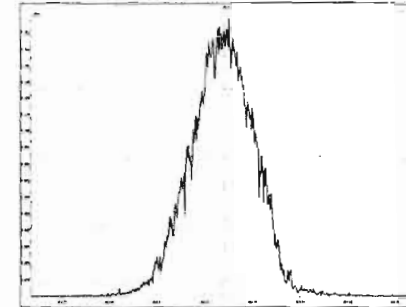
M 380.9760 R 13811



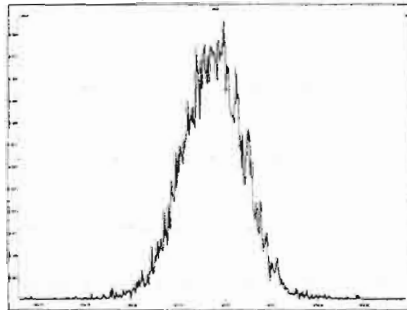
M 392.9760 R 13300



M 404.9760 R 14124



M 416.9760 R 13019



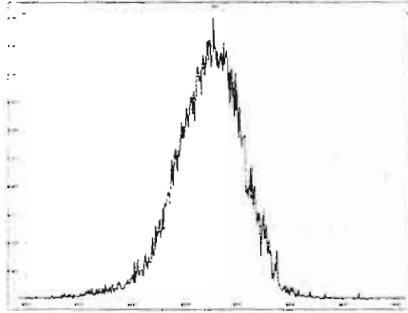
Experiment Calibration Report

MassLynx 4.1 SCN815

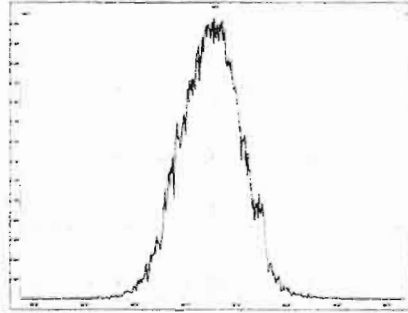
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, March 03, 2020 13:38:44 Pacific Standard Time

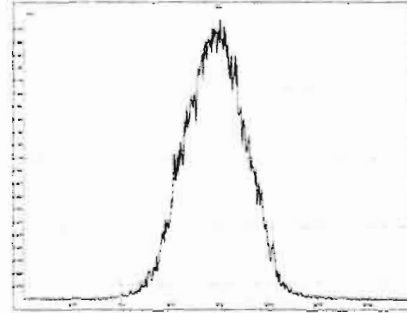
M 366.9792 R 12316



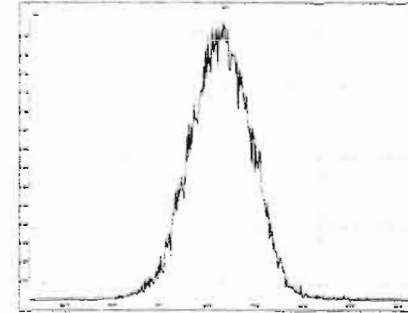
M 380.9760 R 13368



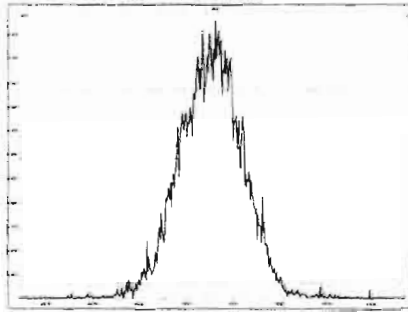
M 392.9760 R 14370



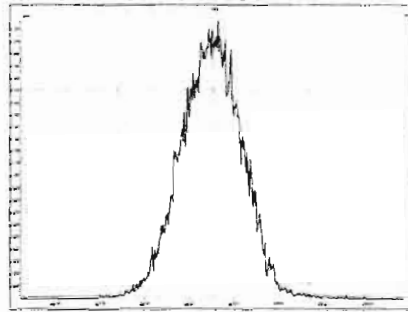
M 404.9760 R 13661



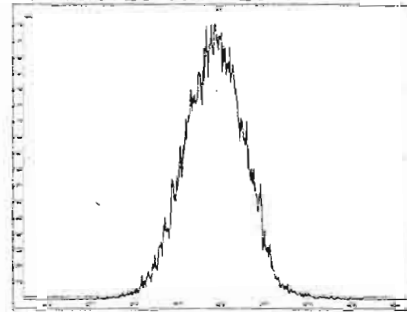
M 416.9760 R 13300



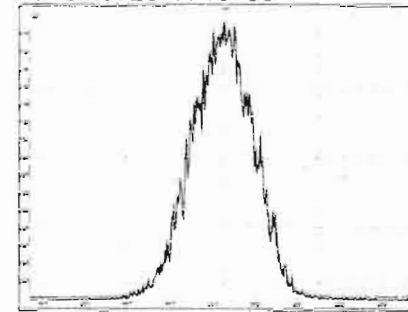
M 430.9728 R 13885



M 442.9728 R 14123



M 454.9728 R 13738



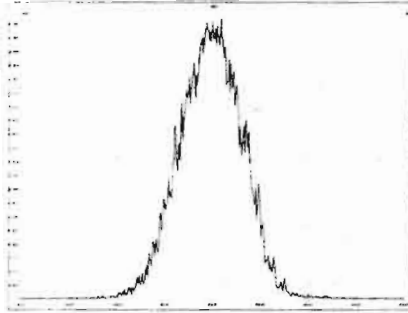
Experiment Calibration Report

MassLynx 4.1 SCN815

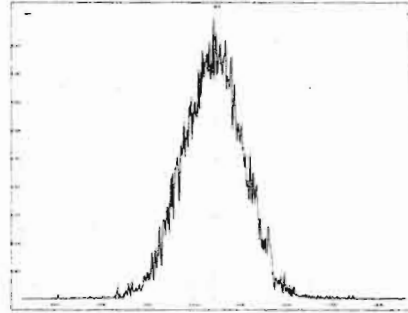
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Printed: Tuesday, March 03, 2020 13:39:07 Pacific Standard Time

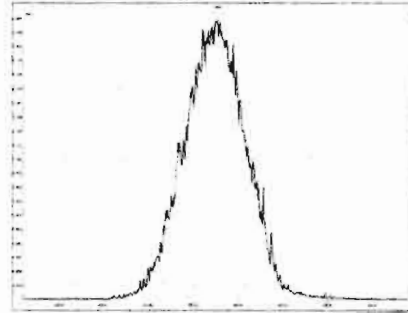
M 404.9760 R 13662



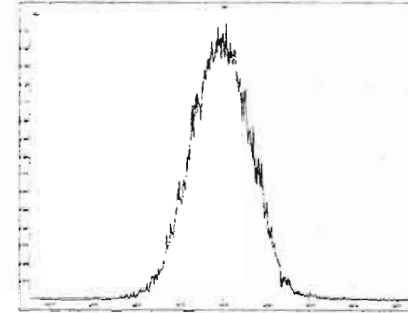
M 416.9760 R 14618



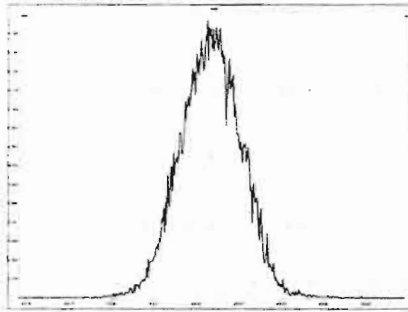
M 430.9728 R 14202



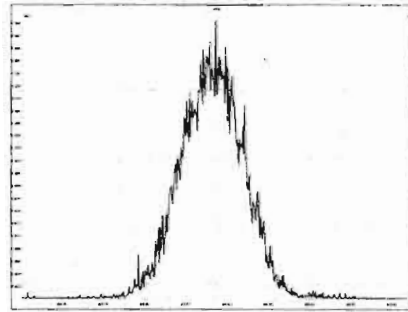
M 442.9728 R 13514



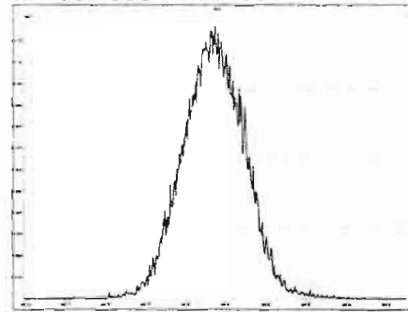
M 454.9728 R 13965



M 466.9728 R 13963



M 480.9696 R 14450



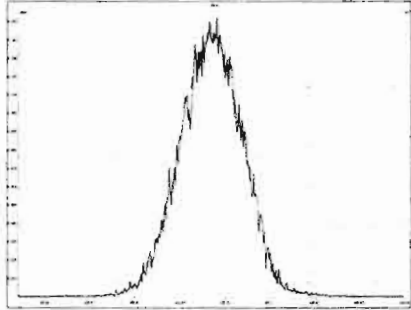
Experiment Calibration Report

MassLynx 4.1 SCN815

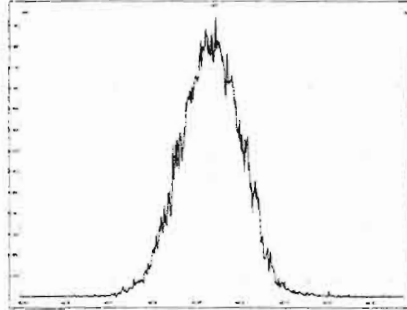
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Printed: Tuesday, March 03, 2020 13:39:44 Pacific Standard Time

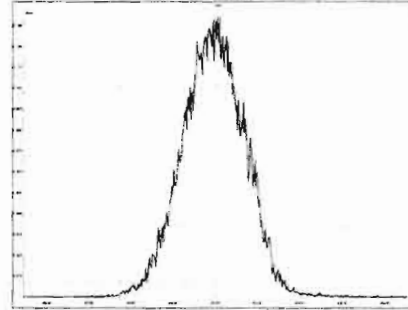
M 430.9728 R 13660



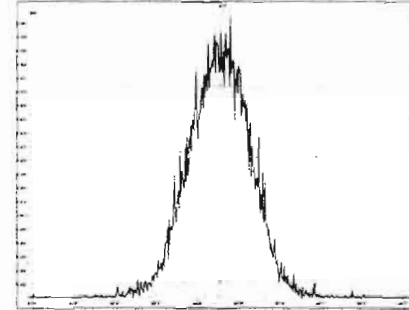
M 442.9728 R 13663



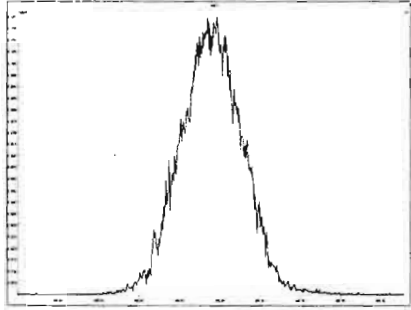
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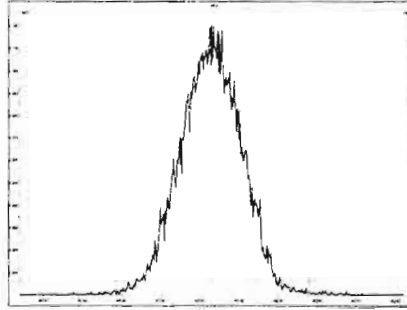
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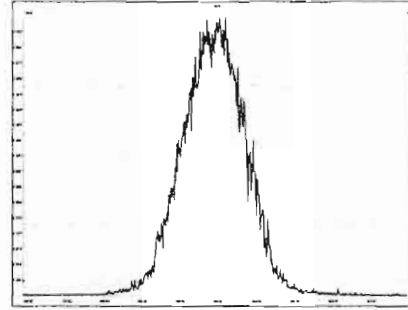
M 480.9696 R 14287



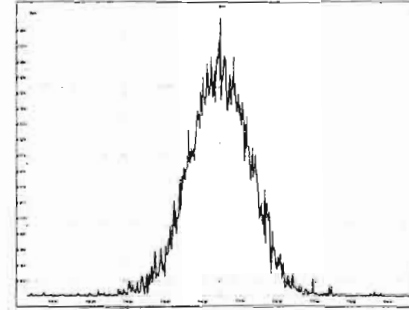
M 492.9696 R 13661



M 504.9696 R 13659



M 516.9697 R 14201



Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Tuesday, March 03, 2020 15:24:36 Pacific Standard Time

Printed: Tuesday, March 03, 2020 15:24:46 Pacific Standard Time

GRB 03/04/2020

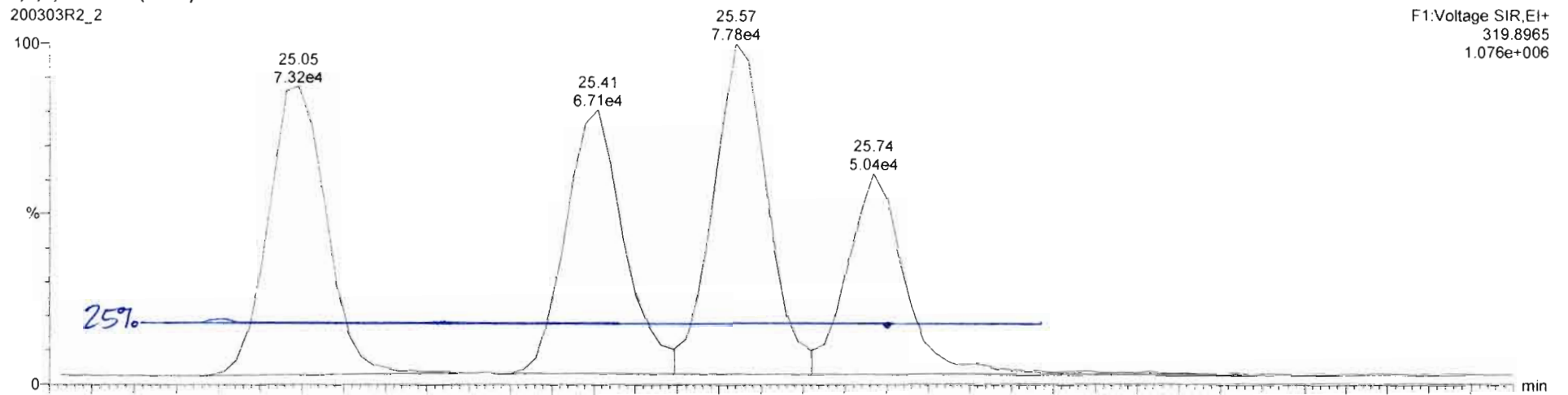
Method: U:\VG12.PRO\MethDB\CPSM.mdb 27 Feb 2020 10:59:03

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

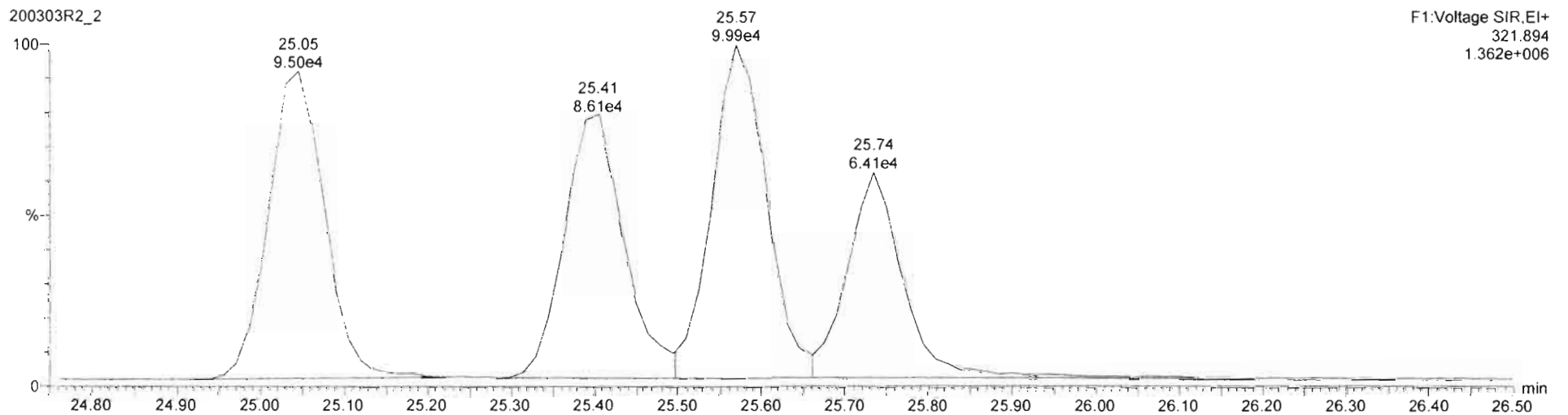
Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

1,3,6,8-TCDD (First)

200303R2\_2



200303R2\_2



Dataset: Untitled

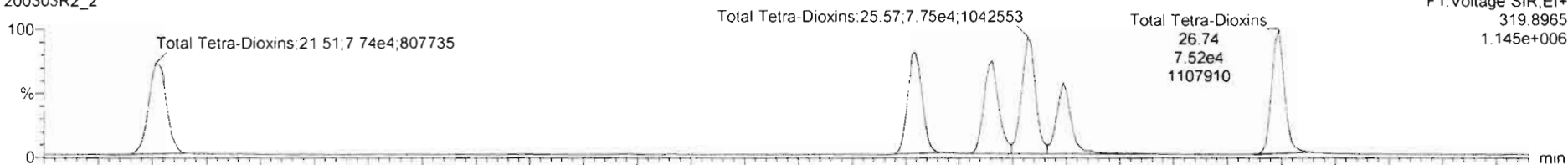
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Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

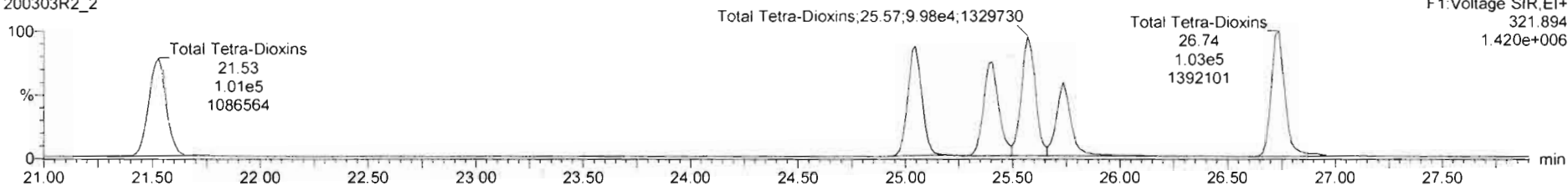
Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

2,3,7,8-TCDD

200303R2\_2

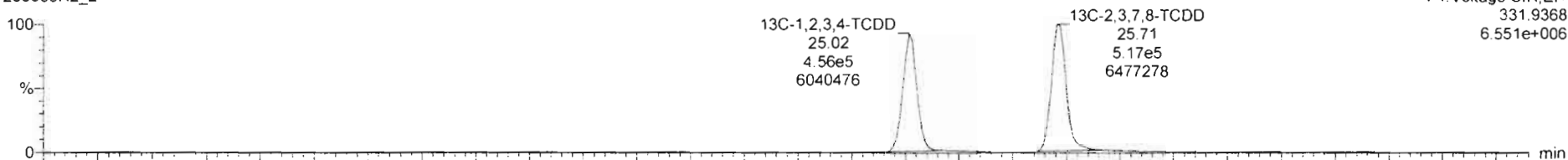


200303R2\_2

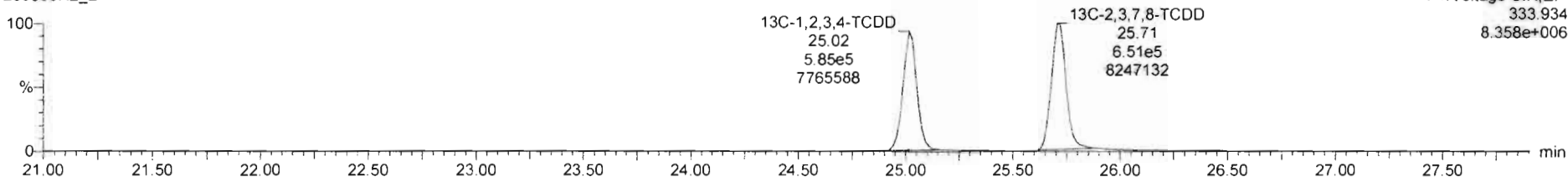


13C-2,3,7,8-TCDD

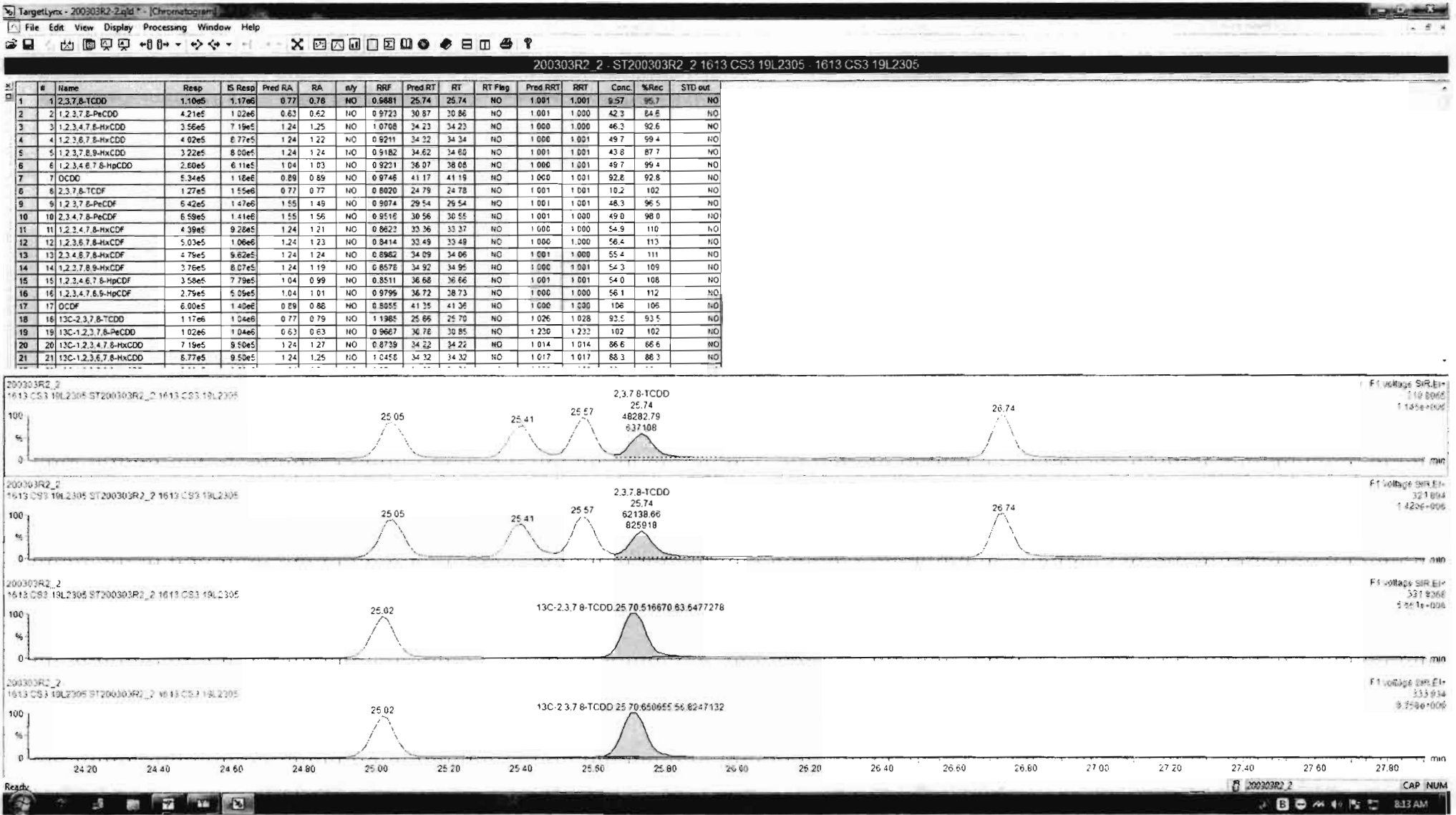
200303R2\_2



200303R2\_2







Dataset: Untitled

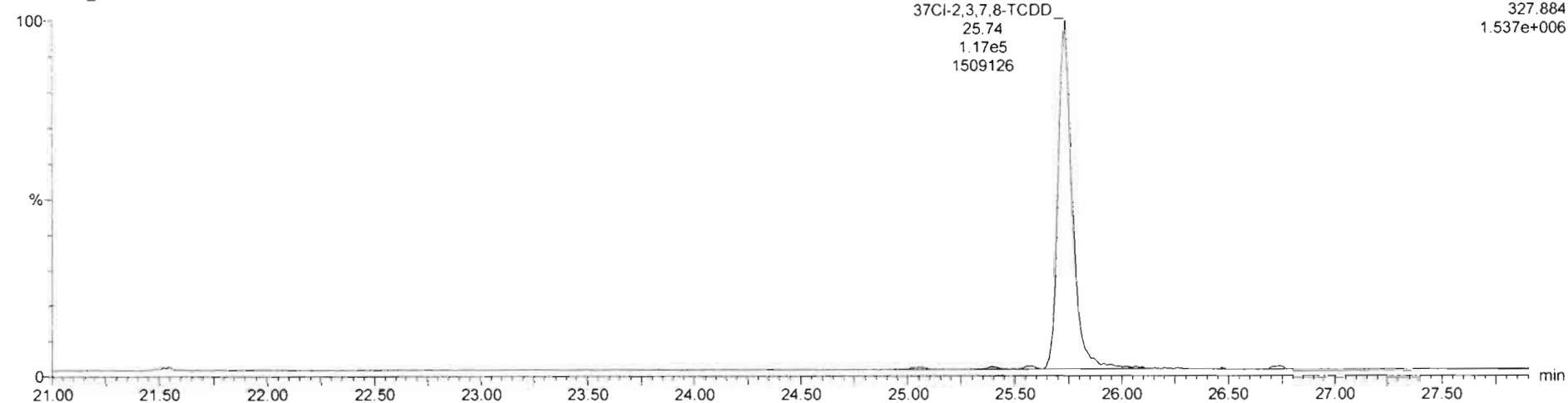
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Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

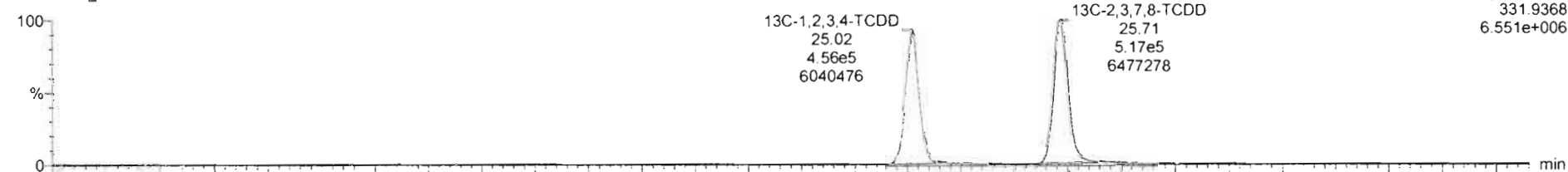
**37Cl-2,3,7,8-TCDD**

200303R2\_2

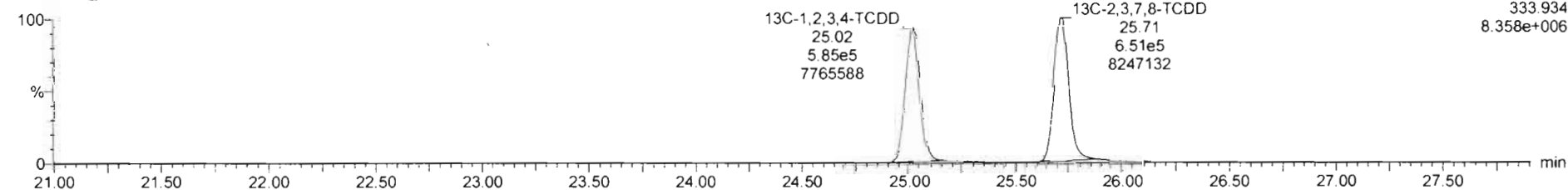


**13C-1,2,3,4-TCDD**

200303R2\_2



200303R2\_2



Dataset: Untitled

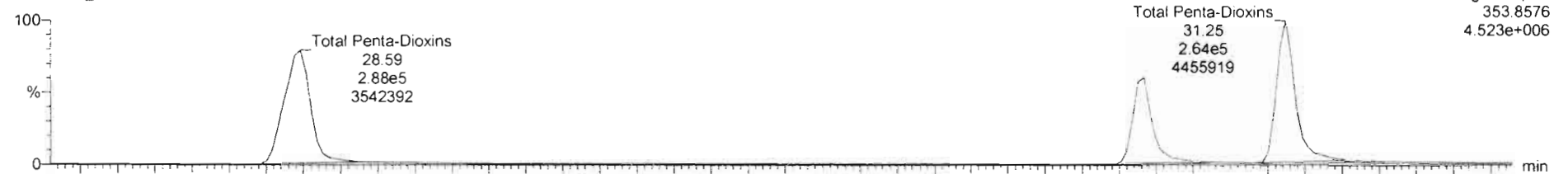
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Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

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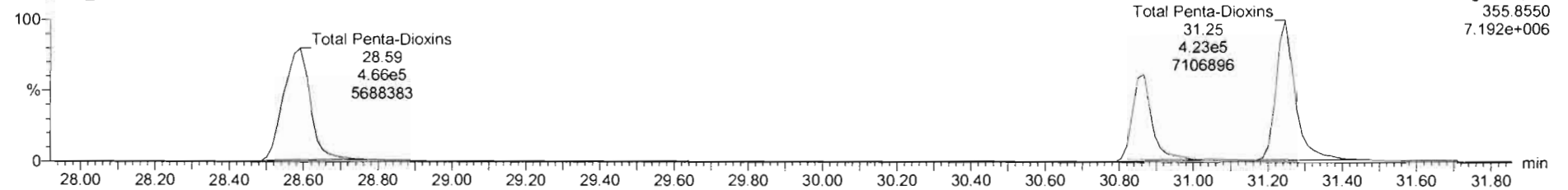
**1,2,3,7,8-PeCDD**

200303R2\_2



F2: Voltage SIR, EI+  
353.8576  
4.523e+006

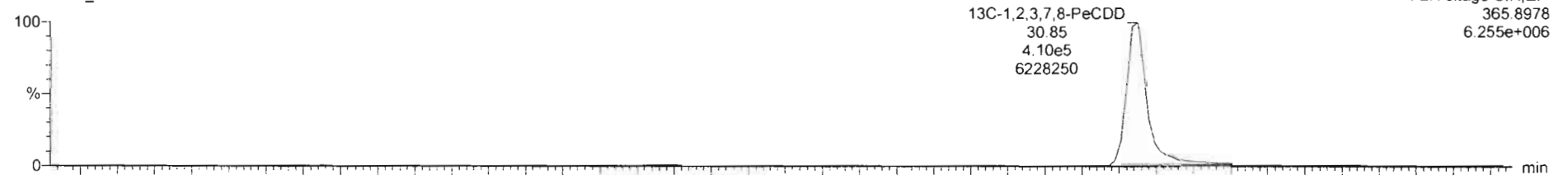
200303R2\_2



F2: Voltage SIR, EI+  
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7.192e+006

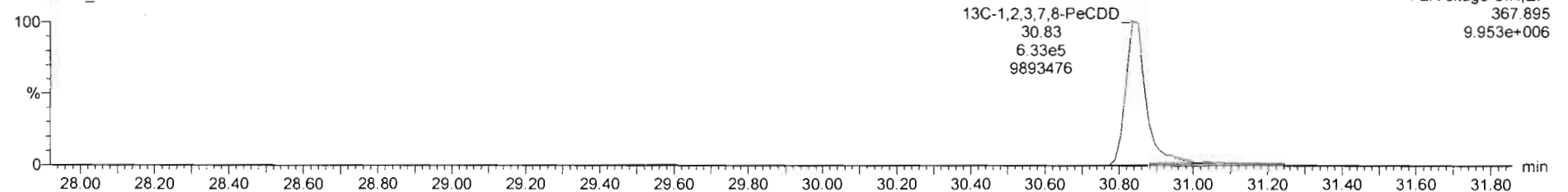
**13C-1,2,3,7,8-PeCDD**

200303R2\_2

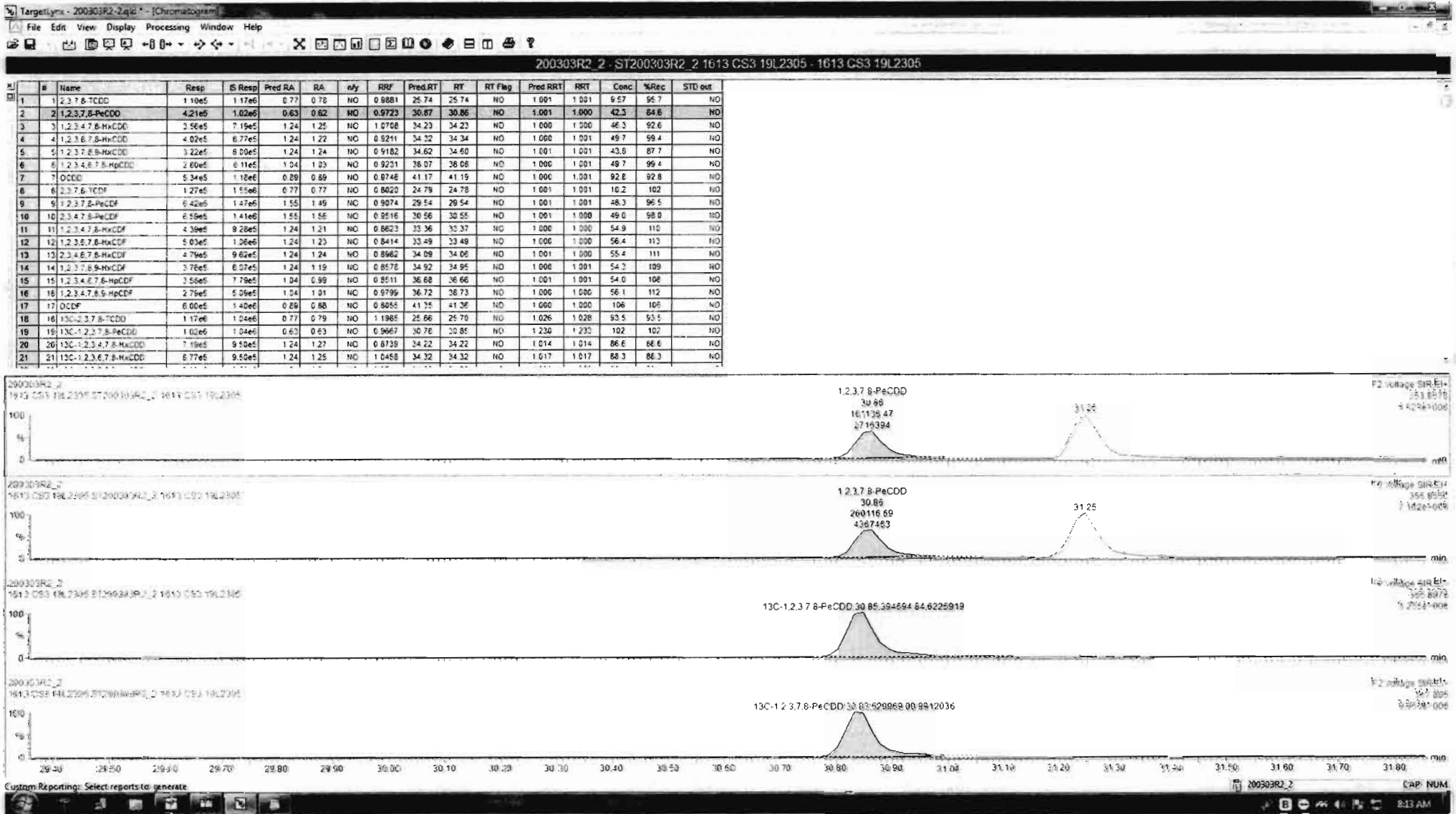


F2: Voltage SIR, EI+  
365.8978  
6.255e+006

200303R2\_2



F2: Voltage SIR, EI+  
367.895  
9.953e+006



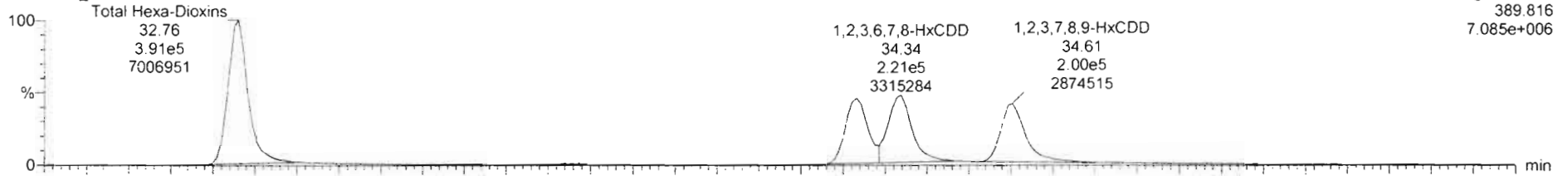
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Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

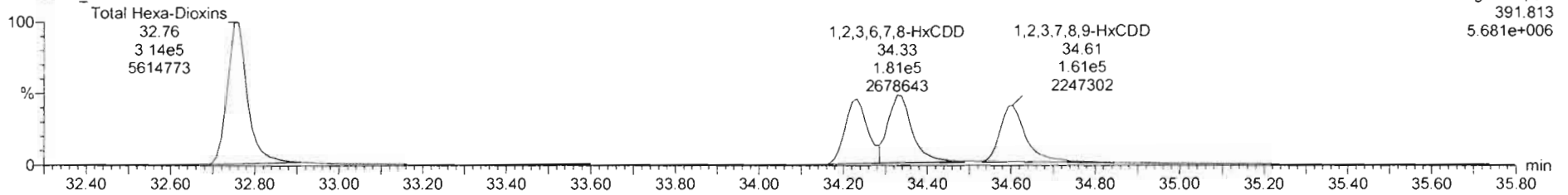
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1,2,3,4,7,8-HxCDD

200303R2\_2

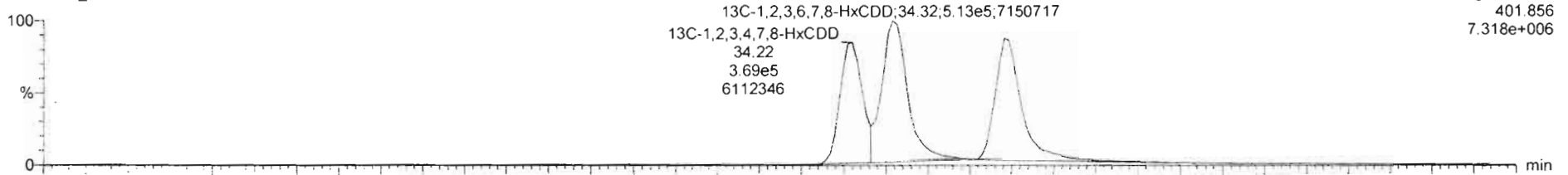


200303R2\_2

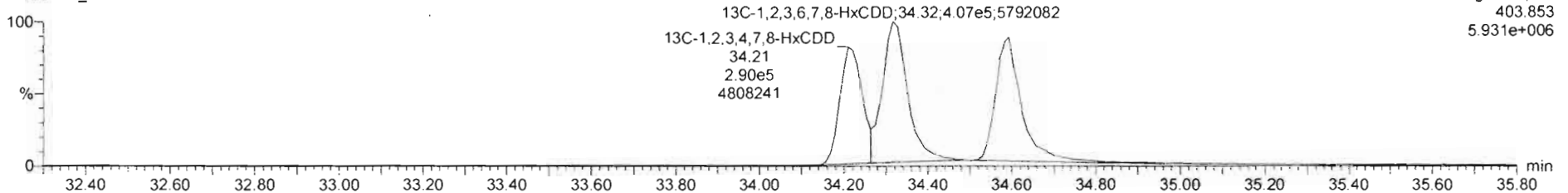


13C-1,2,3,4,7,8-HxCDD

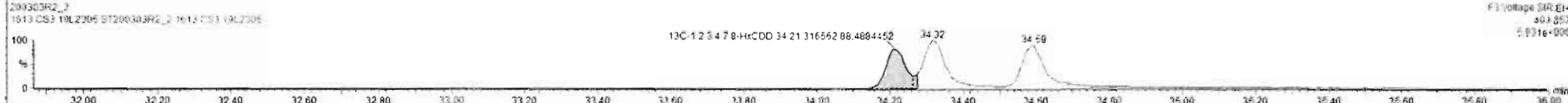
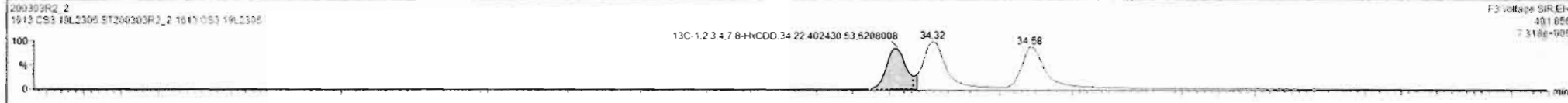
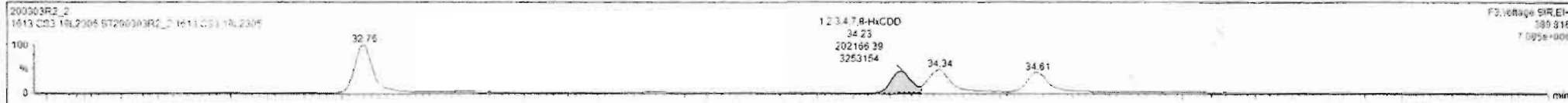
200303R2\_2



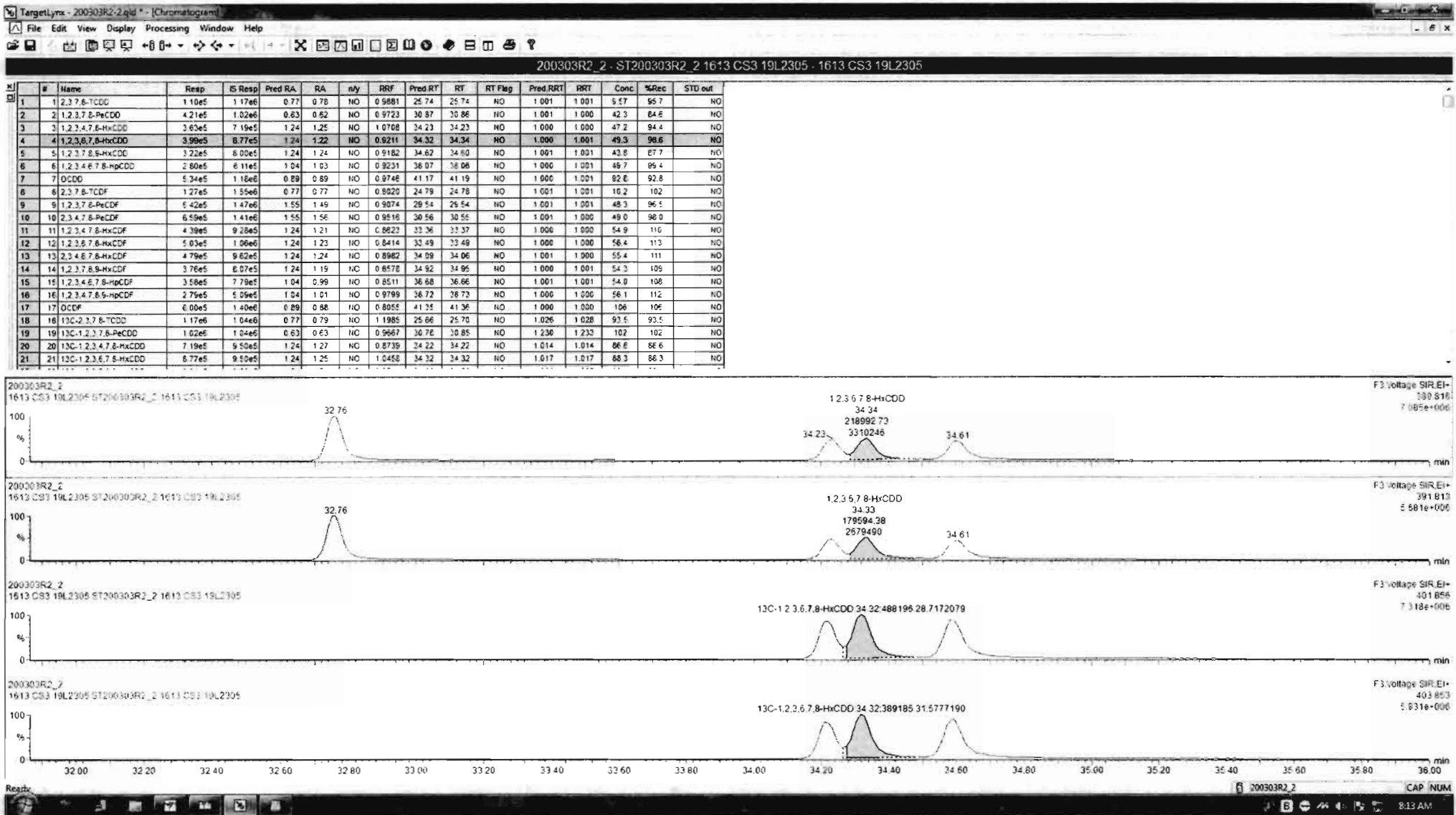
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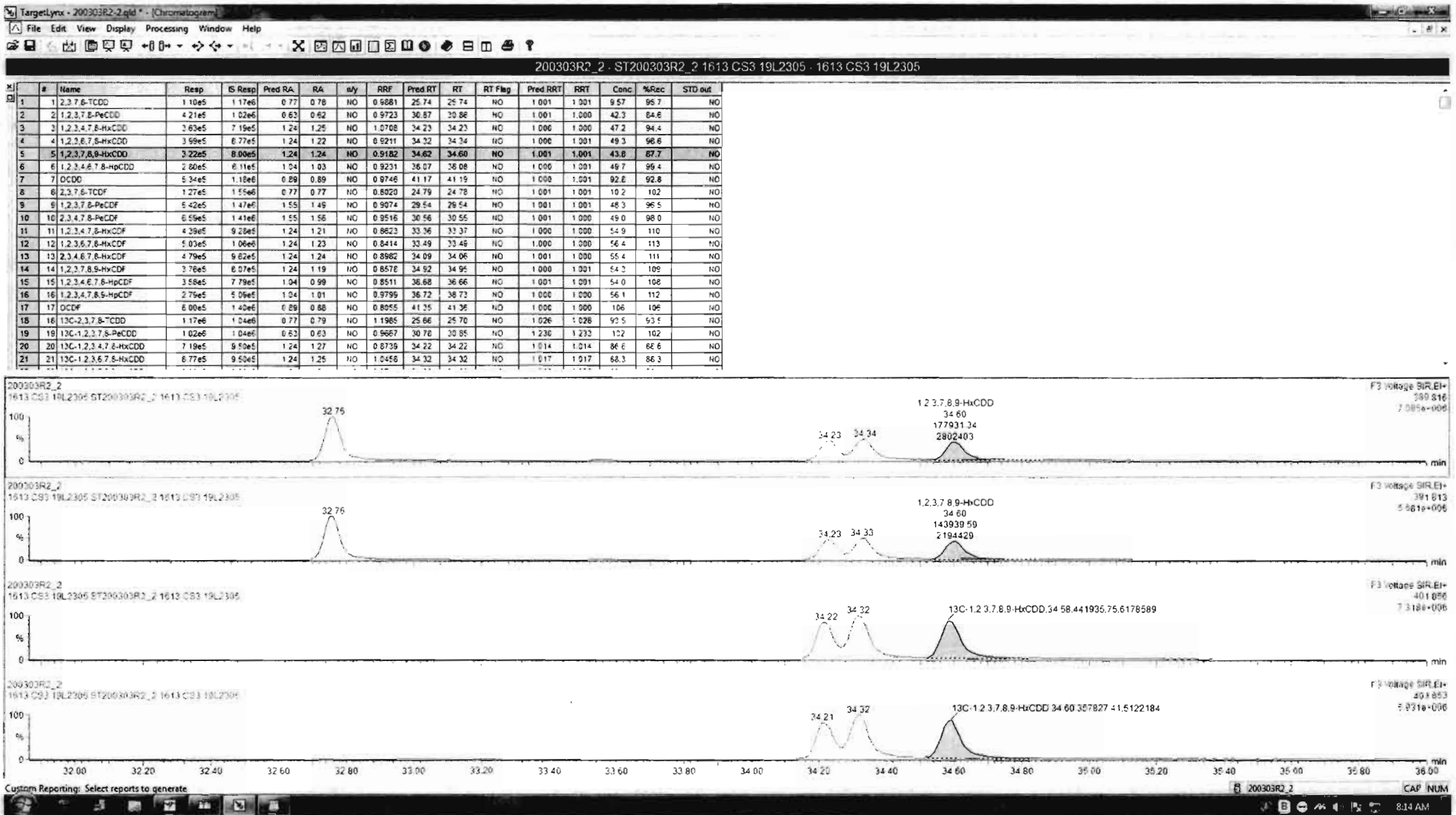


#	Name	Resp	IS Resp	Pred RA	RA	nY	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc	%Rec	STD out
1	1,2,3,7,8-TCDD	1.10e5	1.17e6	0.77	0.78	NO	0.9881	25.74	25.74	NO	1.001	1.001	9.57	95.7	NO
2	1,2,3,7,8-PeCDD	4.21e5	1.02e6	0.63	0.62	NO	0.9723	30.87	30.86	NO	1.001	1.000	42.3	84.6	NO
3	1,2,3,4,7,8-HxCDD	3.63e5	7.19e5	1.24	1.25	NO	1.0708	34.23	34.23	NO	1.000	1.000	47.2	94.4	NO
4	1,2,3,6,7,8-HxCDD	4.02e5	8.77e5	1.24	1.22	NO	0.9211	34.32	34.34	NO	1.000	1.001	49.7	99.4	NO
5	1,2,3,7,8,9-HxCDD	3.22e5	6.03e5	1.24	1.24	NO	0.9182	34.62	34.60	NO	1.001	1.001	43.8	87.7	NO
6	1,2,3,4,6,7,8-HpCDD	2.60e5	6.11e5	1.04	1.03	NO	0.9231	38.07	38.08	NO	1.000	1.001	49.7	99.4	NO
7	OCDD	5.34e5	1.18e6	0.89	0.89	NO	0.9748	41.17	41.19	NO	1.000	1.001	92.8	92.8	NO
8	2,3,7,8-TCDF	1.27e5	1.55e6	0.77	0.77	NO	0.9820	24.79	24.78	NO	1.001	1.001	10.2	100	NO
9	1,2,3,7,8-PeCDF	4.42e5	1.47e6	1.55	1.49	NO	0.9974	28.54	28.54	NO	1.001	1.001	48.3	96.5	NO
10	2,3,4,7,8-PeCDF	6.69e5	1.41e6	1.55	1.55	NO	0.9518	30.56	30.55	NO	1.001	1.000	49.0	98.0	NO
11	1,2,3,4,7,8-HxCDF	4.39e5	9.28e5	1.24	1.21	NO	0.8823	33.36	33.37	NO	1.000	1.000	54.9	110	NO
12	1,2,3,6,7,8-HxCDF	1.03e5	1.06e6	1.24	1.23	NO	0.8414	33.49	33.49	NO	1.000	1.000	56.4	113	NO
13	2,3,4,6,7,8-HxCDF	4.79e5	9.62e5	1.24	1.24	NO	0.8982	34.09	34.06	NO	1.001	1.000	55.4	111	NO
14	1,2,3,7,8,9-HpCDF	3.76e5	6.07e5	1.24	1.19	NO	0.8578	34.92	34.95	NO	1.000	1.001	54.3	109	NO
15	1,2,3,4,6,7,8-HpCDF	2.58e5	7.79e5	1.04	0.99	NO	0.8511	36.68	36.66	NO	1.001	1.001	54.0	108	NO
16	1,2,3,4,7,8,9-HpCDF	2.79e5	5.25e5	1.04	1.01	NO	0.9799	38.72	38.73	NO	1.000	1.000	56.1	112	NO
17	OCDF	8.00e5	1.42e6	0.89	0.88	NO	0.8055	41.35	41.36	NO	1.000	1.000	106	106	NO
18	13C-2,3,7,8-TCDD	1.17e5	1.04e6	0.77	0.79	NO	1.1985	25.86	25.70	NO	1.026	1.028	93.5	93.5	NO
19	13C-1,2,3,7,8-PeCDD	1.02e6	1.04e6	0.63	0.63	NO	0.9867	30.78	30.85	NO	1.230	1.233	102	102	NO
20	13C-1,2,3,4,7,8-HxCDD	7.19e5	9.50e5	1.24	1.27	NO	0.8739	34.22	34.22	NO	1.014	1.014	86.6	86.6	NO
21	13C-1,2,3,6,7,8-HxCDD	6.77e5	9.50e5	1.24	1.25	NO	1.0458	34.32	34.32	NO	1.017	1.017	88.3	88.3	NO









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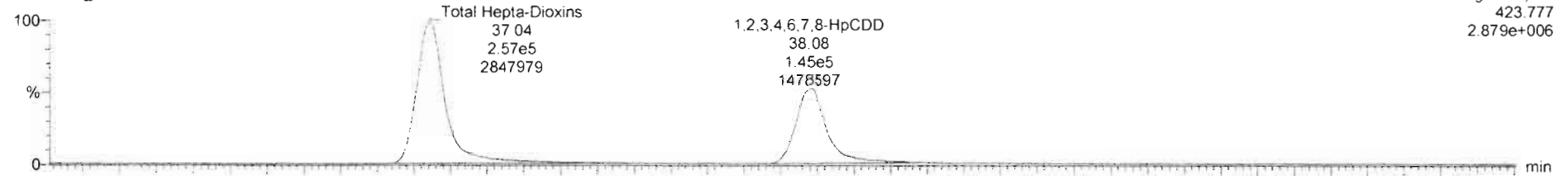
Last Altered: Wednesday, March 04, 2020 08:16:55 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

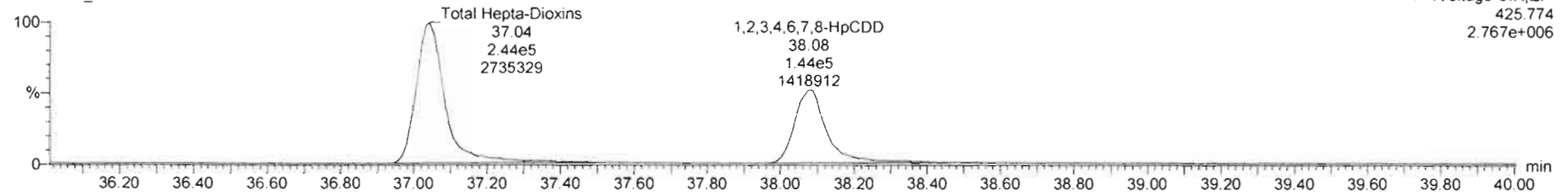
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1,2,3,4,6,7,8-HpCDD

200303R2\_2

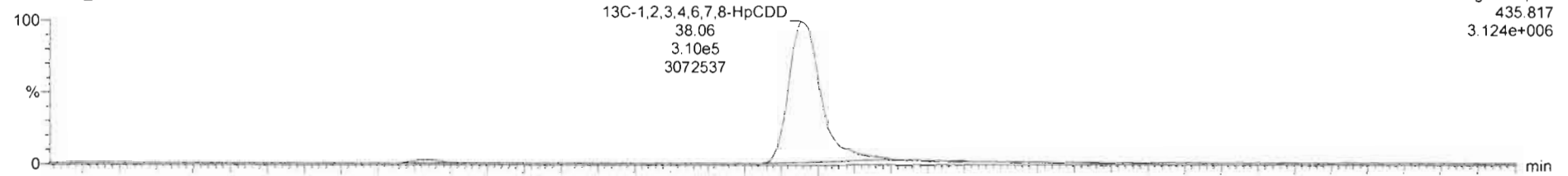


200303R2\_2

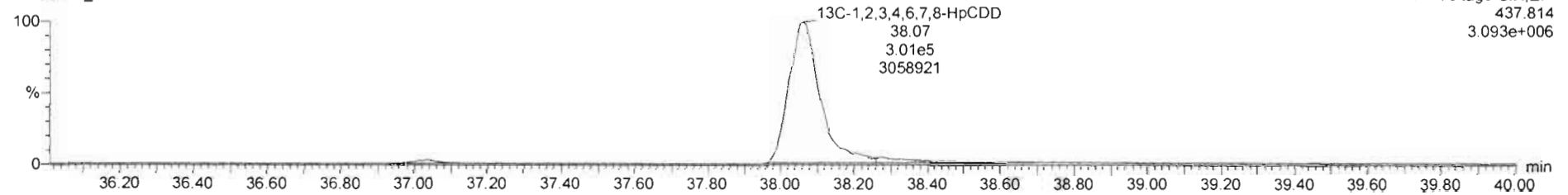


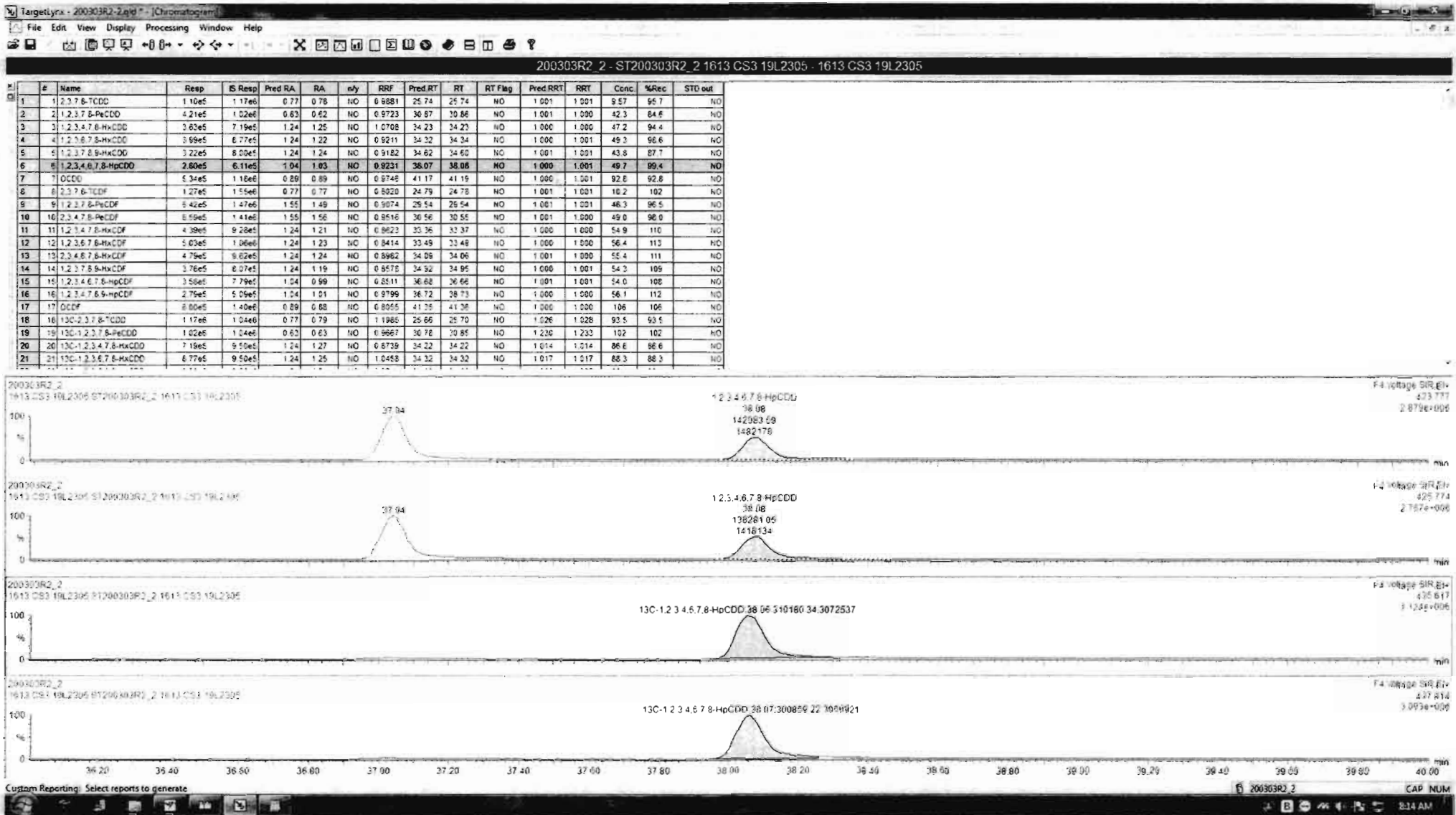
13C-1,2,3,4,6,7,8-HpCDD

200303R2\_2



200303R2\_2

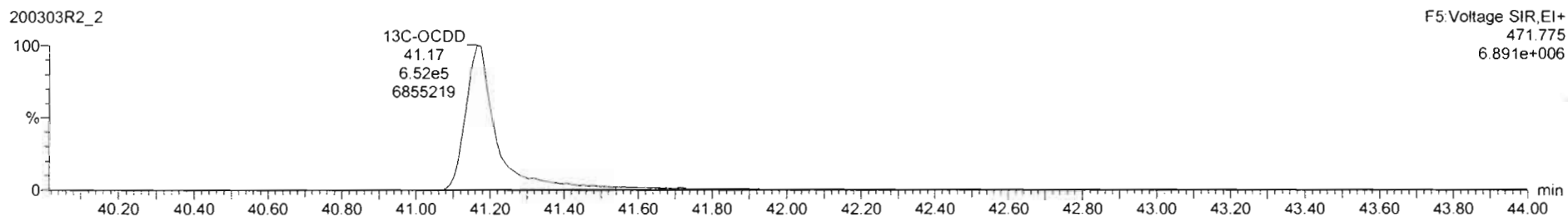
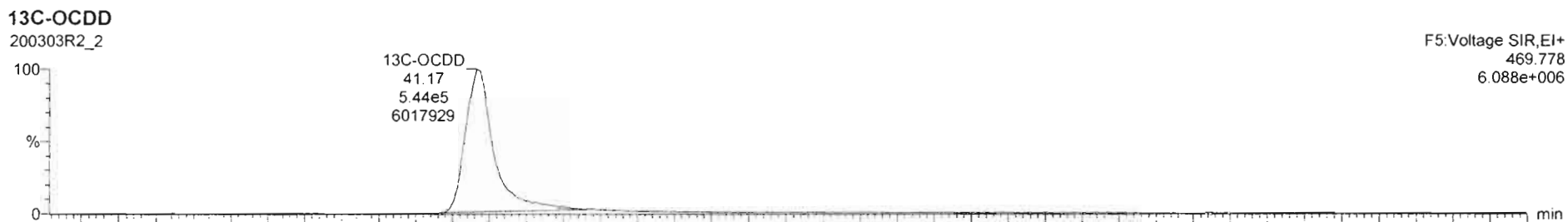
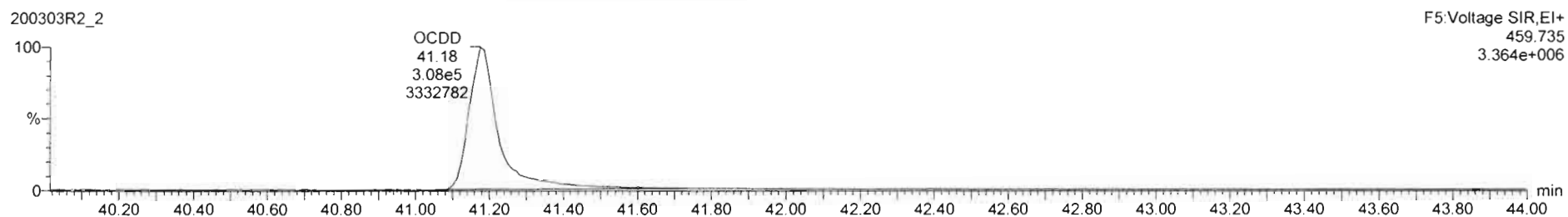


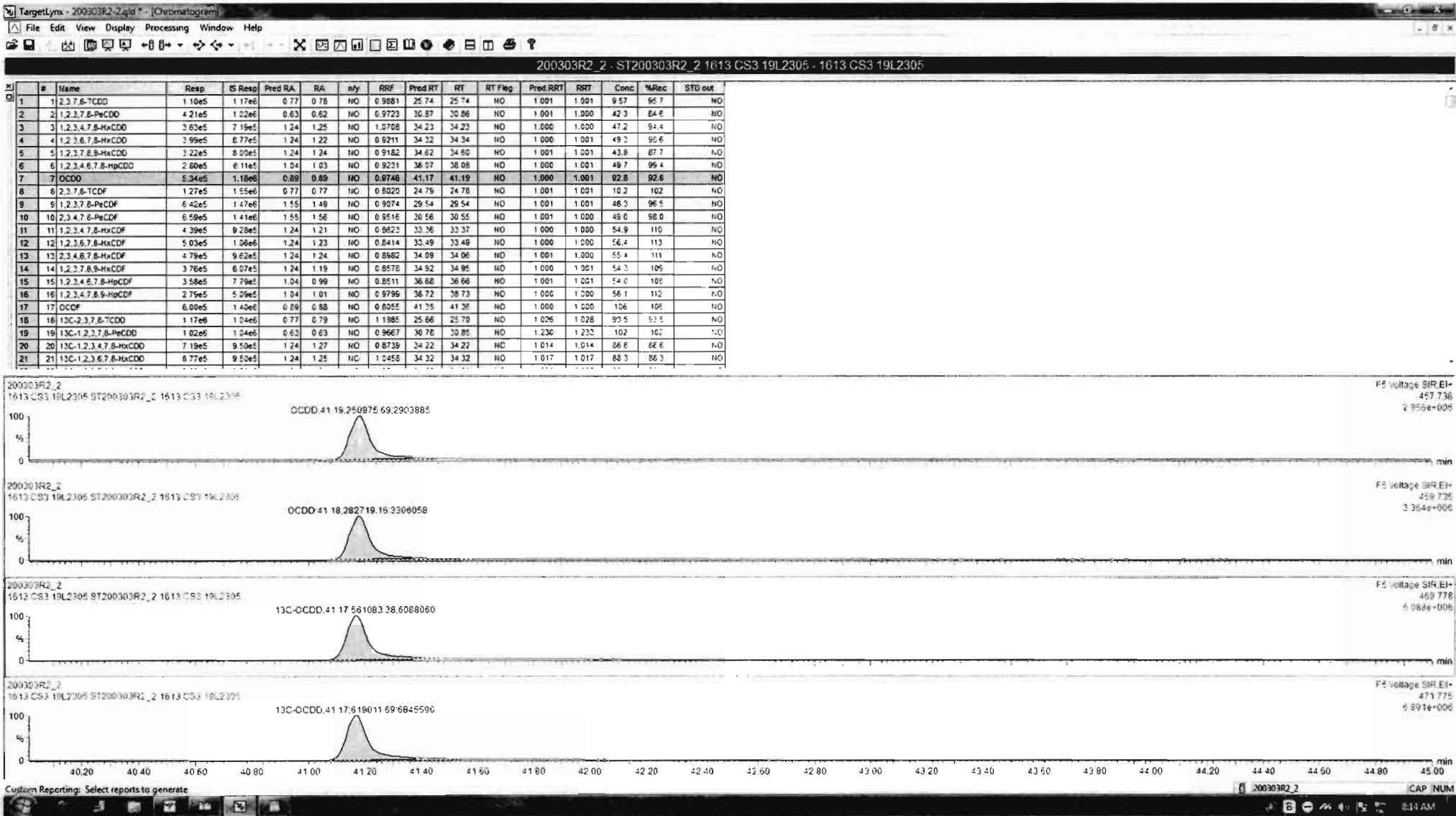


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Last Altered: Wednesday, March 04, 2020 08:16:55 Pacific Standard Time  
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Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305





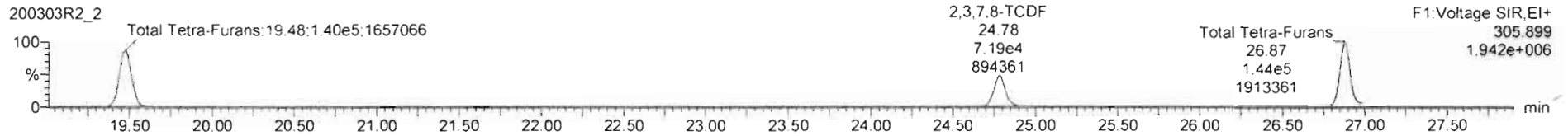
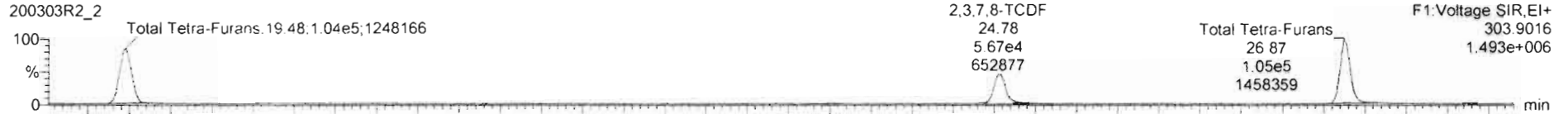


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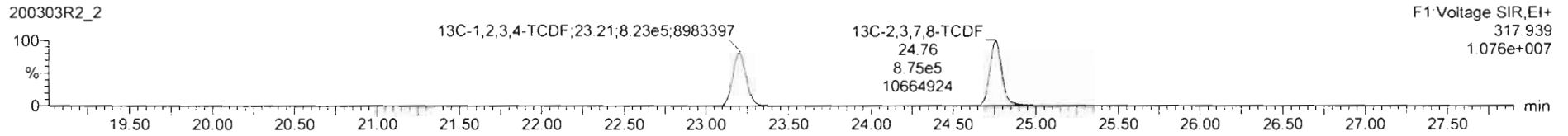
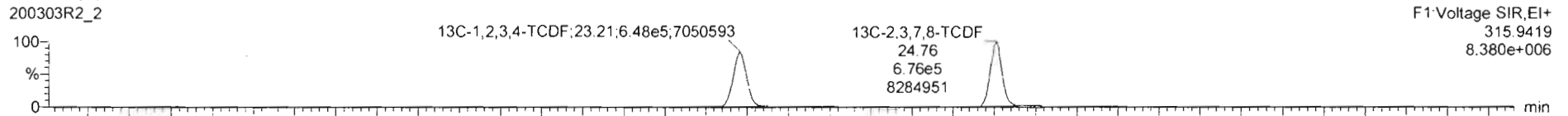
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Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

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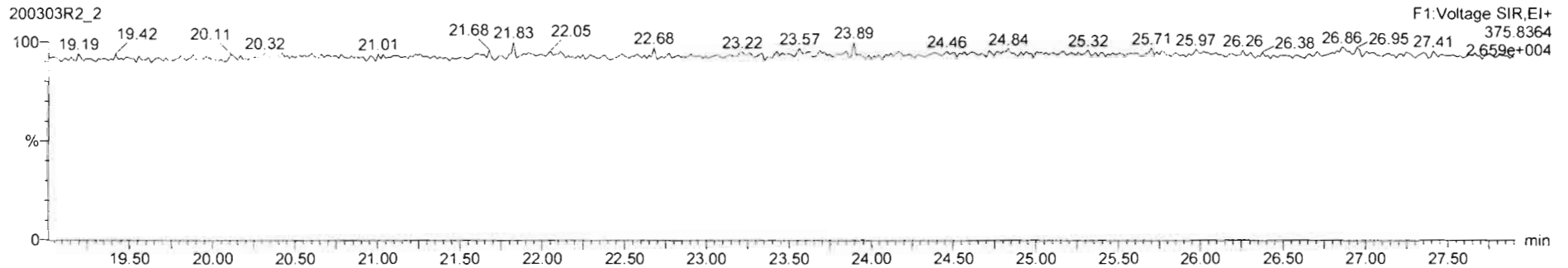
2,3,7,8-TCDF

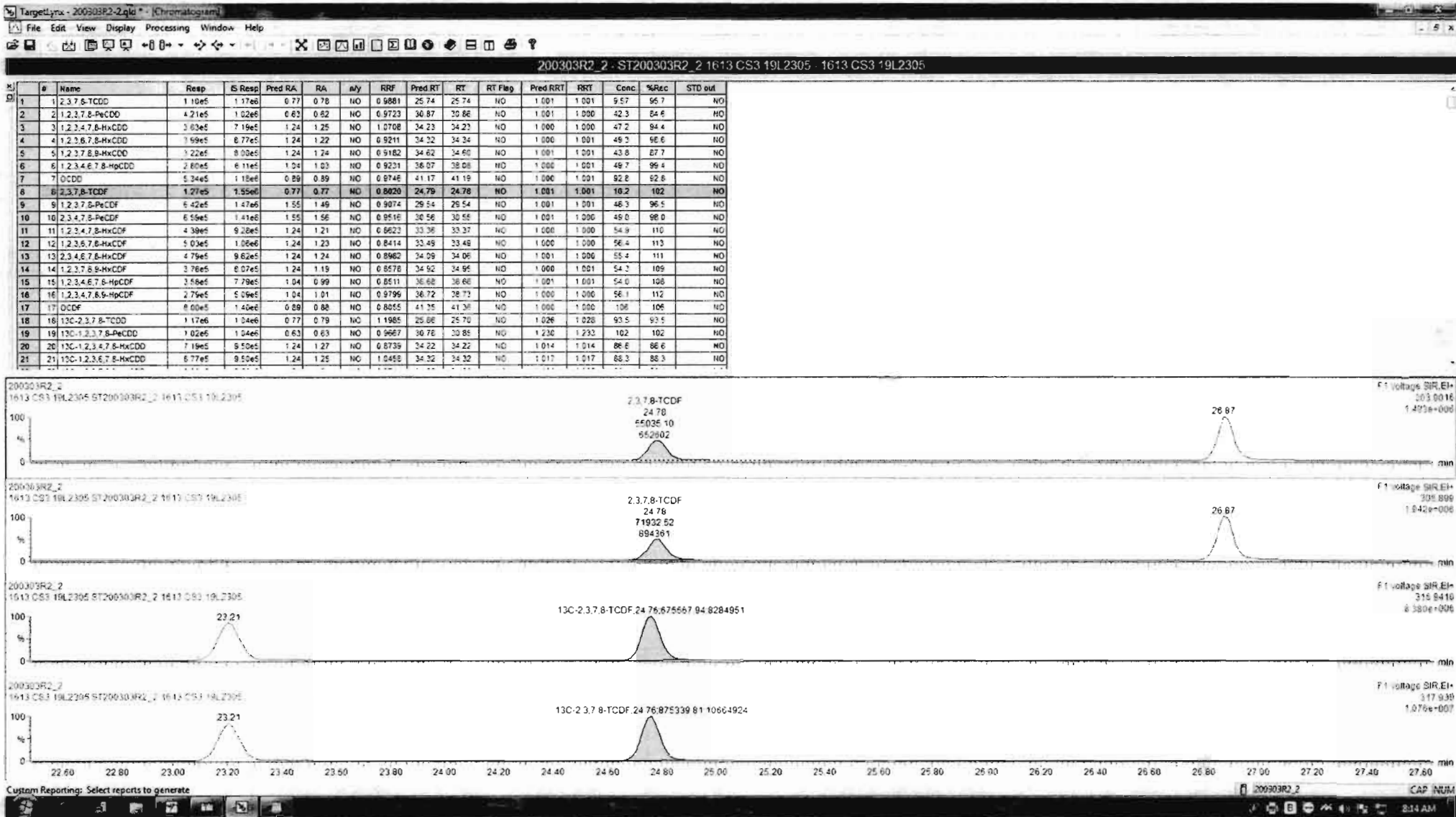


13C-2,3,7,8-TCDF



DPE1





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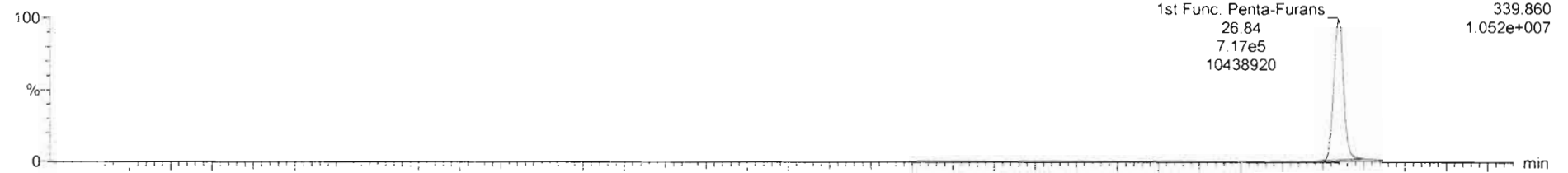
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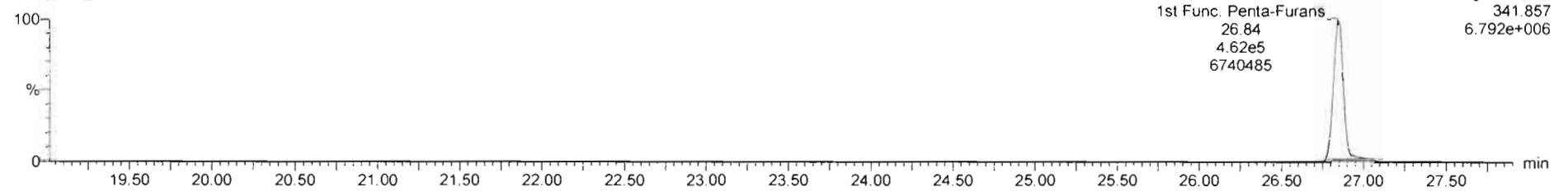
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1st Func. Penta-Furans

200303R2\_2

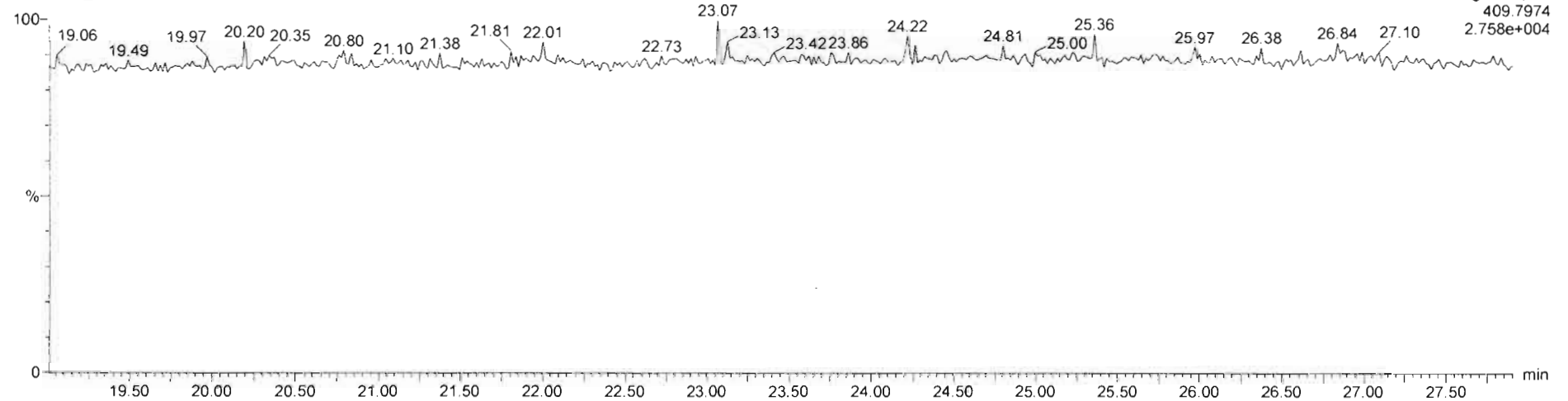


200303R2\_2



DPE6

200303R2\_2

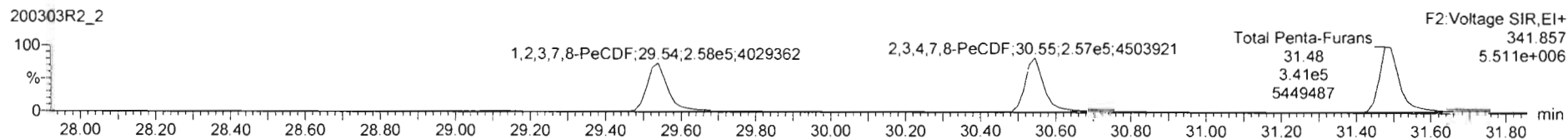
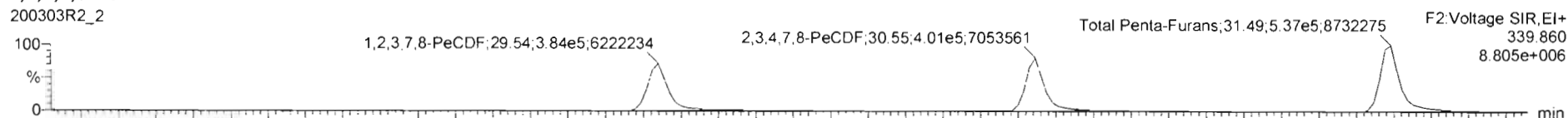


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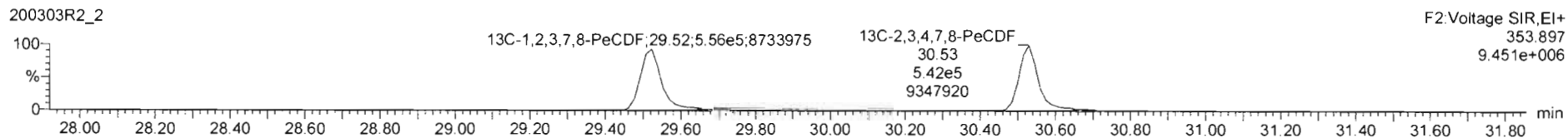
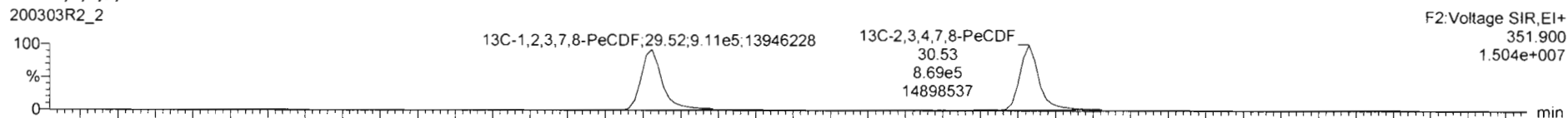
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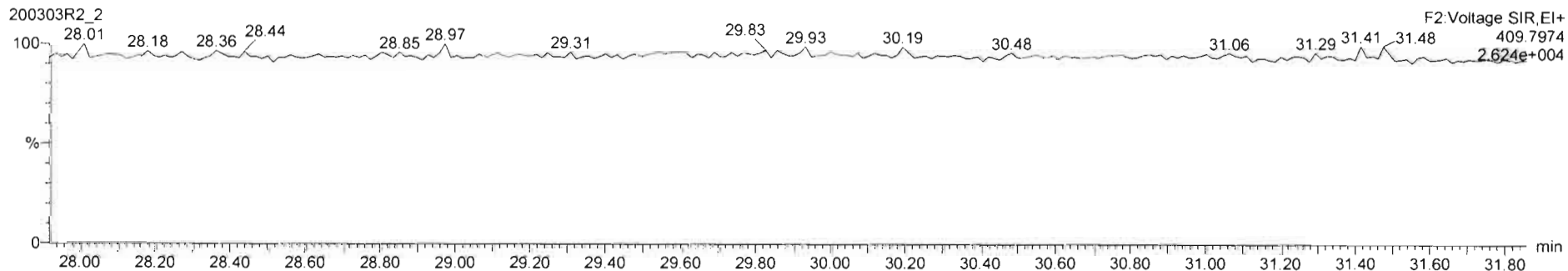
1,2,3,7,8-PeCDF



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



DPE2



Dataset: Untitled

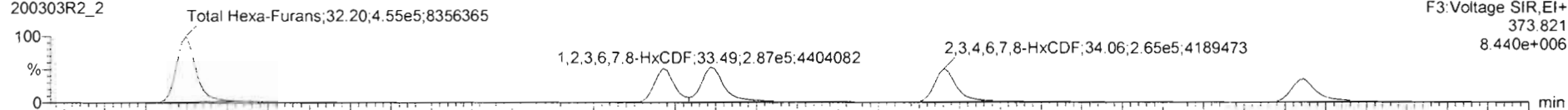
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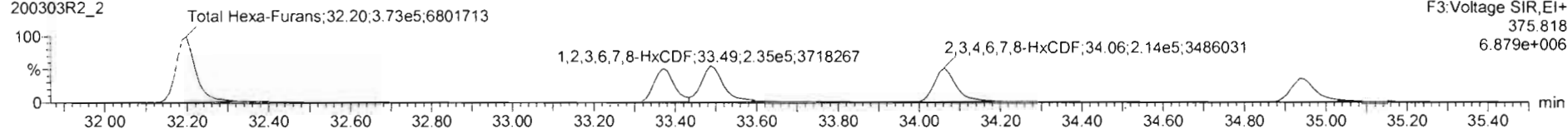
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1,2,3,4,7,8-HxCDF

200303R2\_2

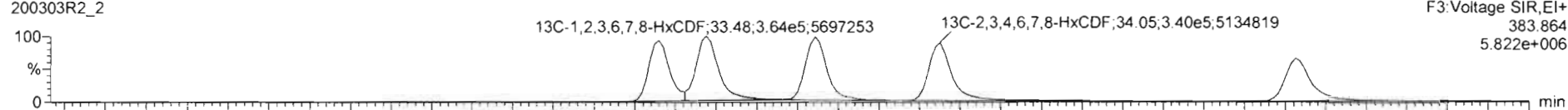


200303R2\_2

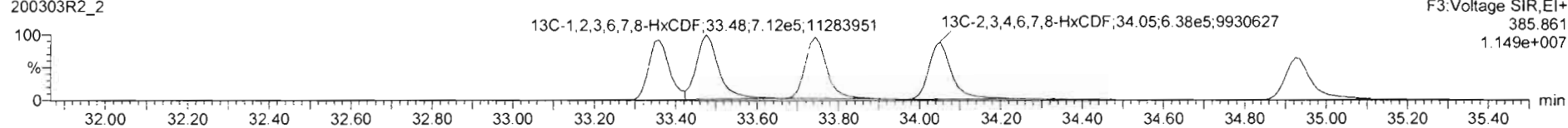


13C-1,2,3,4,7,8-HxCDF

200303R2\_2

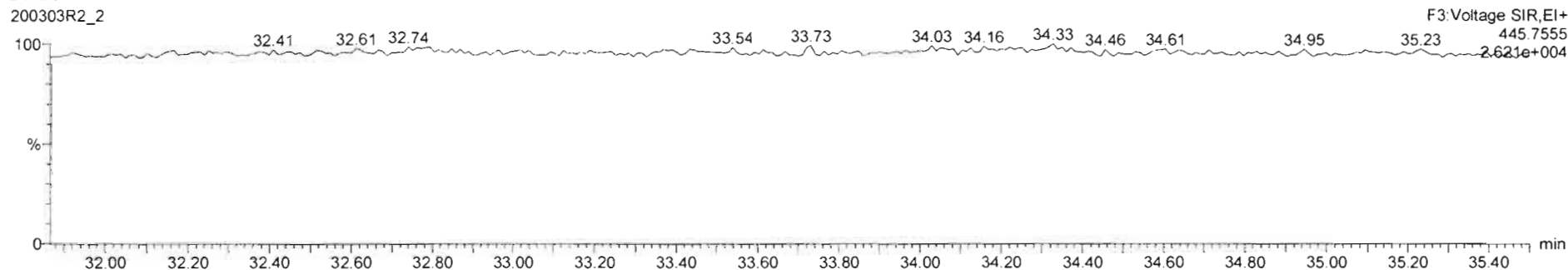


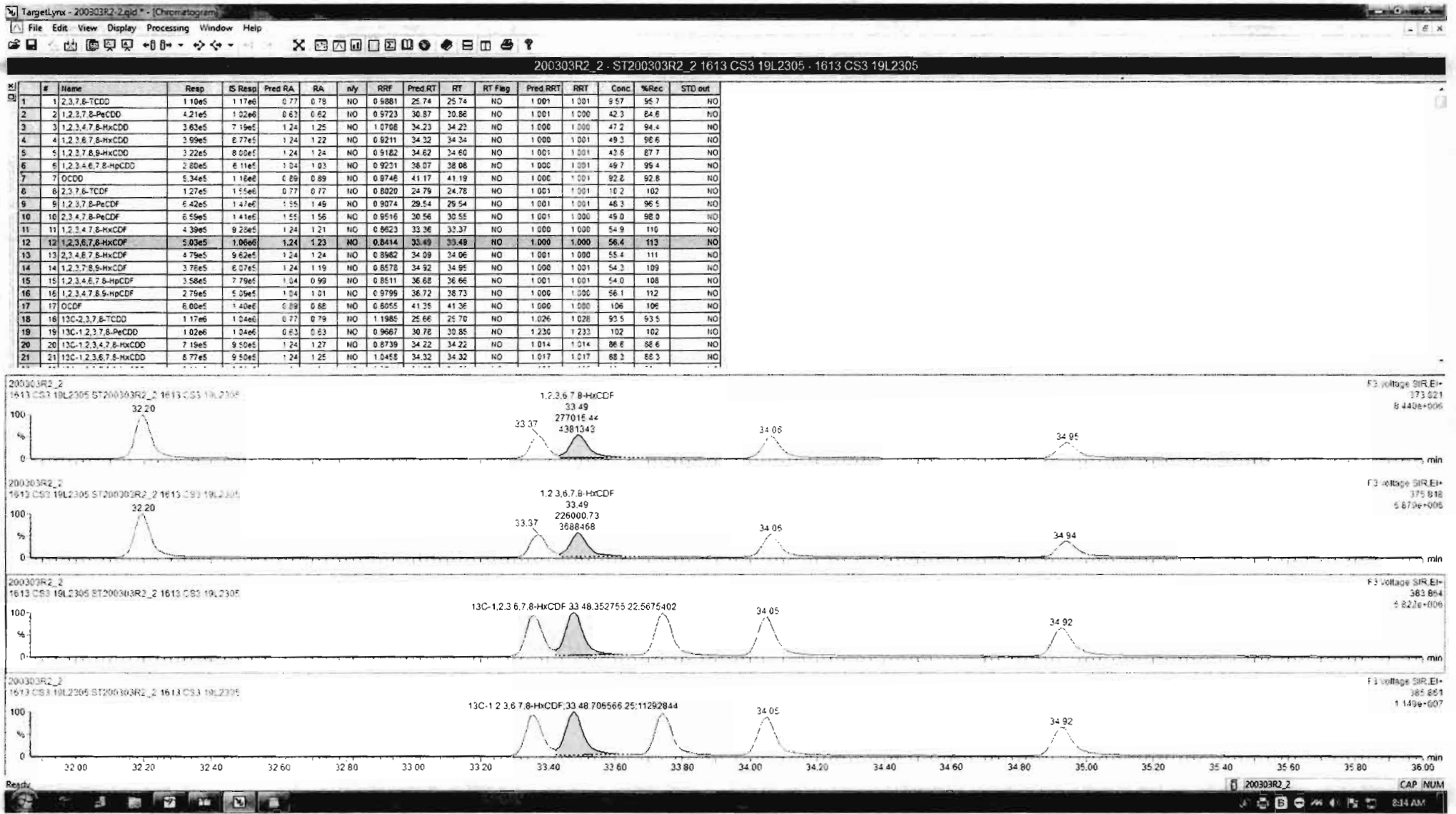
200303R2\_2



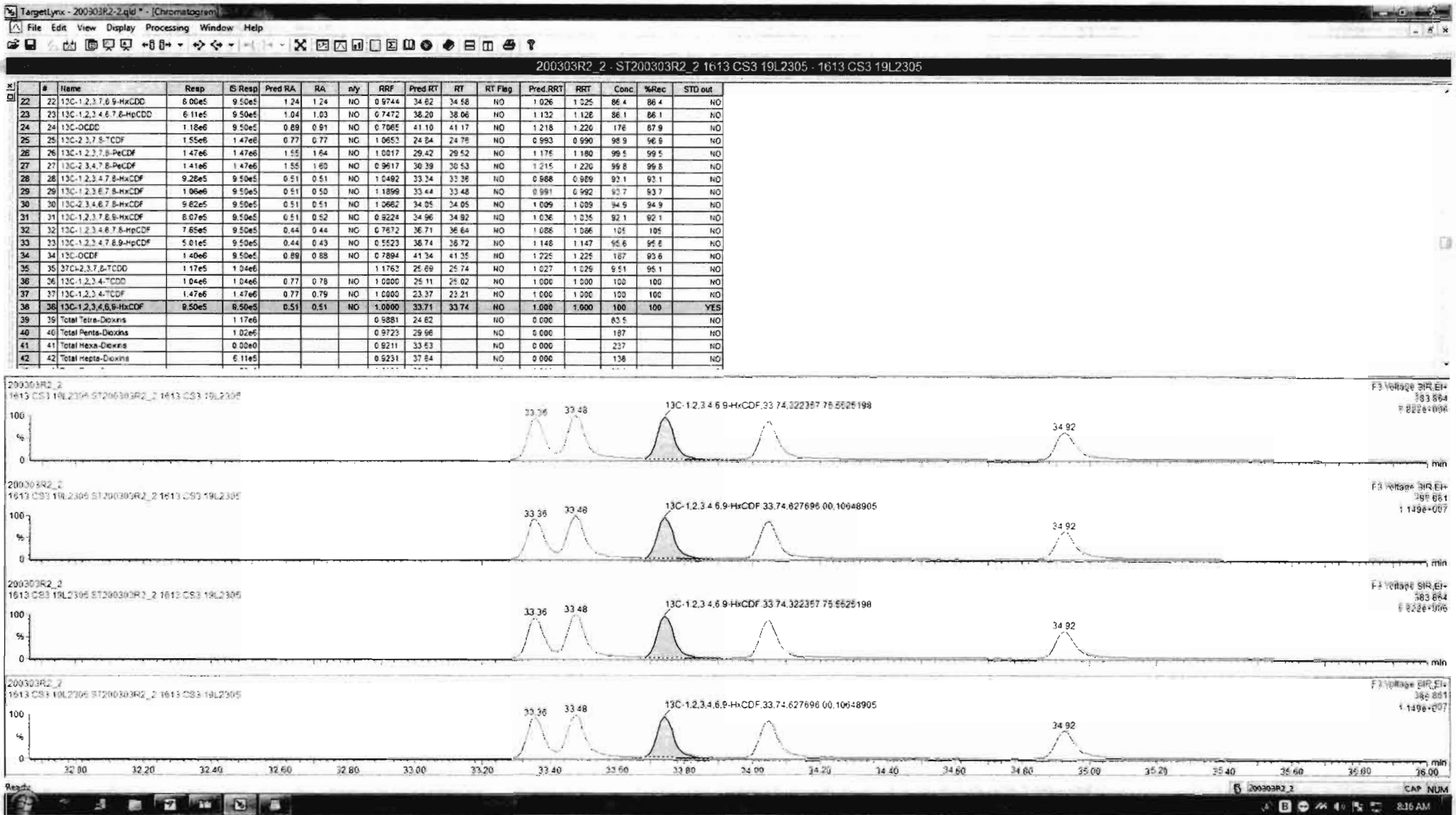
DPE3

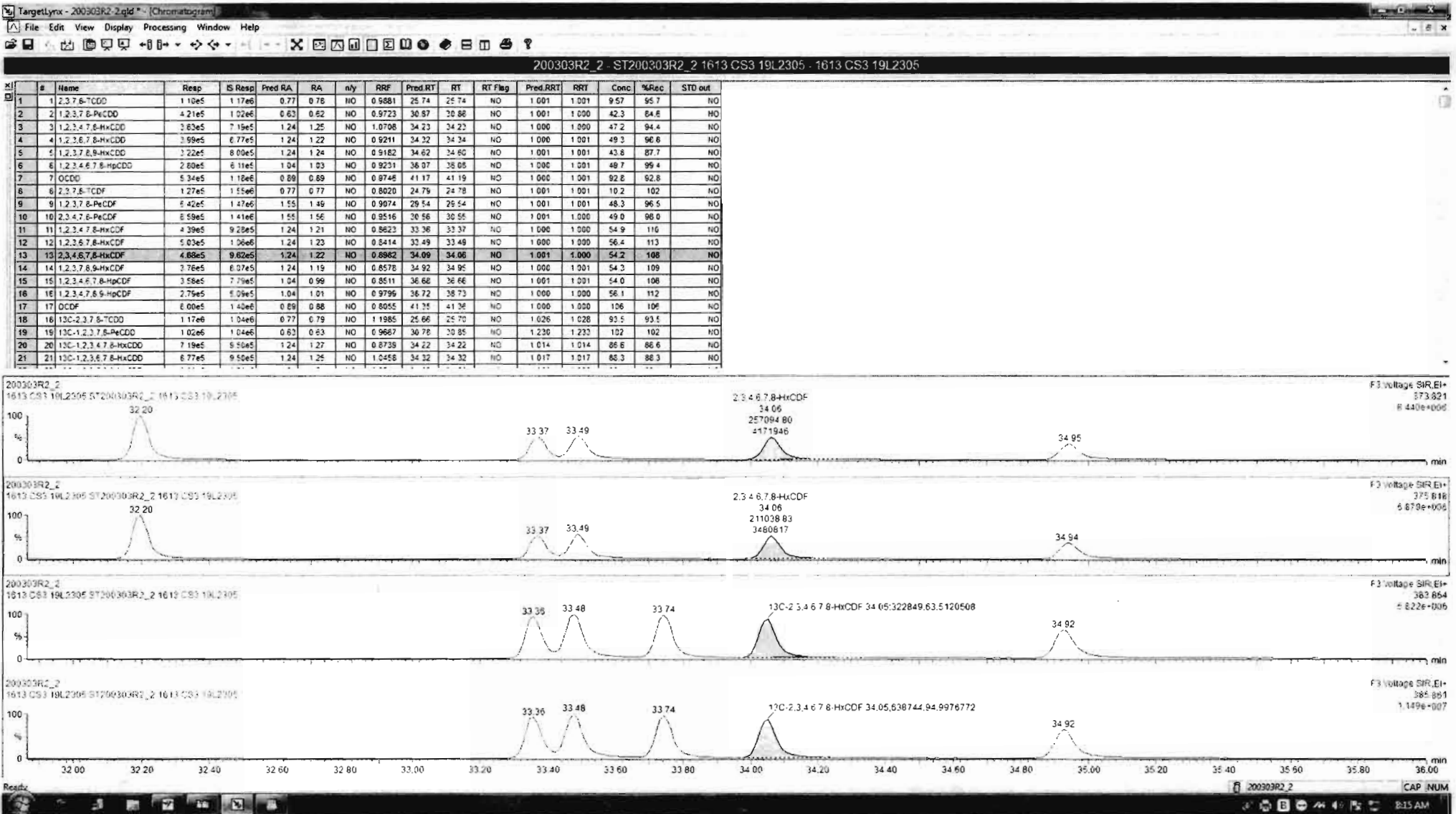
200303R2\_2

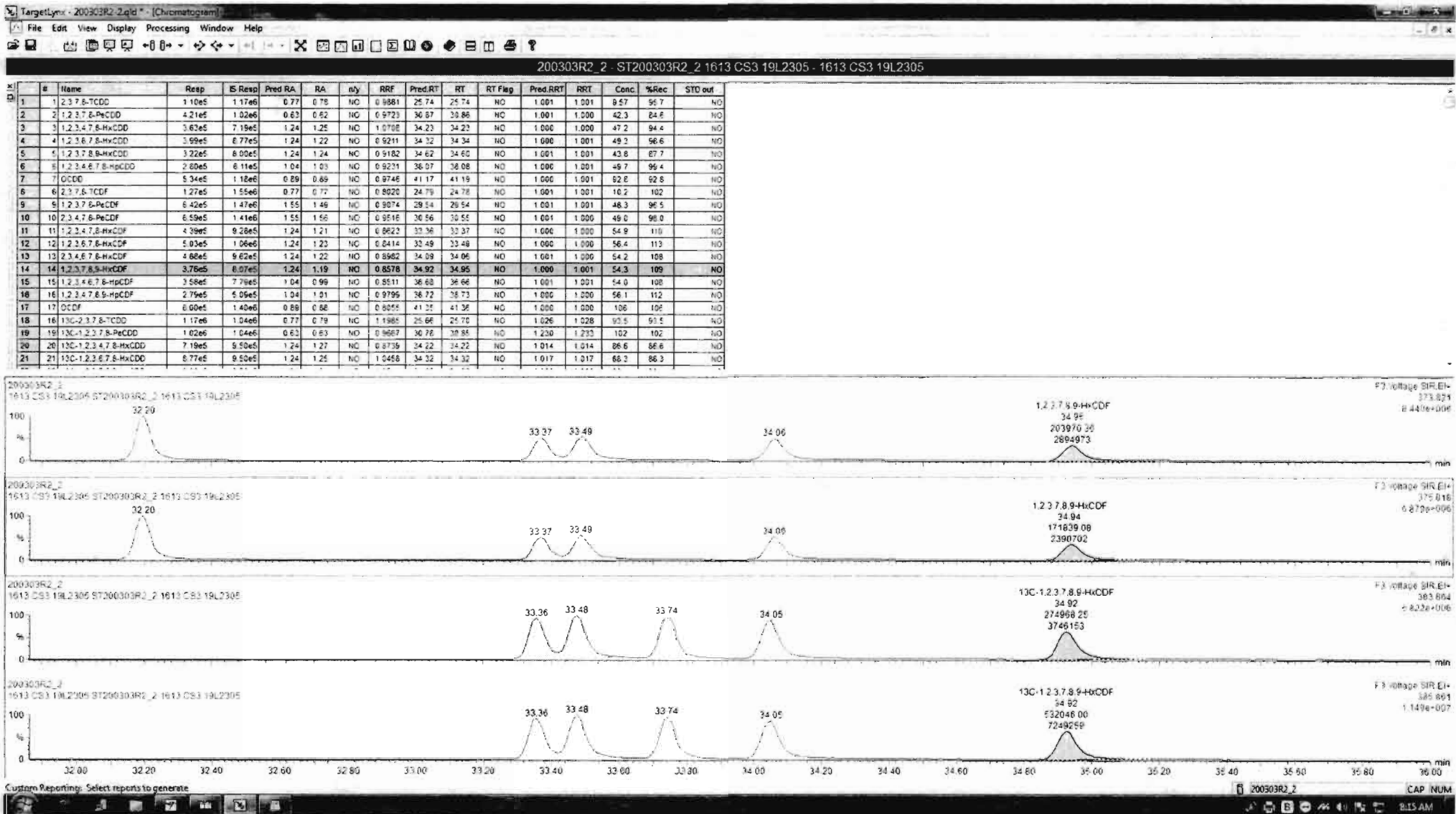












Dataset: Untitled

Last Altered: Wednesday, March 04, 2020 08:16:55 Pacific Standard Time

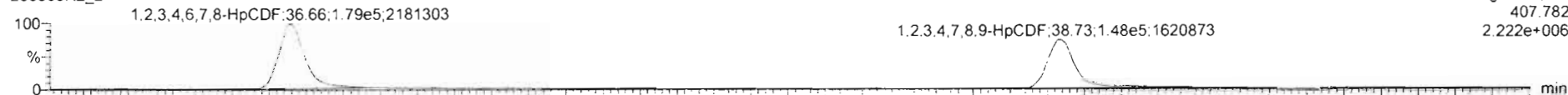
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1,2,3,4,6,7,8-HpCDF

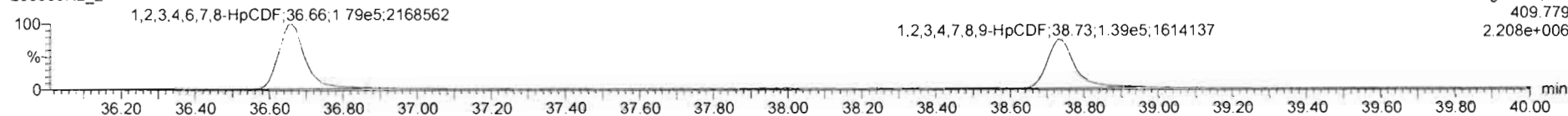
200303R2\_2

F4:Voltage SIR,EI+  
407.782  
2.222e+006



200303R2\_2

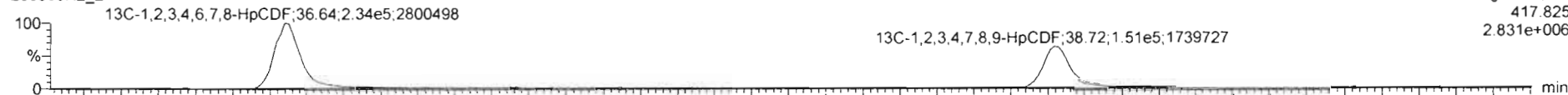
F4:Voltage SIR,EI+  
409.779  
2.208e+006



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

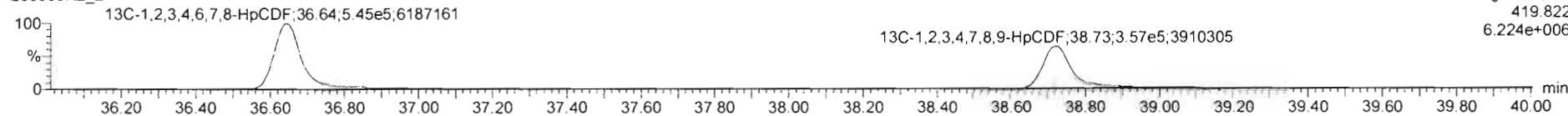
200303R2\_2

F4:Voltage SIR,EI+  
417.825  
2.831e+006



200303R2\_2

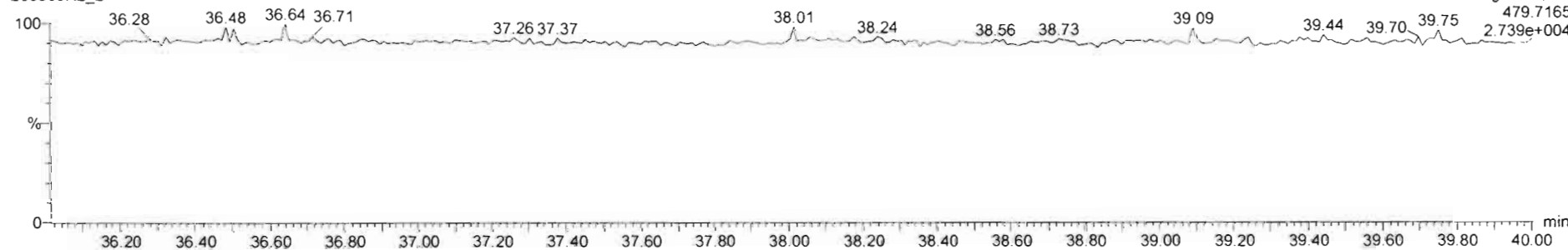
F4:Voltage SIR,EI+  
419.822  
6.224e+006



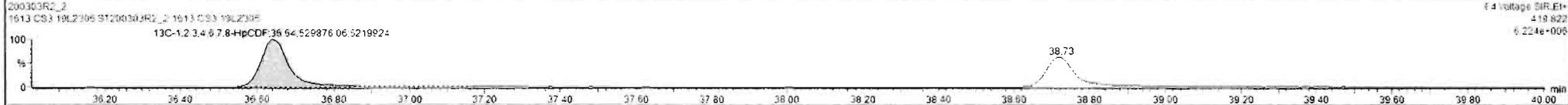
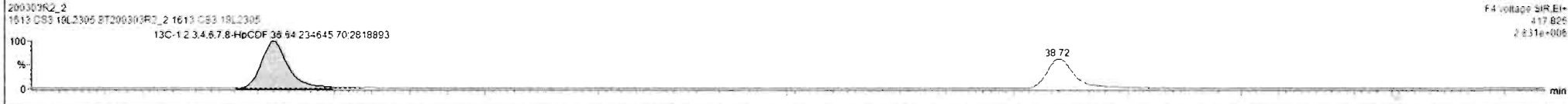
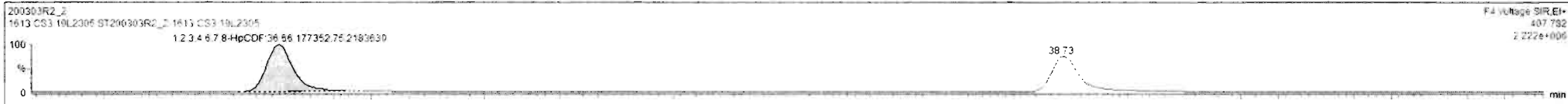
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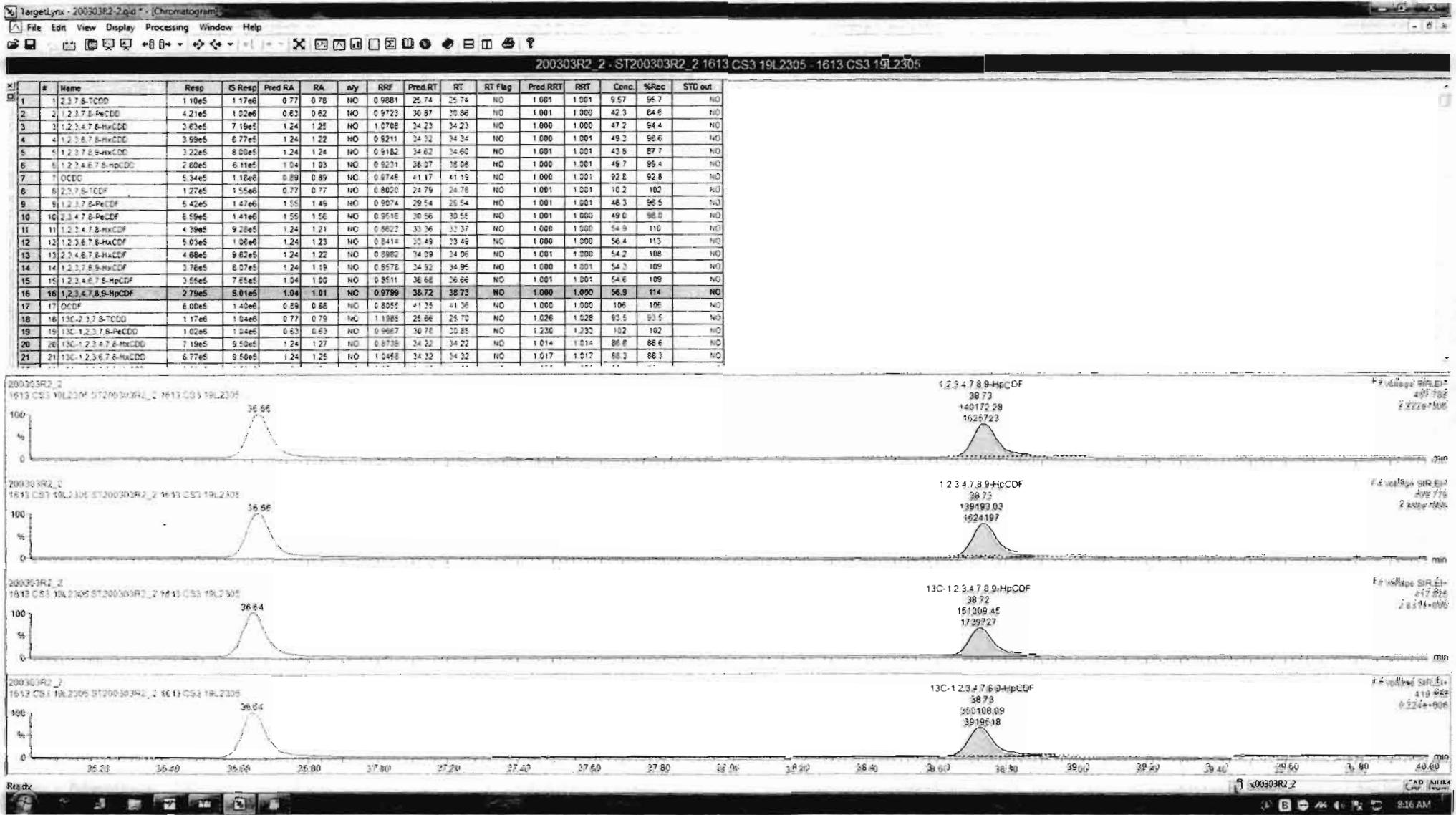
200303R2\_2

F4:Voltage SIR,EI+  
479.7165  
2.739e+004



#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Cnc.	%Rec	STD out
1	1.2,3,7,8-TCDD	1.10e5	1.17e6	0.77	0.78	NO	0.9681	25.74	25.74	NO	1.001	1.001	9.57	95.7	NO
2	1,2,3,7,8-PeCDD	4.21e5	1.02e6	0.63	0.62	NO	0.9723	30.87	30.86	NO	1.001	1.000	42.3	84.6	NO
3	1,2,3,4,7,8-HxCDD	3.63e5	7.19e5	1.24	1.25	NO	1.0708	34.23	34.23	NO	1.000	1.000	47.2	94.4	NO
4	1,2,3,6,7,8-HxCDD	3.99e5	8.77e5	1.24	1.22	NO	0.9211	34.32	34.34	NO	1.000	1.001	49.3	98.6	NO
5	1,2,3,7,8,9-HxCDD	3.22e5	8.00e5	1.24	1.24	NO	0.9182	34.62	34.60	NO	1.001	1.001	43.8	87.7	NO
6	1,2,3,4,6,7,8-HpCDD	2.80e5	6.11e5	1.04	1.03	NO	0.9231	36.07	36.06	NO	1.000	1.001	49.7	99.4	NO
7	OCDD	5.34e5	1.18e6	0.89	0.89	NO	0.9748	41.17	41.19	NO	1.000	1.001	92.8	92.8	NO
8	2,3,7,8-TCDF	1.27e5	1.55e6	0.77	0.77	NO	0.8020	24.79	24.78	NO	1.001	1.001	10.2	102	NO
9	1,2,3,7,8-PeCDF	5.42e5	1.47e6	1.55	1.49	NO	0.9074	29.54	29.54	NO	1.001	1.001	48.3	96.5	NO
10	1,2,3,4,7,8-PeCDF	6.59e5	1.41e6	1.55	1.56	NO	0.9516	30.56	30.55	NO	1.001	1.000	49.0	98.0	NO
11	1,2,3,4,7,8-HxCDF	4.39e5	9.28e5	1.24	1.21	NO	0.8623	33.36	33.37	NO	1.000	1.000	54.9	110	NO
12	1,2,3,6,7,8-HxCDF	5.03e5	1.06e6	1.24	1.23	NO	0.8414	33.49	33.49	NO	1.000	1.000	56.4	113	NO
13	1,2,3,4,6,7,8-HxCDF	4.68e5	9.62e5	1.24	1.22	NO	0.8982	34.09	34.06	NO	1.001	1.000	54.2	108	NO
14	1,2,3,7,8,9-HxCDF	3.76e5	6.07e5	1.24	1.19	NO	0.8578	34.92	34.95	NO	1.000	1.001	54.3	109	NO
15	1,2,3,4,6,7,8-HpCDF	3.55e5	7.65e5	1.04	1.00	NO	0.8511	36.68	36.66	NO	1.001	1.001	54.6	109	NO
16	1,2,3,4,7,8,9-HpCDF	2.79e5	5.05e5	1.04	1.01	NO	0.9799	36.72	36.73	NO	1.000	1.000	58.1	112	NO
17	OCDF	8.00e5	1.40e6	0.89	0.88	NO	0.8055	41.35	41.36	NO	1.000	1.000	106	106	NO
18	13C-2,3,7,8-TCDD	1.17e6	1.04e6	0.77	0.79	NO	1.1985	25.66	25.70	NO	1.026	1.028	93.5	93.5	NO
19	13C-1,2,3,7,8-PeCDD	1.02e6	1.04e6	0.63	0.63	NO	0.9667	30.76	30.85	NO	1.230	1.230	102	102	NO
20	13C-1,2,3,4,7,8-HxCDD	7.19e5	9.50e5	1.24	1.27	NO	0.8739	34.22	34.22	NO	1.014	1.014	86.6	86.6	NO
21	13C-1,2,3,6,7,8-HxCDD	6.77e5	9.50e5	1.24	1.25	NO	1.0458	34.32	34.32	NO	1.017	1.017	88.3	88.3	NO





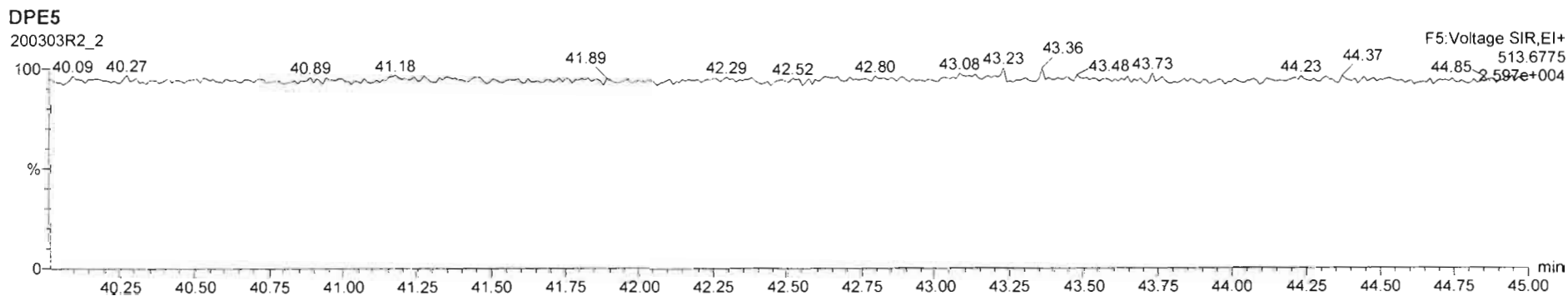
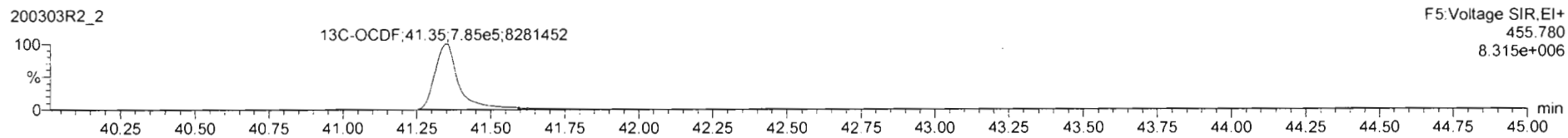
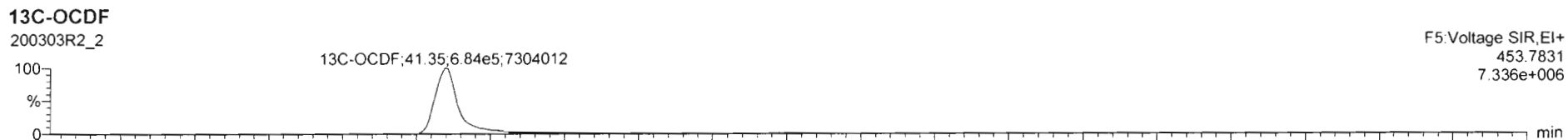
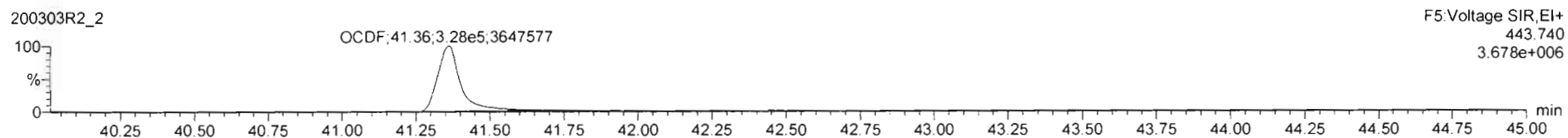
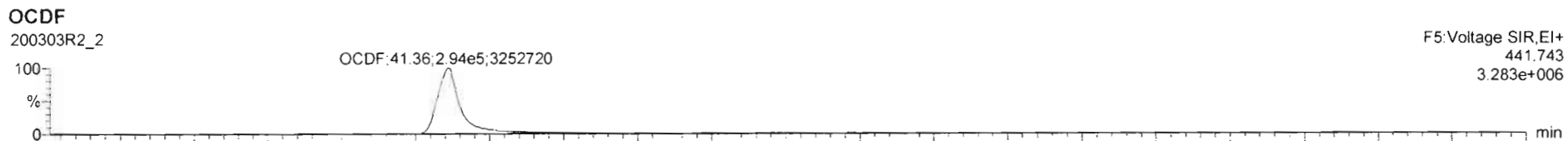


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Last Altered: Wednesday, March 04, 2020 08:16:55 Pacific Standard Time

Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305



200303R2\_2 - ST200303R2\_2 1613 CS3 19L2305 - 1613 CS3 19L2305

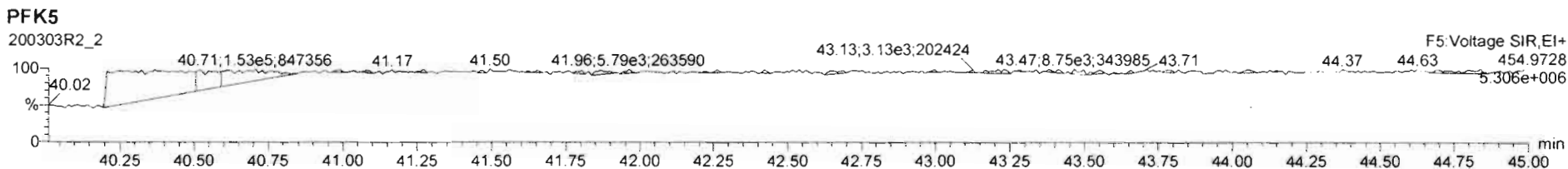
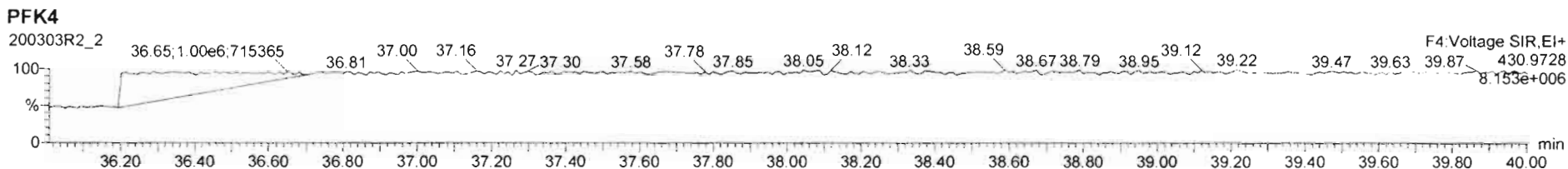
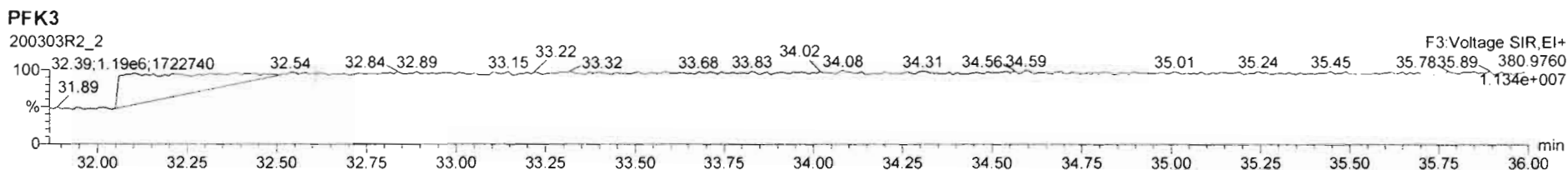
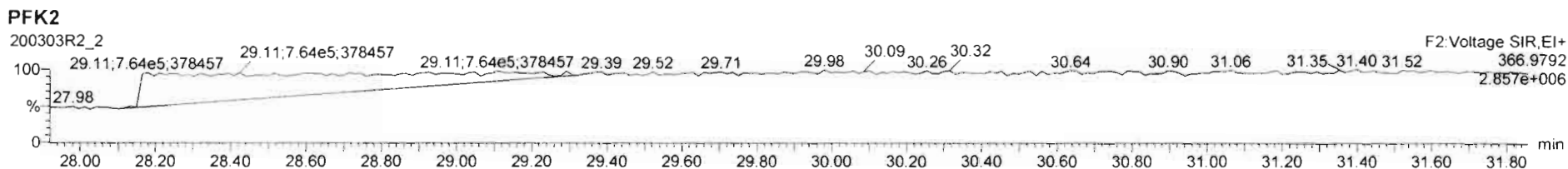
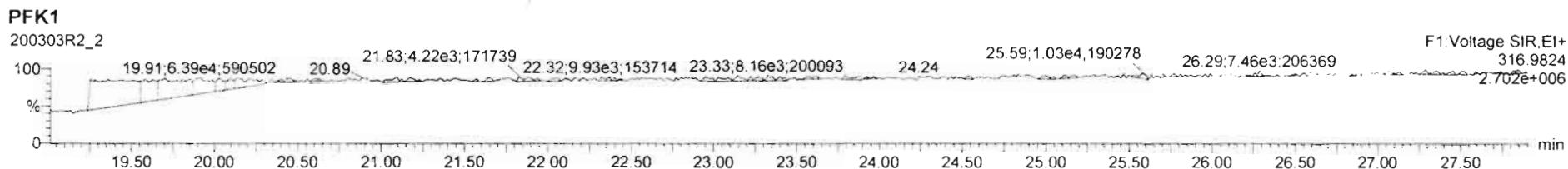
#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc.	%Rec	STD out
1	1,2,3,7,8-TCDD	1.10e5	1.17e6	0.77	0.78	NO	0.9881	25.74	25.74	NO	1.001	1.001	6.57	95.7	NO
2	1,2,3,7,8-PeCDD	4.21e5	1.02e6	0.83	0.82	NO	0.9723	30.87	30.86	NO	1.001	1.000	42.3	84.6	NO
3	1,2,3,4,7,8-HxCDD	3.63e5	7.19e5	1.24	1.25	NO	1.0708	34.23	34.22	NO	1.000	1.000	47.2	94.4	NO
4	1,2,3,6,7,8-HxCDD	3.69e5	6.77e5	1.24	1.22	NO	0.9211	34.32	34.34	NO	1.000	1.001	49.3	98.6	NO
5	1,2,3,7,8,9-HxCDD	3.22e5	6.00e5	1.24	1.24	NO	0.9182	34.62	34.60	NO	1.001	1.001	43.8	87.7	NO
6	1,2,3,4,6,7,8-HpCDD	2.60e5	6.11e5	1.04	1.03	NO	0.9231	38.67	38.68	NO	1.000	1.001	49.7	99.4	NO
7	OCDD	5.34e5	1.18e6	0.89	0.89	NO	0.9746	41.17	41.15	NO	1.000	1.001	92.8	92.8	NO
8	1,2,3,7,8-TCDF	1.27e5	1.55e6	0.77	0.77	NO	0.8020	24.75	24.78	NO	1.001	1.001	16.2	162	NO
9	1,2,3,7,8-PeCDF	6.42e5	1.47e6	1.55	1.46	NO	0.9074	29.54	29.54	NO	1.001	1.001	46.3	96.5	NO
10	1,2,3,4,7,8-PeCDF	6.59e5	1.41e6	1.55	1.56	NO	0.9518	30.56	30.55	NO	1.001	1.000	49.0	98.0	NO
11	1,2,3,4,7,8-HxCDF	4.39e5	9.28e5	1.24	1.21	NO	0.8623	33.36	33.37	NO	1.000	1.000	54.9	110	NO
12	1,2,3,6,7,8-HxCDF	5.03e5	1.06e6	1.24	1.23	NO	0.8414	33.49	33.48	NO	1.000	1.000	56.4	113	NO
13	1,2,3,4,6,7,8-HxCDF	4.68e5	9.62e5	1.24	1.22	NO	0.8962	34.08	34.06	NO	1.001	1.000	54.2	108	NO
14	1,2,3,7,8,9-HxCDF	3.78e5	8.07e5	1.24	1.19	NO	0.8578	34.82	34.95	NO	1.000	1.001	54.3	109	NO
15	1,2,3,4,6,7,8-HpCDF	3.55e5	7.65e5	1.04	1.00	NO	0.8511	36.68	36.66	NO	1.001	1.001	54.6	109	NO
16	1,2,3,4,7,8,9-HpCDF	2.79e5	5.01e5	1.04	1.01	NO	0.8796	36.72	36.73	NO	1.000	1.000	56.6	114	NO
17	OCDF	6.00e5	1.40e6	0.89	0.88	NO	0.8055	41.35	41.36	NO	1.000	1.000	106	106	NO
18	13C-1,2,3,7,8-TCDD	1.17e6	1.04e6	0.77	0.79	NO	1.1985	25.66	25.70	NO	1.026	1.028	93.5	93.5	NO
19	13C-1,2,3,7,8-PeCDD	1.02e6	1.04e6	0.63	0.63	NO	0.9967	30.78	30.85	NO	1.230	1.232	102	102	NO
20	13C-1,2,3,4,7,8-HxCDD	7.19e5	9.50e5	1.24	1.27	NO	0.8736	34.22	34.22	NO	1.014	1.014	86.6	86.6	NO
21	13C-1,2,3,6,7,8-HxCDD	6.77e5	9.50e5	1.24	1.25	NO	1.0458	34.32	34.32	NO	1.017	1.017	88.3	88.3	NO



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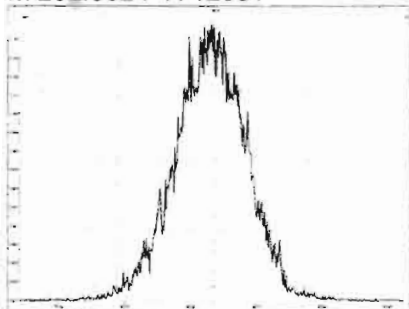
Last Altered: Wednesday, March 04, 2020 08:16:55 Pacific Standard Time  
Printed: Wednesday, March 04, 2020 08:17:26 Pacific Standard Time

Name: 200303R2\_2, Date: 03-Mar-2020, Time: 14:34:40, ID: ST200303R2\_2 1613 CS3 19L2305, Description: 1613 CS3 19L2305

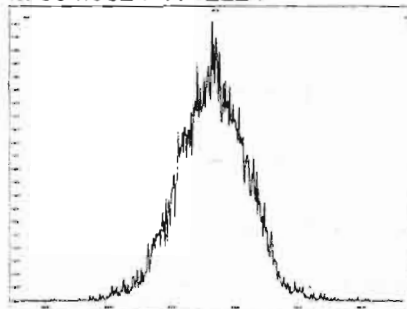


Printed: Wednesday, March 04, 2020 02:37:49 Pacific Standard Time

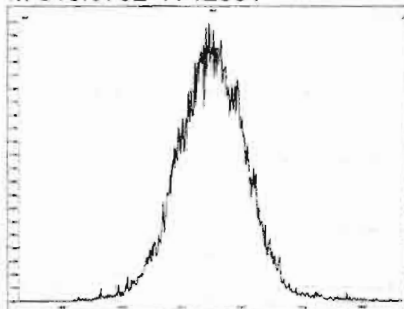
M 292.9824 R 12001



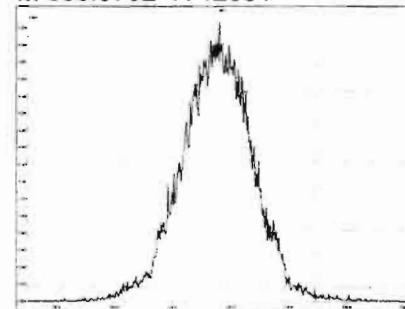
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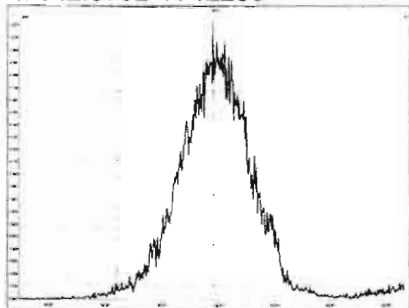
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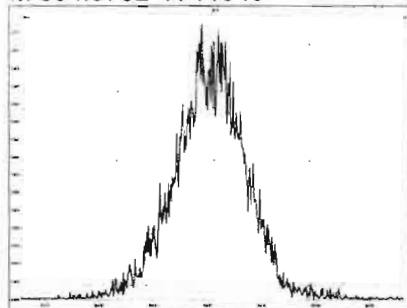
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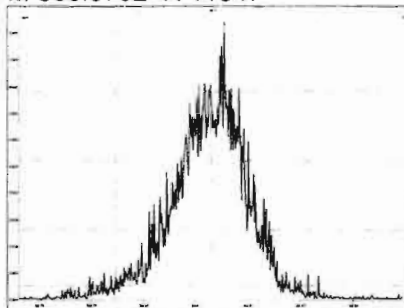
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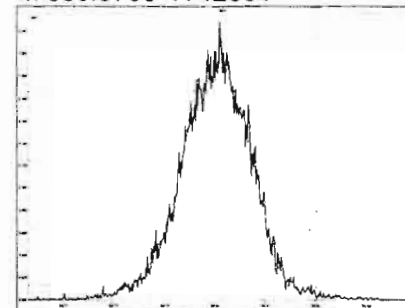
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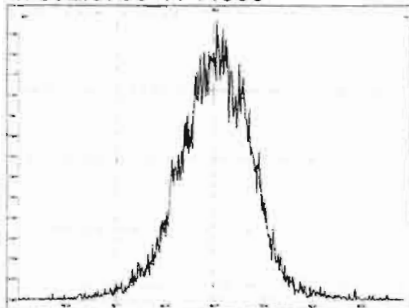
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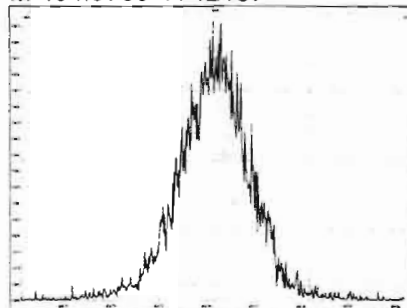
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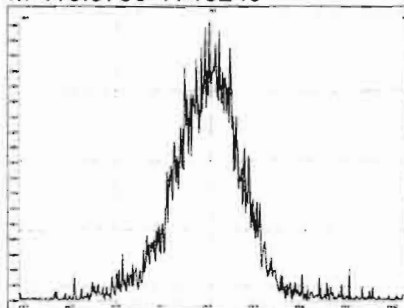
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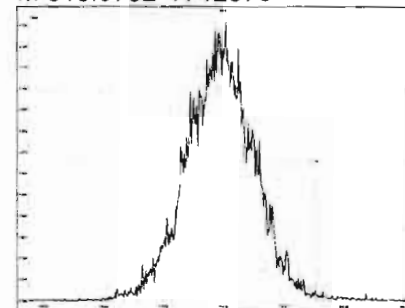
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M 416.9760 R 13240

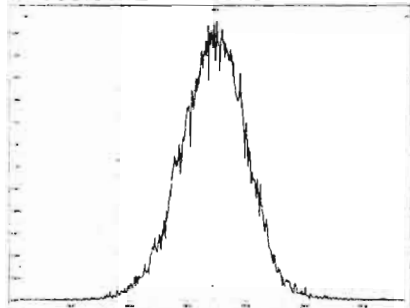


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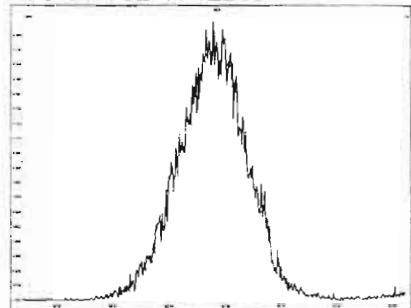


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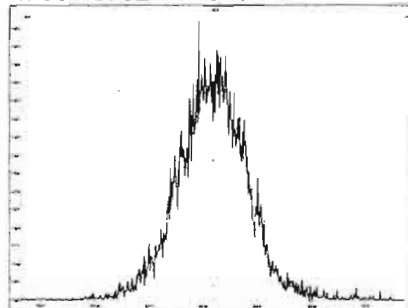
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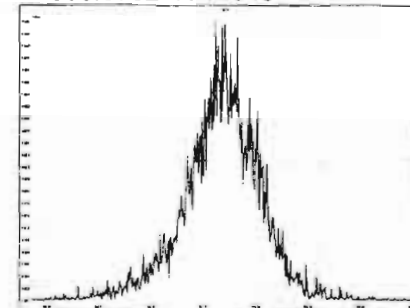
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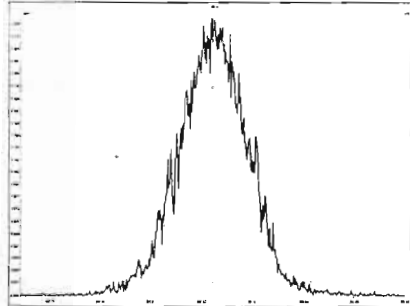
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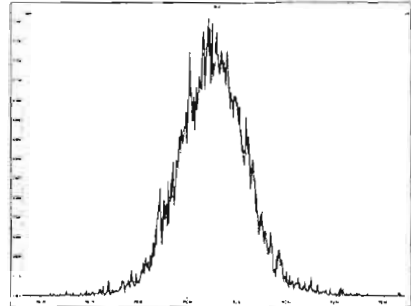
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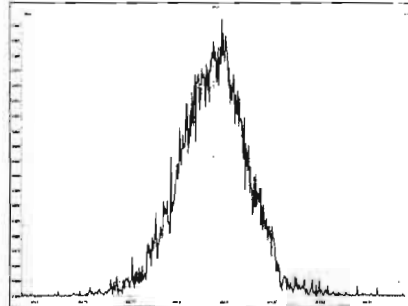
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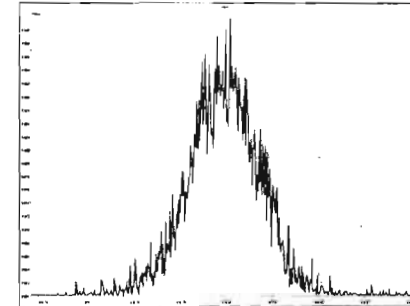
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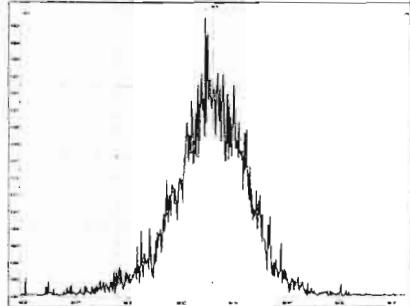
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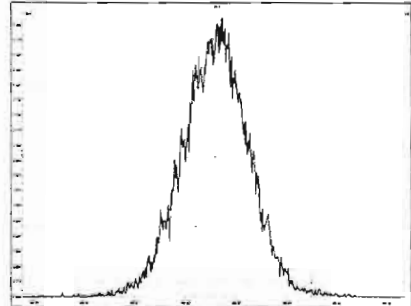
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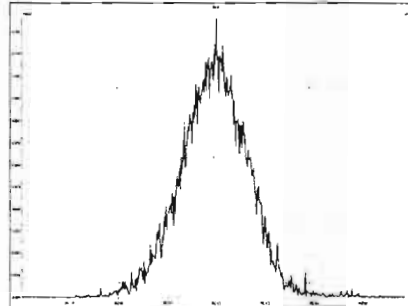
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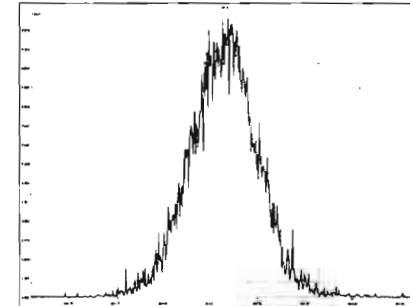
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M 392.9760 R 12698

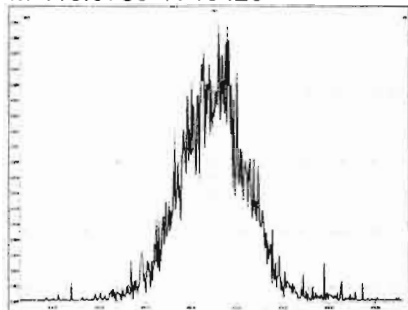


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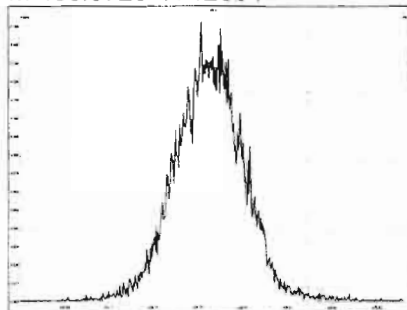


Printed: Wednesday, March 04, 2020 02:37:49 Pacific Standard Time

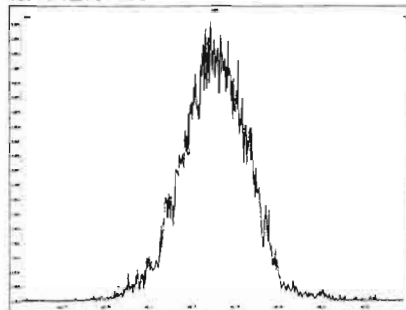
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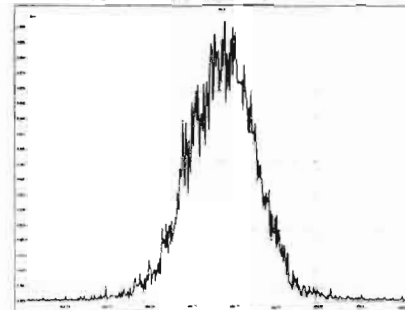
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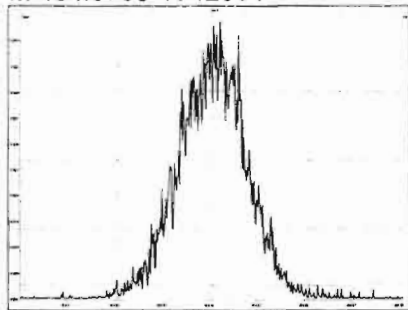
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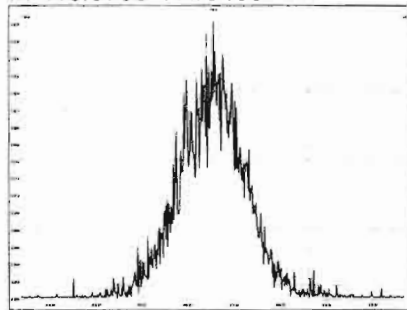
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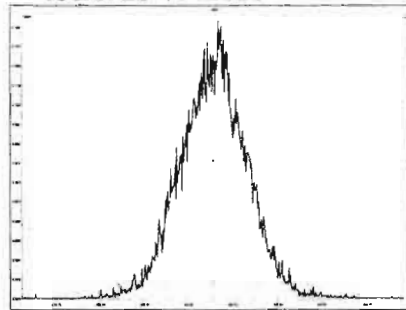
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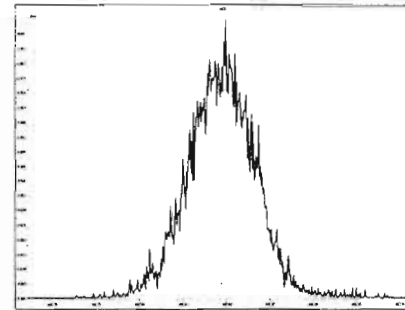
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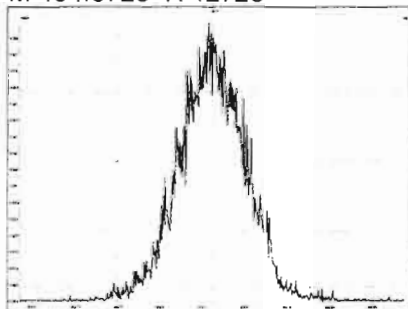
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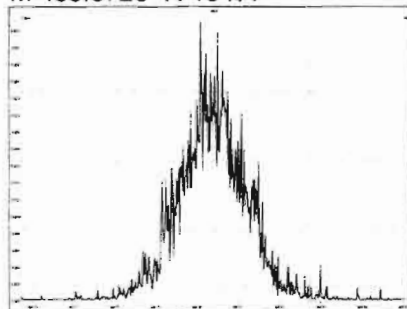
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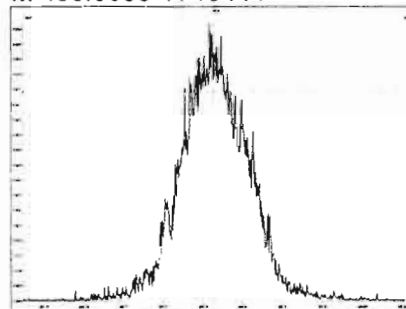
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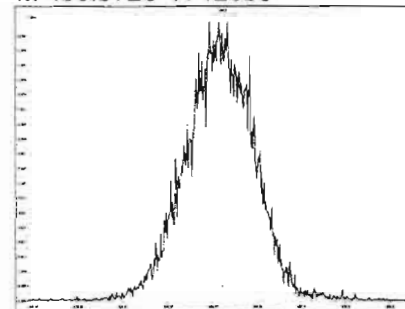
M 466.9728 R 13477



M 480.9696 R 13444



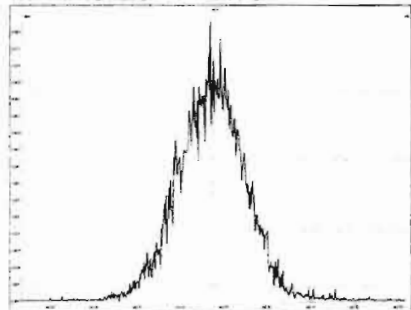
M 430.9728 R 12660



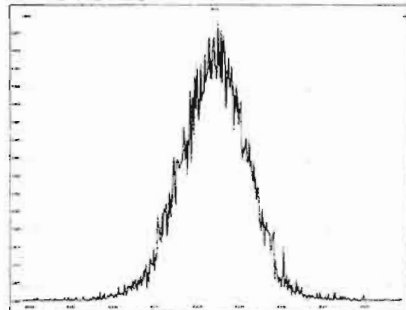


Printed: Wednesday, March 04, 2020 02:37:49 Pacific Standard Time

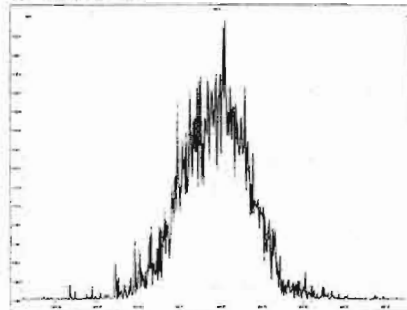
M 442.9728 R 12475



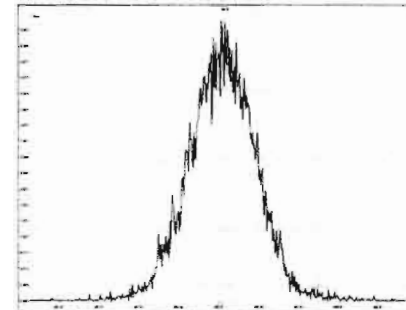
M 454.9728 R 13134



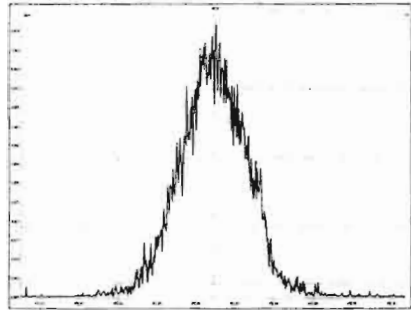
M 466.9728 R 14133



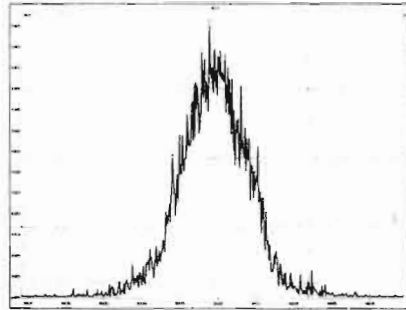
M 480.9696 R 13703



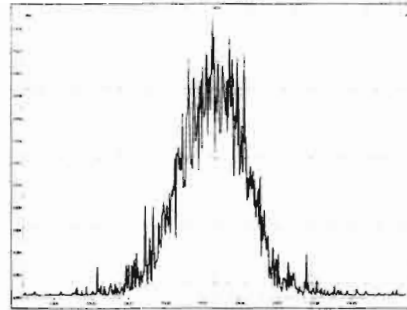
M 492.9696 R 12736



M 504.9696 R 13532



M 516.9697 R 14558



# HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

**Beg. Calibration ID:** ST200305P2-1

**Reviewed By:** CT 03/06/2020

*Initials & Date*

**End Calibration ID:** NA

	<u>Beg.</u>	<u>End</u>
<b>Ion abundance within QC limits?</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<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>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>(ST-Year-Month-Day-VG ID)</b>		
<b>Forms signed and dated?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Correct ICAL referenced?</b>	<u>HZ</u>	<u>J</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 checked="" type="checkbox"/>	<input type="checkbox"/>
- <b>Bottle position verified?</b>	<u>HZ</u>	<u>HZ</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 checked="" type="checkbox"/>
<b><u>8280 CS1 End Standard:</u></b>		
- <b>Ratios within limits, S/N &lt;2.5:1, CS1 within 12 hours</b>		<input checked="" type="checkbox"/>

**Comments:**

Ⓟ Some masses under 10K

Dataset: U:\VG12.PRO\Results\200305R2\200305R2-1.qld

Last Altered: Thursday, March 05, 2020 11:41:50 AM Pacific Standard Time

Printed: Thursday, March 05, 2020 11:42:26 AM Pacific Standard Time

GRB 03/05/2020

CT 03/06/2020

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	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	1.55e5	1.63e6	0.78	NO	0.988	25.75	25.74	NO	1.001	1.001	9.6626	96.6	NO
2	2 1,2,3,7,8-PeCDD	5.28e5	1.19e6	0.64	NO	0.972	30.92	30.91	NO	1.001	1.000	45.704	91.4	NO
3	3 1,2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	NO	1.07	34.30	34.30	NO	1.000	1.000	49.319	98.6	NO
4	4 1,2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	NO	0.921	34.39	34.40	NO	1.000	1.000	51.417	103	NO
5	5 1,2,3,7,8,9-HxCDD	4.62e5	9.87e5	1.23	NO	0.918	34.69	34.67	NO	1.001	1.000	51.046	102	NO
6	6 1,2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.03	NO	0.923	38.12	38.12	NO	1.000	1.000	51.813	104	NO
7	7 OCDD	6.13e5	1.22e6	0.88	NO	0.975	41.23	41.24	NO	1.000	1.000	103.21	103	NO
8	8 2,3,7,8-TCDF	1.99e5	2.25e6	0.77	NO	0.802	24.77	24.78	NO	1.001	1.001	11.011	110	NO
9	9 1,2,3,7,8-PeCDF	8.12e5	1.74e6	1.54	NO	0.907	29.59	29.58	NO	1.001	1.001	51.426	103	NO
10	10 2,3,4,7,8-PeCDF	8.24e5	1.70e6	1.55	NO	0.952	30.61	30.59	NO	1.001	1.000	50.954	102	NO
11	11 1,2,3,4,7,8-HxCDF	5.76e5	1.20e6	1.23	NO	0.862	33.43	33.44	NO	1.000	1.000	55.494	111	NO
12	12 1,2,3,6,7,8-HxCDF	6.36e5	1.33e6	1.22	NO	0.841	33.56	33.56	NO	1.000	1.000	56.650	113	NO
13	13 2,3,4,6,7,8-HxCDF	6.17e5	1.23e6	1.22	NO	0.898	34.15	34.14	NO	1.001	1.001	55.845	112	NO
14	14 1,2,3,7,8,9-HxCDF	4.72e5	9.93e5	1.24	NO	0.858	35.00	35.01	NO	1.000	1.000	55.413	111	NO
15	15 1,2,3,4,6,7,8-HpCDF	4.34e5	9.31e5	1.02	NO	0.851	36.74	36.71	NO	1.001	1.000	54.832	110	NO
16	16 1,2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.00	NO	0.980	38.78	38.79	NO	1.000	1.000	57.817	116	NO
17	17 OCDF	6.92e5	1.52e6	0.88	NO	0.806	41.41	41.42	NO	1.000	1.000	112.93	113	NO
18	18 13C-2,3,7,8-TCDD	1.63e6	1.37e6	0.78	NO	1.20	25.66	25.72	NO	1.026	1.028	99.274	99.3	NO
19	19 13C-1,2,3,7,8-PeCDD	1.19e6	1.37e6	0.63	NO	0.967	30.78	30.90	NO	1.230	1.235	90.011	90.0	NO
20	20 13C-1,2,3,4,7,8-HxCDD	8.73e5	1.17e6	1.28	NO	0.874	34.29	34.28	NO	1.014	1.014	85.305	85.3	NO
21	21 13C-1,2,3,6,7,8-HxCDD	1.05e6	1.17e6	1.27	NO	1.05	34.39	34.39	NO	1.017	1.017	86.004	86.0	NO
22	22 13C-1,2,3,7,8,9-HxCDD	9.87e5	1.17e6	1.23	NO	0.974	34.70	34.66	NO	1.026	1.025	86.459	86.5	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	6.92e5	1.17e6	1.07	NO	0.747	38.28	38.11	NO	1.132	1.127	79.058	79.1	NO
24	24 13C-OCDD	1.22e6	1.17e6	0.92	NO	0.707	41.19	41.23	NO	1.218	1.219	147.38	73.7	NO
25	25 13C-2,3,7,8-TCDF	2.25e6	2.10e6	0.78	NO	1.07	24.84	24.75	NO	0.993	0.989	100.52	101	NO
26	26 13C-1,2,3,7,8-PeCDF	1.74e6	2.10e6	1.57	NO	1.00	29.42	29.57	NO	1.176	1.182	82.698	82.7	NO
27	27 13C-2,3,4,7,8-PeCDF	1.70e6	2.10e6	1.60	NO	0.962	30.39	30.58	NO	1.215	1.222	84.072	84.1	NO
28	28 13C-1,2,3,4,7,8-HxCDF	1.20e6	1.17e6	0.52	NO	1.05	33.41	33.43	NO	0.988	0.989	97.993	98.0	NO
29	29 13C-1,2,3,6,7,8-HxCDF	1.33e6	1.17e6	0.52	NO	1.19	33.51	33.55	NO	0.991	0.992	95.754	95.8	NO
30	30 13C-2,3,4,6,7,8-HxCDF	1.23e6	1.17e6	0.52	NO	1.07	34.12	34.12	NO	1.009	1.009	98.434	98.4	NO
31	31 13C-1,2,3,7,8,9-HxCDF	9.93e5	1.17e6	0.53	NO	0.922	35.03	35.00	NO	1.036	1.035	91.909	91.9	NO

Dataset: U:\VG12.PRO\Results\200305R2\200305R2-1.qld

Last Altered: Thursday, March 05, 2020 11:41:50 AM Pacific Standard Time  
Printed: Thursday, March 05, 2020 11:42:26 AM Pacific Standard Time

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
32	13C-1,2,3,4,6,7,8-HpCDF	9.31e5	1.17e6	0.46	NO	0.767	36.79	36.70	NO	1.088	1.085	103.60	104	NO
33	13C-1,2,3,4,7,8,9-HpCDF	5.72e5	1.17e6	0.44	NO	0.552	38.82	38.78	NO	1.148	1.147	88.451	88.5	NO
34	13C-OCDF	1.52e6	1.17e6	0.88	NO	0.789	41.43	41.41	NO	1.225	1.225	164.57	82.3	NO
35	37Cl-2,3,7,8-TCDD	1.56e5	1.37e6			1.18	25.69	25.74	NO	1.027	1.029	9.6988	97.0	NO
36	13C-1,2,3,4-TCDD	1.37e6	1.37e6	0.80	NO	1.00	25.11	25.02	NO	1.000	1.000	100.00	100	NO
37	13C-1,2,3,4-TCDF	2.10e6	2.10e6	0.80	NO	1.00	23.37	23.18	NO	1.000	1.000	100.00	100	NO
38	13C-1,2,3,4,6,9-HxCDF	1.17e6	1.17e6	0.53	NO	1.00	33.71	33.82	NO	1.000	1.000	100.00	100	YES <i>OK</i>
39	Total Tetra-Dioxins		1.63e6			0.988	24.62		NO	0.000		83.414		NO
40	Total Penta-Dioxins		1.19e6			0.972	29.96		NO	0.000		198.12		NO
41	Total Hexa-Dioxins		0.00e0			0.921	33.63		NO	0.000		251.40		NO
42	Total Hepta-Dioxins		6.92e5			0.923	37.64		NO	0.000		140.21		NO
43	Total Tetra-Furans		2.25e6			0.802	23.61		NO	0.000		52.882		NO
44	1st Func. Penta-Furans		0.00e0			0.907	27.09		NO	0.000		91.673		NO
45	Total Penta-Furans		0.00e0			0.907	29.27		NO	0.000		174.65		NO
46	Total Hexa-Furans		0.00e0			0.898	33.56		NO	0.000		323.36		NO
47	Total Hepta-Furans		0.00e0			0.851	37.83		NO	0.000		112.65		NO

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Friday, March 06, 2020 08:44:06 Pacific Standard Time

Printed: Friday, March 06, 2020 08:44:20 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-02-26-20.mdb 26 Feb 2020 10:14:09

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

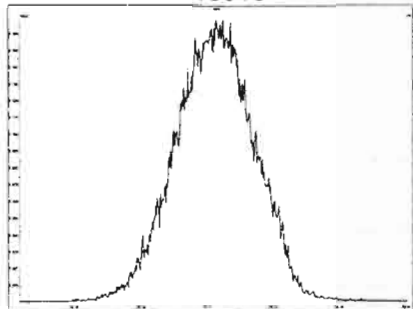
Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	200305R2_1	ST200305R2_1 1613 CS3 19L2305	05-Mar-20	10:40:18
2	200305R2_2	B0B0287-BS1 OPR 10	05-Mar-20	11:31:21
3	200305R2_3	SOLVENT BLANK	05-Mar-20	12:17:32
4	200305R2_4	B0B0287-BLK1 Method Blank 10	05-Mar-20	13:05:17
5	200305R2_5	2000406-01 PDI-014SC-A-04-05-191003 11.9	05-Mar-20	13:52:50
6	200305R2_6	B0B0287-DUP1 Duplicate 11.93	05-Mar-20	14:40:28
7	200305R2_7	2000406-02 PDI-014SC-A-05-06-191003 12.99	05-Mar-20	15:28:10
8	200305R2_8	2000406-03 PDI-014SC-A-06-07-191003 11.11	05-Mar-20	16:15:41
9	200305R2_9	2000406-04 PDI-022SC-A-03-04-191016 12.67	05-Mar-20	17:03:14
10	200305R2_10	2000406-05 PDI-022SC-A-04-05-191016 11.24	05-Mar-20	17:50:56
11	200305R2_11	2000406-06 PDI-022SC-A-05-06-191016 11.06	05-Mar-20	18:38:37
12	200305R2_12	2000406-07 PDI-022SC-A-06-07-191016 11.03	05-Mar-20	19:26:17
13	200305R2_13	2000406-08 PDI-049SC-A-03-04-191015 18.69	05-Mar-20	20:14:00
14	200305R2_14	2000407-01@5X PDI-084SC-A-05-06-191002 ...	05-Mar-20	21:01:41
15	200305R2_15	B0B0291-DUP1@5X Duplicate 18.51	05-Mar-20	21:49:22

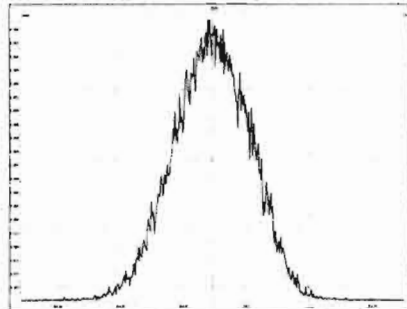
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Thursday, March 05, 2020 10:34:05 Pacific Standard Time

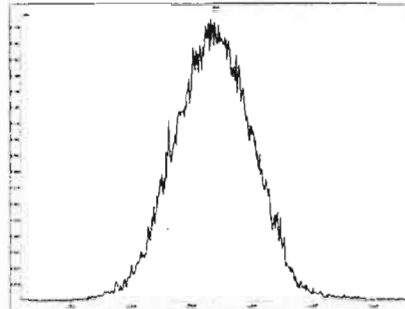
M 292.9824 R 10913



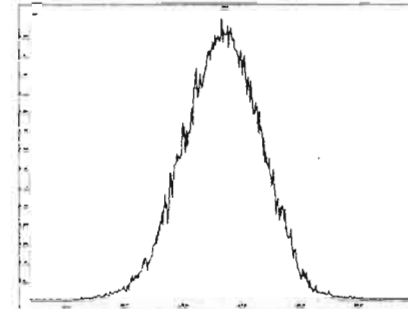
M 304.9824 R 10683



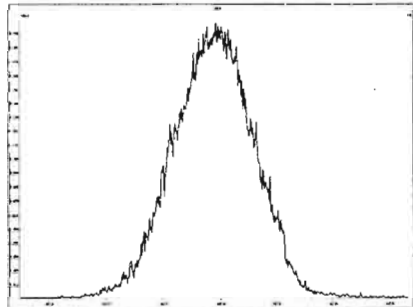
M 318.9792 R 11361



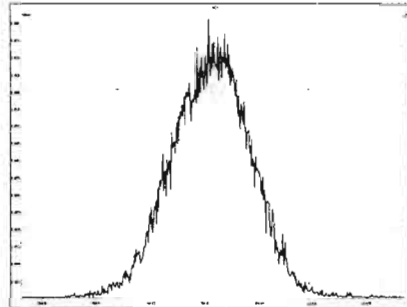
M 330.9792 R 10777



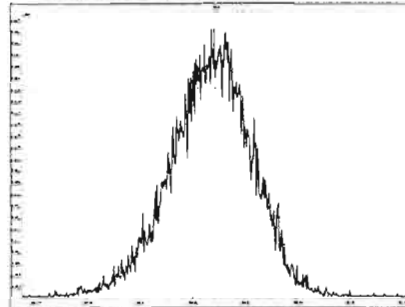
M 342.9792 R 10728



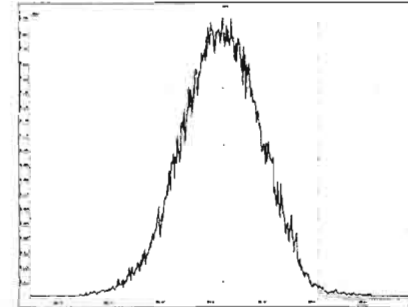
M 354.9792 R 10635



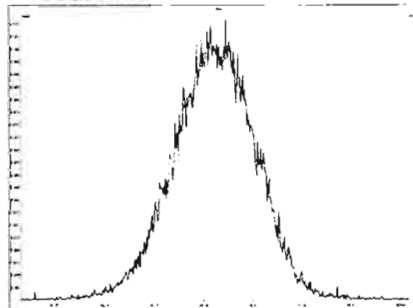
M 366.9792 R 10683



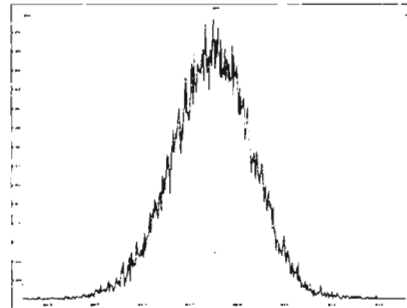
M 380.9760 R 10502



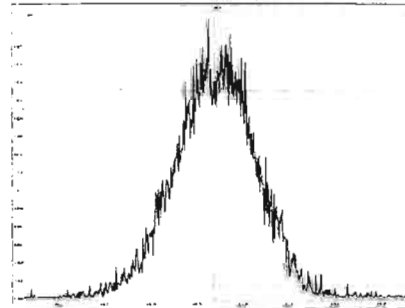
M 392.9760 R 10041



M 404.9760 R 10637



M 416.9760 R 10375

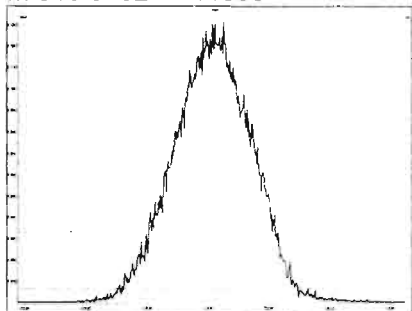




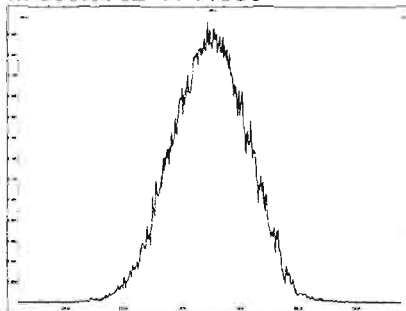
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Thursday, March 05, 2020 10:35:01 Pacific Standard Time

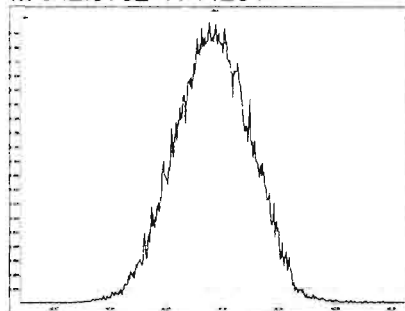
M 318.9792 R 11060



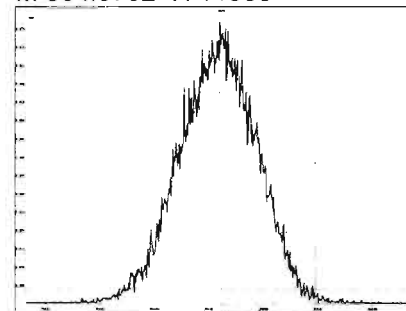
M 330.9792 R 11058



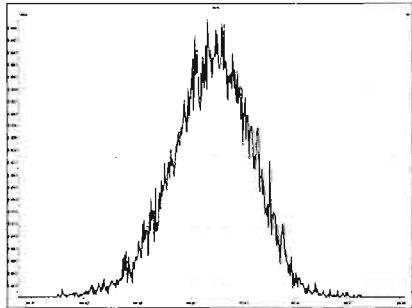
M 342.9792 R 11261



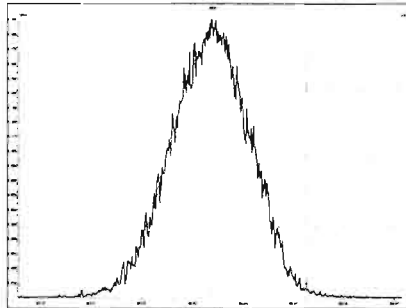
M 354.9792 R 11630



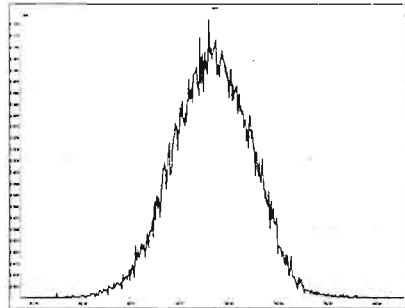
M 366.9792 R 10965



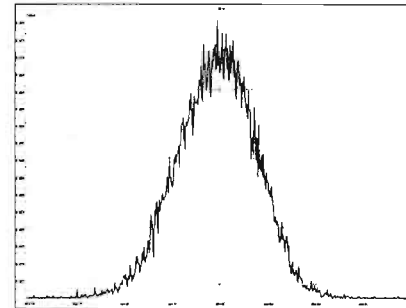
M 380.9760 R 10964



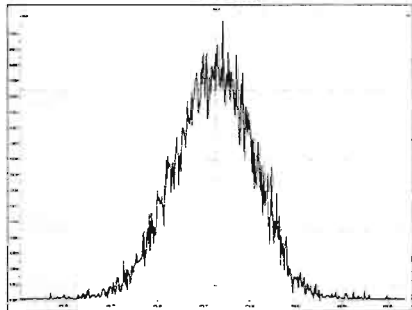
M 392.9760 R 11063



M 404.9760 R 11062



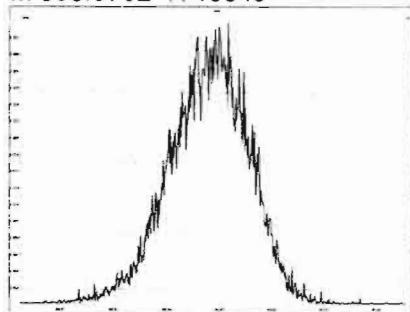
M 416.9760 R 11259



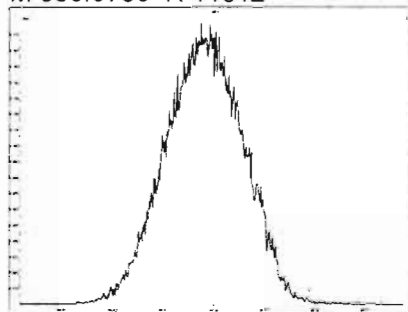
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Thursday, March 05, 2020 10:36:47 Pacific Standard Time

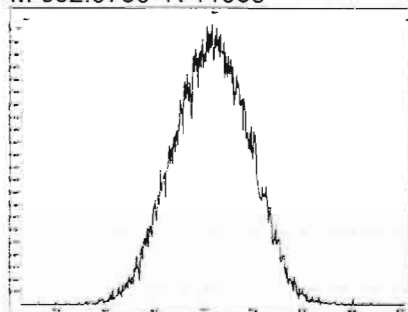
M 366.9792 R 10549



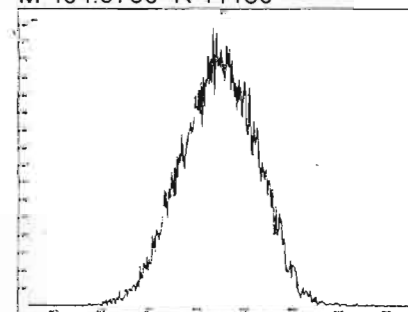
M 380.9760 R 11012



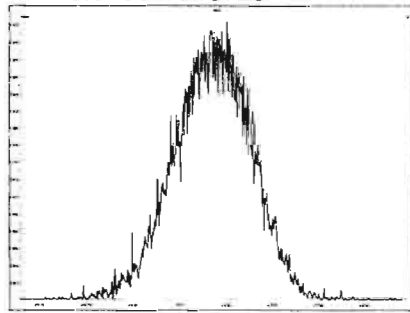
M 392.9760 R 11063



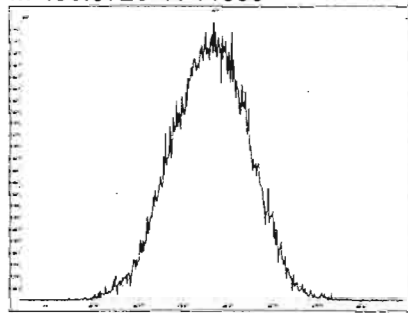
M 404.9760 R 11160



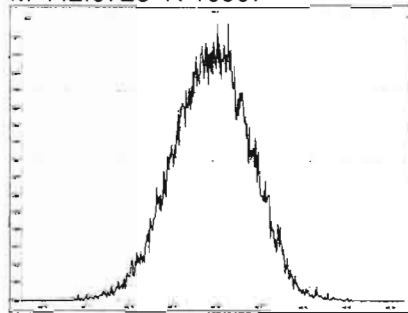
M 416.9760 R 10728



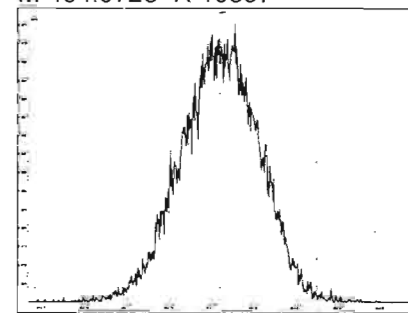
M 430.9728 R 11059



M 442.9728 R 10507



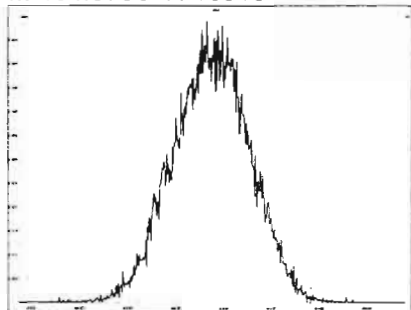
M 454.9728 R 10867



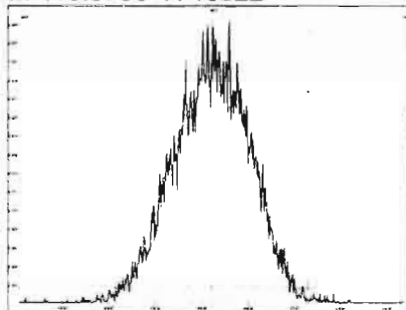
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Thursday, March 05, 2020 10:37:29 Pacific Standard Time

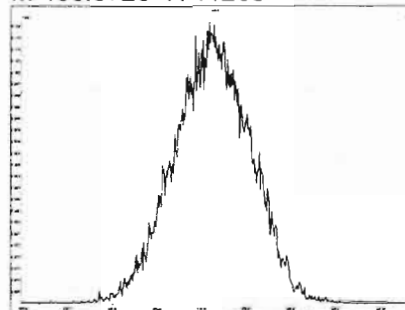
M 404.9760 R 10918



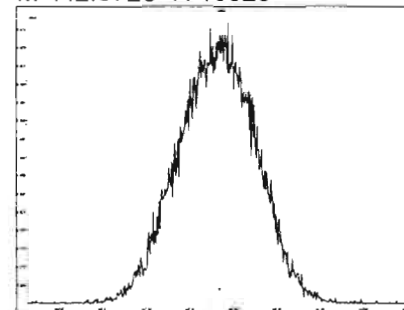
M 416.9760 R 10822



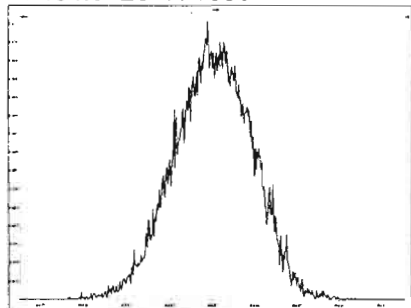
M 430.9728 R 11209



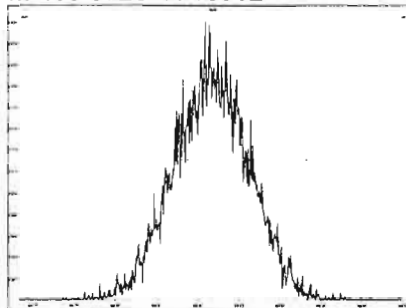
M 442.9728 R 10823



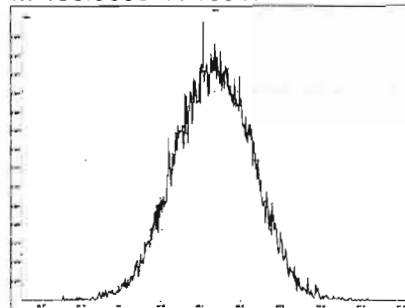
M 454.9728 R 10868



M 466.9728 R 10962



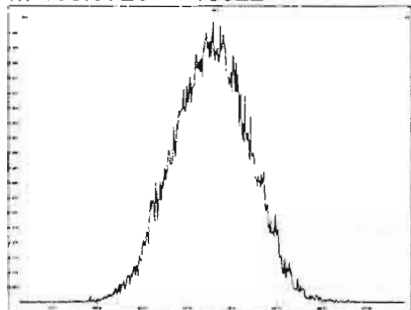
M 480.9696 R 10917



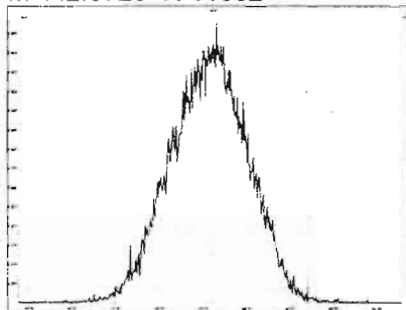
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Thursday, March 05, 2020 10:38:11 Pacific Standard Time

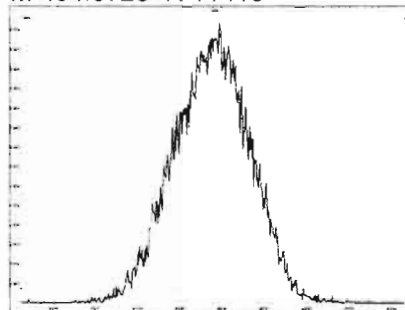
M 430.9728 R 10822



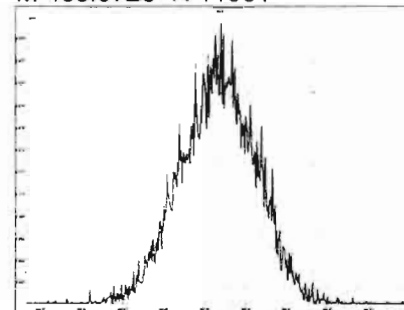
M 442.9728 R 11362



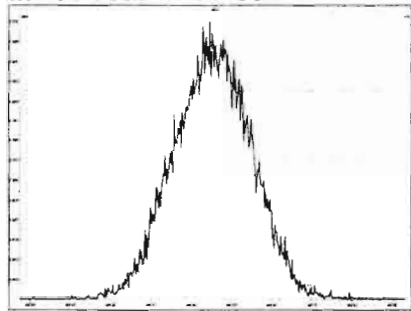
M 454.9728 R 11416



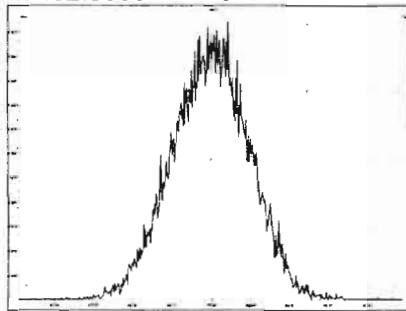
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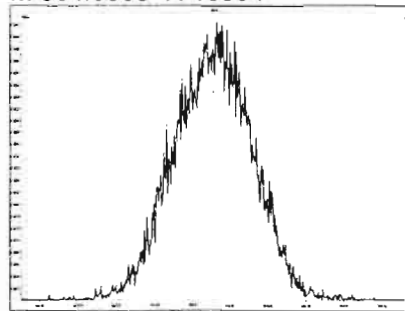
M 480.9696 R 11466



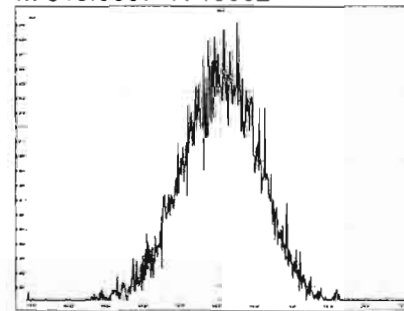
M 492.9696 R 10917



M 504.9696 R 10964



M 516.9697 R 10962



Vista Analytical Laboratory VG-11

Dataset: U:\VG12.PRO\Results\200305R2\200305R2-CPSM.qld

Last Altered: Thursday, March 05, 2020 11:35:06 Pacific Standard Time

Printed: Thursday, March 05, 2020 11:35:45 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 27 Feb 2020 10:59:03

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	Name	RT
1	1,1,3,6,8-TCDD (First)	21.48
2	1,2,8,9-TCDD (Last)	26.75
3	1,2,4,7,9-PeCDD (First)	28.62
4	1,2,3,8,9-PeCDD (Last)	31.31
5	1,2,4,6,7,9-HxCDD (First)	32.83
6	1,2,3,7,8,9-HxCDD (Last)	34.67
7	1,2,3,4,6,7,9-HpCDD (First)	37.09
8	1,2,3,4,6,7,8-HpCDD (Last)	38.12
9	1,3,6,8-TCDF (First)	19.46
10	1,2,8,9-TCDF (Last)	26.90
11	1,1,3,4,6,8-PeCDF (First)	26.86
12	1,2,3,8,9-PeCDF (Last)	31.55
13	1,2,3,4,6,8-HxCDF (First)	32.26
14	1,2,3,7,8,9-HxCDF (Last)	35.01
15	1,2,3,4,6,7,8-HpCDF (First)	36.71
16	1,2,3,4,7,8,9-HpCDF (Last)	38.79

Vista Analytical Laboratory VG-11

Dataset: U:\VG12.PRO\Results\200305R2\200305R2-CPSM.qld

Last Altered: Thursday, March 05, 2020 11:35:06 Pacific Standard Time

Printed: Thursday, March 05, 2020 11:35:45 Pacific Standard Time

GRB 03/05/2020

Method: U:\VG12.PRO\MethDB\CPSM.mdb 27 Feb 2020 10:59:03

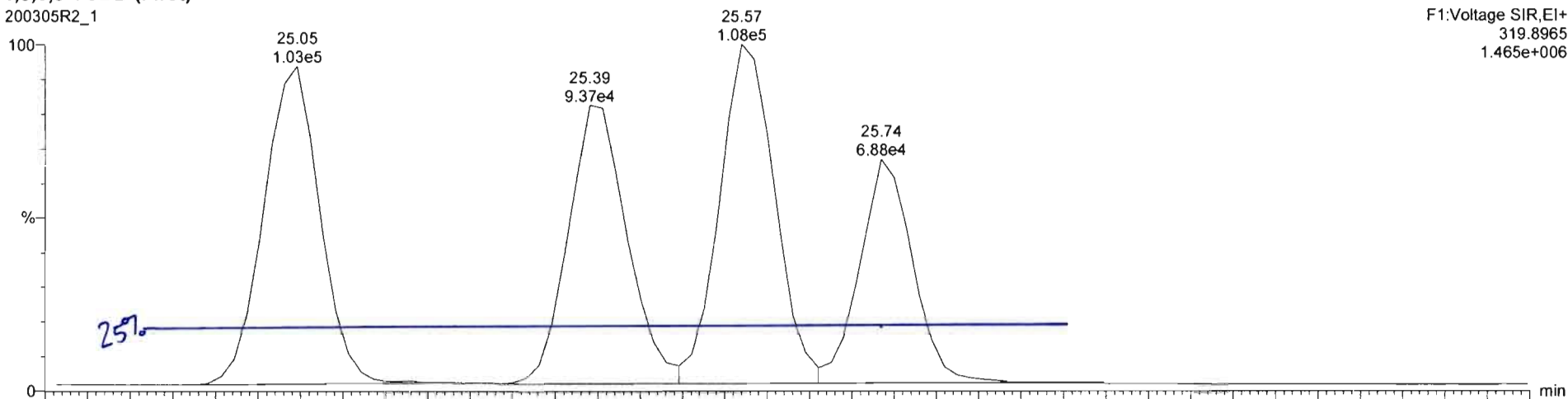
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

1,3,6,8-TCDD (First)

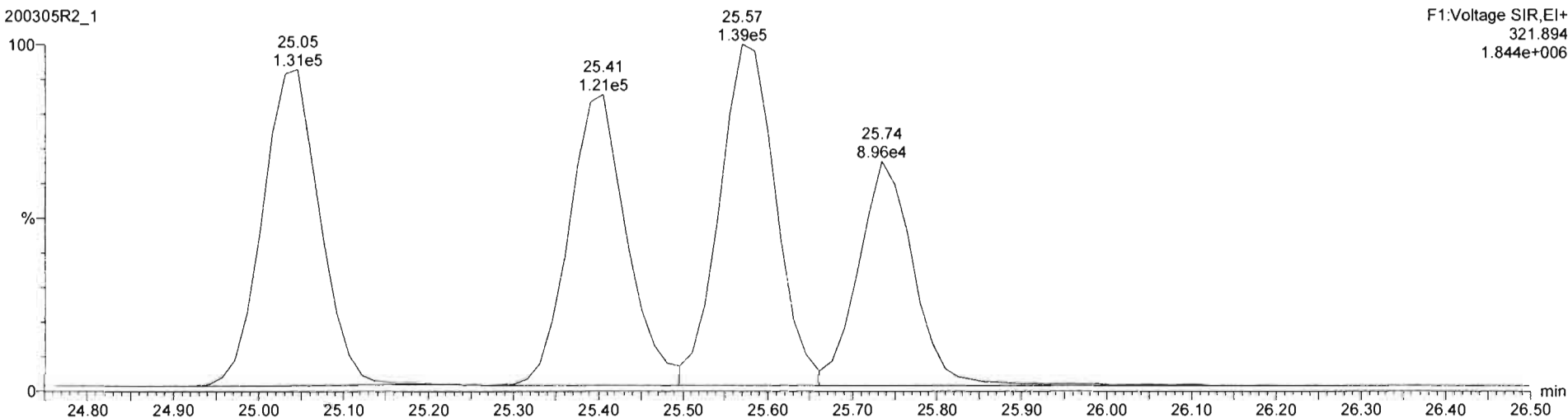
200305R2\_1

F1:Voltage SIR,EI+  
319.8965  
1.465e+006



200305R2\_1

F1:Voltage SIR,EI+  
321.894  
1.844e+006





Dataset: Untitled

Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time

Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

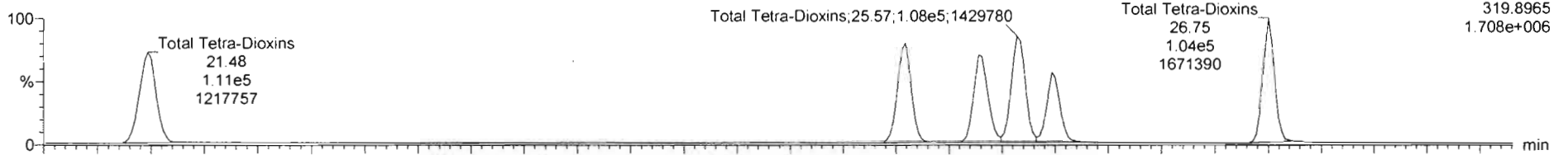
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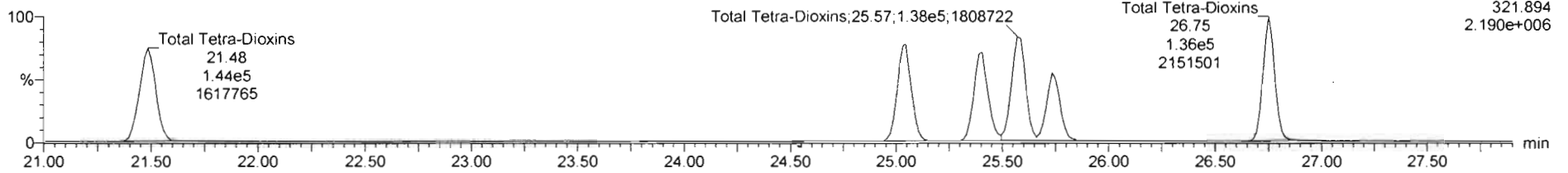
Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

2,3,7,8-TCDD

200305R2\_1

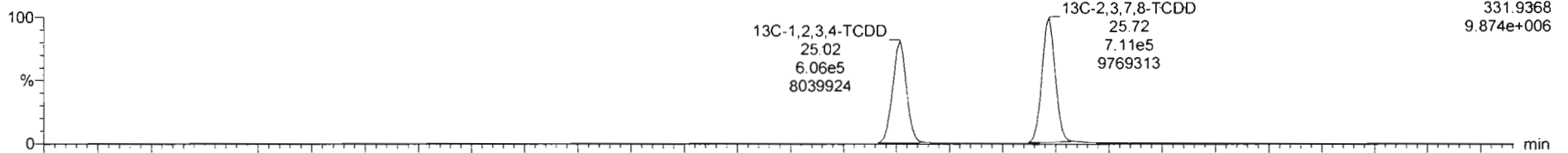


200305R2\_1

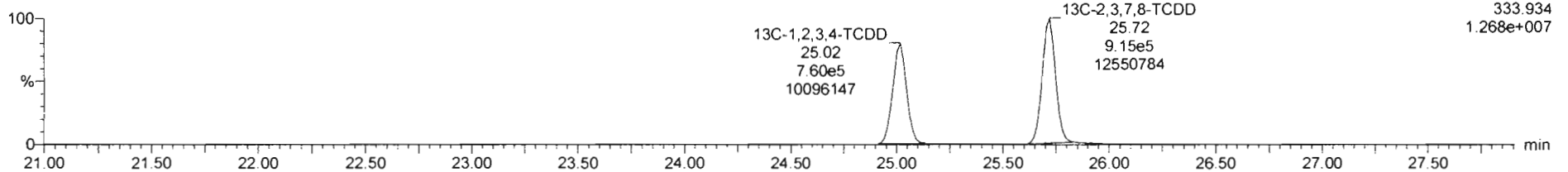


13C-2,3,7,8-TCDD

200305R2\_1



200305R2\_1



Dataset: Untitled

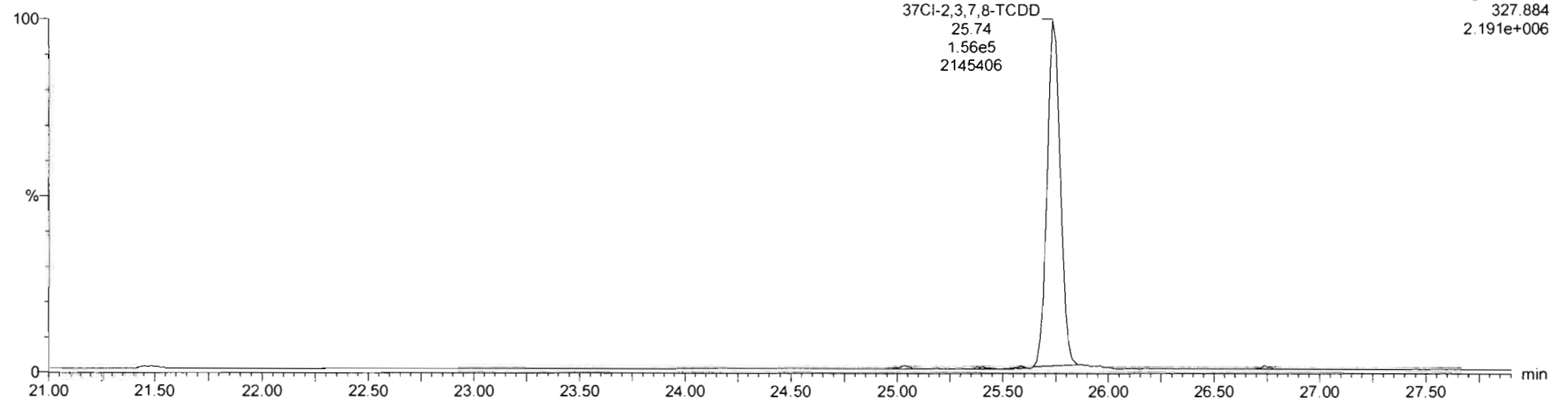
Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time

Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

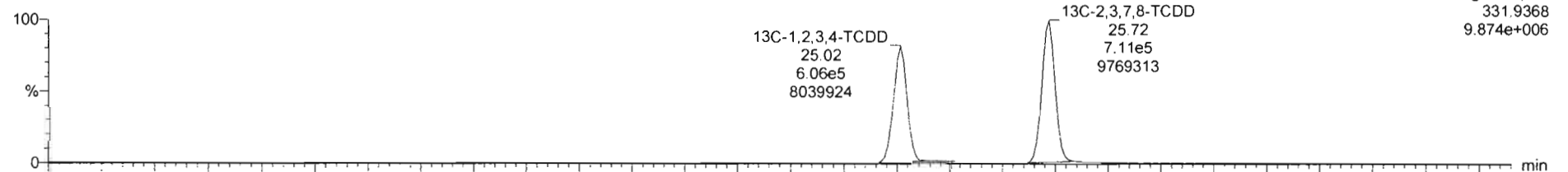
**37Cl-2,3,7,8-TCDD**

200305R2\_1

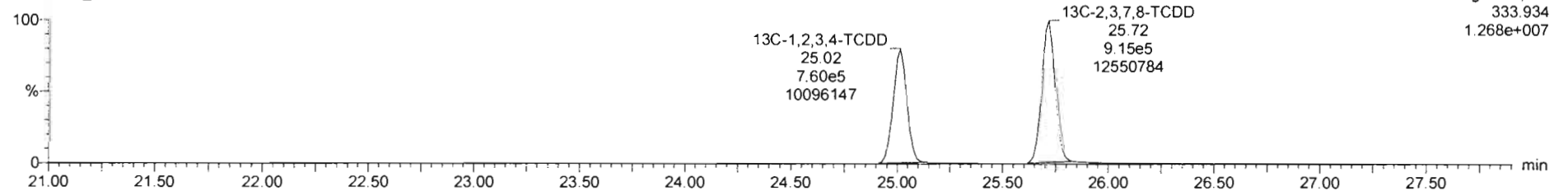


**13C-1,2,3,4-TCDD**

200305R2\_1



200305R2\_1



Dataset: Untitled

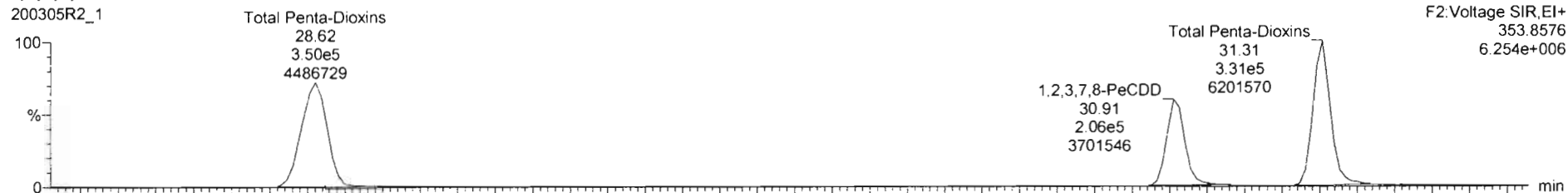
Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time

Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

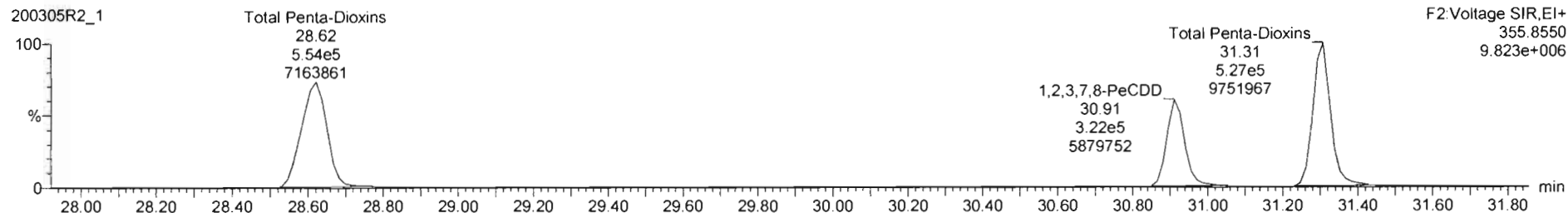
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**1,2,3,7,8-PeCDD**

200305R2\_1



200305R2\_1

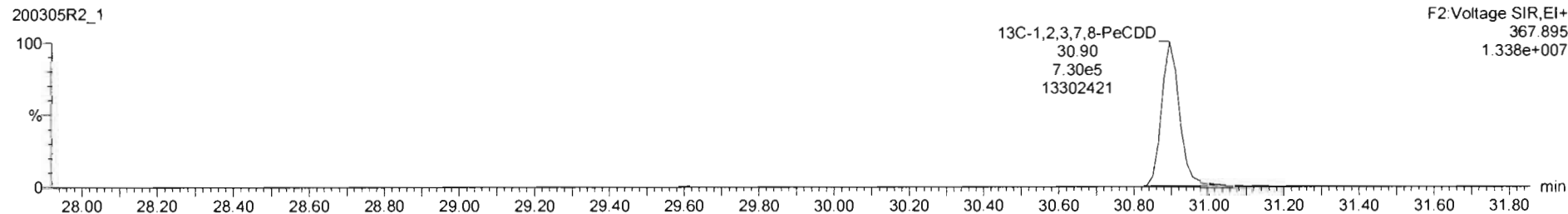


**13C-1,2,3,7,8-PeCDD**

200305R2\_1



200305R2\_1



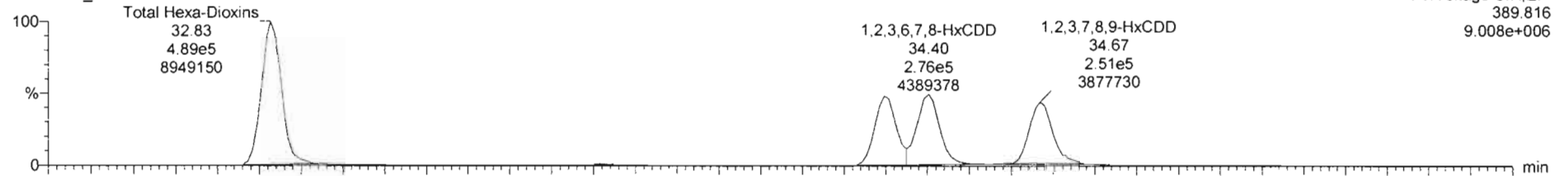
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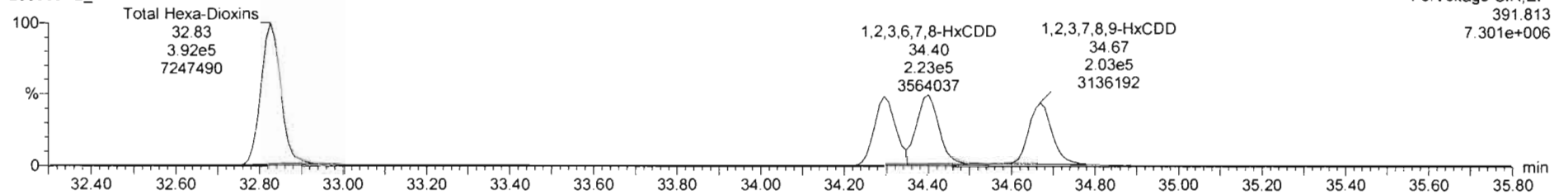
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1,2,3,4,7,8-HxCDD

200305R2\_1

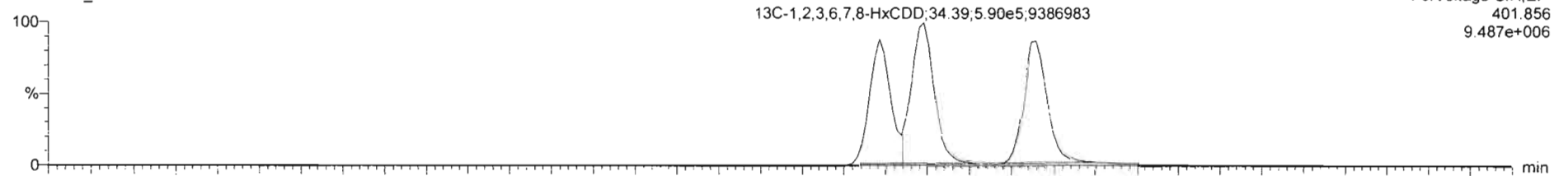


200305R2\_1

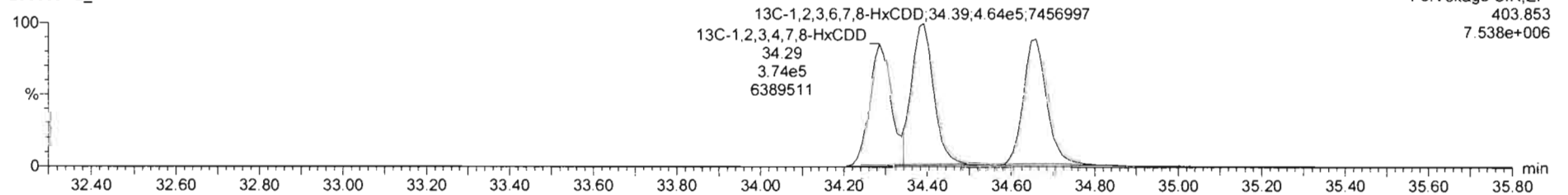


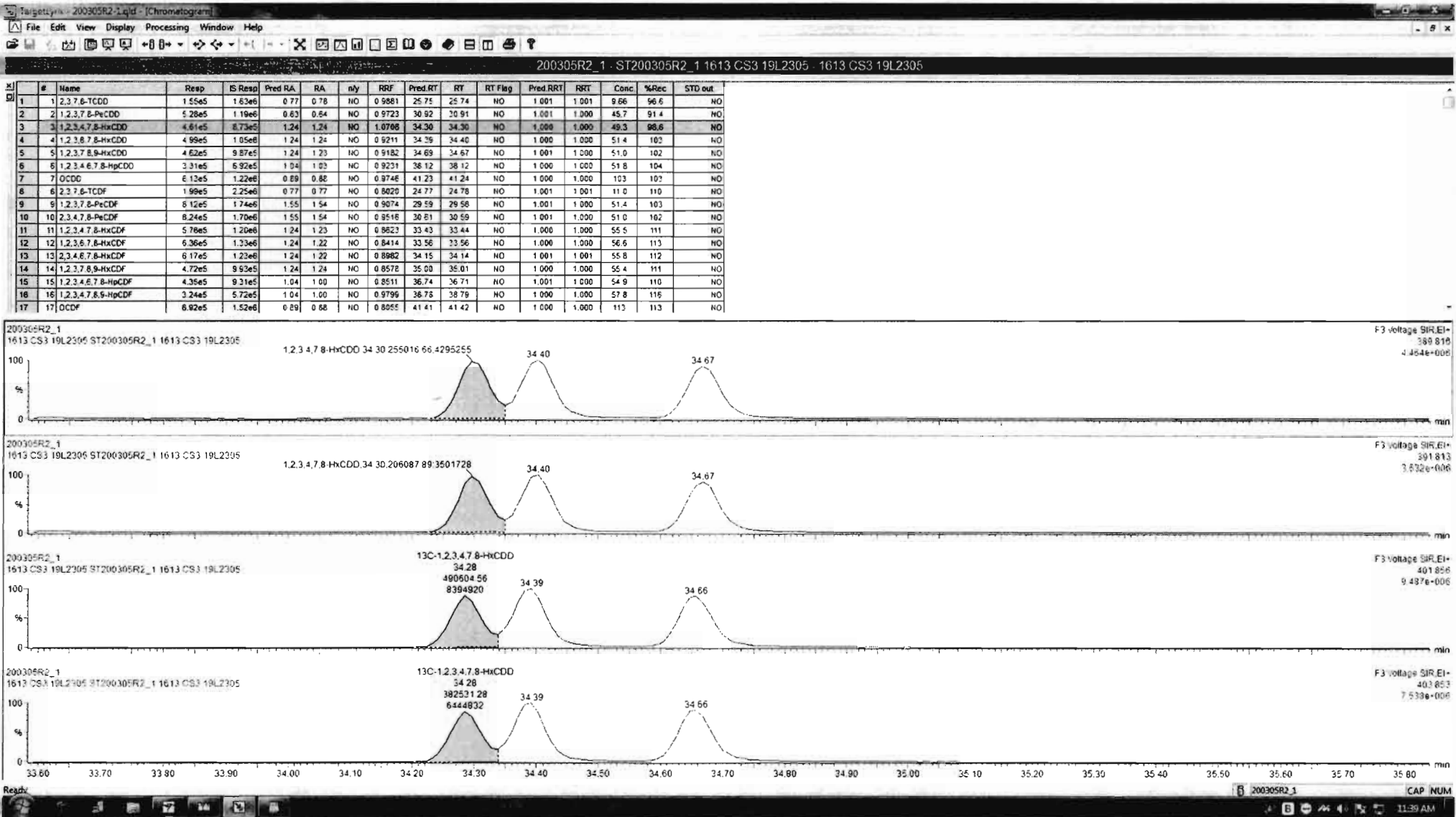
13C-1,2,3,4,7,8-HxCDD

200305R2\_1

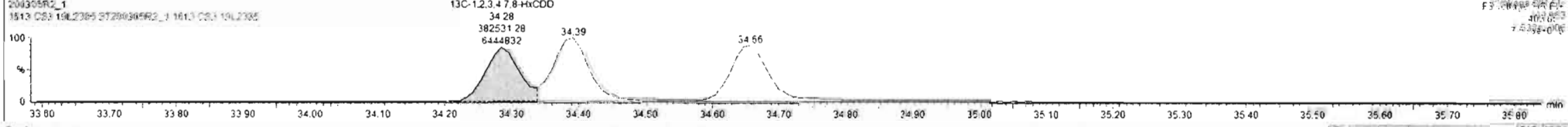
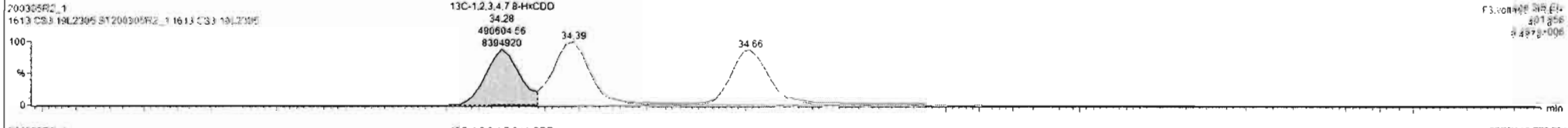
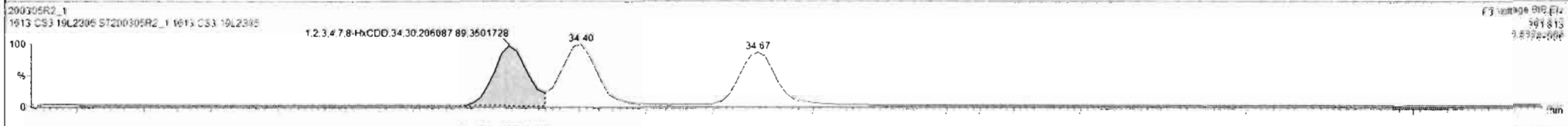
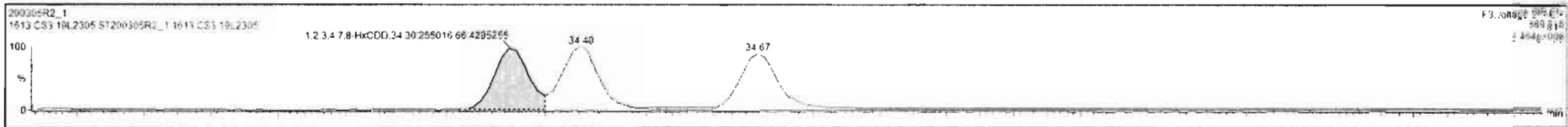


200305R2\_1





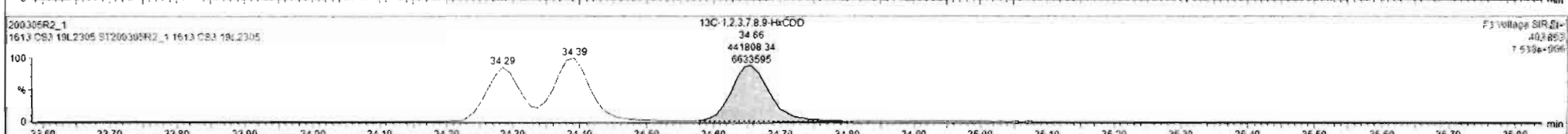
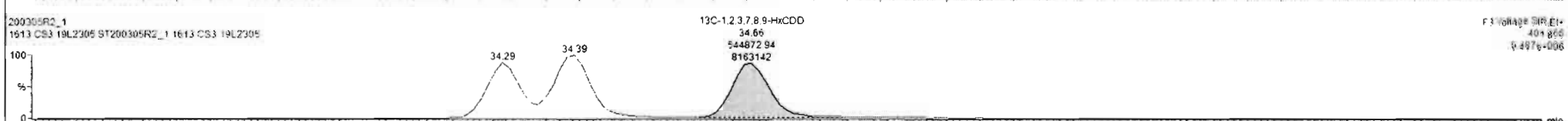
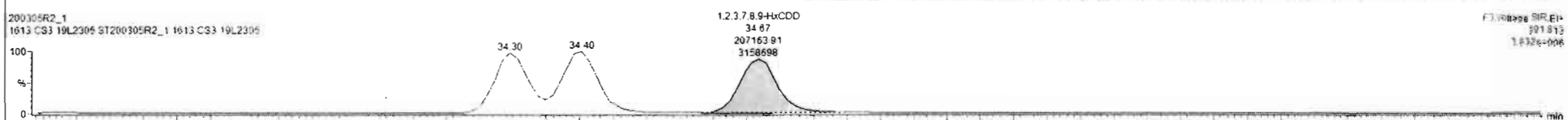
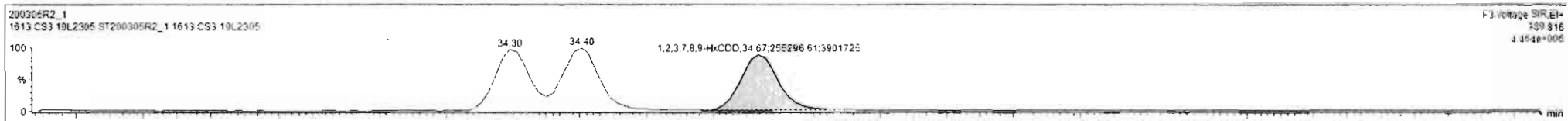
#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc	%Rec	STD out
1	2,3,7,8-TCDD	1.55e5	1.63e6	0.77	0.78	NO	0.9881	25.75	25.74	NO	1.001	1.001	9.66	96.6	NO
2	1,2,3,7,8-PeCDD	5.28e5	1.19e6	0.83	0.84	NO	0.9723	30.82	30.81	NO	1.001	1.000	45.7	91.4	NO
3	1,2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	1.24	NO	1.0708	34.30	34.30	NO	1.000	1.000	49.3	95.6	ND
4	1,2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	1.24	NO	0.9211	34.39	34.40	NO	1.000	1.000	51.4	103	NO
5	1,2,3,7,8-HxCDF	4.62e5	9.87e5	1.24	1.23	NO	0.9182	34.69	34.67	NO	1.001	1.000	51.0	102	NO
6	1,2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.04	1.03	NO	0.9231	36.12	36.12	NO	1.000	1.000	51.8	104	NO
7	OCDD	6.13e5	1.22e6	0.89	0.88	NO	0.9746	41.23	41.24	NO	1.000	1.000	103	103	NO
8	2,3,7,8-TCDF	1.99e5	2.25e6	0.77	0.77	NO	0.8020	24.77	24.78	NO	1.001	1.001	11.0	110	NO
9	1,2,3,7,8-PeCDF	8.12e5	1.74e6	1.55	1.54	NO	0.9074	29.59	29.58	NO	1.001	1.000	51.4	103	NO
10	2,3,4,7,8-PeCDF	8.24e5	1.70e6	1.55	1.54	NO	0.9516	30.61	30.59	NO	1.001	1.000	51.0	102	NO
11	1,2,3,4,7,8-HxCDF	5.76e5	1.20e6	1.24	1.23	NO	0.8623	33.43	33.44	NO	1.000	1.000	55.5	111	NO
12	1,2,3,6,7,8-HxCDF	6.36e5	1.33e6	1.24	1.22	NO	0.8414	33.56	33.56	NO	1.000	1.000	56.6	113	NO
13	2,3,4,6,7,8-HxCDF	6.17e5	1.23e6	1.24	1.22	NO	0.8582	34.15	34.14	NO	1.001	1.001	55.8	112	NO
14	1,2,3,7,8-HxCDF	4.72e5	9.92e5	1.24	1.24	NO	0.8578	35.00	35.01	NO	1.000	1.000	55.4	111	NO
15	1,2,3,4,6,7,8-HpCDF	4.35e5	9.31e5	1.04	1.00	NO	0.8511	36.74	36.71	NO	1.001	1.000	54.9	110	NO
16	1,2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.04	1.00	NO	0.9799	36.70	36.79	NO	1.000	1.000	57.6	116	NO
17	OCDF	6.92e5	1.52e6	0.89	0.88	NO	0.8055	41.41	41.42	NO	1.000	1.000	112	113	NO





200305R2\_1 - ST200305R2\_1 1613 CS3 19L2305 - 1613 CS3 19L2305

#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc.	%Rec	STD out
1	2,3,7,8-TCDD	1.55e5	1.63e6	0.77	0.78	NO	0.9881	25.75	25.74	NO	1.001	1.001	9.66	96.6	NO
2	1,2,3,7,8-PeCDD	5.28e5	1.19e6	0.63	0.64	NO	0.9723	30.92	30.91	NO	1.001	1.000	45.7	91.4	NO
3	1,2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	1.24	NO	1.0708	34.30	34.30	NO	1.000	1.000	49.3	98.6	NO
4	1,2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	1.24	NO	0.9211	34.39	34.40	NO	1.000	1.000	51.4	103	NO
5	1,2,3,7,8,9-HxCDD	4.62e5	9.07e5	1.24	1.23	NO	0.9182	34.69	34.67	NO	1.001	1.000	51.0	102	NO
6	1,2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.04	1.03	NO	0.9231	38.12	38.12	NO	1.000	1.000	51.9	104	NO
7	OCDD	6.13e5	1.22e6	0.89	0.88	NO	0.9748	41.23	41.24	NO	1.000	1.000	103	103	NO
8	2,3,7,8-TCDF	1.99e5	2.25e6	0.77	0.77	NO	0.8020	24.77	24.78	NO	1.001	1.001	11.0	110	NO
9	1,2,3,7,8-PeCDF	8.12e5	1.74e6	1.55	1.54	NO	0.9074	29.59	29.58	NO	1.001	1.000	61.4	103	NO
10	2,3,4,7,8-PeCDF	8.24e5	1.70e6	1.55	1.54	NO	0.9516	30.61	30.59	NO	1.001	1.000	51.0	102	NO
11	1,2,3,4,7,8-HxCDF	5.76e5	1.20e6	1.24	1.23	NO	0.8623	33.43	33.44	NO	1.000	1.000	56.5	111	NO
12	1,2,3,6,7,8-HxCDF	6.36e5	1.33e6	1.24	1.22	NO	0.8414	33.56	33.56	NO	1.000	1.000	56.6	113	NO
13	1,2,3,6,7,8-HxCDF	6.17e5	1.23e6	1.24	1.22	NO	0.8962	34.15	34.14	NO	1.001	1.001	56.8	112	NO
14	1,2,3,7,8,9-HxCDF	4.72e5	9.93e5	1.24	1.24	NO	0.8570	35.00	35.01	NO	1.000	1.000	56.4	111	NO
15	1,2,3,4,6,7,8-HpCDF	4.35e5	9.31e5	1.04	1.00	NO	0.8511	36.74	36.71	NO	1.001	1.000	54.9	110	NO
16	1,2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.04	1.00	NO	0.9799	38.78	38.79	NO	1.000	1.000	57.8	116	NO
17	OCDF	6.92e5	1.52e6	0.89	0.88	NO	0.8055	41.41	41.42	NO	1.000	1.000	115	113	NO



Custom Reporting: Select reports to generate

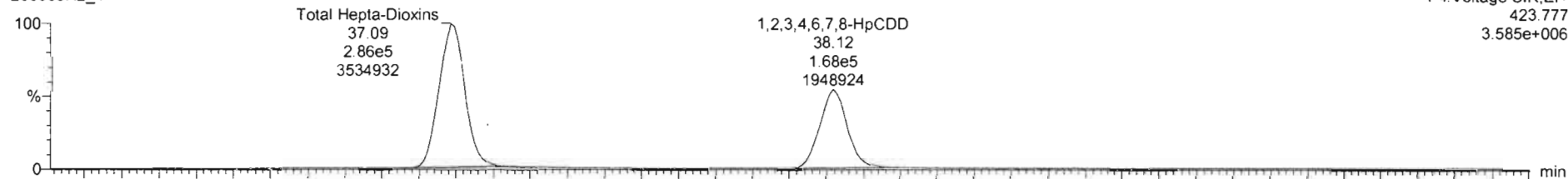
Dataset: Untitled

Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time  
Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

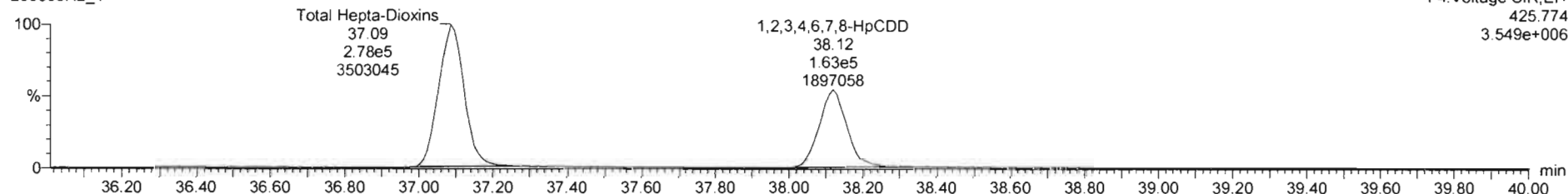
Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

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

200305R2\_1

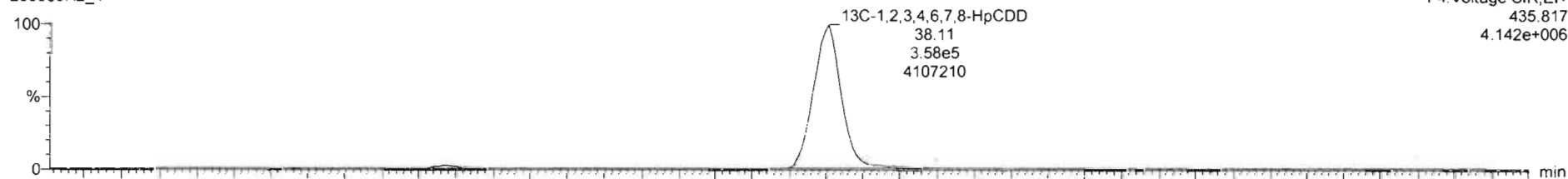


200305R2\_1

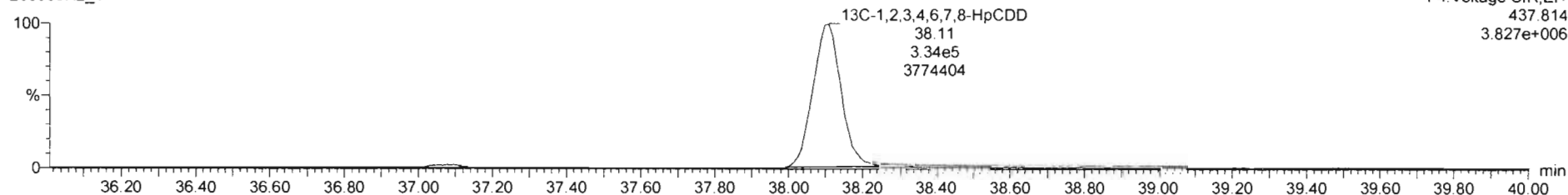


13C-1,2,3,4,6,7,8-HpCDD

200305R2\_1



200305R2\_1

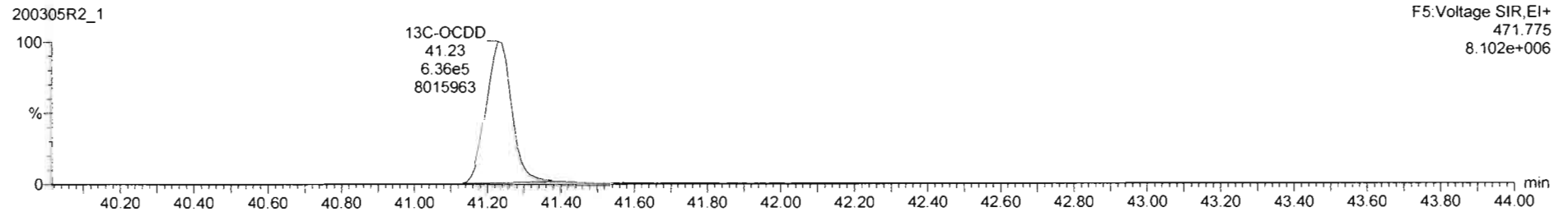
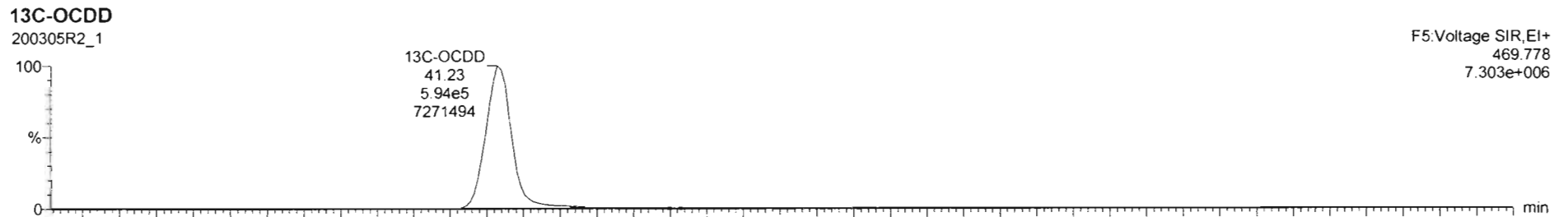
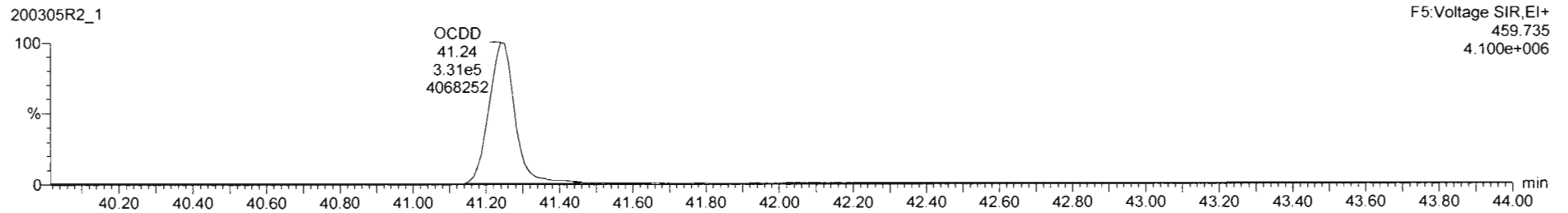
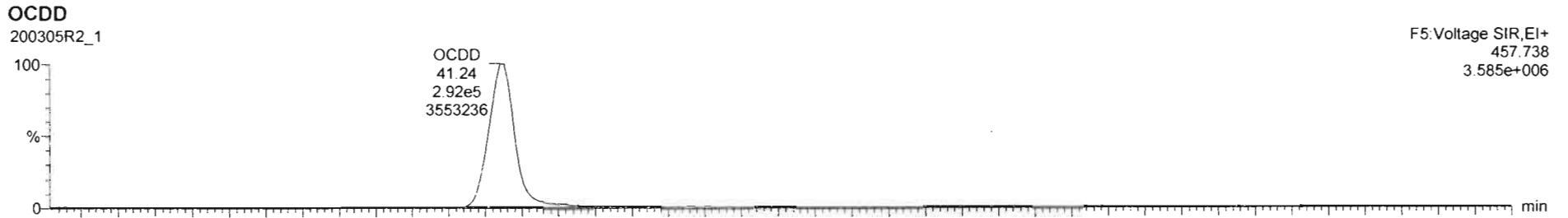


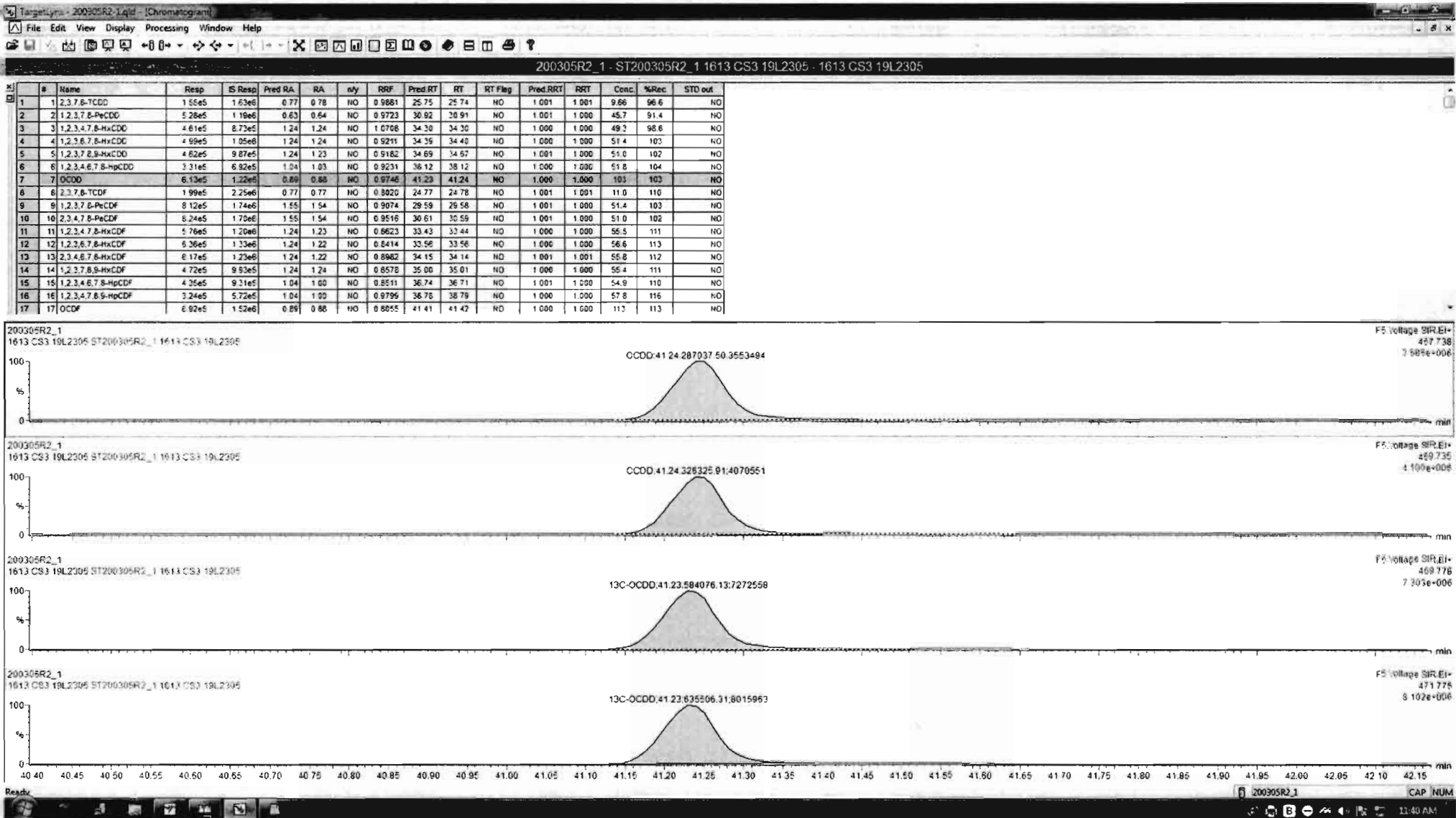
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Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time

Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305





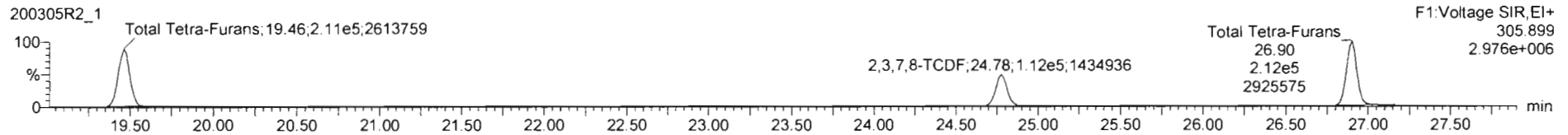
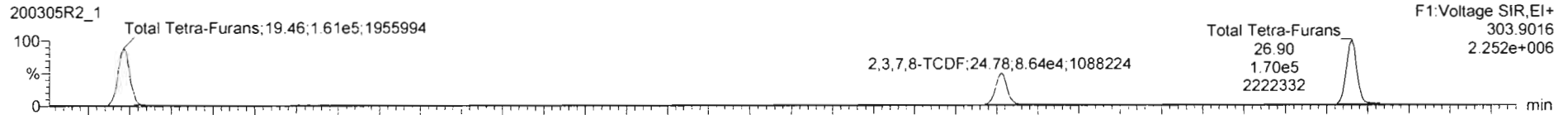
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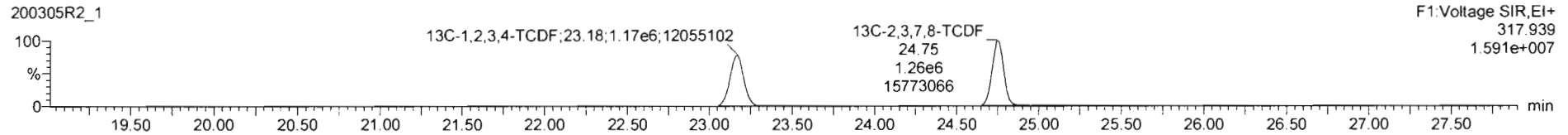
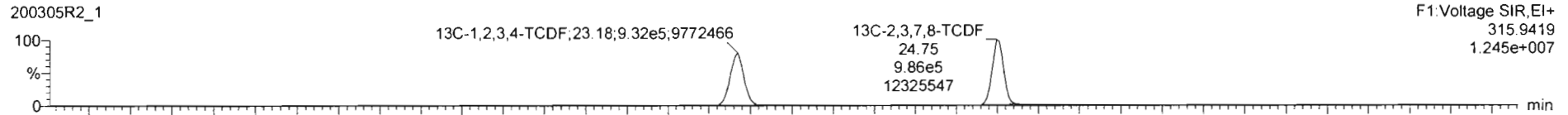
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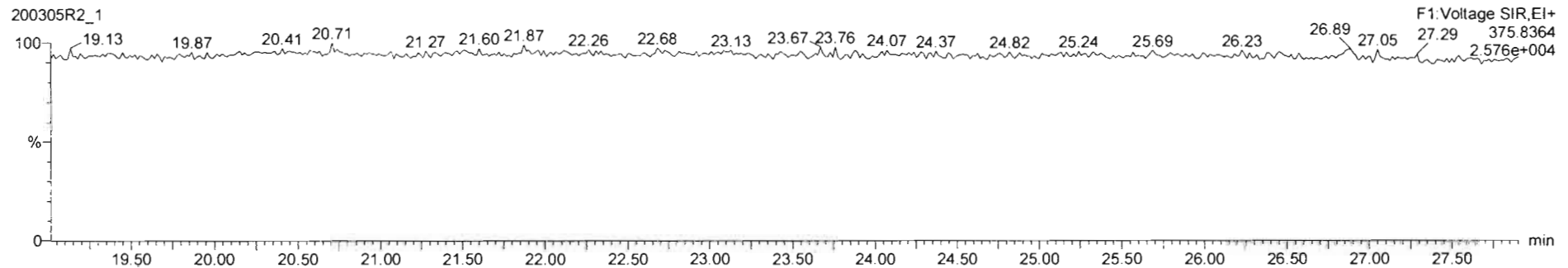
**2,3,7,8-TCDF**



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



**DPE1**



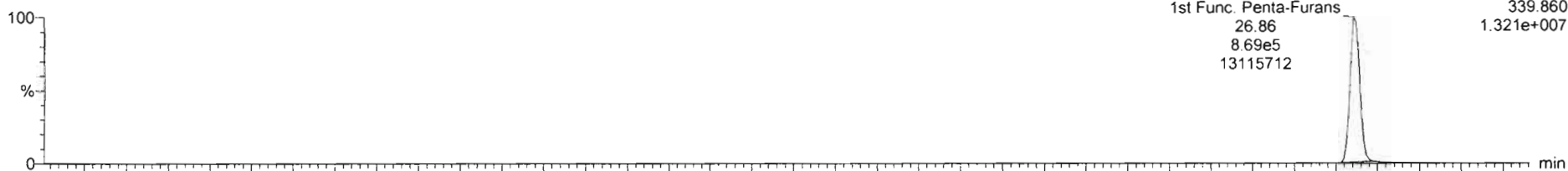
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Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

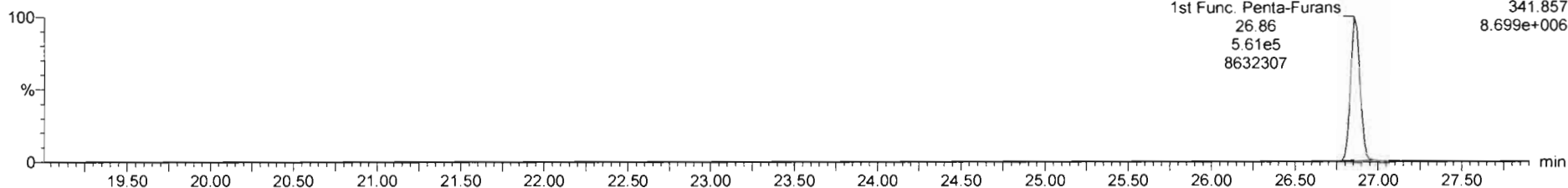
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1st Func. Penta-Furans

200305R2\_1

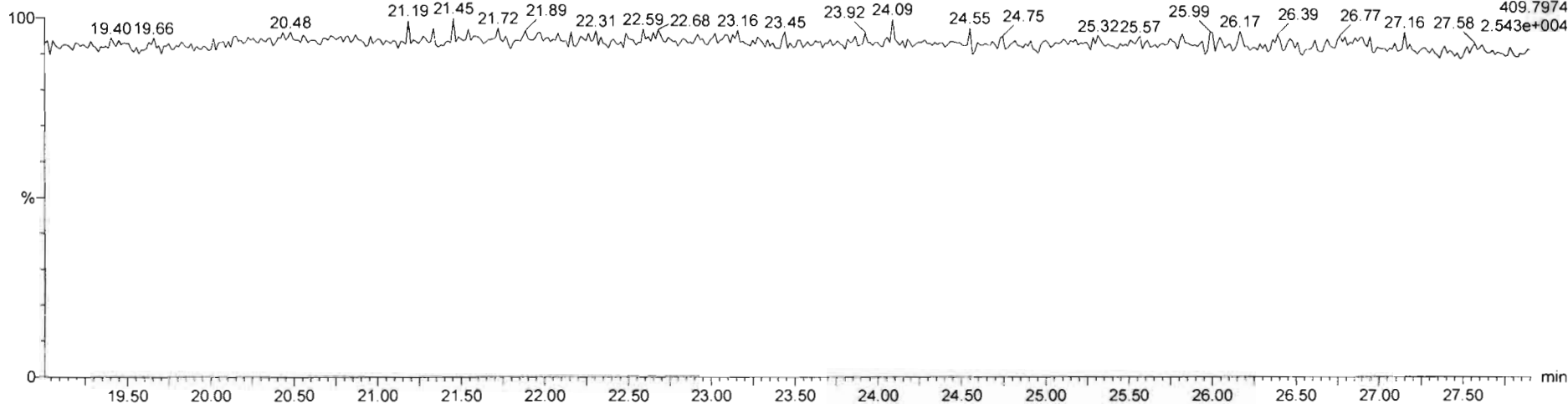


200305R2\_1



DPE6

200305R2\_1



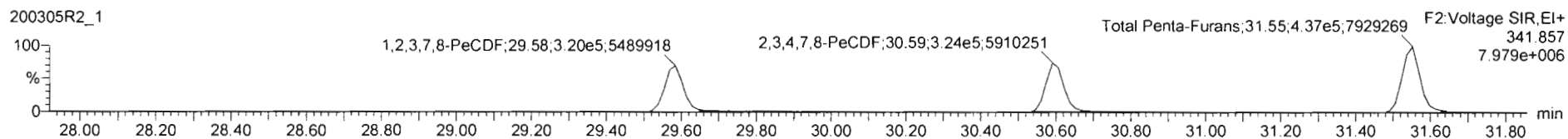
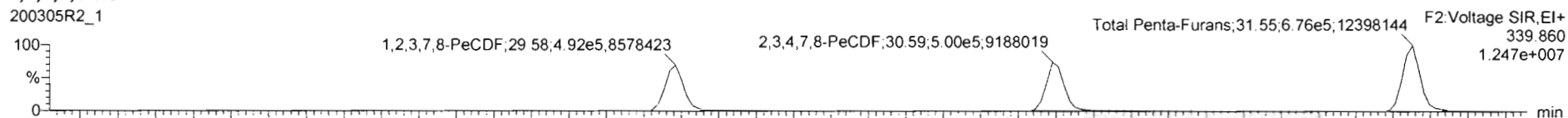


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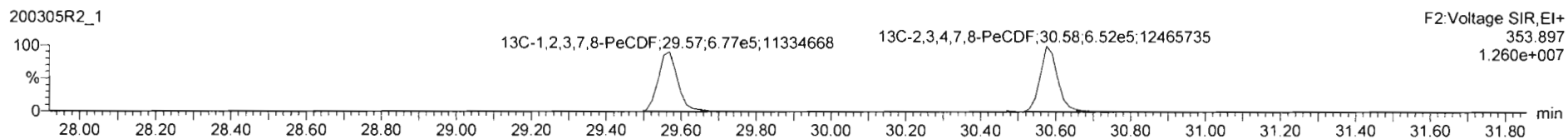
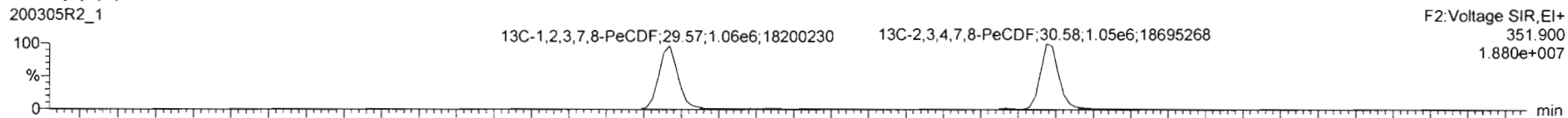
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Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

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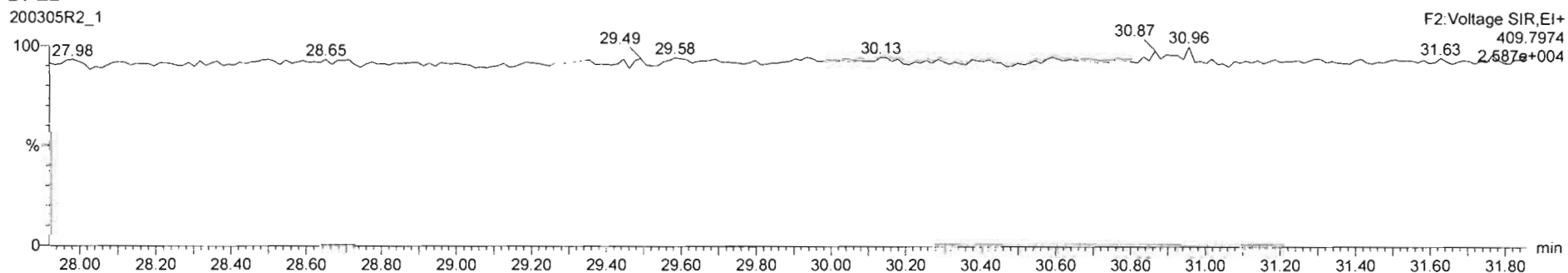
**1,2,3,7,8-PeCDF**



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



**DPE2**



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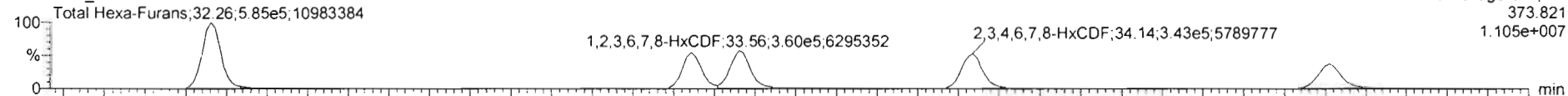
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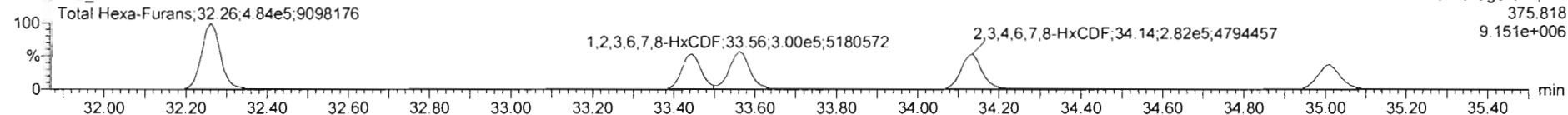
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**1,2,3,4,7,8-HxCDF**

200305R2\_1

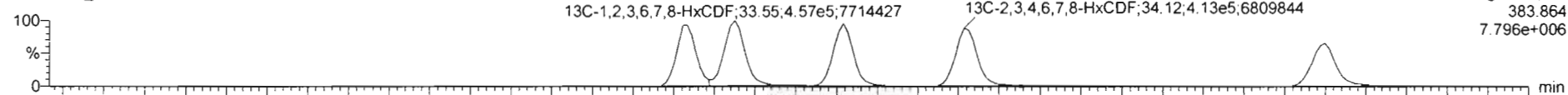


200305R2\_1

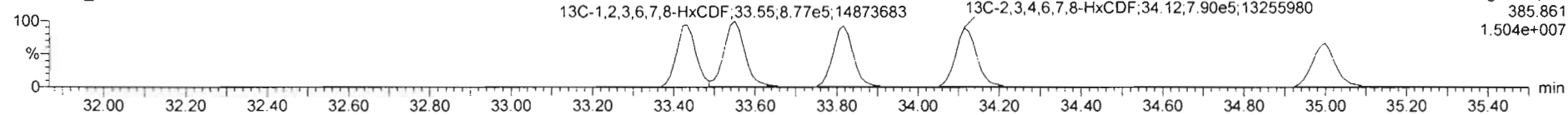


**13C-1,2,3,4,7,8-HxCDF**

200305R2\_1

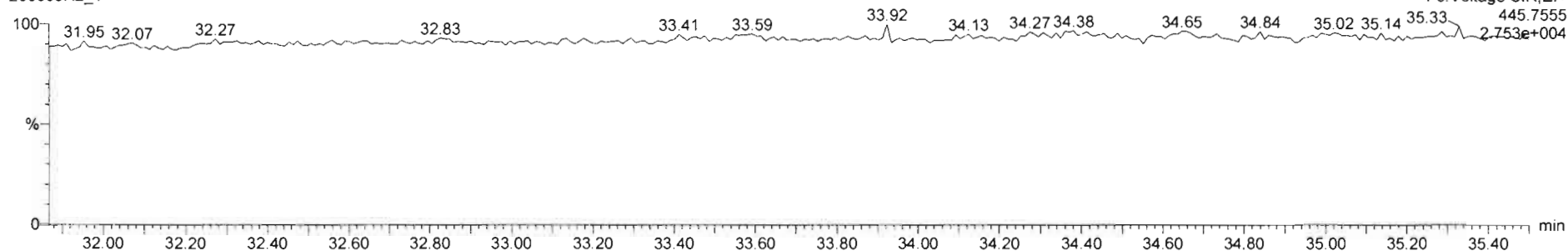


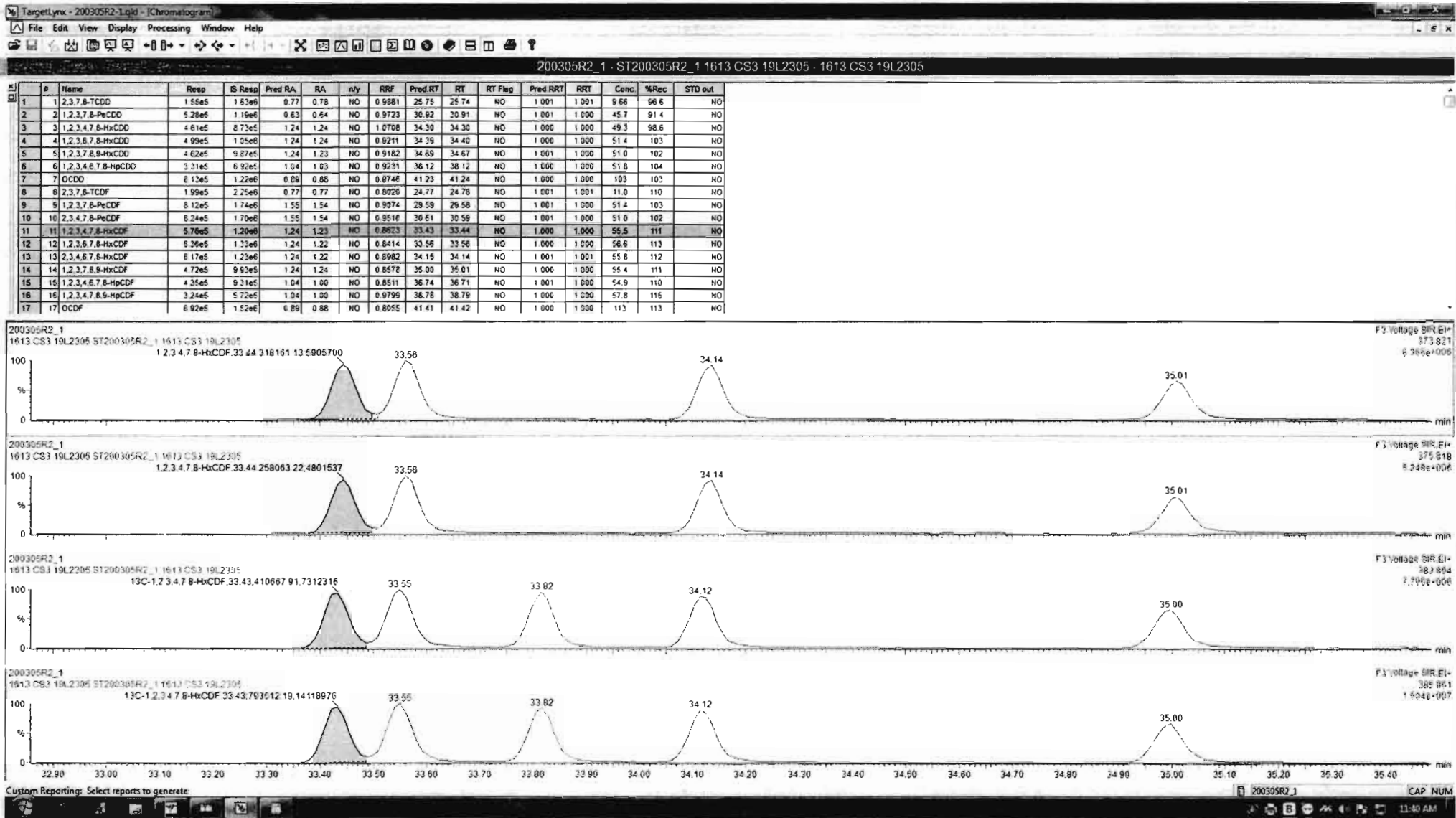
200305R2\_1



**DPE3**

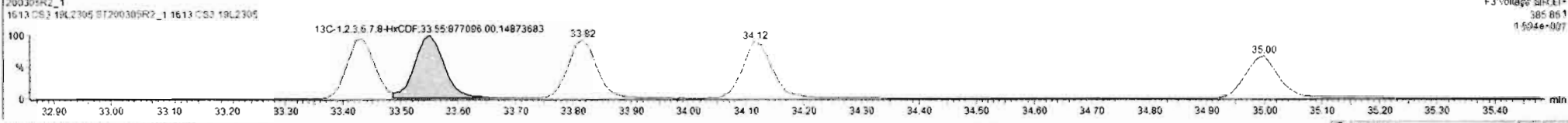
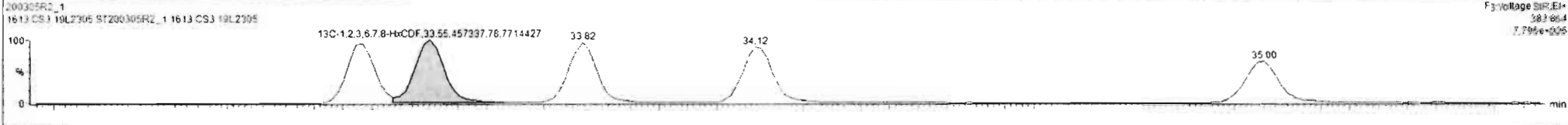
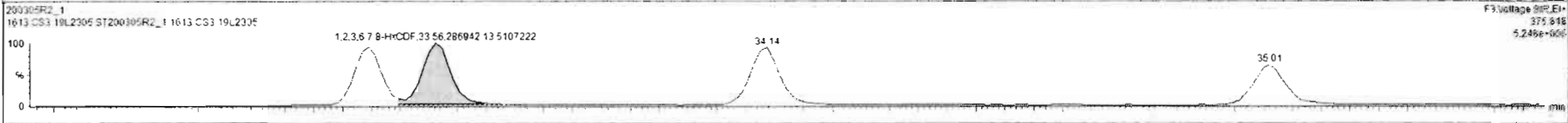
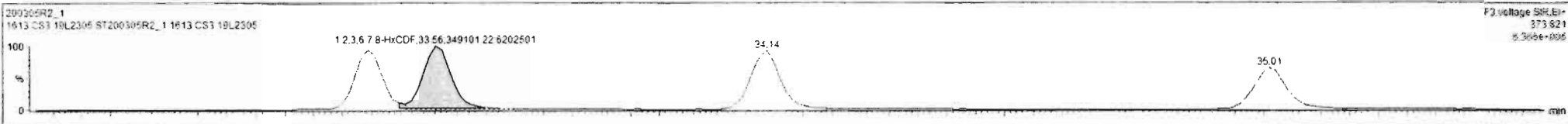
200305R2\_1





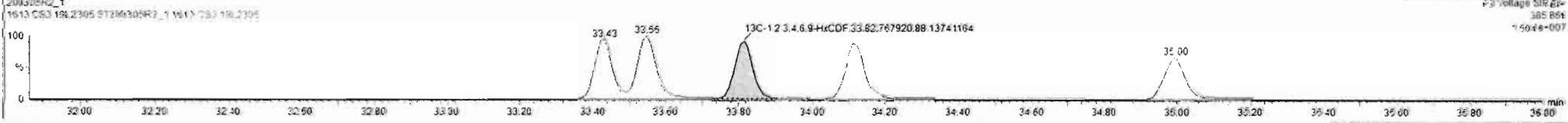
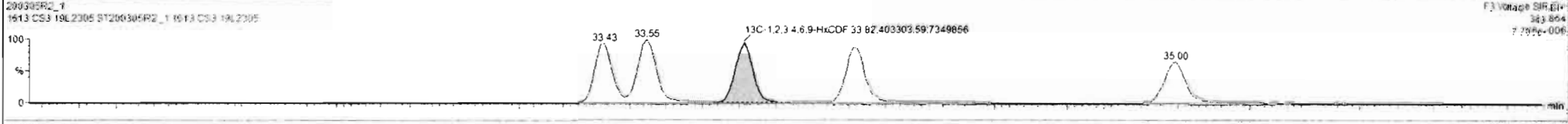
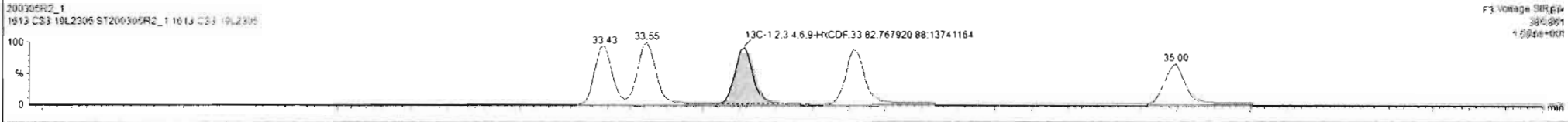
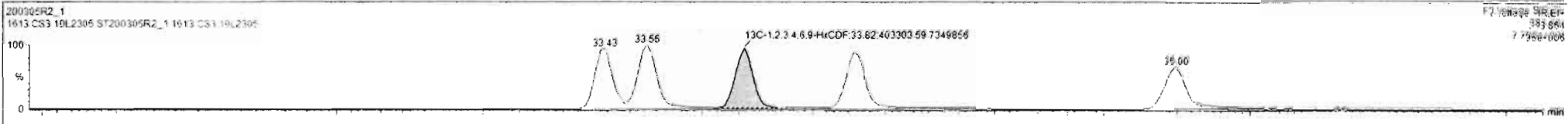
200305R2\_1 - SI200305R2\_1 1613 CS3 19L2305 - 1613 CS3 19L2305

#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc.	%Rec	STD out
1	1.2,3,7,8-TCDD	1.55e5	1.63e6	0.77	0.78	NO	0.9881	25.75	25.74	NO	1.001	1.001	9.68	96.6	NO
2	1.2,3,7,8-PeCDD	5.28e5	1.19e6	0.63	0.64	NO	0.9723	30.92	30.91	NO	1.001	1.000	45.7	91.4	NO
3	1.2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	1.24	NO	1.0708	34.30	34.30	NO	1.000	1.000	49.3	98.6	NO
4	1.2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	1.24	NO	0.9211	34.39	34.40	NO	1.000	1.000	51.4	103	NO
5	1.2,3,7,8,9-HxCDD	4.62e5	9.87e5	1.24	1.23	NO	0.9182	34.69	34.67	NO	1.001	1.000	51.0	102	NO
6	1.2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.04	1.03	NO	0.9231	36.12	36.12	NO	1.000	1.000	51.8	104	NO
7	OCDD	6.13e5	1.22e6	0.89	0.88	NO	0.9748	41.21	41.24	NO	1.000	1.000	103	103	NO
8	1.2,3,7,8-TCDF	1.99e5	2.25e6	0.77	0.77	NO	0.8020	24.77	24.78	NO	1.001	1.001	11.0	110	NO
9	1.2,3,7,8-PeCDF	8.12e5	1.74e6	1.55	1.54	NO	0.9074	29.59	29.58	NO	1.001	1.000	51.4	103	NO
10	1.2,3,4,7,8-HxCDF	8.24e5	1.70e6	1.55	1.54	NO	0.9516	30.61	30.55	NO	1.001	1.000	51.0	102	NO
11	1.2,3,4,7,8-HxCDF	5.76e5	1.20e6	1.24	1.23	NO	0.9823	33.43	33.44	NO	1.000	1.000	55.5	111	NO
12	1.2,3,6,7,8-HxCDF	6.36e5	1.33e6	1.24	1.22	NO	0.8414	33.56	33.56	NO	1.000	1.000	56.0	113	NO
13	1.2,3,4,6,7,8-HpCDF	6.17e5	1.23e6	1.24	1.22	NO	0.8982	34.15	34.14	NO	1.001	1.001	55.8	112	NO
14	1.2,3,7,8,9-HxCDF	4.72e5	9.93e5	1.24	1.24	NO	0.9572	35.00	35.01	NO	1.000	1.000	55.4	111	NO
15	1.2,3,4,6,7,8-HpCDF	4.35e5	9.31e5	1.04	1.00	NO	0.9511	36.74	36.71	NO	1.001	1.000	54.9	110	NO
16	1.2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.04	1.00	NO	0.9799	36.78	36.79	NO	1.000	1.000	57.8	116	NO
17	OCDF	6.92e5	1.52e6	0.89	0.88	NO	0.8055	41.41	41.42	NO	1.000	1.000	113	113	NO

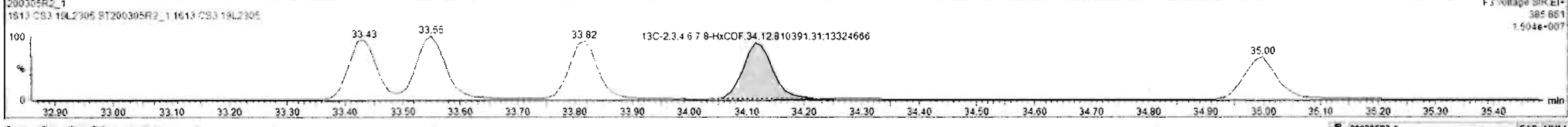
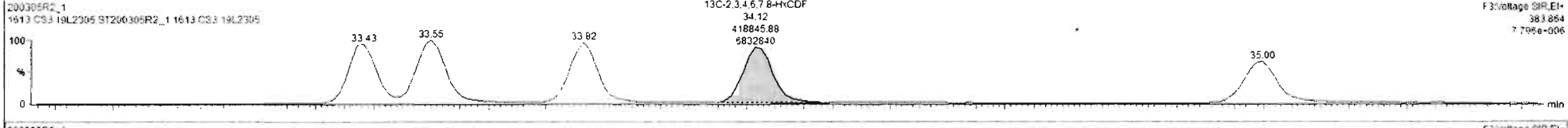
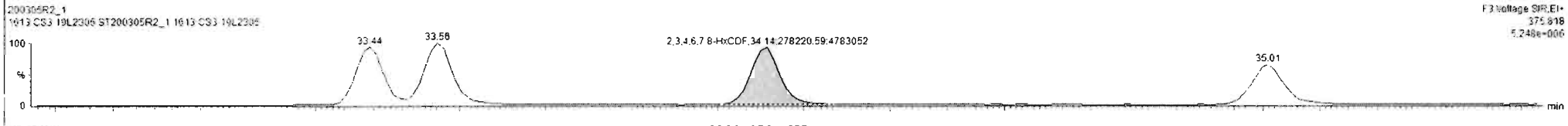
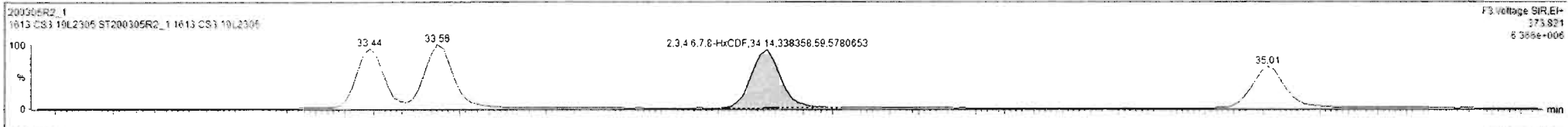


200305R2\_1 - ST200305R2\_1 1613 CS3 19L2305 - 1613 CS3 19L2305

#	Name	Resp	IS Resp	Pred RA	RA	nly	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc.	%Rec	STD out
25	13C-2,3,7,8-TCDF	2.25e6	2.10e6	0.77	0.78	NO	1.0653	24.84	24.75	NO	0.993	0.989	101	101	NO
26	13C-1,2,3,7,8-PeCDF	1.74e6	2.10e6	1.55	1.57	NO	1.0017	29.42	29.57	NO	1.176	1.182	82.7	82.7	NO
27	13C-2,3,4,7,8-PeCDF	1.70e6	2.10e6	1.55	1.60	NO	0.9617	30.39	30.58	NO	1.215	1.222	84.1	84.1	NO
28	13C-1,2,3,4,7,8-HxCDF	1.20e6	1.17e6	0.51	0.52	NO	1.0462	33.41	33.43	NO	0.986	0.985	98.0	98.0	NO
29	13C-1,2,3,6,7,8-HxCDF	1.33e6	1.17e6	0.51	0.52	NO	1.1899	33.51	33.55	NO	0.961	0.992	95.8	95.8	NO
30	13C-2,3,4,6,7,8-HxCDF	1.23e6	1.17e6	0.51	0.52	NO	1.0662	34.12	34.12	NO	1.009	1.009	96.4	96.4	NO
31	13C-1,2,3,7,8,9-HxCDF	9.92e5	1.17e6	0.51	0.53	NO	0.9224	35.03	35.00	NO	1.036	1.025	91.9	91.9	NO
32	13C-1,2,3,4,6,7,8-HpCDF	9.31e5	1.17e6	0.44	0.46	NO	0.7872	36.79	36.70	NO	1.086	1.085	104	104	NO
33	13C-1,2,3,4,7,8,9-HpCDF	5.72e5	1.17e6	0.44	0.44	NO	0.5523	36.82	36.78	NO	1.148	1.147	88.5	88.5	NO
34	13C-OCDF	1.52e6	1.17e6	0.89	0.88	NO	0.7894	41.43	41.41	NO	1.225	1.225	165	82.3	NO
35	3,7Cl-2,3,7,8-TCDD	1.56e5	1.37e6				1.1763	25.65	25.74	NO	1.027	1.029	9.70	97.0	NO
36	13C-1,2,3,4-TCDF	1.37e6	1.37e6	0.77	0.80	NO	1.0000	25.11	25.02	NO	1.000	1.000	100	100	NO
37	13C-1,2,3,4-TCDF	2.10e6	2.10e6	0.77	0.80	NO	1.0000	23.37	23.18	NO	1.000	1.000	100	100	NO
38	13C-1,2,3,4,6,9-HxCDF	1.17e6	1.17e6	0.51	0.53	NO	1.3000	33.71	33.82	NO	1.000	1.000	100	100	YES
39	Total Tetra-Dioxins	1.62e6					0.9681	24.62		NO	0.000		83.4		NO
40	Total Penta-Dioxins	1.15e6					0.9723	28.96		NO	0.000		196		NO
41	Total Hexa-Dioxins	0.00e0					0.9211	33.63		NO	0.000		251		NO



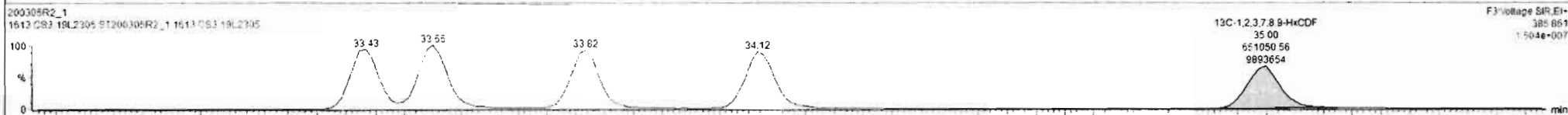
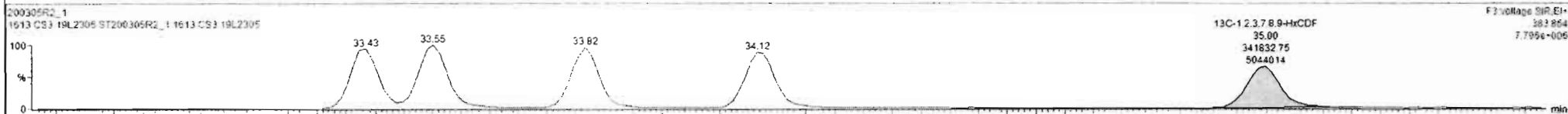
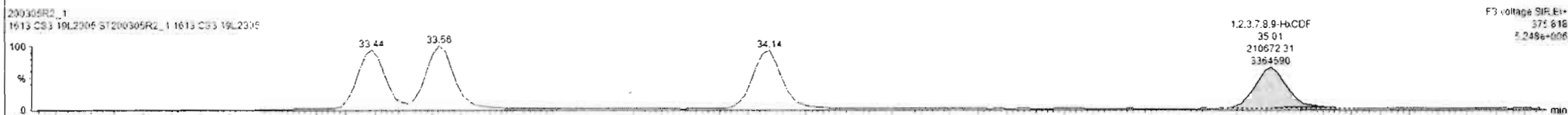
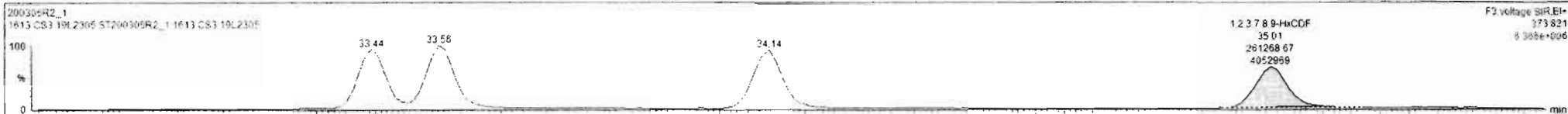
#	Name	Resp	IS Resp	Pred RA	RA	ny	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc	%Rec	STD out
1	2,3,7,8-TCDD	1.55e5	1.63e6	0.77	0.78	NO	0.5681	25.75	25.74	NO	1.001	1.001	9.6E	96.6	NO
2	1,2,3,7,8-PeCDD	5.28e5	1.19e6	0.63	0.64	NO	0.5723	30.92	30.91	NO	1.001	1.000	45.7	91.4	NO
3	1,2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	1.24	NO	1.0768	34.20	34.20	NO	1.000	1.000	49.3	98.6	NO
4	1,2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	1.24	NO	0.9211	34.39	34.40	NO	1.000	1.000	51.4	102	NO
5	1,2,3,7,8,9-HxCDD	4.62e5	9.87e5	1.24	1.23	NO	0.9182	34.69	34.67	NO	1.001	1.000	51.0	102	NO
6	1,2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.24	1.03	NO	0.9231	36.12	36.12	NO	1.000	1.000	51.8	104	NO
7	OCDD	6.13e5	1.22e6	0.89	0.88	NO	0.9746	41.23	41.24	NO	1.000	1.000	103	102	NO
8	2,3,7,8-TCDF	1.99e5	2.25e6	0.77	0.77	NO	0.6020	24.77	24.78	NO	1.001	1.001	11.0	110	NO
9	1,2,3,7,8-PeCDF	8.12e5	1.74e6	1.55	1.54	NO	0.9074	29.59	29.58	NO	1.001	1.000	51.4	103	NO
10	2,3,4,7,8-PeCDF	6.24e5	1.70e6	1.55	1.54	NO	0.9516	30.61	30.59	NO	1.001	1.000	51.0	102	NO
11	1,2,3,4,7,8-HxCDF	5.76e5	1.26e6	1.24	1.23	NO	0.8623	33.43	33.44	NO	1.000	1.000	56.5	111	NO
12	1,2,3,6,7,8-HxCDF	6.36e5	1.33e6	1.24	1.22	NO	0.8414	33.56	33.56	NO	1.000	1.000	56.6	113	NO
13	2,3,4,6,7,8-HxCDF	6.17e5	1.23e6	1.24	1.22	NO	0.8962	34.15	34.14	NO	1.001	1.001	55.8	112	NO
14	1,2,3,7,8,9-HxCDF	4.72e5	9.93e5	1.24	1.24	NO	0.8578	35.00	35.01	NO	1.000	1.000	56.4	111	NO
15	1,2,3,4,6,7,8-HpCDF	4.35e5	9.31e5	1.04	1.00	NO	0.8511	36.74	36.71	NO	1.001	1.000	54.9	110	NO
16	1,2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.04	1.00	NO	0.9799	38.78	38.79	NO	1.000	1.000	57.8	116	NO
17	OCDF	6.92e5	1.52e6	0.89	0.88	NO	0.8655	41.41	41.42	NO	1.000	1.000	112	112	NO





200305R2\_1 - ST200305R2\_1 1613 CS3 19L2305 - 1613 CS3 19L2305

#	Name	Resp	IS Resp	Pred RA	RA	iny	RRF	Pred RT	RT	RT Flag	Pred RRT	RRT	Conc.	%Rec	STD out
1	1,2,3,7,8-TCDD	1.55e5	1.62e6	0.77	0.78	NO	0.9881	25.75	25.74	NO	1.001	1.001	9.66	96.6	NO
2	1,2,3,7,8-PeCDD	5.28e5	1.19e6	0.83	0.84	NO	0.9723	30.92	30.91	NO	1.001	1.000	45.7	91.4	NO
3	1,2,3,4,7,8-HxCDD	4.61e5	8.73e5	1.24	1.24	NO	1.0708	34.30	34.30	NO	1.000	1.000	49.2	98.6	NO
4	1,2,3,6,7,8-HxCDD	4.99e5	1.05e6	1.24	1.24	NO	0.9211	34.39	34.40	NO	1.000	1.000	51.4	103	NO
5	1,2,3,7,8,9-HxCDD	4.62e5	9.87e5	1.24	1.23	NO	0.9182	34.69	34.67	NO	1.001	1.000	51.0	102	NO
6	1,2,3,4,6,7,8-HpCDD	3.31e5	6.92e5	1.04	1.03	NO	0.9231	36.12	36.12	NO	1.000	1.000	51.8	104	NO
7	OCDD	6.13e5	1.22e6	0.89	0.88	NO	0.9748	41.23	41.24	NO	1.000	1.000	103	107	NO
8	2,3,7,8-TCDF	1.99e5	2.25e6	0.77	0.77	NO	0.9820	24.77	24.78	NO	1.001	1.001	11.0	110	NO
9	1,2,3,7,8-PeCDF	8.12e5	1.74e6	1.55	1.54	NO	0.9074	29.59	29.58	NO	1.001	1.000	51.4	103	NO
10	2,3,4,7,8-PeCDF	8.24e5	1.70e6	1.55	1.54	NO	0.9516	30.61	30.59	NO	1.001	1.000	51.0	102	NO
11	1,2,3,4,7,8-HxCDF	5.78e5	1.20e6	1.24	1.23	NO	0.8623	33.43	33.44	NO	1.000	1.000	55.5	111	NO
12	1,2,3,6,7,8-HxCDF	5.36e5	1.33e6	1.24	1.22	NO	0.8414	33.56	33.56	NO	1.000	1.000	56.6	113	NO
13	2,3,4,6,7,8-HxCDF	6.17e5	1.23e6	1.24	1.22	NO	0.8962	34.15	34.14	NO	1.001	1.001	55.8	112	NO
14	1,2,3,7,8,9-HxCDF	4.72e5	9.93e5	1.24	1.24	NO	0.8578	35.00	35.01	NO	1.000	1.000	55.4	111	NO
15	1,2,3,4,6,7,8-HpCDF	4.35e5	9.21e5	1.04	1.00	NO	0.8511	36.74	36.71	NO	1.001	1.000	54.9	110	NO
16	1,2,3,4,7,8,9-HpCDF	3.24e5	5.72e5	1.04	1.00	NO	0.9799	38.78	38.79	NO	1.000	1.000	57.8	116	NO
17	OCDF	6.92e5	1.52e6	0.89	0.88	NO	0.8955	41.41	41.42	NO	1.000	1.000	113	113	NO



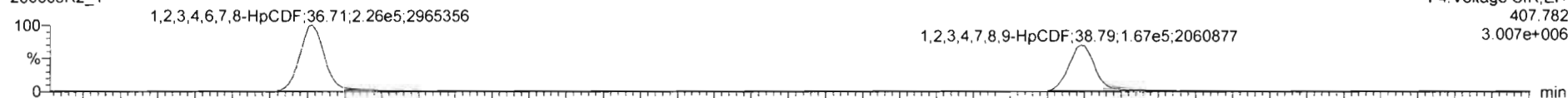
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Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time  
Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

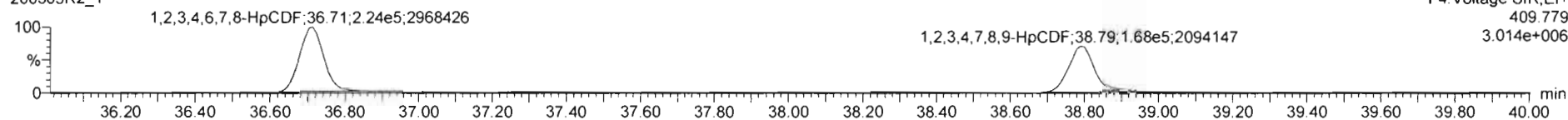
Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

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

200305R2\_1

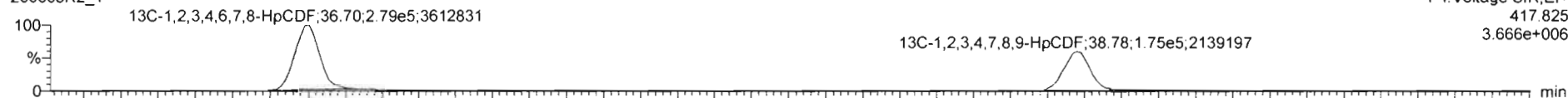


200305R2\_1

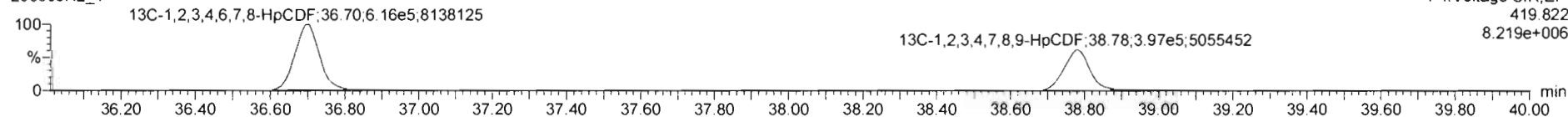


**13C-1,2,3,4,6,7,8-HpCDF**

200305R2\_1

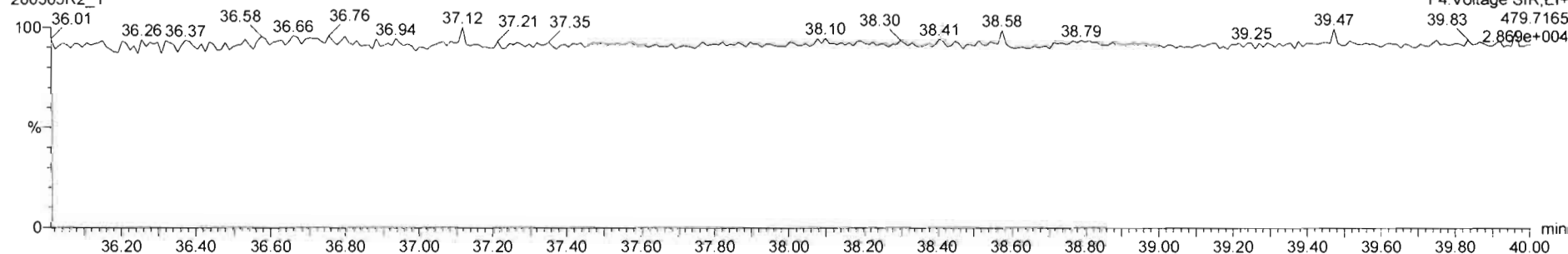


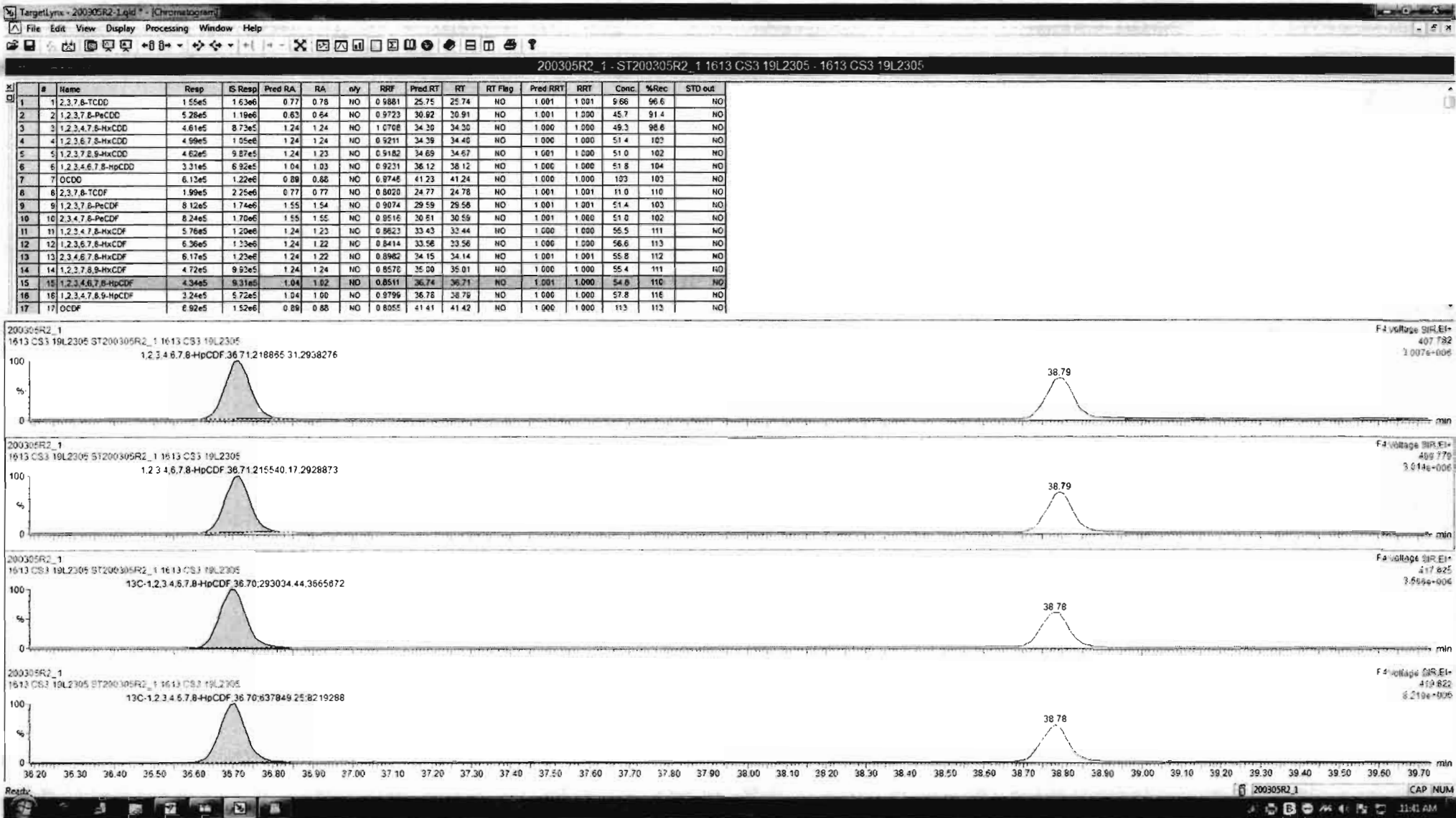
200305R2\_1

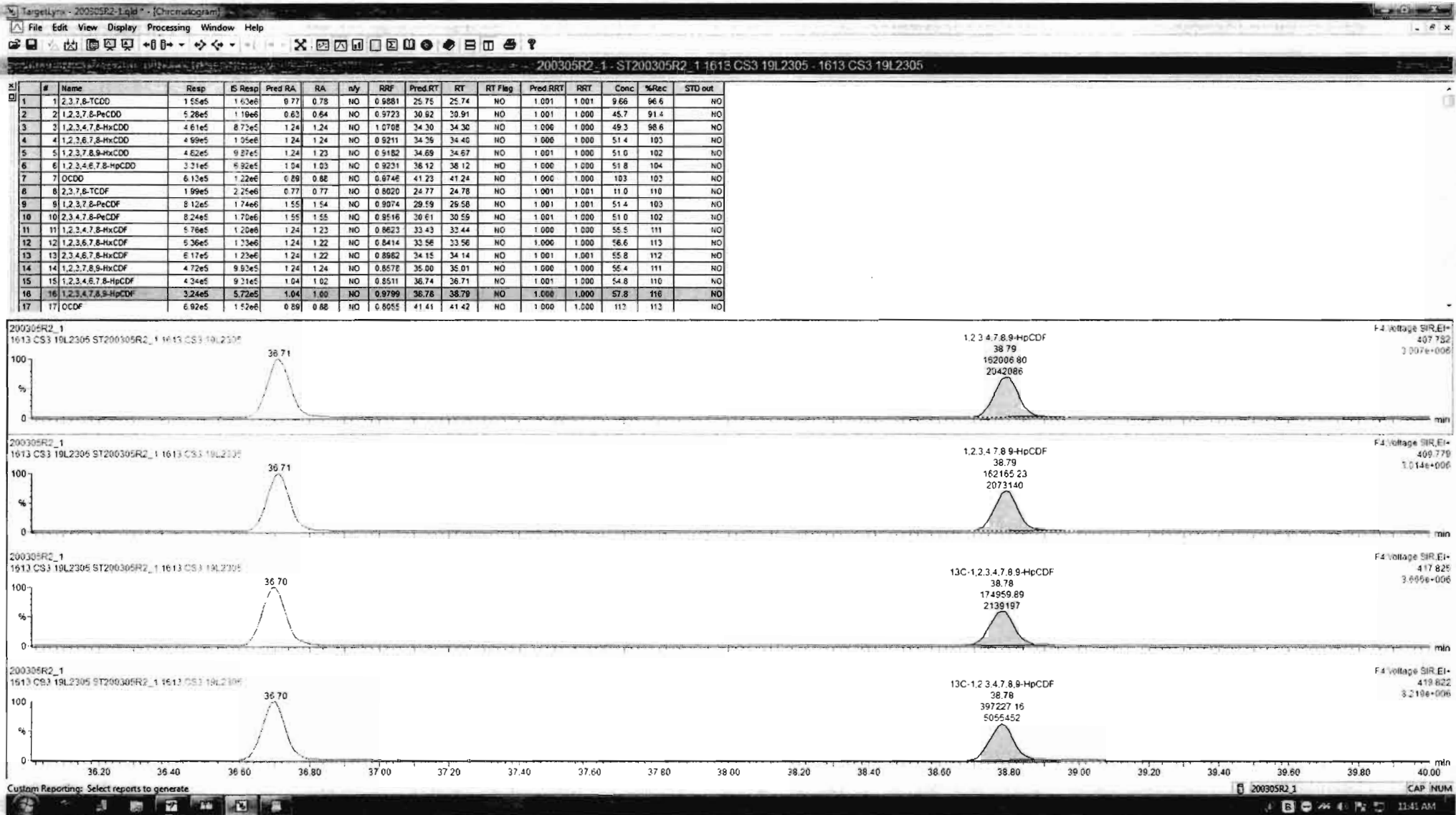


**DPE4**

200305R2\_1





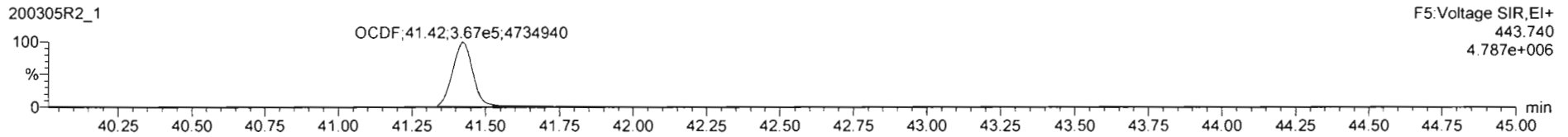
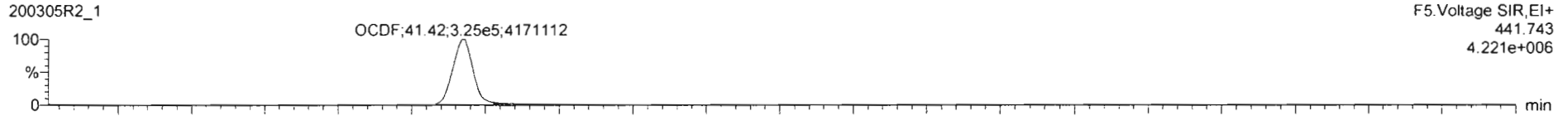


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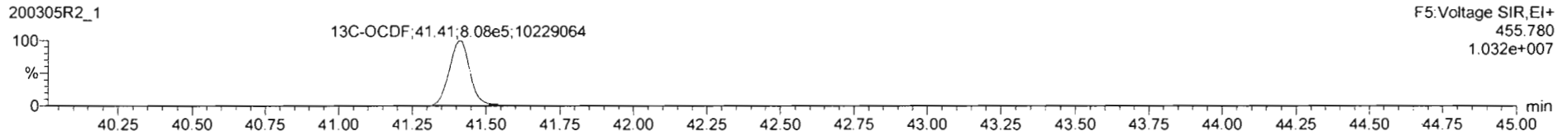
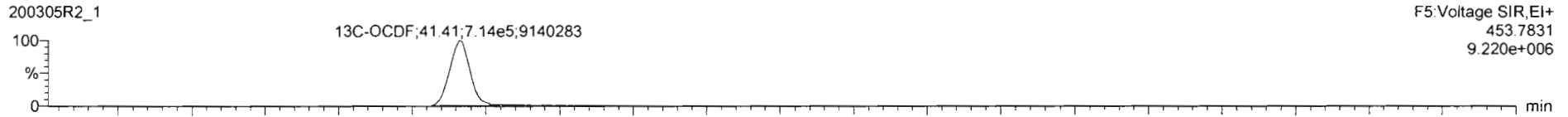
Last Altered: Thursday, March 05, 2020 11:42:38 AM Pacific Standard Time  
Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

Name: 200305R2\_1, Date: 05-Mar-2020, Time: 10:40:18, ID: ST200305R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

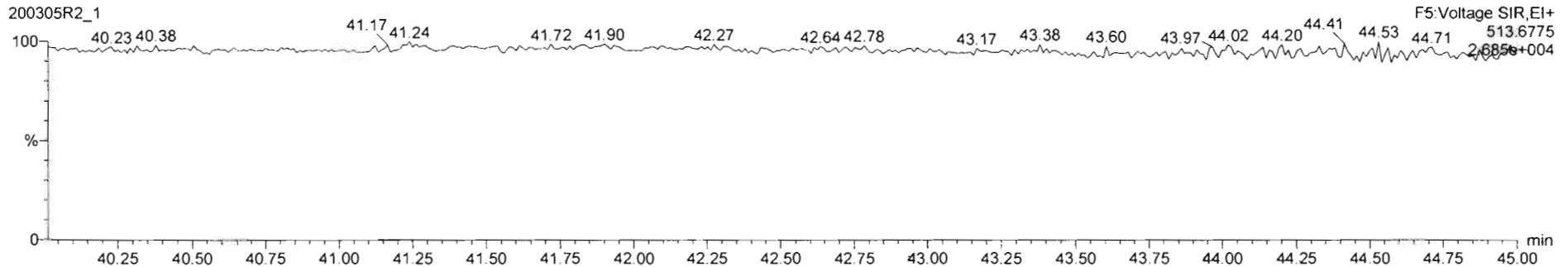
OCDF



13C-OCDF



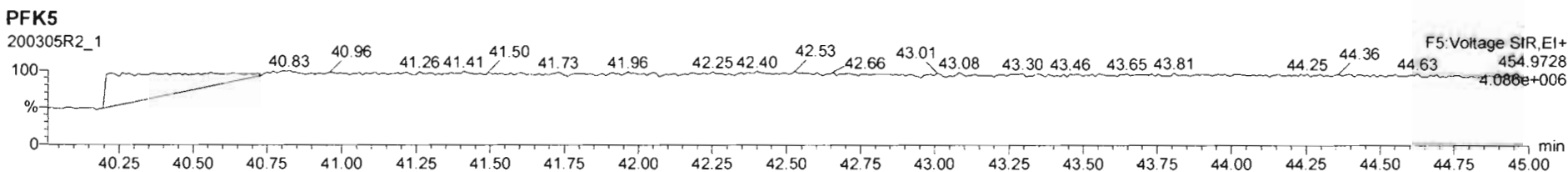
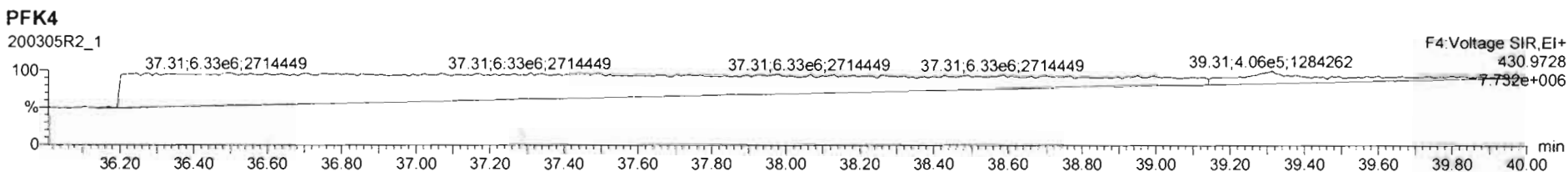
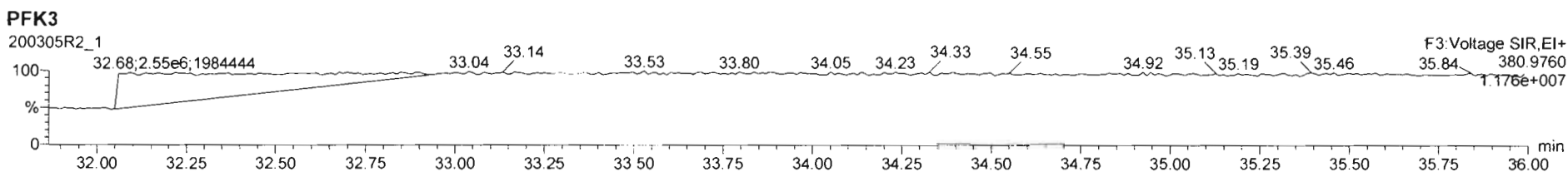
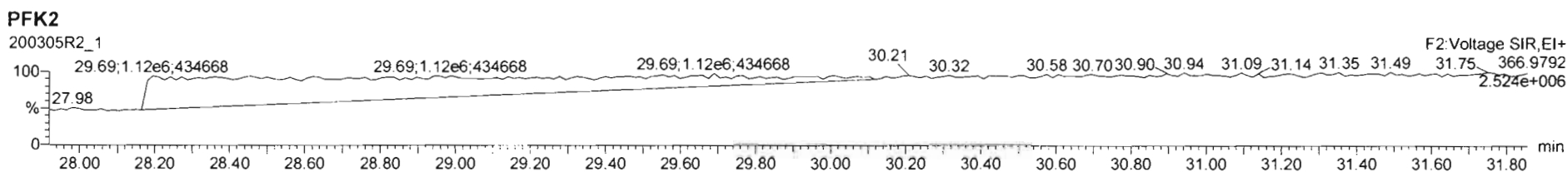
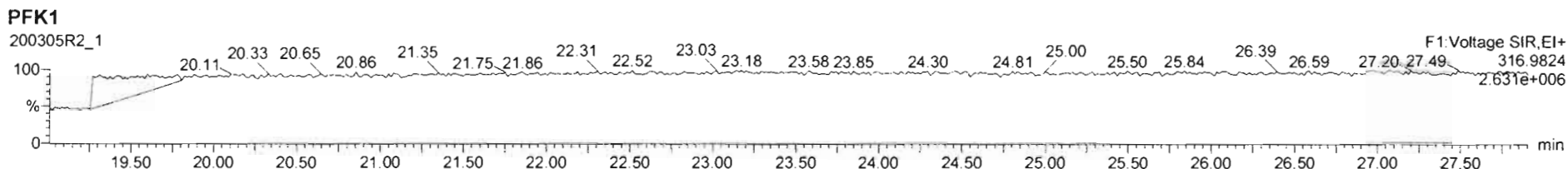
DPE5



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Printed: Thursday, March 05, 2020 11:43:24 AM Pacific Standard Time

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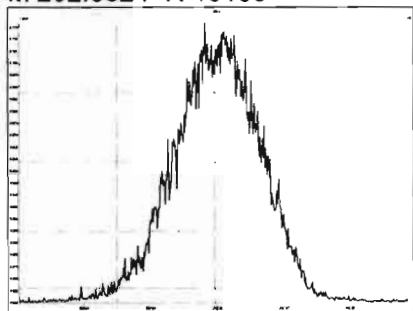




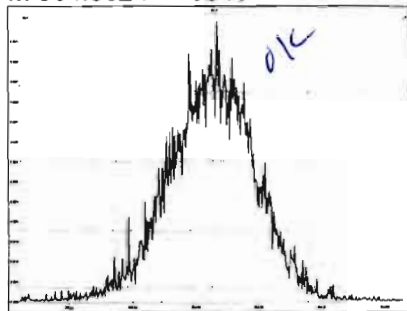
Printed: Thursday, March 05, 2020 22:45:55 Pacific Standard Time

*PFK dial*

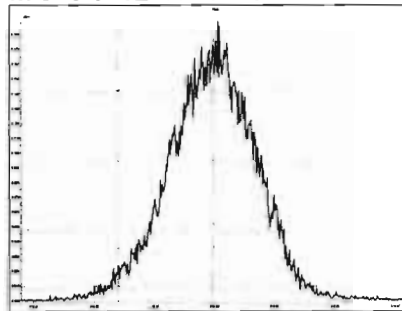
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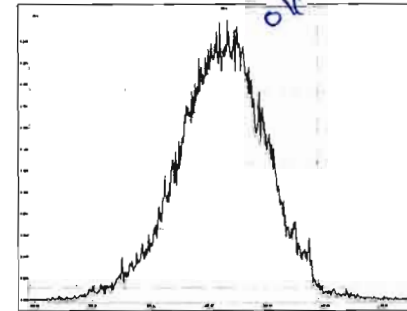
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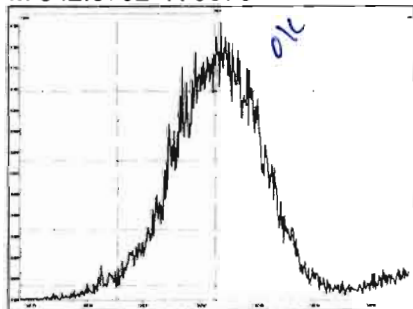
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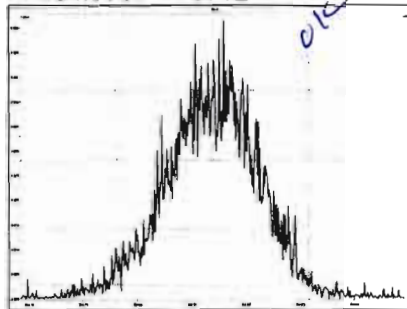
M 330.9792 R 9452



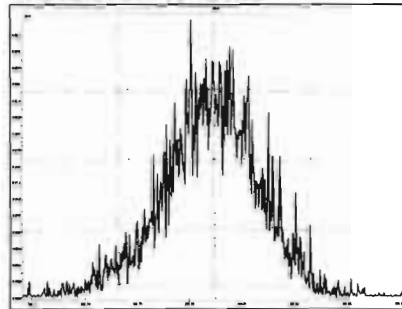
M 342.9792 R 9578



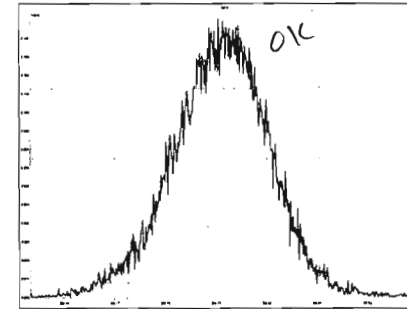
M 354.9792 R 9792



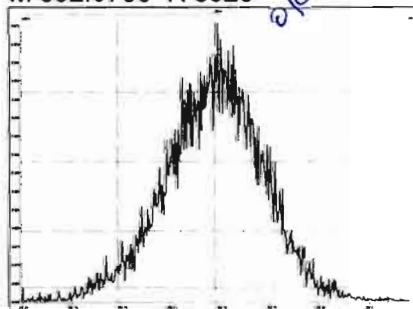
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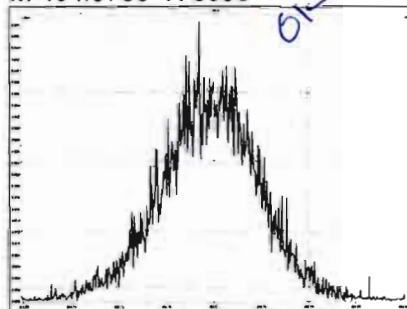
M 380.9760 R 8914



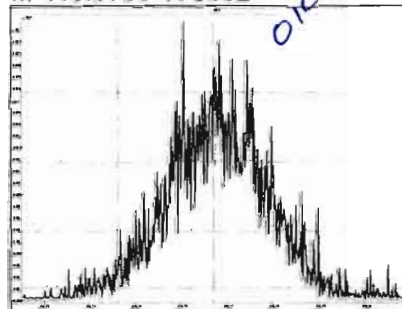
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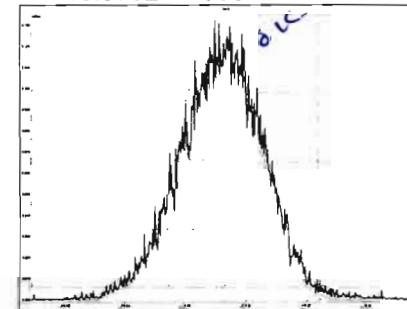
M 404.9760 R 8695



M 416.9760 R 9032

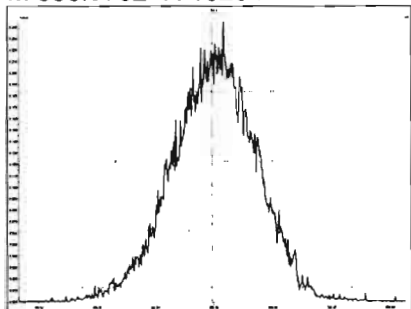


M 318.9792 R 9982

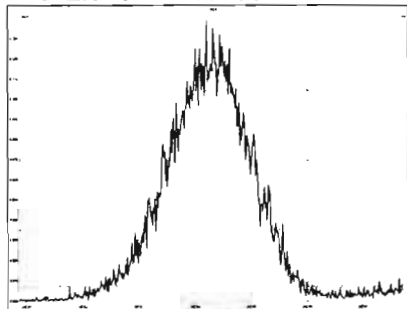


Printed: Thursday, March 05, 2020 22:45:55 Pacific Standard Time

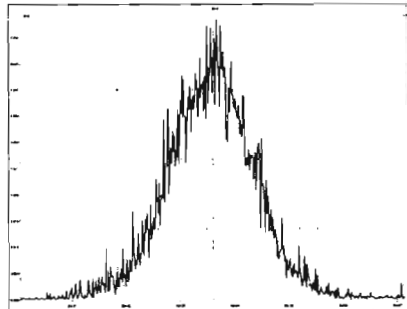
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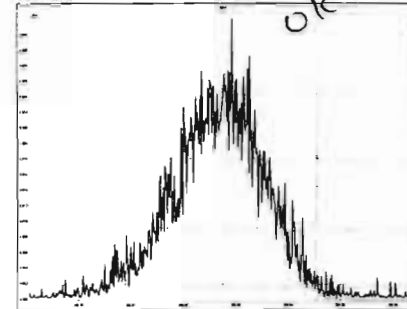
M 342.9792 R 10100



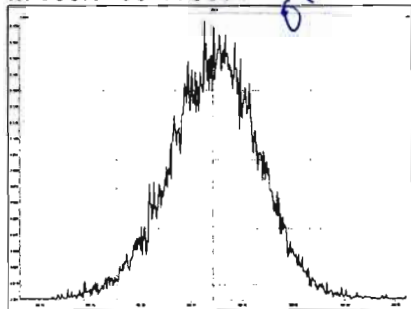
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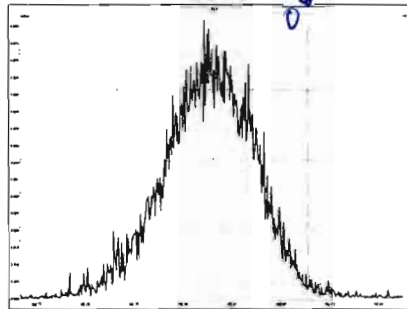
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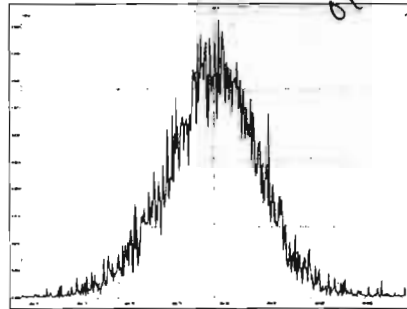
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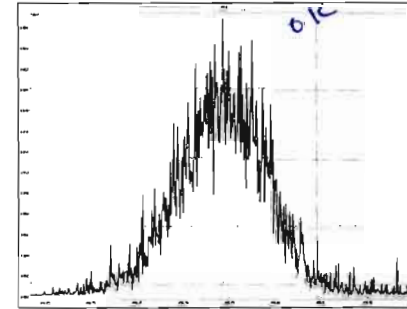
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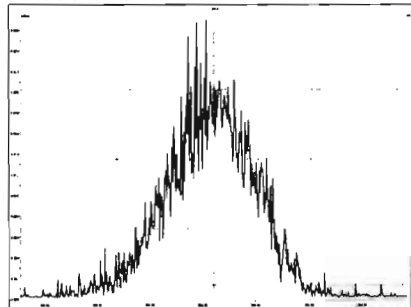
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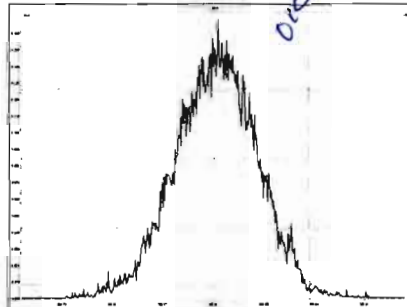
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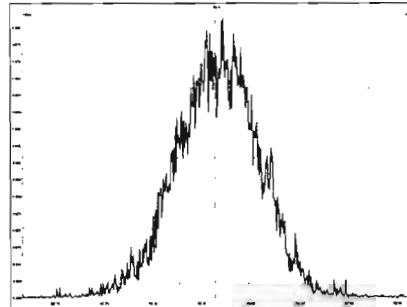
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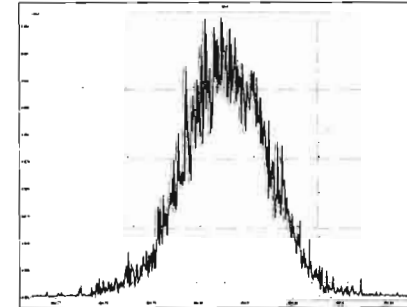
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M 392.9760 R 10162

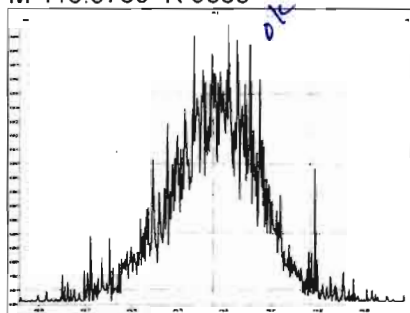


M 404.9760 R 10528

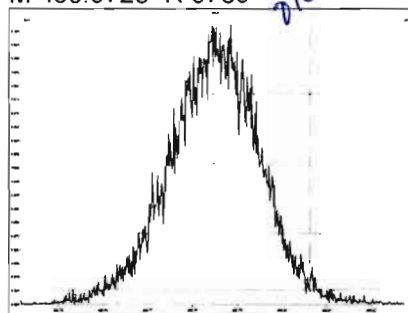


Printed: Thursday, March 05, 2020 22:45:55 Pacific Standard Time

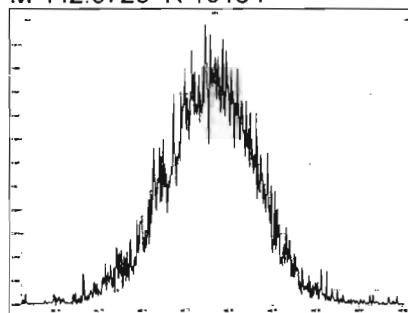
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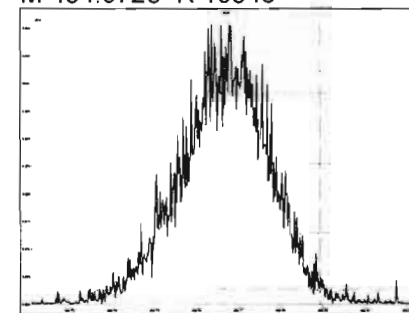
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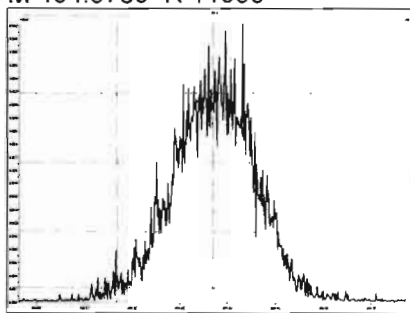
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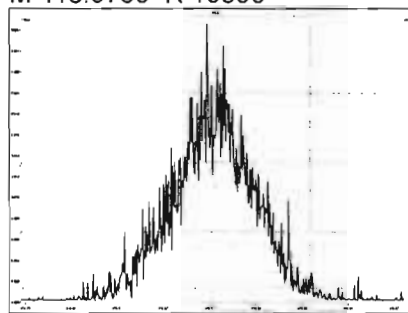
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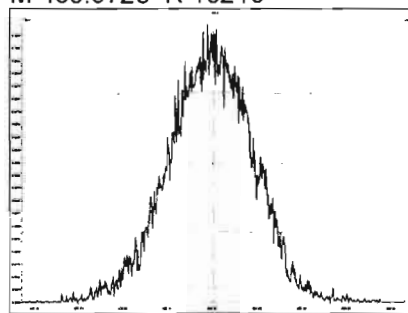
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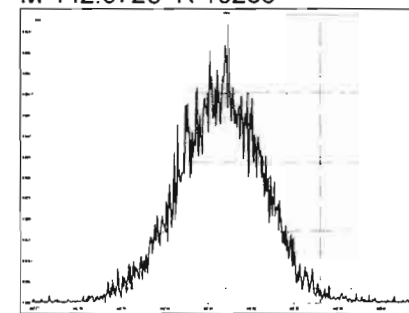
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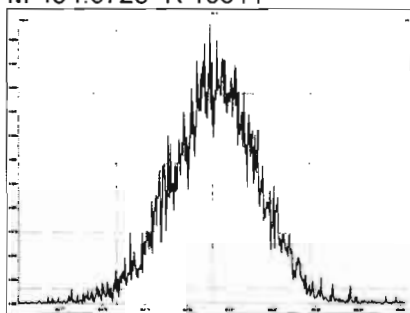
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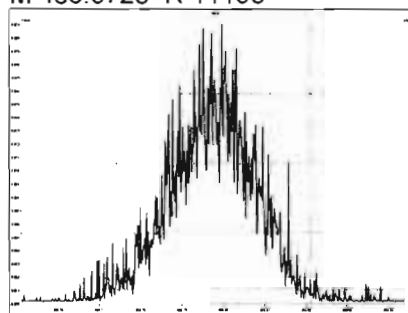
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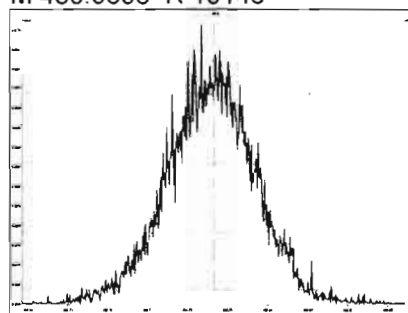
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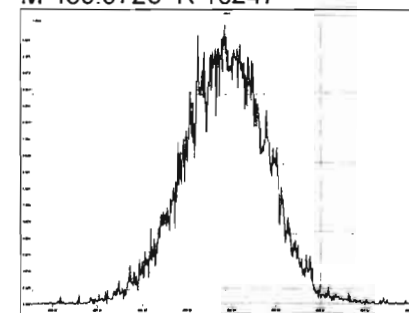
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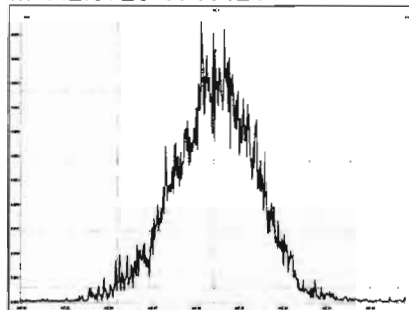
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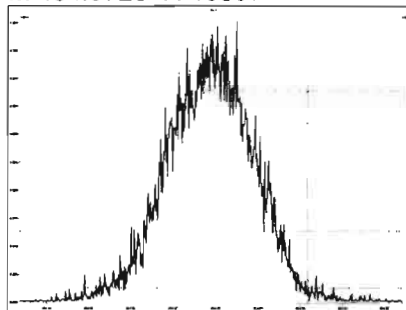
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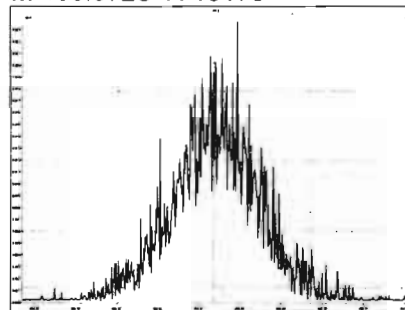
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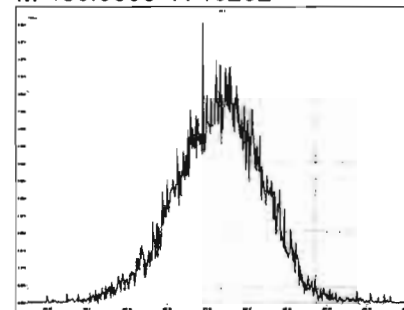
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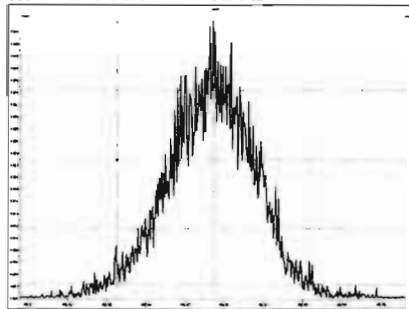
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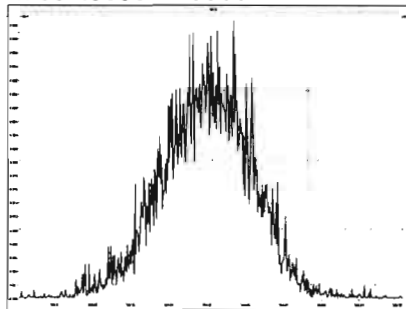
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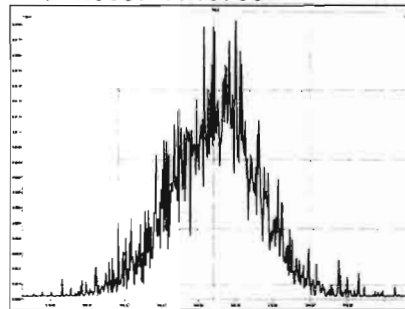
M 492.9696 R 10262



M 504.9696 R 9900



M 516.9697 R 10799



## HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

**Beg. Calibration ID:** ST200310R1-1

**Reviewed By:** HC 3.10.2020

*Initials & Date*

**End Calibration ID:** ST200310R2-1

*GRB  
03/10/2020*

**Beg.**      **End**

**Beg.**      **End**

**Ion abundance within QC limits?**

**Mass resolution  $\geq$**

**Concentrations within criteria?**

5k     6-8K     8K     10K

1614    1699    429    1613/1668/8280

**TCDD/TCDF Valleys <25%**

**Intergrated peaks display correctly?**

**First and last eluters present?**

*NA*       *NA*

**GC Break <20%**

*NA*

**Retention Times within criteria?**

**8280 CS1 End Standard:**

**Verification Std. named correctly?**

**- Ratios within limits, S/N <2.5:1, CS1 within 12 hours**

*NA*

**(ST-Year-Month-Day-VG ID)**

**Forms signed and dated?**

**Comments:**

**Correct ICAL referenced?**

*GRB*      *GRB*

**Run Log:**

**- Correct instrument listed?**

**- Samples within 12 hour clock?**

*(Y)*       *N*

**- Bottle position verified?**

*GRB*

Dataset: U:\VG12.PRO\Results\200310R1\200310R1-2.qld

Last Altered: Tuesday, March 10, 2020 09:56:47 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 17:11:54 Pacific Daylight Time

GRB 03/10/2020

Hc 3.10.2020

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R1\_2, Date: 10-Mar-2020, Time: 09:25:36, ID: ST200310R1\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.96e5	0.74	NO	0.821	1.000	16.56	9.4229	94.2	0.152
2	2 13C-2,3,7,8-TCDF	2.53e6	0.78	NO	1.10	1.000	16.54	101.91	102	0.208
3	3 13C-1,2,3,4-TCDF	2.26e6	0.79	NO	1.00	1.000	14.42	100.00	100	0.229
4	4 13C-1,2,3,4-TCDD	1.98e6	0.77	NO	12000	1.000	15.05	164.88	165	0.206

8.4-12.85/v



82-121/v



Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 17:07:22 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 17:07:31 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	200310R1_1	CP200310R1_1 225 CPSM	10-Mar-20	08:55:22
2	200310R1_2	ST200310R1_1 1613 CS3 19L2305	10-Mar-20	09:25:36
3	200310R1_3	SOLVENT BLANK	10-Mar-20	09:55:54
4	200310R1_4	1904012-10RE2 PX-S23-SB48-0203 10.92	10-Mar-20	10:26:25
5	200310R1_5	2000407-02RE1 PDI-084SC-A-06-07-191002 ...	10-Mar-20	10:56:48
6	200310R1_6	2000407-03RE1 PDI-084SC-A-07-08-191002 ...	10-Mar-20	11:27:16
7	200310R1_7	2000407-04RE1 PDI-084SC-A-08-09-191002 ...	10-Mar-20	11:57:43
8	200310R1_8	2000407-05RE1 PDI-084SC-A-09-10-191002 ...	10-Mar-20	12:28:10
9	200310R1_9	2000407-06RE1 PDI-084SC-A-10-11-191002 ...	10-Mar-20	12:58:38
10	200310R1_10	2000407-07RE1 PDI-084SC-A-11-12-191002 ...	10-Mar-20	13:29:06
11	200310R1_11	1903652-01RE2 PDI-074SC-B-00-02-191012 ...	10-Mar-20	13:59:33
12	200310R1_12	1903652-02RE2 PDI-074SC-B-02-04-191012 ...	10-Mar-20	14:30:00
13	200310R1_13	1903652-03RE2 PDI-074SC-B-04-06-191012 ...	10-Mar-20	15:00:31
14	200310R2_1	SOLVENT BLANK	10-Mar-20	15:33:09
15	200310R2_2	CP200310R2_1 225 CPSM	10-Mar-20	16:03:23
16	200310R2_3	ST200310R2_1 1613 CS3 19L2305	10-Mar-20	16:33:47

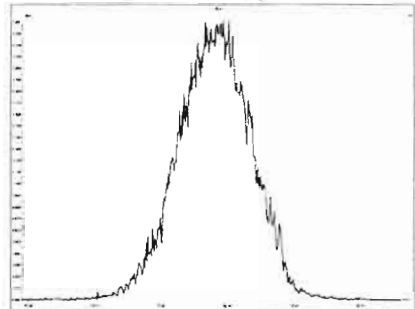
Experiment Calibration Report

MassLynx 4.1 SCN815

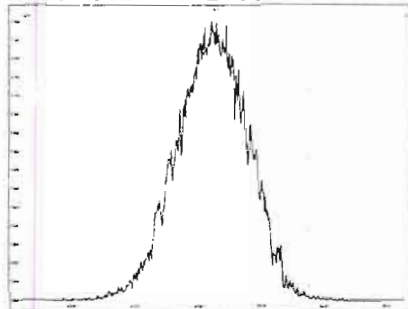
File: Experiment: tcdf\_db225.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, March 10, 2020 08:50:47 Pacific Daylight Time

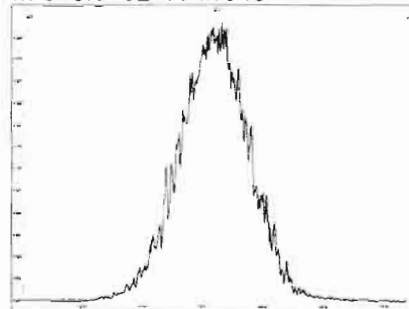
M 292.9824 R 11739



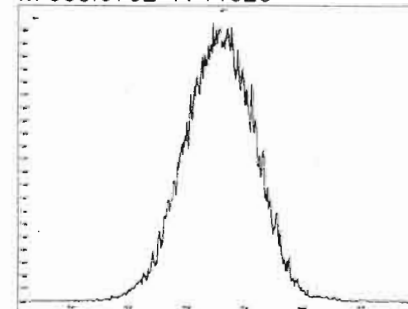
M 304.9824 R 12755



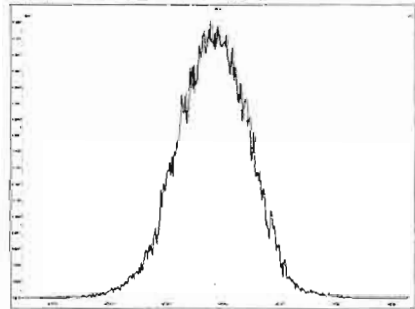
M 318.9792 R 11846



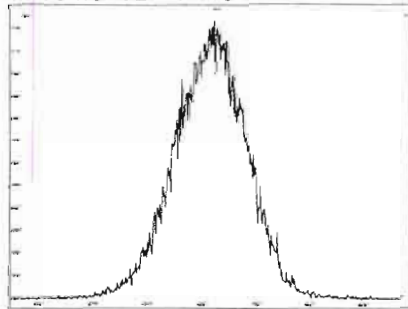
M 330.9792 R 11629



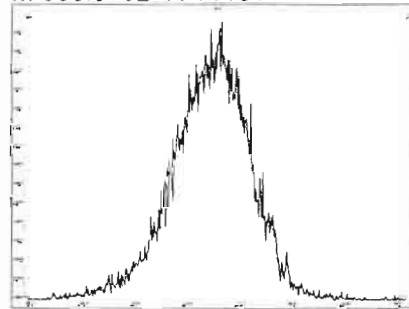
M 342.9792 R 11363



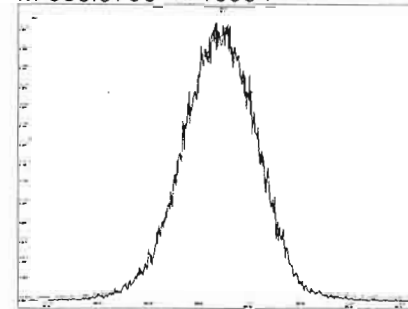
M 354.9792 R 11314



M 366.9792 R 11161



M 380.9760 R 10964

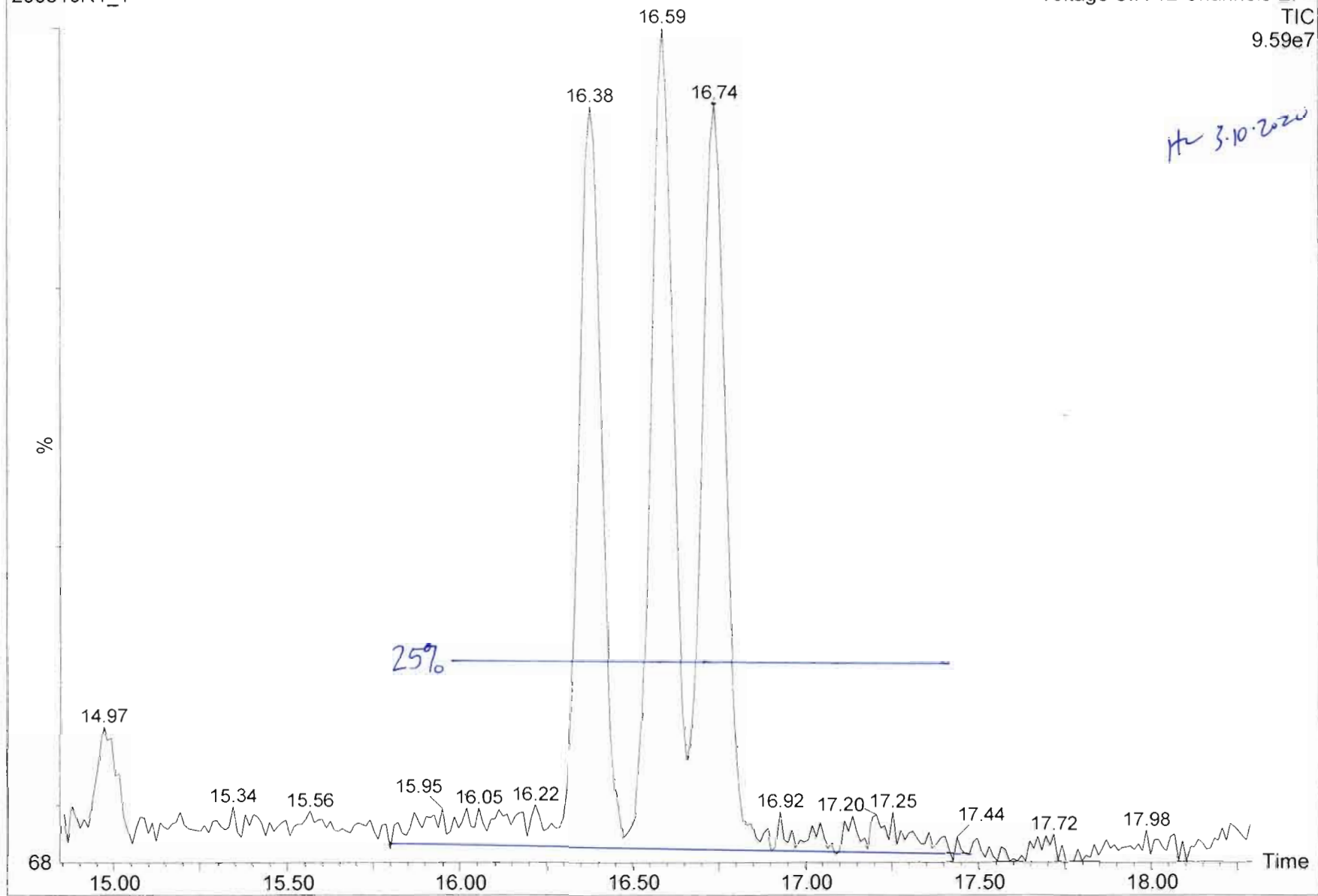


GKB 03/10/2020

225 CPSM  
200310R1\_1

Voltage SIR 12 Channels EI+  
TIC  
9.59e7

Hu 3.10.2020



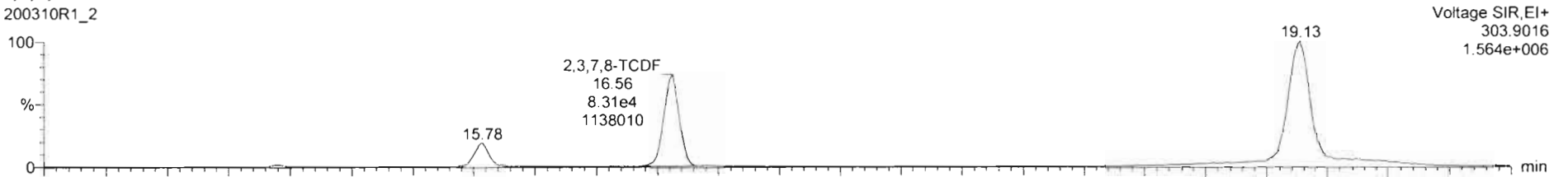
Dataset: U:\VG12.PRO\Results\200310R1\200310R1-2.qld

Last Altered: Tuesday, March 10, 2020 9:56:47 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 10:02:29 AM Pacific Daylight Time

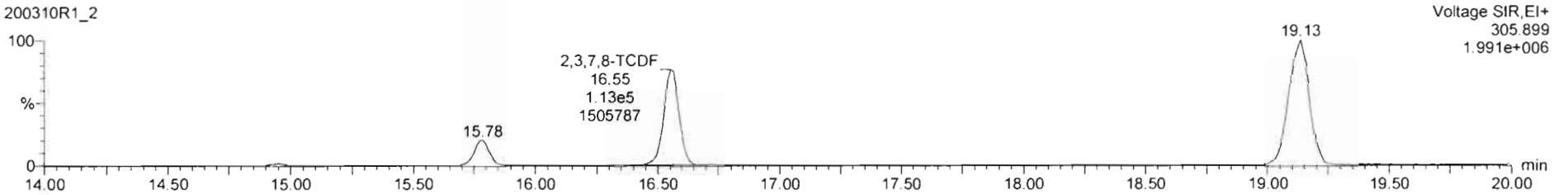
Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49  
Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R1\_2, Date: 10-Mar-2020, Time: 09:25:36, ID: ST200310R1\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

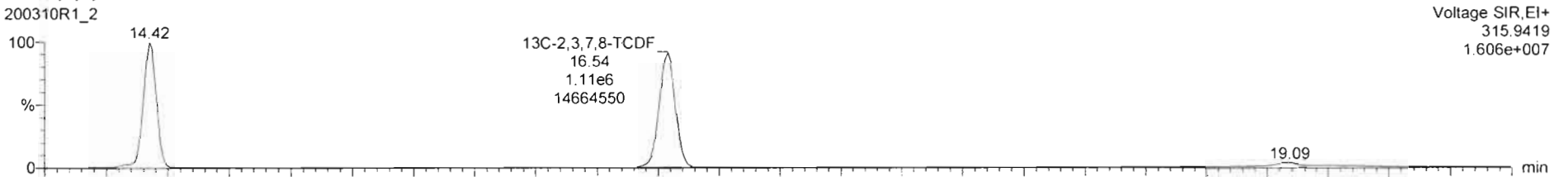
**2,3,7,8-TCDF**  
200310R1\_2



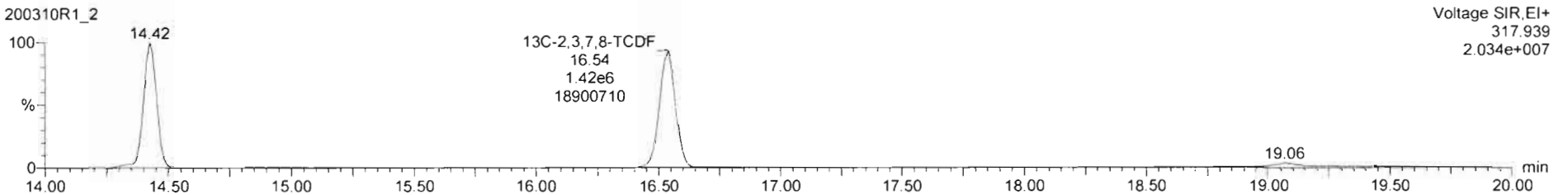
200310R1\_2



**13C-2,3,7,8-TCDF**  
200310R1\_2



200310R1\_2



Dataset: U:\VG12.PRO\Results\200310R1\200310R1-2.qld

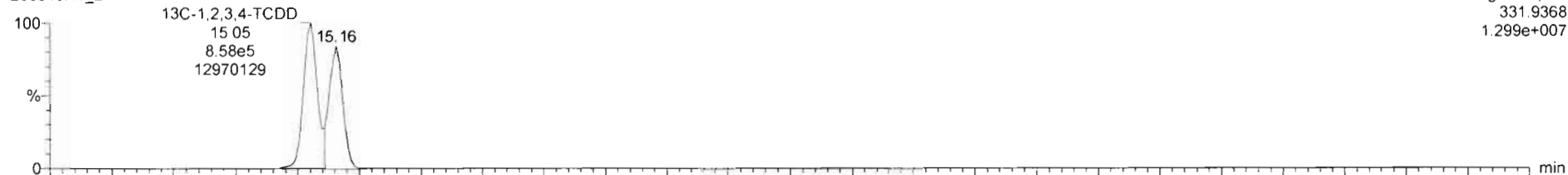
Last Altered: Tuesday, March 10, 2020 9:56:47 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 10:02:29 AM Pacific Daylight Time

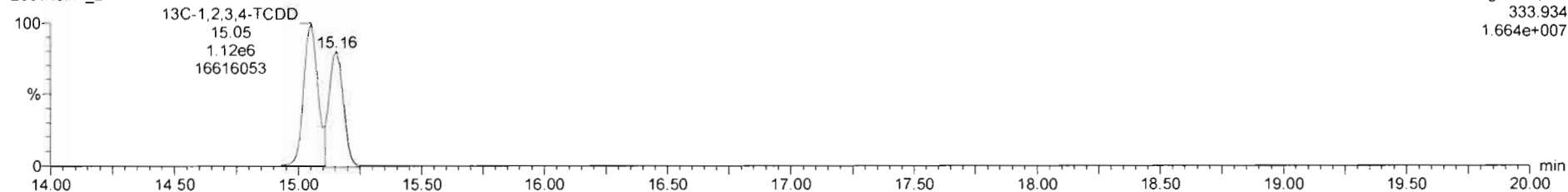
Name: 200310R1\_2, Date: 10-Mar-2020, Time: 09:25:36, ID: ST200310R1\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

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

200310R1\_2

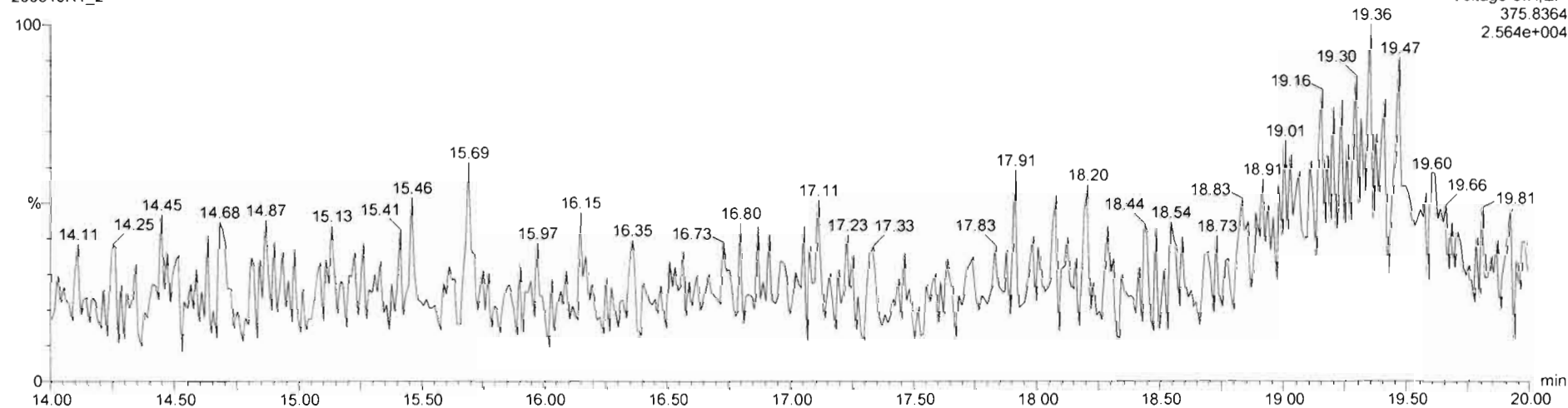


200310R1\_2



### DPE1

200310R1\_2



Dataset: U:\VG12.PRO\Results\200310R2\200310R2-3.qld

Last Altered: Tuesday, March 10, 2020 17:06:17 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 17:12:06 Pacific Daylight Time

*GRB 03/10/2020*

*Hc 3.10.2020*

Method: Untitled 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200310R2\_3, Date: 10-Mar-2020, Time: 16:33:47, ID: ST200310R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.21e5	0.76	NO	0.821	1.000	16.54	9.7120	97.1	0.232
2	2 13C-2,3,7,8-TCDF	2.77e6	0.79	NO	1.10	1.000	16.53	100.42	100	0.355
3	3 13C-1,2,3,4-TCDF	2.50e6	0.79	NO	1.00	1.000	14.42	100.00	100	0.391
4	4 13C-1,2,3,4-TCDD	2.13e6	0.78	NO	12000	1.000	15.05	177.95	178	0.268



Dataset: Untitled

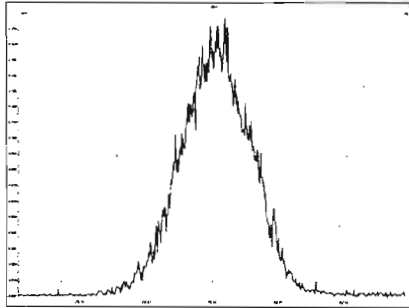
Last Altered: Tuesday, March 10, 2020 17:07:22 Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 17:07:31 Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49  
Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

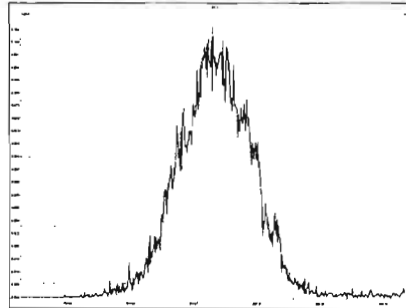
Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	200310R1_1	CP200310R1_1 225 CPSM	10-Mar-20	08:55:22
2	200310R1_2	ST200310R1_1 1613 CS3 19L2305	10-Mar-20	09:25:36
3	200310R1_3	SOLVENT BLANK	10-Mar-20	09:55:54
4	200310R1_4	1904012-10RE2 PX-S23-SB48-0203 10.92	10-Mar-20	10:26:25
5	200310R1_5	2000407-02RE1 PDI-084SC-A-06-07-191002 ...	10-Mar-20	10:56:48
6	200310R1_6	2000407-03RE1 PDI-084SC-A-07-08-191002 ...	10-Mar-20	11:27:16
7	200310R1_7	2000407-04RE1 PDI-084SC-A-08-09-191002 ...	10-Mar-20	11:57:43
8	200310R1_8	2000407-05RE1 PDI-084SC-A-09-10-191002 ...	10-Mar-20	12:28:10
9	200310R1_9	2000407-06RE1 PDI-084SC-A-10-11-191002 ...	10-Mar-20	12:58:38
10	200310R1_10	2000407-07RE1 PDI-084SC-A-11-12-191002 ...	10-Mar-20	13:29:06
11	200310R1_11	1903652-01RE2 PDI-074SC-B-00-02-191012 ...	10-Mar-20	13:59:33
12	200310R1_12	1903652-02RE2 PDI-074SC-B-02-04-191012 ...	10-Mar-20	14:30:00
13	200310R1_13	1903652-03RE2 PDI-074SC-B-04-06-191012 ...	10-Mar-20	15:00:31
14	200310R2_1	SOLVENT BLANK	10-Mar-20	15:33:09
15	200310R2_2	CP200310R2_1 225 CPSM	10-Mar-20	16:03:23
16	200310R2_3	ST200310R2_1 1613 CS3 19L2305	10-Mar-20	16:33:47

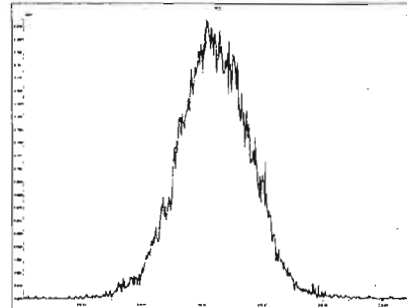
M 292.9824 R 11911



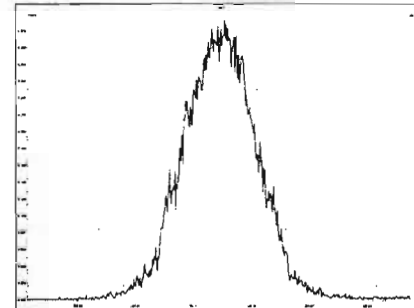
M 304.9824 R 12063



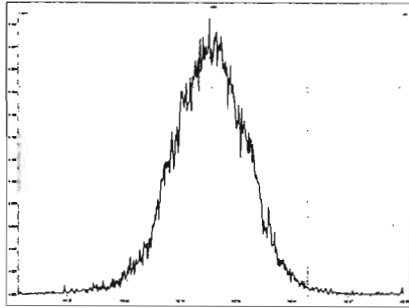
M 318.9792 R 11767



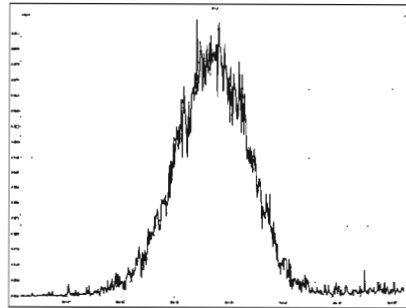
M 330.9792 R 11062



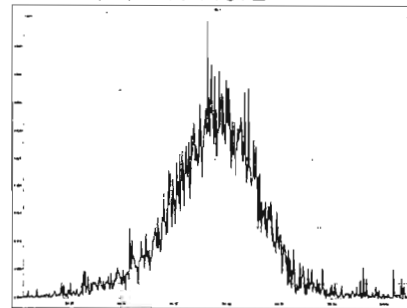
M 342.9792 R 10895



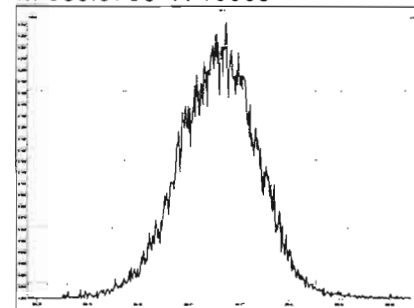
M 354.9792 R 11473



M 366.9792 R 11072



M 380.9760 R 10886

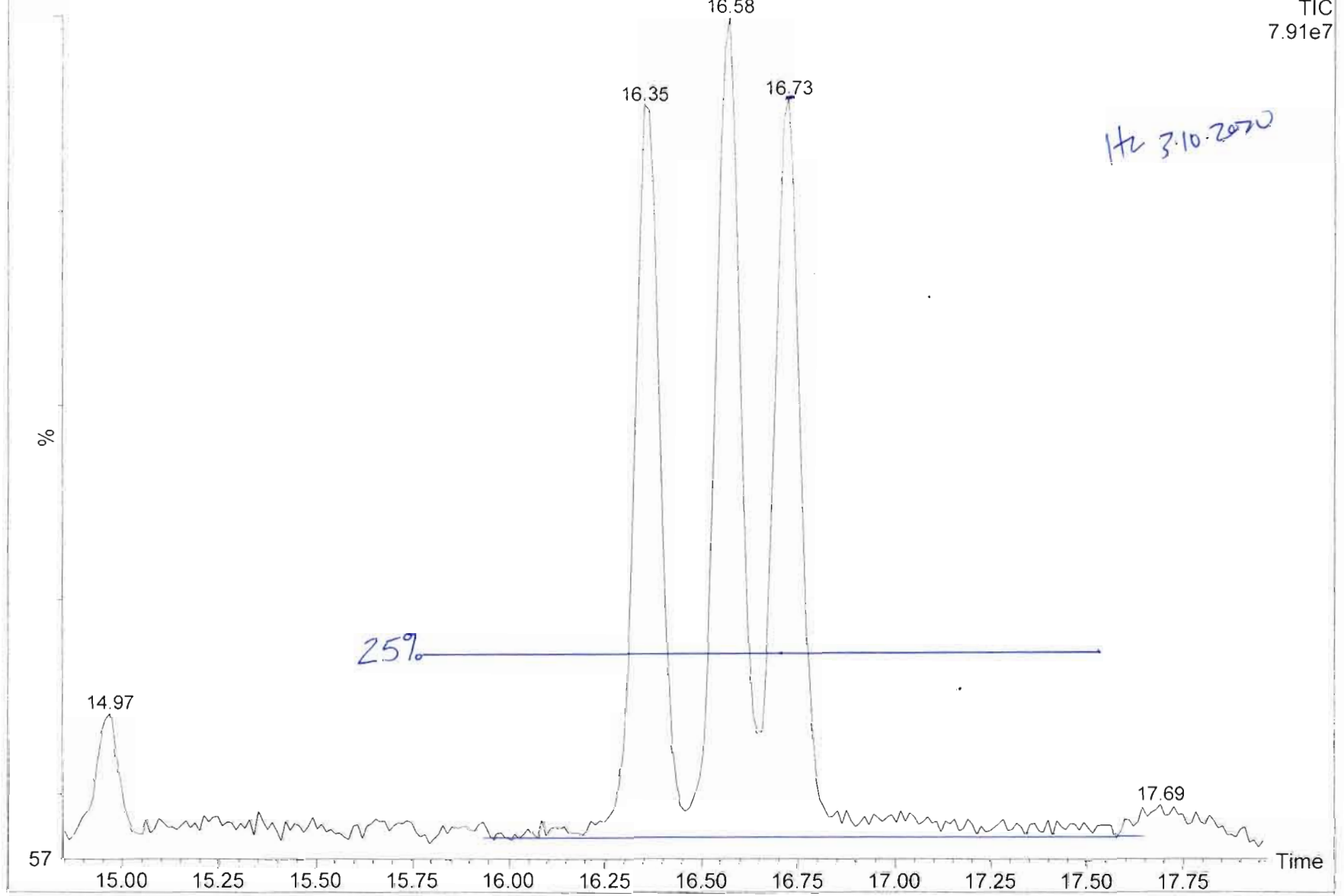


GRB 03/10/2020

225 CPSM  
200310R2\_2

Voltage SIR 12 Channels EI+  
TIC  
7.91e7

HZ 3.10.2020



Dataset: U:\VG12.PRO\Results\200310R2\200310R2-3.qld

Last Altered: Tuesday, March 10, 2020 17:06:17 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 17:08:42 Pacific Daylight Time

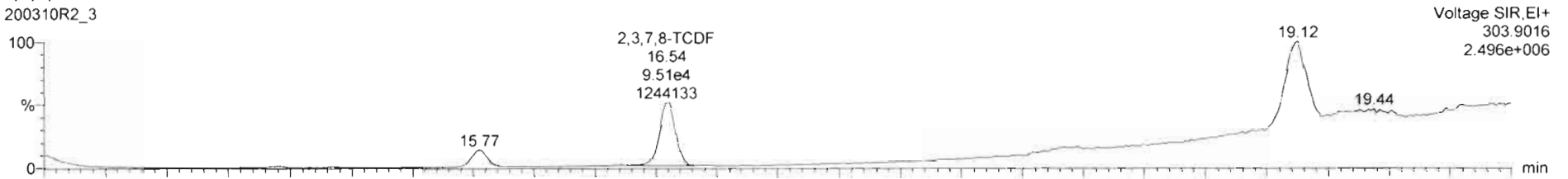
Method: Untitled 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

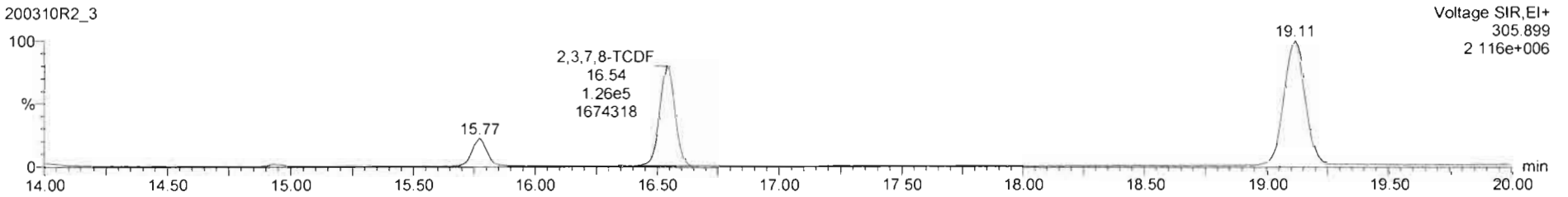
Name: 200310R2\_3, Date: 10-Mar-2020, Time: 16:33:47, ID: ST200310R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

2,3,7,8-TCDF

200310R2\_3

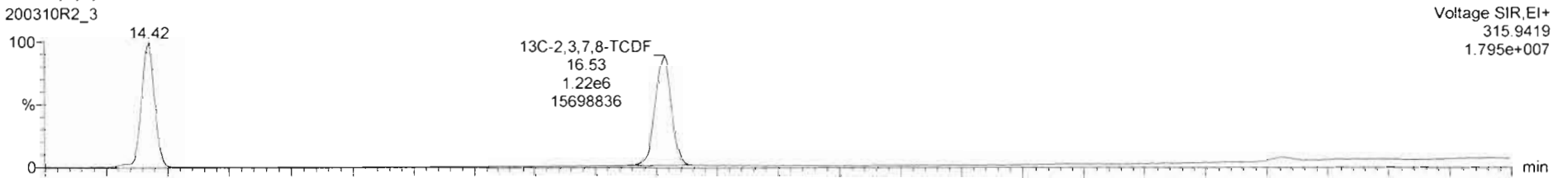


200310R2\_3

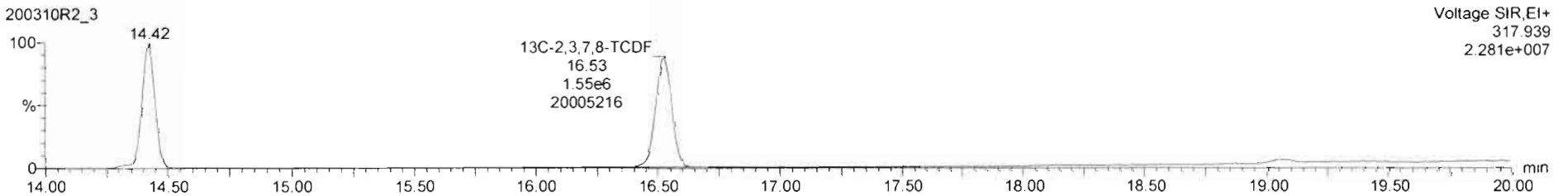


13C-2,3,7,8-TCDF

200310R2\_3



200310R2\_3



Dataset: U:\VG12.PRO\Results\200310R2\200310R2-3.qld

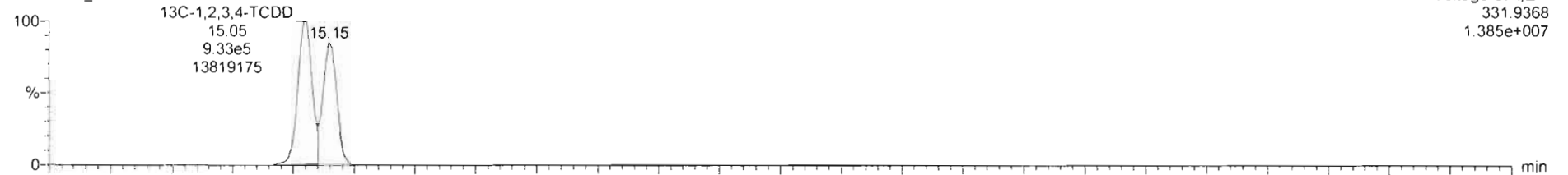
Last Altered: Tuesday, March 10, 2020 17:06:17 Pacific Daylight Time

Printed: Tuesday, March 10, 2020 17:08:42 Pacific Daylight Time

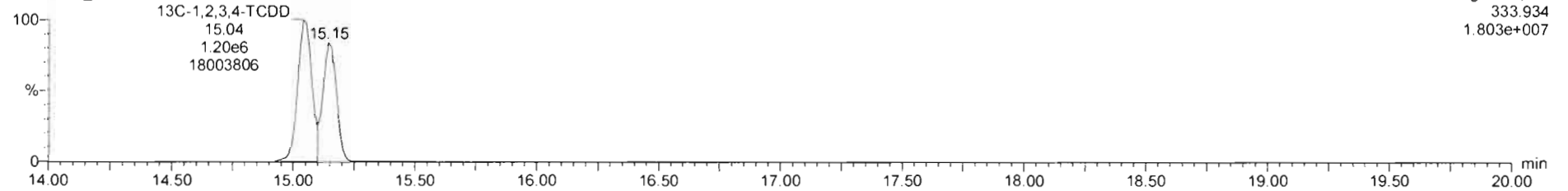
Name: 200310R2\_3, Date: 10-Mar-2020, Time: 16:33:47, ID: ST200310R2\_1 1613 CS3 19L2305, Description: 1613 CS3 19L2305

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

200310R2\_3

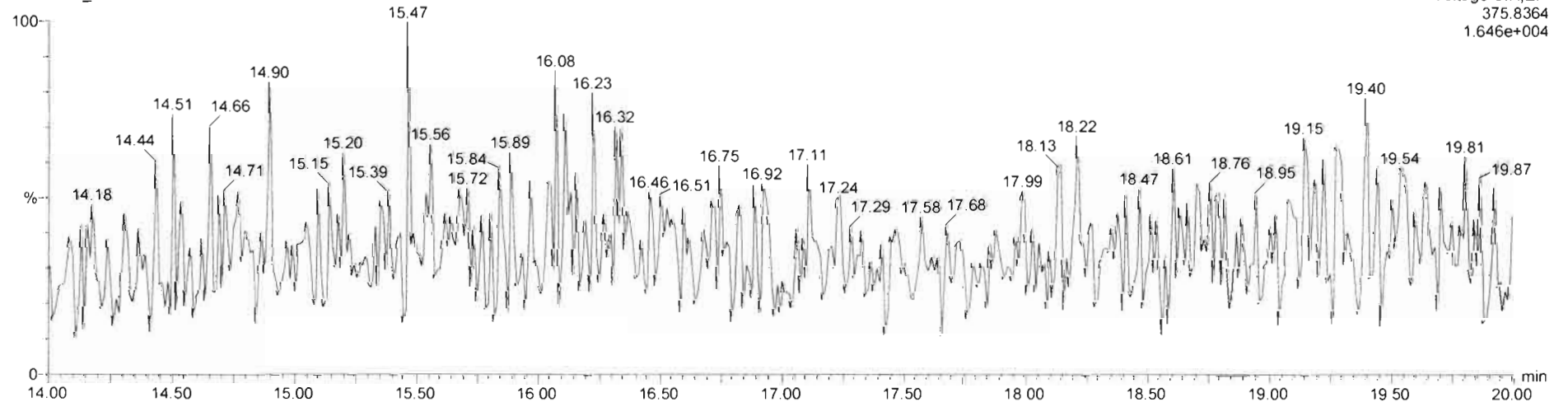


200310R2\_3



DPE1

200310R2\_3



## **INITIAL CALIBRATION**



Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

Last Altered: Sunday, February 02, 2020 11:05:29 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:14:39 AM Pacific Standard Time

GRB 02/02/2020

C: 02/04/2020

Method: U:\VG12.PRO\MethDB\1613rrt-1-28-20.mdb 28 Jan 2020 16:09:23

Calibration: U:\VG12.PRO\CurveDB\cb5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Compound name: 2,3,7,8-TCDD

Response Factor: 0.988069

RRF SD: 0.0483829, Relative SD: 4.89671

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	200131R1_1	0.250	0.83	NO	25.74	1.001	2.87e3	1.21e6	0.239	-4.3	0.945	bb
2	200131R1_2	0.500	0.77	NO	25.69	1.001	7.22e3	1.37e6	0.532	6.5	1.05	bb
3	200131R1_3	2.00	0.80	NO	25.70	1.001	3.00e4	1.44e6	2.11	5.7	1.04	bb
4	200131R1_4	10.0	0.78	NO	25.70	1.001	1.39e5	1.42e6	9.92	-0.8	0.980	db
5	200131R1_5	40.0	0.77	NO	25.69	1.001	5.51e5	1.45e6	38.3	-4.2	0.946	bb
6	200131R1_6	300	0.78	NO	25.70	1.001	5.05e6	1.75e6	291	-2.9	0.960	bb

Compound name: 1,2,3,7,8-PeCDD

Response Factor: 0.972284

RRF SD: 0.054098, Relative SD: 5.56402

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	200131R1_1	1.25	0.57	NO	30.67	1.000	1.12e4	9.52e5	1.21	-3.0	0.943	bb
2	200131R1_2	2.50	0.60	NO	30.64	1.001	2.75e4	1.05e6	2.70	7.9	1.05	bb
3	200131R1_3	10.0	0.63	NO	30.64	1.000	1.18e5	1.14e6	10.6	6.4	1.03	bb
4	200131R1_4	50.0	0.63	NO	30.64	1.000	5.09e5	1.09e6	48.2	-3.7	0.936	bb
5	200131R1_5	200	0.63	NO	30.62	1.000	2.30e6	1.23e6	192	-4.2	0.931	bb
6	200131R1_6	1500	0.63	NO	30.64	1.000	2.16e7	1.53e6	1450	-3.4	0.940	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

Last Altered: Sunday, February 02, 2020 11:05:29 AM Pacific Standard Time  
 Printed: Sunday, February 02, 2020 11:14:39 AM Pacific Standard Time

**Compound name: 1,2,3,4,7,8-HxCDD**

Response Factor: 1.07079  
 RRF SD: 0.0439702, Relative SD: 4.10634  
 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	200131R1_1	1.25	1.18	NO	34.01	1.001	9.84e3	7.72e5	1.19	-4.8	1.02	MM
2	200131R1_2	2.50	1.28	NO	33.98	1.001	2.47e4	8.79e5	2.62	4.9	1.12	bd
3	200131R1_3	10.0	1.23	NO	33.98	1.000	1.09e5	9.69e5	10.5	5.2	1.13	bd
4	200131R1_4	50.0	1.22	NO	33.99	1.000	4.82e5	9.08e5	49.6	-0.8	1.06	bd
5	200131R1_5	200	1.27	NO	33.97	1.000	2.18e6	1.04e6	195	-2.7	1.04	bd
6	200131R1_6	1500	1.21	NO	33.99	1.000	2.05e7	1.30e6	1470	-1.8	1.05	bd

**Compound name: 1,2,3,6,7,8-HxCDD**

Response Factor: 0.921124  
 RRF SD: 0.0705821, Relative SD: 7.66261  
 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	200131R1_1	1.25	1.14	NO	34.10	1.000	1.01e4	9.31e5	1.18	-5.8	0.868	MM
2	200131R1_2	2.50	1.28	NO	34.08	1.001	2.68e4	1.05e6	2.78	11.2	1.02	db
3	200131R1_3	10.0	1.21	NO	34.08	1.000	1.13e5	1.13e6	10.8	8.3	0.998	db
4	200131R1_4	50.0	1.22	NO	34.09	1.001	4.87e5	1.11e6	47.7	-4.7	0.878	db
5	200131R1_5	200	1.17	NO	34.07	1.000	2.21e6	1.24e6	193	-3.4	0.890	db
6	200131R1_6	1500	1.22	NO	34.09	1.001	2.03e7	1.56e6	1410	-5.7	0.868	db

**Compound name: 1,2,3,7,8,9-HxCDD**

Response Factor: 0.9182  
 RRF SD: 0.0596016, Relative SD: 6.49114  
 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	200131R1_1	1.25	1.36	NO	34.38	1.000	9.78e3	9.08e5	1.17	-6.1	0.862	MM
2	200131R1_2	2.50	1.21	NO	34.35	1.000	2.43e4	9.77e5	2.71	8.3	0.995	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

Last Altered: Sunday, February 02, 2020 11:05:29 AM Pacific Standard Time  
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**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	200131R1_3	10.0	1.18	NO	34.36	1.000	1.03e5	1.04e6	10.8	8.0	0.991	bb
4	200131R1_4	50.0	1.22	NO	34.37	1.001	4.43e5	1.02e6	47.4	-5.3	0.870	bb
5	200131R1_5	200	1.22	NO	34.35	1.001	2.05e6	1.15e6	195	-2.7	0.893	bb
6	200131R1_6	1500	1.22	NO	34.37	1.001	1.94e7	1.44e6	1470	-2.2	0.898	bb

**Compound name: 1,2,3,4,6,7,8-HpCDD**

Response Factor: 0.923064  
 RRF SD: 0.0512135, Relative SD: 5.54821  
 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	200131R1_1	1.25	1.04	NO	37.92	1.000	8.20e3	7.05e5	1.26	0.7	0.930	bb
2	200131R1_2	2.50	1.06	NO	37.88	1.000	1.88e4	7.60e5	2.69	7.4	0.991	bb
3	200131R1_3	10.0	1.02	NO	37.90	1.001	7.44e4	7.62e5	10.6	5.8	0.976	bb
4	200131R1_4	50.0	1.01	NO	37.90	1.000	3.45e5	7.83e5	47.7	-4.7	0.880	bb
5	200131R1_5	200	1.00	NO	37.88	1.000	1.57e6	8.87e5	192	-4.0	0.886	bb
6	200131R1_6	1500	1.01	NO	37.91	1.001	1.45e7	1.10e6	1420	-5.2	0.875	bb

**Compound name: OCDD**

Response Factor: 0.974578  
 RRF SD: 0.0610366, Relative SD: 6.26287  
 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	200131R1_1	2.50	0.90	NO	40.92	1.000	1.61e4	1.29e6	2.55	2.2	0.996	bd
2	200131R1_2	5.00	0.89	NO	40.90	1.000	3.84e4	1.46e6	5.41	8.2	1.05	bd
3	200131R1_3	20.0	0.88	NO	40.90	1.000	1.46e5	1.41e6	21.2	5.9	1.03	bd
4	200131R1_4	100	0.86	NO	40.90	1.000	6.76e5	1.48e6	93.7	-6.3	0.914	MM
5	200131R1_5	400	0.87	NO	40.90	1.000	3.13e6	1.69e6	379	-5.2	0.924	bb
6	200131R1_6	3000	0.83	NO	40.92	1.000	2.97e7	2.14e6	2850	-4.8	0.927	bb

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**Compound name: 2,3,7,8-TCDF**

Response Factor: 0.801975

RRF SD: 0.0524877, Relative SD: 6.54481

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	200131R1_1	0.250	0.73	NO	24.85	1.001	3.48e3	1.69e6	0.257	2.8	0.824	bb
2	200131R1_2	0.500	0.74	NO	24.82	1.001	8.24e3	1.87e6	0.549	9.9	0.881	bb
3	200131R1_3	2.00	0.71	NO	24.82	1.001	3.25e4	1.95e6	2.08	4.0	0.834	bb
4	200131R1_4	10.0	0.73	NO	24.82	1.001	1.47e5	1.92e6	9.50	-5.0	0.762	bb
5	200131R1_5	40.0	0.74	NO	24.81	1.001	5.87e5	1.96e6	37.3	-6.7	0.748	bb
6	200131R1_6	300	0.74	NO	24.82	1.001	5.37e6	2.35e6	285	-4.9	0.763	bb

**Compound name: 1,2,3,7,8-PeCDF**

Response Factor: 0.907368

RRF SD: 0.0556686, Relative SD: 6.13518

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	200131R1_1	1.25	1.54	NO	29.39	1.000	1.54e4	1.46e6	1.16	-7.1	0.843	MM
2	200131R1_2	2.50	1.49	NO	29.35	1.000	4.02e4	1.66e6	2.66	6.5	0.967	bb
3	200131R1_3	10.0	1.55	NO	29.35	1.000	1.82e5	1.85e6	10.8	8.5	0.984	bb
4	200131R1_4	50.0	1.54	NO	29.37	1.000	7.66e5	1.72e6	49.2	-1.7	0.892	bb
5	200131R1_5	200	1.53	NO	29.34	1.000	3.44e6	1.96e6	193	-3.5	0.875	bb
6	200131R1_6	1500	1.52	NO	29.37	1.000	3.24e7	2.45e6	1460	-2.7	0.883	bb

**Compound name: 2,3,4,7,8-PeCDF**

Response Factor: 0.951581

RRF SD: 0.0710528, Relative SD: 7.46682

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	200131R1_1	1.25	1.39	NO	30.36	1.000	1.52e4	1.40e6	1.14	-9.0	0.866	bb
2	200131R1_2	2.50	1.49	NO	30.33	1.000	4.18e4	1.60e6	2.74	9.7	1.04	bb

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**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	200131R1_3	10.0	1.52	NO	30.33	1.000	1.83e5	1.77e6	10.9	8.5	1.03	bb
4	200131R1_4	50.0	1.52	NO	30.33	1.000	7.42e5	1.63e6	48.0	-4.1	0.913	bb
5	200131R1_5	200	1.52	NO	30.32	1.000	3.55e6	1.92e6	195	-2.7	0.926	bb
6	200131R1_6	1500	1.53	NO	30.33	1.000	3.27e7	2.35e6	1460	-2.5	0.928	bb

**Compound name: 1,2,3,4,7,8-HxCDF**

Response Factor: 0.862294

RRF SD: 0.0432122, Relative SD: 5.0113

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	200131R1_1	1.25	1.16	NO	33.13	1.000	1.04e4	9.82e5	1.22	-2.1	0.844	MM
2	200131R1_2	2.50	1.16	NO	33.10	1.000	2.37e4	1.03e6	2.66	6.4	0.917	bd
3	200131R1_3	10.0	1.18	NO	33.11	1.000	1.05e5	1.14e6	10.6	6.5	0.918	bd
4	200131R1_4	50.0	1.16	NO	33.13	1.000	4.53e5	1.09e6	48.4	-3.3	0.834	dd
5	200131R1_5	200	1.16	NO	33.10	1.001	2.04e6	1.23e6	192	-4.1	0.827	bd
6	200131R1_6	1500	1.16	NO	33.12	1.000	1.94e7	1.55e6	1450	-3.4	0.833	bd

**Compound name: 1,2,3,6,7,8-HxCDF**

Response Factor: 0.841382

RRF SD: 0.0466581, Relative SD: 5.54541

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	200131R1_1	1.25	1.21	NO	33.26	1.001	1.06e4	1.07e6	1.17	-6.2	0.789	MM
2	200131R1_2	2.50	1.19	NO	33.23	1.001	2.67e4	1.18e6	2.69	7.5	0.904	MM
3	200131R1_3	10.0	1.15	NO	33.24	1.001	1.15e5	1.29e6	10.6	6.3	0.894	db
4	200131R1_4	50.0	1.16	NO	33.24	1.000	5.01e5	1.23e6	48.3	-3.3	0.813	db
5	200131R1_5	200	1.15	NO	33.22	1.000	2.41e6	1.46e6	196	-1.9	0.825	db
6	200131R1_6	1500	1.16	NO	33.24	1.000	2.16e7	1.75e6	1470	-2.3	0.822	db

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**Compound name: 2,3,4,6,7,8-HxCDF**

Response Factor: 0.898194

RRF SD: 0.0533025, Relative SD: 5.9344

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	200131R1_1	1.25	1.07	NO	33.84	1.000	1.01e4	9.62e5	1.17	-6.1	0.844	bb
2	200131R1_2	2.50	1.21	NO	33.81	1.000	2.55e4	1.06e6	2.67	6.7	0.958	bb
3	200131R1_3	10.0	1.14	NO	33.82	1.001	1.14e5	1.17e6	10.8	8.3	0.972	bb
4	200131R1_4	50.0	1.16	NO	33.82	1.000	4.82e5	1.11e6	48.4	-3.3	0.869	bb
5	200131R1_5	200	1.17	NO	33.80	1.000	2.21e6	1.27e6	194	-2.8	0.873	bb
6	200131R1_6	1500	1.17	NO	33.82	1.000	2.08e7	1.59e6	1460	-2.8	0.873	bb

**Compound name: 1,2,3,7,8,9-HxCDF**

Response Factor: 0.857779

RRF SD: 0.0530165, Relative SD: 6.18067

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	200131R1_1	1.25	1.12	NO	34.74	1.000	9.51e3	8.96e5	1.24	-1.0	0.849	bb
2	200131R1_2	2.50	1.18	NO	34.71	1.000	2.15e4	9.11e5	2.76	10.2	0.946	bb
3	200131R1_3	10.0	1.17	NO	34.72	1.001	8.71e4	9.71e5	10.5	4.6	0.897	MM
4	200131R1_4	50.0	1.15	NO	34.72	1.000	3.90e5	9.57e5	47.6	-4.9	0.816	bb
5	200131R1_5	200	1.16	NO	34.70	1.000	1.74e6	1.06e6	191	-4.6	0.818	bb
6	200131R1_6	1500	1.17	NO	34.72	1.000	1.68e7	1.37e6	1430	-4.4	0.820	bb

**Compound name: 1,2,3,4,6,7,8-HpCDF**

Response Factor: 0.851072

RRF SD: 0.0458765, Relative SD: 5.39044

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	200131R1_1	1.25	0.94	NO	36.48	1.000	7.60e3	7.37e5	1.21	-3.0	0.826	bb
2	200131R1_2	2.50	0.99	NO	36.47	1.001	1.79e4	7.82e5	2.70	7.9	0.918	bd



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**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	200131R1_3	10.0	0.96	NO	36.46	1.000	7.21e4	8.00e5	10.6	5.9	0.901	bd
4	200131R1_4	50.0	0.96	NO	36.47	1.001	3.29e5	8.01e5	48.2	-3.5	0.821	bb
5	200131R1_5	200	0.97	NO	36.45	1.000	1.46e6	8.88e5	193	-3.4	0.822	bb
6	200131R1_6	1500	0.96	NO	36.47	1.000	1.37e7	1.12e6	1440	-3.9	0.818	bb

**Compound name: 1,2,3,4,7,8,9-HpCDF**

Response Factor: 0.979894

RRF SD: 0.0488516, Relative SD: 4.9854

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	200131R1_1	1.25	0.96	NO	38.50	1.000	5.89e3	5.04e5	1.19	-4.7	0.934	MM
2	200131R1_2	2.50	0.97	NO	38.48	1.000	1.47e4	5.63e5	2.66	6.4	1.04	bb
3	200131R1_3	10.0	0.96	NO	38.49	1.000	5.91e4	5.68e5	10.6	6.2	1.04	bb
4	200131R1_4	50.0	0.97	NO	38.50	1.000	2.74e5	5.80e5	48.2	-3.6	0.945	bb
5	200131R1_5	200	0.96	NO	38.48	1.000	1.25e6	6.58e5	194	-2.9	0.952	bb
6	200131R1_6	1500	0.96	NO	38.50	1.000	1.20e7	8.31e5	1480	-1.5	0.966	bb

**Compound name: OCDF**

Response Factor: 0.805548

RRF SD: 0.0471476, Relative SD: 5.85286

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	200131R1_1	2.50	0.85	NO	41.10	1.000	1.39e4	1.44e6	2.40	-4.0	0.773	bb
2	200131R1_2	5.00	0.87	NO	41.08	1.000	3.50e4	1.59e6	5.46	9.2	0.880	bb
3	200131R1_3	20.0	0.87	NO	41.09	1.000	1.37e5	1.61e6	21.1	5.5	0.850	MM
4	200131R1_4	100	0.85	NO	41.10	1.000	6.45e5	1.67e6	95.6	-4.4	0.770	bb
5	200131R1_5	400	0.86	NO	41.09	1.000	2.92e6	1.87e6	388	-3.1	0.781	bb
6	200131R1_6	3000	0.86	NO	41.10	1.000	2.81e7	2.40e6	2900	-3.3	0.779	bb

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**Compound name: 13C-2,3,7,8-TCDD**

Response Factor: 1.19852

RRF SD: 0.0939444, Relative SD: 7.83835

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	200131R1_1	100	0.79	NO	25.72	1.026	1.21e6	9.30e5	109	9.0	1.31	bb
2	200131R1_2	100	0.79	NO	25.67	1.026	1.37e6	1.27e6	90.2	-9.8	1.08	bb
3	200131R1_3	100	0.79	NO	25.67	1.026	1.44e6	1.31e6	91.3	-8.7	1.09	bb
4	200131R1_4	100	0.79	NO	25.67	1.026	1.42e6	1.19e6	99.9	-0.1	1.20	bb
5	200131R1_5	100	0.80	NO	25.66	1.026	1.45e6	1.18e6	103	2.7	1.23	bb
6	200131R1_6	100	0.78	NO	25.69	1.026	1.75e6	1.37e6	107	6.9	1.28	bb

**Compound name: 13C-1,2,3,7,8-PeCDD**

Response Factor: 0.966657

RRF SD: 0.113301, Relative SD: 11.7209

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	200131R1_1	100	0.64	NO	30.65	1.222	9.52e5	9.30e5	106	5.9	1.02	bb
2	200131R1_2	100	0.63	NO	30.61	1.223	1.05e6	1.27e6	85.4	-14.6	0.826	bb
3	200131R1_3	100	0.64	NO	30.62	1.223	1.14e6	1.31e6	90.0	-10.0	0.870	bb
4	200131R1_4	100	0.65	NO	30.62	1.223	1.09e6	1.19e6	95.0	-5.0	0.918	bb
5	200131R1_5	100	0.64	NO	30.61	1.223	1.23e6	1.18e6	108	7.9	1.04	bb
6	200131R1_6	100	0.64	NO	30.62	1.223	1.53e6	1.37e6	116	15.8	1.12	bb

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

Response Factor: 0.873915

RRF SD: 0.0797425, Relative SD: 9.12474

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	200131R1_1	100	1.26	NO	33.99	1.014	7.72e5	8.41e5	105	5.1	0.918	bd
2	200131R1_2	100	1.27	NO	33.96	1.014	8.79e5	1.13e6	89.1	-10.9	0.778	bd

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**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	200131R1_3	100	1.28	NO	33.97	1.014	9.69e5	1.23e6	90.5	-9.5	0.791	bd
4	200131R1_4	100	1.26	NO	33.98	1.014	9.08e5	1.05e6	98.8	-1.2	0.863	bd
5	200131R1_5	100	1.27	NO	33.96	1.014	1.04e6	1.15e6	104	3.8	0.907	bd
6	200131R1_6	100	1.28	NO	33.98	1.014	1.30e6	1.32e6	113	12.8	0.986	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDD**

Response Factor: 1.04579  
 RRF SD: 0.10317, Relative SD: 9.86527  
 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	200131R1_1	100	1.24	NO	34.09	1.017	9.31e5	8.41e5	106	5.9	1.11	db
2	200131R1_2	100	1.25	NO	34.06	1.017	1.05e6	1.13e6	88.6	-11.4	0.927	db
3	200131R1_3	100	1.25	NO	34.07	1.017	1.13e6	1.23e6	88.2	-11.8	0.923	db
4	200131R1_4	100	1.25	NO	34.07	1.017	1.11e6	1.05e6	101	0.9	1.05	db
5	200131R1_5	100	1.26	NO	34.06	1.017	1.24e6	1.15e6	103	3.3	1.08	db
6	200131R1_6	100	1.27	NO	34.07	1.017	1.56e6	1.32e6	113	13.1	1.18	db

**Compound name: 13C-1,2,3,7,8,9-HxCDD**

Response Factor: 0.974375  
 RRF SD: 0.10254, Relative SD: 10.5236  
 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	200131R1_1	100	1.26	NO	34.37	1.025	9.08e5	8.41e5	111	10.8	1.08	bb
2	200131R1_2	100	1.24	NO	34.34	1.025	9.77e5	1.13e6	88.8	-11.2	0.865	bb
3	200131R1_3	100	1.23	NO	34.35	1.025	1.04e6	1.23e6	87.1	-12.9	0.848	bb
4	200131R1_4	100	1.26	NO	34.35	1.025	1.02e6	1.05e6	99.4	-0.6	0.968	bb
5	200131R1_5	100	1.22	NO	34.33	1.025	1.15e6	1.15e6	102	2.1	0.995	bb
6	200131R1_6	100	1.27	NO	34.35	1.025	1.44e6	1.32e6	112	11.8	1.09	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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

Response Factor: 0.747228

RRF SD: 0.0868418, Relative SD: 11.6219

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	200131R1_1	100	1.04	NO	37.91	1.131	7.05e5	8.41e5	112	12.3	0.839	bb
2	200131R1_2	100	1.03	NO	37.88	1.131	7.60e5	1.13e6	90.0	-10.0	0.673	bb
3	200131R1_3	100	1.05	NO	37.88	1.131	7.62e5	1.23e6	83.2	-16.8	0.622	bb
4	200131R1_4	100	1.05	NO	37.88	1.131	7.83e5	1.05e6	99.7	-0.3	0.745	bb
5	200131R1_5	100	1.05	NO	37.88	1.131	8.87e5	1.15e6	103	3.2	0.771	bb
6	200131R1_6	100	1.03	NO	37.88	1.131	1.10e6	1.32e6	112	11.6	0.834	bb

**Compound name: 13C-OCDD**

Response Factor: 0.706533

RRF SD: 0.0850665, Relative SD: 12.04

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	200131R1_1	200	0.89	NO	40.90	1.220	1.29e6	8.41e5	218	8.9	0.770	bb
2	200131R1_2	200	0.92	NO	40.88	1.221	1.46e6	1.13e6	183	-8.6	0.646	bd
3	200131R1_3	200	0.90	NO	40.89	1.221	1.41e6	1.23e6	163	-18.5	0.575	bb
4	200131R1_4	200	0.90	NO	40.90	1.221	1.48e6	1.05e6	199	-0.4	0.704	bb
5	200131R1_5	200	0.86	NO	40.89	1.221	1.69e6	1.15e6	208	4.0	0.735	bb
6	200131R1_6	200	0.84	NO	40.90	1.221	2.14e6	1.32e6	229	14.6	0.809	bb

**Compound name: 13C-2,3,7,8-TCDF**

Response Factor: 1.06529

RRF SD: 0.0915828, Relative SD: 8.59701

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	200131R1_1	100	0.77	NO	24.84	0.990	1.69e6	1.42e6	112	11.8	1.19	bb
2	200131R1_2	100	0.78	NO	24.79	0.990	1.87e6	1.95e6	89.9	-10.1	0.958	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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**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	200131R1_3	100	0.76	NO	24.79	0.990	1.95e6	2.03e6	90.3	-9.7	0.962	bb
4	200131R1_4	100	0.77	NO	24.79	0.990	1.92e6	1.80e6	100	0.3	1.07	bb
5	200131R1_5	100	0.77	NO	24.78	0.990	1.96e6	1.80e6	103	2.6	1.09	bb
6	200131R1_6	100	0.77	NO	24.81	0.990	2.35e6	2.10e6	105	5.1	1.12	bb

**Compound name: 13C-1,2,3,7,8-PeCDF**

Response Factor: 1.00172

RRF SD: 0.117905, Relative SD: 11.7703

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	200131R1_1	100	1.57	NO	29.37	1.171	1.46e6	1.42e6	103	3.0	1.03	bb
2	200131R1_2	100	1.56	NO	29.34	1.172	1.66e6	1.95e6	84.9	-15.1	0.851	bb
3	200131R1_3	100	1.61	NO	29.34	1.172	1.85e6	2.03e6	91.2	-8.8	0.914	bb
4	200131R1_4	100	1.59	NO	29.35	1.173	1.72e6	1.80e6	95.2	-4.8	0.953	bb
5	200131R1_5	100	1.60	NO	29.32	1.172	1.96e6	1.80e6	109	9.1	1.09	bb
6	200131R1_6	100	1.59	NO	29.35	1.172	2.45e6	2.10e6	117	16.5	1.17	bb

**Compound name: 13C-2,3,4,7,8-PeCDF**

Response Factor: 0.961692

RRF SD: 0.117094, Relative SD: 12.1758

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	200131R1_1	100	1.59	NO	30.35	1.210	1.40e6	1.42e6	103	2.7	0.988	db
2	200131R1_2	100	1.59	NO	30.32	1.211	1.60e6	1.95e6	85.2	-14.8	0.820	db
3	200131R1_3	100	1.56	NO	30.32	1.211	1.77e6	2.03e6	90.8	-9.2	0.873	bb
4	200131R1_4	100	1.61	NO	30.32	1.211	1.63e6	1.80e6	93.8	-6.2	0.902	db
5	200131R1_5	100	1.59	NO	30.30	1.211	1.92e6	1.80e6	111	10.9	1.07	db
6	200131R1_6	100	1.62	NO	30.33	1.211	2.35e6	2.10e6	117	16.5	1.12	db

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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

Response Factor: 1.0492

RRF SD: 0.111678, Relative SD: 10.6441

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	200131R1_1	100	0.51	NO	33.13	0.988	9.82e5	8.41e5	111	11.3	1.17	bd
2	200131R1_2	100	0.50	NO	33.09	0.988	1.03e6	1.13e6	87.3	-12.7	0.915	bd
3	200131R1_3	100	0.51	NO	33.10	0.988	1.14e6	1.23e6	88.8	-11.2	0.932	bd
4	200131R1_4	100	0.50	NO	33.11	0.988	1.09e6	1.05e6	98.5	-1.5	1.03	bd
5	200131R1_5	100	0.51	NO	33.08	0.988	1.23e6	1.15e6	102	2.0	1.07	bd
6	200131R1_6	100	0.50	NO	33.11	0.989	1.55e6	1.32e6	112	12.1	1.18	bd

**Compound name: 13C-1,2,3,6,7,8-HxCDF**

Response Factor: 1.18988

RRF SD: 0.120357, Relative SD: 10.1151

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	200131R1_1	100	0.51	NO	33.24	0.992	1.07e6	8.41e5	107	7.4	1.28	db
2	200131R1_2	100	0.50	NO	33.21	0.992	1.18e6	1.13e6	88.0	-12.0	1.05	db
3	200131R1_3	100	0.51	NO	33.22	0.992	1.29e6	1.23e6	88.2	-11.8	1.05	db
4	200131R1_4	100	0.51	NO	33.23	0.992	1.23e6	1.05e6	98.5	-1.5	1.17	db
5	200131R1_5	100	0.51	NO	33.21	0.992	1.46e6	1.15e6	107	6.7	1.27	db
6	200131R1_6	100	0.51	NO	33.23	0.992	1.75e6	1.32e6	111	11.2	1.32	db

**Compound name: 13C-2,3,4,6,7,8-HxCDF**

Response Factor: 1.06623

RRF SD: 0.103589, Relative SD: 9.71549

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	200131R1_1	100	0.51	NO	33.83	1.009	9.62e5	8.41e5	107	7.2	1.14	bb
2	200131R1_2	100	0.50	NO	33.80	1.009	1.06e6	1.13e6	88.4	-11.6	0.943	bb



Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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**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	200131R1_3	100	0.51	NO	33.79	1.009	1.17e6	1.23e6	89.3	-10.7	0.953	bb
4	200131R1_4	100	0.51	NO	33.81	1.009	1.11e6	1.05e6	99.0	-1.0	1.06	bb
5	200131R1_5	100	0.51	NO	33.78	1.009	1.27e6	1.15e6	103	3.4	1.10	bb
6	200131R1_6	100	0.50	NO	33.81	1.009	1.59e6	1.32e6	113	12.6	1.20	bb

**Compound name: 13C-1,2,3,7,8,9-HxCDF**

Response Factor: 0.922357

RRF SD: 0.112781, Relative SD: 12.2275

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	200131R1_1	100	0.52	NO	34.73	1.036	8.96e5	8.41e5	115	15.5	1.07	bd
2	200131R1_2	100	0.50	NO	34.70	1.036	9.11e5	1.13e6	87.5	-12.5	0.807	bb
3	200131R1_3	100	0.50	NO	34.70	1.036	9.71e5	1.23e6	85.9	-14.1	0.793	bb
4	200131R1_4	100	0.51	NO	34.71	1.036	9.57e5	1.05e6	98.7	-1.3	0.910	bb
5	200131R1_5	100	0.50	NO	34.69	1.036	1.06e6	1.15e6	100	0.1	0.923	bb
6	200131R1_6	100	0.52	NO	34.71	1.036	1.37e6	1.32e6	112	12.3	1.04	bb

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

Response Factor: 0.767165

RRF SD: 0.0861255, Relative SD: 11.2265

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	200131R1_1	100	0.44	NO	36.47	1.088	7.37e5	8.41e5	114	14.2	0.876	bb
2	200131R1_2	100	0.43	NO	36.44	1.088	7.82e5	1.13e6	90.2	-9.8	0.692	bb
3	200131R1_3	100	0.42	NO	36.45	1.088	8.00e5	1.23e6	85.1	-14.9	0.653	bb
4	200131R1_4	100	0.43	NO	36.45	1.088	8.01e5	1.05e6	99.3	-0.7	0.762	bb
5	200131R1_5	100	0.44	NO	36.44	1.088	8.88e5	1.15e6	101	0.6	0.772	bb
6	200131R1_6	100	0.44	NO	36.46	1.088	1.12e6	1.32e6	111	10.6	0.848	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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**Compound name: 13C-1,2,3,4,7,8,9-HpCDF**

Response Factor: 0.552323

RRF SD: 0.0621028, Relative SD: 11.2439

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	200131R1_1	100	0.44	NO	38.50	1.149	5.04e5	8.41e5	109	8.5	0.600	MM
2	200131R1_2	100	0.43	NO	38.47	1.149	5.63e5	1.13e6	90.3	-9.7	0.499	bb
3	200131R1_3	100	0.44	NO	38.48	1.149	5.68e5	1.23e6	83.9	-16.1	0.464	bb
4	200131R1_4	100	0.43	NO	38.48	1.148	5.80e5	1.05e6	99.8	-0.2	0.551	bb
5	200131R1_5	100	0.43	NO	38.47	1.149	6.58e5	1.15e6	104	3.6	0.572	bb
6	200131R1_6	100	0.43	NO	38.49	1.149	8.31e5	1.32e6	114	13.9	0.629	bb

**Compound name: 13C-OCDF**

Response Factor: 0.78941

RRF SD: 0.0937006, Relative SD: 11.8697

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	200131R1_1	200	0.88	NO	41.10	1.226	1.44e6	8.41e5	217	8.5	0.856	bb
2	200131R1_2	200	0.86	NO	41.07	1.226	1.59e6	1.13e6	178	-10.8	0.704	bb
3	200131R1_3	200	0.84	NO	41.08	1.226	1.61e6	1.23e6	167	-16.6	0.658	bb
4	200131R1_4	200	0.87	NO	41.08	1.226	1.67e6	1.05e6	202	0.8	0.796	bb
5	200131R1_5	200	0.86	NO	41.07	1.227	1.87e6	1.15e6	206	2.8	0.812	bb
6	200131R1_6	200	0.87	NO	41.09	1.227	2.40e6	1.32e6	230	15.2	0.910	bb

**Compound name: 37Cl-2,3,7,8-TCDD**

Response Factor: 1.17626

RRF SD: 0.0677436, Relative SD: 5.75926

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	200131R1_1	0.250			25.74	1.026	2.61e3	9.30e5	0.239	-4.6	1.12	bb
2	200131R1_2	0.500			25.70	1.027	7.49e3	1.27e6	0.502	0.3	1.18	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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**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	200131R1_3	2.00			25.70	1.027	2.85e4	1.31e6	1.85	-7.7	1.09	bb
4	200131R1_4	10.0			25.70	1.027	1.40e5	1.19e6	10.0	0.4	1.18	bb
5	200131R1_5	40.0			25.69	1.027	5.71e5	1.18e6	41.0	2.6	1.21	bb
6	200131R1_6	200			25.70	1.026	3.51e6	1.37e6	218	8.9	1.28	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	200131R1_1	100	0.78	NO	25.08	1.000	9.30e5	9.30e5	100	0.0	1.00	bb
2	200131R1_2	100	0.80	NO	25.03	1.000	1.27e6	1.27e6	100	0.0	1.00	bb
3	200131R1_3	100	0.80	NO	25.03	1.000	1.31e6	1.31e6	100	0.0	1.00	bb
4	200131R1_4	100	0.80	NO	25.03	1.000	1.19e6	1.19e6	100	0.0	1.00	bb
5	200131R1_5	100	0.80	NO	25.02	1.000	1.18e6	1.18e6	100	0.0	1.00	bb
6	200131R1_6	100	0.80	NO	25.05	1.000	1.37e6	1.37e6	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	200131R1_1	100	0.79	NO	23.42	1.000	1.42e6	1.42e6	100	0.0	1.00	bd
2	200131R1_2	100	0.79	NO	23.35	1.000	1.95e6	1.95e6	100	0.0	1.00	bb
3	200131R1_3	100	0.79	NO	23.37	1.000	2.03e6	2.03e6	100	0.0	1.00	bb
4	200131R1_4	100	0.79	NO	23.37	1.000	1.80e6	1.80e6	100	0.0	1.00	bb
5	200131R1_5	100	0.80	NO	23.35	1.000	1.80e6	1.80e6	100	0.0	1.00	bb
6	200131R1_6	100	0.79	NO	23.39	1.000	2.10e6	2.10e6	100	0.0	1.00	bb

Dataset: U:\VG12.PRO\Results\200131R1\200131R1-CRV.qld

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**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	200131R1_1	100	0.51	NO	33.52	1.000	8.41e5	8.41e5	100	0.0	1.00	bb
2	200131R1_2	100	0.51	NO	33.49	1.000	1.13e6	1.13e6	100	0.0	1.00	bb
3	200131R1_3	100	0.51	NO	33.50	1.000	1.23e6	1.23e6	100	0.0	1.00	bb
4	200131R1_4	100	0.51	NO	33.51	1.000	1.05e6	1.05e6	100	0.0	1.00	bb
5	200131R1_5	100	0.51	NO	33.49	1.000	1.15e6	1.15e6	100	0.0	1.00	bb
6	200131R1_6	100	0.51	NO	33.50	1.000	1.32e6	1.32e6	100	0.0	1.00	bb

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:18:48 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:18:51 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-1-28-20.mdb 28 Jan 2020 16:09:23  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	200131R1_1	ST200131R1_1 1613 CS0 19L2302	31-Jan-20	16:48:41
2	200131R1_2	ST200131R1_2 1613 CS1 19L2303	31-Jan-20	17:37:04
3	200131R1_3	ST200131R1_3 1613 CS2 19L2304	31-Jan-20	18:23:19
4	200131R1_4	ST200131R1_4 1613 CS3 19L2305	31-Jan-20	19:10:18
5	200131R1_5	ST200131R1_5 1613 CS4 19L2306	31-Jan-20	19:57:17
6	200131R1_6	ST200131R1_6 1613 CS5 19L2307	31-Jan-20	20:44:23
7	200131R1_7	SOLVENT BLANK	31-Jan-20	21:31:31
8	200131R1_8	SS200131R1_1 1613 SSS 19L2308	31-Jan-20	22:18:30
9	200131R1_9	ST200131R1_7 1613 CS3 19I1604	31-Jan-20	23:05:36
10	200131R1_10	B0A0133-BS1 OPR 1	31-Jan-20	23:52:35
11	200131R1_11	B0A0226-BS1 OPR 10	01-Feb-20	00:39:35
12	200131R1_12	SOLVENT BLANK	01-Feb-20	01:26:32
13	200131R1_13	B0A0133-BLK1 Method Blank 1	01-Feb-20	02:13:32
14	200131R1_14	B0A0226-BLK1 Method Blank 10	01-Feb-20	03:00:32
15	200131R1_15	1904161-10RE1 PDI-046SC-A-02-03-191001 ...	01-Feb-20	03:47:38
16	200131R1_16	1904161-16RE1 PDI-066SC-A-06-07-191011 ...	01-Feb-20	04:34:37
17	200131R1_17	1904207-04RE1 PDI-076SC-A-05-06-191013 ...	01-Feb-20	05:21:38
18	200131R1_18	1903647-05@2X PDI-067SC-B-06-08-191010 ...	01-Feb-20	06:08:35
19	200131R1_19	1903647-02@10X PDI-067SC-B-00-02-19101...	01-Feb-20	06:55:34

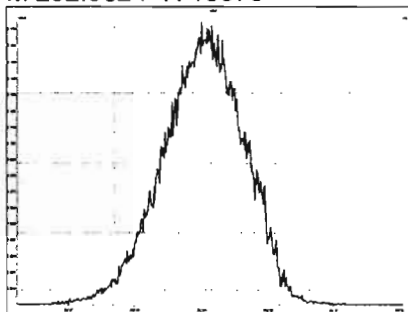
Experiment Calibration Report

MassLynx 4.1 SCN815

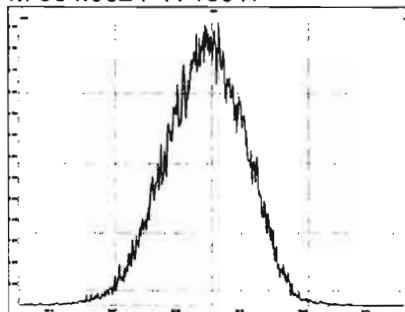
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, January 31, 2020 16:41:39 Pacific Standard Time

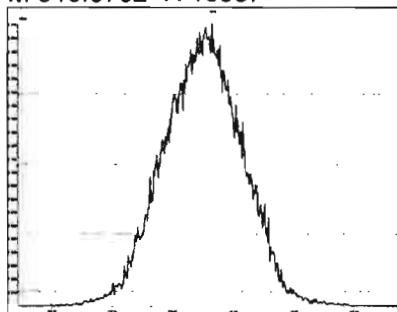
M 292.9824 R 10370



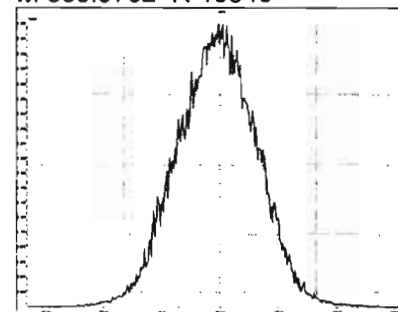
M 304.9824 R 10917



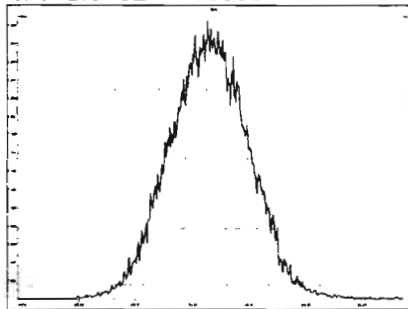
M 318.9792 R 10637



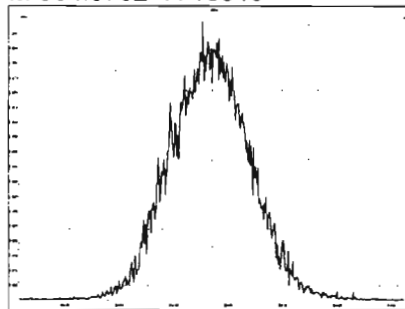
M 330.9792 R 10640



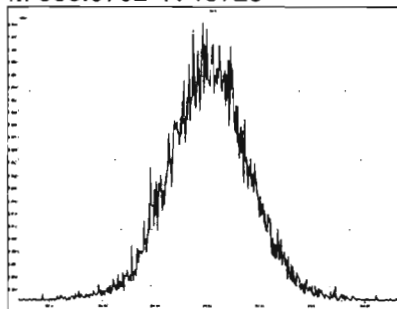
M 342.9792 R 10593



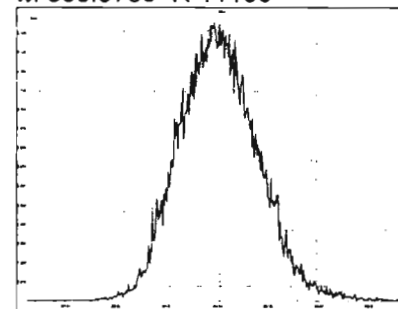
M 354.9792 R 10919



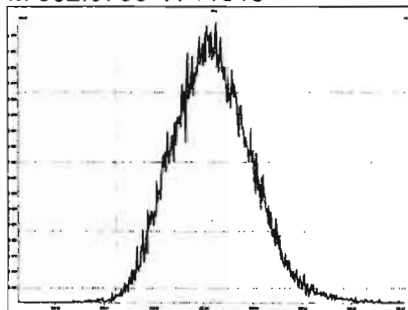
M 366.9792 R 10726



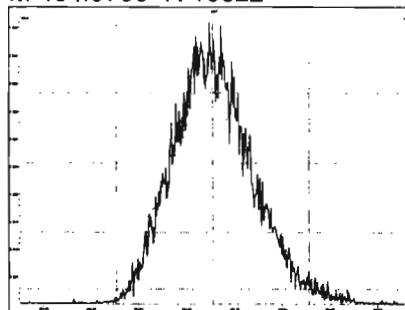
M 380.9760 R 11160



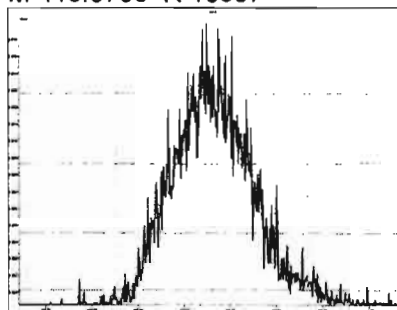
M 392.9760 R 11015



M 404.9760 R 10822



M 416.9760 R 10507





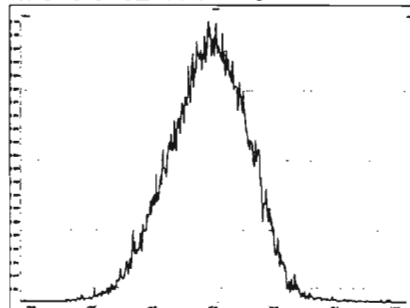
Experiment Calibration Report

MassLynx 4.1 SCN815

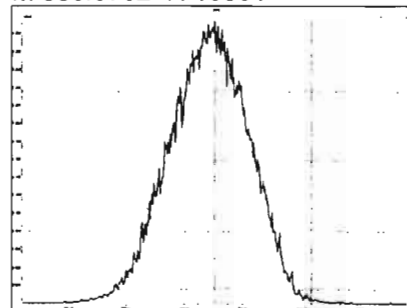
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, January 31, 2020 16:42:23 Pacific Standard Time

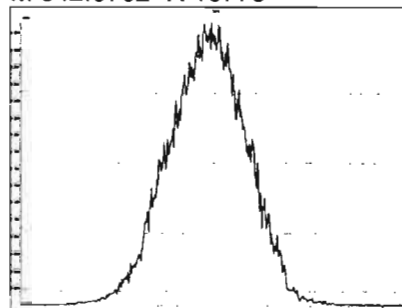
M 318.9792 R 11110



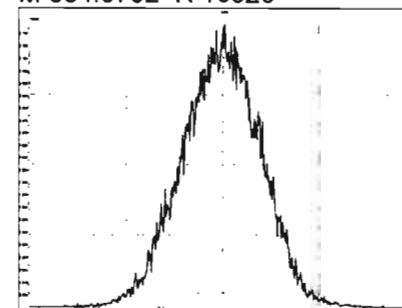
M 330.9792 R 10681



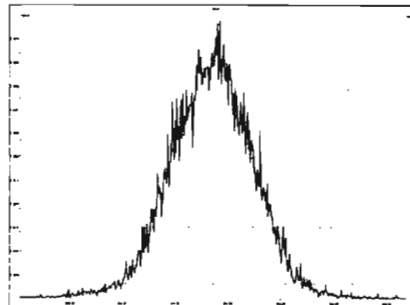
M 342.9792 R 10776



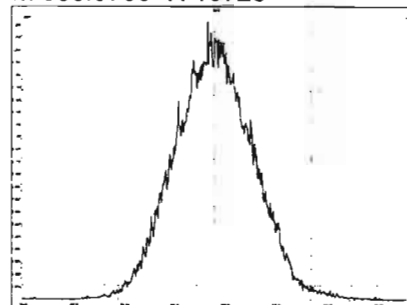
M 354.9792 R 10920



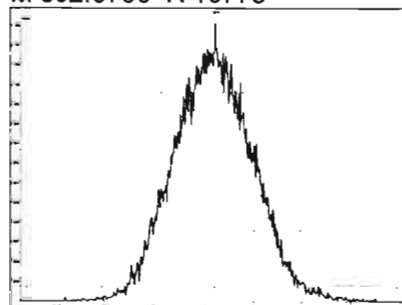
M 366.9792 R 10730



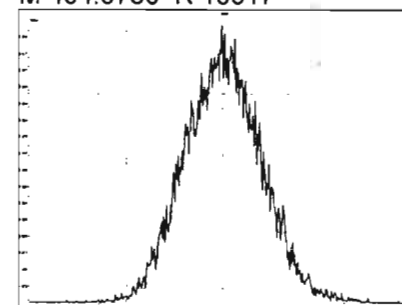
M 380.9760 R 10729



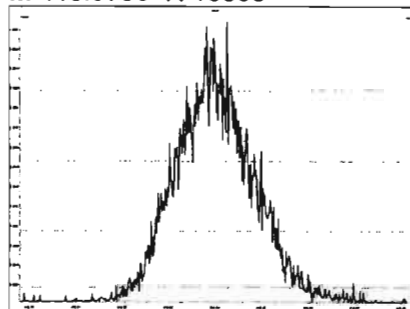
M 392.9760 R 10778



M 404.9760 R 10917



M 416.9760 R 10503



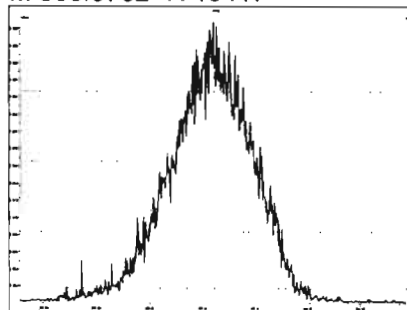
Experiment Calibration Report

MassLynx 4.1 SCN815

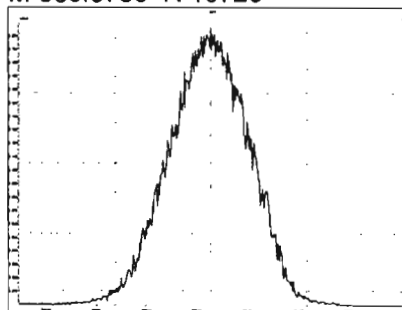
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, January 31, 2020 16:43:30 Pacific Standard Time

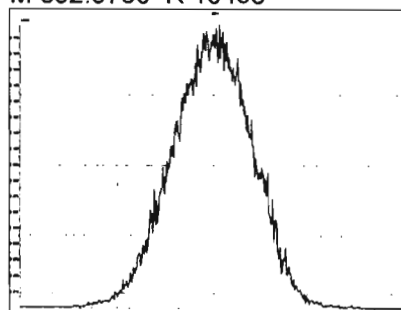
M 366.9792 R 10417



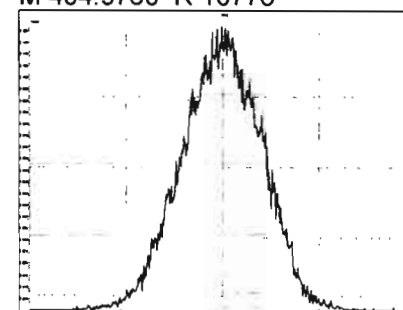
M 380.9760 R 10729



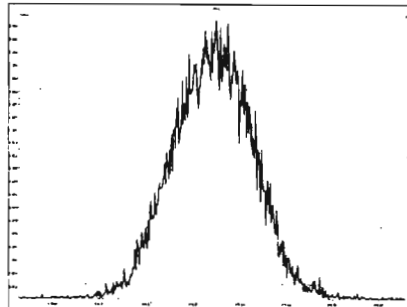
M 392.9760 R 10458



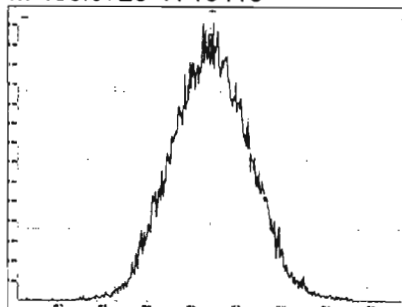
M 404.9760 R 10776



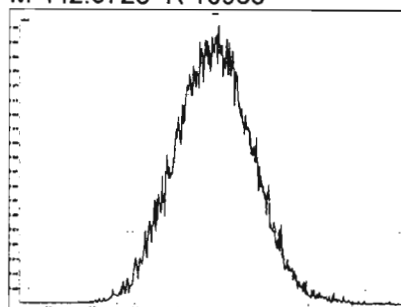
M 416.9760 R 10728



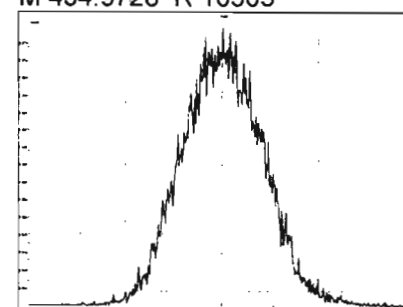
M 430.9728 R 10418



M 442.9728 R 10965



M 454.9728 R 10503



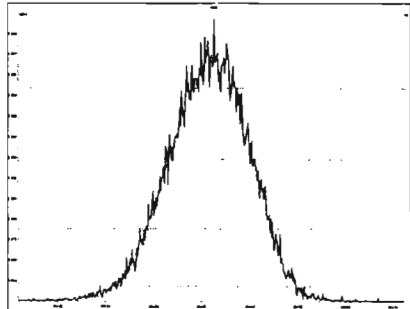
Experiment Calibration Report

MassLynx 4.1 SCN815

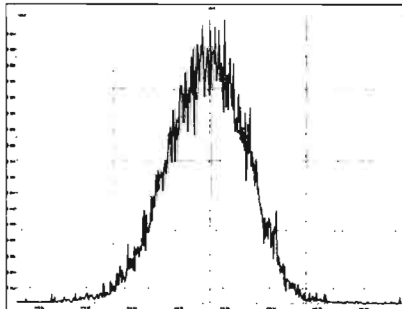
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, January 31, 2020 16:44:27 Pacific Standard Time

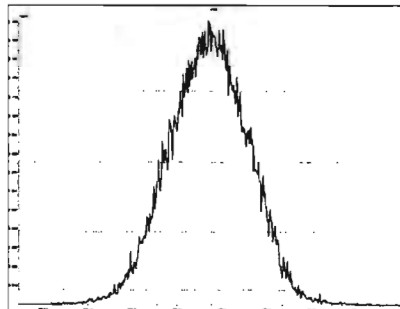
M 404.9760 R 10461



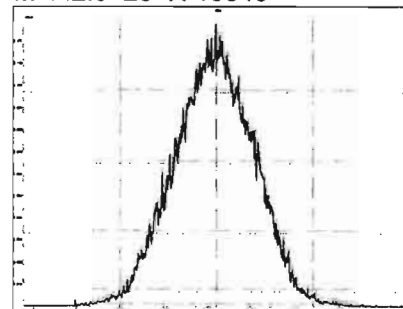
M 416.9760 R 10503



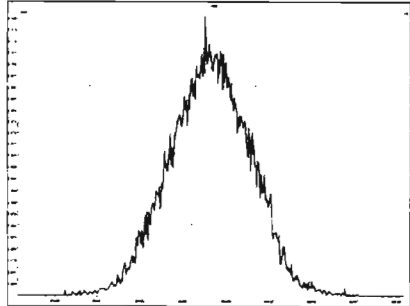
M 430.9728 R 10820



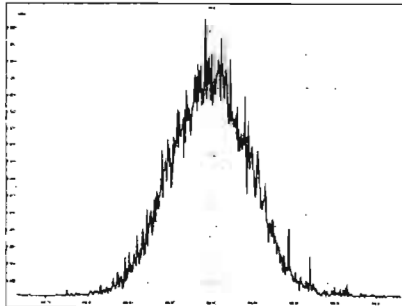
M 442.9728 R 10545



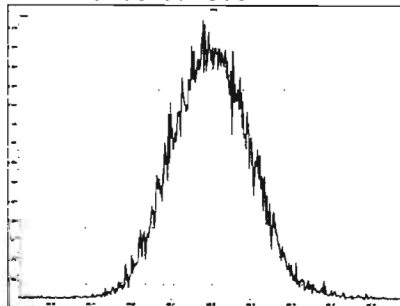
M 454.9728 R 10637



M 466.9728 R 11014



M 480.9696 R 10965



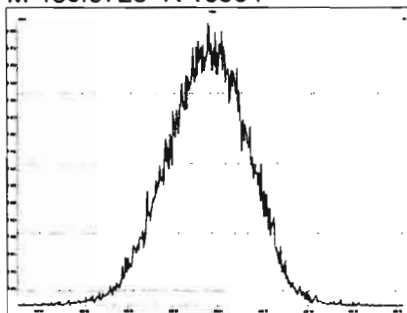
**Experiment Calibration Report**

**MassLynx 4.1 SCN815**

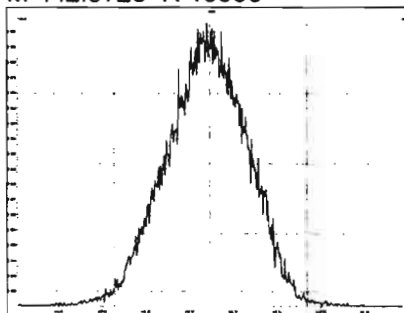
File: Experiment: OCDD\_DB5.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, January 31, 2020 16:45:52 Pacific Standard Time

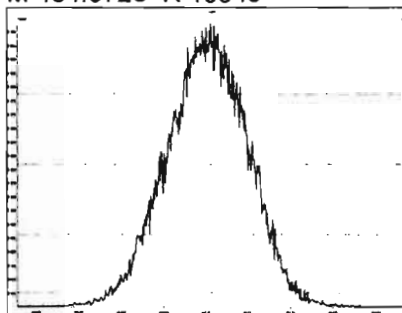
M 430.9728 R 10504



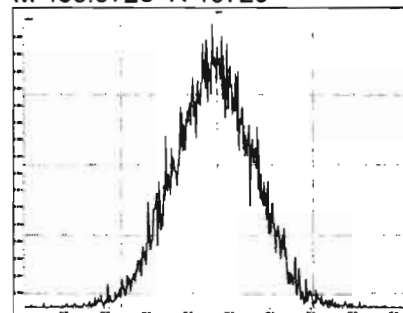
M 442.9728 R 10550



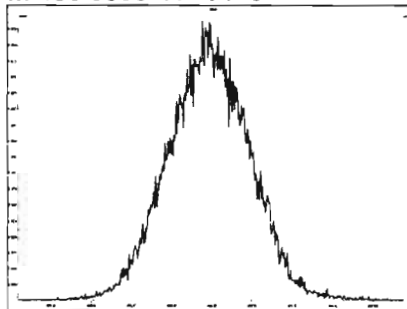
M 454.9728 R 10549



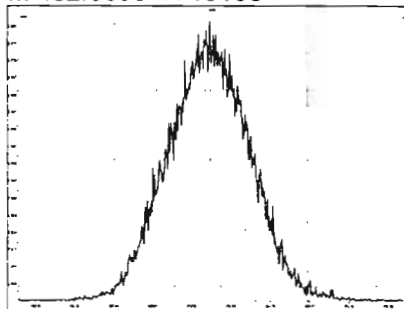
M 466.9728 R 10729



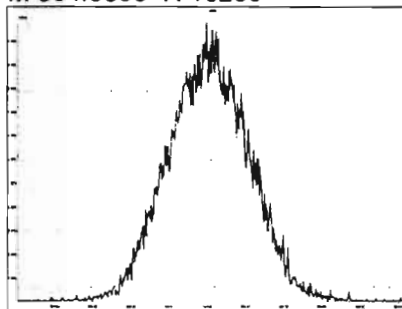
M 480.9696 R 10415



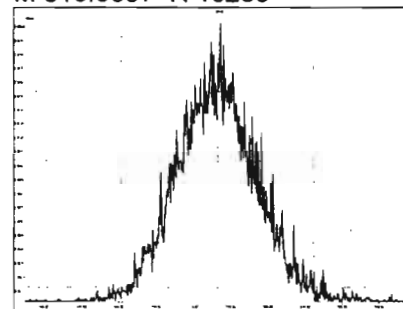
M 492.9696 R 10163



M 504.9696 R 10290



M 516.9697 R 10286



Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:18:10 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:18:19 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 23 Jan 2020 15:01:26

Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200131R1\_4, Date: 31-Jan-2020, Time: 19:10:18, ID: ST200131R1\_4 1613 CS3 19L2305, Description: 1613 CS3 19L2305

#	Name	RT
1	1 1,3,6,8-TCDD (First)	21.72
2	2 1,2,8,9-TCDD (Last)	26.66
3	3 1,2,4,7,9-PeCDD (First)	28.44
4	4 1,2,3,8,9-PeCDD (Last)	31.02
5	5 1,2,4,6,7,9-HxCDD (First)	32.51
6	6 1,2,3,7,8,9-HxCDD (Last)	34.37
7	7 1,2,3,4,6,7,9-HpCDD (First)	36.85
8	8 1,2,3,4,6,7,8-HpCDD (Last)	37.90
9	9 1,3,6,8-TCDF (First)	19.63
10	10 1,2,8,9-TCDF (Last)	26.81
11	11 1,3,4,6,8-PeCDF (First)	26.77
12	12 1,2,3,8,9-PeCDF (Last)	31.26
13	13 1,2,3,4,6,8-HxCDF (First)	31.95
14	14 1,2,3,7,8,9-HxCDF (Last)	34.72
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.47
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.50

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:18:10 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:18:19 AM Pacific Standard Time

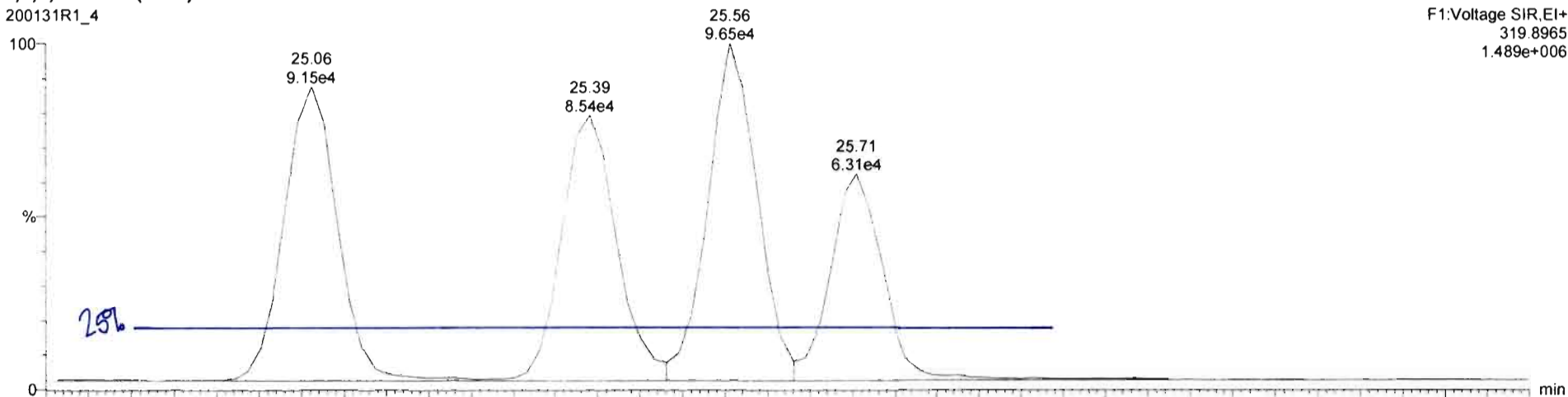
Method: U:\VG12.PRO\MethDB\CPSM.mdb 23 Jan 2020 15:01:26  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200131R1\_4, Date: 31-Jan-2020, Time: 19:10:18, ID: ST200131R1\_4 1613 CS3 19L2305, Description: 1613 CS3 19L2305

1,3,6,8-TCDD (First)

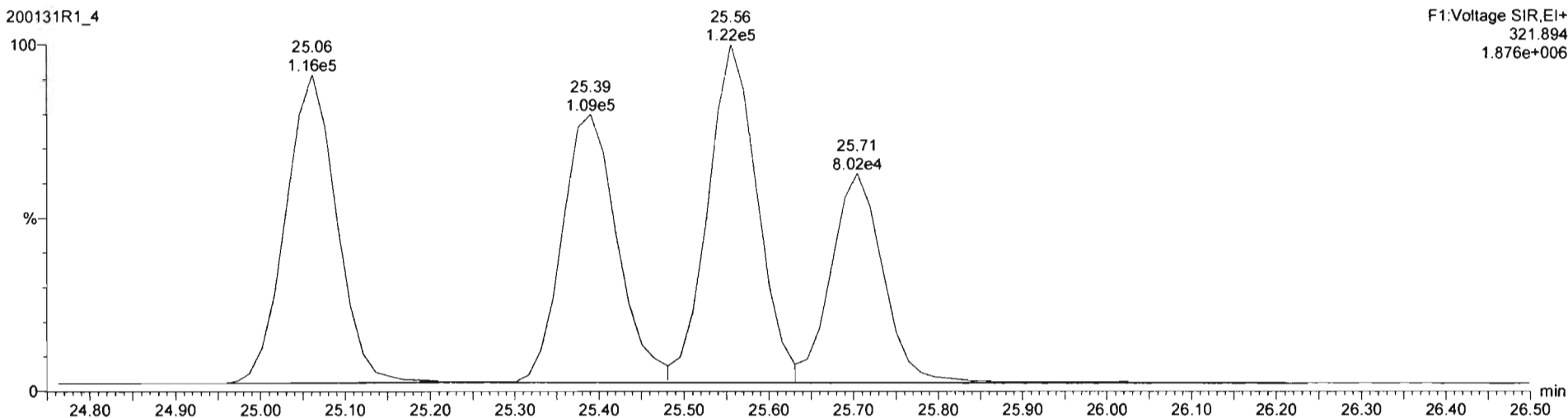
200131R1\_4

F1:Voltage SIR,EI+  
319.8965  
1.489e+006



200131R1\_4

F1:Voltage SIR,EI+  
321.894  
1.876e+006





Dataset: Untitled

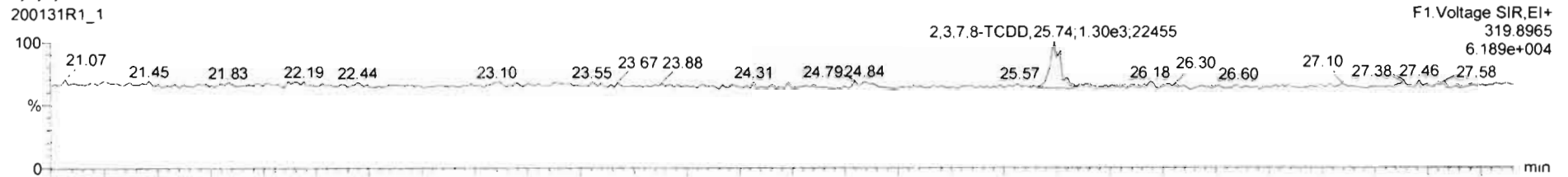
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-1-28-20.mdb 28 Jan 2020 16:09:23  
Calibration: 02 Feb 2020 11:06:20

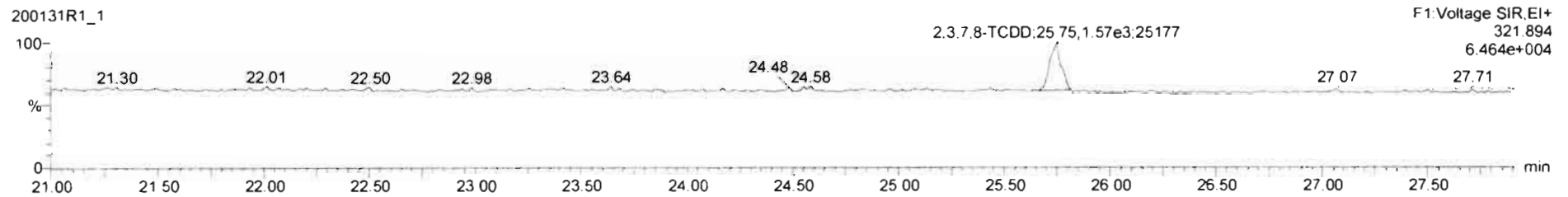
Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

2,3,7,8-TCDD

200131R1\_1

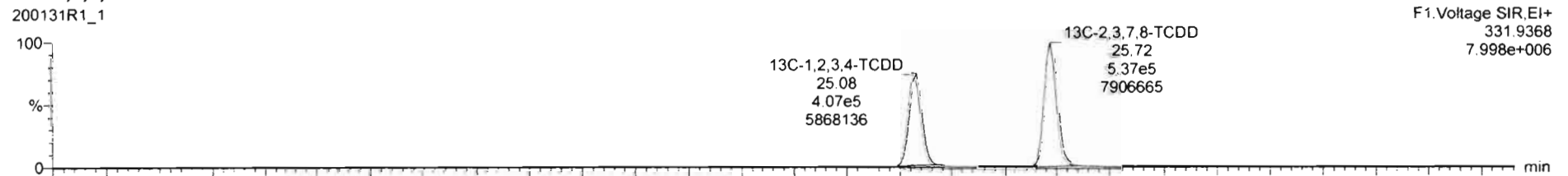


200131R1\_1

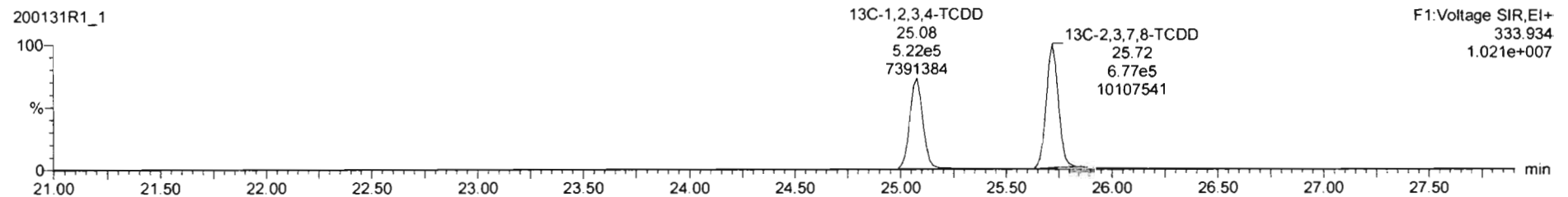


13C-2,3,7,8-TCDD

200131R1\_1



200131R1\_1



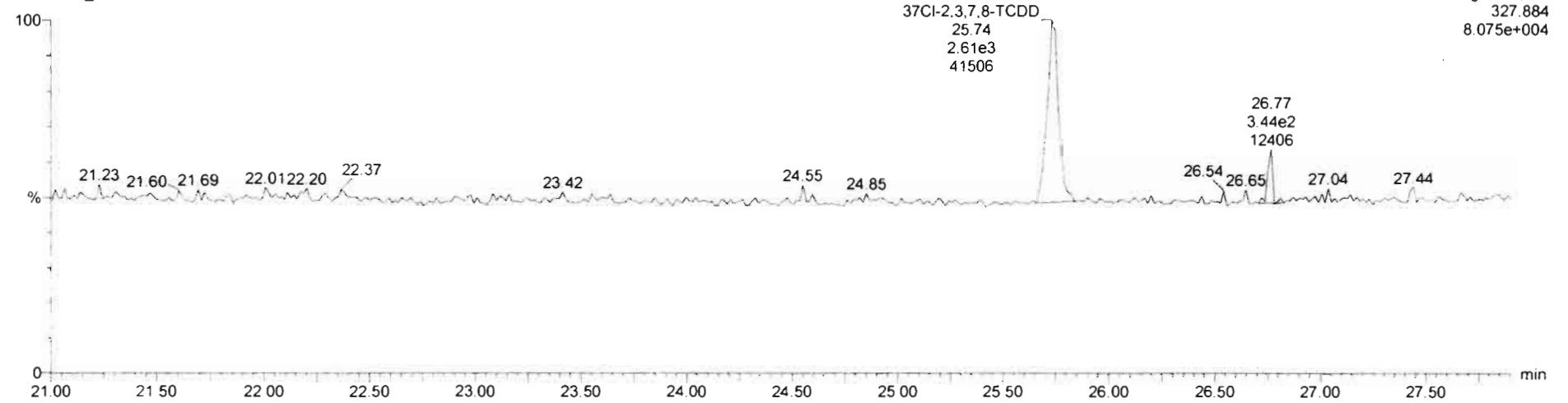
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

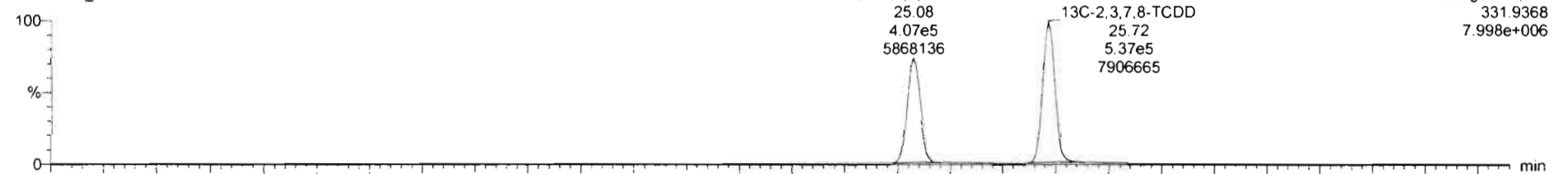
37Cl-2,3,7,8-TCDD

200131R1\_1

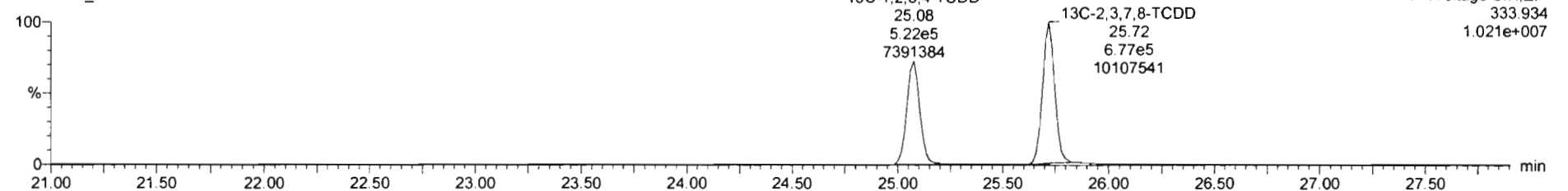


13C-1,2,3,4-TCDD

200131R1\_1



200131R1\_1



Dataset: Untitled

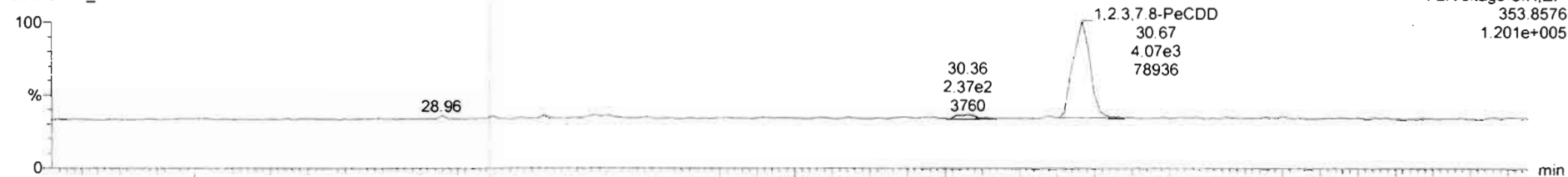
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

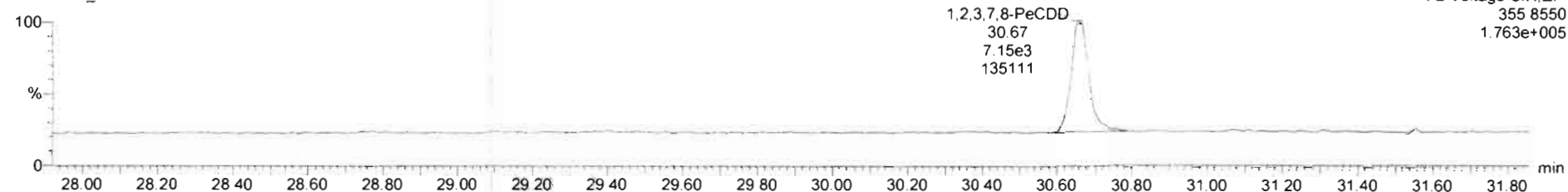
**1,2,3,7,8-PeCDD**

200131R1\_1



F2: Voltage SIR, EI+  
353.8576  
1.201e+005

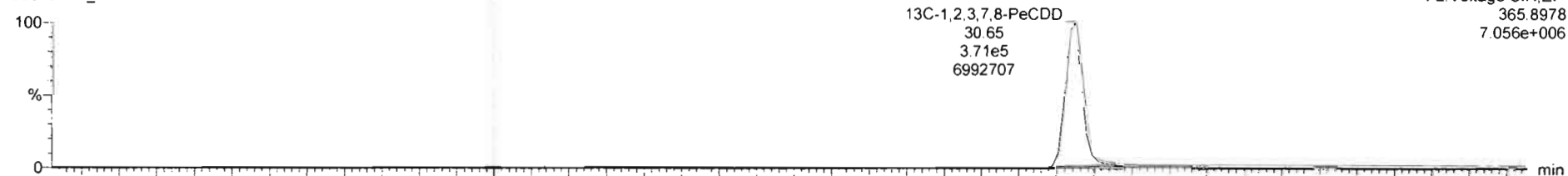
200131R1\_1



F2: Voltage SIR, EI+  
355.8550  
1.763e+005

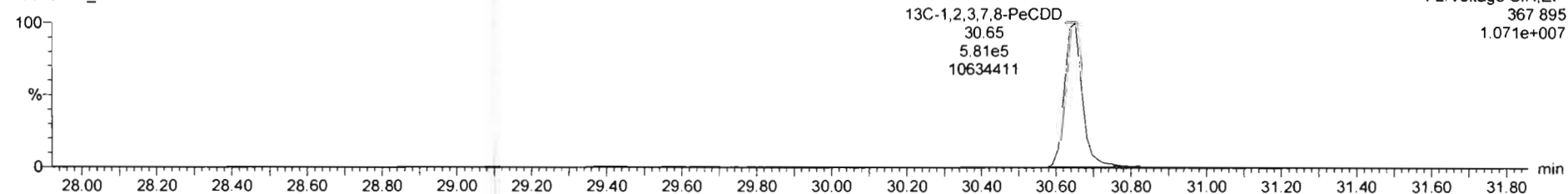
**13C-1,2,3,7,8-PeCDD**

200131R1\_1



F2: Voltage SIR, EI+  
365.8978  
7.056e+006

200131R1\_1



F2: Voltage SIR, EI+  
367.895  
1.071e+007

Dataset: Untitled

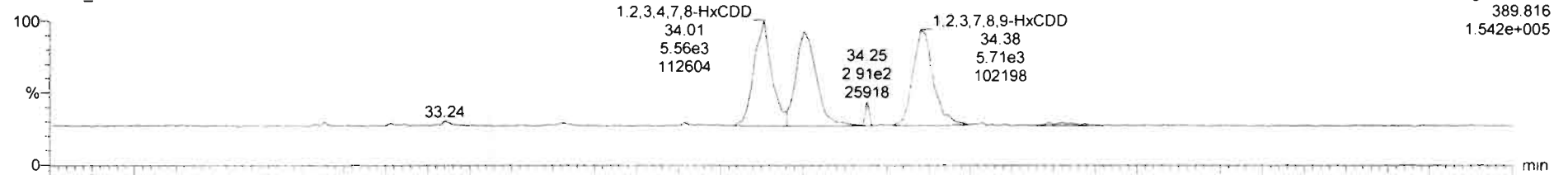
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

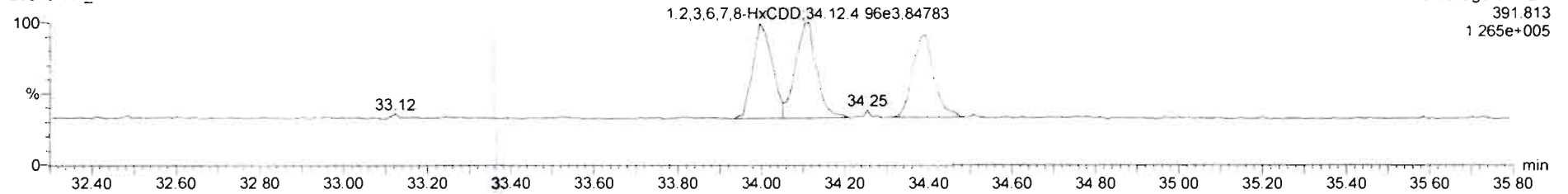
Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

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

200131R1\_1

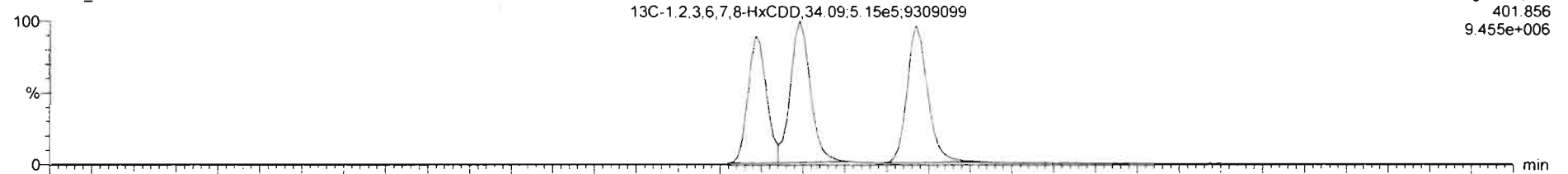


200131R1\_1

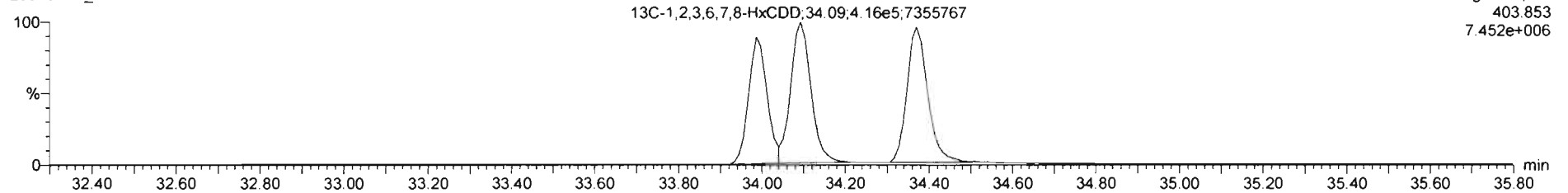


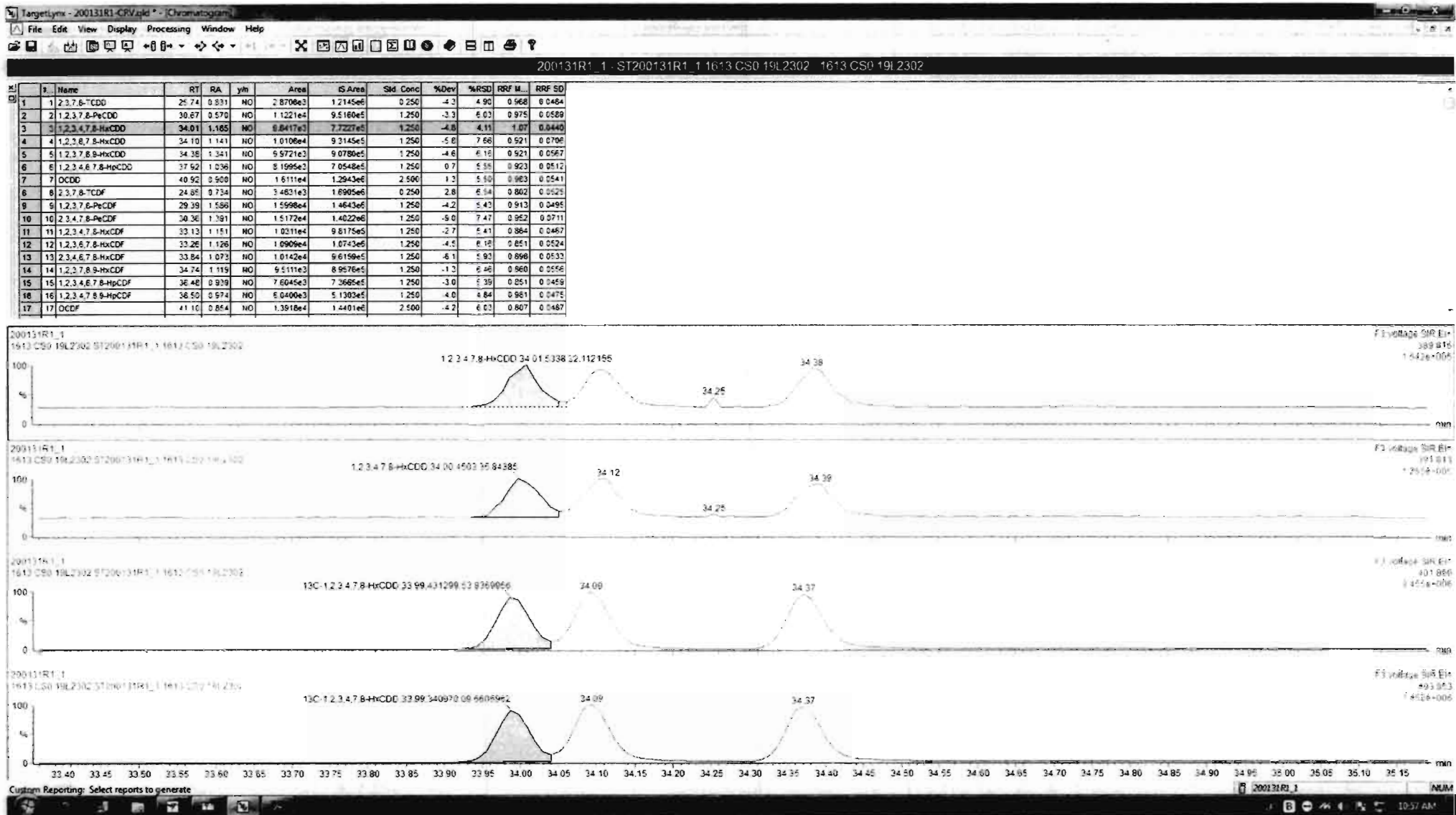
**13C-1,2,3,4,7,8-HxCDD**

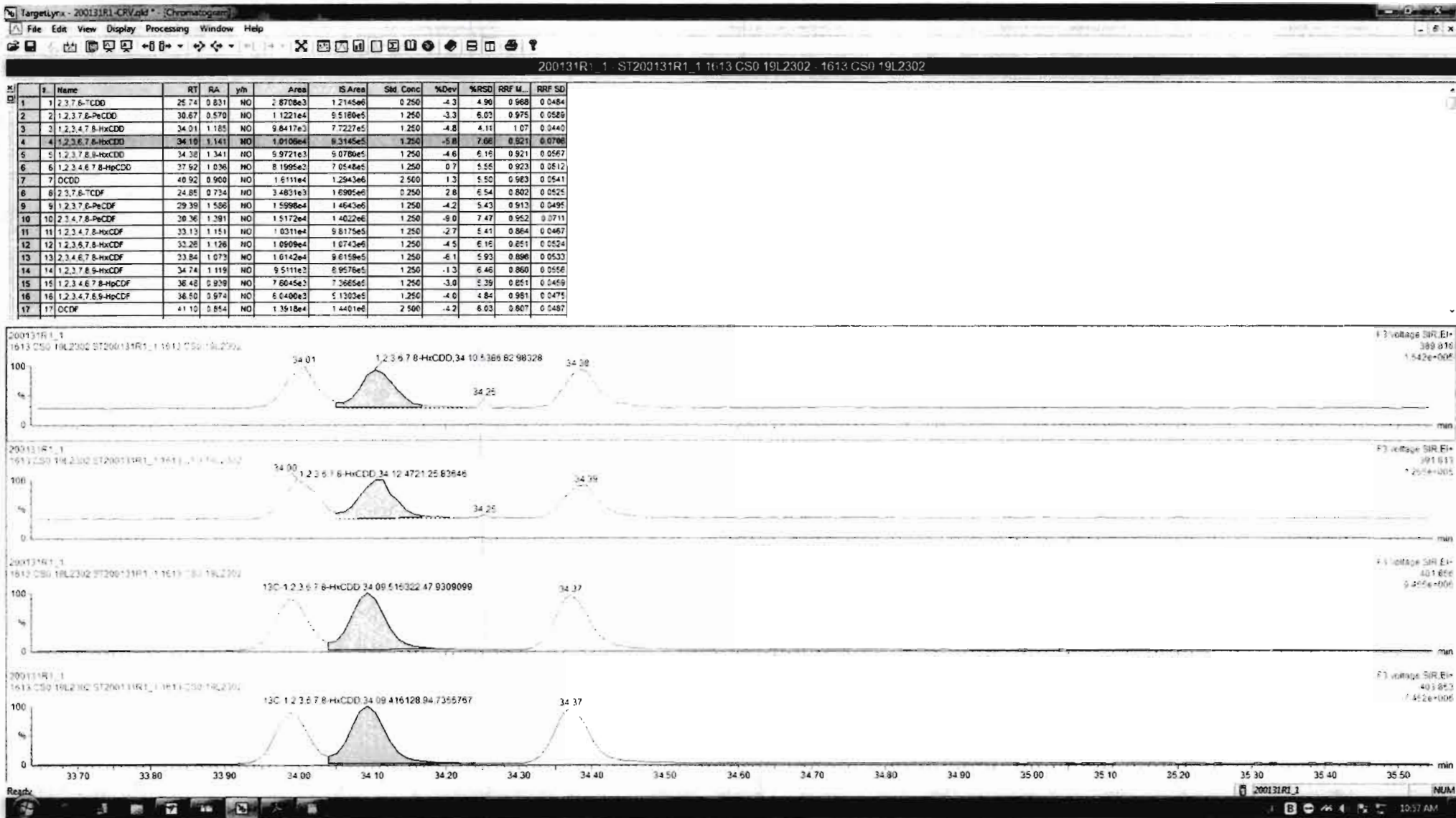
200131R1\_1



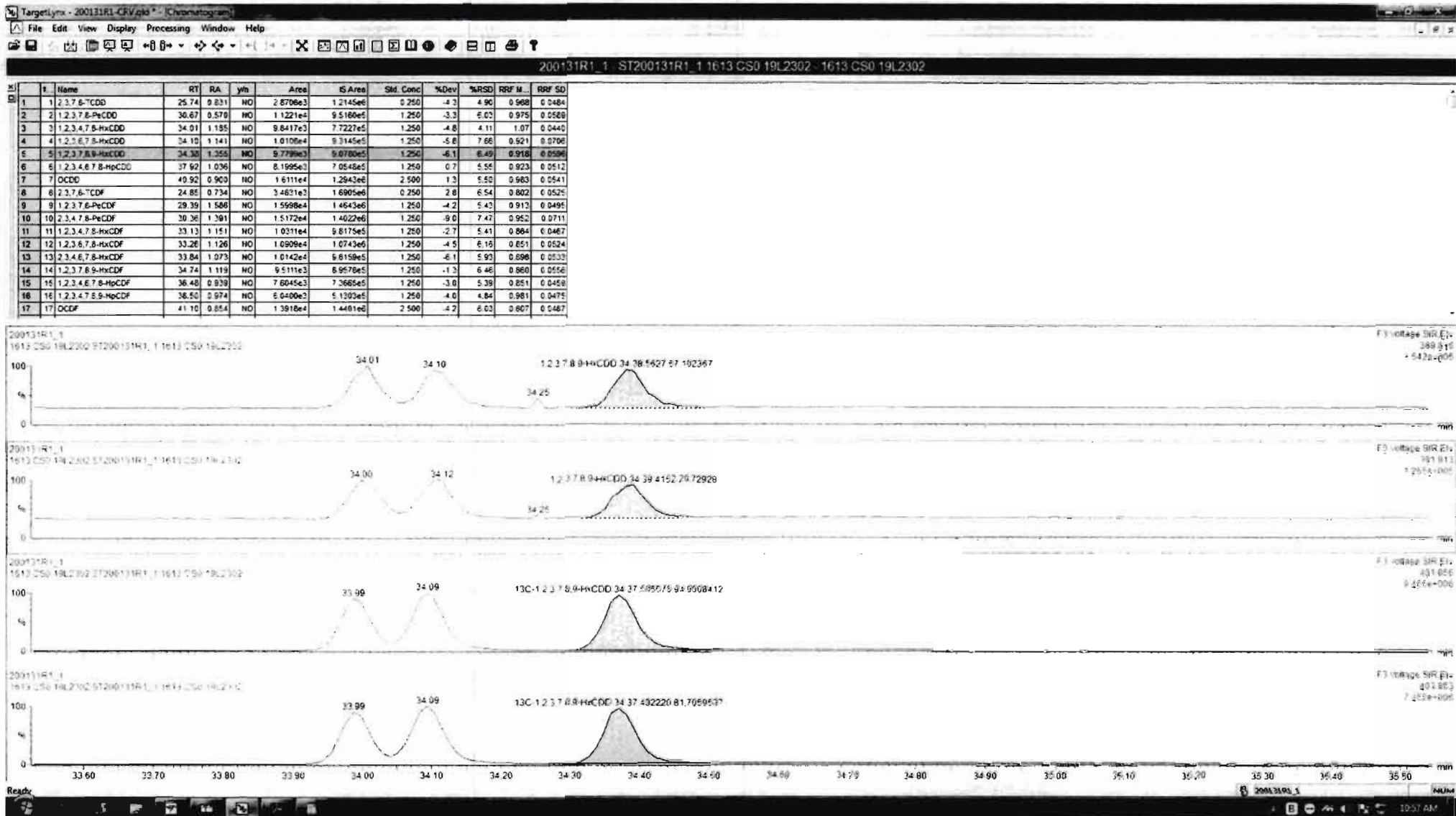
200131R1\_1











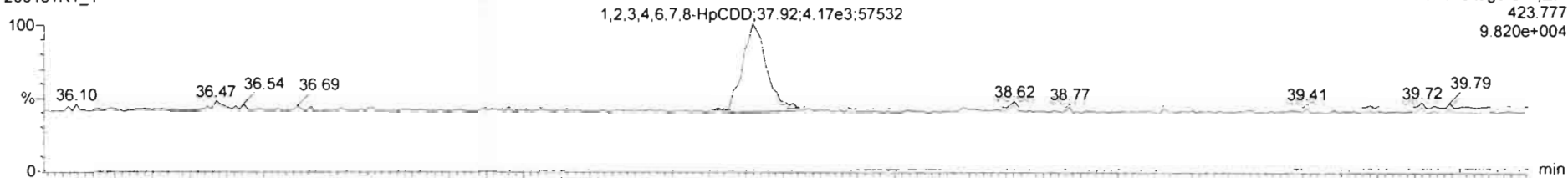
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

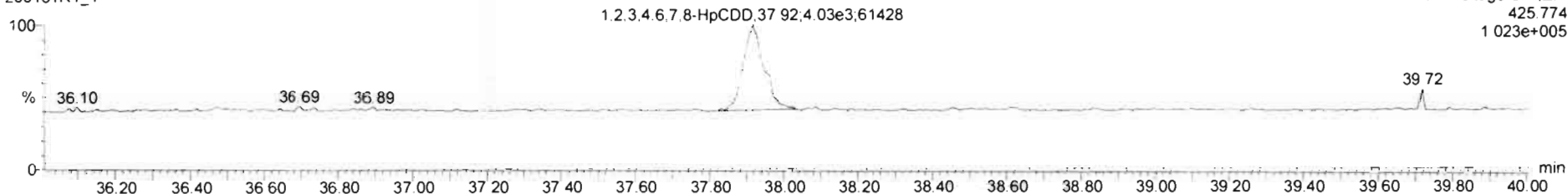
Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

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

200131R1\_1

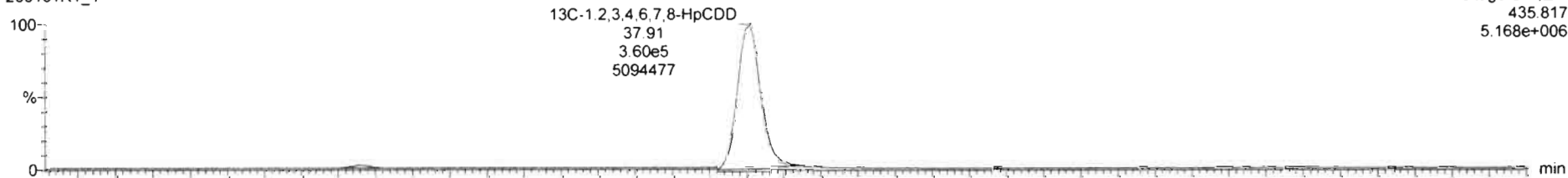


200131R1\_1

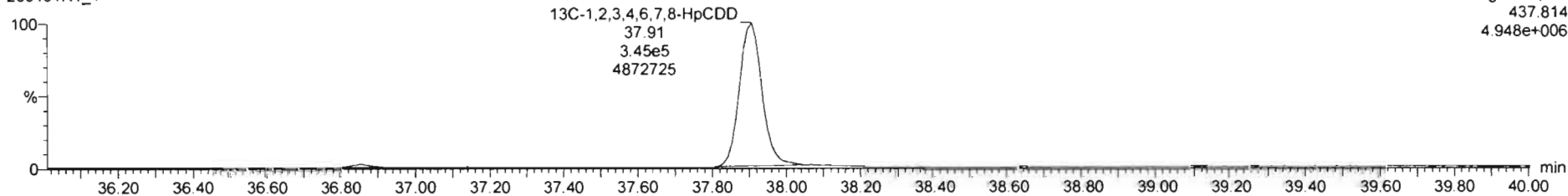


13C-1,2,3,4,6,7,8-HpCDD

200131R1\_1



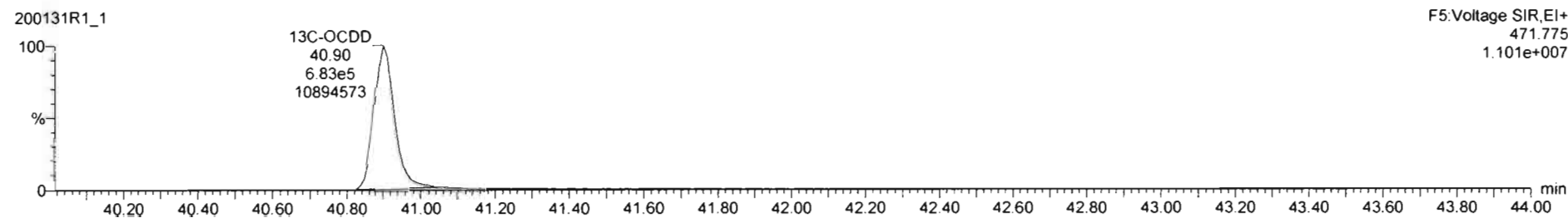
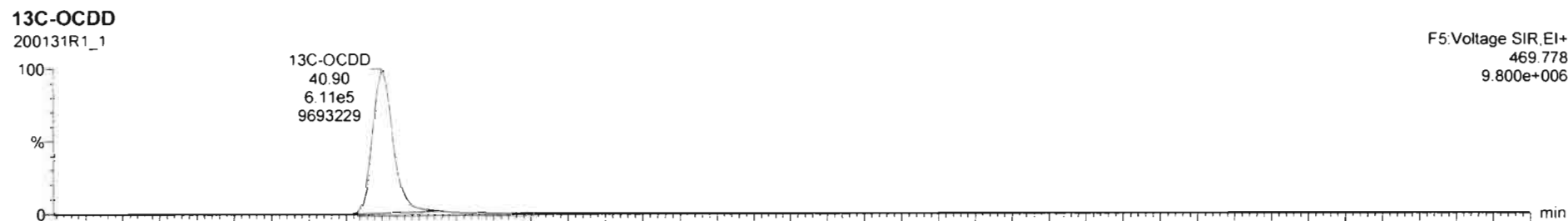
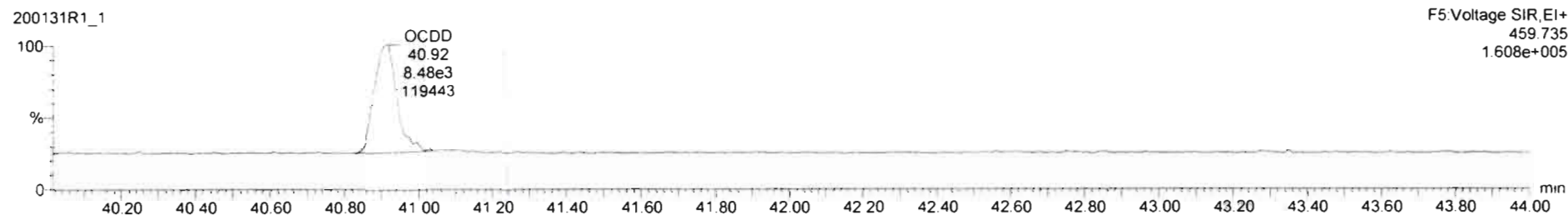
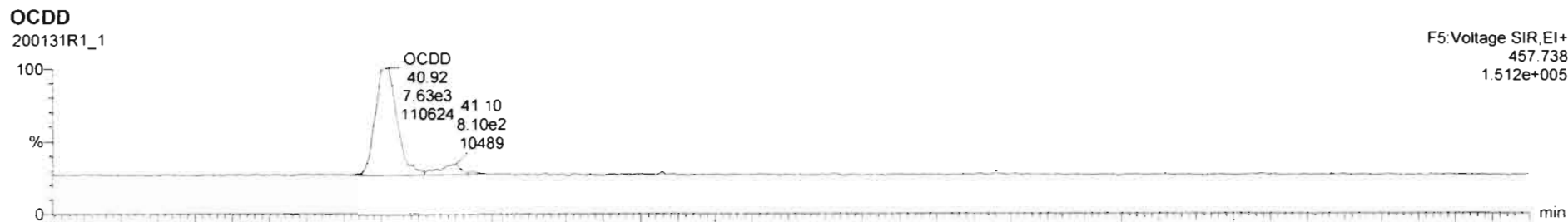
200131R1\_1



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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302



Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

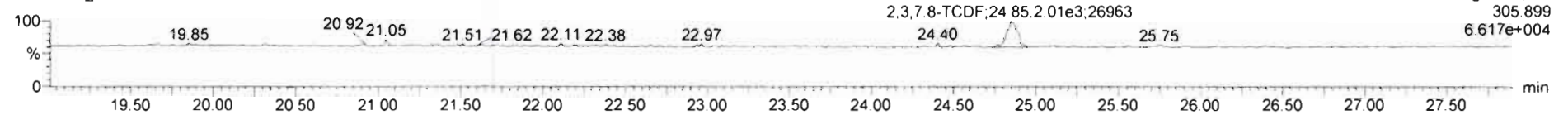
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**2,3,7,8-TCDF**

200131R1\_1

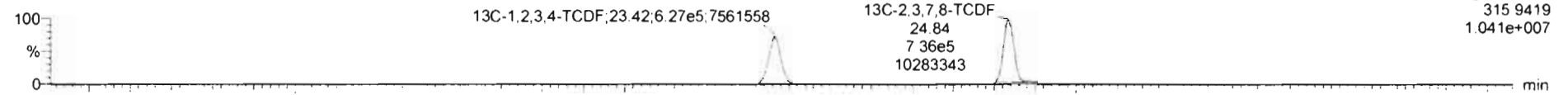


200131R1\_1

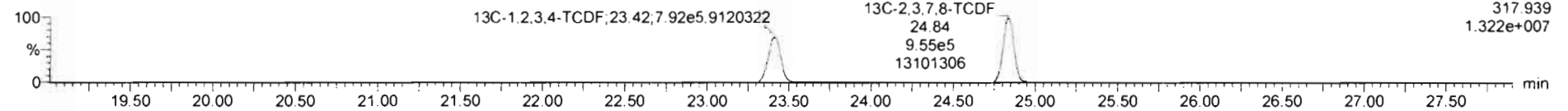


**13C-2,3,7,8-TCDF**

200131R1\_1

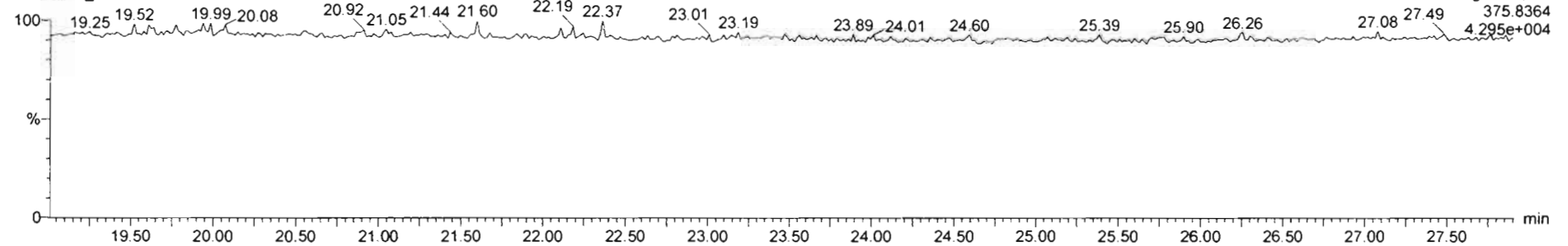


200131R1\_1



**DPE1**

200131R1\_1



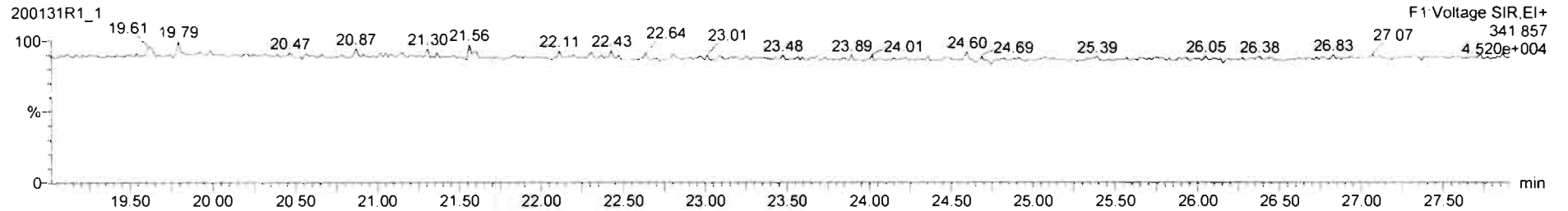
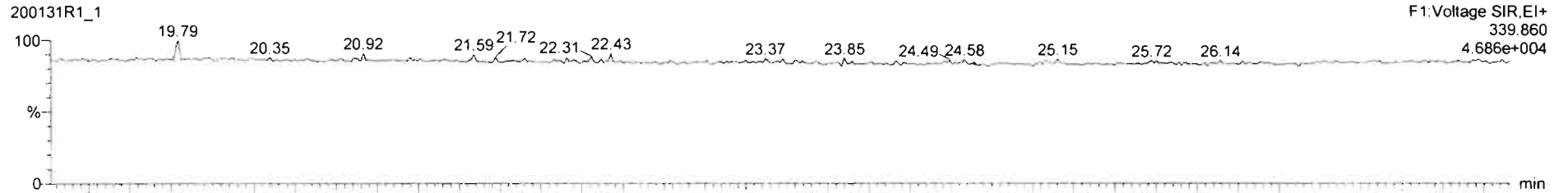
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

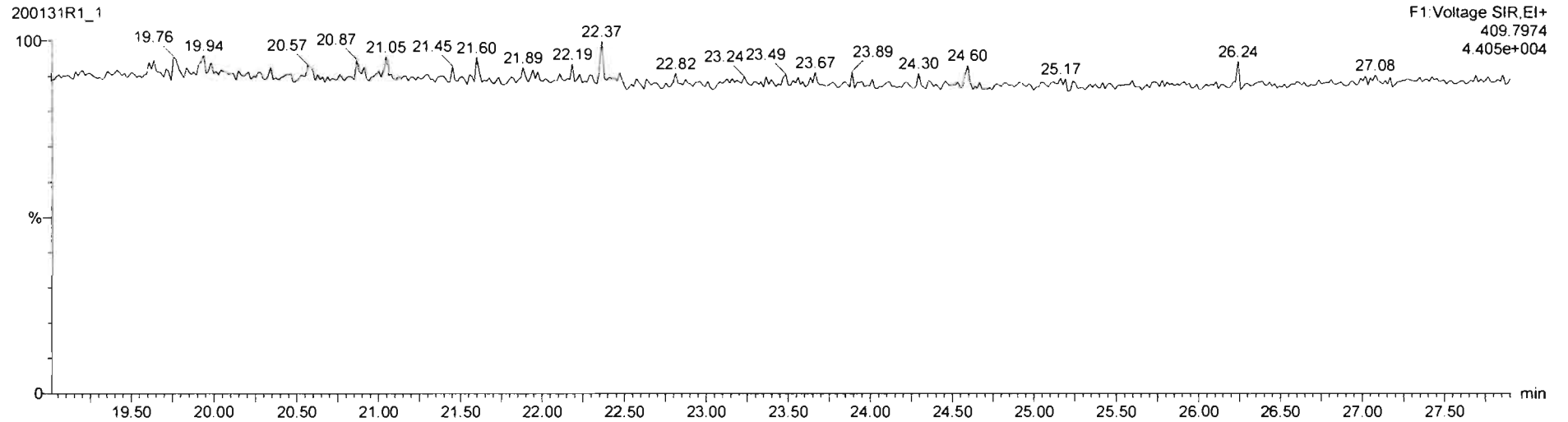
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

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DPE6



Dataset: Untitled

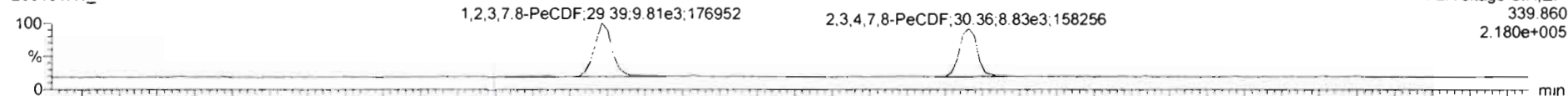
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

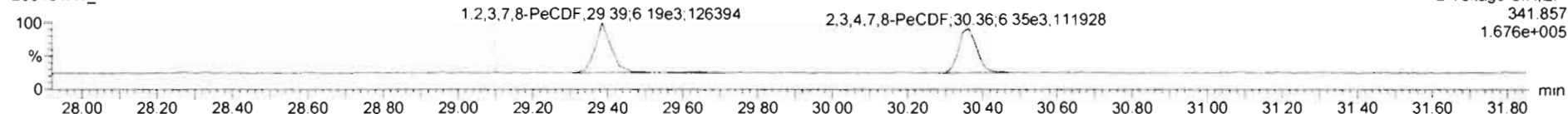
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**1,2,3,7,8-PeCDF**

200131R1\_1

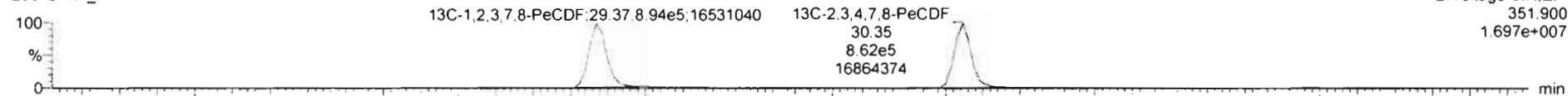


200131R1\_1

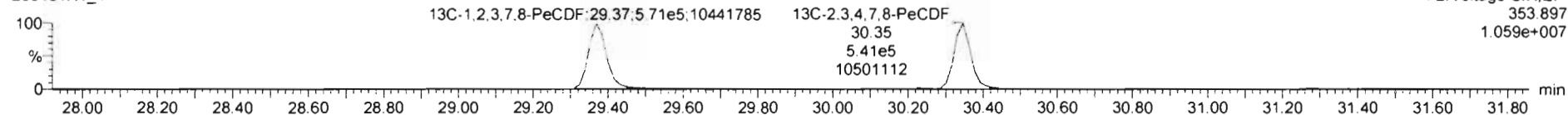


**13C-1,2,3,7,8-PeCDF**

200131R1\_1

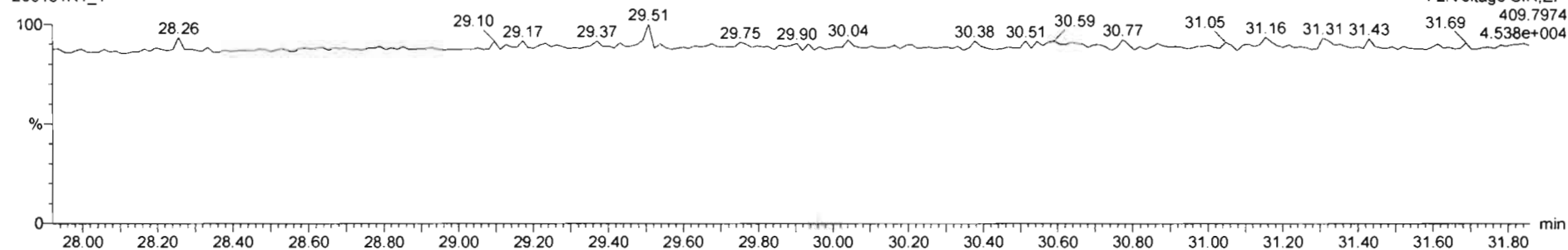


200131R1\_1

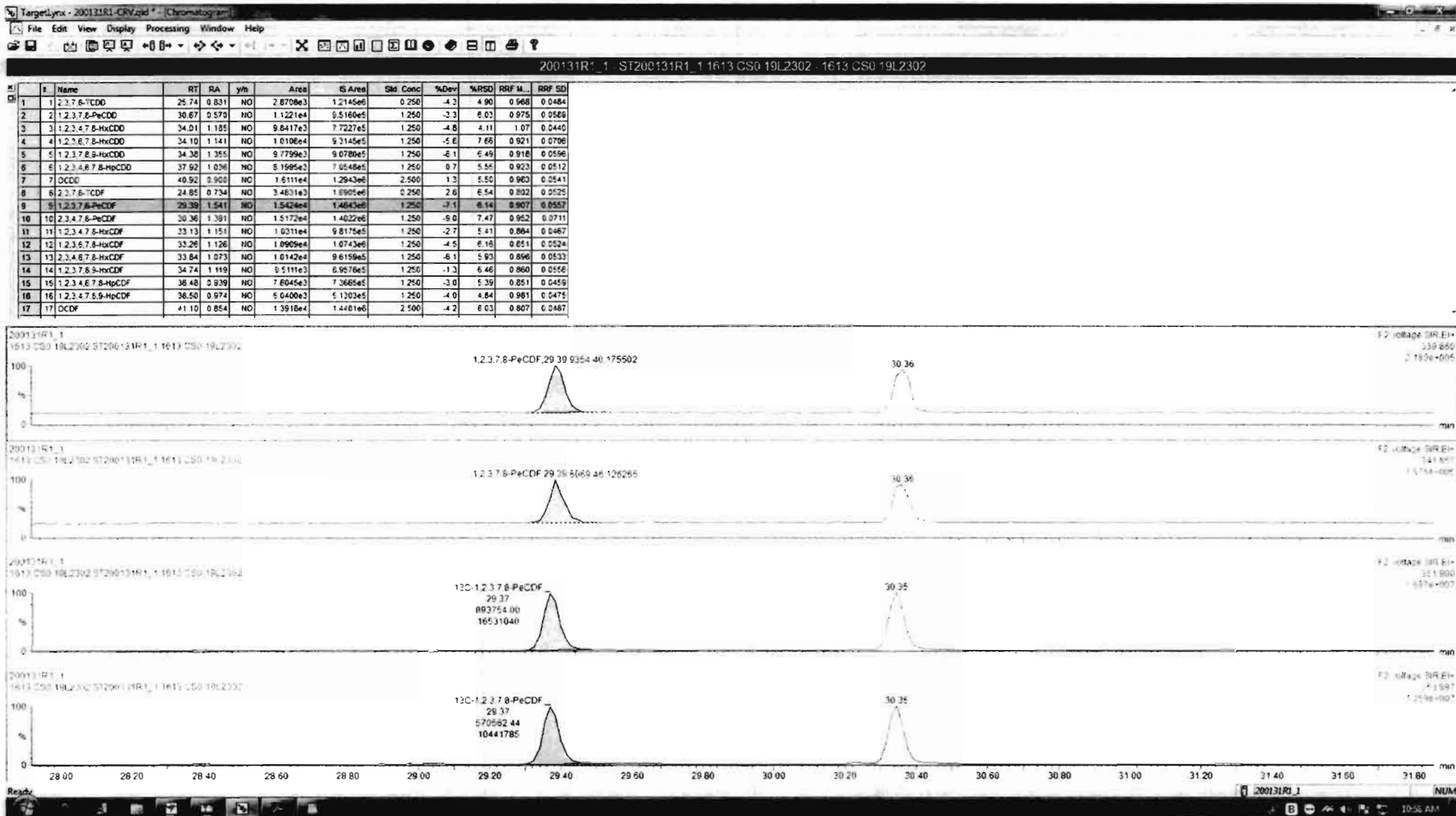


**DPE2**

200131R1\_1







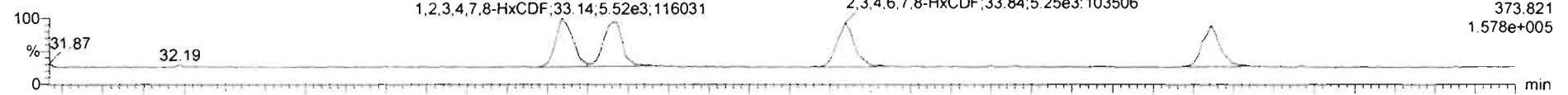
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

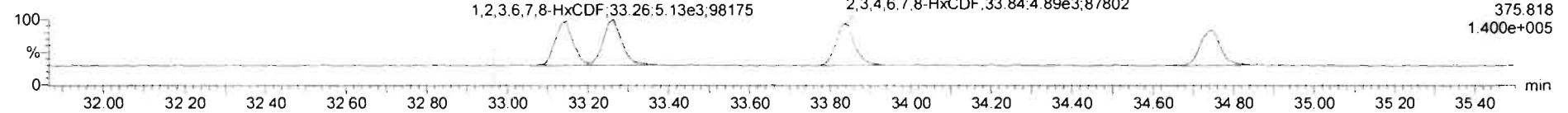
Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

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

200131R1\_1

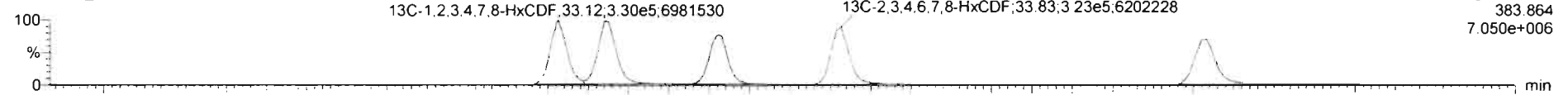


200131R1\_1

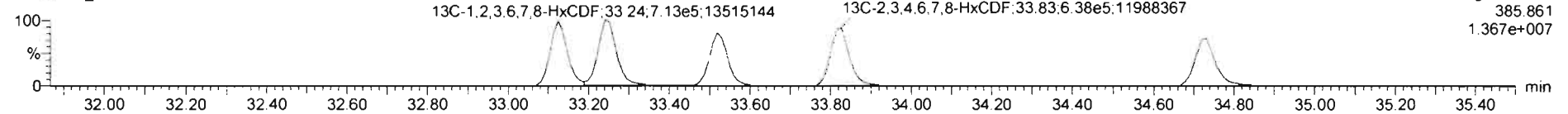


**13C-1,2,3,4,7,8-HxCDF**

200131R1\_1

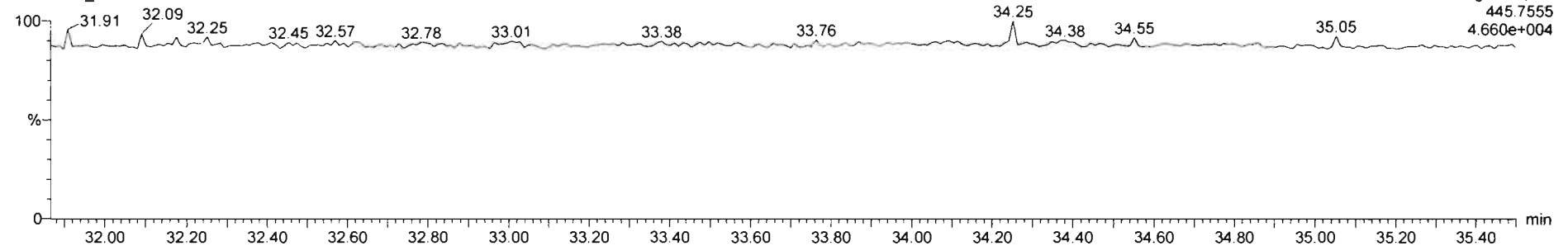


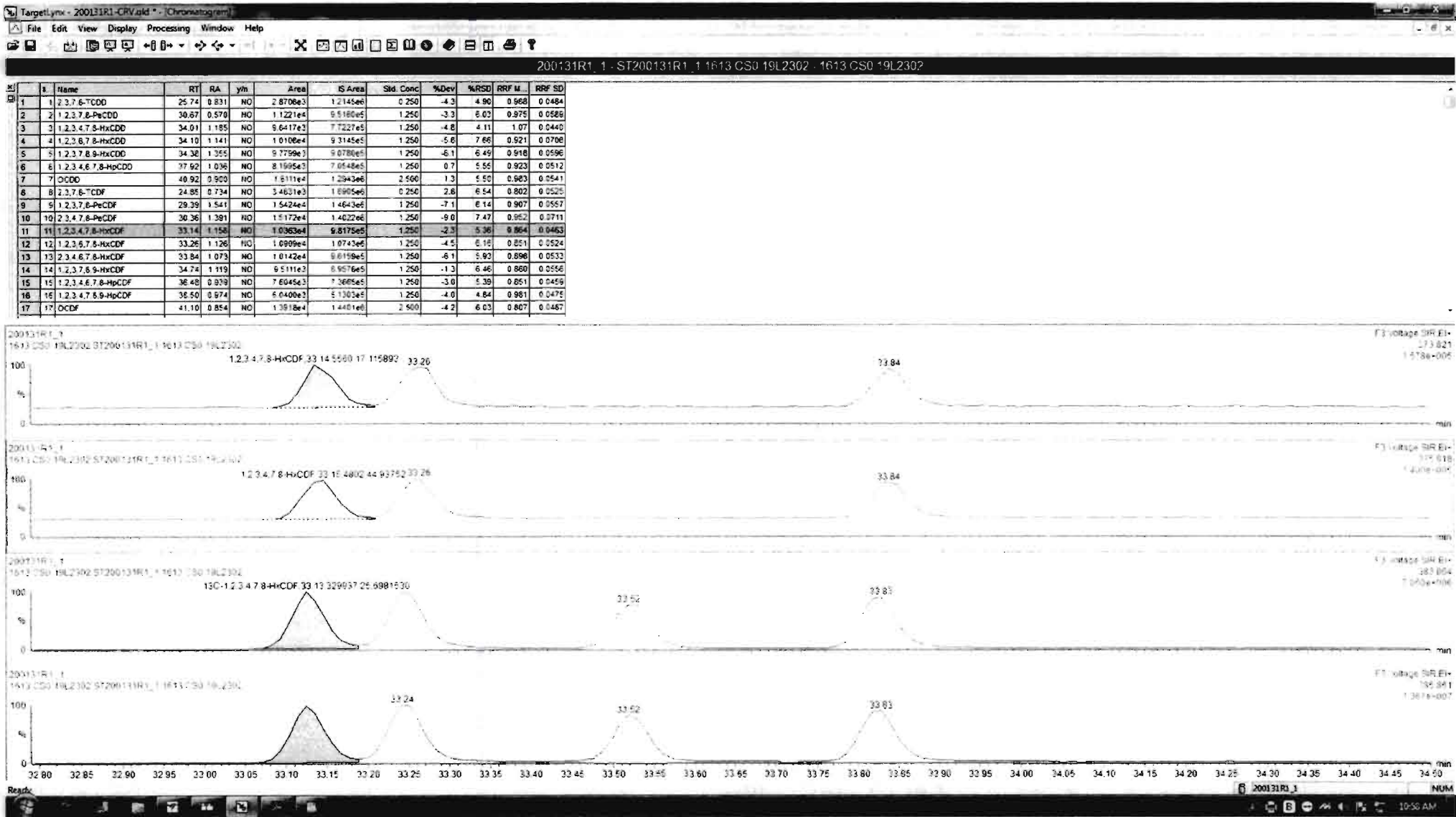
200131R1\_1

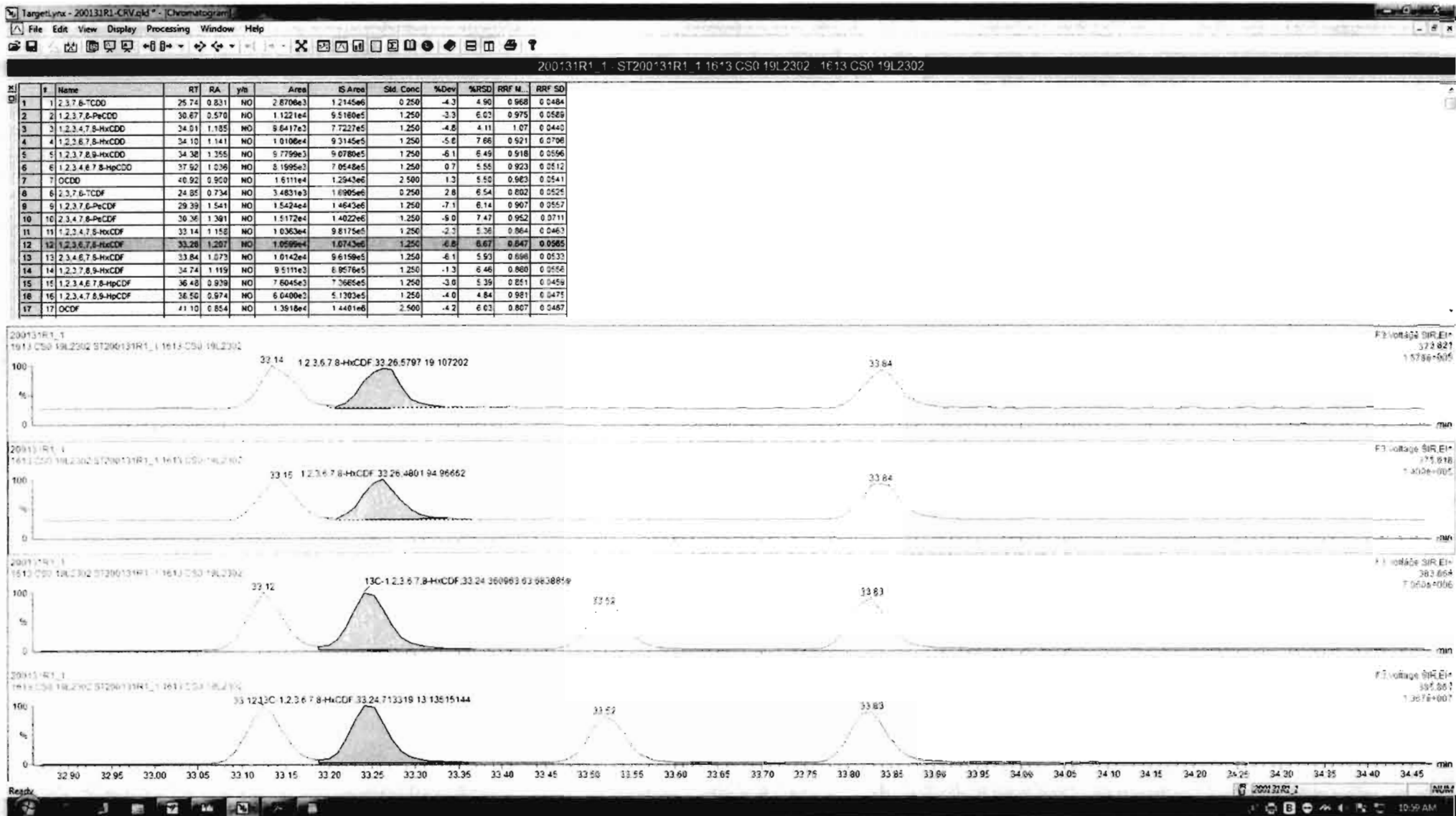


**DPE3**

200131R1\_1







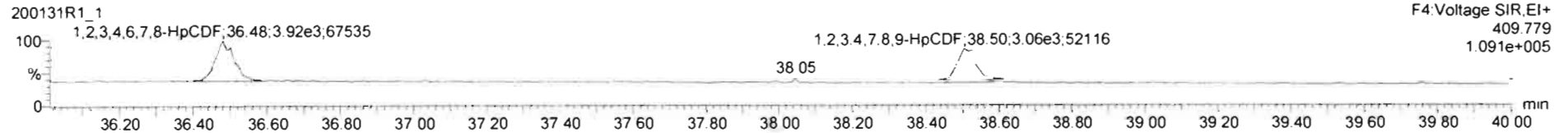
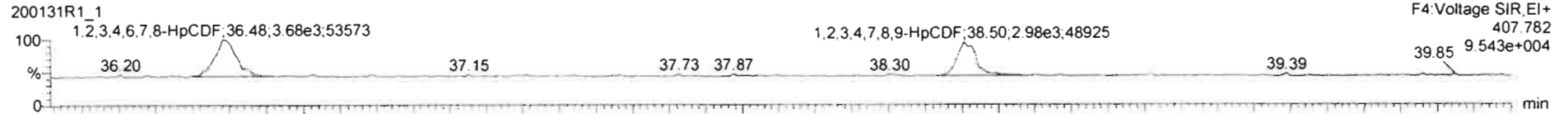
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

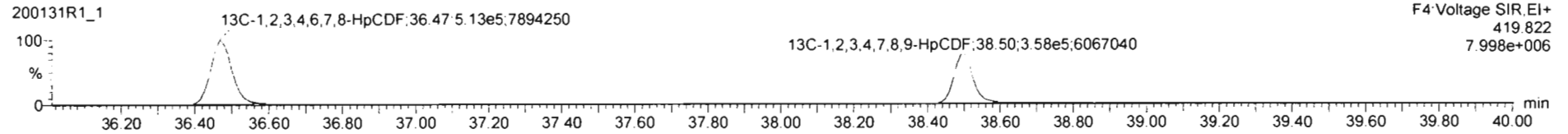
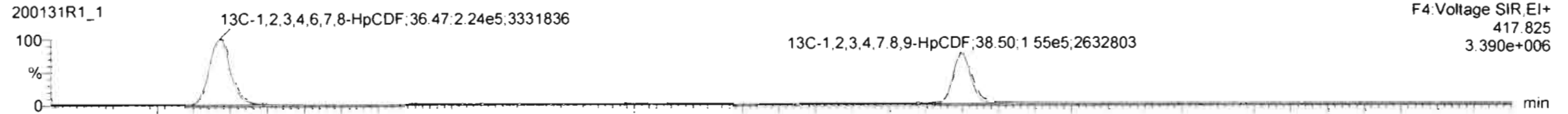
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

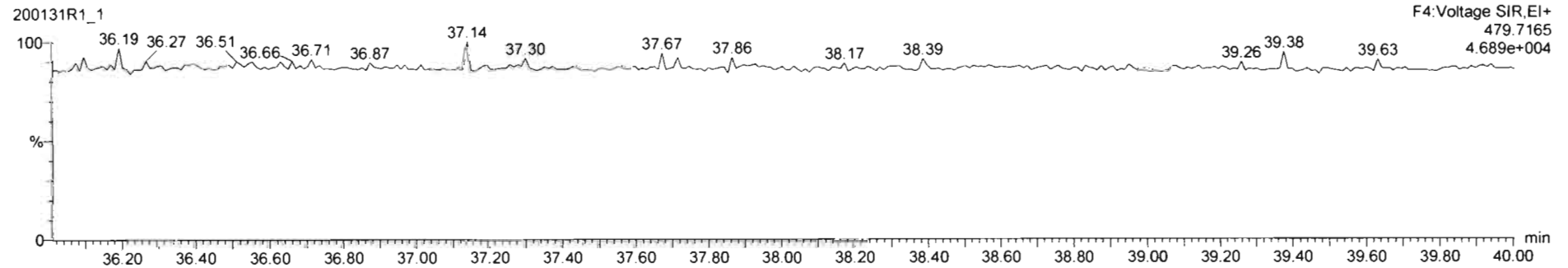
**1,2,3,4,6,7,8-HpCDF**

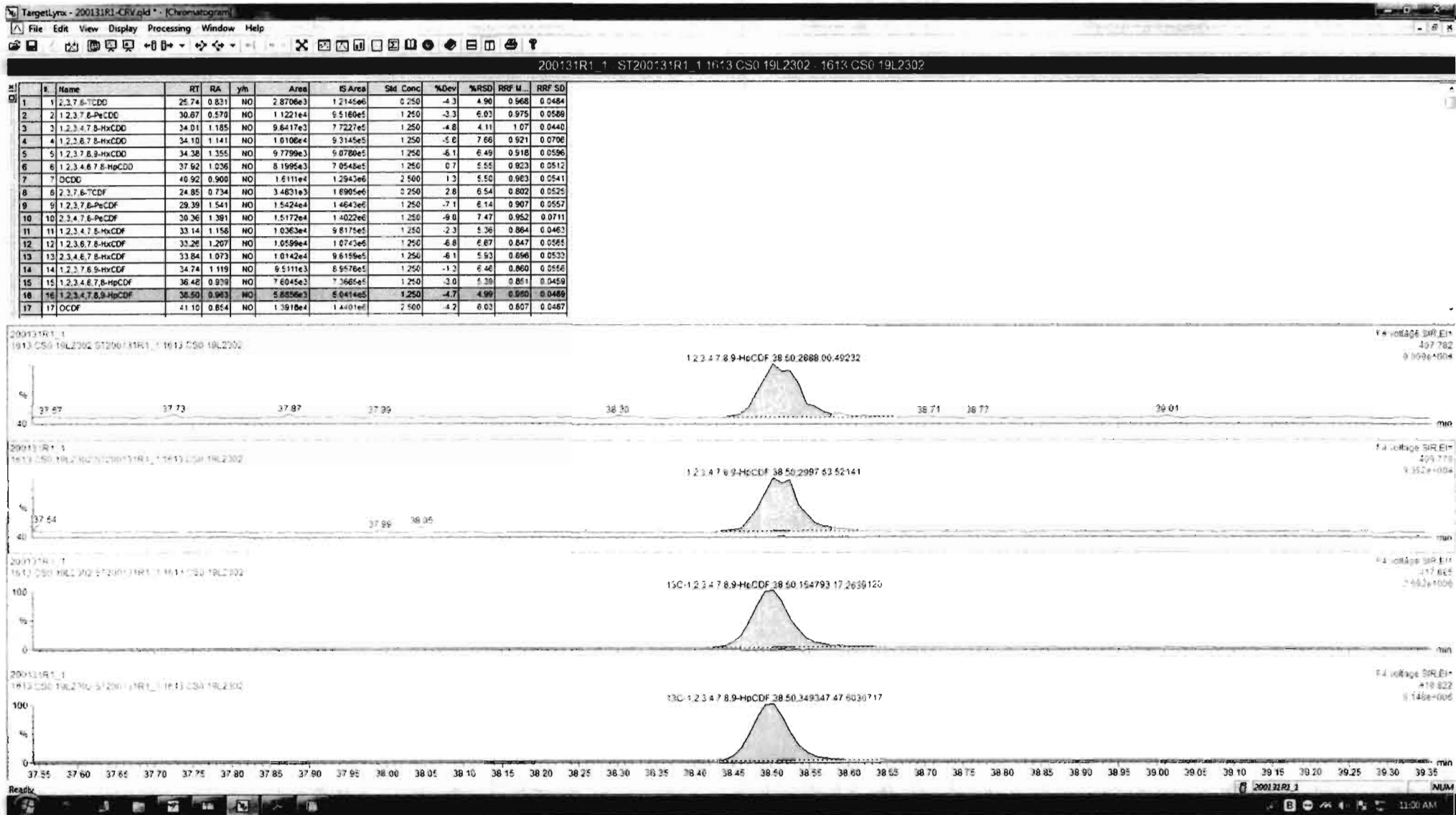


**13C-1,2,3,4,6,7,8-HpCDF**



**DPE4**



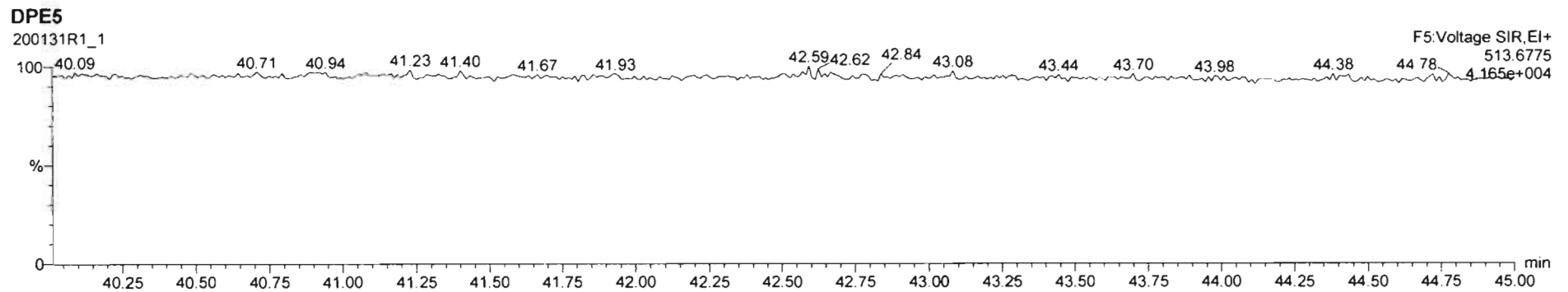
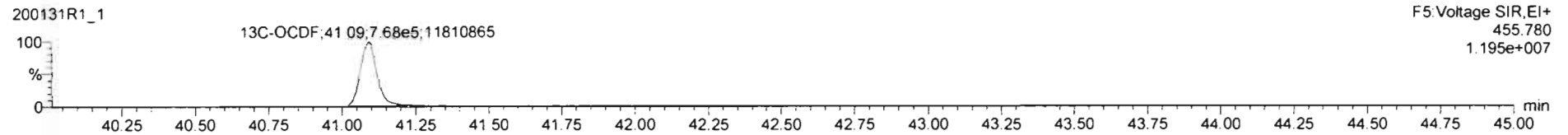
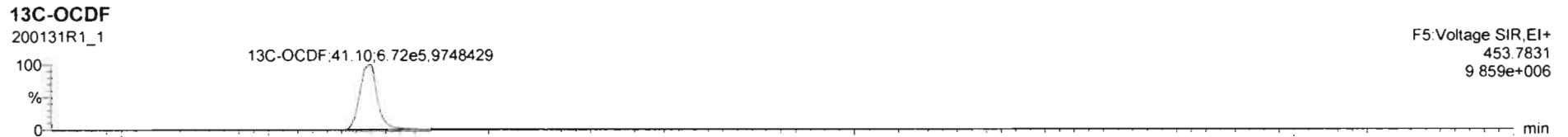
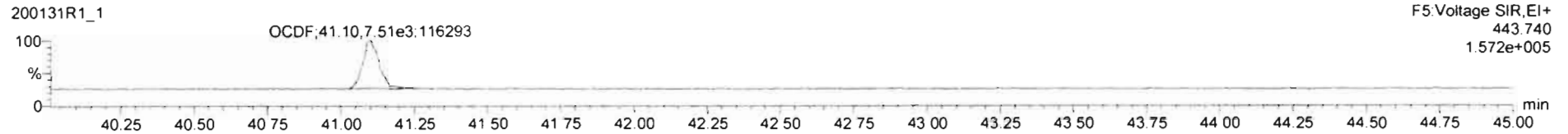
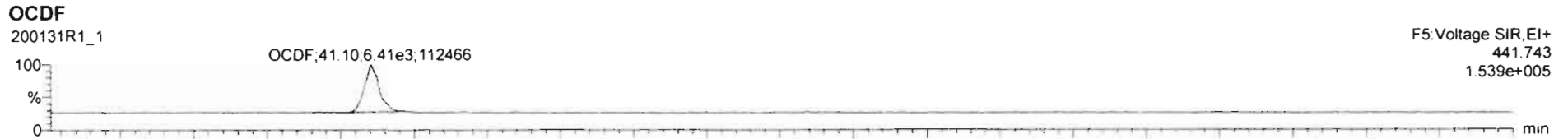




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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

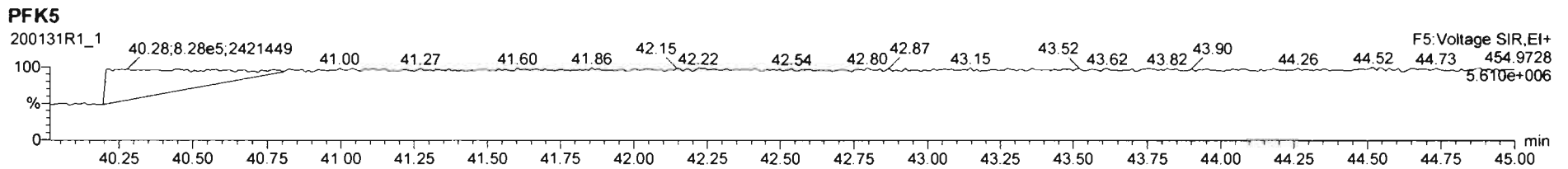
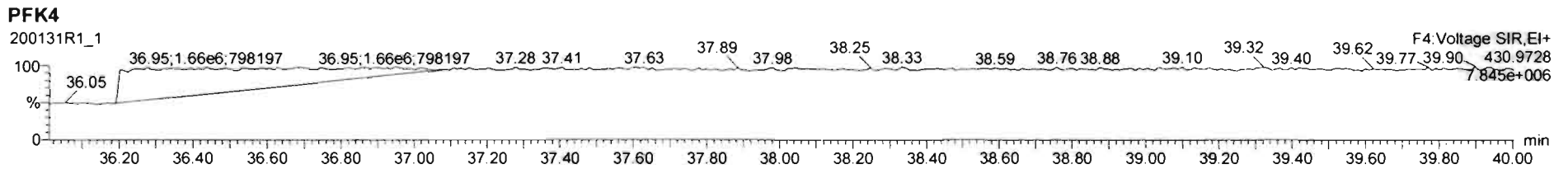
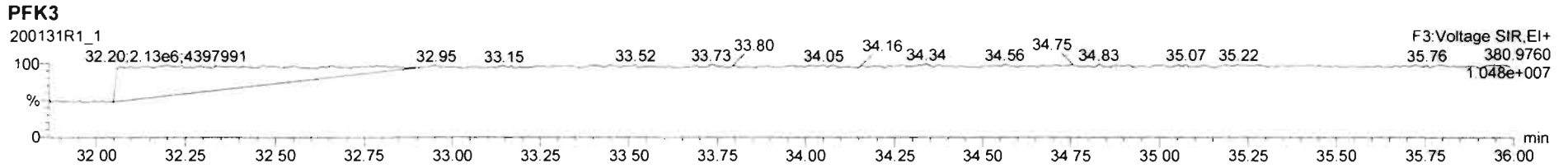
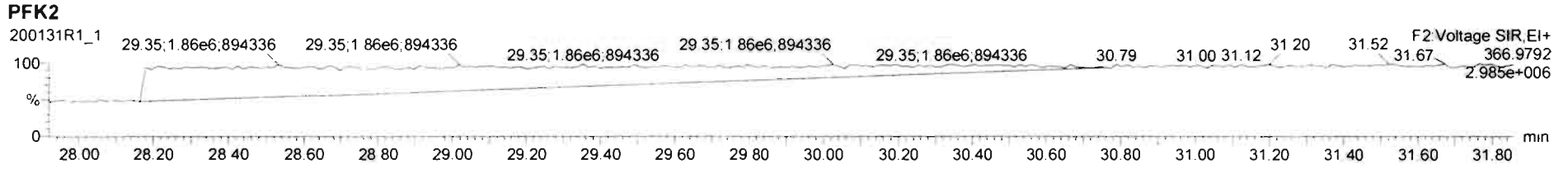
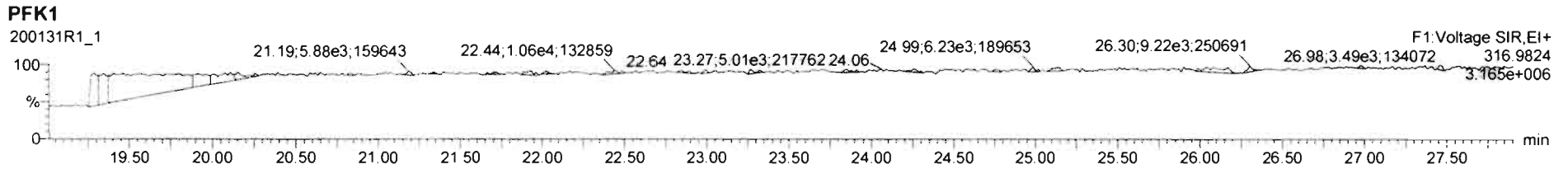


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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_1, Date: 31-Jan-2020, Time: 16:48:41, ID: ST200131R1\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302



Dataset: Untitled

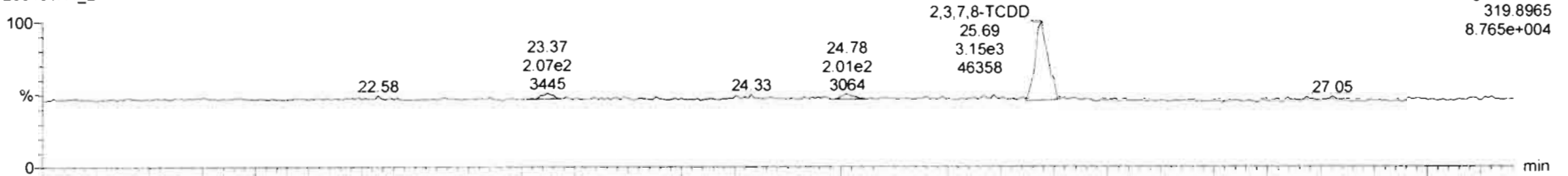
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

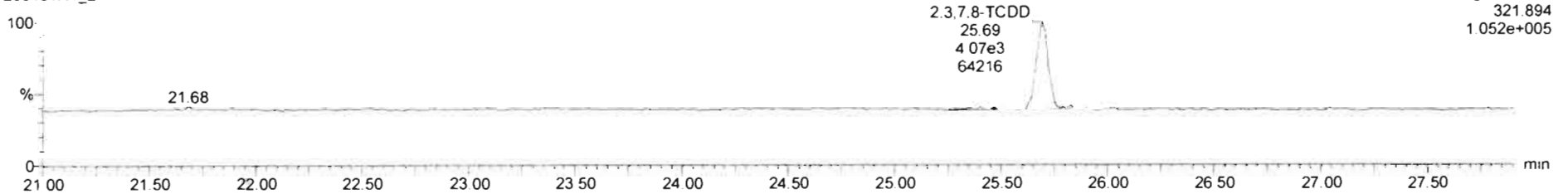
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**2,3,7,8-TCDD**

200131R1\_2

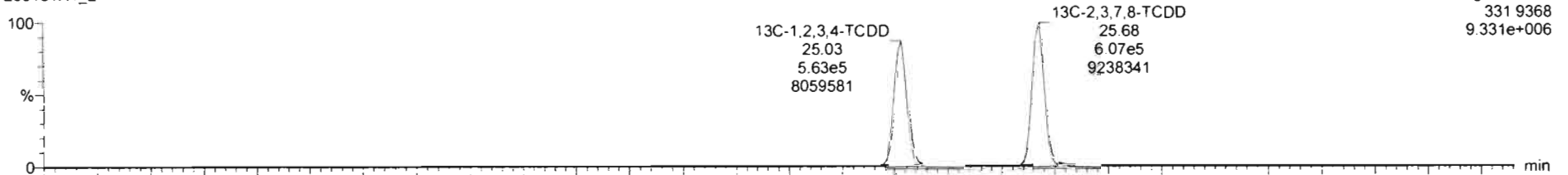


200131R1\_2

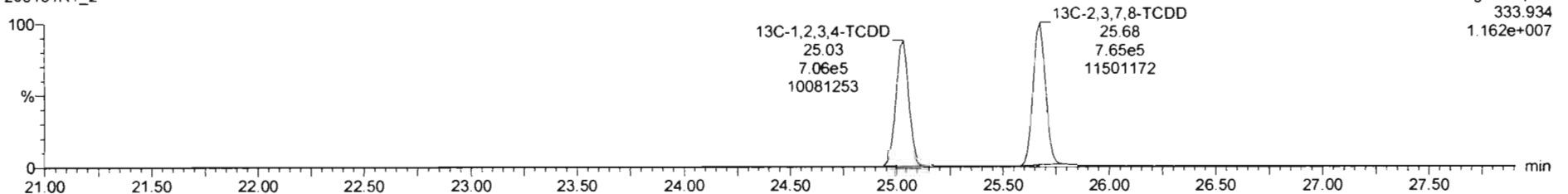


**13C-2,3,7,8-TCDD**

200131R1\_2



200131R1\_2



Dataset: Untitled

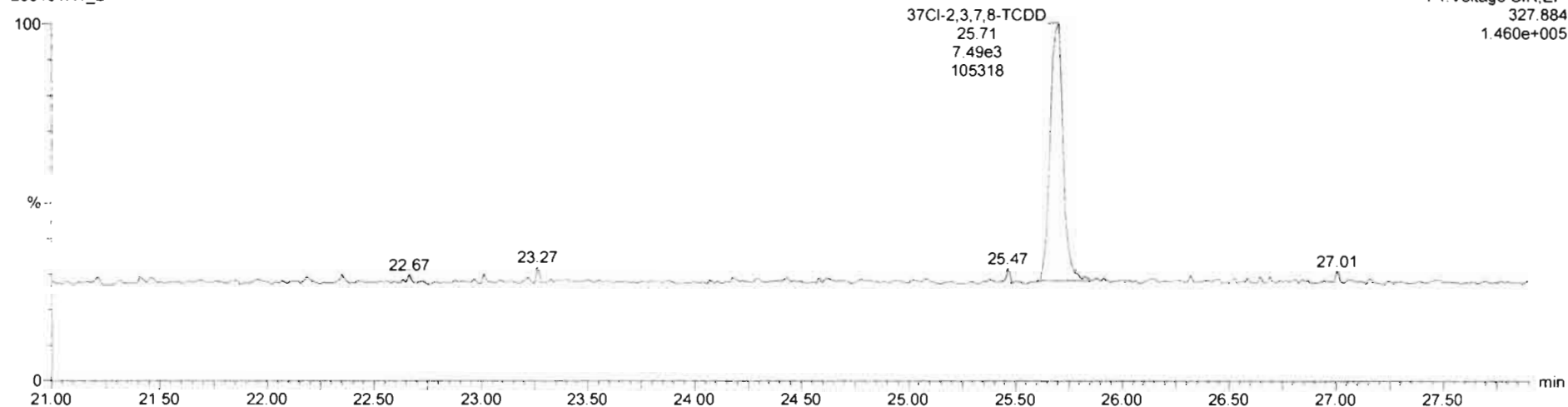
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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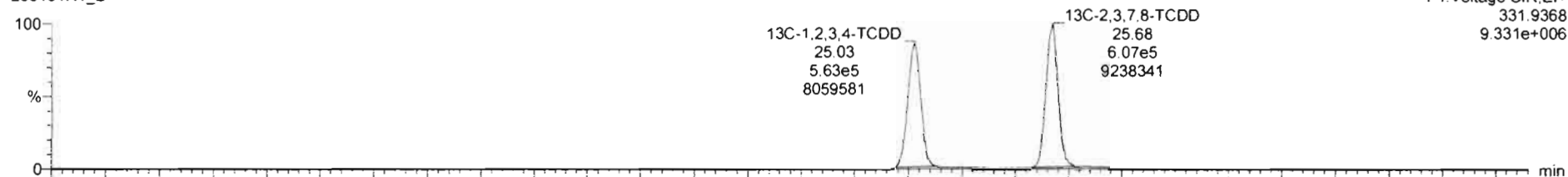
**37Cl-2,3,7,8-TCDD**

200131R1\_2

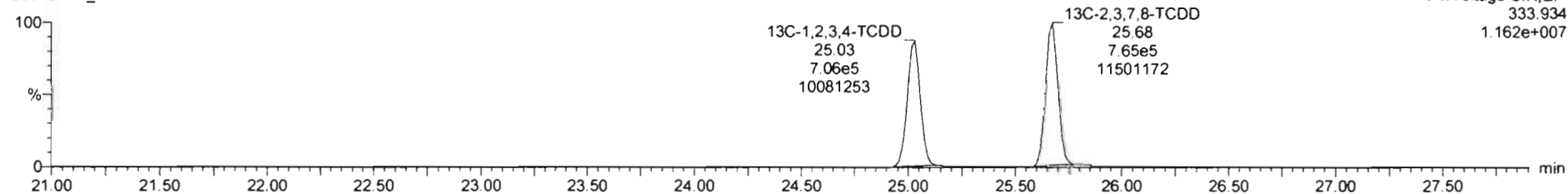


**13C-1,2,3,4-TCDD**

200131R1\_2



200131R1\_2



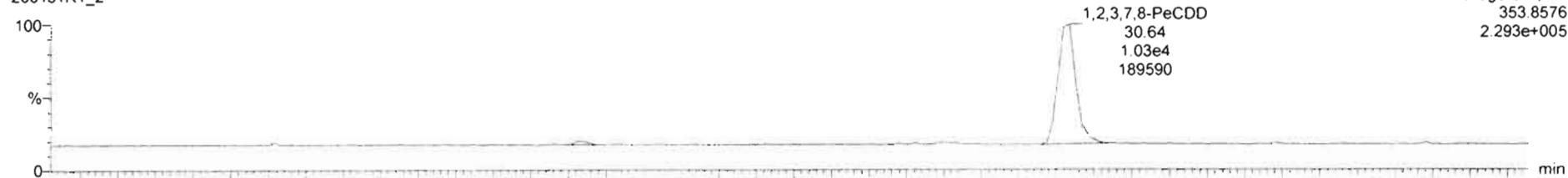
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

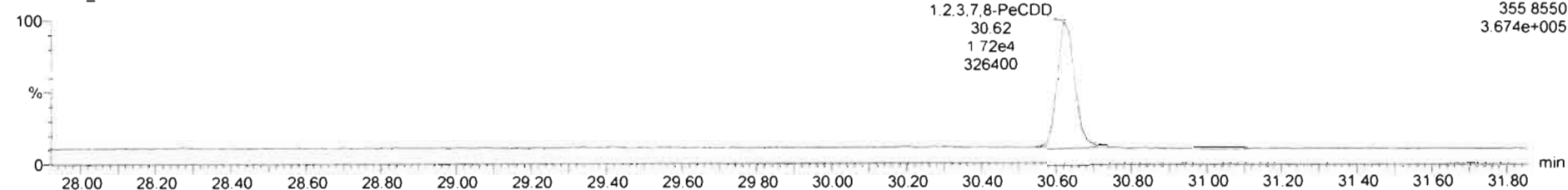
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**1,2,3,7,8-PeCDD**

200131R1\_2

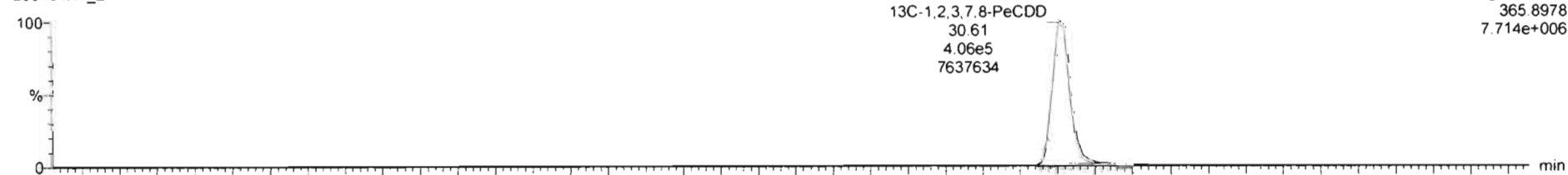


200131R1\_2

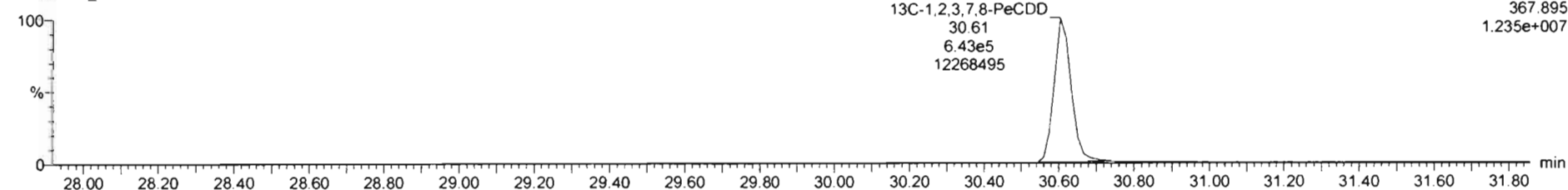


**13C-1,2,3,7,8-PeCDD**

200131R1\_2



200131R1\_2



Dataset: Untitled

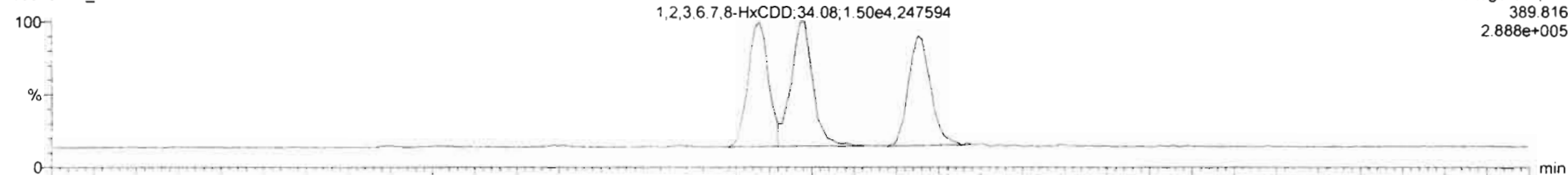
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

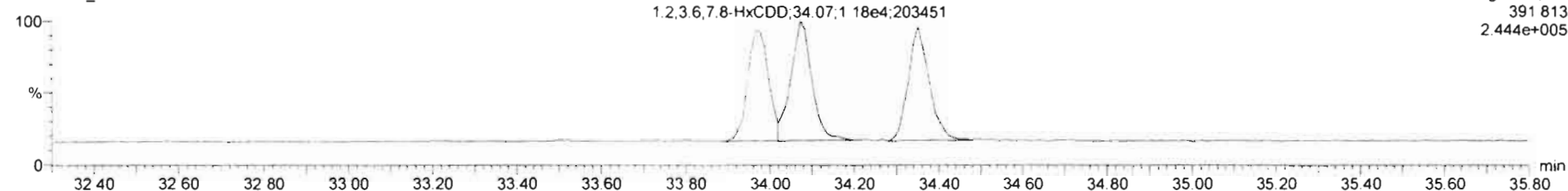
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**1,2,3,4,7,8-HxCDD**

200131R1\_2

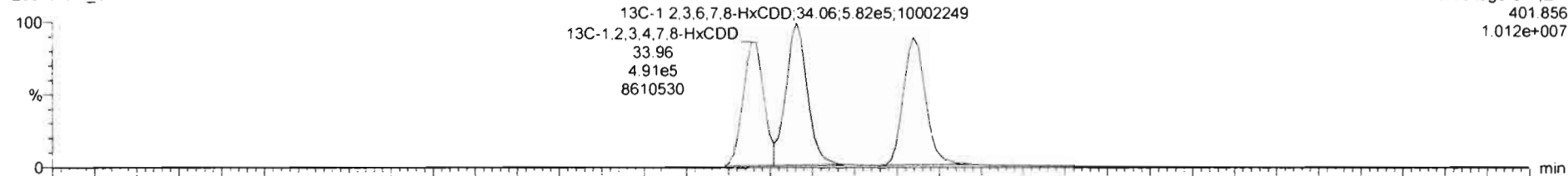


200131R1\_2

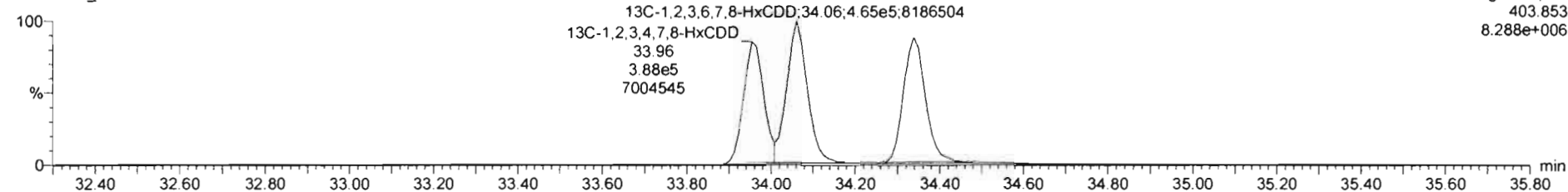


**13C-1,2,3,4,7,8-HxCDD**

200131R1\_2



200131R1\_2





Dataset: Untitled

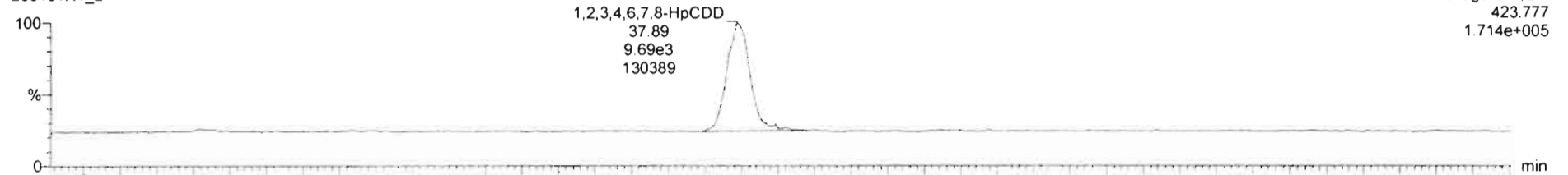
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

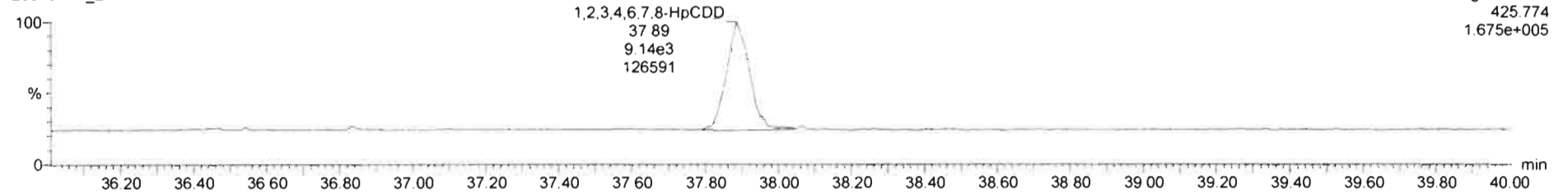
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**1,2,3,4,6,7,8-HpCDD**

200131R1\_2

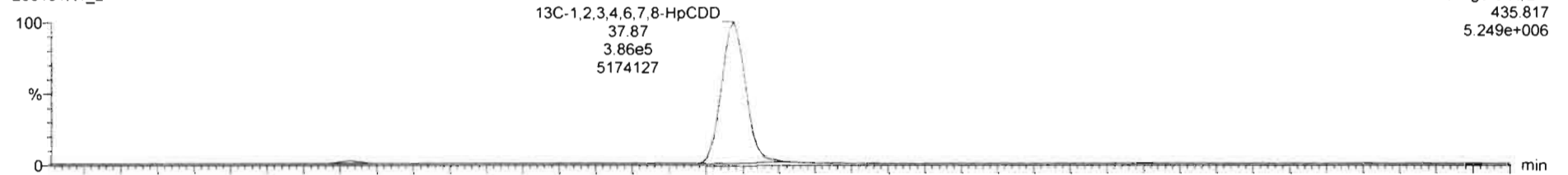


200131R1\_2

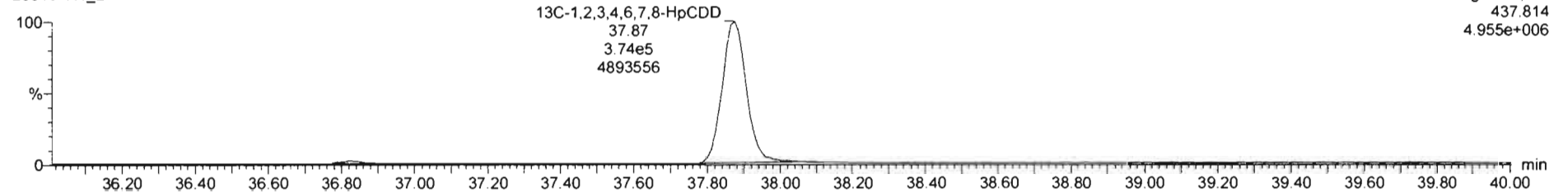


**<sup>13</sup>C-1,2,3,4,6,7,8-HpCDD**

200131R1\_2



200131R1\_2

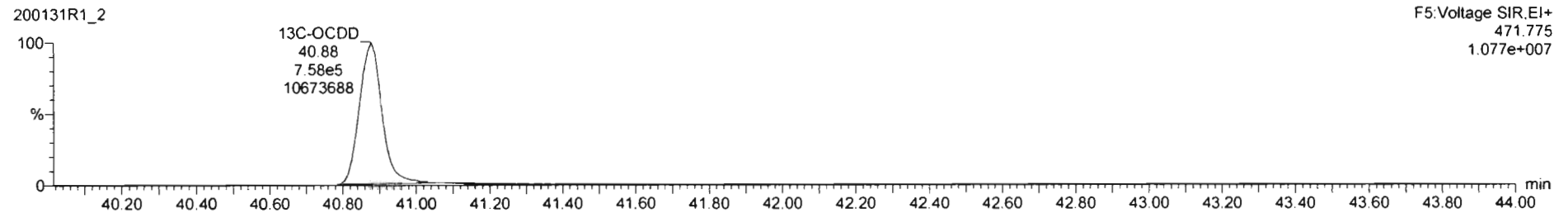
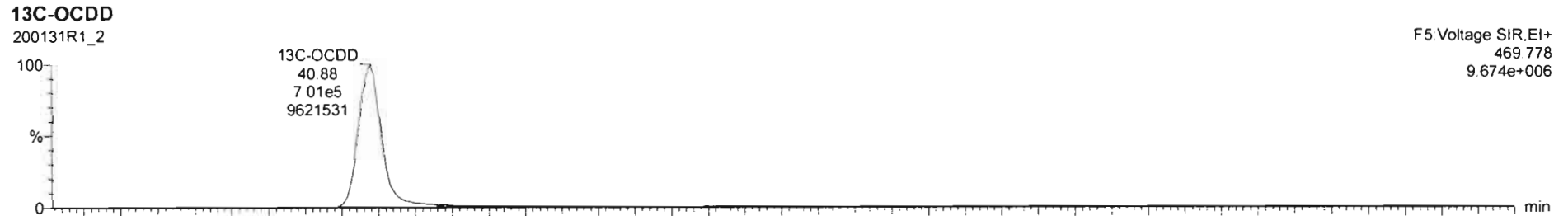
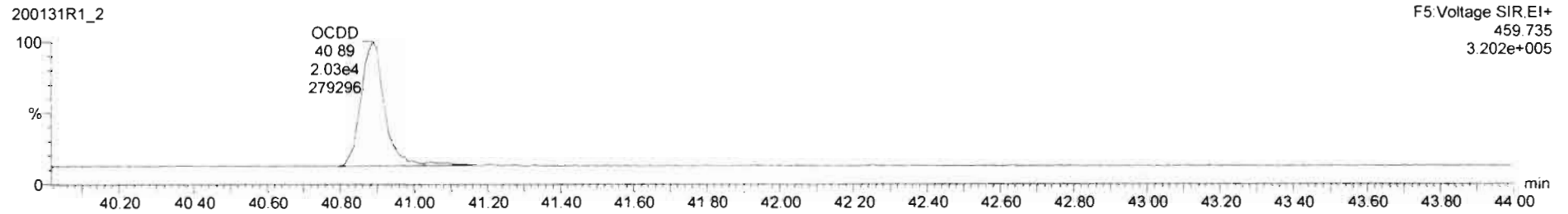
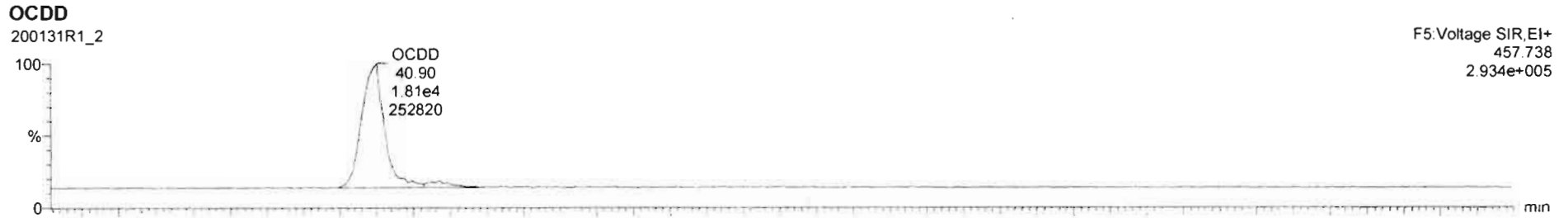


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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

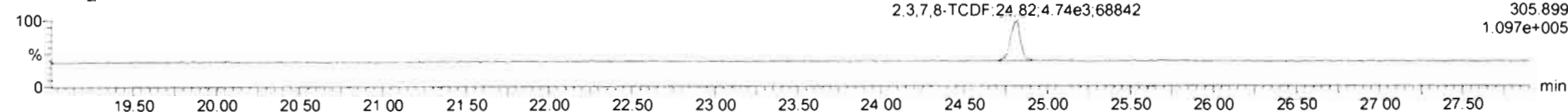
Name: 200131R1\_2, Date: 31-Jan-2020, Time: 17:37:04, ID: ST200131R1\_2 1613 CS1 19L2303, Description: 1613 CS1 19L2303

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

200131R1\_2

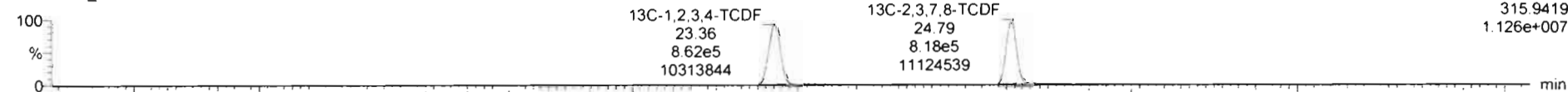


200131R1\_2

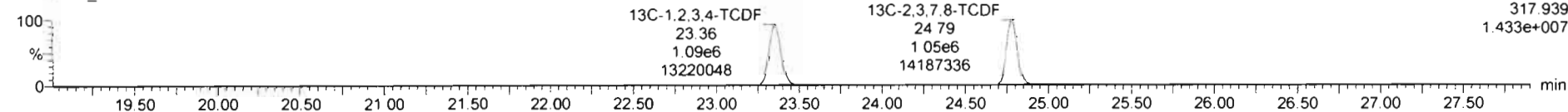


**13C-2,3,7,8-TCDF**

200131R1\_2

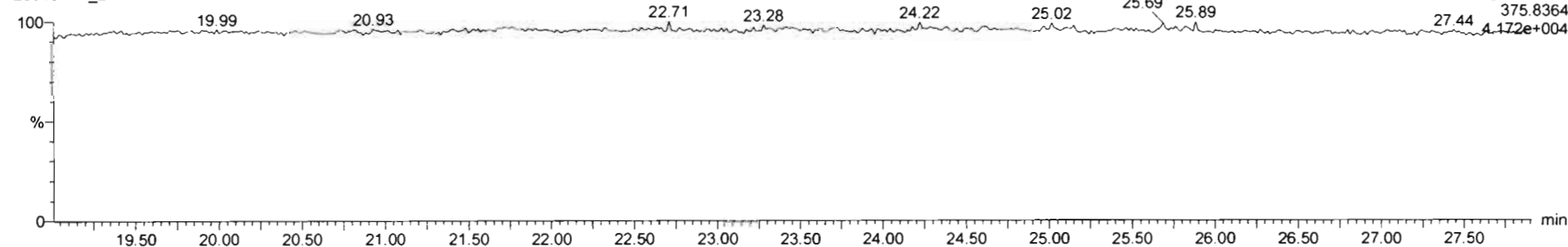


200131R1\_2



**DPE1**

200131R1\_2



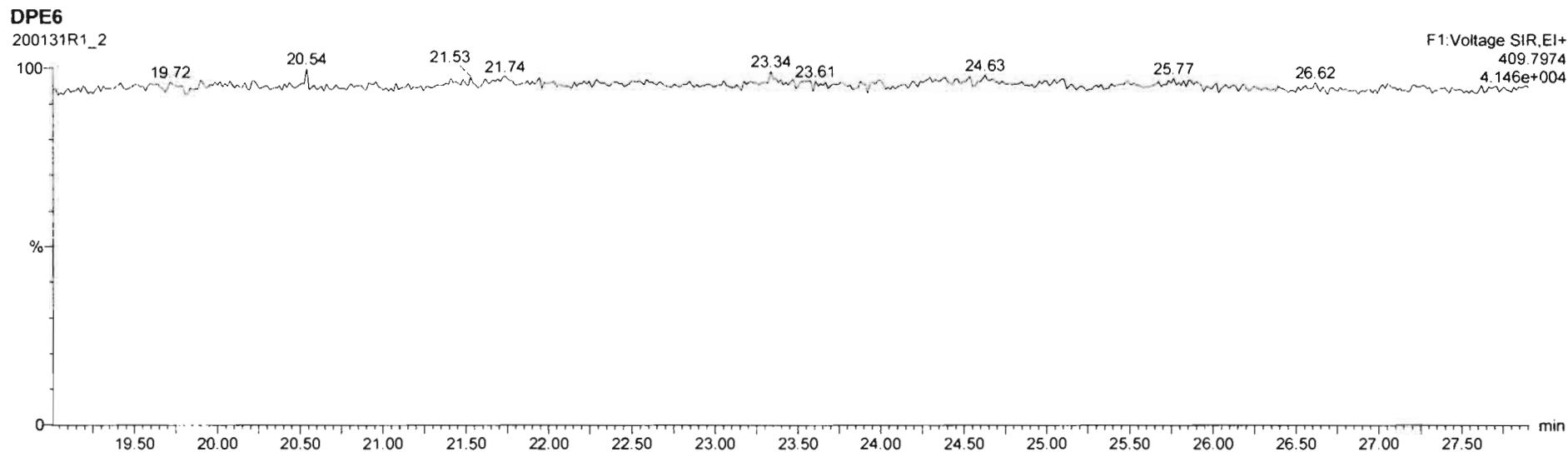
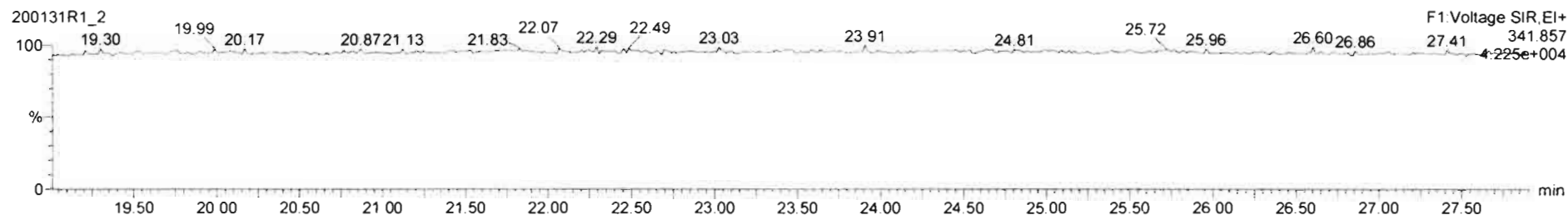
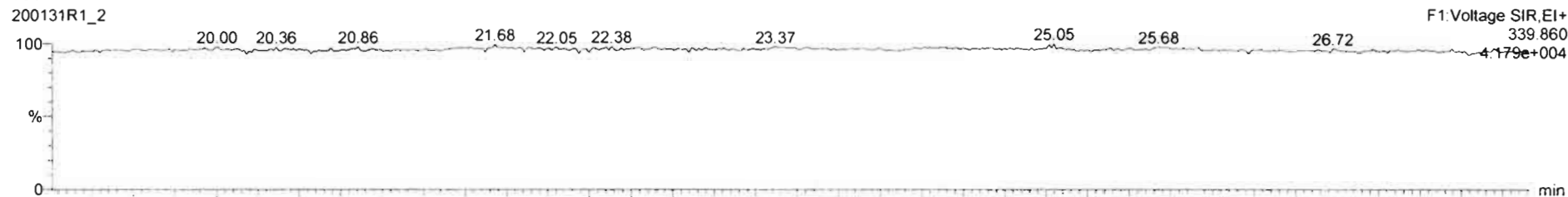
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_2, Date: 31-Jan-2020, Time: 17:37:04, ID: ST200131R1\_2 1613 CS1 19L2303, Description: 1613 CS1 19L2303

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Dataset: Untitled

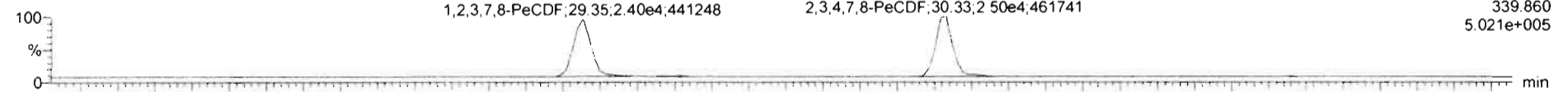
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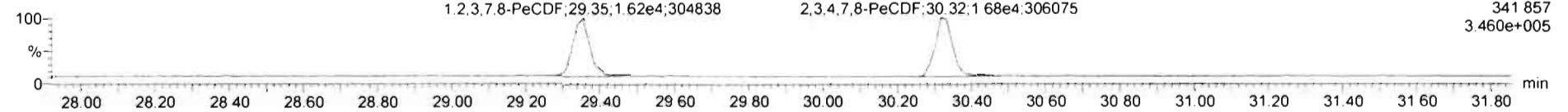
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**1,2,3,7,8-PeCDF**

200131R1\_2

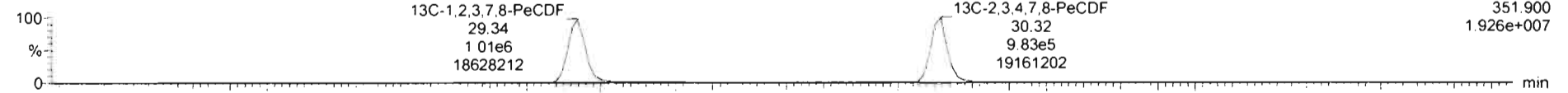


200131R1\_2

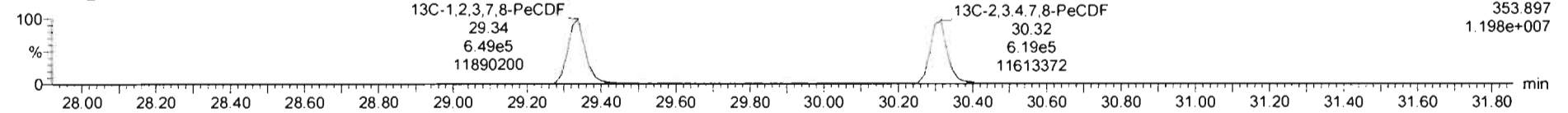


**13C-1,2,3,7,8-PeCDF**

200131R1\_2

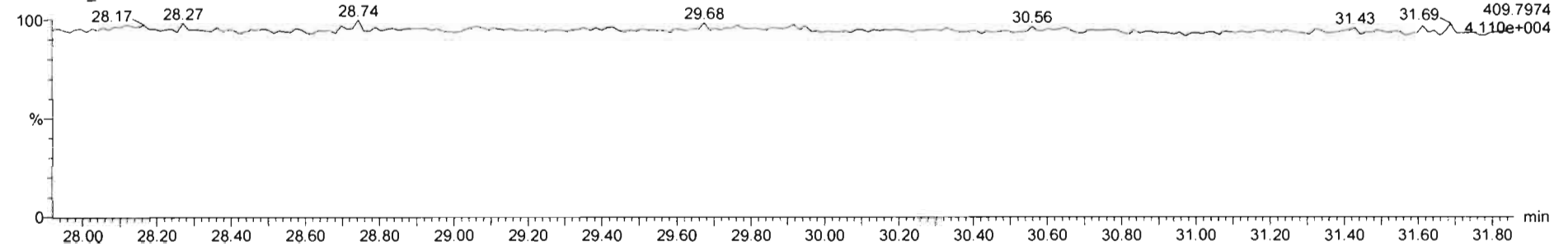


200131R1\_2



**DPE2**

200131R1\_2



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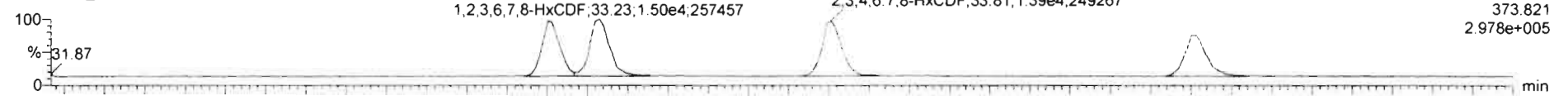
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

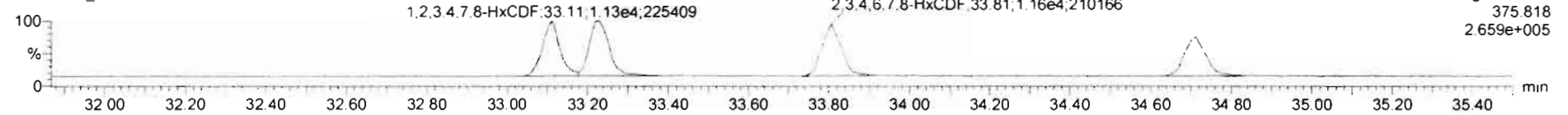
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**1,2,3,4,7,8-HxCDF**

200131R1\_2

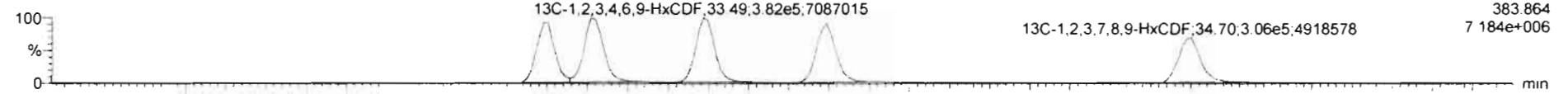


200131R1\_2

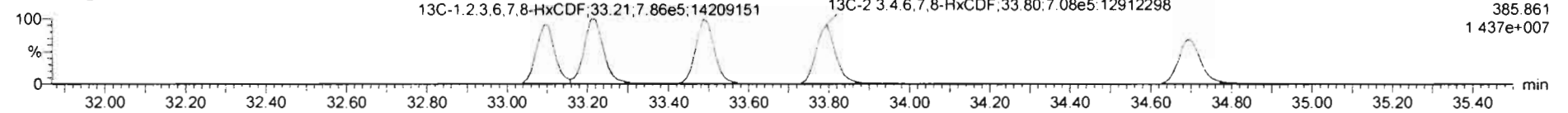


**13C-1,2,3,4,7,8-HxCDF**

200131R1\_2

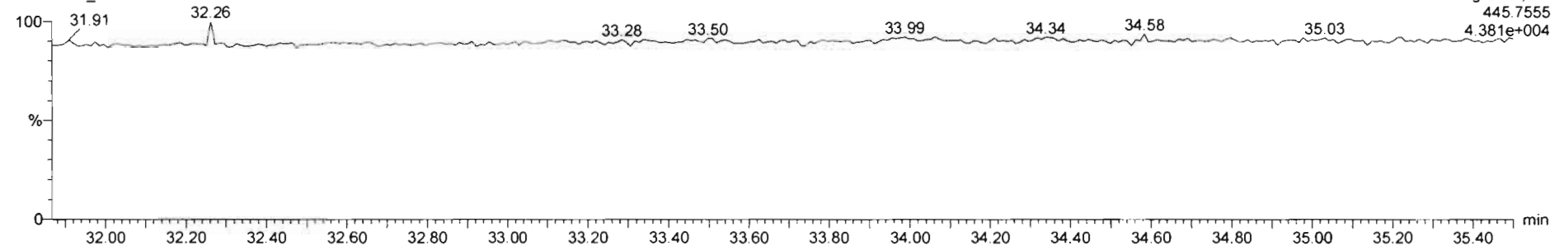


200131R1\_2

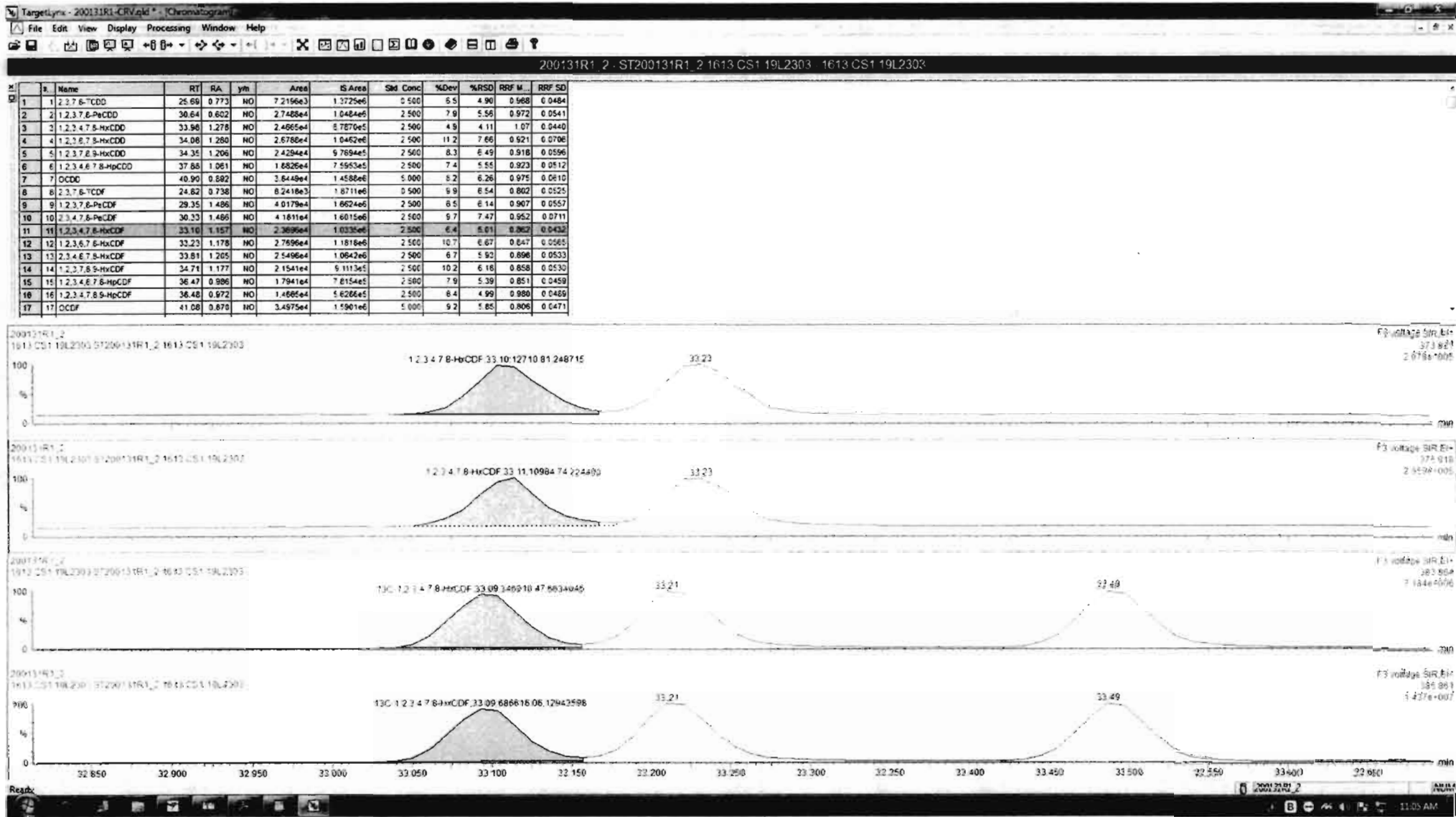


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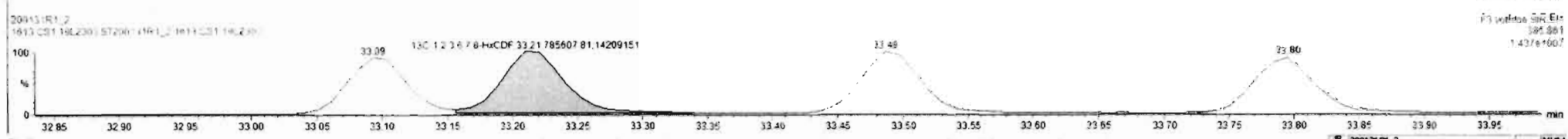
200131R1\_2







#	Name	RT	RA	yh	Area	IS Area	Std Conc	%Dev	%RSD	RRF M	RRF SD
1	1 2 3 7 8-TCDD	25.69	0.773	NO	7.2196e3	1.3725e6	0.500	8.5	4.90	0.968	0.0484
2	2 1 2 3 7 8-PeCDD	30.64	0.802	NO	2.7488e4	1.0484e6	2.500	7.9	5.58	0.972	0.0541
3	3 1 2 3 4 7 8-HxCDD	33.96	1.278	NO	2.6685e4	8.7870e5	2.500	4.9	4.11	1.07	0.0440
4	4 1 2 3 8 7 8-HxCDD	34.08	1.280	NO	2.6786e4	1.0462e6	2.500	11.2	7.66	0.921	0.0706
5	5 1 2 3 7 8 9-HxCDD	34.35	1.206	NO	2.4294e4	9.7694e5	2.500	8.3	6.49	0.918	0.0596
6	6 1 2 3 4 6 7 8-HpCDD	37.86	1.061	NO	1.6826e4	7.5953e5	2.500	7.4	5.55	0.923	0.0512
7	7 OCDD	40.90	0.882	NO	3.8449e4	1.4586e6	5.000	8.2	6.28	0.975	0.0610
8	8 2 3 7 8-TCDF	24.62	0.738	NO	6.2418e3	1.8711e6	3.500	9.9	6.54	0.802	0.0525
9	9 1 2 3 7 8-PeCDF	29.35	1.486	NO	4.0179e4	1.8624e6	2.500	6.5	6.14	0.907	0.0557
10	10 2 3 4 7 8-PeCDF	30.33	1.486	NO	4.1811e4	1.6015e6	2.500	9.7	7.47	0.952	0.0711
11	11 1 2 3 4 7 8-HxCDF	33.10	1.157	NO	2.2696e4	1.0335e6	2.500	6.4	5.01	0.862	0.0432
12	12 1 2 3 6 7 8-HxCDF	33.23	1.192	NO	2.6729e4	1.1618e6	2.500	7.5	5.55	0.841	0.0467
13	13 2 3 4 6 7 8-HxCDF	33.81	1.205	NO	2.5496e4	1.0642e6	2.500	6.7	5.93	0.696	0.0533
14	14 1 2 3 7 8 9-HxCDF	34.71	1.177	NO	2.1541e4	9.1113e5	2.500	10.2	6.18	0.858	0.0530
15	15 1 2 3 4 6 7 8-HpCDF	36.47	0.866	NO	1.7941e4	7.8154e5	2.500	7.9	6.36	0.851	0.0459
16	16 1 2 3 4 7 8 9-HpCDF	38.48	0.972	NO	1.4685e4	5.6286e5	2.500	6.4	4.99	0.980	0.0489
17	17 OCDF	41.98	0.870	NO	3.4975e4	1.5901e6	5.000	9.2	5.85	0.806	0.0471

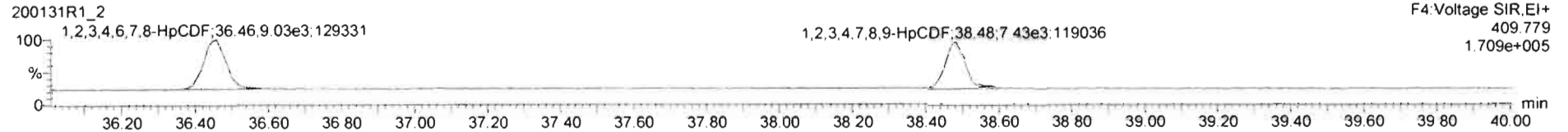
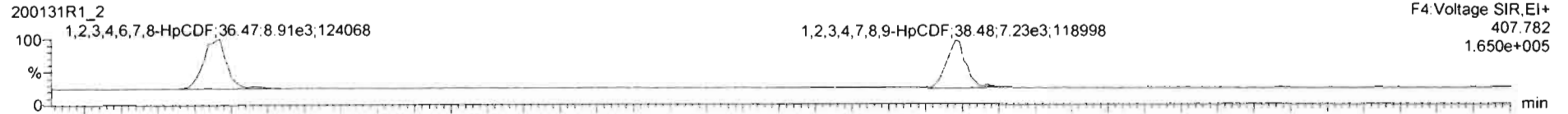


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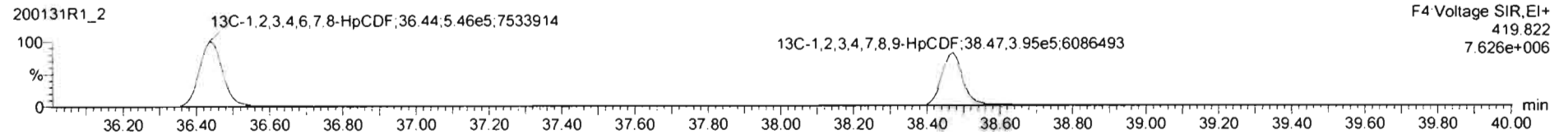
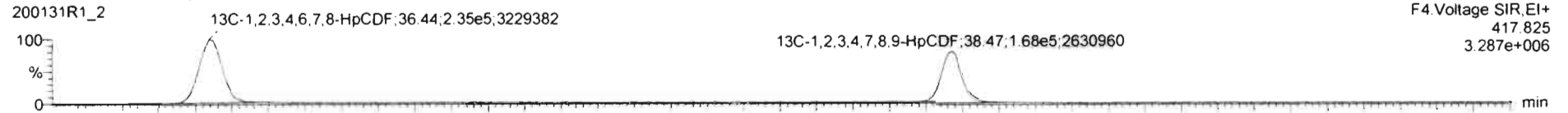
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_2, Date: 31-Jan-2020, Time: 17:37:04, ID: ST200131R1\_2 1613 CS1 19L2303, Description: 1613 CS1 19L2303

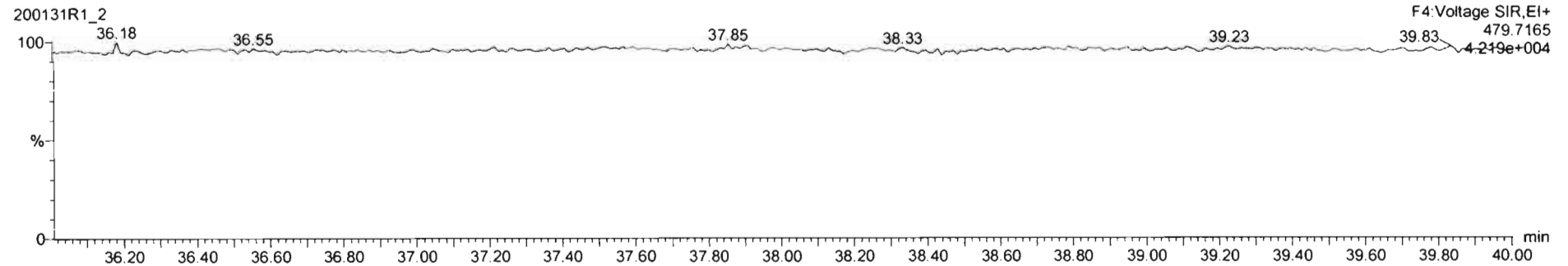
**1,2,3,4,6,7,8-HpCDF**



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



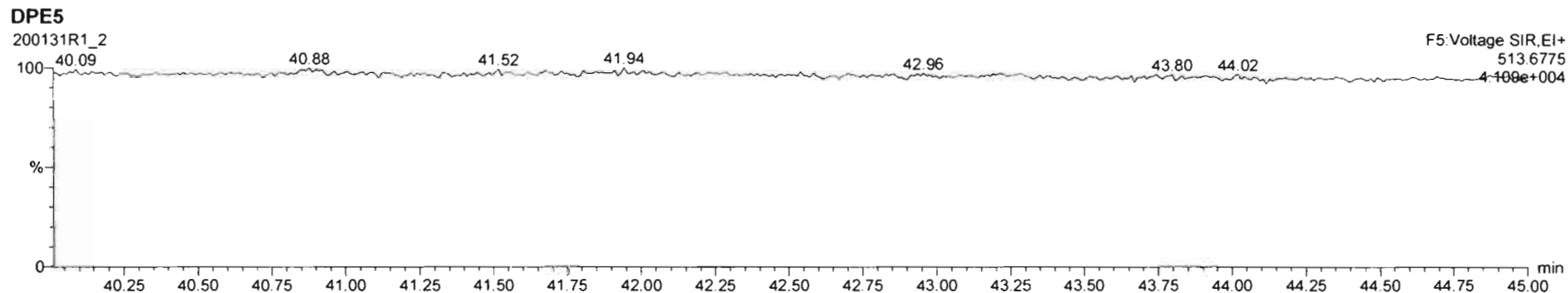
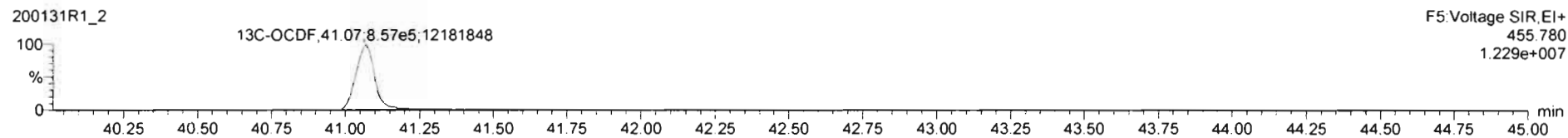
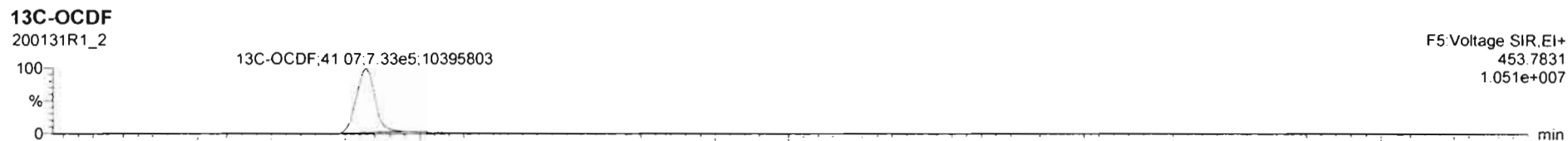
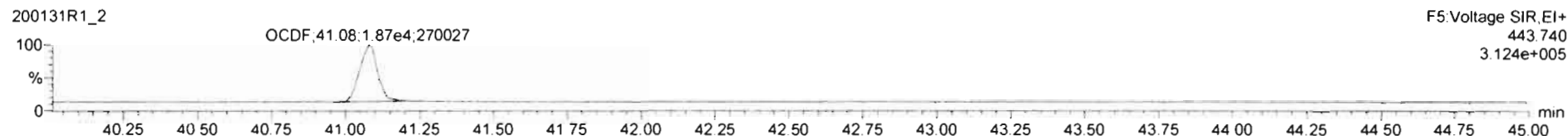
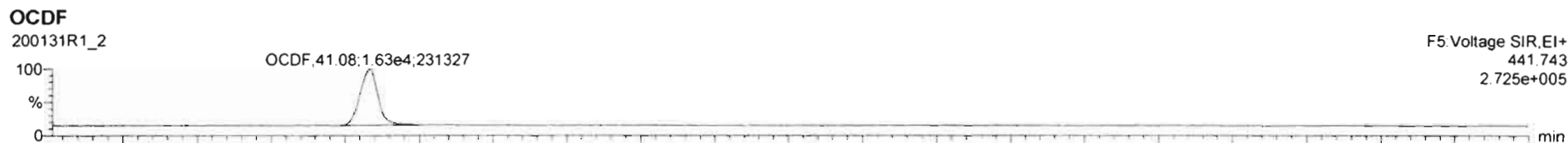
**DPE4**



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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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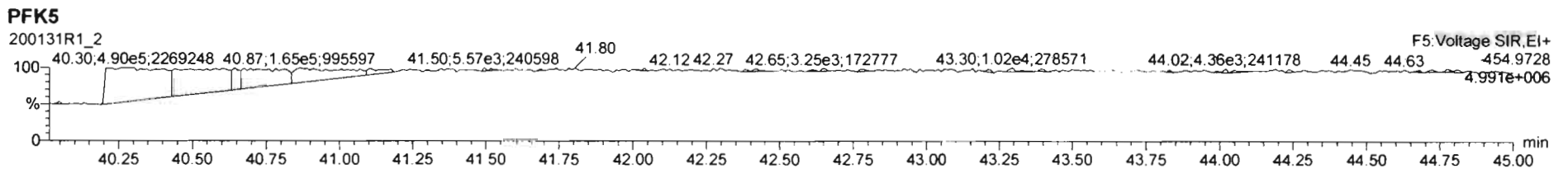
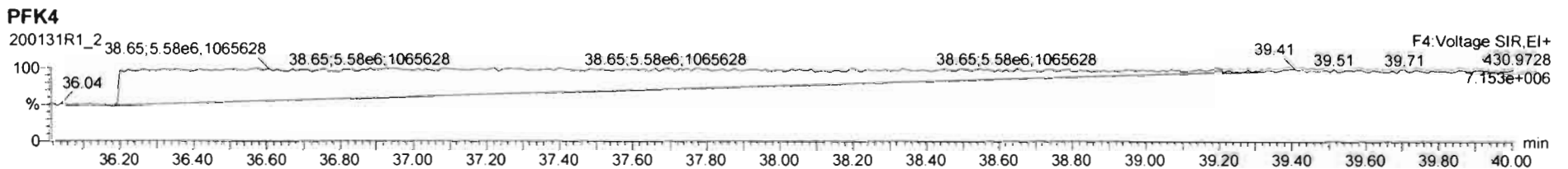
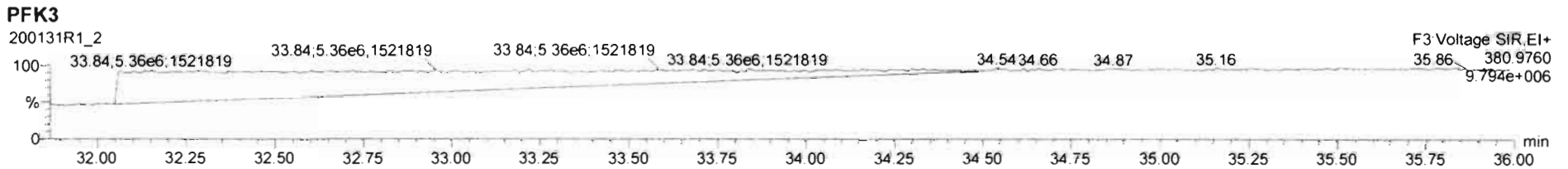
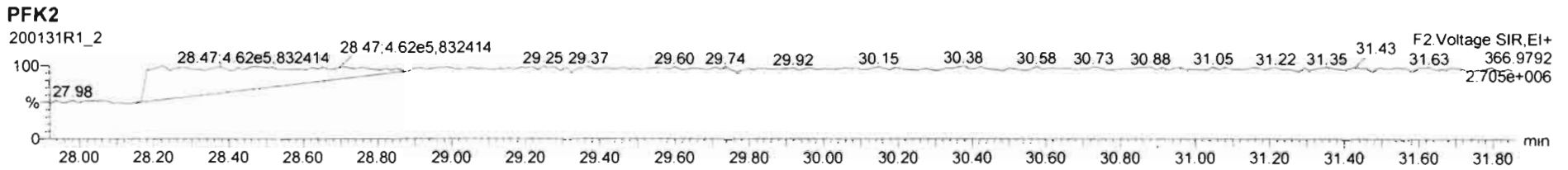
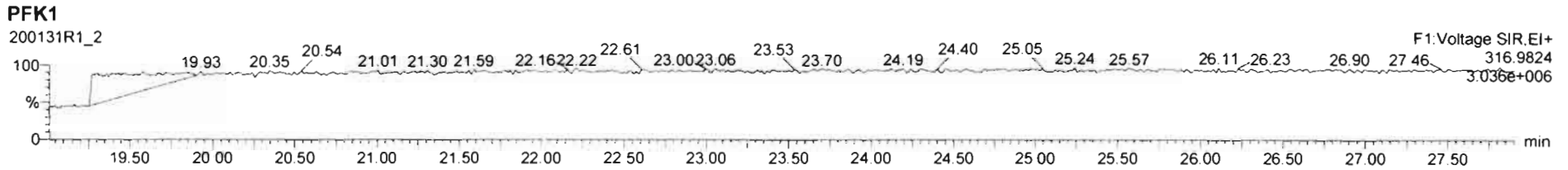


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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

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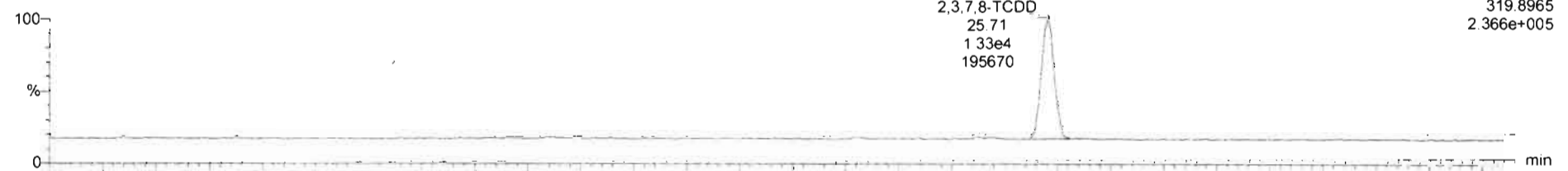
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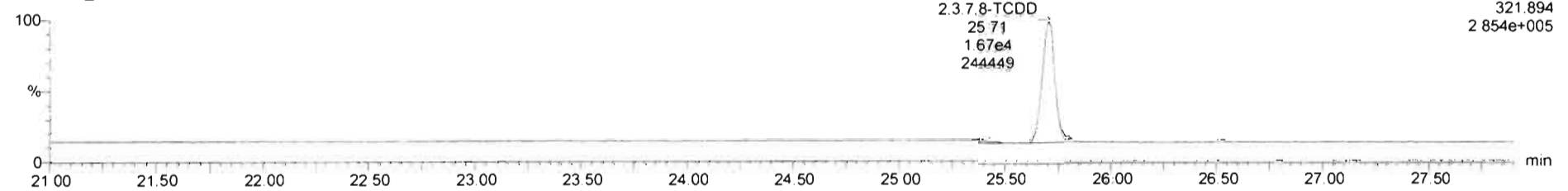
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**2,3,7,8-TCDD**

200131R1\_3

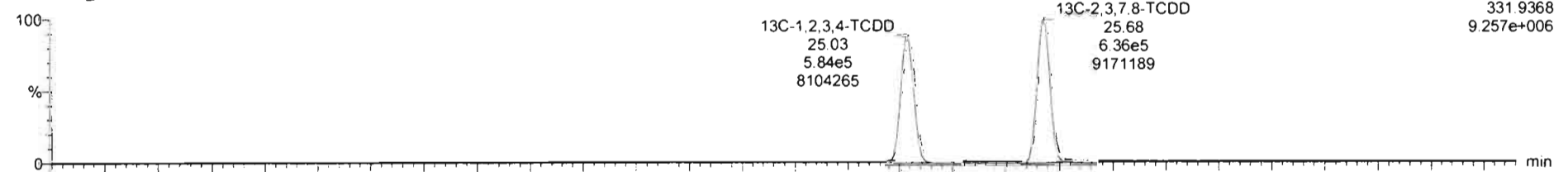


200131R1\_3

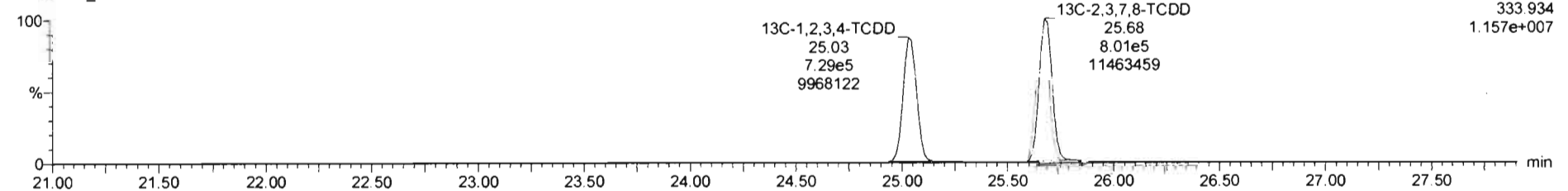


**13C-2,3,7,8-TCDD**

200131R1\_3



200131R1\_3





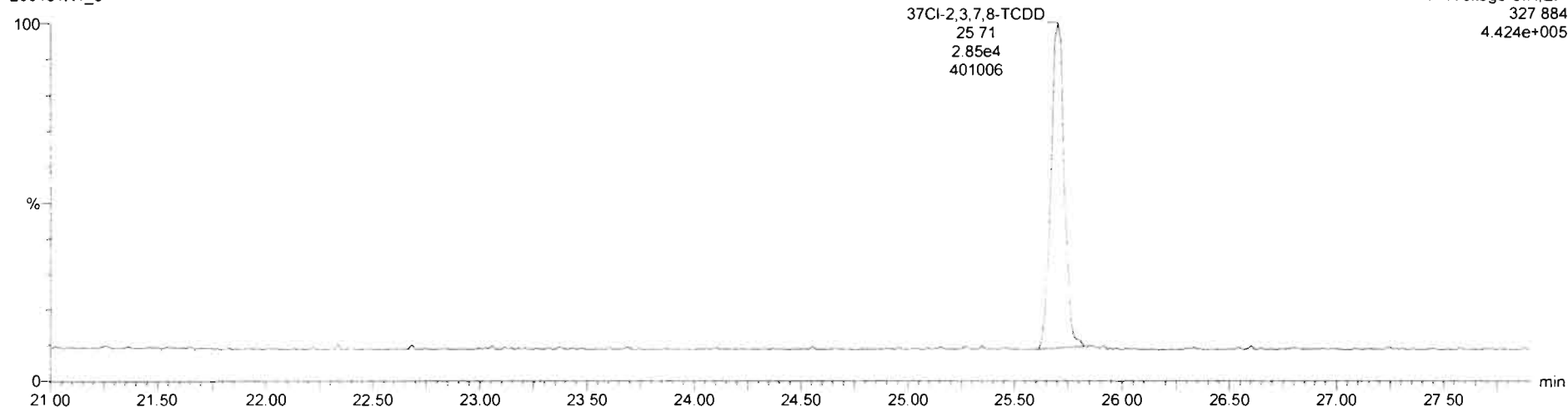
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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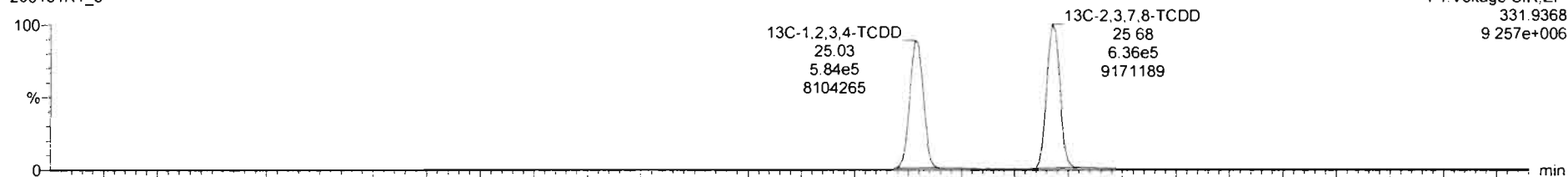
**37Cl-2,3,7,8-TCDD**

200131R1\_3

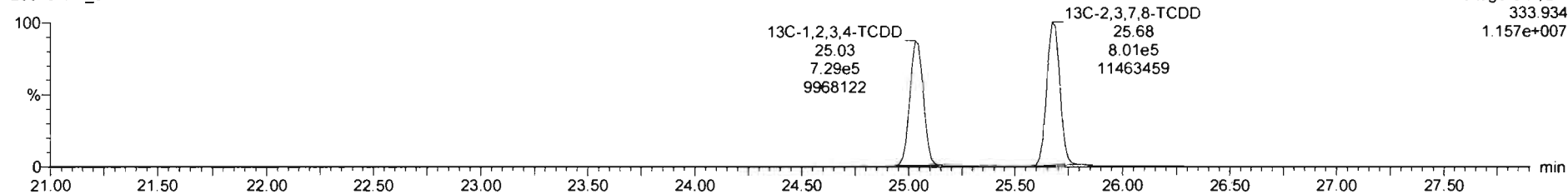


**13C-1,2,3,4-TCDD**

200131R1\_3



200131R1\_3



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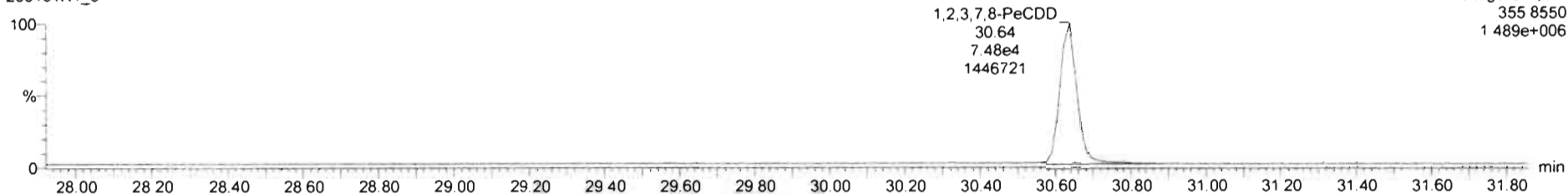
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**1,2,3,7,8-PeCDD**

200131R1\_3

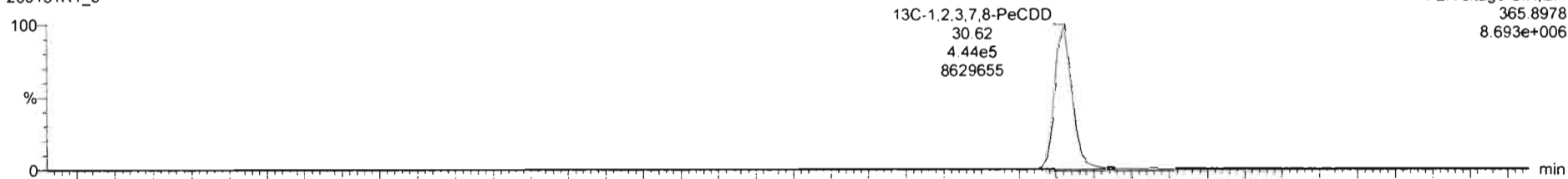


200131R1\_3

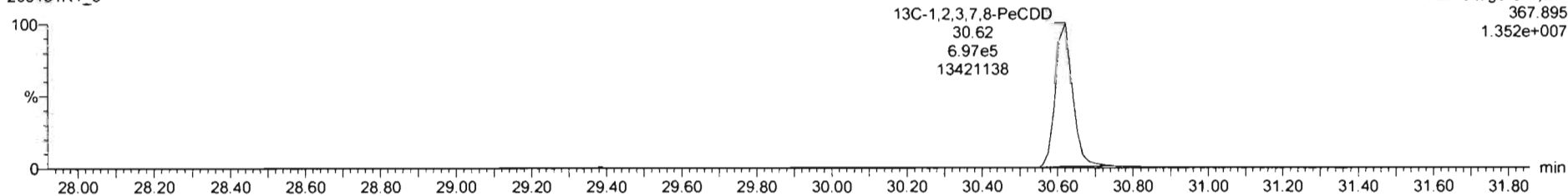


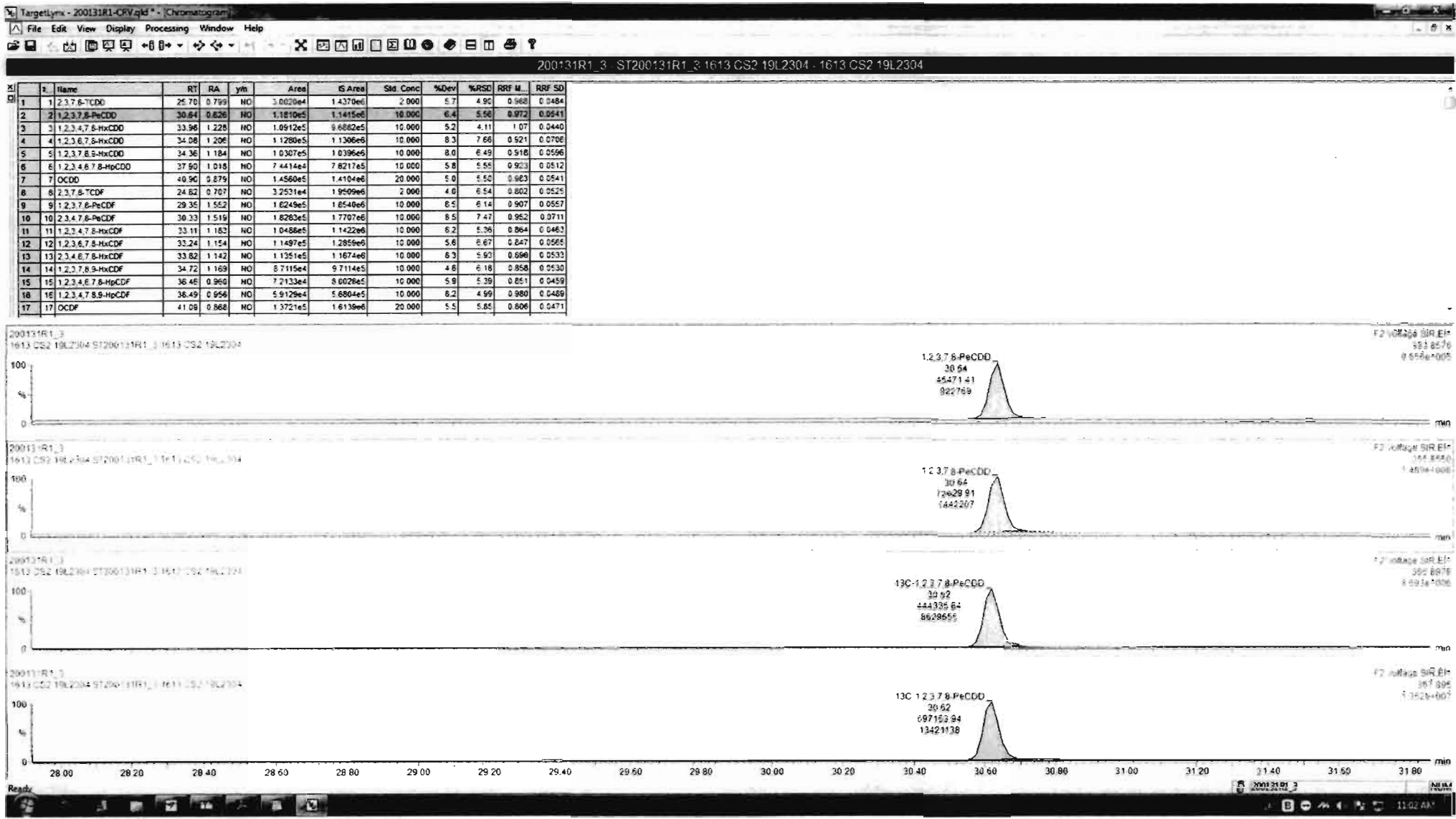
**13C-1,2,3,7,8-PeCDD**

200131R1\_3



200131R1\_3





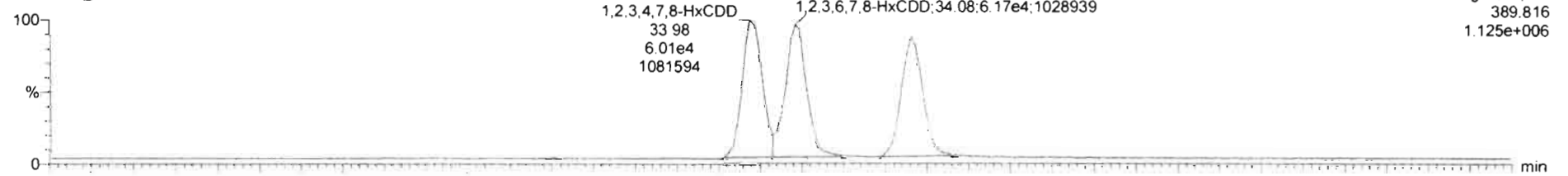
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

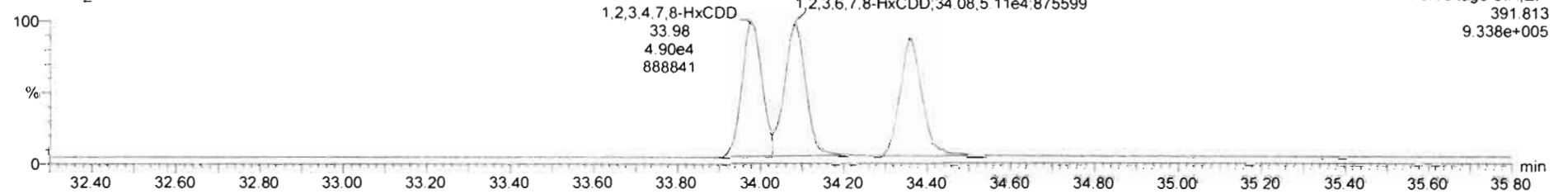
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**1,2,3,4,7,8-HxCDD**

200131R1\_3

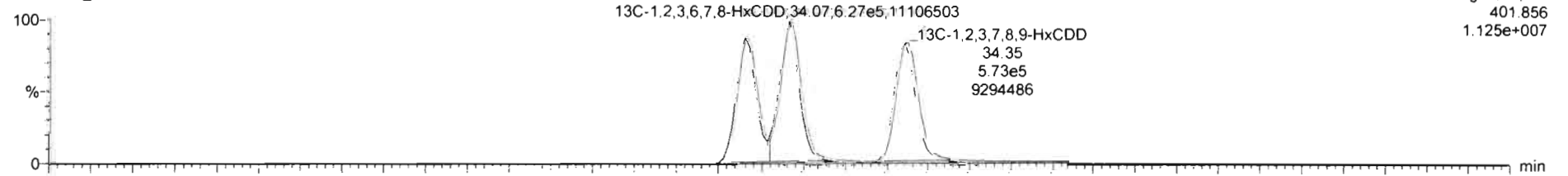


200131R1\_3

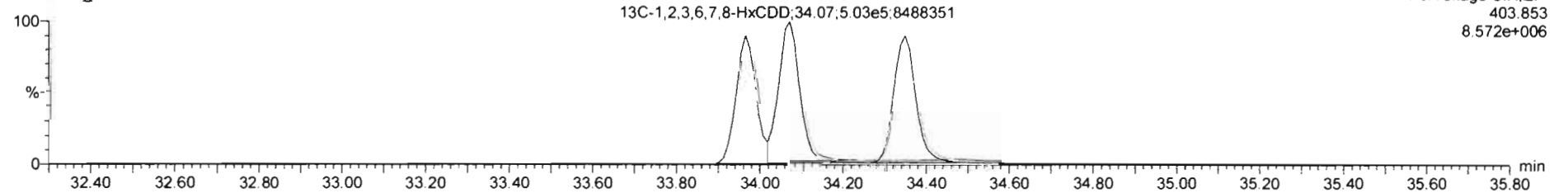


**13C-1,2,3,4,7,8-HxCDD**

200131R1\_3



200131R1\_3



Dataset: Untitled

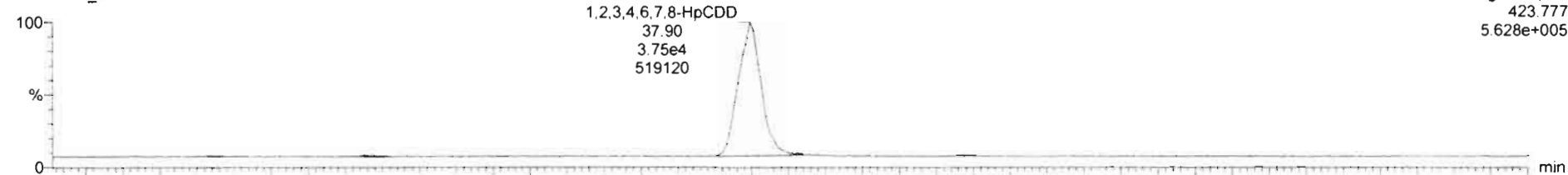
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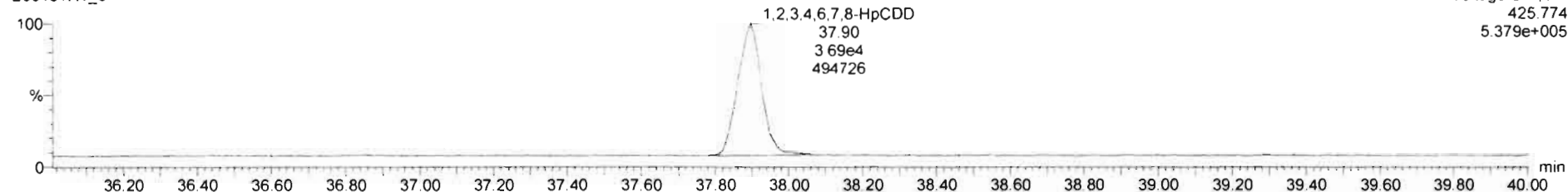
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1,2,3,4,6,7,8-HpCDD

200131R1\_3

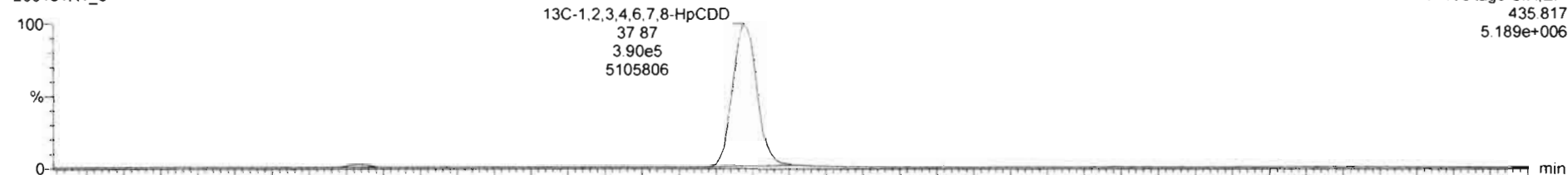


200131R1\_3

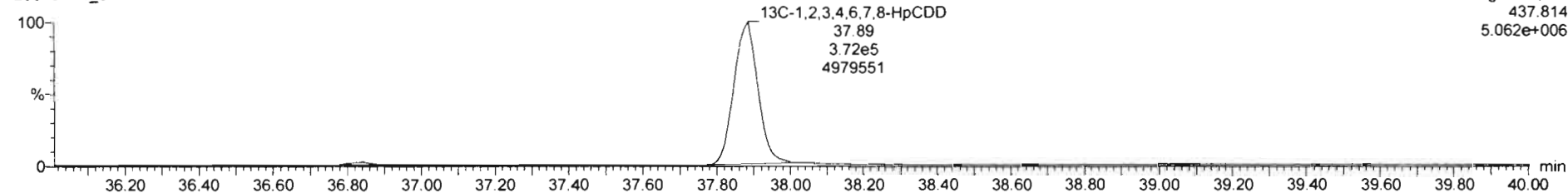


13C-1,2,3,4,6,7,8-HpCDD

200131R1\_3



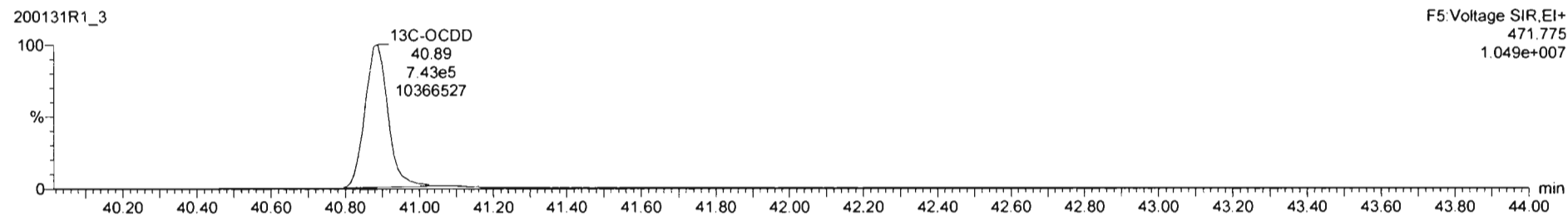
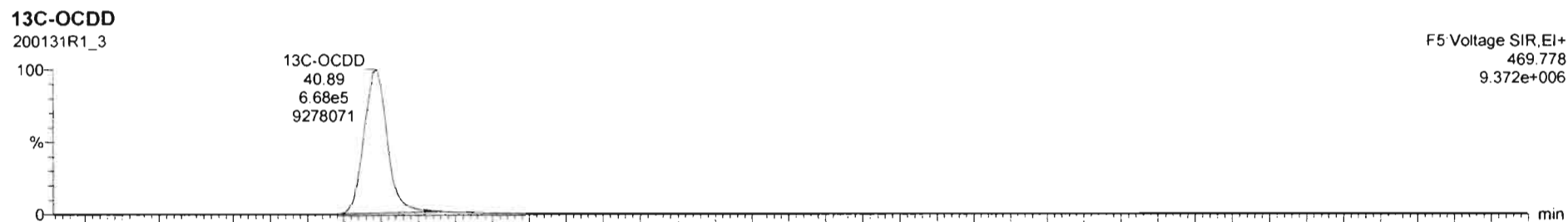
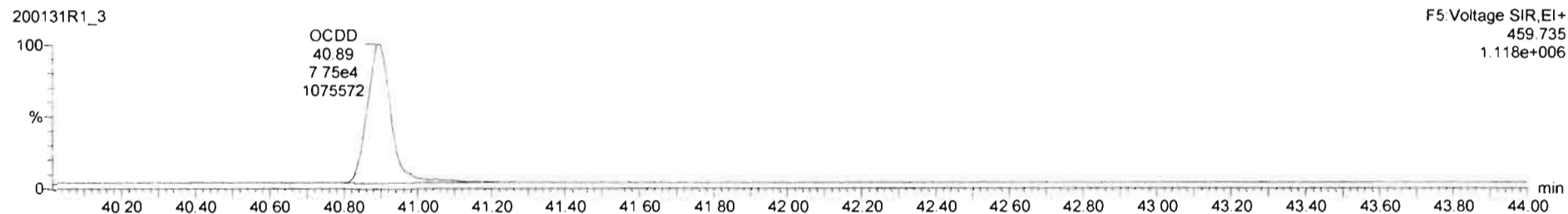
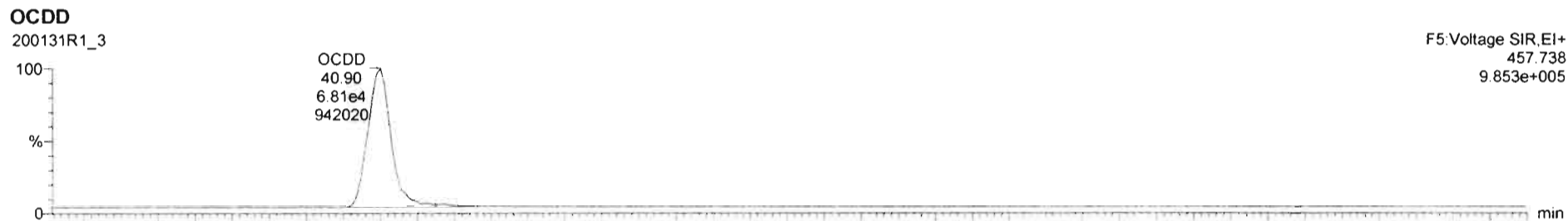
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Dataset: Untitled

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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

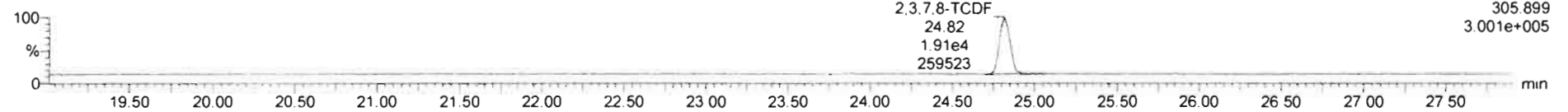
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**2,3,7,8-TCDF**

200131R1\_3

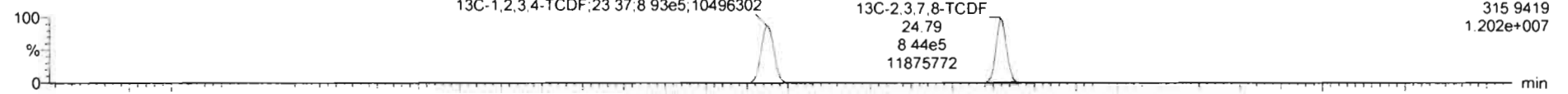


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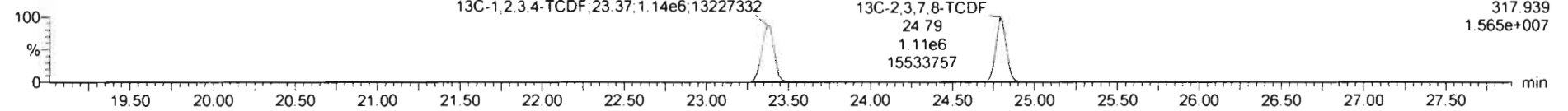


**13C-2,3,7,8-TCDF**

200131R1\_3

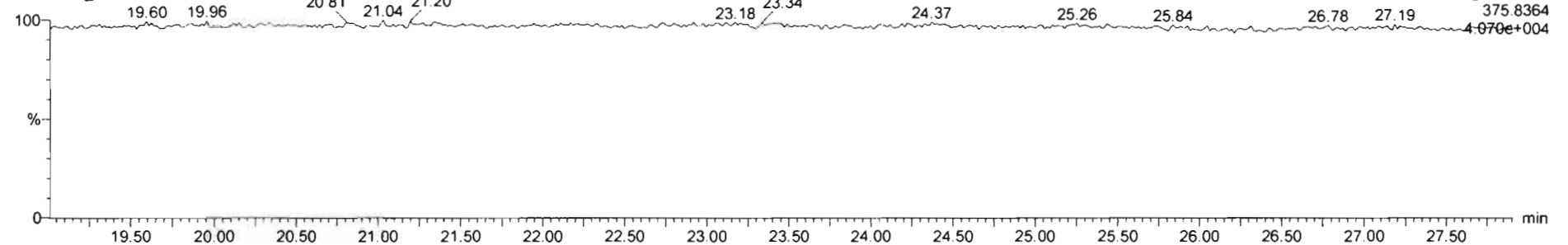


200131R1\_3



**DPE1**

200131R1\_3

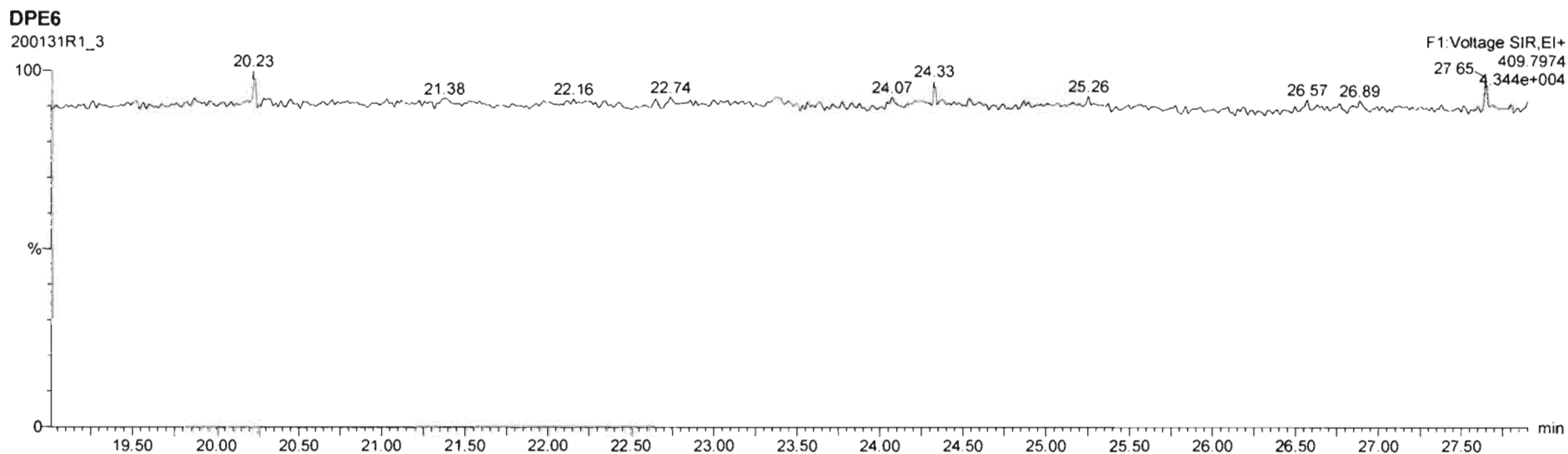
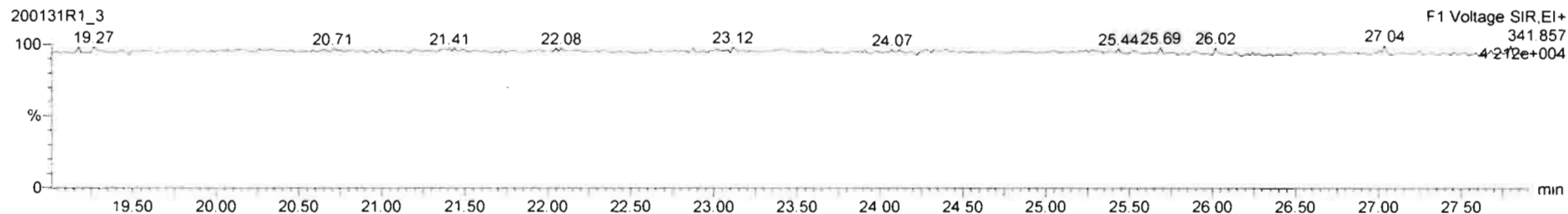
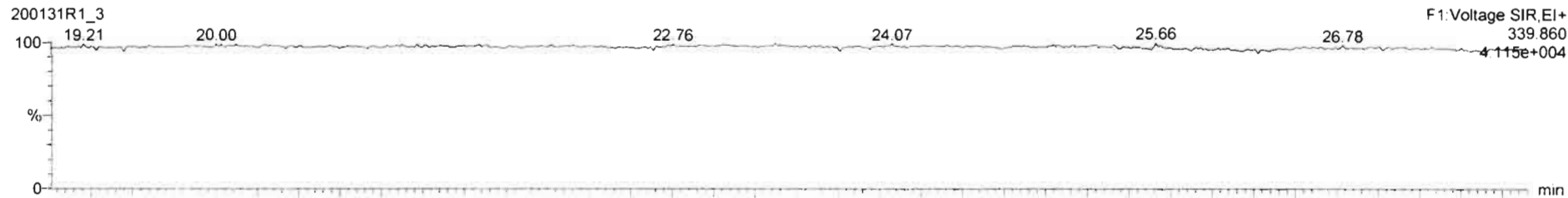


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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_3, Date: 31-Jan-2020, Time: 18:23:19, ID: ST200131R1\_3 1613 CS2 19L2304, Description: 1613 CS2 19L2304

1st Func. Penta-Furans



Dataset: Untitled

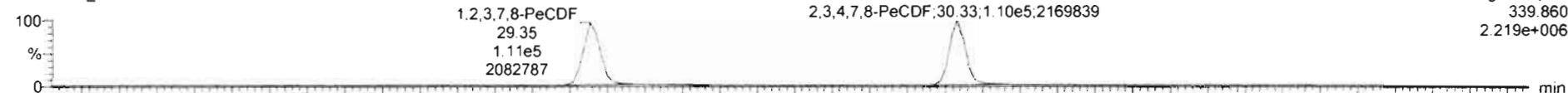
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_3, Date: 31-Jan-2020, Time: 18:23:19, ID: ST200131R1\_3 1613 CS2 19L2304, Description: 1613 CS2 19L2304

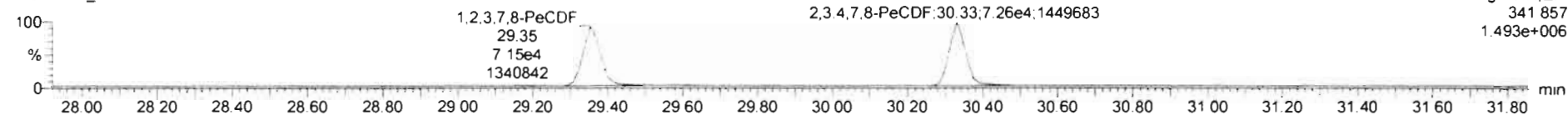
**1,2,3,7,8-PeCDF**

200131R1\_3



F2: Voltage SIR, EI+  
339.860  
2.219e+006

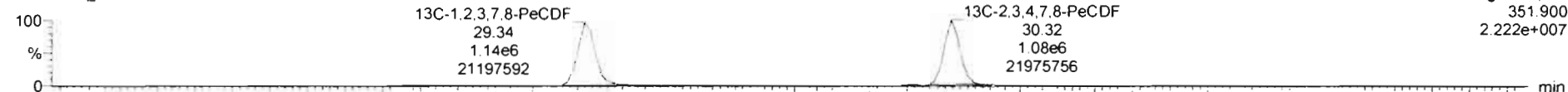
200131R1\_3



F2: Voltage SIR, EI+  
341.857  
1.493e+006

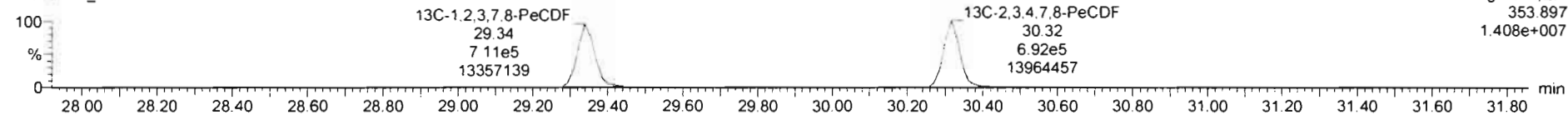
**13C-1,2,3,7,8-PeCDF**

200131R1\_3



F2: Voltage SIR, EI+  
351.900  
2.222e+007

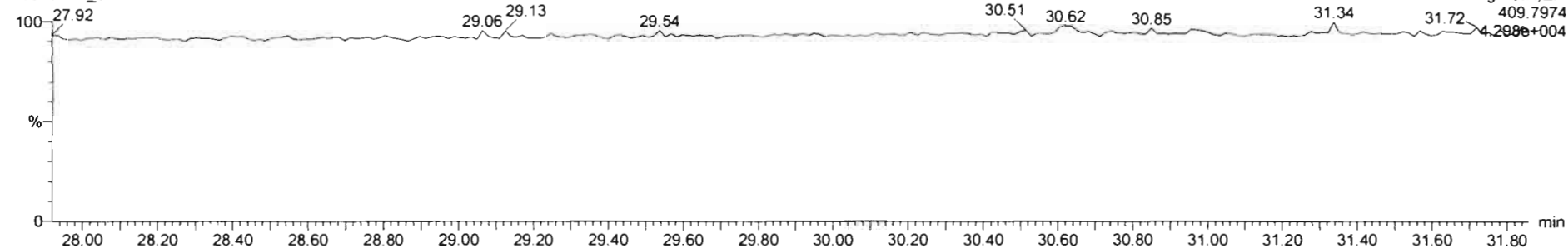
200131R1\_3



F2: Voltage SIR, EI+  
353.897  
1.408e+007

**DPE2**

200131R1\_3



F2: Voltage SIR, EI+  
409.7974  
4.298e+004

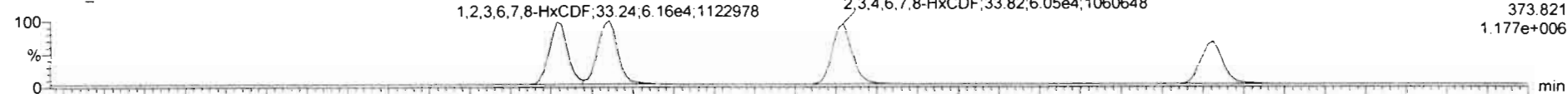
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_3, Date: 31-Jan-2020, Time: 18:23:19, ID: ST200131R1\_3 1613 CS2 19L2304, Description: 1613 CS2 19L2304

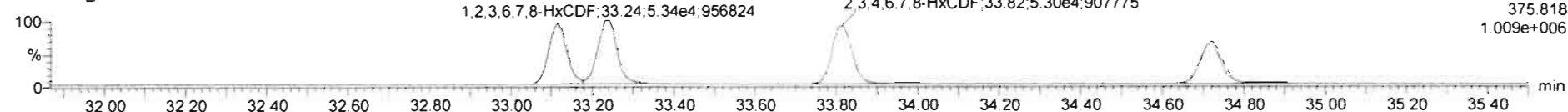
**1,2,3,4,7,8-HxCDF**

200131R1\_3



F3: Voltage SIR, EI+  
373.821  
1.177e+006

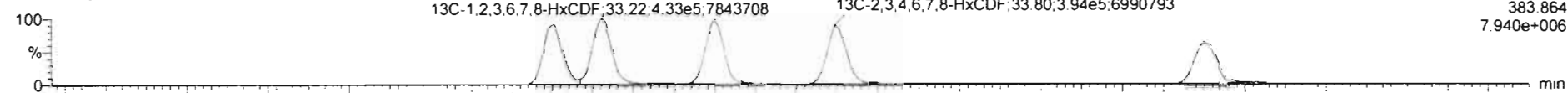
200131R1\_3



F3: Voltage SIR, EI+  
375.818  
1.009e+006

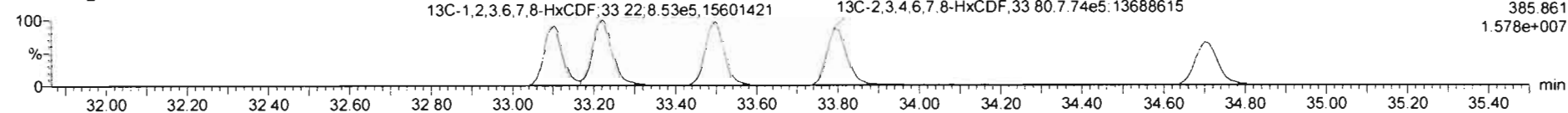
**13C-1,2,3,4,7,8-HxCDF**

200131R1\_3



F3: Voltage SIR, EI+  
383.864  
7.940e+006

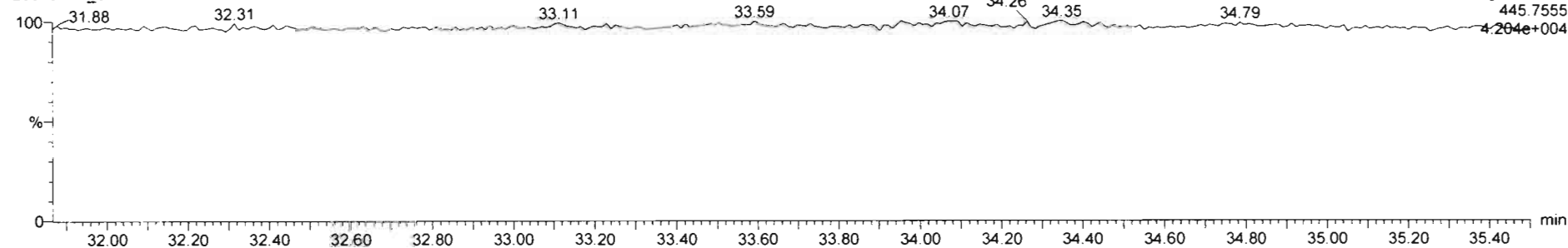
200131R1\_3



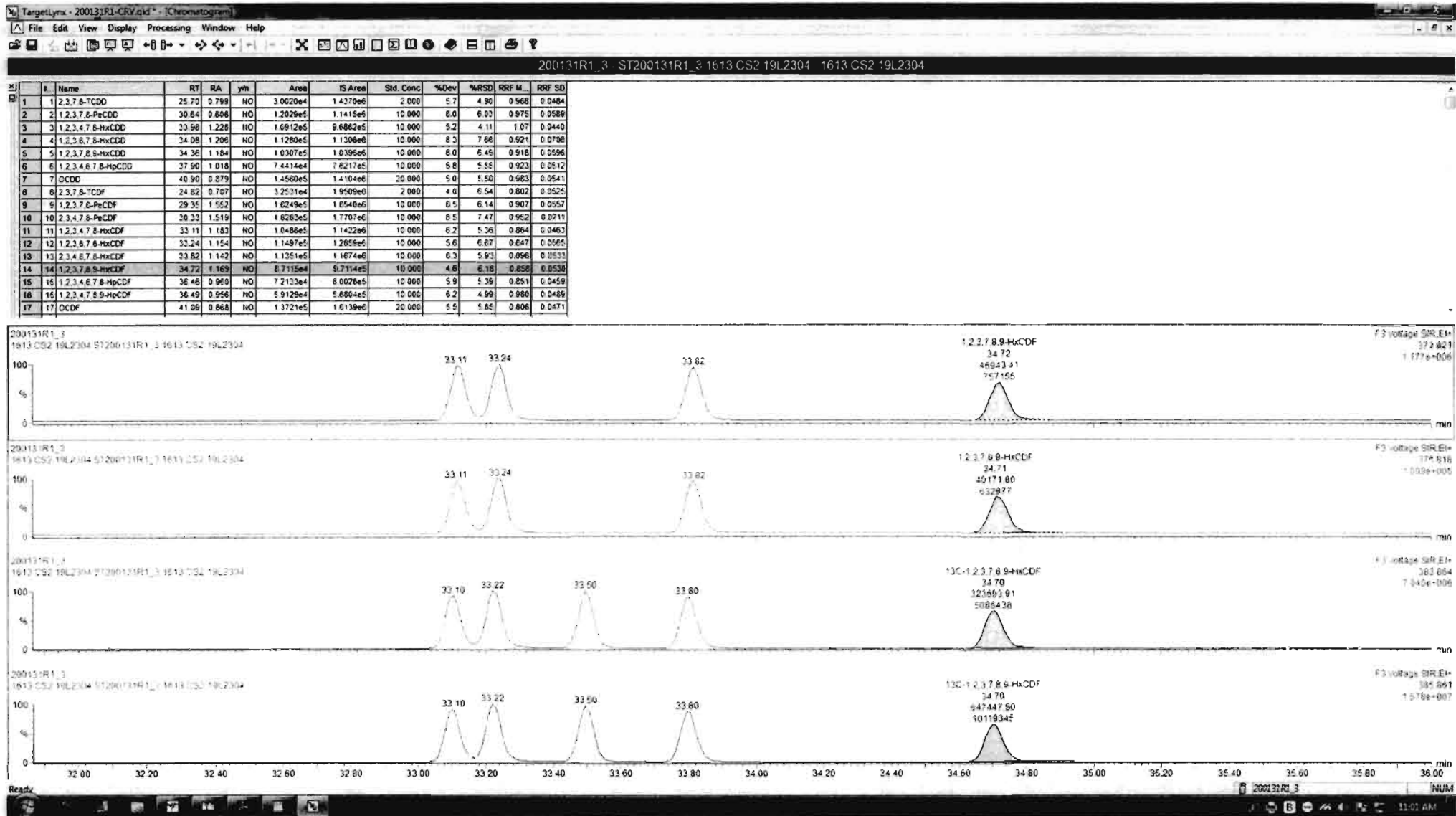
F3: Voltage SIR, EI+  
385.861  
1.578e+007

**DPE3**

200131R1\_3



F3: Voltage SIR, EI+  
445.7555  
4.204e+004

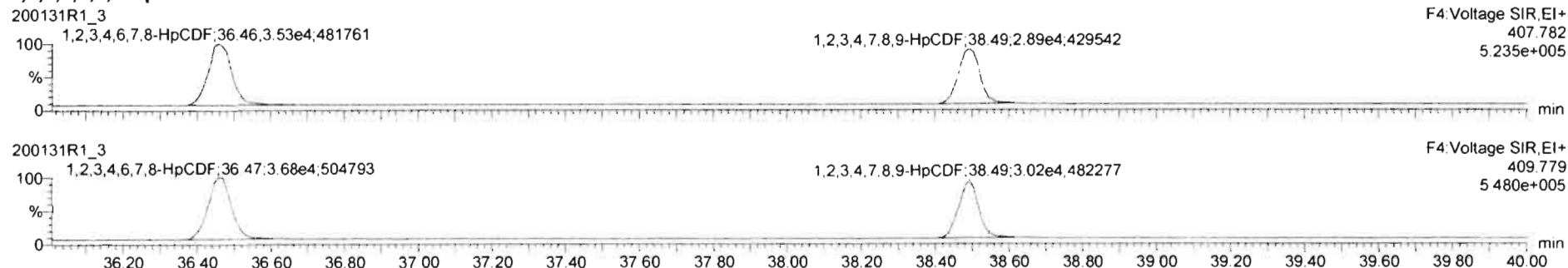


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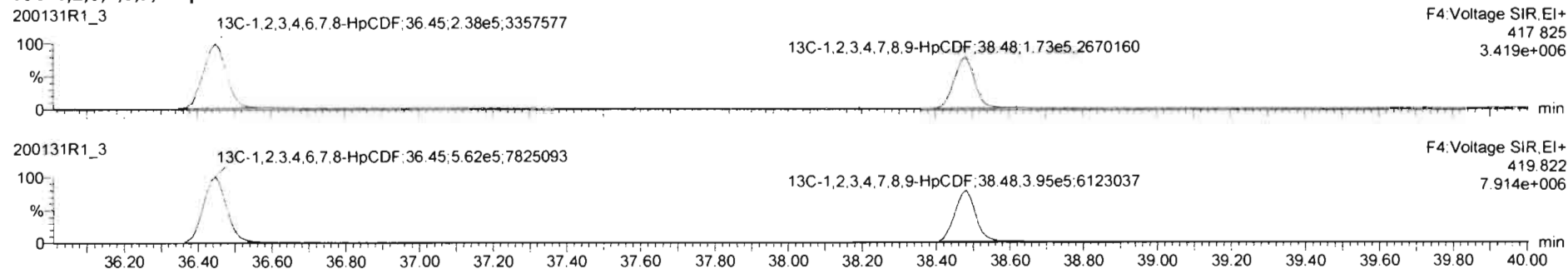
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Name: 200131R1\_3, Date: 31-Jan-2020, Time: 18:23:19, ID: ST200131R1\_3 1613 CS2 19L2304, Description: 1613 CS2 19L2304

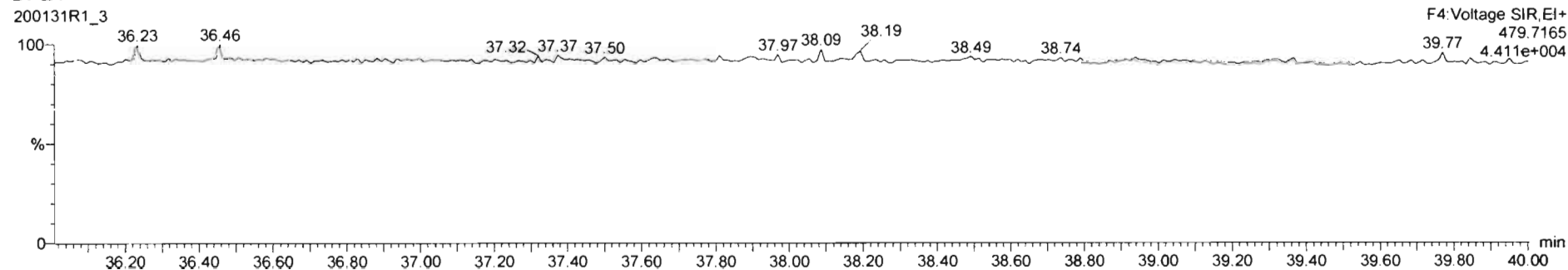
**1,2,3,4,6,7,8-HpCDF**



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



**DPE4**





Dataset: Untitled

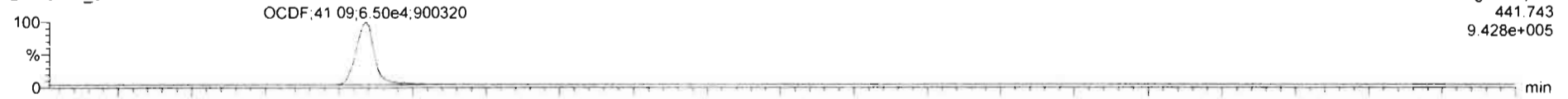
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

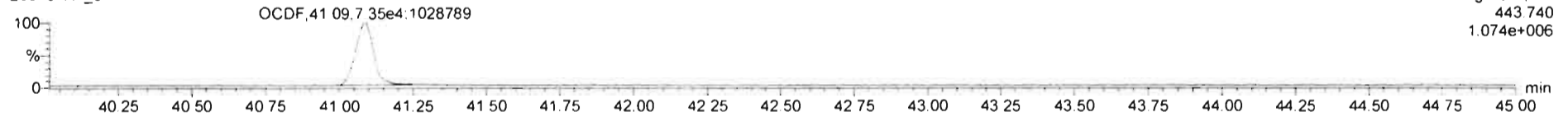
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**OCDF**

200131R1\_3

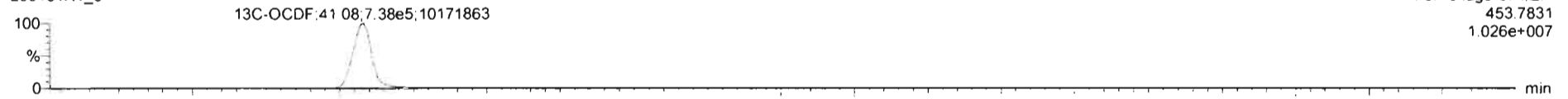


200131R1\_3

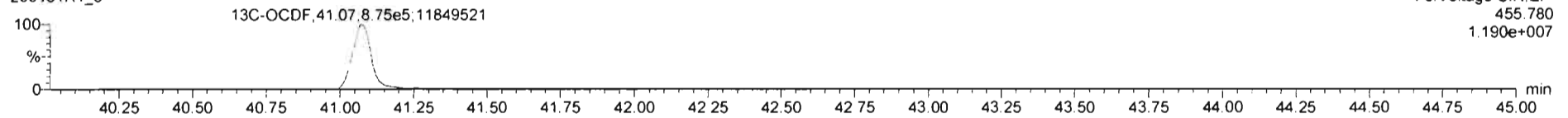


**13C-OCDF**

200131R1\_3

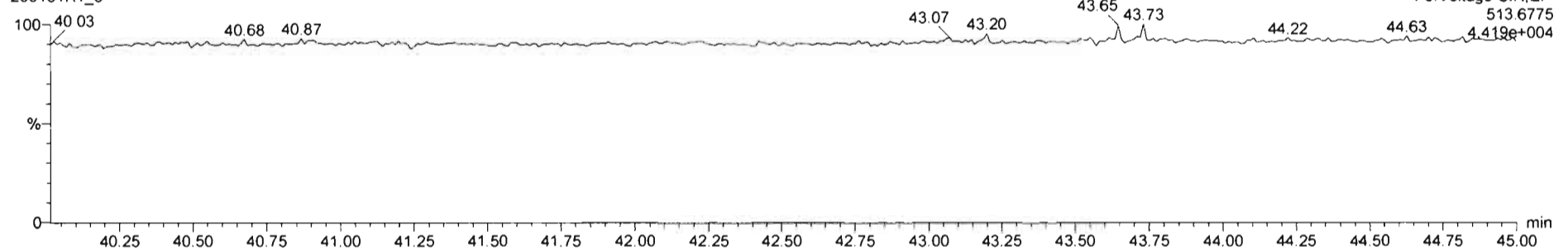


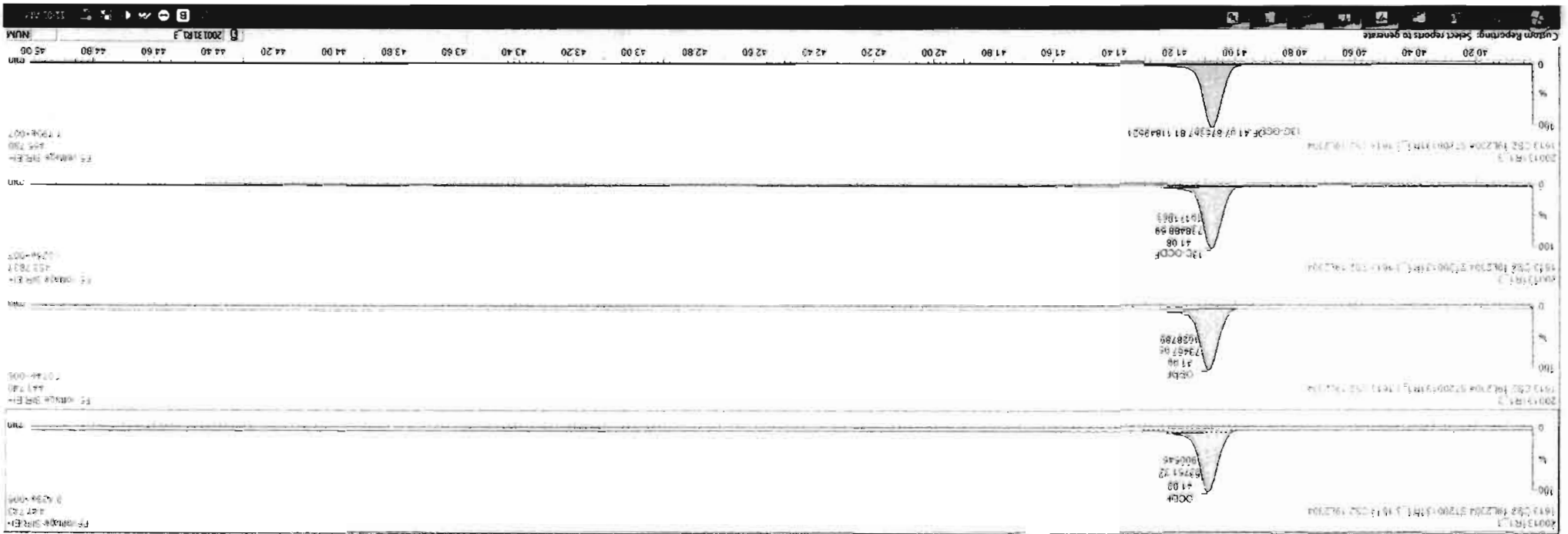
200131R1\_3



**DPE5**

200131R1\_3





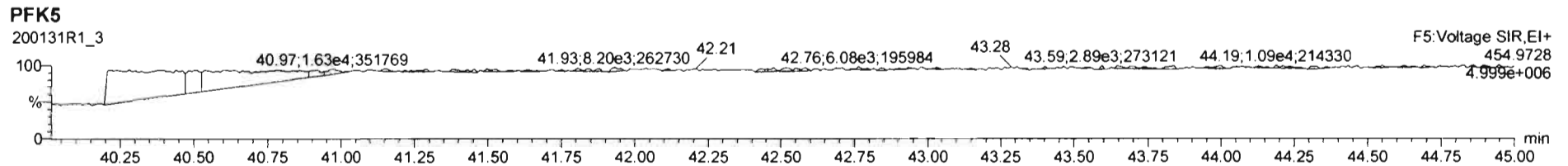
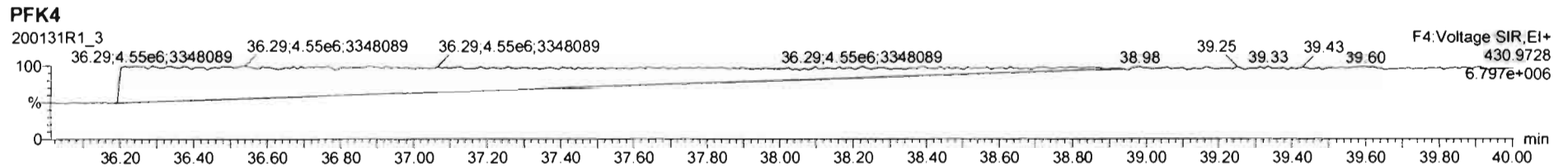
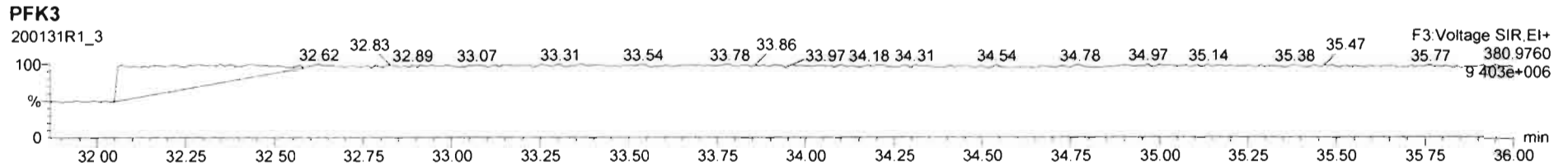
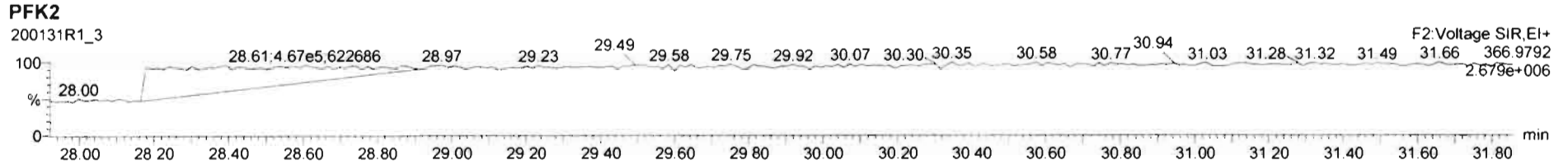
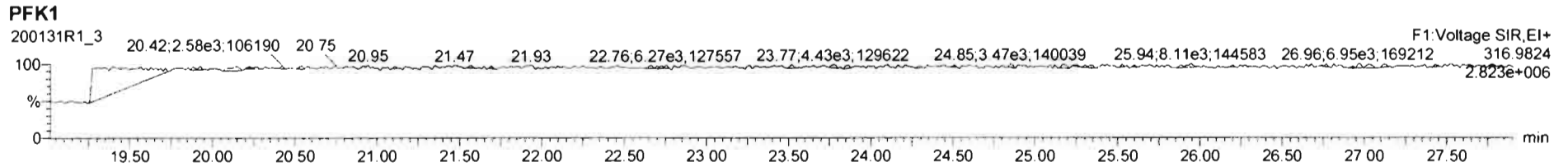
Line	Name	RT	PA	Yth	Area	Std Cond	%RSD	RRF H	RRF SD
1	1.227 E-GC	25.70	0.799	NO	2.00204	1.42168	2.96	1.90	0.968
2	2.223 E-SM-CDD	36.64	0.855	NO	1.20295	1.14155	10.00	1.83	0.975
3	3.223 E-SM-CDD	33.94	1.228	NO	1.09124	5.68825	10.00	5.2	1.07
4	4.223 E-SM-CDD	34.08	1.205	NO	1.12804	1.13068	10.00	8.3	0.921
5	5.223 E-SM-CDD	34.38	1.184	NO	1.03075	1.03964	10.00	6.6	0.918
6	6.223 E-SM-CDD	37.50	1.018	NO	7.44144	2.62174	10.00	5.8	0.932
7	7.223 E-SM-CDD	40.90	0.879	NO	1.55605	1.41046	20.00	5.0	0.983
8	8.223 E-GC	24.00	0.707	NO	1.25314	1.95094	2.000	4.0	0.807
9	9.223 E-SM-CDD	29.26	1.552	NO	1.82485	1.82485	10.00	6.5	0.907
10	10.223 E-SM-CDD	20.20	1.119	NO	1.82505	1.77076	10.00	6.5	0.927
11	11.223 E-SM-CDD	22.10	1.110	NO	1.82505	1.14226	10.00	6.2	0.984
12	12.223 E-SM-CDD	32.24	1.154	NO	1.14974	1.28585	10.00	5.6	0.847
13	13.223 E-SM-CDD	32.82	1.142	NO	1.12514	1.16746	10.00	6.3	0.898
14	14.223 E-SM-CDD	34.22	1.147	NO	6.85974	5.71441	10.00	6.0	0.860
15	15.223 E-SM-CDD	36.46	0.900	NO	7.21244	6.02845	10.00	5.9	0.851
16	16.223 E-SM-CDD	38.49	0.956	NO	5.91294	5.66443	10.00	6.7	0.900
17	17.223 E-SM-CDD	41.08	0.868	NO	1.37214	1.61364	20.00	5.5	0.806

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_3, Date: 31-Jan-2020, Time: 18:23:19, ID: ST200131R1\_3 1613 CS2 19L2304, Description: 1613 CS2 19L2304

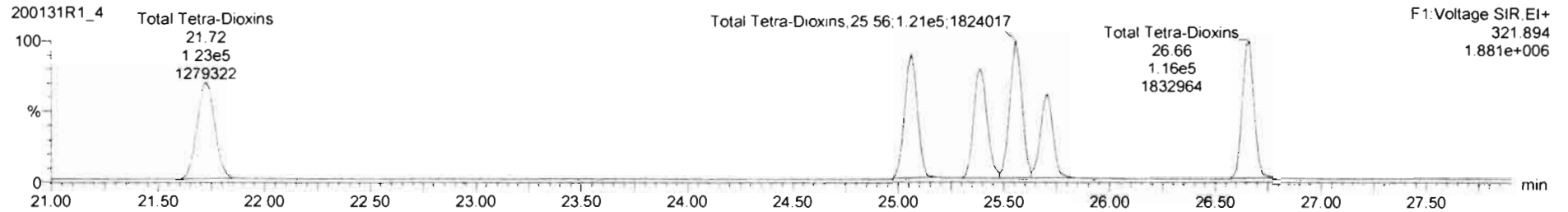
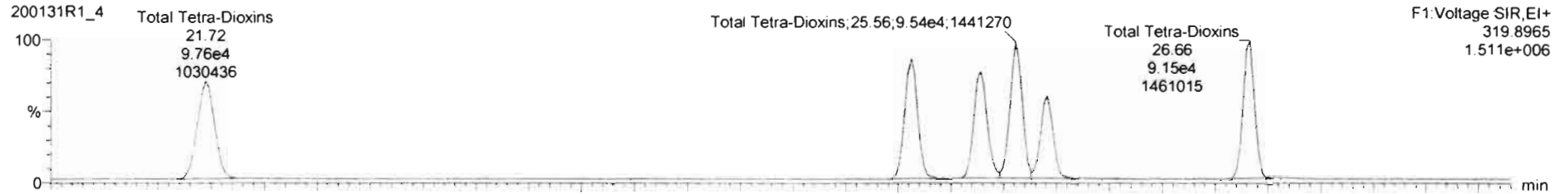


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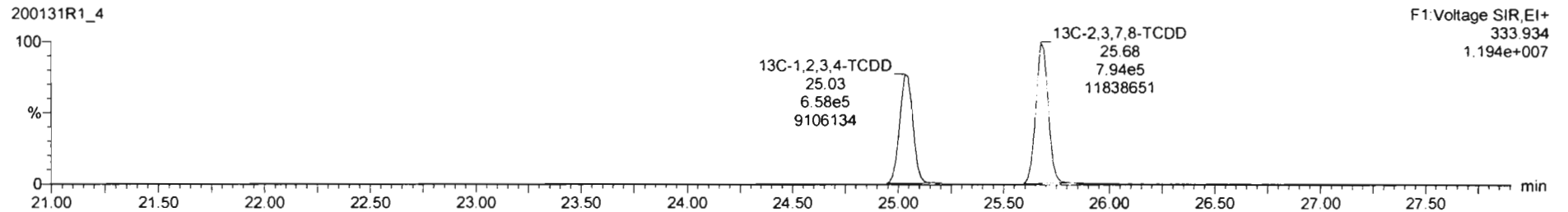
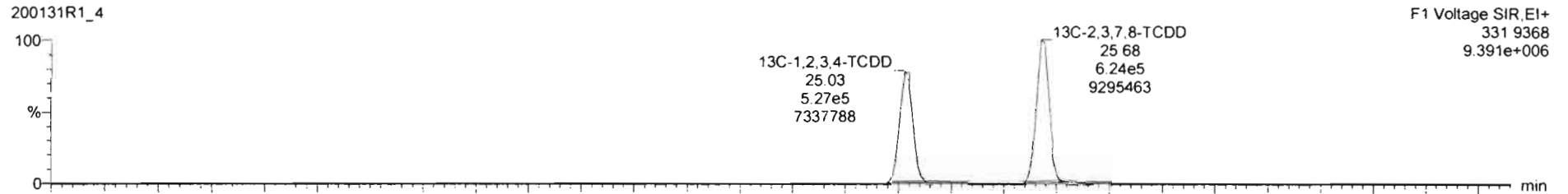
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_4, Date: 31-Jan-2020, Time: 19:10:18, ID: ST200131R1\_4 1613 CS3 19L2305, Description: 1613 CS3 19L2305

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



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



Dataset: Untitled

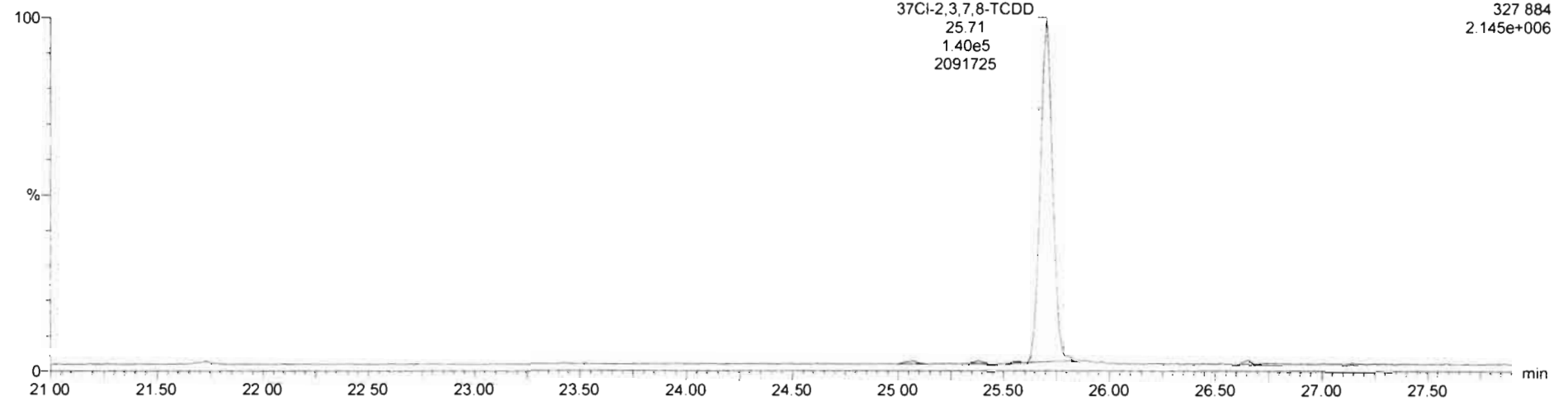
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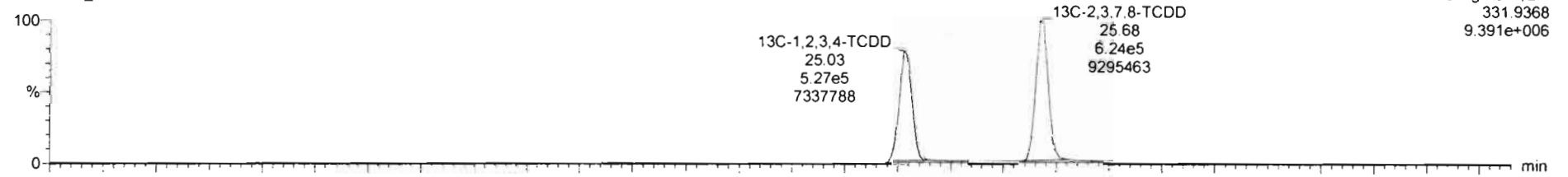
37Cl-2,3,7,8-TCDD

200131R1\_4

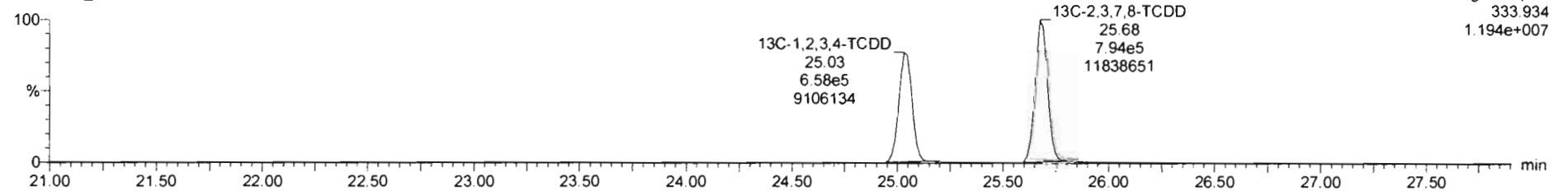


13C-1,2,3,4-TCDD

200131R1\_4



200131R1\_4



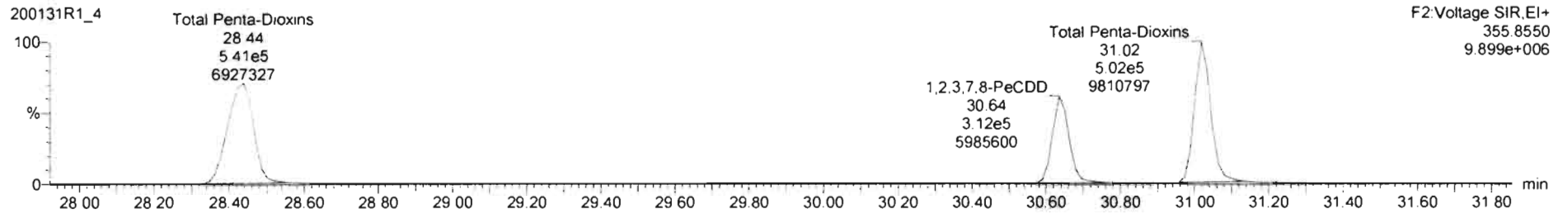
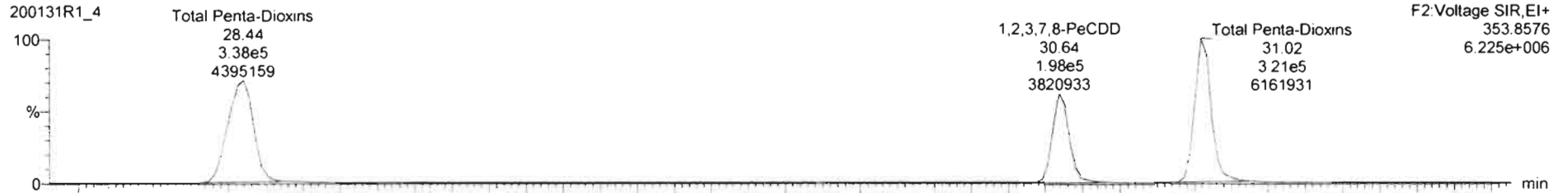
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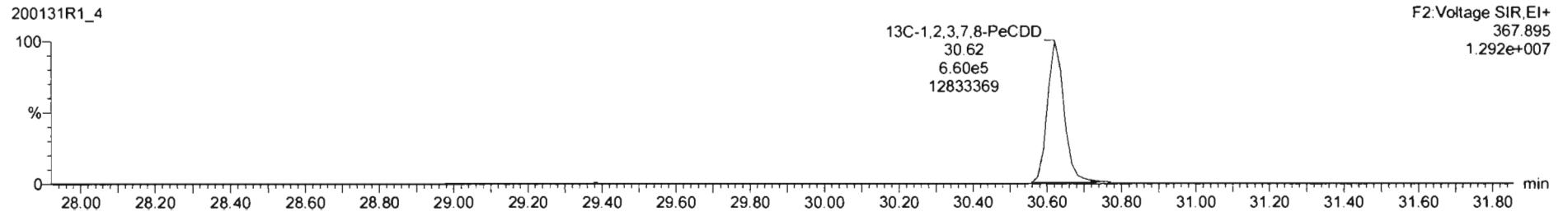
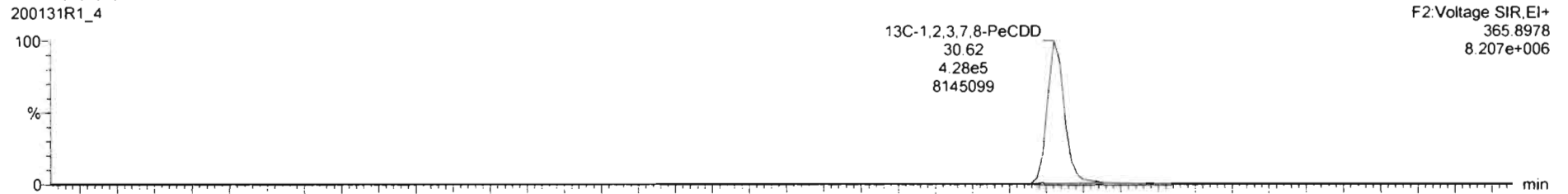
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Name: 200131R1\_4, Date: 31-Jan-2020, Time: 19:10:18, ID: ST200131R1\_4 1613 CS3 19L2305, Description: 1613 CS3 19L2305

1,2,3,7,8-PeCDD



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





Dataset: Untitled

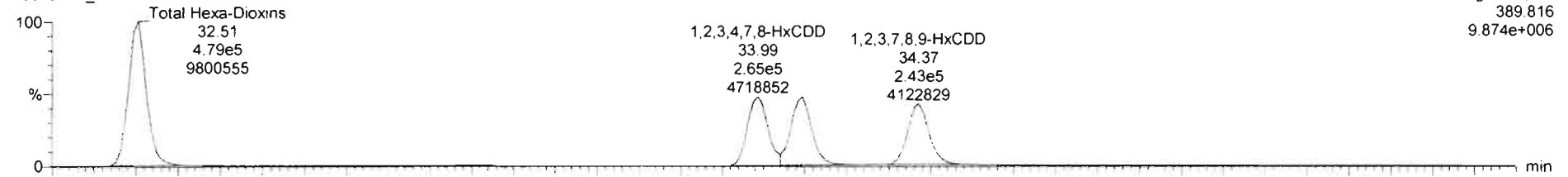
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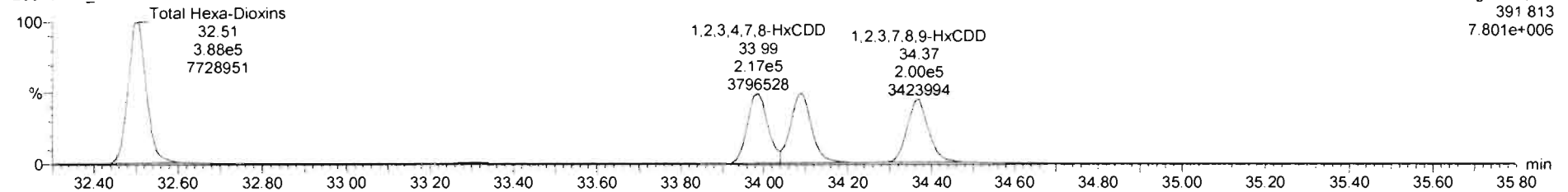
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1,2,3,4,7,8-HxCDD

200131R1\_4

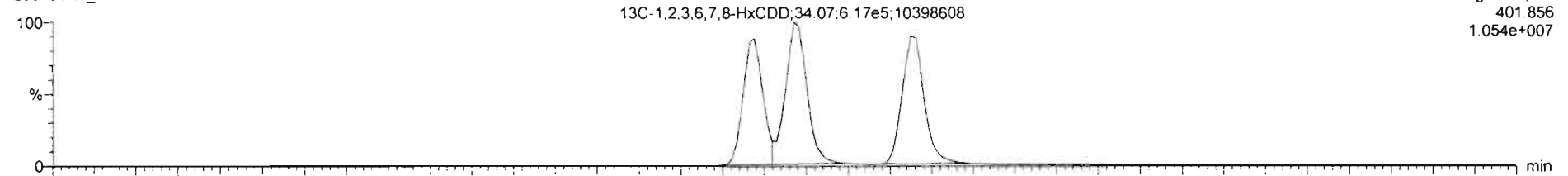


200131R1\_4

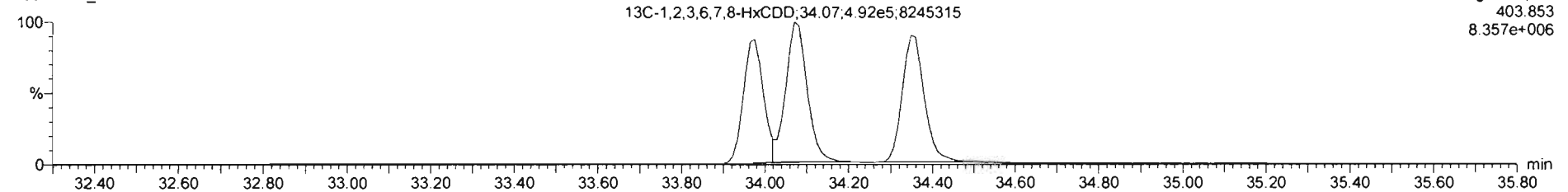


13C-1,2,3,4,7,8-HxCDD

200131R1\_4



200131R1\_4



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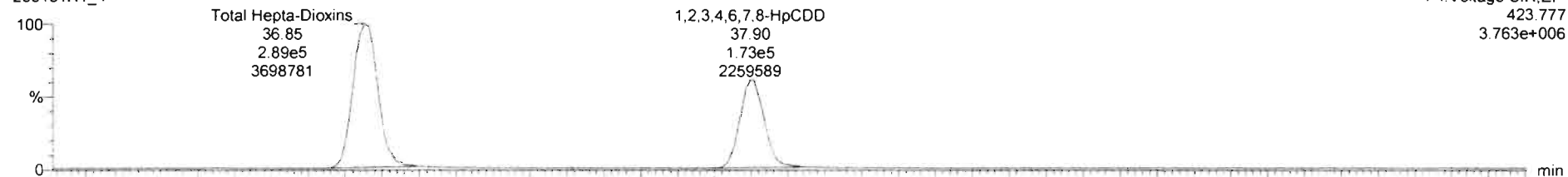
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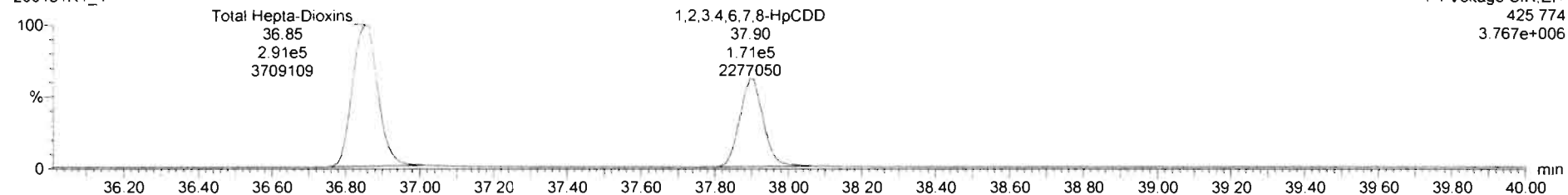
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1,2,3,4,6,7,8-HpCDD

200131R1\_4

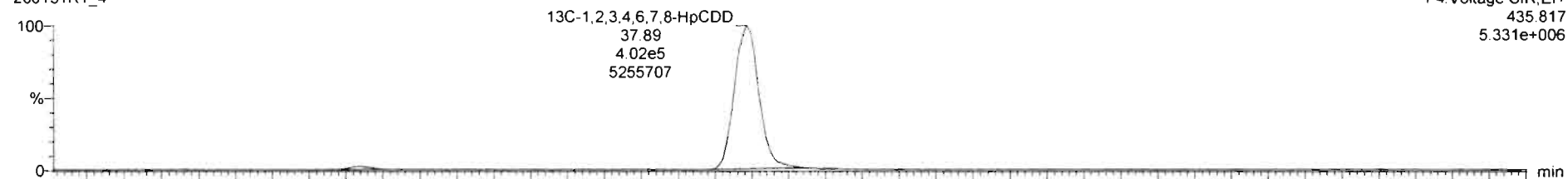


200131R1\_4

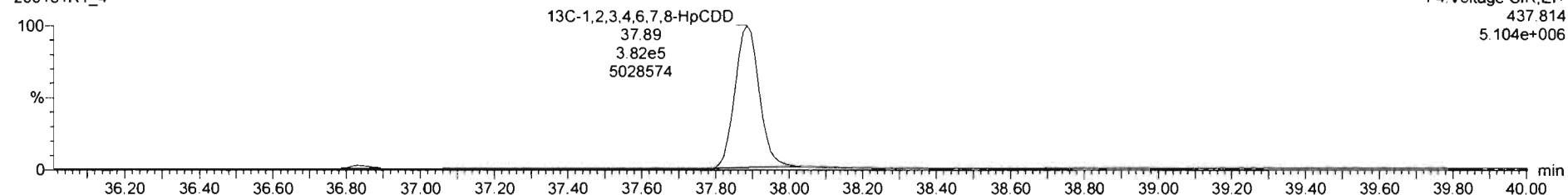


13C-1,2,3,4,6,7,8-HpCDD

200131R1\_4



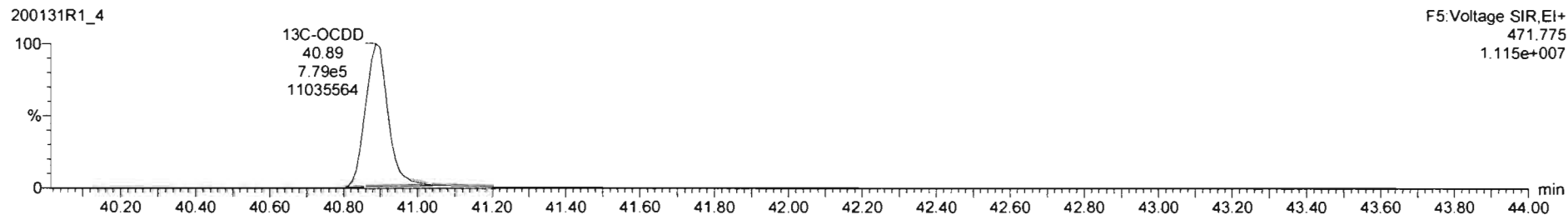
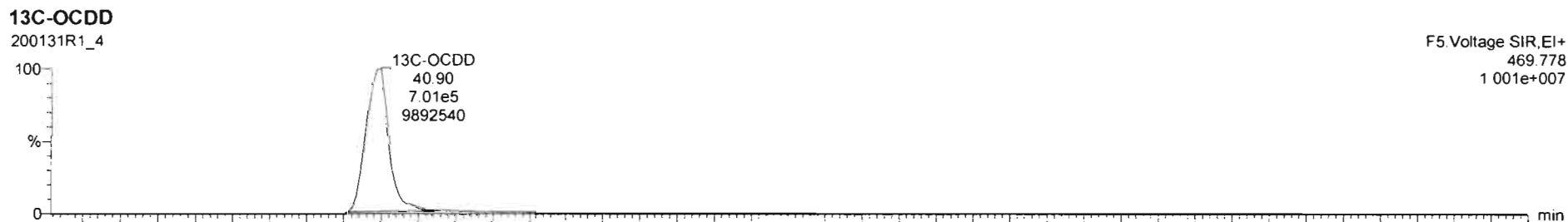
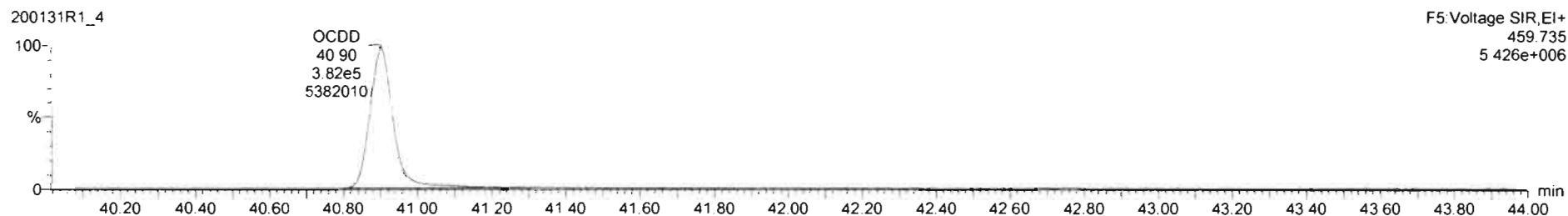
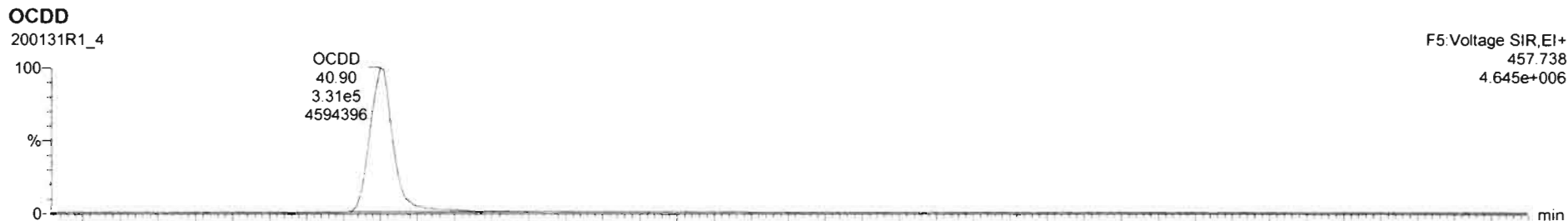
200131R1\_4

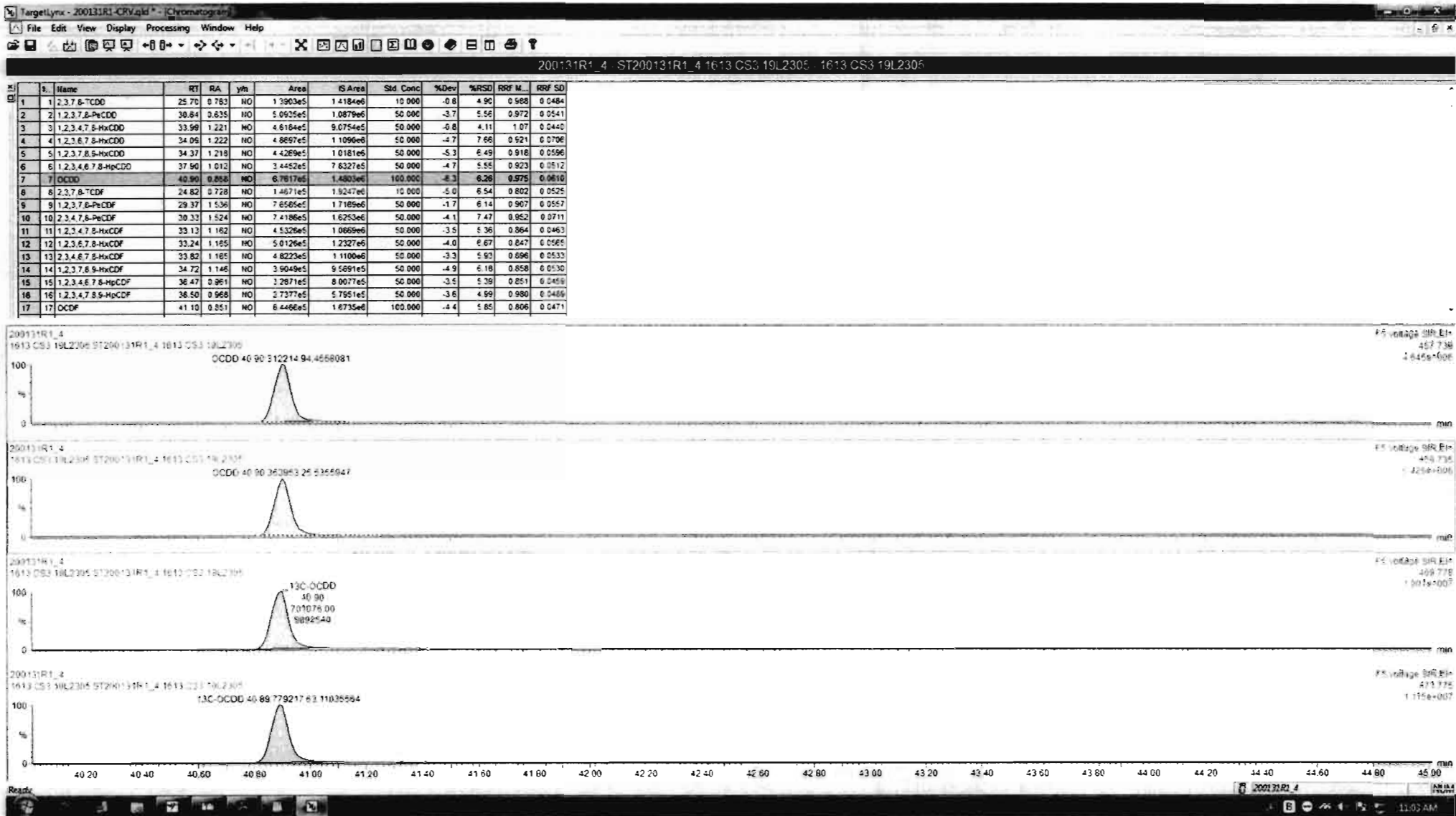


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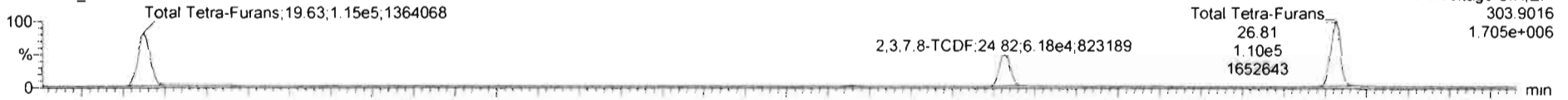
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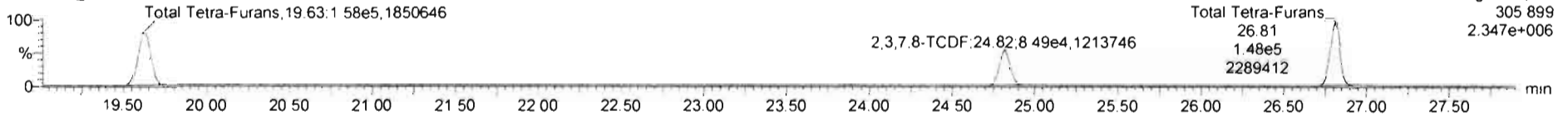
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**2,3,7,8-TCDF**

200131R1\_4

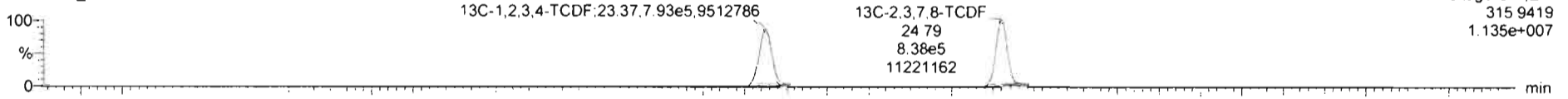


200131R1\_4

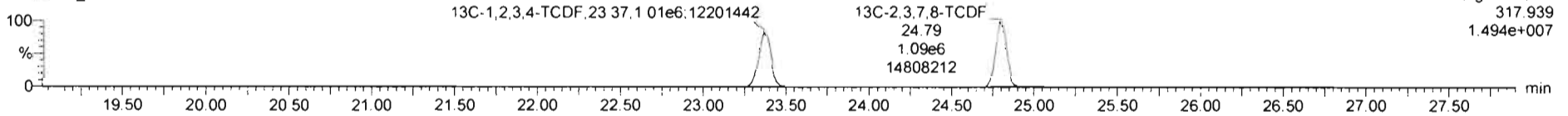


**13C-2,3,7,8-TCDF**

200131R1\_4

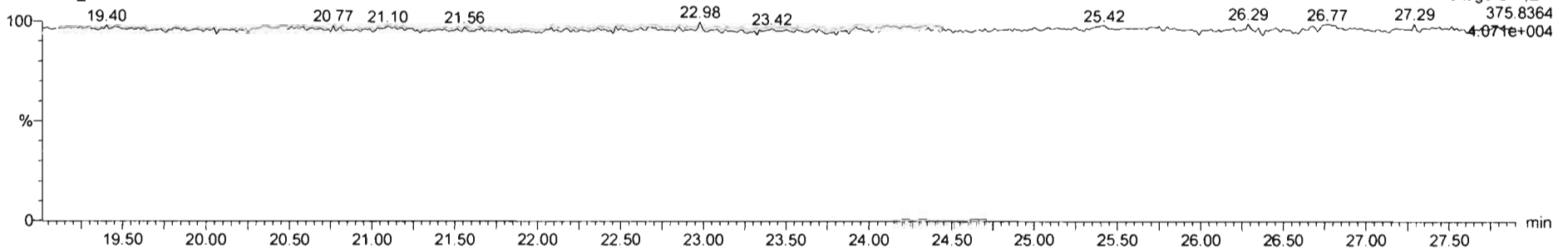


200131R1\_4



**DPE1**

200131R1\_4



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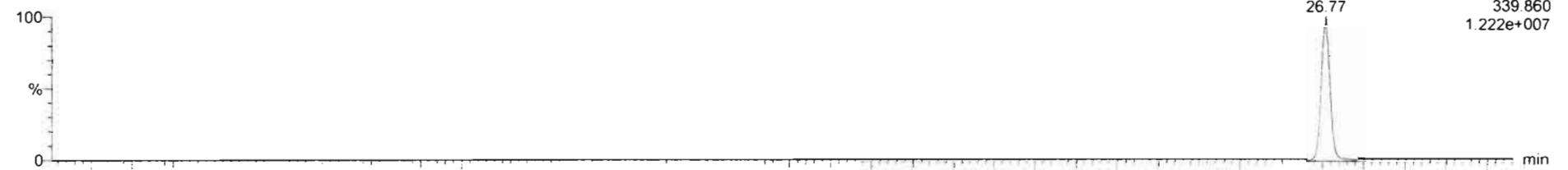
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

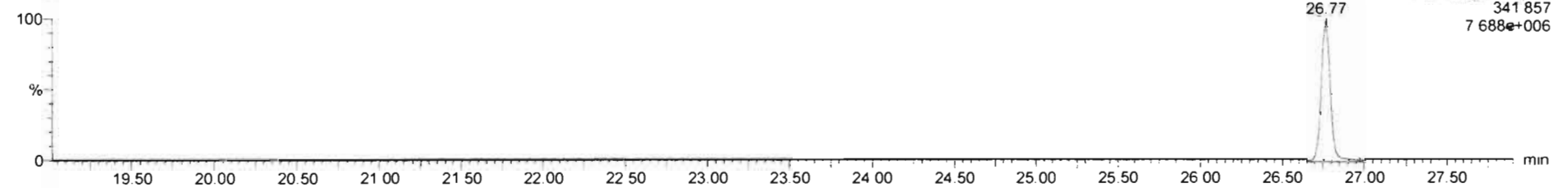
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1st Func. Penta-Furans

200131R1\_4

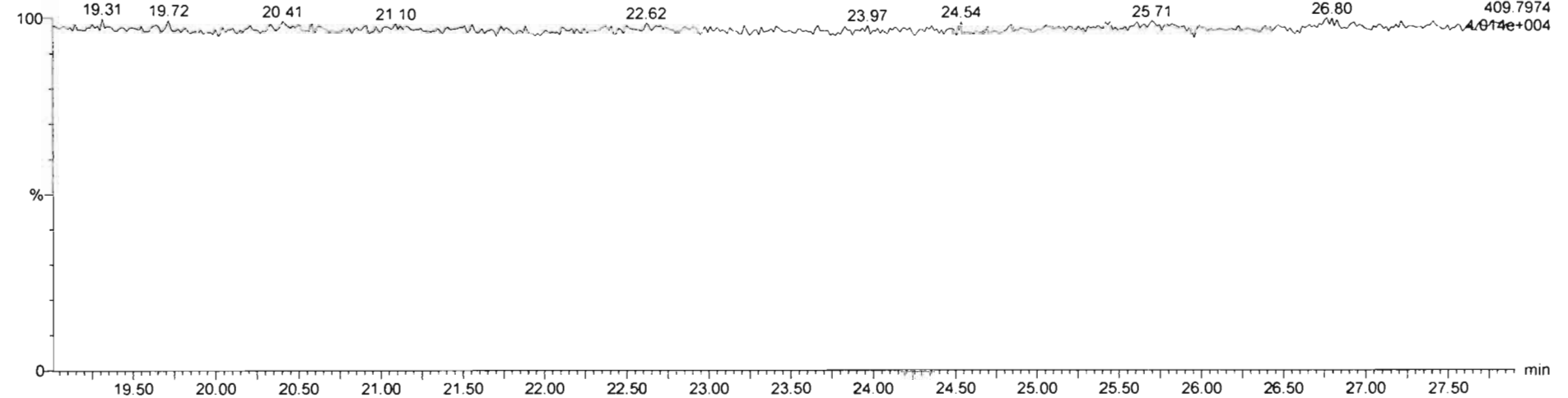


200131R1\_4



DPE6

200131R1\_4





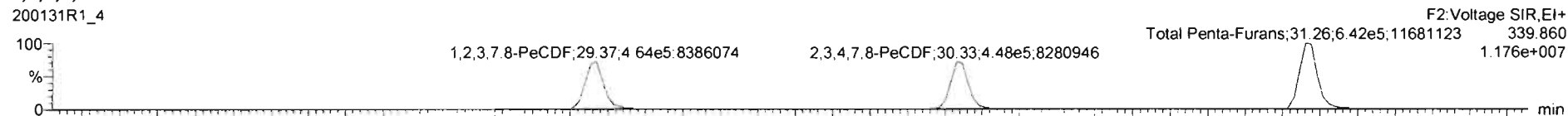
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

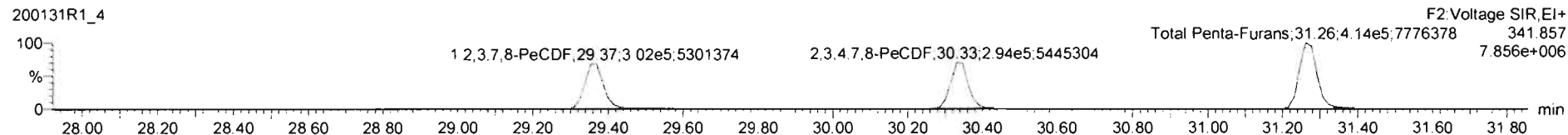
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**1,2,3,7,8-PeCDF**

200131R1\_4

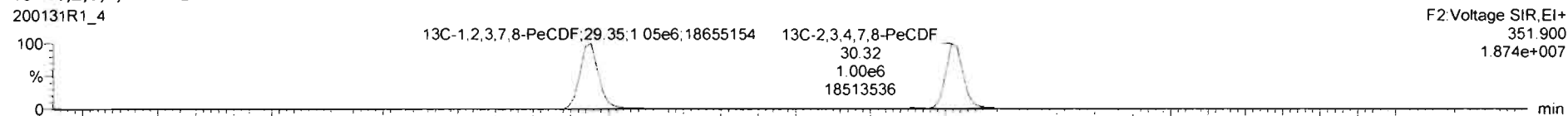


200131R1\_4

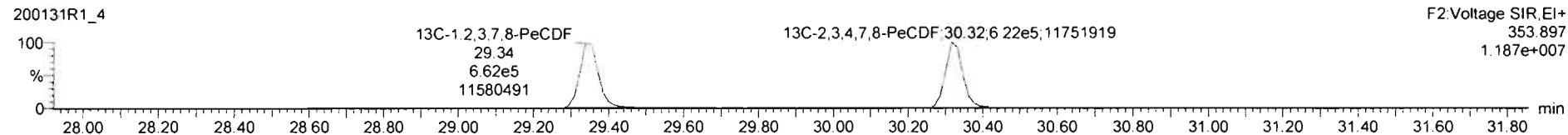


**13C-1,2,3,7,8-PeCDF**

200131R1\_4

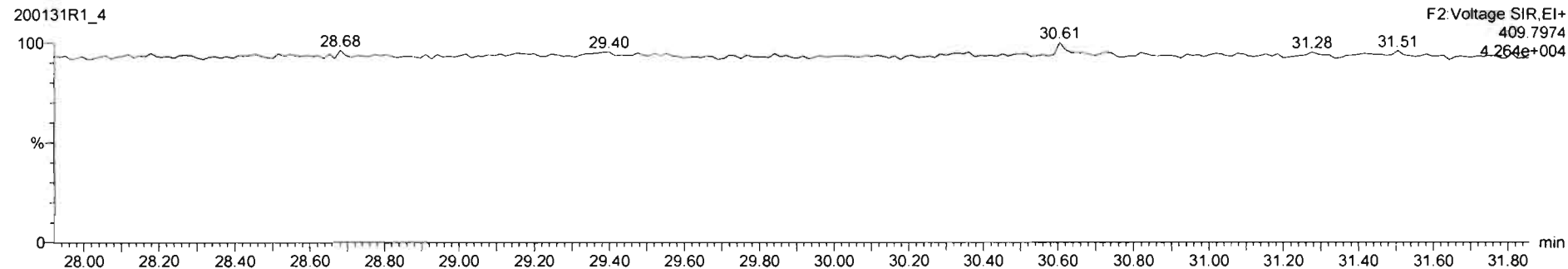


200131R1\_4



**DPE2**

200131R1\_4



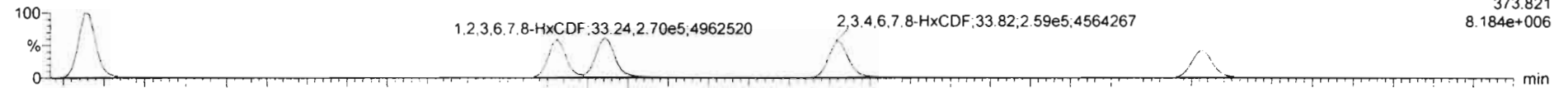
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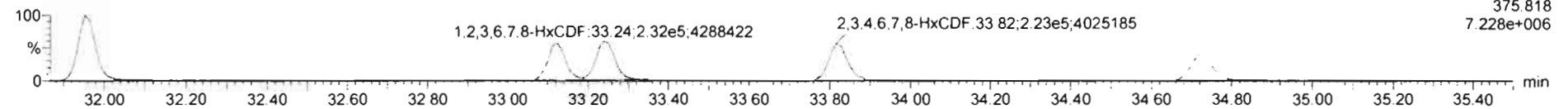
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**1,2,3,4,7,8-HxCDF**

200131R1\_4

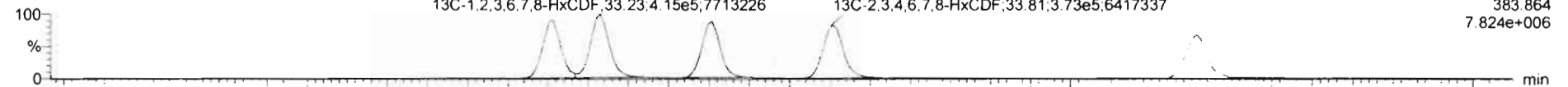


200131R1\_4

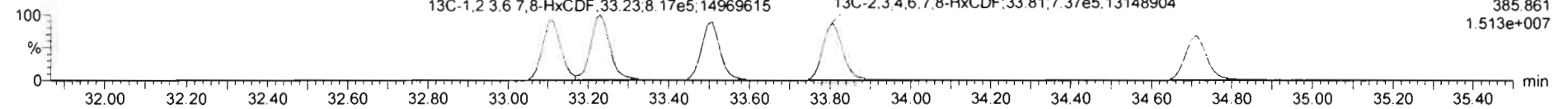


**13C-1,2,3,4,7,8-HxCDF**

200131R1\_4

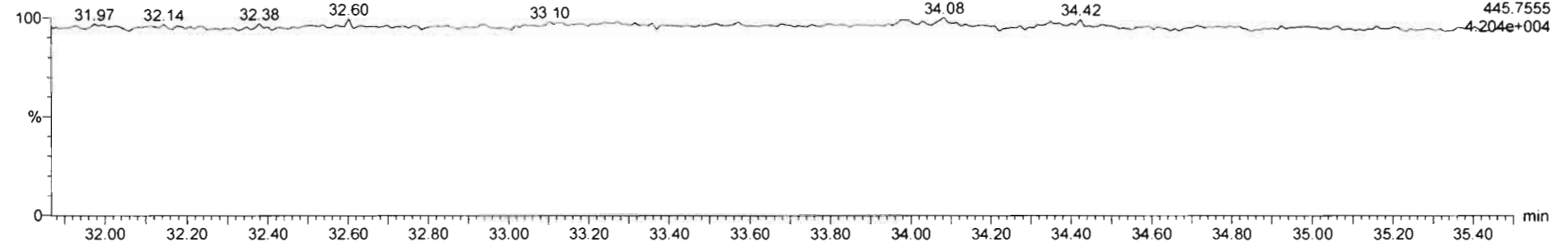


200131R1\_4



**DPE3**

200131R1\_4

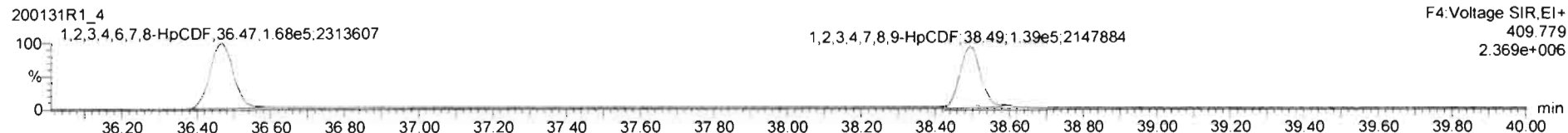
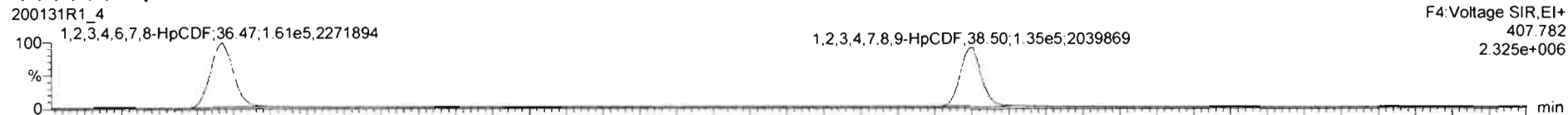


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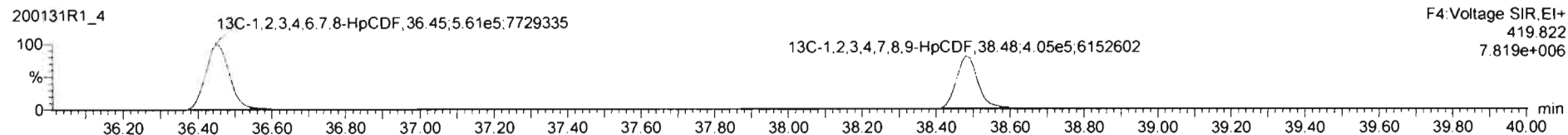
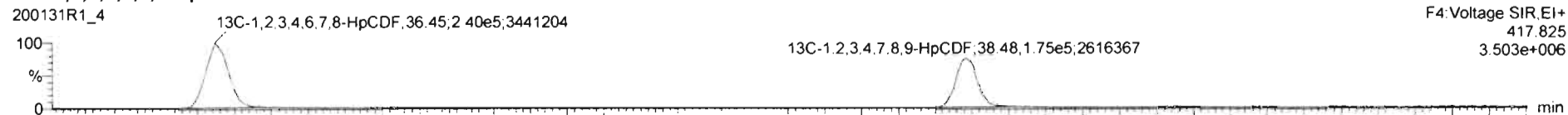
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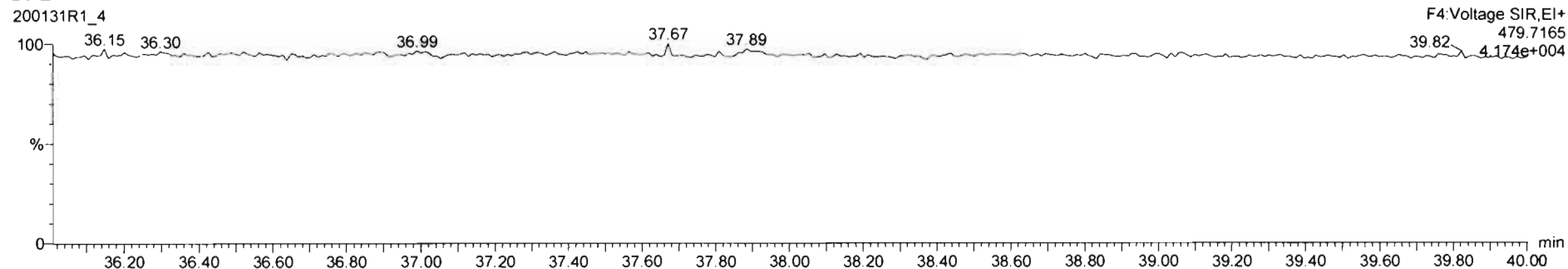
**1,2,3,4,6,7,8-HpCDF**



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



**DPE4**

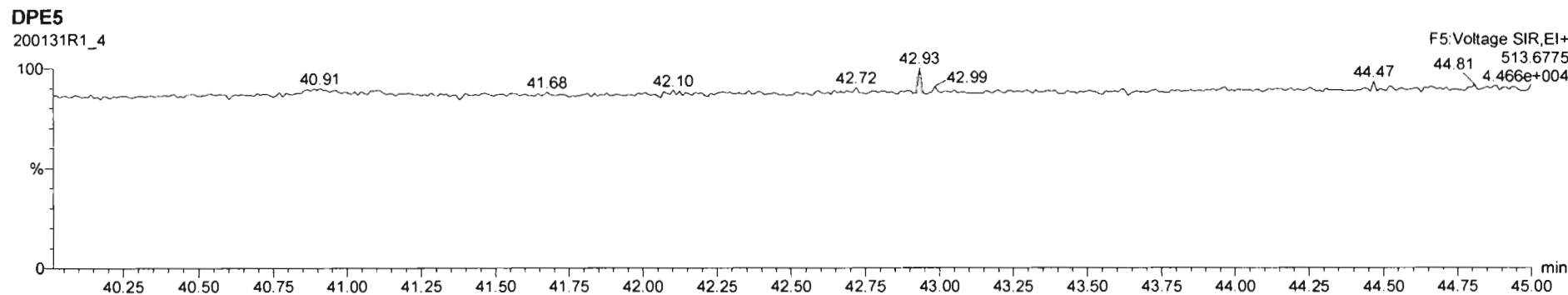
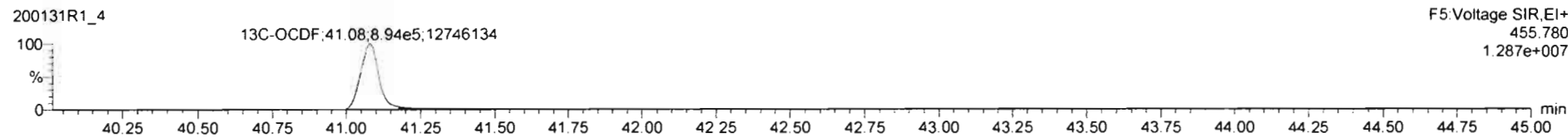
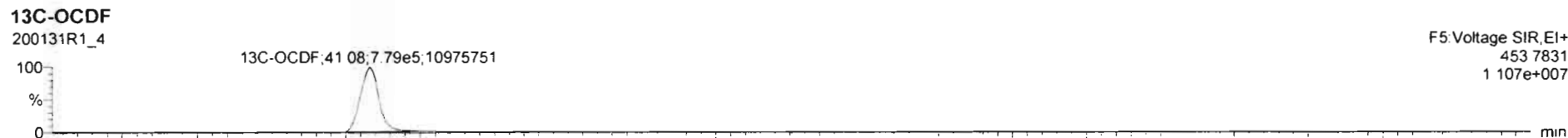
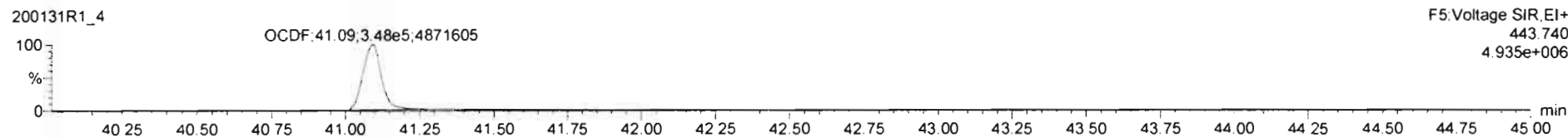
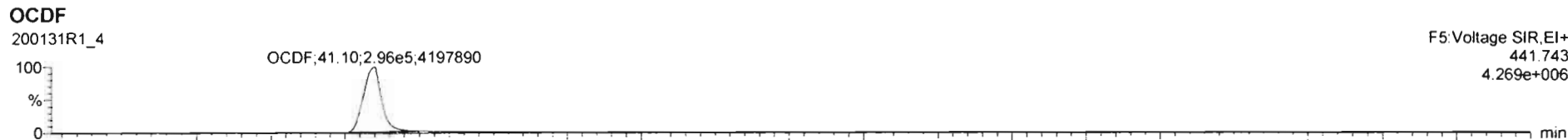


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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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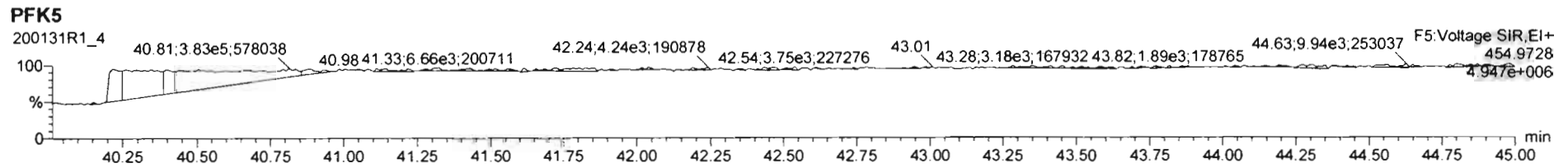
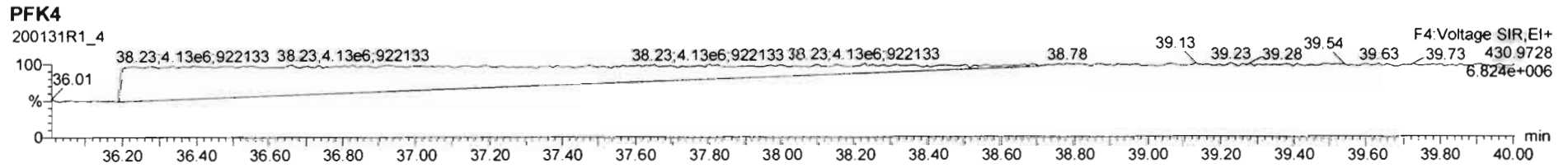
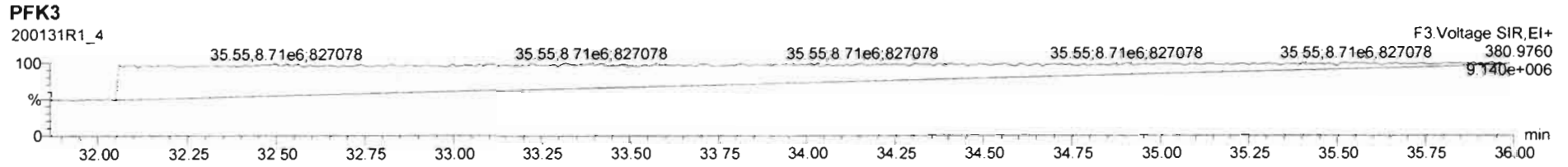
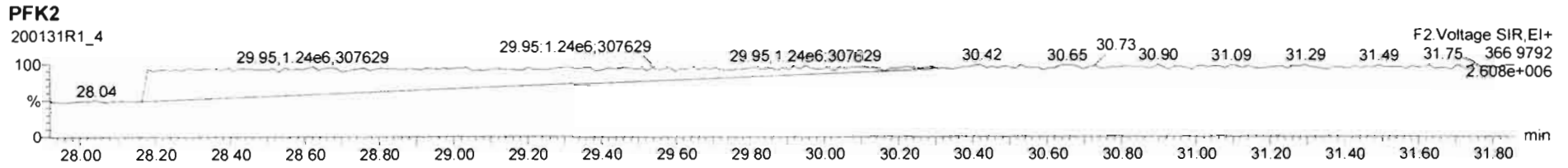
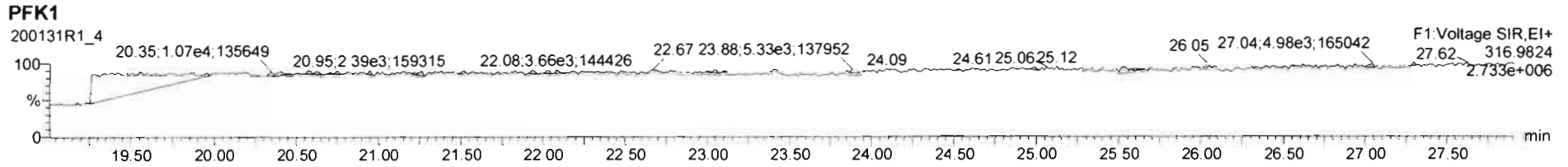


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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

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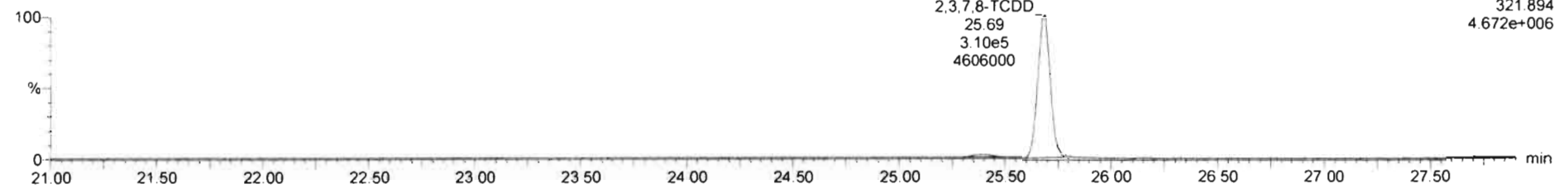
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**2,3,7,8-TCDD**

200131R1\_5

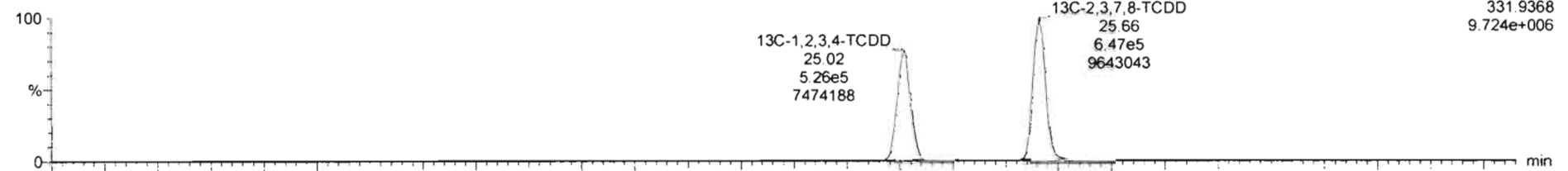


200131R1\_5

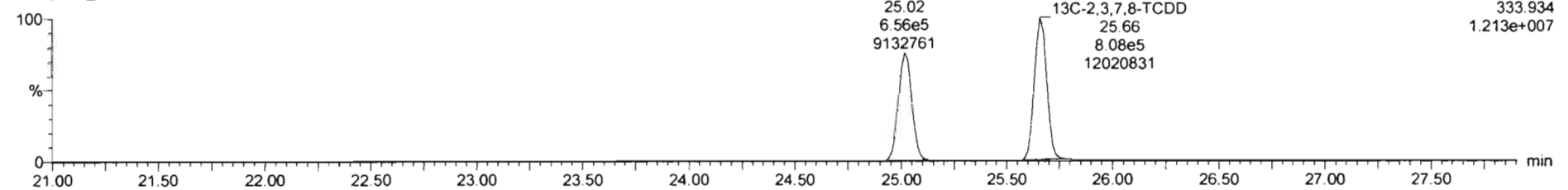


**13C-2,3,7,8-TCDD**

200131R1\_5



200131R1\_5





Dataset: Untitled

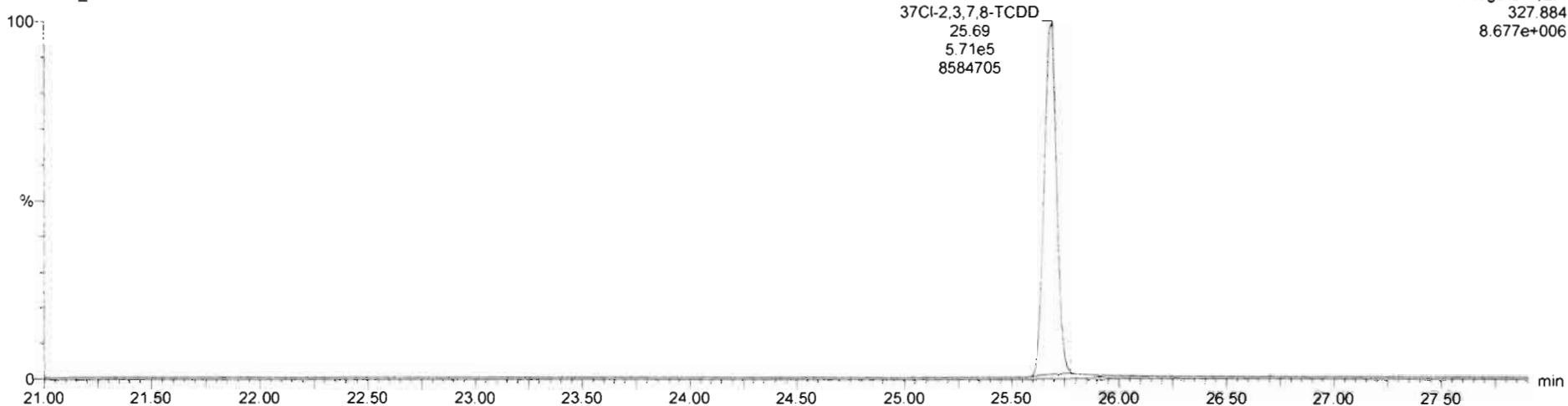
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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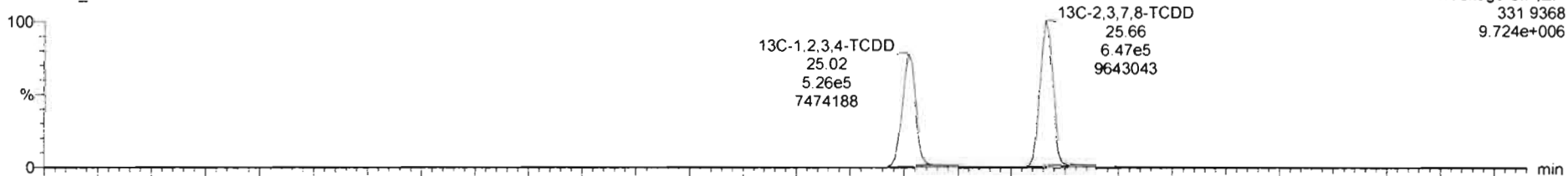
**37Cl-2,3,7,8-TCDD**

200131R1\_5

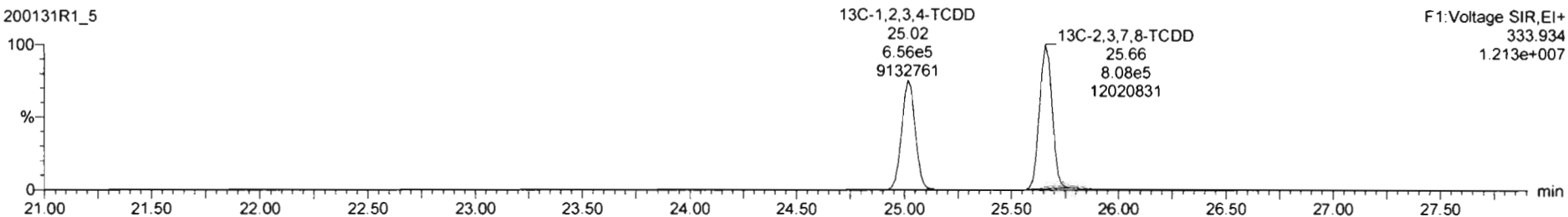


**13C-1,2,3,4-TCDD**

200131R1\_5



200131R1\_5



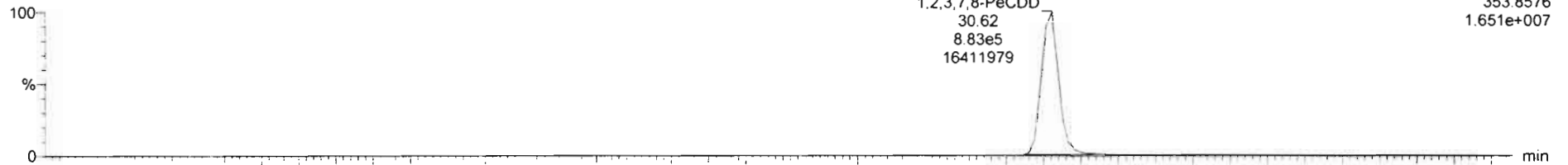
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

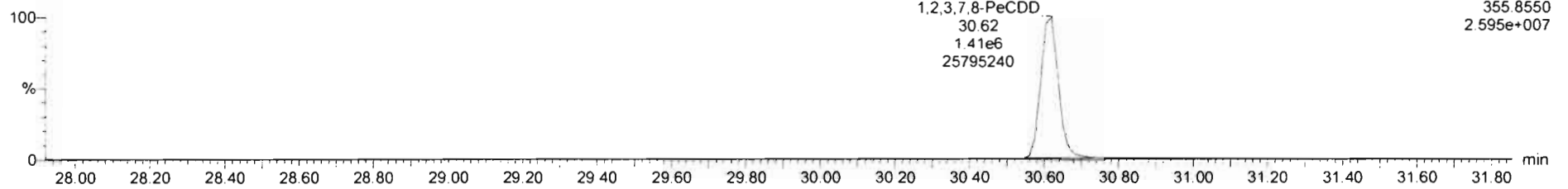
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**1,2,3,7,8-PeCDD**

200131R1\_5

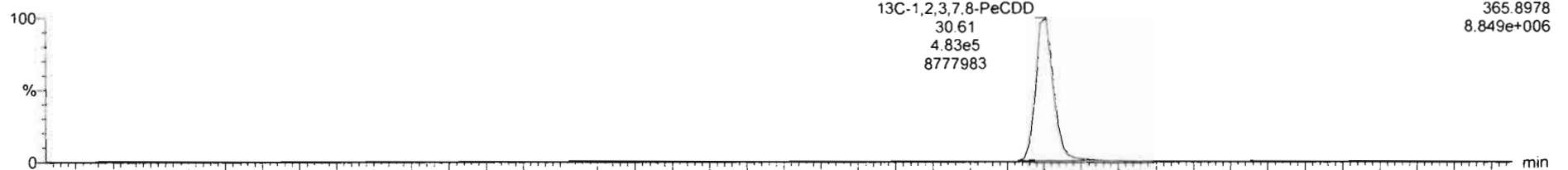


200131R1\_5

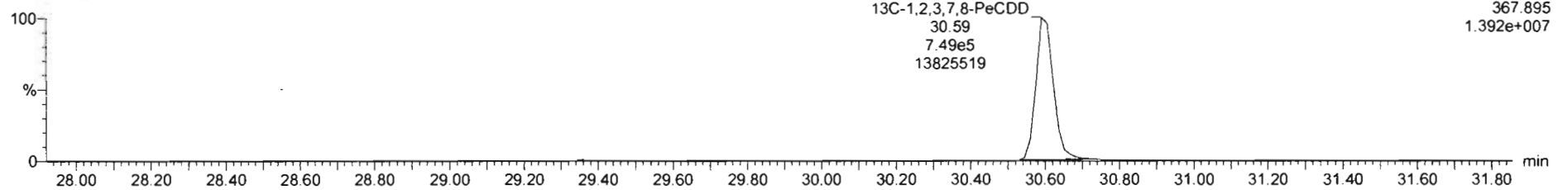


**13C-1,2,3,7,8-PeCDD**

200131R1\_5



200131R1\_5



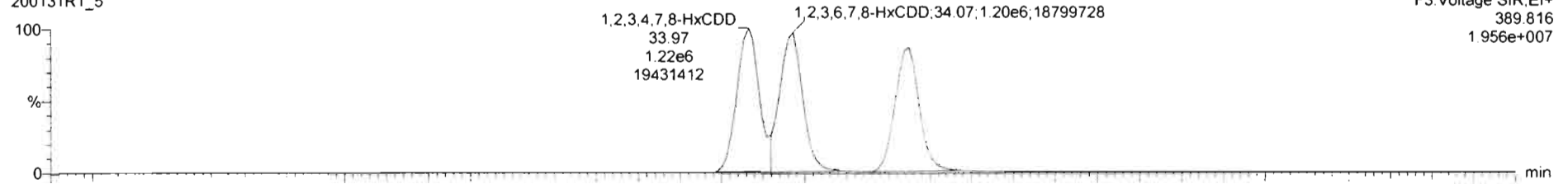
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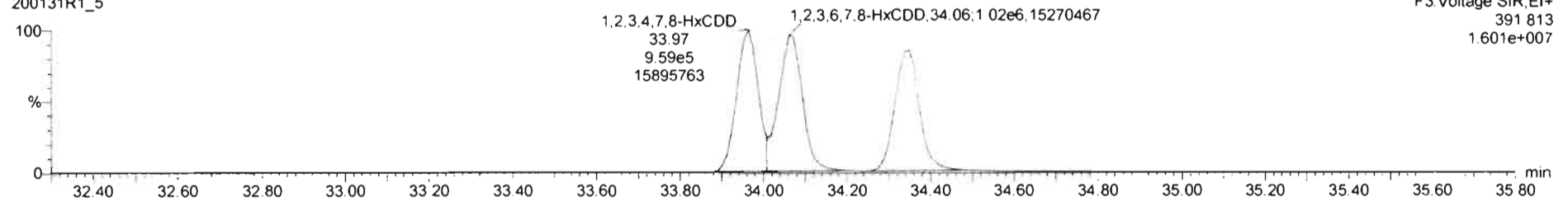
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**1,2,3,4,7,8-HxCDD**

200131R1\_5

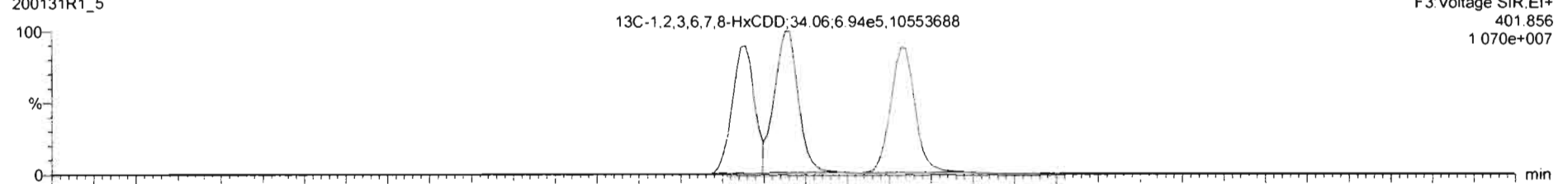


200131R1\_5

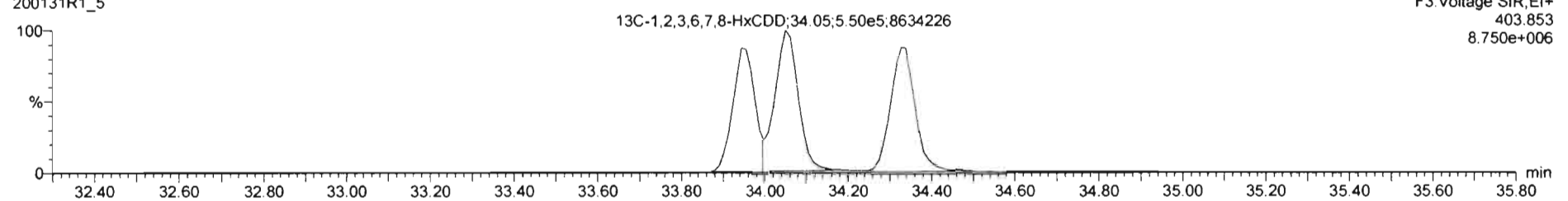


**13C-1,2,3,4,7,8-HxCDD**

200131R1\_5



200131R1\_5



Dataset: Untitled

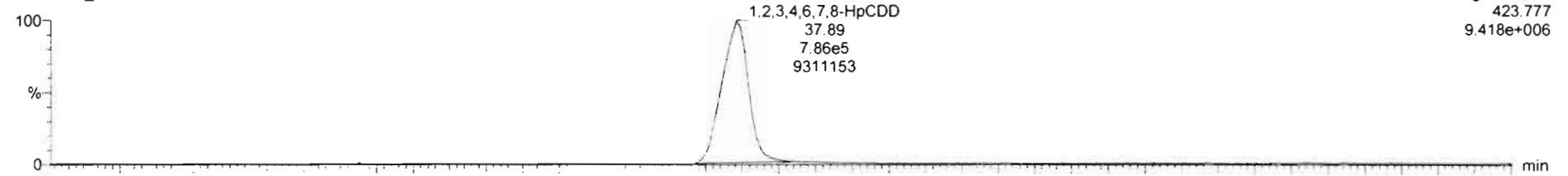
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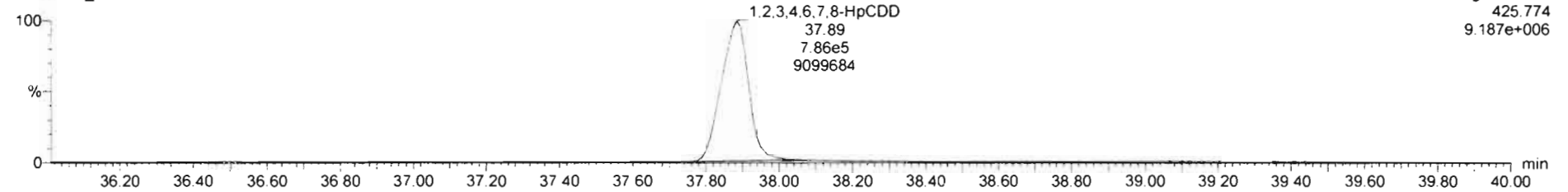
**1,2,3,4,6,7,8-HpCDD**

200131R1\_5



F4: Voltage SIR, EI+  
423.777  
9.418e+006

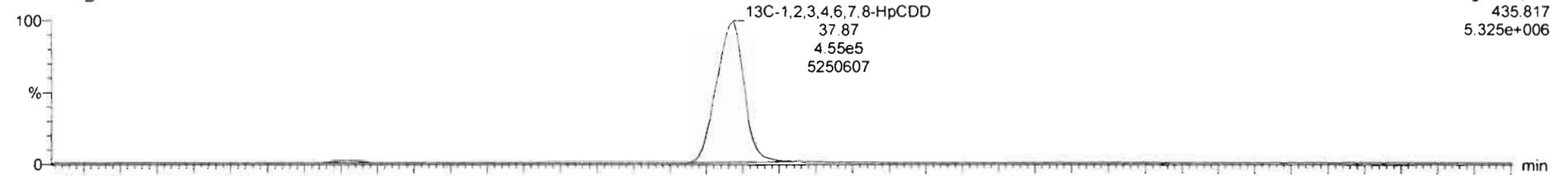
200131R1\_5



F4 Voltage SIR, EI+  
425.774  
9.187e+006

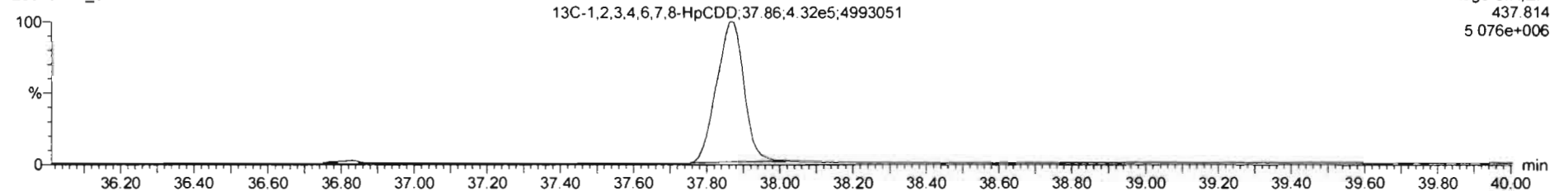
**13C-1,2,3,4,6,7,8-HpCDD**

200131R1\_5



F4: Voltage SIR, EI+  
435.817  
5.325e+006

200131R1\_5



F4: Voltage SIR, EI+  
437.814  
5.076e+006

Dataset: Untitled

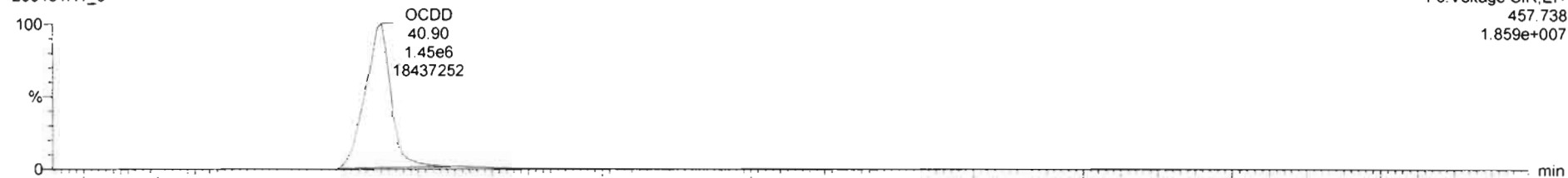
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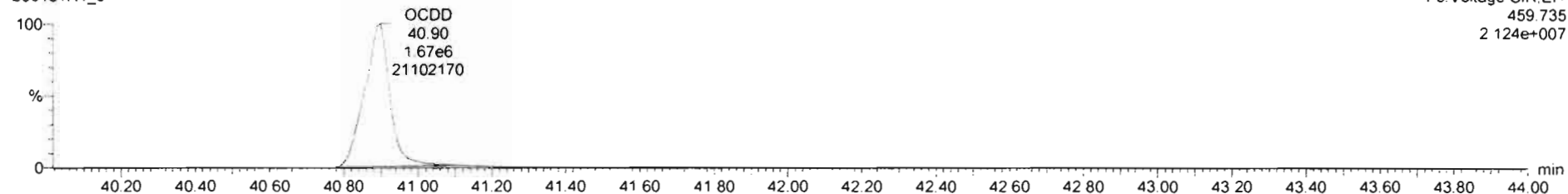
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**OCDD**

200131R1\_5

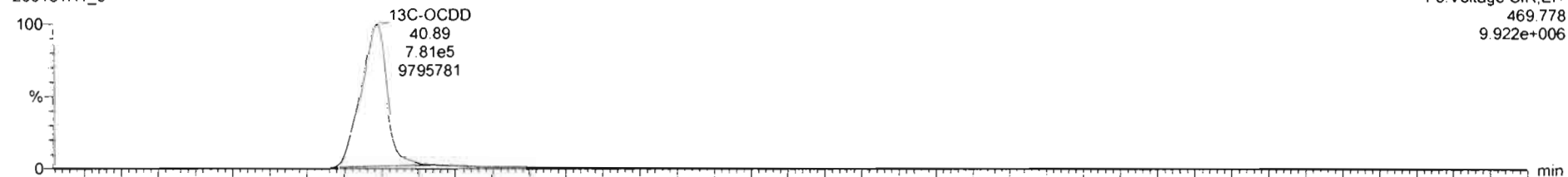


200131R1\_5

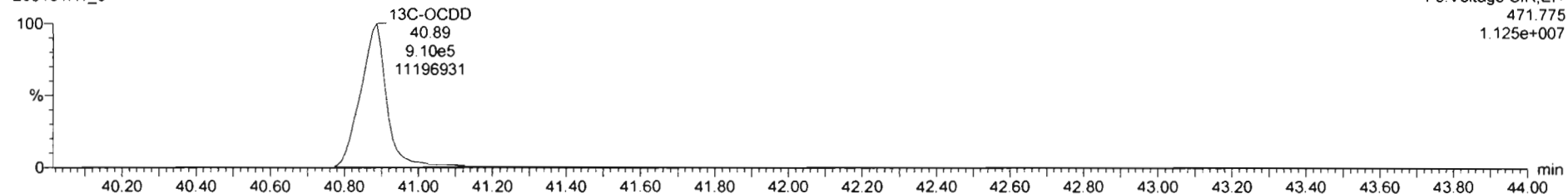


**13C-OCDD**

200131R1\_5



200131R1\_5

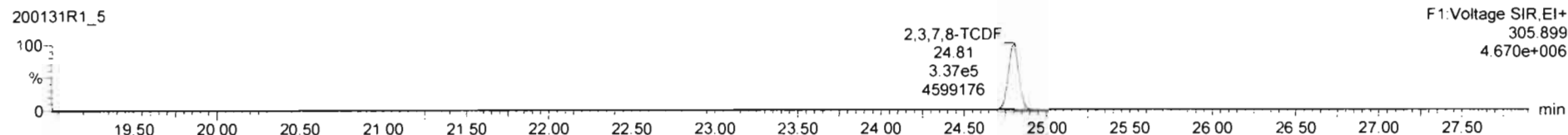


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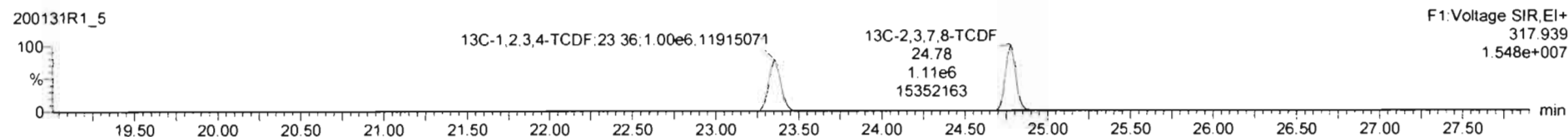
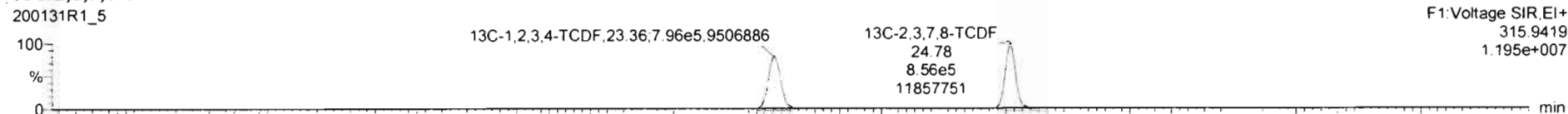
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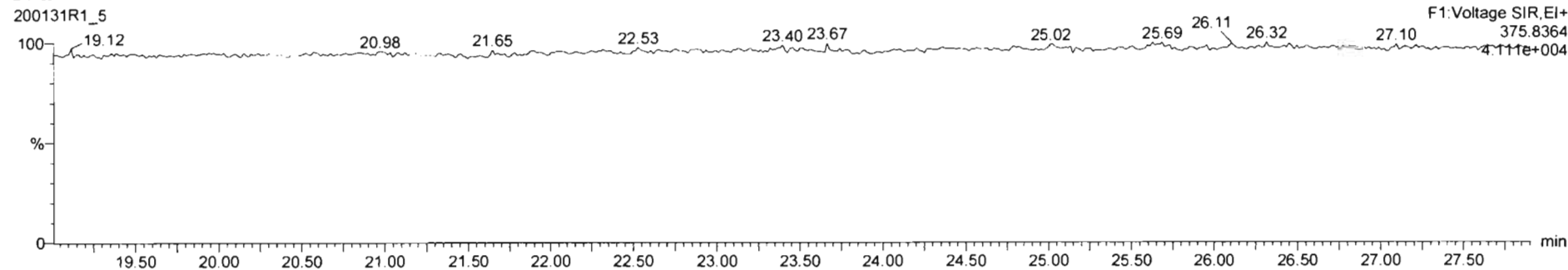
**2,3,7,8-TCDF**



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



**DPE1**



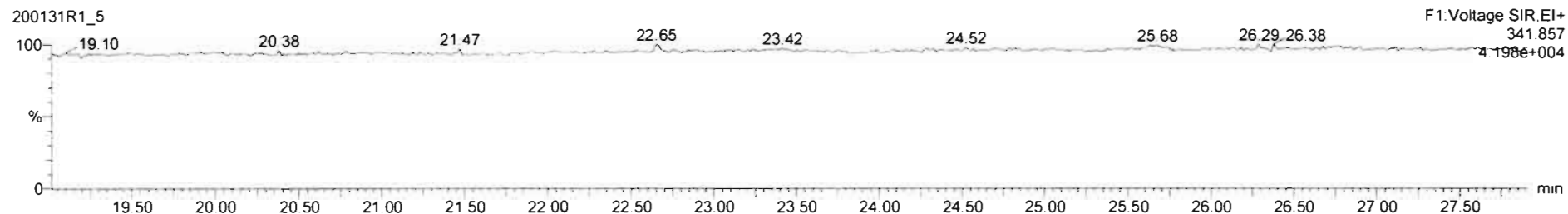
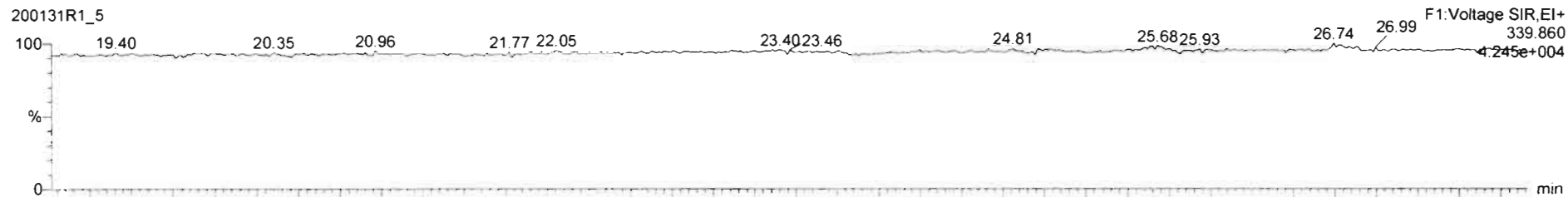


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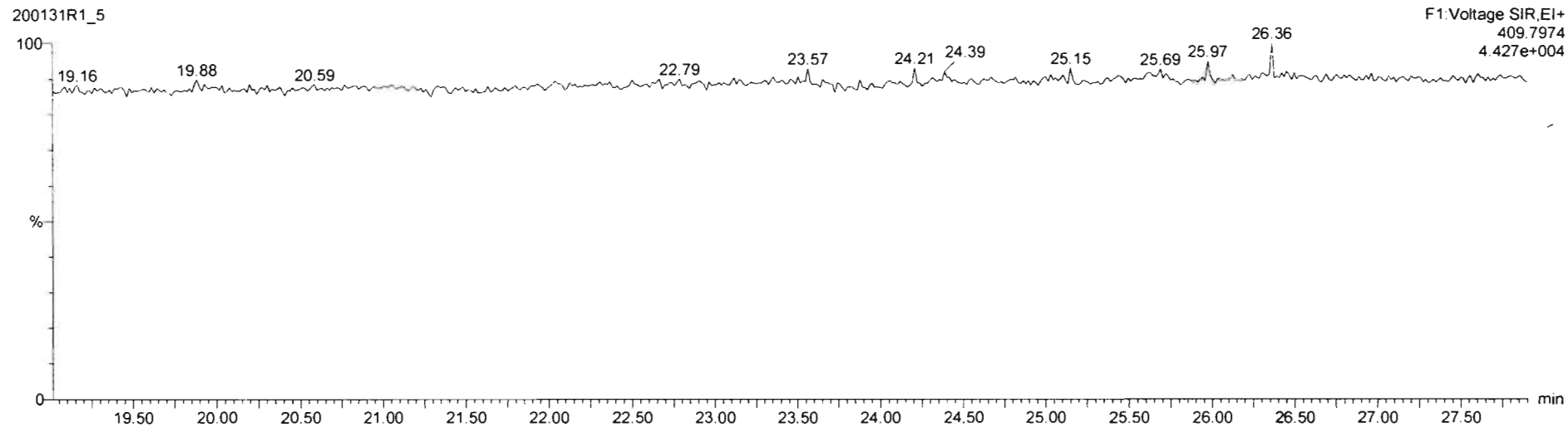
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_5, Date: 31-Jan-2020, Time: 19:57:17, ID: ST200131R1\_5 1613 CS4 19L2306, Description: 1613 CS4 19L2306

1st Func. Penta-Furans



DPE6



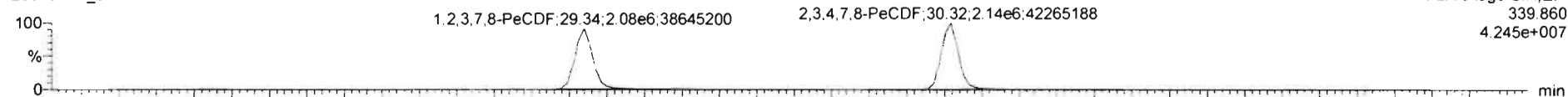
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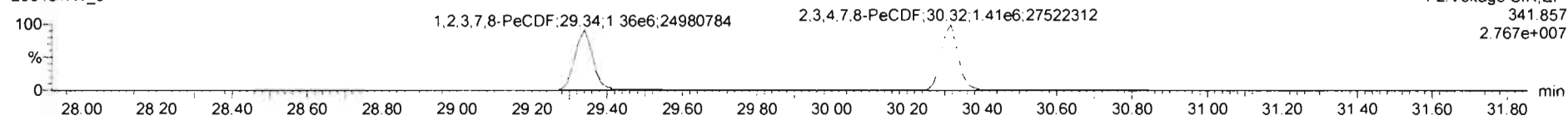
**1,2,3,7,8-PeCDF**

200131R1\_5



F2: Voltage SIR, EI+  
339.860  
4.245e+007

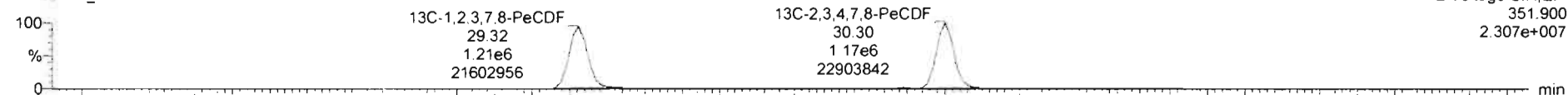
200131R1\_5



F2: Voltage SIR, EI+  
341.857  
2.767e+007

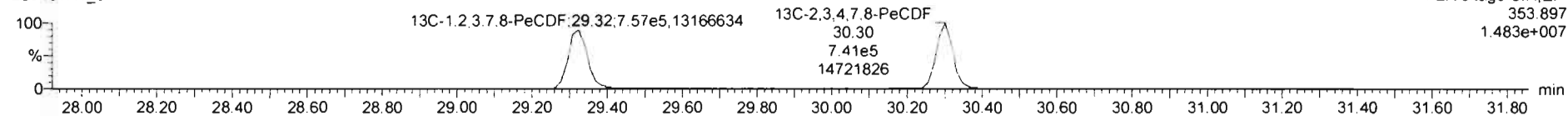
**13C-1,2,3,7,8-PeCDF**

200131R1\_5



F2: Voltage SIR, EI+  
351.900  
2.307e+007

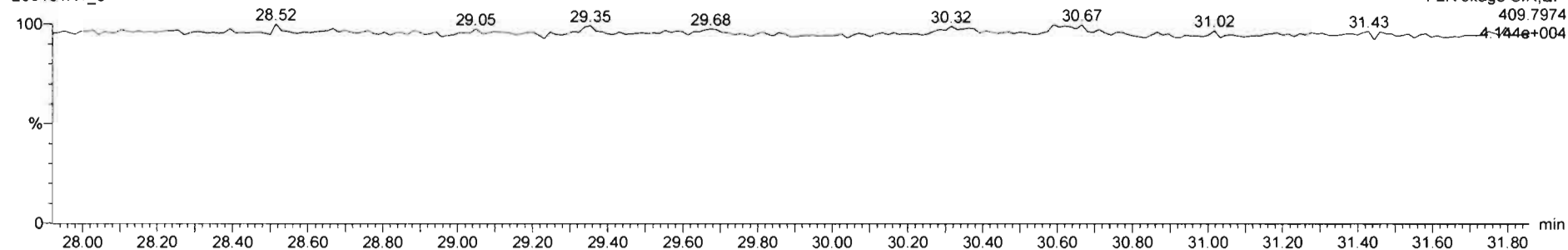
200131R1\_5



F2: Voltage SIR, EI+  
353.897  
1.483e+007

**DPE2**

200131R1\_5



F2: Voltage SIR, EI+  
409.7974  
4.144e+004

Dataset: Untitled

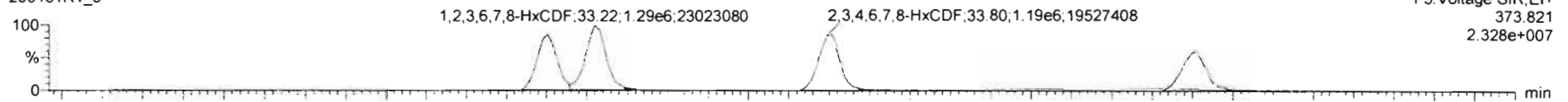
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

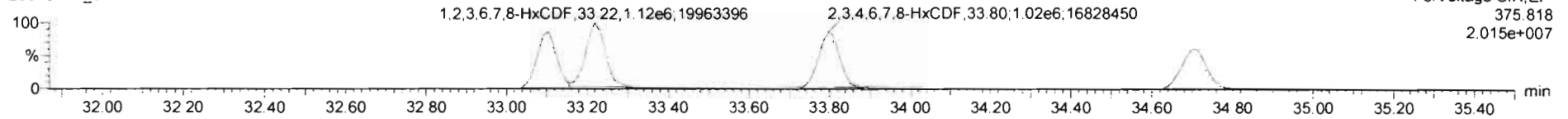
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**1,2,3,4,7,8-HxCDF**

200131R1\_5

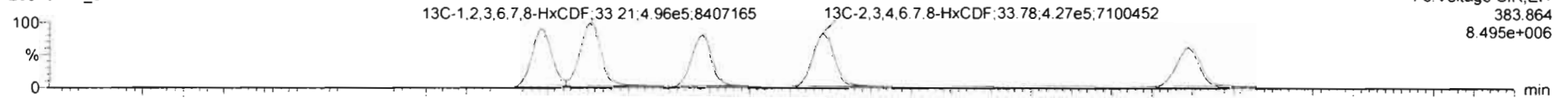


200131R1\_5

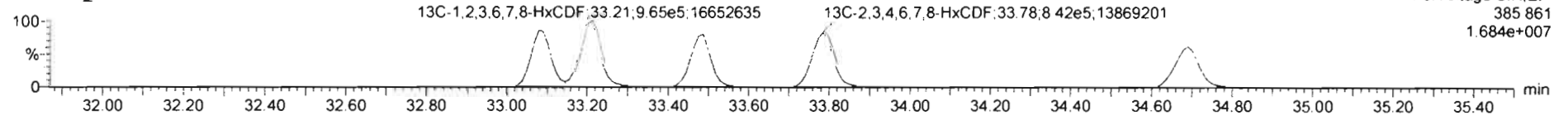


**13C-1,2,3,4,7,8-HxCDF**

200131R1\_5

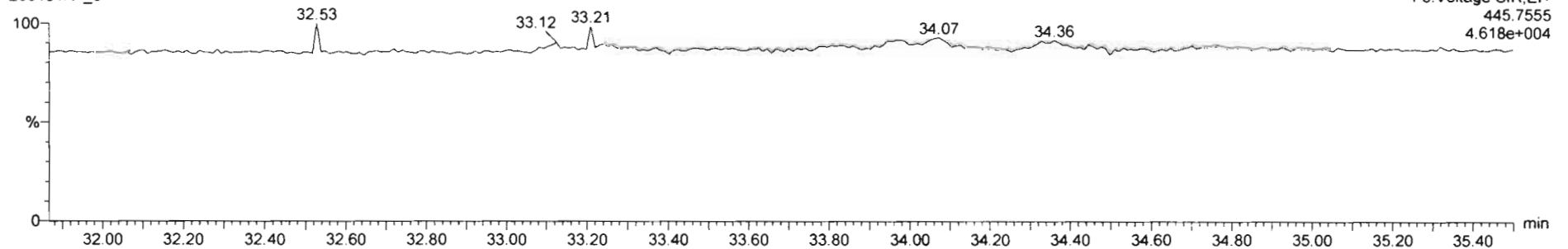


200131R1\_5



**DPE3**

200131R1\_5

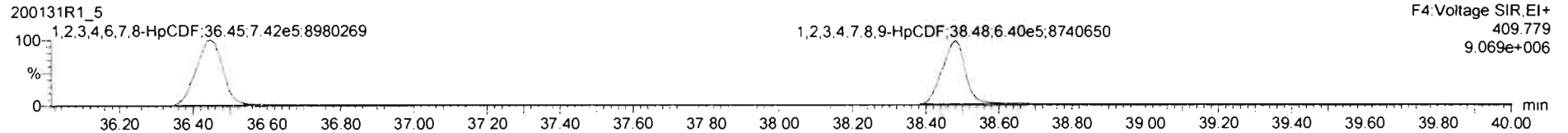
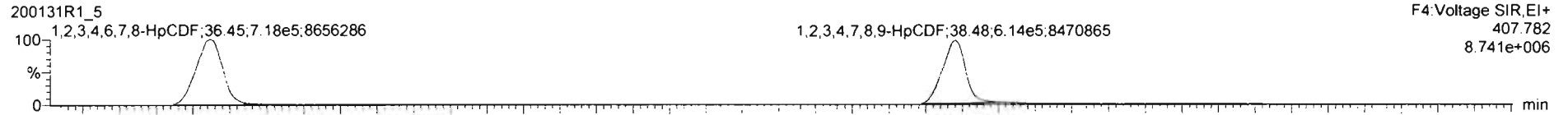


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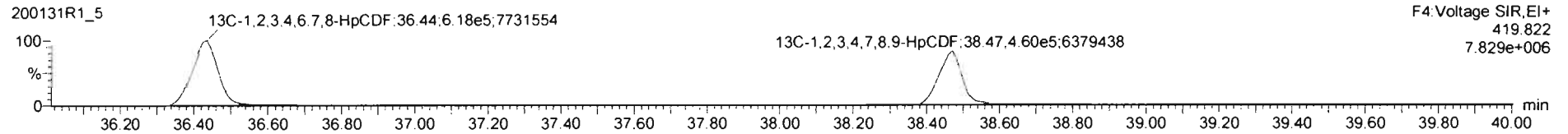
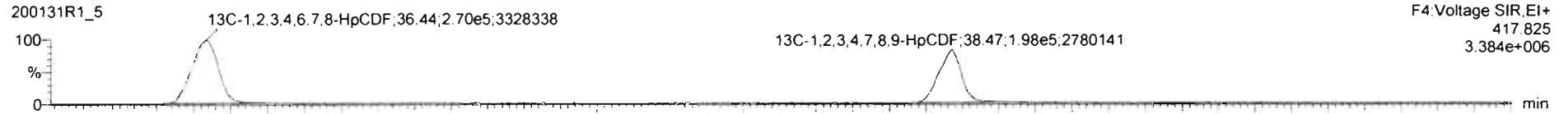
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_5, Date: 31-Jan-2020, Time: 19:57:17, ID: ST200131R1\_5 1613 CS4 19L2306, Description: 1613 CS4 19L2306

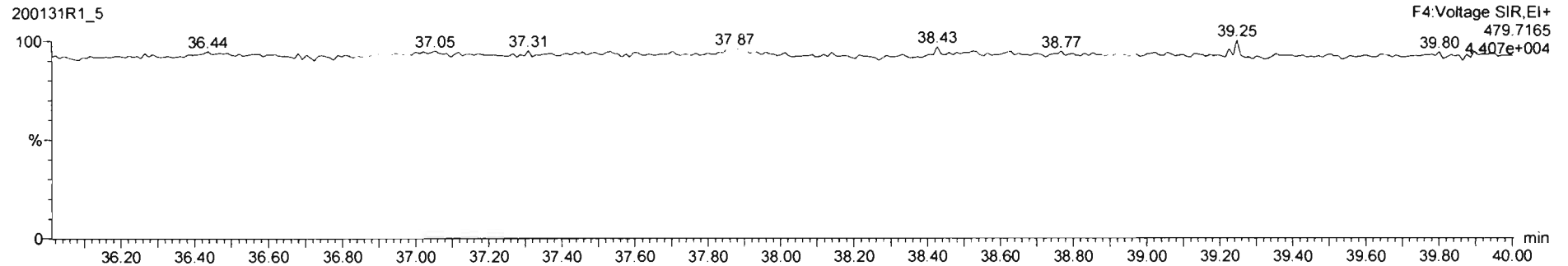
**1,2,3,4,6,7,8-HpCDF**



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



**DPE4**

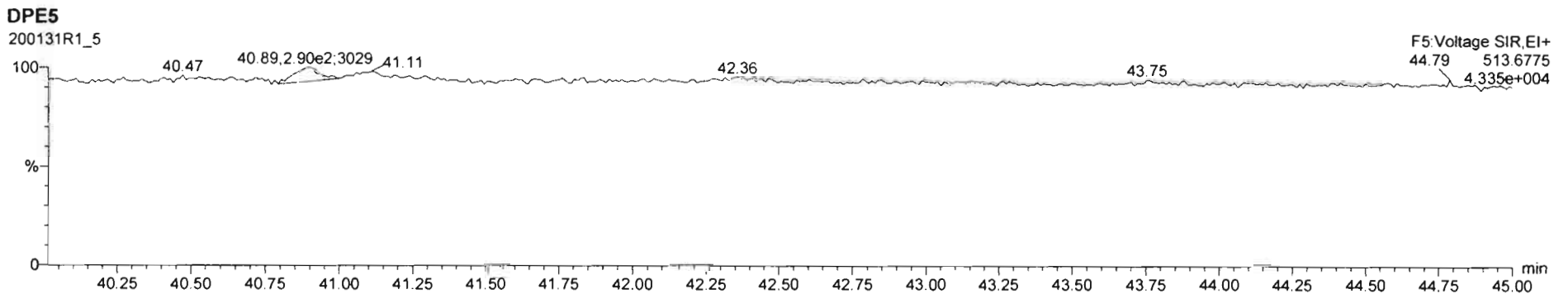
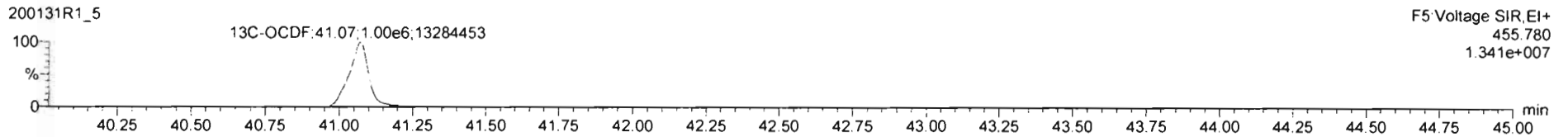
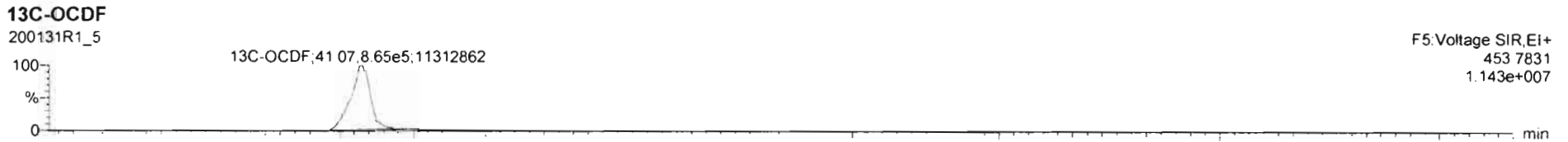
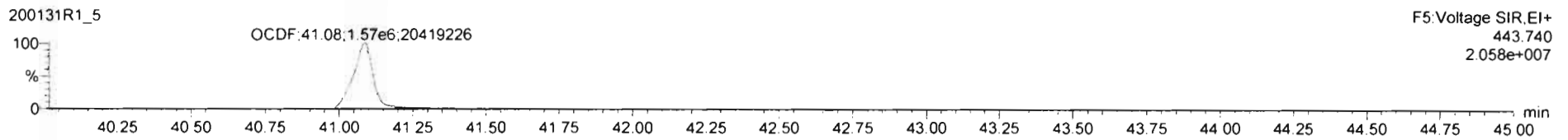
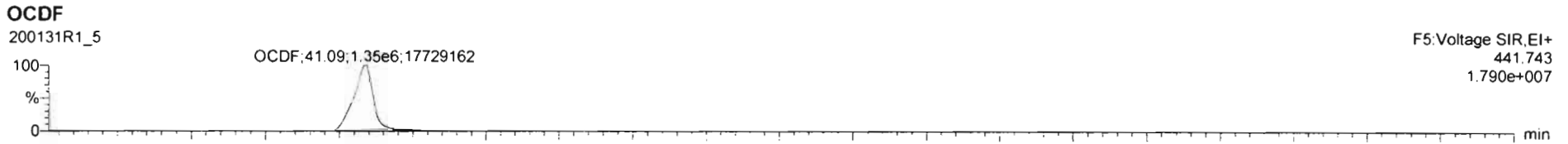


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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

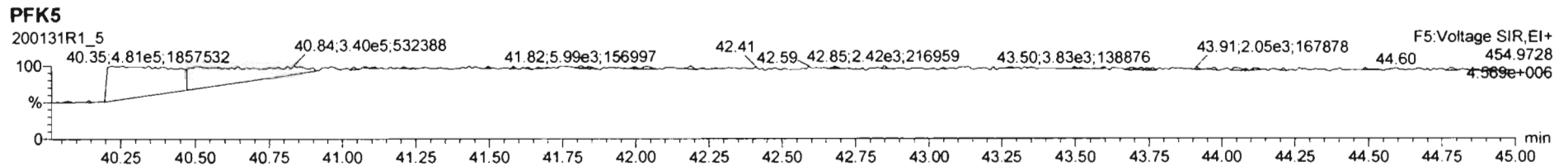
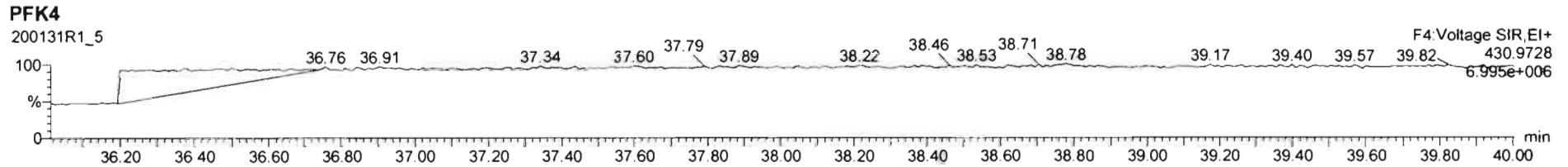
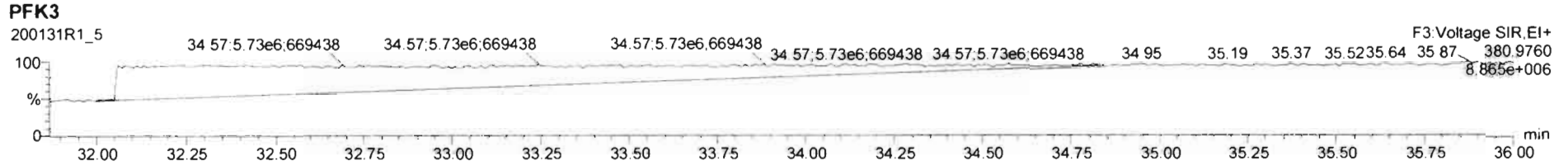
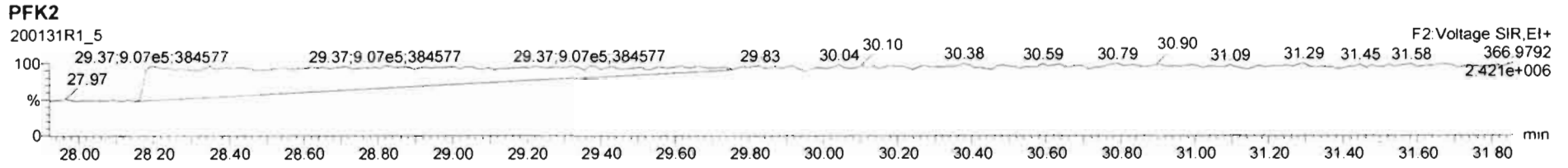
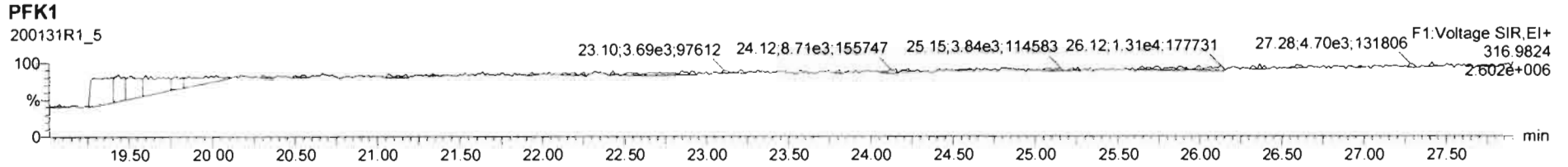
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Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_5, Date: 31-Jan-2020, Time: 19:57:17, ID: ST200131R1\_5 1613 CS4 19L2306, Description: 1613 CS4 19L2306





Dataset: Untitled

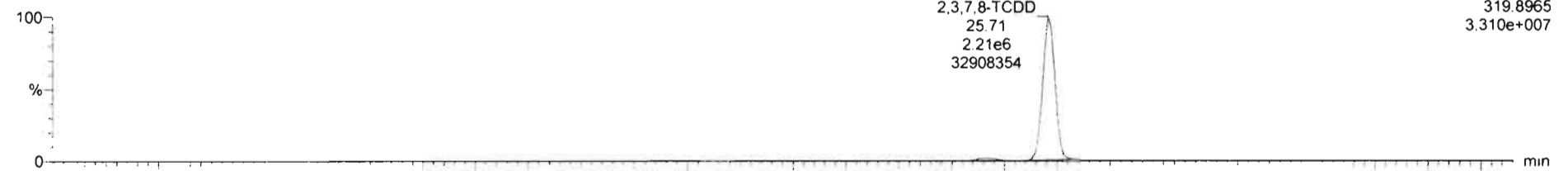
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

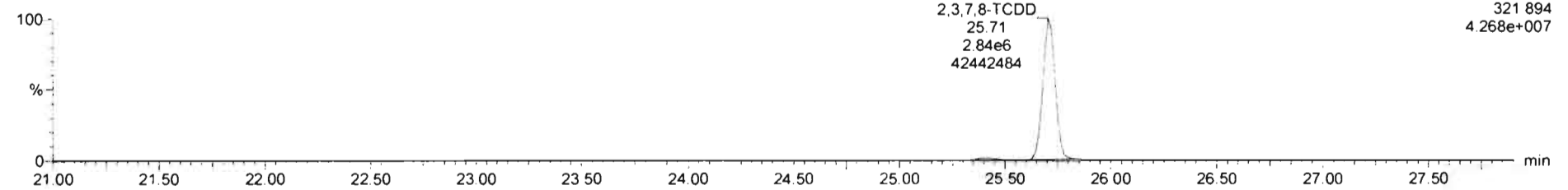
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**2,3,7,8-TCDD**

200131R1\_6

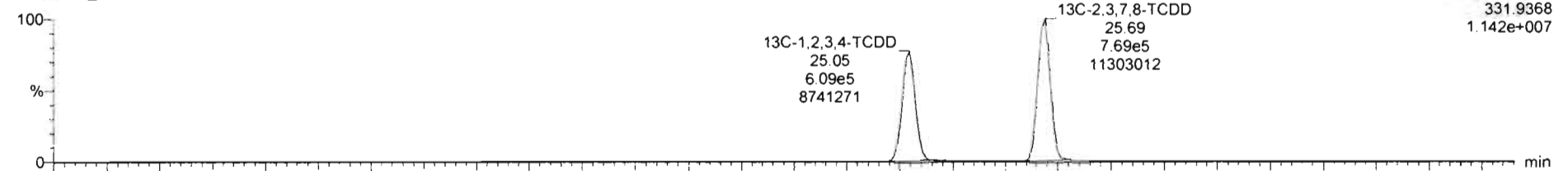


200131R1\_6

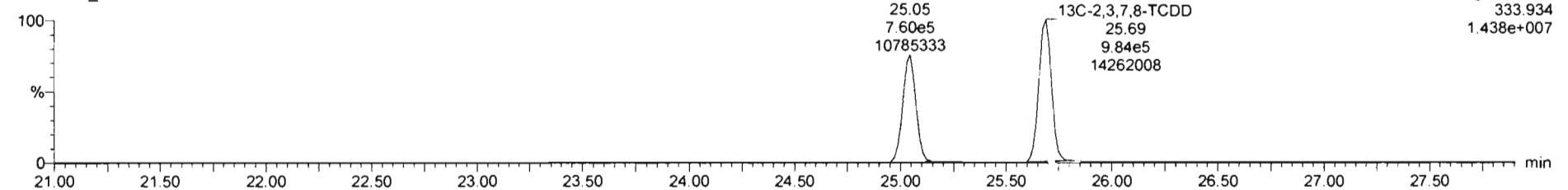


**13C-2,3,7,8-TCDD**

200131R1\_6



200131R1\_6



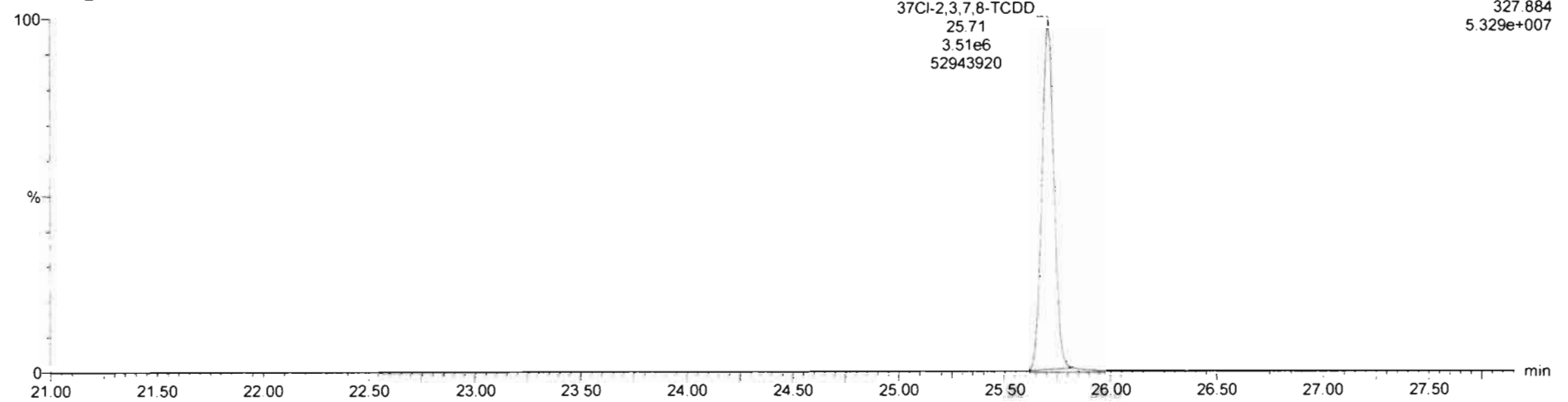
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

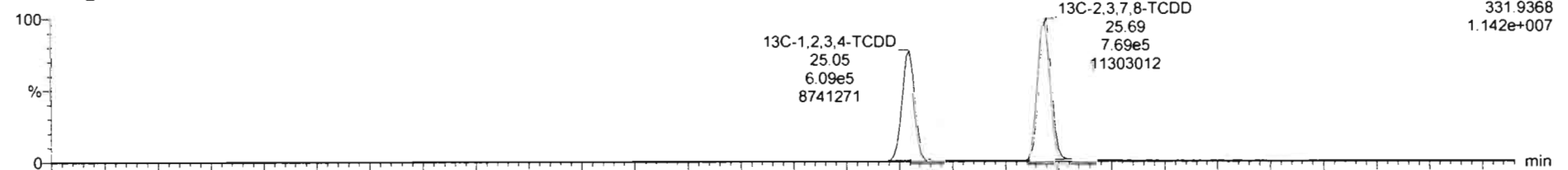
**37Cl-2,3,7,8-TCDD**

200131R1\_6

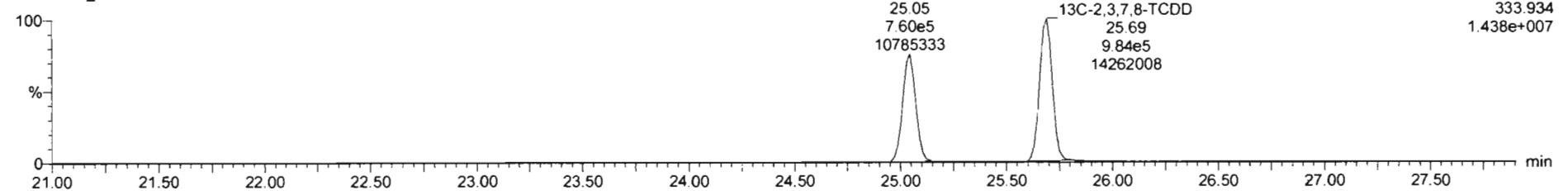


**13C-1,2,3,4-TCDD**

200131R1\_6



200131R1\_6



Dataset: Untitled

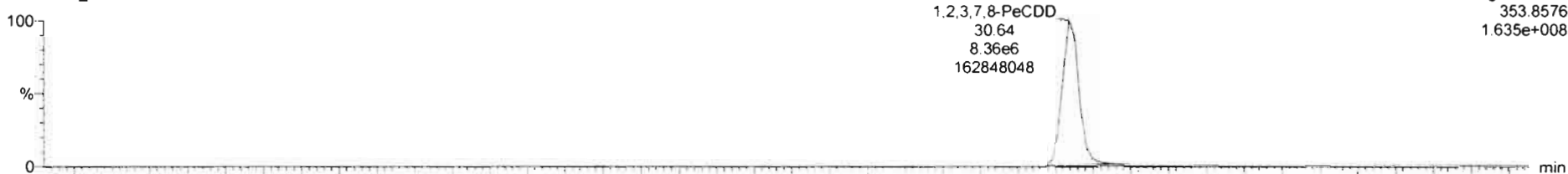
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

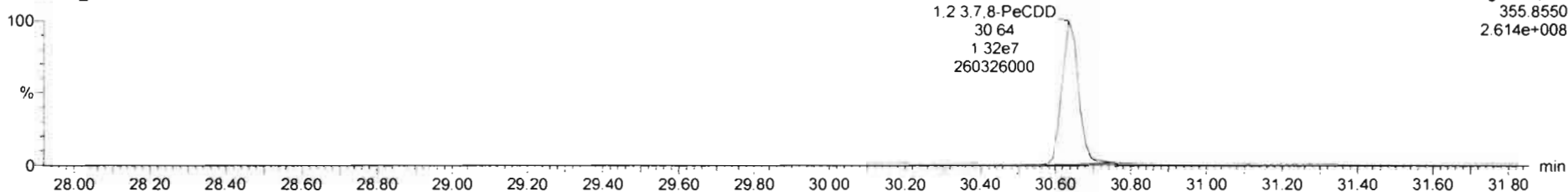
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**1,2,3,7,8-PeCDD**

200131R1\_6

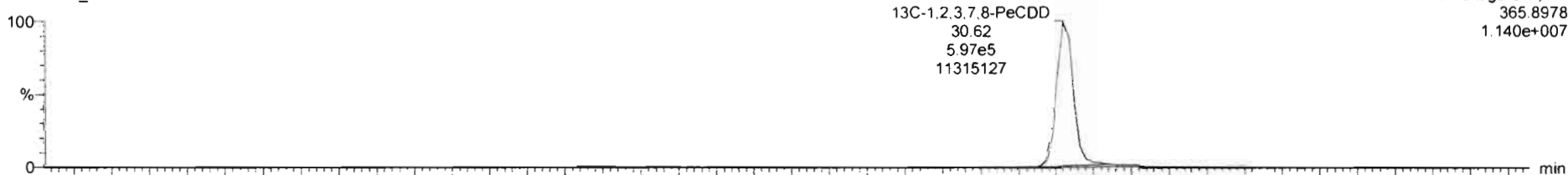


200131R1\_6

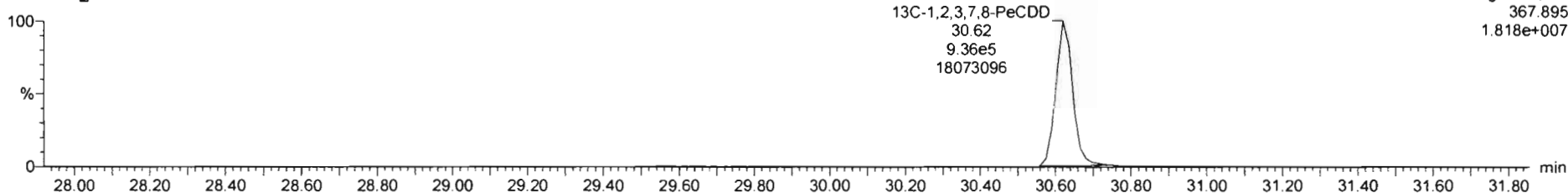


**13C-1,2,3,7,8-PeCDD**

200131R1\_6



200131R1\_6



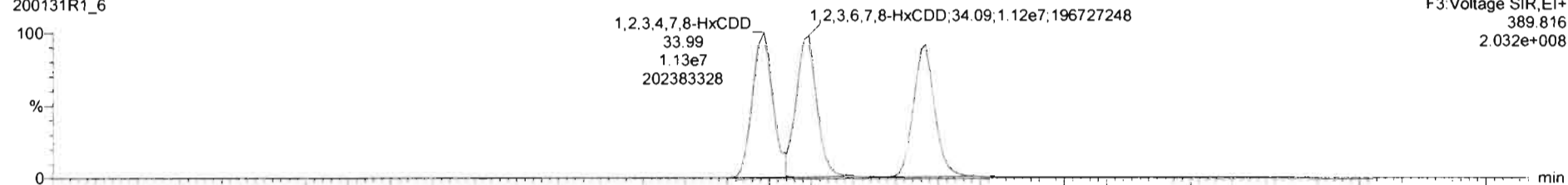
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

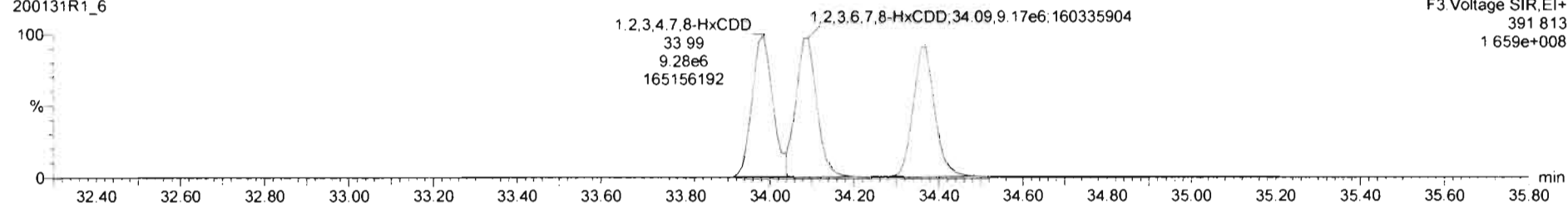
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**1,2,3,4,7,8-HxCDD**

200131R1\_6

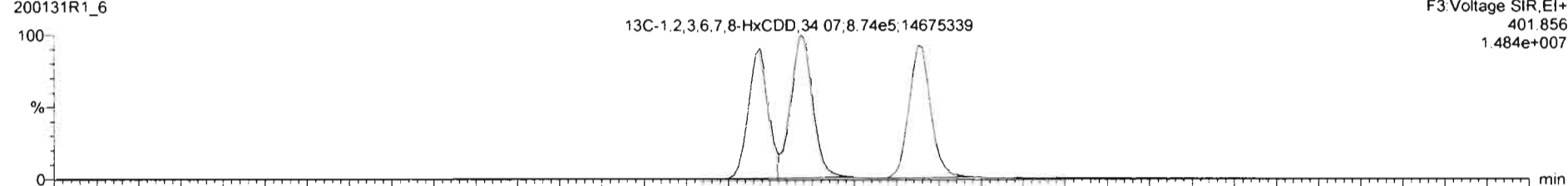


200131R1\_6

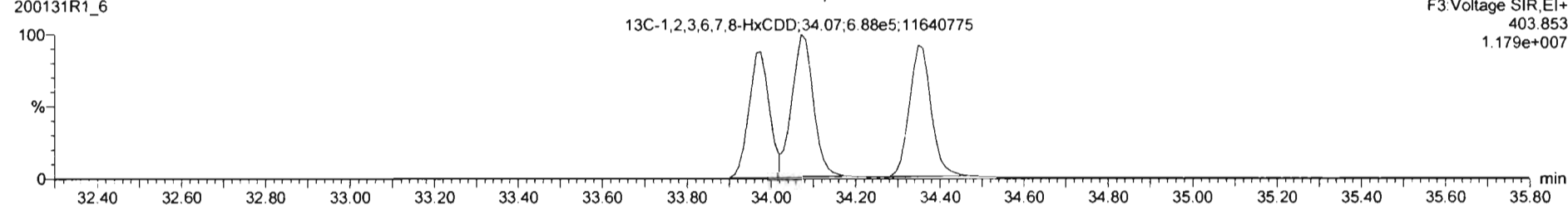


**13C-1,2,3,4,7,8-HxCDD**

200131R1\_6



200131R1\_6



Dataset: Untitled

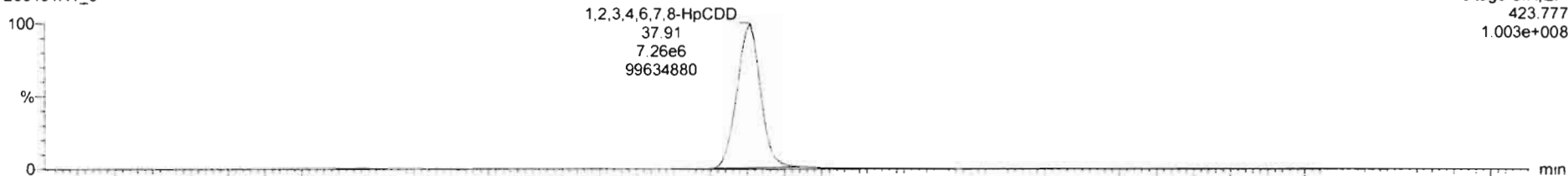
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

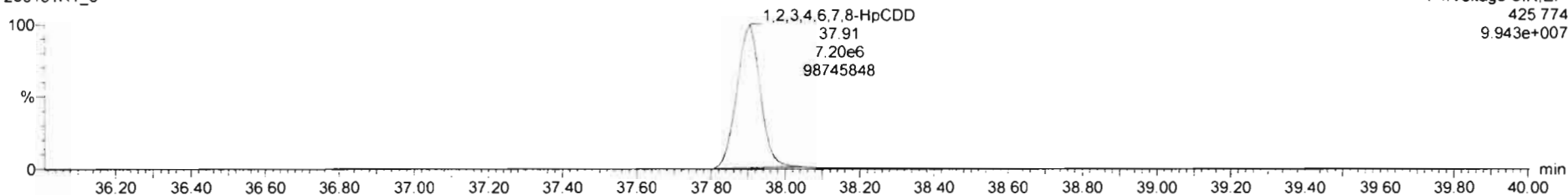
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**1,2,3,4,6,7,8-HpCDD**

200131R1\_6

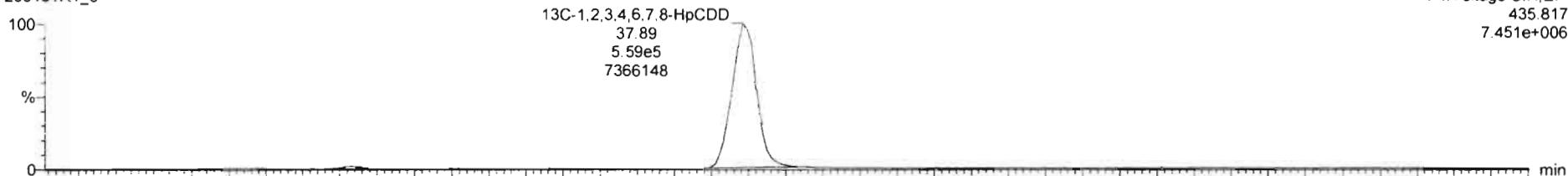


200131R1\_6

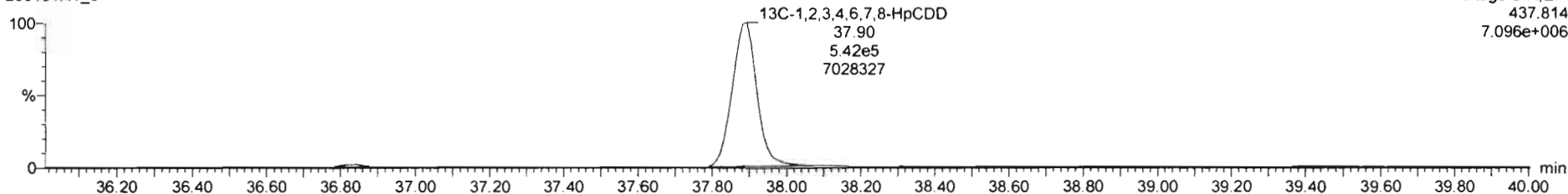


**13C-1,2,3,4,6,7,8-HpCDD**

200131R1\_6



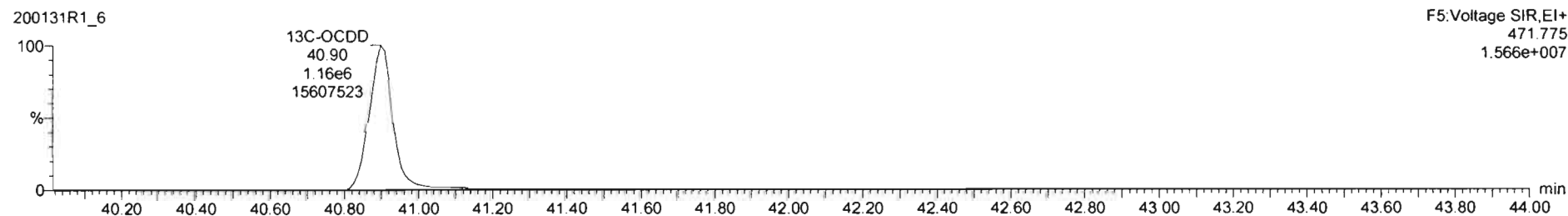
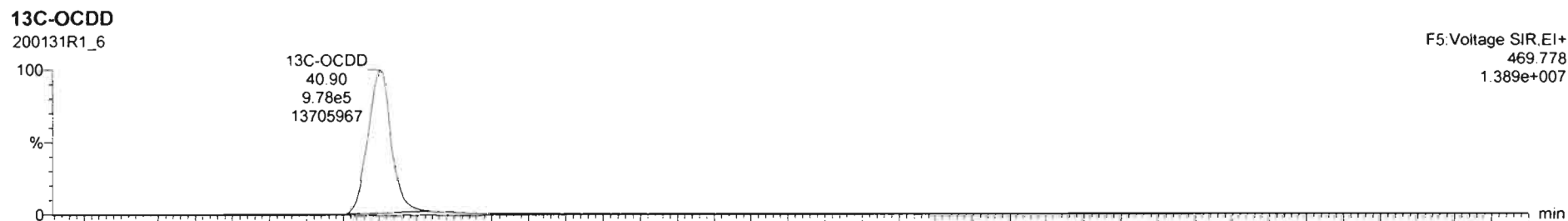
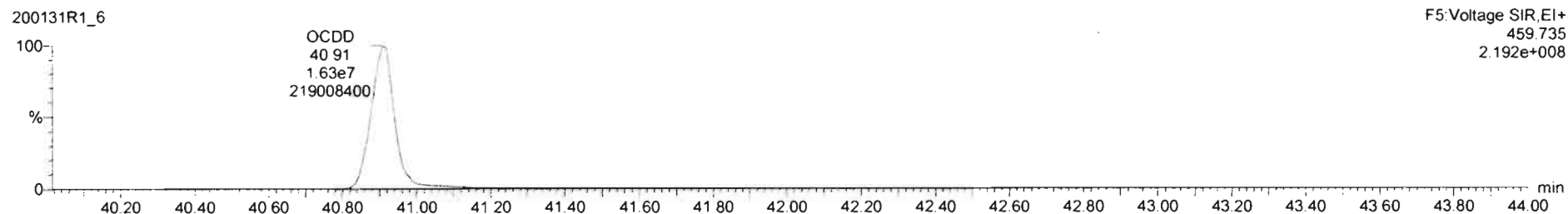
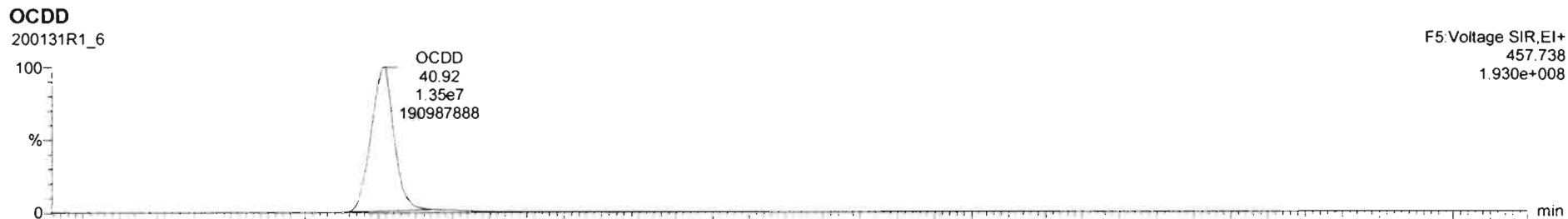
200131R1\_6



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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307





Dataset: Untitled

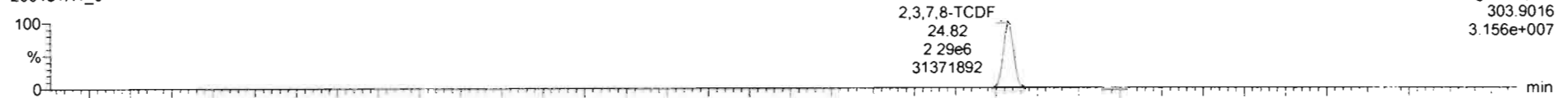
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

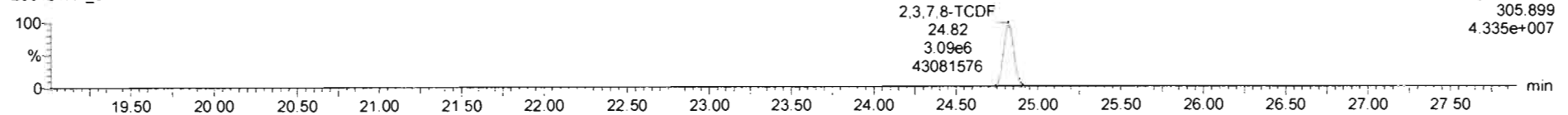
**2,3,7,8-TCDF**

200131R1\_6



F1: Voltage SIR, EI+  
303.9016  
3.156e+007

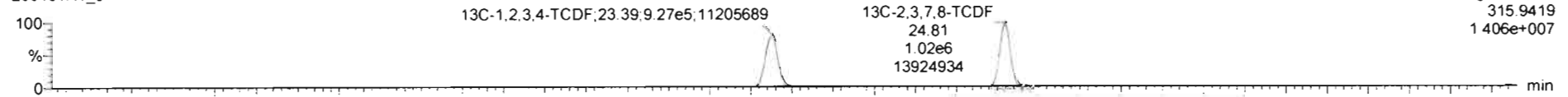
200131R1\_6



F1: Voltage SIR, EI+  
305.899  
4.335e+007

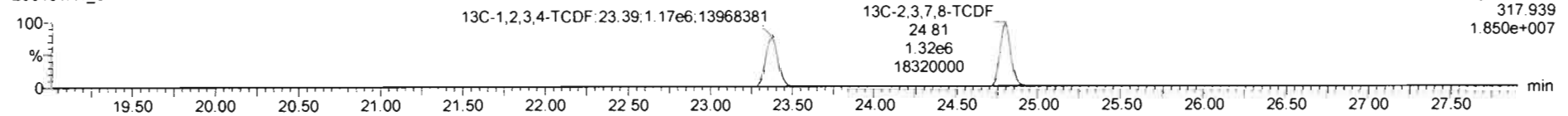
**13C-2,3,7,8-TCDF**

200131R1\_6



F1: Voltage SIR, EI+  
315.9419  
1.406e+007

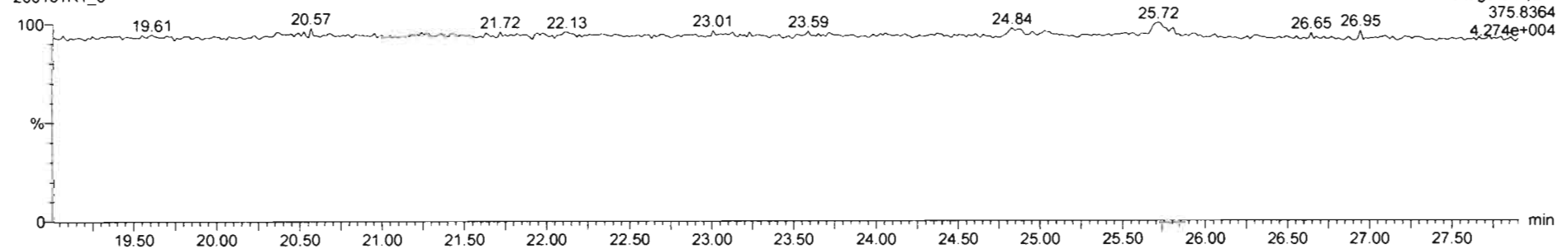
200131R1\_6



F1: Voltage SIR, EI+  
317.939  
1.850e+007

**DPE1**

200131R1\_6



F1: Voltage SIR, EI+  
375.8364  
4.274e+004

Dataset: Untitled

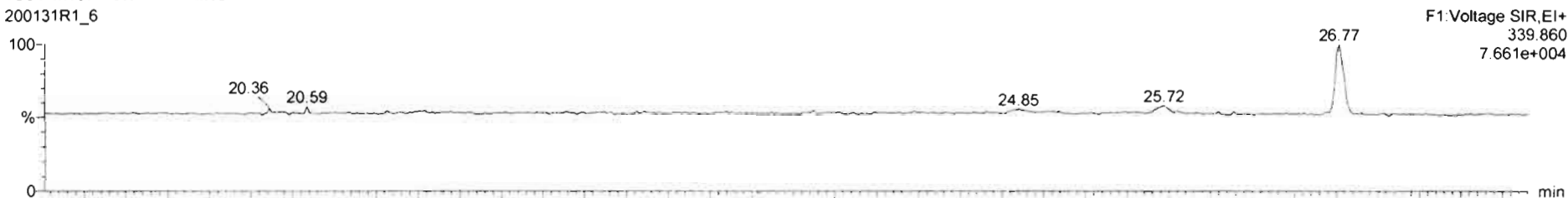
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

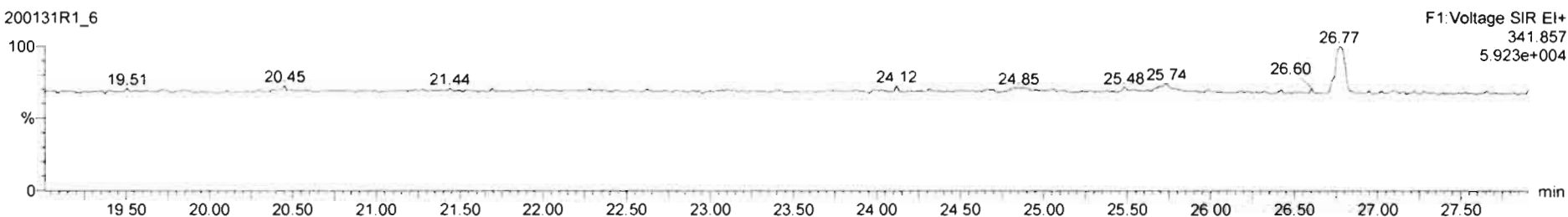
Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

1st Func. Penta-Furans

200131R1\_6

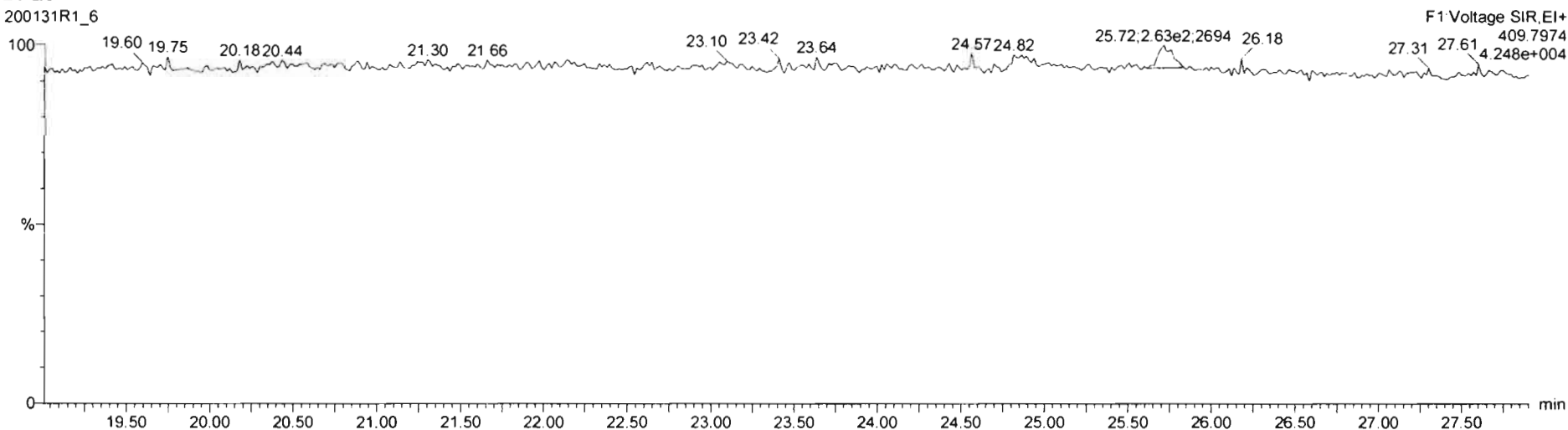


200131R1\_6



DPE6

200131R1\_6



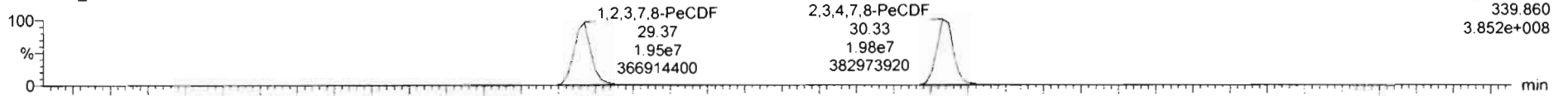
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Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

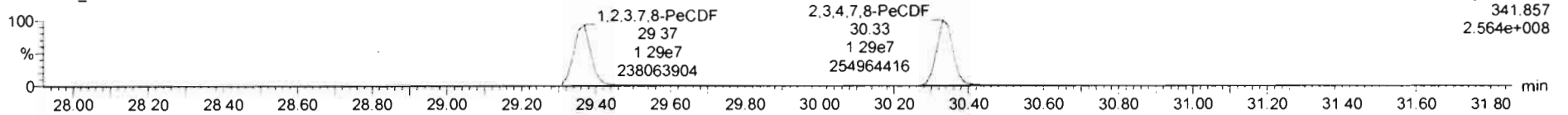
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**1,2,3,7,8-PeCDF**

200131R1\_6

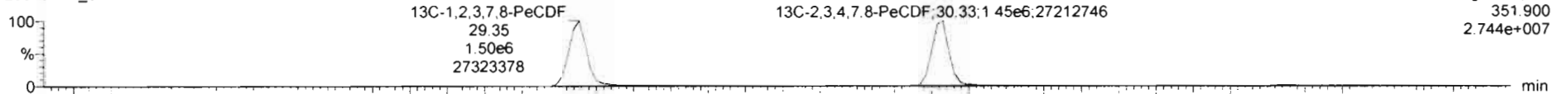


200131R1\_6

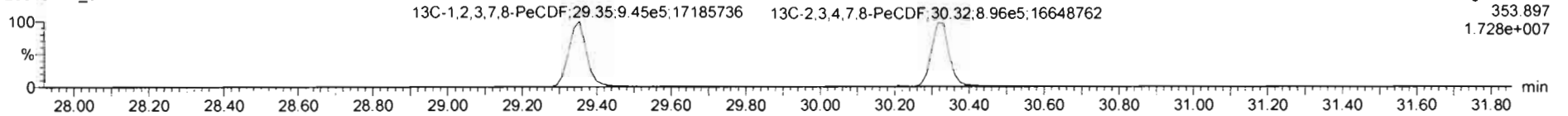


**13C-1,2,3,7,8-PeCDF**

200131R1\_6

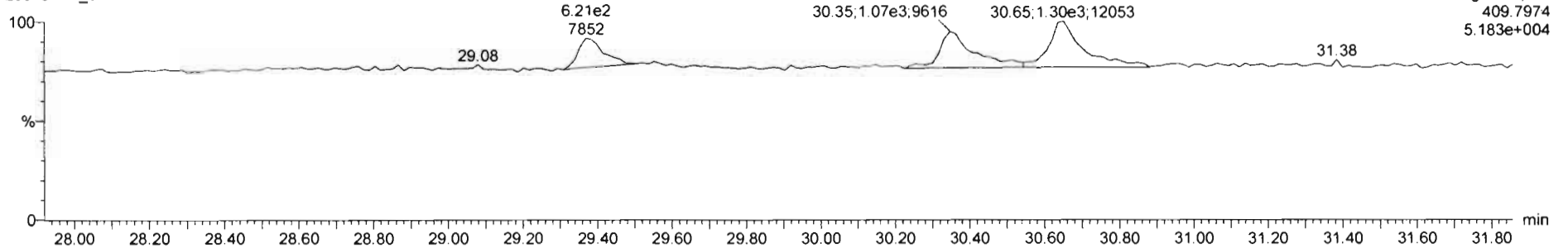


200131R1\_6



**DPE2**

200131R1\_6



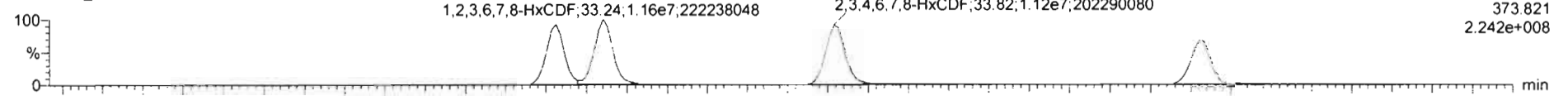
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Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

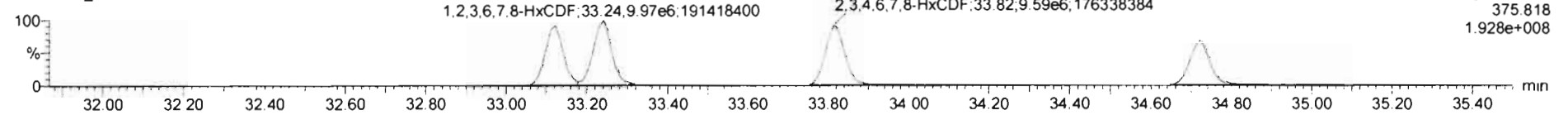
**1,2,3,4,7,8-HxCDF**

200131R1\_6



F3: Voltage SIR, EI+  
373 821  
2.242e+008

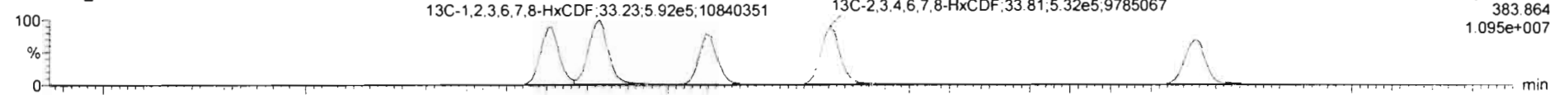
200131R1\_6



F3: Voltage SIR, EI+  
375 818  
1.928e+008

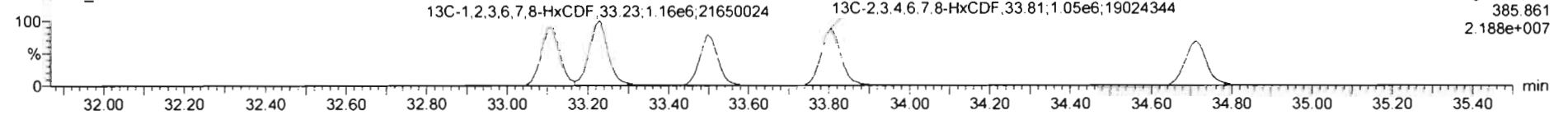
**13C-1,2,3,4,7,8-HxCDF**

200131R1\_6



F3: Voltage SIR, EI+  
383 864  
1.095e+007

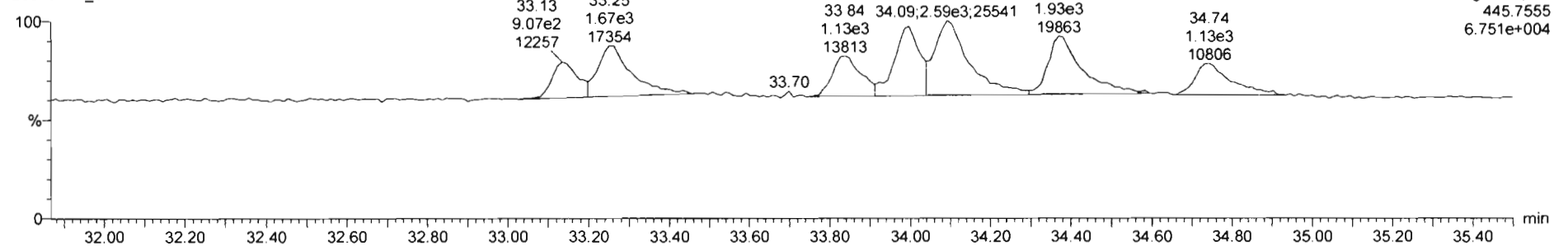
200131R1\_6



F3: Voltage SIR, EI+  
385 861  
2.188e+007

**DPE3**

200131R1\_6



F3: Voltage SIR, EI+  
445 7555  
6.751e+004

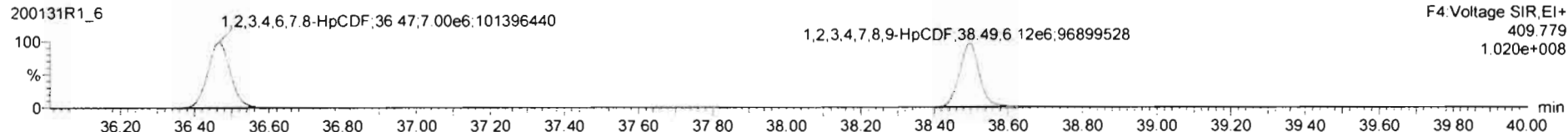
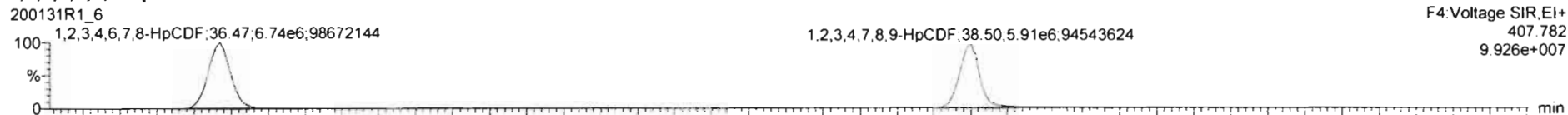
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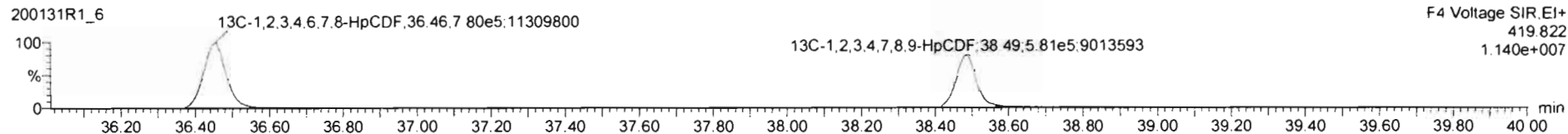
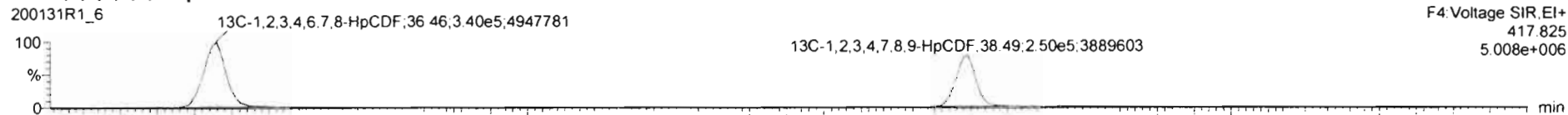
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

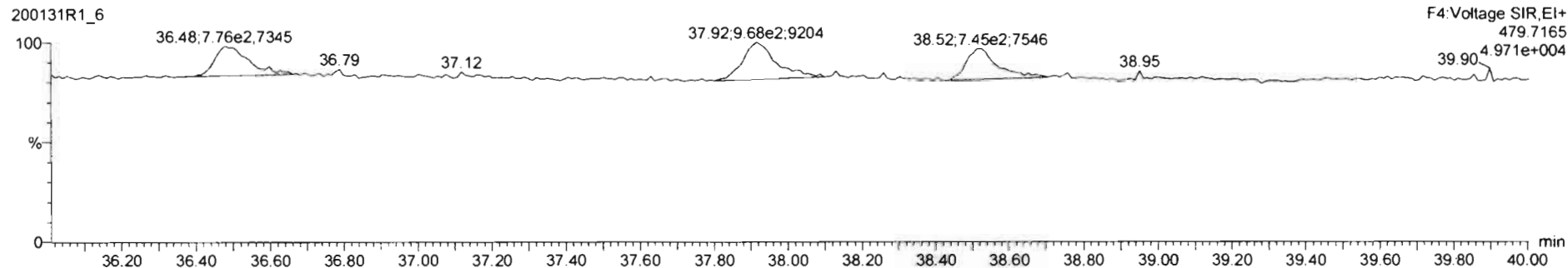
**1,2,3,4,6,7,8-HpCDF**



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



**DPE4**

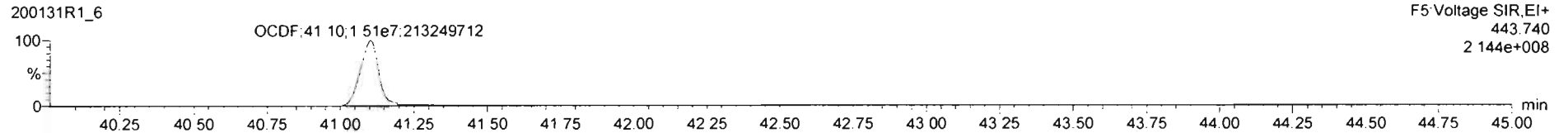
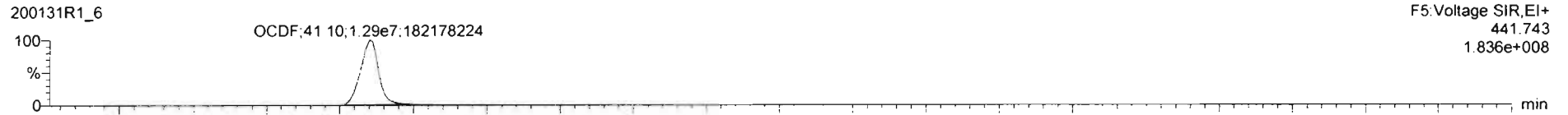


Dataset: Untitled

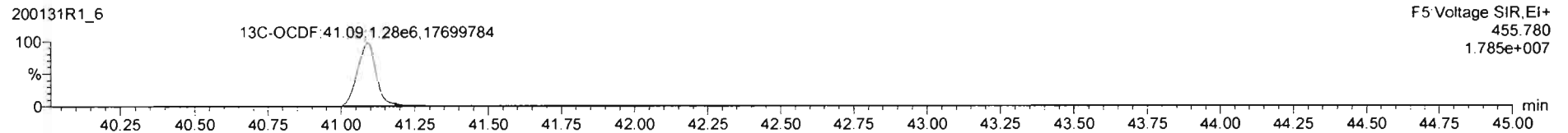
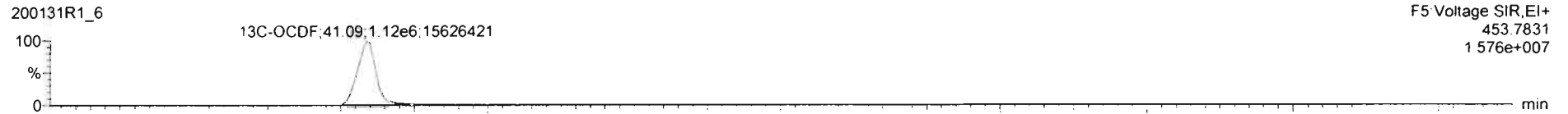
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

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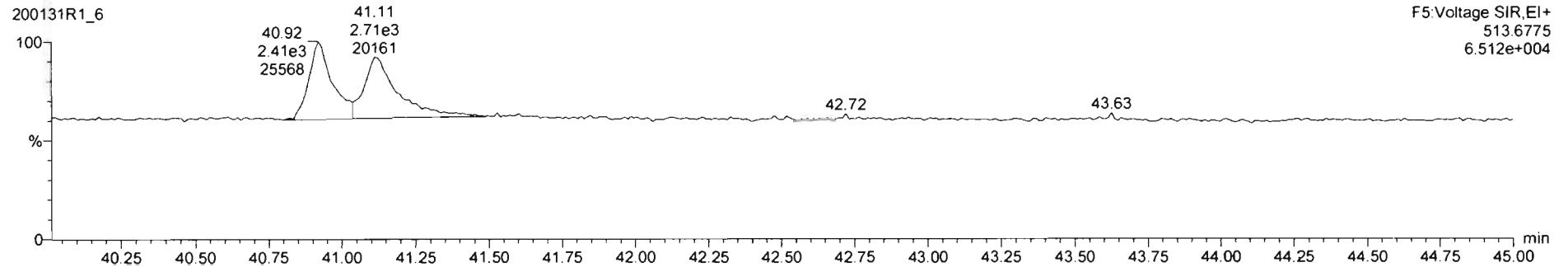
**OCDF**



**13C-OCDF**



**DPE5**



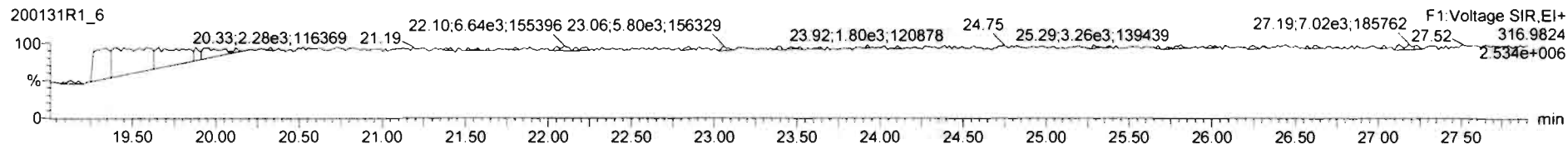


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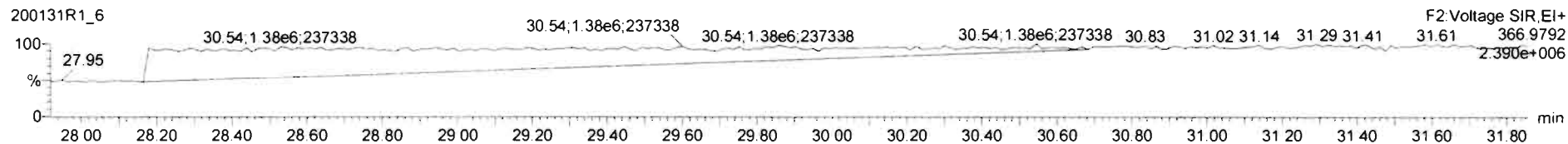
Last Altered: Sunday, February 02, 2020 11:06:20 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:06:35 AM Pacific Standard Time

Name: 200131R1\_6, Date: 31-Jan-2020, Time: 20:44:23, ID: ST200131R1\_6 1613 CS5 19L2307, Description: 1613 CS5 19L2307

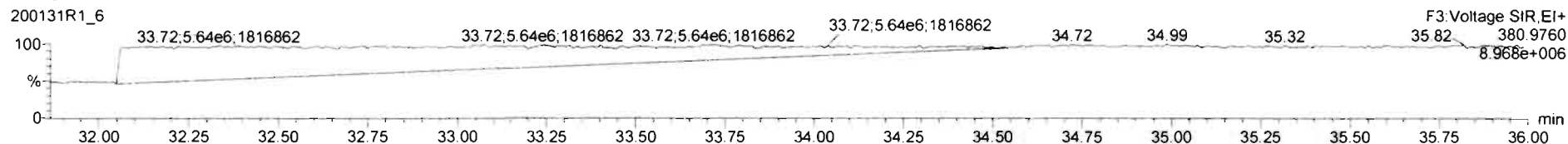
**PFK1**



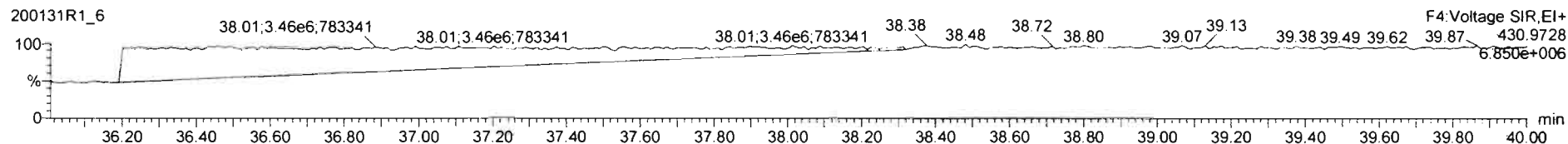
**PFK2**



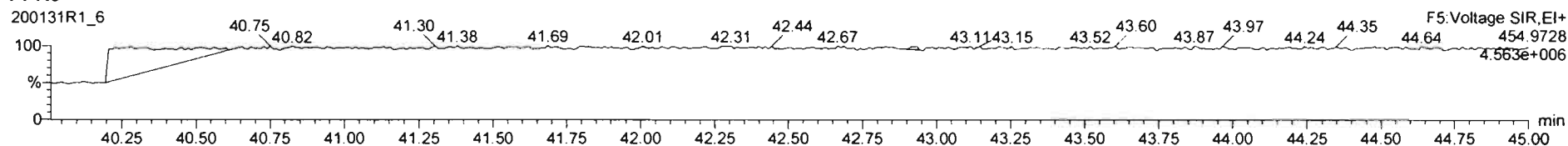
**PFK3**



**PFK4**

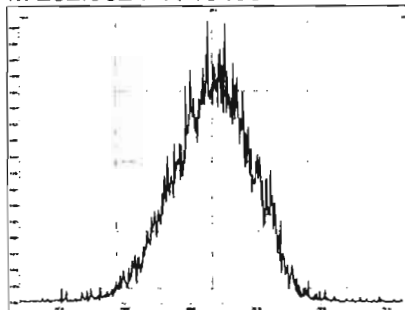


**PFK5**

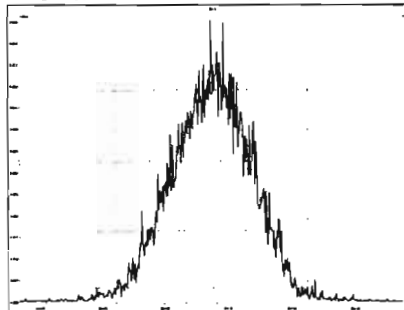


Printed: Saturday, February 01, 2020 07:51:26 Pacific Standard Time

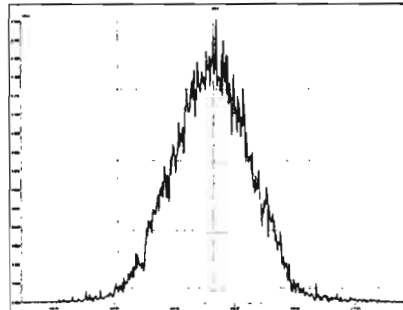
M 292.9824 R 10460



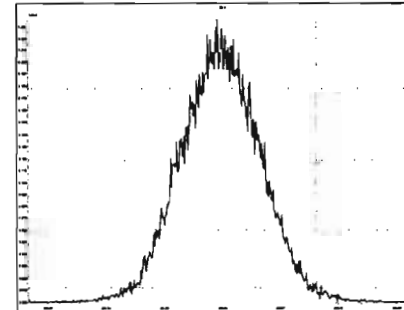
M 304.9824 R 11062



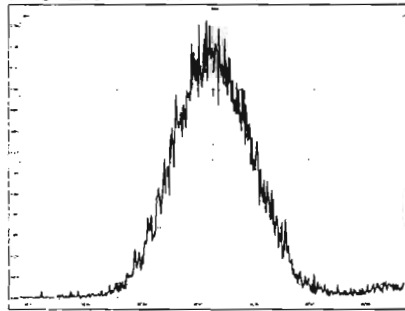
M 318.9792 R 11312



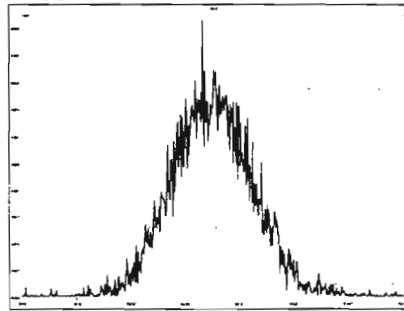
M 330.9792 R 10988



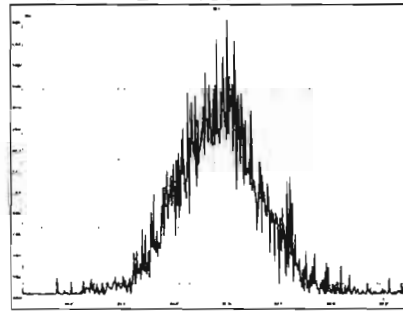
M 342.9792 R 10869



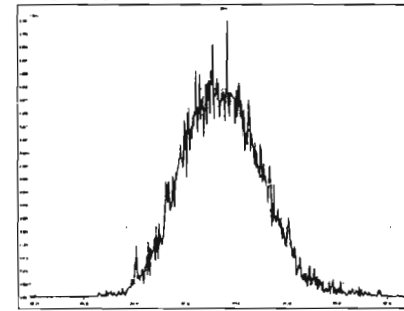
M 354.9792 R 11633



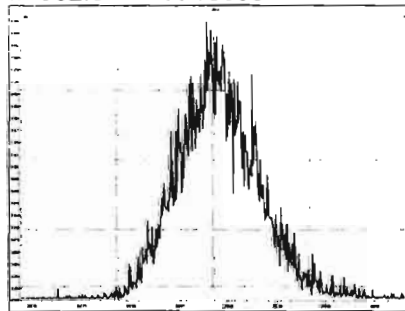
M 366.9792 R 10852



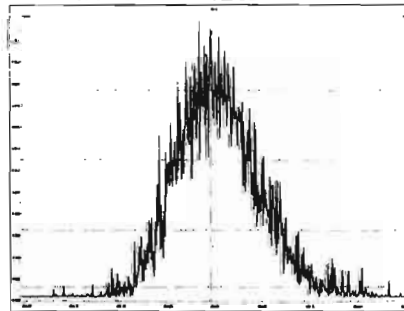
M 380.9760 R 10686



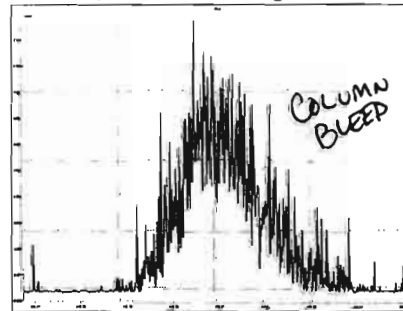
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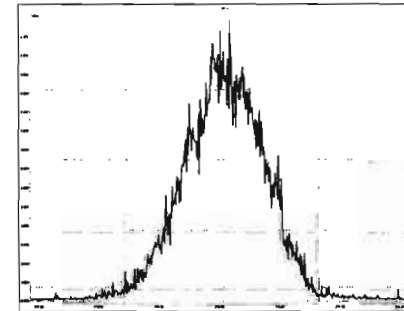
M 404.9760 R 11252



M 416.9760 R 6578 ok

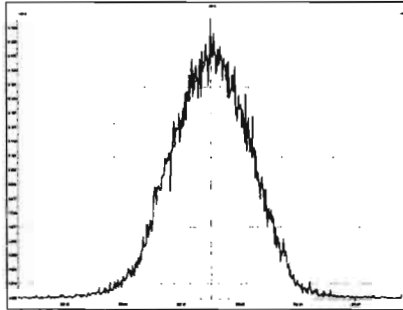


M 318.9792 R 10639

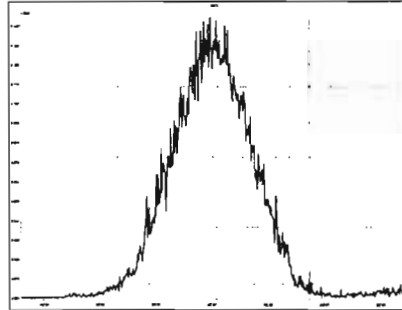


Printed: Saturday, February 01, 2020 07:51:26 Pacific Standard Time

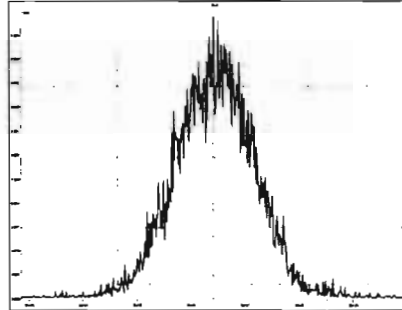
M 330.9792 R 11210



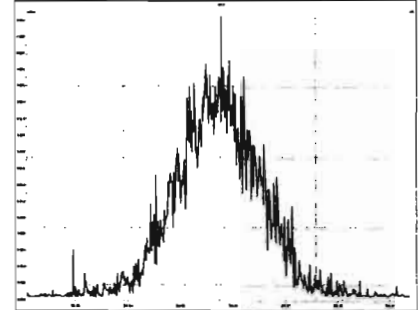
M 342.9792 R 10967



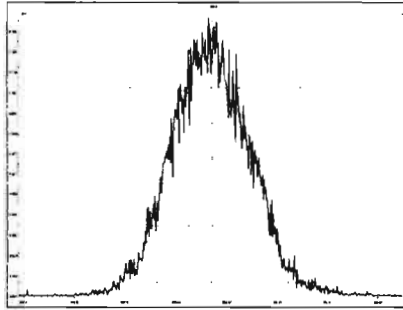
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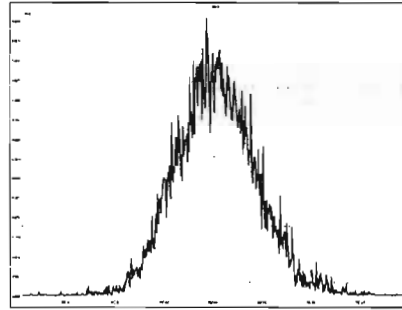
M 366.9792 R 11237



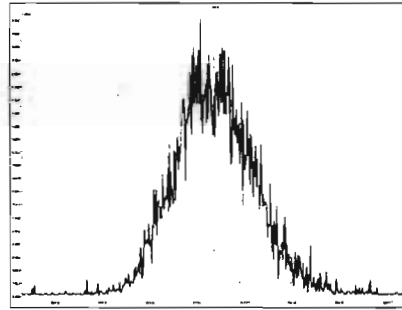
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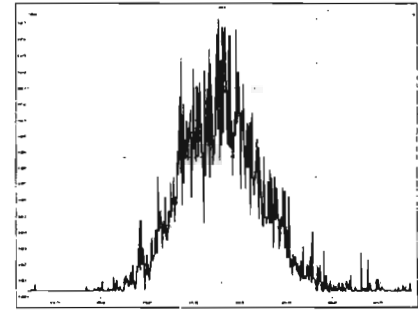
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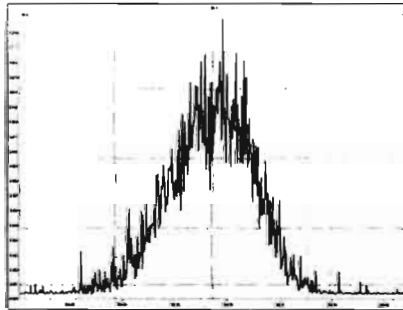
M 404.9760 R 10615



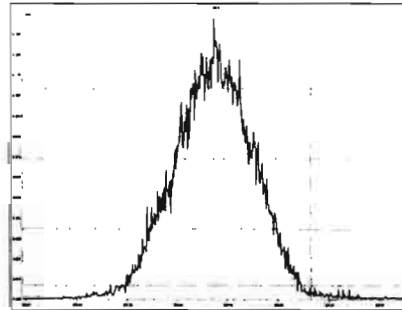
M 416.9760 R 11390



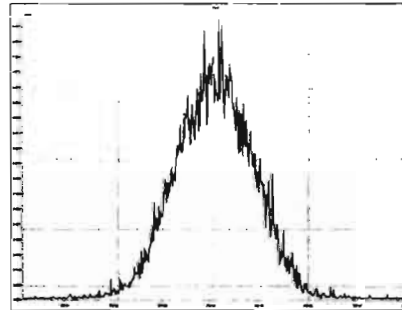
M 366.9792 R 10424



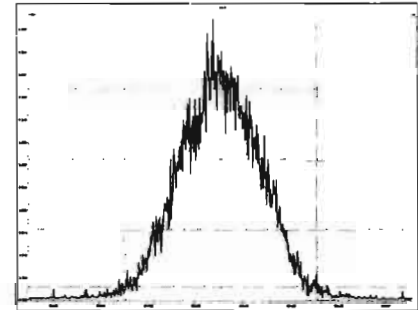
M 380.9760 R 11086



M 392.9760 R 10930

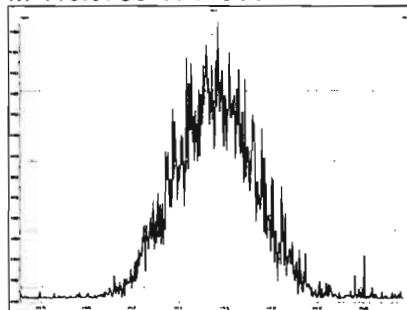


M 404.9760 R 11521

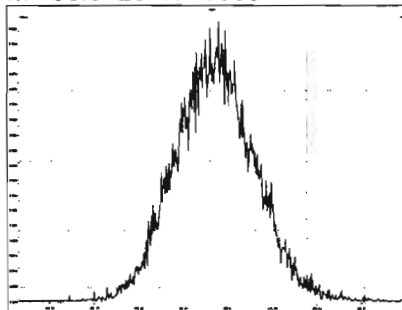


Printed: Saturday, February 01, 2020 07:51:26 Pacific Standard Time

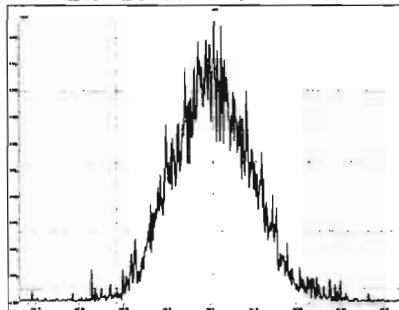
M 416.9760 R 11014



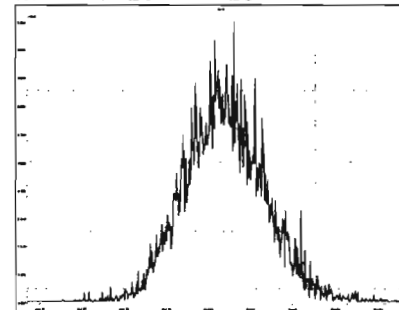
M 430.9728 R 10686



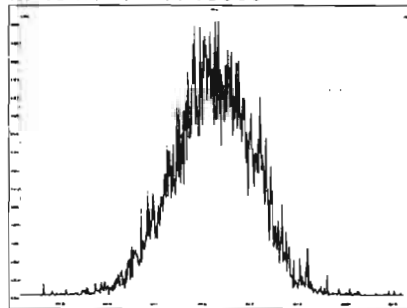
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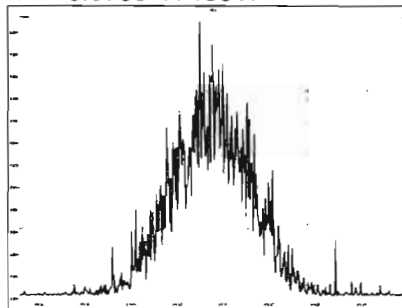
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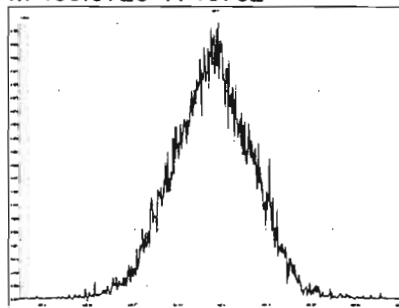
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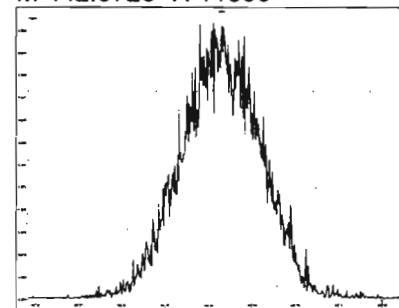
M 416.9760 R 10817



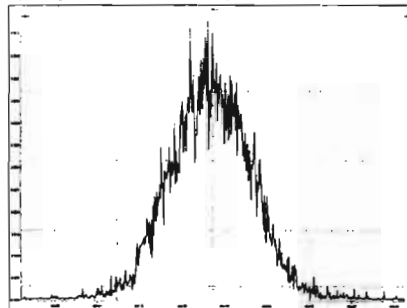
M 430.9728 R 10732



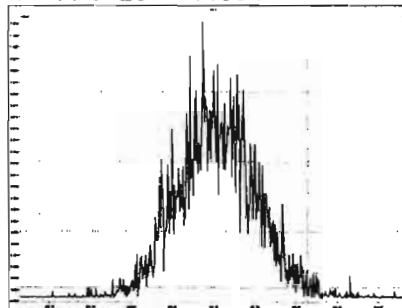
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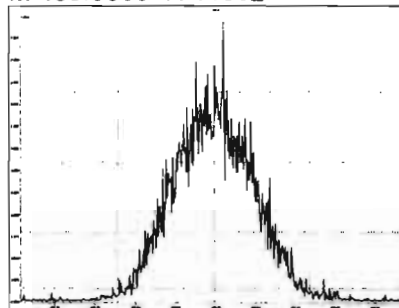
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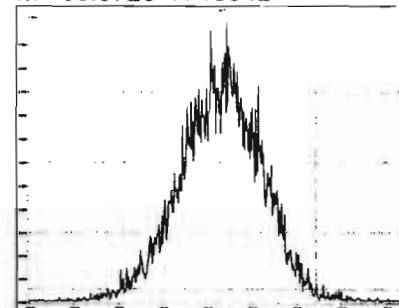
M 466.9728 R 11854



M 480.9696 R 11062

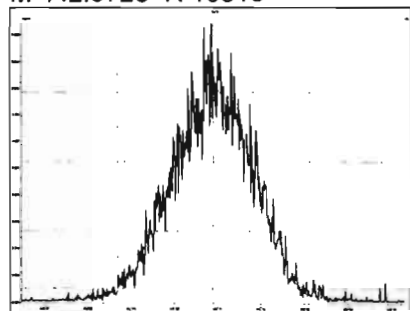


M 430.9728 R 10642

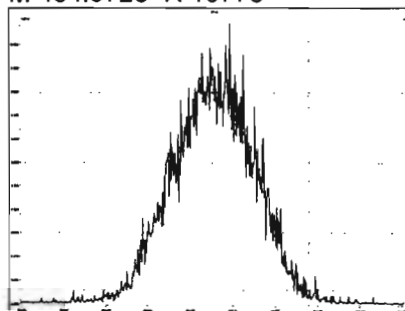


Printed: Saturday, February 01, 2020 07:51:26 Pacific Standard Time

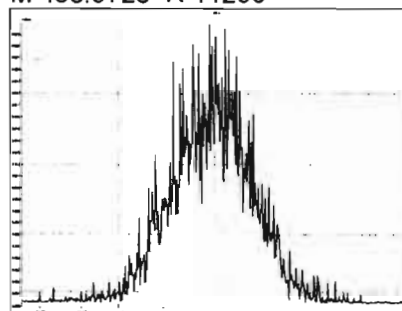
M 442.9728 R 10615



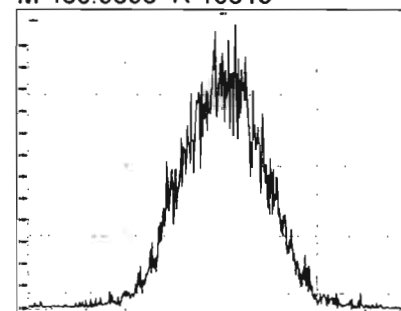
M 454.9728 R 10778



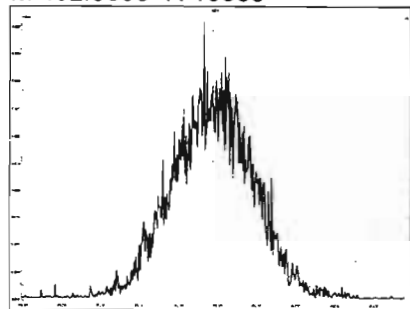
M 466.9728 R 11290



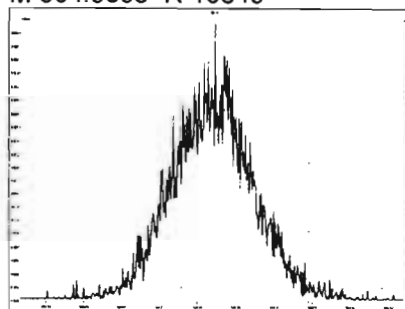
M 480.9696 R 10615



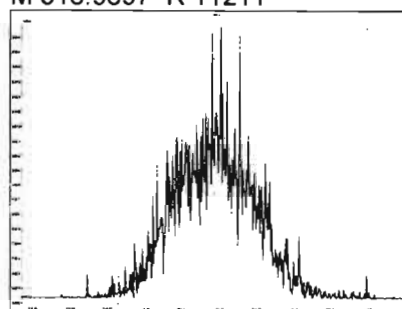
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M 504.9696 R 10849



M 516.9697 R 11211



Dataset: U:\VG12.PRO\Results\200131R1\200131R1-8.qld

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:24:45 AM Pacific Standard Time

*GPB 02/02/2020*

*C7 02/04/2020*

Method: U:\VG12.PRO\MethDB\1613rrt-1-28-20.mdb 28 Jan 2020 16:09:23  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, 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	1.56e5	0.77	NO	0.988	1.000	25.691	25.69	1.001	1.001	10.621	106	0.0312	10.6
2	2 1,2,3,7,8-PeCDD	6.38e5	0.61	NO	0.972	1.000	30.627	30.62	1.001	1.001	53.028	106	0.0615	53.0
3	3 1,2,3,4,7,8-HxCDD	5.69e5	1.22	NO	1.07	1.000	33.966	33.97	1.000	1.000	53.501	107	0.0848	53.5
4	4 1,2,3,6,7,8-HxCDD	6.05e5	1.23	NO	0.921	1.000	34.062	34.07	1.000	1.000	57.295	115	0.0864	57.3
5	5 1,2,3,7,8,9-HxCDD	5.57e5	1.21	NO	0.918	1.000	34.373	34.35	1.001	1.000	55.837	112	0.0961	55.8
6	6 1,2,3,4,6,7,8-HpCDD	4.04e5	1.06	NO	0.923	1.000	37.886	37.90	1.000	1.001	54.330	109	0.220	54.3
7	7 OCDD	7.74e5	0.92	NO	0.975	1.000	40.878	40.89	1.000	1.000	108.30	108	0.139	108
8	8 2,3,7,8-TCDF	1.73e5	0.74	NO	0.802	1.000	24.802	24.79	1.001	1.001	10.751	108	0.0280	10.8
9	9 1,2,3,7,8-PeCDF	9.70e5	1.53	NO	0.907	1.000	29.345	29.34	1.001	1.001	54.081	108	0.0886	54.1
10	10 2,3,4,7,8-PeCDF	1.11e6	1.53	NO	0.952	1.000	30.331	30.32	1.001	1.001	60.939	122	0.0845	60.9
11	11 1,2,3,4,7,8-HxCDF	5.97e5	1.15	NO	0.862	1.000	33.093	33.10	1.000	1.000	56.486	113	0.117	56.5
12	12 1,2,3,6,7,8-HxCDF	6.65e5	1.16	NO	0.841	1.000	33.220	33.22	1.000	1.000	55.919	112	0.104	55.9
13	13 2,3,4,6,7,8-HxCDF	5.96e5	1.17	NO	0.898	1.000	33.819	33.81	1.001	1.001	53.809	108	0.119	53.8
14	14 1,2,3,7,8,9-HxCDF	4.82e5	1.16	NO	0.858	1.000	34.690	34.71	1.000	1.001	54.259	109	0.175	54.3
15	15 1,2,3,4,6,7,8-HpCDF	4.07e5	0.95	NO	0.851	1.000	36.473	36.45	1.001	1.000	56.639	113	0.174	56.6
16	16 1,2,3,4,7,8,9-HpCDF	3.25e5	0.98	NO	0.980	1.000	38.471	38.48	1.000	1.000	55.517	111	0.189	55.5
17	17 OCDF	7.18e5	0.86	NO	0.806	1.000	41.070	41.08	1.000	1.000	105.51	106	0.148	106
18	18 13C-2,3,7,8-TCDD	1.49e6	0.78	NO	1.20	1.000	25.660	25.66	1.026	1.026	92.060	92.1	0.106	
19	19 13C-1,2,3,7,8-PeCDD	1.24e6	0.64	NO	0.967	1.000	30.395	30.61	1.215	1.223	95.149	95.1	0.134	
20	20 13C-1,2,3,4,7,8-HxCDD	9.93e5	1.27	NO	0.874	1.000	33.955	33.96	1.014	1.014	87.678	87.7	0.159	
21	21 13C-1,2,3,6,7,8-HxCDD	1.15e6	1.25	NO	1.05	1.000	34.056	34.06	1.017	1.017	84.618	84.6	0.133	
22	22 13C-1,2,3,7,8,9-HxCDD	1.09e6	1.25	NO	0.974	1.000	34.357	34.34	1.026	1.025	86.118	86.1	0.143	
23	23 13C-1,2,3,4,6,7,8-HpCDD	8.06e5	1.06	NO	0.747	1.000	37.907	37.87	1.132	1.131	83.254	83.3	0.245	
24	24 13C-OCDD	1.47e6	0.89	NO	0.707	1.000	40.787	40.88	1.218	1.221	160.15	80.1	0.173	
25	25 13C-2,3,7,8-TCDF	2.01e6	0.78	NO	1.07	1.000	24.842	24.78	0.993	0.990	91.210	91.2	0.143	
26	26 13C-1,2,3,7,8-PeCDF	1.98e6	1.58	NO	1.00	1.000	29.170	29.32	1.166	1.172	95.322	95.3	0.190	
27	27 13C-2,3,4,7,8-PeCDF	1.91e6	1.60	NO	0.962	1.000	30.120	30.30	1.204	1.211	96.164	96.2	0.198	
28	28 13C-1,2,3,4,7,8-HxCDF	1.23e6	0.52	NO	1.05	1.000	33.085	33.09	0.988	0.988	90.119	90.1	0.194	
29	29 13C-1,2,3,6,7,8-HxCDF	1.41e6	0.50	NO	1.19	1.000	33.185	33.21	0.991	0.992	91.687	91.7	0.171	
30	30 13C-2,3,4,6,7,8-HxCDF	1.23e6	0.51	NO	1.07	1.000	33.791	33.78	1.009	1.009	89.274	89.3	0.190	
31	31 13C-1,2,3,7,8,9-HxCDF	1.04e6	0.51	NO	0.922	1.000	34.692	34.69	1.036	1.036	86.700	86.7	0.220	



Dataset: U:\VG12.PRO\Results\200131R1\200131R1-8.qld

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:24:45 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

#	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	8.43e5	0.43	NO	0.767	1.000	36.433	36.44	1.088	1.088	84.846	84.8	0.232	
33	13C-1,2,3,4,7,8,9-HpCDF	5.98e5	0.43	NO	0.552	1.000	38.443	38.47	1.148	1.149	83.515	83.5	0.322	
34	13C-OCDF	1.69e6	0.90	NO	0.789	1.000	41.021	41.07	1.225	1.226	165.15	82.6	0.137	
35	37Cl-2,3,7,8-TCDD	1.57e5			1.18	1.000	25.692	25.69	1.027	1.027	9.9110	99.1	0.0232	
36	13C-1,2,3,4-TCDD	1.35e6	0.81	NO	1.00	1.000	25.080	25.02	1.000	1.000	100.00	100	0.128	
37	13C-1,2,3,4-TCDF	2.07e6	0.79	NO	1.00	1.000	23.420	23.36	1.000	1.000	100.00	100	0.152	
38	13C-1,2,3,4,6,9-HxCDF	1.30e6	0.51	NO	1.00	1.000	33.520	33.49	1.000	1.000	100.00	100	0.203	

Dataset: Untitled

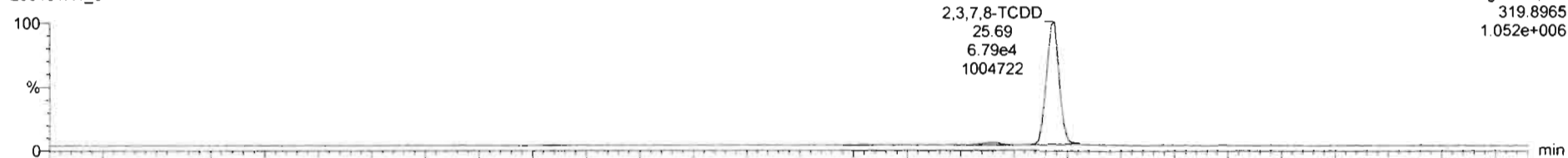
Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-1-28-20.mdb 28 Jan 2020 16:09:23  
Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-1-31-20.cdb 02 Feb 2020 11:05:29

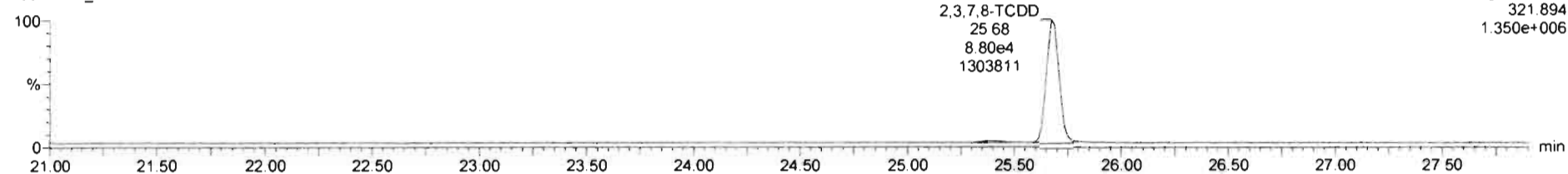
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200131R1\_8

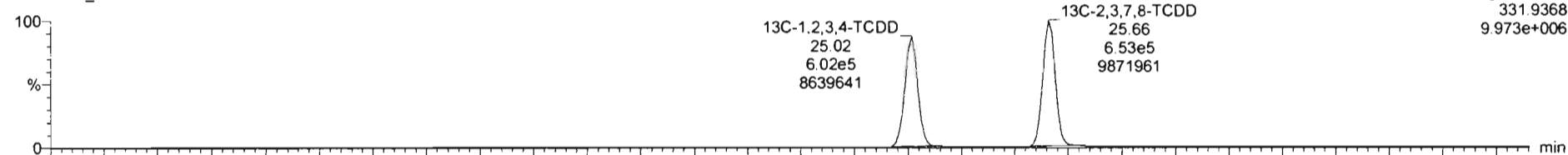


200131R1\_8

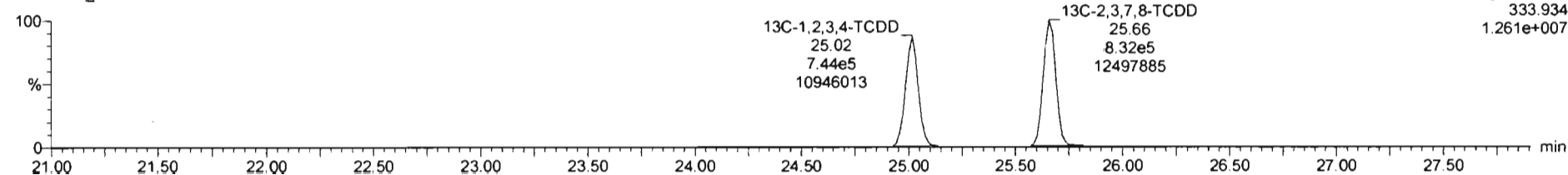


**13C-2,3,7,8-TCDD**

200131R1\_8



200131R1\_8



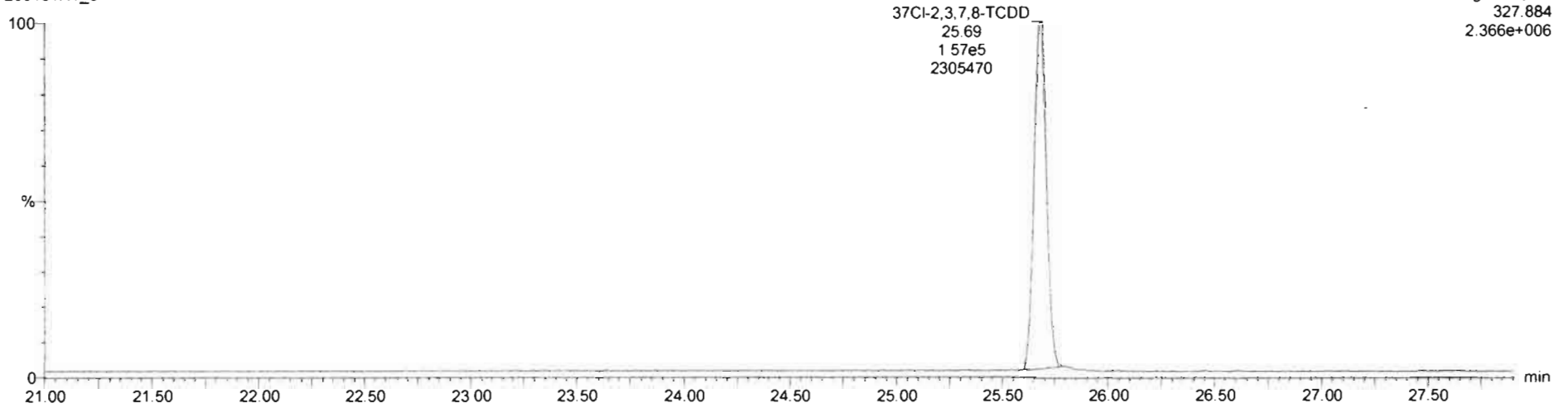
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

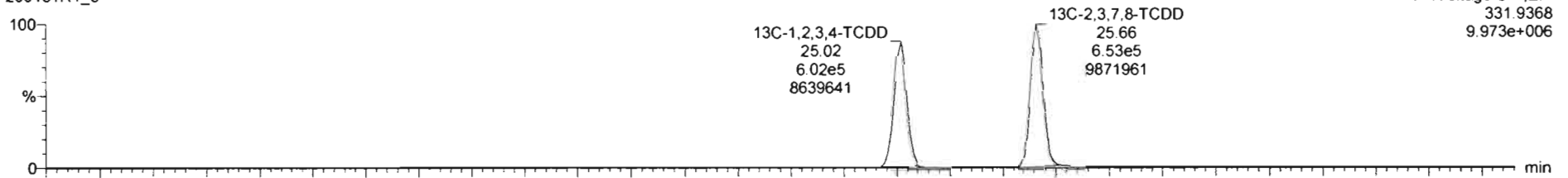
**37Cl-2,3,7,8-TCDD**

200131R1\_8

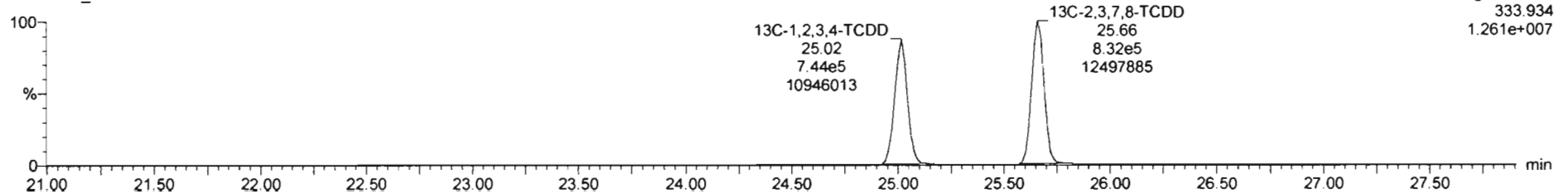


**13C-1,2,3,4-TCDD**

200131R1\_8



200131R1\_8



Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

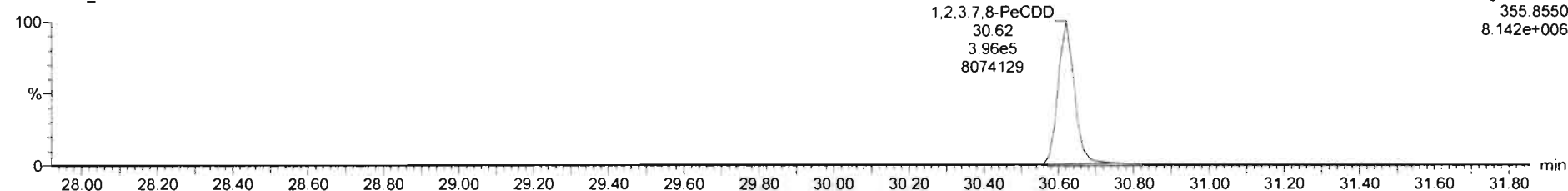
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200131R1\_8

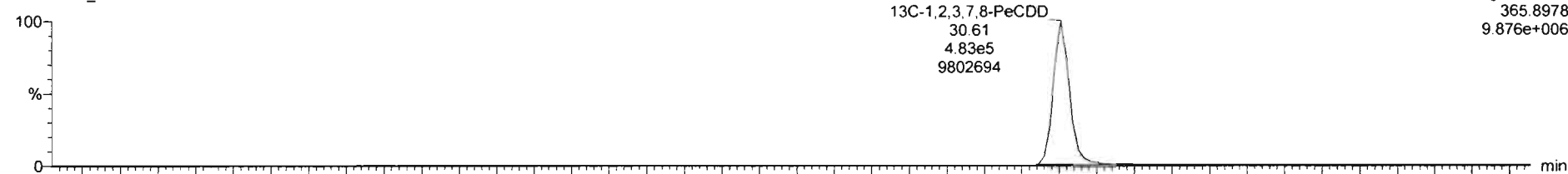


200131R1\_8

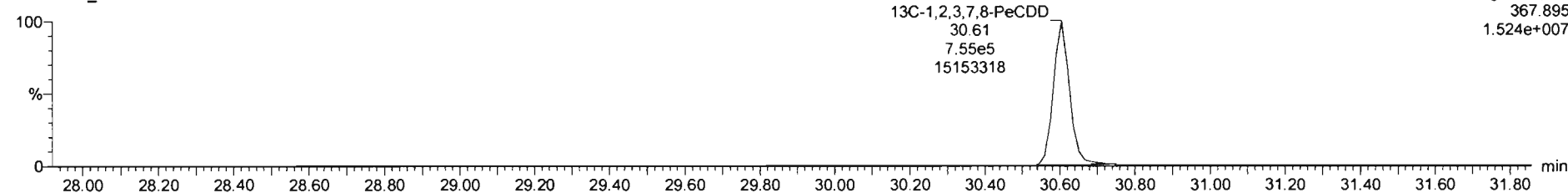


**13C-1,2,3,7,8-PeCDD**

200131R1\_8



200131R1\_8



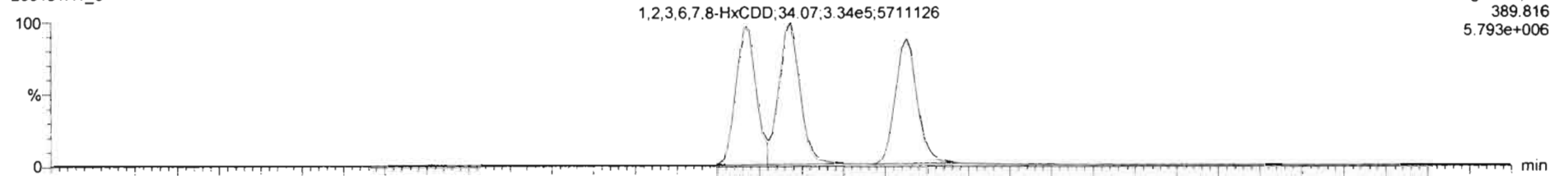
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

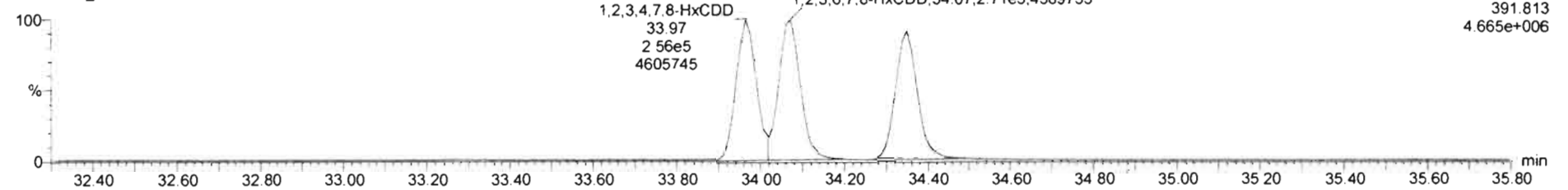
**1,2,3,4,7,8-HxCDD**

200131R1\_8



F3:Voltage SIR,EI+  
389.816  
5.793e+006

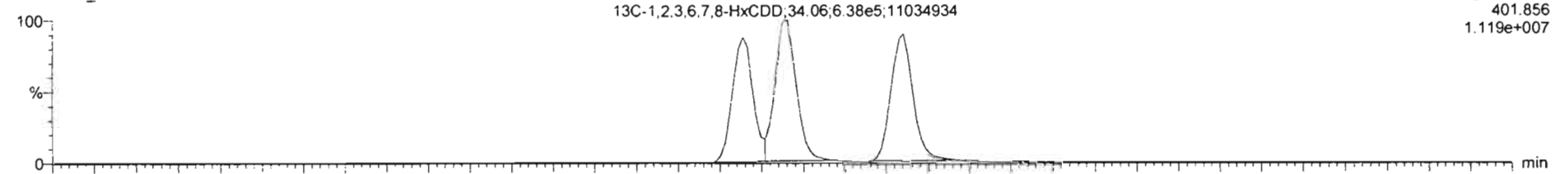
200131R1\_8



F3:Voltage SIR,EI+  
391.813  
4.665e+006

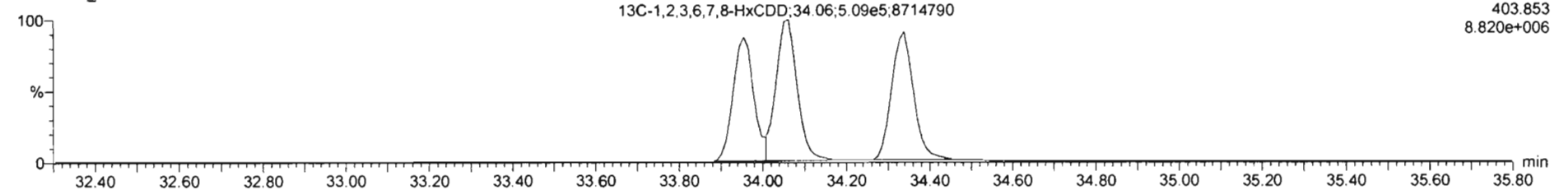
**13C-1,2,3,4,7,8-HxCDD**

200131R1\_8



F3:Voltage SIR,EI+  
401.856  
1.119e+007

200131R1\_8



F3:Voltage SIR,EI+  
403.853  
8.820e+006

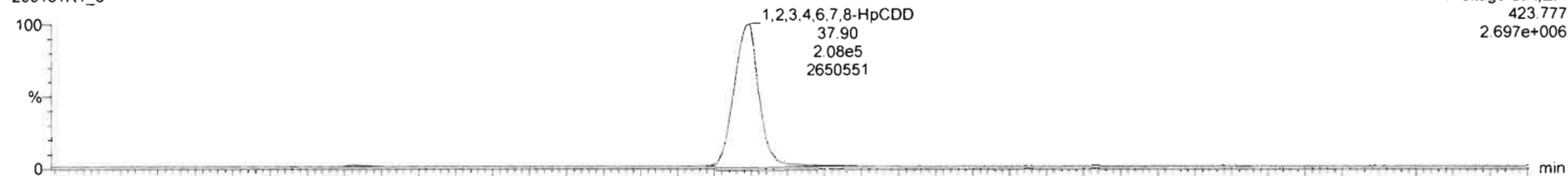
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

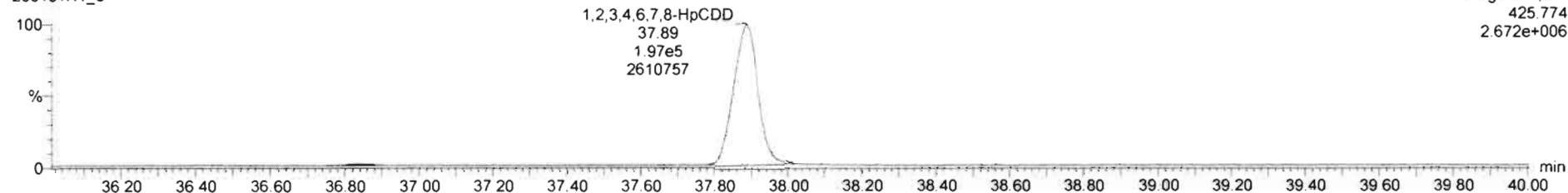
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200131R1\_8

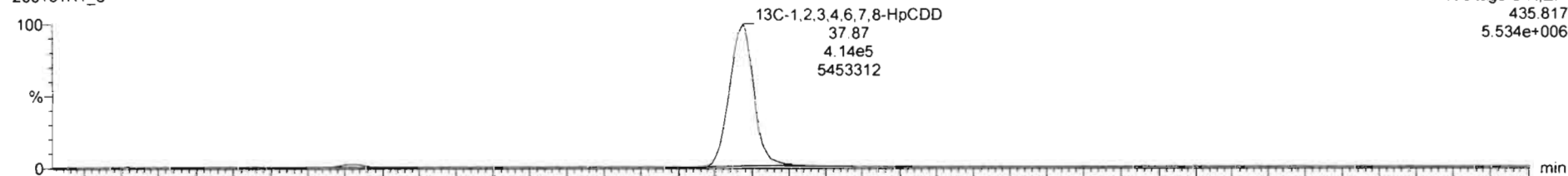


200131R1\_8

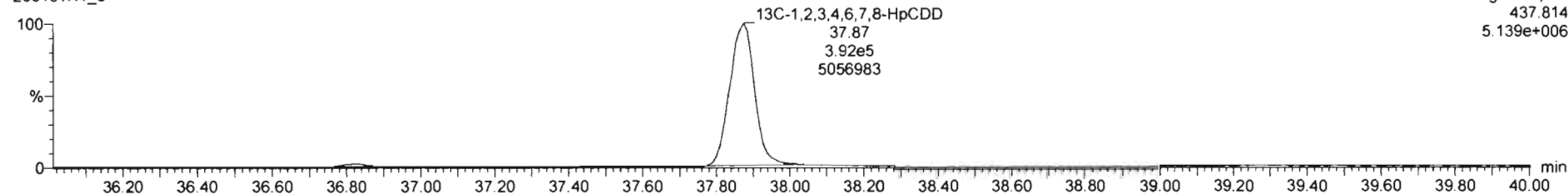


**<sup>13</sup>C-1,2,3,4,6,7,8-HpCDD**

200131R1\_8



200131R1\_8



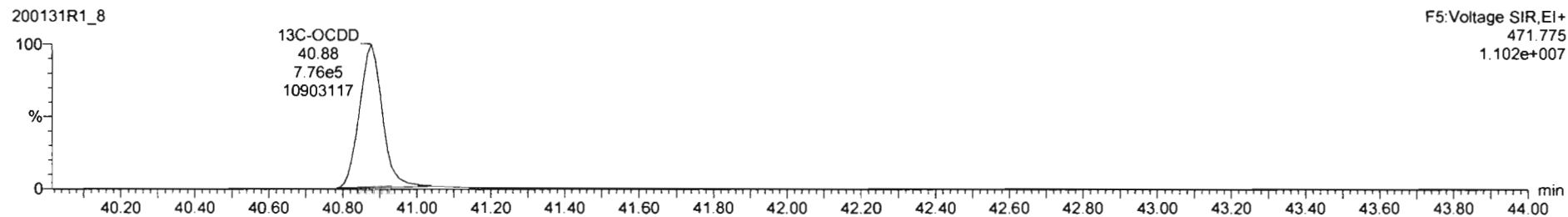
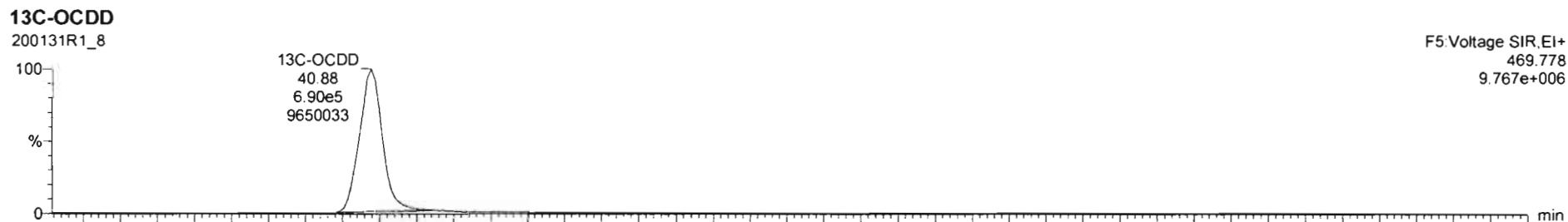
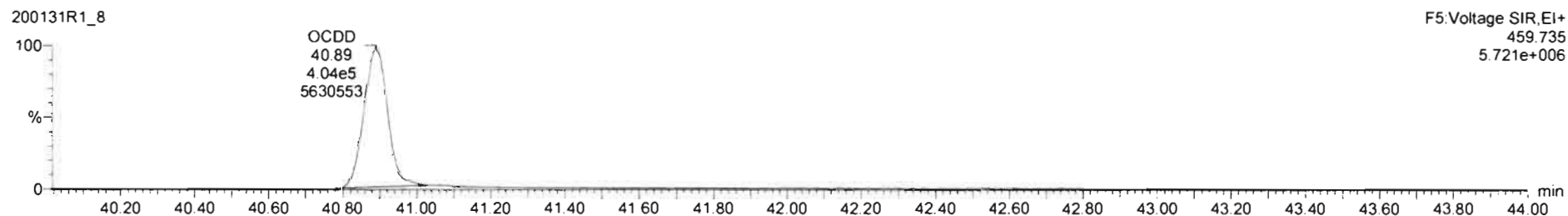
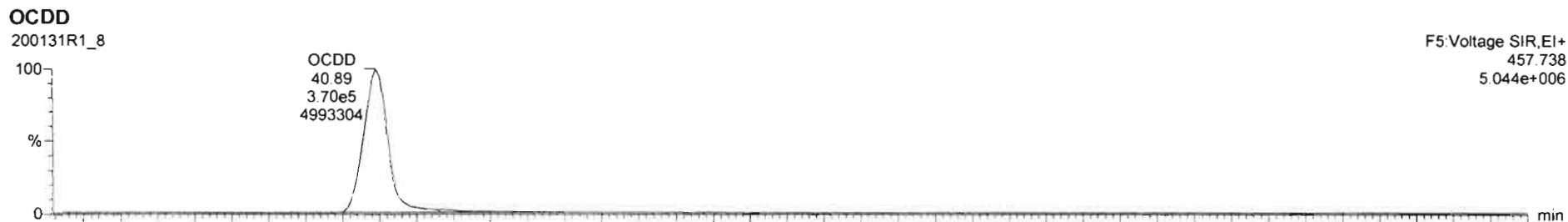


Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308



Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

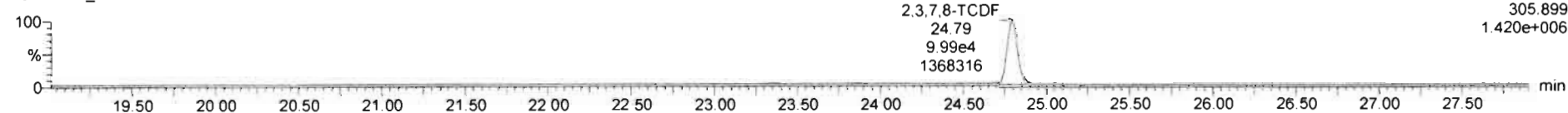
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**2,3,7,8-TCDF**

200131R1\_8

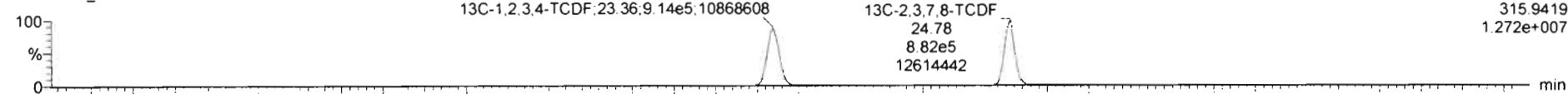


200131R1\_8

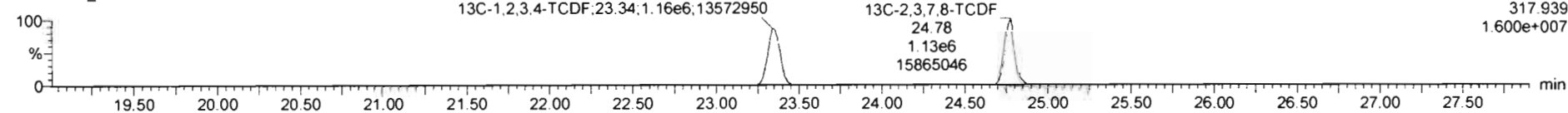


**13C-2,3,7,8-TCDF**

200131R1\_8

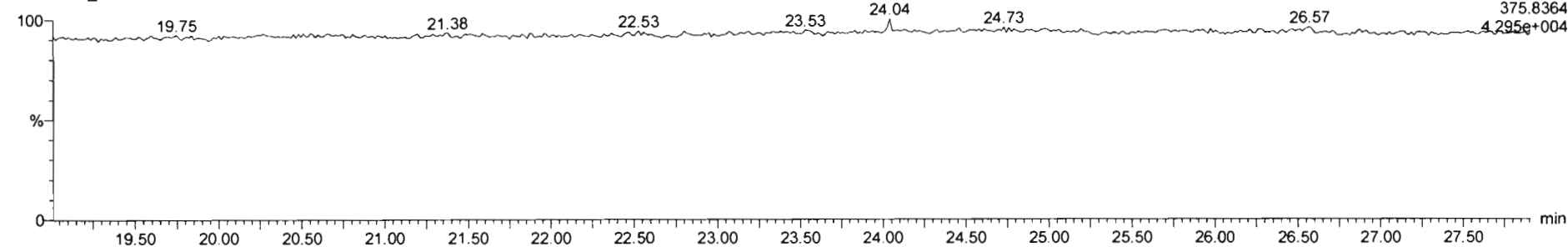


200131R1\_8



**DPE1**

200131R1\_8



Dataset: Untitled

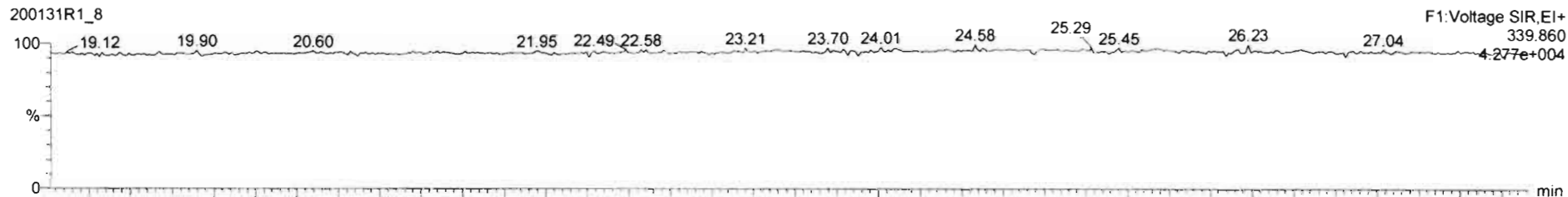
Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

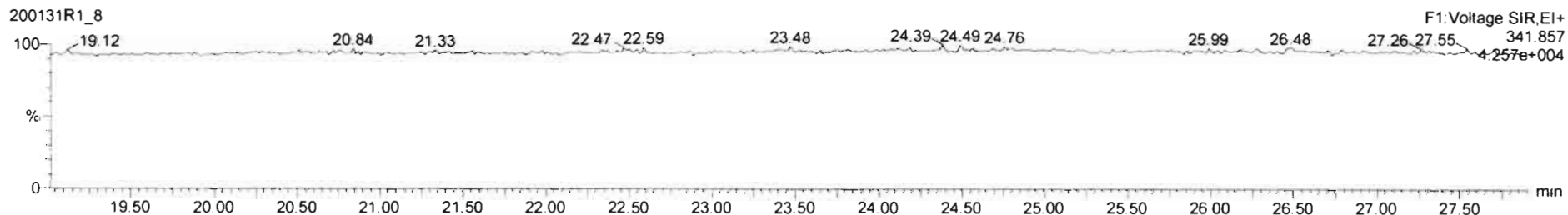
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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200131R1\_8

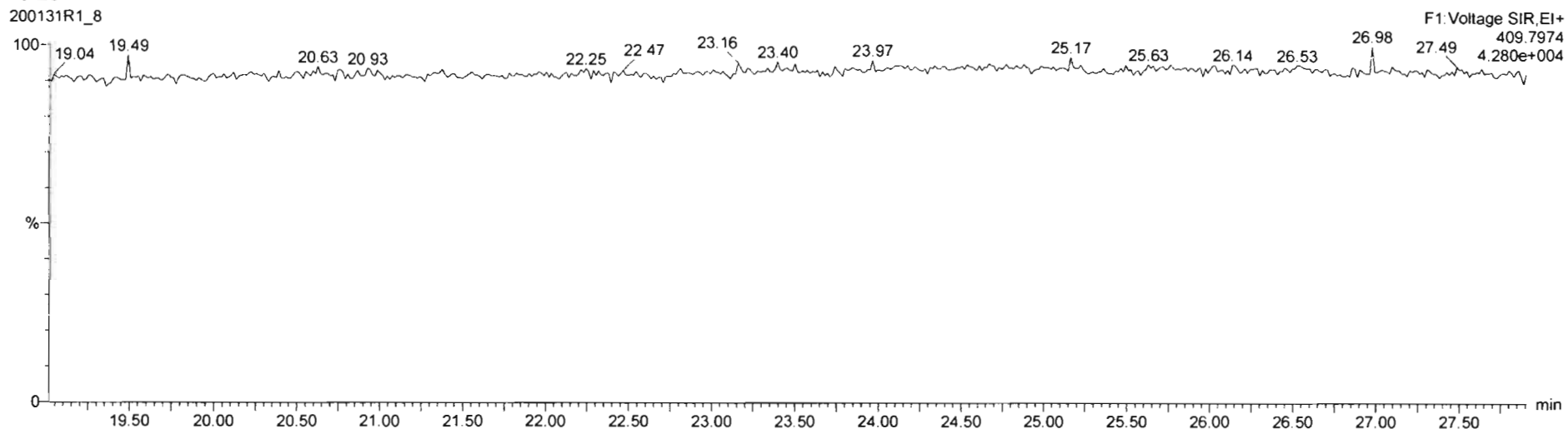


200131R1\_8



DPE6

200131R1\_8



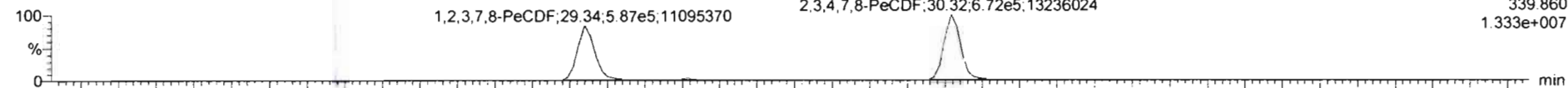
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

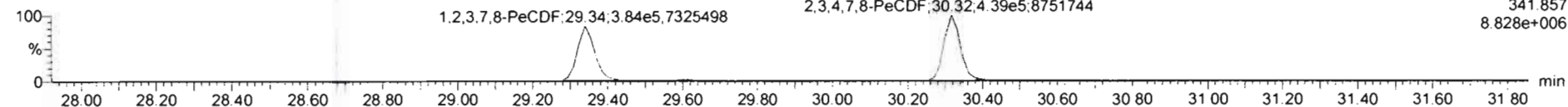
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**1,2,3,7,8-PeCDF**

200131R1\_8

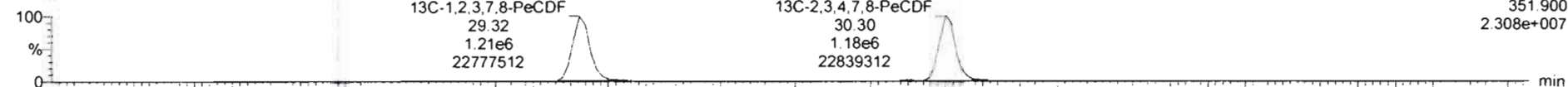


200131R1\_8

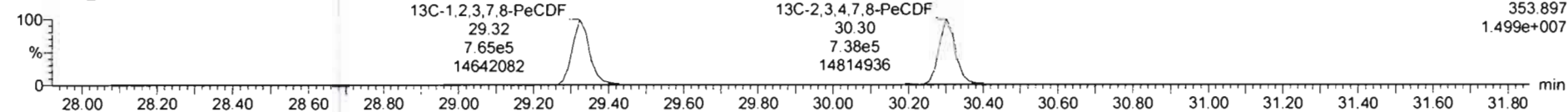


**13C-1,2,3,7,8-PeCDF**

200131R1\_8

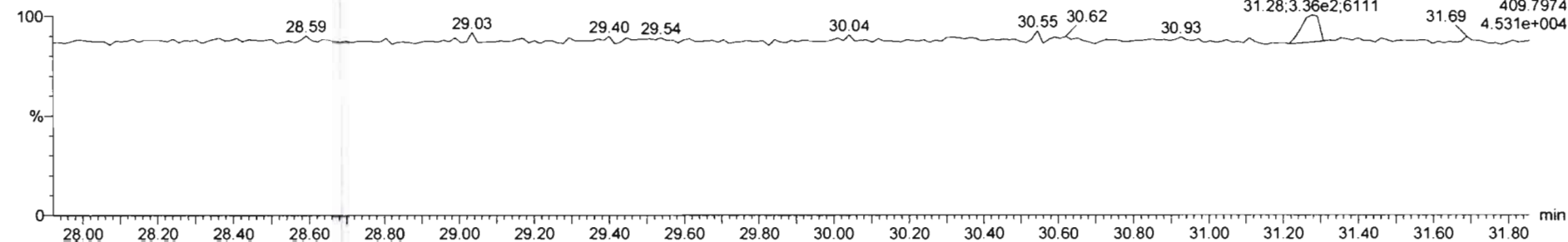


200131R1\_8



**DPE2**

200131R1\_8



Dataset: Untitled

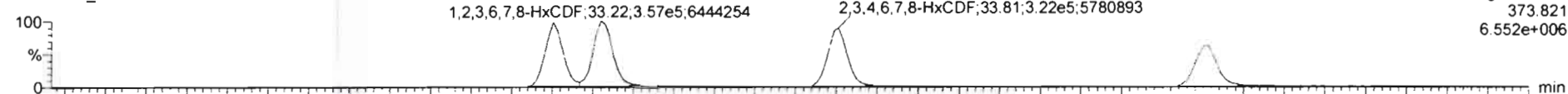
Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

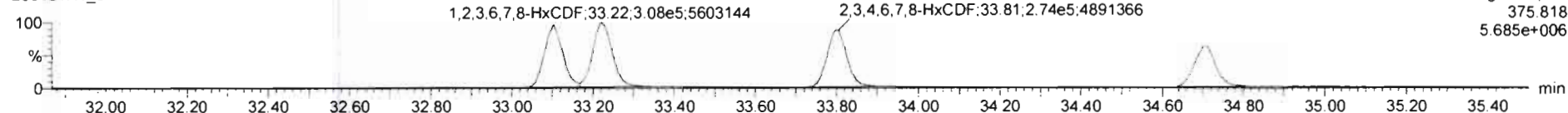
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200131R1\_8

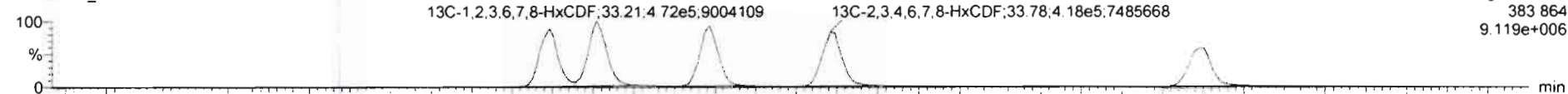


200131R1\_8

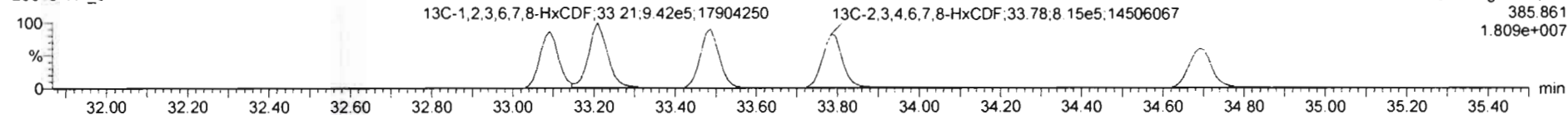


**13C-1,2,3,4,7,8-HxCDF**

200131R1\_8

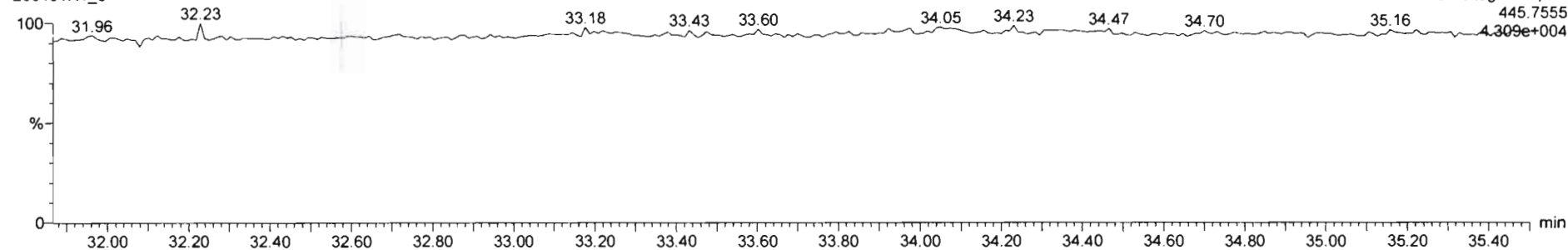


200131R1\_8



**DPE3**

200131R1\_8



Dataset: Untitled

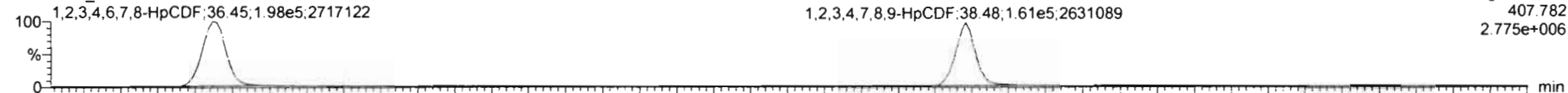
Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

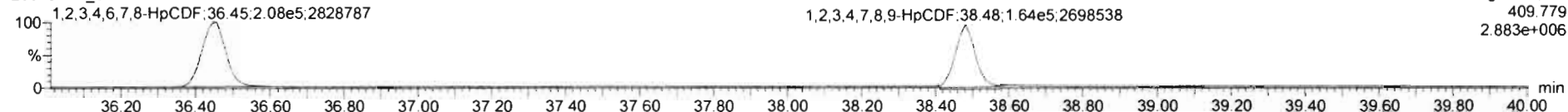
Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200131R1\_8

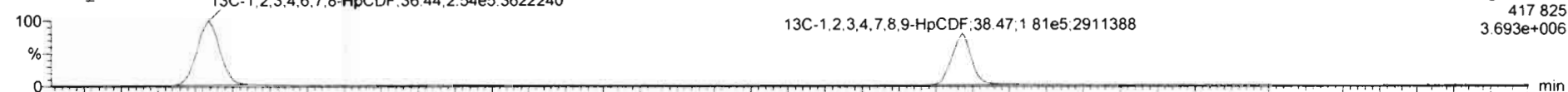


200131R1\_8

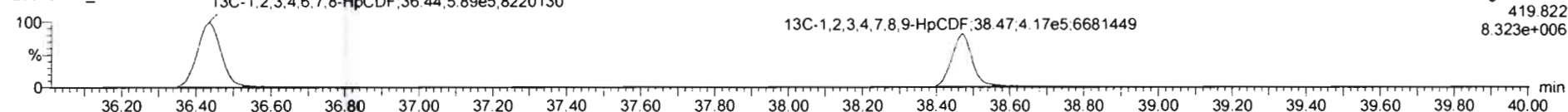


**13C-1,2,3,4,6,7,8-HpCDF**

200131R1\_8

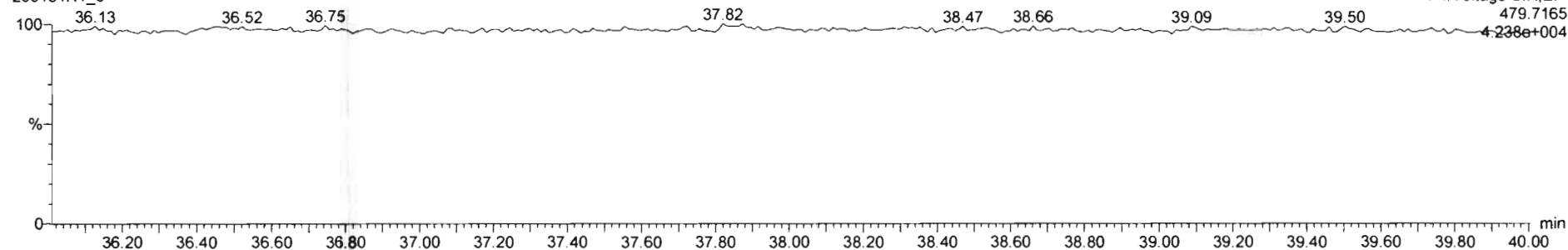


200131R1\_8



**DPE4**

200131R1\_8

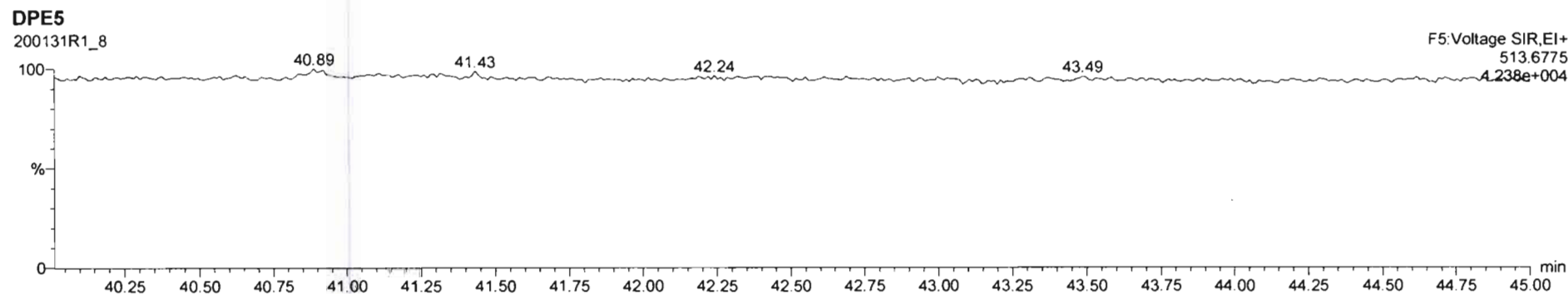
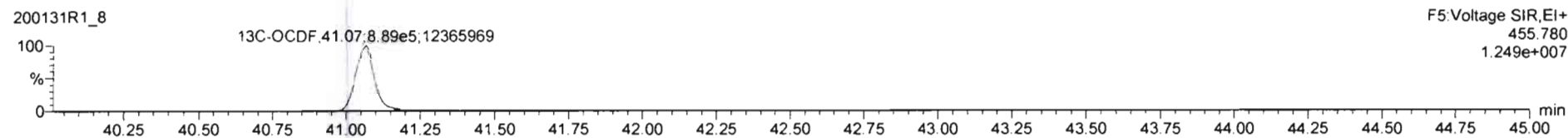
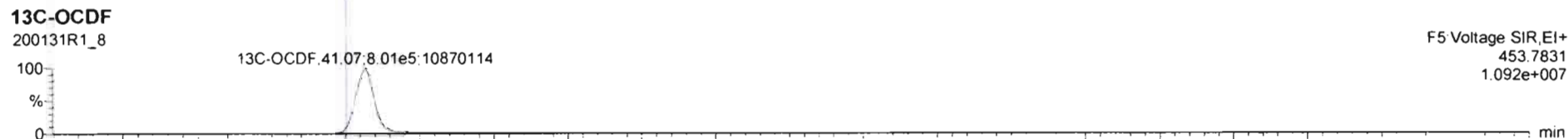
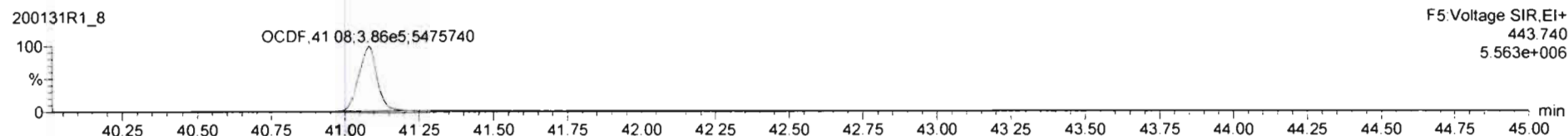
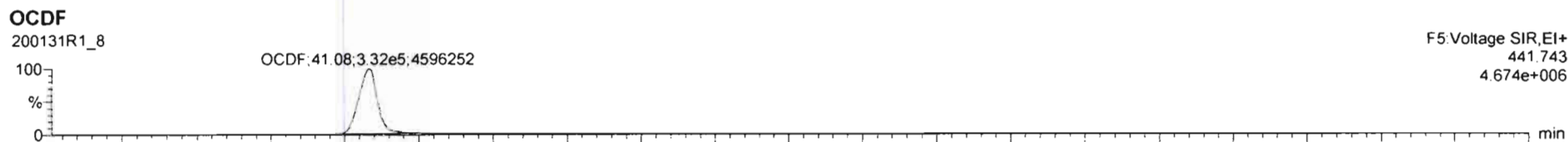




Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time  
Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

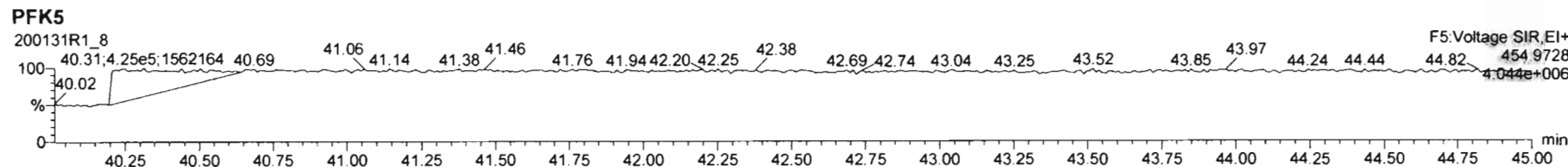
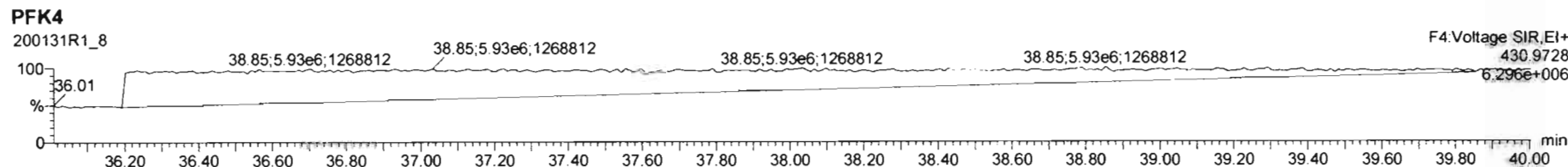
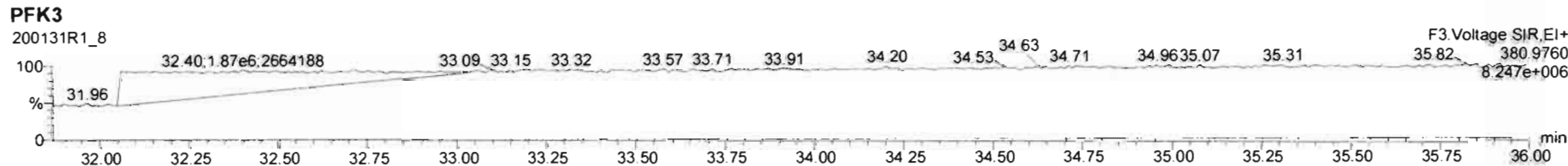
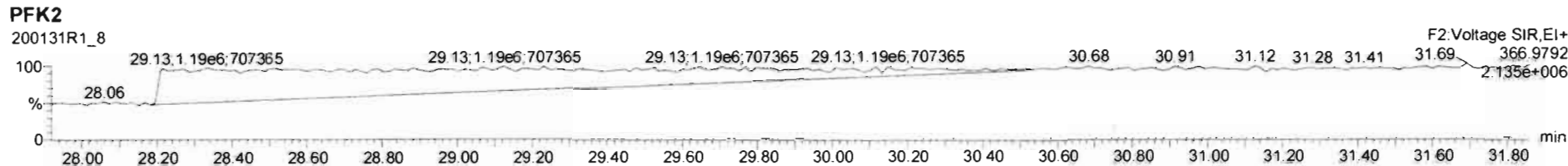
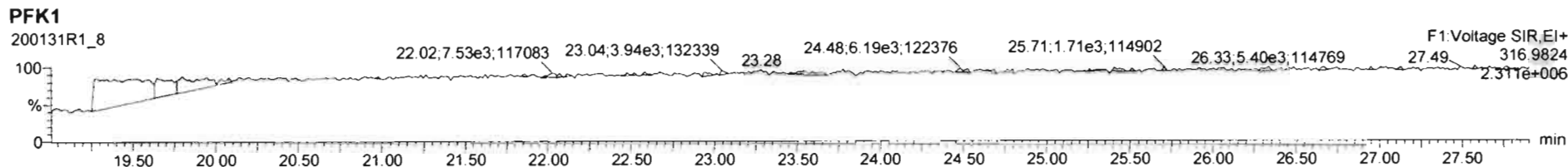


Dataset: Untitled

Last Altered: Sunday, February 02, 2020 11:21:34 AM Pacific Standard Time

Printed: Sunday, February 02, 2020 11:23:53 AM Pacific Standard Time

Name: 200131R1\_8, Date: 31-Jan-2020, Time: 22:18:30, ID: SS200131R1\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308



Dataset: U:\VG12.PRO\Results\200309R2\200309R2-CRV.qld

Last Altered: Tuesday, March 10, 2020 8:18:28 AM Pacific Daylight Time  
 Printed: Tuesday, March 10, 2020 8:19:39 AM Pacific Daylight Time

GRB 03/10/2020

CT 03/10/2020

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49  
 Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Compound name: 2,3,7,8-TCDF  
 Response Factor: 0.820787  
 RRF SD: 0.107593, Relative SD: 13.1085  
 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	200309R2_2	0.250	0.77	NO	16.58	1.001	4.20e3	1.63e6	0.314	25.4	1.03	MM
2	200309R2_3	0.500	0.73	NO	16.59	1.001	5.46e3	1.37e6	0.487	-2.7	0.799	MM
3	200309R2_4	2.00	0.74	NO	16.56	1.001	2.05e4	1.37e6	1.81	-9.3	0.745	bb
4	200309R2_5	10.0	0.75	NO	16.56	1.001	1.02e5	1.39e6	8.95	-10.5	0.735	bb
5	200309R2_6	40.0	0.74	NO	16.56	1.001	5.13e5	1.61e6	38.8	-3.0	0.796	bb
6	200309R2_7	300	0.76	NO	16.56	1.001	4.09e6	1.66e6	300	-0.0	0.821	bb

Compound name: 13C-2,3,7,8-TCDF  
 Response Factor: 1.10088  
 RRF SD: 0.097324, Relative SD: 8.84057  
 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	200309R2_2	100	0.78	NO	16.56	1.147	1.63e6	1.30e6	114	13.7	1.25	bb
2	200309R2_3	100	0.77	NO	16.56	1.147	1.37e6	1.38e6	89.9	-10.1	0.990	bb
3	200309R2_4	100	0.77	NO	16.54	1.146	1.37e6	1.38e6	90.5	-9.5	0.996	bb
4	200309R2_5	100	0.77	NO	16.54	1.147	1.39e6	1.25e6	102	1.6	1.12	bb
5	200309R2_6	100	0.77	NO	16.54	1.146	1.61e6	1.43e6	102	2.2	1.13	bb
6	200309R2_7	100	0.77	NO	16.54	1.146	1.66e6	1.48e6	102	2.0	1.12	bb

Dataset: U:\VG12.PRO\Results\200309R2\200309R2-CRV.qld

Last Altered: Tuesday, March 10, 2020 8:18:28 AM Pacific Daylight Time  
 Printed: Tuesday, March 10, 2020 8:19:39 AM Pacific Daylight Time

**Compound name: 13C-1,2,3,4-TCDF**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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	200309R2_2	100	0.79	NO	14.45	1.000	1.30e6	1.30e6	100	0.0	1.00	bb
2	200309R2_3	100	0.79	NO	14.45	1.000	1.38e6	1.38e6	100	0.0	1.00	bb
3	200309R2_4	100	0.79	NO	14.44	1.000	1.38e6	1.38e6	100	0.0	1.00	bb
4	200309R2_5	100	0.78	NO	14.42	1.000	1.25e6	1.25e6	100	0.0	1.00	bb
5	200309R2_6	100	0.79	NO	14.44	1.000	1.43e6	1.43e6	100	0.0	1.00	bb
6	200309R2_7	100	0.78	NO	14.44	1.000	1.48e6	1.48e6	100	0.0	1.00	bb

**Compound name: 13C-1,2,3,4-TCDD**

Response Factor: 11994.1

RRF SD: 1070.13, Relative SD: 8.92214

Response type: External Std, Area

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200309R2_2	100	0.77	NO	15.08	0.000	1.28e6		107	6.6	12800	bd
2	200309R2_3	100	0.78	NO	15.06	0.000	1.08e6		90.4	-9.6	10800	bd
3	200309R2_4	100	0.77	NO	15.05	0.000	1.11e6		92.2	-7.8	11100	bd
4	200309R2_5	100	0.75	NO	15.05	0.000	1.12e6		93.6	-6.4	11200	bd
5	200309R2_6	100	0.77	NO	15.05	0.000	1.28e6		107	6.5	12800	bd
6	200309R2_7	100	0.78	NO	15.05	0.000	1.33e6		111	10.8	13300	bd

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 8:04:02 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:04:32 AM Pacific Daylight Time

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 07:53:03

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	200309R2_1	CP200309R2_1 225 CPSM	09-Mar-20	17:55:29
2	200309R2_2	ST200309R2_1 1613 CS0 19L2302	09-Mar-20	18:25:43
3	200309R2_3	ST200309R2_2 1613 CS1 19L2303	09-Mar-20	18:56:05
4	200309R2_4	ST200309R2_3 1613 CS2 19L2304	09-Mar-20	19:26:33
5	200309R2_5	ST200309R2_4 1613 CS3 19L2305	09-Mar-20	19:57:01
6	200309R2_6	ST200309R2_5 1613 CS4 19L2306	09-Mar-20	20:27:25
7	200309R2_7	ST200309R2_6 1613 CS5 19L2307	09-Mar-20	20:57:48
8	200309R2_8	SOLVENT BLANK	09-Mar-20	21:28:11
9	200309R2_9	SS200309R2_1 1613 SSS 19L2308	09-Mar-20	21:58:38
10	200309R2_10	SOLVENT BLANK	09-Mar-20	22:29:05
11	200309R2_11	1904012-10RE2 PX-S23-SB48-0203 10.92	09-Mar-20	22:59:38
12	200309R2_12	2000301-01RE2 PDI-077SC-A-02-03-191014 ...	09-Mar-20	23:29:57
13	200309R2_13	B0B0291-DUP1 Duplicate 18.51	10-Mar-20	00:00:21
14	200309R2_14	2000407-01RE1 PDI-084SC-A-05-06-191002 ...	10-Mar-20	00:30:51
15	200309R2_15	2000407-02RE1 PDI-084SC-A-06-07-191002 ...	10-Mar-20	01:01:18
16	200309R2_16	2000407-03RE1 PDI-084SC-A-07-08-191002 ...	10-Mar-20	01:31:45
17	200309R2_17	2000407-04RE1 PDI-084SC-A-08-09-191002 ...	10-Mar-20	02:02:13
18	200309R2_18	2000407-05RE1 PDI-084SC-A-09-10-191002 ...	10-Mar-20	02:32:40
19	200309R2_19	2000407-06RE1 PDI-084SC-A-10-11-191002 ...	10-Mar-20	03:03:07
20	200309R2_20	2000407-07RE1 PDI-084SC-A-11-12-191002 ...	10-Mar-20	03:33:35

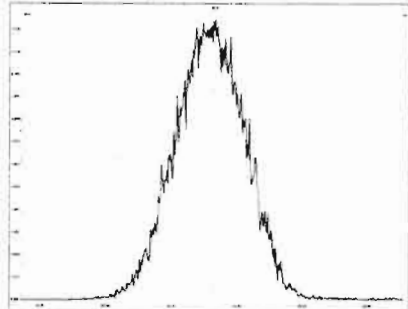
Experiment Calibration Report

MassLynx 4.1 SCN815

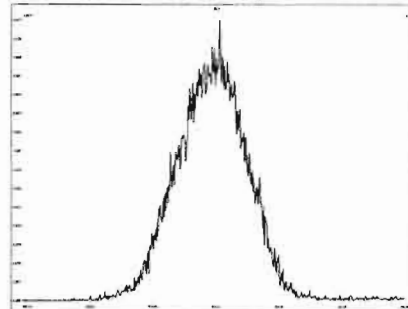
File: Experiment: tcdf\_db225.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, March 09, 2020 17:53:48 Pacific Daylight Time

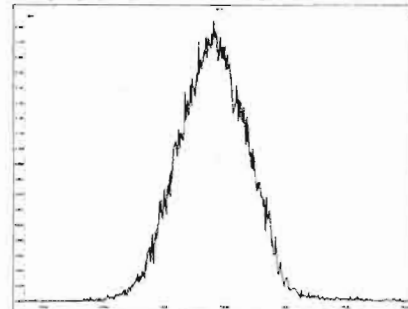
M 292.9824 R 12197



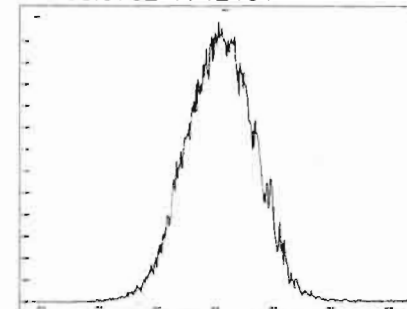
M 304.9824 R 12886



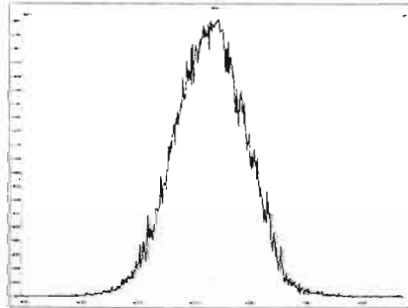
M 318.9792 R 12258



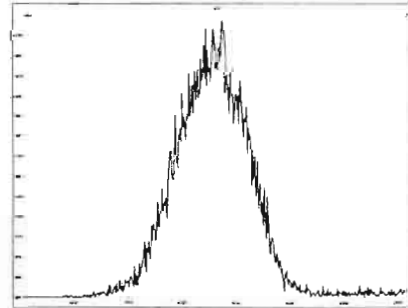
M 330.9792 R 12131



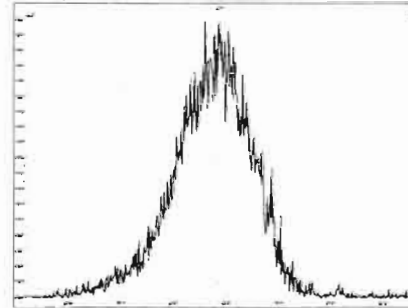
M 342.9792 R 11960



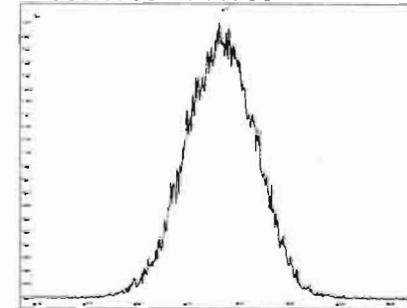
M 354.9792 R 13154



M 366.9792 R 10504



M 380.9760 R 11795

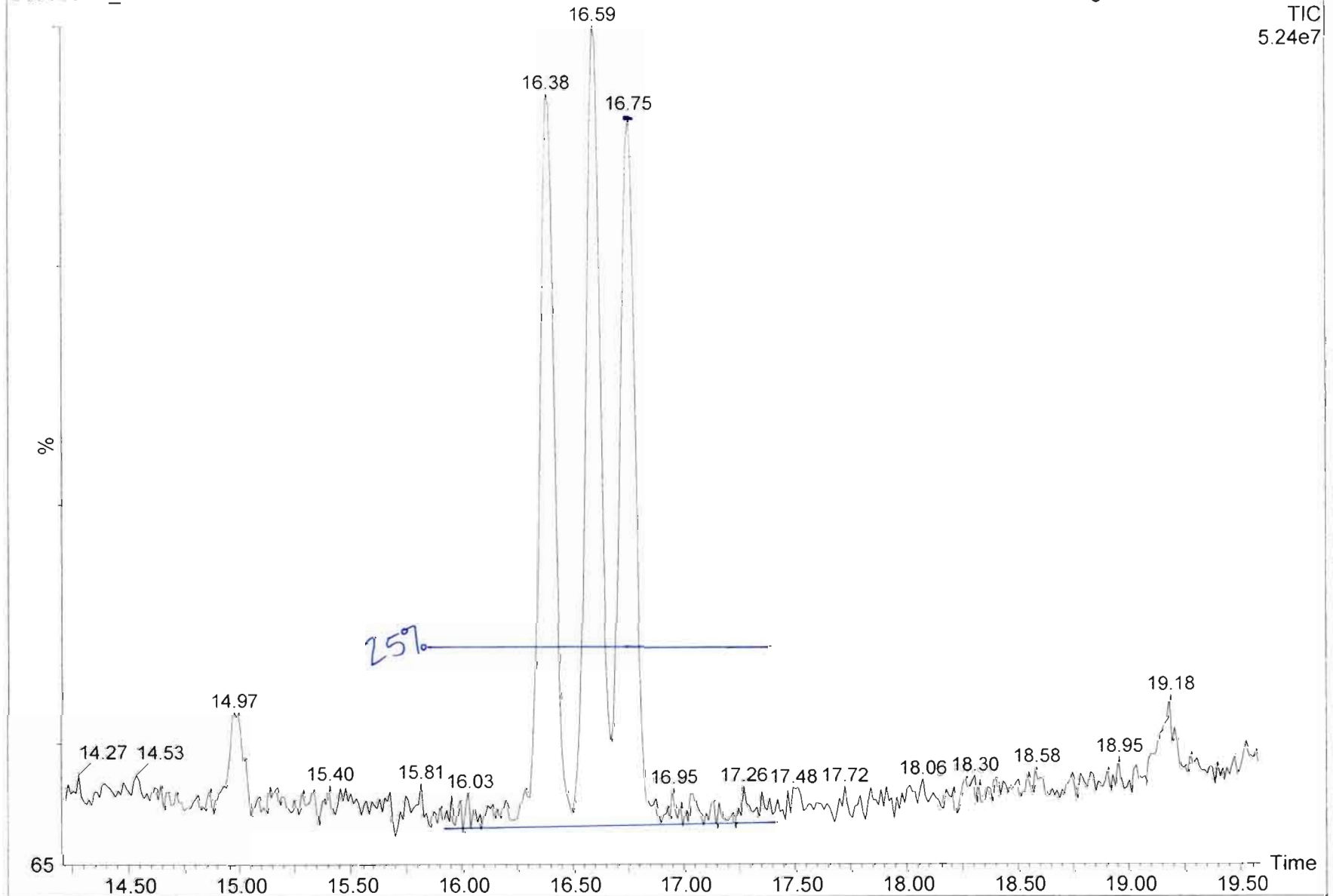




GRB 03/10/2020

225 CPSM  
200309R2\_1

Voltage SIR 12 Channels EI+  
TIC  
5.24e7



Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

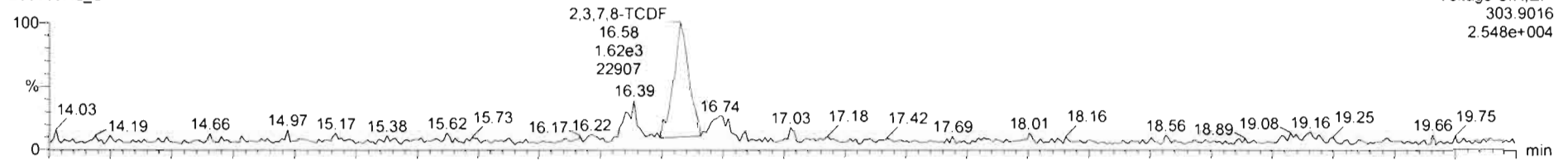
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Calibration: U:\VG12.PRO\CurveDB\db5\_1613vg12-3-6-20.cdb 09 Mar 2020 08:18:02

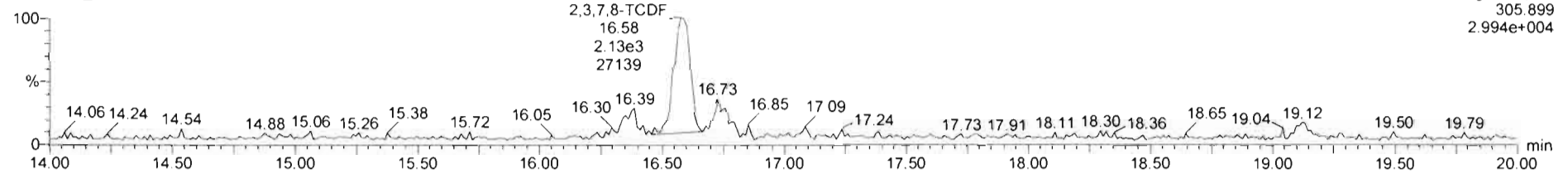
Name: 200309R2\_2, Date: 09-Mar-2020, Time: 18:25:43, ID: ST200309R2\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

2,3,7,8-TCDF

200309R2\_2

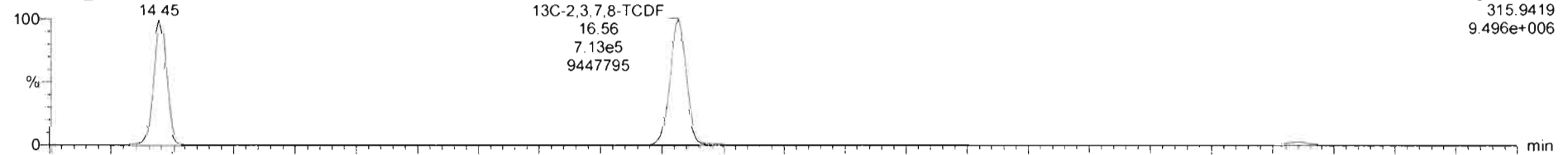


200309R2\_2

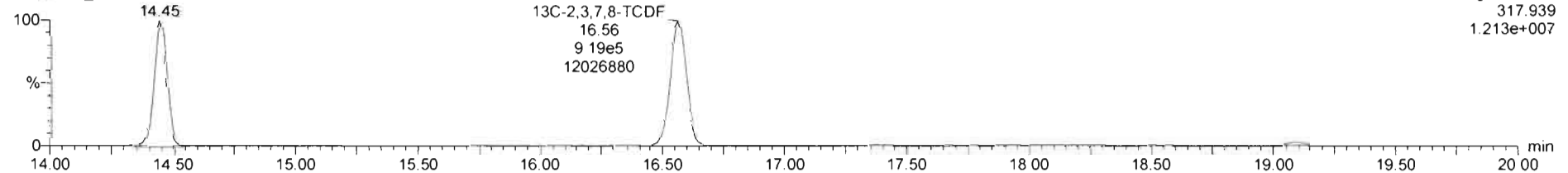


13C-2,3,7,8-TCDF

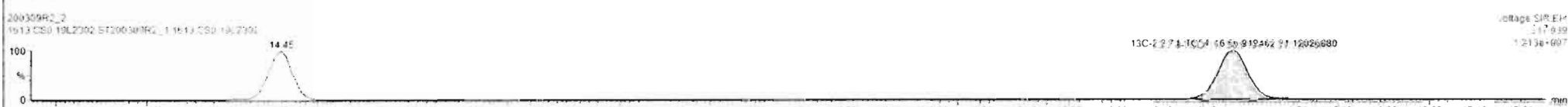
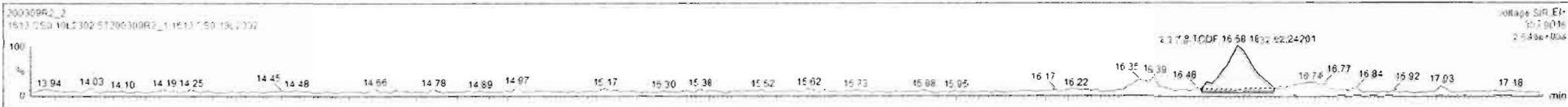
200309R2\_2



200309R2\_2



#	Name	RT	RA	y/n	Area	IS Area	Std Conc	%Dev	%RSD	RRF M.	RRF SD
1	2,3,7,8-TCDF	16.58	0.774	NO	4.2011e3	1.6321e6	0.250	24.2	13.0	6.829	0.107
2	13C-2,3,7,8-TCDF	16.58	0.775	NO	1.6321e5	1.3038e6	100.000	12.7	2.84	1.10	0.0973
3	13C-1,2,3,4-TCDF	14.45	0.787	NO	1.3038e6	1.3038e6	100.000	6.0	0.000	1.00	0.000
4	13C-1,2,3,4-TCDD	15.08	0.790	NO	1.2780e6		100.000	6.6	8.92	12000	1070
5	PFK1						1.000				
6	DPE1						1.000				



Dataset: Untitled

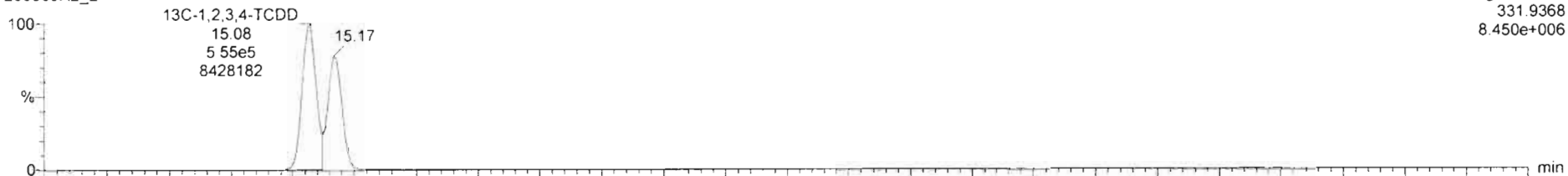
Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

Name: 200309R2\_2, Date: 09-Mar-2020, Time: 18:25:43, ID: ST200309R2\_1 1613 CS0 19L2302, Description: 1613 CS0 19L2302

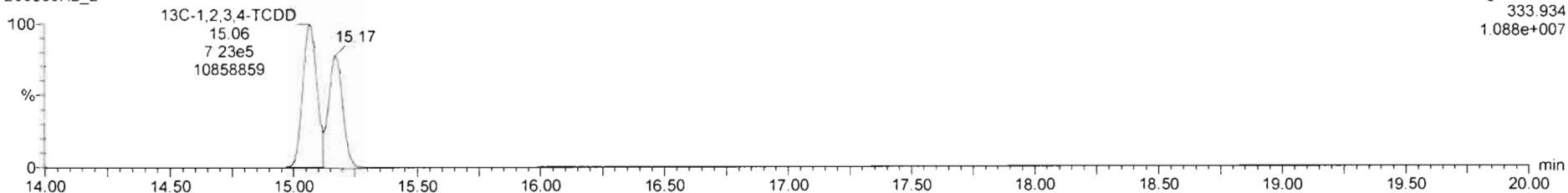
13C-1,2,3,4-TCDD

200309R2\_2



Voltage SIR, EI+  
331.9368  
8.450e+006

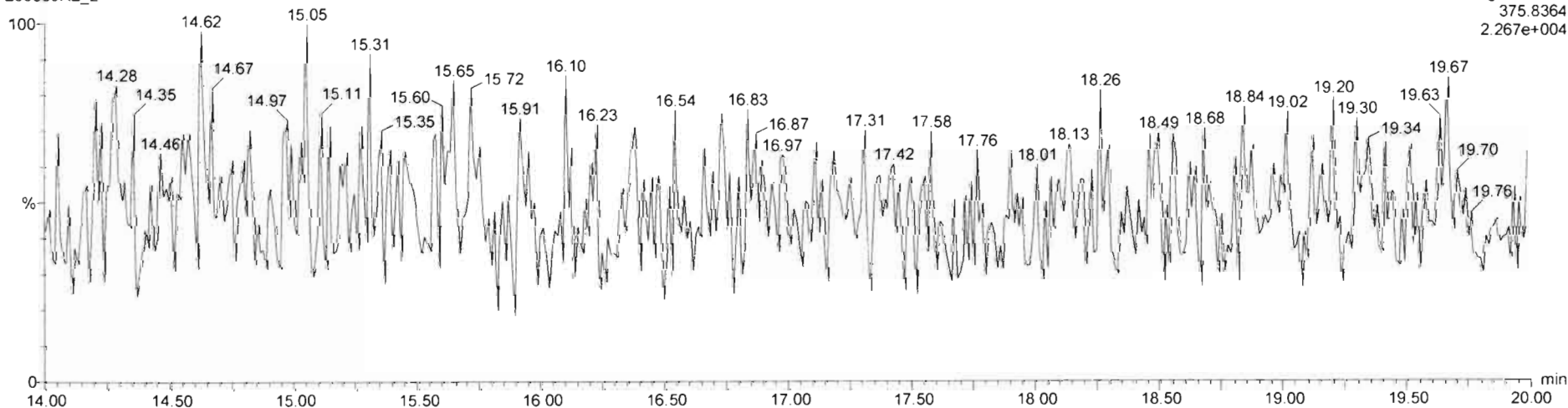
200309R2\_2



Voltage SIR, EI+  
333.934  
1.088e+007

DPE1

200309R2\_2



Voltage SIR, EI+  
375.8364  
2.267e+004

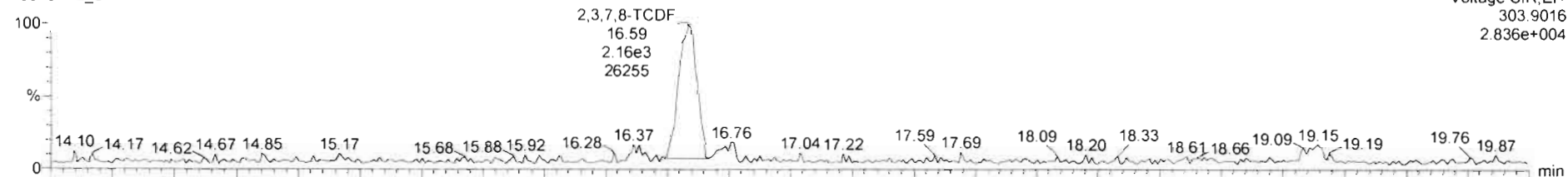
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

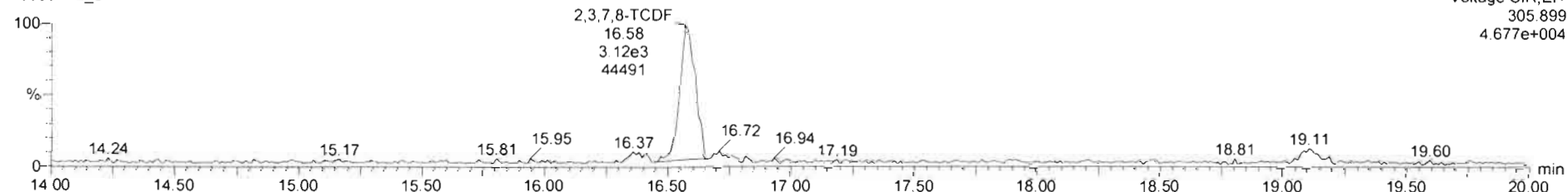
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2,3,7,8-TCDF

200309R2\_3

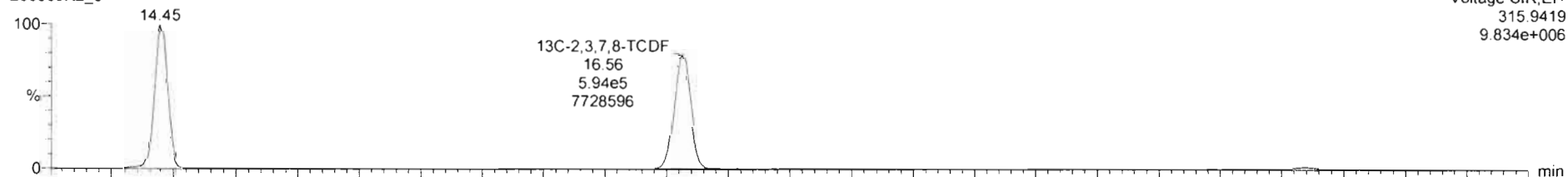


200309R2\_3

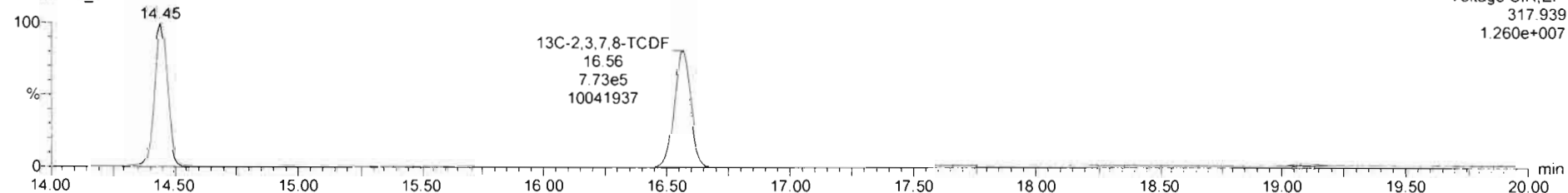


13C-2,3,7,8-TCDF

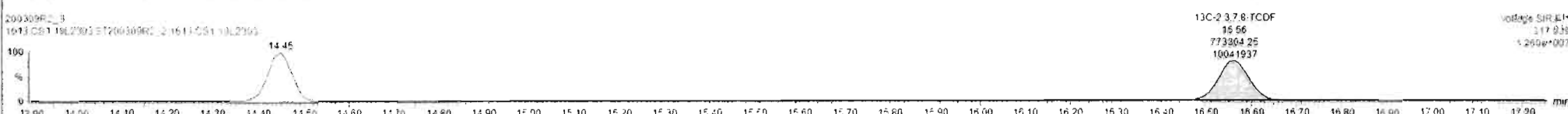
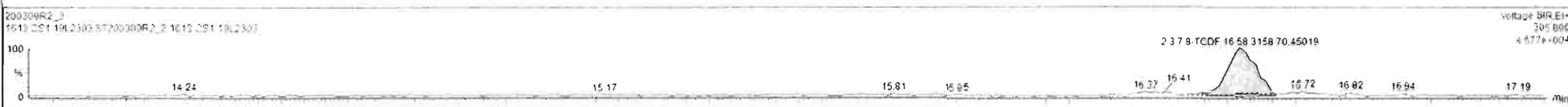
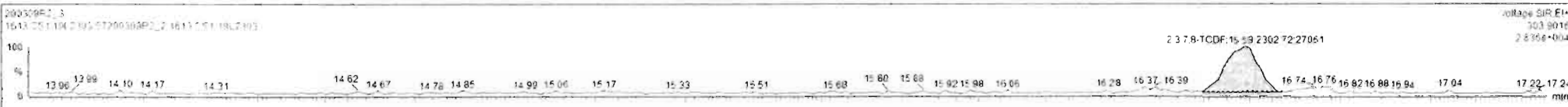
200309R2\_3



200309R2\_3



#	Name	RT	RA	y/n	Area	IS Area	Std Conc	%Dev	%RSD	RRF M	RRF SD
1	2 3 7 8-TCDF	16.56	0.729	NO	5.4614e3	1.3676e6	0.500	-2.7	13.1	0.021	0.108
2	13C 2 3 7 8-TCDF	16.56	0.768	NO	1.3676e6	1.3812e6	100.000	-10.1	2.84	1.10	0.0973
3	13C 1 2 3 4-TCDF	14.45	0.781	NO	1.3812e6	1.3812e6	100.000	0.0	0.000	1.00	0.000
4	13C 1 2 3 4-TCDD	15.96	0.777	NO	1.0641e6		100.000	-9.6	8.92	12000	1070
5	DPK1						1.000				
6	DPS1						1.000				





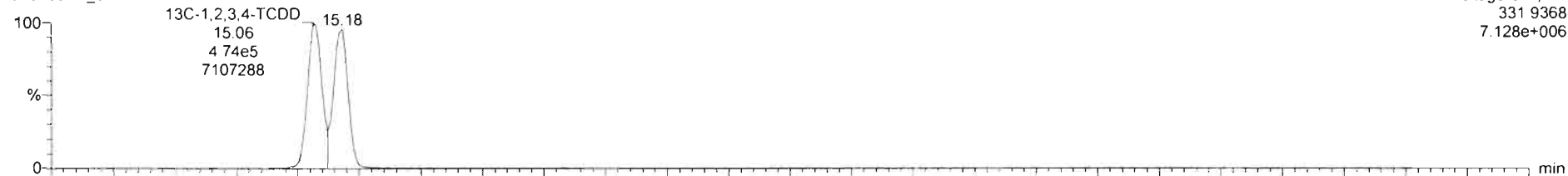
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Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

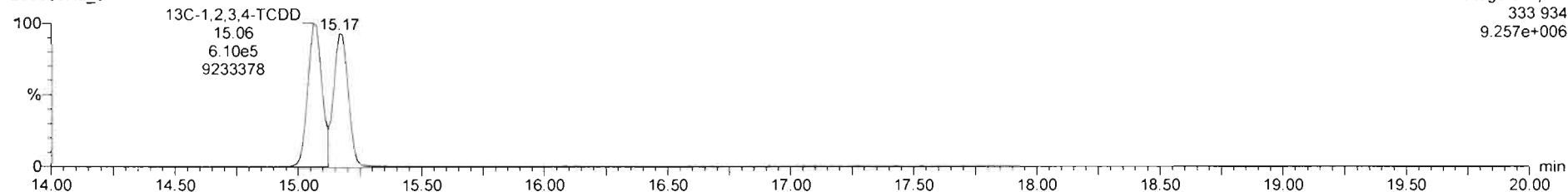
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13C-1,2,3,4-TCDD

200309R2\_3

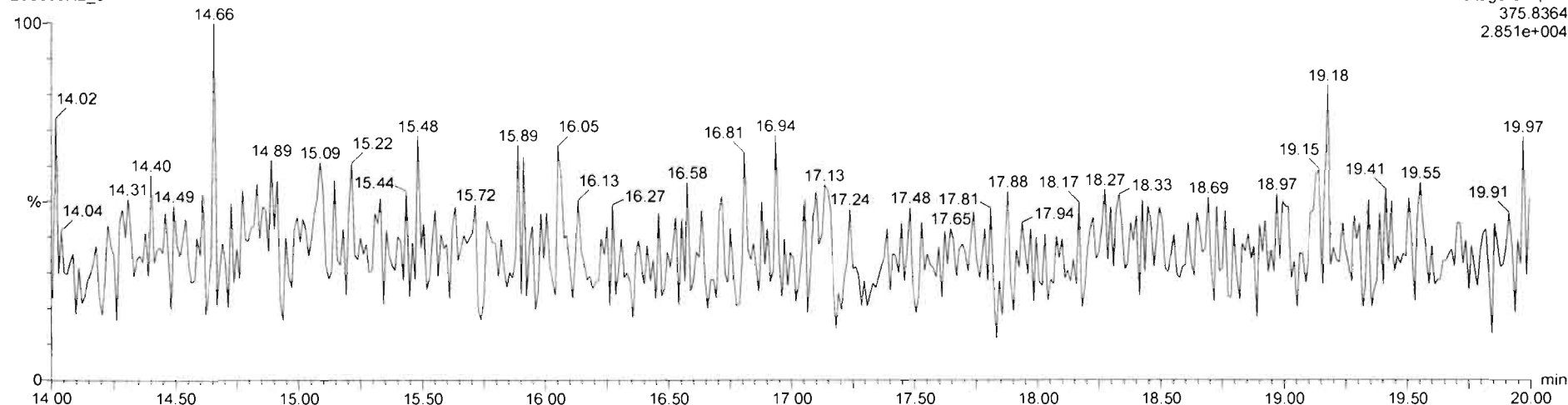


200309R2\_3



DPE1

200309R2\_3



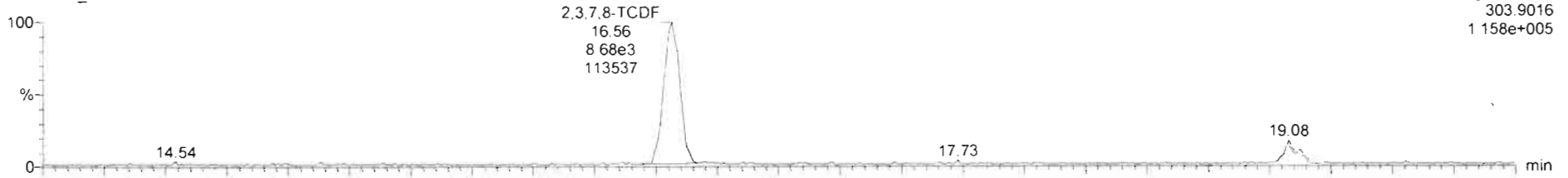
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Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

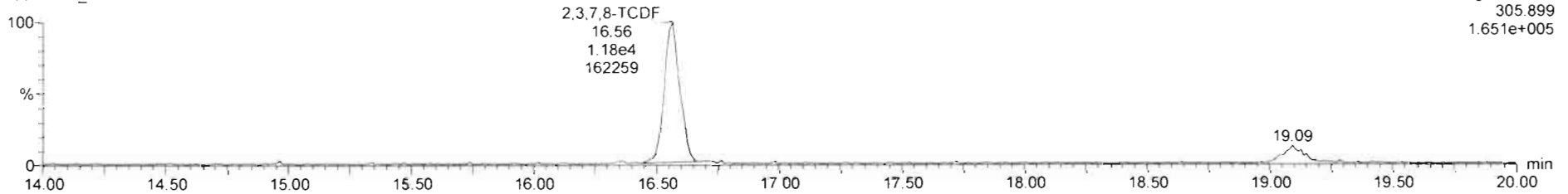
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2,3,7,8-TCDF

200309R2\_4

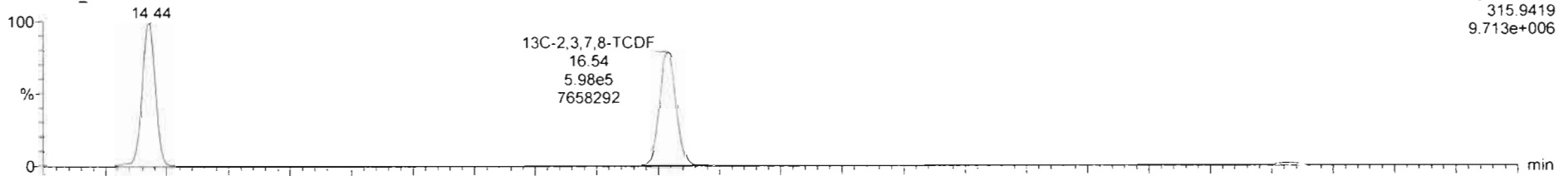


200309R2\_4

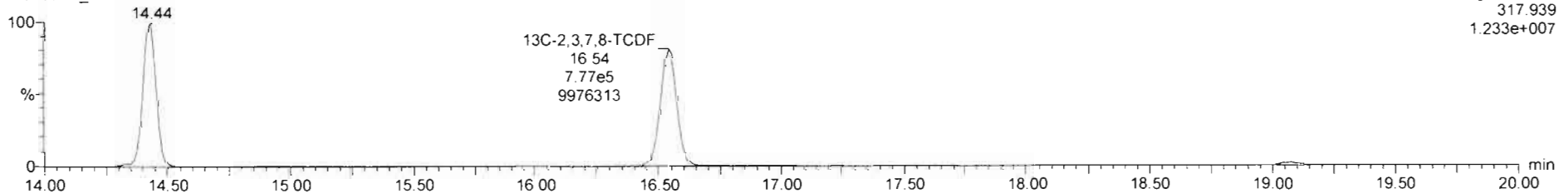


13C-2,3,7,8-TCDF

200309R2\_4



200309R2\_4



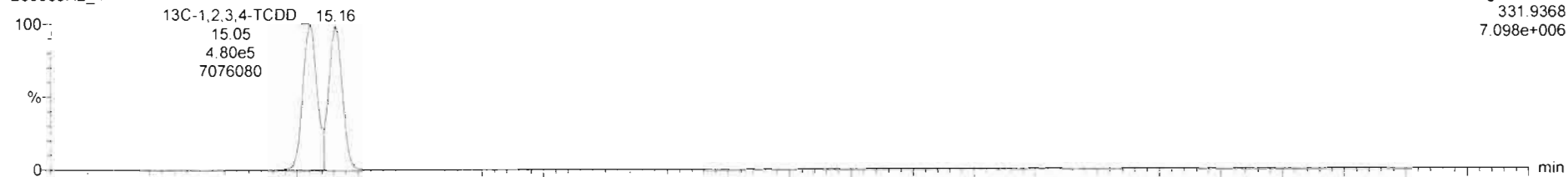
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Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

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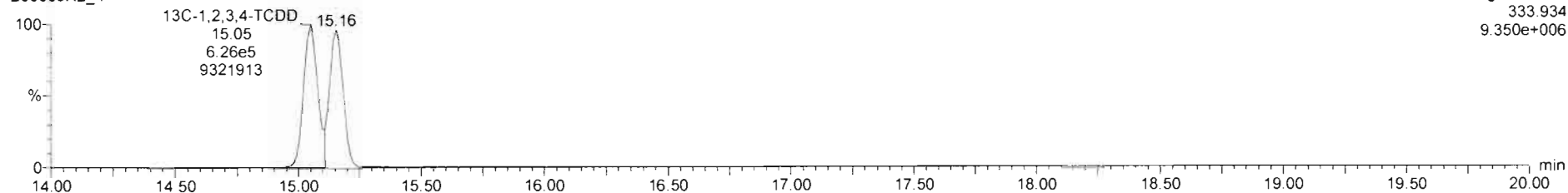
13C-1,2,3,4-TCDD

200309R2\_4



Voltage SIR,EI+  
331.9368  
7.098e+006

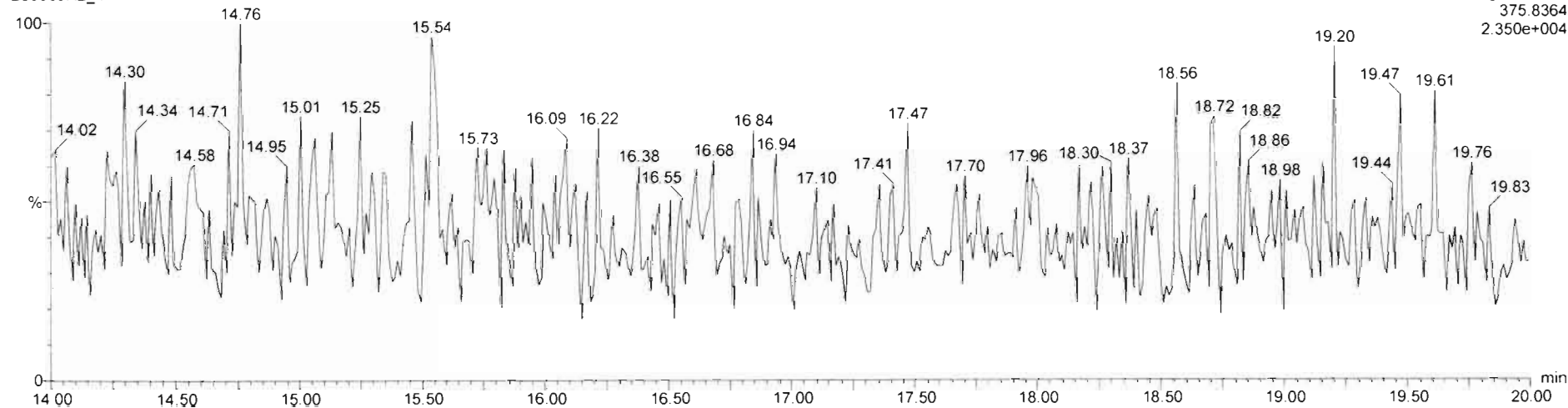
200309R2\_4



Voltage SIR,EI+  
333.934  
9.350e+006

DPE1

200309R2\_4



Voltage SIR,EI+  
375.8364  
2.350e+004

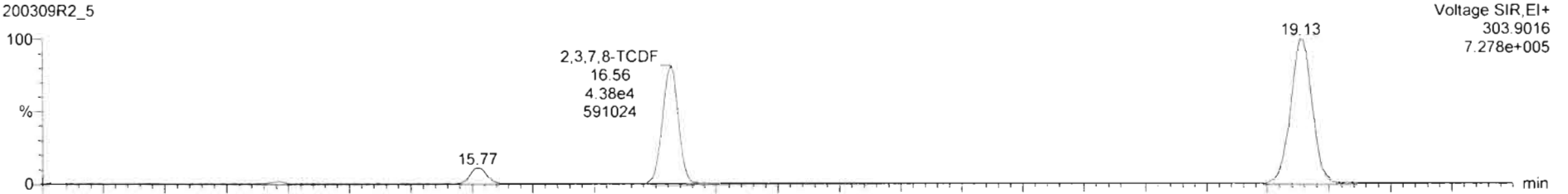
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Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

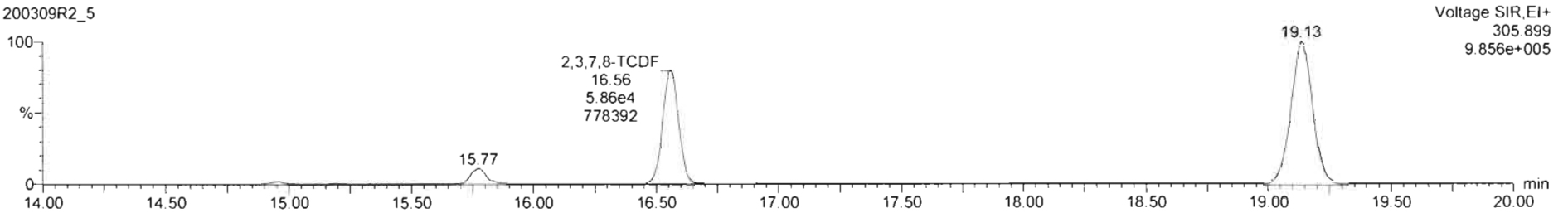
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**2,3,7,8-TCDF**

200309R2\_5

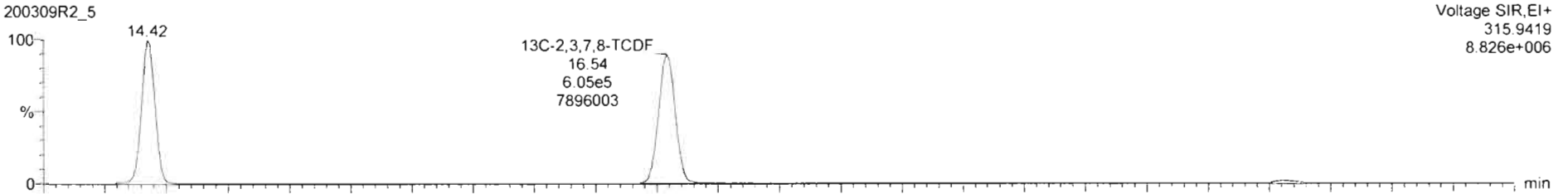


200309R2\_5

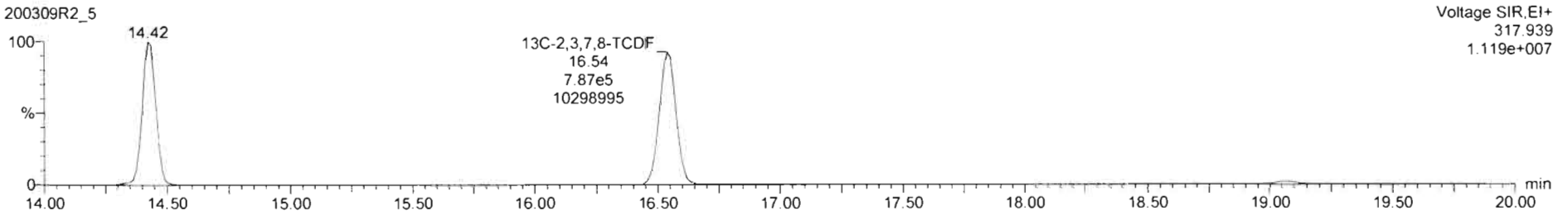


**13C-2,3,7,8-TCDF**

200309R2\_5



200309R2\_5



Dataset: Untitled

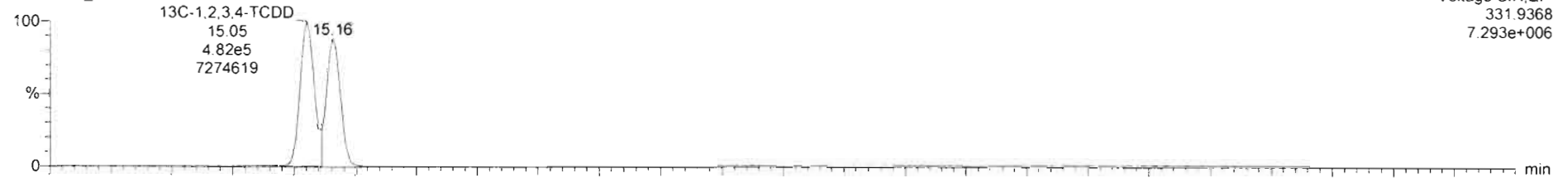
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Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

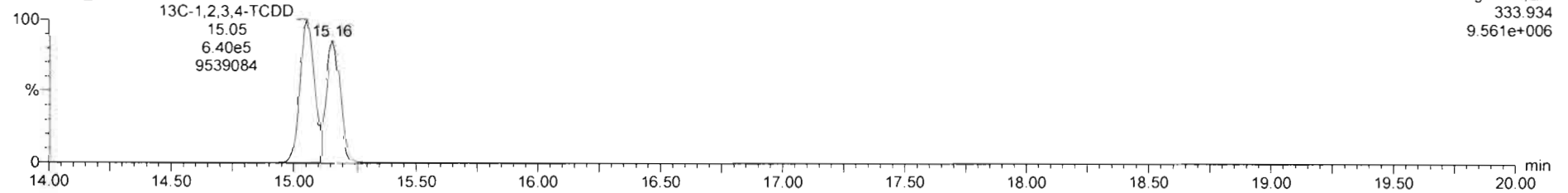
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13C-1,2,3,4-TCDD

200309R2\_5

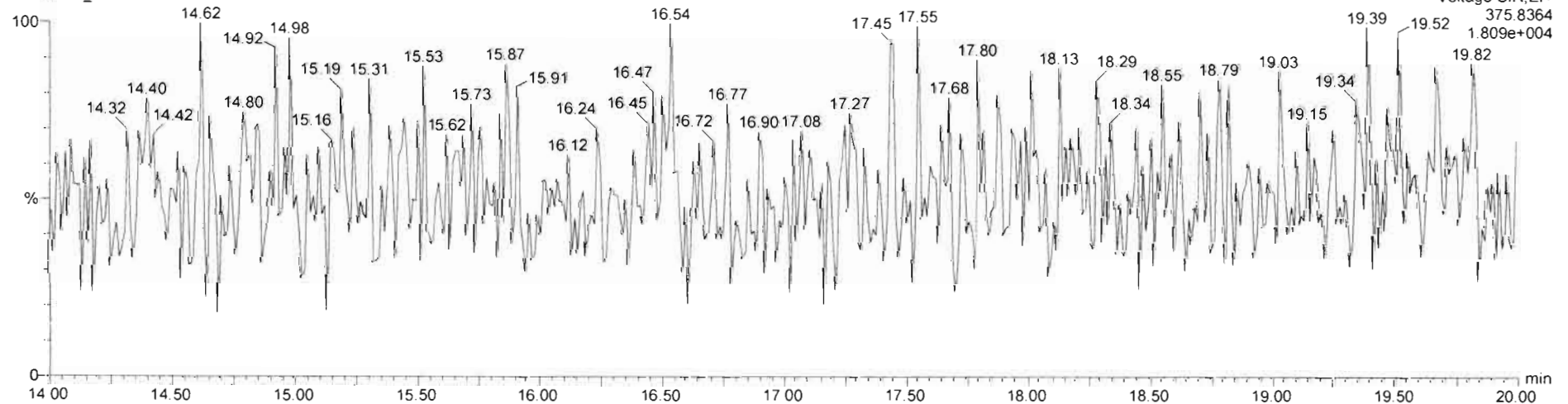


200309R2\_5



DPE1

200309R2\_5



Dataset: Untitled

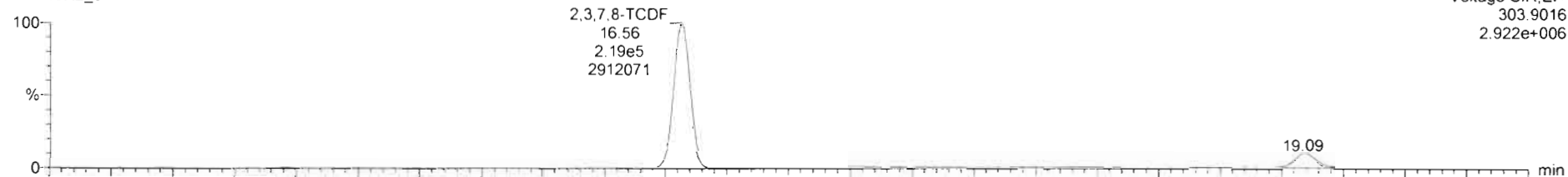
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Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

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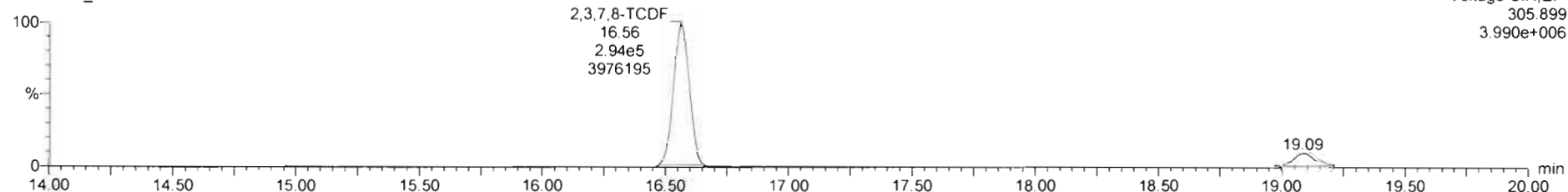
**2,3,7,8-TCDF**

200309R2\_6



Voltage SIR,EI+  
303.9016  
2.922e+006

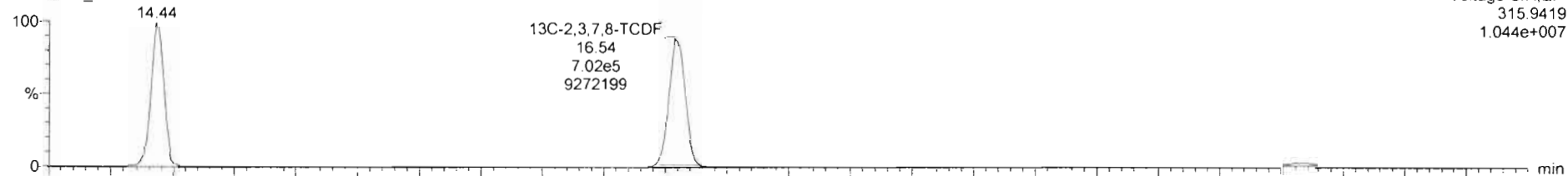
200309R2\_6



Voltage SIR,EI+  
305.899  
3.990e+006

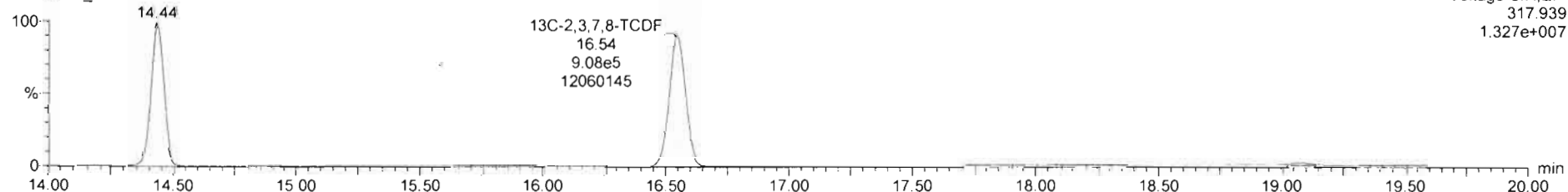
**13C-2,3,7,8-TCDF**

200309R2\_6



Voltage SIR,EI+  
315.9419  
1.044e+007

200309R2\_6



Voltage SIR,EI+  
317.939  
1.327e+007



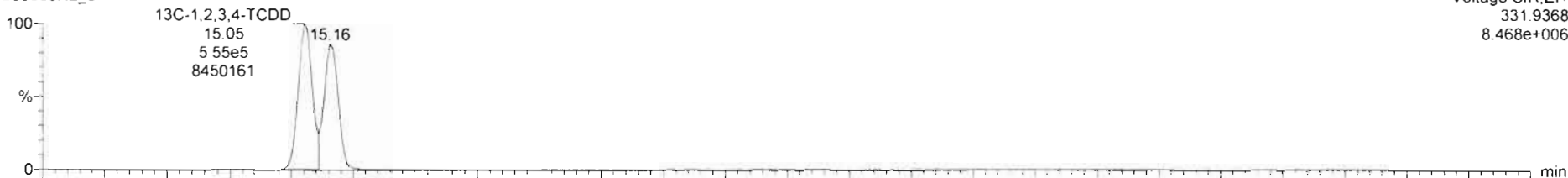
Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

Name: 200309R2\_6, Date: 09-Mar-2020, Time: 20:27:25, ID: ST200309R2\_5 1613 CS4 19L2306, Description: 1613 CS4 19L2306

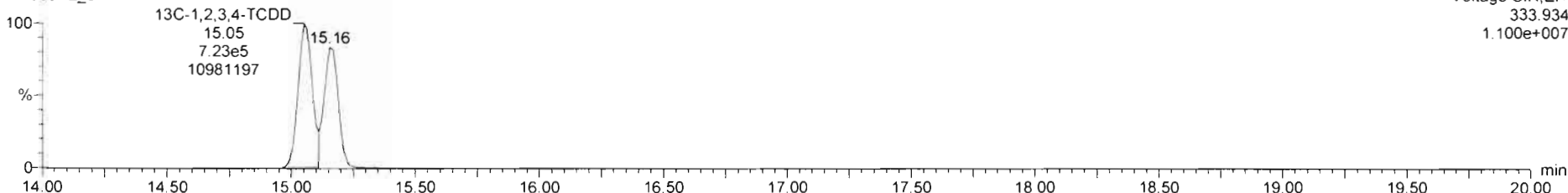
13C-1,2,3,4-TCDD

200309R2\_6



Voltage SIR\_EI+  
331.9368  
8.468e+006

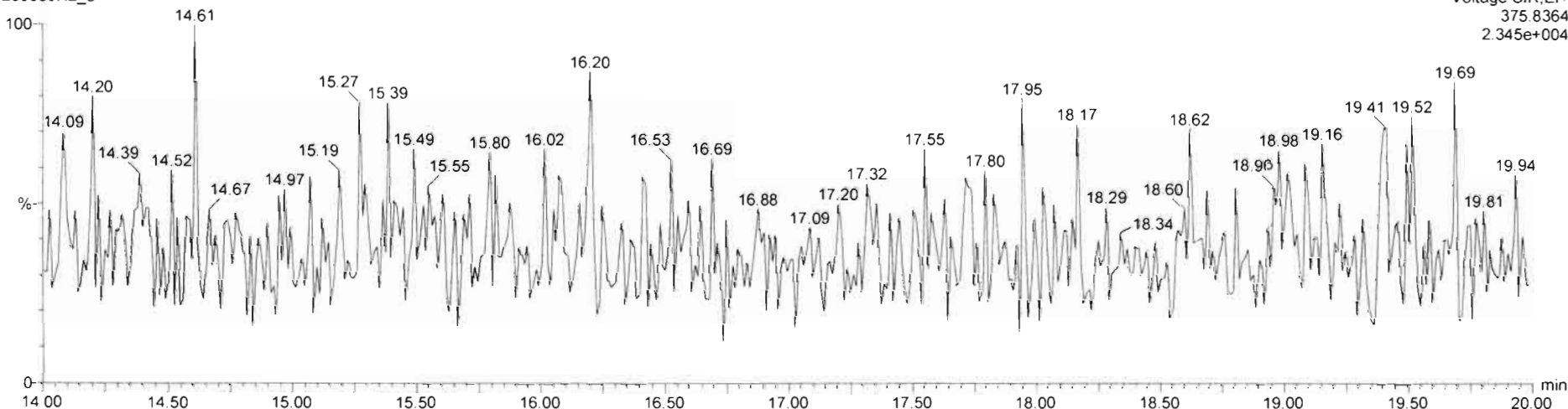
200309R2\_6



Voltage SIR\_EI+  
333.934  
1.100e+007

DPE1

200309R2\_6



Voltage SIR\_EI+  
375.8364  
2.345e+004

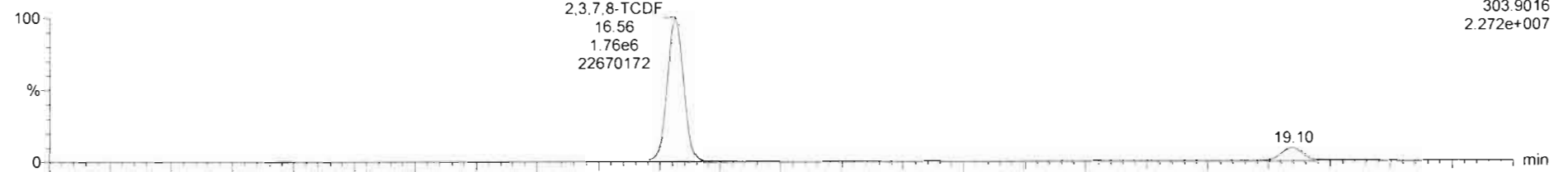
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Last Altered: Tuesday, March 10, 2020 7:38:35 AM Pacific Daylight Time  
Printed: Tuesday, March 10, 2020 7:39:58 AM Pacific Daylight Time

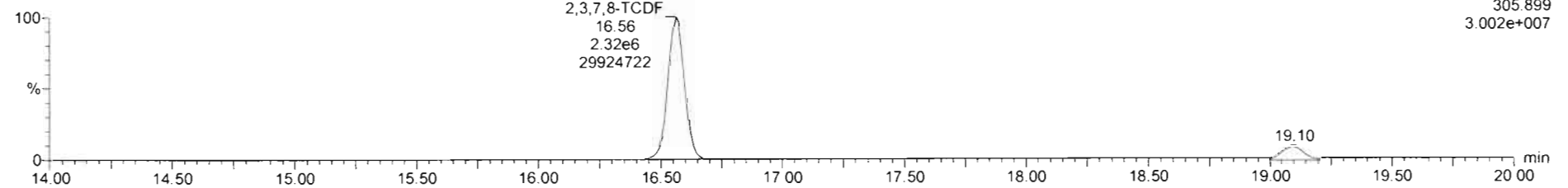
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2,3,7,8-TCDF

200309R2\_7

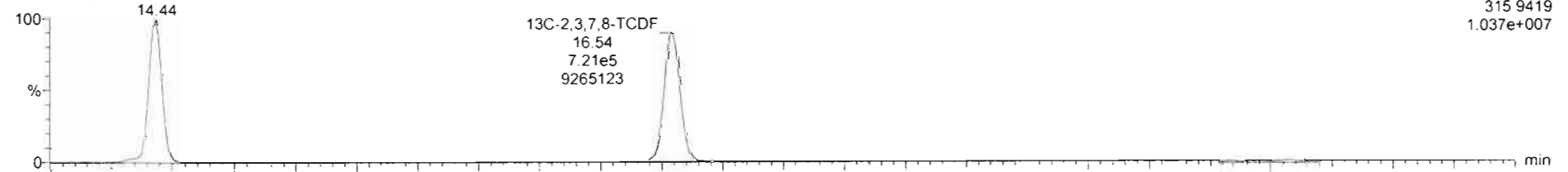


200309R2\_7

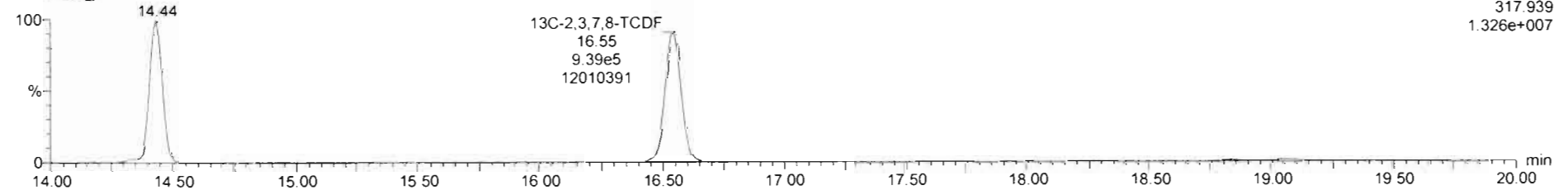


13C-2,3,7,8-TCDF

200309R2\_7



200309R2\_7



Dataset: Untitled

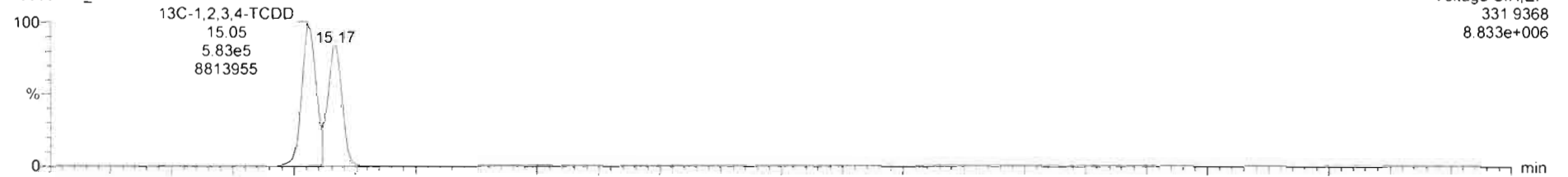
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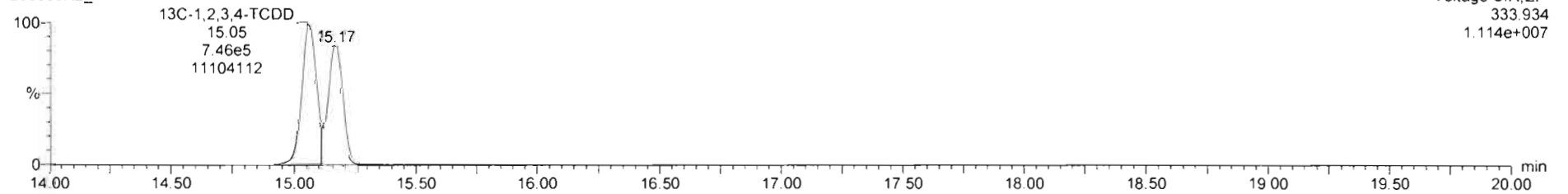
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13C-1,2,3,4-TCDD

200309R2\_7

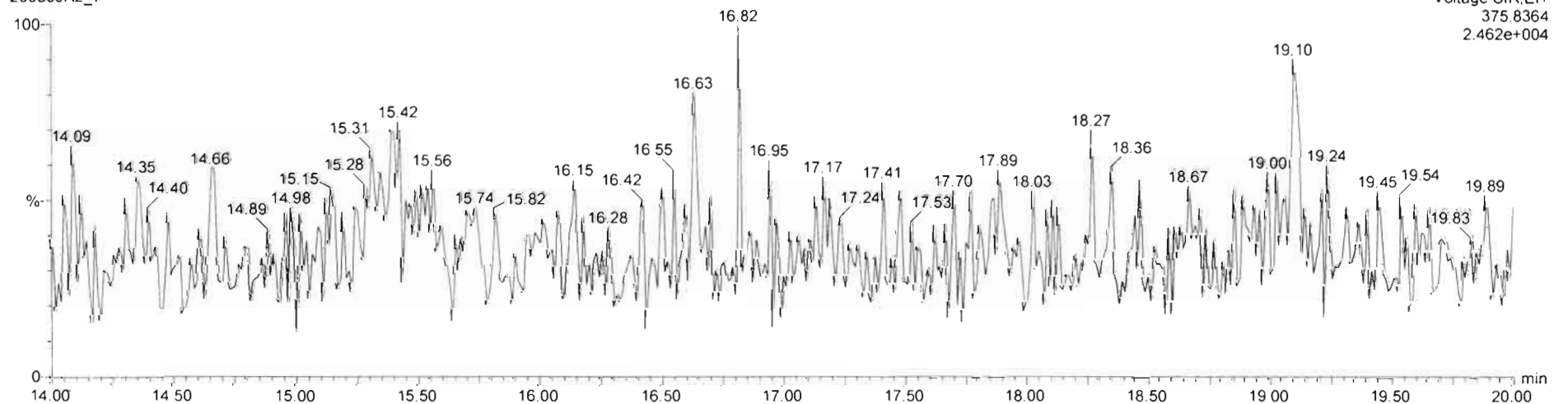


200309R2\_7



DPE1

200309R2\_7



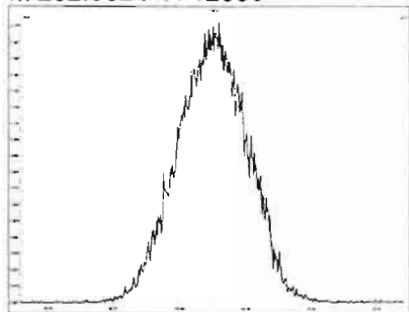
Experiment Calibration Report

MassLynx 4.1 SCN815

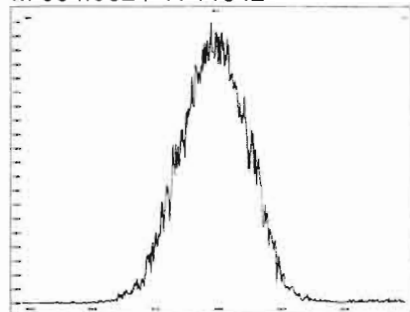
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Printed: Tuesday, March 10, 2020 07:42:24 Pacific Daylight Time

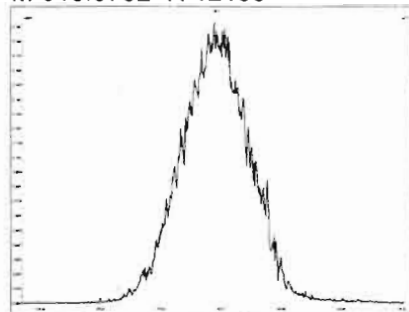
M 292.9824 R 12559



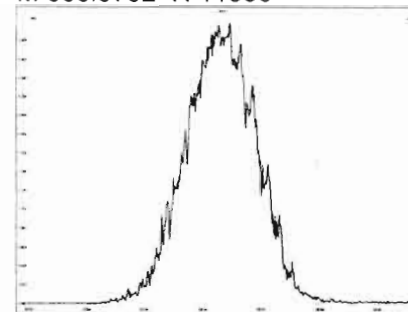
M 304.9824 R 11842



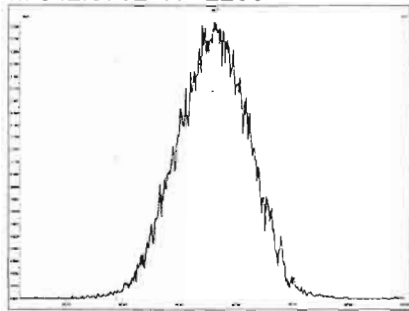
M 318.9792 R 12193



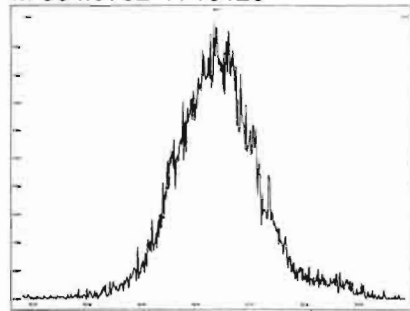
M 330.9792 R 11963



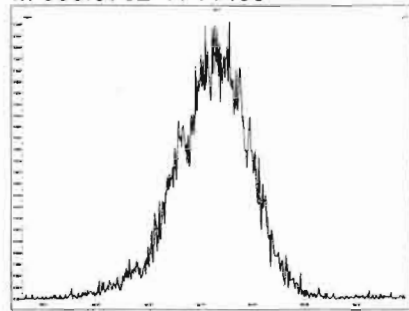
M 342.9792 R 12200



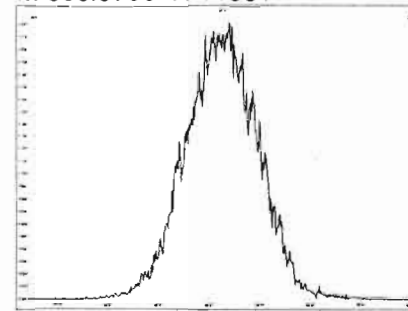
M 354.9792 R 10120



M 366.9792 R 11468



M 380.9760 R 11681



Dataset: U:\VG12.PRO\Results\200309R2\200309R2-9.qld

Last Altered: Tuesday, March 10, 2020 8:22:49 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:25:09 AM Pacific Daylight Time

*GRB 03/10/2020*

*C1 03/10/2020*

Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200309R2\_9, Date: 09-Mar-2020, Time: 21:58:38, ID: SS200309R2\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

	# Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.09e5	0.73	NO	0.821	1.000	16.56	10.163	102	0.0715
2	2 13C-2,3,7,8-TCDF	1.30e6	0.77	NO	1.10	1.000	16.54	93.316	93.3	0.191
3	3 13C-1,2,3,4-TCDF	1.27e6	0.79	NO	1.00	1.000	14.44	100.00	100	0.210

Dataset: Untitled

Last Altered: Tuesday, March 10, 2020 8:22:49 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:22:54 AM Pacific Daylight Time

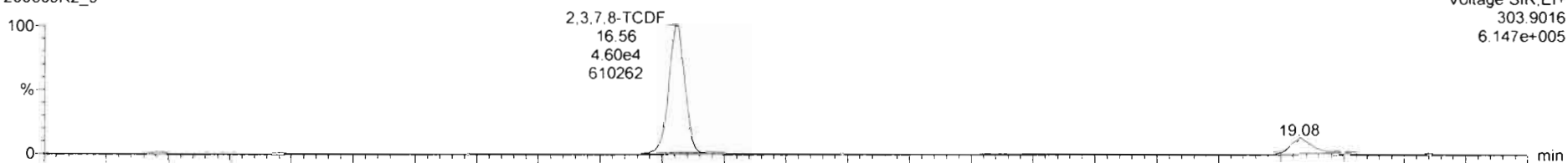
Method: U:\VG12.PRO\MethDB\tcdf.mdb 10 Mar 2020 07:50:49

Calibration: U:\VG12.PRO\CurveDB\db225\_1613TCDFvg12-03-09-20.cdb 10 Mar 2020 08:18:28

Name: 200309R2\_9, Date: 09-Mar-2020, Time: 21:58:38, ID: SS200309R2\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

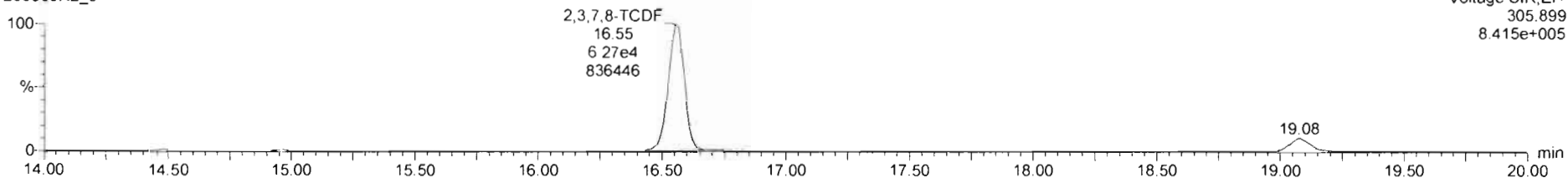
2,3,7,8-TCDF

200309R2\_9



Voltage SIR,EI+  
303.9016  
6.147e+005

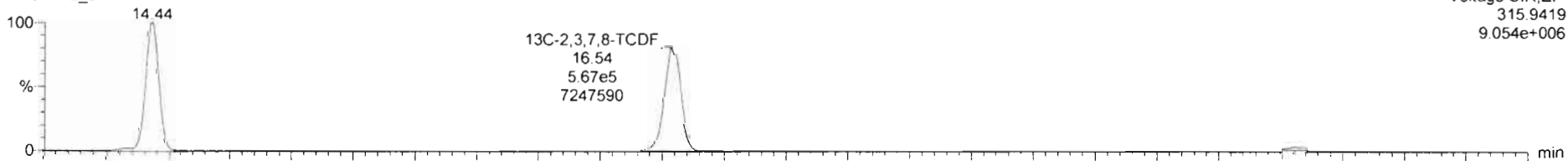
200309R2\_9



Voltage SIR,EI+  
305.899  
8.415e+005

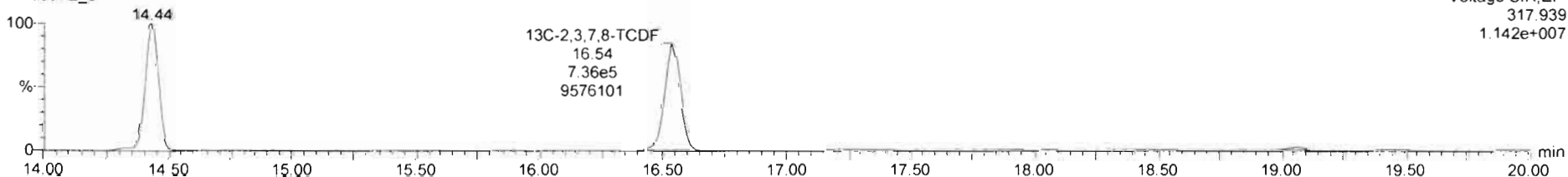
13C-2,3,7,8-TCDF

200309R2\_9



Voltage SIR,EI+  
315.9419  
9.054e+006

200309R2\_9



Voltage SIR,EI+  
317.939  
1.142e+007

Dataset: Untitled

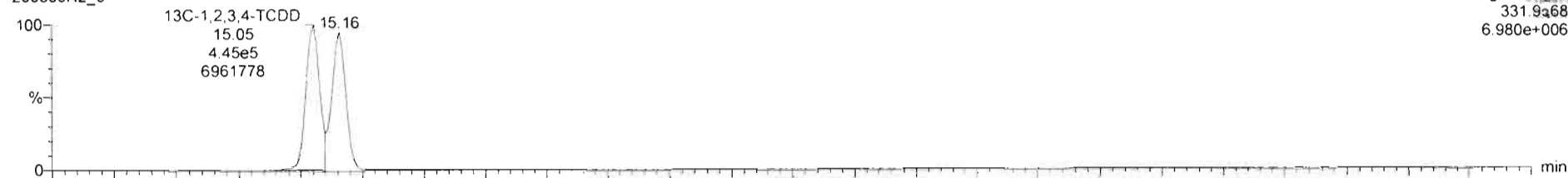
Last Altered: Tuesday, March 10, 2020 8:22:49 AM Pacific Daylight Time

Printed: Tuesday, March 10, 2020 8:22:54 AM Pacific Daylight Time

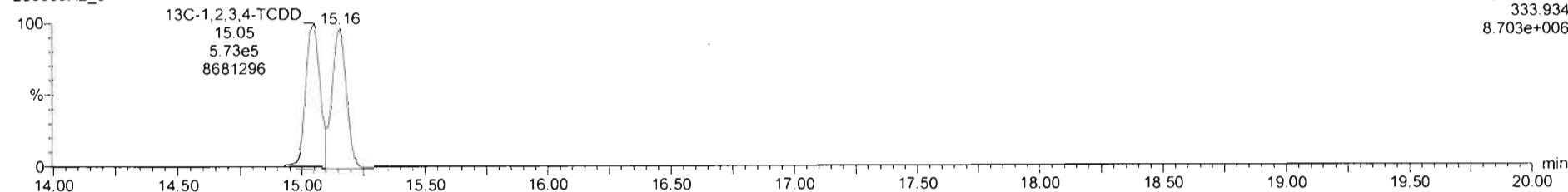
Name: 200309R2\_9, Date: 09-Mar-2020, Time: 21:58:38, ID: SS200309R2\_1 1613 SSS 19L2308, Description: 1613 SSS 19L2308

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

200309R2\_9



200309R2\_9



DPE1

200309R2\_9

