February 04, 2020

Vista Work Order No. 1904021

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 November 15, 2019 under your Project Name 'Gasco PDI'.

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.

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. 1904021
Case Narrative

Sample Condition on Receipt:

Seven soil 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. A sample collection time discrepancy was noted upon sample receipt. The sample collection time for "PDI-1142RAB-20-30.4-191112" was not noted on the Chain of Custody (CoC). The sample container labels for the sample had a collection time of 14:40. The sample has been reported as it was listed on the CoC. Two containers were received with cracked lids: One container of sample "PDI-142RAB-10-20-191112" and one of "PDI-144RAB-00-10-191113". These sample containers were not used for analysis.

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. The confirmation for 2,3,7,8-TCDF was performed using a DB-225 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 each preparation batch. No analytes were detected above the sample quantitation limits in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

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

EPA Method 1699

These samples were extracted and analyzed for a selected list of chlorinated pesticides by EPA Method 1699 using a ZB-50 GC column.

Holding Times

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

Quality Control

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

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

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

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1904021-07	PDI-144RAB-20-29-191113	EPA Method 1699	13C12-4,4'-DDD	H	125
1904021-07	PDI-144RAB-20-29-191113	EPA Method 1699	13C12-4,4'-DDT	H	134

H = Recovery was outside laboratory acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1904021-01	PDI-1142RAB-20-30.4-191112	12-Nov-19 00:00	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-02	PDI-142RAB-00-10-191112	12-Nov-19 11:20	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-03	PDI-142RAB-10-20-191112	12-Nov-19 12:00	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-04	PDI-142RAB-20-30.4-191112	12-Nov-19 14:35	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-05	PDI-144RAB-00-10-191113	13-Nov-19 09:55	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-06	PDI-144RAB-10-20-191113	13-Nov-19 11:20	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL
1904021-07	PDI-144RAB-20-29-191113	13-Nov-19 12:00	15-Nov-19 08:54	Amber Glass, 120 mL
				Amber Glass, 120 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

EPA Method 1613B

Matrix: Solid
Sample Size: 10.0 g

QC Batch: B9K0169
Date Extracted: 19-Nov-2019 7:24

Lab Sample: B9K0169-BLK1
Date Analyzed : 05-Dec-19 09:57 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.224		
1,2,3,7,8-PeCDD	ND	0.235		
1,2,3,4,7,8-HxCDD	ND	0.332		
1,2,3,6,7,8-HxCDD	ND	0.356		
1,2,3,7,8,9-HxCDD	ND	0.378		
1,2,3,4,6,7,8-HpCDD	ND	0.336		
OCDD	ND	0.346		
2,3,7,8-TCDF	ND	0.209		
1,2,3,7,8-PeCDF	ND	0.183		
2,3,4,7,8-PeCDF	ND	0.165		
1,2,3,4,7,8-HxCDF	ND	0.183		
1,2,3,6,7,8-HxCDF	ND	0.199		
2,3,4,6,7,8-HxCDF	ND	0.216		
1,2,3,7,8,9-HxCDF	ND	0.294		
1,2,3,4,6,7,8-HpCDF	ND	0.317		
1,2,3,4,7,8,9-HpCDF	ND	0.296		
OCDF	ND	0.304		

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	80.1	25 - 164	
	13C-1,2,3,7,8-PeCDD	90.5	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	84.7	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	69.0	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	74.7	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	75.8	23 - 140	
	13C-OCDD	83.7	17 - 157	
	13C-2,3,7,8-TCDF	72.1	24 - 169	
	13C-1,2,3,7,8-PeCDF	84.1	24 - 185	
	13C-2,3,4,7,8-PeCDF	82.5	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	89.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	77.0	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	73.9	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	77.7	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	72.1	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	76.7	26 - 138	
	13C-OCDF	87.5	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	78.8	35 - 197	

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

TEQMinWHO2005Dioxin	0.00

TOTALS		
Total TCDD	ND	0.224
Total PeCDD	ND	0.235
Total HxCDD	ND	0.378
Total HpCDD	ND	0.336
Total TCDF	ND	0.209
Total PeCDF	ND	0.183
Total HxCDF	ND	0.294
Total HpCDF	ND	0.317

DL - Sample specifc 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	QC Batch:	B9K0169	Lab Sample:	B9K0169-BS1
Sample Size:	10.0 g	Date Extracted:	19-Nov-2019 7:24	Date Analyzed:	05-Dec-19 08:21 Column: ZB-5MS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	19.7	20.0	98.7	67 - 158	IS	13C-2,3,7,8-TCDD	92.9	20 - 175
1,2,3,7,8-PeCDD	99.2	100	99.2	70 - 142		13C-1,2,3,7,8-PeCDD	101	21 - 227
1,2,3,4,7,8-HxCDD	93.3	100	93.3	70 - 164		13C-1,2,3,4,7,8-HxCDD	94.4	21 - 193
1,2,3,6,7,8-HxCDD	96.9	100	96.9	76 - 134		13C-1,2,3,6,7,8-HxCDD	78.8	25 - 163
1,2,3,7,8,9-HxCDD	95.4	100	95.4	64 - 162		13C-1,2,3,7,8,9-HxCDD	84.6	21 - 193
1,2,3,4,6,7,8-HpCDD	93.8	100	93.8	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	83.1	26 - 166
OCDD	190	200	95.1	78 - 144		13C-OCDD	94.0	13 - 199
2,3,7,8-TCDF	17.6	20.0	88.0	75 - 158		13C-2,3,7,8-TCDF	88.2	22 - 152
1,2,3,7,8-PeCDF	95.3	100	95.3	80 - 134		13C-1,2,3,7,8-PeCDF	98.0	21 - 192
2,3,4,7,8-PeCDF	95.1	100	95.1	68 - 160		13C-2,3,4,7,8-PeCDF	97.3	13 - 328
1,2,3,4,7,8-HxCDF	87.3	100	87.3	72 - 134		13C-1,2,3,4,7,8-HxCDF	104	19 - 202
1,2,3,6,7,8-HxCDF	88.6	100	88.6	84 - 130		13C-1,2,3,6,7,8-HxCDF	86.7	21 - 159
2,3,4,6,7,8-HxCDF	90.5	100	90.5	70 - 156		13C-2,3,4,6,7,8-HxCDF	87.0	22 - 176
1,2,3,7,8,9-HxCDF	87.2	100	87.2	78 - 130		13C-1,2,3,7,8,9-HxCDF	88.8	17 - 205
1,2,3,4,6,7,8-HpCDF	88.3	100	88.3	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	81.5	21 - 158
1,2,3,4,7,8,9-HpCDF	84.6	100	84.6	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	87.0	20 - 186
OCDF	173	200	86.5	63 - 170		13C-OCDF	98.8	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	88.8	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank

EPA Method 1613B

Matrix: Solid
Sample Size: 10.0 g

QC Batch: B9L0200
Date Extracted: 18-Dec-2019 6:38

Lab Sample: B9L0200-BLK1
Date Analyzed : 10-Jan-20 01:54 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.0552		
1,2,3,7,8-PeCDD	ND	0.0603		
1,2,3,4,7,8-HxCDD	ND	0.0997		
1,2,3,6,7,8-HxCDD	ND	0.111		
1,2,3,7,8,9-HxCDD	ND	0.111		
1,2,3,4,6,7,8-HpCDD	ND	0.108		
OCDD	ND	0.108		
2,3,7,8-TCDF	ND	0.0435		
1,2,3,7,8-PeCDF	ND	0.0728		
2,3,4,7,8-PeCDF	ND	0.0631		
1,2,3,4,7,8-HxCDF	ND	0.0454		
1,2,3,6,7,8-HxCDF	ND	0.0469		
2,3,4,6,7,8-HxCDF	ND	0.0513		
1,2,3,7,8,9-HxCDF	ND	0.0761		
1,2,3,4,6,7,8-HpCDF	ND	0.0626		
1,2,3,4,7,8,9-HpCDF	ND	0.0567		
OCDF	ND	0.0930		
TOTALS				
Total TCDD	ND	0.0552		
Total PeCDD	ND	0.0603		
Total HxCDD	ND	0.108		
Total HpCDD	ND	0.108		
Total TCDF	ND	0.0435		
Total PeCDF	ND	0.0678		
Total HxCDF	ND	0.0542		
Total HpCDF	ND	0.0599		

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	94.6	25 - 164	
	13C-1,2,3,7,8-PeCDD	95.7	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	103	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	90.6	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	94.5	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	96.9	23 - 140	
	13C-OCDD	98.0	17 - 157	
	13C-2,3,7,8-TCDF	89.2	24 - 169	
	13C-1,2,3,7,8-PeCDF	98.2	24 - 185	
	13C-2,3,4,7,8-PeCDF	100	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	106	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	95.3	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	96.9	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	102	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	89.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	97.5	26 - 138	
	13C-OCDF	101	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	83.2	35 - 197	

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

TEQMinWHO2005Dioxin	0.00

DL - Sample specifc 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	QC Batch:	B9L0200	Lab Sample:	B9L0200-BS1
Sample Size:	10.0 g	Date Extracted:	18-Dec-2019 6:38	Date Analyzed:	09-Jan-20 23:30 Column: ZB-5MS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	20.9	20.0	105	67 - 158	IS	13C-2,3,7,8-TCDD	90.4	20 - 175
1,2,3,7,8-PeCDD	107	100	107	70 - 142		13C-1,2,3,7,8-PeCDD	95.6	21 - 227
1,2,3,4,7,8-HxCDD	100	100	100	70 - 164		13C-1,2,3,4,7,8-HxCDD	99.3	21 - 193
1,2,3,6,7,8-HxCDD	101	100	101	76 - 134		13C-1,2,3,6,7,8-HxCDD	87.6	25 - 163
1,2,3,7,8,9-HxCDD	102	100	102	64 - 162		13C-1,2,3,7,8,9-HxCDD	90.9	21 - 193
1,2,3,4,6,7,8-HpCDD	94.0	100	94.0	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	103	26 - 166
OCDD	197	200	98.5	78 - 144		13C-OCDD	97.1	13 - 199
2,3,7,8-TCDF	19.0	20.0	95.0	75 - 158		13C-2,3,7,8-TCDF	86.0	22 - 152
1,2,3,7,8-PeCDF	105	100	105	80 - 134		13C-1,2,3,7,8-PeCDF	91.4	21 - 192
2,3,4,7,8-PeCDF	103	100	103	68 - 160		13C-2,3,4,7,8-PeCDF	95.0	13 - 328
1,2,3,4,7,8-HxCDF	89.3	100	89.3	72 - 134		13C-1,2,3,4,7,8-HxCDF	101	19 - 202
1,2,3,6,7,8-HxCDF	88.7	100	88.7	84 - 130		13C-1,2,3,6,7,8-HxCDF	93.7	21 - 159
2,3,4,6,7,8-HxCDF	91.0	100	91.0	70 - 156		13C-2,3,4,6,7,8-HxCDF	94.2	22 - 176
1,2,3,7,8,9-HxCDF	90.1	100	90.1	78 - 130		13C-1,2,3,7,8,9-HxCDF	100	17 - 205
1,2,3,4,6,7,8-HpCDF	86.8	100	86.8	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	91.5	21 - 158
1,2,3,4,7,8,9-HpCDF	84.6	100	84.6	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	101	20 - 186
OCDF	175	200	87.4	63 - 170		13C-OCDF	100	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	81.1	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: PDI-1142RAB-20-30.4-191112

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 12-Nov-2019 0:00

Sample Data
Matrix: Soil
Sample Size: 11.7 g
% Solids: 86.8

Laboratory Data
Lab Sample: 1904021-01 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 06:31 Column: ZB-5MS
16-Dec-19 16:10 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.262		
1,2,3,7,8-PeCDD	ND	0.313		
1,2,3,4,7,8-HxCDD	ND	0.412		
1,2,3,6,7,8-HxCDD	1.42			J
1,2,3,7,8,9-HxCDD	0.684			J
1,2,3,4,6,7,8-HpCDD	96.0			
OCDD	618			
2,3,7,8-TCDF	2.85			
1,2,3,7,8-PeCDF	4.03			
2,3,4,7,8-PeCDF	3.65			
1,2,3,4,7,8-HxCDF	4.28			
1,2,3,6,7,8-HxCDF	1.06			J
2,3,4,6,7,8-HxCDF	ND		0.646	
1,2,3,7,8,9-HxCDF	ND	0.375		
1,2,3,4,6,7,8-HpCDF	6.74			
1,2,3,4,7,8,9-HpCDF	1.09			J
OCDF	24.9			
TOTALS				
Total TCDD	ND	0.262		
Total PeCDD	0.807		1.09	
Total HxCDD	21.8		22.7	
Total HpCDD	220			
Total TCDF	5.75		6.33	
Total PeCDF	17.5		18.4	
Total HxCDF	13.0		13.6	
Total HpCDF	24.0			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	66.4	25 - 164	
	13C-1,2,3,7,8-PeCDD	68.7	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	74.5	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	60.7	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	64.0	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	68.9	23 - 140	
	13C-OCDD	61.7	17 - 157	
	13C-2,3,7,8-TCDF	65.2	24 - 169	
	13C-1,2,3,7,8-PeCDF	70.1	24 - 185	
	13C-2,3,4,7,8-PeCDF	66.4	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	72.2	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	62.7	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	64.1	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	68.9	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	63.6	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	71.0	26 - 138	
	13C-OCDF	63.7	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	85.9	35 - 197	

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

TEQMinWHO2005Dioxin	3.48

DL - Sample specifc 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-142RAB-00-10-191112

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 12-Nov-2019 11:20

Sample Data
Matrix: Soil
Sample Size: 10.8 g
% Solids: 93.0

Laboratory Data
Lab Sample: 1904021-02 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 07:19 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.132		
1,2,3,7,8-PeCDD	ND	0.180		
1,2,3,4,7,8-HxCDD	ND	0.223		
1,2,3,6,7,8-HxCDD	ND		0.441	
1,2,3,7,8,9-HxCDD	ND	0.227		
1,2,3,4,6,7,8-HpCDD	10.2			
OCDD	100			
2,3,7,8-TCDF	ND	0.145		
1,2,3,7,8-PeCDF	ND	0.104		
2,3,4,7,8-PeCDF	ND	0.0907		
1,2,3,4,7,8-HxCDF	0.210			J
1,2,3,6,7,8-HxCDF	ND	0.114		
2,3,4,6,7,8-HxCDF	ND		0.102	
1,2,3,7,8,9-HxCDF	ND	0.158		
1,2,3,4,6,7,8-HpCDF	1.21			J
1,2,3,4,7,8,9-HpCDF	ND	0.134		
OCDF	3.56			J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	104	25 - 164	
	13C-1,2,3,7,8-PeCDD	109	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	111	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	88.8	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	97.2	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	113	23 - 140	
	13C-OCDD	117	17 - 157	
	13C-2,3,7,8-TCDF	98.9	24 - 169	
	13C-1,2,3,7,8-PeCDF	109	24 - 185	
	13C-2,3,4,7,8-PeCDF	105	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	110	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	99.0	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	99.1	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	108	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	120	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	118	26 - 138	
	13C-OCDF	123	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	98.4	35 - 197	

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

TEQMinWHO2005Dioxin	0.166

TOTALS				
Total TCDD	ND	0.132		
Total PeCDD	ND	0.180		
Total HxCDD	1.15		2.74	
Total HpCDD	21.9			
Total TCDF	ND	0.145		
Total PeCDF	0.753			
Total HxCDF	1.61		1.95	
Total HpCDF	4.28			

DL - Sample specifc 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-142RAB-10-20-191112

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 12-Nov-2019 12:00

Sample Data
Matrix: Soil
Sample Size: 10.6 g
% Solids: 94.2

Laboratory Data
Lab Sample: 1904021-03 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 08:07 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.359		
1,2,3,7,8-PeCDD	ND	0.508		
1,2,3,4,7,8-HxCDD	ND	0.699		
1,2,3,6,7,8-HxCDD	ND	0.743		
1,2,3,7,8,9-HxCDD	ND	0.749		
1,2,3,4,6,7,8-HpCDD	9.36			
OCDD	84.0			
2,3,7,8-TCDF	ND	0.301		
1,2,3,7,8-PeCDF	ND	0.255		
2,3,4,7,8-PeCDF	ND	0.264		
1,2,3,4,7,8-HxCDF	ND	0.309		
1,2,3,6,7,8-HxCDF	ND	0.298		
2,3,4,6,7,8-HxCDF	ND	0.349		
1,2,3,7,8,9-HxCDF	ND	0.464		
1,2,3,4,6,7,8-HpCDF	0.975			J
1,2,3,4,7,8,9-HpCDF	ND	0.317		
OCDF	3.47			J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	38.2	25 - 164	
	13C-1,2,3,7,8-PeCDD	39.7	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	38.7	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	33.4	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	36.0	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	42.0	23 - 140	
	13C-OCDD	43.1	17 - 157	
	13C-2,3,7,8-TCDF	36.2	24 - 169	
	13C-1,2,3,7,8-PeCDF	39.4	24 - 185	
	13C-2,3,4,7,8-PeCDF	37.9	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	39.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	36.9	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	35.5	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	39.7	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	42.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	46.8	26 - 138	
	13C-OCDF	46.4	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	88.4	35 - 197	

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

TEQMinWHO2005Dioxin	0.130

TOTALS

Total TCDD	ND	0.359		
Total PeCDD	ND	0.508		
Total HxCDD	ND		0.890	
Total HpCDD	21.4			
Total TCDF	ND	0.301		
Total PeCDF	ND		0.301	
Total HxCDF	0.328		0.974	
Total HpCDF	3.18			

DL - Sample specifc 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-142RAB-20-30.4-191112

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 12-Nov-2019 14:35

Sample Data
Matrix: Soil
Sample Size: 11.5 g
% Solids: 88.0

Laboratory Data
Lab Sample: 1904021-04 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 08:55 Column: ZB-5MS
16-Dec-19 15:38 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.194		
1,2,3,7,8-PeCDD	ND	0.268		
1,2,3,4,7,8-HxCDD	ND	0.425		
1,2,3,6,7,8-HxCDD	1.38			J
1,2,3,7,8,9-HxCDD	ND	0.501		
1,2,3,4,6,7,8-HpCDD	74.9			
OCDD	546			
2,3,7,8-TCDF	0.480			J
1,2,3,7,8-PeCDF	0.773			J
2,3,4,7,8-PeCDF	ND		0.658	
1,2,3,4,7,8-HxCDF	1.47			J
1,2,3,6,7,8-HxCDF	ND		0.473	
2,3,4,6,7,8-HxCDF	0.488			J
1,2,3,7,8,9-HxCDF	ND	0.185		
1,2,3,4,6,7,8-HpCDF	4.71			
1,2,3,4,7,8,9-HpCDF	0.505			J
OCDF	19.7			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	94.1	25 - 164	
	13C-1,2,3,7,8-PeCDD	99.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	97.7	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	82.5	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	84.9	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	102	23 - 140	
	13C-OCDD	89.0	17 - 157	
	13C-2,3,7,8-TCDF	86.9	24 - 169	
	13C-1,2,3,7,8-PeCDF	97.6	24 - 185	
	13C-2,3,4,7,8-PeCDF	96.0	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	99.1	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	88.2	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	85.6	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	93.1	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	90.6	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	101	26 - 138	
	13C-OCDF	90.5	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	88.0	35 - 197	

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

TEQMinWHO2005Dioxin	1.38

TOTALS

Total TCDD	ND	0.194		
Total PeCDD	0.903		1.46	
Total HxCDD	16.5			
Total HpCDD	177			
Total TCDF	0.829		1.01	
Total PeCDF	4.17		6.43	
Total HxCDF	8.63		9.10	
Total HpCDF	19.7			

DL - Sample specifc 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-144RAB-00-10-191113

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 13-Nov-2019 9:55

Sample Data
Matrix: Soil
Sample Size: 11.0 g
% Solids: 91.9

Laboratory Data
Lab Sample: 1904021-05 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 09:42 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.137		
1,2,3,7,8-PeCDD	ND	0.146		
1,2,3,4,7,8-HxCDD	ND	0.241		
1,2,3,6,7,8-HxCDD	ND	0.242		
1,2,3,7,8,9-HxCDD	ND	0.260		
1,2,3,4,6,7,8-HpCDD	11.7			
OCDD	135			
2,3,7,8-TCDF	ND		0.336	
1,2,3,7,8-PeCDF	0.323			J
2,3,4,7,8-PeCDF	0.159			J
1,2,3,4,7,8-HxCDF	0.705			J
1,2,3,6,7,8-HxCDF	ND	0.169		
2,3,4,6,7,8-HxCDF	ND	0.200		
1,2,3,7,8,9-HxCDF	ND	0.251		
1,2,3,4,6,7,8-HpCDF	1.58			J
1,2,3,4,7,8,9-HpCDF	ND		0.210	
OCDF	4.14			J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	102	25 - 164	
	13C-1,2,3,7,8-PeCDD	108	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	103	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	87.5	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	93.6	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	113	23 - 140	
	13C-OCDD	115	17 - 157	
	13C-2,3,7,8-TCDF	95.7	24 - 169	
	13C-1,2,3,7,8-PeCDF	102	24 - 185	
	13C-2,3,4,7,8-PeCDF	103	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	107	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	94.4	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	93.6	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	103	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	116	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	120	26 - 138	
	13C-OCDF	123	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	98.2	35 - 197	

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

TEQMinWHO2005Dioxin	0.302

TOTALS

Total TCDD	ND	0.137		
Total PeCDD	ND	0.146		
Total HxCDD	1.15		2.17	
Total HpCDD	26.4			
Total TCDF	ND		0.336	
Total PeCDF	1.18		1.73	
Total HxCDF	2.55			
Total HpCDF	4.64		4.85	

DL - Sample specifc 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-144RAB-10-20-191113

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 13-Nov-2019 11:20

Sample Data
Matrix: Soil
Sample Size: 10.8 g
% Solids: 93.4

Laboratory Data
Lab Sample: 1904021-06 Date Received: 15-Nov-2019 8:54
QC Batch: B9L0200 Date Extracted: 18-Dec-2019 6:38
Date Analyzed : 10-Jan-20 03:30 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND		0.109	
1,2,3,7,8-PeCDD	ND	0.109		
1,2,3,4,7,8-HxCDD	ND	0.124		
1,2,3,6,7,8-HxCDD	ND		0.278	
1,2,3,7,8,9-HxCDD	0.170			J
1,2,3,4,6,7,8-HpCDD	6.80			
OCDD	63.6			
2,3,7,8-TCDF	0.0972			J
1,2,3,7,8-PeCDF	0.338			J
2,3,4,7,8-PeCDF	ND		0.109	
1,2,3,4,7,8-HxCDF	0.451			J
1,2,3,6,7,8-HxCDF	ND	0.0571		
2,3,4,6,7,8-HxCDF	ND	0.0641		
1,2,3,7,8,9-HxCDF	ND	0.0867		
1,2,3,4,6,7,8-HpCDF	0.985			J
1,2,3,4,7,8,9-HpCDF	0.144			J
OCDF	2.52			J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	103	25 - 164	
	13C-1,2,3,7,8-PeCDD	97.4	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	105	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	86.4	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	94.7	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	104	23 - 140	
	13C-OCDD	104	17 - 157	
	13C-2,3,7,8-TCDF	98.5	24 - 169	
	13C-1,2,3,7,8-PeCDF	104	24 - 185	
	13C-2,3,4,7,8-PeCDF	97.7	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	103	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	95.7	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	93.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	101	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	96.2	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	99.6	26 - 138	
	13C-OCDF	104	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	94.9	35 - 197	

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

TEQMinWHO2005Dioxin	0.181

TOTALS

Total TCDD	0.181		0.549
Total PeCDD	ND	0.109	
Total HxCDD	1.13		2.40
Total HpCDD	14.9		
Total TCDF	0.0972		0.251
Total PeCDF	0.649		1.28
Total HxCDF	1.47		
Total HpCDF	3.03		

DL - Sample specifc 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-144RAB-20-29-191113

EPA Method 1613B

Client Data
Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 13-Nov-2019 12:00

Sample Data
Matrix: Soil
Sample Size: 10.7 g
% Solids: 93.5

Laboratory Data
Lab Sample: 1904021-07 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0169 Date Extracted: 19-Nov-2019 7:24
Date Analyzed : 13-Dec-19 11:18 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
2,3,7,8-TCDD	ND	0.240		
1,2,3,7,8-PeCDD	ND	0.314		
1,2,3,4,7,8-HxCDD	ND	0.823		
1,2,3,6,7,8-HxCDD	ND	0.886		
1,2,3,7,8,9-HxCDD	ND		0.404	
1,2,3,4,6,7,8-HpCDD	7.37			
OCDD	56.4			
2,3,7,8-TCDF	ND	0.251		
1,2,3,7,8-PeCDF	ND	0.222		
2,3,4,7,8-PeCDF	ND	0.213		
1,2,3,4,7,8-HxCDF	ND	0.526		
1,2,3,6,7,8-HxCDF	ND	0.512		
2,3,4,6,7,8-HxCDF	ND	0.567		
1,2,3,7,8,9-HxCDF	ND	0.751		
1,2,3,4,6,7,8-HpCDF	0.700			J
1,2,3,4,7,8,9-HpCDF	ND	0.260		
OCDF	2.27			J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	54.1	25 - 164	
	13C-1,2,3,7,8-PeCDD	58.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	61.1	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	51.8	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	56.7	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	64.3	23 - 140	
	13C-OCDD	66.0	17 - 157	
	13C-2,3,7,8-TCDF	50.6	24 - 169	
	13C-1,2,3,7,8-PeCDF	58.4	24 - 185	
	13C-2,3,4,7,8-PeCDF	56.6	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	61.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	56.3	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	56.4	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	60.9	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	61.1	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	68.4	26 - 138	
	13C-OCDF	70.0	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	82.4	35 - 197	

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

TEQMinWHO2005Dioxin	0.0983

TOTALS

Total TCDD	ND	0.240		
Total PeCDD	ND	0.314		
Total HxCDD	ND		0.950	
Total HpCDD	17.5			
Total TCDF	ND	0.251		
Total PeCDF	ND		0.349	
Total HxCDF	1.15		1.40	
Total HpCDF	2.30			

DL - Sample specifc 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: Method Blank

EPA Method 1699

Matrix: Solid
Sample Size: 1.00 g

QC Batch: B9K0170
Date Extracted: 19-Nov-2019 7:27

Lab Sample: B9K0170-BLK1
Date Analyzed: 23-Nov-19 01:54 Column: ZB-50

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	4.67		
Aldrin	ND	1.67		
Oxychlordane	ND	6.10		
trans-Chlordane (gamma)	ND	5.81		
trans-Nonachlor	ND	5.36		
cis-Chlordane (alpha)	ND	5.48		
2,4'-DDE	ND	1.86		
4,4'-DDE	ND		4.54	
Dieldrin	ND	2.73		
cis-Nonachlor	ND	4.52		
2,4'-DDD	ND	3.42		
2,4'-DDT	ND	5.32		
4,4'-DDD	ND	3.31		
4,4'-DDT	ND	5.55		

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	81.1	11 - 120	
IS	13C12-Aldrin	86.2	5 - 120	
IS	13C10-Oxychlordane	87.9	23 - 135	
IS	13C10-trans-Chlordane (gamma)	81.6	21 - 132	
IS	13C10-trans-Nonachlor	79.7	14 - 136	
IS	13C12-2,4'-DDE	91.1	47 - 160	
IS	13C12-4,4'-DDE	91.0	47 - 160	
IS	13C12-Dieldrin	87.7	40 - 151	
IS	13C10-cis-Nonachlor	84.5	36 - 139	
IS	13C12-2,4'-DDD	102	5 - 199	
IS	13C12-2,4'-DDT	102	5 - 199	
IS	13C12-4,4'-DDD	108	5 - 120	
IS	13C12-4,4'-DDT	108	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: OPR

EPA Method 1699

Matrix:	Solid	QC Batch:	B9K0170	Lab Sample:	B9K0170-BS1
Sample Size:	1.00 g	Date Extracted:	19-Nov-2019 7:27	Date Analyzed:	22-Nov-19 23:25 Column: ZB-50

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits
Lindane (gamma-BHC)	1110	1000	111	50 - 120
Aldrin	1070	1000	107	50 - 120
Oxychlordane	1060	1000	106	50 - 120
trans-Chlordane (gamma)	1040	1000	104	50 - 120
trans-Nonachlor	1050	1000	105	50 - 120
cis-Chlordane (alpha)	1100	1000	110	50 - 120
2,4'-DDE	1090	1000	109	24 - 123
4,4'-DDE	1090	1000	109	50 - 120
Dieldrin	1110	1000	111	50 - 120
cis-Nonachlor	1090	1000	109	50 - 120
2,4'-DDD	1090	1000	109	50 - 120
2,4'-DDT	1150	1000	115	50 - 120
4,4'-DDD	1060	1000	106	42 - 120
4,4'-DDT	1060	1000	106	50 - 120

	Labeled Standard	%R	LCL-UCL
IS	13C6-Lindane (gamma-BHC)	87.1	5 - 124
IS	13C12-Aldrin	92.5	5 - 126
IS	13C10-Oxychlordane	99.2	5 - 144
IS	13C10-trans-Chlordane (gamma)	93.7	15 - 144
IS	13C10-trans-Nonachlor	93.0	13 - 149
IS	13C12-2,4'-DDE	98.8	26 - 169
IS	13C12-4,4'-DDE	98.5	26 - 169
IS	13C12-Dieldrin	95.9	19 - 161
IS	13C10-cis-Nonachlor	95.5	17 - 154
IS	13C12-2,4'-DDD	106	14 - 200
IS	13C12-2,4'-DDT	106	14 - 200
IS	13C12-4,4'-DDD	114	14 - 200
IS	13C12-4,4'-DDT	117	13 - 200

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank

EPA Method 1699

Matrix: Solid
Sample Size: 1.00 g

QC Batch: B9L0270
Date Extracted: 27-Dec-2019 6:22

Lab Sample: B9L0270-BLK1
Date Analyzed: 25-Jan-20 23:46 Column: ZB-50

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	53.3		
Aldrin	ND	9.80		
Oxychlordane	ND	37.6		
trans-Chlordane (gamma)	ND	36.2		
trans-Nonachlor	ND	28.1		
cis-Chlordane (alpha)	ND	27.3		
2,4'-DDE	ND	31.5		
4,4'-DDE	ND	42.4		
Dieldrin	ND	16.7		
cis-Nonachlor	ND	29.9		
2,4'-DDD	ND	74.9		
2,4'-DDT	ND	138		
4,4'-DDD	ND	79.1		
4,4'-DDT	ND	139		

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	86.4	11 - 120	
IS	13C12-Aldrin	87.1	5 - 120	
IS	13C10-Oxychlordane	86.7	23 - 135	
IS	13C10-trans-Chlordane (gamma)	93.5	21 - 132	
IS	13C10-trans-Nonachlor	94.5	14 - 136	
IS	13C12-2,4'-DDE	89.0	47 - 160	
IS	13C12-4,4'-DDE	84.7	47 - 160	
IS	13C12-Dieldrin	83.0	40 - 151	
IS	13C10-cis-Nonachlor	83.9	36 - 139	
IS	13C12-2,4'-DDD	82.3	5 - 199	
IS	13C12-2,4'-DDT	67.2	5 - 199	
IS	13C12-4,4'-DDD	73.4	5 - 120	
IS	13C12-4,4'-DDT	69.0	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: OPR

EPA Method 1699

Matrix:	Solid	QC Batch:	B9L0270	Lab Sample:	B9L0270-BS1
Sample Size:	1.00 g	Date Extracted:	27-Dec-2019 6:22	Date Analyzed:	25-Jan-20 22:09 Column: ZB-50

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits
Lindane (gamma-BHC)	5120	5000	102	50 - 120
Aldrin	5120	5000	102	50 - 120
Oxychlordane	5200	5000	104	50 - 120
trans-Chlordane (gamma)	5000	5000	99.9	50 - 120
trans-Nonachlor	4940	5000	98.8	50 - 120
cis-Chlordane (alpha)	4840	5000	96.8	50 - 120
2,4'-DDE	4980	5000	99.5	24 - 123
4,4'-DDE	5020	5000	100	50 - 120
Dieldrin	5110	5000	102	50 - 120
cis-Nonachlor	5220	5000	104	50 - 120
2,4'-DDD	5080	5000	102	50 - 120
2,4'-DDT	5510	5000	110	50 - 120
4,4'-DDD	5110	5000	102	42 - 120
4,4'-DDT	4950	5000	99.0	50 - 120

	Labeled Standard	%R	LCL-UCL
IS	13C6-Lindane (gamma-BHC)	89.9	5 - 124
IS	13C12-Aldrin	92.4	5 - 126
IS	13C10-Oxychlordane	91.7	5 - 144
IS	13C10-trans-Chlordane (gamma)	94.6	15 - 144
IS	13C10-trans-Nonachlor	98.8	13 - 149
IS	13C12-2,4'-DDE	96.9	26 - 169
IS	13C12-4,4'-DDE	92.4	26 - 169
IS	13C12-Dieldrin	90.6	19 - 161
IS	13C10-cis-Nonachlor	86.9	17 - 154
IS	13C12-2,4'-DDD	88.7	14 - 200
IS	13C12-2,4'-DDT	79.2	14 - 200
IS	13C12-4,4'-DDD	84.2	14 - 200
IS	13C12-4,4'-DDT	85.0	13 - 200

LCL-UCL - Lower control limit - upper control limit

Sample ID: PDI-1142RAB-20-30.4-191112

EPA Method 1699

Client Data

Name:	Anchor QEA, LLC
Project:	Gasco PDI
Date Collected:	12-Nov-2019 0:00
Location:	001

Sample Data

Matrix:	Soil
Sample Size:	1.16 g
% Solids:	86.8

Laboratory Data

Lab Sample:	1904021-01	Date Received:	15-Nov-2019 8:54
QC Batch:	B9L0270	Date Extracted:	27-Dec-2019 6:22
Date Analyzed:	01-Feb-20 21:16 Column: ZB-50		

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	72.5		
Aldrin	ND	112		
Oxychlordane	ND	302		
trans-Chlordane (gamma)	791			
trans-Nonachlor	ND		284	
cis-Chlordane (alpha)	671			
2,4'-DDE	390			
4,4'-DDE	2580			
Dieldrin	678			
cis-Nonachlor	ND	282		
2,4'-DDD	7720			
2,4'-DDT	842			
4,4'-DDD	20200			
4,4'-DDT	2350			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	71.1	11 - 120	
IS	13C12-Aldrin	30.9	5 - 120	
IS	13C10-Oxychlordane	51.1	23 - 135	
IS	13C10-trans-Chlordane (gamma)	52.2	21 - 132	
IS	13C10-trans-Nonachlor	65.1	14 - 136	
IS	13C12-2,4'-DDE	65.6	47 - 160	
IS	13C12-4,4'-DDE	60.5	47 - 160	
IS	13C12-Dieldrin	64.2	40 - 151	
IS	13C10-cis-Nonachlor	62.7	36 - 139	
IS	13C12-2,4'-DDD	18.6	5 - 199	
IS	13C12-2,4'-DDT	59.2	5 - 199	
IS	13C12-4,4'-DDD	50.6	5 - 120	
IS	13C12-4,4'-DDT	59.4	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-142RAB-00-10-191112

EPA Method 1699

Client Data		Sample Data		Laboratory Data			
Name:	Anchor QEA, LLC	Matrix:	Soil	Lab Sample:	1904021-02	Date Received:	15-Nov-2019 8:54
Project:	Gasco PDI	Sample Size:	1.10 g	QC Batch:	B9K0170	Date Extracted:	19-Nov-2019 7:27
Date Collected:	12-Nov-2019 11:20	% Solids:	93.0	Date Analyzed:	23-Nov-19 04:21	Column:	ZB-50
Location:	002						

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	6.33		
Aldrin	ND	2.18		
Oxychlordane	ND	8.19		
trans-Chlordane (gamma)	ND		10.3	
trans-Nonachlor	16.4			J
cis-Chlordane (alpha)	ND		11.4	
2,4'-DDE	ND	2.21		
4,4'-DDE	28.2			J
Dieldrin	18.4			J
cis-Nonachlor	ND	7.76		
2,4'-DDD	30.7			J
2,4'-DDT	29.2			J
4,4'-DDD	97.4			
4,4'-DDT	249			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	56.3	11 - 120	
IS	13C12-Aldrin	63.8	5 - 120	
IS	13C10-Oxychlordane	66.0	23 - 135	
IS	13C10-trans-Chlordane (gamma)	62.3	21 - 132	
IS	13C10-trans-Nonachlor	61.8	14 - 136	
IS	13C12-2,4'-DDE	70.6	47 - 160	
IS	13C12-4,4'-DDE	71.1	47 - 160	
IS	13C12-Dieldrin	63.9	40 - 151	
IS	13C10-cis-Nonachlor	63.9	36 - 139	
IS	13C12-2,4'-DDD	81.7	5 - 199	
IS	13C12-2,4'-DDT	75.9	5 - 199	
IS	13C12-4,4'-DDD	83.8	5 - 120	
IS	13C12-4,4'-DDT	82.0	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-142RAB-10-20-191112

EPA Method 1699

Client Data

Name:	Anchor QEA, LLC
Project:	Gasco PDI
Date Collected:	12-Nov-2019 12:00
Location:	003

Sample Data

Matrix:	Soil
Sample Size:	1.08 g
% Solids:	94.2

Laboratory Data

Lab Sample:	1904021-03	Date Received:	15-Nov-2019 8:54
QC Batch:	B9K0170	Date Extracted:	19-Nov-2019 7:27
Date Analyzed:	23-Nov-19 05:11 Column: ZB-50		

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	4.19			J
Aldrin	ND	2.87		
Oxychlordane	ND	11.4		
trans-Chlordane (gamma)	16.8			J
trans-Nonachlor	ND		8.47	
cis-Chlordane (alpha)	ND		13.1	
2,4'-DDE	ND	2.35		
4,4'-DDE	42.2			
Dieldrin	ND		11.9	
cis-Nonachlor	ND	13.8		
2,4'-DDD	87.2			
2,4'-DDT	67.1			
4,4'-DDD	308			
4,4'-DDT	385			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	70.9	11 - 120	
IS	13C12-Aldrin	83.3	5 - 120	
IS	13C10-Oxychlordane	90.7	23 - 135	
IS	13C10-trans-Chlordane (gamma)	82.4	21 - 132	
IS	13C10-trans-Nonachlor	77.8	14 - 136	
IS	13C12-2,4'-DDE	87.2	47 - 160	
IS	13C12-4,4'-DDE	85.9	47 - 160	
IS	13C12-Dieldrin	79.4	40 - 151	
IS	13C10-cis-Nonachlor	75.3	36 - 139	
IS	13C12-2,4'-DDD	98.6	5 - 199	
IS	13C12-2,4'-DDT	94.3	5 - 199	
IS	13C12-4,4'-DDD	102	5 - 120	
IS	13C12-4,4'-DDT	105	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-142RAB-20-30.4-191112

EPA Method 1699

Client Data

Name:	Anchor QEA, LLC
Project:	Gasco PDI
Date Collected:	12-Nov-2019 14:35
Location:	004

Sample Data

Matrix:	Soil
Sample Size:	1.15 g
% Solids:	88.0

Laboratory Data

Lab Sample:	1904021-04	Date Received:	15-Nov-2019 8:54
QC Batch:	B9L0270	Date Extracted:	27-Dec-2019 6:22
Date Analyzed:	01-Feb-20 23:44 Column: ZB-50		

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	41.8		
Aldrin	ND		22.7	
Oxychlordane	ND	65.1		
trans-Chlordane (gamma)	232			
trans-Nonachlor	104			J
cis-Chlordane (alpha)	283			
2,4'-DDE	90.8			J
4,4'-DDE	659			
Dieldrin	207			
cis-Nonachlor	ND	75.3		
2,4'-DDD	1450			
2,4'-DDT	448			
4,4'-DDD	5180			
4,4'-DDT	1630			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	82.5	11 - 120	
IS	13C12-Aldrin	45.8	5 - 120	
IS	13C10-Oxychlordane	94.0	23 - 135	
IS	13C10-trans-Chlordane (gamma)	94.8	21 - 132	
IS	13C10-trans-Nonachlor	95.1	14 - 136	
IS	13C12-2,4'-DDE	93.7	47 - 160	
IS	13C12-4,4'-DDE	95.9	47 - 160	
IS	13C12-Dieldrin	85.1	40 - 151	
IS	13C10-cis-Nonachlor	87.6	36 - 139	
IS	13C12-2,4'-DDD	87.1	5 - 199	
IS	13C12-2,4'-DDT	77.5	5 - 199	
IS	13C12-4,4'-DDD	83.8	5 - 120	
IS	13C12-4,4'-DDT	74.7	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-144RAB-00-10-191113

EPA Method 1699

Client Data

Name: Anchor QEA, LLC
Project: Gasco PDI
Date Collected: 13-Nov-2019 9:55
Location: 005

Sample Data

Matrix: Soil
Sample Size: 1.10 g
% Solids: 91.9

Laboratory Data

Lab Sample: 1904021-05 Date Received: 15-Nov-2019 8:54
QC Batch: B9K0170 Date Extracted: 19-Nov-2019 7:27
Date Analyzed: 23-Nov-19 06:00 Column: ZB-50

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	6.62		
Aldrin	ND	3.90		
Oxychlordane	ND	14.0		
trans-Chlordane (gamma)	17.2			J
trans-Nonachlor	ND	12.2		
cis-Chlordane (alpha)	ND	12.5		
2,4'-DDE	ND	2.57		
4,4'-DDE	21.1			J
Dieldrin	11.7			J
cis-Nonachlor	ND	11.3		
2,4'-DDD	50.1			
2,4'-DDT	25.0			J
4,4'-DDD	143			
4,4'-DDT	200			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	63.9	11 - 120	
IS	13C12-Aldrin	69.4	5 - 120	
IS	13C10-Oxychlordane	76.3	23 - 135	
IS	13C10-trans-Chlordane (gamma)	72.0	21 - 132	
IS	13C10-trans-Nonachlor	70.5	14 - 136	
IS	13C12-2,4'-DDE	76.8	47 - 160	
IS	13C12-4,4'-DDE	76.7	47 - 160	
IS	13C12-Dieldrin	73.2	40 - 151	
IS	13C10-cis-Nonachlor	71.5	36 - 139	
IS	13C12-2,4'-DDD	93.9	5 - 199	
IS	13C12-2,4'-DDT	90.8	5 - 199	
IS	13C12-4,4'-DDD	98.4	5 - 120	
IS	13C12-4,4'-DDT	97.9	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-144RAB-10-20-191113

EPA Method 1699

Client Data

Name:	Anchor QEA, LLC
Project:	Gasco PDI
Date Collected:	13-Nov-2019 11:20
Location:	006

Sample Data

Matrix:	Soil
Sample Size:	1.08 g
% Solids:	93.4

Laboratory Data

Lab Sample:	1904021-06	Date Received:	15-Nov-2019 8:54
QC Batch:	B9K0170	Date Extracted:	19-Nov-2019 7:27
Date Analyzed:	23-Nov-19 06:51	Column:	ZB-50

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	5.52		
Aldrin	ND	2.34		
Oxychlordane	ND	8.52		
trans-Chlordane (gamma)	ND		14.7	
trans-Nonachlor	13.2			J
cis-Chlordane (alpha)	16.9			J
2,4'-DDE	ND	2.36		
4,4'-DDE	29.4			J
Dieldrin	29.2			J
cis-Nonachlor	ND	8.69		
2,4'-DDD	65.6			
2,4'-DDT	39.1			J
4,4'-DDD	204			
4,4'-DDT	265			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	69.3	11 - 120	
IS	13C12-Aldrin	76.0	5 - 120	
IS	13C10-Oxychlordane	79.5	23 - 135	
IS	13C10-trans-Chlordane (gamma)	78.1	21 - 132	
IS	13C10-trans-Nonachlor	76.1	14 - 136	
IS	13C12-2,4'-DDE	84.1	47 - 160	
IS	13C12-4,4'-DDE	82.7	47 - 160	
IS	13C12-Dieldrin	78.0	40 - 151	
IS	13C10-cis-Nonachlor	76.9	36 - 139	
IS	13C12-2,4'-DDD	101	5 - 199	
IS	13C12-2,4'-DDT	101	5 - 199	
IS	13C12-4,4'-DDD	106	5 - 120	
IS	13C12-4,4'-DDT	108	5 - 120	

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: PDI-144RAB-20-29-191113

EPA Method 1699

Client Data

Name:	Anchor QEA, LLC
Project:	Gasco PDI
Date Collected:	13-Nov-2019 12:00
Location:	007

Sample Data

Matrix:	Soil
Sample Size:	1.15 g
% Solids:	93.5

Laboratory Data

Lab Sample:	1904021-07	Date Received:	15-Nov-2019 8:54
QC Batch:	B9K0170	Date Extracted:	19-Nov-2019 7:27
Date Analyzed:	23-Nov-19 07:40 Column: ZB-50		

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers
Lindane (gamma-BHC)	ND	4.28		
Aldrin	ND		4.71	
Oxychlordane	ND	11.5		
trans-Chlordane (gamma)	47.7			
trans-Nonachlor	16.3			J
cis-Chlordane (alpha)	26.8			J
2,4'-DDE	ND		3.91	
4,4'-DDE	43.7			
Dieldrin	77.2			
cis-Nonachlor	ND	12.2		
2,4'-DDD	55.1			
2,4'-DDT	78.3			
4,4'-DDD	179			
4,4'-DDT	476			

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C6-Lindane (gamma-BHC)	79.3	11 - 120	
IS	13C12-Aldrin	84.9	5 - 120	
IS	13C10-Oxychlordane	93.8	23 - 135	
IS	13C10-trans-Chlordane (gamma)	88.0	21 - 132	
IS	13C10-trans-Nonachlor	84.0	14 - 136	
IS	13C12-2,4'-DDE	91.4	47 - 160	
IS	13C12-4,4'-DDE	92.8	47 - 160	
IS	13C12-Dieldrin	90.3	40 - 151	
IS	13C10-cis-Nonachlor	92.0	36 - 139	
IS	13C12-2,4'-DDD	115	5 - 199	
IS	13C12-2,4'-DDT	117	5 - 199	
IS	13C12-4,4'-DDD	125	5 - 120	H
IS	13C12-4,4'-DDT	134	5 - 120	H

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
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

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: VISTA-20191114-102611

POC: # Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

1904021 2.9°C, 2.4°C

Sample Custodian: SN
Lab: VISTA

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-1142RAB-20-30.4-191112	FD	SO	11/12/2019		2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
002	PDI-142RAB-00-10-191112	N	SO	11/12/2019	11:20	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
003	PDI-142RAB-10-20-191112	N	SO	11/12/2019	12:00	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
004	PDI-142RAB-20-30.4-191112	N	SO	11/12/2019	14:35	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
005	PDI-144RAB-00-10-191113	N	SO	11/13/2019	9:55	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
006	PDI-144RAB-10-20-191113	N	SO	11/13/2019	11:20	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C
007	PDI-144RAB-20-29-191113	N	SO	11/13/2019	12:00	2	☐				
								Dioxin/Furans	E1613B	30	4°C
								HR Pesticides	SW8081B	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Sasha Norwood	Print Name: Marissa Sparks	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: VSA	Company	Company	Company	Company
Date/Time: 11/14/19 1222	Date/Time: 11/15/19 0854	Date/Time	Date/Time	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 11/14/2019

CoC/Label Reconciliation Report WO# 1904021

LabNumber	CoC Sample ID		SampleAlias	Sample Date/Time	Container	Sample BaseMatrix	Comments
1904021-01	A PDI-1142RAB-20-30.4-191112	☑ C1	001	12-Nov-19 00:00 ☐ *	Amber Glass, 120 mL	Solid	
1904021-01	B PDI-1142RAB-20-30.4-191112	☑ C2	001	12-Nov-19 00:00 ☐ *	Amber Glass, 120 mL	Solid	
1904021-02	A PDI-142RAB-00-10-191112	☑ C1	002	12-Nov-19 11:20 ☑	Amber Glass, 120 mL	Solid	
1904021-02	B PDI-142RAB-00-10-191112	☑ C2	002	12-Nov-19 11:20 ☑	Amber Glass, 120 mL	Solid	
1904021-03	A PDI-142RAB-10-20-191112	☑ C1	003	12-Nov-19 12:00 ☑	Amber Glass, 120 mL	Solid	
1904021-03	B PDI-142RAB-10-20-191112	☑ C1	003	12-Nov-19 12:00 ☑	Amber Glass, 120 mL *2	Solid	
1904021-04	A PDI-142RAB-20-30.4-191112	☑ C1	004	12-Nov-19 14:35 ☑	Amber Glass, 120 mL	Solid	
1904021-04	B PDI-142RAB-20-30.4-191112	☑ C1	004	12-Nov-19 14:35 ☑	Amber Glass, 120 mL	Solid	
1904021-05	A PDI-144RAB-00-10-191113	☑ C1	005	13-Nov-19 09:55 ☑	Amber Glass, 120 mL *3	Solid	
1904021-05	B PDI-144RAB-00-10-191113	☑ C2	005	13-Nov-19 09:55 ☑	Amber Glass, 120 mL	Solid	
1904021-06	A PDI-114RAB-10-20-191113 *4	☐ ~~C2~~ HOG 11/15/19 C1	006	13-Nov-19 11:20 ☑	Amber Glass, 120 mL	Solid	
1904021-06	B PDI-114RAB-10-20-191113 *4	☐ C1	006	13-Nov-19 11:20 ☑	Amber Glass, 120 mL	Solid	
1904021-07	A PDI-144RAB-20-29-191113	☑ C2	007	13-Nov-19 12:00 ☑	Amber Glass, 120 mL	Solid	
1904021-07	B PDI-144RAB-20-29-191113	☑ C2	007	13-Nov-19 12:00 ☑	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~~ 11/15/19 HOG		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Verifed by/Date: HOG 11/15/19

Comments: * time on both jars says "14:40"
*2 Lid is cracked
*3 Lid is cracked
*4 Recon report should say "PDI-144RAB-10-20-191113" corrected WLS 11/15/19

C1 = Cooler 1
C2 = Cooler 2

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 1904021 TAT std

Samples Arrival:	Date/Time 11/15/19 0854	Initials: MWS	Location: WR-2 Shelf/Rack: N/a

Delivered By:	(FedEx)	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	(Ice)		Blue Ice		Dry Ice		None

Temp °C: 2.9 (uncorrected)	Probe used: Y / (N)	Thermometer ID: IR-3
Temp °C: 2.9 (corrected)		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Airbill 1 of 2 Trk # 7769 9171 1672	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / (Client) / Retain / (Return) / Dispose			
Chain of Custody / Sample Documentation Present? COC in cooler 2 of 2		✓	✓
Chain of Custody / Sample Documentation Complete?			✓
Holding Time Acceptable?	✓		

Logged In:	Date/Time 11/15/19 1025	Initials: MWS	Location: WR-2 Shelf/Rack: 3-1

COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 1904021 TAT std

Samples Arrival:	**Date/Time** 11/15/19 0854		**Initials:** WWS		**Location:** WR-2 **Shelf/Rack:** n/a		
Delivered By:	(FedEx)	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	(Ice)		Blue Ice		Dry Ice		None
Temp °C: 2.4 (uncorrected) **Temp °C:** 2.4 (corrected)			**Probe used:** Y / (N)		**Thermometer ID:** IR-3		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Airbill 2 of 2 Trk # 7769 9171 0600	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / (Client) / Retain / (Return) / Dispose			
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	**Date/Time** 11/15/19 1025	**Initials:** WWS	**Location:** WR-2 **Shelf/Rack:** 3-1
COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

Vista Analytical Laboratory

ANOMALY FORM

Vista Work Order 1904021

Initial/Date		The following checked issues were noted during sample receipt and login:
_____	☐	**1. The samples were received out of temperature at (WI-PHT):** _____ Was Ice present: Yes No Melted Blue Ice
_____	☐	2. The Chain-of-Custody (CoC) was not relinquished properly.
WWS 11/15/19	☑	3. The CoC did not include collection time(s). 00:00 will be used unless notified otherwise. Sample name: PDI-142R3B-20-30.4-191112
_____	☐	4. The sample(s) did not include a sample collection time. All or Sample Name: _____
_____	☐	5. A sample ID discrepancy was found. See the Reconciliation report. The CoC Sample ID will be used unless notified otherwise.
WWS 11/15/19	☑	6. A sample date and/or time discrepancy was found. See the Reconciliation report. The CoC Sample date/time will be used unless notified otherwise.
_____	☐	**7. The CoC did not include a sample matrix. The following sample matrix will be used:** _____
_____	☐	**8. Insufficent volume received for analysis. All or Sample Name:** _____
_____	☐	9. The backup bottle was received broken. Sample Name: _____
_____	☐	**10. CoC not received, illegible or destroyed.**
_____	☐	**11. The sample(s) were received out of holding time. All or Sample Name:** _____
_____	☐	**12. The CoC did not include an analysis. All or Sample Name:** _____
_____	☐	**13. Sample(s) received without collection date. All or Sample Name:** _____
_____	☐	**14. Sample(s) not received. All or Sample Name:** _____
_____	☐	**15. Sample(s) received broken. All or Sample Name:** _____
_____	☐	**16. An incorrect container-type was used. All or Sample Name:** _____
WWS 11/15/19	☑	17. Other: Received 2- 120mL amber jars with cracked lids. Sample ID's: PDI-142R3B-10-20-191112 (B container- diox.) WWS 11/15/19 PDI-144R3B-00-10-191113 (a container- pest.)

Bolded items require sign-off

Client Contacted: _____

Date of Contact: _____

Vista Client Manager: _____

Resolution:

EXTRACTION INFORMATION

PRIORITY

Process Sheet

Workorder: 1904021

29-Nov-19

Prep Expiration: 2020-11-11
Client: Anchor QEA, LLC

Workorder Due: ~~09-Dec-19 00~~:00

TAT: ~~24~~ 14

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

Prep Batch: B9K0169

Prep Data Entered: 11/21/19
Date and Initials

Initial Sequence: S9L0029

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1904021-01	☑	PDI-1142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-02	☑	PDI-142RAB-00-10-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-03	☑	PDI-142RAB-10-20-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-04	☑	PDI-142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-05	☑	PDI-144RAB-00-10-191113	15-Nov-19 08:54	WR-2 B-1	
1904021-06	☑	PDI-144RAB-10-20-191113	15-Nov-19 08:54	WR-2 B-1	
1904021-07	☑	PDI-144RAB-20-29-191113	15-Nov-19 08:54	WR-2 B-1	

WO Comments: ~~Pest - 4g extraction (dry weight), DDX, Aldrin, Σ-Chlordane, Dieldrin, Lindane~~

Dioxin - 10g (dry weight)

~~PCB - 5g extraction (dry weight)~~

Pre-Prep Check Out: NA
Pre-Prep Check In: NA

Prep Check Out: DF 11/19/19
Prep Check In: DF 11/19/19

Prep Reconciled Initals/Date: * DF 11/19/19 ~~DF 11/19/19~~
Spike Reconciled Initals/Date: TL 11/20/19
VialBoxID: Σ

PREPARATION BENCH SHEET

Matrix: Solid

Method: 1613 Full List

B9K0169

Prepared using: HRMS - Soxhlet

Chemist: DF

Prep Date/Time: 19-Nov-19 07:24

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	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B9K0169-BLK1	NA	(10.00)	DF 11/19/19	11/20/19	11/20/19	11/20/19	11/20/19	11/20/19	11/21/19
☐	B9K0169-BS1	↓	(10.00)	↓	↓	↓	↓	↓	↓	↓
☐	1904016-03	12.22	12.33			N/A				
☐	1904016-04	12.42	12.53			↓				
☐	1904016-05	10.93	10.93							
☐	1904016-06 (A)	11.92	11.96			11/20/19				
☐	1904016-07	10.72	10.86			N/A				
☐	1904016-08	10.91	10.93			↓				
☐	1904016-09	11.04	11.16							
☐	1904021-01	11.52	11.65							
☐	1904021-02	10.76	10.82							
☐	1904021-03	10.62	10.64							
☐	1904021-04	11.36	11.53							
☐	1904021-05	10.89	10.97							
☐	1904021-06	10.71	10.81	↓	↓	↓	↓	↓	↓	↓

IS Name (V2)	NS Name (V5)	CRS Name (V6)	RS Name (V6)	Cycle Time	APP: SEFUN SOX SDS (*DF 11/19/19)	Check Out: Chemist/Date: DF 11/19/19
PCDD/F 19C1902, 10uL	PCDD/F 18719/3, 10uL	PCDD/F 19I1602, 10uL	PCDD/F 19I1603, 10uL	Start Date/Time 11/19/19 ~~11/18/19~~ 14:30	SOLV: Toluene	Check In: Chemist/Date: DF 11/19/19
PCB	PCB	PCB	PCB	Stop Date/Time 11/20/19	Other NA	Balance ID: HRMS-9
PAH	PAH	PAH	PAH	0.51	Final Volume(s) 20 uL C14	

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 extaction; pipetted and used Nitrogen to assist

PREPARATION BENCH SHEET

Matrix: Solid

B9K0169

Chemist: DF

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 19-Nov-19 07:24

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	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	1904021-07	10.71	10.72	DE 11/19/19	11/20/19	N/A	11/20/19	11/20/19	11/20/19	11/21/19

(A) Sample was black after extraction. 11/20/19

IS Name V(2)	NS Name V(5)	CRS Name V(4)	RS Name V(6)
PCDD/F 13C1902,10mL	PCDD/F 13F1913,10mL	PCDD/F 37Cl1602,10µL	PCDD/F 37Cl603,10µL
PCB	PCB	PCB	PCB
PAH	PAH	PAH	PAH

Cycle Time	APP: SEFUN SOX SDS	Check Out: Chemist/Date: DF 11/19/19
Start Date/Time 11/19/19 1430	SOLV: Toluene	Check In: Chemist/Date: DF 11/19/19
Stop Date/Time 11/20/19 631 (est) 11/19/20	Other NA	Balance ID: HRMS-9
	Final Volume(s) 20uL C14	

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 extaction; pipetted and used Nitrogen to assist

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B9K0157

Analyst: DF **Test Code:** %Moist/%Solids

Analyte: **Units:** %

Dried at 110°C+/-5°C

Oven ID: **01** 02

Data Entry Verified by: (Initial and Date) DF 11/19/19

Inst HRMS-9

Date/Time IN: 11/18/19 13:00 Date/Time OUT 11/19/19 7:15

	B	C	D	E	F	G	H	I	K	L	M	N	O	P
				Intial and Date:	DF 11/18/19	DF 11/19/19			DF 11/18/19			DF 11/18/19		DF 11/18/19
Particle Size	SampID		SampType	Pan Tare Wt. (gms)	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*
	1904016-03	A	Sample	1.2800	10.8500	9.1100	7.8300	81.82	Clay	NA	NA	NA	NA	X
	1904016-04	A	Sample	1.2800	9.7900	8.1300	6.8500	80.49	Clay	NA	NA	NA	NA	X
	1904016-05	A	Sample	1.2800	9.1400	8.4700	7.1900	91.48	Dirt	NA	NA	NA	NA	X
	1904016-06	A	Sample	1.2700	7.4700	6.4700	5.2000	83.87	Dirt	NA	NA	NA	NA	X
	1904016-07	A	Sample	1.2900	8.5400	8.0500	6.7600	93.24	Dirt	NA	NA	NA	NA	X
	1904016-08	A	Sample	1.2800	7.3800	6.8700	5.5900	91.64	Dirt	NA	NA	NA	NA	X
	1904016-09	A	Sample	1.2800	8.6000	7.9100	6.6300	90.57	Dirt	NA	NA	NA	NA	X
	1904021-01	A	Sample	1.2900	9.1800	8.1400	6.8500	86.82	Dirt	NA	NA	NA	NA	X
	1904021-02	A	Sample	1.2900	9.4000	8.8300	7.5400	92.97	Dirt	NA	NA	NA	NA	X
	1904021-03	A	Sample	1.2800	6.1000	5.8200	4.5400	94.19	Dirt	NA	NA	NA	NA	X
	1904021-04	A	Sample	1.2700	11.3900	10.1800	8.9100	88.04	Dirt	NA	NA	NA	NA	X
	1904021-05	A	Sample	1.2800	7.3000	6.8100	5.5300	91.86	Dirt	NA	NA	NA	NA	X
	1904021-06	A	Sample	1.2900	7.5100	7.1000	5.8100	93.41	Dirt	NA	NA	NA	NA	X
	1904021-07	A	Sample	1.2800	4.6500	4.4300	3.1500	93.47	Dirt	NA	NA	NA	NA	X

*Sample homogenized in sample container unless otherwise noted.

Percent Moisture/ Percent Soli

D2216-90 BATCH ID B9K0157

Analyst: DF Test Code: %Moist/%Solids

Analyte: Units: %

Dried at 110°C+/-5°C
Oven ID: 01 02

Data Entry Verified by: (Initial and Date) N/A

Inst HLMS-9

Date/Time IN: 11/18/19 13:00 Date/Time OUT: 11/19/19 07:45

*DF 11/18/19

	B	C	D	E	F	G	H	I	K	L	M	N	O	P
				Initial and Date:	DF 11/18/19	DF 11/19/19			DF 11/18/19			NA		DF 11/18/19
Particle Size	SampID		SampType	Pan Tare Wt. (gms)	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*
	1904016-03	A	Sample	1.28	10.85	9.11			Clay	NA	NA	NA	NA	X
	1904016-04		Sample	1.28	9.79	8.13			↓					X
	1904016-05		Sample	1.28	9.14	8.47			Dirt					X
	1904016-06		Sample	1.29	7.47	6.47								X
	1904016-07		Sample	1.29	8.54	8.05								X
	1904016-08		Sample	1.28	7.38	6.87								X
	1904016-09		Sample	1.28	8.60	7.91								X
	1904021-01		Sample	1.29	9.18	8.14								X
	1904021-02		Sample	1.29	9.40	8.83								X
	1904021-03		Sample	1.28	6.10	5.82								X
	1904021-04		Sample	1.27	11.39	10.18								X
	1904021-05		Sample	1.28	7.30	6.81								X
	1904021-06		Sample	1.29	7.51	7.10			clay**					X
	1904021-07		Sample	1.28	4.65	4.43			Dirt					X

*Sample homogenized in sample container unless otherwise noted.

**Dirt DF 11/18/19

Batch: B9K0169

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1904016-03	12.33	81.81818	10.0882	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-04	12.53	80.49354	10.0858	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-05	10.93	91.47583	9.9983	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-06	11.96	83.87096	10.0310	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-07	10.86	93.24138	10.1260	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-08	10.93	91.63934	10.0162	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904016-09	11.16	90.57376	10.1080	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-01	11.65	86.81876	10.1144	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-02	10.82	92.97164	10.0595	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-03	10.64	94.19088	10.0219	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-04	11.53	88.04348	10.1514	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-05	10.97	91.86046	10.0771	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-06	10.81	93.40836	10.0974	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
1904021-07	10.72	93.4718	10.0202	20	19-Nov-19 07:24	DFO			Soil	1613 Full List
B9K0169-BLK1	10			20	19-Nov-19 07:24	DFO				QC
B9K0169-BS1	10			20	19-Nov-19 07:24	DFO	18F1913	10		QC

All bolded data on report verified against written benchsheet by (initial/date) 11/21/19

Printed: 11/21/2019 1:37:19PM
Page 1 of 1

Rx

Process Sheet

Workorder: 1904021

Prep Expiration: 2020-11-11
Client: Anchor QEA, LLC

Workorder Due: 13-Dec-19 00:00

TAT: 28

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

Prep Batch: B9L0200

Prep Data Entered: AZ 01/07/2020
Date and Initials

Initial Sequence: SOA0018

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
~~1904021-01~~	☐	~~PDI-1142RAB-20-30.4-191112~~	~~15-Nov-19 08:54~~	~~WR-2 D-3~~	
1904021-02	☐	PDI-142RAB-00-10-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-03	☐	PDI-142RAB-10-20-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-04	☐	PDI-142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 D-3	
~~1904021-05~~	☐	~~PDI-144RAB-00-10-191113~~	~~15-Nov-19 08:54~~	~~WR-2 D-3~~	
1904021-06	☑	PDI-144RAB-10-20-191113	15-Nov-19 08:54	WR-2 D-3	
~~1904021-07~~	☐	~~PDI-144RAB-20-29-191113~~	~~15-Nov-19 08:54~~	~~WR-2 D-3~~	

WO Comments: ~~**Pest - 1g extraction (dry weight), DDX, Aldrin, 5-Chlordane, Dieldrin, Lindane**~~
Dioxin - 10g (dry weight)
~~**PCB - 5g extraction (dry weight)**~~

Pre-Prep Check Out: _____
Pre-Prep Check In: _____

Prep Check Out: TL 12/18/19
Prep Check In: TL 12/18/19

Prep Reconciled Initals/Date: TL 12/18/19
Spike Reconciled Initals/Date: DF 12/18/19
VialBoxID: Cherry Sprite

PREPARATION BENCH SHEET

Matrix: Solid

Method: 1613 Full List

B9L0200

Prepared using: HRMS - Soxhlet

Chemist: TL

Prep Date/Time: 18-Dec-19 06:38

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	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B9L0200-BLK1	NA	(10.00)	ST TL 12/18/19	TL 12/31/19	12/31/19	AZ 01/02/20	AO 01/02/20	AO AZ 01/02/20	AO AZ 01/02/19
☐	B9L0200-BS1	NA	(10.00)							
☐	B9L0200-DUP1 1904208-05 (B)	11.75	11.80							
☐	B9L0200-DUP2 1904207-01	14.09	14.08			NA				
☐	1904021-06RE1	10.71	10.76							
☐	1904207-01	14.09	14.11							
☐	1904207-02	11.02	11.06							
☐	1904207-03	15.18	15.20							
☐	1904207-04 (B)	16.57	16.63							
☐	1904207-05	20.70	20.71							
☐	1904207-06	19.67	19.67							
☐	1904208-01 (B)	12.08	12.09			12/31/19				
☐	1904208-02 (B)	13.34	13.35							
☐	1904208-03 (B)(A)	13.30	13.30							
☐	1904208-04 (B)	11.68	11.74							

IS Name (V1)	NS Name (V3)	CRS Name (V4)	RS Name (V5)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date: TL 12/18/19
PCDD/F 17C1902 10uL	PCDD/F 18F1913 10uL	PCDD/F 19I1602, 10uL	PCDD/F 19I1603, 10uL	Start Date/Time 12/18/19 14:00	SOLV: Toluene	Check In: Chemist/Date: TL 12/18/19
PCB	PCB	PCB	PCB		Other NA	
PAH	PAH	PAH	PAH	Stop Date/Time 12/19/19 600	Final Volume(s) 20uL C14	Balance ID: HRMS-8

Comments:

(A) Crystallized during rotovaping AO 01/02/20

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 extaction; pipetted and used Nitrogen to assist

PREPARATION BENCH SHEET

Matrix: Solid

B9L0200

Chemist: TL

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 18-Dec-19 06:38

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	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	1904208-05 (B)	11.75	11.89	Df TL 12/18/19	TL 12/31/19	TL 12/31/19	AZ 01/02/20	AO 01/02/20	AO AZ 01/02/20	AO AZ 01/02/20
☐	1904208-06	12.32	12.33							
☐	1904208-07	12.27	12.41			NA				
☐	1904208-08	11.92	11.94							
☐	1904208-09	12.01	12.01			TL 12/31/19				
☐	1904208-10	12.46	12.52							

(B) ABSG/AA darkly colored AO 01/02/2020

AO 01/02/20

IS Name (1)	NS Name (1)	CRS Name (1)	RS Name (1)	Cycle Time	APP: SEFUN SOX SDS (1)	Check Out:
PCDD/F 19C1902, 10µL	PCDD/F 19F1913, 10µL	PCDD/F 19I1602, 10µL	PCDD/F 19I1603, 10µL	Start Date/Time 12/19/19 1400	SOLV: Tol	Chemist/Date: TL 12/18/19
PCB	PCB	PCB	PCB		Other NA	Check In: Chemist/Date: TL 12/18/19
PAH	PAH	PAH	PAH	Stop Date/Time 12/19/19 600	Final Volume(s) 20µL Cu	Balance ID: HRMS-B

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 extaction; pipetted and used Nitrogen to assist

ent Moisture/ Percent Solids

D2216-90 BATCH ID B9K0157

Analyst: DF **Test Code:** %Moist/%Solids

Analyte: **Units:** %

Dried at 110°C+/-5°C

Oven ID: **01** 02

Data Entry Verified by (Initial and Date) 01/07/20

Inst HRMS-9

Date/Time IN:	Date/Time OUT
11/18/19 13:00	11/19/19 7:15

	B	C	D	E	F	G	H	I	K	L	M	N	O	P
				Intial and Date:	DF 11/18/19	DF 11/19/19			DF 11/18/19			DF 11/18/19		DF 11/18/19
Particle Size	SampID		SampType	Pan Tare Wt. (gms)	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*
	1904016-03	A	Sample	1.2800	10.8500	9.1100	7.8300	81.82	Clay	NA	NA	NA	NA	X
	1904016-04	A	Sample	1.2800	9.7900	8.1300	6.8500	80.49	Clay	NA	NA	NA	NA	X
	1904016-05	A	Sample	1.2800	9.1400	8.4700	7.1900	91.48	Dirt	NA	NA	NA	NA	X
	1904016-06	A	Sample	1.2700	7.4700	6.4700	5.2000	83.87	Dirt	NA	NA	NA	NA	X
	1904016-07	A	Sample	1.2900	8.5400	8.0500	6.7600	93.24	Dirt	NA	NA	NA	NA	X
	1904016-08	A	Sample	1.2800	7.3800	6.8700	5.5900	91.64	Dirt	NA	NA	NA	NA	X
	1904016-09	A	Sample	1.2800	8.6000	7.9100	6.6300	90.57	Dirt	NA	NA	NA	NA	X
	1904021-01	A	Sample	1.2900	9.1800	8.1400	6.8500	86.82	Dirt	NA	NA	NA	NA	X
	1904021-02	A	Sample	1.2900	9.4000	8.8300	7.5400	92.97	Dirt	NA	NA	NA	NA	X
	1904021-03	A	Sample	1.2800	6.1000	5.8200	4.5400	94.19	Dirt	NA	NA	NA	NA	X
	1904021-04	A	Sample	1.2700	11.3900	10.1800	8.9100	88.04	Dirt	NA	NA	NA	NA	X
	1904021-05	A	Sample	1.2800	7.3000	6.8100	5.5300	91.86	Dirt	NA	NA	NA	NA	X
	1904021-06	A	Sample	1.2900	7.5100	7.1000	5.8100	93.41	Dirt	NA	NA	NA	NA	X
	1904021-07	A	Sample	1.2800	4.6500	4.4300	3.1500	93.47	Dirt	NA	NA	NA	NA	X

*Sample homogenized in sample container unless otherwise noted.

Batch: B9L0200

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1904021-06RE1	10.76 ✓	93.40836	10.0507	20 ✓	18-Dec-19 06:38	TL			Soil	1613 Full List
1904207-01	14.11 ✓	71.19309	10.0453	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904207-02	11.06 ✓	90.78261	10.0406	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904207-03	15.2 ✓	65.85957	10.0107	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904207-04	16.63 ✓	60.36036	10.0379	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904207-05	20.71 ✓	48.31892	10.0068	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904207-06	19.67 ✓	50.83334	9.9989	20	18-Dec-19 06:38	TL			Sediment	1613 Full List
1904208-01	12.09 ✓	82.77311	10.0073	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-02	13.35 ✓	74.94601	10.0053	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-03	13.3 ✓	75.16779	9.9973	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-04	11.74 ✓	85.59837	10.0492	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-05	11.85 ✓	85.10204	10.0846	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-06	12.33 ✓	81.19002	10.0107	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-07	12.41 ✓	81.50407	10.1147	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-08	11.94 ✓	83.859	10.0128	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-09	12.01 ✓	83.29809	10.0041	20	18-Dec-19 06:38	TL			Soil	1613 Full List
1904208-10	12.52 ✓	80.26846	10.0496	20	18-Dec-19 06:38	TL			Soil	1613 Full List
B9L0200-BLK1	10 ✓			20	18-Dec-19 06:38	TL				QC
B9L0200-BS1	10 ✓			20	18-Dec-19 06:38	TL	18F1913 ✓	10 ✓		QC
B9L0200-DUP1	11.8 ✓			20	18-Dec-19 06:38	TL				QC
B9L0200-DUP2	14.08 ✓			20 ↓	18-Dec-19 06:38 ↓	TL ↓				QC

All bolded data on report verified against written benchsheet by (initial/date) AZ 01/07/2020

Printed: 1/7/2020 11:17:05AM
Page 1 of 1

PRIORITY

Process Sheet

Workorder: 1904021

29-Nov-19

Prep Expiration: 2020-11-11
Client: Anchor QEA, LLC

Workorder Due: ~~09-Dec-19 00~~:00

TAT: ~~24~~ 14

Method: **1699 Full List**
Matrix: **Solid**
Client Matrix: Soil
Also run: **Percent Solids**

Prep Batch: B4K0170

Prep Data Entered: 11/22/19 TC
Date and Initials

Initial Sequence: S4K0054

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1904021-01	☒	PDI-1142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-02	☒	PDI-142RAB-00-10-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-03	☒	PDI-142RAB-10-20-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-04	☒	PDI-142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 B-1	
1904021-05	☒	PDI-144RAB-00-10-191113	15-Nov-19 08:54	WR-2 B-1	
1904021-06	☒	PDI-144RAB-10-20-191113	15-Nov-19 08:54	WR-2 B-1	
1904021-07	☒	PDI-144RAB-20-29-191113	15-Nov-19 08:54	WR-2 B-1	

WO Comments: **Pest - 1g extraction (dry weight). DDX, Aldrin, 5-Chlordane, Dieldrin, Lindane**
~~**Dioxin - 10g (dry weight)**~~
~~**PCB - 5g extraction (dry weight)**~~

Pre-Prep Check Out: DF 11/18/19
Pre-Prep Check In: DF 11/18/19

Prep Check Out: DF 11/19/19
Prep Check In: DF 11/19/19

Prep Reconciled Initals/Date: DF 11/18/19
Spike Reconciled Initals/Date: TC 11/19/19
VialBoxID: Mashed potatoes

Matrix: Solid

Method: 1699 Full List

PREPARATION BENCH SHEET

B9K0170

Prepared using: HRMS - Soxhlet

Chemist: DF

Prep Date/Time: 19-Nov-19 07:27

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~~ Silicoat CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B9K0170-BLK1	NA	(1.00)	DF TL 11/19/19	NA	NA	DF 11/20/19	TL 11/21/19	TL 11/21/19	DF TL 11/21/19
☐	B9K0170-BS1	↓	(1.00)	↓	↓	↓	↓	↓	↓	↓
☐	1904016-03	1.22	1.23							
☐	1904016-04	1.24	1.26							
☐	1904016-05	1.09	1.11							
☐	1904016-06 (A)	1.19	1.20							
☐	1904016-07	1.07	1.08							
☐	1904016-08	1.09	1.12							
☐	1904016-09	1.10	1.11							
☐	1904021-01 (A)	1.15	1.22							
☐	1904021-02	1.08	1.10							
☐	1904021-03	1.06	1.08							
☐	1904021-04 (A)	1.14	1.23							
☐	1904021-05	1.09	1.10							
☐	1904021-06	1.07	1.08	↓	↓	↓	↓	↓	↓	↓

IS Name V6	NS Name V1	CRS Name	RS Name V5
PCDD/F	PCDD/F	PCDD/F	PCDD/F
PCB	PCB	PCB	PCB
PAH	PAH	PAH	PAH
1699: 18D1602, 10mL	18A2304, 10mL	NA	18D1603, 10mL

Cycle Time	
Start Date/Time	11/19/19 14:00
Stop Date/Time	11/20/19

APP: SEFUN SOX SDS

SOLV: 70:30 Hex/Ethyl Acetate

Other NA

Final Volume(s) 20mL

Cq

*DF 11/19/19

Check Out: Chemist/Date: DF 11/19/19

Check In: Chemist/Date: DF 11/19/19

Balance ID: HRMS-9

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 extaction; pipetted and used Nitrogen to assist

(A) yellow color at FV. 1:10 dilution made DF 11/21/19

PREPARATION BENCH SHEET

Matrix: Solid

B9K0170

Chemist: DF

Method: 1699 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 19-Nov-19 07:27

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~~ Charcoal CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	1904021-07	1.07	1.15	DF 11/19/19	NA	NA	DF 11/20/19	TL 11/21/19	TL 11/21/19	DF TL 11/21/19

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: SEFUN SOX SDS	Check Out:
PCDD/F V6	PCDD/F V1	PCDD/F	PCDD/F	Start Date/Time	SOLV: 70/30 Hex:Ethyl Acetate	Chemist/Date: DF 11/19/19
PCB	PCB	PCB	PCB	11/20/19	Other NA	Check In:
PAH	PAH	PAH	PAH	Stop Date/Time	Final Volume(s) 20uL	Chemist/Date: DF 11/19/19
1699: 18D1602, 10uL	18A2304, 10uL	NA		11/20/19	Cq	Balance ID: HRMS-a

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 extaction; pipetted and used Nitrogen to assist

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B9K0157

Analyst: DF **Test Code:** %Moist/%Solids

Analyte: **Units:** %

Dried at 110°C+/-5°C

Oven ID: 01 02

Data Entry Verified by (Initial and Date) DF 11/19/19

Inst HRMS-9

Date/Time IN:	Date/Time OUT
11/18/19 13:00	11/19/19 7:15

	B	C	D	E	F	G	H	I	K	L	M	N	O	P
				Intial and Date:	DF 11/18/19	DF 11/19/19			DF 11/18/19			DF 11/18/19		DF 11/18/19
Particle Size	SampID		SampType	Pan Tare Wt. (gms)	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*
	1904016-03	A	Sample	1.2800	10.8500	9.1100	7.8300	81.82	Clay	NA	NA	NA	NA	X
	1904016-04	A	Sample	1.2800	9.7900	8.1300	6.8500	80.49	Clay	NA	NA	NA	NA	X
	1904016-05	A	Sample	1.2800	9.1400	8.4700	7.1900	91.48	Dirt	NA	NA	NA	NA	X
	1904016-06	A	Sample	1.2700	7.4700	6.4700	5.2000	83.87	Dirt	NA	NA	NA	NA	X
	1904016-07	A	Sample	1.2900	8.5400	8.0500	6.7600	93.24	Dirt	NA	NA	NA	NA	X
	1904016-08	A	Sample	1.2800	7.3800	6.8700	5.5900	91.64	Dirt	NA	NA	NA	NA	X
	1904016-09	A	Sample	1.2800	8.6000	7.9100	6.6300	90.57	Dirt	NA	NA	NA	NA	X
	1904021-01	A	Sample	1.2900	9.1800	8.1400	6.8500	86.82	Dirt	NA	NA	NA	NA	X
	1904021-02	A	Sample	1.2900	9.4000	8.8300	7.5400	92.97	Dirt	NA	NA	NA	NA	X
	1904021-03	A	Sample	1.2800	6.1000	5.8200	4.5400	94.19	Dirt	NA	NA	NA	NA	X
	1904021-04	A	Sample	1.2700	11.3900	10.1800	8.9100	88.04	Dirt	NA	NA	NA	NA	X
	1904021-05	A	Sample	1.2800	7.3000	6.8100	5.5300	91.86	Dirt	NA	NA	NA	NA	X
	1904021-06	A	Sample	1.2900	7.5100	7.1000	5.8100	93.41	Dirt	NA	NA	NA	NA	X
	1904021-07	A	Sample	1.2800	4.6500	4.4300	3.1500	93.47	Dirt	NA	NA	NA	NA	X

*Sample homogenized in sample container unless otherwise noted.

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B9K0157

Analyst: DF
Test Code: %Moist/%Solids
Analyte:
Units: %
Dried at 110°C+/-5°C
Oven ID: 01 02

Data Entry Verified by: (Initial and Date) N/A

Inst HLMS-9

Date/Time IN: 11/18/19 (13:01)
Date/Time OUT: 11/19/19 07:25

*DF 11/18/19

B	C	D	E	F	G	H	I	K	L	M	N	O	P
			Intial and Date:	DF 11/18/19	DF 11/19/19			DF 11/18/19			NA		DF 11/18/19
Particle Size	SampID	SampType	Pan Tare Wt. (gms)	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*
	1904016-03	Sample	1.28	10.85	9.11			Clay	NA	NA	NA	NA	X
	1904016-04	Sample	1.28	9.79	8.13								X
	1904016-05	Sample	1.28	9.14	8.47			Dirt					X
	1904016-06	Sample	1.29	7.47	6.47								X
	1904016-07	Sample	1.29	8.54	8.05								X
	1904016-08	Sample	1.28	7.38	6.87								X
	1904016-09	Sample	1.28	8.60	7.91								X
	1904021-01	Sample	1.29	9.18	8.14								X
	1904021-02	Sample	1.29	9.40	8.85								X
	1904021-03	Sample	1.28	6.10	5.82								X
	1904021-04	Sample	1.27	11.39	10.18								X
	1904021-05	Sample	1.28	7.50	6.81								X
	1904021-06	Sample	1.29	7.51	7.10			clay**					X
	1904021-07	Sample	1.28	4.65	4.43			Dirt					X

*Sample homogenized in sample container unless otherwise noted.

**Dirt DF 11/18/19

Batch: B9K0170

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1904016-03	1.23	81.81818	1.0064	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-04	1.26	80.49354	1.0142	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-05	1.11	91.47583	1.0154	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-06	1.2	83.87096	1.0065	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-07	1.08	93.24138	1.0070	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-08	1.12	91.63934	1.0264	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904016-09	1.11	90.57376	1.0054	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-01	1.22	86.81876	1.0592	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-02	1.1	92.97164	1.0227	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-03	1.08	94.19088	1.0173	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-04	1.23	88.04348	1.0829	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-05	1.1	91.86046	1.0105	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-06	1.08	93.40836	1.0088	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
1904021-07	1.15	93.4718	1.0749	20	19-Nov-19 07:27	DFO			Soil	1699 Full List
B9K0170-BLK1	1			20	19-Nov-19 07:27	DFO				QC
B9K0170-BS1	1			20	19-Nov-19 07:27	DFO	18A2304	10		QC

All bolded data on report verified against written benchsheet by (initial/date) TL 11/22/19

Printed: 11/22/2019 9:31:22AM
Page 1 of 1

Rx 2
HC 12.20.19

Process Sheet

Workorder: 1904021

Prep Expiration: 2020-11-11
Client: Anchor QEA, LLC

Workorder Due: 13-Dec-19 00:00
TAT: 28

Method: **1699 Full List**
Matrix: **Solid**
Client Matrix: Soil
Also run: **Percent Solids**

Prep Batch: B4L0270

Prep Data Entered: DJB 01/08/20
Date and Initials

Initial Sequence: SOA0057

LabSampleID		Recon	ClientSampleID	Date Received	Location	Comments
1904021-01	A	☑	PDI-1142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-02		☐	PDI-142RAB-00-10-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-03		☐	PDI-142RAB-10-20-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-04	A	☑	PDI-142RAB-20-30.4-191112	15-Nov-19 08:54	WR-2 D-3	
1904021-05		☐	PDI-144RAB-00-10-191113	15-Nov-19 08:54	WR-2 D-3	
1904021-06		☐	PDI-144RAB-10-20-191113	15-Nov-19 08:54	WR-2 D-3	
1904021-07		☐	PDI-144RAB-20-29-191113	15-Nov-19 08:54	WR-2 D-3	

5X Spike, 1g wet weight HC 12.20.19

WO Comments: **Pest - 1g extraction (dry weight). DDX, Aldrin, 5-Chlordane, Dieldrin, Lindane**
Dioxin - 10g (dry weight)
PCB - 5g extraction (dry weight)

Pre-Prep Check Out: NA
Pre-Prep Check In: NA

Prep Check Out: TL 12/27/19
Prep Check In: TL 12/27/19

Prep Reconciled Initals/Date: TL 12/27/19
Spike Reconciled Initals/Date: DJB 12/27/19
VialBoxID: 20/20

PREPARATION BENCH SHEET

Matrix: Solid

B9L0270

Chemist: TL

Method: 1699 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 27-Dec-19 06:22

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	BUB 01/07/20 ABSG CHEM/ DATE	BUB 01/07/20 AA Chevron CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B9L0270-BLK1	NA	(1.00)	TL 12/27/19	NA	NA	BUB 01/06/20	BUB 01/07/20	BUB 01/07/20	BUB LW 01/07/20
☐	B9L0270-BS1	NA	(1.00)	↓	↓	↓	↓	↓	↓	↓
☐	1904016-06RE2	(1.00)	1.19	↓	↓	↓	↓	↓	↓	↓
☐	1904021-01RE1 (A)	(1.00)	1.16	↓	↓	↓	↓	↓	↓	↓
☐	1904021-04RE2	(1.00)	1.15	↓	↓	↓	↓	↓	↓	↓

(A) Samples have color after final volume BUB 01/07/20

5x (V4) 5x (V1) 5x 5x (V4)

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: SEFUN SOX SDS	Check Out:
PCDD/F	PCDD/F	PCDD/F	PCDD/F	Start Date/Time 12/27/19 14:00	SOLV: 70:30 Hex/EtoAc	Chemist/Date: TL 12/27/19
PCB	PCB	PCB BUB 01/06/20	PCB		Other NA	Check In: Chemist/Date: TL 12/27/19
PAH	PAH	PAH	PAH	Stop Date/Time 12/28/19 08:10	Final Volume(s) 4	Balance ID: HRMS-8
1699 18D1602 50uL	19I 300350 uL		18D1603, 50uL		BUB 01/07/20 20uL 100uL	

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 extaction; pipetted and used Nitrogen to assist

Batch: B9L0270

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1904016-06RE2	**1.19**	**83.87096**	**0.9981**	**100**	**27-Dec-19 06:22**	**TL**			Soil	1699 Full List
1904021-01RE1	**1.16**	**86.81876**	**1.0071**	**100**	**27-Dec-19 06:22**	**TL**			Soil	1699 Full List
1904021-04RE2	**1.15**	**88.04348**	**1.0125**	**100**	**27-Dec-19 06:22**	**TL**			Soil	1699 Full List
B9L0270-BLK1	**1**	NA	NA	**100**	**27-Dec-19 06:22**	**TL**				QC
B9L0270-BS1	**1**	NA	NA	**100**	**27-Dec-19 06:22**	**TL**	**1913003**	**50**		QC

All bolded data on report verified against written benchsheet by (initial/date) BJB 01/10/20

Printed: 1/8/2020 6:12:50AM
Page 1 of 1

SAMPLE DATA – EPA METHOD 1613

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-4.qld
Last Altered: Thursday, December 19, 2019 08:56:48 Pacific Standard Time
Printed: Thursday, December 19, 2019 08:57:23 Pacific Standard Time

EL 12/19/19

CT 12/20/19

Method: U:\VG7.pro\MethDB\1613VG7-12-4-19.mdb 06 Dec 2019 10:27:59
Calibration: 06 Dec 2019 12:19:23

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		8.91e4	10.0000	0.905			1.001		26.11					0.224
2	2	1,2,3,7,8-PeCDD		8.10e4	10.0000	0.903			1.001		30.62					0.235
3	3	1,2,3,4,7,8-HxCDD		5.93e4	10.0000	1.101			1.000		33.90					0.332
4	4	1,2,3,6,7,8-HxCDD		6.43e4	10.0000	0.939			1.000		34.00					0.356
5	5	1,2,3,7,8,9-HxCDD		6.57e4	10.0000	0.961			1.001		34.33					0.378
6	6	1,2,3,4,6,7,8-HpCDD		5.40e4	10.0000	0.979			1.000		37.77					0.336
7	7	OCDD		1.06e5	10.0000	0.959			1.000		41.02					0.346
8	8	2,3,7,8-TCDF		1.30e5	10.0000	0.950			1.001		25.31					0.209
9	9	1,2,3,7,8-PeCDF		1.25e5	10.0000	0.960			1.001		29.45					0.183
10	10	2,3,4,7,8-PeCDF		1.22e5	10.0000	1.015			1.001		30.35					0.165
11	11	1,2,3,4,7,8-HxCDF		8.15e4	10.0000	1.177			1.000		33.00					0.183
12	12	1,2,3,6,7,8-HxCDF		8.68e4	10.0000	1.069			1.000		33.14					0.199
13	13	2,3,4,6,7,8-HxCDF		7.68e4	10.0000	1.114			1.001		33.76					0.216
14	14	1,2,3,7,8,9-HxCDF		7.01e4	10.0000	1.062			1.000		34.66					0.294
15	15	1,2,3,4,6,7,8-HpCDF		5.95e4	10.0000	1.128			1.001		36.53					0.317
16	16	1,2,3,4,7,8,9-HpCDF		4.86e4	10.0000	1.280			1.000		38.30					0.296
17	17	OCDF		1.31e5	10.0000	0.947			1.000		41.24					0.304
18	18	13C-2,3,7,8-TCDD	8.91e4	1.02e5	10.0000	1.095	0.771	NO	1.021	1.022	26.06	26.08	160.12	80.1		0.596
19	19	13C-1,2,3,7,8-PeCDD	8.10e4	1.02e5	10.0000	0.881	0.627	NO	1.187	1.199	30.29	30.60	180.95	90.5		0.529
20	20	13C-1,2,3,4,7,8-Hx...	5.93e4	1.09e5	10.0000	0.642	1.321	NO	1.014	1.014	33.88	33.89	169.48	84.7		0.797
21	21	13C-1,2,3,6,7,8-Hx...	6.43e4	1.09e5	10.0000	0.856	1.260	NO	1.017	1.017	34.00	34.00	138.06	69.0		0.598
22	22	13C-1,2,3,7,8,9-Hx...	6.57e4	1.09e5	10.0000	0.807	1.270	NO	1.026	1.026	34.30	34.29	149.48	74.7		0.635
23	23	13C-1,2,3,4,6,7,8-H...	5.40e4	1.09e5	10.0000	0.654	1.077	NO	1.126	1.130	37.64	37.76	151.68	75.8		1.10
24	24	13C-OCDD	1.06e5	1.09e5	10.0000	0.580	0.904	NO	1.226	1.228	40.98	41.02	334.77	83.7		0.739
25	25	13C-2,3,7,8-TCDF	1.30e5	1.75e5	10.0000	1.035	0.787	NO	0.992	0.991	25.31	25.29	144.29	72.1		0.488
26	26	13C-1,2,3,7,8-PeCDF	1.25e5	1.75e5	10.0000	0.854	1.623	NO	1.154	1.153	29.45	29.43	168.17	84.1		0.691
27	27	13C-2,3,4,7,8-PeCDF	1.22e5	1.75e5	10.0000	0.847	1.577	NO	1.189	1.188	30.35	30.32	165.02	82.5		0.696
28	28	13C-1,2,3,4,7,8-Hx...	8.15e4	1.09e5	10.0000	0.832	0.520	NO	0.987	0.988	32.99	33.00	179.80	89.9		1.24
29	29	13C-1,2,3,6,7,8-Hx...	8.68e4	1.09e5	10.0000	1.034	0.518	NO	0.991	0.991	33.11	33.13	153.98	77.0		1.00
30	30	13C-2,3,4,6,7,8-Hx...	7.68e4	1.09e5	10.0000	0.953	0.538	NO	1.009	1.009	33.73	33.72	147.81	73.9		1.09
31	31	13C-1,2,3,7,8,9-Hx...	7.01e4	1.09e5	10.0000	0.828	0.521	NO	1.039	1.037	34.71	34.66	155.42	77.7		1.25

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-4.qld
Last Altered: Thursday, December 19, 2019 08:56:48 Pacific Standard Time
Printed: Thursday, December 19, 2019 08:57:23 Pacific Standard Time

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	5.95e4	1.09e5	10.0000	0.757	0.422	NO	1.093	1.092	36.52	36.50	144.27	72.1		0.911
33	33	13C-1,2,3,4,7,8,9-H...	4.86e4	1.09e5	10.0000	0.581	0.428	NO	1.143	1.146	38.20	38.30	153.37	76.7		1.19
34	34	13C-OCDF	1.31e5	1.09e5	10.0000	0.689	0.857	NO	1.233	1.234	41.21	41.24	349.87	87.5		0.631
35	35	37Cl-2,3,7,8-TCDD	3.83e4	1.02e5	10.0000	1.198			1.022	1.023	26.08	26.10	63.011	78.8		0.280
36	36	13C-1,2,3,4-TCDD	1.02e5	1.02e5	10.0000	1.000	0.811	NO	1.000	1.000	25.50	25.52	200.00	100.0		0.653
37	37	13C-1,2,3,4-TCDF	1.75e5	1.75e5	10.0000	1.000	0.809	NO	1.000	1.000	24.06	24.07	200.00	100.0		0.505
38	38	13C-1,2,3,4,6,9-Hx...	1.09e5	1.09e5	10.0000	1.000	0.517	NO	1.000	1.000	33.42	33.42	200.00	100.0		1.03
39	39	Total Tetra-Dioxins		8.91e4	10.0000	0.901			0.000		25.50					0.120
40	40	Total Penta-Dioxins		8.10e4	10.0000	0.872			0.000		30.00					0.0957
41	41	Total Hexa-Dioxins		0.00e0	10.0000	0.976			0.000		33.80					0.178
42	42	Total Hepta-Dioxins		5.40e4	10.0000	0.989			0.000		37.75					0.164
43	43	Total Tetra-Furans		1.30e5	10.0000	0.943			0.000		24.00					0.0897
44	44	1st Func. Penta-Fur...		0.00e0	10.0000	0.940			0.000		27.63					0.0379
45	45	Total Penta-Furans		0.00e0	10.0000	0.940			0.000		30.00					0.0821
46	46	Total Hexa-Furans		0.00e0	10.0000	1.078			0.000		33.00					0.119
47	47	Total Hepta-Furans		0.00e0	10.0000	1.135			0.000		37.75					0.164

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-4.qld
Last Altered: Thursday, December 19, 2019 08:56:48 Pacific Standard Time
Printed: Thursday, December 19, 2019 08:57:23 Pacific Standard Time

Method: U:\VG7.pro\MethDB\1613VG7-12-4-19.mdb 06 Dec 2019 10:27:59
Calibration: 06 Dec 2019 12:19:23

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-4.qld
Last Altered: Thursday, December 19, 2019 08:56:48 Pacific Standard Time
Printed: Thursday, December 19, 2019 08:57:23 Pacific Standard Time

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Hexa-Furans

#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1									

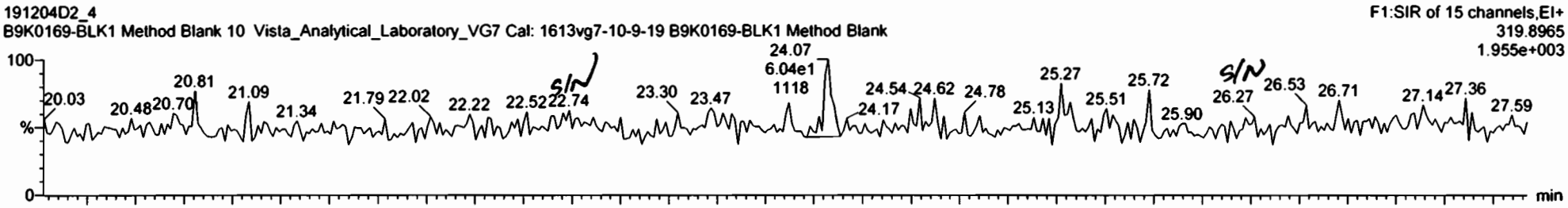
Hepta-Furans

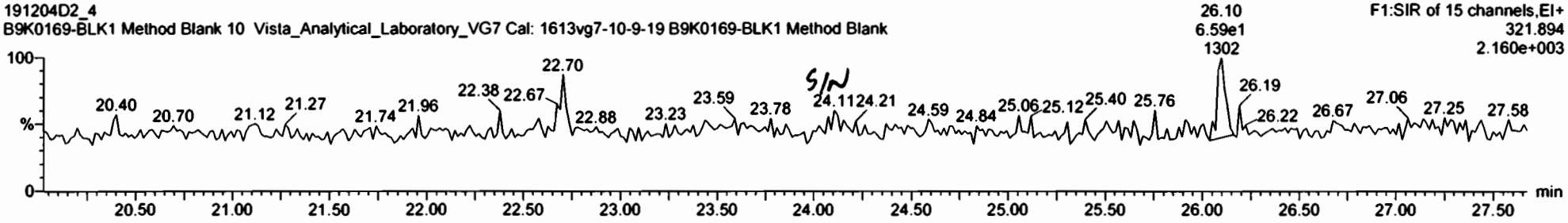
#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1									

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

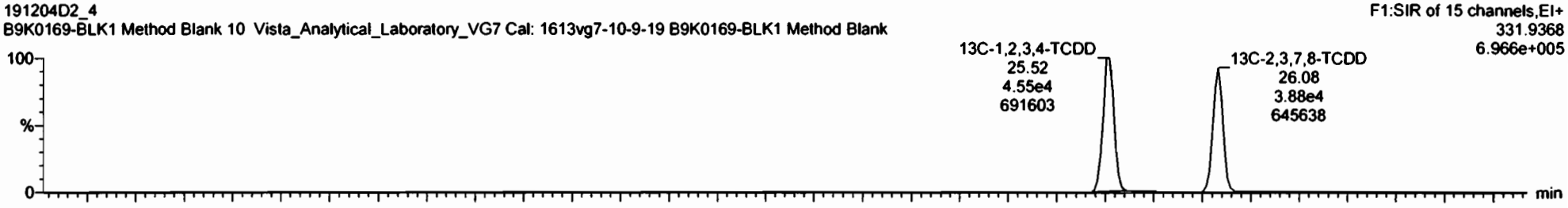
Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

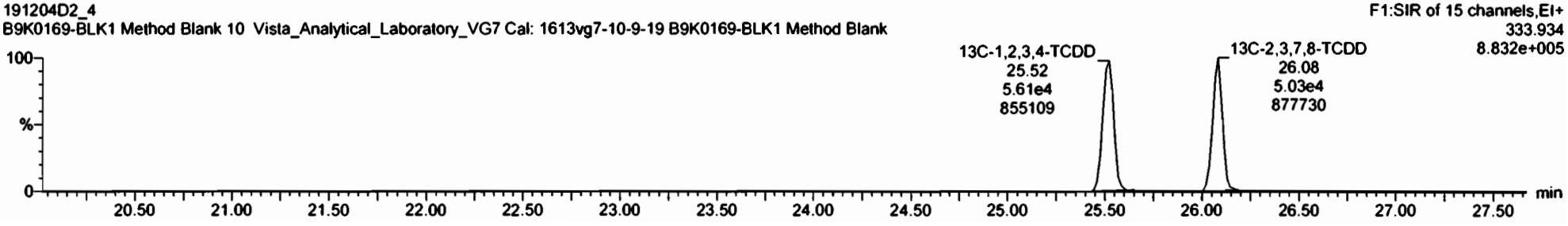
Total Tetra-Dioxins





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





Vista Analytical Laboratory
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Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

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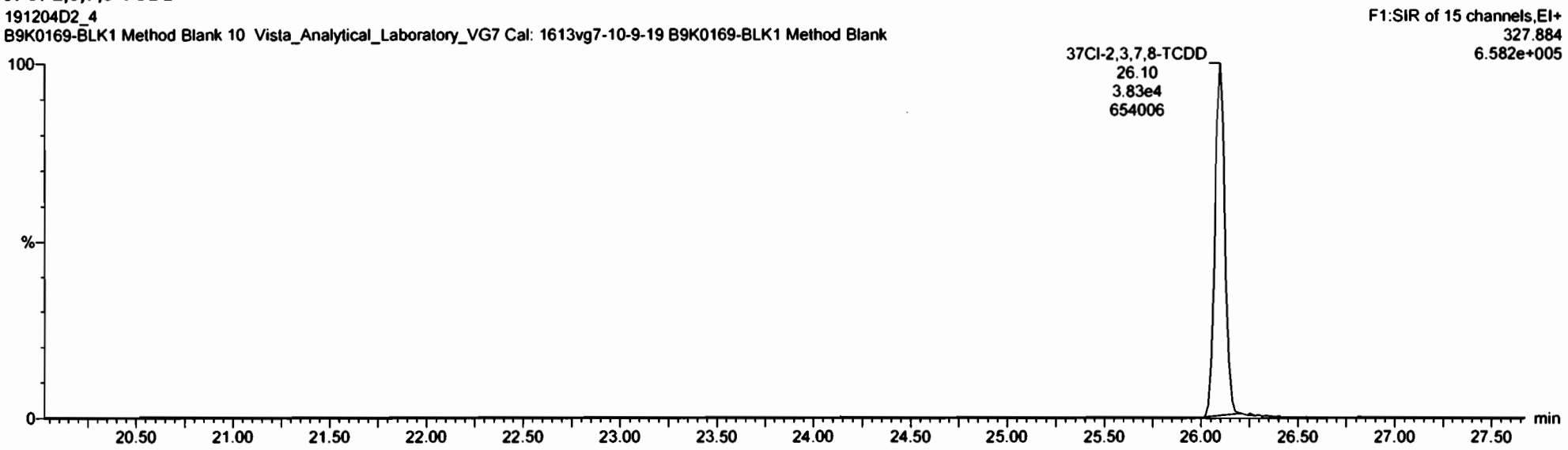

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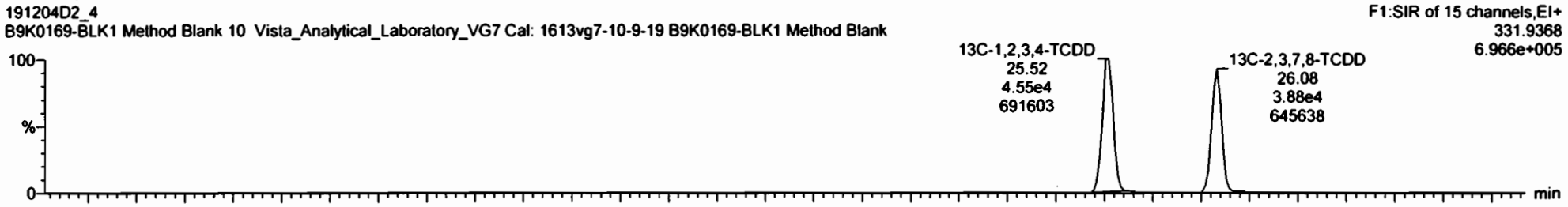
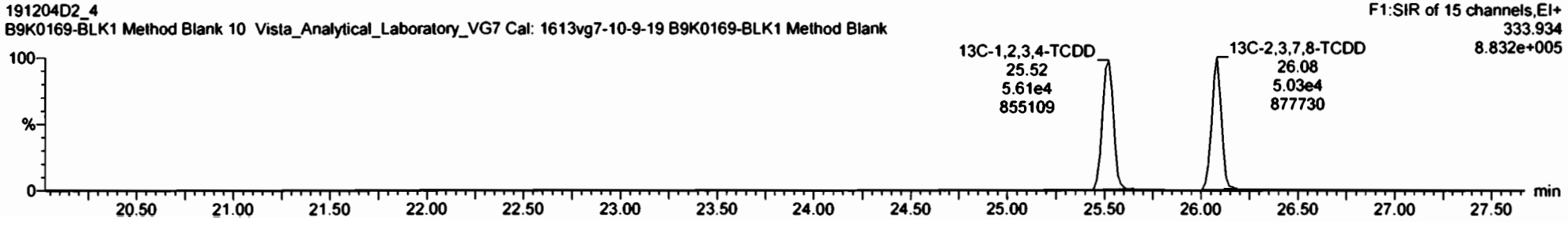
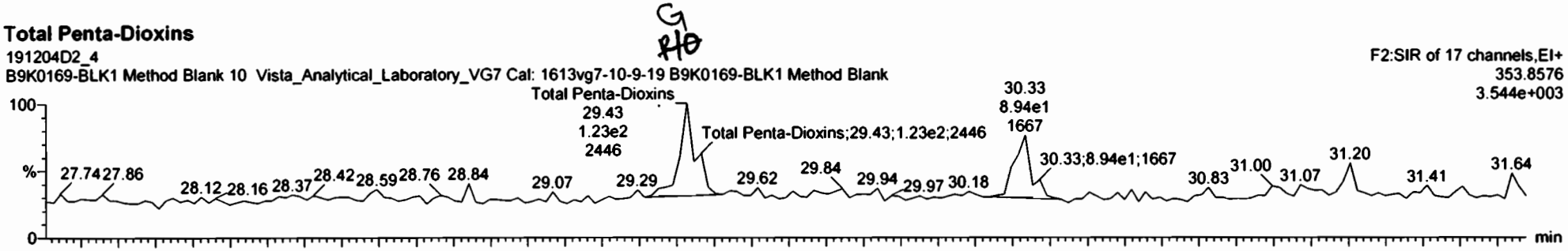


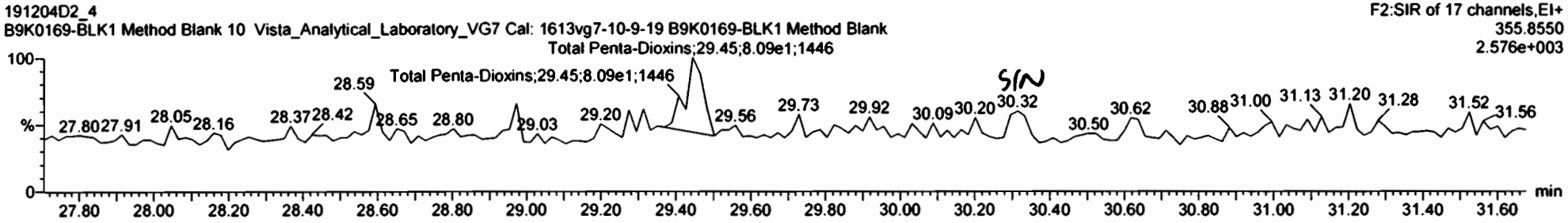


Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

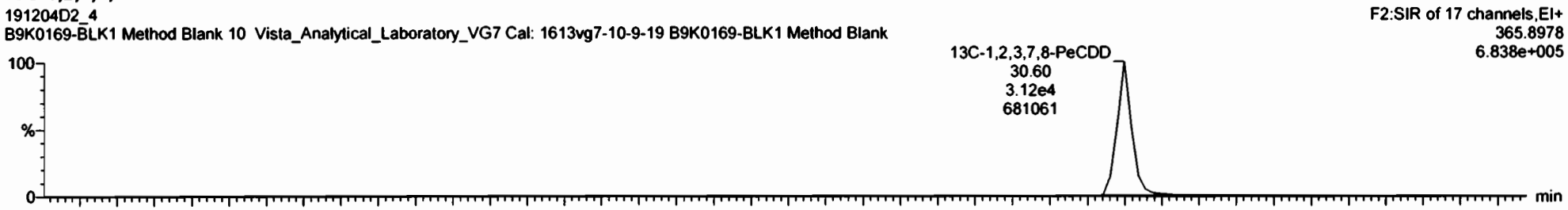
Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

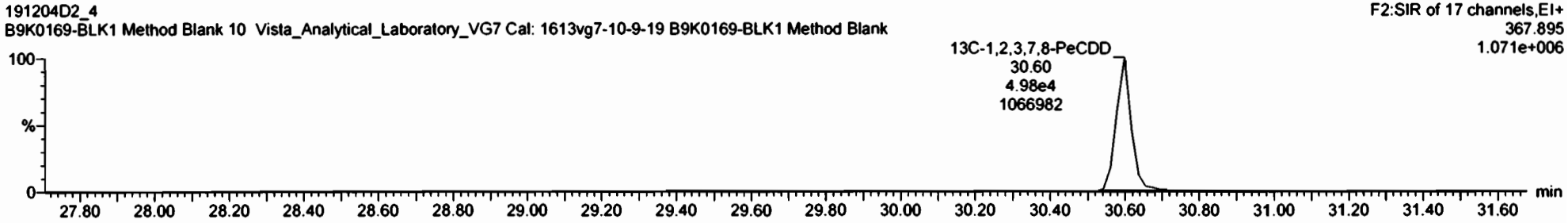
Total Penta-Dioxins





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





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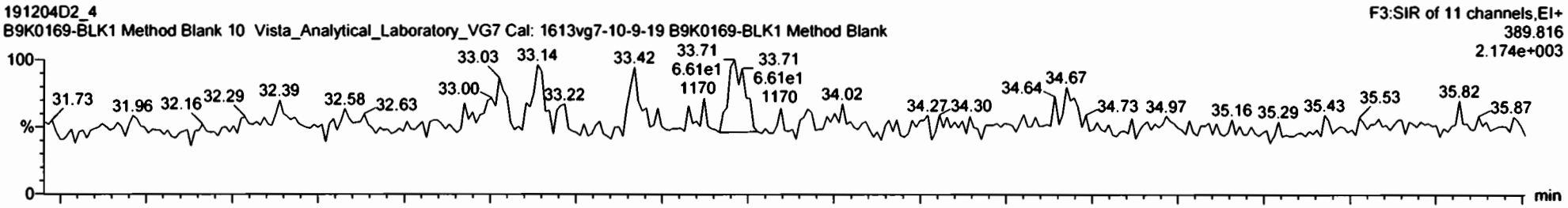
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

Name: 191204D2_4, Date: 5-DEC-2019, Time: 09:57:48, ID: B9K0169-BLK1 Method Blank,
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Hexa-Dioxins



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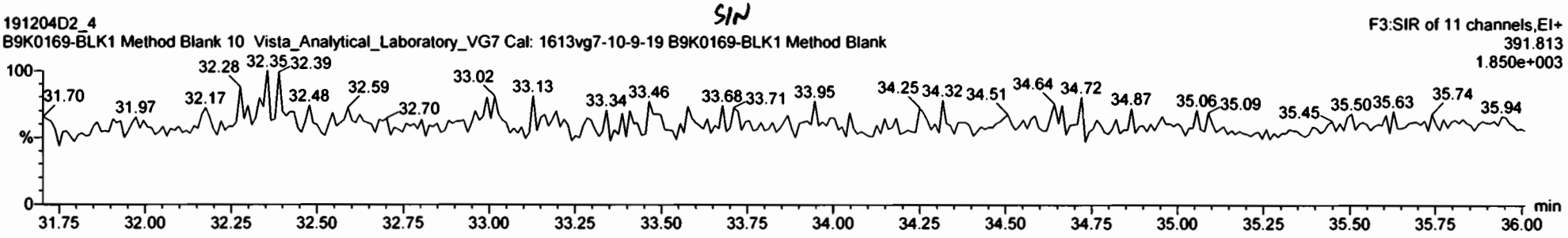

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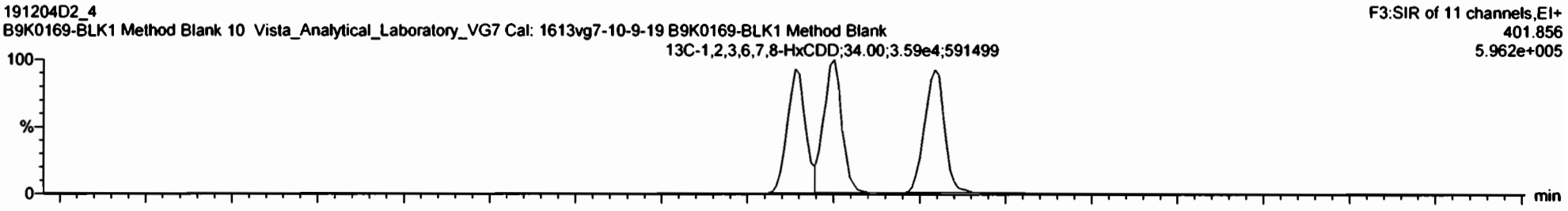

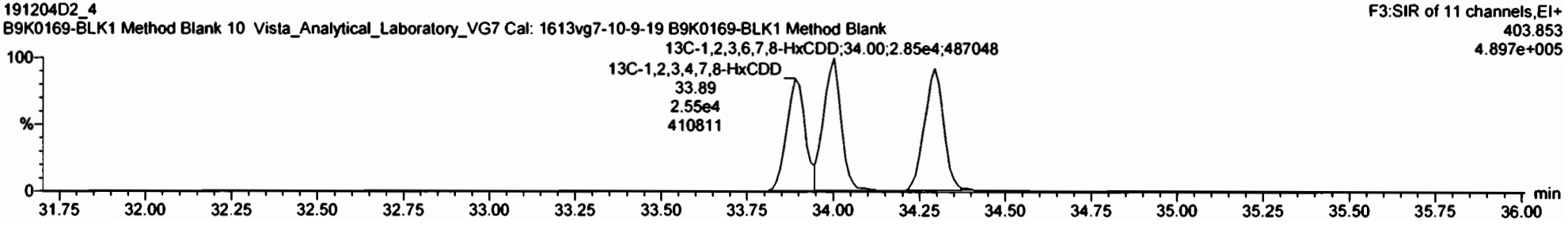

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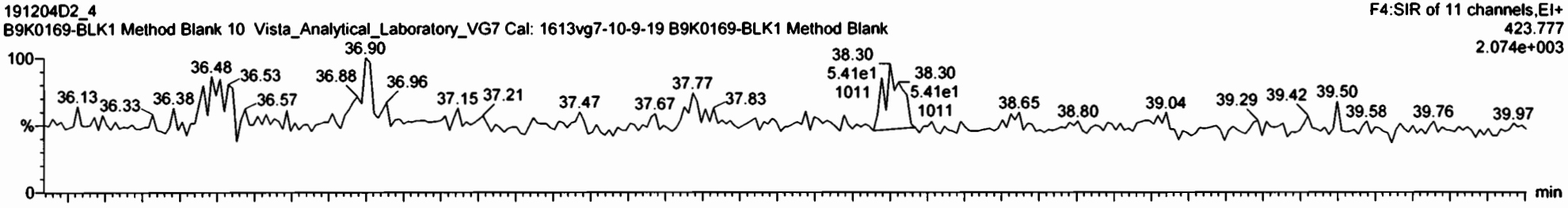
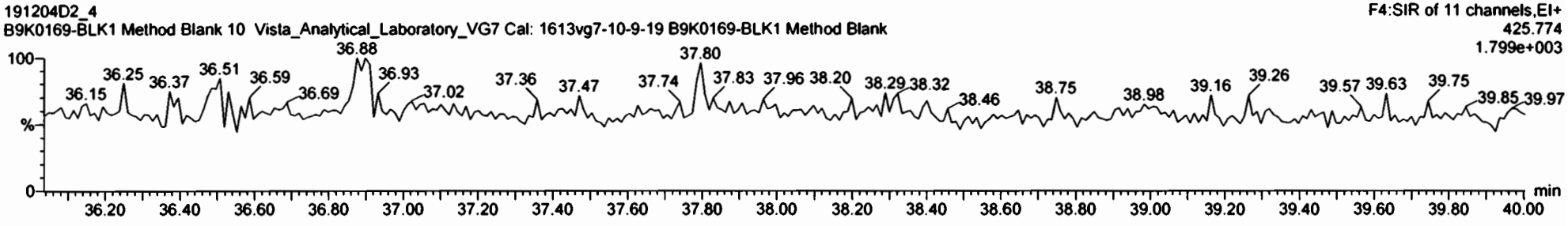
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Hepta-Dioxins





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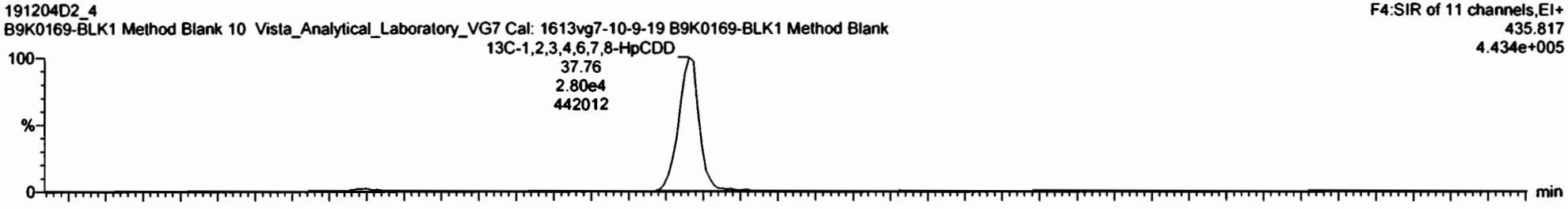

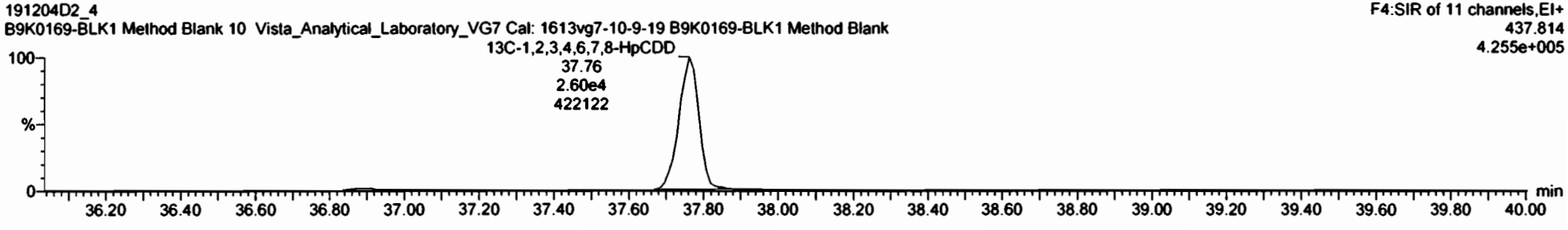

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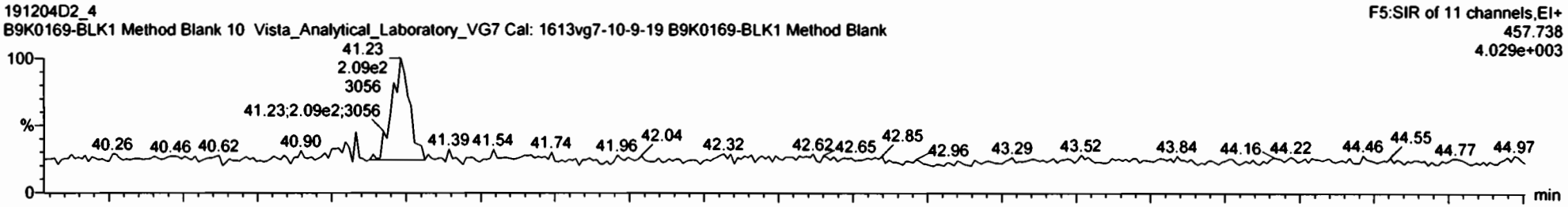
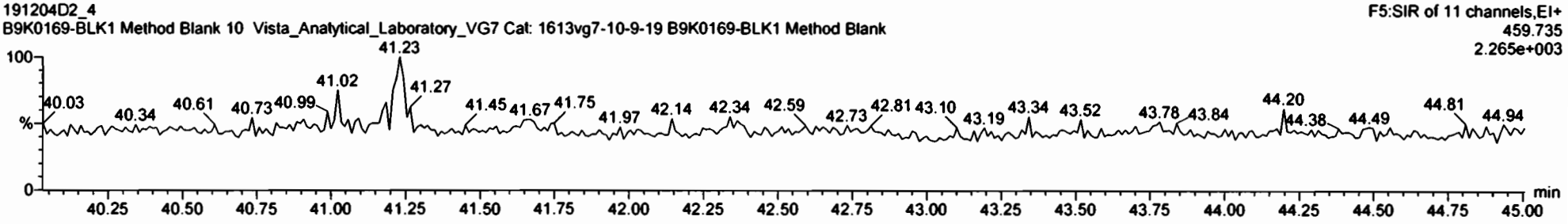
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

OCDD





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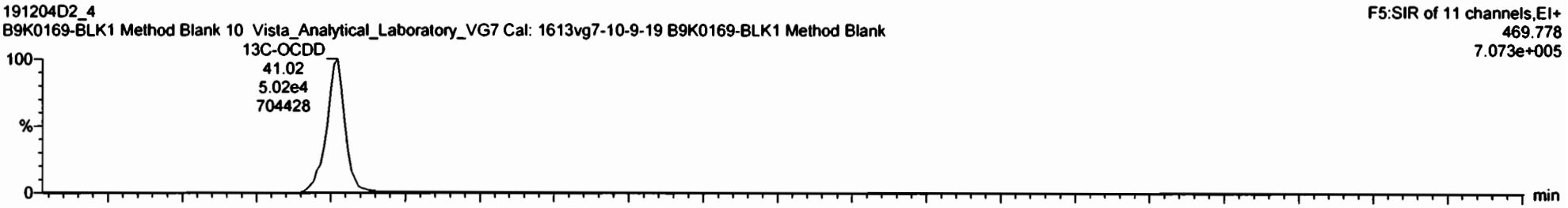

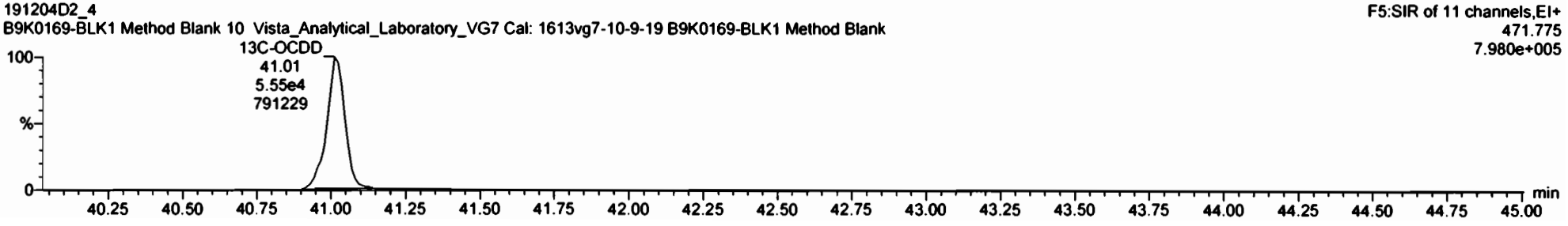

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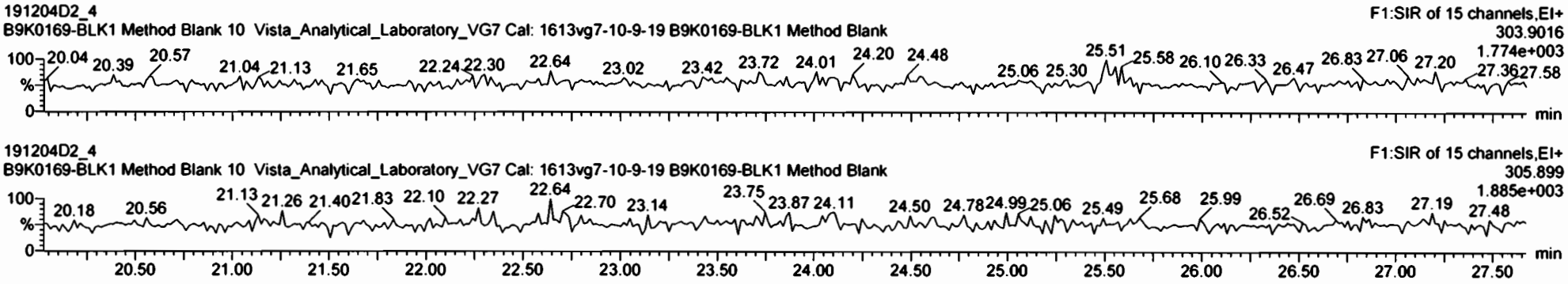
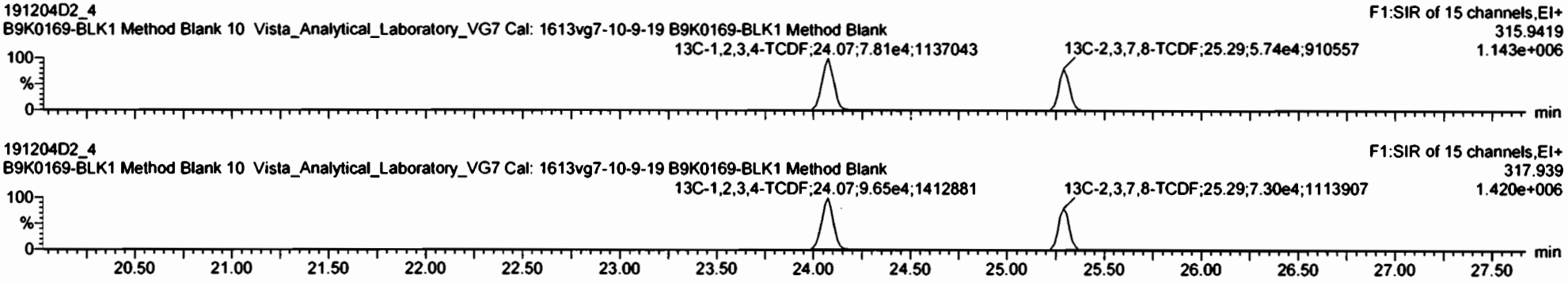
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

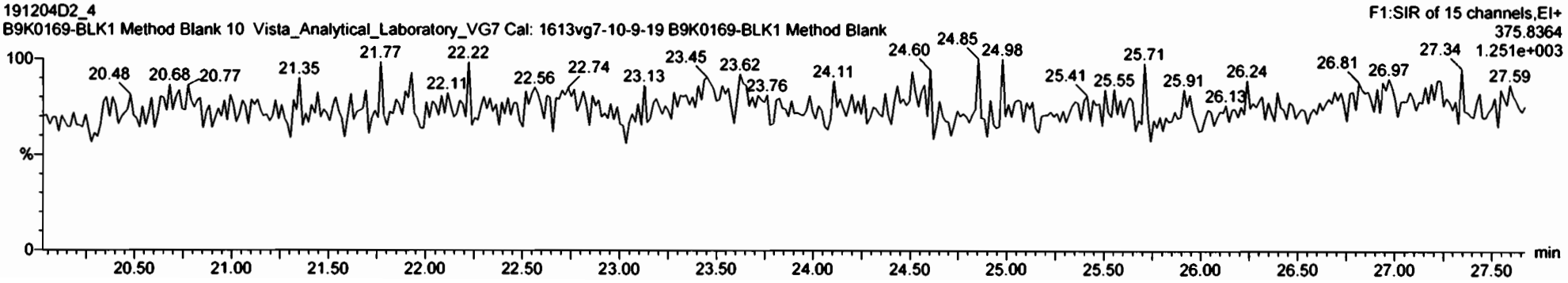
Total Tetra-Furans



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



DPE1



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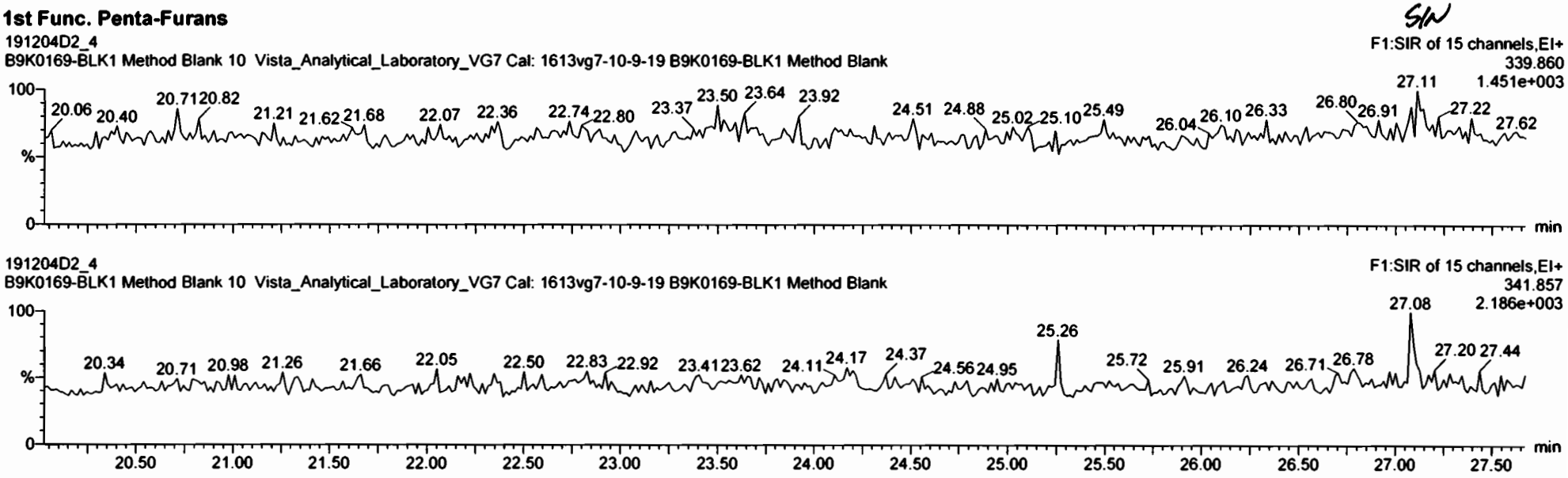
1st Func. Penta-Furans



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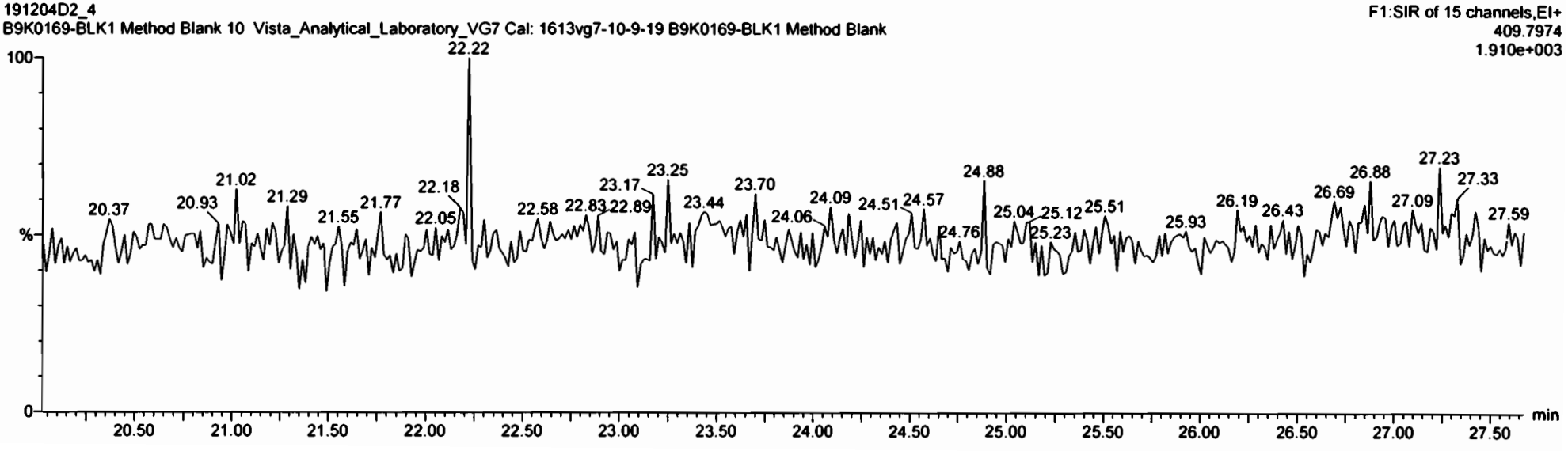

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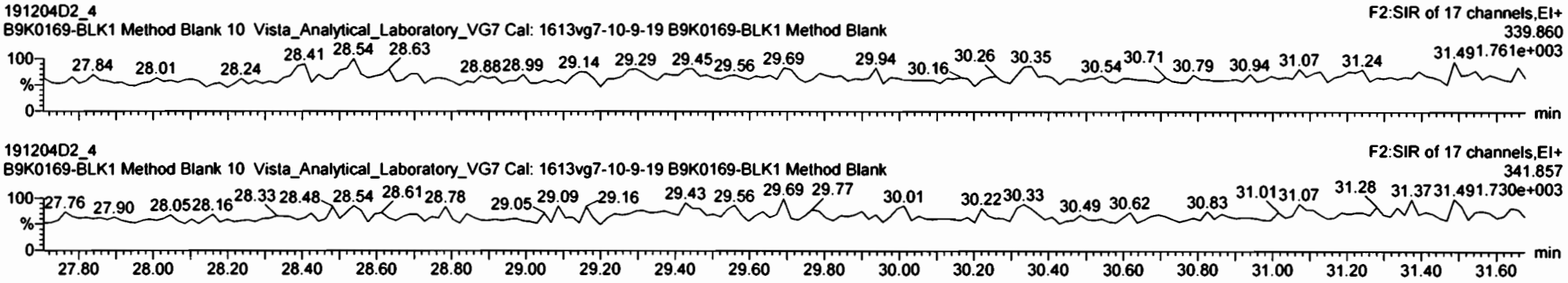
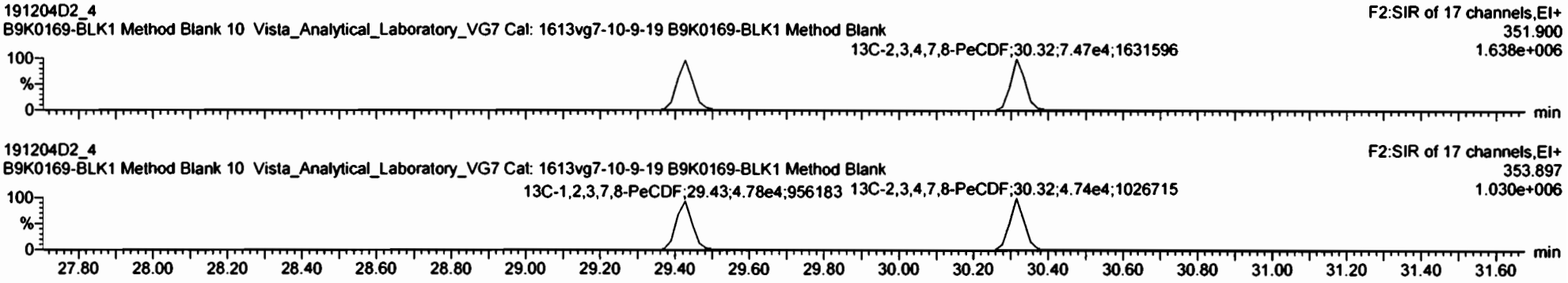
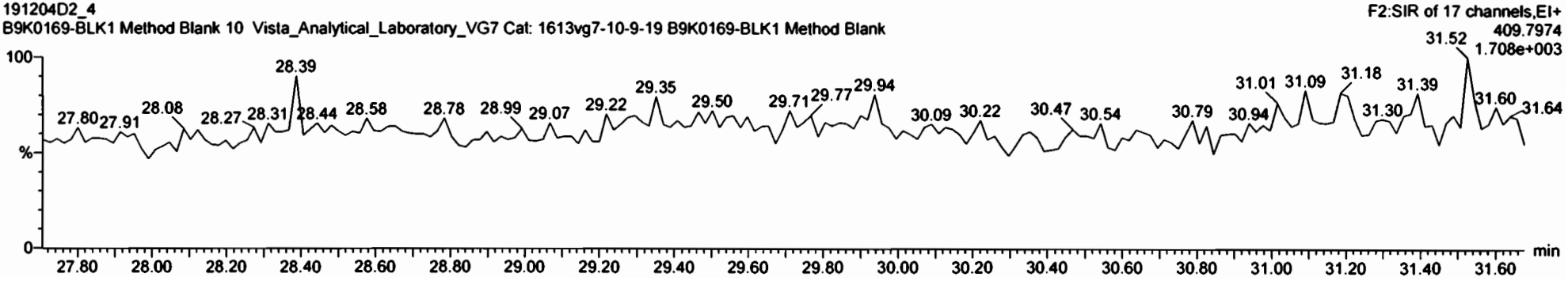
Total Penta-Furans



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



DPE2



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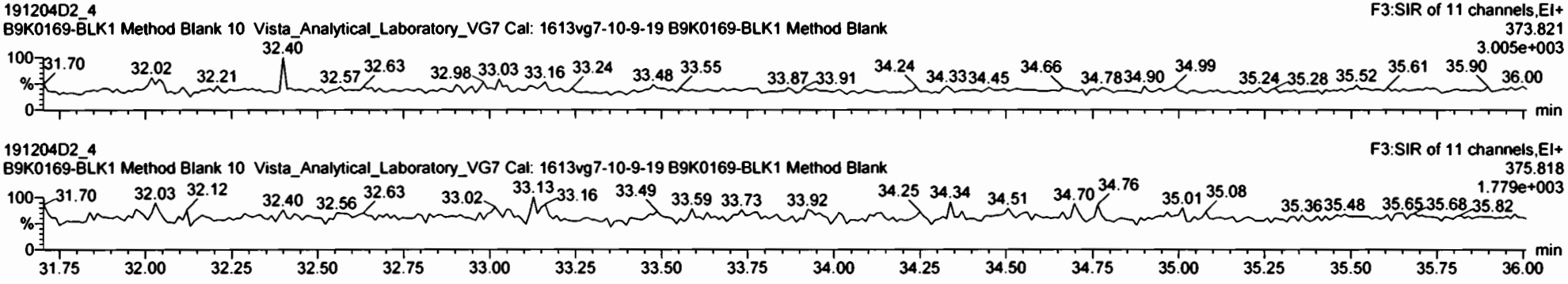
Total Hexa-Furans



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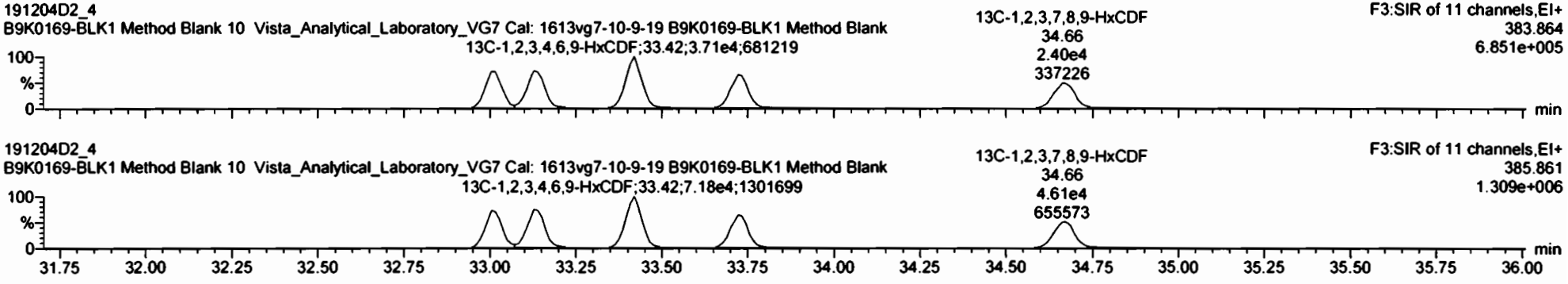

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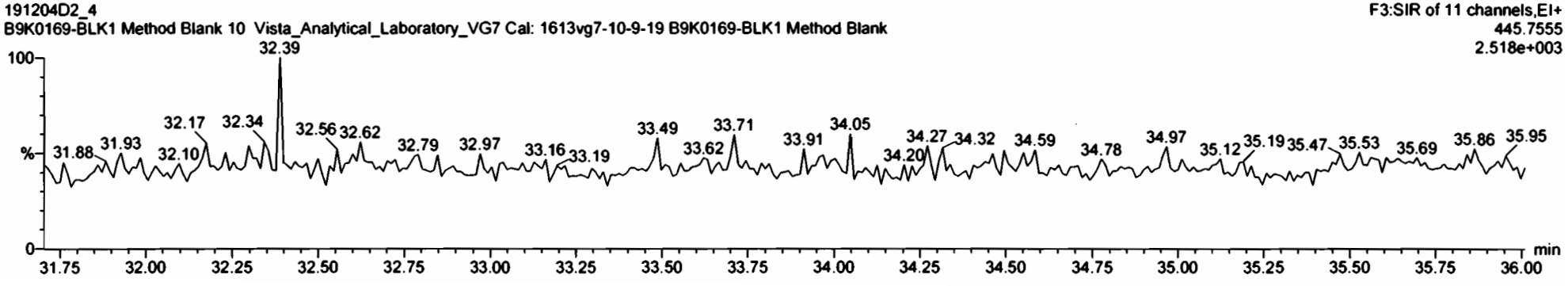

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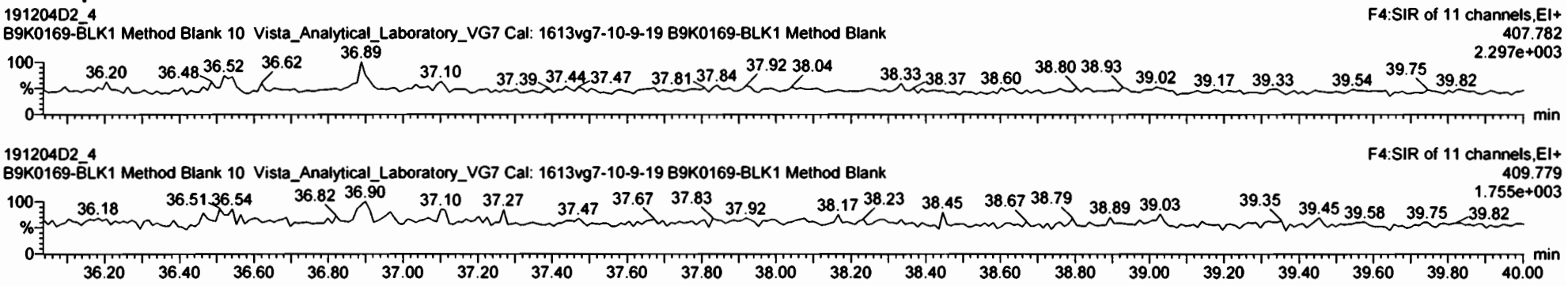
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Hepta-Furans



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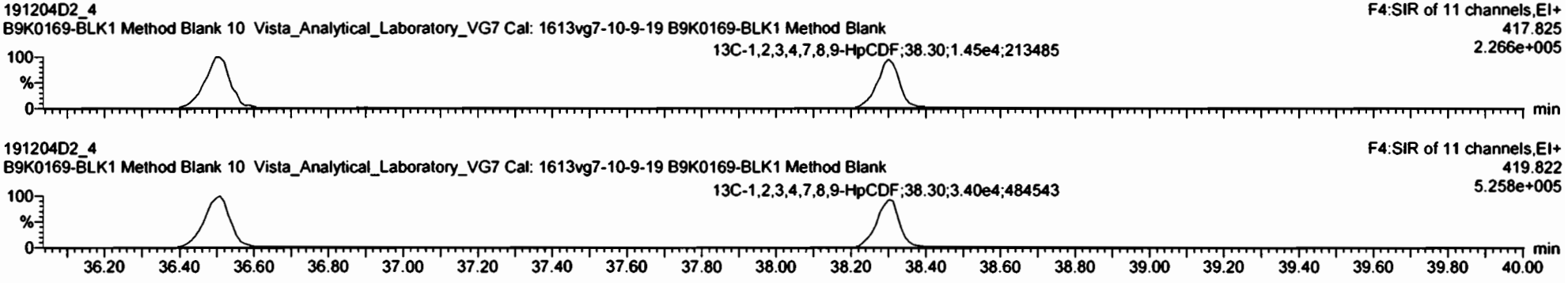

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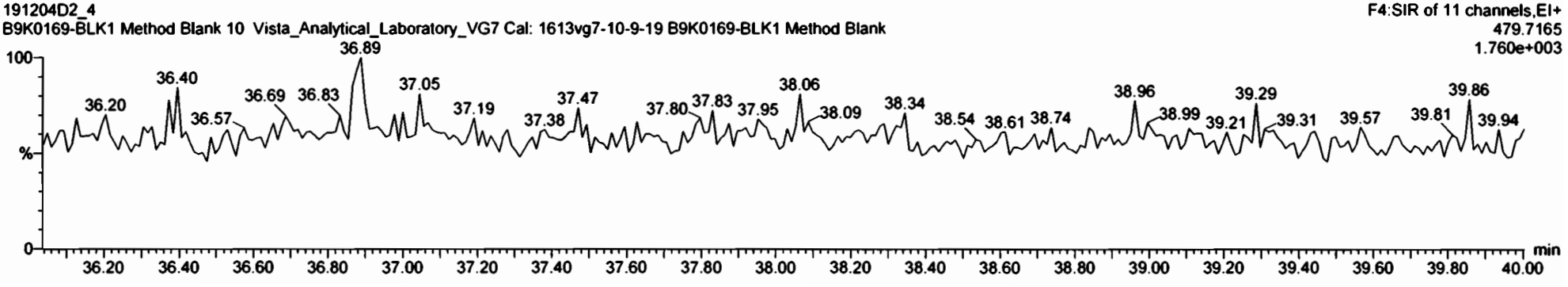

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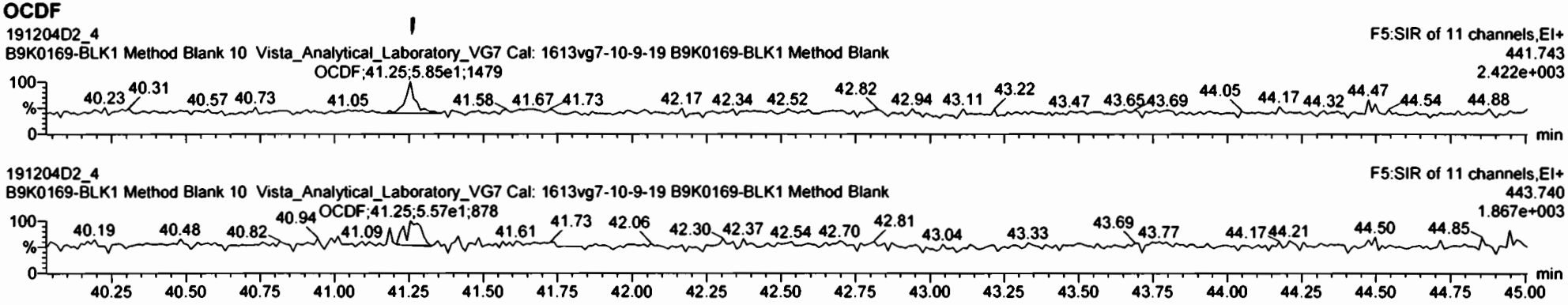
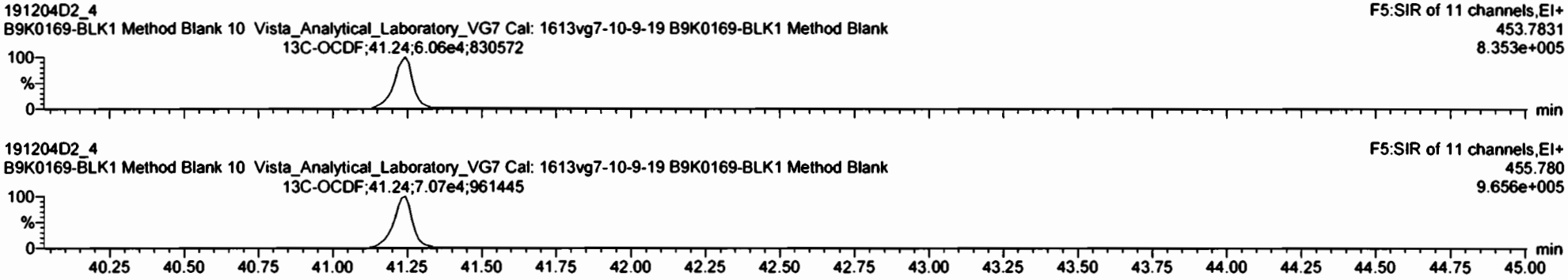
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

OCDF



13C-OCDF



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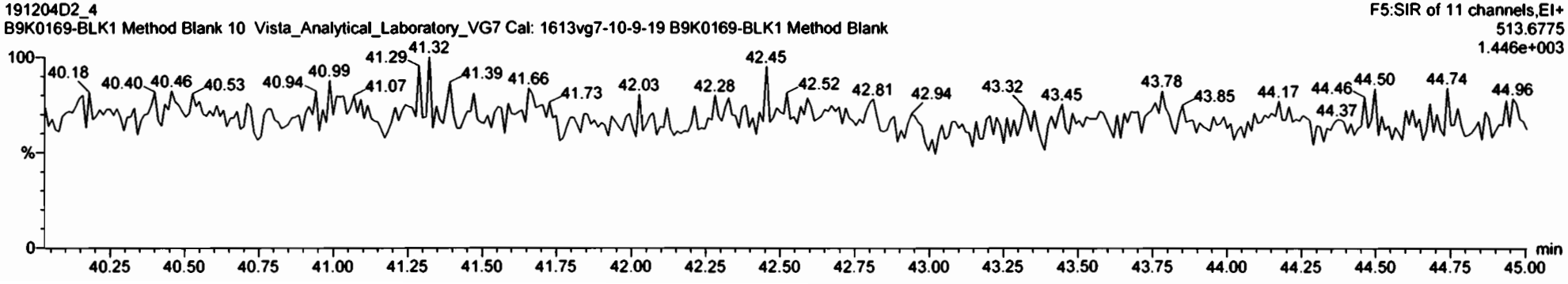


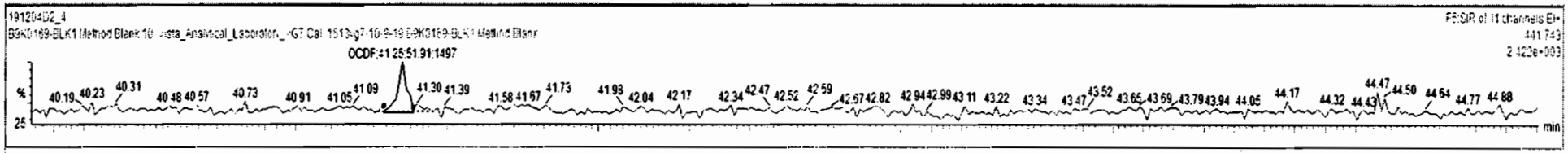
TargetLynx XS - 191204D2-4 * - [Chromatogram]

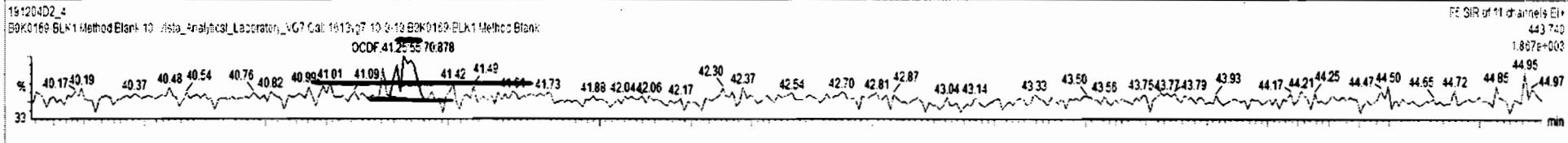
File Edit View Display Processing Window Help

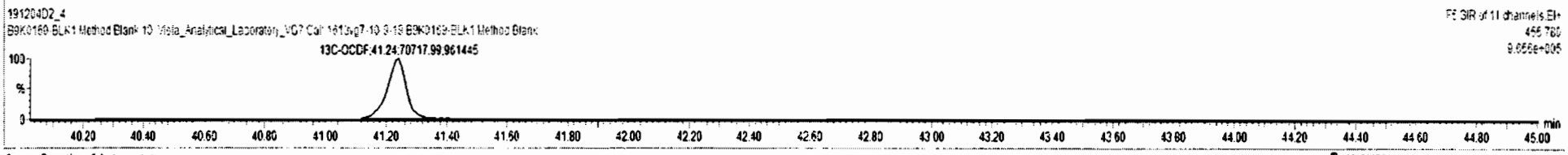
191204D2_4 - B9K0169-BLK1 Method Blank - B9k0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
16	16	1,2,3,4,7,8,9-HpCDF		4.56e4	33			1.260	10.000	38.30			1.000	NO			0.296	
17	17	OCDF	1.06e2	1.31e5	34	0.93	NO	0.947	10.000	41.24	41.25	1.000	1.000	NO	0.3460		0.384	0.3460
18	18	13C-2,3,7,8-TCDD	8.91e4	1.02e5	35	0.77	NO	1.095	10.000	26.06	26.08	1.022	1.021	NO	160.1	80.1	0.596	
19	19	13C-1,2,3,7,8-PeCDD	8.16e4	1.02e5	36	0.63	NO	0.881	10.000	30.29	30.80	1.199	1.187	NO	181.0	90.5	0.529	
20	20	13C-1,2,3,4,7,8-HxCDD	5.93e4	1.09e5	38	1.32	NO	0.642	10.000	33.88	33.89	1.014	1.014	NO	169.5	84.7	0.797	
21	21	13C-1,2,3,6,7,8-HxCDD	6.43e4	1.09e5	38	1.26	NO	0.856	10.000	34.00	34.00	1.017	1.017	NO	138.1	69.0	0.598	
22	22	13C-1,2,3,7,8,9-HxCDD	6.57e4	1.09e5	38	1.27	NO	0.807	10.000	34.30	34.29	1.026	1.026	NO	148.5	74.7	0.635	
23	23	13C-1,2,3,4,6,7,8-HpCDD	5.40e4	1.09e5	38	1.08	NO	0.654	10.000	37.64	37.76	1.130	1.126	NO	151.7	75.8	1.10	
24	24	13C-OCDD	1.06e5	1.09e5	38	0.90	NO	0.580	10.000	40.96	41.02	1.228	1.226	NO	334.8	83.7	0.729	
25	25	13C-2,3,7,8-TCDF	1.30e5	1.75e5	37	0.79	NO	1.025	10.000	25.31	25.29	0.991	0.992	NO	144.3	72.1	0.488	
26	26	13C-1,2,3,7,8-PeCDF	1.25e5	1.75e5	37	1.62	NO	0.854	10.000	29.45	29.43	1.153	1.154	NO	168.2	84.1	0.691	
27	27	13C-2,3,4,7,8-PeCDF	1.22e5	1.75e5	37	1.58	NO	0.647	10.000	30.35	30.32	1.188	1.189	NO	165.0	82.5	0.696	
28	28	13C-1,2,3,4,7,8-HxCDF	8.15e4	1.09e5	38	0.52	NO	0.832	10.000	32.59	33.00	0.968	0.967	NO	179.8	89.9	1.24	
29	29	13C-1,2,3,6,7,8-HxCDF	8.66e4	1.09e5	38	0.52	NO	1.034	10.000	33.11	33.13	0.991	0.991	NO	154.0	77.0	1.00	
30	30	13C-2,3,4,6,7,8-HxCDF	7.68e4	1.09e5	38	0.54	NO	0.953	10.000	33.73	33.72	1.009	1.009	NO	147.8	73.9	1.09	

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1											







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191204D2_4 NUM

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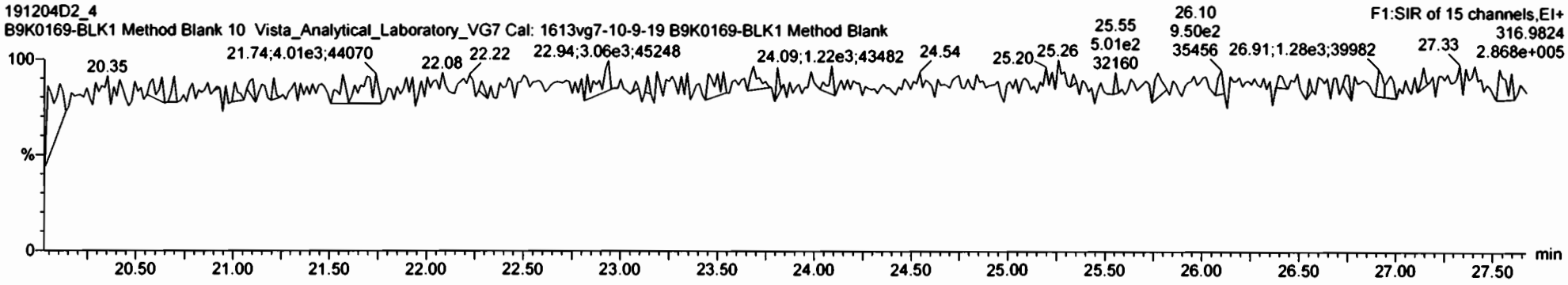
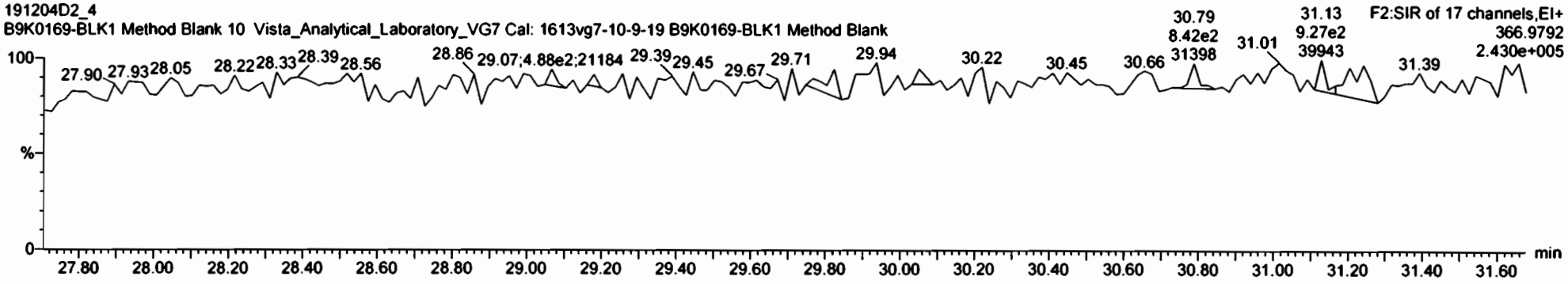
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

PFK1



PFK2



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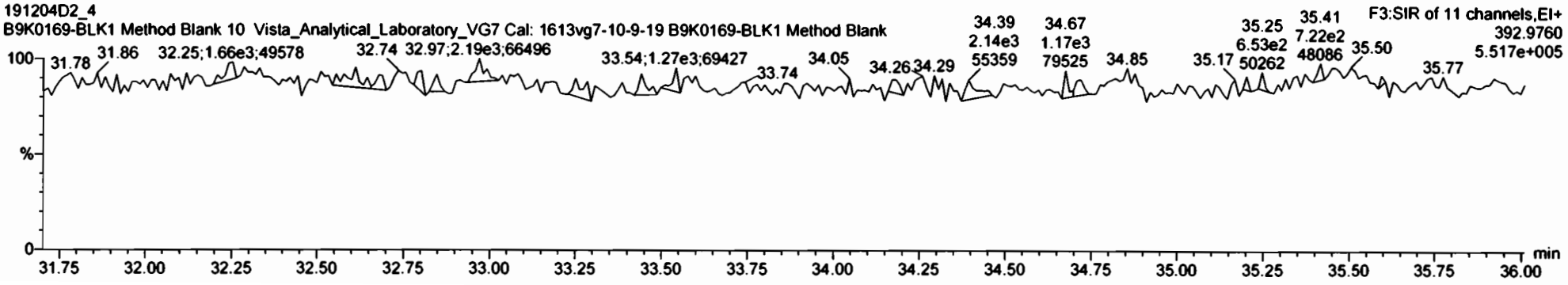

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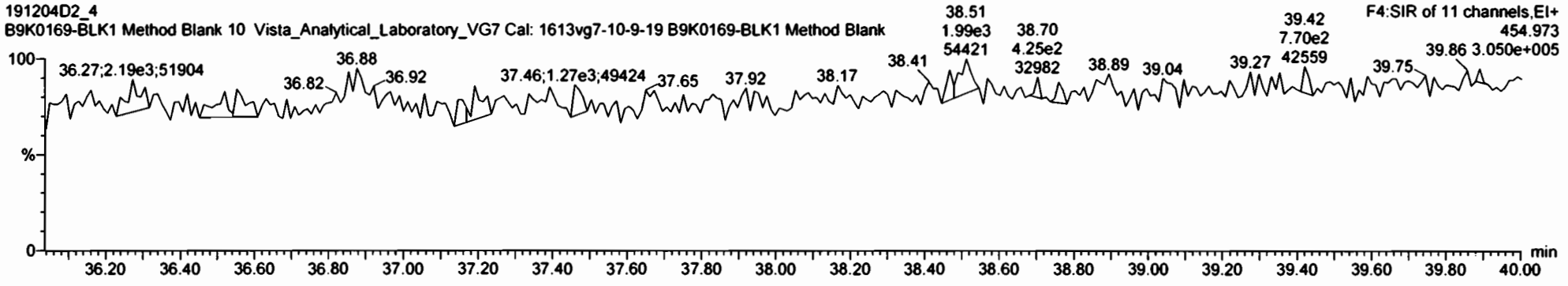
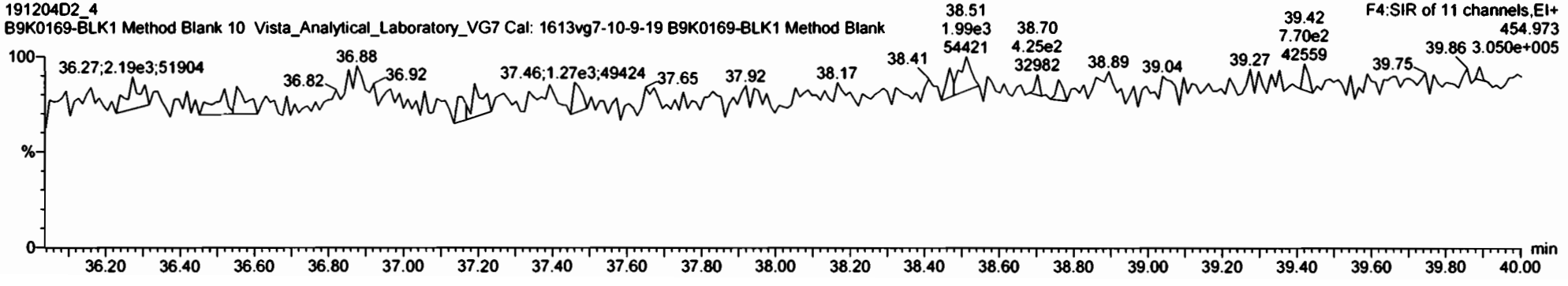
Description: B9K0169-BLK1 Method Blank 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

PFK4



PFK5



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-2.qld
Last Altered: Friday, December 06, 2019 13:07:51 Pacific Standard Time
Printed: Friday, December 06, 2019 13:08:45 Pacific Standard Time

EL 12/6/19

CT 12/18/19

Method: U:\VG7.pro\MethDB\1613VG7-12-4-19.mdb 06 Dec 2019 10:27:59
Calibration: 06 Dec 2019 12:16:39

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD	9.50e3	1.06e5	10.0000	0.905	0.731	NO	1.001	1.001	26.12	26.12	19.732		19.7	0.218
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	10.0000	0.903	0.599	NO	1.001	1.001	30.63	30.63	99.170		99.2	0.308
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.84e4	10.0000	1.101	1.300	NO	1.000	1.000	33.92	33.92	93.281		93.3	0.451
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	10.0000	0.939	1.188	NO	1.000	1.001	34.01	34.03	96.883		96.9	0.532
5	5	1,2,3,7,8,9-HxCDD	3.53e4	7.70e4	10.0000	0.961	1.238	NO	1.001	1.001	34.34	34.32	95.449		95.4	0.506
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.13e4	10.0000	0.979	1.033	NO	1.000	1.000	37.79	37.79	93.751		93.8	0.566
7	7	OCDD	5.61e4	1.23e5	10.0000	0.959	0.890	NO	1.000	1.000	41.03	41.03	190.26		190	0.609
8	8	2,3,7,8-TCDF	1.33e4	1.59e5	10.0000	0.950	0.773	NO	1.001	1.001	25.34	25.33	17.607		17.6	0.175
9	9	1,2,3,7,8-PeCDF	6.66e4	1.46e5	10.0000	0.960	1.582	NO	1.001	1.001	29.45	29.45	95.289		95.3	0.264
10	10	2,3,4,7,8-PeCDF	6.92e4	1.43e5	10.0000	1.015	1.609	NO	1.001	1.001	30.35	30.34	95.104		95.1	0.279
11	11	1,2,3,4,7,8-HxCDF	5.03e4	9.80e4	10.0000	1.177	1.227	NO	1.000	1.001	33.02	33.05	87.292		87.3	0.402
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	10.0000	1.069	1.236	NO	1.000	1.001	33.16	33.17	88.621		88.6	0.445
13	13	2,3,4,6,7,8-HxCDF	4.71e4	9.36e4	10.0000	1.114	1.172	NO	1.001	1.001	33.77	33.76	90.487		90.5	0.480
14	14	1,2,3,7,8,9-HxCDF	3.84e4	8.30e4	10.0000	1.062	1.249	NO	1.000	1.000	34.68	34.69	87.182		87.2	0.653
15	15	1,2,3,4,6,7,8-HpCDF	3.47e4	6.96e4	10.0000	1.128	1.020	NO	1.001	1.000	36.56	36.54	88.342		88.3	0.971
16	16	1,2,3,4,7,8,9-HpCDF	3.09e4	5.71e4	10.0000	1.280	1.037	NO	1.000	1.001	38.31	38.33	84.559		84.6	0.814
17	17	OCDF	6.30e4	1.54e5	10.0000	0.947	0.882	NO	1.000	1.000	41.25	41.26	172.96		173	0.519
18	18	13C-2,3,7,8-TCDD	1.06e5	1.04e5	10.0000	1.095	0.755	NO	1.021	1.022	26.07	26.09	185.88	92.9		0.541
19	19	13C-1,2,3,7,8-PeCDD	9.32e4	1.04e5	10.0000	0.881	0.634	NO	1.187	1.199	30.29	30.61	202.44	101.2		0.502
20	20	13C-1,2,3,4,7,8-Hx...	6.84e4	1.13e5	10.0000	0.642	1.285	NO	1.014	1.014	33.90	33.91	188.78	94.4		0.944
21	21	13C-1,2,3,6,7,8-Hx...	7.61e4	1.13e5	10.0000	0.856	1.224	NO	1.017	1.017	34.02	34.01	157.62	78.8		0.708
22	22	13C-1,2,3,7,8,9-Hx...	7.70e4	1.13e5	10.0000	0.807	1.272	NO	1.026	1.026	34.32	34.30	169.13	84.6		0.751
23	23	13C-1,2,3,4,6,7,8-H...	6.13e4	1.13e5	10.0000	0.654	1.056	NO	1.126	1.130	37.66	37.78	166.18	83.1		1.08
24	24	13C-OCDD	1.23e5	1.13e5	10.0000	0.580	0.914	NO	1.226	1.227	41.00	41.03	376.01	94.0		1.32
25	25	13C-2,3,7,8-TCDF	1.59e5	1.74e5	10.0000	1.035	0.795	NO	0.992	0.991	25.32	25.31	176.49	88.2		0.586
26	26	13C-1,2,3,7,8-PeCDF	1.46e5	1.74e5	10.0000	0.854	1.608	NO	1.154	1.153	29.45	29.43	195.93	98.0		0.797
27	27	13C-2,3,4,7,8-PeCDF	1.43e5	1.74e5	10.0000	0.847	1.619	NO	1.189	1.188	30.35	30.32	194.60	97.3		0.804
28	28	13C-1,2,3,4,7,8-Hx...	9.80e4	1.13e5	10.0000	0.832	0.486	NO	0.987	0.988	33.01	33.02	208.74	104.4		1.00
29	29	13C-1,2,3,6,7,8-Hx...	1.01e5	1.13e5	10.0000	1.034	0.518	NO	0.991	0.991	33.13	33.15	173.34	86.7		0.806
30	30	13C-2,3,4,6,7,8-Hx...	9.36e4	1.13e5	10.0000	0.953	0.515	NO	1.009	1.009	33.75	33.74	173.98	87.0		0.875
31	31	13C-1,2,3,7,8,9-Hx...	8.30e4	1.13e5	10.0000	0.828	0.525	NO	1.039	1.037	34.73	34.68	177.69	88.8		1.01

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-2.qld
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Printed: Friday, December 06, 2019 13:08:45 Pacific Standard Time

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	6.96e4	1.13e5	10.0000	0.757	0.446	NO	1.093	1.092	36.54	36.53	162.93	81.5		1.11
33	33	13C-1,2,3,4,7,8,9-H...	5.71e4	1.13e5	10.0000	0.581	0.440	NO	1.143	1.146	38.22	38.31	174.03	87.0		1.45
34	34	13C-OCDF	1.54e5	1.13e5	10.0000	0.689	0.867	NO	1.233	1.234	41.24	41.25	395.37	98.8		0.848
35	35	37Cl-2,3,7,8-TCDD	4.44e4	1.04e5	10.0000	1.198			1.022	1.023	26.09	26.10	71.059	88.8		0.206
36	36	13C-1,2,3,4-TCDD	1.04e5	1.04e5	10.0000	1.000	0.813	NO	1.000	1.000	25.50	25.53	200.00	100.0		0.592
37	37	13C-1,2,3,4-TCDF	1.74e5	1.74e5	10.0000	1.000	0.785	NO	1.000	1.000	24.06	24.10	200.00	100.0		0.606
38	38	13C-1,2,3,4,6,9-Hx...	1.13e5	1.13e5	10.0000	1.000	0.524	NO	1.000	1.000	33.42	33.44	200.00	100.0		0.834
39	39	Total Tetra-Dioxins		1.06e5	10.0000	0.901			0.000		25.50		19.732		19.7	0.219
40	40	Total Penta-Dioxins		9.32e4	10.0000	0.872			0.000		30.00		99.170		99.2	0.319
41	41	Total Hexa-Dioxins		0.00e0	10.0000	0.976			0.000		33.80		285.61		286	0.506
42	42	Total Hepta-Dioxins		6.13e4	10.0000	0.989			0.000		37.75		93.751		93.8	0.561
43	43	Total Tetra-Furans		1.59e5	10.0000	0.943			0.000		24.00		17.607		17.6	0.177
44	44	1st Func. Penta-Fur...		0.00e0	10.0000	0.940			0.000		27.63					0.0383
45	45	Total Penta-Furans		0.00e0	10.0000	0.940			0.000		30.00		190.39		190	0.285
46	46	Total Hexa-Furans		0.00e0	10.0000	1.078			0.000		33.00		353.58		354	0.499
47	47	Total Hepta-Furans		0.00e0	10.0000	1.135			0.000		37.75		172.90		173	0.944

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-2.qld
Last Altered: Friday, December 06, 2019 13:07:51 Pacific Standard Time
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Method: U:\VG7.pro\MethDB\1613VG7-12-4-19.mdb 06 Dec 2019 10:27:59
Calibration: 06 Dec 2019 12:16:39

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	1	2,3,7,8-TCDD	NO	26.12	4009.251	45754.215	178.634	MM	19.7320	19.73

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	2	1,2,3,7,8-PeCDD	NO	30.63	15626.803	36161.051	895.211	bb	99.1704	99.17

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	5	1,2,3,7,8,9-HxCDD	NO	34.32	19532.418	43089.723	917.554	bb	95.4493	95.45
2	4	1,2,3,6,7,8-HxCDD	NO	34.03	18779.799	41870.102	909.348	db	96.8835	96.88
3	3	1,2,3,4,7,8-HxCDD	NO	33.92	19856.619	38461.695	1027.302	MM	93.2808	93.28

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
	6	1,2,3,4,6,7,8-HpCDD	NO	37.79	14303.960	31492.725	918.198	MM	93.7511	93.75

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
	8	2,3,7,8-TCDF	NO	25.33	5792.411	70391.891	167.281	MM	17.6067	17.61

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191204D2\191204D2-2.qld
Last Altered: Friday, December 06, 2019 13:07:51 Pacific Standard Time
Printed: Friday, December 06, 2019 13:08:45 Pacific Standard Time

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	10	2,3,4,7,8-PeCDF	NO	30.34	42674.500	88647.508	965.119	MM	95.1044	95.10
2	9	1,2,3,7,8-PeCDF	NO	29.45	40817.824	89756.313	915.158	MM	95.2893	95.29

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	14	1,2,3,7,8,9-HxCDF	NO	34.69	21326.883	28549.756	925.528	bb	87.1824	87.18
2	13	2,3,4,6,7,8-HxCDF	NO	33.76	25435.596	31824.111	1007.658	bb	90.4865	90.49
3	12	1,2,3,6,7,8-HxCDF	NO	33.17	26483.299	34527.047	947.268	db	88.6208	88.62
4	11	1,2,3,4,7,8-HxCDF	NO	33.05	27715.289	32055.814	1027.253	bd	87.2921	87.29

Hepta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	16	1,2,3,4,7,8,9-HpCDF	NO	38.33	15721.413	17437.201	1082.265	bb	84.5586	84.56
2	15	1,2,3,4,6,7,8-HpCDF	NO	36.54	17517.432	21478.678	996.146	bb	88.3421	88.34

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

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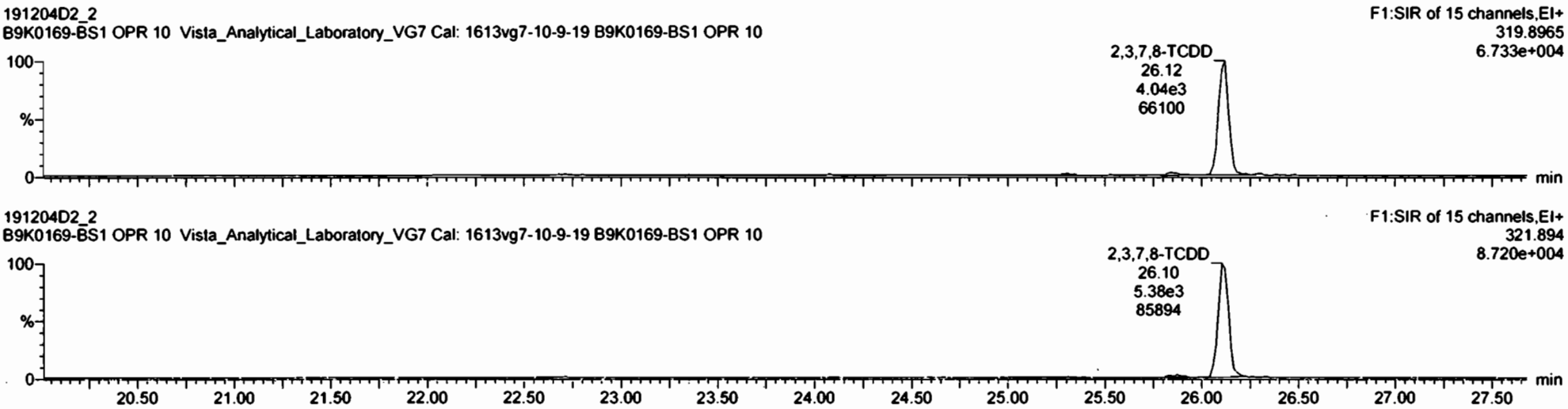
Calibration: 06 Dec 2019 10:31:47

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Tetra-Dioxins



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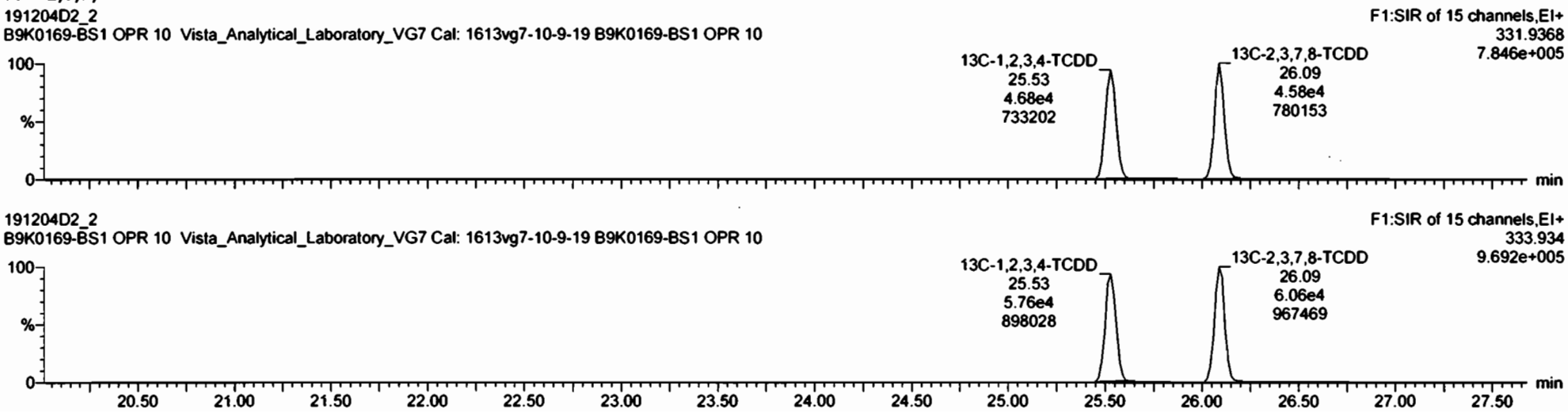

TargetLynx XS

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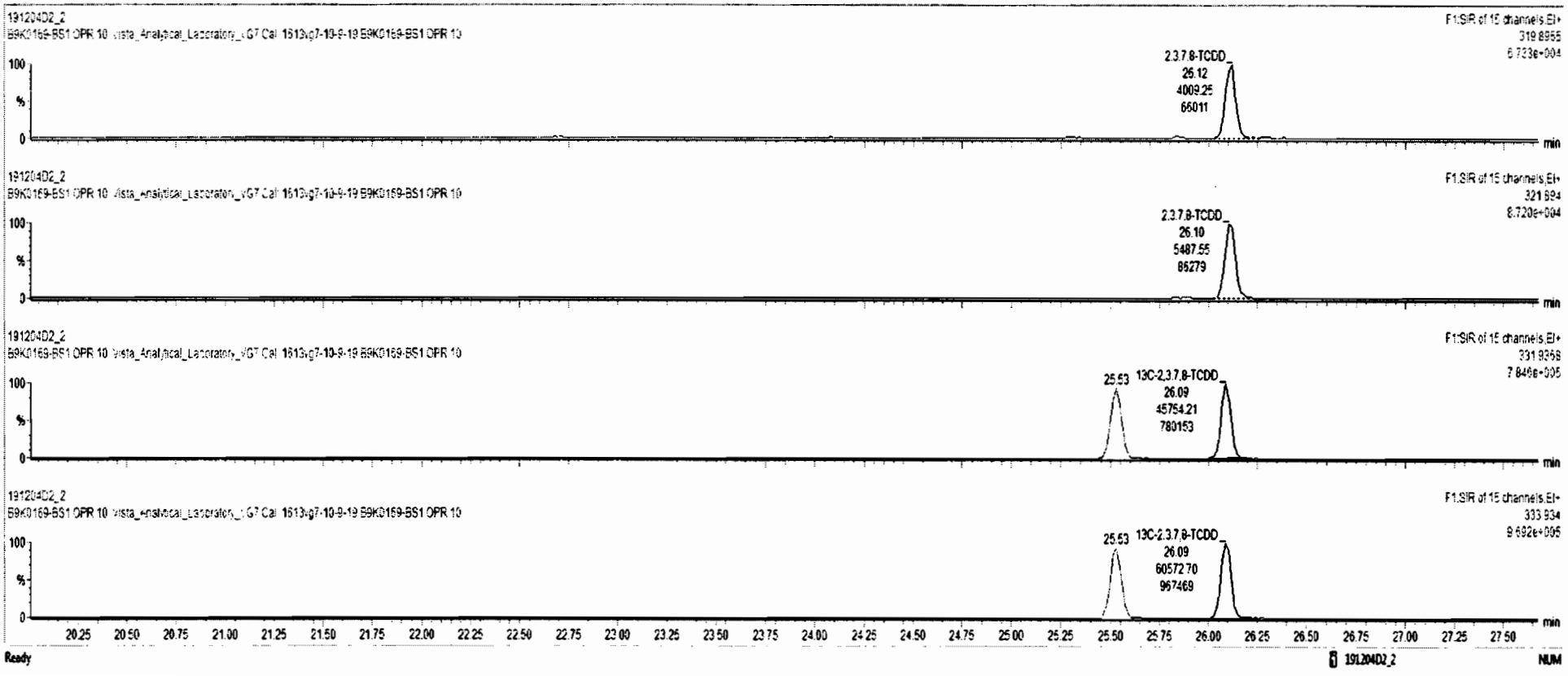
191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	Name	Resp	RA	n/y	RRF	wVol	RT	RRT	Conc	%Rec	DL	EMPC
1	2,3,7,8-TCDD	9.50e3	0.73	NO		10.000	26.12	1.001	19.7		0.218	19.7
2	1,2,3,7,8-PeCDD	4.17e4	0.60	NO		10.000	30.62	1.001	99.2		0.308	99.2
3	1,2,3,4,7,8-HxCDD	3.52e4	1.24	NO		10.000	33.92	1.000	93.6		0.451	92.6
4	1,2,3,6,7,8-HxCDD	3.40e4	1.23	NO		10.000	34.03	1.001	95.3		0.532	95.3
5	1,2,3,7,8,9-HxCDD	3.53e4	1.24	NO		10.000	34.32	1.001	95.4		0.506	95.4
6	1,2,3,4,6,7,8-HpCDD	2.81e4	1.03	NO		10.000	37.78	1.000	93.8		0.566	92.8
7	OCDD	5.81e4	0.89	NO		10.000	41.03	1.000	190		0.609	190
8	2,3,7,8-TCDF	1.33e4	0.77	NO		10.000	25.33	1.001	17.6		0.175	17.6
9	1,2,3,7,8-PeCDF	6.66e4	1.60	NO		10.000	29.45	1.001	95.3		0.264	95.3
10	2,3,4,7,8-PeCDF	6.92e4	1.61	NO		10.000	30.34	1.001	95.1		0.279	95.1
11	1,2,3,4,7,8-HxCDF	5.03e4	1.23	NO		10.000	33.05	1.001	87.3		0.402	87.3
12	1,2,3,6,7,8-HxCDF	4.79e4	1.24	NO		10.000	33.17	1.001	88.6		0.445	88.6
13	2,3,4,6,7,8-HxCDF	4.71e4	1.17	NO		10.000	33.76	1.001	90.5		0.480	90.5

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



Ready

191204D2_2

NUM

Vista Analytical Laboratory
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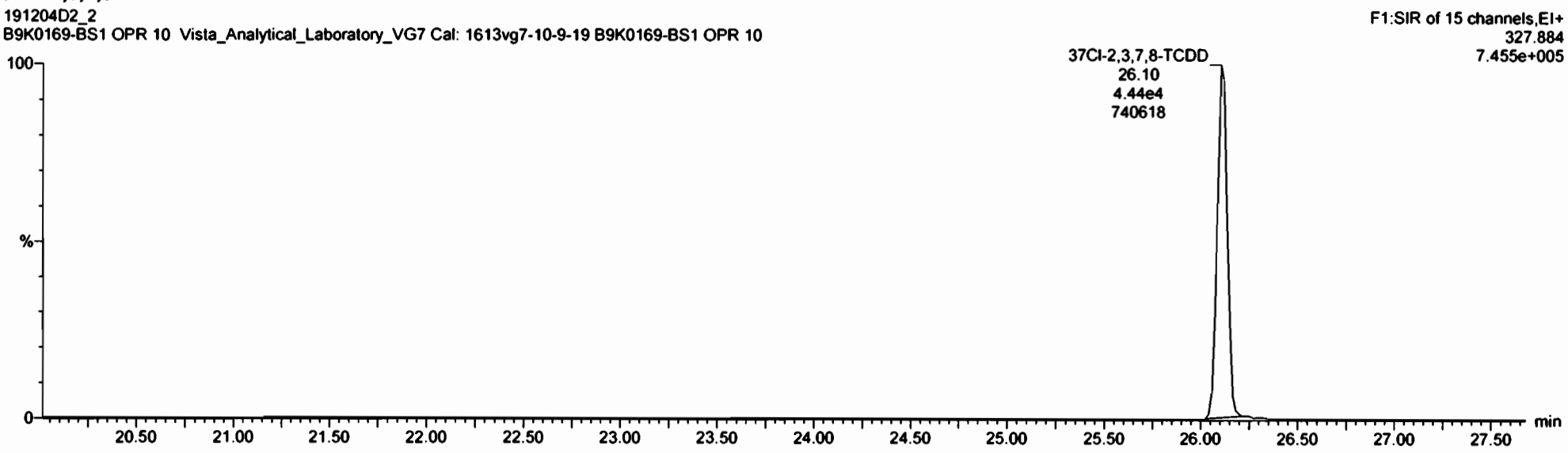
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

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



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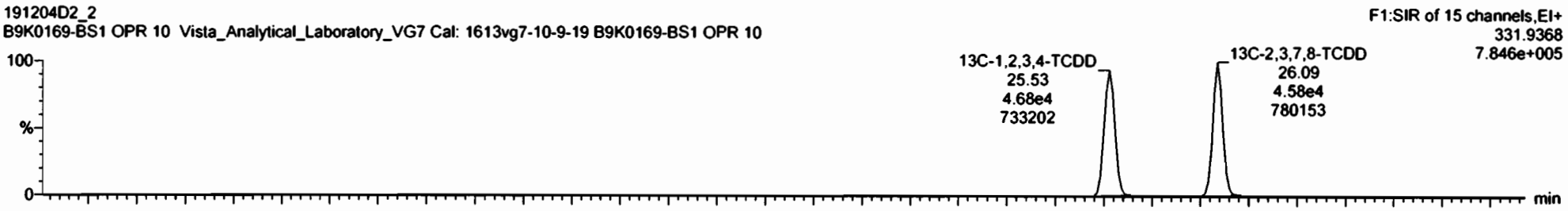

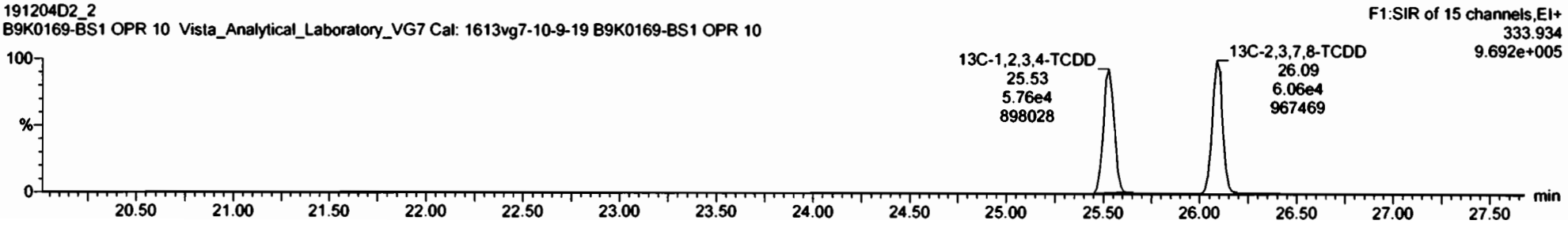

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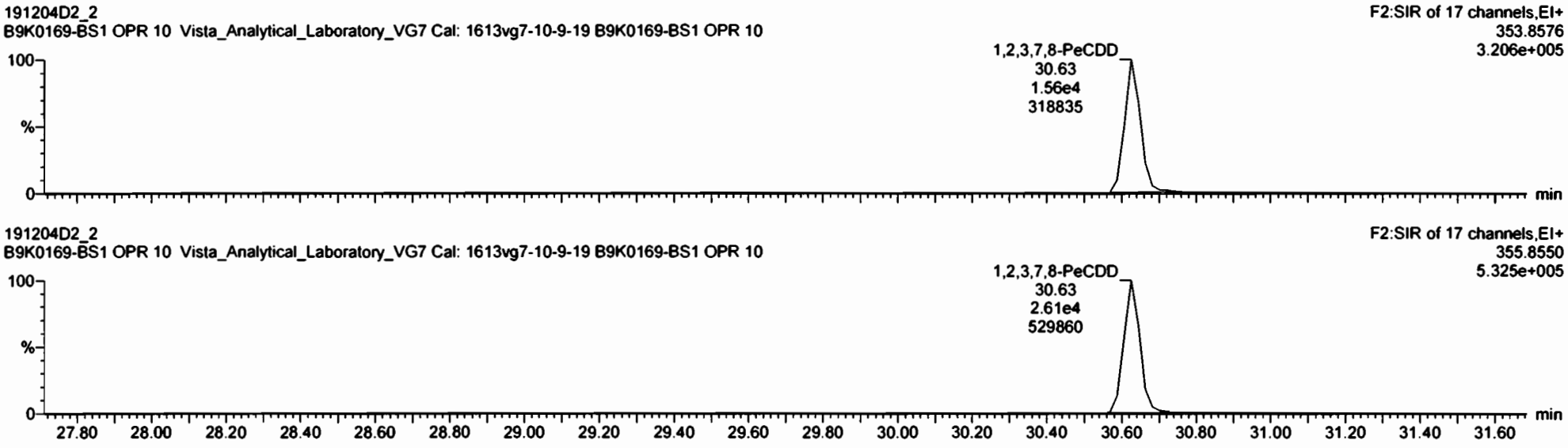
Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Penta-Dioxins



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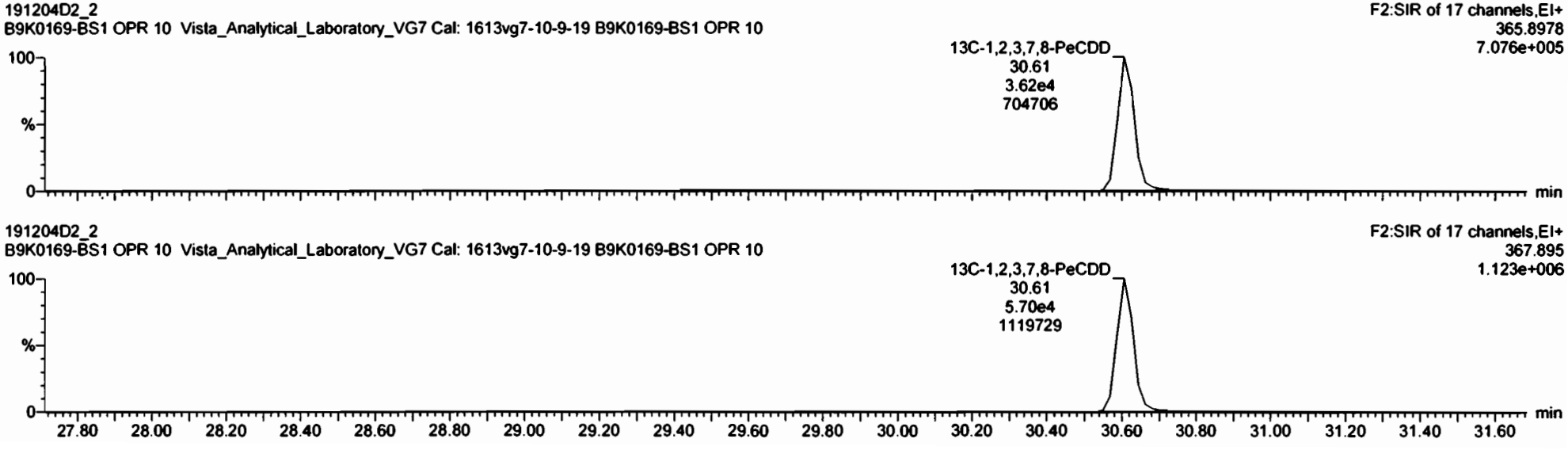

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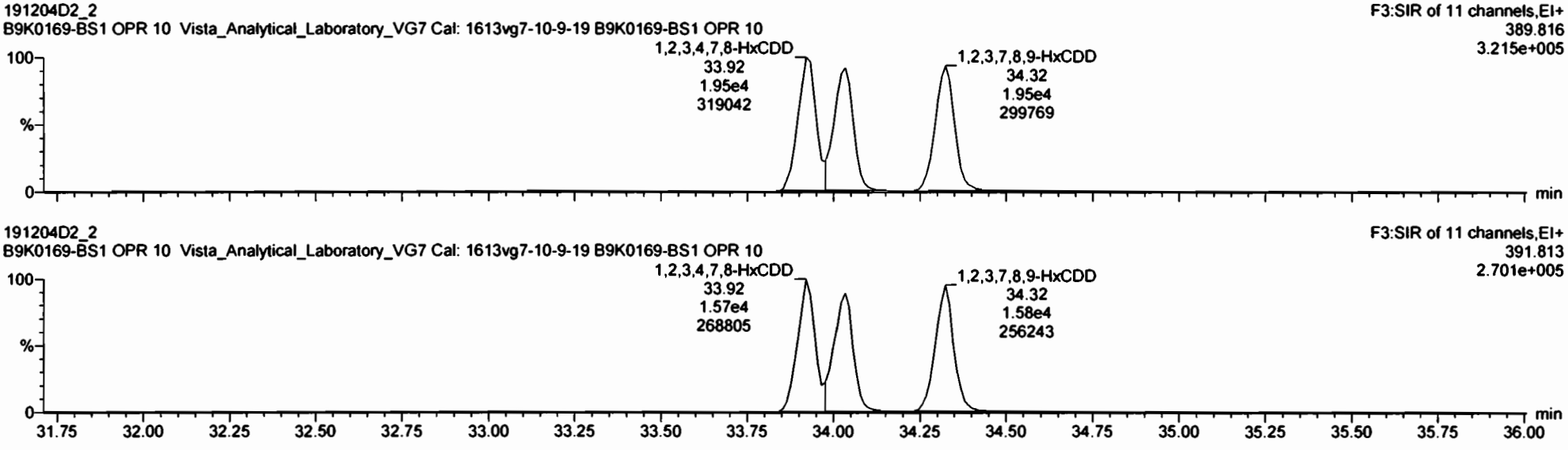
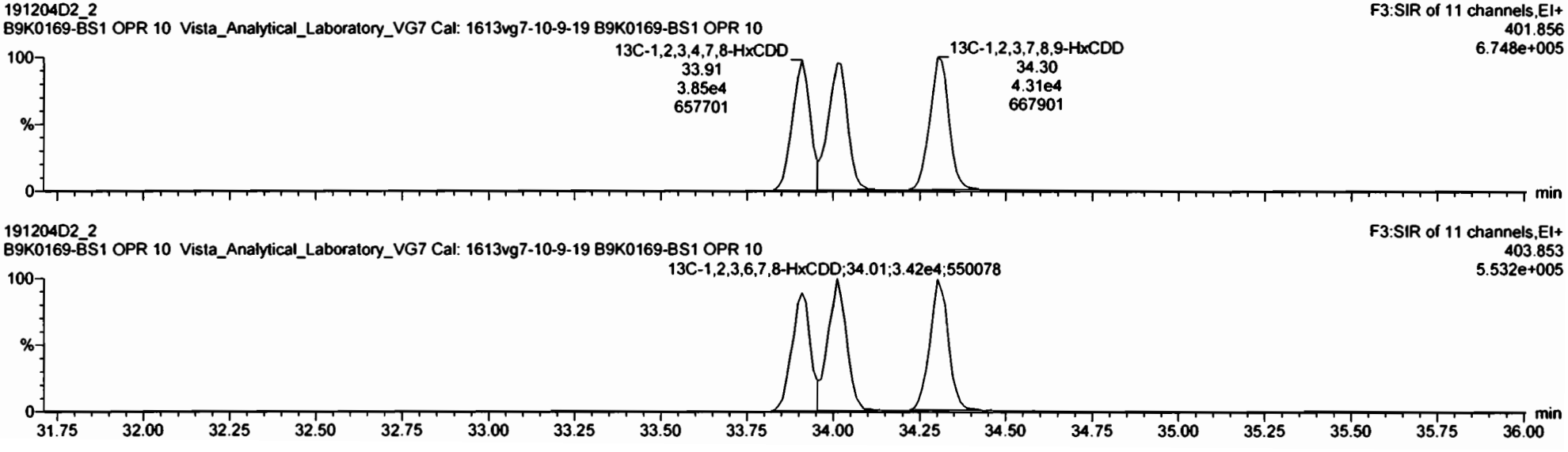
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Hexa-Dioxins



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



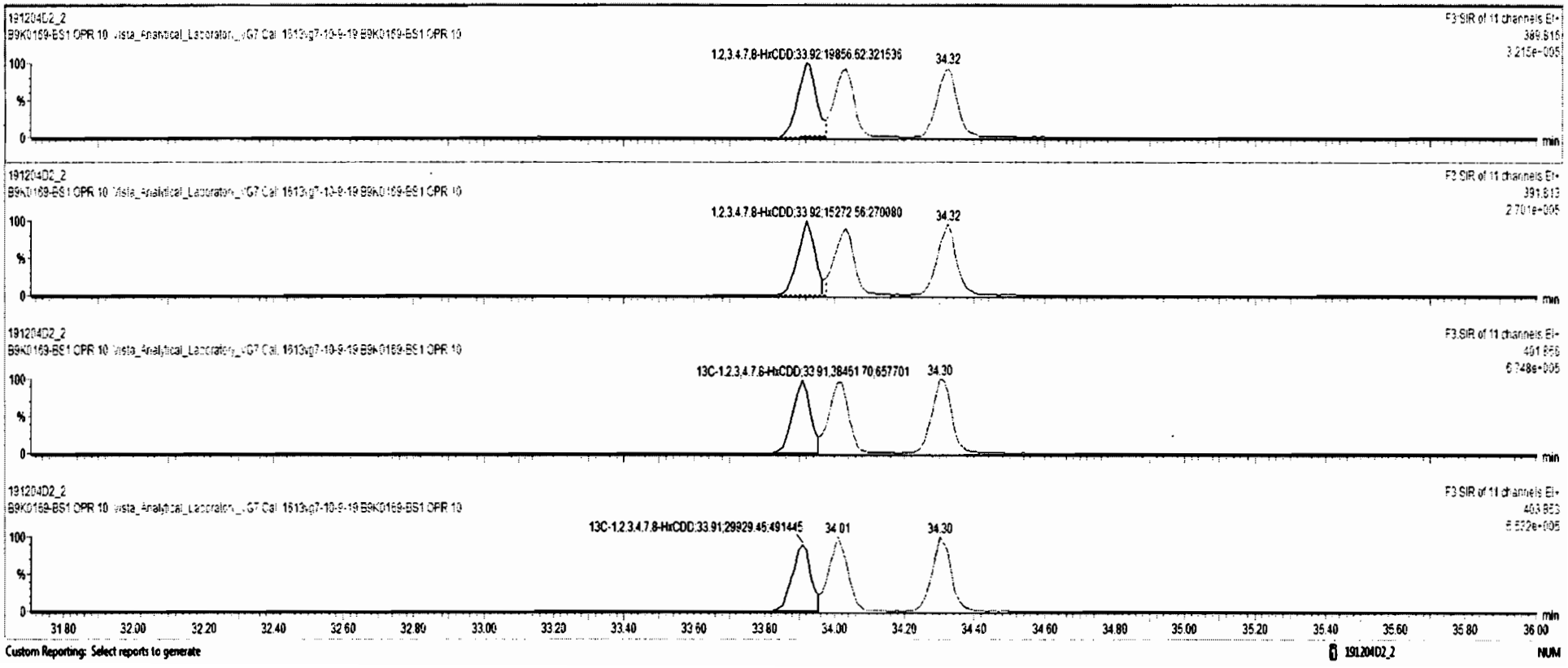
TargetLynx XS - 191204D2-2 * - [Chromatogram]

File Edit View Display Processing Window Help

191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	Name	Resp	RA	n/y	RRF	w/v/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	2,3,7,8-TCDD	9.50e3	0.73	NO		10.000	26.12	1.001	19.7		0.218	19.7
2	1,2,3,7,8-PeCDD	4.17e4	0.60	NO		10.000	30.63	1.001	99.2		0.308	99.2
3	1,2,3,4,7,8-HxCDD	3.51e4	1.30	NO		10.000	33.92	1.000	93.3		0.451	93.3
4	1,2,3,6,7,8-HxCDD	3.40e4	1.23	NO		10.000	34.03	1.001	95.3		0.532	95.3
5	1,2,3,7,8,9-HxCDD	2.53e4	1.24	NO		10.000	34.22	1.001	95.4		0.506	95.4
6	1,2,3,4,6,7,8-HpCDD	2.81e4	1.03	NO		10.000	37.79	1.000	93.6		0.566	93.6
7	OCDD	5.61e4	0.86	NO		10.000	41.62	1.000	190		0.609	190
8	2,3,7,8-TCDF	1.33e4	0.77	NO		10.000	25.33	1.001	17.6		0.175	17.6
9	1,2,3,7,8-PeCDF	6.66e4	1.60	NO		10.000	29.45	1.001	95.3		0.264	95.3
10	2,3,4,7,8-PeCDF	6.92e4	1.61	NO		10.000	30.34	1.001	95.1		0.279	95.1
11	1,2,3,4,7,8-HxCDF	5.03e4	1.23	NO		10.000	33.05	1.001	87.3		0.402	87.3
12	1,2,3,6,7,8-HxCDF	4.79e4	1.24	NO		10.000	33.17	1.001	88.6		0.445	88.6
13	2,3,4,6,7,8-HxCDF	4.71e4	1.17	NO		10.000	33.76	1.001	90.5		0.480	90.5

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



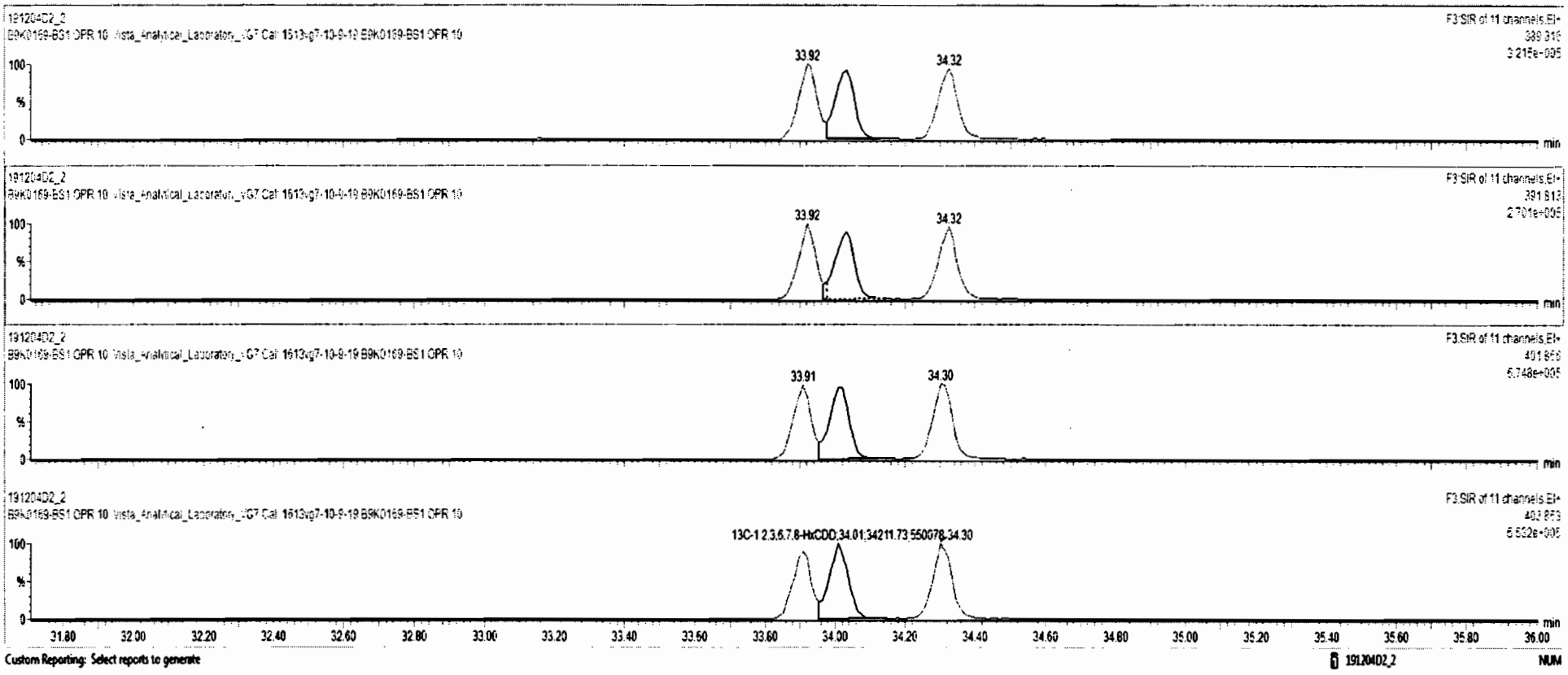
TargetLynx XS - 191204D2-2 * - [Chromatogram]

File Edit View Display Processing Window Help

191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	a/y	RRF	wVol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD	9.50e3	1.06e5	16	0.73	NO	0.905	10.000	26.12	26.12	1.001	1.001	NO	19.73		0.218	19.73
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	19	0.60	NO	0.903	10.000	30.69	30.69	1.001	1.001	NO	99.17		0.308	99.17
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.34e4	20	1.30	NO	1.101	10.000	33.92	33.92	1.000	1.000	NO	93.28		0.451	93.28
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	21	1.19	NO	0.929	10.000	34.01	34.03	1.001	1.000	NO	96.68		0.532	96.68
5	5	1,2,3,7,8,9-HxCDD	3.53e4	7.70e4	22	1.24	NO	0.961	10.000	34.34	34.32	1.001	1.001	NO	95.45		0.596	95.45
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.13e4	23	1.03	NO	0.979	10.000	37.79	37.79	1.000	1.000	NO	93.75		0.566	93.75
7	7	OCDD	5.61e4	1.22e5	24	0.89	NO	0.959	10.000	41.03	41.03	1.000	1.000	NO	190.3		0.809	190.3
8	8	2,3,7,8-TCDF	1.33e4	1.59e5	25	0.77	NO	0.950	10.000	25.34	25.33	1.001	1.001	NO	17.61		0.175	17.61
9	9	1,2,3,7,8-PeCDF	6.66e4	1.46e5	26	1.60	NO	0.960	10.000	29.45	29.45	1.001	1.001	NO	95.33		0.264	95.33
10	10	2,3,4,7,8-PeCDF	6.92e4	1.42e5	27	1.61	NO	1.015	10.000	30.35	30.34	1.001	1.001	NO	95.10		0.279	95.10
11	11	1,2,3,4,7,8-HxCDF	5.03e4	9.80e4	28	1.23	NO	1.177	10.000	33.02	33.05	1.001	1.000	NO	87.29		0.402	87.29
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	29	1.24	NO	1.069	10.000	33.16	33.17	1.001	1.000	NO	86.62		0.445	86.62
13	13	2,3,4,6,7,8-HxCDF	4.71e4	9.36e4	30	1.17	NO	1.114	10.000	33.77	33.76	1.001	1.001	NO	90.49		0.480	90.49

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	a/y	EMPC	Conc.
1											



Custom Reporting: Select reports to generate

191204D2_2 NUM

Vista Analytical Laboratory
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Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
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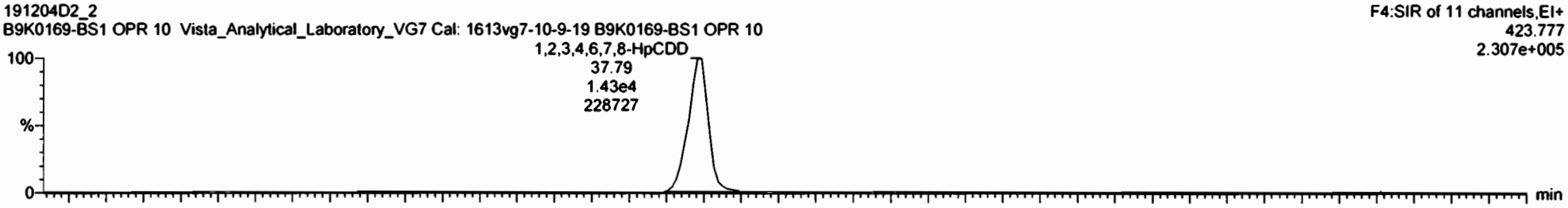
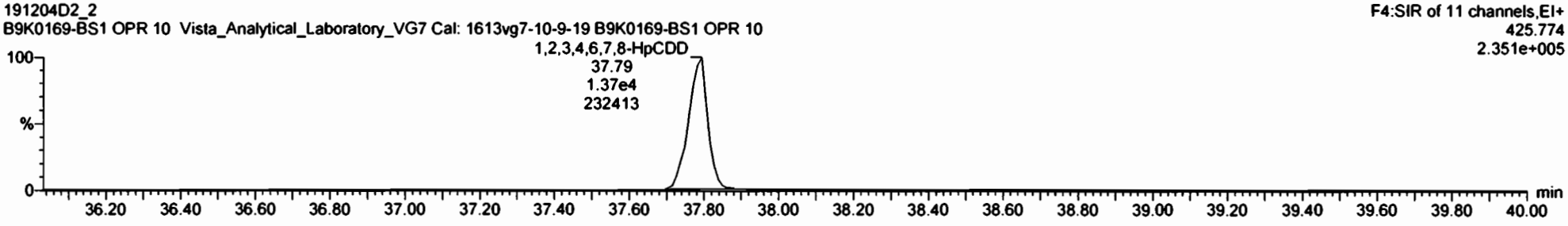
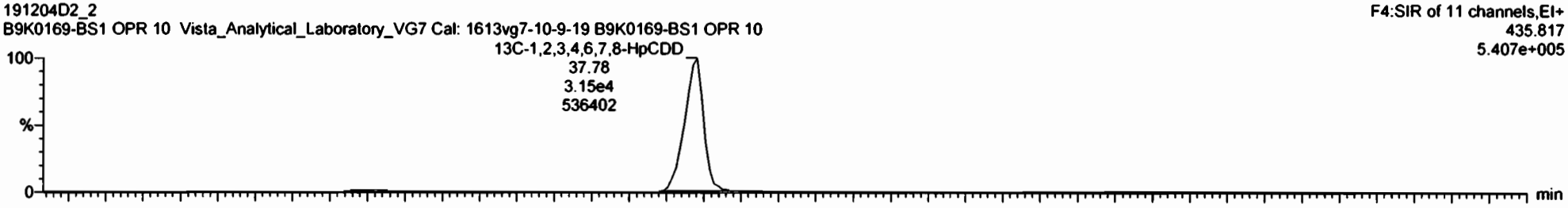
Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

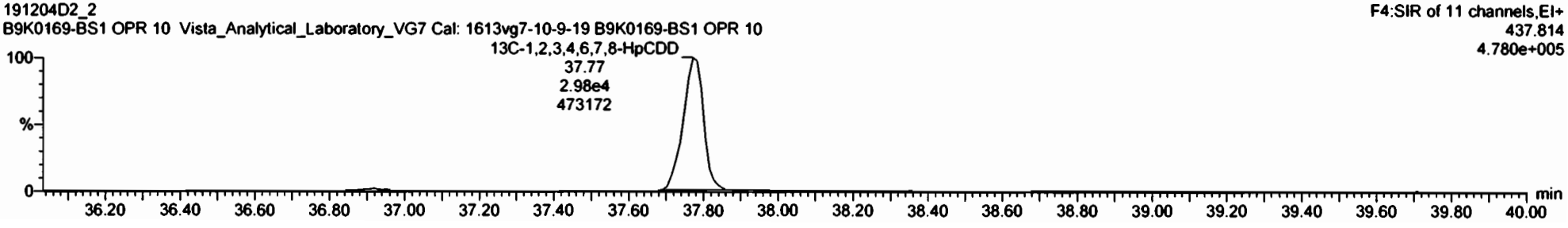
Total Hepta-Dioxins





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





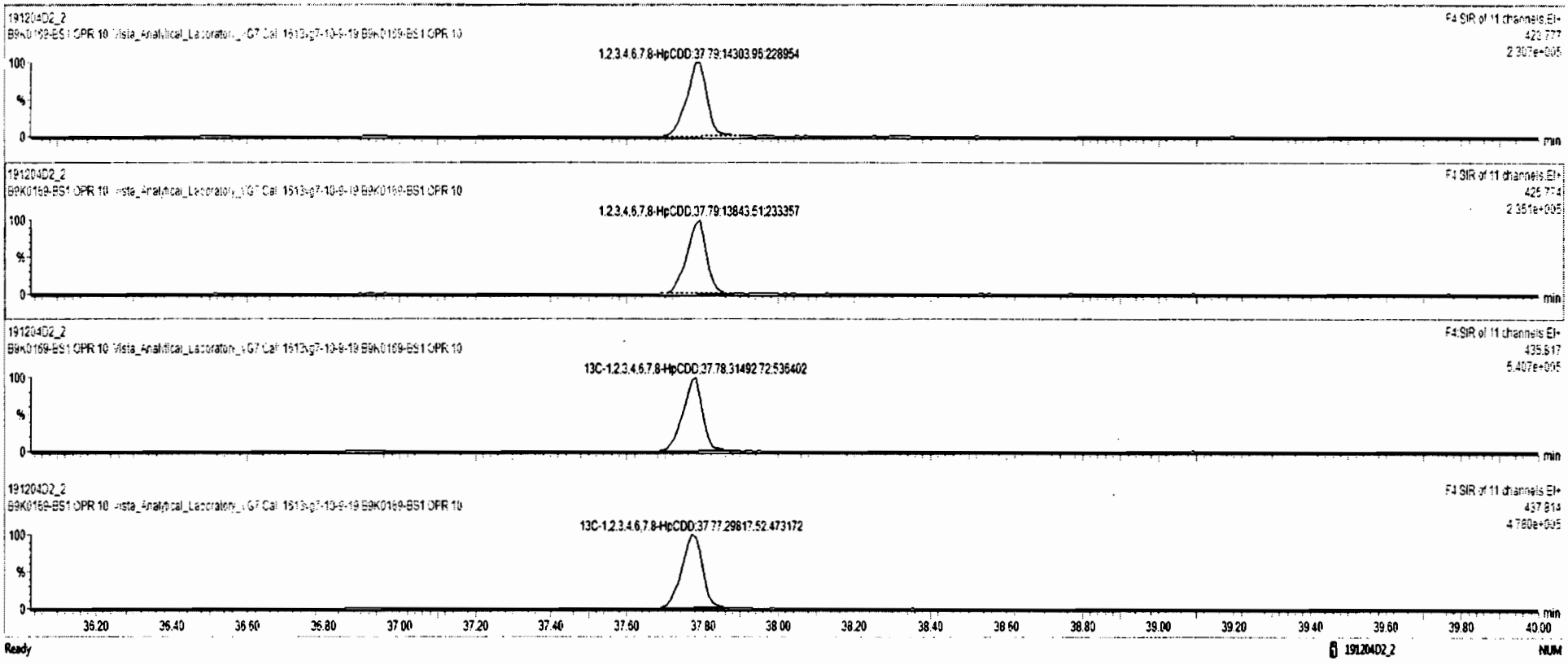
TargetLynx XS - 191204D2-2* - [Chromatogram]

File Edit View Display Processing Window Help

191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	a/y	RRF	w/v/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD	9.50e3	1.06e5	18	0.73	NO	0.905	10.000	26.12	26.12	1.001	1.001	NO	19.73		0.218	19.72
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	19	0.60	NO	0.903	10.000	30.63	30.63	1.001	1.001	NO	99.17		0.398	99.17
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.84e4	20	1.30	NO	1.101	10.000	33.52	33.52	1.000	1.000	NO	93.28		0.451	93.28
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	21	1.19	NO	0.939	10.000	34.01	34.02	1.001	1.000	NO	96.88		0.532	96.88
5	5	1,2,3,7,8,9-HxCDD	3.53e4	7.70e4	22	1.24	NO	0.961	10.000	34.34	34.32	1.001	1.001	NO	95.45		0.596	95.45
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.13e4	23	1.03	NO	0.979	10.000	37.79	37.79	1.000	1.000	NO	93.75		0.566	93.75
7	7	OCDD	5.61e4	1.23e5	24	0.89	NO	0.959	10.000	41.03	41.03	1.000	1.000	NO	190.3		0.509	190.3
8	8	2,3,7,8-TCDF	1.23e4	1.56e5	25	0.77	NO	0.950	10.000	25.34	25.33	1.001	1.001	NO	17.61		0.175	17.61
9	9	1,2,3,7,8-PeCDF	6.86e4	1.48e5	26	1.60	NO	0.960	10.000	29.45	29.45	1.001	1.001	NO	95.33		0.264	95.33
10	10	2,3,4,7,8-PeCDF	6.92e4	1.43e5	27	1.61	NO	1.015	10.000	30.35	30.34	1.001	1.001	NO	95.10		0.279	95.10
11	11	1,2,3,4,7,8-HxCDF	5.03e4	9.80e4	28	1.23	NO	1.177	10.000	33.02	33.05	1.001	1.000	NO	87.29		0.402	87.29
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	29	1.24	NO	1.069	10.000	33.16	33.17	1.001	1.000	NO	86.62		0.445	86.62
13	13	2,3,4,6,7,8-HxCDF	4.71e4	9.36e4	30	1.17	NO	1.114	10.000	33.77	33.76	1.001	1.001	NO	90.45		0.490	90.45

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	a/y	EMPC	Conc.
1											



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Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
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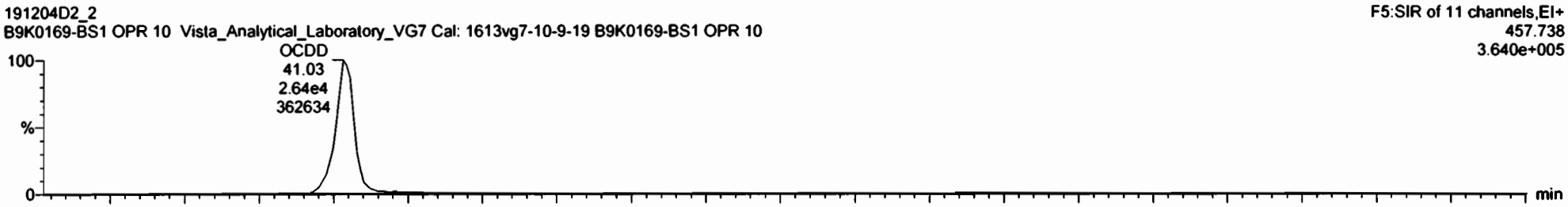
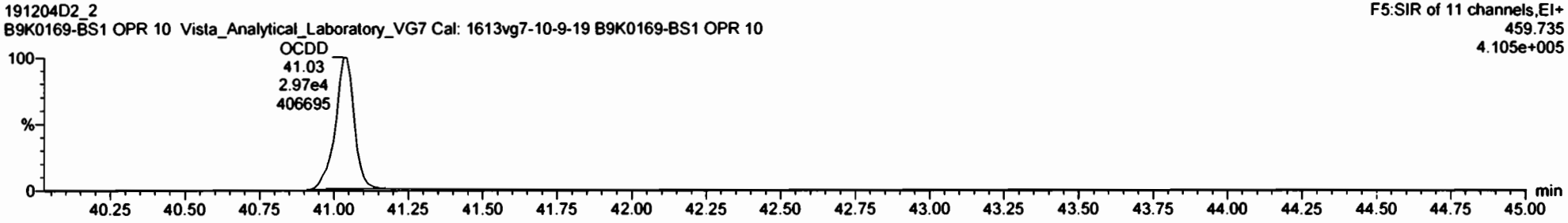
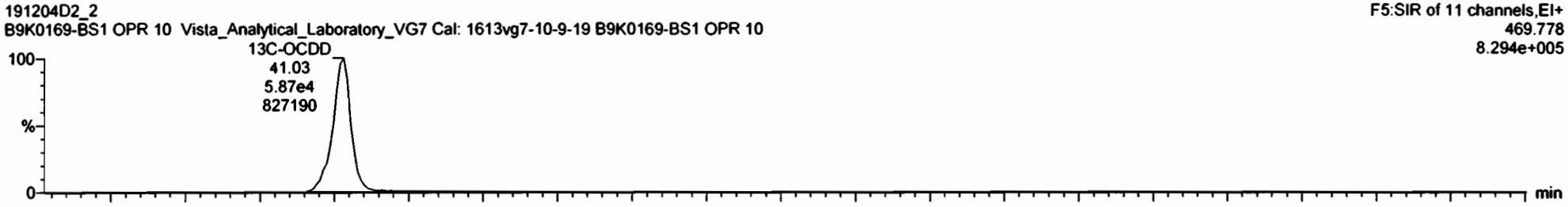
Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

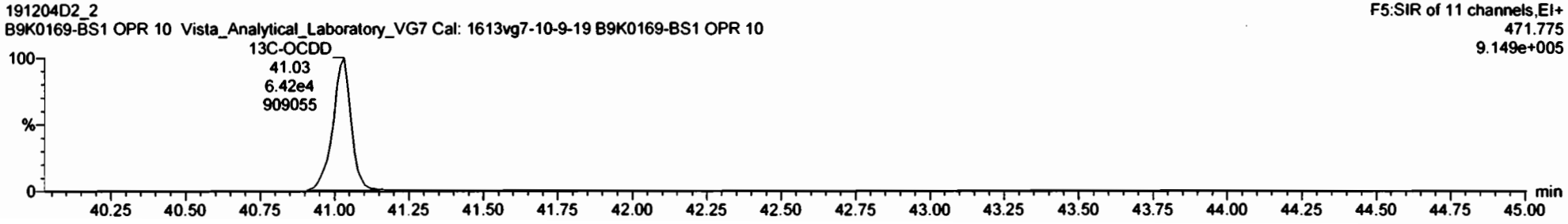
OCDD





13C-OCDD





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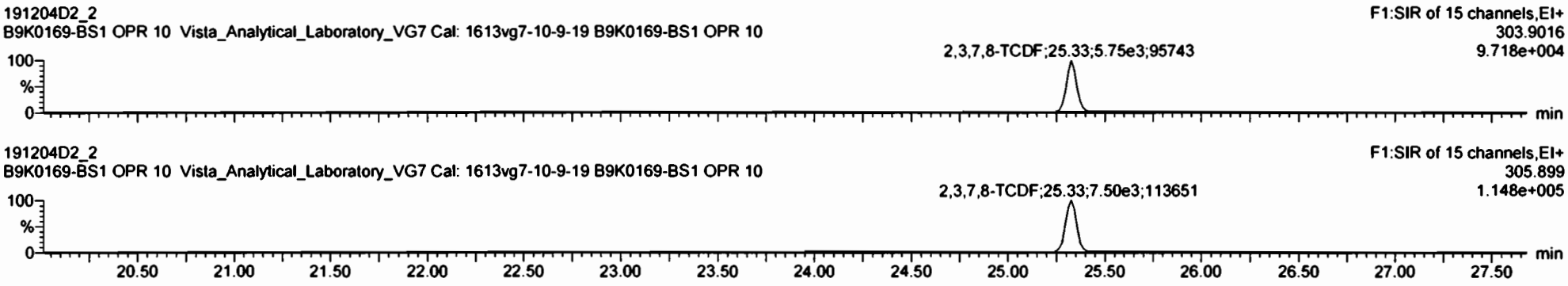
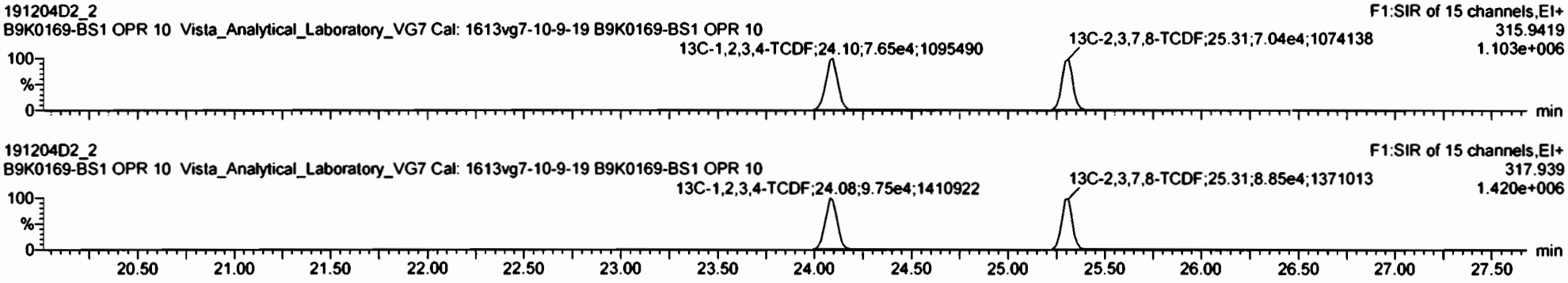
Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

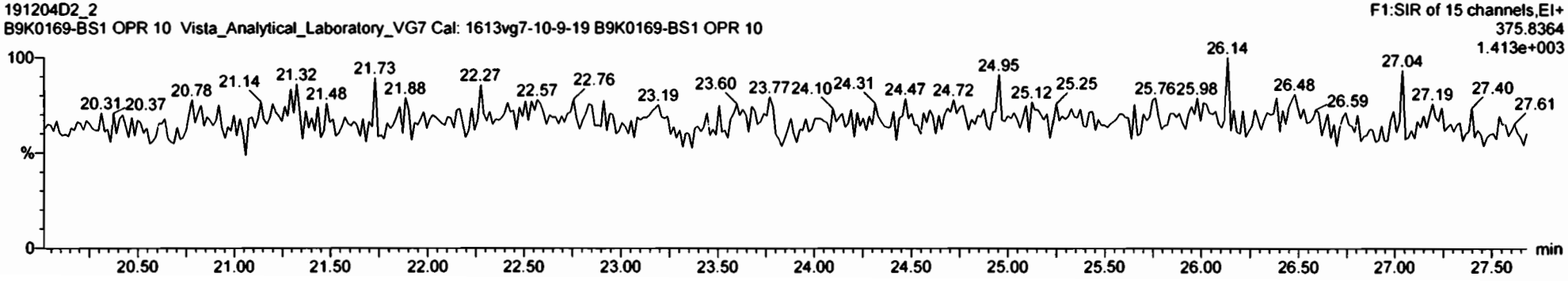
Total Tetra-Furans



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



DPE1



TargetLynx XS - 191204D2-2 * - [Chromatogram]

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191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613x(g7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	w/v/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD	9.50e2	1.06e5	16	0.72	NO	0.905	10.000	26.12	26.12	1.001	1.001	NO	19.73		0.218	19.73
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	19	0.60	NO	0.903	10.000	30.63	30.63	1.001	1.001	NO	99.17		0.398	99.17
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.84e4	28	1.30	NO	1.101	10.000	33.92	33.92	1.000	1.000	NO	93.28		0.451	93.28
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	21	1.19	NO	0.939	10.000	34.01	34.03	1.001	1.000	NO	96.88		0.532	96.88
5	5	1,2,3,7,8,9-HxCDD	3.52e4	7.70e4	22	1.24	NO	0.961	10.000	34.34	34.32	1.001	1.001	NO	95.45		0.536	95.45
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.12e4	23	1.03	NO	0.979	10.000	37.79	37.79	1.000	1.000	NO	93.75		0.566	93.75
7	7	OCDD	5.61e4	1.23e5	24	0.89	NO	0.959	10.000	41.03	41.03	1.000	1.000	NO	190.3		0.609	190.3
8	8	**2,3,7,8-TCDF**	**1.35e4**	**1.59e5**	**25**	**0.77**	**NO**	**0.950**	**10.000**	**25.34**	**25.33**	**1.001**	**1.001**	**NO**	**17.61**		**0.175**	**17.61**
9	9	1,2,3,7,8-PeCDF	6.66e4	1.46e5	26	1.60	NO	0.960	10.000	29.45	29.45	1.001	1.001	NO	95.33		0.264	95.33
10	10	2,3,4,7,8-PeCDF	6.92e4	1.42e5	27	1.61	NO	1.015	10.000	30.35	30.34	1.001	1.001	NO	96.16		0.279	96.16
11	11	1,2,3,4,7,8-HxCDF	5.03e4	9.60e4	28	1.23	NO	1.177	10.000	33.02	33.05	1.001	1.000	NO	87.25		0.402	87.25
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	29	1.24	NO	1.069	10.000	33.16	33.17	1.001	1.000	NO	86.62		0.445	86.62
13	13	2,3,4,6,7,8-HxCDF	4.71e4	9.36e4	30	1.17	NO	1.114	10.000	33.77	33.76	1.001	1.001	NO	90.49		0.460	90.49

	#	Name	Pred.RT	RT	rt Resp	rt2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1											

191204D2_2
B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613x(g7-10-9-19 B9K0169-BS1 OPR 10

F1:SIR of 15 channels ES+
305.9016
9.718e+004

2,3,7,8-TCDF
25.33
5792.41
96048

191204D2_2
B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613x(g7-10-9-19 B9K0169-BS1 OPR 10

F1:SIR of 15 channels ES+
305.998
1.148e+005

2,3,7,8-TCDF
25.33
7496.43
113651

191204D2_2
B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613x(g7-10-9-19 B9K0169-BS1 OPR 10

F1:SIR of 15 channels ES+
315.9419
1.103e+006

24.10

13C-2,3,7,8-TCDF
25.31
70391.89
1074138

191204D2_2
B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613x(g7-10-9-19 B9K0169-BS1 OPR 10

F1:SIR of 15 channels ES+
317.939
1.420e+006

24.08

13C-2,3,7,8-TCDF
25.31
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1371013

Custom Reporting: Select reports to generate

191204D2_2 NUM

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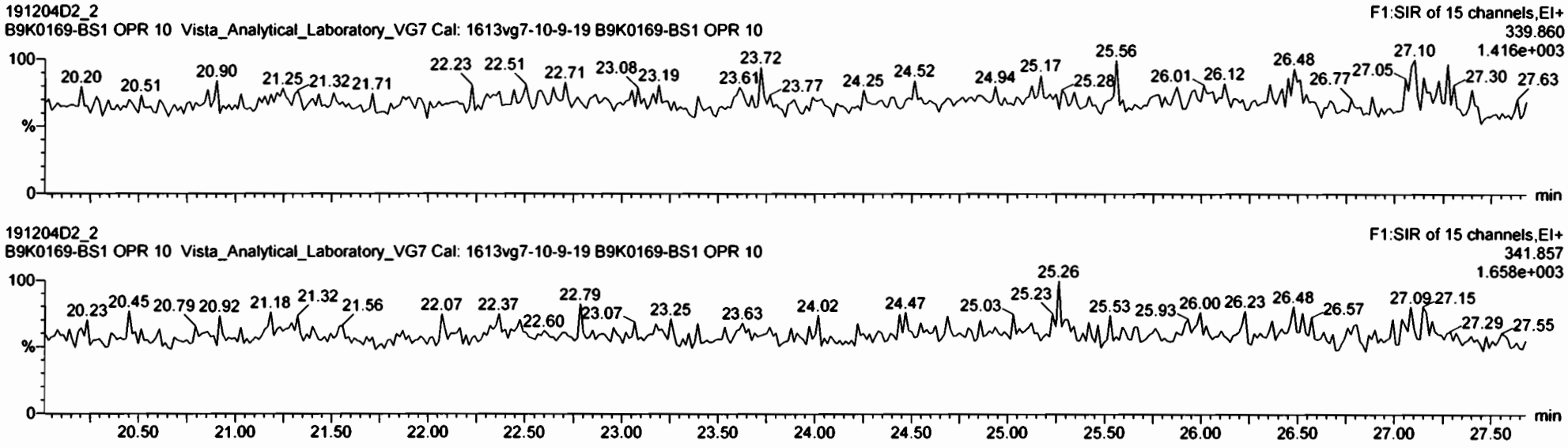
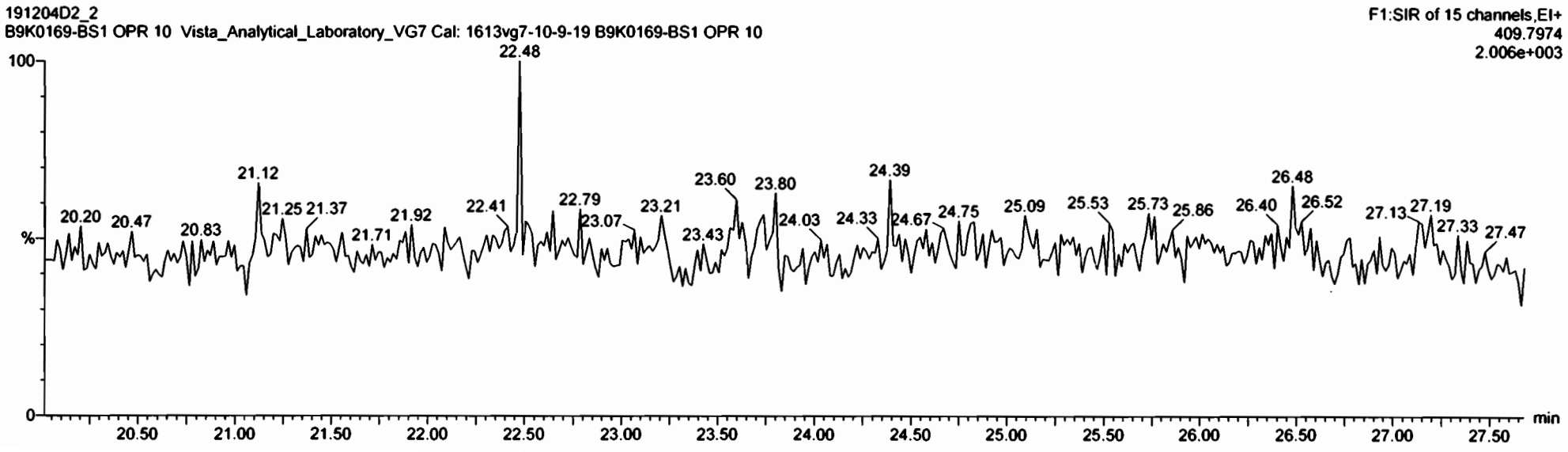
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

1st Func. Penta-Furans



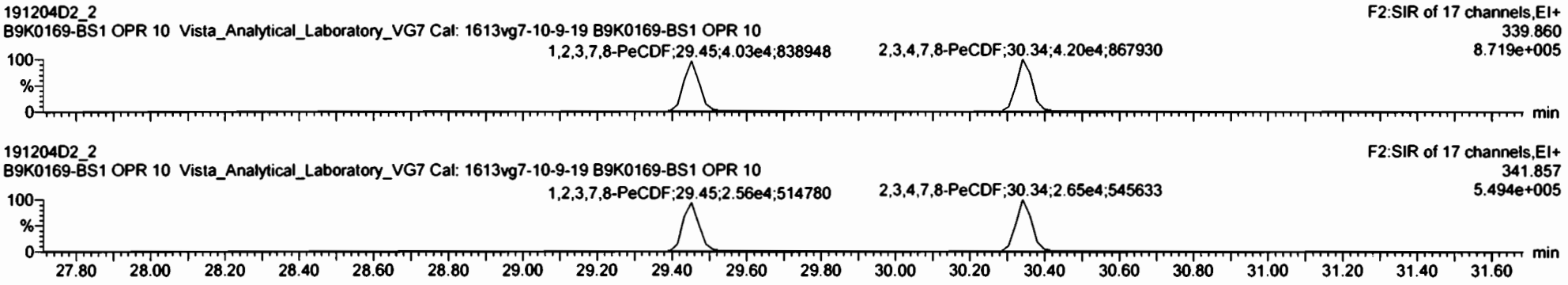
DPE6



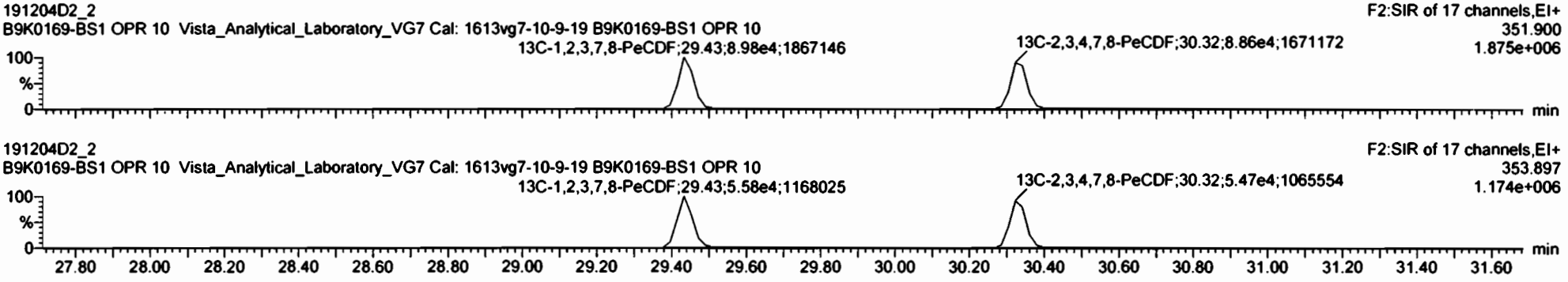
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Friday, December 06, 2019 10:31:48 Pacific Standard Time
Printed: Friday, December 06, 2019 10:37:02 Pacific Standard Time

Name: 191204D2_2, Date: 5-DEC-2019, Time: 08:21:55, ID: B9K0169-BS1 OPR 10,
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

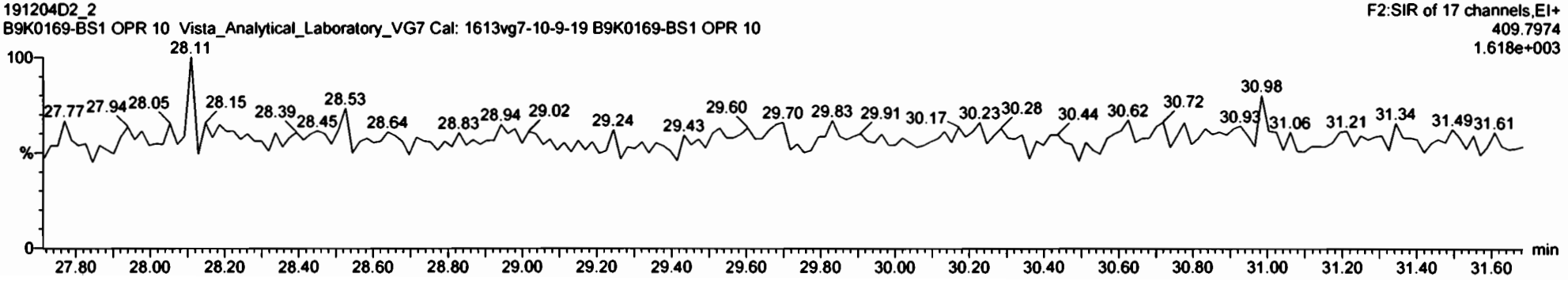
Total Penta-Furans



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



DPE2



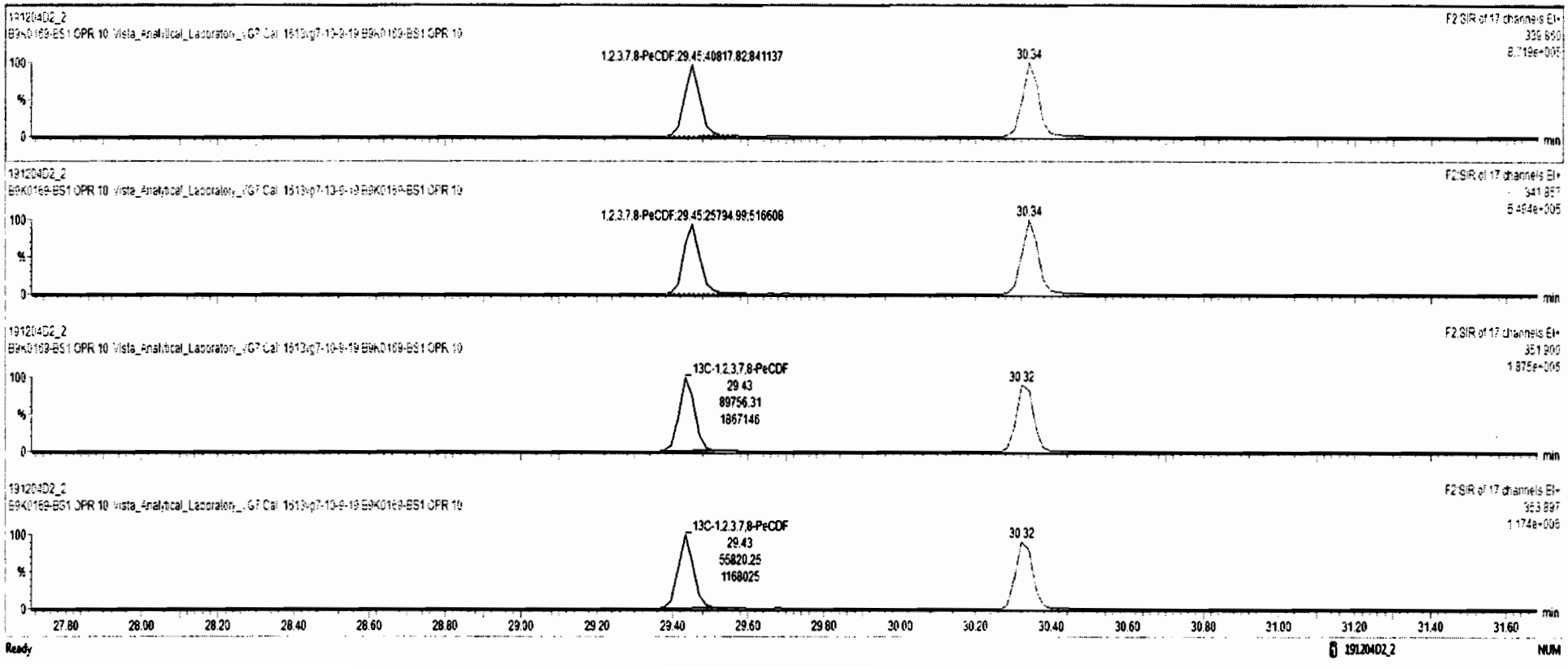
TargetLynx XS - 191204D2-2 * - [Chromatogram]

File Edit View Display Processing Window Help

191204D2_2 B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD	9.50e3	1.06e5	16	0.73	NO	0.895	10.000	26.12	26.12	1.001	1.001	NO	19.73		0.218	19.73
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	19	0.60	NO	0.503	10.000	30.63	30.63	1.001	1.001	NO	99.17		0.308	99.17
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.84e4	20	1.30	NO	1.101	10.000	33.92	33.92	1.000	1.000	NO	93.28		0.451	93.28
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	21	1.19	NO	0.939	10.000	34.01	34.03	1.001	1.000	NO	96.88		0.532	96.88
5	5	1,2,3,7,8,9-HxCDD	2.53e4	7.70e4	22	1.24	NO	0.961	10.000	34.34	34.32	1.001	1.001	NO	95.45		0.596	95.45
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.13e4	23	1.03	NO	0.979	10.000	37.79	37.79	1.000	1.000	NO	93.75		0.566	93.75
7	7	OCDD	5.61e4	1.23e5	24	0.89	NO	0.959	10.000	41.03	41.03	1.000	1.000	NO	190.3		0.609	190.3
8	8	2,3,7,8-TCDF	1.33e4	1.59e5	25	0.77	NO	0.950	10.000	25.34	25.33	1.001	1.001	NO	17.61		0.175	17.61
9	9	1,2,3,7,8-PeCDF	6.66e4	1.46e5	26	1.58	NO	0.960	10.000	29.45	29.45	1.001	1.001	NO	95.29		0.264	95.29
10	10	2,3,4,7,8-PeCDF	6.92e4	1.43e5	27	1.61	NO	1.015	10.000	30.35	30.34	1.001	1.001	NO	95.10		0.279	95.10
11	11	1,2,3,4,7,8-HxCDF	5.92e4	9.66e4	28	1.23	NO	1.177	10.000	33.02	33.05	1.001	1.000	NO	87.29		0.402	87.29
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	29	1.24	NO	1.069	10.000	33.16	33.17	1.001	1.000	NO	86.62		0.445	86.62
13	13	2,3,4,6,7,8-HxCDF	4.21e4	9.16e4	30	1.17	NO	1.114	10.000	33.77	33.76	1.001	1.001	NO	90.49		0.490	90.49

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1											



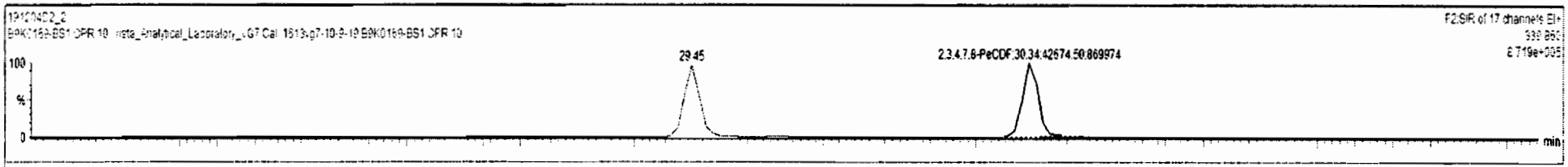
TargetLynx XS - 191204D2-2 * - [Chromatogram]

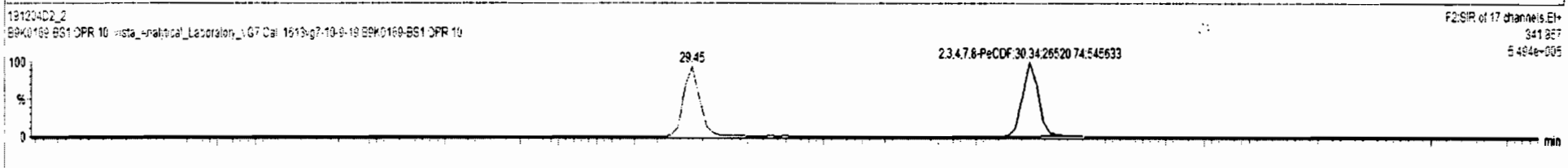
File Edit View Display Processing Window Help

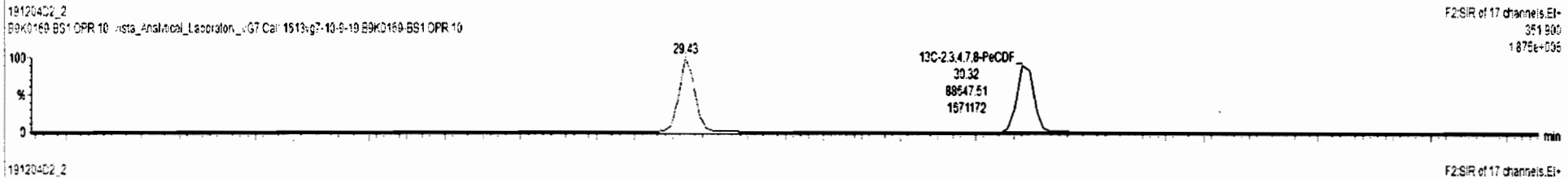
191204D2_2 - B9K0169-BS1 OPR 10 - B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal 1613vg7-10-9-19

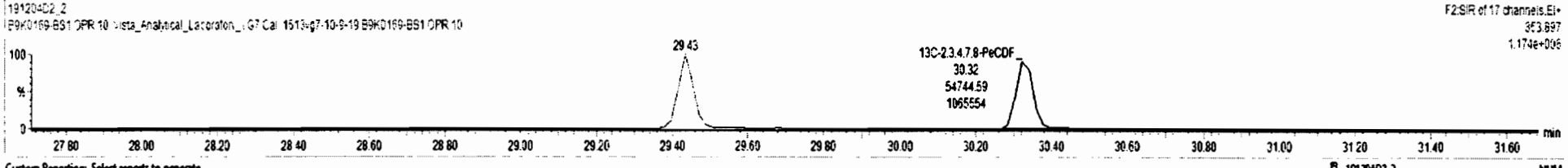
	#	Name	Resp	IS Resp	IS#	RA	a/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD	9.50e3	1.06e5	18	0.73	NO	0.905	10.000	26.12	26.12	1.001	1.001	NO	19.73		0.218	19.73
2	2	1,2,3,7,8-PeCDD	4.17e4	9.32e4	19	0.60	NO	0.903	10.000	30.63	30.62	1.001	1.001	NO	99.17		0.398	99.17
3	3	1,2,3,4,7,8-HxCDD	3.51e4	6.84e4	20	1.30	NO	1.101	10.000	33.92	33.92	1.000	1.000	NO	93.28		0.451	93.28
4	4	1,2,3,6,7,8-HxCDD	3.46e4	7.61e4	21	1.19	NO	0.939	10.000	34.01	34.03	1.001	1.000	NO	96.68		0.532	96.68
5	5	1,2,3,7,8,9-HxCDD	3.53e4	7.70e4	22	1.24	NO	0.961	10.000	34.34	34.32	1.001	1.001	NO	95.45		0.596	95.45
6	6	1,2,3,4,6,7,8-HpCDD	2.81e4	6.12e4	23	1.03	NO	0.979	10.000	37.79	37.79	1.000	1.000	NO	93.75		0.566	93.75
7	7	OCDD	5.61e4	1.23e5	24	0.89	NO	0.959	10.000	41.03	41.03	1.000	1.000	NO	190.3		0.609	190.3
8	8	2,3,7,8-TCDF	1.33e4	1.59e5	25	0.77	NO	0.950	10.000	25.34	25.33	1.001	1.001	NO	17.61		0.175	17.61
9	9	1,2,3,7,8-PeCDF	6.66e4	1.46e5	26	1.56	NO	0.960	10.000	29.45	29.45	1.001	1.001	NO	95.29		0.264	95.29
10	10	2,3,4,7,8-PeCDF	6.92e4	1.43e5	27	1.61	NO	1.015	10.000	30.35	30.34	1.001	1.001	NO	95.10		0.279	95.10
11	11	1,2,3,4,7,8-HxCDF	5.03e4	9.80e4	28	1.23	NO	1.177	10.000	33.02	33.05	1.001	1.000	NO	87.26		0.492	87.26
12	12	1,2,3,6,7,8-HxCDF	4.79e4	1.01e5	29	1.24	NO	1.069	10.000	33.16	33.17	1.001	1.000	NO	86.62		0.445	86.62
13	13	2,3,4,6,7,8-HxCDF	4.71e4	9.36e4	30	1.17	NO	1.114	10.000	33.77	33.76	1.001	1.001	NO	90.49		0.486	90.49

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	a/y	EMPC	Conc.
1											









Custom Reporting: Select reports to generate

191204D2_2

NUM

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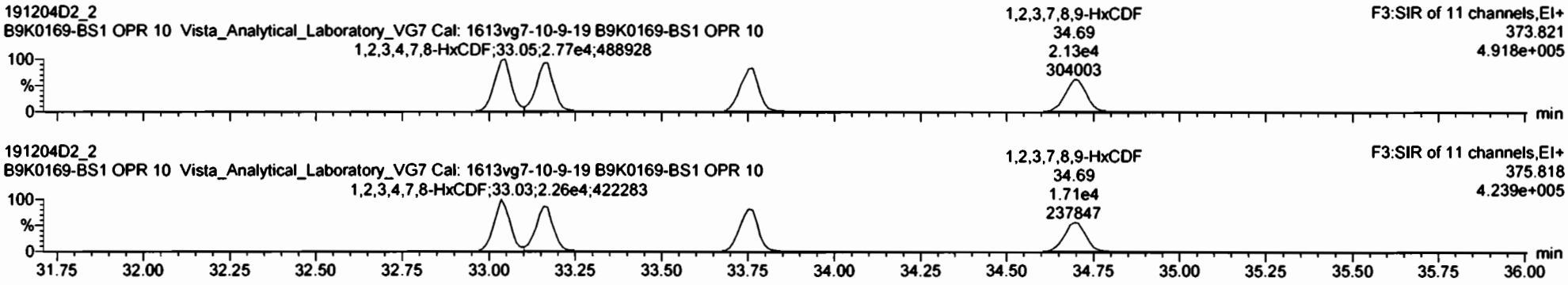
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

Total Hexa-Furans



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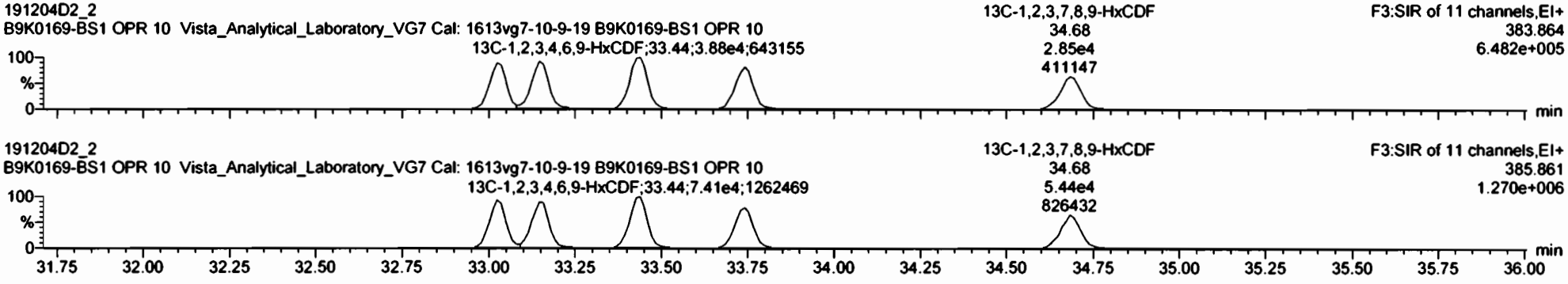
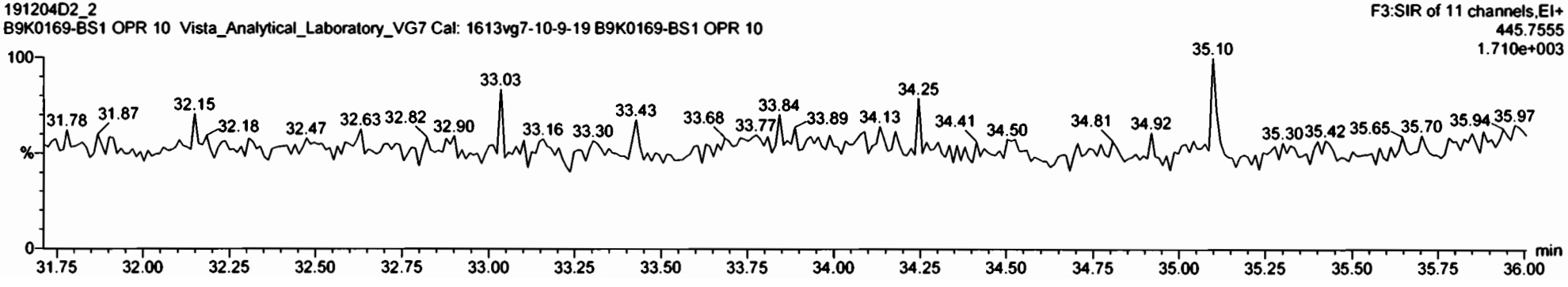


DPE3



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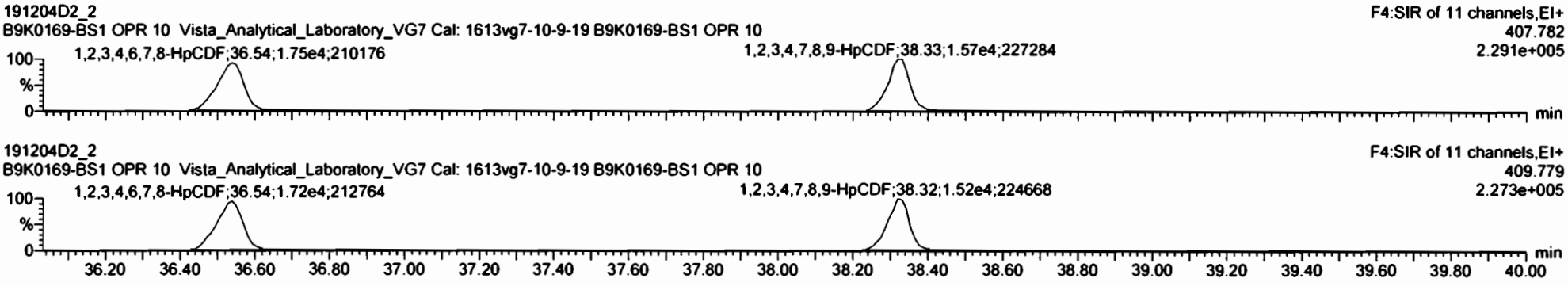
Total Hepta-Furans



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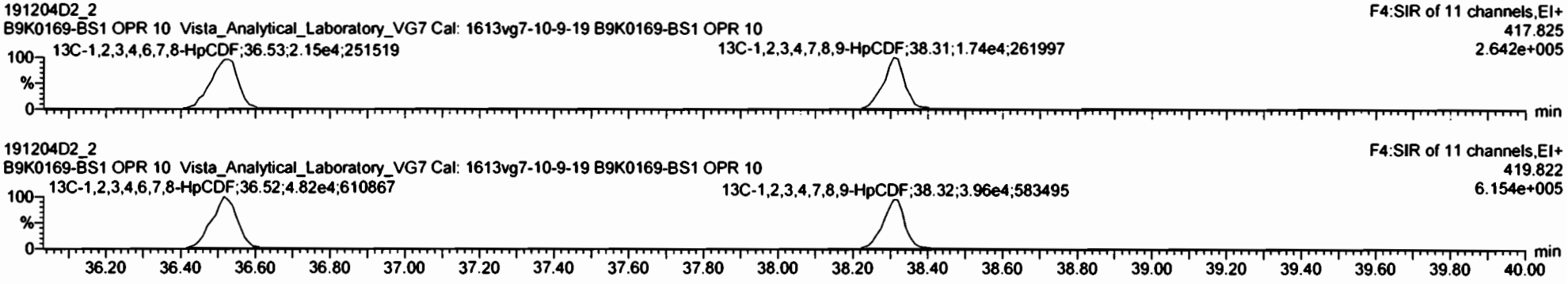
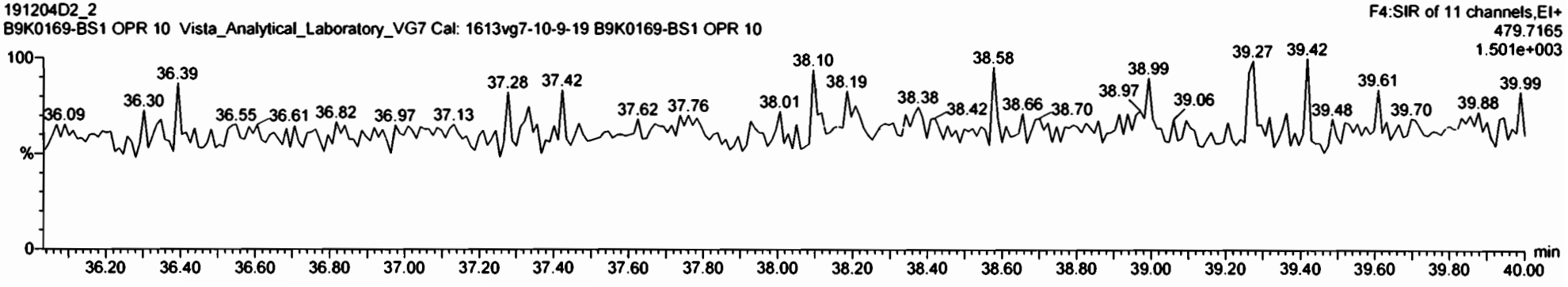


DPE4



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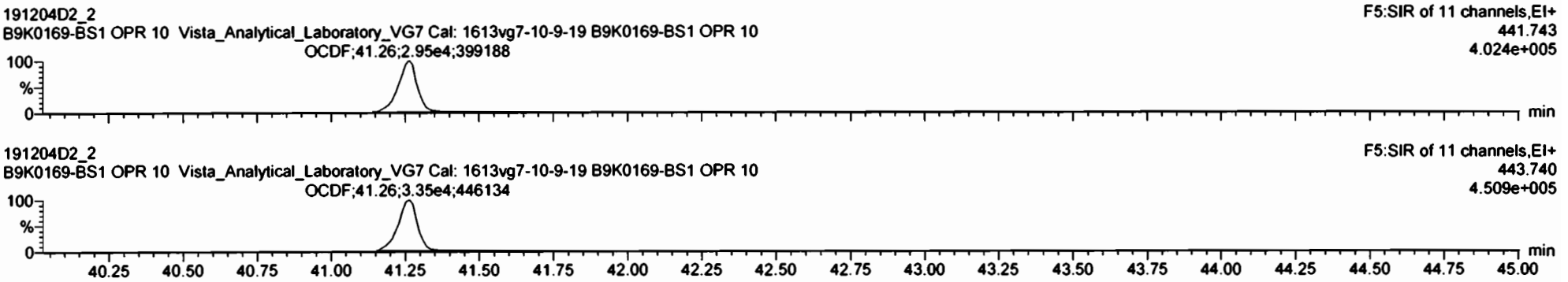
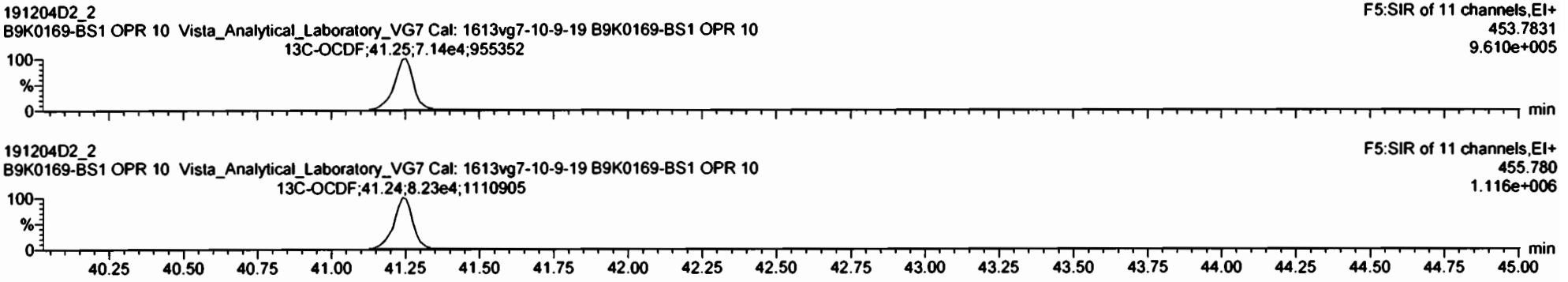
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

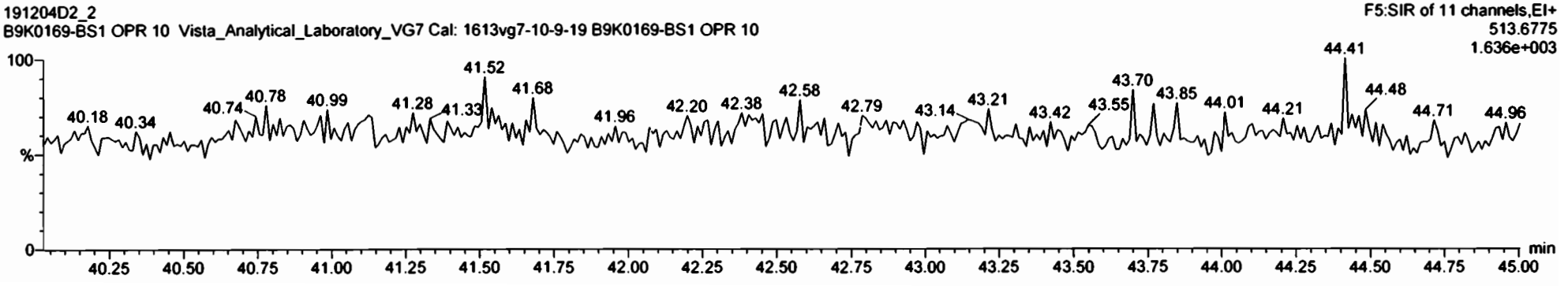
OCDF



13C-OCDF



DPE5



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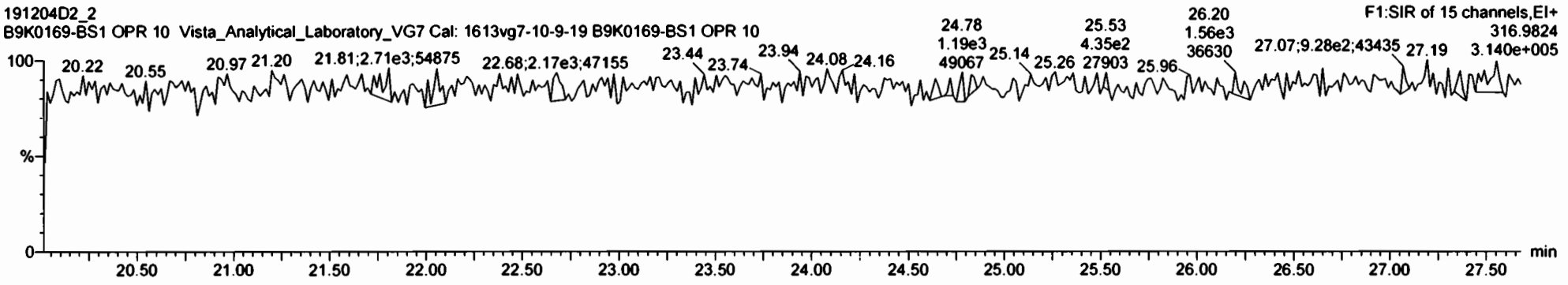
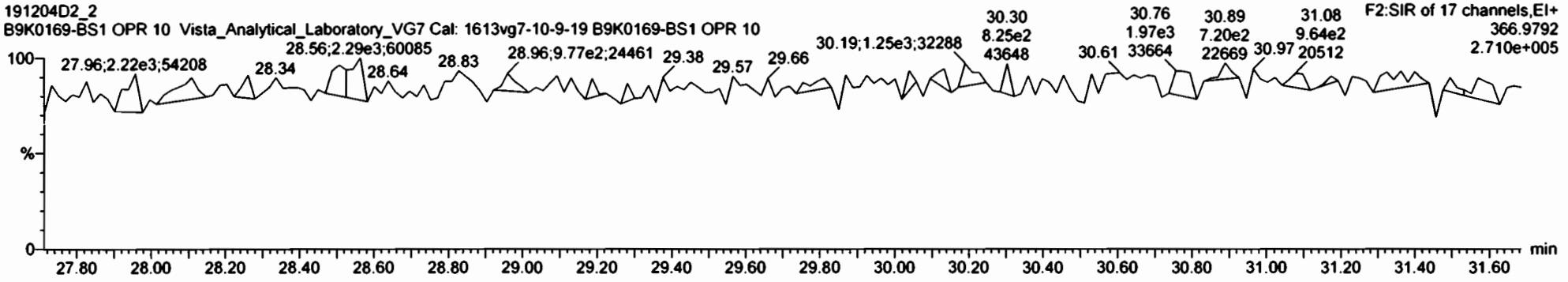
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

PFK1



PFK2



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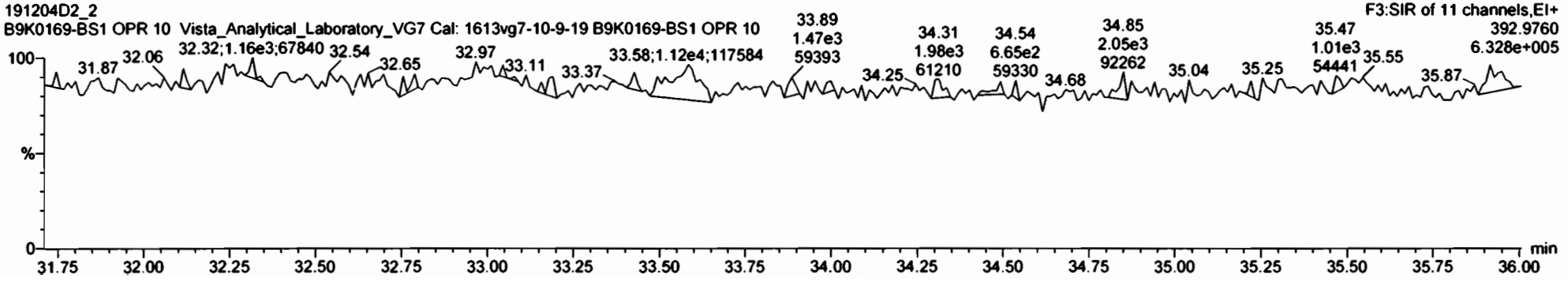

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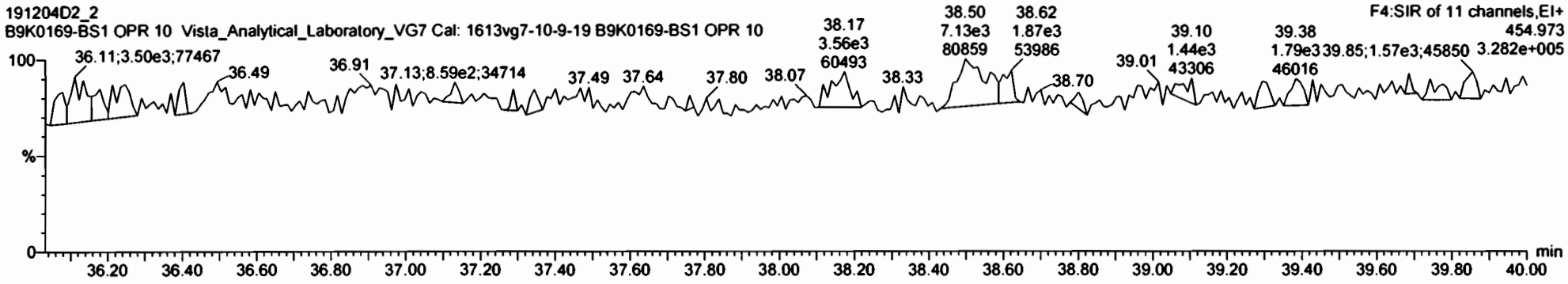
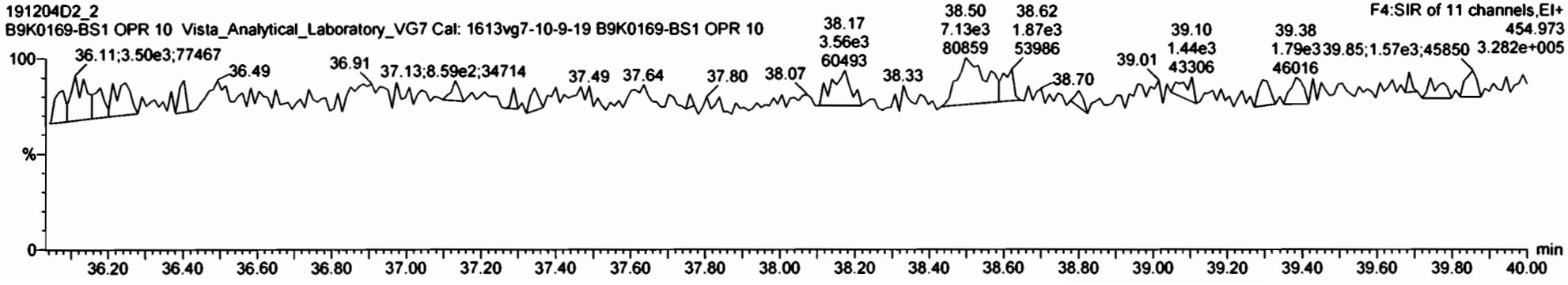
Description: B9K0169-BS1 OPR 10 Vista_Analytical_Laboratory_VG7 Cal: 1613vg7-10-9-19

PFK4



PFK5



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Lab ID: B9L0200-BLK1 GC Column ID: ZB-5MS ICal. 1613VG7-10-9-19 wt/vol:10.000 EndCAL: NA

Name	Resp	RA		RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	*	*	n	0.91	NotFnd	*		117	2.5	0.0552
1,2,3,7,8-PeCDD	*	*	n	0.90	NotFnd	*		144	2.5	0.0603
1,2,3,4,7,8-HxCDD	*	*	n	1.10	NotFnd	*		158	2.5	0.0997
1,2,3,6,7,8-HxCDD	*	*	n	0.94	NotFnd	*		158	2.5	0.111
1,2,3,7,8,9-HxCDD	*	*	n	0.96	NotFnd	*		158	2.5	0.111
1,2,3,4,6,7,8-HpCDD	*	*	n	0.98	NotFnd	*		167	2.5	0.108
OCDD	*	*	n	0.96	NotFnd	*		134	2.5	0.108
2,3,7,8-TCDF	*	*	n	0.95	NotFnd	*		139	2.5	0.0435
1,2,3,7,8-PeCDF	*	*	n	0.96	NotFnd	*		165	2.5	0.0728
2,3,4,7,8-PeCDF	*	*	n	1.01	NotFnd	*		165	2.5	0.0631
1,2,3,4,7,8-HxCDF	*	*	n	1.18	NotFnd	*		175	2.5	0.0454
1,2,3,6,7,8-HxCDF	*	*	n	1.07	NotFnd	*		175	2.5	0.0469
2,3,4,6,7,8-HxCDF	*	*	n	1.11	NotFnd	*		175	2.5	0.0513
1,2,3,7,8,9-HxCDF	*	*	n	1.06	NotFnd	*		175	2.5	0.0761
1,2,3,4,6,7,8-HpCDF	*	*	n	1.13	NotFnd	*		126	2.5	0.0626
1,2,3,4,7,8,9-HpCDF	*	*	n	1.28	NotFnd	*		126	2.5	0.0567
OCDF	*	*	n	0.95	NotFnd	*		132	2.5	0.0930

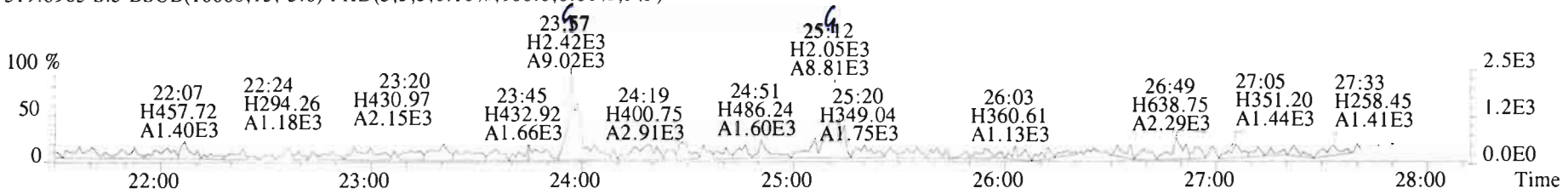
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		117	0.0552
Total Penta-Dioxins	*	*		144	0.0603
Total Hexa-Dioxins	*	*		158	0.108
Total Hepta-Dioxins	*	*		167	0.108
Total Tetra-Furans	*	*		139	0.0435
Total Penta-Furans	0.0000	0.0000		165	0.0678
Total Hexa-Furans	*	*		175	0.0542
Total Hepta-Furans	*	*		126	0.0599

								Rec	Qual
IS	13C-2,3,7,8-TCDD	8.18e+06	0.82	y	1.10	25:59	189.22	94.6	
IS	13C-1,2,3,7,8-PeCDD	6.66e+06	0.63	y	0.88	30:34	191.46	95.7	
IS	13C-1,2,3,4,7,8-HxCDD	5.99e+06	1.23	y	0.64	33:52	205.87	103	
IS	13C-1,2,3,6,7,8-HxCDD	7.03e+06	1.25	y	0.86	33:58	181.21	90.6	
IS	13C-1,2,3,7,8,9-HxCDD	6.91e+06	1.26	y	0.81	34:16	188.92	94.5	
IS	13C-1,2,3,4,6,7,8-HpCDD	5.75e+06	1.07	y	0.65	37:45	193.83	96.9	
IS	13C-OCDD	1.03e+07	0.90	y	0.58	41:01	391.89	98.0	
IS	13C-2,3,7,8-TCDF	1.13e+07	0.78	y	1.03	25:12	178.34	89.2	
IS	13C-1,2,3,7,8-PeCDF	1.03e+07	1.65	y	0.85	29:23	196.46	98.2	
IS	13C-2,3,4,7,8-PeCDF	1.04e+07	1.58	y	0.85	30:17	200.24	100	
IS	13C-1,2,3,4,7,8-HxCDF	7.98e+06	0.52	y	0.83	32:59	211.55	106	
IS	13C-1,2,3,6,7,8-HxCDF	8.94e+06	0.50	y	1.03	33:06	190.70	95.3	
IS	13C-2,3,4,6,7,8-HxCDF	8.37e+06	0.50	y	0.95	33:42	193.76	96.9	
IS	13C-1,2,3,7,8,9-HxCDF	7.64e+06	0.51	y	0.83	34:39	203.59	102	
IS	13C-1,2,3,4,6,7,8-HpCDF	6.16e+06	0.45	y	0.76	36:29	179.46	89.7	
IS	13C-1,2,3,4,7,8,9-HpCDF	5.14e+06	0.44	y	0.58	38:18	194.95	97.5	
IS	13C-OCDF	1.26e+07	0.87	y	0.69	41:13	403.59	101	
C/Up	37Cl-2,3,7,8-TCDD	3.15e+06			1.20	26:01	66.547	83.2	
RS/RT	13C-1,2,3,4-TCDD	7.89e+06	0.83	y	1.00	25:25	200.00		
RS	13C-1,2,3,4-TCDF	1.23e+07	0.81	y	1.00	23:58	200.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.07e+06	0.51	y	1.00	33:24	200.00		

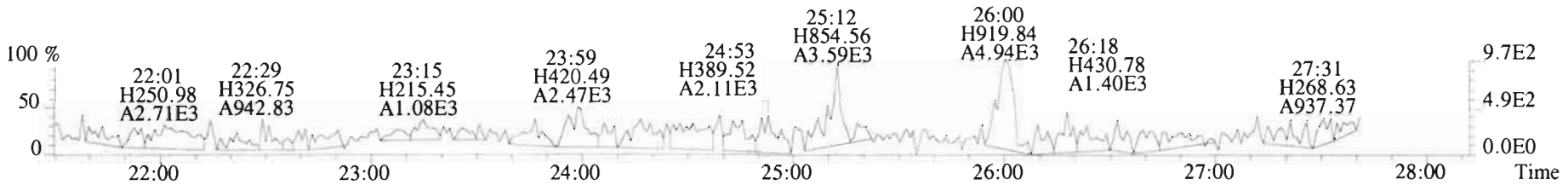
Integrations by Analyst: DB Date: 1/10/20

Reviewed by Analyst: CT Date: 01/17/2020

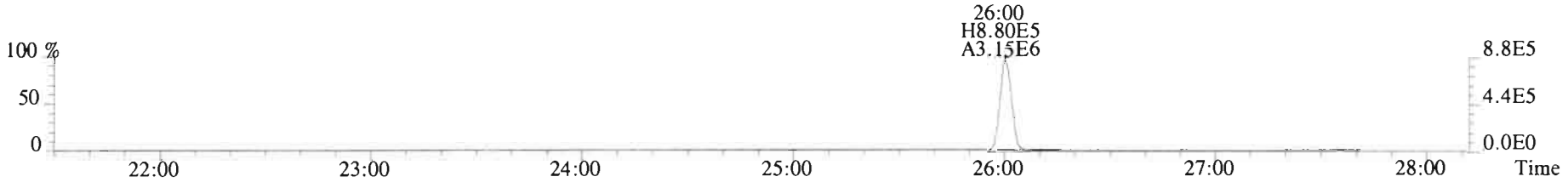
File:200109D2 #1-493 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



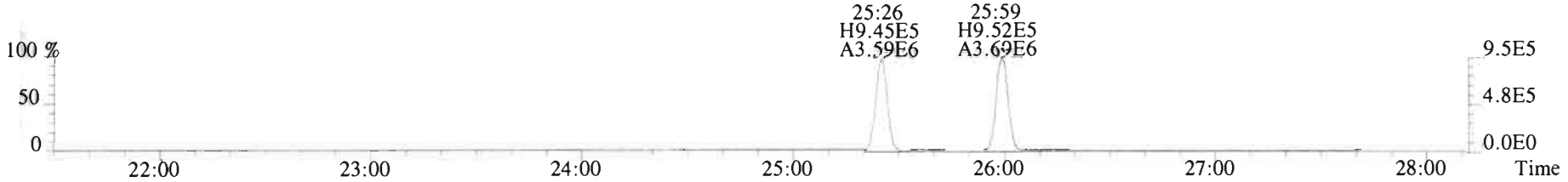
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



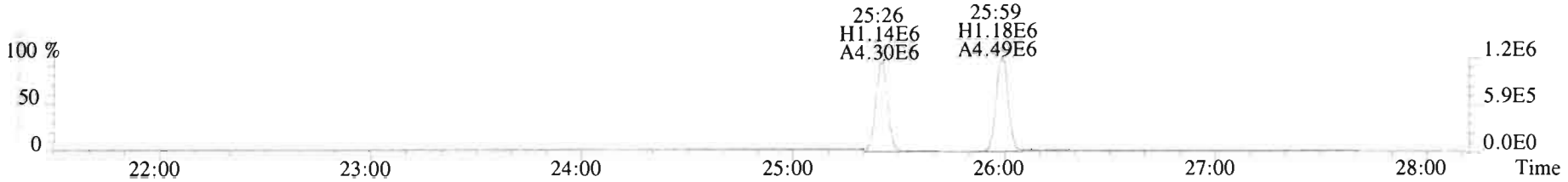
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

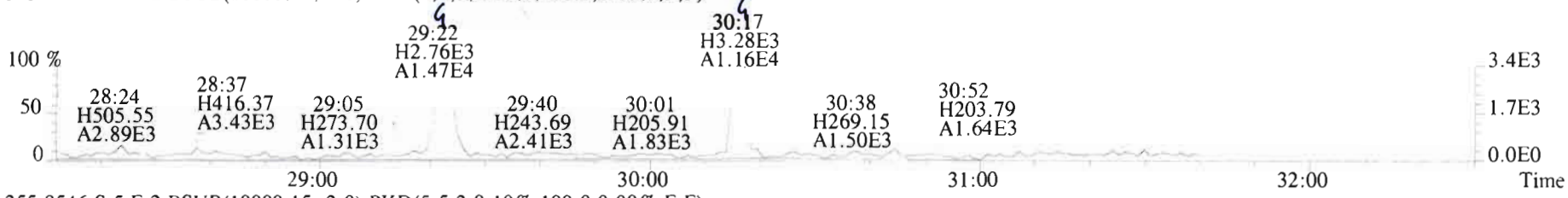


333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

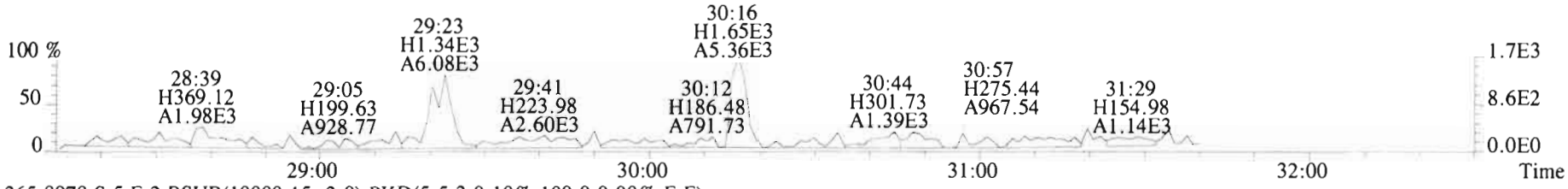


File:200109D2 #1-210 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5

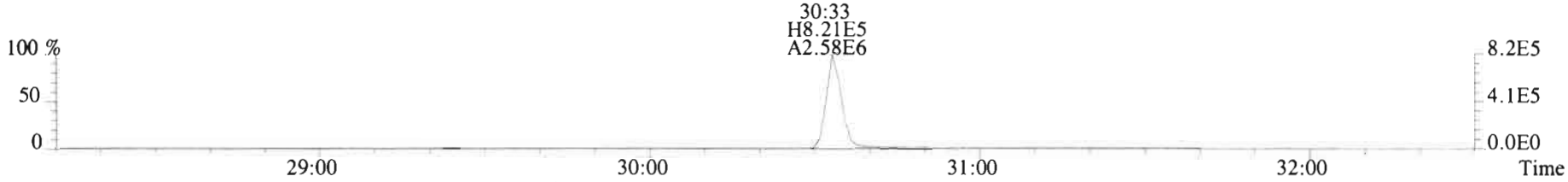
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



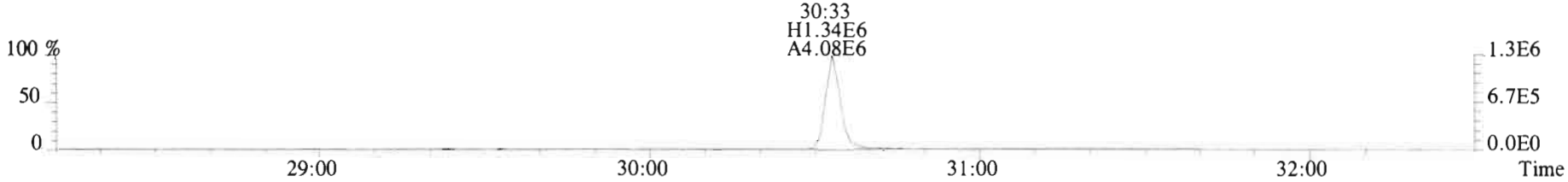
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



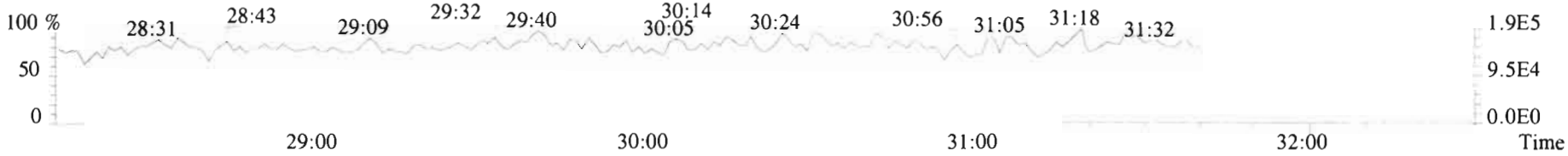
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

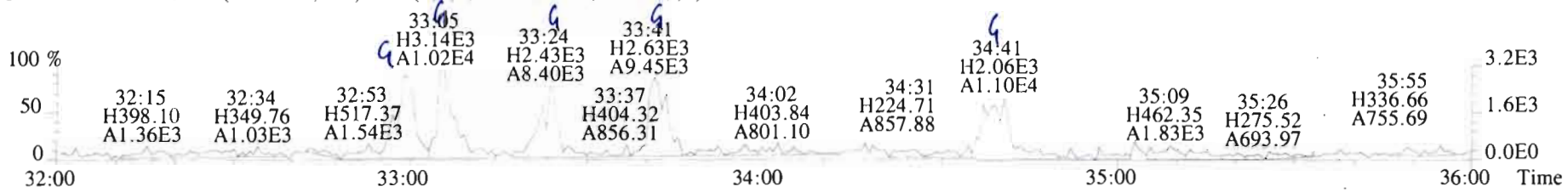


366.9792 S:5 F:2

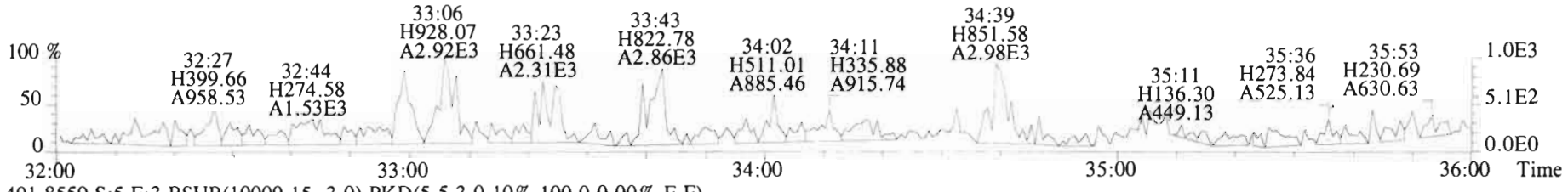


File:200109D2 #1-386 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5

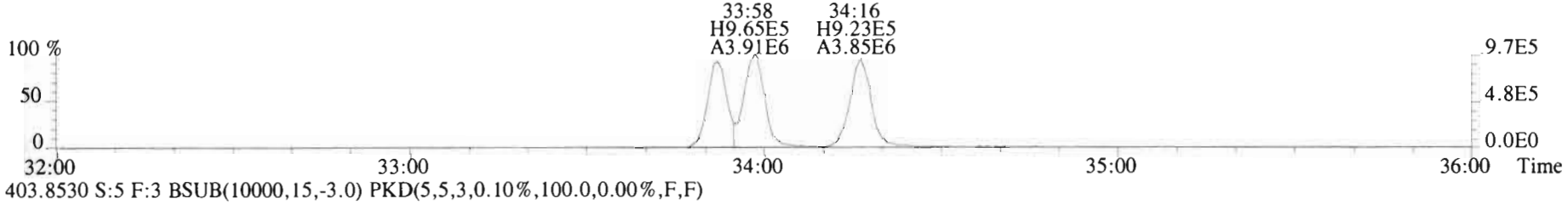
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



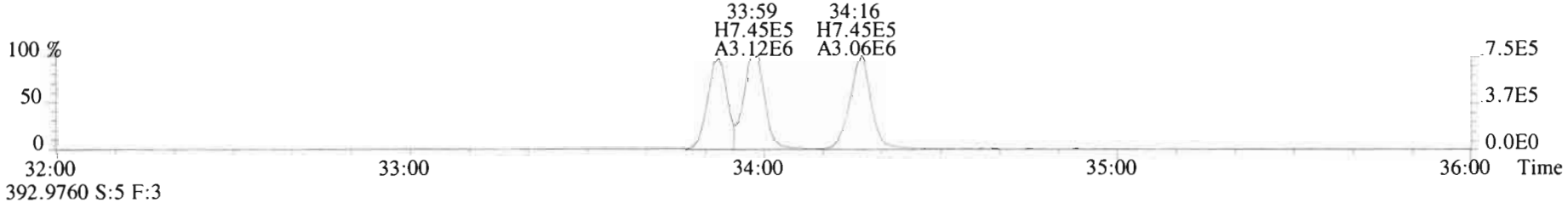
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



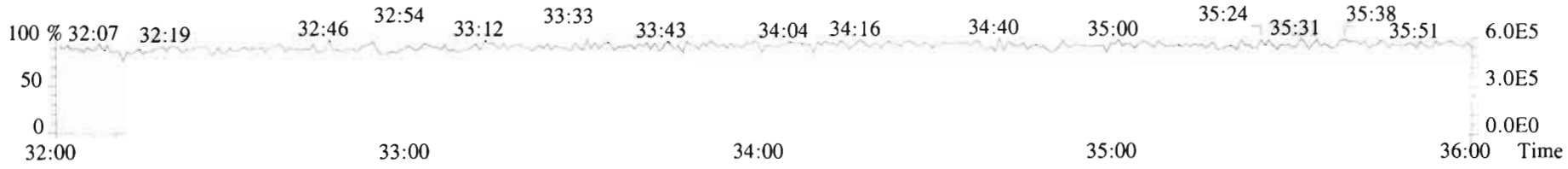
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



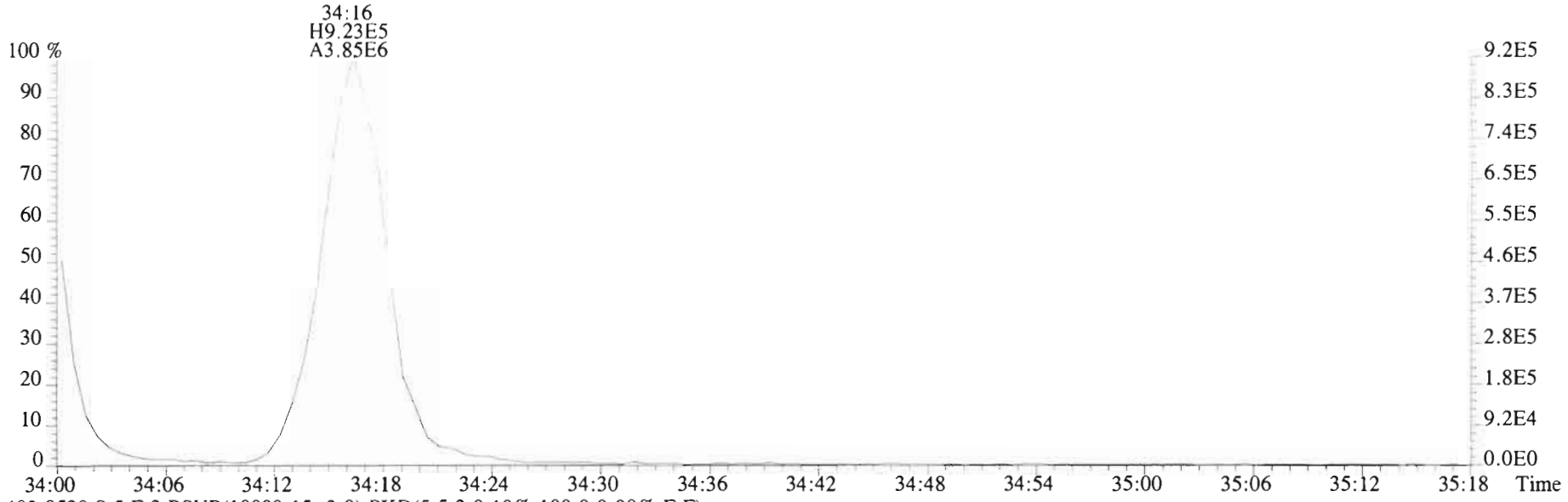
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



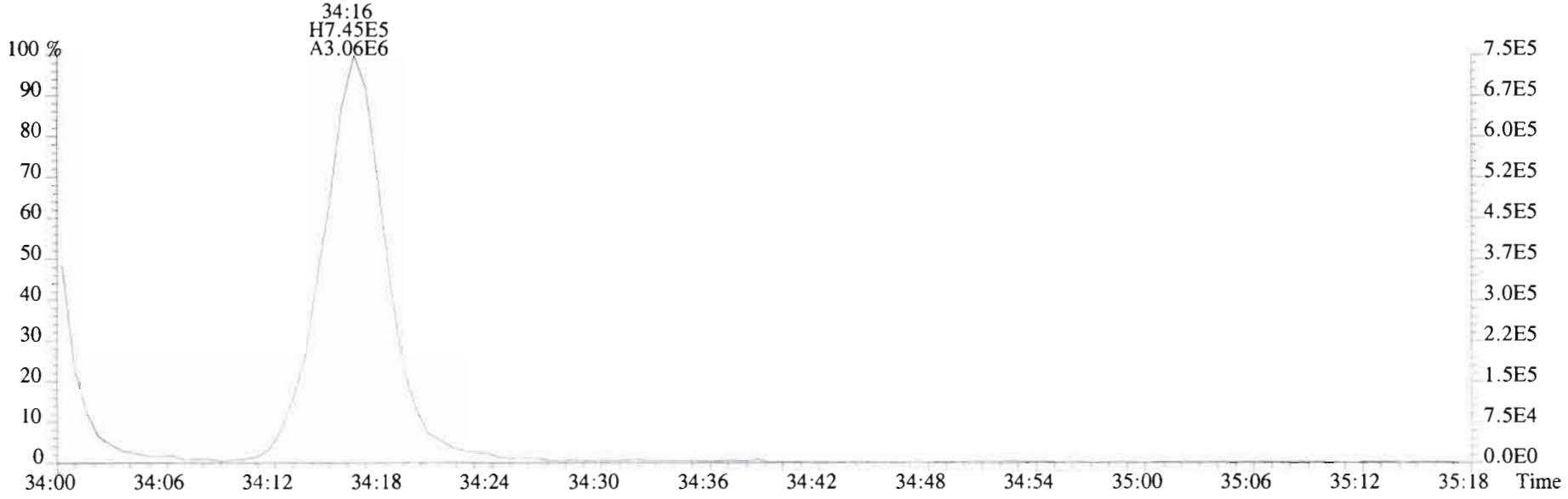
392.9760 S:5 F:3



File:200109D2 #1-386 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

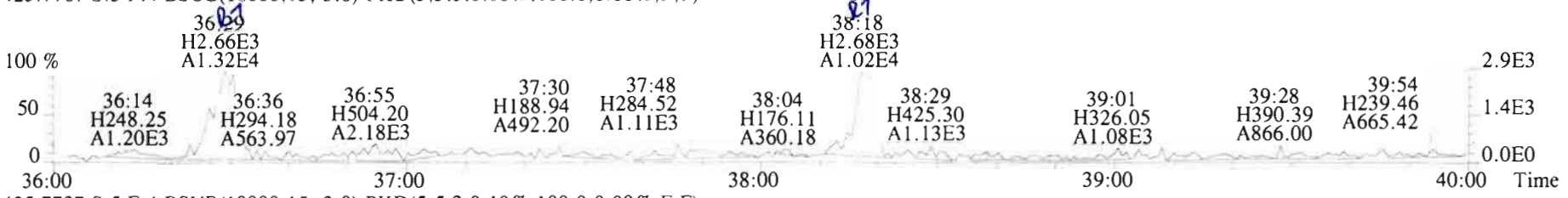


403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

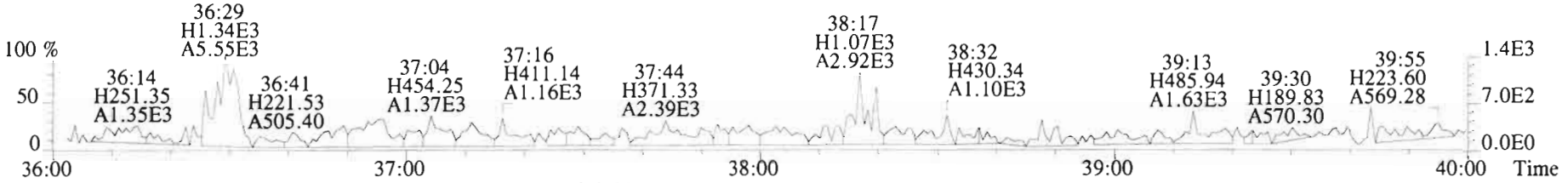


File:200109D2 #1-355 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5

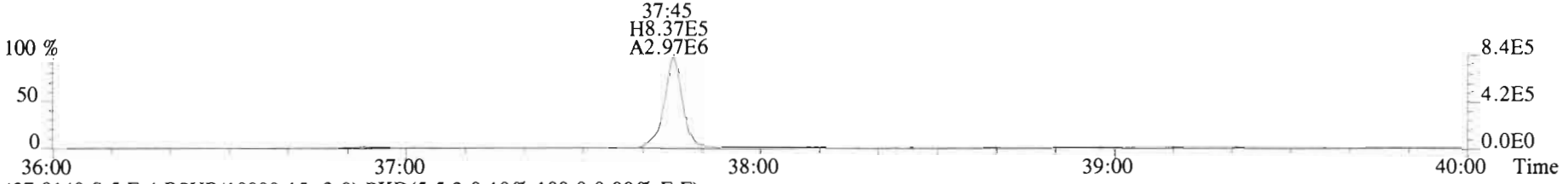
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



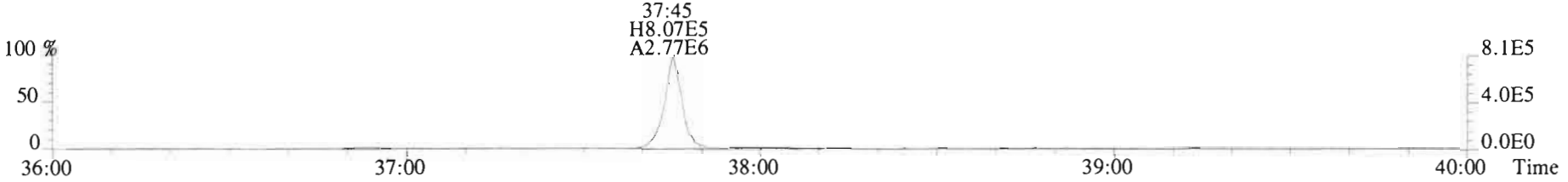
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



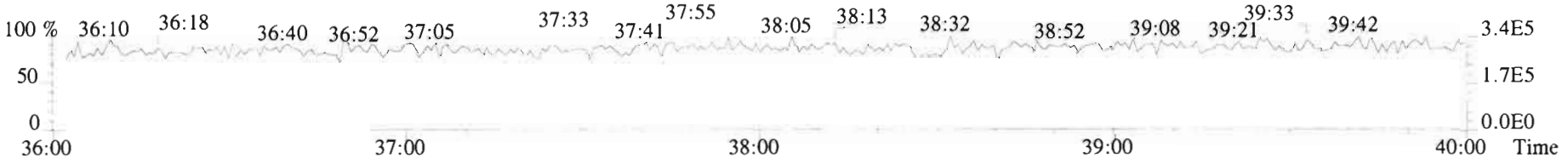
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

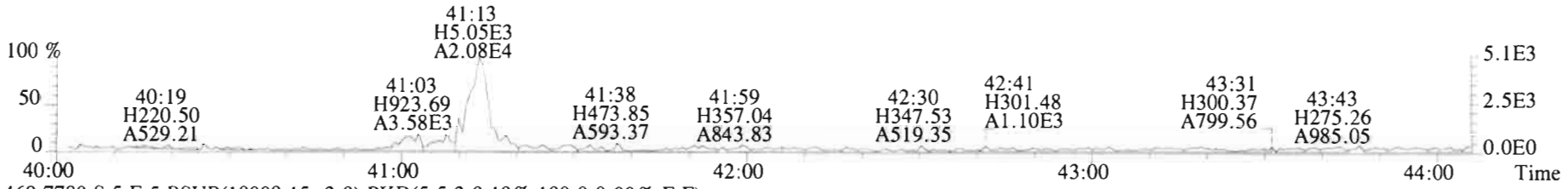


454.9728 S:5 F:4

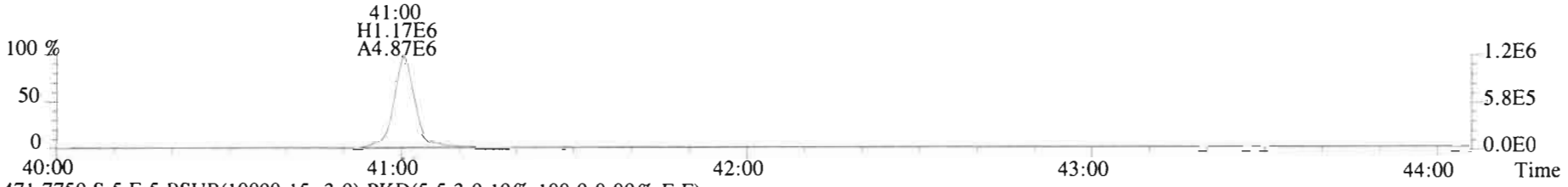


File:200109D2 #1-432 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

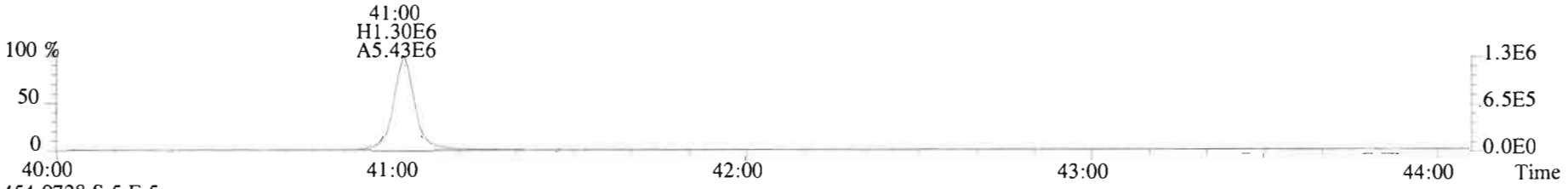
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

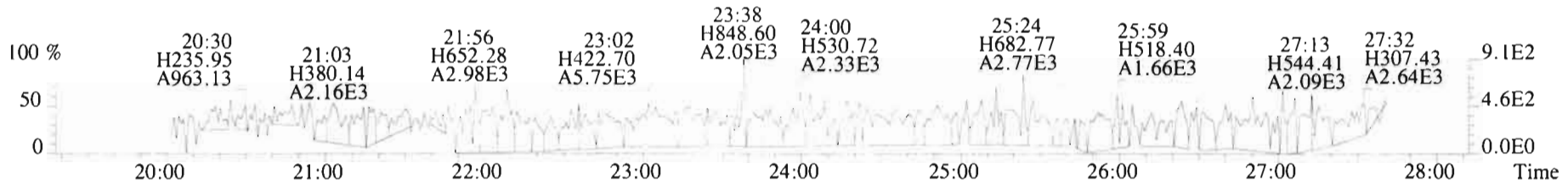


471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

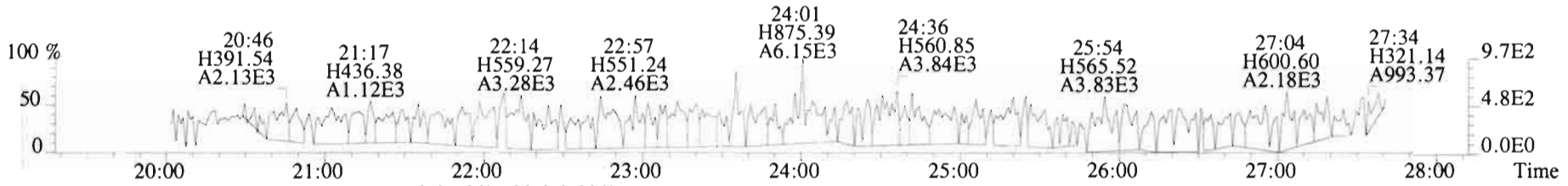


454.9728 S:5 F:5

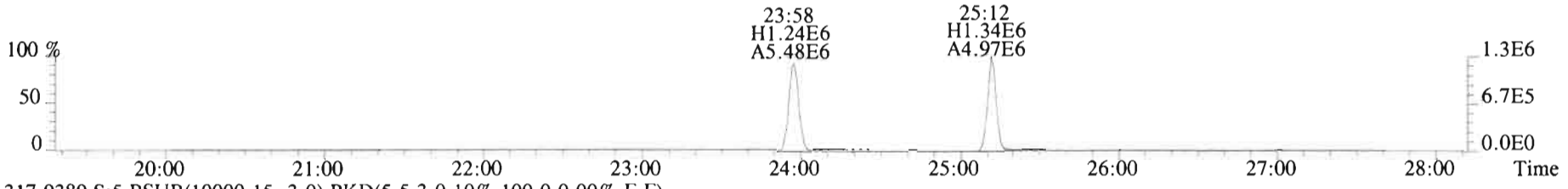
File:200109D2 #1-493 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



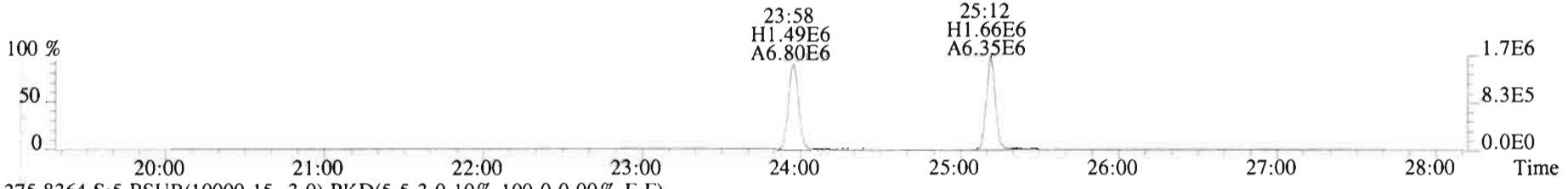
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



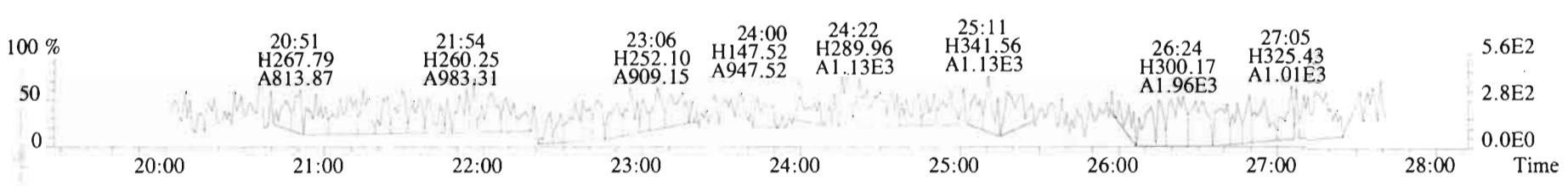
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



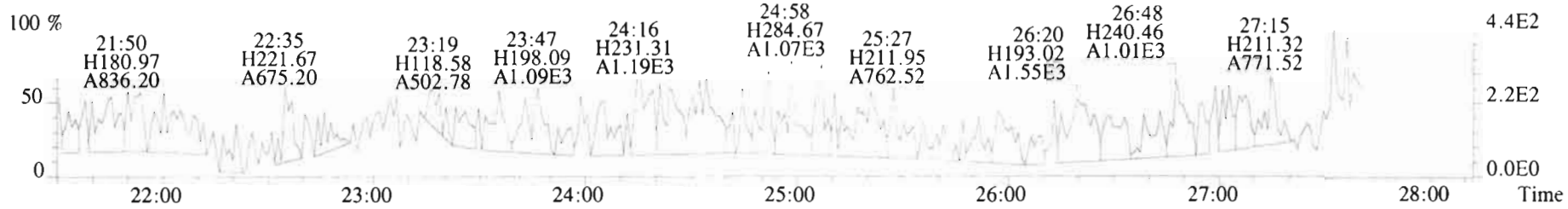
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



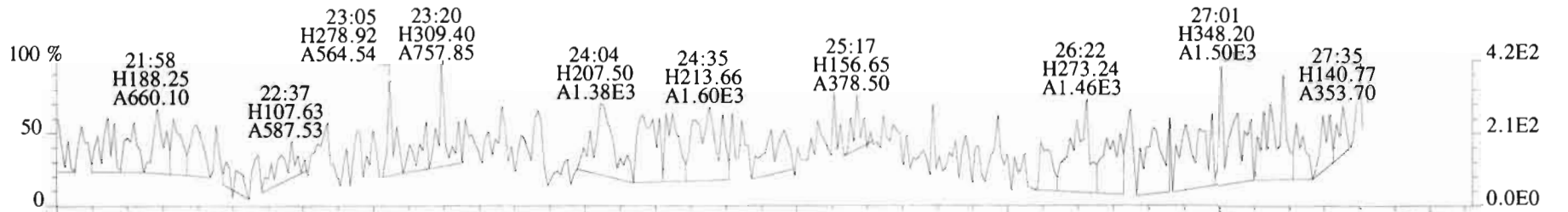
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



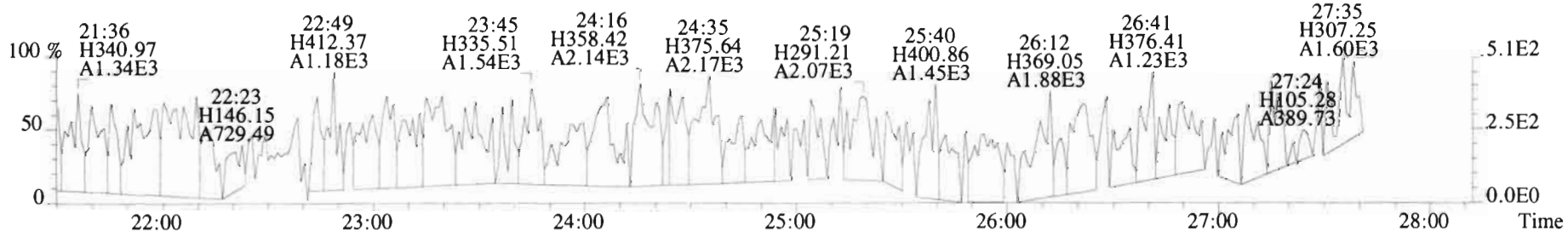
File:200109D2 #1-493 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



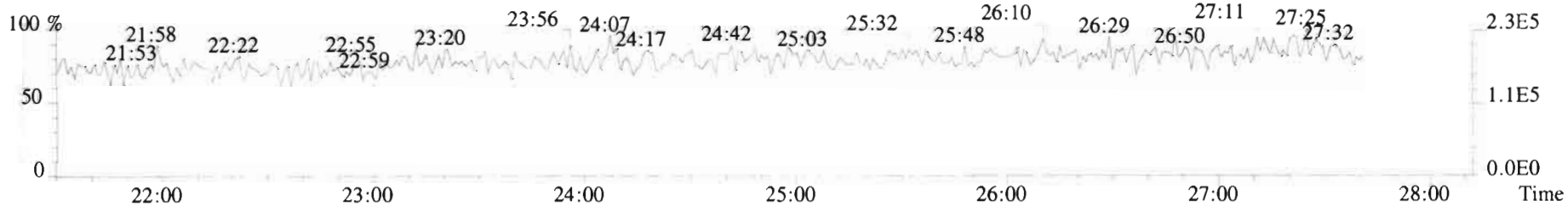
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



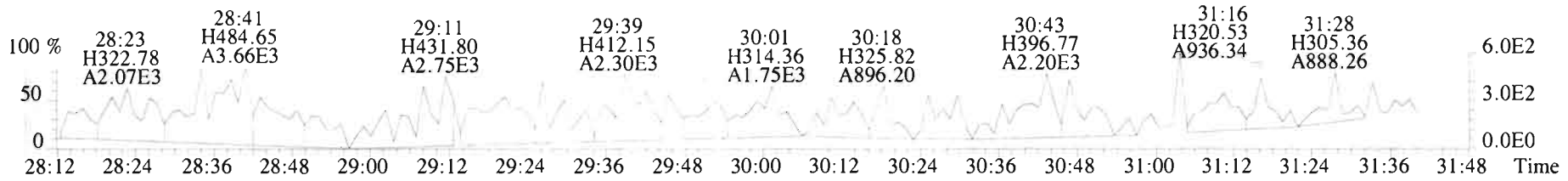
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



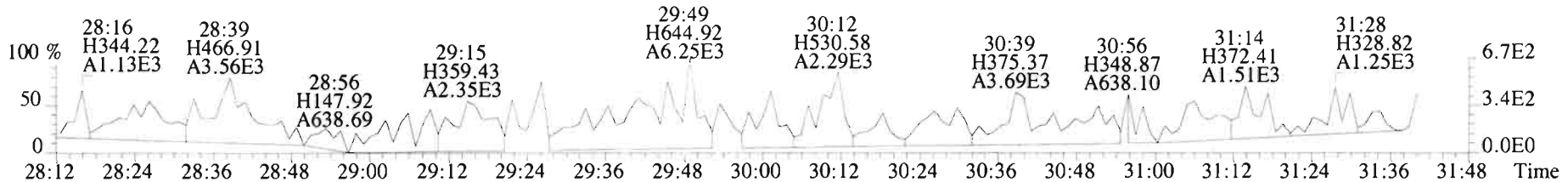
316.9824 S:5



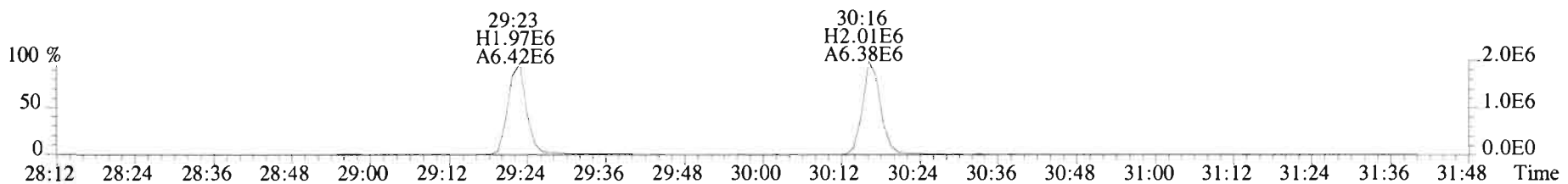
File:200109D2 #1-210 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



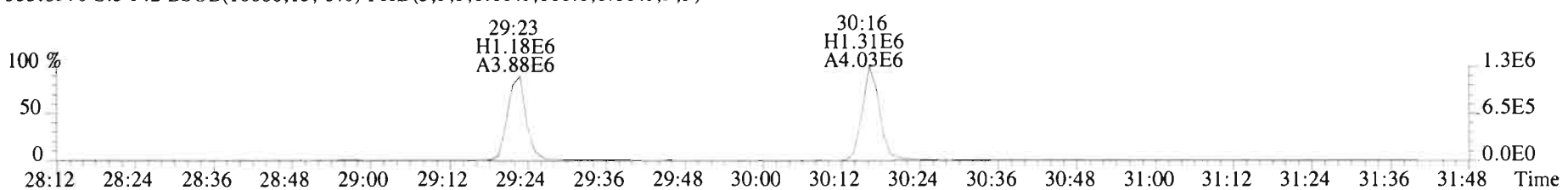
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



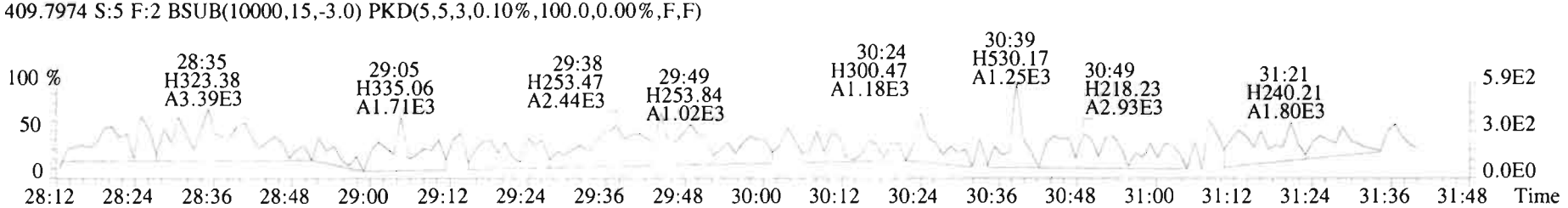
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



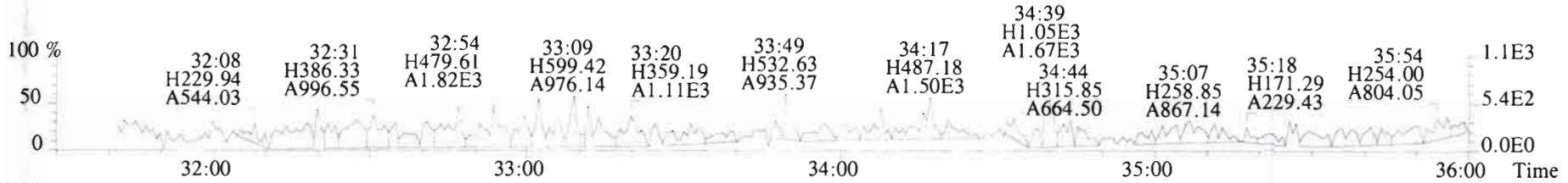
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



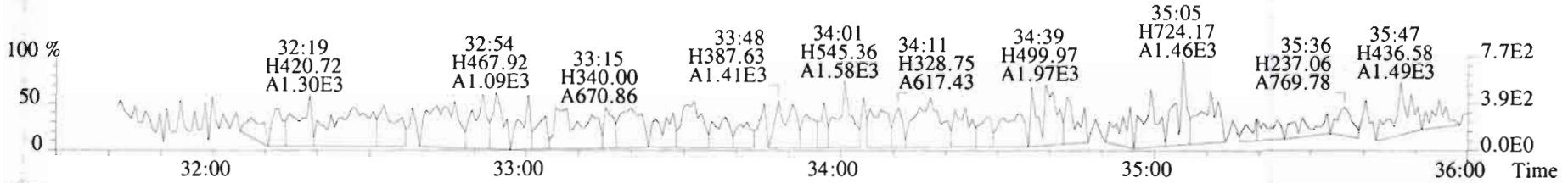
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



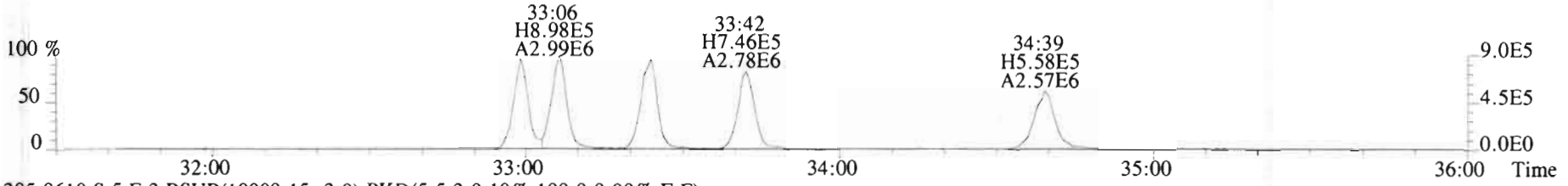
File:200109D2 #1-386 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



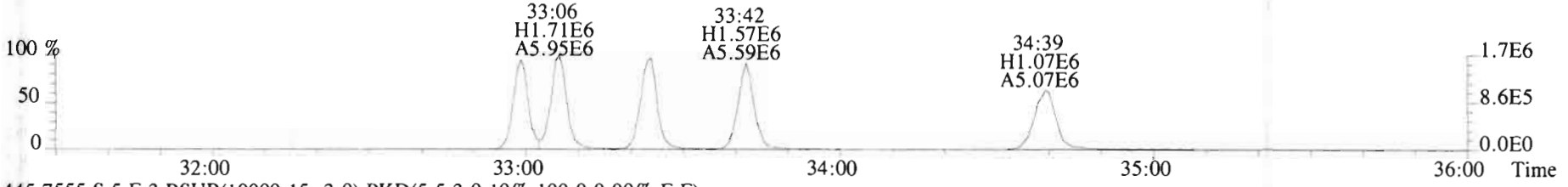
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



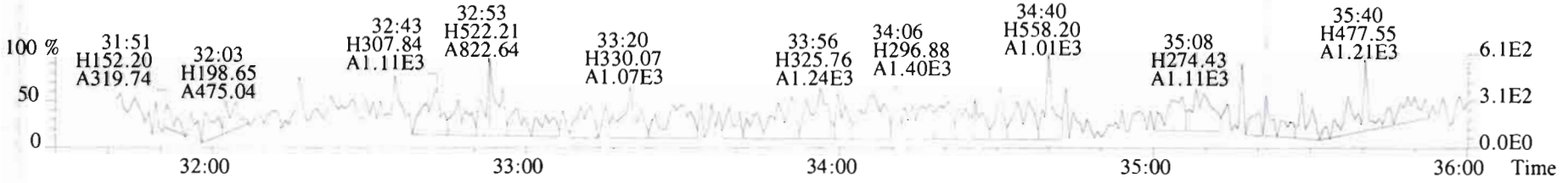
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



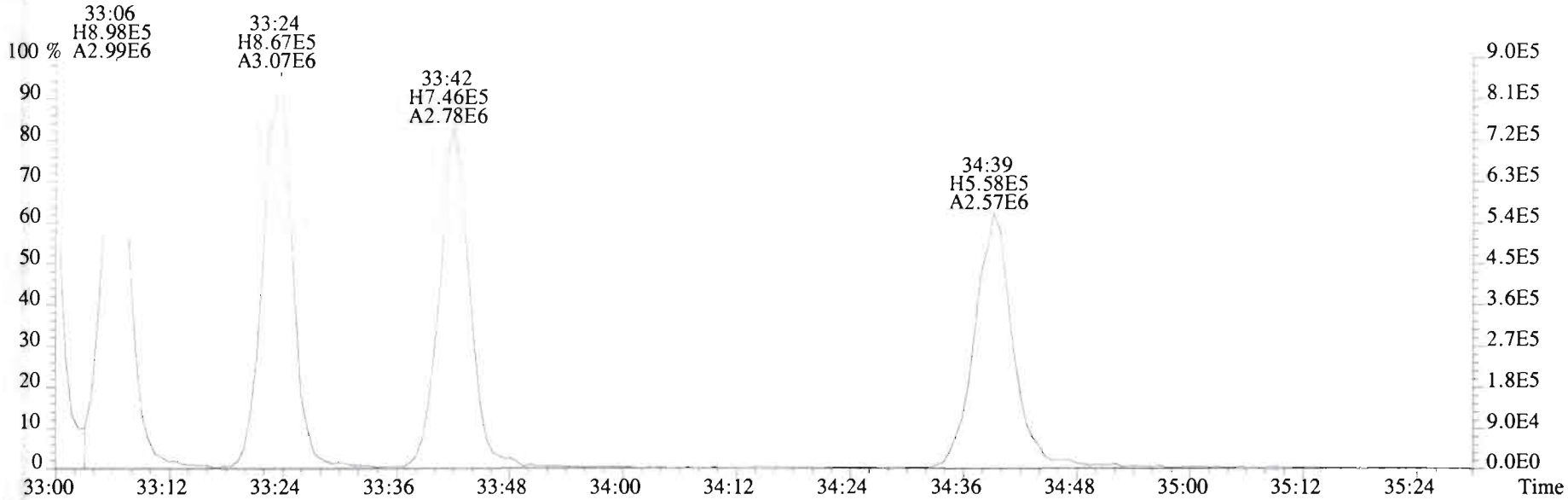
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



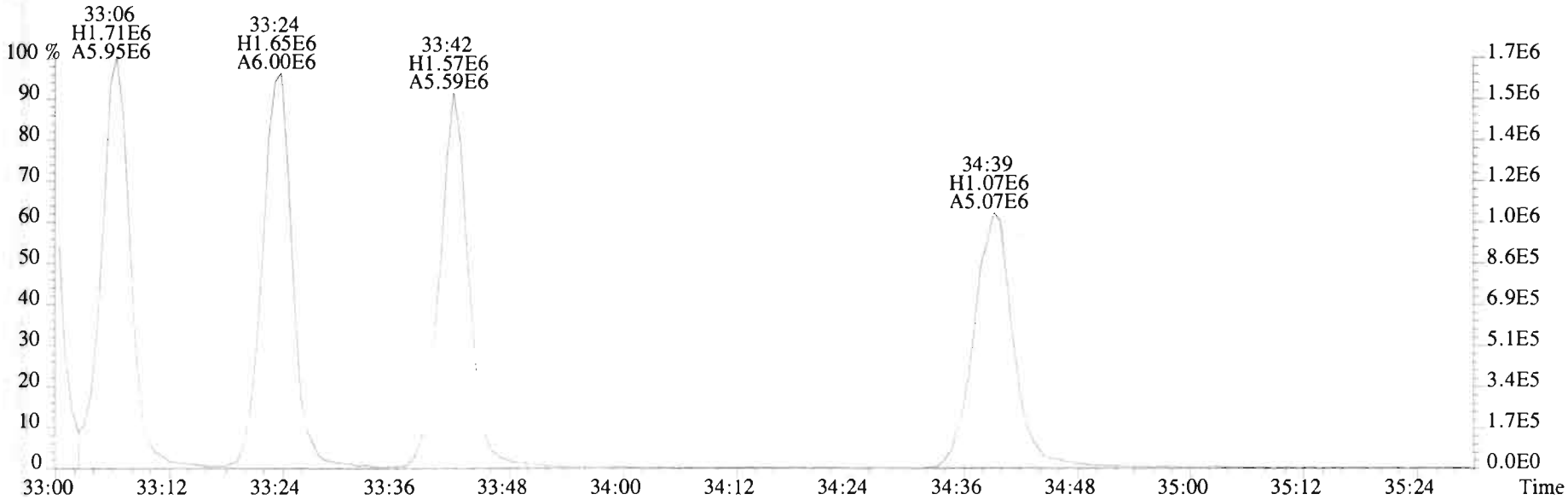
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



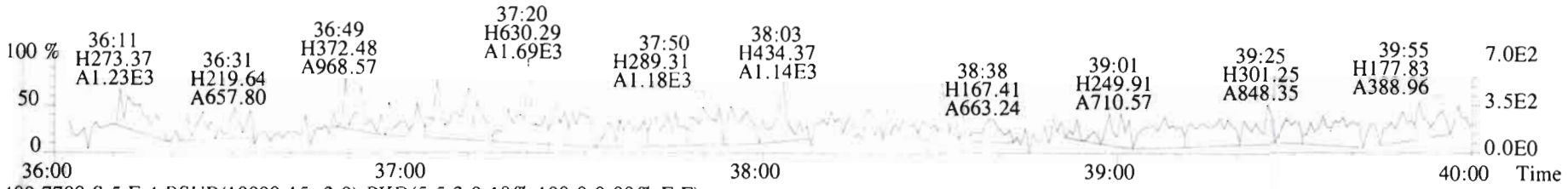
File:200109D2 #1-386 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



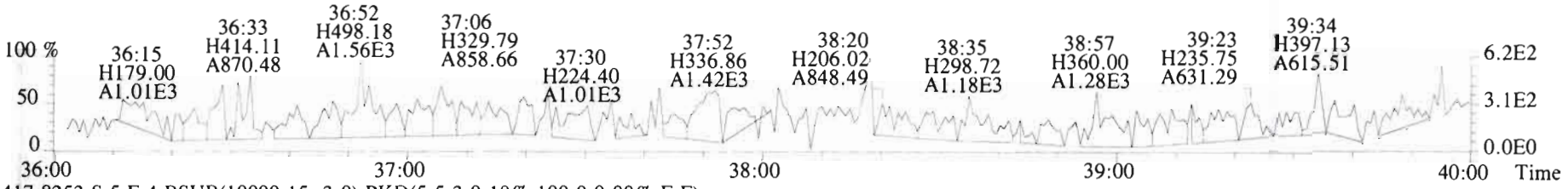
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



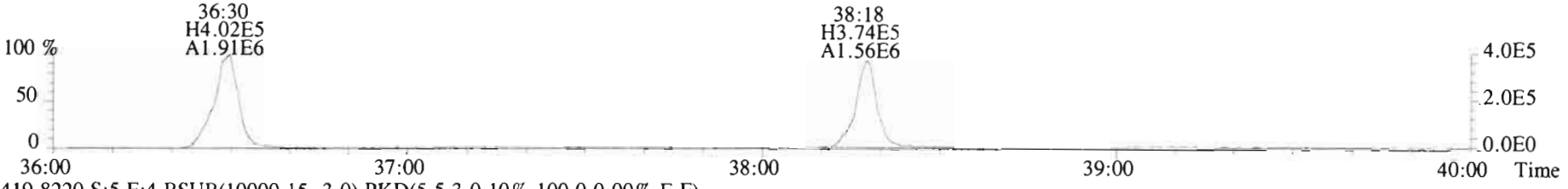
File:200109D2 #1-355 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



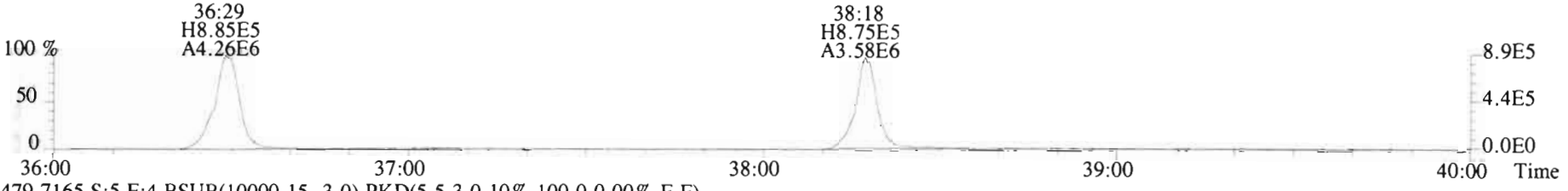
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



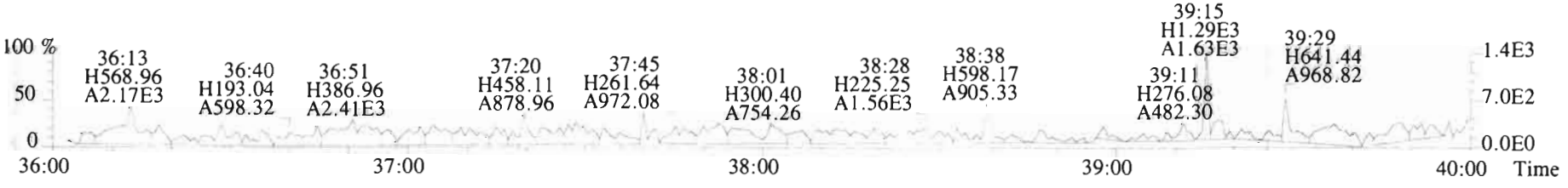
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

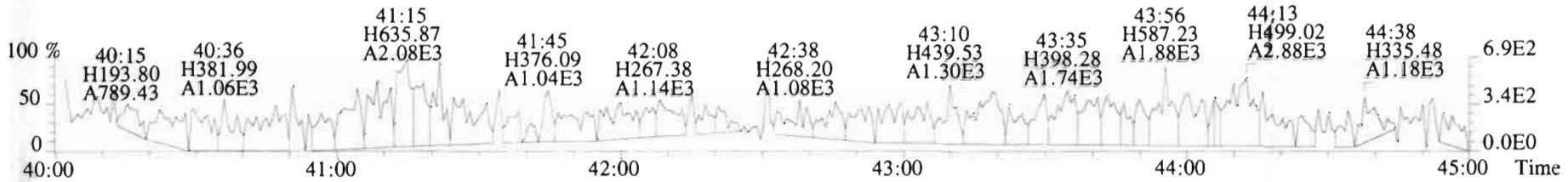


479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

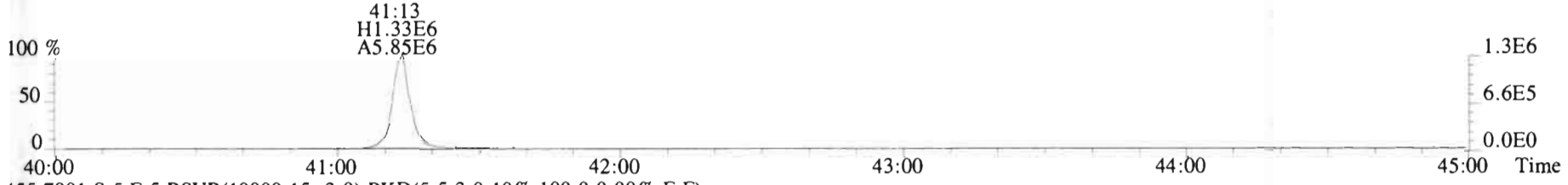


File:200109D2 #1-432 Acq:10-JAN-2020 01:54:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BLK1 Method Blank 10 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

FORM 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B9L0200-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 200109D2-2

Ext. Date: Shift: Day Analysis Date: 9-JAN-20 Time: 23:30:46

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
2,3,7,8-TCDD	10	10.5	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	53.5	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	50.2	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	50.3	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	50.9	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	47.0	35.0 - 70.0
OCDD	100	98.5	78.0 - 144.0
2,3,7,8-TCDF	10	9.50	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	52.6	40.0 - 67.0
2,3,4,7,8-PeCDF	50	51.7	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	44.6	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	44.3	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	45.5	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	45.0	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	43.4	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	42.3	39.0 - 69.0
OCDF	100	87.4	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: DB

Date: 1/10/20

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B9L0200-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 200109D2-2

Ext. Date: Shift: Day Analysis Date: 9-JAN-20 Time: 23:30:46

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

LABELED COMPOUNDS	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
13C-2,3,7,8-TCDD	100	90.4	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	95.6	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	99.3	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	87.6	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	90.9	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	103	26.0 - 166.0
13C-OCDD	200	194	26.0 - 397.0
13C-2,3,7,8-TCDF	100	86.0	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	91.4	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	95.0	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	101	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	93.7	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	94.2	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	100	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	91.5	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	101	20.0 - 186.0
13C-OCDF	200	201	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	32.5	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: DB

Date: 1/10/20

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	7.51e+05	0.80 y	0.91	26:02	10.457		*	2.5	*
	1,2,3,7,8-PeCDD	3.26e+06	0.61 y	0.90	30:35	53.543		*	2.5	*
	1,2,3,4,7,8-HxCDD	3.54e+06	1.24 y	1.10	33:54	50.202		*	2.5	*
	1,2,3,6,7,8-HxCDD	3.55e+06	1.25 y	0.94	34:00	50.253		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.60e+06	1.22 y	0.96	34:18	50.875		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	3.11e+06	1.03 y	0.98	37:47	46.978		*	2.5	*
	OCDD	5.34e+06	0.89 y	0.96	41:02	98.496		*	2.5	*
	2,3,7,8-TCDF	9.93e+05	0.77 y	0.95	25:14	9.4991		*	2.5	*
	1,2,3,7,8-PeCDF	4.87e+06	1.51 y	0.96	29:24	52.570		*	2.5	*
	2,3,4,7,8-PeCDF	5.22e+06	1.47 y	1.01	30:18	51.673		*	2.5	*
	1,2,3,4,7,8-HxCDF	4.42e+06	1.24 y	1.18	33:00	44.634		*	2.5	*
	1,2,3,6,7,8-HxCDF	4.61e+06	1.18 y	1.07	33:08	44.330		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.57e+06	1.24 y	1.11	33:44	45.477		*	2.5	*
	1,2,3,7,8,9-HxCDF	3.99e+06	1.22 y	1.06	34:41	45.030		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	3.41e+06	1.02 y	1.13	36:31	43.377		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	3.19e+06	1.03 y	1.28	38:19	42.286		*	2.5	*
	OCDF	5.76e+06	0.86 y	0.95	41:15	87.426		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.94e+06	0.81 y	1.10	26:00	90.437				
IS	13C-1,2,3,7,8-PeCDD	6.75e+06	0.64 y	0.88	30:34	95.585				
IS	13C-1,2,3,4,7,8-HxCDD	6.41e+06	1.27 y	0.64	33:53	99.349				
IS	13C-1,2,3,6,7,8-HxCDD	7.53e+06	1.27 y	0.86	33:59	87.609				
IS	13C-1,2,3,7,8,9-HxCDD	7.37e+06	1.26 y	0.81	34:17	90.930				
IS	13C-1,2,3,4,6,7,8-HpCDD	6.77e+06	1.03 y	0.65	37:46	103.01				
IS	13C-OCDD	1.13e+07	0.90 y	0.58	41:01	194.10				
IS	13C-2,3,7,8-TCDF	1.10e+07	0.79 y	1.03	25:13	85.980				
IS	13C-1,2,3,7,8-PeCDF	9.65e+06	1.61 y	0.85	29:23	91.371				
IS	13C-2,3,4,7,8-PeCDF	9.95e+06	1.56 y	0.85	30:17	94.984				
IS	13C-1,2,3,4,7,8-HxCDF	8.41e+06	0.51 y	0.83	32:60	100.66				
IS	13C-1,2,3,6,7,8-HxCDF	9.73e+06	0.51 y	1.03	33:07	93.667				
IS	13C-2,3,4,6,7,8-HxCDF	9.02e+06	0.51 y	0.95	33:43	94.172				
IS	13C-1,2,3,7,8,9-HxCDF	8.34e+06	0.51 y	0.83	34:40	100.32				
IS	13C-1,2,3,4,6,7,8-HpCDF	6.96e+06	0.43 y	0.76	36:30	91.516				
IS	13C-1,2,3,4,7,8,9-HpCDF	5.89e+06	0.44 y	0.58	38:18	100.95				
IS	13C-OCDF	1.39e+07	0.86 y	0.69	41:14	200.85				
C/Up	37Cl-2,3,7,8-TCDD	3.11e+06		1.20	26:02	32.456				
RS/RT	13C-1,2,3,4-TCDD	8.01e+06	0.77 y	1.00	25:26	100.00				
RS	13C-1,2,3,4-TCDF	1.24e+07	0.81 y	1.00	23:58	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.00e+07	0.52 y	1.00	33:24	100.00				

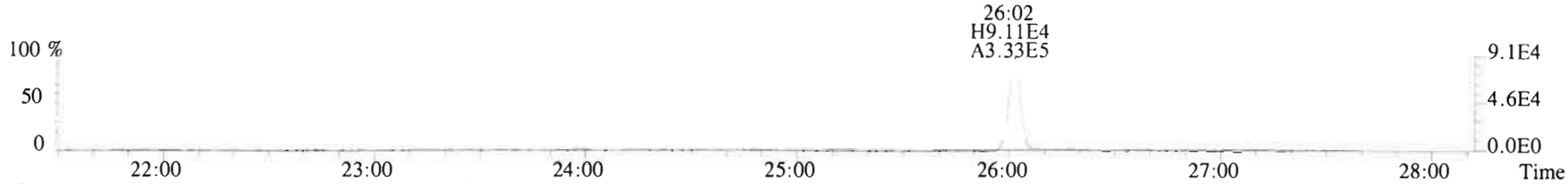
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.5	11.7		*	*
Total Penta-Dioxins	53.6	54.1		*	*
Total Hexa-Dioxins	151	152		*	*
Total Hepta-Dioxins	47.8	48.1		*	*
Total Tetra-Furans	9.86	11.5		*	*
Total Penta-Furans	105.22	106.11		*	*
Total Hexa-Furans	180	181		*	*
Total Hepta-Furans	86.3	87.7		*	*

	Rec	Qual
IS	90.4	
IS	95.6	
IS	99.3	
IS	87.6	
IS	90.9	
IS	103	
IS	97.1	
IS	86.0	
IS	91.4	
IS	95.0	
IS	101	
IS	93.7	
IS	94.2	
IS	100	
IS	91.5	
IS	101	
IS	100	
C/Up	81.1	

Integrations by Analyst: DB Date: 1/10/20

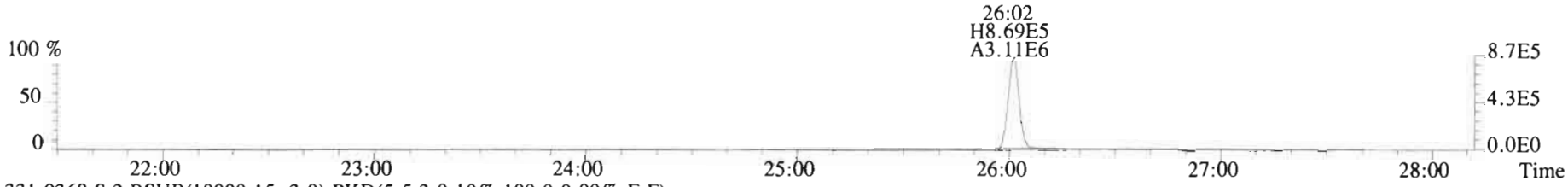
Reviewed by Analyst: CT Date: 01/17/2020

File:200109D2 #1-493 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

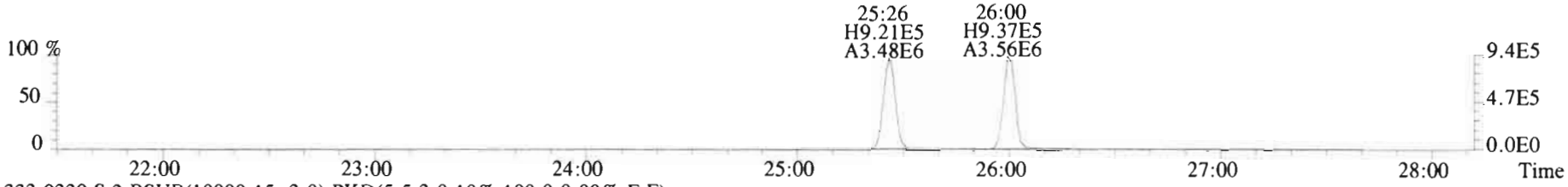


321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

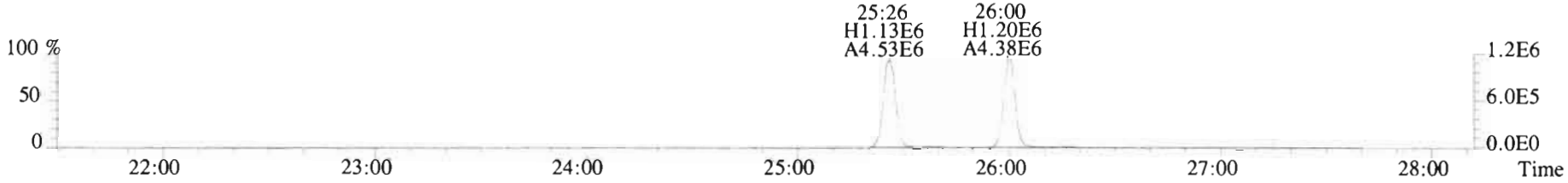
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



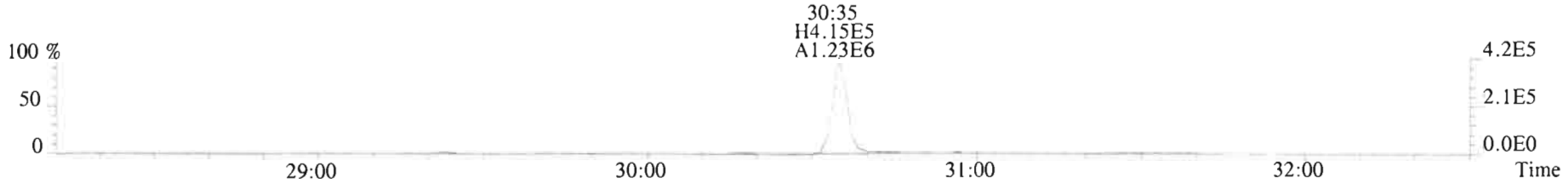
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



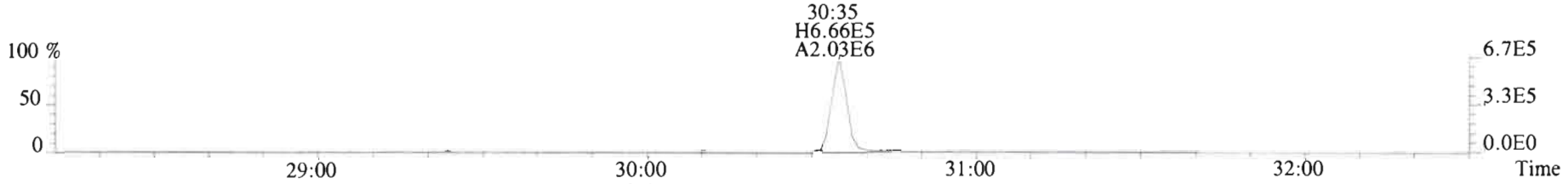
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



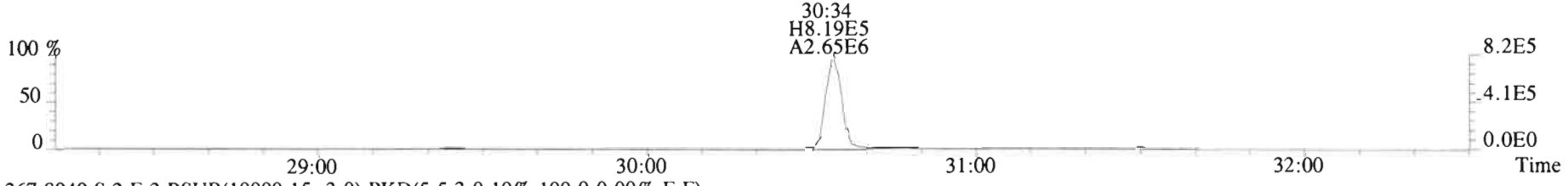
File:200109D2 #1-211 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



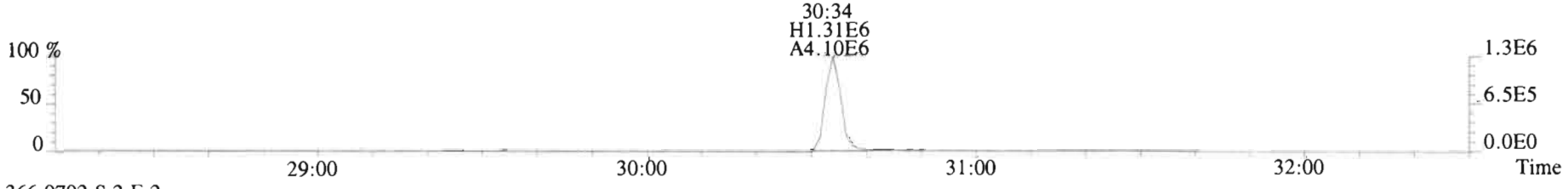
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



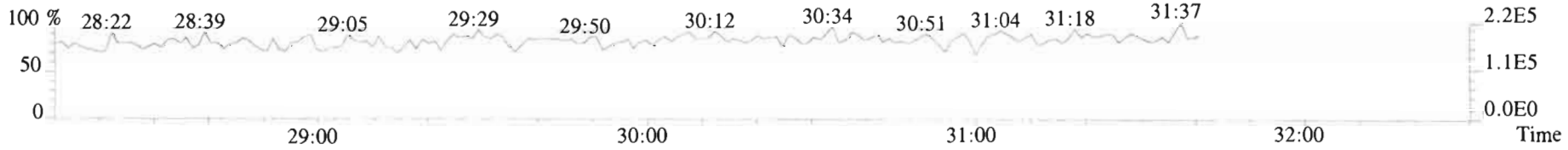
365.8978 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



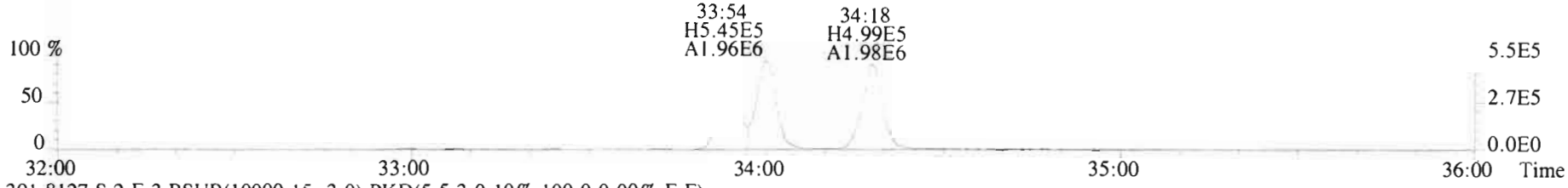
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



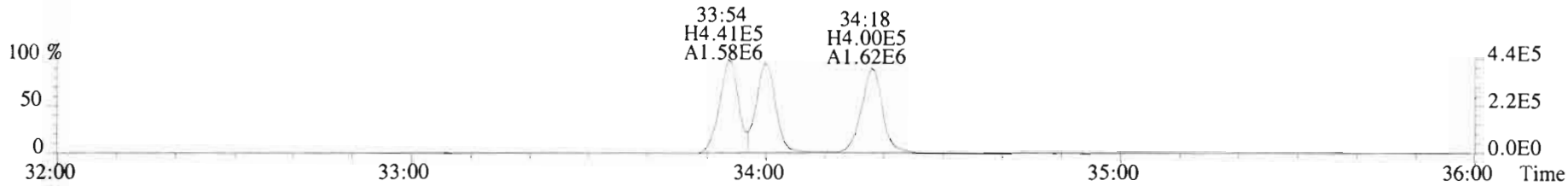
366.9792 S:2 F:2



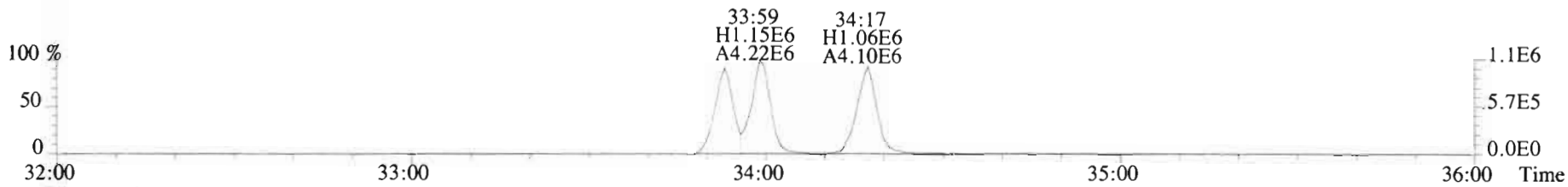
File:200109D2 #1-384 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



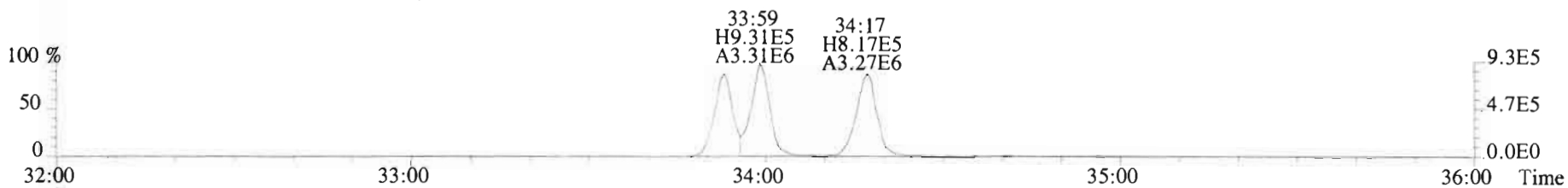
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



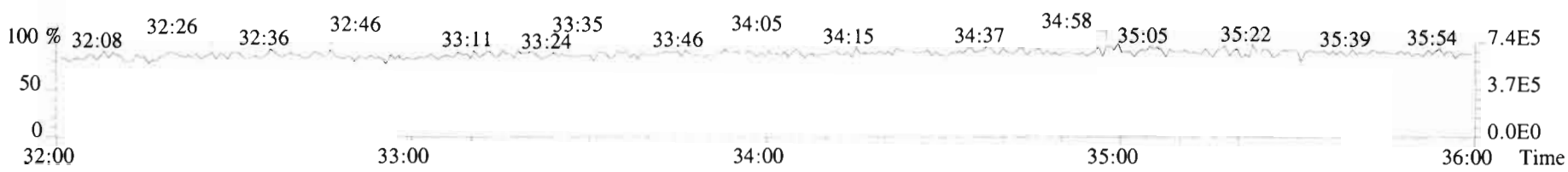
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



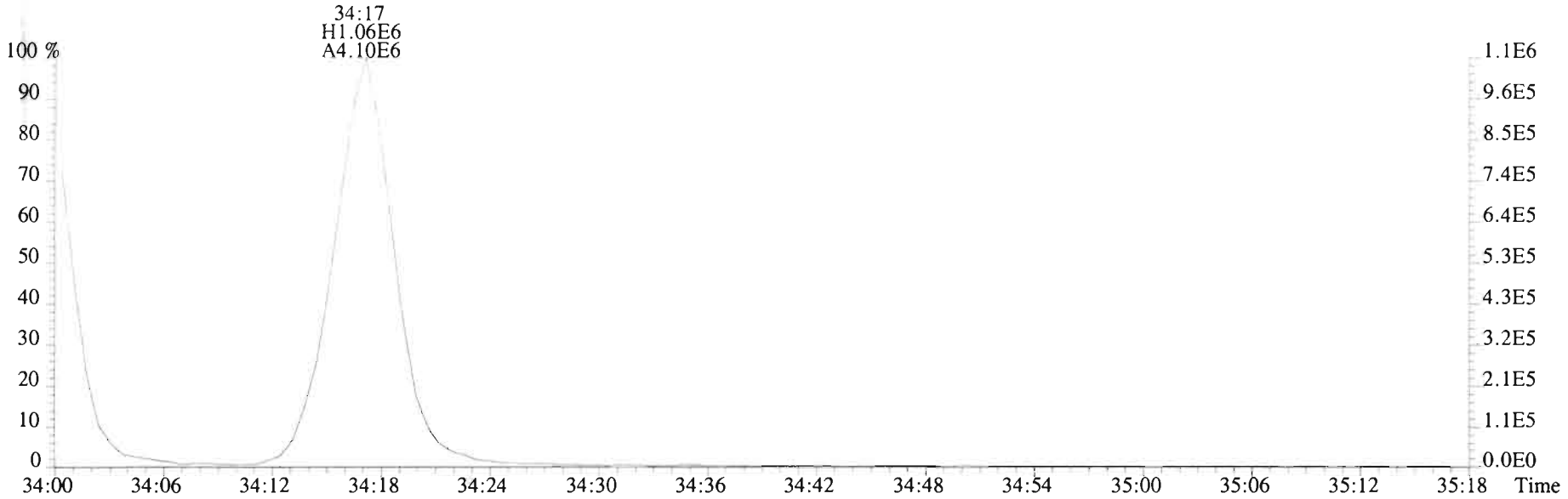
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



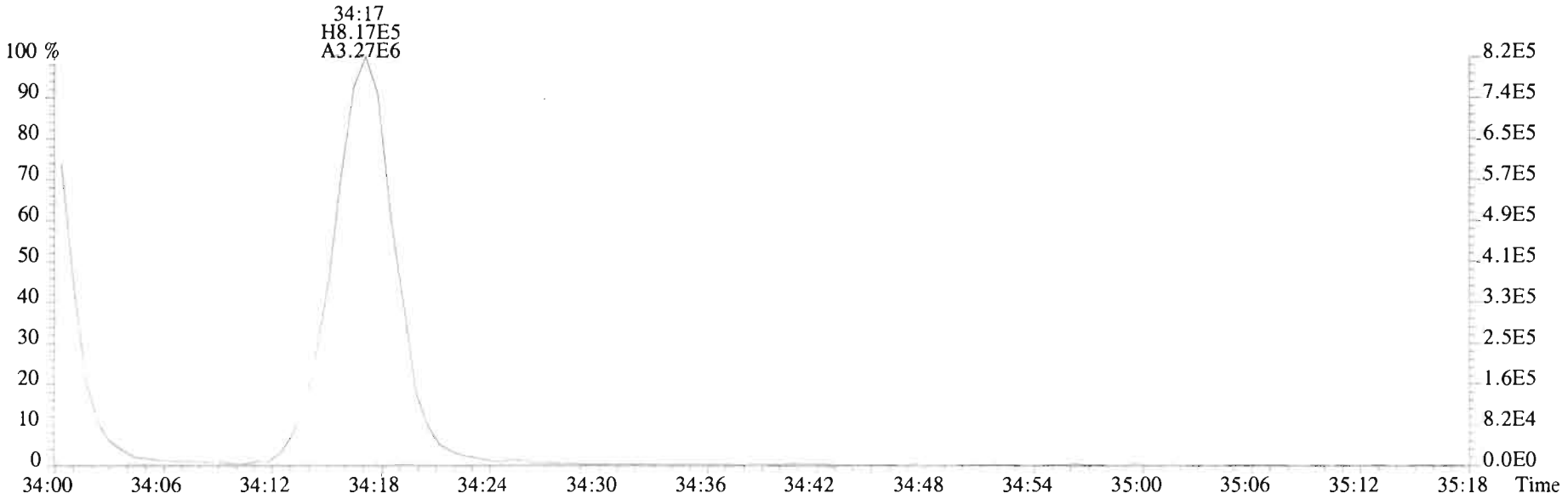
392.9760 S:2 F:3



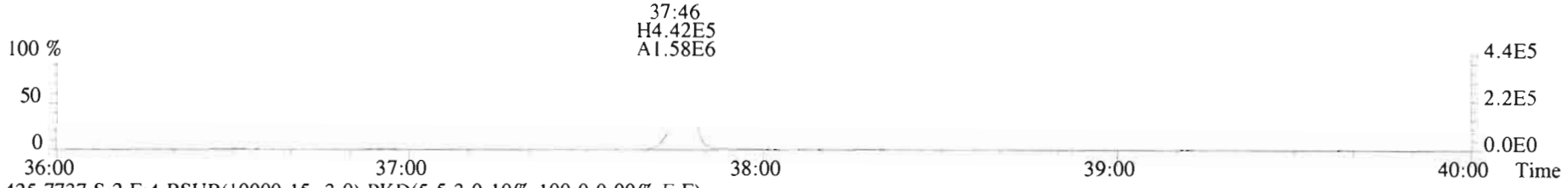
File:200109D2 #1-384 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



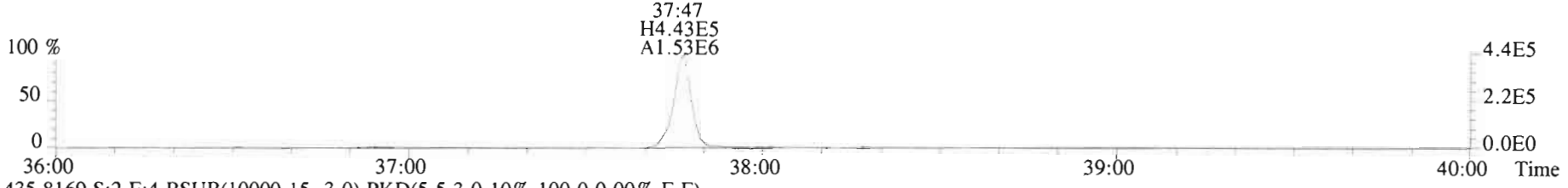
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



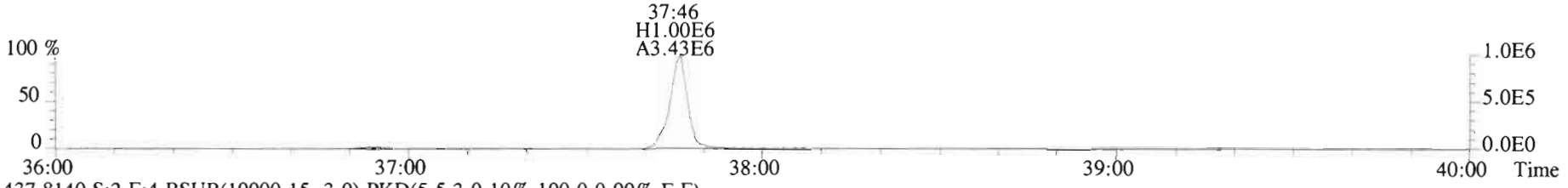
File:200109D2 #1-356 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



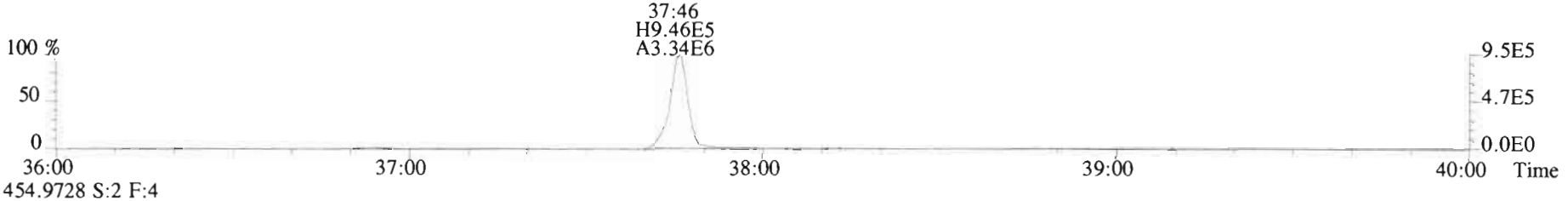
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



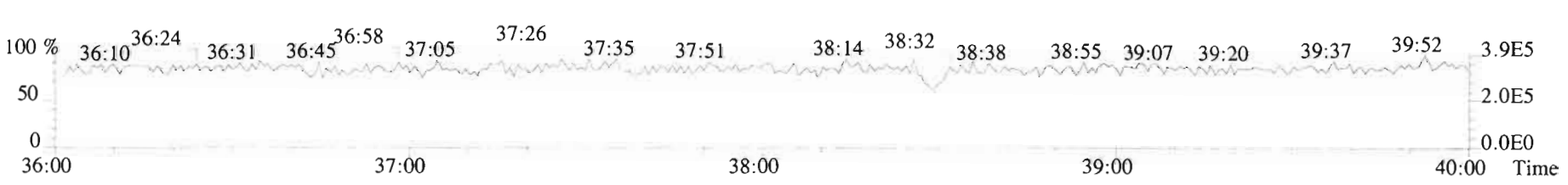
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

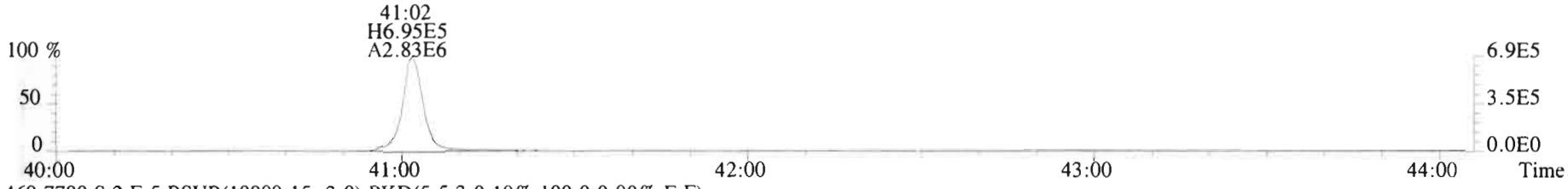


454.9728 S:2 F:4

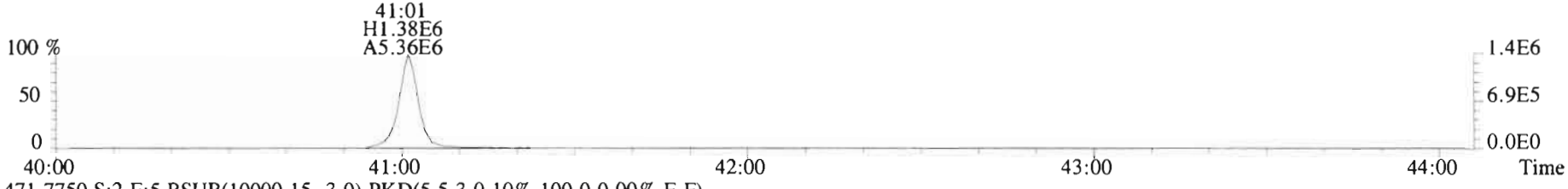


File:200109D2 #1-431 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

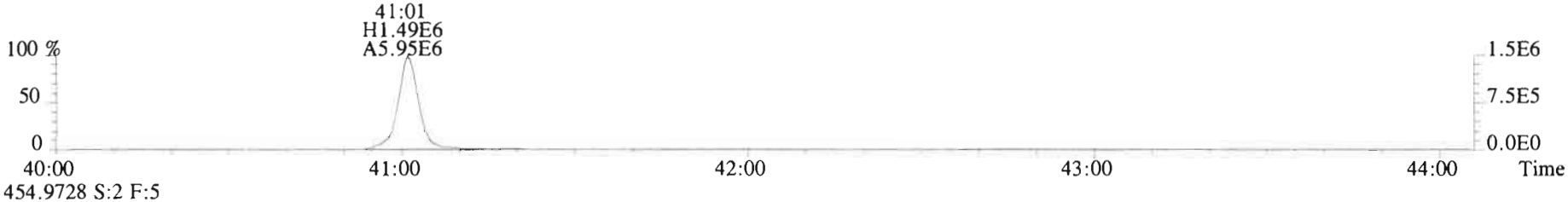
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



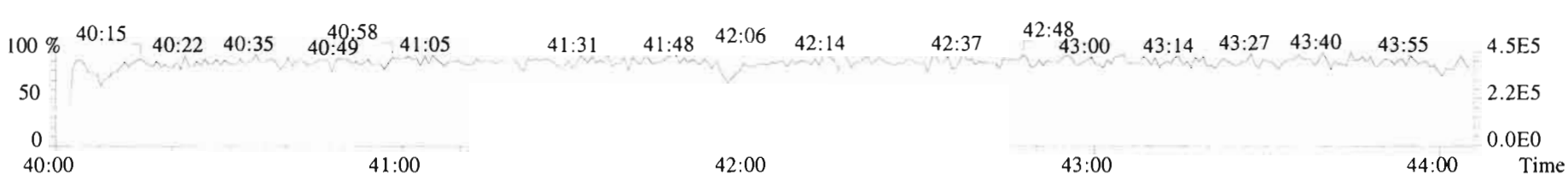
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



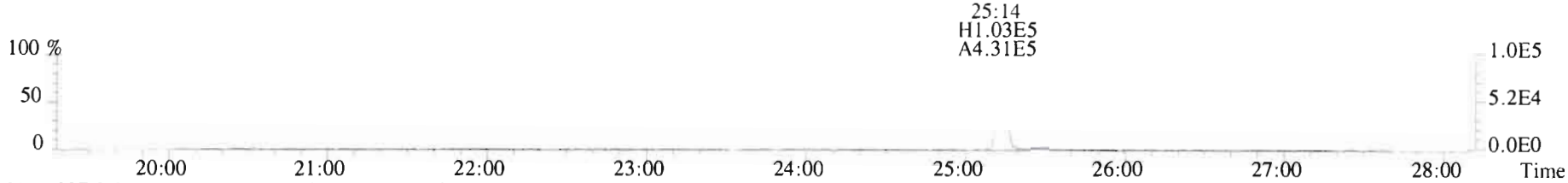
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



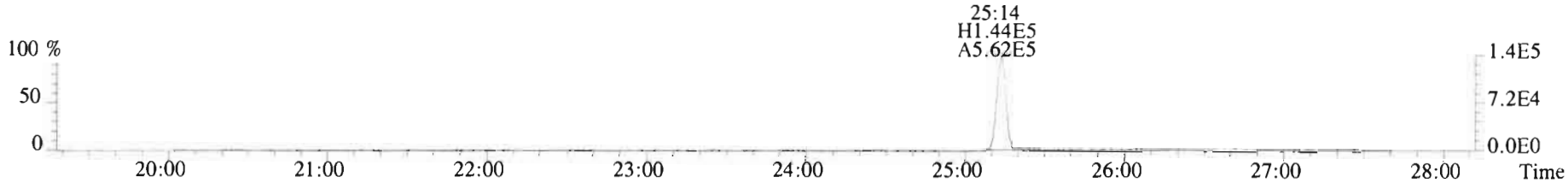
454.9728 S:2 F:5



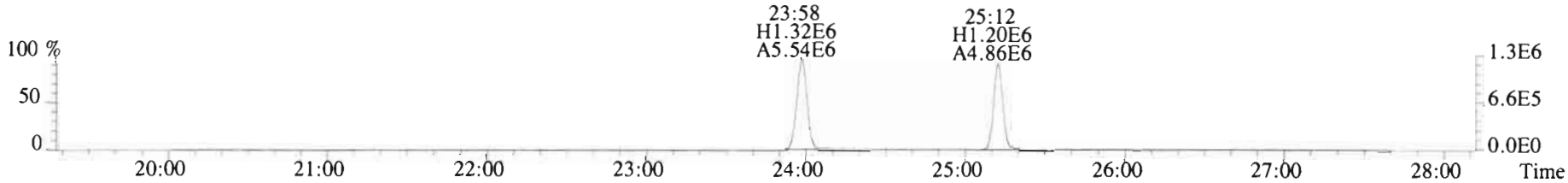
File:200109D2 #1-493 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



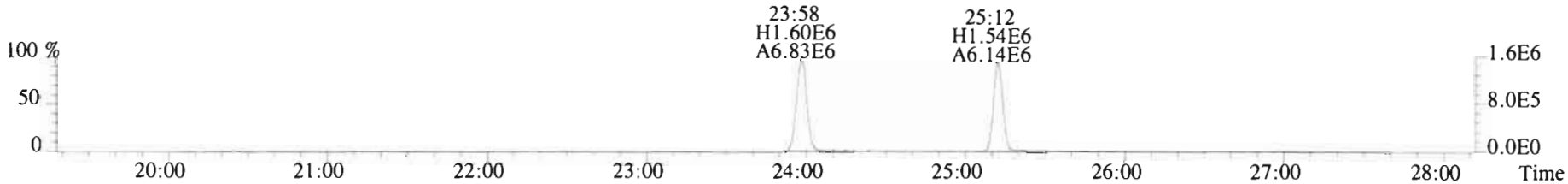
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



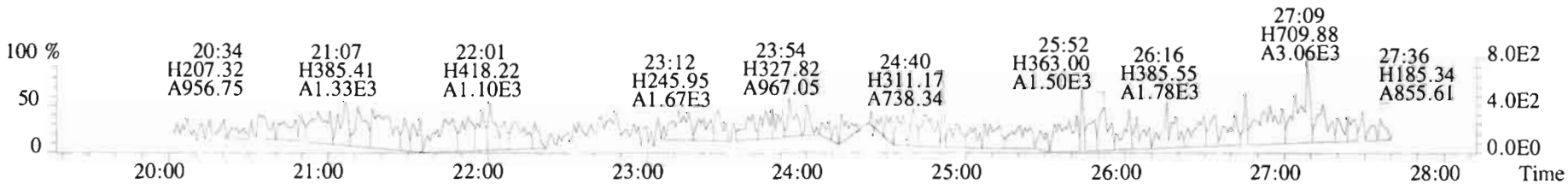
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



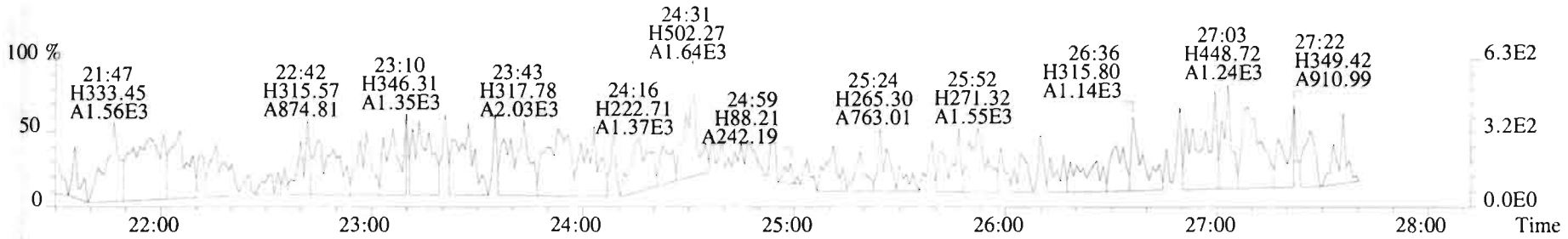
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



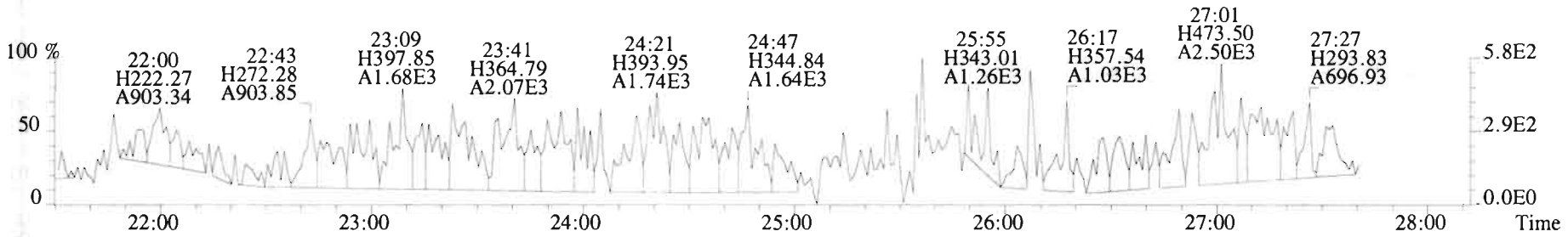
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



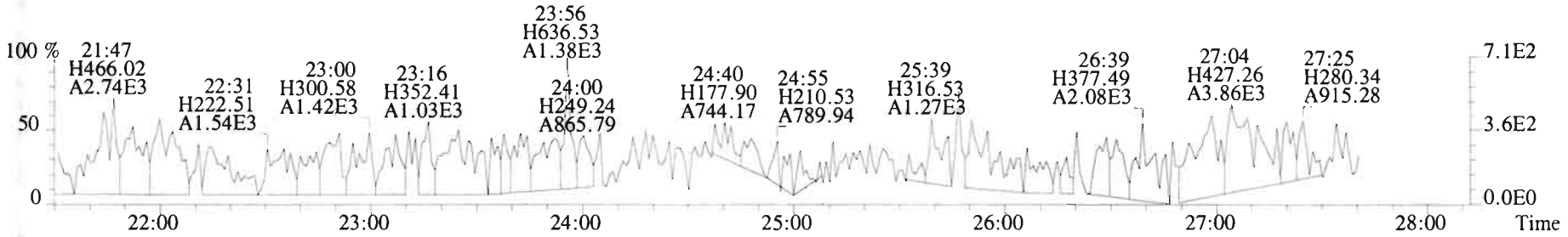
File:200109D2 #1-493 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



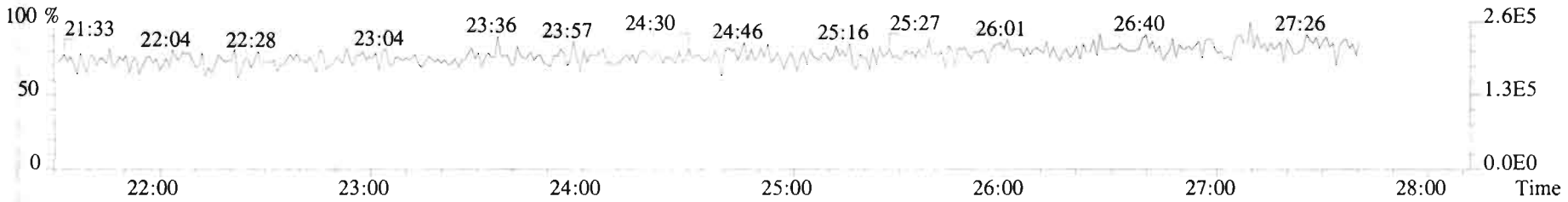
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



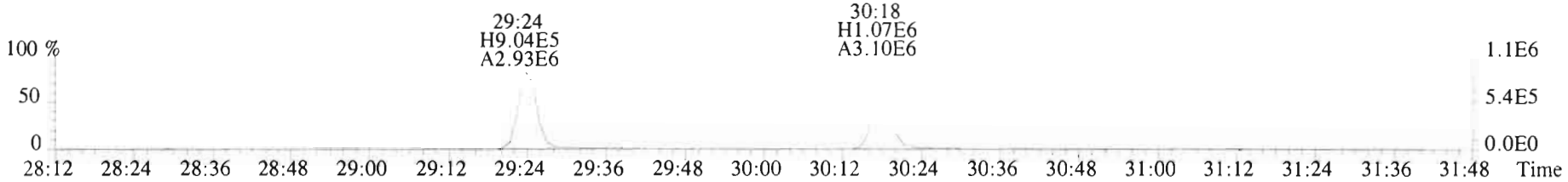
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



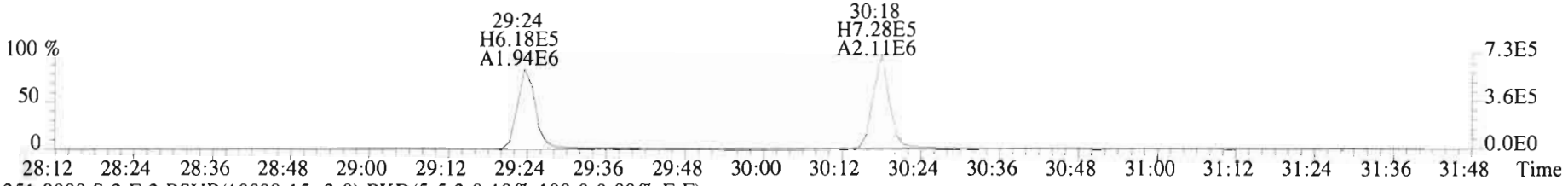
316.9824 S:2



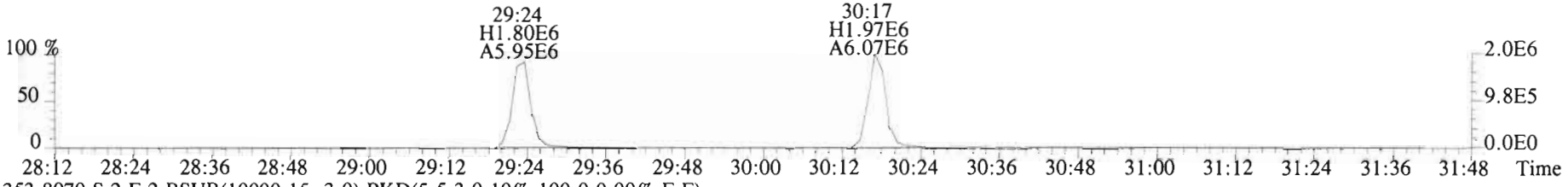
File:200109D2 #1-211 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



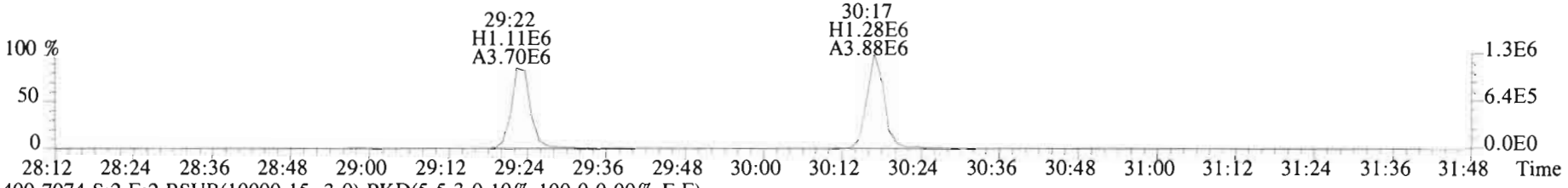
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



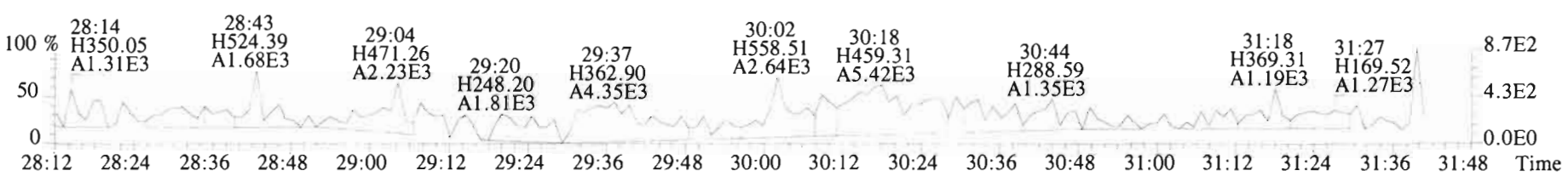
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



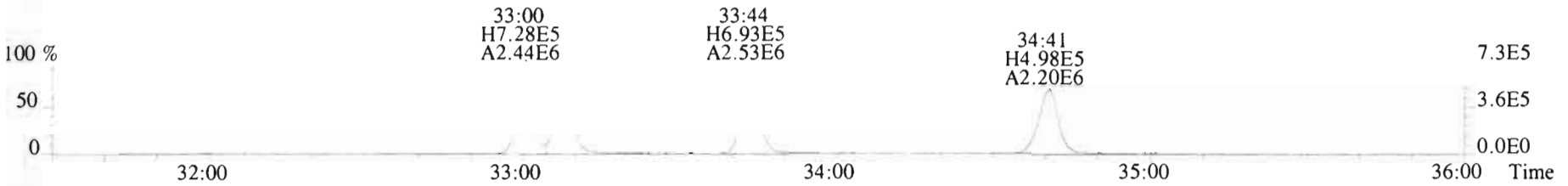
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



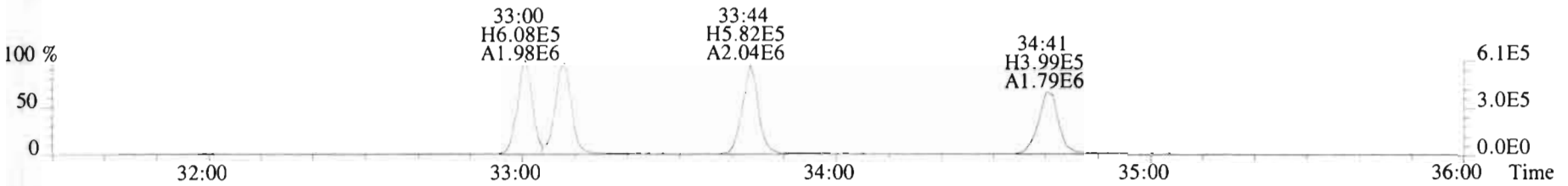
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



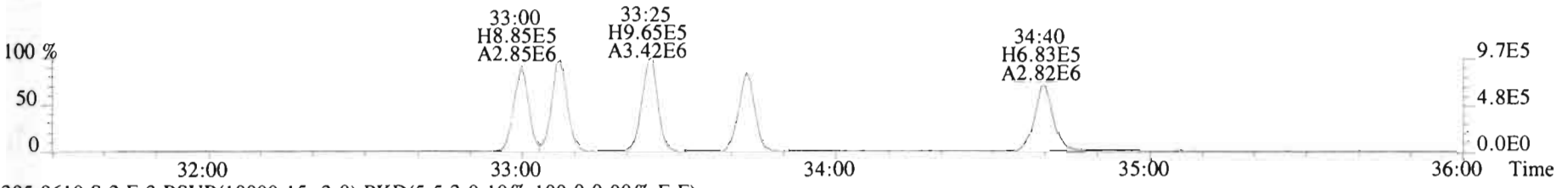
File:200109D2 #1-384 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



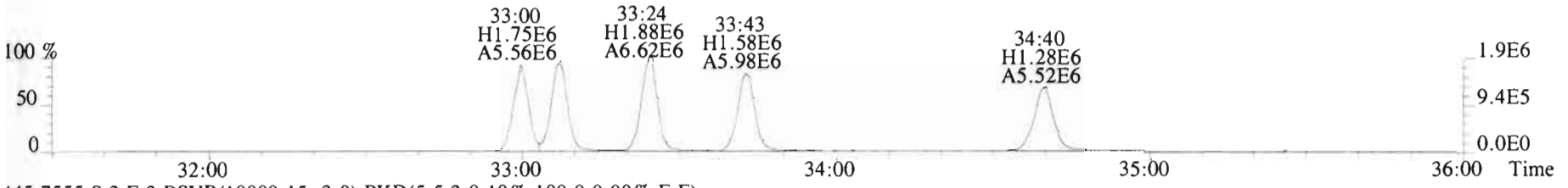
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



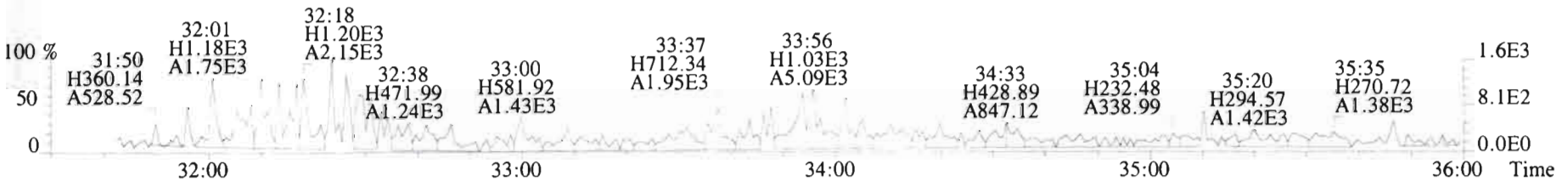
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



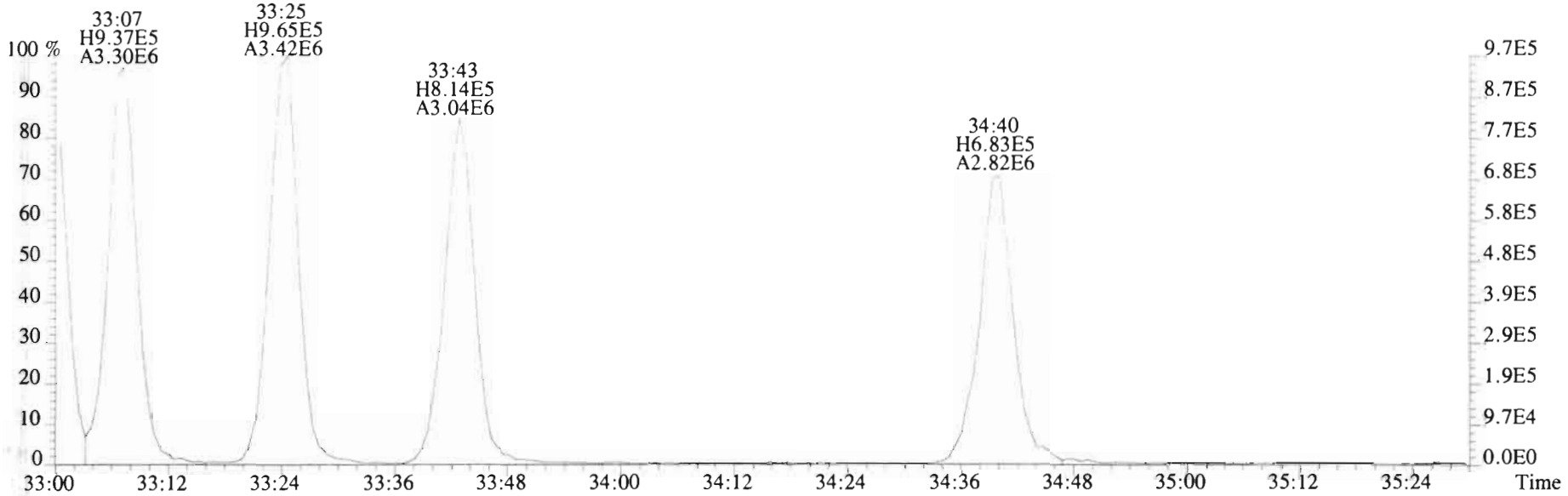
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



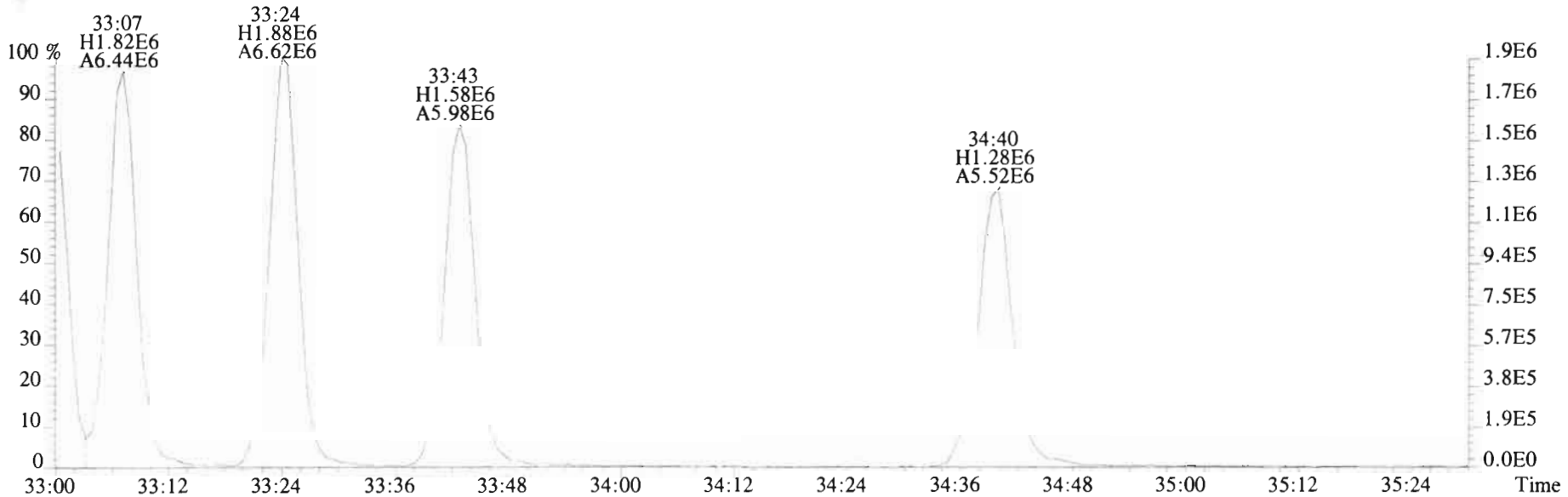
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



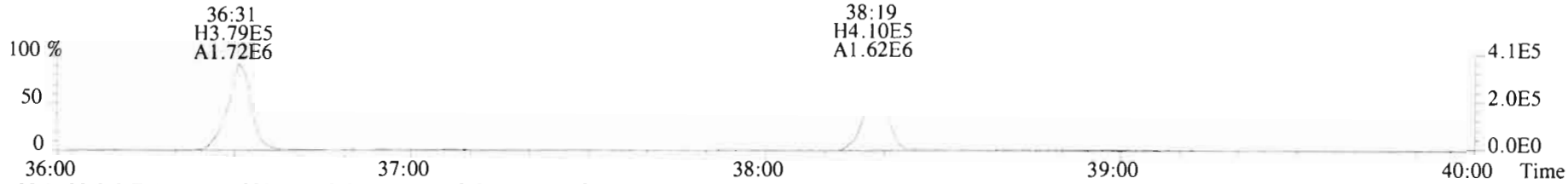
File:200109D2 #1-384 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaF
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



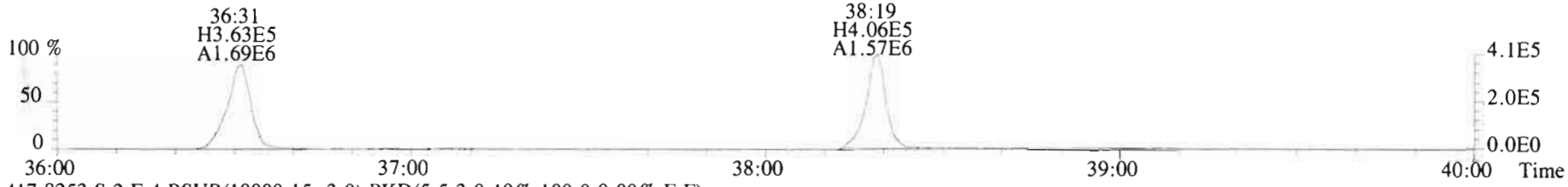
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



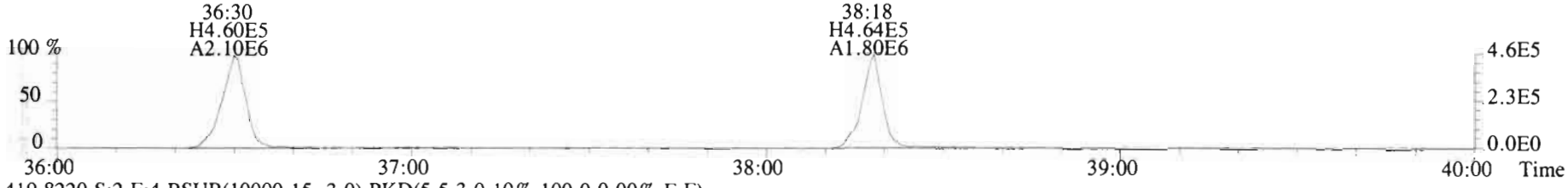
File:200109D2 #1-356 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text.Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



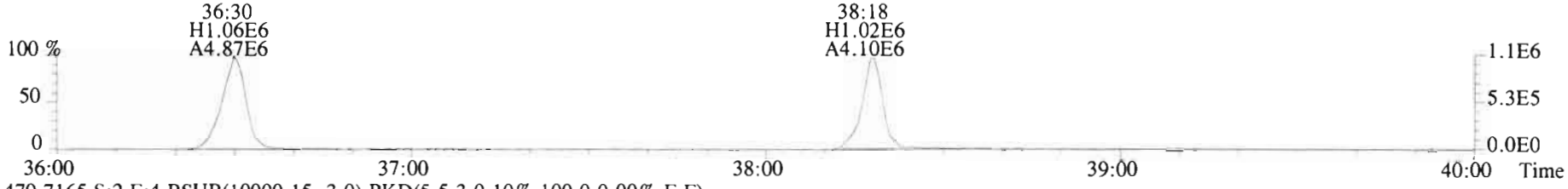
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



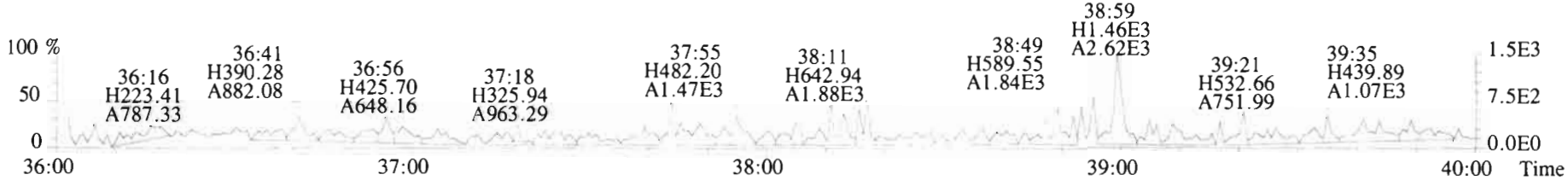
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



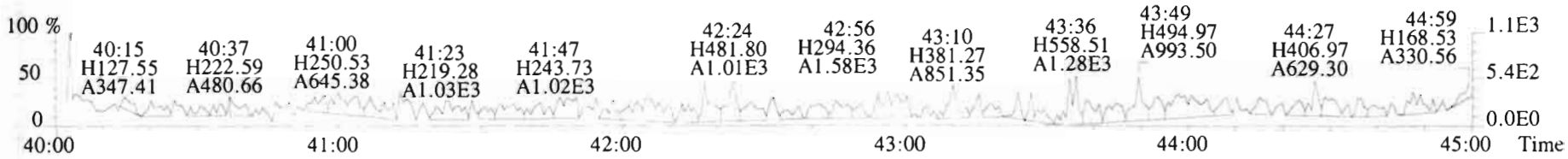
File:200109D2 #1-431 Acq: 9-JAN-2020 23:30:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:B9L0200-BS1 OPR 10 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_8.qld
Last Altered: Friday, December 27, 2019 14:24:38 Pacific Standard Time
Printed: Friday, December 27, 2019 14:27:07 Pacific Standard Time

EL 12/27/19

CT 12/27/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:03:10

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		1.09e5	10.1144	0.905			1.001		26.08					0.262
2	2	1,2,3,7,8-PeCDD		9.07e4	10.1144	0.903			1.001		30.60					0.313
3	3	1,2,3,4,7,8-HxCDD		9.07e4	10.1144	1.101			1.000		33.87					0.412
4	4	1,2,3,6,7,8-HxCDD	6.64e2	9.85e4	10.1144	0.939	1.286	NO	1.000	1.001	33.97	33.99	1.4199		1.42	0.452
5	5	1,2,3,7,8,9-HxCDD	3.26e2	9.80e4	10.1144	0.961	1.271	NO	1.001	1.001	34.30	34.29	0.68392		0.684	0.449
6	6	1,2,3,4,6,7,8-HpCDD	4.06e4	8.55e4	10.1144	0.979	1.054	NO	1.000	1.000	37.75	37.75	95.981		96.0	0.901
7	7	OCDD	2.03e5	1.36e5	10.1144	0.959	0.882	NO	1.000	1.000	40.99	41.00	618.26		618	0.683
8	8	2,3,7,8-TCDF	2.18e3	1.59e5	10.1144	0.950	0.661	NO	1.001	1.001	25.28	25.29	2.8521		2.85	0.274
9	9	1,2,3,7,8-PeCDF	2.77e3	1.41e5	10.1144	0.960	1.513	NO	1.001	1.001	29.41	29.40	4.0308		4.03	0.238
10	10	2,3,4,7,8-PeCDF	2.49e3	1.33e5	10.1144	1.015	1.491	NO	1.001	1.001	30.32	30.31	3.6487		3.65	0.229
11	11	1,2,3,4,7,8-HxCDF	2.91e3	1.14e5	10.1144	1.177	1.210	NO	1.000	1.001	32.98	33.00	4.2839		4.28	0.267
12	12	1,2,3,6,7,8-HxCDF	7.01e2	1.23e5	10.1144	1.069	1.323	NO	1.000	1.000	33.12	33.11	1.0556		1.06	0.285
13	13	2,3,4,6,7,8-HxCDF	5.03e2	1.16e5	10.1144	1.114	1.675	YES	1.001	1.001	33.73	33.72	0.77106		0.646	0.300
14	14	1,2,3,7,8,9-HxCDF		1.08e5	10.1144	1.062			1.000		34.65					0.375
15	15	1,2,3,4,6,7,8-HpCDF	3.51e3	9.14e4	10.1144	1.128	0.978	NO	1.001	1.000	36.52	36.49	6.7382		6.74	0.336
16	16	1,2,3,4,7,8,9-HpCDF	5.51e2	7.83e4	10.1144	1.280	0.913	NO	1.000	1.000	38.28	38.29	1.0880		1.09	0.294
17	17	OCDF	9.95e3	1.67e5	10.1144	0.947	0.847	NO	1.000	1.000	41.21	41.22	24.939		24.9	0.314
18	18	13C-2,3,7,8-TCDD	1.09e5	1.50e5	10.1144	1.095	0.785	NO	1.021	1.023	26.01	26.05	131.34	66.4		0.473
19	19	13C-1,2,3,7,8-PeCDD	9.07e4	1.50e5	10.1144	0.881	0.619	NO	1.187	1.200	30.23	30.58	135.83	68.7		0.319
20	20	13C-1,2,3,4,7,8-Hx...	9.07e4	1.90e5	10.1144	0.642	1.275	NO	1.014	1.014	33.86	33.86	147.22	74.5		0.519
21	21	13C-1,2,3,6,7,8-Hx...	9.85e4	1.90e5	10.1144	0.856	1.260	NO	1.017	1.017	33.97	33.97	120.04	60.7		0.389
22	22	13C-1,2,3,7,8,9-Hx...	9.80e4	1.90e5	10.1144	0.807	1.232	NO	1.026	1.026	34.27	34.27	126.65	64.0		0.413
23	23	13C-1,2,3,4,6,7,8-H...	8.55e4	1.90e5	10.1144	0.654	1.067	NO	1.126	1.130	37.61	37.74	136.31	68.9		0.746
24	24	13C-OCDD	1.36e5	1.90e5	10.1144	0.580	0.906	NO	1.226	1.227	40.94	40.99	243.91	61.7		0.384
25	25	13C-2,3,7,8-TCDF	1.59e5	2.36e5	10.1144	1.035	0.799	NO	0.992	0.991	25.26	25.26	128.89	65.2		0.430
26	26	13C-1,2,3,7,8-PeCDF	1.41e5	2.36e5	10.1144	0.854	1.609	NO	1.154	1.154	29.39	29.39	138.57	70.1		0.532
27	27	13C-2,3,4,7,8-PeCDF	1.33e5	2.36e5	10.1144	0.847	1.651	NO	1.189	1.189	30.29	30.29	131.20	66.4		0.537
28	28	13C-1,2,3,4,7,8-Hx...	1.14e5	1.90e5	10.1144	0.832	0.543	NO	0.987	0.988	32.97	32.98	142.86	72.2		0.839
29	29	13C-1,2,3,6,7,8-Hx...	1.23e5	1.90e5	10.1144	1.034	0.531	NO	0.991	0.992	33.09	33.11	123.90	62.7		0.675
30	30	13C-2,3,4,6,7,8-Hx...	1.16e5	1.90e5	10.1144	0.953	0.501	NO	1.009	1.009	33.70	33.70	126.74	64.1		0.732
31	31	13C-1,2,3,7,8,9-Hx...	1.08e5	1.90e5	10.1144	0.828	0.494	NO	1.039	1.038	34.69	34.65	136.22	68.9		0.843

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_8.qld
Last Altered: Friday, December 27, 2019 14:24:38 Pacific Standard Time
Printed: Friday, December 27, 2019 14:27:07 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H. .	9.14e4	1.90e5	10.1144	0.757	0.436	NO	1.093	1.092	36.49	36.48	125.80	63.6		0.569
33	33	13C-1,2,3,4,7,8,9-H.	7.83e4	1.90e5	10.1144	0.581	0.424	NO	1.143	1.146	38.17	38.28	140.46	71.0		0.742
34	34	13C-OCDF	1.67e5	1.90e5	10.1144	0.689	0.852	NO	1.233	1.234	41.18	41.21	251.97	63.7		0.401
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1 50e5	10.1144	1.198			1.022	1.023	26 03	26.06	67.923	85.9		0.159
36	36	13C-1,2,3,4-TCDD	1.50e5	1.50e5	10.1144	1.000	0.797	NO	1.000	1.000	25.50	25.47	197.74	100.0		0.518
37	37	13C-1,2,3,4-TCDF	2.36e5	2.36e5	10.1144	1.000	0.799	NO	1.000	1.000	24.06	24.04	197.74	100.0		0.445
38	38	13C-1,2,3,4,6,9-Hx...	1.90e5	1 90e5	10.1144	1.000	0.517	NO	1.000	1 000	33.42	33.39	197.74	100.0		0.698
39	39	Total Tetra-Dioxins		1 09e5	10.1144	0.901			0.000		25.50					0 128
40	40	Total Penta-Dioxins		9.07e4	10.1144	0.872			0.000		30.00		0.80703		1.09	0.324
41	41	Total Hexa-Dioxins		0.00e0	10.1144	0.976			0.000		33.80		21.846		22.7	0.447
42	42	Total Hepta-Dioxins		8.55e4	10.1144	0.989			0.000		37.75		220.48		220	0.893
43	43	Total Tetra-Furans		1.59e5	10.1144	0.943			0.000		24.00		5.7489		6.33	0.276
44	44	1st Func. Penta-Fur...		0.00e0	10.1144	0.940			0.000		27.63		3.4466		3.45	0.101
45	45	Total Penta-Furans		0.00e0	10.1144	0.940			0.000		30.00		14.082		15.0	0.245
46	46	Total Hexa-Furans		0.00e0	10.1144	1.078			0.000		33.00		12.964		13.6	0.312
47	47	Total Hepta-Furans		0.00e0	10.1144	1.135			0.000		37.75		23.958		24.0	0.333

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_8.qld
Last Altered: Friday, December 27, 2019 14:24:38 Pacific Standard Time
Printed: Friday, December 27, 2019 14:27:07 Pacific Standard Time

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:03:10

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	40	Total Penta-Dioxins	NO	28.54	133.685	34667.863	7.119	MM	0.8070	0.81
2	40	Total Penta-Dioxins	YES	28.97	59.433	34667.863	0.000	MM	0.0000	0.29

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	41	Total Hexa-Dioxins	NO	32.36	2457.522	53274.937	93.058	MM	9.4278	9.43
2	41	Total Hexa-Dioxins	NO	32.92	383.988	53274.937	14.026	MM	1.4210	1.42
3	41	Total Hexa-Dioxins	NO	33.18	2388.632	53274.937	87.780	bd	8.8931	8.89
4	41	Total Hexa-Dioxins	YES	33.30	153.217	53274.937	0.000	MM	0.0000	0.59
5	4	1,2,3,6,7,8-HxCDD	NO	33.99	373.424	54921.496	13.479	MM	1.4199	1.42
6	5	1,2,3,7,8,9-HxCDD	NO	34.29	182.355	54082.656	6.650	MM	0.6839	0.68
7	41	Total Hexa-Dioxins	YES	34.01	68.880	53274.937	0.000	MM	0.0000	0.26

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	42	Total Hepta-Dioxins	NO	36.90	27204.314	44136.234	1245.030	MM	124.5019	124.50
2	6	1,2,3,4,6,7,8-HpCDD	NO	37.75	20859.959	44136.234	950.789	MM	95.9808	95.98

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_8.qld
Last Altered: Friday, December 27, 2019 14:24:38 Pacific Standard Time
Printed: Friday, December 27, 2019 14:27:07 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	43	Total Tetra-Furans	NO	21.05	44.490	70792.305	1.315	MM	0.1379	0.14
2	43	Total Tetra-Furans	NO	21.68	203.458	70792.305	5.448	MM	0.5713	0.57
3	43	Total Tetra-Furans	YES	22.58	191.510	70792.305	0.000	bd	0.0000	0.58
4	43	Total Tetra-Furans	NO	24.46	722.025	70792.305	20.860	MM	2.1876	2.19
5	8	2,3,7,8-TCDF	NO	25.29	869.407	70792.305	27.408	MM	2.8521	2.85

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44	1st Func. Penta-Furans	NO	27.06	1394.908	84988.402	32.755	bb	3.4466	3.45

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	45	Total Penta-Furans	YES	28.38	119.303	84988.402	0.000	bd	0.0000	0.30
2	45	Total Penta-Furans	NO	28.50	1395.799	84988.402	33.255	MM	3.4992	3.50
3	45	Total Penta-Furans	YES	29.03	283.506	84988.402	0.000	MM	0.0000	0.57
4	45	Total Penta-Furans	NO	29.23	311.791	84988.402	7.360	MM	0.7745	0.77
5	9	1,2,3,7,8-PeCDF	NO	29.40	1667.332	87241.828	39.155	MM	4.0308	4.03
6	45	Total Penta-Furans	NO	29.65	840.545	84988.402	20.235	MM	2.1292	2.13
7	10	2,3,4,7,8-PeCDF	NO	30.31	1489.121	82734.977	37.451	MM	3.6487	3.65

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	46	Total Hexa-Furans	NO	31.84	224.321	39293.313	6.791	MM	0.6230	0.62
2	46	Total Hexa-Furans	NO	31.99	1156.786	39293.313	36.281	MM	3.3287	3.33
3	46	Total Hexa-Furans	NO	32.53	1270.782	39293.313	40.031	MM	3.6729	3.67
4	11	1,2,3,4,7,8-HxCDF	NO	33.00	1590.950	40110.730	50.990	dd	4.2839	4.28
5	12	1,2,3,6,7,8-HxCDF	NO	33.11	399.464	42645.398	11.413	db	1.0556	1.06
6	13	2,3,4,6,7,8-HxCDF	YES	33.72	315.102	38666.574	0.000	MM	0.0000	0.65

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_8.qld
Last Altered: Friday, December 27, 2019 14:24:38 Pacific Standard Time
Printed: Friday, December 27, 2019 14:27:07 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Hepta-Furans

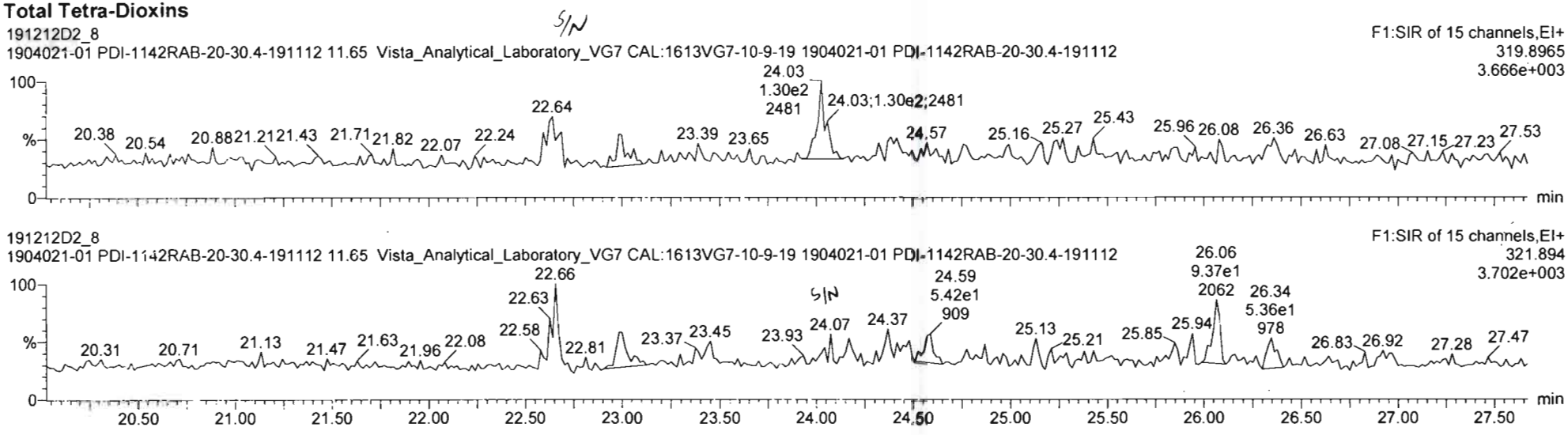
	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	15	1,2,3,4,6,7,8-HpCDF	NO	36.49	1736.178	27758.938	76.849	bb	6.7382	6.74
2	47	Total Hepta-Furans	NO	37.09	3935.635	25531.732	185.141	MM	16.1318	16.13
3	16	1,2,3,4,7,8,9-HpCDF	NO	38.29	263.244	23304.527	14.085	MM	1.0880	1.09

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

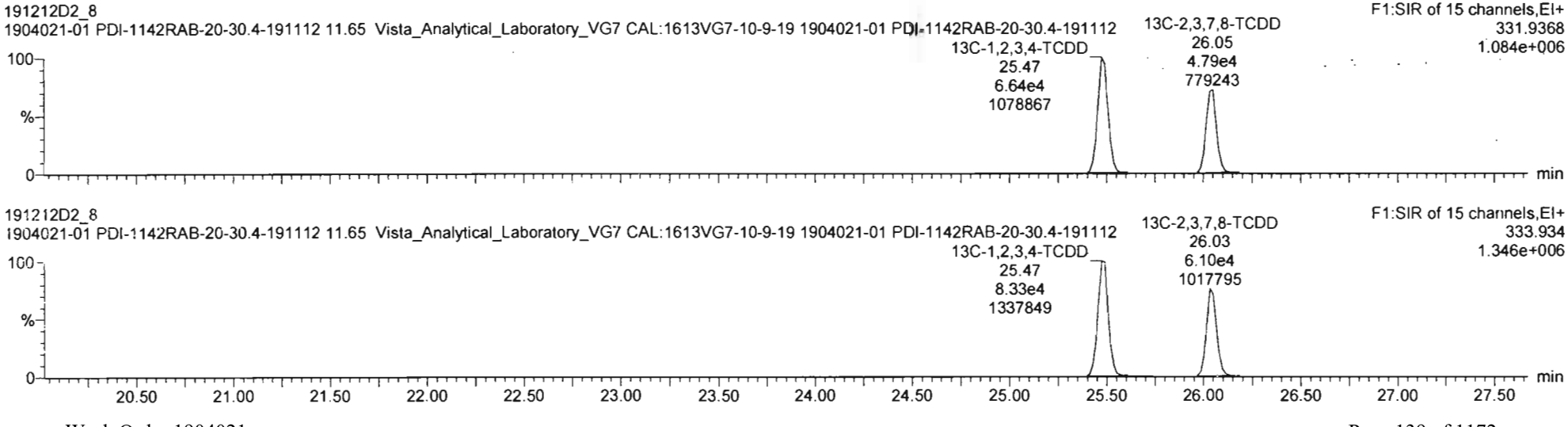
Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 09:53:12

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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



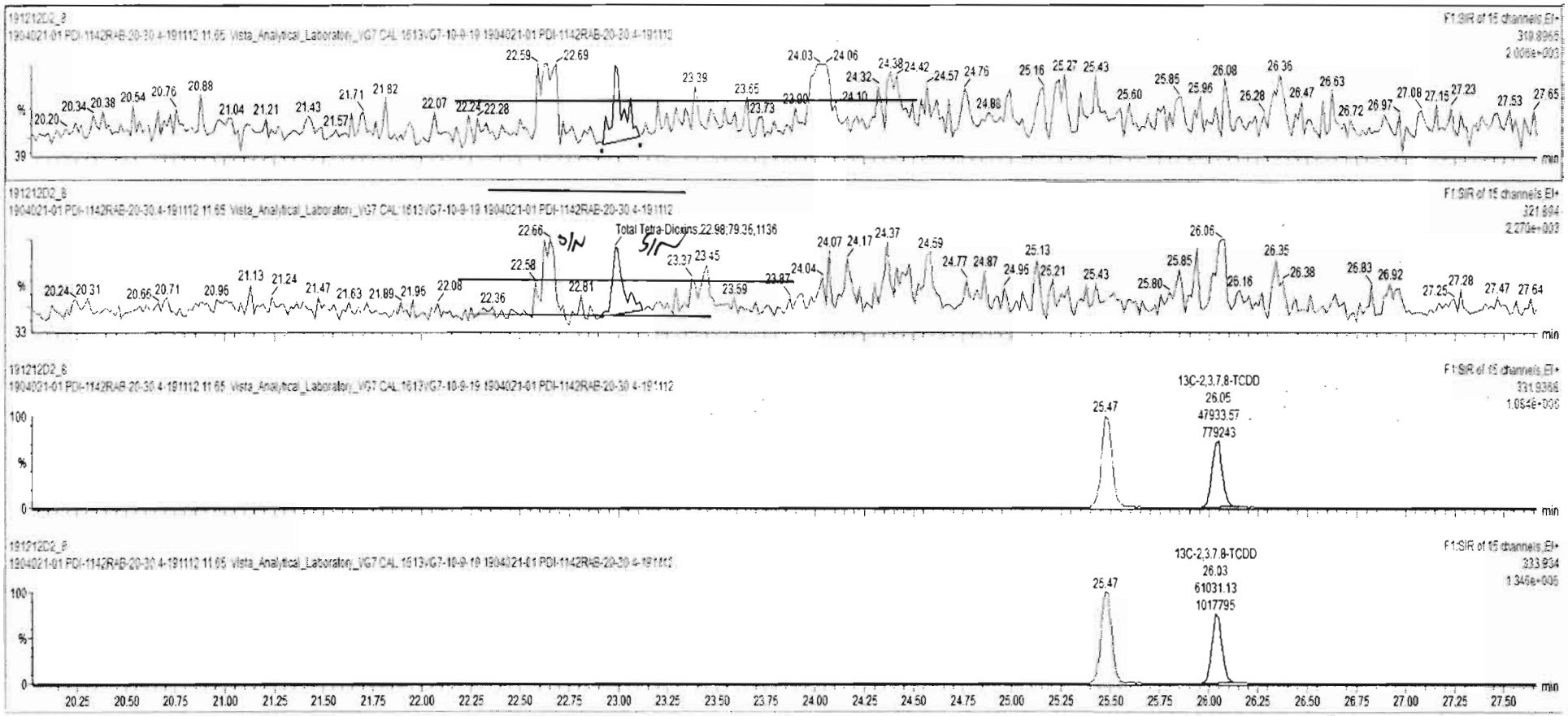
TargetLynx XS - 191212D2_8 - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30 4-191112 11 65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
39	39	Total Tetra-Dioxins		1.09e5				0.901	10.114	25.50			0.000	NO	0.2989		0.264	0.2990
40	40	Total Penta-Dioxins		9.07e4				0.872	10.114	30.00			0.000	NO	0.0000		0.139	2.628
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.114	33.80			0.000	NO	21.40		0.447	24.19
42	42	Total Hepta-Dioxins		8.55e4				0.989	10.114	37.75			0.000	NO	218.1		0.893	218.4
43	43	Total Tetra-Furans		1.59e5				0.943	10.114	24.00			0.000	NO	3.477		0.276	7.254

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	39	Total Tetra-Dioxins	25.50	22.98	6.902e1	7.936e1	0.770	0.87	NO	0.26900	0.26888



Custom Reporting: Select reports to generate

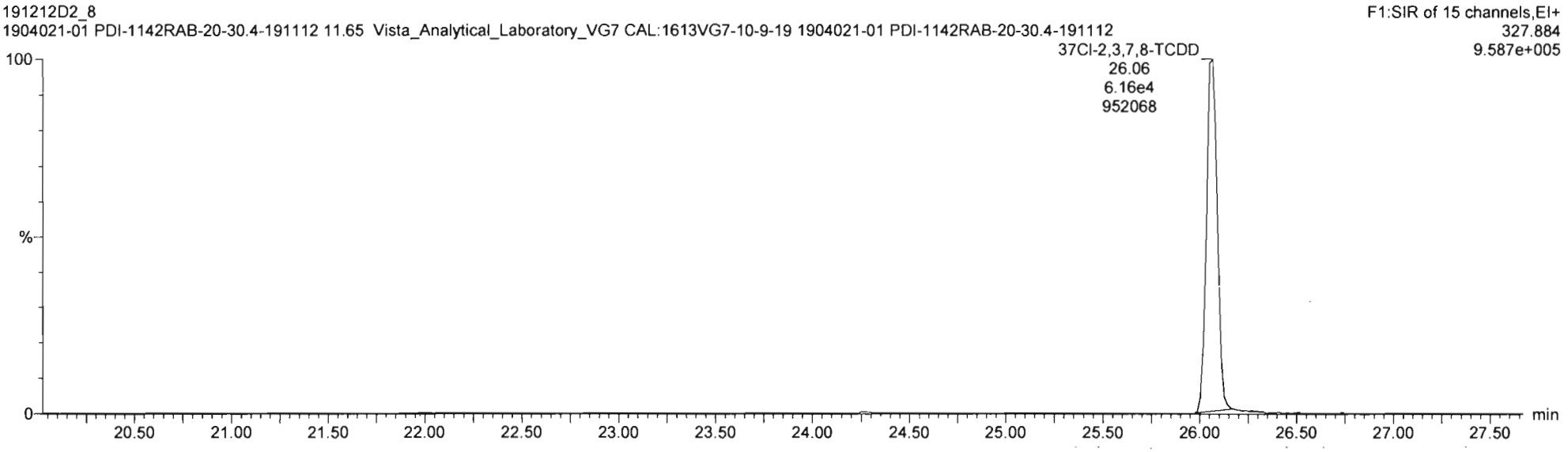
191212D2_8

CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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



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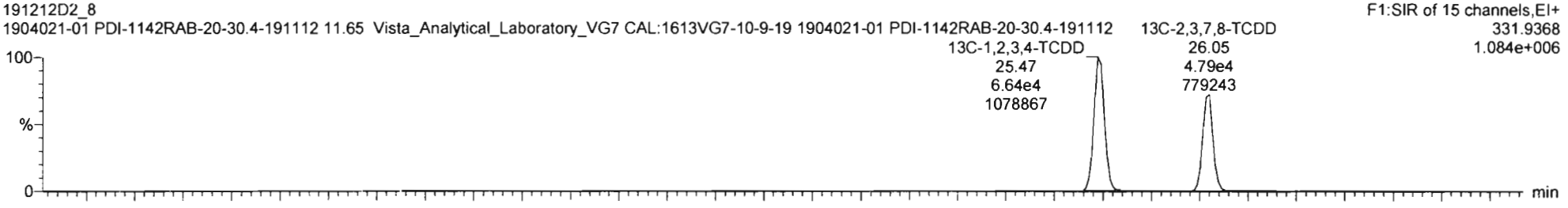

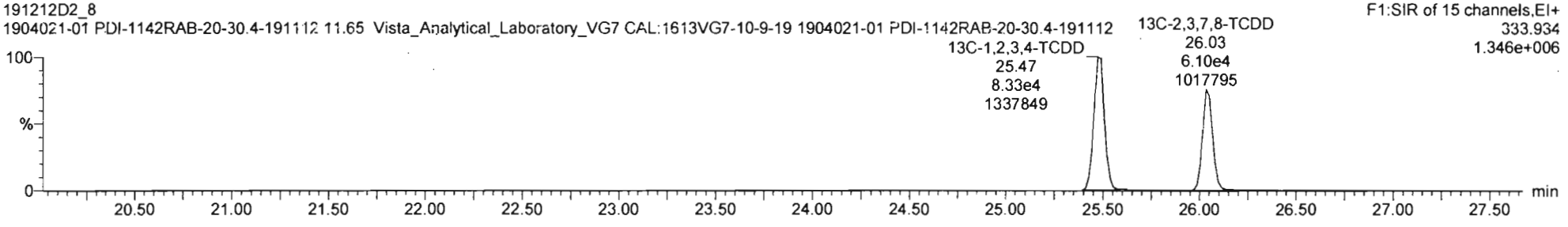

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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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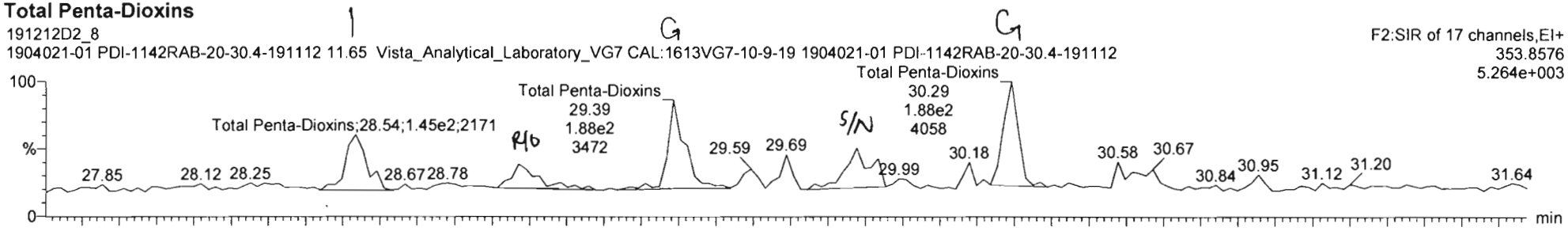
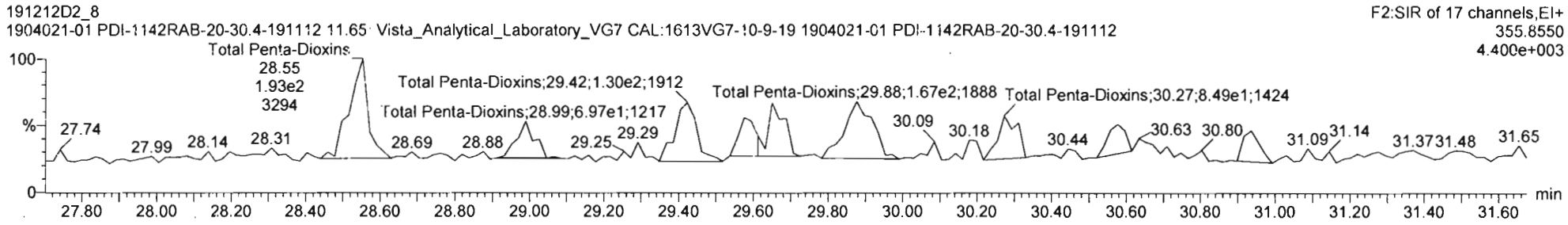
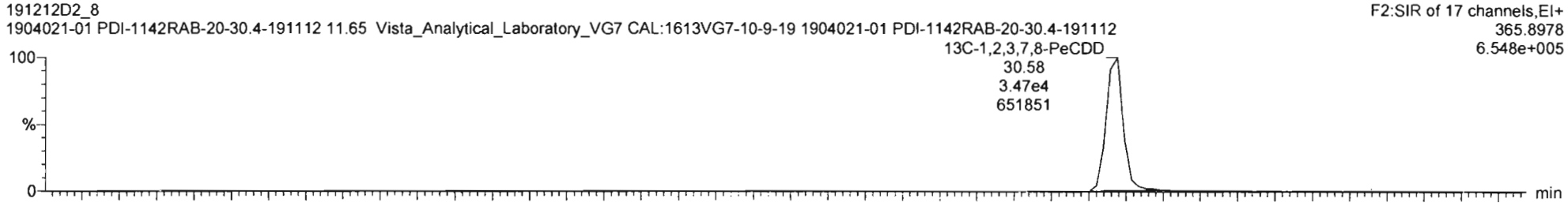
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

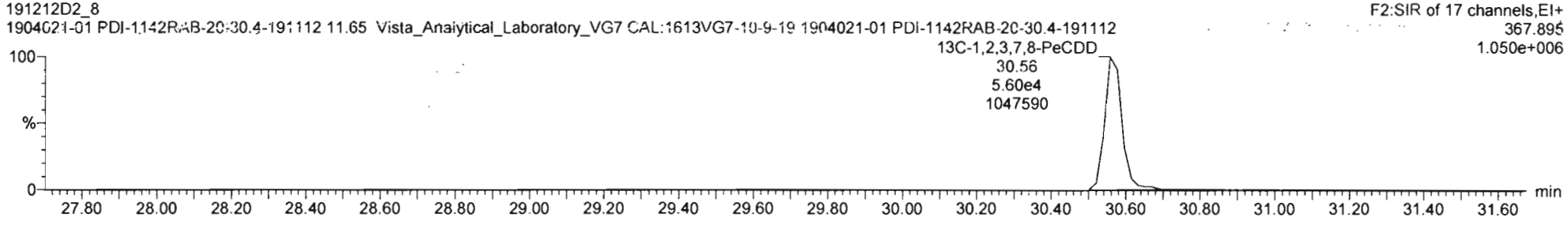
Total Penta-Dioxins





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





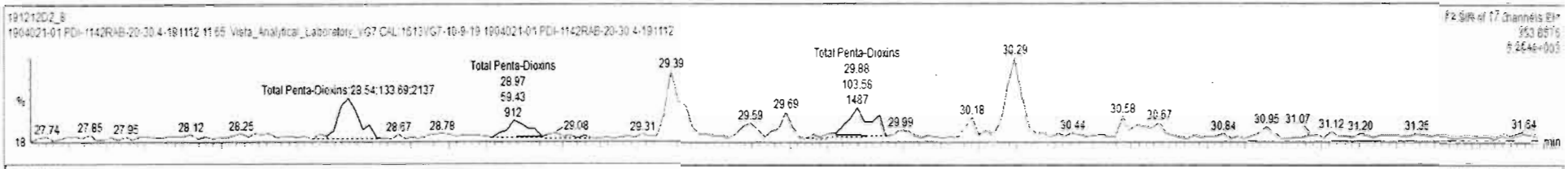
TargetLynx XS - 191212D2_8 * - [Chromatogram]

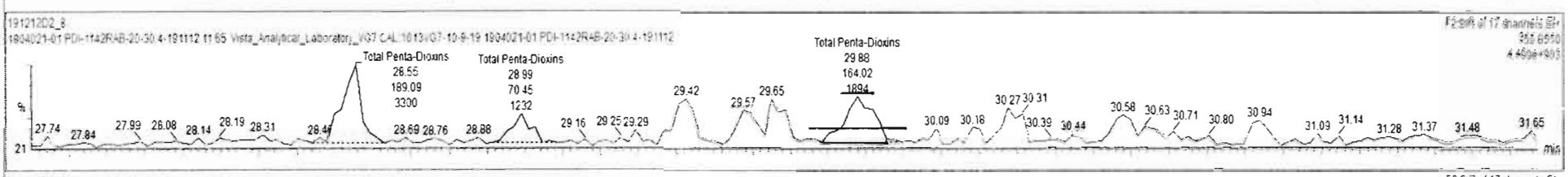
File Edit View Display Processing Window Help

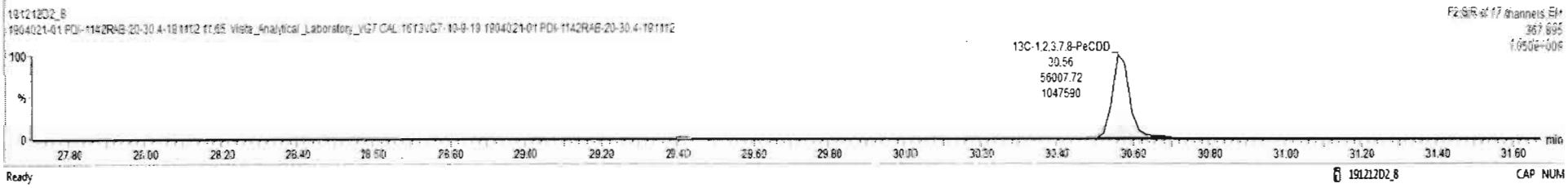
191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
39	39	Total Tetra-Dioxins		1.09e5				0.901	10.114	25.50			0.000	NO			0.128	
40	40	Total Penta-Dioxins		9.07e4				0.872	10.114	30.00			0.000	NO	1.476		0.324	1.763
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.114	33.80			0.000	NO	21.40		0.447	24.19
42	42	Total Hepta-Dioxins		8.55e4				0.989	10.114	37.75			0.000	NO	218.1		0.093	218.4
43	43	Total Tetra-Furans		1.59e5				0.943	10.114	24.00			0.000	NO	3.477		0.276	7.254

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	40	Total Penta-Dioxins	30.00	28.54	1.237e2	1.691e2	0.630	0.71	NO	0.80793	0.80793
2	40	Total Penta-Dioxins	30.00	28.97	5.943e1	7.045e1	0.630	0.84	YES	0.28710	0.00000
3	40	Total Penta-Dioxins	30.00	29.88	1.036e2	1.640e2	0.630	0.63	NO	0.66908	0.66908







Ready

191212D2_8

CAP NUM

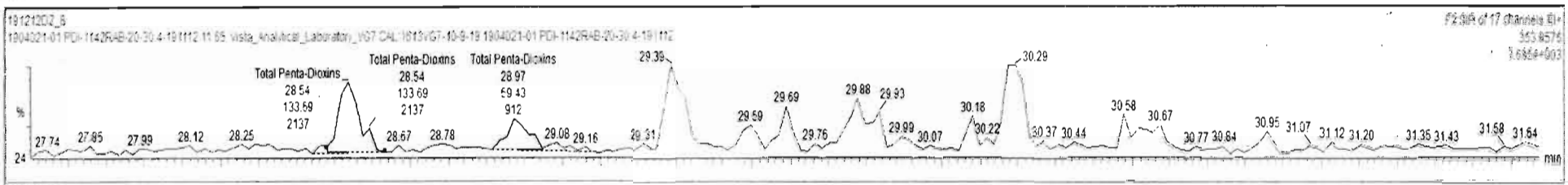
TargetLynx XS - 191212D2_8 * - [Chromatogram]

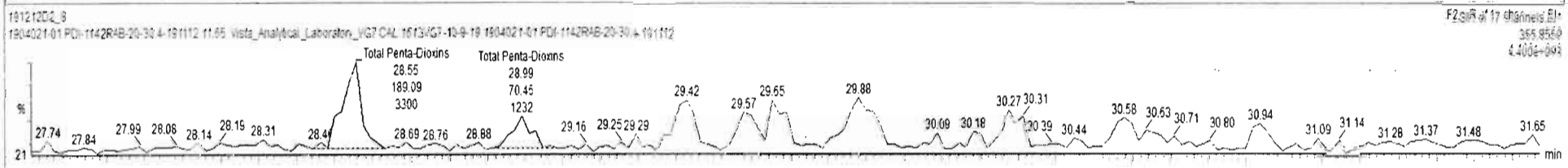
File Edit View Display Processing Window Help

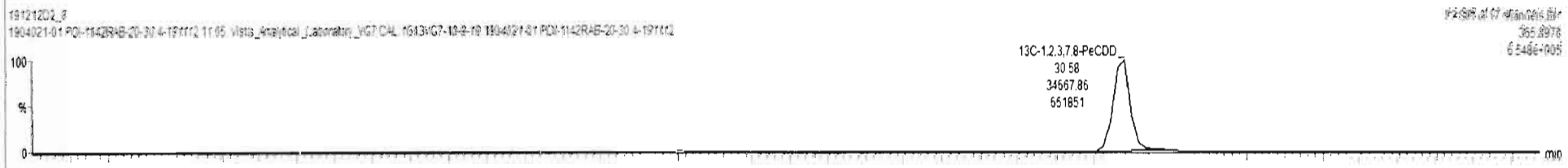
191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30 4-191112 11 65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

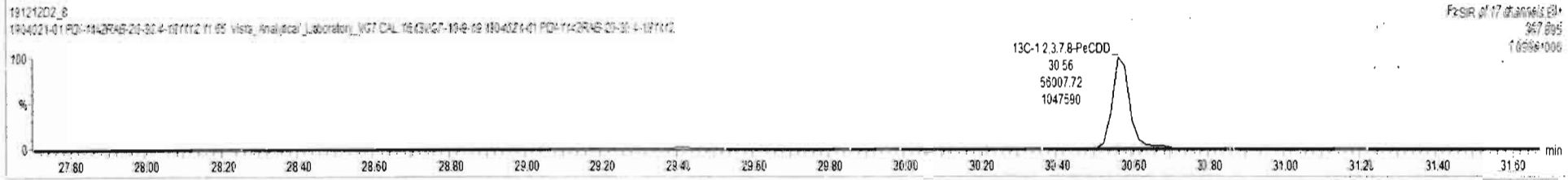
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
39	39	Total Tetra-Dioxins		1.09e5				0.901	10.114	25.50			0.000	NO			0.128	
40	40	Total Penta-Dioxins		9.07e4				0.872	10.114	30.00			0.000	NO	0.8070		0.324	1.094
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.114	33.80			0.000	NO	21.40		0.447	24.19
42	42	Total Hepta-Dioxins		8.55e4				0.989	10.114	37.75			0.000	NO	218.1		0.663	218.4
43	43	Total Tetra-Furans		1.59e5				0.943	10.114	24.00			0.000	NO	3.477		0.276	7.254

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	40	Total Penta-Dioxins	30.00	28.54	1.337e2	1.891e2	0.630	0.71	NO	0.80703	0.80703
2	40	Total Penta-Dioxins	30.00	28.97	5.943e1	7.045e1	0.630	0.84	YES	0.28710	0.00000









Custom Reporting: Select reports to generate

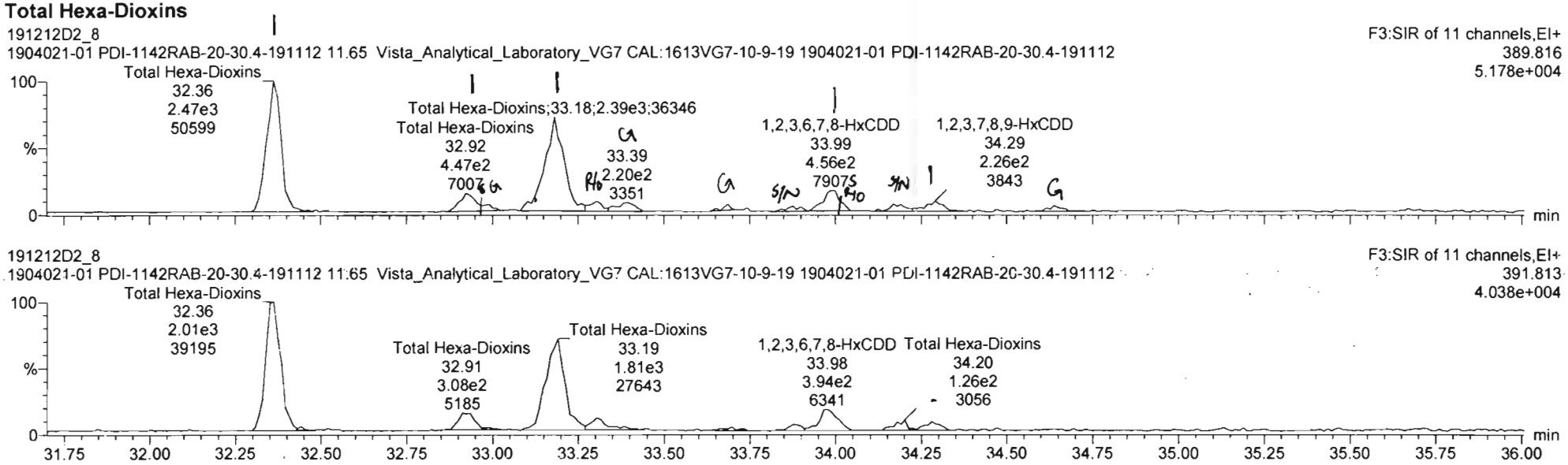
191212D2_8

CAP NUM

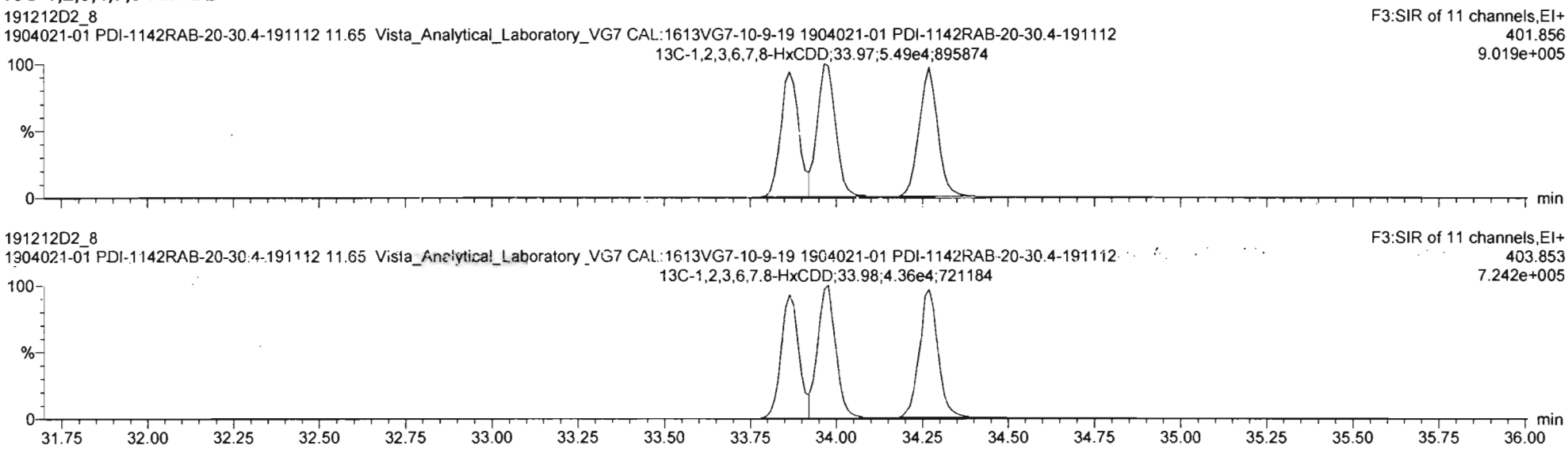
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Dioxins



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



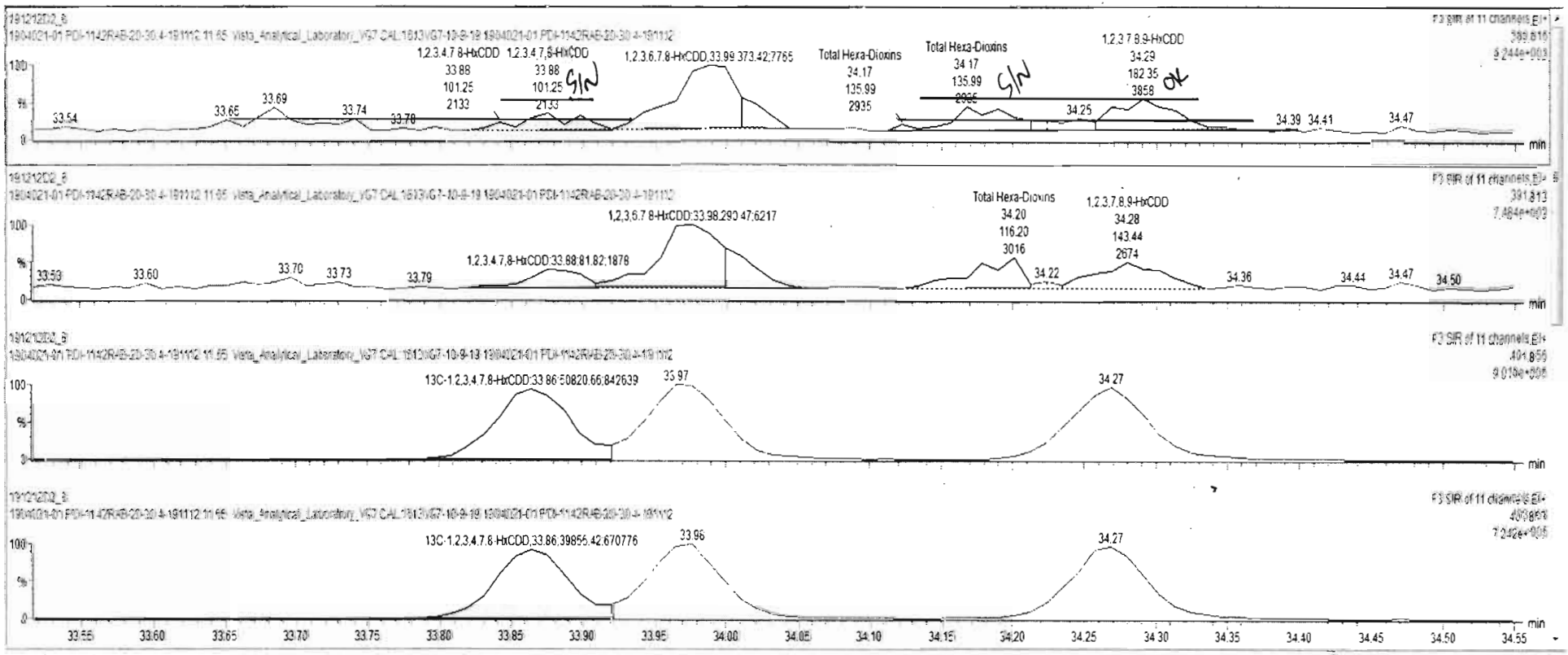
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30 4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	w/t/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
18	18	13C-2,3,7,8-TCDD	1.09e5	1.50e5	36	0.79	NO	1.095	10.114	26.01	26.05	1.023	1.021	NO	131.3	66.4	0.473	
19	19	13C-1,2,3,7,8-PeCDD	9.07e4	1.50e5	36	0.62	NO	0.881	10.114	30.23	30.58	1.200	1.187	NO	135.8	68.7	0.319	
20	20	13C-1,2,3,4,7,8-HxCDD	9.07e4	1.90e5	38	1.28	NO	0.642	10.114	33.86	33.66	1.014	1.014	NO	147.2	74.5	0.519	
21	21	13C-1,2,3,6,7,8-HxCDD	9.85e4	1.90e5	38	1.26	NO	0.856	10.114	33.97	33.97	1.017	1.017	NO	120.9	60.7	0.389	
22	22	13C-1,2,3,7,8,9-HxCDD	9.80e4	1.90e5	38	1.23	NO	0.807	10.114	34.27	34.27	1.026	1.026	NO	126.6	64.0	0.413	
23	23	13C-1,2,3,4,6,7,8-HpCDD	8.55e4	1.90e5	38	1.07	NO	0.654	10.114	37.61	37.74	1.139	1.126	NO	138.3	68.9	0.746	

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.36	2.458e3	1.996e3	1.240	1.23	NO	9.4278	9.4278
2	41	Total Hexa-Dioxins	33.80	32.92	3.840e2	2.673e2	1.240	1.34	NO	1.4210	1.4210
3	41	Total Hexa-Dioxins	33.80	33.18	2.389e3	1.813e3	1.240	1.32	NO	8.8931	8.8931
4	41	Total Hexa-Dioxins	33.80	33.30	1.532e2	1.569e2	1.240	0.98	YES	0.58567	0.00000
5	3	1,2,3,4,7,8-HxCDD	33.87	33.88	1.013e2	8.182e1	1.240	1.24	NO	0.36251	0.36251
6	4	1,2,3,6,7,8-HxCDD	33.97	33.99	3.734e2	2.905e2	1.240	1.29	NO	1.4199	1.4199
7	41	Total Hexa-Dioxins	33.80	34.01	6.868e1	9.248e1	1.240	0.74	YES	0.26338	0.00000
8	41	Total Hexa-Dioxins	33.80	34.17	1.360e2	1.162e2	1.240	1.17	NO	0.53381	0.53381
9	5	1,2,3,7,8,9-HxCDD	34.30	34.29	1.824e2	1.434e2	1.240	1.27	NO	0.68392	0.68392



Custom Reporting: Select reports to generate

191212D2_8 CAP NUM

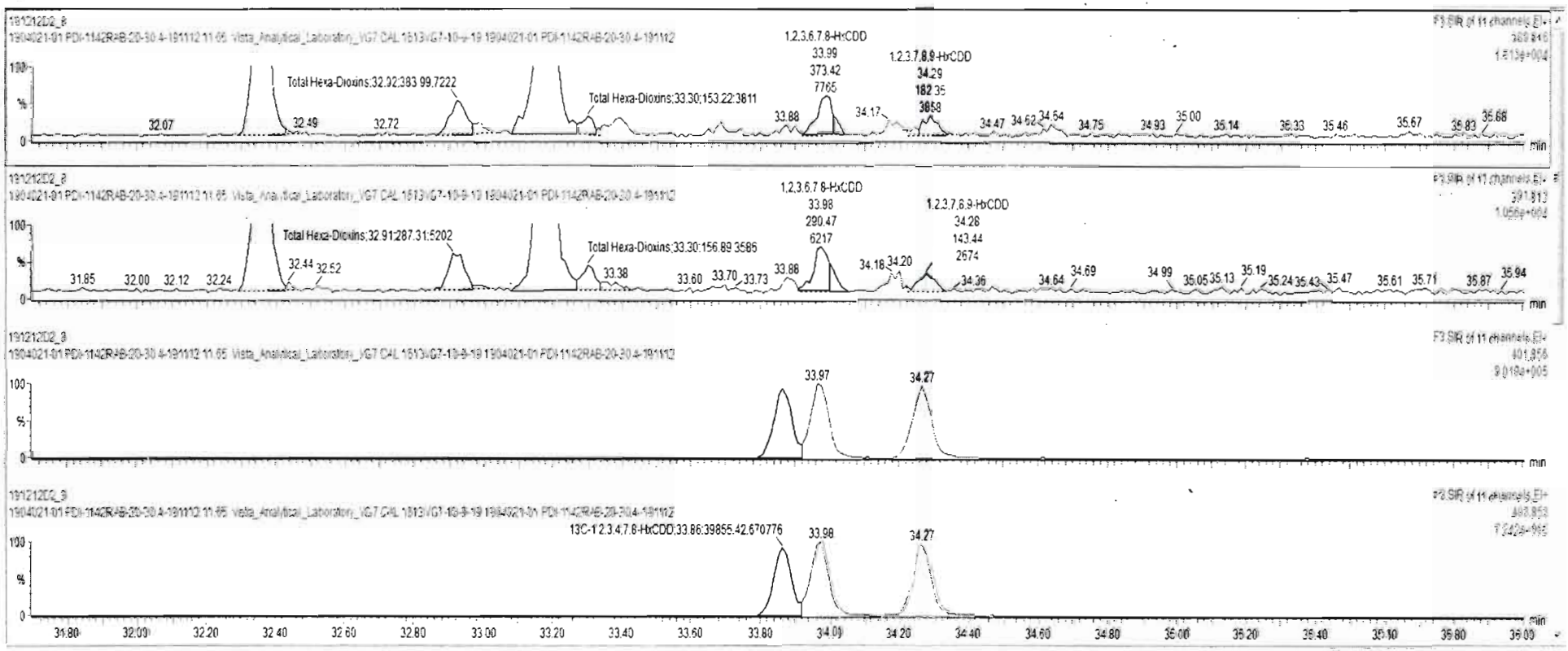
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 : 1904021-01 PDI-1142RAB-20-30.4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
18	18	13C-2,3,7,8-TCDD	1.09e5	1.50e5	36	0.79	NO	1.095	10.114	26.01	26.05	1.023	1.021	NO	131.3	66.4	0.473	
19	19	13C-1,2,3,7,8-PeCDD	9.07e4	1.50e5	36	0.62	NO	0.861	10.114	30.23	30.58	1.200	1.187	NO	135.8	68.7	0.319	
20	20	13C-1,2,3,4,7,8-HxCDD	9.07e4	1.50e5	38	1.28	NO	0.642	10.114	33.86	33.86	1.014	1.014	NO	147.2	74.5	0.519	
21	21	13C-1,2,3,6,7,8-HxCDD	9.85e4	1.90e5	38	1.26	NO	0.866	10.114	33.97	33.97	1.017	1.017	NO	120.6	60.7	0.339	
22	22	13C-1,2,3,7,8,9-HxCDD	9.80e4	1.90e5	38	1.23	NO	0.807	10.114	34.27	34.27	1.026	1.026	NO	126.6	64.0	0.413	
23	23	13C-1,2,3,4,6,7,8-HpCDD	8.55e4	1.90e5	38	1.07	NO	0.654	10.114	37.61	37.74	1.130	1.126	NO	138.3	68.9	0.745	

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.36	2.458e3	1.996e3	1.240	1.23	NO	9.4276	9.4276
2	41	Total Hexa-Dioxins	33.80	32.92	3.840e2	2.873e2	1.240	1.34	NO	1.4210	1.4210
3	41	Total Hexa-Dioxins	33.80	33.18	2.389e3	1.813e3	1.240	1.32	NO	8.8931	8.8931
4	41	Total Hexa-Dioxins	33.80	33.30	1.532e2	1.569e2	1.240	0.98	YES	0.56587	0.00000
5	4	1,2,3,6,7,8-HxCDD	32.97	33.99	3.734e2	2.905e2	1.240	1.29	NO	1.4199	1.4199
6	41	Total Hexa-Dioxins	33.80	34.01	6.888e1	9.248e1	1.240	0.74	YES	0.26308	0.00000
7	5	1,2,3,7,8,9-HxCDD	34.30	34.29	1.824e2	1.434e2	1.240	1.27	NO	0.68392	0.68392



Custom Reporting: Select reports to generate

191212D2_8 CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
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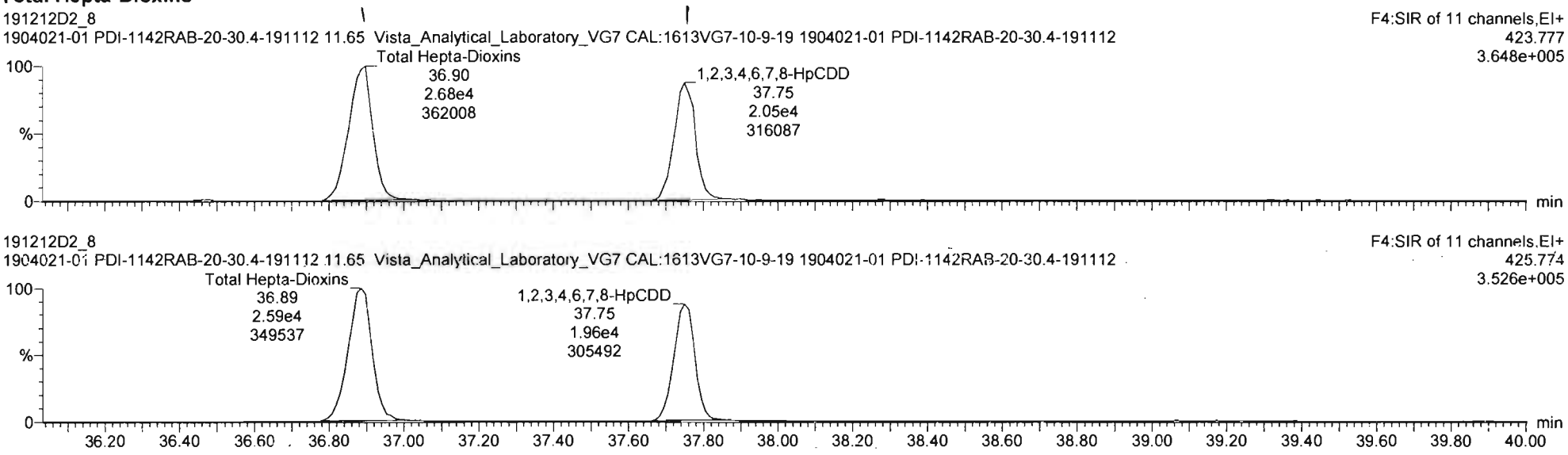
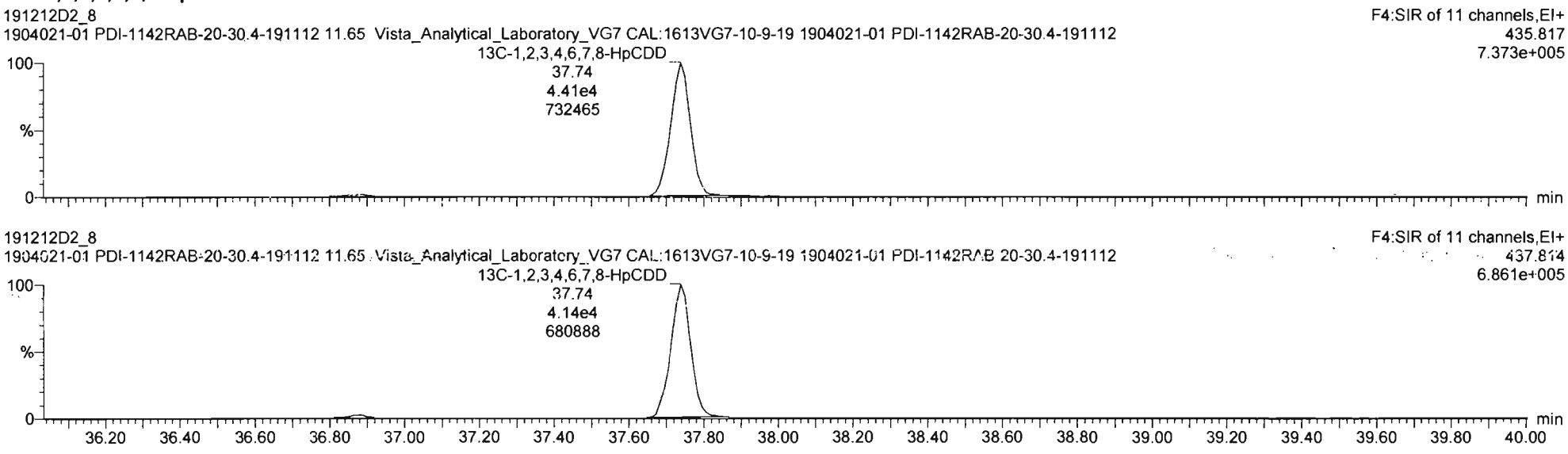
Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Dioxins



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



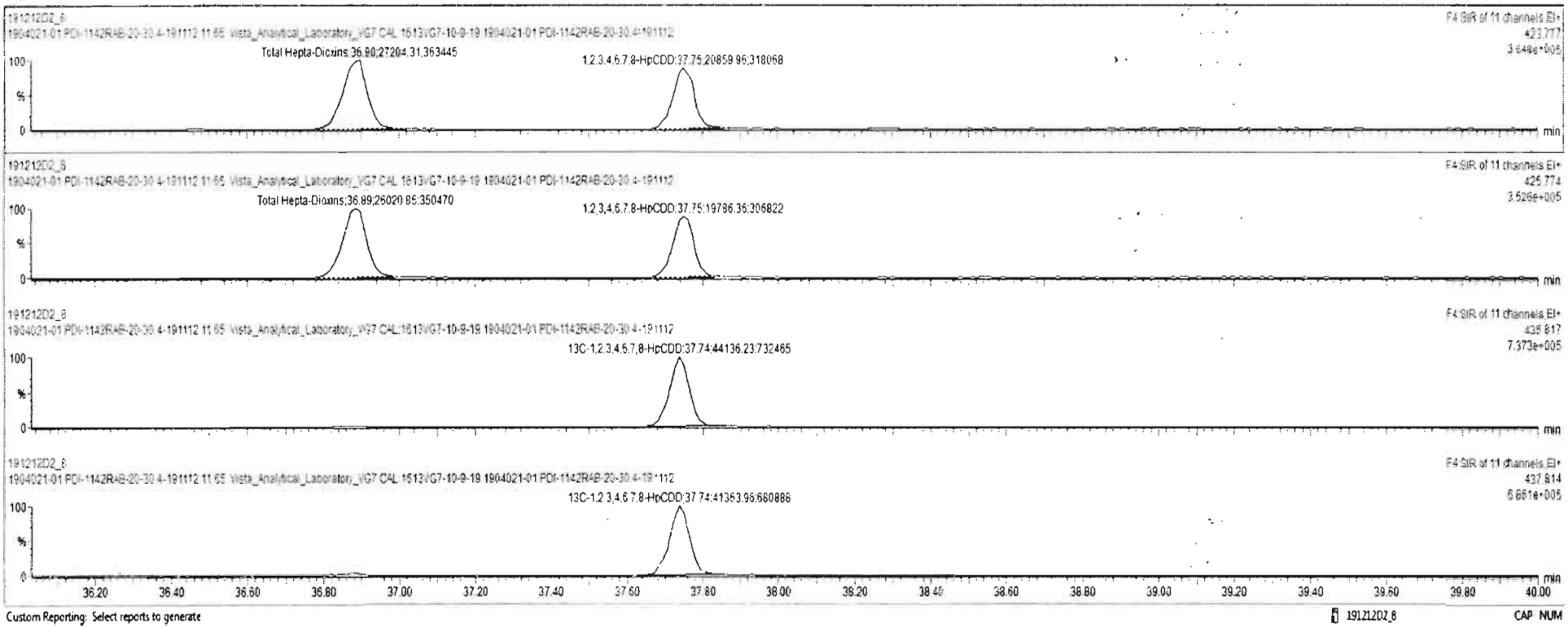
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30.4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
42	42	Total Hepta-Dioxins		8.55e4				0.989	10.114	37.75			0.000	NO	220.5		0.893	220.5
43	43	Total Tetra-Furans		1.59e5				0.943	10.114	24.00			0.000	NO	3.477		0.276	7.254
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.114	27.83			0.000	NO	3.447		0.101	3.447
45	45	Total Penta-Furans		0.00e0				0.940	10.114	30.00			0.000	NO	14.56		0.245	15.74
46	46	Total Hexa-Furans		0.00e0				1.078	10.114	33.00			0.000	NO	13.21		0.312	14.42
47	47	Total Hepta-Furans		0.00e0				1.135	10.114	37.75			0.000	NO	23.65		0.333	23.88

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	42	Total Hepta-Dioxins	37.75	36.90	2.720e4	2.602e4	1.040	1.05	NO	124.59	124.59
2	6	1,2,3,4,6,7,8-HpCDD	37.75	37.75	2.096e4	1.979e4	1.040	1.05	NO	95.981	95.981



Custom Reporting: Select reports to generate

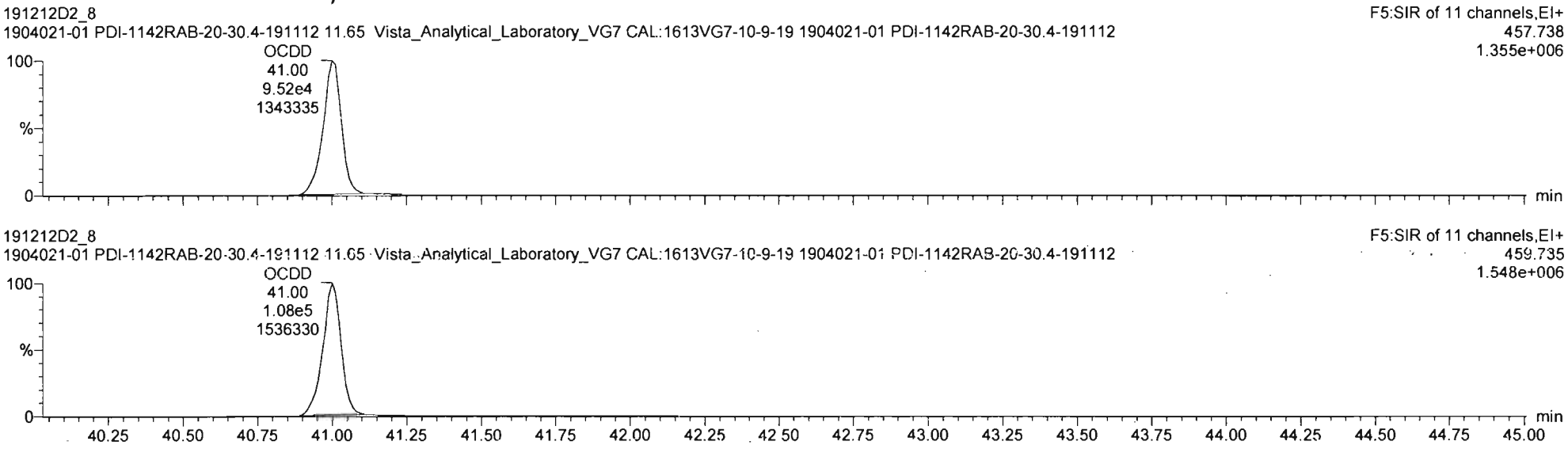
191212D2_8

CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDD



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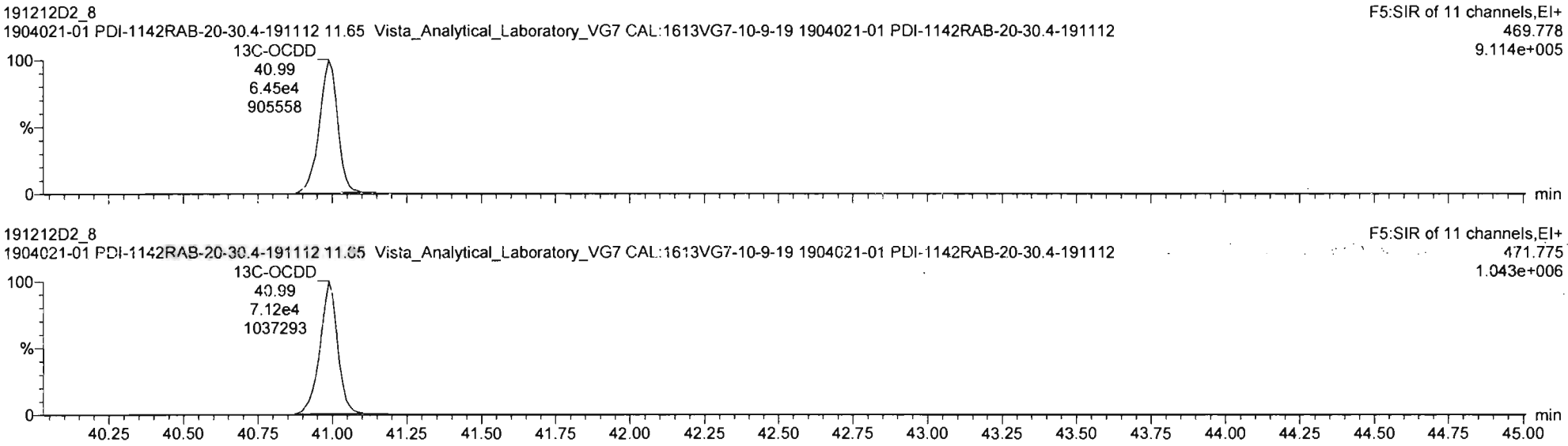

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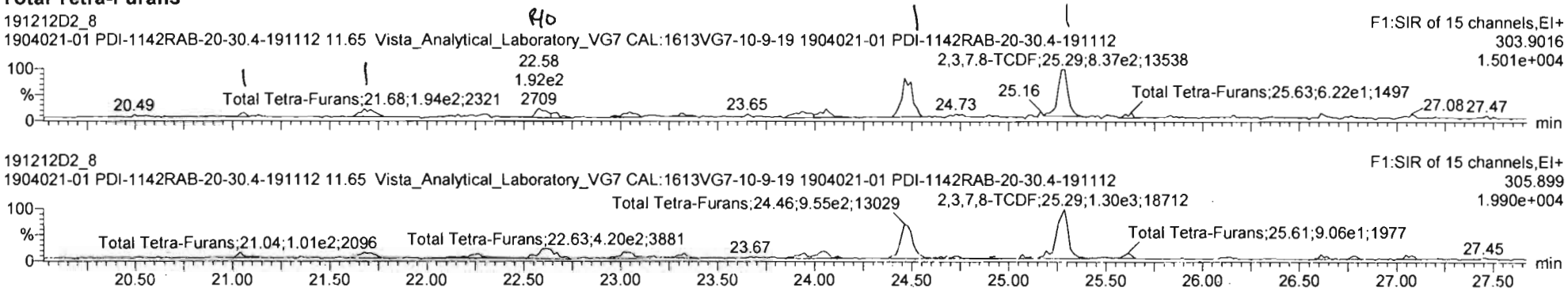
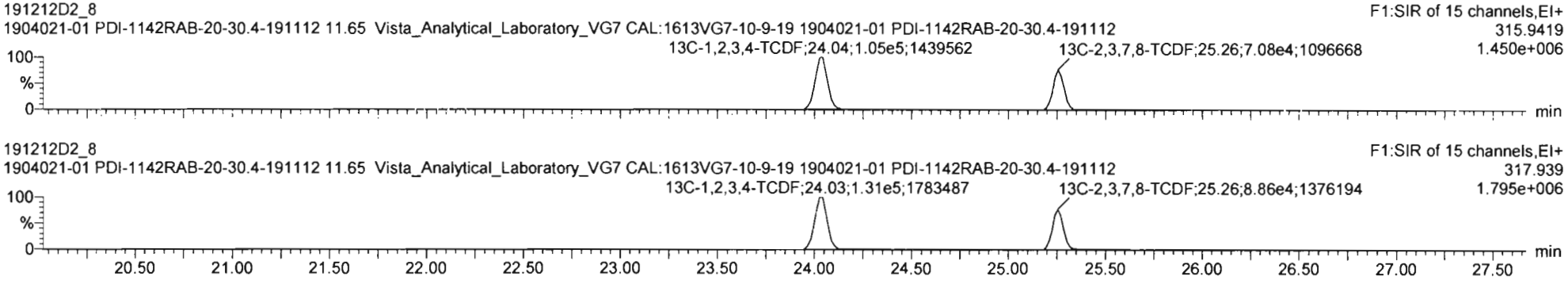
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

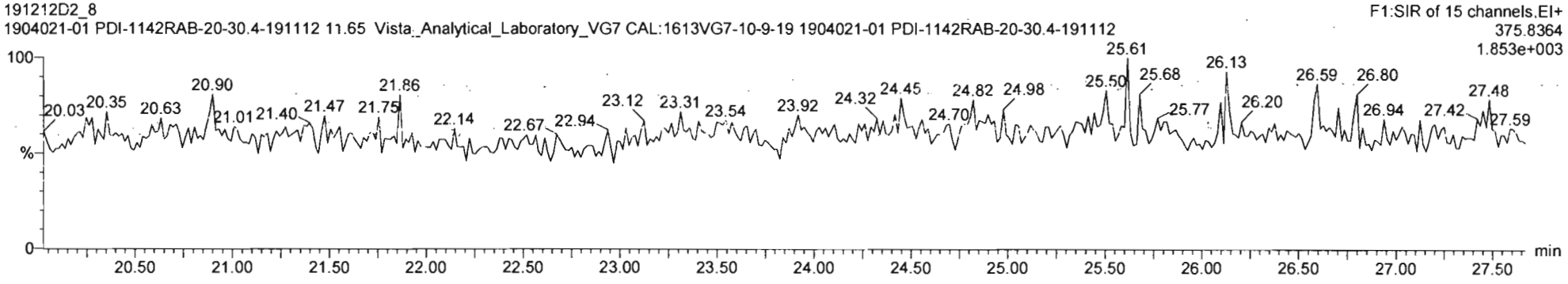
Total Tetra-Furans



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



DPE1



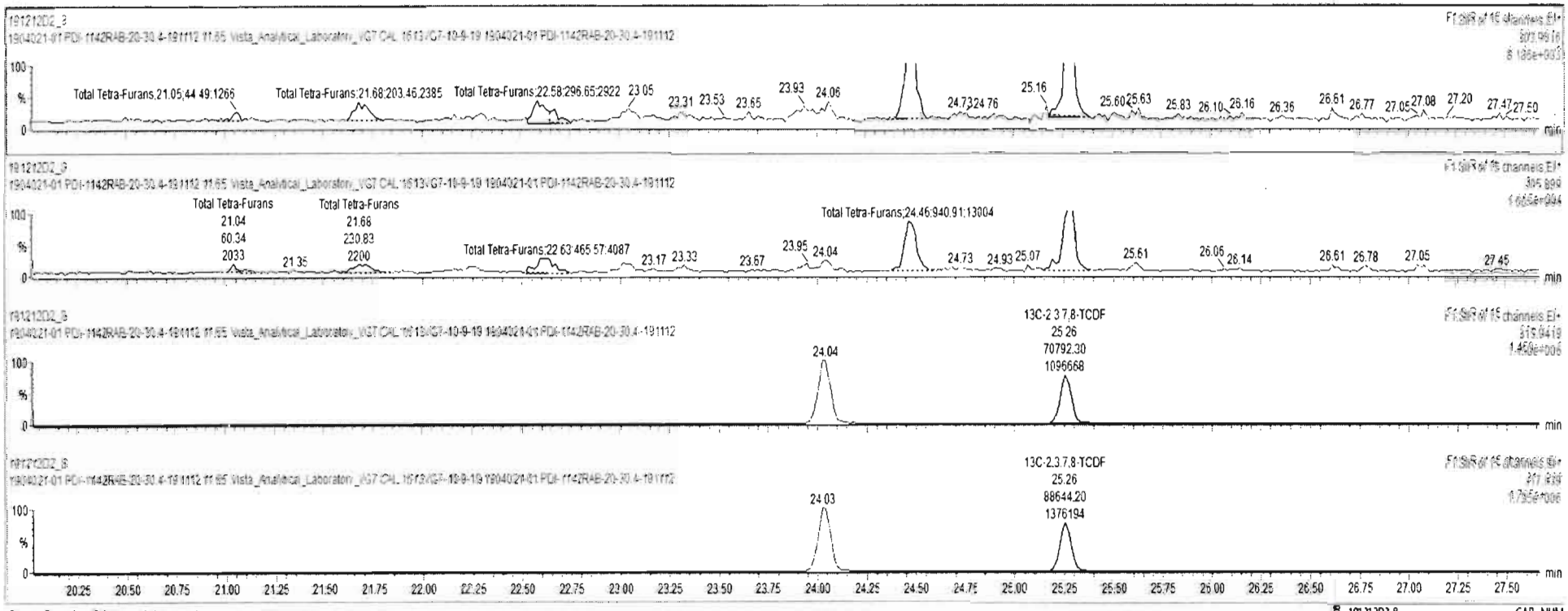
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30 4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
30	30	13C-2,3,4,6,7,8-HxCDF	1.16e5	1.90e5	38	0.50	NO	0.953	10 114	33.70	33.70	1.009	1.009	NO	126.7	64.1	0.732	
31	31	13C-1,2,3,7,8,9-HxCDF	1.06e5	1.90e5	38	0.49	NO	0.828	10 114	34.65	34.65	1.038	1.039	NO	136.2	68.9	0.843	
32	32	13C-1,2,3,4,6,7,8-HpCDF	9.14e4	1.90e5	38	0.44	NO	0.757	10 114	36.49	36.48	1.092	1.093	NO	125.6	62.6	0.569	
33	33	13C-1,2,3,4,7,8,9-HpCDF	7.83e4	1.90e5	38	0.42	NO	0.581	10.114	38.17	38.28	1.146	1.143	NO	140.5	71.0	0.742	
34	34	13C-OCDF	1.67e5	1.90e5	38	0.85	NO	0.689	10 114	41.18	41.21	1.234	1.233	NO	252.0	63.7	0.401	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.50e5	36			1.198	10 114	26.03	26.06	1.023	1.022	NO	67.92	85.9	0.159	
36	36	13C-1,2,3,4-TCDD	1.50e5	1.50e5	36	0.80	NO	1.000	10 114	25.50	25.47	1.000	1.000	NO	197.7	100	0.518	
37	37	13C-1,2,3,4-TCDF	2.36e5	2.36e5	37	0.80	NO	1.000	10 114	24.06	24.04	1.000	1.000	NO	197.7	100	0.445	
38	38	13C-1,2,3,4,6,9-HxCDF	1.90e5	1.90e5	38	0.52	NO	1.000	10 114	33.42	33.39	1.000	1.000	NO	197.7	100	0.698	
39	39	Total Tetra-Dioxins		1.09e5				0.901	10 114	25.50			0.000	NO			0.128	
40	40	Total Penta-Dioxins		9.07e4				0.872	10 114	30.00			0.000	NO	0.8070		0.324	1.094
41	41	Total Hexa-Dioxins		0.00e0				0.976	10 114	32.80			0.000	NO	21.65		0.447	22.69
42	42	Total Hepta-Dioxins		8.55e4				0.989	10 114	37.75			0.000	NO	220.5		0.893	220.5
43	43	Total Tetra-Furans		1.59e5				0.943	10 114	24.00			0.000	NO	5.749		0.276	6.646

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	21.05	4.449e1	6.034e1	0.770	0.74	NO	0.13790	0.13790
2	43	Total Tetra-Furans	24.00	21.68	2.035e2	2.308e2	0.770	0.88	NO	0.57130	0.57130
3	43	Total Tetra-Furans	24.00	22.58	2.967e2	4.656e2	0.770	0.64	YES	0.89704	0.00000
4	43	Total Tetra-Furans	24.00	24.46	7.229e2	9.409e2	0.770	0.77	NO	2.1876	2.1876
5	8	2,3,7,8-TCDF	25.28	25.29	8.694e2	1.316e3	0.770	0.66	NO	2.8521	2.8521



Custom Reporting: Select reports to generate

191212D2_8 CAP NUM

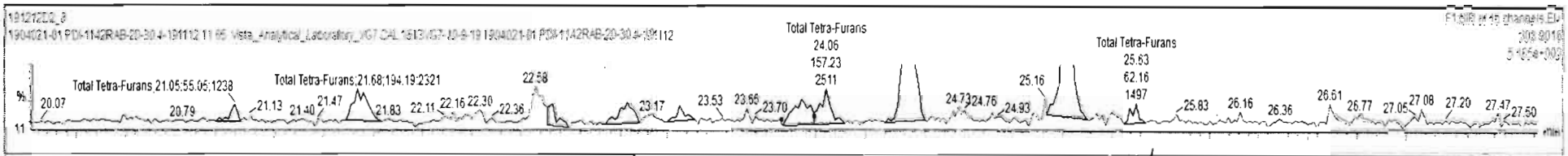
TargetLynx XS - 191212D2_8 * - [Chromatogram]

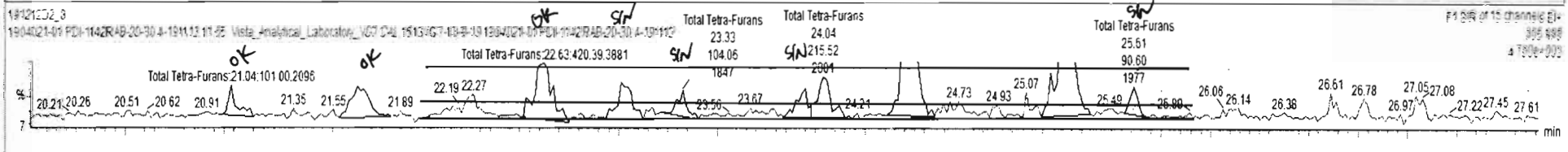
File Edit View Display Processing Window Help

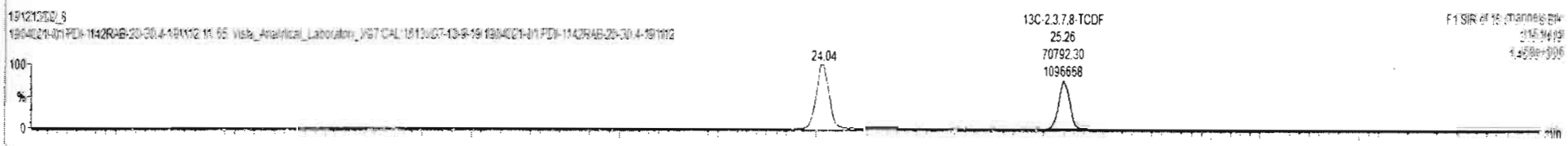
191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11 65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

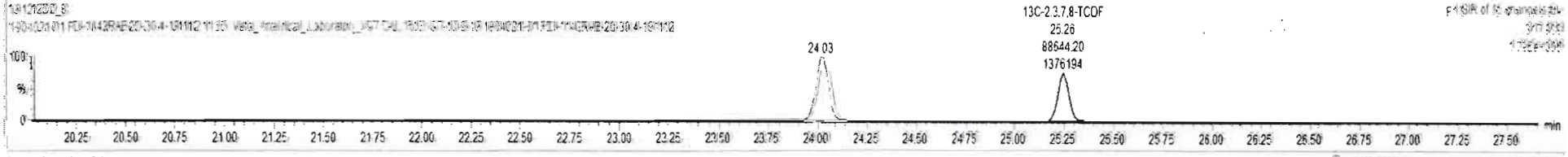
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
30	30	13C-2,3,4,6,7,8-HxCDF	1.16e5	1.90e5	38	0.50	NO	0.953	10.114	33.70	33.70	1.009	1.009	NO	126.7	64.1	0.732	
31	31	13C-1,2,3,7,8,9-HxCDF	1.06e5	1.90e5	38	0.49	NO	0.828	10.114	34.69	34.65	1.038	1.039	NO	136.2	68.9	0.843	
32	32	13C-1,2,3,4,6,7,8-HpCDF	9.14e4	1.90e5	38	0.44	NO	0.757	10.114	36.49	36.48	1.092	1.093	NO	125.8	63.6	0.569	
33	33	13C-1,2,3,4,7,8,9-HpCDF	7.83e4	1.90e5	38	0.42	NO	0.581	10.114	38.17	38.28	1.146	1.143	NO	140.5	71.0	0.742	
34	34	13C-OCDF	1.67e5	1.90e5	38	0.85	NO	0.689	10.114	41.18	41.21	1.234	1.233	NO	252.0	63.7	0.401	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.50e5	36			1.152	10.114	26.03	26.06	1.023	1.022	NO	67.92	85.9	0.155	
36	36	13C-1,2,3,4-TCDD	1.50e5	1.50e5	36	0.80	NO	1.000	10.114	25.50	25.47	1.000	1.000	NO	197.7	100	0.518	
37	37	13C-1,2,3,4-TCDF	2.36e5	2.36e5	37	0.80	NO	1.000	10.114	24.06	24.04	1.000	1.000	NO	197.7	100	0.445	
38	38	13C-1,2,3,4,8,9-HxCDF	1.90e5	1.90e5	38	0.52	NO	1.000	10.114	33.42	33.39	1.000	1.000	NO	197.7	100	0.658	
39	39	Total Tetra-Dioxins		1.89e5				0.501	10.114	25.50			0.000	NO			0.128	
40	40	Total Penta-Dioxins		9.07e4				0.872	10.114	30.00			0.000	NO	0.8976		0.324	1.094
41	41	Total Hexa-Dioxins		0.00e0				0.975	10.114	33.80			0.000	NO	21.65		0.447	22.69
42	42	Total Hepta-Dioxins		8.55e4				0.989	10.114	37.75			0.000	NO	220.5		0.662	220.5
43	43	Total Tetra-Furans		1.89e5				0.943	10.114	24.00			0.000	NO	3.477		0.276	7.254

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	21.05	5.505e1	1.019e2	0.770	0.55	YES	0.16648	0.00000
2	43	Total Tetra-Furans	24.00	21.68	1.942e2	2.311e2	0.770	0.84	NO	0.55944	0.55944
3	43	Total Tetra-Furans	24.00	22.67	8.550e1	4.204e2	0.770	0.20	YES	0.25864	0.00000
4	43	Total Tetra-Furans	24.00	23.05	1.272e2	2.136e2	0.770	0.60	YES	0.38455	0.00000
5	43	Total Tetra-Furans	24.00	23.31	5.213e1	1.041e2	0.770	0.50	YES	0.15763	0.00000
6	43	Total Tetra-Furans	24.00	23.53	1.759e2	1.275e2	0.770	1.46	YES	0.29788	0.00000









Custom Reporting: Select reports to generate

191212D2_8 CAP NUM

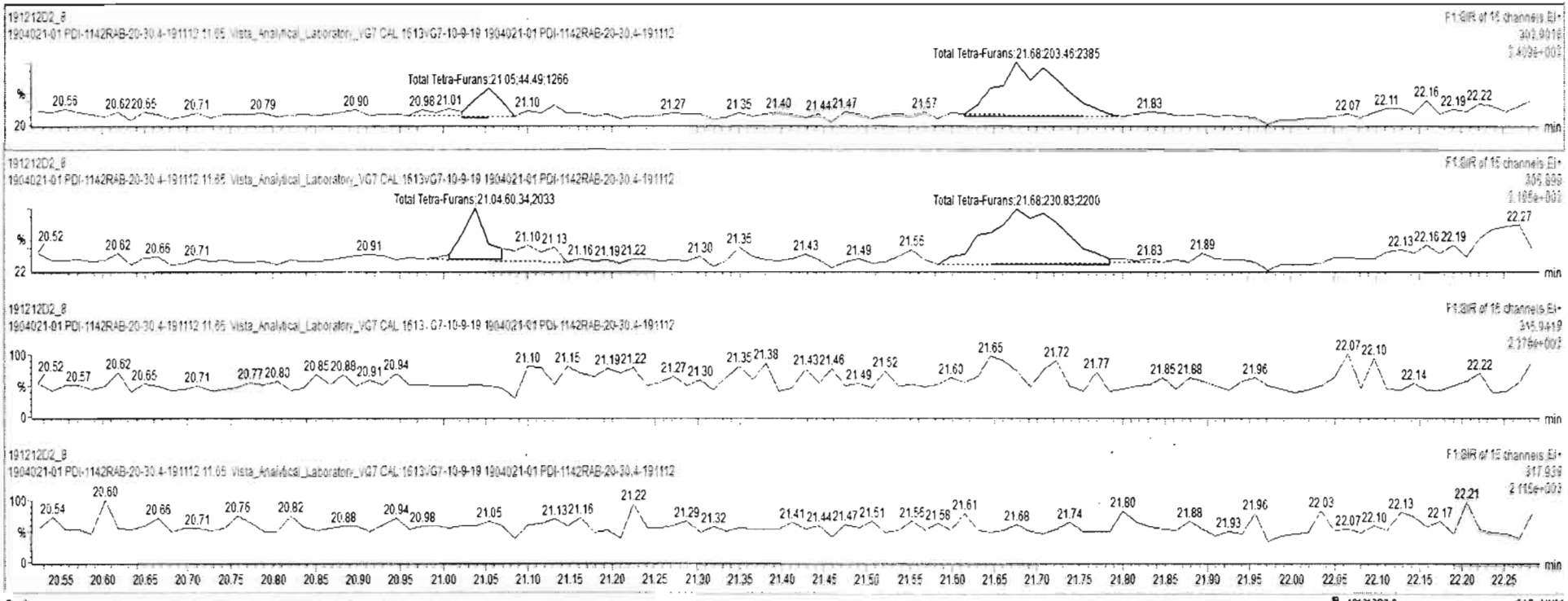
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30.4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
30	30	13C-2,3,4,6,7,8-HxCDF	1.16e5	1.90e5	38	0.50	NO	0.953	10.114	33.70	33.70	1.009	1.009	NO	126.7	64.1	0.732	
31	31	13C-1,2,3,7,8,9-HxCDF	1.08e5	1.90e5	38	0.49	NO	0.828	10.114	34.69	34.65	1.038	1.039	NO	136.2	68.9	0.843	
32	32	13C-1,2,3,4,6,7,8-HpCDF	9.14e4	1.90e5	38	0.44	NO	0.757	10.114	36.49	36.48	1.092	1.093	NO	125.8	63.6	0.569	
33	33	13C-1,2,3,4,7,8,9-HpCDF	7.83e4	1.90e5	38	0.42	NO	0.581	10.114	38.17	38.28	1.146	1.143	NO	140.5	71.0	0.742	
34	34	13C-OCDF	1.67e5	1.90e5	38	0.85	NO	0.689	10.114	41.18	41.21	1.234	1.233	NO	252.0	63.7	0.401	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.50e5	36			1.198	10.114	26.03	26.06	1.023	1.022	NO	67.92	85.9	0.159	
36	36	13C-1,2,3,4-TCDD	1.50e5	1.50e5	36	0.80	NO	1.000	10.114	25.50	25.47	1.060	1.060	NO	197.7	100	0.516	
37	37	13C-1,2,3,4-TCDF	2.36e5	2.36e5	37	0.80	NO	1.000	10.114	24.06	24.04	1.060	1.060	NO	197.7	100	0.445	
38	38	13C-1,2,3,4,6,9-HxCDF	1.90e5	1.90e5	38	0.52	NO	1.000	10.114	33.42	33.39	1.009	1.009	NO	197.7	100	0.698	
39	39	Total Tetra-Dioxins		1.09e5				0.901	10.114	25.50			0.000	NO			0.126	
40	40	Total Penta-Dioxins		9.07e4				0.872	10.114	30.00			0.000	NO	0.8070		0.324	1.094
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.114	33.80			0.000	NO	21.85		0.447	22.68
42	42	Total Hepta-Dioxins		8.55e4				0.969	10.114	37.75			0.000	NO	220.5		0.893	220.5
43	43	Total Tetra-Furans		1.55e5				0.943	10.114	24.00			0.000	NO	5.749		0.776	6.646

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	21.05	4.449e1	6.034e1	0.770	0.74	NO	0.13790	0.13790
2	43	Total Tetra-Furans	24.00	21.68	2.035e2	2.308e2	0.770	0.88	NO	0.57130	0.57130
3	43	Total Tetra-Furans	24.00	22.58	2.967e2	4.656e2	0.770	0.64	YES	0.89704	0.00000
4	43	Total Tetra-Furans	24.00	24.46	7.226e2	9.409e2	0.770	0.77	NO	2.1876	2.1876
5	8	2,3,7,8-TCDF	25.28	25.29	8.694e2	1.316e3	0.770	0.66	NO	2.8521	2.8521



Ready

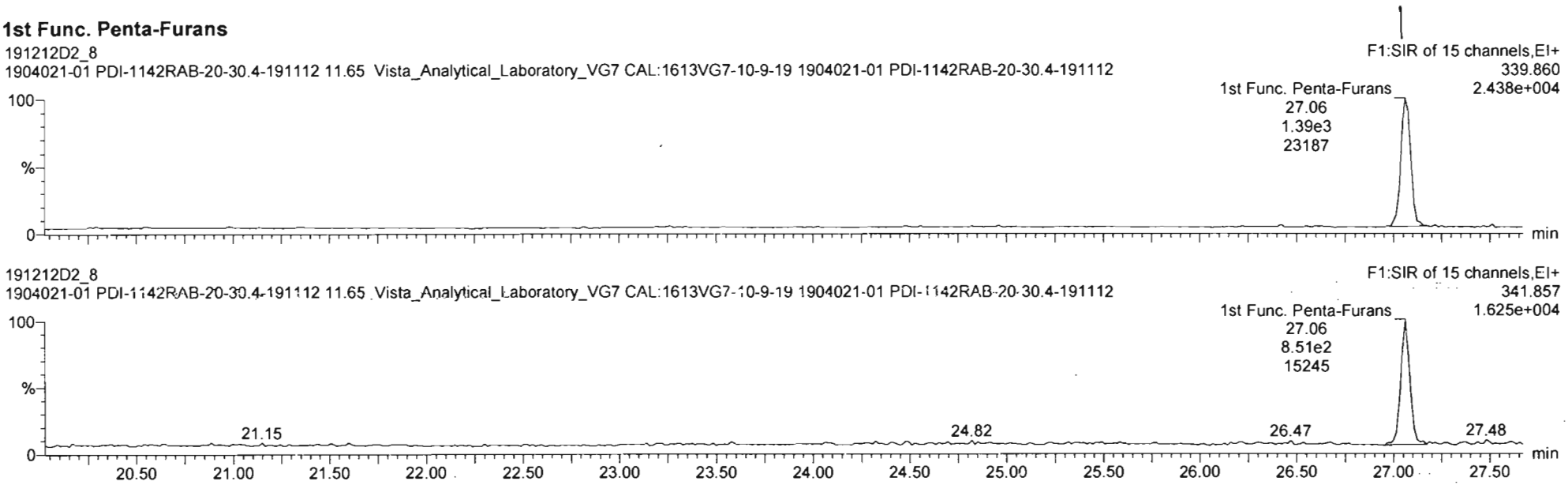
191212D2_8

CAP NUM

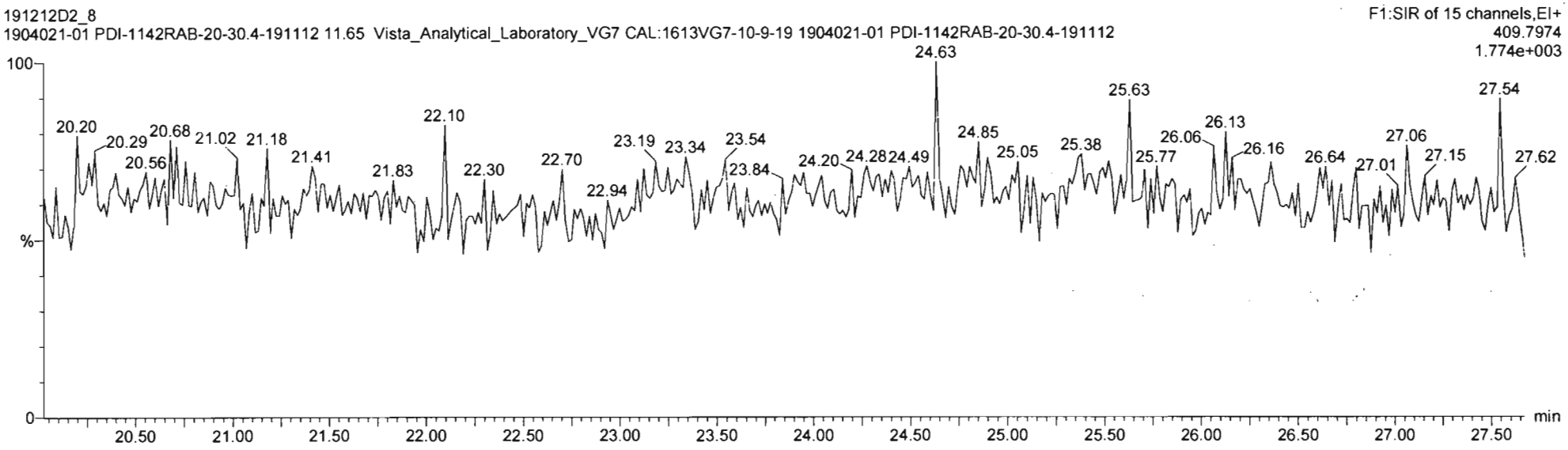
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

1st Func. Penta-Furans



DPE6



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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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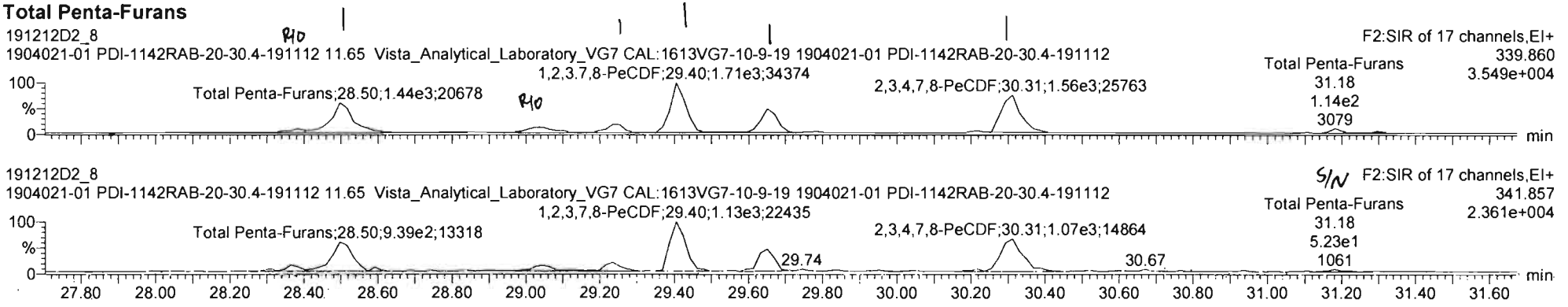
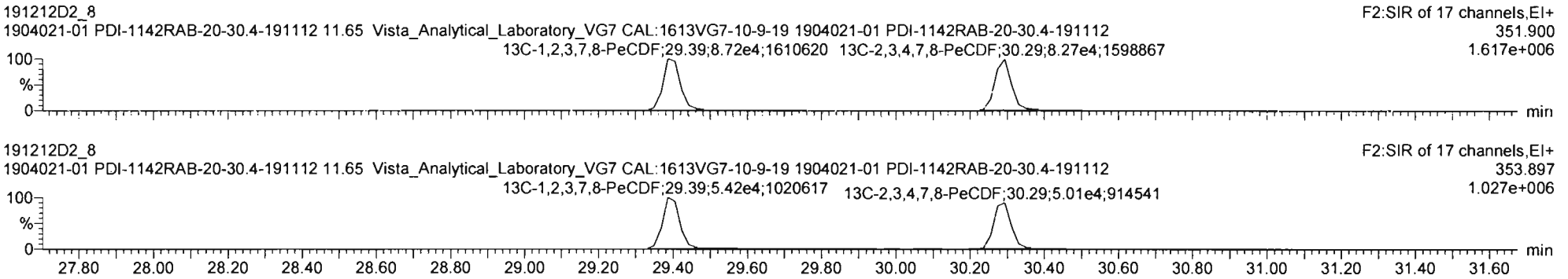
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

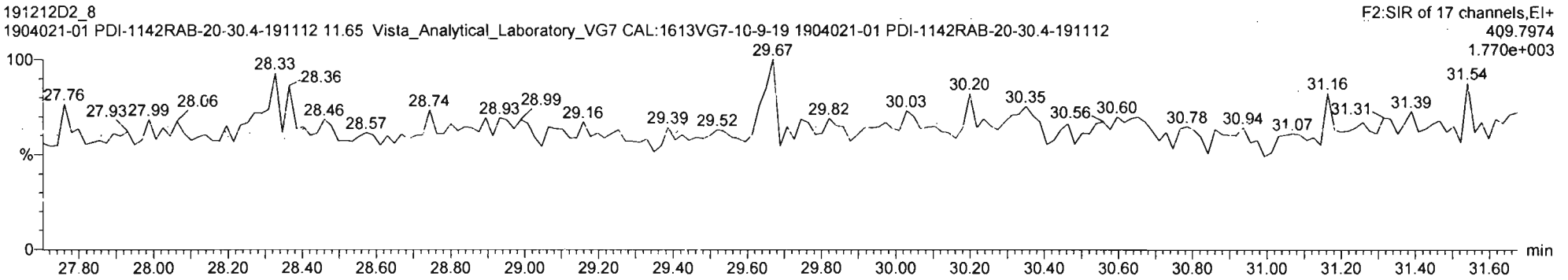
Total Penta-Furans



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



DPE2



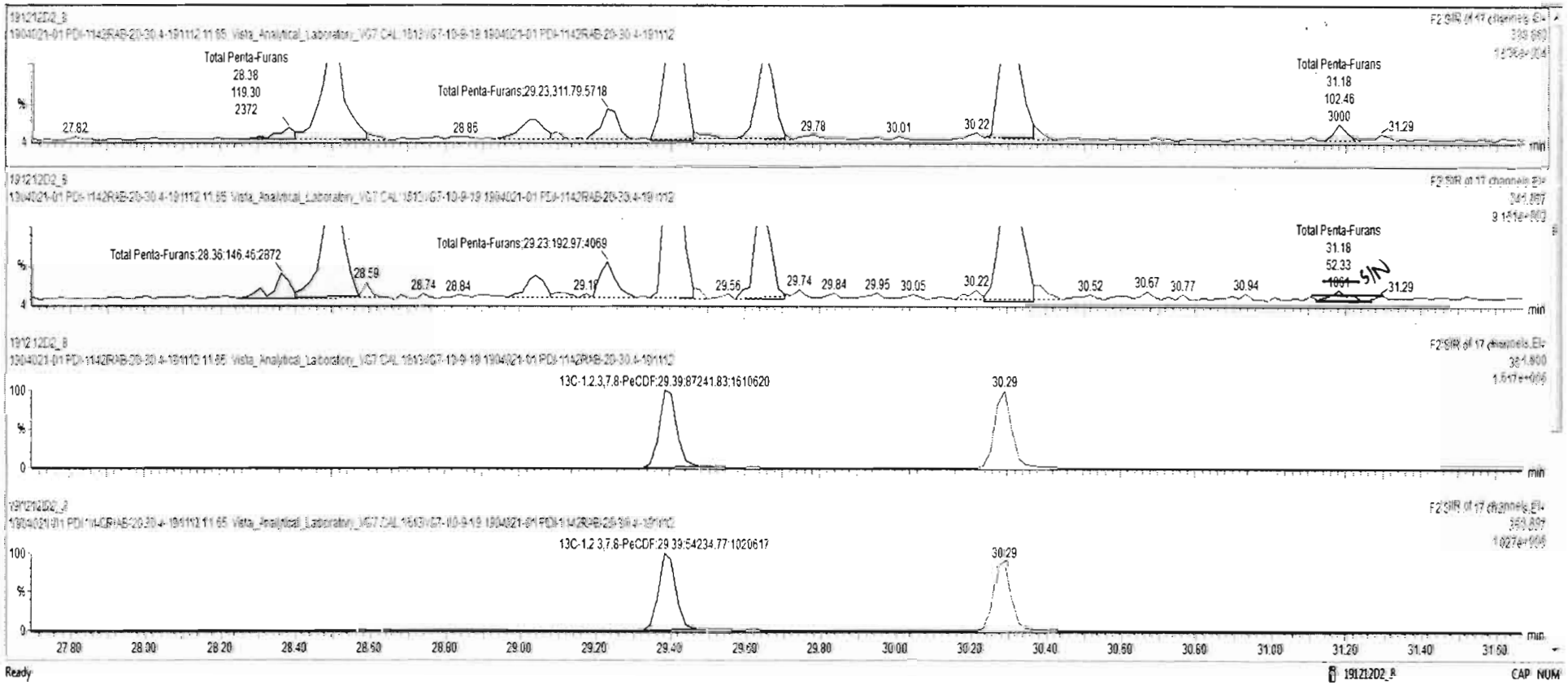
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30.4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.114	27.63			0.000	NO	3.447		0.101	3.447
45	45	Total Penta-Furans		0.00e0				0.940	10.114	30.00			0.000	NO	14.06		0.245	15.16
46	46	Total Hexa-Furans		0.00e0				1.078	10.114	33.00			0.000	NO	13.21		0.312	14.43
47	47	Total Hepta-Furans		0.00e0				1.125	10.114	37.75			0.000	NO	23.68		0.333	23.68
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																
53	53	DPE1																
54	54	DPE2																
55	55	DPE3																
56	56	DPE4																
57	57	DPE5																

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	45	Total Penta-Furans	30.00	28.38	1.193e2	1.465e2	1.550	0.81	YES	0.30115	0.00000
2	45	Total Penta-Furans	30.00	28.50	1.396e3	8.848e2	1.550	1.58	NO	3.4992	3.4992
3	45	Total Penta-Furans	30.00	29.03	2.835e2	1.449e2	1.550	1.96	YES	0.56675	0.00000



Ready

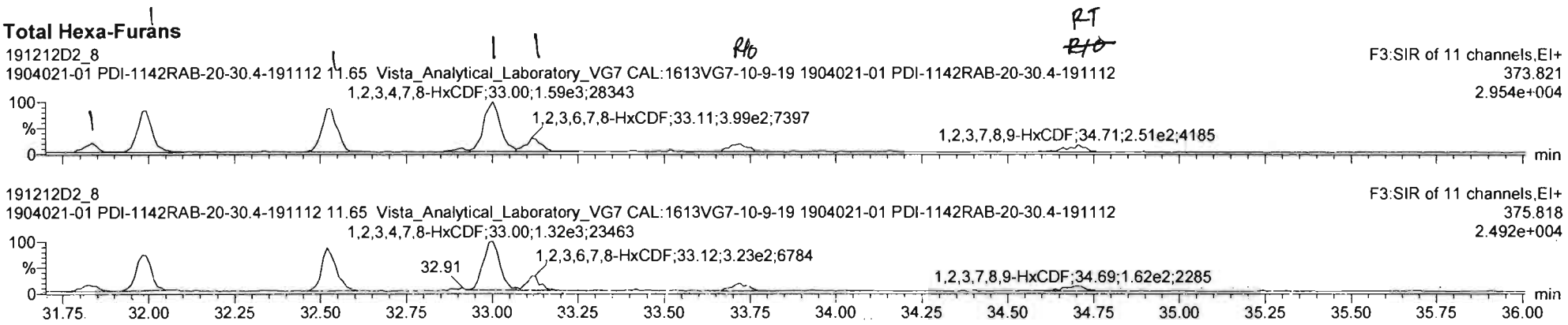
191212D2_8

CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_8, Date: 13-DEC-2019, Time: 06:31:22, ID: 1904021-01 PDI-1142RAB-20-30.4-191112,
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Furans



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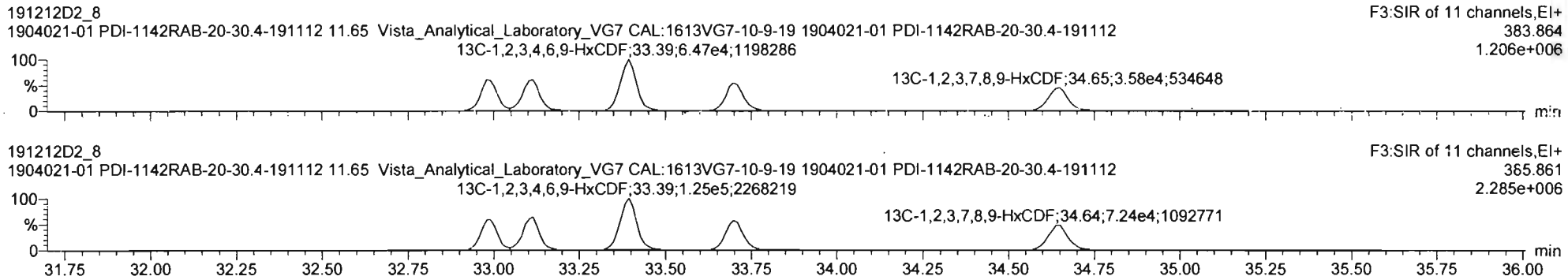

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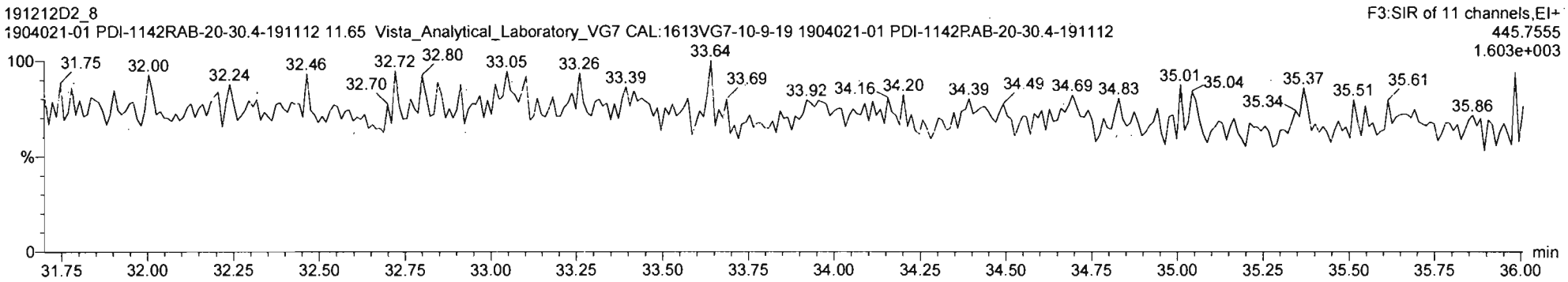

TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

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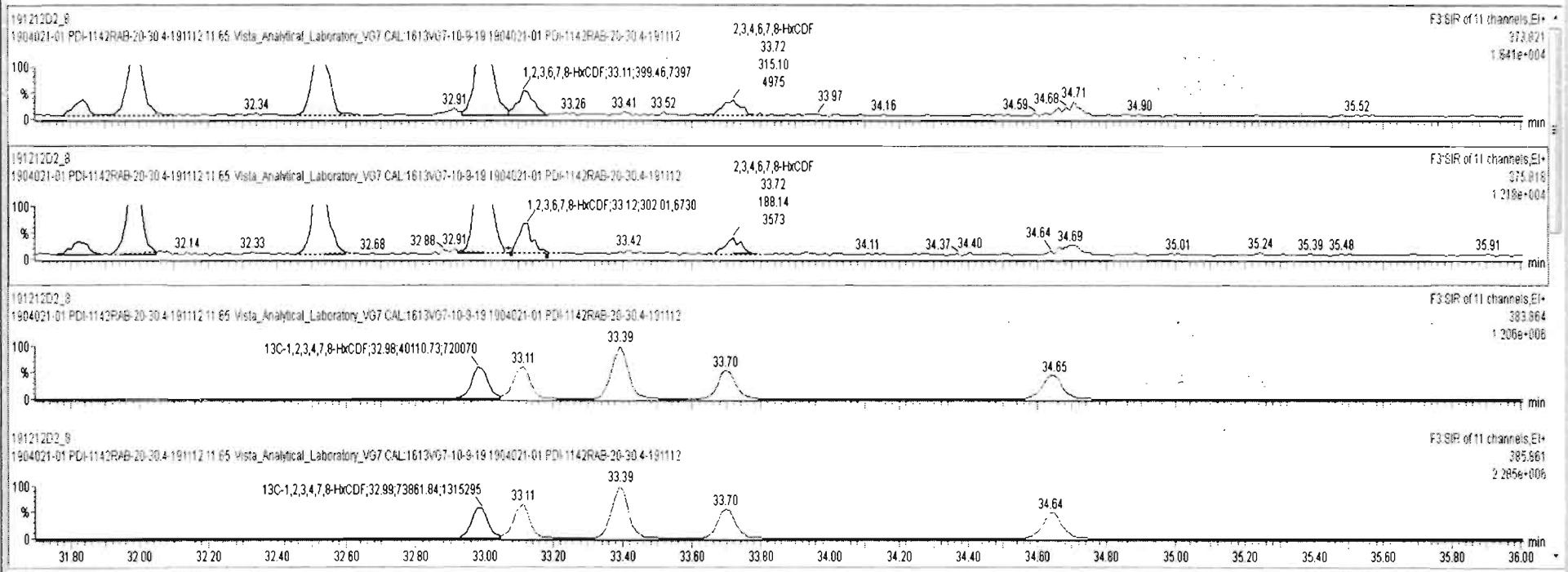
	Name	Conc.	DL	%Rec	EMPC	Abs Resp	RRF	RT	#	IS#	RA	Y/N	RRT	Acq Date	Acq Time	1° Chr Noise	ID	Sample Text	Factor1	SAR	Cal File
1	2,3,7,8-TCDD		0.262						1	18				13-DEC-19	06:31:22	364.216	1904021-01...	1904021-01 PDI-...	0.0	10:1	
2	1,2,3,7,8-PeCDD		0.313						2	19				13-DEC-19	06:31:22	464.165	1904021-01...	1904021-01 PDI-...	0.0	10:1	
3	1,2,3,4,7,8-HxCDD		0.412						3	20				13-DEC-19	06:31:22	470.829	1904021-01...	1904021-01 PDI-...	0.0	10:1	
4	1,2,3,6,7,8-HxCDD	1.41987	0.452		1.41987	6.639e2		33.99	4	21	1.286	NO	1.001	13-DEC-19	06:31:22	470.829	1904021-01...	1904021-01 PDI-...	0.0	10:1	
5	1,2,3,7,8,9-HxCDD	0.683920	0.449		0.683920	3.258e2		34.29	5	22	1.271	NO	1.001	13-DEC-19	06:31:22	470.829	1904021-01...	1904021-01 PDI-...	0.0	10:1	
6	1,2,3,4,6,7,8-HpCDD	95.9808	0.901		95.9808	4.065e4		37.75	6	23	1.054	NO	1.000	13-DEC-19	06:31:22	1042.999	1904021-01...	1904021-01 PDI-...	0.0	10:1	
7	OCDD	618.259	0.683		618.259	2.032e5		41.00	7	24	0.882	NO	1.000	13-DEC-19	06:31:22	597.130	1904021-01...	1904021-01 PDI-	0.0	10:1	
8	2,3,7,8-TCDF	2.85214	0.274		2.85214	2.185e3		25.29	8	25	0.661	NO	1.001	13-DEC-19	06:31:22	537.971	1904021-01...	1904021-01 PDI-...	0.0	10:1	
9	1,2,3,7,8-PeCDF	4.03081	0.238		4.03081	2.770e3		29.40	9	26	1.513	NO	1.001	13-DEC-19	06:31:22	585.195	1904021-01...	1904021-01 PDI-...	0.0	10:1	
10	2,3,4,7,8-PeCDF	3.64872	0.229		3.64872	2.488e3		30.31	10	27	1.491	NO	1.001	13-DEC-19	06:31:22	585.195	1904021-01...	1904021-01 PDI-...	0.0	10:1	
11	1,2,3,4,7,8-HxCDF	4.26390	0.267		4.26390	2.906e3		33.00	11	28	1.210	NO	1.001	13-DEC-19	06:31:22	603.097	1904021-01...	1904021-01 PDI-...	0.0	10:1	
12	1,2,3,6,7,8-HxCDF	1.05561	0.285		1.05561	7.015e2		33.11	12	29	1.323	NO	1.000	13-DEC-19	06:31:22	603.097	1904021-01...	1904021-01 PDI-...	0.0	10:1	

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC
1	Total Hexa-Furans	31.84	5.069e3	2.873e3	2.243e2	1.669e2	1.34	NO	3.913e2	0.623	0.623
2	Total Hexa-Furans	31.99	2.360e4	1.750e4	1.157e3	9.336e2	1.24	NO	2.090e3	3.33	3.33
3	Total Hexa-Furans	32.53	2.458e4	2.100e4	1.271e3	1.036e3	1.23	NO	2.307e3	3.67	3.67
4	1,2,3,4,7,8-HxCDF	33.00	2.834e4	2.348e4	1.591e3	1.315e3	1.21	NO	2.906e3	4.26	4.26
5	1,2,3,6,7,8-HxCDF	33.11	7.397e3	6.730e3	3.995e2	3.020e2	1.32	NO	7.015e2	1.06	1.06
6	2,3,4,6,7,8-HxCDF	33.72	4.975e3	3.573e3	3.151e2	1.881e2	1.67	YES	5.032e2	0.000	0.646



Custom Reporting: Select reports to generate

191212D2_8

NUM

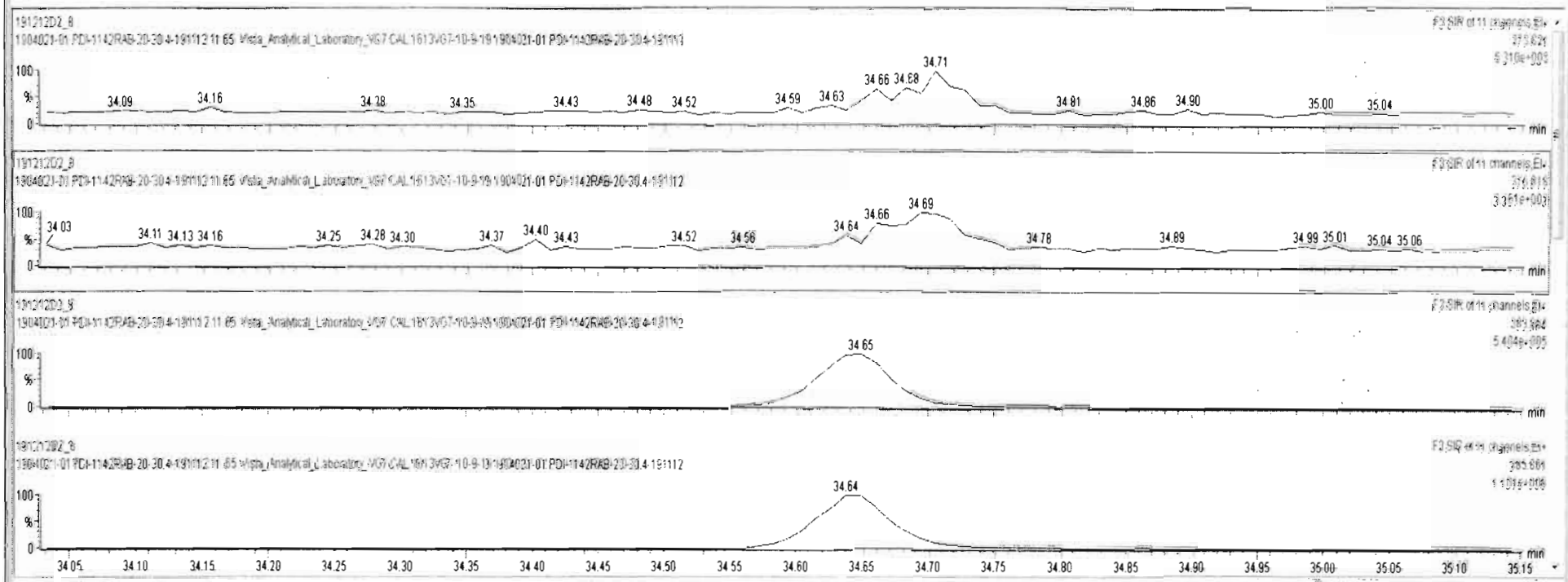
TargetLynx XS - 191212D2_8 - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30 4-191112 11 65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD		1.09e5	18			0.905	10 114	26 08			1.001	NO			0.262	
2	2	1,2,3,7,8-PeCDD		9.07e4	19			0.903	10 114	30 60			1.001	NO			0.313	
3	3	1,2,3,4,7,8-HxCDD		9.07e4	20			1.101	10 114	33 87			1.000	NO			0.412	
4	4	1,2,3,6,7,8-HxCDD	6.64e2	9.85e4	21	1.29	NO	0.939	10 114	33.97	33.99	1.001	1.000	NO	1.420		0.452	1.420
5	5	1,2,3,7,8,9-HxCDD	3.26e2	9.80e4	22	1.27	NO	0.961	10 114	34.38	34.29	1.001	1 001	NO	0.6839		0.449	0 6839
6	6	1,2,3,4,6,7,8-HpCDD	4.06e4	8.55e4	23	1 05	NO	0.979	10 114	37 75	37.75	1.000	1.000	NO	95.98		0.901	95 98
7	7	OCDD	2.03e5	1.36e5	24	0 88	NO	0.959	10 114	40 99	41 00	1.000	1.000	NO	618 3		0.683	618.3
8	8	2,3,7,8-TCDF	2.18e3	1.59e5	25	0 66	NO	0.950	10 114	25 28	25.29	1 001	1.001	NO	2 852		0.274	2 852
9	9	1,2,3,7,8-PeCDF	2.77e3	1.41e5	26	1.51	NO	0.960	10 114	29 41	29.40	1.001	1.001	NO	4 031		0.238	4 031
10	10	2,3,4,7,8-PeCDF	2.49e3	1.33e5	27	1.49	NO	1.015	10 114	30.32	30.31	1.001	1.001	NO	3.649		0.229	3.649
11	11	1,2,3,4,7,8-HxCDF	2.91e3	1.14e5	28	1.21	NO	1.177	10 114	32 98	33 00	1.001	1.000	NO	4.284		0.267	4.284
12	12	1,2,3,6,7,8-HxCDF	7.01e2	1.23e5	29	1.32	NO	1.069	10 114	33 12	33.11	1.000	1.000	NO	1.056		0.285	1 056

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	31.84	2.243e2	1.669e2	1.240	1 34	NO	0.62304	0.62304
2	46	Total Hexa-Furans	33.00	31.99	1.157e3	9.336e2	1.240	1.24	NO	3.3287	3.3287
3	46	Total Hexa-Furans	33.00	32.53	1.271e3	1.036e3	1.240	1 23	NO	3.6729	3.6729
4	11	1,2,3,4,7,8-HxCDF	32.98	33.00	1.591e3	1.315e3	1.240	1.21	NO	4.2839	4.2839
5	12	1,2,3,6,7,8-HxCDF	33.12	33.11	3.995e2	3.020e2	1.240	1 32	NO	1.0556	1.0556
6	13	2,3,4,6,7,8-HxCDF	33.73	33.72	3.151e2	1.881e2	1.240	1 67	YES	0.64570	0.00000



Custom Reporting: Select reports to generate

Vista Analytical Laboratory
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Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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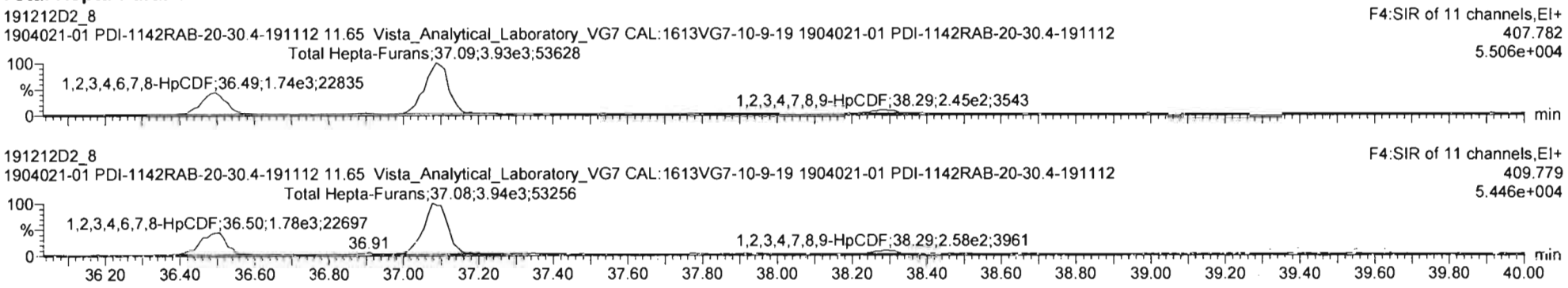
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Furans



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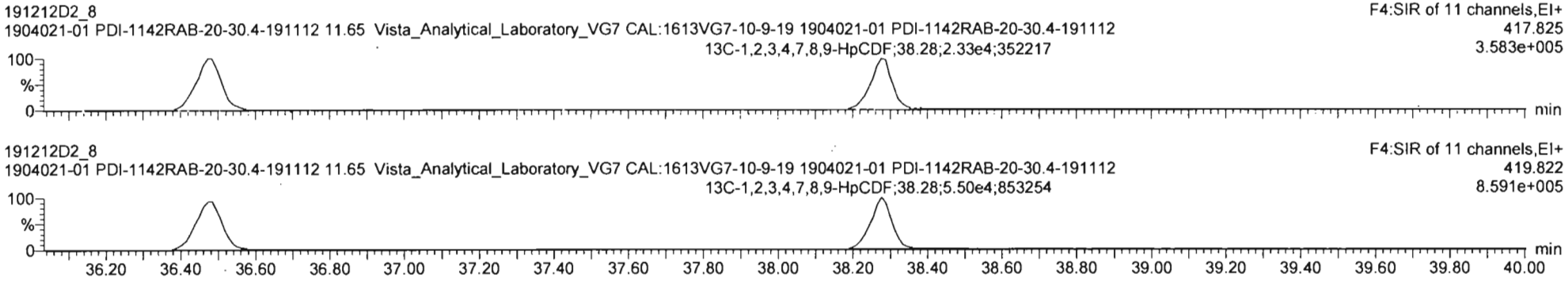
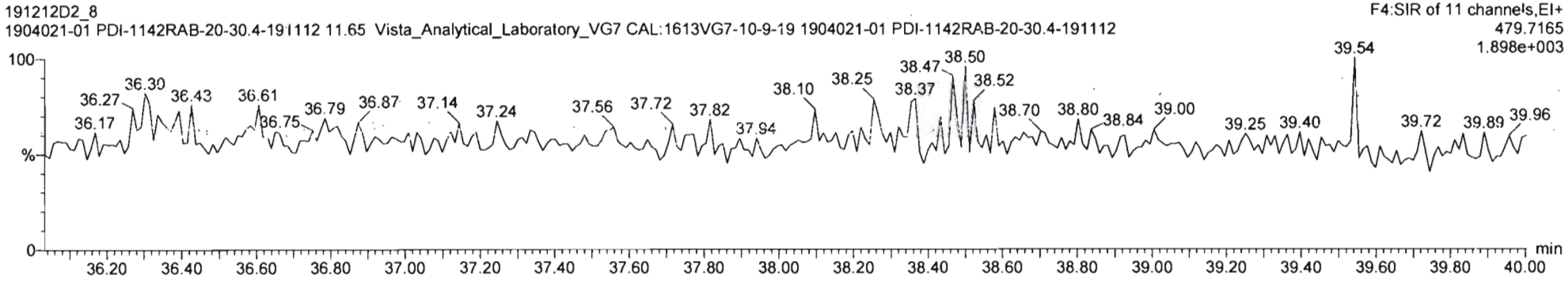


DPE4



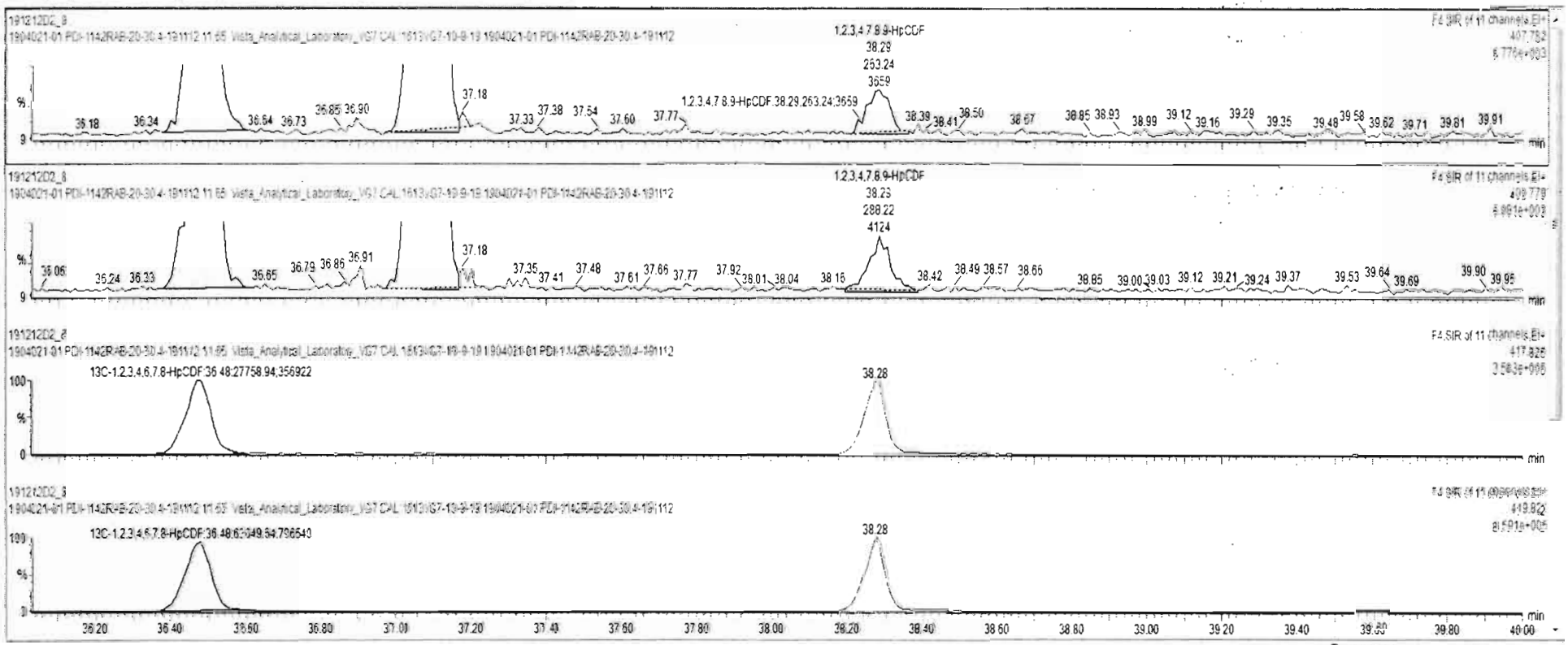
TargetLynx XS - 191212D2_8 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_8 - 1904021-01 PDI-1142RAB-20-30 4-191112 - 1904021-01 PDI-1142RAB-20-30.4-191112 11 65 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.114	27.63			0.000	NO	3.447		0.101	3.447
45	45	Total Penta-Furans		0.00e0				0.940	10.114	30.00			0.000	NO	14.08		0.245	14.95
46	46	Total Hexa-Furans		0.00e0				1.078	10.114	33.00			0.000	NO	12.96		0.312	14.23
47	47	Total Hepta-Furans		0.00e0				1.135	10.114	37.75			0.000	NO	23.96		0.333	23.96
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																
53	53	DPE1																
54	54	DPE2																
55	55	DPE3																
56	56	DPE4																
57	57	DPE5																
58	58	DPE6																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	15	1,2,3,4,6,7,8-HpCDF	36.52	36.49	1.736e3	1.776e3	1.040	0.96	NO	6.7382	6.7382
2	47	Total Hepta-Furans	37.75	37.09	3.936e3	3.920e3	1.040	1.00	NO	16.132	16.132



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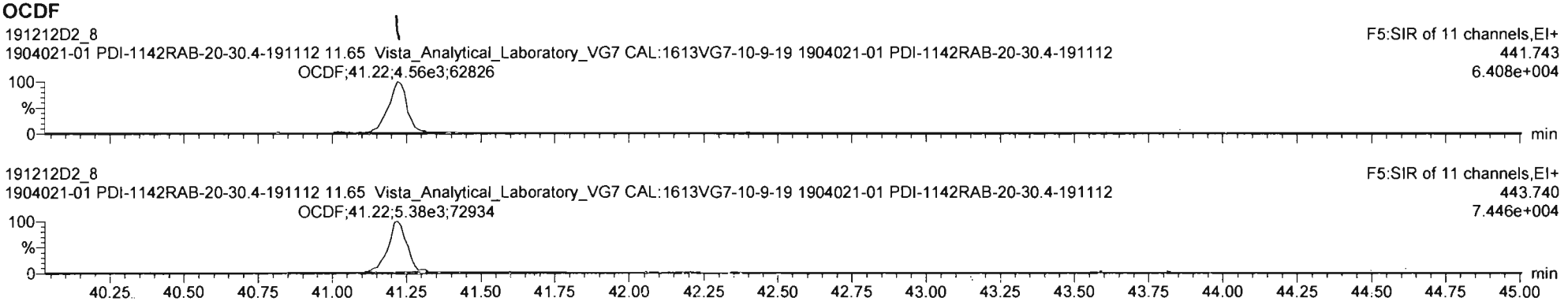
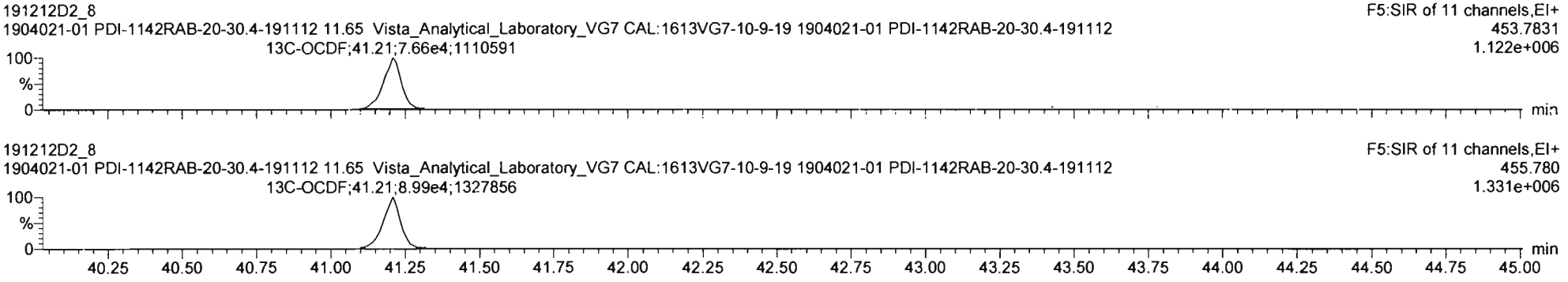
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDF



13C-OCDF



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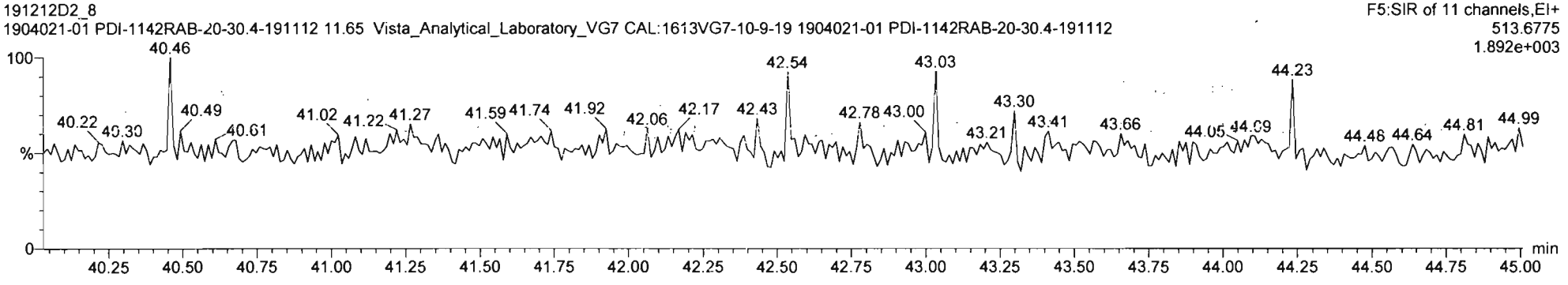

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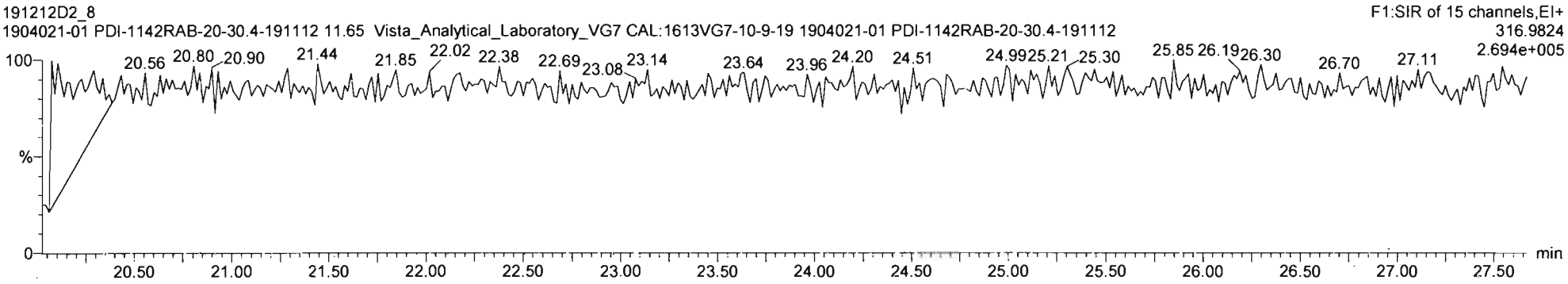
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK1



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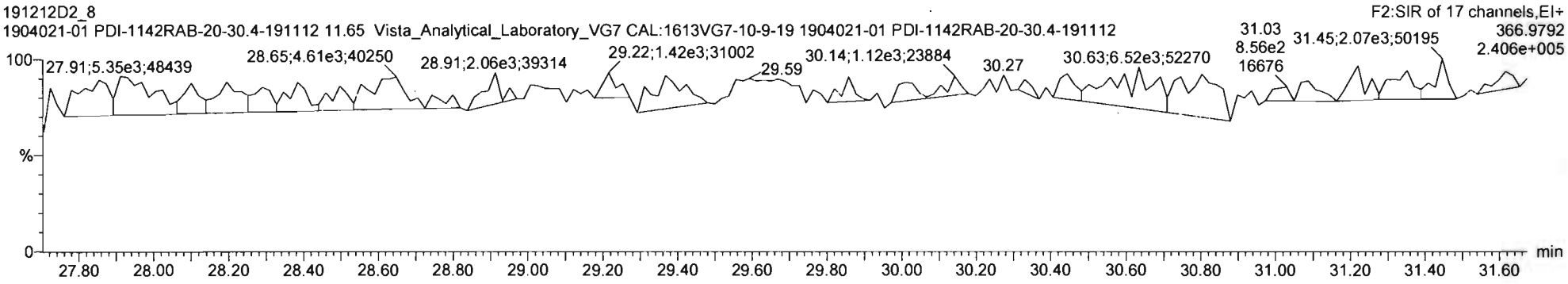

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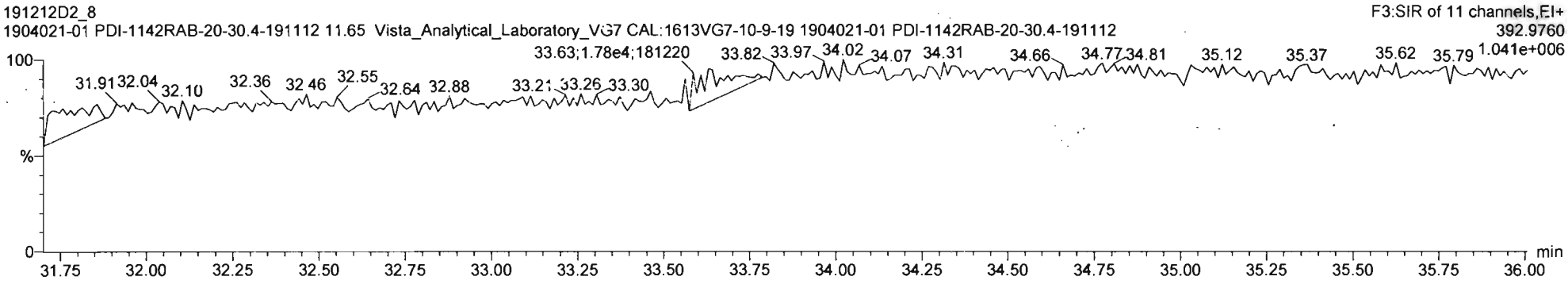

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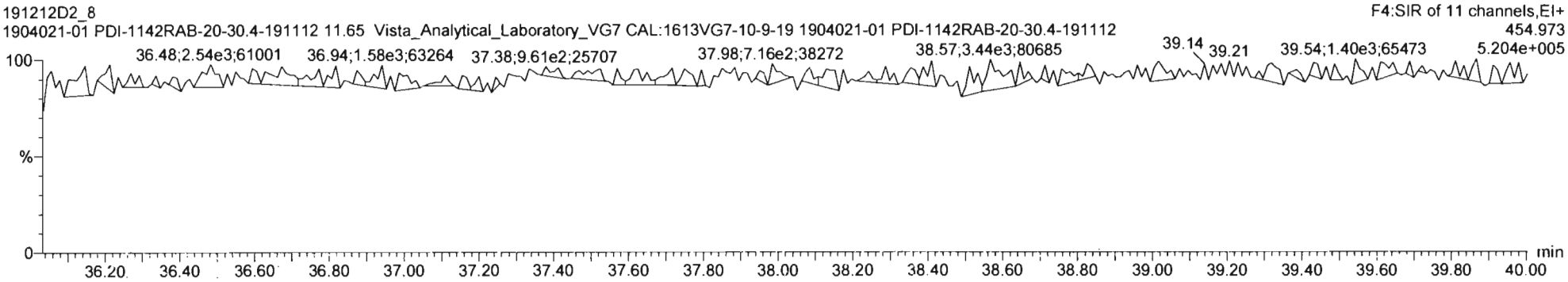
Description: 1904021-01 PDI-1142RAB-20-30.4-191112 11.65 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK4



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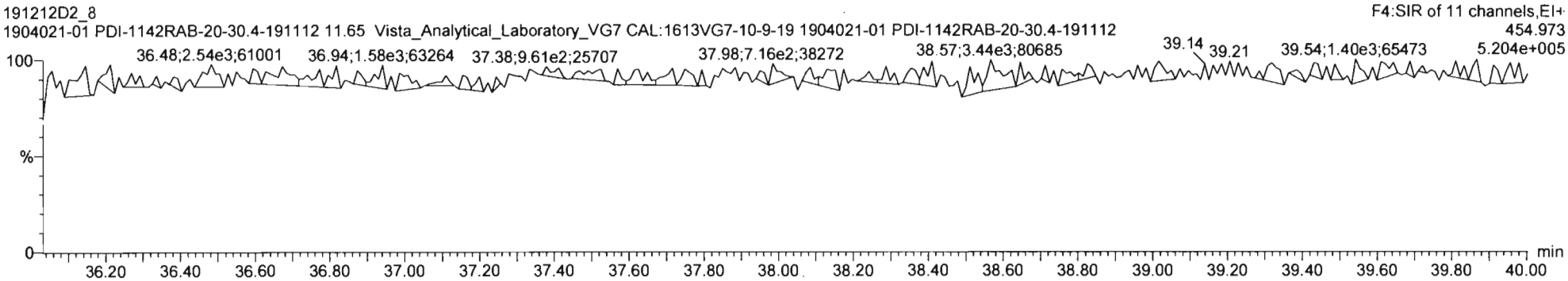

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Last Altered: Tuesday, December 17, 2019 11:36:06 Pacific Standard Time
Printed: Tuesday, December 17, 2019 11:37:56 Pacific Standard Time

EL 12/17/19 CT 12/24/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:04:19

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		1.75e5	10.0595 ✓	0.905			1.001		26.07					0.132
2	2	1,2,3,7,8-PeCDD		1.48e5	10.0595	0.903			1.001		30.60					0.180
3	3	1,2,3,4,7,8-HxCDD		1.37e5	10.0595	1.101			1.000		33.88					0.223
4	4	1,2,3,6,7,8-HxCDD	3.30e2	1.46e5	10.0595	0.939	1.431	YES	1.000	1.000	33.98	33.99	0.47899		0.441	0.226
5	5	1,2,3,7,8,9-HxCDD		1.51e5	10.0595	0.961			1.001		34.30					0.227
6	6	1,2,3,4,6,7,8-HpCDD	7.17e3	1.43e5	10.0595	0.979	1.049	NO	1.000	1.000	37.75	37.75	10.203		10.2	0.381
7	7	OCDD	6.27e4	2.60e5	10.0595	0.959	0.903	NO	1.000	1.000	40.99	41.00	99.997		100	0.291
8	8	2,3,7,8-TCDF		2.53e5	10.0595	0.950			1.001		25.28					0.145
9	9	1,2,3,7,8-PeCDF		2.30e5	10.0595	0.960			1.001		29.41					0.104
10	10	2,3,4,7,8-PeCDF		2.20e5	10.0595	1.015			1.001		30.32					0.0907
11	11	1,2,3,4,7,8-HxCDF	2.19e2	1.76e5	10.0595	1.177	1.279	NO	1.000	1.001	32.98	33.01	0.20960		0.210	0.111
12	12	1,2,3,6,7,8-HxCDF		1.97e5	10.0595	1.069			1.000		33.12					0.114
13	13	2,3,4,6,7,8-HxCDF	1.19e2	1.82e5	10.0595	1.114	0.934	YES	1.001	1.000	33.73	33.71	0.11663		0.102	0.125
14	14	1,2,3,7,8,9-HxCDF		1.71e5	10.0595	1.062			1.000		34.64					0.158
15	15	1,2,3,4,6,7,8-HpCDF	1.20e3	1.75e5	10.0595	1.128	1.082	NO	1.001	1.001	36.51	36.51	1.2125		1.21	0.135
16	16	1,2,3,4,7,8,9-HpCDF		1.32e5	10.0595	1.280			1.000		38.28					0.134
17	17	OCDF	2.76e3	3.26e5	10.0595	0.947	0.874	NO	1.000	1.000	41.21	41.22	3.5574		3.56	0.165
18	18	13C-2,3,7,8-TCDD	1.75e5	1.54e5	10.0595	1.095	0.776	NO	1.021	1.022	26.01	26.03	205.87	103.6		0.408
19	19	13C-1,2,3,7,8-PeCDD	1.48e5	1.54e5	10.0595	0.881	0.638	NO	1.187	1.200	30.23	30.58	217.49	109.4		0.462
20	20	13C-1,2,3,4,7,8-Hx...	1.37e5	1.92e5	10.0595	0.642	1.261	NO	1.014	1.014	33.86	33.87	220.89	111.1		0.870
21	21	13C-1,2,3,6,7,8-Hx...	1.46e5	1.92e5	10.0595	0.856	1.258	NO	1.017	1.017	33.98	33.98	176.53	88.8		0.653
22	22	13C-1,2,3,7,8,9-Hx...	1.51e5	1.92e5	10.0595	0.807	1.258	NO	1.026	1.026	34.27	34.27	193.29	97.2		0.693
23	23	13C-1,2,3,4,6,7,8-H...	1.43e5	1.92e5	10.0595	0.654	1.029	NO	1.126	1.130	37.61	37.74	225.47	113.4		1.18
24	24	13C-OCDD	2.60e5	1.92e5	10.0595	0.580	0.906	NO	1.226	1.227	40.95	40.99	464.37	116.8		0.594
25	25	13C-2,3,7,8-TCDF	2.53e5	2.47e5	10.0595	1.035	0.782	NO	0.992	0.991	25.27	25.26	196.63	98.9		0.346
26	26	13C-1,2,3,7,8-PeCDF	2.30e5	2.47e5	10.0595	0.854	1.645	NO	1.154	1.154	29.39	29.39	216.24	108.8		0.711
27	27	13C-2,3,4,7,8-PeCDF	2.20e5	2.47e5	10.0595	0.847	1.639	NO	1.189	1.189	30.29	30.29	209.24	105.2		0.717
28	28	13C-1,2,3,4,7,8-Hx...	1.76e5	1.92e5	10.0595	0.832	0.516	NO	0.987	0.988	32.97	32.98	219.29	110.3		0.641
29	29	13C-1,2,3,6,7,8-Hx...	1.97e5	1.92e5	10.0595	1.034	0.518	NO	0.991	0.992	33.09	33.11	196.83	99.0		0.515
30	30	13C-2,3,4,6,7,8-Hx...	1.82e5	1.92e5	10.0595	0.953	0.511	NO	1.009	1.009	33.70	33.70	197.01	99.1		0.559
31	31	13C-1,2,3,7,8,9-Hx...	1.71e5	1.92e5	10.0595	0.828	0.515	NO	1.039	1.037	34.69	34.64	214.05	107.7		0.644

Vista Analytical Laboratory
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Printed: Tuesday, December 17, 2019 11:37:56 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	1.75e5	1.92e5	10.0595	0.757	0.437	NO	1.093	1.092	36.49	36.47	238.94	120.2		0.857
33	33	13C-1,2,3,4,7,8,9-H...	1.32e5	1.92e5	10.0595	0.581	0.424	NO	1.143	1.146	38.17	38.28	235.13	118.3		1.12
34	34	13C-OCDF	3.26e5	1.92e5	10.0595	0.689	0.890	NO	1.233	1.234	41.18	41.21	489.21	123.0		0.566
35	35	37Cl-2,3,7,8-TCDD	7.25e4	1.54e5	10.0595	1.198			1.022	1.023	26.03	26.05	78.220	98.4		0.127
36	36	13C-1,2,3,4-TCDD	1.54e5	1.54e5	10.0595	1.000	0.802	NO	1.000	1.000	25.50	25.47	198.82	100.0		0.447
37	37	13C-1,2,3,4-TCDF	2.47e5	2.47e5	10.0595	1.000	0.802	NO	1.000	1.000	24.06	24.03	198.82	100.0		0.358
38	38	13C-1,2,3,4,6,9-Hx...	1.92e5	1.92e5	10.0595	1.000	0.507	NO	1.000	1.000	33.42	33.39	198.82	100.0		0.533
39	39	Total Tetra-Dioxins		1.75e5	10.0595	0.901			0.000		25.50					0.0745
40	40	Total Penta-Dioxins		1.48e5	10.0595	0.872			0.000		30.00					0.0815
41	41	Total Hexa-Dioxins		0.00e0	10.0595	0.976			0.000		33.80		1.1450		2.74	0.230
42	42	Total Hepta-Dioxins		1.43e5	10.0595	0.989			0.000		37.75		21.863		21.9	0.377
43	43	Total Tetra-Furans		2.53e5	10.0595	0.943			0.000		24.00					0.0699
44	44	1st Func. Penta-Fur...		0.00e0	10.0595	0.940			0.000		27.63		0.49291		0.493	0.0627
45	45	Total Penta-Furans		0.00e0	10.0595	0.940			0.000		30.00		0.26038		0.260	0.0459
46	46	Total Hexa-Furans		0.00e0	10.0595	1.078			0.000		33.00		1.6120		1.95	0.129
47	47	Total Hepta-Furans		0.00e0	10.0595	1.135			0.000		37.75		4.2809		4.28	0.141

Vista Analytical Laboratory
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Calibration: 17 Dec 2019 10:04:19

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	41	Total Hexa-Dioxins	NO	32.36	448.247	80614.838	11.241	bb	1.1450	1.15
2	4	1,2,3,6,7,8-HxCDD	YES	33.99	194.391	81349.328	0.000	bb	0.0000	0.44
3	41	Total Hexa-Dioxins	NO	33.20	222.736	80614.838	0.000	MM	0.0000	0.59
4	41	Total Hexa-Dioxins	YES	33.17	270.784	80614.838	0.000	MM	0.0000	0.57

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	6	1,2,3,4,6,7,8-HpCDD	NO	37.75	3668.960	72295.305	100.521	bb	10.2028	10.20
2	42	Total Hepta-Dioxins	NO	36.89	4138.031	72295.305	115.967	bb	11.6598	11.66

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44	1st Func. Penta-Furans	NO	27.05	325.874	139771.476	4.659	MM	0.4929	0.49

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_9.qld
Last Altered: Tuesday, December 17, 2019 11:36:06 Pacific Standard Time
Printed: Tuesday, December 17, 2019 11:37:56 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	45	Total Penta-Furans	NO	28.48	174.296	139771.476	2.461	MM	0.2604	0.26

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	11	1,2,3,4,7,8-HxCDF	NO	33.01	122.794	60064.984	2.481	MM	0.2096	0.21
2	46	Total Hexa-Furans	NO	32.52	448.079	61725.628	8.553	MM	0.7890	0.79
3	46	Total Hexa-Furans	NO	31.98	315.497	61725.628	6.649	MM	0.6134	0.61
4	46	Total Hexa-Furans	YES	31.81	127.814	61725.628	0.000	MM	0.0000	0.23
5	13	2,3,4,6,7,8-HxCDF	YES	33.71	57.307	61413.879	0.000	MM	0.0000	0.10

Hepta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	47	Total Hepta-Furans	NO	37.08	1429.097	46309.826	35.024	bb	3.0684	3.07
2	15	1,2,3,4,6,7,8-HpCDF	NO	36.51	625.406	53249.094	13.754	bb	1.2125	1.21

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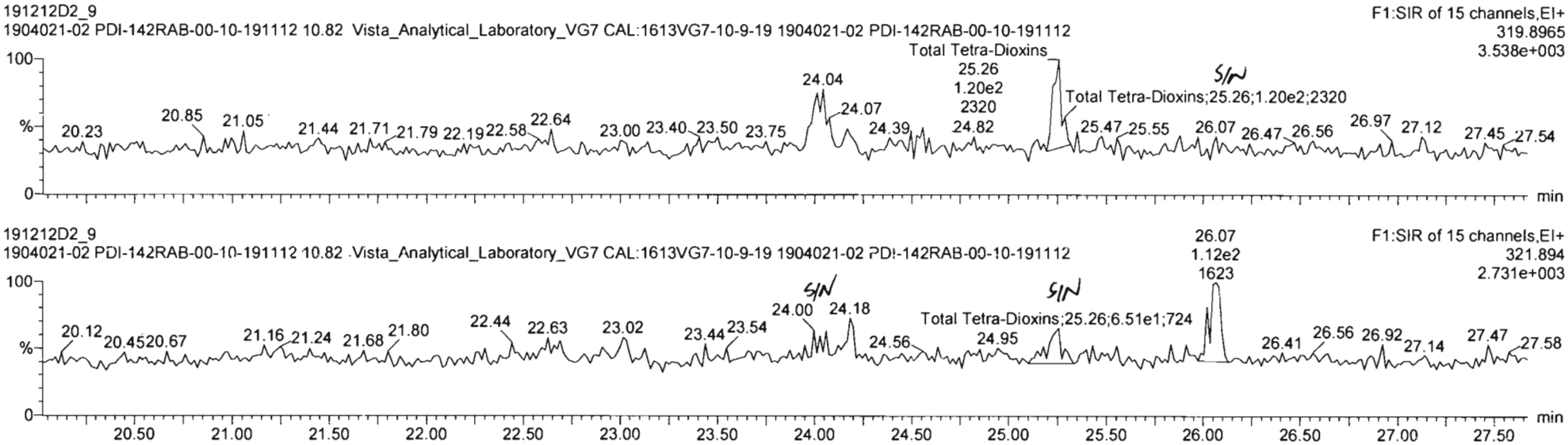
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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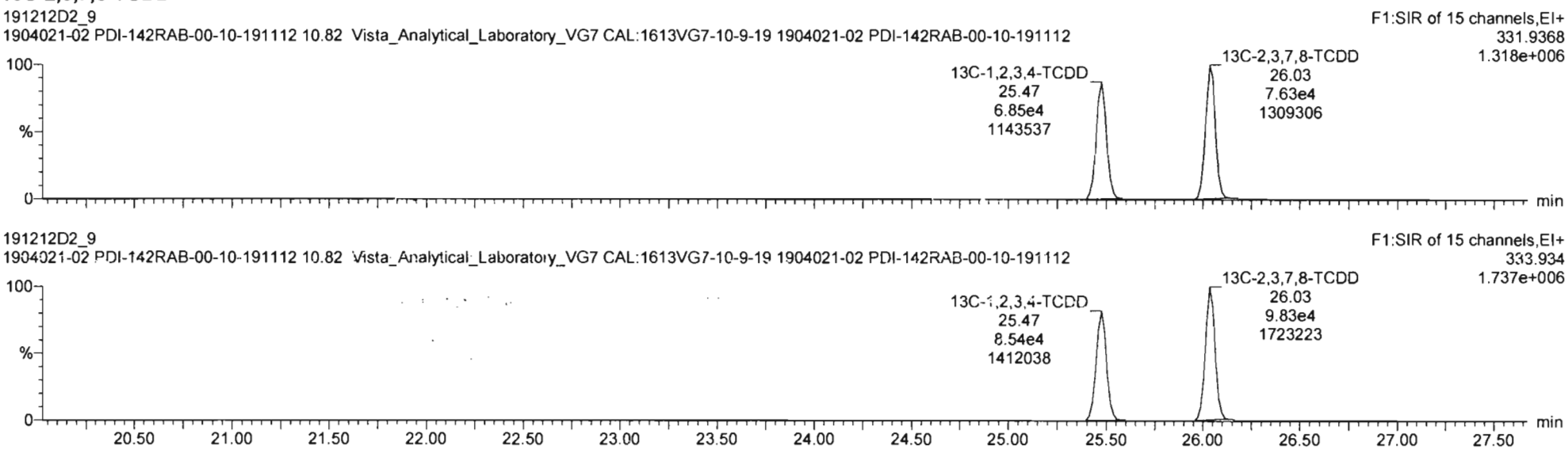

TargetLynx XS - 191212D2_9 - [Chromatogram]

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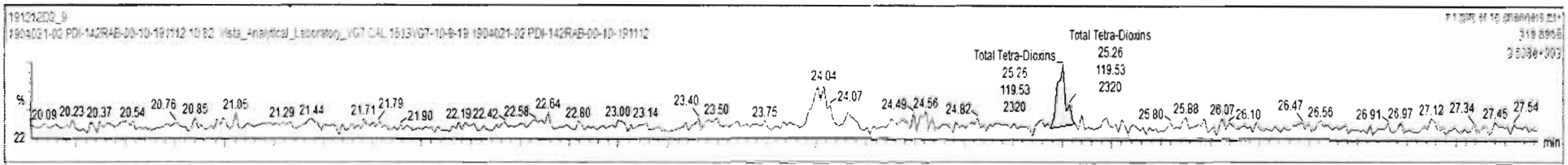
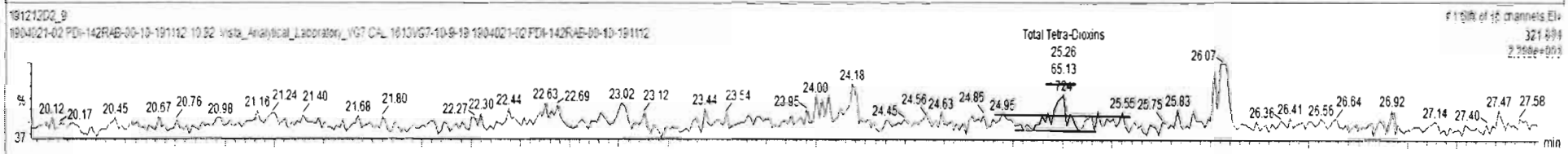
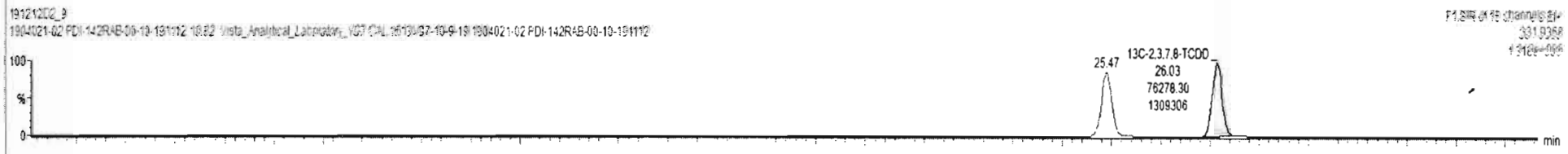
191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

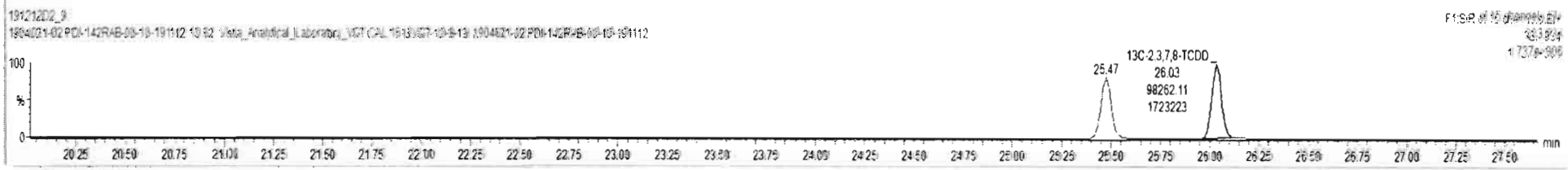
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	1.22e5	1.52e5	38	0.42	NO	0.581	10.060	36.17	36.28	1.146	1.143	NO	235.1	118	1.12	
34	34	13C-OCDF	3.26e5	1.92e5	38	0.89	NO	0.689	10.060	41.18	41.21	1.234	1.233	NO	489.2	123	0.566	
35	35	37Cl-2,3,7,8-TCDD	7.25e4	1.54e5	36			1.158	10.060	26.03	26.05	1.023	1.022	NO	78.22	98.4	0.127	
36	36	13C-1,2,3,4-TCDD	1.54e5	1.54e5	36	0.80	NO	1.000	10.060	25.50	25.47	1.000	1.000	NO	198.8	100	0.447	
37	37	13C-1,2,3,4-TCDF	2.47e5	2.47e5	37	0.80	NO	1.000	10.060	24.06	24.03	1.000	1.000	NO	198.8	100	0.356	
38	38	13C-1,2,3,4,6,9-HxCDF	1.92e5	1.92e5	38	0.51	NO	1.000	10.060	33.42	33.39	1.000	1.000	NO	198.8	100	0.533	
39	39	Total Tetra-Dioxins		1.75e5				0.901	10.060	25.50			0.000	NO	0.0000		0.0745	0.1460
40	40	Total Penta-Dioxins		1.48e5				0.872	10.060	30.00			0.000	NO	0.0000		0.0815	0.6660
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.060	33.80			0.000	NO	1.632		0.230	3.025
42	42	Total Hepta-Dioxins		1.43e5				0.989	10.060	37.75			0.000	NO	21.86		0.377	21.86
43	43	Total Tetra-Furans		2.53e5				0.943	10.060	24.00			0.000	NO	0.1591		0.148	0.1930
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.060	27.62			0.000	NO	0.4958		0.0627	0.4960
45	45	Total Penta-Furans		0.00e0				0.940	10.060	30.00			0.000	NO	0.3652		0.102	0.7280
46	46	Total Hexa-Furans		0.00e0				1.078	10.060	33.00			0.000	NO	1.937		0.129	2.248
47	47	Total Hepta-Furans		0.00e0				1.135	10.060	37.75			0.000	NO	4.281		0.141	4.281

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	39	Total Tetra-Dioxins	25.50	25.26	1.195e2	6.512e1	0.770	1.84	YES	0.14600	0.00000









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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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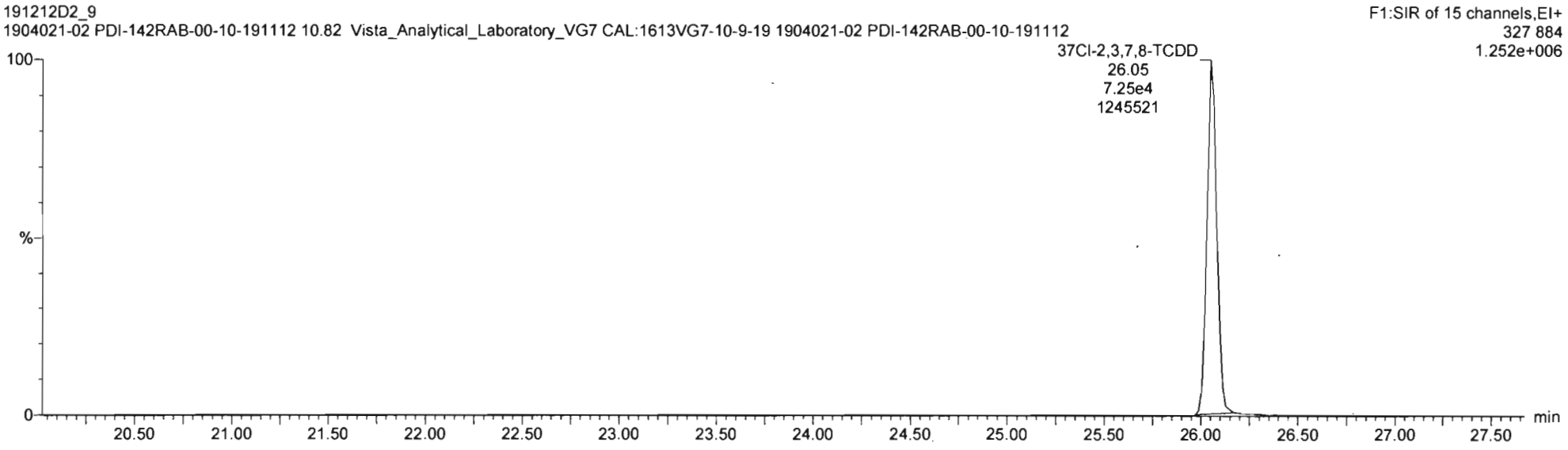

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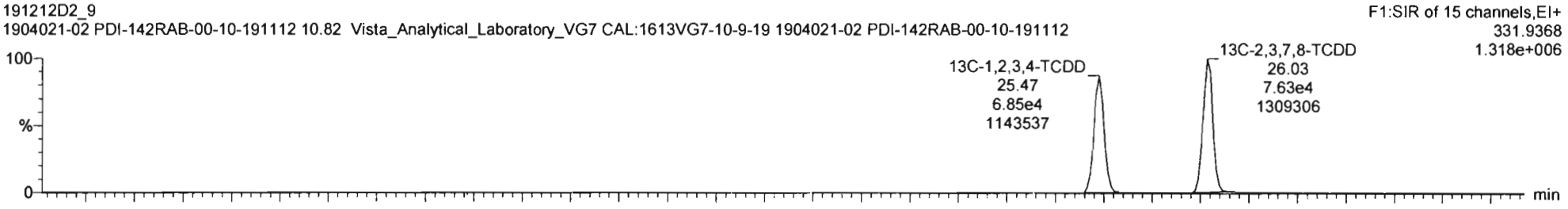

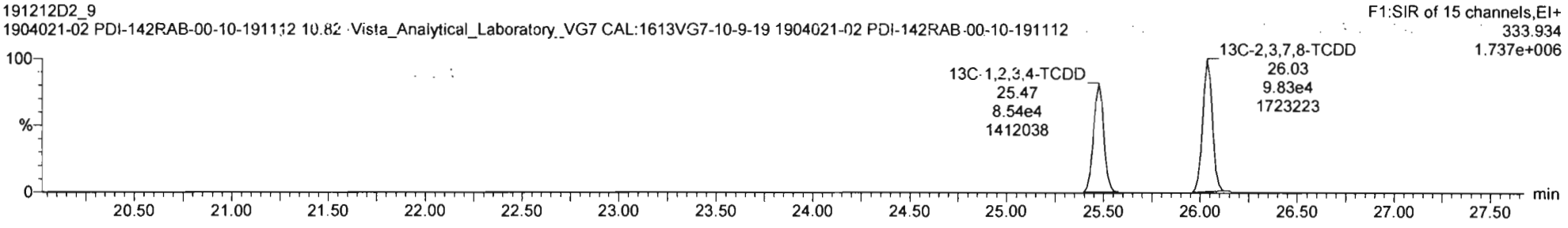

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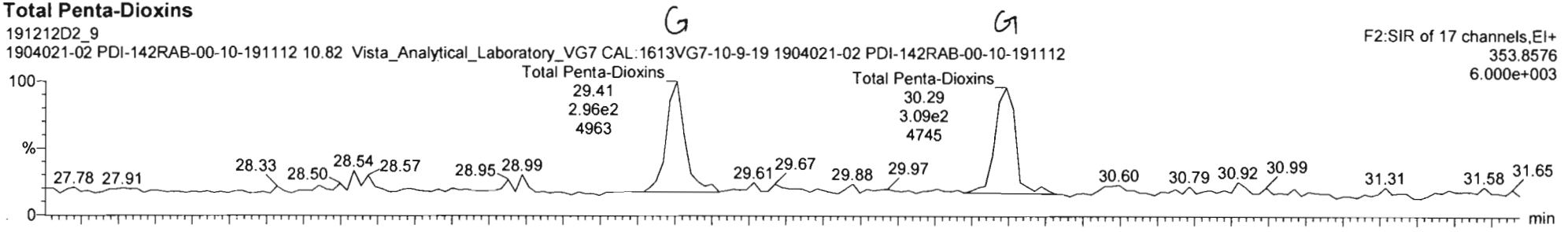
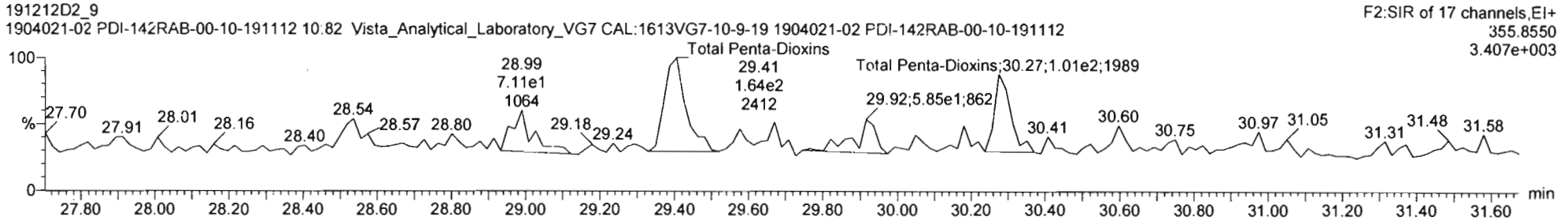
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Penta-Dioxins





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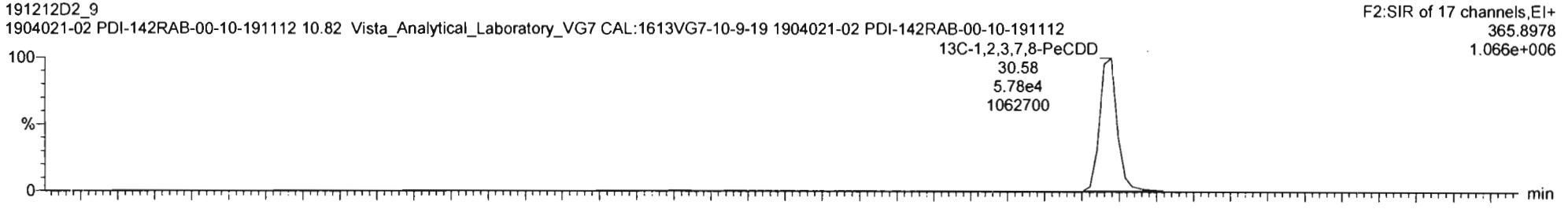

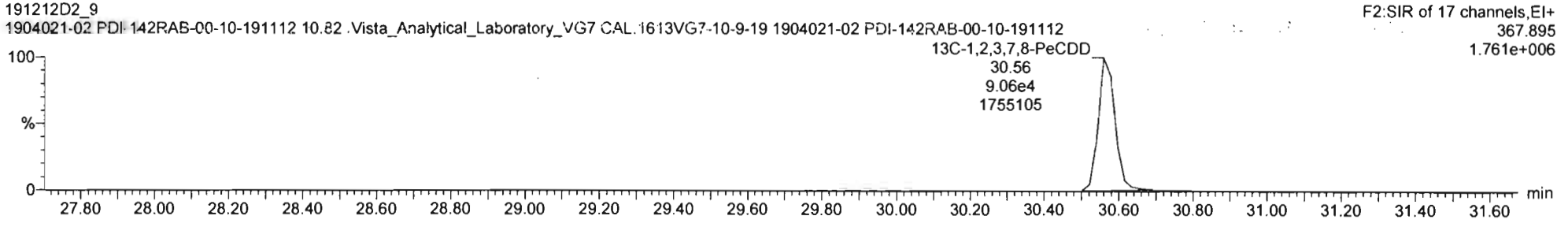

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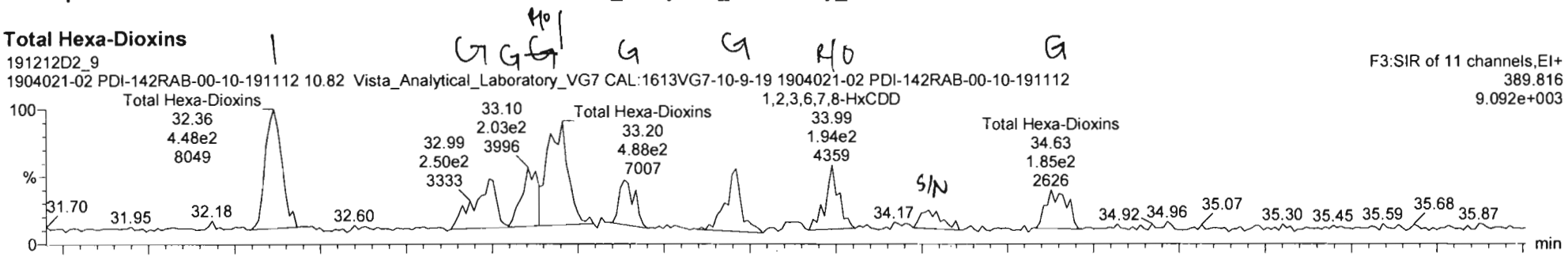
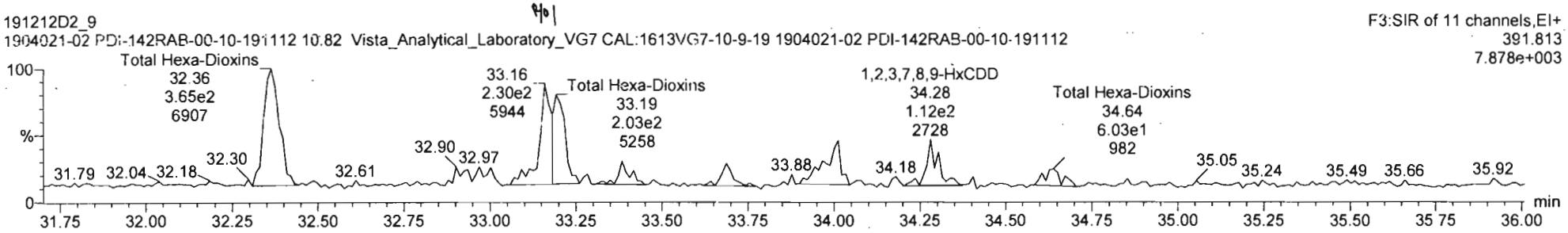
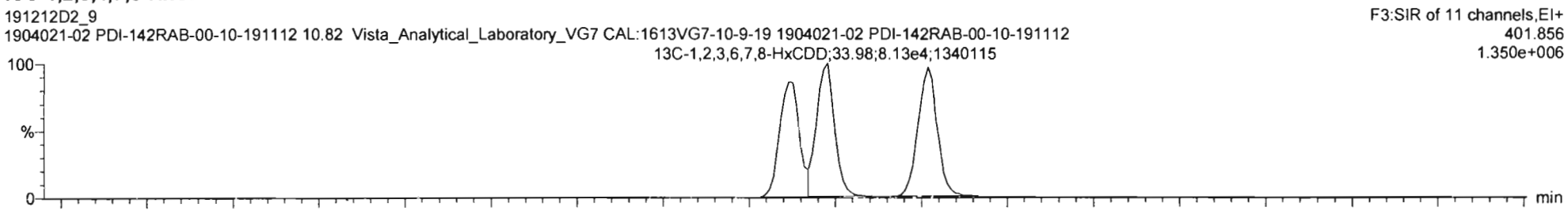
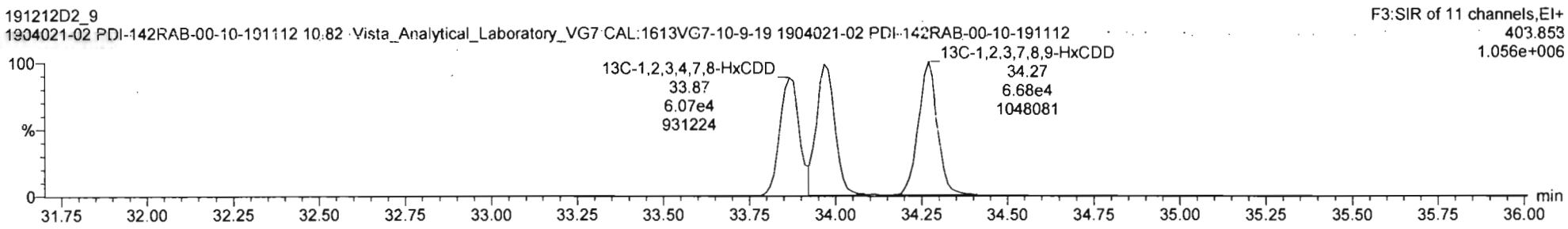
Total Hexa-Dioxins





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





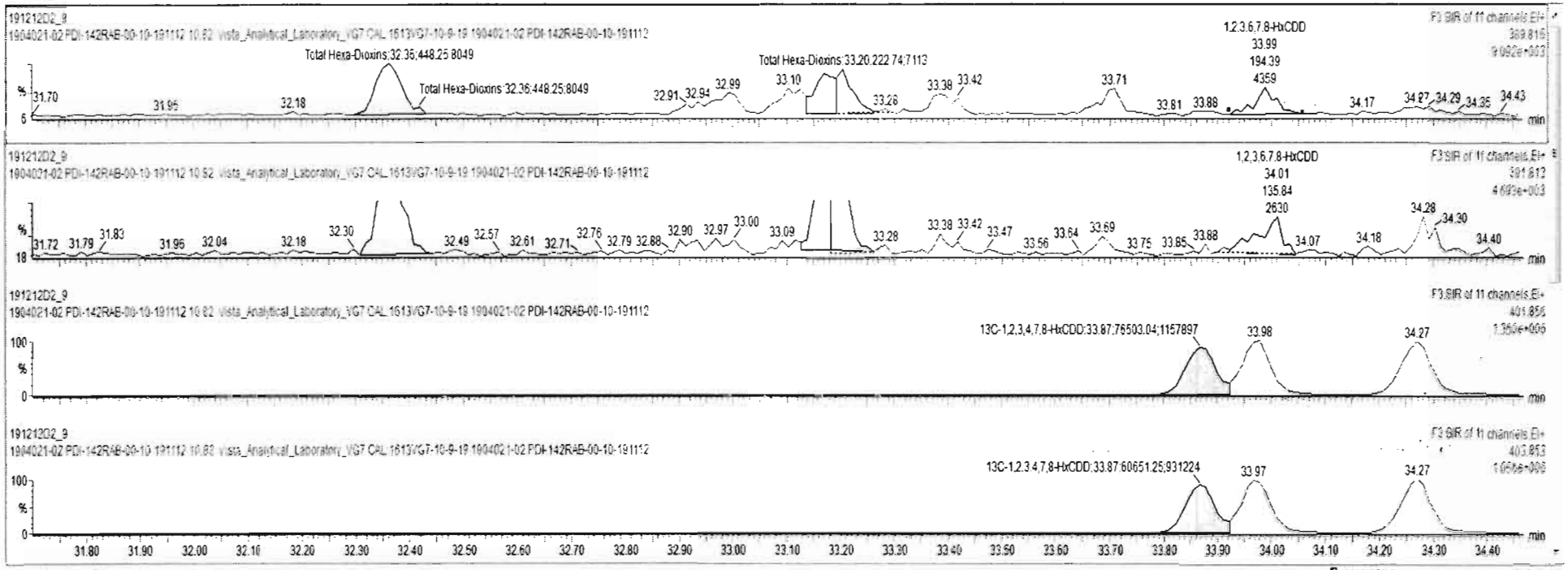
TargetLynx XS - 191212D2_9 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
27	27	13C-2,3,4,7,8-PeCDF	2.26e5	2.47e5	37	1.64	NO	0.847	10.060	30.29	30.29	1.189	1.189	NO	209.2	105	0.717	
28	28	13C-1,2,3,4,7,8-HxCDF	1.76e5	1.92e5	38	0.52	NO	0.832	10.060	32.97	32.98	0.988	0.987	NO	219.3	110	0.641	
29	29	13C-1,2,3,6,7,8-HxCDF	1.97e5	1.92e5	38	0.52	NO	1.034	10.060	33.09	33.11	0.992	0.991	NO	196.8	99.0	0.515	
30	30	13C-2,3,4,6,7,8-HxCDF	1.82e5	1.92e5	38	0.51	NO	0.953	10.060	33.70	33.70	1.009	1.009	NO	197.0	99.1	0.559	
31	31	13C-1,2,3,7,8,9-HxCDF	1.71e5	1.92e5	38	0.52	NO	0.828	10.060	34.69	34.64	1.037	1.039	NO	214.0	108	0.644	
32	32	13C-1,2,3,4,6,7,8-HpCDF	1.75e5	1.92e5	38	0.44	NO	0.757	10.060	36.49	36.47	1.092	1.092	NO	228.9	120	0.857	
33	33	13C-1,2,3,4,7,8,9-HpCDF	1.32e5	1.92e5	38	0.42	NO	0.581	10.060	38.17	38.28	1.146	1.143	NO	235.1	118	1.12	
34	34	13C-OCDF	3.26e5	1.92e5	38	0.69	NO	0.689	10.060	41.18	41.21	1.234	1.233	NO	488.2	122	0.566	
35	35	37Cl-2,3,7,8-TCDD	7.25e4	1.54e5	36			1.198	10.060	26.03	26.05	1.023	1.022	NO	78.22	98.4	0.127	
36	36	13C-1,2,3,4-TCDD	1.54e5	1.54e5	36	0.80	NO	1.000	10.060	25.50	25.47	1.000	1.000	NO	198.6	100	0.447	
37	37	13C-1,2,3,4-TCDF	2.47e5	2.47e5	37	0.80	NO	1.000	10.060	24.06	24.03	1.000	1.000	NO	198.8	100	0.358	
38	38	13C-1,2,3,4,6,9-HxCDF	1.92e5	1.92e5	38	0.51	NO	1.000	10.060	33.42	33.39	1.009	1.009	NO	198.8	100	0.533	
39	39	Total Tetra-Dioxins		1.75e5				0.901	10.060	25.50			0.000	NO			0.0745	
40	40	Total Penta-Dioxins		1.46e5				0.872	10.060	30.00			0.000	NO			0.0815	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.060	33.80			0.000	NO	1.145		0.230	2.743

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.60	32.36	4.482e2	3.648e2	1.240	1.23	NO	1.1450	1.1450
2	41	Total Hexa-Dioxins	33.60	33.17	2.708e2	1.802e2	1.240	1.50	YES	0.56847	0.00000
3	41	Total Hexa-Dioxins	33.60	33.20	2.227e2	1.548e2	1.240	1.14	NO	0.58634	0.00000
4	4	1,2,3,6,7,8-HxCDD	32.58	33.99	1.944e2	1.358e2	1.240	1.43	YES	0.44136	0.00000



Custom Reporting: Select reports to generate

191212D2_9

CAP NUM

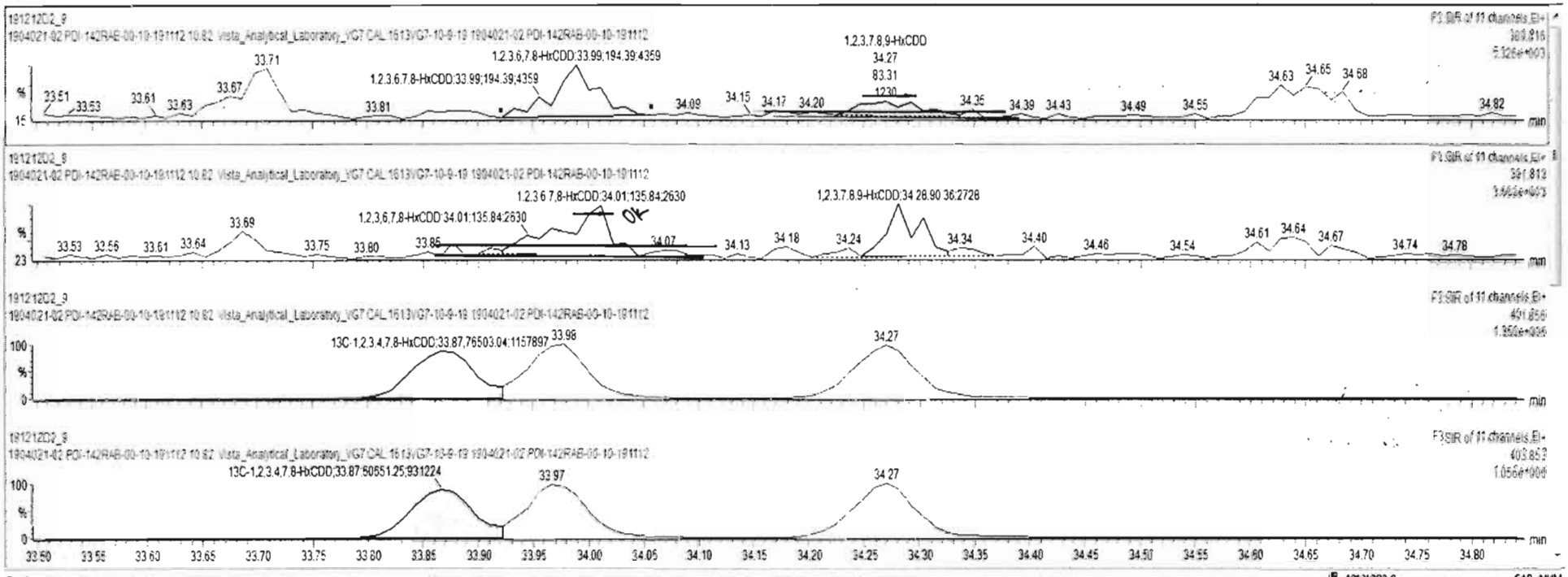
TargetLynx XS - 191212D2_9 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
27	27	13C-2,3,4,7,8-PeCDF	2.20e5	2.47e5	37	1.64	NO	0.847	10.060	30.29	30.29	1.189	1.189	NO	209.2	105	0.717	
28	28	13C-1,2,3,4,7,8-HxCDF	1.76e5	1.92e5	38	0.52	NO	0.832	10.060	32.97	32.98	0.988	0.987	NO	219.3	110	0.641	
29	29	13C-1,2,3,6,7,8-HxCDF	1.57e5	1.92e5	38	0.52	NO	1.034	10.060	33.09	33.11	0.992	0.991	NO	196.6	99.0	0.515	
30	30	13C-2,3,4,6,7,8-HxCDF	1.82e5	1.92e5	38	0.51	NO	0.953	10.060	33.70	33.70	1.009	1.009	NO	197.0	99.1	0.599	
31	31	13C-1,2,3,7,8,9-HxCDF	1.71e5	1.92e5	38	0.52	NO	0.828	10.060	34.69	34.64	1.037	1.038	NO	214.0	108	0.644	
32	32	13C-1,2,3,4,6,7,8-HpCDF	1.75e5	1.92e5	38	0.44	NO	0.757	10.060	36.49	36.47	1.092	1.093	NO	238.9	120	0.857	
33	33	13C-1,2,3,4,7,8,9-HpCDF	1.32e5	1.92e5	38	0.42	NO	0.581	10.060	38.17	38.28	1.146	1.143	NO	235.1	118	1.12	
34	34	13C-OCDF	3.26e5	1.92e5	38	0.89	NO	0.689	10.060	41.18	41.21	1.234	1.233	NO	488.2	123	0.566	
35	35	37Cl-2,3,7,8-TCDD	7.25e4	1.54e5	36			1.198	10.060	26.03	26.05	1.023	1.022	NO	78.22	99.4	0.127	
36	36	13C-1,2,3,4-TCDD	1.54e5	1.54e5	36	0.80	NO	1.000	10.060	25.50	25.47	1.000	1.000	NO	198.6	100	0.447	
37	37	13C-1,2,3,4-TCDF	2.47e5	2.47e5	37	0.80	NO	1.000	10.060	24.06	24.03	1.000	1.000	NO	198.6	100	0.358	
38	38	13C-1,2,3,4,6,9-HxCDF	1.92e5	1.92e5	38	0.51	NO	1.000	10.060	33.42	33.39	1.000	1.000	NO	198.6	100	0.533	
39	39	Total Tetra-Dioxins		1.75e5				0.901	10.060	25.50			0.000	NO			0.0745	
40	40	Total Penta-Dioxins		1.48e5				0.872	10.060	30.00			0.000	NO			0.0515	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.060	33.80			0.000	NO	1.145		0.230	2.949

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	33.36	4.462e2	3.648e2	1.240	1.23	NO	1.1450	1.1450
2	41	Total Hexa-Dioxins	33.80	33.17	2.708e2	1.802e2	1.240	1.50	YES	0.56847	0.00000
3	41	Total Hexa-Dioxins	33.80	33.20	2.227e2	1.948e2	1.240	1.14	NO	0.56804	0.00000
4	4	1,2,3,6,7,8-HxCDD	33.98	33.99	1.944e2	1.358e2	1.240	1.43	YES	0.44136	0.00000
5	5	1,2,3,7,8,9-HxCDD	34.30	34.27	8.331e1	9.036e1	1.240	0.92	YES	0.20645	0.00000



Ready

191212D2_9 CAP NUM

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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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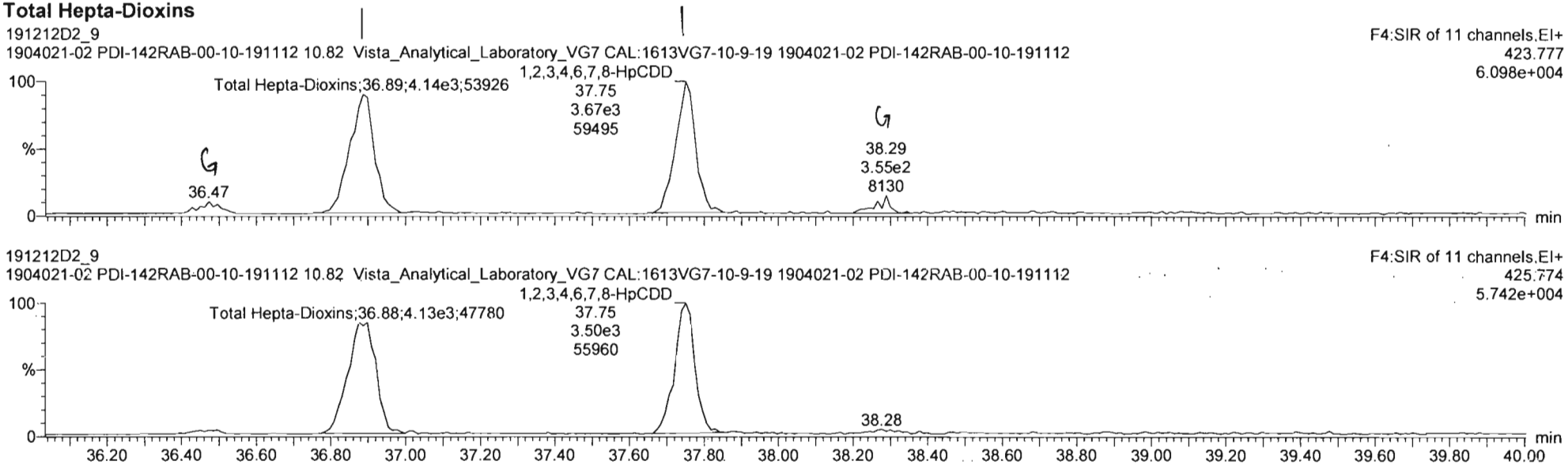
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Dioxins



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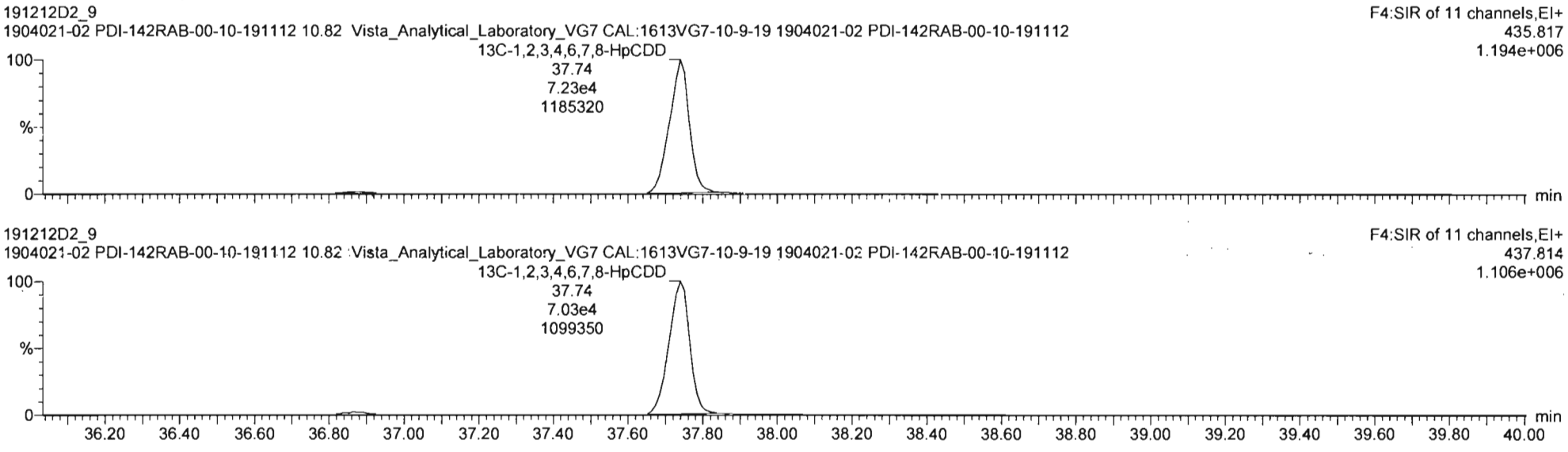

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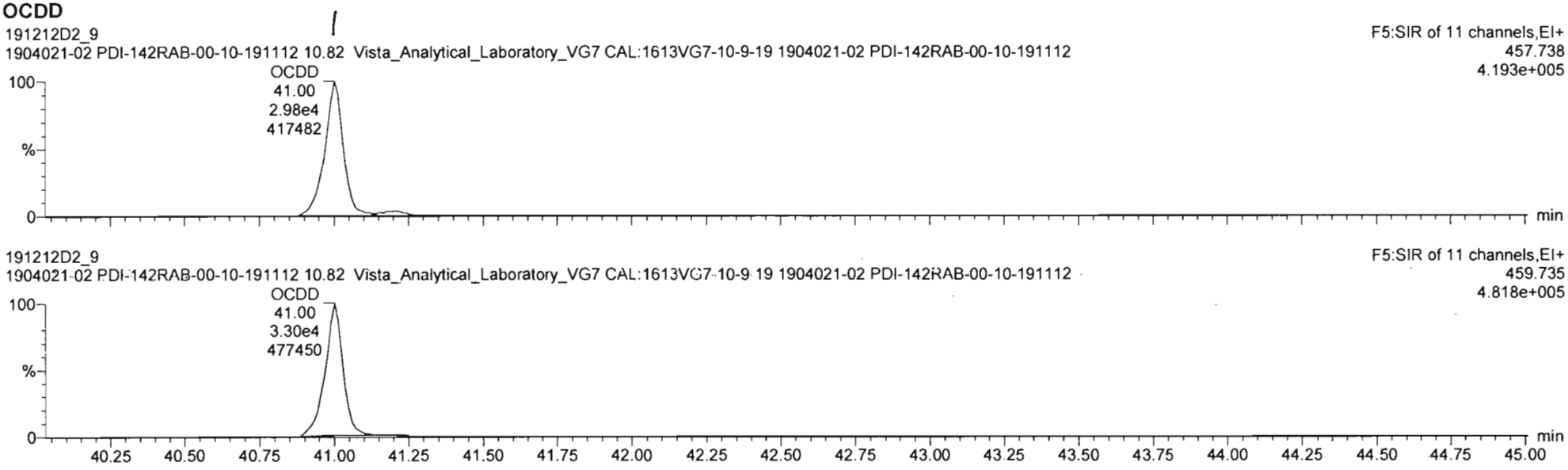
Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDD



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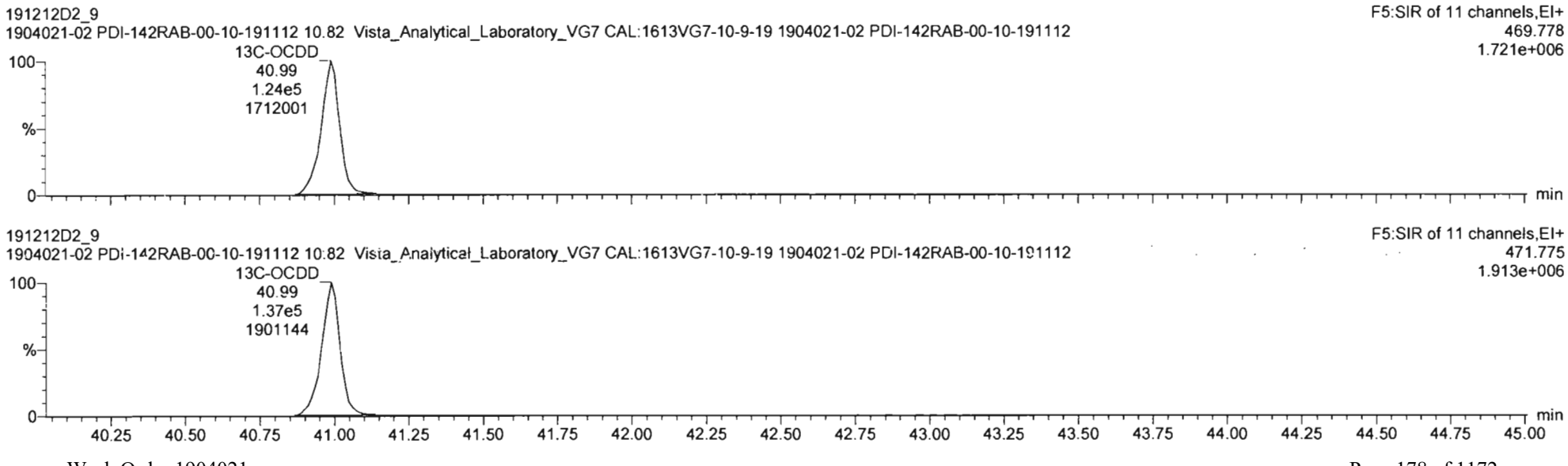

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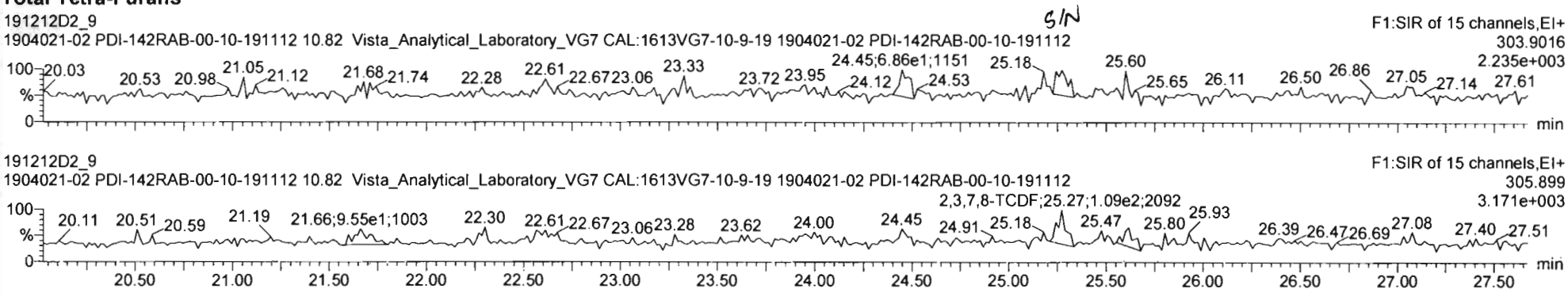
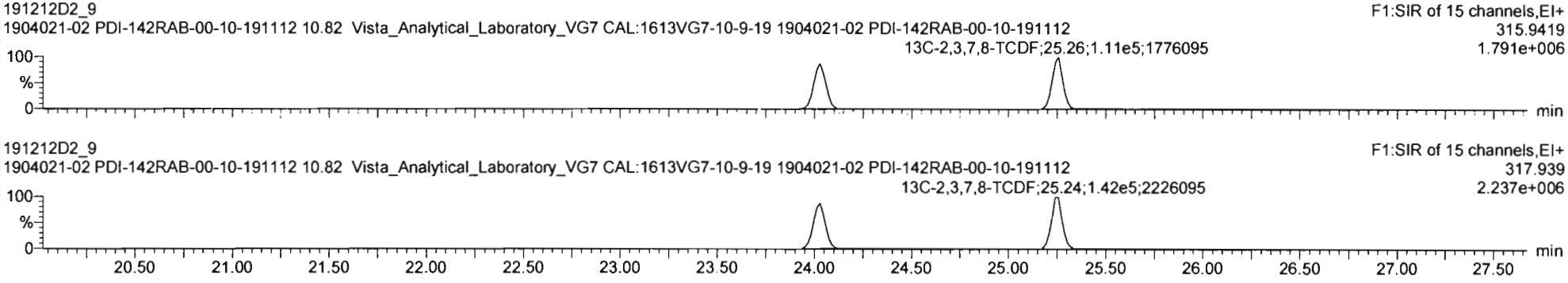
Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

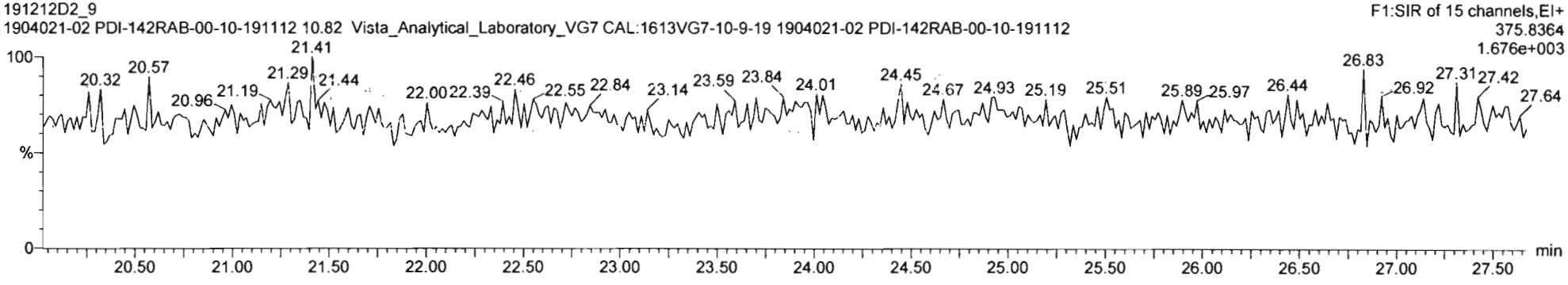
Total Tetra-Furans



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



DPE1



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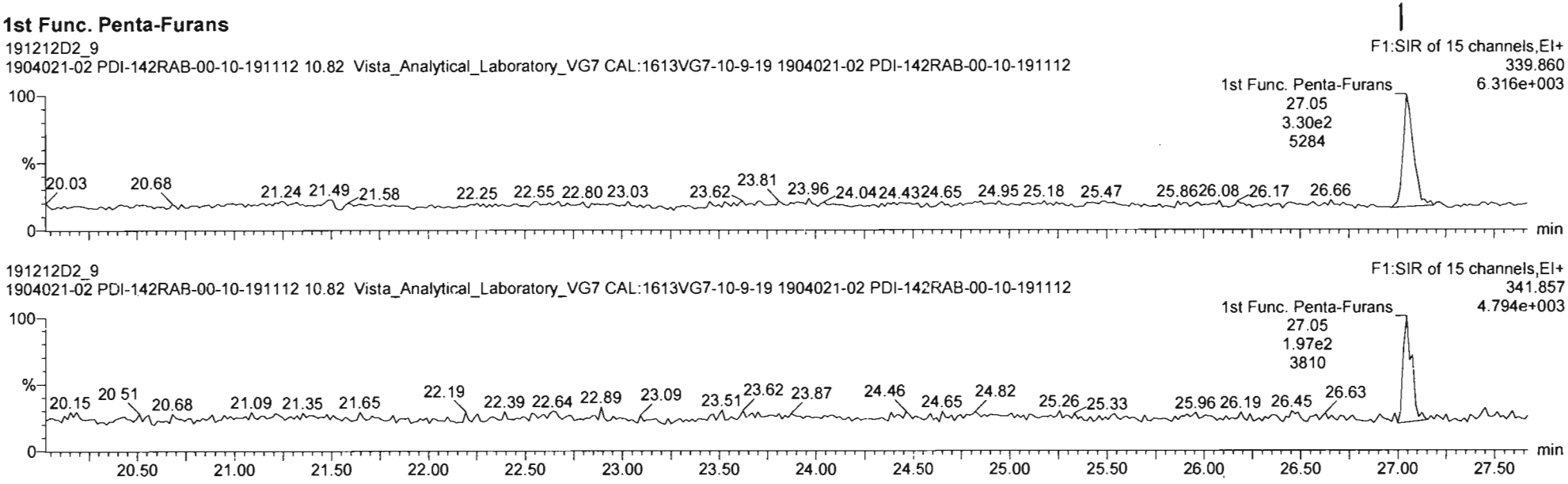
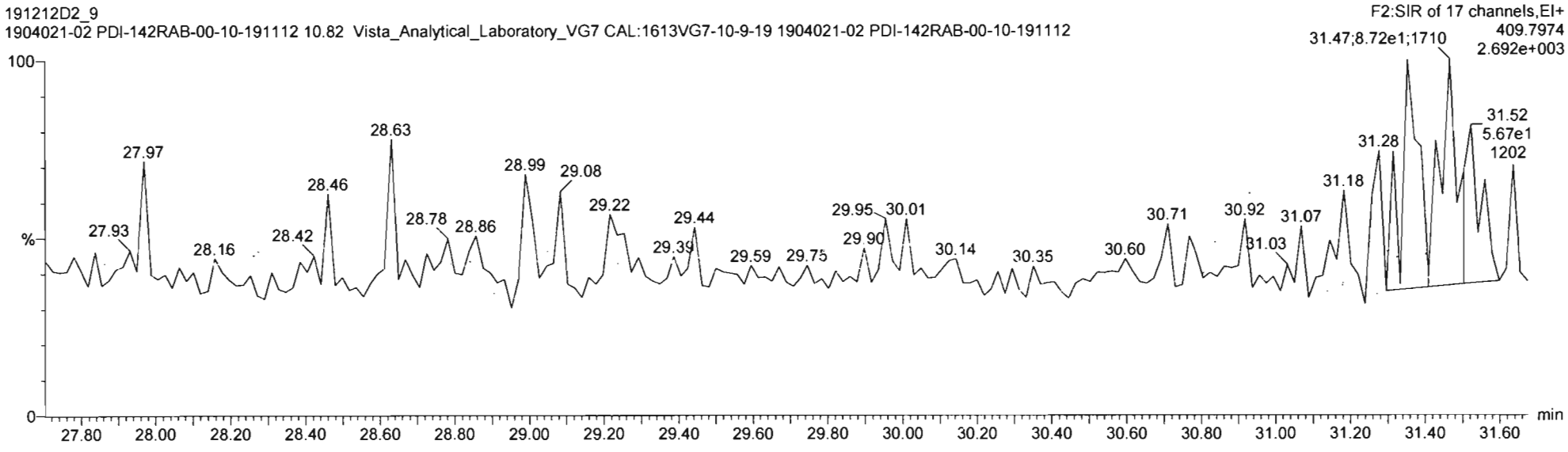
Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

1st Func. Penta-Furans



DPE6



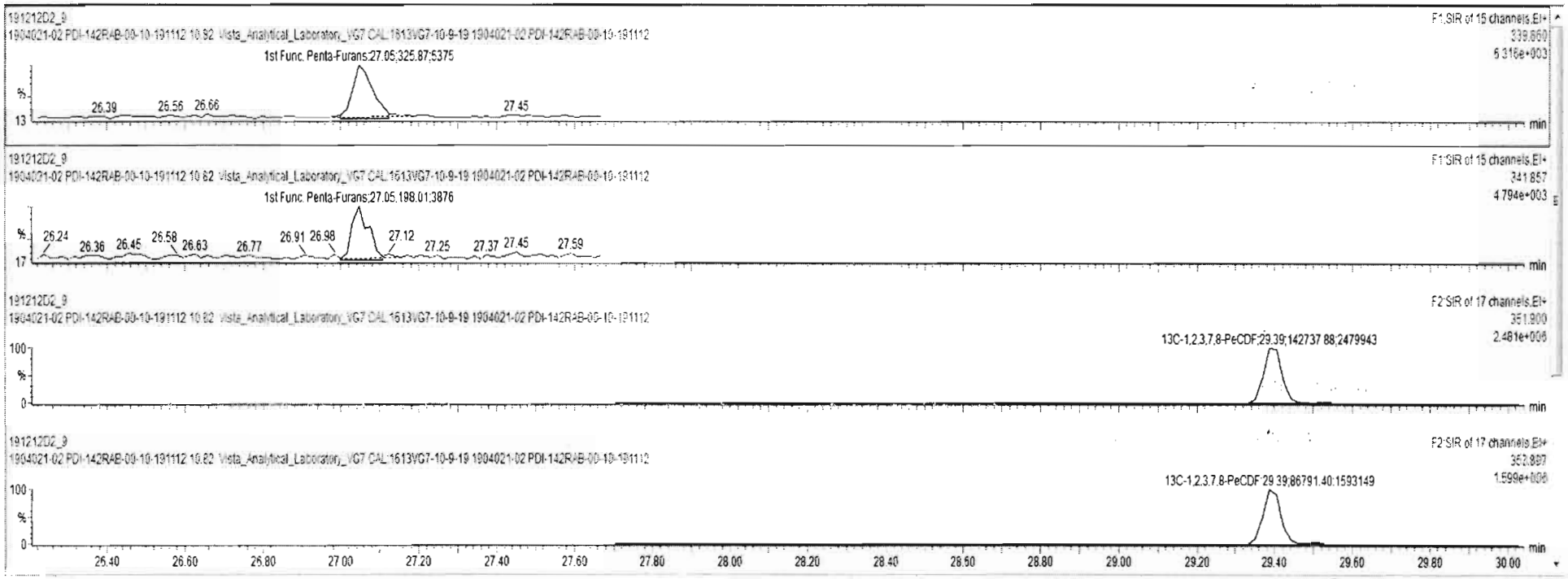
TargetLynx XS - 191212D2_9 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10 82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
43	43	Total Tetra-Furans		2.53e5				0.943	10.060	24.00			0.000	NO			0.0699	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.060	27.63			0.000	NO	0.4929		0.0627	0.4929
45	45	Total Penta-Furans		0.00e0				0.940	10.060	30.00			0.000	NO	0.3652		0.102	8.7258
46	46	Total Hexa-Furans		0.00e0				1.078	10.060	33.00			0.000	NO	1.937		0.129	2.048
47	47	Total Hepta-Furans		0.00e0				1.125	10.060	37.75			0.000	NO	4.281		0.141	4.281
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																
53	53	DPE1																
54	54	DPE2																
55	55	DPE3																
56	56	DPE4																
57	57	DPE5																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	44	1st Func. Penta-Furans	27.63	27.05	3.259e2	1.960e2	1.550	1.65	NO	0.49291	0.49291



Ready 191212D2_9 CAP NUM

Vista Analytical Laboratory
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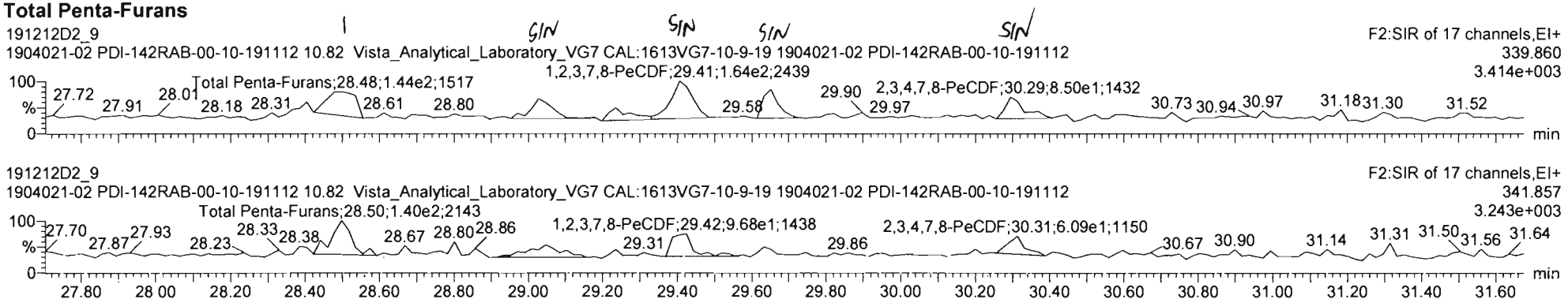
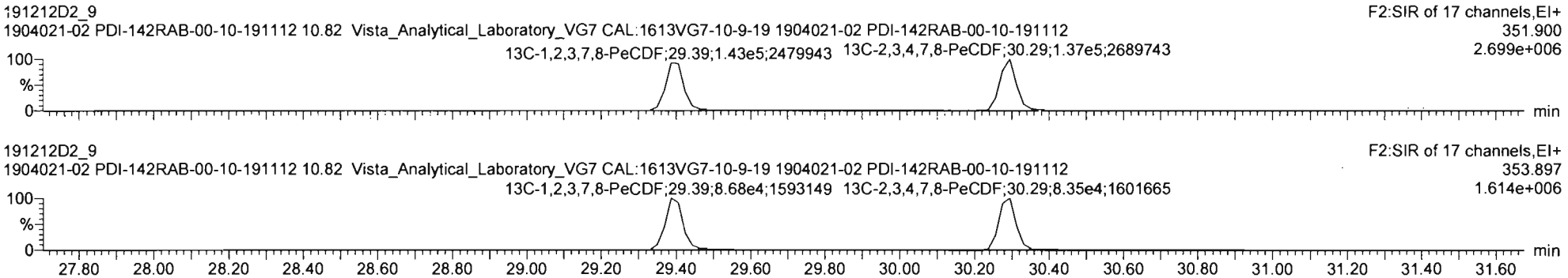
Printed: Tuesday, December 17, 2019 11:30:14 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

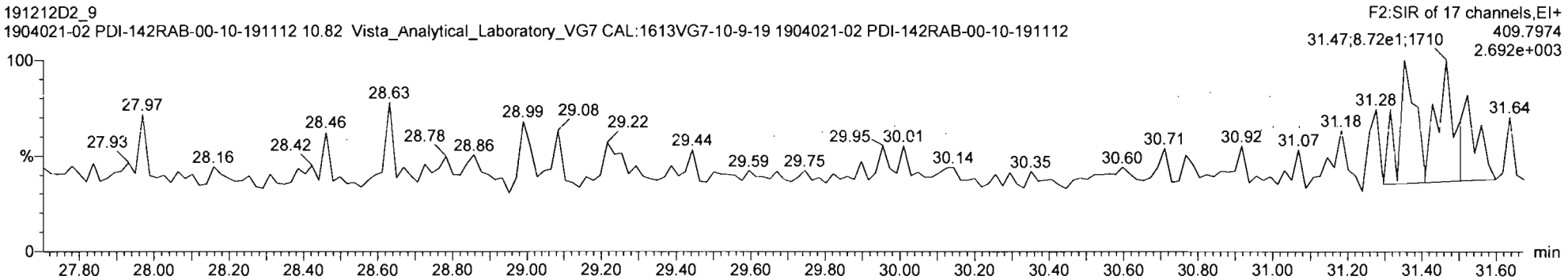
Total Penta-Furans



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



DPE2



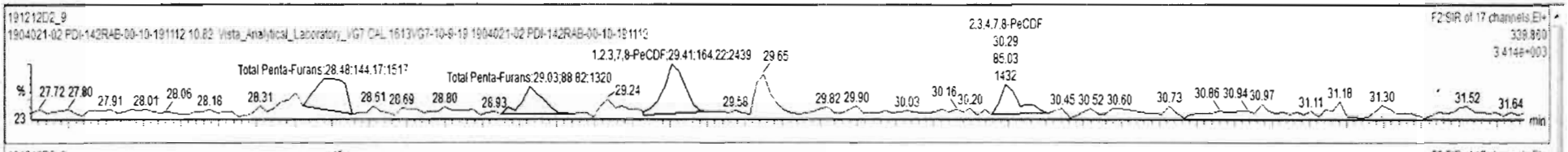
TargetLynx XS - 191212D2_9 * - [Chromatogram]

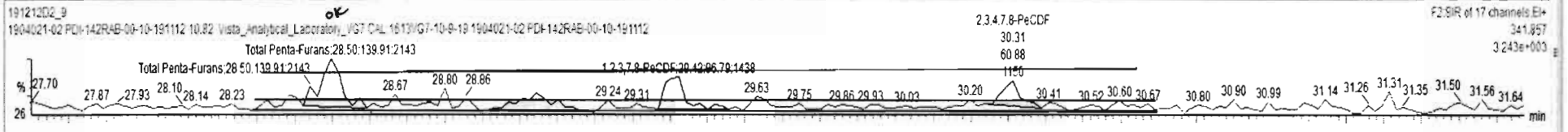
File Edit View Display Processing Window Help

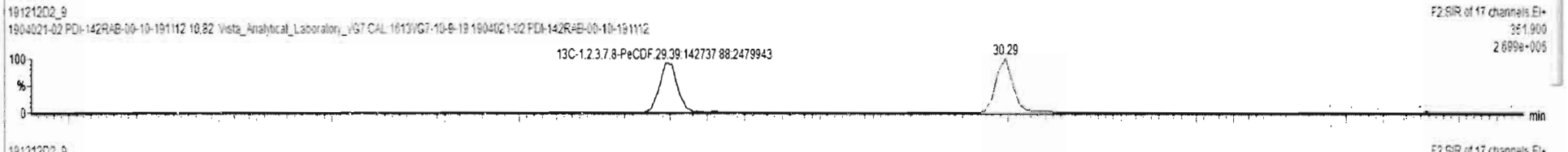
191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

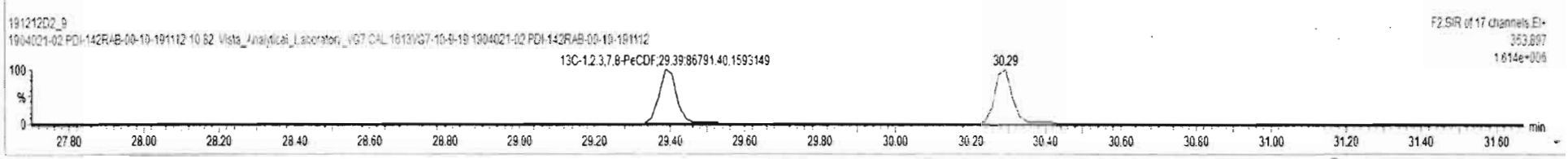
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
43	43	Total Tetra-Furans		2.52e5				0.943	10.060	24.00			0.000	NO			0.0699	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.060	27.63			0.000	NO	0.4829		0.0627	0.4829
45	45	Total Penta-Furans		0.00e0				0.940	10.060	30.00			0.000	NO	0.3652		0.102	0.7258
46	46	Total Hexa-Furans		0.00e0				1.078	10.060	33.00			0.000	NO	1.937		0.129	2.048
47	47	Total Hepta-Furans		0.00e0				1.135	10.060	37.75			0.000	NO	4.261		0.141	4.261
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																
53	53	DPE1																
54	54	DPE2																
55	55	DPE3																
56	56	DPE4																
57	57	DPE5																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	45	Total Penta-Furans	30.00	28.48	1.442e2	1.399e2	1.550	1.03	YES	0.22315	0.00000
2	45	Total Penta-Furans	30.00	29.03	8.882e1	8.085e1	1.550	1.10	YES	0.13749	0.00000
3	9	1,2,3,7,8-PeCDF	29.41	29.41	1.642e2	9.679e1	1.550	1.70	NO	0.23541	0.23541
4	10	2,3,4,7,8-PeCDF	30.32	30.29	8.503e1	6.068e1	1.550	1.40	NO	0.12978	0.12978









Ready

191212D2_9

CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
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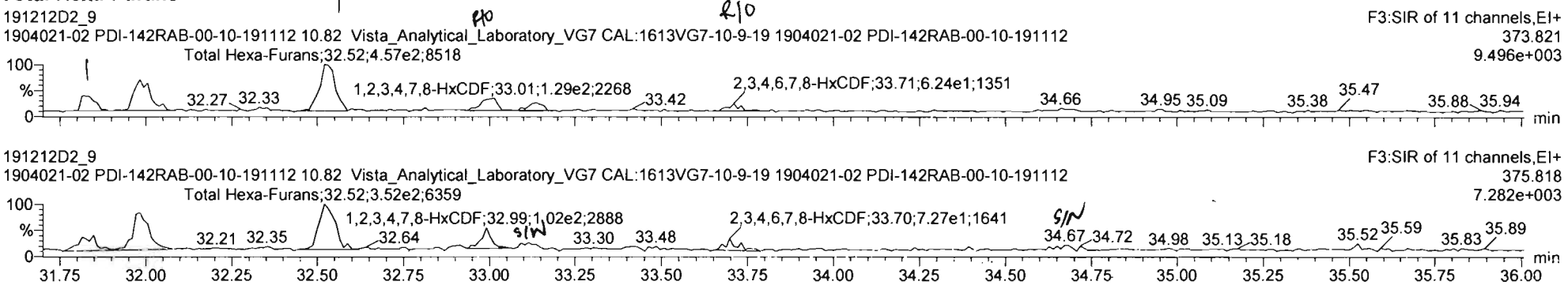
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Furans



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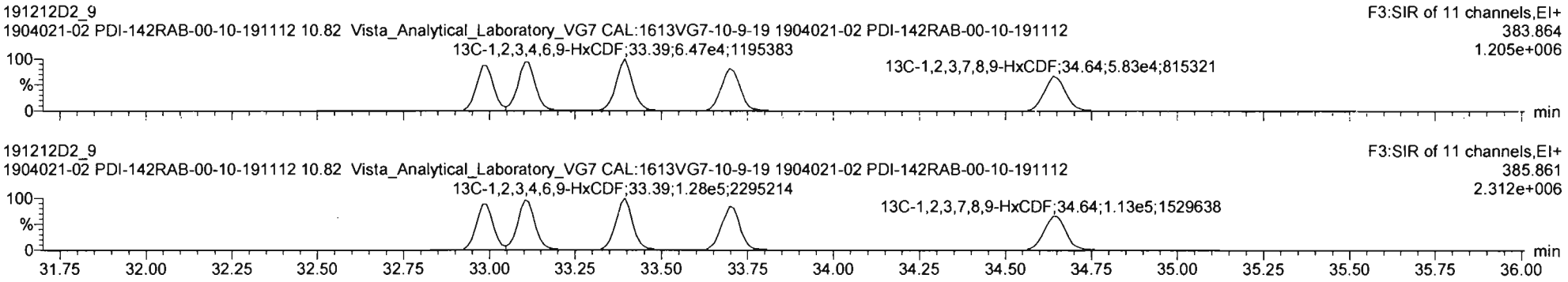
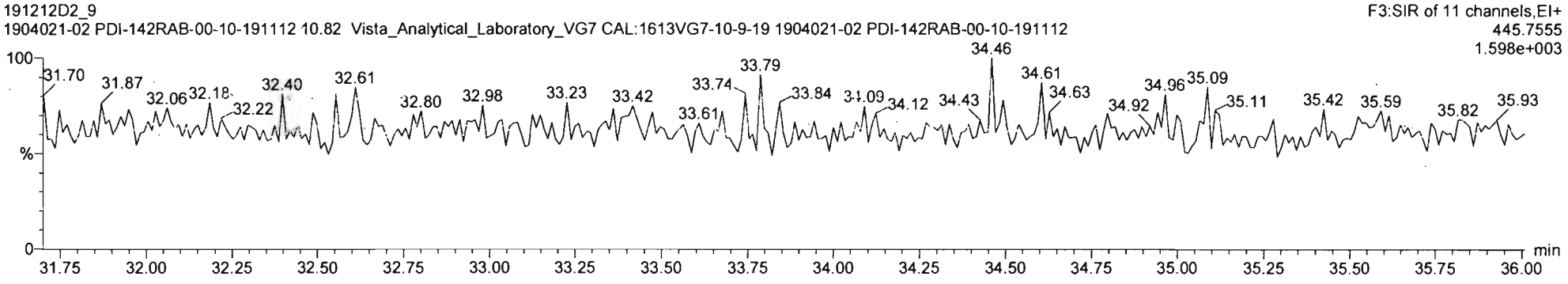


DPE3



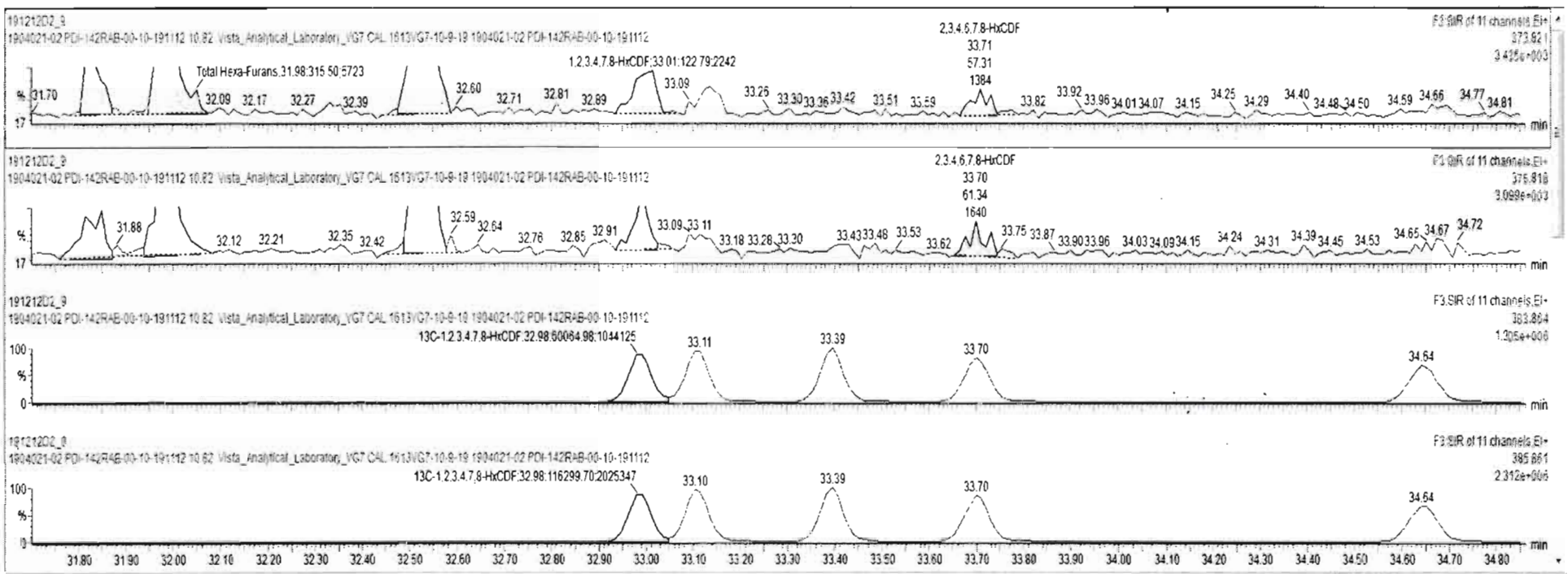
TargetLynx XS - 191212D2_9 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_9 - 1904021-02 PDI-142RAB-00-10-191112 - 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
35	37Cl-2,3,7,8-TCDD	7.25e4				10.060	26.05	1.023	78.2	98.4	0.127	
36	13C-1,2,3,4-TCDD	1.54e5	0.80	NO		10.060	25.47	1.000	199	100	0.447	
37	13C-1,2,3,4-TCDF	2.47e5	0.80	NO		10.060	24.03	1.000	199	100	0.358	
38	13C-1,2,3,4,6,9-HxCDF	1.92e5	0.51	NO		10.060	33.39	1.030	199	100	0.533	
39	Total Tetra-Dioxins					10.060					0.0745	
40	Total Penta-Dioxins					10.060					0.0815	
41	Total Hexa-Dioxins					10.060			1.15		0.230	2.74
42	Total Hepta-Dioxins					10.060			21.9		0.377	21.9
43	Total Tetra-Furans					10.060					0.0659	
44	1st Func. Penta-Furans					10.060			0.493		0.0627	0.493
45	Total Penta-Furans					10.060			0.260		0.0459	0.260
46	**Total Hexa-Furans**					**10.060**			**1.61**		**0.129**	**1.95**
47	Total Hepta-Furans					10.060			4.28		0.141	4.28
48	PFK1											
49	PFK2											

	Name	RT	m1 Resp	m2 Resp	RA	n/y	EMPC	Conc.
1	1,2,3,4,7,8-HxCDF	33.01	1.228e2	9.601e1	1.28	NO	0.20960	0.20960
2	Total Hexa-Furans	32.52	4.481e2	3.283e2	1.36	NO	0.78903	0.78903
3	Total Hexa-Furans	31.98	3.155e2	2.681e2	1.10	NO	0.61341	0.61341
4	Total Hexa-Furans	31.81	1.278e2	1.257e2	1.02	YES	0.23484	0.00000
5	2,3,4,6,7,8-HxCDF	33.71	5.731e1	6.134e1	0.93	YES	0.16177	0.00000



Custom Reporting: Select reports to generate

191212D2_9 CAP NUM

Vista Analytical Laboratory
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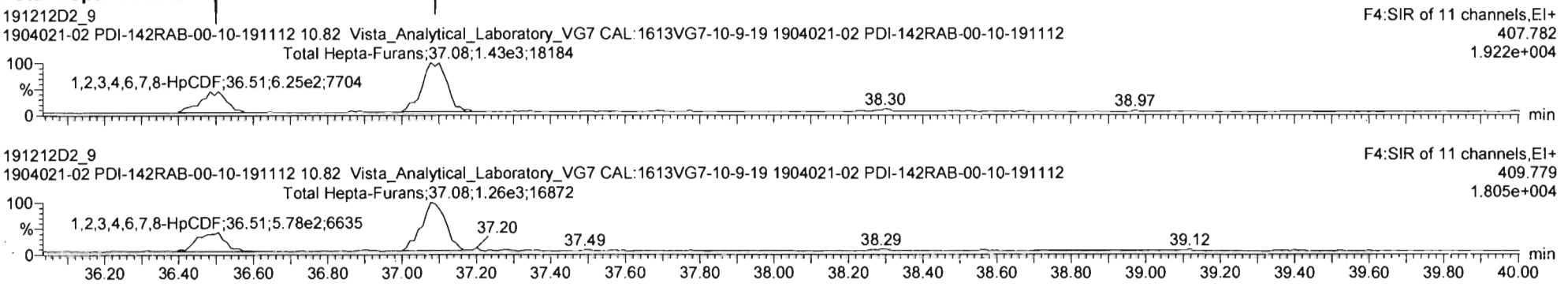
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Furans



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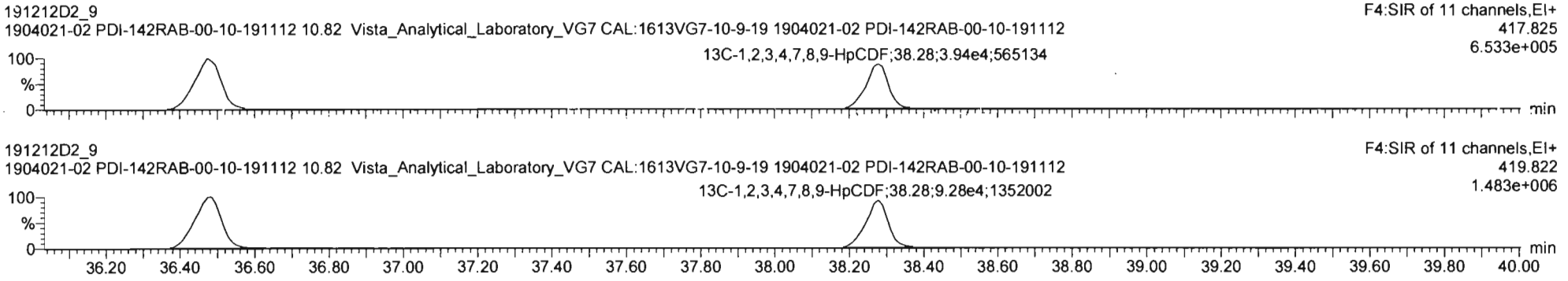

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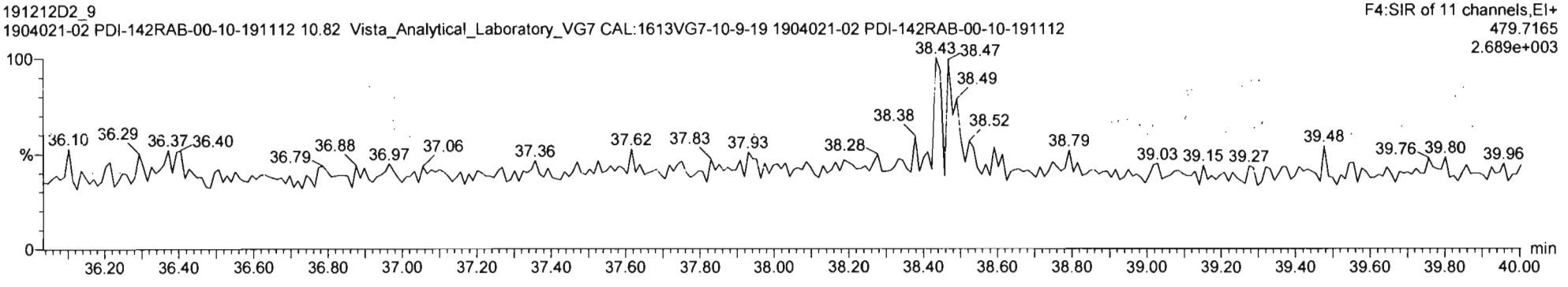

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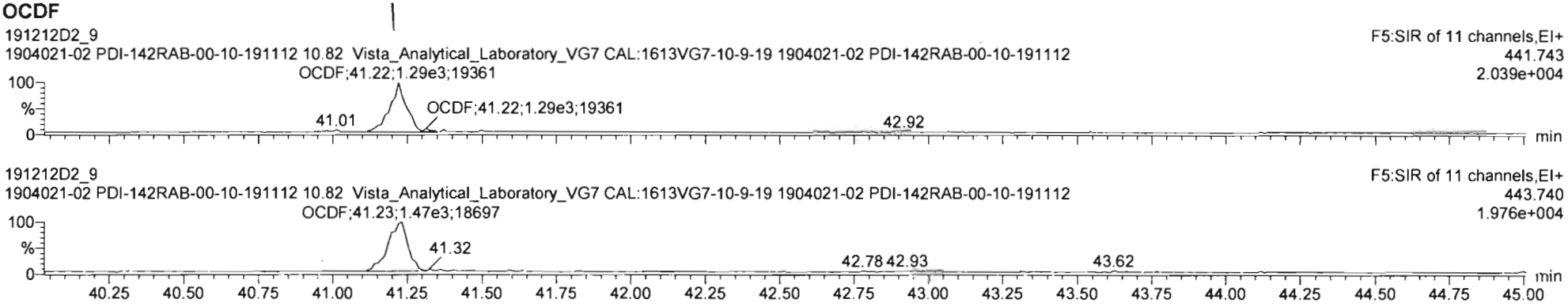
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_9, Date: 13-DEC-2019, Time: 07:19:19, ID: 1904021-02 PDI-142RAB-00-10-191112,
Description: 1904021-02 PDI-142RAB-00-10-191112 10.82 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDF



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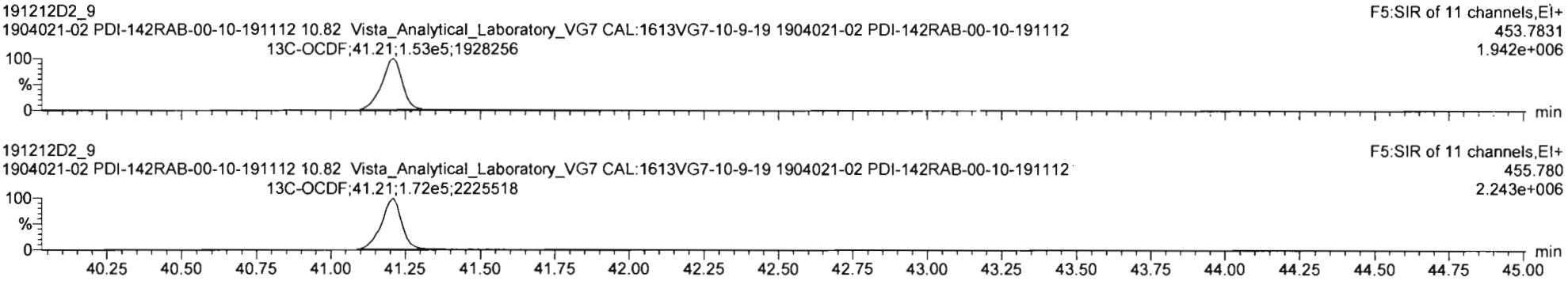

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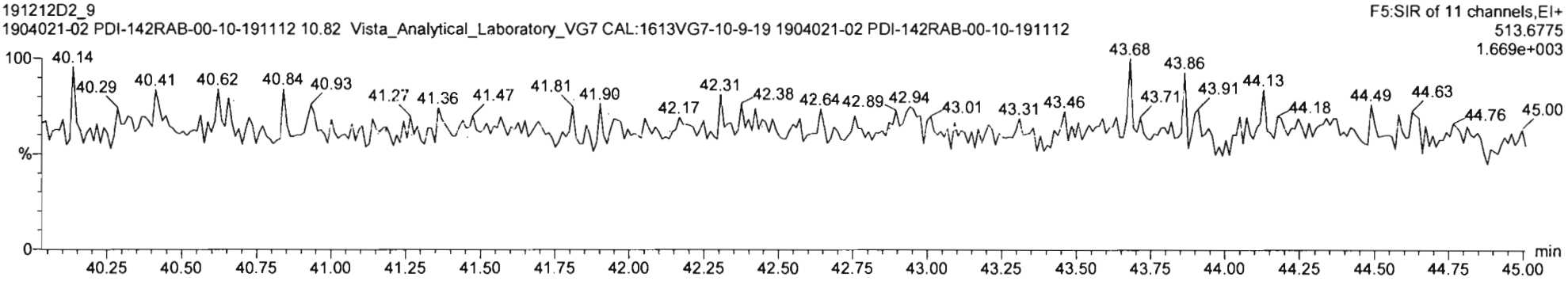

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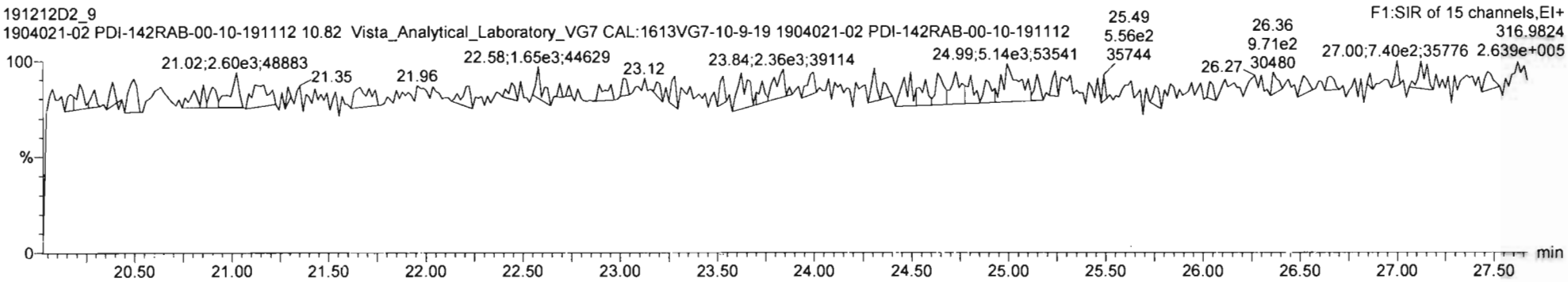
PFK1



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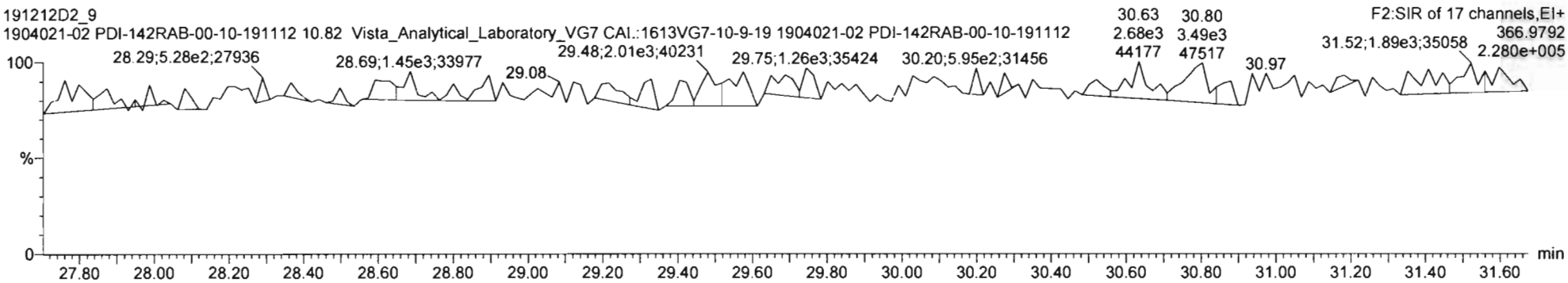

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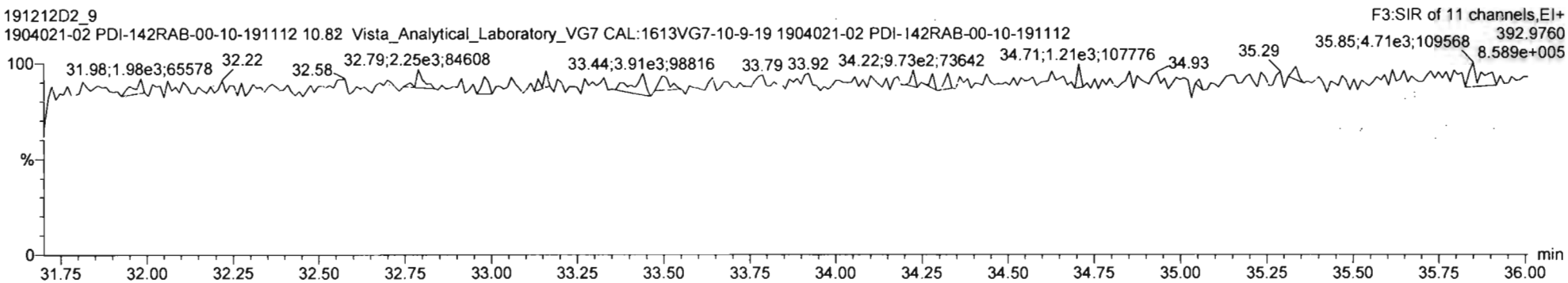

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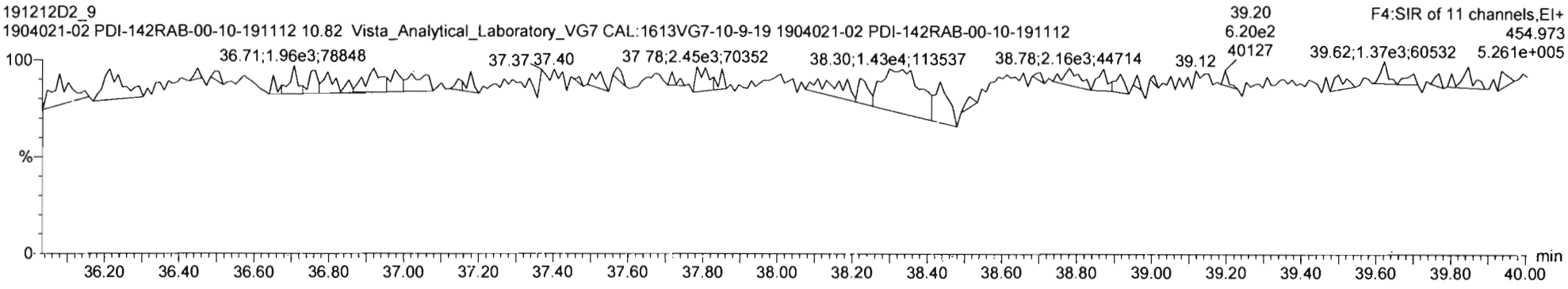
PFK4



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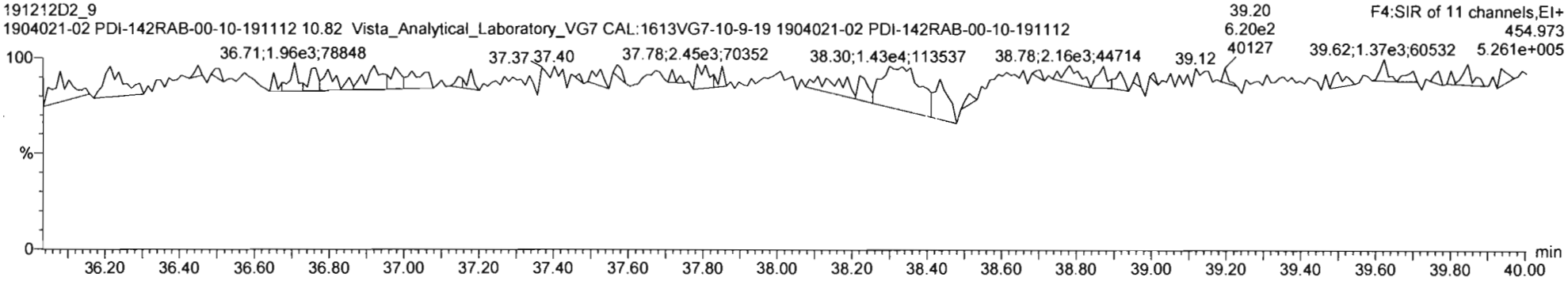

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_10.qld
Last Altered: Tuesday, December 17, 2019 11:55:46 Pacific Standard Time
Printed: Tuesday, December 17, 2019 11:56:50 Pacific Standard Time

EL 12/17/19 CT 12/26/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:05:21

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		6.10e4	10.0219	0.905			1.001		26.06					0.359
2	2	1,2,3,7,8-PeCDD		5.10e4	10.0219	0.903			1.001		30.59					0.508
3	3	1,2,3,4,7,8-HxCDD		4.45e4	10.0219	1.101			1.000		33.88					0.699
4	4	1,2,3,6,7,8-HxCDD		5.11e4	10.0219	0.939			1.000		33.97					0.743
5	5	1,2,3,7,8,9-HxCDD		5.21e4	10.0219	0.961			1.001		34.31					0.749
6	6	1,2,3,4,6,7,8-HpCDD	2.26e3	4.92e4	10.0219	0.979	1.056	NO	1.000	1.000	37.76	37.76	9.3571		9.36	0.699
7	7	OCDD	1.81e4	8.95e4	10.0219	0.959	0.873	NO	1.000	1.000	40.98	41.00	83.993		84.0	0.942
8	8	2,3,7,8-TCDF		8.75e4	10.0219	0.950			1.001		25.27					0.301
9	9	1,2,3,7,8-PeCDF		7.87e4	10.0219	0.960			1.001		29.41					0.255
10	10	2,3,4,7,8-PeCDF		7.51e4	10.0219	1.015			1.001		30.31					0.264
11	11	1,2,3,4,7,8-HxCDF		5.94e4	10.0219	1.177			1.000		32.99					0.309
12	12	1,2,3,6,7,8-HxCDF		6.84e4	10.0219	1.069			1.000		33.12					0.298
13	13	2,3,4,6,7,8-HxCDF		6.07e4	10.0219	1.114			1.001		33.74					0.349
14	14	1,2,3,7,8,9-HxCDF		5.89e4	10.0219	1.062			1.000		34.65					0.464
15	15	1,2,3,4,6,7,8-HpCDF	3.19e2	5.80e4	10.0219	1.128	0.958	NO	1.001	1.000	36.53	36.50	0.97482		0.975	0.374
16	16	1,2,3,4,7,8,9-HpCDF		4.87e4	10.0219	1.280			1.000		38.27					0.317
17	17	OCDF	9.44e2	1.15e5	10.0219	0.947	0.965	NO	1.000	1.001	41.20	41.23	3.4697		3.47	0.422
18	18	13C-2,3,7,8-TCDD	6.10e4	1.46e5	10.0219	1.095	0.801	NO	1.021	1.022	26.00	26.03	76.264	38.2		0.384
19	19	13C-1,2,3,7,8-PeCDD	5.10e4	1.46e5	10.0219	0.881	0.650	NO	1.187	1.200	30.22	30.56	79.297	39.7		0.279
20	20	13C-1,2,3,4,7,8-Hx...	4.45e4	1.79e5	10.0219	0.642	1.224	NO	1.014	1.014	33.86	33.87	77.180	38.7		0.758
21	21	13C-1,2,3,6,7,8-Hx...	5.11e4	1.79e5	10.0219	0.856	1.295	NO	1.017	1.017	33.98	33.97	66.553	33.3		0.569
22	22	13C-1,2,3,7,8,9-Hx...	5.21e4	1.79e5	10.0219	0.807	1.246	NO	1.026	1.026	34.28	34.28	71.869	36.0		0.603
23	23	13C-1,2,3,4,6,7,8-H...	4.92e4	1.79e5	10.0219	0.654	1.030	NO	1.126	1.130	37.62	37.74	83.807	42.0		0.811
24	24	13C-OCDD	8.95e4	1.79e5	10.0219	0.580	0.879	NO	1.226	1.227	40.95	40.98	171.92	43.1		0.429
25	25	13C-2,3,7,8-TCDF	8.75e4	2.34e5	10.0219	1.035	0.776	NO	0.992	0.991	25.26	25.25	72.157	36.2		0.417
26	26	13C-1,2,3,7,8-PeCDF	7.87e4	2.34e5	10.0219	0.854	1.569	NO	1.154	1.154	29.38	29.39	78.653	39.4		0.678
27	27	13C-2,3,4,7,8-PeCDF	7.51e4	2.34e5	10.0219	0.847	1.637	NO	1.189	1.189	30.28	30.28	75.692	37.9		0.683
28	28	13C-1,2,3,4,7,8-Hx...	5.94e4	1.79e5	10.0219	0.832	0.519	NO	0.987	0.988	32.98	32.99	79.567	39.9		0.648
29	29	13C-1,2,3,6,7,8-Hx...	6.84e4	1.79e5	10.0219	1.034	0.505	NO	0.991	0.991	33.09	33.11	73.594	36.9		0.521
30	30	13C-2,3,4,6,7,8-Hx...	6.07e4	1.79e5	10.0219	0.953	0.503	NO	1.009	1.009	33.71	33.70	70.918	35.5		0.566
31	31	13C-1,2,3,7,8,9-Hx...	5.89e4	1.79e5	10.0219	0.828	0.538	NO	1.039	1.037	34.69	34.65	79.198	39.7		0.651

Vista Analytical Laboratory
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Printed: Tuesday, December 17, 2019 11:56:50 Pacific Standard Time

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Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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32	32	13C-1,2,3,4,6,7,8-H...	5.80e4	1.79e5	10.0219	0.757	0.424	NO	1.093	1.092	36.50	36.49	85.188	42.7		0.741
33	33	13C-1,2,3,4,7,8,9-H...	4.87e4	1.79e5	10.0219	0.581	0.416	NO	1.143	1.146	38.18	38.27	93.327	46.8		0.966
34	34	13C-OCDF	1.15e5	1.79e5	10.0219	0.689	0.927	NO	1.233	1.234	41.19	41.20	185.32	46.4		0.454
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	10.0219	1.198			1.022	1.023	26.03	26.06	70.532	88.4		0.188
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	10.0219	1.000	0.841	NO	1.000	1.000	25.50	25.47	199.56	100.0		0.421
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	10.0219	1.000	0.820	NO	1.000	1.000	24.06	24.02	199.56	100.0		0.431
38	38	13C-1,2,3,4,6,9-Hx...	1.79e5	1.79e5	10.0219	1.000	0.509	NO	1.000	1.000	33.42	33.40	199.56	100.0		0.539
39	39	Total Tetra-Dioxins		6.10e4	10.0219	0.901			0.000		25.50					0.207
40	40	Total Penta-Dioxins		5.10e4	10.0219	0.872			0.000		30.00					0.248
41	41	Total Hexa-Dioxins		0.00e0	10.0219	0.976			0.000		33.80		0.00000		0.890	0.445
42	42	Total Hepta-Dioxins		4.92e4	10.0219	0.989			0.000		37.75		21.426		21.4	0.692
43	43	Total Tetra-Furans		8.75e4	10.0219	0.943			0.000		24.00					0.132
44	44	1st Func. Penta-Fur...		0.00e0	10.0219	0.940			0.000		27.63		0.00000		0.301	0.0711
45	45	Total Penta-Furans		0.00e0	10.0219	0.940			0.000		30.00					0.110
46	46	Total Hexa-Furans		0.00e0	10.0219	1.078			0.000		33.00		0.32783		0.974	0.360
47	47	Total Hepta-Furans		0.00e0	10.0219	1.135			0.000		37.75		3.1799		3.18	0.365

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_10.qld
Last Altered: Tuesday, December 17, 2019 11:55:46 Pacific Standard Time
Printed: Tuesday, December 17, 2019 11:56:50 Pacific Standard Time

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Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	41	Total Hexa-Dioxins	YES	32.36	151.116	27411.391	0.000	MM	0.0000	0.89

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	6	1,2,3,4,6,7,8-HpCDD	NO	37.76	1160.948	24979.955	91.844	bb	9.3571	9.36
2	42	Total Hepta-Dioxins	NO	36.88	1543.808	24979.955	119.588	MM	12.0691	12.07

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44	1st Func. Penta-Furans	YES	27.05	77.066	47368.717	0.000	MM	0.0000	0.30

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_10.qld
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Printed: Tuesday, December 17, 2019 11:56:50 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Penta-Furans

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1									

Hexa-Furans

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	46 Total Hexa-Furans	YES	32.54	119.380	21039.296	0.000	MM	0.0000	0.65
2	46 Total Hexa-Furans	NO	31.99	58.280	21039.296	3.540	MM	0.3278	0.33

Hepta-Furans

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	47 Total Hepta-Furans	NO	37.11	347.825	15787.701	25.075	bb	2.2050	2.21
2	15 1,2,3,4,6,7,8-HpCDF	NO	36.50	156.228	17261.113	11.016	bb	0.9748	0.97

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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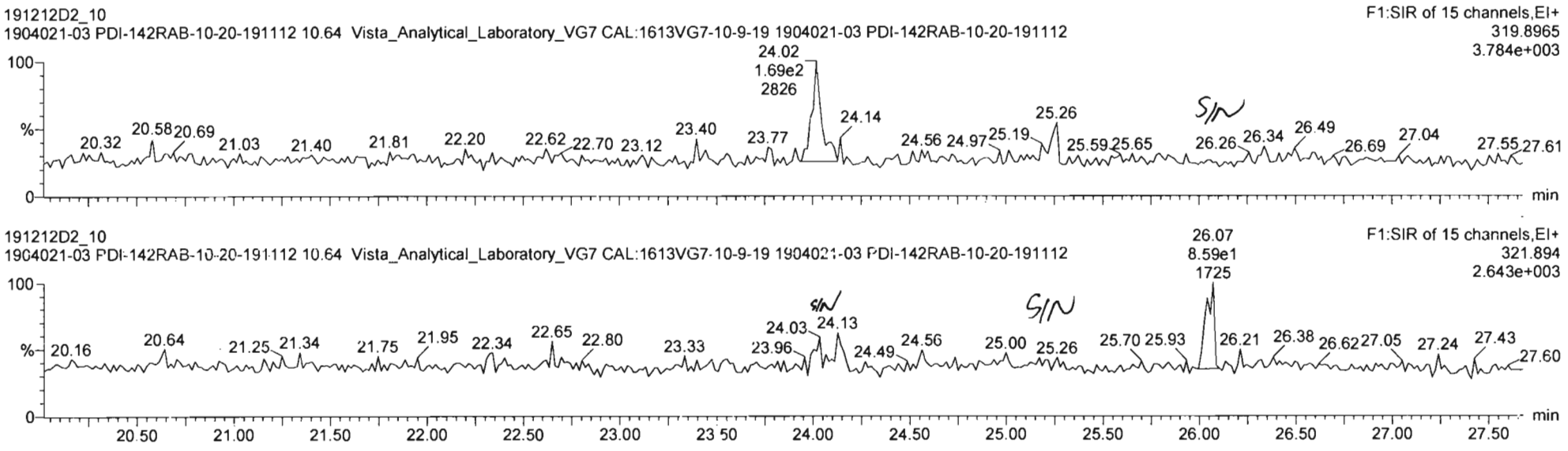
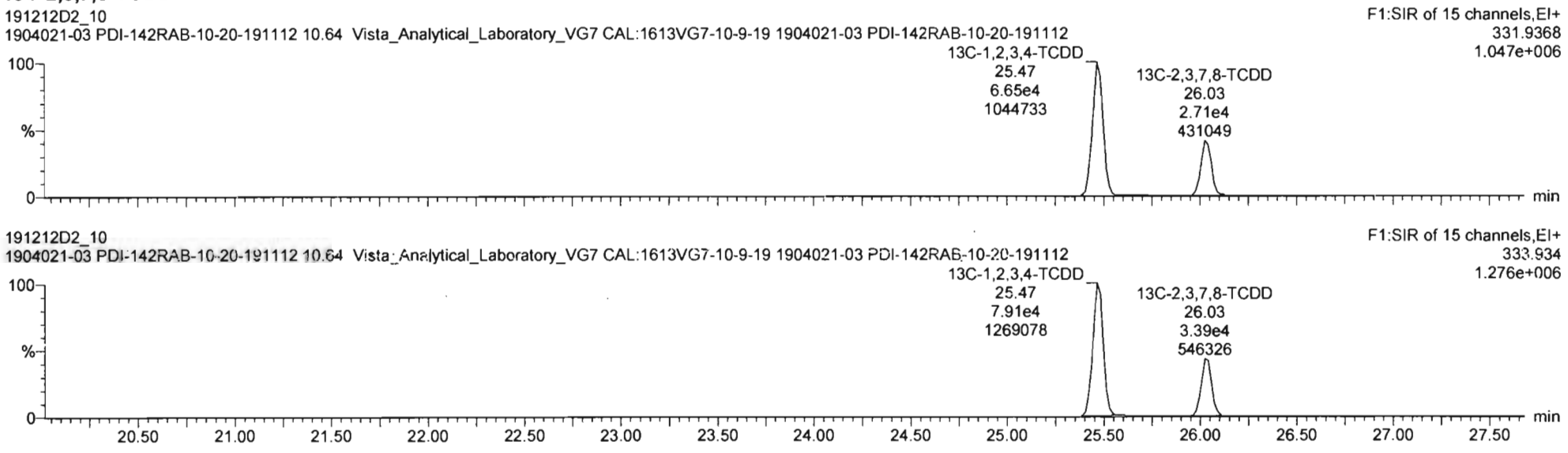
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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



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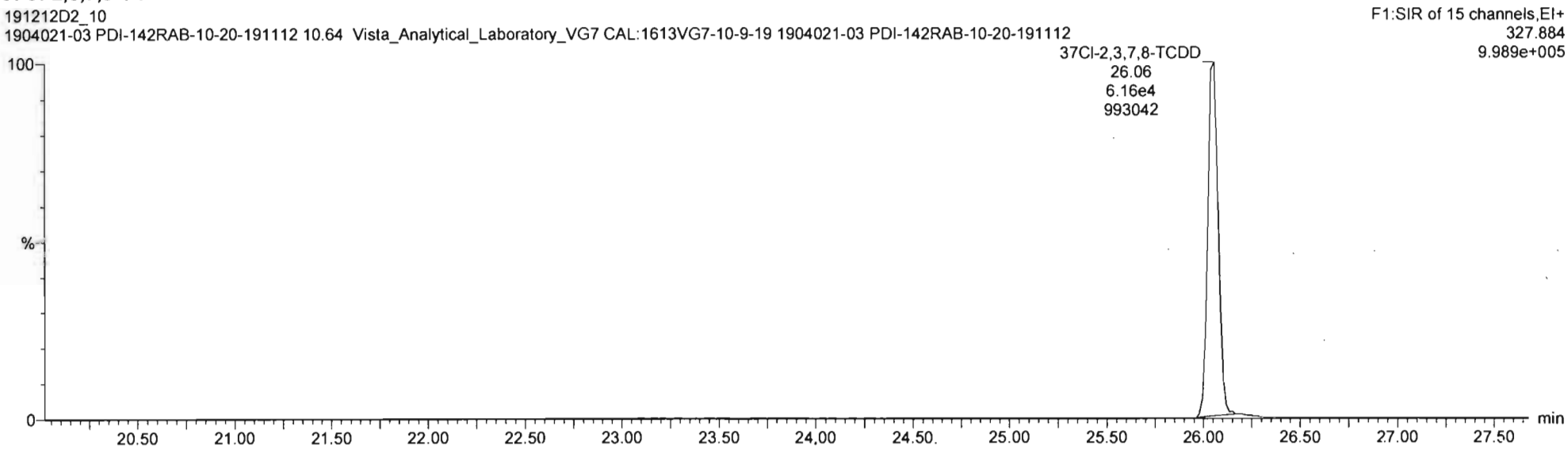
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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



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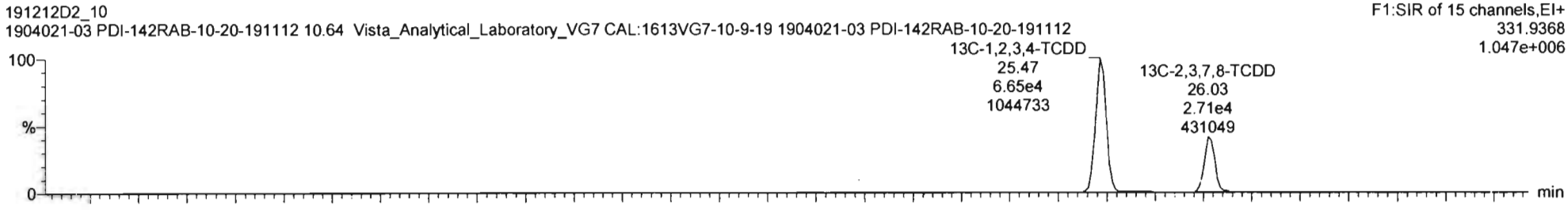

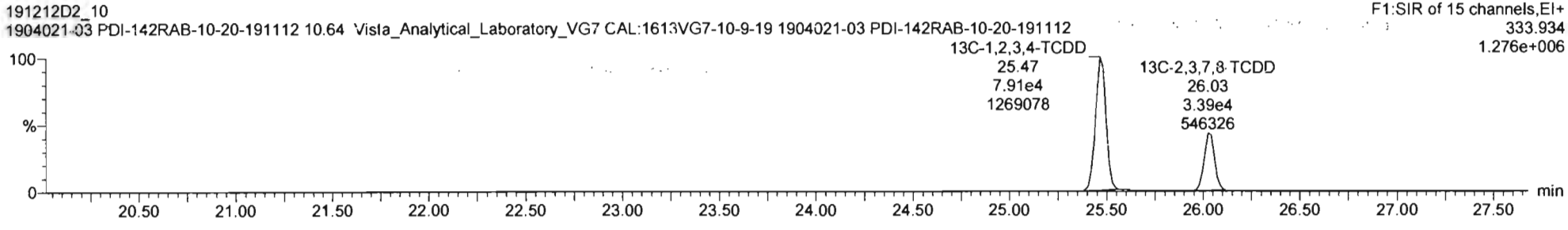

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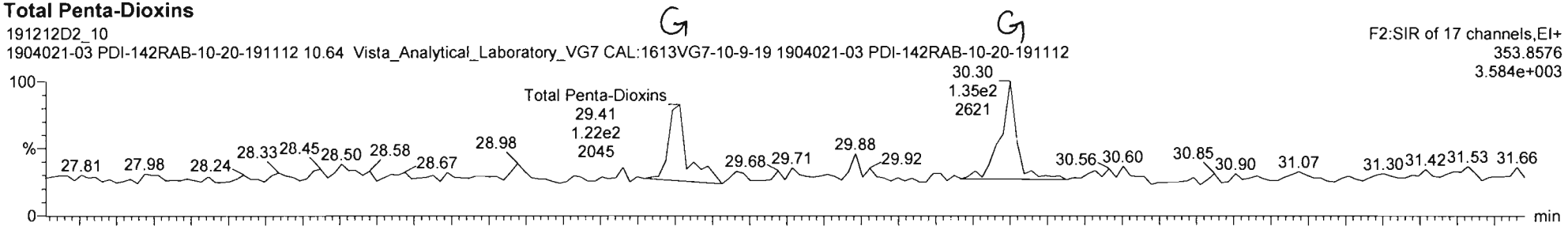
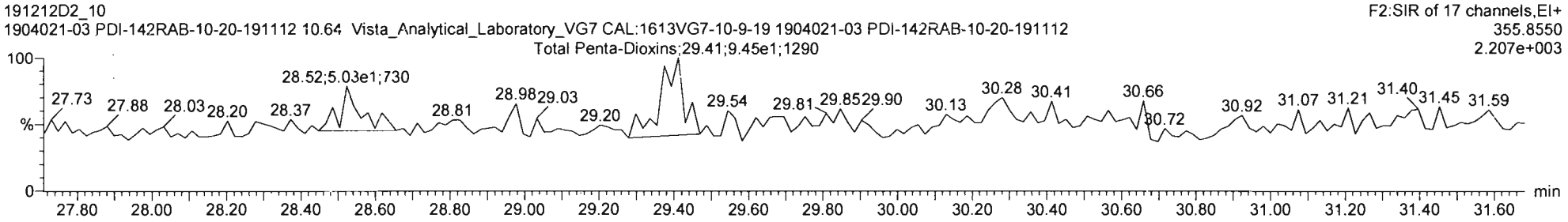
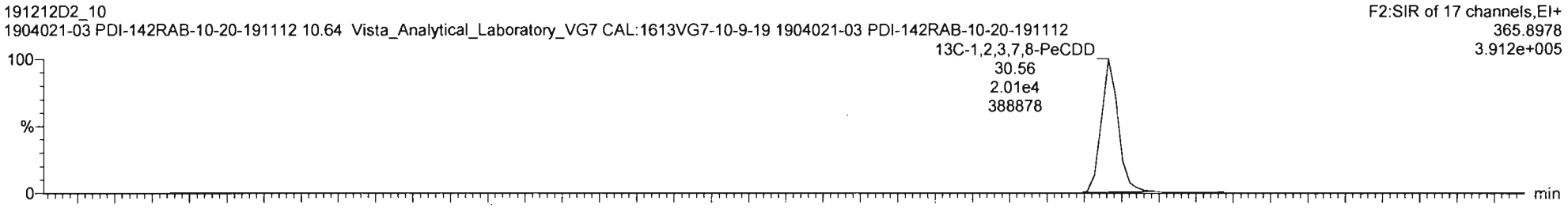
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

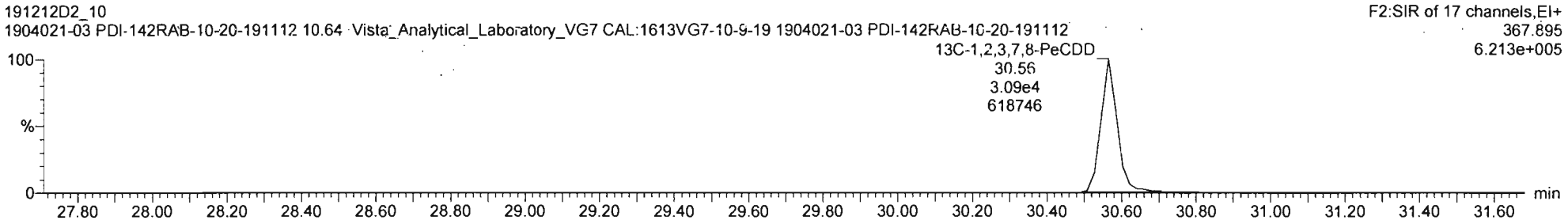
Total Penta-Dioxins





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





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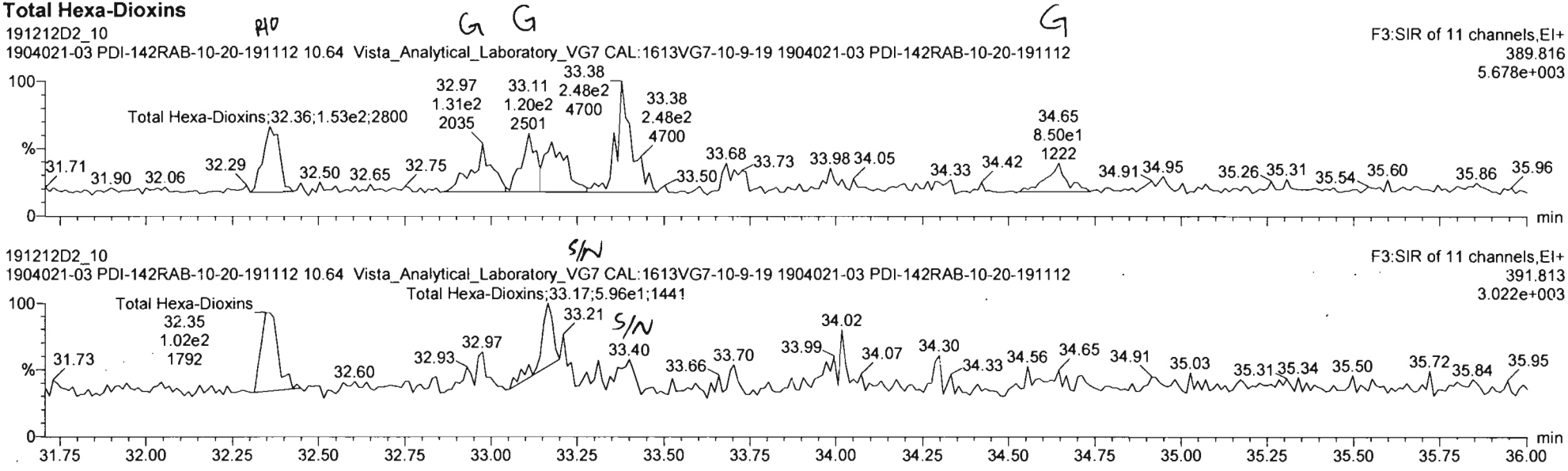
Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Dioxins



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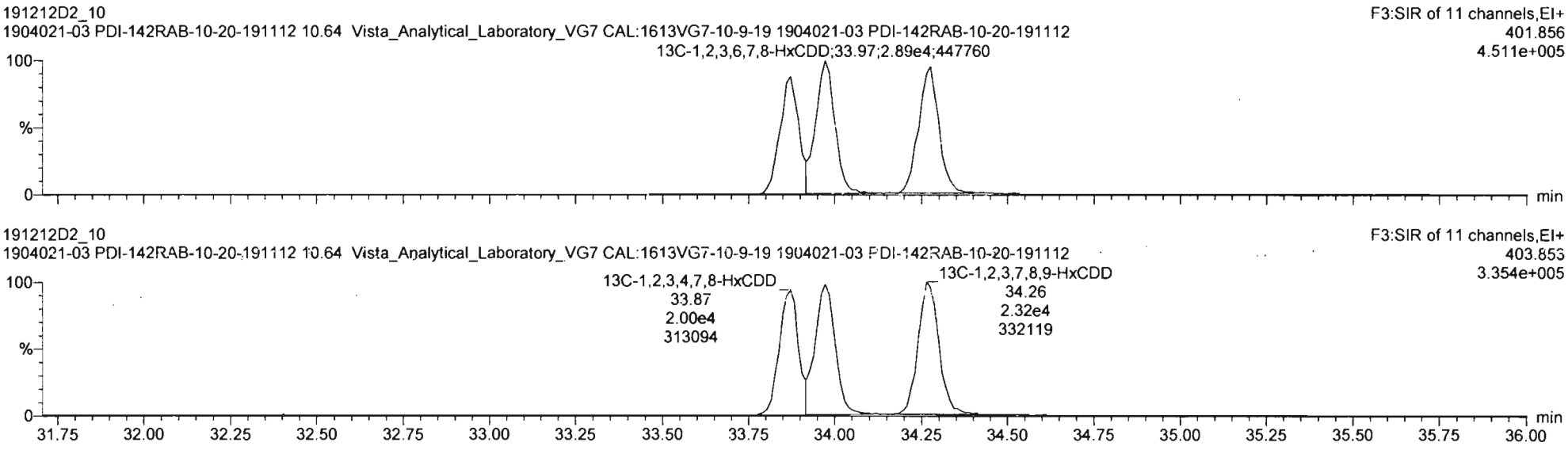


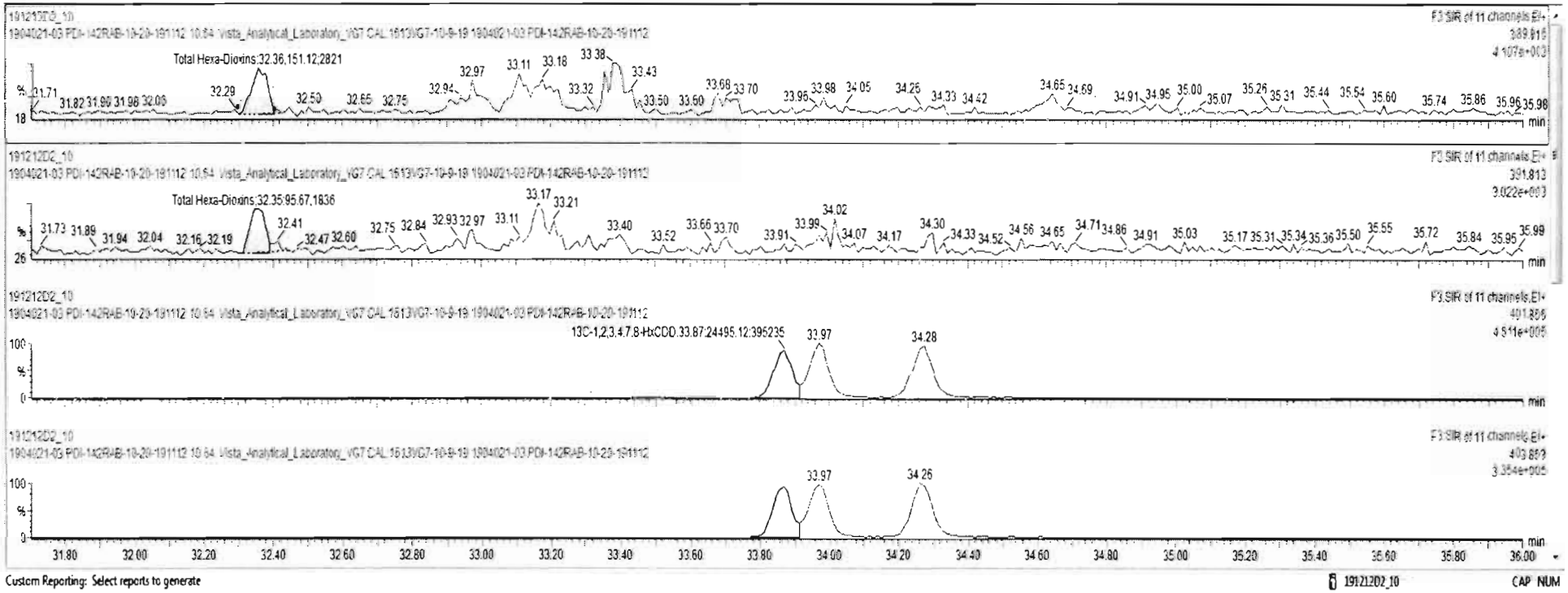
TargetLynx XS - 191212D2_10 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10:64 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	4.87e4	1.79e5	38	0.42	NO	0.581	10.022	38.18	38.27	1.146	1.143	NO	93.33	46.8	0.966	
34	34	13C-OCDF	1.15e5	1.79e5	38	0.93	NO	0.689	10.022	41.19	41.20	1.234	1.233	NO	185.3	46.4	0.454	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	36			1.198	10.022	26.03	26.06	1.023	1.022	NO	70.53	88.4	0.188	
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	36	0.84	NO	1.000	10.022	25.50	25.47	1.000	1.000	NO	199.6	100	0.421	
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	37	0.82	NO	1.000	10.022	24.06	24.02	1.000	1.000	NO	199.6	100	0.421	
38	38	13C-1,2,3,4,6,9-HxCDF	1.79e5	1.79e5	38	0.51	NO	1.000	10.022	33.42	33.40	1.000	1.000	NO	199.6	100	0.535	
39	39	Total Tetra-Dioxins		6.16e4				0.901	10.022	25.50			0.000	NO			0.207	
40	40	Total Penta-Dioxins		5.16e4				0.872	10.022	30.00			0.000	NO			0.248	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.022	33.80			0.000	NO	0.0000		0.445	0.8900
42	42	Total Hepta-Dioxins		4.92e4				0.989	10.022	37.75			0.000	NO	21.62		0.892	21.62
43	43	Total Tetra-Furans		8.75e4				0.942	10.022	24.00			0.000	NO			0.132	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.022	27.63			0.000	NO	0.0000		0.0711	0.3428
45	45	Total Penta-Furans		0.00e0				0.940	10.022	30.00			0.000	NO			0.110	
46	46	Total Hexa-Furans		0.00e0				1.078	10.022	33.00			0.000	NO	0.8382		0.360	1.390
47	47	Total Hepta-Furans		0.00e0				1.135	10.022	37.75			0.000	NO	3.160		0.365	2.180

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.36	1.511e2	9.567e1	1.240	1.56	YES	0.8699	0.0000



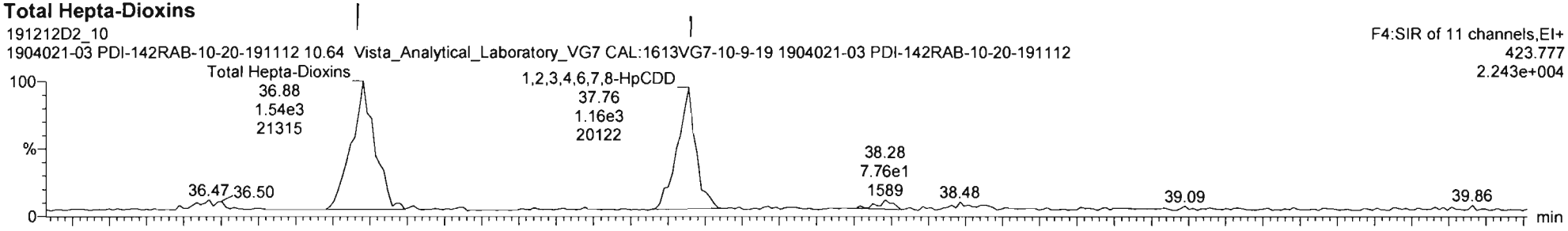
Custom Reporting: Select reports to generate

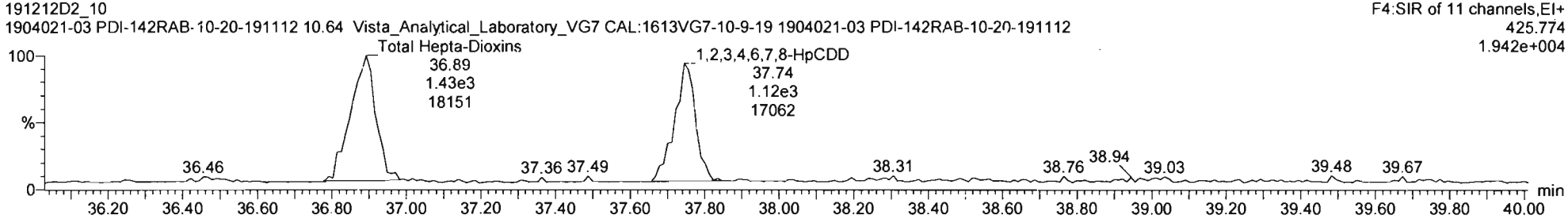
191212D2_10 CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Dioxins





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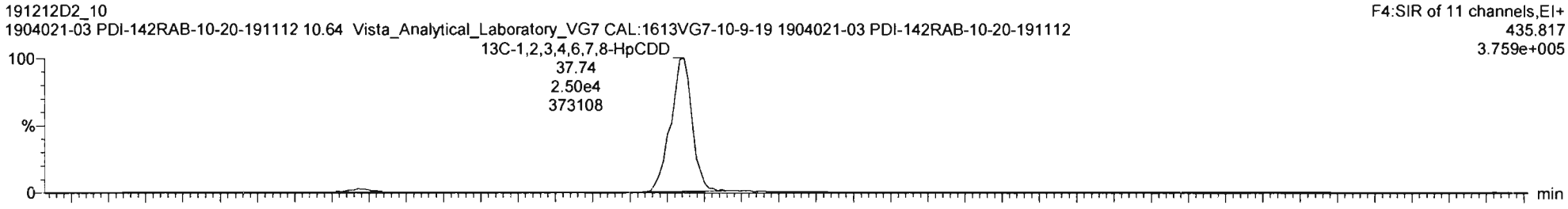
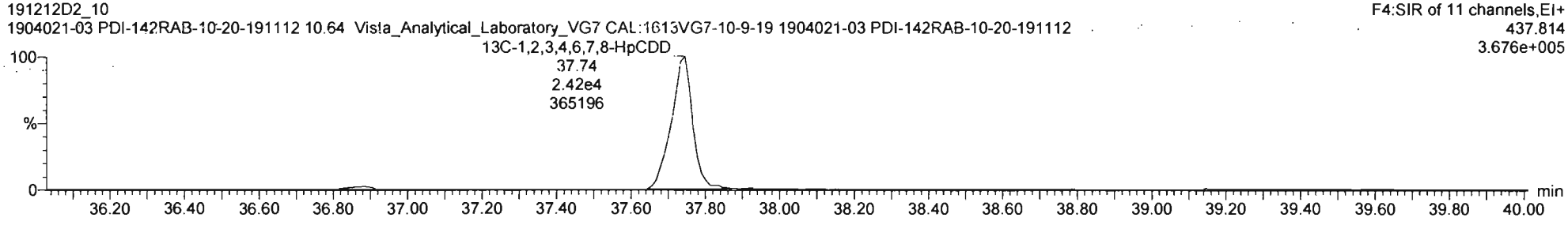




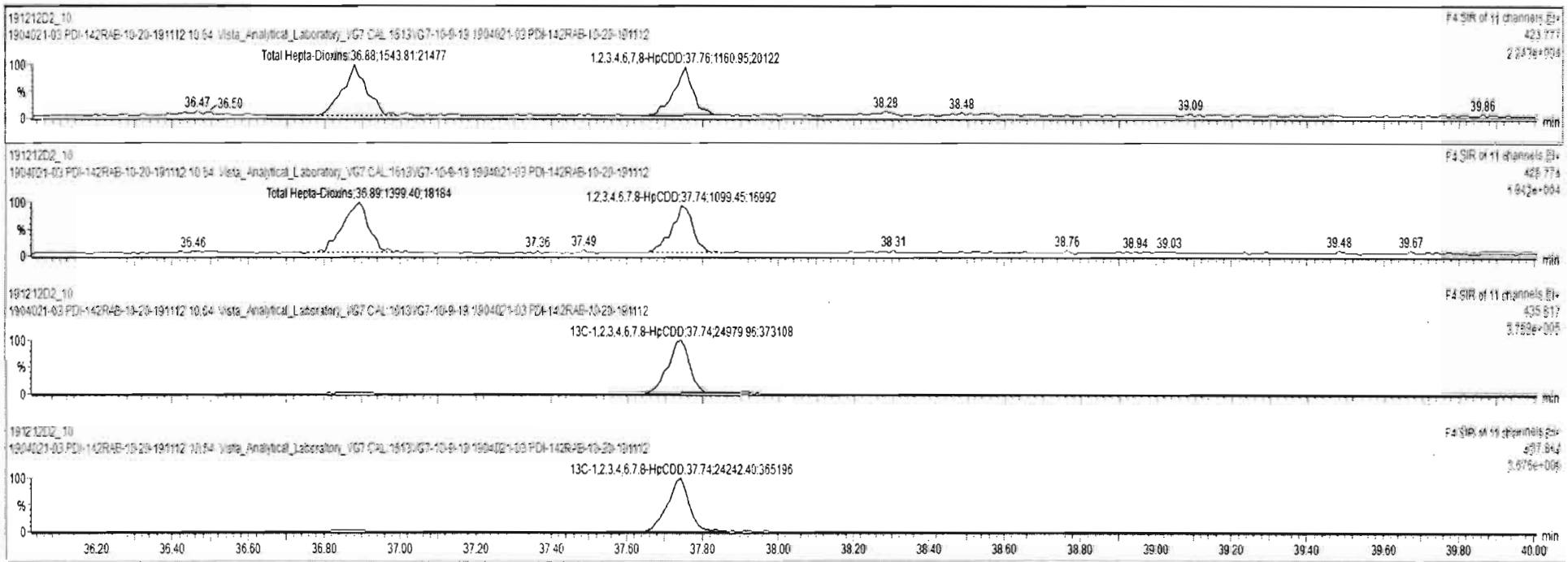
TargetLynx XS - 191212D2_10 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10:64 Vista_Analytical_Laboratory_VG7 CAL 1613\VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	4.87e4	1.79e5	38	0.42	NO	0.581	10.022	38.18	38.27	1.146	1.140	NO	93.33	46.8	0.966	
34	34	13C-OCDF	1.15e5	1.79e5	38	0.93	NO	0.689	10.022	41.19	41.29	1.234	1.233	NO	185.3	46.4	0.454	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	36			1.198	10.022	26.03	26.06	1.023	1.022	NO	70.53	88.4	0.186	
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	36	0.84	NO	1.000	10.022	25.50	25.47	1.000	1.000	NO	199.6	100	0.421	
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	37	0.82	NO	1.000	10.022	24.06	24.02	1.000	1.000	NO	199.6	100	0.431	
38	38	13C-1,2,3,4,6,9-HxCDF	1.79e5	1.79e5	38	0.51	NO	1.000	10.022	33.42	33.40	1.000	1.000	NO	199.6	100	0.539	
39	39	Total Tetra-Dioxins		6.10e4				0.901	10.022	25.50			0.000	NO			0.207	
40	40	Total Penta-Dioxins		5.10e4				0.872	10.022	30.00			0.000	NO			0.248	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.022	33.80			0.000	NO	0.0000		0.445	0.8900
42	42	Total Hepta-Dioxins		4.92e4				0.989	10.022	37.75			0.000	NO	21.43		0.692	21.43
43	43	Total Tetra-Furans		8.75e4				0.943	10.022	24.00			0.000	NO			0.132	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.022	27.63			0.000	NO	0.0000		0.0711	0.3438
45	45	Total Penta-Furans		0.00e0				0.940	10.022	30.00			0.000	NO			0.119	
46	46	Total Hexa-Furans		0.00e0				1.078	10.022	33.00			0.000	NO	0.8382		0.360	1.390
47	47	Total Hepta-Furans		0.00e0				1.135	10.022	37.75			0.000	NO	3.160		0.365	3.160

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	42	Total Hepta-Dioxins	37.75	36.68	1.544e3	1.399e3	1.040	1.10	NO	12.069	12.069
2	6	1,2,3,4,6,7,8-HpCDD	37.76	37.76	1.161e3	1.099e3	1.040	1.06	NO	9.3571	9.3571



Ready 191212D2_10 CAP NUM

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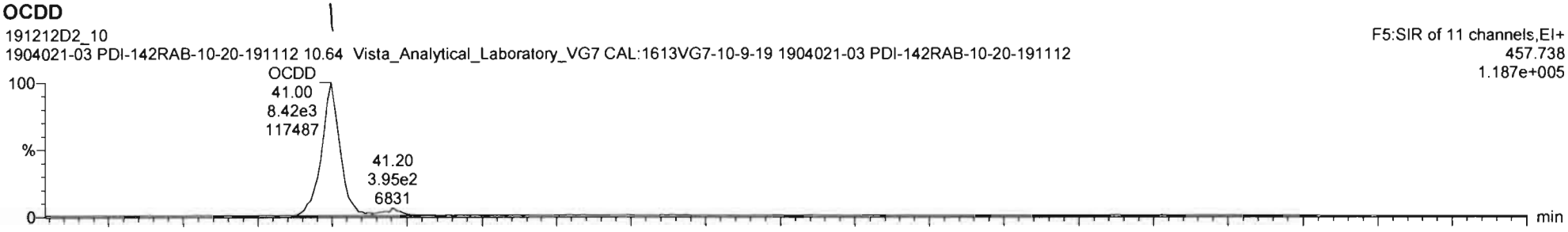
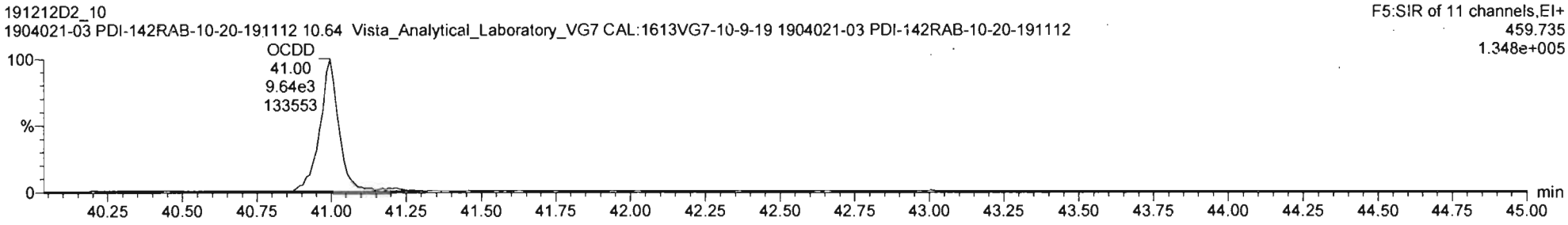
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDD





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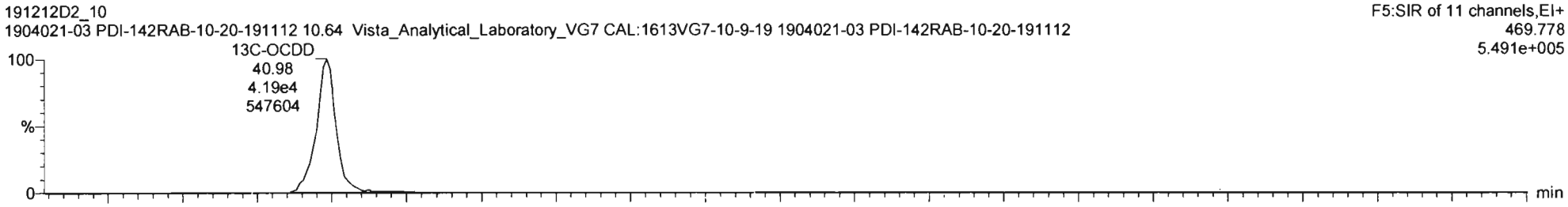

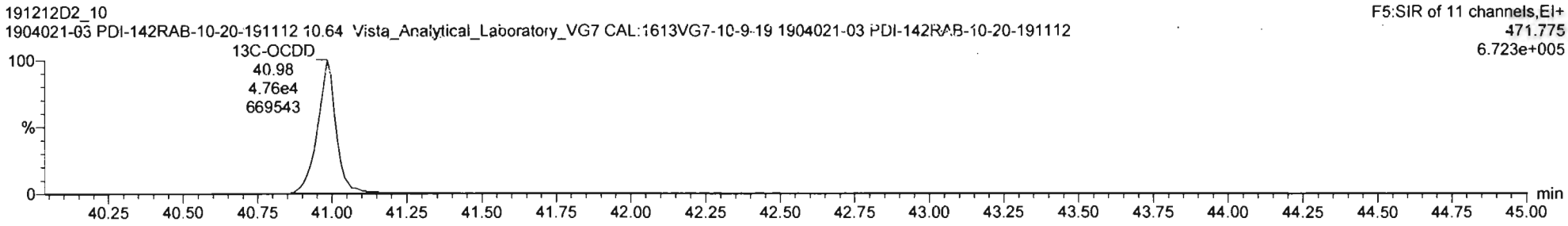

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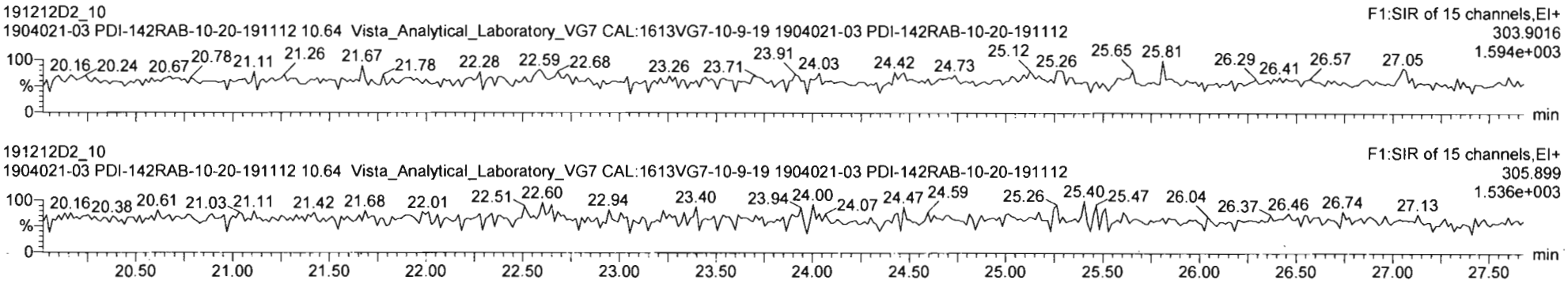
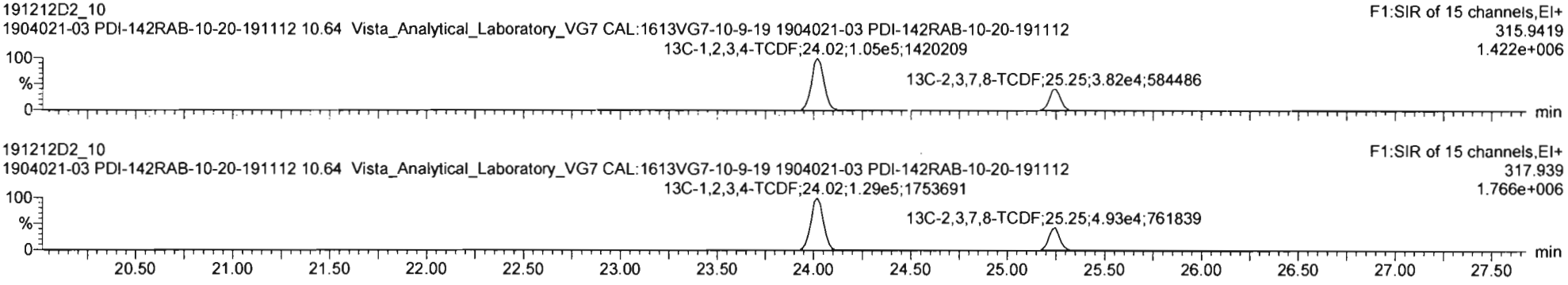
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

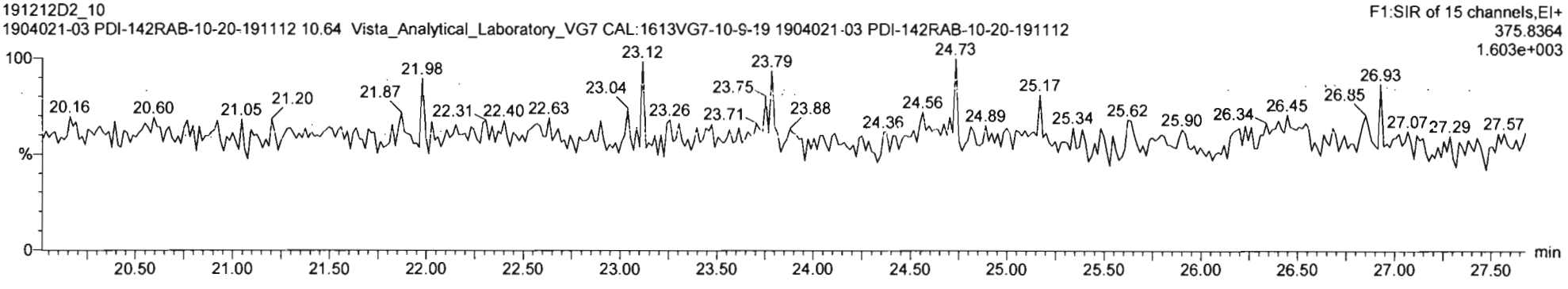
Total Tetra-Furans



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



DPE1



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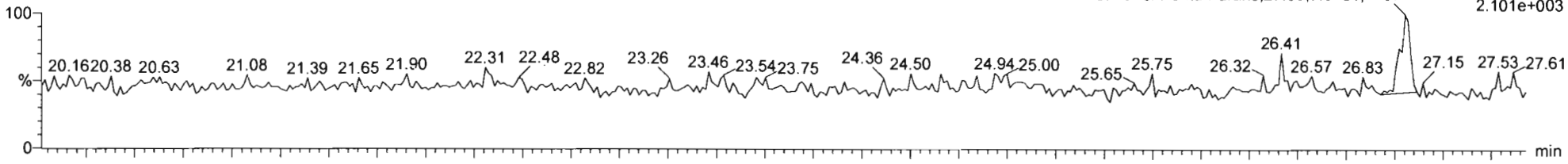
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

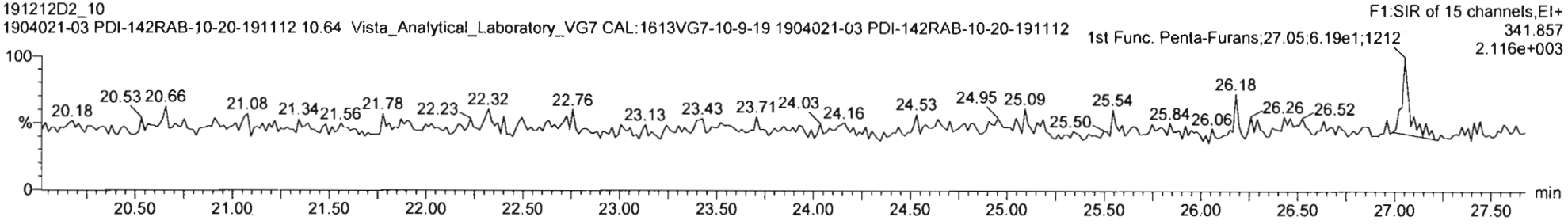
1st Func. Penta-Furans

R10

191212D2_10
1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19 1904021-03 PDI-142RAB-10-20-191112
F1:SIR of 15 channels,EI+
339.860
2.101e+003
1st Func. Penta-Furans;27.05;7.57e1;1207



191212D2_10
1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19 1904021-03 PDI-142RAB-10-20-191112
F1:SIR of 15 channels,EI+
341.857
2.116e+003
1st Func. Penta-Furans;27.05;6.19e1;1212



DPE6

191212D2_10
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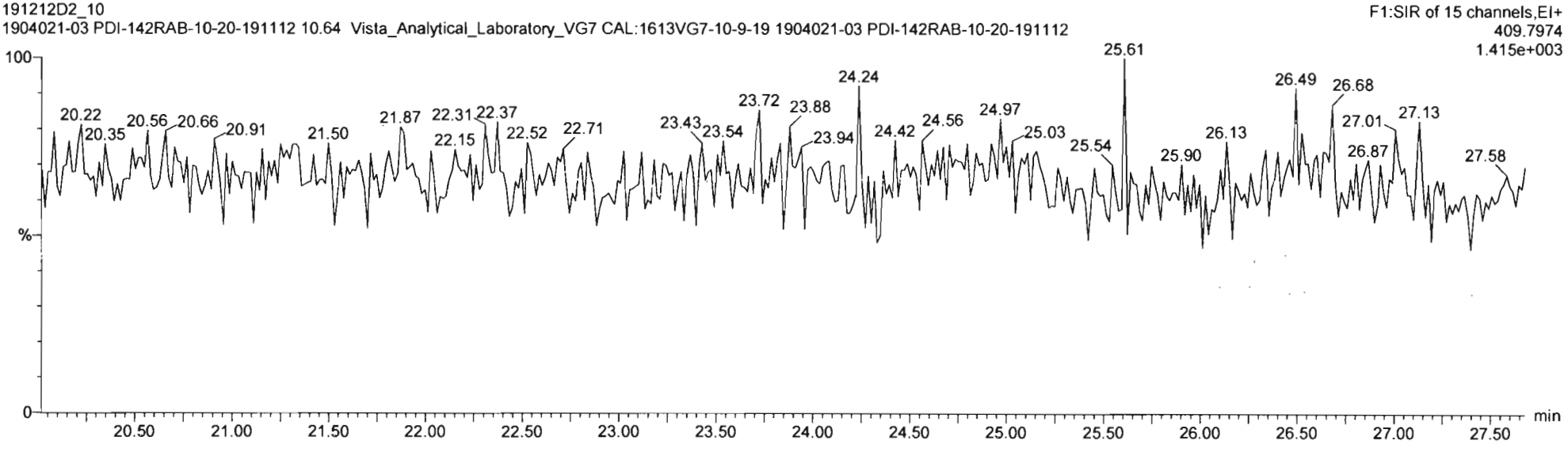
F1:SIR of 15 channels,EI+
409.7974
1.415e+003



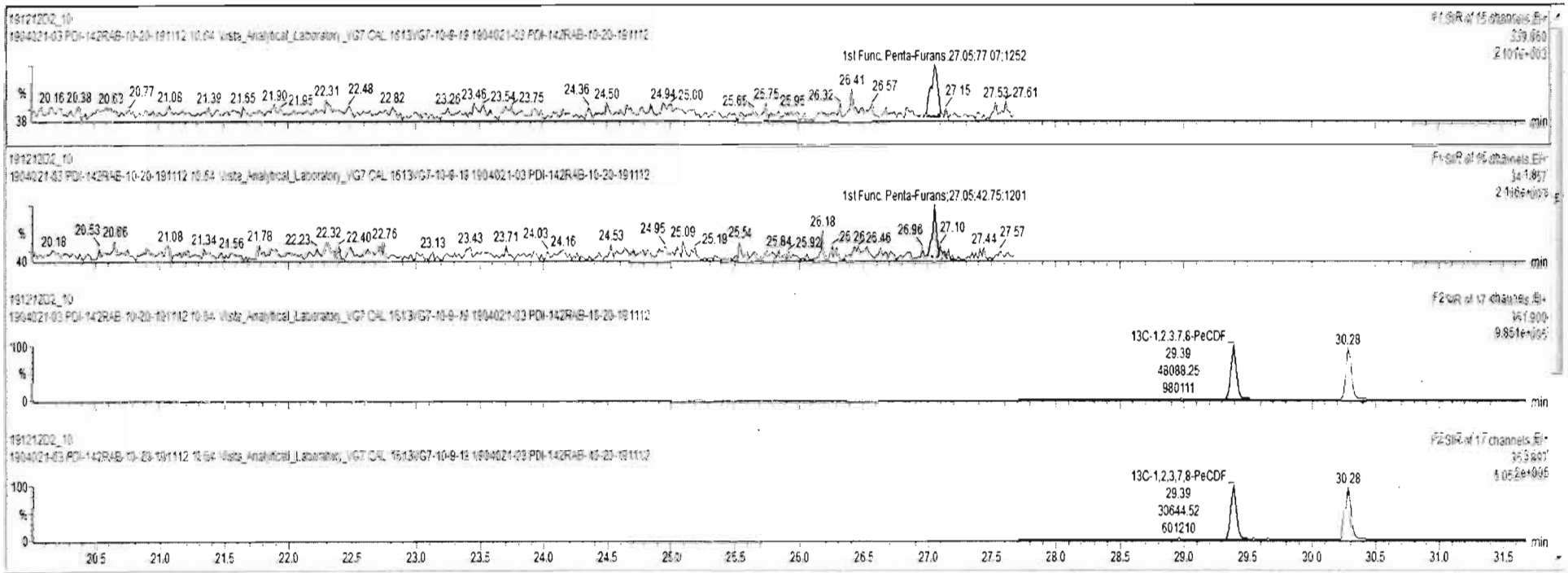
TargetLynx XS - 191212D2_10 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	4.87e4	1.79e5	38	0.42	NO	0.581	10.022	38.18	38.27	1.146	1.143	NO	93.33	46.8	0.966	
34	34	13C-OCDF	1.15e5	1.79e5	38	0.93	NO	0.689	10.022	41.19	41.23	1.234	1.233	NO	165.3	46.4	0.454	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	36			1.198	10.022	26.03	26.06	1.023	1.022	NO	70.52	68.4	0.188	
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	36	0.84	NO	1.000	10.022	25.50	25.47	1.000	1.000	NO	199.6	100	0.421	
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	37	0.82	NO	1.000	10.022	24.06	24.02	1.000	1.000	NO	199.6	100	0.431	
38	38	13C-1,2,3,4,6,9-HxCDF	1.79e5	1.79e5	38	0.51	NO	1.000	10.022	33.42	33.43	1.000	1.000	NO	199.6	100	0.536	
39	39	Total Tetra-Dioxins		6.10e4				0.931	10.022	25.50			0.000	NO			0.297	
40	40	Total Penta-Dioxins		5.10e4				0.872	10.022	30.00			0.000	NO			0.248	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.022	33.80			0.000	NO	0.0000		0.445	0.8900
42	42	Total Hepta-Dioxins		4.82e4				0.989	10.022	37.75			0.000	NO	21.43		0.692	21.43
43	43	Total Tetra-Furans		8.75e4				0.943	10.022	24.00			0.000	NO			0.132	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.022	27.63			0.000	NO	0.0000		0.0711	0.3016
45	45	Total Penta-Furans		0.00e0				0.940	10.022	30.00			0.000	NO			0.110	
46	46	Total Hexa-Furans		0.00e0				1.078	10.022	33.00			0.000	NO	0.8382		0.360	1.390
47	47	Total Hepta-Furans		0.00e0				1.135	10.022	37.75			0.000	NO	3.160		0.365	3.160

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	44	1st Func. Penta-Furans	27.63	27.05	7.707e1	4.275e1	1.550	1.80	YES	0.30097	0.00000



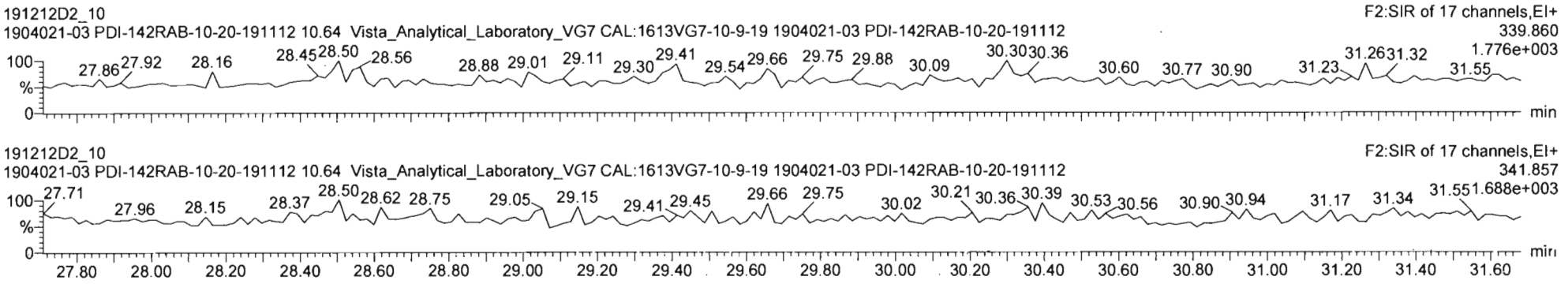
Custom Reporting: Select reports to generate

191212D2_10 CAP NUM

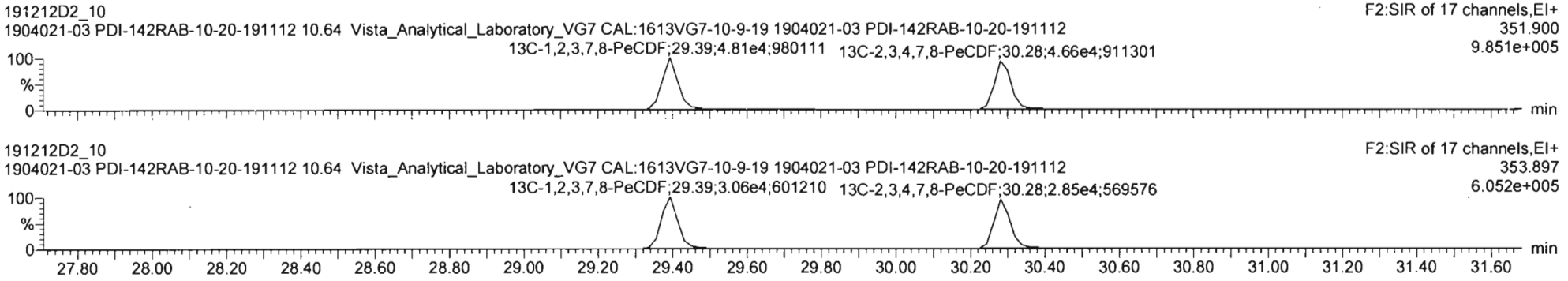
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

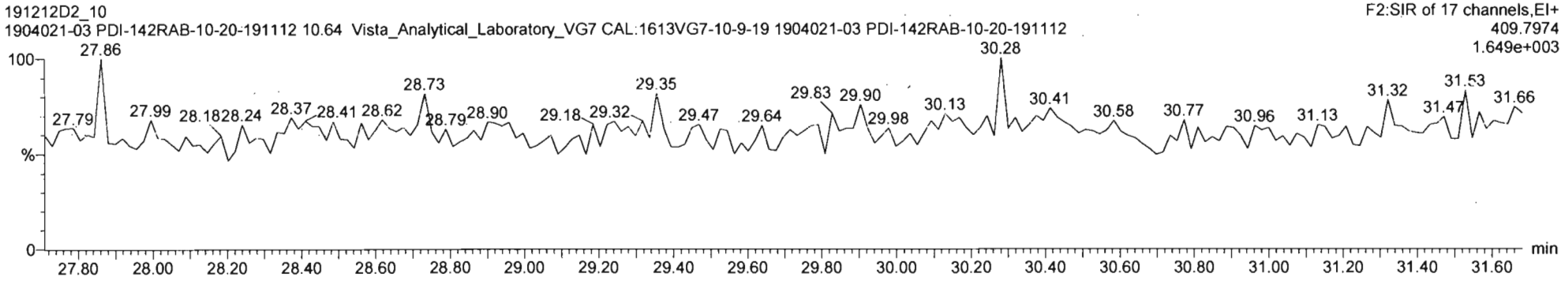
Total Penta-Furans



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



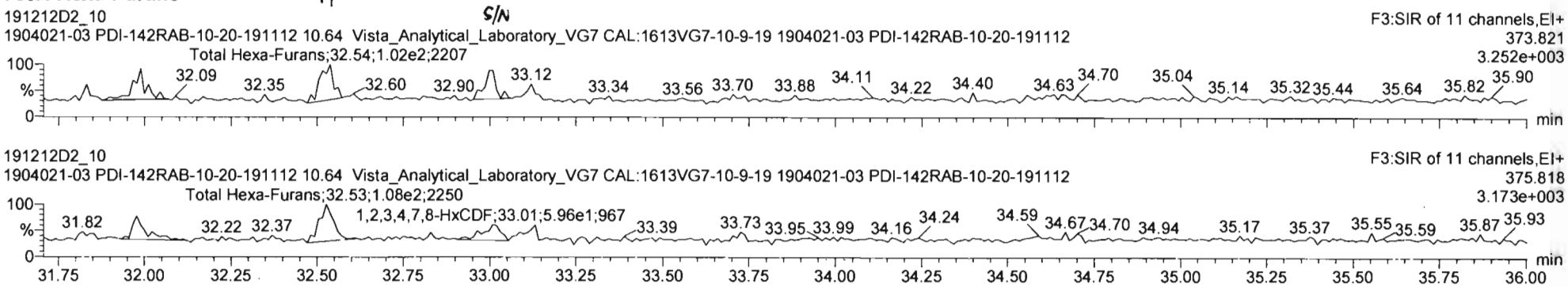
DPE2



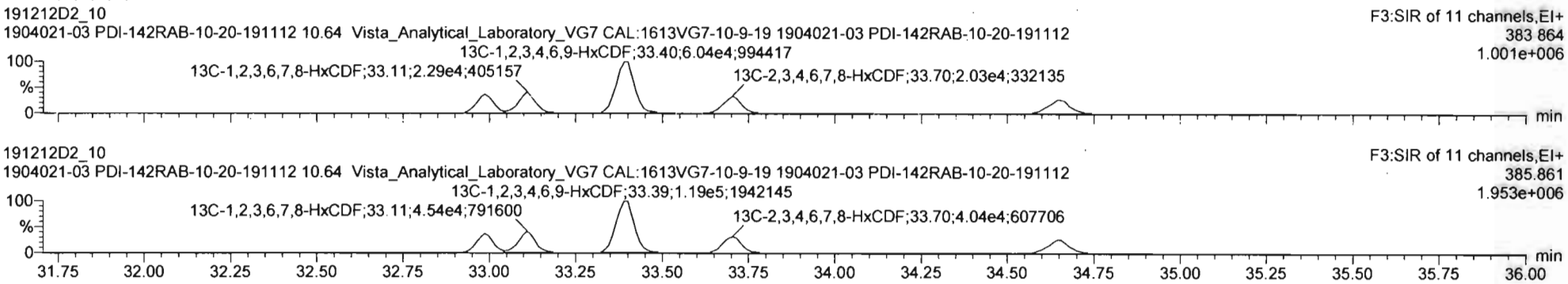
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

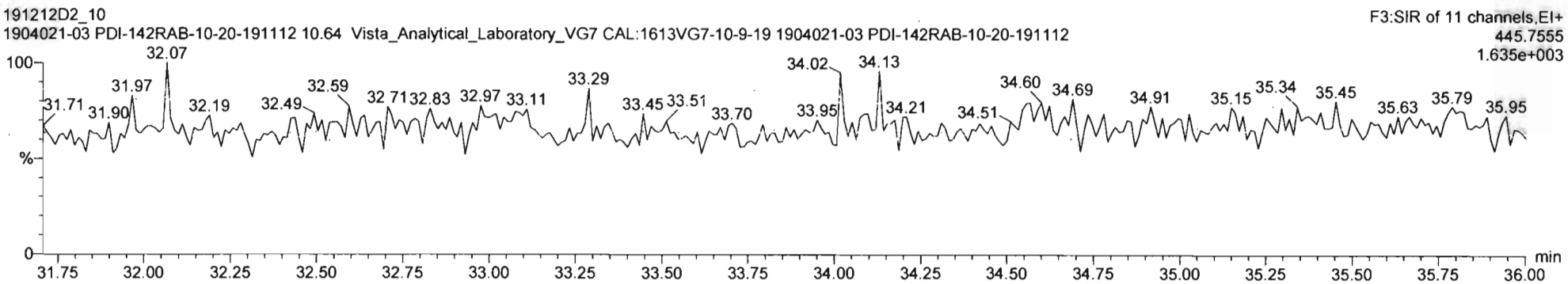
Total Hexa-Furans R/O



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



DPE3



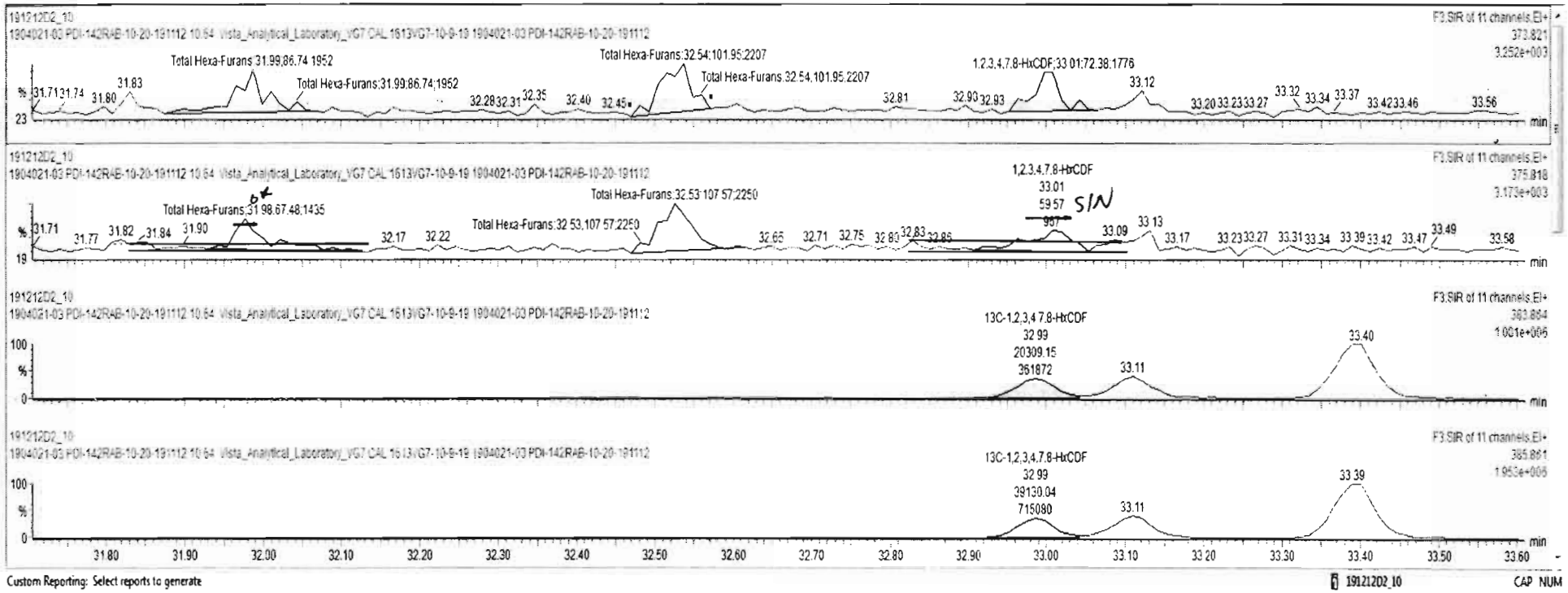
TargetLynx XS - 191212D2_10 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	4.87e4	1.79e5	38	0.42	NO	0.581	10.022	38.18	38.27	1.146	1.143	NO	93.33	46.8	0.969	
34	34	13C-OCDF	1.15e5	1.79e5	38	0.93	NO	0.689	10.022	41.19	41.29	1.234	1.233	NO	185.3	46.4	0.454	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	36			1.196	10.022	26.03	26.06	1.023	1.022	NO	70.53	88.4	0.186	
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	36	0.84	NO	1.000	10.022	25.50	25.47	1.000	1.000	NO	199.6	100	0.421	
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	37	0.82	NO	1.000	10.022	24.06	24.02	1.000	1.000	NO	199.6	100	0.431	
38	38	13C-1,2,3,4,6,9-HxCDF	1.79e5	1.79e5	38	0.51	NO	1.000	10.022	33.42	33.40	1.000	1.000	NO	199.6	100	0.539	
39	39	Total Tetra-Dioxins		6.10e4				0.901	10.022	25.50			0.000	NO			0.207	
40	40	Total Penta-Dioxins		5.10e4				0.872	10.022	30.00			0.000	NO			0.246	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.022	33.80			0.000	NO	0.0000		0.445	0.8900
42	42	Total Hepta-Dioxins		4.92e4				0.989	10.022	37.75			0.000	NO	21.43		0.692	21.43
43	43	Total Tetra-Furans		8.75e4				0.943	10.022	24.00			0.000	NO			0.122	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.022	27.63			0.000	NO	0.0000		0.0711	0.3810
45	45	Total Penta-Furans		0.00e0				0.940	10.022	30.00			0.000	NO			0.110	
46	46	Total Hexa-Furans		0.00e0				1.078	10.022	33.00			0.000	NO	0.8382		0.360	1.394
47	47	Total Hepta-Furans		0.00e0				1.135	10.022	37.75			0.000	NO	3.160		0.365	3.160

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	31.99	6.674e1	6.748e1	1.240	1.29	NO	0.46174	0.46174
2	46	Total Hexa-Furans	33.00	32.54	1.019e2	1.076e2	1.240	0.95	YES	0.55138	0.00000
3	11	1,2,3,4,7,8-HxCDF	32.99	33.01	7.238e1	5.957e1	1.240	1.22	NO	0.37644	0.37644



Custom Reporting: Select reports to generate

191212D2_10 CAP NUM

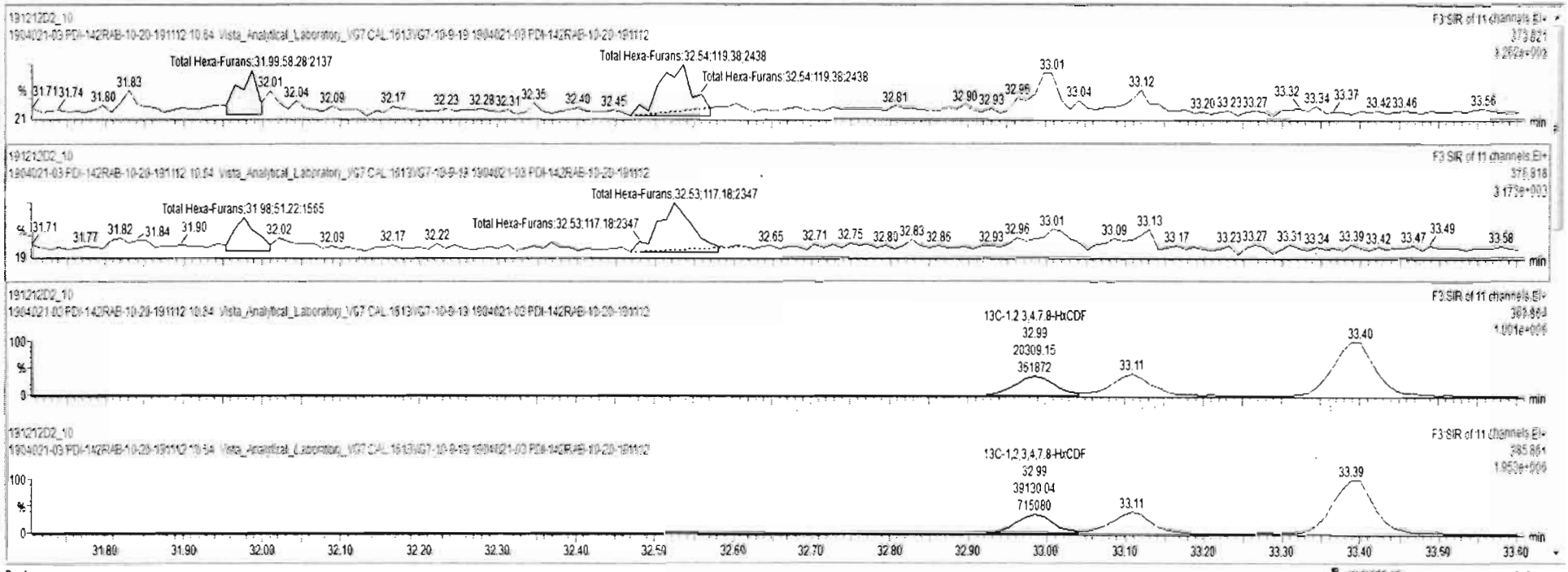
TargetLynx XS - 191212D2_10 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10 64 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
33	33	13C-1,2,3,4,7,8,9-HpCDF	4.87e4	1.79e5	38	0.42	NO	0.581	10.022	38.18	38.27	1.146	1.143	NO	93.33	46.8	0.966	
34	34	13C-OCDF	1.15e5	1.79e5	38	0.93	NO	0.689	10.022	41.19	41.20	1.234	1.233	NO	185.3	46.4	0.454	
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	36			1.198	10.022	26.03	26.06	1.023	1.022	NO	70.53	88.4	0.188	
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	36	0.84	NO	1.000	10.022	25.50	25.47	1.000	1.000	NO	199.6	100	0.421	
37	37	13C-1,2,3,4-TCDF	2.34e5	2.34e5	37	0.82	NO	1.000	10.022	24.06	24.02	1.000	1.000	NO	199.6	100	0.431	
38	38	13C-1,2,3,4,6,9-HxCDF	1.79e5	1.79e5	38	0.51	NO	1.000	10.022	33.42	33.40	1.000	1.000	NO	199.6	100	0.539	
39	39	Total Tetra-Dioxins		6.10e4				0.901	10.022	25.50			0.000	NO			0.237	
40	40	Total Penta-Dioxins		5.10e4				0.872	10.022	30.00			0.000	NO			0.248	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.022	33.80			0.000	NO	0.0000		0.445	0.8900
42	42	Total Hepta-Dioxins		4.92e4				0.989	10.022	37.75			0.000	NO	21.43		0.692	21.43
43	43	Total Tetra-Furans		8.75e4				0.943	10.022	24.00			0.000	NO			0.132	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.022	27.63			0.000	NO	0.0000		0.0711	0.3010
45	45	Total Penta-Furans		0.00e0				0.940	10.022	30.00			0.000	NO			0.110	
46	46	Total Hexa-Furans		0.00e0				1.078	10.022	33.00			0.000	NO	0.3278		0.360	0.9735
47	47	Total Hepta-Furans		0.00e0				1.135	10.022	37.75			0.000	NO	3.160		0.365	3.160

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	31.99	5.828e1	5.122e1	1.240	1.14	NO	0.32783	0.32783
2	46	Total Hexa-Furans	33.00	32.54	1.194e2	1.172e2	1.240	1.02	YES	0.64567	0.00000



Vista Analytical Laboratory
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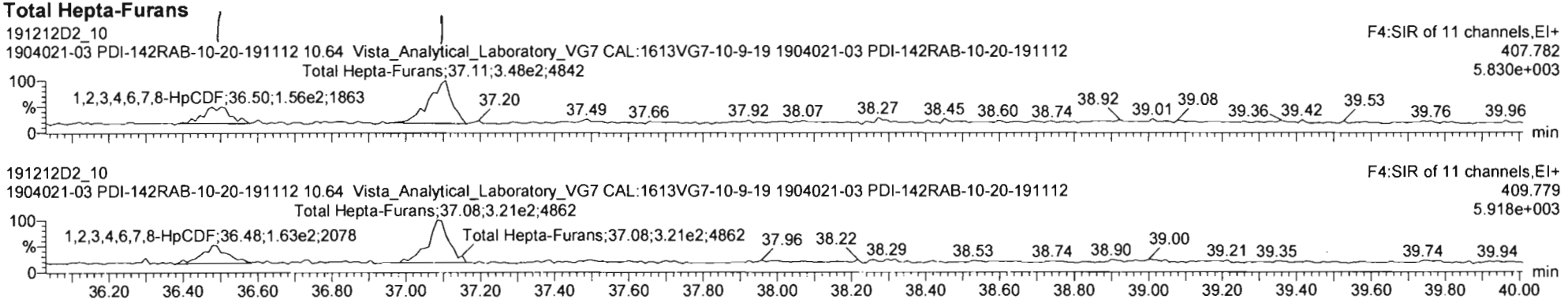
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Furans



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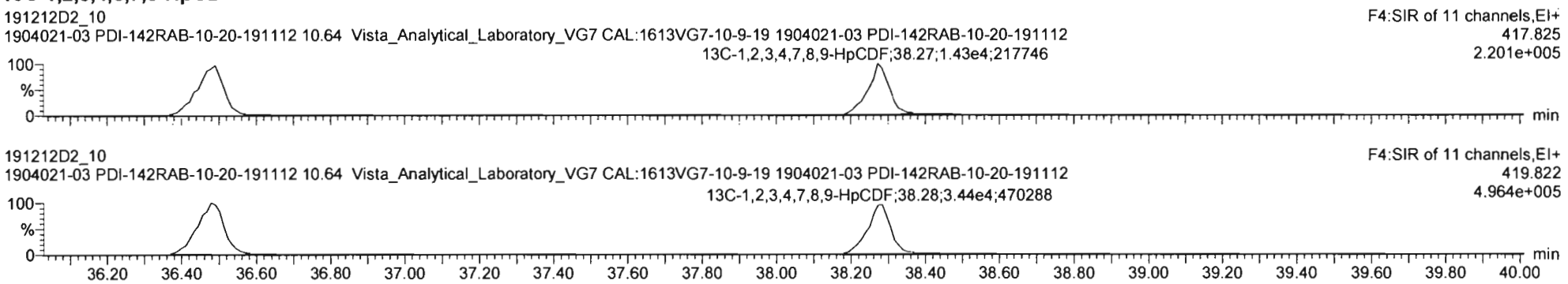
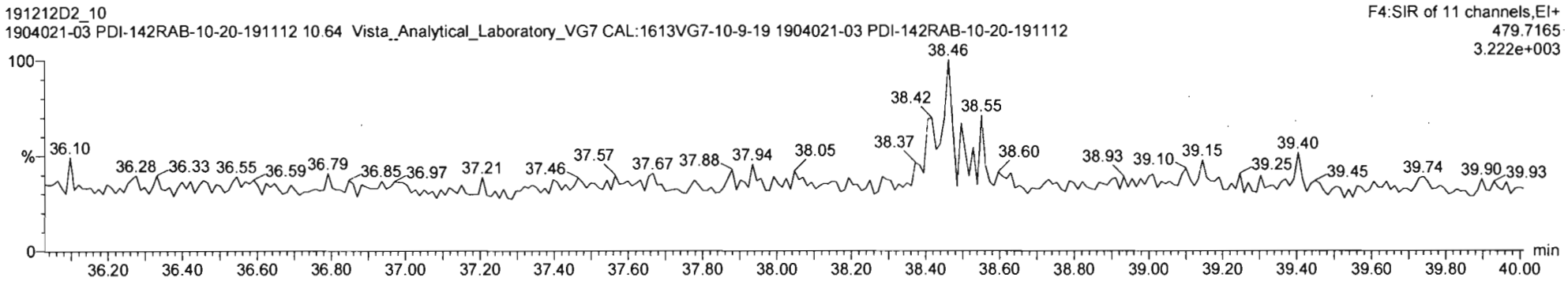


DPE4



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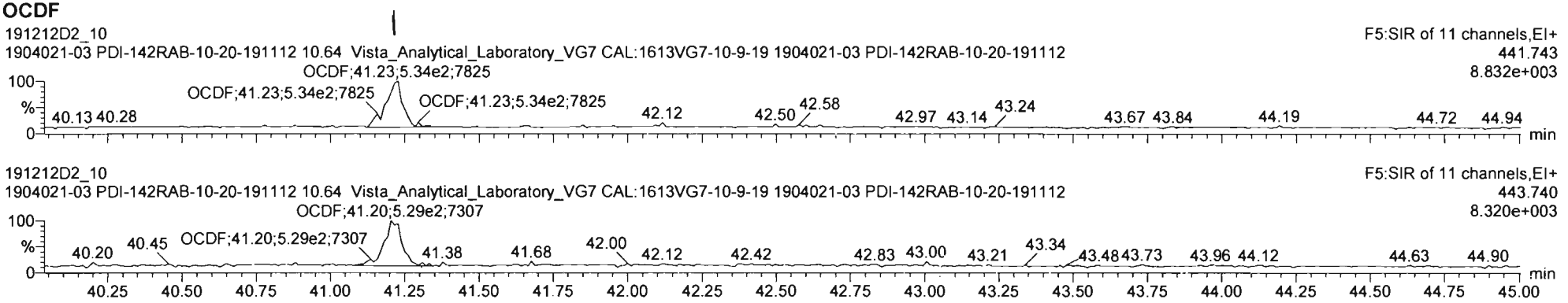
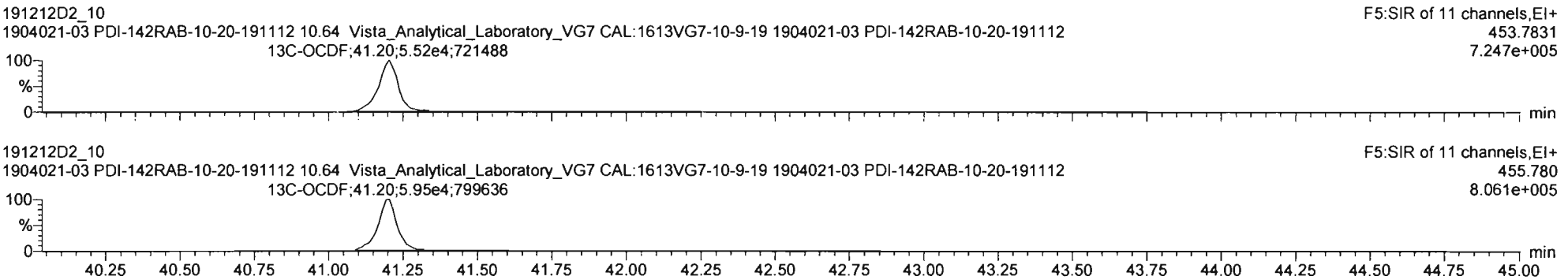
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

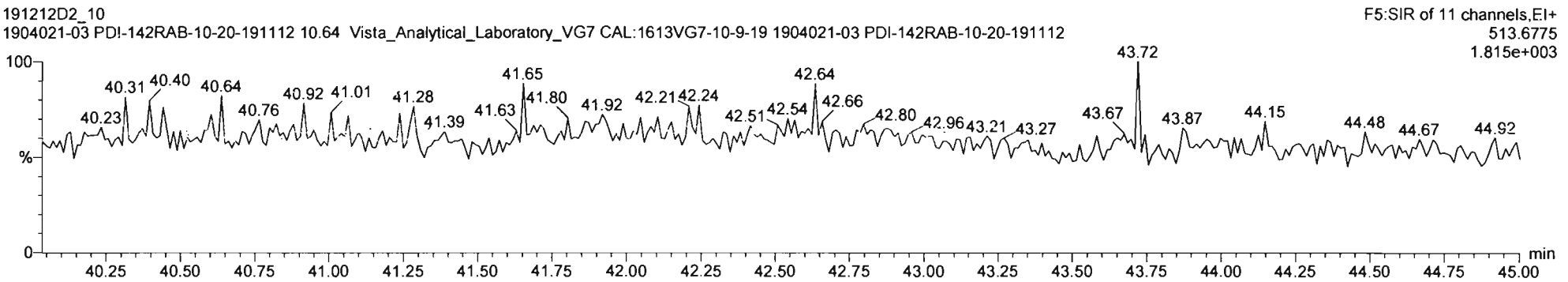
OCDF



13C-OCDF



DPE5



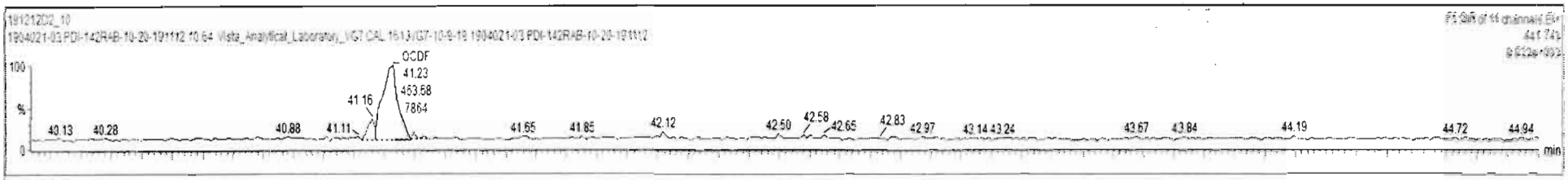
TargetLynx XS - 191212D2_10 * - [Chromatogram]

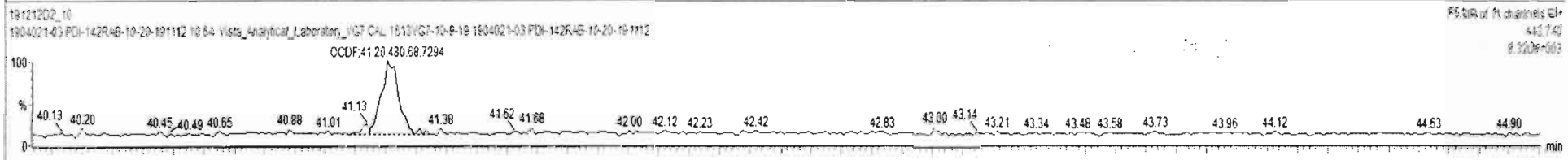
File Edit View Display Processing Window Help

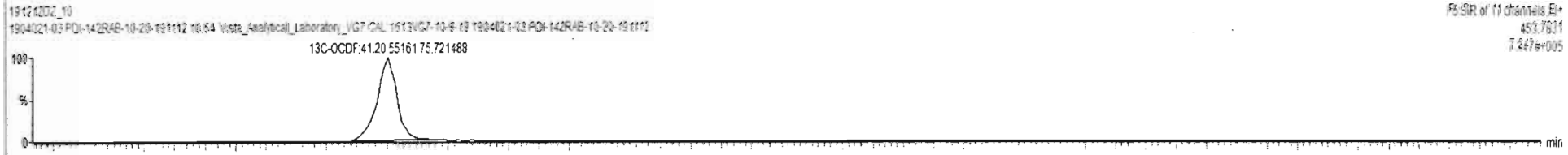
191212D2_10 - 1904021-03 PDI-142RAB-10-20-191112 - 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

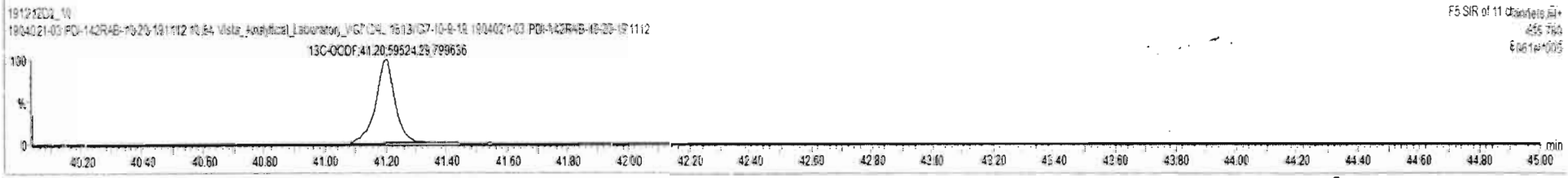
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	2,3,7,8-TCDD		6.10e4	18			0.905	10.022	26.06			1.001	NO			0.259	
2	2	1,2,3,7,8-PeCDD		5.10e4	19			0.903	10.022	30.59			1.001	NO			0.508	
3	3	1,2,3,4,7,8-HxCDD		4.45e4	20			1.101	10.022	33.88			1.000	NO			0.699	
4	4	1,2,3,6,7,8-HxCDD		5.11e4	21			0.939	10.022	33.97			1.000	NO			0.743	
5	5	1,2,3,7,8,9-HxCDD		5.21e4	22			0.961	10.022	34.31			1.001	NO			0.746	
6	6	1,2,3,4,6,7,8-HpCDD	2.26e3	4.92e4	23	1.06	NO	0.979	10.022	37.76	37.76	1.000	1.000	NO	9.357		0.659	9.357
7	7	OCDD	1.81e4	8.95e4	24	0.87	NO	0.959	10.022	40.96	41.00	1.000	1.000	NO	83.99		0.942	83.99
8	8	2,3,7,8-TCDF		8.75e4	25			0.960	10.022	25.27			1.001	NO			0.301	
9	9	1,2,3,7,8-PeCDF		7.87e4	26			0.960	10.022	29.41			1.001	NO			0.255	

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1											









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191212D2_10 CAP NUM

Vista Analytical Laboratory
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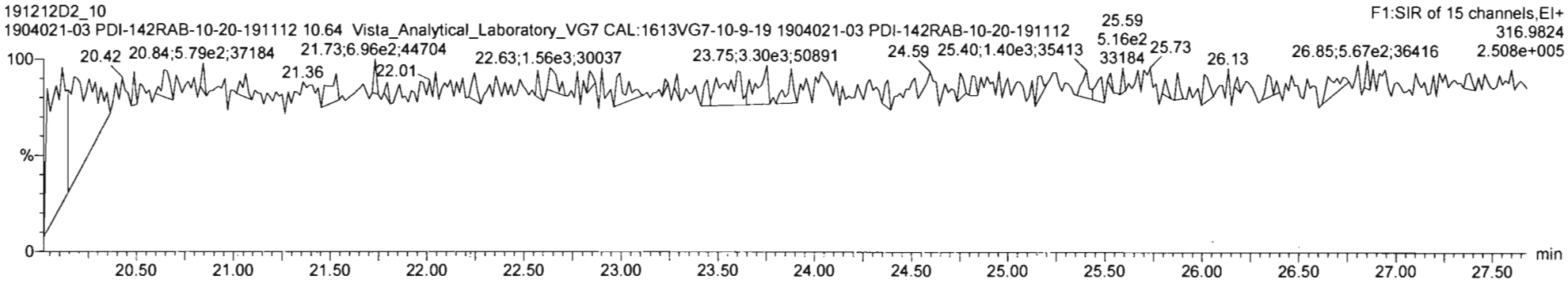
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_10, Date: 13-DEC-2019, Time: 08:07:11, ID: 1904021-03 PDI-142RAB-10-20-191112,
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK1



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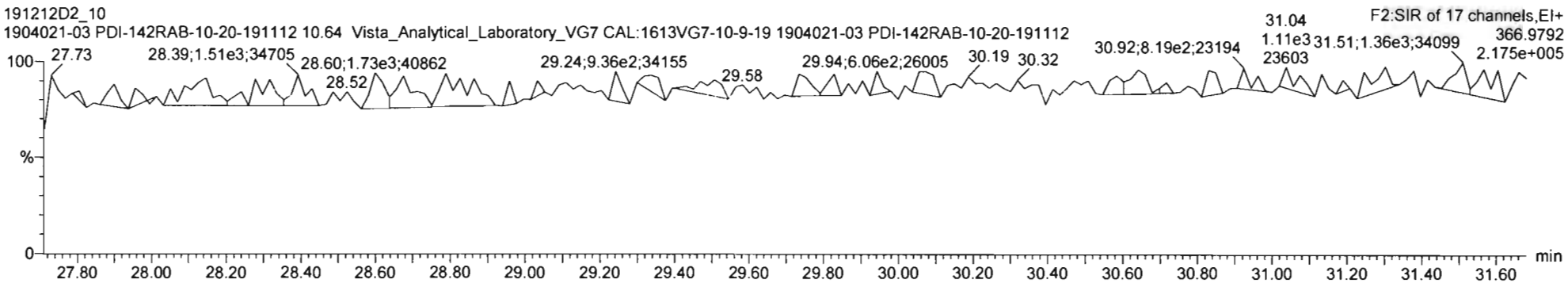

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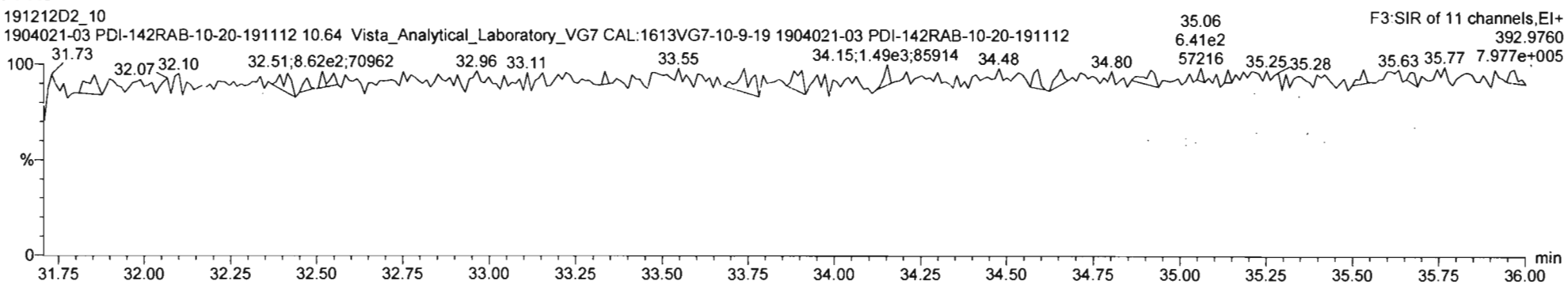

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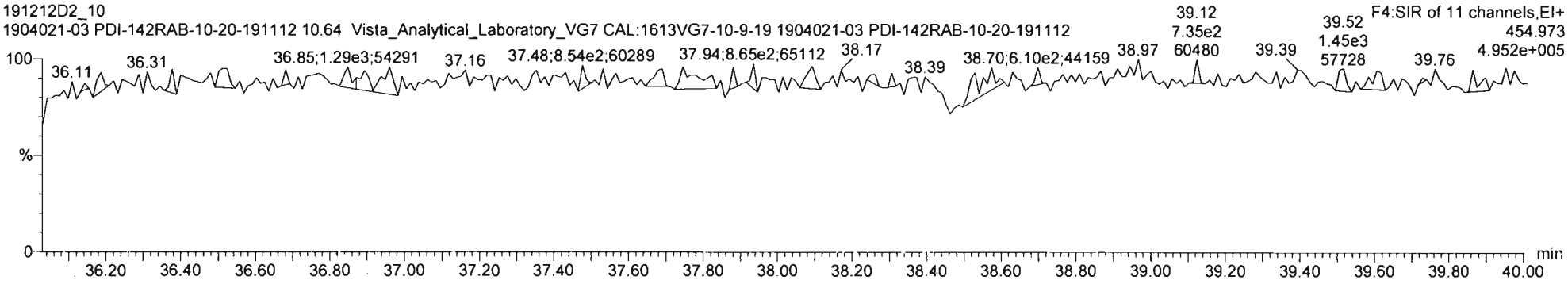
Description: 1904021-03 PDI-142RAB-10-20-191112 10.64 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK4



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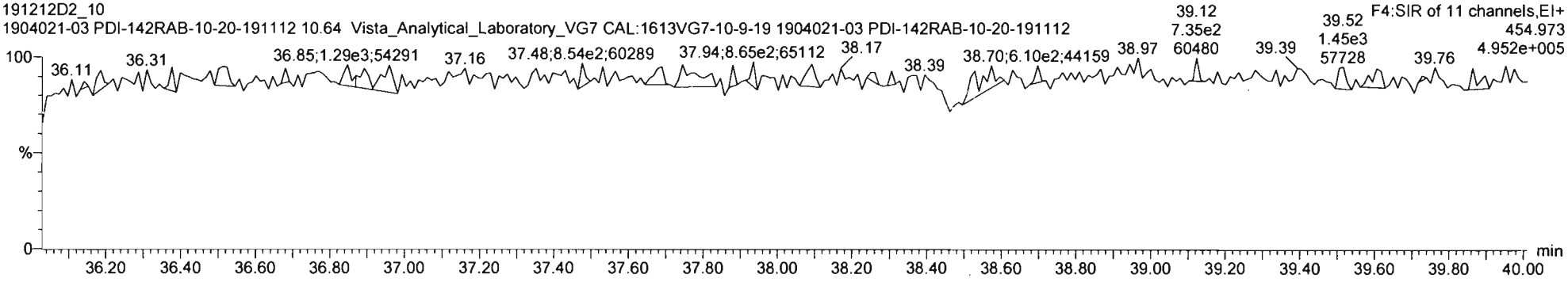

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_11.qld
Last Altered: Tuesday, December 17, 2019 12:27:42 Pacific Standard Time
Printed: Tuesday, December 17, 2019 12:28:46 Pacific Standard Time

EL 12/17/19

CT 12/26/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:06:23

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		1.50e5	10.1514	0.905			1.001		26.08					0.194
2	2	1,2,3,7,8-PeCDD		1.28e5	10.1514	0.903			1.001		30.61					0.268
3	3	1,2,3,4,7,8-HxCDD		1.16e5	10.1514	1.101			1.000		33.90					0.425
4	4	1,2,3,6,7,8-HxCDD	8.62e2	1.31e5	10.1514	0.939	1.209	NO	1.000	1.001	33.99	34.01	1.3849		1.38	0.465
5	5	1,2,3,7,8,9-HxCDD		1.27e5	10.1514	0.961			1.001		34.33					0.501
6	6	1,2,3,4,6,7,8-HpCDD	4.58e4	1.23e5	10.1514	0.979	0.998	NO	1.000	1.001	37.76	37.77	74.892		74.9	0.671
7	7	OCDD	2.53e5	1.91e5	10.1514	0.959	0.877	NO	1.000	1.001	41.00	41.02	545.66		546	0.580
8	8	2,3,7,8-TCDF	4.97e2	2.15e5	10.1514	0.950	0.868	NO	1.001	1.001	25.28	25.28	0.48008	OK	0.480	0.214
9	9	1,2,3,7,8-PeCDF	7.49e2	1.99e5	10.1514	0.960	1.423	NO	1.001	1.001	29.42	29.42	0.77253		0.773	0.147
10	10	2,3,4,7,8-PeCDF	7.32e2	1.94e5	10.1514	1.015	1.833	YES	1.001	1.001	30.34	30.32	0.73156		0.658	0.182
11	11	1,2,3,4,7,8-HxCDF	1.34e3	1.53e5	10.1514	1.177	1.352	NO	1.000	1.000	33.00	33.01	1.4717		1.47	0.122
12	12	1,2,3,6,7,8-HxCDF	5.05e2	1.69e5	10.1514	1.069	1.613	YES	1.000	1.001	33.14	33.15	0.55118		0.473	0.134
13	13	2,3,4,6,7,8-HxCDF	4.17e2	1.51e5	10.1514	1.114	1.223	NO	1.001	1.000	33.75	33.72	0.48822		0.488	0.149
14	14	1,2,3,7,8,9-HxCDF		1.43e5	10.1514	1.062			1.000		34.66					0.185
15	15	1,2,3,4,6,7,8-HpCDF	3.42e3	1.27e5	10.1514	1.128	1.095	NO	1.001	1.000	36.53	36.49	4.7116		4.71	0.236
16	16	1,2,3,4,7,8,9-HpCDF	3.56e2	1.08e5	10.1514	1.280	1.187	NO	1.000	1.001	38.29	38.32	0.50511		0.505	0.217
17	17	OCDF	1.09e4	2.31e5	10.1514	0.947	0.885	NO	1.000	1.000	41.22	41.23	19.710		19.7	0.244
18	18	13C-2,3,7,8-TCDD	1.50e5	1.46e5	10.1514	1.095	0.795	NO	1.021	1.022	26.02	26.05	185.33	94.1		0.499
19	19	13C-1,2,3,7,8-PeCDD	1.28e5	1.46e5	10.1514	0.881	0.641	NO	1.187	1.200	30.25	30.59	196.64	99.8		0.487
20	20	13C-1,2,3,4,7,8-Hx...	1.16e5	1.85e5	10.1514	0.642	1.303	NO	1.014	1.014	33.87	33.89	192.52	97.7		0.755
21	21	13C-1,2,3,6,7,8-Hx...	1.31e5	1.85e5	10.1514	0.856	1.254	NO	1.017	1.017	33.99	33.99	162.59	82.5		0.567
22	22	13C-1,2,3,7,8,9-Hx...	1.27e5	1.85e5	10.1514	0.807	1.245	NO	1.026	1.027	34.28	34.29	167.25	84.9		0.601
23	23	13C-1,2,3,4,6,7,8-H...	1.23e5	1.85e5	10.1514	0.654	1.065	NO	1.126	1.130	37.62	37.75	200.37	101.7		0.957
24	24	13C-OCDD	1.91e5	1.85e5	10.1514	0.580	0.877	NO	1.226	1.227	40.96	41.00	350.72	89.0		0.547
25	25	13C-2,3,7,8-TCDF	2.15e5	2.39e5	10.1514	1.035	0.789	NO	0.992	0.991	25.28	25.25	171.29	86.9		0.449
26	26	13C-1,2,3,7,8-PeCDF	1.99e5	2.39e5	10.1514	0.854	1.616	NO	1.154	1.153	29.40	29.40	192.32	97.6		0.630
27	27	13C-2,3,4,7,8-PeCDF	1.94e5	2.39e5	10.1514	0.847	1.644	NO	1.189	1.189	30.30	30.31	189.21	96.0		0.635
28	28	13C-1,2,3,4,7,8-Hx...	1.53e5	1.85e5	10.1514	0.832	0.507	NO	0.987	0.988	32.98	33.00	195.31	99.1		0.856
29	29	13C-1,2,3,6,7,8-Hx...	1.69e5	1.85e5	10.1514	1.034	0.512	NO	0.991	0.992	33.10	33.13	173.70	88.2		0.688
30	30	13C-2,3,4,6,7,8-Hx...	1.51e5	1.85e5	10.1514	0.953	0.512	NO	1.009	1.009	33.71	33.72	168.64	85.6		0.747
31	31	13C-1,2,3,7,8,9-Hx...	1.43e5	1.85e5	10.1514	0.828	0.513	NO	1.039	1.038	34.70	34.66	183.41	93.1		0.860

Vista Analytical Laboratory
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Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	1.27e5	1.85e5	10.1514	0.757	0.442	NO	1.093	1.092	36.51	36.49	178.48	90.6		0.950
33	33	13C-1,2,3,4,7,8,9-H...	1.08e5	1.85e5	10.1514	0.581	0.451	NO	1.143	1.146	38.19	38.29	198.81	100.9		1.24
34	34	13C-OCDF	2.31e5	1.85e5	10.1514	0.689	0.878	NO	1.233	1.234	41.20	41.22	356.59	90.5		0.681
35	35	37Cl-2,3,7,8-TCDD	6.16e4	1.46e5	10.1514	1.198			1.022	1.023	26.05	26.08	69.386	88.0		0.120
36	36	13C-1,2,3,4-TCDD	1.46e5	1.46e5	10.1514	1.000	0.790	NO	1.000	1.000	25.50	25.49	197.02	100.0		0.546
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	10.1514	1.000	0.799	NO	1.000	1.000	24.06	24.04	197.02	100.0		0.465
38	38	13C-1,2,3,4,6,9-Hx...	1.85e5	1.85e5	10.1514	1.000	0.505	NO	1.000	1.000	33.42	33.41	197.02	100.0		0.712
39	39	Total Tetra-Dioxins		1.50e5	10.1514	0.901			0.000		25.50					0.119
40	40	Total Penta-Dioxins		1.28e5	10.1514	0.872			0.000		30.00		0.90291		1.46	0.277
41	41	Total Hexa-Dioxins		0.00e0	10.1514	0.976			0.000		33.80		16.490		16.5	0.473
42	42	Total Hepta-Dioxins		1.23e5	10.1514	0.989			0.000		37.75		177.01		177	0.665
43	43	Total Tetra-Furans		2.15e5	10.1514	0.943			0.000		24.00		0.82894		1.01	0.215
44	44	1st Func. Penta-Fur...		0.00e0	10.1514	0.940			0.000		27.63		2.9226		2.92	0.0669
45	45	Total Penta-Furans		0.00e0	10.1514	0.940			0.000		30.00		1.2514		3.50	0.147
46	46	Total Hexa-Furans		0.00e0	10.1514	1.078			0.000		33.00		8.6313		9.10	0.150
47	47	Total Hepta-Furans		0.00e0	10.1514	1.135			0.000		37.75		19.688		19.7	0.239

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_11.qld
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Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	40	Total Penta-Dioxins	NO	29.02	73.885	50164.668	3.240	MM	0.3660	0.37
2	40	Total Penta-Dioxins	NO	28.57	113.203	50164.668	0.000	MM	0.0000	0.56
3	40	Total Penta-Dioxins	NO	29.87	119.184	50164.668	4.754	MM	0.5370	0.54

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	41	Total Hexa-Dioxins	NO	32.37	2614.147	69530.985	77.010	MM	7.7735	7.77
2	4	1,2,3,6,7,8-HxCDD	NO	34.01	471.538	72666.633	13.195	MM	1.3849	1.38
3	41	Total Hexa-Dioxins	NO	33.19	2524.438	69530.985	72.637	dd	7.3321	7.33

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	6	1,2,3,4,6,7,8-HpCDD	NO	37.77	22876.158	63453.590	744.596	bb	74.8918	74.89
2	42	Total Hepta-Dioxins	NO	36.90	31590.396	63453.590	1024.904	bb	102.1156	102.12

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	8	2,3,7,8-TCDF	NO	25.28	230.986	94698.906	4.630	MM	0.4801	0.48
2	43	Total Tetra-Furans	NO	24.46	158.014	94698.906	3.339	MM	0.3489	0.35
3	43	Total Tetra-Furans	YES	25.61	99.689	94698.906	0.000	MM	0.0000	0.18

Vista Analytical Laboratory
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Last Altered: Tuesday, December 17, 2019 12:27:42 Pacific Standard Time
Printed: Tuesday, December 17, 2019 12:28:46 Pacific Standard Time

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44	1st Func. Penta-Furans	NO	27.07	1751.500	121807.989	27.877	bb	2.9226	2.92

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	10	2,3,4,7,8-PeCDF	YES	30.32	473.324	120708.414	0.000	MM	0.0000	0.66
2	45	Total Penta-Furans	YES	29.66	323.679	121807.989	0.000	bb	0.0000	0.41
3	9	1,2,3,7,8-PeCDF	NO	29.42	440.123	122907.563	7.532	MM	0.7725	0.77
4	45	Total Penta-Furans	YES	29.25	119.221	121807.989	0.000	MM	0.0000	0.14
5	45	Total Penta-Furans	NO	29.04	286.218	121807.989	4.568	MM	0.4789	0.48
6	45	Total Penta-Furans	YES	28.51	697.211	121807.989	0.000	MM	0.0000	0.69
7	45	Total Penta-Furans	YES	28.36	240.281	121807.989	0.000	bd	0.0000	0.20
8	45	Total Penta-Furans	YES	28.47	84.125	121807.989	0.000	MM	0.0000	0.15

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	13	2,3,4,6,7,8-HxCDF	NO	33.72	229.150	51122.621	5.519	MM	0.4882	0.49
2	12	1,2,3,6,7,8-HxCDF	YES	33.15	311.425	57106.883	0.000	db	0.0000	0.47
3	11	1,2,3,4,7,8-HxCDF	NO	33.01	770.635	51336.227	17.581	dd	1.4717	1.47
4	46	Total Hexa-Furans	NO	32.54	1491.646	51977.448	34.333	MM	3.1386	3.14
5	46	Total Hexa-Furans	NO	32.00	1359.846	51977.448	31.885	MM	2.9148	2.91
6	46	Total Hexa-Furans	NO	31.84	285.044	51977.448	6.761	bb	0.6181	0.62

Hepta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	15	1,2,3,4,6,7,8-HpCDF	NO	36.49	1789.330	38944.895	53.933	bb	4.7116	4.71
2	16	1,2,3,4,7,8,9-HpCDF	NO	38.32	193.211	33746.609	6.563	MM	0.5051	0.51
3	47	Total Hepta-Furans	NO	37.11	4806.487	36345.752	166.695	bb	14.4716	14.47

Vista Analytical Laboratory
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Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
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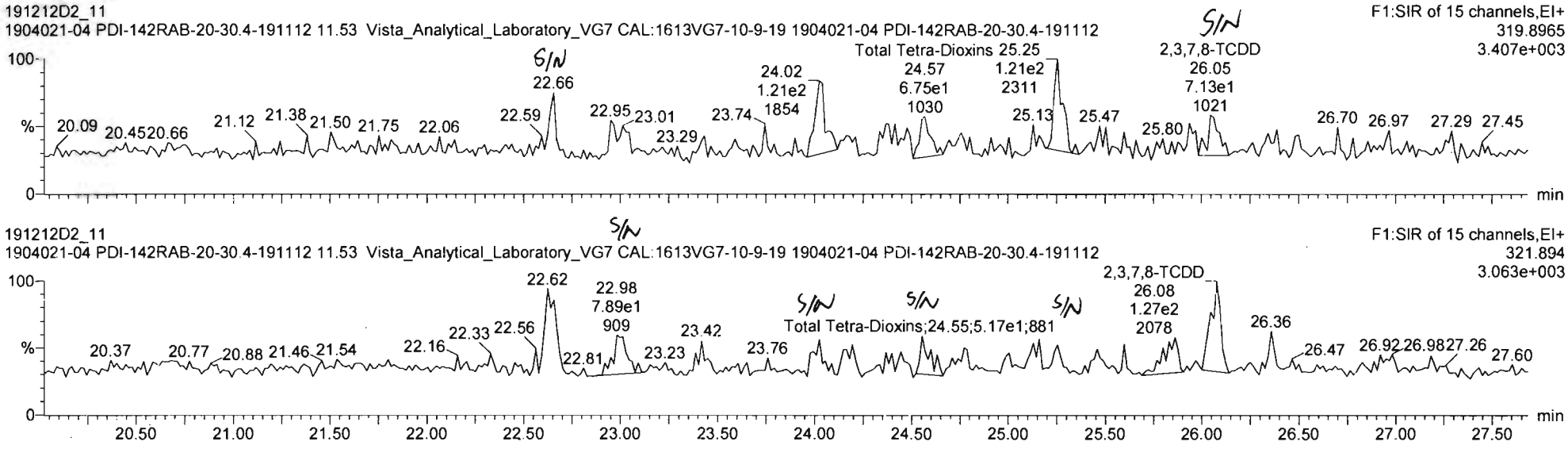
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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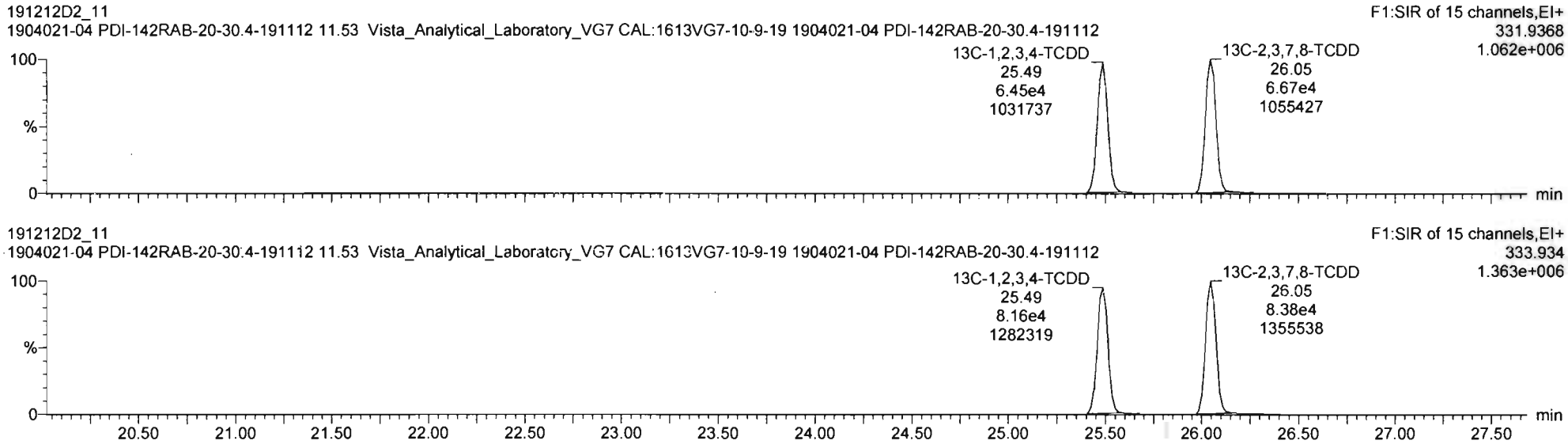

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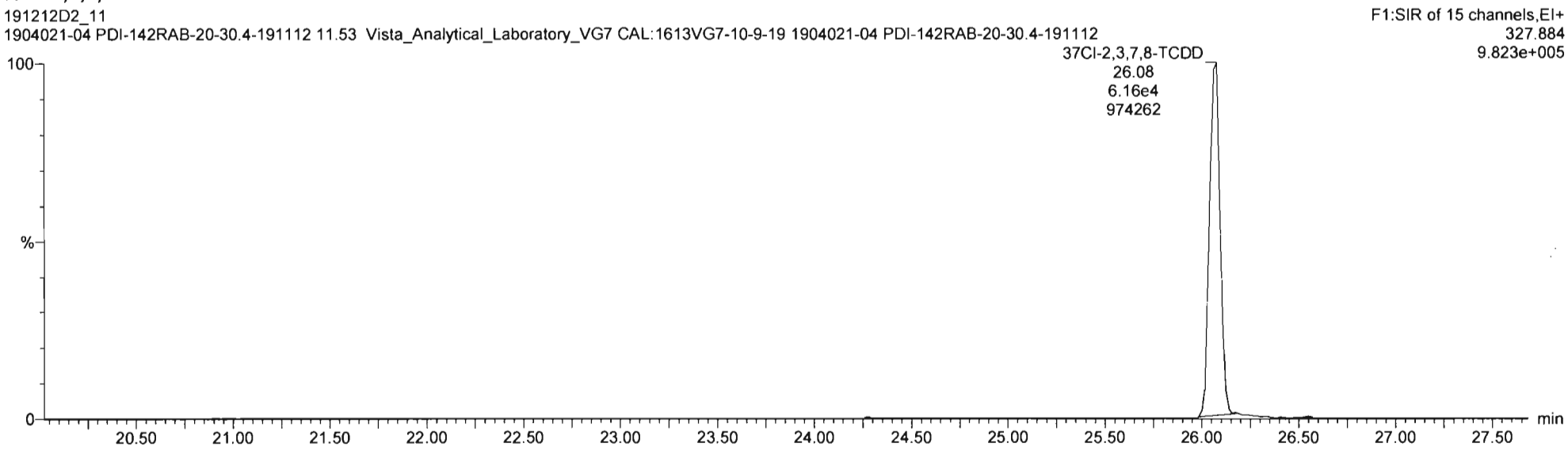
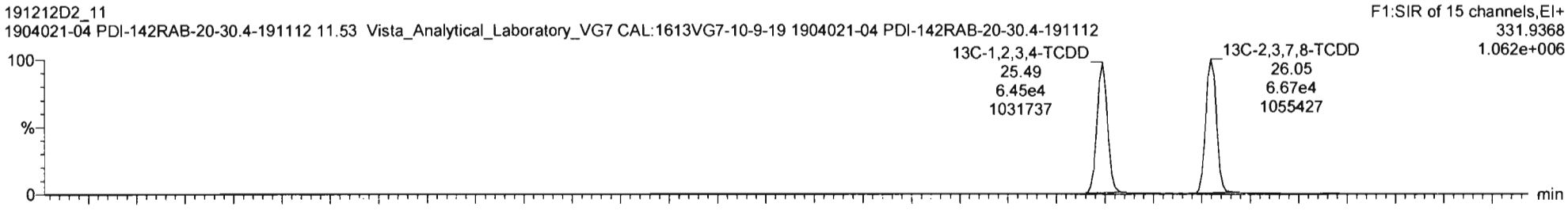
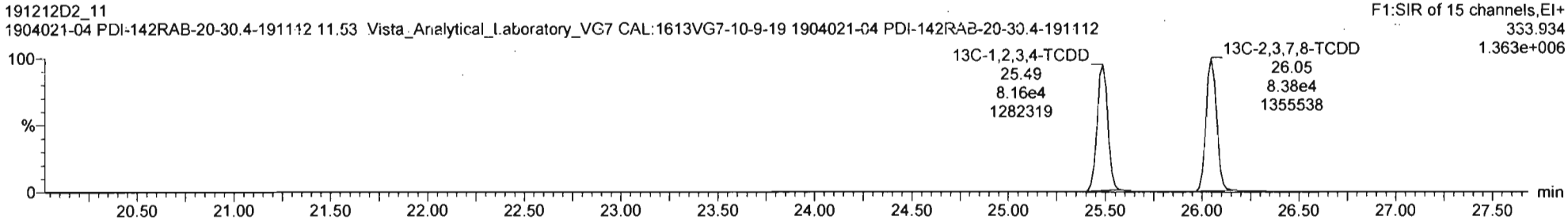
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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



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





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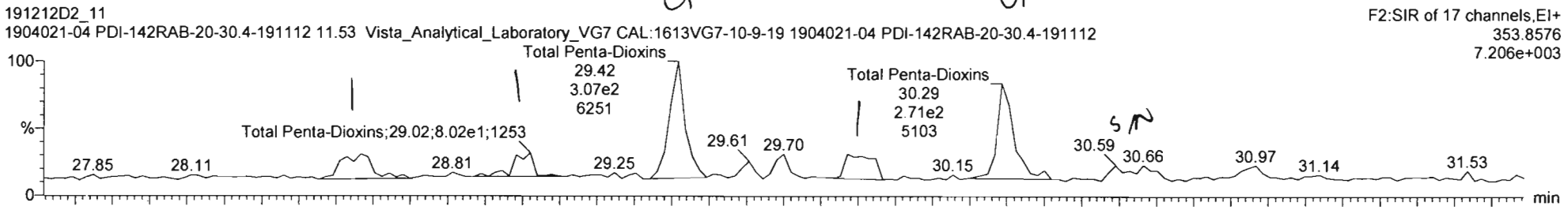
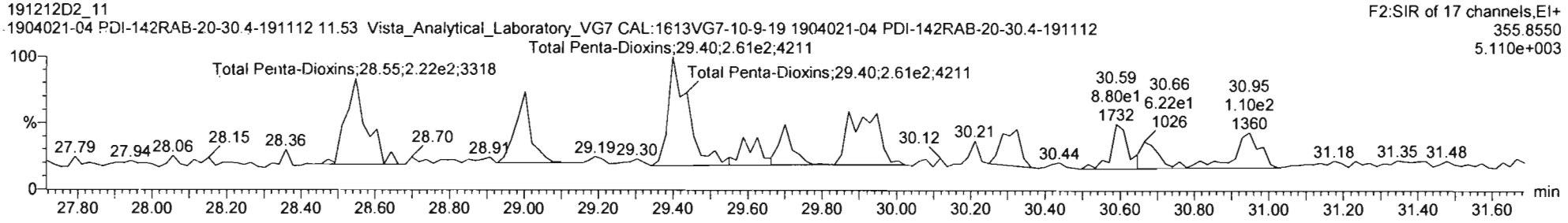
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Penta-Dioxins





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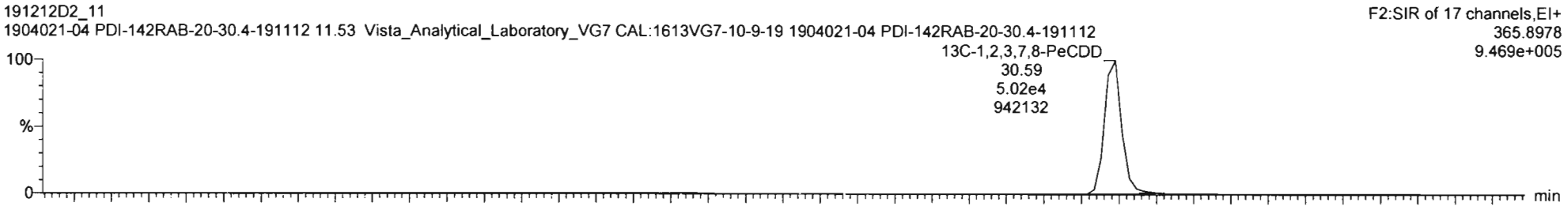
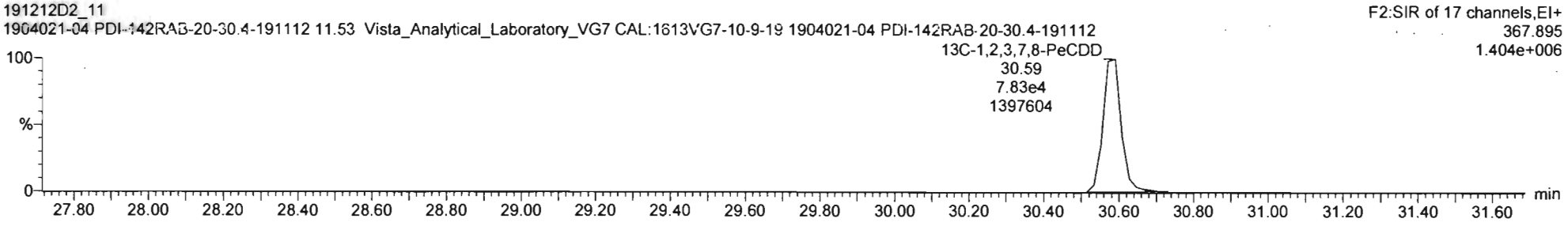




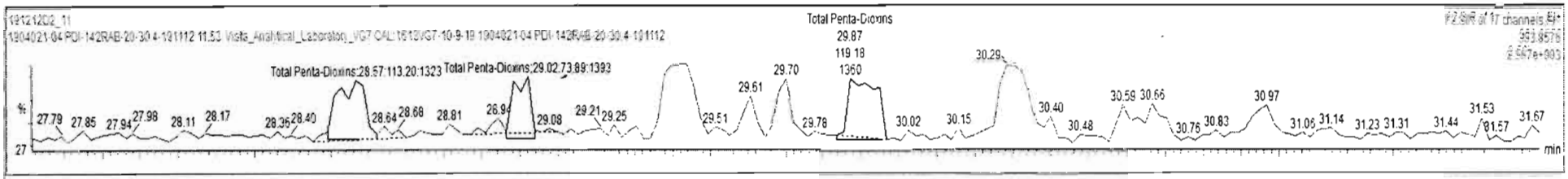
TargetLynx XS - 191212D2_11 * - [Chromatogram]

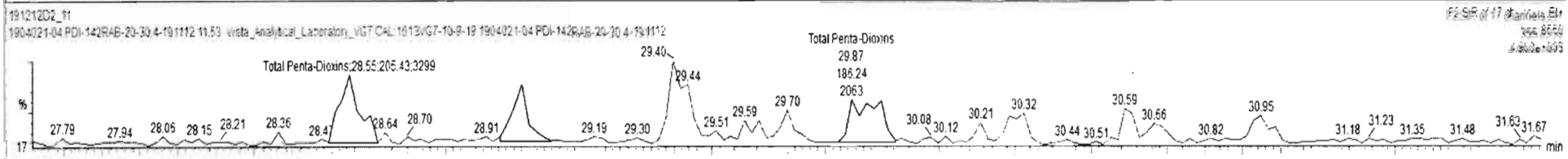
File Edit View Display Processing Window Help

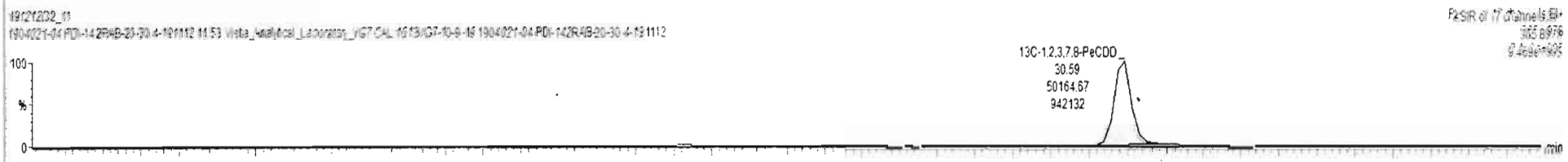
191212D2_11 - 1904021-04 PDI-142RAB-20-30.4-191112 - 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

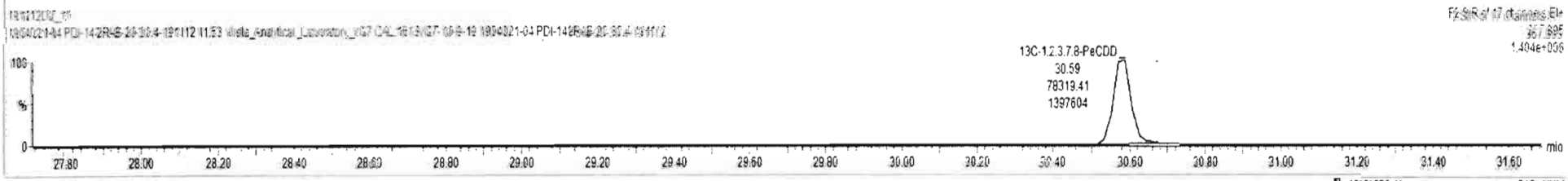
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.69	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.465	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.28e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.43		0.473	18.79
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.665	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.7009		0.215	2.362
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.83			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.988		0.147	4.228

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	40	Total Penta-Dioxins	30.00	28.57	1.132e2	2.054e2	0.630	0.55	NO	0.56018	0.00000
2	40	Total Penta-Dioxins	30.00	29.02	7.389e1	1.343e2	0.630	0.55	NO	0.36595	0.36595
3	40	Total Penta-Dioxins	30.00	29.87	1.192e2	1.862e2	0.630	0.64	NO	0.53696	0.53696









Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

Vista Analytical Laboratory
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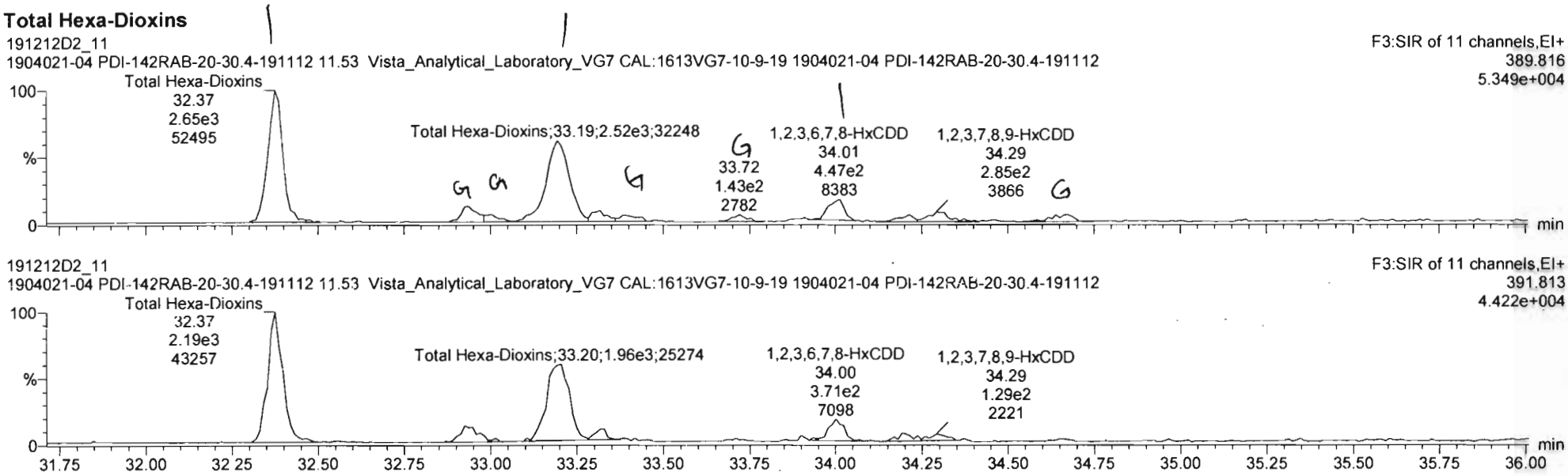
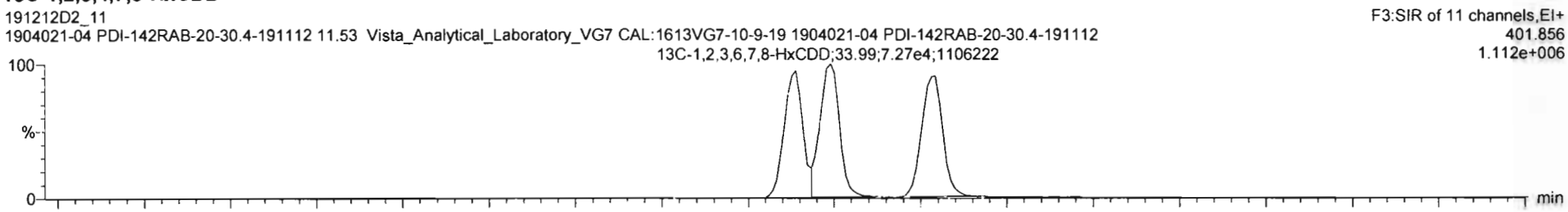
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

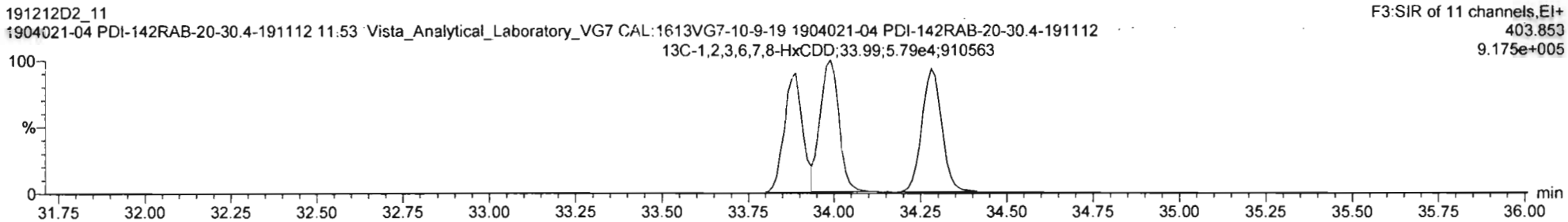
Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Dioxins



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





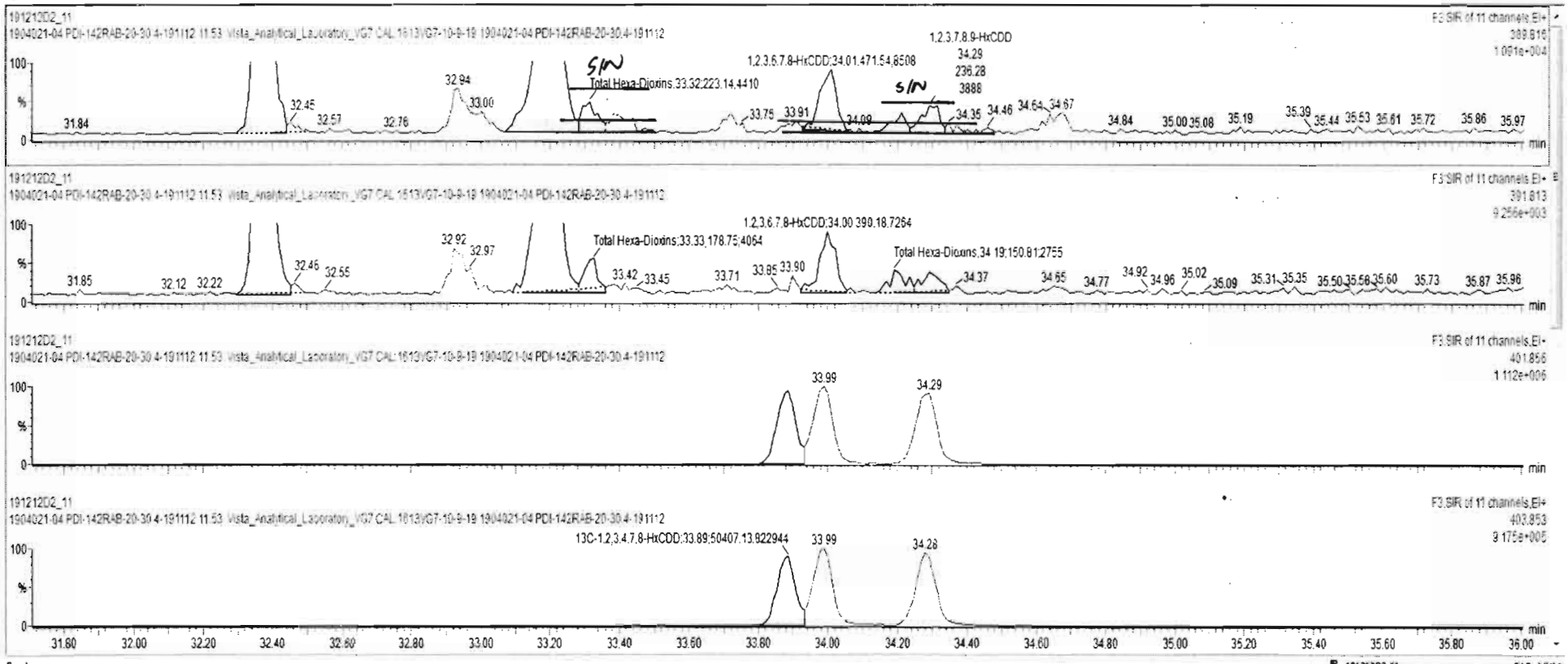
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30 4-191112 - 1904021-04 PDI-142RAB-20-30 4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.466	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.26e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	17.14		0.473	18.06
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.865	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.7009		0.219	2.302
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.568		0.147	4.228

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.37	2.614e3	2.178e3	1.240	1.20	NO	7.7735	7.7735
2	41	Total Hexa-Dioxins	33.80	33.19	2.524e3	1.996e3	1.240	1.27	NO	7.3321	7.3321
3	41	Total Hexa-Dioxins	33.80	33.32	2.231e2	1.787e2	1.240	1.25	NO	0.65192	0.65192
4	4	1,2,3,6,7,8-HxCDD	33.99	34.01	4.715e2	3.902e2	1.240	1.21	NO	1.3849	1.3849
5	41	Total Hexa-Dioxins	33.80	34.21	1.344e2	1.508e2	1.240	0.89	YES	0.39380	0.00000
6	5	1,2,3,7,8,9-HxCDD	34.33	34.29	2.363e2	1.458e2	1.240	1.62	YES	0.52834	0.00000



Ready

191212D2_11

CAP NUM

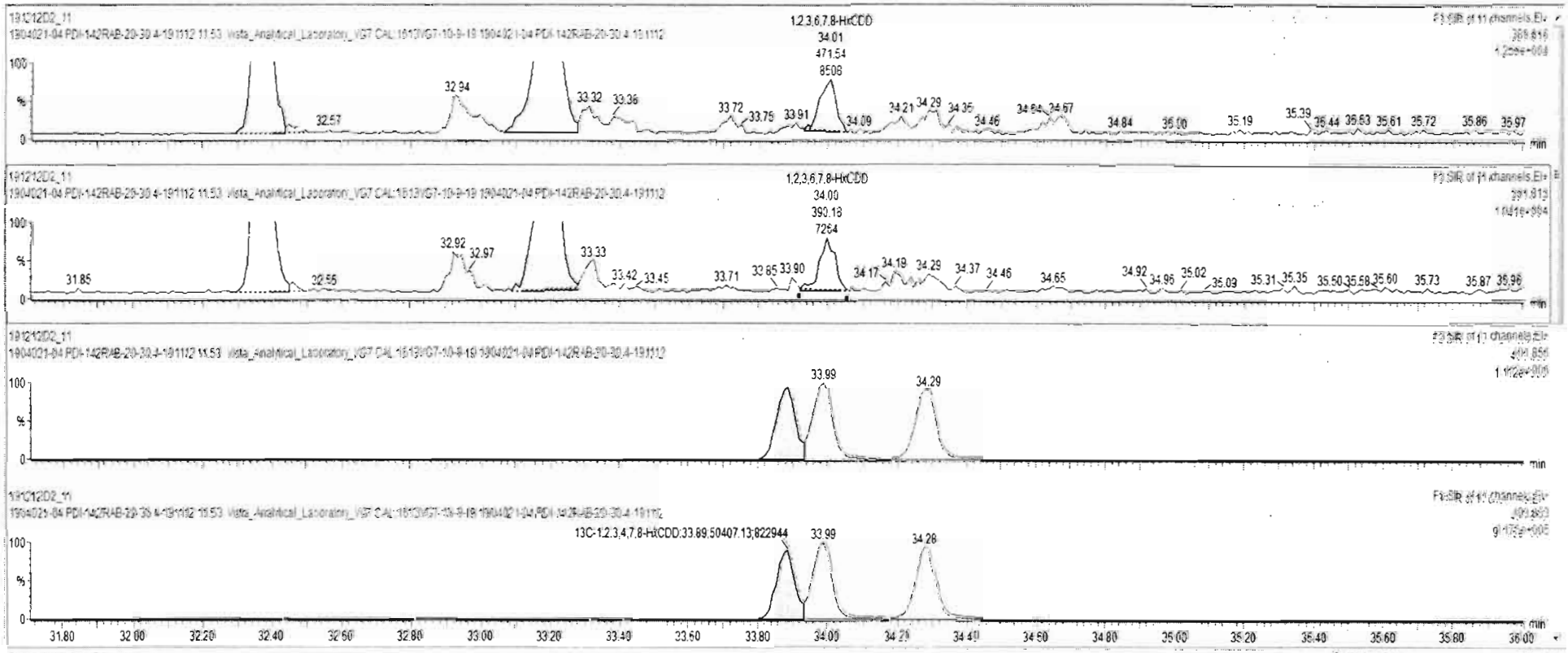
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30 4-191112 - 1904021-04 PDI-142RAB-20-30 4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.465	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.115	
40	40	Total Penta-Dioxins		1.26e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.665	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.7009		0.215	2.302
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.568		0.147	4.228

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.37	2.614e3	2.178e3	1.240	1.20	NO	7.7735	7.7735
2	41	Total Hexa-Dioxins	33.80	33.19	2.524e3	1.996e3	1.240	1.27	NO	7.3321	7.3321
3	4	1,2,3,6,7,8-HxCDD	33.99	34.01	4.715e2	3.902e2	1.240	1.21	NO	1.3849	1.3849



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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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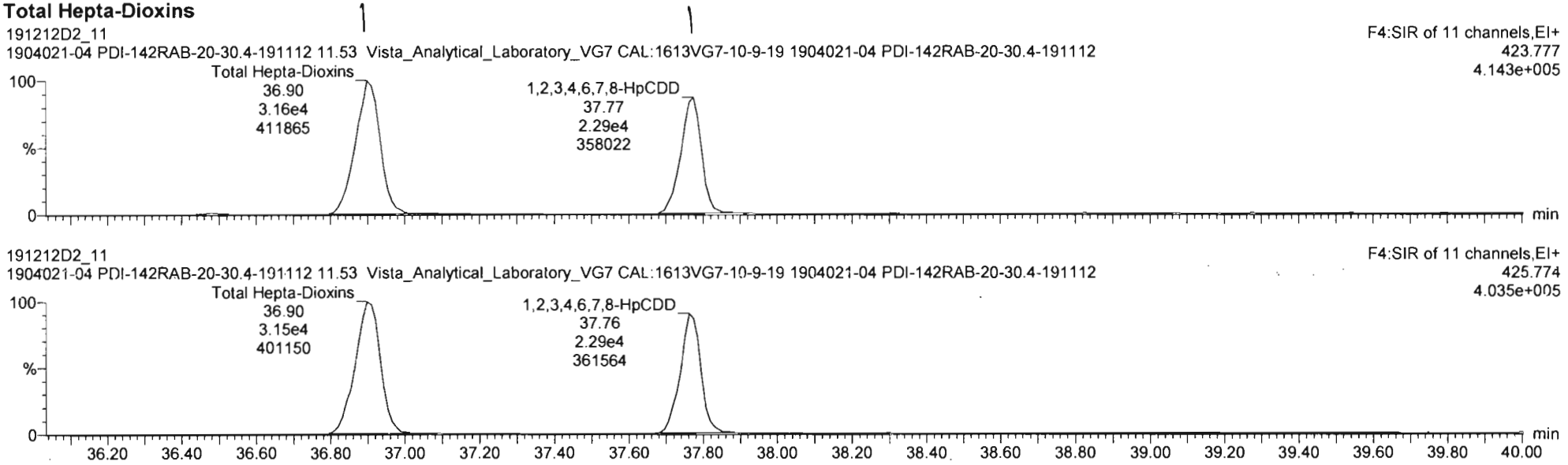
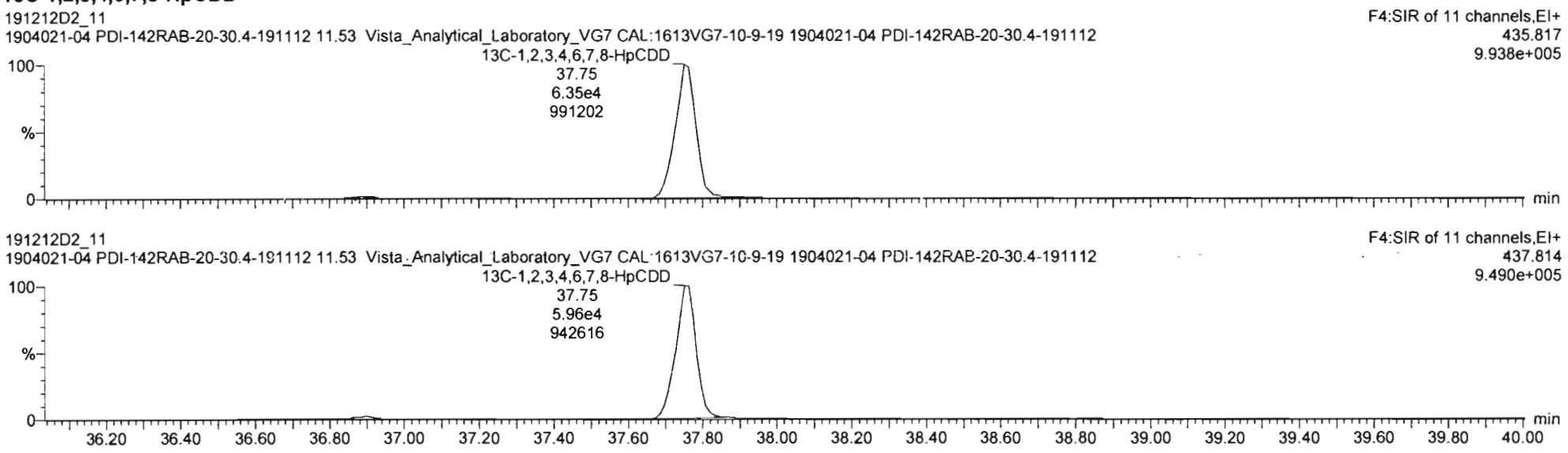
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Dioxins



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



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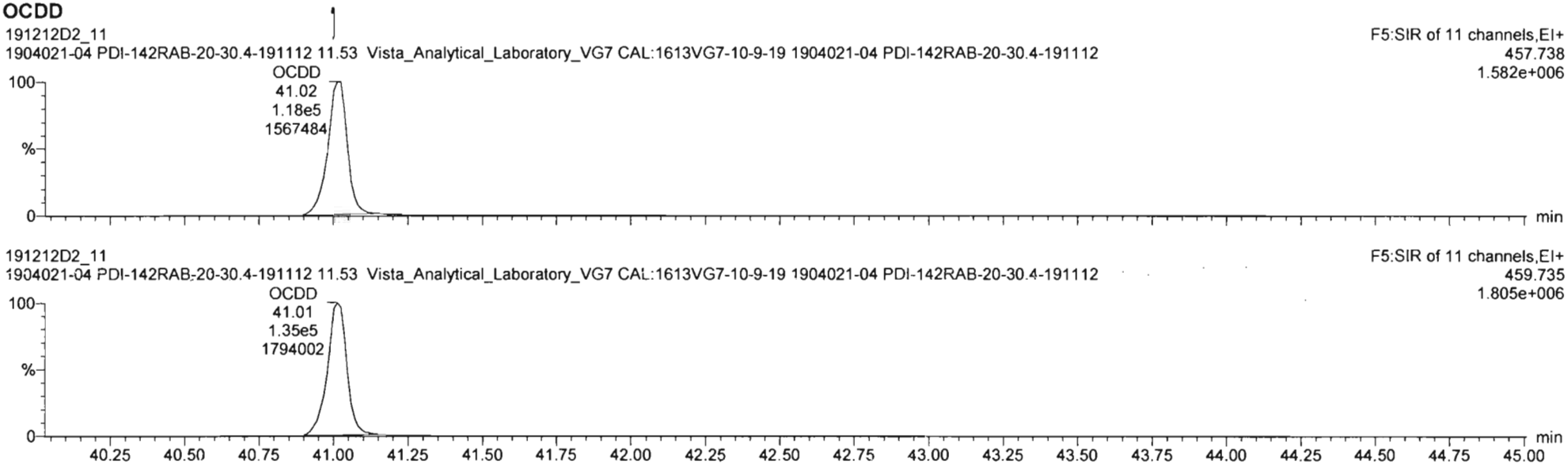
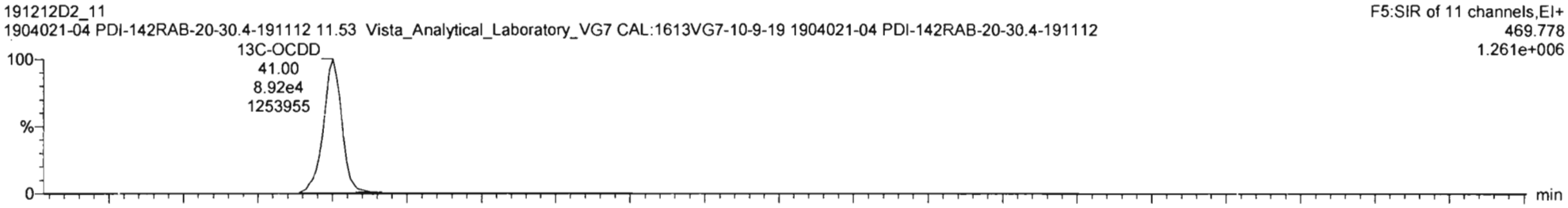
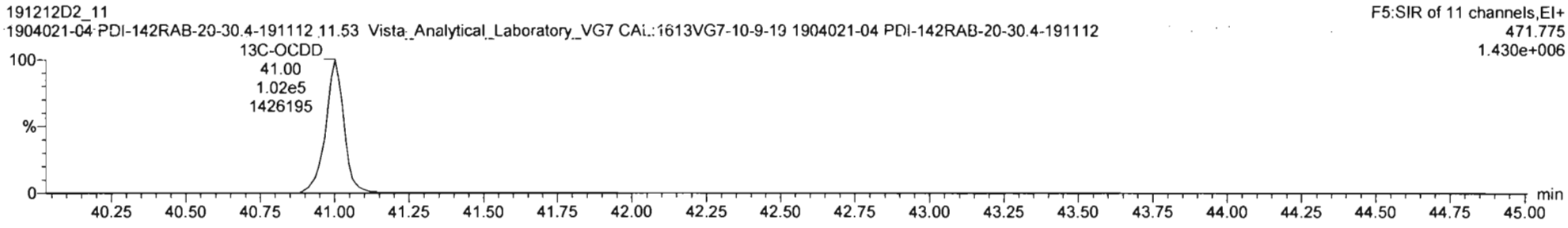
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDD



13C-OCDD





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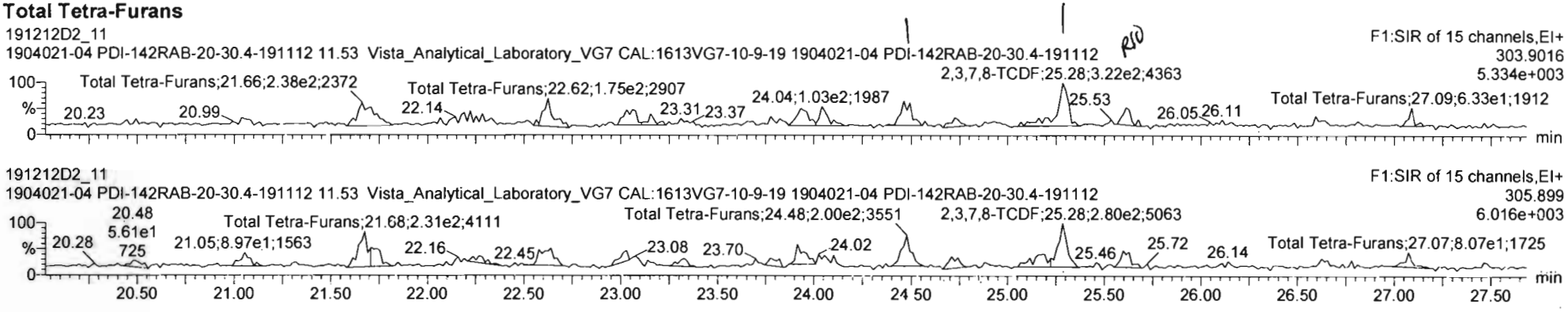
Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Furans



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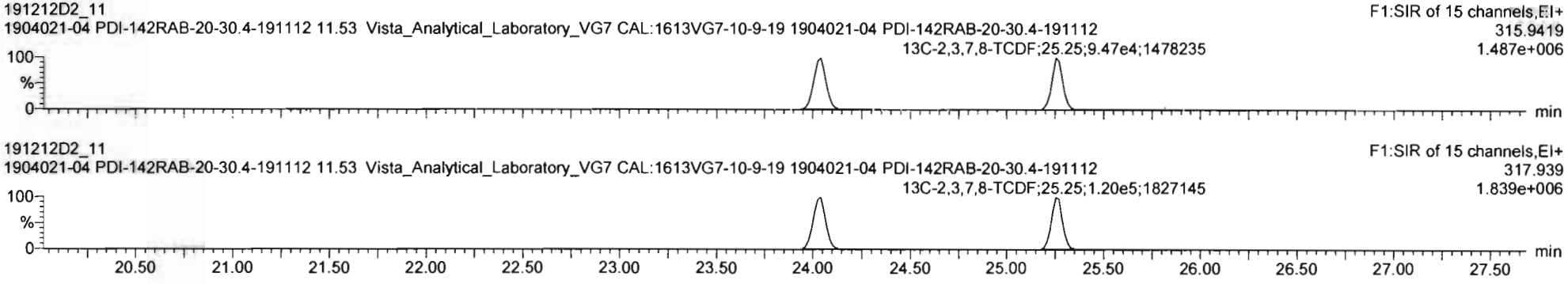

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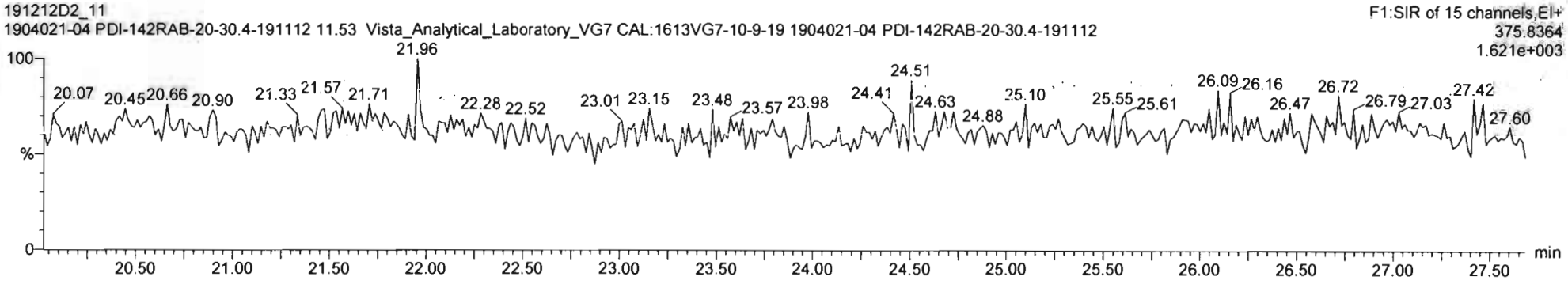


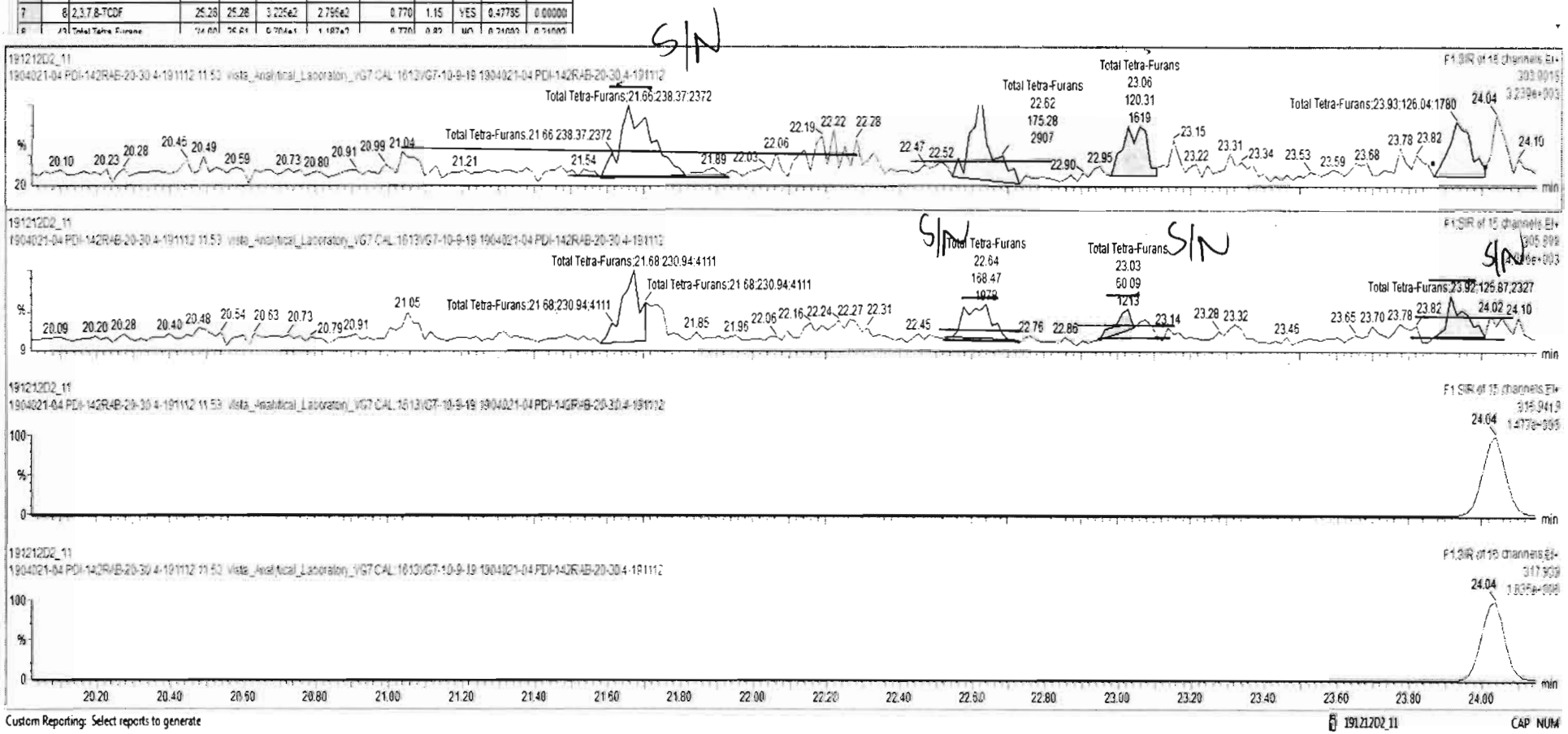
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30.4-191112 - 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.485	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.28e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.665	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.7009		0.215	2.362
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.368		0.147	4.228

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	21.66	2.364e2	2.309e2	0.770	1.03	YES	0.39784	0.00000
2	43	Total Tetra-Furans	24.00	22.62	1.753e2	1.685e2	0.770	1.04	YES	0.29022	0.00000
3	43	Total Tetra-Furans	24.00	23.06	1.263e2	6.009e1	0.770	2.09	YES	0.10352	0.00000
4	43	Total Tetra-Furans	24.00	23.93	1.260e2	1.259e2	0.770	1.00	YES	0.21683	0.00000
5	43	Total Tetra-Furans	24.00	24.46	1.599e2	2.004e2	0.770	0.80	NO	0.35071	0.35071
6	43	Total Tetra-Furans	24.00	24.72	5.136e1	8.347e1	0.770	0.62	YES	0.11492	0.00000
7	8	2,3,7,8-TCDF	25.28	25.28	3.225e2	2.796e2	0.770	1.15	YES	0.47735	0.00000
8	43	Total Tetra-Furans	24.00	25.61	9.204e1	1.187e2	0.770	0.82	NO	0.21093	0.21093



Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

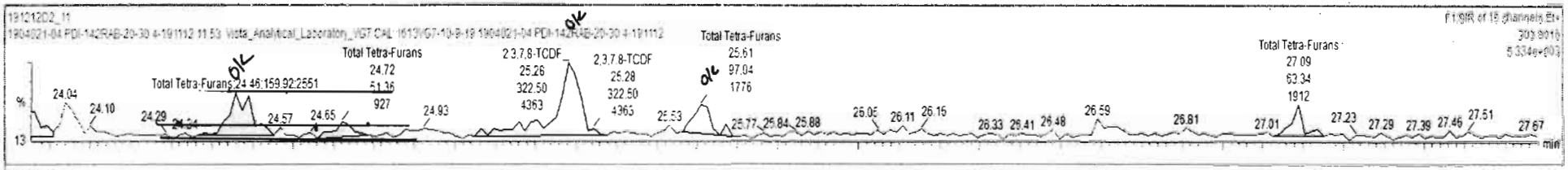
TargetLynx XS - 191212D2_11 * - [Chromatogram]

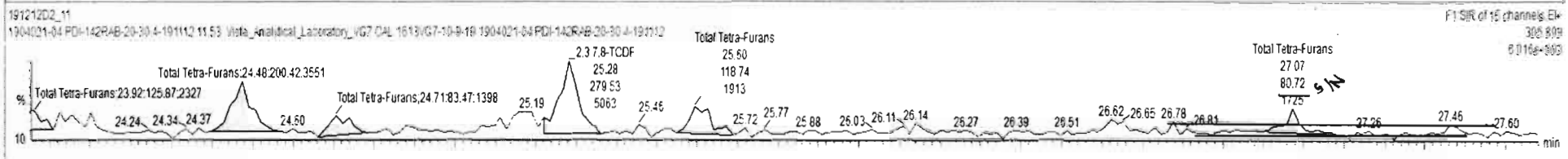
File Edit View Display Processing Window Help

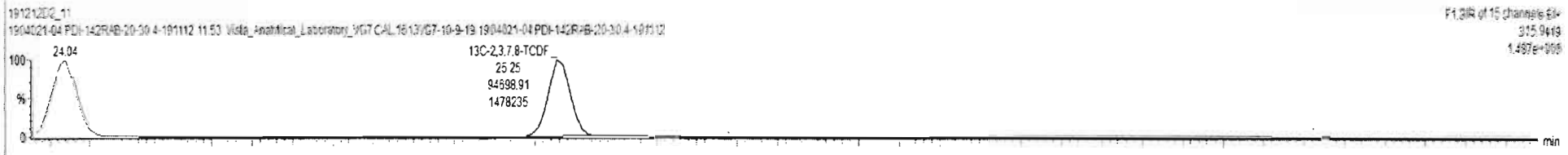
191212D2_11 - 1904021-04 PDI-142RAB-20-30 4-191112 - 1904021-04 PDI-142RAB-20-30 4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

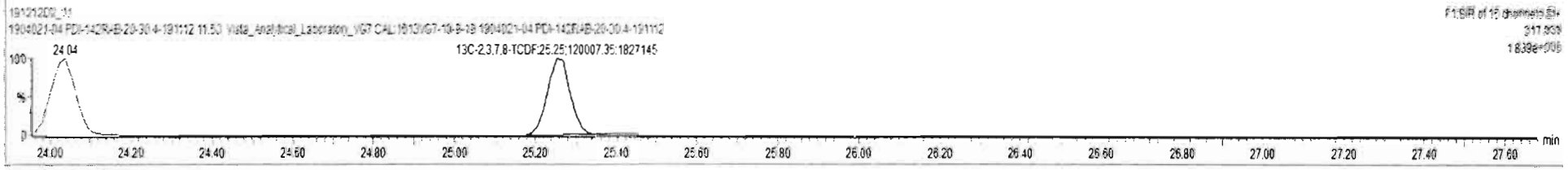
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.485	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.59			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.28e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.60			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.665	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.7009		0.215	2.302
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.988		0.147	4.226

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	21.68	2.384e2	2.309e2	0.770	1.03	YES	0.39784	0.00000
2	43	Total Tetra-Furans	24.00	22.62	1.750e2	1.685e2	0.770	1.04	YES	0.29022	0.00000
3	43	Total Tetra-Furans	24.00	23.06	1.203e2	6.009e1	0.770	2.00	YES	0.10352	0.00000
4	43	Total Tetra-Furans	24.00	23.92	1.260e2	1.259e2	0.770	1.00	YES	0.21683	0.00000
5	43	Total Tetra-Furans	24.00	24.48	1.593e2	2.004e2	0.770	0.80	NO	0.35071	0.35071
6	43	Total Tetra-Furans	24.00	24.72	5.135e1	8.347e1	0.770	0.62	YES	0.11492	0.00000
7	8	2,3,7,8-TCDF	25.28	25.28	3.225e2	2.795e2	0.770	1.15	YES	0.47785	0.00000
8	43	Total Tetra-Furans	24.00	25.61	9.704e1	1.167e2	0.770	0.83	NO	0.21002	0.21002









Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

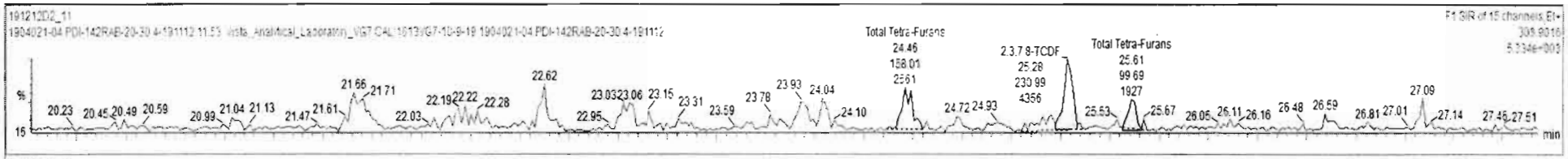
TargetLynx XS - 191212D2_11 * - [Chromatogram]

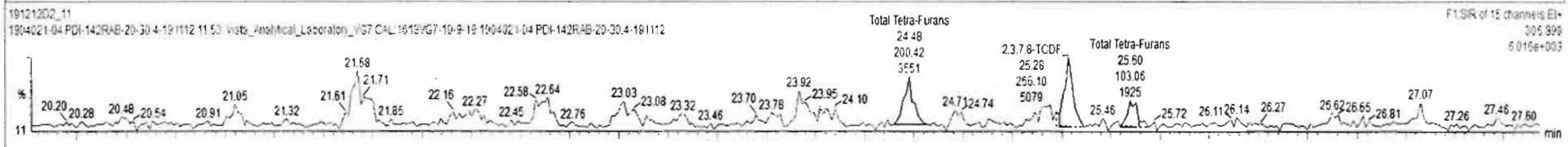
File Edit View Display Processing Window Help

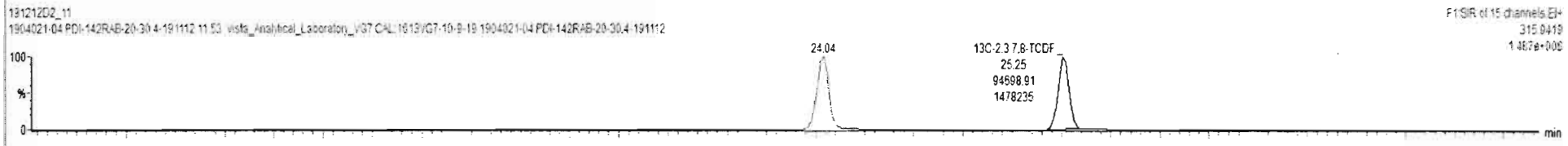
191212D2_11 - 1904021-04 PDI-142RAB-20-30 4-191112 - 1904021-04 PDI-142RAB-20-30 4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

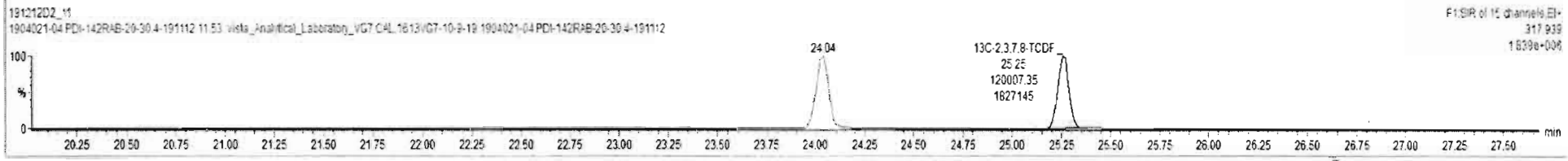
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.465	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.28e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.886	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.8289		0.219	1.006
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0665	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	2.968		0.147	4.228

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	24.46	1.580e2	2.004e2	0.770	0.79	NO	0.34886	0.34886
2	8	2,3,7,8-TCDF	25.28	25.28	2.310e2	2.661e2	0.770	0.87	NO	0.48008	0.48008
3	43	Total Tetra-Furans	24.00	25.61	9.569e1	1.031e2	0.770	0.97	YES	0.17754	0.00000









Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

Vista Analytical Laboratory
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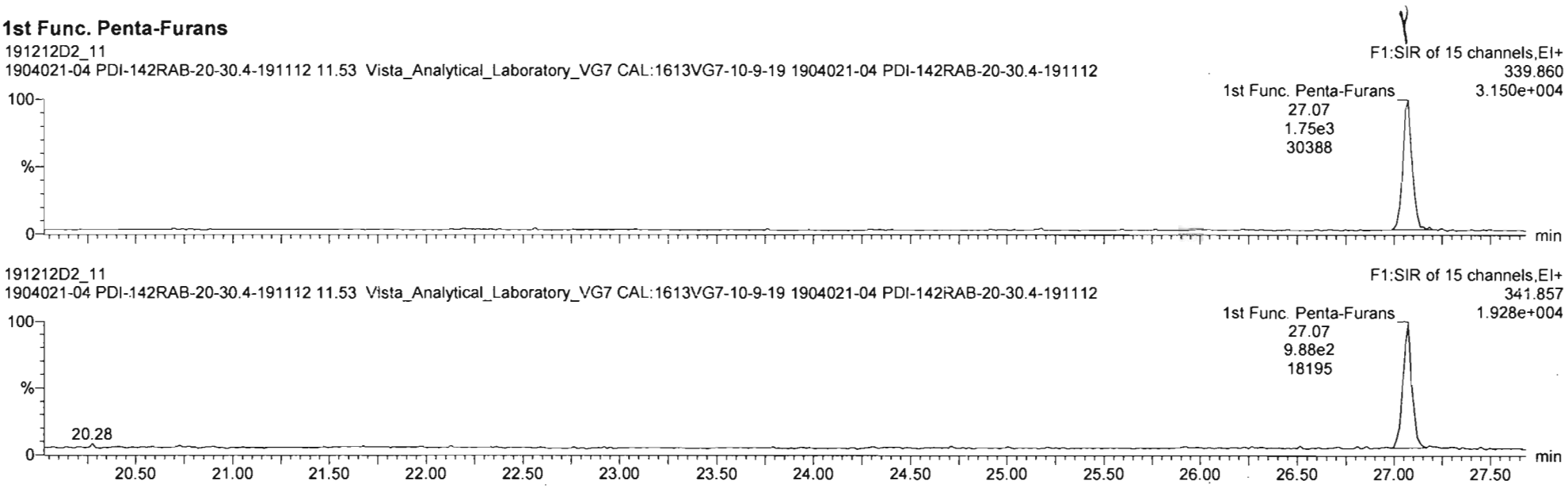
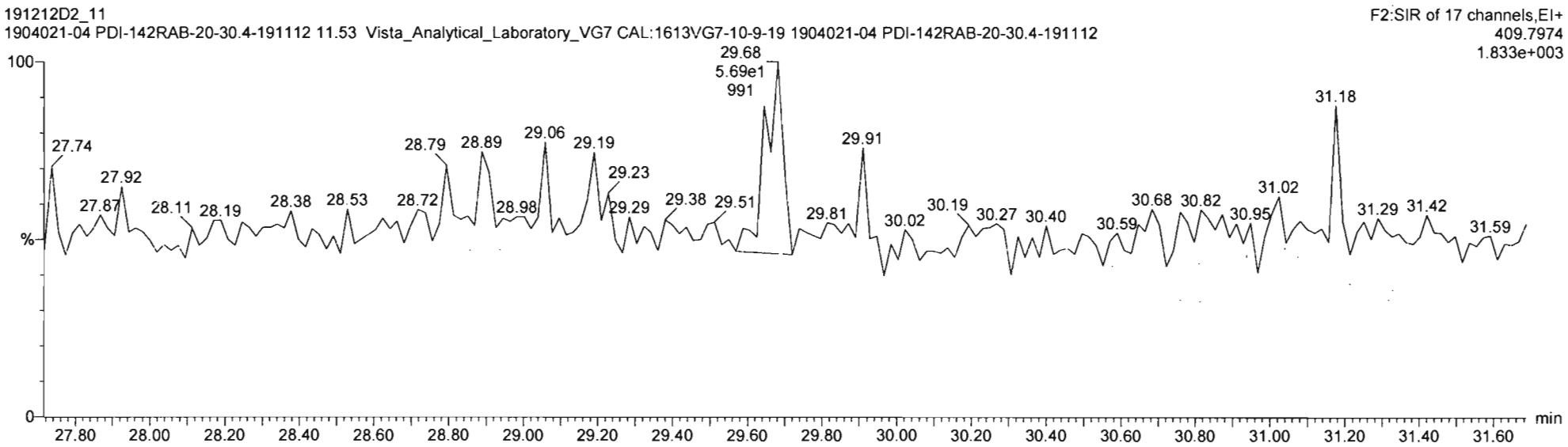
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

1st Func. Penta-Furans



DPE6



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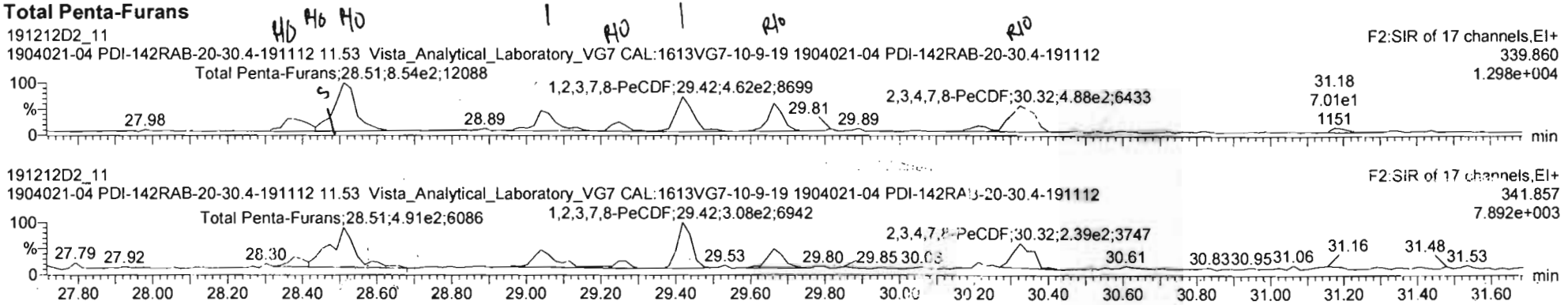
Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Penta-Furans



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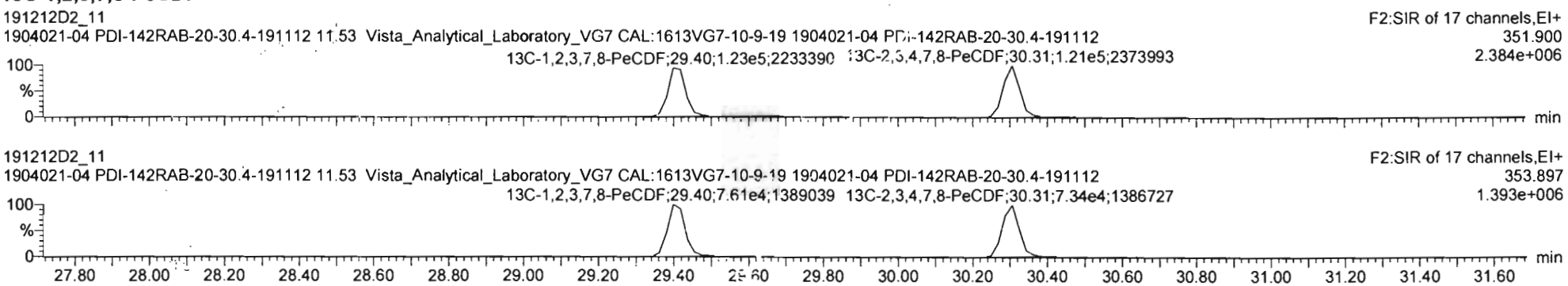
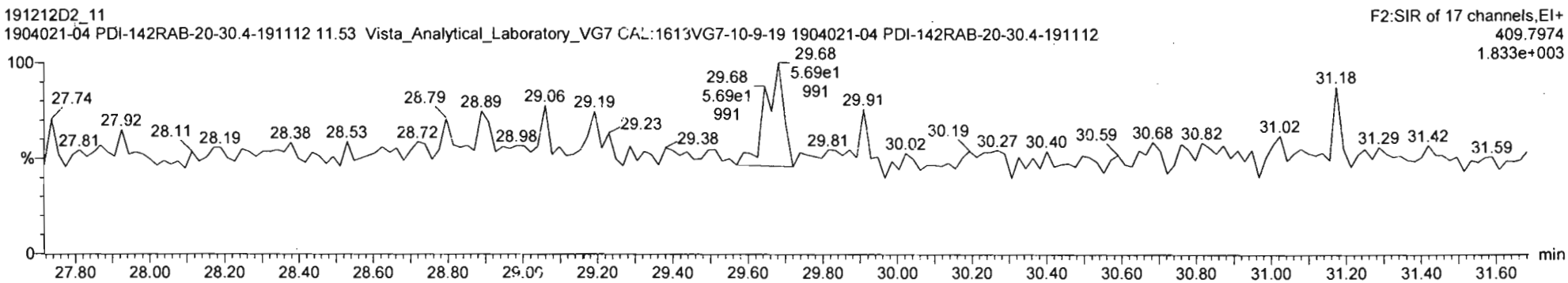


DPE2



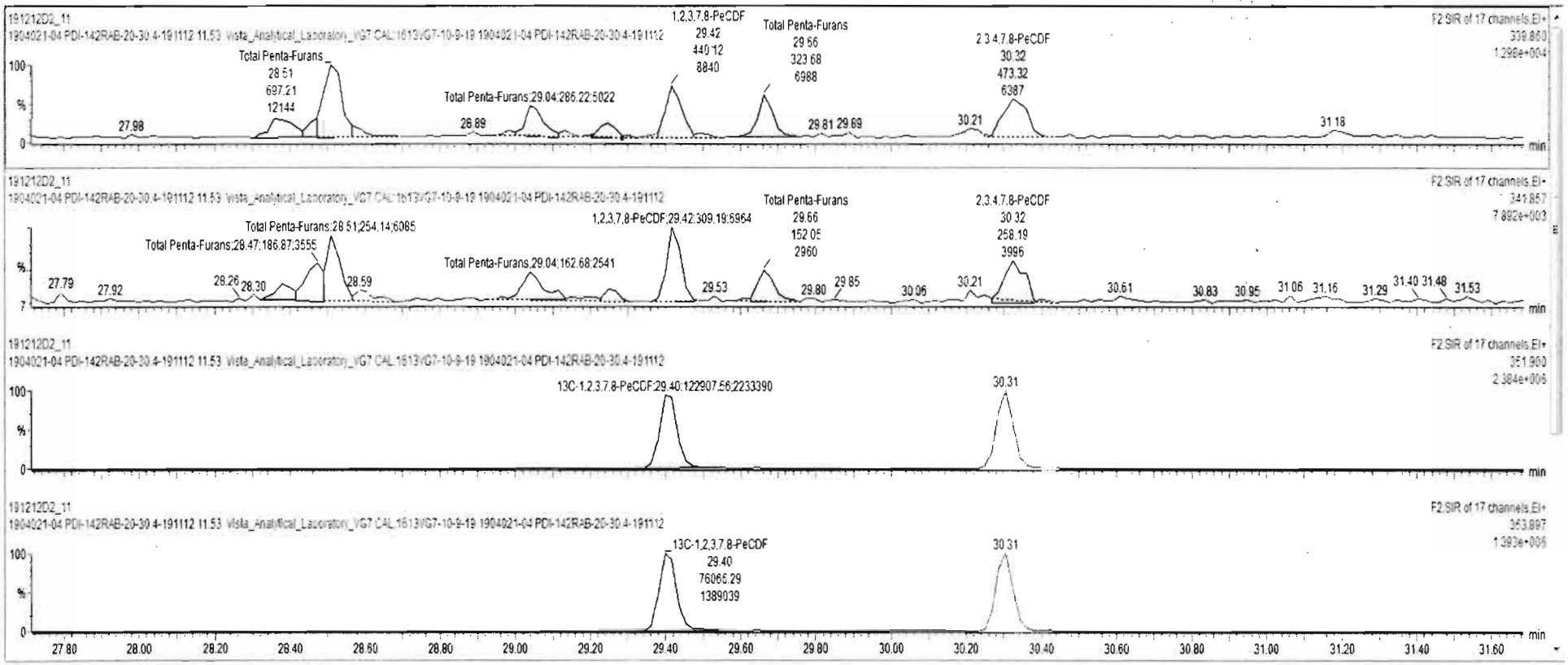
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30.4-191112 - 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.80	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.465	
38	38	13C-1,2,3,4,6,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.26e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.665	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.00			0.000	NO	0.6289		0.215	1.006
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0669	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	30.00			0.000	NO	1.251		0.147	3.502

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	45	Total Penta-Furans	30.00	28.36	2.403e2	7.499e1	1.550	3.20	YES	0.20399	0.00000
2	45	Total Penta-Furans	30.00	28.47	6.413e1	1.869e2	1.550	0.45	YES	0.14764	0.00000
3	45	Total Penta-Furans	30.00	28.51	6.972e2	2.541e2	1.550	2.74	YES	0.69135	0.00000
4	45	Total Penta-Furans	30.00	29.04	2.662e2	1.627e2	1.550	1.76	NO	0.47888	0.47888
5	45	Total Penta-Furans	30.00	29.25	1.192e2	4.992e1	1.550	2.39	YES	0.13560	0.00000
6	9	1,2,3,7,8-PeCDF	29.42	29.42	4.401e2	3.092e2	1.550	1.42	NO	0.77253	0.77253
7	45	Total Penta-Furans	30.00	29.66	3.237e2	1.520e2	1.550	2.13	YES	0.41362	0.00000



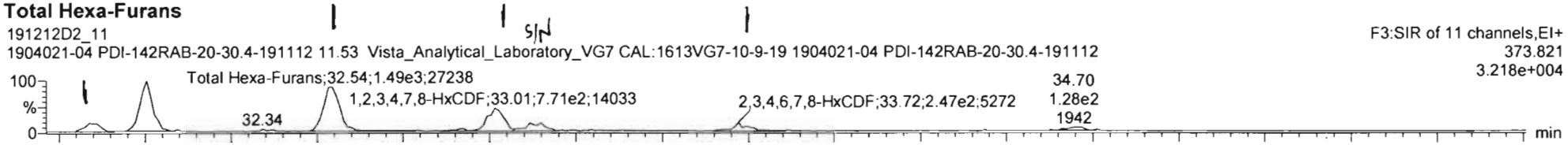
Custom Reporting: Select reports to generate

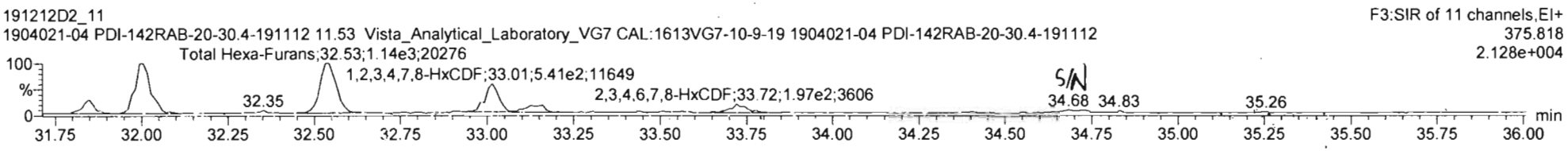
191212D2_11 CAP NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Furans





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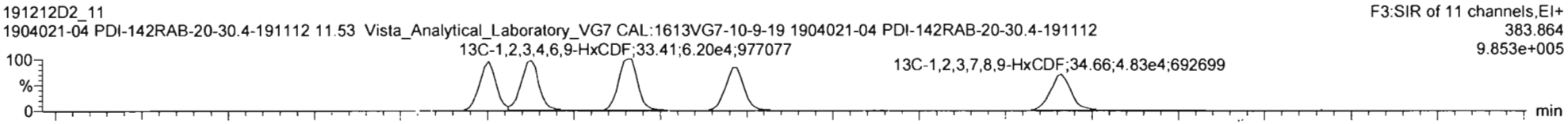
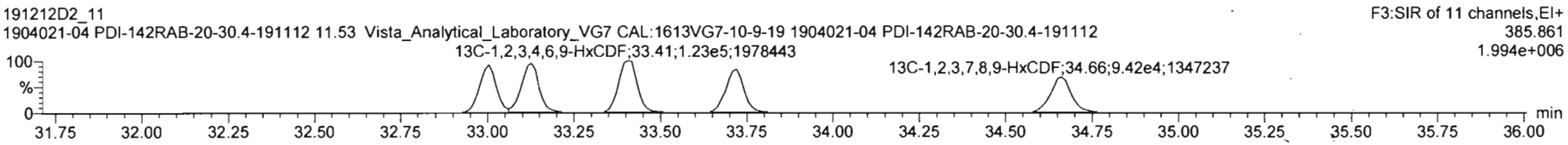
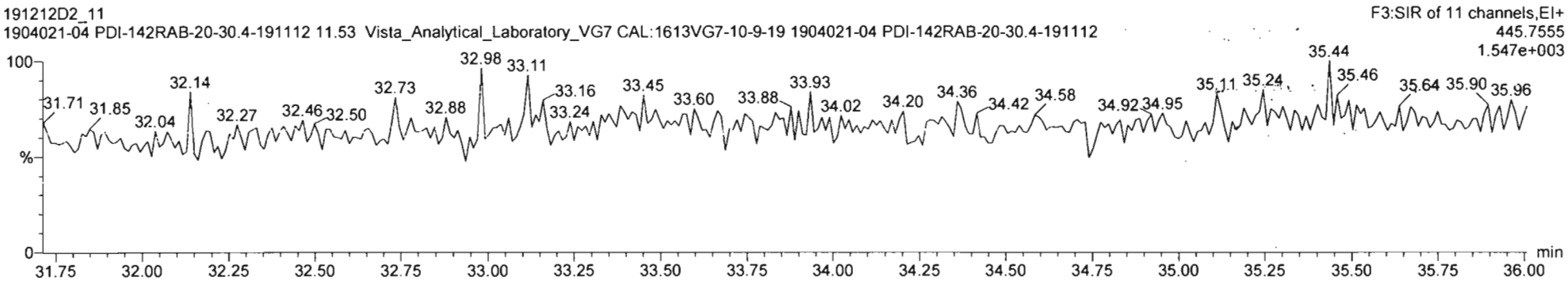




DPE3



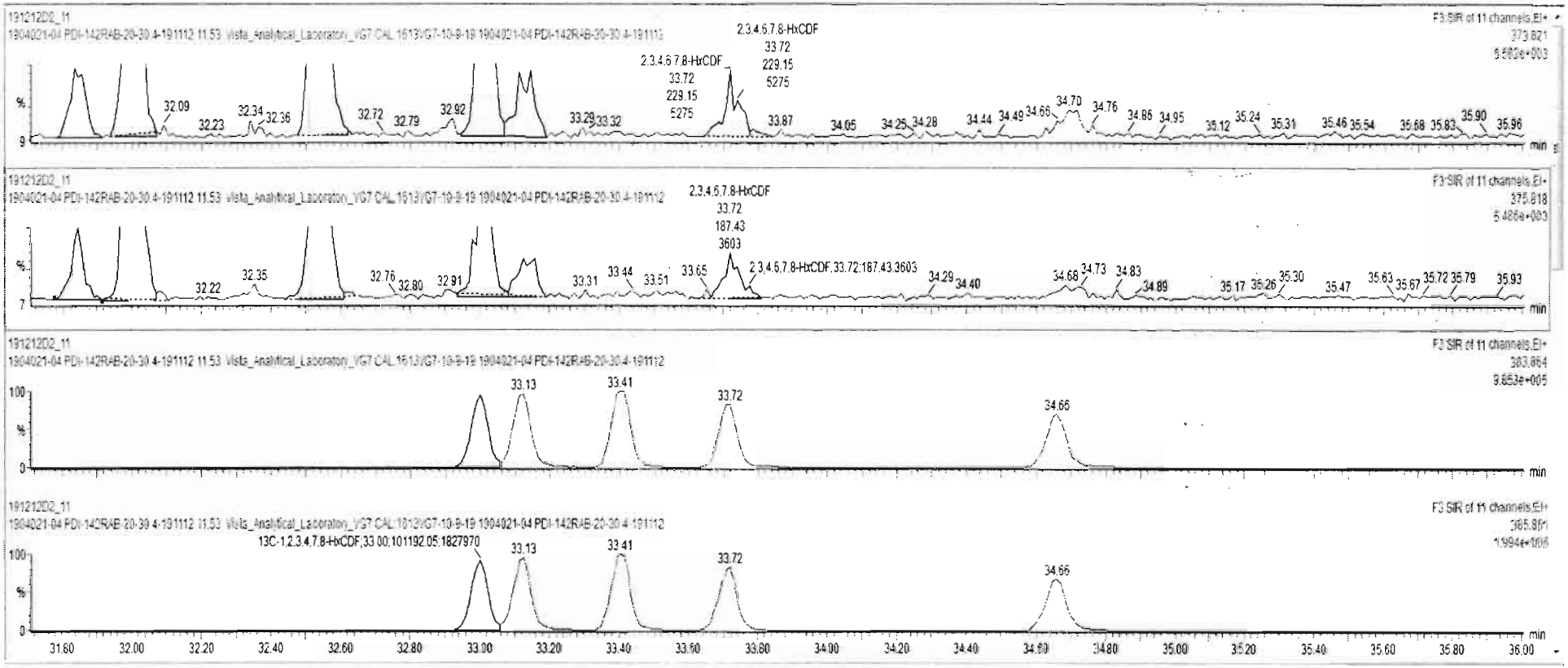
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30.4-191112 - 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	37	0.60	NO	1.000	10.151	24.06	24.04	1.000	1.000	NO	197.0	100	0.485	
38	38	13C-1,2,3,4,8,9-HxCDF	1.85e5	1.85e5	38	0.50	NO	1.000	10.151	33.42	33.41	1.000	1.000	NO	197.0	100	0.712	
39	39	Total Tetra-Dioxins		1.50e5				0.901	10.151	25.50			0.000	NO			0.119	
40	40	Total Penta-Dioxins		1.26e5				0.872	10.151	30.00			0.000	NO	0.9029		0.277	1.463
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.151	33.80			0.000	NO	16.49		0.473	16.49
42	42	Total Hepta-Dioxins		1.23e5				0.989	10.151	37.75			0.000	NO	177.0		0.669	177.0
43	43	Total Tetra-Furans		2.15e5				0.943	10.151	24.09			0.000	NO	0.8286		0.215	1.006
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.151	27.63			0.000	NO	2.923		0.0689	2.923
45	45	Total Penta-Furans		0.00e0				0.940	10.151	29.08			0.000	NO	1.251		0.147	3.502

	#	Name	Pred.RT	RT	m1 Resp.	m2 Resp.	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	31.84	2.858e2	2.345e2	1.240	1.22	NO	0.61806	0.61806
2	46	Total Hexa-Furans	33.00	32.00	1.360e3	1.096e3	1.240	1.25	NO	2.9148	2.9148
3	46	Total Hexa-Furans	33.00	32.54	1.492e3	1.147e3	1.240	1.30	NO	3.1386	3.1386
4	11	1,2,3,4,7,8-HxCDF	33.00	33.01	7.706e2	5.701e2	1.240	1.35	NO	1.4717	1.4717
5	12	1,2,3,6,7,8-HxCDF	33.14	33.15	3.114e2	1.931e2	1.240	1.61	YES	0.47251	0.00000
6	13	2,3,4,6,7,8-HxCDF	33.75	33.72	2.292e2	1.874e2	1.240	1.22	NO	0.48622	0.48622



Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

Vista Analytical Laboratory
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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

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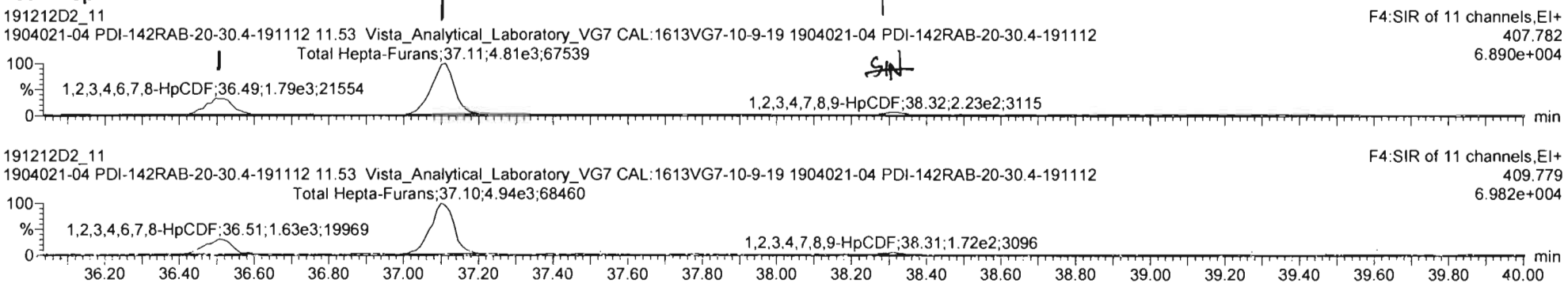
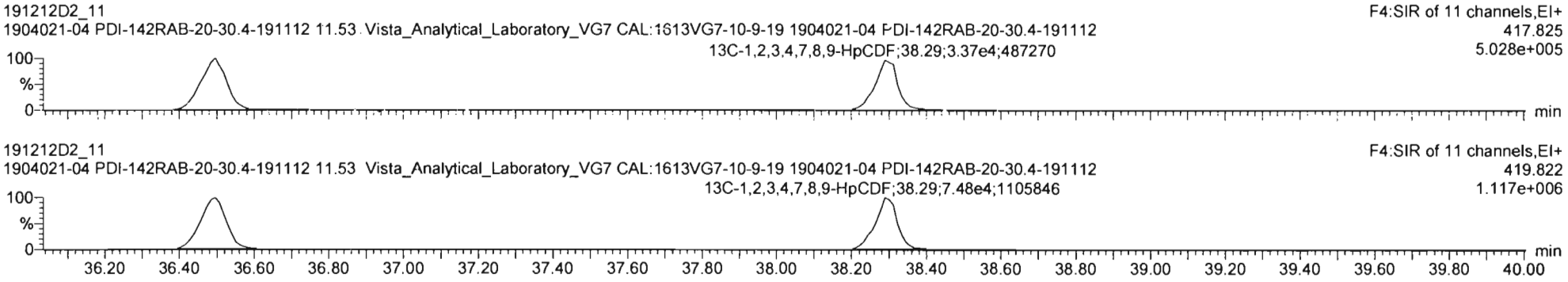
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

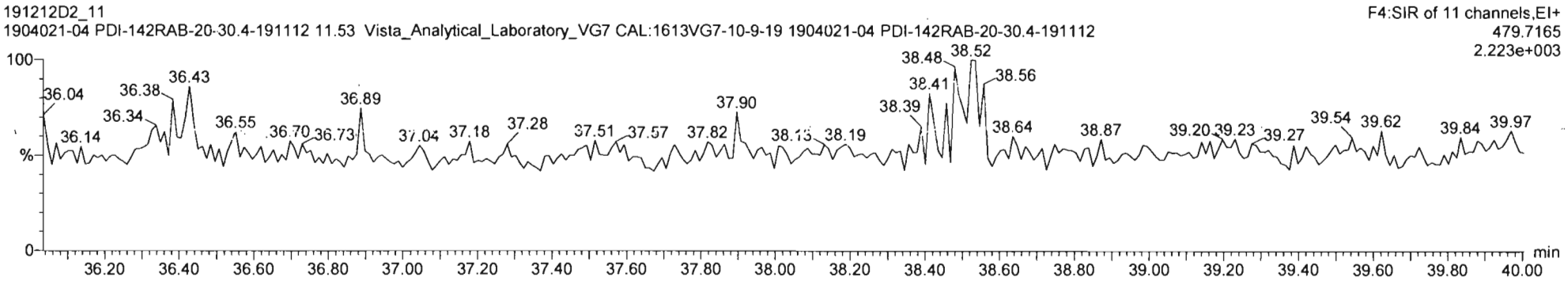
Total Hepta-Furans



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



DPE4



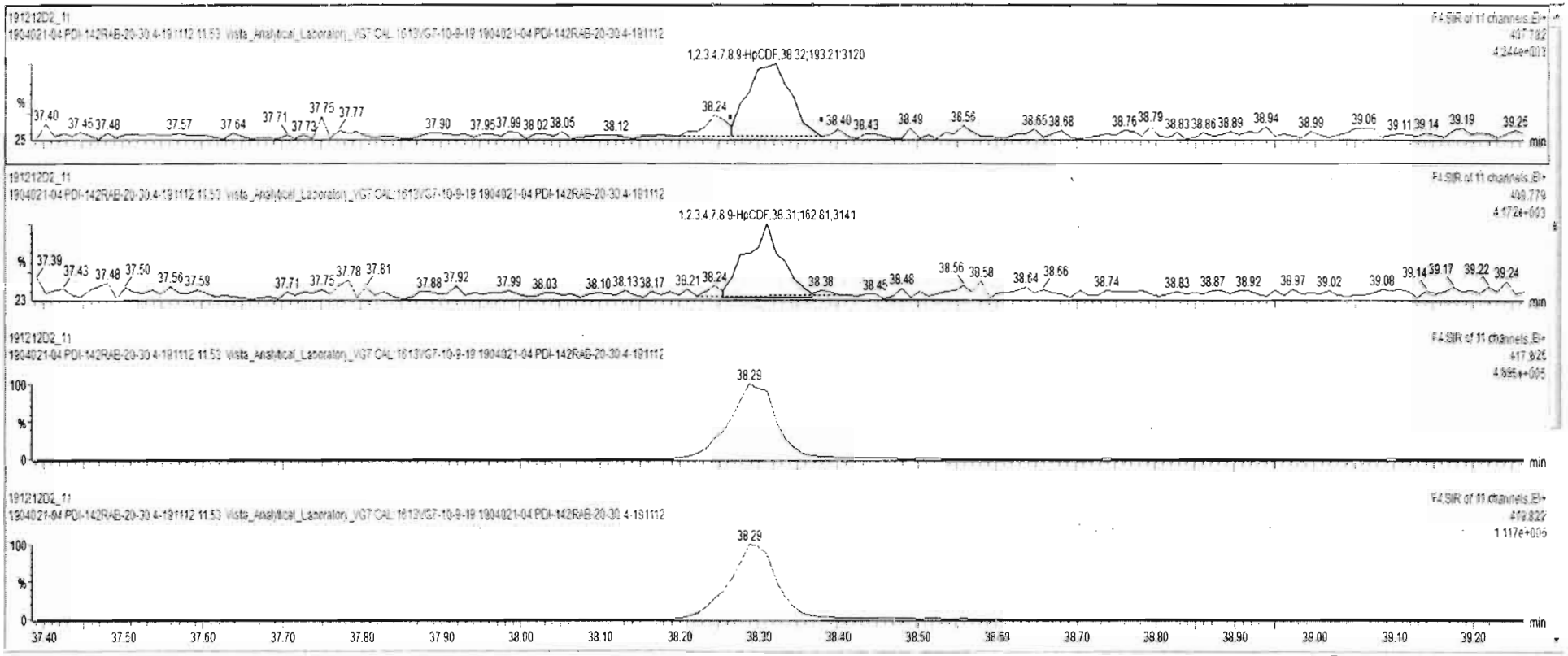
TargetLynx XS - 191212D2_11 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_11 - 1904021-04 PDI-142RAB-20-30 4-191112 - 1904021-04 PDI-142RAB-20-30 4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
47	47	Total Hepta-Furans		0.00e0				1.135	10.151	37.75			0.000	NO	19.69		0.239	19.69
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																
53	53	DPE1																
54	54	DPE2																
55	55	DPE3																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	15	1,2,3,4,6,7,8-HpCDF	38.53	38.49	1.789e3	1.634e2	1.040	1.10	NO	4.7116	4.7116
2	47	Total Hepta-Furans	37.75	37.11	4.808e3	5.005e3	1.040	0.96	NO	14.472	14.472
3	16	1,2,3,4,7,8,9-HpCDF	38.29	38.32	1.932e2	1.628e2	1.040	1.19	NO	0.50511	0.50511



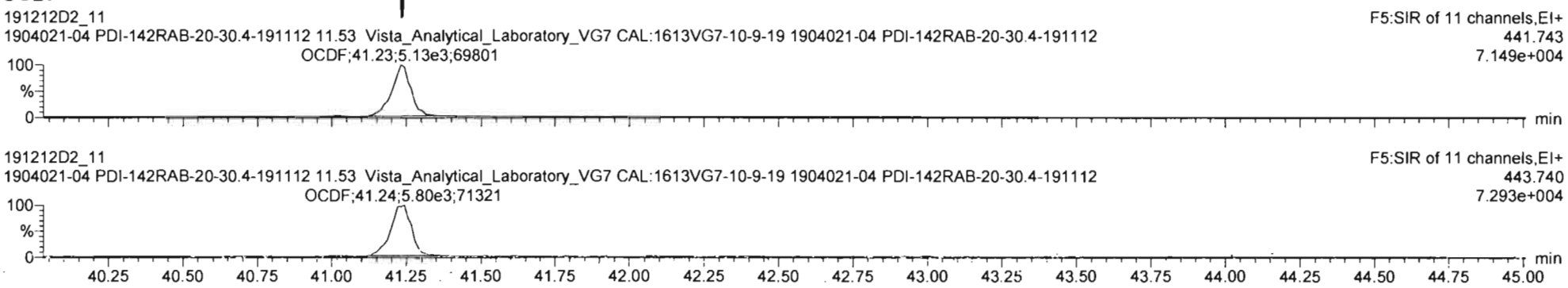
Custom Reporting: Select reports to generate

191212D2_11 CAP NUM

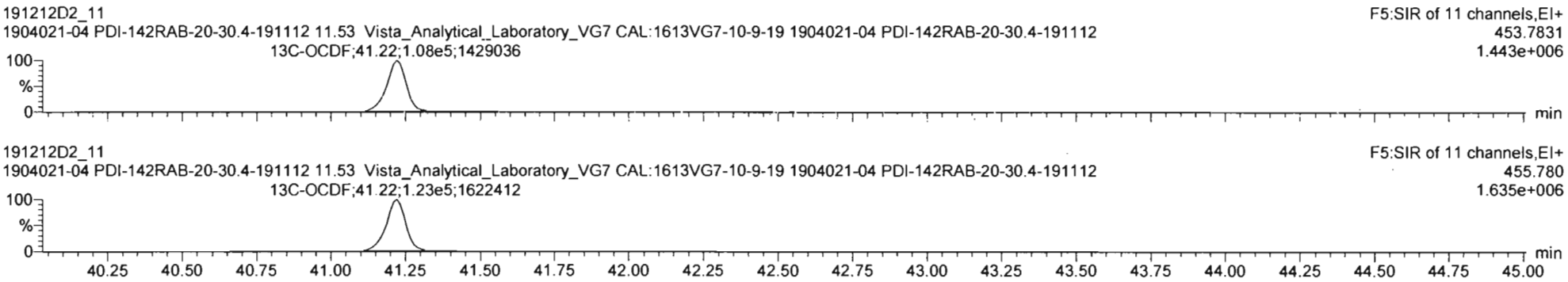
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_11, Date: 13-DEC-2019, Time: 08:55:01, ID: 1904021-04 PDI-142RAB-20-30.4-191112,
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

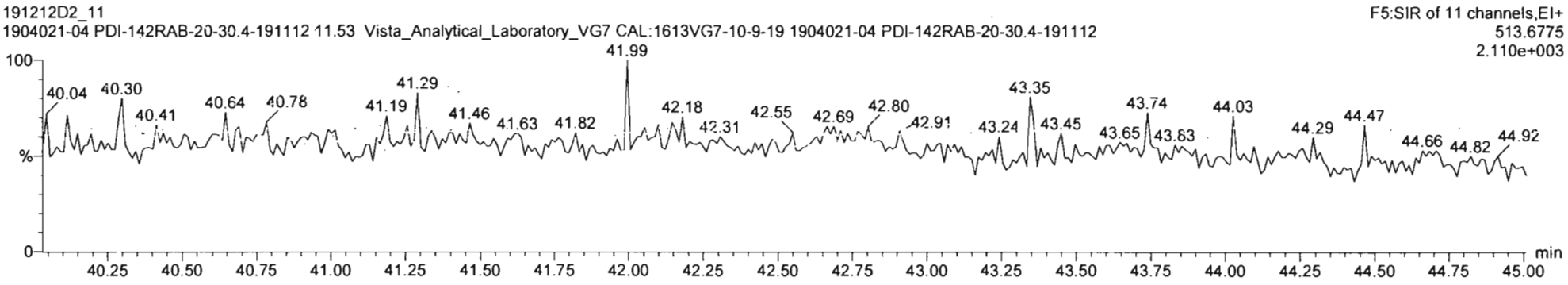
OCDF



13C-OCDF



DPE5



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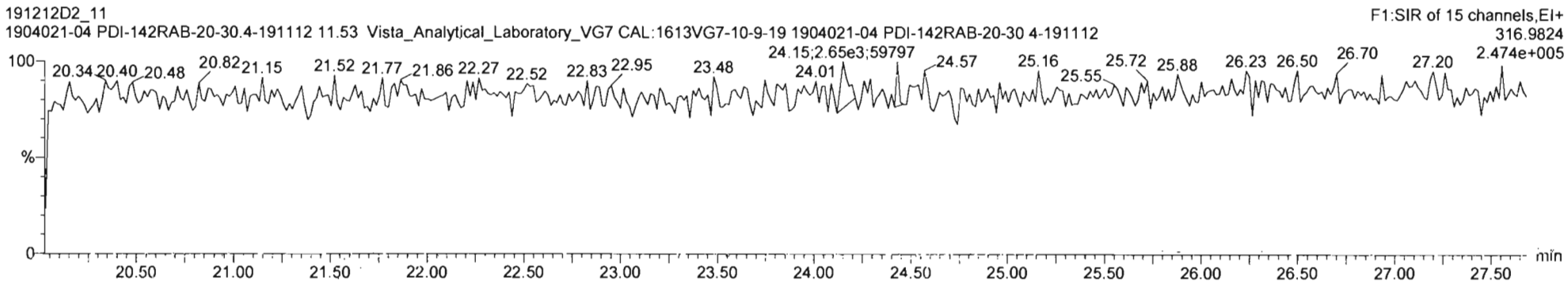
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK1



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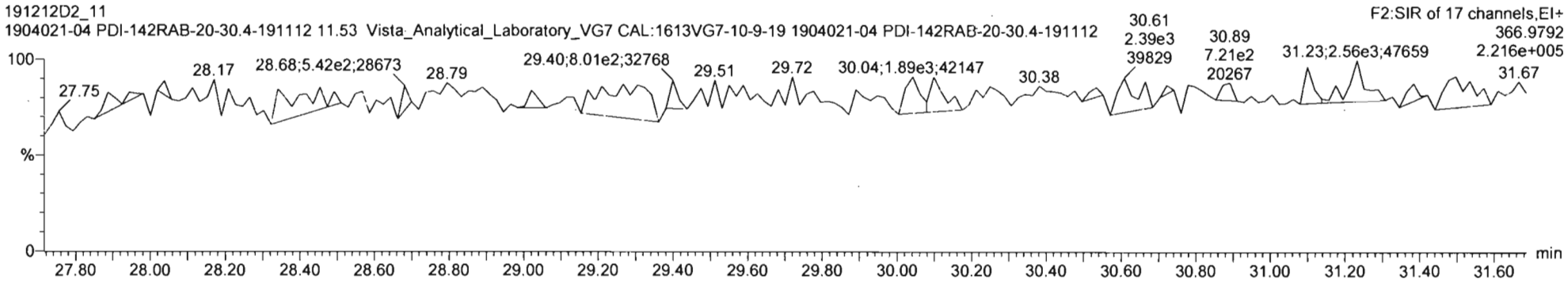

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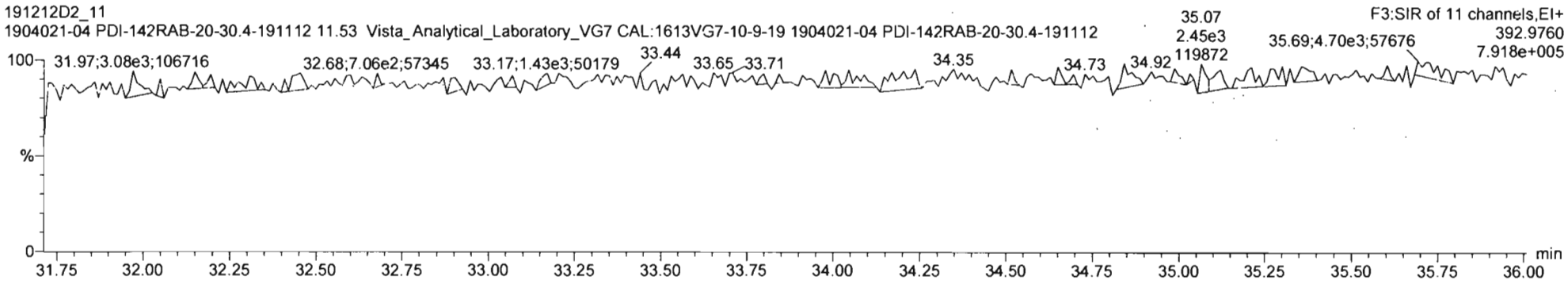

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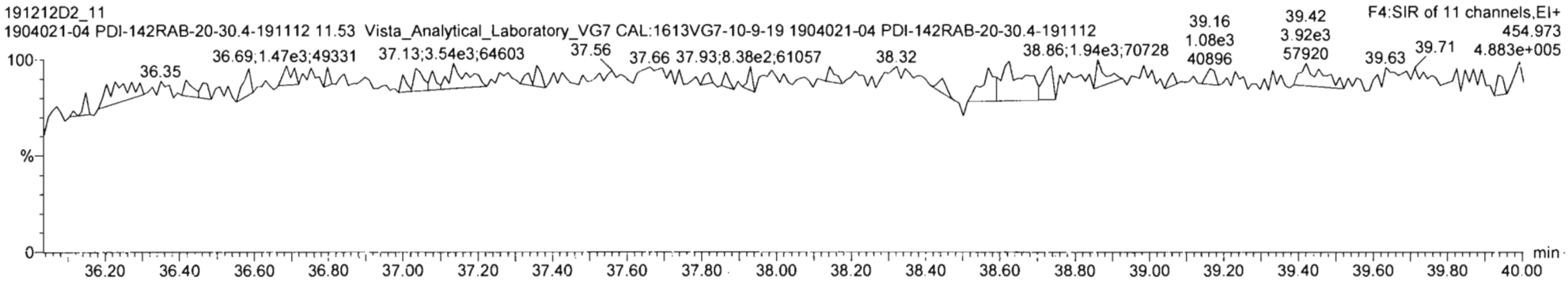
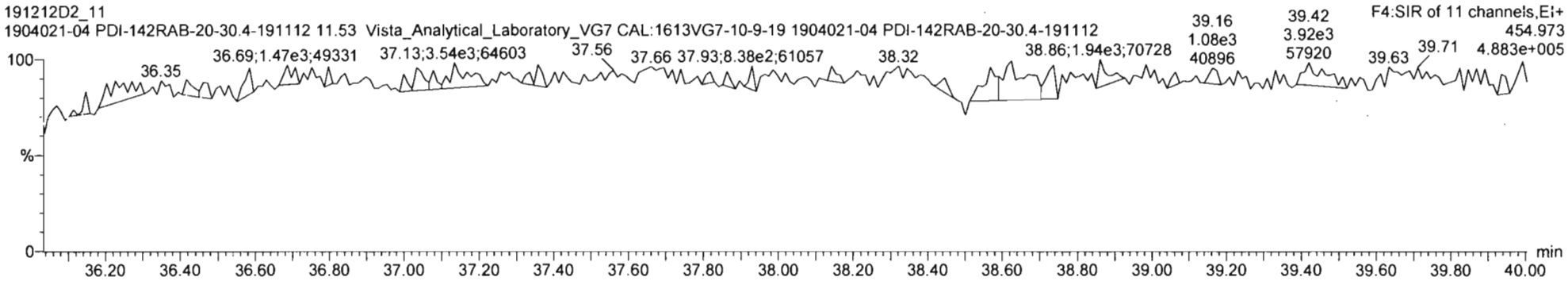
Description: 1904021-04 PDI-142RAB-20-30.4-191112 11.53 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK4



PFK5



Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN 945**
Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_12.qld
Last Altered: Friday, December 27, 2019 11:14:17 Pacific Standard Time
Printed: Friday, December 27, 2019 11:18:25 Pacific Standard Time

EL 12/27/19

CT 12/27/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:06:59

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		1.66e5	10.0771	0.905			1.001		26.08					0.137
2	2	1,2,3,7,8-PeCDD		1.42e5	10.0771	0.903			1.001		30.59					0.146
3	3	1,2,3,4,7,8-HxCDD		1.28e5	10.0771	1.101			1.000		33.89					0.241
4	4	1,2,3,6,7,8-HxCDD		1.44e5	10.0771	0.939			1.000		33.98					0.242
5	5	1,2,3,7,8,9-HxCDD		1.45e5	10.0771	0.961			1.001		34.31					0.260
6	6	1,2,3,4,6,7,8-HpCDD	8.23e3	1.42e5	10.0771	0.979	0.991	NO	1.000	1.000	37.75	37.75	11.721		11.7	0.377
7	7	OCDD	8.34e4	2.55e5	10.0771	0.959	0.881	NO	1.000	1.000	40.99	41.01	135.37		135	0.376
8	8	2,3,7,8-TCDF	4.29e2	2.41e5	10.0771	0.950	0.956	YES	1.001	1.001	25.28	25.29	0.37148		0.336	0.138
9	9	1,2,3,7,8-PeCDF	3.32e2	2.13e5	10.0771	0.960	1.456	NO	1.001	1.001	29.42	29.42	0.32285		0.323	0.105
10	10	2,3,4,7,8-PeCDF	1.72e2	2.12e5	10.0771	1.015	1.568	NO	1.000	1.000	30.31	30.31	0.15856		0.159	0.102
11	11	1,2,3,4,7,8-HxCDF	7.14e2	1.71e5	10.0771	1.177	1.214	NO	1.000	1.001	33.00	33.02	0.70543		0.705	0.165
12	12	1,2,3,6,7,8-HxCDF		1.88e5	10.0771	1.069			1.000		33.13					0.169
13	13	2,3,4,6,7,8-HxCDF		1.71e5	10.0771	1.114			1.001		33.75					0.200
14	14	1,2,3,7,8,9-HxCDF		1.63e5	10.0771	1.062			1.000		34.65					0.251
15	15	1,2,3,4,6,7,8-HpCDF	1.51e3	1.68e5	10.0771	1.128	1.111	NO	1.001	1.000	36.51	36.49	1.5781		1.58	0.173
16	16	1,2,3,4,7,8,9-HpCDF	1.97e2	1.34e5	10.0771	1.280	1.219	YES	1.000	1.000	38.28	38.27	0.22816		0.210	0.164
17	17	OCDF	3.21e3	3.25e5	10.0771	0.947	0.855	NO	1.000	1.000	41.21	41.23	4.1351		4.14	0.183
18	18	13C-2,3,7,8-TCDD	1.66e5	1.49e5	10.0771	1.095	0.821	NO	1.021	1.022	26.03	26.05	201.80	101.7		0.363
19	19	13C-1,2,3,7,8-PeCDD	1.42e5	1.49e5	10.0771	0.881	0.630	NO	1.187	1.199	30.25	30.57	214.93	108.3		0.268
20	20	13C-1,2,3,4,7,8-Hx...	1.28e5	1.92e5	10.0771	0.642	1.274	NO	1.014	1.014	33.87	33.88	205.21	103.4		0.678
21	21	13C-1,2,3,6,7,8-Hx...	1.44e5	1.92e5	10.0771	0.856	1.269	NO	1.017	1.017	33.99	33.98	173.75	87.5		0.509
22	22	13C-1,2,3,7,8,9-Hx...	1.45e5	1.92e5	10.0771	0.807	1.256	NO	1.026	1.026	34.29	34.27	185.81	93.6		0.540
23	23	13C-1,2,3,4,6,7,8-H...	1.42e5	1.92e5	10.0771	0.654	1.102	NO	1.126	1.130	37.63	37.74	224.74	113.2		0.845
24	24	13C-OCDD	2.55e5	1.92e5	10.0771	0.580	0.888	NO	1.226	1.227	40.96	40.99	454.75	114.6		0.675
25	25	13C-2,3,7,8-TCDF	2.41e5	2.43e5	10.0771	1.035	0.797	NO	0.992	0.991	25.28	25.25	190.03	95.7		0.356
26	26	13C-1,2,3,7,8-PeCDF	2.13e5	2.43e5	10.0771	0.854	1.558	NO	1.154	1.153	29.41	29.40	203.04	102.3		0.534
27	27	13C-2,3,4,7,8-PeCDF	2.12e5	2.43e5	10.0771	0.847	1.638	NO	1.189	1.189	30.30	30.31	204.13	102.9		0.538
28	28	13C-1,2,3,4,7,8-Hx...	1.71e5	1.92e5	10.0771	0.832	0.500	NO	0.987	0.988	32.99	33.00	211.96	106.8		0.983
29	29	13C-1,2,3,6,7,8-Hx...	1.88e5	1.92e5	10.0771	1.034	0.510	NO	0.991	0.991	33.10	33.12	187.39	94.4		0.790
30	30	13C-2,3,4,6,7,8-Hx...	1.71e5	1.92e5	10.0771	0.953	0.517	NO	1.009	1.009	33.72	33.71	185.76	93.6		0.858
31	31	13C-1,2,3,7,8,9-Hx...	1.63e5	1.92e5	10.0771	0.828	0.518	NO	1.039	1.037	34.70	34.65	203.68	102.6		0.988

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Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	1.68e5	1.92e5	10.0771	0.757	0.431	NO	1.093	1.092	36.51	36.48	229.55	115.7		0.792
33	33	13C-1,2,3,4,7,8,9-H...	1.34e5	1.92e5	10.0771	0.581	0.444	NO	1.143	1.146	38.19	38.28	237.82	119.8		1.03
34	34	13C-OCDF	3.25e5	1.92e5	10.0771	0.689	0.878	NO	1.233	1.234	41.20	41.21	487.98	122.9		0.660
35	35	37Cl-2,3,7,8-TCDD	7.00e4	1.49e5	10.0771	1.198			1.022	1.023	26.05	26.06	77.990	98.2		0.318
36	36	13C-1,2,3,4-TCDD	1.49e5	1.49e5	10.0771	1.000	0.826	NO	1.000	1.000	25.50	25.49	198.47	100.0		0.398
37	37	13C-1,2,3,4-TCDF	2.43e5	2.43e5	10.0771	1.000	0.813	NO	1.000	1.000	24.06	24.04	198.47	100.0		0.368
38	38	13C-1,2,3,4,6,9-Hx...	1.92e5	1.92e5	10.0771	1.000	0.511	NO	1.000	1.000	33.42	33.41	198.47	100.0		0.817
39	39	Total Tetra-Dioxins		1.66e5	10.0771	0.901			0.000		25.50					0.0799
40	40	Total Penta-Dioxins		1.42e5	10.0771	0.872			0.000		30.00					0.0794
41	41	Total Hexa-Dioxins		0.00e0	10.0771	0.976			0.000		33.80		1.1456		2.17	0.253
42	42	Total Hepta-Dioxins		1.42e5	10.0771	0.989			0.000		37.75		26.363		26.4	0.374
43	43	Total Tetra-Furans		2.41e5	10.0771	0.943			0.000		24.00		0.00000		0.336	0.0679
44	44	1st Func. Penta-Fur...		0.00e0	10.0771	0.940			0.000		27.63		0.50383		0.504	0.0580
45	45	Total Penta-Furans		0.00e0	10.0771	0.940			0.000		30.00		0.67277		1.23	0.109
46	46	Total Hexa-Furans		0.00e0	10.0771	1.078			0.000		33.00		2.5503		2.55	0.199
47	47	Total Hepta-Furans		0.00e0	10.0771	1.135			0.000		37.75		4.6438		4.85	0.178

Vista Analytical Laboratory
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Calibration: 17 Dec 2019 10:06:59

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Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1									

Penta-Dioxins

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1									

Hexa-Dioxins

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	41 Total Hexa-Dioxins	NO	32.38	401.225	77544.120	11.266	MM	1.1456	1.15
2	41 Total Hexa-Dioxins	YES	33.21	385.286	77544.120	0.000	MM	0.0000	1.02

Hepta-Dioxins

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	42 Total Hepta-Dioxins	NO	36.90	5120.620	74558.930	145.881	MM	14.6419	14.64
2	6 1,2,3,4,6,7,8-HpCDD	NO	37.75	4094.898	74558.930	115.682	MM	11.7212	11.72

Tetra-Furans

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	8 2,3,7,8-TCDF	YES	25.29	209.726	107003.336	0.000	db	0.0000	0.34

Penta-Furans function 1

	# Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44 1st Func. Penta-Furans	NO	27.07	304.896	130632.609	4.770	bb	0.5038	0.50

Vista Analytical Laboratory
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Printed: Friday, December 27, 2019 11:18:25 Pacific Standard Time

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Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	45	Total Penta-Furans	YES	28.51	298.402	130632.609	0.000	MM	0.0000	0.39
2	9	1,2,3,7,8-PeCDF	NO	29.42	197.024	129569.172	3.125	MM	0.3228	0.32
3	45	Total Penta-Furans	YES	29.66	101.324	130632.609	0.000	MM	0.0000	0.17
4	10	2,3,4,7,8-PeCDF	NO	30.31	104.993	131696.047	1.621	MM	0.1586	0.16
5	45	Total Penta-Furans	NO	30.34	114.162	130632.609	1.812	MM	0.1914	0.19

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	46	Total Hexa-Furans	NO	31.85	123.480	58583.238	2.693	MM	0.2480	0.25
2	46	Total Hexa-Furans	NO	32.00	358.290	58583.238	7.775	db	0.7160	0.72
3	46	Total Hexa-Furans	NO	32.55	459.944	58583.238	9.566	MM	0.8810	0.88
4	11	1,2,3,4,7,8-HxCDF	NO	33.02	391.320	56875.625	8.365	bd	0.7054	0.71

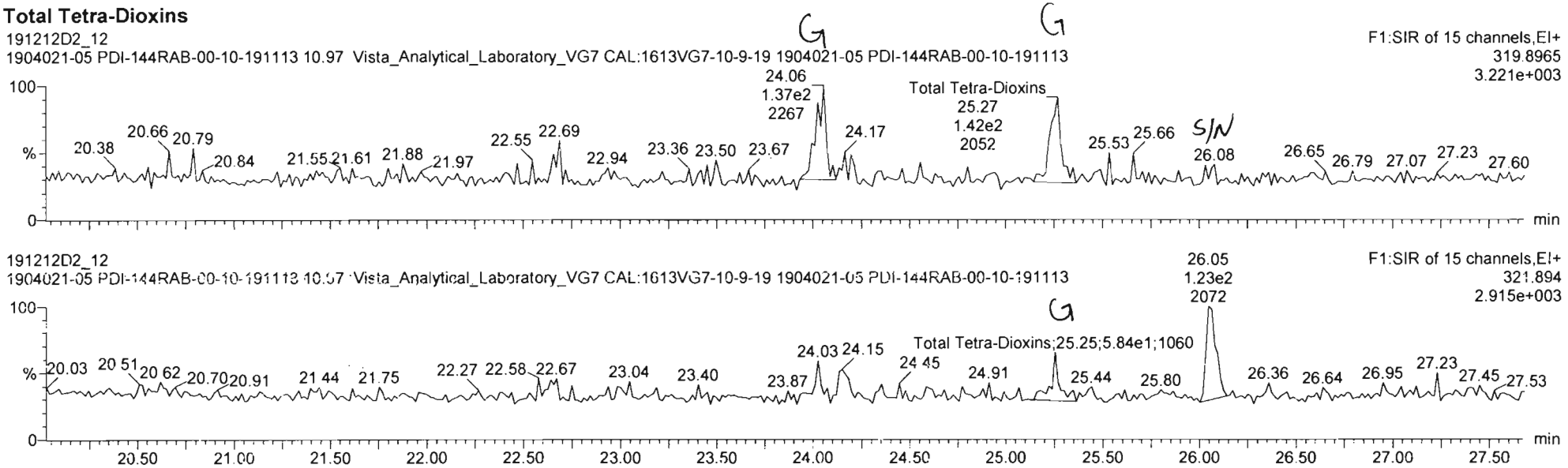
Hepta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	15	1,2,3,4,6,7,8-HpCDF	NO	36.49	793.909	50725.941	17.932	MM	1.5781	1.58
2	47	Total Hepta-Furans	NO	37.09	1338.907	45915.605	35.055	MM	3.0657	3.07
3	16	1,2,3,4,7,8,9-HpCDF	YES	38.27	108.110	41105.270	0.000	bb	0.0000	0.21

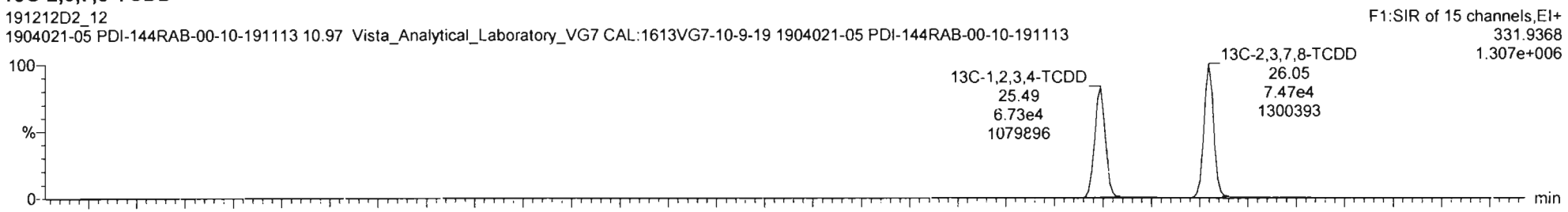
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

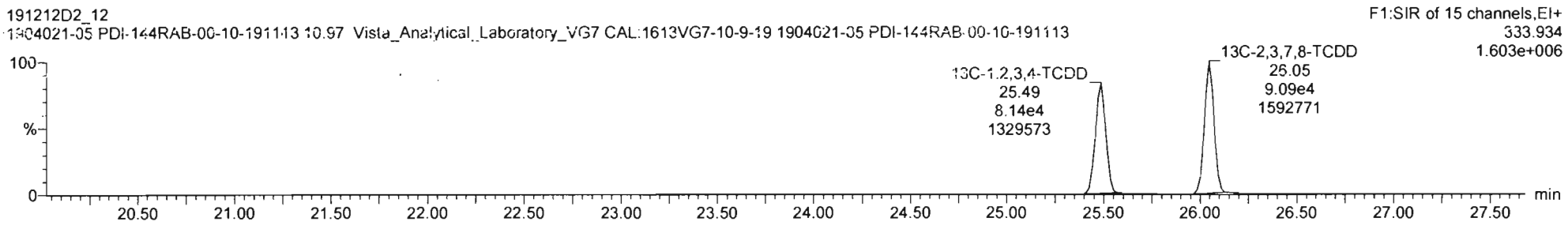
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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

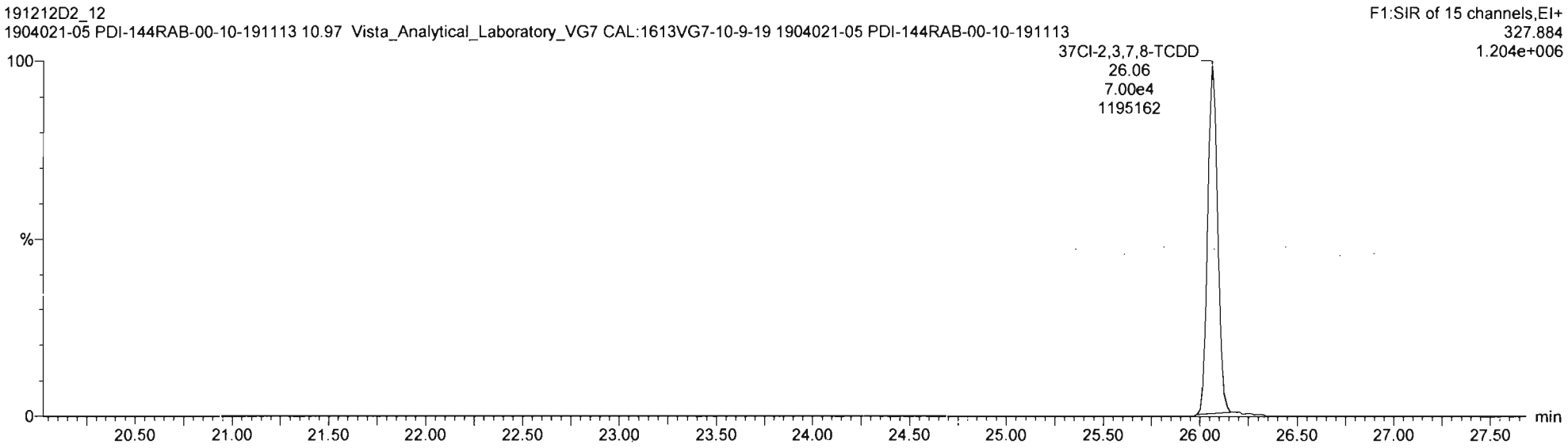




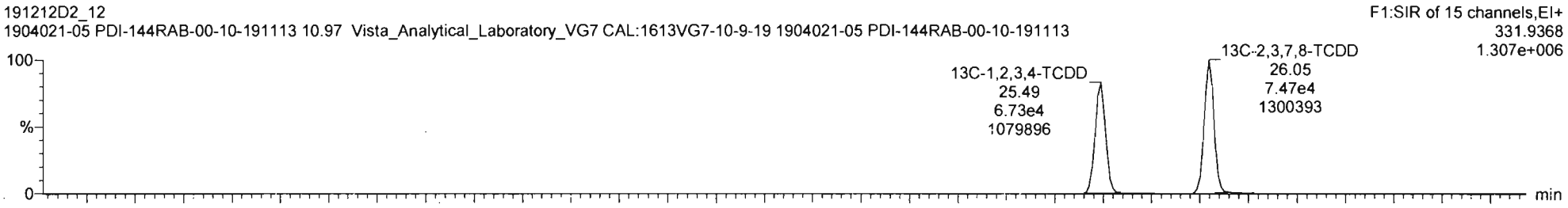
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

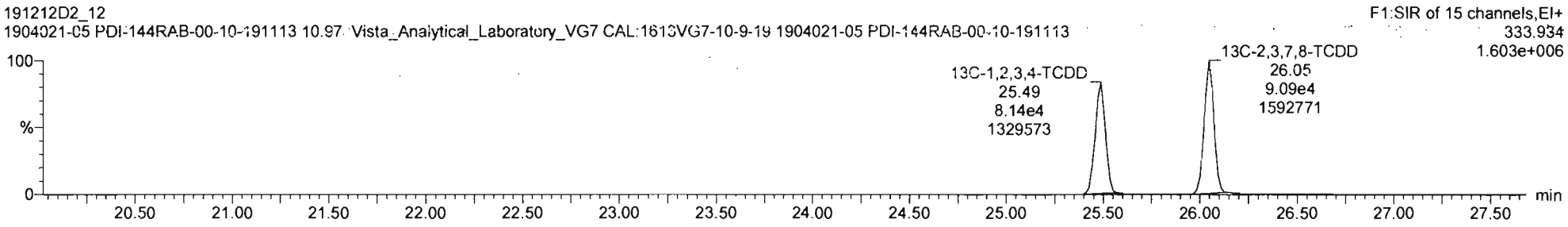
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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



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





Vista Analytical Laboratory
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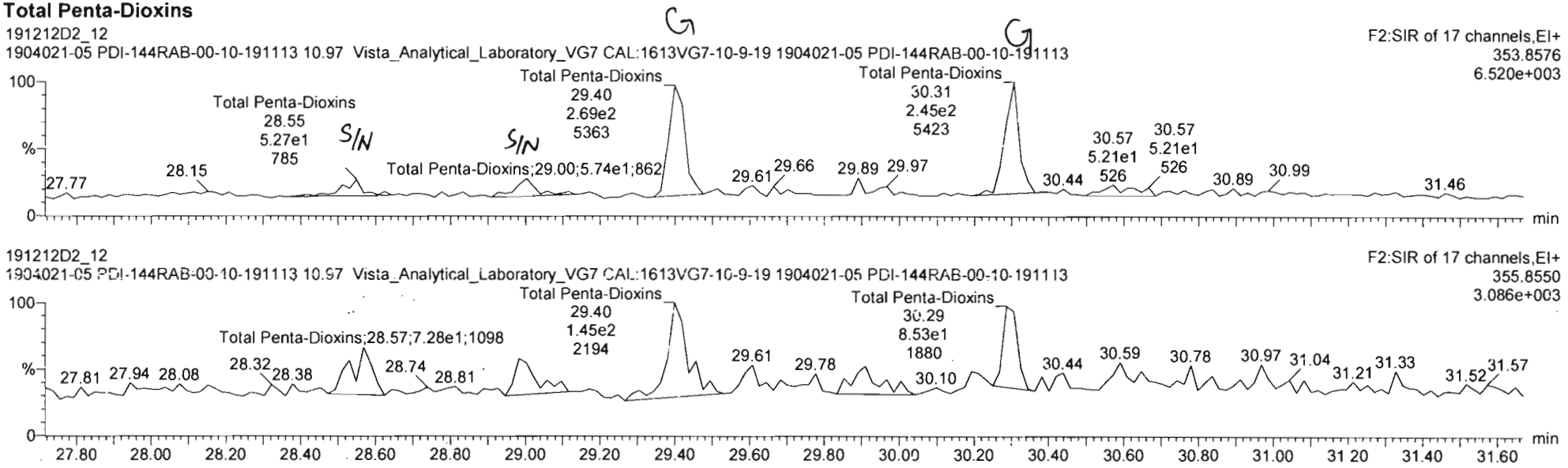
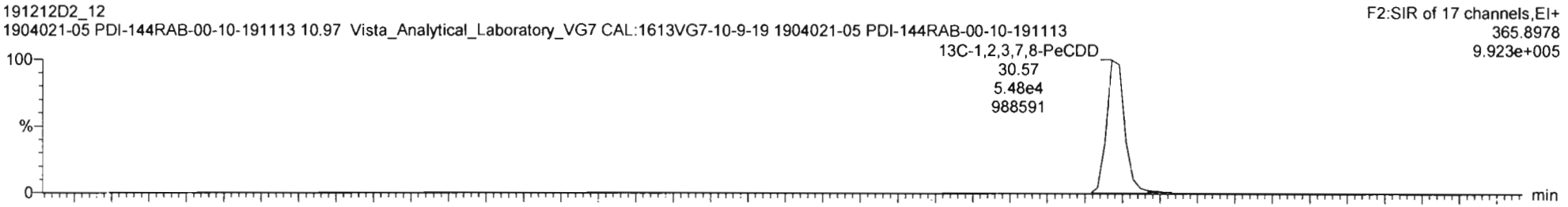
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

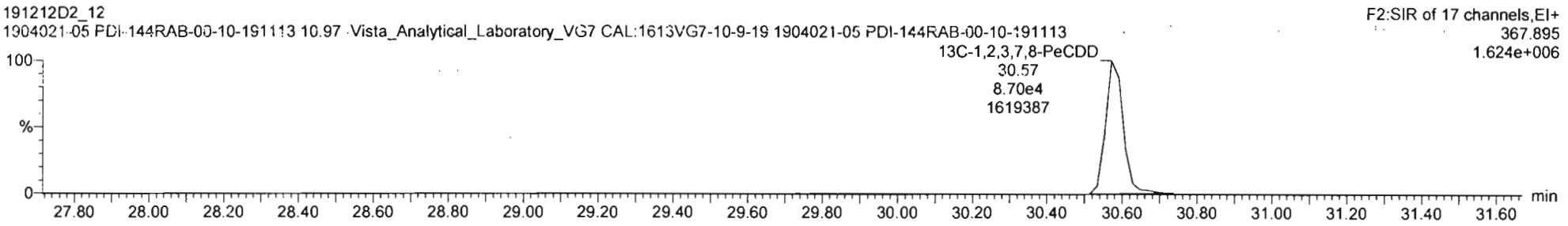
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Penta-Dioxins



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





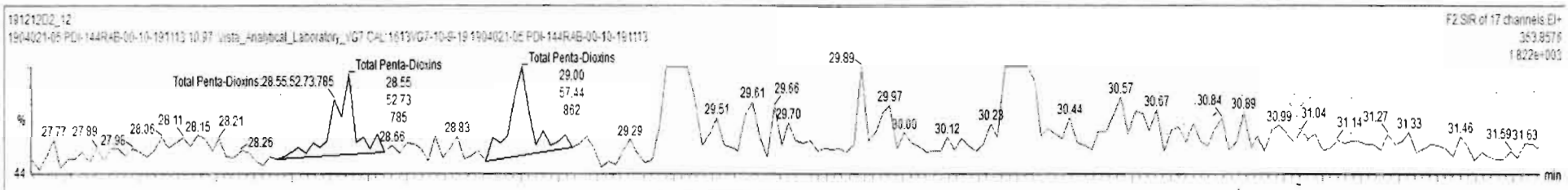
TargetLynx XS - 191212D2_12 * - [Chromatogram]

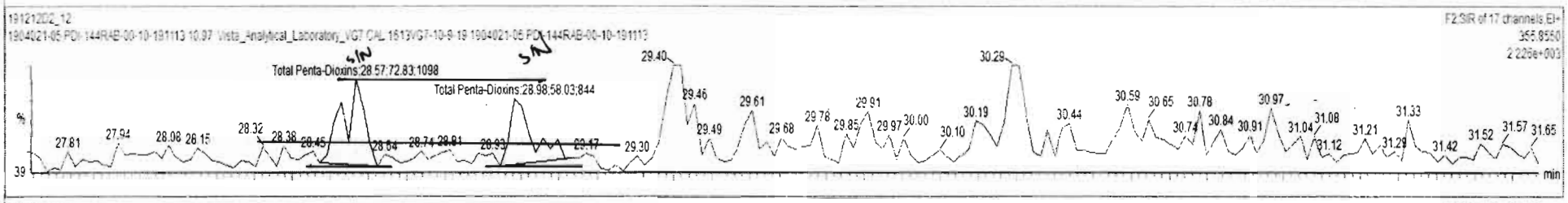
File Edit View Display Processing Window Help

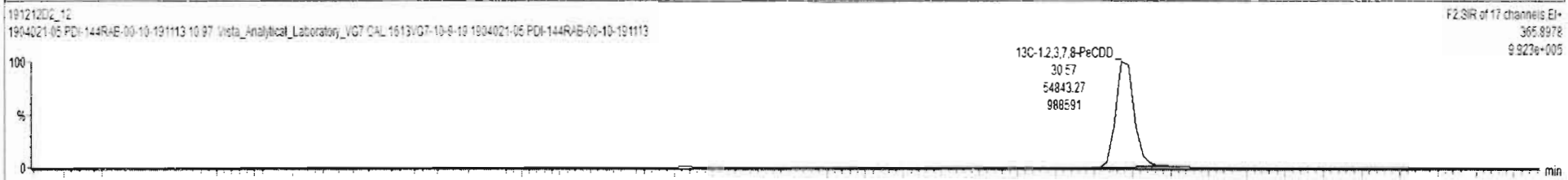
191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

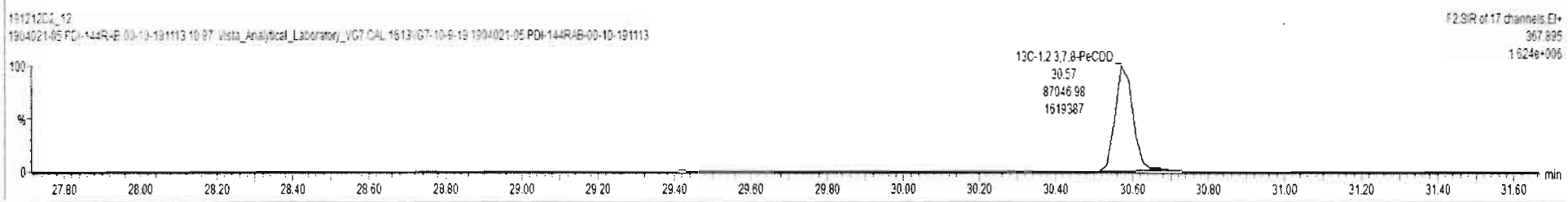
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRF	Pred RRF	Check RRF	Conc.	%Rec	DL	EMPC
32	32	13C-1,2,3,4,6,7,8-HpCDF	1.68e5	1.92e5	38	0.43	NO	0.757	10.077	36.51	36.48	1.092	1.093	NO	229.9	116	0.792	
33	33	13C-1,2,3,4,7,8,9-HpCDF	1.34e5	1.92e5	38	0.44	NO	0.581	10.077	38.19	38.28	1.146	1.143	NO	237.6	123	1.03	
34	34	13C-OCDF	3.25e5	1.92e5	38	0.88	NO	0.686	10.077	41.26	41.21	1.234	1.233	NO	488.0	123	0.660	
35	35	37Cl-2,3,7,8-TCDD	7.00e4	1.49e5	36			1.158	10.077	26.05	26.06	1.023	1.022	NO	77.99	98.2	0.318	
36	36	13C-1,2,3,4-TCDD	1.49e5	1.49e5	36	0.83	NO	1.000	10.077	25.50	25.49	1.000	1.000	NO	198.5	100	0.398	
37	37	13C-1,2,3,4-TCDF	2.43e5	2.43e5	37	0.81	NO	1.000	10.077	24.06	24.04	1.000	1.000	NO	198.5	100	0.368	
38	38	13C-1,2,3,4,6,9-HxCDF	1.92e5	1.92e5	38	0.51	NO	1.000	10.077	33.42	33.41	1.000	1.000	NO	198.5	100	0.817	
39	39	Total Tetra-Dioxins		1.66e5				0.901	10.077	25.50			0.000	NO			0.0799	
40	40	Total Penta-Dioxins		1.42e5				0.872	10.077	30.00			0.000	NO	0.2014		0.151	0.2531

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	40	Total Penta-Dioxins	30.00	28.55	5.273e1	7.263e1	0.630	0.72	NO	0.20136	0.20136
2	40	Total Penta-Dioxins	30.00	29.00	5.744e1	5.803e1	0.630	0.99	YES	0.15169	0.00000









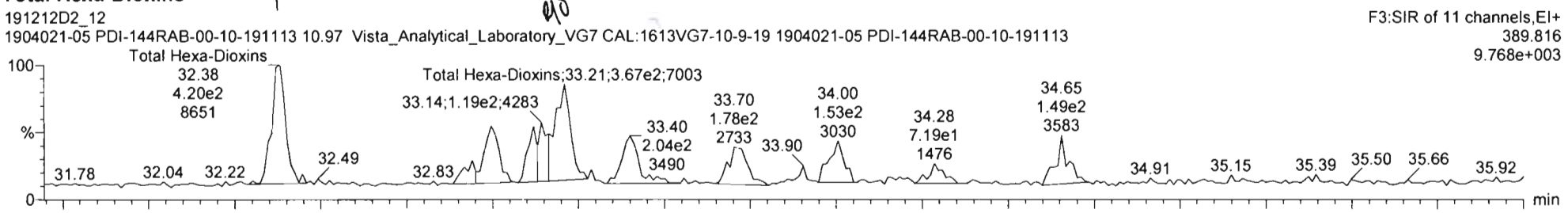
Custom Reporting: Select reports to generate

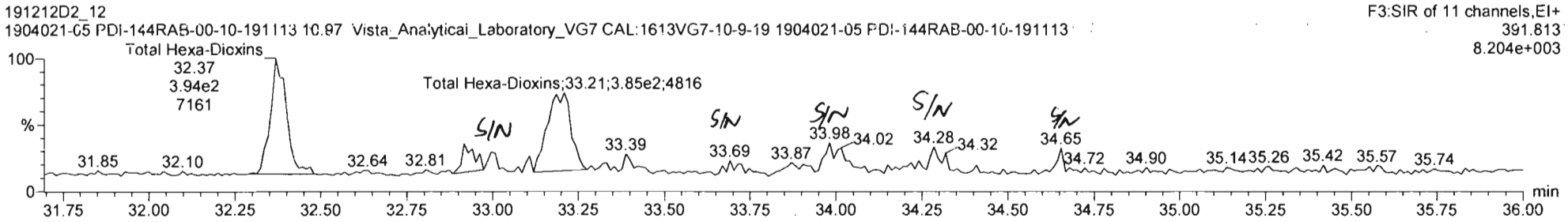
191212D2_12 NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

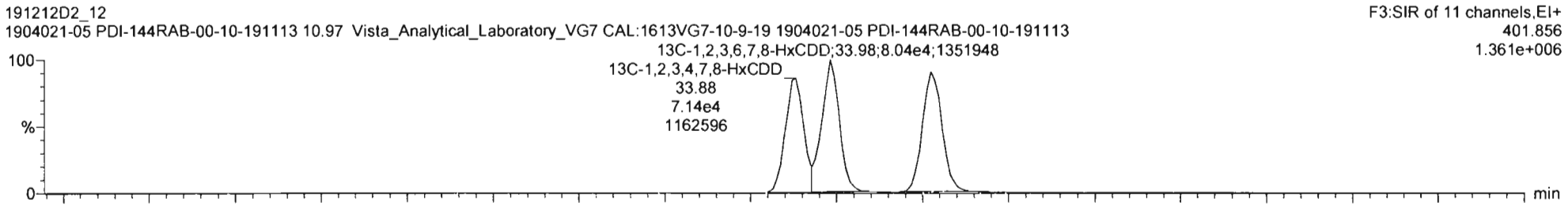
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

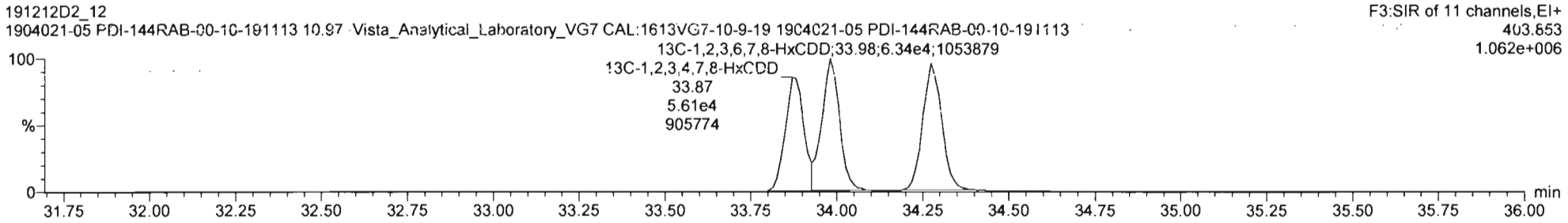
Total Hexa-Dioxins





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





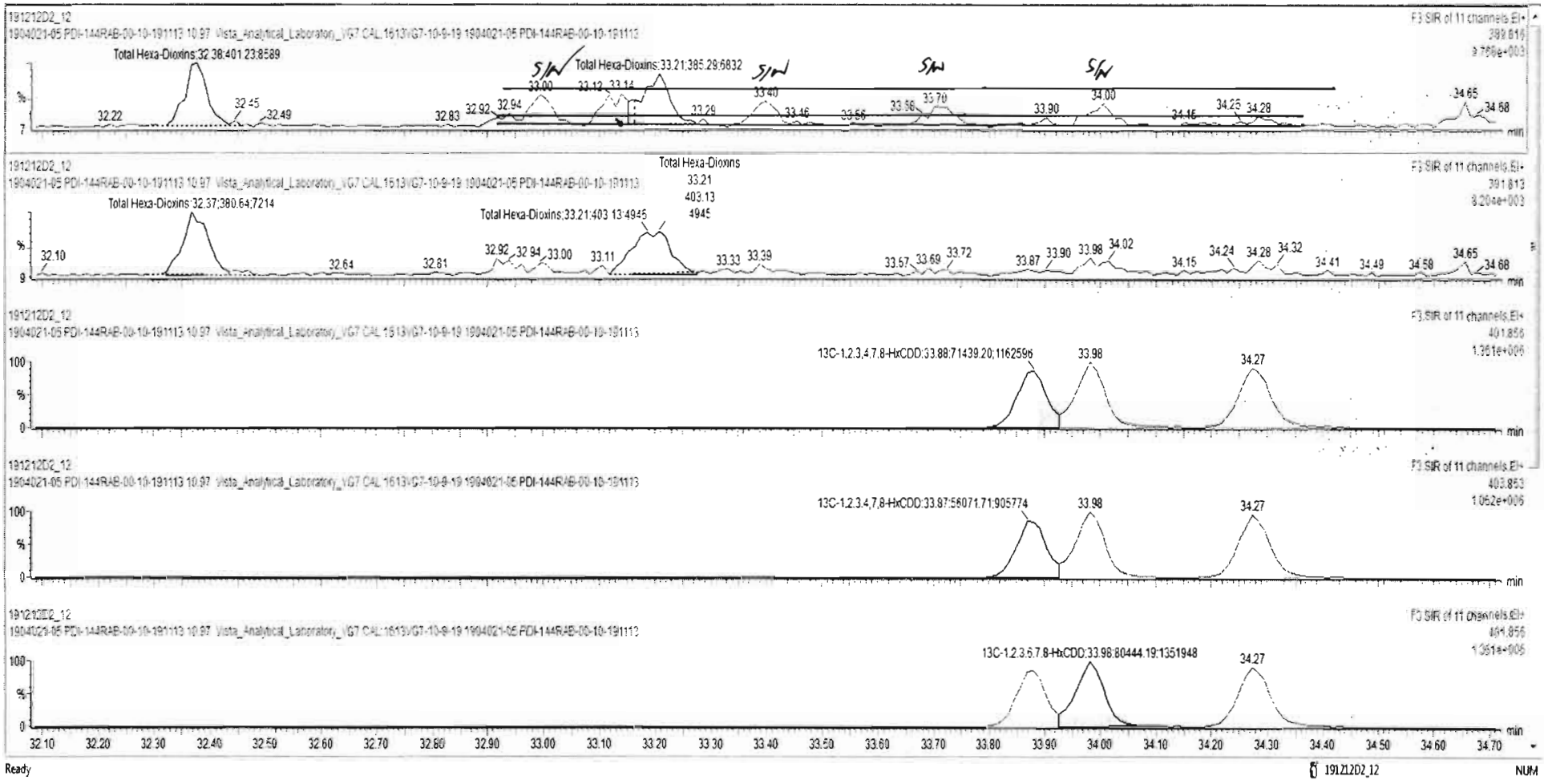
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.19		0.374	26.31
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.6293
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3739		0.109	1.264
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.572		0.199	2.996
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.656		0.178	4.866
48	48	PFK1																
49	49	PFK2																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.38	4.012e2	3.806e2	1.240	1.05	NO	1.1456	1.1456
2	41	Total Hexa-Dioxins	33.80	33.21	3.853e2	4.031e2	1.240	0.96	YES	1.0196	0.00000



Ready

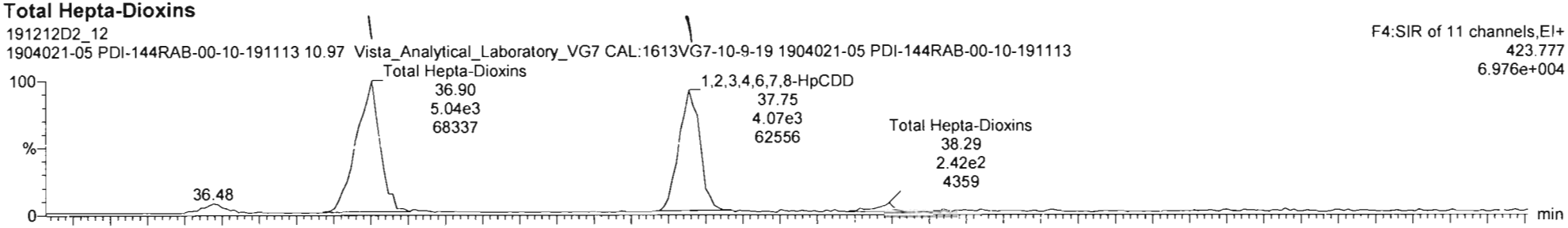
191212D2_12

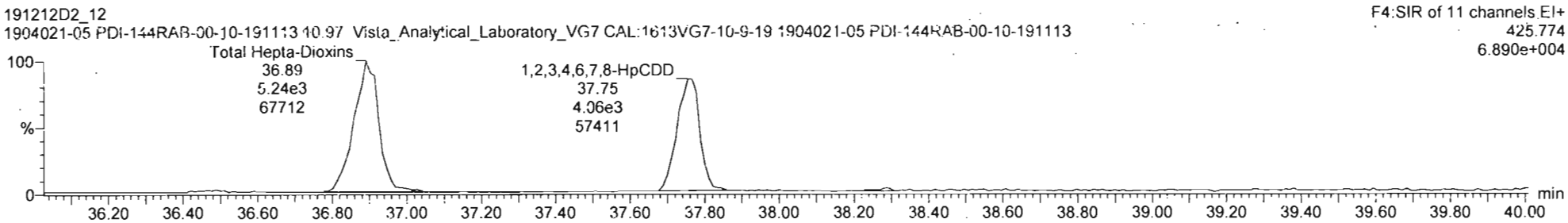
NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

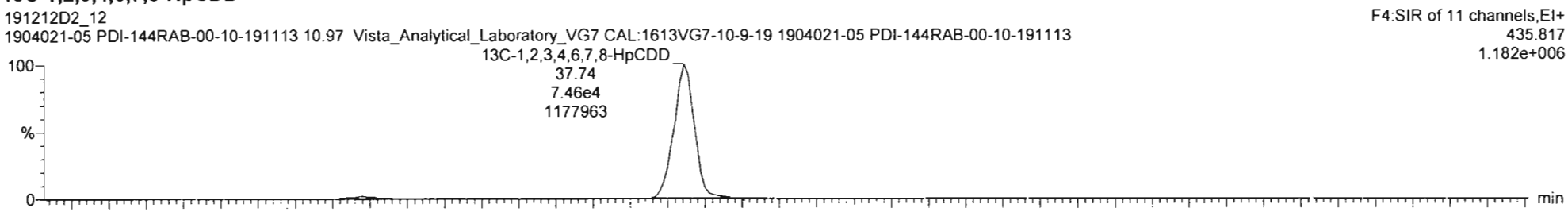
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

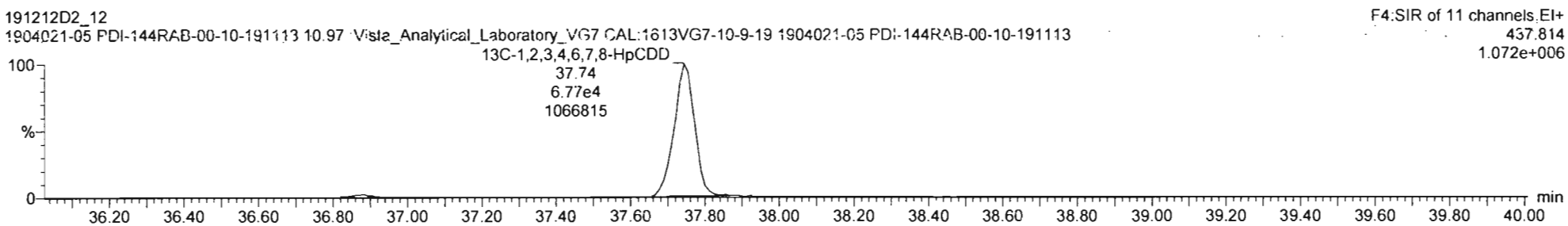
Total Hepta-Dioxins





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





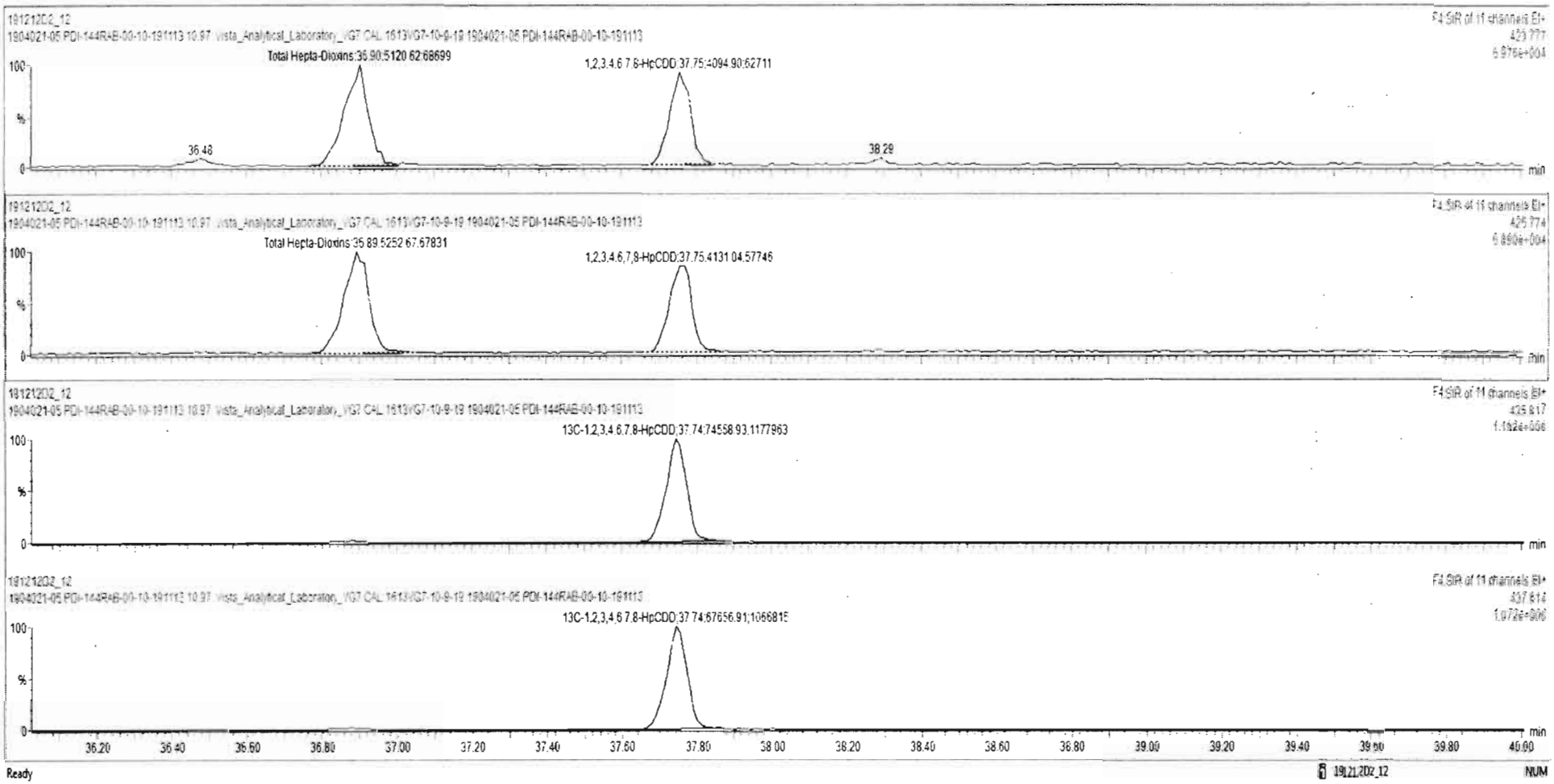
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.148		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.6253
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3739		0.109	1.264
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.572		0.199	2.996
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.658		0.178	4.868
48	48	PFK1																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	42	Total Hepta-Dioxins	37.75	37.90	5.121e3	5.253e3	1.040	0.97	NO	14.642	14.642
2	6	1,2,3,4,6,7,8-HpCDD	37.75	37.75	4.095e3	4.131e3	1.040	0.99	NO	11.721	11.721



Ready

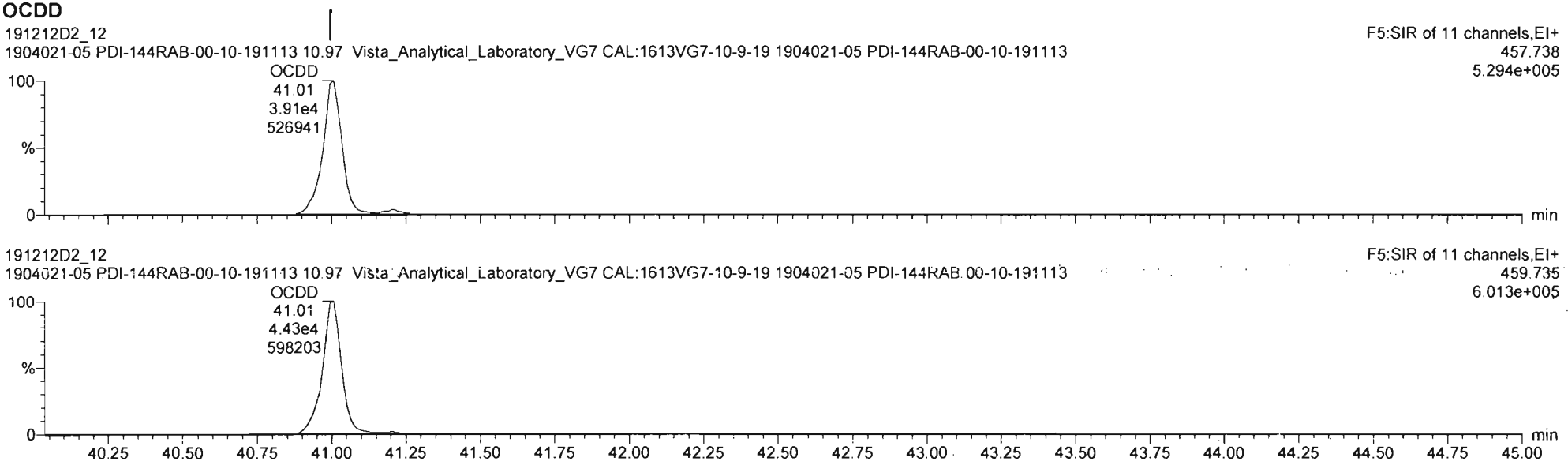
191212D2_12

NUM

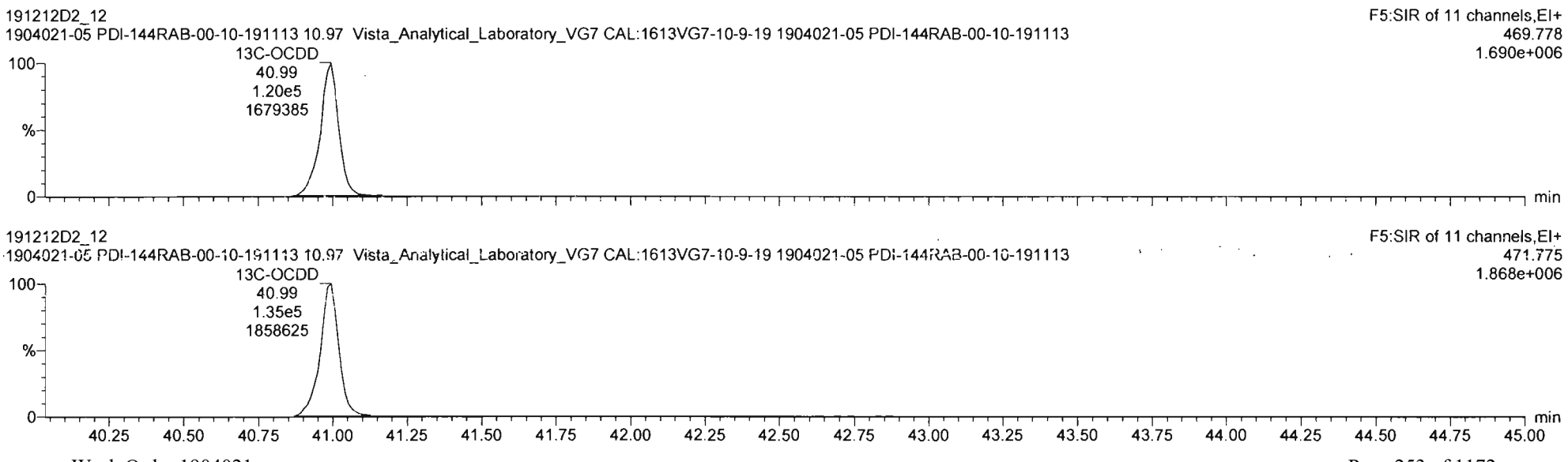
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

OCDD



13C-OCDD



Vista Analytical Laboratory
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Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
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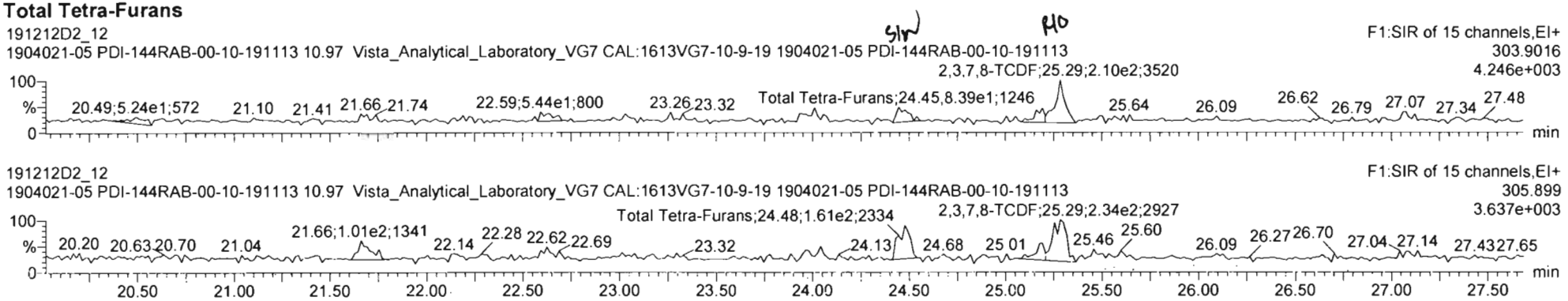
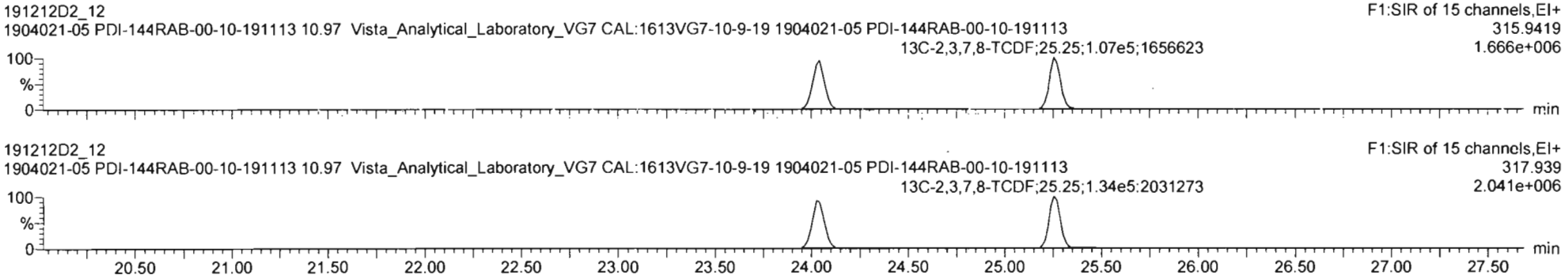
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

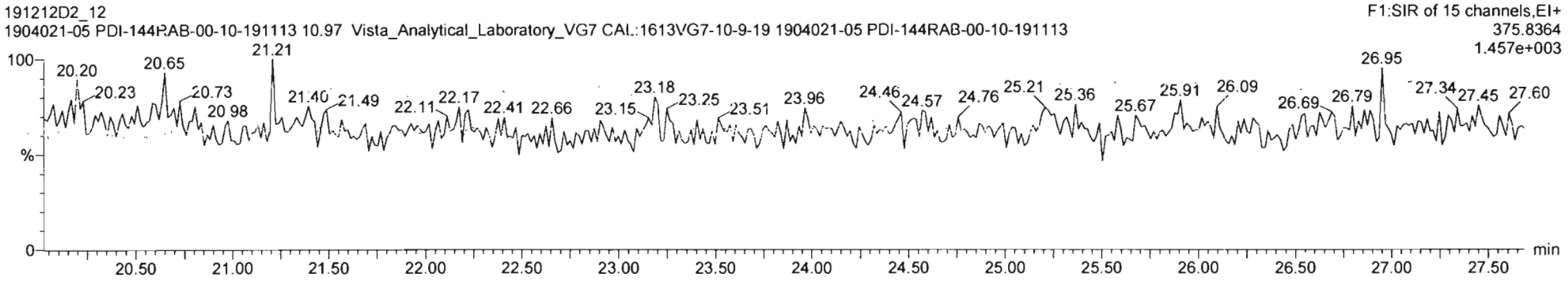
Total Tetra-Furans



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



DPE1



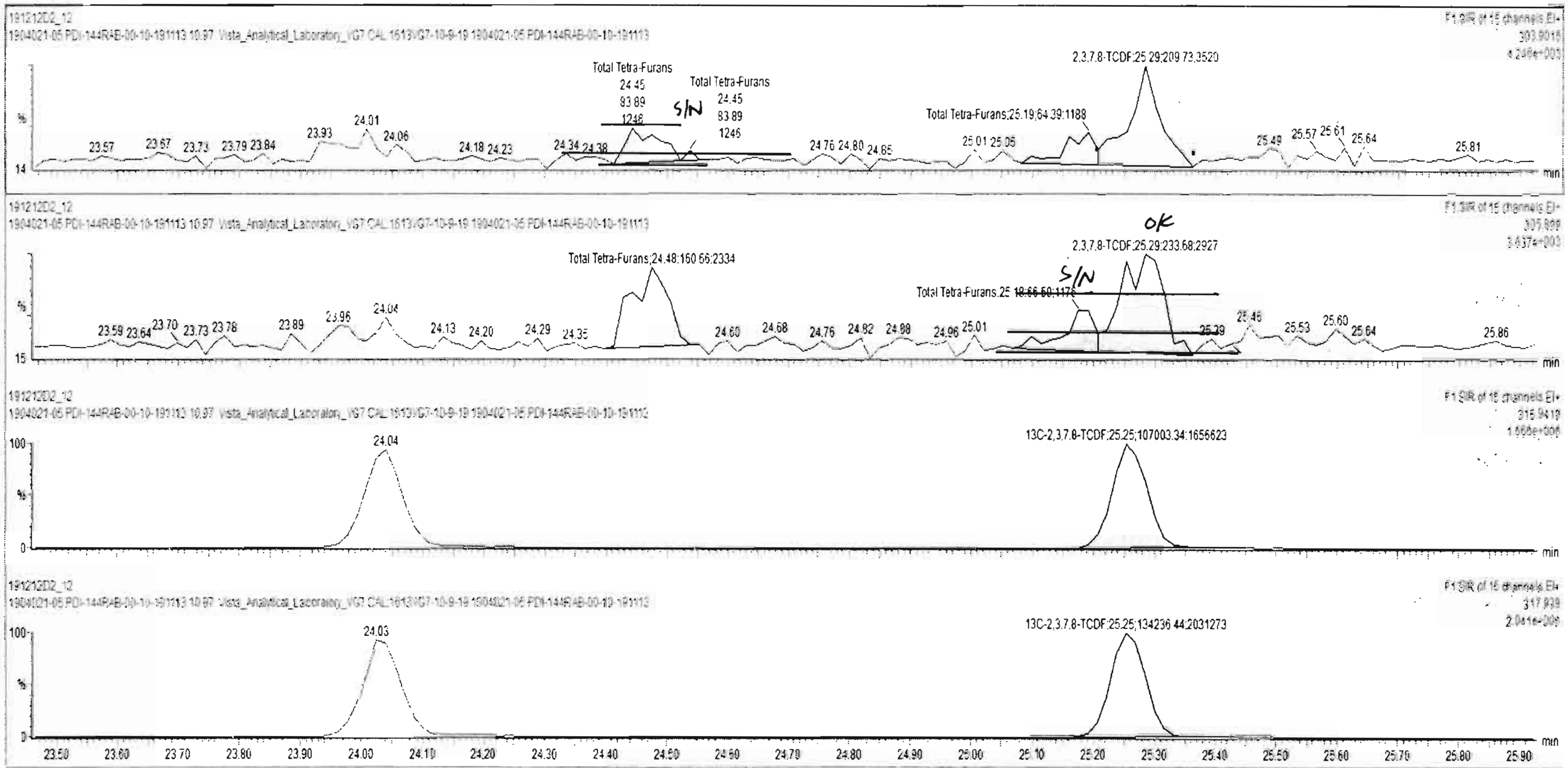
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.6293
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5036		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3739		0.109	1.264
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.572		0.199	2.996
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.656		0.178	4.866
48	48	PFK1																
49	49	PFK2																

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	43	Total Tetra-Furans	24.00	24.45	8.389e1	1.607e2	0.770	0.52	YES	0.16626	0.00000
2	43	Total Tetra-Furans	24.00	25.19	6.439e1	6.659e1	0.770	0.97	YES	0.10285	0.00000
3	8	2,3,7,8-TCDF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Custom Reporting: Select reports to generate

191212D2_12 NUM

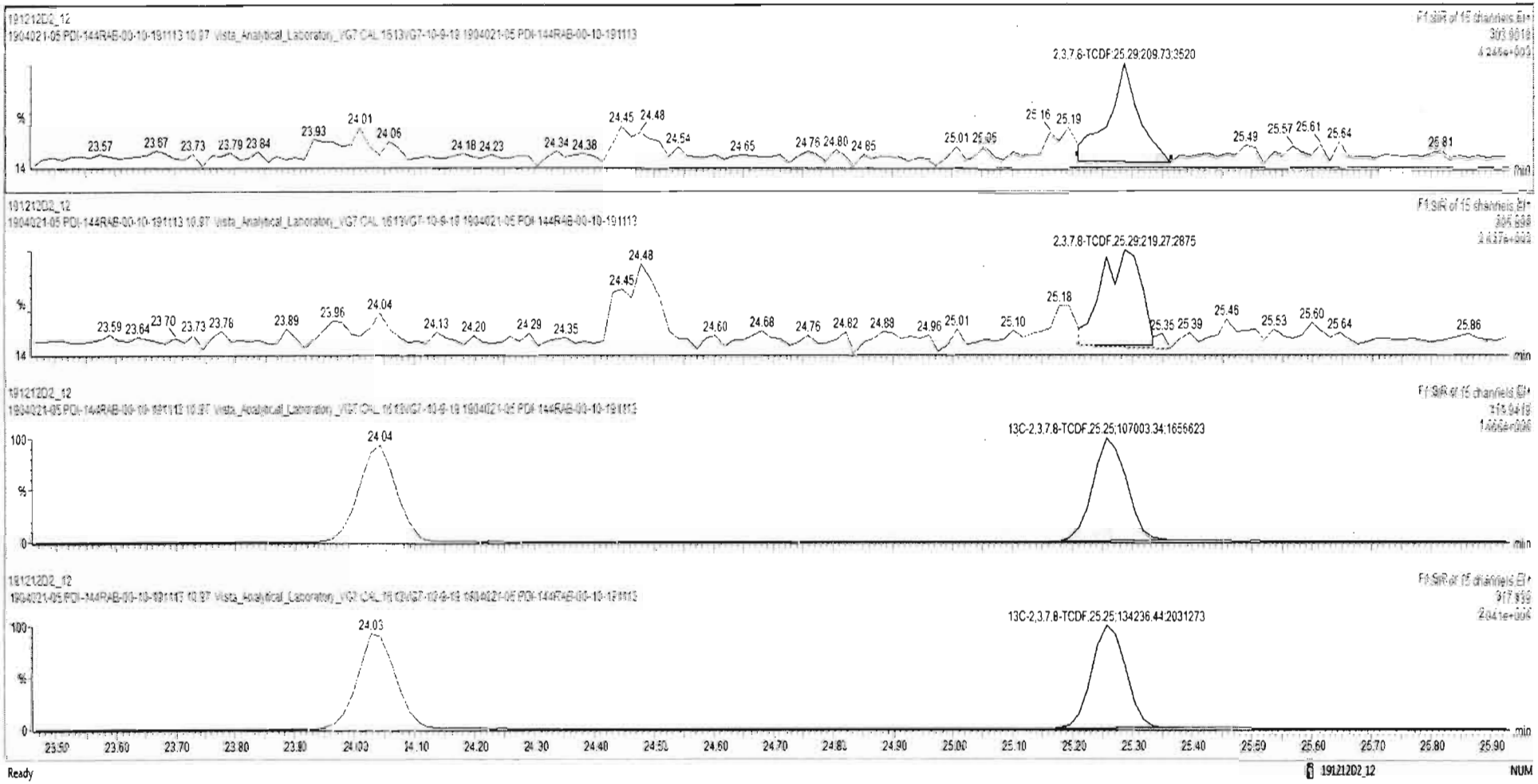
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3739		0.189	1.264
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.572		0.199	2.996
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.656		0.178	4.866
48	48	PFK1																
49	49	PFK2																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	6	2,3,7,8-TCDF	25.28	25.29	2.097e2	2.193e2	0.770	0.96	YES	0.33657	0.00000

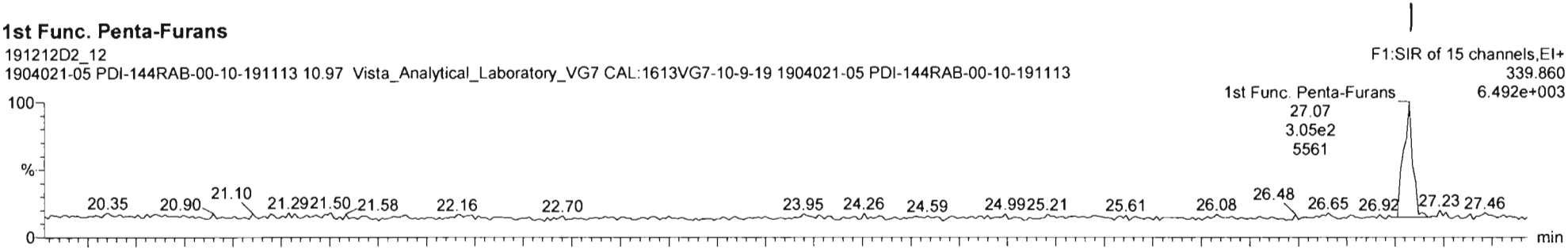


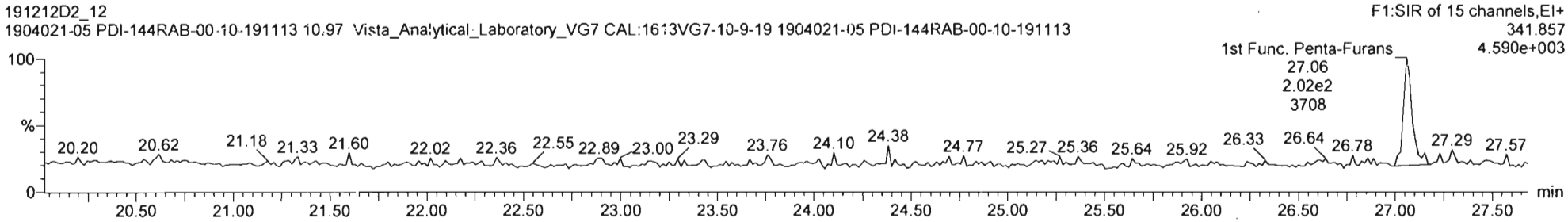
Ready 191212D2_12 NUM

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

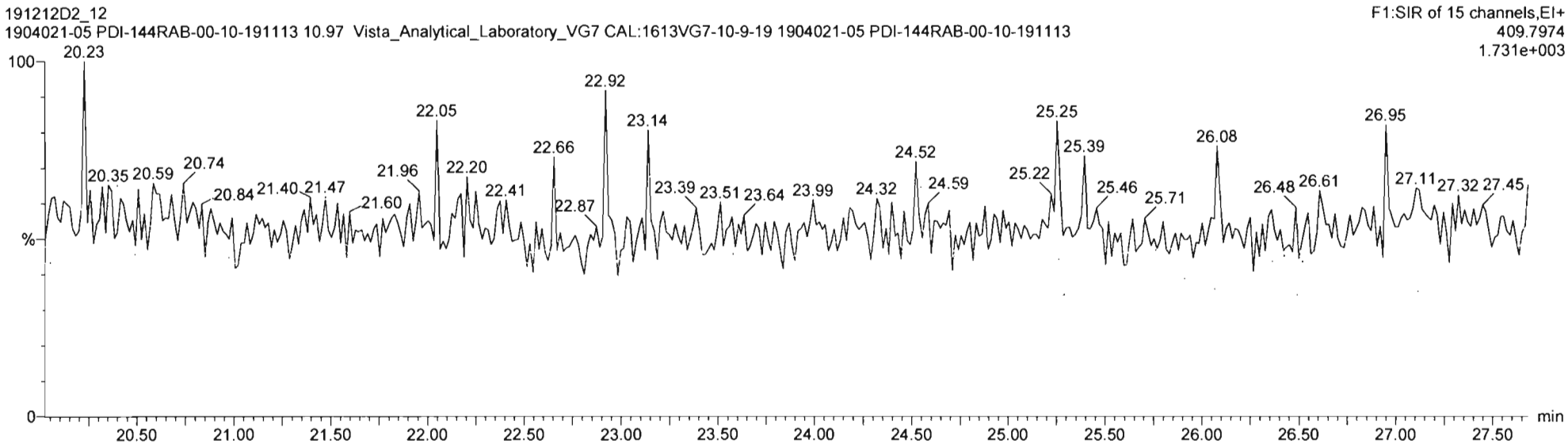
Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

1st Func. Penta-Furans





DPE6



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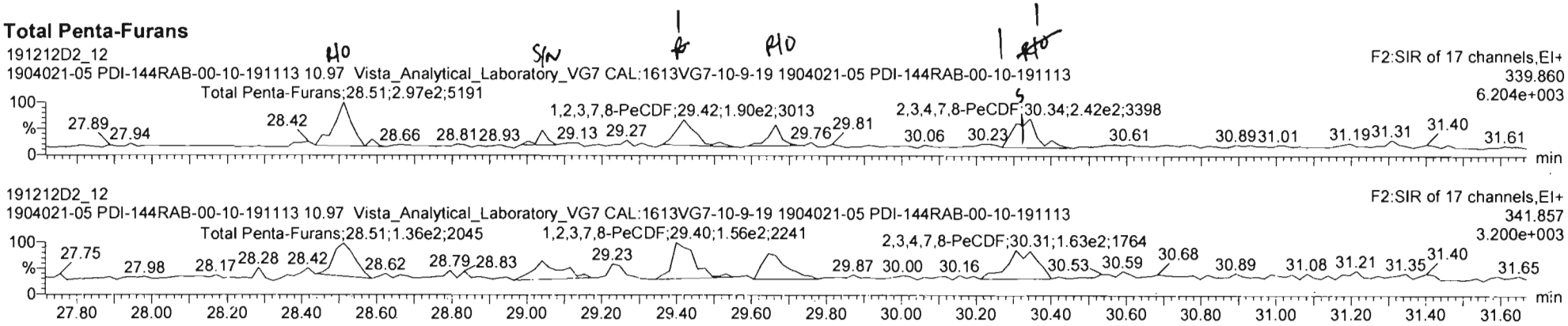
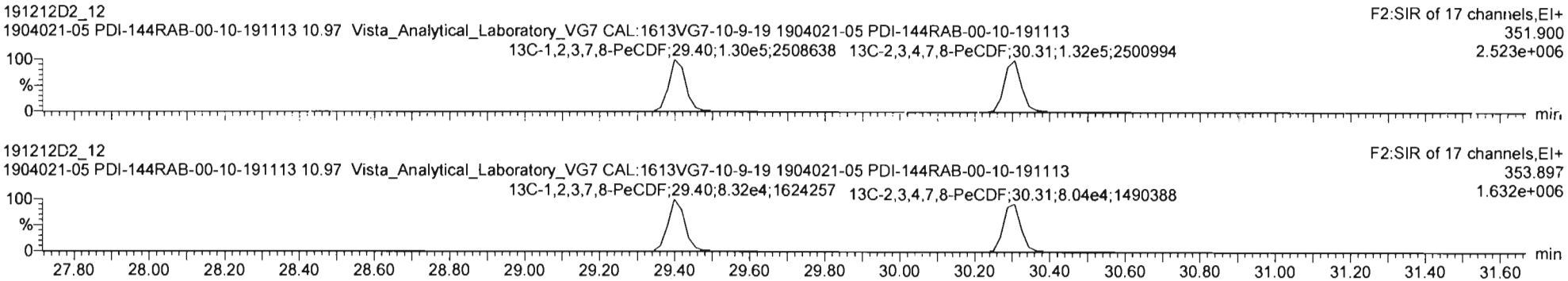
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

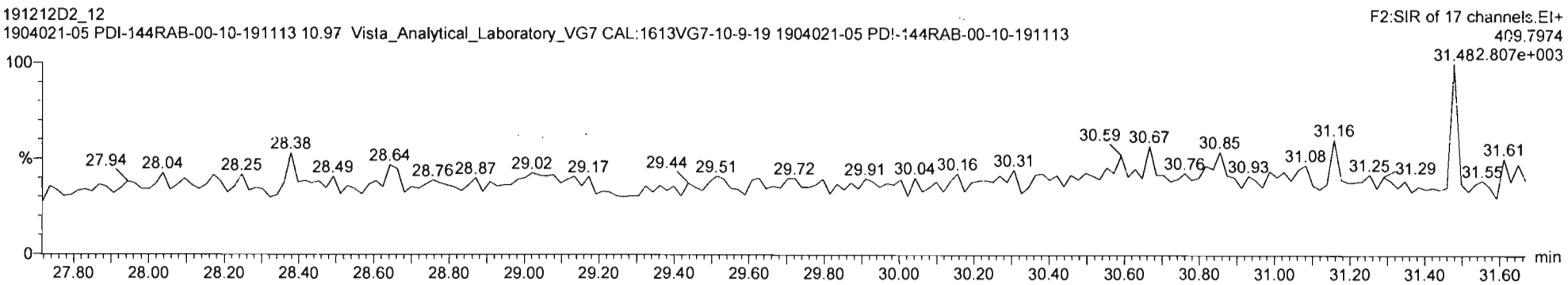
Total Penta-Furans

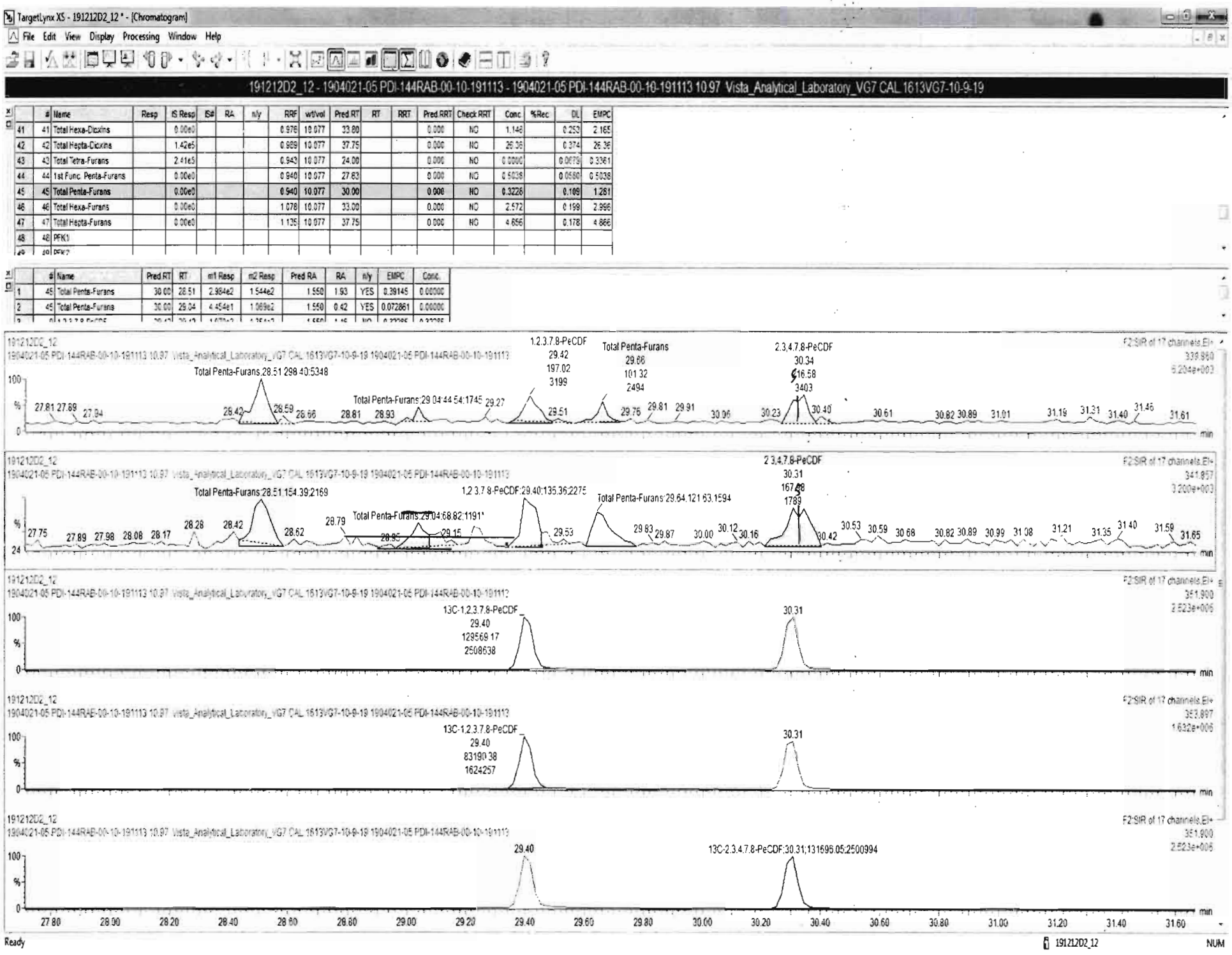


13C-1,2,3,7,8-PeCDF



DPE2





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.148		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3226		0.109	1.281
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.572		0.199	2.996
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.856		0.178	4.866
48	48	PFK1																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	45	Total Penta-Furans	30.00	29.51	2.984e2	1.544e2	1.550	1.93	YES	0.39145	0.00000
2	45	Total Penta-Furans	30.00	29.04	4.454e1	1.069e2	1.550	0.42	YES	0.072861	0.00000

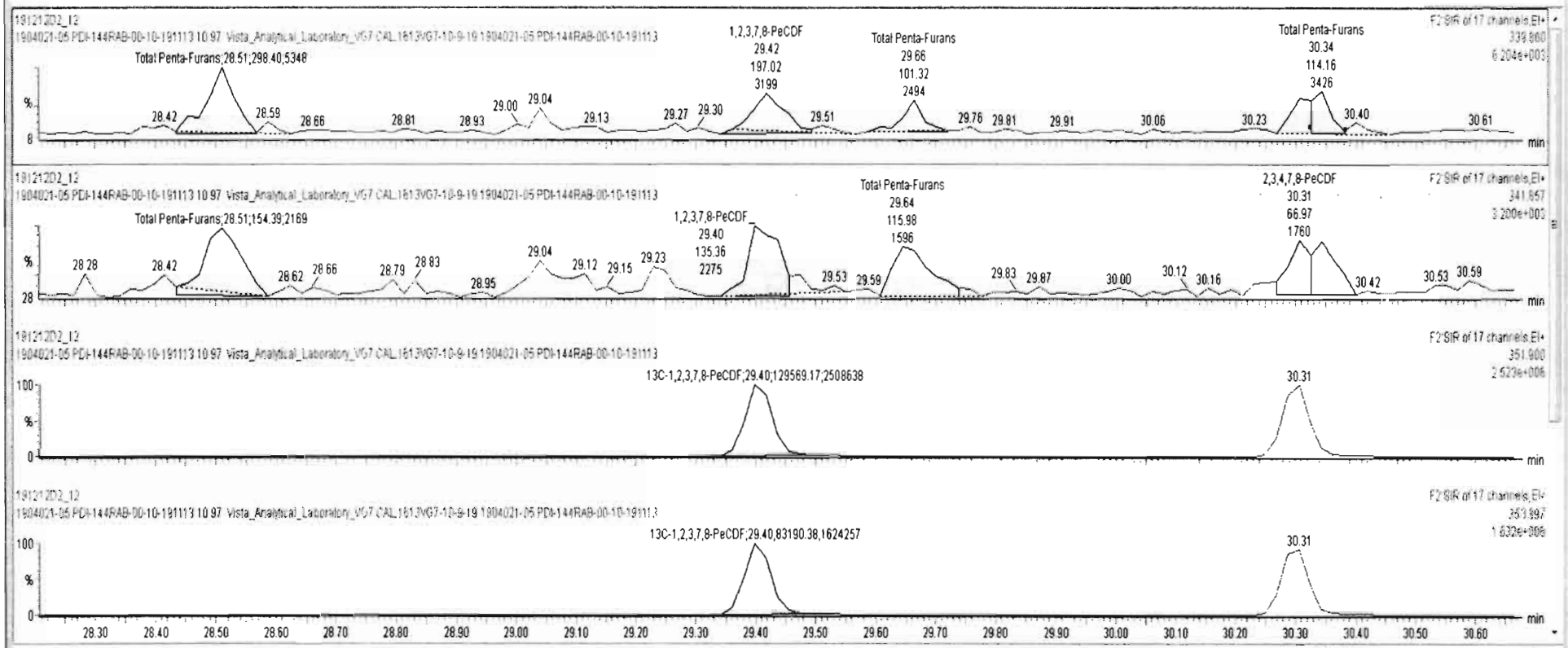
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAE-00-10-191113 - 1904021-05 PDI-144RAE-00-10-191113 10 97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
40	40	Total Penta-Dioxins		1.42e5				0.872	10.077	30.00			0.000	NO			0.0794	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.6728		0.109	1.230
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.550		0.199	2.550

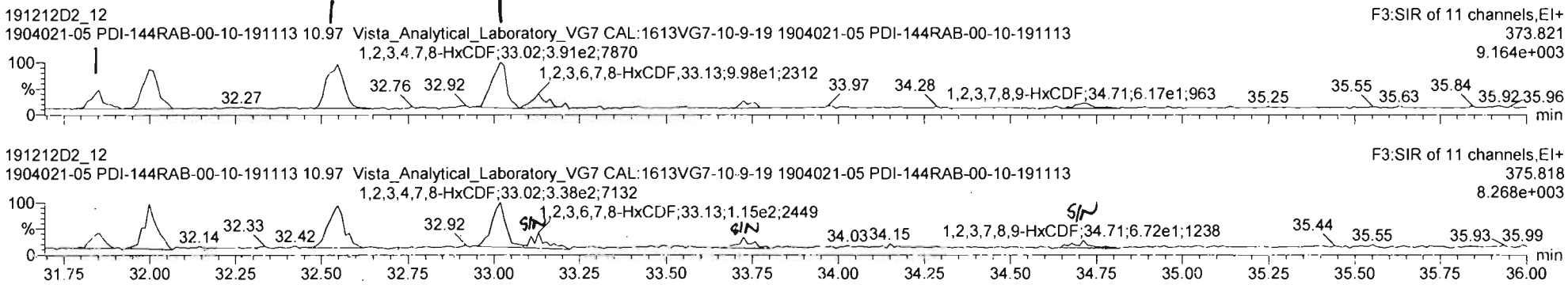
	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	45	Total Penta-Furans	30.00	28.51	2.984e2	1.544e2	1.550	1.93	YES	0.39145	0.00000
2	9	1,2,3,7,8-PeCDF	29.42	29.42	1.970e2	1.354e2	1.550	1.46	NO	0.32285	0.32285
3	45	Total Penta-Furans	30.00	29.66	1.013e2	1.160e2	1.550	0.87	YES	0.16574	0.00000
4	10	2,3,4,7,8-PeCDF	30.31	30.31	1.050e2	6.697e1	1.550	1.57	NO	0.15856	0.15856
5	45	Total Penta-Furans	30.00	30.34	1.142e2	7.830e1	1.550	1.46	NO	0.19136	0.19136



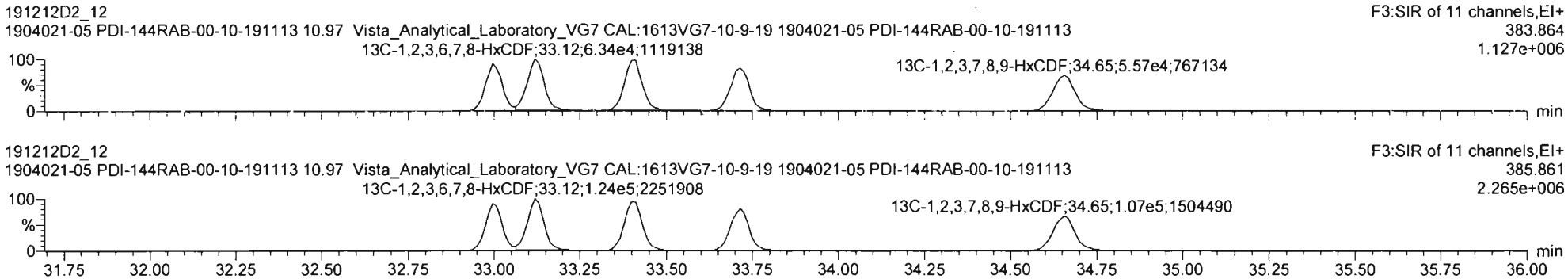
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

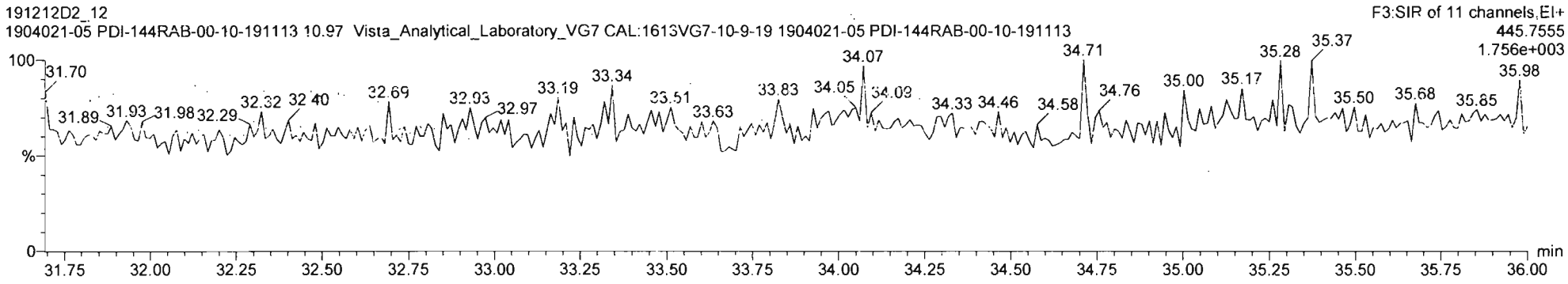
Total Hexa-Furans



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



DPE3



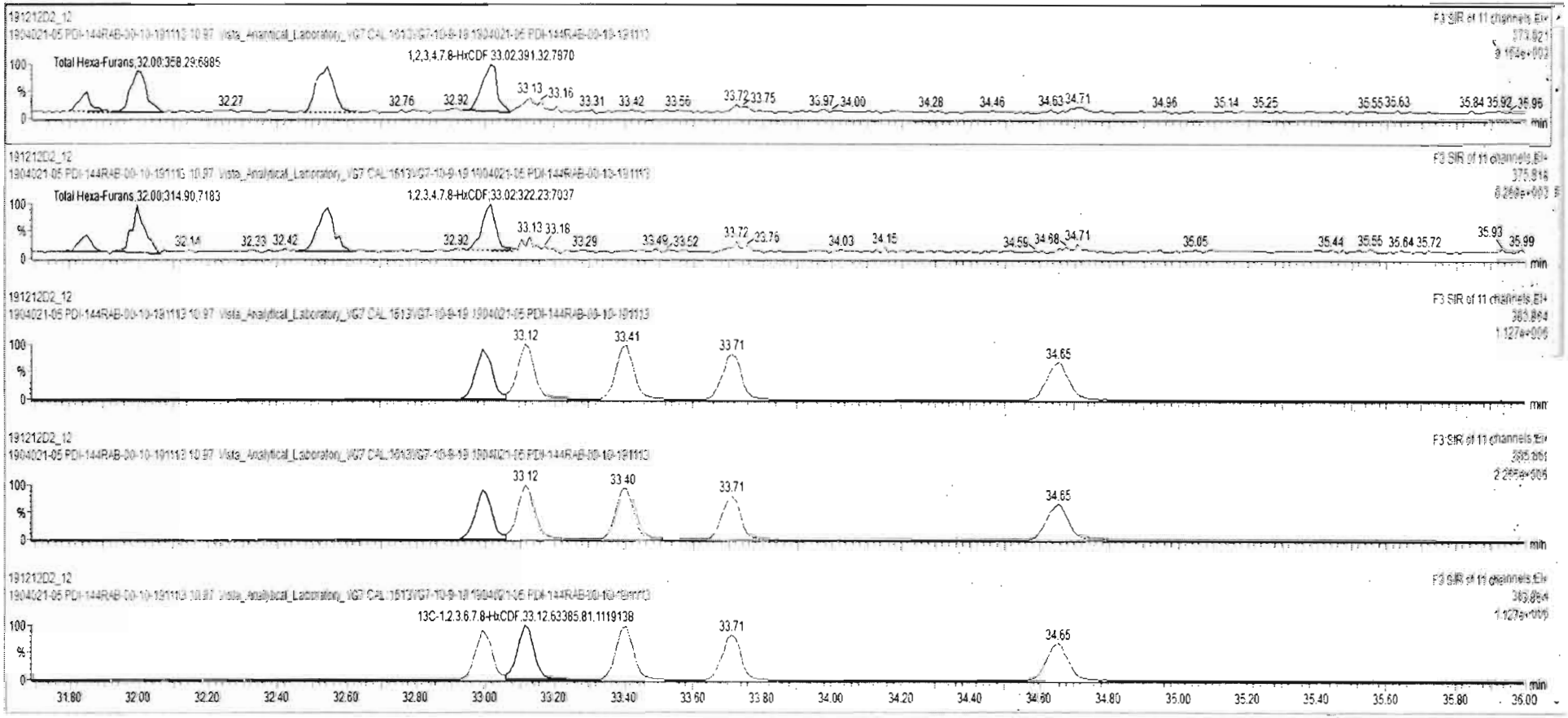
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3226		0.109	1.205
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.550		0.199	2.550
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.656		0.178	4.866
48	48	PFK1																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	31.85	1.235e2	1.097e2	1.240	1.13	NO	0.24799	0.24799
2	46	Total Hexa-Furans	33.00	32.09	3.563e2	3.149e2	1.240	1.14	NO	0.71597	0.71597
3	46	Total Hexa-Furans	33.00	32.55	4.599e2	3.684e2	1.240	1.25	NO	0.88096	0.88096
4	11	1,2,3,4,7,8-HxCDF	33.00	33.02	3.913e2	3.222e2	1.240	1.21	NO	0.70543	0.70543



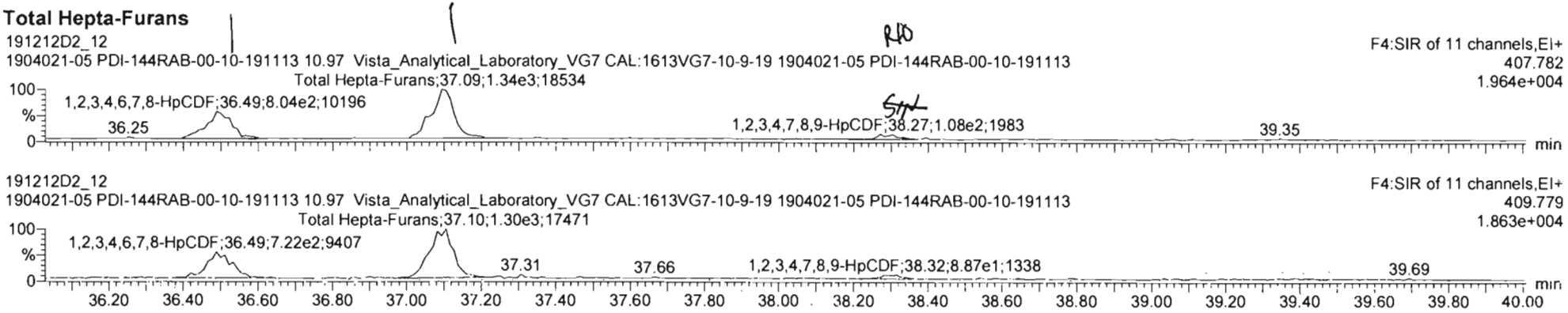
Ready

191212D2_12 NUM

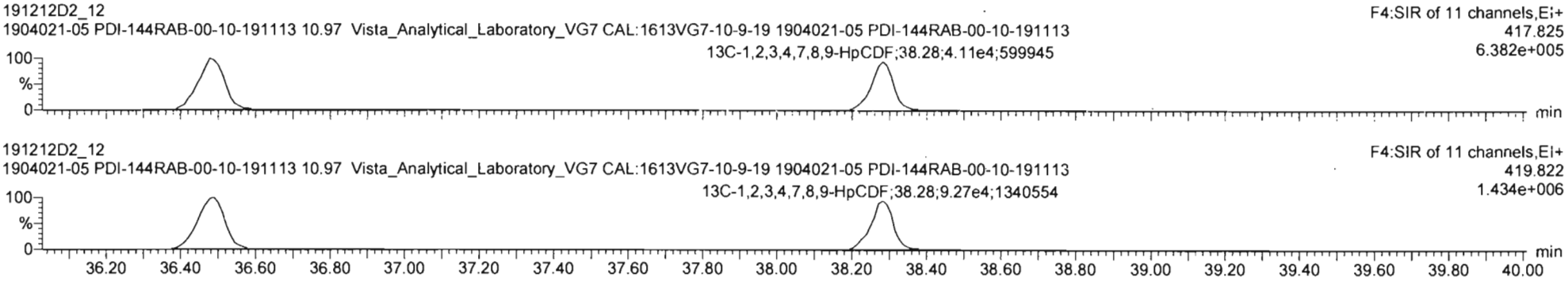
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

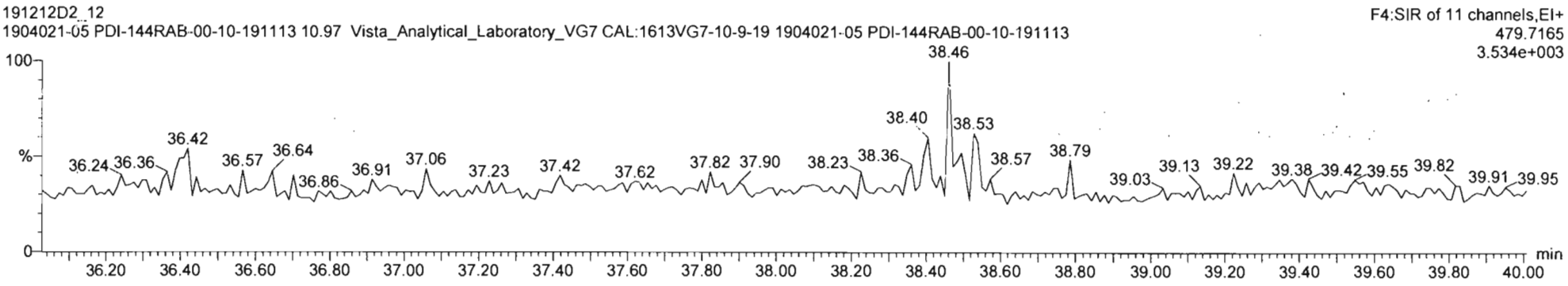
Total Hepta-Furans



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



DPE4



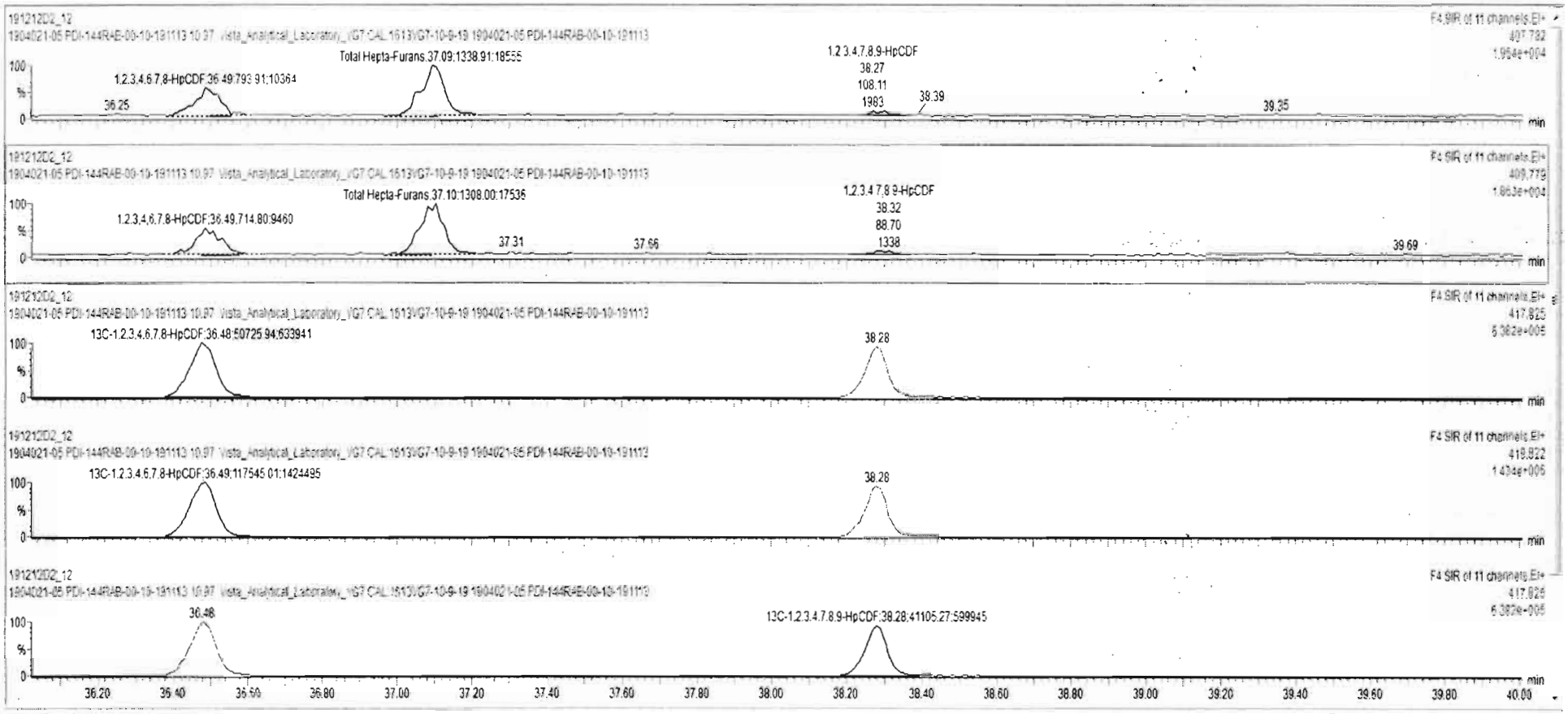
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10 97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.60			0.000	NO	1.146		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.374	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.63			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3228		0.109	1.209
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.550		0.199	2.550
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.644		0.178	4.854
48	48	PFK1																
49	49	PFK2																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	15	1,2,3,4,6,7,8-HpCDF	36.51	36.49	7.939e2	7.148e2	1.040	1.11	NO	1.5781	1.5781
2	47	Total Hepta-Furans	37.75	37.09	1.339e3	1.308e3	1.040	1.02	NO	3.0657	3.0657
3	16	1,2,3,4,7,8,9-HpCDF	38.28	38.27	1.081e2	8.870e1	1.040	1.22	YES	0.20976	0.00000



Custom Reporting: Select reports to generate

191212D2_12 NUM

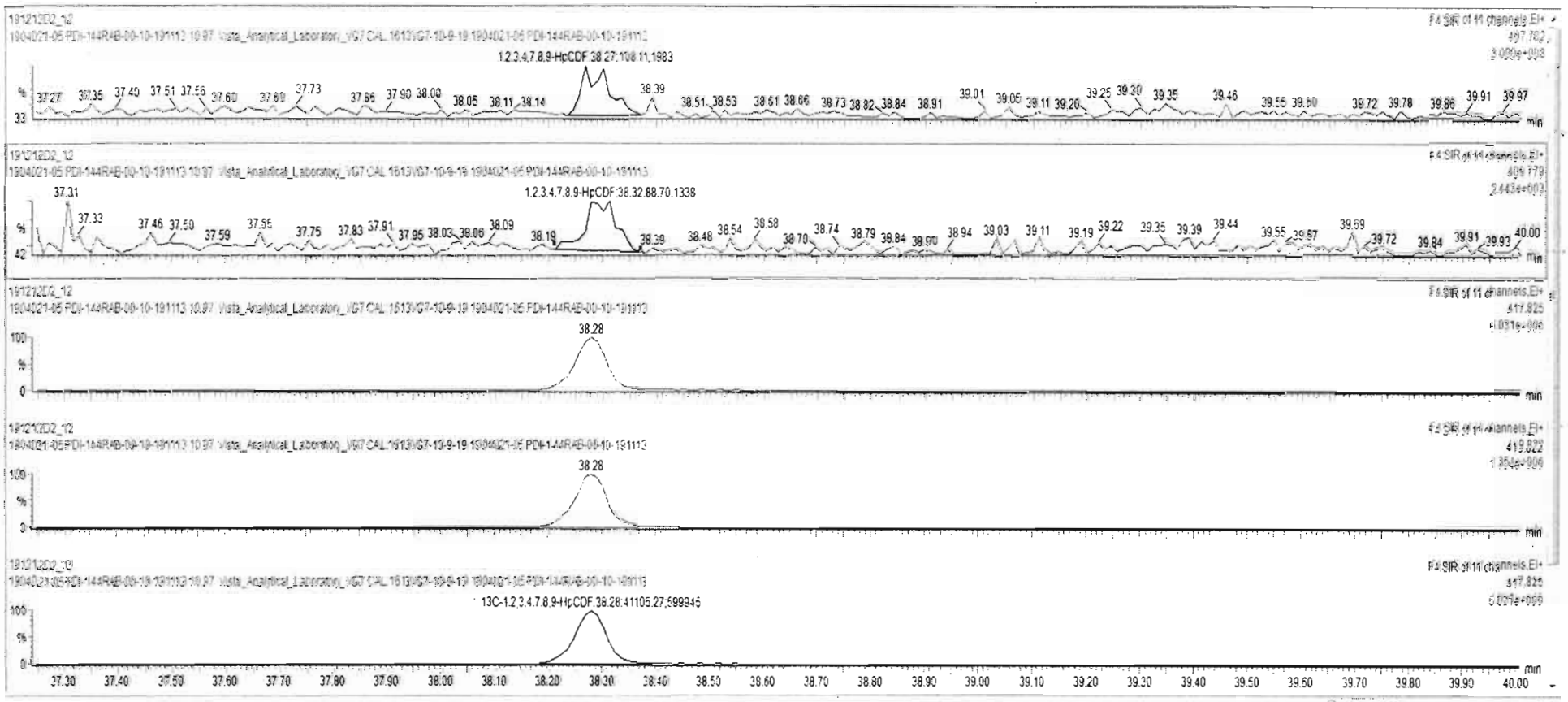
TargetLynx XS - 191212D2_12 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_12 - 1904021-05 PDI-144RAB-00-10-191113 - 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.077	33.80			0.000	NO	1.148		0.253	2.165
42	42	Total Hepta-Dioxins		1.42e5				0.989	10.077	37.75			0.000	NO	26.36		0.274	26.36
43	43	Total Tetra-Furans		2.41e5				0.943	10.077	24.00			0.000	NO	0.0000		0.0679	0.3361
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.077	27.62			0.000	NO	0.5038		0.0580	0.5038
45	45	Total Penta-Furans		0.00e0				0.940	10.077	30.00			0.000	NO	0.3228		0.105	1.209
46	46	Total Hexa-Furans		0.00e0				1.078	10.077	33.00			0.000	NO	2.560		0.155	2.560
47	47	Total Hepta-Furans		0.00e0				1.135	10.077	37.75			0.000	NO	4.644		0.178	4.854
48	48	PFK1																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	15	1,2,3,4,6,7,8-HpCDF	36.51	36.49	7.539e2	7.148e2	1.040	1.11	NO	1.5781	1.5781
2	47	Total Hepta-Furans	37.75	37.09	1.339e3	1.308e3	1.040	1.02	NO	3.0657	3.0657
3	16	1,2,3,4,7,8,9-HpCDF	38.28	38.27	1.081e2	8.870e1	1.040	1.22	YES	0.26978	0.00000



Custom Reporting: Select reports to generate

191212D2_12

NUM

Vista Analytical Laboratory
Dataset: Untitled
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Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
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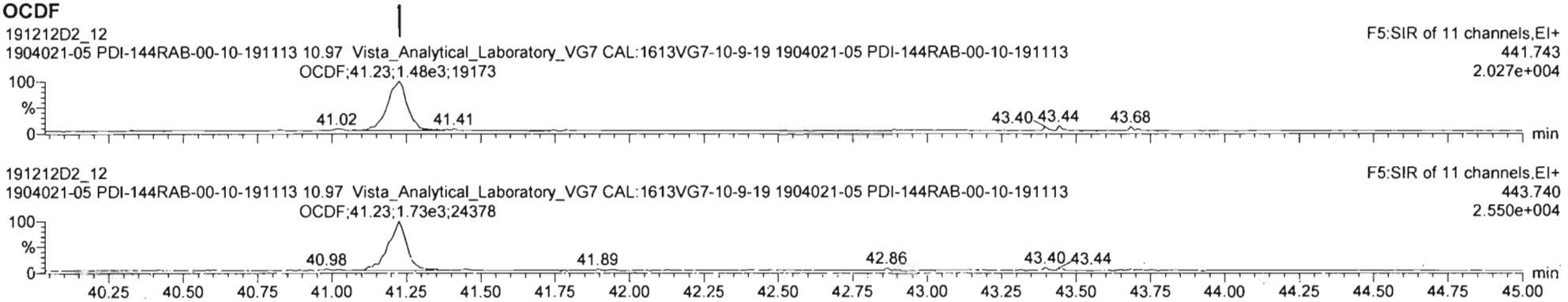
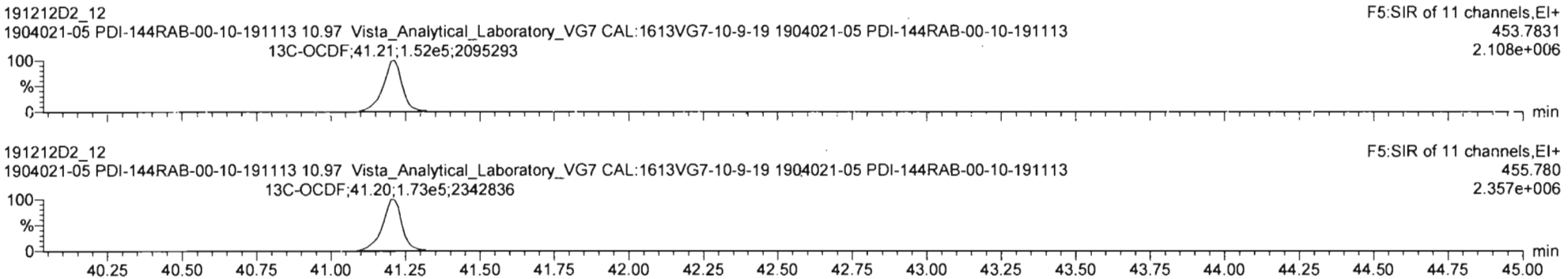
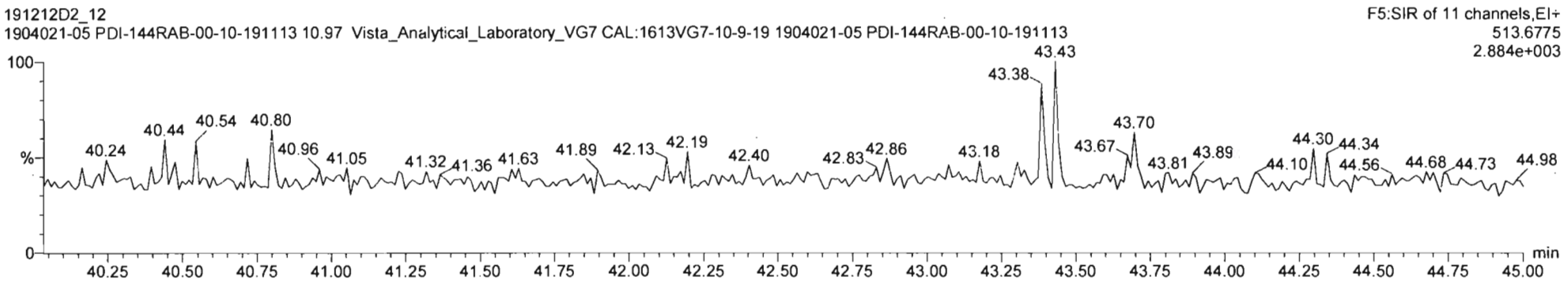
OCDF



13C-OCDF



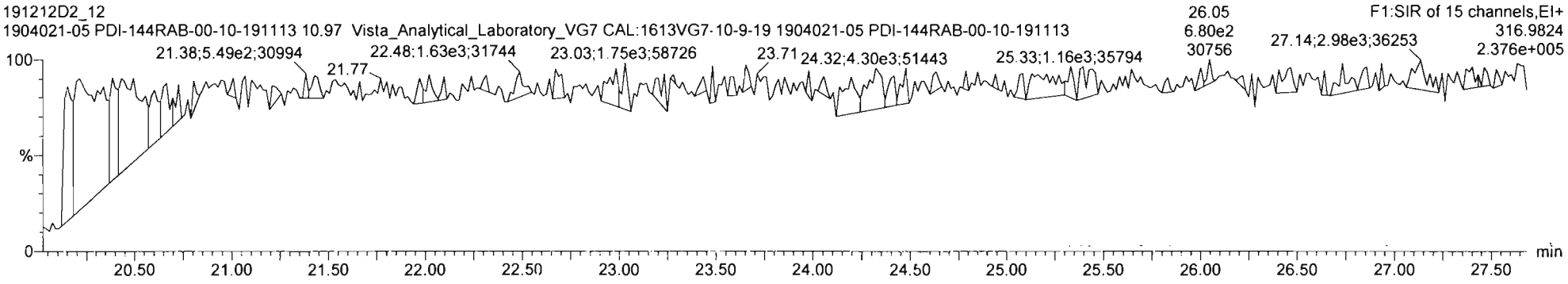
DPE5



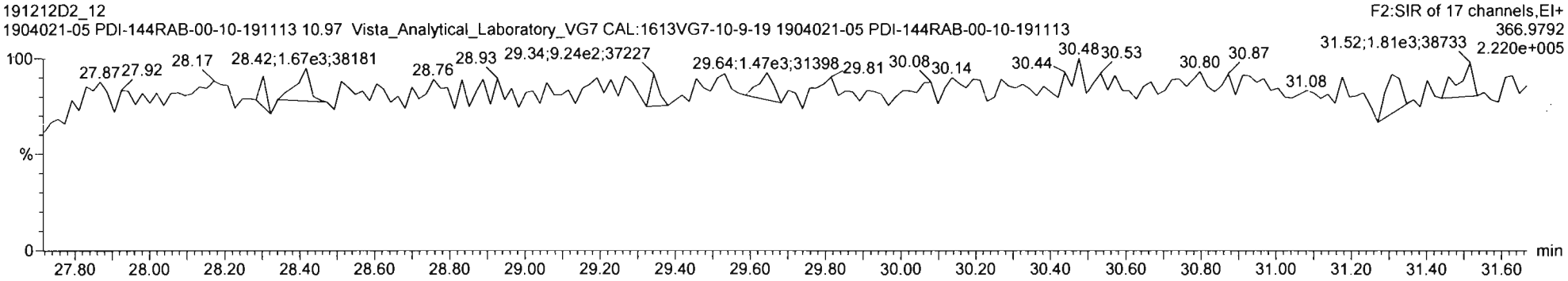
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:53:12 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:53:46 Pacific Standard Time

Name: 191212D2_12, Date: 13-DEC-2019, Time: 09:42:52, ID: 1904021-05 PDI-144RAB-00-10-191113,
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

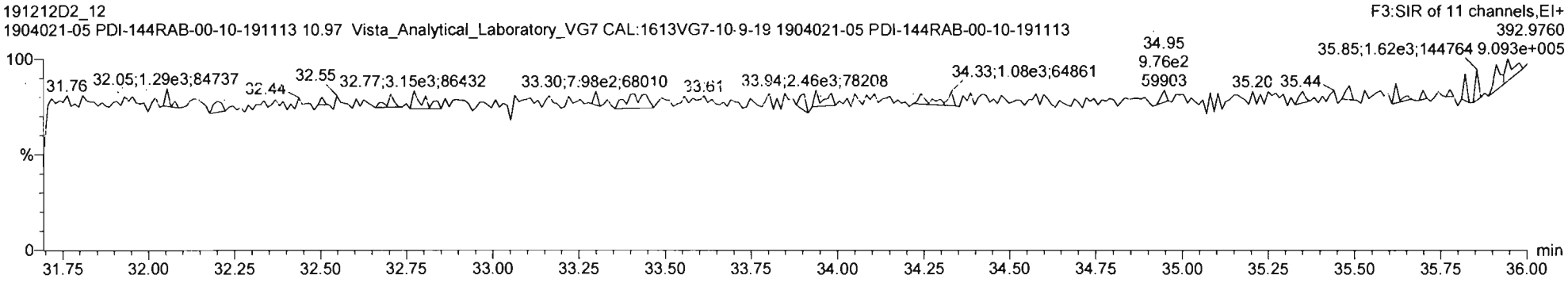
PFK1



PFK2



PFK3



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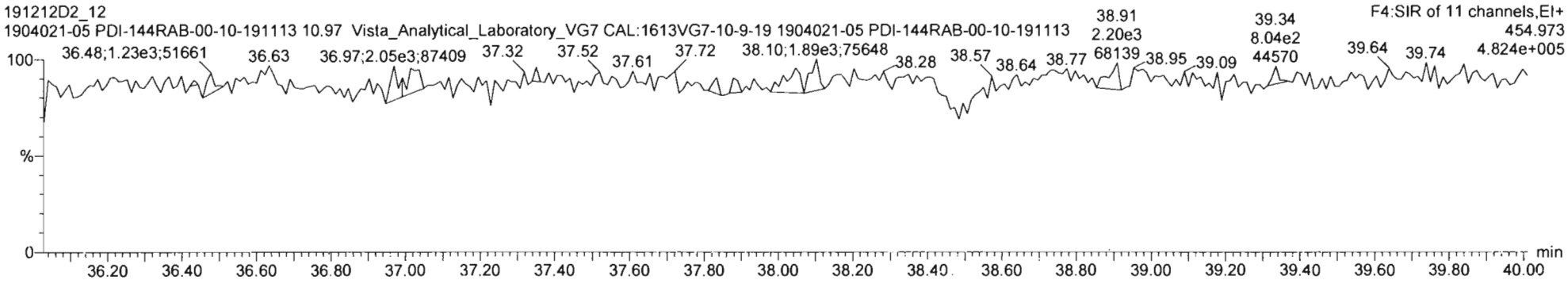
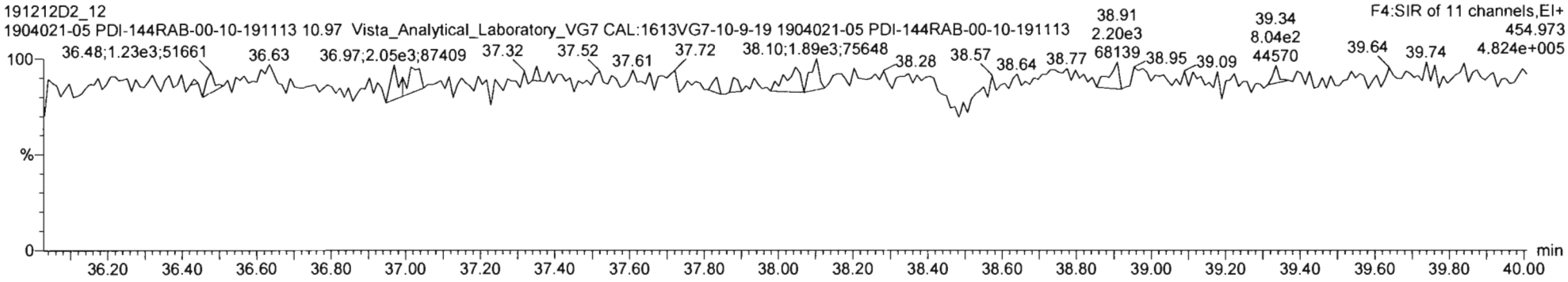
Description: 1904021-05 PDI-144RAB-00-10-191113 10.97 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK4



PFK5



Client ID: PDI-144RAB-10-20-191113 Filename: 200109D2 S:7 Acq:10-JAN-20 03:30:28 ConCal: ST200109D2-1
Lab ID: 1904021-06RE1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol:10.051 EndCAL: NA

	Name	Resp	RA		RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	3.99e+03	0.40	n	0.91	25:59	0.10916		*	2.5	*
	1,2,3,7,8-PeCDD	*	*	n	0.90	NotF	*		217	2.5	0.109
	1,2,3,4,7,8-HxCDD	*	*	n	1.10	NotF	*		191	2.5	0.124
	1,2,3,6,7,8-HxCDD	8.55e+03	1.58	n	0.94	33:58	0.27831		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.54e+03	1.25	y	0.96	34:16	0.17026		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	2.00e+05	1.03	y	0.98	37:45	6.7954		*	2.5	*
	OCDD	1.62e+06	0.91	y	0.96	41:00	63.625		*	2.5	*
	2,3,7,8-TCDF	5.49e+03	0.66	y	0.95	25:12	0.097161		*	2.5	*
	1,2,3,7,8-PeCDF	1.69e+04	1.58	y	0.96	29:22	0.33770		*	2.5	*
	2,3,4,7,8-PeCDF	5.36e+03	1.96	n	1.01	30:15	0.10923		*	2.5	*
	1,2,3,4,7,8-HxCDF	2.01e+04	1.27	y	1.18	33:00	0.45099		*	2.5	*
	1,2,3,6,7,8-HxCDF	*	*	n	1.07	NotF	*		185	2.5	0.0571
	2,3,4,6,7,8-HxCDF	*	*	n	1.11	NotF	*		185	2.5	0.0641
	1,2,3,7,8,9-HxCDF	*	*	n	1.06	NotF	*		185	2.5	0.0867
	1,2,3,4,6,7,8-HpCDF	3.58e+04	1.11	y	1.13	36:29	0.98509		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	4.71e+03	0.96	y	1.28	38:18	0.14350		*	2.5	*
	OCDF	7.60e+04	1.00	y	0.95	41:13	2.5194		*	2.5	*

	Name	Resp	RA		RRF	RT	Conc	Qual	Rec	Qual
IS	13C-2,3,7,8-TCDD	8.03e+06	0.77	y	1.10	25:59	204.82		103	
IS	13C-1,2,3,7,8-PeCDD	6.11e+06	0.65	y	0.88	30:33	193.76		97.4	
IS	13C-1,2,3,4,7,8-HxCDD	5.91e+06	1.25	y	0.64	33:52	207.98		105	
IS	13C-1,2,3,6,7,8-HxCDD	6.51e+06	1.26	y	0.86	33:58	171.99		86.4	
IS	13C-1,2,3,7,8,9-HxCDD	6.73e+06	1.24	y	0.81	34:16	188.50		94.7	
IS	13C-1,2,3,4,6,7,8-HpCDD	5.99e+06	1.10	y	0.65	37:45	206.98		104	
IS	13C-OCDD	1.06e+07	0.88	y	0.58	41:00	412.83		104	
IS	13C-2,3,7,8-TCDF	1.18e+07	0.76	y	1.03	25:11	196.07		98.5	
IS	13C-1,2,3,7,8-PeCDF	1.04e+07	1.61	y	0.85	29:22	207.84		104	
IS	13C-2,3,4,7,8-PeCDF	9.62e+06	1.62	y	0.85	30:16	194.49		97.7	
IS	13C-1,2,3,4,7,8-HxCDF	7.54e+06	0.50	y	0.83	32:58	204.68		103	
IS	13C-1,2,3,6,7,8-HxCDF	8.72e+06	0.51	y	1.03	33:06	190.35		95.7	
IS	13C-2,3,4,6,7,8-HxCDF	7.88e+06	0.51	y	0.95	33:42	186.70		93.8	
IS	13C-1,2,3,7,8,9-HxCDF	7.34e+06	0.49	y	0.83	34:39	200.34		101	
IS	13C-1,2,3,4,6,7,8-HpCDF	6.42e+06	0.41	y	0.76	36:29	191.41		96.2	
IS	13C-1,2,3,4,7,8,9-HpCDF	5.10e+06	0.44	y	0.58	38:17	198.27		99.6	
IS	13C-OCDF	1.27e+07	0.87	y	0.69	41:13	415.75		104	
C/Up	37Cl-2,3,7,8-TCDD	3.24e+06			1.20	26:00	75.562		94.9	
RS/RT	13C-1,2,3,4-TCDD	7.12e+06	0.83	y	1.00	25:25	198.99			
RS	13C-1,2,3,4-TCDF	1.16e+07	0.79	y	1.00	23:57	198.99			
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.81e+06	0.51	y	1.00	33:23	198.99			

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	0.181	0.549		*	*
Total Penta-Dioxins	*	*		217	0.109
Total Hexa-Dioxins	1.13	2.40		*	*
Total Hepta-Dioxins	14.9	14.9		*	*
Total Tetra-Furans	0.0972	0.251		*	*
Total Penta-Furans	0.64922	1.2765		*	*
Total Hexa-Furans	1.47	1.47		*	*
Total Hepta-Furans	3.03	3.03		*	*

Integrations by Analyst: DB Date: 1/10/20

Reviewed by Analyst: CT Date: 01/17/2020

Totals class: TCDD EMPC Entry #: 19

Run: 12 File: 200109D2 S: 7 I: 1 F: 1
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 0.54887 Unnamed Concentration: 0.440

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
22:32	6.047e+03	5.334e+03	1.13	n	9.441e+03	0.25853	
25:59	1.734e+03	4.389e+03	0.40	n	3.987e+03	0.10916	2,3,7,8-TCDD
26:18	2.985e+03	3.632e+03	0.82	y	6.617e+03	0.18118	

Totals class: HxCDD EMPC Entry #: 23

Run: 12 File: 200109D2 S: 7 I: 1 F: 3
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 2.4045 Unnamed Concentration: 1.956

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:21	1.692e+04	1.378e+04	1.23	y	3.071e+04	0.96472	
32:55	4.163e+03	2.867e+03	1.45	n	6.422e+03	0.20177	
33:10	1.634e+04	1.122e+04	1.46	n	2.513e+04	0.78945	
33:58	6.045e+03	3.818e+03	1.58	n	8.552e+03	0.27831	1,2,3,6,7,8-HxCDD
34:16	3.075e+03	2.462e+03	1.25	y	5.537e+03	0.17026	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 12 File: 200109D2 S: 7 I: 1 F: 4
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 14.883 Unnamed Concentration: 8.088

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
36:53	1.220e+05	1.165e+05	1.05	y	2.385e+05	8.0877	
37:45	1.016e+05	9.885e+04	1.03	y	2.004e+05	6.7954	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 12 File: 200109D2 S: 7 I: 1 F: 1
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 0.25119 Unnamed Concentration: 0.154

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:32	2.185e+03	3.611e+03	0.61	n	5.022e+03	0.088807	
24:23	2.680e+03	2.084e+03	1.29	n	3.689e+03	0.065225	
25:12	2.184e+03	3.310e+03	0.66	y	5.495e+03	0.097161	2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 12 File: 200109D2 S: 7 I: 1 F: 1
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 0.31152 Unnamed Concentration: 0.312

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
27:00	9.509e+03	5.934e+03	1.60 y	1.544e+04	0.31152	

Totals class: PeCDF EMPC Entry #: 31

Run: 12 File: 200109D2 S: 7 I: 1 F: 2
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 0.96501 Unnamed Concentration: 0.518

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
28:27	1.128e+04	4.819e+03	2.34	n	1.229e+04	0.24788	
28:59	1.752e+03	1.625e+03	1.08	n	2.882e+03	0.058139	
29:22	1.035e+04	6.540e+03	1.58	y	1.689e+04	0.33770	1,2,3,7,8-PeCDF
29:38	3.902e+03	2.188e+03	1.78	n	5.580e+03	0.11256	
30:15	4.115e+03	2.101e+03	1.96	n	5.357e+03	0.10923	2,3,4,7,8-PeCDF
30:18	2.999e+03	2.444e+03	1.23	n	4.934e+03	0.099520	

Totals class: HxCDF EMPC Entry #: 33

Run: 12 File: 200109D2 S: 7 I: 1 F: 3
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

Total Concentration: 1.4655 Unnamed Concentration: 1.015

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
31:48	2.973e+03	2.558e+03	1.16 y	5.531e+03	0.12676	
31:59	1.033e+04	7.843e+03	1.32 y	1.818e+04	0.41660	
32:30	1.119e+04	9.368e+03	1.19 y	2.056e+04	0.47120	
33:00	1.123e+04	8.873e+03	1.27 y	2.010e+04	0.45099	1,2,3,4,7,8-HxCDF

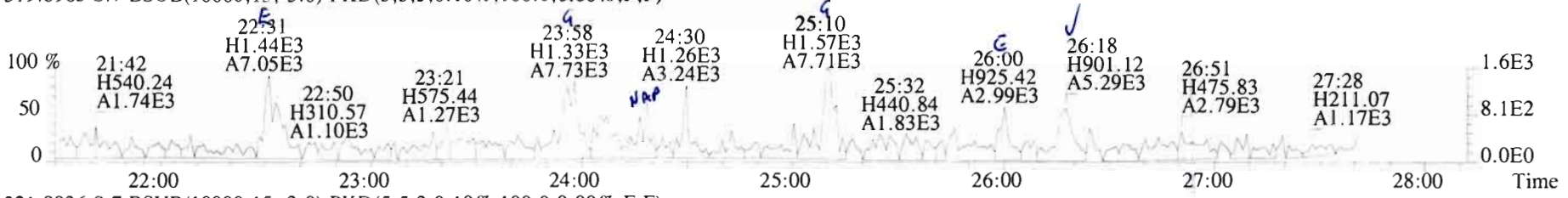
Totals class: HpCDF EMPC Entry #: 35

Run: 12 File: 200109D2 S: 7 I: 1 F: 4
Acquired: 10-JAN-20 03:30:28 Processed: 10-JAN-20 10:44:51

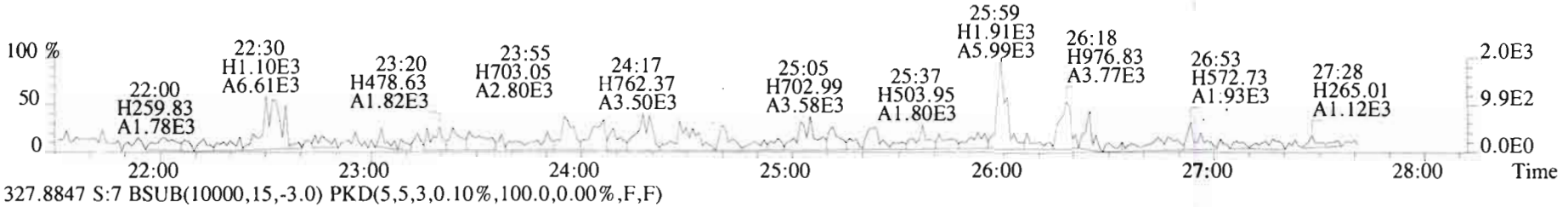
Total Concentration: 3.0271 Unnamed Concentration: 1.899

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
36:29	1.882e+04	1.701e+04	1.11 y	3.583e+04	0.98509	1,2,3,4,6,7,8-HpCDF
37:06	3.377e+04	3.184e+04	1.06 y	6.561e+04	1.8985	
38:18	2.308e+03	2.401e+03	0.96 y	4.709e+03	0.14350	1,2,3,4,7,8,9-HpCDF

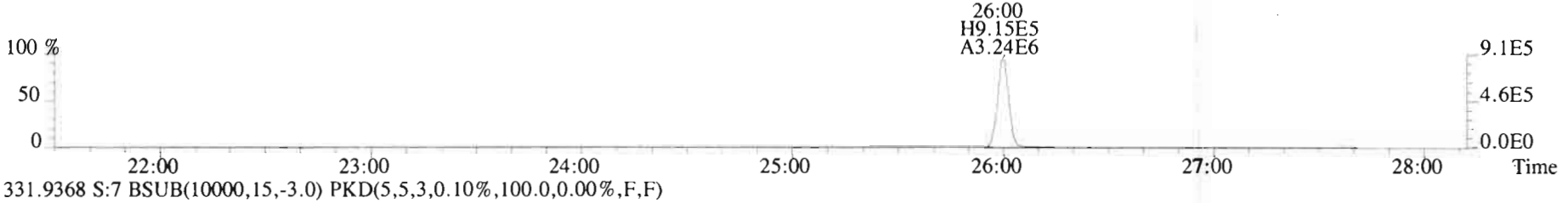
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



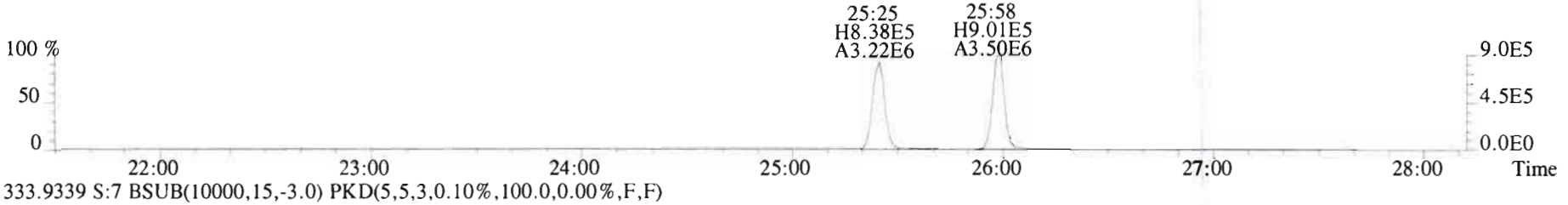
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



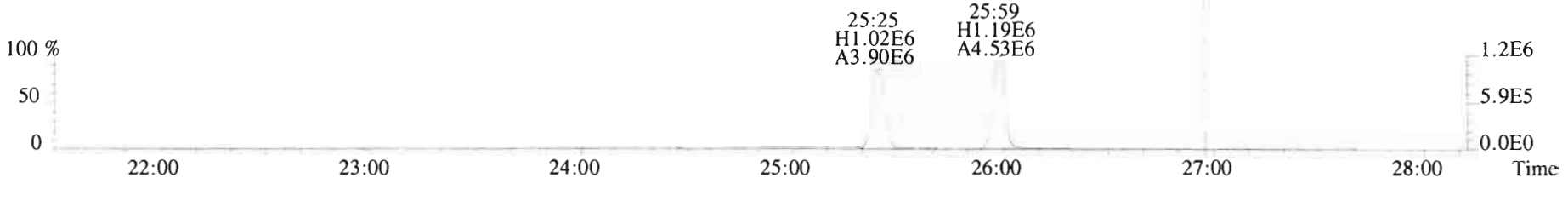
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



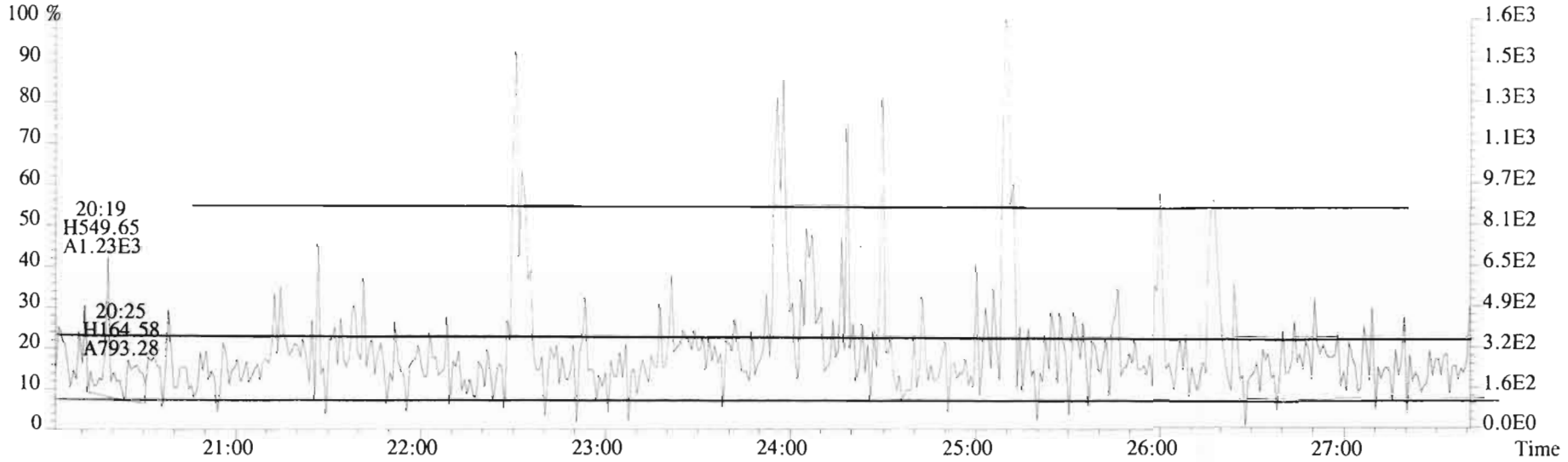
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



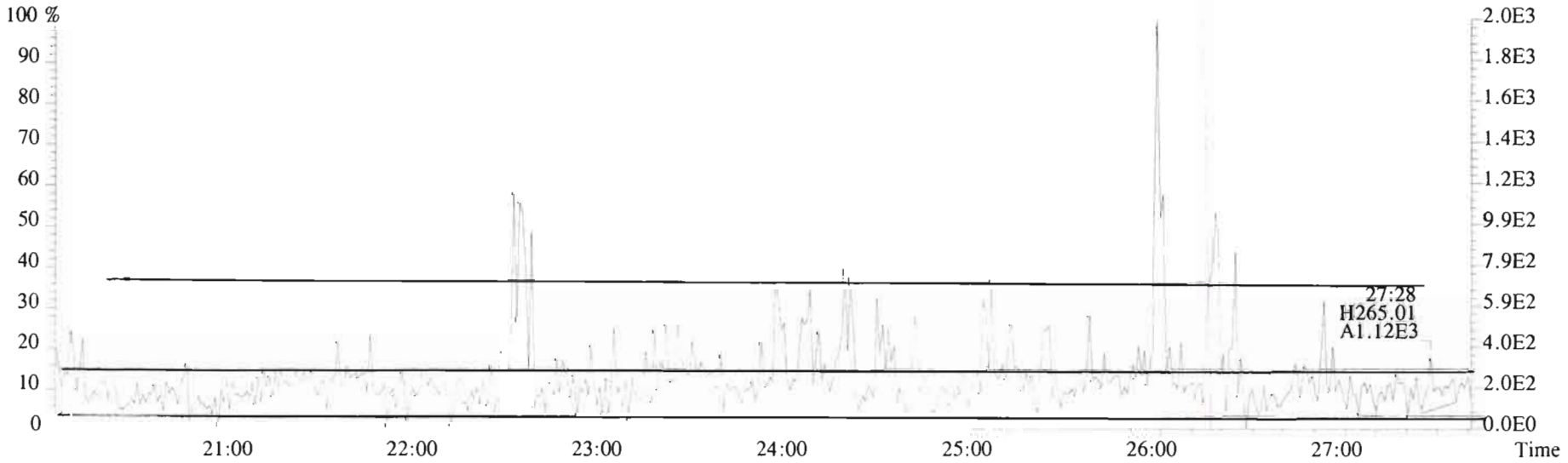
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



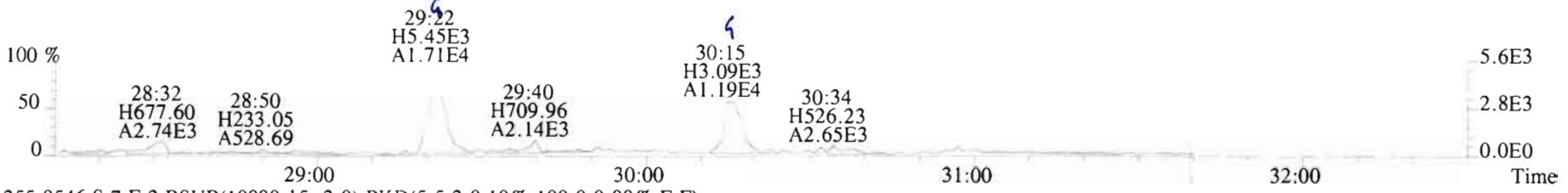
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



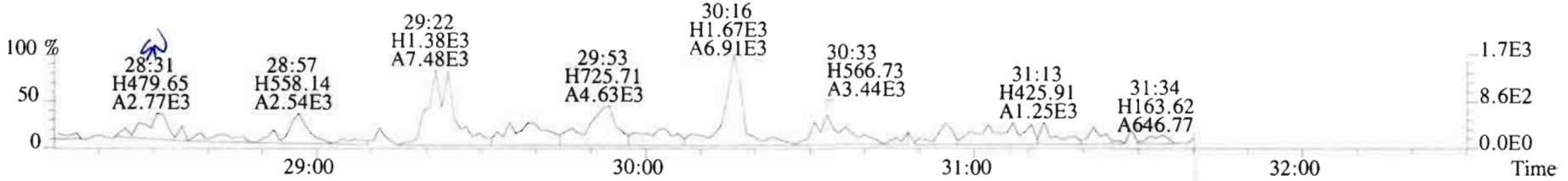
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



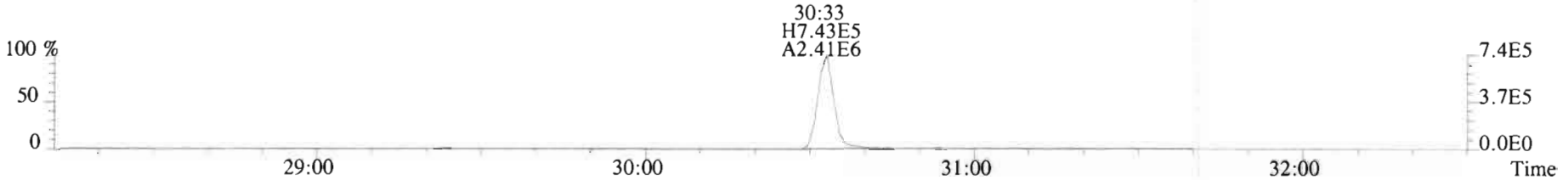
File:200109D2 #1-210 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



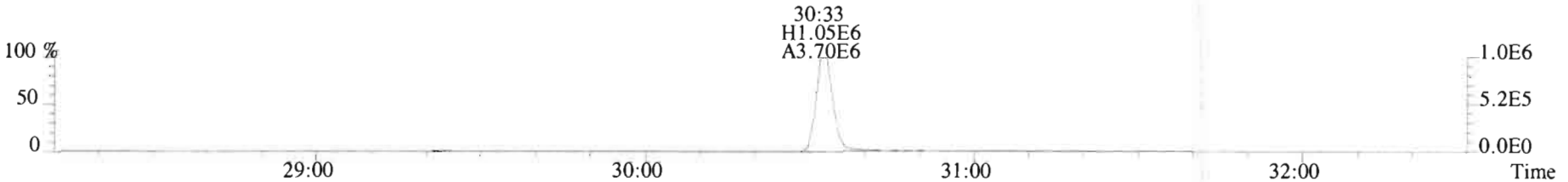
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



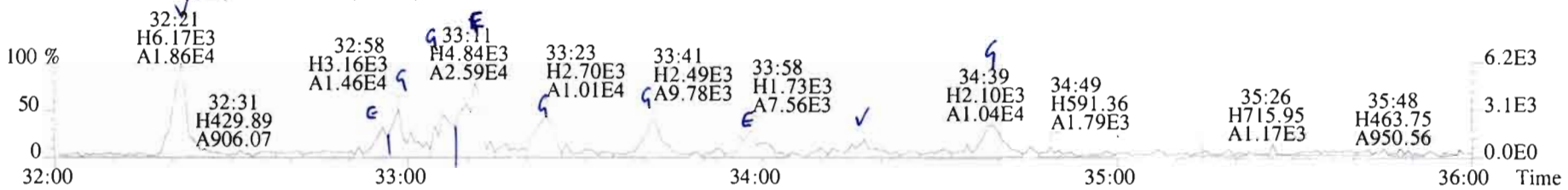
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



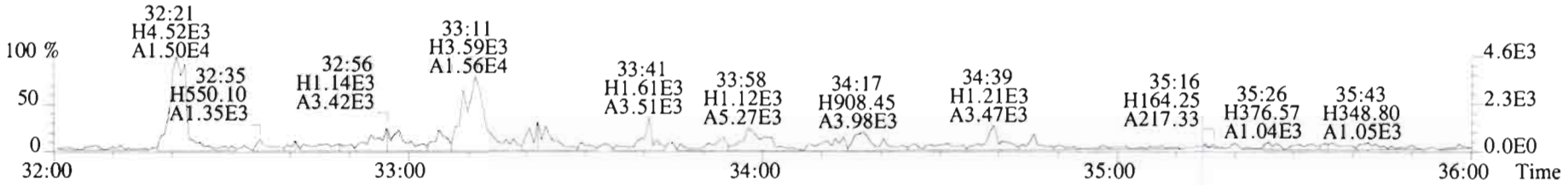
366.9792 S:7 F:2

File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5

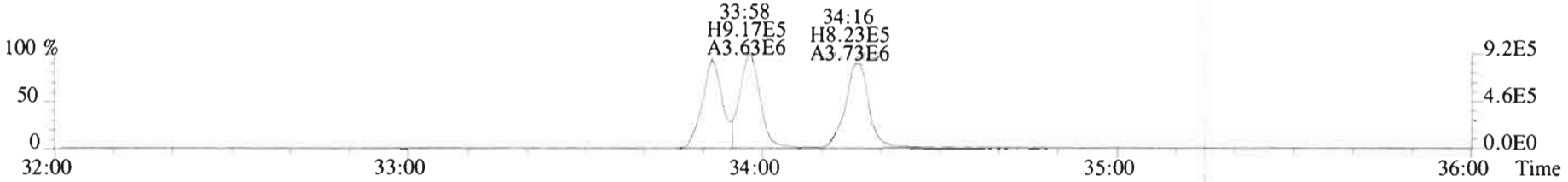
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



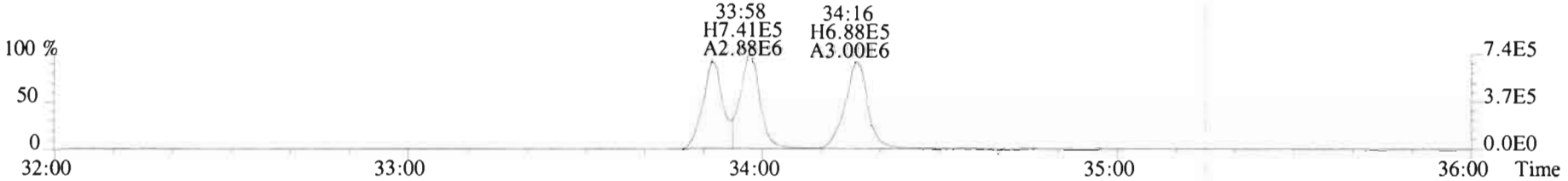
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



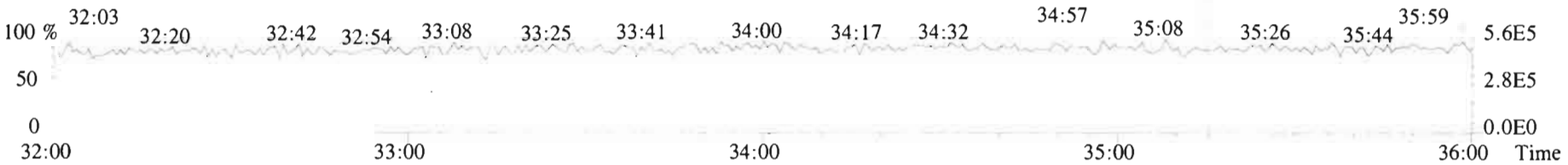
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



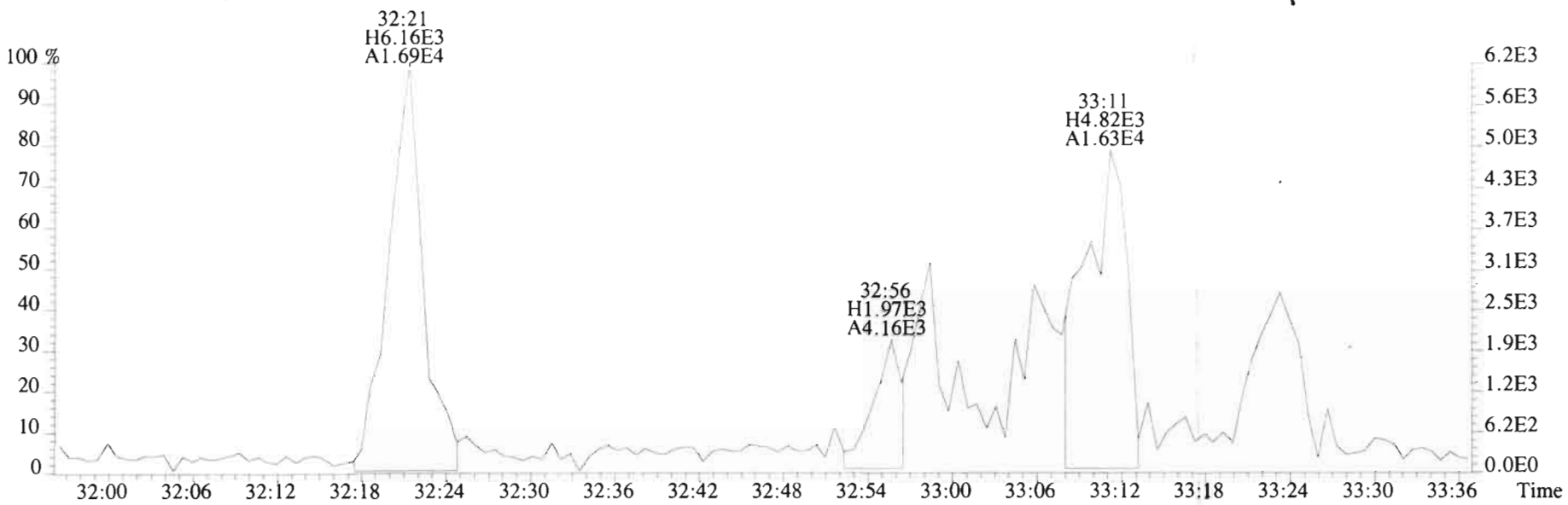
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



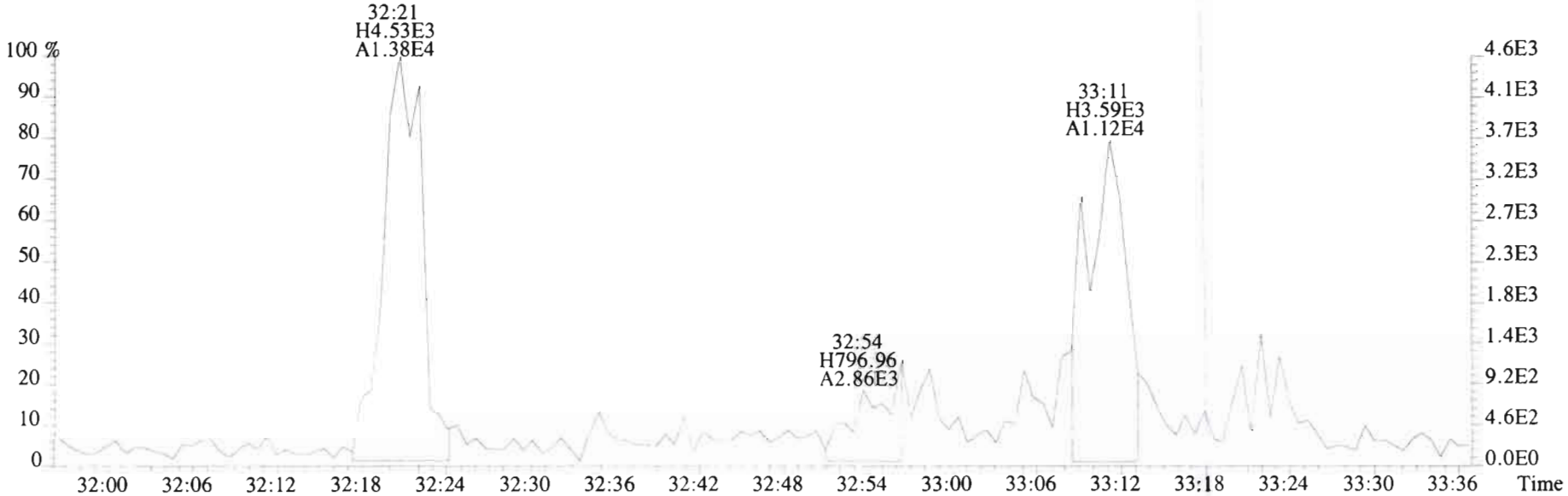
392.9760 S:7 F:3



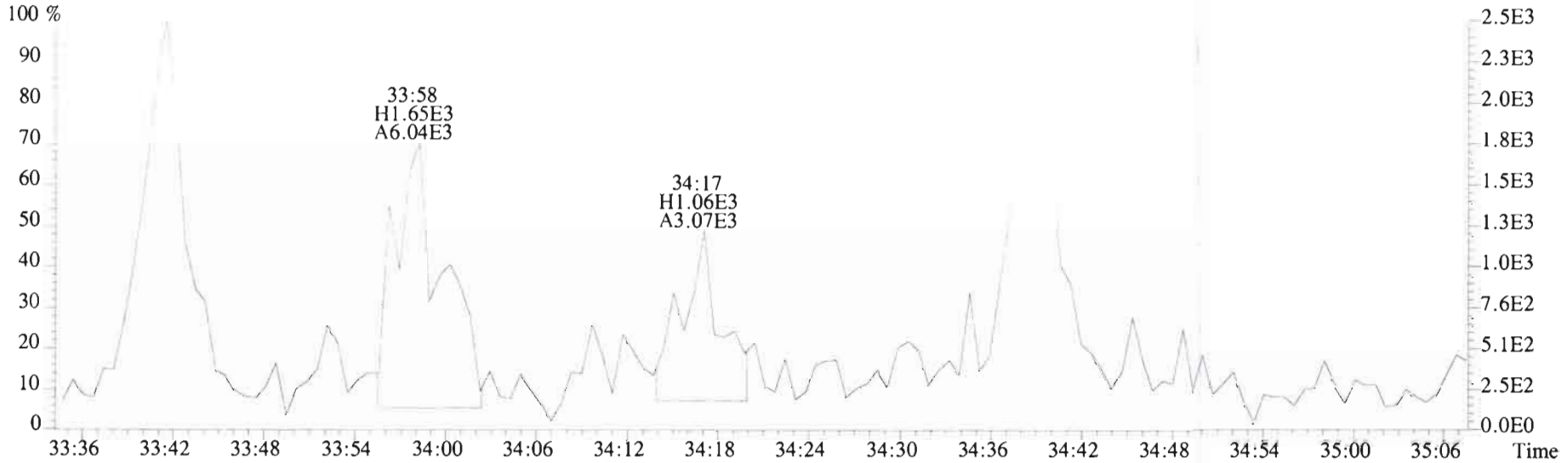
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0)



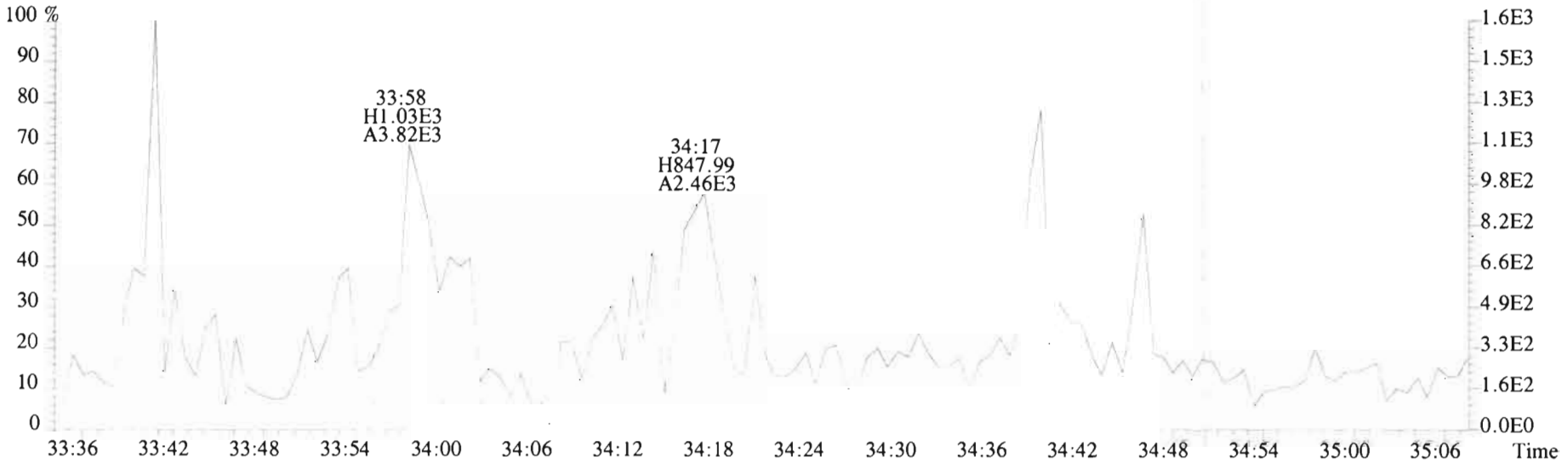
391.8127 S:7 F:3 BSUB(10000,15,-3.0)



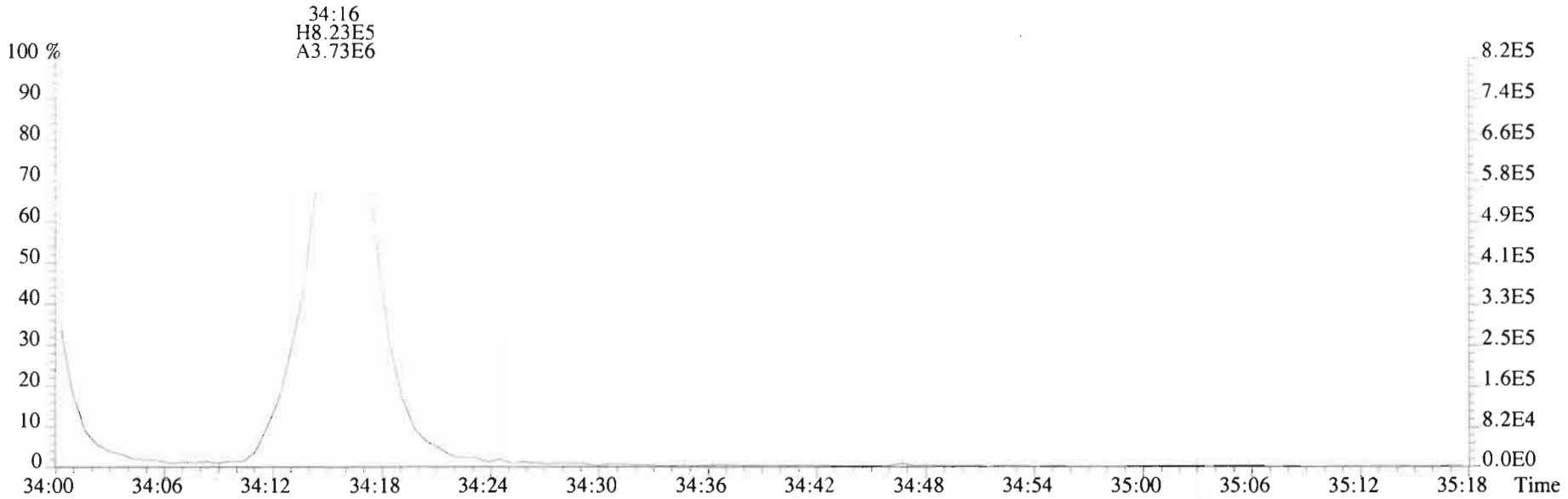
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0)



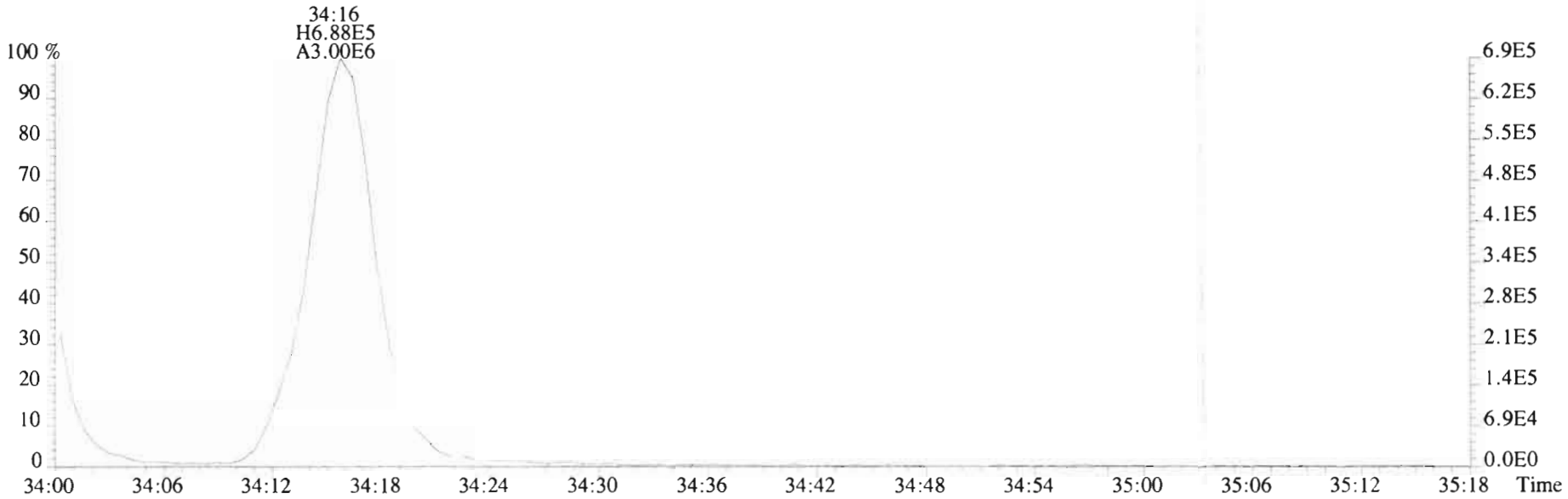
391.8127 S:7 F:3 BSUB(10000,15,-3.0)



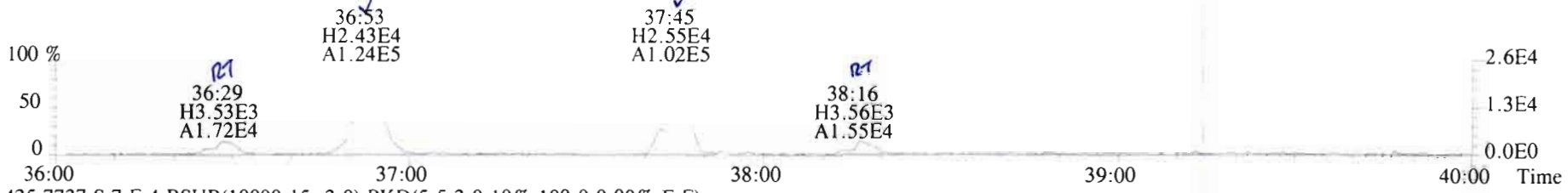
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



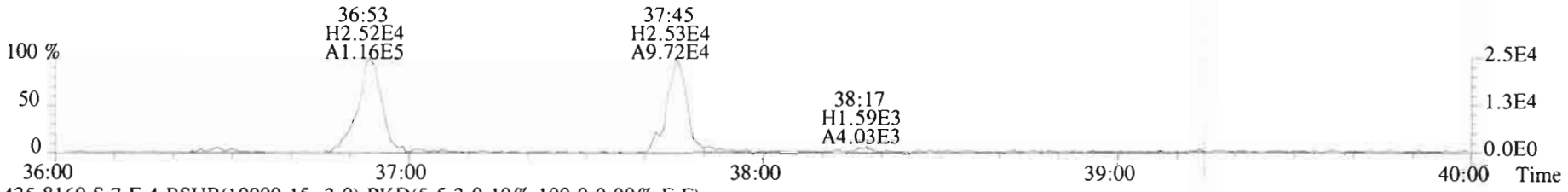
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



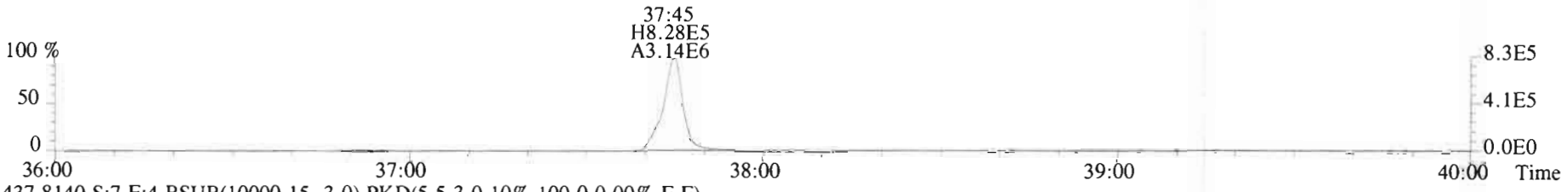
File:200109D2 #1-356 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



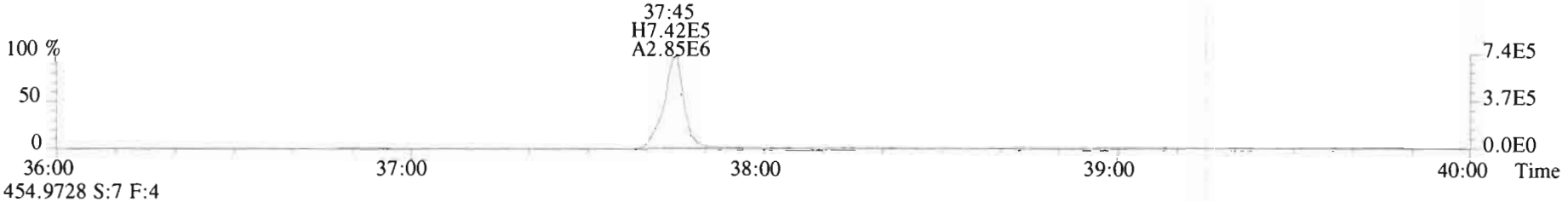
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



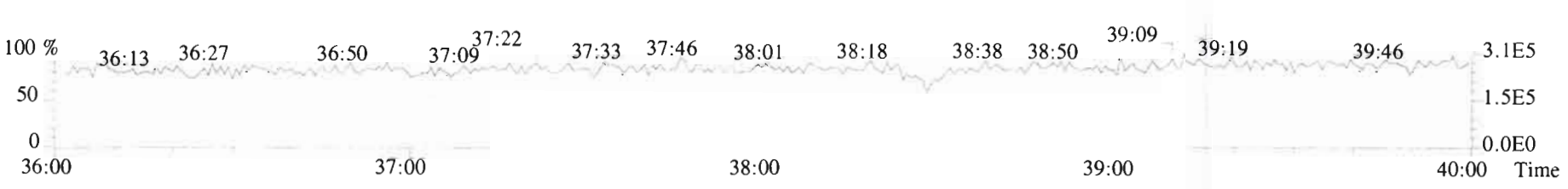
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



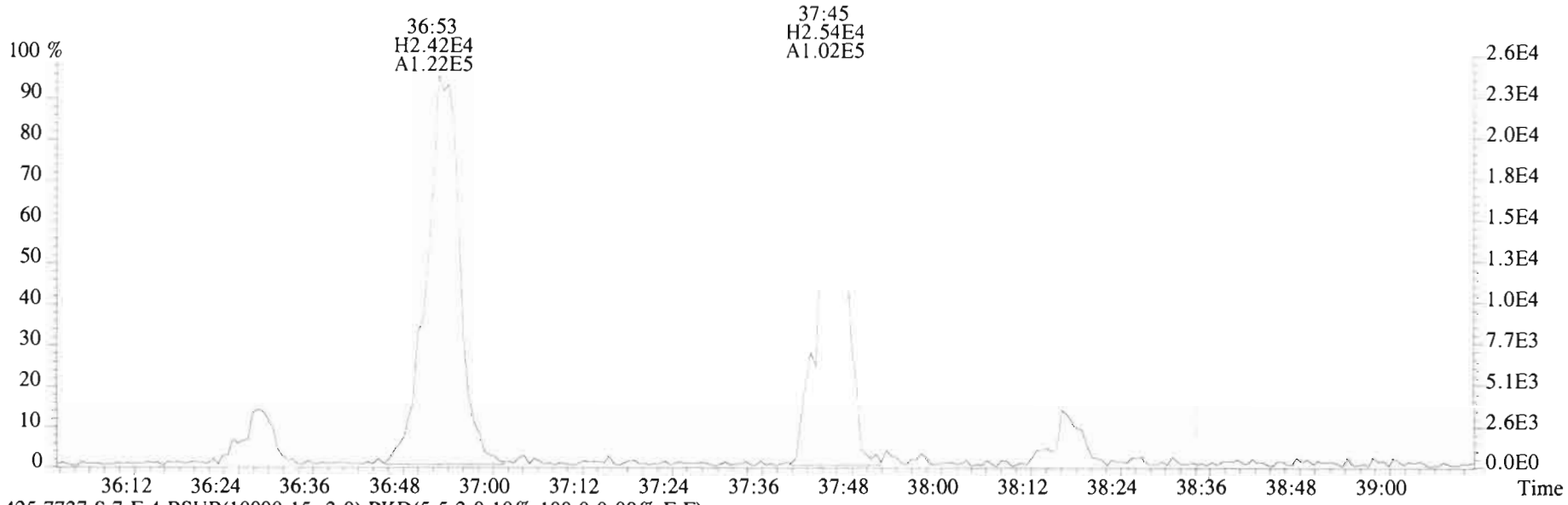
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



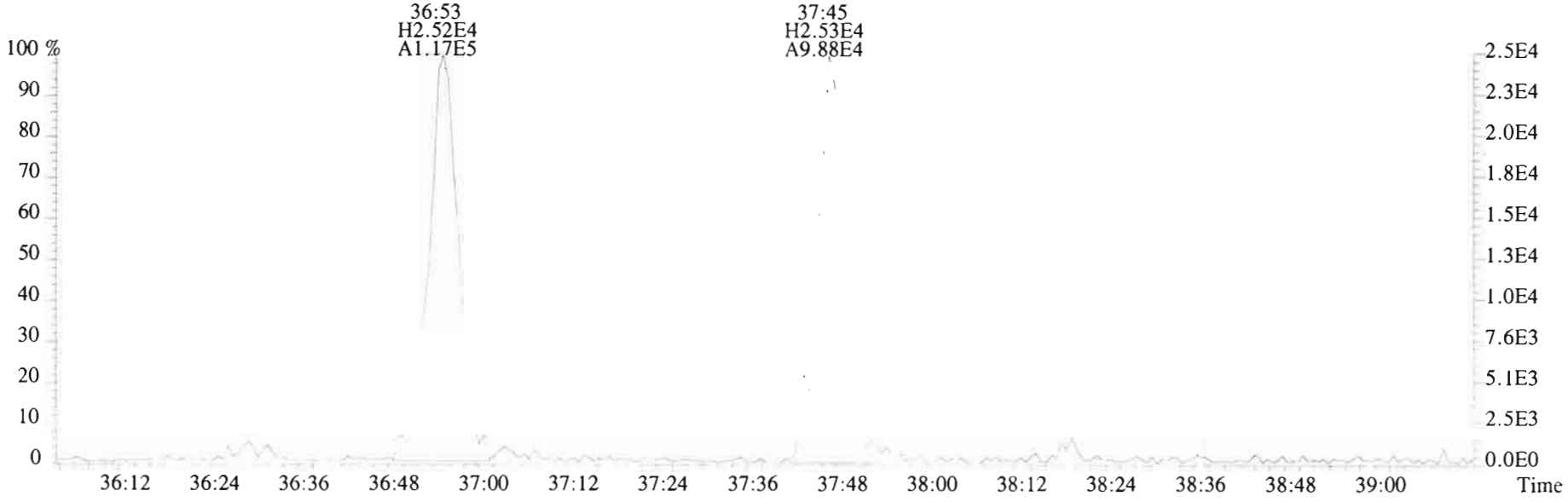
454.9728 S:7 F:4



File:200109D2 #1-356 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

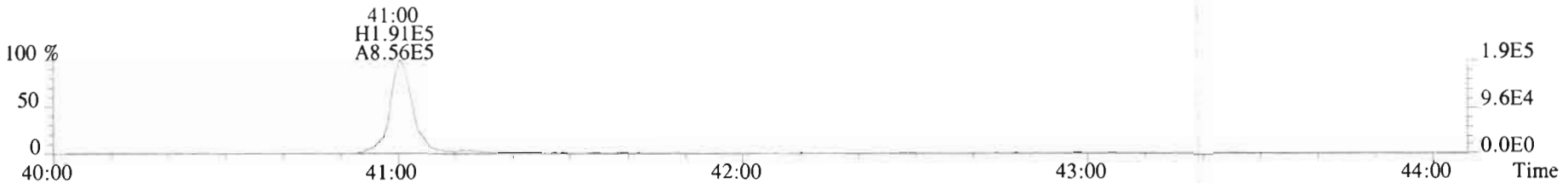


425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

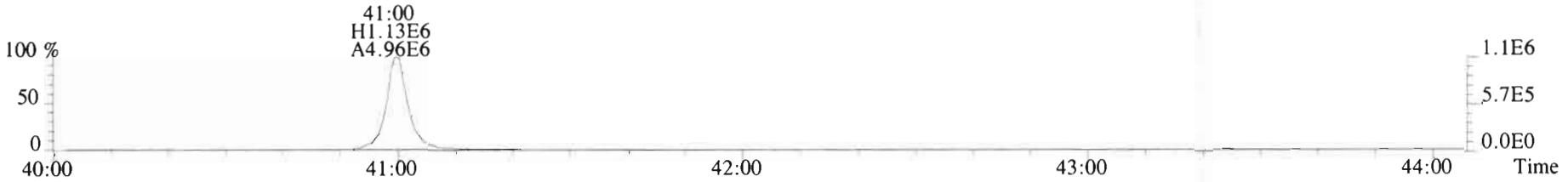


File:200109D2 #1-432 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

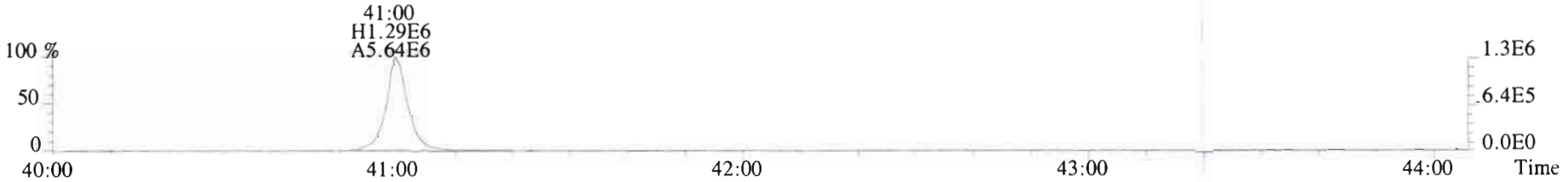
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



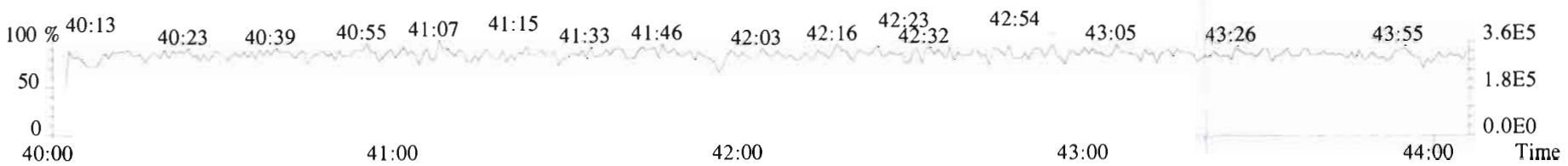
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



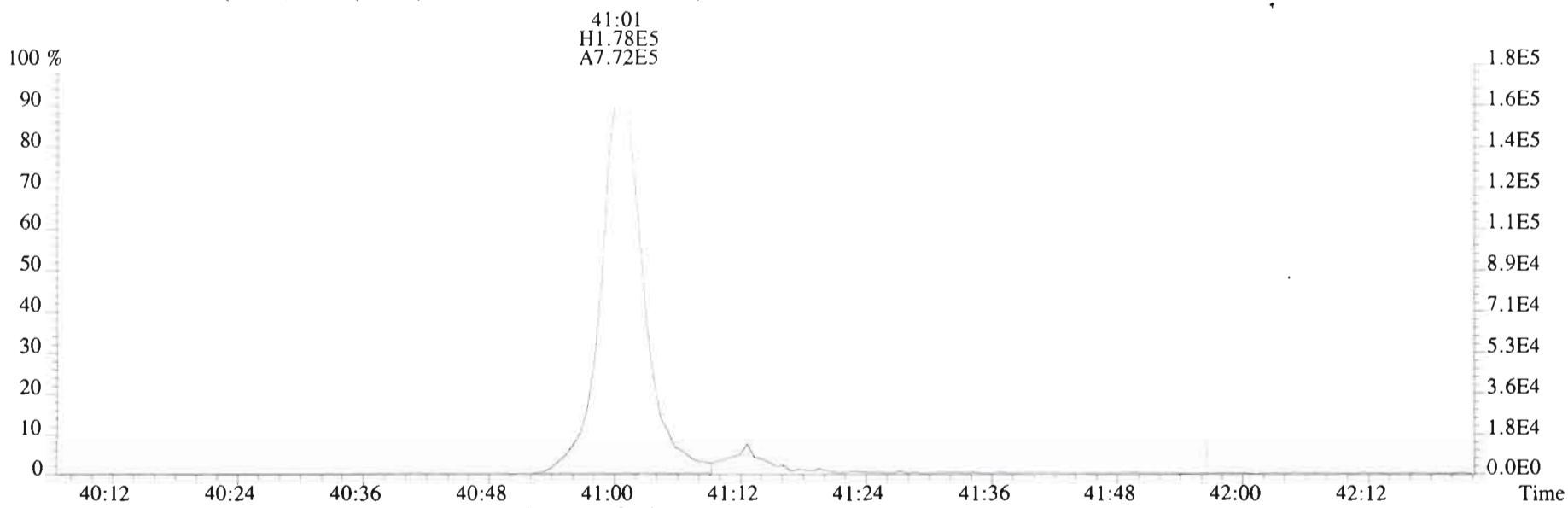
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



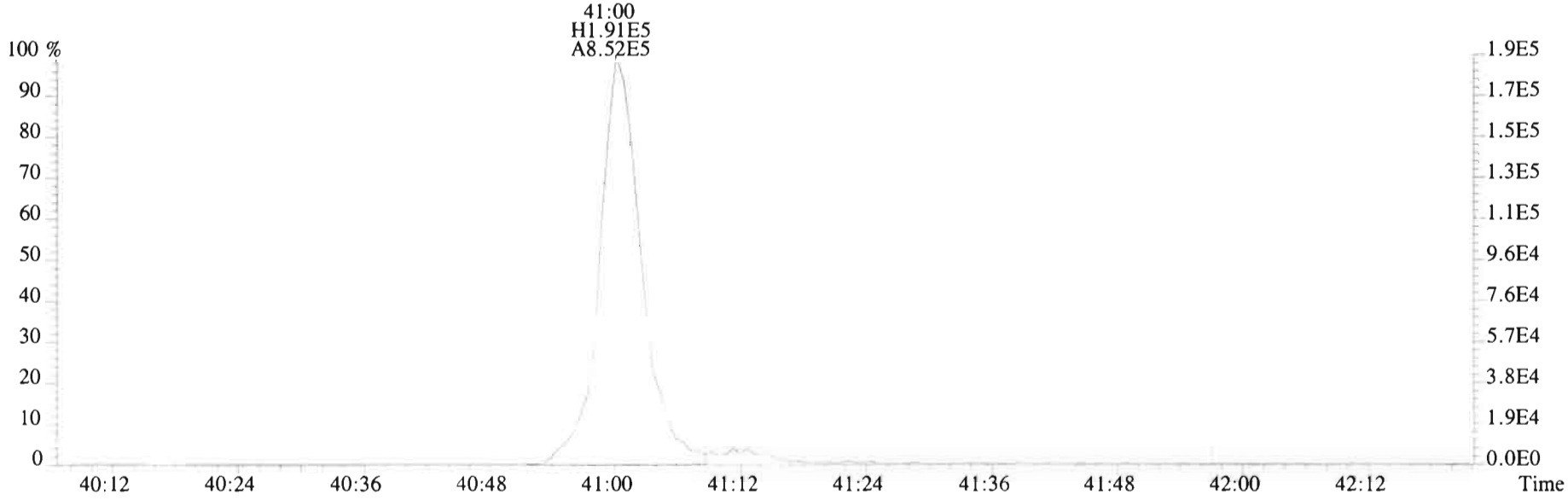
454.9728 S:7 F:5



File:200109D2 #1-432 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

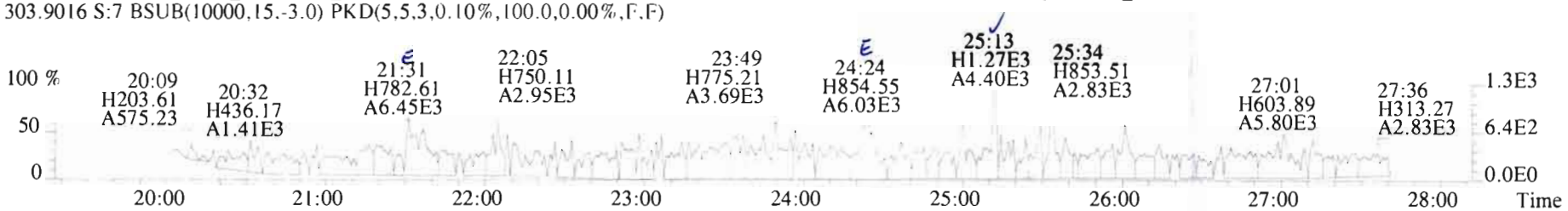


459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

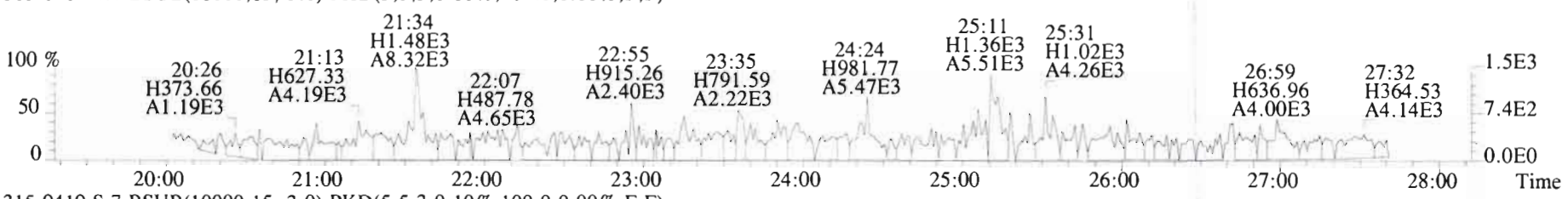


File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5

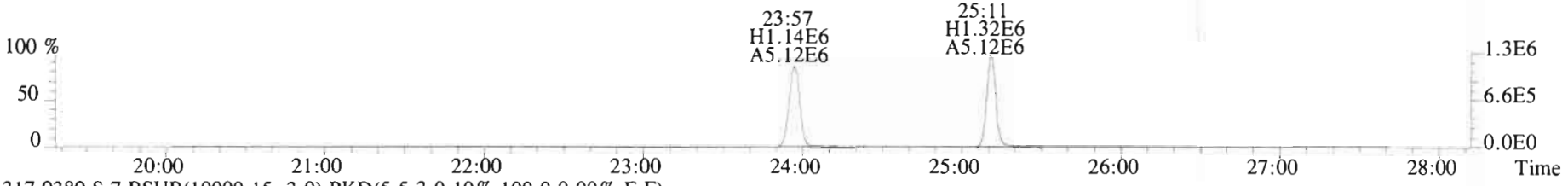
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



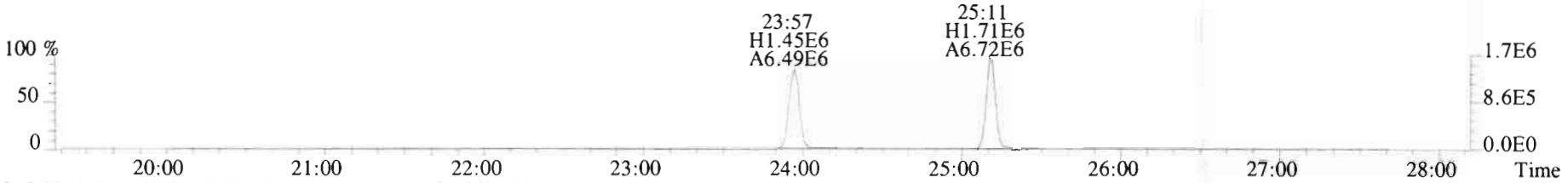
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



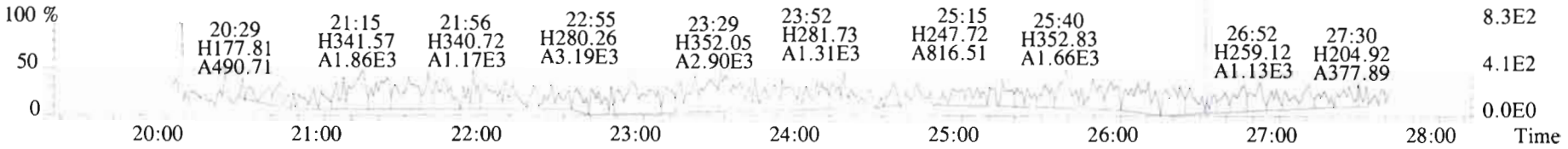
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



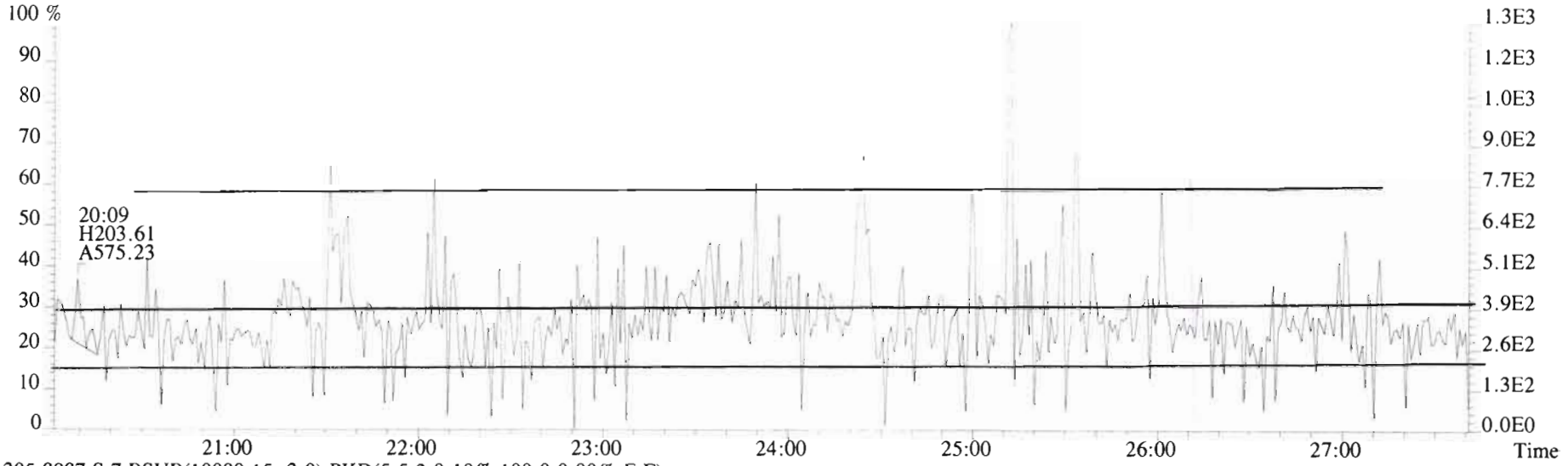
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



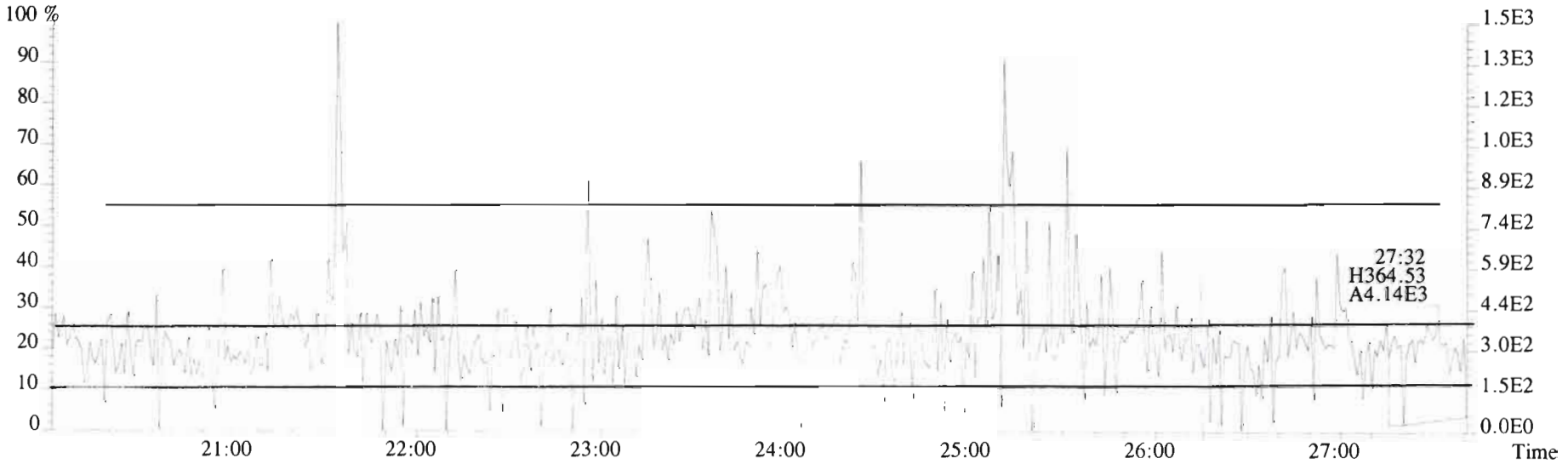
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



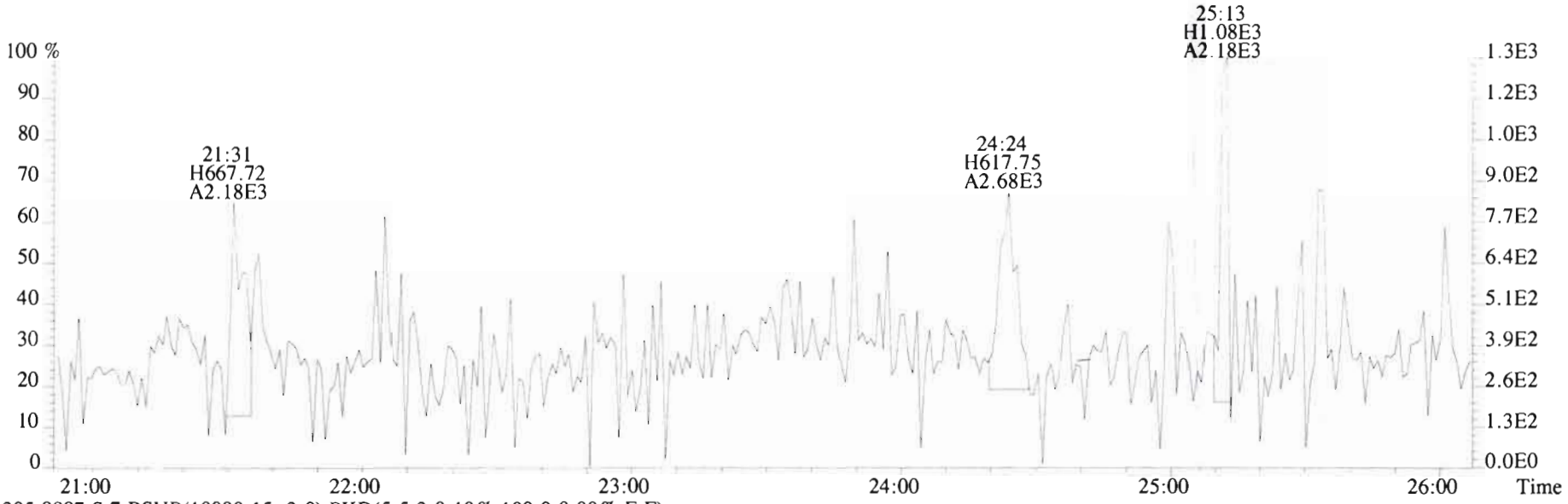
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



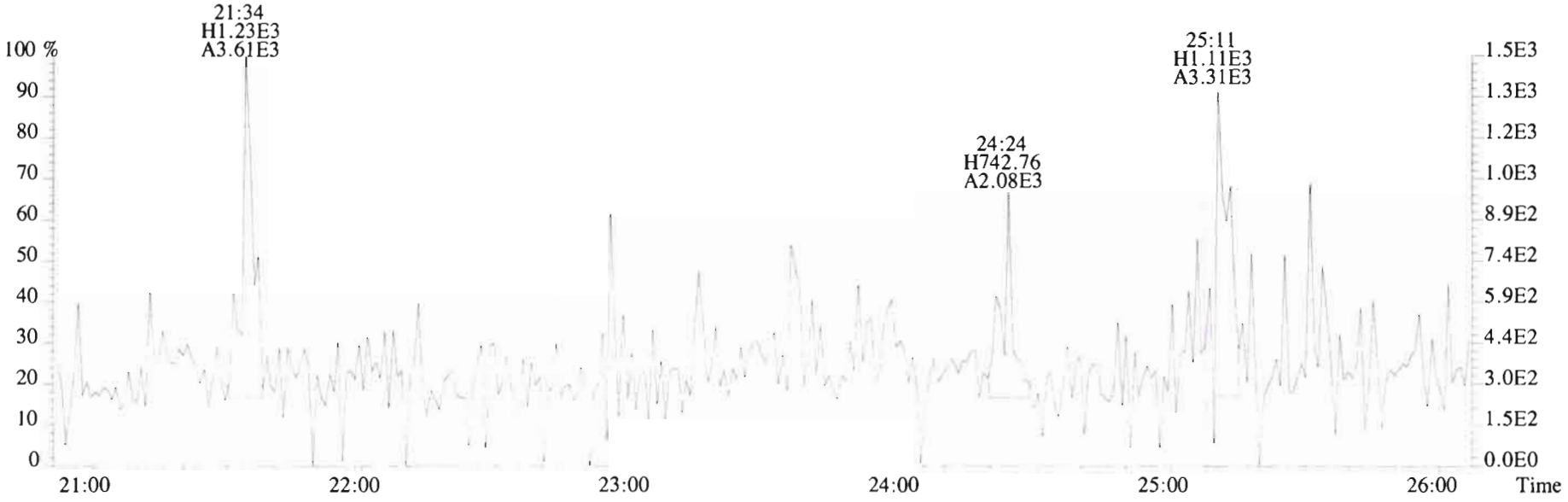
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



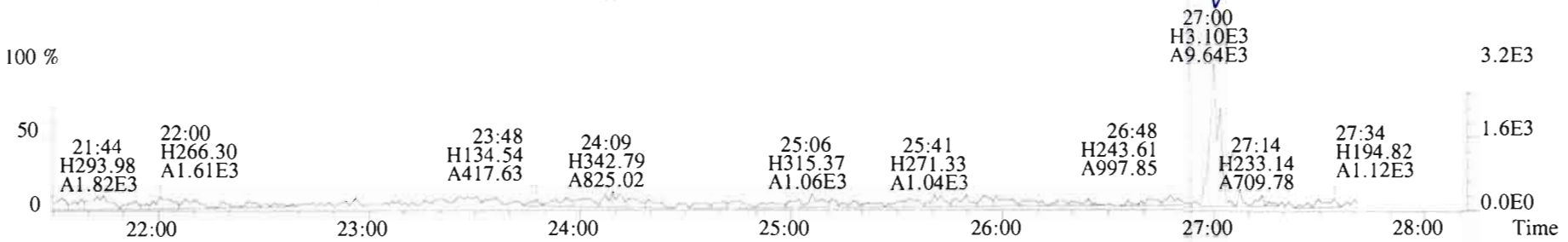
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



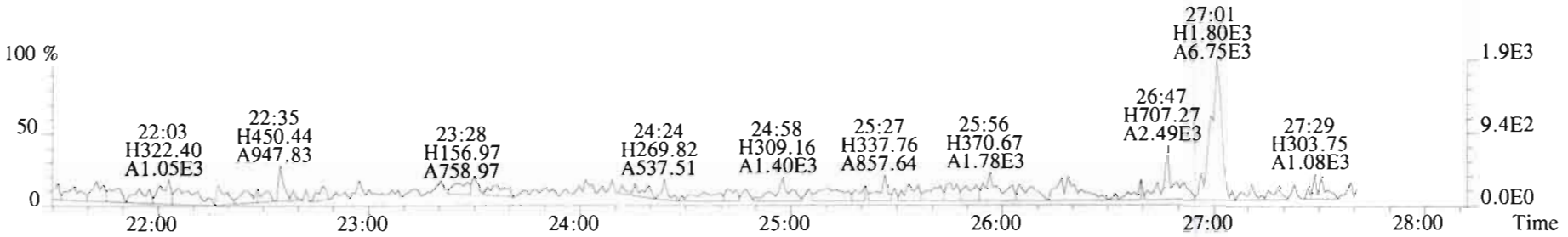
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



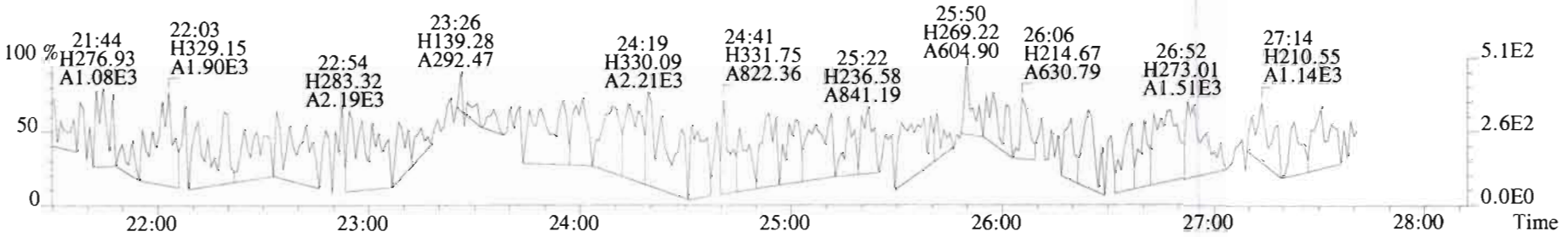
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



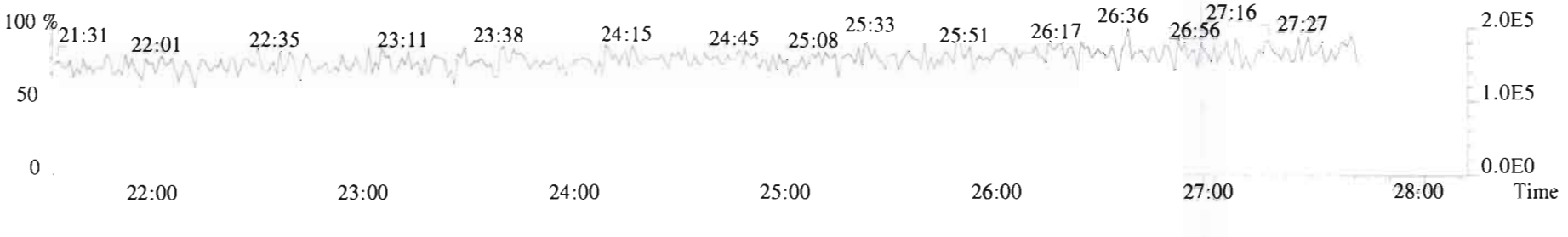
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



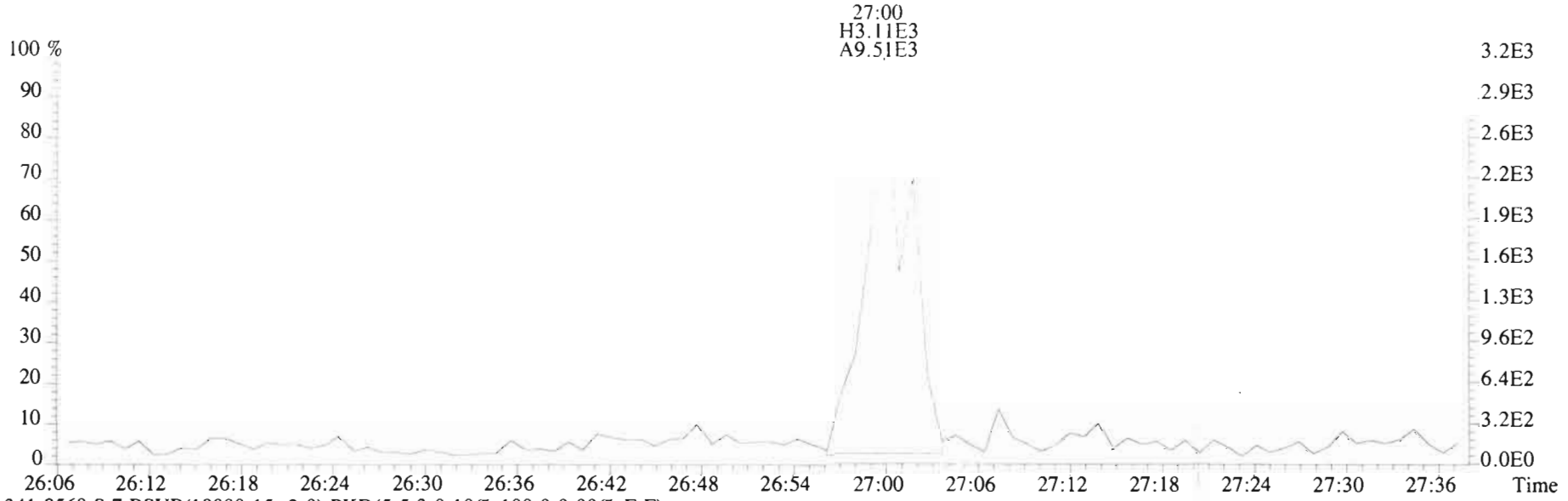
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



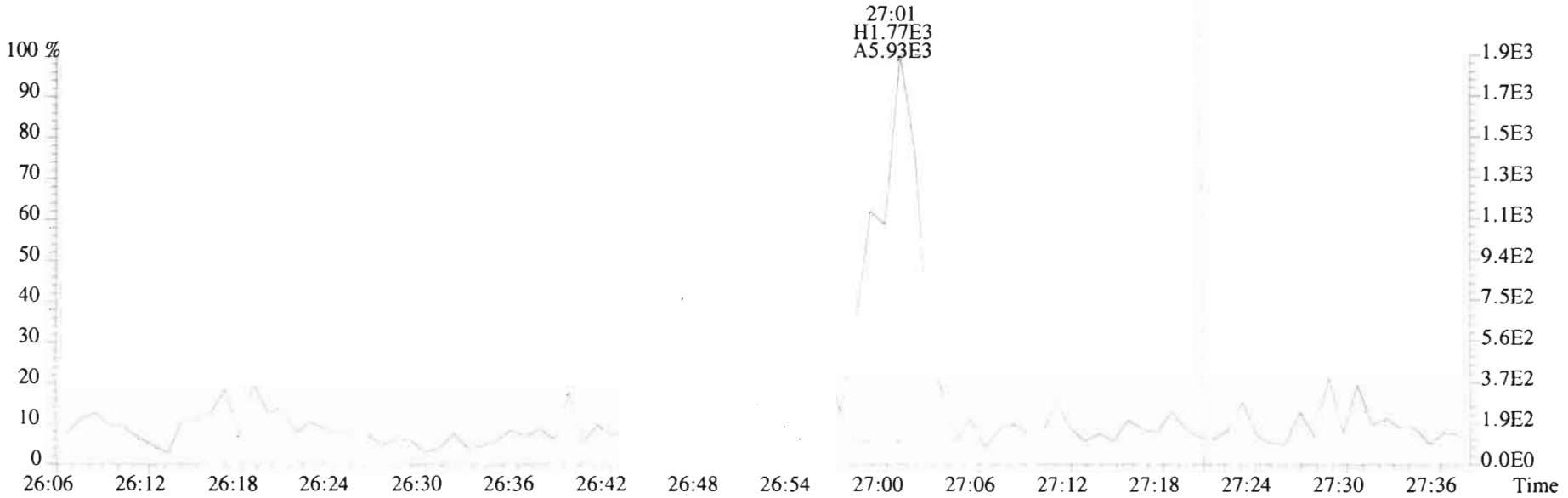
316.9824 S:7



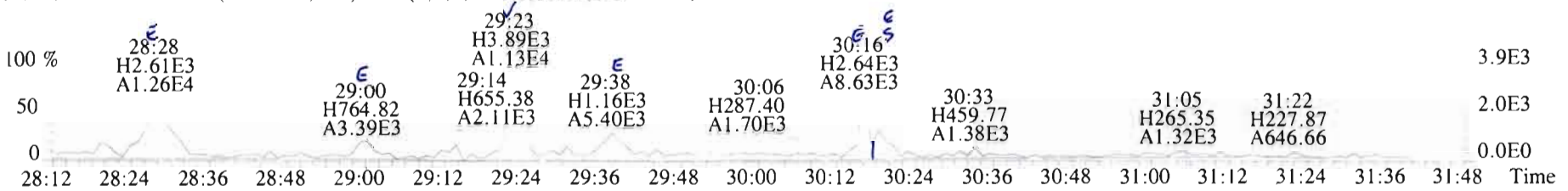
File:200109D2 #1-493 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



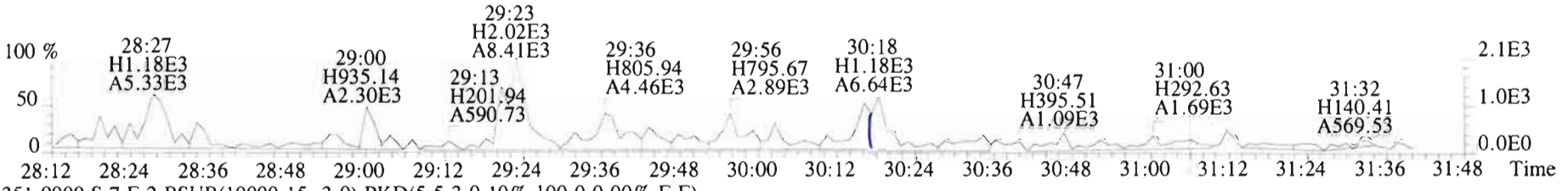
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



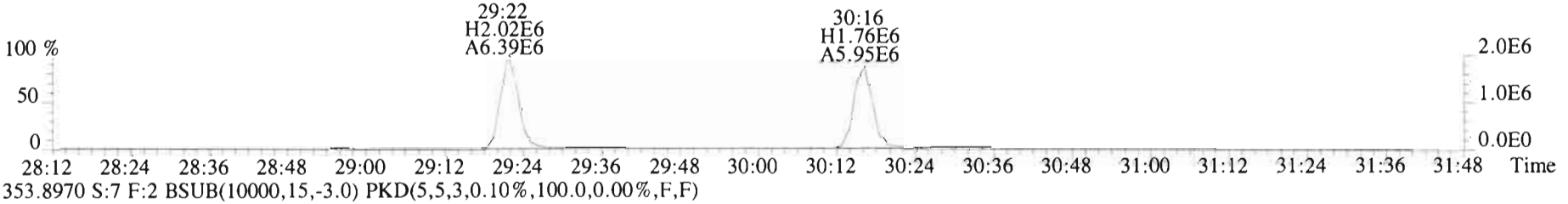
File:200109D2 #1-210 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



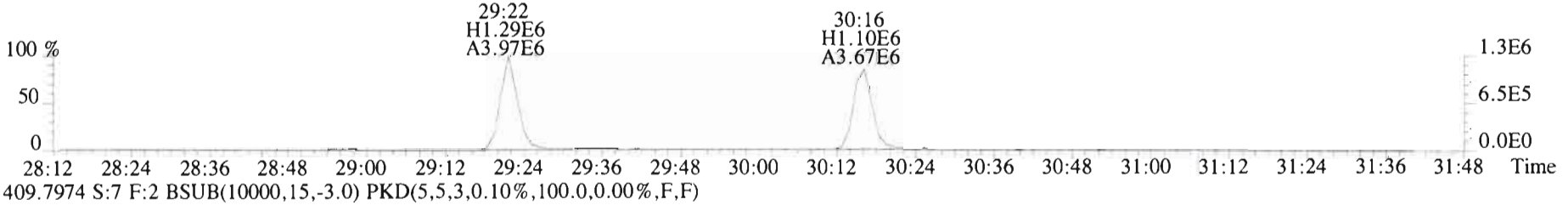
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



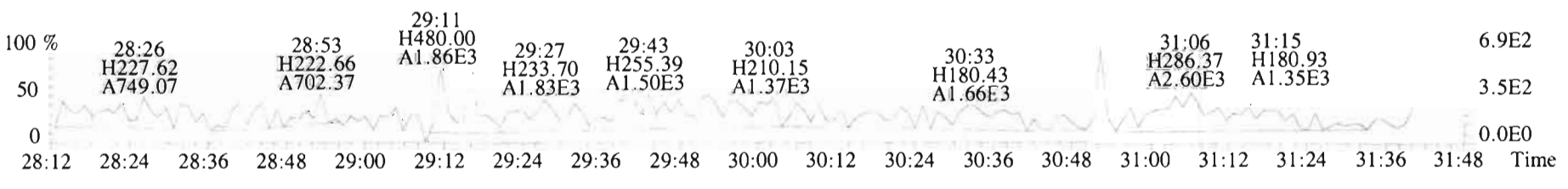
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



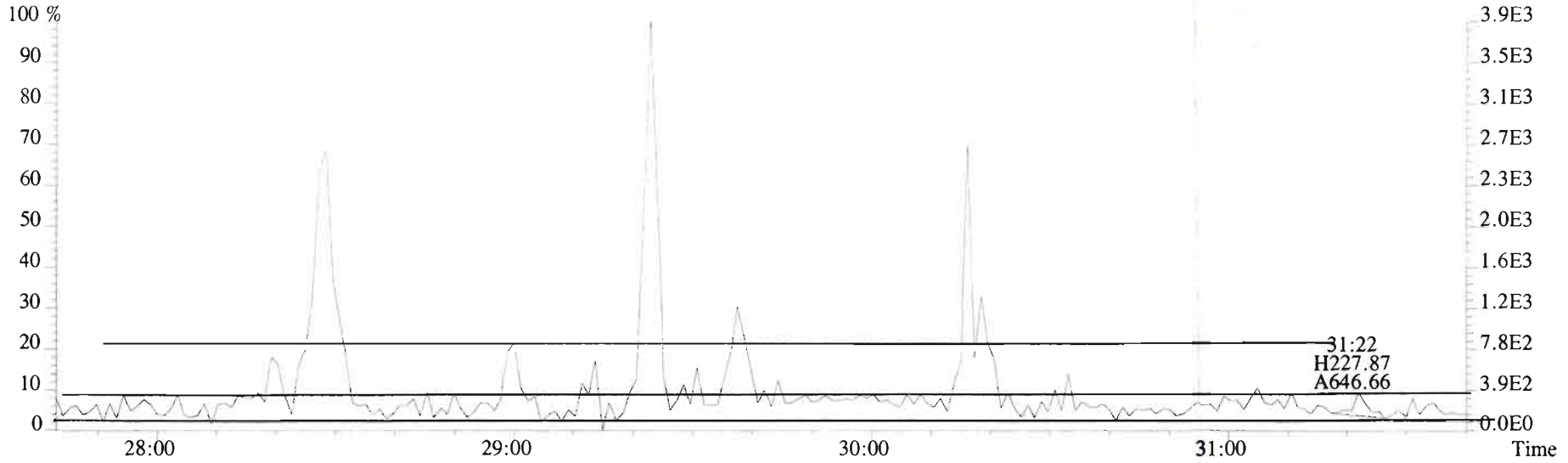
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



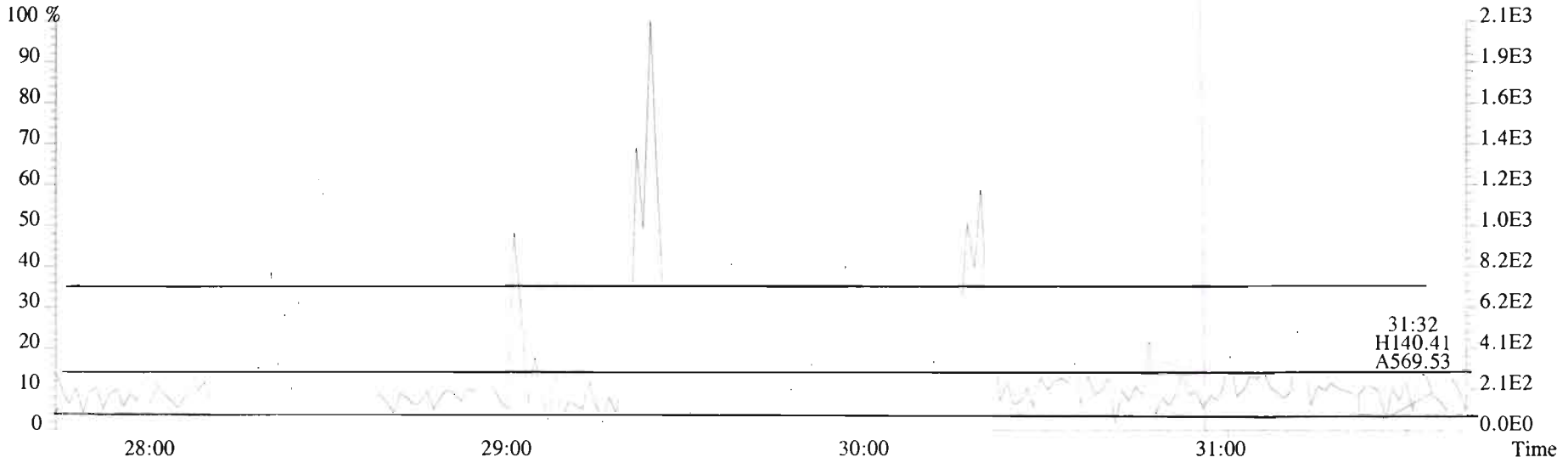
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



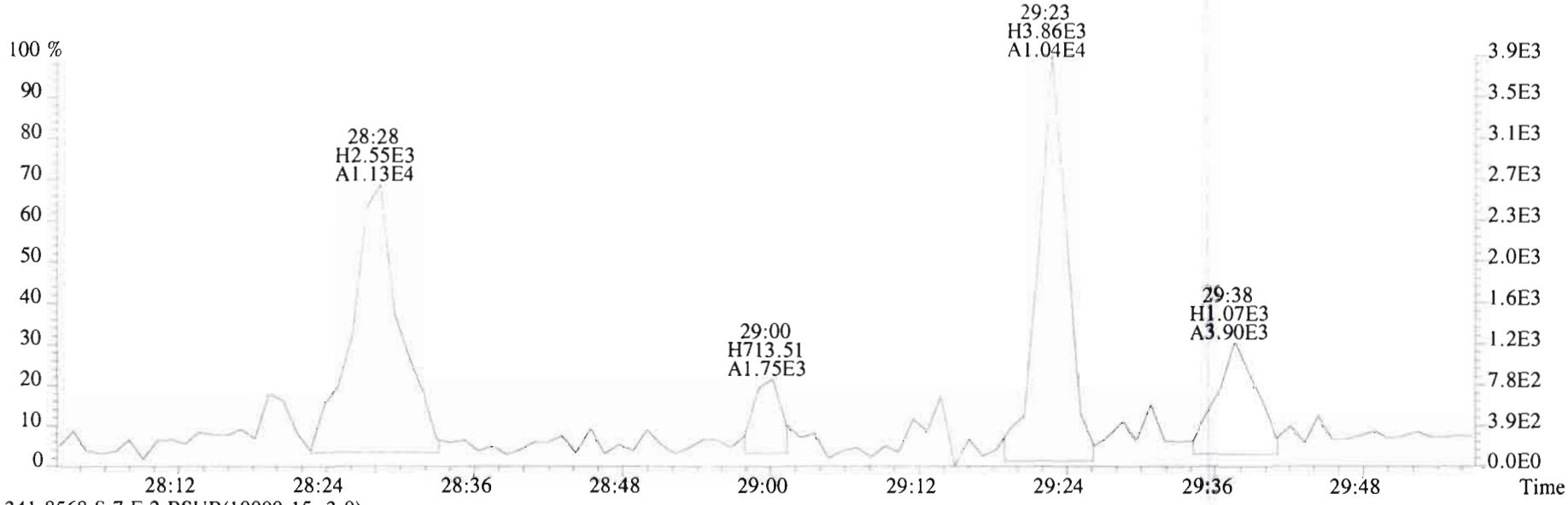
File:200109D2 #1-210 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



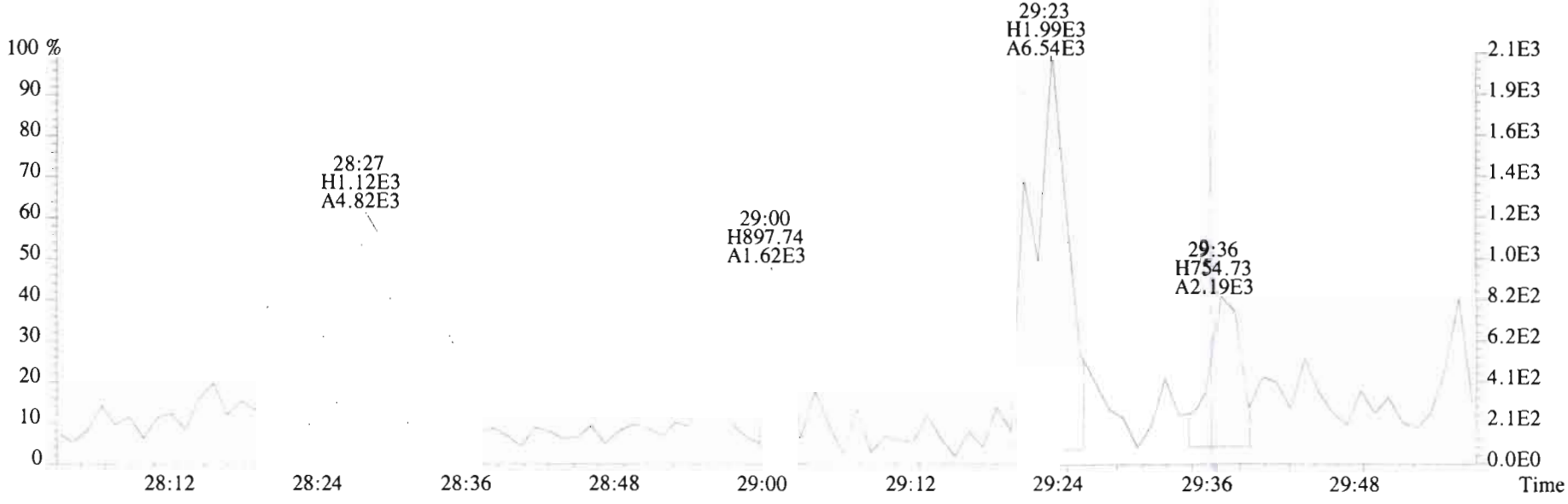
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



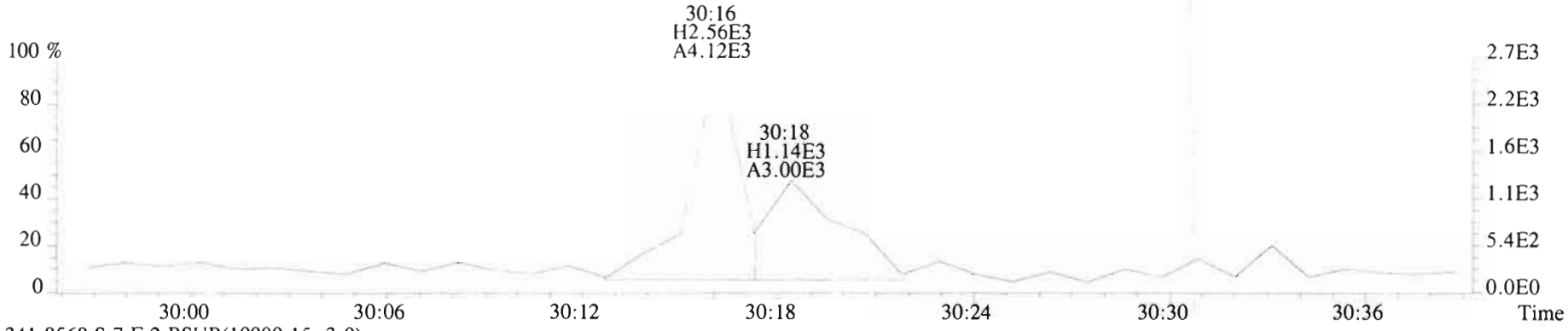
File:200109D2 #1-210 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



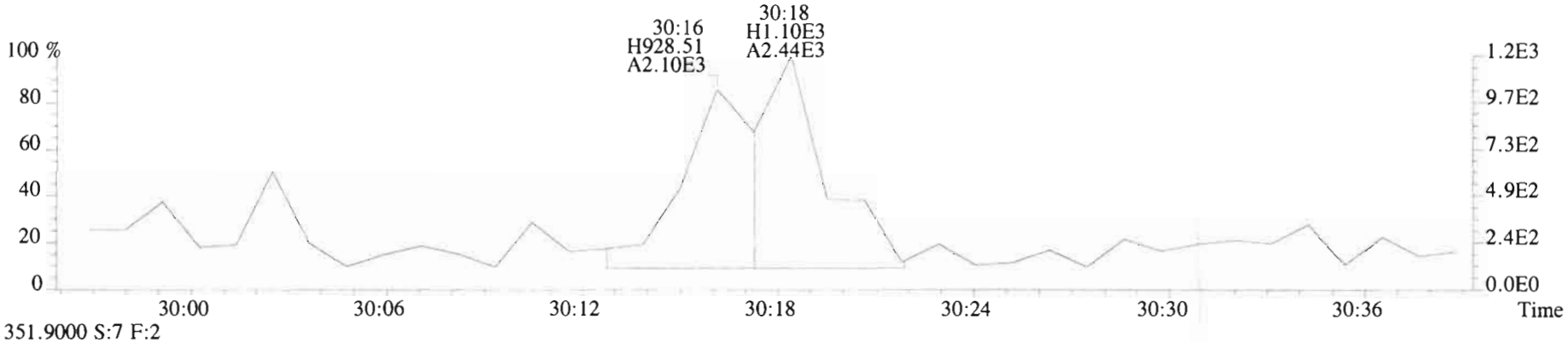
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



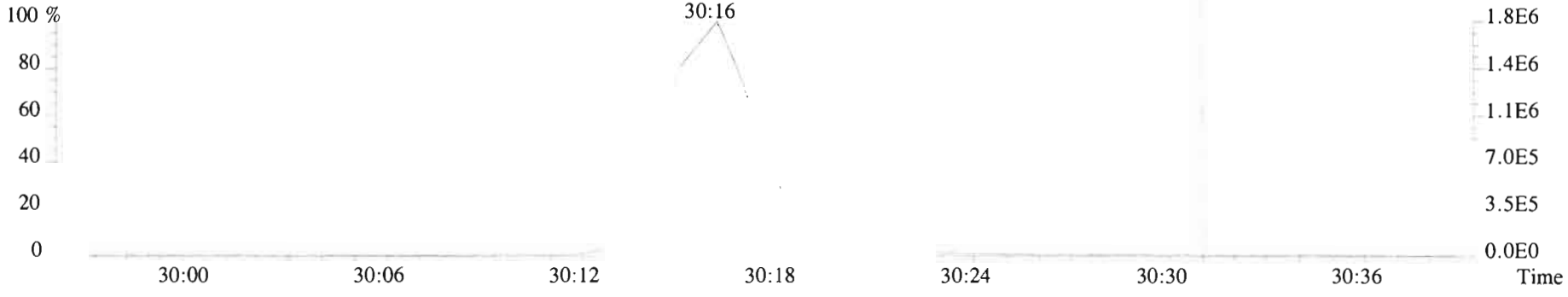
File:200109D2 #1-210 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



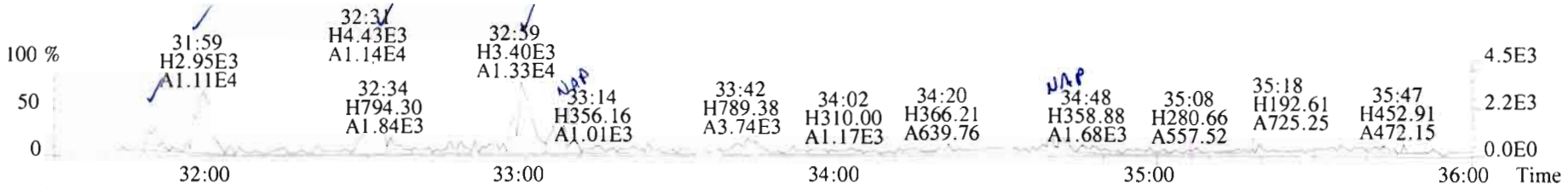
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



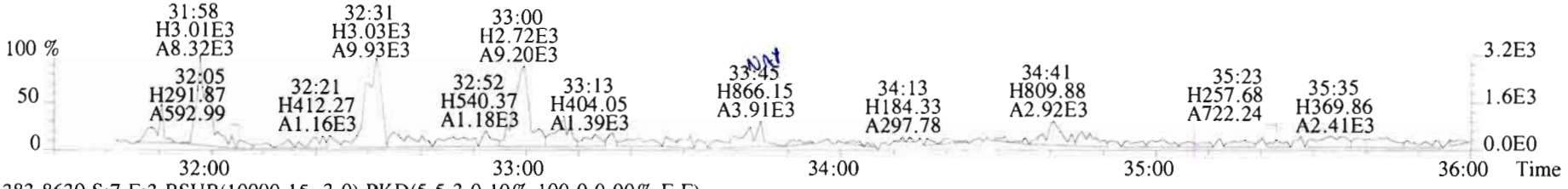
351.9000 S:7 F:2



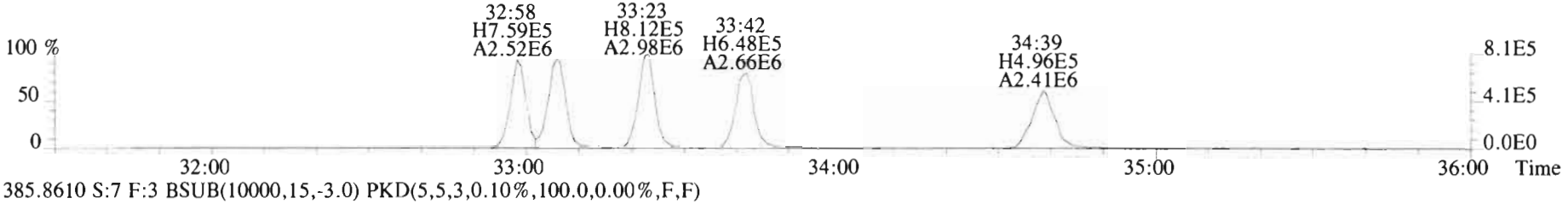
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



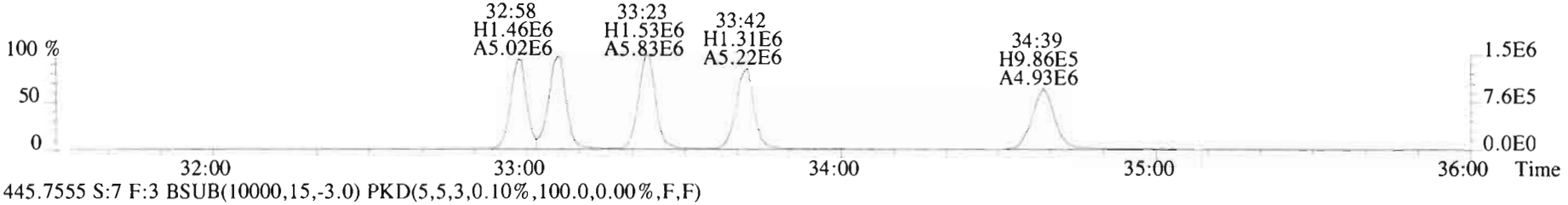
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



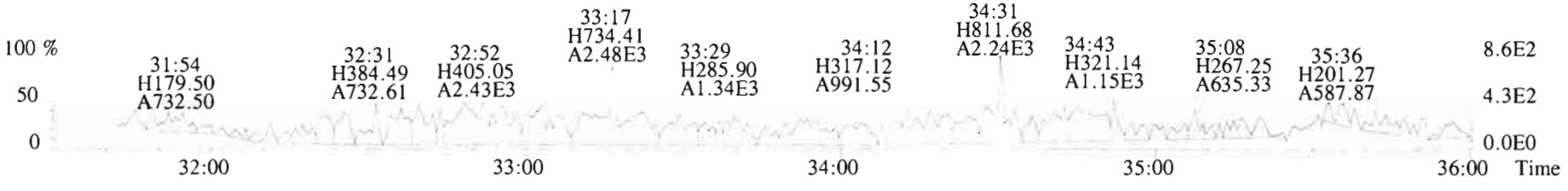
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



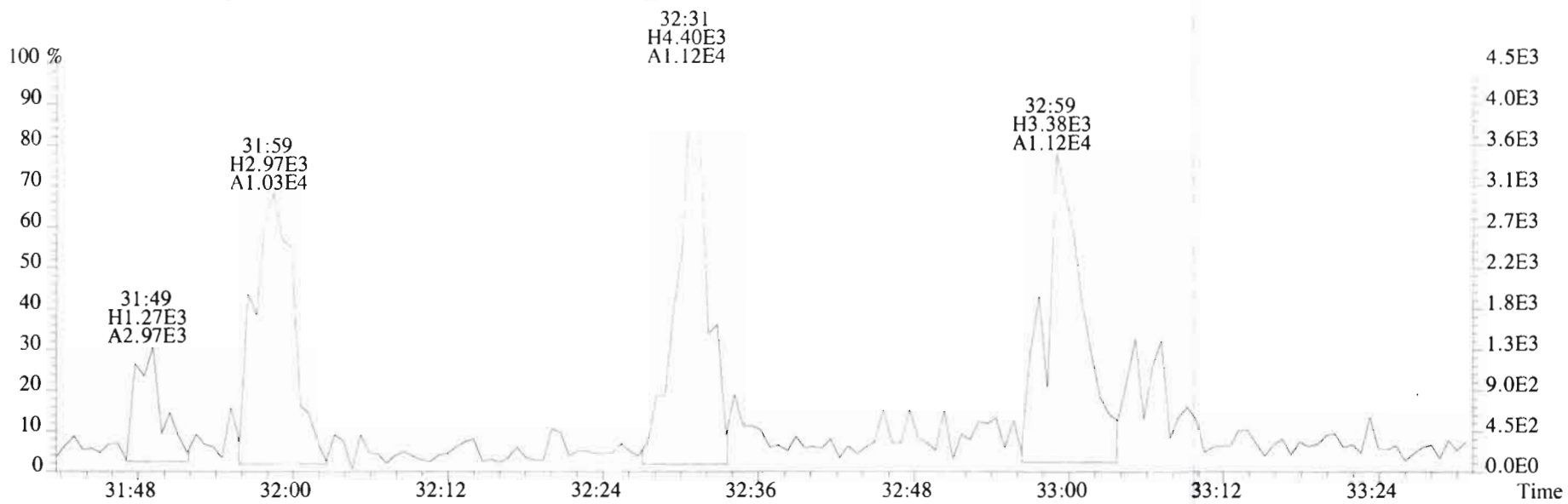
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



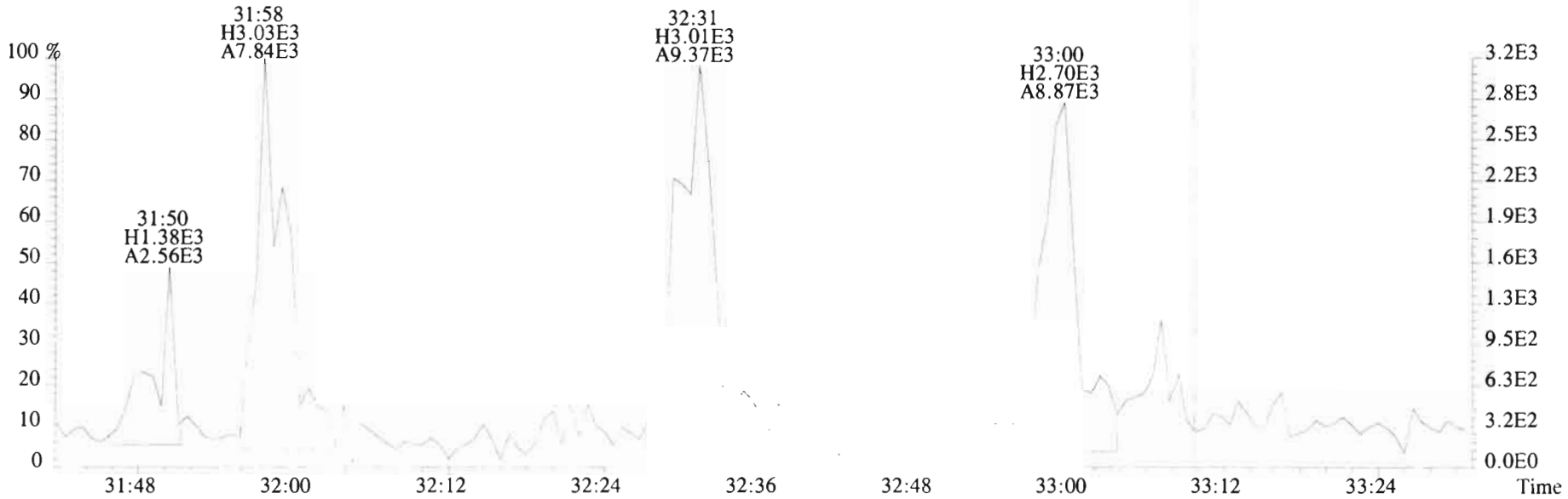
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



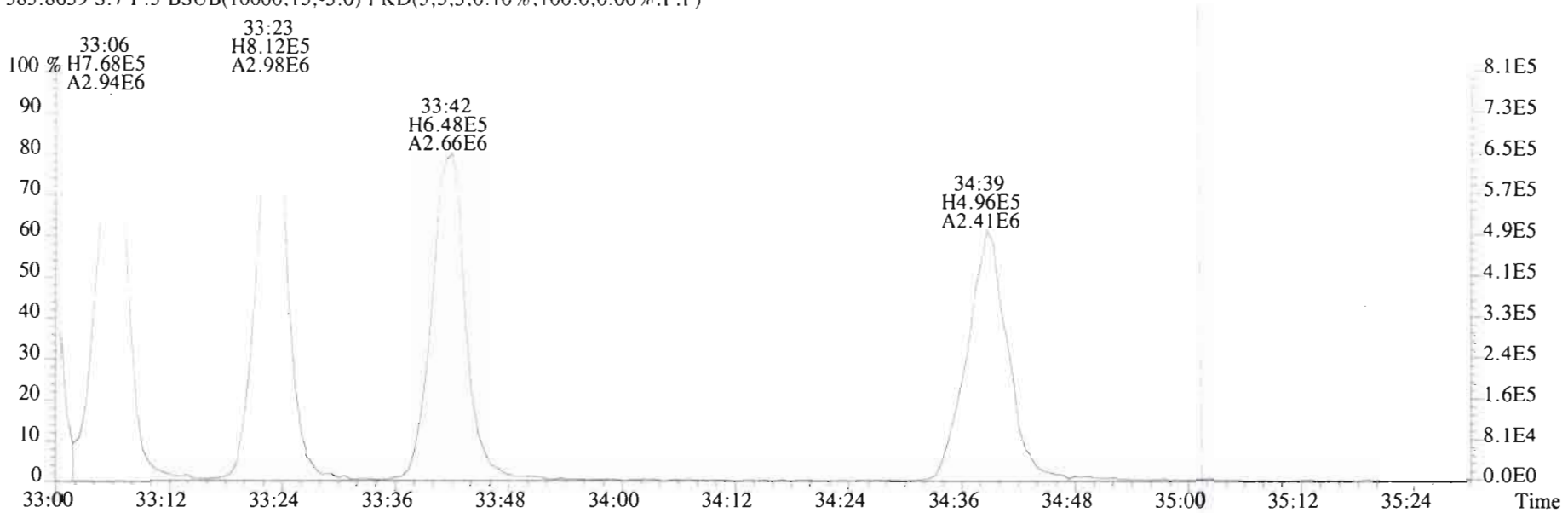
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



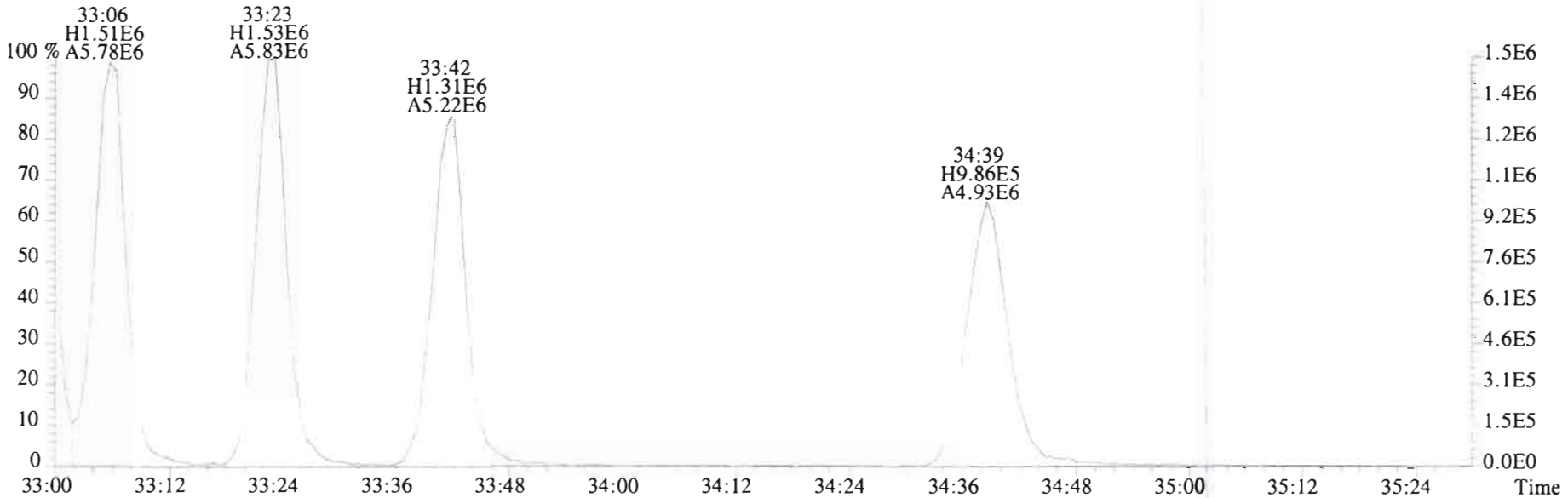
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



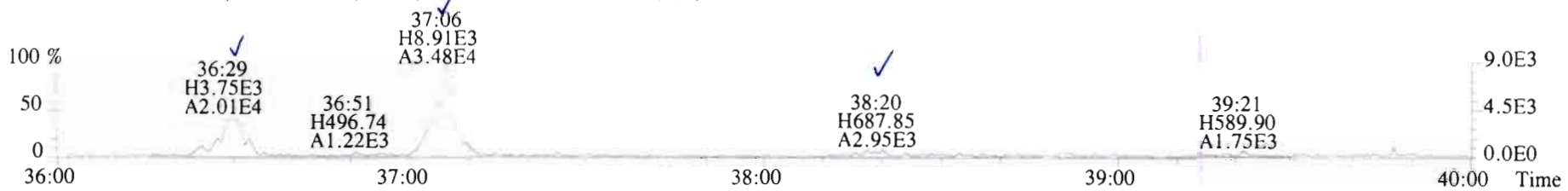
File:200109D2 #1-385 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



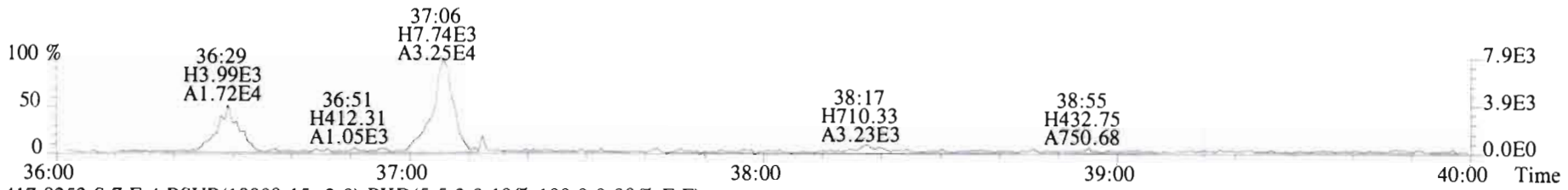
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



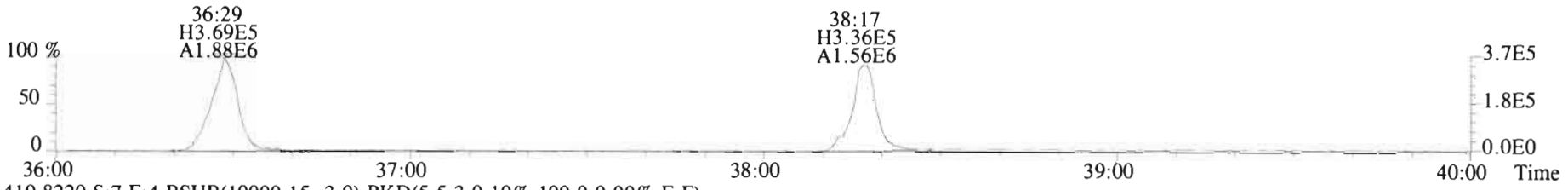
File:200109D2 #1-356 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



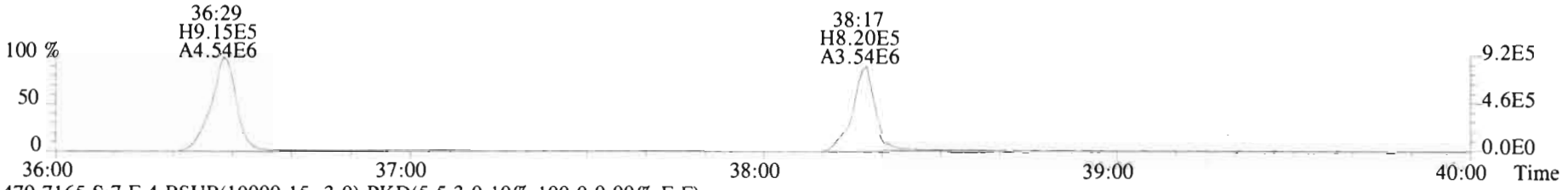
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

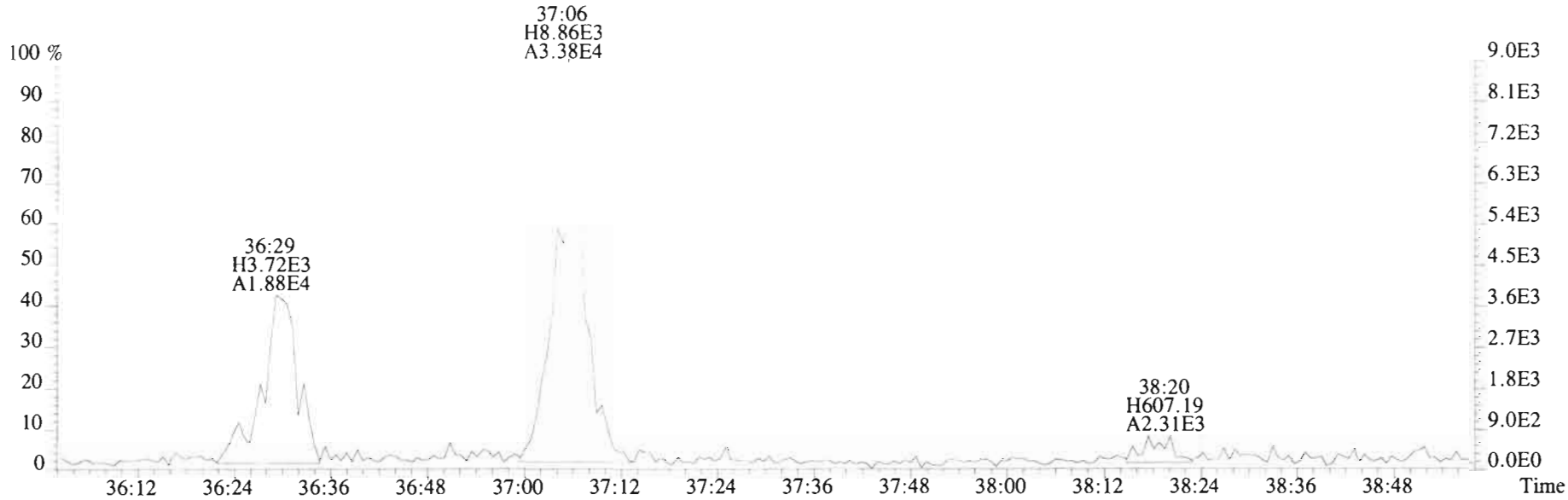


419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

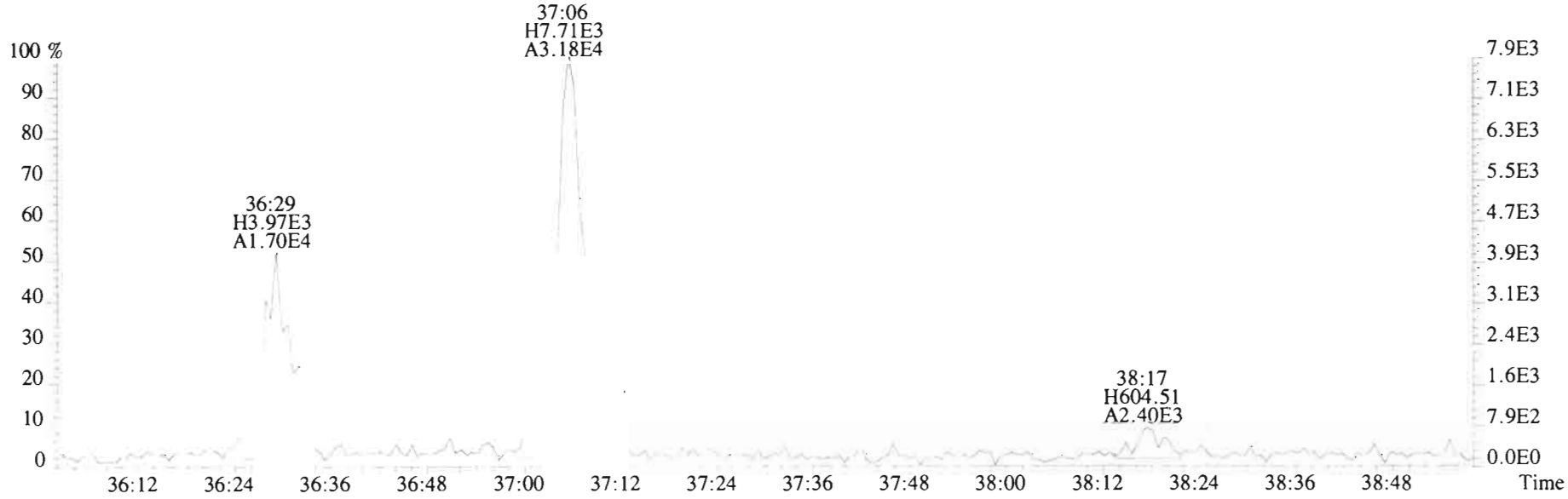


479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

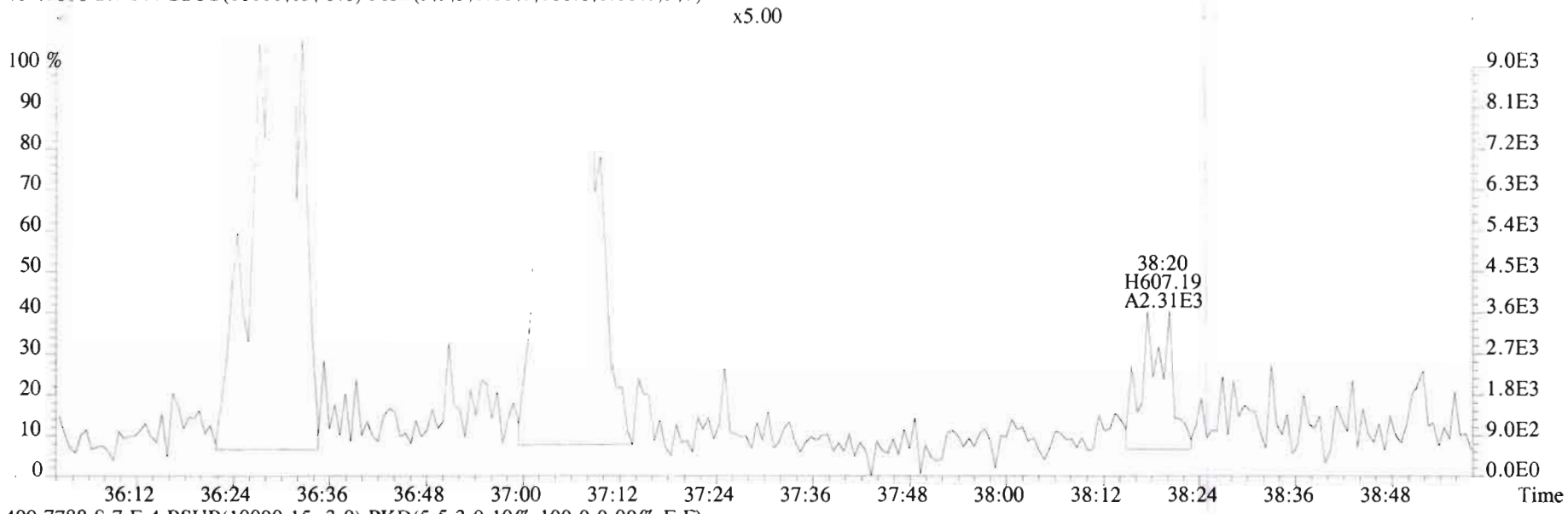
File:200109D2 #1-356 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



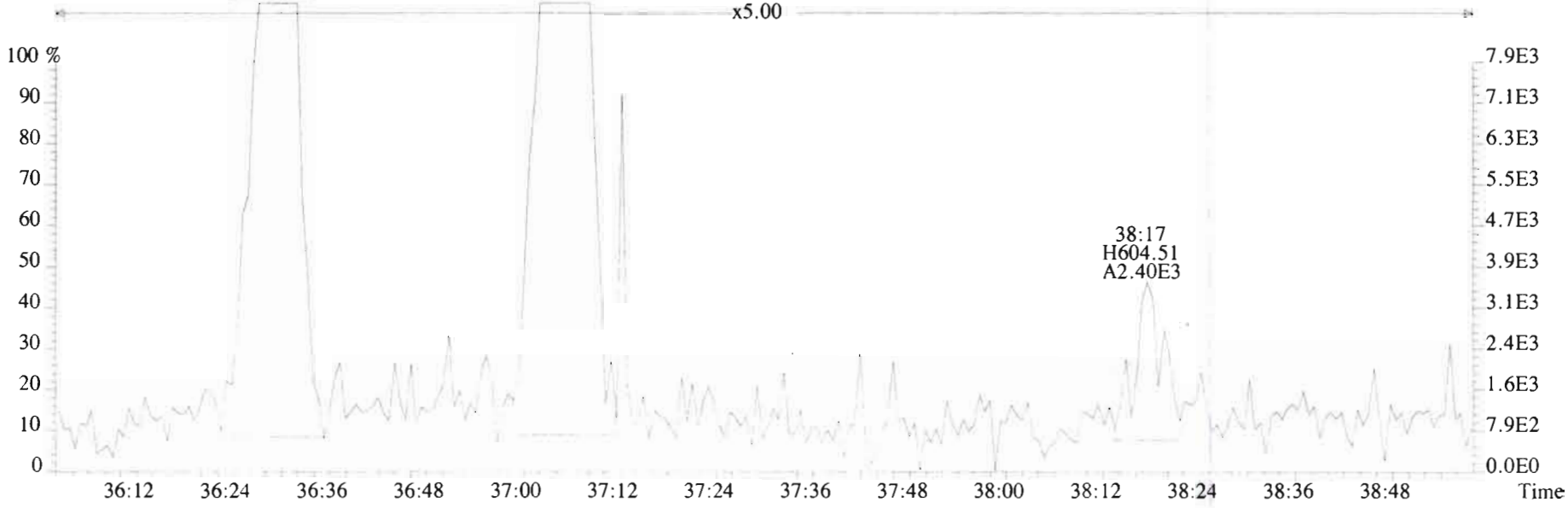
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:200109D2 #1-356 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



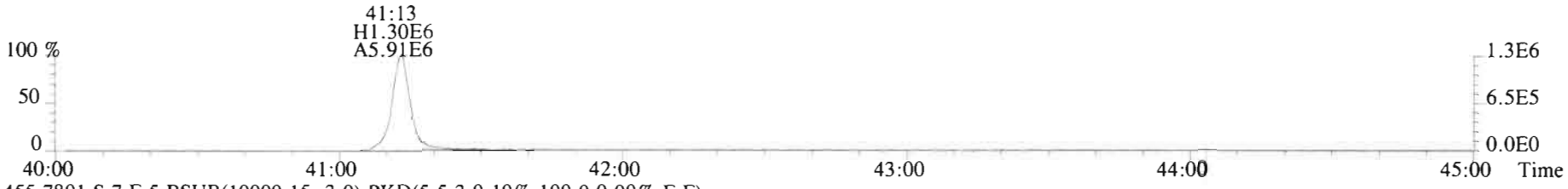
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



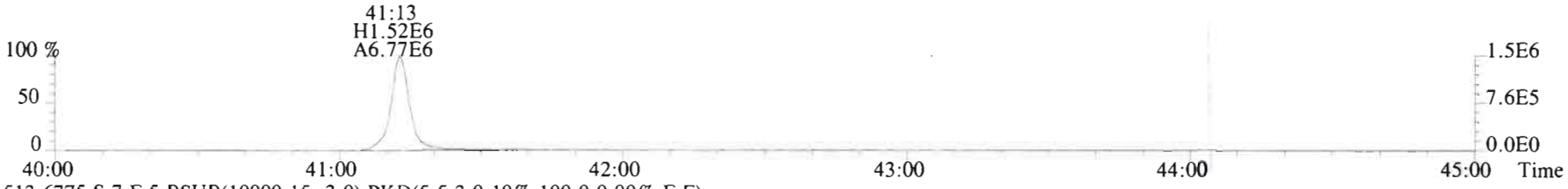
File:200109D2 #1-432 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

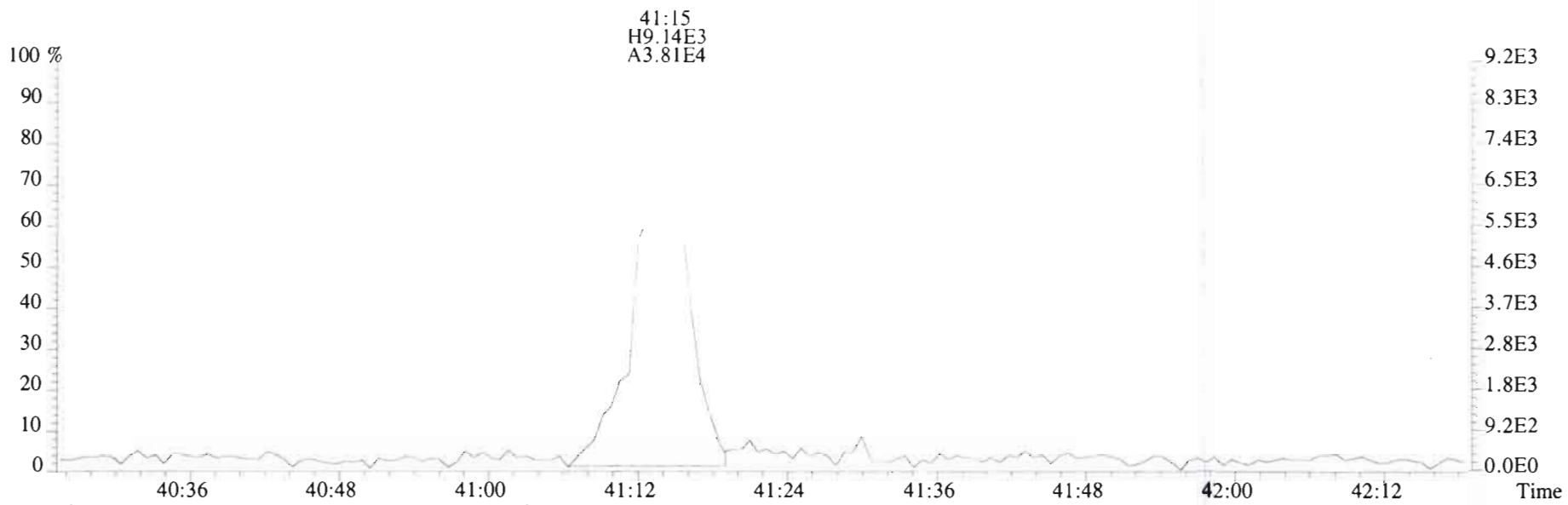


455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

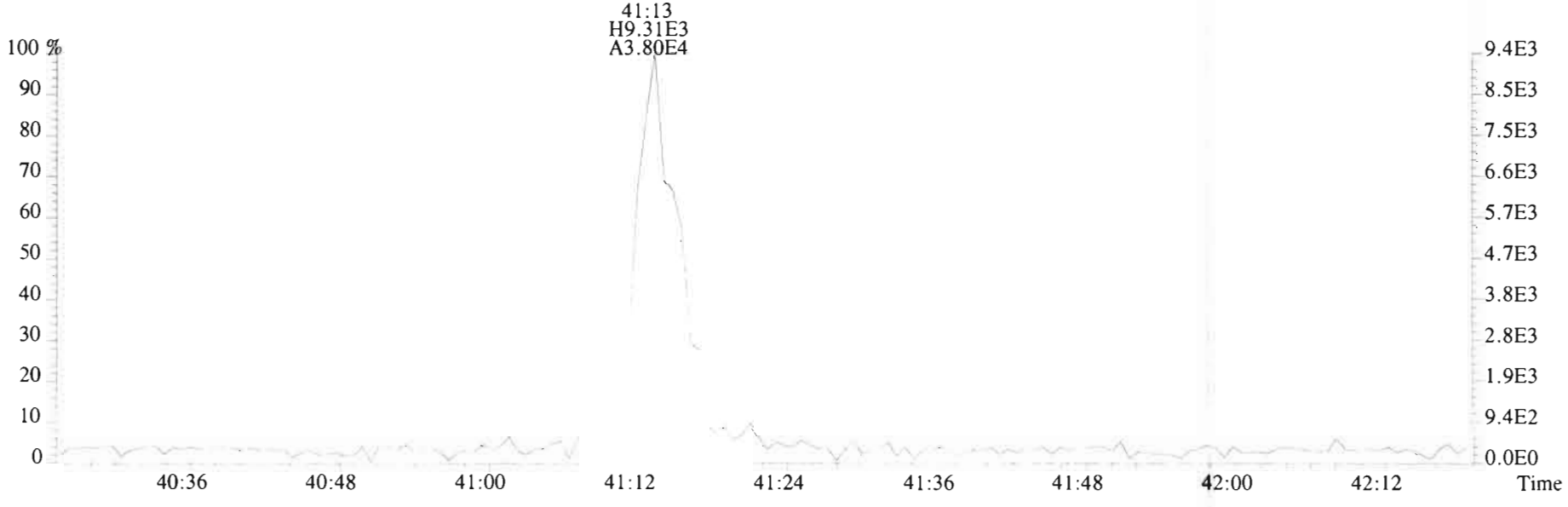


513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

File:200109D2 #1-432 Acq:10-JAN-2020 03:30:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-06RE1 PDI-144RAB-10-20-191113 10.76 Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_14.qld
Last Altered: Tuesday, December 17, 2019 14:23:55 Pacific Standard Time
Printed: Tuesday, December 17, 2019 14:25:14 Pacific Standard Time

EL 12/17/19

CT 12/26/19

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:07:51

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
1	1	2,3,7,8-TCDD		8.92e4	10.0202	0.905			1.001		26.05					0.240
2	2	1,2,3,7,8-PeCDD		7.80e4	10.0202	0.903			1.001		30.60					0.314
3	3	1,2,3,4,7,8-HxCDD		7.18e4	10.0202	1.101			1.000		33.89					0.823
4	4	1,2,3,6,7,8-HxCDD		8.11e4	10.0202	0.939			1.000		33.98					0.886
5	5	1,2,3,7,8,9-HxCDD	1.88e2	8.37e4	10.0202	0.961	0.921	YES	1.001	1.003	34.32	34.37	0.46675		0.404	0.872
6	6	1,2,3,4,6,7,8-HpCDD	2.78e3	7.69e4	10.0202	0.979	1.061	NO	1.000	1.001	37.75	37.76	7.3681		7.37	0.524
7	7	OCDD	1.90e4	1.40e5	10.0202	0.959	0.902	NO	1.000	1.000	40.99	41.00	56.386		56.4	0.496
8	8	2,3,7,8-TCDF		1.25e5	10.0202	0.950			1.001		25.27					0.251
9	9	1,2,3,7,8-PeCDF		1.19e5	10.0202	0.960			1.001		29.41					0.222
10	10	2,3,4,7,8-PeCDF		1.15e5	10.0202	1.015			1.001		30.33					0.213
11	11	1,2,3,4,7,8-HxCDF		9.42e4	10.0202	1.177			1.000		32.99					0.526
12	12	1,2,3,6,7,8-HxCDF		1.07e5	10.0202	1.069			1.000		33.13					0.512
13	13	2,3,4,6,7,8-HxCDF		9.85e4	10.0202	1.114			1.001		33.74					0.567
14	14	1,2,3,7,8,9-HxCDF		9.23e4	10.0202	1.062			1.000		34.65					0.751
15	15	1,2,3,4,6,7,8-HpCDF	3.35e2	8.47e4	10.0202	1.128	0.935	NO	1.001	1.001	36.52	36.51	0.70039		0.700	0.285
16	16	1,2,3,4,7,8,9-HpCDF		7.27e4	10.0202	1.280			1.000		38.28					0.260
17	17	OCDF	9.49e2	1.77e5	10.0202	0.947	0.996	NO	1.000	1.001	41.20	41.23	2.2656		2.27	0.335
18	18	13C-2,3,7,8-TCDD	8.92e4	1.51e5	10.0202	1.095	0.768	NO	1.021	1.022	26.00	26.02	107.97	54.1		0.434
19	19	13C-1,2,3,7,8-PeCDD	7.80e4	1.51e5	10.0202	0.881	0.638	NO	1.187	1.201	30.22	30.58	117.36	58.8		0.257
20	20	13C-1,2,3,4,7,8-Hx...	7.18e4	1.83e5	10.0202	0.642	1.281	NO	1.014	1.014	33.86	33.88	121.97	61.1		0.820
21	21	13C-1,2,3,6,7,8-Hx...	8.11e4	1.83e5	10.0202	0.856	1.257	NO	1.017	1.017	33.98	33.98	103.38	51.8		0.615
22	22	13C-1,2,3,7,8,9-Hx...	8.37e4	1.83e5	10.0202	0.807	1.225	NO	1.026	1.027	34.28	34.28	113.13	56.7		0.653
23	23	13C-1,2,3,4,6,7,8-H...	7.69e4	1.83e5	10.0202	0.654	1.054	NO	1.126	1.130	37.61	37.74	128.26	64.3		0.944
24	24	13C-OCDD	1.40e5	1.83e5	10.0202	0.580	0.907	NO	1.226	1.227	40.95	40.99	263.44	66.0		0.614
25	25	13C-2,3,7,8-TCDF	1.25e5	2.39e5	10.0202	1.035	0.782	NO	0.992	0.991	25.25	25.24	101.05	50.6		0.363
26	26	13C-1,2,3,7,8-PeCDF	1.19e5	2.39e5	10.0202	0.854	1.643	NO	1.154	1.154	29.38	29.39	116.58	58.4		0.501
27	27	13C-2,3,4,7,8-PeCDF	1.15e5	2.39e5	10.0202	0.847	1.523	NO	1.189	1.190	30.27	30.30	112.88	56.6		0.505
28	28	13C-1,2,3,4,7,8-Hx...	9.42e4	1.83e5	10.0202	0.832	0.519	NO	0.987	0.988	32.97	32.99	123.49	61.9		1.08
29	29	13C-1,2,3,6,7,8-Hx...	1.07e5	1.83e5	10.0202	1.034	0.516	NO	0.991	0.992	33.09	33.12	112.28	56.3		0.867
30	30	13C-2,3,4,6,7,8-Hx...	9.85e4	1.83e5	10.0202	0.953	0.503	NO	1.009	1.009	33.70	33.71	112.63	56.4		0.941
31	31	13C-1,2,3,7,8,9-Hx...	9.23e4	1.83e5	10.0202	0.828	0.524	NO	1.039	1.038	34.69	34.65	121.62	60.9		1.08

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_14.qld
Last Altered: Tuesday, December 17, 2019 14:23:55 Pacific Standard Time
Printed: Tuesday, December 17, 2019 14:25:14 Pacific Standard Time

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Area	IS Area	Wt./Vol.	RRF	RA	Y/N	Pred...	RRT	Pred.RT	RT	Conc.	%Rec	EMPC	DL
32	32	13C-1,2,3,4,6,7,8-H...	8.47e4	1.83e5	10.0202	0.757	0.434	NO	1.093	1.092	36.50	36.49	121.94	61.1		0.679
33	33	13C-1,2,3,4,7,8,9-H...	7.27e4	1.83e5	10.0202	0.581	0.441	NO	1.143	1.146	38.18	38.28	136.47	68.4		0.885
34	34	13C-OCDF	1.77e5	1.83e5	10.0202	0.689	0.913	NO	1.233	1.234	41.18	41.20	279.51	70.0		0.597
35	35	37Cl-2,3,7,8-TCDD	5.95e4	1.51e5	10.0202	1.198			1.022	1.023	26.02	26.05	65.795	82.4		0.129
36	36	13C-1,2,3,4-TCDD	1.51e5	1.51e5	10.0202	1.000	0.785	NO	1.000	1.000	25.50	25.46	199.60	100.0		0.475
37	37	13C-1,2,3,4-TCDF	2.39e5	2.39e5	10.0202	1.000	0.788	NO	1.000	1.000	24.06	24.02	199.60	100.0		0.375
38	38	13C-1,2,3,4,6,9-Hx...	1.83e5	1.83e5	10.0202	1.000	0.500	NO	1.000	1.000	33.42	33.40	199.60	100.0		0.897
39	39	Total Tetra-Dioxins		8.92e4	10.0202	0.901			0.000		25.50					0.134
40	40	Total Penta-Dioxins		7.80e4	10.0202	0.872			0.000		30.00					0.160
41	41	Total Hexa-Dioxins		0.00e0	10.0202	0.976			0.000		33.80		0.00000		0.950	0.336
42	42	Total Hepta-Dioxins		7.69e4	10.0202	0.989			0.000		37.75		17.460		17.5	0.519
43	43	Total Tetra-Furans		1.25e5	10.0202	0.943			0.000		24.00					0.121
44	44	1st Func. Penta-Fur...		0.00e0	10.0202	0.940			0.000		27.63		0.00000		0.349	0.0506
45	45	Total Penta-Furans		0.00e0	10.0202	0.940			0.000		30.00					0.131
46	46	Total Hexa-Furans		0.00e0	10.0202	1.078			0.000		33.00		1.1544		1.39	0.599
47	47	Total Hepta-Furans		0.00e0	10.0202	1.135			0.000		37.75		2.3026		2.30	0.288

Vista Analytical Laboratory
Dataset: U:\VG7.PRO\Results\191212D2\191212D2_14.qld
Last Altered: Tuesday, December 17, 2019 14:23:55 Pacific Standard Time
Printed: Tuesday, December 17, 2019 14:25:14 Pacific Standard Time

Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 10:07:51

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Tetra-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hexa-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	5	1,2,3,7,8,9-HxCDD	YES	34.37	90.216	46080.836	0.000	MM	0.0000	0.40
2	41	Total Hexa-Dioxins	YES	32.44	116.524	43866.056	0.000	MM	0.0000	0.55

Hepta-Dioxins

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	6	1,2,3,4,6,7,8-HpCDD	NO	37.76	1431.551	39476.934	72.308	bb	7.3681	7.37
2	42	Total Hepta-Dioxins	NO	36.89	1916.311	39476.934	99.983	bb	10.0922	10.09

Tetra-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Penta-Furans function 1

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	44	1st Func. Penta-Furans	YES	27.03	116.864	71751.683	0.000	MM	0.0000	0.35

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Penta-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1										

Hexa-Furans

	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	46	Total Hexa-Furans	NO	34.37	107.775	33289.061	4.176	bb	0.3867	0.39
2	46	Total Hexa-Furans	NO	33.56	101.763	33289.061	3.647	bb	0.3378	0.34
3	46	Total Hexa-Furans	YES	33.25	70.251	33289.061	0.000	bb	0.0000	0.24
4	46	Total Hexa-Furans	NO	32.06	121.602	33289.061	4.642	MM	0.4299	0.43

Hepta-Furans

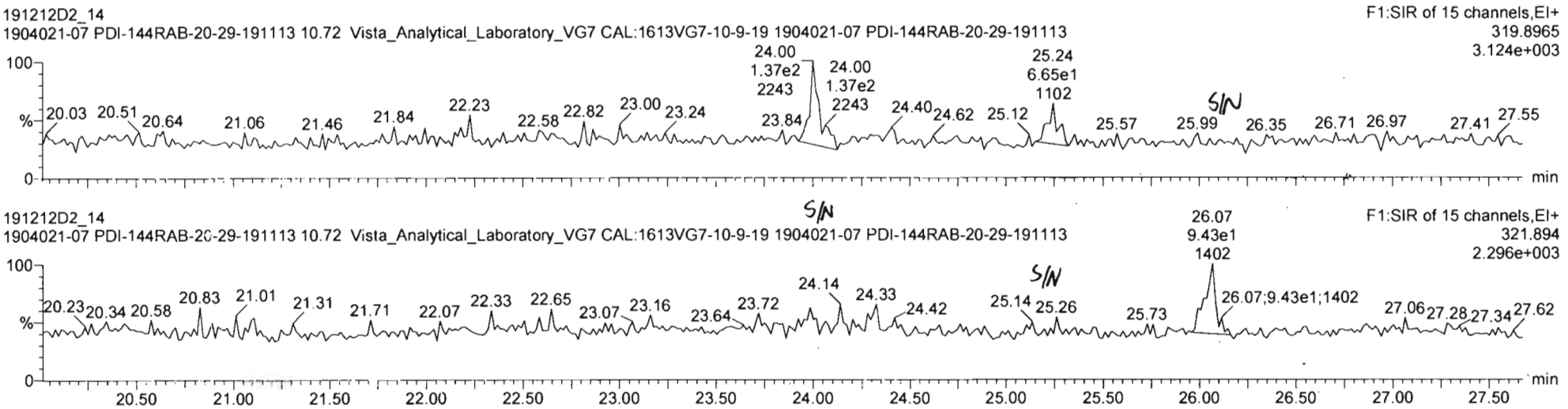
	#	Name	N/Y	RT	Area	IS Area	Response	Primary Flags	Conc.	EMPC
1	47	Total Hepta-Furans	NO	37.09	353.111	23957.702	18.217	bb	1.6022	1.60
2	15	1,2,3,4,6,7,8-HpCDF	NO	36.51	162.004	25655.092	7.914	bb	0.7004	0.70

Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

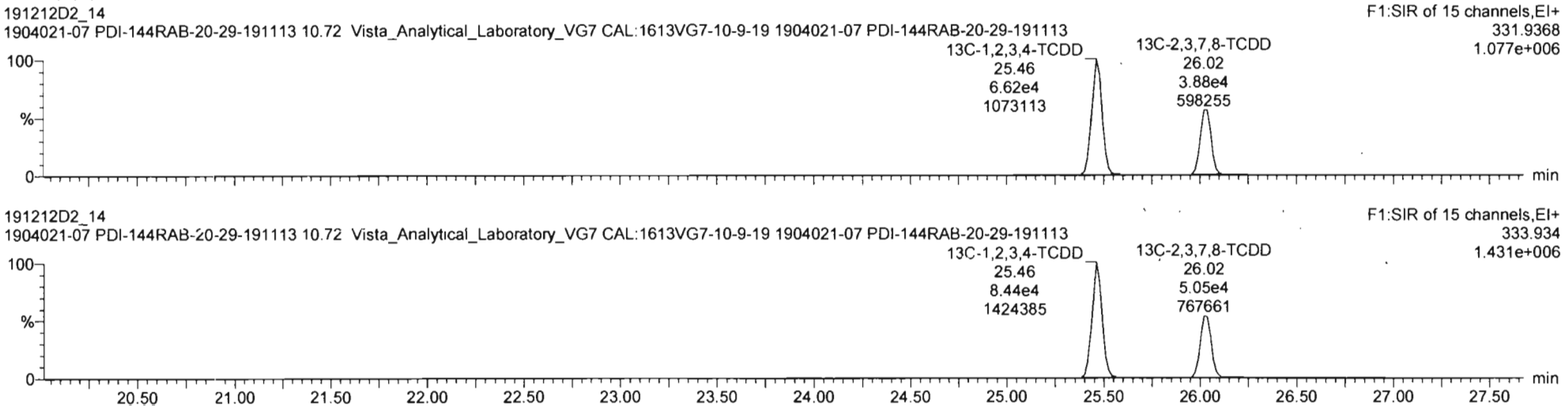
Method: U:\VG7.PRO\MethDB\1613VG7-12-4-19.mdb 10 Dec 2019 16:21:14
Calibration: 17 Dec 2019 09:58:24

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Tetra-Dioxins



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



Vista Analytical Laboratory
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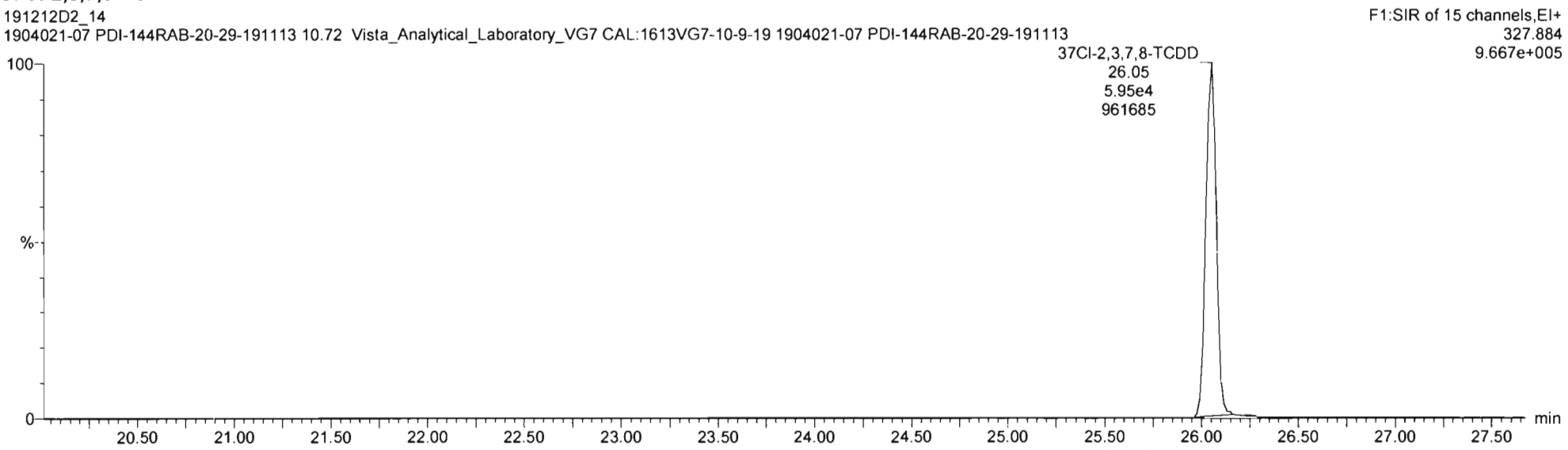
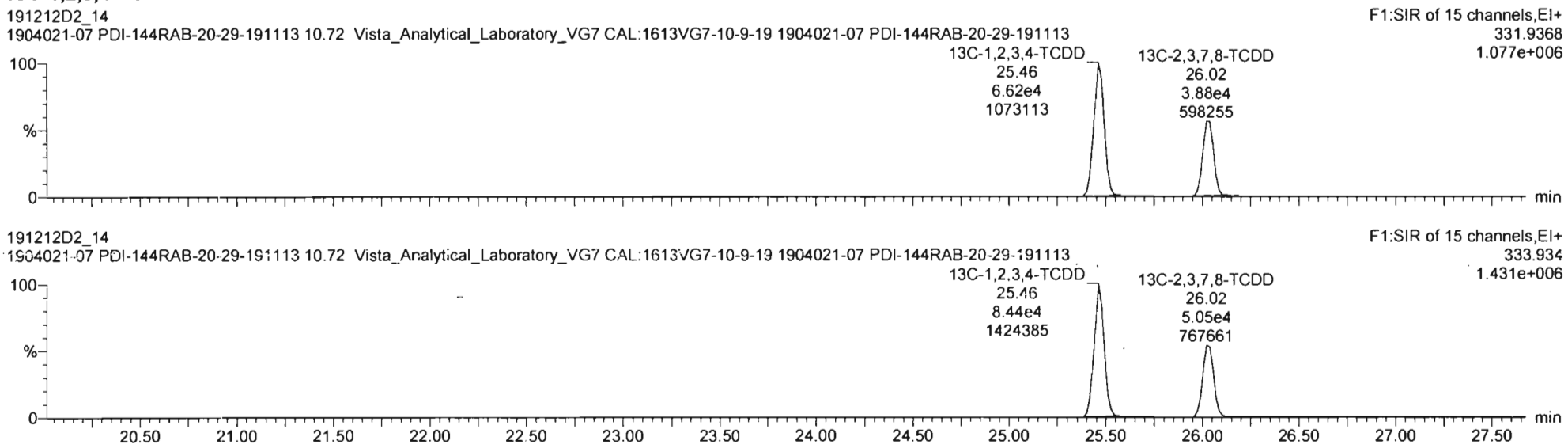
Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

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



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



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Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
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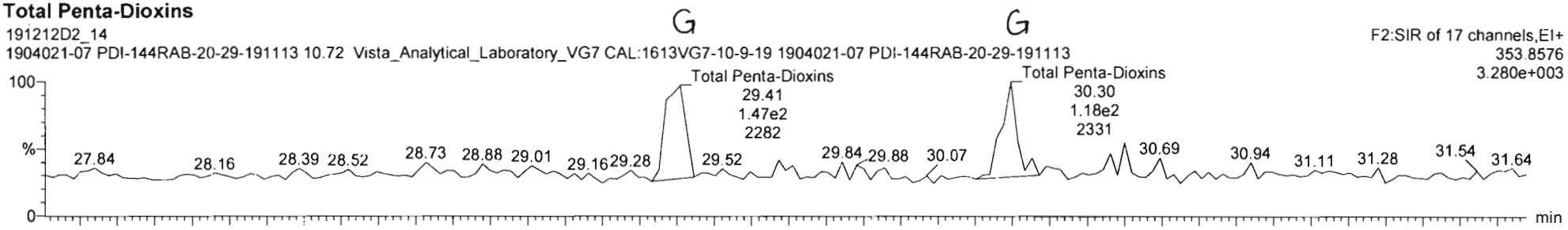
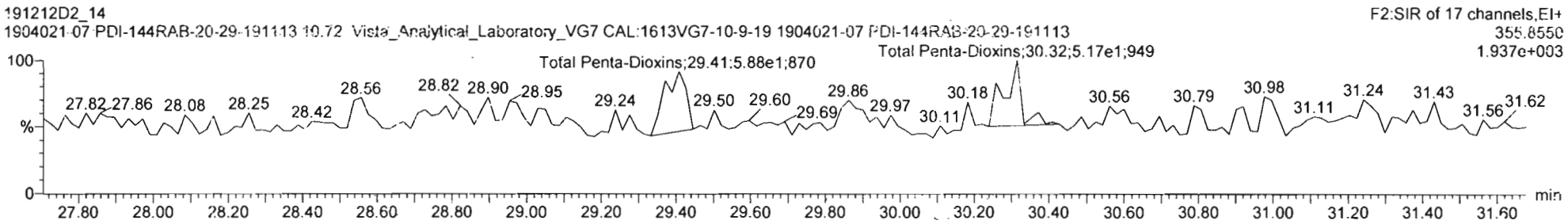
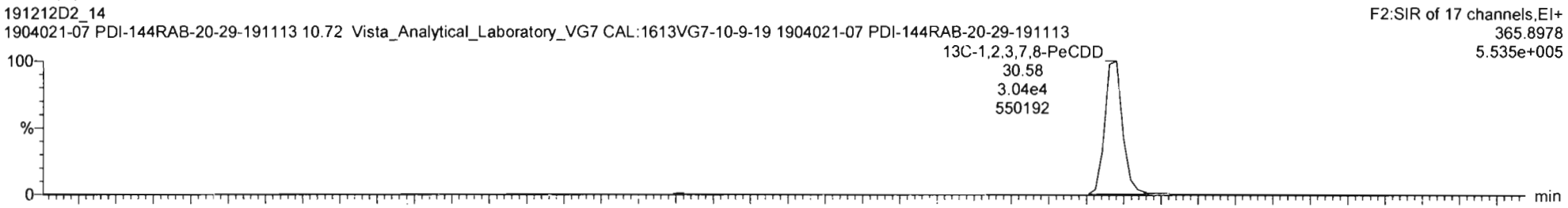
Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

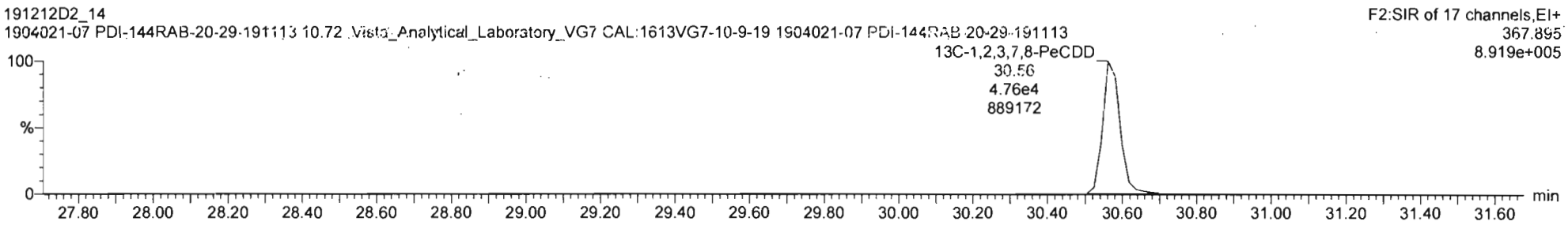
Total Penta-Dioxins





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

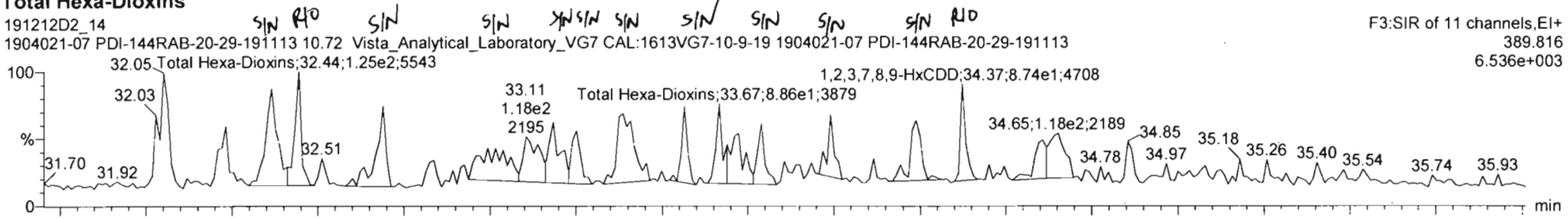


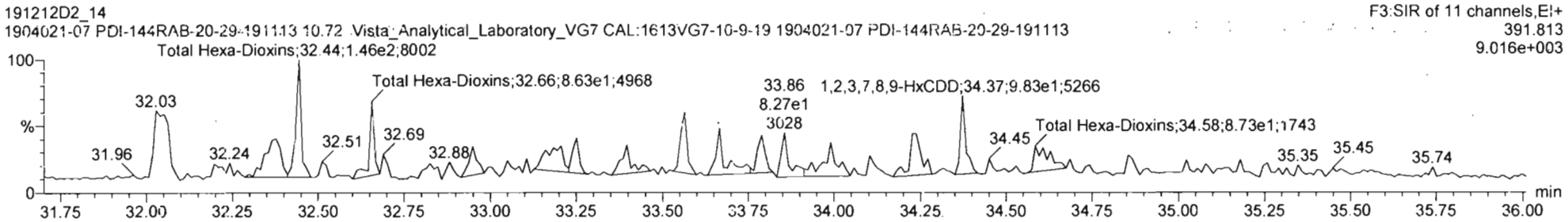


Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hexa-Dioxins





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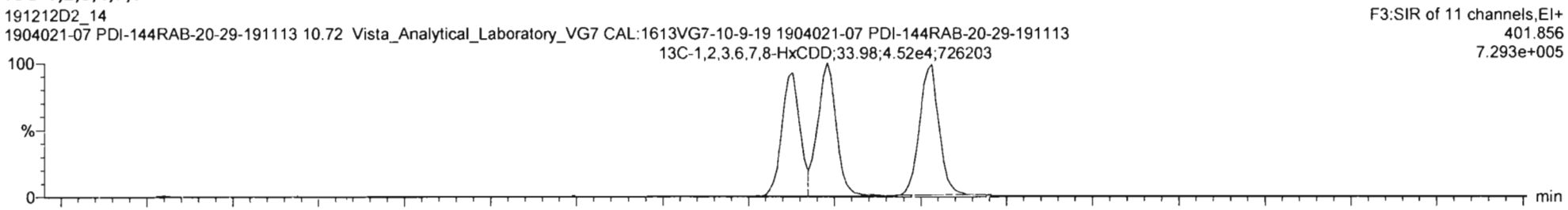
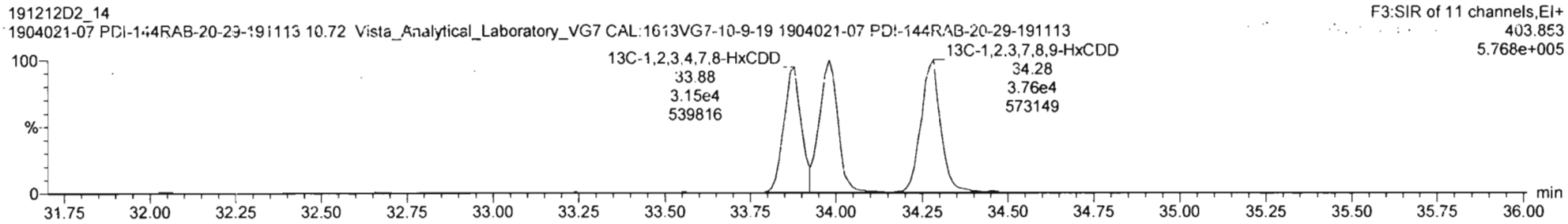




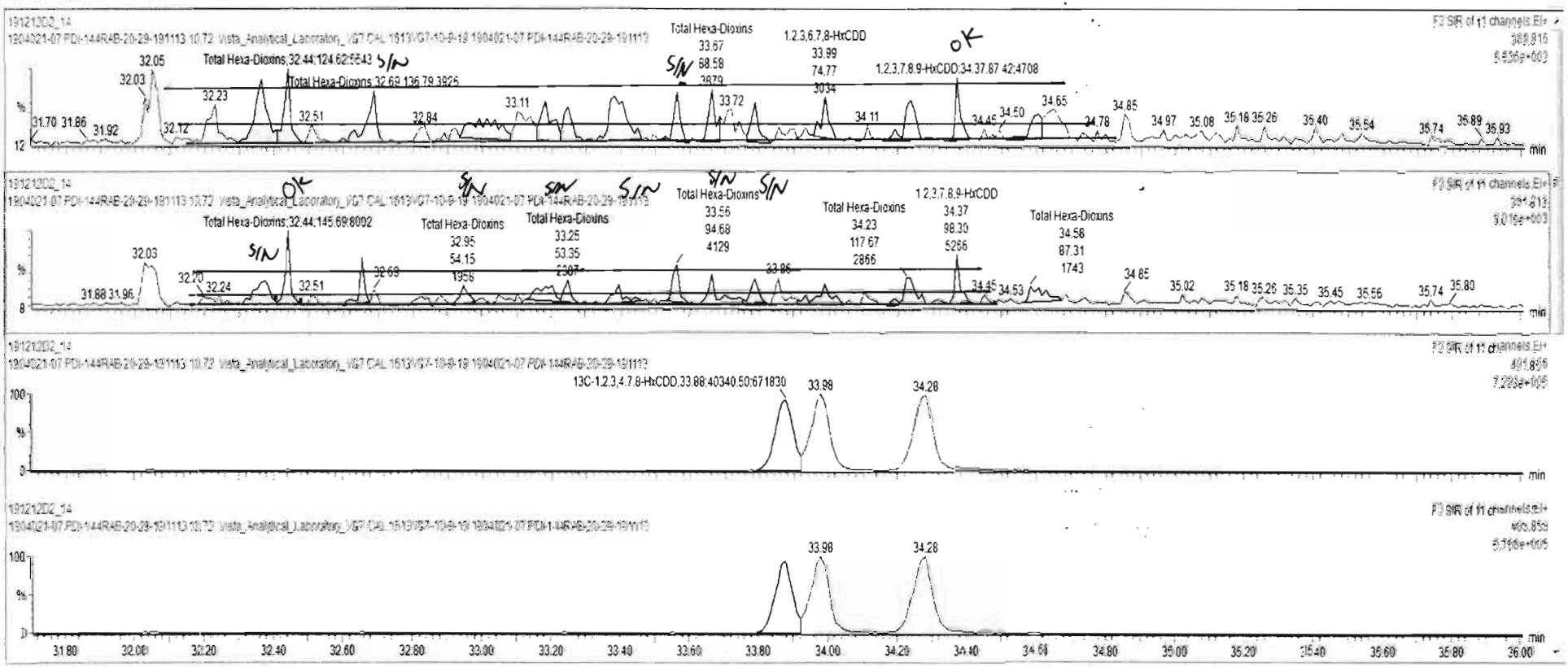
TargetLynx XS - 191212D2_14 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_14 - 1904021-07 PDI-144RAB-20-29-191113 - 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
40	40	Total Penta-Dioxins		7.80e4				0.872	10.026	30.00			0.000	NO			0.160	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.020	33.80			0.000	NO	1.760		0.877	6.269
42	42	Total Hepta-Dioxins		7.69e4				0.989	10.026	37.75			0.000	NO	17.46		0.519	17.46
43	43	Total Tetra-Furans		1.25e5				0.943	10.026	24.00			0.000	NO			0.121	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.026	27.63			0.000	NO	0.3862		0.117	0.3862
45	45	Total Penta-Furans		0.00e0				0.940	10.026	28.00			0.000	NO	0.0000		0.131	0.1794
46	46	Total Hexa-Furans		0.00e0				1.078	10.026	33.00			0.000	NO	0.9608		0.599	3.898
47	47	Total Hepta-Furans		0.00e0				1.135	10.026	37.75			0.000	NO	2.303		0.286	2.303

	#	Name	Fred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.37	1.901e2	1.390e2	1.240	1.37	NO	0.85320	0.85320
2	41	Total Hexa-Dioxins	33.80	32.44	1.246e2	1.457e2	1.240	0.86	YES	0.58375	0.00000
3	41	Total Hexa-Dioxins	33.80	32.69	1.368e2	8.625e1	1.240	1.59	YES	0.50097	0.00000
4	41	Total Hexa-Dioxins	33.80	32.99	1.481e2	5.415e1	1.240	2.74	YES	0.31452	0.00000
5	41	Total Hexa-Dioxins	33.80	33.18	1.131e2	9.981e1	1.240	1.13	NO	0.55295	0.55295
6	41	Total Hexa-Dioxins	33.60	33.25	8.025e1	5.335e1	1.240	1.50	YES	0.30980	0.00000
7	41	Total Hexa-Dioxins	33.80	33.39	1.993e2	6.874e1	1.240	2.90	YES	0.39927	0.00000
8	41	Total Hexa-Dioxins	33.60	33.56	7.663e1	9.468e1	1.240	0.81	YES	0.35896	0.00000
9	41	Total Hexa-Dioxins	33.80	33.67	8.858e1	1.014e2	1.240	0.87	YES	0.41491	0.00000



Custom Reportings: Select reports to generate

191212D2_14 NUM

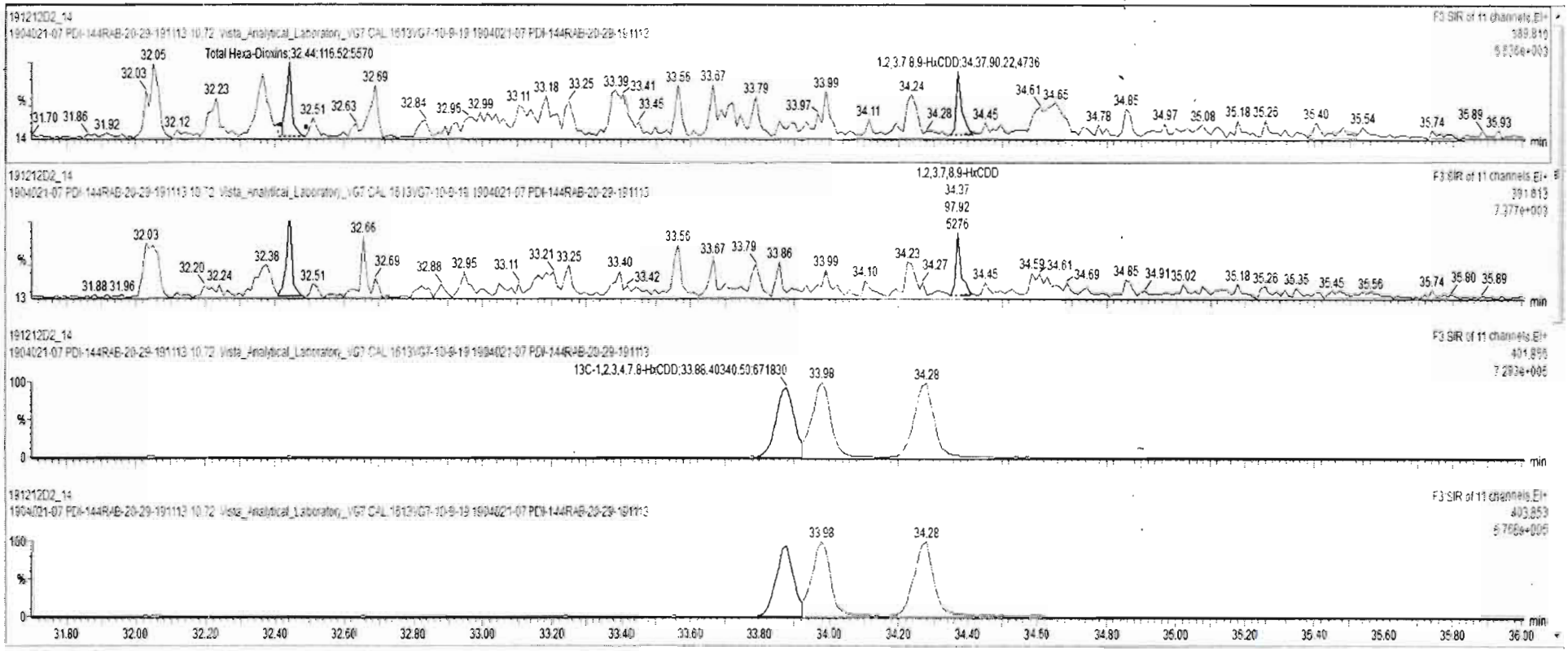
TargetLynx XS - 191212D2_14 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_14 - 1904021-07 PDI-144RAB-20-29-191113 - 1904021-07 PDI-144RAB-20-29-191113 10 72 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
40	40	Total Penta-Dioxins		7.36e4				0.872	10.020	30.00			0.000	NO			0.160	
41	41	Total Hexa-Dioxins		0.00e0				0.976	10.020	33.80			0.000	NO	0.0000		0.336	0.9501
42	42	Total Hepta-Dioxins		7.69e4				0.989	10.020	37.75			0.000	NO	17.46		0.519	17.46
43	43	Total Tetra-Furans		1.25e5				0.943	10.020	24.00			0.000	NO			0.121	
44	44	1st Func. Penta-Furans		0.00e0				0.940	10.020	27.63			0.000	NO	0.3862		0.117	0.3862
45	45	Total Penta-Furans		0.00e0				0.940	10.020	30.00			0.000	NO	0.0000		0.131	0.1794
46	46	Total Hexa-Furans		0.00e0				1.078	10.020	33.00			0.000	NO	0.9606		0.589	3.898
47	47	Total Hepta-Furans		0.00e0				1.135	10.020	37.75			0.000	NO	2.303		0.288	2.303

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	41	Total Hexa-Dioxins	33.80	32.44	1.165e2	1.457e2	1.240	0.80	YES	0.54581	0.00000
2	9	1,2,3,7,8,9-HxCDD	34.32	34.37	9.022e1	9.792e1	1.240	0.92	YES	0.40432	0.00000



Custom Reporting: Select reports to generate

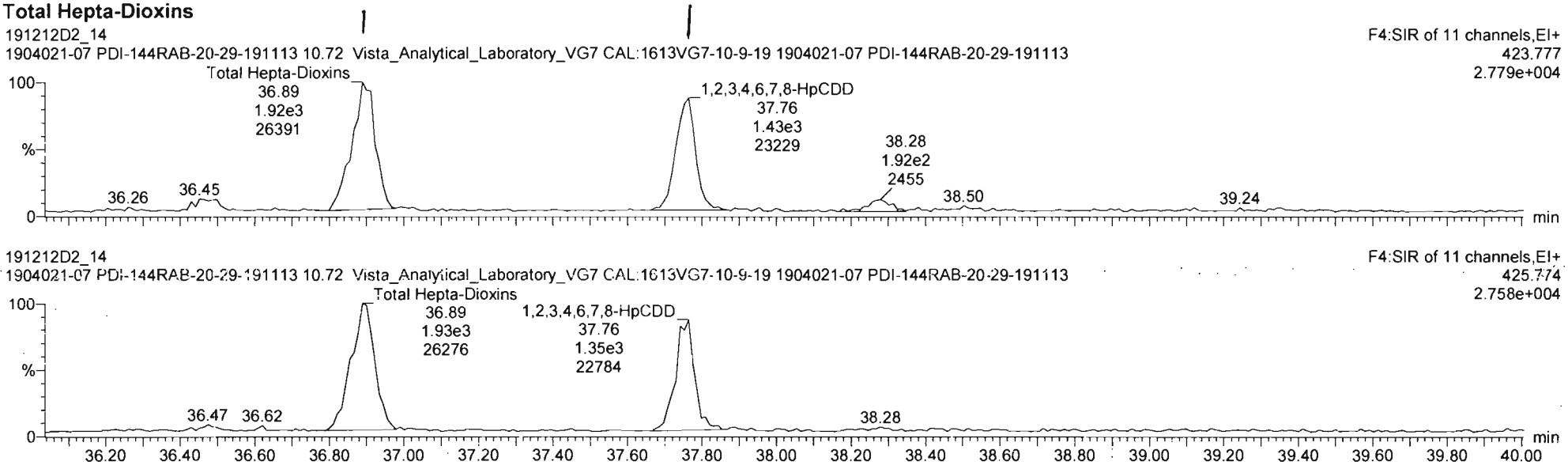
191212D2_14

NUM

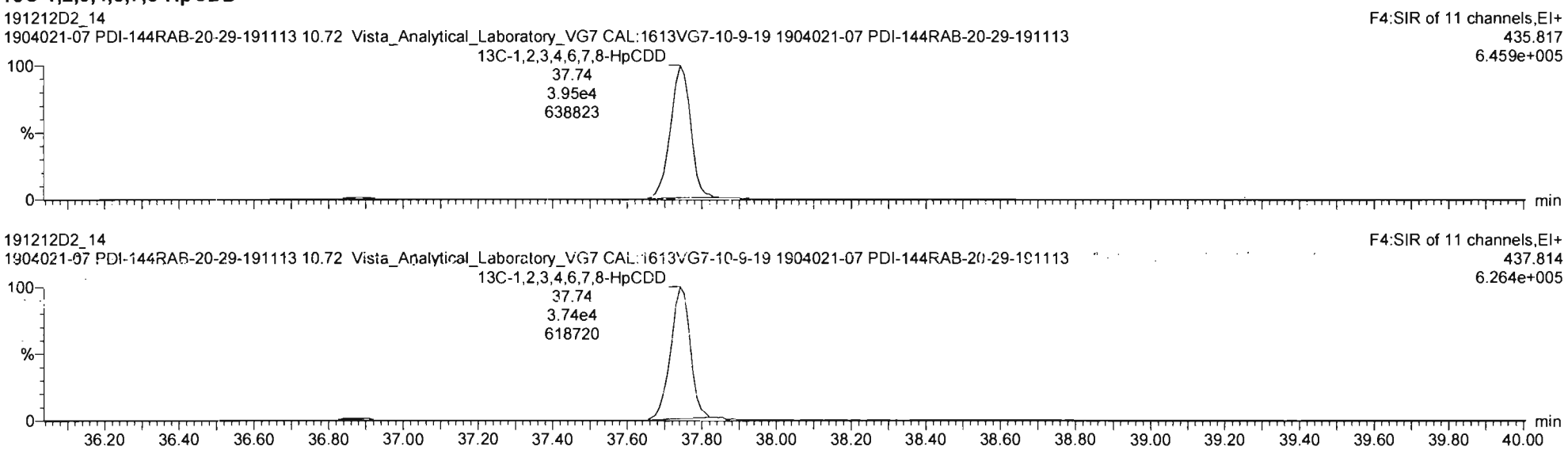
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

Total Hepta-Dioxins



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



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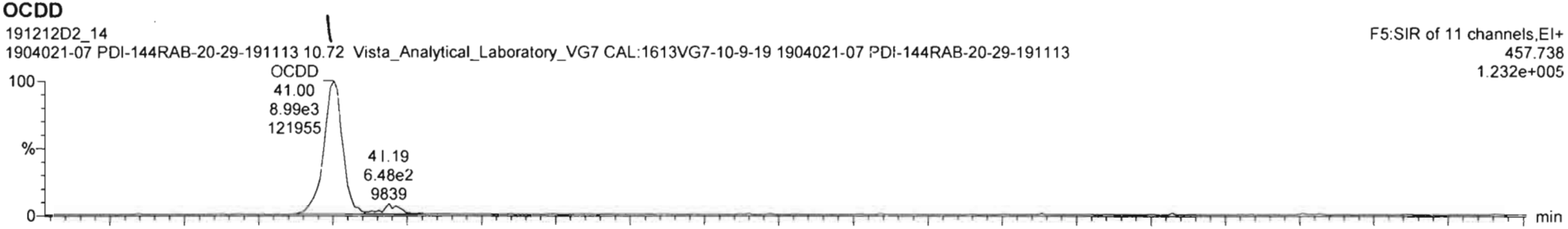
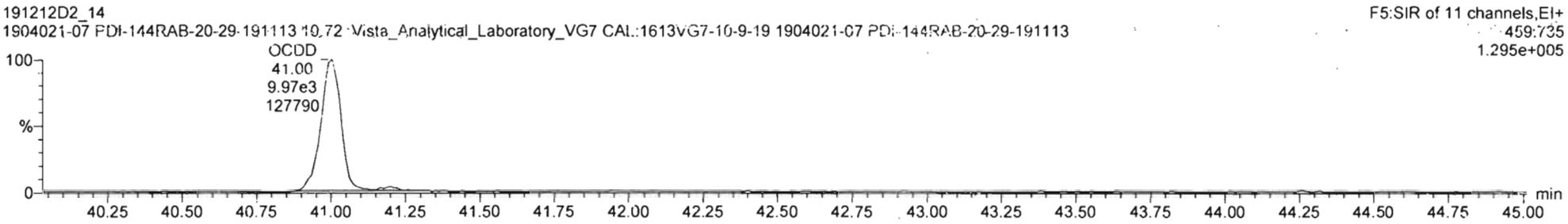
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

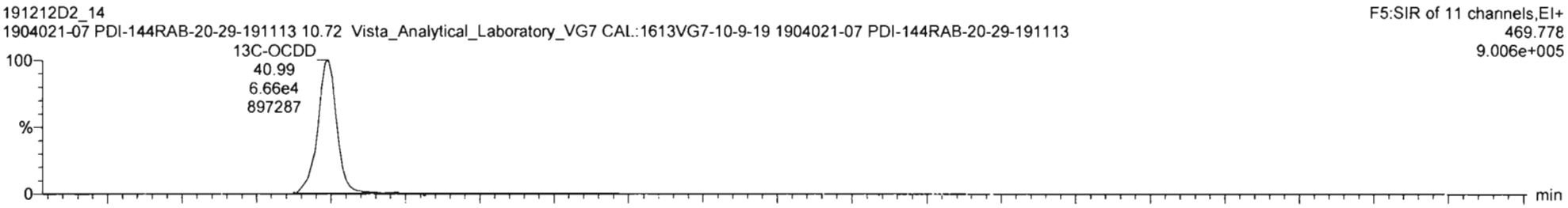
Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

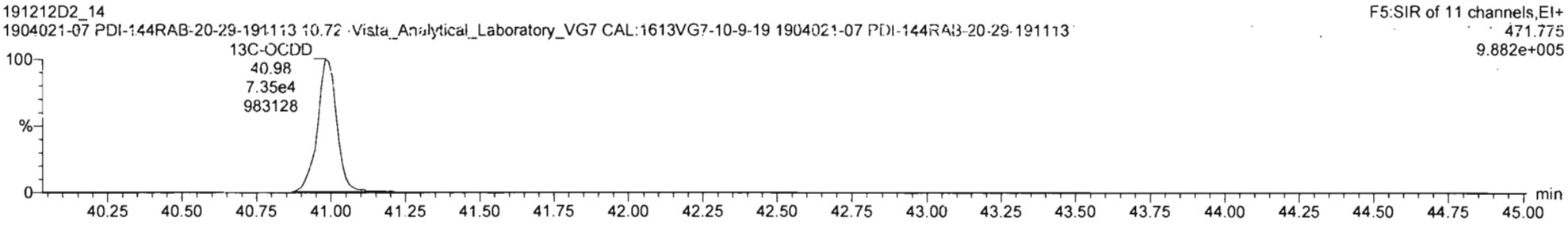
OCDD





13C-OCDD





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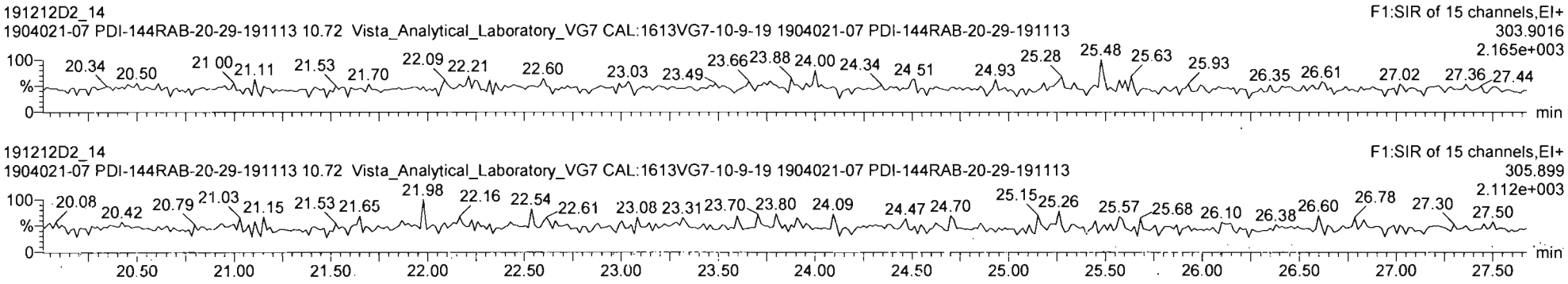
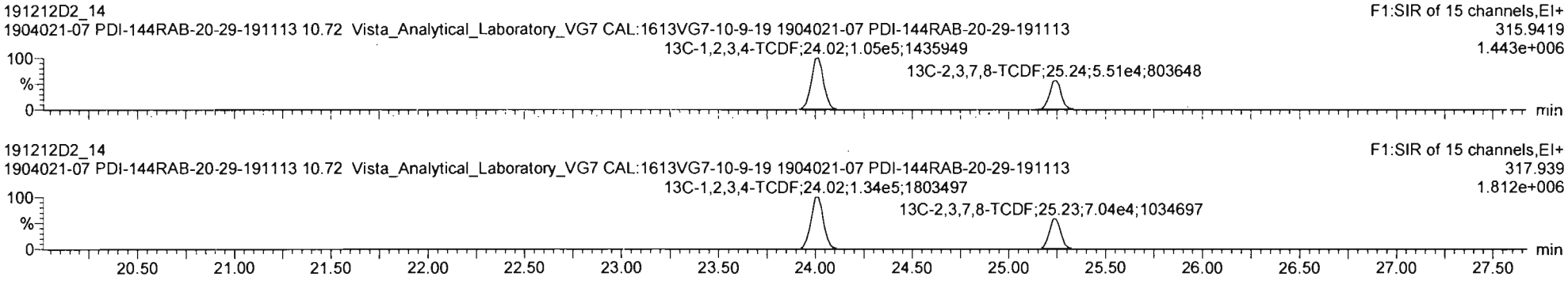
Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

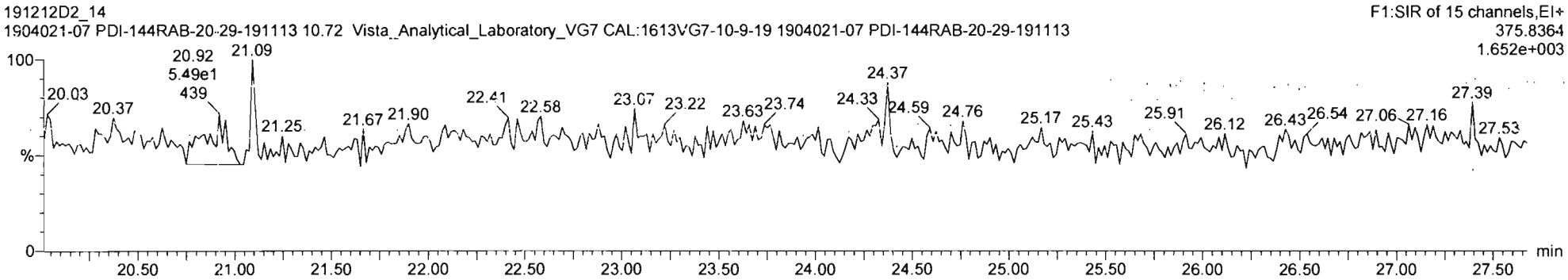
Total Tetra-Furans



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



DPE1



Vista Analytical Laboratory
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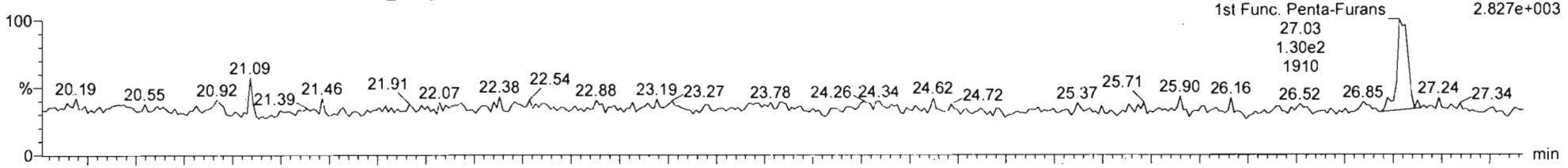
Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

1st Func. Penta-Furans

RIO

191212D2_14
1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19 1904021-07 PDI-144RAB-20-29-191113
F1:SIR of 15 channels,EI+
339.860
2.827e+003



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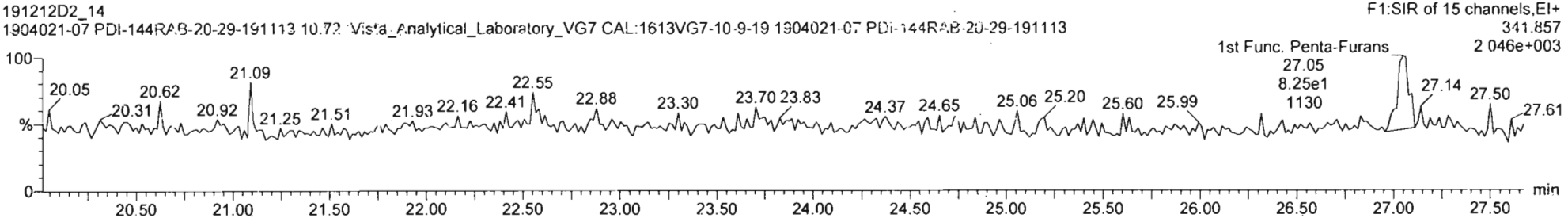
F1:SIR of 15 channels,EI+
341.857
2 046e+003



DPE6

191212D2_14
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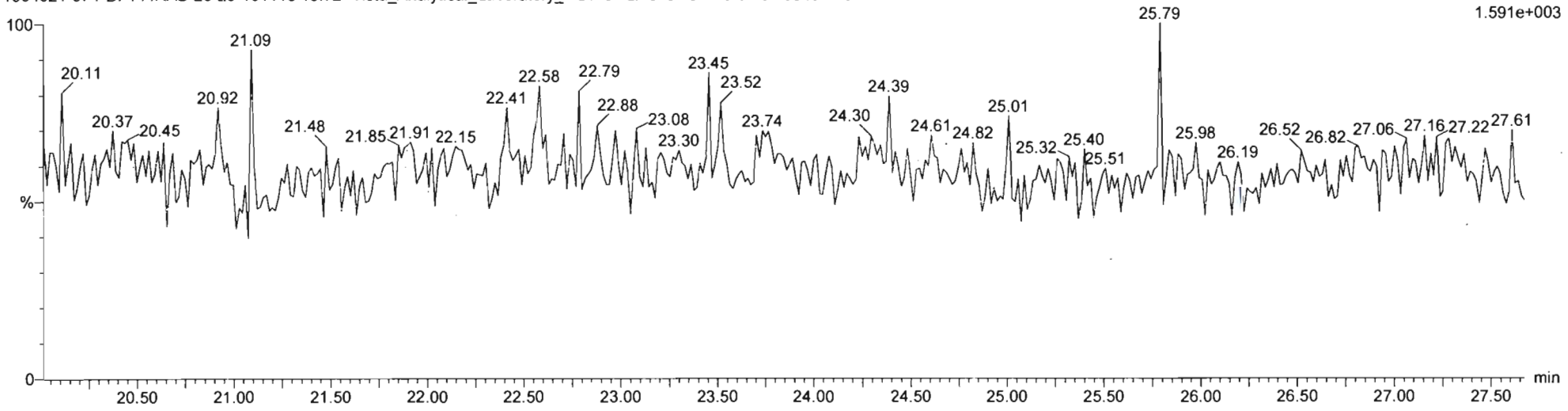
F1:SIR of 15 channels,EI+
409.7974
1.591e+003



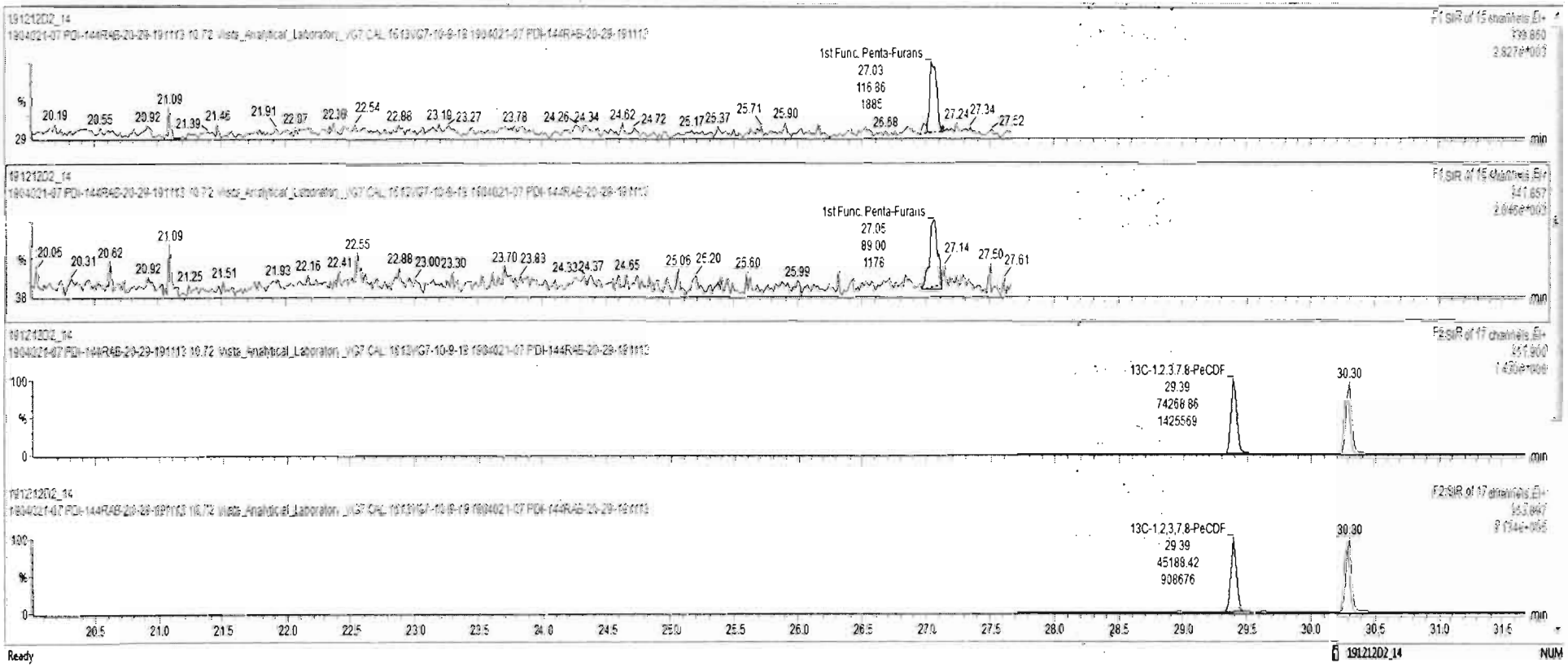
TargetLynx XS - 191212D2_14 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_14 - 1904021-07 PDI-144RAB-20-29-191113 - 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL.1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
3	3	1,2,3,4,7,8-HxCDD		7.18e4	20			1.101	10.020	33.89			1.000	NO			0.823	
4	4	1,2,3,6,7,8-HxCDD		8.11e4	21			0.939	10.020	33.98			1.000	NO			0.886	
5	5	1,2,3,7,8,9-HxCDD	1.86e2	8.37e4	22	0.92	YES	0.961	10.020	34.32	34.37	1.003	1.001	NO	0.4667		0.872	0.4047
6	6	1,2,3,4,6,7,8-HpCDD	2.78e3	7.69e4	23	1.06	NO	0.979	10.020	37.75	37.76	1.001	1.000	NO	7.368		0.524	7.368
7	7	OCDD	1.90e4	1.40e5	24	0.90	NO	0.959	10.020	40.99	41.00	1.000	1.000	NO	56.39		0.496	56.39
8	8	2,3,7,8-TCDF		1.25e5	25			0.950	10.020	25.27			1.001	NO			0.251	
9	9	1,2,3,7,8-PeCDF		1.19e5	26			0.960	10.020	29.41			1.001	NO			0.222	
10	10	2,3,4,7,8-PeCDF		1.15e5	27			1.015	10.020	30.33			1.001	NO			0.213	

	#	Name	Pred.RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	44	1st Func. Penta-Furans	27.63	27.03	1.169e2	8.900e1	1.550	1.31	YES	0.34883	0.00000



Ready

191212D2_14 NUM

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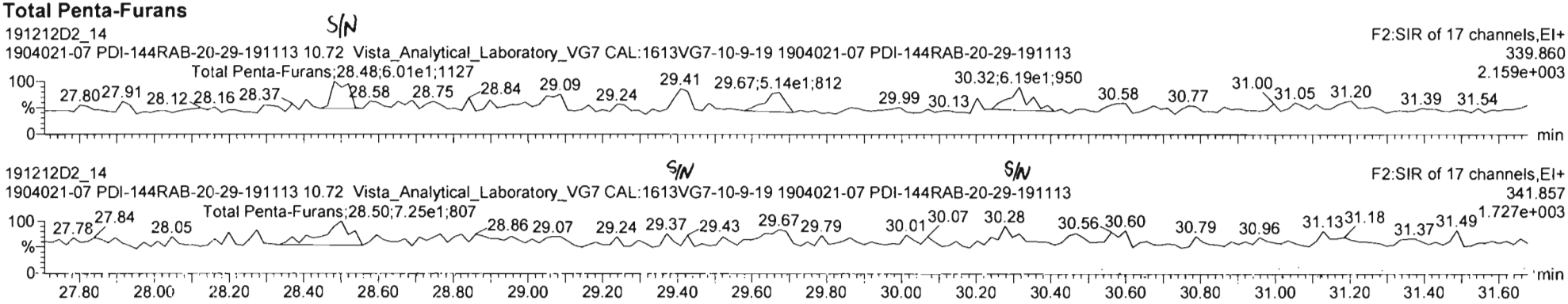
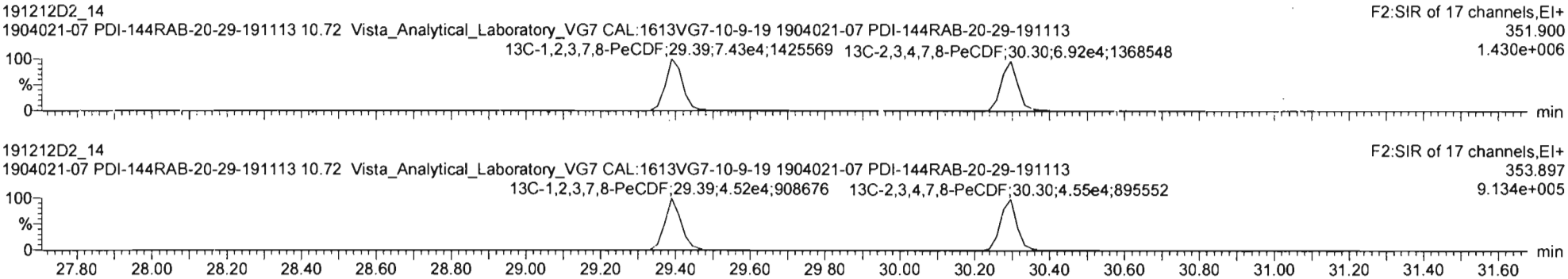
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

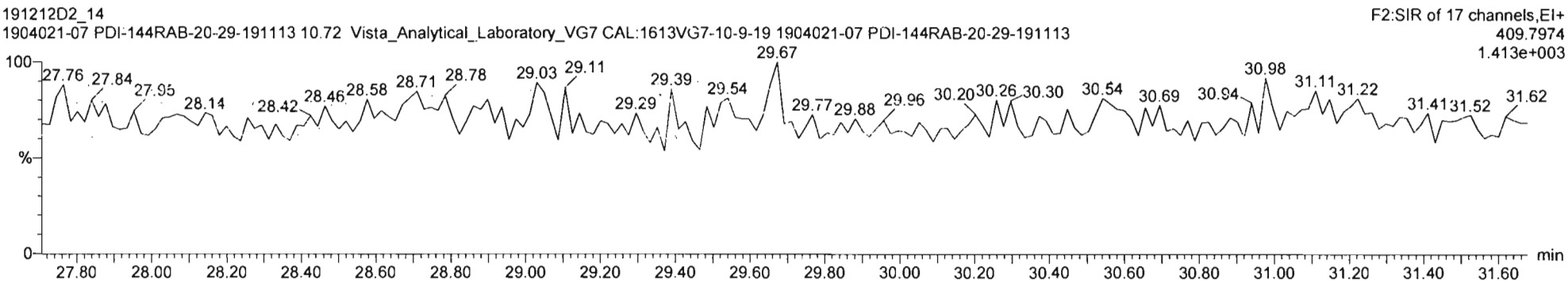
Total Penta-Furans



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



DPE2



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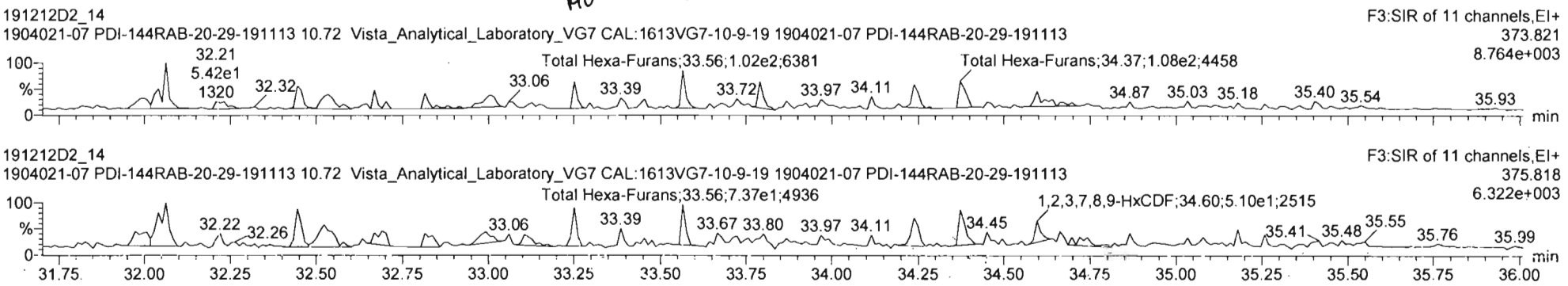
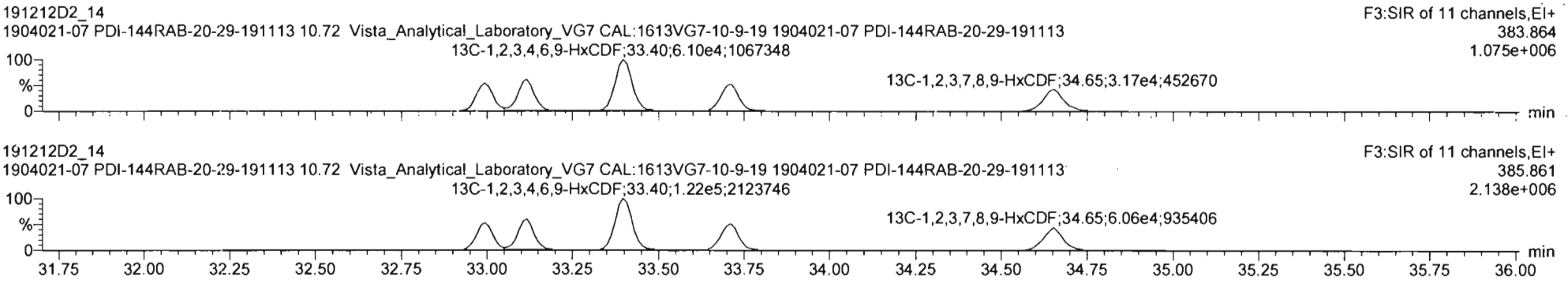
Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

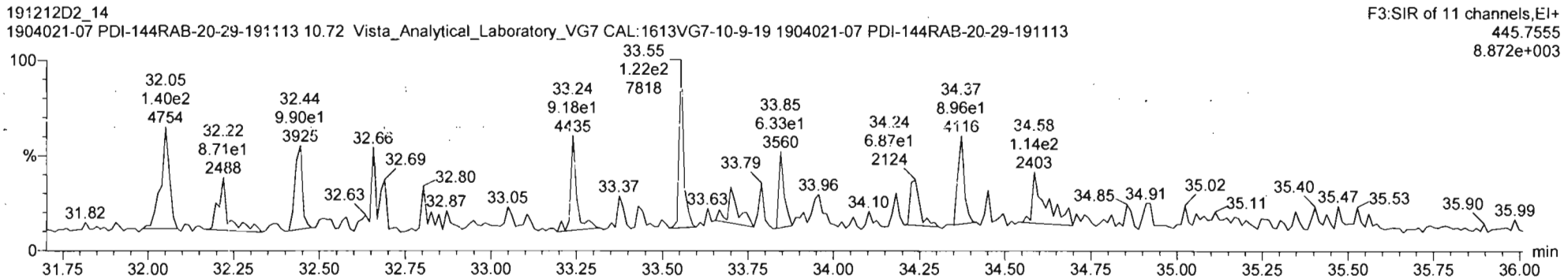
Total Hexa-Furans



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



DPE3



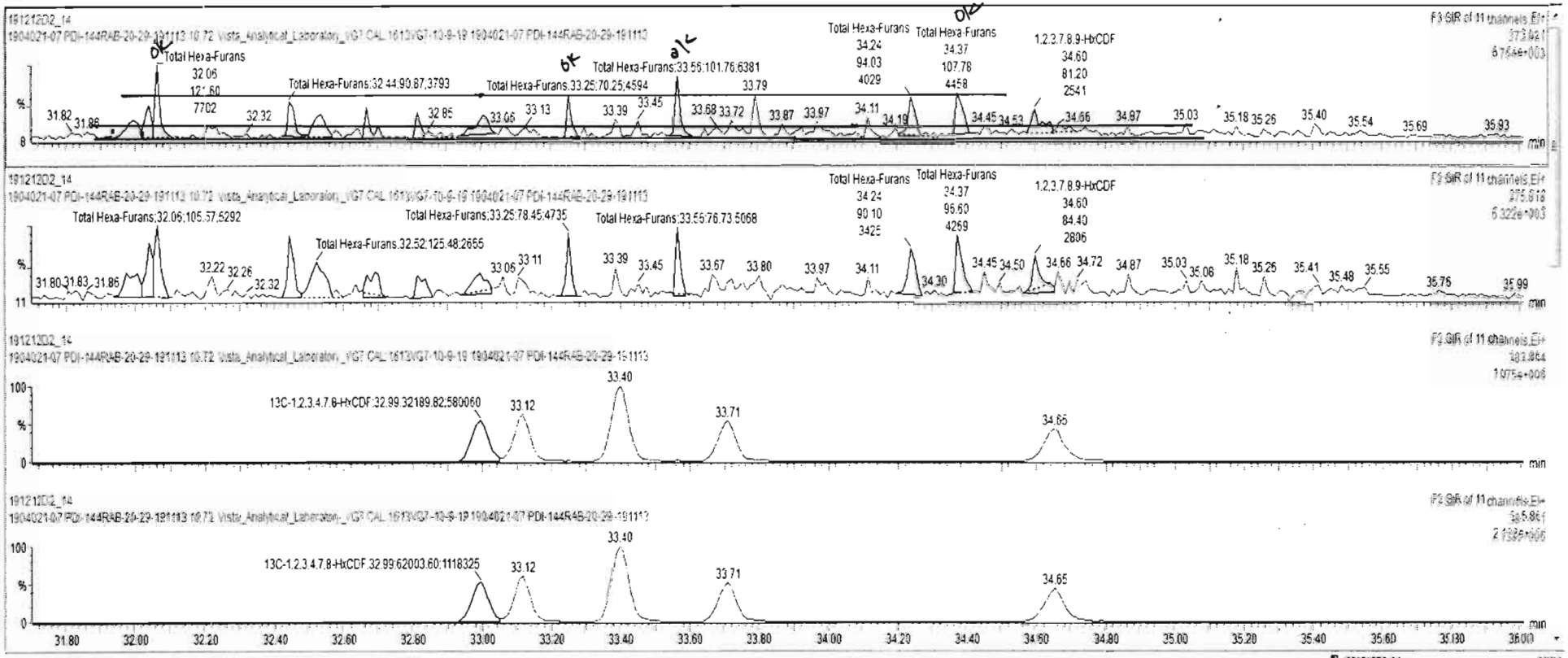
TargetLynx XS - 191212D2_14 * - [Chromatogram]

File Edit View Display Processing Window Help

191212D2_14 - 1904021-07 PDI-144RAB-20-29-191113 - 1904021-07 PDI-144RAB-20-29-191113 10 72 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp.	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
45	45	Total Penta-Furans		0.00e0				0.940	10.020	30.00			0.000	NO			0.131	
46	46	Total Hexa-Furans		0.00e0				1.078	10.020	33.00			0.000	NO	1.449		0.599	3.880
47	47	Total Hepta-Furans		0.00e0				1.135	10.020	37.75			0.000	NO	2.303		0.268	2.302
48	48	PFK1																
49	49	PFK2																
50	50	PFK3																
51	51	PFK4																
52	52	PFK5																

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1	46	Total Hexa-Furans	33.00	32.00	8.517e1	8.387e1	1.240	1.02	YES	0.29115	0.00000
2	46	Total Hexa-Furans	33.00	32.04	7.408e1	8.577e1	1.240	0.86	YES	0.25323	0.00000
3	46	Total Hexa-Furans	33.00	32.06	1.216e2	1.056e2	1.240	1.15	NO	0.42990	0.42990
4	46	Total Hexa-Furans	33.00	32.44	9.887e1	1.621e2	1.240	0.85	YES	0.31064	0.00000
5	46	Total Hexa-Furans	33.00	32.53	9.852e1	1.255e2	1.240	0.79	YES	0.33678	0.00000
6	46	Total Hexa-Furans	33.00	32.67	6.529e1	7.555e1	1.240	0.86	YES	0.22286	0.00000
7	46	Total Hexa-Furans	33.00	32.81	4.563e1	5.641e1	1.240	0.81	YES	0.15606	0.00000
8	11	1,2,3,4,7,8-HxCDF	32.99	33.00	8.911e1	7.444e1	1.240	1.20	NO	0.29449	0.29449
9	46	Total Hexa-Furans	33.00	33.25	7.925e1	7.815e1	1.240	0.90	YES	0.24015	0.00000



Custom Reporting: Select reports to generate

191212D2_14 NUM

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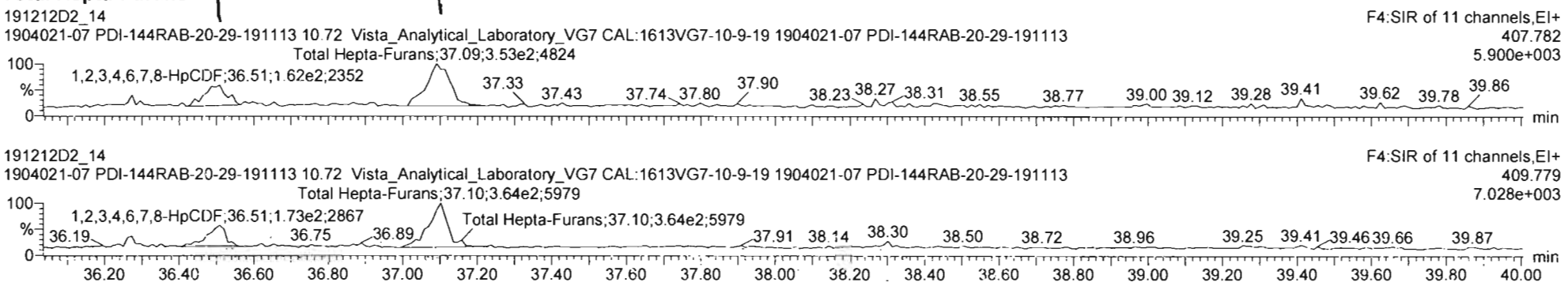
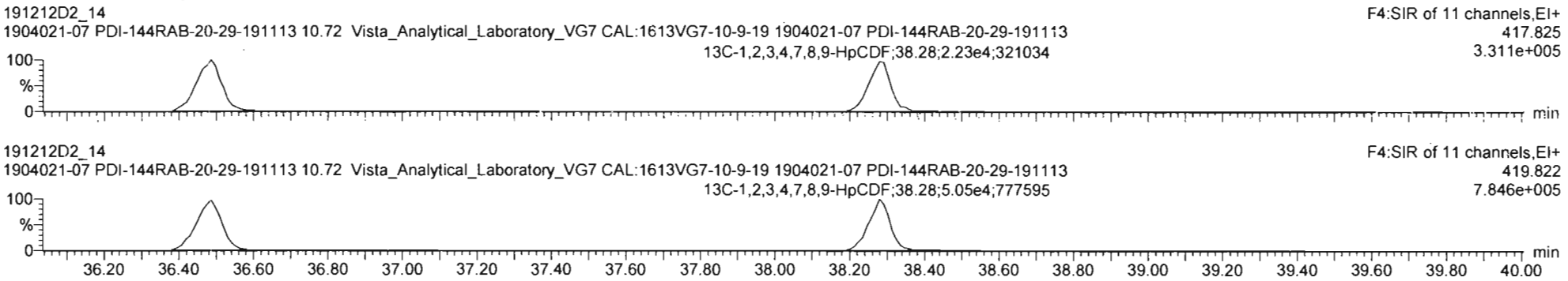
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

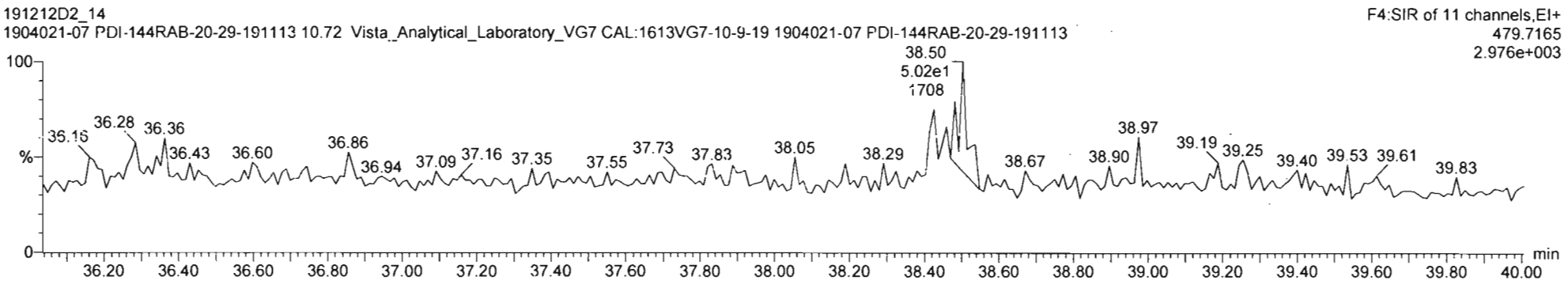
Total Hepta-Furans



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



DPE4



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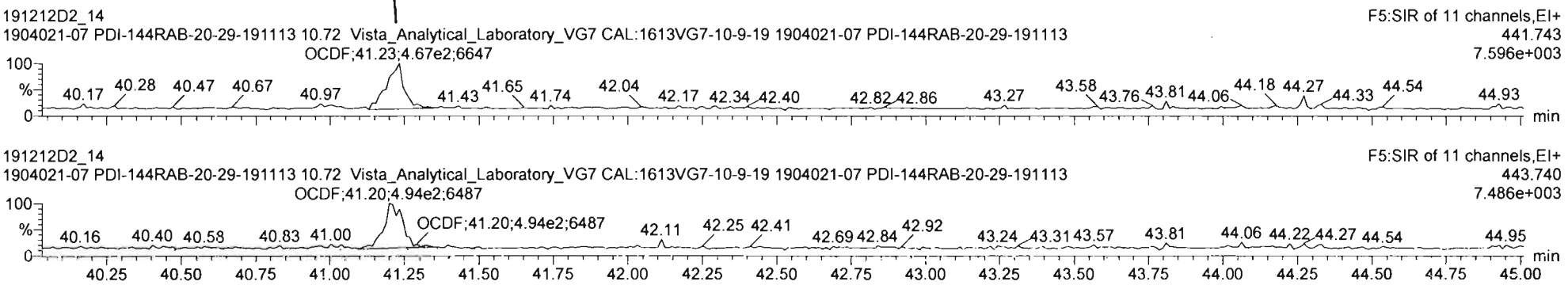
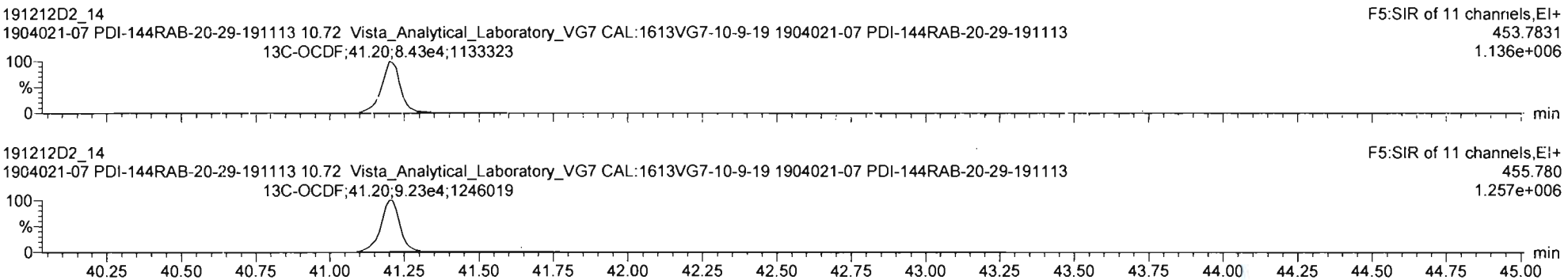
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

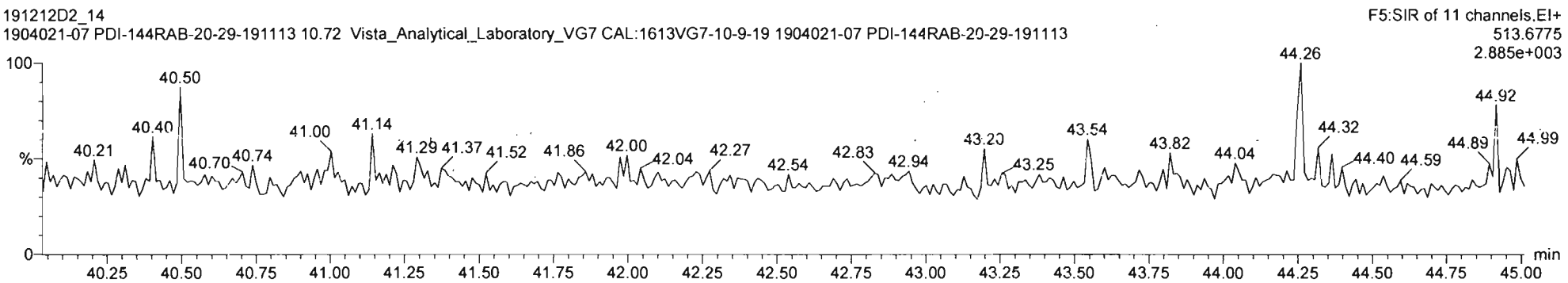
OCDF



13C-OCDF



DPE5



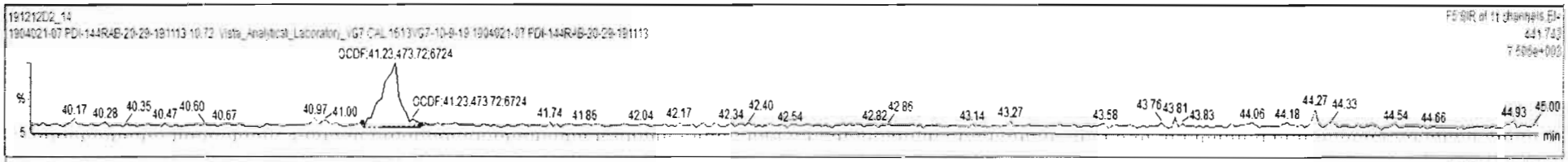
TargetLynx XS - 191212D2_14 * - [Chromatogram]

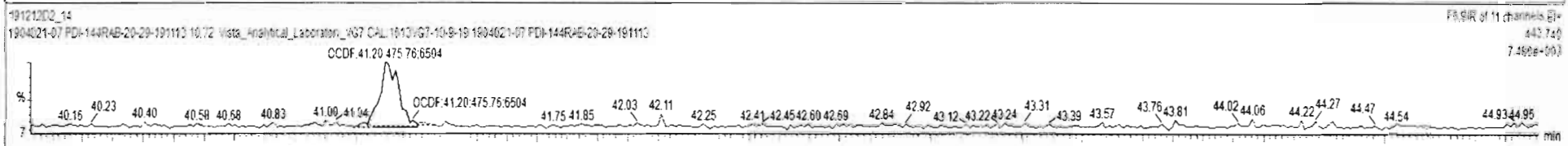
File Edit View Display Processing Window Help

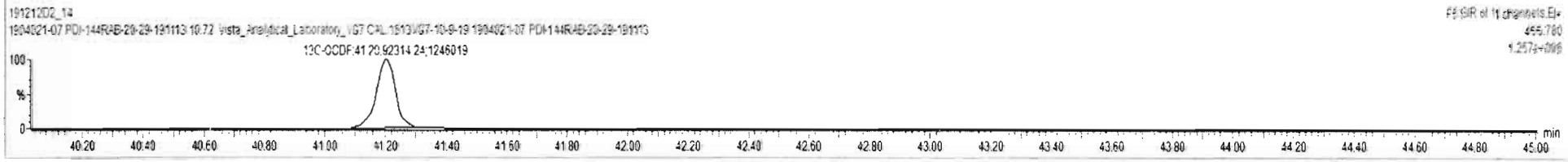
191212D2_14 - 1904021-07 PDI-144RAB-20-29-191113 - 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL 1613VG7-10-9-19

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
14	14	1,2,3,7,8,9-HxCDF		9.23e4	31			1.062	10.020	34.65			1.000	NO			0.751	
15	15	1,2,3,4,6,7,8-HpCDF	3.35e2	8.47e4	32	0.94	NO	1.128	10.020	36.52	36.51	1.001	1.001	NO	0.7004		0.286	0.7004
16	16	1,2,3,4,7,8,9-HpCDF		7.27e4	33			1.260	10.020	38.28			1.000	NO			0.260	
17	17	OCDF	9.49e2	1.77e5	34	1.00	NO	0.947	10.020	41.20	41.23	1.001	1.000	NO	2.266		0.335	2.266
18	18	13C-2,3,7,8-TCDD	8.92e4	1.51e5	36	0.77	NO	1.095	10.020	26.00	26.02	1.022	1.021	NO	108.0	54.1	0.434	
19	19	13C-1,2,3,7,8-PeCDD	7.80e4	1.51e5	36	0.64	NO	0.881	10.020	30.22	30.58	1.201	1.187	NO	117.4	58.8	0.257	
20	20	13C-1,2,3,4,7,8-HxCDD	7.18e4	1.83e5	38	1.28	NO	0.642	10.020	33.86	33.88	1.014	1.014	NO	122.0	61.1	0.820	
21	21	13C-1,2,3,6,7,8-HxCDD	8.11e4	1.83e5	38	1.26	NO	0.856	10.020	33.98	33.98	1.017	1.017	NO	103.4	51.8	0.619	
22	22	13C-1,2,3,7,8,9-HxCDD	8.37e4	1.83e5	38	1.23	NO	0.807	10.020	34.28	34.28	1.027	1.026	NO	113.1	56.7	0.653	

	#	Name	Pred RT	RT	m1 Resp	m2 Resp	Pred RA	RA	n/y	EMPC	Conc.
1											







Ready

191212D2_14

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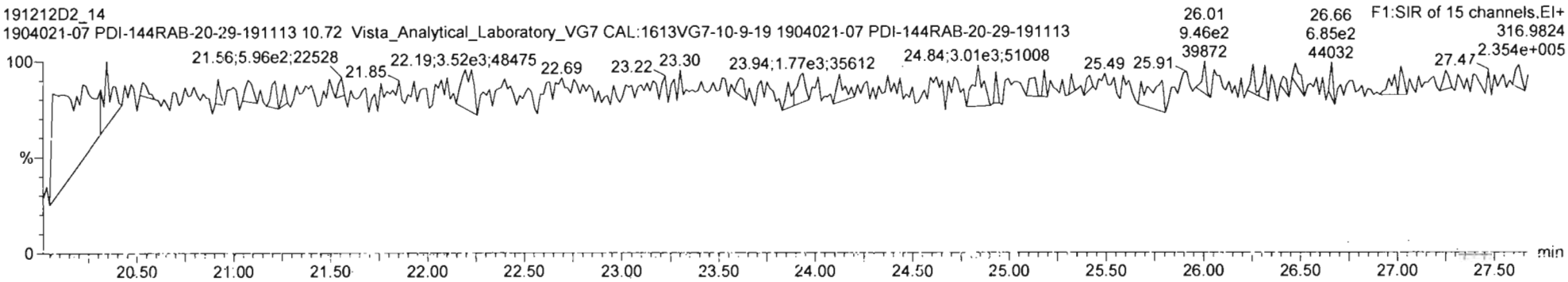
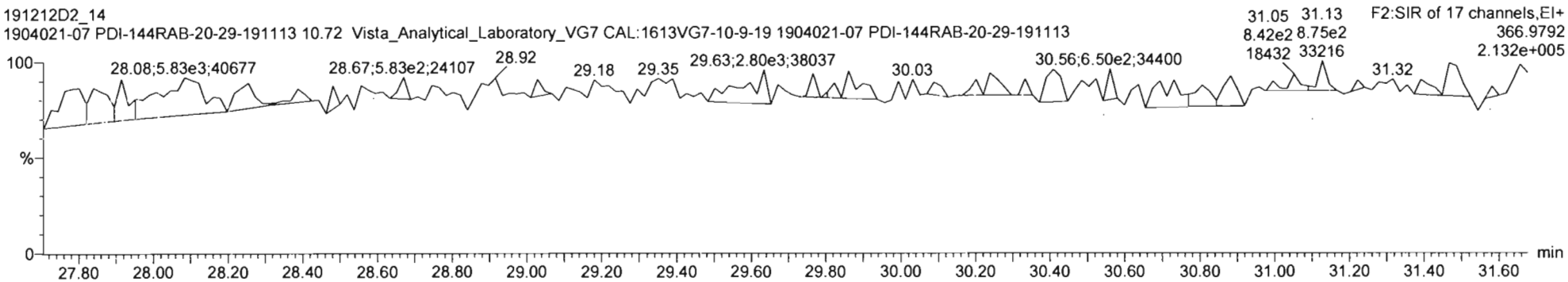
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

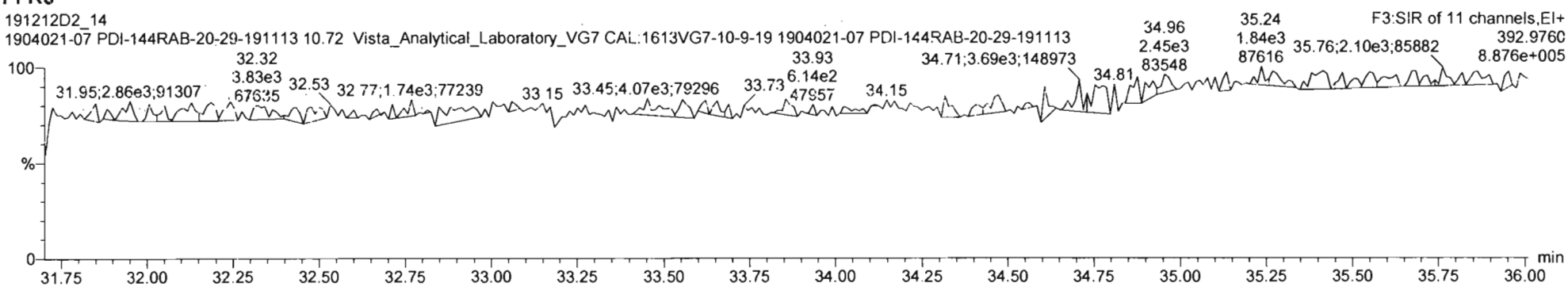
PFK1



PFK2



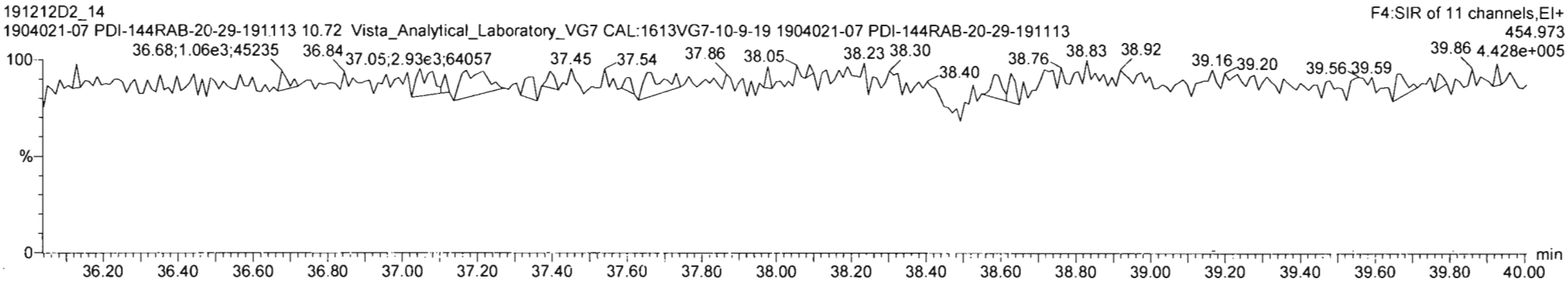
PFK3



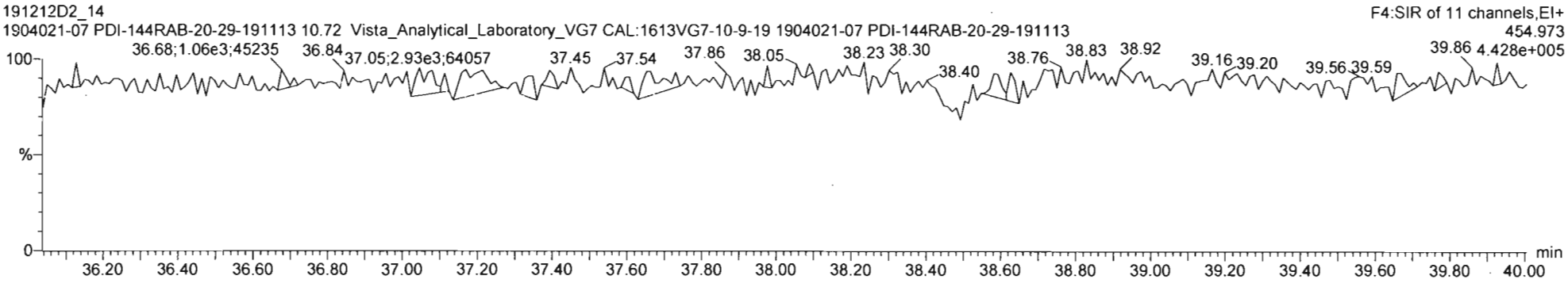
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Tuesday, December 17, 2019 09:58:24 Pacific Standard Time
Printed: Tuesday, December 17, 2019 09:58:31 Pacific Standard Time

Name: 191212D2_14, Date: 13-DEC-2019, Time: 11:18:43, ID: 1904021-07 PDI-144RAB-20-29-191113,
Description: 1904021-07 PDI-144RAB-20-29-191113 10.72 Vista_Analytical_Laboratory_VG7 CAL:1613VG7-10-9-19

PFK4



PFK5

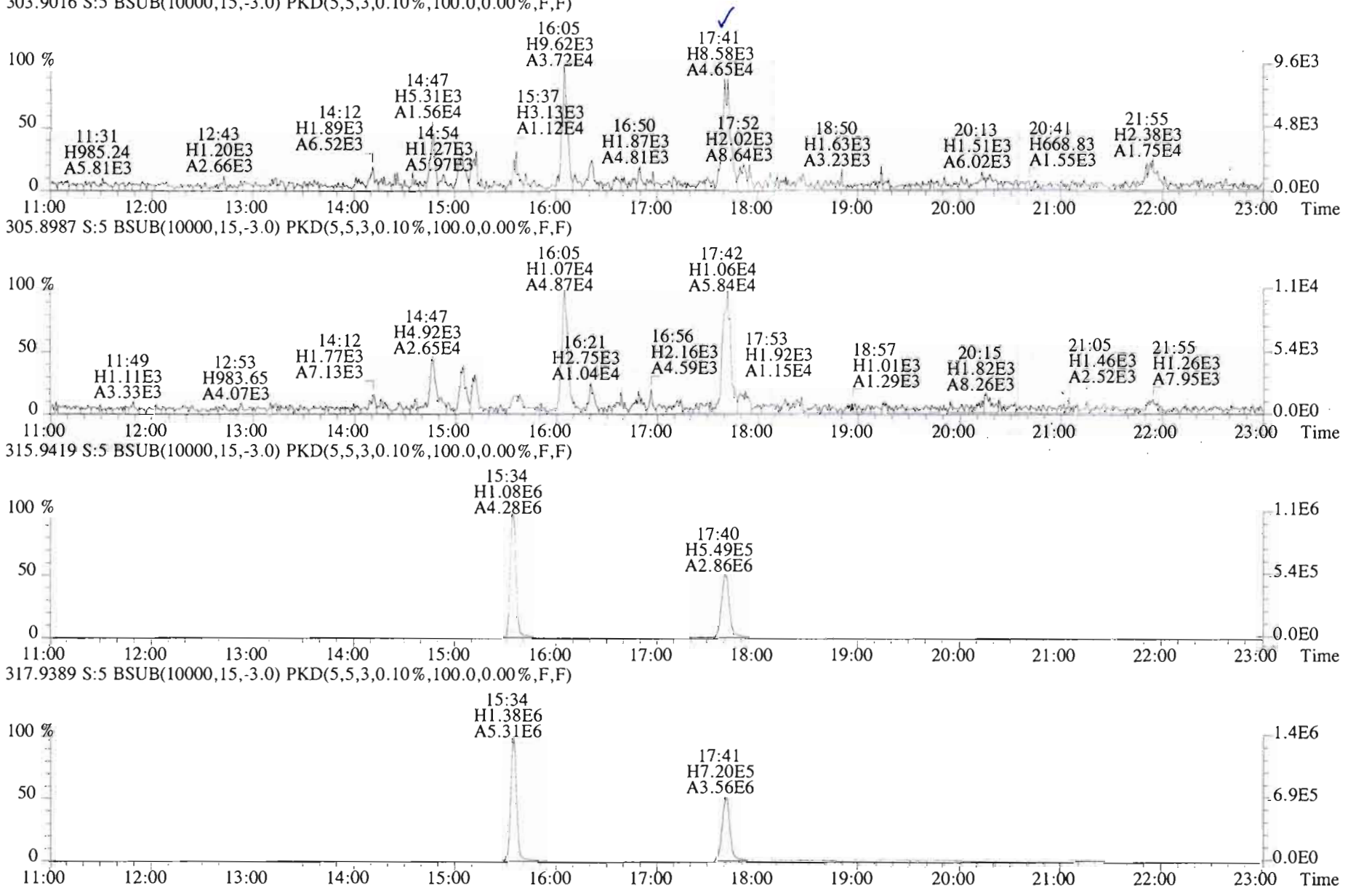


CONFIRMATION

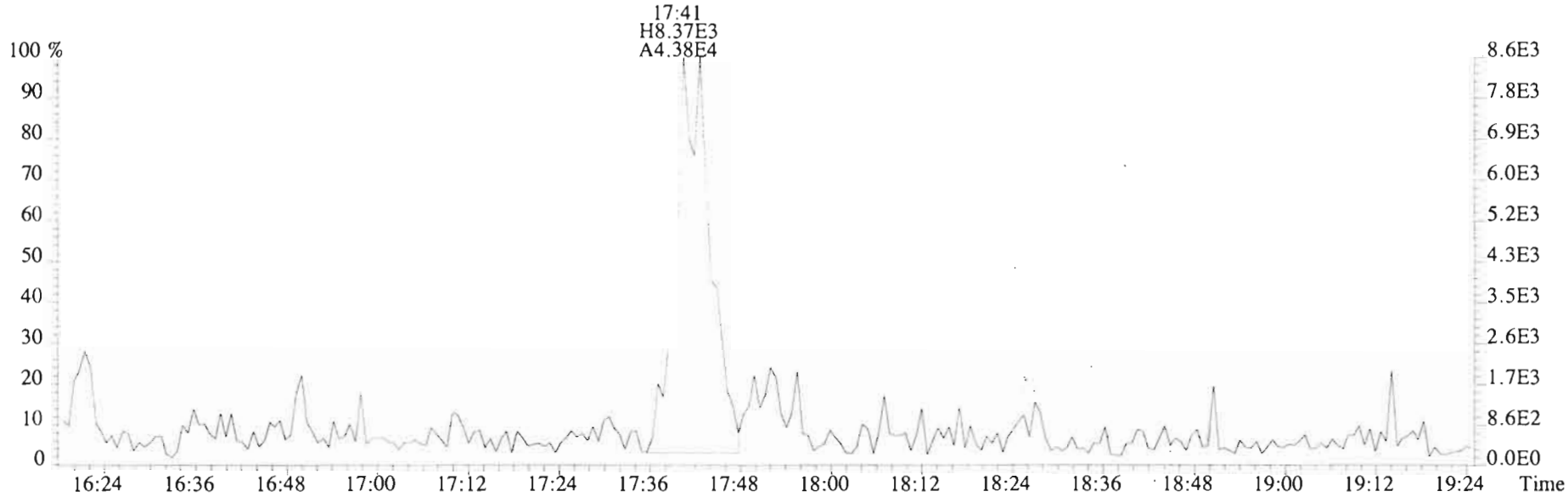
Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	9.59e+06	0.81 y	15:34	1.00	197.7	-
13C-2,3,7,8-TCDF	6.42e+06	0.80 y	17:41	1.02	129.6	65.6
2,3,7,8-TCDF	9.72e+04	0.82 y	17:41	0.95	3.161	

Integrations by Analyst: DB Date: 12/16/19

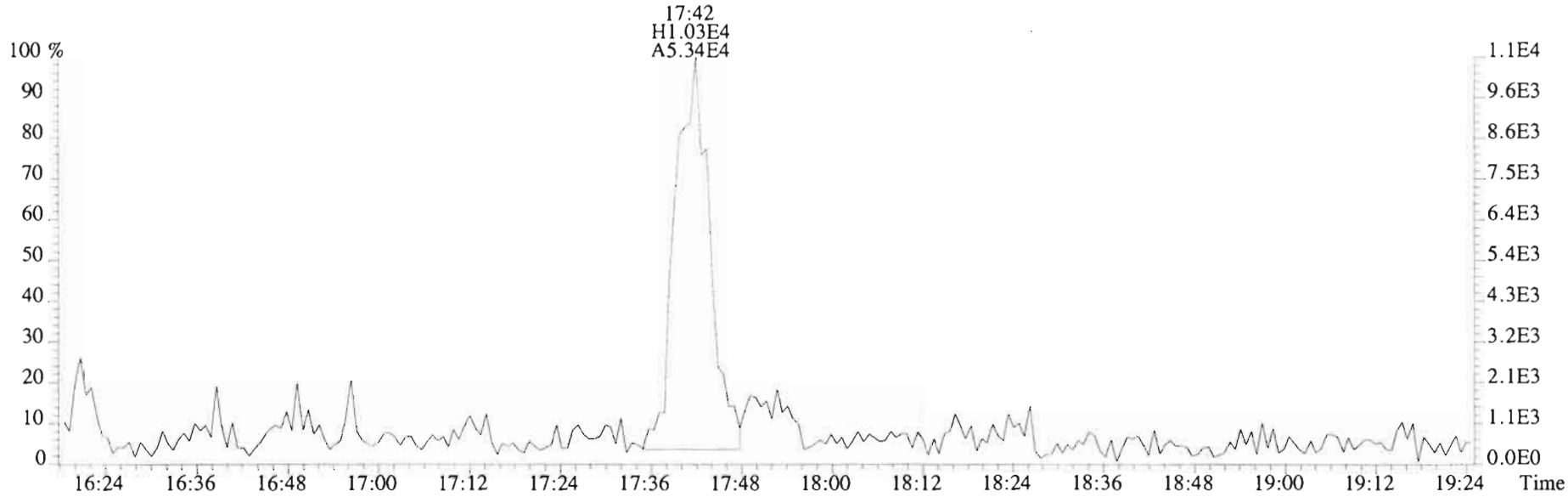
Reviewed by Analyst: CT Date: 12/26/19


File:191216D1 #1-1682 Acq:16-DEC-2019 16:10:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-01RE1 PDI-1142RAB-20-30.4-191112 11.65 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:05 H9.62E3 A3.72E4
17:41 H8.58E3 A4.65E4
14:47 H5.31E3 A1.56E4
15:37 H3.13E3 A1.12E4
14:12 H1.89E3 A6.52E3
16:50 H1.87E3 A4.81E3
17:52 H2.02E3 A8.64E3
11:31 H985.24 A5.81E3
12:43 H1.20E3 A2.66E3
14:54 H1.27E3 A5.97E3
18:50 H1.63E3 A3.23E3
20:13 H1.51E3 A6.02E3
20:41 H668.83 A1.55E3
21:55 H2.38E3 A1.75E4
100 %
50
0
9.6E3
4.8E3
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:05 H1.07E4 A4.87E4
17:42 H1.06E4 A5.84E4
14:47 H4.92E3 A2.65E4
16:21 H2.75E3 A1.04E4
16:56 H2.16E3 A4.59E3
17:53 H1.92E3 A1.15E4
14:12 H1.77E3 A7.13E3
18:57 H1.01E3 A1.29E3
20:15 H1.82E3 A8.26E3
21:05 H1.46E3 A2.52E3
21:55 H1.26E3 A7.95E3
11:49 H1.11E3 A3.33E3
12:53 H983.65 A4.07E3
100 %
50
0
1.1E4
5.4E3
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:34 H1.08E6 A4.28E6
17:40 H5.49E5 A2.86E6
100 %
50
0
1.1E6
5.4E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:34 H1.38E6 A5.31E6
17:41 H7.20E5 A3.56E6
100 %
50
0
1.4E6
6.9E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time

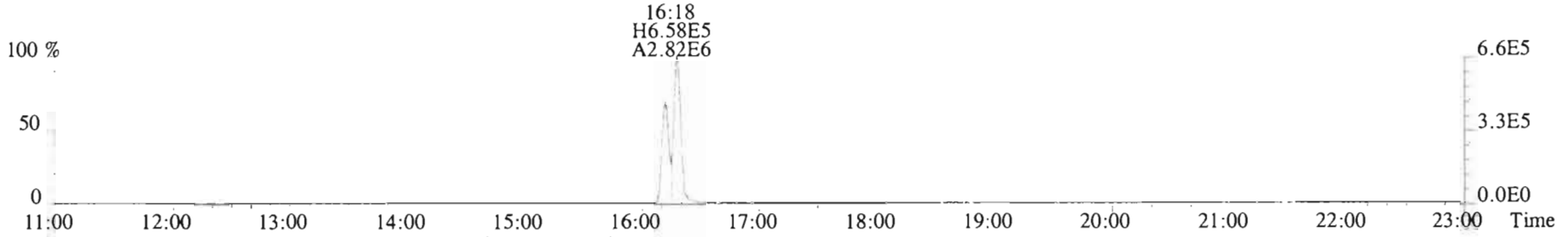
File:191216D1 #1-1682 Acq:16-DEC-2019 16:10:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-01RE1 PDI-1142RAB-20-30.4-191112 11.65 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



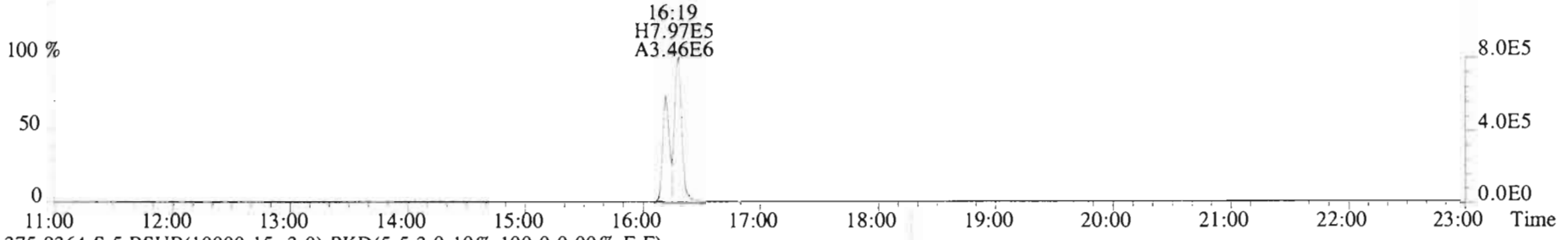
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



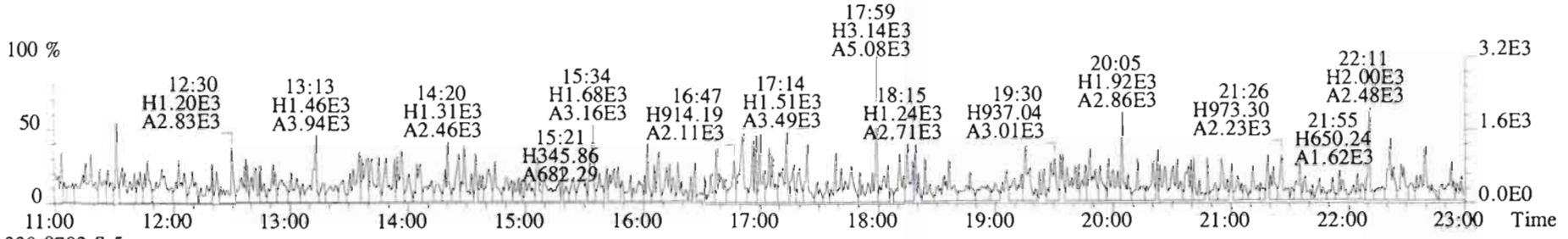
File:191216D1 #1-1682 Acq:16-DEC-2019 16:10:34 GC El+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-01RE1 PDI-1142RAB-20-30.4-191112 11.65 Exp:TCDF_DB225
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



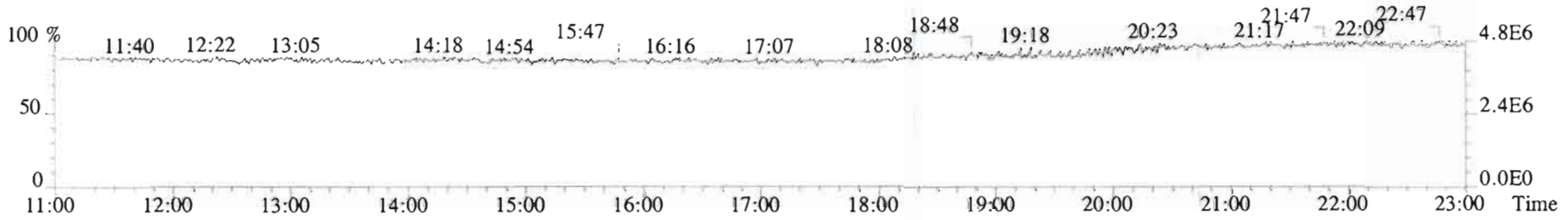
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



330.9792 S:5



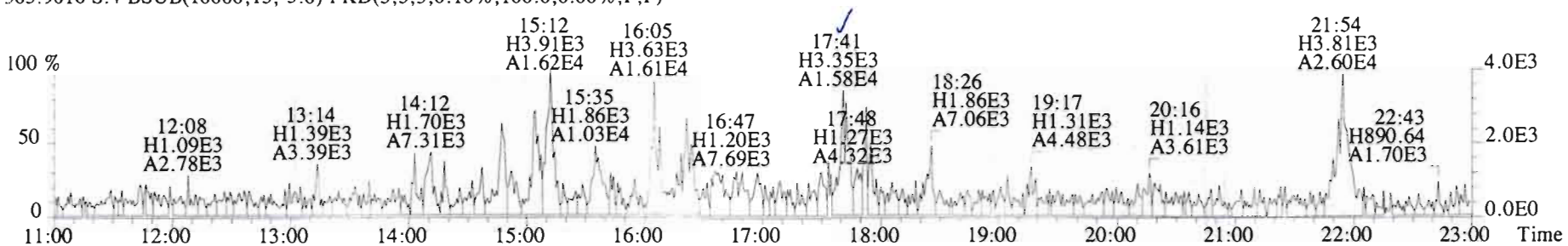
Client ID: PDI-142RAB-20-30.4-191 Filename: 191216D1 S:4 Acq:16-DEC-19 15:38:18 ✓ ConCal: ST191216D1-1
Lab ID: 1904021-04RE1 GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol:10.151 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.01e+07	0.81 y	15:35	1.00	197.0	-
13C-2,3,7,8-TCDF	9.23e+06	0.82 y	17:41	1.02	176.9	89.8
2,3,7,8-TCDF	3.04e+04	0.66 y	17:41	0.95	0.6842	

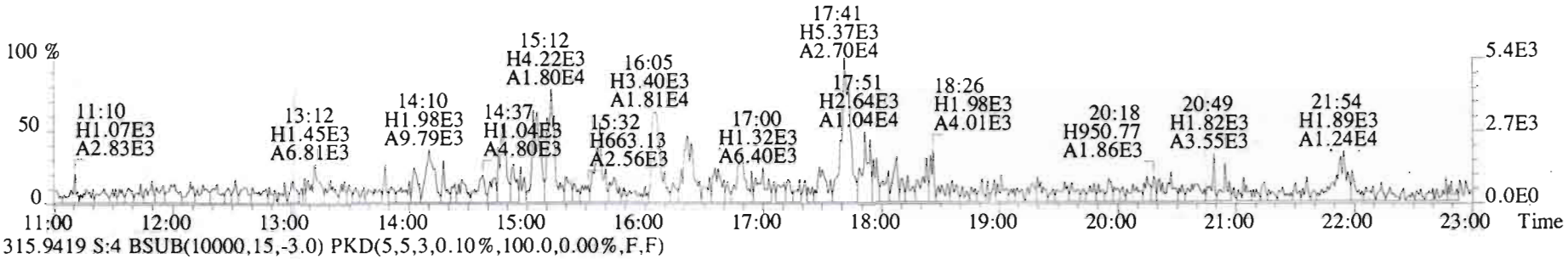
Integrations by Analyst: DB
Date: 12/16/19

Reviewed by Analyst: CT
Date: 12/20/19

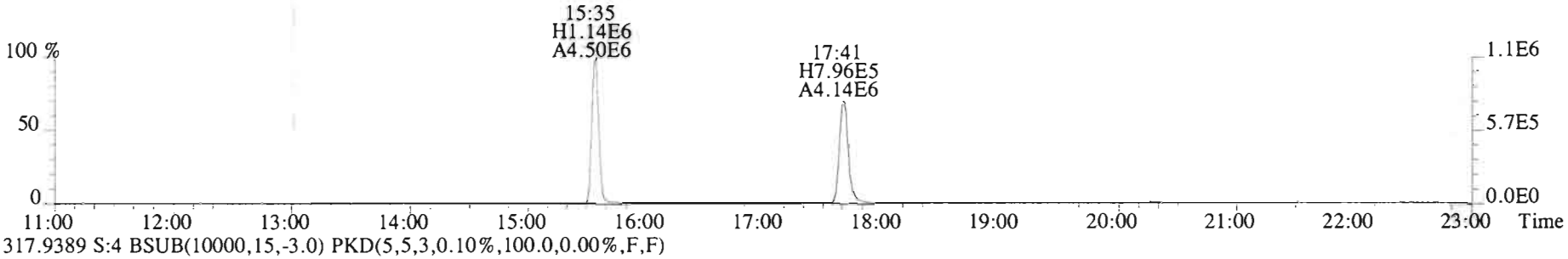
File:191216D1 #1-1682 Acq:16-DEC-2019 15:38:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-04RE1 PDI-142RAB-20-30.4-191112 11.53 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



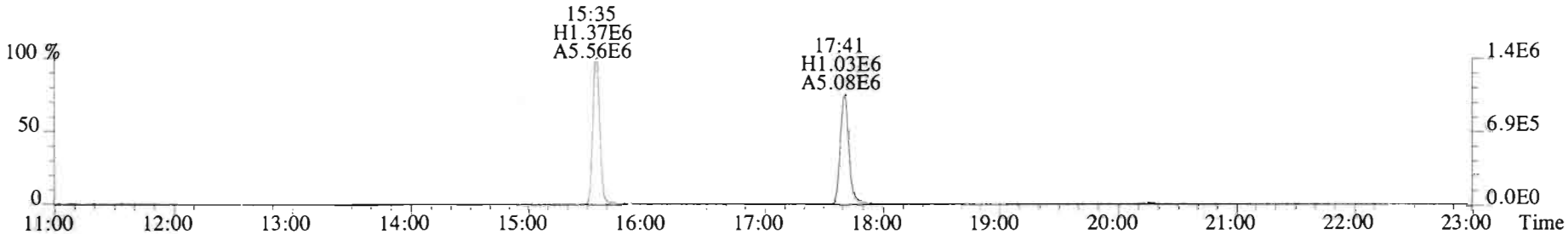
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



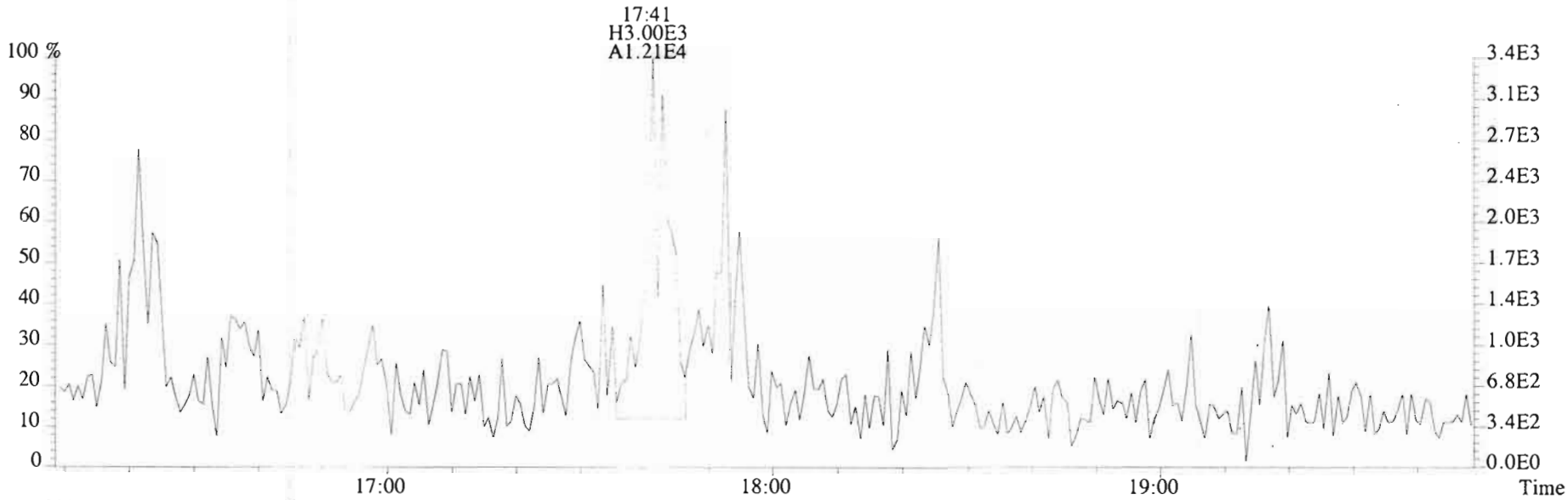
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



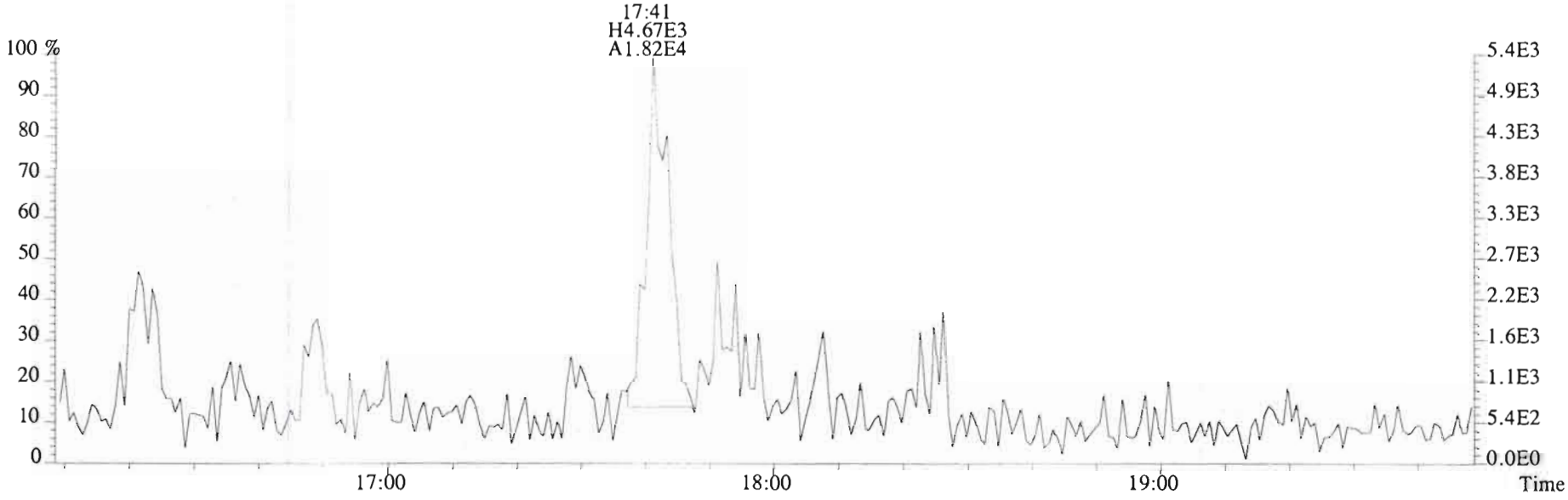
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



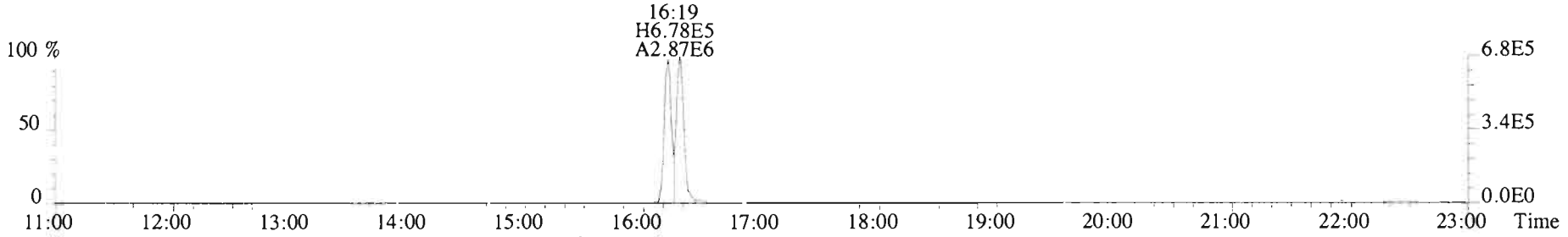
File:191216D1 #1-1364 Acq:16-DEC-2019 15:38:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-04RE1 PDI-142RAB-20-30.4-191112 11.53 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



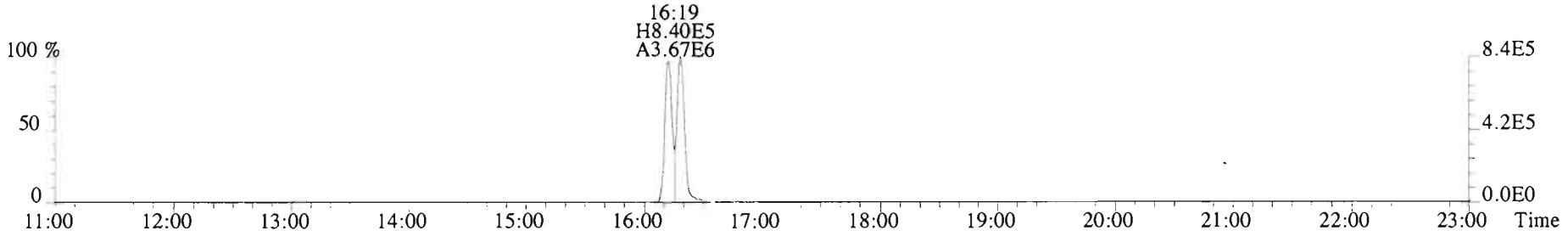
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



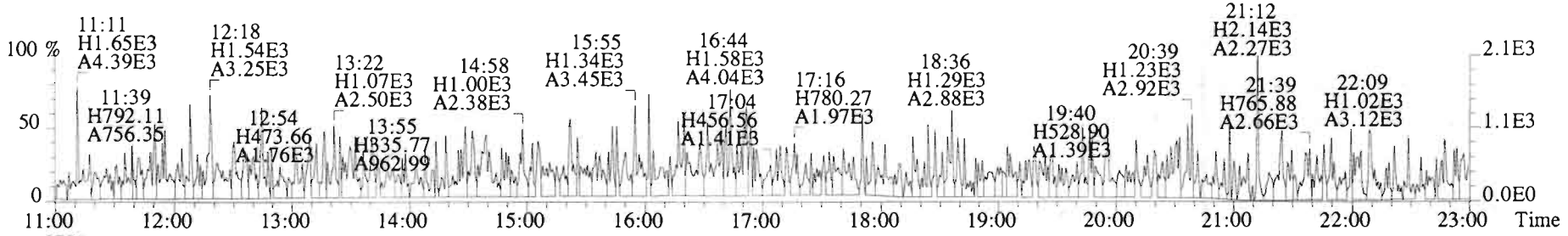
File:191216D1 #1-1682 Acq:16-DEC-2019 15:38:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:1904021-04RE1 PDI-142RAB-20-30.4-191112 11.53 Exp:TCDF_DB225
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



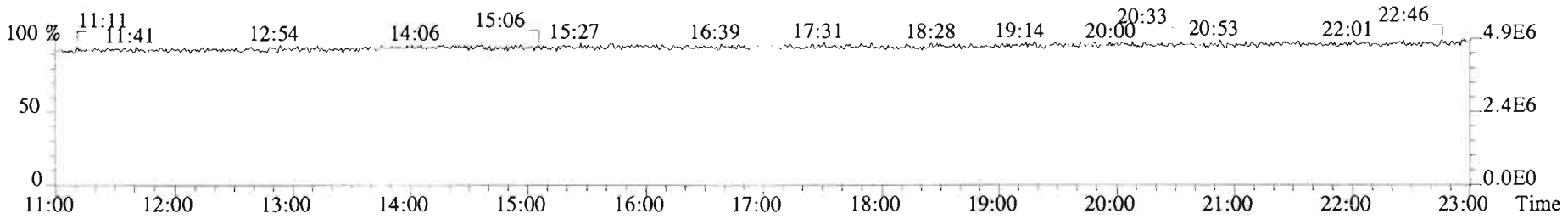
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



330.9792 S:4



SAMPLE DATA – EPA METHOD 1699

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Tuesday, November 26, 2019 08:05:46 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:07:59 Pacific Standard Time

GRB 11/26/19

CTO 2/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	2	Hexachlorobenzene	9.06e3	3.85e5	1.12	NO	0.874	1.000	22.83	22.83	1.001	1.001	NO	26.9		0.304	26.9
2	3	Alpha-BHC		2.64e5		NO	0.760	1.000	23.40			1.002	YES			2.77	
3	4	Lindane (gamma-BHC)		2.04e5		NO	0.744	1.000	26.66			1.001	YES			4.67	
4	5	Beta-BHC		1.59e5		NO	0.896	1.000	28.71			1.000	YES			3.84	
5	6	Delta-BHC		1.83e5		NO	0.837	1.000	30.41			1.001	YES			3.69	
6	7	Heptachlor	1.41e2	9.97e4	0.45	YES	0.968	1.000	28.86	28.87	1.001	1.001	NO	1.45		1.05	0.819
7	9	Aldrin		1.39e5		NO	1.02	1.000	30.99			1.001	YES			1.67	
8	10	Oxychlordane		3.31e4		NO	0.992	1.000	33.59			1.001	YES			6.10	
9	11	cis-Heptachlor Epoxide		4.37e4		NO	1.00	1.000	34.38			1.001	YES			4.91	
10	12	trans-Heptachlor Epox...		4.37e4		NO	0.255	1.000	34.87			1.015	YES			19.3	
11	13	trans-Chlordane (gam...		3.17e4		NO	1.08	1.000	35.28			1.001	YES			5.81	
12	14	trans-Nonachlor		3.54e4		NO	1.00	1.000	35.47			1.001	YES			5.36	
13	15	cis-Chlordane		3.54e4		NO	0.981	1.000	35.96			1.014	YES			5.48	
14	16	Endosulfan I (alpha)		2.38e4		NO	1.11	1.000	36.07			1.001	YES			7.70	
15	18	2,4'-DDE		9.26e5		NO	0.854	1.000	35.94			1.000	YES			1.86	
16	19	4,4'-DDE	3.11e3	6.69e5	1.08	YES	0.873	1.000	37.03	37.03	1.000	1.000	NO	5.32		2.40	4.54
17	20	Dieldrin		8.75e4		NO	0.957	1.000	37.53			1.000	YES			2.73	
18	21	Endrin		5.47e4		NO	0.933	1.000	38.91			1.000	YES			4.35	
19	22	cis-Nonachlor		4.38e4		NO	0.956	1.000	39.22			1.000	YES			4.52	
20	23	Endosulfan II (beta)		1.29e4		NO	1.06	1.000	39.93			1.000	YES			13.0	
21	24	2,4'-DDD		7.96e5		NO	0.915	1.000	38.17			1.000	NO			3.42	
22	25	2,4'-DDT		5.02e5		NO	0.921	1.000	39.31			1.000	NO			5.32	
23	26	4,4'-DDD		6.79e5		NO	1.00	1.000	39.43			1.000	NO			3.31	
24	27	4,4'-DDT		4.04e5		NO	0.986	1.000	40.50			1.000	NO			5.55	
25	28	Endosulfan Sulfate		1.80e4		NO	0.928	1.000	41.67			1.000	YES			14.9	
26	29	4,4'-Methoxychlor		3.57e6		NO	1.14	1.000	43.53			1.000	NO			4.51	
27	30	Mirex		1.63e5		NO	0.932	1.000	44.10			1.000	YES			2.66	
28	31	Endrin Aldehyde		2.94e5		NO	0.887	1.000	41.07			1.000	YES			11.1	
29	32	Endrin Ketone		2.49e5		NO	0.911	1.000	44.22			1.000	YES			12.3	
30	34	13C6-Hexachlorobenz...	3.85e5	1.33e6	1.30	NO	0.691	1.000	22.82	22.81	0.873	0.874	NO	419	41.9	0.142	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Tuesday, November 26, 2019 08:05:46 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:07:59 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
31	35	13C6-Alpha-BHC	2.64e5	1.33e6	0.79	NO	0.246	1.000	23.37	23.35	0.894	0.895	NO	808	80.8	3.64	
32	36	13C6-Lindane (gamma)	2.04e5	1.33e6	0.79	NO	0.189	1.000	26.63	26.63	1.020	1.020	NO	811	81.1	4.73	
33	37	13C6-Beta-BHC	1.59e5	1.33e6	0.77	NO	0.141	1.000	28.68	28.70	1.099	1.098	NO	852	85.2	6.35	
34	38	13C6-Delta-BHC	1.83e5	1.33e6	0.80	NO	0.164	1.000	30.38	30.39	1.164	1.163	NO	834	83.4	5.43	
35	39	13C10-Heptachlor	9.97e4	1.33e6	1.25	NO	0.0770	1.000	28.81	28.83	1.104	1.103	NO	973	97.3	2.17	
36	40	13C12-Aldrin	1.39e5	1.33e6	1.61	NO	0.122	1.000	30.93	30.96	1.185	1.184	NO	862	86.2	3.36	
37	41	13C10-Oxychlordane	3.31e4	1.33e6	1.68	NO	0.0283	1.000	33.53	33.57	1.285	1.284	NO	879	87.9	14.5	
38	42	13C10-cis-Heptachlor ...	4.37e4	1.33e6	1.62	NO	0.0366	1.000	34.32	34.36	1.315	1.314	NO	896	89.6	11.2	
39	43	13C10-trans-Chlordan...	3.17e4	1.33e6	1.65	NO	0.0292	1.000	35.23	35.26	1.350	1.349	NO	816	81.6	14.0	
40	44	13C10-trans-Nonachlor	3.54e4	1.33e6	1.62	NO	0.0333	1.000	35.42	35.45	1.357	1.356	NO	797	79.7	12.3	
41	45	13C9-Endosulfan I (al...	2.38e4	1.33e6	1.57	NO	0.0212	1.000	36.00	36.05	1.380	1.378	NO	842	84.2	19.3	
42	46	13C12-2,4'-DDE	9.26e5	1.33e6	1.60	NO	0.763	1.000	35.95	35.93	0.996	0.996	NO	911	91.1	4.08	
43	47	13C12-4,4'-DDE	6.69e5	1.33e6	1.59	NO	0.552	1.000	37.01	37.01	1.025	1.026	NO	910	91.0	5.64	
44	48	13C12-Dieldrin	8.75e4	1.33e6	1.52	NO	0.0749	1.000	37.51	37.51	1.039	1.039	NO	877	87.7	7.32	
45	49	13C12-Endrin	5.47e4	1.33e6	1.56	NO	0.0351	1.000	38.92	38.91	1.078	1.078	NO	1170	117	15.6	
46	50	13C10-cis-Nonachlor	4.38e4	1.33e6	1.64	NO	0.0389	1.000	39.20	39.21	1.086	1.086	NO	845	84.5	14.1	
47	51	13C9-Endosulfan II	1.29e4	1.33e6	1.82	NO	0.0112	1.000	39.93	39.93	1.106	1.106	NO	868	86.8	49.0	
48	52	13C12-2,4'-DDD	7.96e5	1.33e6	1.60	NO	0.588	1.000	38.10	38.17	1.461	1.459	NO	1020	102	3.86	
49	53	13C12-2,4'-DDT	5.02e5	1.33e6	1.63	NO	0.370	1.000	39.23	39.29	1.504	1.502	NO	1020	102	6.13	
50	54	13C12-4,4'-DDD	6.79e5	1.33e6	1.61	NO	0.473	1.000	39.35	39.41	1.509	1.507	NO	1080	108	4.80	
51	55	13C12-4,4'-DDT	4.04e5	1.33e6	1.58	NO	0.280	1.000	40.41	40.48	1.550	1.547	NO	1080	108	8.10	
52	56	13C9-Endosulfan Sulf...	1.80e4	1.33e6	1.51	NO	0.0173	1.000	41.66	41.67	1.154	1.154	NO	781	78.1	33.1	
53	57	13C12-Methoxychlor	3.57e6	1.33e6	22.68	NO	0.257	1.000	43.53	43.52	1.206	1.206	NO	10400	104	16.5	
54	58	13C10-Mirex	1.63e5	1.33e6	1.60	NO	0.164	1.000	44.08	44.07	1.221	1.221	NO	744	74.4	5.58	
55	59	13C12-Endrin Aldehyde	2.94e5	1.33e6	0.50	NO	0.0345	1.000	41.06	41.05	1.137	1.138	NO	6390	63.9	27.9	
56	60	13C12-Endrin Ketone	2.49e5	1.33e6	0.47	NO	0.0222	1.000	44.22	44.22	1.225	1.225	NO	8420	84.2	43.4	
57	62	13C-PCB-15	1.33e6	1.33e6	1.58	NO	1.00	1.000	26.18	26.12	1.000	1.000	NO	1000	100	0.841	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
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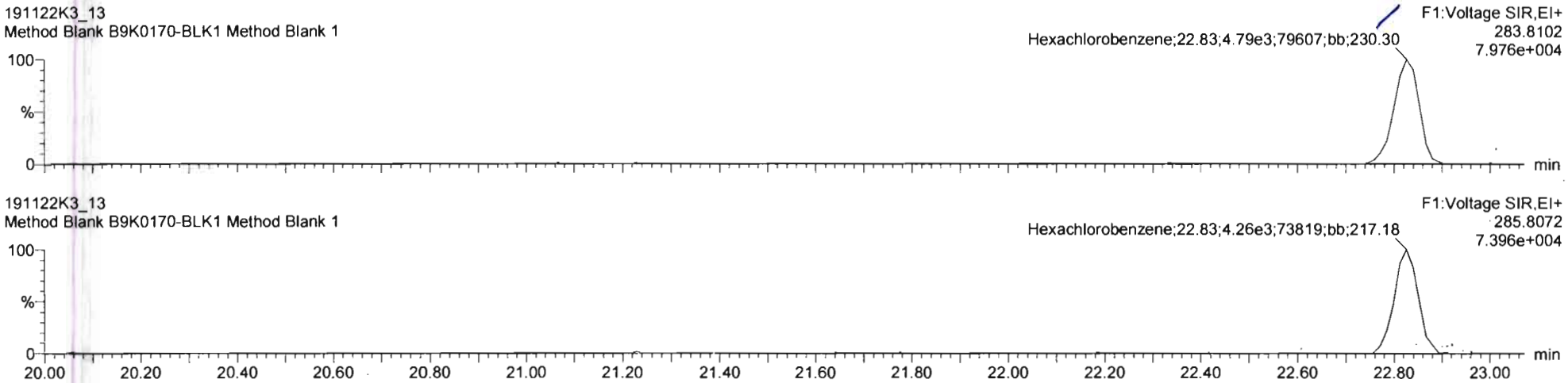
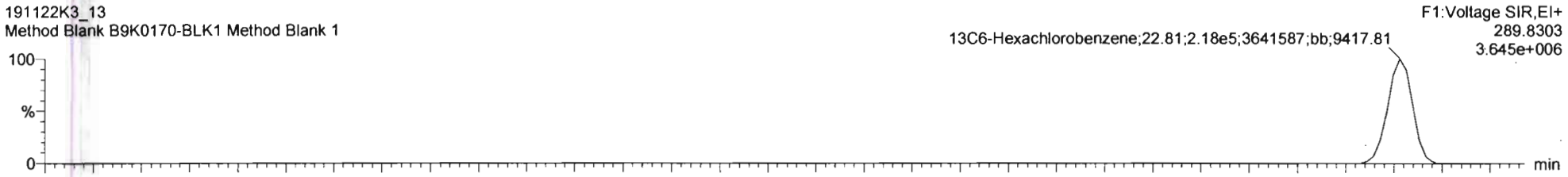
Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

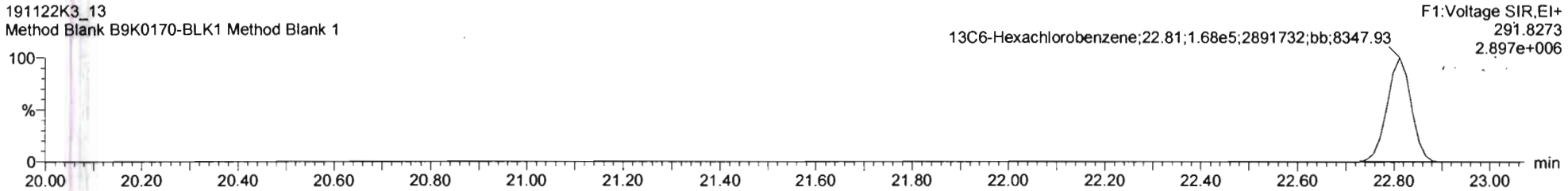
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

Hexachlorobenzene



13C6-Hexachlorobenzene





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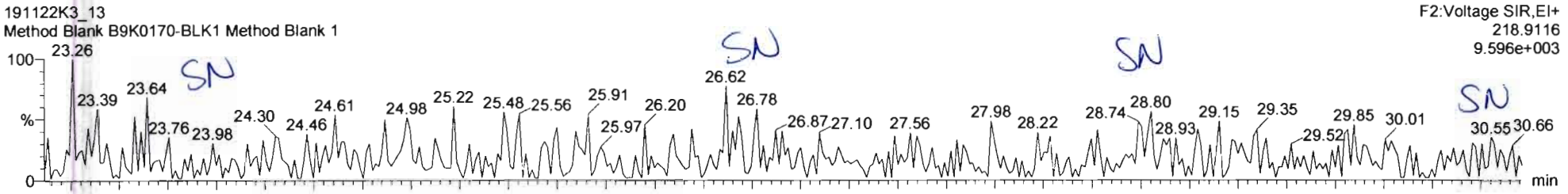
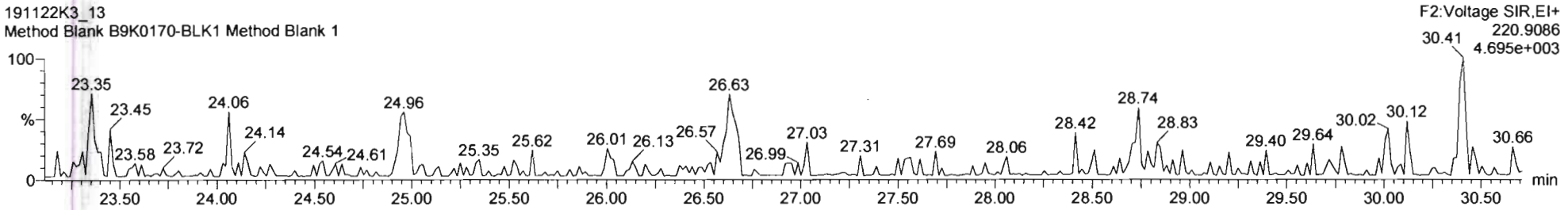
Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

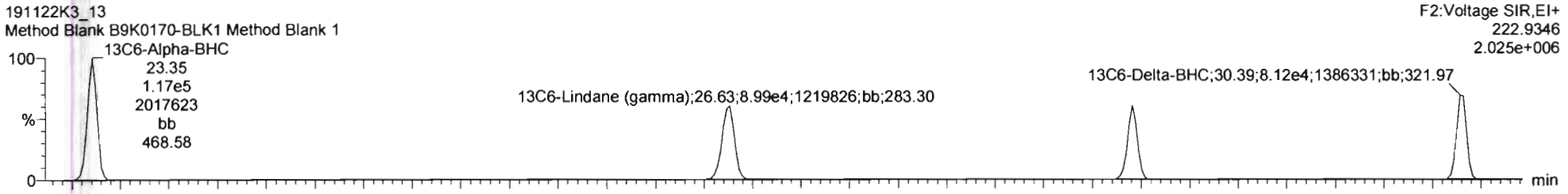
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

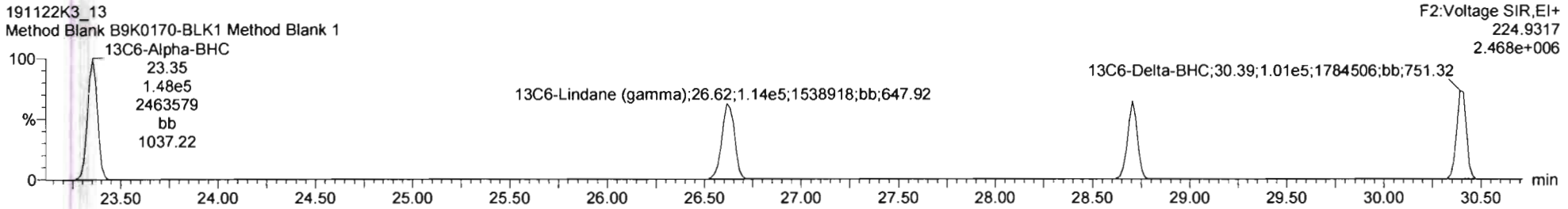
BHC Totals





BHC-isotopes





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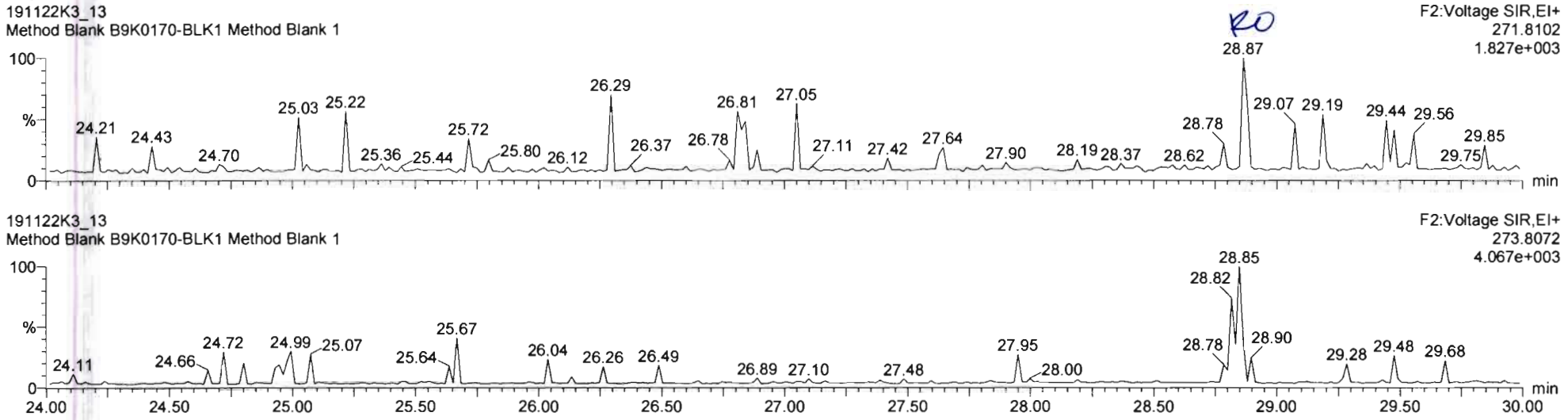
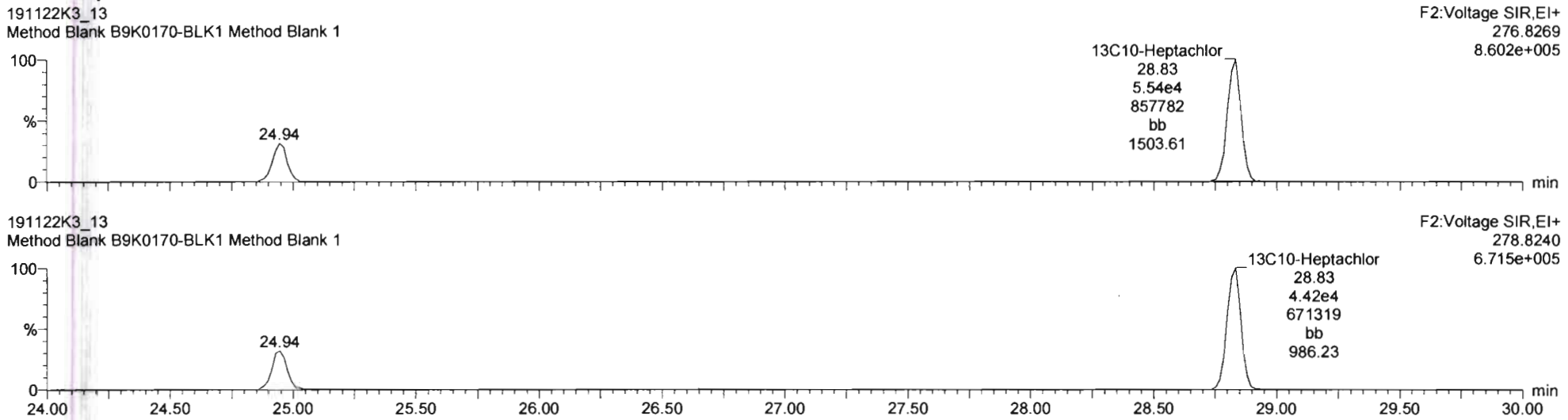
Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

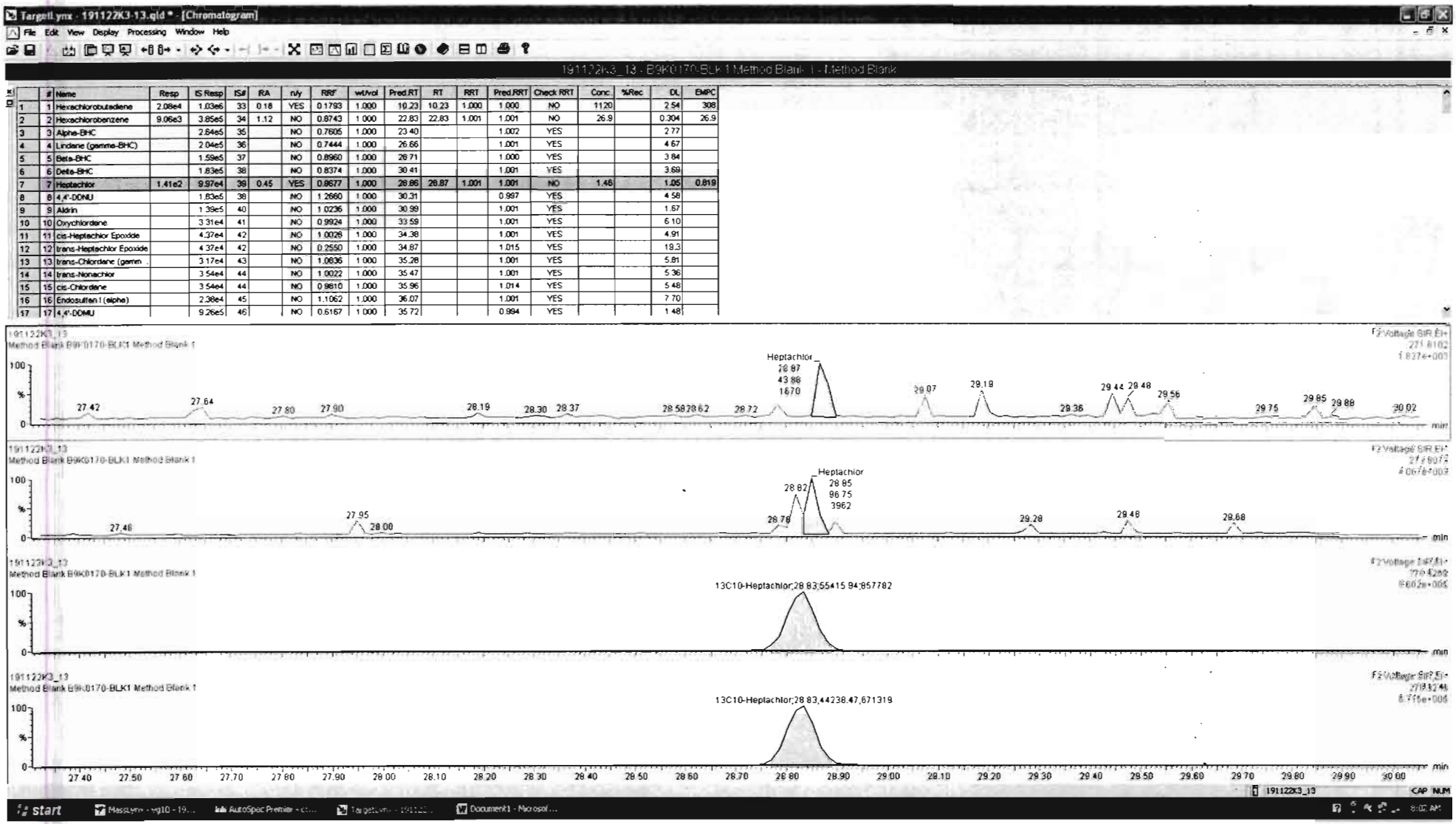
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

Heptachlor



13C10-Heptachlor





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	2.08e4	1.03e6	33	0.18	YES	0.1793	1.000	10.23	10.23	1.000	1.000	NO	1120		2.54	308
2	2	Hexachlorobenzene	9.06e3	3.85e5	34	1.12	NO	0.8743	1.000	22.83	22.83	1.001	1.001	NO	26.9		0.304	26.9
3	3	Alpha-BHC		2.84e5	35		NO	0.7605	1.000	23.40			1.002	YES			2.77	
4	4	Lindane (gamma-BHC)		2.04e5	36		NO	0.7444	1.000	26.66			1.001	YES			4.67	
5	5	Beta-BHC		1.59e5	37		NO	0.8960	1.000	26.71			1.000	YES			3.84	
6	6	Delta-BHC		1.83e5	38		NO	0.8374	1.000	30.41			1.001	YES			3.69	
7	7	Heptachlor	1.41e2	9.97e4	39	0.45	YES	0.8677	1.000	28.86	28.87	1.001	1.001	NO	1.46		1.05	0.819
8	8	4,4'-DDMU		1.83e5	38		NO	1.2660	1.000	30.31			0.997	YES			4.58	
9	9	Aldrin		1.39e5	40		NO	1.0236	1.000	30.99			1.001	YES			1.67	
10	10	Oxychlordane		3.31e4	41		NO	0.9924	1.000	33.59			1.001	YES			6.10	
11	11	cis-Heptachlor Epoxide		4.37e4	42		NO	1.0026	1.000	34.38			1.001	YES			4.91	
12	12	trans-Heptachlor Epoxide		4.37e4	42		NO	0.2550	1.000	34.87			1.015	YES			19.3	
13	13	trans-Chlordane (gamm .		3.17e4	43		NO	1.0836	1.000	35.28			1.001	YES			5.81	
14	14	trans-Nonachlor		3.54e4	44		NO	1.0022	1.000	35.47			1.001	YES			5.36	
15	15	cis-Chlordane		3.54e4	44		NO	0.9810	1.000	35.96			1.014	YES			5.48	
16	16	Endosulfan I (alpha)		2.38e4	45		NO	1.1062	1.000	36.07			1.001	YES			7.70	
17	17	4,4'-DDMU		9.26e5	46		NO	0.6167	1.000	35.72			0.994	YES			1.48	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
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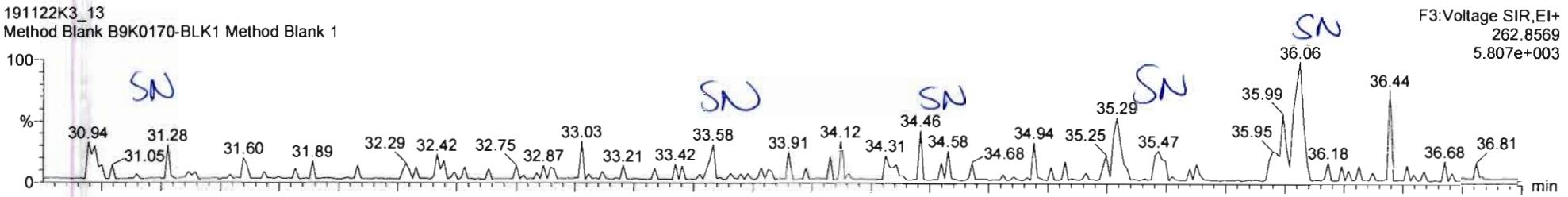
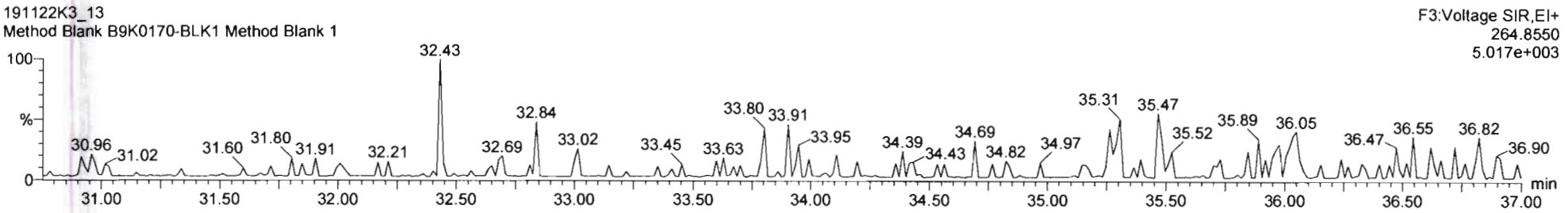
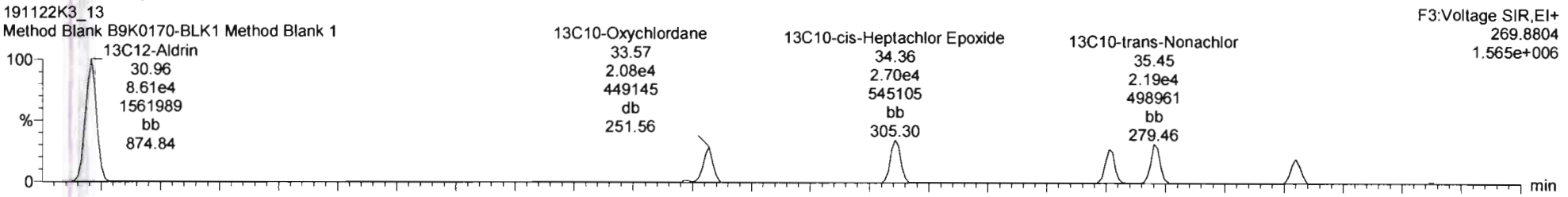
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

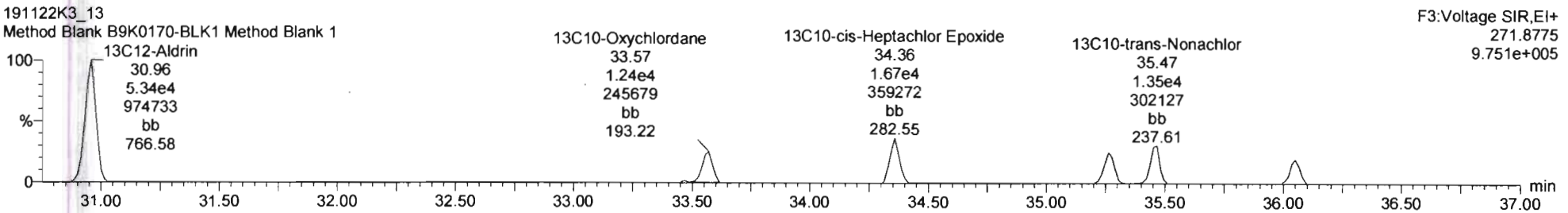
Aldrin-EI





Aldrin-EI-isotopes





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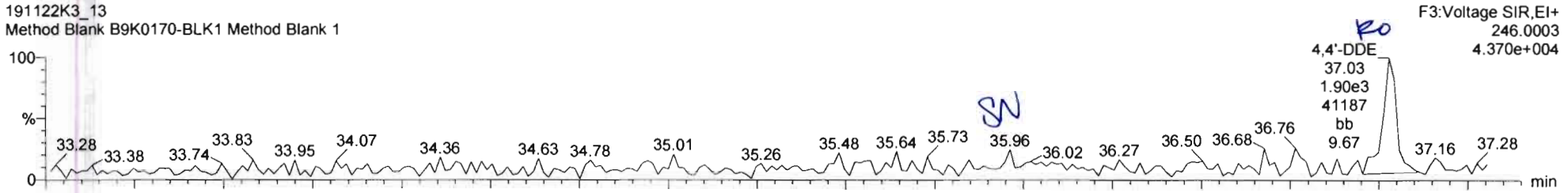
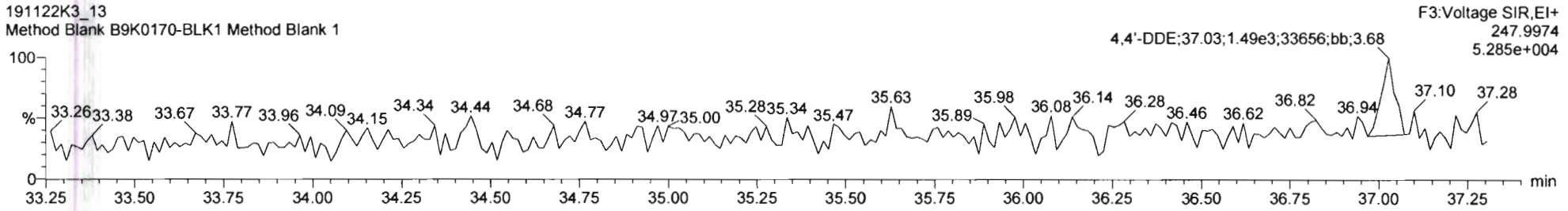
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

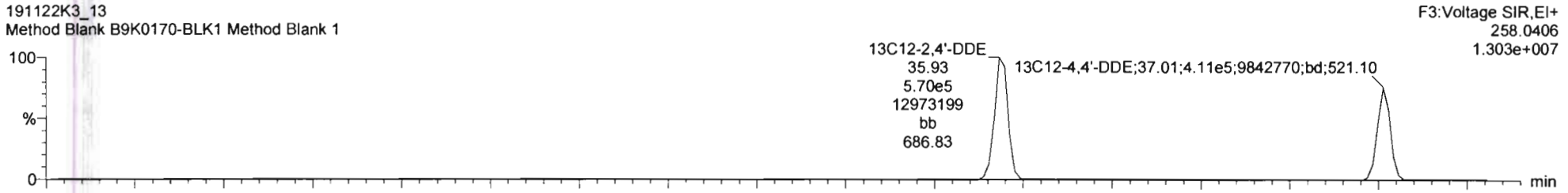
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

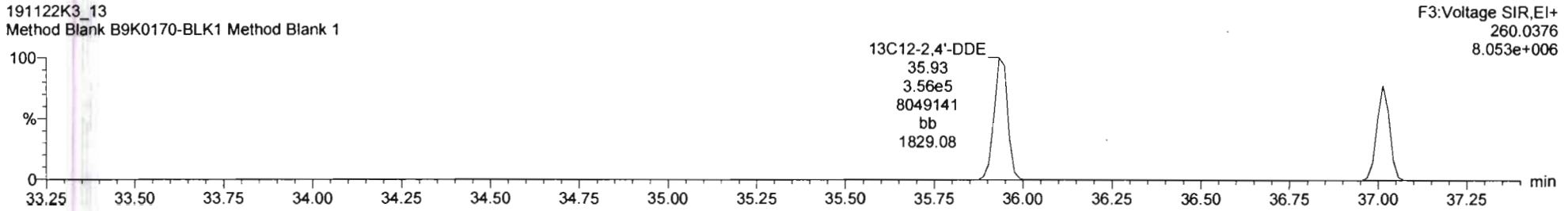
DDMU-DDE

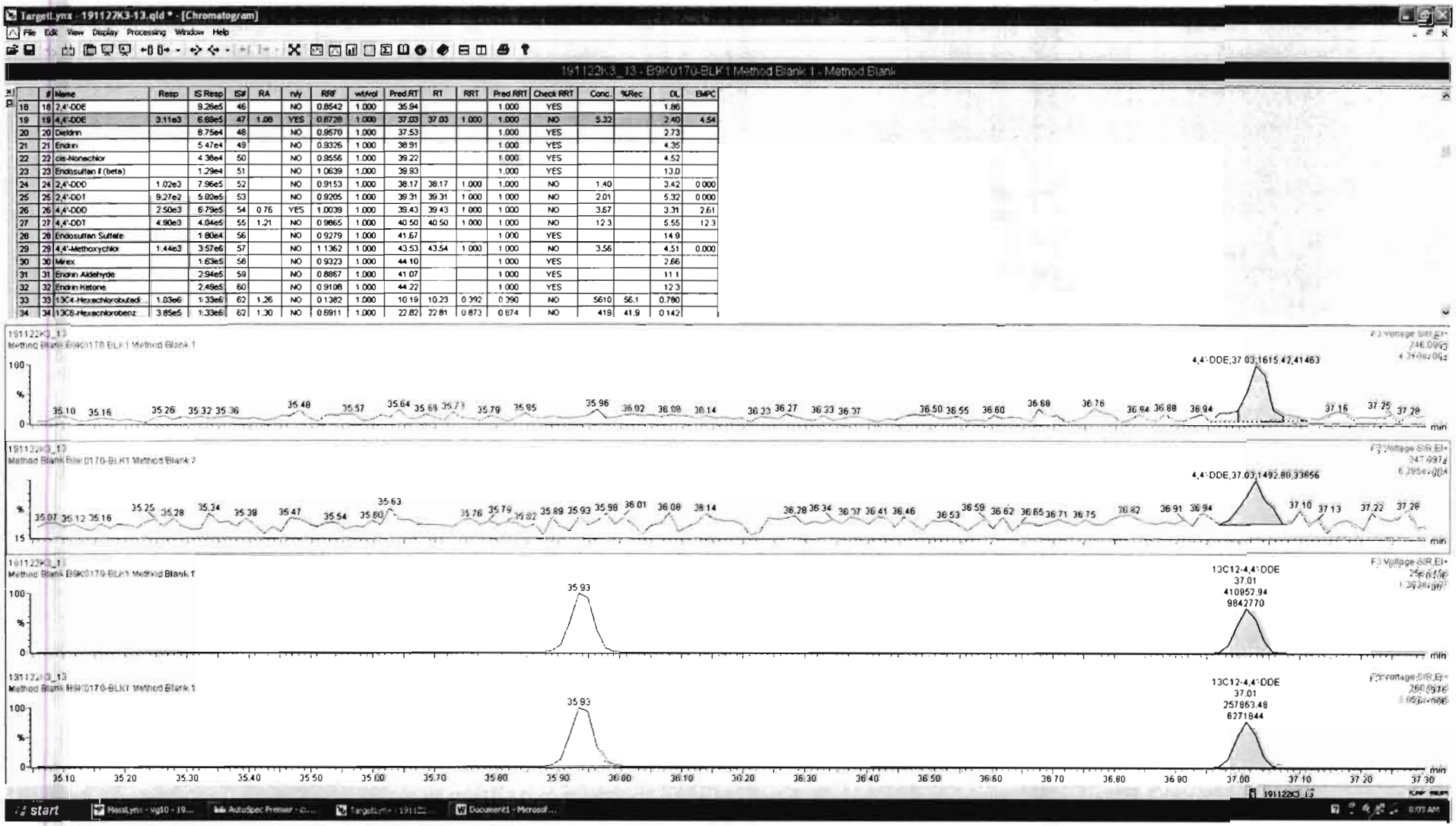




DDE-isotopes







	#	Name	Resp	IS Resp	IS#	RA	rvy	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
18	18	2,4'-DDE		9.26e5	46		NO	0.8542	1.000	35.94			1.000	YES			1.86	
19	19	4,4'-DDE	3.11e3	6.89e5	47	1.00	YES	0.8728	1.000	37.03	37.03	1.000	1.000	NO	5.32		2.40	4.54
20	20	Dieldrin		8.75e4	48		NO	0.9570	1.000	37.53			1.000	YES			2.73	
21	21	Endrin		5.47e4	49		NO	0.9326	1.000	38.91			1.000	YES			4.35	
22	22	cis-Nonachlor		4.38e4	50		NO	0.9556	1.000	39.22			1.000	YES			4.52	
23	23	Endosulfan II (beta)		1.29e4	51		NO	1.0639	1.000	39.93			1.000	YES			13.0	
24	24	2,4'-DDD	1.02e3	7.96e5	52		NO	0.9153	1.000	38.17	38.17	1.000	1.000	NO	1.40		3.42	0.000
25	25	2,4'-DDT	9.27e2	5.02e5	53		NO	0.9205	1.000	39.31	39.31	1.000	1.000	NO	2.01		5.32	0.000
26	26	4,4'-DDD	2.50e3	6.79e5	54	0.76	YES	1.0039	1.000	39.43	39.43	1.000	1.000	NO	3.67		3.31	2.61
27	27	4,4'-DDT	4.90e3	4.04e5	55	1.21	NO	0.9865	1.000	40.50	40.50	1.000	1.000	NO	12.3		5.55	12.3
28	28	Endosulfan Sulfate		1.80e4	56		NO	0.9279	1.000	41.67			1.000	YES			14.9	
29	29	4,4'-Methoxychlor	1.44e3	3.57e6	57		NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	3.56		4.51	0.000
30	30	Mirex		1.63e5	58		NO	0.9323	1.000	44.10			1.000	YES			2.66	
31	31	Endrin Aldehyde		2.94e5	59		NO	0.8867	1.000	41.07			1.000	YES			11.1	
32	32	Endrin Ketone		2.48e5	60		NO	0.9108	1.000	44.22			1.000	YES			12.3	
33	33	13C4-Hexachlorobutadi	1.03e6	1.33e6	62	1.26	NO	0.1382	1.000	10.19	10.23	0.392	0.390	NO	5610	56.1	0.780	
34	34	13C6-Hexachlorobenz	3.85e5	1.33e6	62	1.30	NO	0.6911	1.000	22.82	22.81	0.873	0.674	NO	419	41.9	0.142	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

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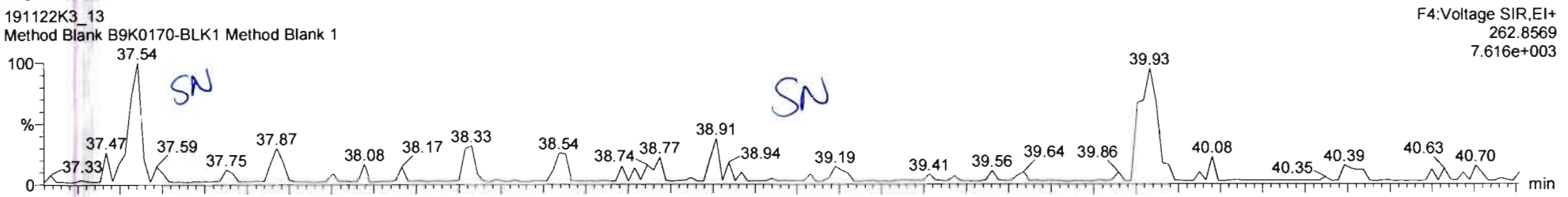
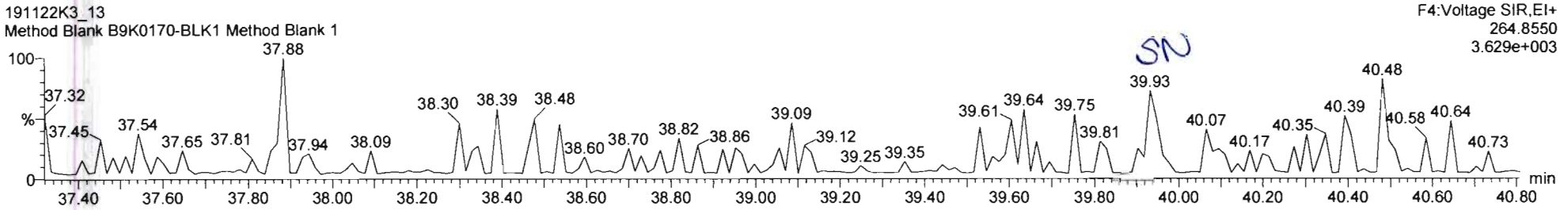
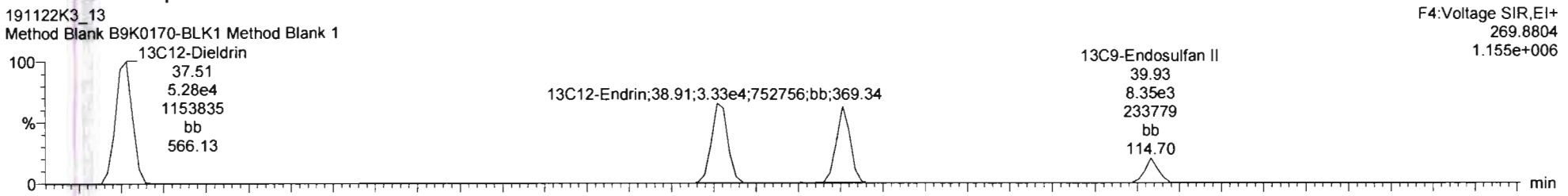
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

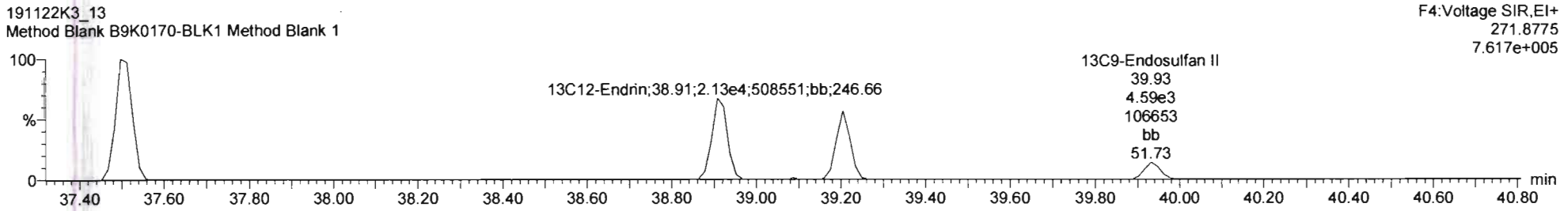
Dieldrin-EII





Dieldrin-EII-isotopes





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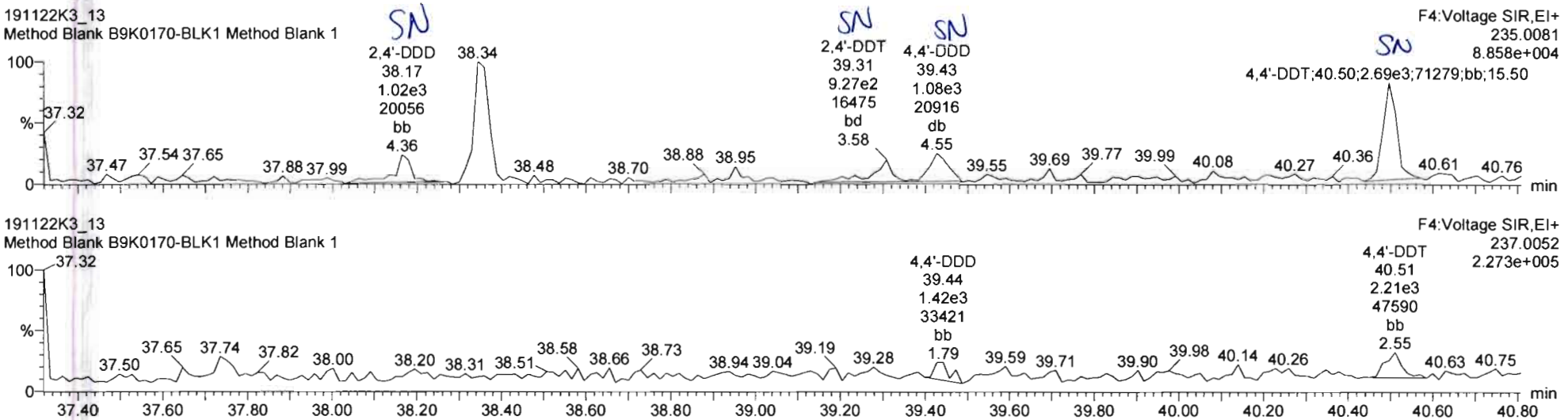
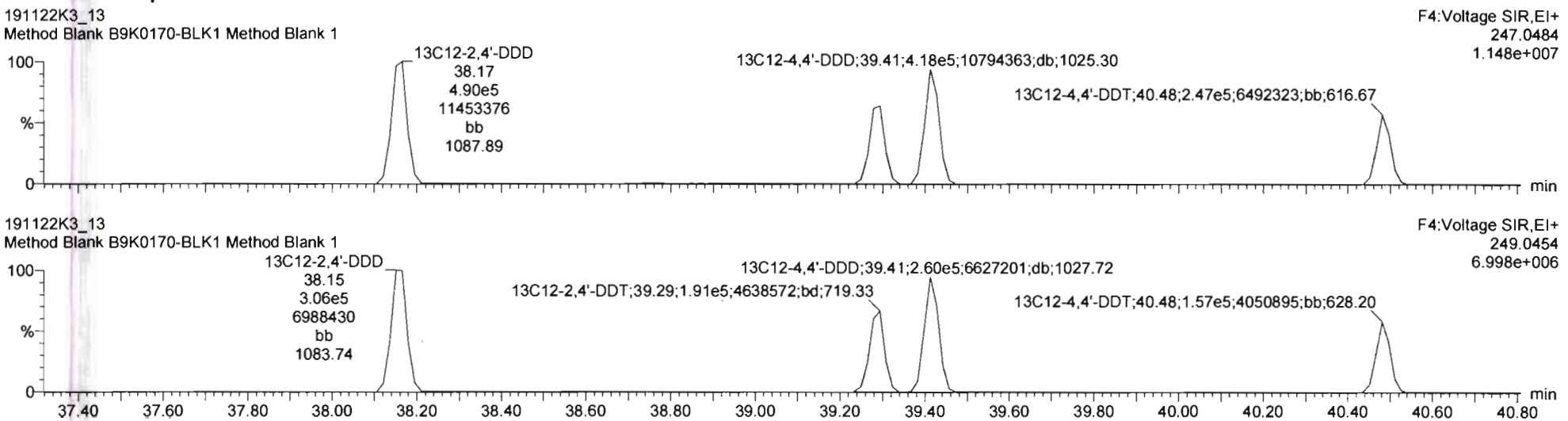
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

DDD-DDT



DDD-DDT-isotopes

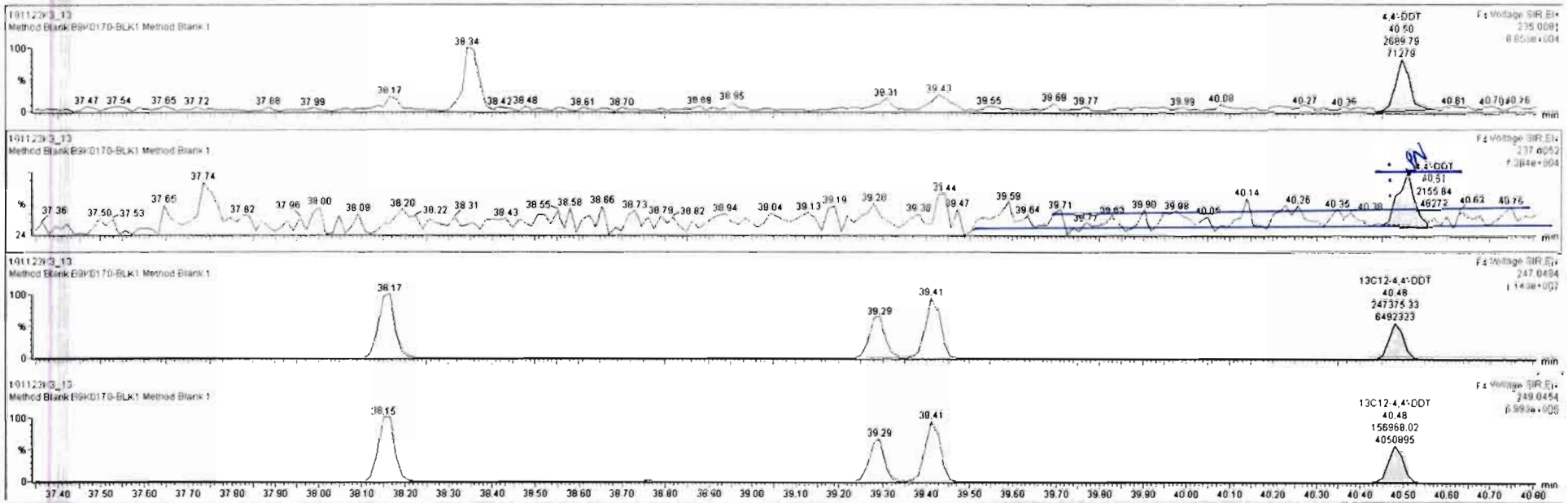


TargetLynx - 191122K3-13.qld * - [Chromatogram]

File Edit View Display Processing Window Help

191122K3_13 : B9K0170-BLK1 Method Blank 1 : Method Blank

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
18	18	2,4'-DDE		9.26e5	46		NO	0.8542	1.000	35.94			1.000	YES			1.86	
19	19	4,4'-DDE	3.11e3	6.69e5	47	1.08	YES	0.6728	1.000	37.03	37.03	1.000	1.000	NO	5.32		2.40	4.54
20	20	Dieldrin		8.75e4	48		NO	0.9570	1.000	37.53			1.000	YES			2.73	
21	21	Endrin		5.47e4	49		NO	0.9326	1.000	38.91			1.000	YES			4.35	
22	22	cis-Nonachlor		4.38e4	50		NO	0.9556	1.000	39.22			1.000	YES			4.52	
23	23	Endosulfan II (beta)		1.29e4	51		NO	1.0639	1.000	39.93			1.000	YES			13.0	
24	24	2,4'-DDD		7.96e5	52		NO	0.9153	1.000	38.17			1.000	NO			3.42	
25	25	2,4'-DDT		5.02e5	53		NO	0.9205	1.000	39.31			1.000	NO			5.32	
26	26	4,4'-DDD		6.79e5	54		NO	1.0039	1.000	39.43			1.000	NO			3.31	
27	27	4,4'-DDT	4.85e3	4.04e5	55	1.25	NO	0.9865	1.000	40.50	40.50	1.000	1.000	NO	12.1		5.55	12.1
28	28	Endosulfan Sulfate		1.80e4	56		NO	0.9279	1.000	41.67			1.000	YES			14.9	
29	29	4,4'-Methoxychlor	1.44e3	3.57e6	57		NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	3.56		4.51	0.000
30	30	Mirex		1.63e5	58		NO	0.9323	1.000	44.10			1.000	YES			2.66	
31	31	Endrin Aldehyde		2.94e5	59		NO	0.8867	1.000	41.07			1.000	YES			11.1	
32	32	Endrin Ketone		2.49e5	60		NO	0.9108	1.000	44.22			1.000	YES			12.3	
33	33	13C4-Hexachlorobutadi	1.03e6	1.33e6	62	1.26	NO	0.1382	1.000	10.19	10.23	0.392	0.390	NO	5610	56.1	0.780	
34	34	13C6-Hexachlorobenz	3.85e5	1.33e6	62	1.30	NO	0.6911	1.000	22.82	22.81	0.873	0.874	NO	419	41.9	0.142	

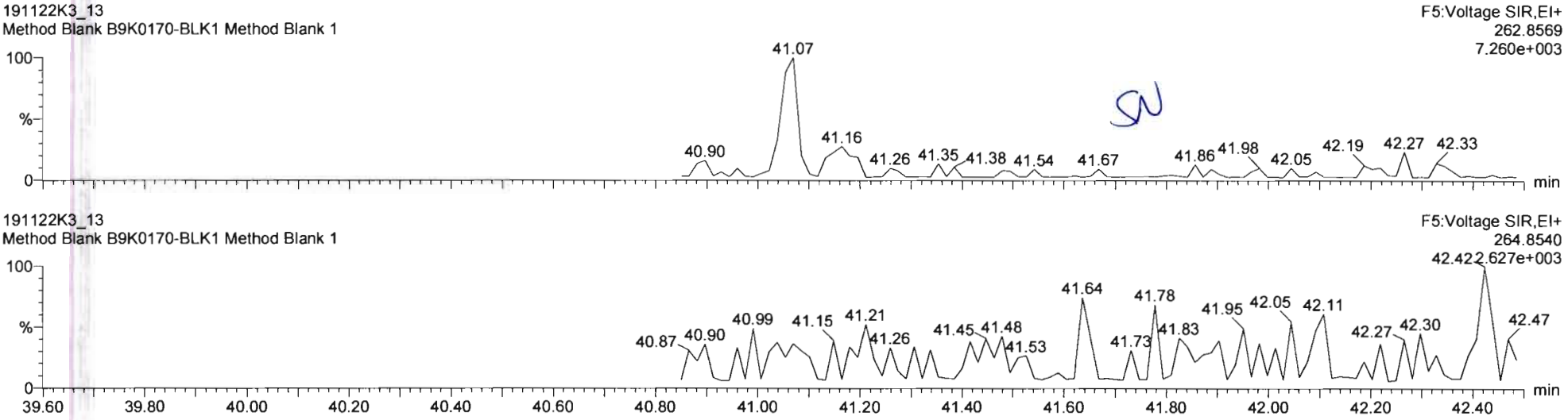


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

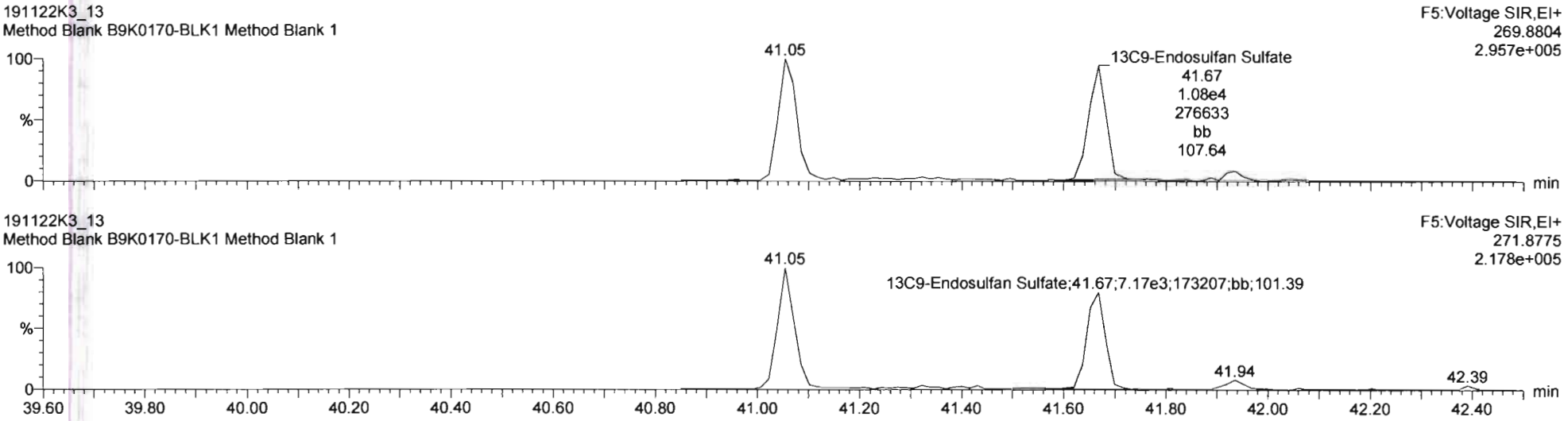
Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

Endosulfan Sulfate



13C9-Endosulfan Sulfate

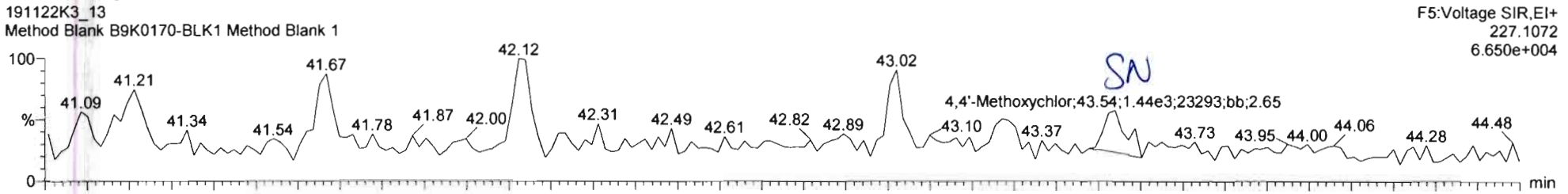


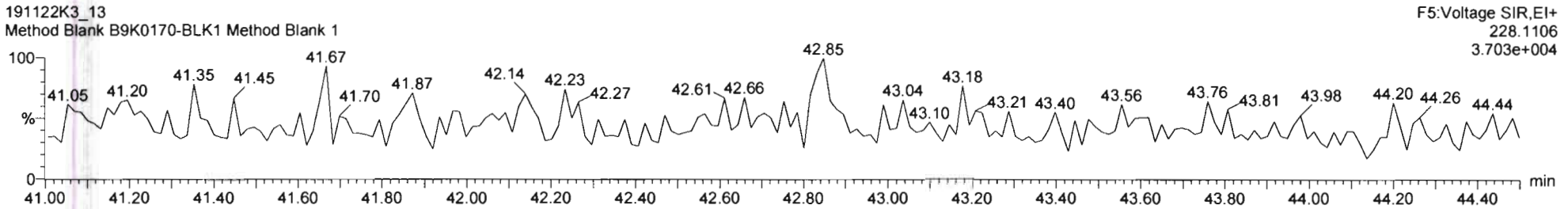
Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

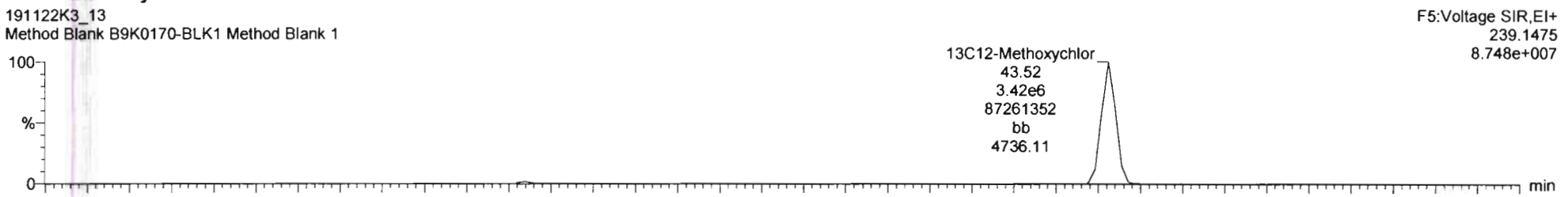
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

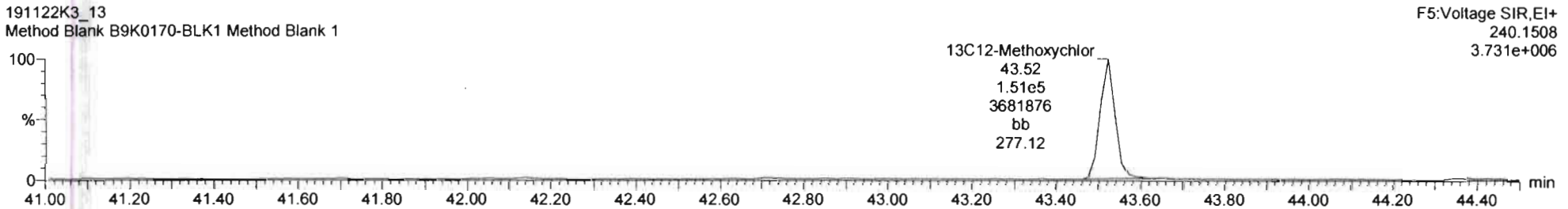
4,4'-Methoxychlor





13C12-Methoxychlor



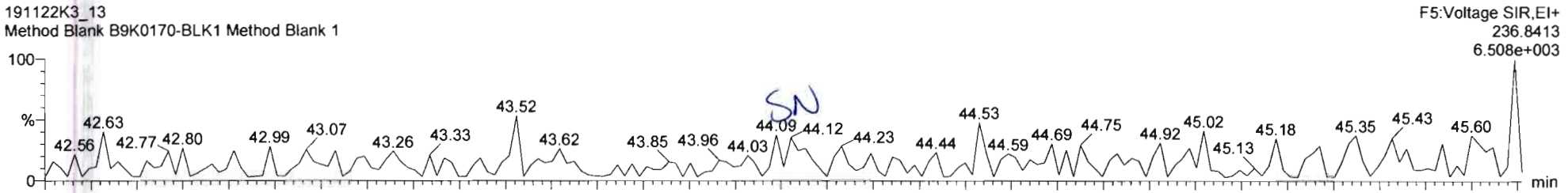


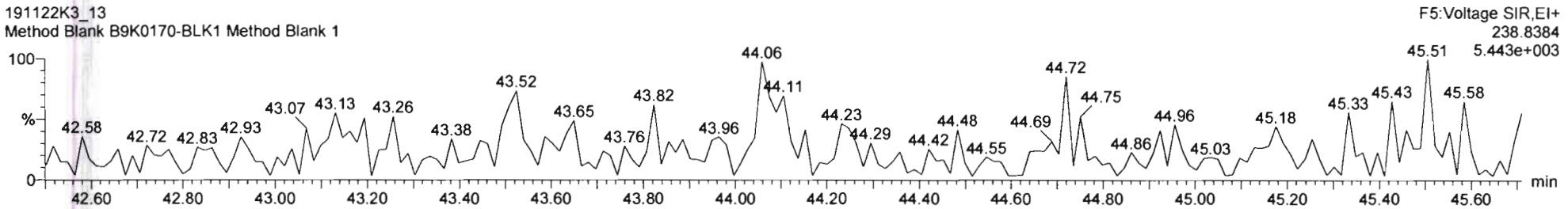
Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

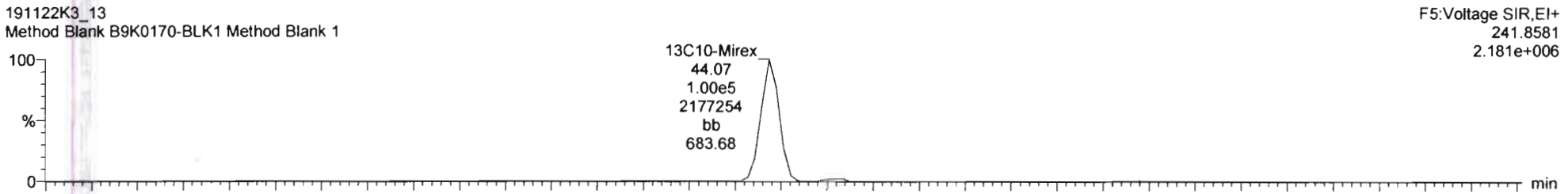
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

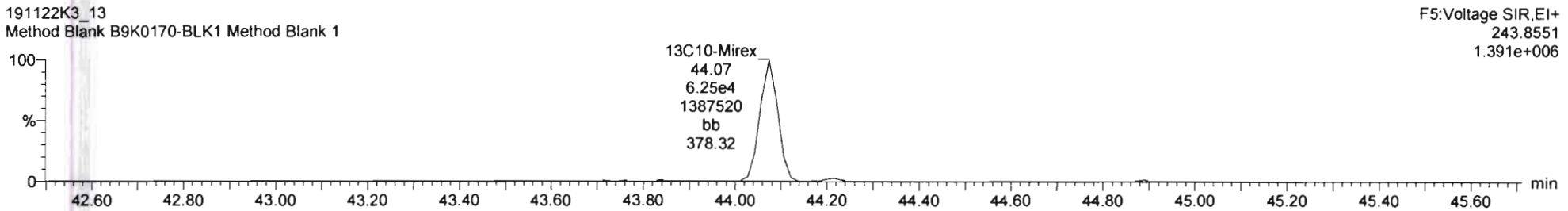
Mirex





13C10-Mirex





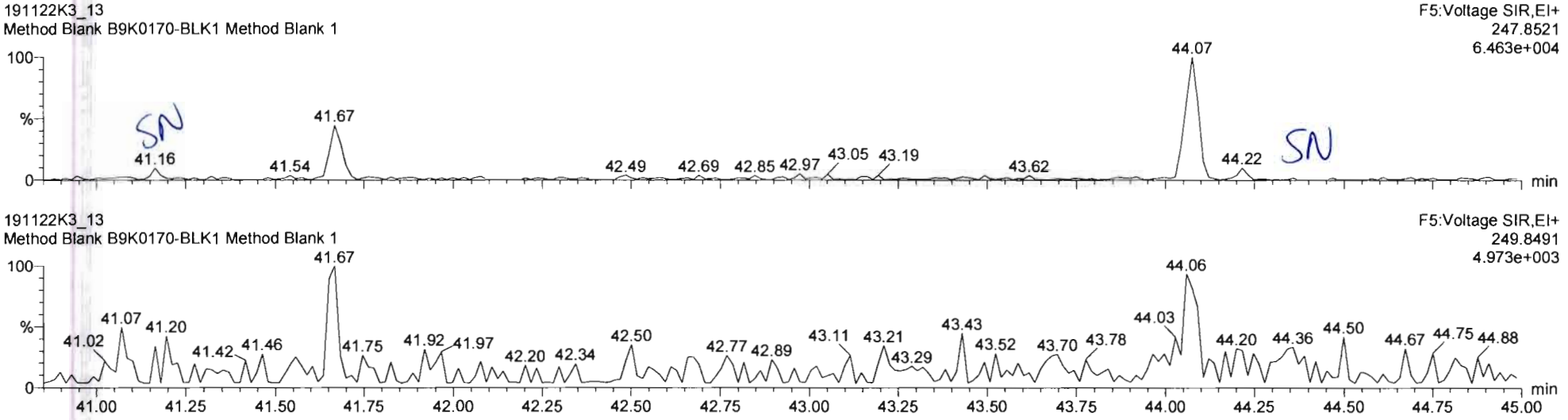
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

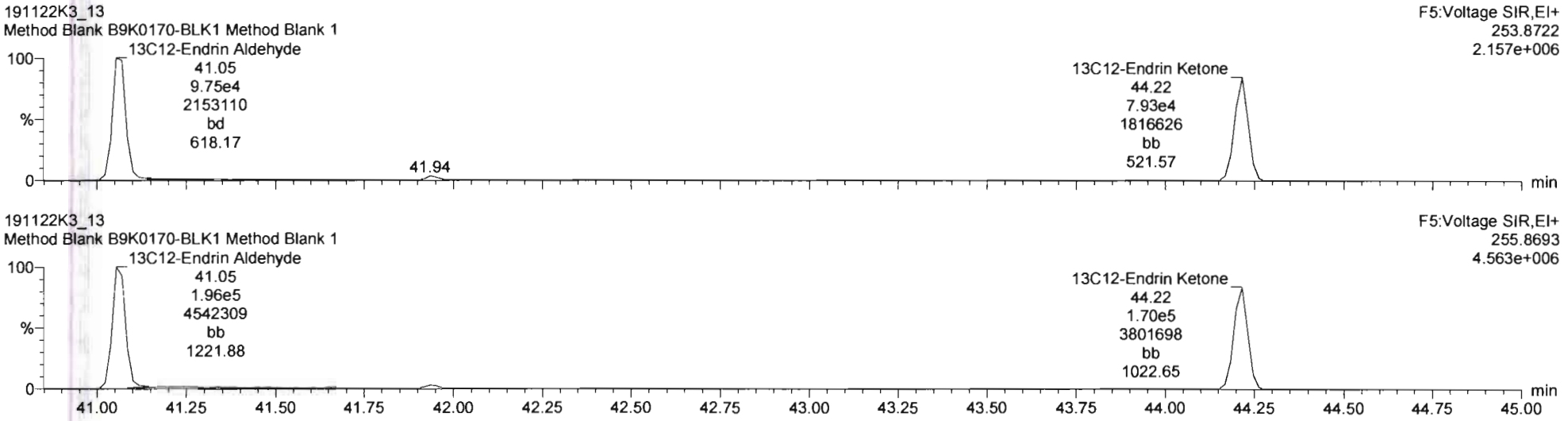
Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

EA-EK



EA-EK-isotopes

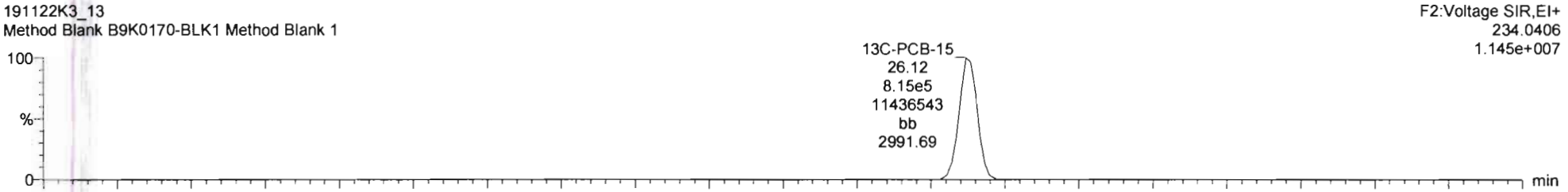


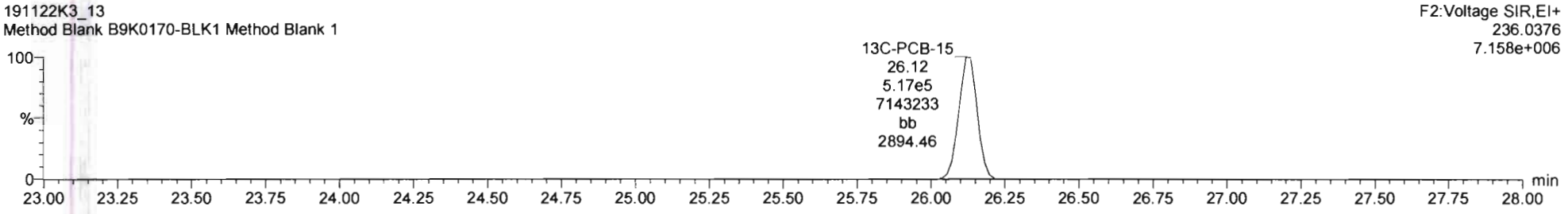
Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

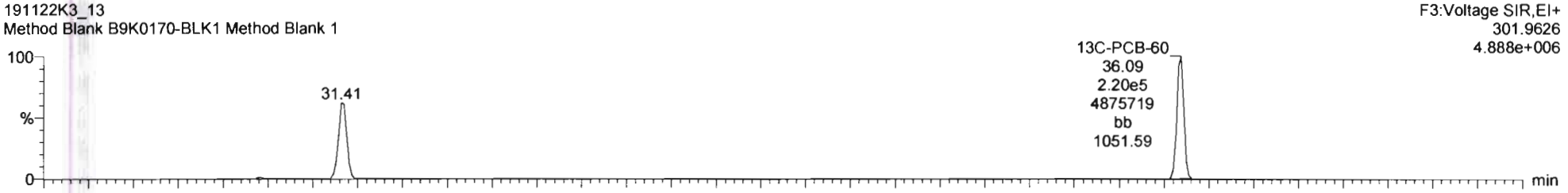
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

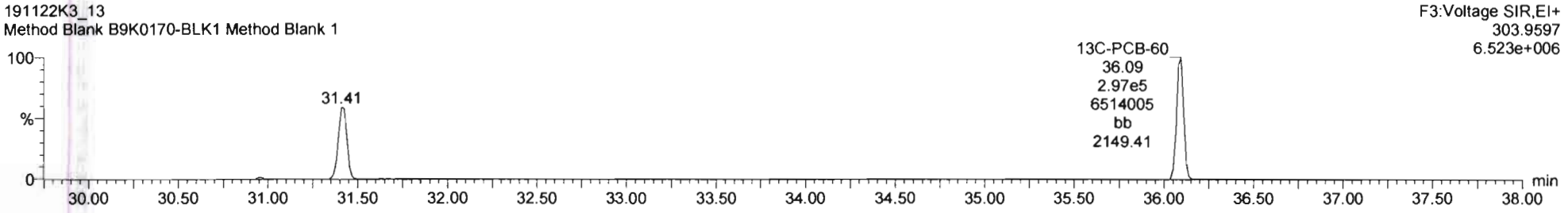
13C-PCB-15





13C-PCB-60



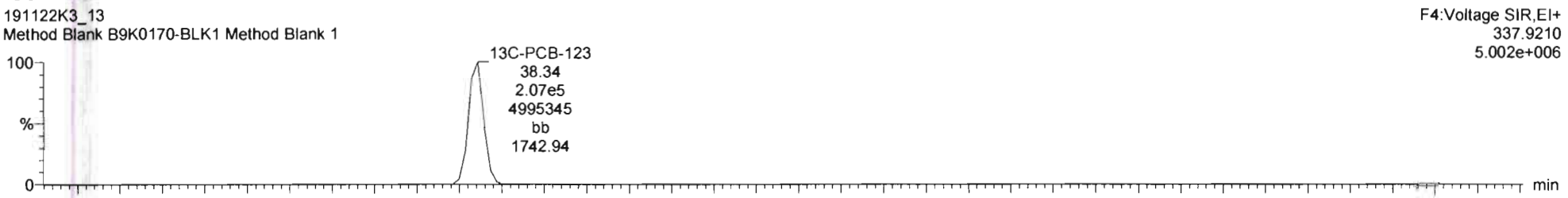


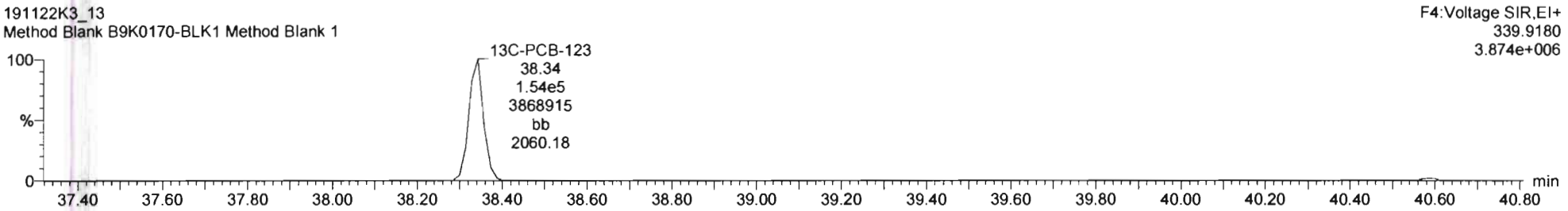
Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

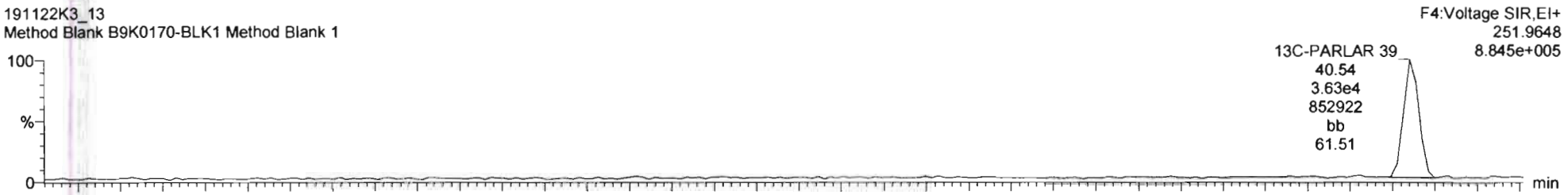
Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

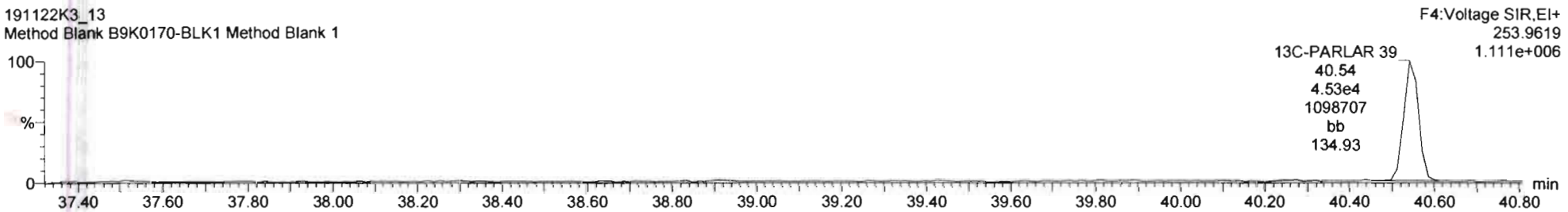
13C-PCB-123





13C-PARLAR 39





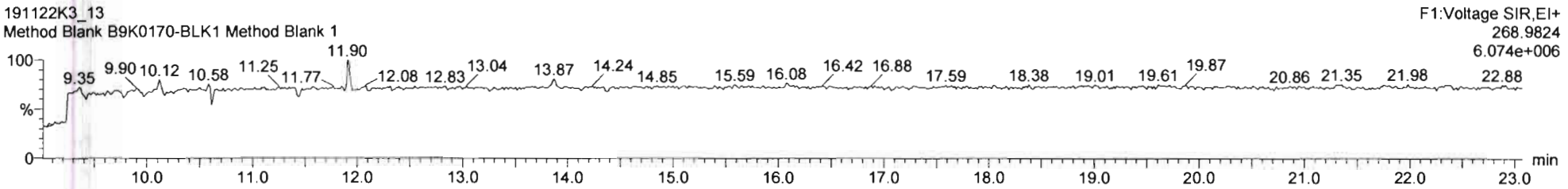
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

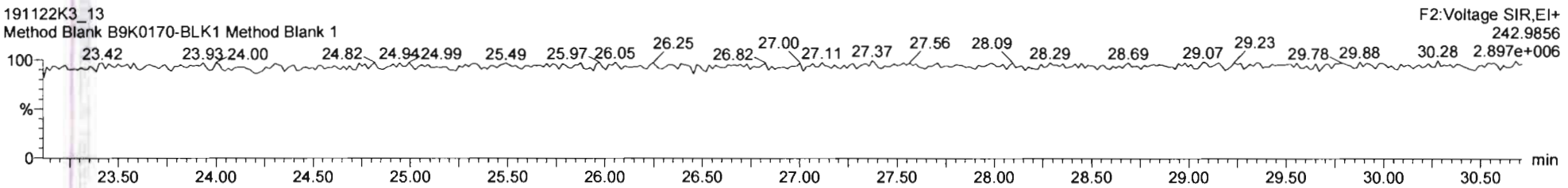
Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

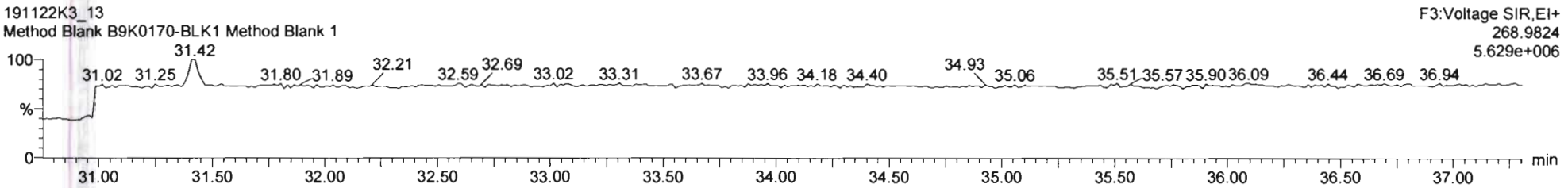
PFK1



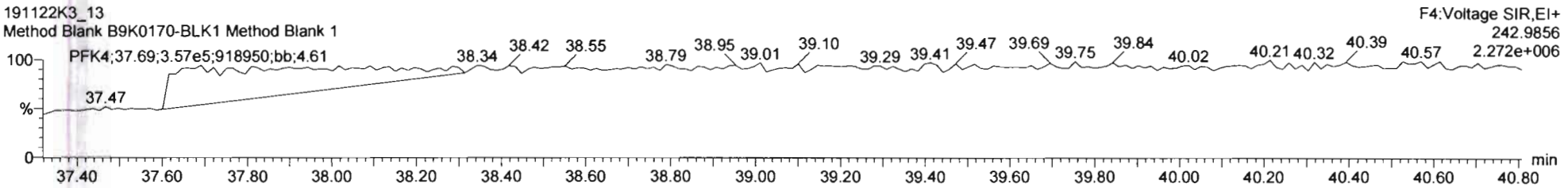
PFK2



PFK3



PFK4

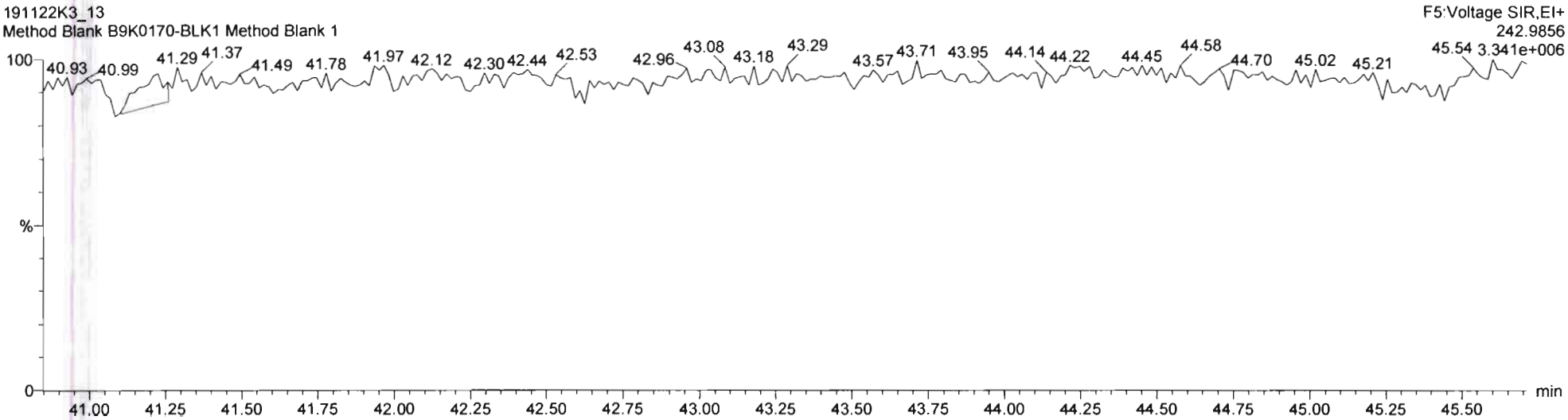


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-13.qld

Last Altered: Monday, November 25, 2019 11:36:28 Pacific Standard Time
Printed: Tuesday, November 26, 2019 07:59:16 Pacific Standard Time

Name: 191122K3_13, Date: 23-Nov-2019, Time: 01:54:28, ID: B9K0170-BLK1 Method Blank 1, Description: Method Blank

PFK5



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

Last Altered: Tuesday, November 26, 2019 08:14:23 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:14:44 Pacific Standard Time

GPO 11/26/19

C7 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	2	Hexachlorobenzene	4.25e5	4.35e5	1.23	NO	0.874	1.000	22.83	22.83	1.001	1.001	NO	1120		0.243	1120
2	3	Alpha-BHC	2.33e5	2.81e5	2.11	NO	0.760	1.000	23.40	23.37	1.001	1.002	NO	1090		2.71	1090
3	4	Lindane (gamma-BHC)	1.79e5	2.16e5	2.12	NO	0.744	1.000	26.65	26.65	1.001	1.001	NO	1110		4.42	1110
4	5	Beta-BHC	1.65e5	1.71e5	2.14	NO	0.896	1.000	28.71	28.74	1.001	1.000	NO	1070		3.66	1070
5	6	Delta-BHC	1.81e5	1.96e5	2.09	NO	0.837	1.000	30.41	30.42	1.001	1.001	NO	1100		3.37	1100
6	7	Heptachlor	1.12e5	1.04e5	1.14	NO	0.968	1.000	28.85	28.85	1.001	1.001	NO	1110		1.63	1110
7	9	Aldrin	1.61e5	1.48e5	1.62	NO	1.02	1.000	30.99	30.99	1.001	1.001	NO	1070		1.42	1070
8	10	Oxychlordane	3.88e4	3.68e4	1.61	NO	0.992	1.000	33.58	33.58	1.001	1.001	NO	1060		5.14	1060
9	11	cis-Heptachlor Epoxide	5.27e4	4.66e4	1.64	NO	1.00	1.000	34.38	34.39	1.001	1.001	NO	1130		4.00	1130
10	12	trans-Heptachlor Epox...	1.42e4	4.66e4	1.44	NO	0.255	1.000	34.87	34.87	1.015	1.015	NO	1190		15.7	1190
11	13	trans-Chlordane (gam...	4.03e4	3.59e4	1.60	NO	1.08	1.000	35.28	35.29	1.001	1.001	NO	1040		4.63	1040
12	14	trans-Nonachlor	4.30e4	4.07e4	1.45	NO	1.00	1.000	35.47	35.48	1.001	1.001	NO	1050		4.69	1050
13	15	cis-Chlordane	4.40e4	4.07e4	1.58	NO	0.981	1.000	35.96	35.96	1.014	1.014	NO	1100		4.79	1100
14	16	Endosulfan I (alpha)	3.08e4	2.70e4	1.60	NO	1.11	1.000	36.07	36.06	1.000	1.001	NO	1030		5.82	1030
15	18	2,4'-DDE	9.18e5	9.90e5	1.31	NO	0.854	1.000	35.94	35.95	1.000	1.000	NO	1090		1.88	1090
16	19	4,4'-DDE	6.80e5	7.14e5	1.35	NO	0.873	1.000	37.03	37.03	1.000	1.000	NO	1090		2.43	1090
17	20	Dieldrin	1.00e5	9.44e4	1.57	NO	0.957	1.000	37.52	37.53	1.001	1.000	NO	1110		3.79	1110
18	21	Endrin	5.89e4	6.03e4	1.62	NO	0.933	1.000	38.91	38.94	1.001	1.000	NO	1050		5.74	1050
19	22	cis-Nonachlor	5.08e4	4.88e4	1.55	NO	0.956	1.000	39.22	39.22	1.000	1.000	NO	1090		6.72	1090
20	23	Endosulfan II (beta)	1.71e4	1.58e4	1.55	NO	1.06	1.000	39.93	39.95	1.000	1.000	NO	1020		18.7	1020
21	24	2,4'-DDD	8.20e5	8.20e5	1.61	NO	0.915	1.000	38.15	38.17	1.000	1.000	NO	1090		3.77	1090
22	25	2,4'-DDT	5.42e5	5.13e5	1.56	NO	0.921	1.000	39.30	39.29	1.000	1.000	NO	1150		6.08	1150
23	26	4,4'-DDD	7.54e5	7.10e5	1.60	NO	1.00	1.000	39.43	39.43	1.000	1.000	NO	1060		3.77	1060
24	27	4,4'-DDT	4.48e5	4.30e5	1.62	NO	0.986	1.000	40.50	40.50	1.000	1.000	NO	1060		6.20	1060
25	28	Endosulfan Sulfate	2.00e4	2.05e4	1.57	NO	0.928	1.000	41.67	41.68	1.000	1.000	NO	1050		14.9	1050
26	29	4,4'-Methoxychlor	4.54e5	3.62e6	6.02	NO	1.14	1.000	43.53	43.54	1.000	1.000	NO	1100		4.09	1100
27	30	Mirex	1.84e5	1.75e5	1.53	NO	0.932	1.000	44.10	44.09	1.000	1.000	NO	1130		5.24	1130
28	31	Endrin Aldehyde	3.51e4	3.33e5	0.64	NO	0.887	1.000	41.07	41.09	1.001	1.000	NO	1190		14.0	1190
29	32	Endrin Ketone	2.48e4	2.73e5	0.64	NO	0.911	1.000	44.22	44.23	1.000	1.000	NO	996		17.5	996
30	34	13C6-Hexachlorobenz...	4.35e5	1.31e6	1.27	NO	0.691	1.000	22.82	22.81	0.873	0.874	NO	479	47.9	0.146	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

Last Altered: Tuesday, November 26, 2019 08:14:23 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:14:44 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
31	35	13C6-Alpha-BHC	2.81e5	1.31e6	0.77	NO	0.246	1.000	23.37	23.35	0.894	0.895	NO	872	87.2	3.67	
32	36	13C6-Lindane (gamma)	2.16e5	1.31e6	0.80	NO	0.189	1.000	26.63	26.62	1.019	1.020	NO	871	87.1	4.77	
33	37	13C6-Beta-BHC	1.71e5	1.31e6	0.79	NO	0.141	1.000	28.68	28.70	1.099	1.098	NO	928	92.8	6.41	
34	38	13C6-Delta-BHC	1.96e5	1.31e6	0.79	NO	0.164	1.000	30.38	30.39	1.164	1.163	NO	906	90.6	5.48	
35	39	13C10-Heptachlor	1.04e5	1.31e6	1.26	NO	0.0770	1.000	28.81	28.82	1.103	1.103	NO	1030	103	2.45	
36	40	13C12-Aldrin	1.48e5	1.31e6	1.60	NO	0.122	1.000	30.93	30.96	1.185	1.184	NO	925	92.5	3.78	
37	41	13C10-Oxychlordane	3.68e4	1.31e6	1.59	NO	0.0283	1.000	33.53	33.56	1.285	1.284	NO	992	99.2	16.3	
38	42	13C10-cis-Heptachlor ...	4.66e4	1.31e6	1.64	NO	0.0366	1.000	34.32	34.36	1.315	1.314	NO	969	96.9	12.6	
39	43	13C10-trans-Chlordan...	3.59e4	1.31e6	1.67	NO	0.0292	1.000	35.23	35.26	1.350	1.349	NO	937	93.7	15.8	
40	44	13C10-trans-Nonachlor	4.07e4	1.31e6	1.66	NO	0.0333	1.000	35.42	35.45	1.357	1.356	NO	930	93.0	13.8	
41	45	13C9-Endosulfan I (al...	2.70e4	1.31e6	1.49	NO	0.0212	1.000	36.00	36.05	1.380	1.378	NO	968	96.8	21.7	
42	46	13C12-2,4'-DDE	9.90e5	1.31e6	1.60	NO	0.763	1.000	35.94	35.93	0.996	0.996	NO	988	98.8	4.42	
43	47	13C12-4,4'-DDE	7.14e5	1.31e6	1.60	NO	0.552	1.000	37.00	37.01	1.026	1.026	NO	985	98.5	6.11	
44	48	13C12-Dieldrin	9.44e4	1.31e6	1.73	NO	0.0749	1.000	37.50	37.50	1.039	1.039	NO	959	95.9	6.46	
45	49	13C12-Endrin	6.03e4	1.31e6	1.63	NO	0.0351	1.000	38.90	38.91	1.078	1.078	NO	1310	131	13.8	
46	50	13C10-cis-Nonachlor	4.88e4	1.31e6	1.58	NO	0.0389	1.000	39.19	39.20	1.087	1.086	NO	955	95.5	12.4	
47	51	13C9-Endosulfan II	1.58e4	1.31e6	1.56	NO	0.0112	1.000	39.91	39.93	1.107	1.106	NO	1070	107	43.3	
48	52	13C12-2,4'-DDD	8.20e5	1.31e6	1.58	NO	0.588	1.000	38.10	38.15	1.461	1.459	NO	1060	106	4.32	
49	53	13C12-2,4'-DDT	5.13e5	1.31e6	1.62	NO	0.370	1.000	39.23	39.28	1.504	1.502	NO	1060	106	6.86	
50	54	13C12-4,4'-DDD	7.10e5	1.31e6	1.60	NO	0.473	1.000	39.35	39.41	1.509	1.507	NO	1140	114	5.37	
51	55	13C12-4,4'-DDT	4.30e5	1.31e6	1.60	NO	0.280	1.000	40.41	40.48	1.550	1.547	NO	1170	117	9.06	
52	56	13C9-Endosulfan Sulf...	2.05e4	1.31e6	1.49	NO	0.0173	1.000	41.64	41.67	1.155	1.154	NO	903	90.3	31.7	
53	57	13C12-Methoxychlor	3.62e6	1.31e6	21.77	NO	0.257	1.000	43.51	43.52	1.206	1.206	NO	10700	107	14.3	
54	58	13C10-Mirex	1.75e5	1.31e6	1.56	NO	0.164	1.000	44.06	44.07	1.222	1.221	NO	811	81.1	6.91	
55	59	13C12-Endrin Aldehyde	3.33e5	1.31e6	0.49	NO	0.0345	1.000	41.04	41.05	1.138	1.138	NO	7350	73.5	37.2	
56	60	13C12-Endrin Ketone	2.73e5	1.31e6	0.51	NO	0.0222	1.000	44.20	44.22	1.226	1.225	NO	9370	93.7	57.8	
57	62	13C-PCB-15	1.31e6	1.31e6	1.57	NO	1.00	1.000	26.18	26.12	1.000	1.000	NO	1000	100	0.921	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

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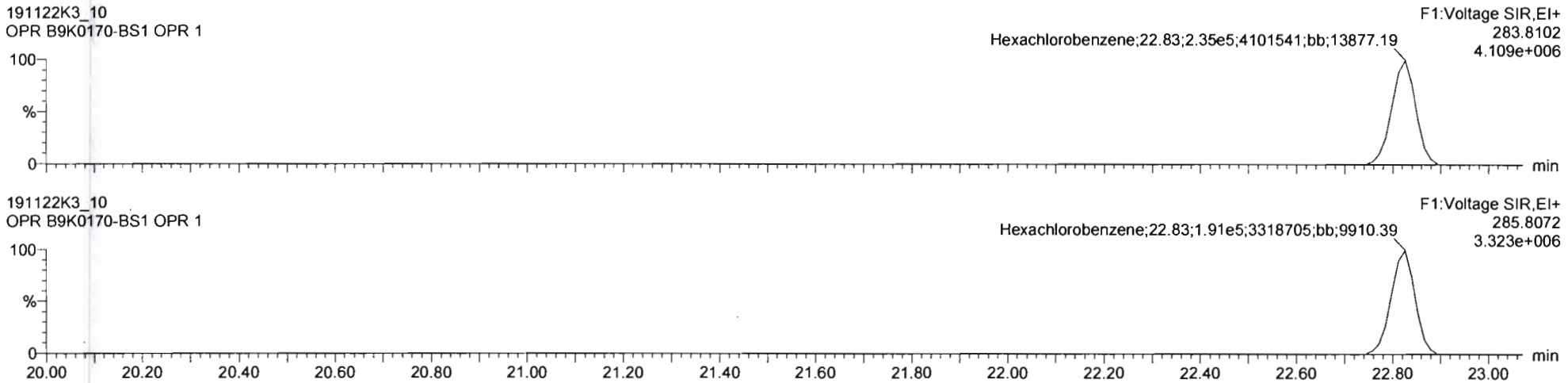
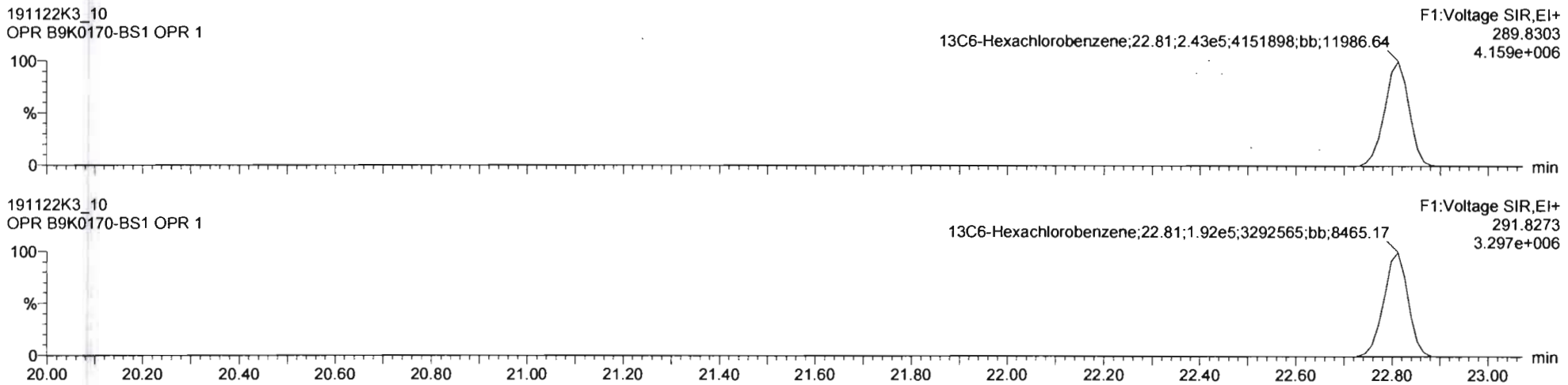
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

Hexachlorobenzene



13C6-Hexachlorobenzene



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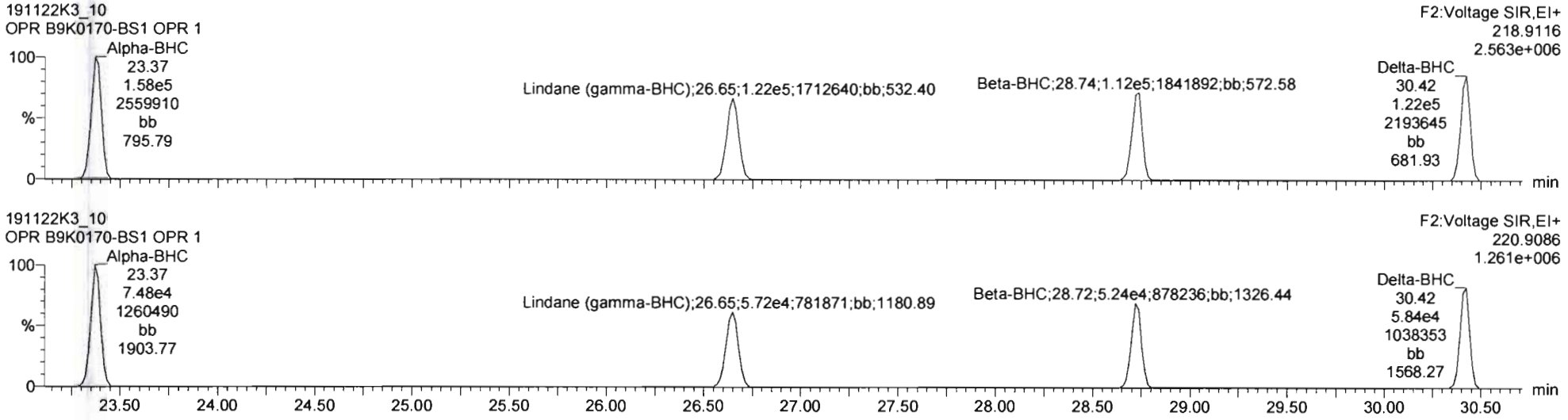
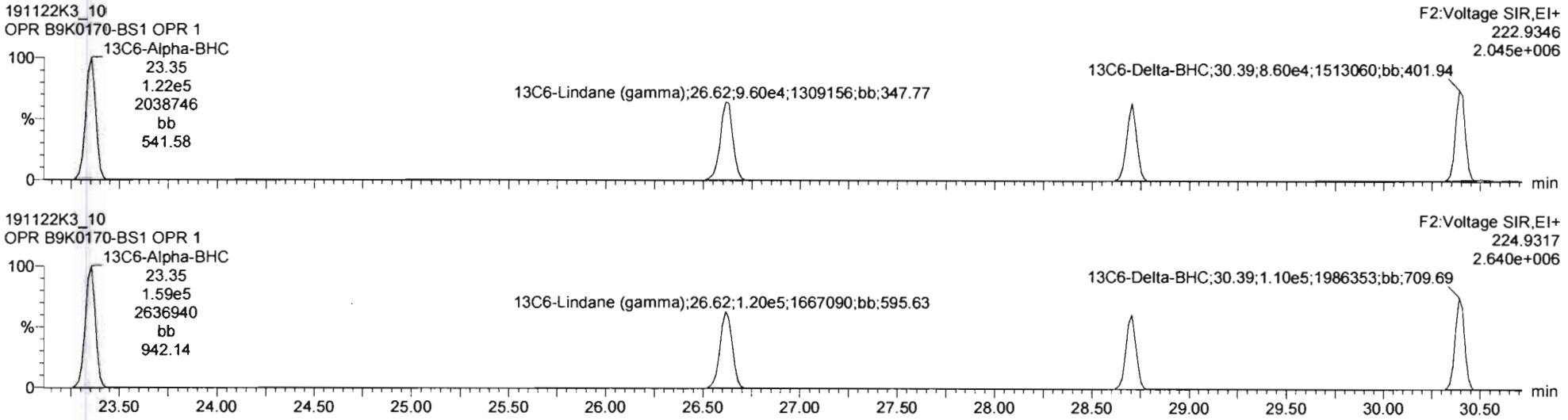
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

BHC Totals



BHC-isotopes



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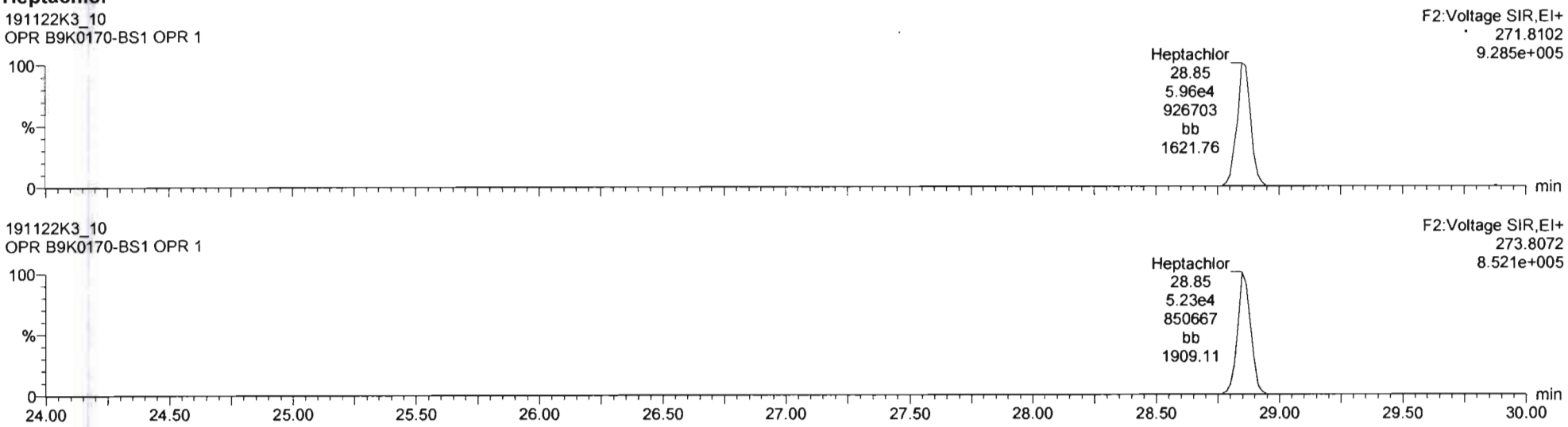
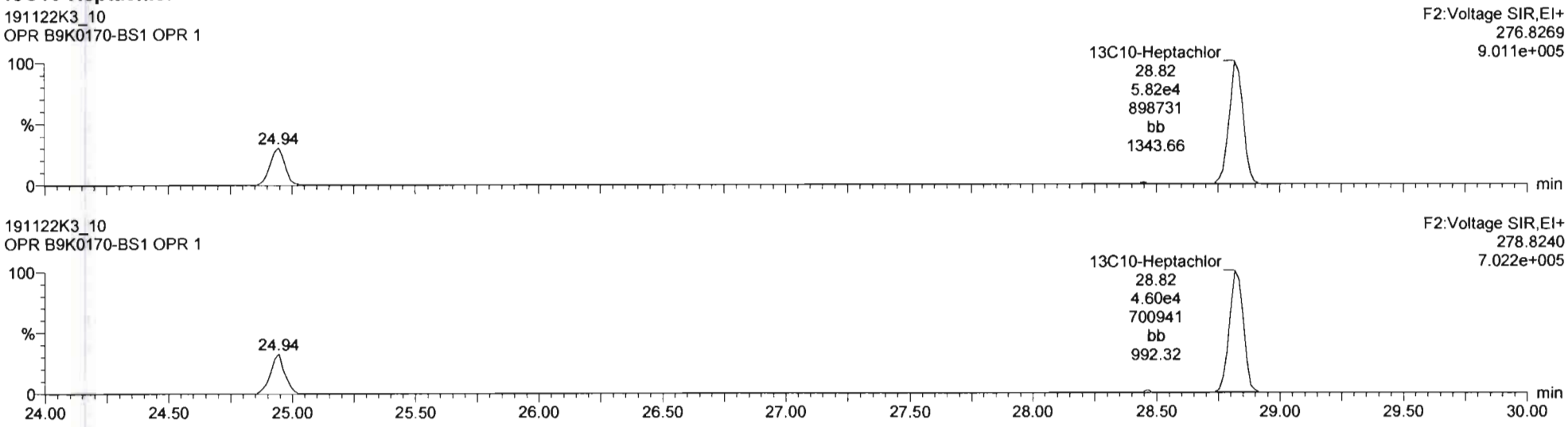
Heptachlor



13C10-Heptachlor



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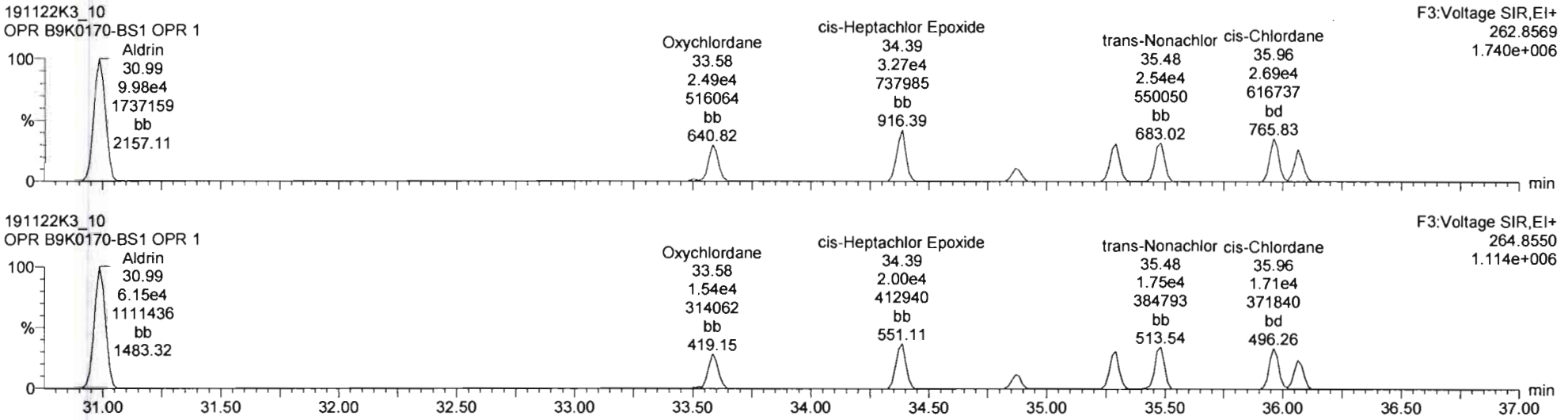
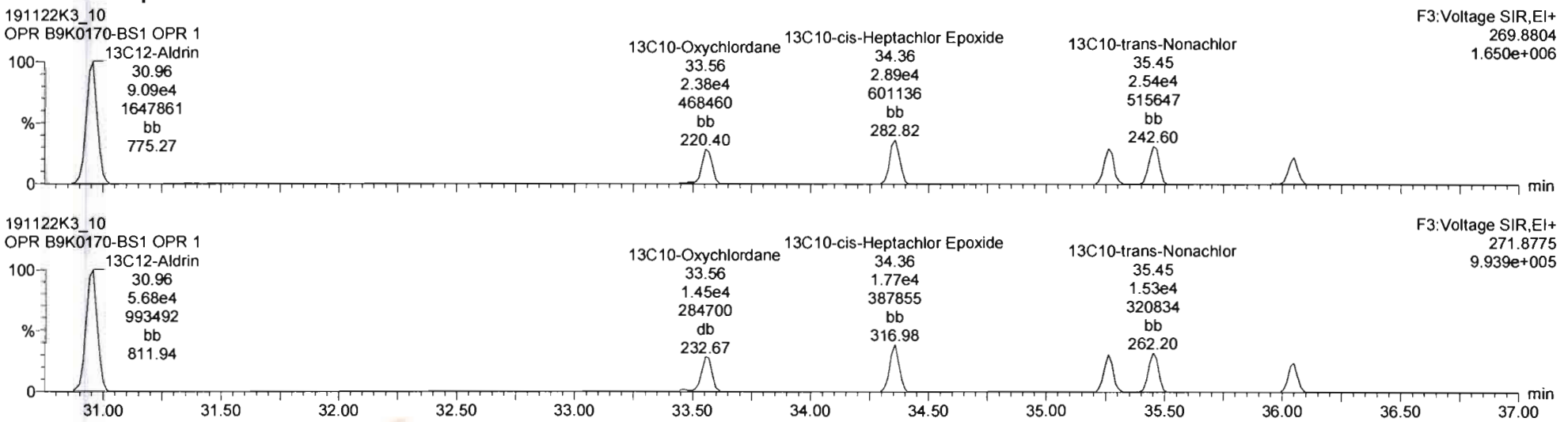
Aldrin-El



Aldrin-El-isotopes

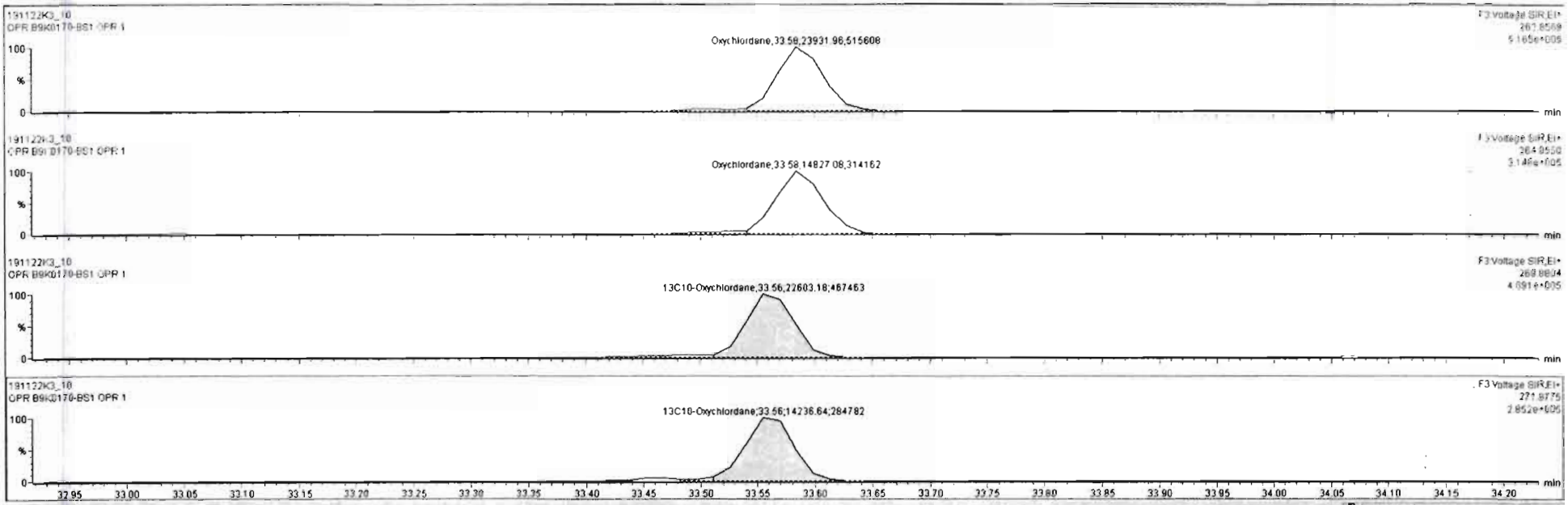


TargetLynx - 191122K3-10.qld * - [Chromatogram]

File Edit View Display Processing Window Help

191122K3_10 - B9K0170-BS1 OPR 1 - OPR

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.05e4	1.44e6	33	0.15	YES	0.1793	1.000	10.21	10.21	1.000	1.000	NO	1160		1.60	285
2	2	Hexachlorobenzene	4.25e5	4.35e5	34	1.23	NO	0.8743	1.000	22.83	22.83	1.001	1.001	NO	1120		0.243	1120
3	3	Alpha-BHC	2.33e5	2.81e5	35	2.11	NO	0.7605	1.000	23.40	23.37	1.001	1.002	NO	1090		2.71	1090
4	4	Lindane (gamma-BHC)	1.79e5	2.16e5	36	2.12	NO	0.7444	1.000	26.65	26.65	1.001	1.001	NO	1110		4.42	1110
5	5	Beta-BHC	1.65e5	1.71e5	37	2.14	NO	0.8960	1.000	28.71	28.74	1.001	1.000	NO	1070		3.66	1070
6	6	Delta-BHC	1.81e5	1.96e5	38	2.09	NO	0.8374	1.000	30.41	30.42	1.001	1.001	NO	1100		3.37	1100
7	7	Heptachlor	1.12e5	1.04e5	39	1.14	NO	0.9677	1.000	26.85	26.85	1.001	1.001	NO	1110		1.63	1110
8	8	4,4'-DDNU	2.56e5	1.96e5	38	3.24	NO	1.2660	1.000	30.31	30.34	0.998	0.997	NO	1030		4.36	1030
9	9	Aldrin	1.61e5	1.48e5	40	1.62	NO	1.0236	1.000	30.99	30.99	1.001	1.001	NO	1070		1.42	1070
10	10	Oxychlordane	3.88e4	3.88e4	41	1.61	NO	0.9924	1.000	33.58	33.58	1.001	1.001	NO	1060		5.14	1060
11	11	cis-Heptachlor Epoxide	5.27e4	4.66e4	42	1.64	NO	1.0028	1.000	34.38	34.39	1.001	1.001	NO	1130		4.00	1130
12	12	trans-Heptachlor Epoxide	1.42e4	4.66e4	42	1.44	NO	0.2550	1.000	34.87	34.87	1.015	1.015	NO	1190		15.7	1190
13	13	trans-Chlordane (gamm	4.03e4	3.59e4	43	1.60	NO	1.0836	1.000	35.28	35.29	1.001	1.001	NO	1040		4.63	1040
14	14	trans-Nonachlor	4.30e4	4.07e4	44	1.45	NO	1.0022	1.000	35.47	35.48	1.001	1.001	NO	1050		4.89	1050
15	15	cis-Chlordane	4.40e4	4.07e4	44	1.58	NO	0.9810	1.000	35.96	35.96	1.014	1.014	NO	1100		4.79	1100
16	16	Endosulfan I (alpha)	3.08e4	2.70e4	45	1.60	NO	1.1062	1.000	36.07	36.06	1.000	1.001	NO	1030		5.82	1030
17	17	4,4'-DDMU	6.46e5	9.90e5	46	3.16	NO	0.6167	1.000	35.72	35.71	0.994	0.994	NO	1060		1.34	1060



Ready

191122K3_10 CAP NUM

start 8:11 AM

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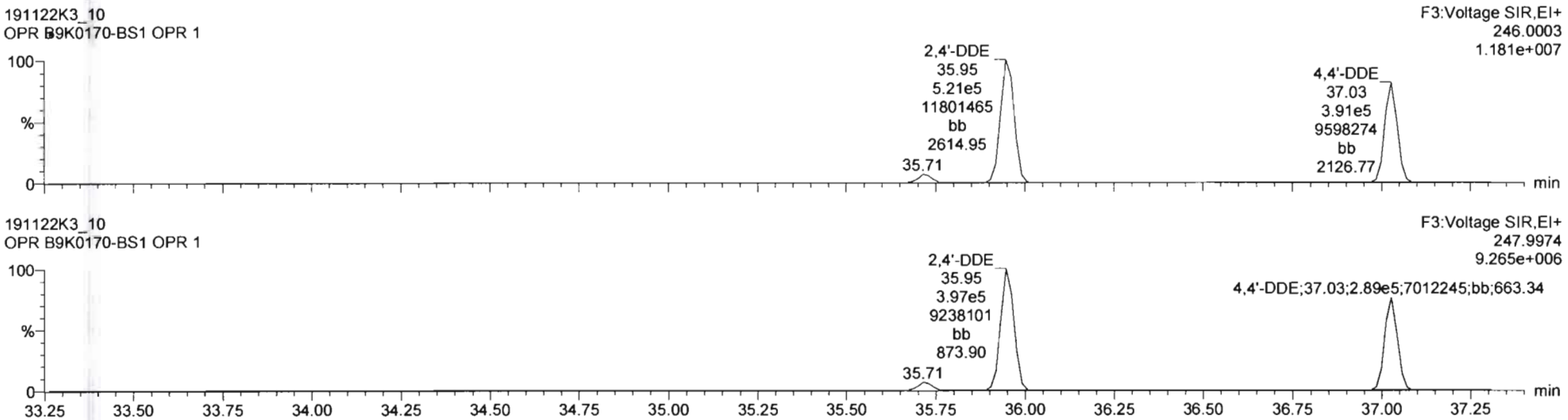
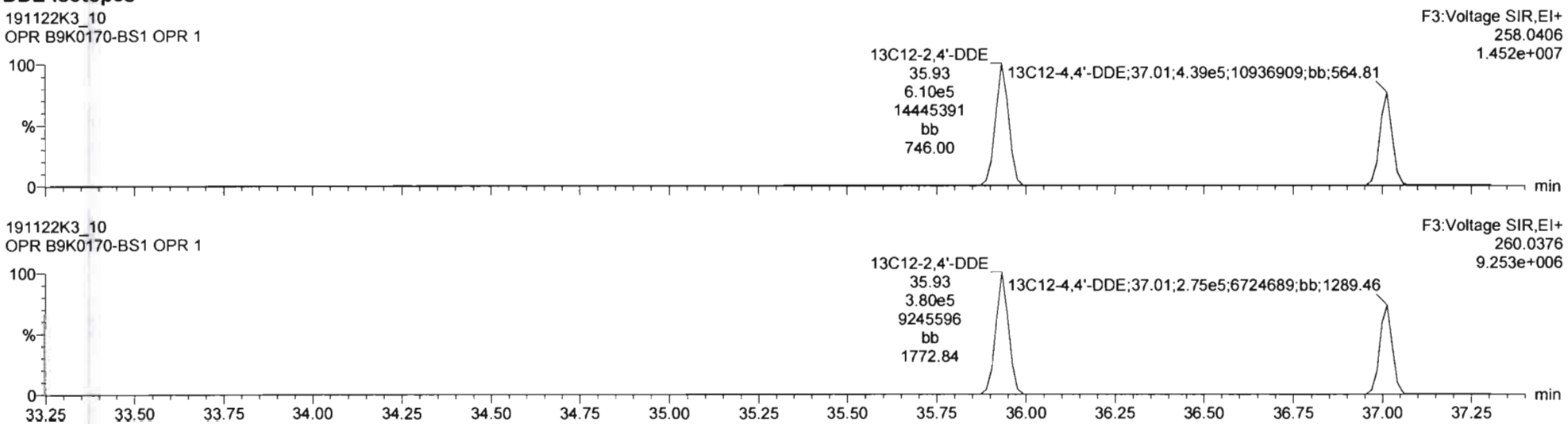
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

DDMU-DDE



DDE-isotopes



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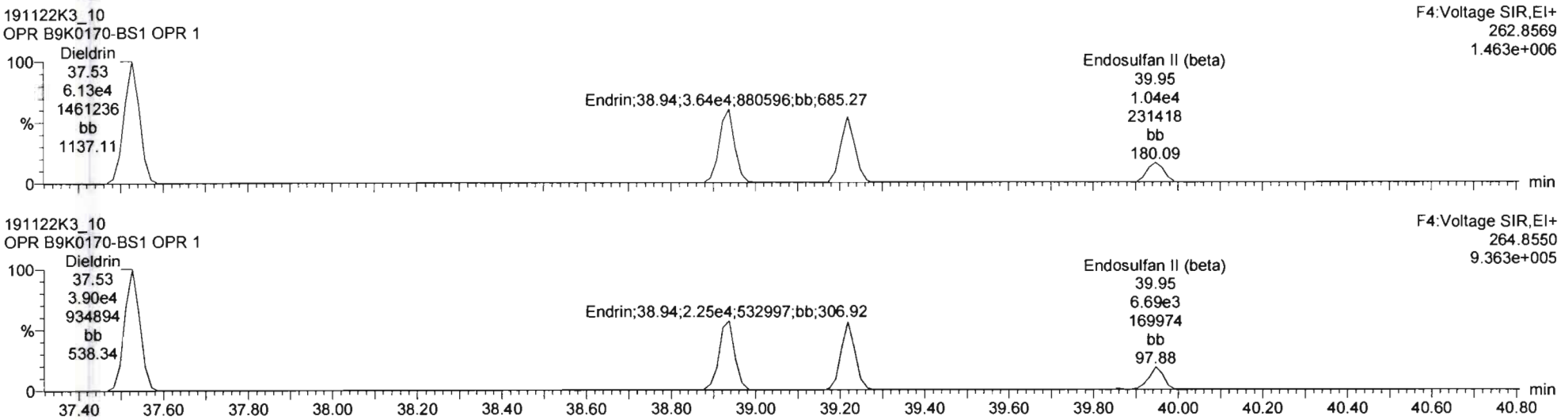
Dieldrin-EII



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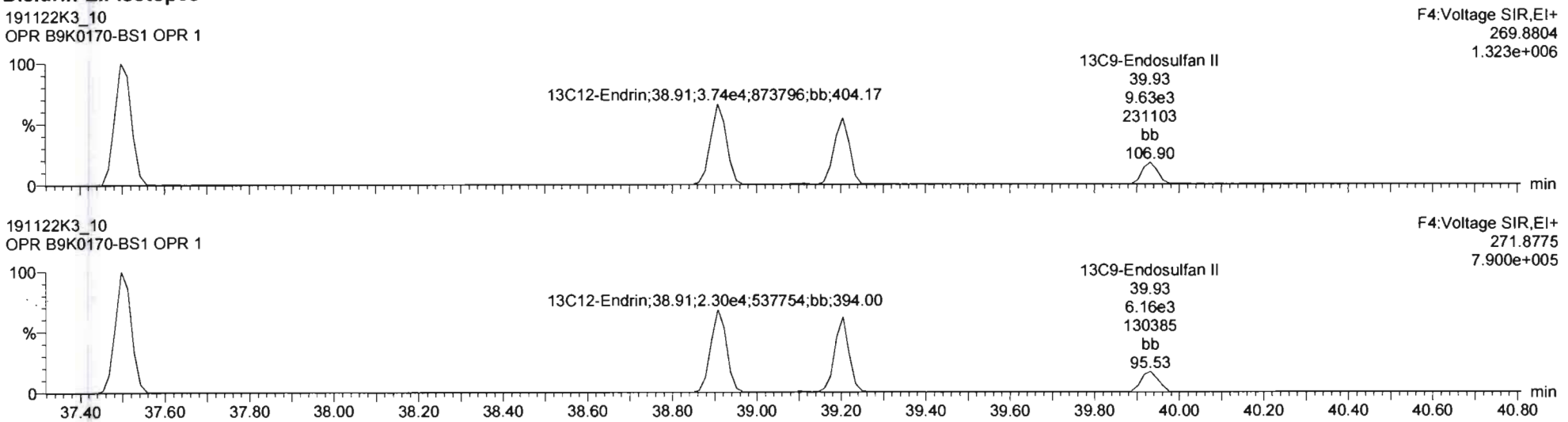

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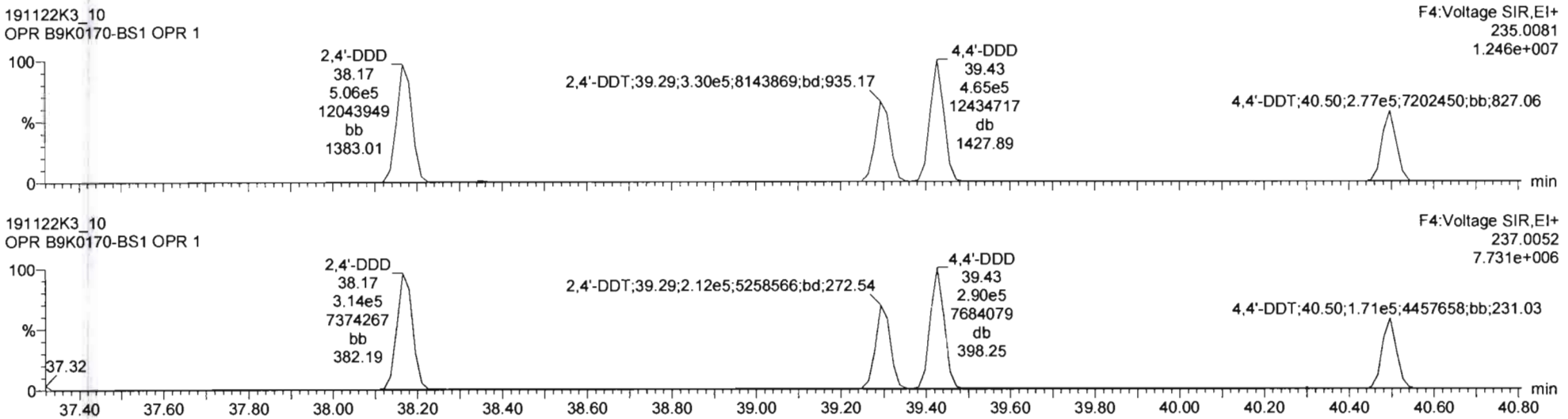
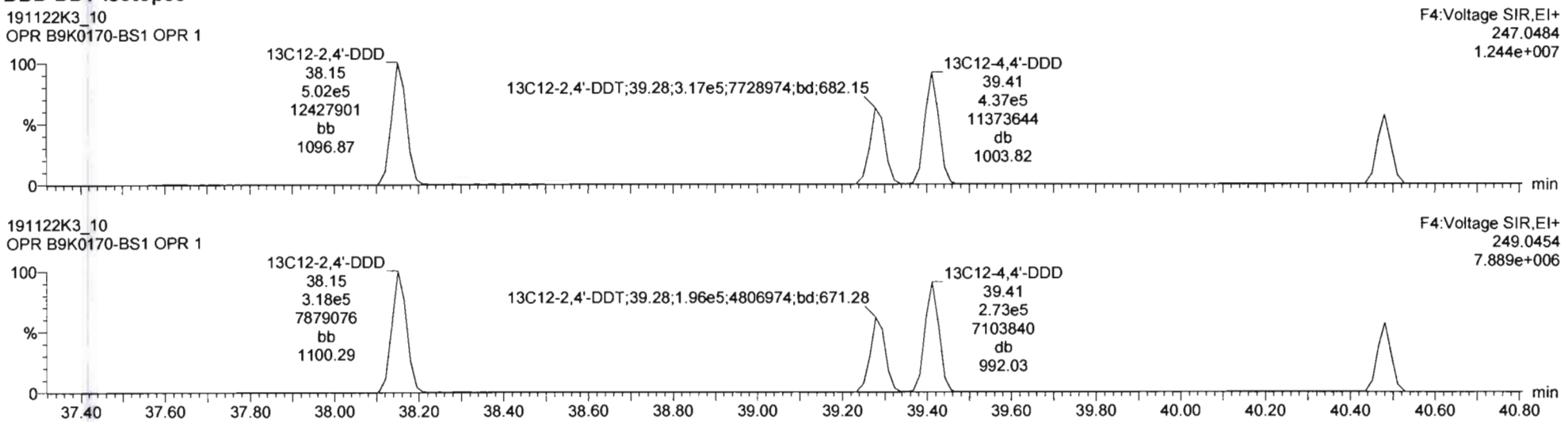
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

DDD-DDT



DDD-DDT-isotopes



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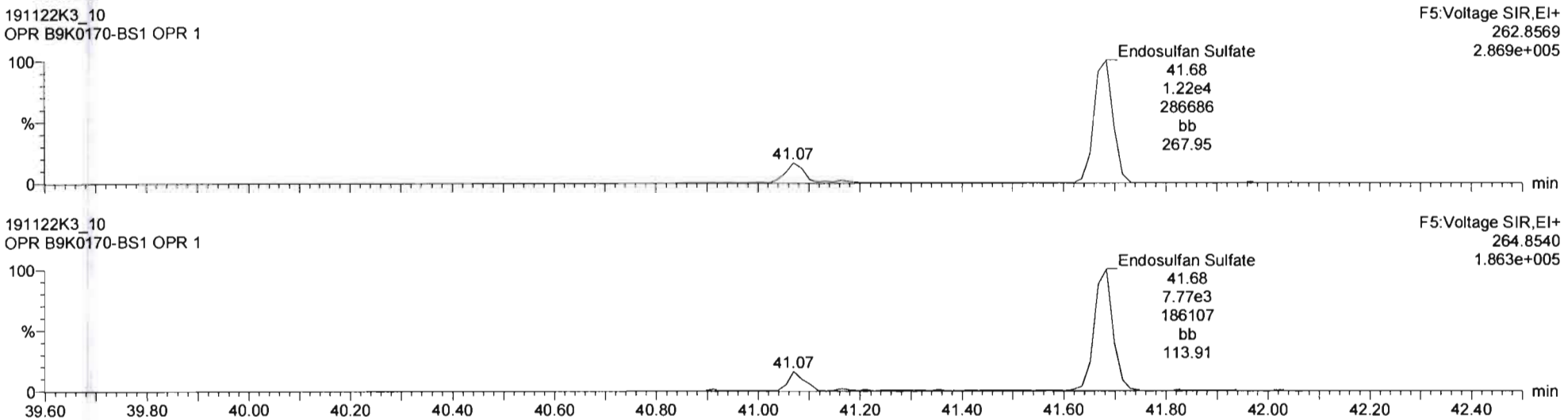
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

Endosulfan Sulfate



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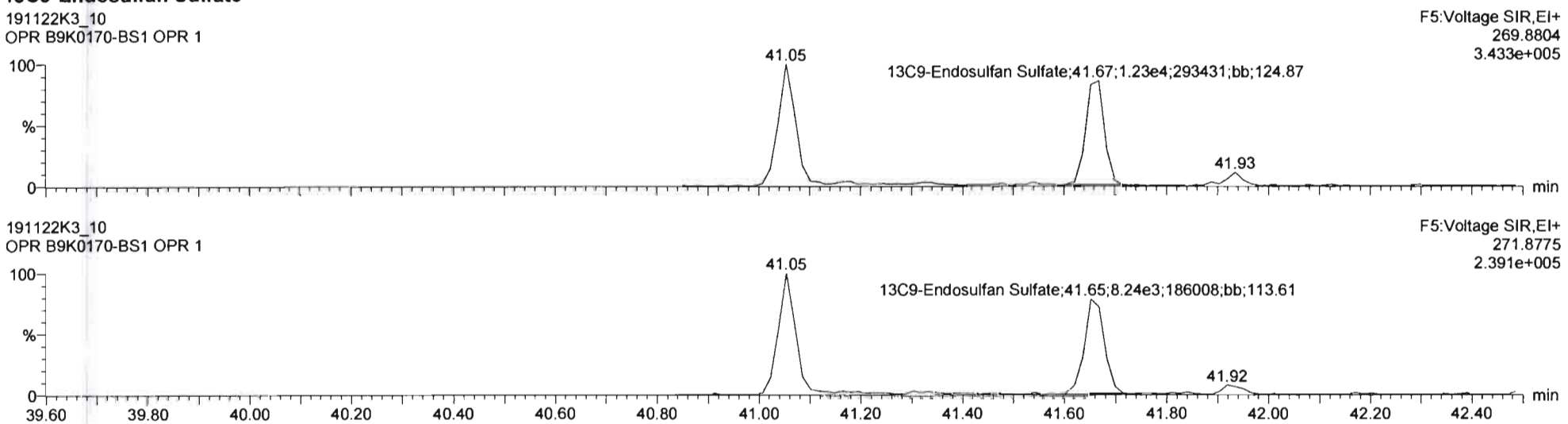

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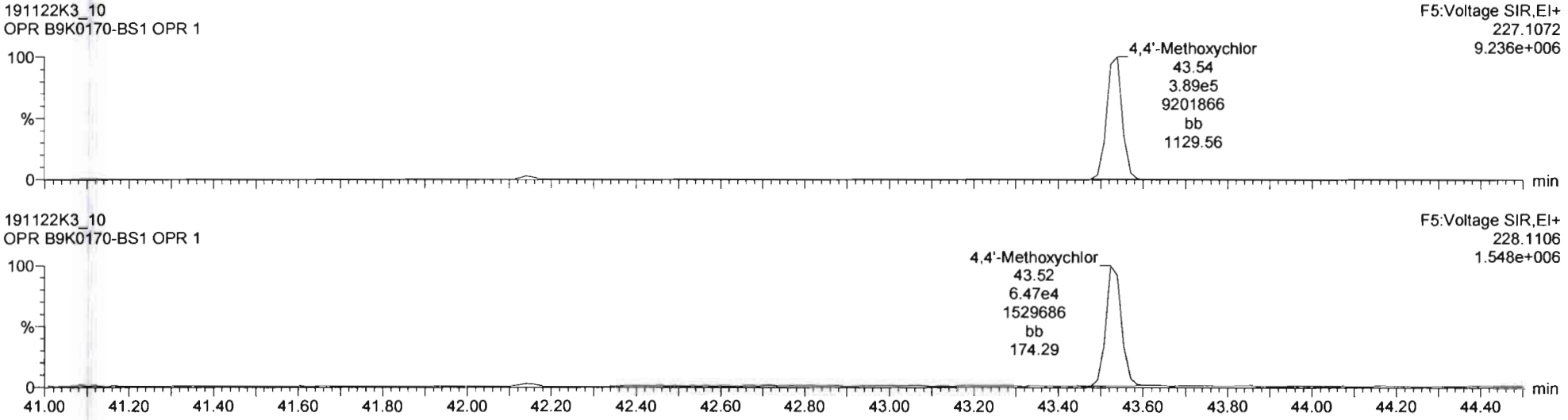
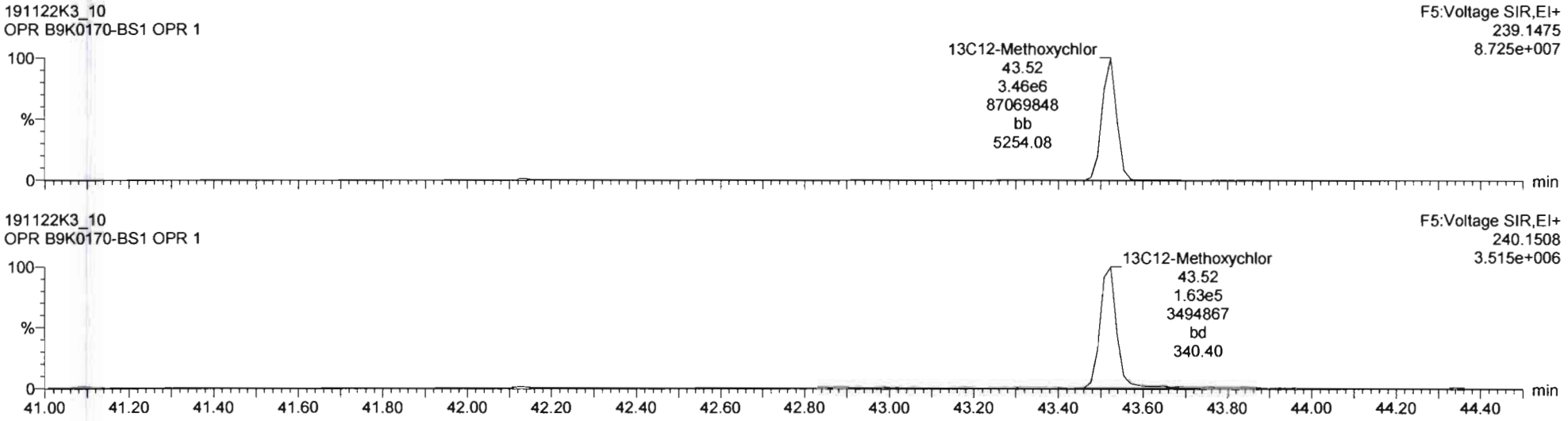
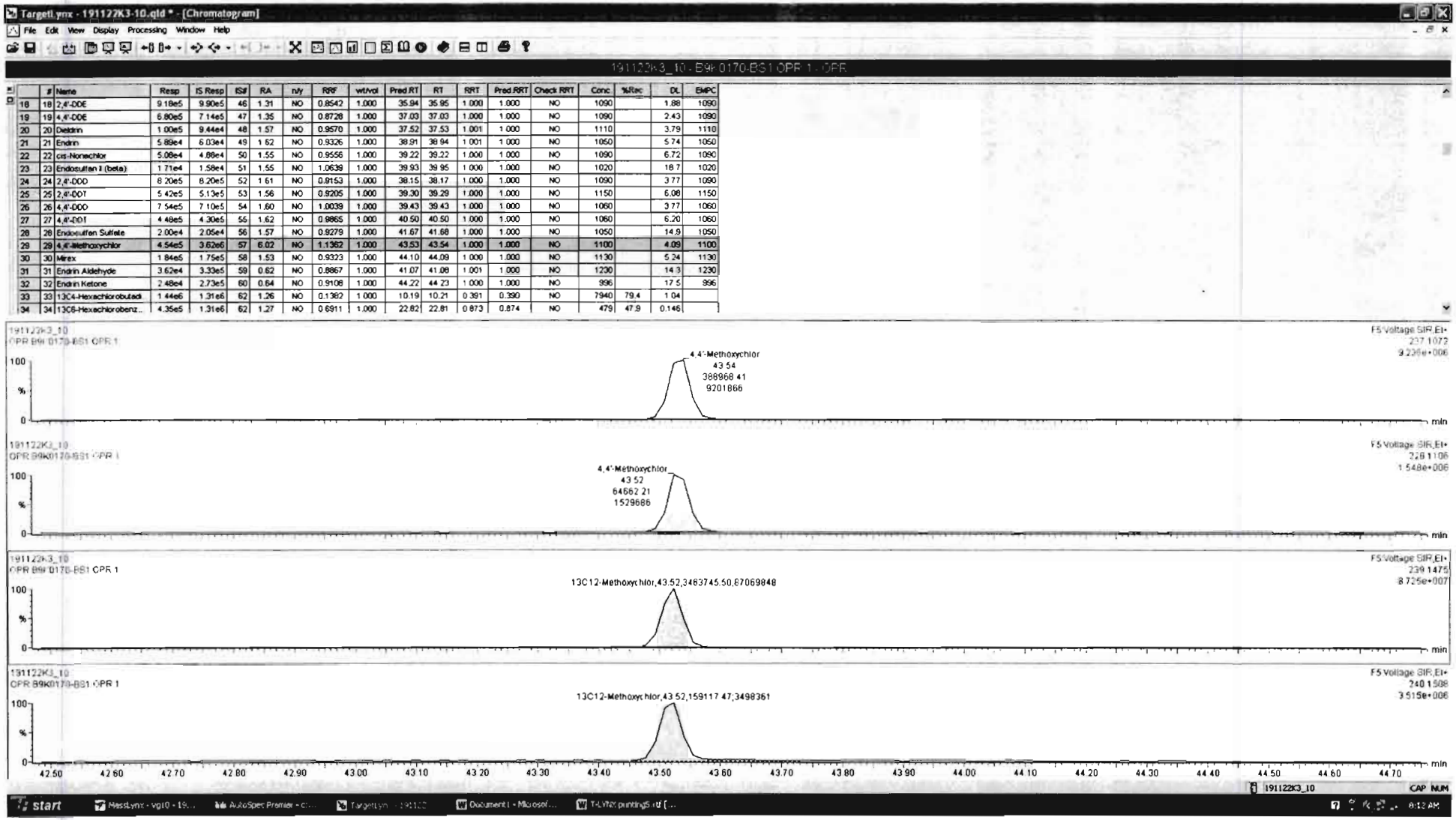
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

4,4'-Methoxychlor



13C12-Methoxychlor





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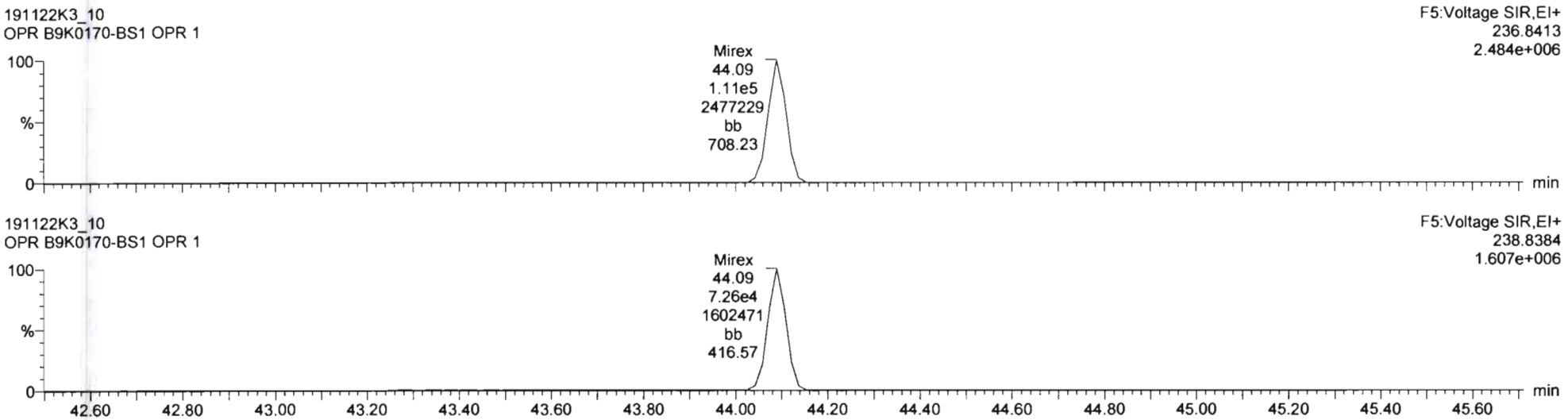
18	18	2,4'-DDE	9.18e5	9.90e5	46	1.31	NO	0.8542	1.000	35.94	35.95	1.000	1.000	NO	1090		1.88	1090
19	19	4,4'-DDE	6.80e5	7.14e5	47	1.35	NO	0.8728	1.000	37.03	37.03	1.000	1.000	NO	1090		2.43	1090
20	20	Deldrin	1.00e5	9.44e4	48	1.57	NO	0.9570	1.000	37.52	37.53	1.001	1.000	NO	1110		3.79	1110
21	21	Endrin	5.89e4	6.03e4	49	1.62	NO	0.9326	1.000	38.91	38.94	1.001	1.000	NO	1050		5.74	1050
22	22	cis-Nonachlor	5.08e4	4.88e4	50	1.55	NO	0.9556	1.000	39.22	39.22	1.000	1.000	NO	1090		6.72	1090
23	23	Endosulfan II (beta)	1.71e4	1.58e4	51	1.55	NO	1.0639	1.000	39.93	39.95	1.000	1.000	NO	1020		18.7	1020
24	24	2,4'-DDD	8.20e5	8.20e5	52	1.61	NO	0.9153	1.000	38.15	38.17	1.000	1.000	NO	1090		3.77	1090
25	25	2,4'-DDT	5.42e5	5.13e5	53	1.56	NO	0.9205	1.000	39.30	39.29	1.000	1.000	NO	1150		6.08	1150
26	26	4,4'-DDD	7.54e5	7.10e5	54	1.60	NO	1.0039	1.000	39.43	39.43	1.000	1.000	NO	1060		3.77	1060
27	27	4,4'-DDT	4.48e5	4.30e5	55	1.62	NO	0.9865	1.000	40.50	40.50	1.000	1.000	NO	1060		6.20	1060
28	28	Endosulfan Sulfate	2.00e4	2.05e4	56	1.57	NO	0.9279	1.000	41.67	41.68	1.000	1.000	NO	1050		14.9	1050
29	29	4,4'-Methoxychlor	4.54e5	3.62e6	57	6.02	NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	1100		4.09	1100
30	30	Mirex	1.84e5	1.75e5	58	1.53	NO	0.9323	1.000	44.10	44.09	1.000	1.000	NO	1130		5.24	1130
31	31	Endrin Aldehyde	3.62e4	3.33e5	59	0.82	NO	0.8867	1.000	41.07	41.08	1.001	1.000	NO	1230		14.3	1230
32	32	Endrin Ketone	2.48e4	2.73e5	60	0.64	NO	0.9108	1.000	44.22	44.23	1.000	1.000	NO	996		17.5	996
33	33	13C4-Hexachlorobutadi	1.44e6	1.31e6	62	1.26	NO	0.1382	1.000	10.19	10.21	0.381	0.390	NO	7940	79.4	1.04	
34	34	13C6-Hexachlorobenz...	4.35e5	1.31e6	62	1.27	NO	0.6911	1.000	22.82	22.81	0.873	0.874	NO	479	47.9	0.146	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

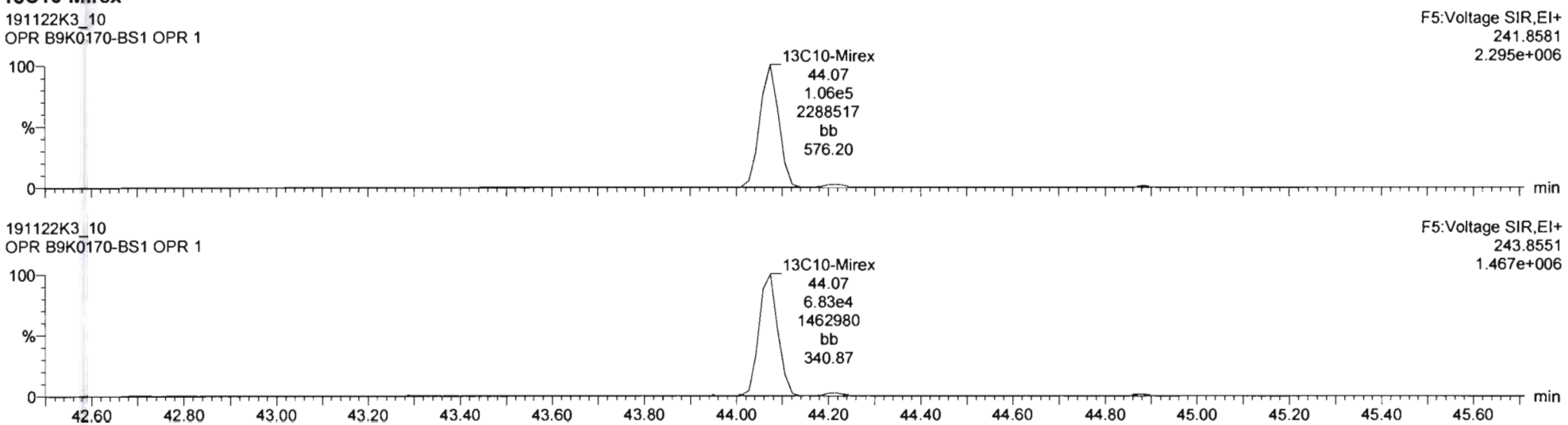
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

Mirex



13C10-Mirex

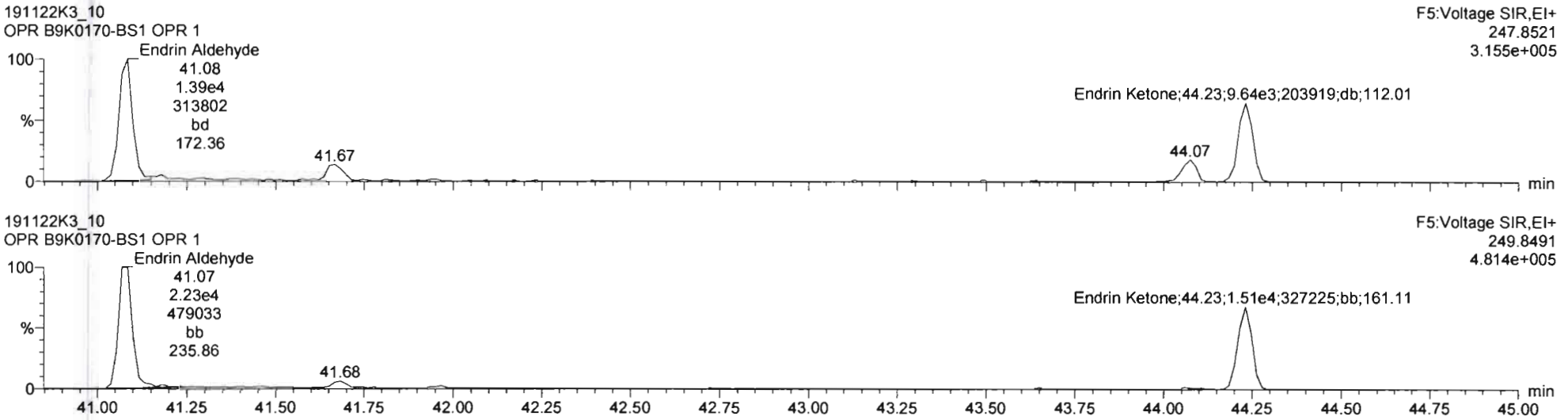


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

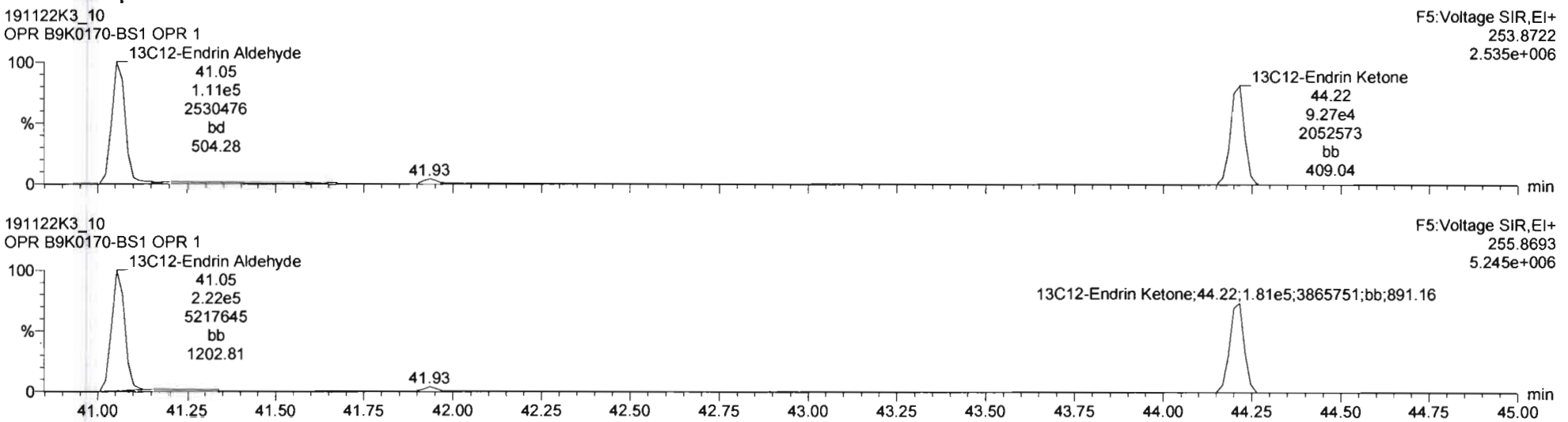
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

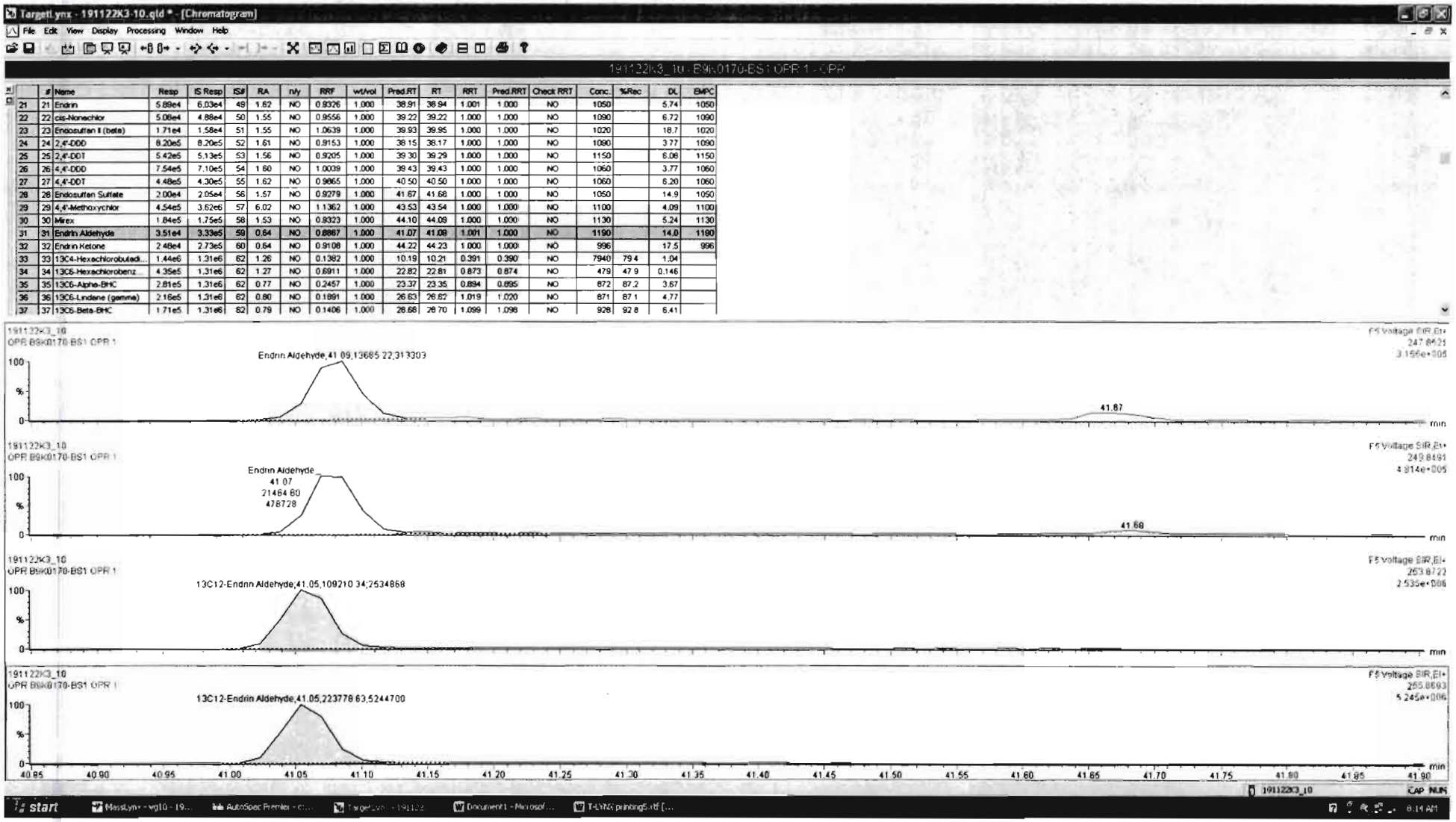
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

EA-EK



EA-EK-isotopes





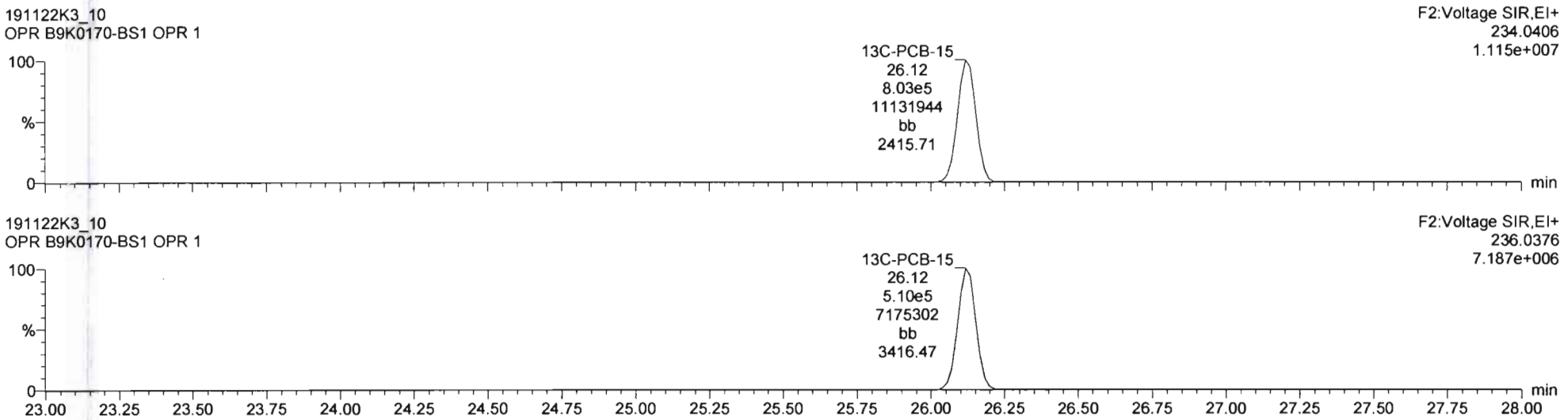
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
21	21	Endrin	5.89e4	6.03e4	49	1.62	NO	0.9326	1.000	38.91	38.94	1.001	1.000	NO	1050		5.74	1050
22	22	cis-Nonachlor	5.08e4	4.88e4	50	1.55	NO	0.9556	1.000	39.22	39.22	1.000	1.000	NO	1090		6.72	1090
23	23	Endosulfan II (beta)	1.71e4	1.58e4	51	1.55	NO	1.0639	1.000	39.93	39.95	1.000	1.000	NO	1020		18.7	1020
24	24	2,4'-DDD	8.20e5	8.20e5	52	1.61	NO	0.9153	1.000	38.15	38.17	1.000	1.000	NO	1090		3.77	1090
25	25	2,4'-DDT	5.42e5	5.13e5	53	1.56	NO	0.9205	1.000	39.30	39.29	1.000	1.000	NO	1150		6.08	1150
26	26	4,4'-DDD	7.54e5	7.10e5	54	1.60	NO	1.0039	1.000	39.43	39.43	1.000	1.000	NO	1060		3.77	1060
27	27	4,4'-DDT	4.48e5	4.30e5	55	1.62	NO	0.9865	1.000	40.50	40.50	1.000	1.000	NO	1060		6.20	1060
28	28	Endosulfan Sulfate	2.00e4	2.05e4	56	1.57	NO	0.9279	1.000	41.67	41.68	1.000	1.000	NO	1050		14.9	1050
29	29	4,4'-Methoxychlor	4.54e5	3.62e6	57	6.02	NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	1100		4.09	1100
30	30	Mirex	1.84e5	1.75e5	58	1.53	NO	0.9323	1.000	44.10	44.09	1.000	1.000	NO	1130		5.24	1130
31	31	Endrin Aldehyde	3.51e4	3.33e5	59	0.64	NO	0.8887	1.000	41.07	41.09	1.001	1.000	NO	1190		14.0	1190
32	32	Endrin Ketone	2.48e4	2.73e5	60	0.64	NO	0.9108	1.000	44.22	44.23	1.000	1.000	NO	996		17.5	996
33	33	13C4-Hexachlorobutadi...	1.44e6	1.31e6	62	1.26	NO	0.1382	1.000	10.19	10.21	0.391	0.390	NO	7940	79.4	1.04	
34	34	13C6-Hexachlorobenz...	4.35e5	1.31e6	62	1.27	NO	0.6911	1.000	22.82	22.81	0.873	0.874	NO	479	47.9	0.146	
35	35	13C6-Alpha-BHC	2.81e5	1.31e6	62	0.77	NO	0.2457	1.000	23.37	23.35	0.894	0.895	NO	872	87.2	3.67	
36	36	13C6-Lindane (gamma)	2.16e5	1.31e6	62	0.80	NO	0.1891	1.000	26.63	26.62	1.019	1.020	NO	871	87.1	4.77	
37	37	13C6-Beta-BHC	1.71e5	1.31e6	62	0.79	NO	0.1406	1.000	26.68	26.70	1.099	1.098	NO	928	92.8	6.41	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

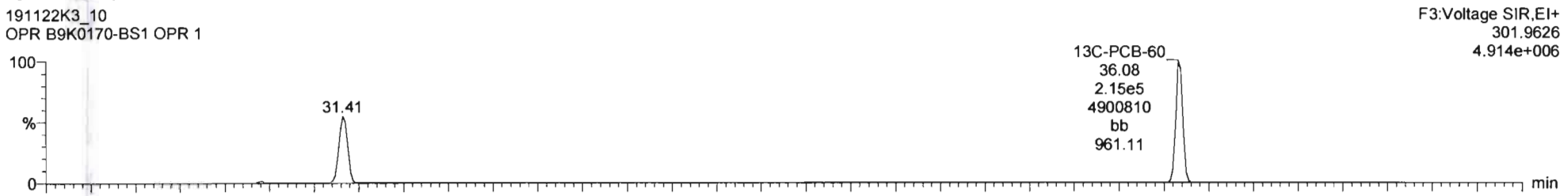
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

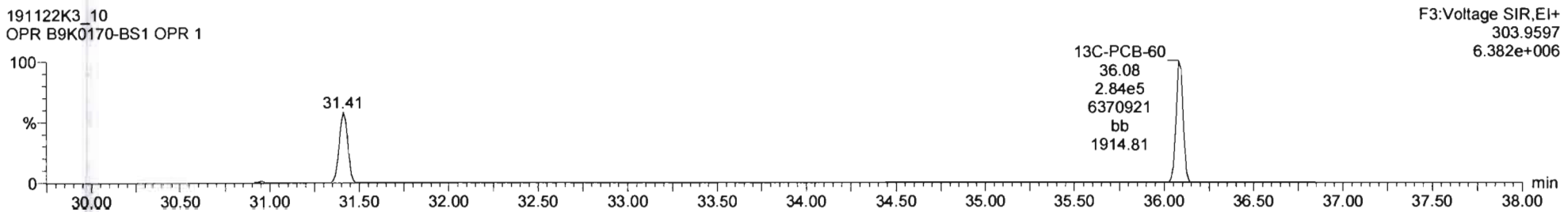
Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

13C-PCB-15



13C-PCB-60



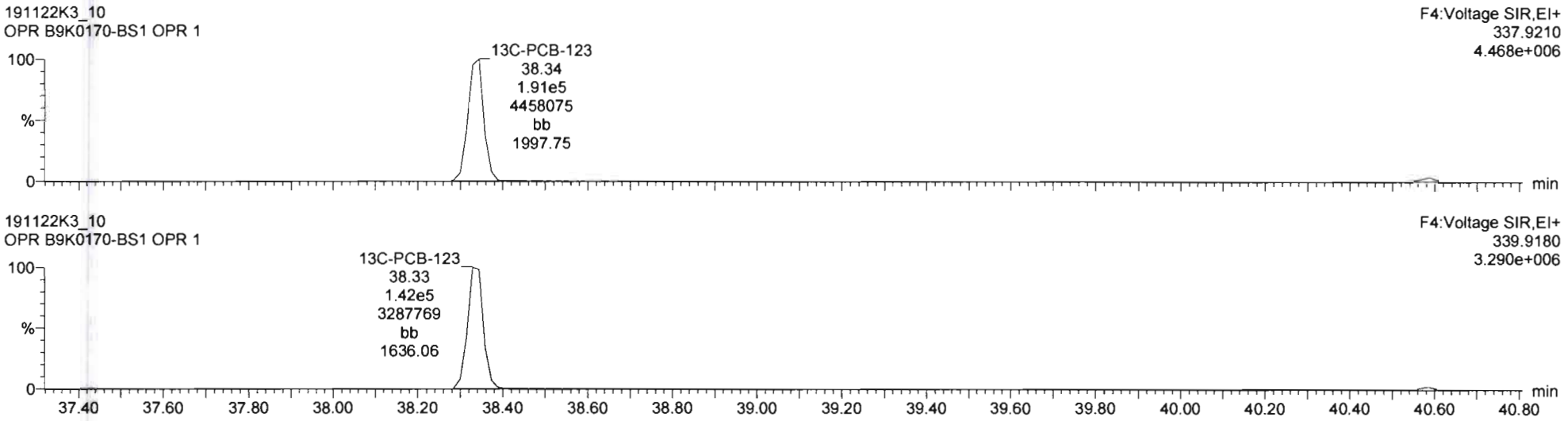


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

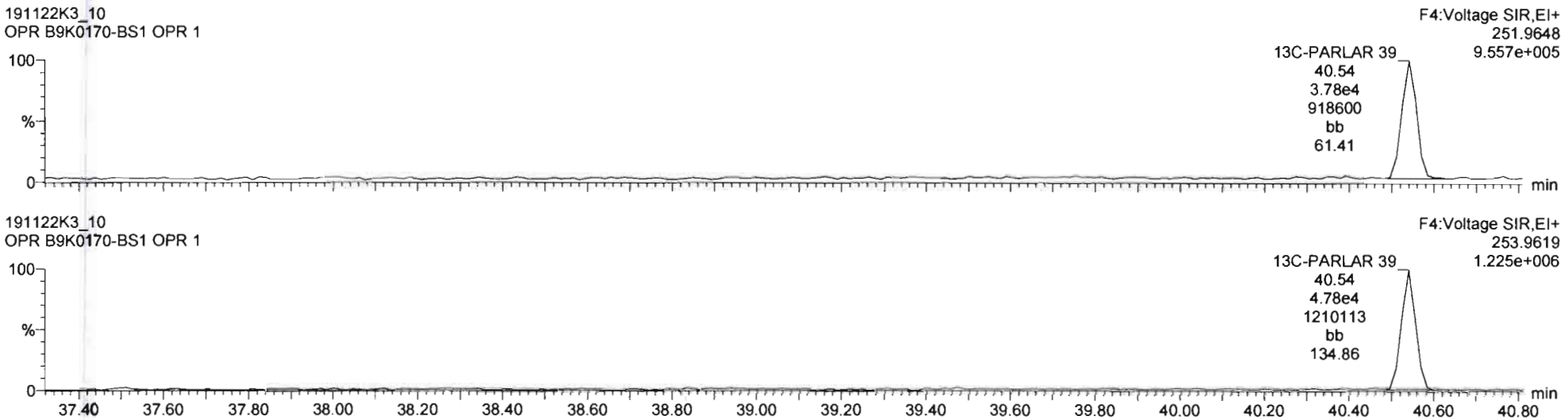
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

13C-PCB-123



13C-PARLAR 39

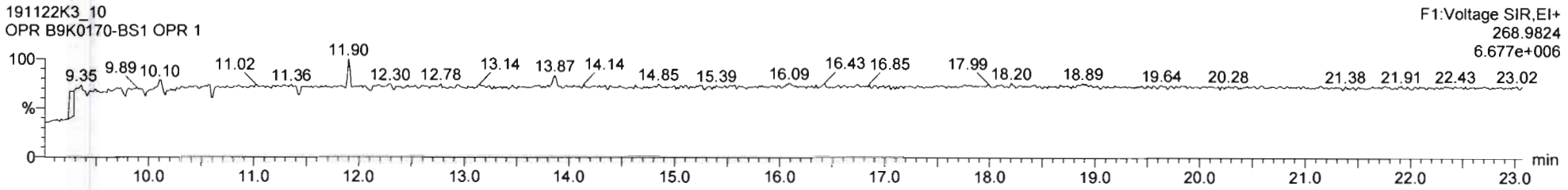


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

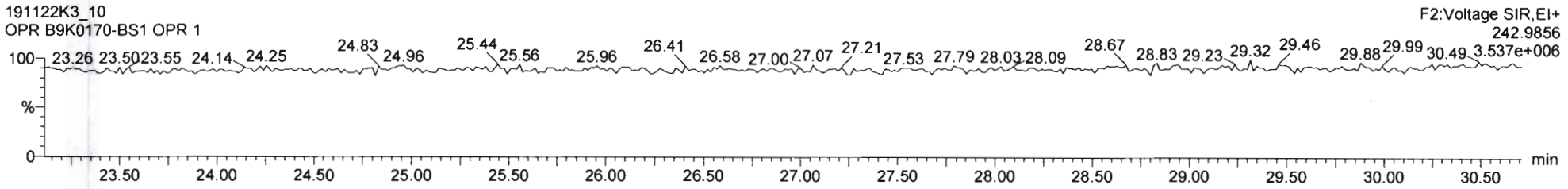
Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

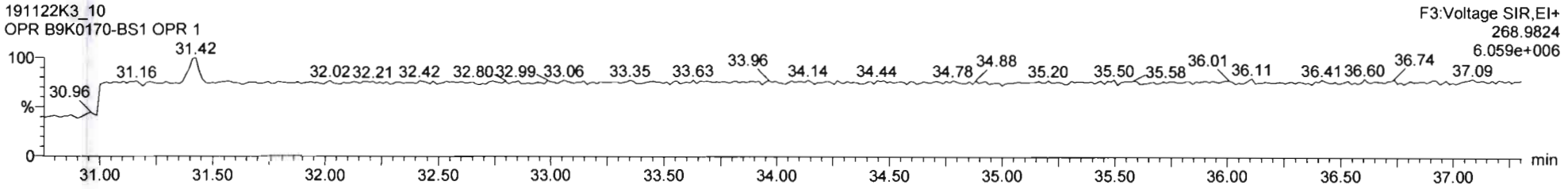
PFK1



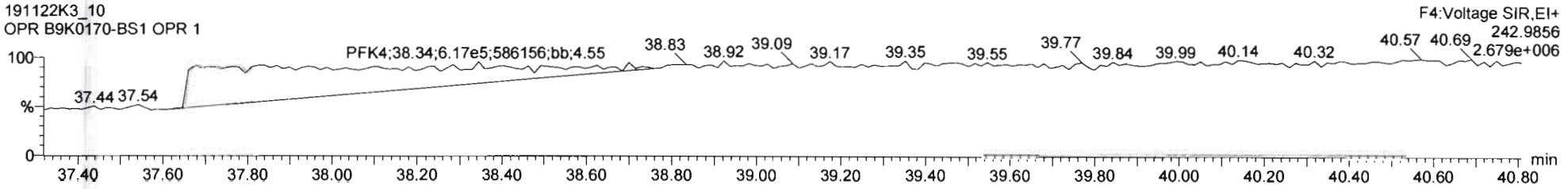
PFK2



PFK3



PFK4

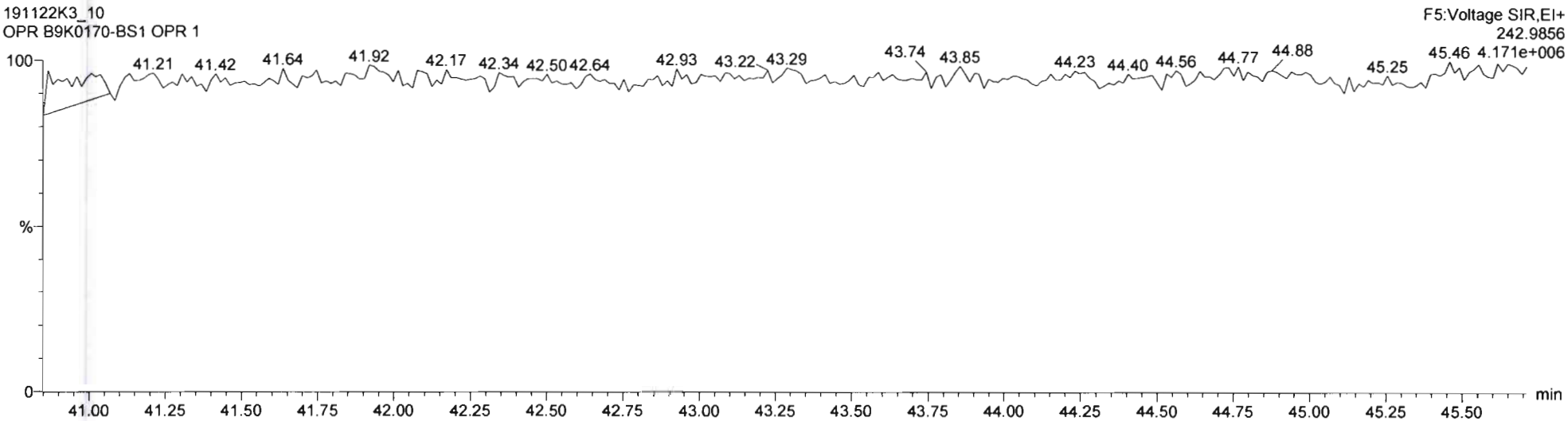


Dataset: U:\VG11.PRO\Results\191122K3\191122K3-10.qld

Last Altered: Monday, November 25, 2019 11:31:52 Pacific Standard Time
Printed: Tuesday, November 26, 2019 08:10:16 Pacific Standard Time

Name: 191122K3_10, Date: 22-Nov-2019, Time: 23:25:35, ID: B9K0170-BS1 OPR 1, Description: OPR

PFK5



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-14.qld

Last Altered: Monday, January 27, 2020 10:57:59 Pacific Standard Time
Printed: Monday, January 27, 2020 10:59:19 Pacific Standard Time

HK 1.27.2020 CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)		1.69e5		NO	0.869	1.000	26.51			1.001	YES			53.3	
2	9	Aldrin		1.11e5		NO	1.11	1.000	30.79			1.001	YES			9.80	
3	10	Oxychlordane		2.65e4		NO	1.09	1.000	33.37			1.001	YES			37.6	
4	13	trans-Chlordane (gam...		2.57e4		NO	1.18	1.000	35.07			1.001	YES			36.2	
5	14	trans-Nonachlor		3.04e4		NO	1.08	1.000	35.26			1.001	YES			28.1	
6	15	cis-Chlordane		3.04e4		NO	1.11	1.000	35.74			1.014	YES			27.3	
7	18	2,4'-DDE		6.65e5		NO	0.984	1.000	35.73			1.000	YES			31.5	
8	19	4,4'-DDE		4.59e5		NO	0.996	1.000	36.80			1.000	NO			42.4	
9	20	Dieldrin		6.15e4		NO	1.09	1.000	37.30			1.000	YES			16.7	
10	22	cis-Nonachlor		3.19e4		NO	1.08	1.000	38.99			1.000	YES			29.9	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-14.qld

Last Altered: Monday, January 27, 2020 10:57:59 Pacific Standard Time
Printed: Monday, January 27, 2020 10:59:25 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD		6.06e5		NO	1.05	1.000	37.92			1.000	YES			74.9	
2	25	2,4'-DDT		3.41e5		NO	1.03	1.000	39.07			1.000	YES			138	
3	26	4,4'-DDD		4.75e5		NO	1.12	1.000	39.20			1.000	YES			79.1	
4	27	4,4'-DDT		2.82e5		NO	1.13	1.000	40.27			1.000	YES			139	
5	36	13C6-Lindane (gamma)	1.69e5	9.76e5	0.79	NO	0.201	1.000	26.46	26.48	1.019	1.018	NO	4320	86.4	39.1	
6	40	13C12-Aldrin	1.11e5	9.76e5	1.66	NO	0.130	1.000	30.78	30.76	1.184	1.185	NO	4350	87.1	26.6	
7	41	13C10-Oxychlordane	2.65e4	9.76e5	1.59	NO	0.0314	1.000	33.38	33.35	1.284	1.285	NO	4330	86.7	110	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-14.qld

Last Altered: Monday, January 27, 2020 10:57:59 Pacific Standard Time
Printed: Monday, January 27, 2020 10:59:32 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc	%Rec	DL	EMPC
1	43 13C10-trans-Chlordan...	2.57e4	9.76e5	1.53	NO	0.0281	1.000	35.08	35.05	1.349	1.350	NO	4680	93.5	123	
2	44 13C10-trans-Nonachlor	3.04e4	9.76e5	1.51	NO	0.0330	1.000	35.27	35.23	1.356	1.357	NO	4730	94.5	105	
3	46 13C12-2,4'-DDE	6.65e5	9.76e5	1.59	NO	0.765	1.000	35.69	35.72	0.996	0.995	NO	4450	89.0	11.2	
4	47 13C12-4,4'-DDE	4.59e5	9.76e5	1.60	NO	0.556	1.000	36.77	36.78	1.026	1.025	NO	4230	84.7	15.4	
5	48 13C12-Dieldrin	6.15e4	9.76e5	1.56	NO	0.0759	1.000	37.28	37.28	1.040	1.040	NO	4150	83.0	45.3	
6	50 13C10-cis-Nonachlor	3.19e4	9.76e5	1.68	NO	0.0389	1.000	38.97	38.97	1.087	1.087	NO	4200	83.9	88.3	
7	52 13C12-2,4'-DDD	6.06e5	9.76e5	1.58	NO	0.754	1.000	37.95	37.92	1.460	1.461	NO	4110	82.3	14.9	
8	53 13C12-2,4'-DDT	3.41e5	9.76e5	1.60	NO	0.519	1.000	39.08	39.05	1.503	1.504	NO	3360	67.2	21.7	
9	54 13C12-4,4'-DDD	4.75e5	9.76e5	1.61	NO	0.662	1.000	39.21	39.18	1.508	1.509	NO	3670	73.4	17.0	
10	55 13C12-4,4'-DDT	2.82e5	9.76e5	1.61	NO	0.419	1.000	40.28	40.25	1.549	1.551	NO	3450	69.0	26.9	
11	62 13C-PCB-15	9.76e5	9.76e5	1.57	NO	1.00	1.000	25.96	25.98	1.000	1.000	NO	5000	100	5.83	

Vista Analytical Laboratory

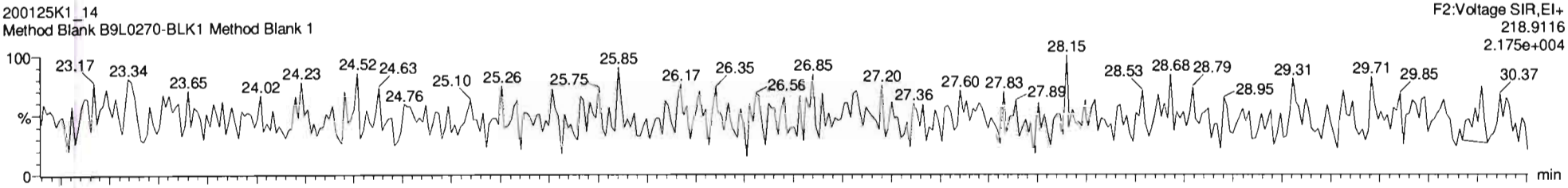
Dataset: Untitled

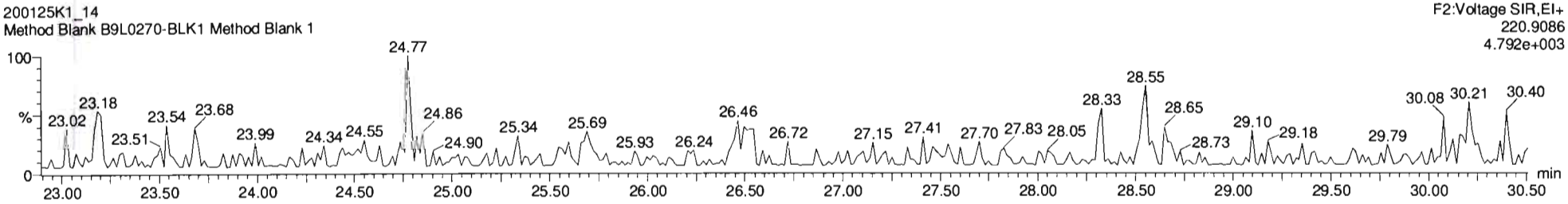
Last Altered: Monday, January 27, 2020 11:02:20 Pacific Standard Time
Printed: Monday, January 27, 2020 11:03:04 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

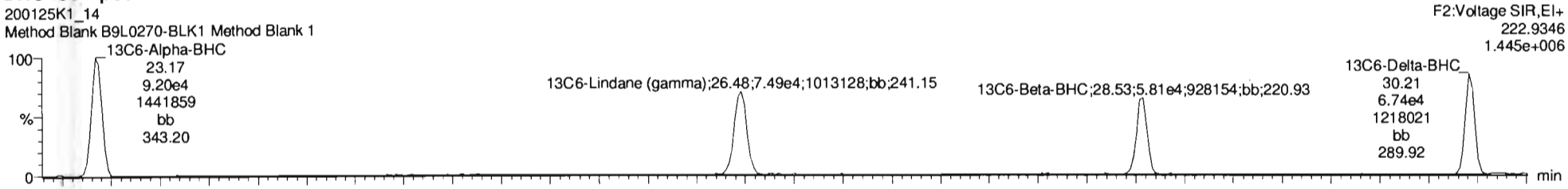
Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

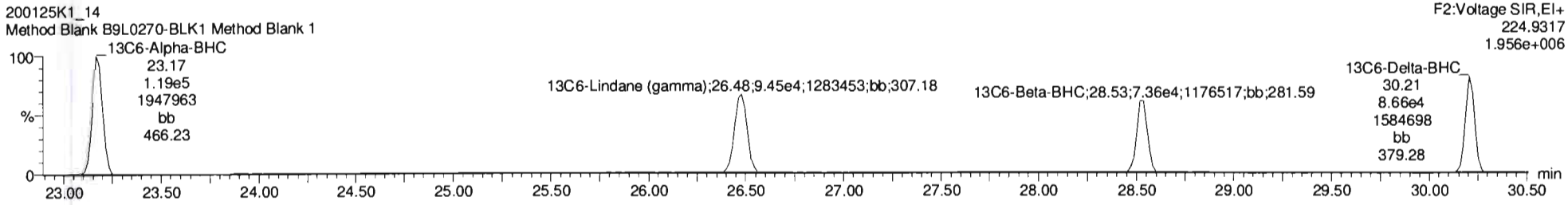
BHC Totals





BHC-isotopes



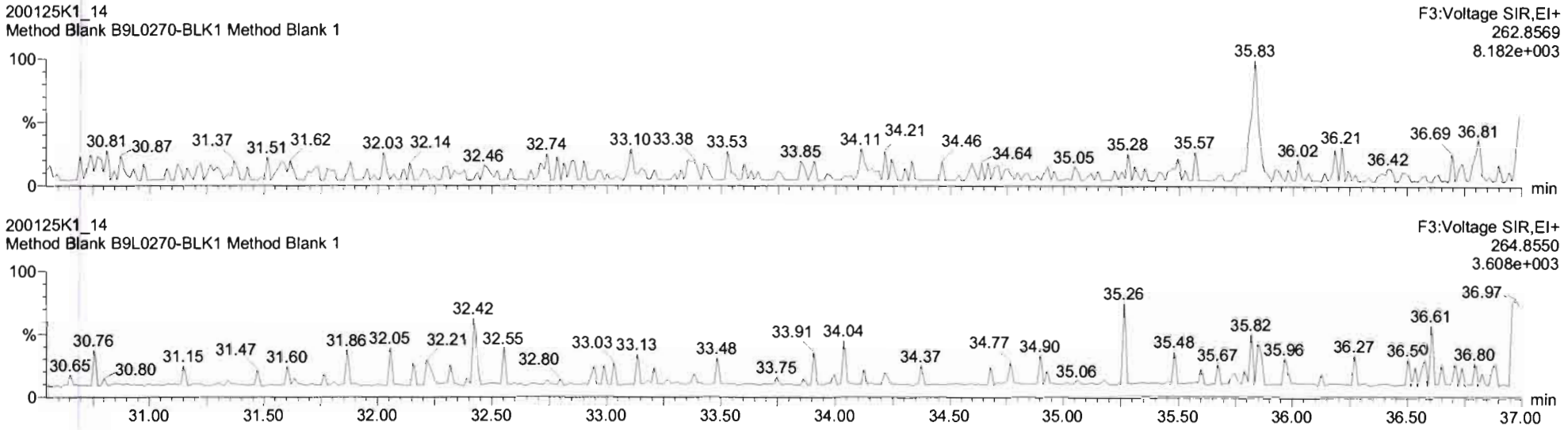


Dataset: Untitled

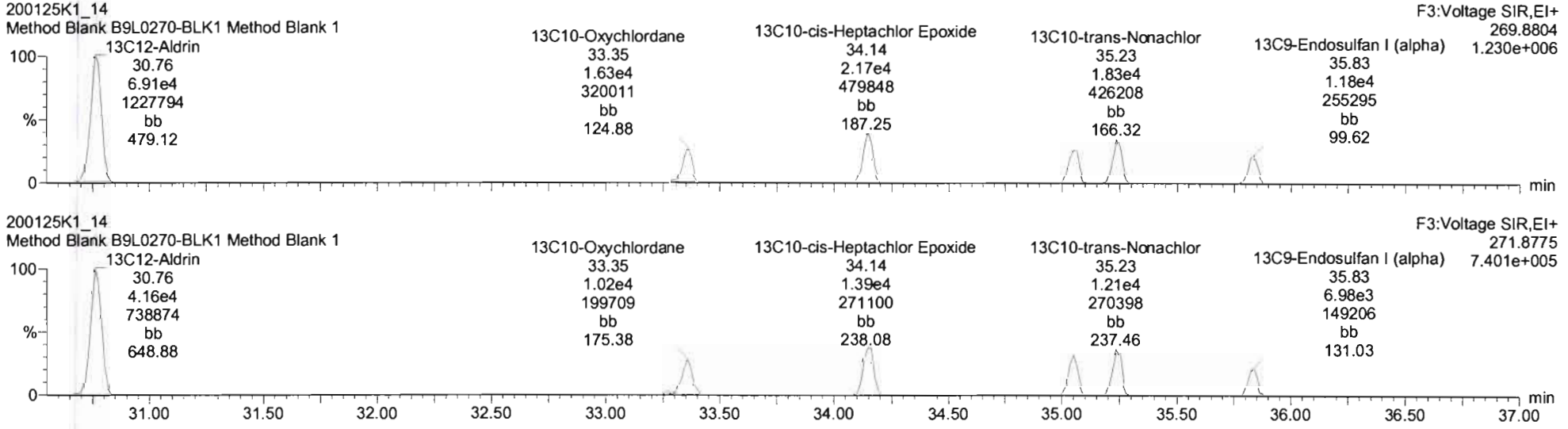
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

Aldrin-EI



Aldrin-EI-isotopes

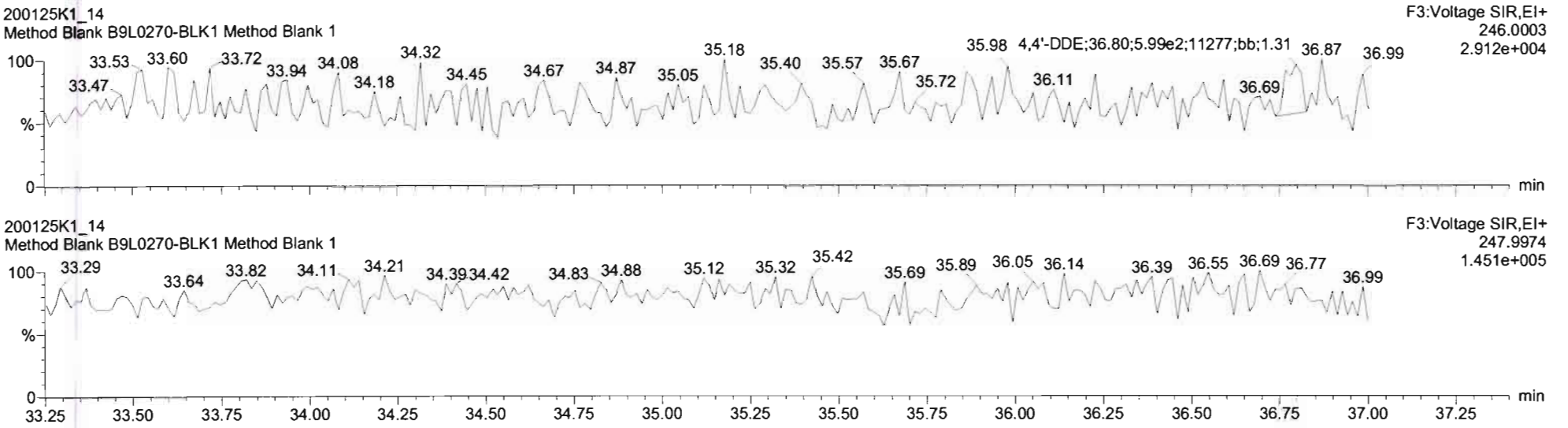


Dataset: Untitled

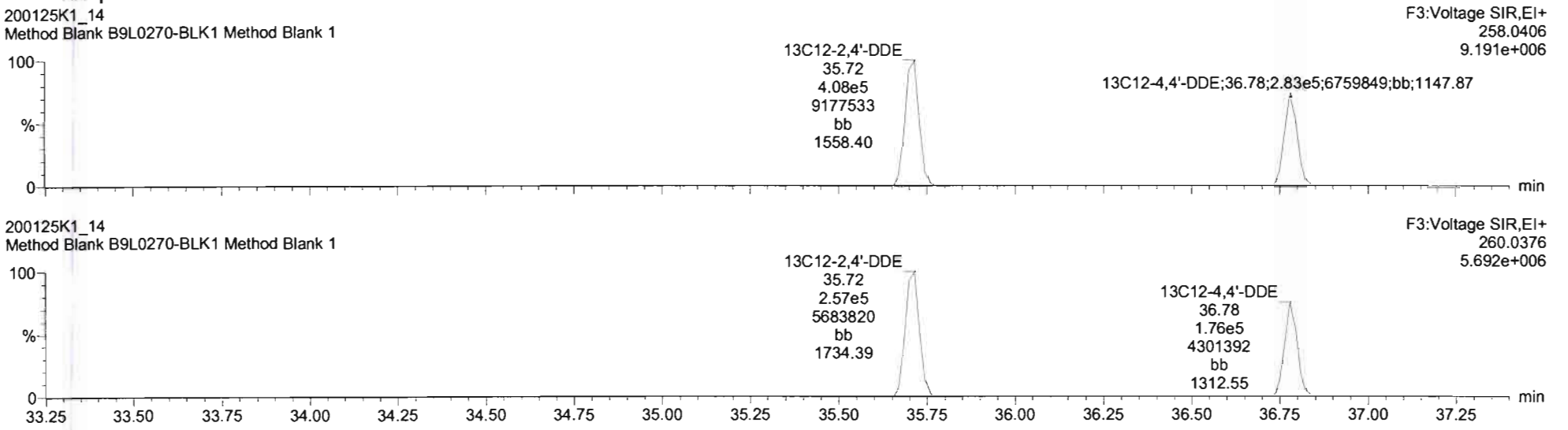
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

DDMU-DDE



DDE-isotopes

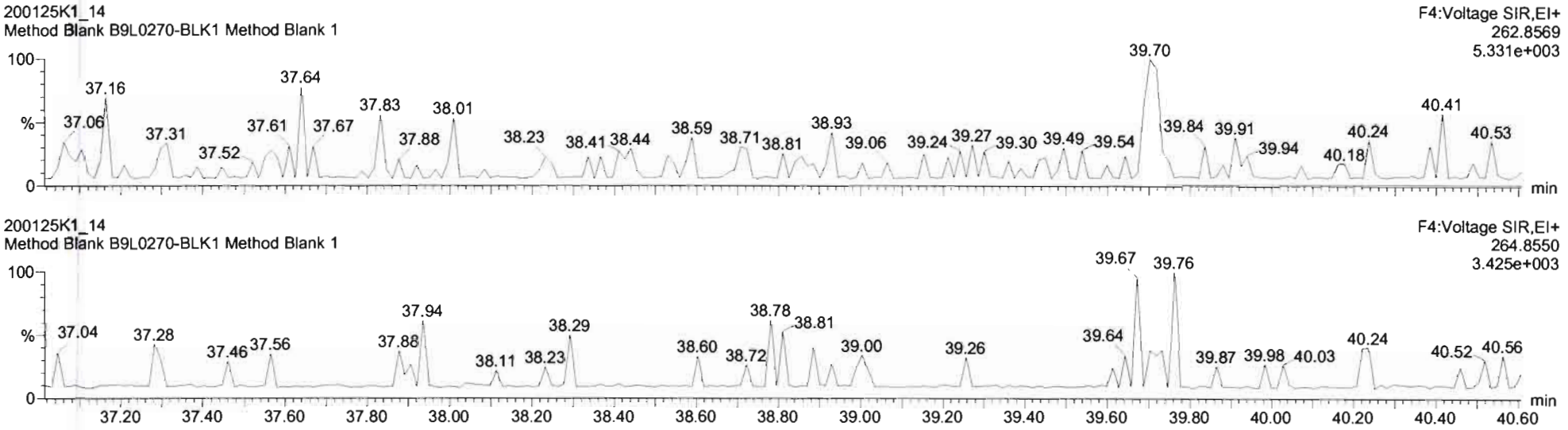


Dataset: Untitled

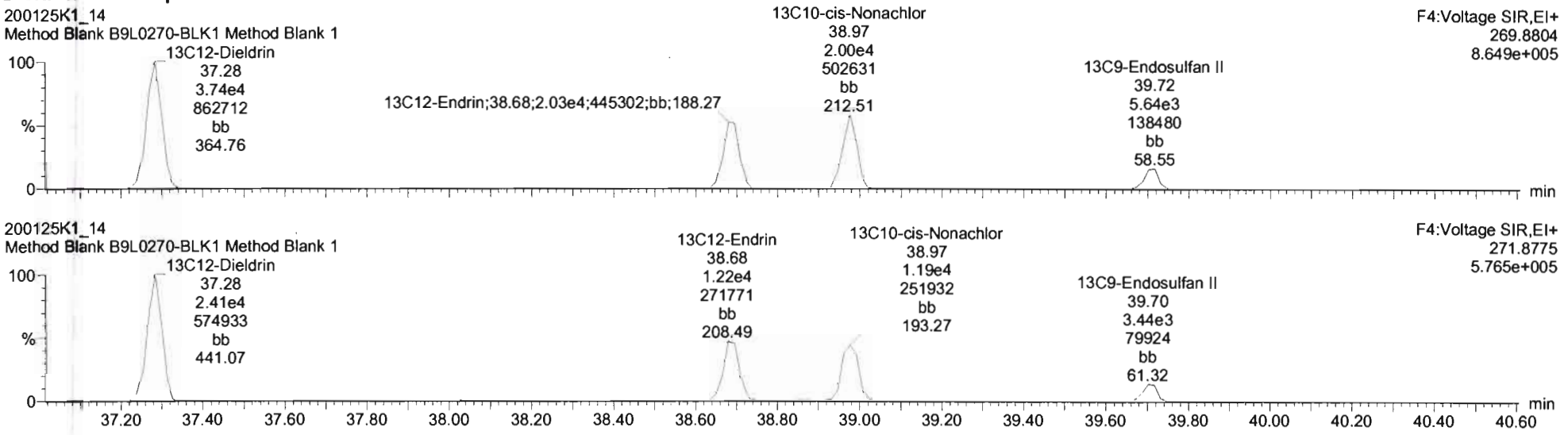
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

Dieldrin-EII



Dieldrin-EII-isotopes



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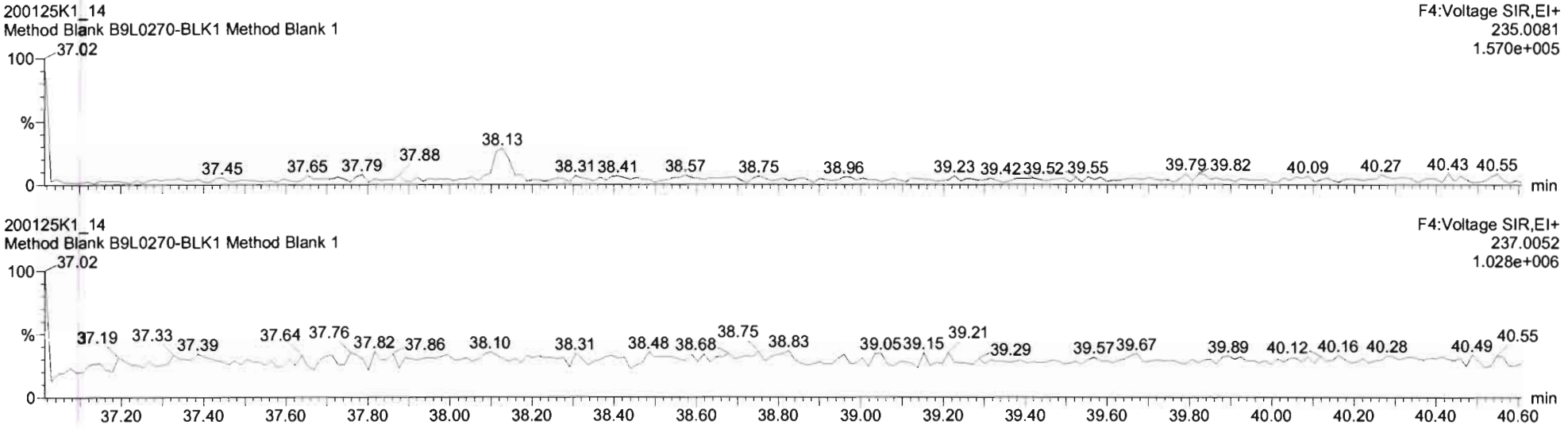
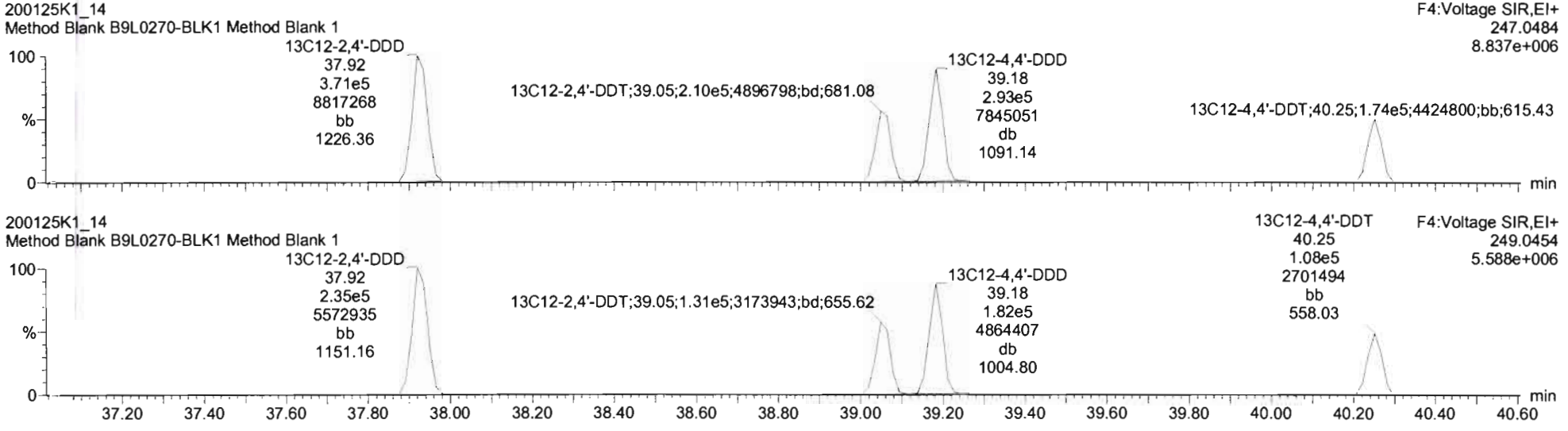
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

DDD-DDT



DDD-DDT-isotopes



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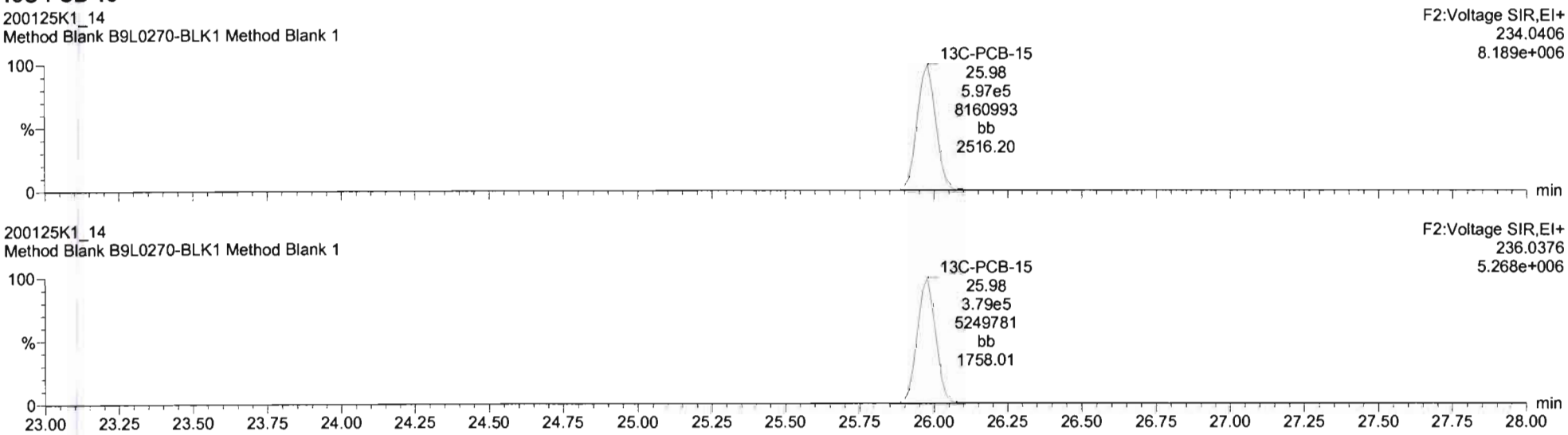
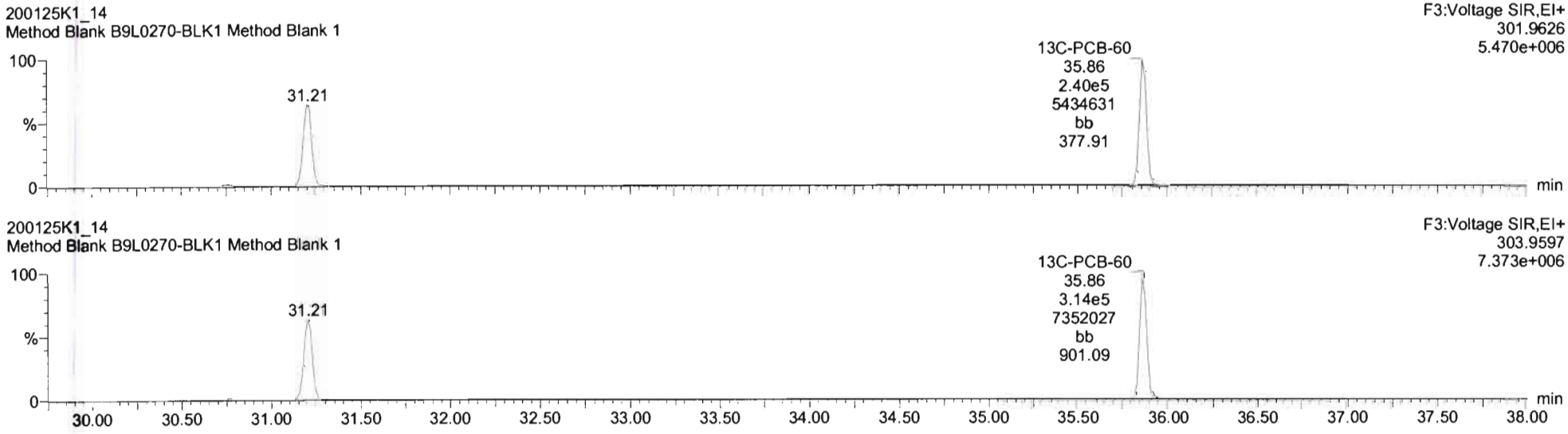
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

13C-PCB-15



13C-PCB-60



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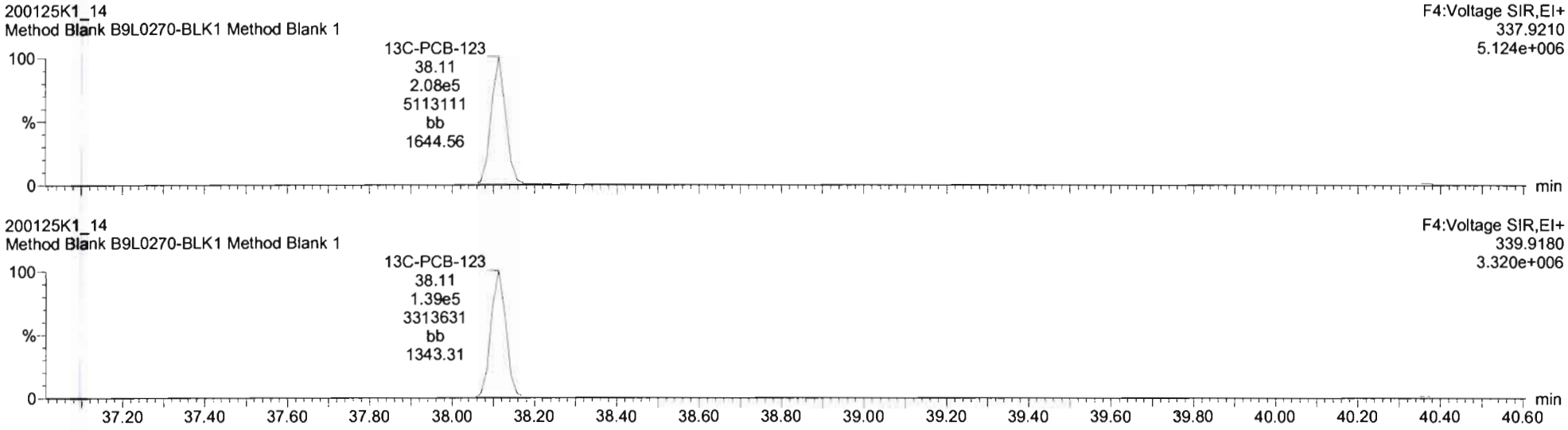
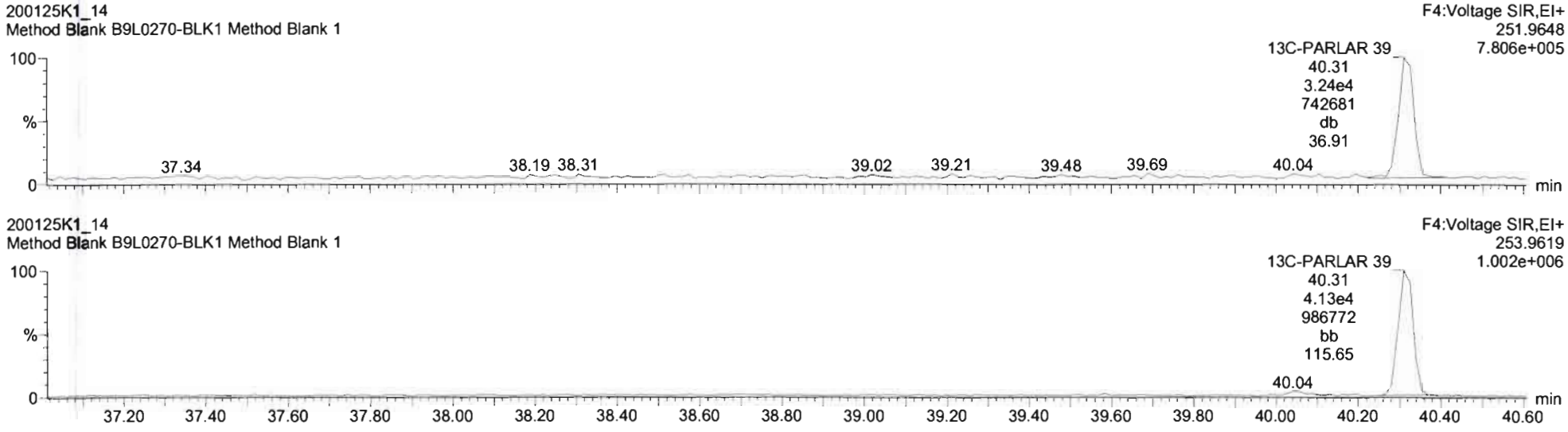
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

13C-PCB-123



13C-PARLAR 39



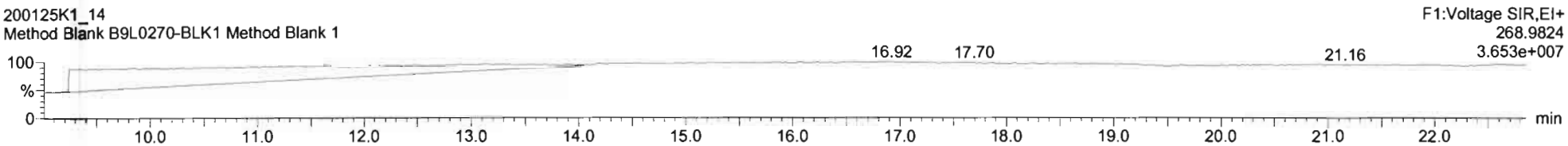
Vista Analytical Laboratory

Dataset: Untitled

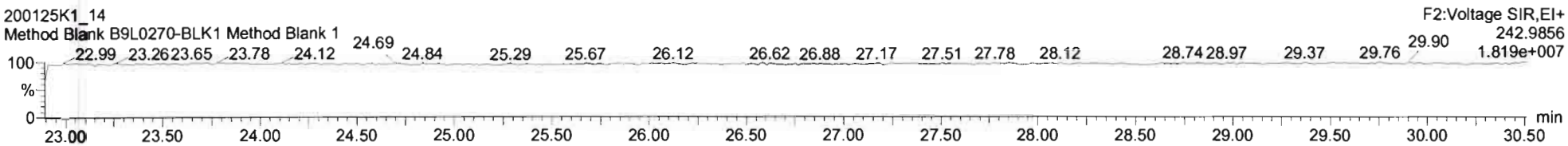
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_14, Date: 25-Jan-2020, Time: 23:46:59, ID: B9L0270-BLK1 Method Blank 1, Description: Method Blank

PFK1



PFK2



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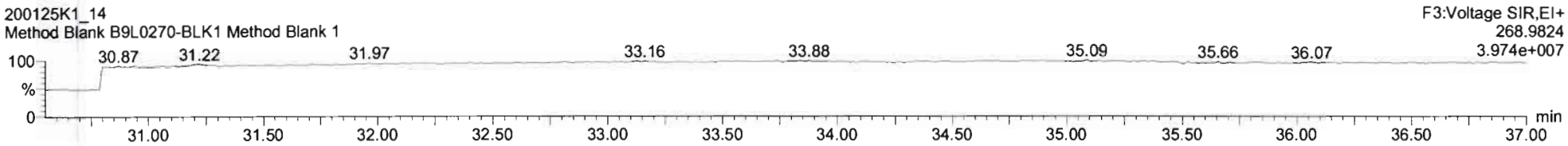
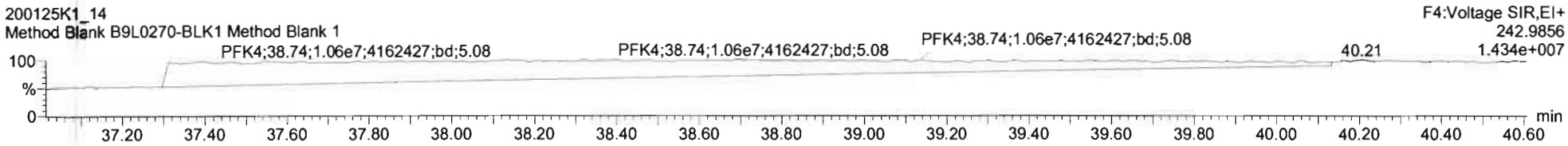
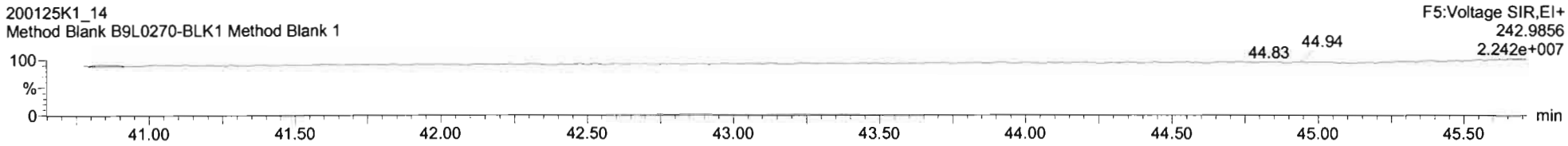


PFK4



PFK5



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-12.qld

Last Altered: Monday, January 27, 2020 10:56:01 Pacific Standard Time
Printed: Monday, January 27, 2020 11:01:49 Pacific Standard Time

HK 1.27.2020 CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4 Lindane (gamma-BHC)	1.95e5	2.20e5	2.21	NO	0.869	1.000	26.51	26.51	1.001	1.001	NO	5120		47.2	5120
2	9 Aldrin	1.67e5	1.47e5	1.63	NO	1.11	1.000	30.79	30.80	1.001	1.001	NO	5120		10.7	5120
3	10 Oxychlordane	3.99e4	3.51e4	1.52	NO	1.09	1.000	33.37	33.38	1.001	1.001	NO	5200		39.1	5200
4	13 trans-Chlordane (gam...	3.82e4	3.24e4	1.66	NO	1.18	1.000	35.07	35.08	1.001	1.001	NO	5000		35.2	5000
5	14 trans-Nonachlor	4.22e4	3.97e4	1.53	NO	1.08	1.000	35.26	35.26	1.001	1.001	NO	4940		31.1	4940
6	15 cis-Chlordane	4.26e4	3.97e4	1.60	NO	1.11	1.000	35.74	35.75	1.015	1.014	NO	4840		30.2	4840
7	18 2,4'-DDE	8.85e5	9.03e5	1.41	NO	0.984	1.000	35.73	35.73	1.000	1.000	NO	4980		22.8	4980
8	19 4,4'-DDE	6.26e5	6.26e5	1.42	NO	0.996	1.000	36.80	36.80	1.000	1.000	NO	5020		30.1	5020
9	20 Dieldrin	9.35e4	8.38e4	1.54	NO	1.09	1.000	37.30	37.30	1.000	1.000	NO	5110		16.1	5110
10	22 cis-Nonachlor	4.63e4	4.12e4	1.62	NO	1.08	1.000	38.99	38.99	1.000	1.000	NO	5220		31.9	5220

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-12.qld

Last Altered: Monday, January 27, 2020 10:56:01 Pacific Standard Time
Printed: Monday, January 27, 2020 11:01:55 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	8.68e5	8.16e5	1.50	NO	1.05	1.000	37.94	37.95	1.000	1.000	NO	5080		50.2	5080
2	25	2,4'-DDT	5.68e5	5.01e5	1.50	NO	1.03	1.000	39.08	39.08	1.000	1.000	NO	5510		82.5	5510
3	26	4,4'-DDD	7.80e5	6.79e5	1.54	NO	1.12	1.000	39.20	39.20	1.000	1.000	NO	5110		52.8	5110
4	27	4,4'-DDT	4.87e5	4.34e5	1.53	NO	1.13	1.000	40.27	40.27	1.000	1.000	NO	4950		80.7	4950
5	36	13C6-Lindane (gamma)	2.20e5	1.22e6	0.79	NO	0.201	1.000	26.45	26.48	1.019	1.018	NO	4490	89.9	33.7	
6	40	13C12-Aldrin	1.47e5	1.22e6	1.68	NO	0.130	1.000	30.78	30.76	1.184	1.185	NO	4620	92.4	22.1	
7	41	13C10-Oxychlordane	3.51e4	1.22e6	1.69	NO	0.0314	1.000	33.38	33.35	1.284	1.285	NO	4590	91.7	91.9	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-12.qld

Last Altered: Monday, January 27, 2020 10:56:01 Pacific Standard Time
Printed: Tuesday, February 04, 2020 10:56:23 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	43	13C10-trans-Chlordan...	3.24e4	1.22e6	1.67	NO	0.0281	1.000	35.08	35.05	1.349	1.350	NO	4730	94.6	103	
2	44	13C10-trans-Nonachlor	3.97e4	1.22e6	1.48	NO	0.0330	1.000	35.27	35.24	1.356	1.357	NO	4940	98.8	87.4	
3	46	13C12-2,4'-DDE	9.03e5	1.22e6	1.57	NO	0.765	1.000	35.69	35.72	0.996	0.995	NO	4840	96.9	9.62	
4	47	13C12-4,4'-DDE	6.26e5	1.22e6	1.60	NO	0.556	1.000	36.77	36.78	1.026	1.025	NO	4620	92.4	13.2	
5	48	13C12-Dieldrin	8.38e4	1.22e6	1.55	NO	0.0759	1.000	37.28	37.28	1.040	1.040	NO	4530	90.6	38.9	
6	50	13C10-cis-Nonachlor	4.12e4	1.22e6	1.56	NO	0.0389	1.000	38.97	38.97	1.087	1.087	NO	4350	86.9	75.8	
7	52	13C12-2,4'-DDD	8.16e5	1.22e6	1.58	NO	0.754	1.000	37.95	37.94	1.460	1.461	NO	4440	88.7	15.4	
8	53	13C12-2,4'-DDT	5.01e5	1.22e6	1.57	NO	0.519	1.000	39.08	39.06	1.504	1.504	NO	3960	79.2	22.3	
9	54	13C12-4,4'-DDD	6.79e5	1.22e6	1.55	NO	0.662	1.000	39.21	39.18	1.508	1.509	NO	4210	84.2	17.5	
10	55	13C12-4,4'-DDT	4.34e5	1.22e6	1.61	NO	0.419	1.000	40.28	40.25	1.549	1.551	NO	4250	85.0	27.7	
11	62	13C-PCB-15	1.22e6	1.22e6	1.59	NO	1.00	1.000	25.96	25.98	1.000	1.000	NO	5000	100	4.76	

Vista Analytical Laboratory

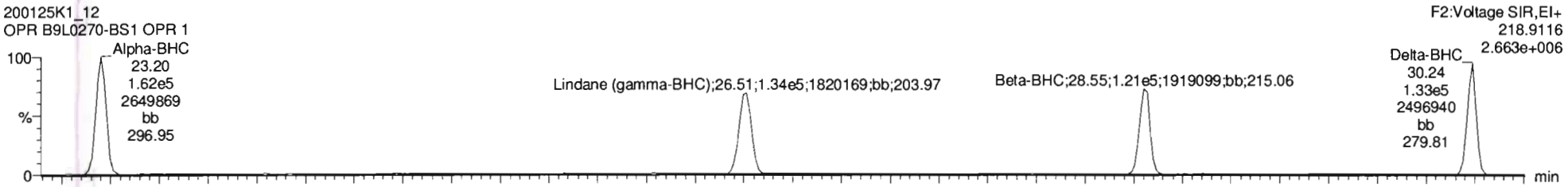
Dataset: Untitled

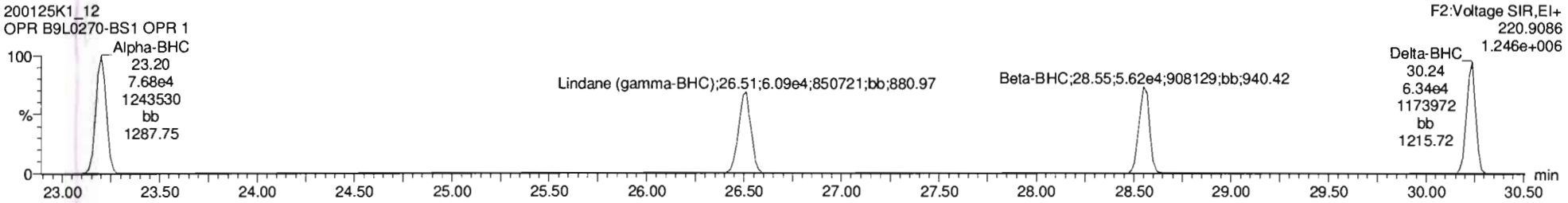
Last Altered: Monday, January 27, 2020 11:00:40 Pacific Standard Time
Printed: Monday, January 27, 2020 11:00:44 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

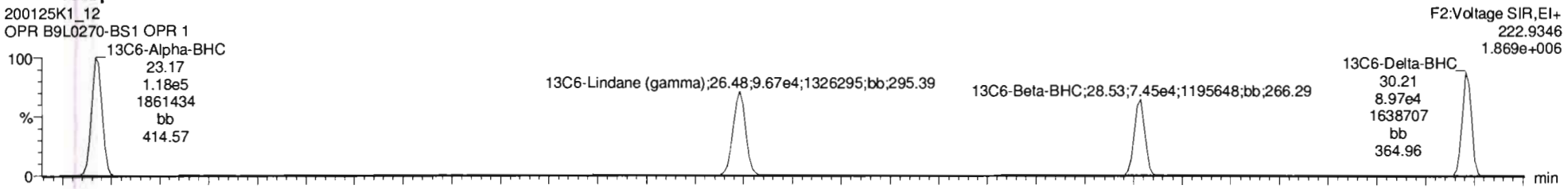
Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

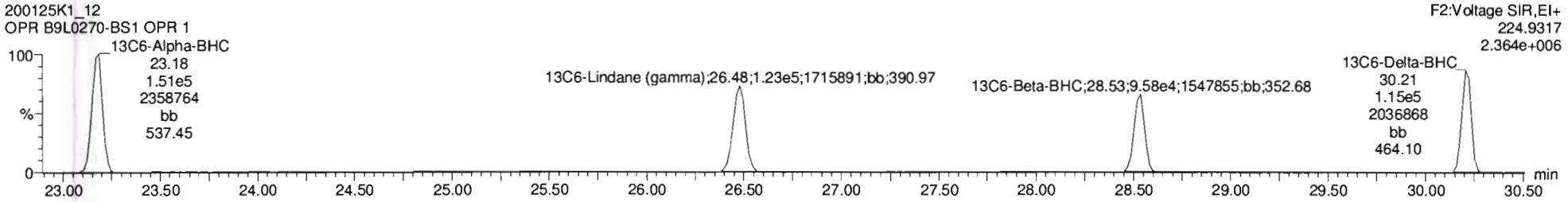
BHC Totals





BHC-isotopes



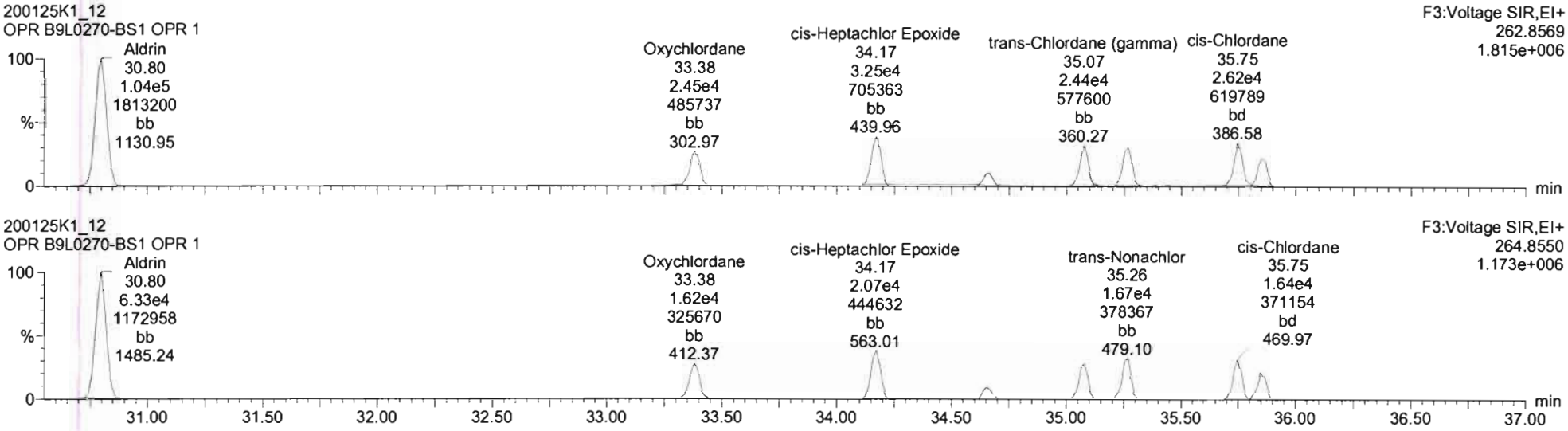


Dataset: Untitled

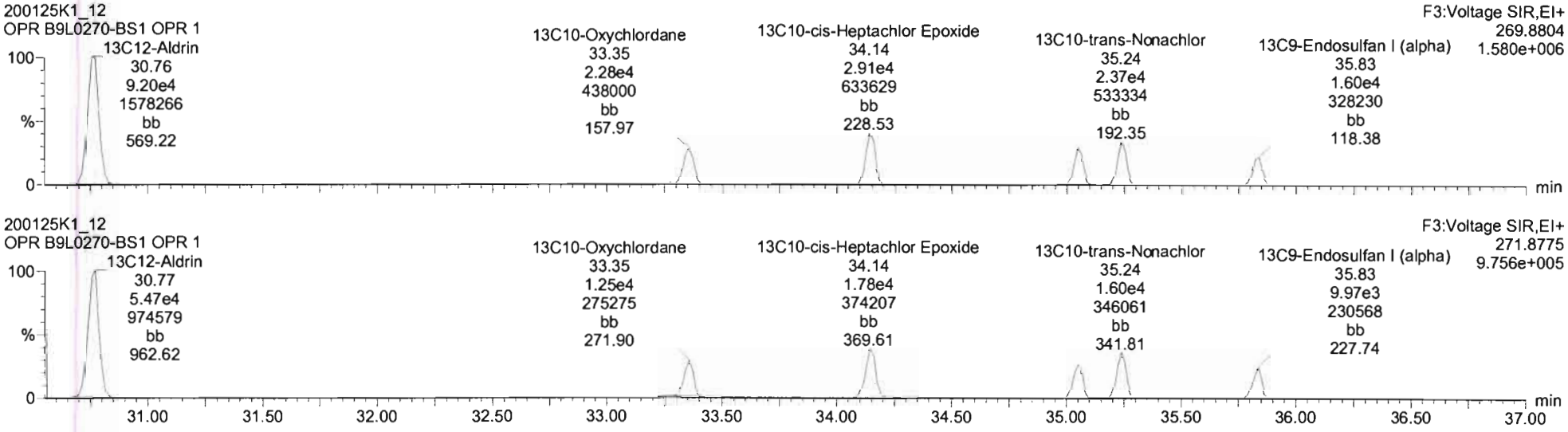
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

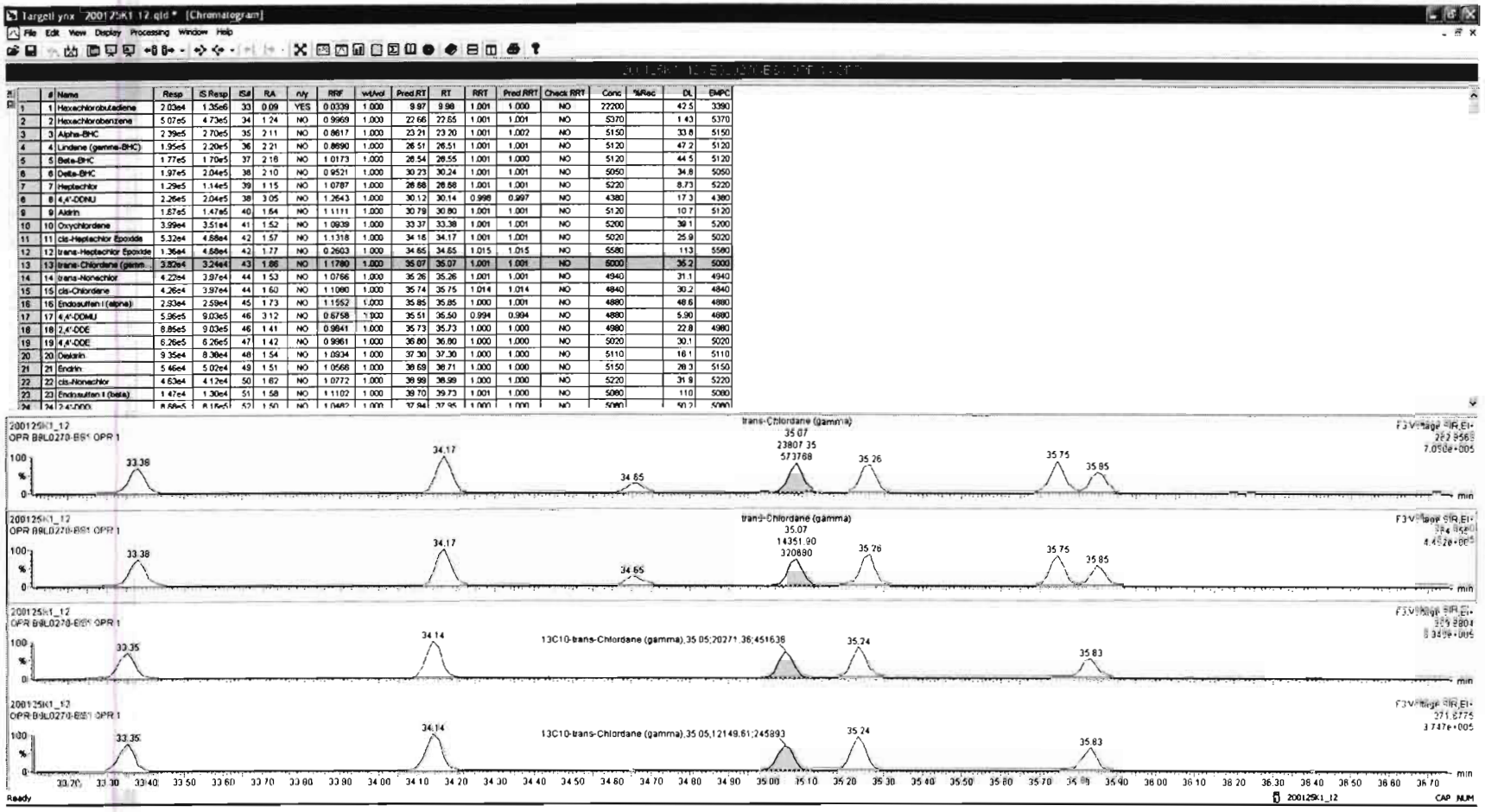
Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

Aldrin-EI



Aldrin-EI-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	2.03e4	1.35e6	33	0.09	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	22200		42.5	3390
2	2	Hexachlorobenzene	5.07e5	4.73e6	34	1.24	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	5370		1.43	5370
3	3	Alpha-BHC	2.39e5	2.70e5	35	2.11	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	5150		33.8	5150
4	4	Lindane (gamma-BHC)	1.95e5	2.20e5	36	2.21	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	5120		47.2	5120
5	5	Beta-BHC	1.77e5	1.70e5	37	2.18	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	5120		44.5	5120
6	6	Delta-BHC	1.97e5	2.04e5	38	2.10	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	5050		34.8	5050
7	7	Heptachlor	1.29e5	1.14e5	39	1.15	NO	1.0787	1.000	28.88	28.88	1.001	1.001	NO	5220		8.73	5220
8	8	4,4'-DDMU	2.26e5	2.04e5	38	3.05	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	4380		17.3	4380
9	9	Aldrin	1.87e5	1.47e6	40	1.64	NO	1.1111	1.000	30.79	30.80	1.001	1.001	NO	5120		10.7	5120
10	10	Oxychlordane	3.99e4	3.51e4	41	1.52	NO	1.0839	1.000	33.37	33.38	1.001	1.001	NO	5200		39.1	5200
11	11	cis-Heptachlor Epoxide	5.32e4	4.68e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	5020		25.9	5020
12	12	trans-Heptachlor Epoxide	1.36e4	4.68e4	42	1.77	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	5580		113	5580
13	13	trans-Chlordane (gamm...	3.82e4	3.24e4	43	1.66	NO	1.1780	1.000	35.07	35.07	1.001	1.001	NO	5000		35.2	5000
14	14	trans-Nonachlor	4.22e4	3.97e4	44	1.53	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	4940		31.1	4940
15	15	cis-Chlordane	4.26e4	3.97e4	44	1.60	NO	1.1080	1.000	35.74	35.75	1.014	1.014	NO	4840		30.2	4840
16	16	Endosulfan I (alpha)	2.93e4	2.59e4	45	1.73	NO	1.1552	1.000	35.85	35.85	1.000	1.001	NO	4880		48.6	4880
17	17	4,4'-DDMU	5.96e5	9.03e5	46	3.12	NO	0.6758	1.000	35.51	36.50	0.994	0.994	NO	4880		5.90	4880
18	18	2,4'-DDE	8.86e5	9.03e5	46	1.41	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	4980		22.8	4980
19	19	4,4'-DDE	6.26e5	6.26e5	47	1.42	NO	0.9961	1.000	36.80	36.80	1.000	1.000	NO	5020		30.1	5020
20	20	Dieldrin	9.35e4	8.38e4	48	1.54	NO	1.0934	1.000	37.30	37.30	1.000	1.000	NO	5110		16.1	5110
21	21	Endrin	5.46e4	5.02e4	49	1.51	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	5150		28.3	5150
22	22	cis-Nonachlor	4.63e4	4.12e4	50	1.62	NO	1.0772	1.000	38.98	38.99	1.000	1.000	NO	5220		31.9	5220
23	23	Endosulfan II (beta)	1.47e4	1.30e4	51	1.58	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	5080		110	5080
24	24	2,4'-DDD	8.66e5	8.15e5	52	1.50	NO	1.0482	1.000	37.84	37.85	1.000	1.000	NO	5090		50.2	5090

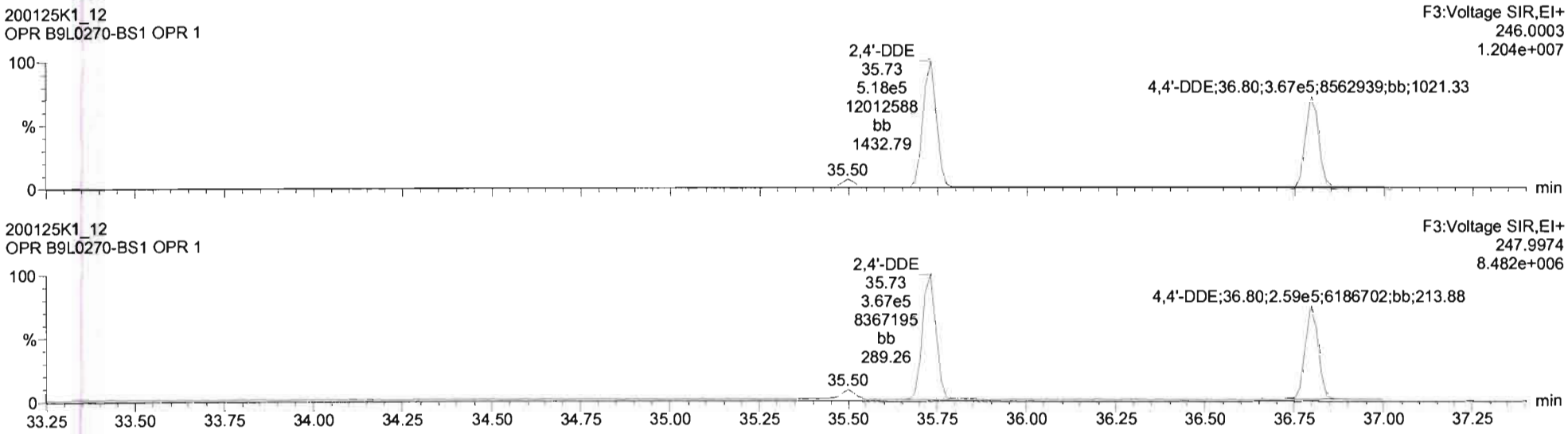
Vista Analytical Laboratory

Dataset: Untitled

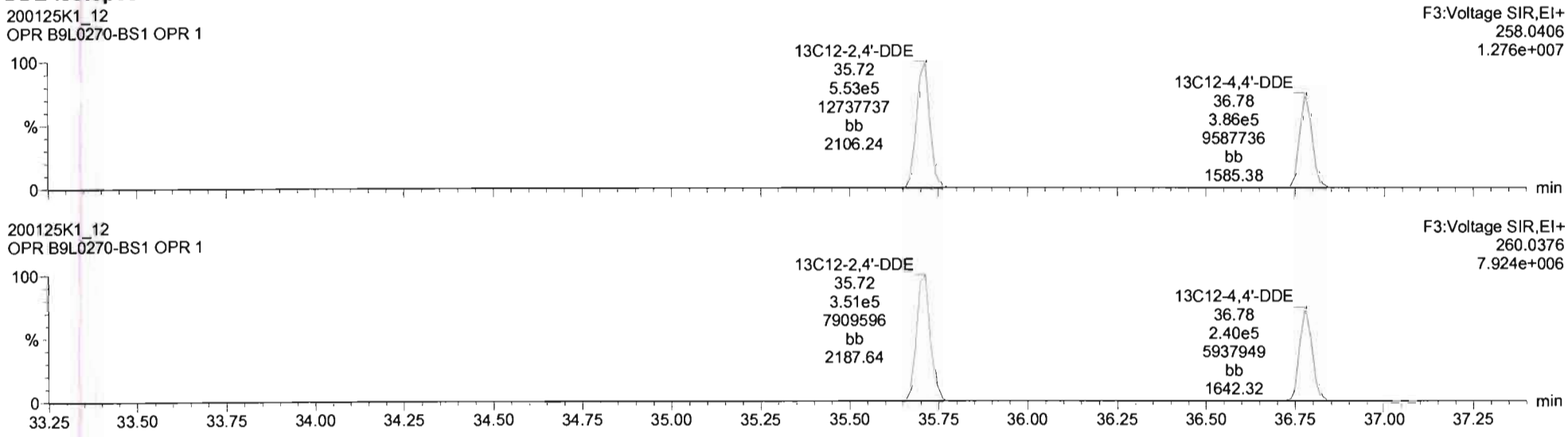
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

DDMU-DDE



DDE-isotopes



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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

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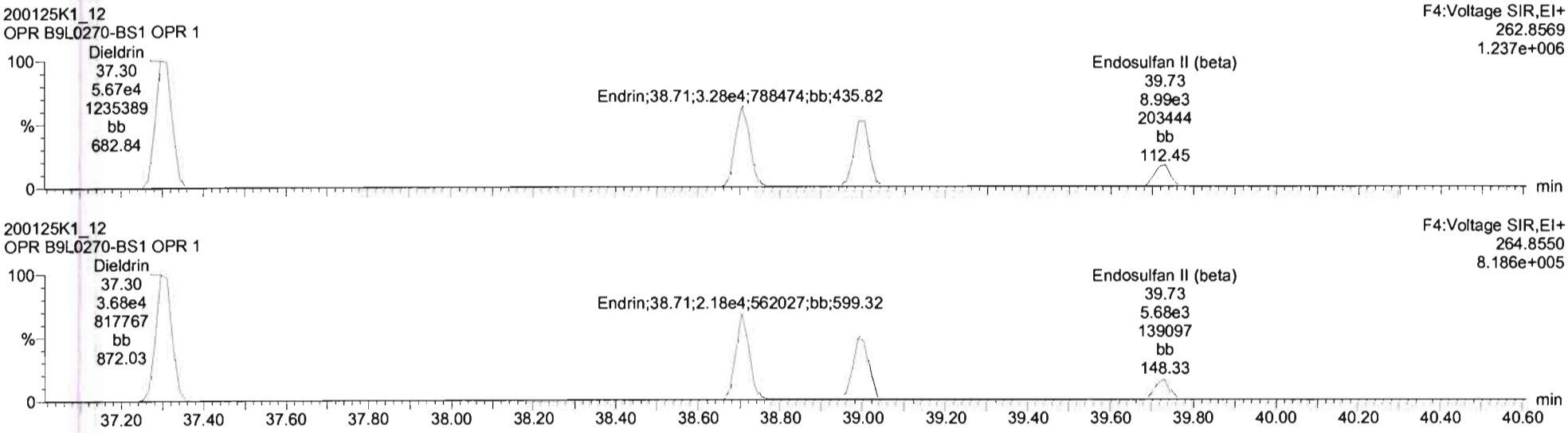
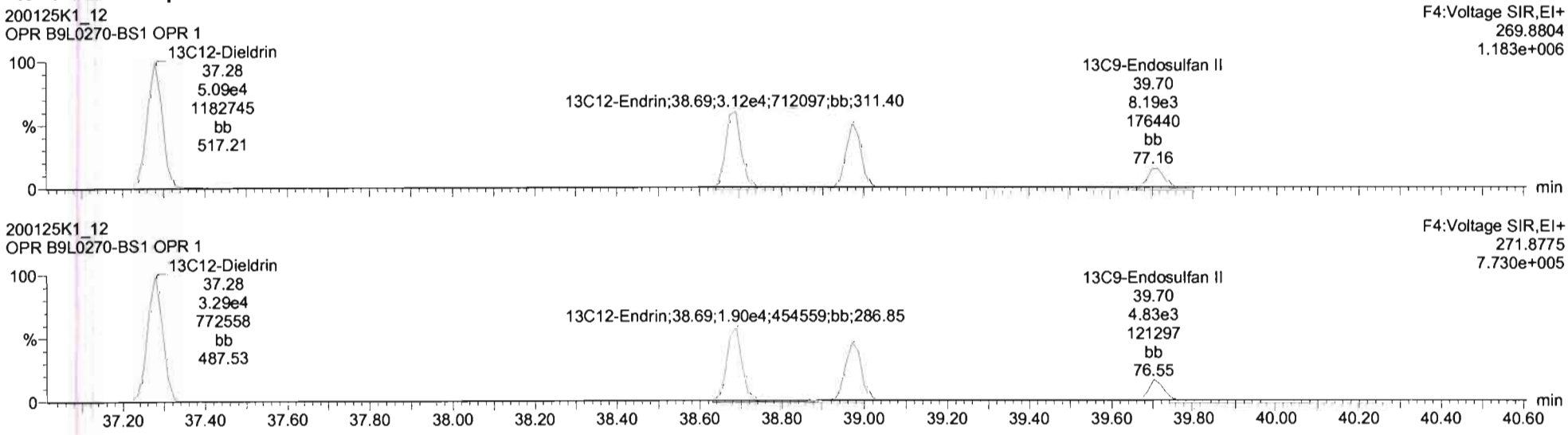
Dieldrin-EII



Dieldrin-EII-isotopes



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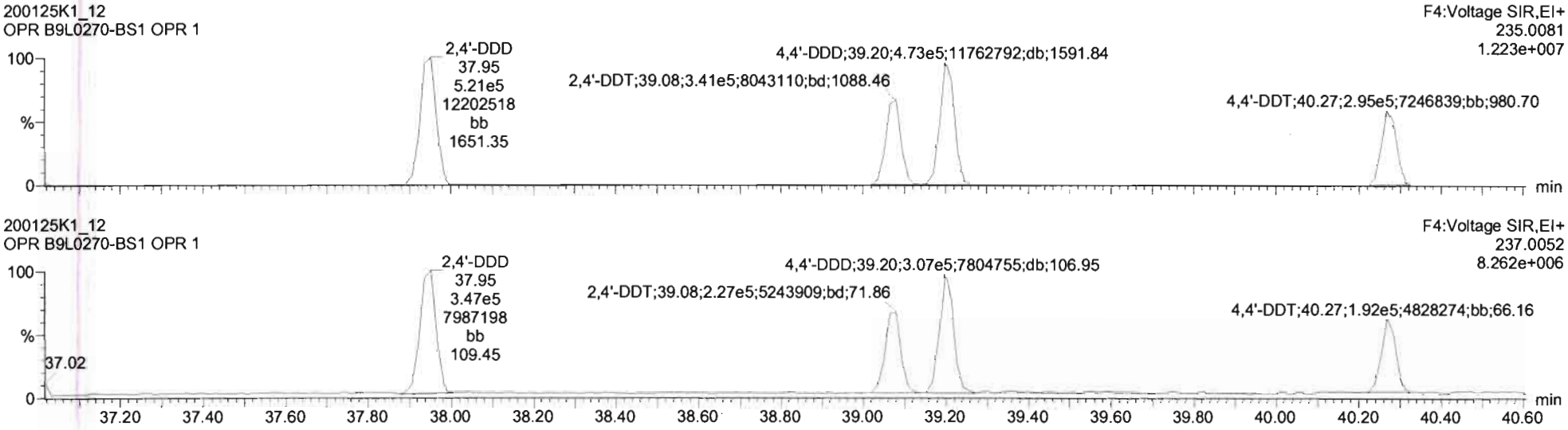
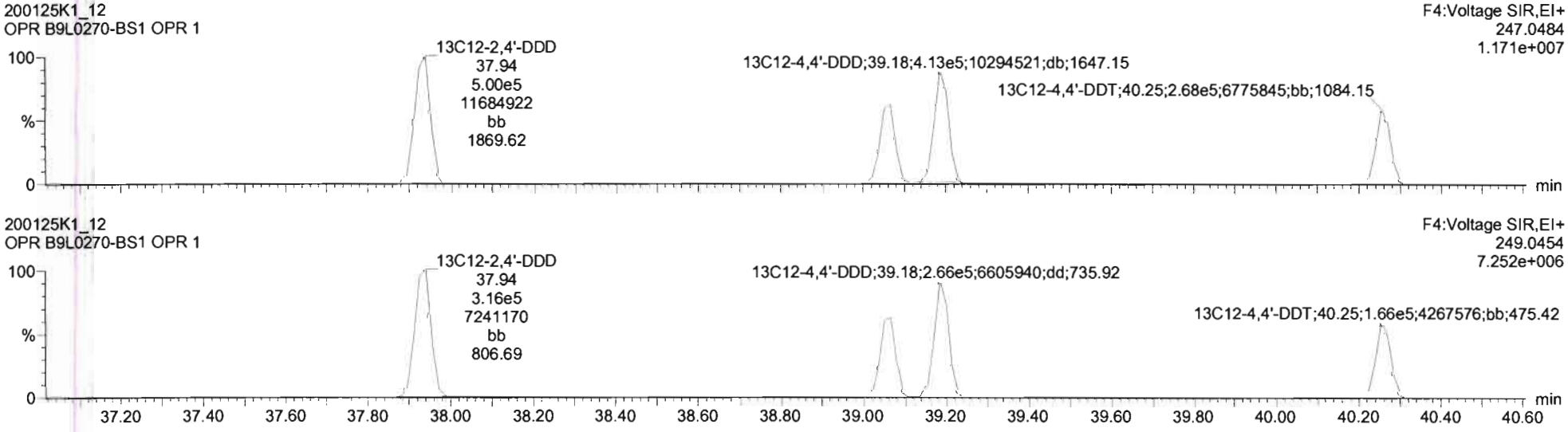
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

DDD-DDT



DDD-DDT-isotopes



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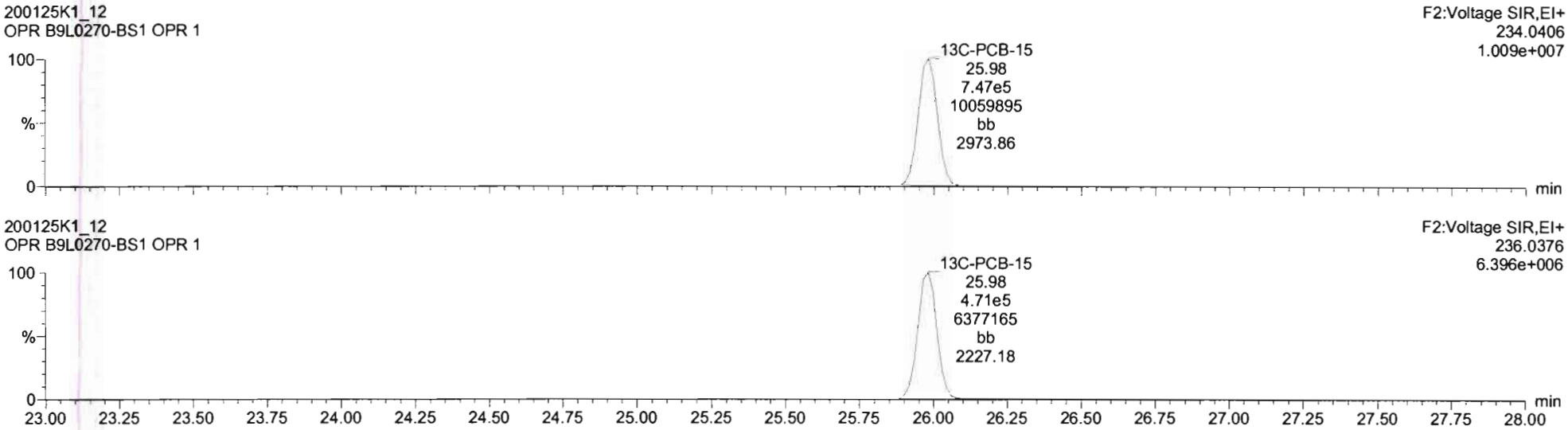
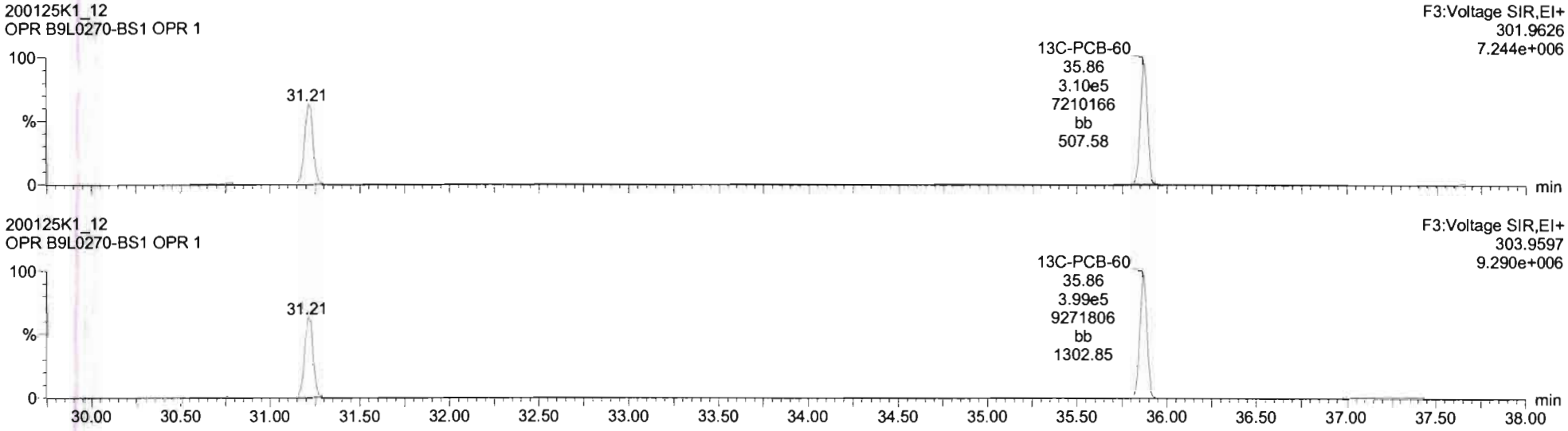
13C-PCB-15



13C-PCB-60



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Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

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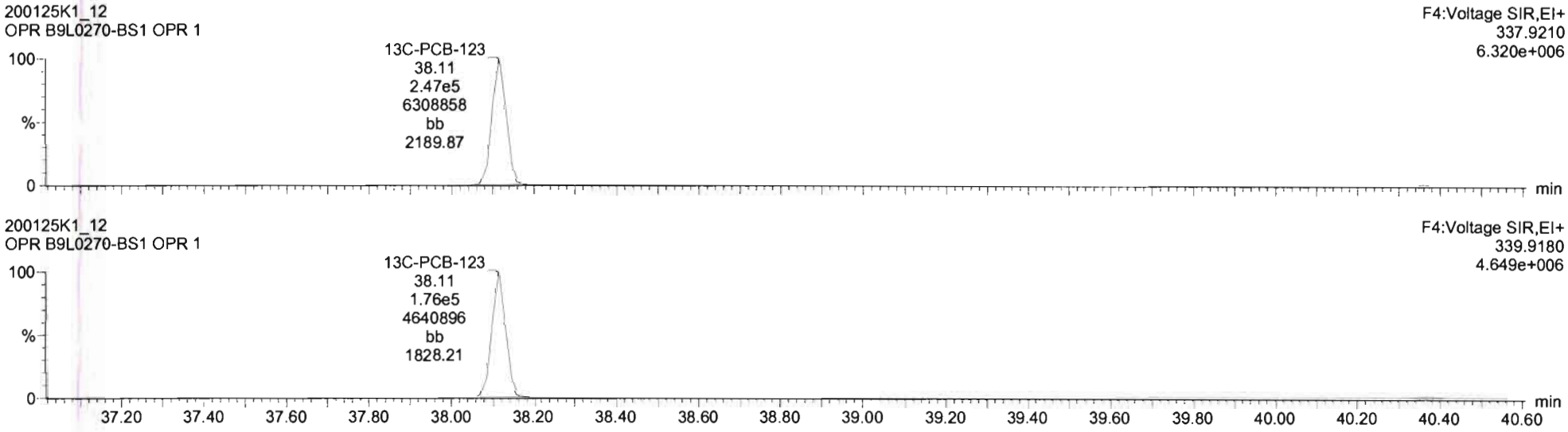
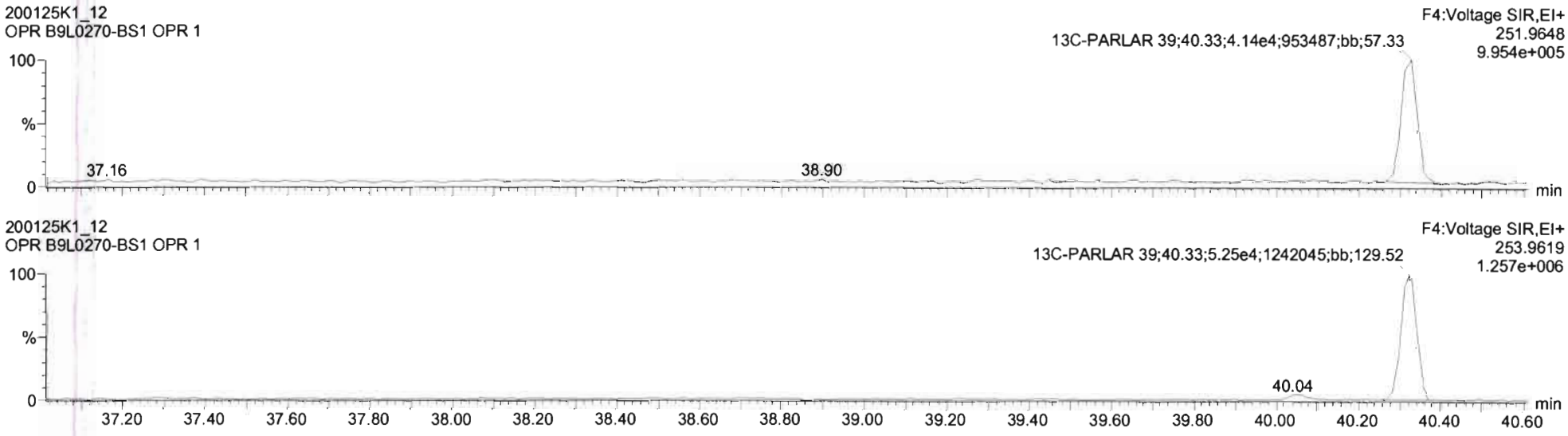
13C-PCB-123



13C-PARLAR 39

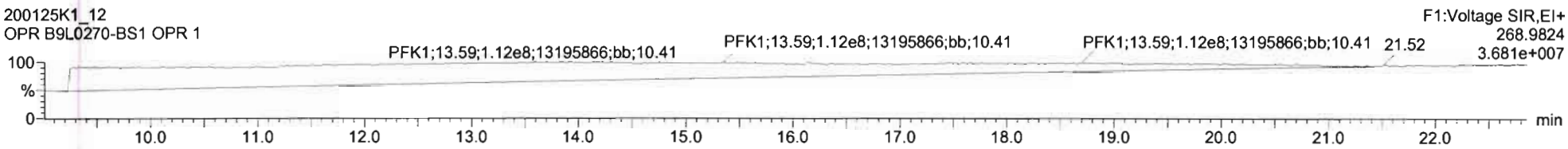


Dataset: Untitled

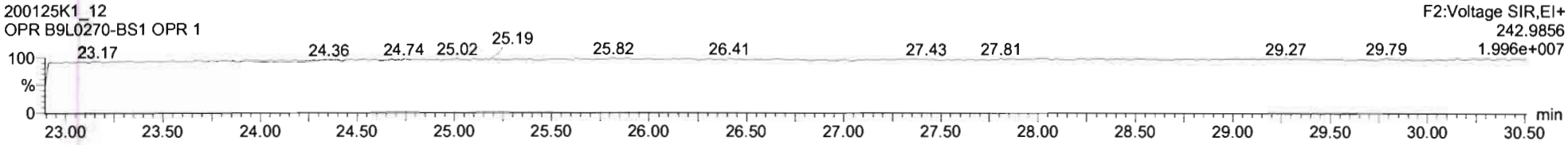
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:18:52 Pacific Standard Time

Name: 200125K1_12, Date: 25-Jan-2020, Time: 22:09:02, ID: B9L0270-BS1 OPR 1, Description: OPR

PFK1



PFK2



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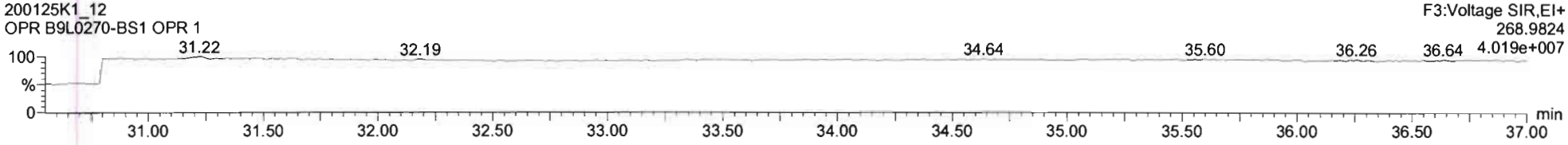
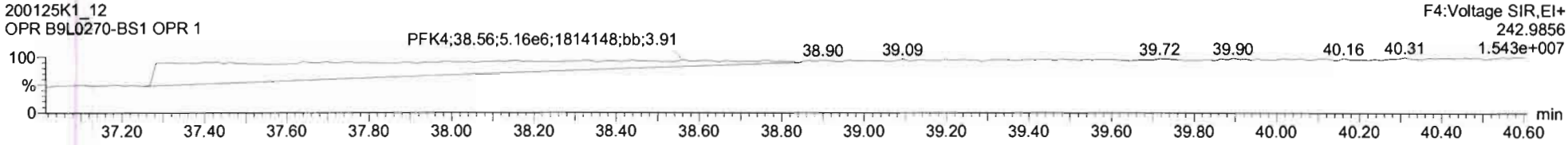
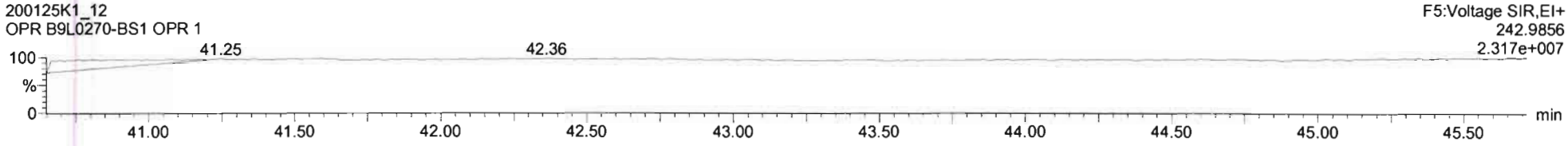


PFK4



PFK5



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

Last Altered: Monday, February 03, 2020 11:31:03 Pacific Standard Time
Printed: Monday, February 03, 2020 11:31:52 Pacific Standard Time

HL 2/7/20 CT 02/04/2020

Method: Untitled 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4 Lindane (gamma-BHC)		1.79e5		NO	0.869	1.007	26.57			1.001	YES			72.5	
2	9 Aldrin		5.03e4		NO	1.11	1.007	30.80			1.001	YES			112	
3	10 Oxychlordane		2.01e4		NO	1.09	1.007	33.39			1.001	YES			302	
4	13 trans-Chlordane (gam...	3.45e3	1.84e4	1.54	NO	1.18	1.007	35.10	35.09	1.000	1.001	NO	791		207	791
5	14 trans-Nonachlor	2.10e3	2.69e4	0.92	YES	1.08	1.007	35.29	35.28	1.000	1.001	NO	361		177	284
6	15 cis-Chlordane	4.03e3	2.69e4	1.40	NO	1.11	1.007	35.77	35.78	1.014	1.014	NO	671		172	671
7	18 2,4'-DDE	4.85e4	6.28e5	1.31	NO	0.984	1.007	35.77	35.79	1.001	1.000	NO	390		23.4	390
8	19 4,4'-DDE	2.18e5	4.21e5	1.34	NO	0.996	1.007	36.86	36.85	1.000	1.000	NO	2580		31.5	2580
9	20 Dieldrin	9.10e3	6.10e4	1.39	NO	1.09	1.007	37.33	37.33	1.000	1.000	NO	678		168	678
10	22 cis-Nonachlor		3.05e4		NO	1.08	1.007	39.00			1.000	YES			282	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

Last Altered: Monday, February 03, 2020 11:31:03 Pacific Standard Time
Printed: Monday, February 03, 2020 11:31:58 Pacific Standard Time

Method: Untitled 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	2.86e5	1.75e5	1.54	NO	1.05	1.007	37.94	37.95	1.000	1.000	NO	7720		162	7720
2	25	2,4'-DDT	6.72e4	3.85e5	1.43	NO	1.03	1.007	39.08	39.08	1.000	1.000	NO	842		79.9	842
3	26	4,4'-DDD	1.92e6	4.19e5	1.57	NO	1.12	1.007	39.22	39.21	1.000	1.000	NO	20200		64.7	20200
4	27	4,4'-DDT	1.68e5	3.12e5	1.48	NO	1.13	1.007	40.27	40.27	1.000	1.000	NO	2350		88.6	2350
5	36	13C6-Lindane (gamma)	1.79e5	1.25e6	0.81	NO	0.201	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	
6	40	13C12-Aldrin	5.03e4	1.25e6	1.78	NO	0.130	1.007	30.86	30.77	1.181	1.185	NO	1530	30.9	90.5	
7	41	13C10-Oxychlordane	2.01e4	1.25e6	1.51	NO	0.0314	1.007	33.46	33.37	1.281	1.285	NO	2540	51.1	376	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

Last Altered: Monday, February 03, 2020 11:31:03 Pacific Standard Time
Printed: Monday, February 03, 2020 11:32:05 Pacific Standard Time

Method: Untitled 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	43	13C10-trans-Chlordan...	1.84e4	1.25e6	1.59	NO	0.0281	1.007	35.17	35.08	1.347	1.350	NO	2590	52.2	420	
2	44	13C10-trans-Nonachlor	2.69e4	1.25e6	1.69	NO	0.0330	1.007	35.36	35.26	1.354	1.357	NO	3230	65.1	357	
3	46	13C12-2,4'-DDE	6.28e5	1.25e6	1.64	NO	0.765	1.007	35.78	35.76	0.995	0.995	NO	3260	65.6	118	
4	47	13C12-4,4'-DDE	4.21e5	1.25e6	1.64	NO	0.556	1.007	36.86	36.84	1.025	1.025	NO	3010	60.5	162	
5	48	13C12-Dieldrin	6.10e4	1.25e6	1.49	NO	0.0759	1.007	37.37	37.31	1.038	1.040	NO	3190	64.2	286	
6	50	13C10-cis-Nonachlor	3.05e4	1.25e6	1.69	NO	0.0389	1.007	39.07	38.99	1.085	1.087	NO	3110	62.7	559	
7	52	13C12-2,4'-DDD	1.75e5	1.25e6	1.50	NO	0.754	1.007	37.95	37.94	1.457	1.457	NO	921	18.6	155	
8	53	13C12-2,4'-DDT	3.85e5	1.25e6	1.63	NO	0.519	1.007	39.07	39.06	1.500	1.500	NO	2940	59.2	226	
9	54	13C12-4,4'-DDD	4.19e5	1.25e6	1.57	NO	0.662	1.007	39.21	39.20	1.505	1.505	NO	2510	50.6	177	
10	55	13C12-4,4'-DDT	3.12e5	1.25e6	1.72	NO	0.419	1.007	40.26	40.25	1.545	1.546	NO	2950	59.4	280	
11	62	13C-PCB-15	1.25e6	1.25e6	1.57	NO	1.00	1.007	25.96	26.04	1.000	1.000	NO	4960	100	33.7	

Vista Analytical Laboratory

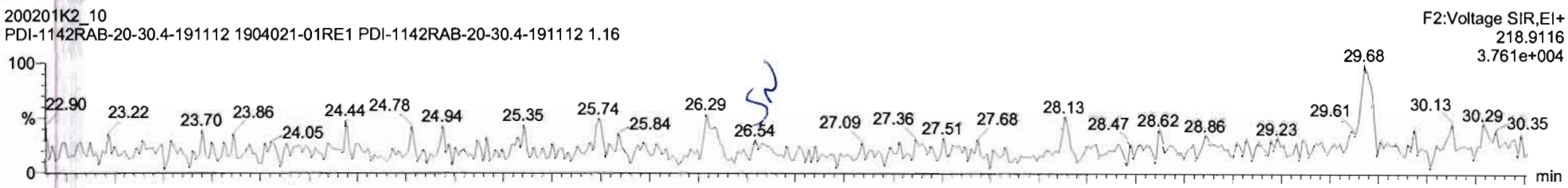
Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

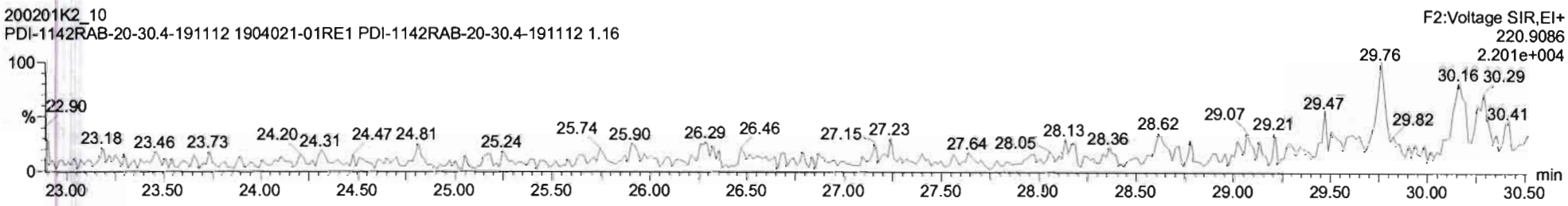
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

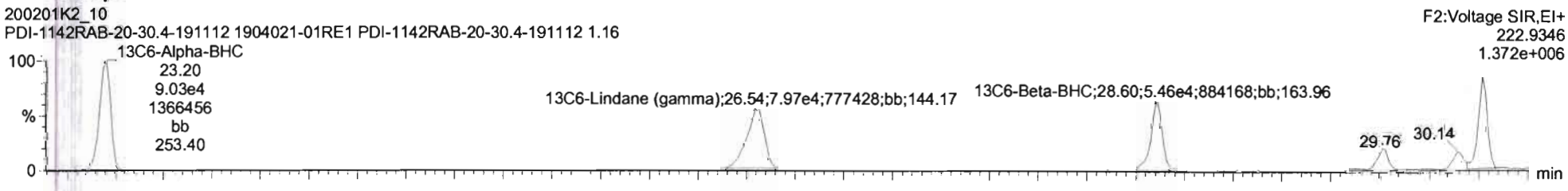
Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

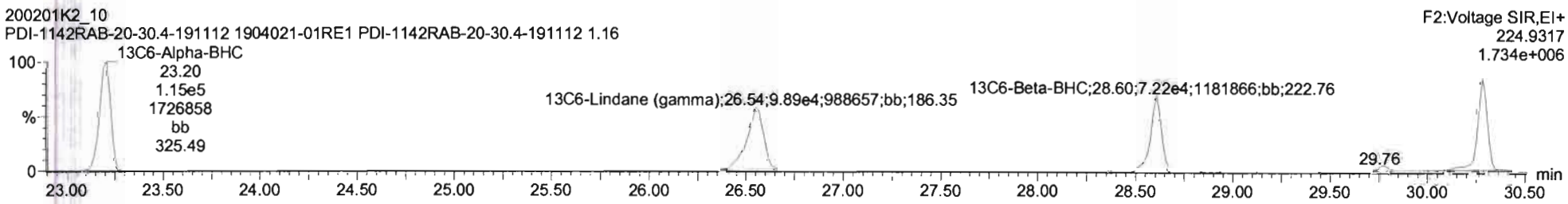
BHC Totals





BHC-isotopes





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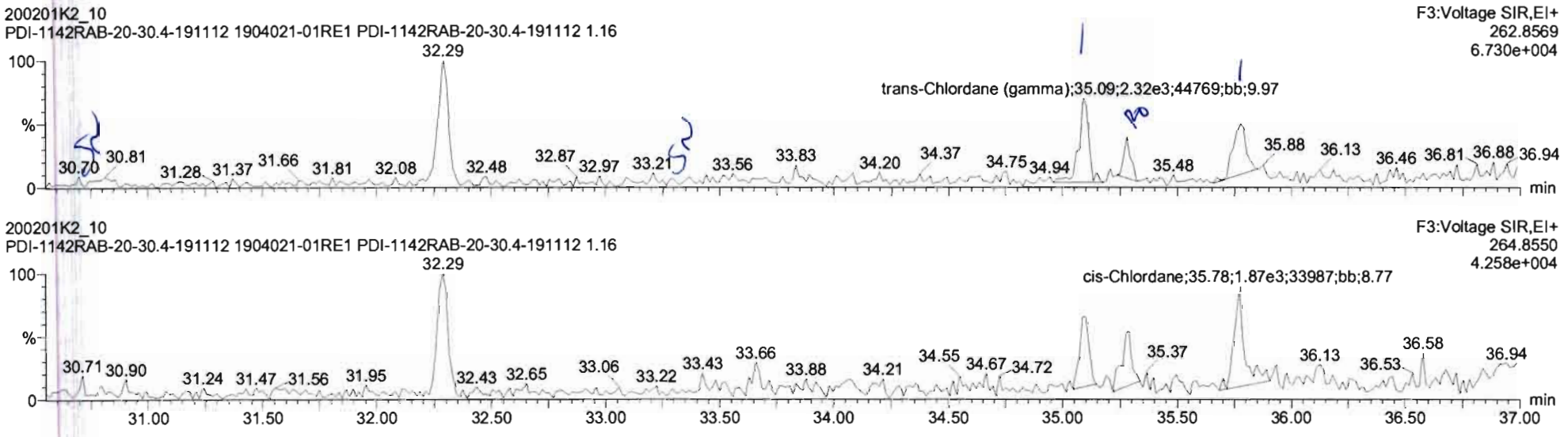
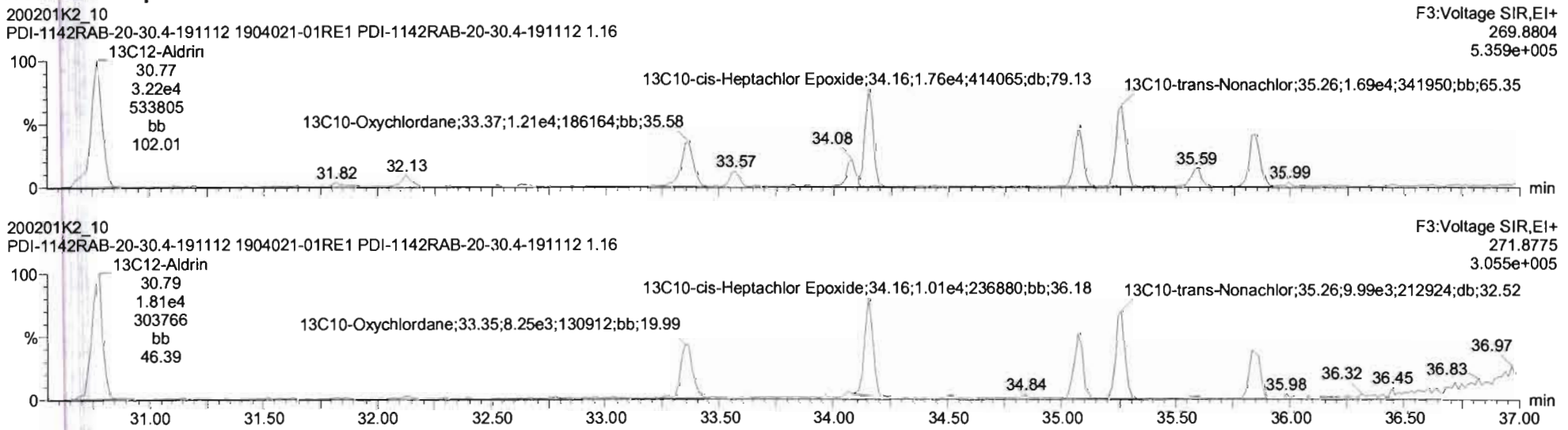
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

Aldrin-EI



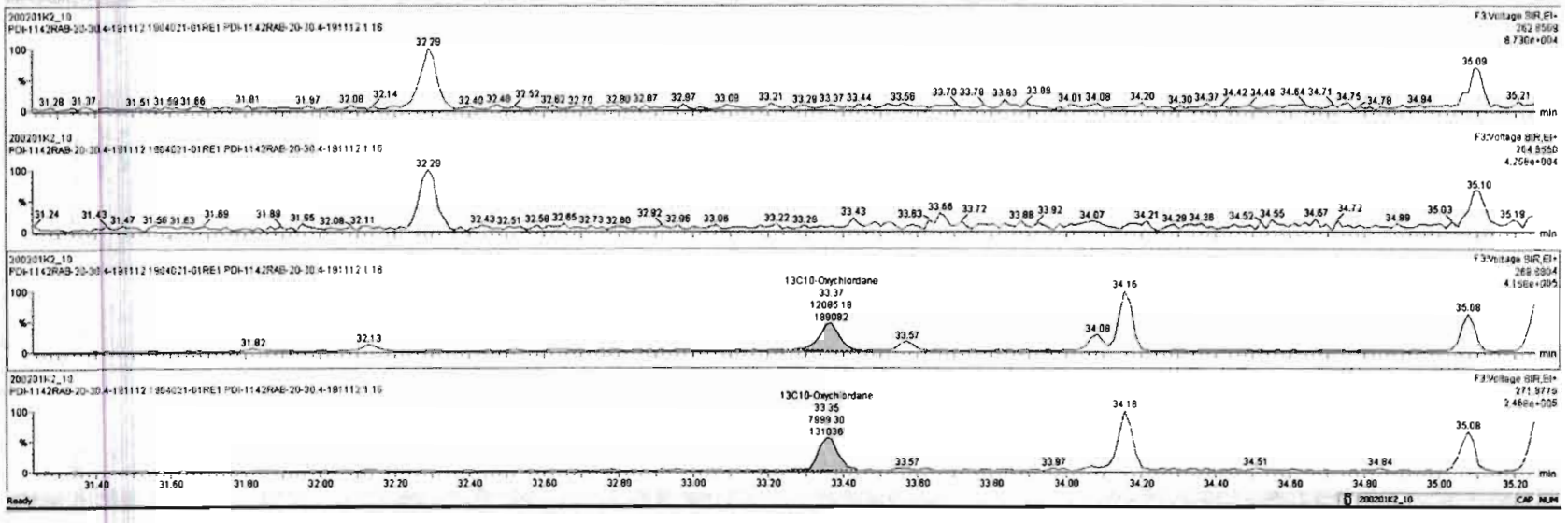
Aldrin-EI-isotopes

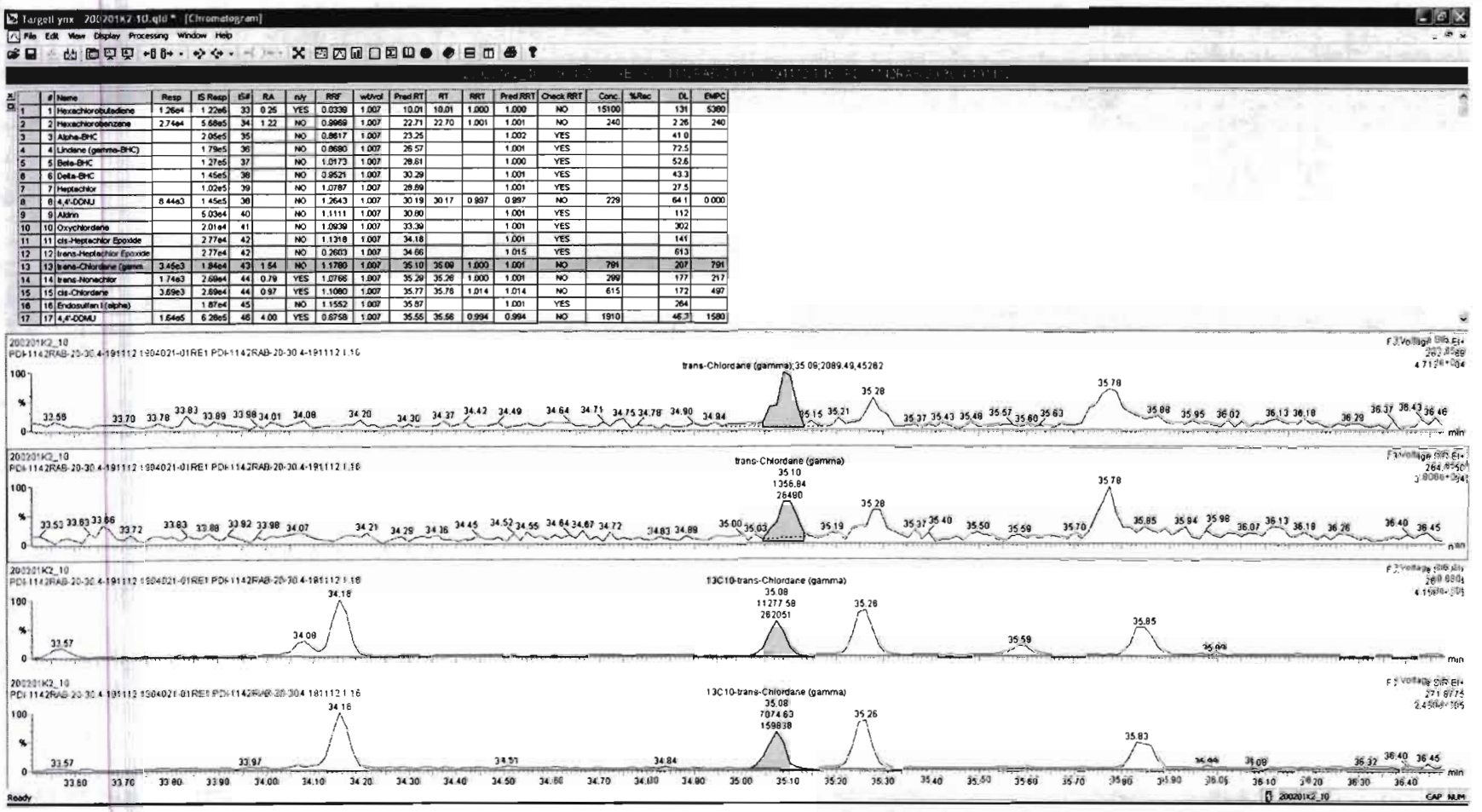


TargetLynx 200201K2_10.qld * [Chromatogram]

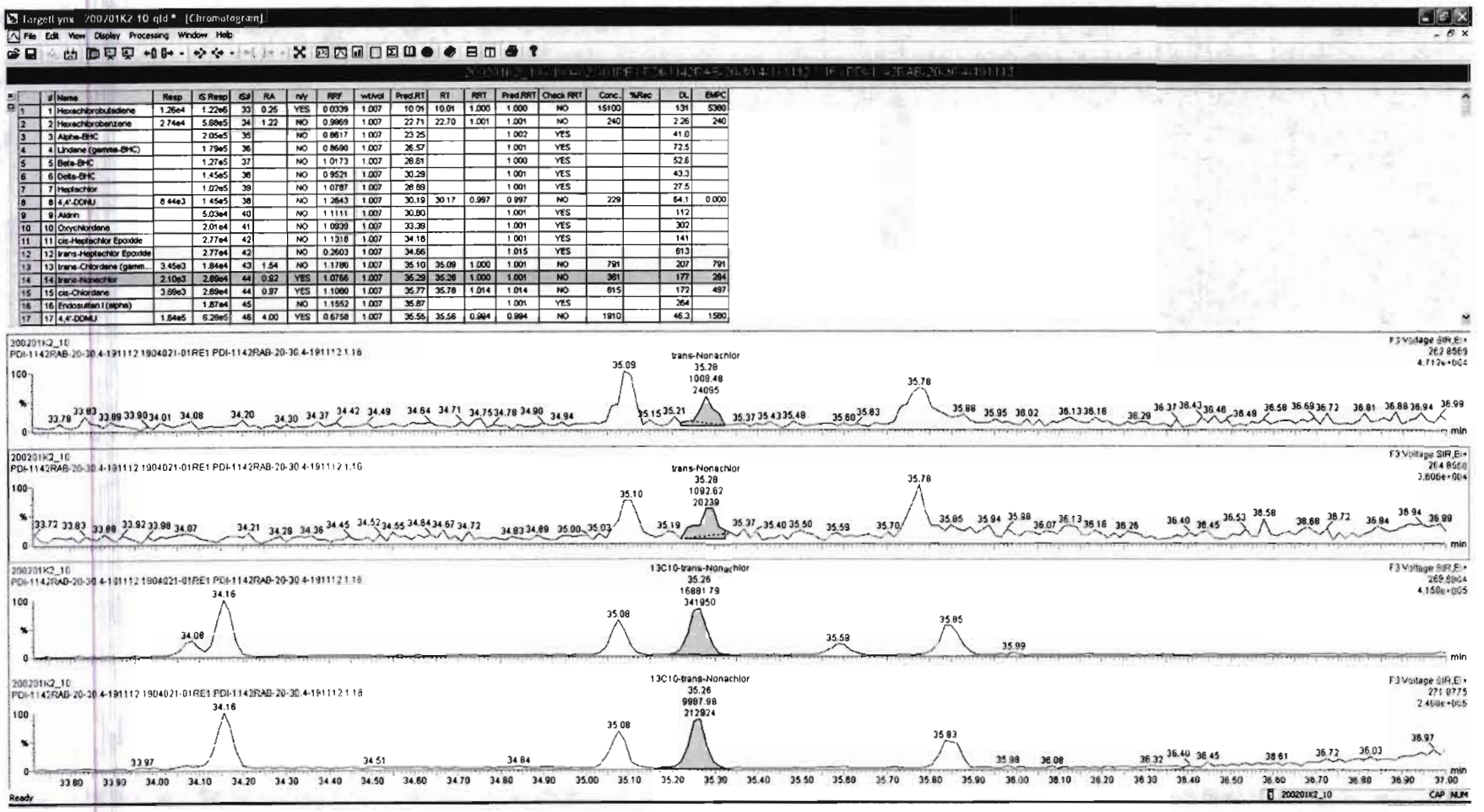
File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	ISd	RA	nVy	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.22e6	33	0.25	YES	0.0339	1.007	10.01	10.01	1.000	1.000	NO	15100		131	5380
2	2	Hexachlorobenzene	2.74e4	5.68e5	34	1.22	NO	0.9869	1.007	22.71	22.70	1.001	1.001	NO	240		2.26	240
3	3	Alpha-BHC		2.05e5	35		NO	0.8617	1.007	23.25			1.002	YES			41.0	
4	4	Lindane (gamma-BHC)		1.79e5	36		NO	0.8690	1.007	26.57			1.001	YES			72.5	
5	5	Beta-BHC		1.27e5	37		NO	1.0173	1.007	28.61			1.000	YES			52.8	
6	6	Delta-BHC		1.45e5	38		NO	0.9521	1.007	30.29			1.001	YES			43.3	
7	7	Heptachlor		1.02e5	39		NO	1.0787	1.007	28.69			1.001	YES			27.5	
8	8	4,4'-DDMU	8.44e3	1.45e5	38		NO	1.2643	1.007	30.19	30.17	0.997	0.997	NO	229		64.1	0.000
9	9	Aldrin		5.03e4	40		NO	1.1111	1.007	30.80			1.001	YES			112	
10	10	Oxychlordane		2.01e4	41		NO	1.0938	1.007	33.39			1.001	YES			302	
11	11	cis-Heptachlor Epoxide		2.77e4	42		NO	1.1318	1.007	34.18			1.001	YES			141	
12	12	trans-Heptachlor Epoxide		2.77e4	42		NO	0.2603	1.007	34.86			1.015	YES			613	
13	13	trans-Chlordane (gamm	3.50e3	1.84e4	43	1.97	YES	1.1780	1.007	35.10	35.09	1.000	1.001	NO	804		207	693
14	14	trans-Nonachlor	1.74e3	2.69e4	44	0.79	YES	1.0766	1.007	35.29	35.28	1.000	1.001	NO	299		177	217
15	15	cis-Chlordane	3.69e3	2.68e4	44	0.97	YES	1.1080	1.007	35.77	35.78	1.014	1.014	NO	615		172	487
16	16	Endosulfan I (alpha)		1.87e4	45		NO	1.1552	1.007	35.87			1.001	YES			264	
17	17	4,4'-DDMU	1.84e5	8.26e5	46	4.00	YES	0.6758	1.007	35.55	35.56	0.994	0.994	NO	1910		46.3	1580

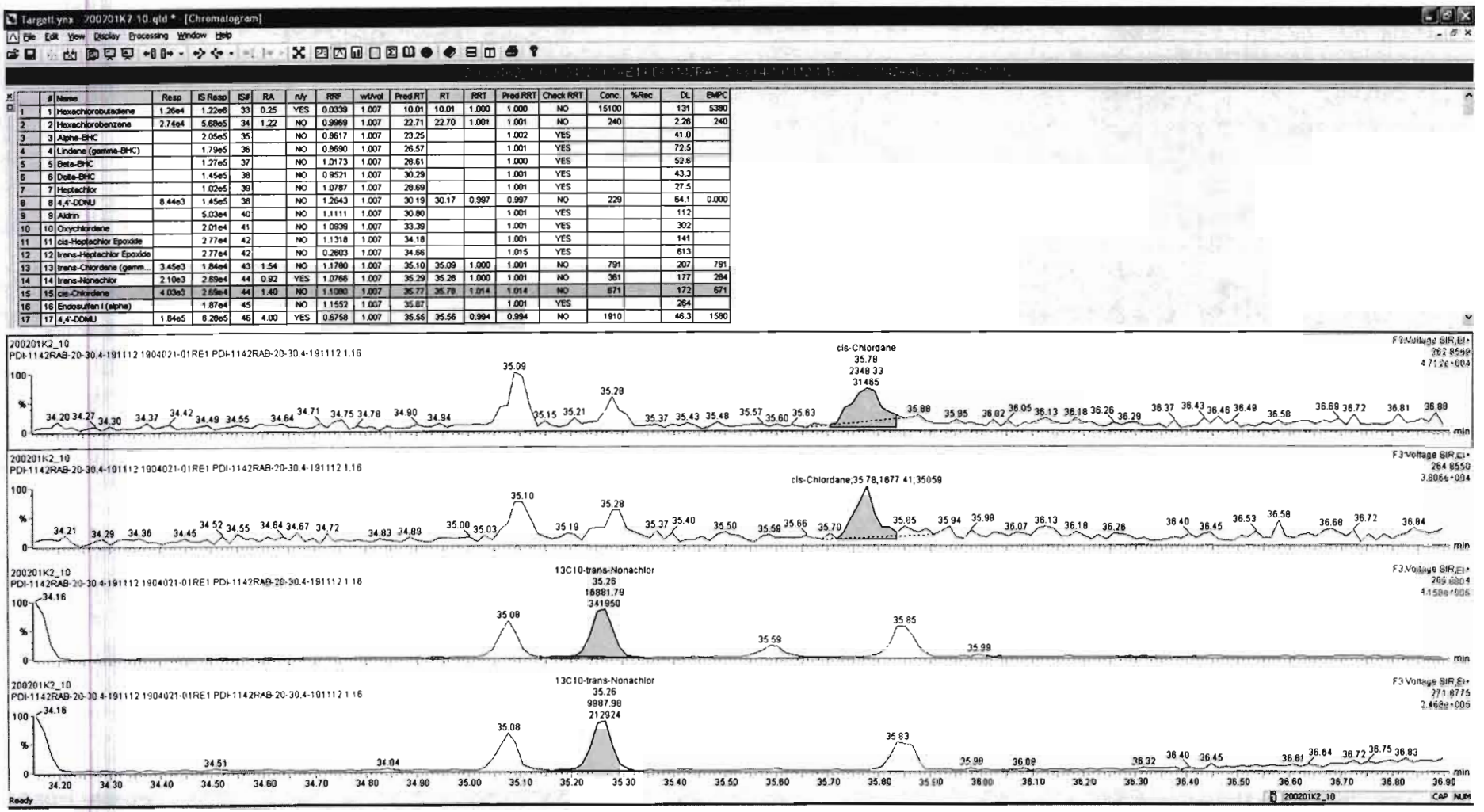




	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.22e6	33	0.25	YES	0.0339	1.007	10.01	10.01	1.000	1.000	NO	15100		131	5380
2	2	Hexachlorobenzene	2.74e4	5.68e5	34	1.22	NO	0.9969	1.007	22.71	22.70	1.001	1.001	NO	240		2.26	240
3	3	Alpha-BHC		2.05e5	35		NO	0.8617	1.007	23.25			1.002	YES			41.0	
4	4	Lindane (gamma-BHC)		1.79e5	36		NO	0.8680	1.007	26.57			1.001	YES			72.5	
5	5	Beta-BHC		1.27e5	37		NO	1.0173	1.007	28.81			1.000	YES			52.6	
6	6	Delta-BHC		1.45e5	38		NO	0.9521	1.007	30.29			1.001	YES			43.3	
7	7	Heptachlor		1.02e5	39		NO	1.0787	1.007	28.89			1.001	YES			27.5	
8	8	4,4'-DDMU	8.44e3	1.45e5	38		NO	1.2643	1.007	30.19	30.17	0.997	0.997	NO	229		64.1	0.000
9	9	Aldrin		5.03e4	40		NO	1.1111	1.007	30.80			1.001	YES			112	
10	10	Oxychlordane		2.01e4	41		NO	1.0939	1.007	33.39			1.001	YES			302	
11	11	cis-Heptachlor Epoxide		2.77e4	42		NO	1.1318	1.007	34.18			1.001	YES			141	
12	12	trans-Heptachlor Epoxide		2.77e4	42		NO	0.2603	1.007	34.66			1.015	YES			613	
13	13	trans-Chlordane (gamma	3.45e3	1.84e4	43	1.54	NO	1.1780	1.007	35.10	35.09	1.000	1.001	NO	791		207	791
14	14	trans-Nonachlor	1.74e3	2.69e4	44	0.79	YES	1.0768	1.007	35.29	35.28	1.000	1.001	NO	299		177	217
15	15	cis-Chlordane	3.69e3	2.69e4	44	0.97	YES	1.1080	1.007	35.77	35.78	1.014	1.014	NO	615		172	497
16	16	Endosulfan I (alpha)		1.87e4	45		NO	1.1552	1.007	35.87			1.001	YES			264	
17	17	4,4'-DDMU	1.64e5	6.28e5	46	4.00	YES	0.6758	1.007	35.55	35.56	0.994	0.994	NO	1910		46.7	1580



	#	Name	Resp	IS Resp	ISR	RA	rVy	RRF	wtVol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.22e6	33	0.25	YES	0.0339	1.007	10.01	10.01	1.000	1.000	NO	15100		131	5360
2	2	Hexachlorobenzene	2.74e4	5.68e5	34	1.22	NO	0.9969	1.007	22.71	22.70	1.001	1.001	NO	240		2.26	240
3	3	Alpha-BHC		2.05e5	35		NO	0.8617	1.007	23.25			1.002	YES			41.0	
4	4	Lindane (gamma-BHC)		1.79e5	36		NO	0.8690	1.007	26.57			1.001	YES			72.5	
5	5	Beta-BHC		1.27e5	37		NO	1.0173	1.007	26.81			1.000	YES			52.6	
6	6	Delta-BHC		1.45e5	38		NO	0.9521	1.007	30.29			1.001	YES			43.3	
7	7	Heptachlor		1.02e5	39		NO	1.0787	1.007	28.89			1.001	YES			27.5	
8	8	4,4'-DDMU	8.44e3	1.45e5	38		NO	1.2643	1.007	30.19	30.17	0.997	0.997	NO	229		64.1	0.000
9	9	Aldrin		5.03e4	40		NO	1.1111	1.007	30.80			1.001	YES			112	
10	10	Oxychlordane		2.01e4	41		NO	1.0939	1.007	33.38			1.001	YES			302	
11	11	cis-Heptachlor Epoxide		2.77e4	42		NO	1.1318	1.007	34.18			1.001	YES			141	
12	12	trans-Heptachlor Epoxide		2.77e4	42		NO	0.2603	1.007	34.66			1.015	YES			613	
13	13	trans-Chlordane (gamm...	3.45e3	1.84e4	43	1.54	NO	1.1786	1.007	35.10	35.09	1.000	1.001	NO	791		207	791
14	14	trans-Nonachlor	2.10e3	2.89e4	44	0.82	YES	1.0766	1.007	35.29	35.28	1.000	1.001	NO	361		177	284
15	15	cis-Chlordane	3.86e3	2.89e4	44	0.97	YES	1.1000	1.007	35.77	35.78	1.014	1.014	NO	615		172	497
16	16	Endosulfan I (alpha)		1.87e4	45		NO	1.1552	1.007	35.87			1.001	YES			264	
17	17	4,4'-DDMU	1.84e5	6.28e5	48	4.00	YES	0.6758	1.007	35.55	35.56	0.994	0.994	NO	1910		46.3	1580

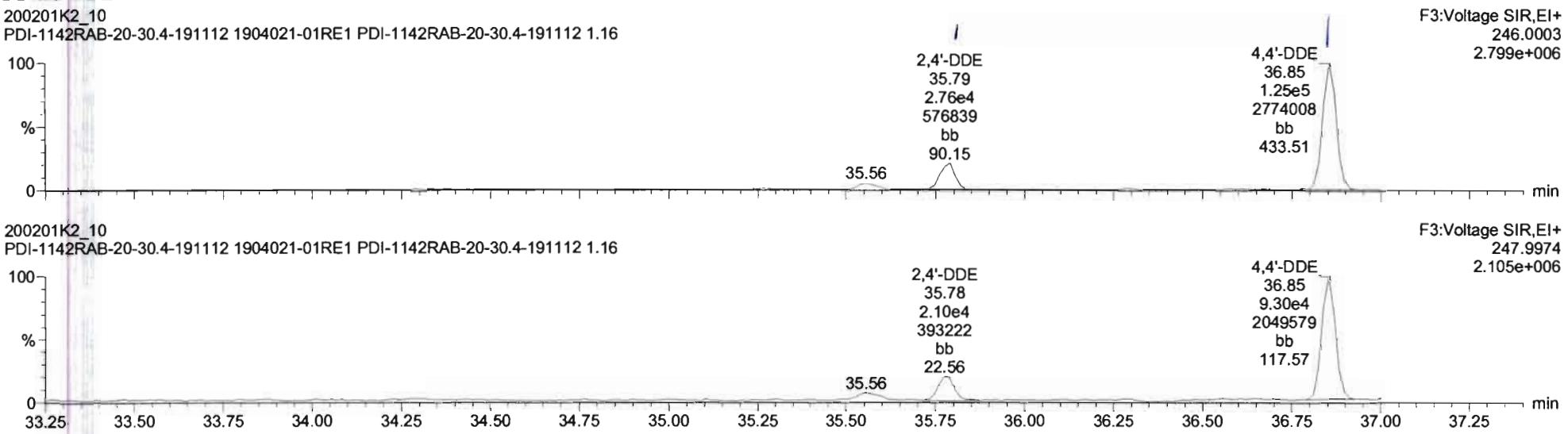

Target1.ynx : 200201K2_10.qld * : [Chromatogram]
File Edit View Display Processing Window Help
Name Resp IS Resp IS# RA n/y RRF wt/vol Pred RT RT RRT Pred RRT Check RRT Conc. %Rec DL EMPC
1 Hexachlorobutadiene 1.26e4 1.22e6 33 0.25 YES 0.0339 1.007 10.01 10.01 1.000 1.000 NO 15100 131 5380
2 Hexachlorobenzene 2.74e4 5.68e5 34 1.22 NO 0.9969 1.007 22.71 22.70 1.001 1.001 NO 240 2.26 240
3 Alpha-BHC 2.05e5 35 NO 0.8617 1.007 23.25 1.002 YES 41.0
4 Lindane (gamma-BHC) 1.79e5 36 NO 0.8690 1.007 26.57 1.001 YES 72.5
5 Beta-BHC 1.27e5 37 NO 1.0173 1.007 28.61 1.000 YES 52.6
6 Delta-BHC 1.45e5 38 NO 0.9521 1.007 30.29 1.001 YES 43.3
7 Heptachlor 1.02e5 39 NO 1.0787 1.007 28.69 1.001 YES 27.5
8 4,4'-DDMU 8.44e3 1.45e5 38 NO 1.2643 1.007 30.19 30.17 0.997 0.997 NO 229 64.1 0.000
9 Aldrin 5.03e4 40 NO 1.1111 1.007 30.80 1.001 YES 112
10 Oxychlordane 2.01e4 41 NO 1.0939 1.007 33.39 1.001 YES 302
11 cis-Heptachlor Epoxide 2.77e4 42 NO 1.1318 1.007 34.18 1.001 YES 141
12 trans-Heptachlor Epoxide 2.77e4 42 NO 0.2603 1.007 34.66 1.015 YES 613
13 trans-Chlordane (gamm... 3.45e3 1.84e4 43 1.54 NO 1.1780 1.007 35.10 35.09 1.000 1.001 NO 791 207 791
14 trans-Nonachlor 2.10e3 2.89e4 44 0.92 YES 1.0766 1.007 35.29 35.28 1.000 1.001 NO 361 177 284
15 cis-Chlordane 4.03e3 2.59e4 44 1.40 NO 1.1080 1.007 35.77 35.78 1.014 1.014 NO 671 172 671
16 Endosulfan I (alpha) 1.87e4 45 NO 1.1552 1.007 35.87 1.001 YES 264
17 4,4'-DDMU 1.84e5 6.28e5 46 4.00 YES 0.6758 1.007 35.55 35.56 0.994 0.994 NO 1910 46.3 1580
200201K2_10
PDI-1142RAB-20-30.4-191112 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16
F3:Voltage SIR,EI+
cis-Chlordane
35.78
2348.33
31465
200201K2_10
PDI-1142RAB-20-30.4-191112 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16
F3:Voltage SIR,EI+
cis-Chlordane;35.78,1677.41;35059
200201K2_10
PDI-1142RAB-20-30.4-191112 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16
F3:Voltage SIR,EI+
13C10-trans-Nonachlor
35.26
16881.79
341950
200201K2_10
PDI-1142RAB-20-30.4-191112 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16
F3:Voltage SIR,EI+
13C10-trans-Nonachlor
35.26
9987.98
212924
min
Ready
200201K2_10
CAP NUM

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

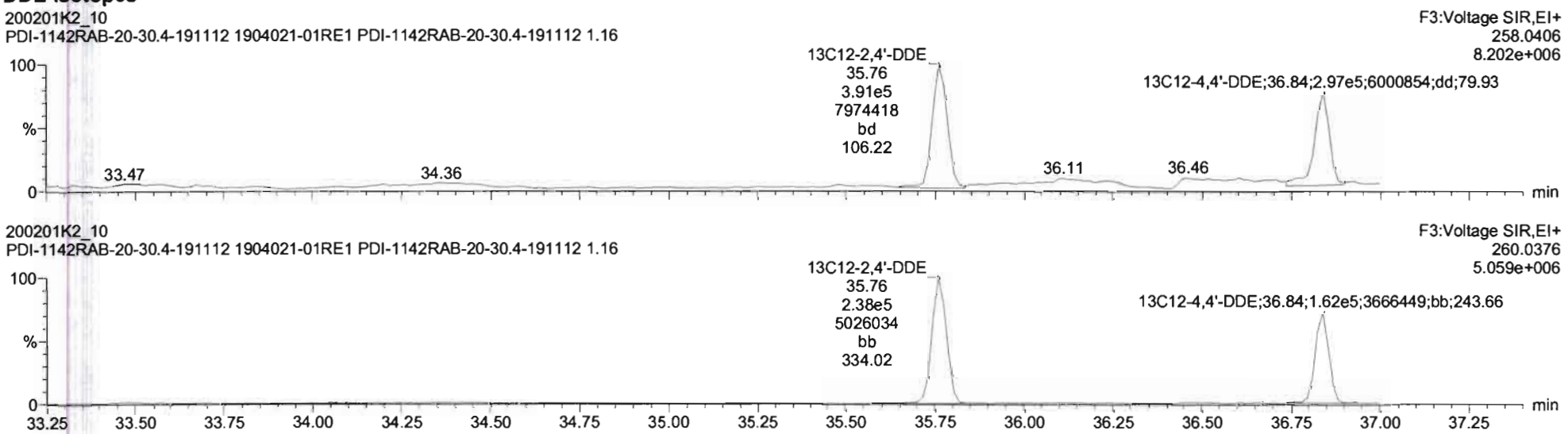
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

DDMU-DDE



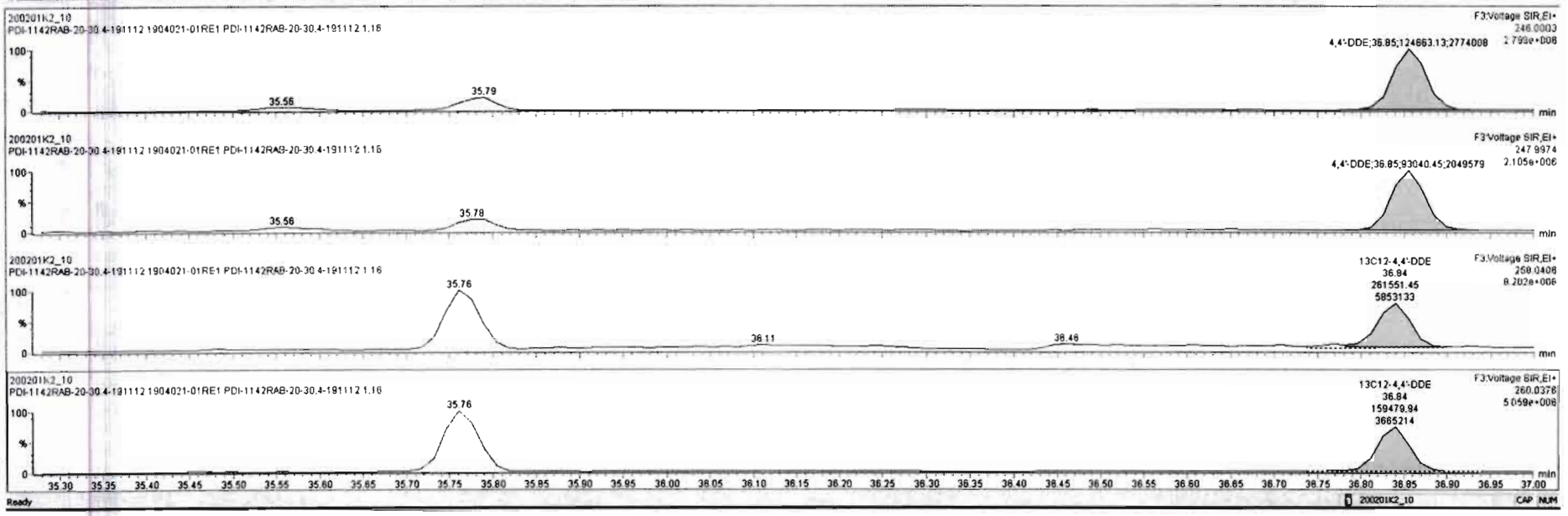
DDE-isotopes



TargetLynx 200201K2 10.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	nY	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.22e6	33	0.25	YES	0.0339	1.007	10.01	10.01	1.000	1.000	NO	15100		131	5380
2	2	Hexachlorobenzene	2.74e4	5.68e5	34	1.22	NO	0.9969	1.007	22.71	22.70	1.001	1.001	NO	240		2.26	240
3	3	Alpha-BHC		2.05e5	35		NO	0.8617	1.007	23.25			1.002	YES			41.0	
4	4	Lindane (gamma-BHC)		1.79e5	36		NO	0.8690	1.007	26.57			1.001	YES			72.5	
5	5	Beta-BHC		1.27e5	37		NO	1.0173	1.007	29.61			1.000	YES			52.8	
6	6	Delta-BHC		1.45e5	38		NO	0.9521	1.007	30.29			1.001	YES			43.3	
7	7	Heptachlor		1.02e5	39		NO	1.0787	1.007	28.59			1.001	YES			27.5	
8	8	4,4'-DDMU	8.44e3	1.45e5	38		NO	1.2643	1.007	30.19	30.17	0.997	0.997	NO	229		64.1	0.000
9	9	Aldrin		5.03e4	40		NO	1.1111	1.007	30.80			1.001	YES			112	
10	10	Oxychlordane		2.01e4	41		NO	1.0939	1.007	33.39			1.001	YES			302	
11	11	cis-Heptachlor Epoxide		2.77e4	42		NO	1.1318	1.007	34.18			1.001	YES			141	
12	12	trans-Heptachlor Epoxide		2.77e4	42		NO	0.2603	1.007	34.66			1.015	YES			613	
13	13	trans-Chlordane (gamm...	3.45e3	1.84e4	43	1.54	NO	1.1780	1.007	35.10	35.09	1.000	1.001	NO	791		207	791
14	14	trans-Nonachlor	2.10e3	2.89e4	44	0.92	YES	1.0766	1.007	35.29	35.28	1.000	1.001	NO	361		177	284
15	15	cis-Chlordane	4.03e3	2.89e4	44	1.40	NO	1.1080	1.007	35.77	35.78	1.014	1.014	NO	671		172	671
16	16	Endosulfan I (alpha)		1.87e4	45		NO	1.1552	1.007	35.87			1.001	YES			264	
17	17	4,4'-DDMU	1.84e5	6.26e5	46	4.00	YES	0.6758	1.007	35.55	35.56	0.994	0.994	NO	1910		46.3	1580

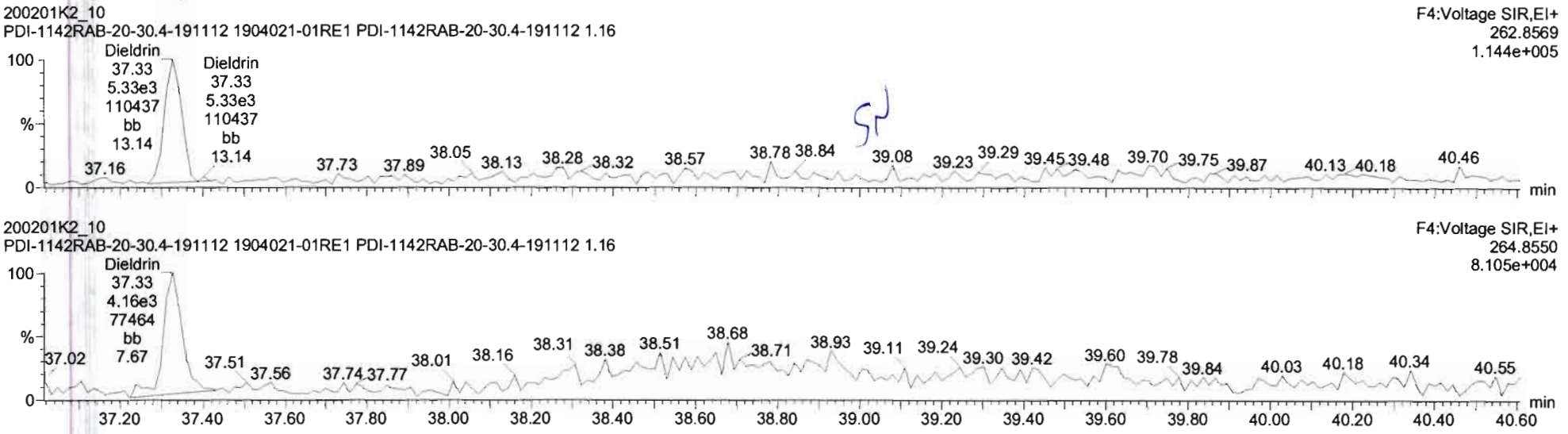


Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

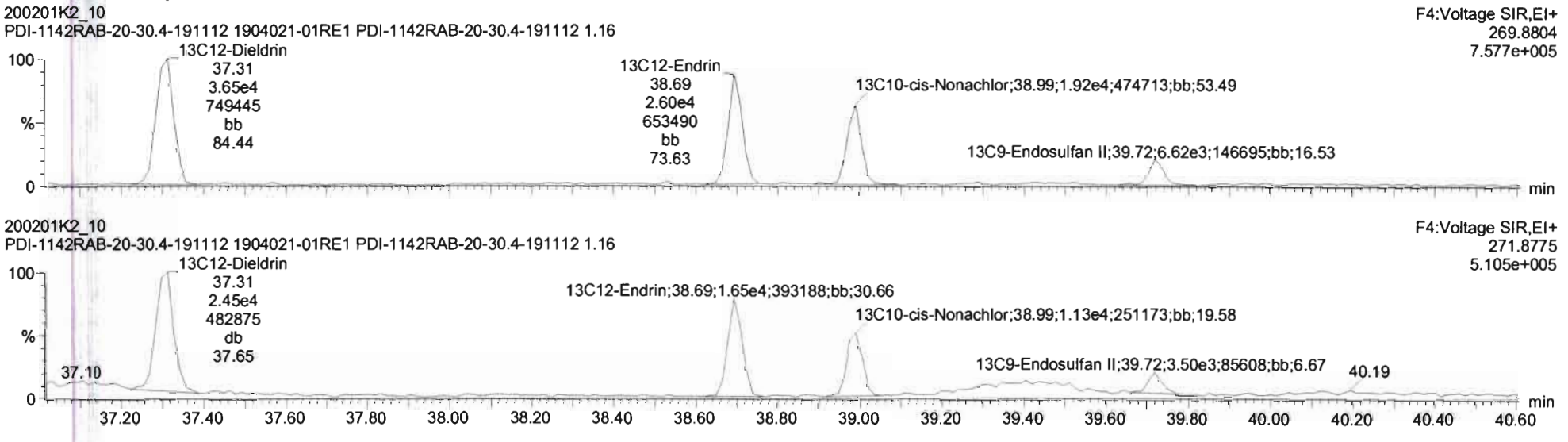
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

Dieldrin-EII



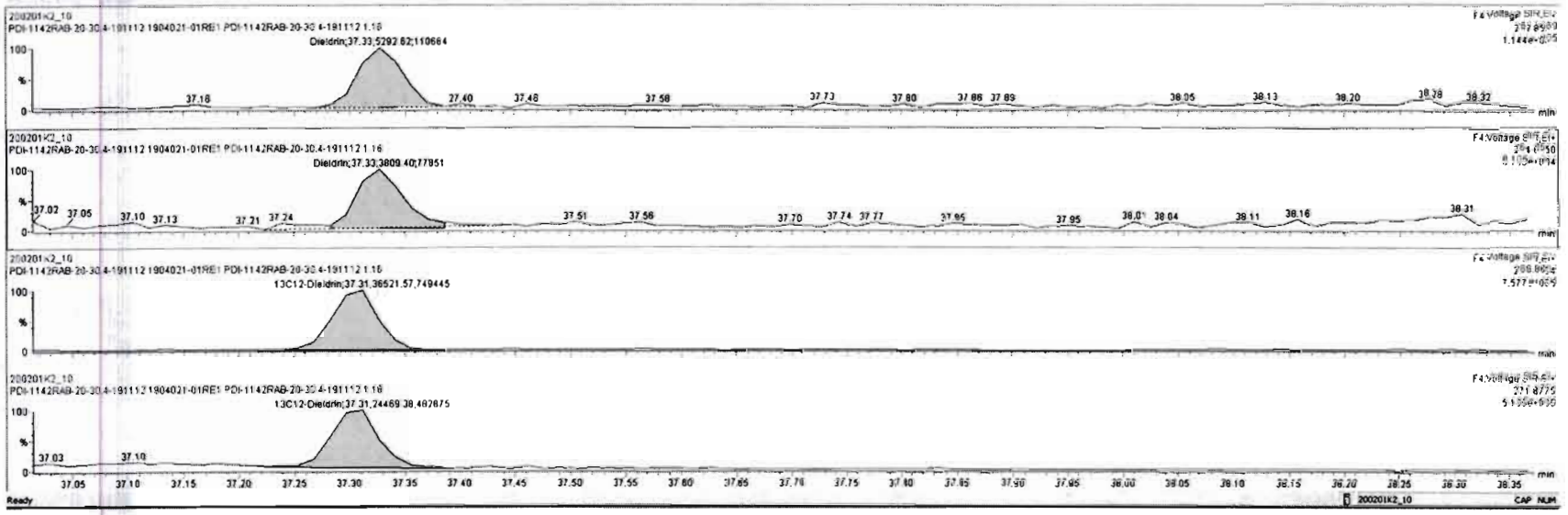
Dieldrin-EII-isotopes



TargetLynx - 200201K2_10.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	ISt	RA	n/y	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	9.10e3	8.10e4	48	1.39	NO	1.0034	1.007	37.33	37.33	1.000	1.000	NO	678		188	678
21	21	Endrin		4.25e4	49		NO	1.0566	1.007	38.69			1.000	YES			204	
22	22	cis-Nonachlor		3.05e4	50		NO	1.0772	1.007	39.00			1.000	YES			282	
23	23	Endosulfan II (beta)		1.01e4	51		NO	1.1102	1.007	39.72			1.000	YES			922	
24	24	2,4'-DDD	2.84e5	1.75e5	52	1.56	NO	1.0482	1.007	37.94	37.95	1.000	1.000	NO	7690		182	7890
25	25	2,4'-DDT	7.19e4	3.85e5	53	1.48	NO	1.0290	1.007	38.08	38.08	1.000	1.000	NO	902		79.9	902
26	26	4,4'-DDD	1.92e6	4.29e5	54	1.57	NO	1.1242	1.007	39.22	39.21	1.000	1.000	NO	19800		64.9	19800
27	27	4,4'-DDT	1.73e5	3.58e5	55	1.48	NO	1.1336	1.007	40.27	40.27	1.000	1.000	NO	2110		67.5	2110
28	28	Endosulfan Sulfate		1.72e4	56		NO	0.9871	1.007	41.44			1.000	YES			781	
29	29	4,4'-Methoxychlor	2.87e5	3.12e6	57	0.21	NO	1.2668	1.007	43.36	43.36	1.001	1.000	NO	3600		1070	3600
30	30	Mirex	9.24e3	8.69e4	58	0.60	YES	1.0435	1.007	43.88	43.89	1.001	1.000	NO	506		211	310
31	31	Endrin Aldehyde	2.10e4	1.55e5	59	0.40	YES	1.0582	1.007	40.86	40.90	1.002	1.000	NO	6370		1060	4690
32	32	Endrin Ketone		2.03e5	60		NO	0.9741	1.007	44.00			1.000	YES			820	
33	33	13C4-Hexachlorobutadi...	1.22e6	1.25e6	62	1.28	NO	0.1267	1.007	9.97	10.01	0.384	0.383	NO	38300	77.1	24.5	
34	34	13C6-Hexachlorobenz...	5.68e5	1.25e6	62	1.28	NO	0.8741	1.007	22.72	22.69	0.871	0.872	NO	3350	67.4	2.36	
35	35	13C6-Alpha-BHC	2.05e5	1.25e6	62	0.78	NO	0.2548	1.007	23.24	23.20	0.881	0.882	NO	3200	64.4	42.0	
36	36	13C6-Lindane (gamma)	1.79e5	1.25e6	62	0.81	NO	0.2007	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	



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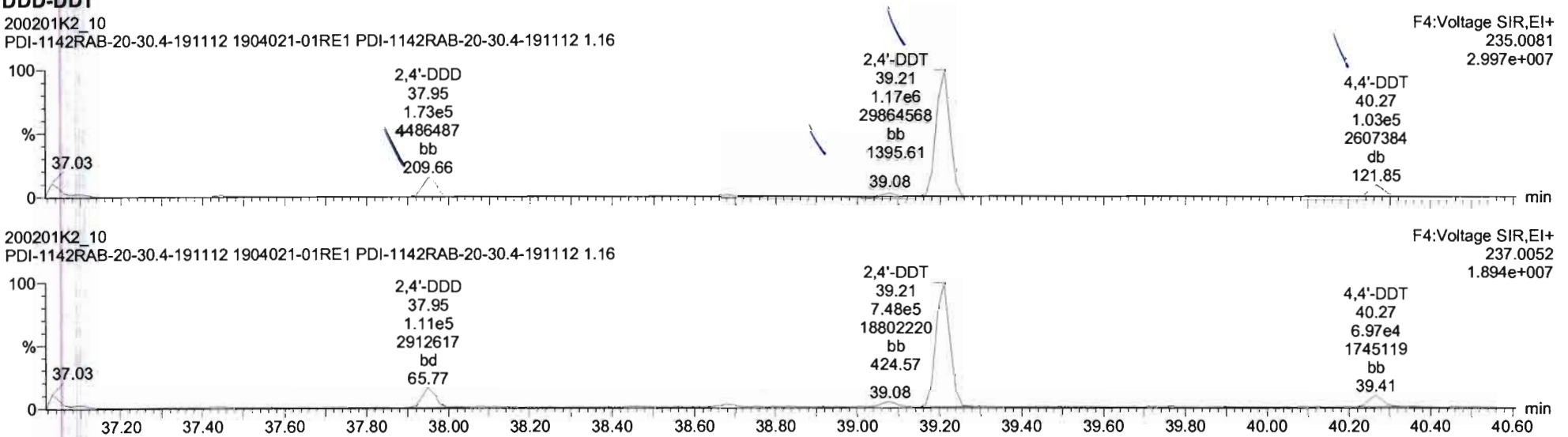
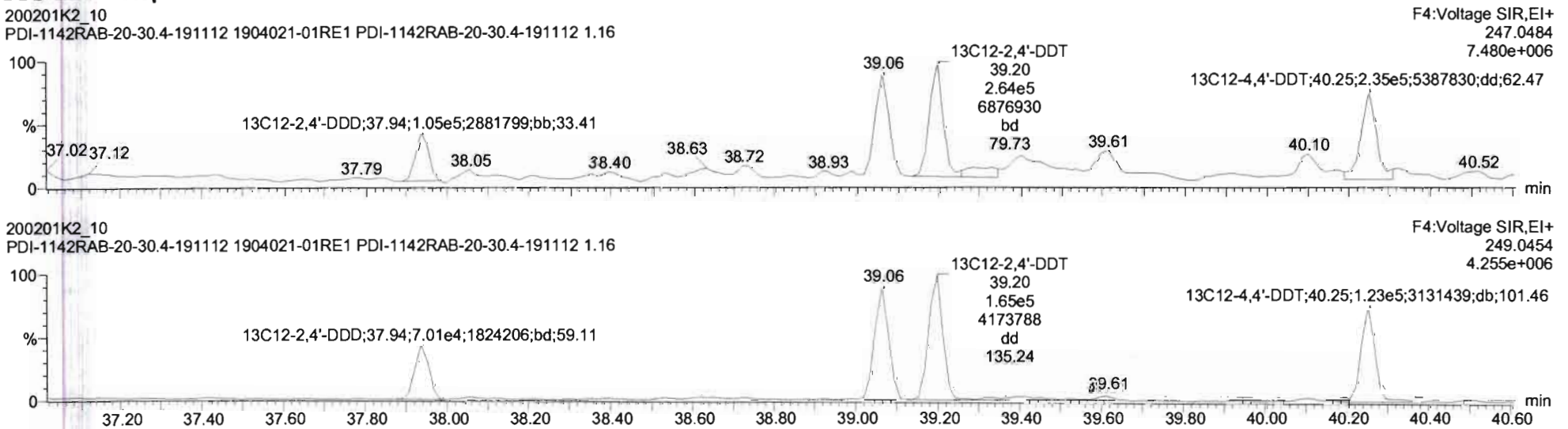
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

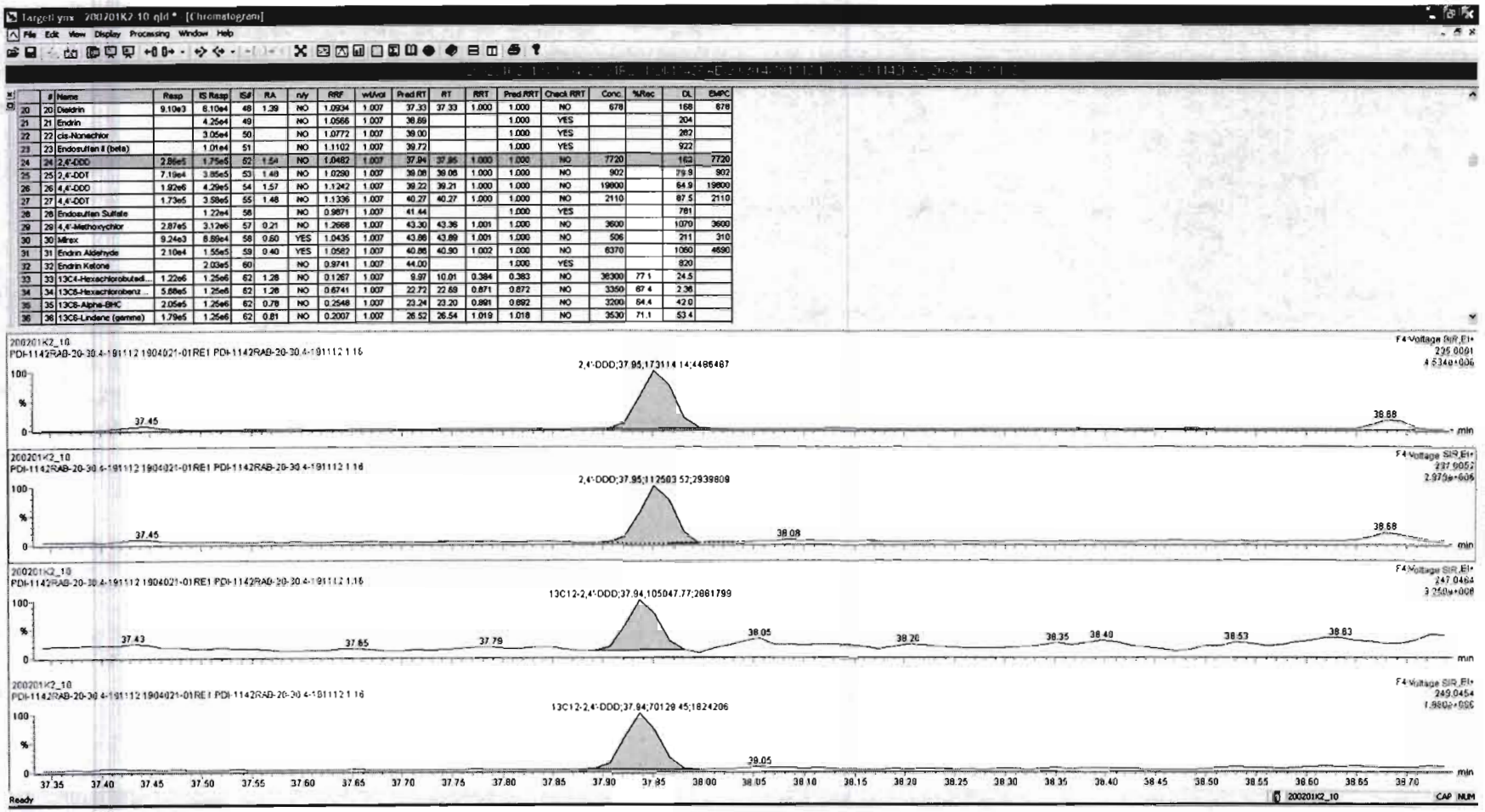
Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

DDD-DDT



DDD-DDT-isotopes



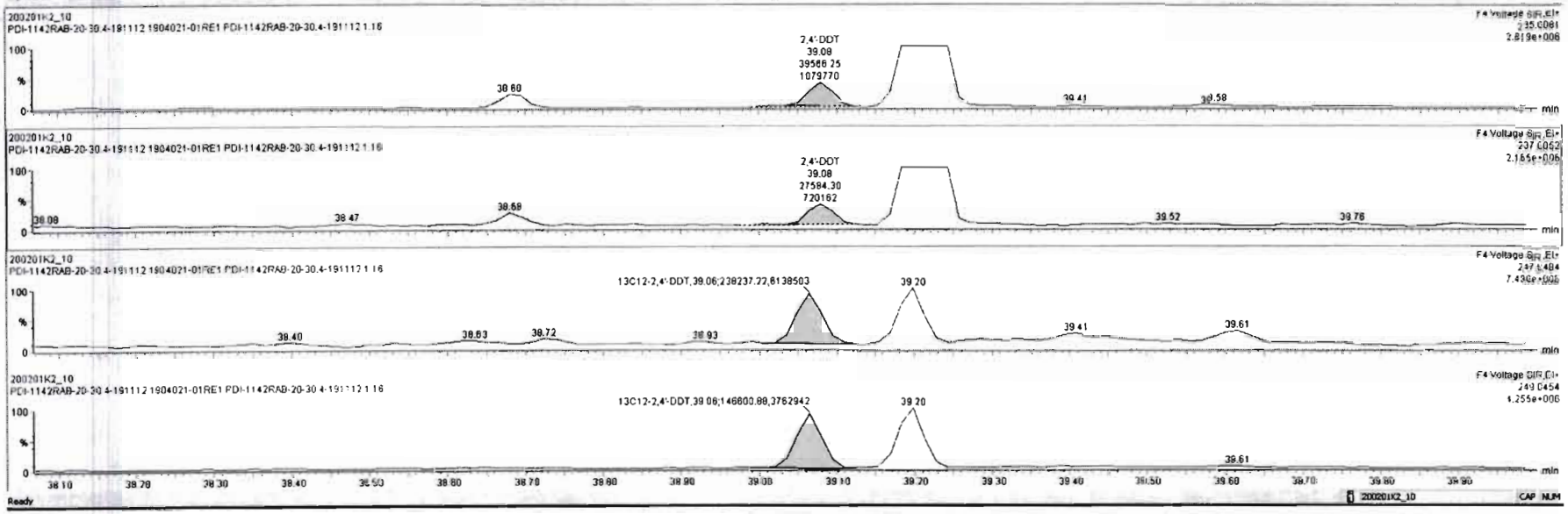


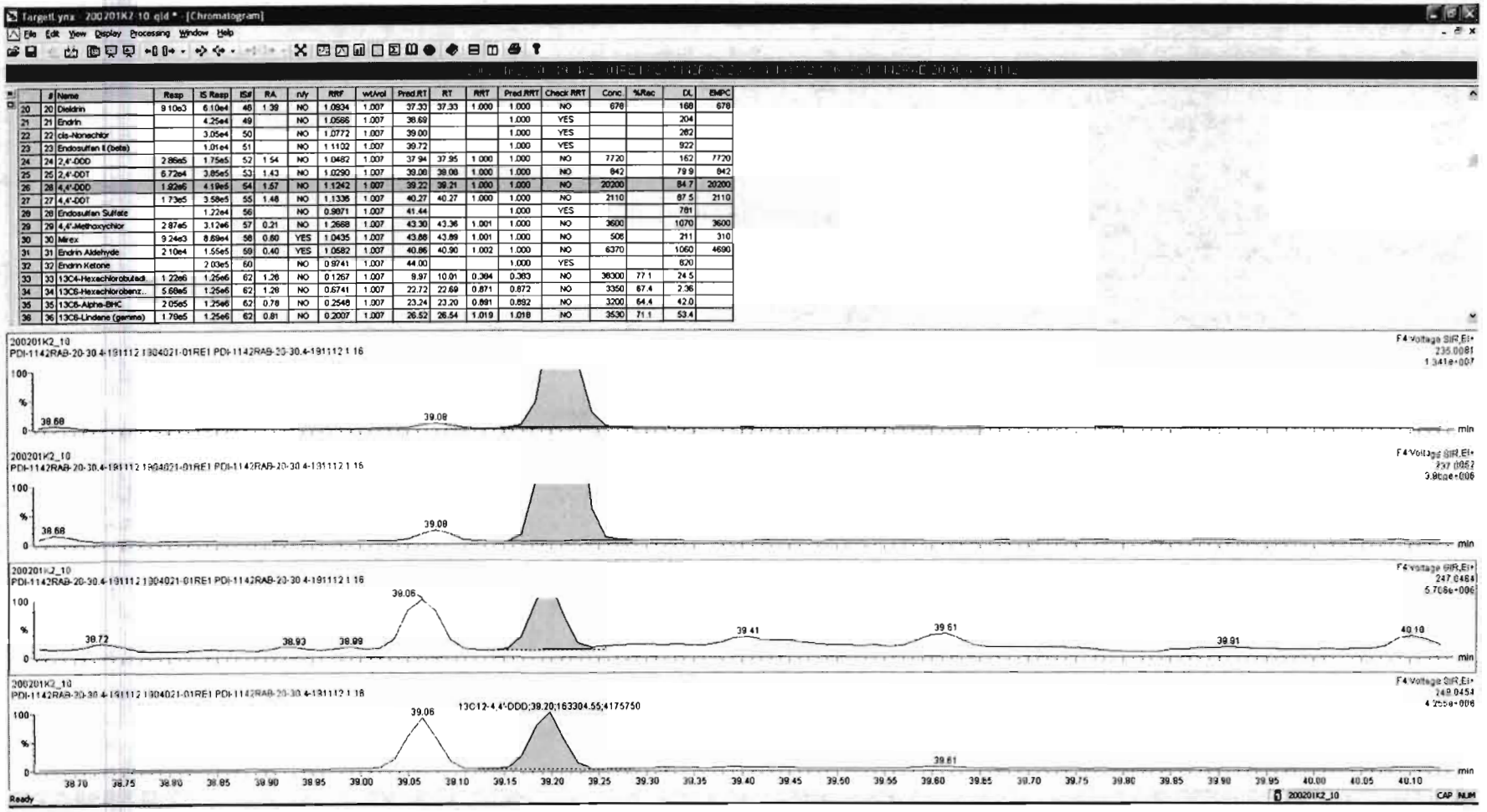
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	9.10e3	8.10e4	48	1.39	NO	1.0934	1.007	37.33	37.33	1.000	1.000	NO	678		168	678
21	21	Endrin		4.25e4	49		NO	1.0566	1.007	38.69			1.000	YES			204	
22	22	cis-Nonachlor		3.05e4	50		NO	1.0772	1.007	39.00			1.000	YES			282	
23	23	Endosulfan II (beta)		1.01e4	51		NO	1.1102	1.007	39.72			1.000	YES			922	
24	24	2,4'-DDD	2.86e5	1.75e5	52	1.54	NO	1.0482	1.007	37.94	37.95	1.000	1.000	NO	7720		163	7720
25	25	2,4'-DDT	7.19e4	3.85e5	53	1.48	NO	1.0290	1.007	39.08	39.08	1.000	1.000	NO	902		79.9	902
26	26	4,4'-DDD	1.92e6	4.29e5	54	1.57	NO	1.1242	1.007	39.22	39.21	1.000	1.000	NO	19800		64.9	19800
27	27	4,4'-DDT	1.73e5	3.58e5	55	1.48	NO	1.1336	1.007	40.27	40.27	1.000	1.000	NO	2110		87.5	2110
28	28	Endosulfan Sulfate		1.22e4	56		NO	0.9871	1.007	41.44			1.000	YES			781	
29	29	4,4'-Methoxychlor	2.87e5	3.12e6	57	0.21	NO	1.2668	1.007	43.30	43.36	1.001	1.000	NO	3600		1070	3600
30	30	Mirex	9.24e3	8.89e4	58	0.60	YES	1.0435	1.007	43.86	43.89	1.001	1.000	NO	506		211	310
31	31	Endrin Aldehyde	2.10e4	1.55e5	59	0.40	YES	1.0582	1.007	40.86	40.90	1.002	1.000	NO	6370		1060	4690
32	32	Endrin Ketone		2.03e5	60		NO	0.9741	1.007	44.00			1.000	YES			820	
33	33	13C4-Hexachlorobutadi...	1.22e6	1.25e6	62	1.28	NO	0.1267	1.007	9.97	10.01	0.384	0.383	NO	36300	77.1	24.5	
34	34	13C6-Hexachlorobenz...	5.68e5	1.25e6	62	1.28	NO	0.6741	1.007	22.72	22.68	0.871	0.872	NO	3350	67.4	2.36	
35	35	13C6-Alpha-BHC	2.05e5	1.25e6	62	0.78	NO	0.2548	1.007	23.24	23.20	0.891	0.892	NO	3200	64.4	42.0	
36	36	13C6-Lindane (gamma)	1.79e5	1.25e6	62	0.81	NO	0.2007	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	

TargetLynx 200201K2-10.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	ISR	RA	IVy	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	9.10e3	6.10e4	48	1.39	NO	1.0934	1.007	37.33	37.33	1.000	1.000	NO	878		168	878
21	21	Endrin		4.25e4	49		NO	1.0566	1.007	36.89			1.000	YES			204	
22	22	cis-Nonachlor		3.05e4	50		NO	1.0772	1.007	39.00			1.000	YES			282	
23	23	Endosulfan II (beta)		1.01e4	51		NO	1.1102	1.007	39.72			1.000	YES			922	
24	24	2,4'-DDD	2.86e5	1.75e5	52	1.54	NO	1.0482	1.007	37.94	37.95	1.000	1.000	NO	7720		162	7720
25	25	2,4'-DDT	6.72e4	3.85e5	53	1.43	NO	1.0290	1.007	39.08	39.08	1.000	1.000	NO	842		79.8	842
26	26	4,4'-DDD	1.32e6	4.29e5	54	1.57	NO	1.1242	1.007	39.22	39.21	1.000	1.000	NO	19800		64.9	19800
27	27	4,4'-DDT	1.73e5	3.58e5	55	1.48	NO	1.1336	1.007	40.27	40.27	1.000	1.000	NO	2110		87.5	2110
28	28	Endosulfan Sulfate		1.22e4	56		NO	0.9871	1.007	41.44			1.000	YES			781	
29	29	4,4'-Methoxychlor	2.87e5	3.12e6	57	0.21	NO	1.2668	1.007	43.30	43.36	1.001	1.000	NO	3600		1070	3600
30	30	Mirex	9.24e3	8.69e4	58	0.60	YES	1.0435	1.007	43.88	43.89	1.001	1.000	NO	506		211	310
31	31	Endrin Aldehyde	2.10e4	1.55e5	59	0.40	YES	1.0582	1.007	40.86	40.90	1.002	1.000	NO	6370		1060	4690
32	32	Endrin Ketone		2.03e5	60		NO	0.9741	1.007	44.00			1.000	YES			820	
33	33	13C4-Hexachlorobutadi...	1.22e6	1.25e6	62	1.28	NO	0.1267	1.007	9.97	10.01	0.364	0.363	NO	38300	77.1	24.5	
34	34	13C6-Hexachlorobenz...	5.88e5	1.25e6	62	1.28	NO	0.6741	1.007	22.72	22.69	0.871	0.872	NO	3350	67.4	2.36	
35	35	13C6-Alpha-BHC	2.05e5	1.25e6	62	0.78	NO	0.2548	1.007	23.24	23.20	0.891	0.892	NO	3200	64.4	42.0	
36	36	13C6-Lindane (gamma)	1.79e5	1.25e6	62	0.81	NO	0.2007	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	



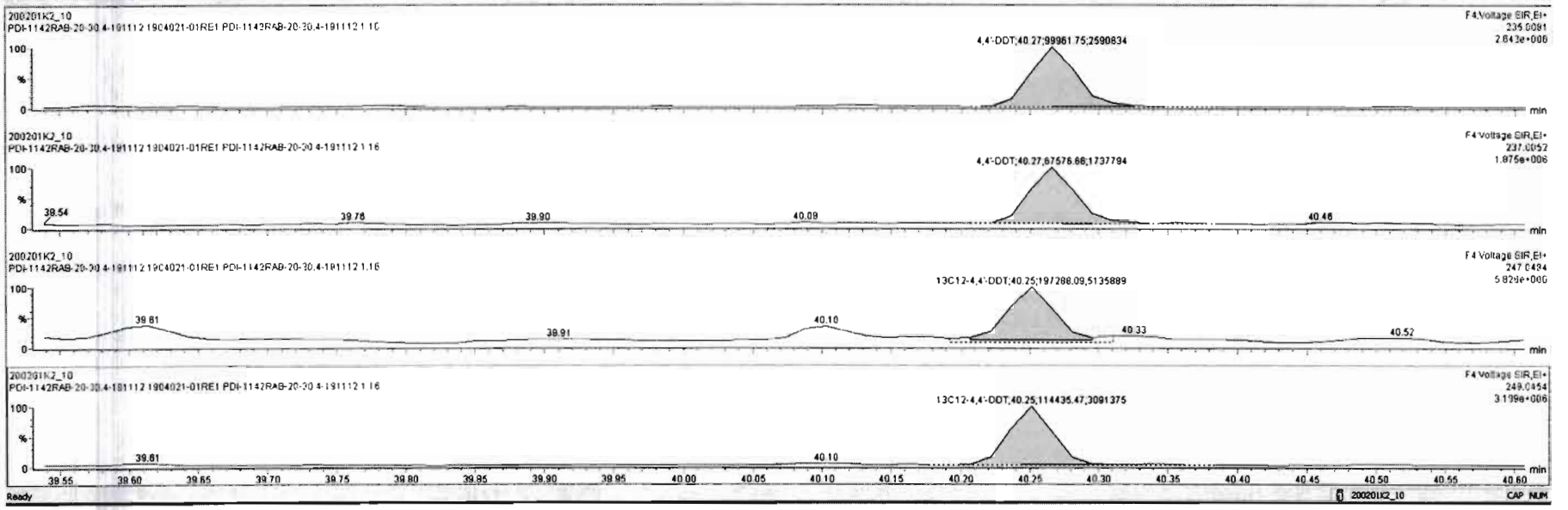


	#	Name	Resp	IS Resp	IS#	RA	rdy	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	9.10e3	6.10e4	46	1.39	NO	1.0834	1.007	37.33	37.33	1.000	1.000	NO	676		168	676
21	21	Endrin		4.25e4	49		NO	1.0586	1.007	38.69			1.000	YES			204	
22	22	cis-Nonachlor		3.05e4	50		NO	1.0772	1.007	39.00			1.000	YES			262	
23	23	Endosulfen II (beta)		1.01e4	51		NO	1.1102	1.007	39.72			1.000	YES			922	
24	24	2,4'-DDD	2.86e5	1.75e5	52	1.54	NO	1.0482	1.007	37.94	37.95	1.000	1.000	NO	7720		162	7720
25	25	2,4'-DDT	6.72e4	3.85e5	53	1.43	NO	1.0290	1.007	39.08	39.08	1.000	1.000	NO	842		79.9	842
26	26	4,4'-DDD	1.92e6	4.19e5	54	1.57	NO	1.1242	1.007	39.22	39.21	1.000	1.000	NO	20200		84.7	20200
27	27	4,4'-DDT	1.73e5	3.58e5	55	1.48	NO	1.1336	1.007	40.27	40.27	1.000	1.000	NO	2110		87.5	2110
28	28	Endosulfen Sulfate		1.22e4	56		NO	0.9871	1.007	41.44			1.000	YES			781	
29	29	4,4'-Methoxychlor	2.87e5	3.12e6	57	0.21	NO	1.2668	1.007	43.30	43.36	1.001	1.000	NO	3600		1070	3600
30	30	Mirex	9.24e3	8.69e4	58	0.60	YES	1.0435	1.007	43.88	43.89	1.001	1.000	NO	508		211	310
31	31	Endrin Aldehyde	2.10e4	1.55e5	59	0.40	YES	1.0582	1.007	40.86	40.90	1.002	1.000	NO	6370		1060	4690
32	32	Endrin Ketone		2.03e5	60		NO	0.9741	1.007	44.00			1.000	YES			820	
33	33	13C4-Hexachlorobutadi	1.22e6	1.25e6	62	1.26	NO	0.1267	1.007	9.97	10.01	0.364	0.363	NO	36300	77.1	24.5	
34	34	13C6-Hexachlorobenz...	5.68e5	1.25e6	62	1.26	NO	0.6741	1.007	22.72	22.69	0.871	0.872	NO	3350	67.4	2.36	
35	35	13C6-Alpha-BHC	2.05e5	1.25e6	62	0.78	NO	0.2548	1.007	23.24	23.20	0.891	0.892	NO	3200	64.4	42.0	
36	36	13C6-Lindane (gamma)	1.79e5	1.25e6	62	0.81	NO	0.2007	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	

TargetLynx 200201K2_10.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	ISR	RA	rVy	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	9.10e3	6.10e4	48	1.39	NO	1.0934	1.007	37.33	37.33	1.000	1.000	NO	678		168	678
21	21	Endrin		4.25e4	49		NO	1.0566	1.007	38.69			1.000	YES			204	
22	22	cis-Nonachlor		3.05e4	50		NO	1.0772	1.007	39.00			1.000	YES			262	
23	23	Endosulfan II (beta)		1.01e4	51		NO	1.1102	1.007	39.72			1.000	YES			922	
24	24	2,4'-DDD	2.86e5	1.75e5	52	1.54	NO	1.0482	1.007	37.94	37.95	1.000	1.000	NO	7720		162	7720
25	25	2,4'-DDT	6.72e4	3.85e5	53	1.43	NO	1.0290	1.007	39.08	39.08	1.000	1.000	NO	842		79.9	842
26	26	4,4'-DDD	1.92e6	4.19e5	54	1.57	NO	1.1242	1.007	39.22	39.21	1.000	1.000	NO	20200		64.7	20200
27	27	4,4'-DDT	1.88e5	3.12e5	55	1.48	NO	1.1336	1.007	40.27	40.27	1.000	1.000	NO	2350		88.6	2350
28	28	Endosulfan Sulfate		1.22e4	56		NO	0.9871	1.007	41.44			1.000	YES			781	
29	29	4,4'-Methoxychlor	2.87e5	3.12e6	57	0.21	NO	1.2668	1.007	43.36	43.36	1.001	1.000	NO	3600		1070	3600
30	30	Mirex	9.24e3	6.69e4	58	0.60	YES	1.0435	1.007	43.88	43.89	1.001	1.000	NO	506		211	310
31	31	Endrin Aldehyde	2.10e4	1.55e5	59	0.40	YES	1.0582	1.007	40.86	40.90	1.002	1.000	NO	6370		1060	4690
32	32	Endrin Ketone		2.03e5	60		NO	0.9741	1.007	44.00			1.000	YES			820	
33	33	13C4-Hexachlorobutadi...	1.22e6	1.25e6	62	1.28	NO	0.1267	1.007	9.97	10.01	0.384	0.383	NO	38300	77.1	24.5	
34	34	13C6-Hexachlorobenz...	5.68e5	1.25e6	62	1.28	NO	0.6741	1.007	22.72	22.69	0.871	0.872	NO	3350	67.4	2.36	
35	35	13C6-Alpha-BHC	2.05e5	1.25e6	62	0.78	NO	0.2548	1.007	23.24	23.20	0.891	0.892	NO	3200	64.4	42.0	
36	36	13C6-Lindane (gamma)	1.79e5	1.25e6	62	0.81	NO	0.2007	1.007	26.52	26.54	1.019	1.018	NO	3530	71.1	53.4	



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Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

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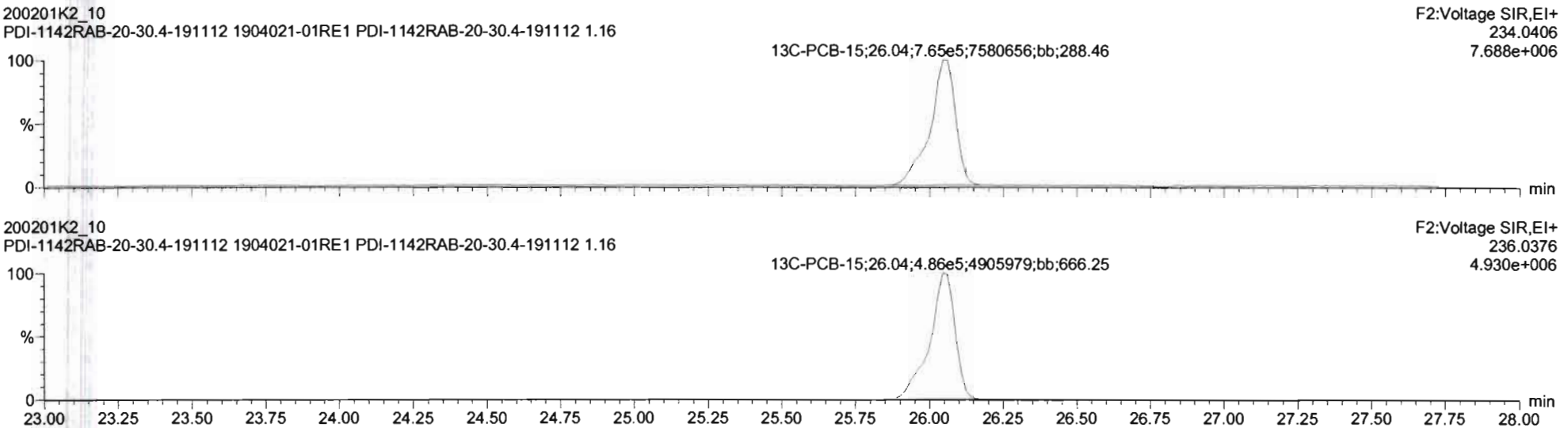

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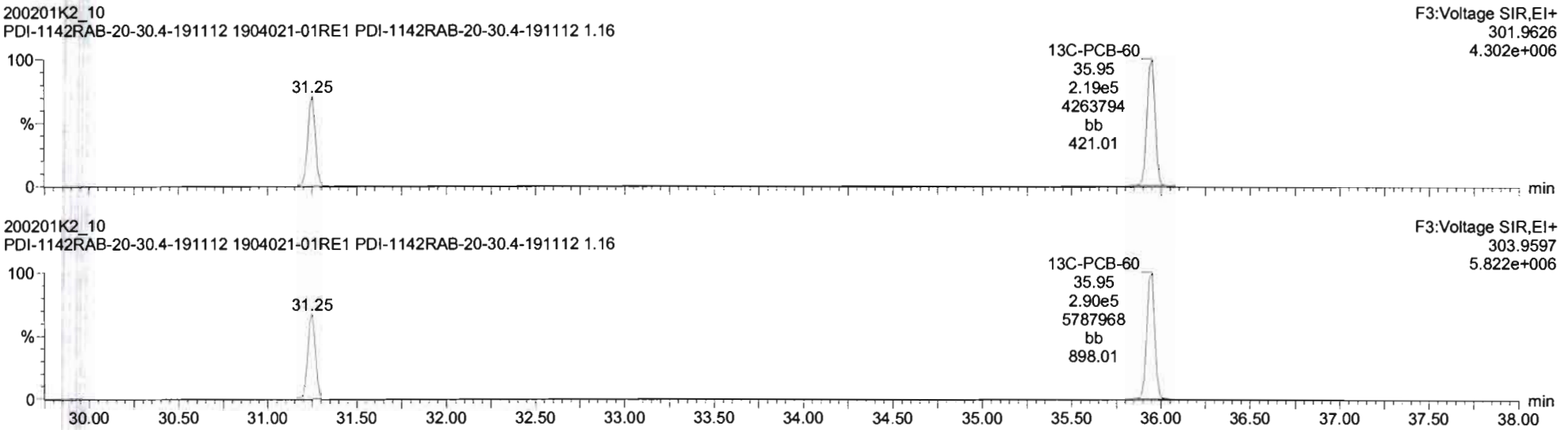

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Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

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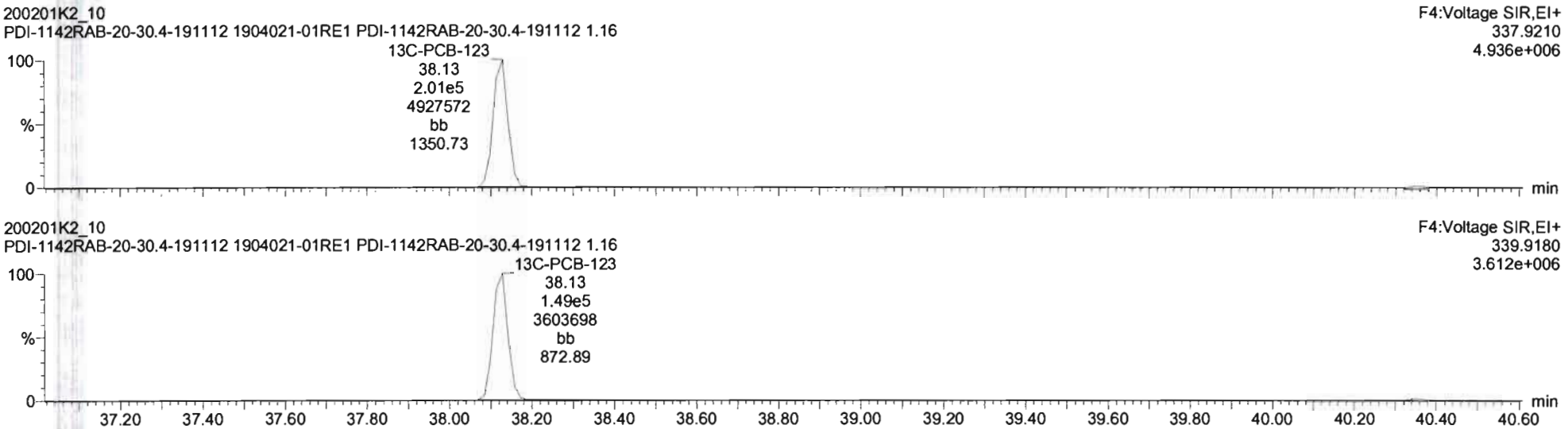
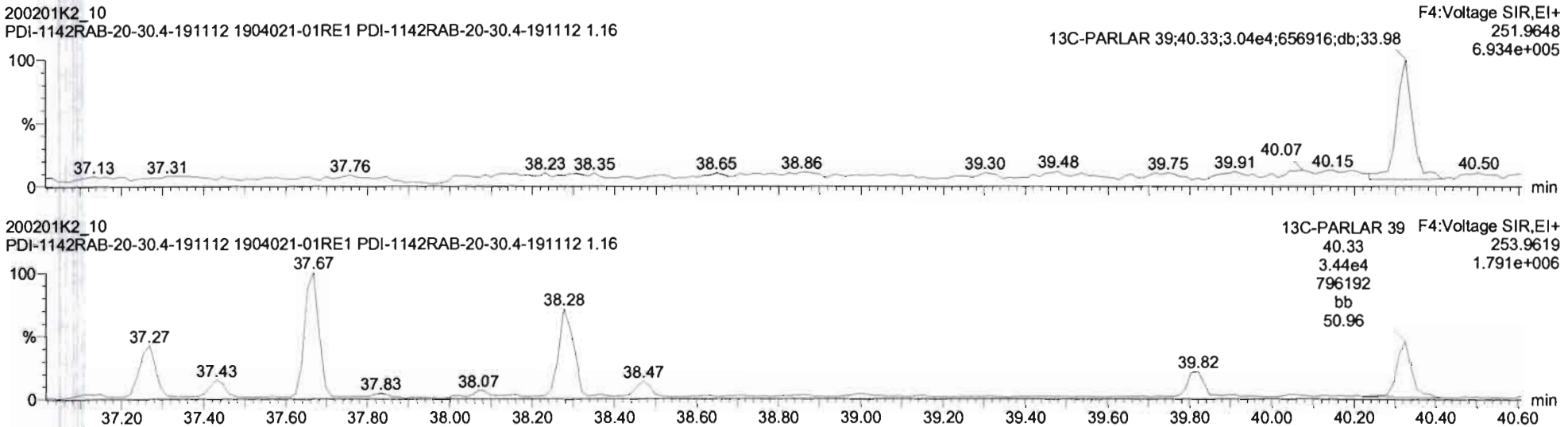


13C-PARLAR 39



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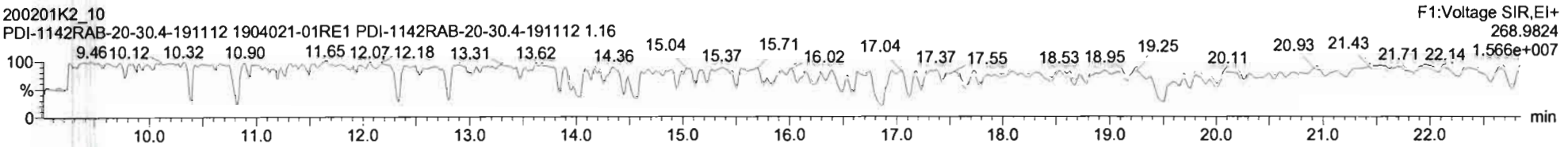
Dataset: U:\VG11.PRO\Results\200201K2\200201K2-10.qld

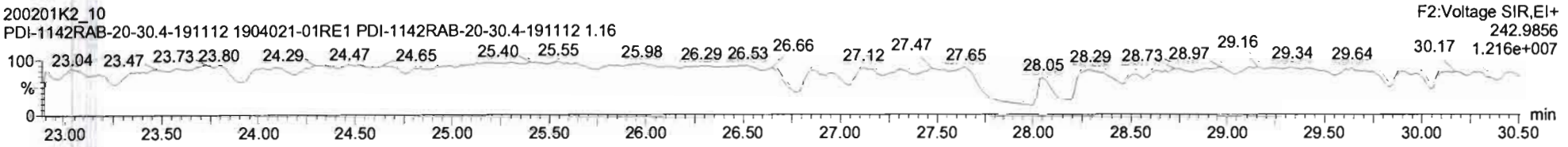
Last Altered: Monday, February 03, 2020 11:20:31 Pacific Standard Time
Printed: Monday, February 03, 2020 11:21:36 Pacific Standard Time

Name: 200201K2_10, Date: 01-Feb-2020, Time: 21:16:02, ID: 1904021-01RE1 PDI-1142RAB-20-30.4-191112 1.16, Description: PDI-1142RAB-20-30.4-191112

PFK1



PFK2



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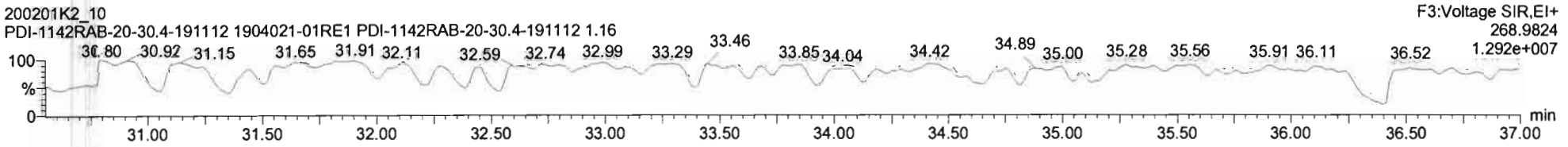
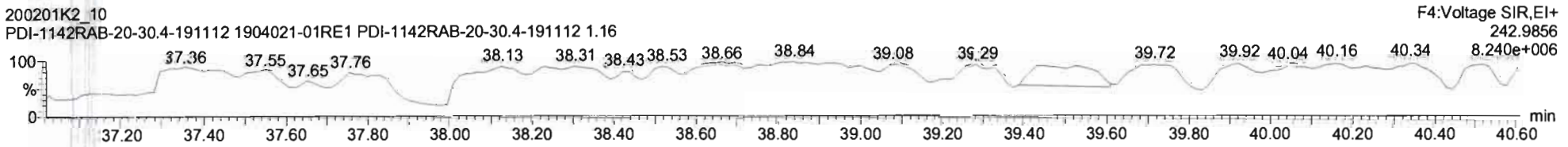
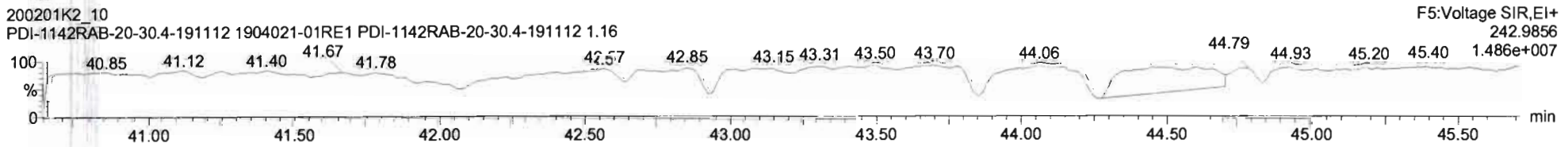


PFK4



PFK5



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-16.qld

Last Altered: Tuesday, November 26, 2019 09:25:44 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:26:08 Pacific Standard Time

GRS 11/26/19

CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)		1.39e5		NO	0.744	1.023	✓ 26.65			1.001	YES			6.33	
2	9	Aldrin		1.01e5		NO	1.02	1.023	30.99			1.001	YES			2.18	
3	10	Oxychlordane		2.44e4		NO	0.992	1.023	33.59			1.001	YES			8.19	
4	13	trans-Chlordane (gam...	3.33e2	2.37e4	0.98	YES	1.08	1.023	35.28	35.31	1.001	1.001	NO	12.7		7.01	10.3
5	14	trans-Nonachlor	4.54e2	2.69e4	1.79	NO	1.00	1.023	35.47	35.47	1.000	1.001	NO	16.4		6.02	16.4
6	15	cis-Chlordane	3.84e2	2.69e4	0.95	YES	0.981	1.023	35.96	35.95	1.014	1.014	NO	14.2		6.18	11.4
7	18	2,4'-DDE		7.03e5		NO	0.854	1.023	35.94			1.000	NO			2.21	
8	19	4,4'-DDE	1.29e4	5.13e5	1.25	NO	0.873	1.023	37.03	37.03	1.000	1.000	NO	28.2		2.79	28.2
9	20	Dieldrin	1.13e3	6.26e4	1.70	NO	0.957	1.023	37.52	37.51	1.000	1.000	NO	18.4		4.42	18.4
10	22	cis-Nonachlor		3.25e4		NO	0.956	1.023	39.22			1.000	YES			7.76	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-16.qld

Last Altered: Tuesday, November 26, 2019 09:21:55 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:24:45 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	1.81e4	6.28e5	1.38	NO	0.915	1.023	38.15	38.18	1.001	1.000	NO	30.7		3.26	30.7
2	25	2,4'-DDT	1.01e4	3.67e5	1.52	NO	0.921	1.023	39.30	39.29	1.000	1.000	NO	29.2		5.41	29.2
3	26	4,4'-DDD	5.18e4	5.18e5	1.48	NO	1.00	1.023	39.43	39.43	1.000	1.000	NO	97.4		3.22	97.4
4	27	4,4'-DDT	7.52e4	3.00e5	1.67	NO	0.986	1.023	40.50	40.50	1.000	1.000	NO	249		5.92	249
5	36	13C6-Lindane (gamma)	1.39e5	1.31e6	0.79	NO	0.189	1.023	26.64	26.62	1.018	1.020	NO	550	56.3	3.74	
6	40	13C12-Aldrin	1.01e5	1.31e6	1.66	NO	0.122	1.023	30.95	30.96	1.185	1.184	NO	624	63.8	2.80	
7	41	13C10-Oxychlordane	2.44e4	1.31e6	1.49	NO	0.0283	1.023	33.55	33.57	1.285	1.284	NO	645	66.0	12.0	
8	43	13C10-trans-Chlordan...	2.37e4	1.31e6	1.68	NO	0.0292	1.023	35.25	35.26	1.349	1.349	NO	609	62.3	11.7	
9	44	13C10-trans-Nonachlor	2.69e4	1.31e6	1.64	NO	0.0333	1.023	35.44	35.45	1.357	1.356	NO	604	61.8	10.2	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-16.qld

Last Altered: Tuesday, November 26, 2019 09:21:55 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:24:54 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

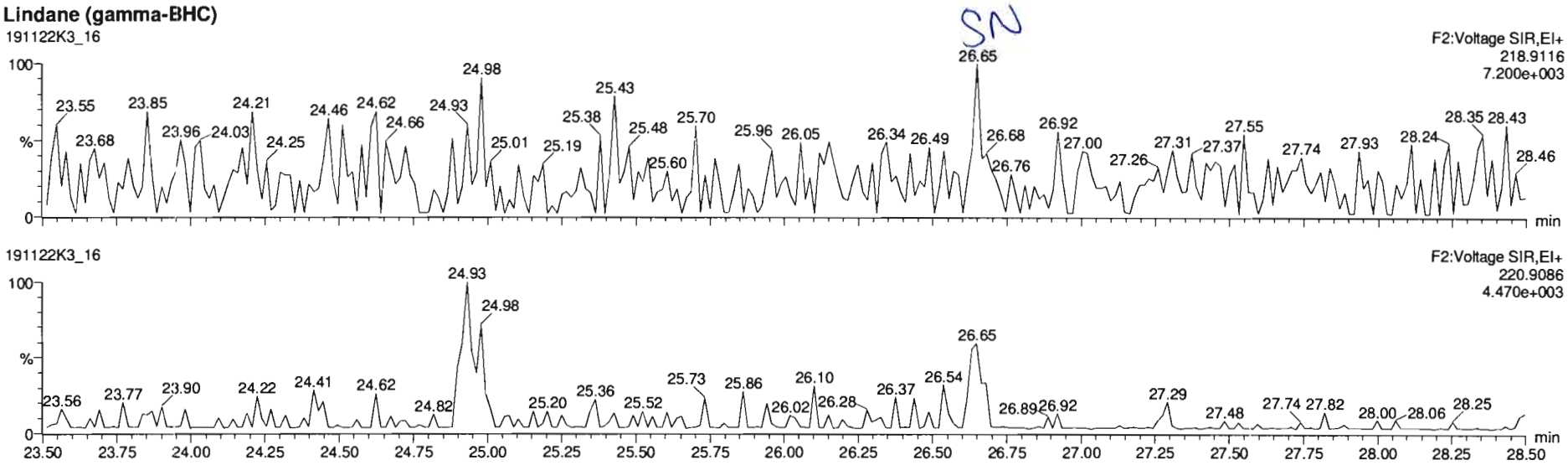
	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	46	13C12-2,4'-DDE	7.03e5	1.31e6	1.55	NO	0.763	1.023	35.95	35.93	0.996	0.996	NO	690	70.6	6.28	
2	47	13C12-4,4'-DDE	5.13e5	1.31e6	1.56	NO	0.552	1.023	37.01	37.01	1.025	1.026	NO	695	71.1	8.68	
3	48	13C12-Dieldrin	6.26e4	1.31e6	1.56	NO	0.0749	1.023	37.51	37.50	1.039	1.039	NO	625	63.9	5.15	
4	50	13C10-cis-Nonachlor	3.25e4	1.31e6	1.64	NO	0.0389	1.023	39.20	39.21	1.086	1.086	NO	625	63.9	9.91	
5	52	13C12-2,4'-DDD	6.28e5	1.31e6	1.56	NO	0.588	1.023	38.12	38.15	1.460	1.459	NO	799	81.7	3.94	
6	53	13C12-2,4'-DDT	3.67e5	1.31e6	1.62	NO	0.370	1.023	39.25	39.28	1.503	1.502	NO	742	75.9	6.25	
7	54	13C12-4,4'-DDD	5.18e5	1.31e6	1.61	NO	0.473	1.023	39.37	39.41	1.508	1.507	NO	820	83.8	4.89	
8	55	13C12-4,4'-DDT	3.00e5	1.31e6	1.57	NO	0.280	1.023	40.44	40.48	1.549	1.547	NO	801	82.0	8.26	
9	62	13C-PCB-15	1.31e6	1.31e6	1.56	NO	1.00	1.023	26.18	26.13	1.000	1.000	NO	978	100	0.846	

Dataset: Untitled

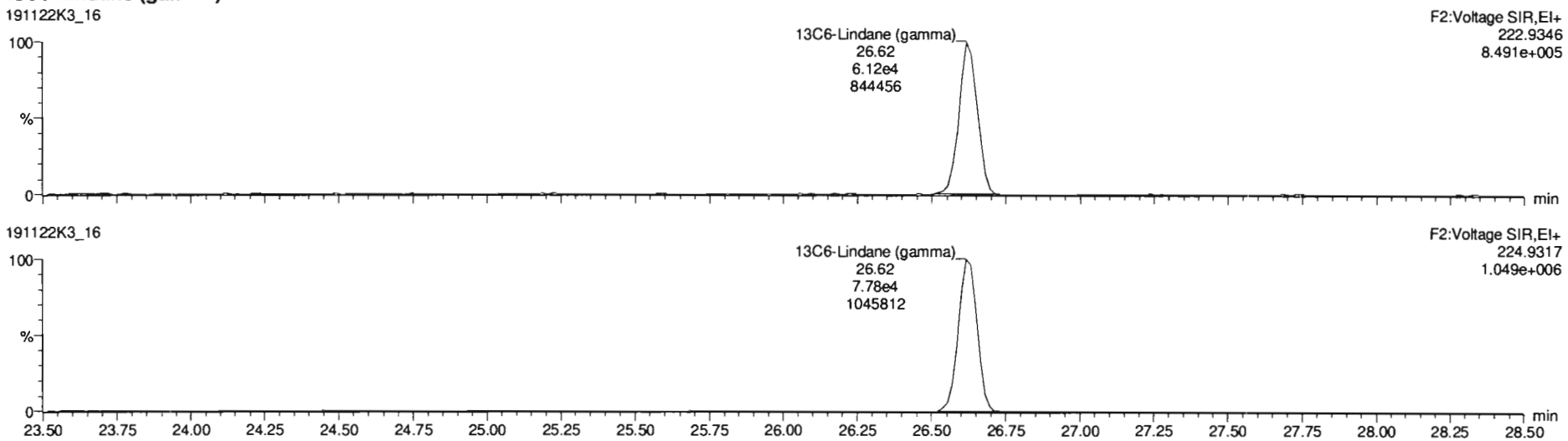
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

Lindane (gamma-BHC)



13C6-Lindane (gamma)



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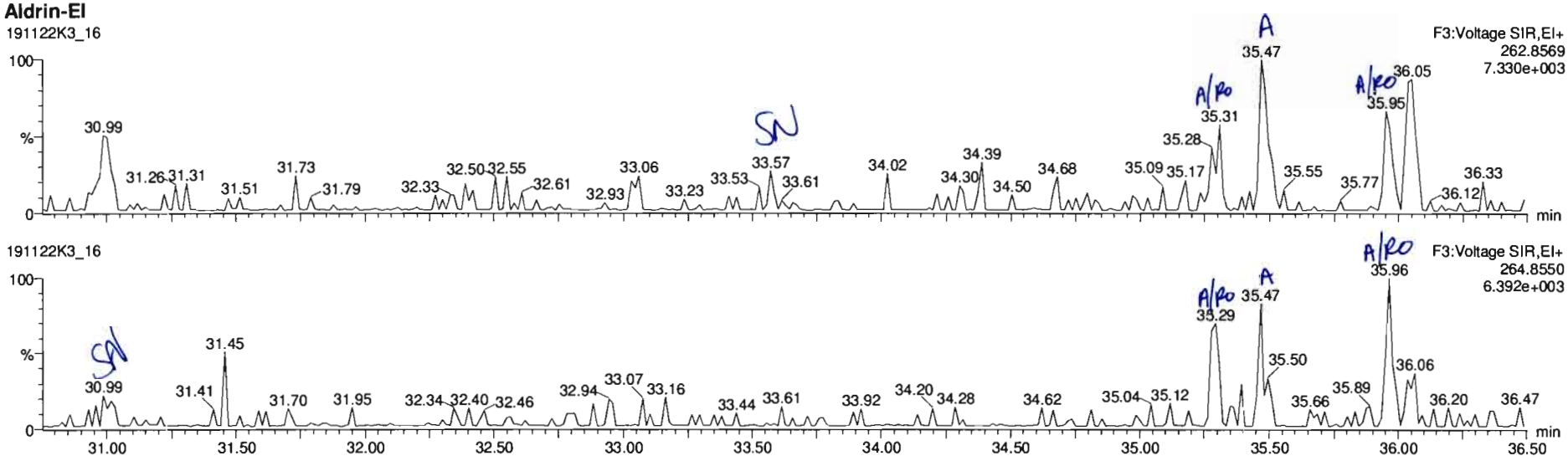
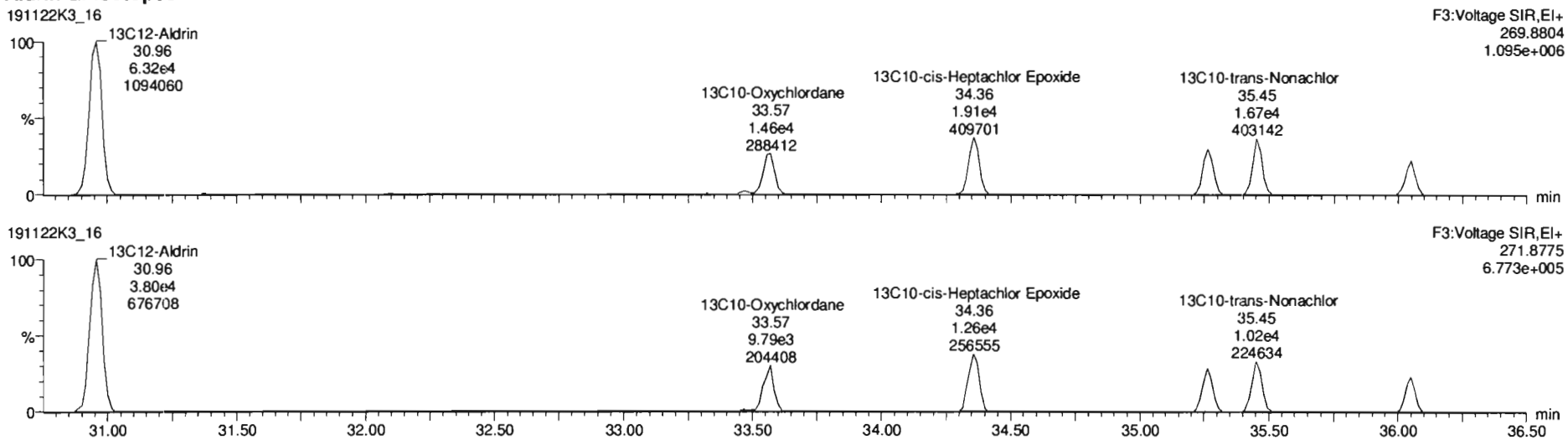
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

Aldrin-EI



Aldrin-EI-isotopes

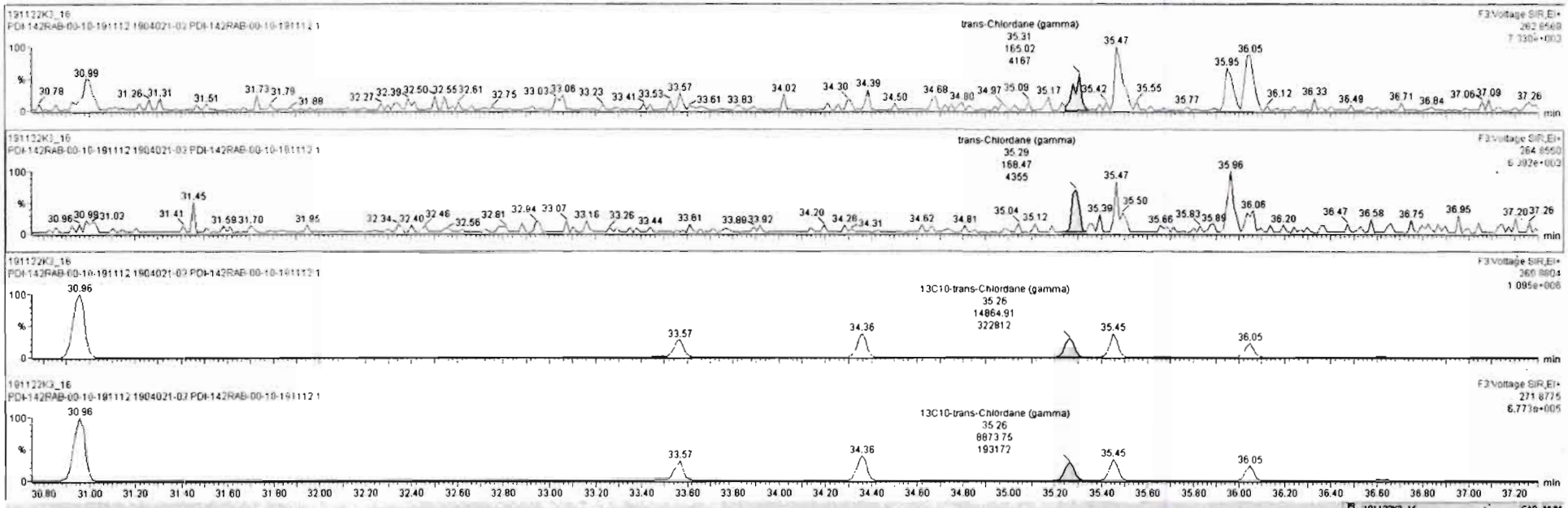


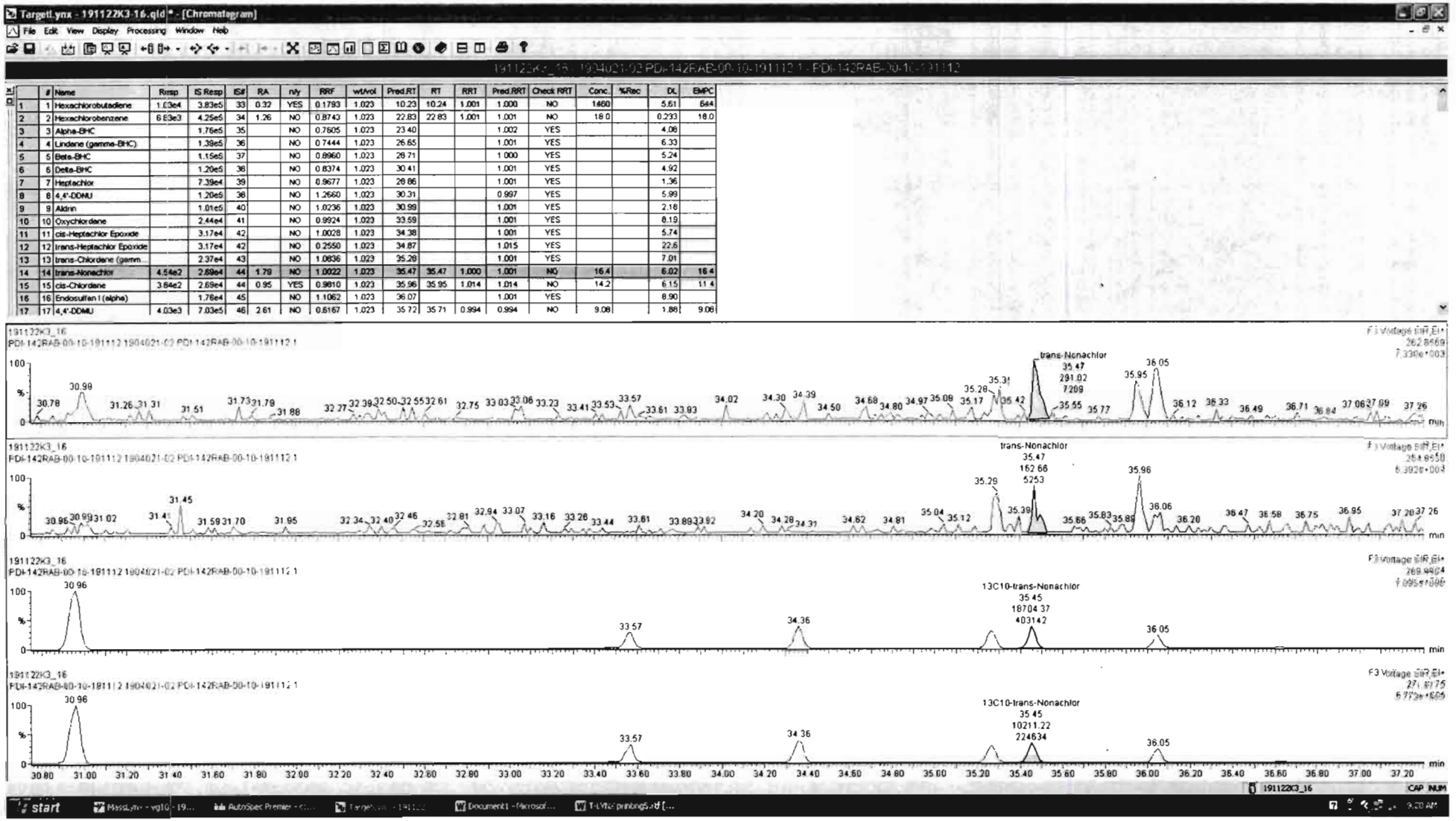
TargetLynx - 191122K3-16.qld * - [Chromatogram]

File Edit View Display Processing Window Help

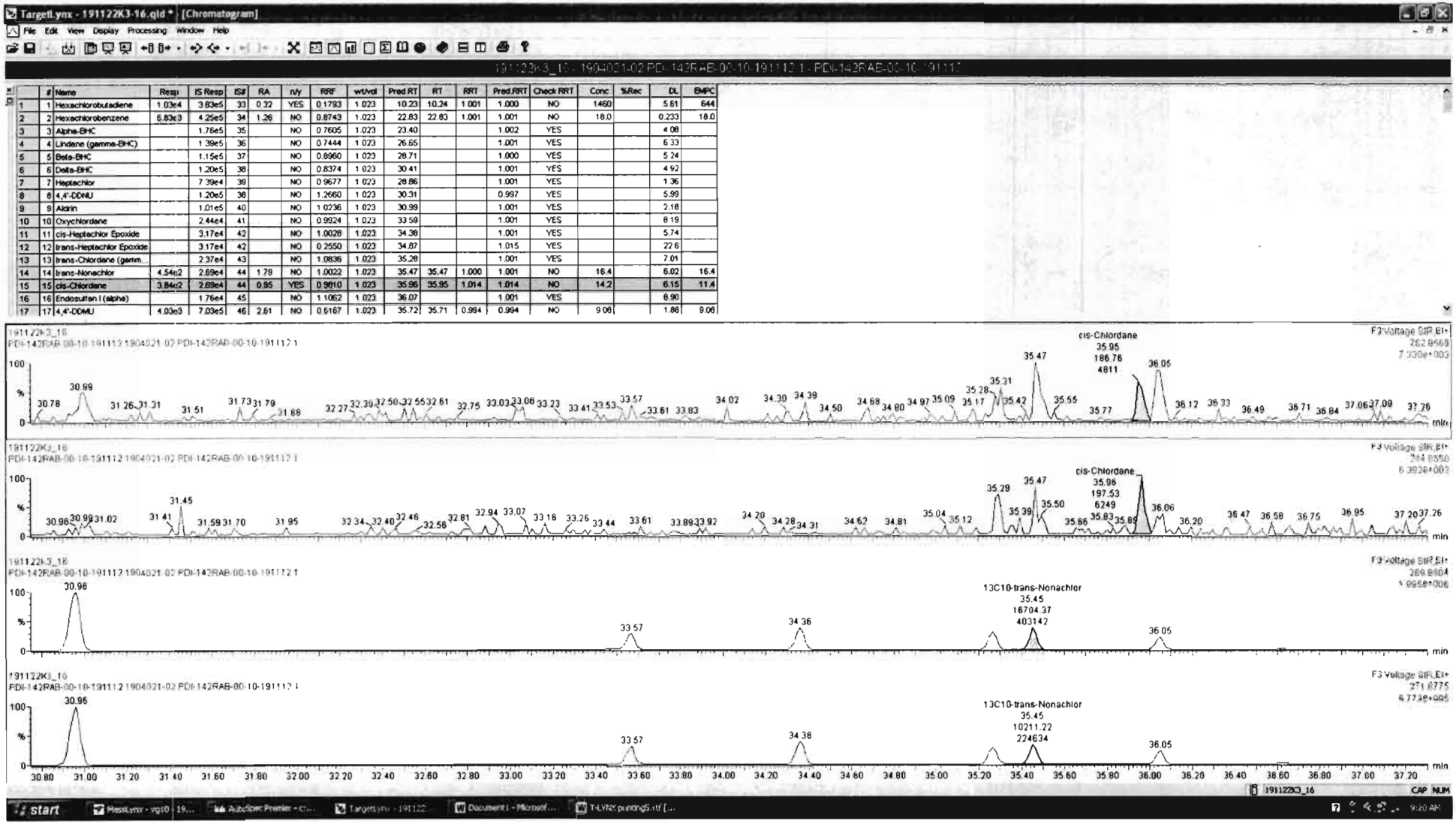
191122K3_16 - 1904021-02 PDI-142RAB-00-10-191112 1 - PDI-142RAB-00-10-191112

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.03e4	3.83e5	33	0.32	YES	0.1793	1.023	10.23	10.24	1.001	1.000	NO	1460		5.61	644
2	2	Hexachlorobenzene	6.83e3	4.25e5	34	1.26	NO	0.8743	1.023	22.83	22.83	1.001	1.001	NO	18.0		0.233	18.0
3	3	Alpha-BHC		1.76e5	35		NO	0.7605	1.023	23.40			1.002	YES			4.08	
4	4	Lindane (gamma-BHC)		1.39e5	36		NO	0.7444	1.023	26.65			1.001	YES			6.33	
5	5	Beta-BHC		1.15e5	37		NO	0.8960	1.023	26.71			1.000	YES			5.24	
6	6	Delta-BHC		1.20e5	38		NO	0.8374	1.023	30.41			1.001	YES			4.92	
7	7	Heptachlor		7.39e4	39		NO	0.9677	1.023	28.86			1.001	YES			1.36	
8	8	4,4'-DDNU		1.20e5	38		NO	1.2660	1.023	30.31			0.997	YES			5.99	
9	9	Aldrin		1.01e5	40		NO	1.0236	1.023	30.99			1.001	YES			2.16	
10	10	Oxychlordane		2.44e4	41		NO	0.9924	1.023	33.59			1.001	YES			8.19	
11	11	cis-Heptachlor Epoxide		3.17e4	42		NO	1.0026	1.023	34.38			1.001	YES			5.74	
12	12	trans-Heptachlor Epoxide		3.17e4	42		NO	0.2550	1.023	34.87			1.015	YES			22.6	
13	13	trans-Chlordane (gamm...	3.30e2	2.37e4	43	0.98	YES	1.0836	1.023	35.28	35.31	1.001	1.001	NO	12.7		7.01	10.3
14	14	trans-Nonachlor	4.54e2	2.69e4	44	1.79	NO	1.0022	1.023	35.47	35.47	1.000	1.001	NO	16.4		6.02	16.4
15	15	cis-Chlordane	3.84e2	2.69e4	44	0.95	YES	0.9810	1.023	35.96	35.95	1.014	1.014	NO	14.2		6.15	11.4
16	16	Endosulfan1 (alpha)		1.76e4	45		NO	1.1062	1.023	36.07			1.001	YES			8.90	
17	17	4,4'-DDMU	4.03e3	7.03e5	46	2.61	NO	0.6167	1.023	35.72	35.71	0.994	0.994	NO	9.08		1.88	9.08





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/Vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.03e4	3.83e5	33	0.32	YES	0.1793	1.023	10.23	10.24	1.001	1.000	NO	1460		5.61	644
2	2	Hexachlorobenzene	6.83e3	4.25e5	34	1.26	NO	0.8743	1.023	22.83	22.83	1.001	1.001	NO	18.0		0.233	18.0
3	3	Alpha-BHC		1.76e5	35		NO	0.7605	1.023	23.40			1.002	YES			4.08	
4	4	Lindane (gamma-BHC)		1.39e5	36		NO	0.7444	1.023	26.65			1.001	YES			6.33	
5	5	Beta-BHC		1.15e5	37		NO	0.8960	1.023	28.71			1.000	YES			5.24	
6	6	Delta-BHC		1.20e5	38		NO	0.8374	1.023	30.41			1.001	YES			4.92	
7	7	Heptachlor		7.39e4	39		NO	0.9677	1.023	28.86			1.001	YES			1.36	
8	8	4,4'-DDMU		1.26e5	38		NO	1.2660	1.023	30.31			0.997	YES			5.99	
9	9	Aldrin		1.01e5	40		NO	1.0236	1.023	30.99			1.001	YES			2.16	
10	10	Oxychlordane		2.44e4	41		NO	0.9924	1.023	33.59			1.001	YES			8.19	
11	11	cis-Heptachlor Epoxide		3.17e4	42		NO	1.0028	1.023	34.38			1.001	YES			5.74	
12	12	trans-Heptachlor Epoxide		3.17e4	42		NO	0.2550	1.023	34.87			1.015	YES			22.6	
13	13	trans-Chlordane (gamm...		2.37e4	43		NO	1.0836	1.023	35.28			1.001	YES			7.01	
14	14	trans-Nonachlor	4.54e2	2.69e4	44	1.79	NO	1.0022	1.023	35.47	35.47	1.000	1.001	NO	16.4		6.02	16.4
15	15	cis-Chlordane	3.84e2	2.69e4	44	0.95	YES	0.9810	1.023	35.96	35.95	1.014	1.014	NO	14.2		6.15	11.4
16	16	Endosulfan I (alpha)		1.76e4	45		NO	1.1062	1.023	36.07			1.001	YES			8.90	
17	17	4,4'-DDMU	4.03e3	7.03e5	46	2.61	NO	0.5167	1.023	35.72	35.71	0.994	0.994	NO	9.08		1.88	9.08



	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.03e4	3.63e5	33	0.32	YES	0.1793	1.023	10.23	10.24	1.001	1.000	NO	1460		5.61	644
2	2	Hexachlorobenzene	6.83e3	4.25e5	34	1.26	NO	0.8743	1.023	22.83	22.83	1.001	1.001	NO	18.0		0.233	18.0
3	3	Alpha-BHC		1.76e5	35		NO	0.7605	1.023	23.40			1.002	YES			4.08	
4	4	Lindane (gamma-BHC)		1.39e5	36		NO	0.7444	1.023	26.65			1.001	YES			6.33	
5	5	Beta-BHC		1.15e5	37		NO	0.8960	1.023	28.71			1.000	YES			5.24	
6	6	Delta-BHC		1.20e5	38		NO	0.8374	1.023	30.41			1.001	YES			4.92	
7	7	Heptachlor		7.39e4	39		NO	0.9677	1.023	28.86			1.001	YES			1.36	
8	8	4,4'-DDMU		1.20e5	38		NO	1.2660	1.023	30.31			0.997	YES			5.99	
9	9	Aldrin		1.01e5	40		NO	1.0236	1.023	30.99			1.001	YES			2.18	
10	10	Oxychlordane		2.44e4	41		NO	0.9924	1.023	33.59			1.001	YES			8.19	
11	11	cis-Heptechlor Epoxide		3.17e4	42		NO	1.0028	1.023	34.36			1.001	YES			5.74	
12	12	trans-Heptechlor Epoxide		3.17e4	42		NO	0.2550	1.023	34.87			1.015	YES			22.6	
13	13	trans-Chlordane (gamm		2.37e4	43		NO	1.0836	1.023	35.28			1.001	YES			7.01	
14	14	trans-Nonachlor	4.54e2	2.69e4	44	1.78	NO	1.0022	1.023	35.47	35.47	1.000	1.001	NO	16.4		6.02	16.4
15	15	cis-Chlordane	3.84e2	2.69e4	44	0.95	YES	0.9610	1.023	35.96	35.95	1.014	1.014	NO	14.2		6.15	11.4
16	16	Endosulfan I (alpha)		1.76e4	45		NO	1.1062	1.023	36.07			1.001	YES			8.90	
17	17	4,4'-DDMU	4.03e3	7.03e5	46	2.61	NO	0.6167	1.023	35.72	35.71	0.994	0.994	NO	9.06		1.86	9.06

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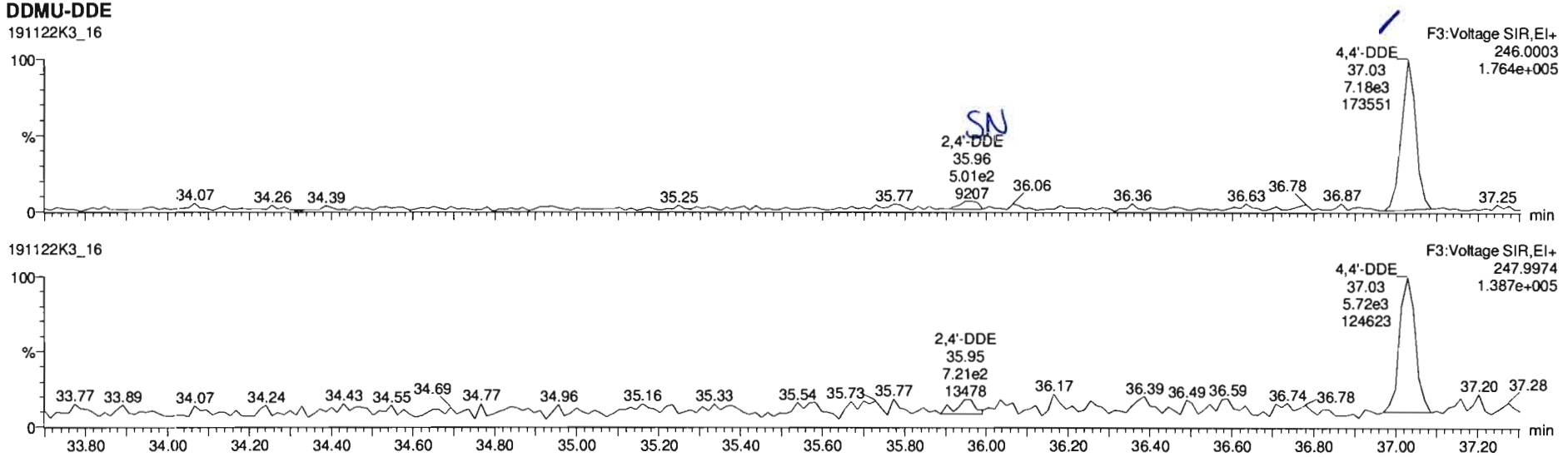
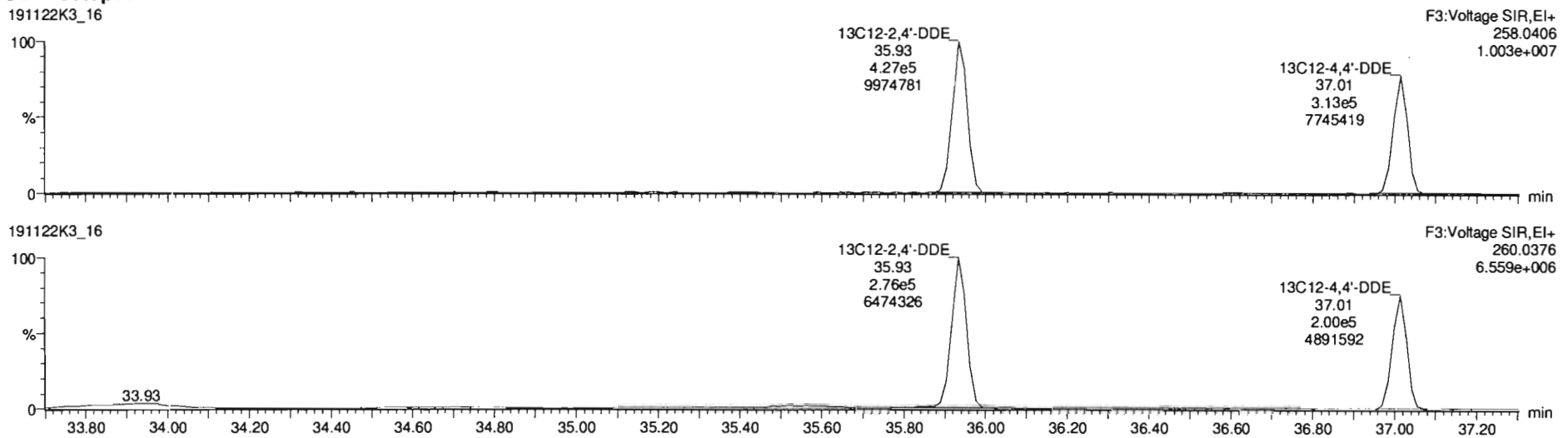
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

DDMU-DDE



DDE-isotopes



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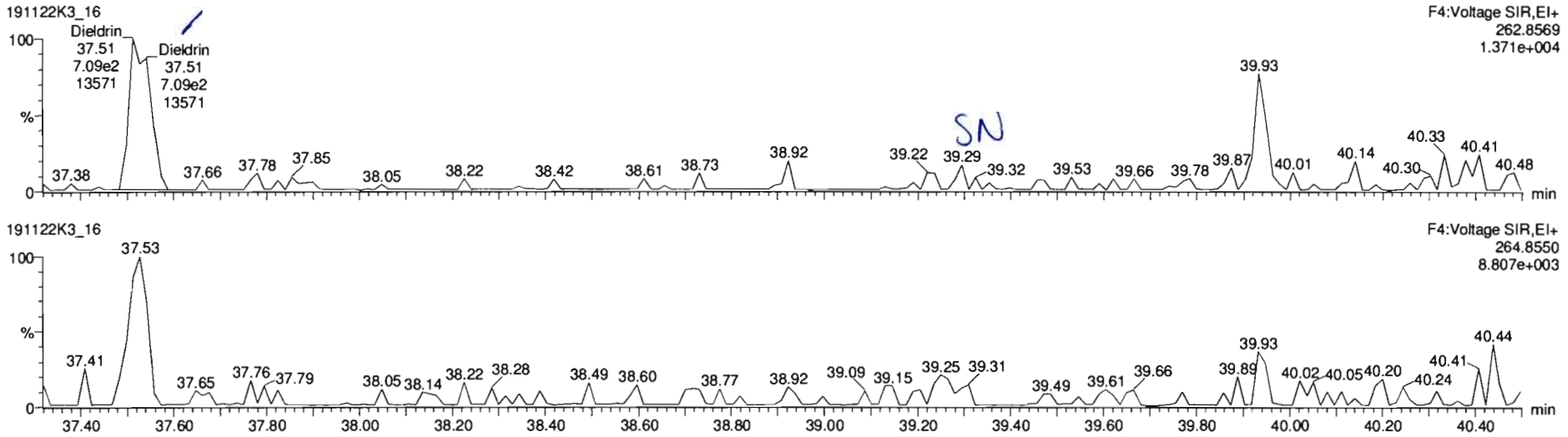
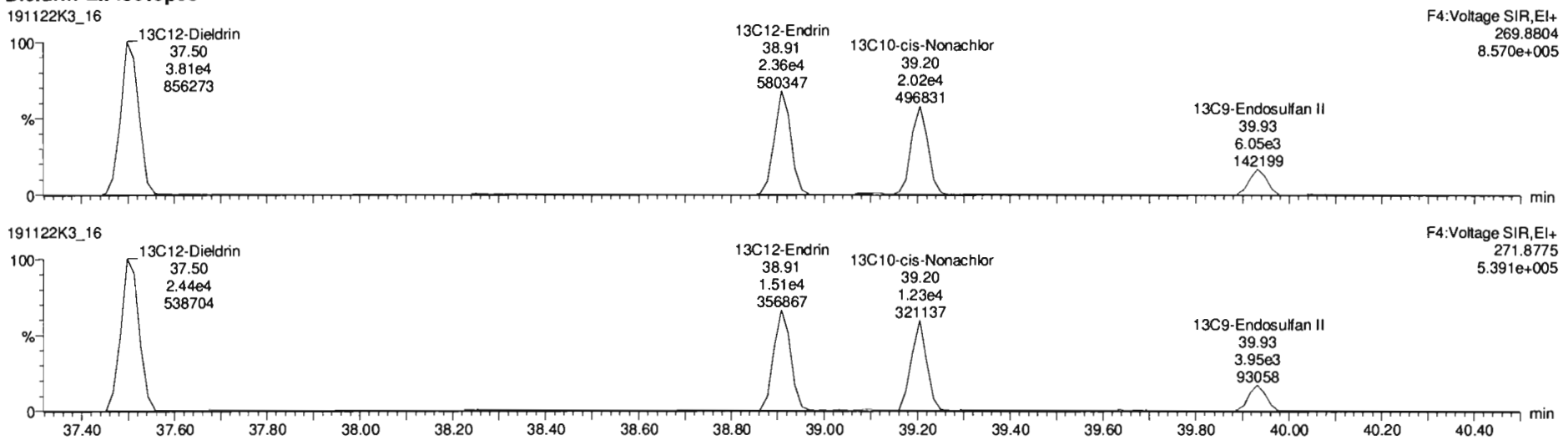
Dieldrin-EII



Dieldrin-EII-isotopes



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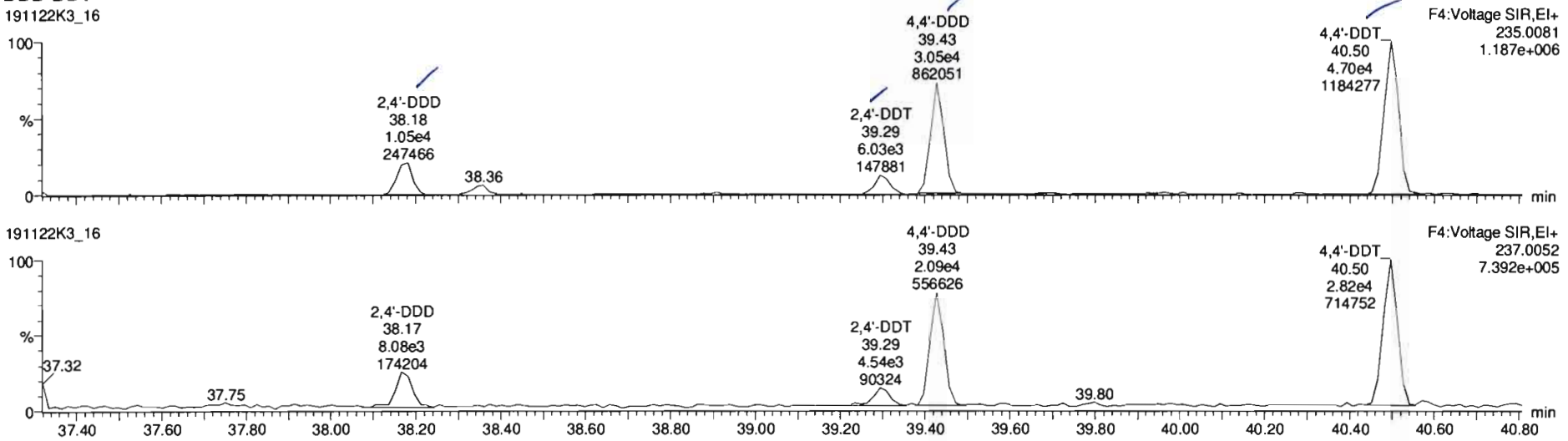
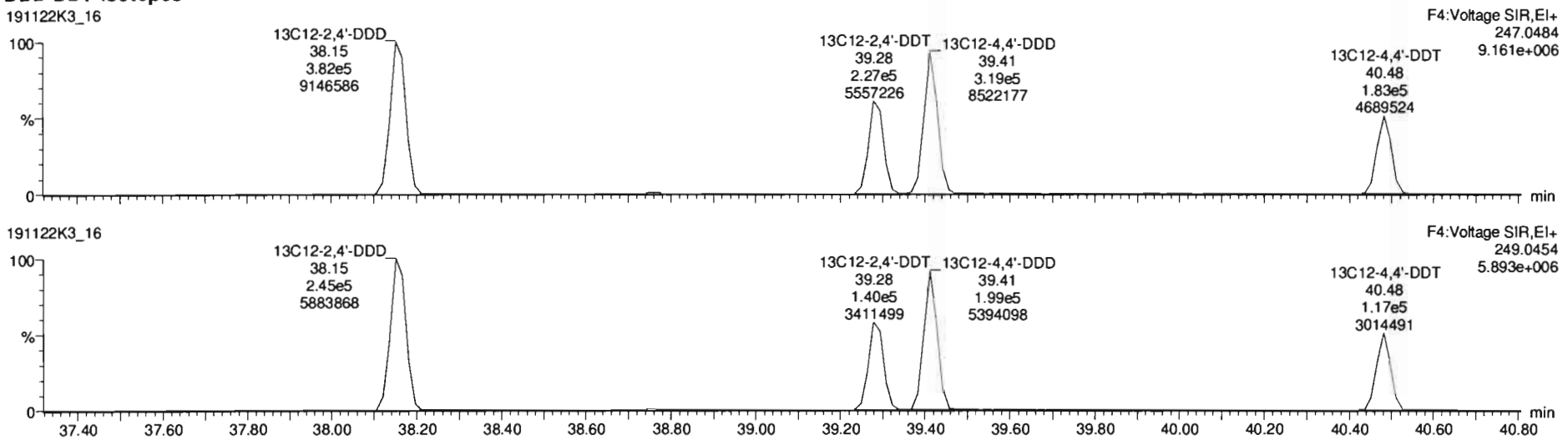
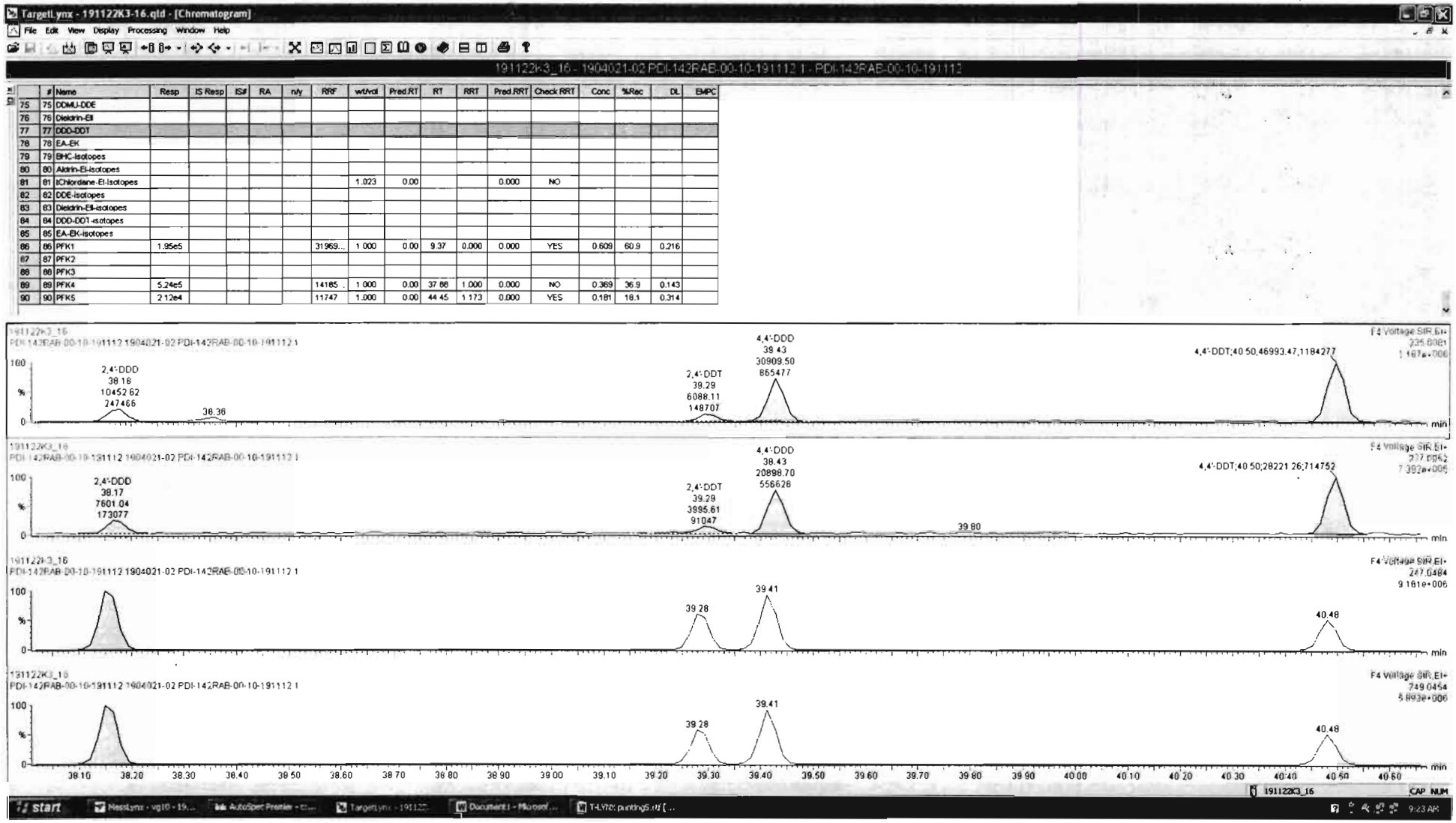
Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

DDD-DDT



DDD-DDT-isotopes





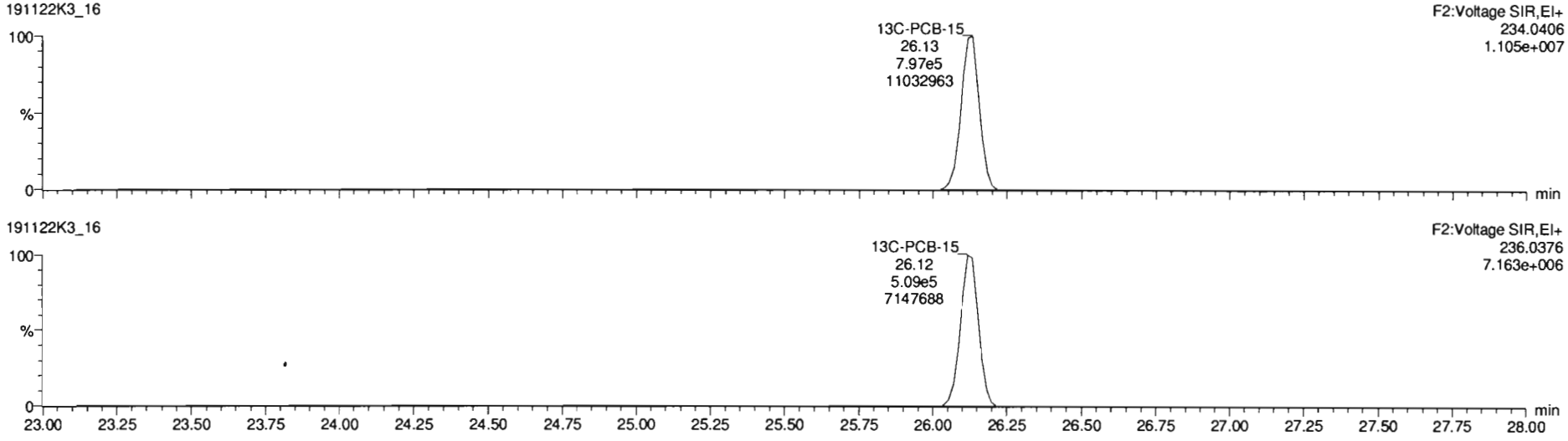
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
75	75	DDMU-DDE																
76	76	Dieldrin-EI																
77	77	DDD-DDT																
78	78	EA-EK																
79	79	BHC-Isotopes																
80	80	Aldrin-EI-Isotopes																
81	81	tChlordane-EI-Isotopes							1.023	0.00			0.000	NO				
82	82	DDE-Isotopes																
83	83	Dieldrin-EI-Isotopes																
84	84	DDD-DDT-Isotopes																
85	85	EA-EK-Isotopes																
86	86	PFK1	1.95e5					31969...	1.000	0.00	9.37	0.000	0.000	YES	0.609	60.9	0.216	
87	87	PFK2																
88	88	PFK3																
89	89	PFK4	5.24e5					14185...	1.000	0.00	37.86	1.000	0.000	NO	0.369	36.9	0.143	
90	90	PFK5	2.12e4					11747	1.000	0.00	44.45	1.173	0.000	YES	0.181	18.1	0.314	

Dataset: Untitled

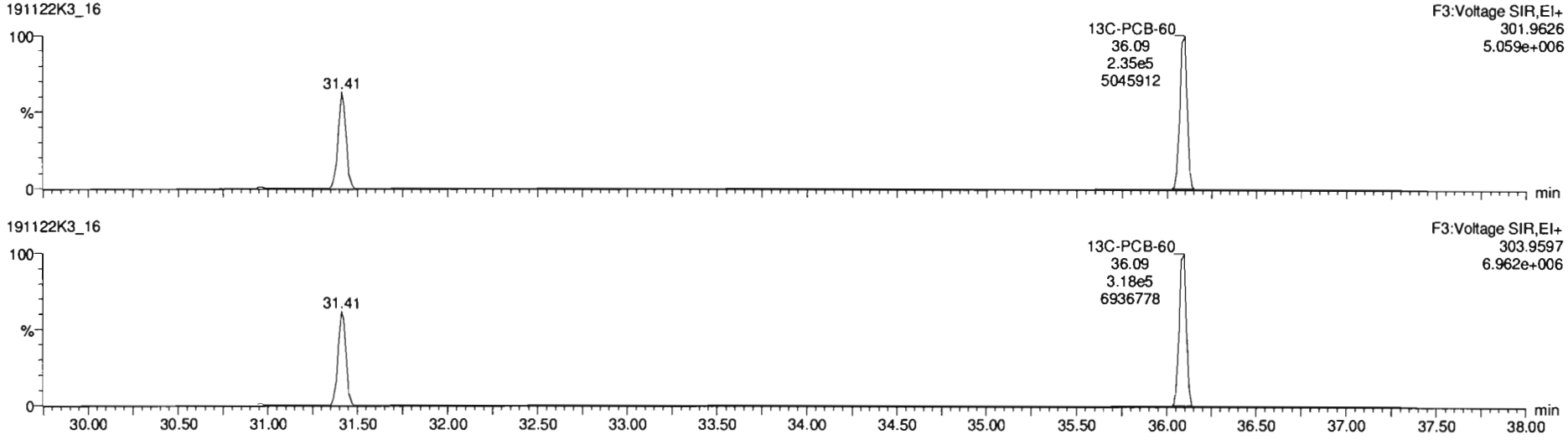
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

13C-PCB-15



13C-PCB-60



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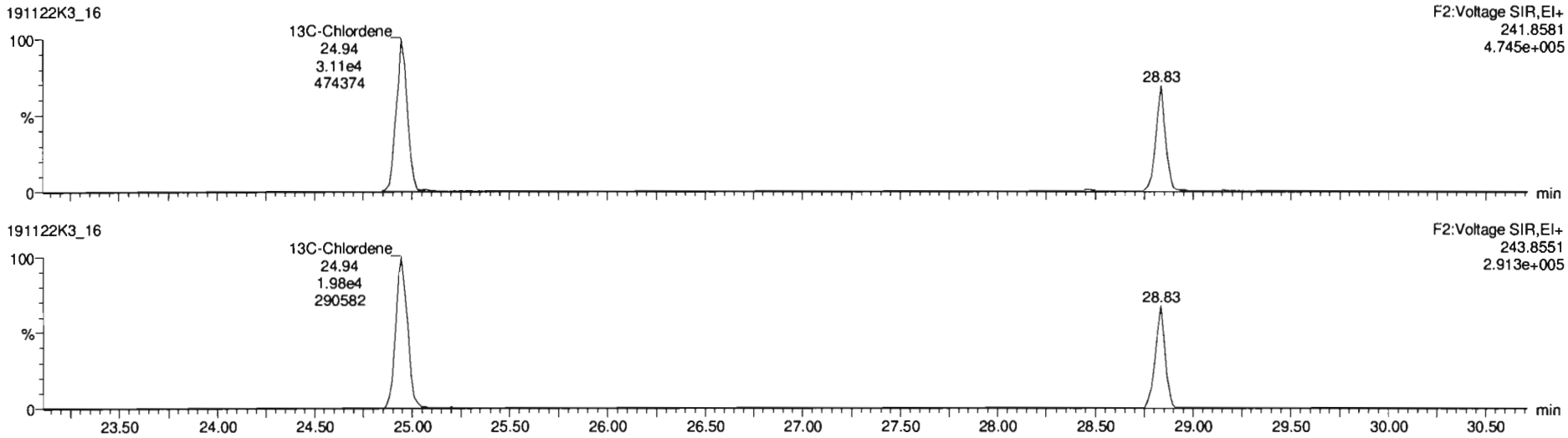
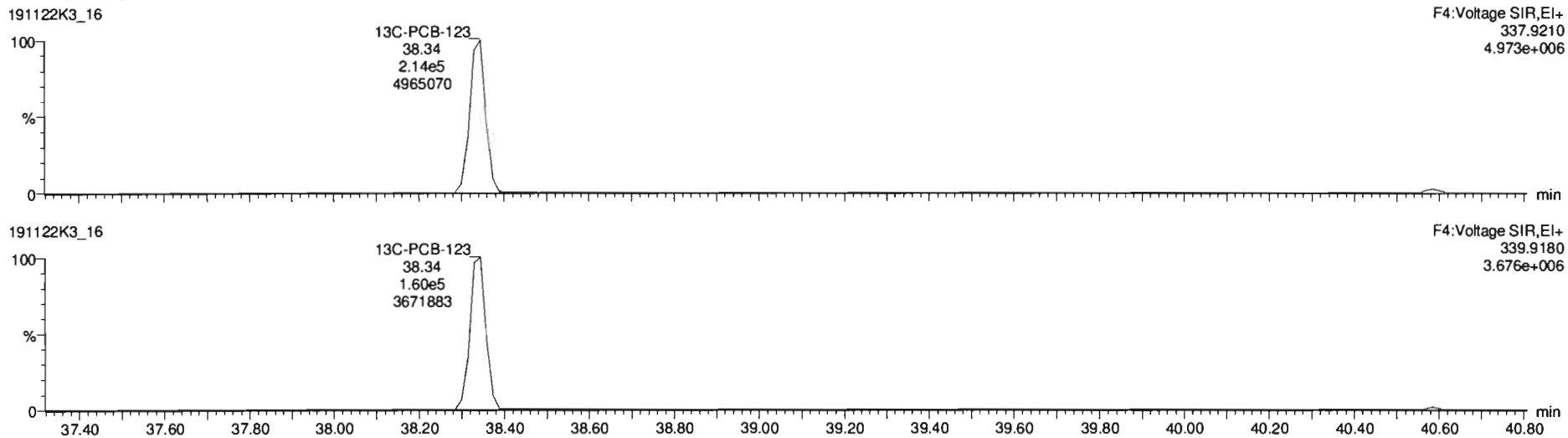
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

13C-Chlordene



13C-PCB-123



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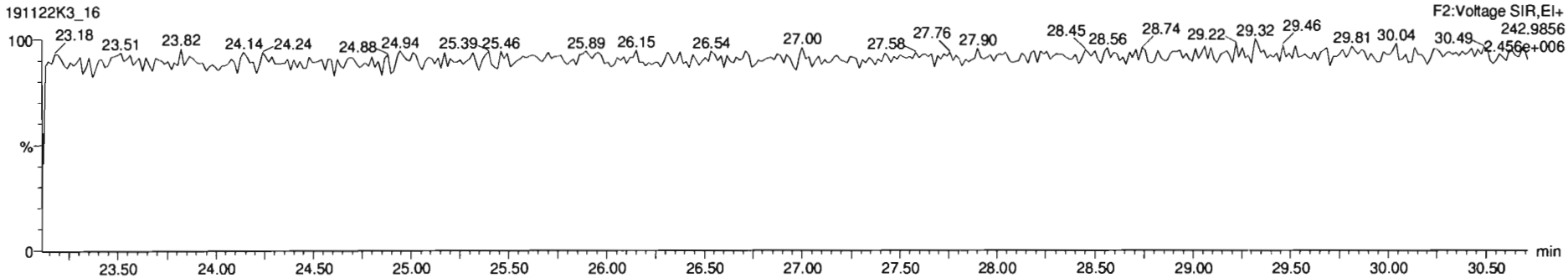
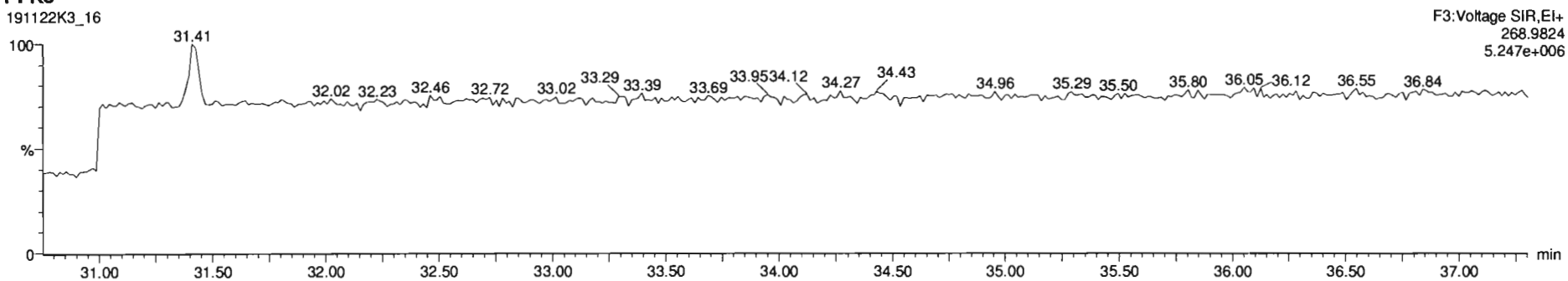
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_16, Date: 23-Nov-2019, Time: 04:21:41, ID: 1904021-02 PDI-142RAB-00-10-191112 1, Description: PDI-142RAB-00-10-191112

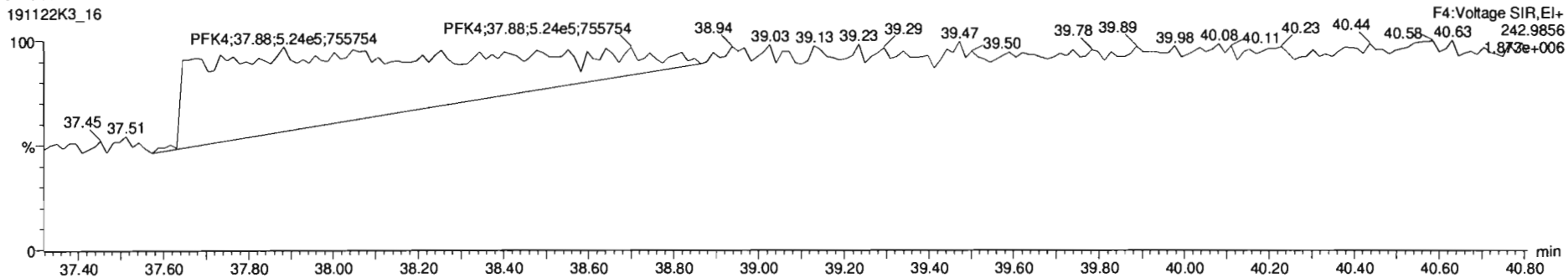
PFK2



PFK3



PFK4



Quantify Sample Summary Report **MassLynx 4.1**
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-17.qld

Last Altered: Tuesday, November 26, 2019 09:54:58 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:56:36 Pacific Standard Time

GRB 11/26/19

CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol		Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)	4.04e2	1.28e5	2.34	NO	0.744	1.017	✓	26.66	26.66	1.001	1.001	NO	4.19		7.76	4.19
2	9	Aldrin		9.63e4		NO	1.02	1.017		30.99			1.001	YES			2.87	
3	10	Oxychlordane		2.44e4		NO	0.992	1.017		33.59			1.001	YES			11.4	
4	13	trans-Chlordane (gam...	4.23e2	2.29e4	1.21	NO	1.08	1.017		35.30	35.29	1.000	1.001	NO	16.8		9.32	16.8
5	14	trans-Nonachlor	2.70e2	2.47e4	2.24	YES	1.00	1.017		35.49	35.50	1.001	1.001	NO	10.7		9.27	8.47
6	15	cis-Chlordane	3.90e2	2.47e4	2.08	YES	0.981	1.017		35.97	35.98	1.014	1.014	NO	15.8		9.47	13.1
7	18	2,4'-DDE		6.33e5		NO	0.854	1.017		35.96			1.000	NO			2.35	
8	19	4,4'-DDE	1.69e4	4.51e5	1.22	NO	0.873	1.017		37.05	37.04	1.000	1.000	NO	42.2		3.18	42.2
9	20	Dieldrin	8.46e2	5.66e4	2.30	YES	0.957	1.017		37.53	37.54	1.001	1.000	NO	15.3		6.82	11.9
10	22	cis-Nonachlor		2.79e4		NO	0.956	1.017		39.23			1.000	YES			13.8	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-17.qld

Last Altered: Tuesday, November 26, 2019 09:54:58 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:56:42 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	4.48e4	5.52e5	1.65	NO	0.915	1.017	38.17	38.18	1.000	1.000	NO	87.2		3.96	87.2
2	25	2,4'-DDT	2.09e4	3.32e5	1.86	NO	0.921	1.017	39.31	39.31	1.000	1.000	NO	67.1		6.57	67.1
3	26	4,4'-DDD	1.44e5	4.60e5	1.56	NO	1.00	1.017	39.45	39.44	1.000	1.000	NO	307		4.41	307
4	27	4,4'-DDT	1.08e5	2.80e5	1.64	NO	0.986	1.017	40.52	40.51	1.000	1.000	NO	385		7.63	385
5	36	13C6-Lindane (gamma)	1.28e5	9.51e5	0.79	NO	0.189	1.017	26.64	26.63	1.019	1.020	NO	697	70.9	5.06	
6	40	13C12-Aldrin	9.63e4	9.51e5	1.63	NO	0.122	1.017	30.95	30.96	1.185	1.184	NO	819	83.3	5.28	
7	41	13C10-Oxychlordane	2.44e4	9.51e5	1.49	NO	0.0283	1.017	33.55	33.57	1.285	1.284	NO	892	90.7	22.7	
8	43	13C10-trans-Chlordan...	2.29e4	9.51e5	1.64	NO	0.0292	1.017	35.25	35.28	1.350	1.349	NO	810	82.4	22.0	
9	44	13C10-trans-Nonachlor	2.47e4	9.51e5	1.57	NO	0.0333	1.017	35.44	35.47	1.357	1.356	NO	765	77.8	19.2	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-17.qld

Last Altered: Tuesday, November 26, 2019 09:54:58 Pacific Standard Time
Printed: Tuesday, November 26, 2019 09:56:49 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

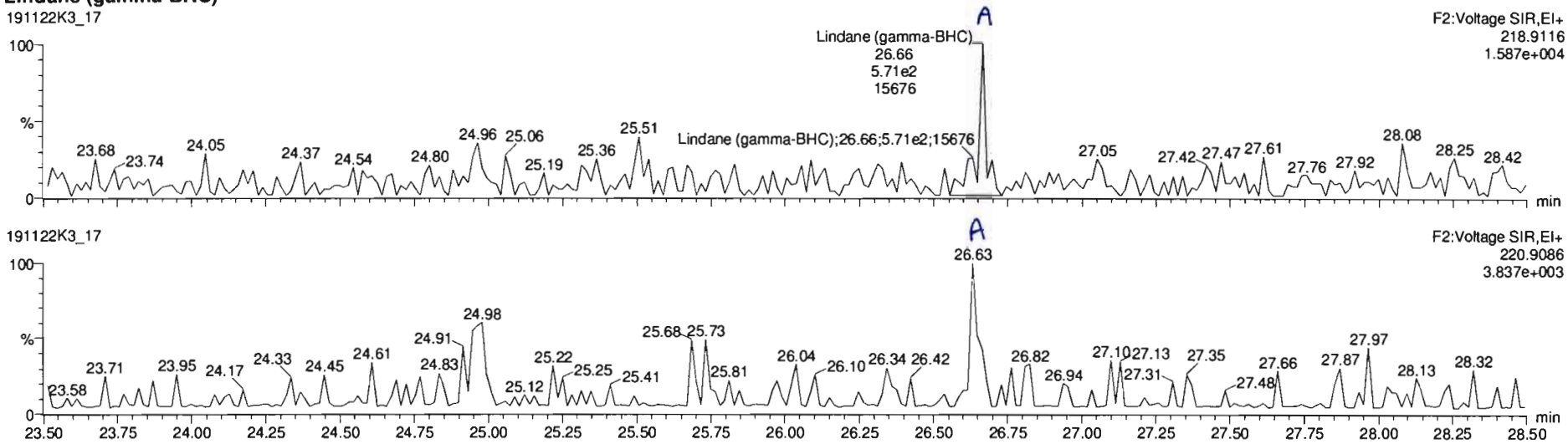
	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	46	13C12-2,4'-DDE	6.33e5	9.51e5	1.59	NO	0.763	1.017	35.95	35.95	0.996	0.996	NO	857	87.2	5.94	
2	47	13C12-4,4'-DDE	4.51e5	9.51e5	1.60	NO	0.552	1.017	37.01	37.03	1.026	1.026	NO	844	85.9	8.22	
3	48	13C12-Dieldrin	5.66e4	9.51e5	1.56	NO	0.0749	1.017	37.51	37.51	1.039	1.039	NO	781	79.4	6.98	
4	50	13C10-cis-Nonachlor	2.79e4	9.51e5	1.50	NO	0.0389	1.017	39.20	39.22	1.087	1.086	NO	740	75.3	13.4	
5	52	13C12-2,4'-DDD	5.52e5	9.51e5	1.56	NO	0.588	1.017	38.12	38.17	1.460	1.459	NO	969	98.6	6.77	
6	53	13C12-2,4'-DDT	3.32e5	9.51e5	1.60	NO	0.370	1.017	39.25	39.29	1.504	1.502	NO	927	94.3	10.7	
7	54	13C12-4,4'-DDD	4.60e5	9.51e5	1.56	NO	0.473	1.017	39.37	39.43	1.509	1.507	NO	1000	102	8.41	
8	55	13C12-4,4'-DDT	2.80e5	9.51e5	1.63	NO	0.280	1.017	40.44	40.50	1.550	1.547	NO	1030	105	14.2	
9	62	13C-PCB-15	9.51e5	9.51e5	1.59	NO	1.00	1.017	26.18	26.13	1.000	1.000	NO	983	100	1.14	

Dataset: Untitled

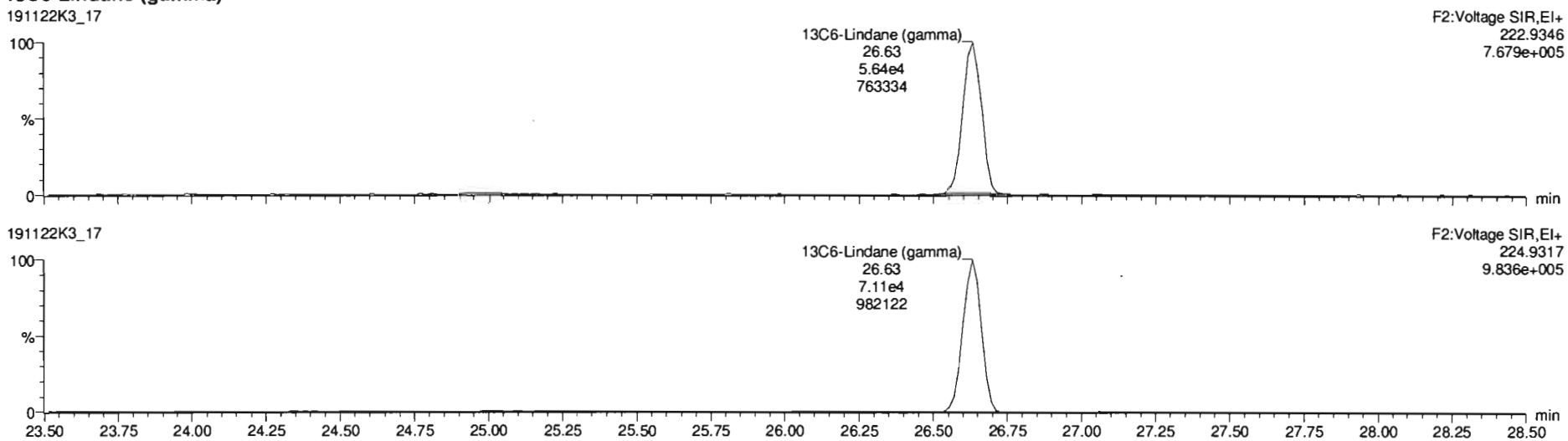
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

Lindane (gamma-BHC)



13C6-Lindane (gamma)

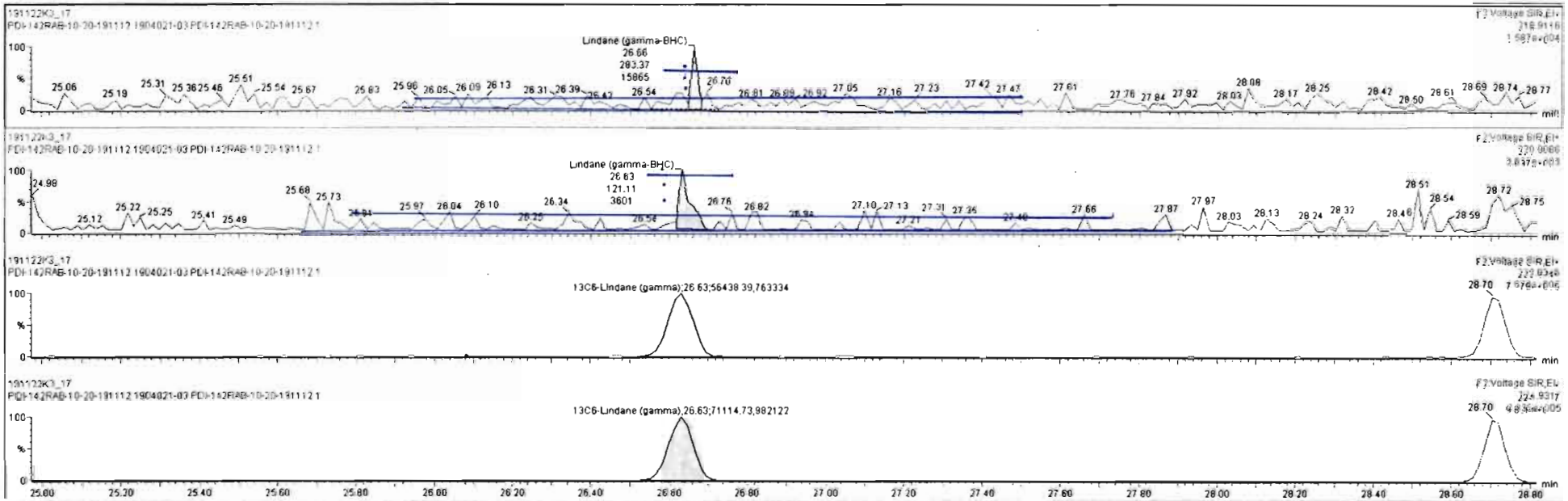


TargetLynx - 191122K3-17.qld * - [Chromatogram]

File Edit View Display Processing Window Help

191122K3_17 - 1904021-03 PDI-142RAB-10-20-191112 1 - PDI-142RAB-10-20-191112

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRT	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.58e4	6.07e5	33	0.17	YES	0.1793	1.017	10.21	10.21	1.000	1.000	NO	1430		4.03	373
2	2	Hexachlorobenzene	7.17e3	4.66e5	34	1.22	NO	0.8743	1.017	22.83	22.83	1.001	1.001	NO	17.3		0.205	17.3
3	3	Alpha-BHC		1.69e5	35		NO	0.7605	1.017	23.40			1.002	YES			4.96	
4	4	Lindane (gamma-BHC)	4.04e2	1.26e5	36	2.34	NO	0.7444	1.017	26.66	26.66	1.001	1.001	NO	4.19		7.76	4.19
5	5	Beta-BHC		1.04e5	37		NO	0.8960	1.017	28.71			1.000	YES			6.62	
6	6	Delta-BHC		1.13e5	38		NO	0.8374	1.017	30.43			1.001	YES			5.70	
7	7	Heptachlor		7.00e4	39		NO	0.9677	1.017	28.86			1.001	YES			2.86	
8	8	4,4'-DDMU		1.13e5	38		NO	1.2660	1.017	30.33			0.997	YES			6.83	
9	9	Aldrin		9.63e4	40		NO	1.0236	1.017	30.99			1.001	YES			2.87	
10	10	Oxychlordane		2.44e4	41		NO	0.9924	1.017	33.59			1.001	YES			11.4	
11	11	cis-Heptachlor Epoxide		2.67e4	42		NO	1.0028	1.017	34.39			1.001	YES			9.17	
12	12	trans-Heptachlor Epoxide		2.67e4	42		NO	0.2550	1.017	34.88			1.015	YES			36.1	
13	13	trans-Chlordane (gamm...		2.29e4	43		NO	1.0836	1.017	35.30			1.001	YES			9.32	
14	14	trans-Nonachlor		2.47e4	44		NO	1.0022	1.017	35.49			1.001	YES			9.27	
15	15	cis-Chlordane		2.47e4	44		NO	0.9810	1.017	35.97			1.014	YES			9.47	
16	16	Endosulfan I (alpha)		1.58e4	45		NO	1.1062	1.017	36.07			1.001	YES			12.1	
17	17	4,4'-DDMU	7.85e3	6.33e5	46	3.58	NO	0.6167	1.017	35.74	35.74	0.994	0.994	NO	19.8		2.74	19.8



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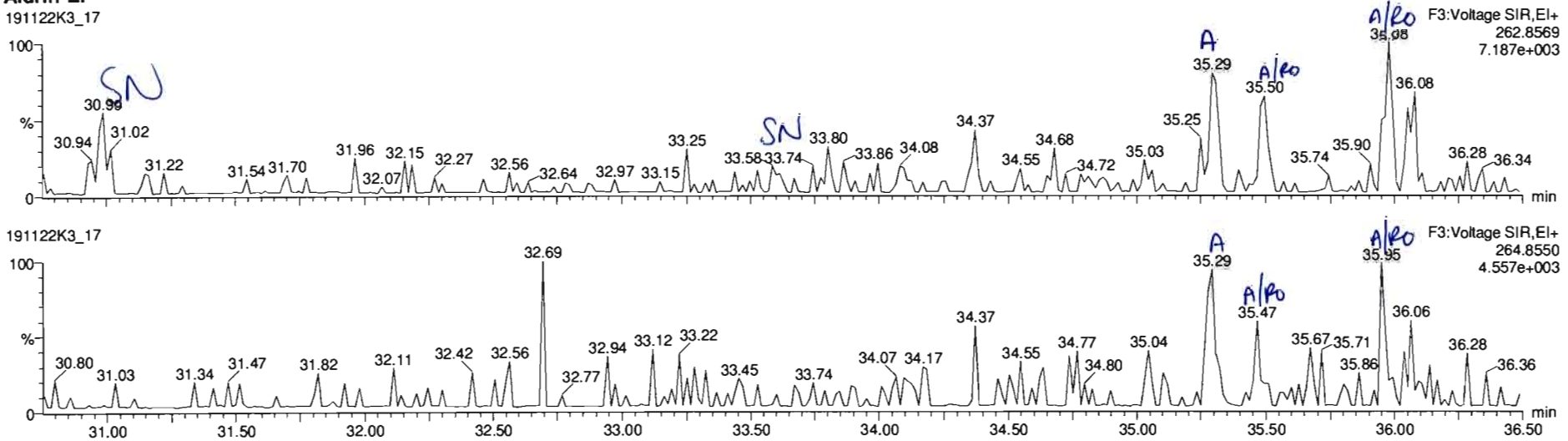
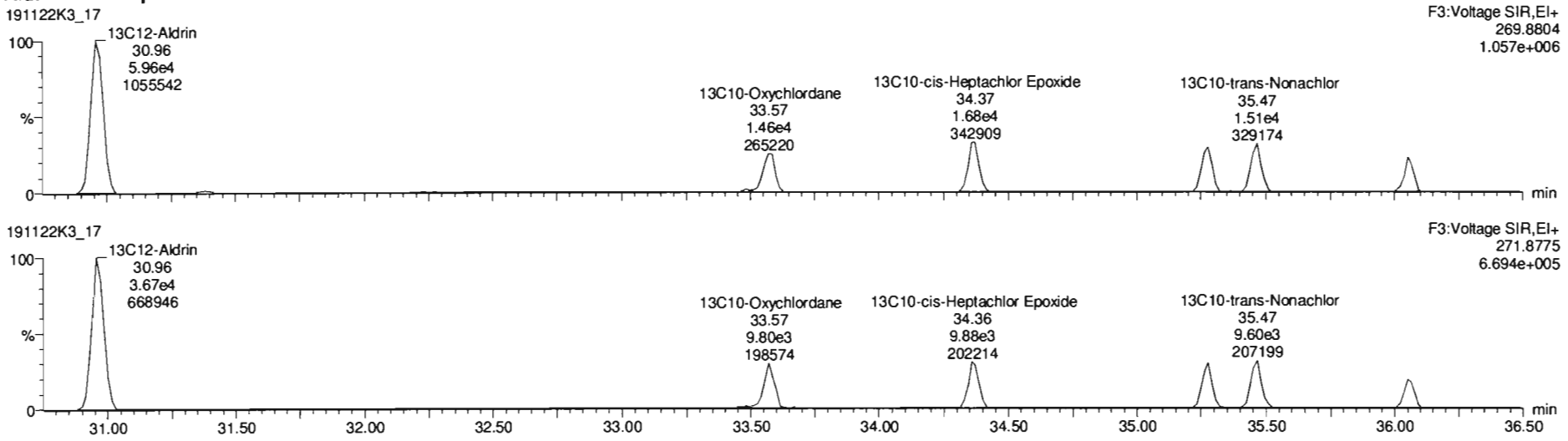
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

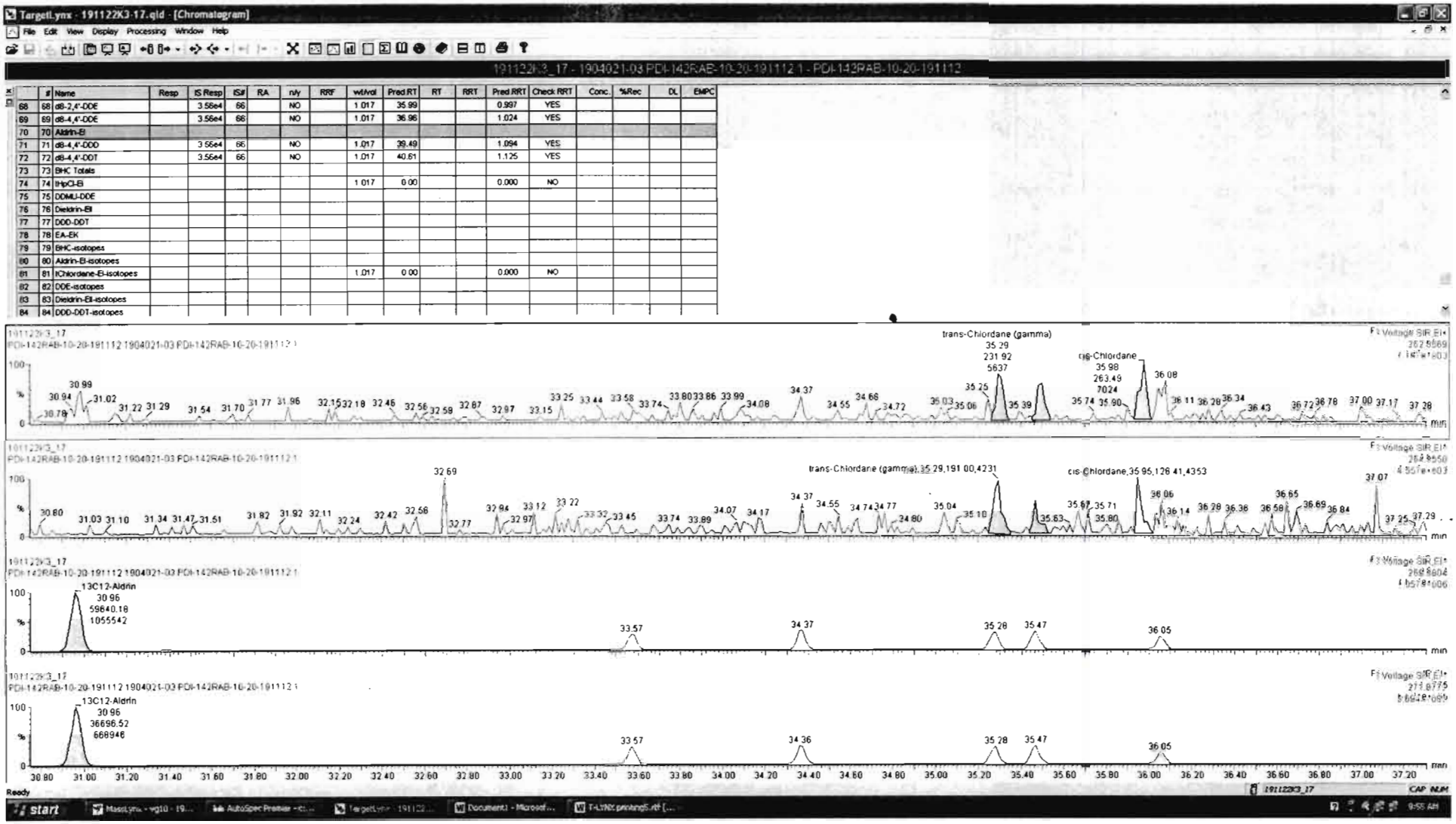
Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

Aldrin-EI



Aldrin-EI-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
68	68	d8-2,4'-DDE		3.56e4	66		NO		1.017	35.99			0.997	YES				
69	69	d8-4,4'-DDE		3.56e4	66		NO		1.017	36.96			1.024	YES				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD		3.56e4	66		NO		1.017	39.49			1.094	YES				
72	72	d8-4,4'-DDT		3.56e4	66		NO		1.017	40.61			1.125	YES				
73	73	BHC Totals																
74	74	tripCl-EI							1.017	0.00			0.000	NO				
75	75	DDMU-DDE																
76	76	Dieldrin-EI																
77	77	DDD-DDT																
78	78	EA-EK																
79	79	BHC-isotopes																
80	80	Aldrin-EI-isotopes																
81	81	tChlordane-EI-isotopes							1.017	0.00			0.000	NO				
82	82	DDE-isotopes																
83	83	Dieldrin-EI-isotopes																
84	84	DDD-DDT-isotopes																

Dataset: Untitled

Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
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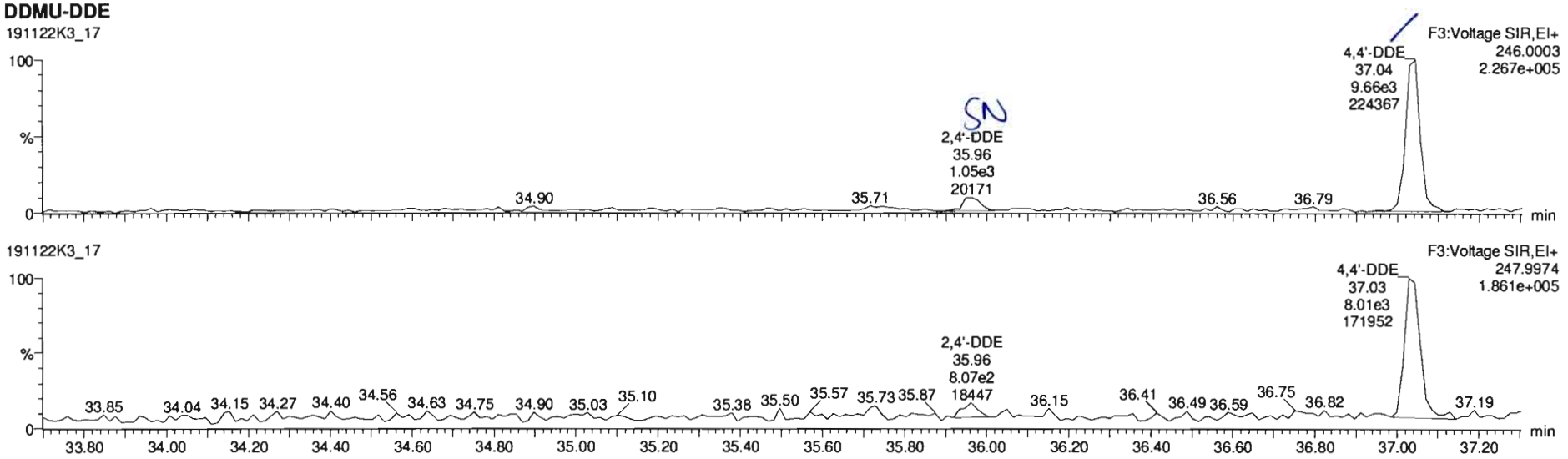
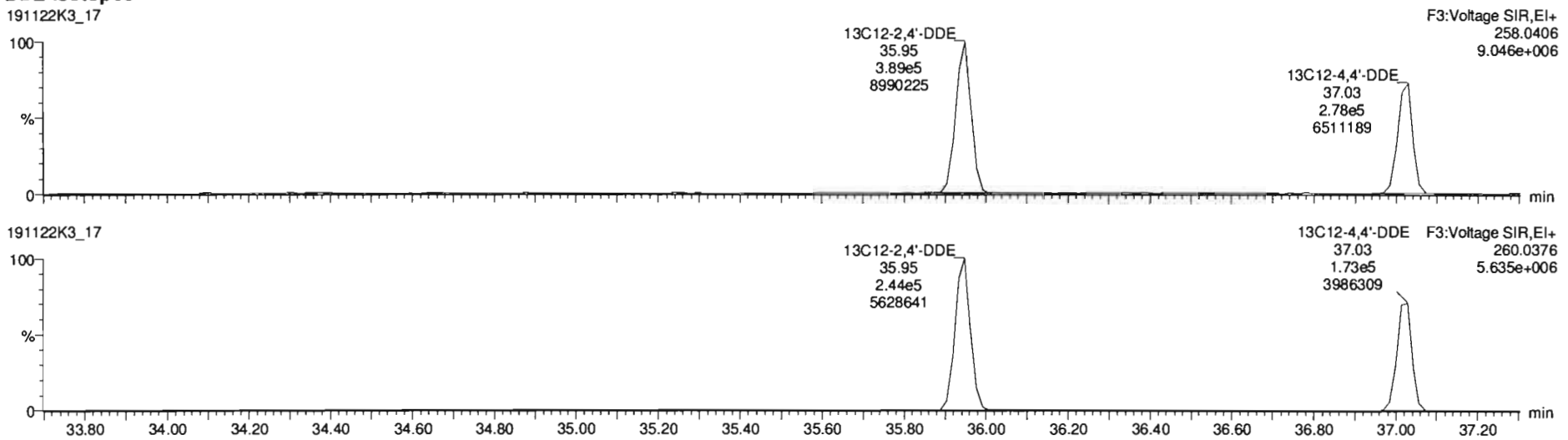
Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

DDMU-DDE



DDE-isotopes

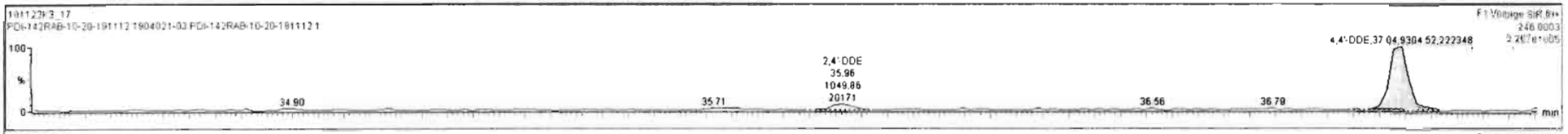


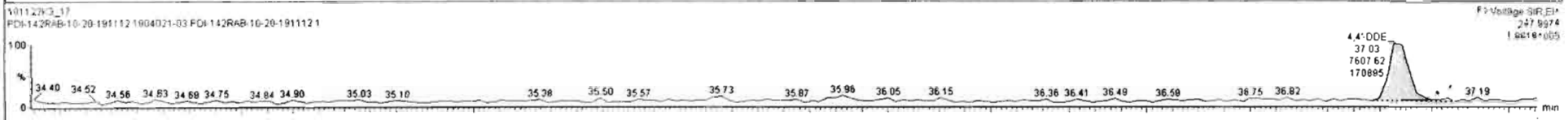
TargetLynx - 191122K3-17.qld - [Chromatogram]

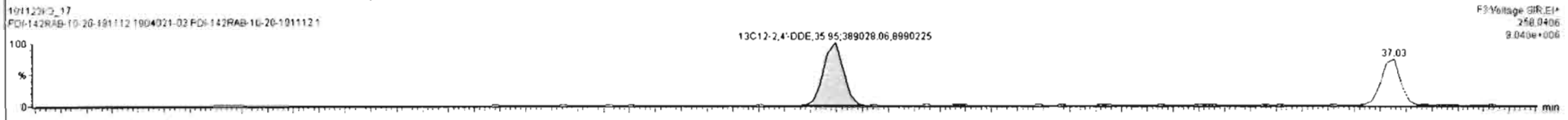
File Edit View Display Processing Window Help

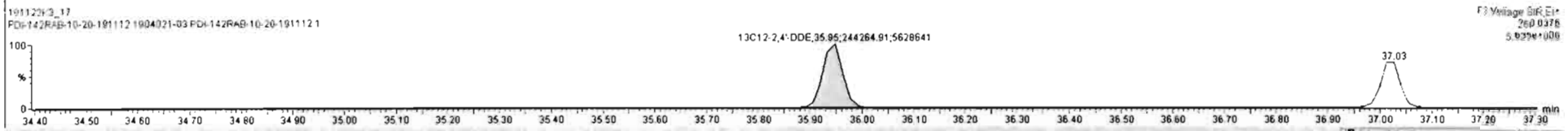
191122K3_17 - 1904021-03 PDI-142RAB-10-20-191112 1 - PDI-142RAB-10-20-191112

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
59	59	13C12-Endrin Aldehyde	6.85e4	9.51e5	62	0.49	NO	0.0345	1.017	41.06	41.07	1.138	1.138	NO	2050	20.9	40.7	
60	60	13C12-Endrin Ketone	1.08e5	9.51e5	62	0.48	NO	0.0222	1.017	44.22	44.22	1.225	1.225	NO	5040	51.2	63.2	
61	61	13C-PCB-52	2.80e5	2.80e5	61	0.73	NO	1.0000	1.017	31.45	31.42	1.000	1.000	NO	983	100	3.26	
62	62	13C-PCB-15	9.51e5	9.51e5	62	1.59	NO	1.0000	1.017	26.18	26.13	1.000	1.000	NO	983	100	1.14	
63	63	13C-PCB-80	4.05e5	4.05e5	63	0.75	NO	1.0000	1.017	36.12	36.09	1.000	1.000	NO	983	100	1.82	
64	64	13C-PCB-123	2.70e5	2.70e5	64	1.38	NO	1.0000	1.017	38.37	38.34	1.000	1.000	NO	983	100	3.53	
65	65	13C-PCB-138	1.67e5	1.67e5	65	1.27	NO	1.0000	1.017	40.61	40.58	1.000	1.000	NO	983	100	1.71	
66	66	13C-Chlordene	3.56e4	3.56e4	66	1.58	NO	1.0000	1.017	25.01	24.98	1.000	1.000	NO	983	100	7.22	
67	67	13C-PARLAR 39	6.06e4	6.06e4	67	0.81	NO	1.0000	1.017	40.58	40.56	1.000	1.000	NO	983	100	30.1	
68	68	d8-2,4'-DDE		3.56e4	66		NO		1.017	35.99			0.997	YES				
69	69	d8-4,4'-DDE		3.56e4	66		NO		1.017	36.96			1.024	YES				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD		3.56e4	66		NO		1.017	39.49			1.094	YES				
72	72	d8-4,4'-DDT		3.56e4	66		NO		1.017	40.61			1.125	YES				
73	73	BHC Totals																
74	74	thpCl-EI							1.017	0.00			0.000	NO				
75	75	DDMU-DDE																









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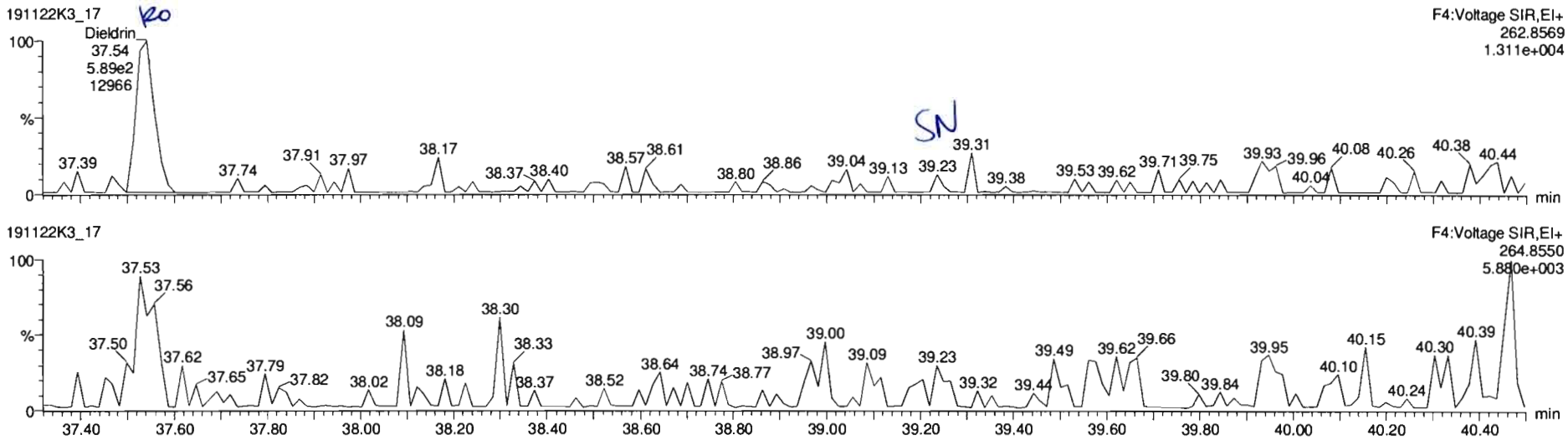
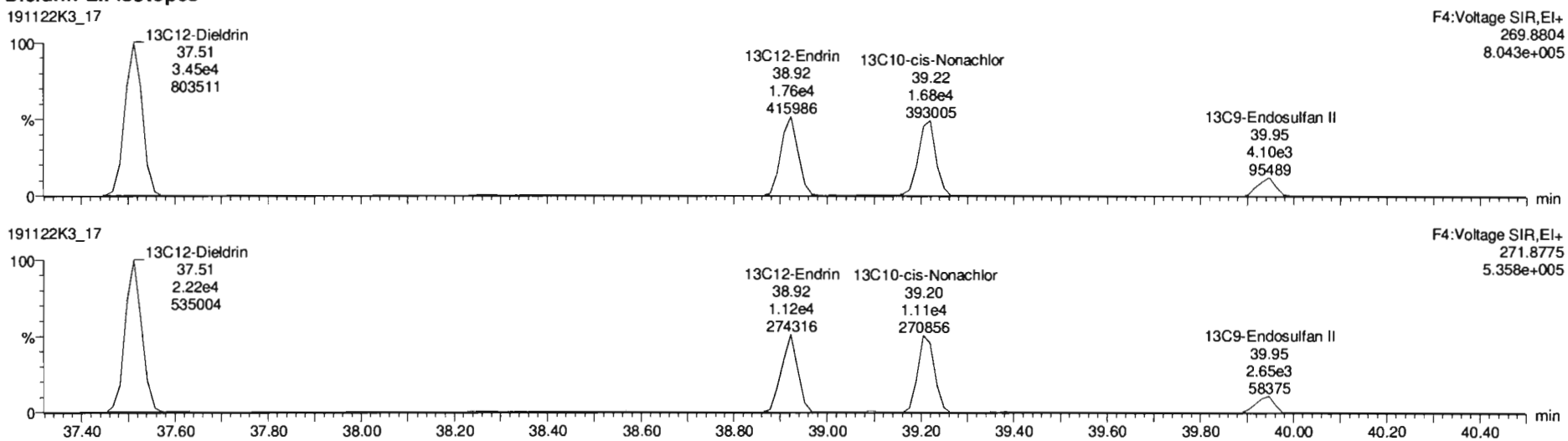
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

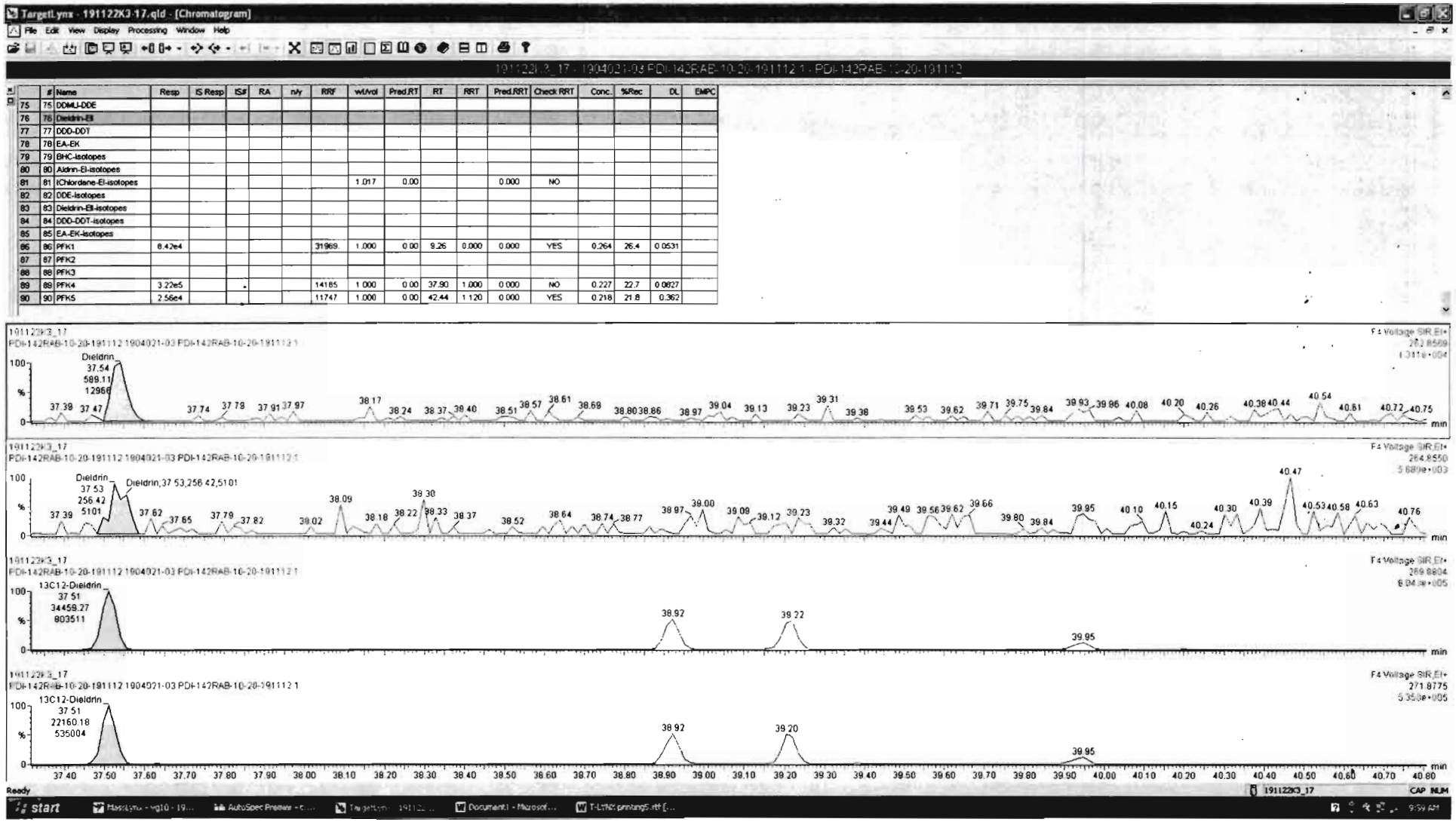
Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

Dieldrin-EII



Dieldrin-EII-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
75	75	DDMU-DDE																
76	76	Dieldrin-EI																
77	77	DDD-DDT																
78	78	EA-EK																
79	79	BHC-Isotopes																
80	80	Aldrin-EI-isotopes																
81	81	tChlordane-EI-isotopes							1.017	0.00			0.000	NO				
82	82	DDE-Isotopes																
83	83	Dieldrin-EI-isotopes																
84	84	DDD-DDT-isotopes																
85	85	EA-EK-isotopes																
86	86	PFK1	8.42e4					31969.	1.000	0.00	9.26	0.000	0.000	YES	0.264	26.4	0.0531	
87	87	PFK2																
88	88	PFK3																
89	89	PFK4	3.22e5					14185	1.000	0.00	37.90	1.000	0.000	NO	0.227	22.7	0.0827	
90	90	PFK5	2.56e4					11747	1.000	0.00	42.44	1.120	0.000	YES	0.218	21.8	0.362	

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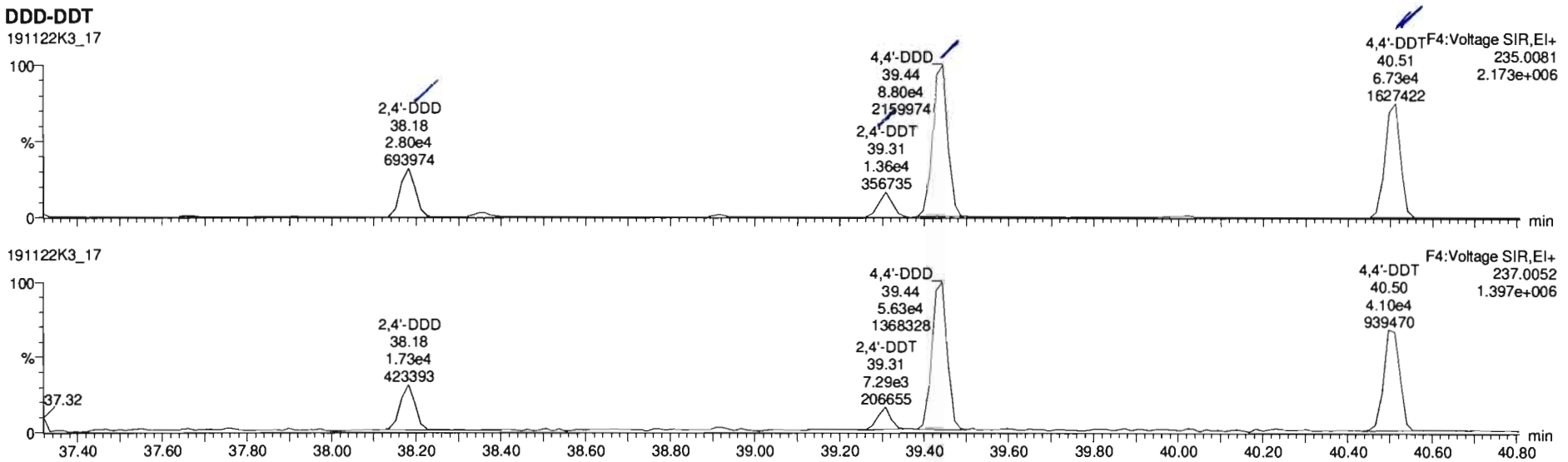
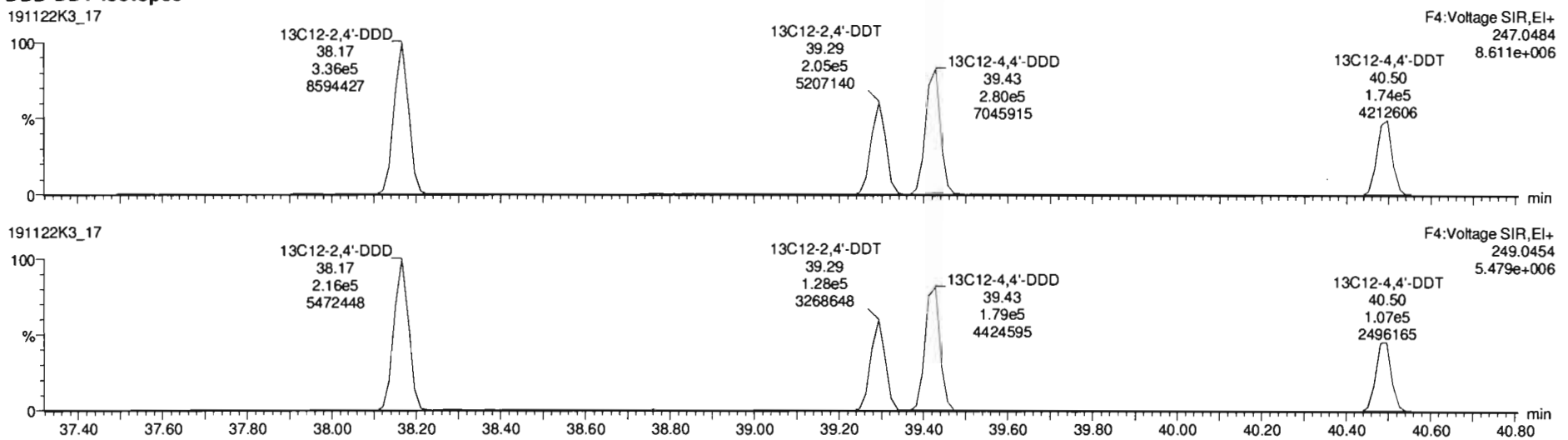
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

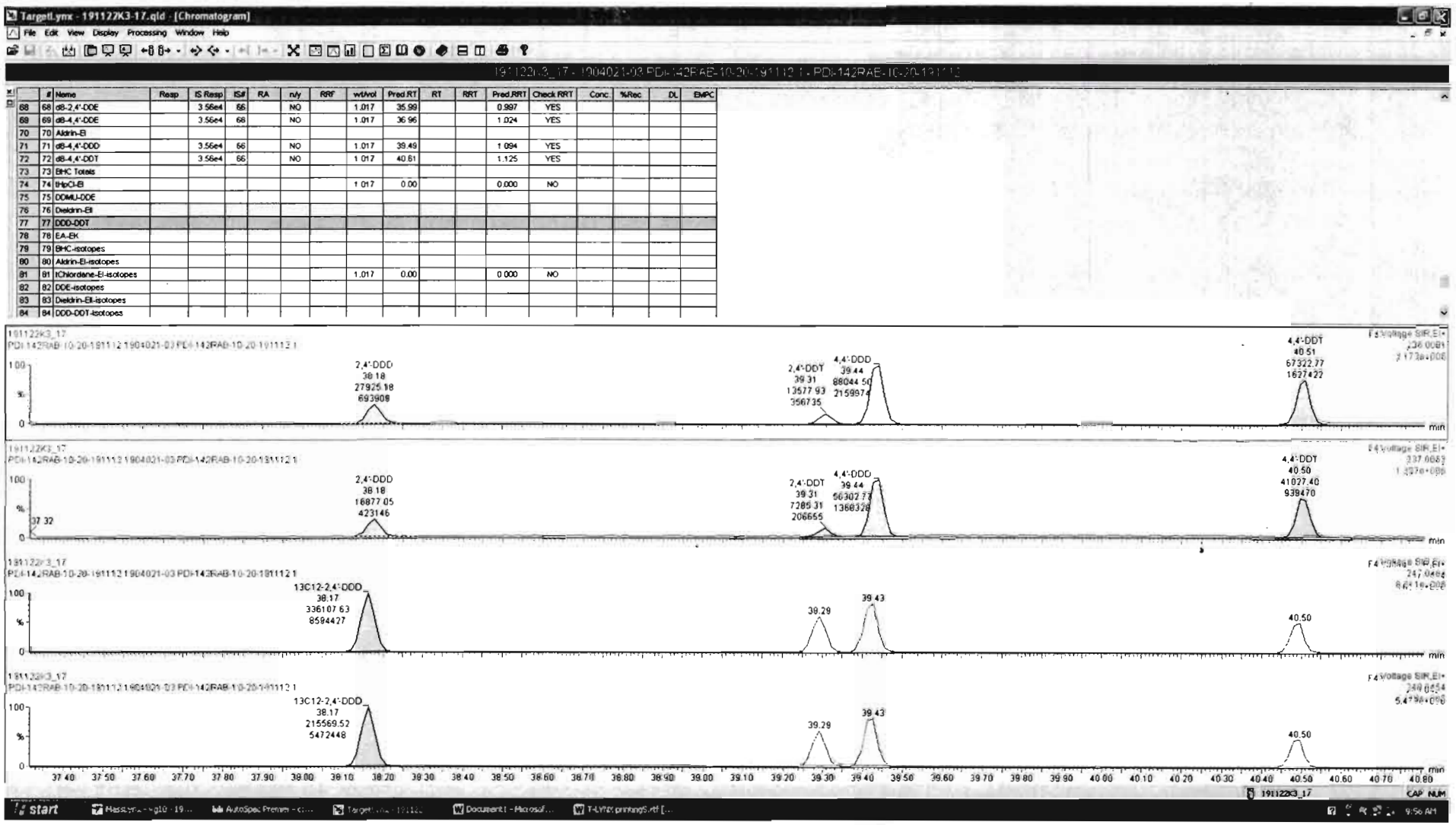
Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

DDD-DDT



DDD-DDT-isotopes



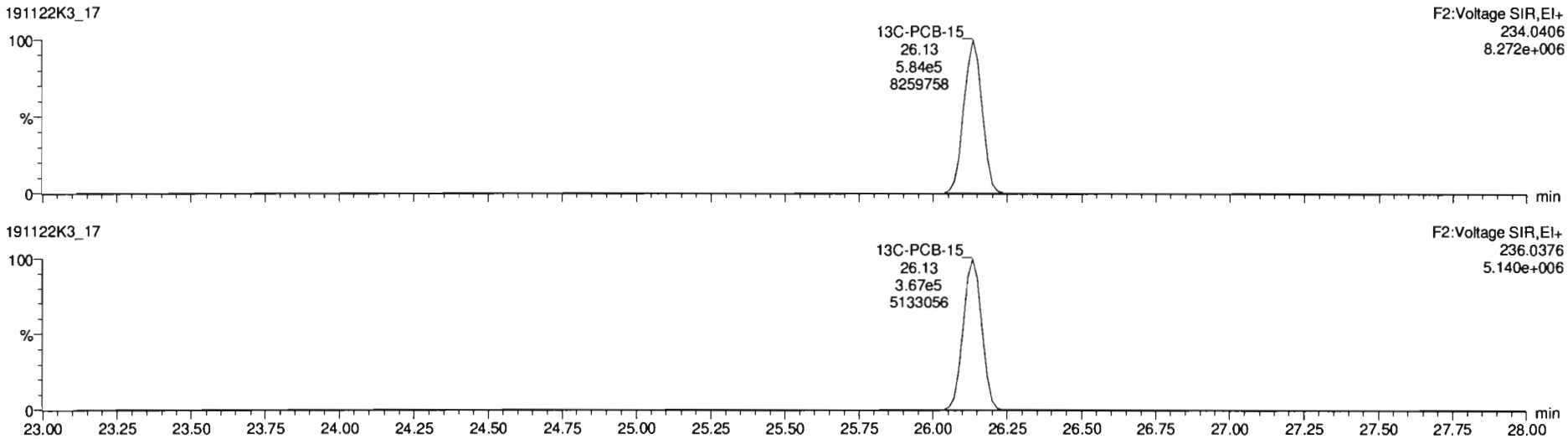

TargetLynx - 191122K3-17.qld - [Chromatogram]
File Edit View Display Processing Window Help
191122K3_17 - 1904021-03 PDI-142RAE-10-20-191112 1 - PDI-142RAE-10-20-191112 1
Name Resp IS Resp IS# RA n/y RRF wt/vol Pred RT RT RRT Pred RRT Check RRT Conc. %Rec DL EMPC
68 68 d8-2,4'-DDE 3.56e4 66 NO 1.017 35.99 0.997 YES
69 69 d8-4,4'-DDE 3.56e4 66 NO 1.017 36.96 1.024 YES
70 70 Aldrin-EI
71 71 d8-4,4'-DDD 3.56e4 66 NO 1.017 39.49 1.094 YES
72 72 d8-4,4'-DDT 3.56e4 66 NO 1.017 40.61 1.125 YES
73 73 BHC Totals
74 74 tHpCl-EI 1.017 0.00 0.000 NO
75 75 DDMU-DDE
76 76 Dieldrin-EI
77 77 DDD-DDT
78 78 EA-EK
79 79 BHC-isotopes
80 80 Aldrin-EI-isotopes
81 81 tChlordane-EI-isotopes 1.017 0.00 0.000 NO
82 82 DDE-isotopes
83 83 Dieldrin-EI-isotopes
84 84 DDD-DDT-isotopes
2,4'-DDD 38.18 27925.18 693908
2,4'-DDT 39.31 13577.93 356735
4,4'-DDD 39.44 88044.50 2159974
4,4'-DDT 40.51 67322.77 1627422
37.32
2,4'-DDD 38.18 16877.05 423146
2,4'-DDT 39.31 7285.31 206655
4,4'-DDD 39.44 56302.73 1368328
4,4'-DDT 40.50 41027.40 939470
13C12-2,4'-DDD 38.17 336107.63 8594427
39.29
39.43
40.50
13C12-2,4'-DDD 38.17 215569.52 5472448
39.29
39.43
40.50
min
191122K3_17
CAP NUM
Start
9:56 AM

Dataset: Untitled

Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

13C-PCB-15



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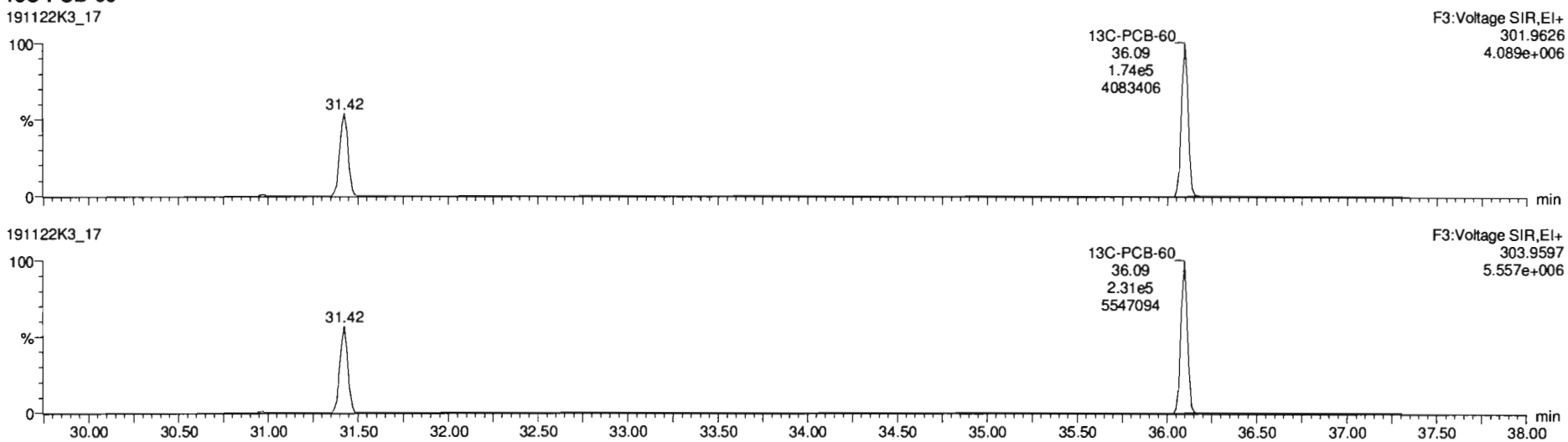

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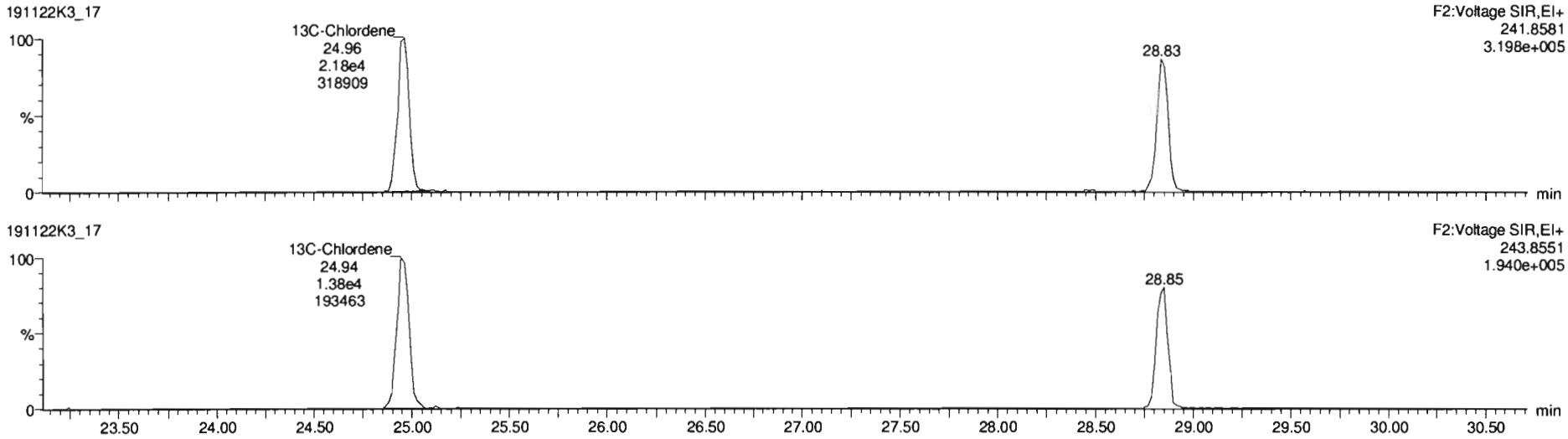
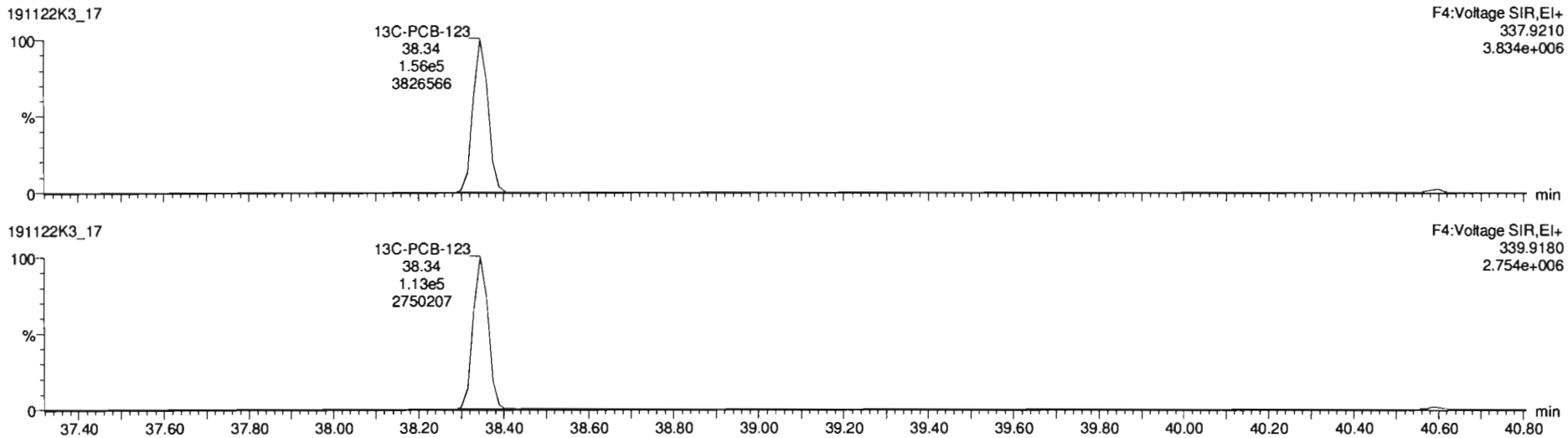
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

13C-Chlordene



13C-PCB-123



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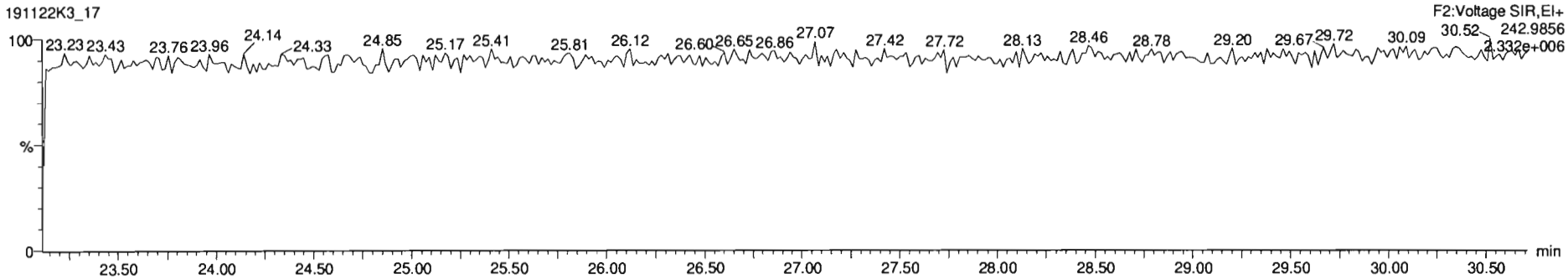
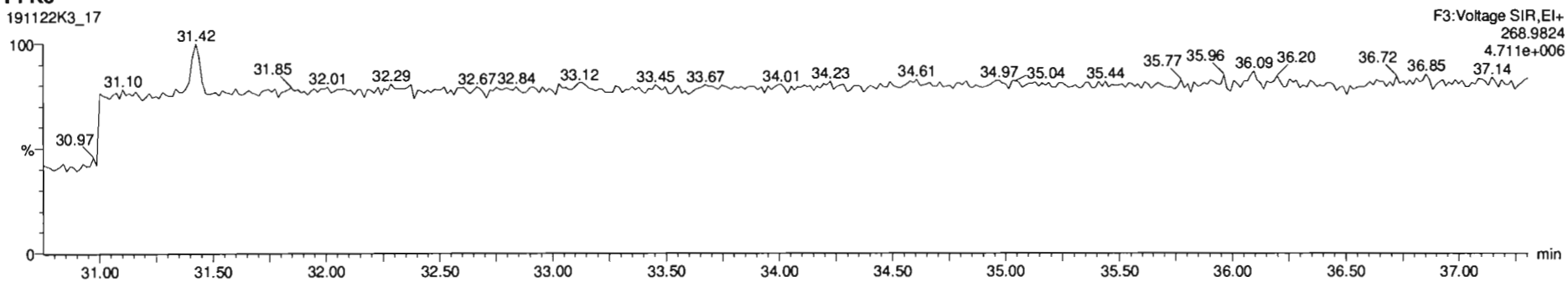
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_17, Date: 23-Nov-2019, Time: 05:11:17, ID: 1904021-03 PDI-142RAB-10-20-191112 1, Description: PDI-142RAB-10-20-191112

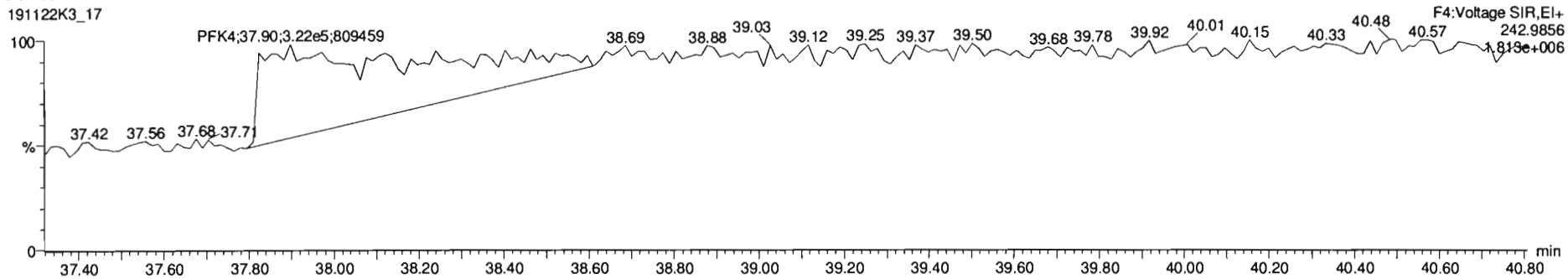
PFK2



PFK3



PFK4



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 12:06:34 Pacific Standard Time
Printed: Monday, February 03, 2020 12:07:27 Pacific Standard Time

kr 2.3.2020 CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4 Lindane (gamma-BHC)		2.29e5		NO	0.869	1.013	26.49			1.001	YES			41.8	
2	9 Aldrin	4.91e2	8.27e4	1.98	YES	1.11	1.013	30.77	30.77	1.001	1.001	NO	26.4		36.2	22.7
3	10 Oxychlordane		4.09e4		NO	1.09	1.013	33.36			1.001	YES			65.1	
4	13 trans-Chlordane (gam...	2.04e3	3.69e4	1.76	NO	1.18	1.013	35.05	35.06	1.001	1.001	NO	232		63.9	232
5	14 trans-Nonachlor	9.82e2	4.35e4	1.61	NO	1.08	1.013	35.24	35.26	1.001	1.001	NO	104		60.7	104
6	15 cis-Chlordane	2.76e3	4.35e4	1.70	NO	1.11	1.013	35.72	35.73	1.014	1.014	NO	283		58.9	283
7	18 2,4'-DDE	1.80e4	9.94e5	1.24	NO	0.984	1.013	35.71	35.72	1.000	1.000	NO	90.8		13.7	90.8
8	19 4,4'-DDE	9.83e4	7.39e5	1.32	NO	0.996	1.013	36.80	36.80	1.000	1.000	NO	659		18.4	659
9	20 Dieldrin	4.10e3	8.95e4	1.63	NO	1.09	1.013	37.30	37.30	1.000	1.000	NO	207		47.1	207
10	22 cis-Nonachlor		4.72e4		NO	1.08	1.013	38.97			1.000	YES			75.3	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 12:06:34 Pacific Standard Time
Printed: Monday, February 03, 2020 12:07:33 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24 2,4'-DDD	2.80e5	9.11e5	1.44	NO	1.05	1.013	37.91	37.92	1.000	1.000	NO	1450		24.9	1450
2	25 2,4'-DDT	5.21e4	5.57e5	1.78	NO	1.03	1.013	39.05	39.05	1.000	1.000	NO	448		39.3	448
3	26 4,4'-DDD	9.08e5	7.69e5	1.56	NO	1.12	1.013	39.19	39.18	1.000	1.000	NO	5180		24.8	5180
4	27 4,4'-DDT	1.62e5	4.34e5	1.47	NO	1.13	1.013	40.26	40.25	1.000	1.000	NO	1630		47.2	1630
5	36 13C6-Lindane (gamma)	2.29e5	1.39e6	0.78	NO	0.201	1.013	26.44	26.46	1.019	1.018	NO	4070	82.5	27.9	
6	40 13C12-Aldrin	8.27e4	1.39e6	1.59	NO	0.130	1.013	30.76	30.74	1.184	1.185	NO	2260	45.8	34.9	
7	41 13C10-Oxychlordane	4.09e4	1.39e6	1.69	NO	0.0314	1.013	33.36	33.34	1.284	1.285	NO	4640	94.0	145	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 12:06:34 Pacific Standard Time
Printed: Monday, February 03, 2020 12:07:40 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	43 13C10-trans-Chlordan...	3.69e4	1.39e6	1.60	NO	0.0281	1.013	35.06	35.03	1.349	1.350	NO	4680	94.8	162	
2	44 13C10-trans-Nonachlor	4.35e4	1.39e6	1.69	NO	0.0330	1.013	35.25	35.22	1.357	1.357	NO	4700	95.1	138	
3	46 13C12-2,4'-DDE	9.94e5	1.39e6	1.57	NO	0.765	1.013	35.69	35.70	0.996	0.995	NO	4630	93.7	26.7	
4	47 13C12-4,4'-DDE	7.39e5	1.39e6	1.61	NO	0.556	1.013	36.77	36.78	1.026	1.025	NO	4740	95.9	36.8	
5	48 13C12-Dieldrin	8.95e4	1.39e6	1.60	NO	0.0759	1.013	37.28	37.28	1.040	1.040	NO	4200	85.1	124	
6	50 13C10-cis-Nonachlor	4.72e4	1.39e6	1.56	NO	0.0389	1.013	38.97	38.96	1.086	1.087	NO	4320	87.6	243	
7	52 13C12-2,4'-DDD	9.11e5	1.39e6	1.66	NO	0.754	1.013	37.93	37.91	1.460	1.461	NO	4300	87.1	64.4	
8	53 13C12-2,4'-DDT	5.57e5	1.39e6	1.65	NO	0.519	1.013	39.06	39.03	1.503	1.504	NO	3830	77.5	93.6	
9	54 13C12-4,4'-DDD	7.69e5	1.39e6	1.62	NO	0.662	1.013	39.18	39.17	1.509	1.509	NO	4140	83.8	73.4	
10	55 13C12-4,4'-DDT	4.34e5	1.39e6	1.64	NO	0.419	1.013	40.26	40.24	1.550	1.551	NO	3690	74.7	116	
11	62 13C-PCB-15	1.39e6	1.39e6	1.59	NO	1.00	1.013	25.96	25.96	1.000	1.000	NO	4940	100	12.8	

Vista Analytical Laboratory

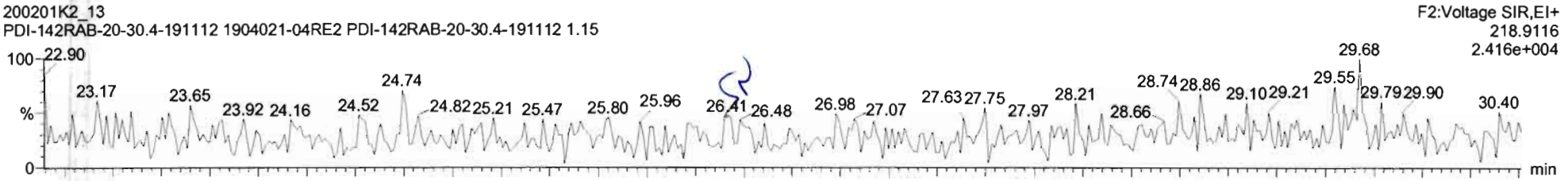
Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

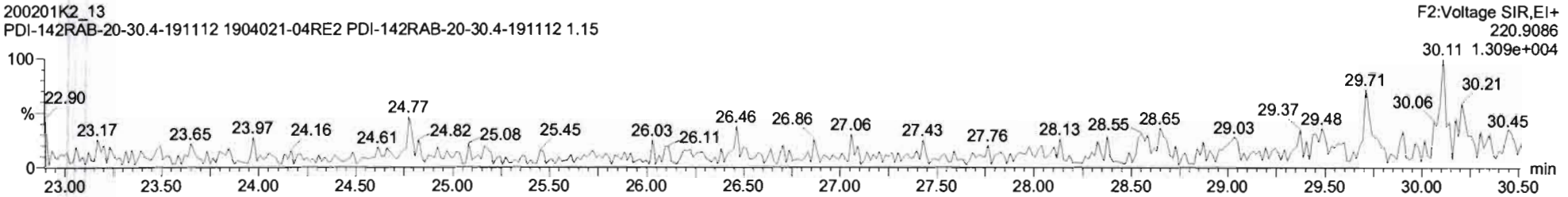
Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
Printed: Monday, February 03, 2020 12:00:53 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

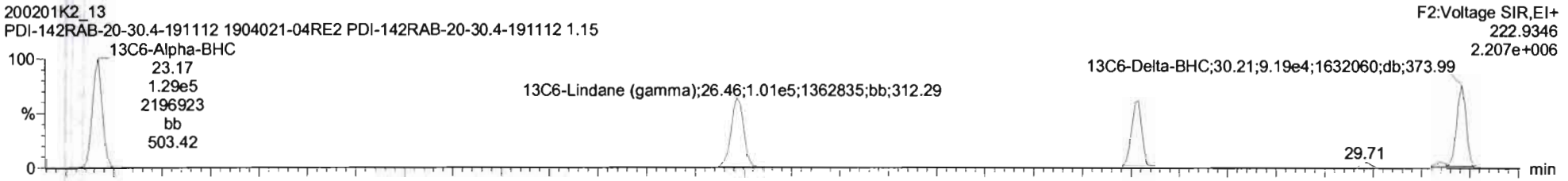
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

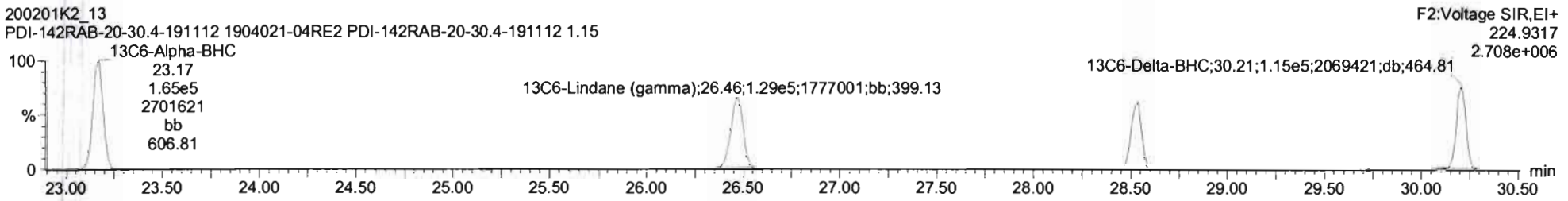
BHC Totals





BHC-isotopes



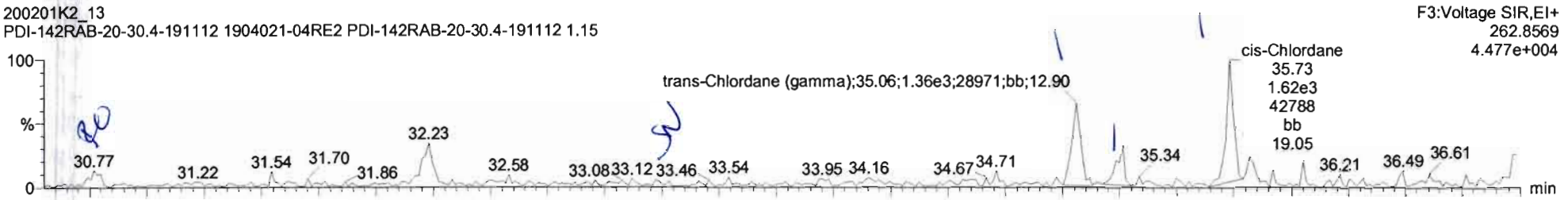


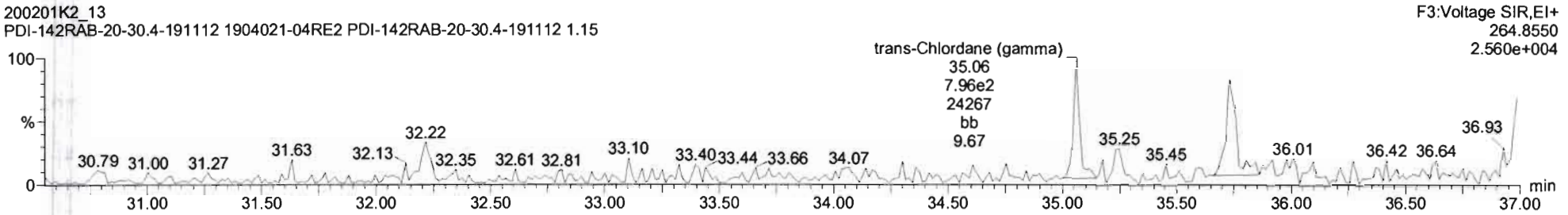
Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
Printed: Monday, February 03, 2020 12:00:53 Pacific Standard Time

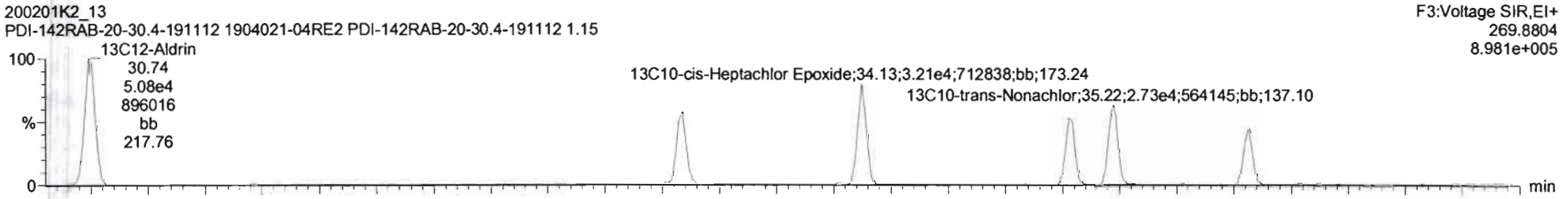
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

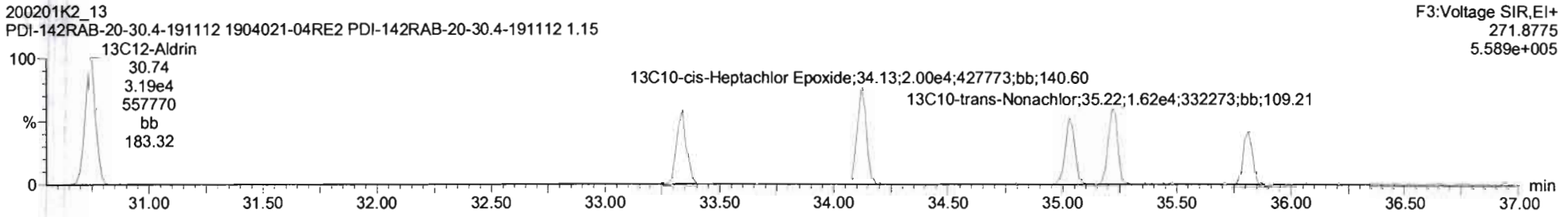
Aldrin-EI





Aldrin-EI-isotopes

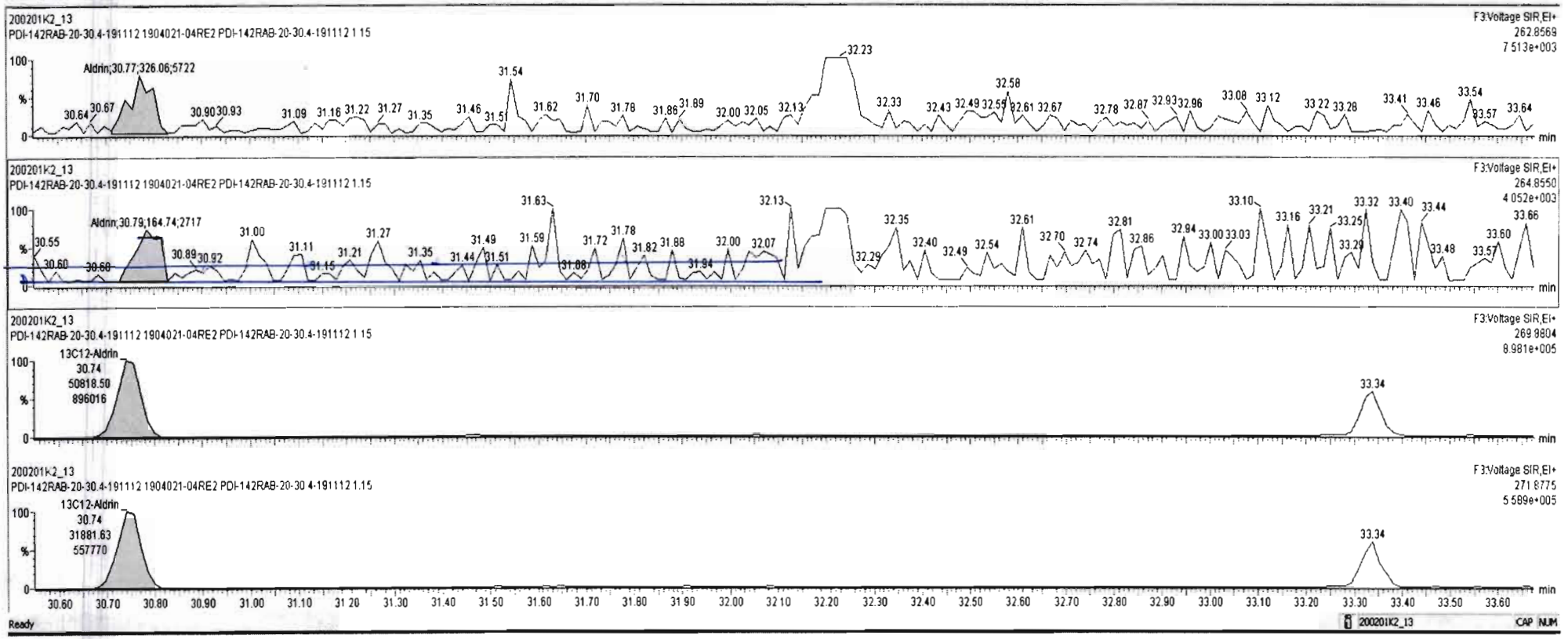




TargetLynx - 200201K2 13.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.30e6	33	0.14	YES	0.0339	1.013	9.98	9.98	1.000	1.000	NO	14100		80.1	3090
2	2	Hexachlorobenzene	1.04e4	8.09e5	34	1.21	NO	0.9969	1.013	22.66	22.65	1.001	1.001	NO	63.8		0.910	63.8
3	3	Alpha-BHC		2.94e5	35		NO	0.8617	1.013	23.21			1.002	YES			26.2	
4	4	Lindane (gamma-BHC)		2.29e5	36		NO	0.8690	1.013	26.49			1.001	YES			41.8	
5	5	Beta-BHC		1.83e5	37		NO	1.0173	1.013	28.54			1.000	YES			37.2	
6	6	Delta-BHC		2.07e5	38		NO	0.9521	1.013	30.23			1.001	YES			32.2	
7	7	Heptachlor		1.48e5	39		NO	1.0787	1.013	28.66			1.001	YES			11.1	
8	8	4,4'-DDMU	1.22e3	2.07e5	38		NO	1.2643	1.013	30.12	30.13	0.997	0.997	NO	23.0		31.8	0.000
9	9	Aldrin	4.91e2	8.27e4	40	1.98	YES	1.1111	1.013	30.77	30.77	1.001	1.001	NO	26.4		36.2	22.7
10	10	Oxychlordane		4.09e4	41		NO	1.0939	1.013	33.36			1.001	YES			65.1	
11	11	cis-Heptachlor Epoxide		5.21e4	42		NO	1.1318	1.013	34.15			1.001	YES			44.8	
12	12	trans-Heptachlor Epoxide		5.21e4	42		NO	0.2603	1.013	34.63			1.015	YES			195	
13	13	trans-Chlordane (gamm...	2.15e3	3.69e4	43	1.70	NO	1.1780	1.013	35.05	35.06	1.001	1.001	NO	245		63.9	245
14	14	trans-Nonachlor	5.77e2	4.35e4	44		NO	1.0766	1.013	35.24	35.26	1.001	1.001	NO	60.9		60.7	0.000
15	15	cis-Chlordane	2.67e3	4.35e4	44	1.56	NO	1.1080	1.013	35.72	35.73	1.014	1.014	NO	273		58.9	273
16	16	Endosulfan I (alpha)		2.89e4	45		NO	1.1552	1.013	35.84			1.001	YES			79.2	
17	17	4,4'-DDMU	3.25e4	9.94e5	46	3.42	NO	0.6758	1.013	35.49	35.50	0.994	0.994	NO	239		22.8	239

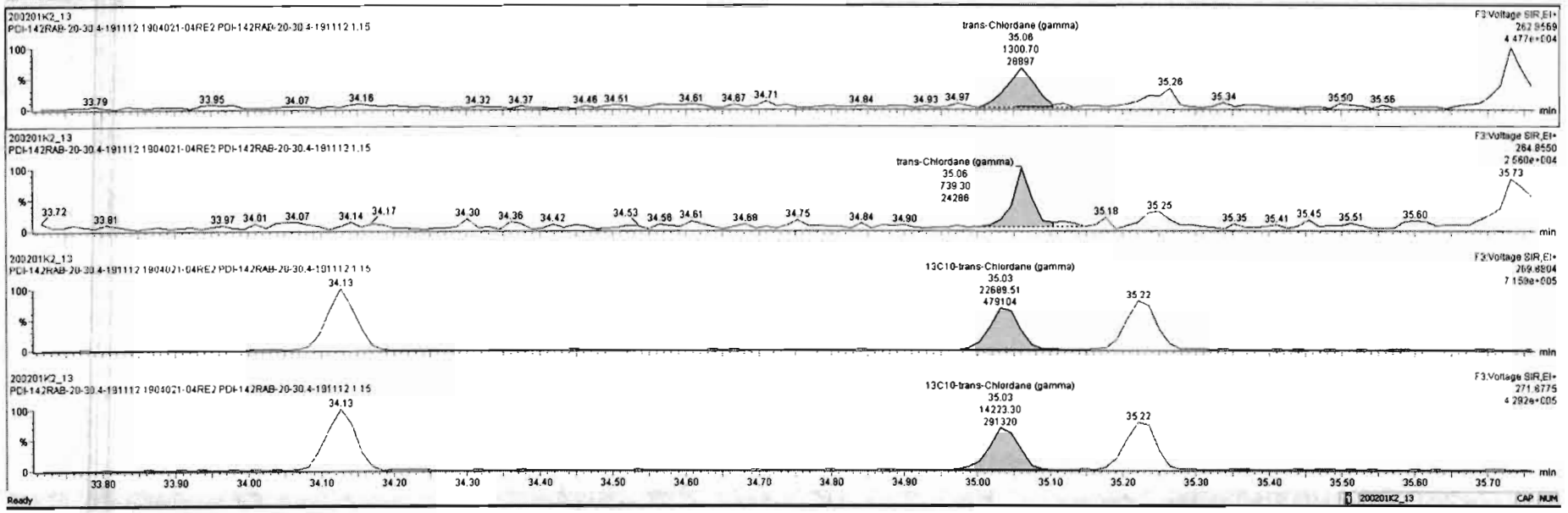


Ready

TargetLynx - 200201K2 13.qld * [Chromatogram]

File Edit View Display Processing Window Help

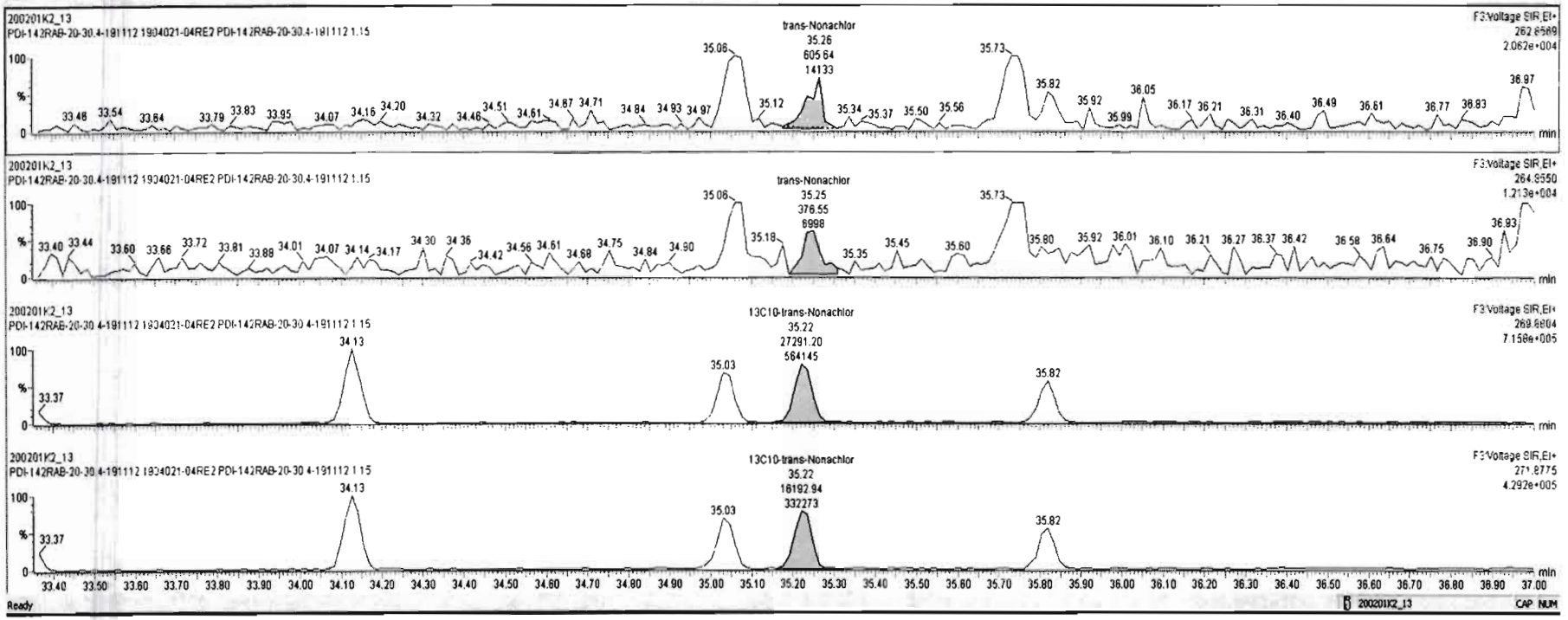
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	w/Vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.30e6	33	0.14	YES	0.0339	1.013	9.98	9.98	1.000	1.000	NO	14100		80.1	3090
2	2	Hexachlorobenzene	1.04e4	8.09e5	34	1.21	NO	0.9969	1.013	22.66	22.65	1.001	1.001	NO	63.8		0.910	63.8
3	3	Alpha-BHC		2.94e5	35		NO	0.8617	1.013	23.21			1.002	YES			26.2	
4	4	Lindane (gamma-BHC)		2.28e5	36		NO	0.8690	1.013	26.49			1.001	YES			41.8	
5	5	Beta-BHC		1.83e5	37		NO	1.0173	1.013	26.54			1.000	YES			37.2	
6	6	Delta-BHC		2.07e5	38		NO	0.9521	1.013	30.23			1.001	YES			32.2	
7	7	Heptachlor		1.48e5	39		NO	1.0787	1.013	28.66			1.001	YES			11.1	
8	8	4,4'-DDNU	1.22e3	2.07e5	38		NO	1.2643	1.013	30.12	30.13	0.997	0.997	NO	23.0		31.8	0.000
9	9	Aldrin	4.91e2	8.27e4	40	1.98	YES	1.1111	1.013	30.77	30.77	1.001	1.001	NO	26.4		36.2	22.7
10	10	Oxychlordane		4.09e4	41		NO	1.0939	1.013	33.36			1.001	YES			65.1	
11	11	cis-Heptachlor Epoxide		5.21e4	42		NO	1.1318	1.013	34.15			1.001	YES			44.8	
12	12	trans-Heptachlor Epoxide		5.21e4	42		NO	0.2603	1.013	34.63			1.015	YES			195	
13	13	trans-Chlordane (gamm	2.04e3	3.69e4	43	1.76	NO	1.1780	1.013	35.05	35.06	1.001	1.001	NO	232		63.9	232
14	14	trans-Nonachlor	5.77e2	4.35e4	44		NO	1.0766	1.013	35.24	35.26	1.001	1.001	NO	60.9		60.7	0.000
15	15	cis-Chlordane	2.67e3	4.35e4	44	1.56	NO	1.1080	1.013	35.72	35.73	1.014	1.014	NO	273		58.9	273
16	16	Endosulfan I (alpha)		2.89e4	45		NO	1.1552	1.013	35.84			1.001	YES			79.2	
17	17	4,4'-DDMU	3.25e4	9.94e5	46	3.42	NO	0.6758	1.013	35.49	35.50	0.994	0.994	NO	239		22.8	239



Target1.ynx - 200201K2-13.qld * - [Chromatogram]

File Edit View Display Processing Window Help

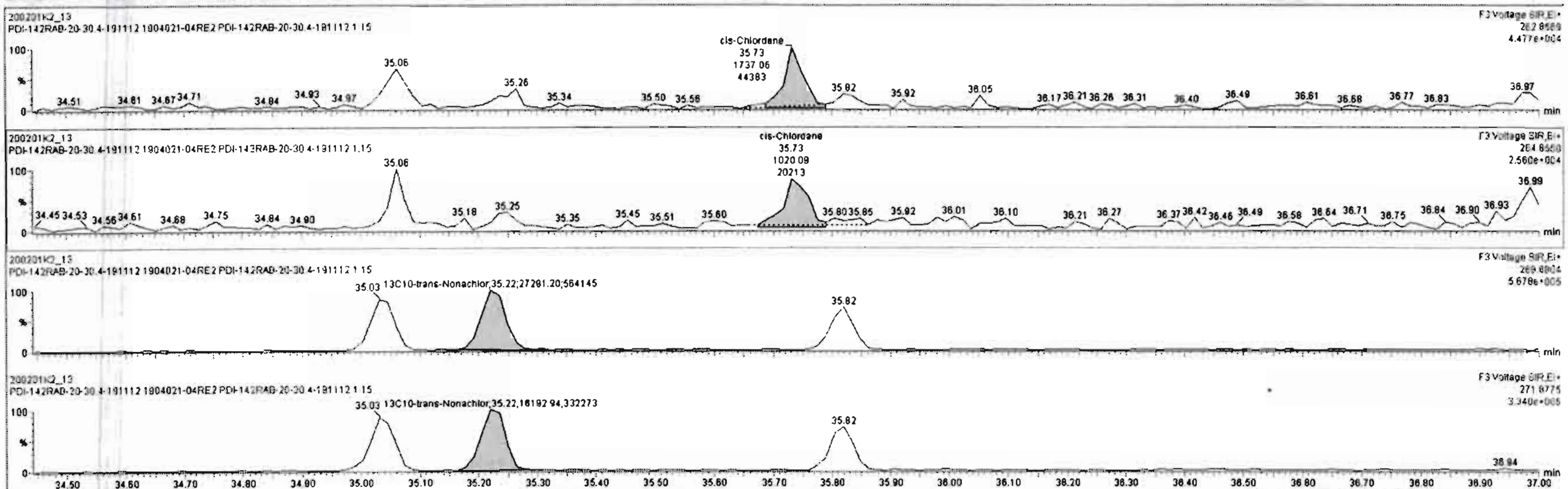
	#	Name	Resp	IS Resp	IS#	RA	rvy	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.30e6	33	0.14	YES	0.0339	1.013	9.98	9.98	1.000	1.000	NO	14100		80.1	3090
2	2	Hexachlorobenzene	1.04e4	8.09e5	34	1.21	NO	0.9969	1.013	22.66	22.65	1.001	1.001	NO	63.8		0.910	63.8
3	3	Alpha-BHC		2.94e5	35		NO	0.8617	1.013	23.21			1.002	YES			26.2	
4	4	Lindane (gamma-BHC)		2.29e5	36		NO	0.8690	1.013	26.49			1.001	YES			41.8	
5	5	Beta-BHC		1.83e5	37		NO	1.0173	1.013	26.54			1.000	YES			37.2	
6	6	Delta-BHC		2.07e5	38		NO	0.9521	1.013	30.23			1.001	YES			32.2	
7	7	Heptachlor		1.48e5	39		NO	1.0787	1.013	28.66			1.001	YES			11.1	
8	8	4,4'-DDMU	1.22e3	2.07e5	38		NO	1.2643	1.013	30.12	30.13	0.997	0.997	NO	23.0		31.8	0.000
9	9	Aldrin	4.91e2	8.27e4	40	1.98	YES	1.1111	1.013	30.77	30.77	1.001	1.001	NO	26.4		36.2	22.7
10	10	Oxychlordane		4.09e4	41		NO	1.0939	1.013	33.36			1.001	YES			65.1	
11	11	cis-Heptachlor Epoxide		5.21e4	42		NO	1.1318	1.013	34.15			1.001	YES			44.8	
12	12	trans-Heptachlor Epoxide		5.21e4	42		NO	0.2603	1.013	34.63			1.015	YES			195	
13	13	trans-Chlordane (gamm...	2.04e3	3.69e4	43	1.76	NO	1.1780	1.013	35.05	35.06	1.001	1.001	NO	232		63.9	232
14	14	trans-Nonachlor	9.82e2	4.35e4	44	1.81	NO	1.0706	1.013	35.24	35.26	1.001	1.001	NO	104		60.7	104
15	15	cis-Chlordane	2.67e3	4.35e4	44	1.56	NO	1.1080	1.013	35.72	35.73	1.014	1.014	NO	273		58.9	273
16	16	Endosulfan I (alpha)		2.89e4	45		NO	1.1552	1.013	35.84			1.001	YES			79.2	
17	17	4,4'-DDMU	3.25e4	9.94e5	46	3.42	NO	0.6758	1.013	35.49	35.50	0.994	0.994	NO	239		22.8	239



TargetLynx - 200201K2-13.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.26e4	1.30e6	33	0.14	YES	0.0339	1.013	9.98	9.98	1.000	1.000	NO	14100		80.1	3090
2	2	Hexachlorobenzene	1.04e4	8.09e5	34	1.21	NO	0.9969	1.013	22.66	22.65	1.001	1.001	NO	63.8		0.910	63.8
3	3	Alpha-BHC		2.84e5	35		NO	0.8617	1.013	23.21			1.002	YES			28.2	
4	4	Lindane (gamma-BHC)		2.29e5	36		NO	0.8690	1.013	26.49			1.001	YES			41.8	
5	5	Beta-BHC		1.83e5	37		NO	1.0173	1.013	28.54			1.000	YES			37.2	
6	6	Delta-BHC		2.07e5	38		NO	0.9521	1.013	30.23			1.001	YES			32.2	
7	7	Heptachlor		1.48e5	39		NO	1.0787	1.013	28.86			1.001	YES			11.1	
8	8	4,4'-DDNU	1.22e3	2.07e5	38		NO	1.2643	1.013	30.12	30.13	0.997	0.997	NO	23.0		31.8	0.000
9	9	Aldrin	4.81e2	8.27e4	40	1.98	YES	1.1111	1.013	30.77	30.77	1.001	1.001	NO	26.4		36.2	22.7
10	10	Oxychlordane		4.09e4	41		NO	1.0939	1.013	33.36			1.001	YES			65.1	
11	11	cis-Heptachlor Epoxide		5.21e4	42		NO	1.1318	1.013	34.15			1.001	YES			44.8	
12	12	trans-Heptachlor Epoxide		5.21e4	42		NO	0.2603	1.013	34.63			1.015	YES			195	
13	13	trans-Chlordane (gamm...	2.04e3	3.89e4	43	1.76	NO	1.1780	1.013	35.05	35.06	1.001	1.001	NO	232		63.9	232
14	14	trans-Nonachlor	9.82e2	4.35e4	44	1.61	NO	1.0766	1.013	35.24	35.26	1.001	1.001	NO	104		60.7	104
15	15	cis-Chlordane	2.76e3	4.35e4	44	1.70	NO	1.1080	1.013	35.72	35.73	1.014	1.014	NO	283		58.9	283
16	16	Endosulfan I (alpha)		2.89e4	45		NO	1.1552	1.013	35.84			1.001	YES			79.2	
17	17	4,4'-DDMU	3.25e4	9.84e5	46	3.42	NO	0.6758	1.013	35.49	35.50	0.994	0.994	NO	239		22.8	239



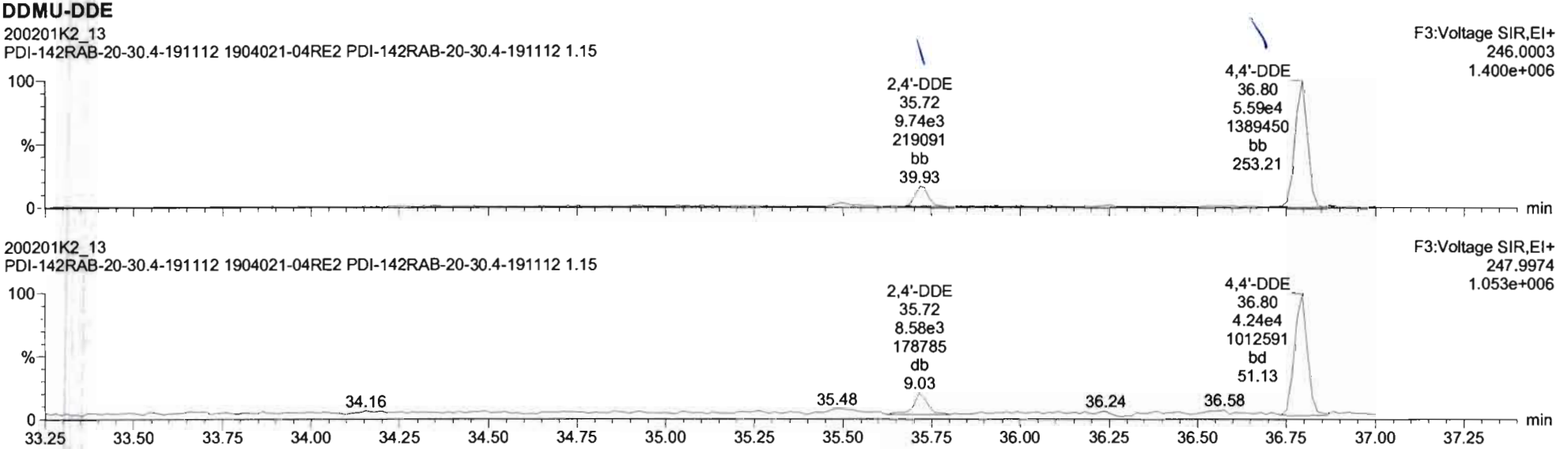
Ready

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

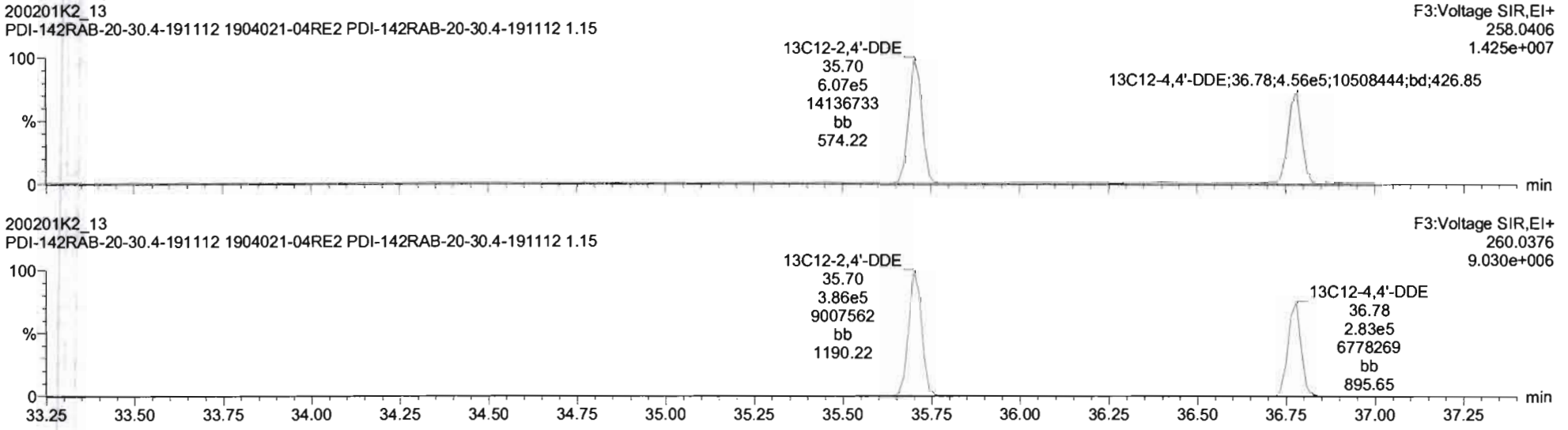
Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
Printed: Monday, February 03, 2020 12:00:53 Pacific Standard Time

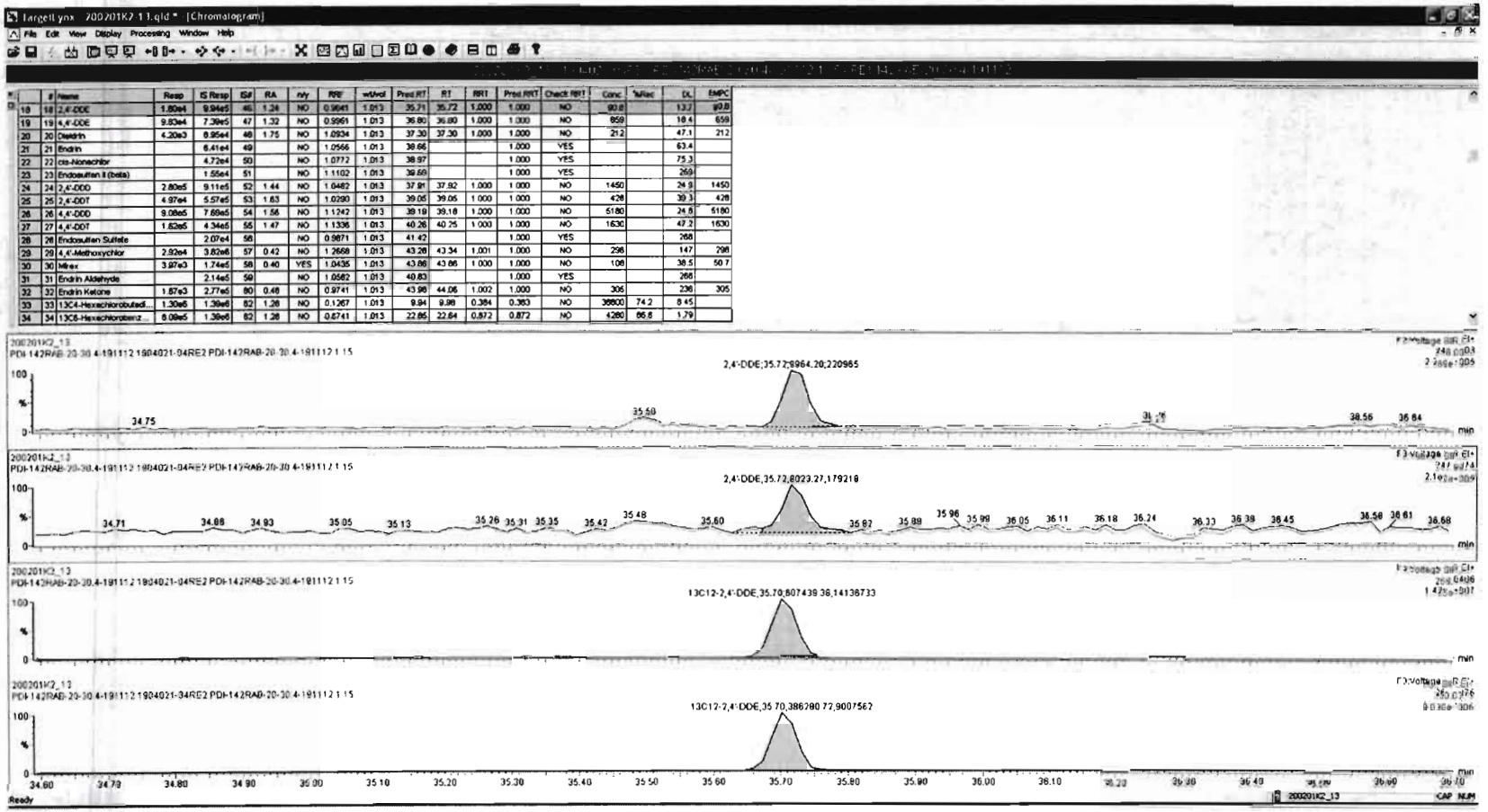
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

DDMU-DDE



DDE-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wdvol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
18	18	2,4'-DDE	1.80e4	9.94e5	46	1.24	NO	0.9641	1.013	35.71	35.72	1.000	1.000	NO	80.8		13.7	80.8
19	19	4,4'-DDE	9.83e4	7.39e5	47	1.32	NO	0.9961	1.013	36.80	36.80	1.000	1.000	NO	659		18.4	659
20	20	Dieldrin	4.20e3	8.95e4	48	1.75	NO	1.0934	1.013	37.30	37.30	1.000	1.000	NO	212		47.1	212
21	21	Endrin		6.41e4	49		NO	1.0566	1.013	38.66			1.000	YES			63.4	
22	22	cis-Nonachlor		4.72e4	50		NO	1.0772	1.013	38.97			1.000	YES			75.3	
23	23	Endosulfan II (beta)		1.55e4	51		NO	1.1102	1.013	39.69			1.000	YES			269	
24	24	2,4'-DDD	2.80e5	9.11e5	52	1.44	NO	1.0482	1.013	37.91	37.92	1.000	1.000	NO	1450		24.9	1450
25	25	2,4'-DDT	4.97e4	5.57e5	53	1.63	NO	1.0290	1.013	39.05	39.05	1.000	1.000	NO	428		39.3	428
26	26	4,4'-DDD	9.08e5	7.69e5	54	1.56	NO	1.1242	1.013	39.19	39.18	1.000	1.000	NO	5180		24.8	5180
27	27	4,4'-DDT	1.82e5	4.34e5	55	1.47	NO	1.1336	1.013	40.26	40.25	1.000	1.000	NO	1630		47.2	1630
28	28	Endosulfan Sulfate		2.07e4	56		NO	0.9871	1.013	41.42			1.000	YES			268	
29	29	4,4'-Methoxychlor	2.92e4	3.82e6	57	0.42	NO	1.2668	1.013	43.28	43.34	1.001	1.000	NO	298		147	298
30	30	Mirex	3.97e3	1.74e5	58	0.40	YES	1.0435	1.013	43.86	43.86	1.000	1.000	NO	108		38.5	50.7
31	31	Endrin Aldehyde		2.14e5	59		NO	1.0582	1.013	40.83			1.000	YES			268	
32	32	Endrin Ketone	1.87e3	2.77e5	60	0.48	NO	0.9741	1.013	43.98	44.06	1.002	1.000	NO	305		236	305
33	33	13C4-Hexechlorobuteadi...	1.30e6	1.39e6	62	1.26	NO	0.1267	1.013	9.94	9.86	0.384	0.383	NO	38800	74.2	8.45	
34	34	13C6-Hexechlorobenz...	8.09e5	1.39e6	62	1.26	NO	0.8741	1.013	22.85	22.84	0.872	0.872	NO	4280	86.8	1.79	

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
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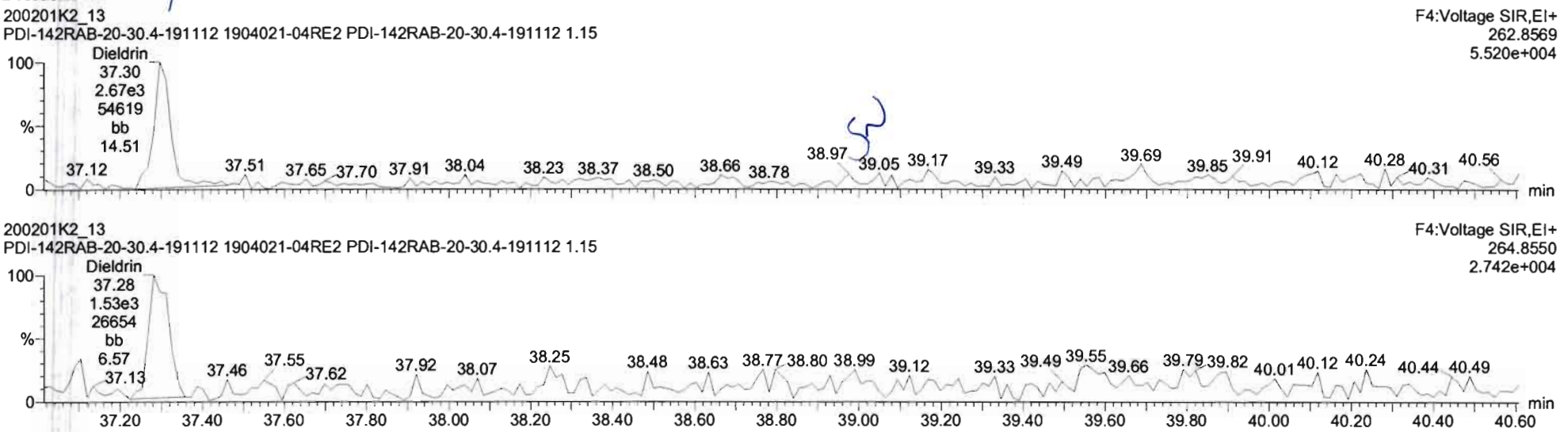
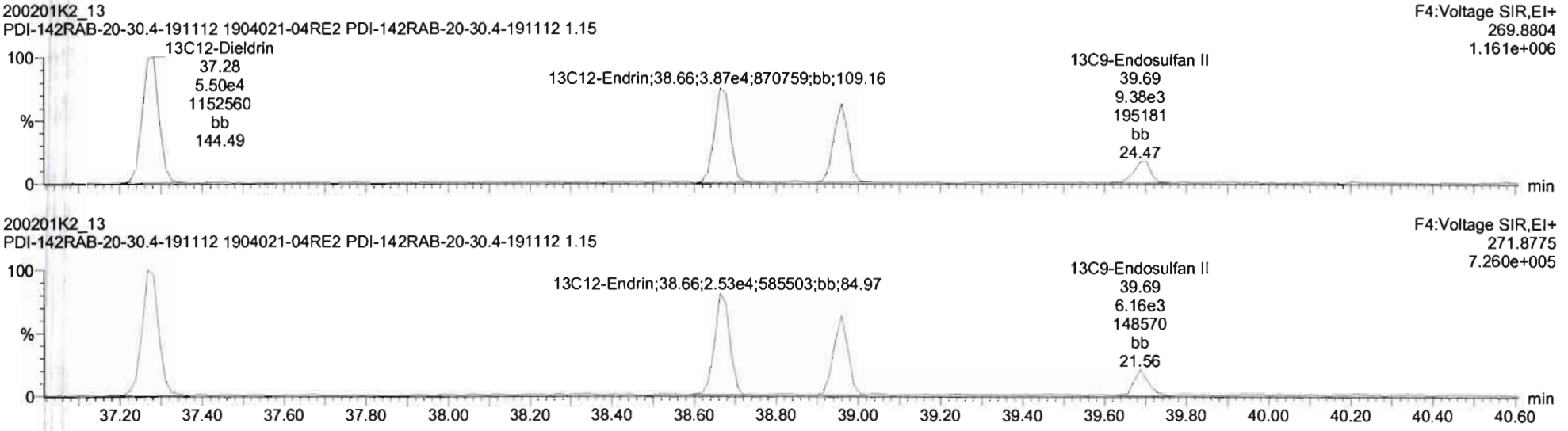
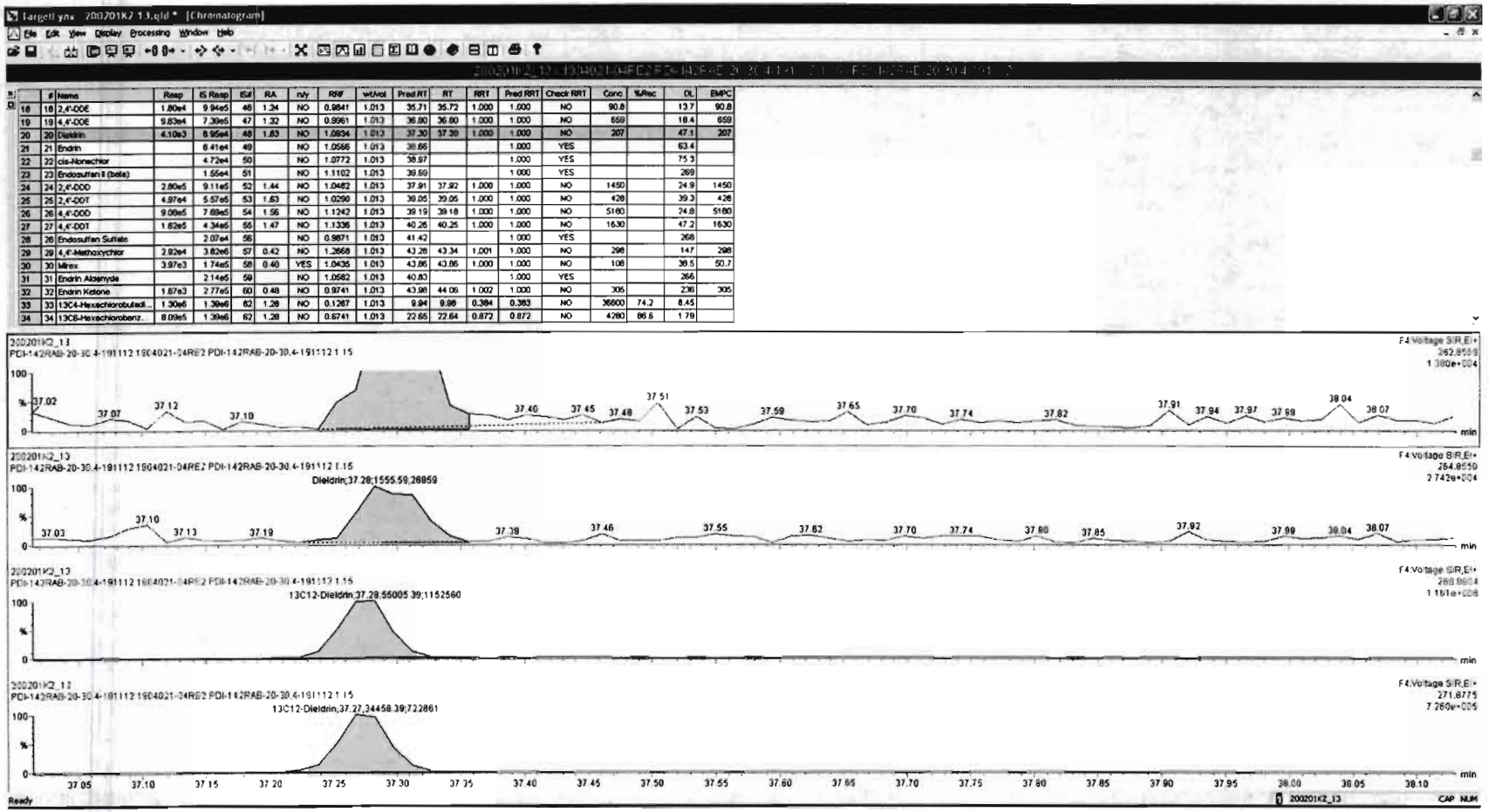
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

Dieldrin-EII



Dieldrin-EII-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/Vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
18	18	2,4'-DDE	1.80e4	9.94e5	46	1.24	NO	0.9841	1.013	35.71	35.72	1.000	1.000	NO	90.8		13.7	90.8
19	19	4,4'-DDE	9.83e4	7.39e5	47	1.32	NO	0.9961	1.013	36.80	36.80	1.000	1.000	NO	659		18.4	659
20	20	Dieldrin	4.10e3	8.95e4	48	1.83	NO	1.0834	1.013	37.30	37.30	1.000	1.000	NO	207		47.1	207
21	21	Endrin		6.41e4	49		NO	1.0566	1.013	38.66			1.000	YES			63.4	
22	22	cis-Nonachlor		4.72e4	50		NO	1.0772	1.013	38.97			1.000	YES			75.3	
23	23	Endosulfan II (beta)		1.55e4	51		NO	1.1102	1.013	39.59			1.000	YES			269	
24	24	2,4'-DDD	2.80e5	9.11e5	52	1.44	NO	1.0482	1.013	37.91	37.92	1.000	1.000	NO	1450		24.9	1450
25	25	2,4'-DDT	4.97e4	5.57e5	53	1.63	NO	1.0290	1.013	39.05	39.05	1.000	1.000	NO	428		39.3	428
26	26	4,4'-DDD	9.06e5	7.69e5	54	1.56	NO	1.1242	1.013	39.19	39.18	1.000	1.000	NO	5160		24.8	5160
27	27	4,4'-DDT	1.82e5	4.34e5	55	1.47	NO	1.1336	1.013	40.26	40.25	1.000	1.000	NO	1630		47.2	1630
28	28	Endosulfan Sulfate		2.07e4	56		NO	0.9871	1.013	41.42			1.000	YES			268	
29	29	4,4'-Methoxychlor	2.92e4	3.82e6	57	0.42	NO	1.2668	1.013	43.26	43.34	1.001	1.000	NO	298		147	298
30	30	Mirex	3.97e3	1.74e5	58	0.40	YES	1.0435	1.013	43.86	43.86	1.000	1.000	NO	108		38.5	50.7
31	31	Endrin Aldehyde		2.14e5	59		NO	1.0582	1.013	40.83			1.000	YES			266	
32	32	Endrin Ketone	1.67e3	2.77e5	60	0.48	NO	0.9741	1.013	43.98	44.06	1.002	1.000	NO	305		236	305
33	33	13C4-Hexachlorobutadi...	1.30e6	1.39e6	62	1.28	NO	0.1267	1.013	9.94	9.98	0.384	0.383	NO	36800	74.2	8.45	
34	34	13C6-Hexachlorobenz.	8.09e5	1.39e6	62	1.28	NO	0.6741	1.013	22.65	22.64	0.872	0.872	NO	4280	86.6	1.79	

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

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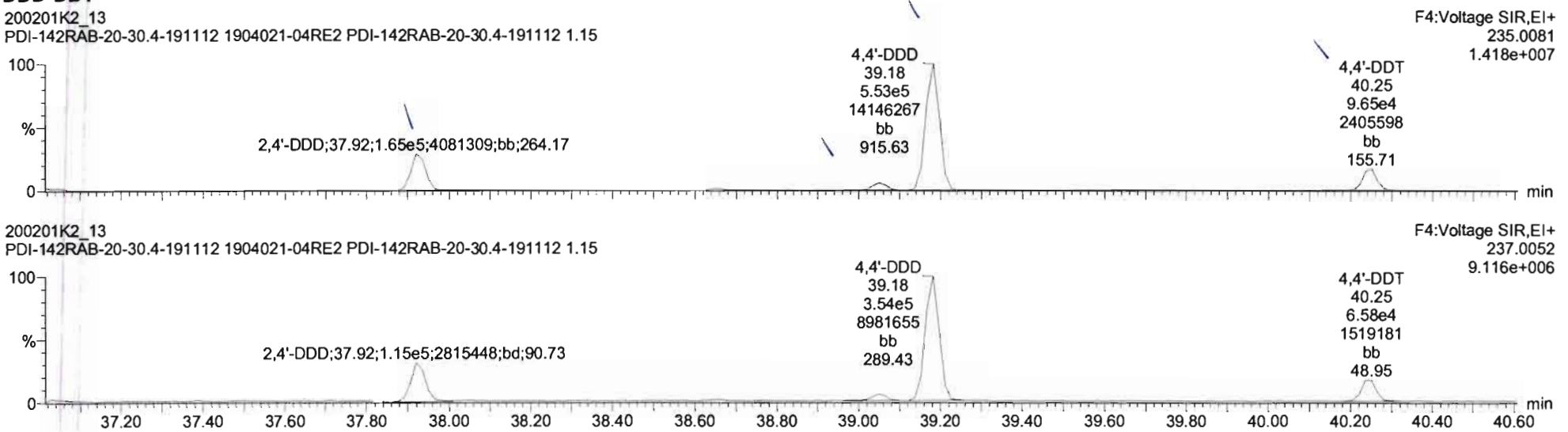
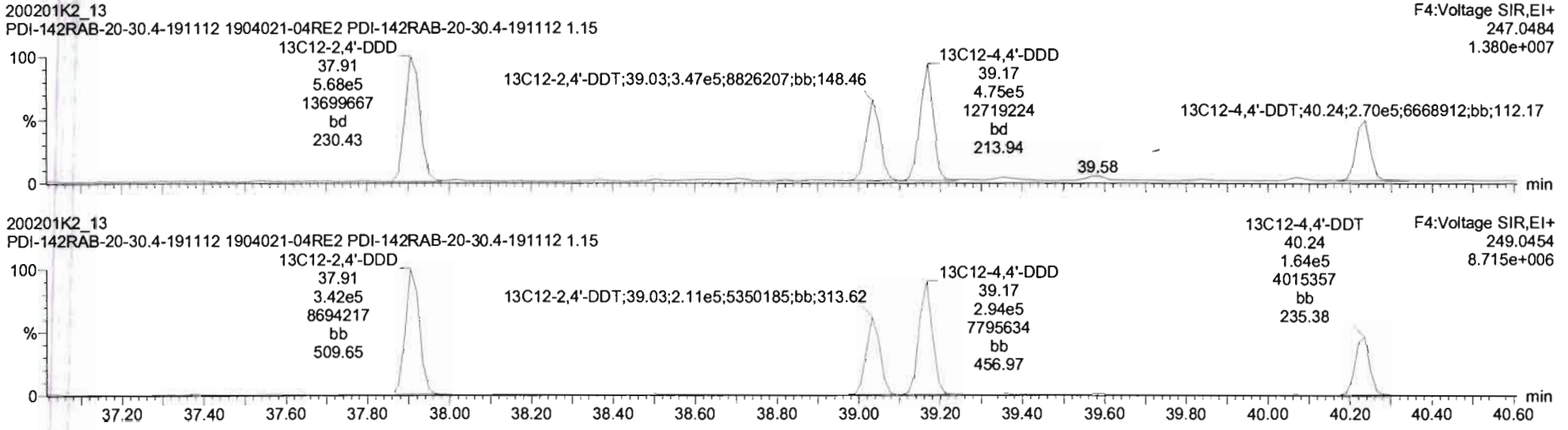
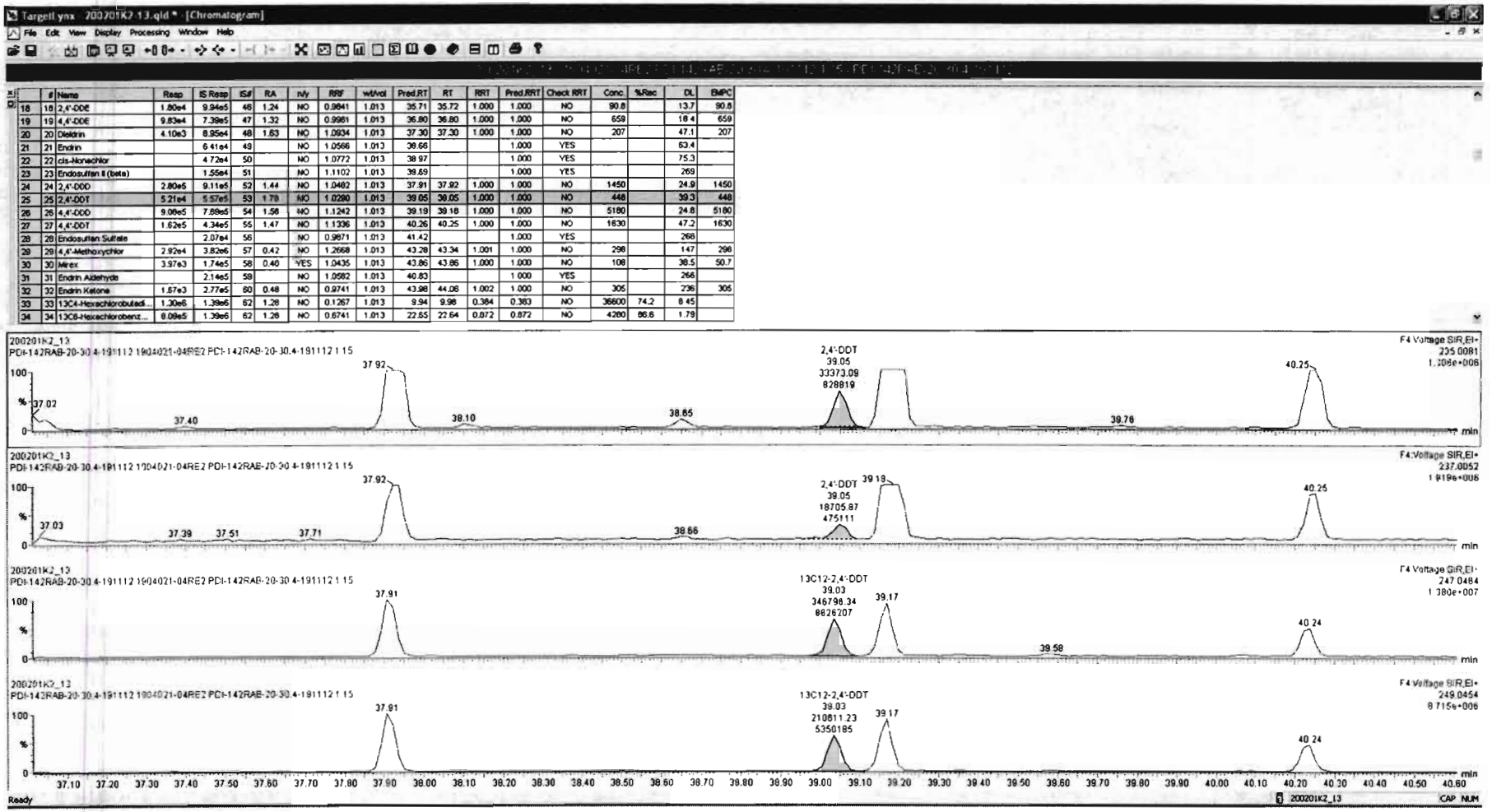
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

DDD-DDT



DDD-DDT-isotopes





	#	Name	Resp	IS Resp	ISR	RA	Qlty	RRF	wtVol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
18	18	2,4'-DDE	1.80e4	9.94e5	46	1.24	NO	0.9841	1.013	35.71	35.72	1.000	1.000	NO	90.8		13.7	90.8
19	19	4,4'-DDE	9.83e4	7.39e5	47	1.32	NO	0.9981	1.013	36.80	36.80	1.000	1.000	NO	659		18.4	659
20	20	Dieldrin	4.10e3	8.95e4	48	1.63	NO	1.0934	1.013	37.30	37.30	1.000	1.000	NO	207		47.1	207
21	21	Endrin		6.41e4	49		NO	1.0566	1.013	38.66			1.000	YES			63.4	
22	22	cis-Nonachlor		4.72e4	50		NO	1.0772	1.013	38.97			1.000	YES			75.3	
23	23	Endosulfan II (beta)		1.55e4	51		NO	1.1102	1.013	39.69			1.000	YES			269	
24	24	2,4'-DDD	2.80e5	9.11e5	52	1.44	NO	1.0402	1.013	37.91	37.92	1.000	1.000	NO	1450		24.9	1450
25	25	2,4'-DDT	5.21e4	5.57e5	53	1.78	NO	1.0280	1.013	39.05	39.05	1.000	1.000	NO	448		39.3	448
26	26	4,4'-DDD	9.06e5	7.89e5	54	1.56	NO	1.1242	1.013	39.19	39.18	1.000	1.000	NO	5180		24.8	5180
27	27	4,4'-DDT	1.62e5	4.34e5	55	1.47	NO	1.1336	1.013	40.26	40.25	1.000	1.000	NO	1630		47.2	1630
28	28	Endosulfan Sulfate		2.07e4	56		NO	0.9871	1.013	41.42			1.000	YES			268	
29	29	4,4'-Methoxychlor	2.92e4	3.82e6	57	0.42	NO	1.2668	1.013	43.28	43.34	1.001	1.000	NO	298		147	298
30	30	Mirex	3.97e3	1.74e5	58	0.40	YES	1.0435	1.013	43.86	43.86	1.000	1.000	NO	108		38.5	50.7
31	31	Endrin Aldehyde		2.14e5	59		NO	1.0582	1.013	40.83			1.000	YES			268	
32	32	Endrin Ketone	1.67e3	2.77e5	60	0.48	NO	0.9741	1.013	43.98	44.08	1.002	1.000	NO	305		236	305
33	33	13C4-Hexachlorobutadi...	1.30e6	1.39e6	62	1.28	NO	0.1267	1.013	9.94	9.98	0.384	0.383	NO	36600	74.2	8.45	
34	34	13C6-Hexachlorobenz...	8.09e5	1.39e6	62	1.28	NO	0.6741	1.013	22.65	22.64	0.872	0.872	NO	4280	86.6	1.79	

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-13.qld

Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
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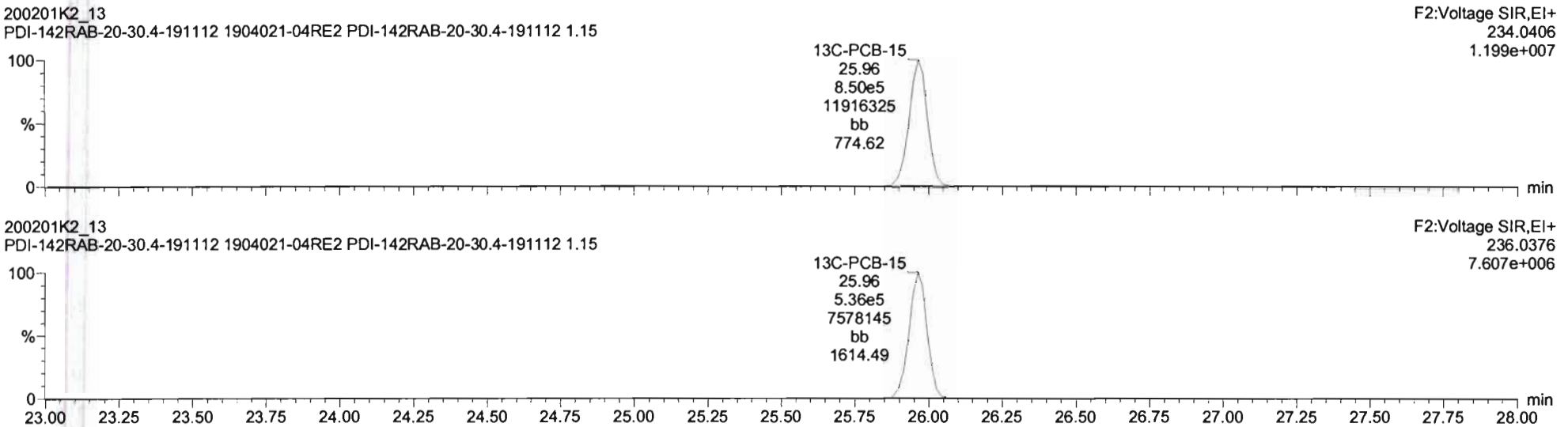
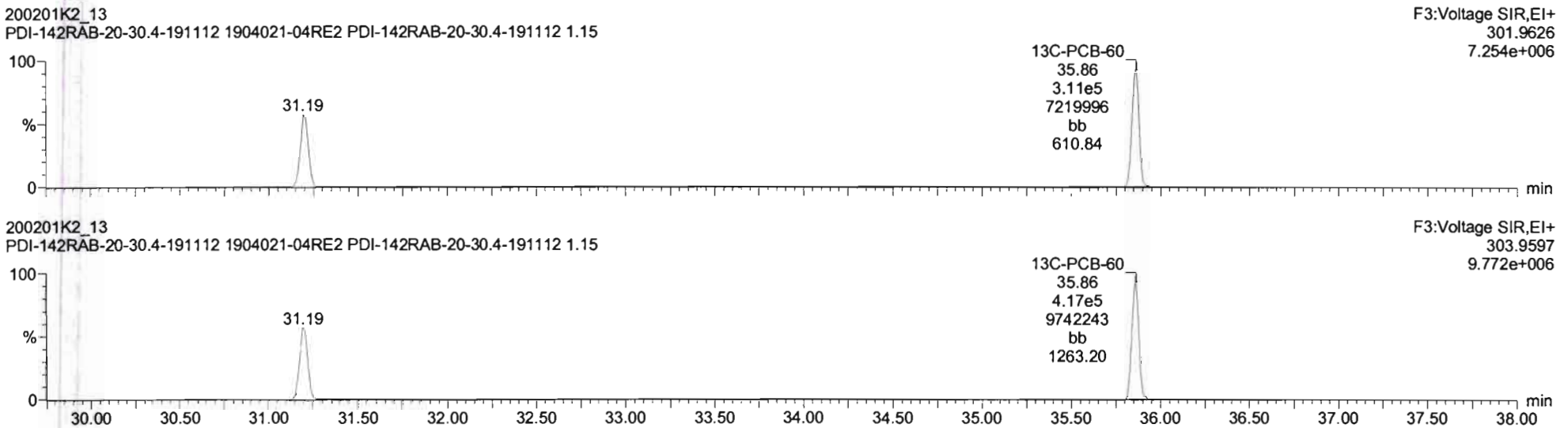
Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

13C-PCB-15



13C-PCB-60



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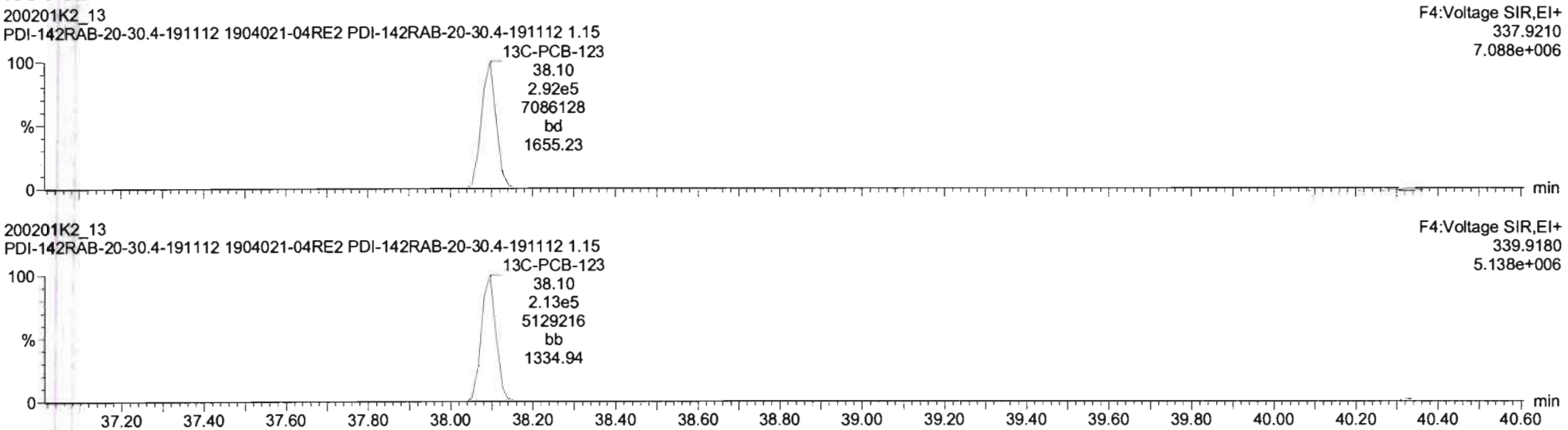
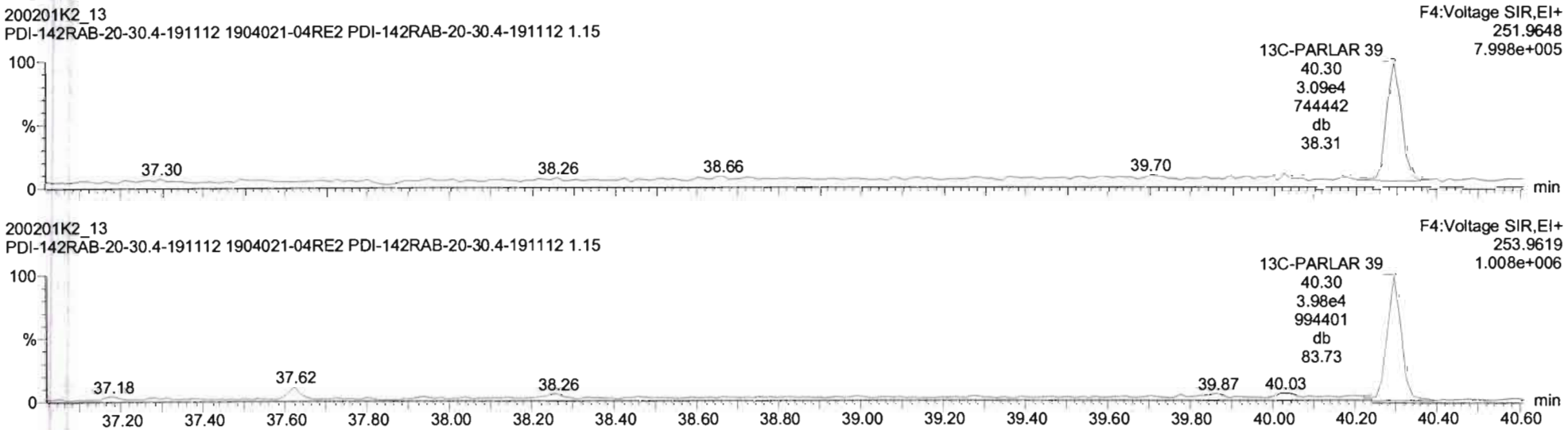
Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
Printed: Monday, February 03, 2020 12:00:53 Pacific Standard Time

Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

13C-PCB-123



13C-PARLAR 39



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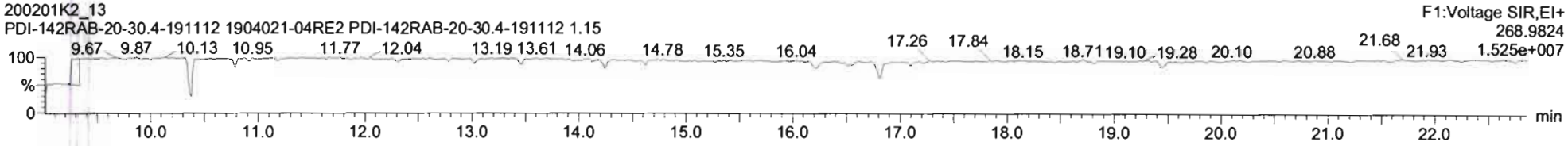
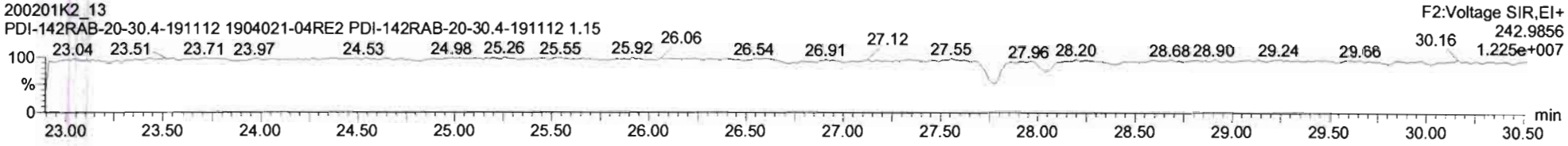
Last Altered: Monday, February 03, 2020 11:33:58 Pacific Standard Time
Printed: Monday, February 03, 2020 12:00:53 Pacific Standard Time

Name: 200201K2_13, Date: 01-Feb-2020, Time: 23:44:36, ID: 1904021-04RE2 PDI-142RAB-20-30.4-191112 1.15, Description: PDI-142RAB-20-30.4-191112

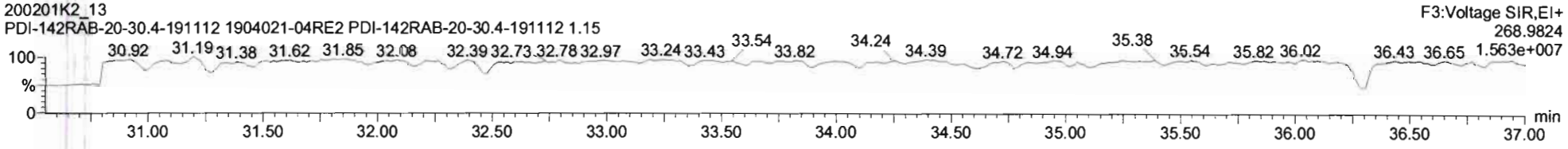
PFK1



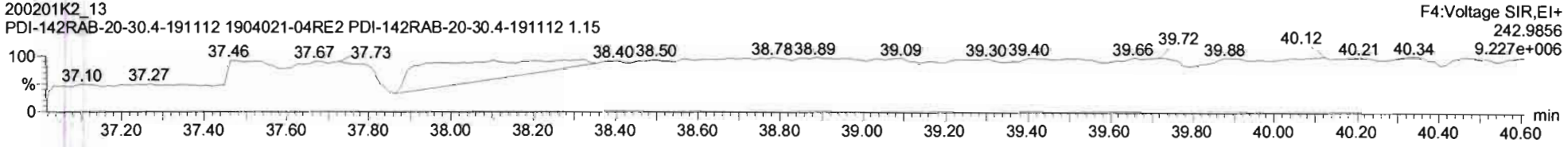
PFK2



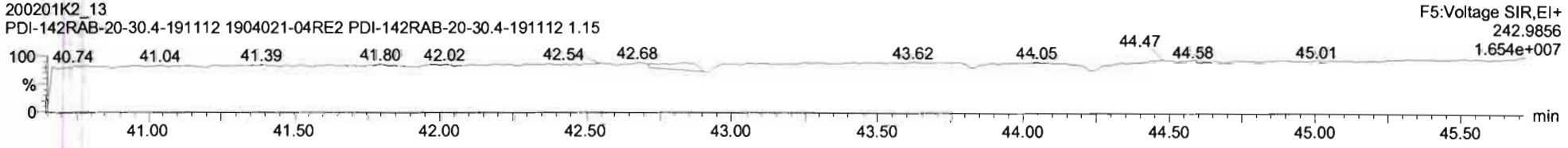
PFK3



PFK4



PFK5



Quantify Sample Summary Report **MassLynx 4.1**
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-18.qld

Last Altered: Tuesday, November 26, 2019 10:09:05 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:10:13 Pacific Standard Time

GRB 11/26/19

CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)		1.33e5		NO	0.744	1.011	26.66			1.001	YES			6.62	
2	9	Aldrin		9.31e4		NO	1.02	1.011	30.99			1.001	YES			3.90	
3	10	Oxychlordane		2.38e4		NO	0.992	1.011	33.59			1.001	YES			14.0	
4	13	trans-Chlordane (gam...	4.35e2	2.32e4	1.52	NO	1.08	1.011	35.30	35.29	1.000	1.001	NO	17.2		12.7	17.2
5	14	trans-Nonachlor		2.59e4		NO	1.00	1.011	35.49			1.001	YES			12.2	
6	15	cis-Chlordane		2.59e4		NO	0.981	1.011	35.97			1.014	YES			12.5	
7	18	2,4'-DDE		6.47e5		NO	0.854	1.011	35.94			1.000	YES			2.57	
8	19	4,4'-DDE	8.68e3	4.67e5	1.26	NO	0.873	1.011	37.03	37.03	1.000	1.000	NO	21.1		3.27	21.1
9	20	Dieldrin	6.85e2	6.06e4	1.32	NO	0.957	1.011	37.53	37.53	1.000	1.000	NO	11.7		5.64	11.7
10	22	cis-Nonachlor		3.08e4		NO	0.956	1.011	39.22			1.000	YES			11.3	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-18.qld

Last Altered: Tuesday, November 26, 2019 10:09:05 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:10:06 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	2.82e4	6.10e5	1.55	NO	0.915	1.011	38.17	38.18	1.000	1.000	NO	50.1		3.51	50.1
2	25	2,4'-DDT	8.64e3	3.71e5	1.78	NO	0.921	1.011	39.31	39.31	1.000	1.000	NO	25.0		5.68	25.0
3	26	4,4'-DDD	7.47e4	5.14e5	1.56	NO	1.00	1.011	39.43	39.43	1.000	1.000	NO	143		3.58	143
4	27	4,4'-DDT	6.04e4	3.03e5	1.60	NO	0.986	1.011	40.50	40.50	1.000	1.000	NO	200		6.01	200
5	36	13C6-Lindane (gamma)	1.33e5	1.10e6	0.78	NO	0.189	1.011	26.63	26.63	1.020	1.020	NO	632	63.9	4.52	
6	40	13C12-Aldrin	9.31e4	1.10e6	1.61	NO	0.122	1.011	30.93	30.96	1.185	1.184	NO	686	69.4	5.26	
7	41	13C10-Oxychlordane	2.38e4	1.10e6	1.88	NO	0.0283	1.011	33.53	33.57	1.285	1.284	NO	755	76.3	22.6	
8	43	13C10-trans-Chlordan...	2.32e4	1.10e6	1.59	NO	0.0292	1.011	35.23	35.28	1.351	1.349	NO	712	72.0	21.9	
9	44	13C10-trans-Nonachlor	2.59e4	1.10e6	1.74	NO	0.0333	1.011	35.42	35.47	1.358	1.356	NO	698	70.5	19.2	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-18.qld

Last Altered: Tuesday, November 26, 2019 10:09:05 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:09:26 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

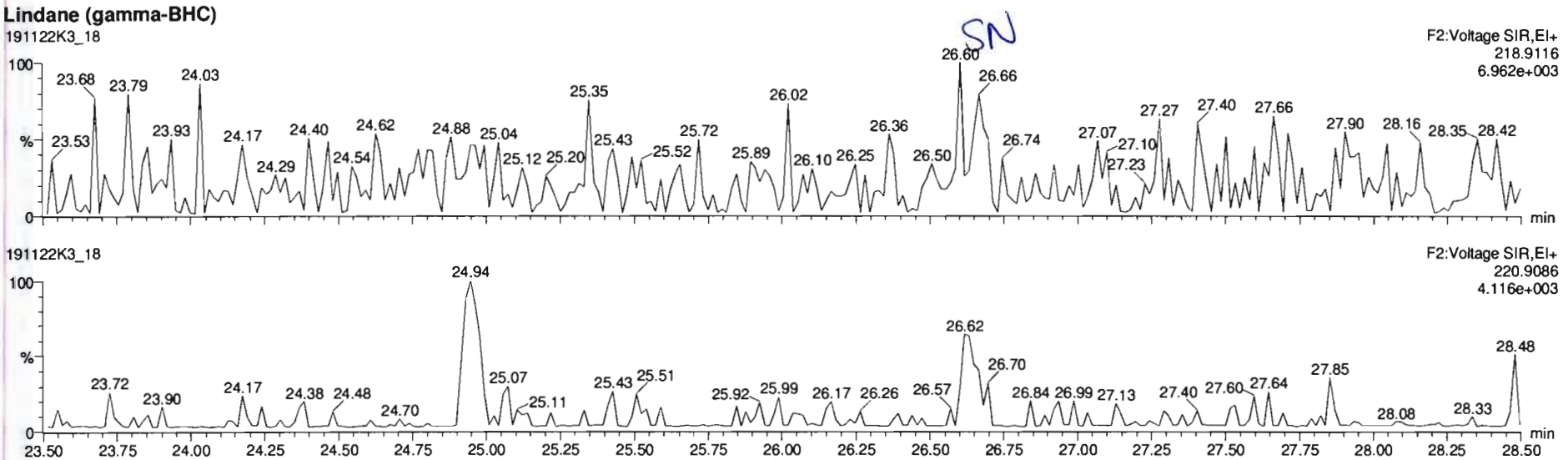
	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	46	13C12-2,4'-DDE	6.47e5	1.10e6	1.57	NO	0.763	1.011	35.95	35.93	0.996	0.996	NO	760	76.8	4.42	
2	47	13C12-4,4'-DDE	4.67e5	1.10e6	1.59	NO	0.552	1.011	37.01	37.01	1.025	1.026	NO	759	76.7	6.11	
3	48	13C12-Dieldrin	6.06e4	1.10e6	1.57	NO	0.0749	1.011	37.51	37.51	1.039	1.039	NO	725	73.2	17.7	
4	50	13C10-cis-Nonachlor	3.08e4	1.10e6	1.67	NO	0.0389	1.011	39.20	39.20	1.086	1.086	NO	708	71.5	34.1	
5	52	13C12-2,4'-DDD	6.10e5	1.10e6	1.61	NO	0.588	1.011	38.10	38.17	1.461	1.459	NO	929	93.9	4.35	
6	53	13C12-2,4'-DDT	3.71e5	1.10e6	1.58	NO	0.370	1.011	39.23	39.29	1.504	1.502	NO	898	90.8	6.91	
7	54	13C12-4,4'-DDD	5.14e5	1.10e6	1.59	NO	0.473	1.011	39.35	39.41	1.509	1.507	NO	974	98.4	5.41	
8	55	13C12-4,4'-DDT	3.03e5	1.10e6	1.59	NO	0.280	1.011	40.41	40.48	1.550	1.547	NO	969	97.9	9.14	
9	62	13C-PCB-15	1.10e6	1.10e6	1.56	NO	1.00	1.011	26.18	26.12	1.000	1.000	NO	990	100	0.933	

Dataset: Untitled

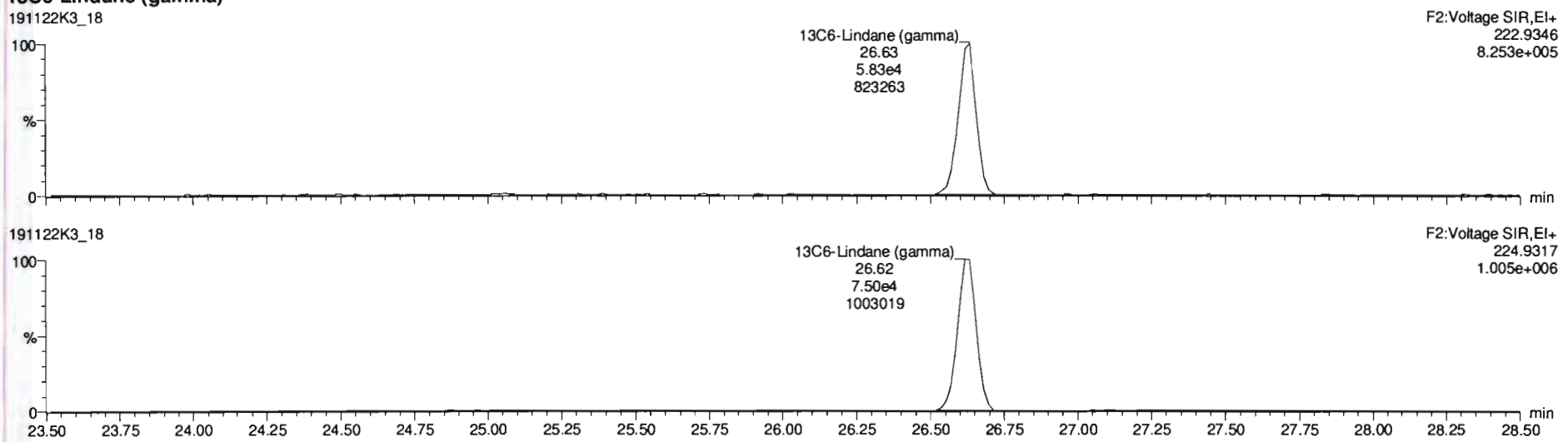
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

Lindane (gamma-BHC)



13C6-Lindane (gamma)



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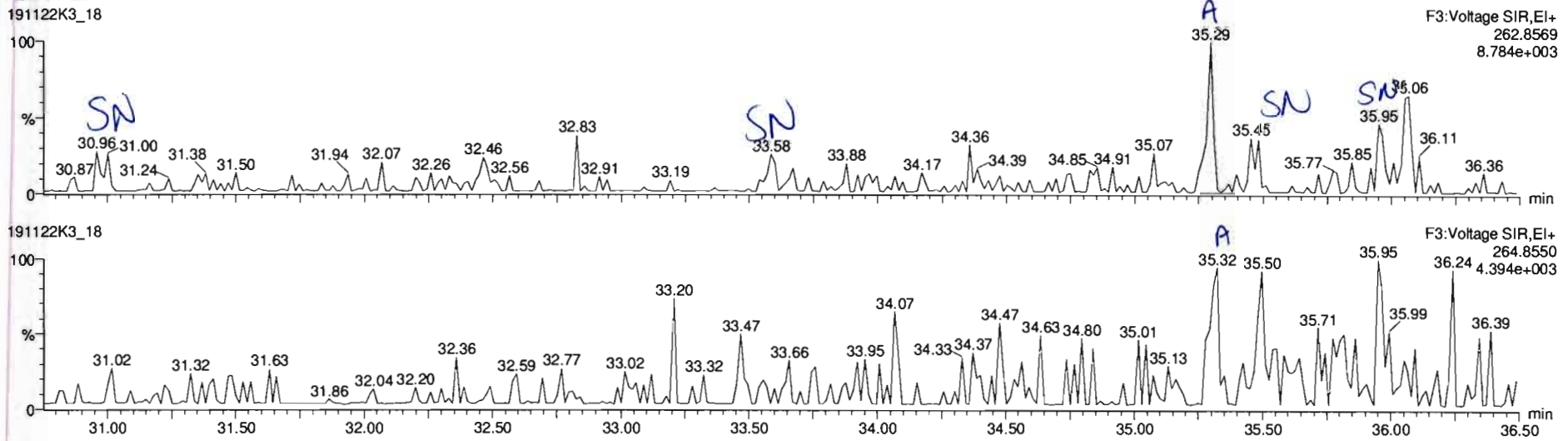
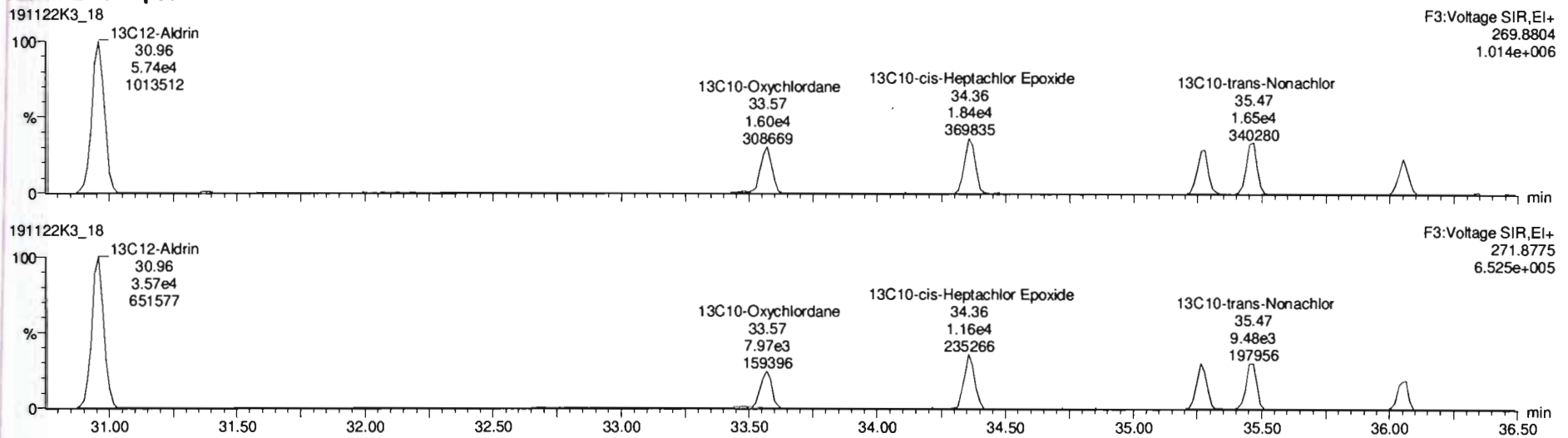
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

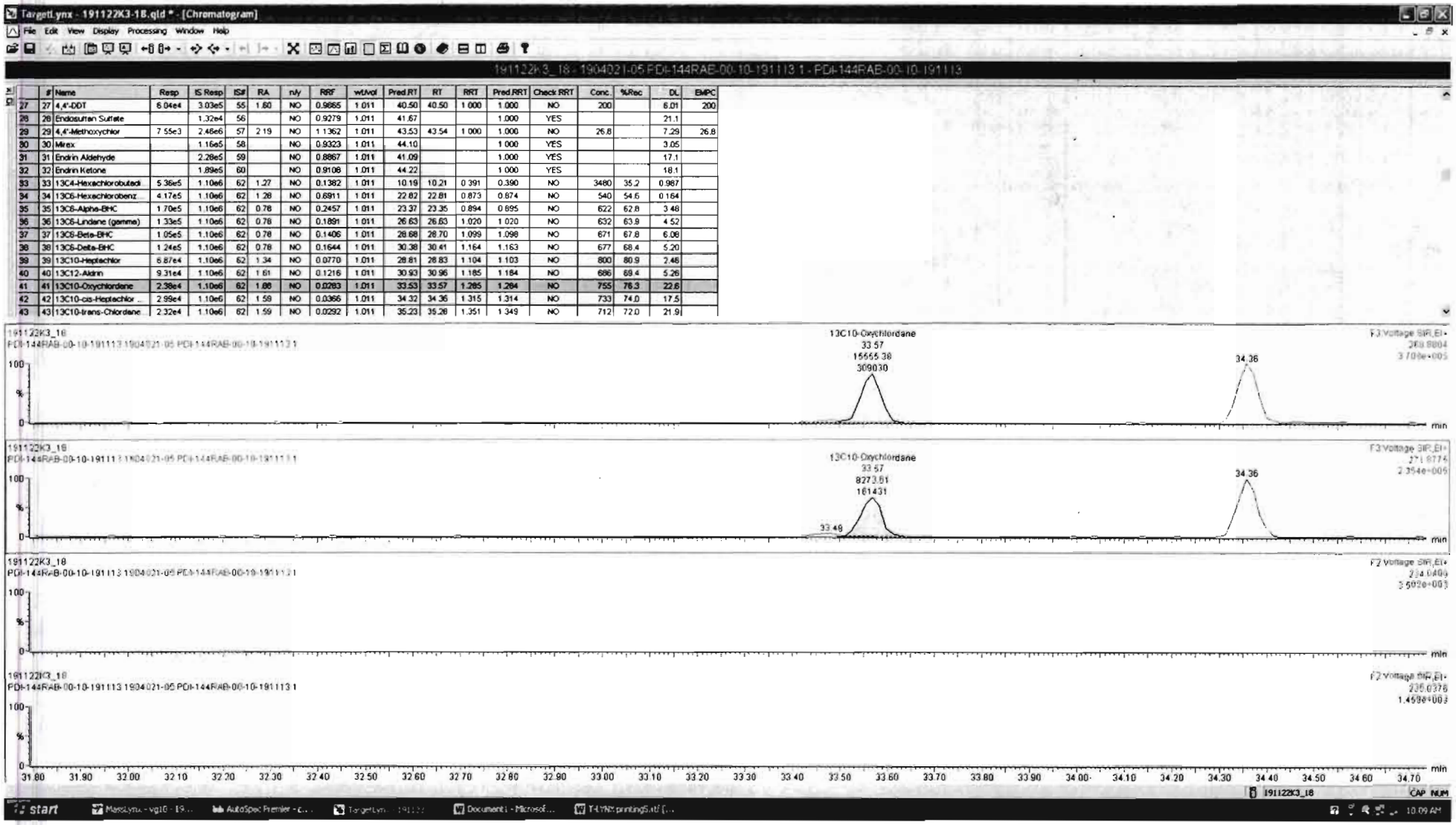
Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

Aldrin-EI

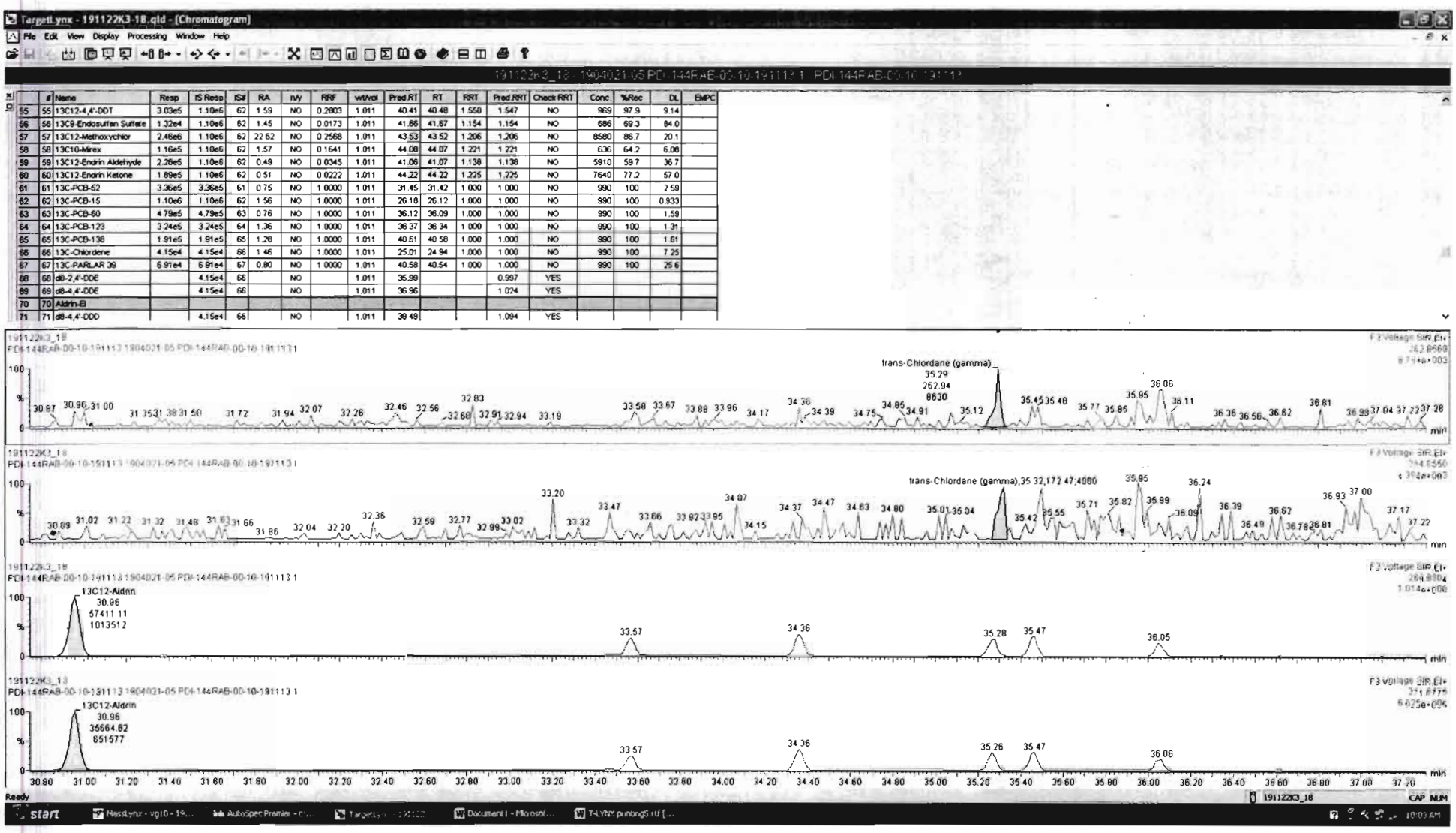


Aldrin-EI-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
27	27	4,4'-DDT	6.04e4	3.03e5	55	1.60	NO	0.9665	1.011	40.50	40.50	1.000	1.000	NO	200		6.01	200
28	28	Endosulfan Sulfate		1.32e4	56		NO	0.9279	1.011	41.67			1.000	YES			21.1	
29	29	4,4'-Methoxychlor	7.55e3	2.46e6	57	2.19	NO	1.1362	1.011	43.53	43.54	1.000	1.000	NO	26.8		7.29	26.8
30	30	Mirex		1.16e5	58		NO	0.9323	1.011	44.10			1.000	YES			3.05	
31	31	Endrin Aldehyde		2.26e5	59		NO	0.8867	1.011	41.09			1.000	YES			17.1	
32	32	Endrin Ketone		1.89e5	60		NO	0.9108	1.011	44.22			1.000	YES			18.1	
33	33	13C4-Hexachlorobutadi	5.36e5	1.10e6	62	1.27	NO	0.1382	1.011	10.19	10.21	0.391	0.390	NO	3480	35.2	0.987	
34	34	13C6-Hexachlorobenz	4.17e5	1.10e6	62	1.28	NO	0.6911	1.011	22.82	22.81	0.873	0.874	NO	540	54.6	0.164	
35	35	13C6-Alpha-BHC	1.70e5	1.10e6	62	0.78	NO	0.2457	1.011	23.37	23.35	0.894	0.895	NO	622	62.8	3.48	
36	36	13C6-Lindane (gamma)	1.33e5	1.10e6	62	0.78	NO	0.1891	1.011	26.63	26.63	1.020	1.020	NO	632	63.9	4.52	
37	37	13C6-Beta-BHC	1.05e5	1.10e6	62	0.78	NO	0.1406	1.011	28.68	28.70	1.099	1.098	NO	671	67.8	6.06	
38	38	13C6-Delta-BHC	1.24e5	1.10e6	62	0.78	NO	0.1644	1.011	30.38	30.41	1.164	1.163	NO	677	68.4	5.20	
39	39	13C10-Heptachlor	6.87e4	1.10e6	62	1.34	NO	0.0770	1.011	28.81	28.83	1.104	1.103	NO	800	80.9	2.46	
40	40	13C12-Aldrin	9.31e4	1.10e6	62	1.61	NO	0.1216	1.011	30.93	30.96	1.185	1.184	NO	686	69.4	5.26	
41	41	13C10-Oxychlordane	2.38e4	1.10e6	62	1.88	NO	0.0283	1.011	33.53	33.57	1.285	1.284	NO	755	76.3	22.8	
42	42	13C10-cis-Heptachlor ...	2.99e4	1.10e6	62	1.59	NO	0.0366	1.011	34.32	34.36	1.315	1.314	NO	733	74.0	17.5	
43	43	13C10-trans-Chlordane	2.32e4	1.10e6	62	1.59	NO	0.0292	1.011	35.23	35.28	1.351	1.349	NO	712	72.0	21.9	



	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
55	55	13C12-4,4'-DDT	3.03e5	1.10e6	62	1.59	NO	0.2803	1.011	40.41	40.48	1.550	1.547	NO	969	97.9	9.14	
56	56	13C9-Endosulfan Sulfate	1.32e4	1.10e6	62	1.45	NO	0.0173	1.011	41.66	41.67	1.154	1.154	NO	686	69.3	84.0	
57	57	13C12-Methoxychlor	2.46e6	1.10e6	62	22.62	NO	0.2568	1.011	43.53	43.52	1.206	1.206	NO	8580	86.7	20.1	
58	58	13C10-Mirex	1.16e5	1.10e6	62	1.57	NO	0.1641	1.011	44.08	44.07	1.221	1.221	NO	636	64.2	6.08	
59	59	13C12-Endrin Aldehyde	2.26e5	1.10e6	62	0.49	NO	0.0345	1.011	41.06	41.07	1.138	1.138	NO	5910	59.7	36.7	
60	60	13C12-Endrin Ketone	1.89e5	1.10e6	62	0.51	NO	0.0222	1.011	44.22	44.22	1.225	1.225	NO	7640	77.2	57.0	
61	61	13C-PCB-52	3.36e5	3.36e5	61	0.75	NO	1.0000	1.011	31.45	31.42	1.000	1.000	NO	990	100	2.59	
62	62	13C-PCB-15	1.10e6	1.10e6	62	1.56	NO	1.0000	1.011	26.18	26.12	1.000	1.000	NO	990	100	0.933	
63	63	13C-PCB-60	4.79e5	4.79e5	63	0.76	NO	1.0000	1.011	36.12	36.09	1.000	1.000	NO	990	100	1.59	
64	64	13C-PCB-173	3.24e5	3.24e5	64	1.36	NO	1.0000	1.011	36.37	36.34	1.000	1.000	NO	990	100	1.31	
65	65	13C-PCB-138	1.91e5	1.91e5	65	1.26	NO	1.0000	1.011	40.61	40.58	1.000	1.000	NO	990	100	1.61	
66	66	13C-Chlordane	4.15e4	4.15e4	66	1.46	NO	1.0000	1.011	25.01	24.94	1.000	1.000	NO	990	100	7.25	
67	67	13C-PARLAR 39	6.91e4	6.91e4	67	0.80	NO	1.0000	1.011	40.58	40.54	1.000	1.000	NO	990	100	25.6	
68	68	d8-2,4'-DDE		4.15e4	66		NO		1.011	35.99			0.997	YES				
69	69	d8-4,4'-DDE		4.15e4	66		NO		1.011	36.96			1.024	YES				
70	70	Aldrin-El																
71	71	d8-4,4'-DDD		4.15e4	66		NO		1.011	39.49			1.094	YES				

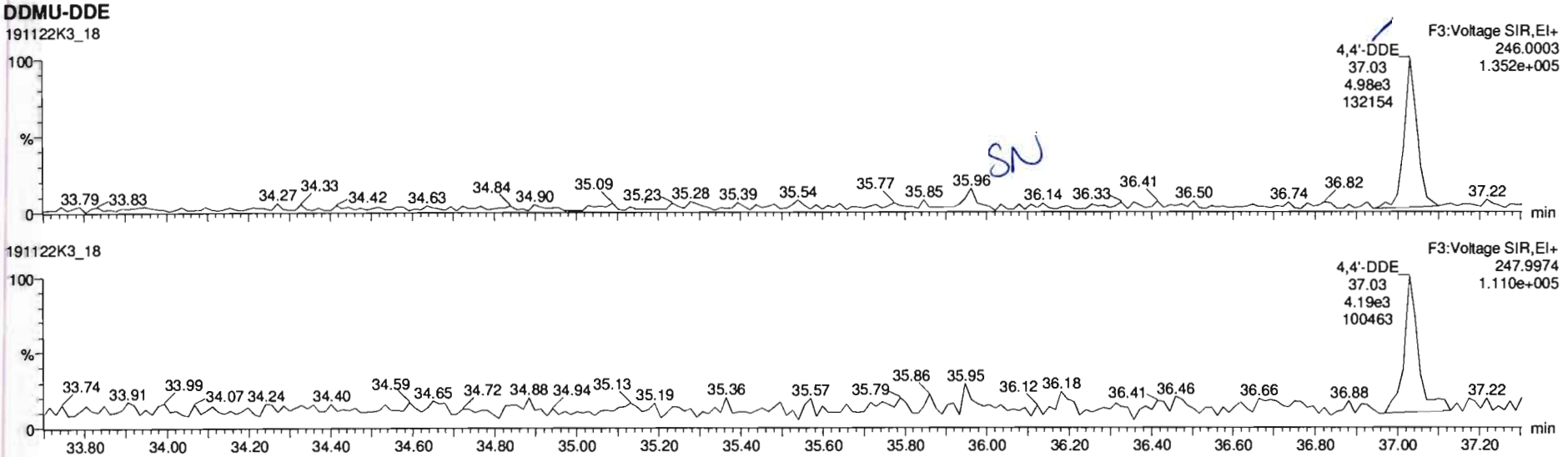
Vista Analytical Laboratory

Dataset: Untitled

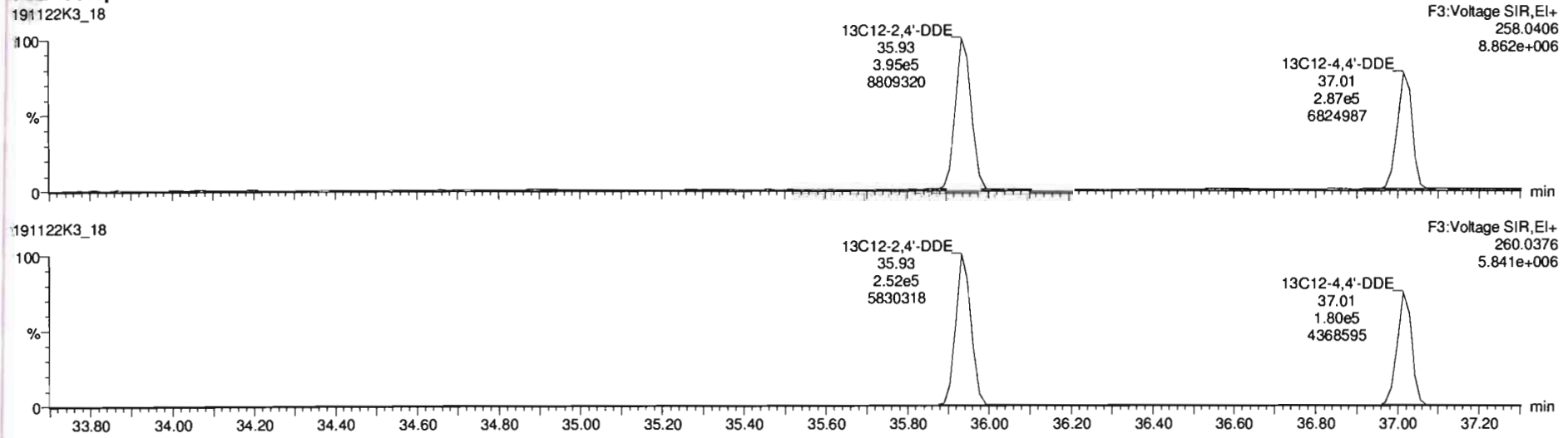
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

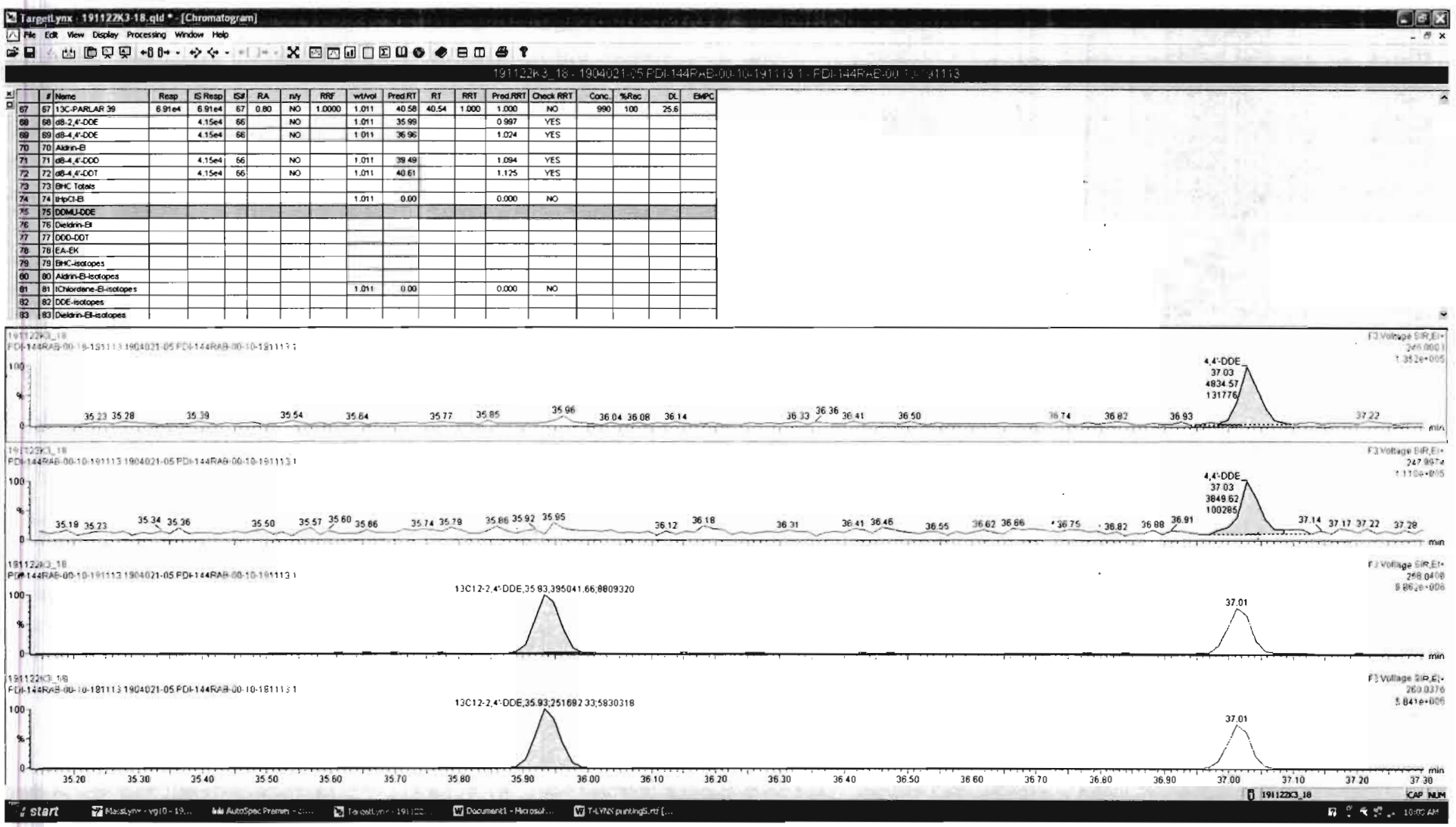
Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

DDMU-DDE



DDE-isotopes





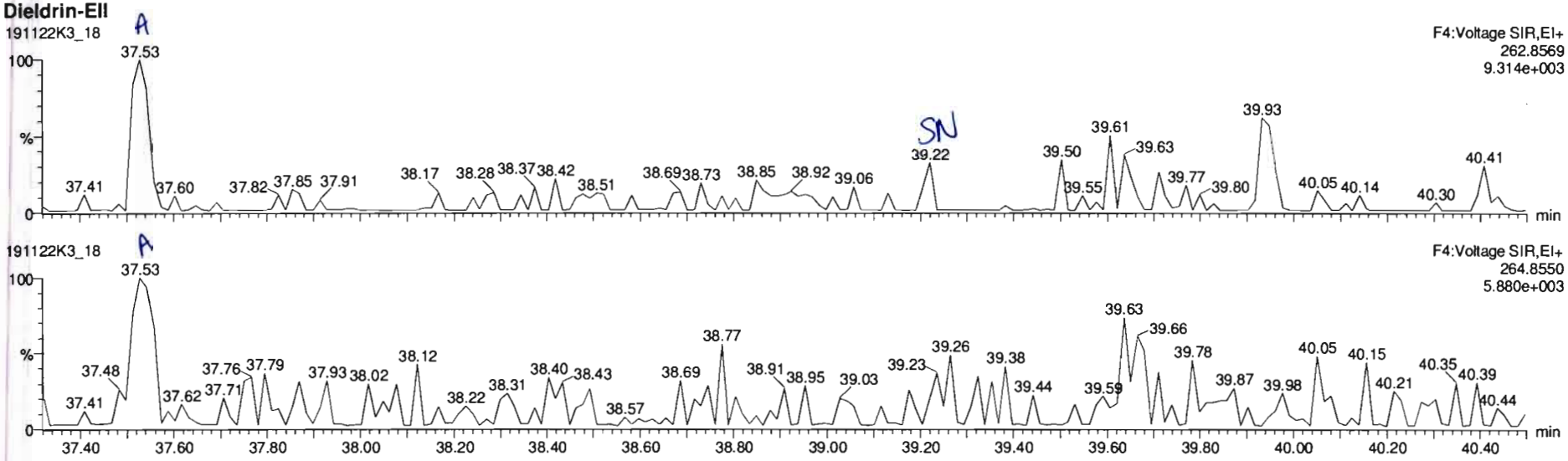
	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
67	67	13C-PARLAR 39	6.91e4	6.91e4	67	0.80	NO	1.0000	1.011	40.58	40.54	1.000	1.000	NO	990	100	25.6	
68	68	d8-2,4'-DDE		4.15e4	66		NO		1.011	35.99			0.997	YES				
69	69	d8-4,4'-DDE		4.15e4	66		NO		1.011	36.96			1.024	YES				
70	70	Aldrin-Et																
71	71	d8-4,4'-DDD		4.15e4	66		NO		1.011	39.49			1.094	YES				
72	72	d8-4,4'-DDT		4.15e4	66		NO		1.011	40.61			1.125	YES				
73	73	BHC Totals																
74	74	trip Cl-Et							1.011	0.00			0.000	NO				
75	75	DDMU-DDE																
76	76	Dieldrin-Et																
77	77	DDD-DDT																
78	78	EA-EK																
79	79	BHC-isotopes																
80	80	Aldrin-Et-isotopes																
81	81	Chlordane-Et-isotopes							1.011	0.00			0.000	NO				
82	82	DDE-isotopes																
83	83	Dieldrin-Et-isotopes																

Dataset: Untitled

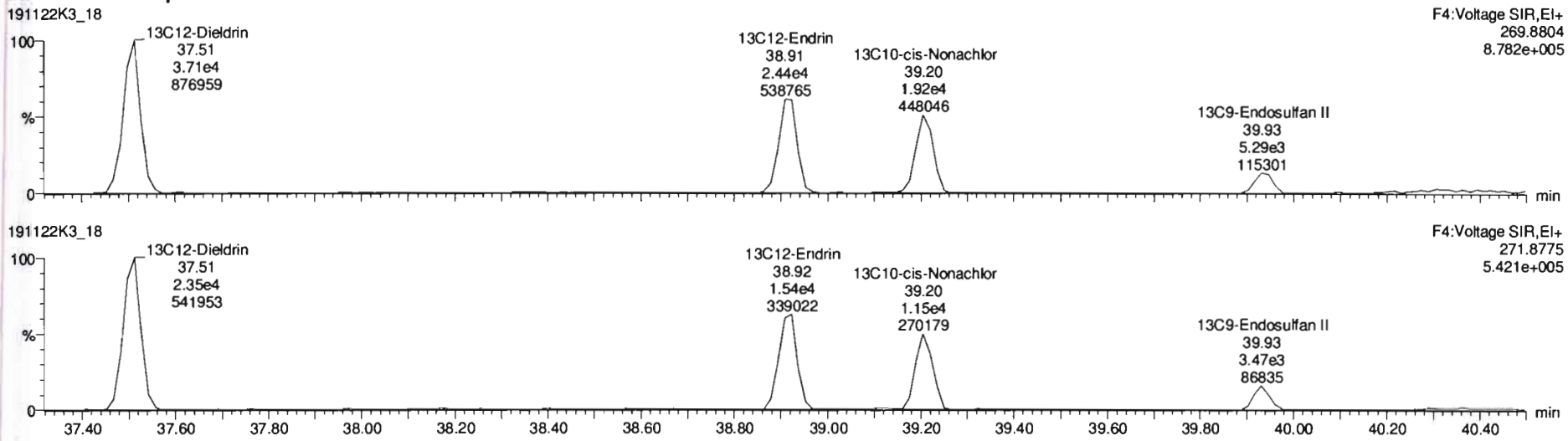
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

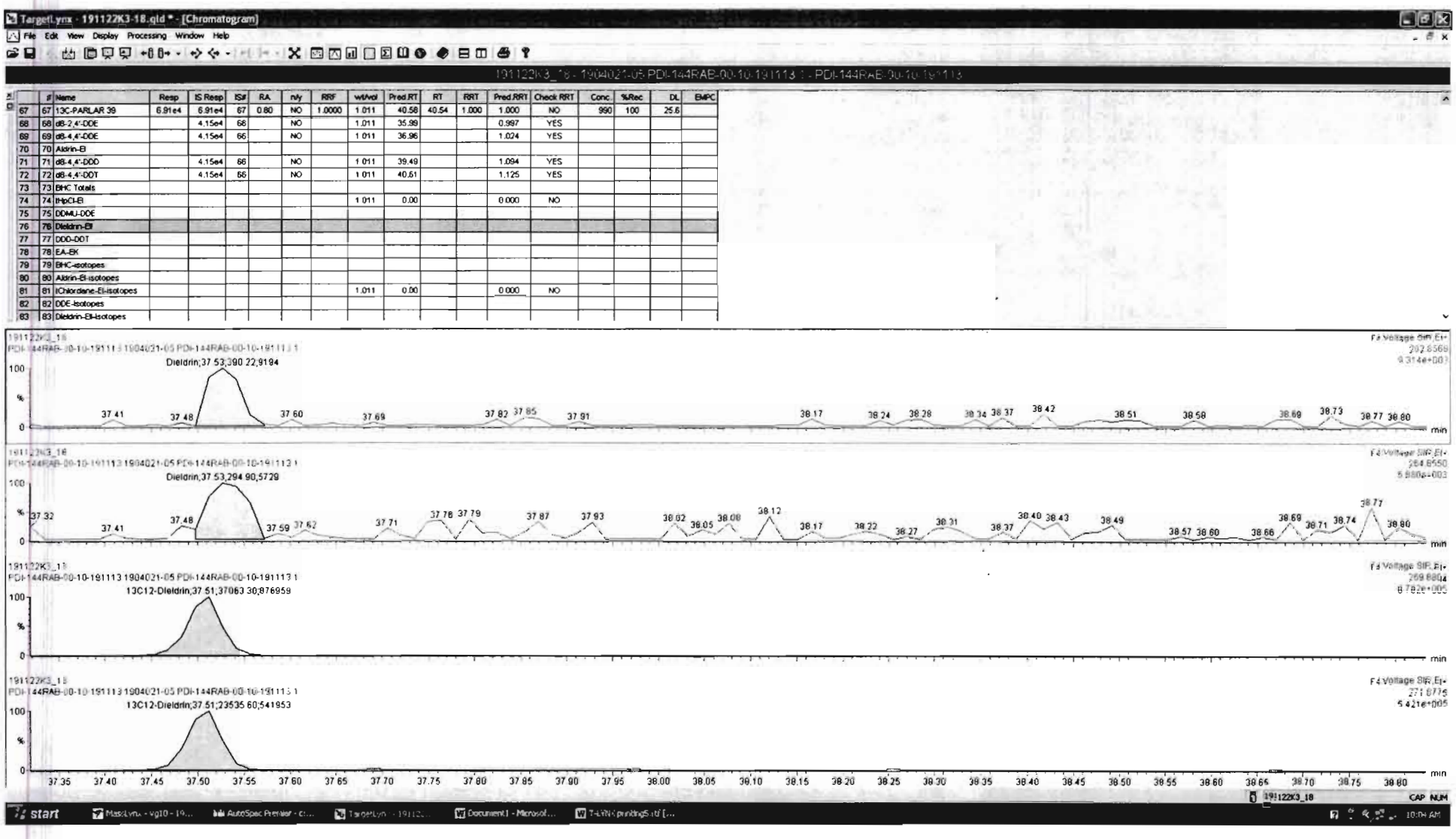
Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

Dieldrin-EII



Dieldrin-EII-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
67	67	13C-PARLAR 39	6.91e4	6.91e4	67	0.80	NO	1.0000	1.011	40.58	40.54	1.000	1.000	NO	990	100	25.6	
68	68	d8-2,4'-DDE		4.15e4	66		NO		1.011	35.99			0.997	YES				
69	69	d8-4,4'-DDE		4.15e4	66		NO		1.011	36.96			1.024	YES				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD		4.15e4	66		NO		1.011	39.49			1.094	YES				
72	72	d8-4,4'-DDT		4.15e4	66		NO		1.011	40.51			1.125	YES				
73	73	BHC Totals																
74	74	BHpCl-EI							1.011	0.00			0.000	NO				
75	75	DDMU-DDE																
76	76	Dieldrin-EI																
77	77	DDD-DDT																
78	78	EA-BK																
79	79	BHC-isotopes																
80	80	Aldrin-EI-isotopes																
81	81	Chlordane-EI-isotopes							1.011	0.00			0.000	NO				
82	82	DDE-Isotopes																
83	83	Dieldrin-EI-Isotopes																

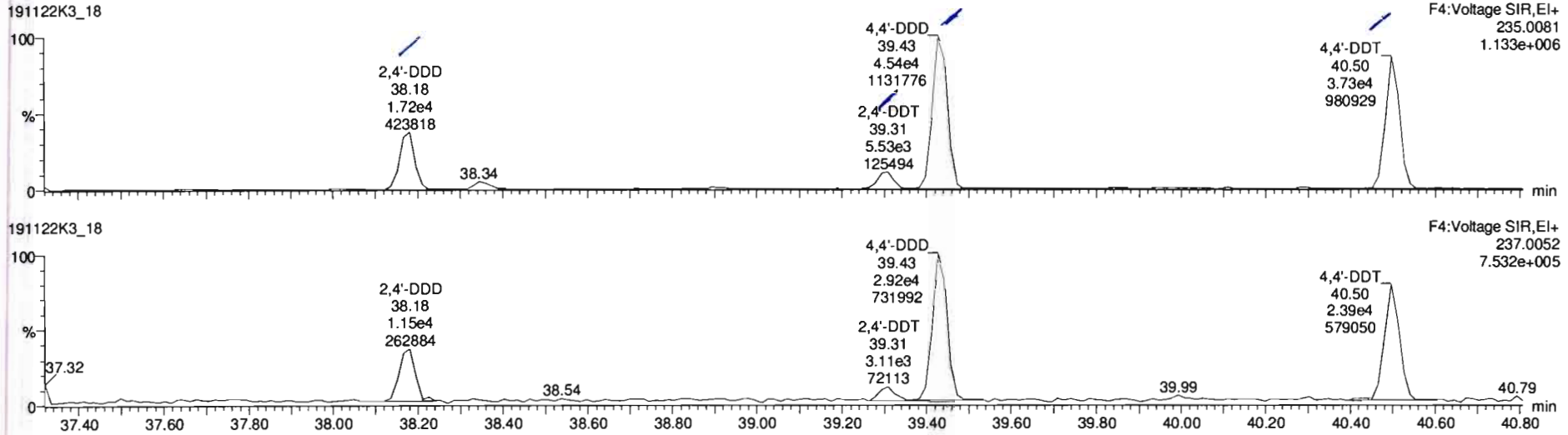
Vista Analytical Laboratory

Dataset: Untitled

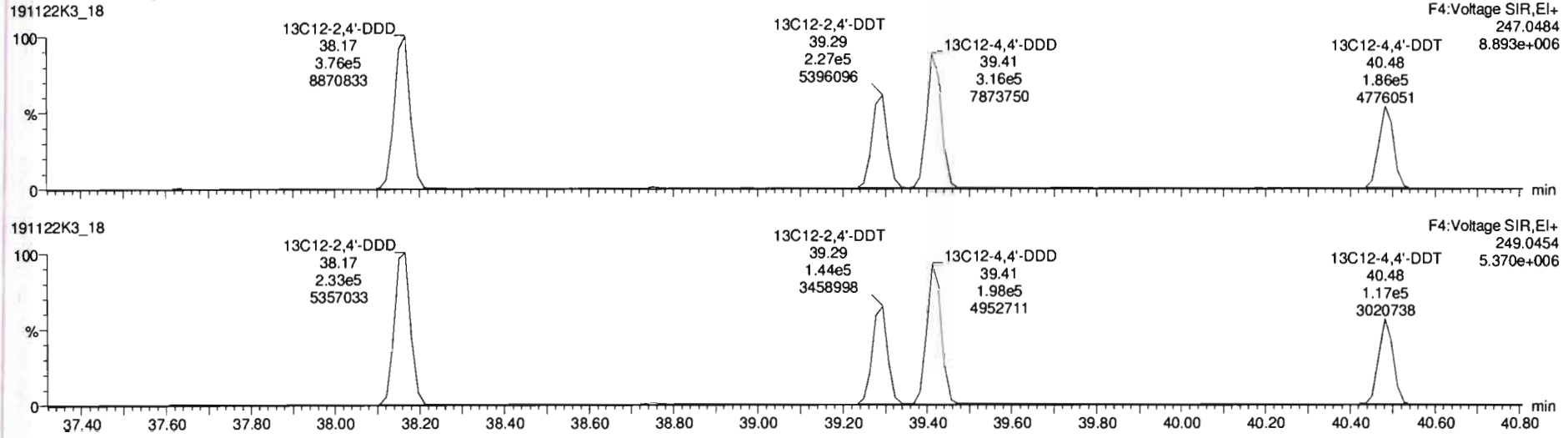
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

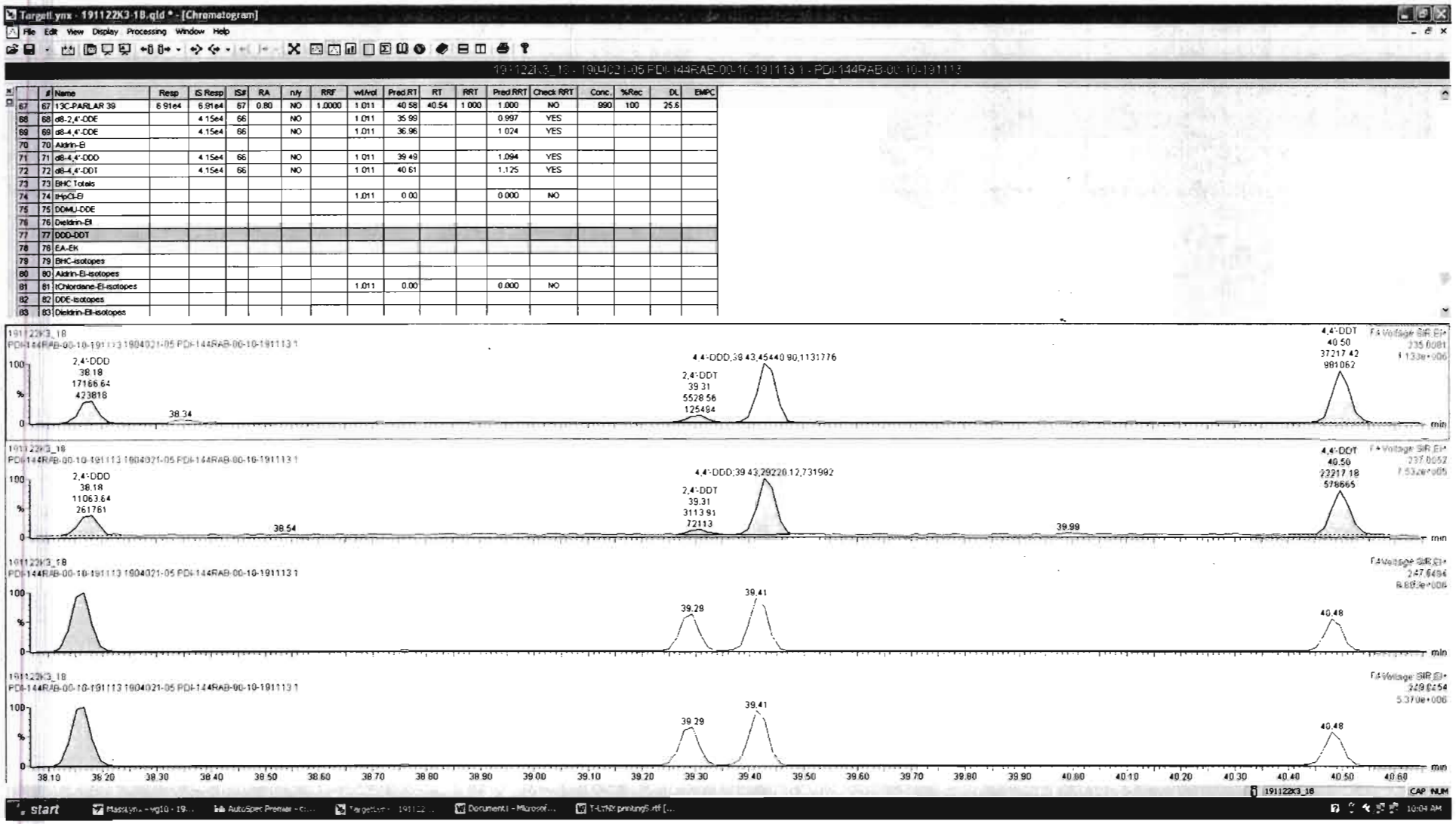
Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

DDD-DDT



DDD-DDT-isotopes





#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
67	13C-PARLAR 39	6.91e4	6.91e4	67	0.80	NO	1.0000	1.011	40.58	40.54	1.000	1.000	NO	990	100	25.6	
68	d8-2,4'-DDE		4.15e4	66		NO		1.011	35.99			0.997	YES				
69	d8-4,4'-DDE		4.15e4	66		NO		1.011	36.96			1.024	YES				
70	Aldrin-El																
71	d8-4,4'-DDD		4.15e4	66		NO		1.011	39.49			1.094	YES				
72	d8-4,4'-DDT		4.15e4	66		NO		1.011	40.61			1.125	YES				
73	BHC Totals																
74	HpCl-El							1.011	0.00			0.000	NO				
75	DDMU-DDE																
76	Dieldrin-El																
77	DDD-DDT																
78	EA-EK																
79	BHC-isotopes																
80	Aldrin-El-isotopes																
81	tChlordane-El-isotopes							1.011	0.00			0.000	NO				
82	DDE-isotopes																
83	Dieldrin-El-isotopes																

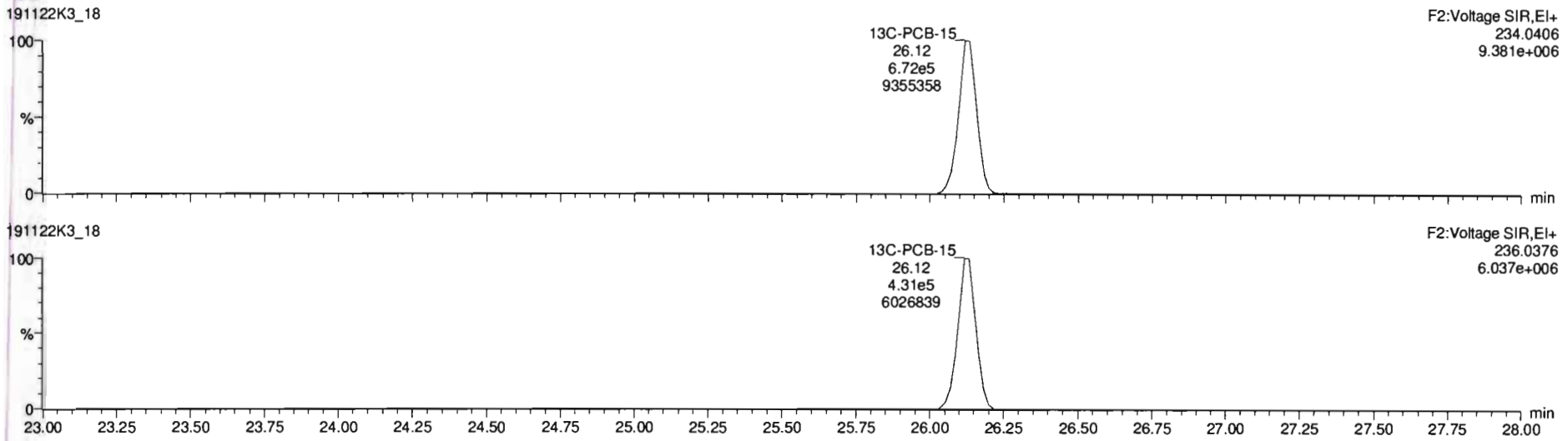
Vista Analytical Laboratory

Dataset: Untitled

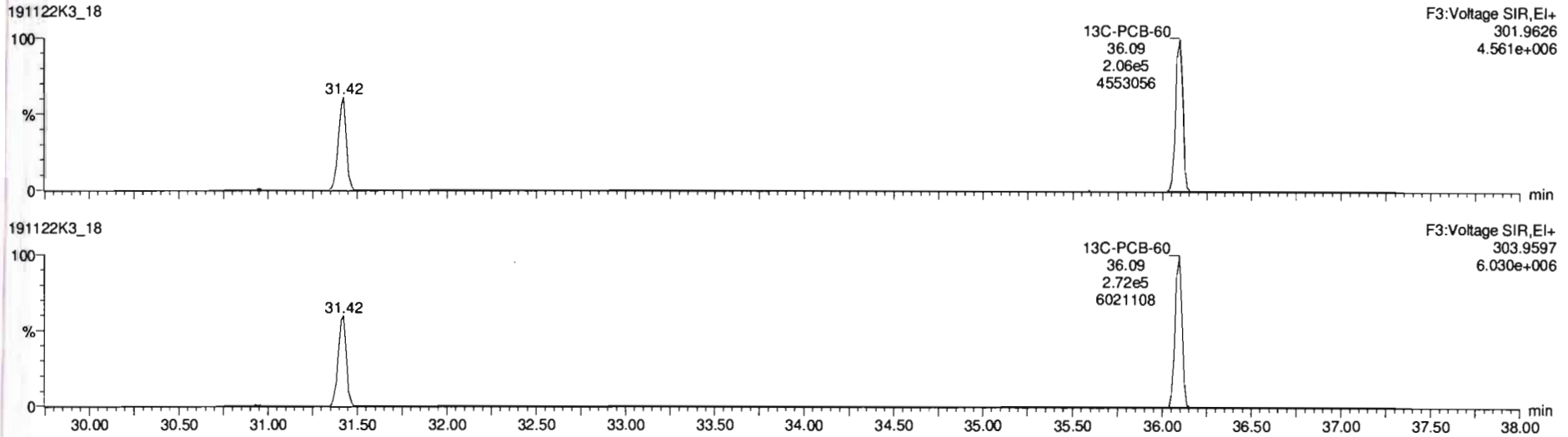
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

13C-PCB-15



13C-PCB-60

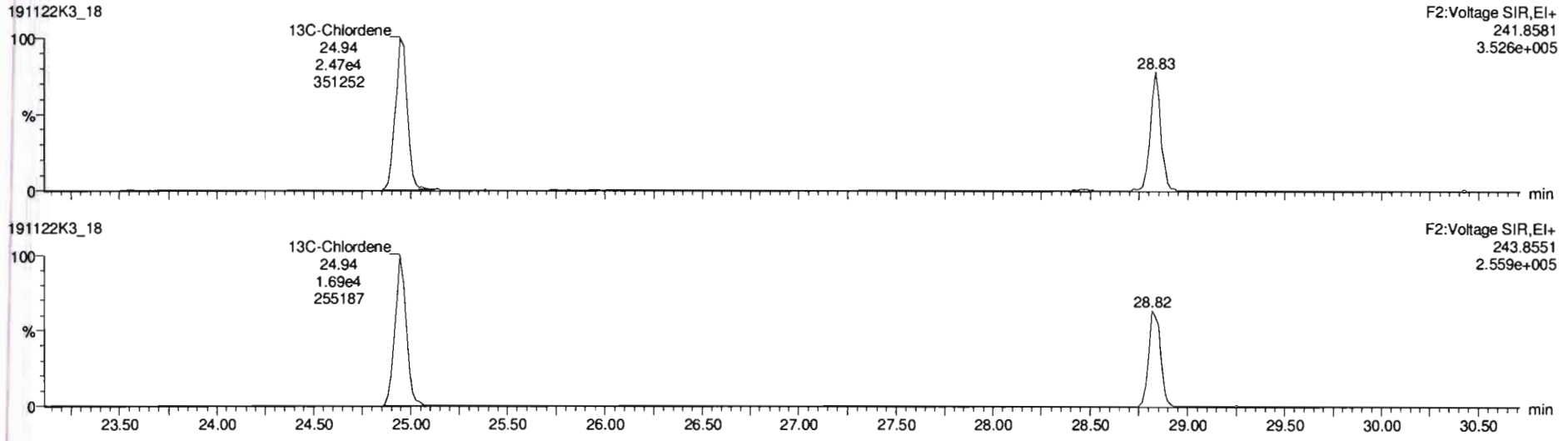


Dataset: Untitled

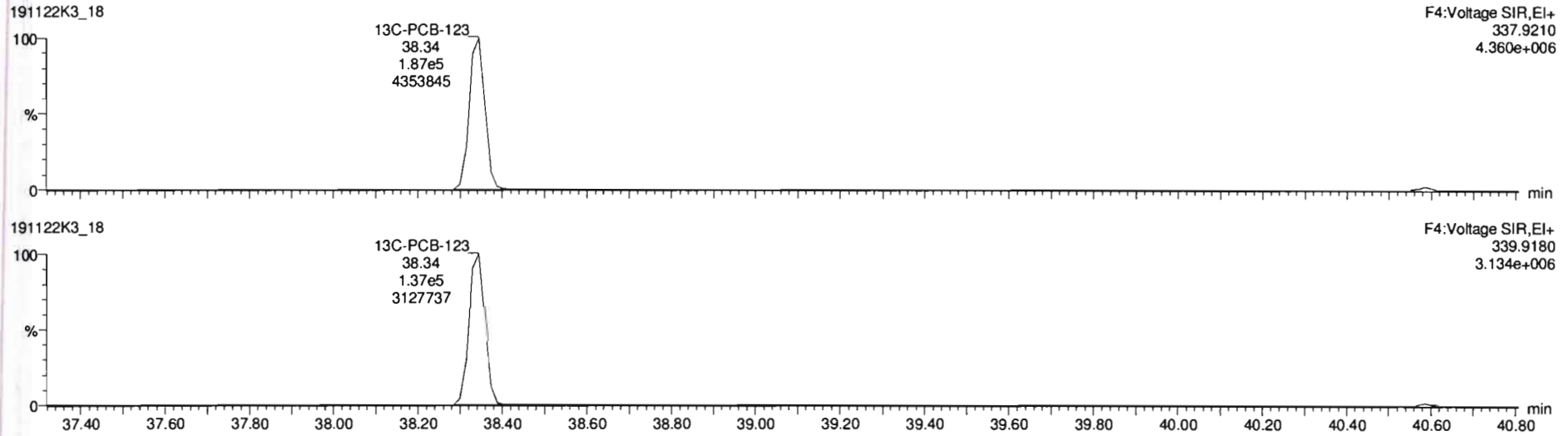
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

13C-Chlordene



13C-PCB-123



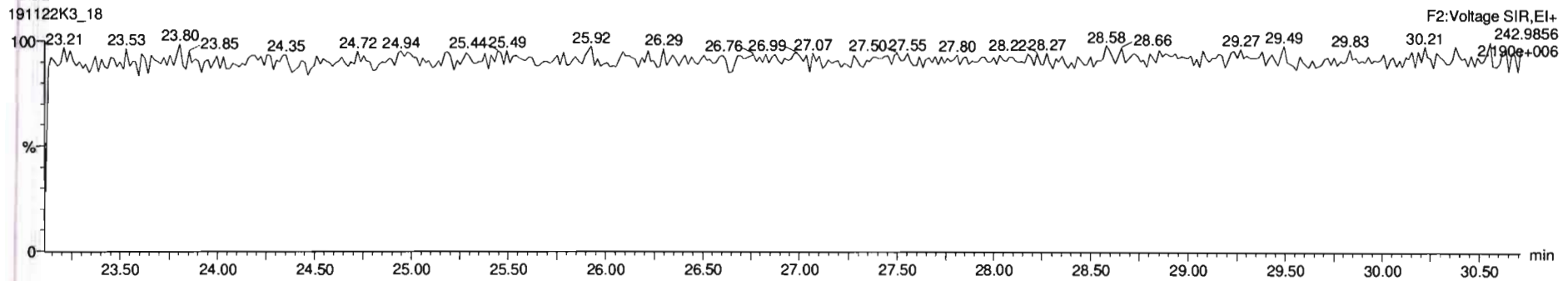
Vista Analytical Laboratory

Dataset: Untitled

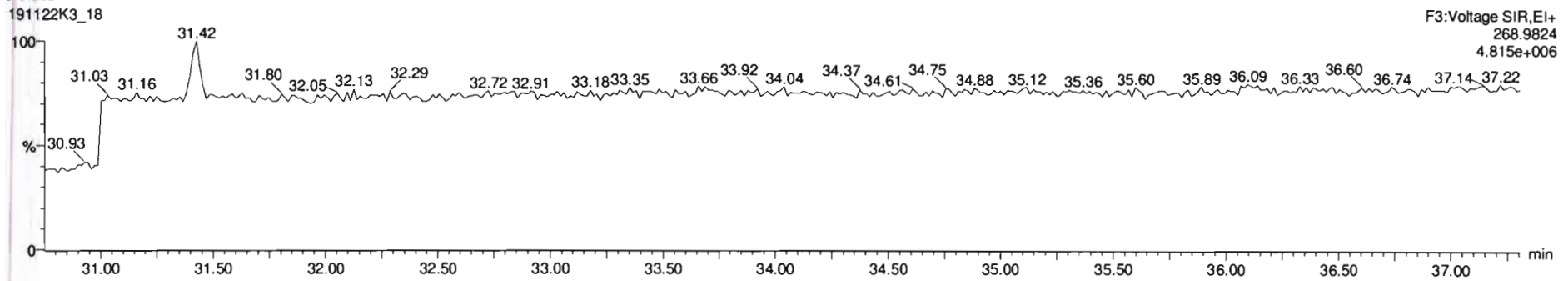
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_18, Date: 23-Nov-2019, Time: 06:00:48, ID: 1904021-05 PDI-144RAB-00-10-191113 1, Description: PDI-144RAB-00-10-191113

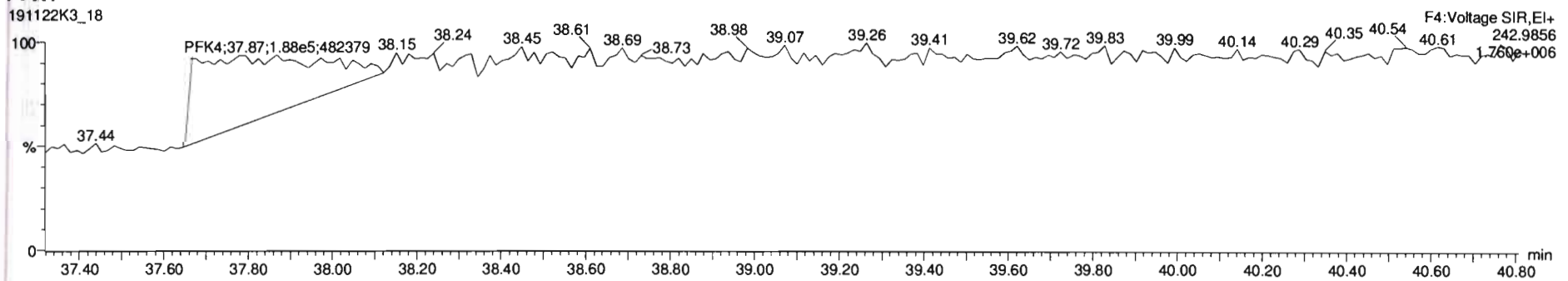
PFK2



PFK3



PFK4



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-19.qld

Last Altered: Tuesday, November 26, 2019 10:13:33 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:14:40 Pacific Standard Time

GRB 11/26/19

CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)		1.48e5		NO	0.744	1.009	26.65			1.001	YES			5.52	
2	9	Aldrin		1.04e5		NO	1.02	1.009	30.97			1.001	YES			2.34	
3	10	Oxychlordane		2.53e4		NO	0.992	1.009	33.58			1.001	YES			8.52	
4	13	trans-Chlordane (gam...	6.91e2	2.56e4	3.28	YES	1.08	1.009	35.27	35.28	1.001	1.001	NO	24.7		7.62	14.7
5	14	trans-Nonachlor	3.82e2	2.86e4	1.73	NO	1.00	1.009	35.47	35.45	1.000	1.001	NO	13.2		6.74	13.2
6	15	cis-Chlordane	4.78e2	2.86e4	1.61	NO	0.981	1.009	35.96	35.95	1.014	1.014	NO	16.9		6.89	16.9
7	18	2,4'-DDE		7.23e5		NO	0.854	1.009	35.93			1.000	NO			2.36	
8	19	4,4'-DDE	1.33e4	5.14e5	1.23	NO	0.873	1.009	37.02	37.01	1.000	1.000	NO	29.4		3.03	29.4
9	20	Dieldrin	1.86e3	6.58e4	1.47	NO	0.957	1.009	37.52	37.53	1.001	1.000	NO	29.2		4.59	29.2
10	22	cis-Nonachlor		3.37e4		NO	0.956	1.009	39.20			1.000	YES			8.69	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-19.qld

Last Altered: Tuesday, November 26, 2019 10:13:33 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:14:46 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	4.05e4	6.70e5	1.69	NO	0.915	1.009	38.15	38.17	1.000	1.000	NO	65.6		3.63	65.6
2	25	2,4'-DDT	1.53e4	4.22e5	1.54	NO	0.921	1.009	39.30	39.29	1.000	1.000	NO	39.1		5.15	39.1
3	26	4,4'-DDD	1.16e5	5.62e5	1.58	NO	1.00	1.009	39.42	39.41	1.000	1.000	NO	204		3.62	204
4	27	4,4'-DDT	9.01e4	3.41e5	1.53	NO	0.986	1.009	40.49	40.48	1.000	1.000	NO	265		6.14	265
5	36	13C6-Lindane (gamma)	1.48e5	1.13e6	0.82	NO	0.189	1.009	26.63	26.62	1.019	1.020	NO	687	69.3	4.49	
6	40	13C12-Aldrin	1.04e5	1.13e6	1.67	NO	0.122	1.009	30.93	30.94	1.185	1.184	NO	753	76.0	5.59	
7	41	13C10-Oxychlordane	2.53e4	1.13e6	1.59	NO	0.0283	1.009	33.53	33.56	1.285	1.284	NO	788	79.5	24.0	
8	43	13C10-trans-Chlordan...	2.56e4	1.13e6	1.56	NO	0.0292	1.009	35.23	35.25	1.350	1.349	NO	774	78.1	23.3	
9	44	13C10-trans-Nonachlor	2.86e4	1.13e6	1.52	NO	0.0333	1.009	35.42	35.45	1.357	1.356	NO	754	76.1	20.4	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-19.qld

Last Altered: Tuesday, November 26, 2019 10:13:33 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:14:54 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

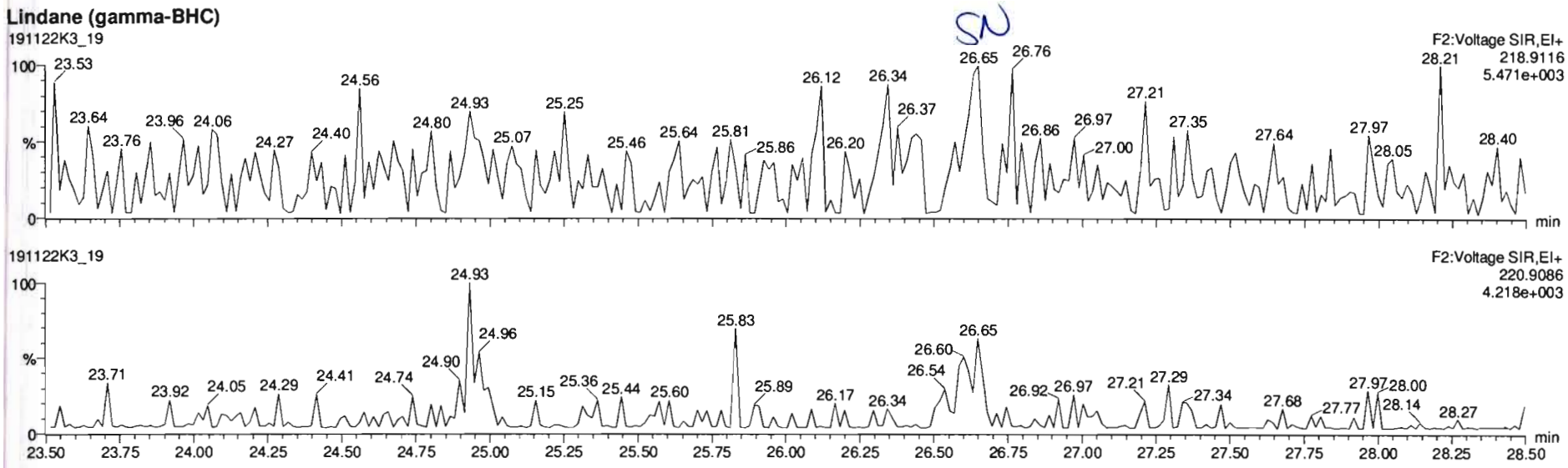
	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	46	13C12-2,4'-DDE	7.23e5	1.13e6	1.57	NO	0.763	1.009	35.94	35.92	0.996	0.996	NO	833	84.1	3.91	
2	47	13C12-4,4'-DDE	5.14e5	1.13e6	1.55	NO	0.552	1.009	37.00	37.00	1.025	1.026	NO	820	82.7	5.41	
3	48	13C12-Dieldrin	6.58e4	1.13e6	1.60	NO	0.0749	1.009	37.50	37.50	1.039	1.039	NO	773	78.0	14.6	
4	50	13C10-cis-Nonachlor	3.37e4	1.13e6	1.51	NO	0.0389	1.009	39.19	39.19	1.086	1.086	NO	763	76.9	28.1	
5	52	13C12-2,4'-DDD	6.70e5	1.13e6	1.61	NO	0.588	1.009	38.10	38.15	1.461	1.459	NO	1000	101	4.72	
6	53	13C12-2,4'-DDT	4.22e5	1.13e6	1.59	NO	0.370	1.009	39.23	39.28	1.504	1.502	NO	1000	101	7.50	
7	54	13C12-4,4'-DDD	5.62e5	1.13e6	1.58	NO	0.473	1.009	39.35	39.40	1.508	1.507	NO	1050	105	5.87	
8	55	13C12-4,4'-DDT	3.41e5	1.13e6	1.60	NO	0.280	1.009	40.41	40.47	1.549	1.547	NO	1070	108	9.91	
9	62	13C-PCB-15	1.13e6	1.13e6	1.56	NO	1.00	1.009	26.18	26.12	1.000	1.000	NO	991	100	0.836	

Dataset: Untitled

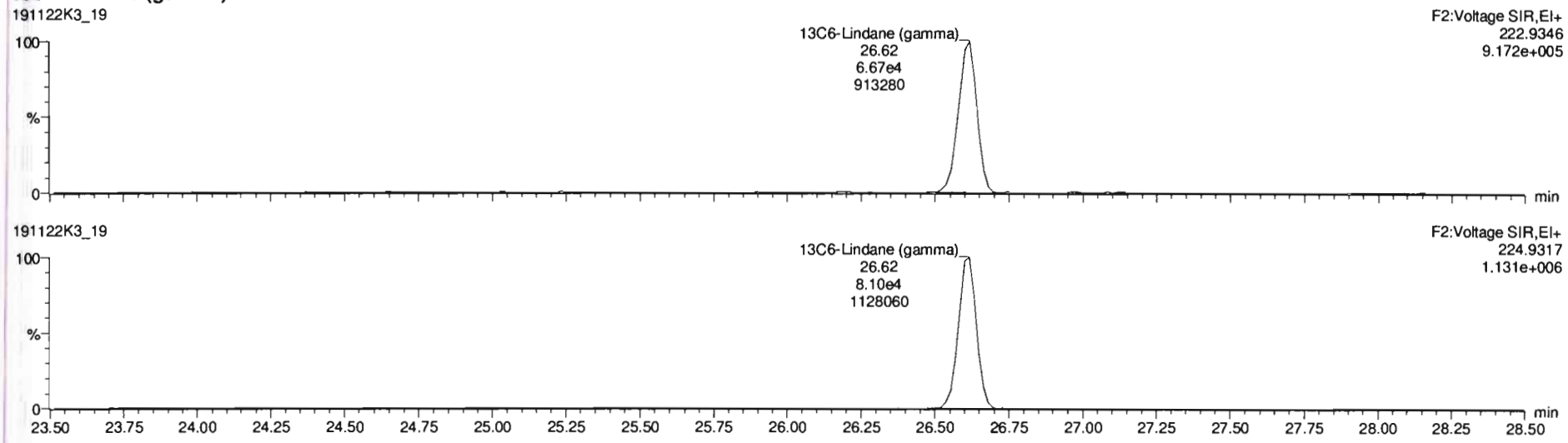
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

Lindane (gamma-BHC)



13C6-Lindane (gamma)

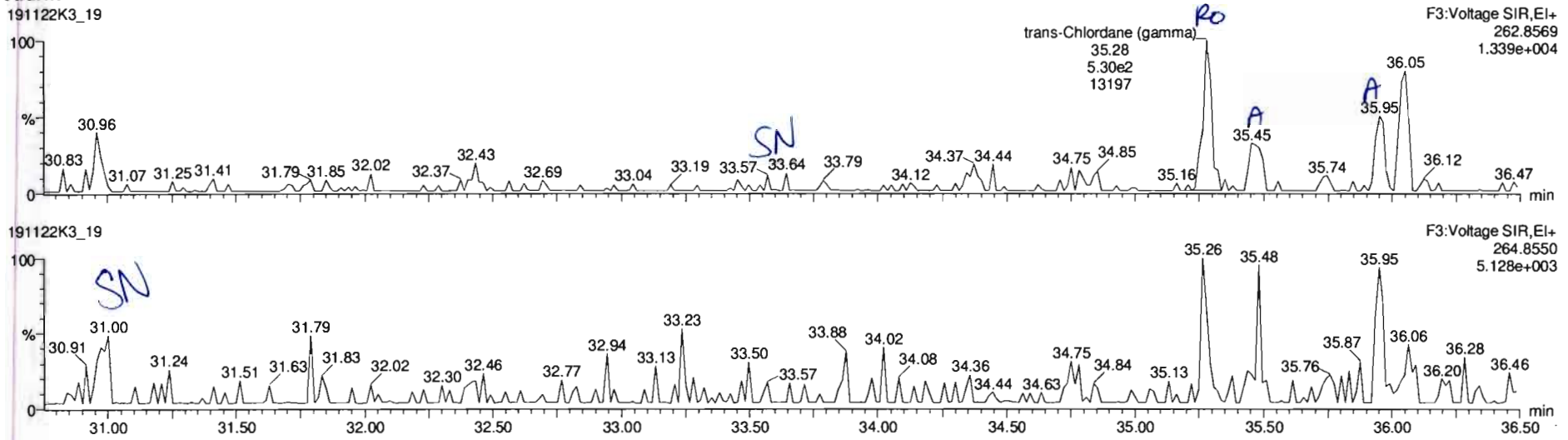


Dataset: Untitled

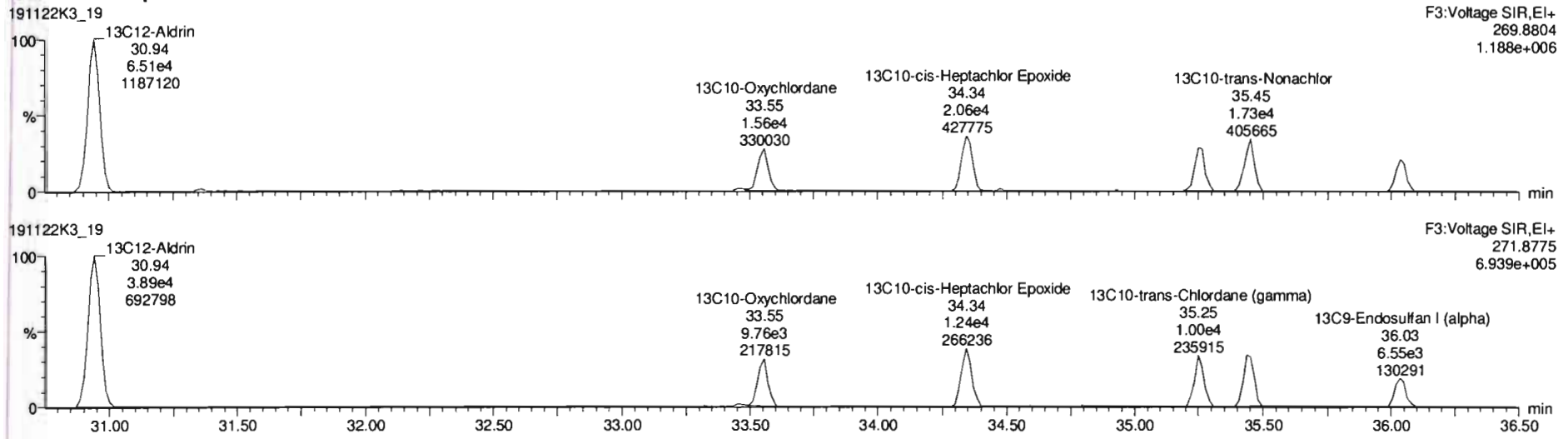
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

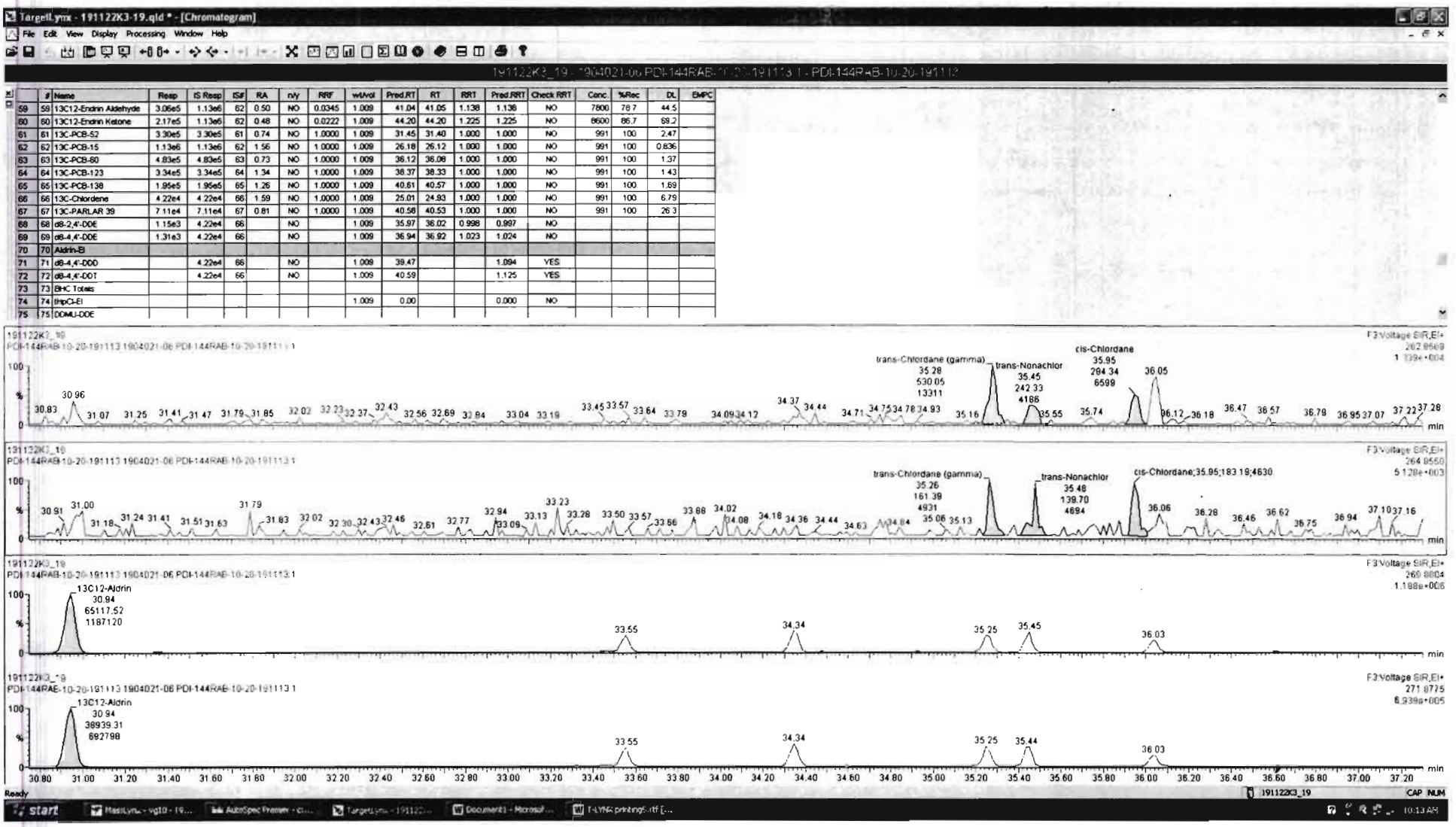
Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

Aldrin-EI



Aldrin-EI-isotopes





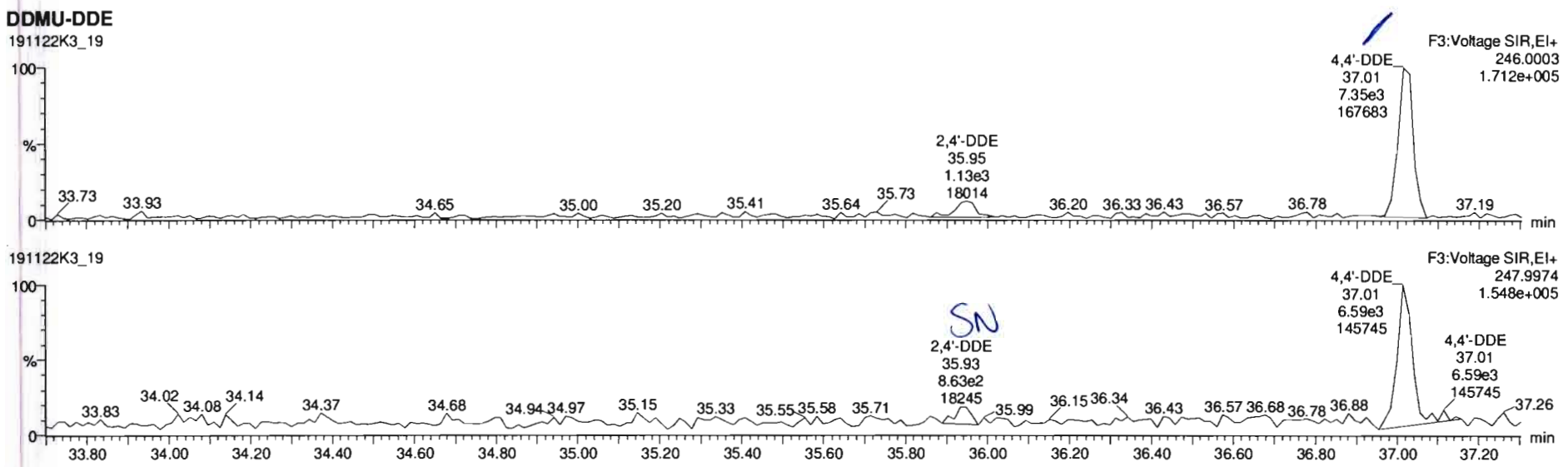
	#	Name	Resp	IS Resp	ISt	RA	n/y	RRF	wt/Vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
59	59	13C12-Endrin Aldehyde	3.06e5	1.13e6	62	0.50	NO	0.0345	1.009	41.04	41.05	1.138	1.136	NO	7800	78.7	44.5	
60	60	13C12-Endrin Ketone	2.17e5	1.13e6	62	0.48	NO	0.0222	1.009	44.20	44.20	1.225	1.225	NO	8600	86.7	69.2	
61	61	13C-PCB-52	3.30e5	3.30e5	61	0.74	NO	1.0000	1.009	31.45	31.40	1.000	1.000	NO	991	100	2.47	
62	62	13C-PCB-15	1.13e6	1.13e6	62	1.56	NO	1.0000	1.009	26.18	26.12	1.000	1.000	NO	991	100	0.836	
63	63	13C-PCB-80	4.83e5	4.83e5	63	0.73	NO	1.0000	1.009	36.12	36.08	1.000	1.000	NO	991	100	1.37	
64	64	13C-PCB-123	3.34e5	3.34e5	64	1.34	NO	1.0000	1.009	38.37	38.33	1.000	1.000	NO	991	100	1.43	
65	65	13C-PCB-138	1.95e5	1.95e5	65	1.26	NO	1.0000	1.009	40.61	40.57	1.000	1.000	NO	991	100	1.69	
66	66	13C-Chlordene	4.22e4	4.22e4	66	1.59	NO	1.0000	1.009	25.01	24.93	1.000	1.000	NO	991	100	6.79	
67	67	13C-PARLAR 39	7.11e4	7.11e4	67	0.81	NO	1.0000	1.009	40.58	40.53	1.000	1.000	NO	991	100	26.3	
68	68	d8-2,4'-DDE	1.15e3	4.22e4	66		NO		1.009	35.97	36.02	0.998	0.997	NO				
69	69	d8-4,4'-DDE	1.31e3	4.22e4	66		NO		1.009	36.94	36.92	1.023	1.024	NO				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD		4.22e4	66		NO		1.009	39.47			1.094	YES				
72	72	d8-4,4'-DDT		4.22e4	66		NO		1.009	40.59			1.125	YES				
73	73	BHC Totals																
74	74	thpCl-EI							1.009	0.00			0.000	NO				
75	75	DDMU-DDE																

Dataset: Untitled

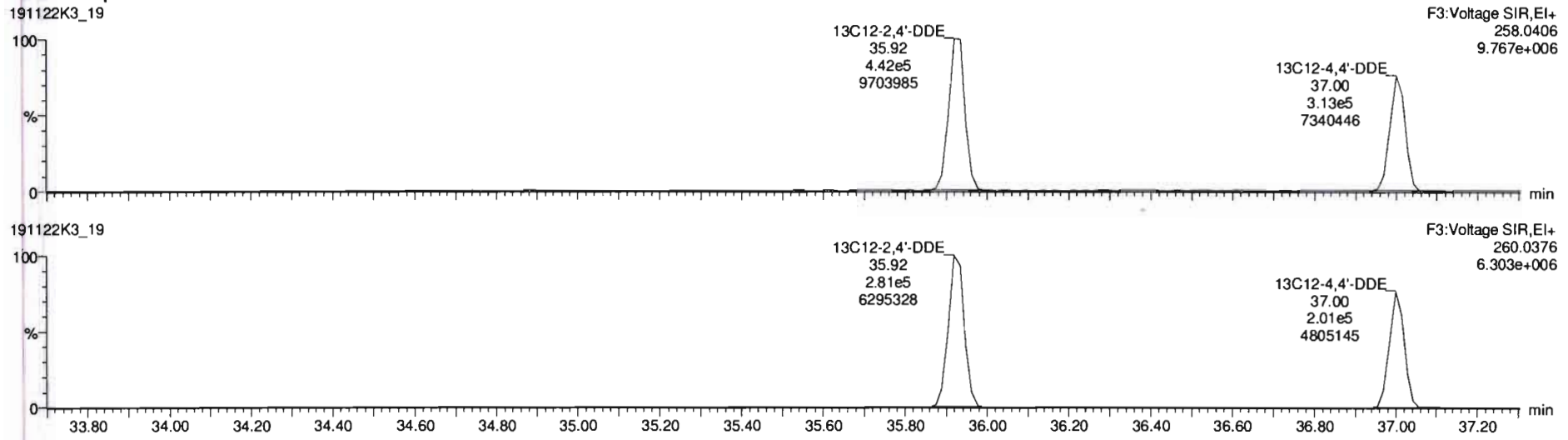
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

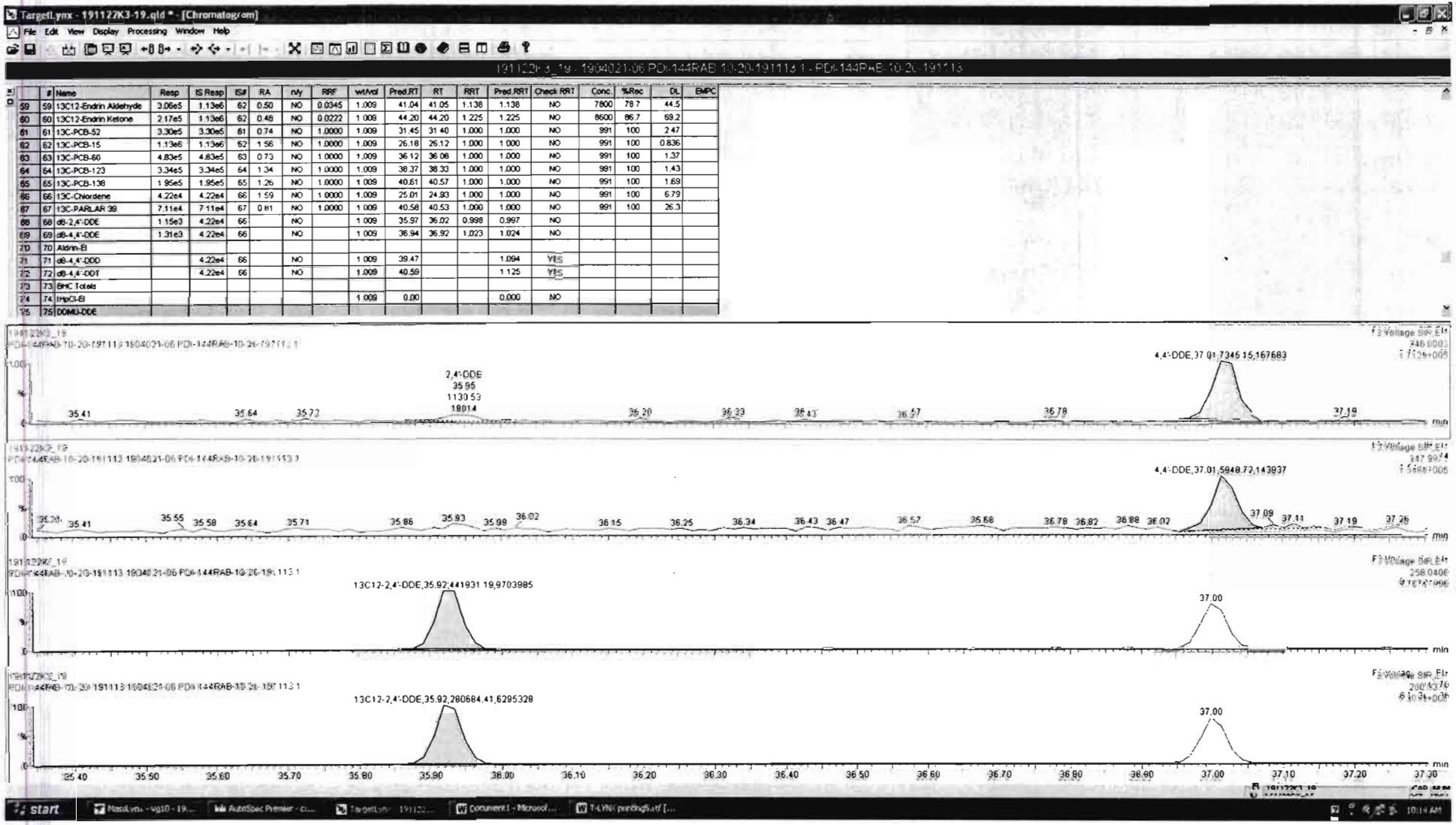
Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

DDMU-DDE



DDE-isotopes





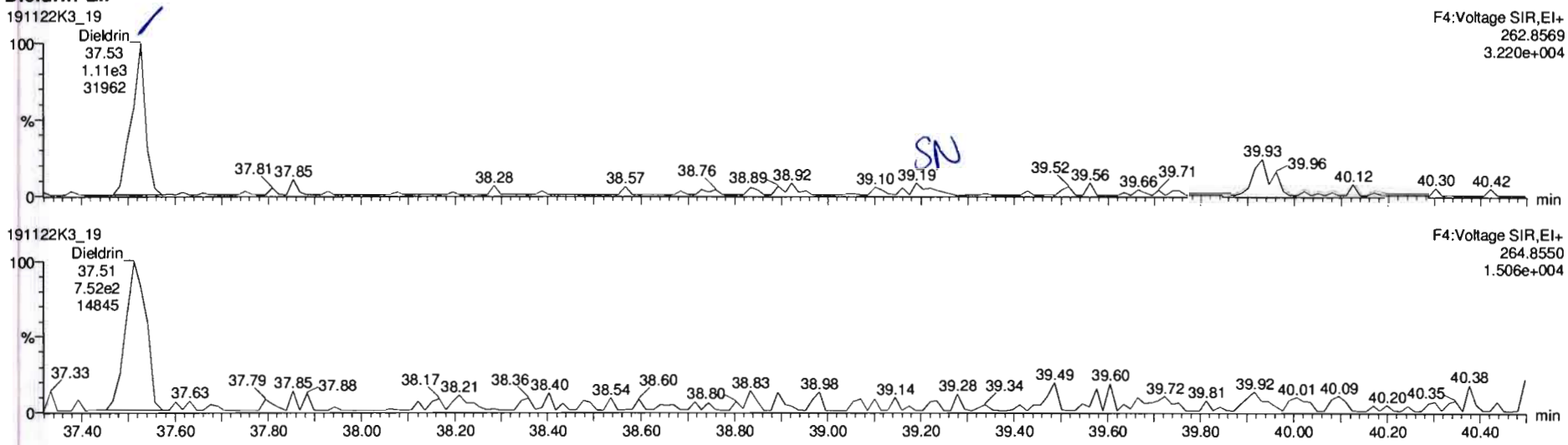
	#	Name	Resp	IS Resp	IS#	RA	rAy	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
59	59	13C12-Endrin Aldehyde	3.06e5	1.13e6	62	0.50	NO	0.0345	1.009	41.04	41.05	1.138	1.138	NO	7800	78.7	44.5	
60	60	13C12-Endrin Ketone	2.17e5	1.13e6	62	0.48	NO	0.0222	1.009	44.20	44.20	1.225	1.225	NO	8600	86.7	59.2	
61	61	13C-PCB-52	3.30e5	3.30e5	61	0.74	NO	1.0000	1.009	31.45	31.40	1.000	1.000	NO	991	100	2.47	
62	62	13C-PCB-15	1.13e6	1.13e6	62	1.56	NO	1.0000	1.009	26.18	26.12	1.000	1.000	NO	991	100	0.836	
63	63	13C-PCB-60	4.83e5	4.83e5	63	0.73	NO	1.0000	1.009	36.12	36.08	1.000	1.000	NO	991	100	1.37	
64	64	13C-PCB-123	3.34e5	3.34e5	64	1.34	NO	1.0000	1.009	38.37	38.33	1.000	1.000	NO	991	100	1.43	
65	65	13C-PCB-138	1.95e5	1.95e5	65	1.26	NO	1.0000	1.009	40.61	40.57	1.000	1.000	NO	991	100	1.69	
66	66	13C-Chlordene	4.22e4	4.22e4	66	1.59	NO	1.0000	1.009	25.01	24.93	1.000	1.000	NO	991	100	6.79	
67	67	13C-PARLAR 39	7.11e4	7.11e4	67	0.81	NO	1.0000	1.009	40.58	40.53	1.000	1.000	NO	991	100	26.3	
68	68	d8-2,4'-DDE	1.15e3	4.22e4	66		NO		1.009	35.97	36.02	0.998	0.997	NO				
69	69	d8-4,4'-DDE	1.31e3	4.22e4	66		NO		1.009	36.94	36.92	1.023	1.024	NO				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD		4.22e4	66		NO		1.009	39.47			1.094	YES				
72	72	d8-4,4'-DDT		4.22e4	66		NO		1.009	40.59			1.125	YES				
73	73	BHC Totals																
74	74	HpCl-EI							1.009	0.00			0.000	NO				
75	75	DDMU-DDE																

Dataset: Untitled

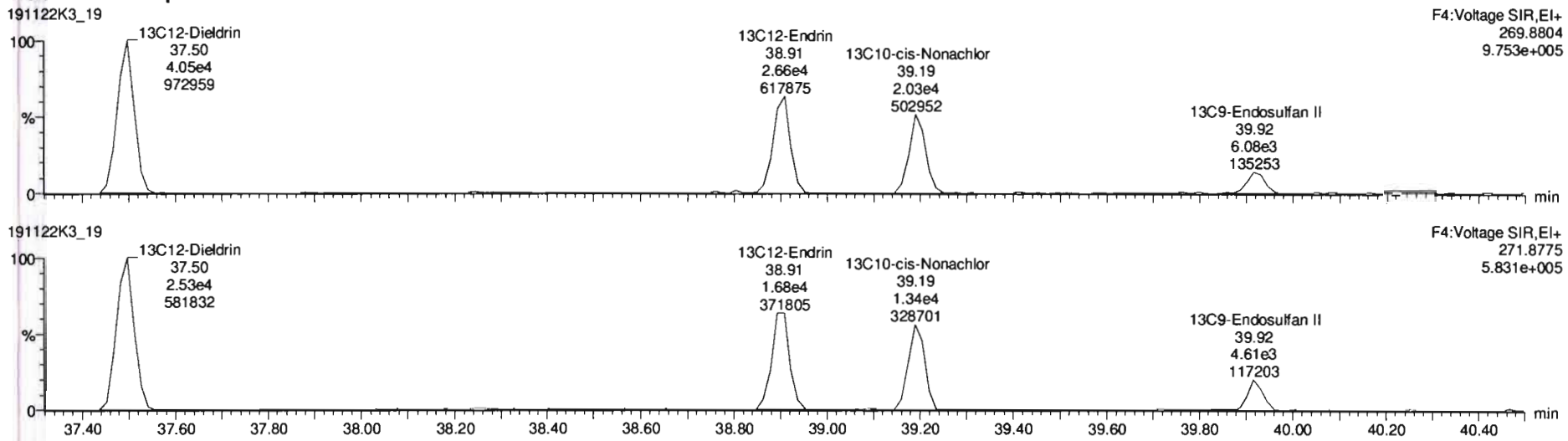
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

Dieldrin-EII



Dieldrin-EII-isotopes



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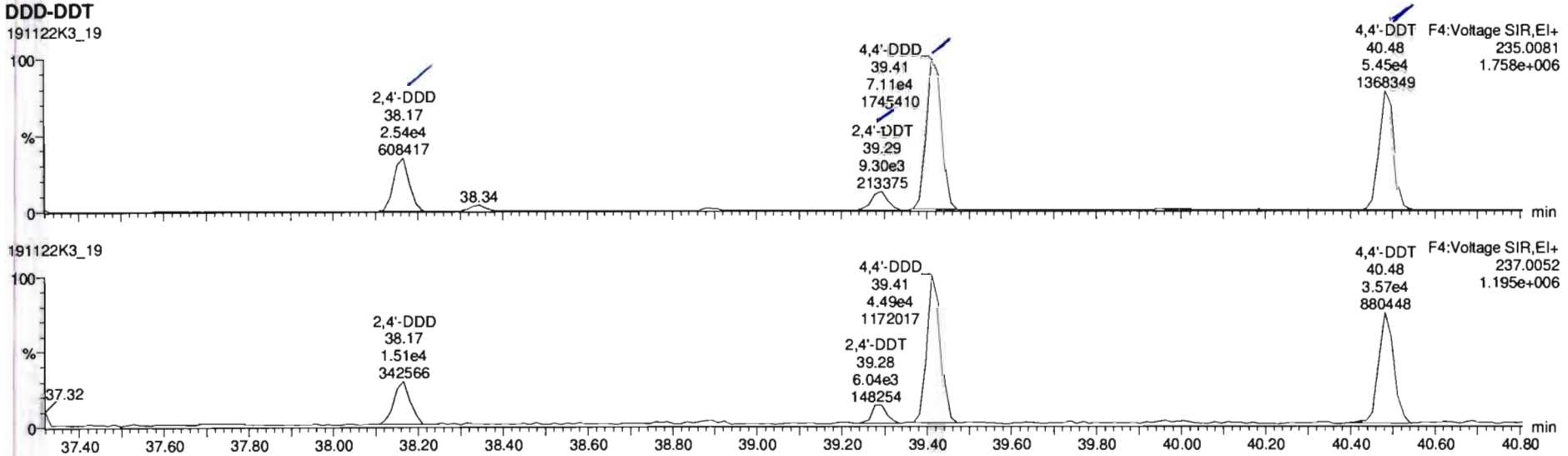
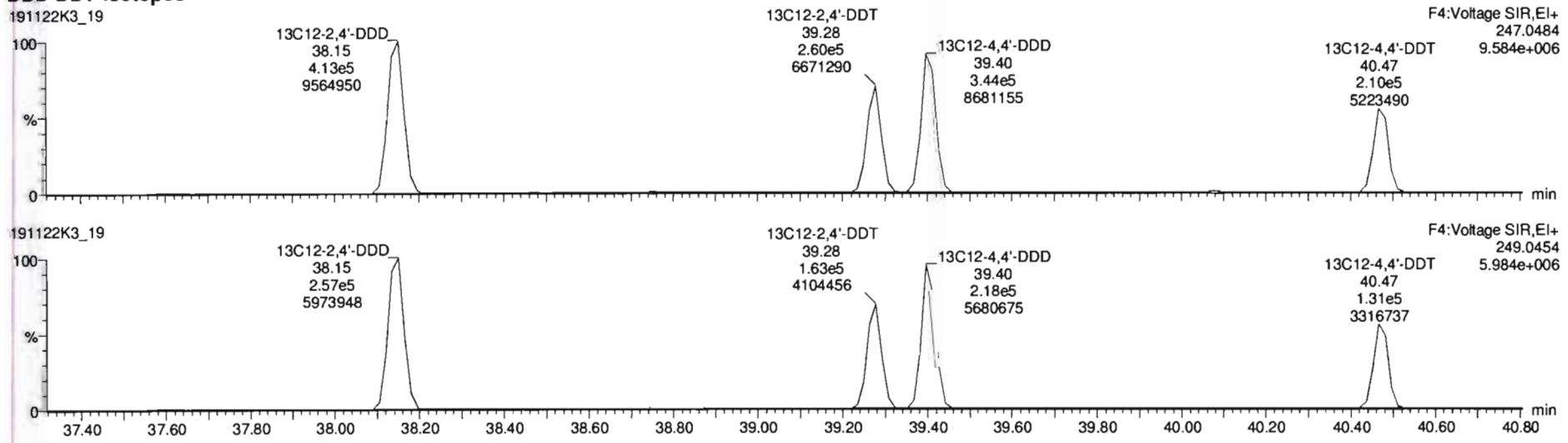
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

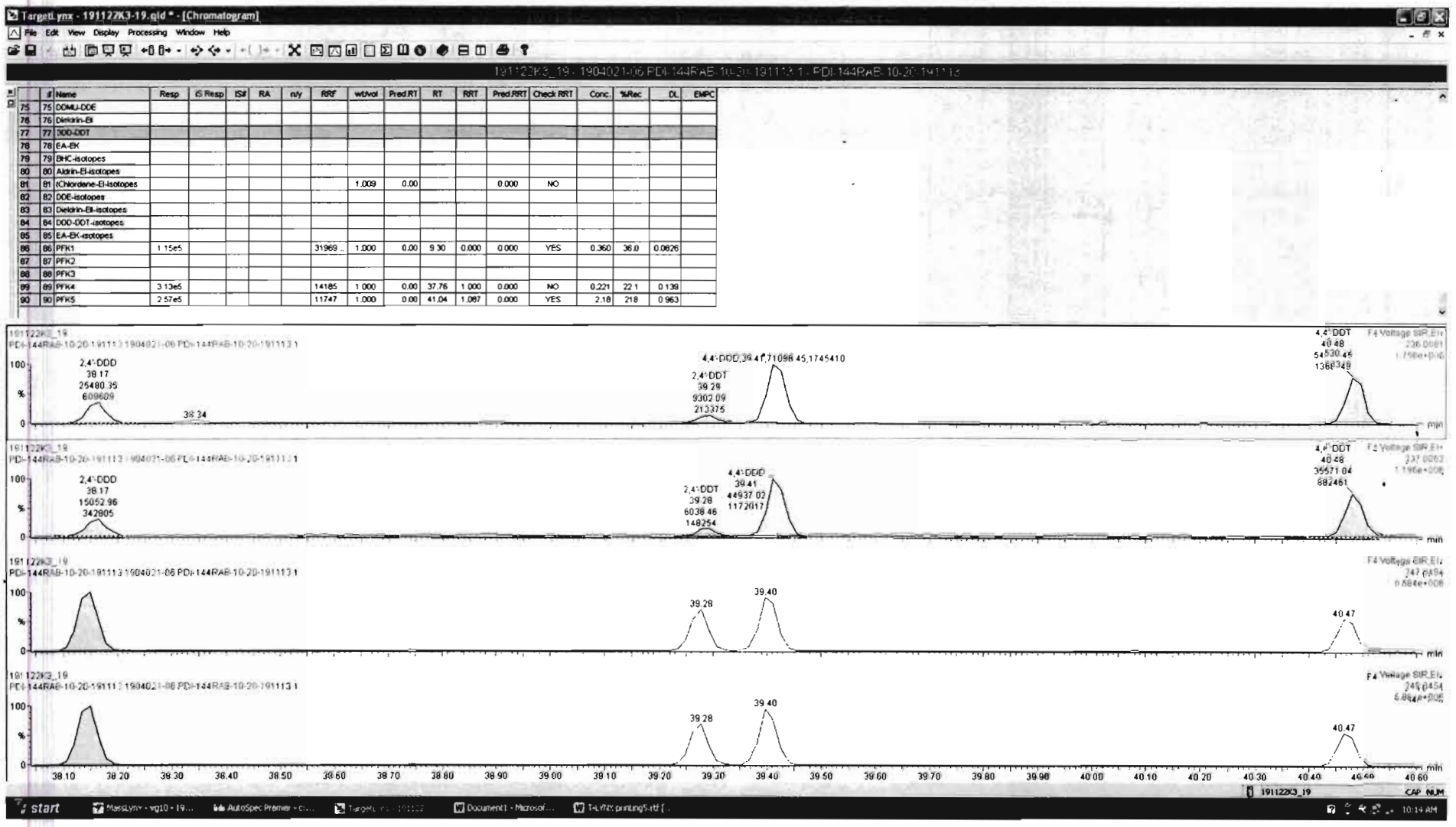
Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

DDD-DDT



DDD-DDT-isotopes





	#	Name	Resp	IS Resp	ISf	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
75	75	DDMU-DDE																
76	76	Dieldrin-EI																
77	77	300-DDT																
78	78	EA-BK																
79	79	BHC-isotopes																
80	80	Aldrin-EI-isotopes																
81	81	cChlordane-EI-isotopes							1.009	0.00			0.000	NO				
82	82	DDE-isotopes																
83	83	Dieldrin-EI-isotopes																
84	84	DDD-DDT-isotopes																
85	85	EA-BK-isotopes																
86	86	PFK1	1.15e5					31969	1.000	0.00	9.30	0.000	0.000	YES	0.360	36.0	0.0626	
87	87	PFK2																
88	88	PFK3																
89	89	PFK4	3.13e5					14185	1.000	0.00	37.76	1.000	0.000	NO	0.221	22.1	0.139	
90	90	PFK5	2.57e5					11747	1.000	0.00	41.04	1.087	0.000	YES	2.18	218	0.963	

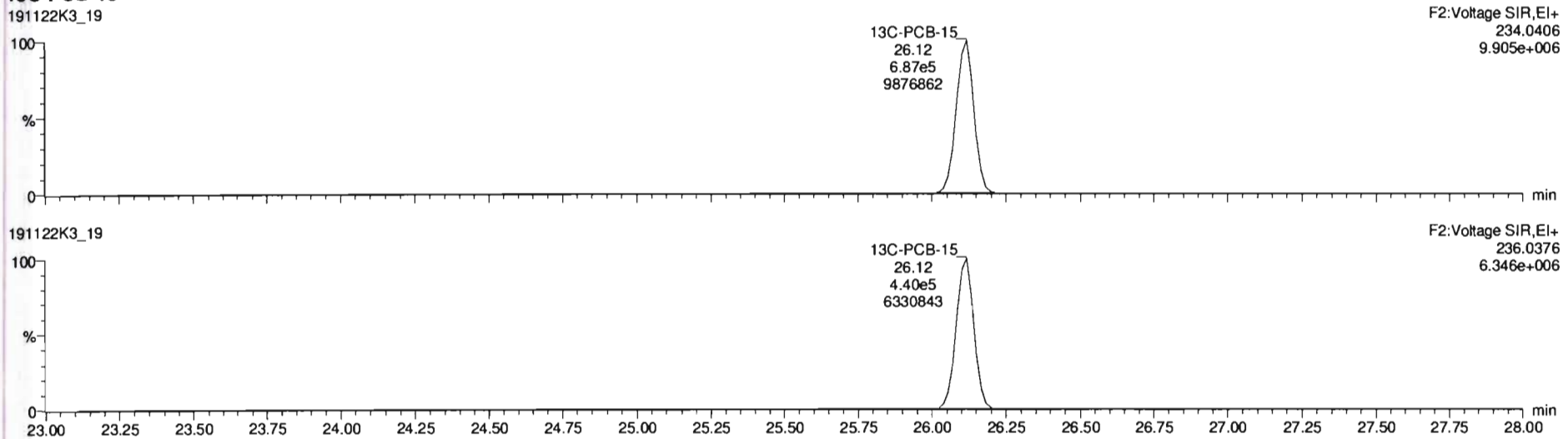
Vista Analytical Laboratory

Dataset: Untitled

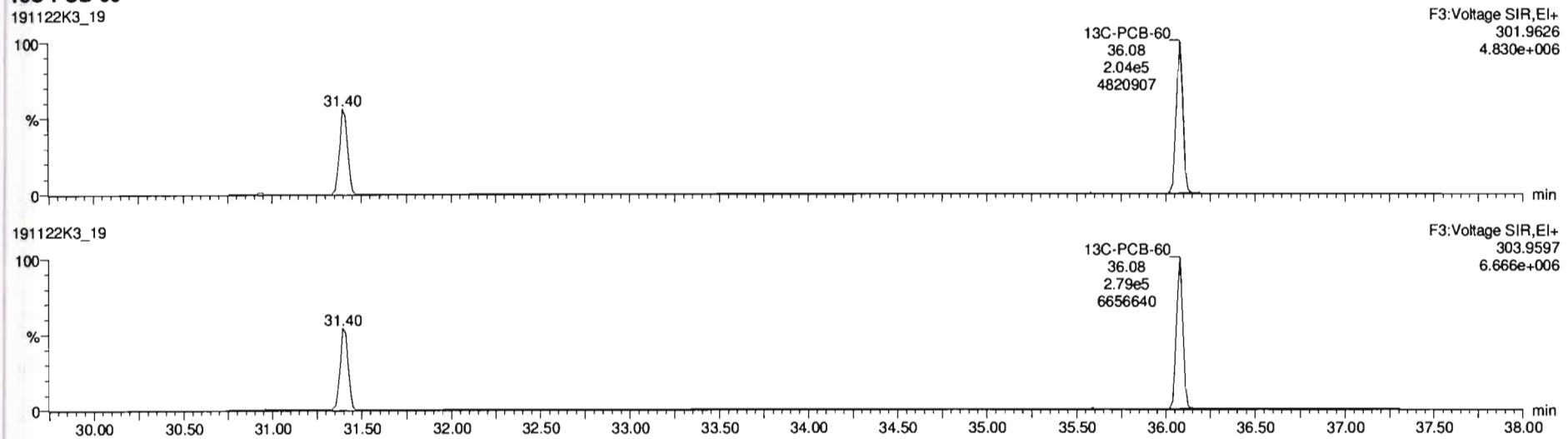
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

13C-PCB-15



13C-PCB-60

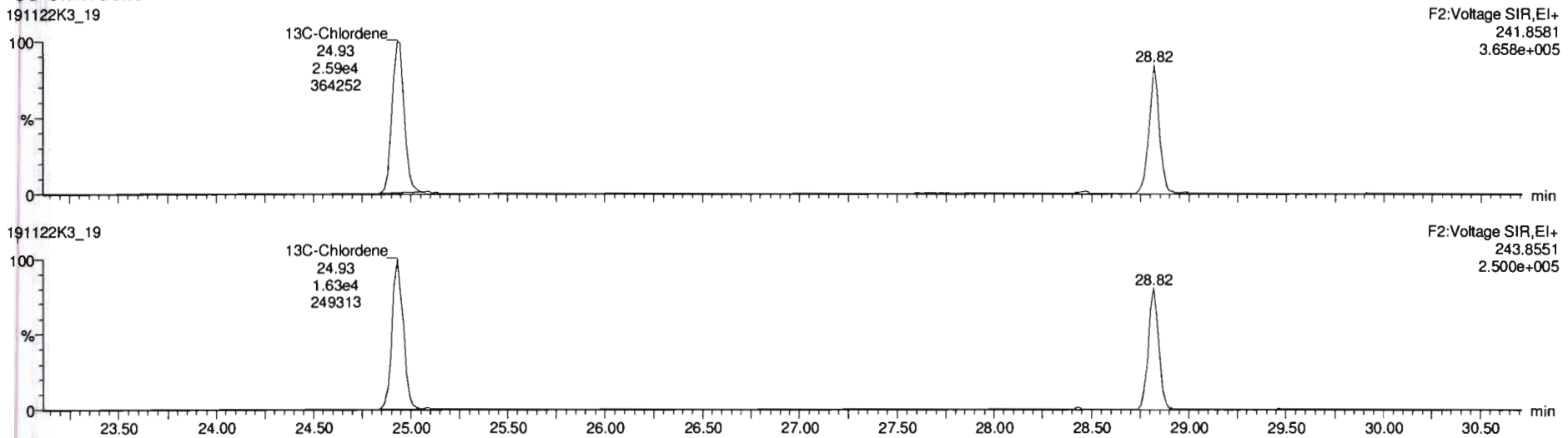


Dataset: Untitled

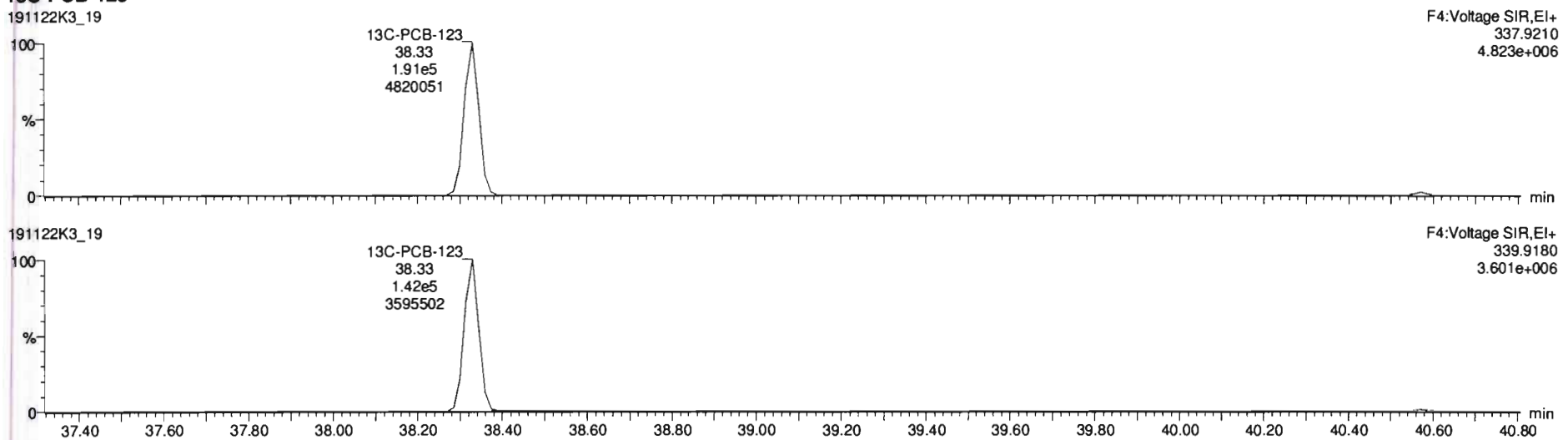
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

13C-Chlordene



13C-PCB-123

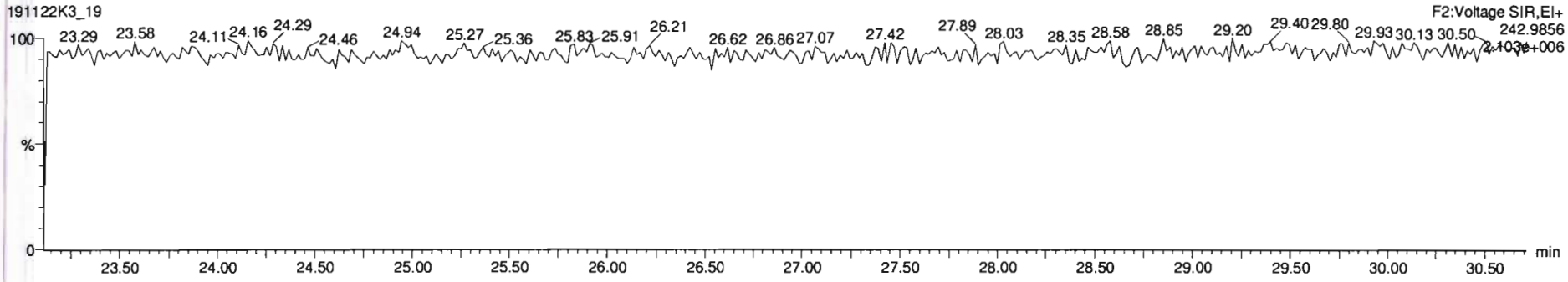


Dataset: Untitled

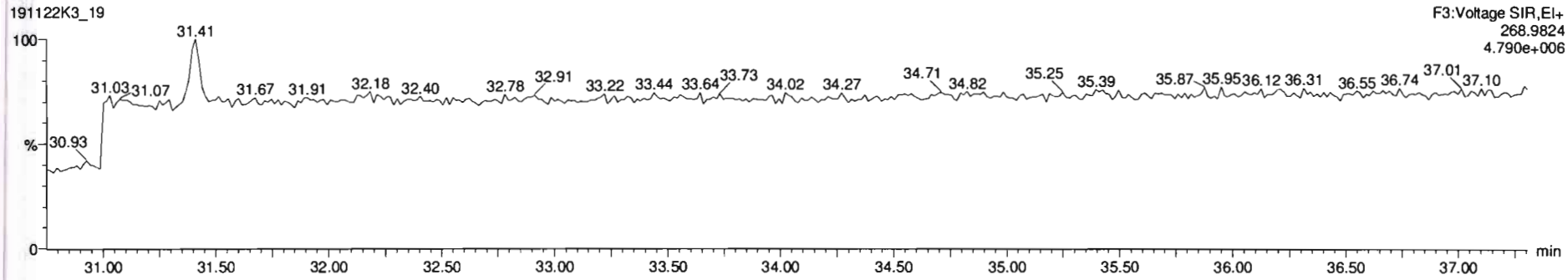
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_19, Date: 23-Nov-2019, Time: 06:51:35, ID: 1904021-06 PDI-144RAB-10-20-191113 1, Description: PDI-144RAB-10-20-191113

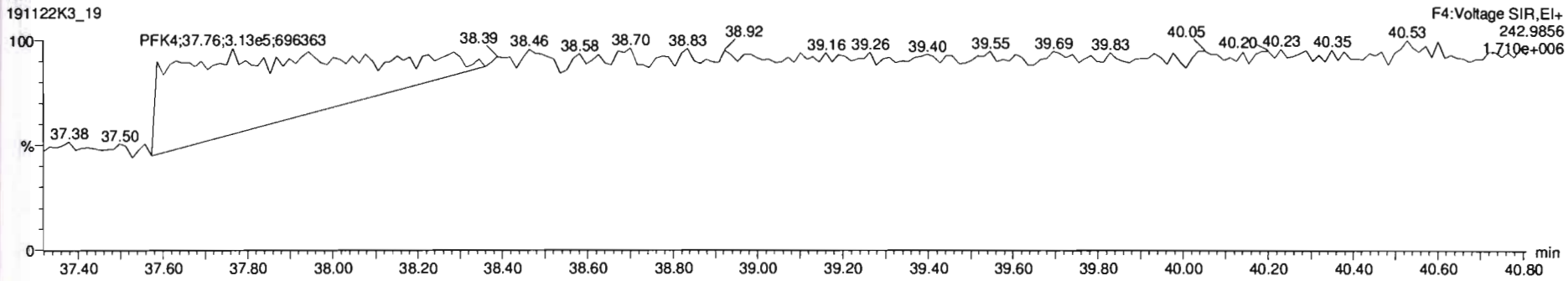
PFK2



PFK3



PFK4



Quantify Sample Summary Report **MassLynx 4.1**
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-20.qld

Last Altered: Tuesday, November 26, 2019 10:19:47 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:21:32 Pacific Standard Time

GRB 11/26/19

CT 02/04/2020

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	4	Lindane (gamma-BHC)		2.05e5		NO	0.744	1.075	26.65			1.001	YES			4.28	
2	9	Aldrin	8.43e2	1.41e5	1.11	YES	1.02	1.075	30.97	30.99	1.001	1.001	NO	5.45		3.37	4.71
3	10	Oxychlordane		3.62e4		NO	0.992	1.075	33.58			1.001	YES			11.5	
4	13	trans-Chlordane (gam...	1.94e3	3.50e4	1.92	NO	1.08	1.075	35.28	35.29	1.001	1.001	NO	47.7		9.40	47.7
5	14	trans-Nonachlor	6.73e2	3.82e4	1.25	NO	1.00	1.075	35.47	35.47	1.000	1.001	NO	16.3		9.76	16.3
6	15	cis-Chlordane	1.08e3	3.82e4	1.26	NO	0.981	1.075	35.96	35.95	1.014	1.014	NO	26.8		9.97	26.8
7	18	2,4'-DDE	3.89e3	9.52e5	1.15	YES	0.854	1.075	35.94	35.95	1.000	1.000	NO	4.45		1.88	3.91
8	19	4,4'-DDE	2.87e4	6.99e5	1.40	NO	0.873	1.075	37.03	37.03	1.000	1.000	NO	43.7		2.08	43.7
9	20	Dieldrin	7.33e3	9.23e4	1.56	NO	0.957	1.075	37.52	37.53	1.001	1.000	NO	77.2		6.44	77.2
10	22	cis-Nonachlor		4.89e4		NO	0.956	1.075	39.22			1.000	YES			12.2	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-20.qld

Last Altered: Tuesday, November 26, 2019 10:19:47 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:21:41 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	24	2,4'-DDD	5.00e4	9.22e5	1.50	NO	0.915	1.075	38.15	38.17	1.000	1.000	NO	55.1		2.41	55.1
2	25	2,4'-DDT	4.58e4	5.91e5	1.56	NO	0.921	1.075	39.30	39.29	1.000	1.000	NO	78.3		3.93	78.3
3	26	4,4'-DDD	1.56e5	8.08e5	1.60	NO	1.00	1.075	39.43	39.43	1.000	1.000	NO	179		2.56	179
4	27	4,4'-DDT	2.58e5	5.11e5	1.59	NO	0.986	1.075	40.50	40.50	1.000	1.000	NO	476		4.17	476
5	36	13C6-Lindane (gamma)	2.05e5	1.36e6	0.79	NO	0.189	1.075	26.63	26.62	1.019	1.020	NO	738	79.3	4.10	
6	40	13C12-Aldrin	1.41e5	1.36e6	1.62	NO	0.122	1.075	30.93	30.94	1.185	1.184	NO	789	84.9	3.53	
7	41	13C10-Oxychlordane	3.62e4	1.36e6	1.59	NO	0.0283	1.075	33.53	33.56	1.285	1.284	NO	873	93.8	15.2	
8	43	13C10-trans-Chlordan...	3.50e4	1.36e6	1.59	NO	0.0292	1.075	35.23	35.26	1.350	1.349	NO	818	88.0	14.7	
9	44	13C10-trans-Nonachlor	3.82e4	1.36e6	1.66	NO	0.0333	1.075	35.42	35.45	1.357	1.356	NO	782	84.0	12.9	

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-20.qld

Last Altered: Tuesday, November 26, 2019 10:19:47 Pacific Standard Time
Printed: Tuesday, November 26, 2019 10:21:47 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	46	13C12-2,4'-DDE	9.52e5	1.36e6	1.60	NO	0.763	1.075	35.94	35.93	0.996	0.996	NO	851	91.4	3.72	
2	47	13C12-4,4'-DDE	6.99e5	1.36e6	1.61	NO	0.552	1.075	37.00	37.01	1.026	1.026	NO	864	92.8	5.14	
3	48	13C12-Dieldrin	9.23e4	1.36e6	1.53	NO	0.0749	1.075	37.50	37.50	1.039	1.039	NO	840	90.3	7.45	
4	50	13C10-cis-Nonachlor	4.89e4	1.36e6	1.66	NO	0.0389	1.075	39.19	39.20	1.087	1.086	NO	856	92.0	14.3	
5	52	13C12-2,4'-DDD	9.22e5	1.36e6	1.60	NO	0.588	1.075	38.10	38.15	1.461	1.459	NO	1070	115	5.54	
6	53	13C12-2,4'-DDT	5.91e5	1.36e6	1.62	NO	0.370	1.075	39.23	39.28	1.504	1.502	NO	1090	117	8.81	
7	54	13C12-4,4'-DDD	8.08e5	1.36e6	1.59	NO	0.473	1.075	39.35	39.41	1.509	1.507	NO	1160	125	6.89	
8	55	13C12-4,4'-DDT	5.11e5	1.36e6	1.59	NO	0.280	1.075	40.41	40.48	1.550	1.547	NO	1240	134	11.6	
9	62	13C-PCB-15	1.36e6	1.36e6	1.59	NO	1.00	1.075	26.18	26.12	1.000	1.000	NO	930	100	0.824	

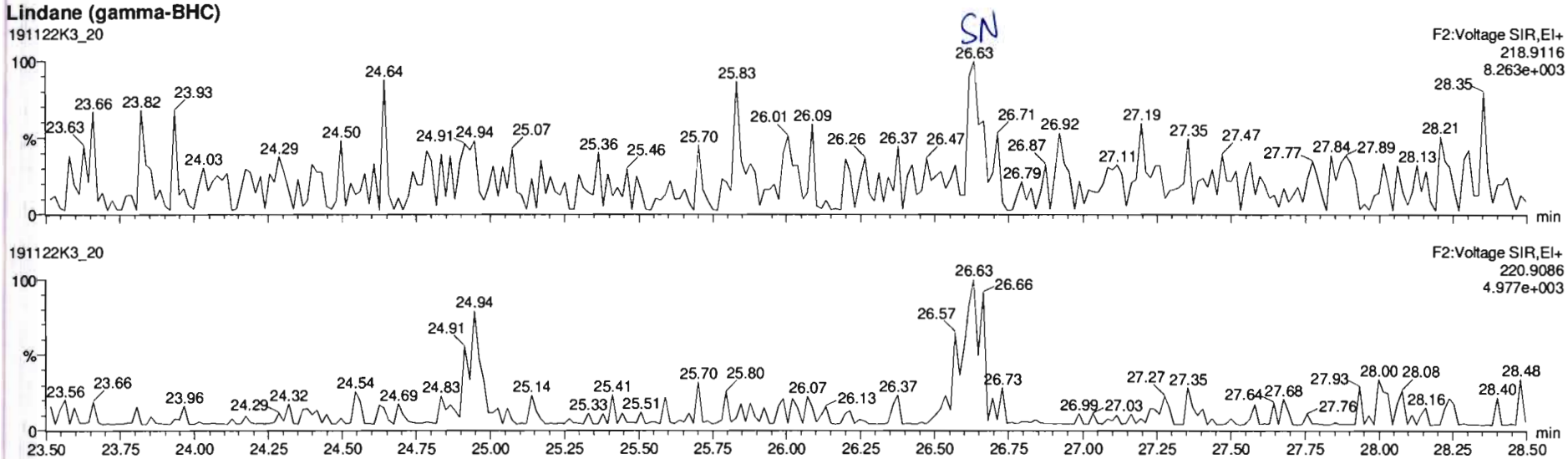
Vista Analytical Laboratory

Dataset: Untitled

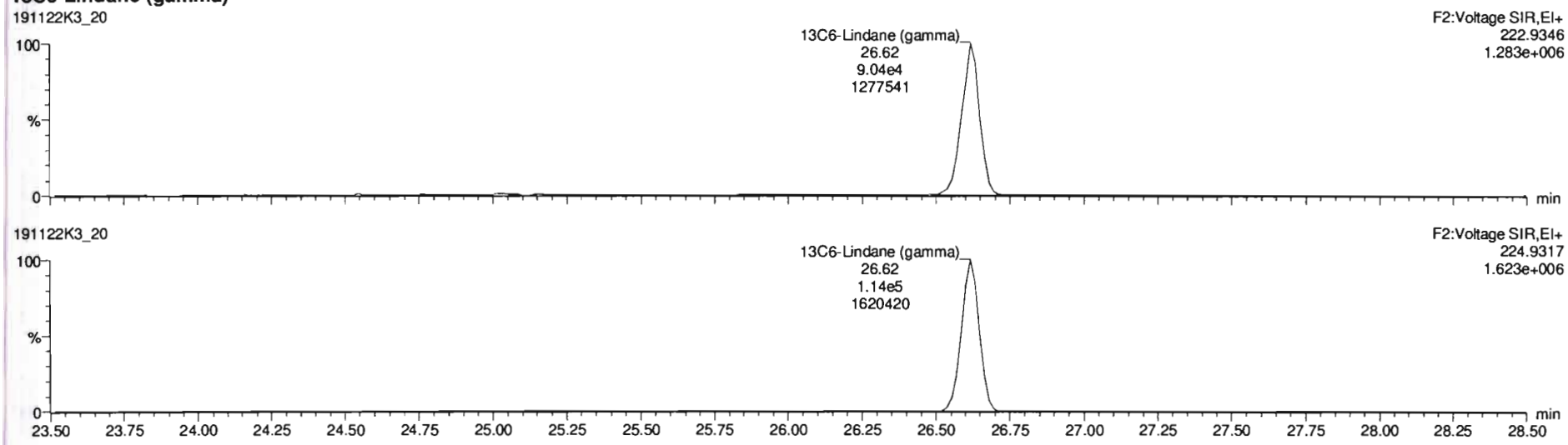
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

Lindane (gamma-BHC)



13C6-Lindane (gamma)

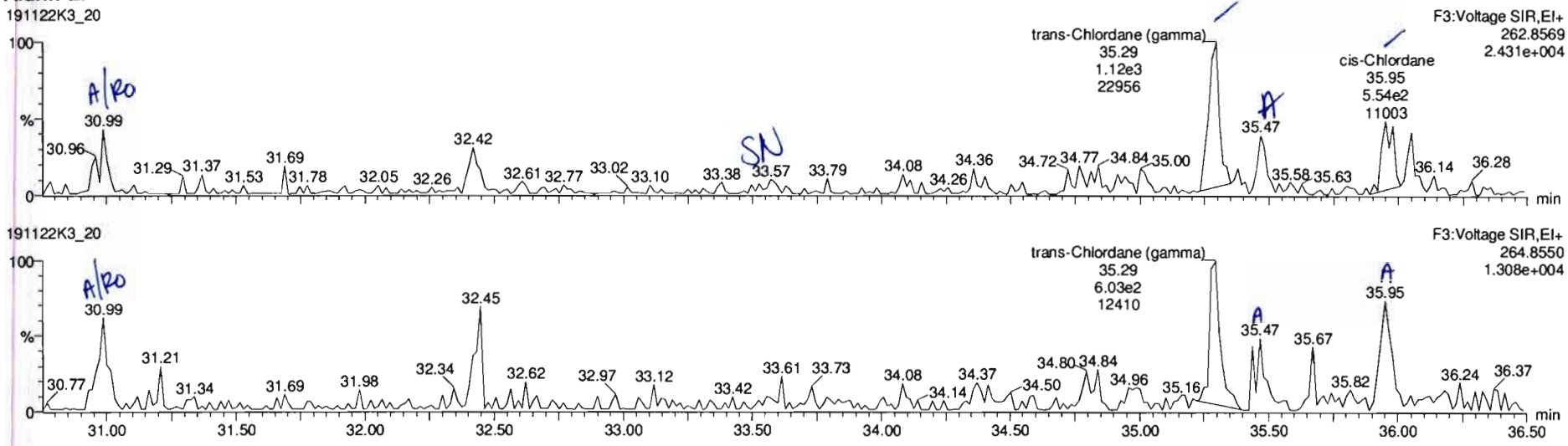


Dataset: Untitled

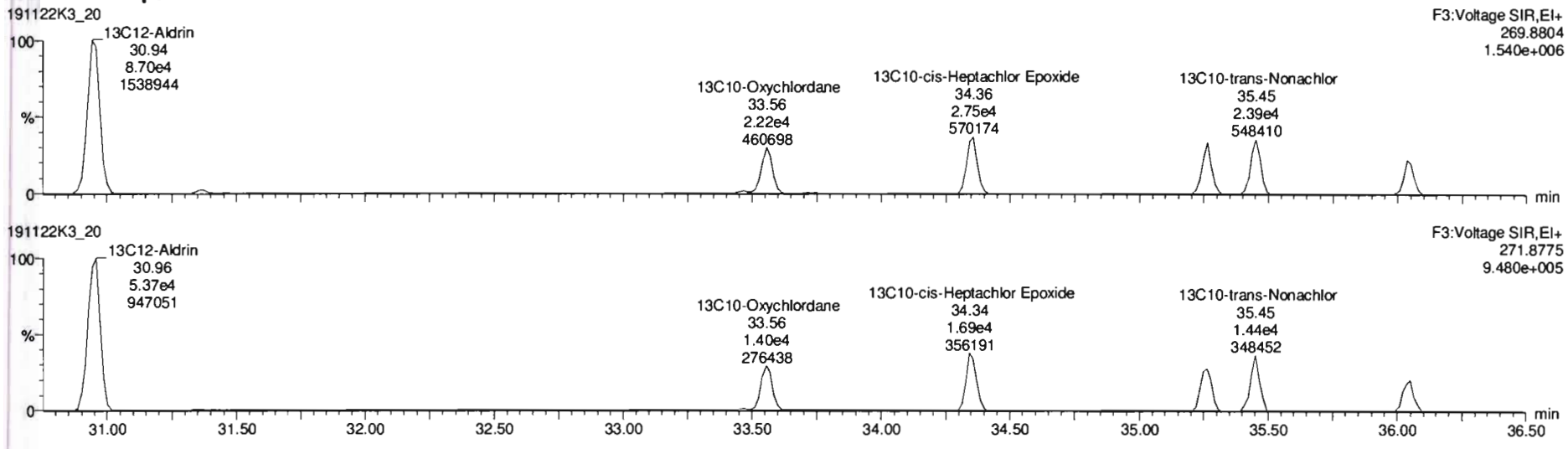
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

Aldrin-EI



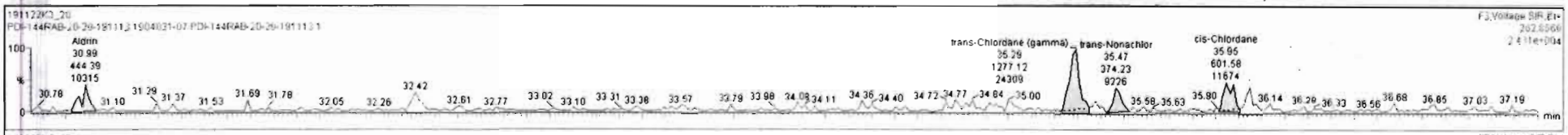
Aldrin-EI-isotopes

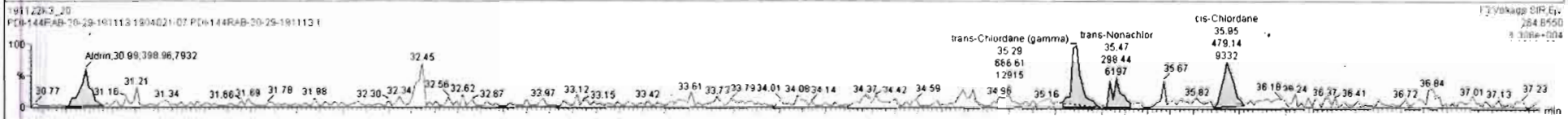


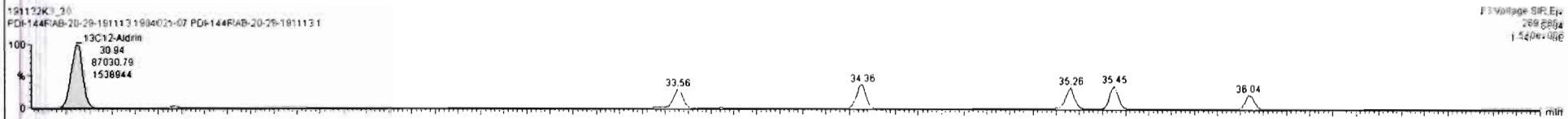
TargetLynx - 191122K3-20.qld - [Chromatogram]

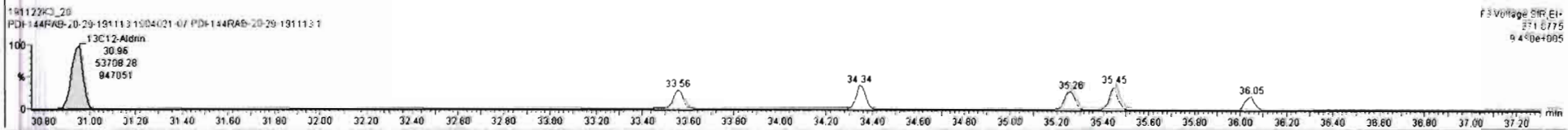
File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
59	59	13C12-Endrin Aldehyde	3.87e5	1.36e6	62	0.50	NO	0.0345	1.075	41.04	41.05	1.138	1.138	NO	7640	82.1	45.5	
60	60	13C12-Endrin Ketone	2.90e5	1.36e6	62	0.48	NO	0.0222	1.075	44.20	44.20	1.225	1.225	NO	8920	95.9	70.7	
61	61	13C-PCB-52	3.73e5	3.73e5	61	0.76	NO	1.0000	1.075	31.45	31.41	1.000	1.000	NO	930	100	2.36	
62	62	13C-PCB-15	1.36e6	1.36e6	62	1.59	NO	1.0000	1.075	26.16	26.12	1.000	1.000	NO	930	100	0.824	
63	63	13C-PCB-80	5.67e5	5.67e5	63	0.74	NO	1.0000	1.075	36.12	36.08	1.000	1.000	NO	930	100	1.20	
64	64	13C-PCB-123	3.96e5	3.96e5	64	1.35	NO	1.0000	1.075	38.37	38.33	1.000	1.000	NO	930	100	1.12	
65	65	13C-PCB-138	2.32e5	2.32e5	65	1.27	NO	1.0000	1.075	40.61	40.57	1.000	1.000	NO	930	100	1.23	
66	66	13C-Chlordene	5.09e4	5.09e4	66	1.53	NO	1.0000	1.075	25.01	24.94	1.000	1.000	NO	930	100	6.80	
67	67	13C-PARLAR 39	8.43e4	8.43e4	67	0.79	NO	1.0000	1.075	40.58	40.54	1.000	1.000	NO	930	100	20.4	
68	68	d8-2,4'-DDE	1.11e3	5.09e4	66		NO		1.075	35.97	35.76	0.991	0.987	NO				
69	69	d8-4,4'-DDE		5.09e4	66		NO		1.075	36.94			1.024	YES				
70	70	Aldrin-EI																
71	71	d8-4,4'-DDD	1.32e3	5.09e4	66		NO		1.075	39.47	39.47	1.094	1.094	NO				
72	72	d8-4,4'-DDT		5.09e4	66		NO		1.075	40.59			1.125	YES				
73	73	BHC Totals																
74	74	tHpCl-EI							1.075	0.00			0.000	NO				
75	75	DDMU-DDE																









Ready

191122K3_20

CAP NUM

start

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Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

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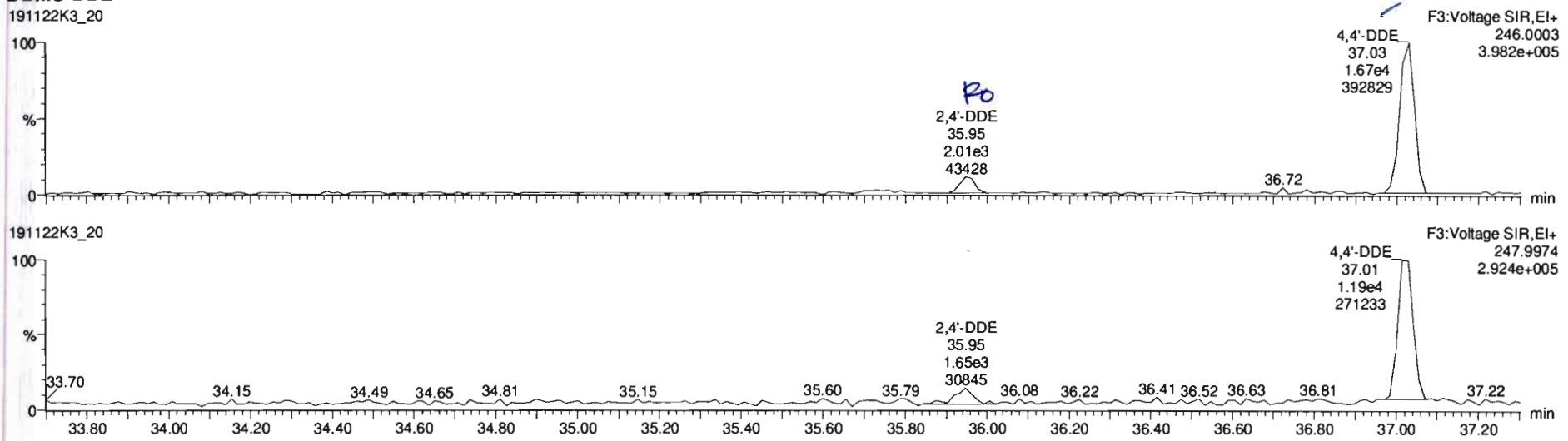
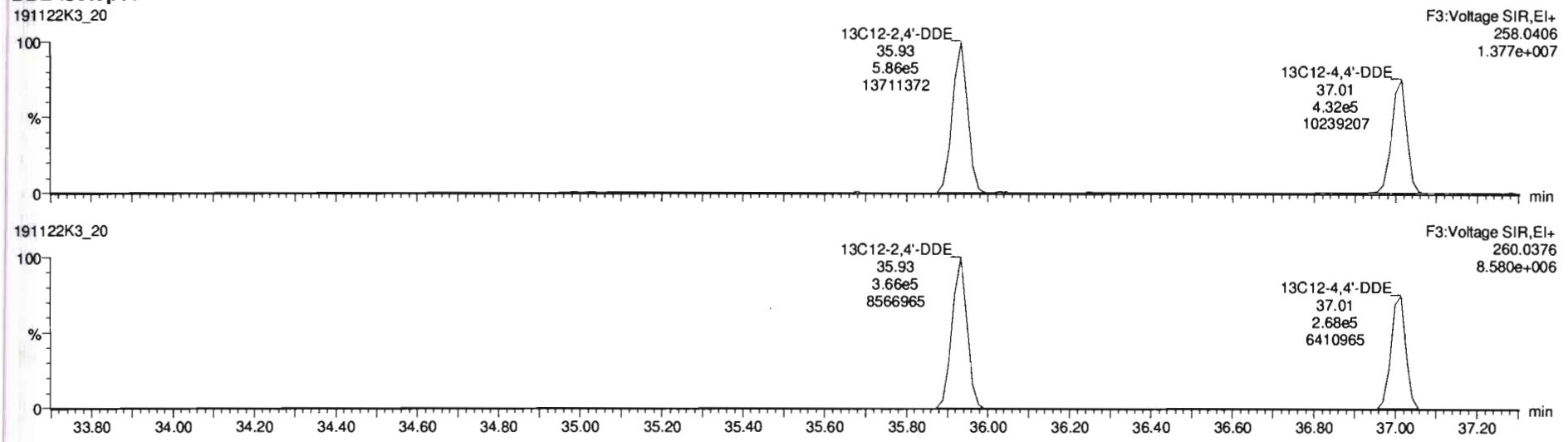
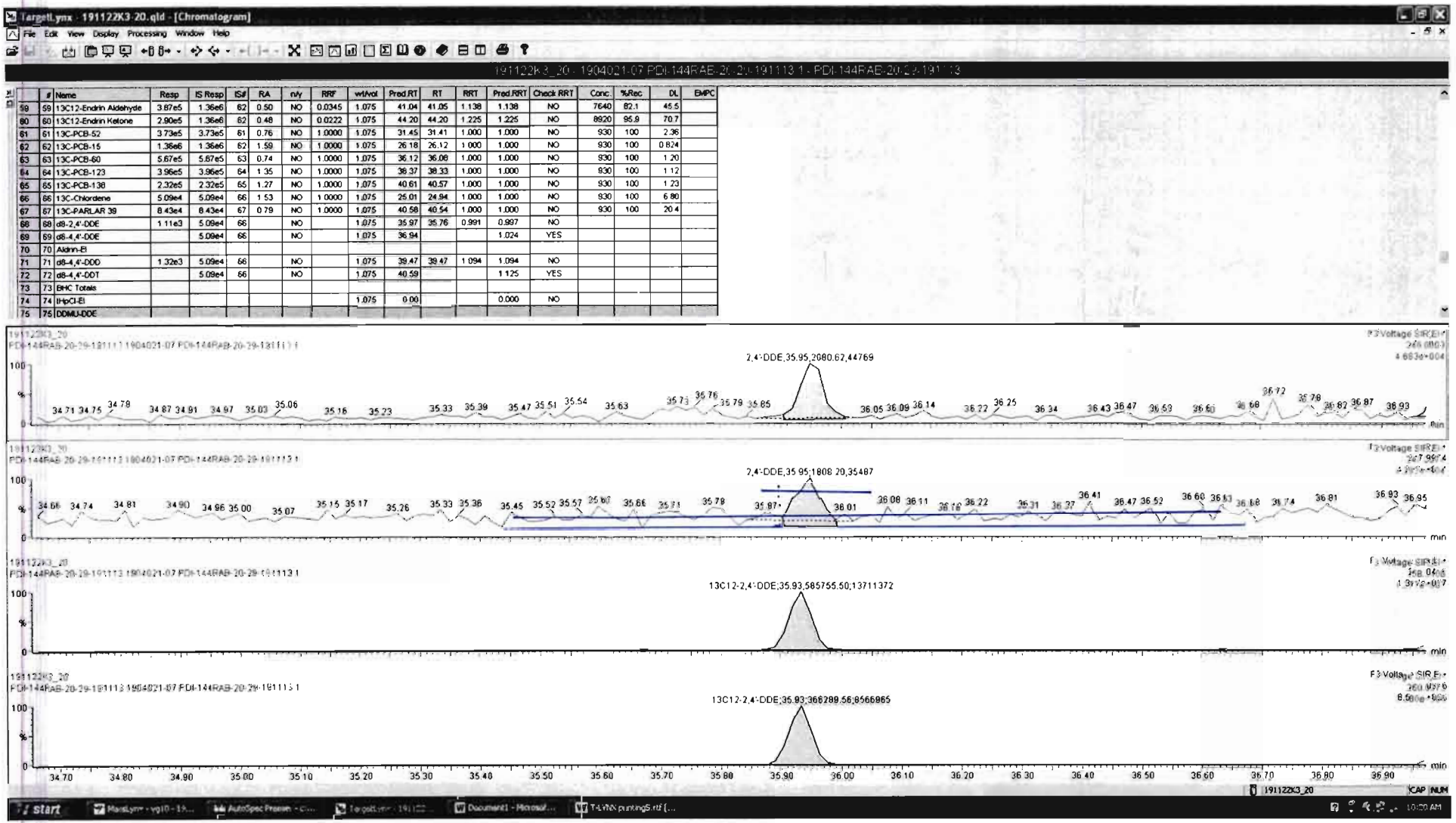
DDMU-DDE



DDE-isotopes





	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
59	59	13C12-Endrin Aldehyde	3.67e5	1.36e6	62	0.50	NO	0.0345	1.075	41.04	41.05	1.138	1.138	NO	7640	82.1	45.5	
60	60	13C12-Endrin Ketone	2.90e5	1.36e6	62	0.48	NO	0.0222	1.075	44.20	44.20	1.225	1.225	NO	8920	95.9	70.7	
61	61	13C-PCB-52	3.73e5	3.73e5	61	0.76	NO	1.0000	1.075	31.45	31.41	1.000	1.000	NO	930	100	2.36	
62	62	13C-PCB-15	1.36e6	1.36e6	62	1.59	NO	1.0000	1.075	26.18	26.12	1.000	1.000	NO	930	100	0.824	
63	63	13C-PCB-60	5.67e5	5.67e5	63	0.74	NO	1.0000	1.075	36.12	36.08	1.000	1.000	NO	930	100	1.20	
64	64	13C-PCB-123	3.96e5	3.96e5	64	1.35	NO	1.0000	1.075	38.37	38.33	1.000	1.000	NO	930	100	1.12	
65	65	13C-PCB-138	2.32e5	2.32e5	65	1.27	NO	1.0000	1.075	40.61	40.57	1.000	1.000	NO	930	100	1.23	
66	66	13C-Chlordene	5.09e4	5.09e4	66	1.53	NO	1.0000	1.075	25.01	24.94	1.000	1.000	NO	930	100	6.80	
67	67	13C-PARLAR 39	8.43e4	8.43e4	67	0.79	NO	1.0000	1.075	40.58	40.54	1.000	1.000	NO	930	100	20.4	
68	68	d8-2,4'-DDE	1.11e3	5.09e4	66		NO		1.075	35.97	35.76	0.991	0.997	NO				
69	69	d8-4,4'-DDE		5.09e4	66		NO		1.075	36.94			1.024	YES				
70	70	Aldrin-BI																
71	71	d8-4,4'-DDD	1.32e3	5.09e4	66		NO		1.075	39.47	39.47	1.094	1.094	NO				
72	72	d8-4,4'-DDT		5.09e4	66		NO		1.075	40.59			1.125	YES				
73	73	BHC Totals																
74	74	HpCl-BI							1.075	0.00			0.000	NO				
75	75	DDMU-DDE																

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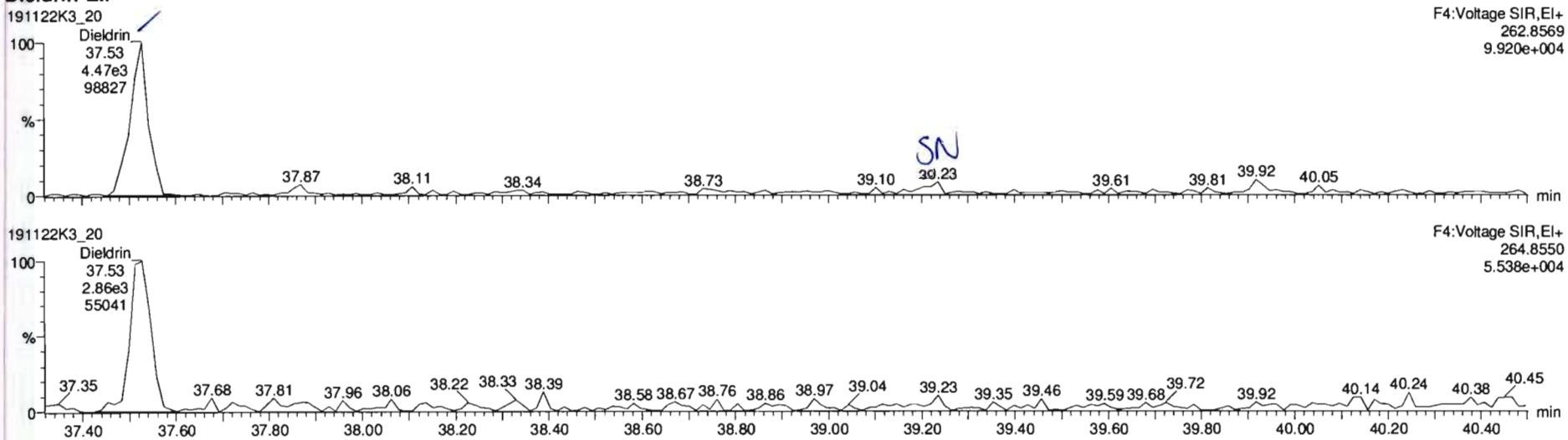
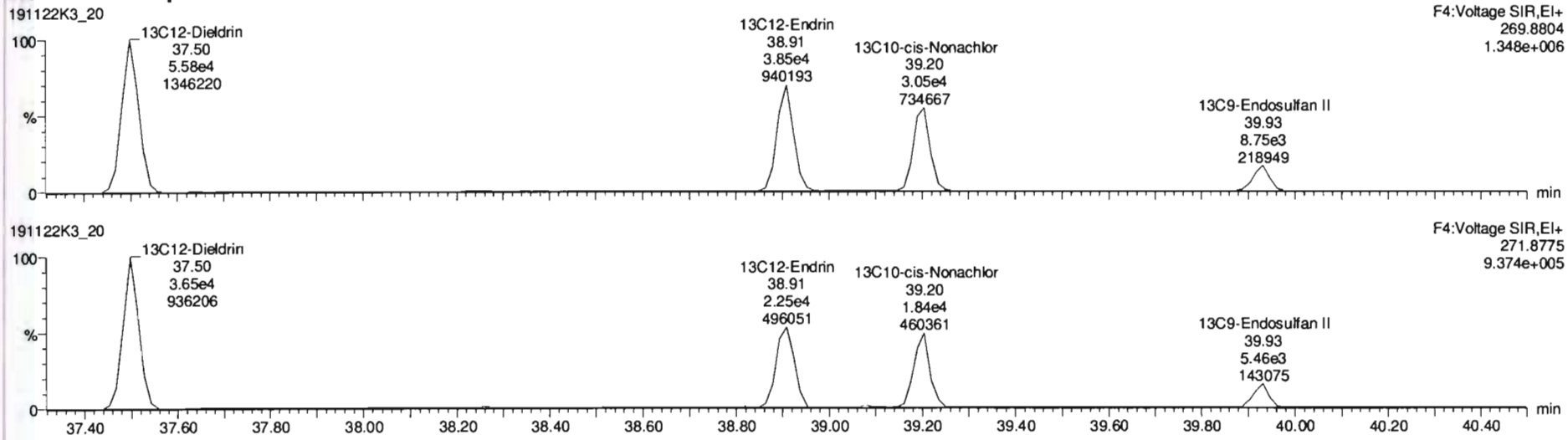
Last Altered: Monday, November 25, 2019 11:01:53 Pacific Standard Time
Printed: Monday, November 25, 2019 11:23:53 Pacific Standard Time

Name: 191122K3_20, Date: 23-Nov-2019, Time: 07:40:46, ID: 1904021-07 PDI-144RAB-20-29-191113 1, Description: PDI-144RAB-20-29-191113

Dieldrin-EII



Dieldrin-EII-isotopes



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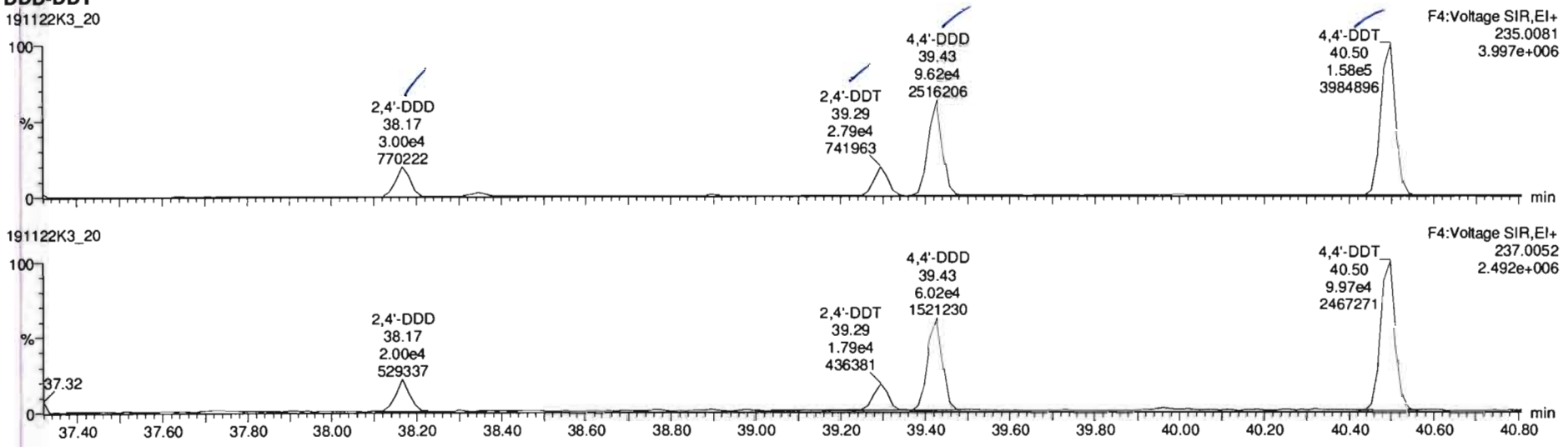
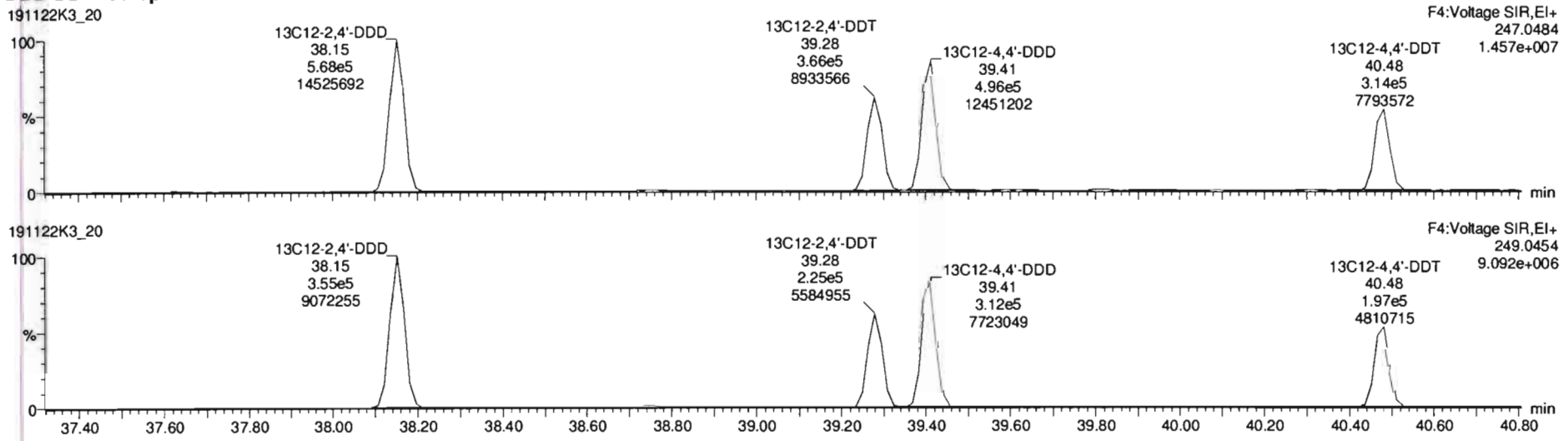
DDD-DDT



DDD-DDT-isotopes



Vista Analytical Laboratory

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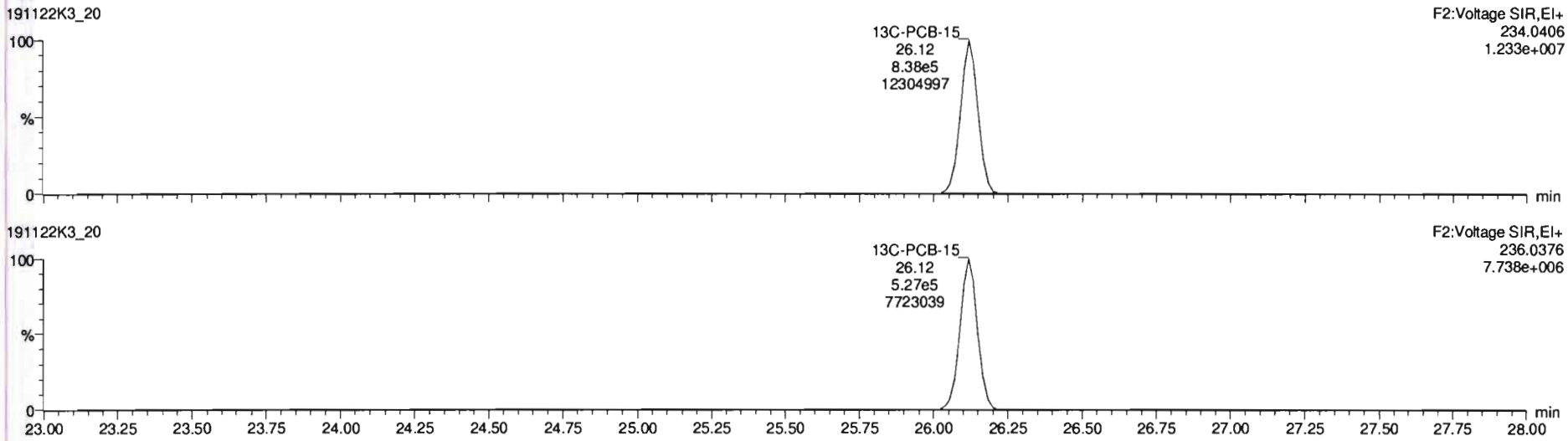
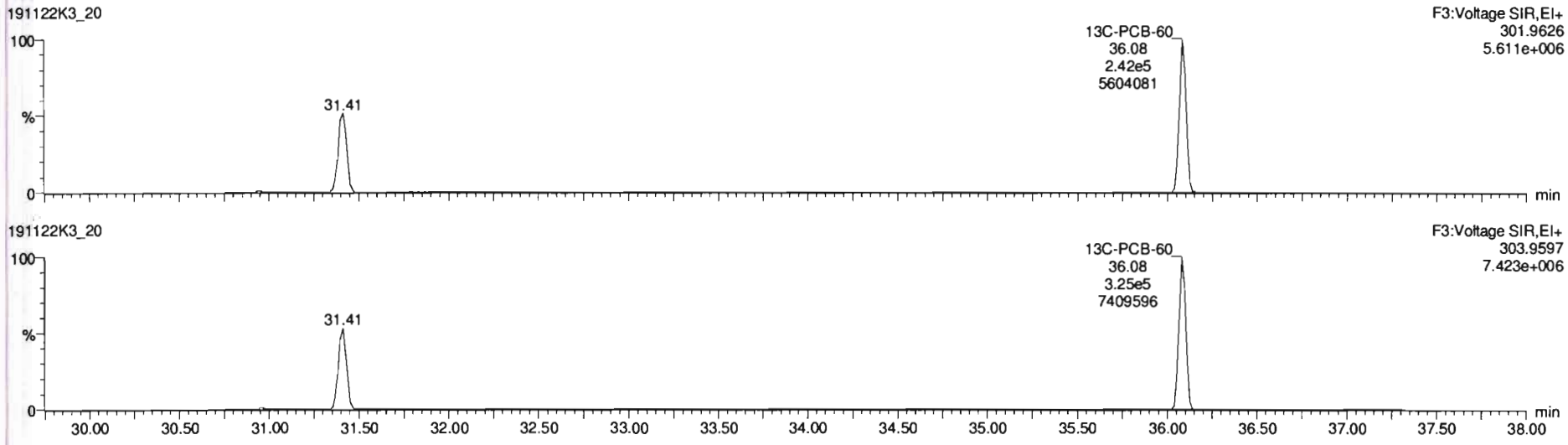
13C-PCB-15



13C-PCB-60



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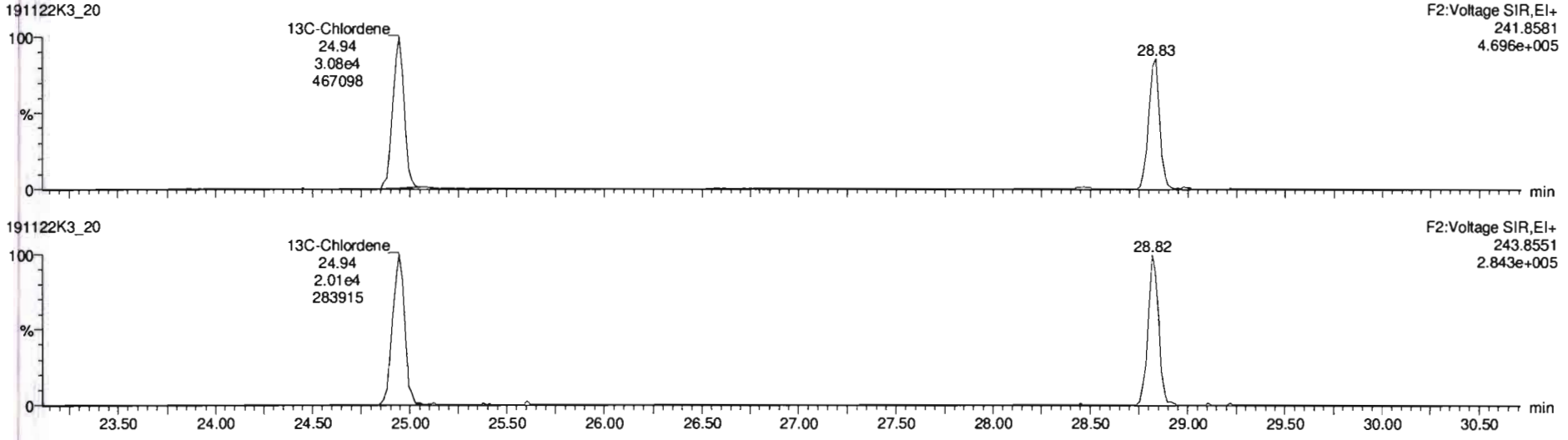
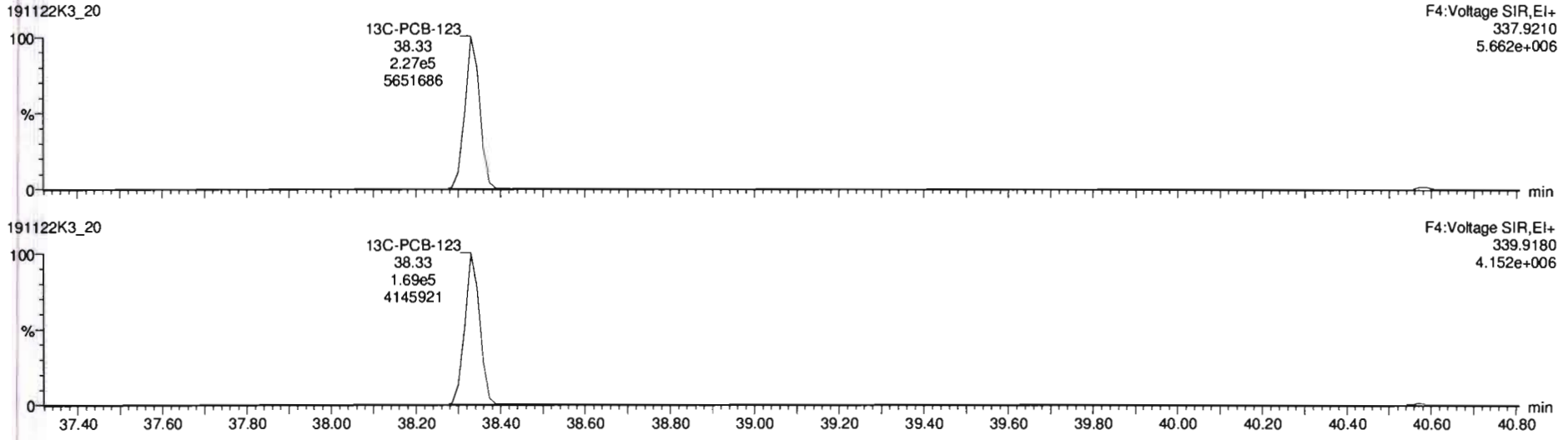
13C-Chlordene



13C-PCB-123



Vista Analytical Laboratory

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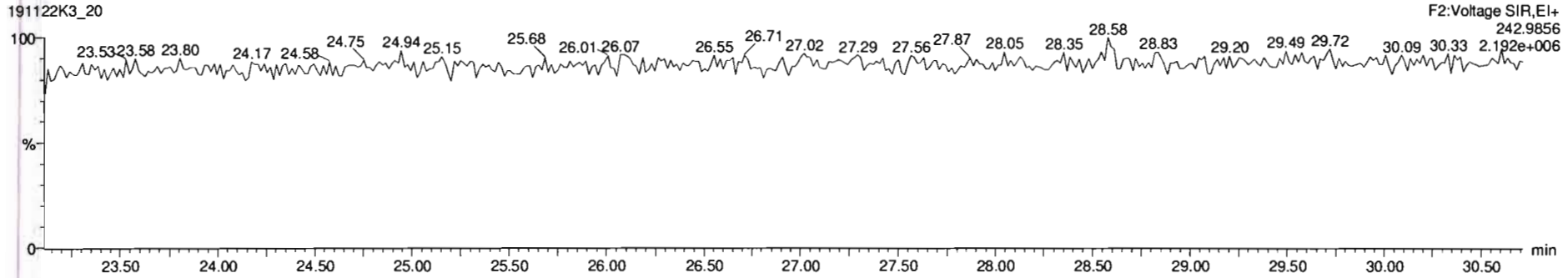
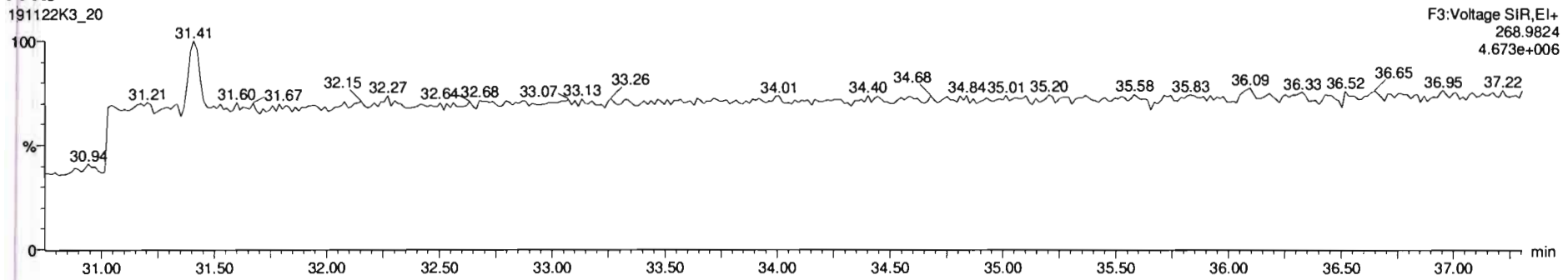
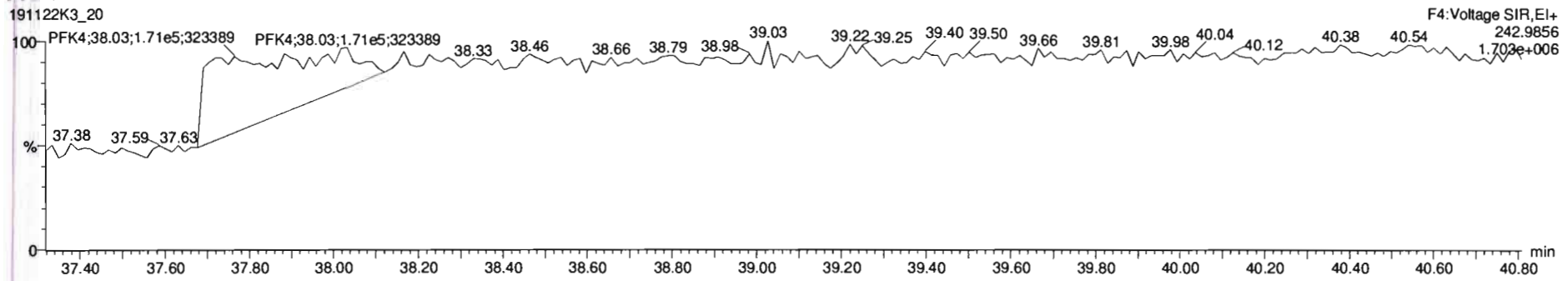
PFK2



PFK3



PFK4



CONTINUING CALIBRATION

HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191204D2-1 **Reviewed By:** EL 12/6/19

Initials & Date

End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentrations within criteria?	✓	
TCDD/TCDF Valleys <25%	✓	
First and last eluters present?	✓	
Retention Times within criteria?	✓	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	
Forms signed and dated?	✓	
Correct ICAL referenced?	DB	
Run Log:		
- Correct instrument listed?	✓	✓
- Samples within 12 hour clock?	(Y)	N
- Bottle position verfied?	DB	

	Beg.	End
Mass resolution ≥	✓	✓
☐ 5k ☐ 6-8K ☐ 8K ☑ 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	✓	NA
GC Break <20%	NA	

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours — NA

Comments:

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST191204D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.3	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.65	0.54-0.72	y	50.6	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	48.1	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	49.5	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	48.4	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	99.3	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	9.48	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	48.7	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	49.1	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	45.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	46.0	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	47.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	46.9	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.99	0.88-1.20	y	45.7	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	43.7	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	92.5	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: DB

Date: 12/5/19

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	104	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	102	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	108	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	92.5	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	98.4	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	100	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	252	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	100	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	111	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	109	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	113	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	98.5	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	99.8	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	103	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	97.5	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.43	0.37-0.51	y	107	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	257	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.34	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: DB

Date: 12/5/19

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST191204D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.3	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.65	0.54-0.72	y	50.6	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	48.1	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.3	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	49.5	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	48.4	40.0 - 60.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	99.3	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	9.48	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	48.7	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	49.1	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	45.8	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	46.0	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	47.5	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	46.9	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.99	0.88-1.20	y	45.7	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	43.7	40.0 - 60.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	92.5	80.0 - 120

Analyst: DB

Date: 12/5/19

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	104	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	102	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	108	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	92.5	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	98.4	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	100	70.0 - 130
13C-OCDD	M+2/M+4	0.89	0.76-1.02	y	252	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	100	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	111	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	109	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	113	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	98.5	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	99.8	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	103	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	97.5	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.37-0.51	y	107	70.0 - 130
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	257	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.34	7.00 - 13.0

Analyst: DB

Date: 12/5/19

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-9-19

RT Window Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

ZB-5MS IS Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:40	1,3,6,8-TCDF (F)	20:32
1,2,8,9-TCDD (L)	26:57	1,2,8,9-TCDF (L)	27:05
1,2,4,7,9-PeCDD (F)	28:33	1,3,4,6,8-PeCDF (F)	27:04
1,2,3,8,9-PeCDD (L)	30:58	1,2,3,8,9-PeCDF (L)	31:12
1,2,4,6,7,9-HxCDD (F)	32:23	1,2,3,4,6,8-HxCDF (F)	31:51
1,2,3,7,8,9-HxCDD (L)	34:18	1,2,3,7,8,9-HxCDF (L)	34:41
1,2,3,4,6,7,9-HpCDD (F)	36:54	1,2,3,4,6,7,8-HpCDF (F)	36:31
1,2,3,4,6,7,8-HpCDD (L)	37:46	1,2,3,4,7,8,9-HpCDF (L)	38:18

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DB

Date: 12/5/19

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.200	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.991	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.153	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.189	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052

Analyst: DB

Date: 12/5/19

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191204D2 S#1 Analysis Date: 5-DEC-19 Time: 07:34:10

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.991	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.092	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.146	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.130	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.227	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.234	1.091-1.371

Analyst: JB

Date: 12/5/19

Client ID: 1613 CS3 19C2204 Filename: 191204D2 S:1 Acq: 5-DEC-19 07:34:10 ConCal: ST191204D2-1

Lab ID: ST191204D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	7.22e+05	0.79 y	0.91	26:05	10.336		*	2.5	*
	1,2,3,7,8-PeCDD	2.81e+06	0.65 y	0.90	30:37	50.623		*	2.5	*
	1,2,3,4,7,8-HxCDD	2.55e+06	1.24 y	1.10	33:54	48.073		*	2.5	*
	1,2,3,6,7,8-HxCDD	2.54e+06	1.25 y	0.94	34:01	49.253		*	2.5	*
	1,2,3,7,8,9-HxCDD	2.62e+06	1.26 y	0.96	34:18	49.513		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	2.16e+06	1.03 y	0.98	37:46	48.413		*	2.5	*
	OCDD	4.83e+06	0.87 y	0.96	41:01	99.336		*	2.5	*
	2,3,7,8-TCDF	9.78e+05	0.76 y	0.95	25:18	9.4763		*	2.5	*
	1,2,3,7,8-PeCDF	4.64e+06	1.54 y	0.96	29:25	48.720		*	2.5	*
	2,3,4,7,8-PeCDF	4.82e+06	1.58 y	1.01	30:20	49.057		*	2.5	*
	1,2,3,4,7,8-HxCDF	3.51e+06	1.22 y	1.18	33:01	45.805		*	2.5	*
	1,2,3,6,7,8-HxCDF	3.48e+06	1.22 y	1.07	33:09	46.040		*	2.5	*
	2,3,4,6,7,8-HxCDF	3.49e+06	1.22 y	1.11	33:44	47.466		*	2.5	*
	1,2,3,7,8,9-HxCDF	2.94e+06	1.25 y	1.06	34:41	46.941		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	2.64e+06	0.99 y	1.13	36:31	45.684		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	2.42e+06	1.01 y	1.28	38:18	43.687		*	2.5	*
	OCDF	5.38e+06	0.88 y	0.95	41:14	92.517		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.72e+06	0.79 y	1.10	26:04	103.54				
IS	13C-1,2,3,7,8-PeCDD	6.15e+06	0.62 y	0.88	30:36	102.47				
IS	13C-1,2,3,4,7,8-HxCDD	4.82e+06	1.28 y	0.64	33:53	107.98				
IS	13C-1,2,3,6,7,8-HxCDD	5.50e+06	1.29 y	0.86	33:59	92.466				
IS	13C-1,2,3,7,8,9-HxCDD	5.51e+06	1.24 y	0.81	34:17	98.411				
IS	13C-1,2,3,4,6,7,8-HpCDD	4.56e+06	1.05 y	0.65	37:45	100.43				
IS	13C-OCDD	1.01e+07	0.89 y	0.58	41:01	251.82				
IS	13C-2,3,7,8-TCDF	1.09e+07	0.77 y	1.03	25:17	100.26				
IS	13C-1,2,3,7,8-PeCDF	9.93e+06	1.60 y	0.85	29:25	111.02				
IS	13C-2,3,4,7,8-PeCDF	9.68e+06	1.60 y	0.85	30:19	109.16				
IS	13C-1,2,3,4,7,8-HxCDF	6.51e+06	0.52 y	0.83	33:00	112.62				
IS	13C-1,2,3,6,7,8-HxCDF	7.08e+06	0.51 y	1.03	33:08	98.534				
IS	13C-2,3,4,6,7,8-HxCDF	6.61e+06	0.51 y	0.95	33:43	99.828				
IS	13C-1,2,3,7,8,9-HxCDF	5.90e+06	0.51 y	0.83	34:40	102.68				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.13e+06	0.44 y	0.76	36:30	97.457				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.33e+06	0.43 y	0.58	38:18	107.20				
IS	13C-OCDF	1.23e+07	0.88 y	0.69	41:14	256.78				
C/Up	37Cl-2,3,7,8-TCDD	7.62e+05		1.20	26:05	9.3443				
RS/RT	13C-1,2,3,4-TCDD	6.81e+06	0.79 y	1.00	25:30	100.00				
RS	13C-1,2,3,4-TCDF	1.05e+07	0.80 y	1.00	24:03	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	6.95e+06	0.52 y	1.00	33:25	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	74.0	75.1		*	*
Total Penta-Dioxins	203	204		*	*
Total Hexa-Dioxins	216	217		*	*
Total Hepta-Dioxins	116	117		*	*
Total Tetra-Furans	36.5	37.5		*	*
Total Penta-Furans	212.60	213.66		*	*
Total Hexa-Furans	247	248		*	*
Total Hepta-Furans	90.3	91.4		*	*

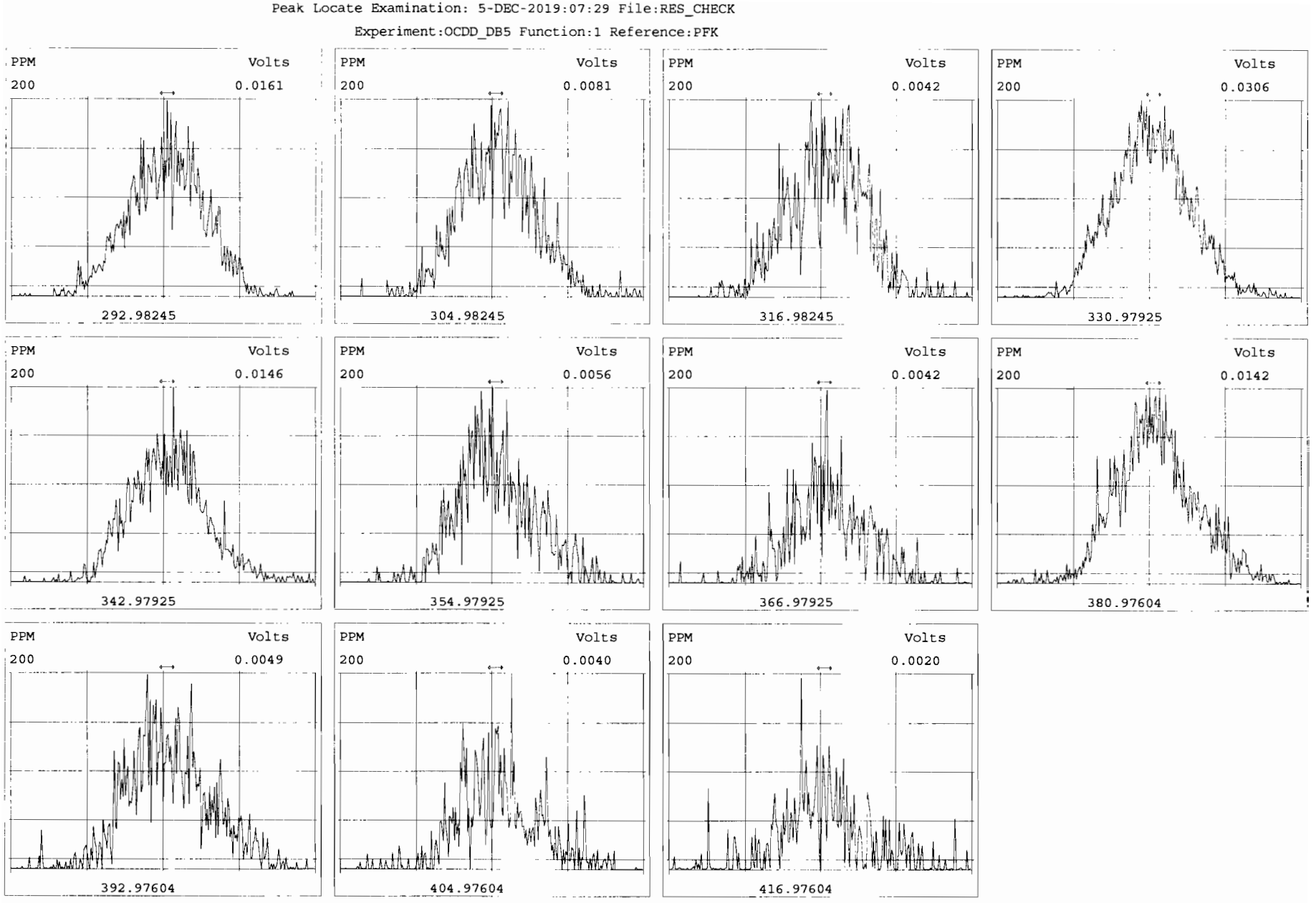
	Rec	Qual
IS	104	
IS	102	
IS	108	
IS	92.5	
IS	98.4	
IS	100	
IS	126	
IS	100	
IS	111	
IS	109	
IS	113	
IS	98.5	
IS	99.8	
IS	103	
IS	97.5	
IS	107	
IS	128	
C/Up	93.4	

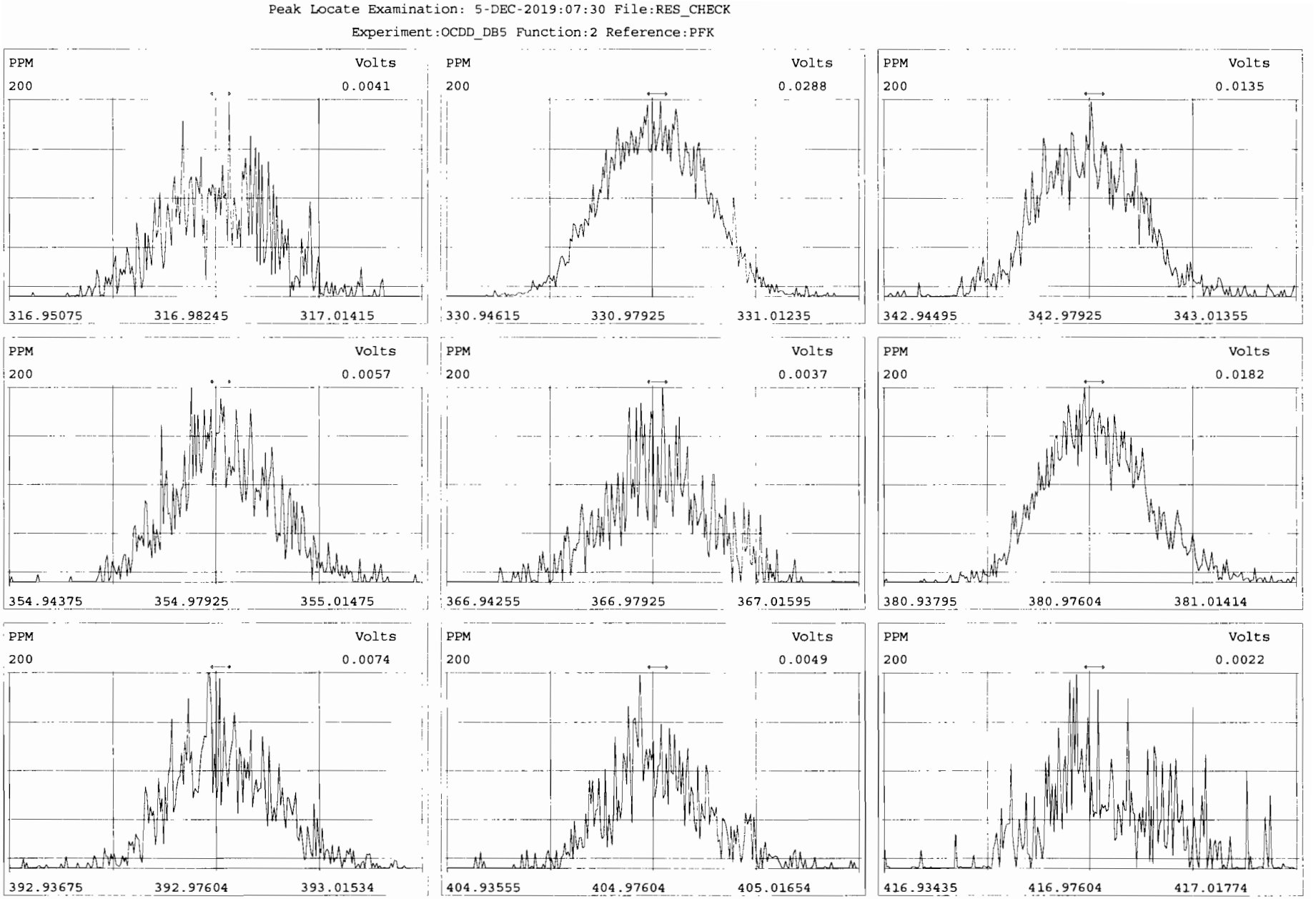
Integrations by Analyst: DB Date: 12/5/19

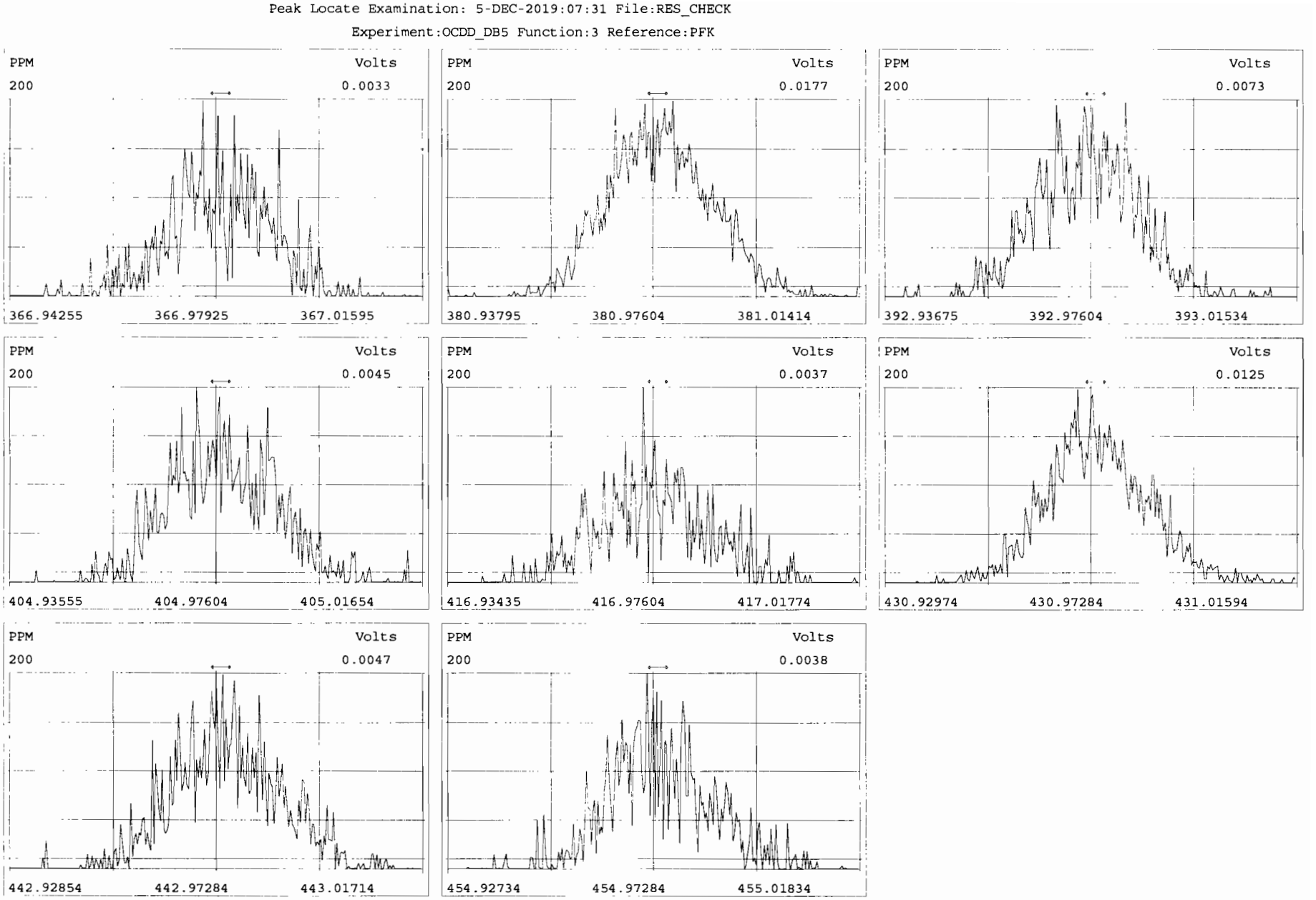
Reviewed by Analyst: EL Date: 12/6/19

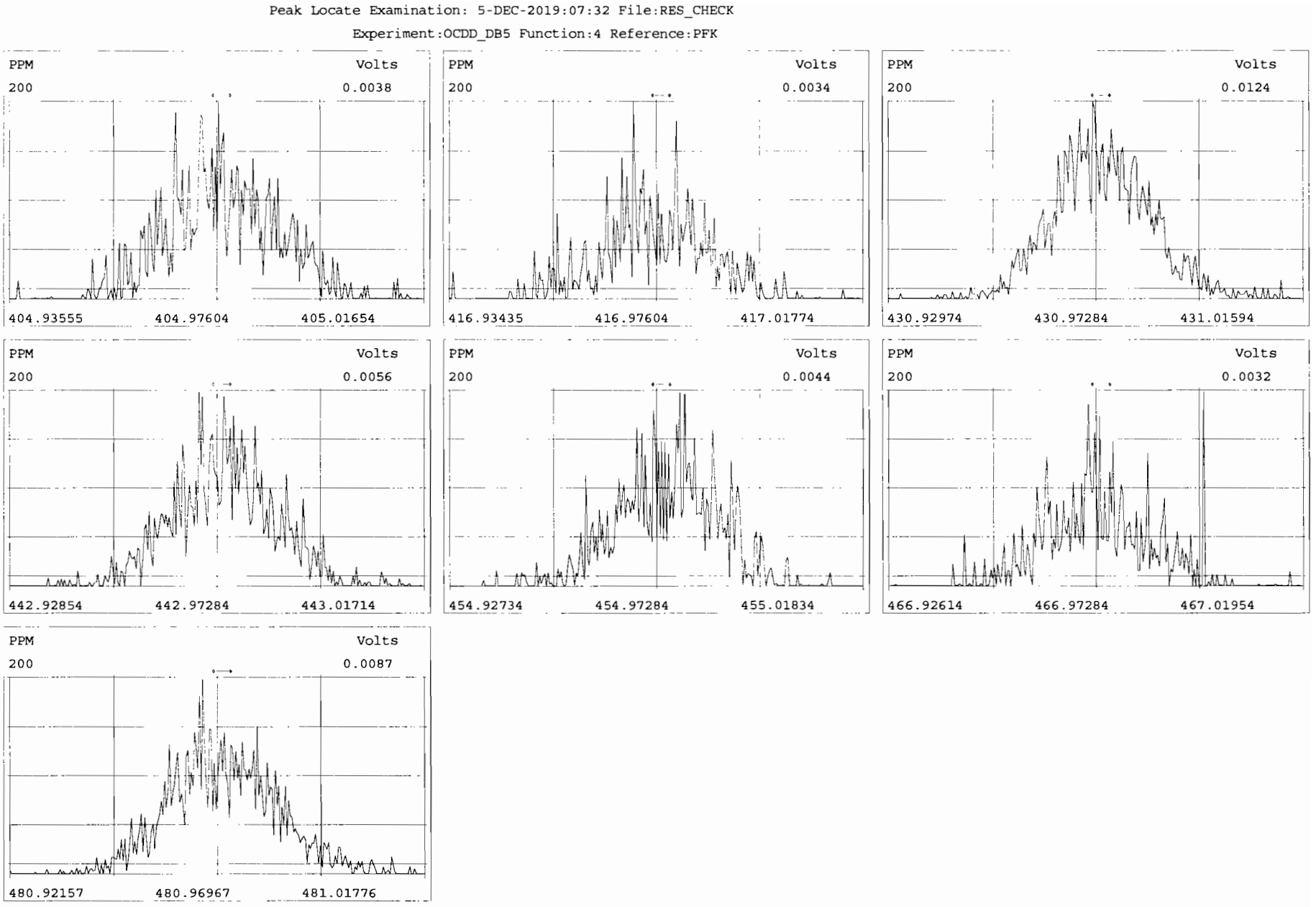
Vista Analytical Laboratory - Injection Log Run file: 191204D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

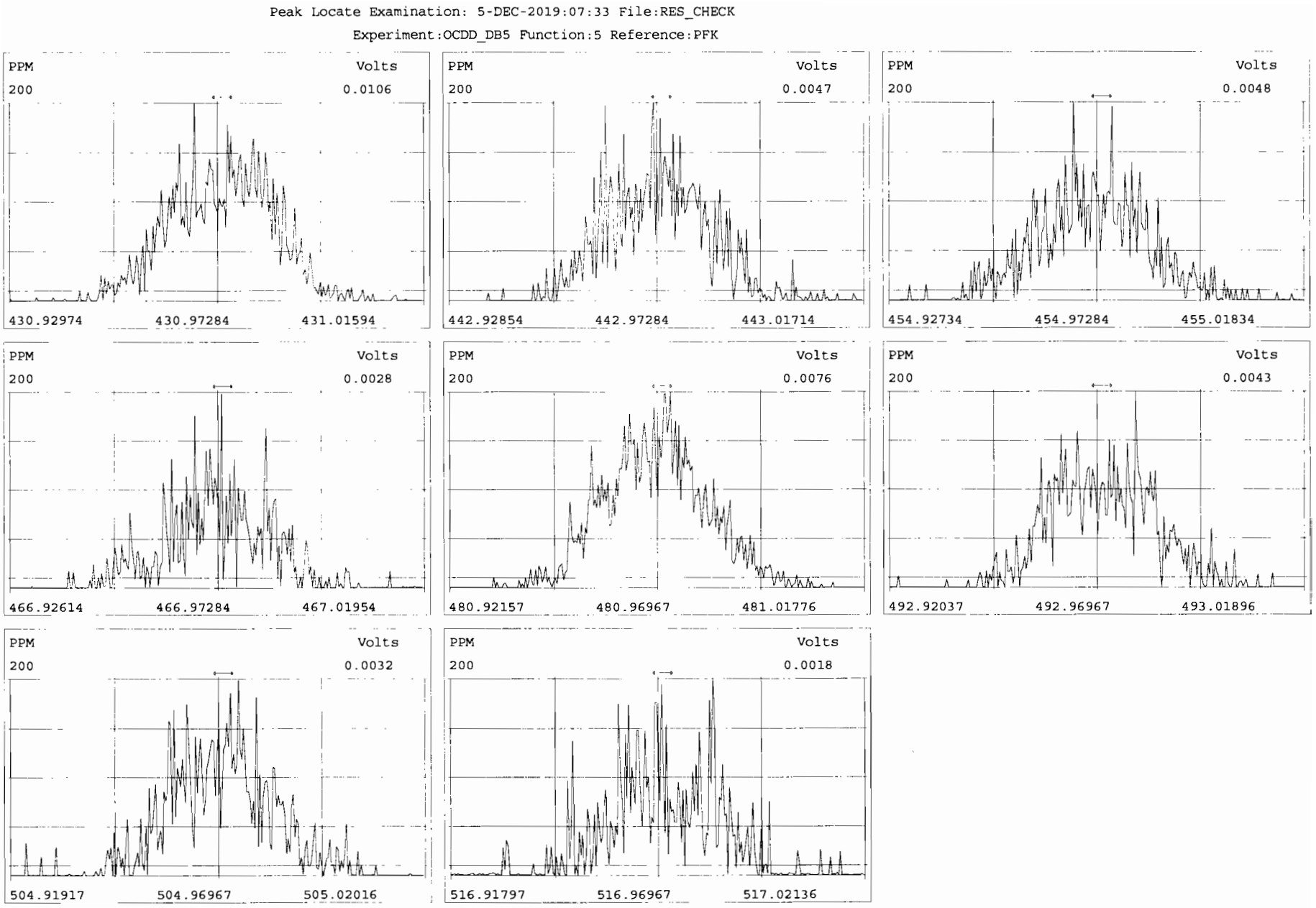
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191204D2	1	ST191204D2-1	DB	5-DEC-19	07:34:10	ST191204D2-1	NA
191204D2	2	B9K0169-BS1	DB	5-DEC-19	08:21:55	ST191204D2-1	NA
191204D2	3	SOLVENT BLANK	DB	5-DEC-19	09:09:51	ST191204D2-1	NA
191204D2	4	B9K0169-BLK1	DB	5-DEC-19	09:57:48	ST191204D2-1	NA
191204D2	5	1904016-03	DB	5-DEC-19	10:45:45	ST191204D2-1	NA
191204D2	6	1904016-04	DB	5-DEC-19	11:33:42	ST191204D2-1	NA
191204D2	7	1904016-05	DB	5-DEC-19	12:21:33	ST191204D2-1	NA
191204D2	8	1904016-06	DB	5-DEC-19	13:09:20	ST191204D2-1	NA
191204D2	9	1904016-07	DB	5-DEC-19	13:57:12	ST191204D2-1	NA
191204D2	10	1904016-08	DB	5-DEC-19	14:45:08	ST191204D2-1	NA
191204D2	11	1904016-09	DB	5-DEC-19	15:33:00	ST191204D2-1	NA


Peak Locate Examination: 5-DEC-2019:07:29 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0161
292.98245
PPM
Volts
200
0.0081
304.98245
PPM
Volts
200
0.0042
316.98245
PPM
Volts
200
0.0306
330.97925
PPM
Volts
200
0.0146
342.97925
PPM
Volts
200
0.0056
354.97925
PPM
Volts
200
0.0042
366.97925
PPM
Volts
200
0.0142
380.97604
PPM
Volts
200
0.0049
392.97604
PPM
Volts
200
0.0040
404.97604
PPM
Volts
200
0.0020
416.97604

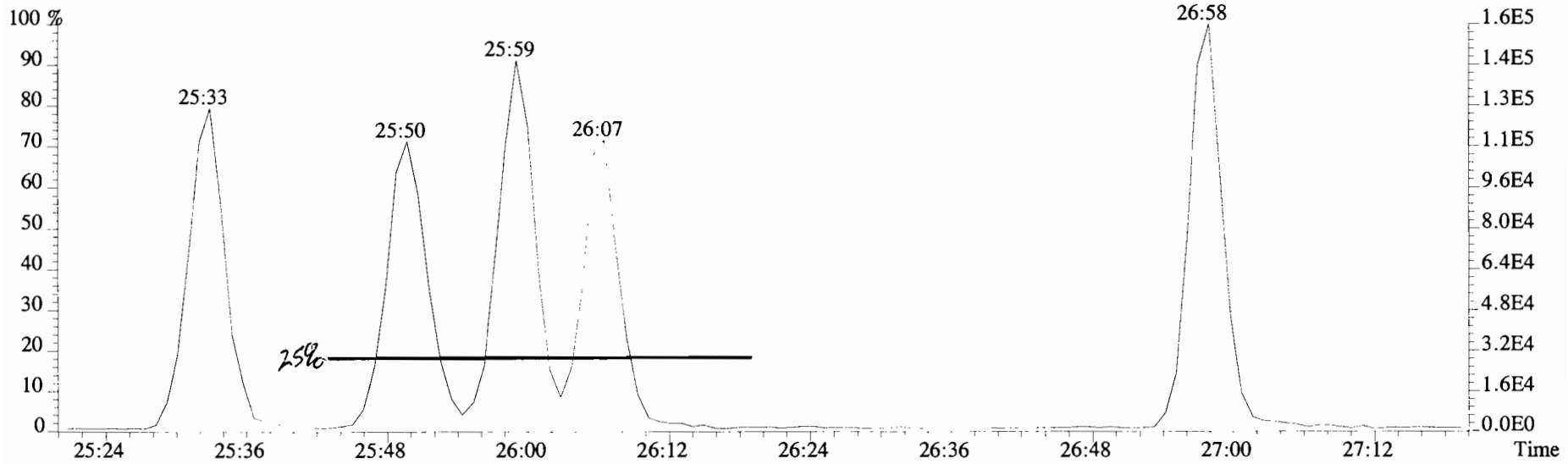

Peak Locate Examination: 5-DEC-2019:07:30 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0041
316.95075
316.98245
317.01415
PPM
Volts
200
0.0288
330.94615
330.97925
331.01235
PPM
Volts
200
0.0135
342.94495
342.97925
343.01355
PPM
Volts
200
0.0057
354.94375
354.97925
355.01475
PPM
Volts
200
0.0037
366.94255
366.97925
367.01595
PPM
Volts
200
0.0182
380.93795
380.97604
381.01414
PPM
Volts
200
0.0074
392.93675
392.97604
393.01534
PPM
Volts
200
0.0049
404.93555
404.97604
405.01654
PPM
Volts
200
0.0022
416.93435
416.97604
417.01774


Peak Locate Examination: 5-DEC-2019:07:31 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0033
366.94255
366.97925
367.01595
PPM
Volts
200
0.0177
380.93795
380.97604
381.01414
PPM
Volts
200
0.0073
392.93675
392.97604
393.01534
PPM
Volts
200
0.0045
404.93555
404.97604
405.01654
PPM
Volts
200
0.0037
416.93435
416.97604
417.01774
PPM
Volts
200
0.0125
430.92974
430.97284
431.01594
PPM
Volts
200
0.0047
442.92854
442.97284
443.01714
PPM
Volts
200
0.0038
454.92734
454.97284
455.01834

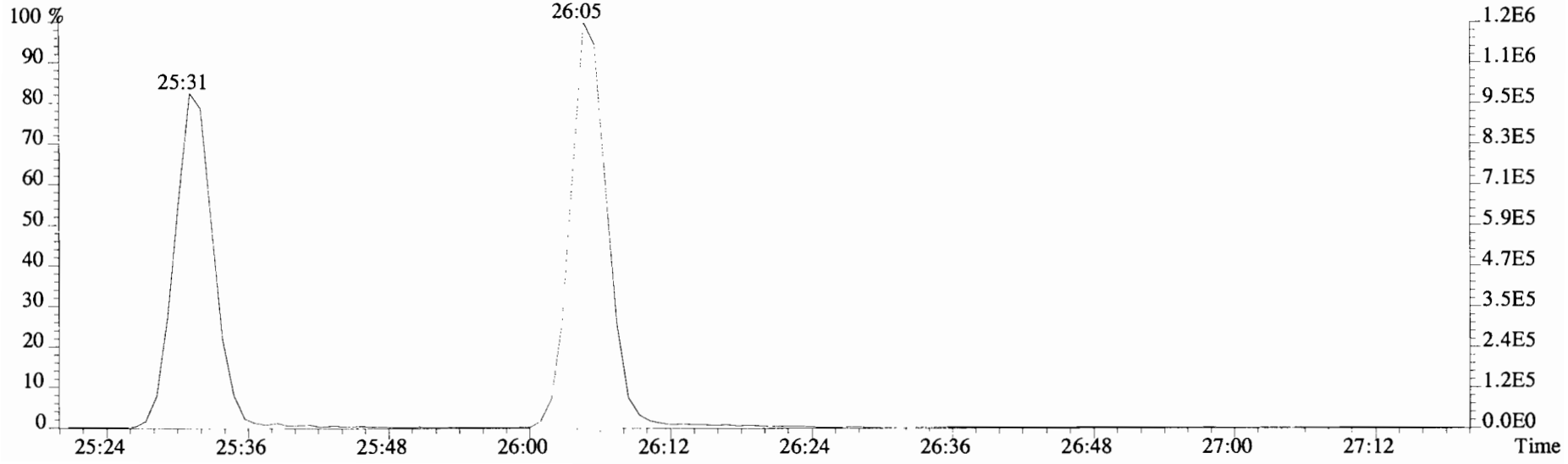

Peak Locate Examination: 5-DEC-2019:07:32 File:RES_CHECK
Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
0.0038
404.93555
404.97604
405.01654
PPM
Volts
200
0.0034
416.93435
416.97604
417.01774
PPM
Volts
200
0.0124
430.92974
430.97284
431.01594
PPM
Volts
200
0.0056
442.92854
442.97284
443.01714
PPM
Volts
200
0.0044
454.92734
454.97284
455.01834
PPM
Volts
200
0.0032
466.92614
466.97284
467.01954
PPM
Volts
200
0.0087
480.92157
480.96967
481.01776

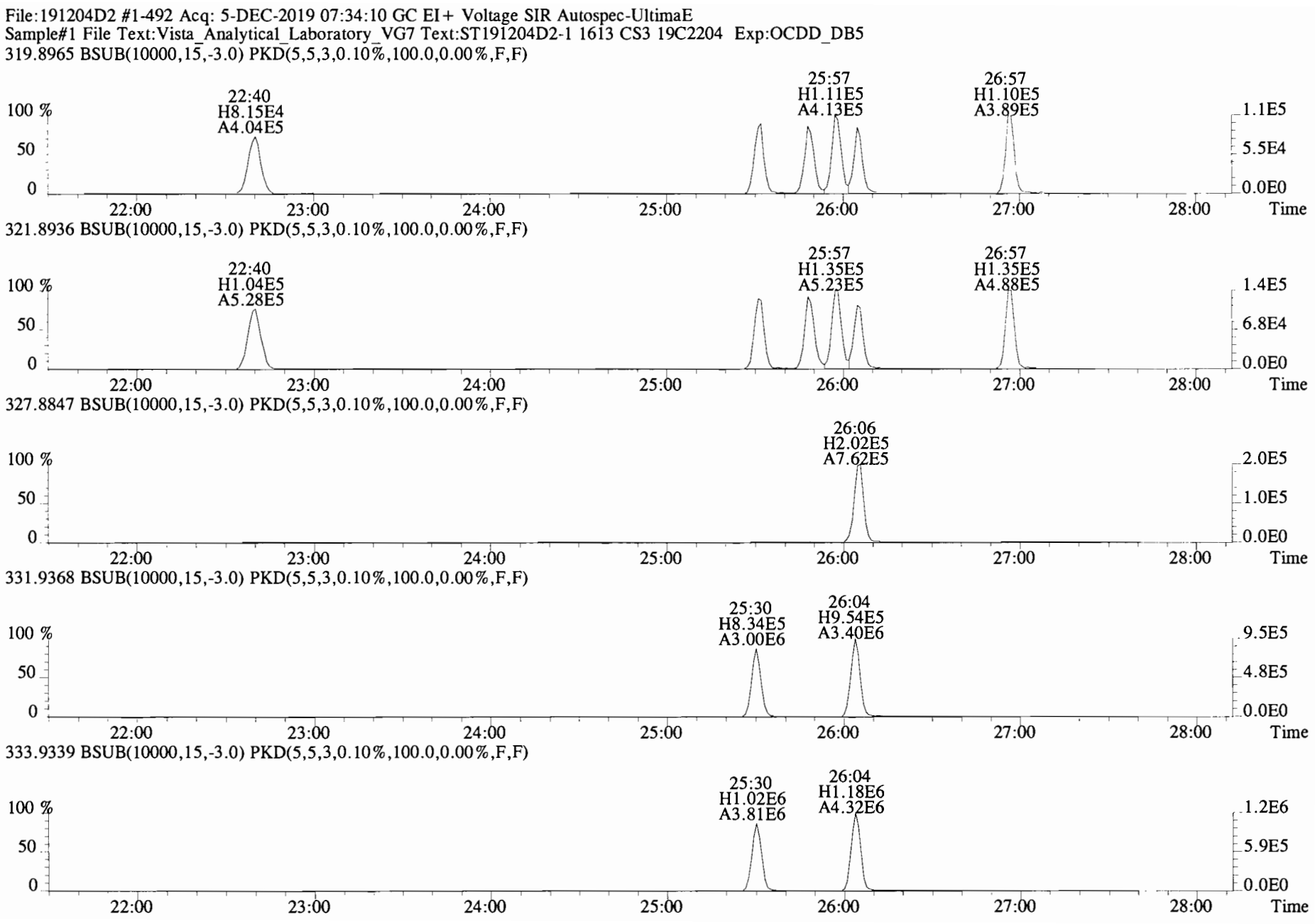

Peak Locate Examination: 5-DEC-2019:07:33 File:RES_CHECK
Experiment:OCDD_DB5 Function:5 Reference:PFK
PPM
Volts
200
0.0106
430.92974
430.97284
431.01594
PPM
Volts
200
0.0047
442.92854
442.97284
443.01714
PPM
Volts
200
0.0048
454.92734
454.97284
455.01834
PPM
Volts
200
0.0028
466.92614
466.97284
467.01954
PPM
Volts
200
0.0076
480.92157
480.96967
481.01776
PPM
Volts
200
0.0043
492.92037
492.96967
493.01896
PPM
Volts
200
0.0032
504.91917
504.96967
505.02016
PPM
Volts
200
0.0018
516.91797
516.96967
517.02136

File:191204D1 #1-493 Acq: 4-DEC-2019 17:47:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936

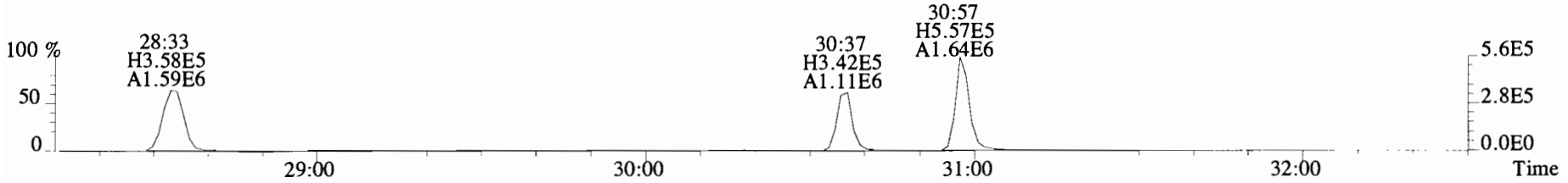


333.9339

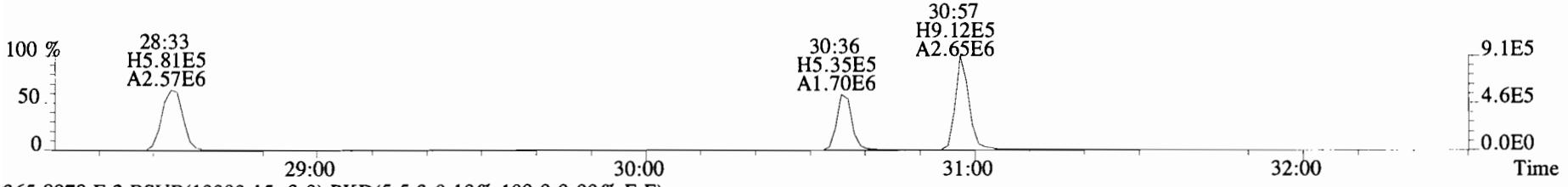



File:191204D2 #1-492 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:40 H8.15E4 A4.04E5
25:57 H1.11E5 A4.13E5
26:57 H1.10E5 A3.89E5
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:40 H1.04E5 A5.28E5
25:57 H1.35E5 A5.23E5
26:57 H1.35E5 A4.88E5
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:06 H2.02E5 A7.62E5
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:30 H8.34E5 A3.00E6
26:04 H9.54E5 A3.40E6
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:30 H1.02E6 A3.81E6
26:04 H1.18E6 A4.32E6
100 %
50
0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
1.1E5
5.5E4
0.0E0
1.4E5
6.8E4
2.0E5
1.0E5
9.5E5
4.8E5
1.2E6
5.9E5

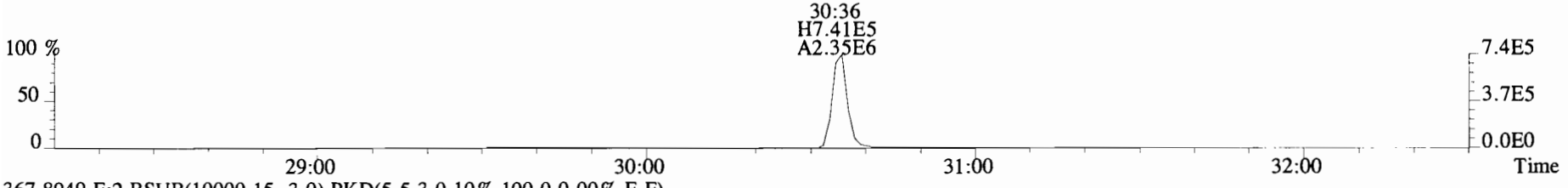
File:191204D2 #1-211 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



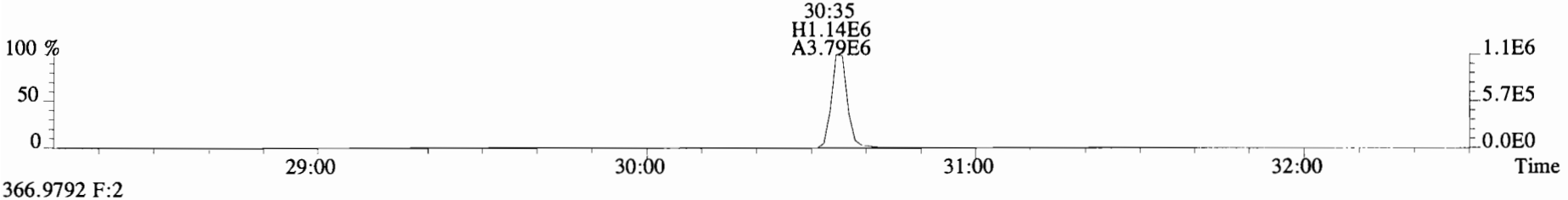
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



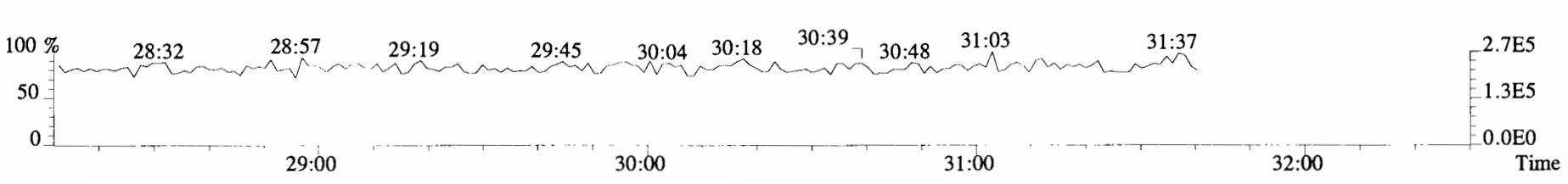
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



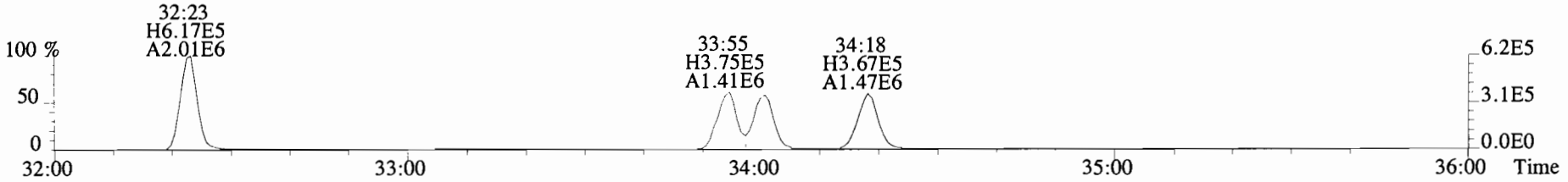
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



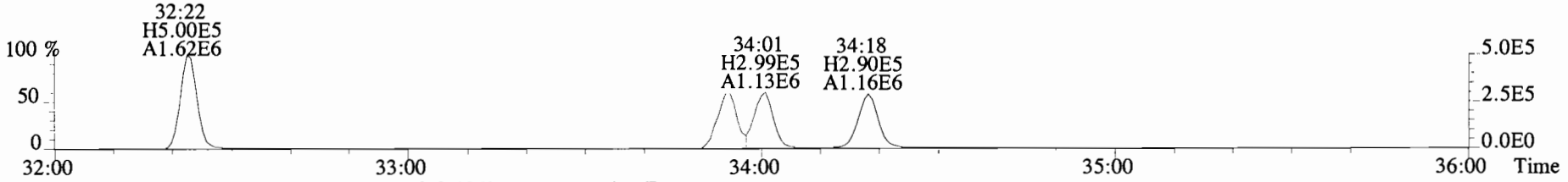
366.9792 F:2



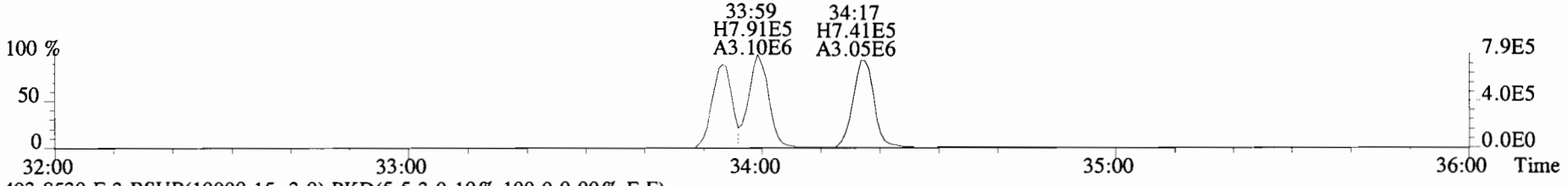
File:191204D2 #1-385 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



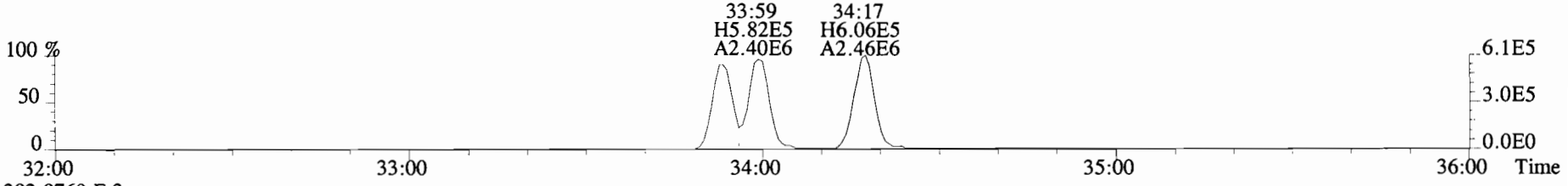
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



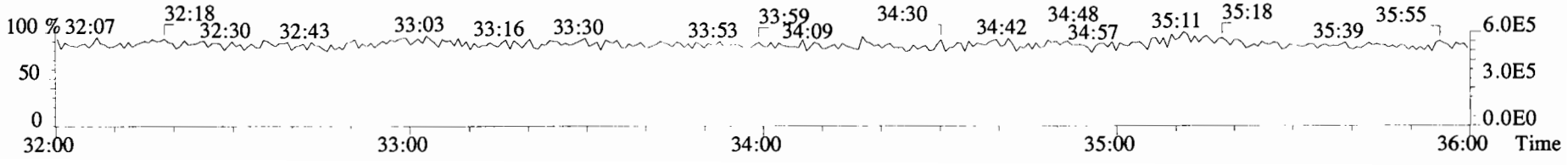
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



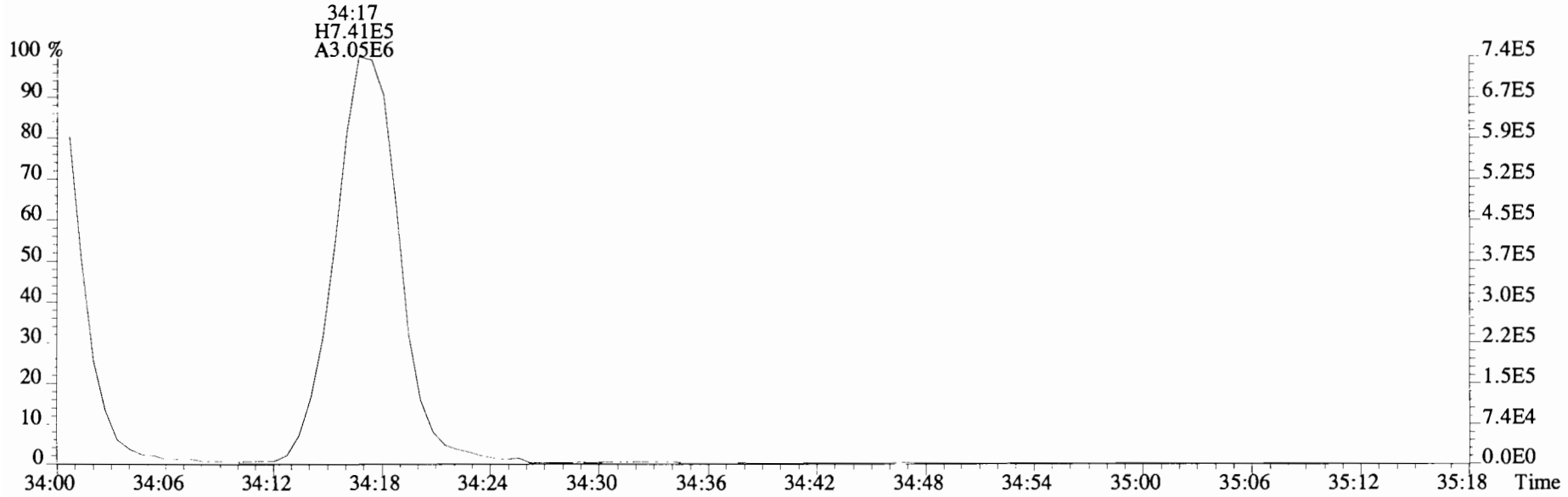
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



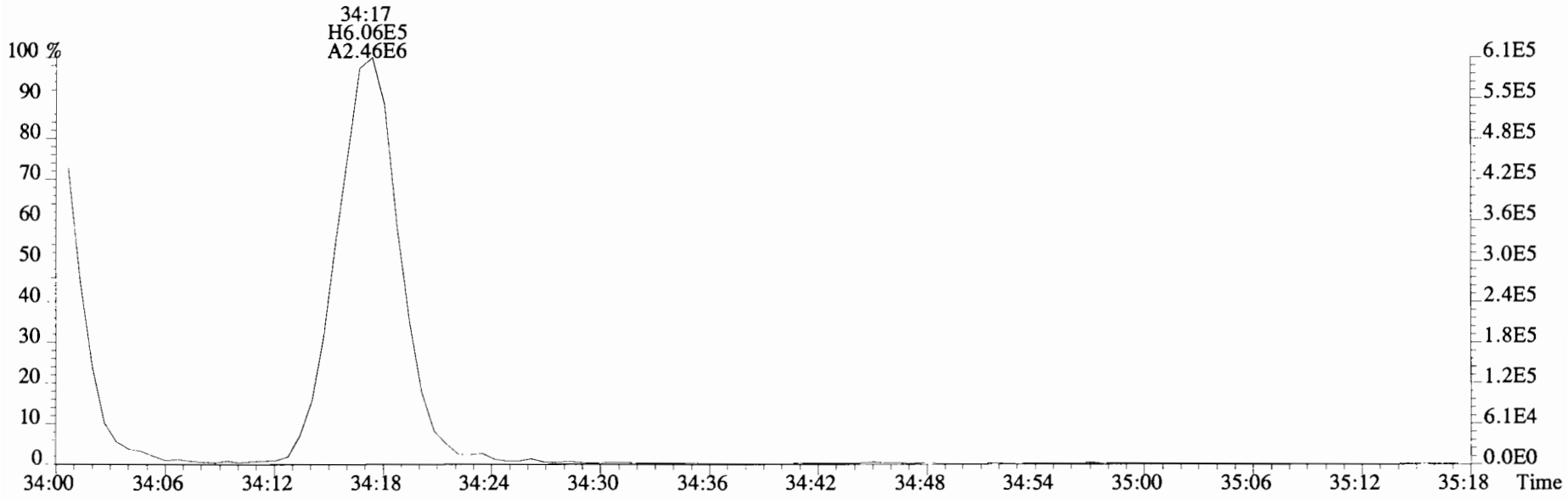
392.9760 F:3

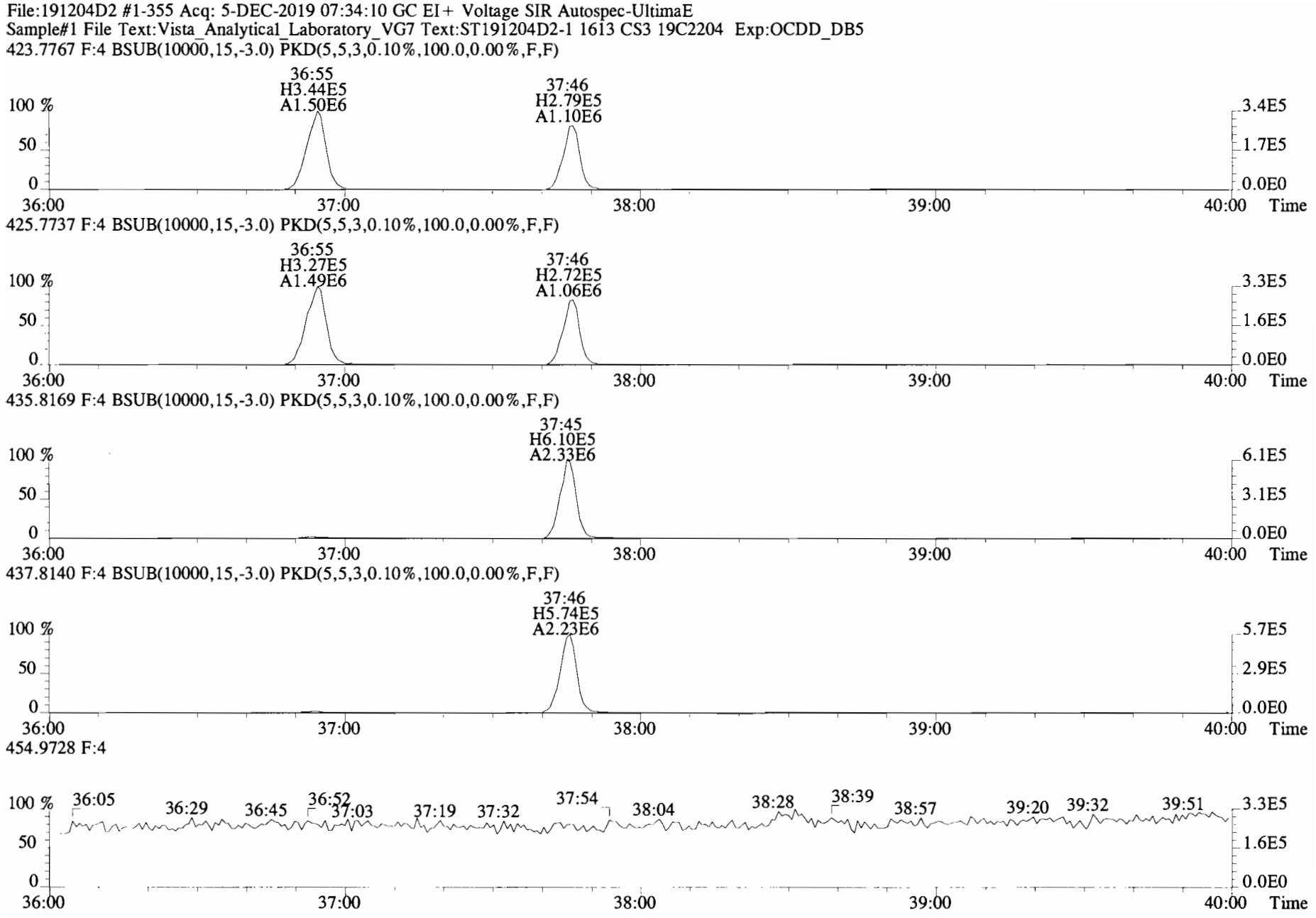


File:191204D2 #1-385 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

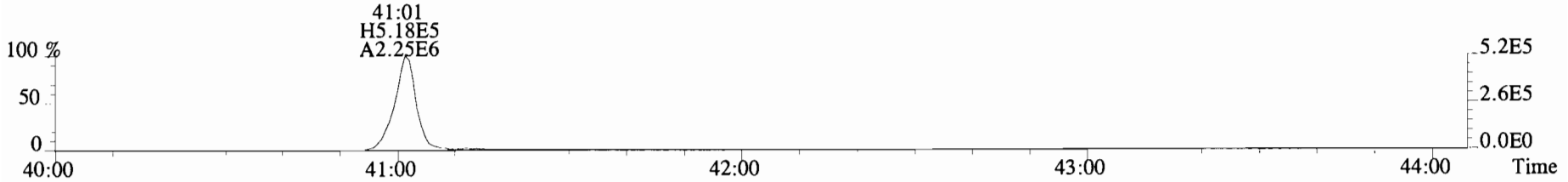


403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

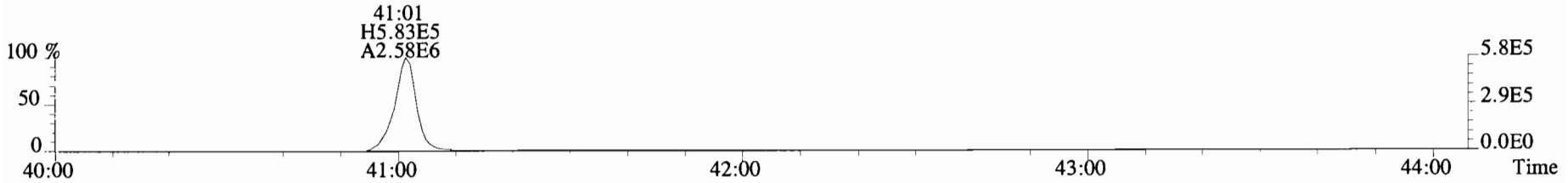



File:191204D2 #1-355 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:55
H3.44E5
A1.50E6
37:46
H2.79E5
A1.10E6
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:55
H3.27E5
A1.49E6
37:46
H2.72E5
A1.06E6
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:45
H6.10E5
A2.33E6
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:46
H5.74E5
A2.23E6
454.9728 F:4
36:05
36:29
36:45
36:52
37:03
37:19
37:32
37:54
38:04
38:28
38:39
38:57
39:20
39:32
39:51
100 %
50
0
36:00
37:00
38:00
39:00
40:00
Time
3.4E5
1.7E5
0.0E0
3.3E5
1.6E5
6.1E5
3.1E5
5.7E5
2.9E5

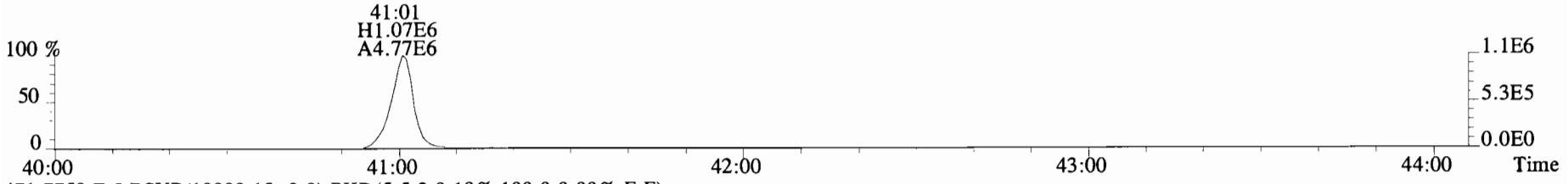
File:191204D2 #1-432 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



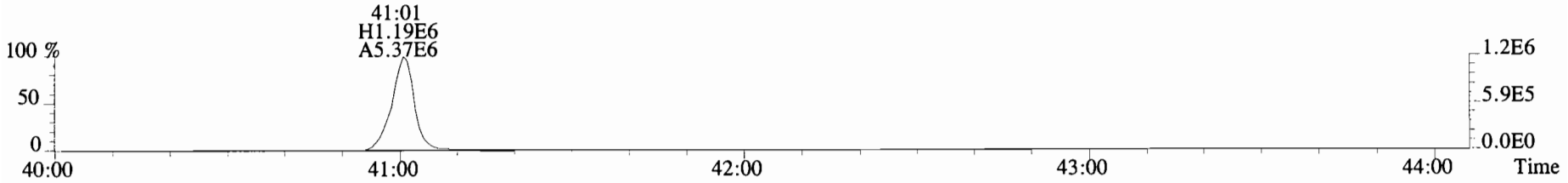
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



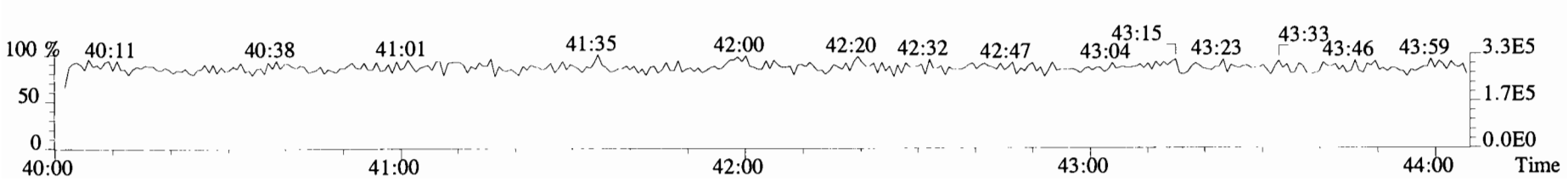
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

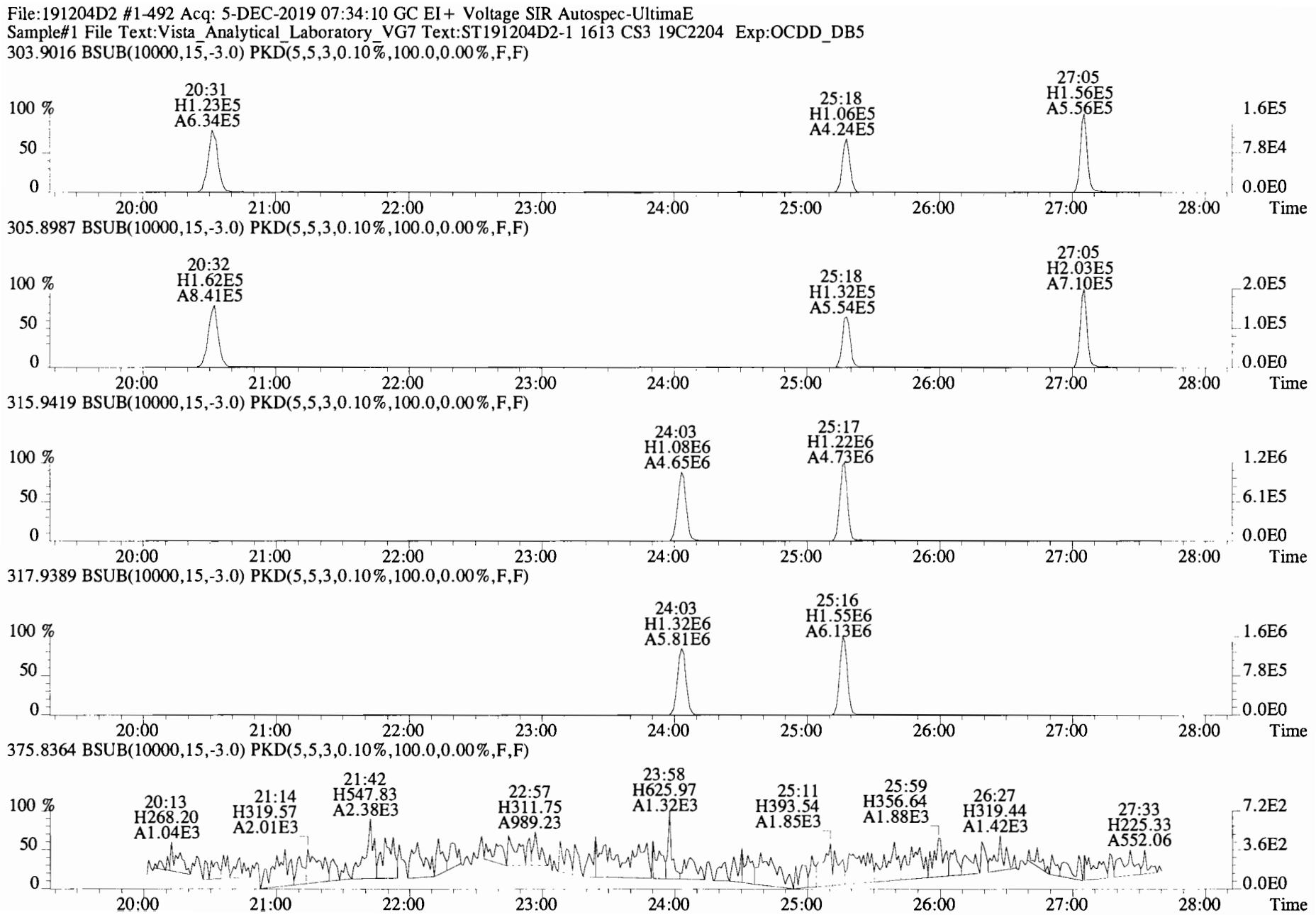


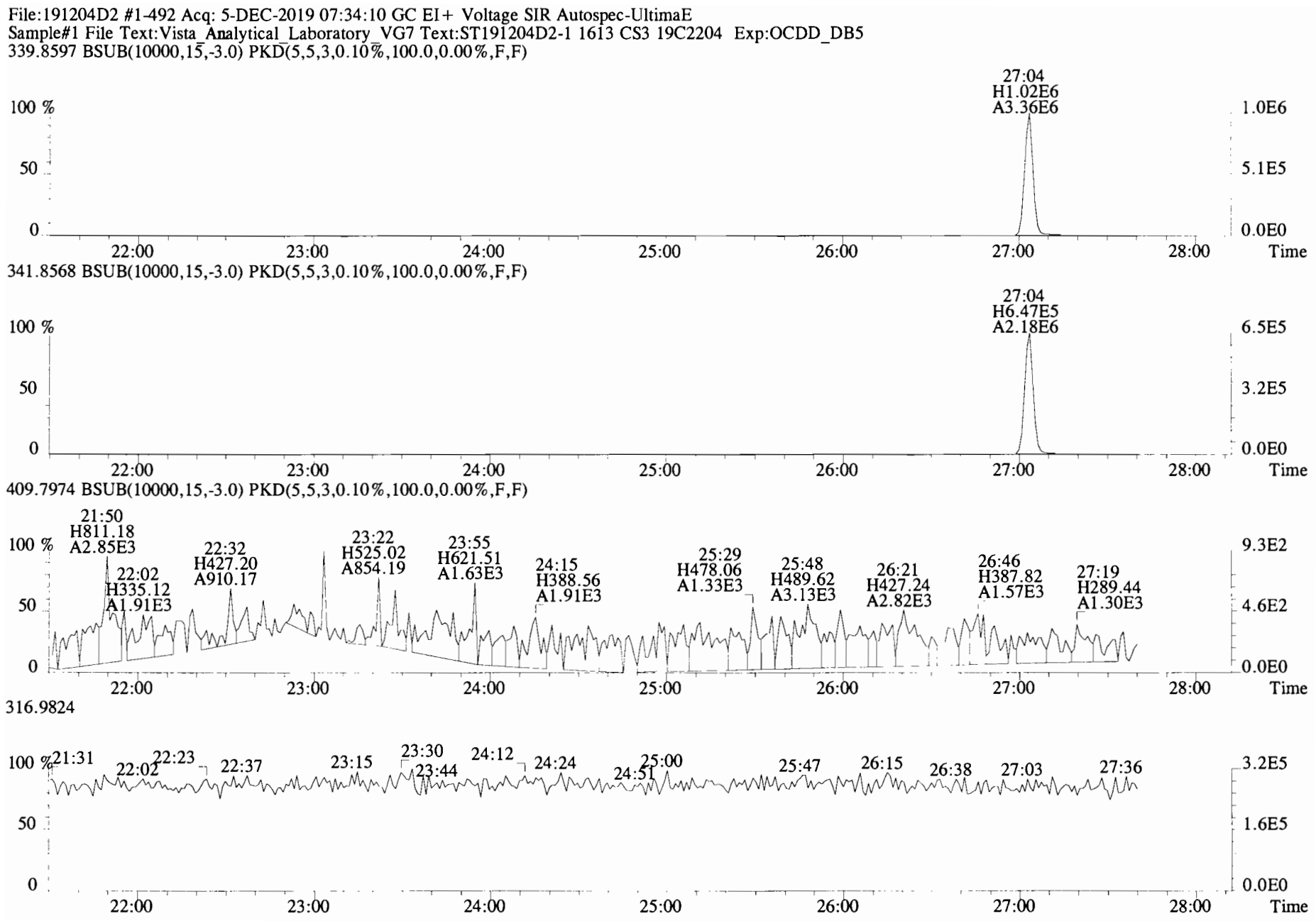
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



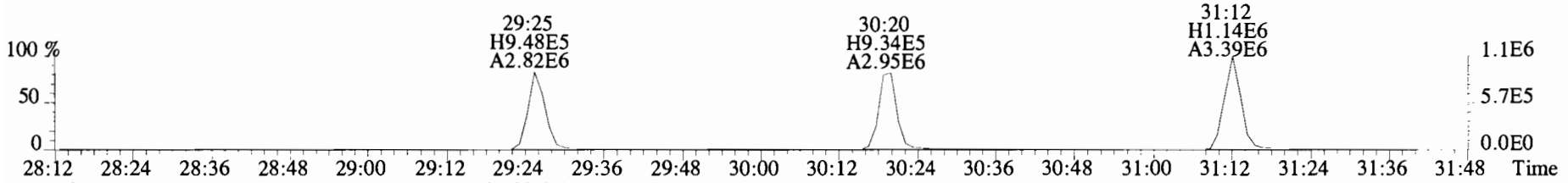
454.9728 F:5



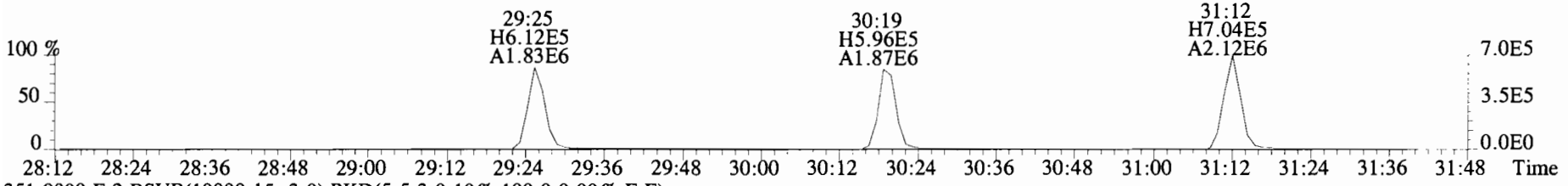

File:191204D2 #1-492 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:31 H1.23E5 A6.34E5
25:18 H1.06E5 A4.24E5
27:05 H1.56E5 A5.56E5
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:32 H1.62E5 A8.41E5
25:18 H1.32E5 A5.54E5
27:05 H2.03E5 A7.10E5
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:03 H1.08E6 A4.65E6
25:17 H1.22E6 A4.73E6
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:03 H1.32E6 A5.81E6
25:16 H1.55E6 A6.13E6
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:13 H268.20 A1.04E3
21:14 H319.57 A2.01E3
21:42 H547.83 A2.38E3
22:57 H311.75 A989.23
23:58 H625.97 A1.32E3
25:11 H393.54 A1.85E3
25:59 H356.64 A1.88E3
26:27 H319.44 A1.42E3
27:33 H225.33 A552.06
100 %
50
0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
1.6E5
7.8E4
0.0E0
2.0E5
1.0E5
1.2E6
6.1E5
1.6E6
7.8E5
7.2E2
3.6E2


File:191204D2 #1-492 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
H1.02E6
A3.36E6
100 %
50
0
1.0E6
5.1E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
H6.47E5
A2.18E6
100 %
50
0
6.5E5
3.2E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:50
H811.18
A2.85E3
22:02
H335.12
A1.91E3
22:32
H427.20
A910.17
23:22
H525.02
A854.19
23:55
H621.51
A1.63E3
24:15
H388.56
A1.91E3
25:29
H478.06
A1.33E3
25:48
H489.62
A3.13E3
26:21
H427.24
A2.82E3
26:46
H387.82
A1.57E3
27:19
H289.44
A1.30E3
100 %
50
0
9.3E2
4.6E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
316.9824
21:31
22:02
22:23
22:37
23:15
23:30
23:44
24:12
24:24
24:51
25:00
25:47
26:15
26:38
27:03
27:36
100 %
50
0
3.2E5
1.6E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time

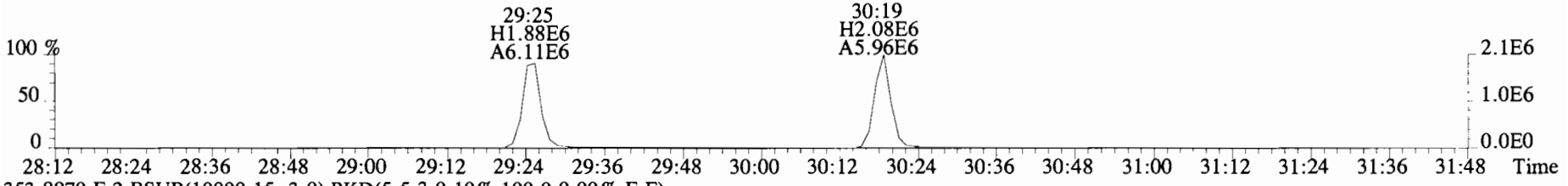
File:191204D2 #1-211 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



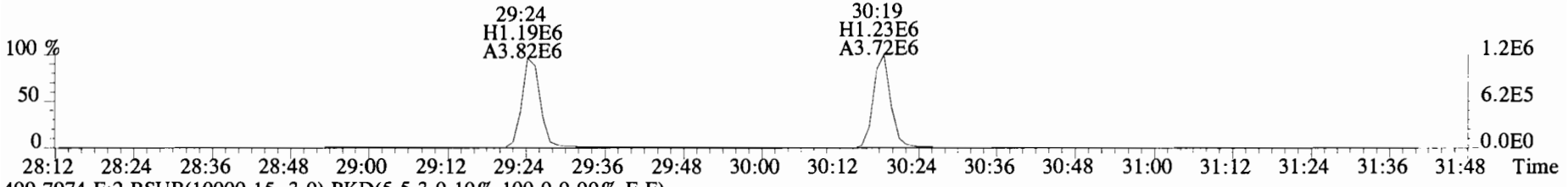
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



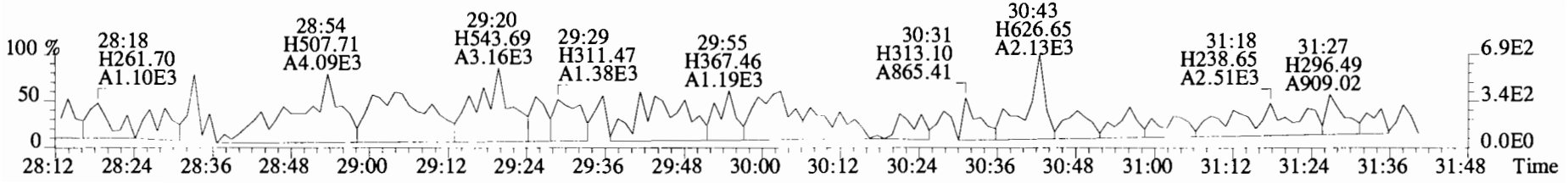
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



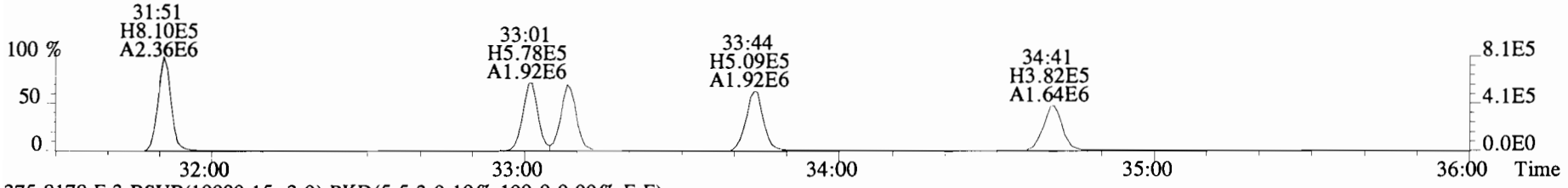
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



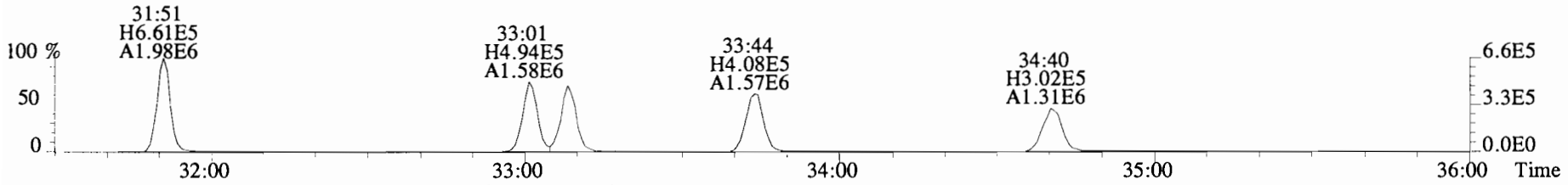
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



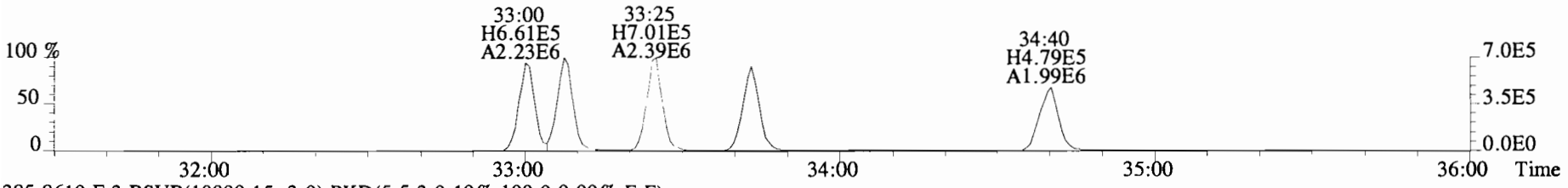
File:191204D2 #1-385 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



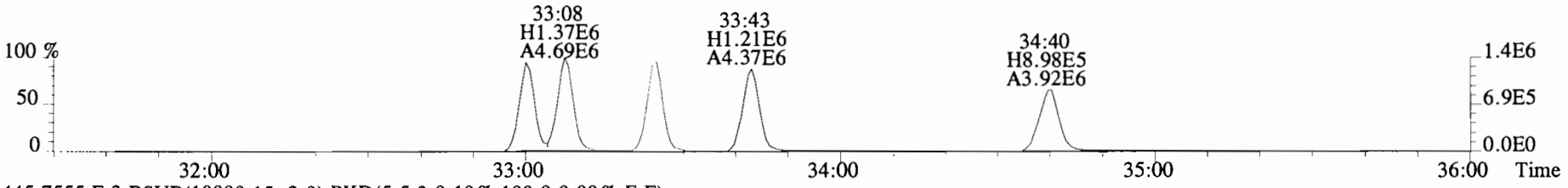
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



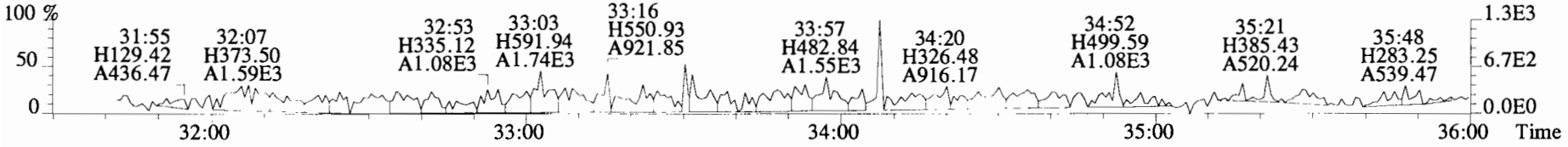
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



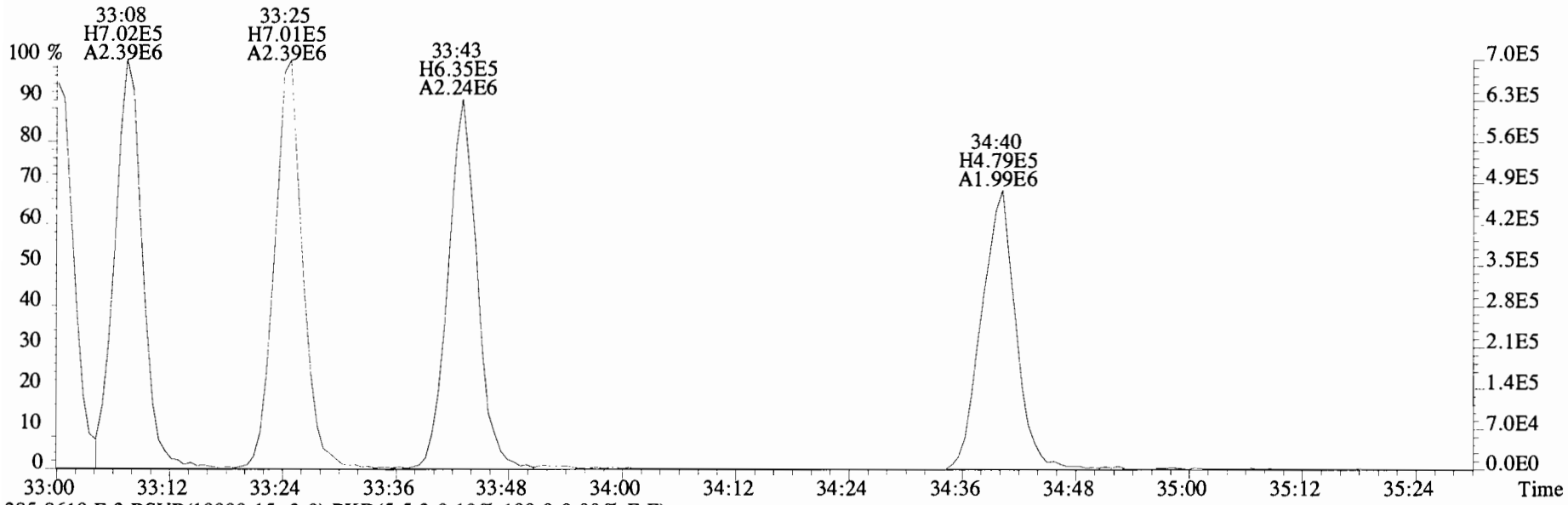
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



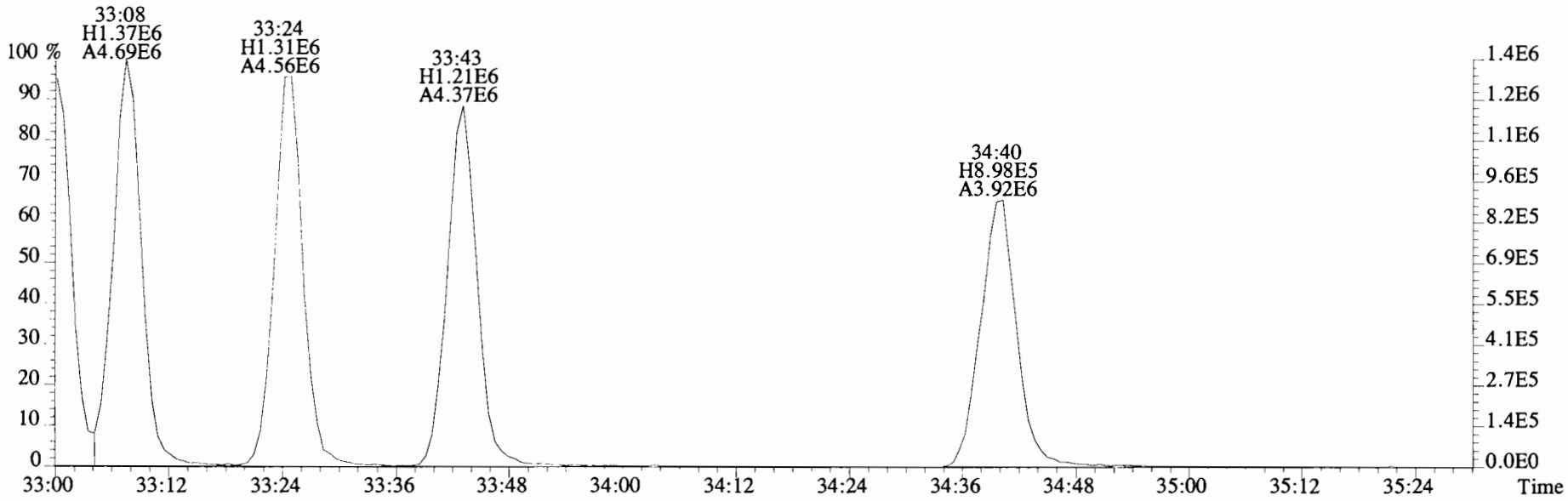
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



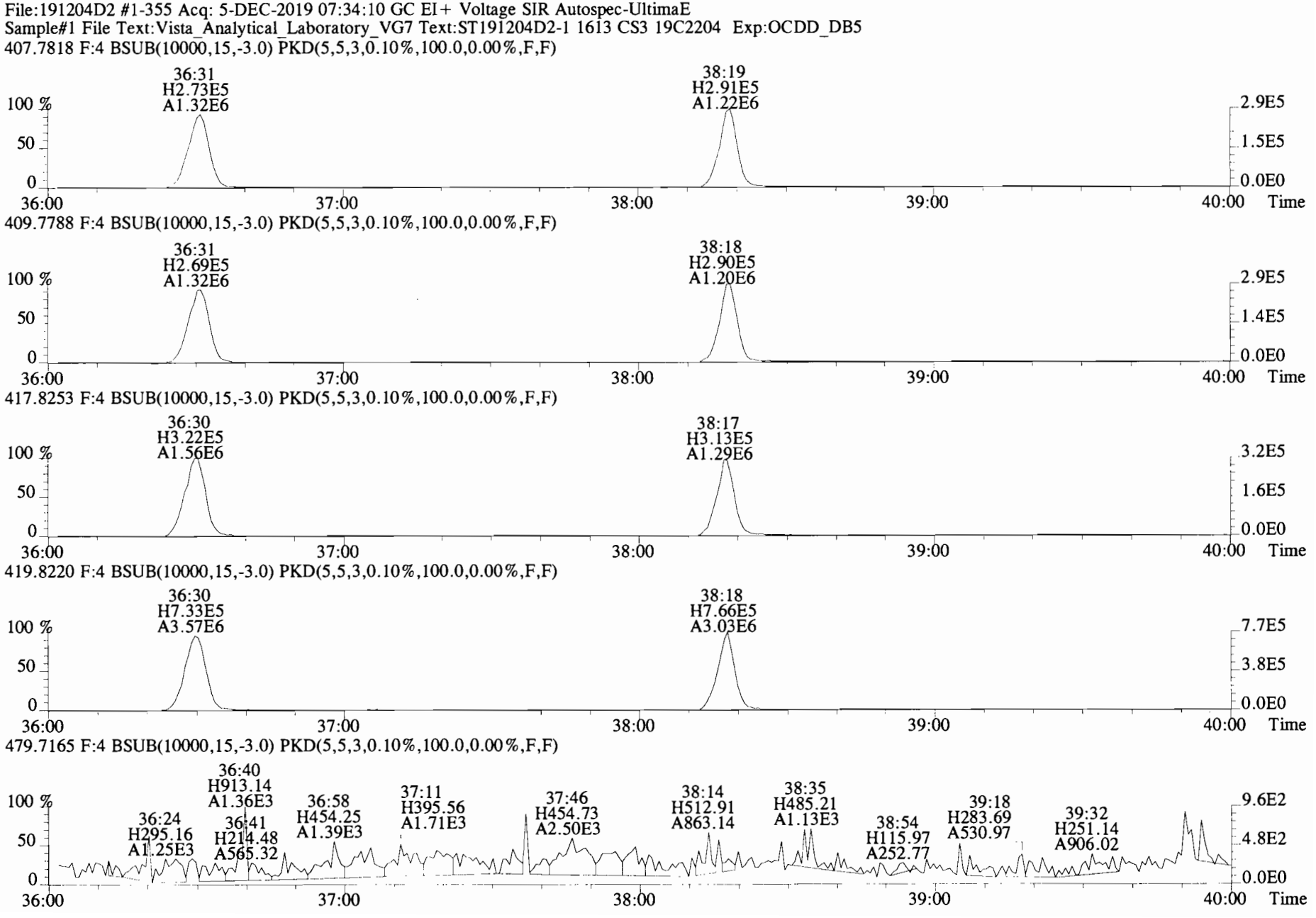
File:191204D2 #1-385 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

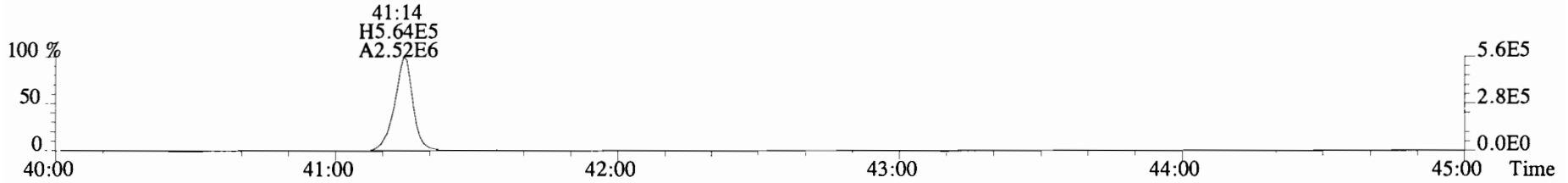


File:191204D2 #1-355 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5

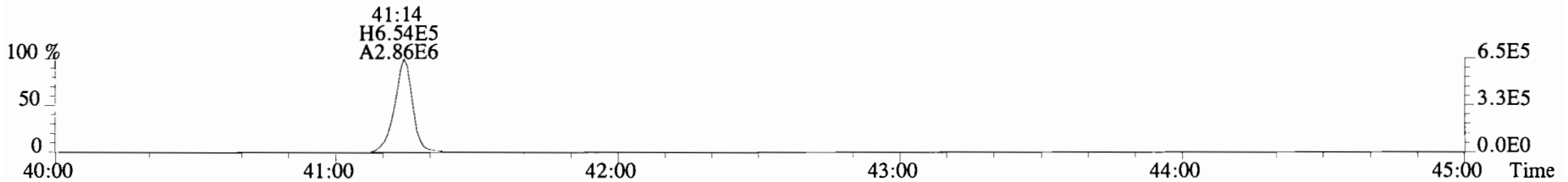


File:191204D2 #1-432 Acq: 5-DEC-2019 07:34:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191204D2-1 1613 CS3 19C2204 Exp:OCDD_DB5

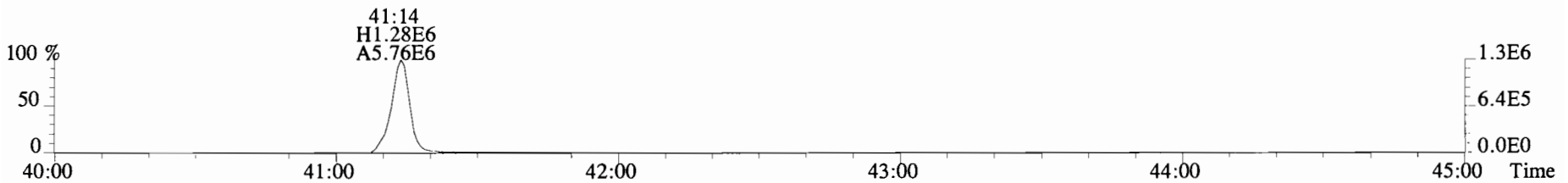
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



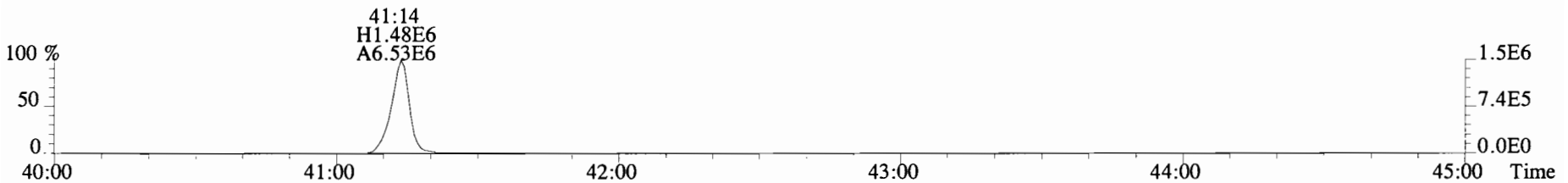
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



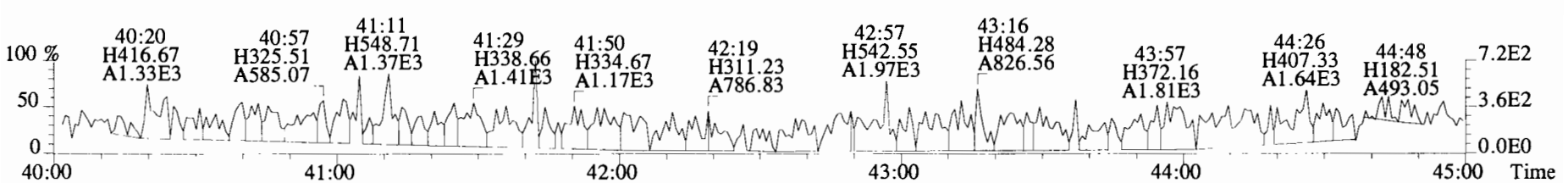
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

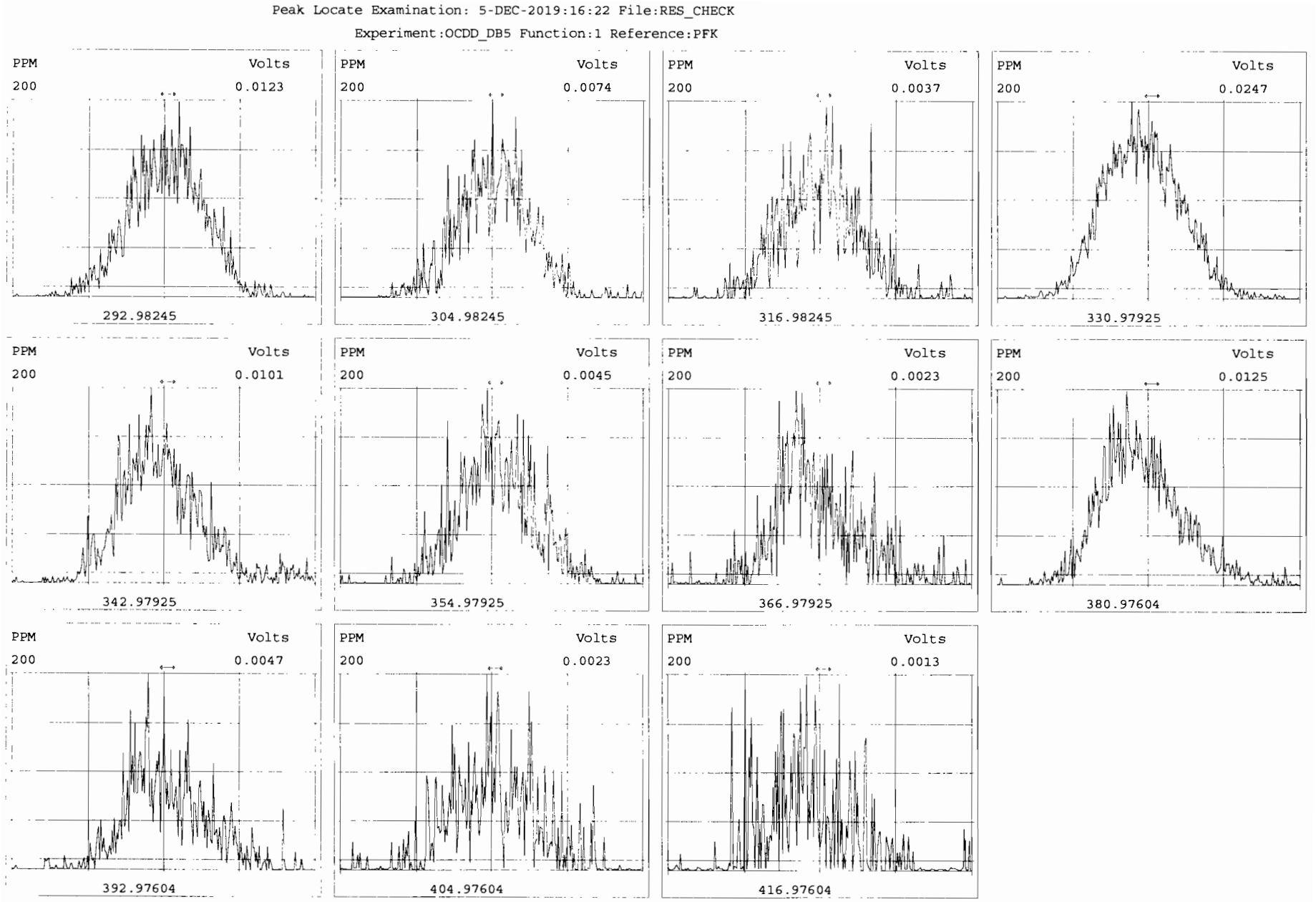


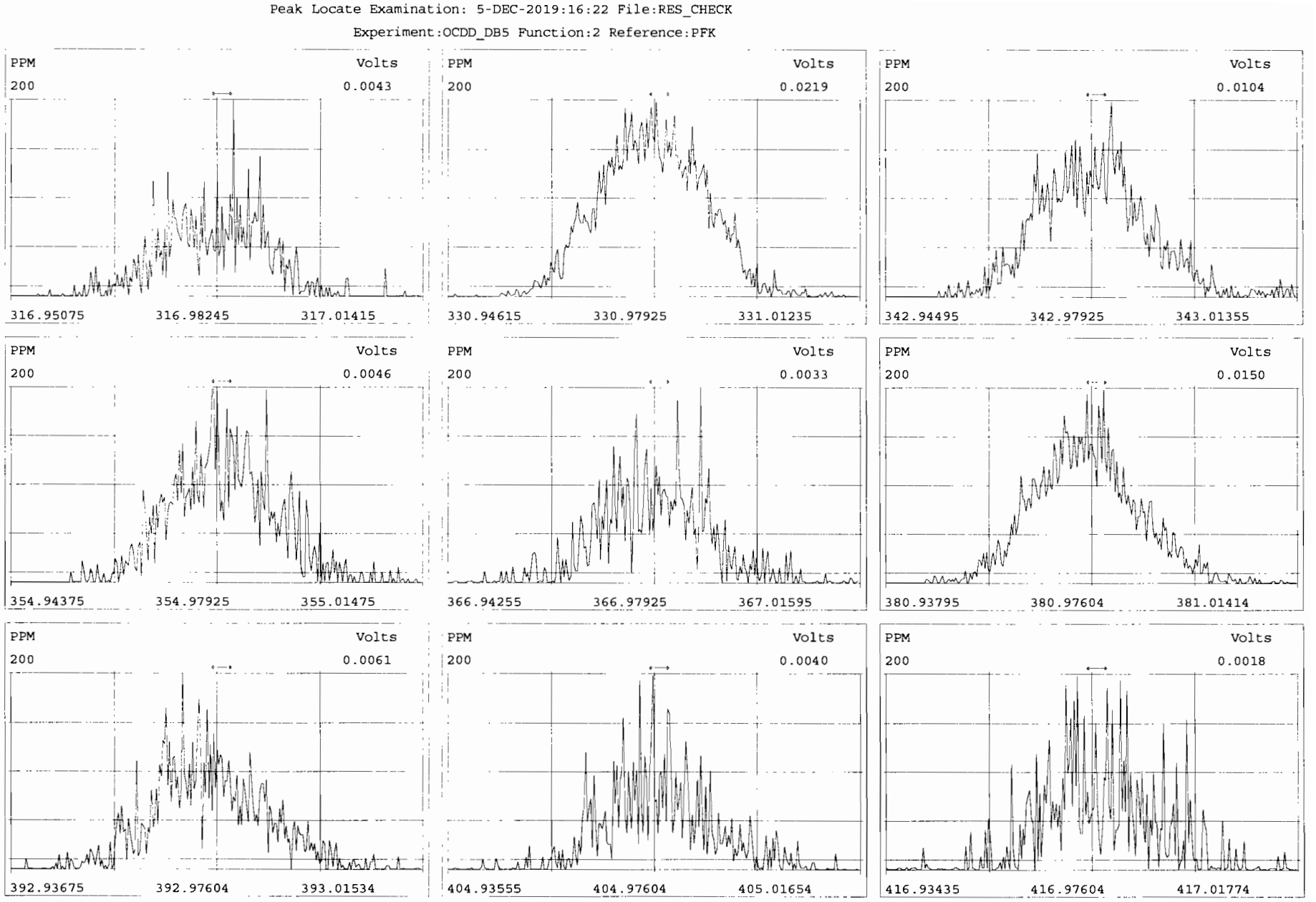
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

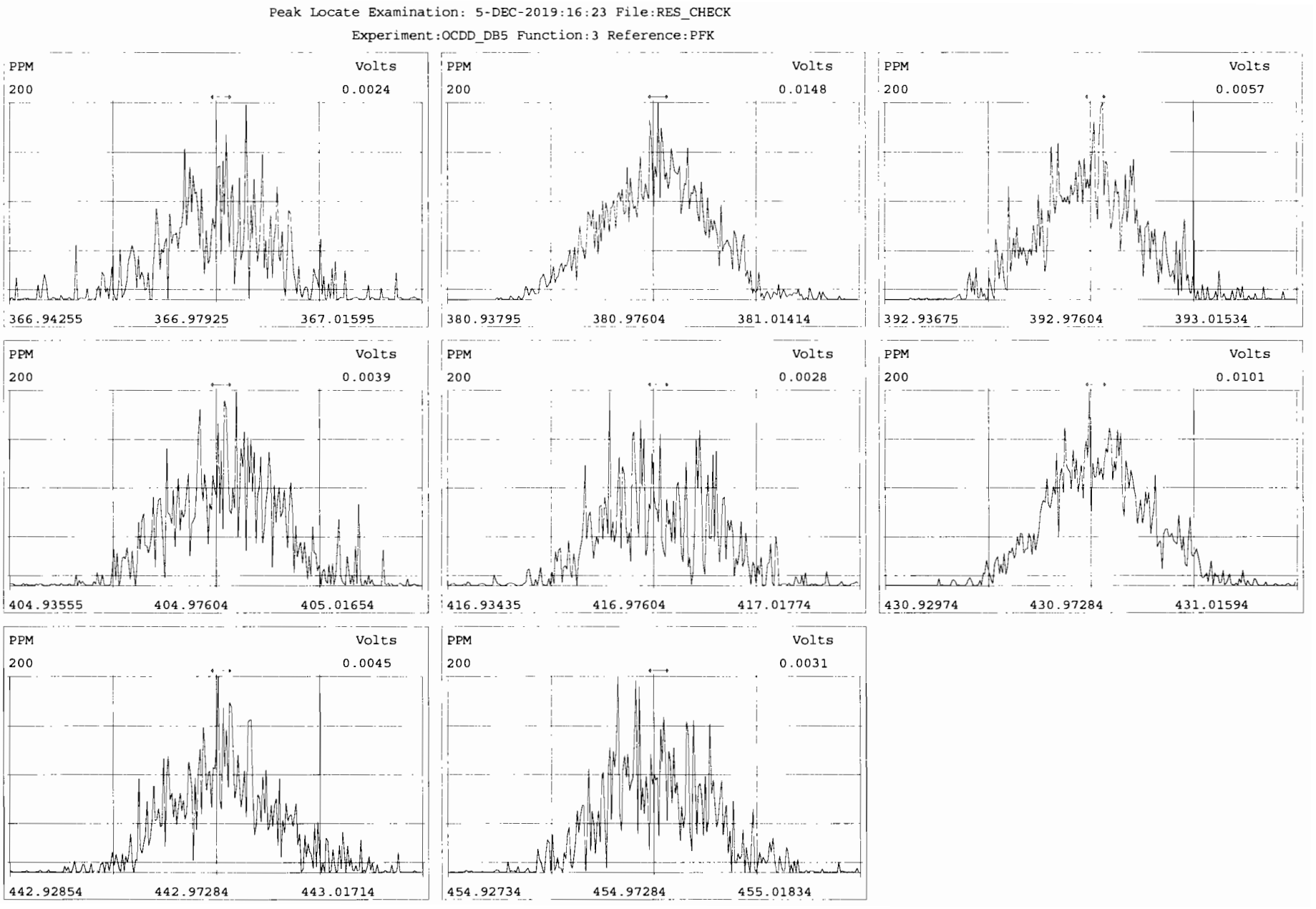


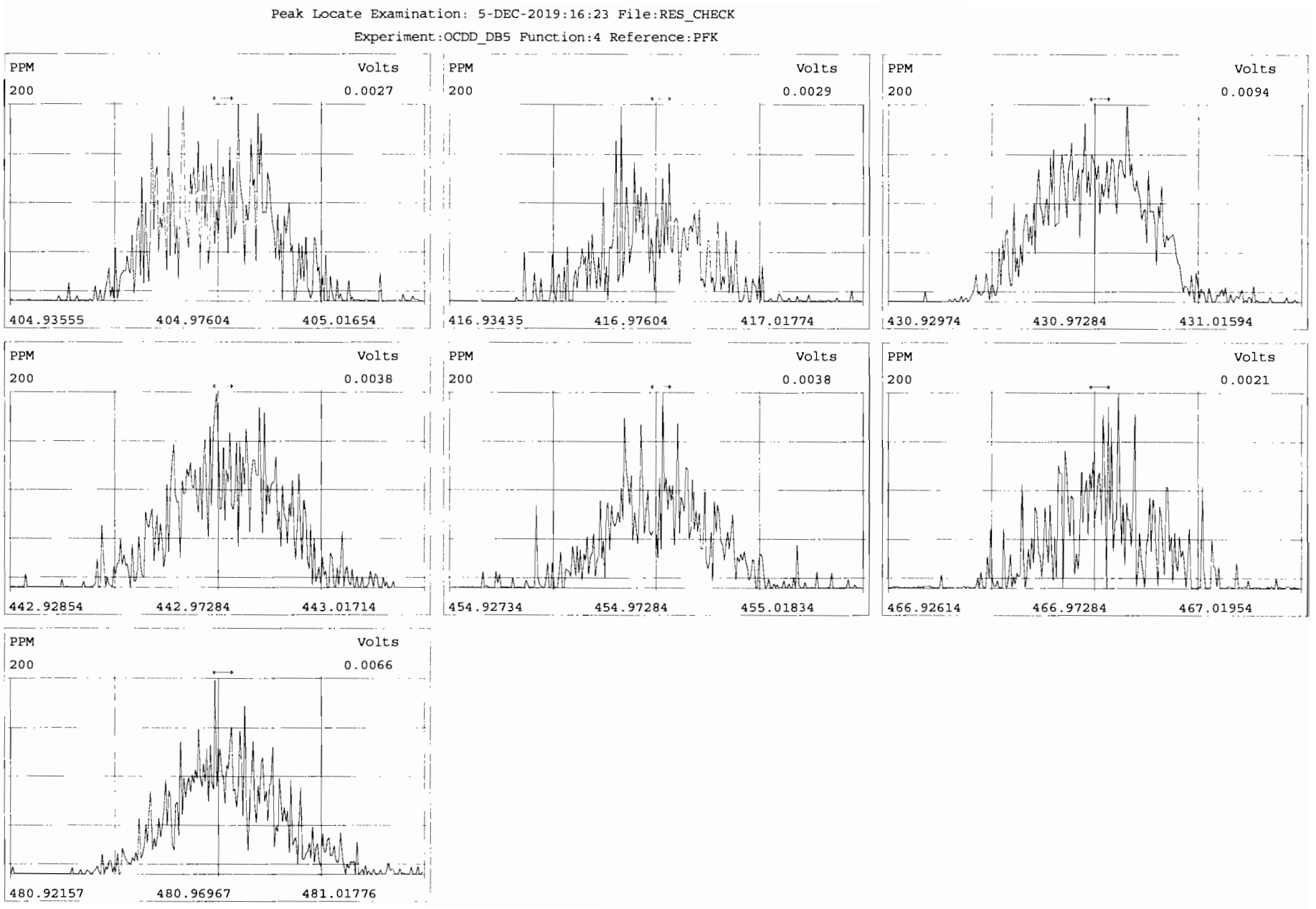
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

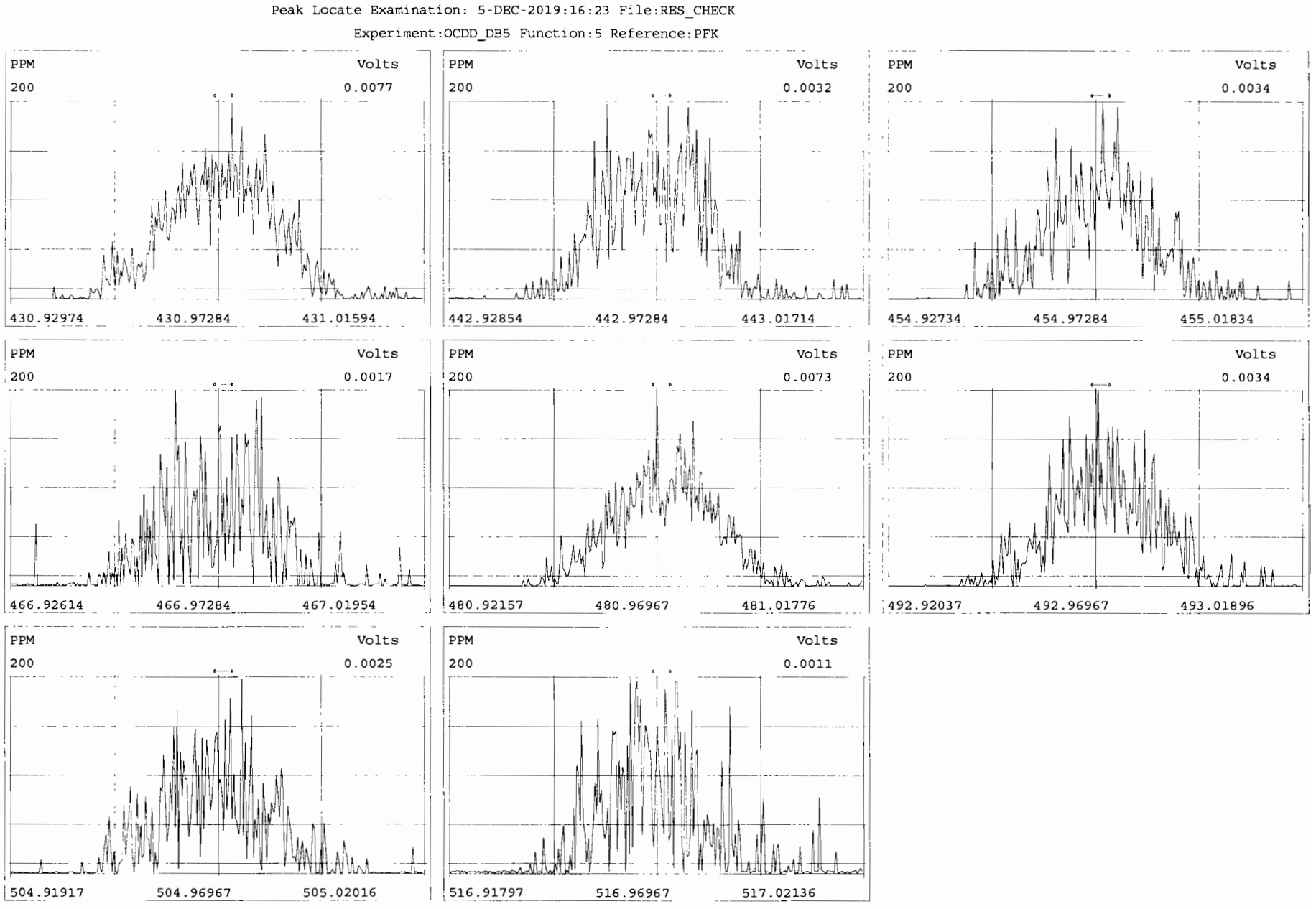



Peak Locate Examination: 5-DEC-2019:16:22 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0123
292.98245
PPM
Volts
200
0.0074
304.98245
PPM
Volts
200
0.0037
316.98245
PPM
Volts
200
0.0247
330.97925
PPM
Volts
200
0.0101
342.97925
PPM
Volts
200
0.0045
354.97925
PPM
Volts
200
0.0023
366.97925
PPM
Volts
200
0.0125
380.97604
PPM
Volts
200
0.0047
392.97604
PPM
Volts
200
0.0023
404.97604
PPM
Volts
200
0.0013
416.97604


Peak Locate Examination: 5-DEC-2019:16:22 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0043
316.95075
316.98245
317.01415
PPM
Volts
200
0.0219
330.94615
330.97925
331.01235
PPM
Volts
200
0.0104
342.94495
342.97925
343.01355
PPM
Volts
200
0.0046
354.94375
354.97925
355.01475
PPM
Volts
200
0.0033
366.94255
366.97925
367.01595
PPM
Volts
200
0.0150
380.93795
380.97604
381.01414
PPM
Volts
200
0.0061
392.93675
392.97604
393.01534
PPM
Volts
200
0.0040
404.93555
404.97604
405.01654
PPM
Volts
200
0.0018
416.93435
416.97604
417.01774


Peak Locate Examination: 5-DEC-2019:16:23 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0024
366.94255
366.97925
367.01595
PPM
Volts
200
0.0148
380.93795
380.97604
381.01414
PPM
Volts
200
0.0057
392.93675
392.97604
393.01534
PPM
Volts
200
0.0039
404.93555
404.97604
405.01654
PPM
Volts
200
0.0028
416.93435
416.97604
417.01774
PPM
Volts
200
0.0101
430.92974
430.97284
431.01594
PPM
Volts
200
0.0045
442.92854
442.97284
443.01714
PPM
Volts
200
0.0031
454.92734
454.97284
455.01834


Peak Locate Examination: 5-DEC-2019:16:23 File:RES_CHECK
Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
0.0027
404.93555
404.97604
405.01654
PPM
Volts
200
0.0029
416.93435
416.97604
417.01774
PPM
Volts
200
0.0094
430.92974
430.97284
431.01594
PPM
Volts
200
0.0038
442.92854
442.97284
443.01714
PPM
Volts
200
0.0038
454.92734
454.97284
455.01834
PPM
Volts
200
0.0021
466.92614
466.97284
467.01954
PPM
Volts
200
0.0066
480.92157
480.96967
481.01776


Peak Locate Examination: 5-DEC-2019:16:23 File:RES_CHECK
Experiment:OCDD_DB5 Function:5 Reference:PFK
PPM
Volts
200
0.0077
430.92974
430.97284
431.01594
PPM
Volts
200
0.0032
442.92854
442.97284
443.01714
PPM
Volts
200
0.0034
454.92734
454.97284
455.01834
PPM
Volts
200
0.0017
466.92614
466.97284
467.01954
PPM
Volts
200
0.0073
480.92157
480.96967
481.01776
PPM
Volts
200
0.0034
492.92037
492.96967
493.01896
PPM
Volts
200
0.0025
504.91917
504.96967
505.02016
PPM
Volts
200
0.0011
516.91797
516.96967
517.02136

HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calbration ID: ST191212D2-1 **Reviewed By:** CT 12/13/19

Initials & Date

End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentrations within criteria?	✓	
TCDD/TCDF Valleys <25%	✓	
First and last eluters present?	✓	
Retention Times within criteria?	✓	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	
Forms signed and dated?	✓	
Correct ICAL referenced?	DB	

	Beg.	End
Mass resolution ≥	✓	✓
☐ 5k ☐ 6-8K ☐ 8K ☑ 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	✓	NA
GC Break <20%	NA	

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours: NA

Run Log:

	Beg.	End
- Correct Instrument listed?	✓	✓
- Samples within 12 hour clock?	(Y)	N
- Bottle position verfied?	DB	

Comments:

Vista Analytical Laboratory - Injection Log Run file: 191212D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191212D2	1	ST191212D2-1	DB	13-DEC-19	00:56:17	ST191212D2-1	NA
191212D2	2	SOLVENT BLANK	DB	13-DEC-19	01:44:02	ST191212D2-1	NA
191212D2	3	1903828-01	DB	13-DEC-19	02:31:49	ST191212D2-1	NA
191212D2	4	1903828-02	DB	13-DEC-19	03:19:45	ST191212D2-1	NA
191212D2	5	1903828-03	DB	13-DEC-19	04:07:42	ST191212D2-1	NA
191212D2	6	1903828-06	DB	13-DEC-19	04:55:29	ST191212D2-1	NA
191212D2	7	1903828-07	DB	13-DEC-19	05:43:25	ST191212D2-1	NA
191212D2	8	1904021-01	DB	13-DEC-19	06:31:22	ST191212D2-1	NA
191212D2	9	1904021-02	DB	13-DEC-19	07:19:19	ST191212D2-1	NA
191212D2	10	1904021-03	DB	13-DEC-19	08:07:11	ST191212D2-1	NA
191212D2	11	1904021-04	DB	13-DEC-19	08:55:01	ST191212D2-1	NA
191212D2	12	1904021-05	DB	13-DEC-19	09:42:52	ST191212D2-1	NA
191212D2	13	1904021-06	DB	13-DEC-19	10:30:47	ST191212D2-1	NA
191212D2	14	1904021-07	DB	13-DEC-19	11:18:43	ST191212D2-1	NA

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST191212D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.85	0.65-0.89	y	10.6	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	52.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	53.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	53.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	51.6	43.0 - 58.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	104	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.63	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	51.9	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	51.6	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	49.2	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	48.0	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.17	1.05-1.43	y	48.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.26	1.05-1.43	y	49.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	46.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	46.3	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	96.4	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: DB

Date: 12/13/19

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	102	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	91.5	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	103	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	89.2	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	95.0	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	96.2	72.0 - 138.0
13C-OCDD	M/M+2	0.90	0.76-1.02	y	215	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.79	0.65-0.89	y	99.5	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	91.9	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	90.3	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	101	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	95.4	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	105	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	109	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.43	0.37-0.51	y	101	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.43	0.37-0.51	y	108	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	232	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.47	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: DB

Date: 12/13/19

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-9-19

RT Window Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

ZB-5MS IS Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:37	1,3,6,8-TCDF (F)	20:29
1,2,8,9-TCDD (L)	26:55	1,2,8,9-TCDF (L)	27:04
1,2,4,7,9-PeCDD (F)	28:32	1,3,4,6,8-PeCDF (F)	27:02
1,2,3,8,9-PeCDD (L)	30:56	1,2,3,8,9-PeCDF (L)	31:11
1,2,4,6,7,9-HxCDD (F)	32:22	1,2,3,4,6,8-HxCDF (F)	31:50
1,2,3,7,8,9-HxCDD (L)	34:17	1,2,3,7,8,9-HxCDF (L)	34:40
1,2,3,4,6,7,9-HpCDD (F)	36:53	1,2,3,4,6,7,8-HpCDF (F)	36:29
1,2,3,4,6,7,8-HpCDD (L)	37:45	1,2,3,4,7,8,9-HpCDF (L)	38:17

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DB

Date: 12/13/19

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.200	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.991	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.154	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.189	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052

Analyst: DB

Date: 12/13/19

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191212D2 S#1 Analysis Date: 13-DEC-19 Time: 00:56:17

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.991	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.092	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.146	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.130	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.227	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.234	1.091-1.371

Analyst: DB

Date: 12/13/19

Client ID: 1613 CS3 19C2204 Filename: 191212D2 S:1 Acq:13-DEC-19 00:56:17 ConCal: ST191212D2-1

Lab ID: ST191212D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	1.17e+06	0.85 y	0.91	26:04	10.619			* 2.5	*
	1,2,3,7,8-PeCDD	4.22e+06	0.61 y	0.90	30:35	52.799			* 2.5	*
	1,2,3,4,7,8-HxCDD	4.67e+06	1.28 y	1.10	33:53	50.109			* 2.5	*
	1,2,3,6,7,8-HxCDD	4.91e+06	1.20 y	0.94	33:59	53.381			* 2.5	*
	1,2,3,7,8,9-HxCDD	5.06e+06	1.26 y	0.96	34:17	53.437			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	4.08e+06	1.04 y	0.98	37:45	51.562			* 2.5	*
	OCDD	7.98e+06	0.88 y	0.96	41:00	104.10			* 2.5	*
	2,3,7,8-TCDF	1.64e+06	0.77 y	0.95	25:16	9.6274			* 2.5	*
	1,2,3,7,8-PeCDF	6.82e+06	1.61 y	0.96	29:24	51.907			* 2.5	*
	2,3,4,7,8-PeCDF	6.98e+06	1.61 y	1.01	30:18	51.641			* 2.5	*
	1,2,3,4,7,8-HxCDF	6.23e+06	1.21 y	1.18	32:60	49.223			* 2.5	*
	1,2,3,6,7,8-HxCDF	6.51e+06	1.23 y	1.07	33:07	48.047			* 2.5	*
	2,3,4,6,7,8-HxCDF	6.93e+06	1.17 y	1.11	33:43	48.375			* 2.5	*
	1,2,3,7,8,9-HxCDF	6.01e+06	1.26 y	1.06	34:40	48.976			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	5.15e+06	1.01 y	1.13	36:29	46.412			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	4.78e+06	1.01 y	1.28	38:17	46.318			* 2.5	*
	OCDF	9.37e+06	0.88 y	0.95	41:13	96.377			* 2.5	*
IS	13C-2,3,7,8-TCDD	1.22e+07	0.77 y	1.10	26:02	101.50				102
IS	13C-1,2,3,7,8-PeCDD	8.85e+06	0.64 y	0.88	30:34	91.529				91.5
IS	13C-1,2,3,4,7,8-HxCDD	8.46e+06	1.29 y	0.64	33:52	102.53				103
IS	13C-1,2,3,6,7,8-HxCDD	9.80e+06	1.25 y	0.86	33:58	89.165				89.2
IS	13C-1,2,3,7,8,9-HxCDD	9.84e+06	1.26 y	0.81	34:16	94.967				95.0
IS	13C-1,2,3,4,6,7,8-HpCDD	8.09e+06	1.07 y	0.65	37:44	96.229				96.2
IS	13C-OCDD	1.60e+07	0.90 y	0.58	40:59	214.88				107
IS	13C-2,3,7,8-TCDF	1.79e+07	0.79 y	1.03	25:15	99.545				99.5
IS	13C-1,2,3,7,8-PeCDF	1.37e+07	1.60 y	0.85	29:24	91.901				91.9
IS	13C-2,3,4,7,8-PeCDF	1.33e+07	1.62 y	0.85	30:18	90.334				90.3
IS	13C-1,2,3,4,7,8-HxCDF	1.07e+07	0.53 y	0.83	32:59	100.58				101
IS	13C-1,2,3,6,7,8-HxCDF	1.27e+07	0.52 y	1.03	33:06	95.403				95.4
IS	13C-2,3,4,6,7,8-HxCDF	1.29e+07	0.53 y	0.95	33:42	105.05				105
IS	13C-1,2,3,7,8,9-HxCDF	1.16e+07	0.53 y	0.83	34:39	108.74				109
IS	13C-1,2,3,4,6,7,8-HpCDF	9.85e+06	0.43 y	0.76	36:28	101.16				101
IS	13C-1,2,3,4,7,8,9-HpCDF	8.06e+06	0.43 y	0.58	38:16	107.95				108
IS	13C-OCDF	2.05e+07	0.88 y	0.69	41:13	231.88				116
C/Up	37Cl-2,3,7,8-TCDD	1.24e+06		1.20	26:03	9.4729				94.7
RS/RT	13C-1,2,3,4-TCDD	1.10e+07	0.79 y	1.00	25:28	100.00				
RS	13C-1,2,3,4-TCDF	1.74e+07	0.80 y	1.00	24:01	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.28e+07	0.50 y	1.00	33:24	100.00				

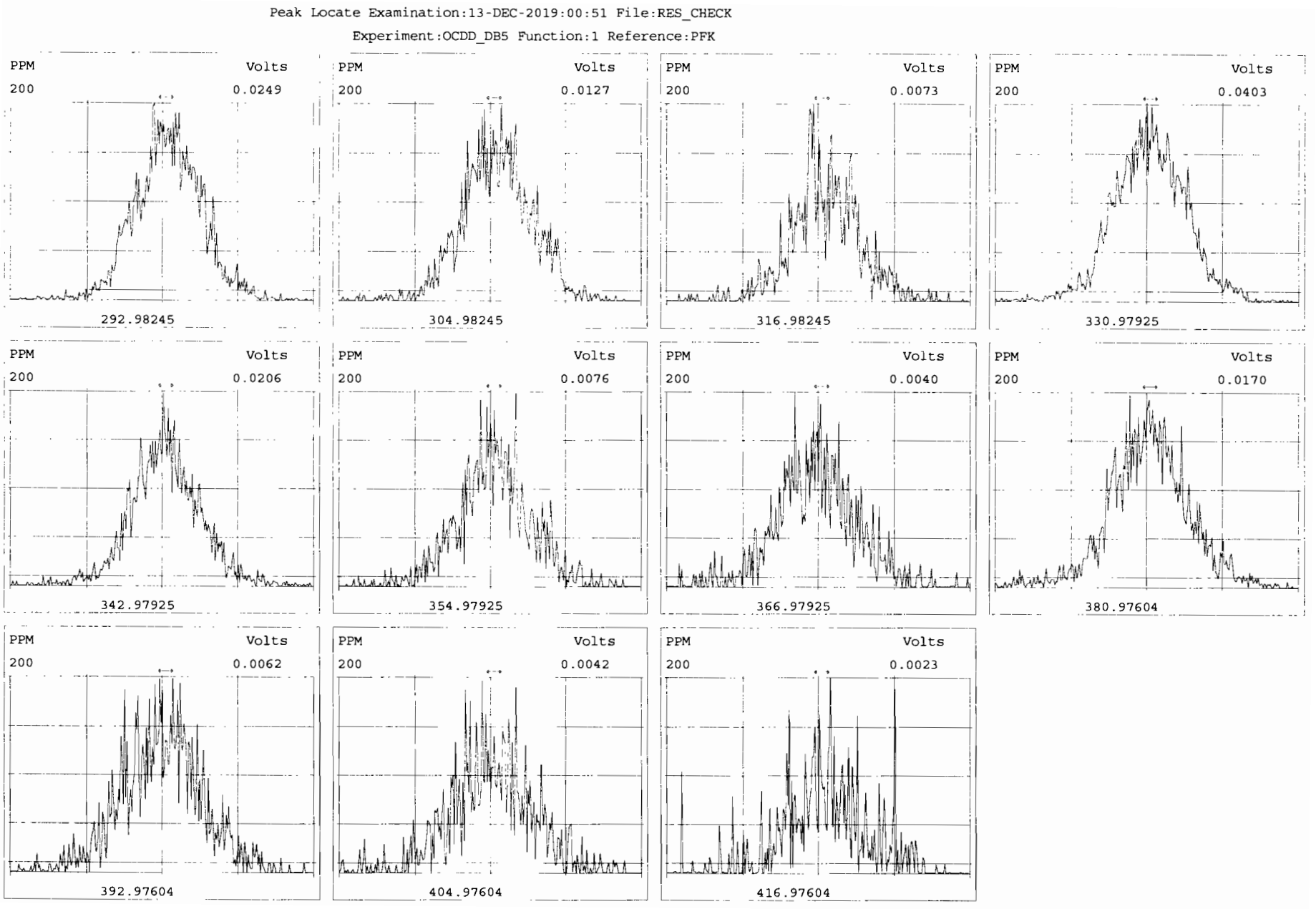
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	76.9	77.5		*	*
Total Penta-Dioxins	202	203		*	*
Total Hexa-Dioxins	226	228		*	*
Total Hepta-Dioxins	118	120		*	*
Total Tetra-Furans	37.1	37.9		*	*
Total Penta-Furans	231.17	232.60		*	*
Total Hexa-Furans	254	255		*	*
Total Hepta-Furans	92.9	93.9		*	*

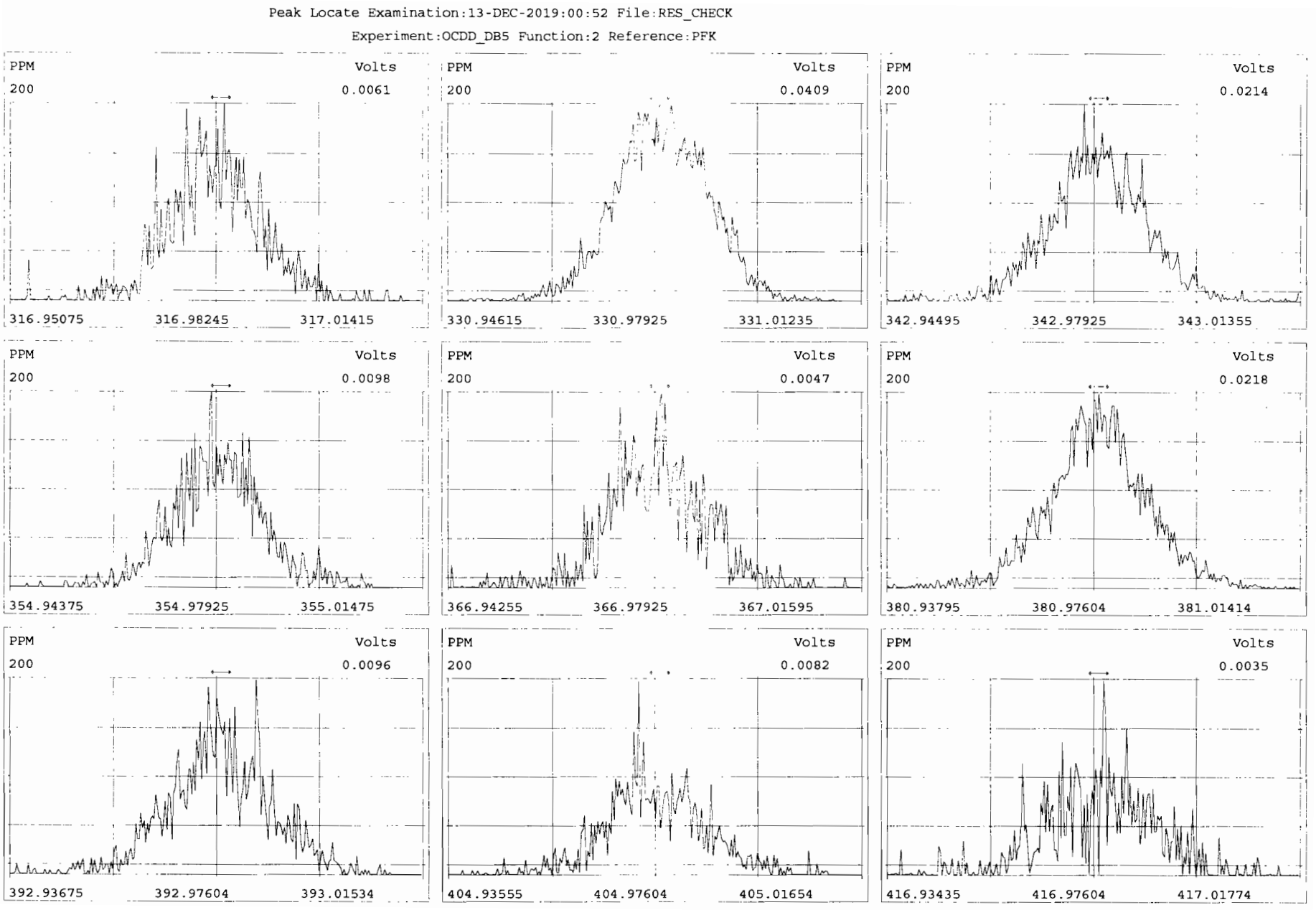
Integrations by Analyst: DB Date: 12/13/19

Reviewed by Analyst: CT Date: 12/13/19

Vista Analytical Laboratory - Injection Log Run file: 191212D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191212D2	1	ST191212D2-1	DB	13-DEC-19	00:56:17	ST191212D2-1	NA
191212D2	2	SOLVENT BLANK	DB	13-DEC-19	01:44:02	ST191212D2-1	NA
191212D2	3	1903828-01	DB	13-DEC-19	02:31:49	ST191212D2-1	NA
191212D2	4	1903828-02	DB	13-DEC-19	03:19:45	ST191212D2-1	NA
191212D2	5	1903828-03	DB	13-DEC-19	04:07:42	ST191212D2-1	NA
191212D2	6	1903828-06	DB	13-DEC-19	04:55:29	ST191212D2-1	NA
191212D2	7	1903828-07	DB	13-DEC-19	05:43:25	ST191212D2-1	NA
191212D2	8	1904021-01	DB	13-DEC-19	06:31:22	ST191212D2-1	NA
191212D2	9	1904021-02	DB	13-DEC-19	07:19:19	ST191212D2-1	NA
191212D2	10	1904021-03	DB	13-DEC-19	08:07:11	ST191212D2-1	NA
191212D2	11	1904021-04	DB	13-DEC-19	08:55:01	ST191212D2-1	NA
191212D2	12	1904021-05	DB	13-DEC-19	09:42:52	ST191212D2-1	NA
191212D2	13	1904021-06	DB	13-DEC-19	10:30:47	ST191212D2-1	NA
191212D2	14	1904021-07	DB	13-DEC-19	11:18:43	ST191212D2-1	NA


Peak Locate Examination:13-DEC-2019:00:51 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0249
292.98245
PPM
Volts
200
0.0127
304.98245
PPM
Volts
200
0.0073
316.98245
PPM
Volts
200
0.0403
330.97925
PPM
Volts
200
0.0206
342.97925
PPM
Volts
200
0.0076
354.97925
PPM
Volts
200
0.0040
366.97925
PPM
Volts
200
0.0170
380.97604
PPM
Volts
200
0.0062
392.97604
PPM
Volts
200
0.0042
404.97604
PPM
Volts
200
0.0023
416.97604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Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0061
316.95075
316.98245
317.01415
PPM
Volts
200
0.0409
330.94615
330.97925
331.01235
PPM
Volts
200
0.0214
342.94495
342.97925
343.01355
PPM
Volts
200
0.0098
354.94375
354.97925
355.01475
PPM
Volts
200
0.0047
366.94255
366.97925
367.01595
PPM
Volts
200
0.0218
380.93795
380.97604
381.01414
PPM
Volts
200
0.0096
392.93675
392.97604
393.01534
PPM
Volts
200
0.0082
404.93555
404.97604
405.01654
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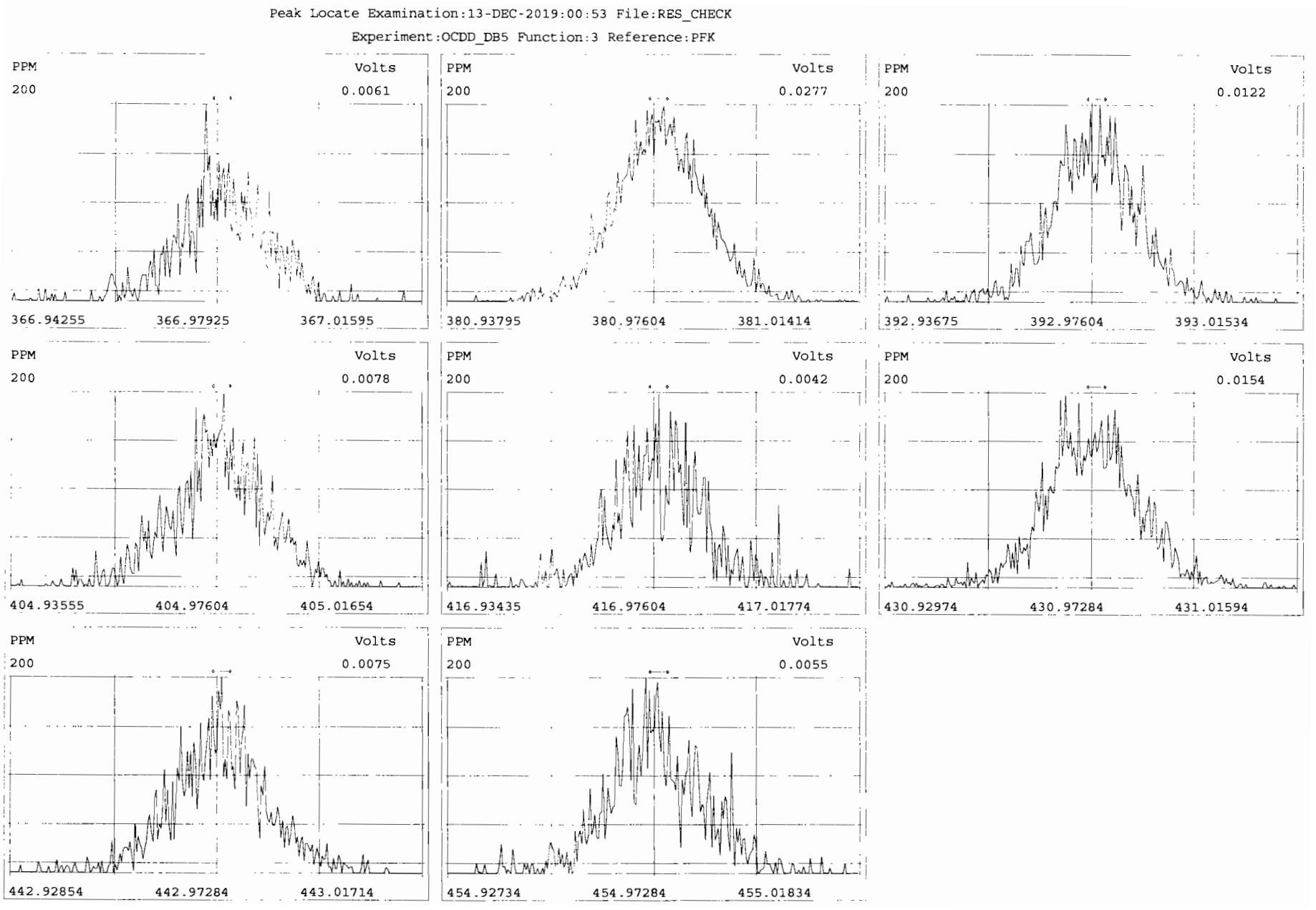
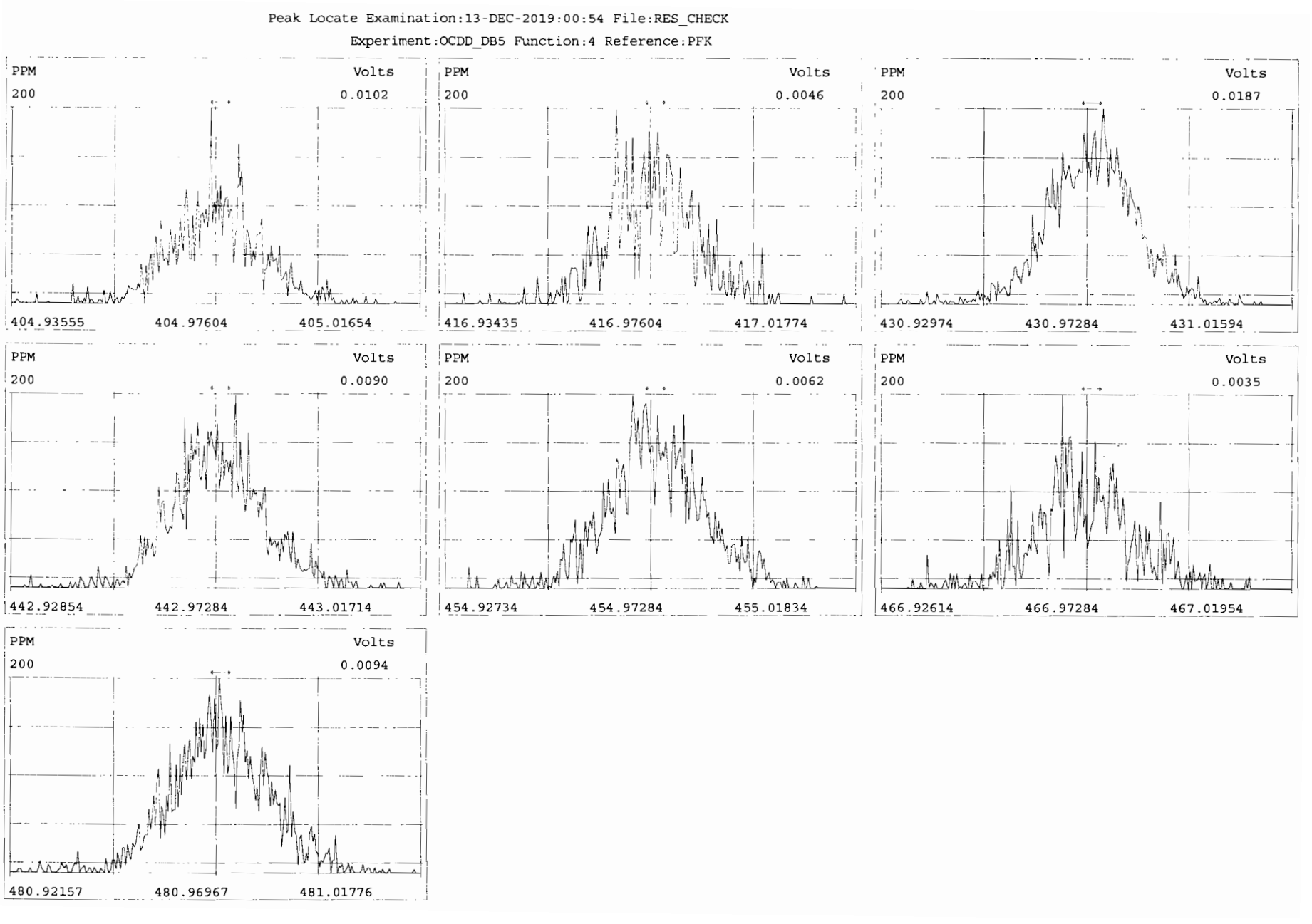
Volts
200
0.0035
416.93435
416.97604
417.01774


Peak Locate Examination:13-DEC-2019:00:53 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0061
366.94255
366.97925
367.01595
PPM
Volts
200
0.0277
380.93795
380.97604
381.01414
PPM
Volts
200
0.0122
392.93675
392.97604
393.01534
PPM
Volts
200
0.0078
404.93555
404.97604
405.01654
PPM
Volts
200
0.0042
416.93435
416.97604
417.01774
PPM
Volts
200
0.0154
430.92974
430.97284
431.01594
PPM
Volts
200
0.0075
442.92854
442.97284
443.01714
PPM
Volts
200
0.0055
454.92734
454.97284
455.01834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Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
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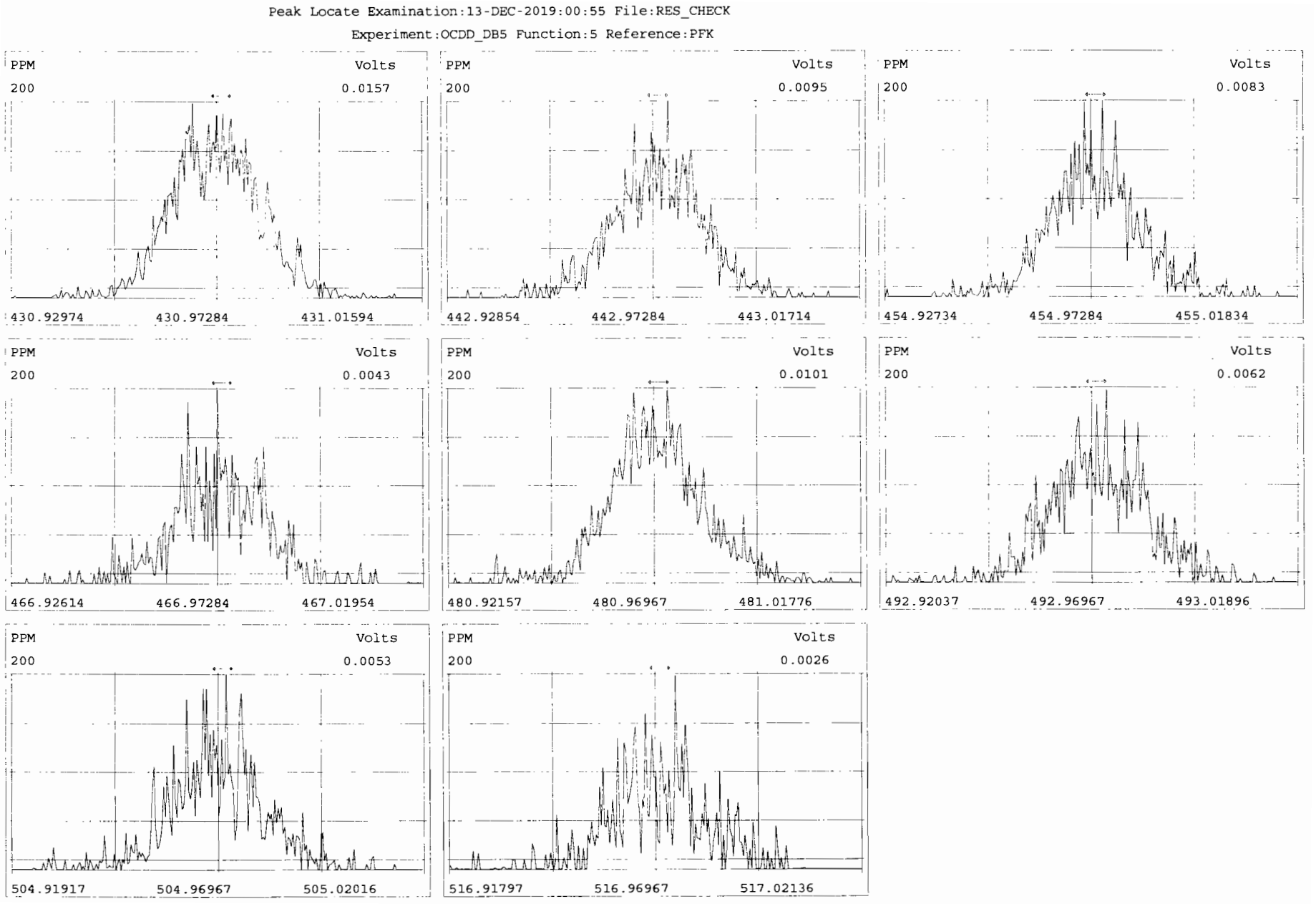
404.93555
404.97604
405.01654
PPM
Volts
200
0.0046
416.93435
416.97604
417.01774
PPM
Volts
200
0.0187
430.92974
430.97284
431.01594
PPM
Volts
200
0.0090
442.92854
442.97284
443.01714
PPM
Volts
200
0.0062
454.92734
454.97284
455.01834
PPM
Volts
200
0.0035
466.92614
466.97284
467.01954
PPM
Volts
200
0.0094
480.92157
480.96967
481.01776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Experiment:OCDD_DB5 Function:5 Reference:PFK
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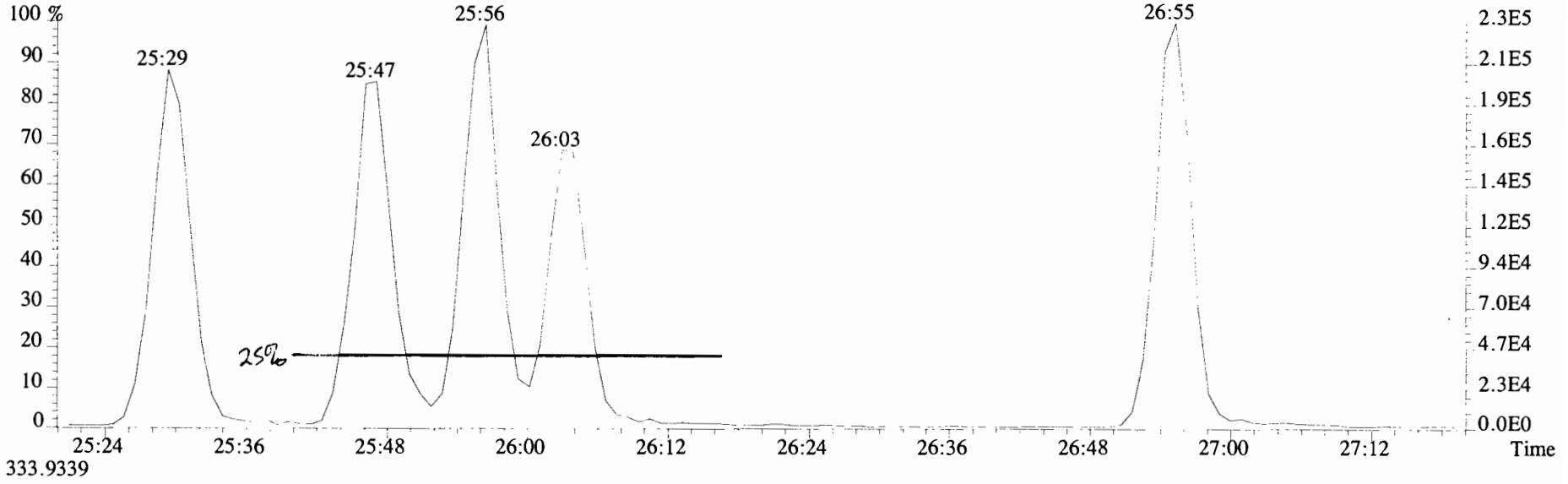
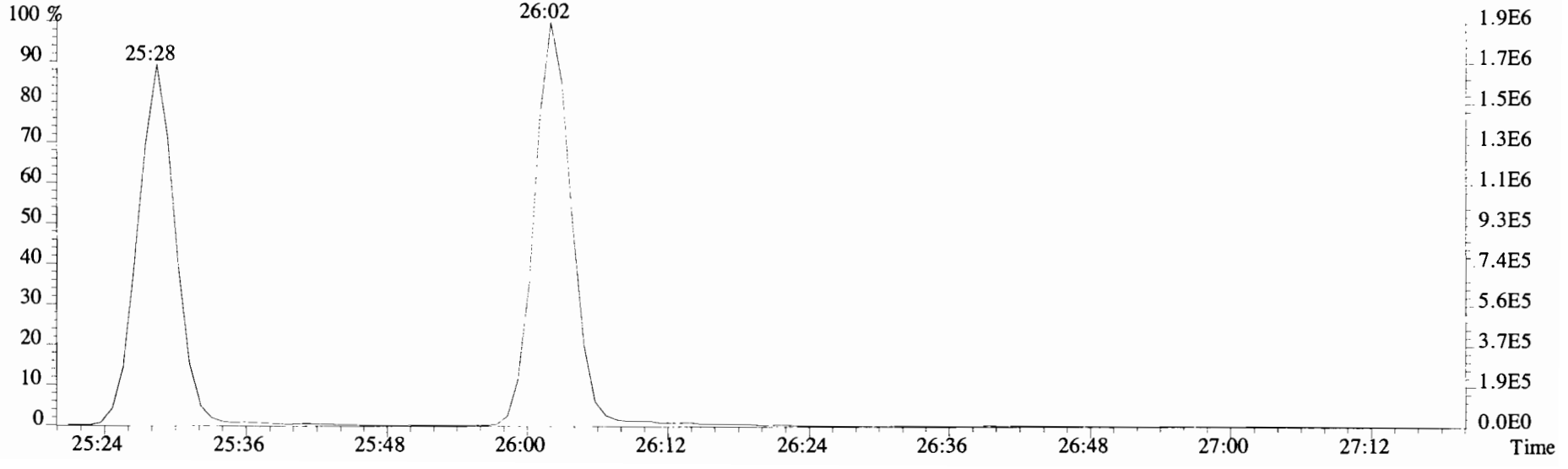
Volts
200
0.0157
430.92974
430.97284
431.01594
PPM
Volts
200
0.0095
442.92854
442.97284
443.01714
PPM
Volts
200
0.0083
454.92734
454.97284
455.01834
PPM
Volts
200
0.0043
466.92614
466.97284
467.01954
PPM
Volts
200
0.0101
480.92157
480.96967
481.01776
PPM
Volts
200
0.0062
492.92037
492.96967
493.01896
PPM
Volts
200
0.0053
504.91917
504.96967
505.02016
PPM
Volts
200
0.0026
516.91797
516.96967
517.02136

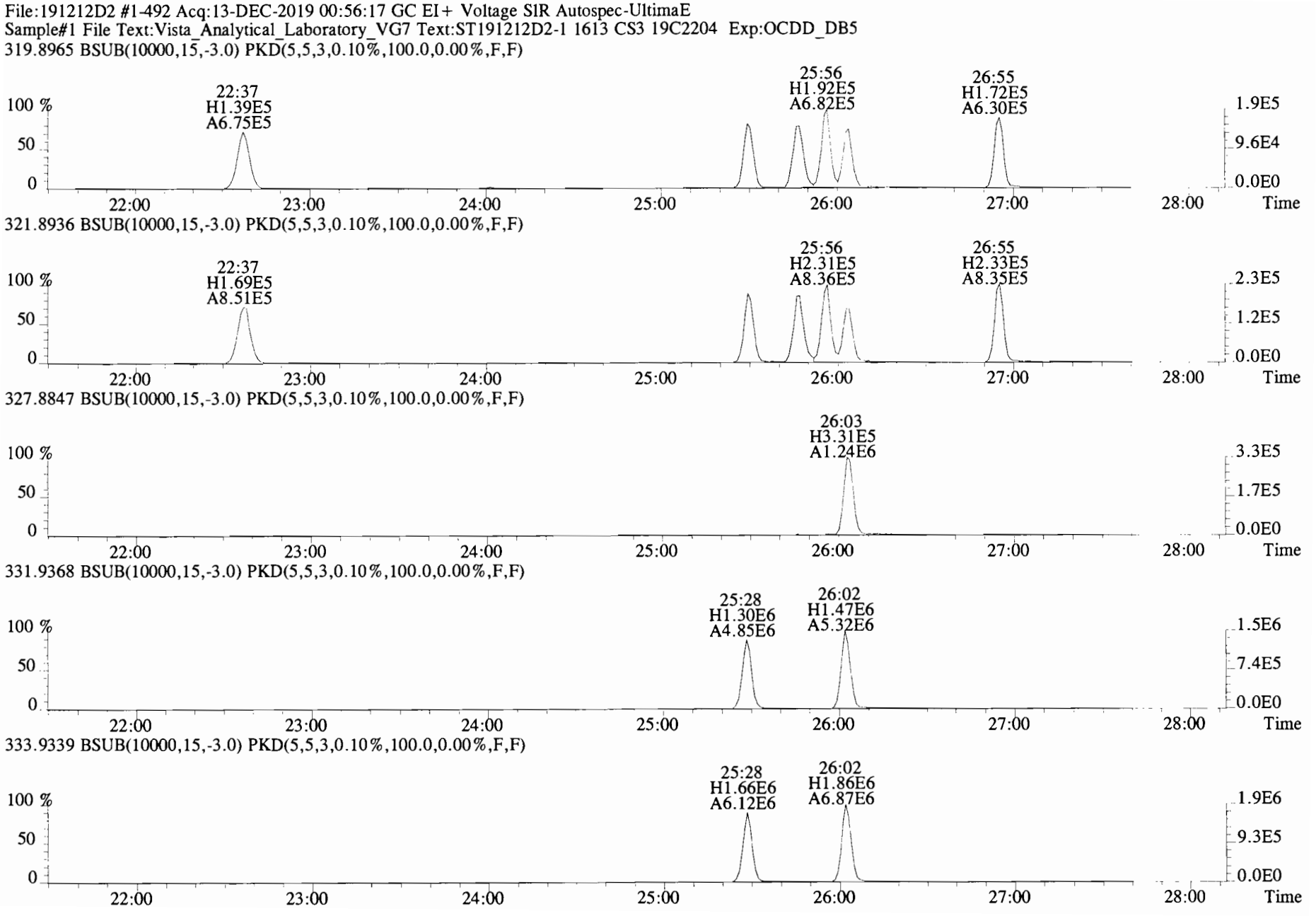
File:191212D2 #1-492 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



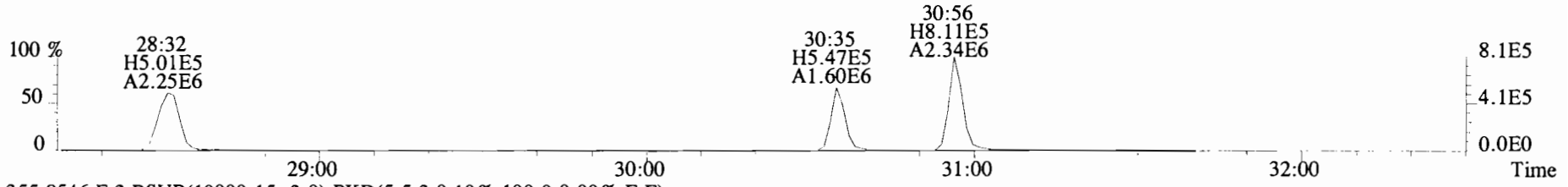
333.9339



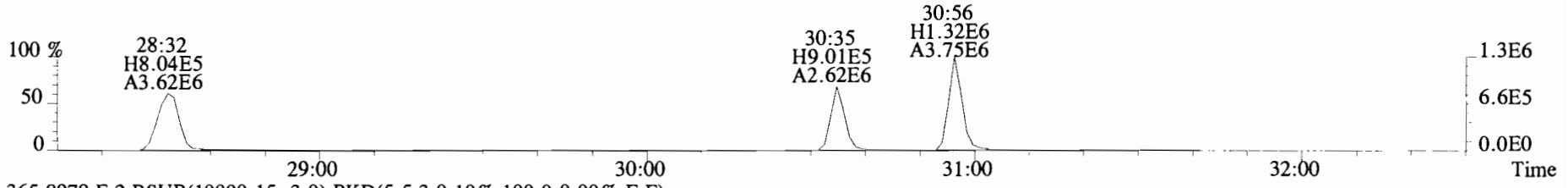
File:191212D2 #1-492 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5



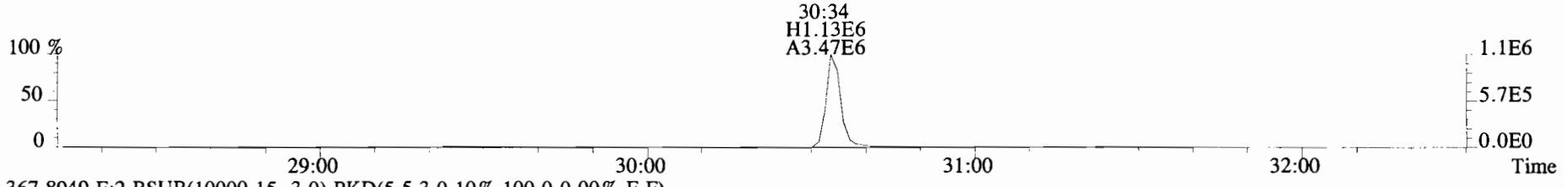
File:191212D2 #1-211 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



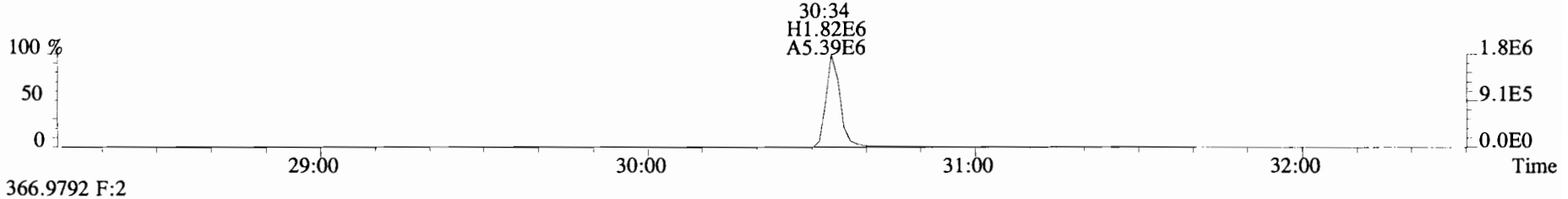
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



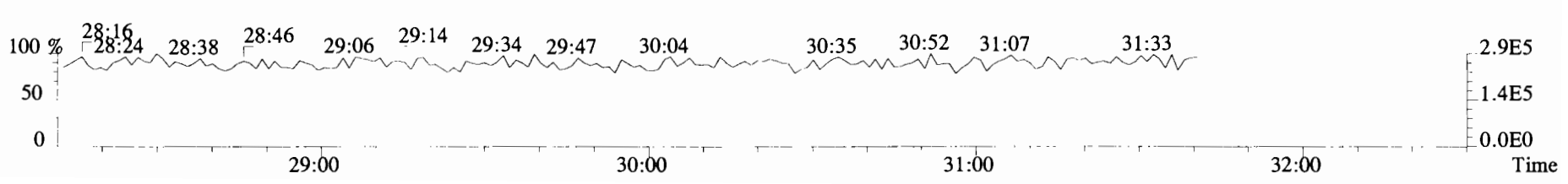
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



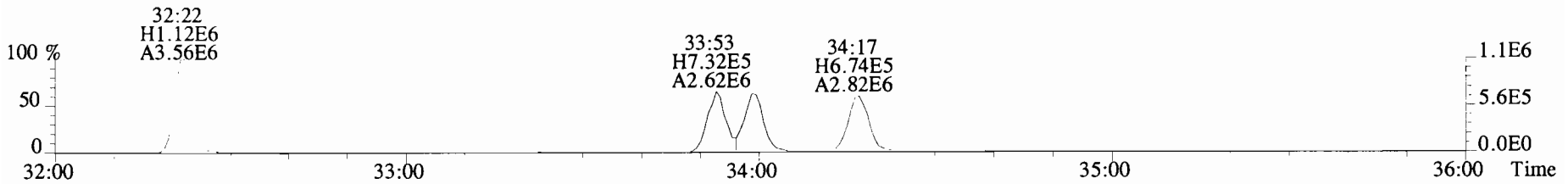
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



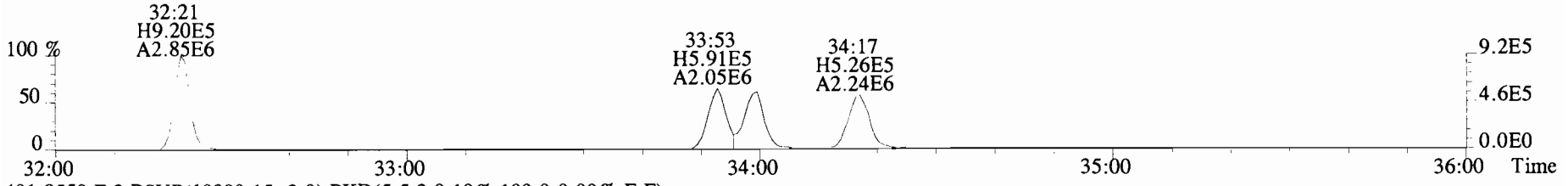
366.9792 F:2



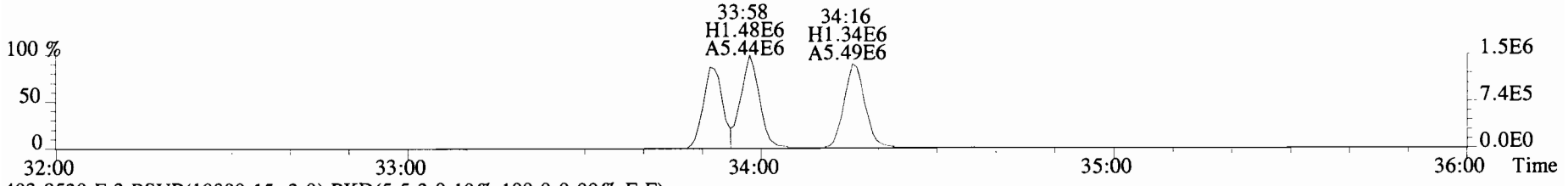
File:191212D2 #1-385 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



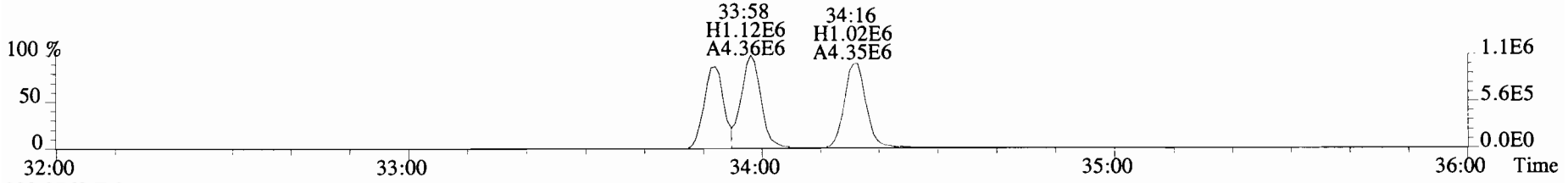
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



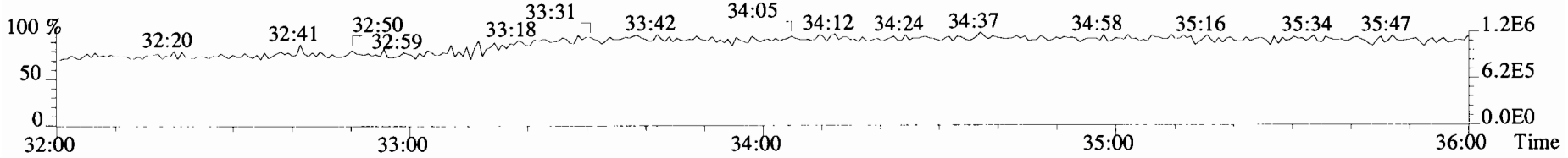
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



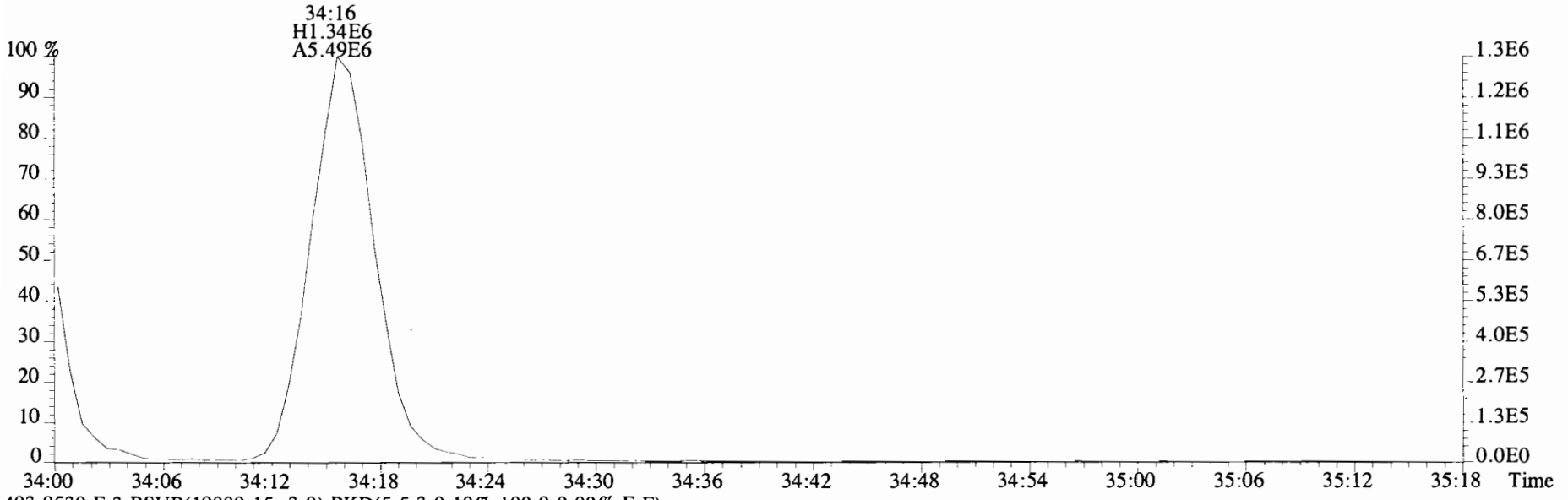
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



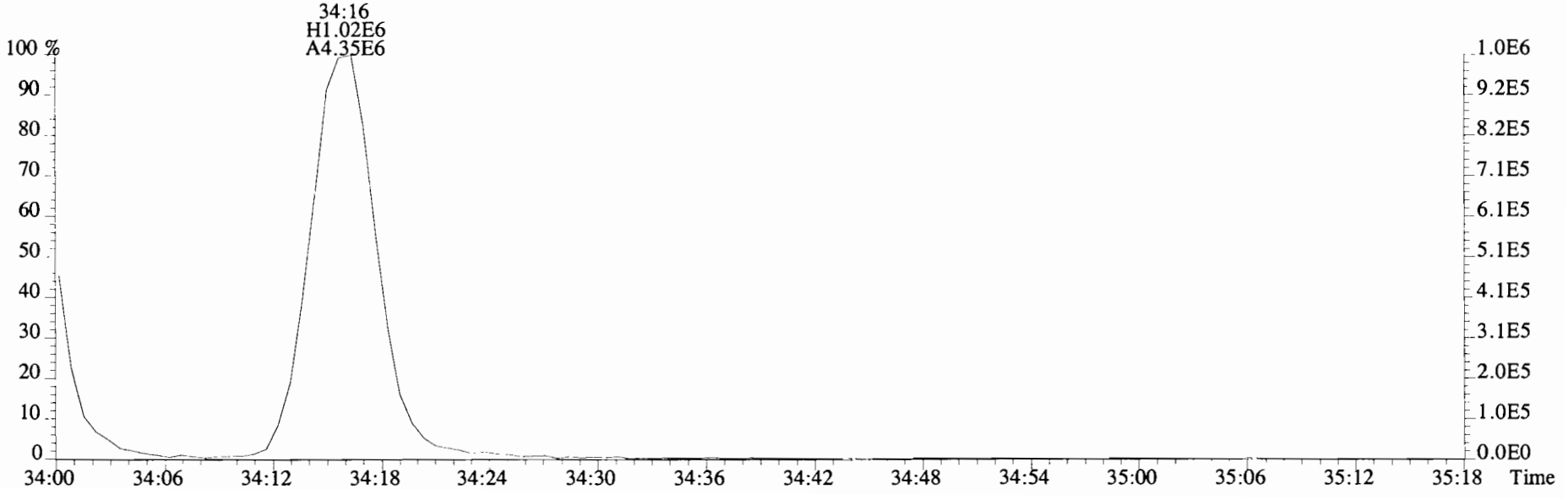
392.9760 F:3



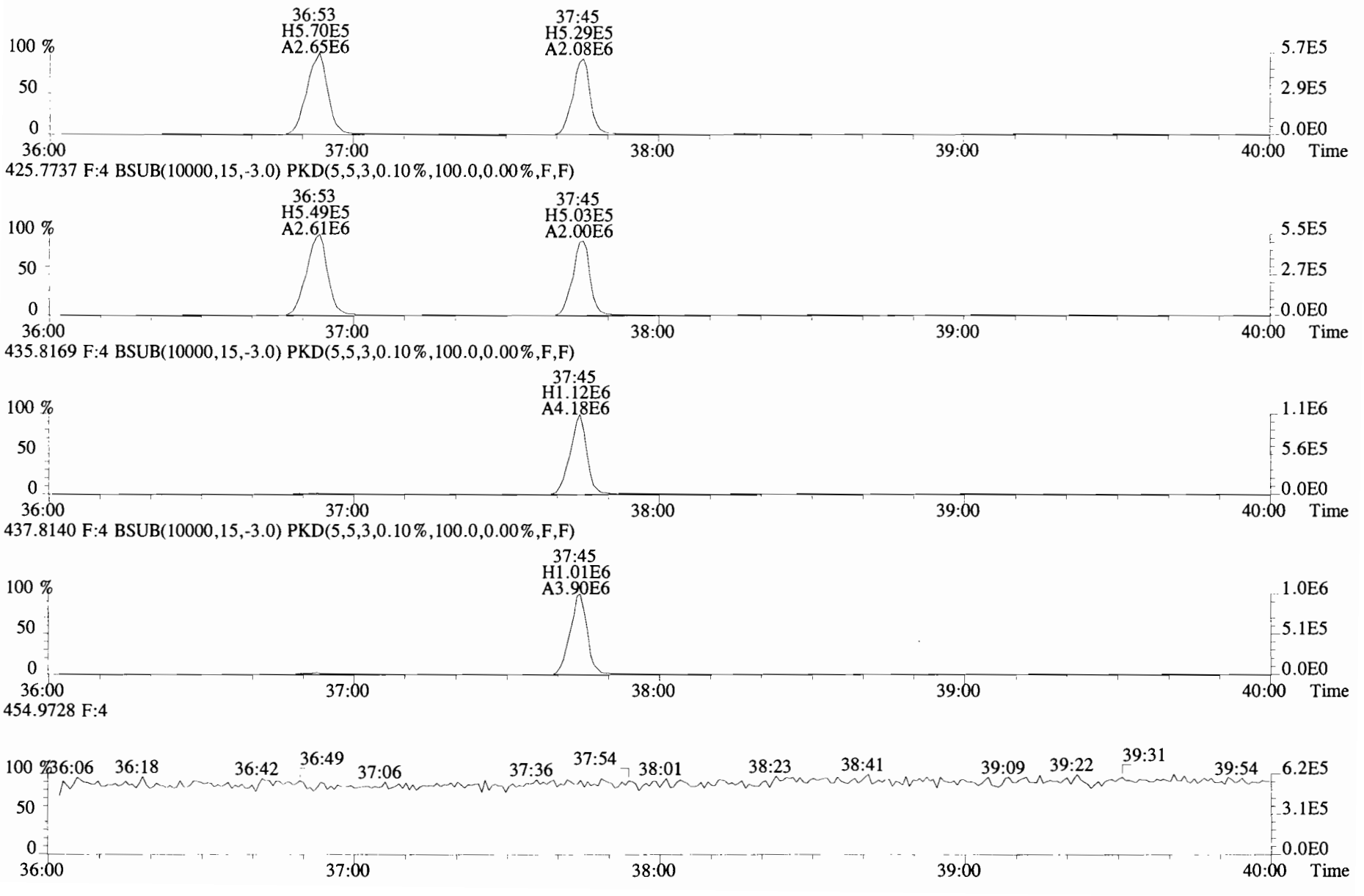
File:191212D2 #1-385 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



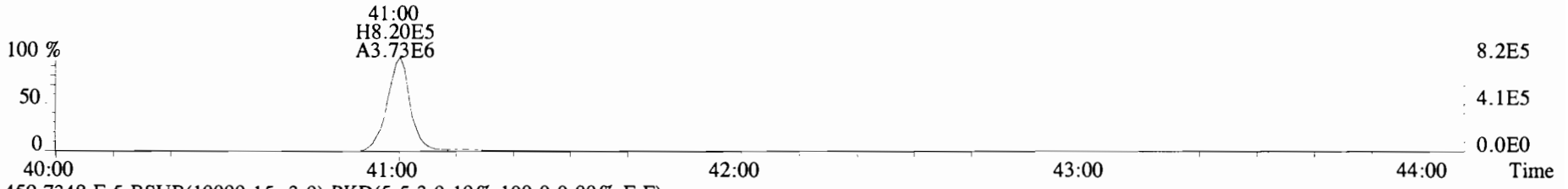
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



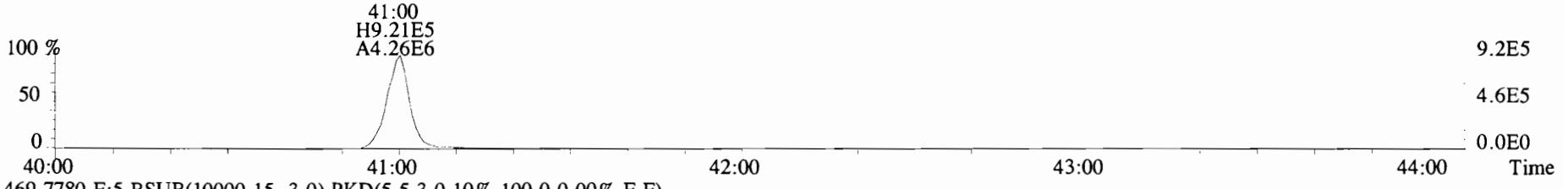
File:191212D2 #1-355 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5



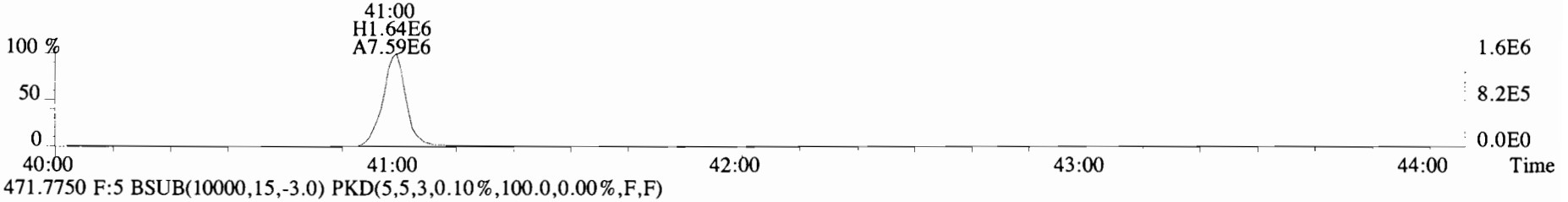
File:191212D2 #1-432 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



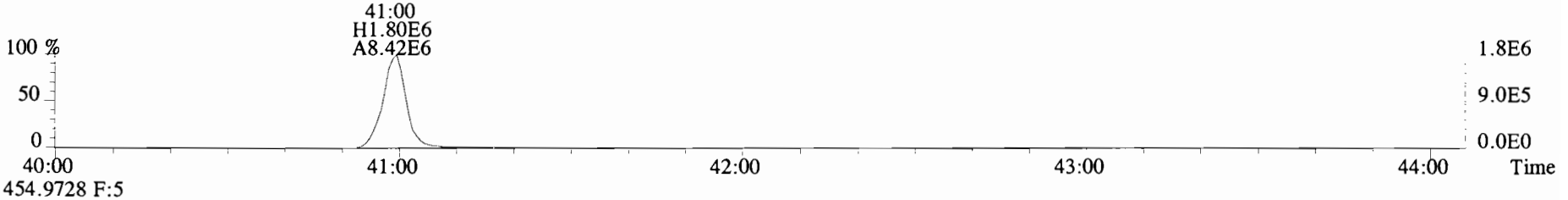
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



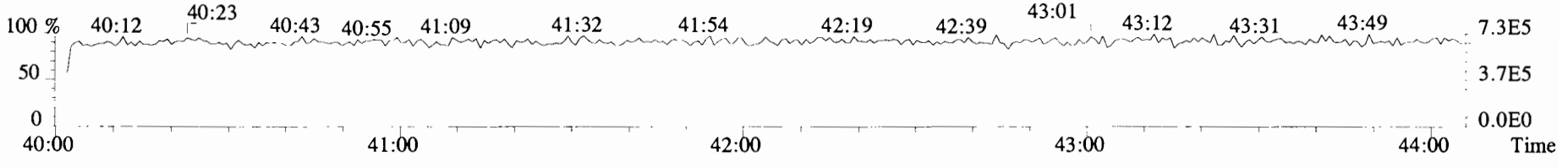
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



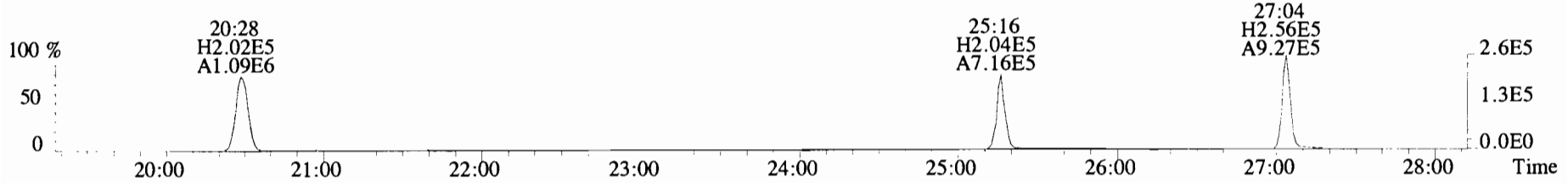
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



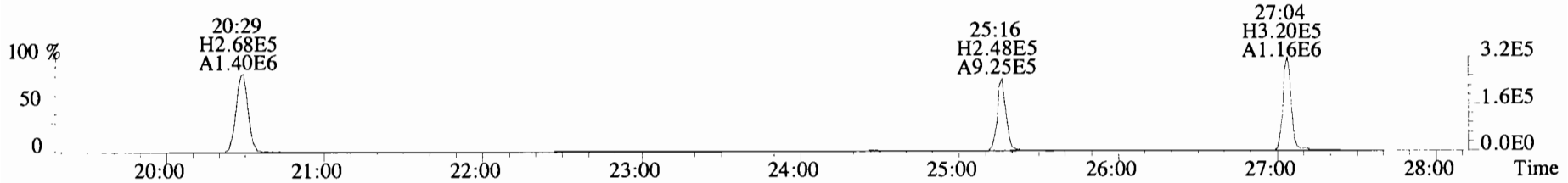
454.9728 F:5



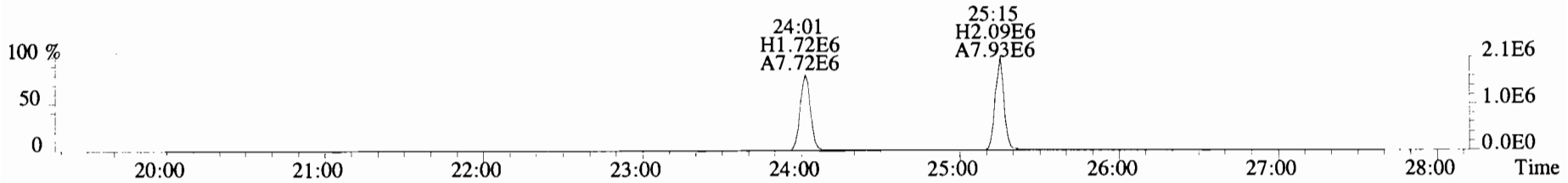
File:191212D2 #1-492 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



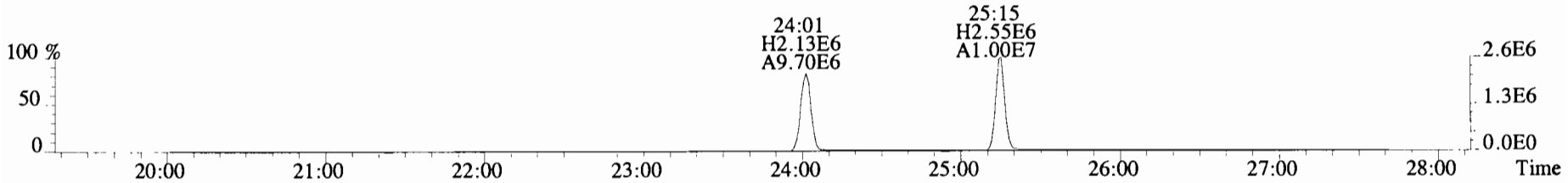
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



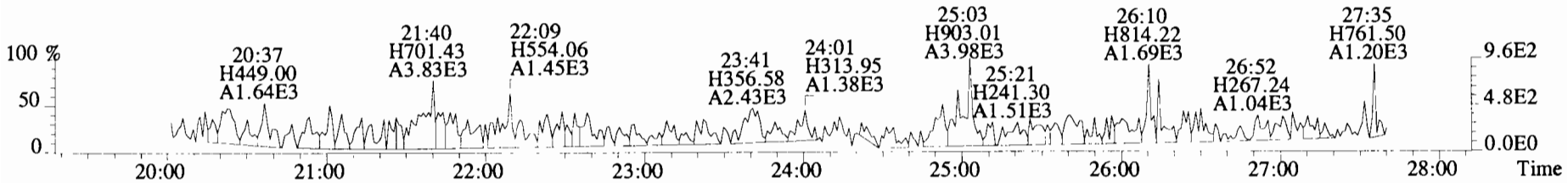
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

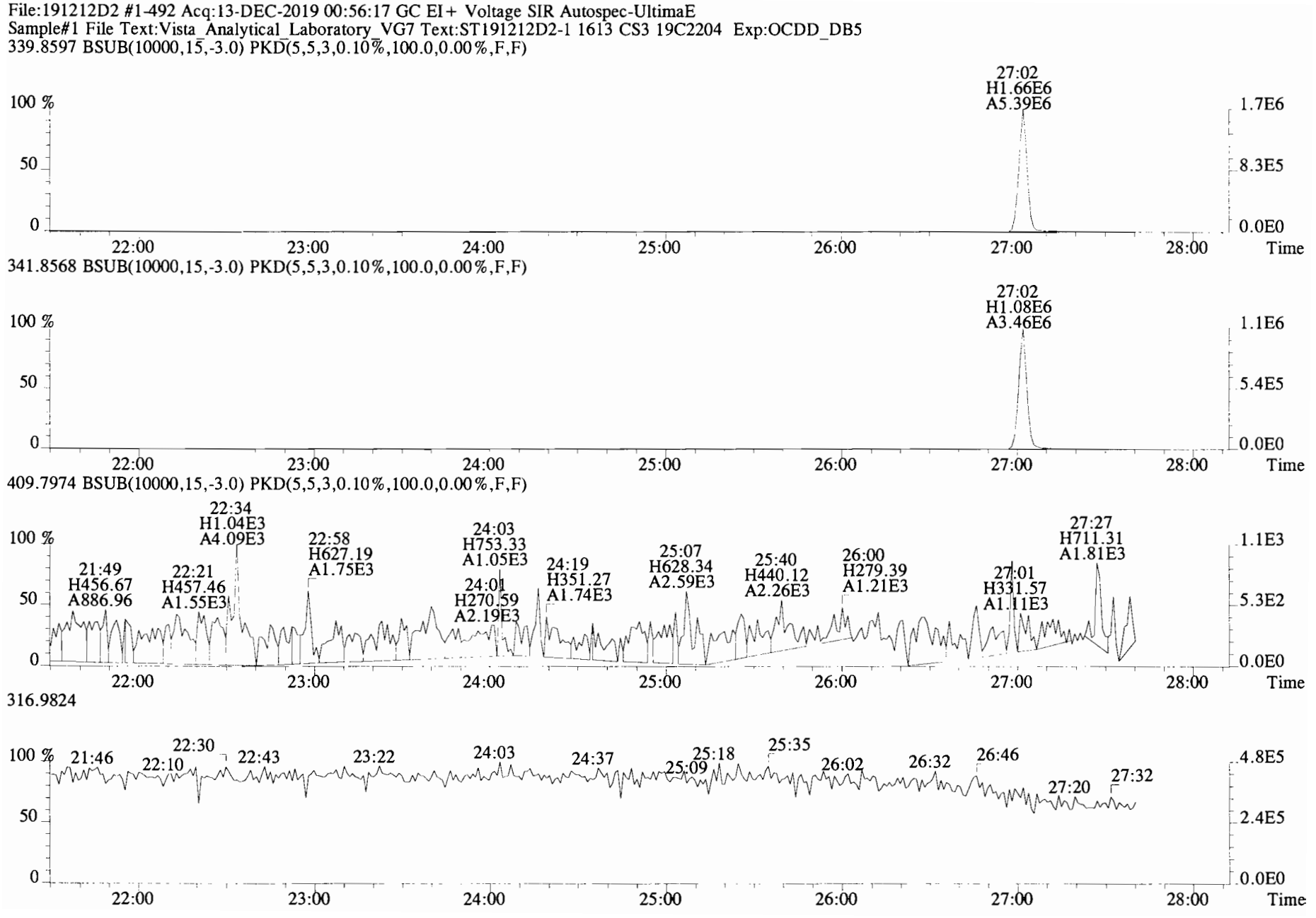


317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

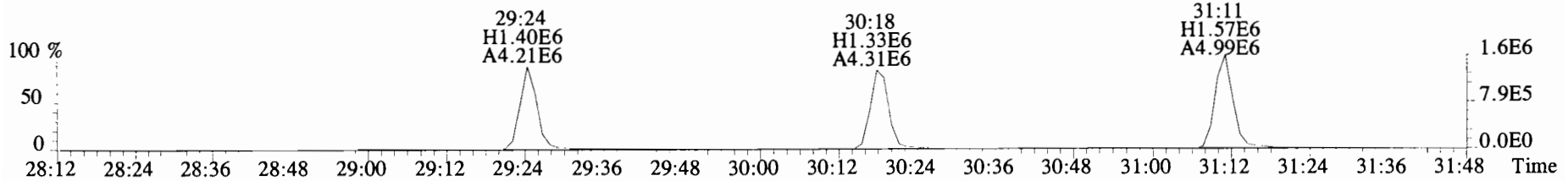


375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

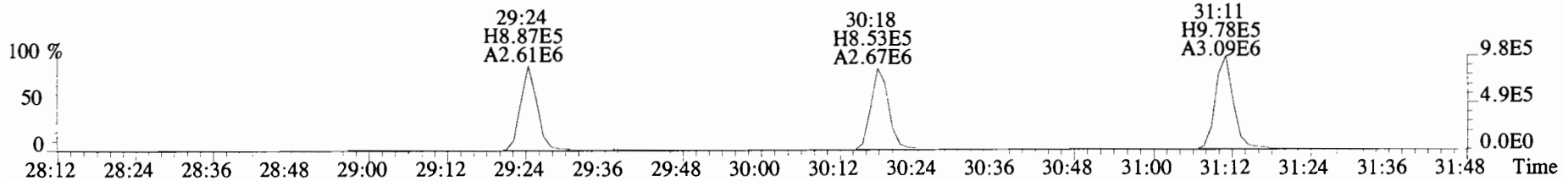



File:191212D2 #1-492 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:02
H1.66E6
A5.39E6
100 %
50
0
1.7E6
8.3E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:02
H1.08E6
A3.46E6
100 %
50
0
1.1E6
5.4E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:34
H1.04E3
A4.09E3
22:58
H627.19
A1.75E3
24:03
H753.33
A1.05E3
21:49
H456.67
A886.96
22:21
H457.46
A1.55E3
24:01
H270.59
A2.19E3
24:19
H351.27
A1.74E3
25:07
H628.34
A2.59E3
25:40
H440.12
A2.26E3
26:00
H279.39
A1.21E3
27:01
H331.57
A1.11E3
27:27
H711.31
A1.81E3
100 %
50
0
1.1E3
5.3E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
316.9824
100 %
21:46
22:10
22:30
22:43
23:22
24:03
24:37
25:09
25:18
25:35
26:02
26:32
26:46
27:20
27:32
50
0
4.8E5
2.4E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time

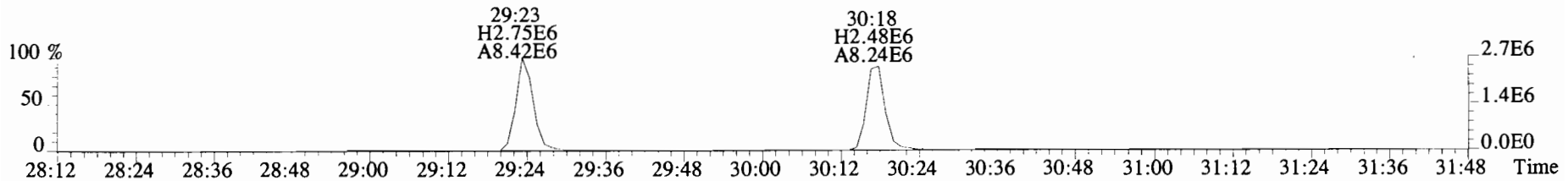
File:191212D2 #1-211 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



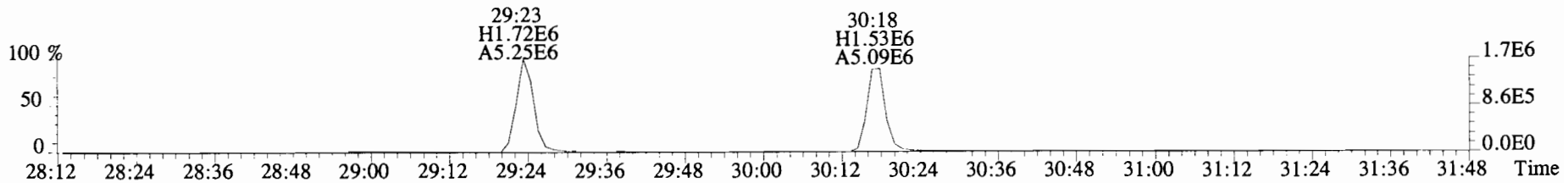
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



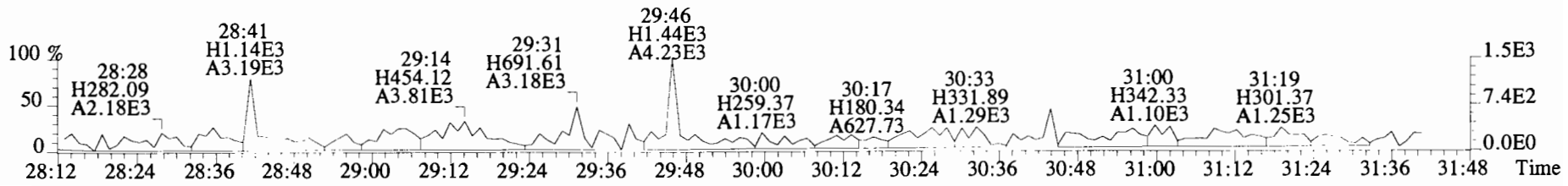
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

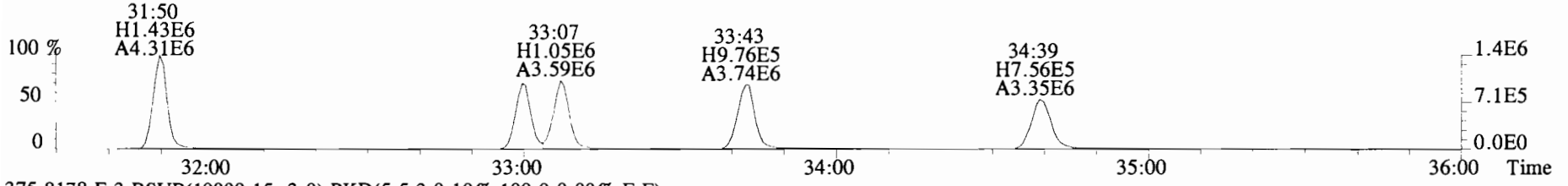


409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

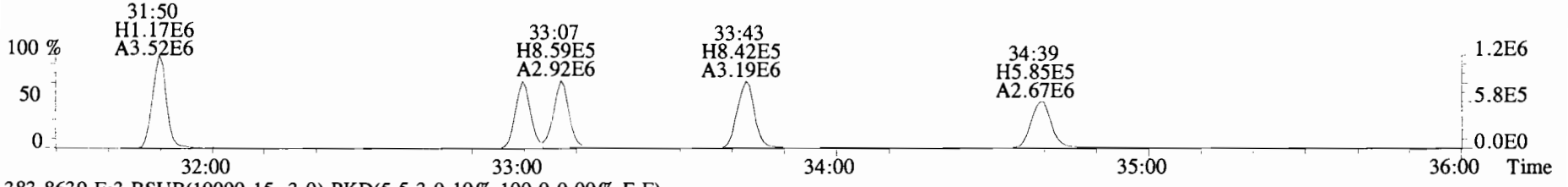


File:191212D2 #1-385 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5

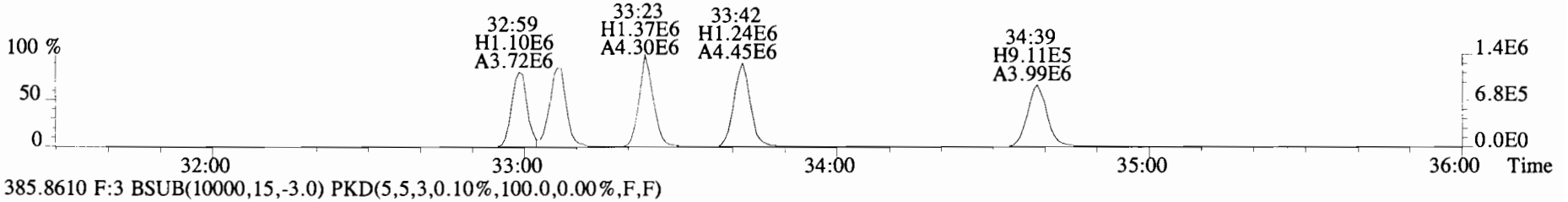
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



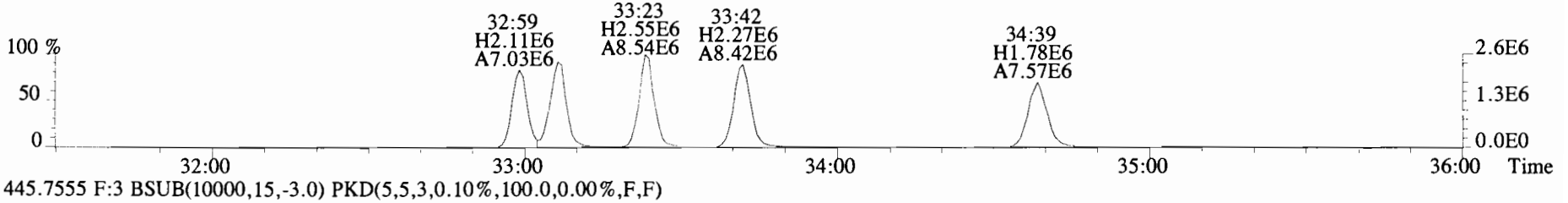
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



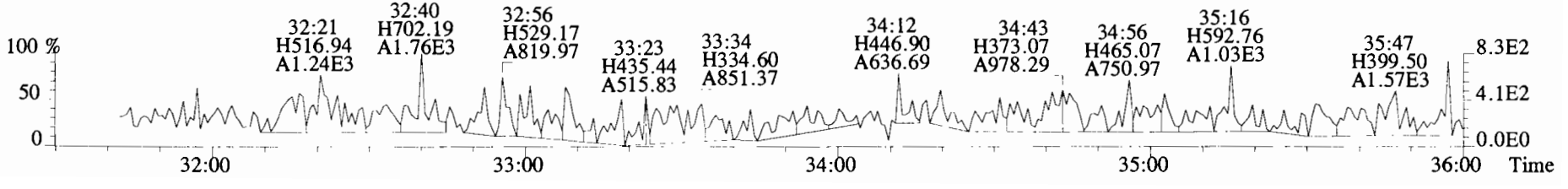
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



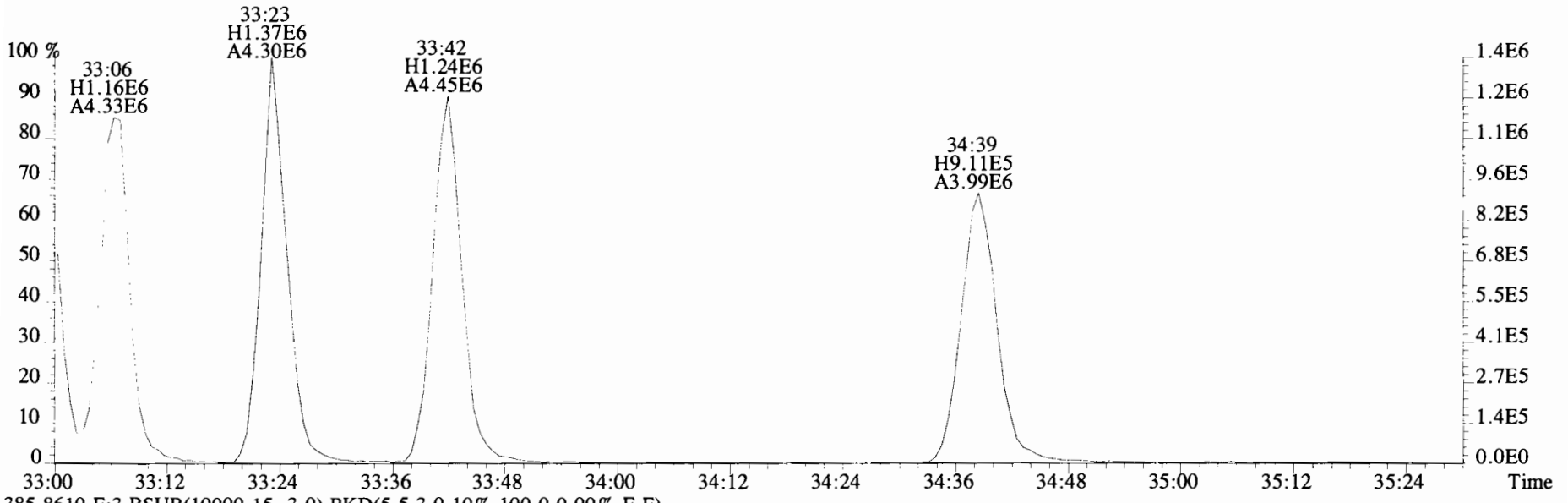
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



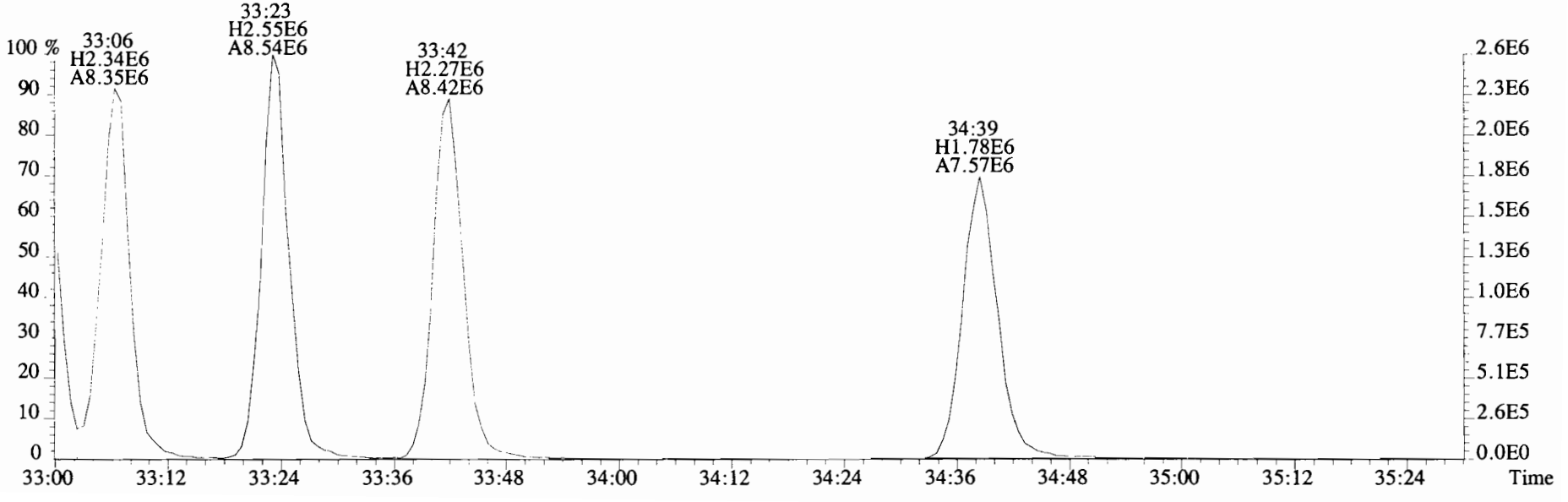
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



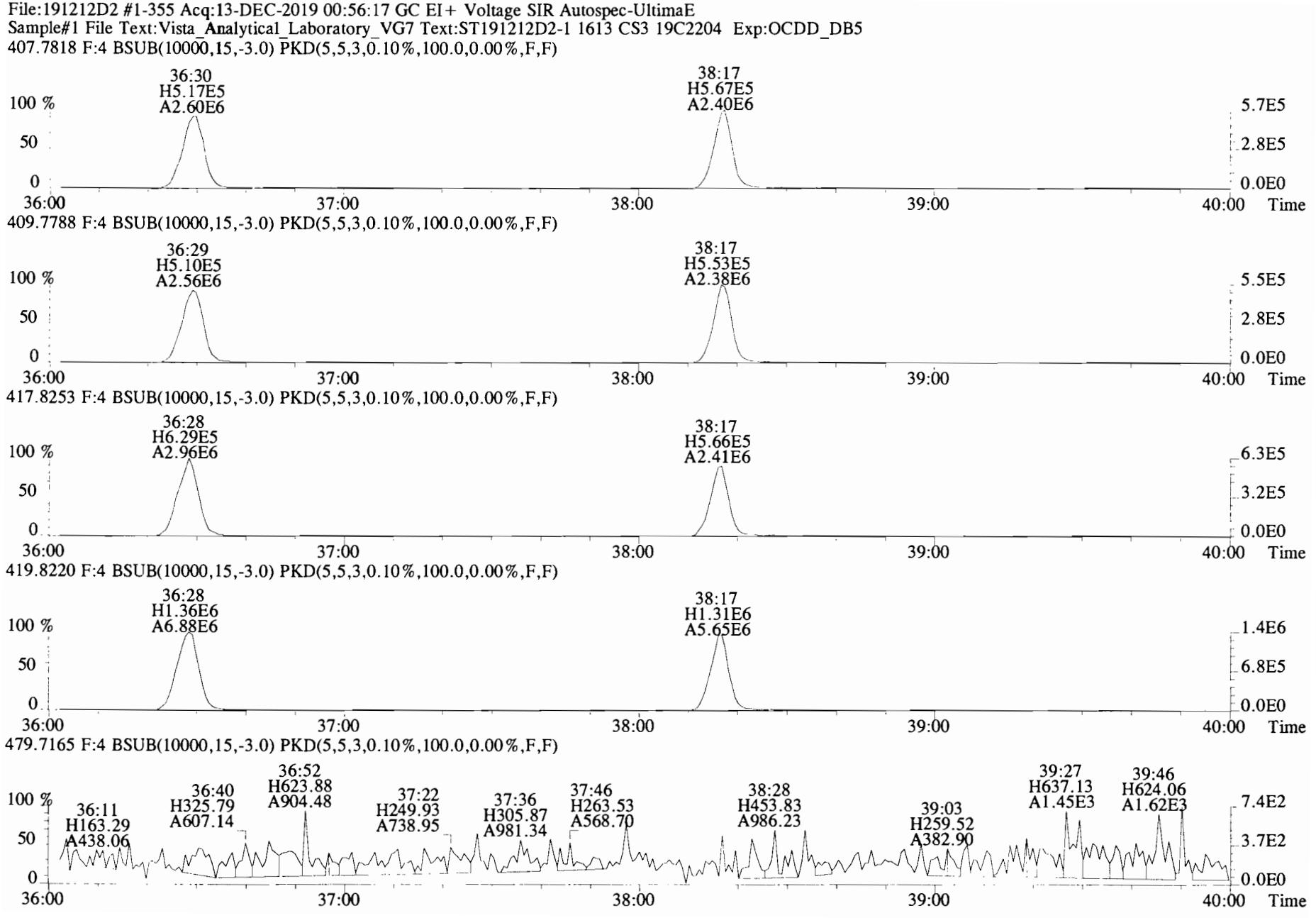
File:191212D2 #1-385 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



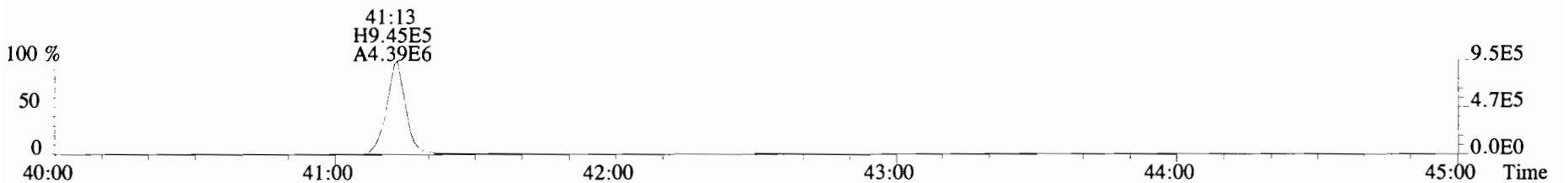
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



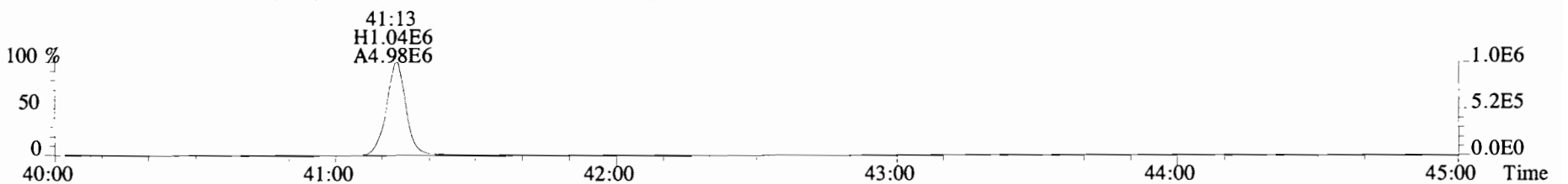
File:191212D2 #1-355 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5



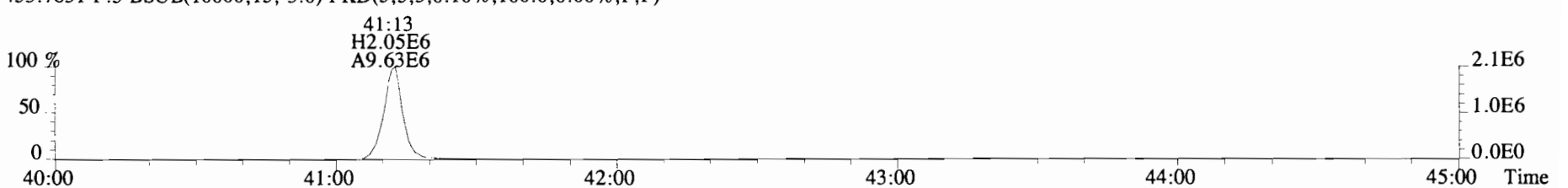
File:191212D2 #1-432 Acq:13-DEC-2019 00:56:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191212D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



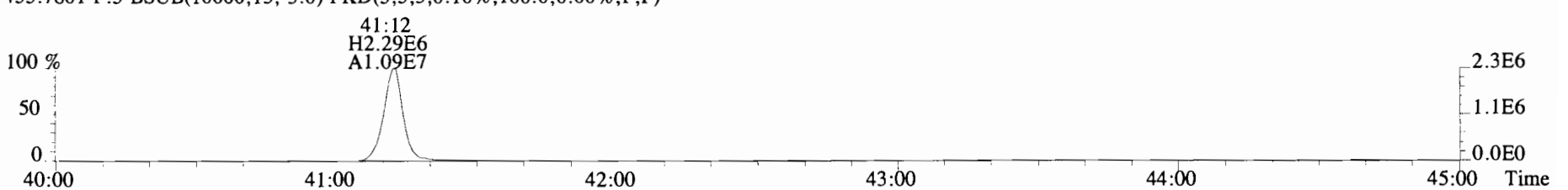
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



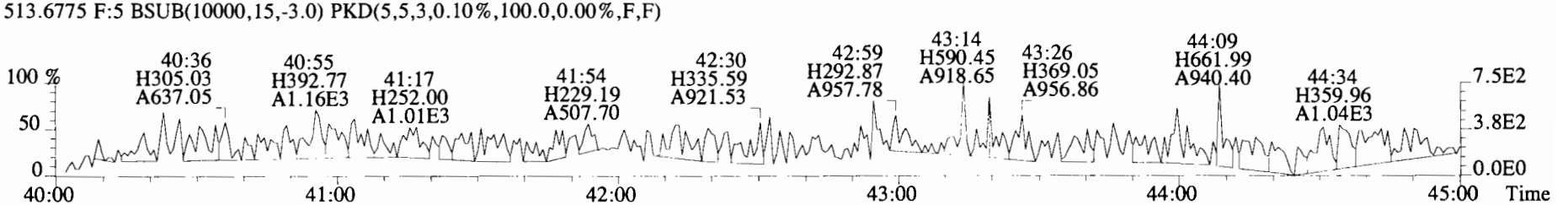
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

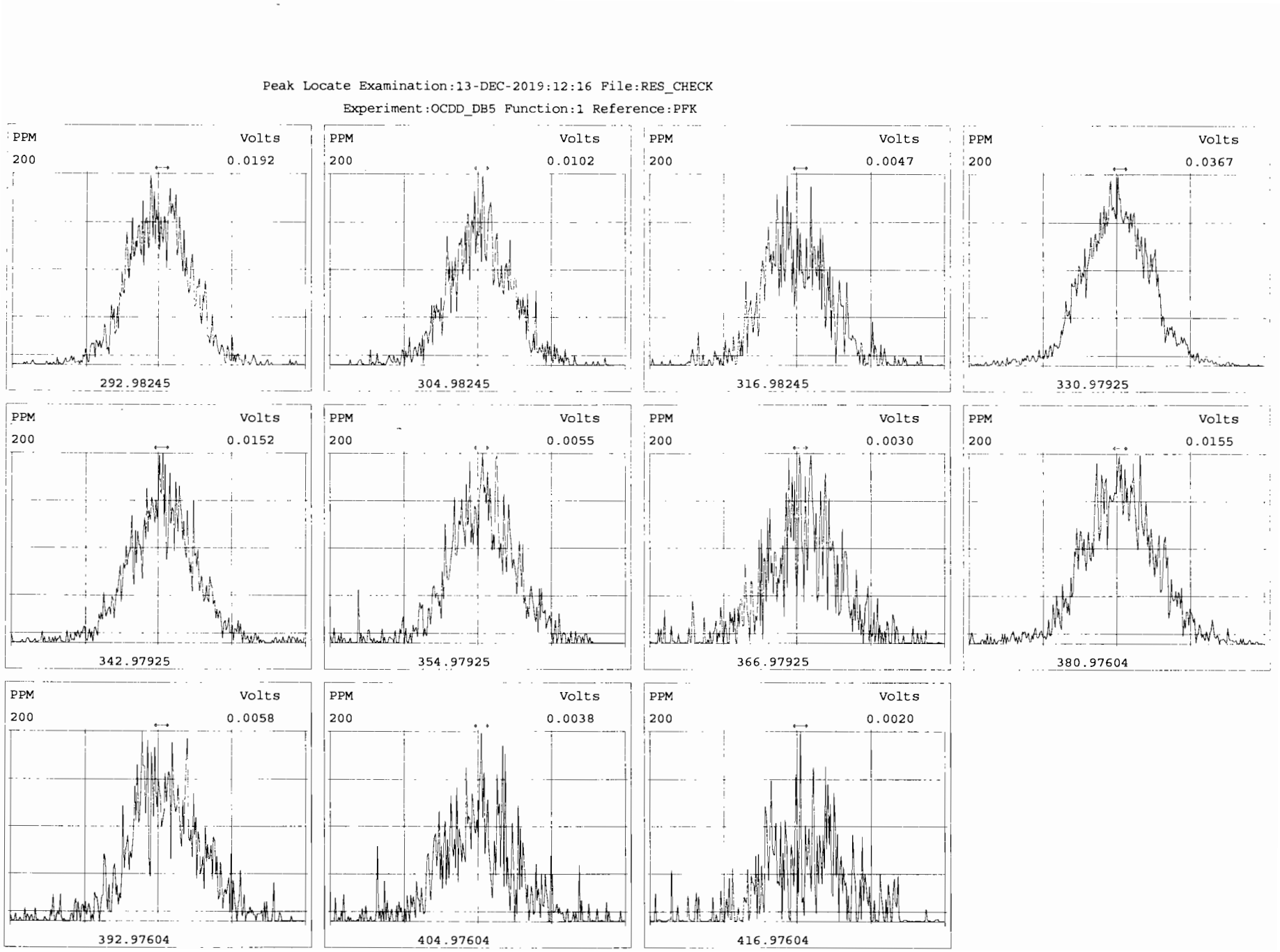


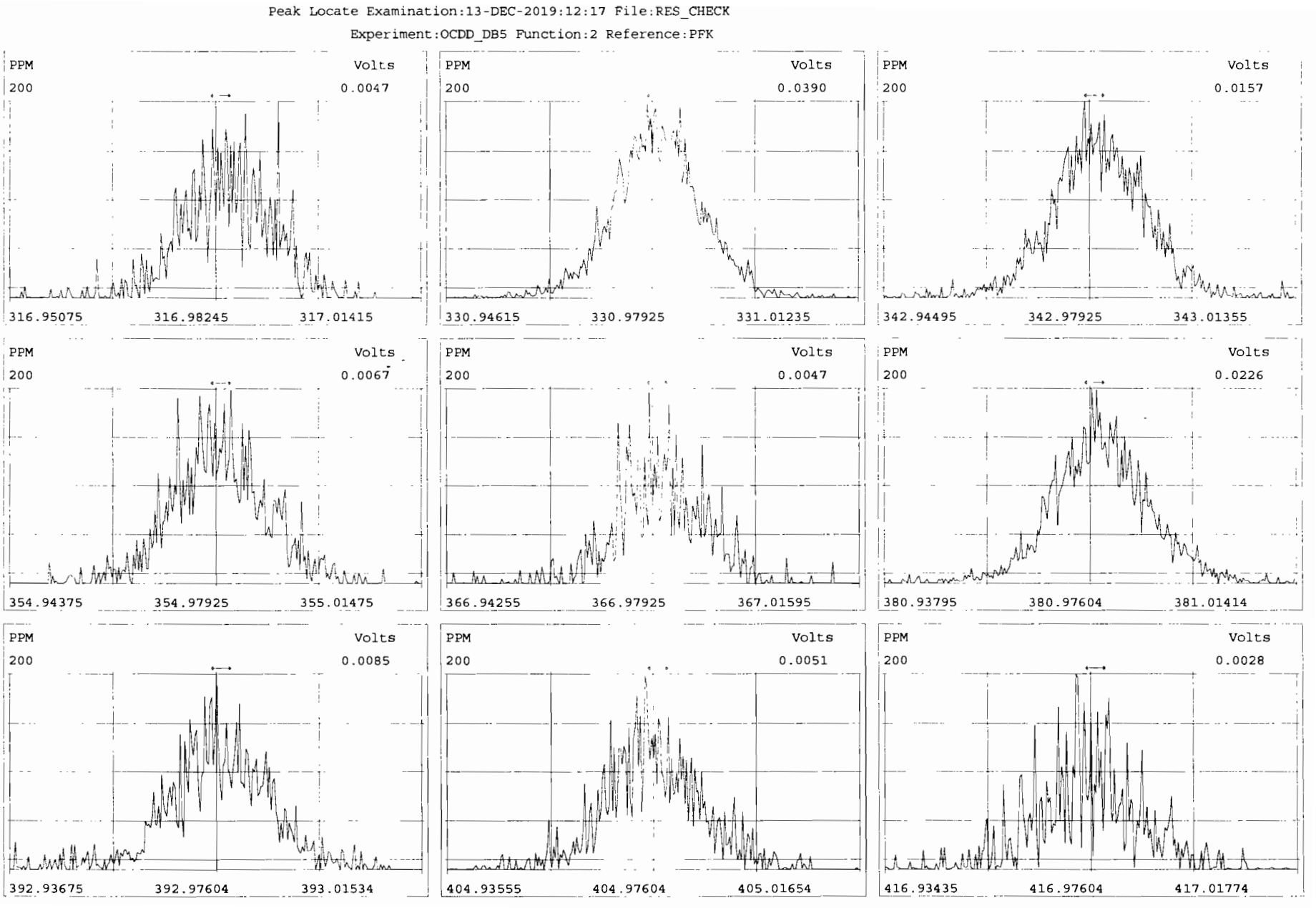
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

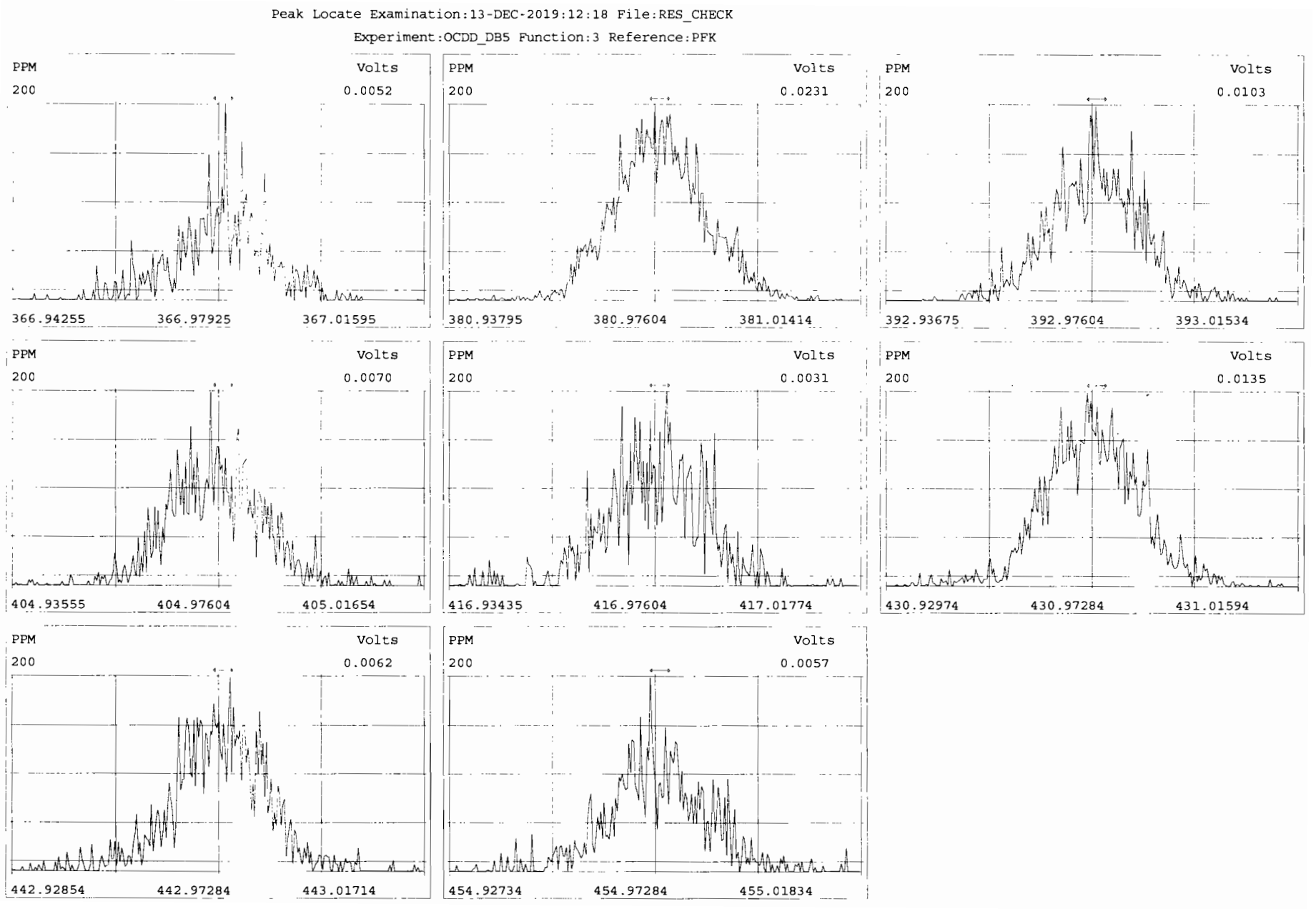


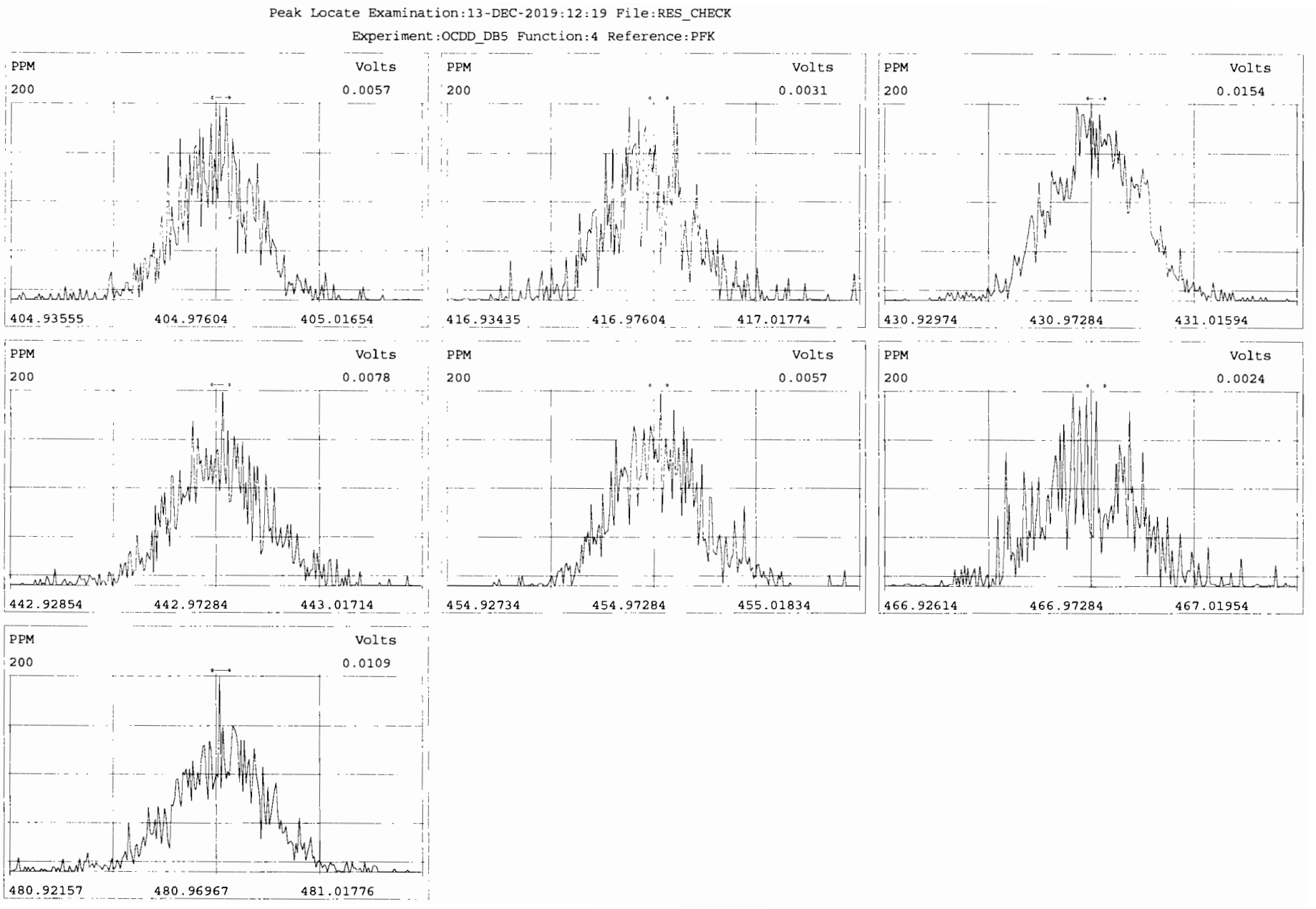
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

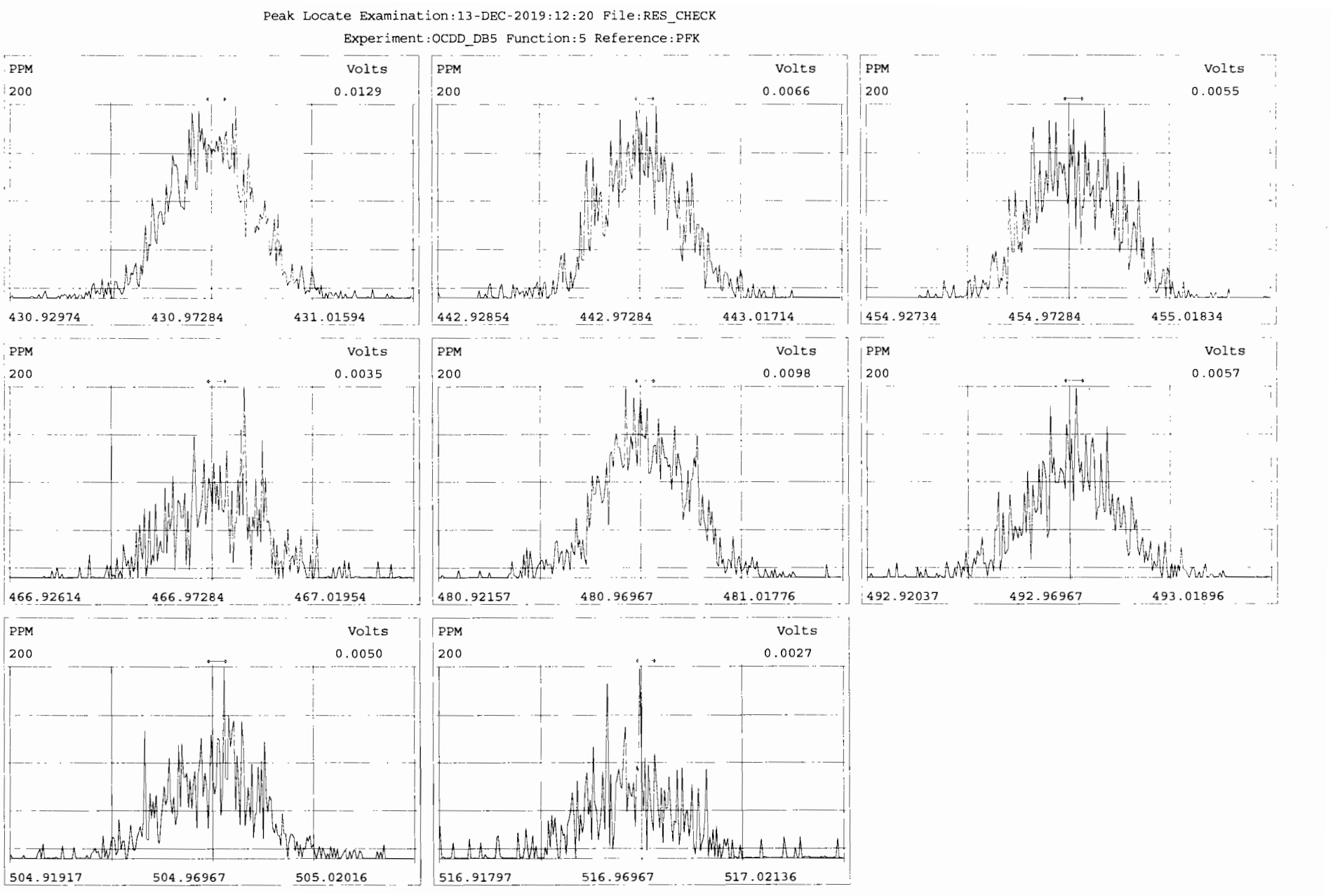



Peak Locate Examination:13-DEC-2019:12:16 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0192
292.98245
PPM
Volts
200
0.0102
304.98245
PPM
Volts
200
0.0047
316.98245
PPM
Volts
200
0.0367
330.97925
PPM
Volts
200
0.0152
342.97925
PPM
Volts
200
0.0055
354.97925
PPM
Volts
200
0.0030
366.97925
PPM
Volts
200
0.0155
380.97604
PPM
Volts
200
0.0058
392.97604
PPM
Volts
200
0.0038
404.97604
PPM
Volts
200
0.0020
416.97604


Peak Locate Examination:13-DEC-2019:12:17 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0047
316.95075
316.98245
317.01415
PPM
Volts
200
0.0390
330.94615
330.97925
331.01235
PPM
Volts
200
0.0157
342.94495
342.97925
343.01355
PPM
Volts
200
0.0067
354.94375
354.97925
355.01475
PPM
Volts
200
0.0047
366.94255
366.97925
367.01595
PPM
Volts
200
0.0226
380.93795
380.97604
381.01414
PPM
Volts
200
0.0085
392.93675
392.97604
393.01534
PPM
Volts
200
0.0051
404.93555
404.97604
405.01654
PPM
Volts
200
0.0028
416.93435
416.97604
417.01774


Peak Locate Examination:13-DEC-2019:12:18 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0052
366.94255
366.97925
367.01595
PPM
Volts
200
0.0231
380.93795
380.97604
381.01414
PPM
Volts
200
0.0103
392.93675
392.97604
393.01534
PPM
Volts
200
0.0070
404.93555
404.97604
405.01654
PPM
Volts
200
0.0031
416.93435
416.97604
417.01774
PPM
Volts
200
0.0135
430.92974
430.97284
431.01594
PPM
Volts
200
0.0062
442.92854
442.97284
443.01714
PPM
Volts
200
0.0057
454.92734
454.97284
455.01834


Peak Locate Examination:13-DEC-2019:12:19 File:RES_CHECK
Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
0.0057
404.93555
404.97604
405.01654
PPM
Volts
200
0.0031
416.93435
416.97604
417.01774
PPM
Volts
200
0.0154
430.92974
430.97284
431.01594
PPM
Volts
200
0.0078
442.92854
442.97284
443.01714
PPM
Volts
200
0.0057
454.92734
454.97284
455.01834
PPM
Volts
200
0.0024
466.92614
466.97284
467.01954
PPM
Volts
200
0.0109
480.92157
480.96967
481.01776


Peak Locate Examination:13-DEC-2019:12:20 File:RES_CHECK
Experiment:OCDD_DB5 Function:5 Reference:PFK
PPM
Volts
200
0.0129
430.92974
430.97284
431.01594
PPM
Volts
200
0.0066
442.92854
442.97284
443.01714
PPM
Volts
200
0.0055
454.92734
454.97284
455.01834
PPM
Volts
200
0.0035
466.92614
466.97284
467.01954
PPM
Volts
200
0.0098
480.92157
480.96967
481.01776
PPM
Volts
200
0.0057
492.92037
492.96967
493.01896
PPM
Volts
200
0.0050
504.91917
504.96967
505.02016
PPM
Volts
200
0.0027
516.91797
516.96967
517.02136

HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191216D1-1 **Reviewed By:** CT 12/17/19 *Initials & Date*

End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	☑	NA
Concentrations within criteria?	☑	☐
TCDD/TCDF Valleys <25%	☑	☐
First and last eluters present?	☑	☐
Retention Times within criteria?	☑	☐
Verification Std. named correctly?	☑	☐
(ST-Year-Month-Day-VG ID)		
Forms signed and dated?	☑	☐
Correct ICAL referenced?	DB	

Run Log:

- Correct instrument listed?	☑	☑
- Samples within 12 hour clock?	(Y)	N
- Bottle position verified?	DB	

	Beg.	End
Mass resolution ≥	☑	☑

☐ 5k ☐ 6-8K ☐ 8K ☑ 10K

1614 1699 429 1613/1668/8280

Intergrated peaks display correctly?	☑	NA

GC Break <20% NA

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours NA

Comments:

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST191216D1-1

Initial Calibration Date: 5-30-19

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 191216D1 S#2 Analysis Date: 16-DEC-19 Time: 14:33:44

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE 1613 (ng/mL)	CONC. RANGE 8290 (ng/mL)
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	11.5	8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	102.3	71.0 - 140.0 (3) 76.0 - 131.0 (4)	70.0 - 130.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

(4) Contract required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: DB

Date: 12/16/19

Client ID: 1613 CS3 19C2204 Filename: 191216D1 S:2 Acq:16-DEC-19 14:33:44 ConCal: ST191216D1-1
Lab ID: ST191216D1-1 GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.01e+07	0.79 y	15:35	1.00	100.0	-
13C-2,3,7,8-TCDF	1.05e+07	0.78 y	17:41	1.02	102.3	102.3
2,3,7,8-TCDF	1.14e+06	0.80 y	17:43	0.95	11.46	

Integrations by Analyst: DB Date: 12/16/19

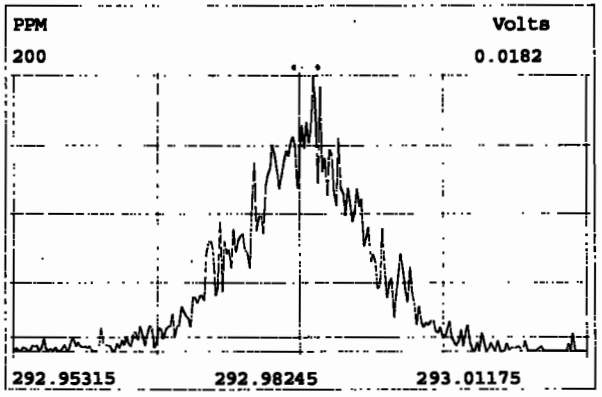
Reviewed by Analyst: CT Date: 12/17/19

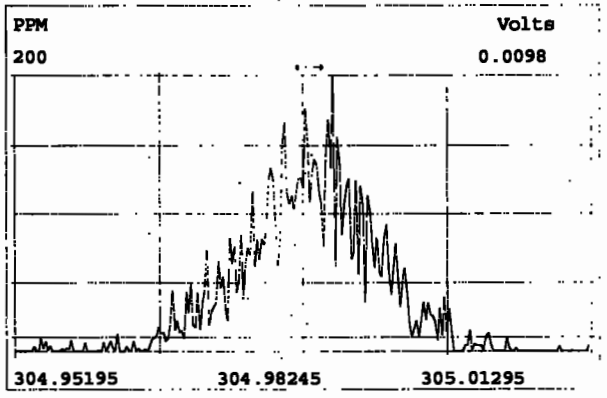
Vista Analytical Laboratory - Injection Log Run file: 191216D1 Instrument ID: VG-7 GC Column ID: DB-225

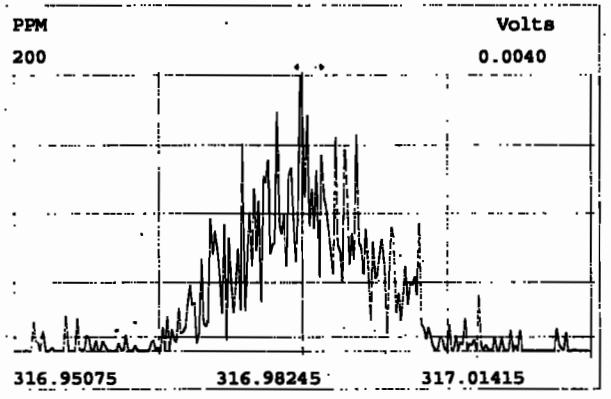
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191216D1	1	CP191216D1-1	DB	16-DEC-19	14:01:29	ST191216D1-1	NA
191216D1	2	ST191216D1-1	DB	16-DEC-19	14:33:44	ST191216D1-1	NA
191216D1	3	SOLVENT BLANK	DB	16-DEC-19	15:06:01	ST191216D1-1	NA
191216D1	4	1904021-04RE1	DB	16-DEC-19	15:38:18	ST191216D1-1	NA
191216D1	5	1904021-01RE1	DB	16-DEC-19	16:10:34	ST191216D1-1	NA
191216D1	6	1903430-06RE3	DB	16-DEC-19	16:42:50	ST191216D1-1	NA
191216D1	7	1903828-01RE1	DB	16-DEC-19	17:15:07	ST191216D1-1	NA

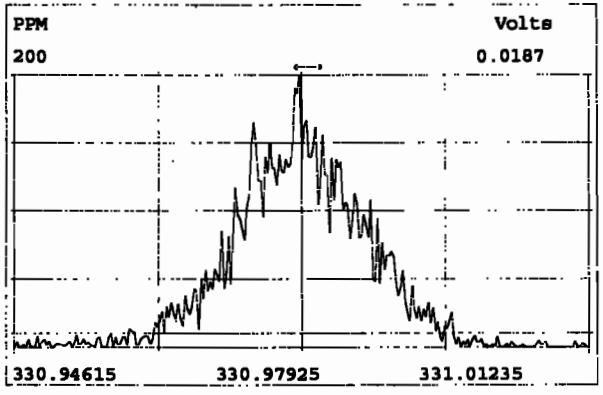
Peak Locate Examination:16-DEC-2019:14:01 File:191216D1

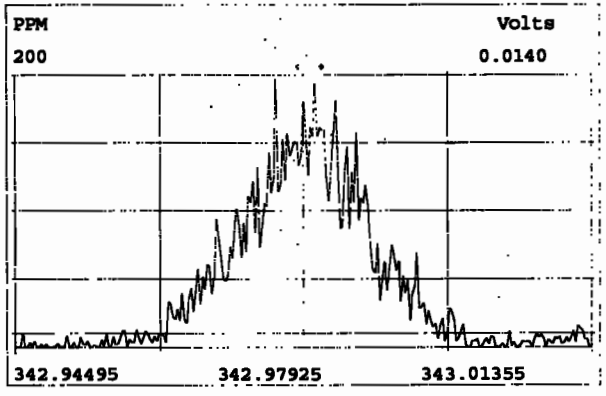
Experiment:TCDF_DB225 Function:1 Reference:PFK

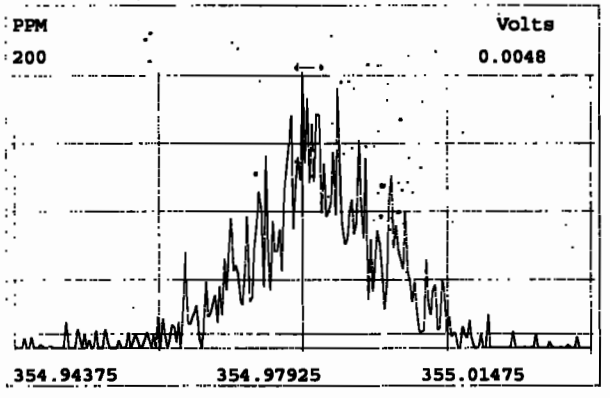


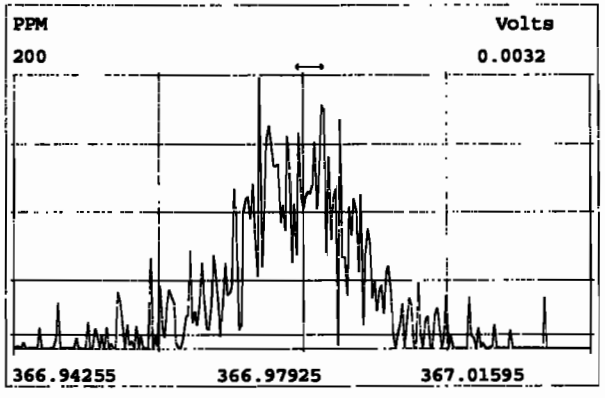


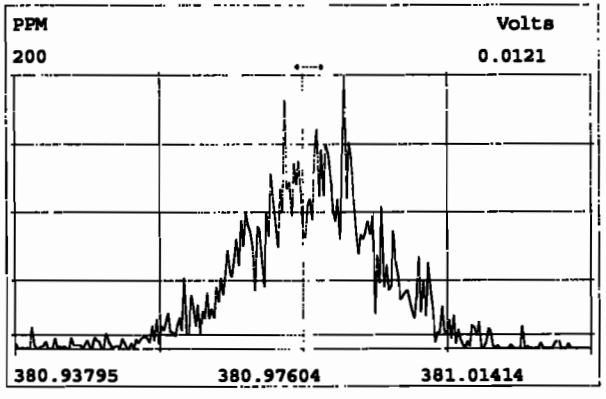




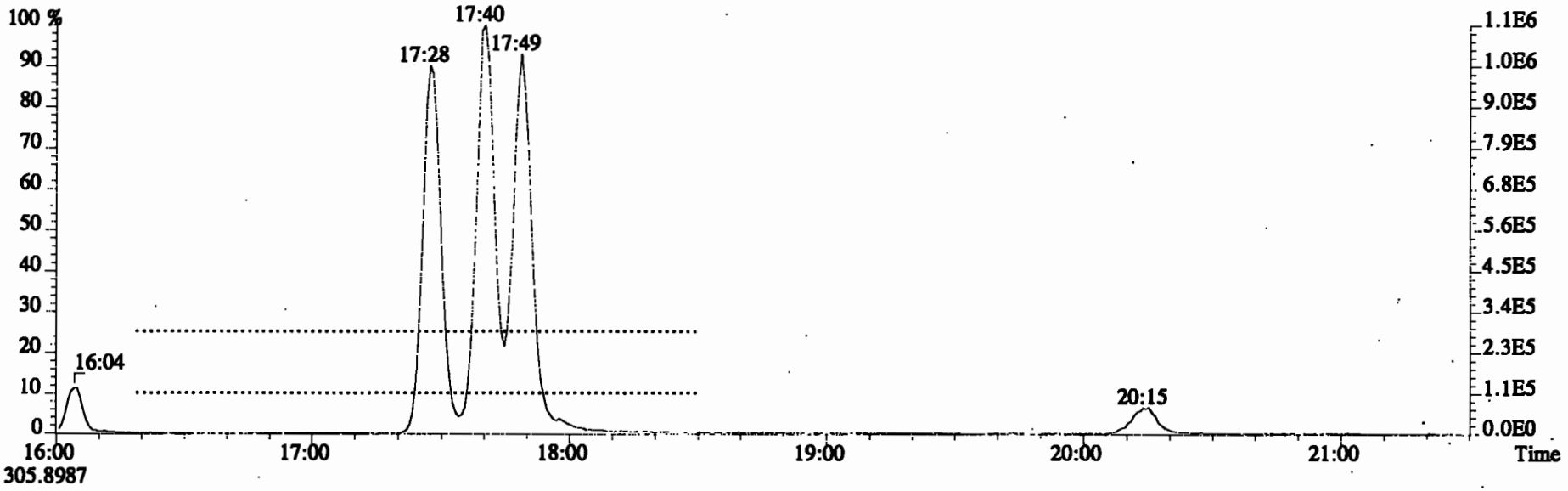




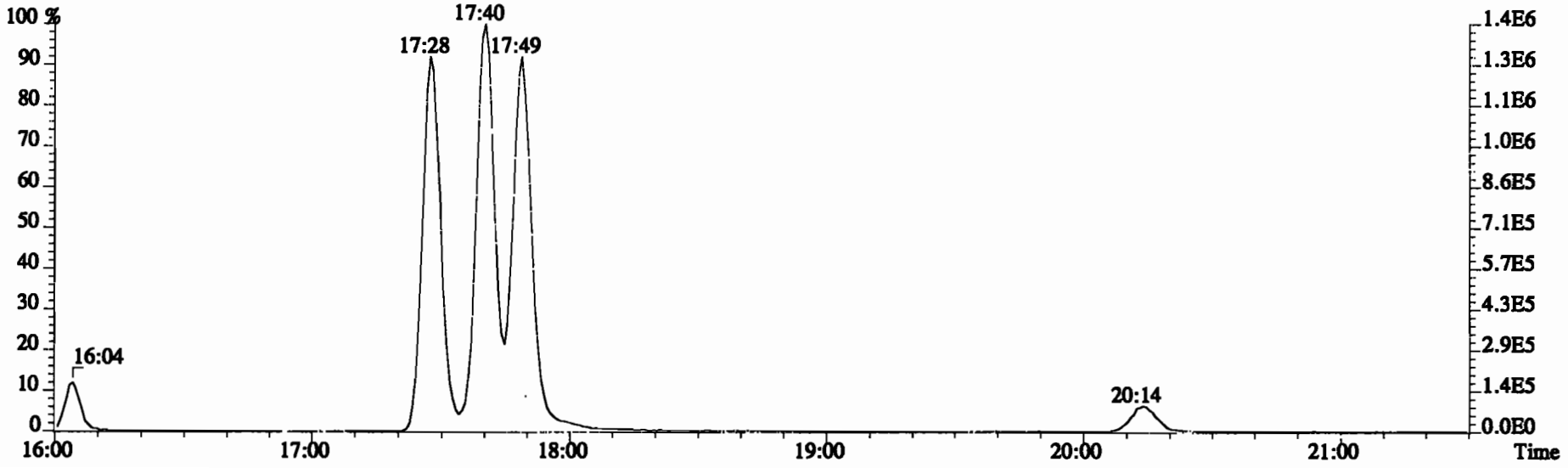




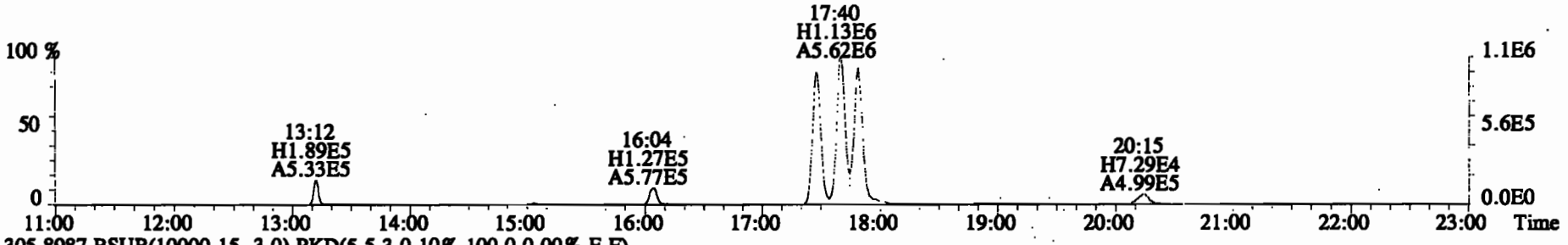
File:191216D1 #1-1194 Acq:16-DEC-2019 14:01:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP191216D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016



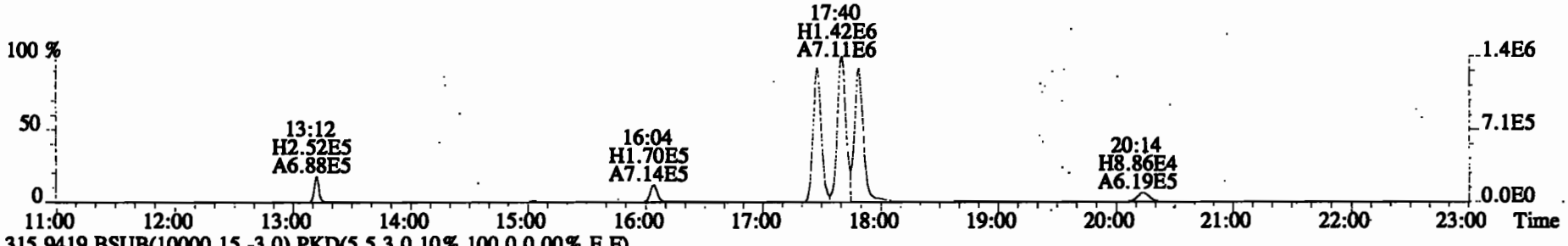
305.8987



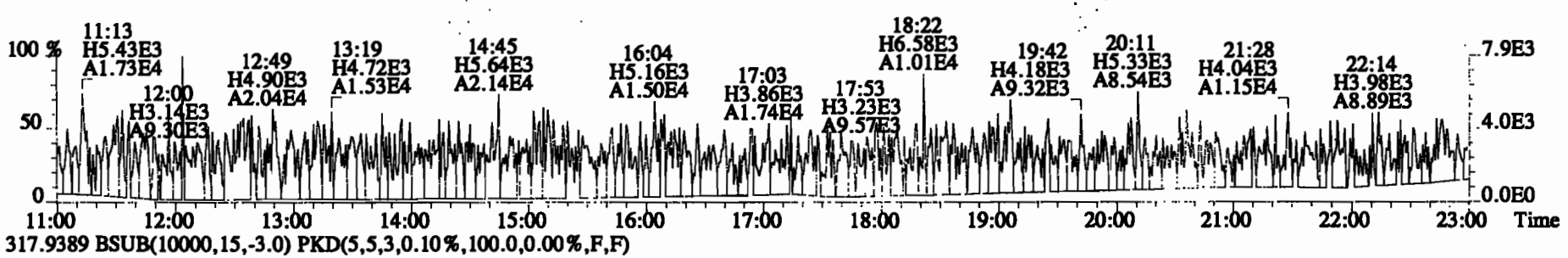
File:191216D1 #1-1225 Acq:16-DEC-2019 14:01:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP191216D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



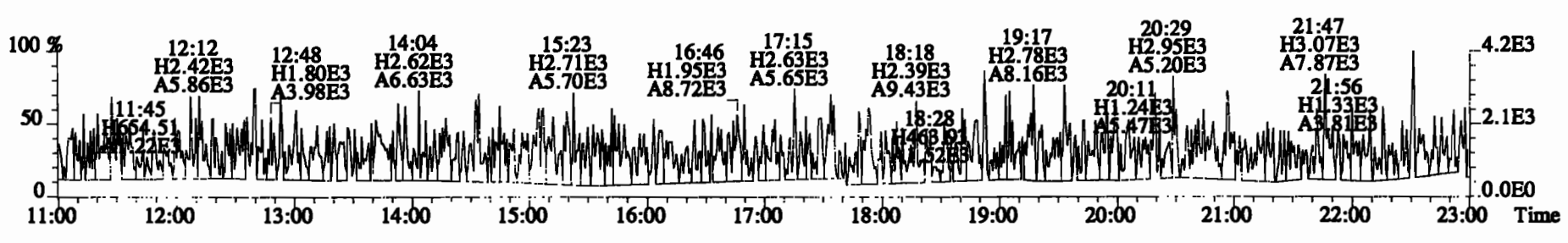
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



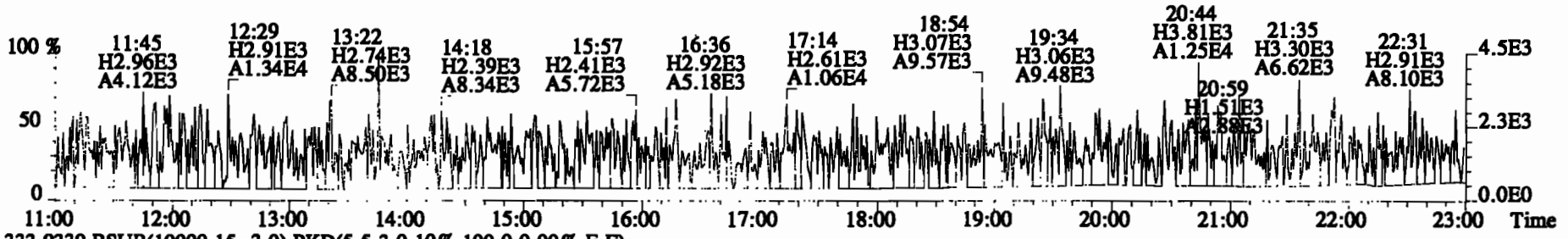
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



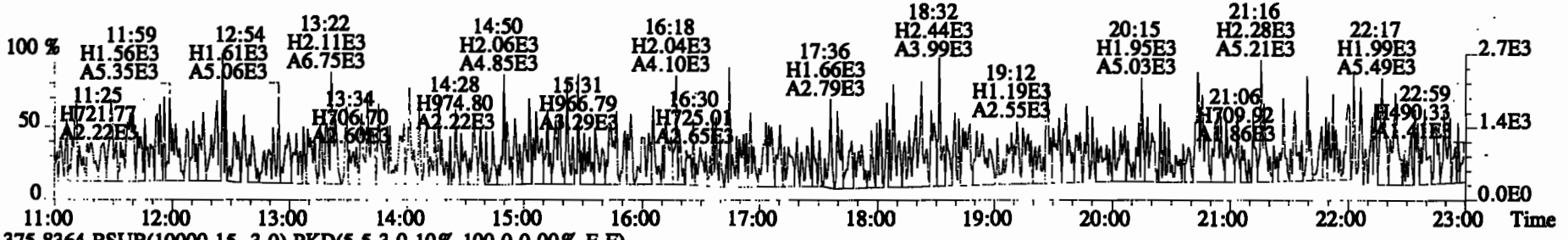
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



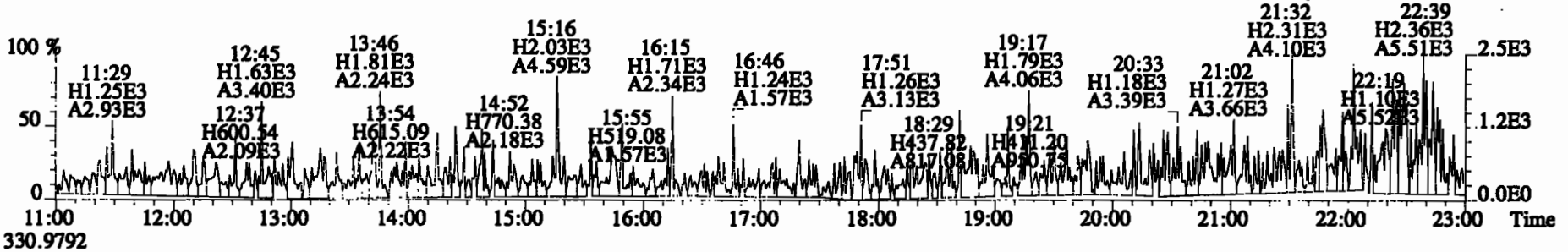
File:191216D1 #1-1229 Acq:16-DEC-2019 14:01:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP191216D1-1 DB225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



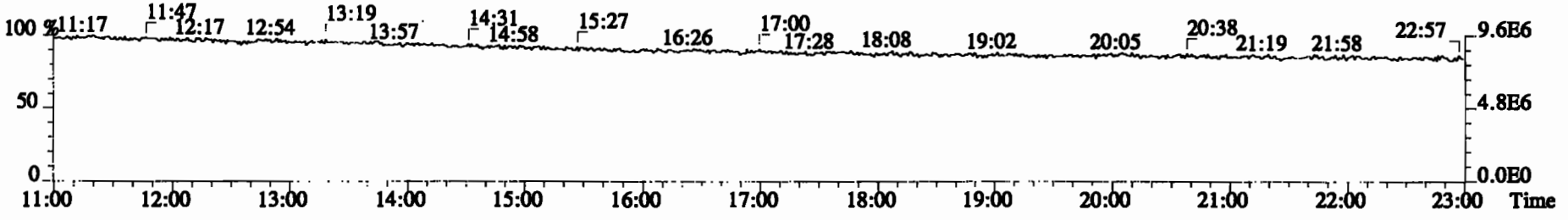
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

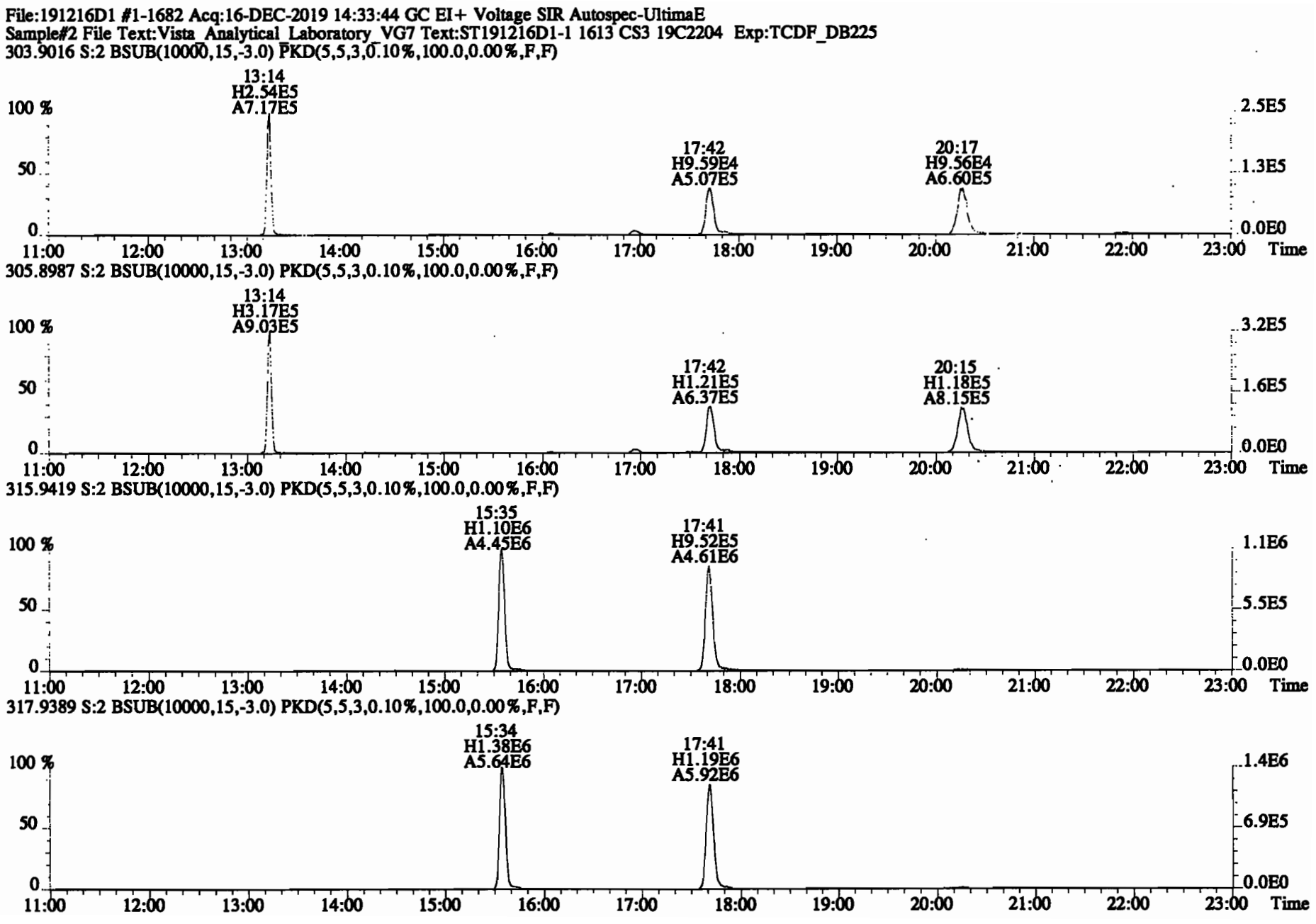


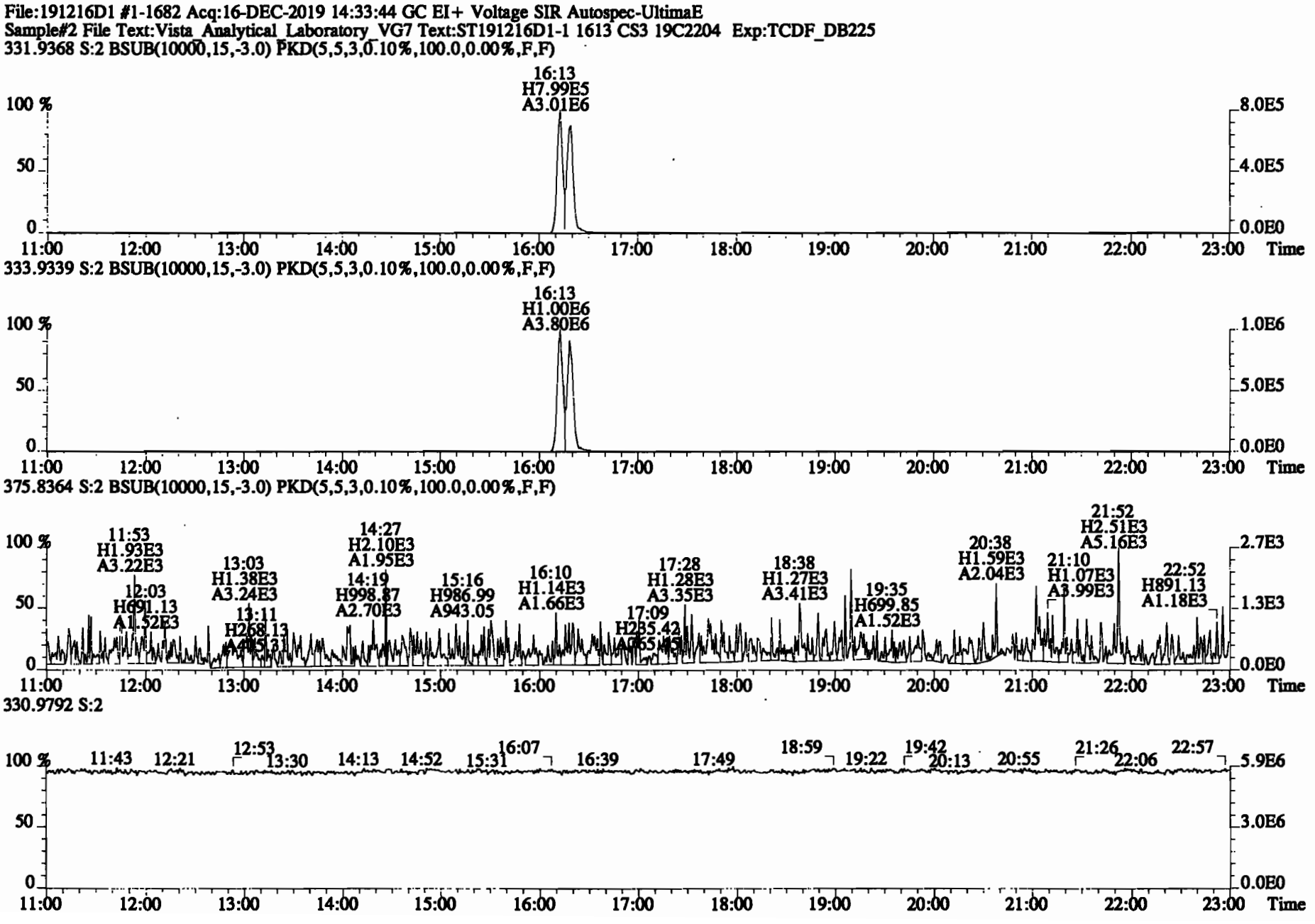
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



330.9792

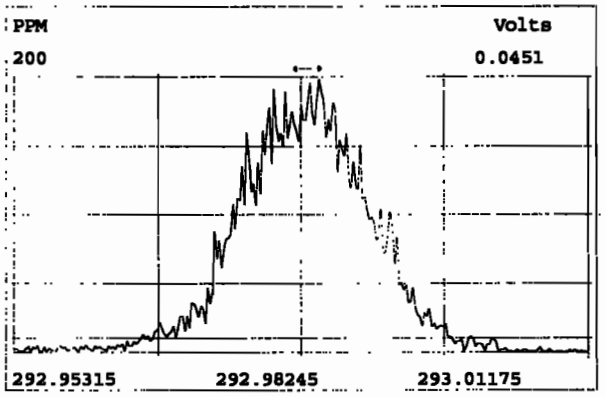


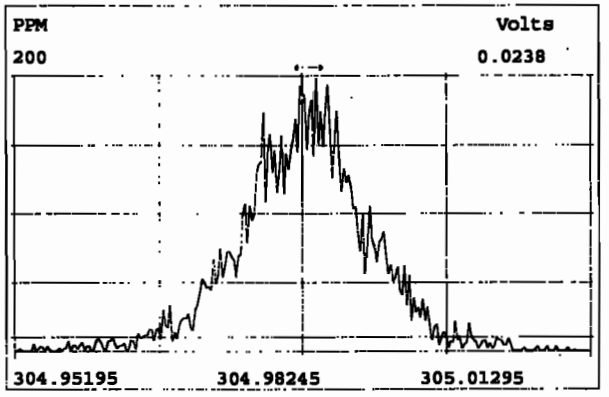

File:191216D1 #1-1682 Acq:16-DEC-2019 14:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191216D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
13:14
H2.54E5
A7.17E5
17:42
H9.59E4
A5.07E5
20:17
H9.56E4
A6.60E5
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
13:14
H3.17E5
A9.03E5
17:42
H1.21E5
A6.37E5
20:15
H1.18E5
A8.15E5
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:35
H1.10E6
A4.45E6
17:41
H9.52E5
A4.61E6
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:34
H1.38E6
A5.64E6
17:41
H1.19E6
A5.92E6
100 %
50
0
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Time
2.5E5
1.3E5
0.0E0
3.2E5
1.6E5
1.1E6
5.5E5
1.4E6
6.9E5

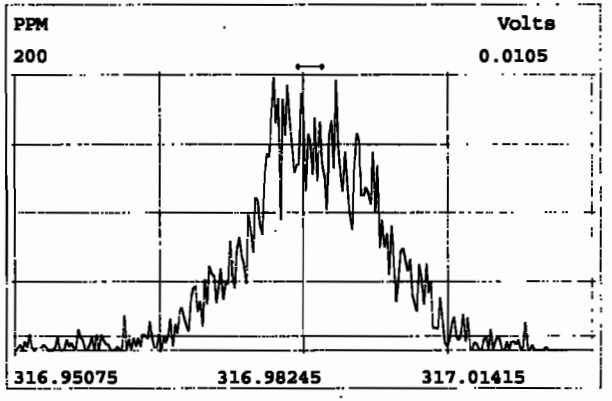

File:191216D1 #1-1682 Acq:16-DEC-2019 14:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191216D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:13
H7.99E5
A3.01E6
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:13
H1.00E6
A3.80E6
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
11:53
H1.93E3
A3.22E3
12:03
H691.13
A1.52E3
13:03
H1.38E3
A3.24E3
13:11
H268.13
14:19
H998.87
A2.70E3
14:27
H2.10E3
A1.95E3
15:16
H986.99
A943.05
16:10
H1.14E3
A1.66E3
17:09
H285.42
17:28
H1.28E3
A3.35E3
18:38
H1.27E3
A3.41E3
19:35
H699.85
A1.52E3
20:38
H1.59E3
A2.04E3
21:10
H1.07E3
A3.99E3
21:52
H2.51E3
A5.16E3
22:52
H891.13
A1.18E3
330.9792 S:2
11:43
12:21
12:53
13:30
14:13
14:52
15:31
16:07
16:39
17:49
18:59
19:22
19:42
20:13
20:55
21:26
22:06
22:57
100 %
50
0
8.0E5
4.0E5
0.0E0
1.0E6
5.0E5
2.7E3
1.3E3
5.9E6
3.0E6
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Time

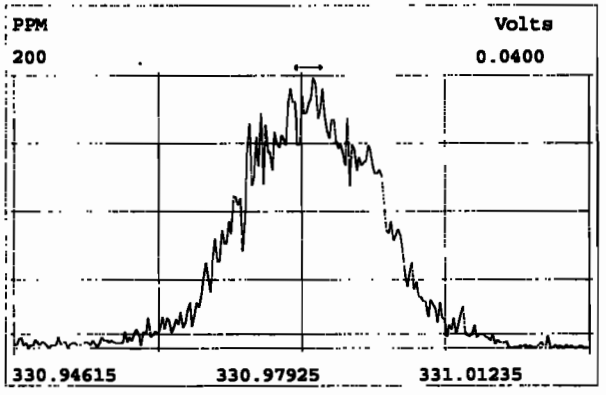
Peak Locate Examination:16-DEC-2019:17:56 File:RES_CHECK

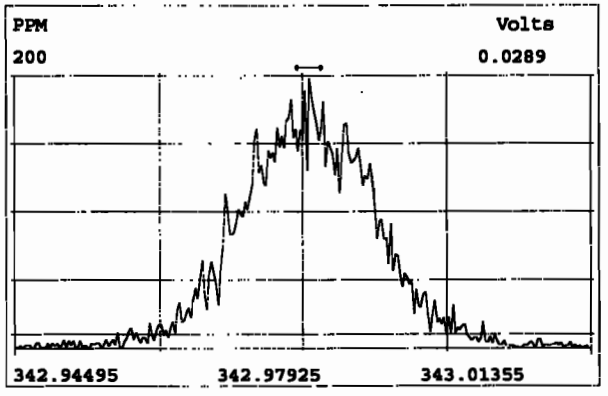
Experiment:TCDF_DB225 Function:1 Reference:PFK

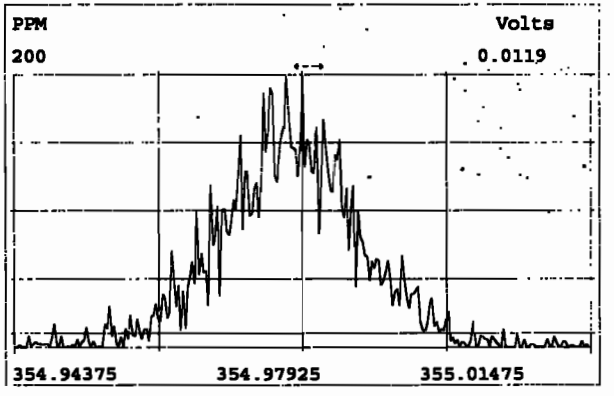


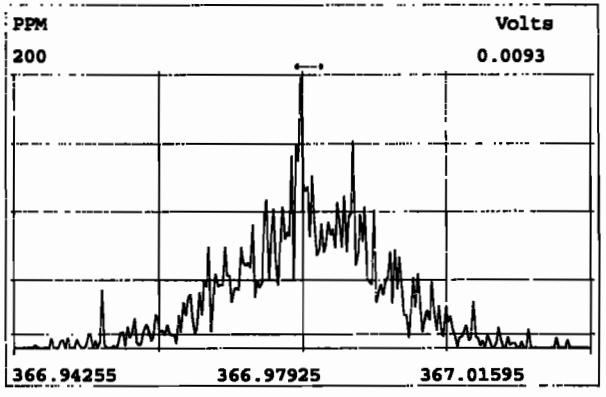


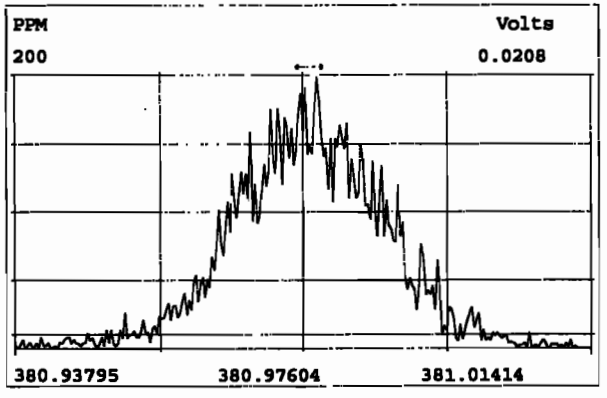












HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST20010902-1 **Reviewed By:** CT 01/10/2020 *Initials & Date*

End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	☑	NA
Concentrations within criteria?	☑	☐
TCDD/TCDF Valleys <25%	☑	☐
First and last elutors present?	☑	☐
Retention Times within criteria?	☑	☐
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	☑	☐
Forms signed and dated?	☑	☐
Correct ICAL referenced?	DB	

Run Log:

- Correct instrument listed?	☑	☑
- Samples within 12 hour clock?	(Y)	N
- Bottle position verified?	DB	

	Beg.	End
Mass resolution ≥	☑	☑
☐ 5k ☐ 6-8K ☐ 8K ☑ 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	☑	NA
GC Break <20%	NA	

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours	NA

Comments:

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST200109D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	11.2	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	53.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	49.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	54.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	53.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	47.7	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	101	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	9.57	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	y	54.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.49	1.32-1.78	y	52.5	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	46.0	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	45.8	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	47.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05-1.43	y	46.8	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	45.0	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.99	0.88-1.20	y	45.2	43.0 - 58.0
OCDF	M+2/M+4	0.87	0.76-1.02	y	89.7	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: DB

Date: 1/10/20

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	110	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	109	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	115	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	94.6	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	103	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	122	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	268	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	110	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	109	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	109	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	113	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	106	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	105	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	113	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.45	0.37-0.51	y	109	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.45	0.37-0.51	y	123	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	268	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.81	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: DB

Date: 1/10/20

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-9-19

RT Window Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

ZB-5MS IS Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:32	1,3,6,8-TCDF (F)	20:23
1,2,8,9-TCDD (L)	26:52	1,2,8,9-TCDF (L)	27:01
1,2,4,7,9-PeCDD (F)	28:30	1,3,4,6,8-PeCDF (F)	26:59
1,2,3,8,9-PeCDD (L)	30:56	1,2,3,8,9-PeCDF (L)	31:10
1,2,4,6,7,9-HxCDD (F)	32:21	1,2,3,4,6,8-HxCDF (F)	31:49
1,2,3,7,8,9-HxCDD (L)	34:17	1,2,3,7,8,9-HxCDF (L)	34:40
1,2,3,4,6,7,9-HpCDD (F)	36:53	1,2,3,4,6,7,8-HpCDF (F)	36:30
1,2,3,4,6,7,8-HpCDD (L)	37:46	1,2,3,4,7,8,9-HpCDF (L)	38:18

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DB

Date: 1/10/20

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.202	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.991	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.156	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.191	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052

Analyst: DB

Date: 1/10/20

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 200109D2 S#1 Analysis Date: 9-JAN-20 Time: 22:42:55

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.991	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.038	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.093	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.147	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.131	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.228	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.235	1.091-1.371

Analyst: DB

Date: 1/10/20

Client ID: 1613 CS3 19I1604 Filename: 200109D2 S:1 Acq: 9-JAN-20 22:42:55 ConCal: ST200109D2-1

Lab ID: ST200109D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	7.95e+05	0.78 y	0.91	26:00	11.181		*	2.5	*
	1,2,3,7,8-PeCDD	3.05e+06	0.62 y	0.90	30:34	53.838		*	2.5	*
	1,2,3,4,7,8-HxCDD	3.32e+06	1.23 y	1.10	33:52	49.871		*	2.5	*
	1,2,3,6,7,8-HxCDD	3.37e+06	1.25 y	0.94	33:59	54.391		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.47e+06	1.22 y	0.96	34:17	53.131		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	3.05e+06	1.05 y	0.98	37:46	47.699		*	2.5	*
	OCDD	6.11e+06	0.87 y	0.96	41:01	100.58		*	2.5	*
	2,3,7,8-TCDF	1.06e+06	0.76 y	0.95	25:12	9.5715		*	2.5	*
	1,2,3,7,8-PeCDF	4.97e+06	1.52 y	0.96	29:23	54.419		*	2.5	*
	2,3,4,7,8-PeCDF	5.03e+06	1.49 y	1.01	30:17	52.547		*	2.5	*
	1,2,3,4,7,8-HxCDF	4.14e+06	1.25 y	1.18	32:59	45.972		*	2.5	*
	1,2,3,6,7,8-HxCDF	4.37e+06	1.20 y	1.07	33:07	45.750		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.36e+06	1.21 y	1.11	33:43	47.929		*	2.5	*
	1,2,3,7,8,9-HxCDF	3.79e+06	1.20 y	1.06	34:40	46.770		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	3.41e+06	1.03 y	1.13	36:30	45.021		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	3.36e+06	0.99 y	1.28	38:18	45.184		*	2.5	*
	OCDF	6.40e+06	0.87 y	0.95	41:14	89.673		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.86e+06	0.79 y	1.10	25:59	110.21				
IS	13C-1,2,3,7,8-PeCDD	6.27e+06	0.63 y	0.88	30:33	109.26				
IS	13C-1,2,3,4,7,8-HxCDD	6.05e+06	1.28 y	0.64	33:52	115.38				
IS	13C-1,2,3,6,7,8-HxCDD	6.60e+06	1.22 y	0.86	33:58	94.550				
IS	13C-1,2,3,7,8,9-HxCDD	6.80e+06	1.26 y	0.81	34:16	103.27				
IS	13C-1,2,3,4,6,7,8-HpCDD	6.54e+06	1.07 y	0.65	37:45	122.49				
IS	13C-OCDD	1.27e+07	0.89 y	0.58	41:00	267.99				
IS	13C-2,3,7,8-TCDF	1.16e+07	0.78 y	1.03	25:11	110.30				
IS	13C-1,2,3,7,8-PeCDF	9.51e+06	1.65 y	0.85	29:22	109.25				
IS	13C-2,3,4,7,8-PeCDF	9.43e+06	1.60 y	0.85	30:16	109.25				
IS	13C-1,2,3,4,7,8-HxCDF	7.65e+06	0.50 y	0.83	32:59	112.72				
IS	13C-1,2,3,6,7,8-HxCDF	8.94e+06	0.52 y	1.03	33:06	105.90				
IS	13C-2,3,4,6,7,8-HxCDF	8.18e+06	0.52 y	0.95	33:42	105.11				
IS	13C-1,2,3,7,8,9-HxCDF	7.64e+06	0.51 y	0.83	34:39	113.11				
IS	13C-1,2,3,4,6,7,8-HpCDF	6.71e+06	0.45 y	0.76	36:29	108.61				
IS	13C-1,2,3,4,7,8,9-HpCDF	5.81e+06	0.45 y	0.58	38:17	122.58				
IS	13C-OCDF	1.51e+07	0.89 y	0.69	41:13	268.26				
C/Up	37Cl-2,3,7,8-TCDD	7.65e+05		1.20	25:60	9.8119				
RS/RT	13C-1,2,3,4-TCDD	6.51e+06	0.79 y	1.00	25:25	100.00				
RS	13C-1,2,3,4-TCDF	1.02e+07	0.79 y	1.00	23:57	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.16e+06	0.52 y	1.00	33:23	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	90.4	91.3		*	*
Total Penta-Dioxins	222	222		*	*
Total Hexa-Dioxins	243	244		*	*
Total Hepta-Dioxins	118	120		*	*
Total Tetra-Furans	40.5	41.4		*	*
Total Penta-Furans	247.06	248.10		*	*
Total Hexa-Furans	257	258		*	*
Total Hepta-Furans	90.6	91.2		*	*

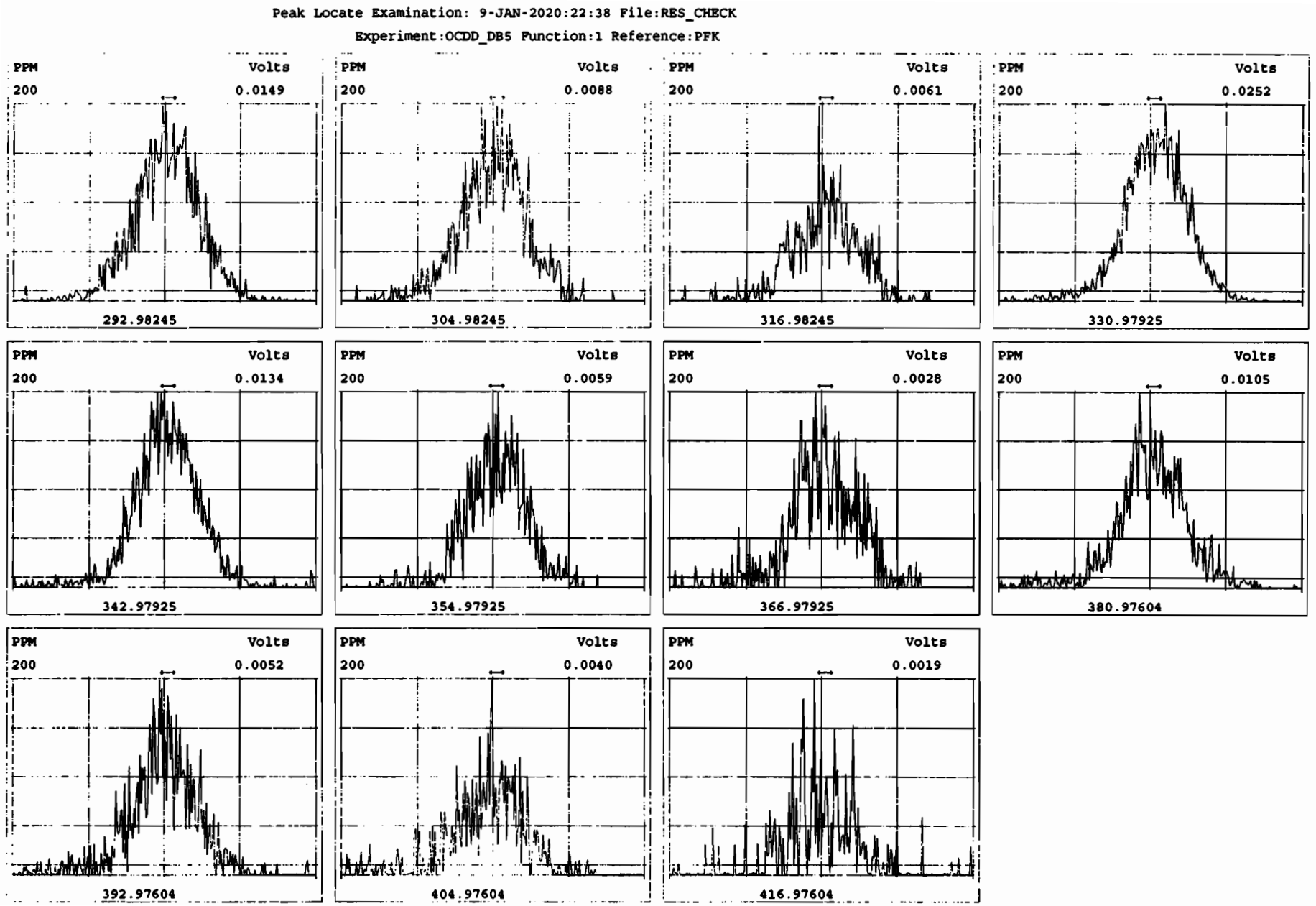
	Rec	Qual
IS	110	
IS	109	
IS	115	
IS	94.6	
IS	103	
IS	122	
IS	134	
IS	110	
IS	109	
IS	109	
IS	113	
IS	106	
IS	105	
IS	113	
IS	109	
IS	123	
IS	134	
C/Up	98.1	

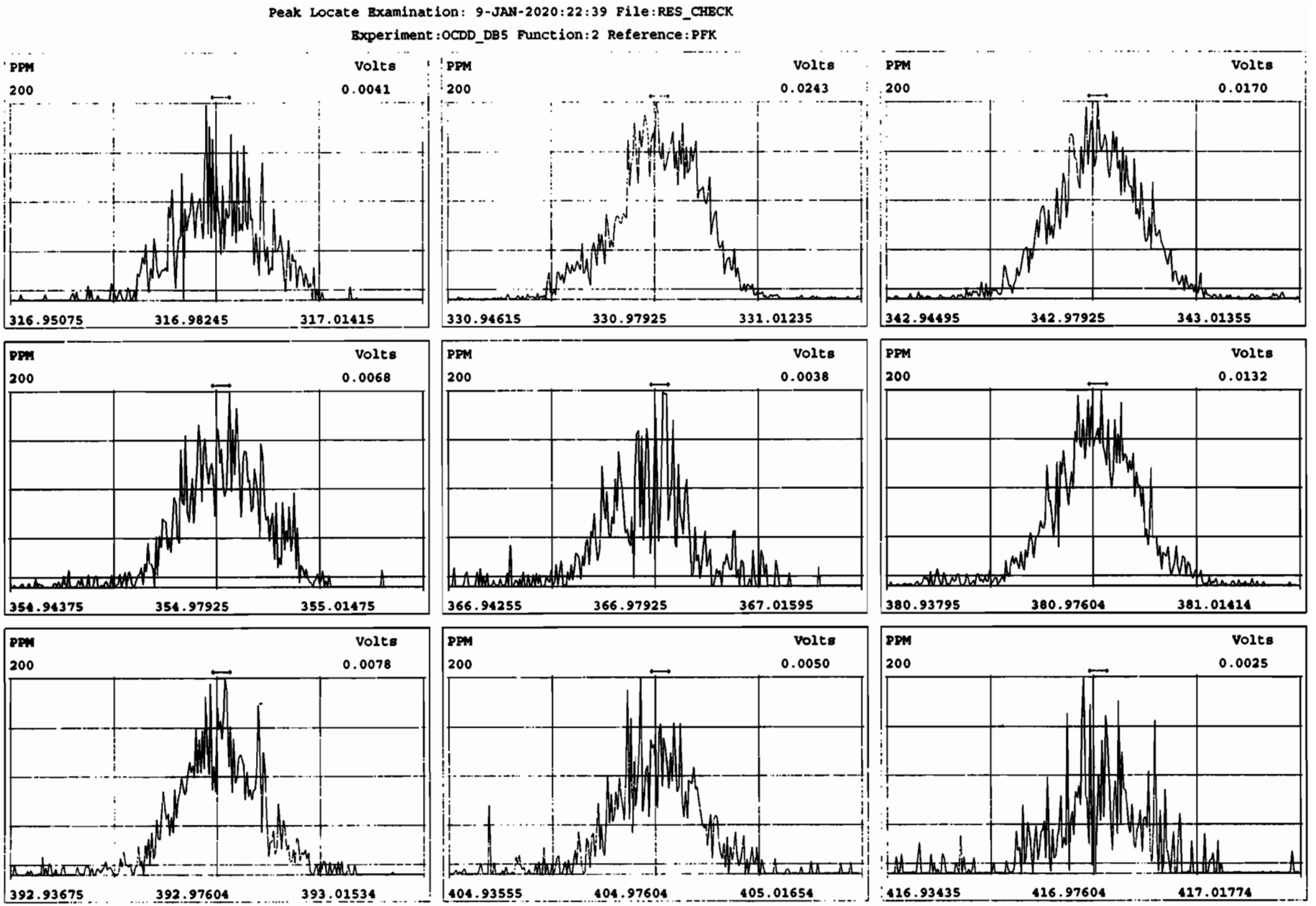
Integrations by Analyst: DB Date: 1/10/20

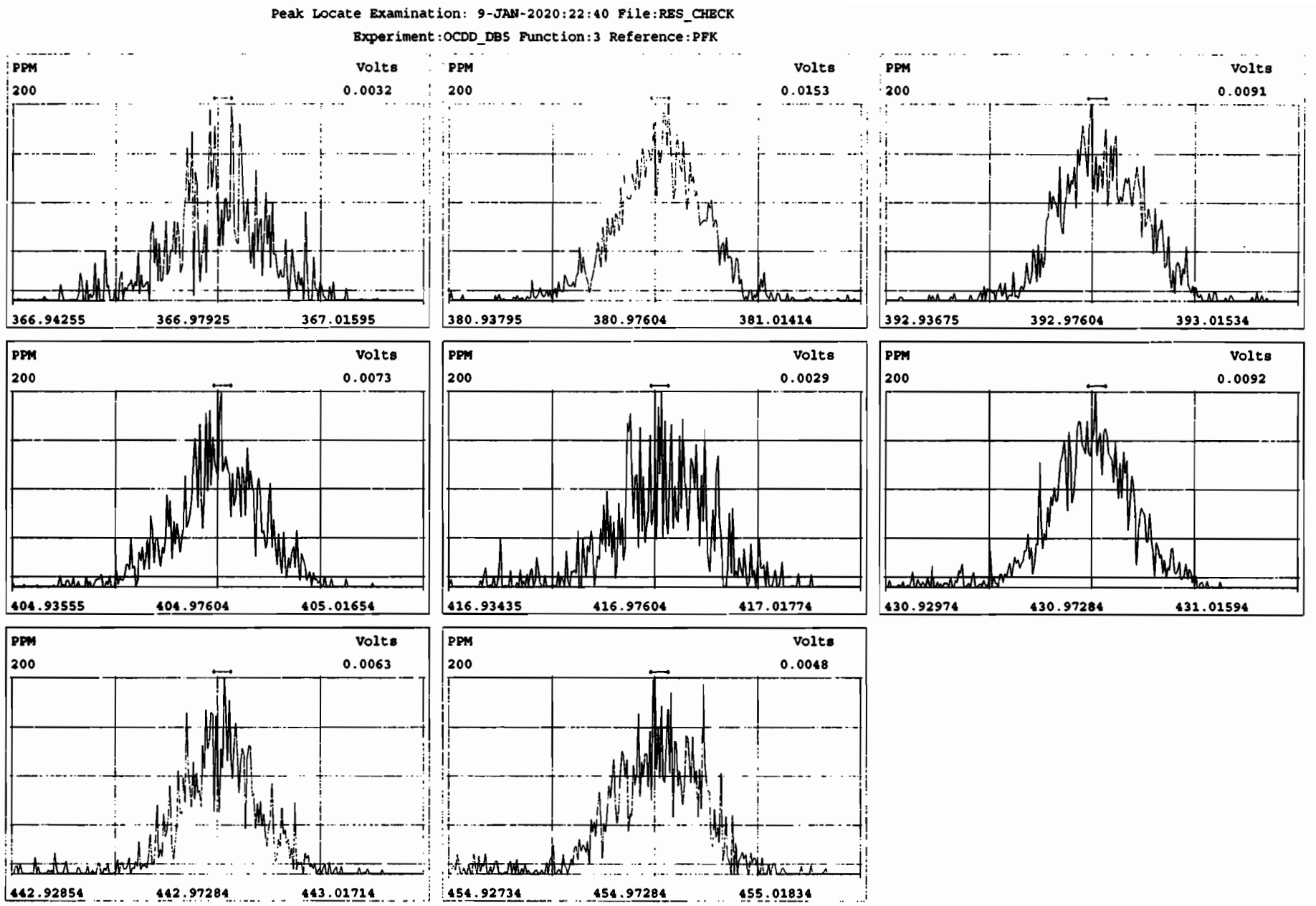
Reviewed by Analyst: CT Date: 01/10/2020

Vista Analytical Laboratory - Injection Log Run file: 200109D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
200109D2	1	ST200109D2-1	DB	9-JAN-20	22:42:55	ST200109D2-1	NA
200109D2	2	B9L0200-BS1	DB	9-JAN-20	23:30:46	ST200109D2-1	NA
200109D2	3	B9L0173-BS1	DB	10-JAN-20	00:18:43	ST200109D2-1	NA
200109D2	4	SOLVENT BLANK	DB	10-JAN-20	01:06:38	ST200109D2-1	NA
200109D2	5	B9L0200-BLK1	DB	10-JAN-20	01:54:35	ST200109D2-1	NA
200109D2	6	B9L0173-BLK1	DB	10-JAN-20	02:42:32	ST200109D2-1	NA
200109D2	7	1904021-06RE1	DB	10-JAN-20	03:30:28	ST200109D2-1	NA
200109D2	8	1904246-01	DB	10-JAN-20	04:18:25	ST200109D2-1	NA
200109D2	9	1904246-02	DB	10-JAN-20	05:06:22	ST200109D2-1	NA
200109D2	10	1904246-03@20X	DB	10-JAN-20	05:54:18	ST200109D2-1	NA
200109D2	11	1904246-04	DB	10-JAN-20	06:42:14	ST200109D2-1	NA
200109D2	12	1904246-05	DB	10-JAN-20	07:30:10	ST200109D2-1	NA
200109D2	13	1904246-06	DB	10-JAN-20	08:18:05	ST200109D2-1	NA
200109D2	14	1904246-07@20X	DB	10-JAN-20	09:06:00	ST200109D2-1	NA
200109D2	15	1904246-08	DB	10-JAN-20	09:53:56	ST200109D2-1	NA

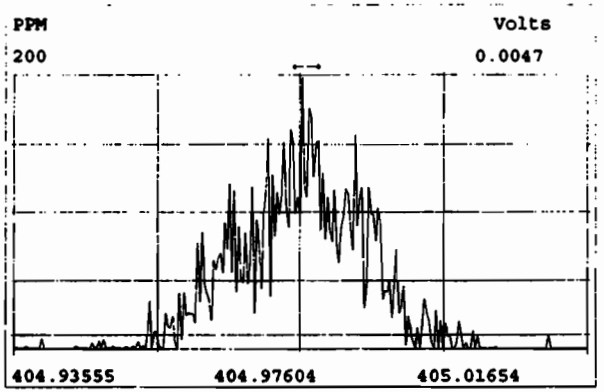

Peak Locate Examination: 9-JAN-2020:22:38 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0149
292.98245
PPM
Volts
200
0.0088
304.98245
PPM
Volts
200
0.0061
316.98245
PPM
Volts
200
0.0252
330.97925
PPM
Volts
200
0.0134
342.97925
PPM
Volts
200
0.0059
354.97925
PPM
Volts
200
0.0028
366.97925
PPM
Volts
200
0.0105
380.97604
PPM
Volts
200
0.0052
392.97604
PPM
Volts
200
0.0040
404.97604
PPM
Volts
200
0.0019
416.97604

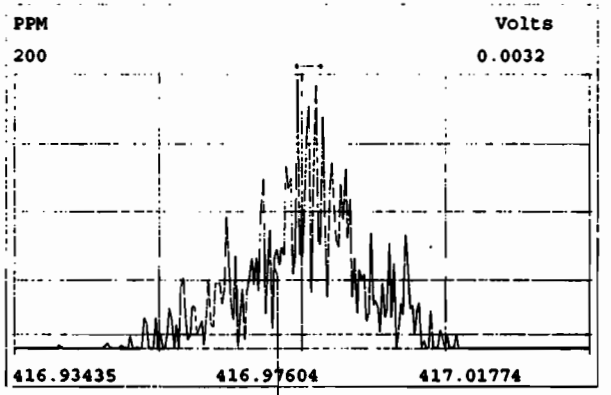

Peak Locate Examination: 9-JAN-2020:22:39 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0041
316.95075
316.98245
317.01415
PPM
Volts
200
0.0243
330.94615
330.97925
331.01235
PPM
Volts
200
0.0170
342.94495
342.97925
343.01355
PPM
Volts
200
0.0068
354.94375
354.97925
355.01475
PPM
Volts
200
0.0038
366.94255
366.97925
367.01595
PPM
Volts
200
0.0132
380.93795
380.97604
381.01414
PPM
Volts
200
0.0078
392.93675
392.97604
393.01534
PPM
Volts
200
0.0050
404.93555
404.97604
405.01654
PPM
Volts
200
0.0025
416.93435
416.97604
417.01774

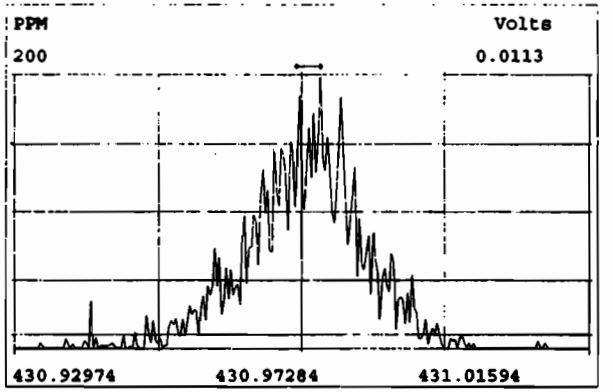

Peak Locate Examination: 9-JAN-2020:22:40 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0032
366.94255
366.97925
367.01595
PPM
Volts
200
0.0153
380.93795
380.97604
381.01414
PPM
Volts
200
0.0091
392.93675
392.97604
393.01534
PPM
Volts
200
0.0073
404.93555
404.97604
405.01654
PPM
Volts
200
0.0029
416.93435
416.97604
417.01774
PPM
Volts
200
0.0092
430.92974
430.97284
431.01594
PPM
Volts
200
0.0063
442.92854
442.97284
443.01714
PPM
Volts
200
0.0048
454.92734
454.97284
455.01834

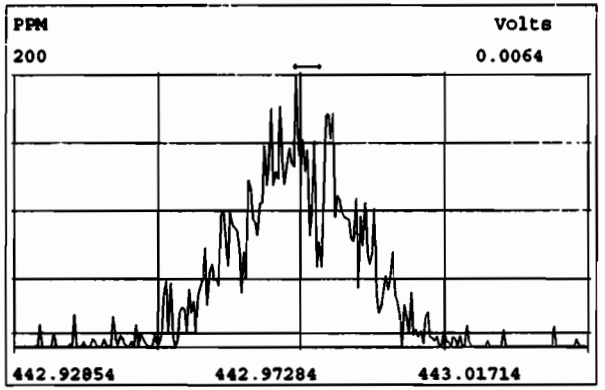
Peak Locate Examination: 9-JAN-2020:22:41 File:RES_CHECK

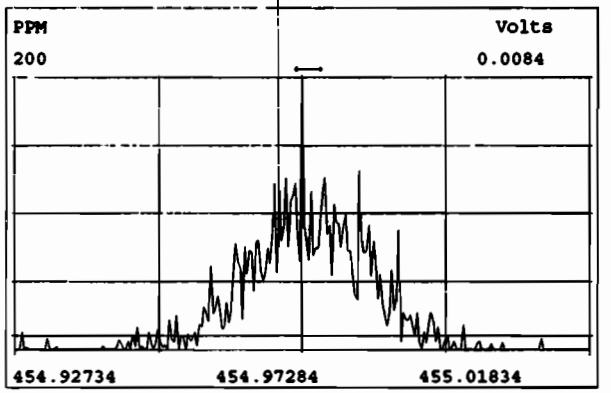
Experiment:OCDD_DB5 Function:4 Reference:PFK

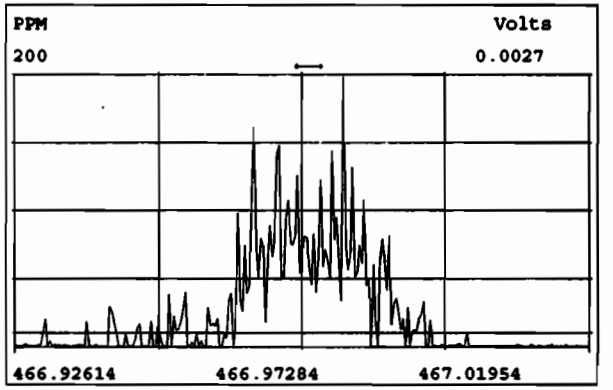


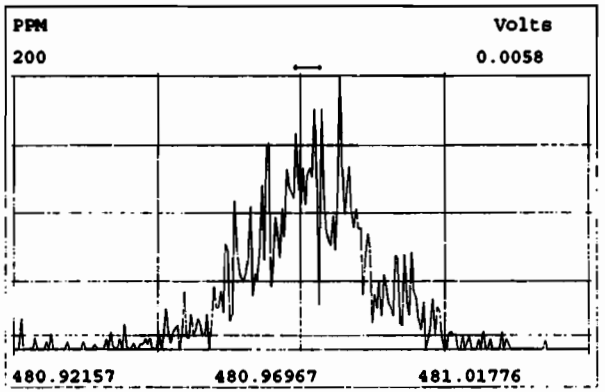


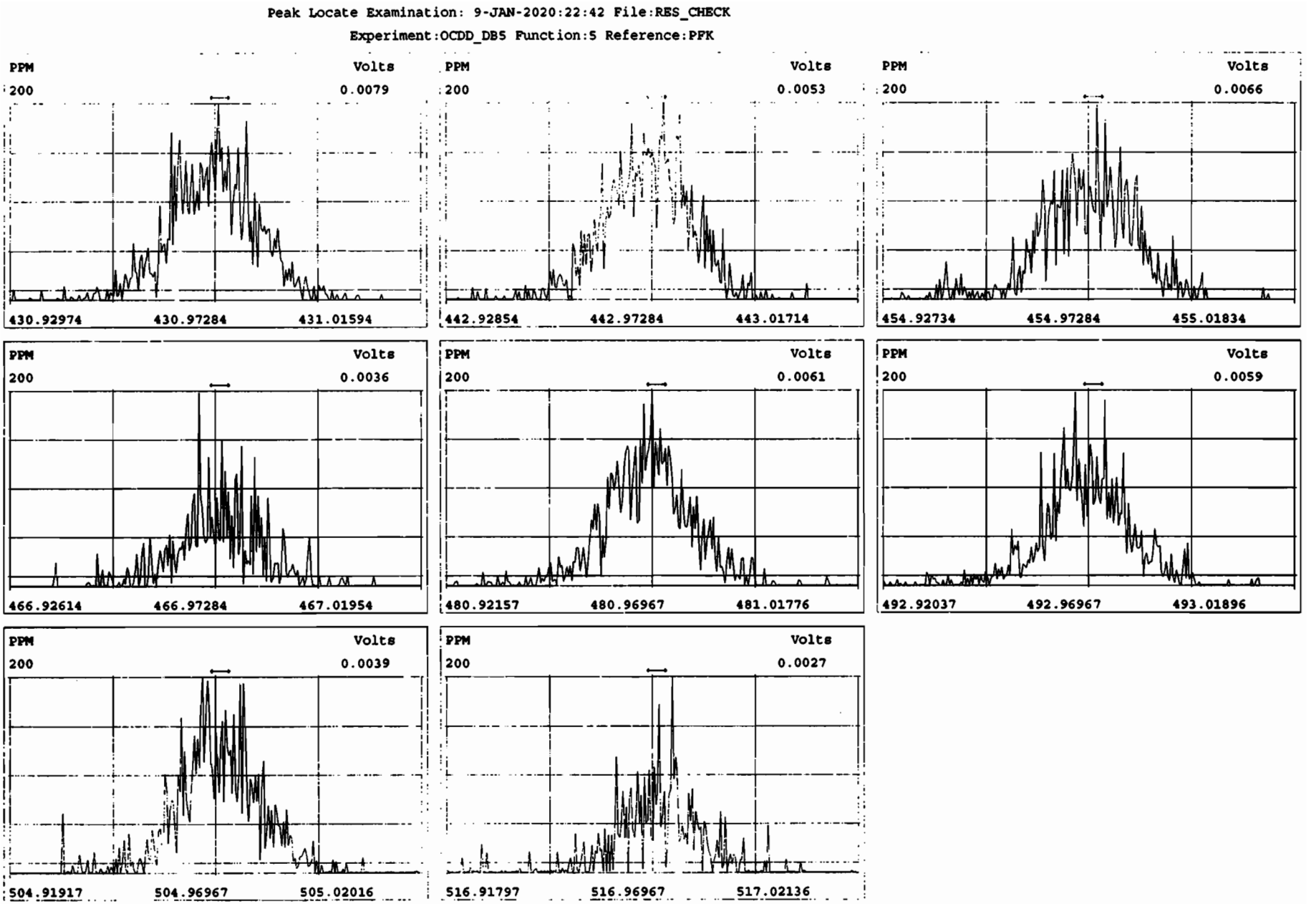




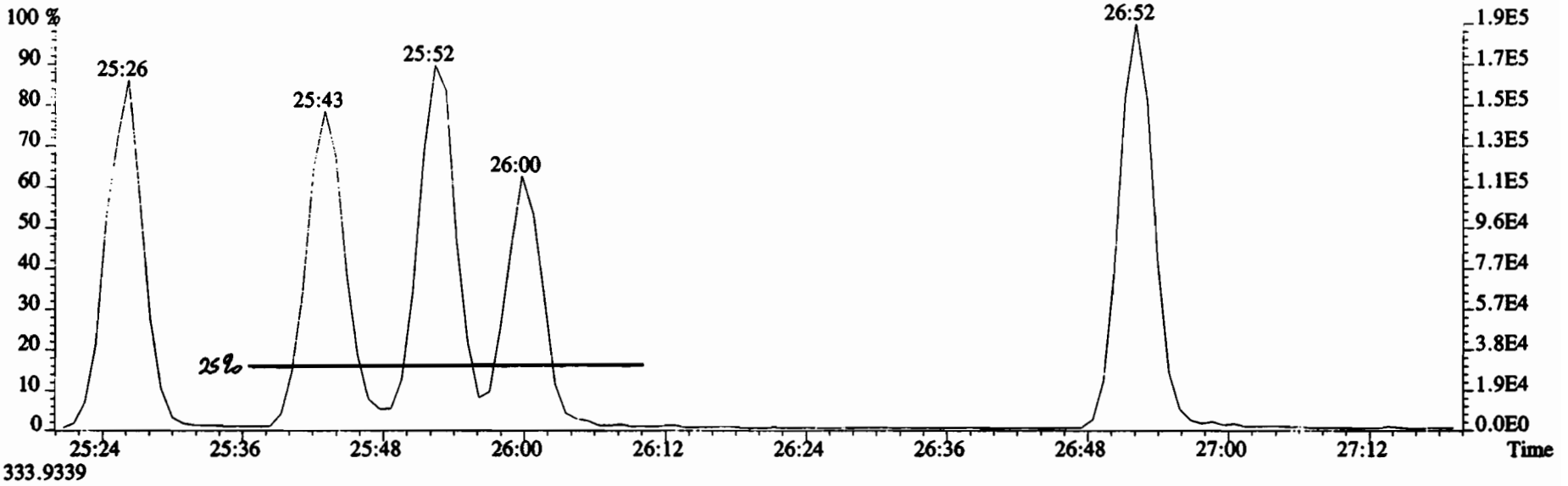




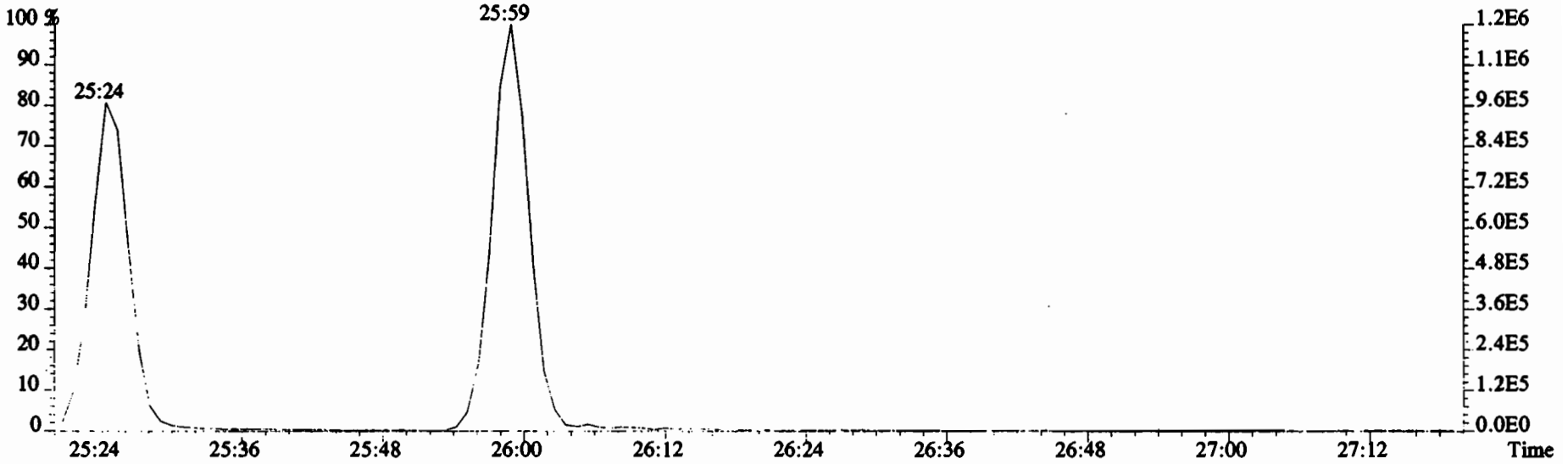


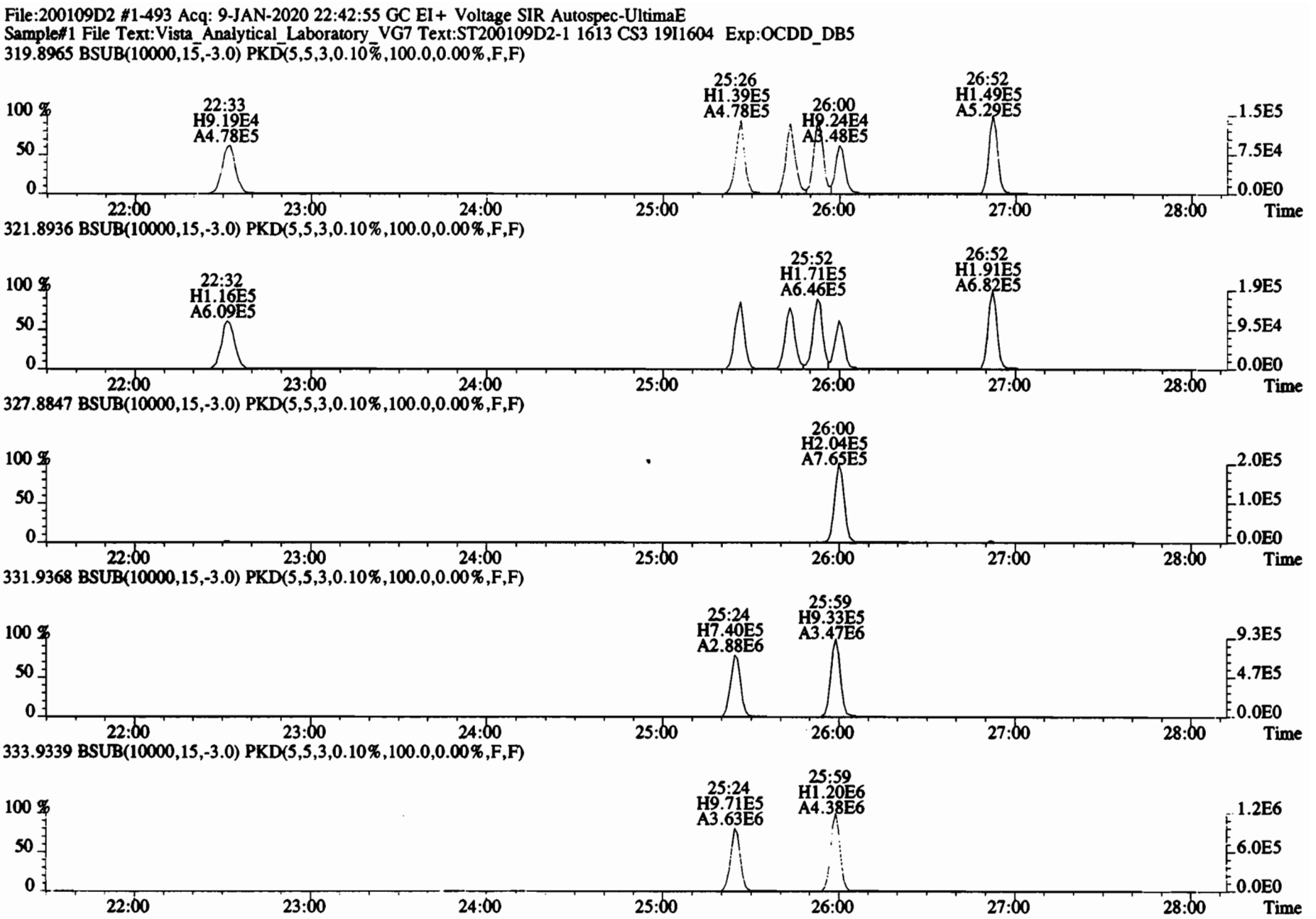

Peak Locate Examination: 9-JAN-2020:22:42 File:RES_CHECK
Experiment:OCDD_DB5 Function:5 Reference:PFK
PPM
Volts
200
0.0079
430.92974
430.97284
431.01594
PPM
Volts
200
0.0053
442.92854
442.97284
443.01714
PPM
Volts
200
0.0066
454.92734
454.97284
455.01834
PPM
Volts
200
0.0036
466.92614
466.97284
467.01954
PPM
Volts
200
0.0061
480.92157
480.96967
481.01776
PPM
Volts
200
0.0059
492.92037
492.96967
493.01896
PPM
Volts
200
0.0039
504.91917
504.96967
505.02016
PPM
Volts
200
0.0027
516.91797
516.96967
517.02136

File:200109D2 #1-493 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
321.8936

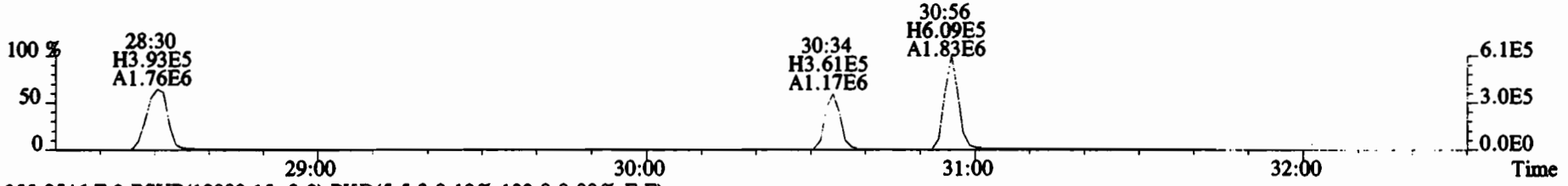


333.9339

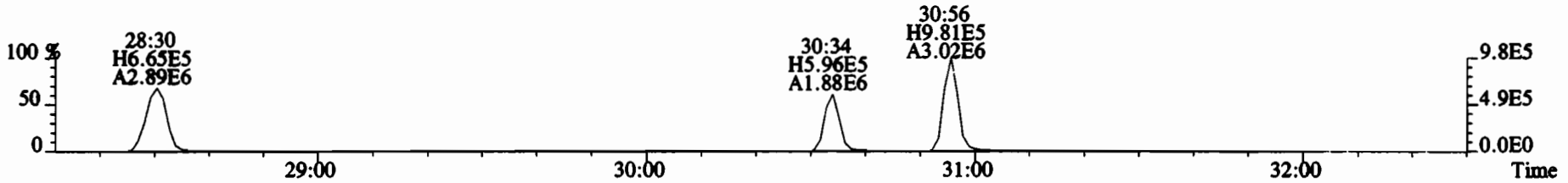



File:200109D2 #1-493 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:33 H9.19E4 A4.78E5
25:26 H1.39E5 A4.78E5
26:00 H9.24E4 A3.48E5
26:52 H1.49E5 A5.29E5
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:32 H1.16E5 A6.09E5
25:52 H1.71E5 A6.46E5
26:52 H1.91E5 A6.82E5
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:00 H2.04E5 A7.65E5
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:24 H7.40E5 A2.88E6
25:59 H9.33E5 A3.47E6
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:24 H9.71E5 A3.63E6
25:59 H1.20E6 A4.38E6
100 %
50
0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
1.5E5
7.5E4
0.0E0
1.9E5
9.5E4
2.0E5
1.0E5
9.3E5
4.7E5
1.2E6
6.0E5

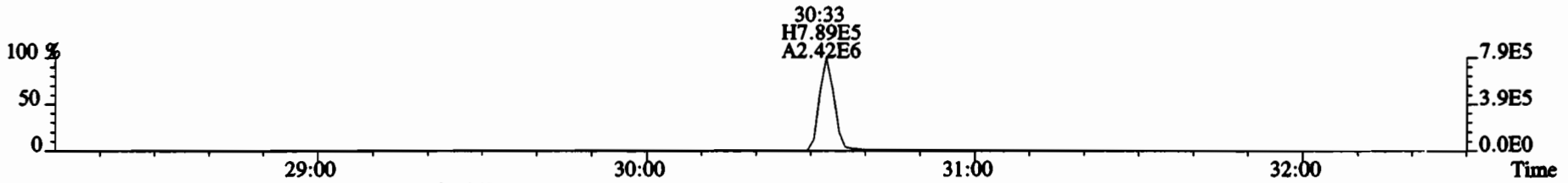
File:200109D2 #1-211 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



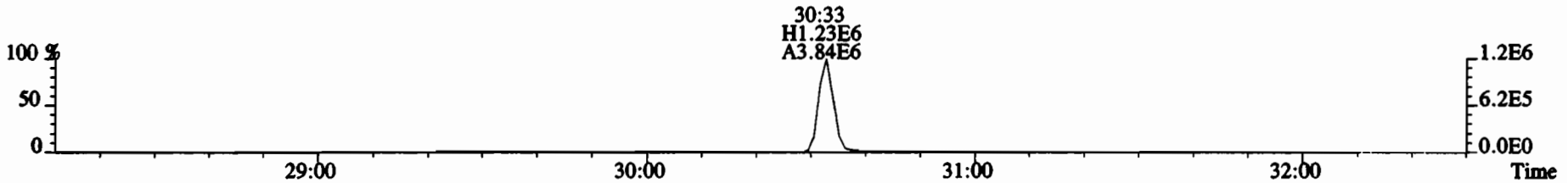
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



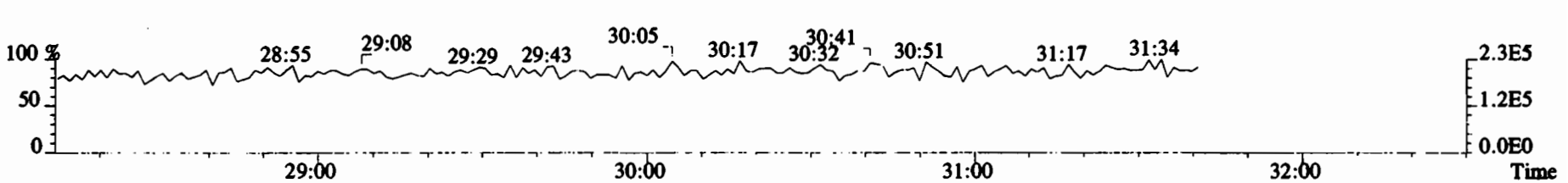
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



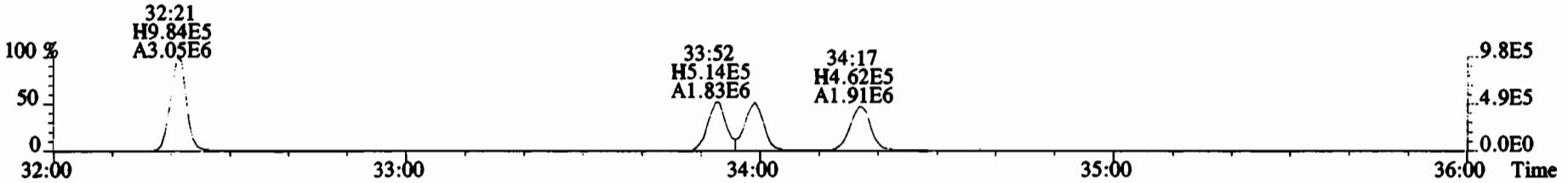
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



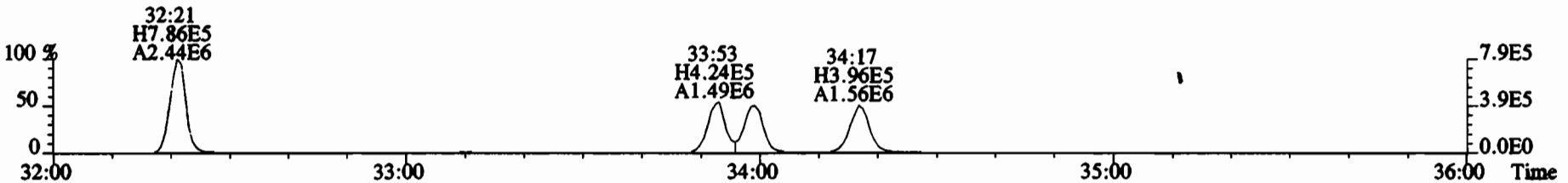
366.9792 F:2



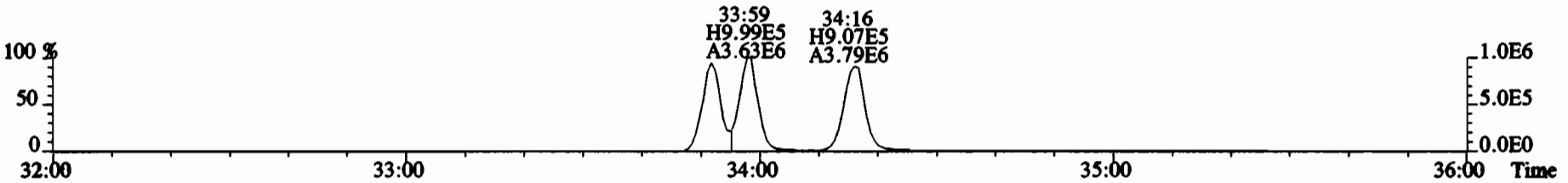
File:200109D2 #1-384 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



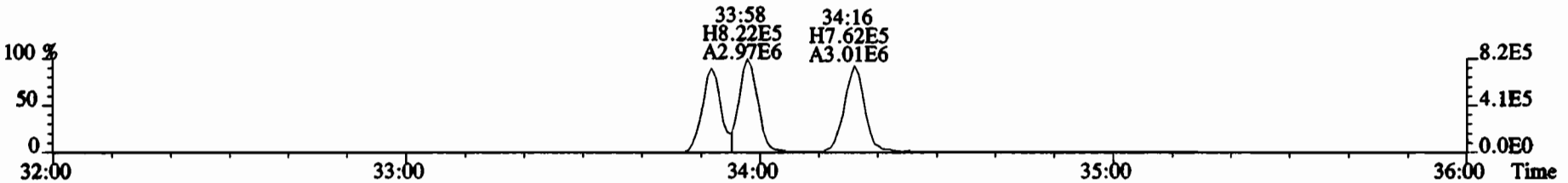
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



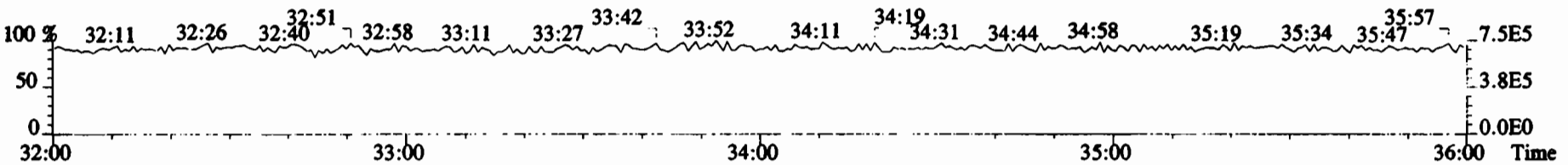
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



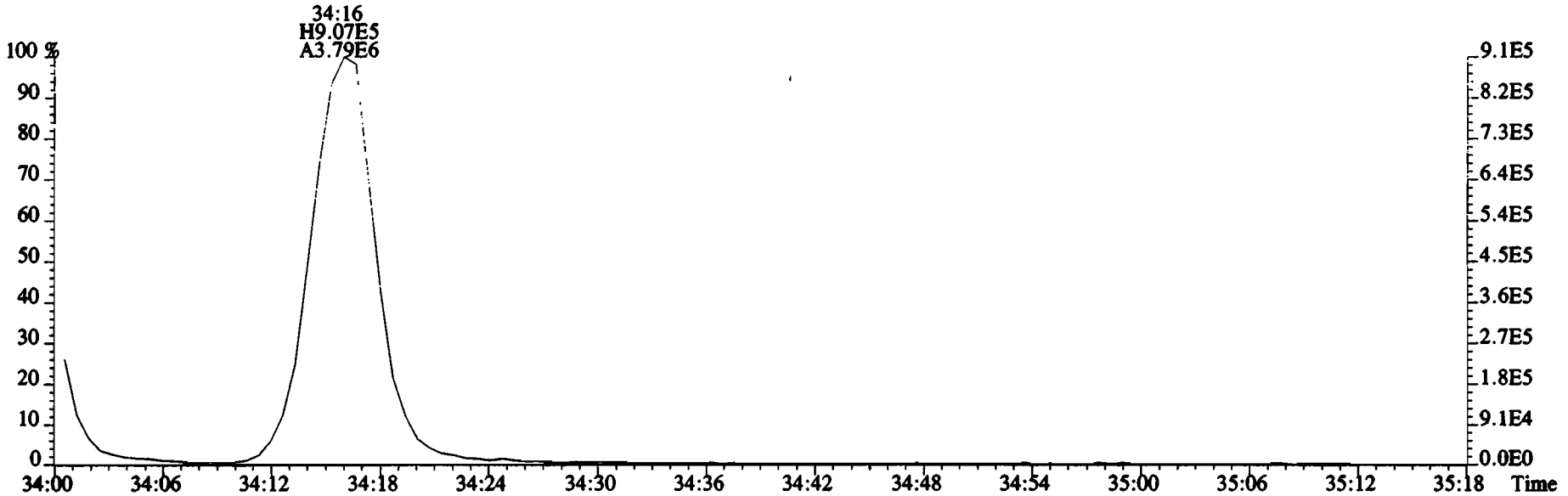
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



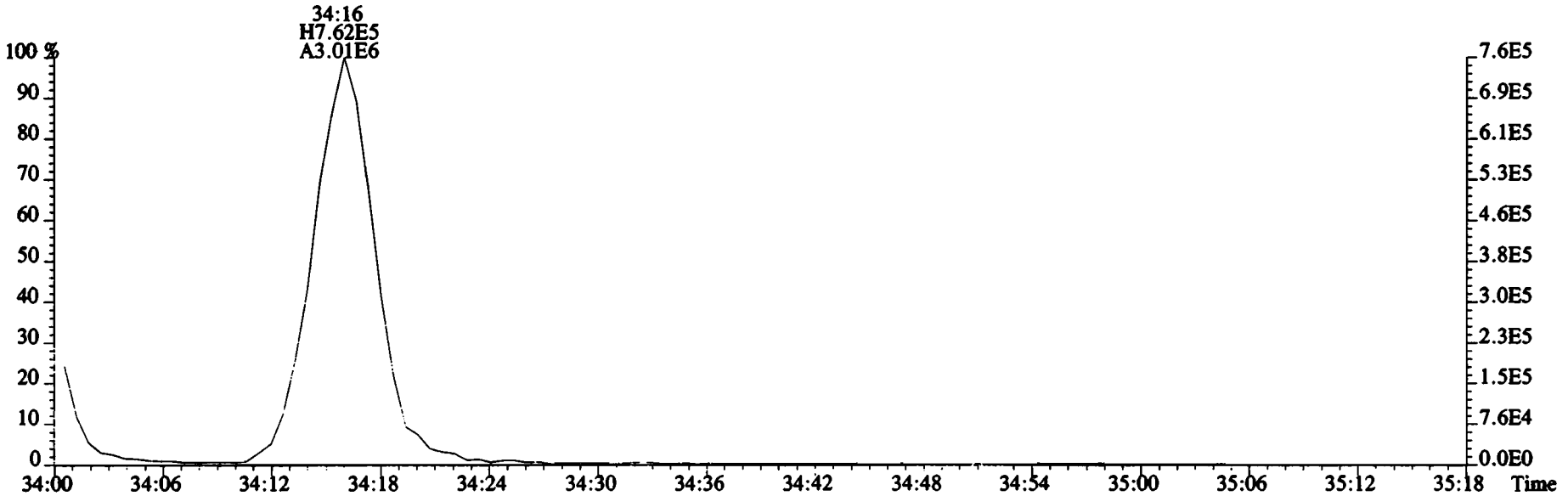
392.9760 F:3



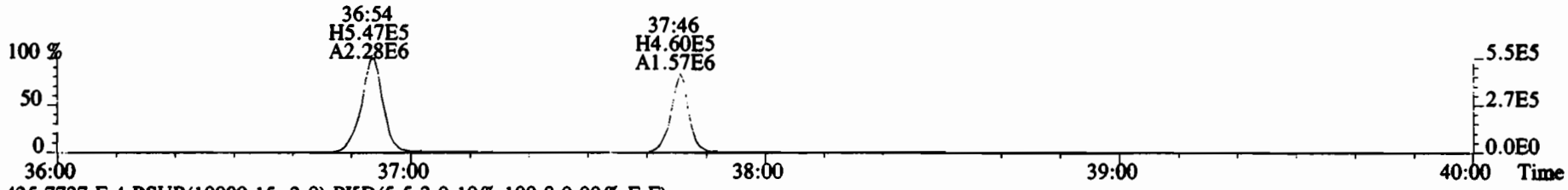
File:200109D2 #1-384 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



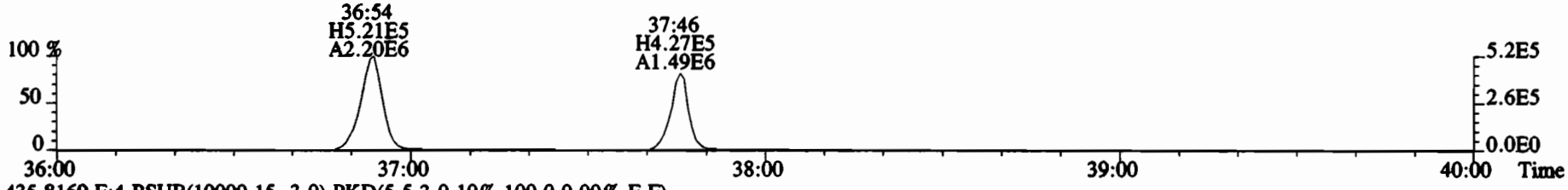
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



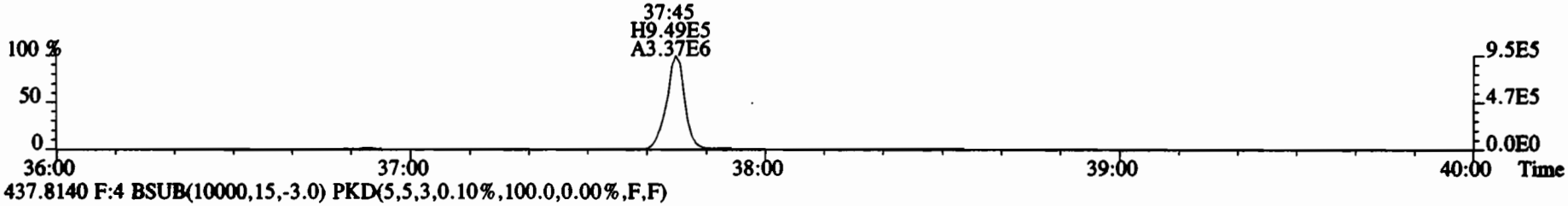
File:200109D2 #1-355 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



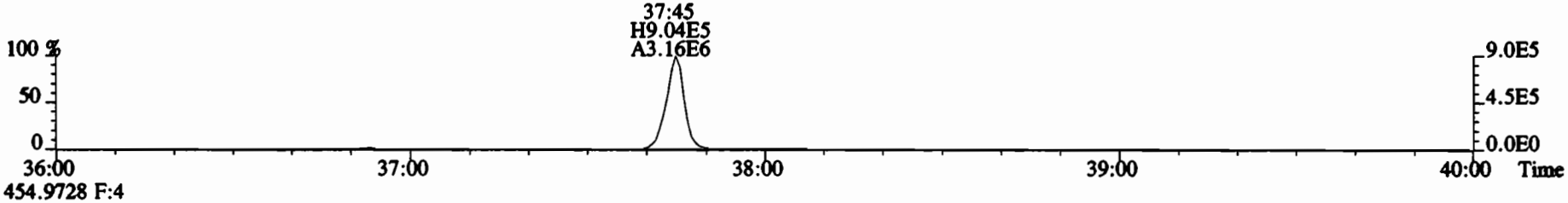
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



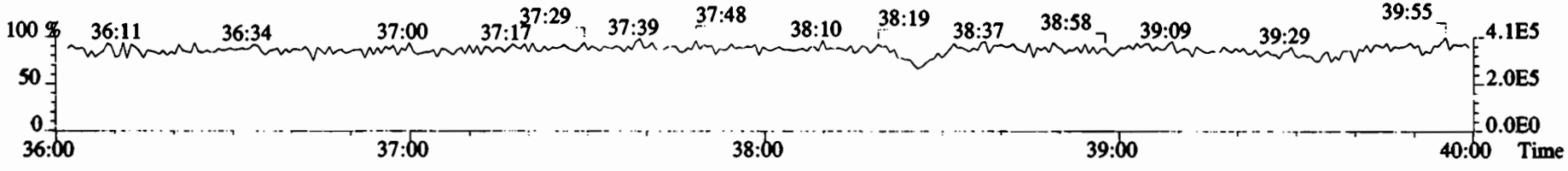
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



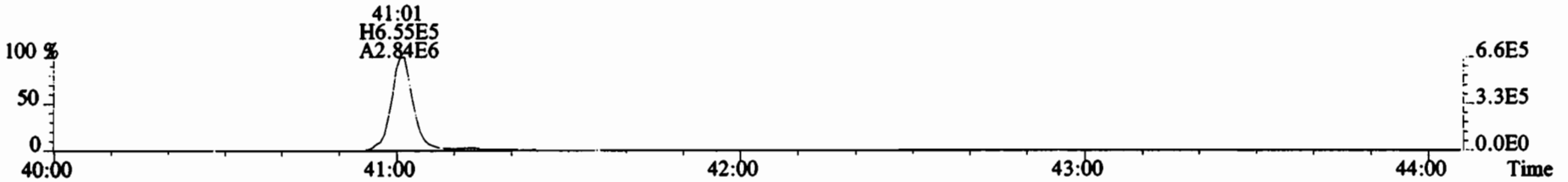
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



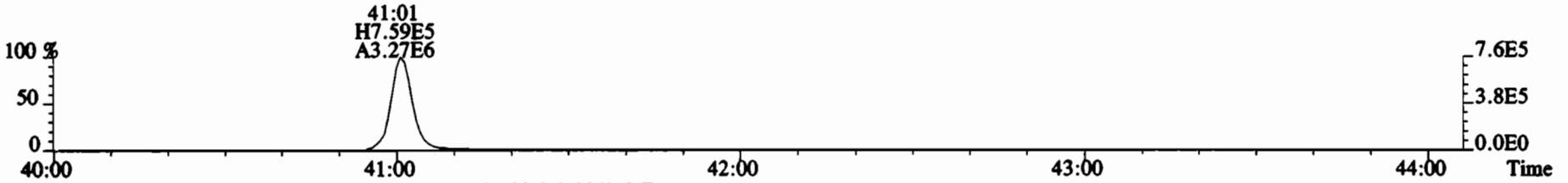
454.9728 F:4



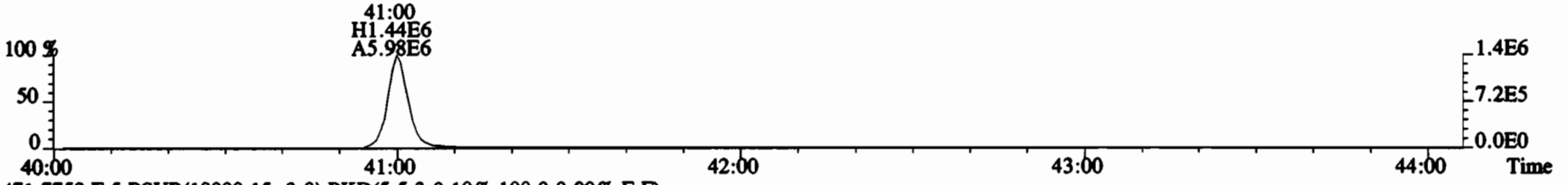
File:200109D2 #1-432 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



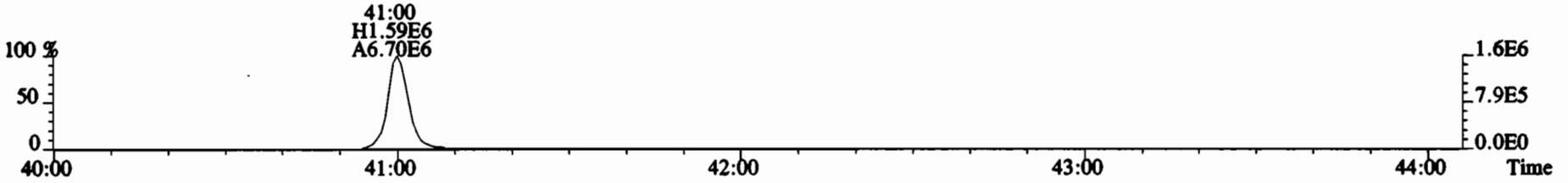
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



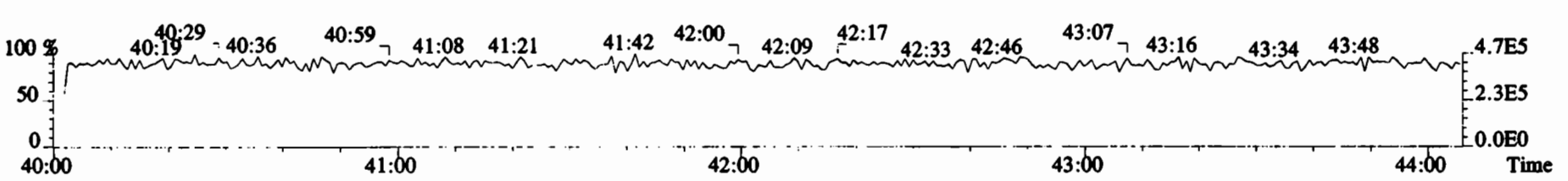
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



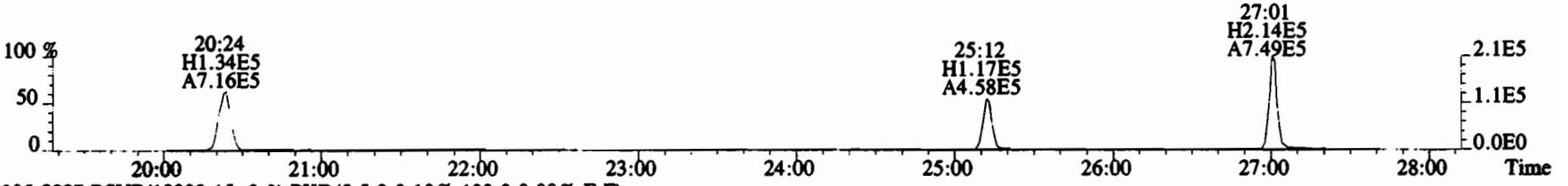
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



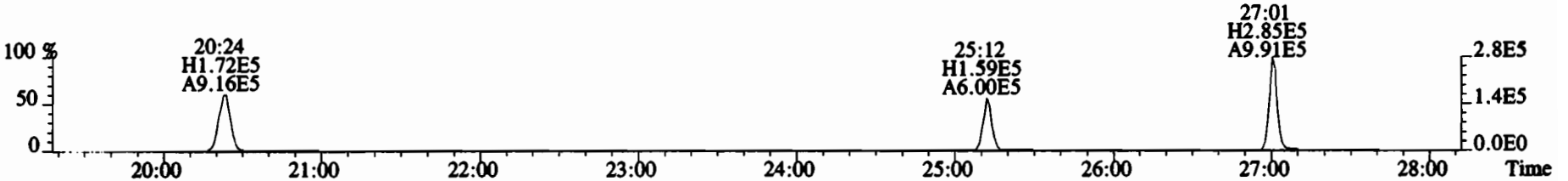
454.9728 F:5



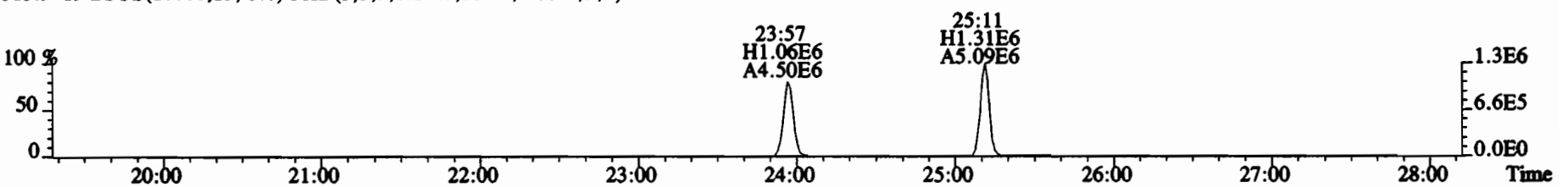
File:200109D2 #1-493 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



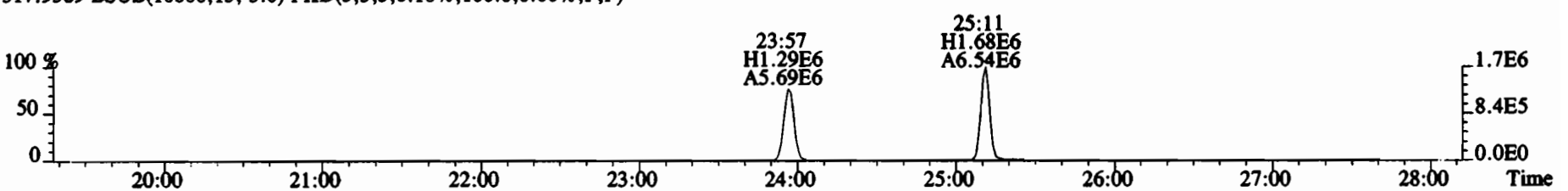
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



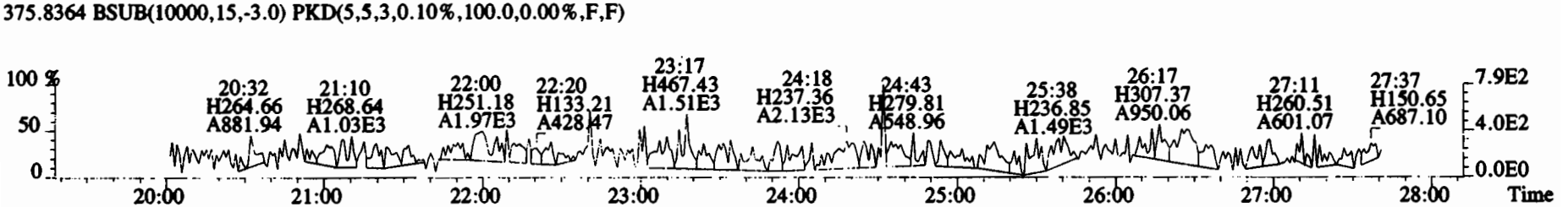
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



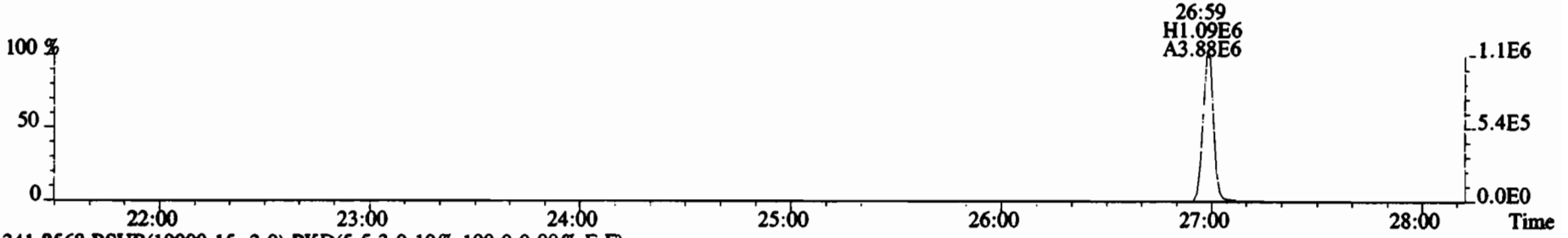
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



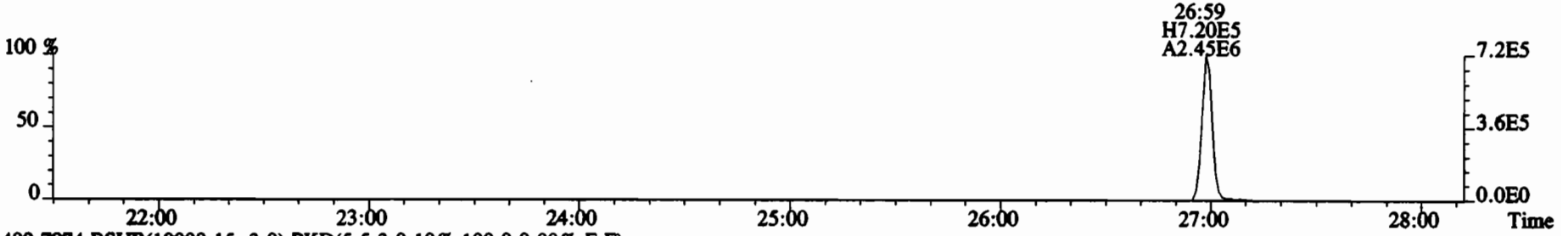
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



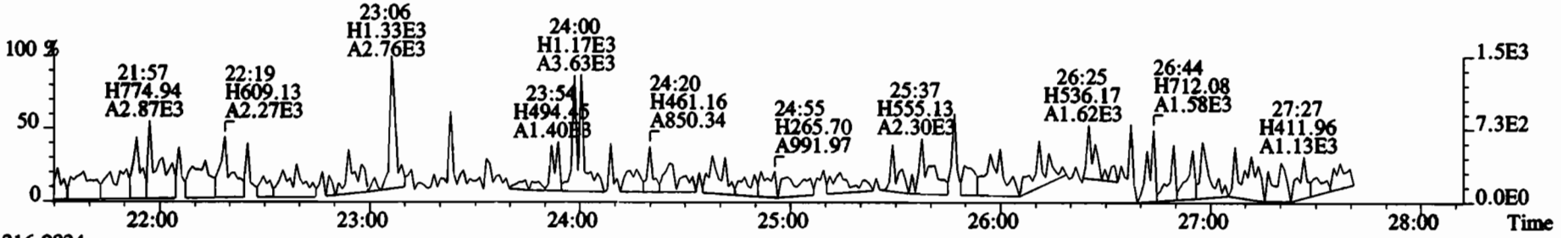
File:200109D2 #1-493 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



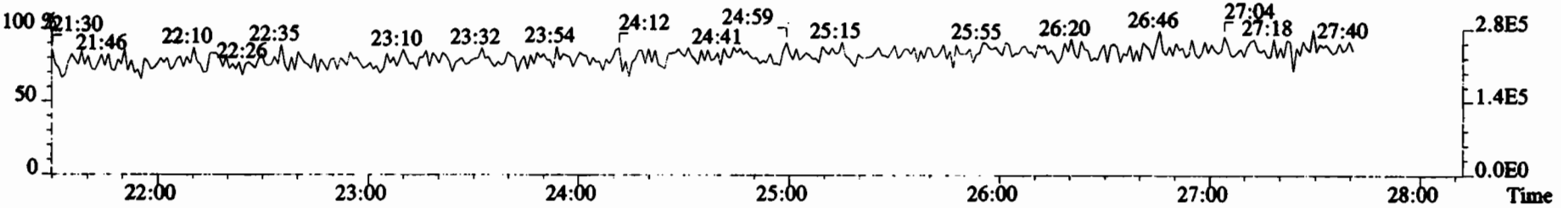
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



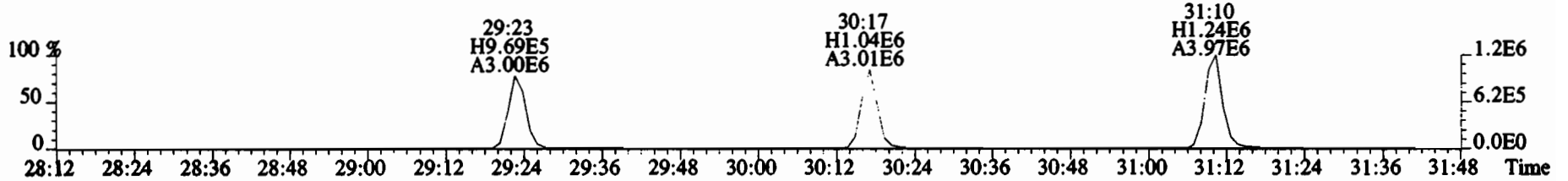
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



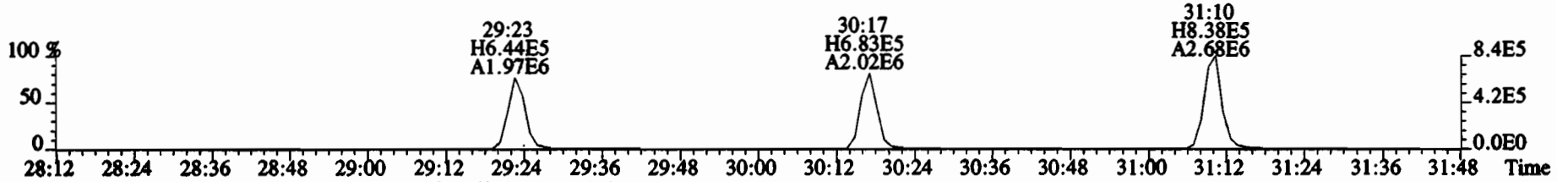
316.9824



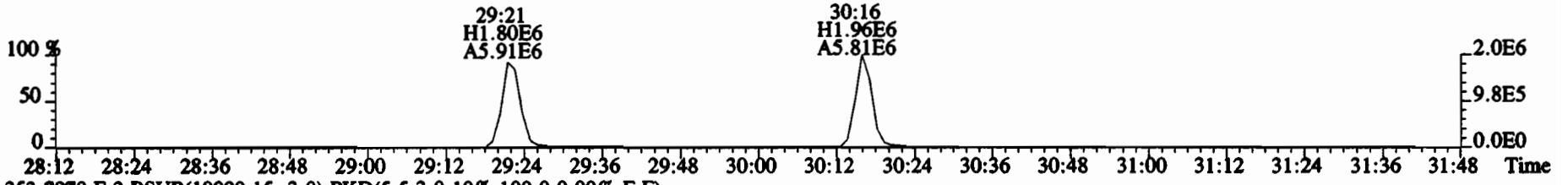
File:200109D2 #1-211 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



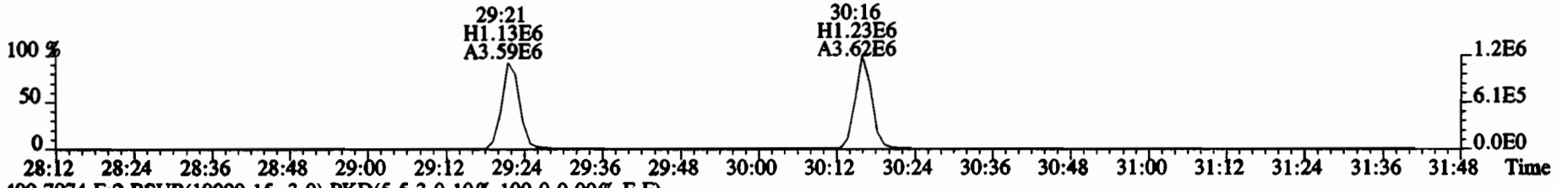
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



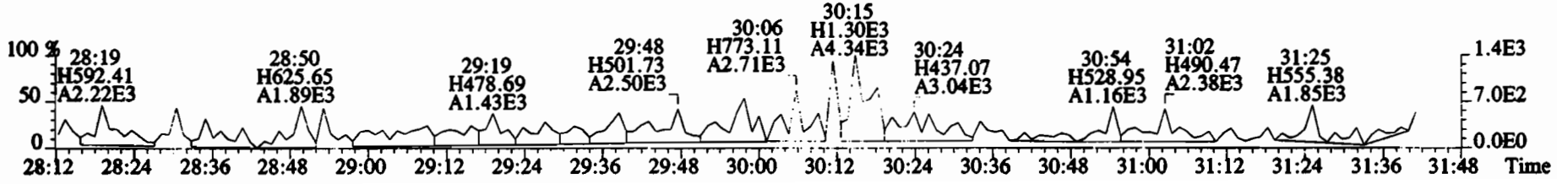
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



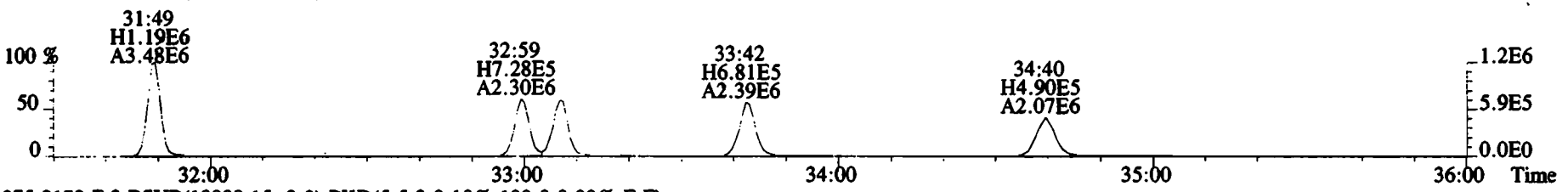
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



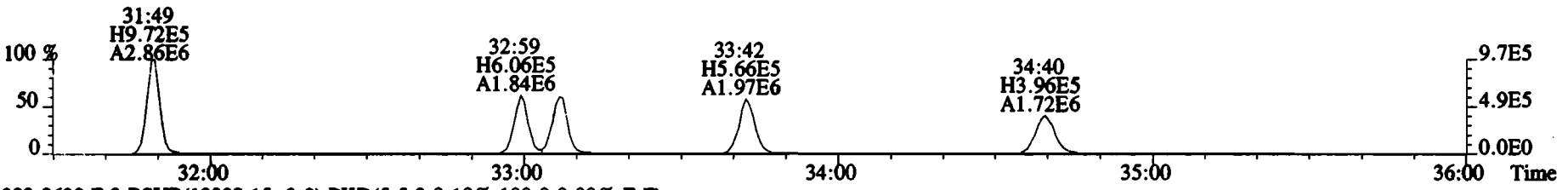
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



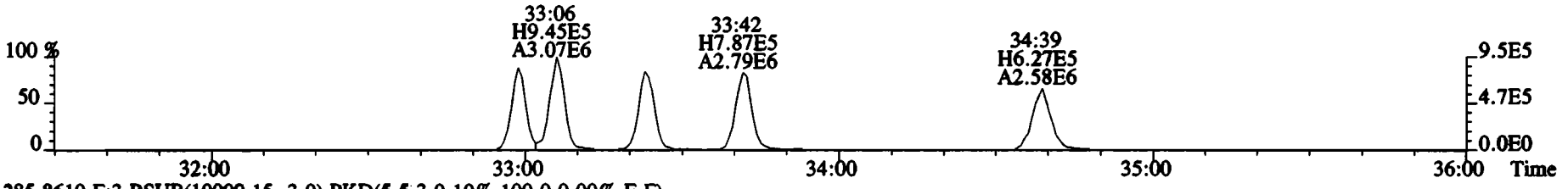
File:200109D2 #1-384 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



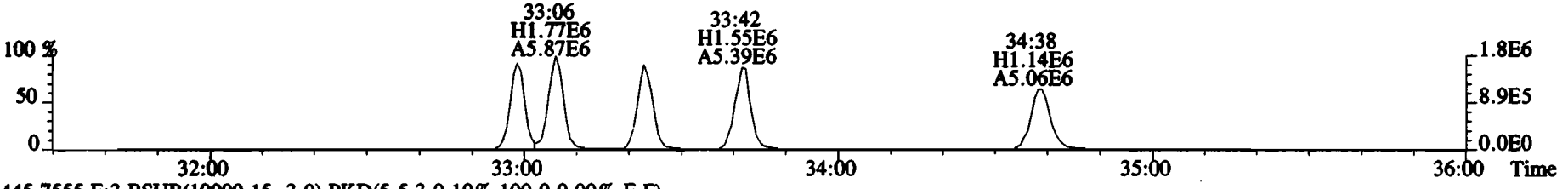
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



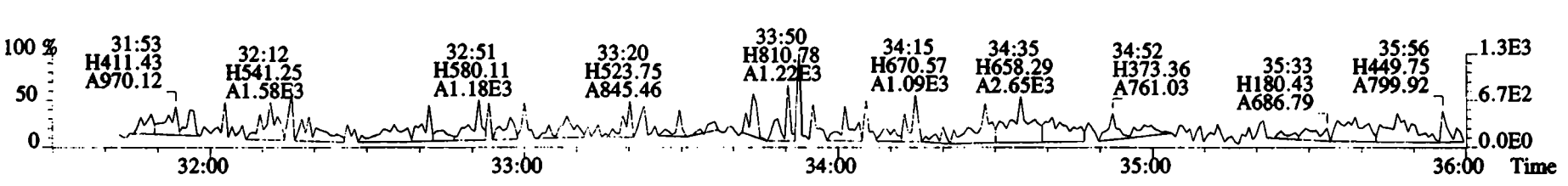
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

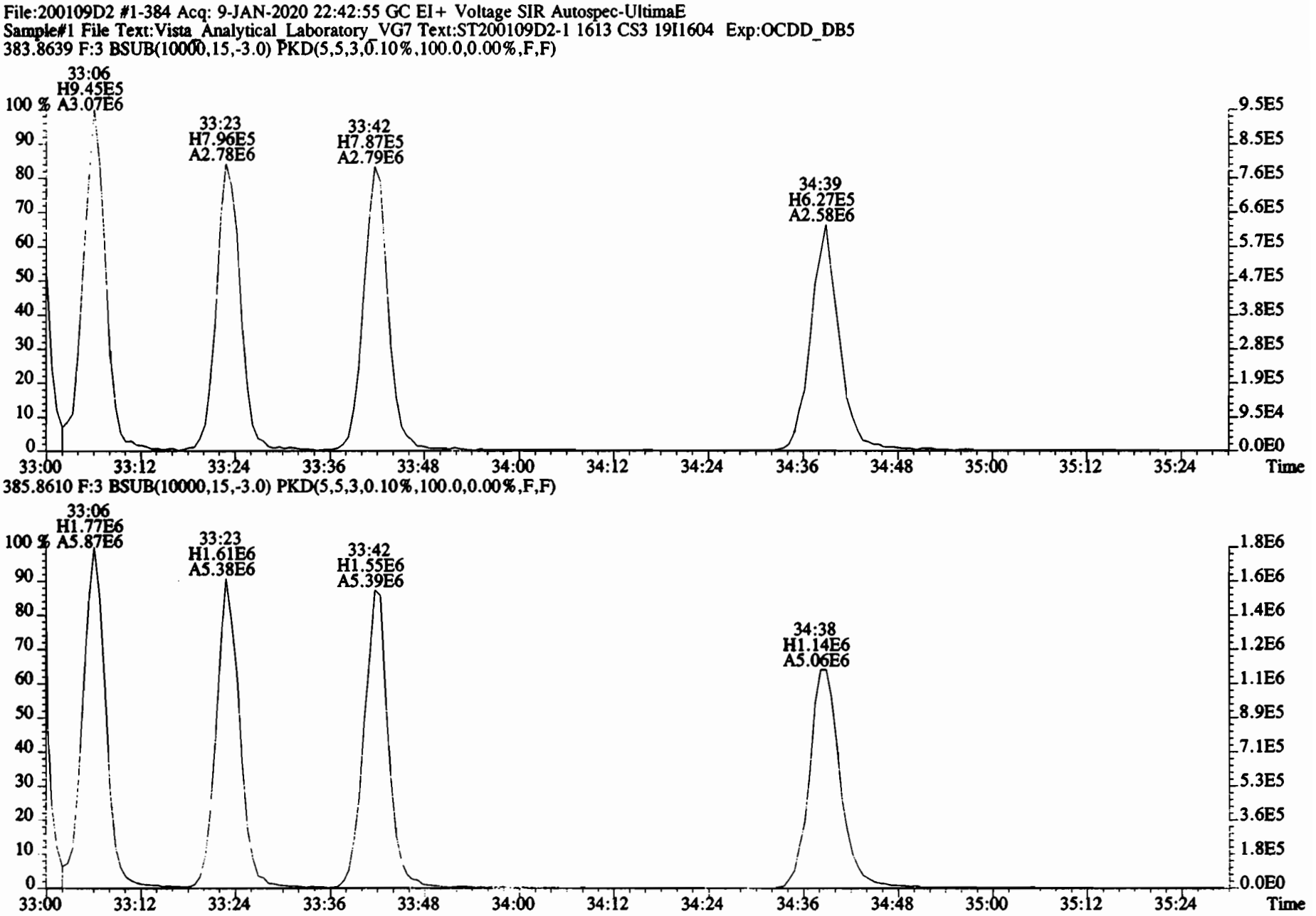


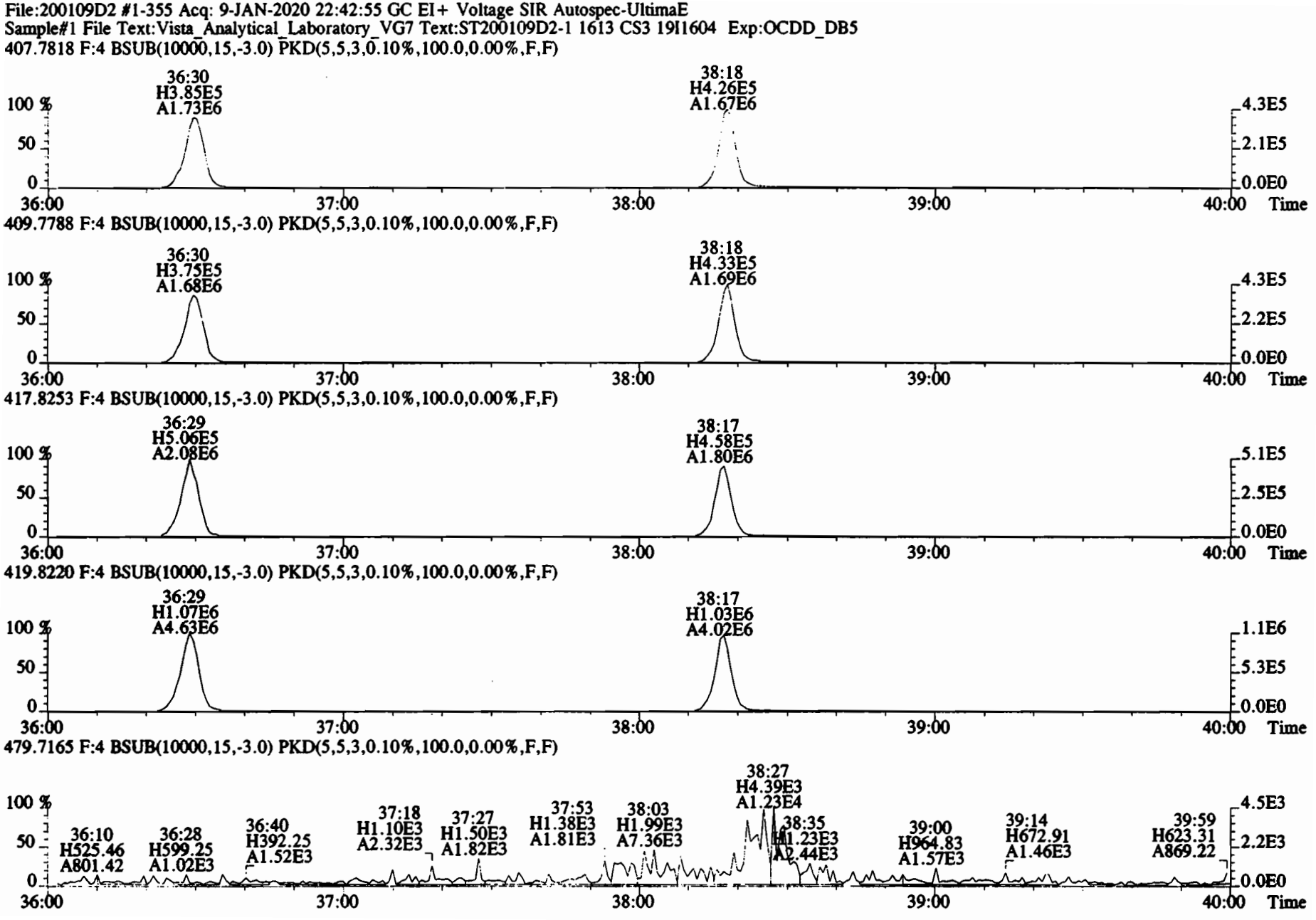
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



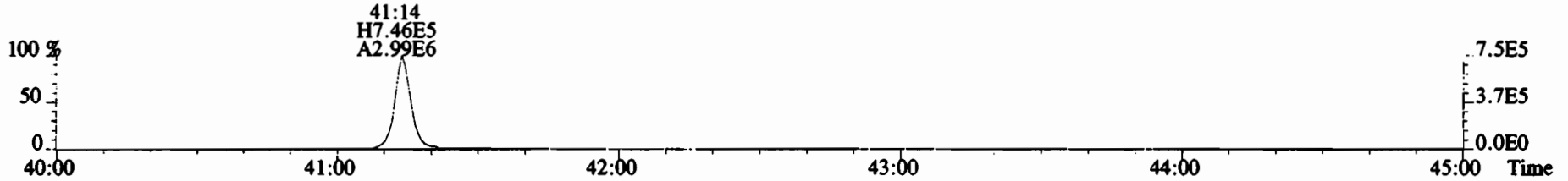
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



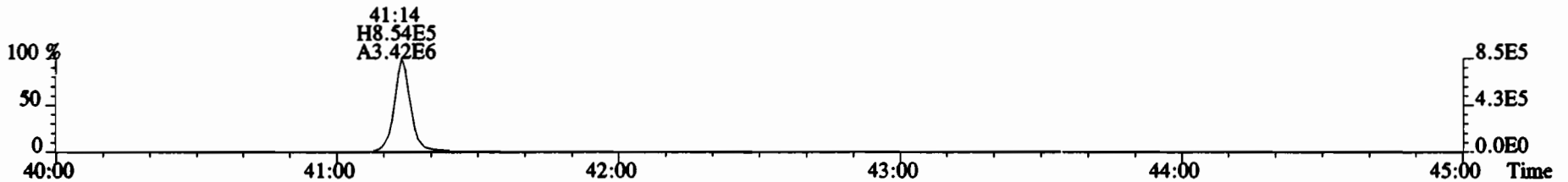

File:200109D2 #1-384 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:06 H9.45E5 A3.07E6
33:23 H7.96E5 A2.78E6
33:42 H7.87E5 A2.79E6
34:39 H6.27E5 A2.58E6
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:06 H1.77E6 A5.87E6
33:23 H1.61E6 A5.38E6
33:42 H1.55E6 A5.39E6
34:38 H1.14E6 A5.06E6
Time


File:200109D2 #1-355 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:30 H3.85E5 A1.73E6
38:18 H4.26E5 A1.67E6
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:30 H3.75E5 A1.68E6
38:18 H4.33E5 A1.69E6
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:29 H5.06E5 A2.08E6
38:17 H4.58E5 A1.80E6
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:29 H1.07E6 A4.63E6
38:17 H1.03E6 A4.02E6
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:10 H525.46 A801.42
36:28 H599.25 A1.02E3
36:40 H392.25 A1.52E3
37:18 H1.10E3 A2.32E3
37:27 H1.50E3 A1.82E3
37:53 H1.38E3 A1.81E3
38:03 H1.99E3 A7.36E3
38:27 H4.39E3 A1.23E4
38:35 H1.23E3 A2.44E3
39:00 H964.83 A1.57E3
39:14 H672.91 A1.46E3
39:59 H623.31 A869.22
100 %
50
0
36:00
37:00
38:00
39:00
40:00
Time
4.3E5
2.1E5
0.0E0
4.3E5
2.2E5
0.0E0
5.1E5
2.5E5
0.0E0
1.1E6
5.3E5
0.0E0
4.5E3
2.2E3
0.0E0

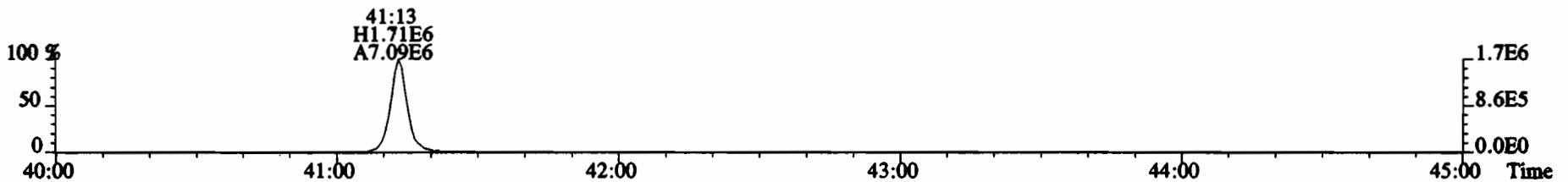
File:200109D2 #1-432 Acq: 9-JAN-2020 22:42:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST200109D2-1 1613 CS3 19I1604 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



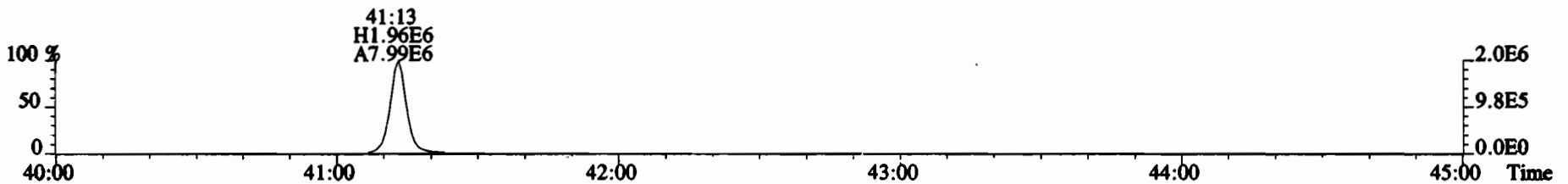
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



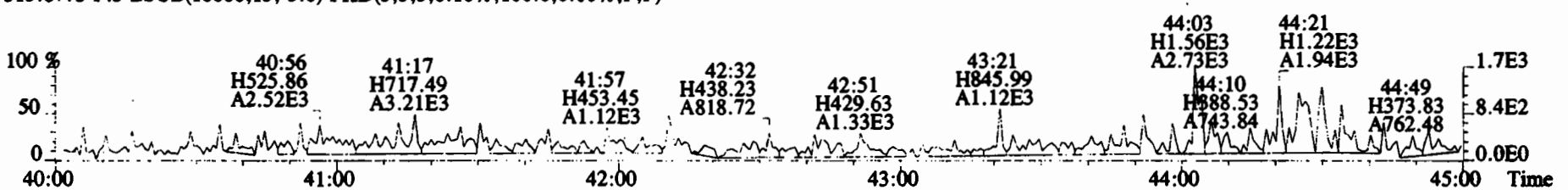
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

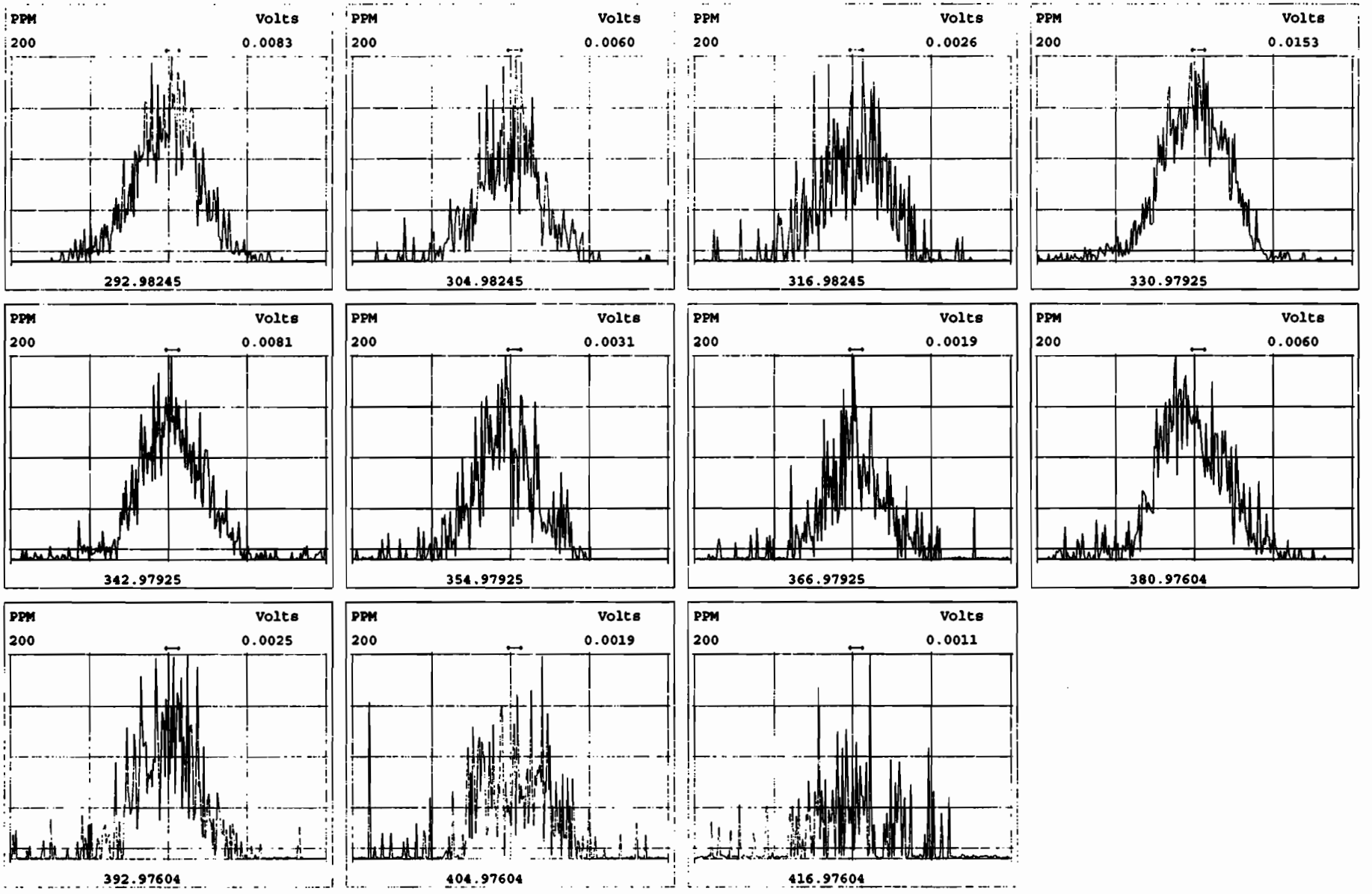


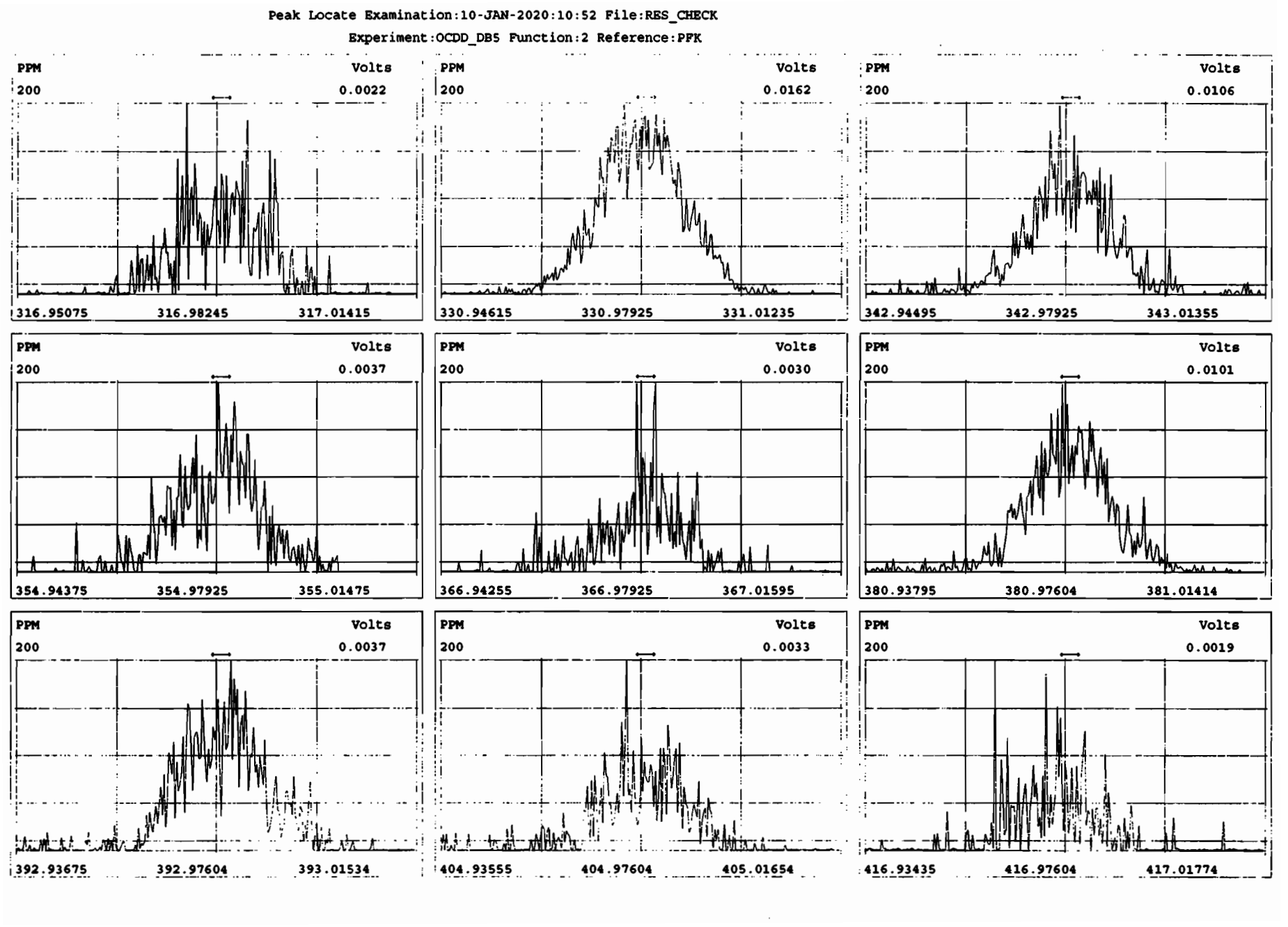
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

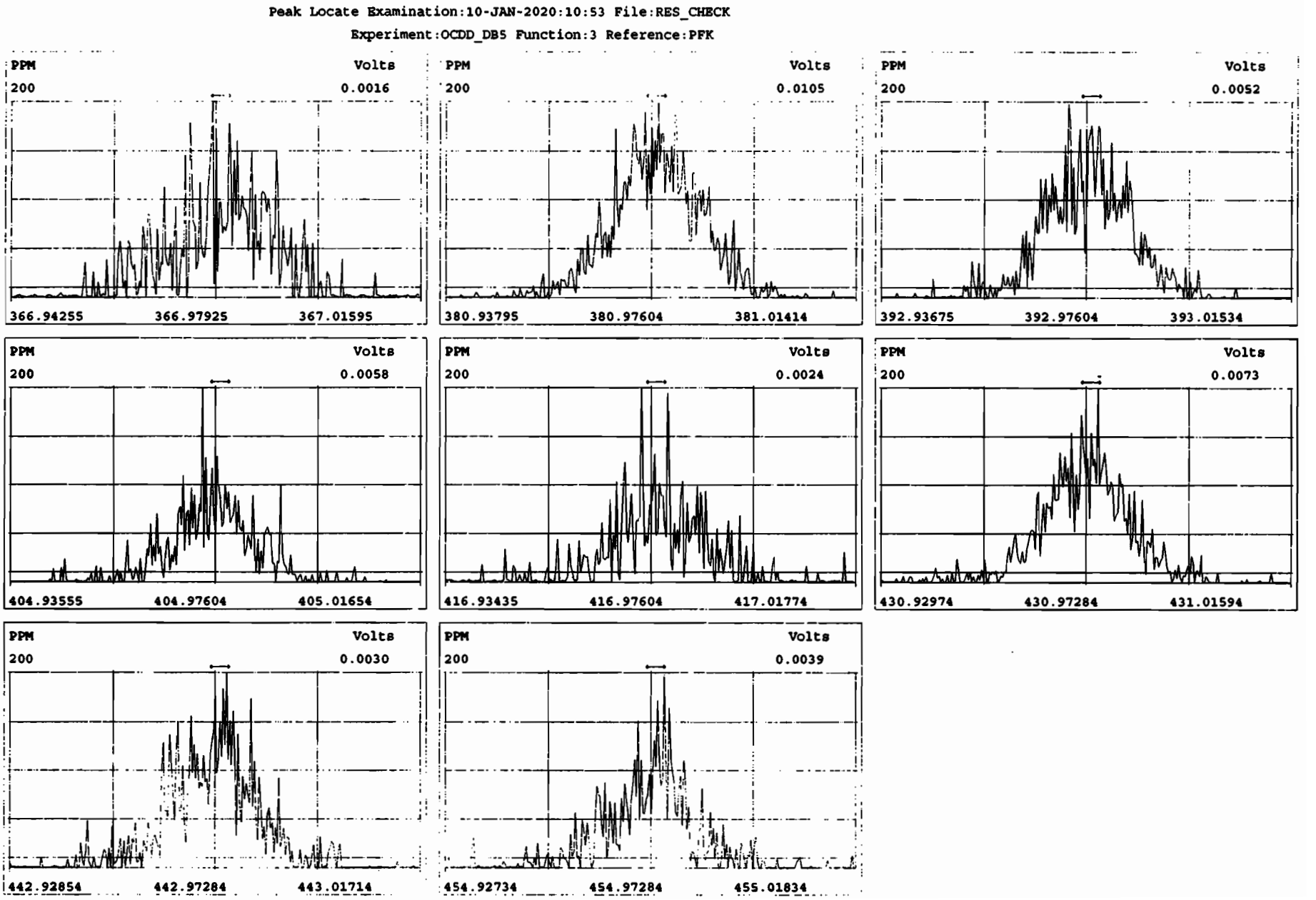


Peak Locate Examination:10-JAN-2020:10:51 File:RES_CHECK

Experiment:OCDD_DB5 Function:1 Reference:PFK

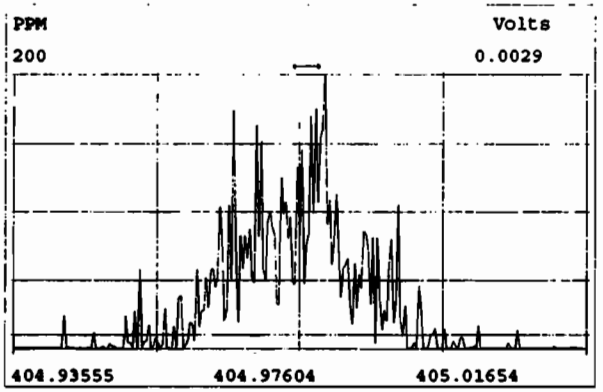


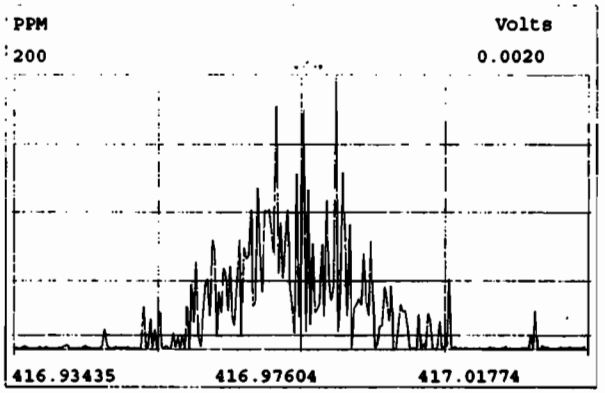

Peak Locate Examination:10-JAN-2020:10:52 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0022
316.95075
316.98245
317.01415
PPM
Volts
200
0.0162
330.94615
330.97925
331.01235
PPM
Volts
200
0.0106
342.94495
342.97925
343.01355
PPM
Volts
200
0.0037
354.94375
354.97925
355.01475
PPM
Volts
200
0.0030
366.94255
366.97925
367.01595
PPM
Volts
200
0.0101
380.93795
380.97604
381.01414
PPM
Volts
200
0.0037
392.93675
392.97604
393.01534
PPM
Volts
200
0.0033
404.93555
404.97604
405.01654
PPM
Volts
200
0.0019
416.93435
416.97604
417.01774

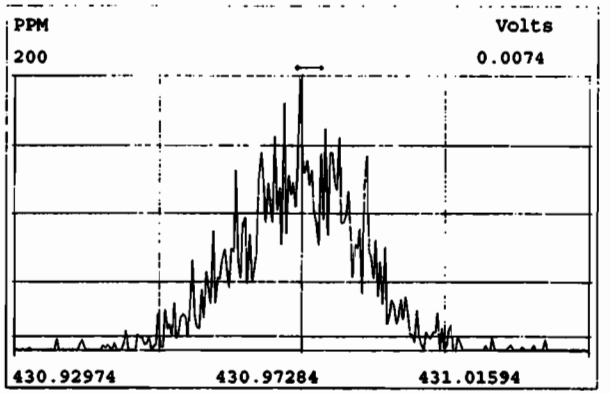

Peak Locate Examination:10-JAN-2020:10:53 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0016
366.94255
366.97925
367.01595
PPM
Volts
200
0.0105
380.93795
380.97604
381.01414
PPM
Volts
200
0.0052
392.93675
392.97604
393.01534
PPM
Volts
200
0.0058
404.93555
404.97604
405.01654
PPM
Volts
200
0.0024
416.93435
416.97604
417.01774
PPM
Volts
200
0.0073
430.92974
430.97284
431.01594
PPM
Volts
200
0.0030
442.92854
442.97284
443.01714
PPM
Volts
200
0.0039
454.92734
454.97284
455.01834

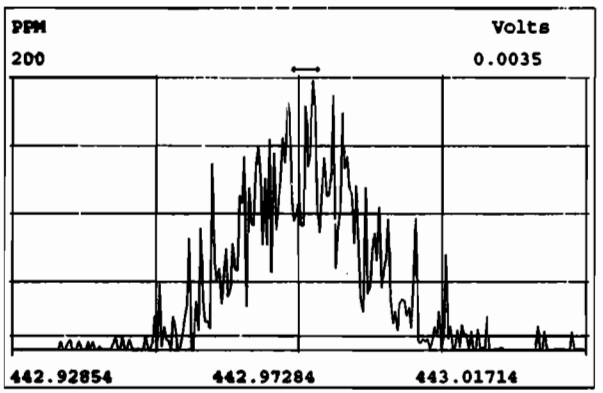
Peak Locate Examination:10-JAN-2020:10:54 File:RES_CHECK

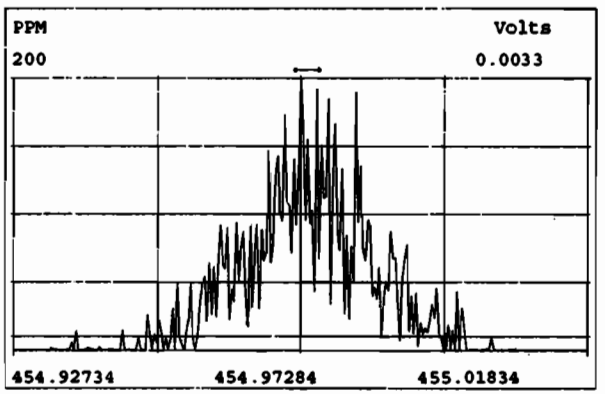
Experiment:OCDD_DB5 Function:4 Reference:PFK

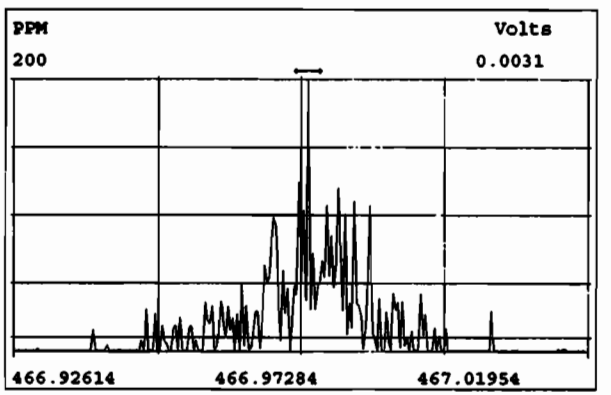


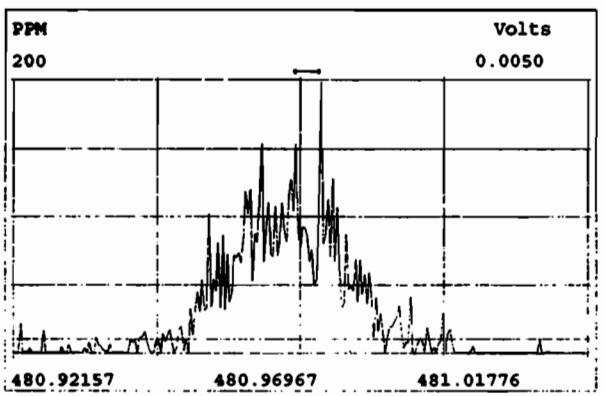


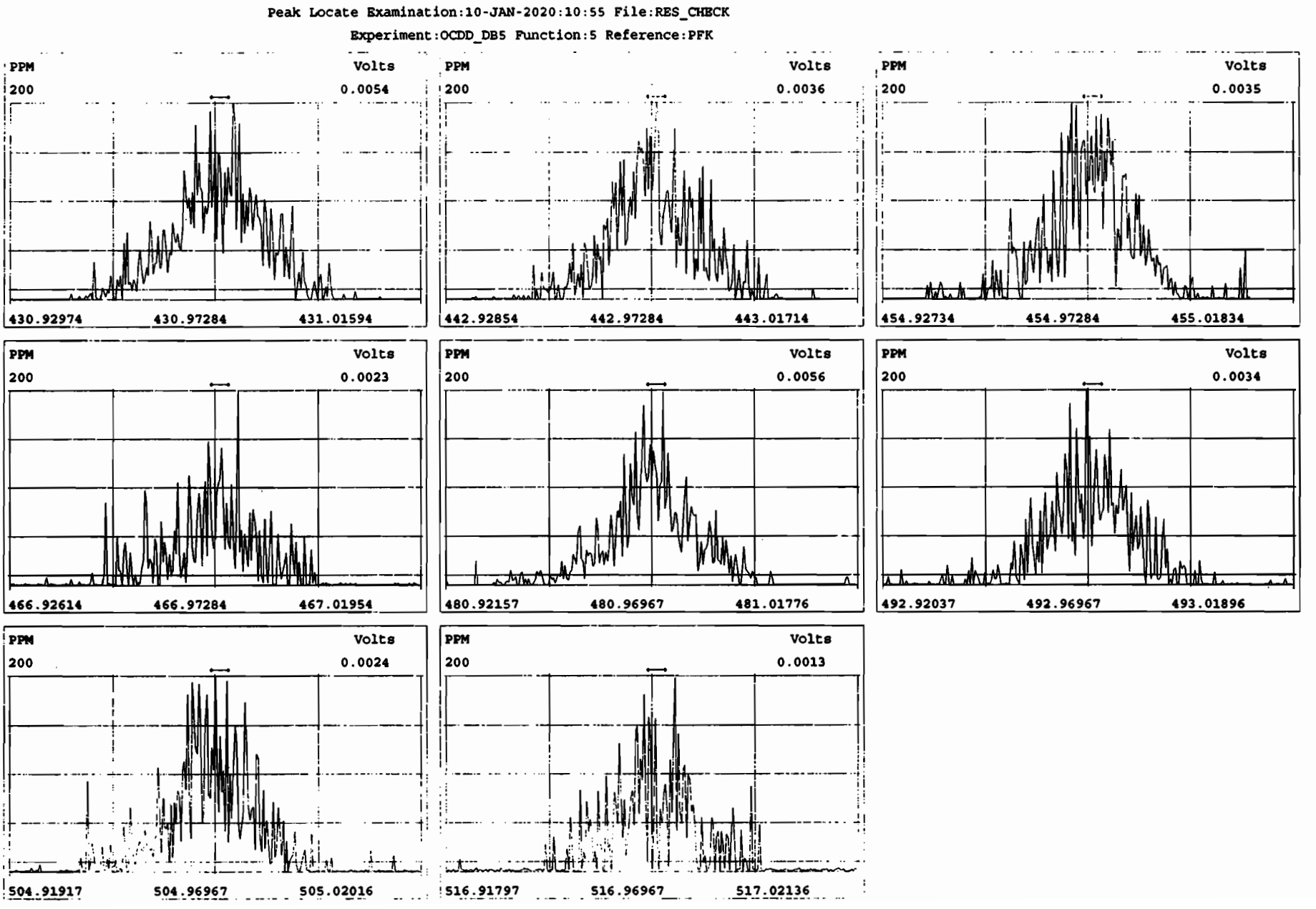











Peak Locate Examination:10-JAN-2020:10:55 File:RES_CHECK
Experiment:OCDD_DB5 Function:5 Reference:PFK
PPM
Volts
200
0.0054
430.92974
430.97284
431.01594
PPM
Volts
200
0.0036
442.92854
442.97284
443.01714
PPM
Volts
200
0.0035
454.92734
454.97284
455.01834
PPM
Volts
200
0.0023
466.92614
466.97284
467.01954
PPM
Volts
200
0.0056
480.92157
480.96967
481.01776
PPM
Volts
200
0.0034
492.92037
492.96967
493.01896
PPM
Volts
200
0.0024
504.91917
504.96967
505.02016
PPM
Volts
200
0.0013
516.91797
516.96967
517.02136

HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calbration ID: ST200201K2-1 **Reviewed By:** HC 2.3.2020

Initials & Date

End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentrations within criteria?	✓	
TCDD/TCDF Valleys <25%	NA	
First and last eluters present?	NA	
Retention Times within criteria?	✓	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	
Forms signed and dated?	✓	
Correct ICAL referenced?	GRB	
Run Log:		
- Correct instrument listed?	✓	↓
- Samples within 12 hour clock?	(Y)	N
- Bottle position verfied?	GRB	

	Beg.	End
Mass resolution ≥	✓	✓ (A)
☐ 5k ☒ 6-8K ☐ 8K ☐ 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	✓	NA
GC Break <20%	✓	

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours — NA

Comments:

(A) END RES CHECK HAD ONE MASS BELOW ~~10K~~ 6K GRB 02/02/2020

Quantify Sample Summary Report **MassLynx 4.1 SCN815**
Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-1.qld

Last Altered: Sunday, February 02, 2020 12:19:07 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:20:07 Pacific Standard Time

GRB 02/02/2020
HL 2.3.2020

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	2 Hexachlorobenzene	8.45e5	8.07e5	1.23	NO	0.997	1.000	22.63	22.63	1.001	1.001	NO	52.5	105	0.0107	52.5
2	3 Alpha-BHC	2.90e5	3.11e5	2.19	NO	0.862	1.000	23.20	23.17	1.001	1.002	NO	54.1	108	0.257	54.1
3	4 Lindane (gamma-BHC)	2.18e5	2.33e5	2.16	NO	0.869	1.000	26.48	26.46	1.001	1.001	NO	53.7	107	0.405	53.7
4	5 Beta-BHC	2.02e5	1.84e5	2.22	NO	1.02	1.000	28.51	28.53	1.001	1.000	NO	53.8	108	0.371	53.8
5	6 Delta-BHC	2.12e5	2.12e5	2.14	NO	0.952	1.000	30.21	30.21	1.001	1.001	NO	52.6	105	0.312	52.6
6	7 Heptachlor	1.61e5	1.43e5	1.14	NO	1.08	1.000	28.64	28.65	1.001	1.001	NO	52.5	105	0.0870	52.5
7	9 Aldrin	1.92e5	1.70e5	1.64	NO	1.11	1.000	30.77	30.77	1.001	1.001	NO	50.9	102	0.128	50.9
8	10 Oxychlordane	4.91e4	4.28e4	1.60	NO	1.09	1.000	33.34	33.35	1.001	1.001	NO	52.5	105	0.455	52.5
9	11 cis-Heptachlor Epoxide	6.42e4	5.68e4	1.57	NO	1.13	1.000	34.13	34.14	1.001	1.001	NO	50.0	100	0.338	50.0
10	12 trans-Heptachlor Epox...	1.53e4	5.68e4	1.50	NO	0.260	1.000	34.62	34.64	1.015	1.015	NO	51.7	103	1.47	51.7
11	13 trans-Chlordane (gam...	4.77e4	4.18e4	1.63	NO	1.18	1.000	35.05	35.05	1.000	1.001	NO	48.4	96.8	0.414	48.4
12	14 trans-Nonachlor	5.01e4	4.68e4	1.59	NO	1.08	1.000	35.24	35.23	1.000	1.001	NO	49.7	99.4	0.389	49.7
13	15 cis-Chlordane	5.16e4	4.68e4	1.62	NO	1.11	1.000	35.72	35.73	1.014	1.014	NO	49.8	99.6	0.378	49.8
14	16 Endosulfan I (alpha)	3.37e4	2.95e4	1.48	NO	1.16	1.000	35.83	35.83	1.001	1.001	NO	49.5	98.9	0.588	49.5
15	18 2,4'-DDE	9.85e5	1.00e6	1.35	NO	0.984	1.000	35.70	35.70	1.000	1.000	NO	50.0	100	0.252	50.0
16	19 4,4'-DDE	7.30e5	7.43e5	1.35	NO	0.996	1.000	36.78	36.78	1.000	1.000	NO	49.3	98.6	0.316	49.3
17	20 Dieldrin	1.01e5	8.87e4	1.58	NO	1.09	1.000	37.27	37.28	1.001	1.000	NO	52.3	105	0.316	52.3
18	21 Endrin	8.30e4	7.57e4	1.63	NO	1.06	1.000	38.66	38.69	1.001	1.000	NO	51.9	104	0.343	51.9
19	22 cis-Nonachlor	5.76e4	5.10e4	1.54	NO	1.08	1.000	38.97	38.97	1.000	1.000	NO	52.5	105	0.501	52.5
20	23 Endosulfan II (beta)	1.94e4	1.60e4	1.62	NO	1.11	1.000	39.69	39.70	1.000	1.000	NO	54.7	109	1.60	54.7
21	24 2,4'-DDD	1.07e6	9.70e5	1.54	NO	1.05	1.000	37.91	37.92	1.000	1.000	NO	52.5	105	0.337	52.5
22	25 2,4'-DDT	7.07e5	6.52e5	1.56	NO	1.03	1.000	39.05	39.05	1.000	1.000	NO	52.7	105	0.521	52.7
23	26 4,4'-DDD	9.80e5	8.38e5	1.55	NO	1.12	1.000	39.19	39.18	1.000	1.000	NO	52.0	104	0.343	52.0
24	27 4,4'-DDT	6.23e5	5.25e5	1.53	NO	1.13	1.000	40.26	40.25	1.000	1.000	NO	52.4	105	0.554	52.4
25	28 Endosulfan Sulfate	2.37e4	2.32e4	1.36	NO	0.987	1.000	41.42	41.44	1.000	1.000	NO	51.7	103	1.63	51.7
26	29 4,4'-Methoxychlor	7.37e5	5.70e6	6.07	NO	1.27	1.000	43.28	43.29	1.000	1.000	NO	51.1	102	0.192	51.1
27	30 Mirex	2.62e5	2.44e5	1.55	NO	1.04	1.000	43.86	43.86	1.000	1.000	NO	51.5	103	0.147	51.5
28	31 Endrin Aldehyde	4.16e4	3.85e5	0.65	NO	1.06	1.000	40.83	40.84	1.001	1.000	NO	51.1	102	0.644	51.1
29	32 Endrin Ketone	3.36e4	3.27e5	0.59	NO	0.974	1.000	43.98	44.00	1.000	1.000	NO	52.7	105	0.912	52.7
30	34 13C6-Hexachlorobenz...	8.07e5	1.22e6	1.27	NO	0.674	1.000	22.63	22.61	0.871	0.872	NO	49.2	98.4	0.0175	
31	35 13C6-Alpha-BHC	3.11e5	1.22e6	0.80	NO	0.255	1.000	23.16	23.15	0.892	0.892	NO	50.1	100	0.455	

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-1.qld

Last Altered: Sunday, February 02, 2020 12:19:07 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:20:07 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
32	36 13C6-Lindane (gamma)	2.33e5	1.22e6	0.80	NO	0.201	1.000	26.42	26.45	1.019	1.018	NO	47.8	95.5	0.577	
33	37 13C6-Beta-BHC	1.84e5	1.22e6	0.79	NO	0.155	1.000	28.51	28.50	1.098	1.099	NO	49.0	97.9	0.749	
34	38 13C6-Delta-BHC	2.12e5	1.22e6	0.78	NO	0.183	1.000	30.20	30.19	1.163	1.164	NO	47.6	95.1	0.633	
35	39 13C10-Heptachlor	1.43e5	1.22e6	1.24	NO	0.106	1.000	28.64	28.61	1.103	1.104	NO	55.4	111	0.147	
36	40 13C12-Aldrin	1.70e5	1.22e6	1.61	NO	0.130	1.000	30.75	30.74	1.185	1.185	NO	53.5	107	0.393	
37	41 13C10-Oxychlordane	4.28e4	1.22e6	1.69	NO	0.0314	1.000	33.34	33.32	1.284	1.285	NO	56.0	112	1.63	
38	42 13C10-cis-Heptachlor ...	5.68e4	1.22e6	1.60	NO	0.0404	1.000	34.12	34.11	1.315	1.315	NO	57.6	115	1.26	
39	43 13C10-trans-Chlordan...	4.18e4	1.22e6	1.72	NO	0.0281	1.000	35.03	35.03	1.350	1.350	NO	61.0	122	1.82	
40	44 13C10-trans-Nonachlor	4.68e4	1.22e6	1.57	NO	0.0330	1.000	35.22	35.22	1.357	1.357	NO	58.2	116	1.55	
41	45 13C9-Endosulfan I (al...	2.95e4	1.22e6	1.80	NO	0.0219	1.000	35.80	35.80	1.380	1.380	NO	55.3	111	2.33	
42	46 13C12-2,4'-DDE	1.00e6	1.22e6	1.59	NO	0.765	1.000	35.68	35.69	0.996	0.995	NO	53.7	107	0.344	
43	47 13C12-4,4'-DDE	7.43e5	1.22e6	1.54	NO	0.556	1.000	36.75	36.77	1.026	1.025	NO	54.9	110	0.473	
44	48 13C12-Dieldrin	8.87e4	1.22e6	1.61	NO	0.0759	1.000	37.27	37.25	1.039	1.040	NO	48.0	95.9	0.673	
45	49 13C12-Endrin	7.57e4	1.22e6	1.56	NO	0.0477	1.000	38.67	38.66	1.079	1.079	NO	65.2	130	1.07	
46	50 13C10-cis-Nonachlor	5.10e4	1.22e6	1.73	NO	0.0389	1.000	38.96	38.96	1.087	1.087	NO	53.8	108	1.31	
47	51 13C9-Endosulfan II	1.60e4	1.22e6	1.51	NO	0.0122	1.000	39.69	39.69	1.107	1.107	NO	53.7	107	4.19	
48	52 13C12-2,4'-DDD	9.70e5	1.22e6	1.60	NO	0.754	1.000	37.90	37.91	1.461	1.461	NO	52.8	106	0.298	
49	53 13C12-2,4'-DDT	6.52e5	1.22e6	1.82	NO	0.519	1.000	39.03	39.03	1.504	1.504	NO	51.6	103	0.433	
50	54 13C12-4,4'-DDD	8.38e5	1.22e6	1.62	NO	0.662	1.000	39.16	39.17	1.509	1.509	NO	51.9	104	0.339	
51	55 13C12-4,4'-DDT	5.25e5	1.22e6	1.58	NO	0.419	1.000	40.23	40.24	1.551	1.551	NO	51.4	103	0.536	
52	56 13C9-Endosulfan Sulf...	2.32e4	1.22e6	1.60	NO	0.0189	1.000	41.43	41.42	1.155	1.156	NO	50.3	101	3.01	
53	57 13C12-Methoxychlor	5.70e6	1.22e6	23.44	NO	0.473	1.000	43.28	43.28	1.207	1.207	NO	495	99.0	0.755	
54	58 13C10-Mirex	2.44e5	1.22e6	1.55	NO	0.194	1.000	43.86	43.84	1.223	1.223	NO	51.6	103	0.239	
55	59 13C12-Endrin Aldehyde	3.85e5	1.22e6	0.43	NO	0.0388	1.000	40.83	40.81	1.138	1.139	NO	407	81.4	2.28	
56	60 13C12-Endrin Ketone	3.27e5	1.22e6	0.45	NO	0.0330	1.000	44.01	43.98	1.227	1.228	NO	408	81.6	2.68	
57	62 13C-PCB-15	1.22e6	1.22e6	1.59	NO	1.00	1.000	25.96	25.95	1.000	1.000	NO	50.0	100	0.0881	

50-150

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 12:27:53 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:28:10 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

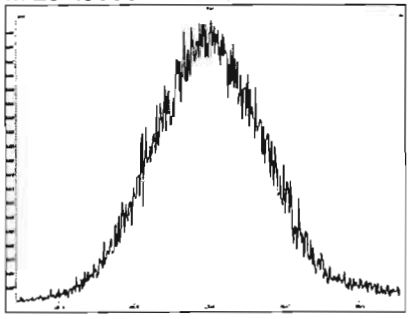
Compound name: Hexachlorobutadiene

	Name	ID	Acq.Date	Acq.Time
1	200201K2_1	ST200201K2-1 1699 CS3 19K1309	01-Feb-20	13:55:36
2	200201K2_2	GC200201K2-1 GC BREAK	01-Feb-20	14:43:33
3	200201K2_3	B9L0235-BS1 OPR 1	01-Feb-20	15:31:39
4	200201K2_4	SOLVENT BLANK	01-Feb-20	16:20:54
5	200201K2_5	B0A0087-BLK1 Method Blank 1	01-Feb-20	17:10:04
6	200201K2_6	1904016-06RE2@5X PDI-141RAB-10-17.7-19...	01-Feb-20	17:59:16
7	200201K2_7	1904016-06RE2 PDI-141RAB-10-17.7-191107...	01-Feb-20	18:48:29
8	200201K2_8	SOLVENT BLANK	01-Feb-20	19:38:43
9	200201K2_9	1904021-01RE1@5X PDI-1142RAB-20-30.4-1...	01-Feb-20	20:26:51
10	200201K2_10	1904021-01RE1 PDI-1142RAB-20-30.4-19111...	01-Feb-20	21:16:02
11	200201K2_11	SOLVENT BLANK	01-Feb-20	22:06:24
12	200201K2_12	1904021-04RE2@5X PDI-142RAB-20-30.4-19...	01-Feb-20	22:55:23
13	200201K2_13	1904021-04RE2 PDI-142RAB-20-30.4-191112...	01-Feb-20	23:44:36

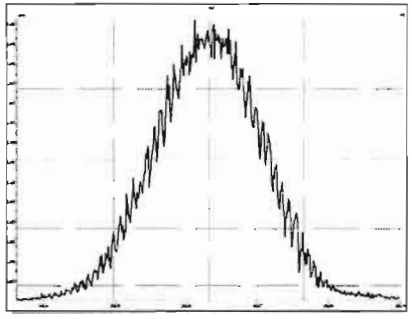
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:50:57 Pacific Standard Time

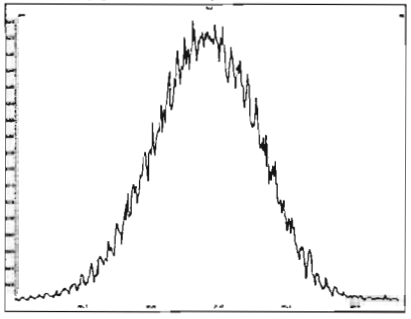
M 254.9856 R 7141



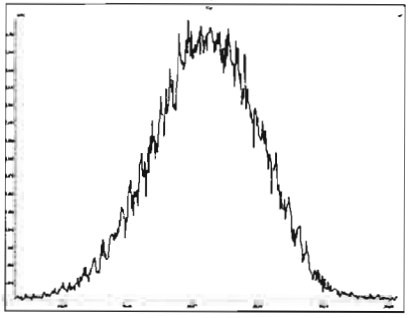
M 268.9824 R 8278



M 280.9824 R 7835



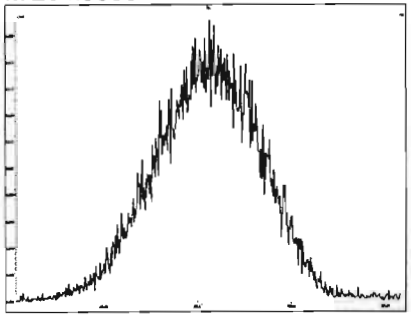
M 292.9824 R 7737



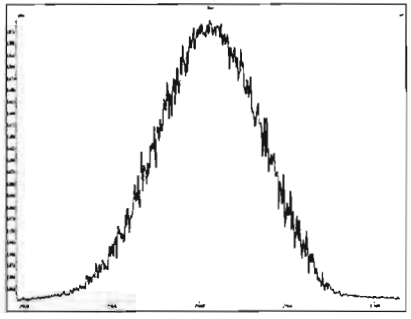
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:51:34 Pacific Standard Time

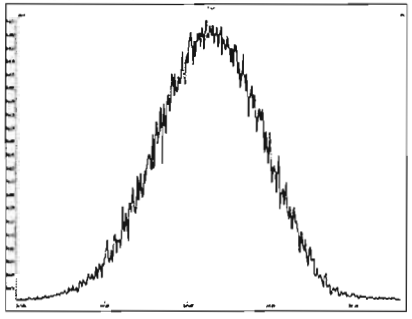
M 204.9888 R 8710



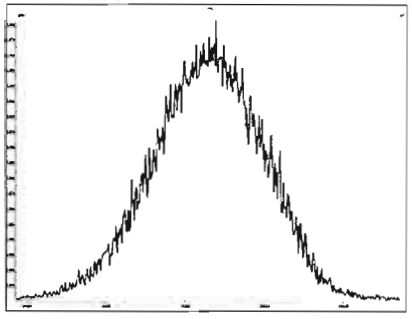
M 218.9856 R 8168



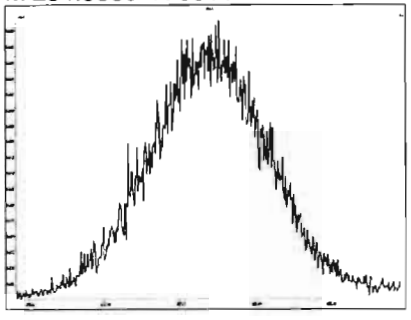
M 230.9856 R 7860



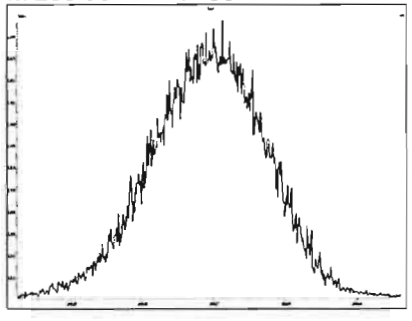
M 242.9856 R 7418



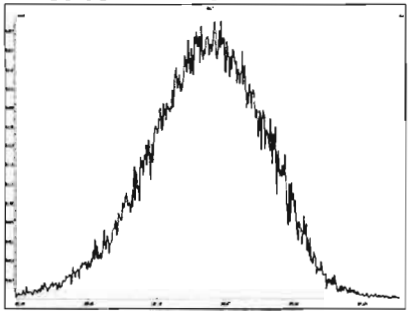
M 254.9856 R 6511



M 268.9824 R 7185



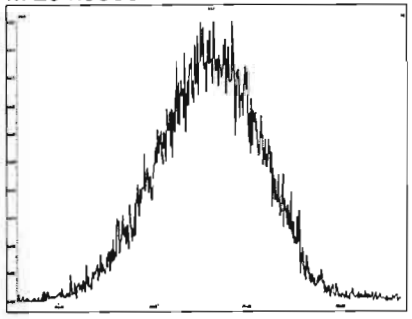
M 280.9824 R 7267



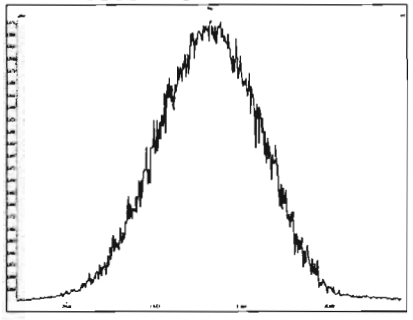
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:52:22 Pacific Standard Time

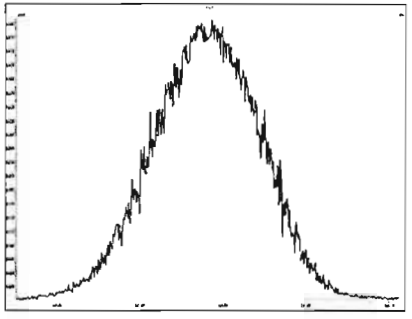
M 204.9888 R 8278



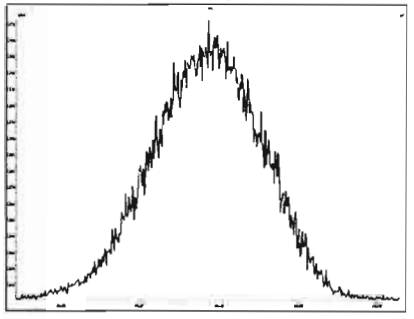
M 218.9856 R 8171



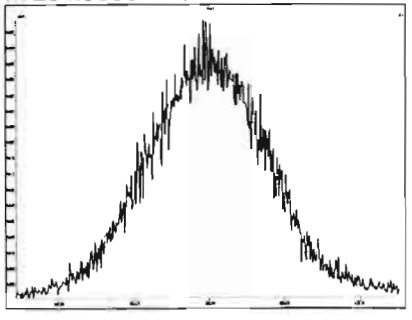
M 230.9856 R 7739



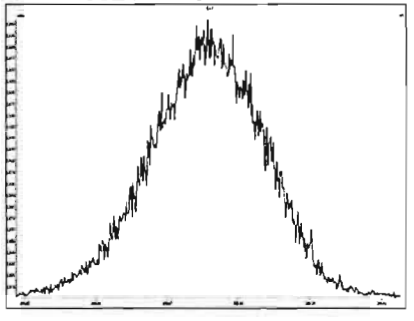
M 242.9856 R 7310



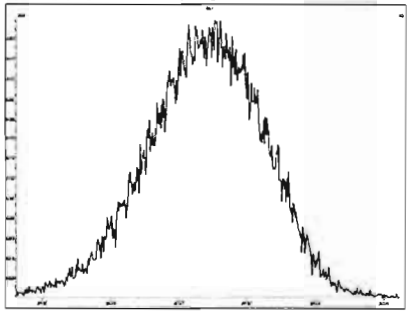
M 254.9856 R 6494



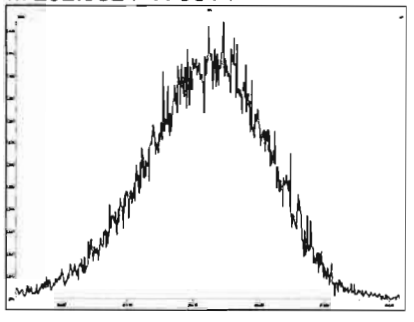
M 268.9824 R 7024



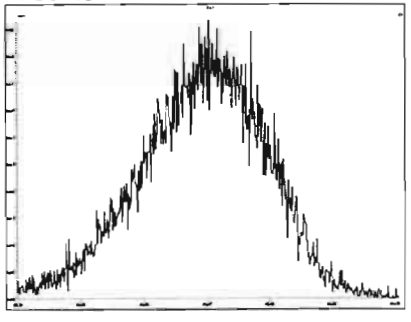
M 280.9824 R 7204



M 292.9824 R 6814



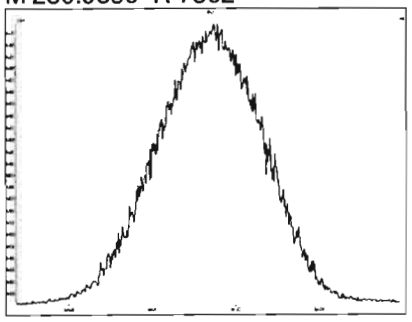
M 304.9824 R 7247



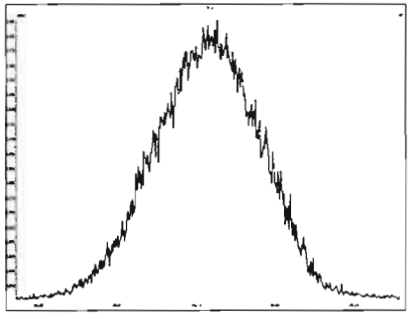
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:53:46 Pacific Standard Time

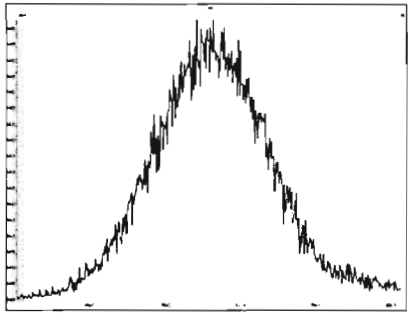
M 230.9856 R 7862



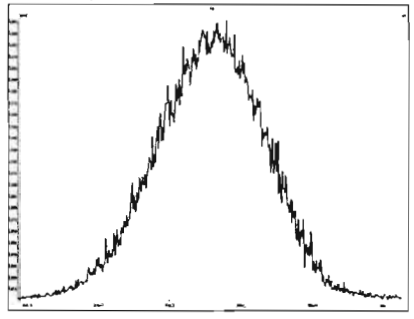
M 242.9856 R 7960



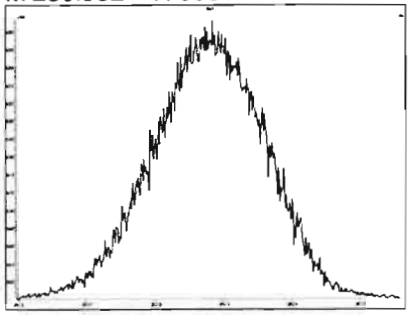
M 254.9856 R 6686



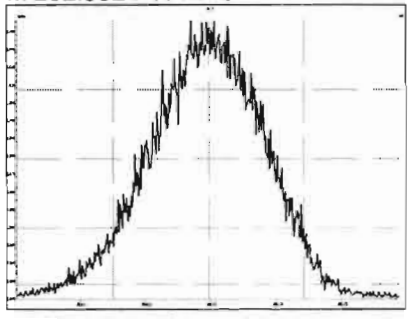
M 268.9824 R 7574



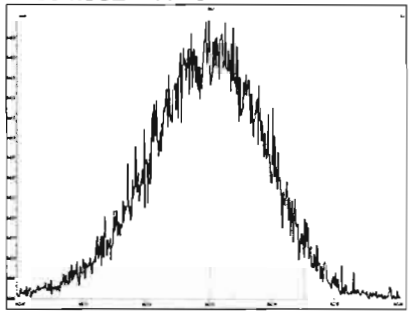
M 280.9824 R 8061



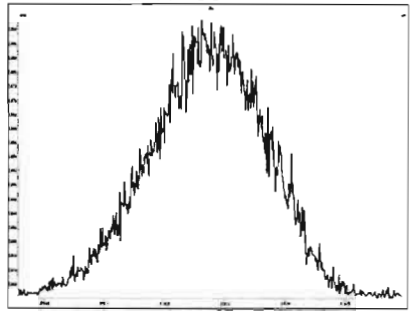
M 292.9824 R 7440



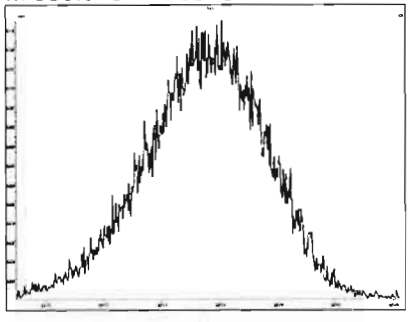
M 304.9824 R 7644



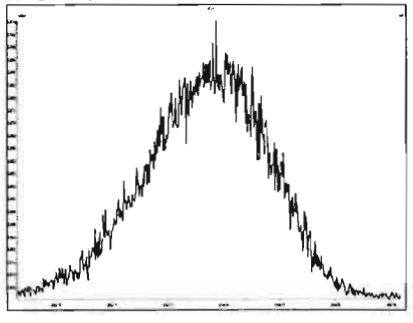
M 318.9792 R 7332



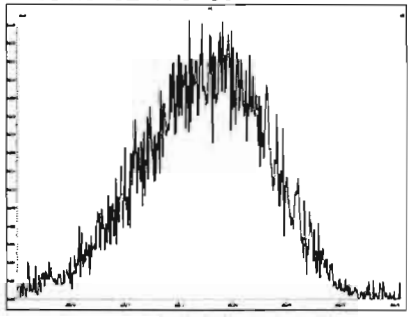
M 330.9792 R 6576



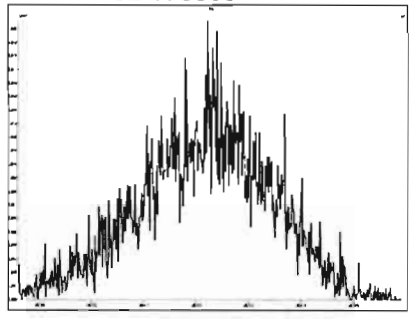
M 342.9792 R 6795



M 354.9792 R 6408



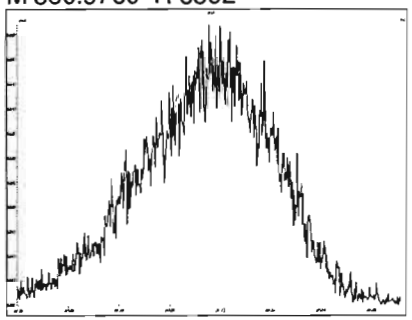
M 366.9792 R 8305



File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:53:46 Pacific Standard Time

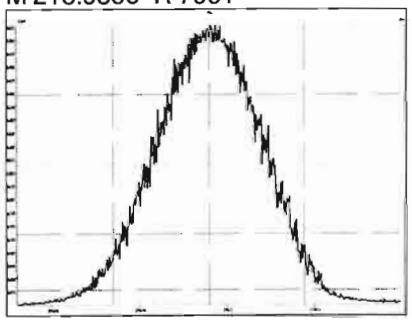
M 380.9760 R 6392



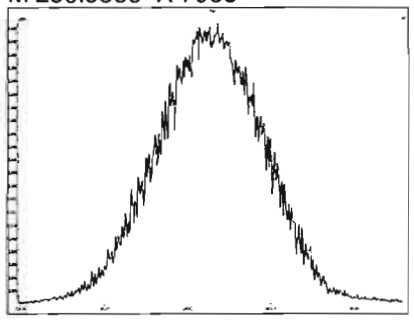
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Saturday, February 01, 2020 13:54:33 Pacific Standard Time

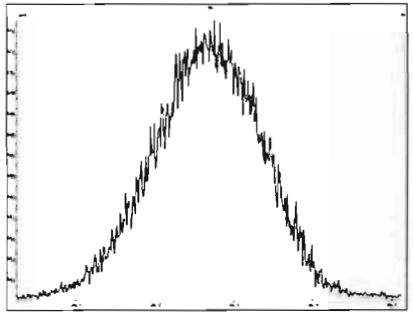
M 218.9856 R 7961



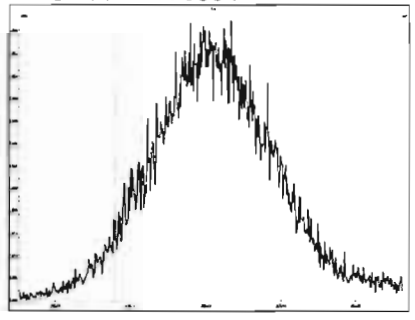
M 230.9856 R 7985



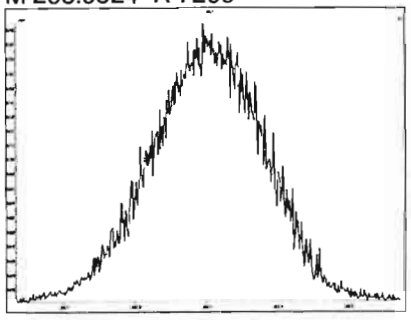
M 242.9856 R 8012



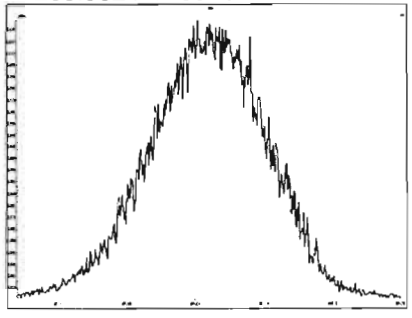
M 254.9856 R 6394



M 268.9824 R 7266



M 280.9824 R 6926



Vista Analytical Laboratory VG-11

Dataset: U:\VG11.PRO\Results\200201K2\200201K2-2.qld

Last Altered: Sunday, February 02, 2020 12:22:27 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:22:55 Pacific Standard Time

GRB 02/02/2020

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 26 Jan 2020 09:58:44
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

HC 7.4.2020

Name: 200201K2_2, Date: 01-Feb-2020, Time: 14:43:33, ID: GC200201K2-1 GC BREAK, Description: GC BREAK

	#	Name	Resp	RA	n/y	RT
1	1	Endrin Aldehyde	1.48e3	0.74	NO	40.82
2	2	Endrin Ketone	5.39e3	0.56	NO	44.00
3	3	Endrin	4.95e5	1.59	NO	38.69
4	4	4,4'-DDE			NO	
5	5	4,4'-DDD	1.74e4	1.60	NO	39.18
6	6	4,4'-DDT	9.25e6	1.57	NO	40.24

$$\frac{EA + EK}{E} \times 100\% = 1.39\%$$

$$\frac{DDE + DDD}{DDT} \times 100\% = 0.19\%$$

Vista Analytical Laboratory VG-11

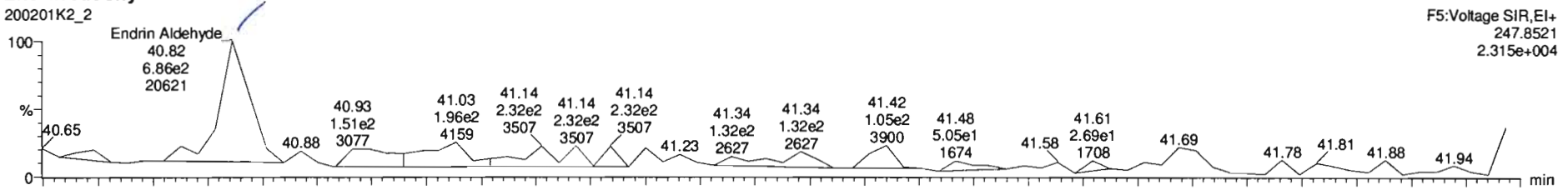
Dataset: Untitled

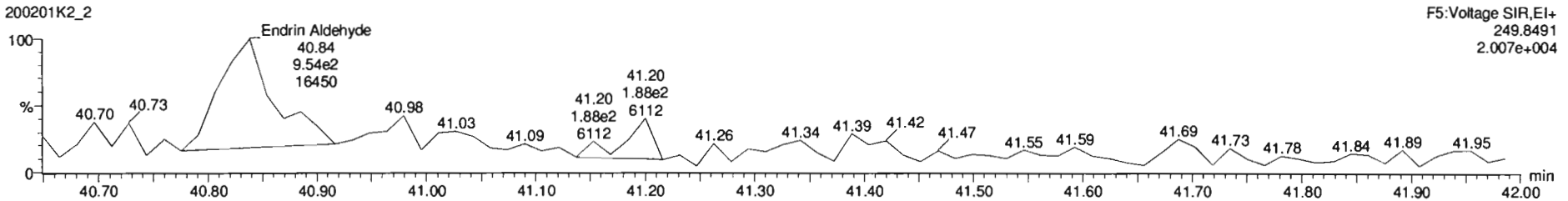
Last Altered: Sunday, February 02, 2020 12:20:24 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:21:08 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 26 Jan 2020 09:58:44
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

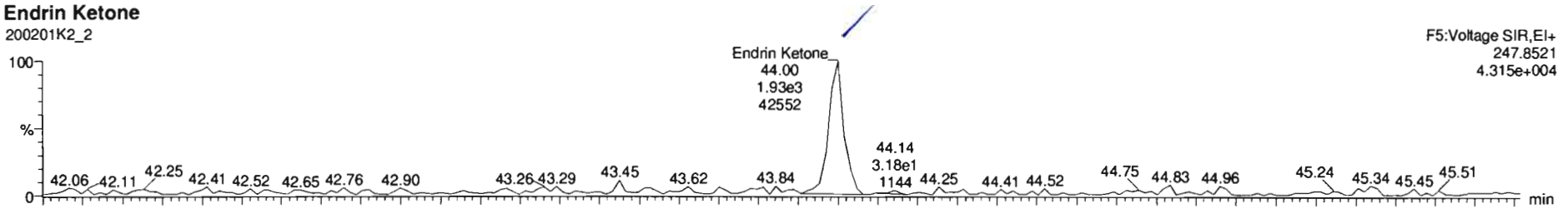
Name: 200201K2_2, Date: 01-Feb-2020, Time: 14:43:33, ID: GC200201K2-1 GC BREAK, Description: GC BREAK

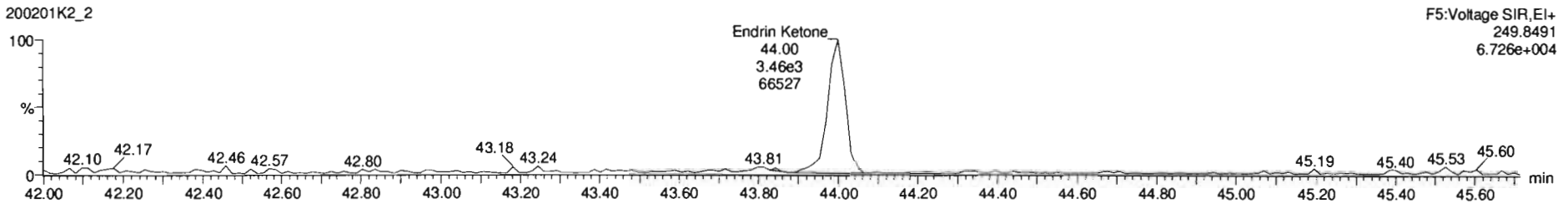
Endrin Aldehyde





Endrin Ketone

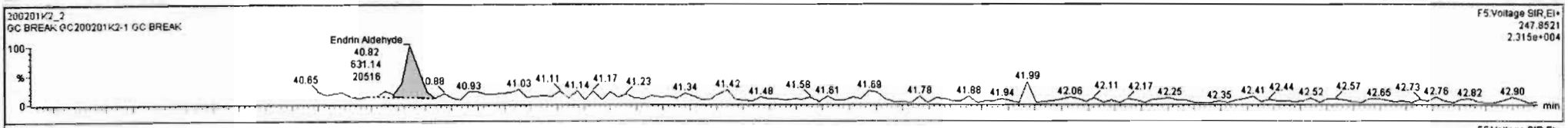


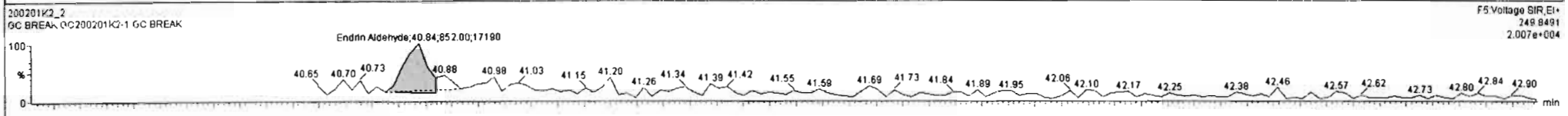


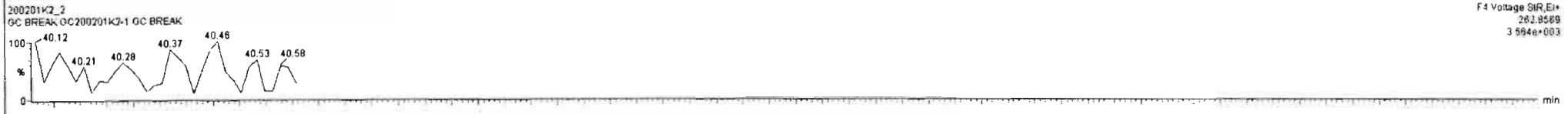
Target1.ynx 200201K2-2.qld [Chromatogram]

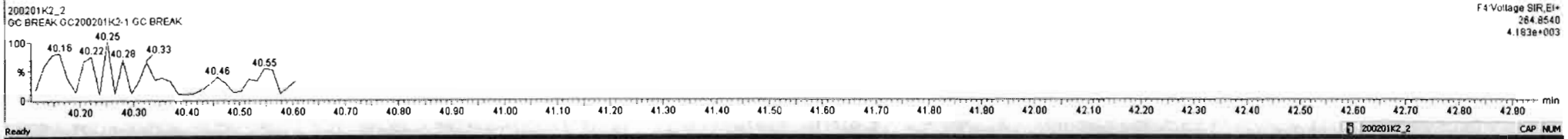
File Edit View Display Processing Window Help

	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	Endrin Aldehyde	1.48e3	0.74	NO		1.000	40.82	0.000				
2	Endrin Ketone	5.39e3	0.56	NO		1.000	44.00	0.000				
3	Endrin	4.95e5	1.59	NO		1.000	38.69	0.000				
4	4,4'-DDE			NO		1.000						
5	4,4'-DDD	1.71e4	1.55	NO		1.000	39.18	0.000				
6	4,4'-DDT	9.25e6	1.57	NO		1.000	40.24	0.000				
7	PFK4					1.000						
8	PFK5											









Ready

200201K2_2 CAP NUM

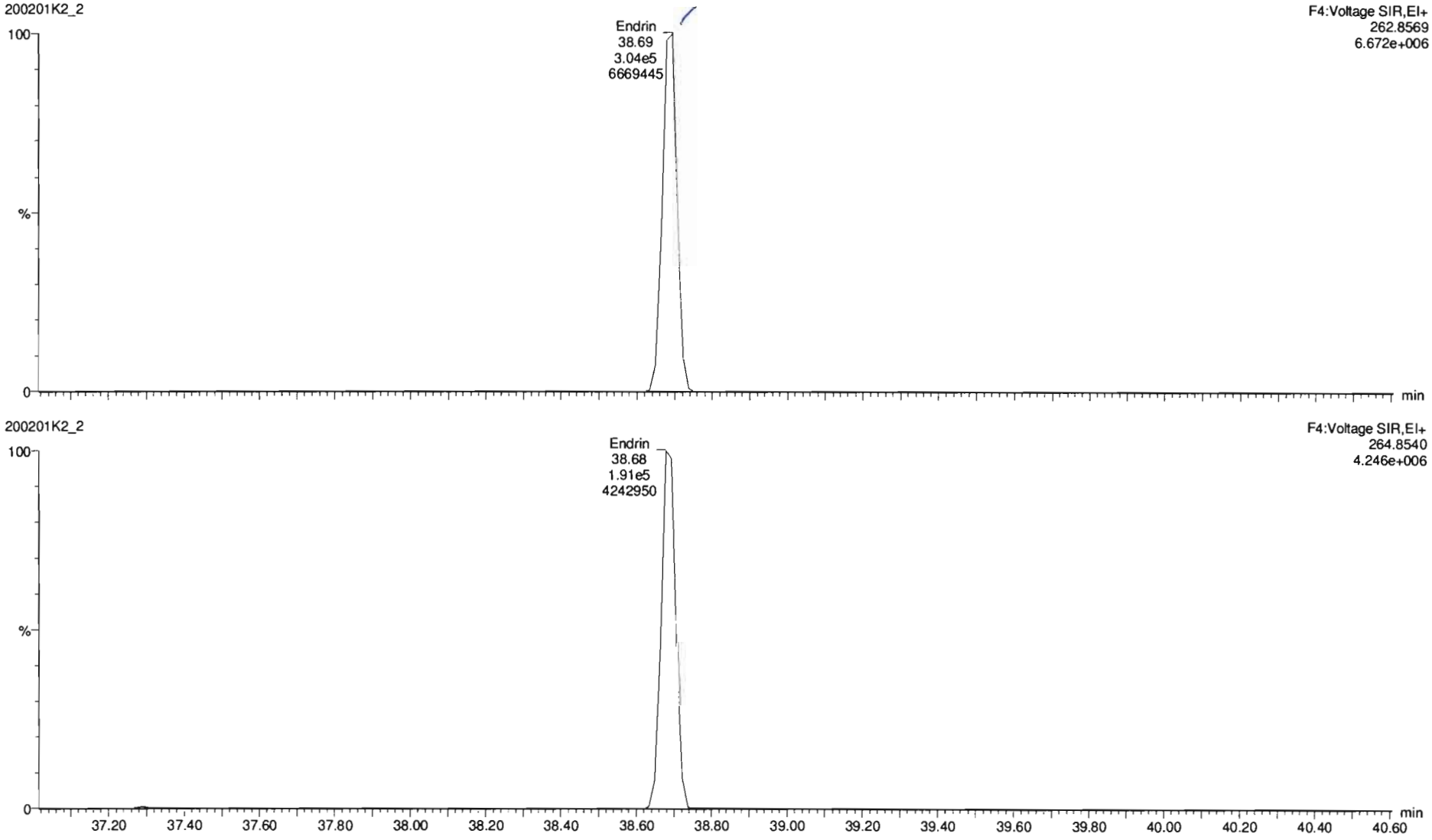
start 12:21 PM

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 12:20:24 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:21:08 Pacific Standard Time

Name: 200201K2_2, Date: 01-Feb-2020, Time: 14:43:33, ID: GC200201K2-1 GC BREAK, Description: GC BREAK

Endrin



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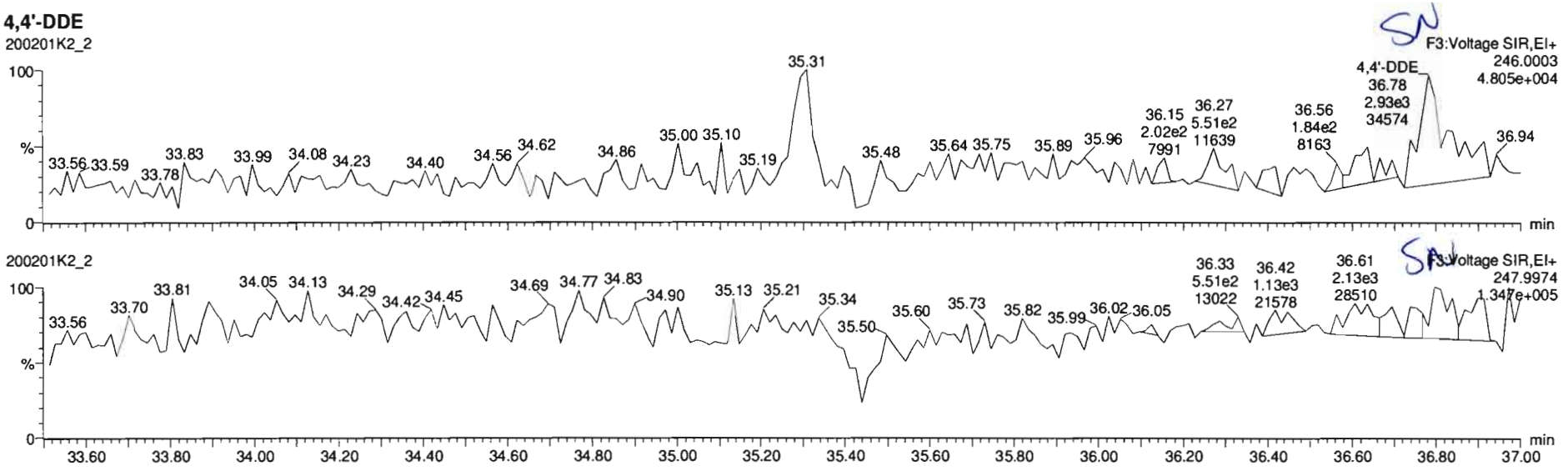
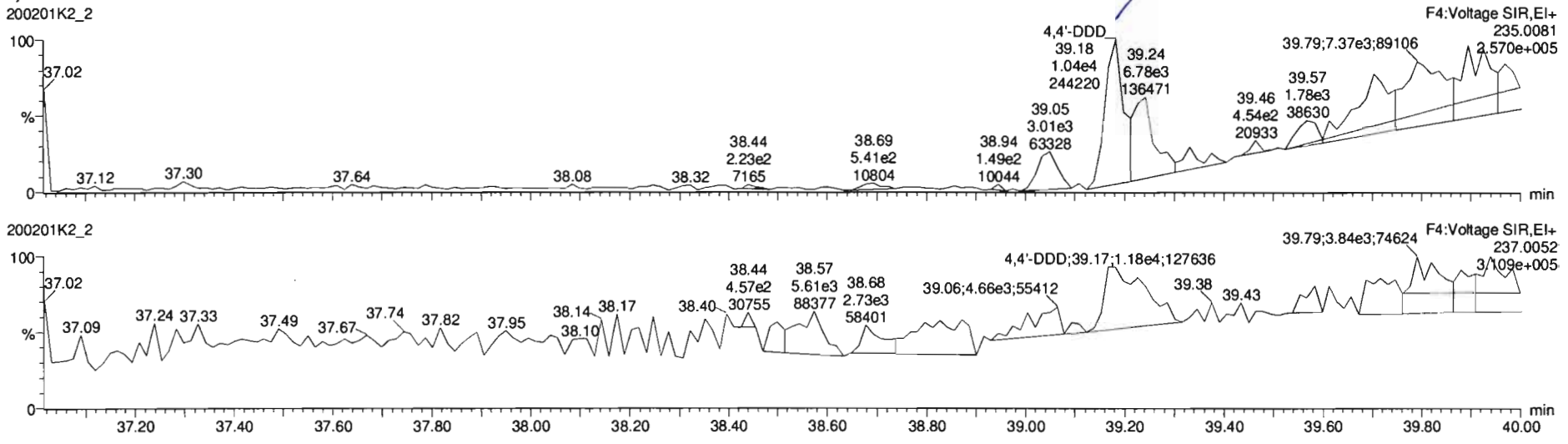
Last Altered: Sunday, February 02, 2020 12:20:24 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:21:08 Pacific Standard Time

Name: 200201K2_2, Date: 01-Feb-2020, Time: 14:43:33, ID: GC200201K2-1 GC BREAK, Description: GC BREAK

4,4'-DDE



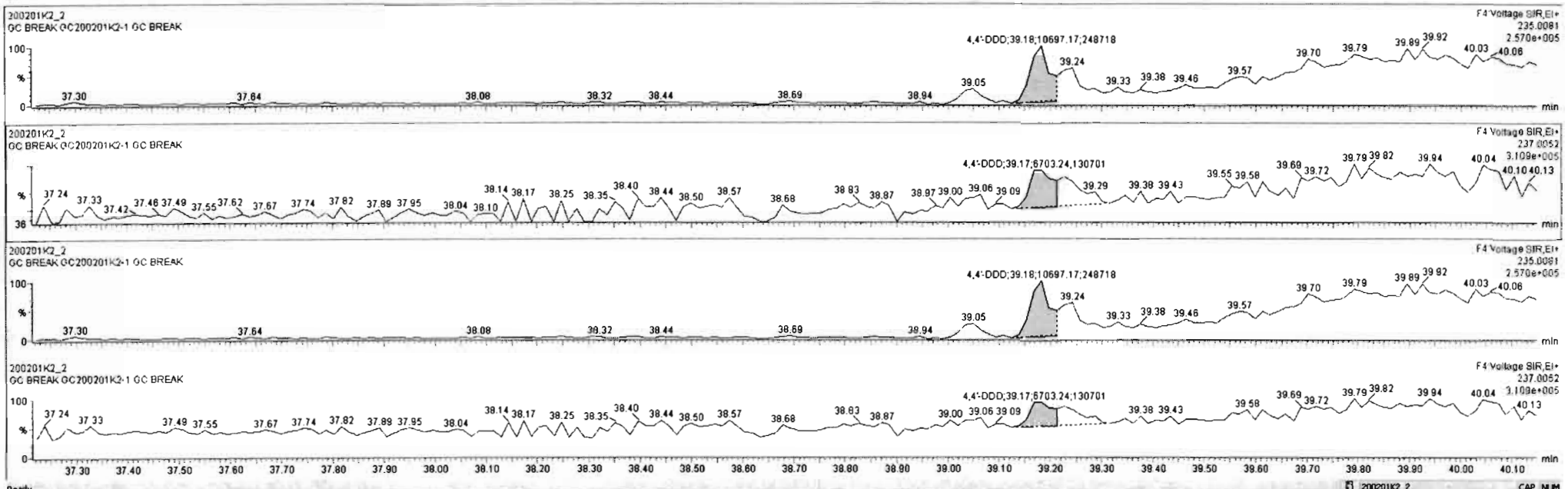
4,4'-DDD



TargetLynx - 200201K2 2.qld * [Chromatogram]

File Edit View Display Processing Window Help

	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	Endrin Aldehyde	1.48e3	0.74	NO		1.000	40.82	0.000				
2	Endrin Ketone	5.39e3	0.56	NO		1.000	44.00	0.000				
3	Endrin	4.95e5	1.59	NO		1.000	38.69	0.000				
4	4,4'-DDE			NO		1.000						
5	4,4'-DDD	1.74e4	1.80	NO		1.000	39.18	0.000				
6	4,4'-DDT	9.25e6	1.57	NO		1.000	40.24	0.000				
7	PFK4					1.000						
8	PFK5											



Ready

200201K2_2 CAP NUM

start

Dataset: Untitled

Last Altered: Sunday, February 02, 2020 12:20:24 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:21:08 Pacific Standard Time

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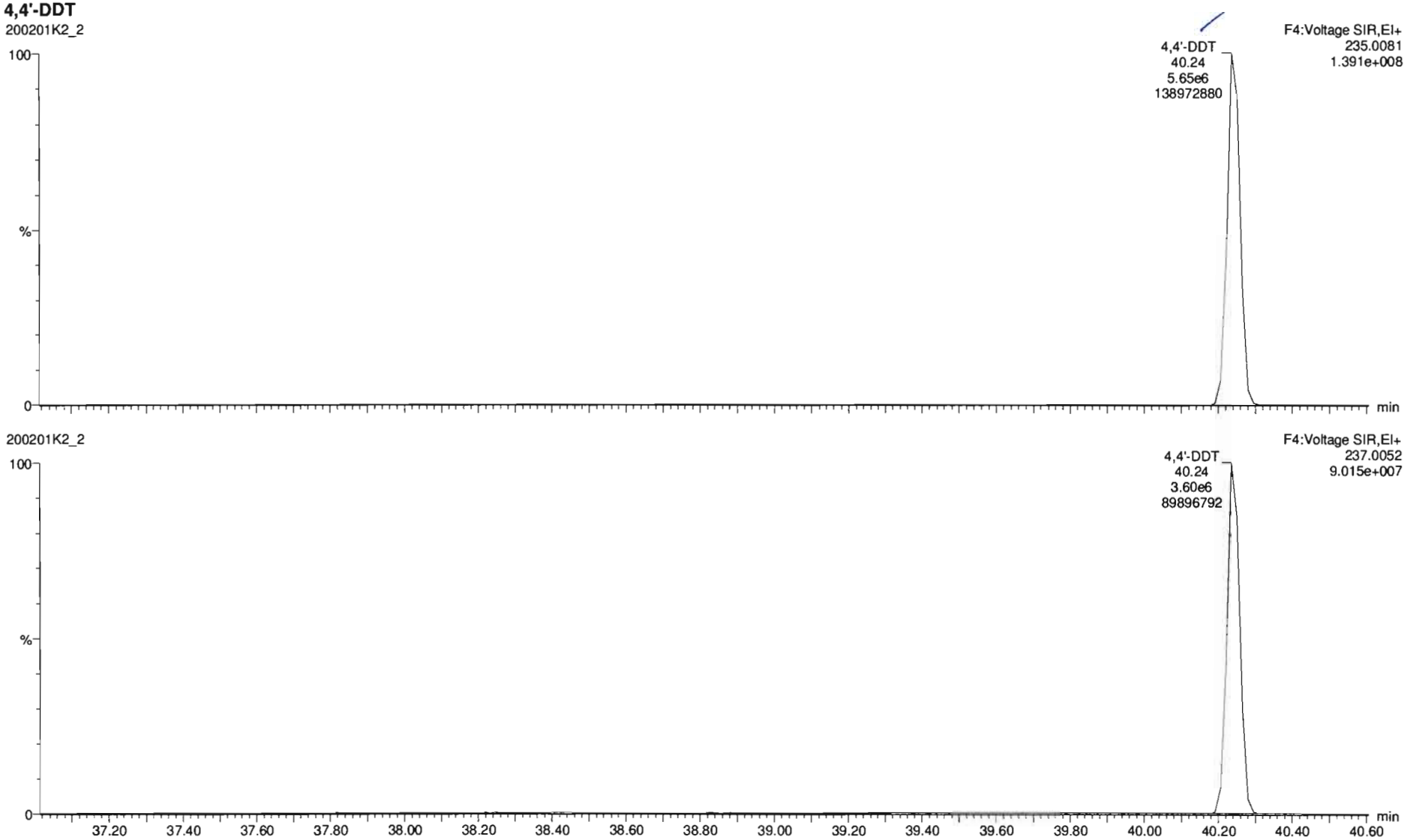
4,4'-DDT



Vista Analytical Laboratory

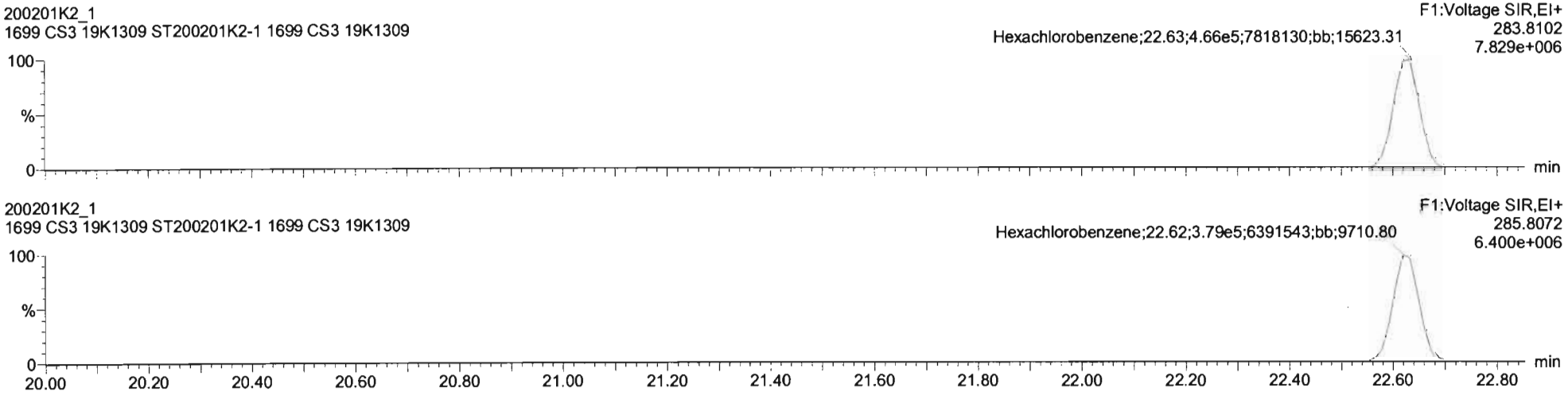
Dataset: Untitled

Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

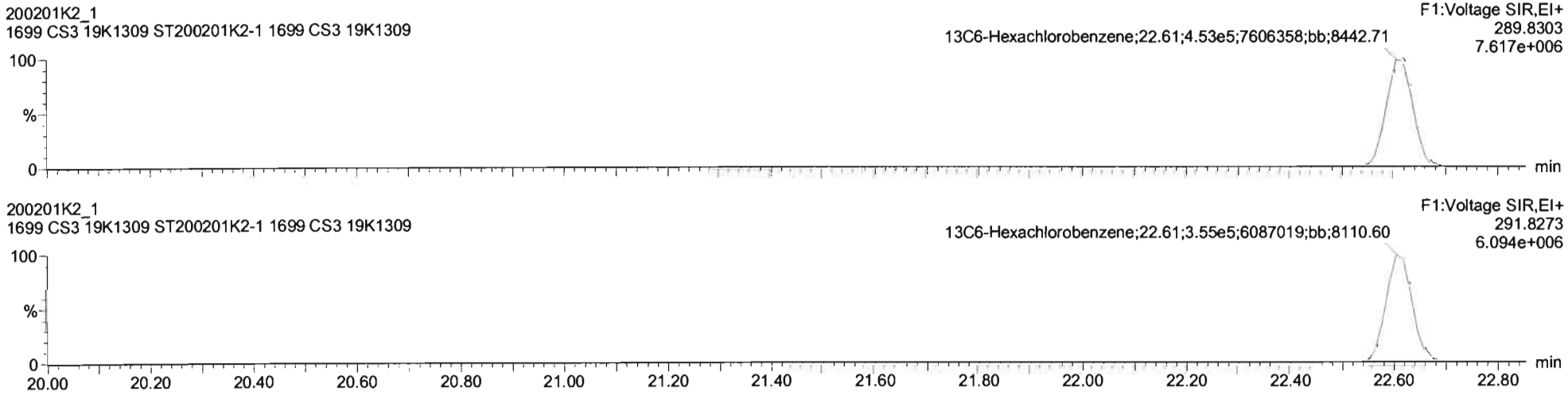
Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Hexachlorobenzene



13C6-Hexachlorobenzene

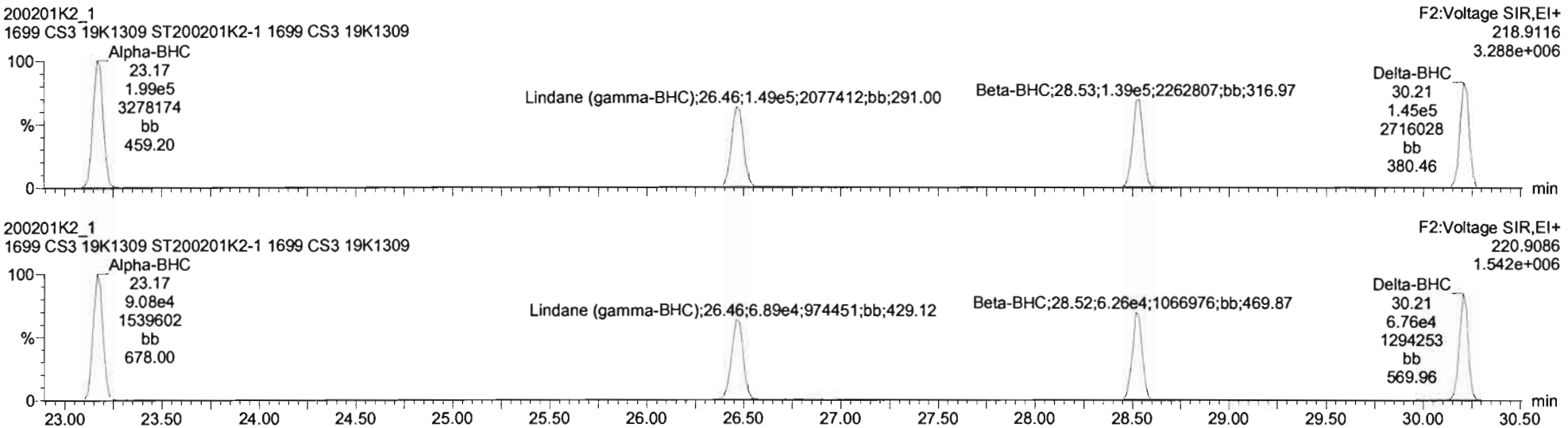


Dataset: Untitled

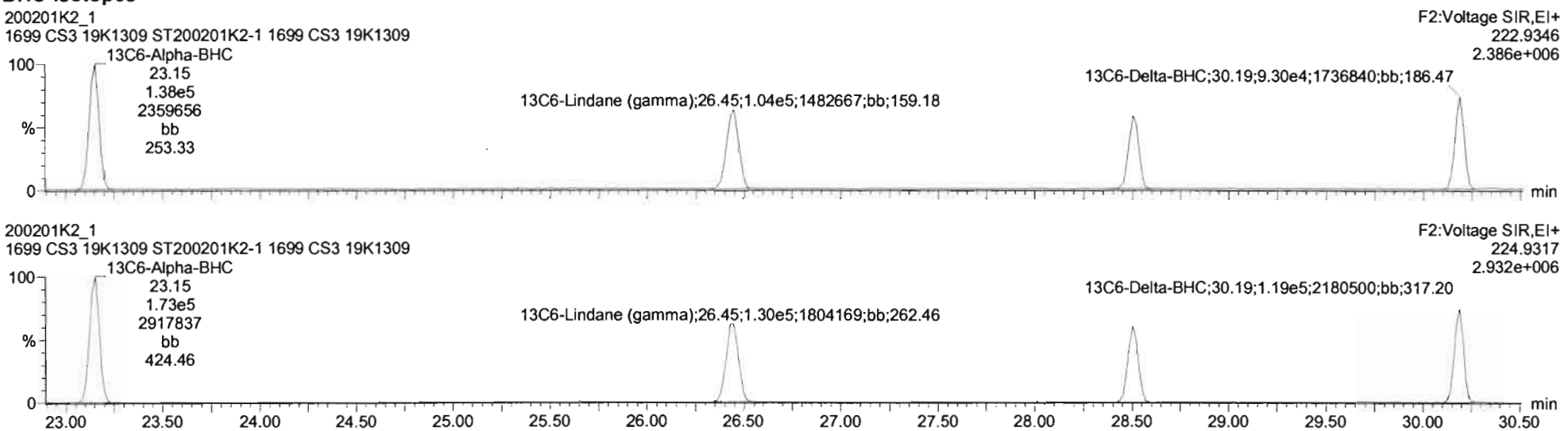
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

BHC Totals



BHC-isotopes



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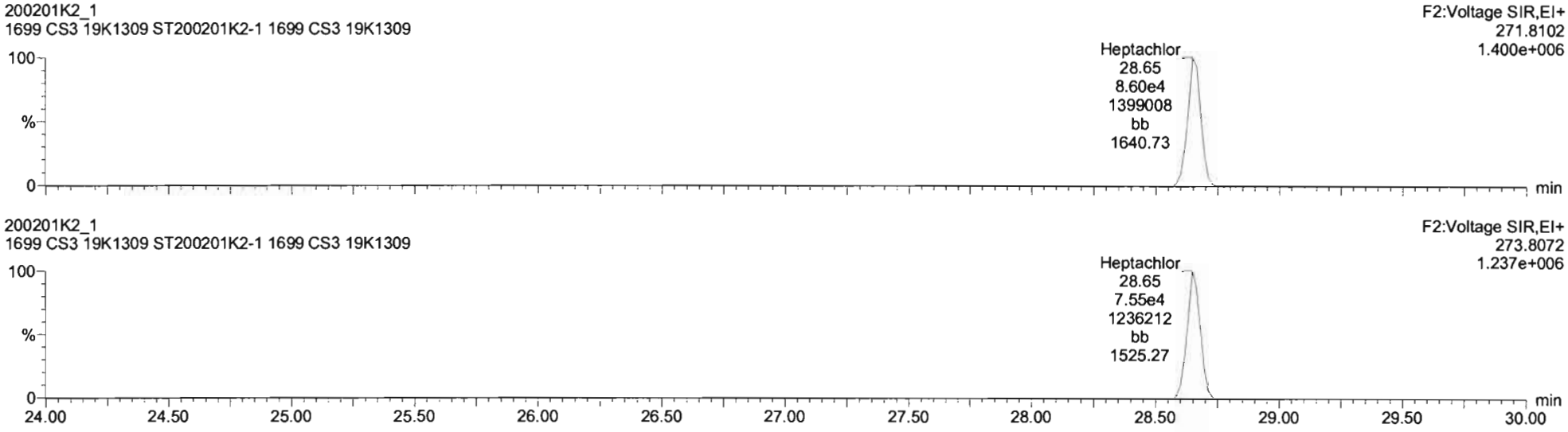
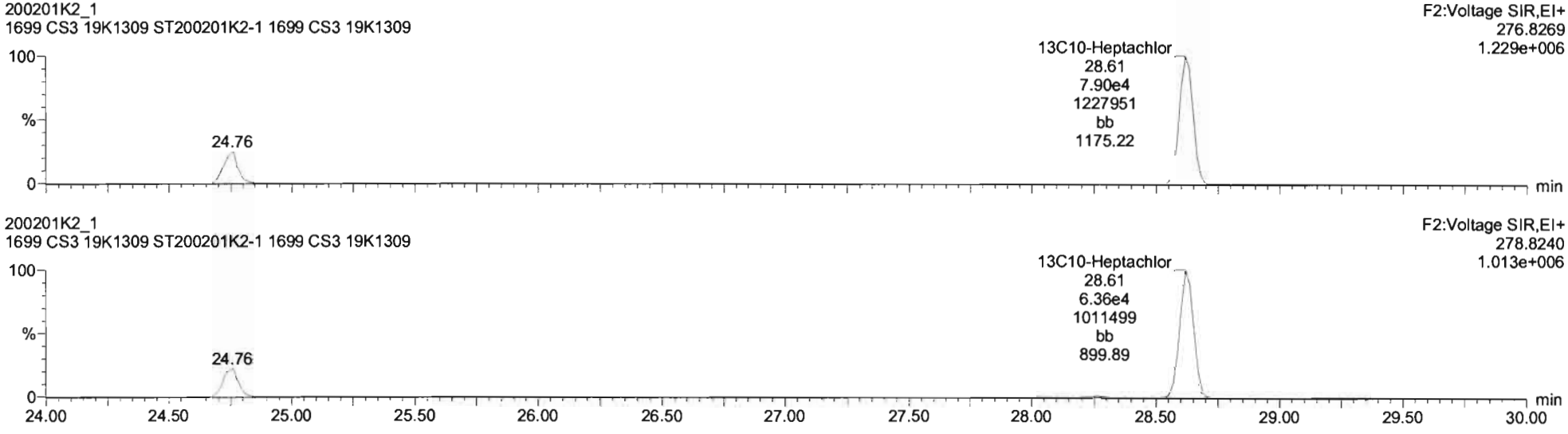
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Heptachlor



13C10-Heptachlor



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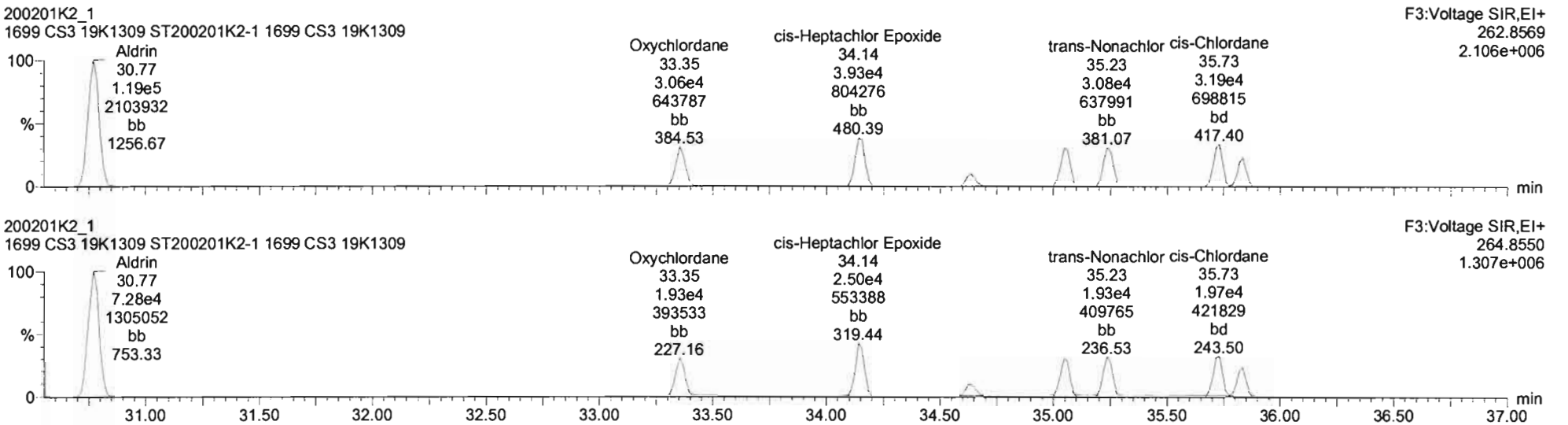
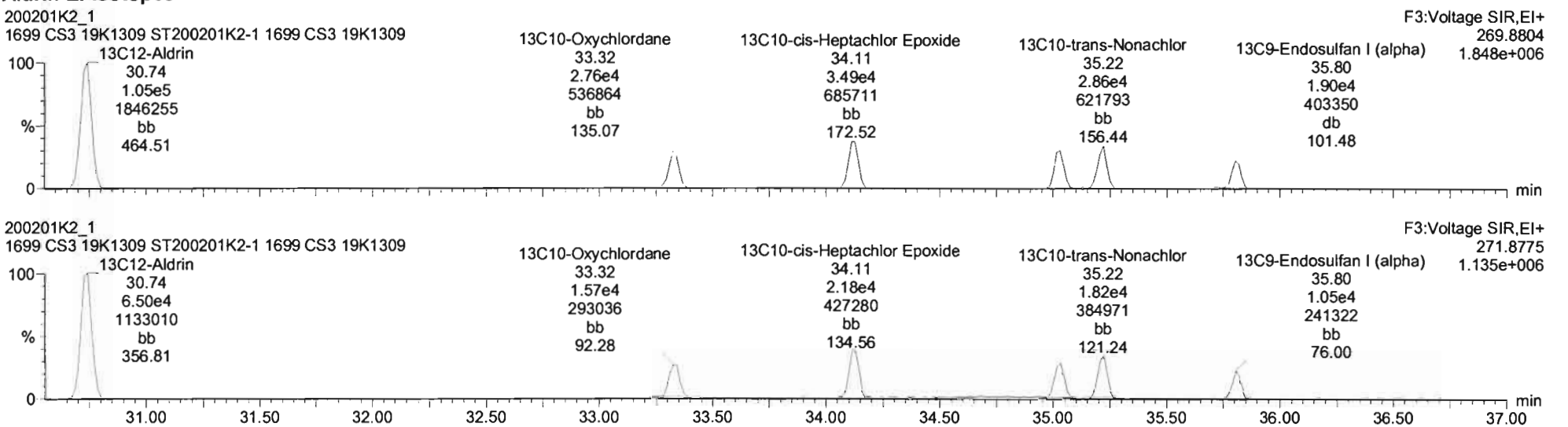
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Aldrin-EI



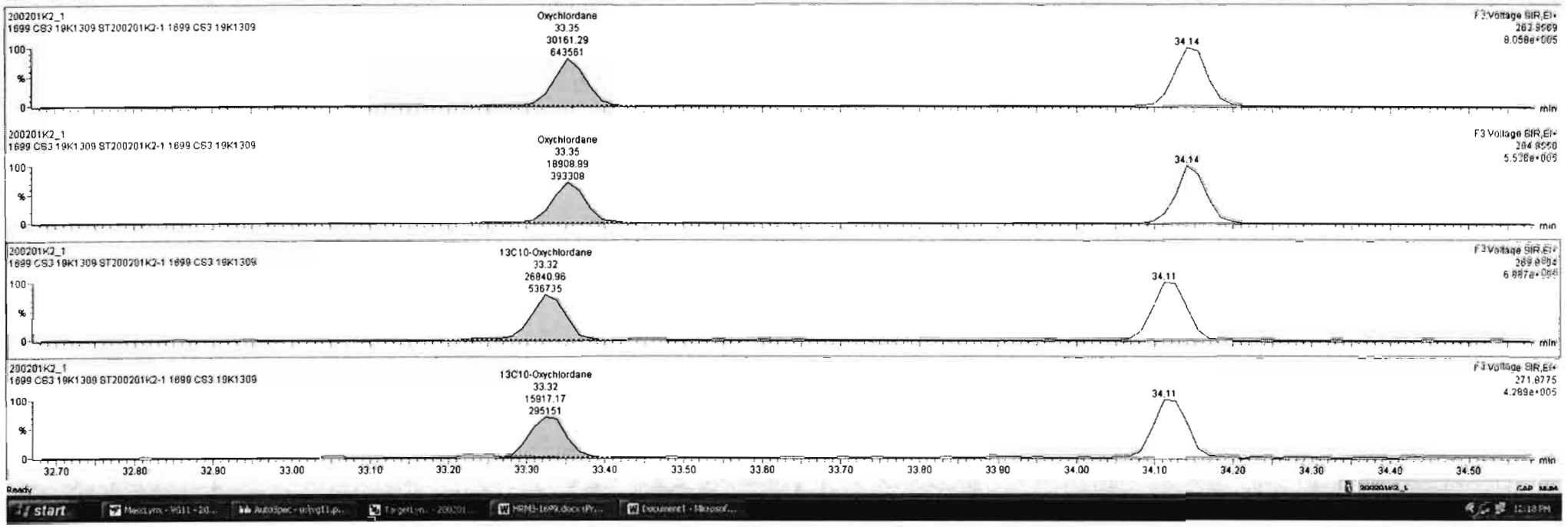
Aldrin-EI-isotopes



TargetLynx 200201K2 1.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	1.81e4	1.97e6	33	0.07	YES	0.0339	1.000	9.99	9.98	1.000	1.000	NO	135	54.1	0.539	16.3
2	2	Hexachlorobenzene	8.45e5	8.07e5	34	1.23	NO	0.9969	1.000	22.63	22.63	1.001	1.001	NO	52.5	105	0.0107	52.5
3	3	Alpha-BHC	2.90e5	3.11e5	35	2.19	NO	0.8617	1.000	23.20	23.17	1.001	1.002	NO	54.1	108	0.257	54.1
4	4	Lindane (gamma-BHC)	2.18e5	2.33e5	36	2.16	NO	0.8690	1.000	26.48	26.46	1.001	1.001	NO	53.7	107	0.405	53.7
5	5	Beta-BHC	2.02e5	1.84e5	37	2.22	NO	1.0173	1.000	26.51	26.53	1.001	1.000	NO	53.8	108	0.371	53.8
6	6	Delta-BHC	2.12e5	2.12e5	38	2.14	NO	0.9521	1.000	30.21	30.21	1.001	1.001	NO	52.6	105	0.312	52.6
7	7	Heptachlor	1.61e5	1.43e5	39	1.14	NO	1.0787	1.000	28.64	28.65	1.001	1.001	NO	52.5	105	0.0870	52.5
8	8	4,4'-DDMU	3.51e5	2.12e5	38	3.22	NO	1.2643	1.000	30.11	30.13	0.998	0.997	NO	65.4	131	0.269	65.4
9	9	Aldrin	1.92e5	1.70e5	40	1.64	NO	1.1111	1.000	30.77	30.77	1.001	1.001	NO	50.9	102	0.128	50.9
10	10	Oxychlordane	4.91e4	4.28e4	41	1.60	NO	1.0939	1.000	33.34	33.35	1.001	1.001	NO	52.5	105	0.455	52.5
11	11	cis-Heptachlor Epoxide	6.42e4	5.88e4	42	1.57	NO	1.1318	1.000	34.13	34.14	1.001	1.001	NO	50.0	100	0.336	50.0
12	12	trans-Heptachlor Epoxide	1.53e4	5.68e4	42	1.50	NO	0.2603	1.000	34.62	34.64	1.015	1.015	NO	51.7	103	1.47	51.7
13	13	trans-Chlordane (gamm...	4.77e4	4.18e4	43	1.83	NO	1.1780	1.000	35.05	35.05	1.000	1.001	NO	48.4	96.8	0.414	48.4
14	14	trans-Nonachlor	5.01e4	4.68e4	44	1.59	NO	1.0766	1.000	35.24	35.23	1.000	1.001	NO	49.7	99.4	0.389	49.7
15	15	cis-Chlordane	5.16e4	4.68e4	44	1.62	NO	1.1080	1.000	35.72	35.73	1.014	1.014	NO	49.8	99.6	0.378	49.8
16	16	Endosulfan I (alpha)	3.37e4	2.95e4	45	1.48	NO	1.1552	1.000	35.83	35.83	1.001	1.001	NO	49.5	98.9	0.588	49.5
17	17	4,4'-DDMU	7.33e5	1.00e6	46	3.16	NO	0.6758	1.000	35.48	35.48	0.994	0.994	NO	54.2	108	0.0820	54.2
18	18	2,4'-DDE	9.85e5	1.00e6	46	1.35	NO	0.9841	1.000	35.70	35.70	1.000	1.000	NO	50.0	100	0.252	50.0



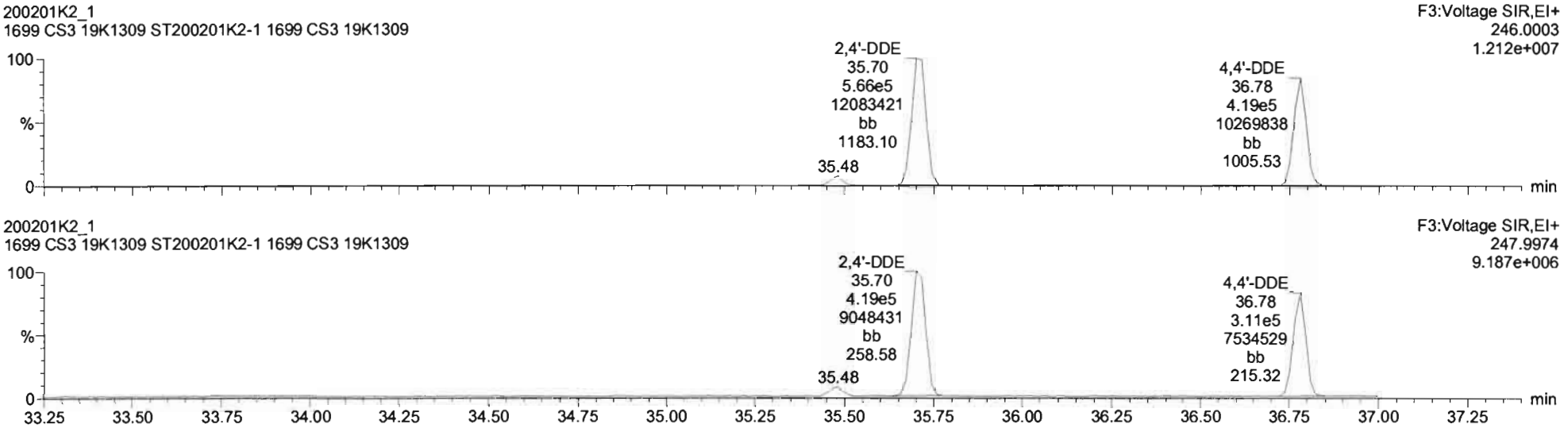
Ready

Dataset: Untitled

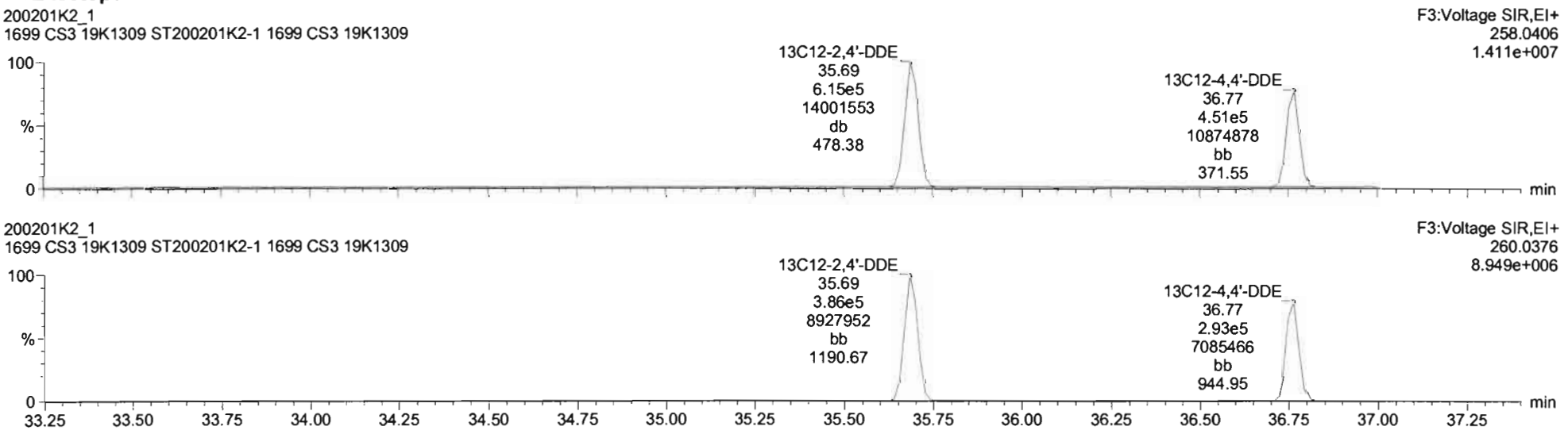
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

DDMU-DDE



DDE-isotopes



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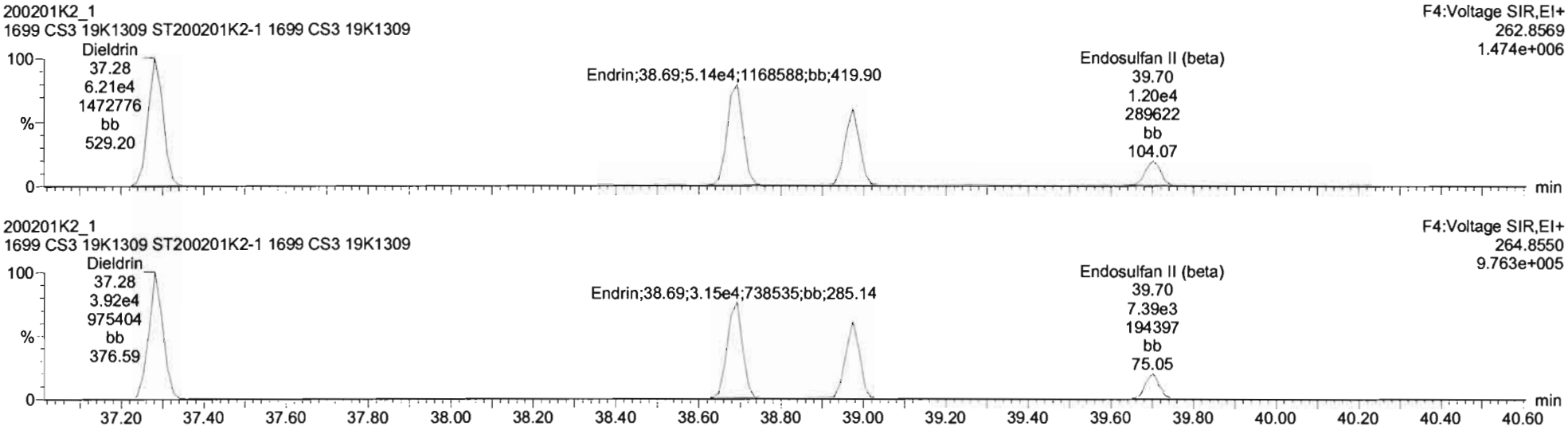
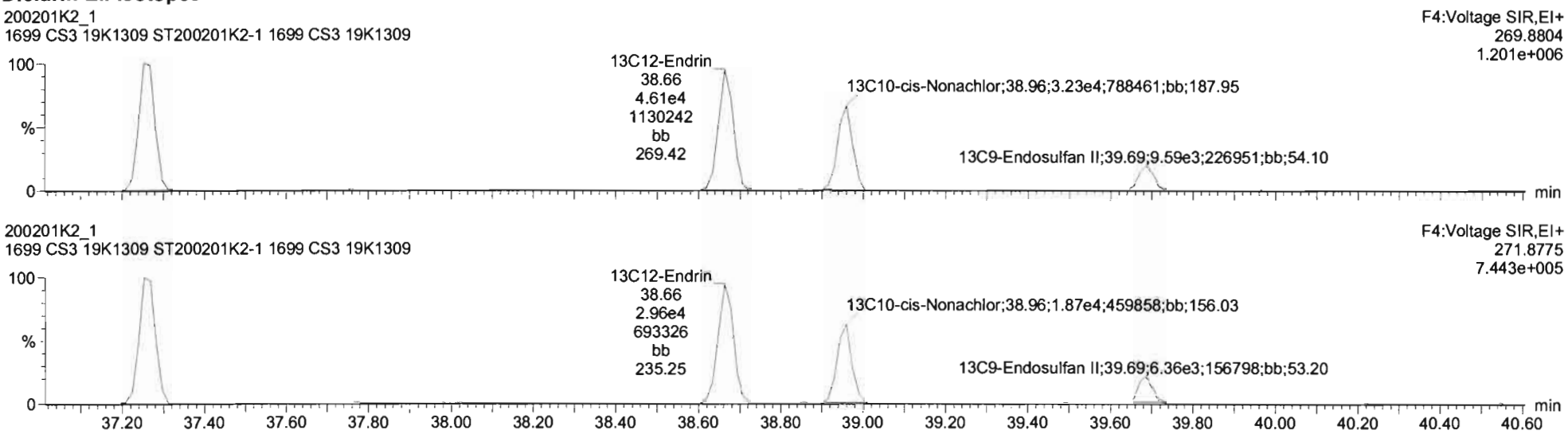
Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Dieldrin-EII



Dieldrin-EII-isotopes



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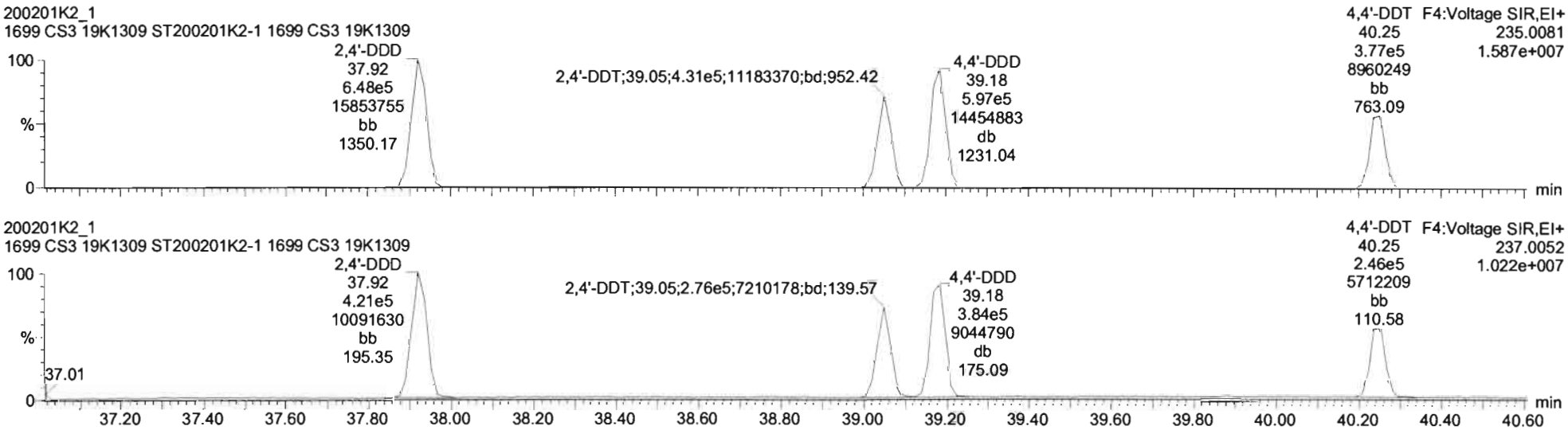
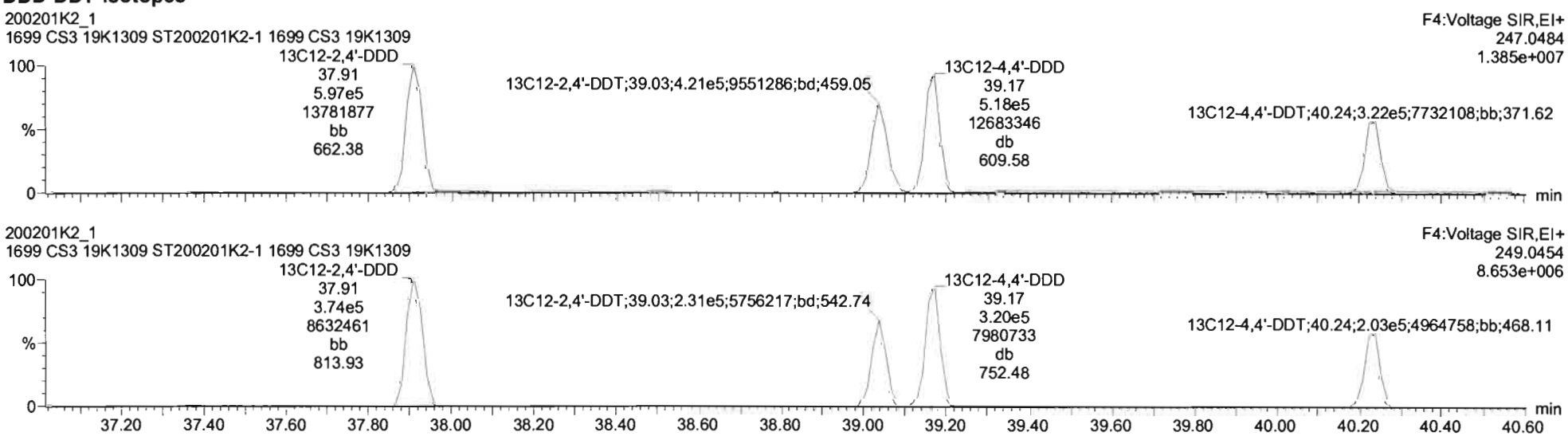
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

DDD-DDT



DDD-DDT-isotopes



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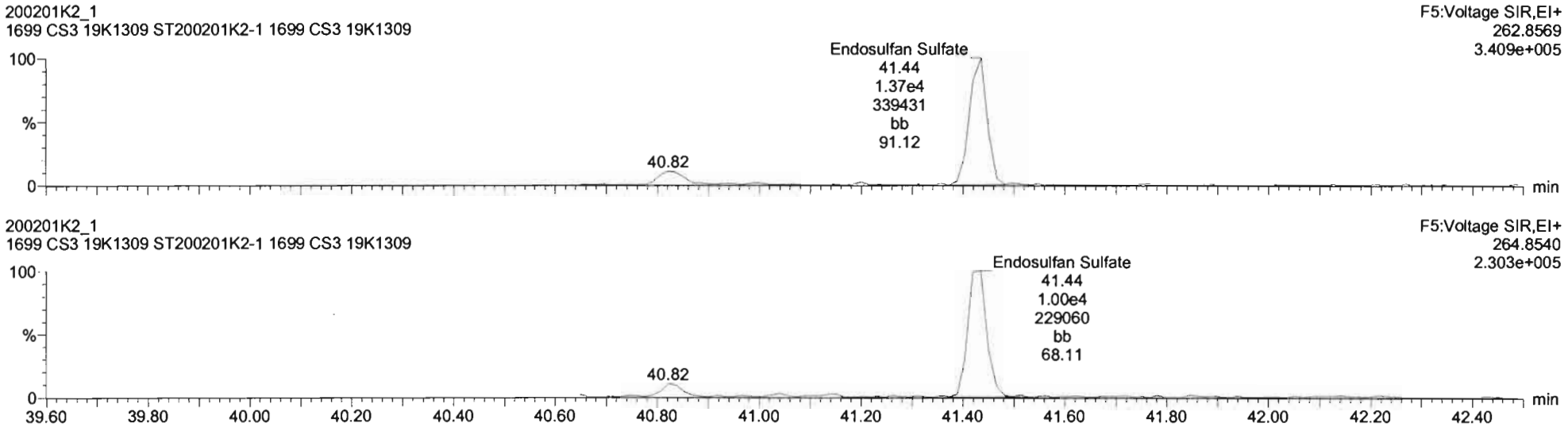
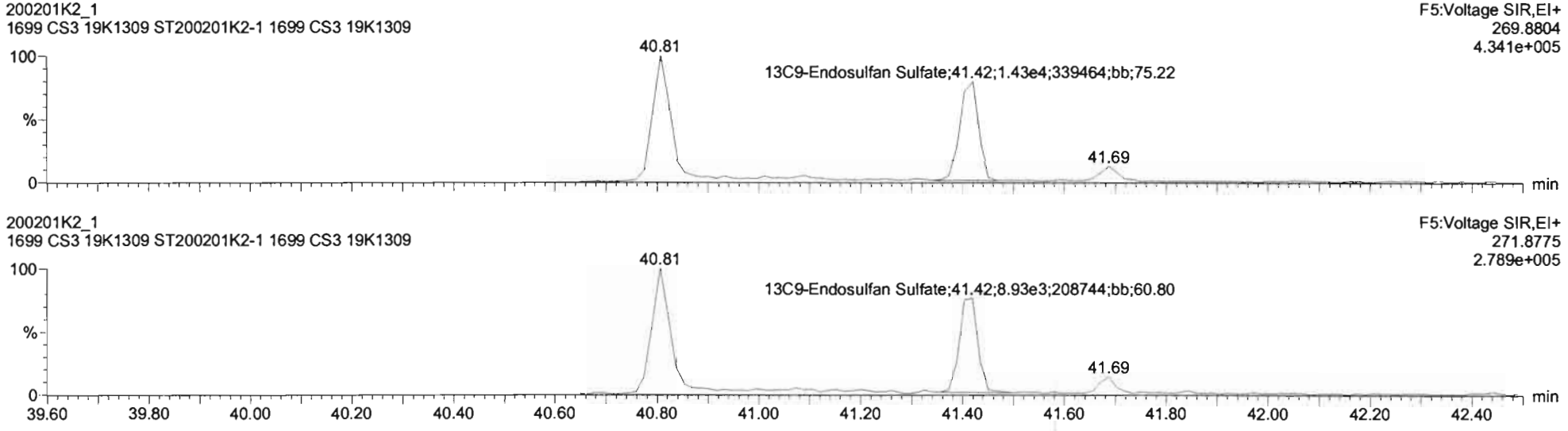
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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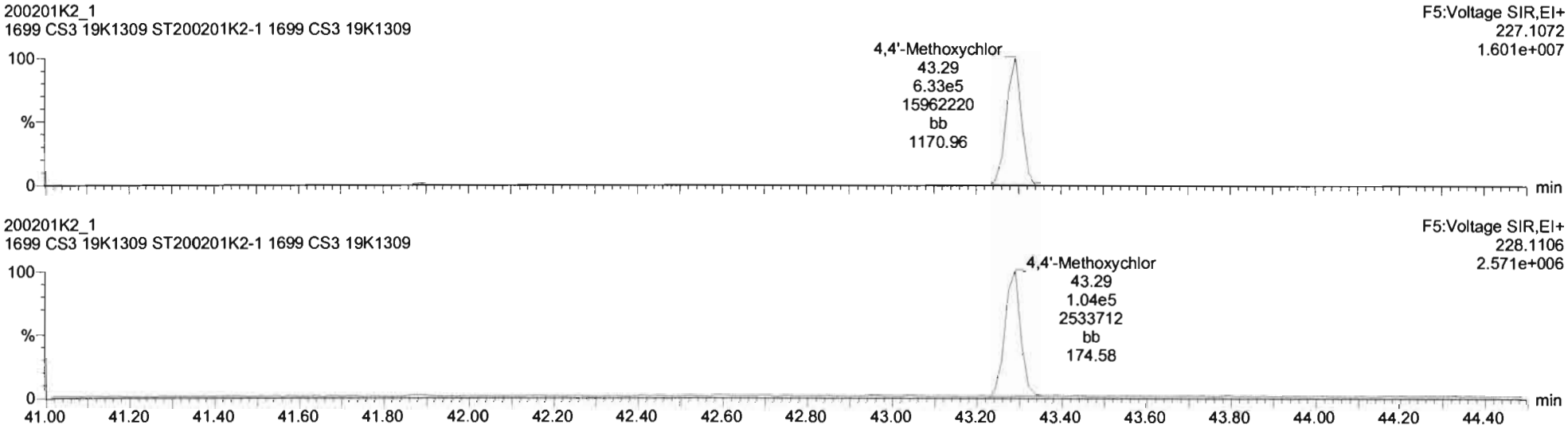
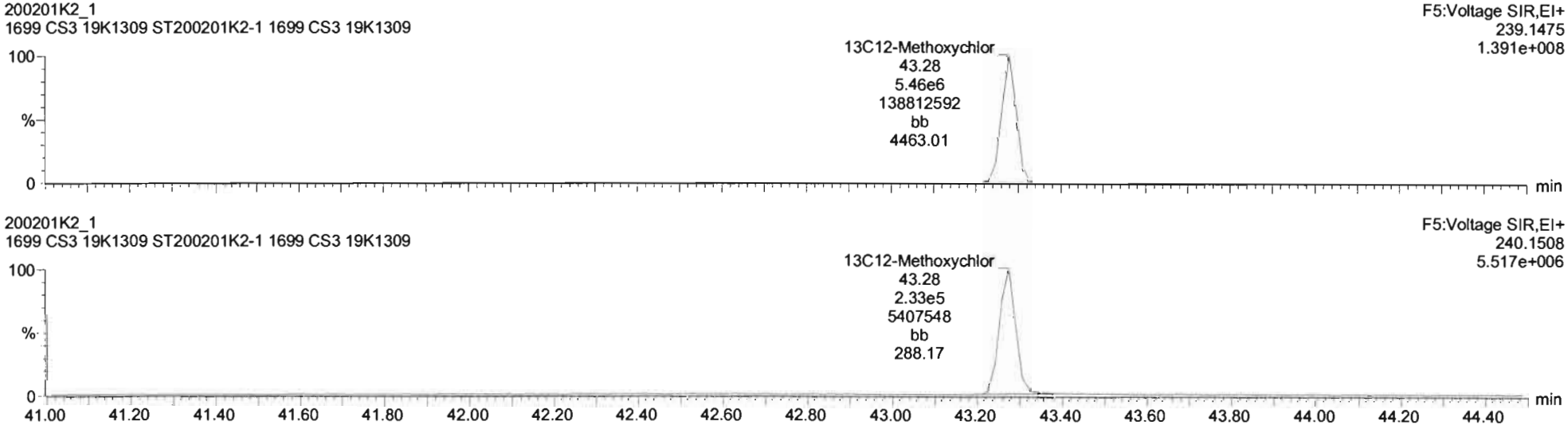
Last Altered: Sunday, February 02, 2020 12:15:58 Pacific Standard Time
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

4,4'-Methoxychlor



13C12-Methoxychlor



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Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

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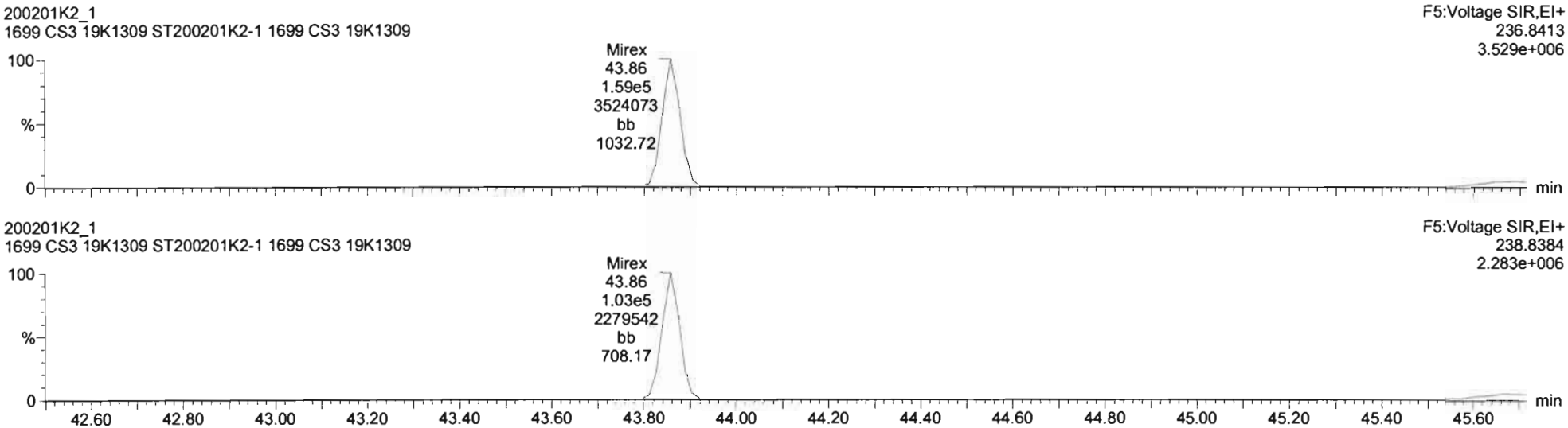
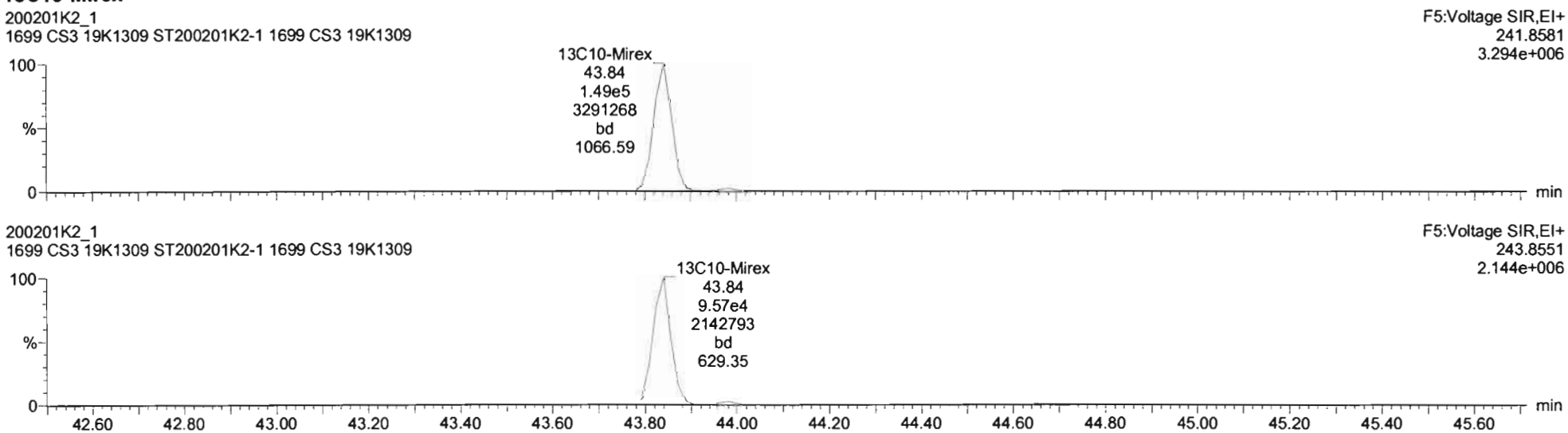
Mirex



13C10-Mirex



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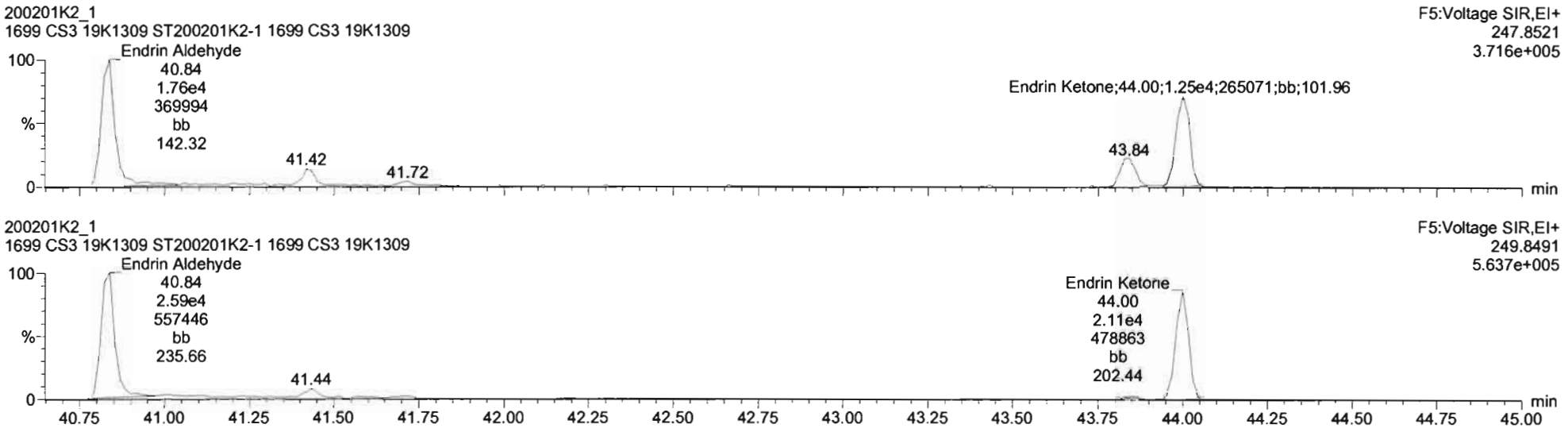
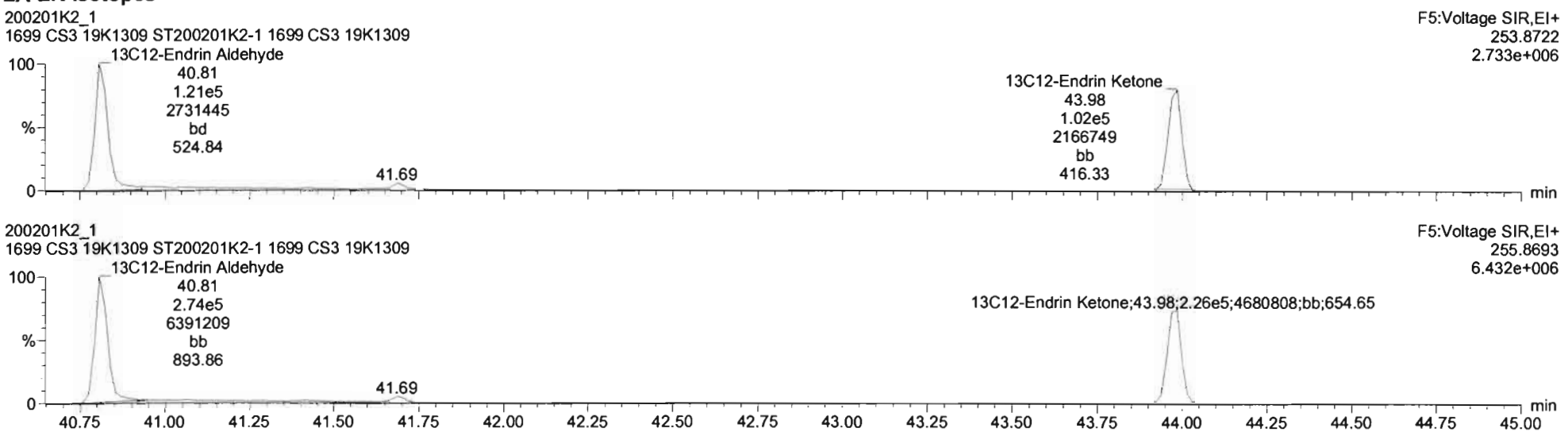
Printed: Sunday, February 02, 2020 12:16:18 Pacific Standard Time

Name: 200201K2_1, Date: 01-Feb-2020, Time: 13:55:36, ID: ST200201K2-1 1699 CS3 19K1309, Description: 1699 CS3 19K1309

EA-EK



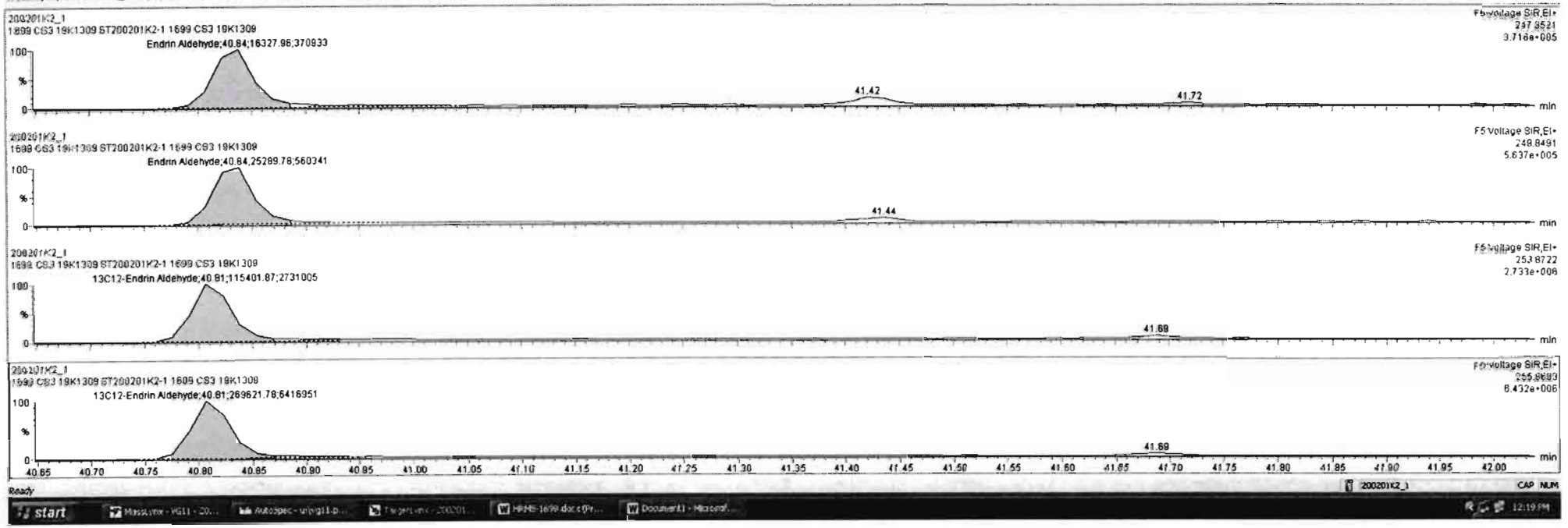
EA-EK-isotopes



TargetLynx 200201K2_1.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	rvy	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
19	19	4,4'-DDE	7.30e5	7.43e5	47	1.35	NO	0.9981	1.000	36.78	36.78	1.000	1.000	NO	49.3	98.6	0.316	49.3
20	20	Dieldrin	1.01e5	6.87e4	48	1.58	NO	1.0934	1.000	37.27	37.28	1.001	1.000	NO	52.3	105	0.316	52.3
21	21	Endrin	8.30e4	7.57e4	49	1.63	NO	1.0568	1.000	38.66	38.69	1.001	1.000	NO	51.9	104	0.343	51.9
22	22	cis-Nonachlor	5.76e4	5.10e4	50	1.54	NO	1.0772	1.000	38.97	38.97	1.000	1.000	NO	52.5	105	0.501	52.5
23	23	Endosulfan II (beta)	1.94e4	1.60e4	51	1.62	NO	1.1102	1.000	39.69	39.70	1.000	1.000	NO	54.7	109	1.80	54.7
24	24	2,4'-DDD	1.07e6	9.70e5	52	1.54	NO	1.0482	1.000	37.91	37.92	1.000	1.000	NO	52.5	105	0.337	52.5
25	25	2,4'-DDT	7.07e5	6.52e5	53	1.56	NO	1.0290	1.000	39.05	39.05	1.000	1.000	NO	52.7	105	0.521	52.7
26	26	4,4'-DDD	9.80e5	8.38e5	54	1.55	NO	1.1242	1.000	39.19	39.18	1.000	1.000	NO	52.0	104	0.343	52.0
27	27	4,4'-DDT	6.23e5	5.25e5	55	1.53	NO	1.1336	1.000	40.26	40.25	1.000	1.000	NO	52.4	105	0.554	52.4
28	28	Endosulfan Sulfate	2.37e4	2.32e4	56	1.36	NO	0.9871	1.000	41.42	41.44	1.000	1.000	NO	51.7	103	1.63	51.7
29	29	4,4'-Methoxychlor	7.37e5	5.70e6	57	6.07	NO	1.2668	1.000	43.28	43.29	1.000	1.000	NO	51.1	102	0.192	51.1
30	30	Mirex	2.62e5	2.44e5	58	1.55	NO	1.0435	1.000	43.86	43.86	1.000	1.000	NO	51.5	103	0.147	51.5
31	31	Endrin Aldehyde	4.16e4	3.85e5	59	0.65	NO	1.0582	1.000	40.83	40.84	1.001	1.000	NO	51.1	102	0.644	51.1
32	32	Endrin Ketone	3.36e4	3.27e5	60	0.59	NO	0.9741	1.000	43.98	44.00	1.000	1.000	NO	52.7	105	0.912	52.7
33	33	13C4-Hexachlorobutadi...	1.97e6	1.22e6	62	1.29	NO	0.1267	1.000	9.93	9.98	0.385	0.383	NO	639	128	0.0996	
34	34	13C6-Hexachlorobenz...	8.07e5	1.22e6	62	1.27	NO	0.6741	1.000	22.63	22.61	0.871	0.872	NO	49.2	98.4	0.0175	
35	35	13C6-Alpha-BHC	3.11e5	1.22e6	62	0.80	NO	0.2548	1.000	23.16	23.15	0.892	0.892	NO	50.1	100	0.455	
36	36	13C6-Lindane (gamma)	2.33e5	1.22e6	62	0.80	NO	0.2007	1.000	26.42	26.45	1.019	1.018	NO	47.8	95.5	0.577	



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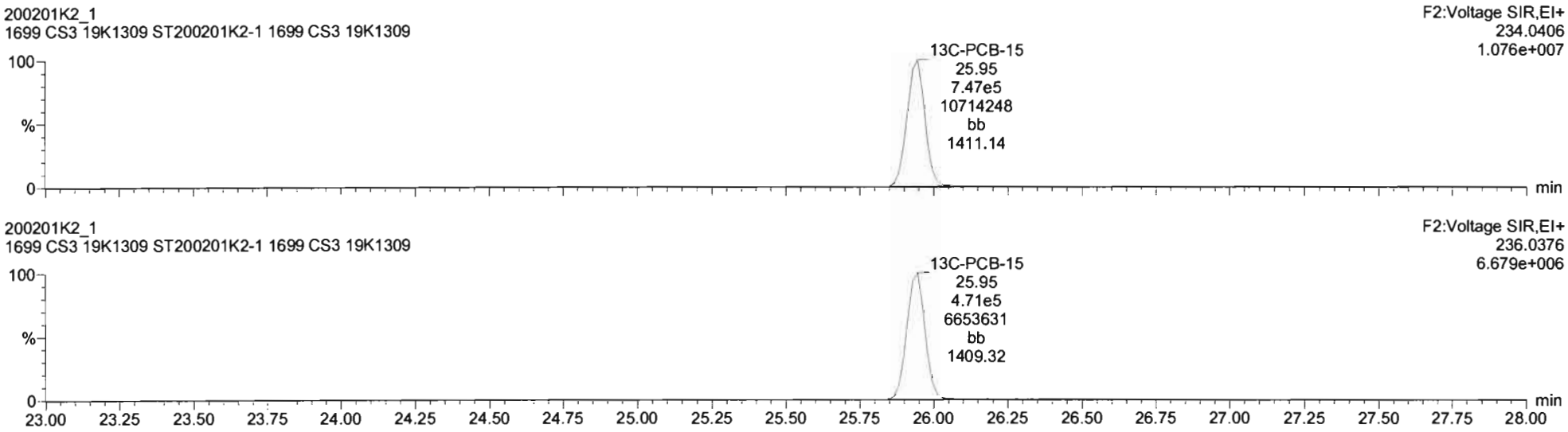

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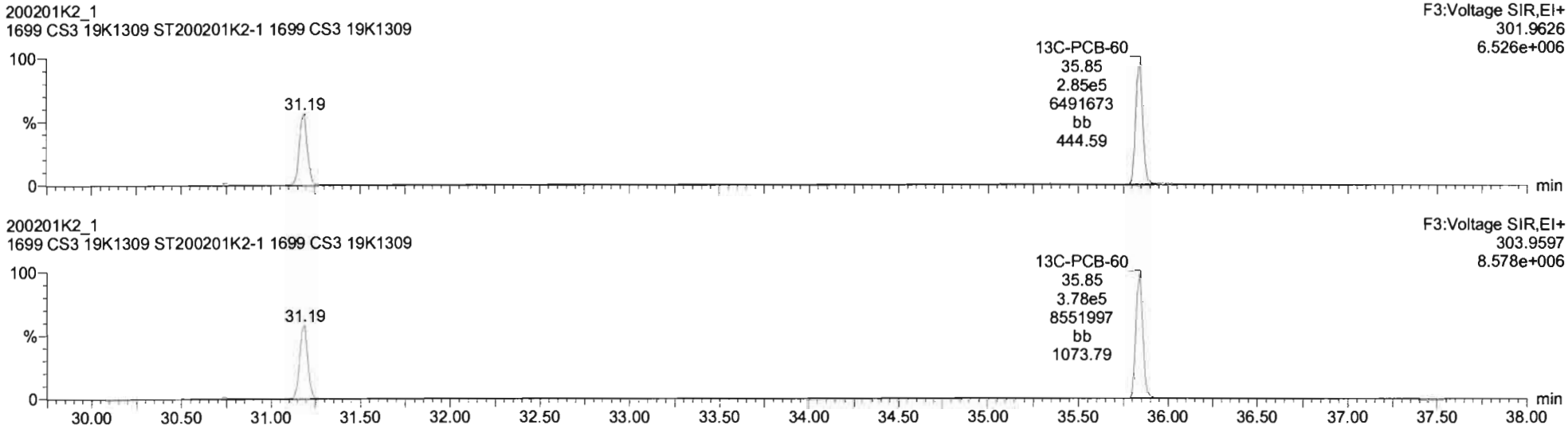

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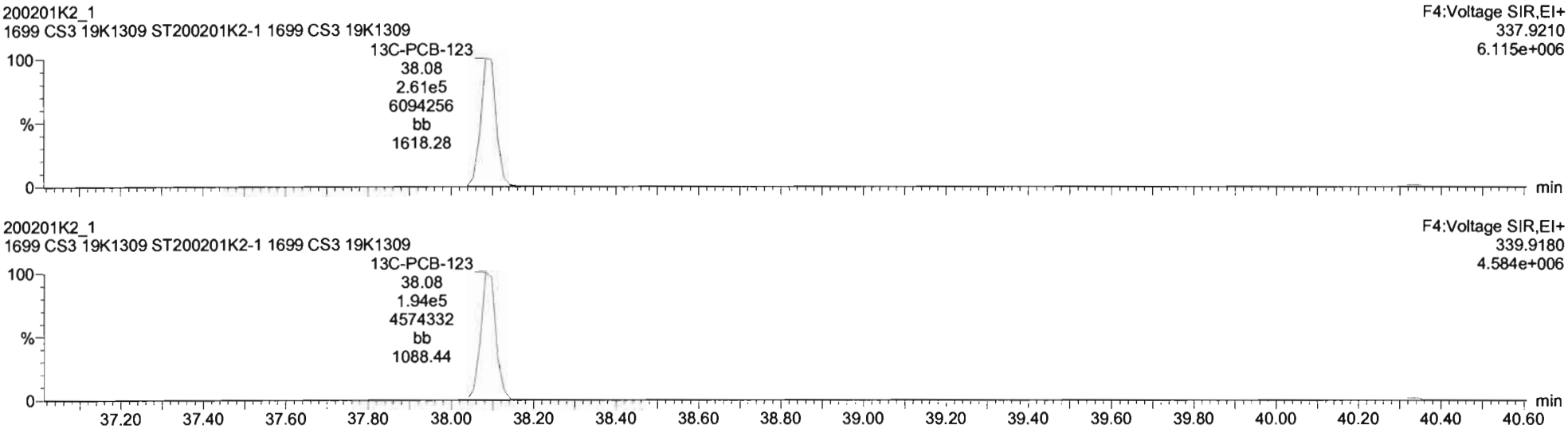

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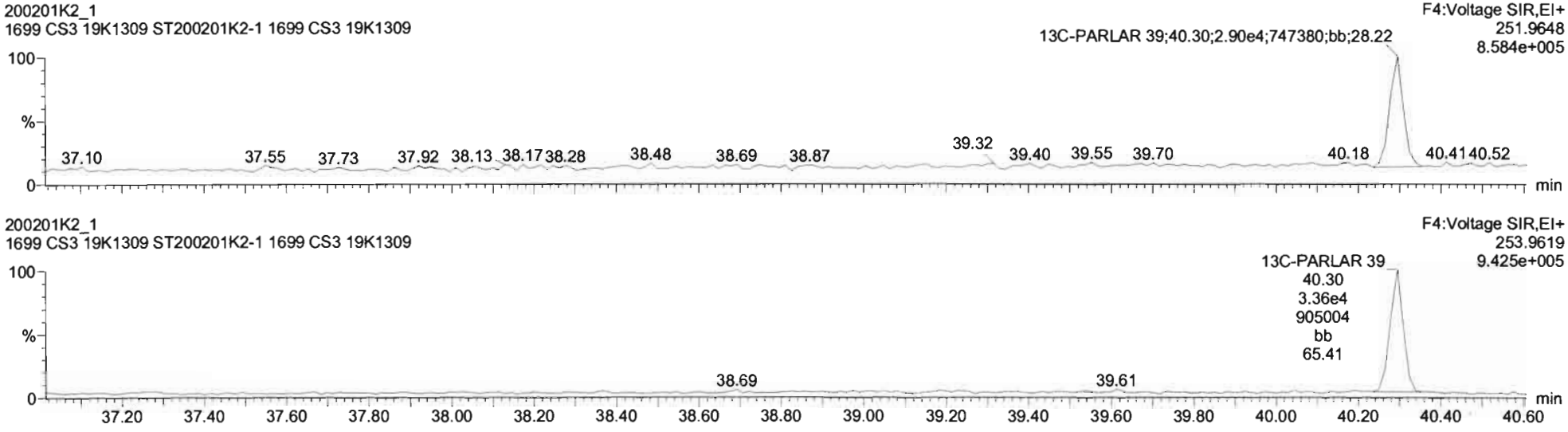

Vista Analytical Laboratory

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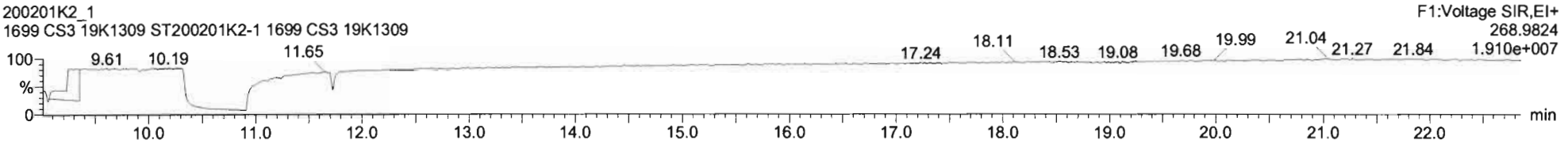

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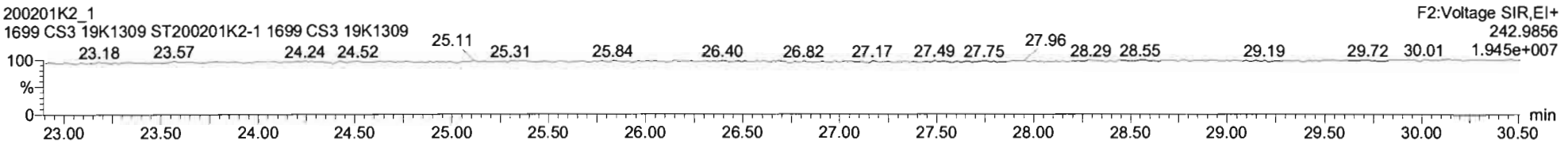

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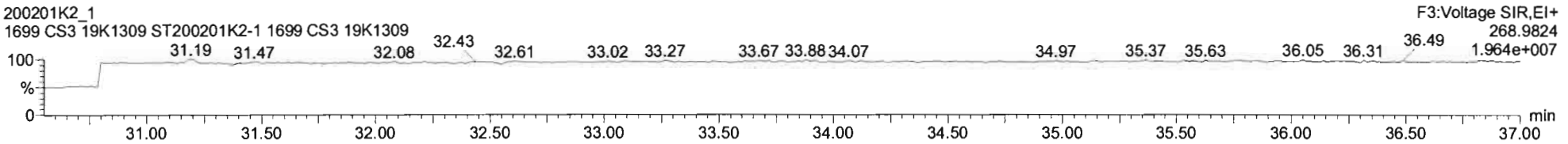

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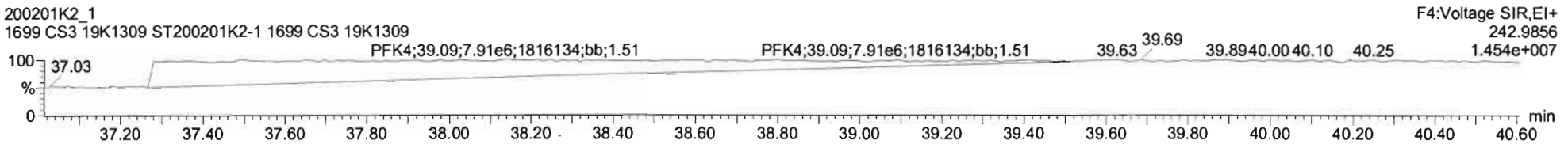

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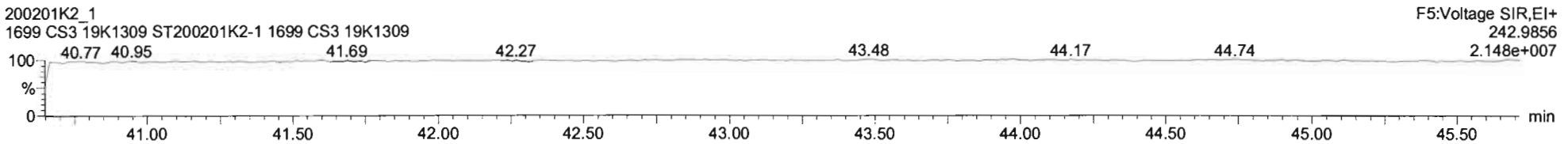

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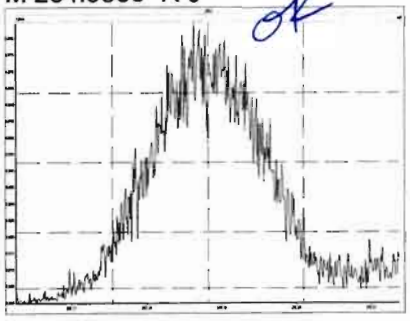

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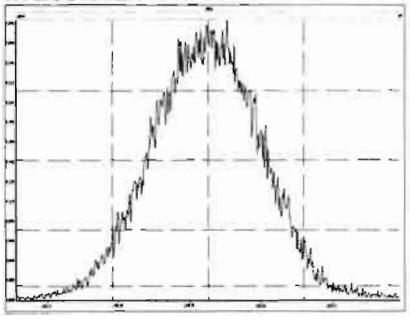

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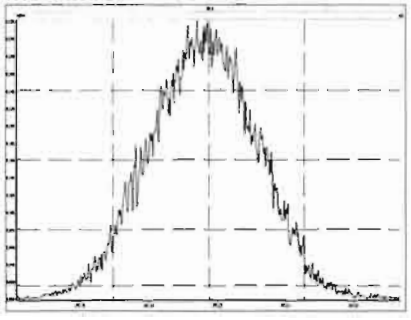

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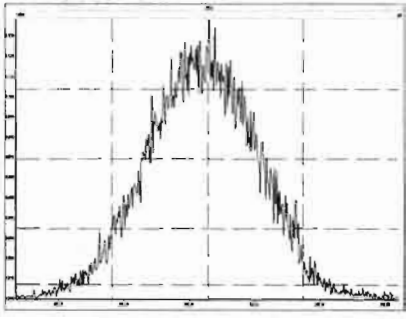

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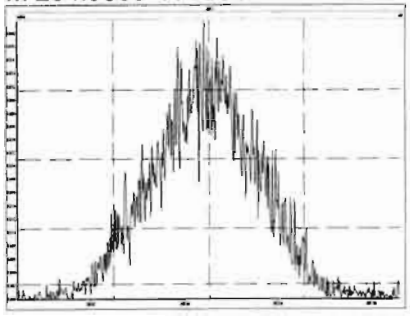

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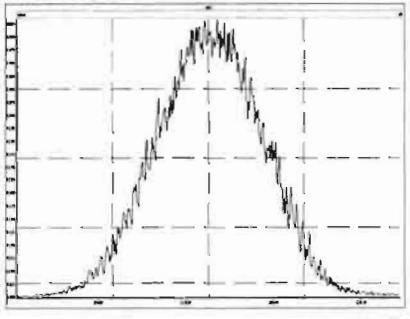

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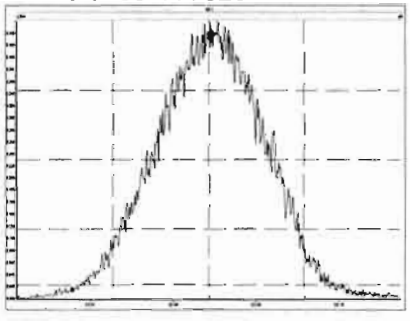

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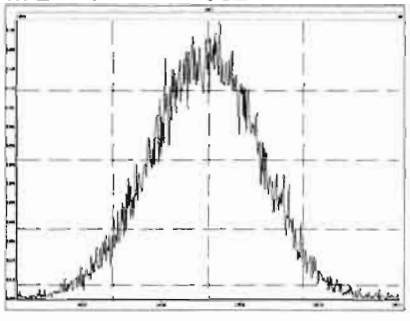

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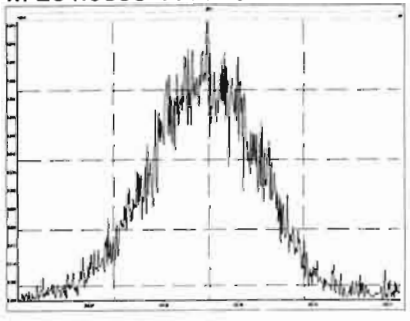

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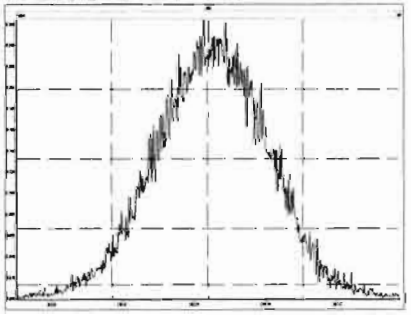

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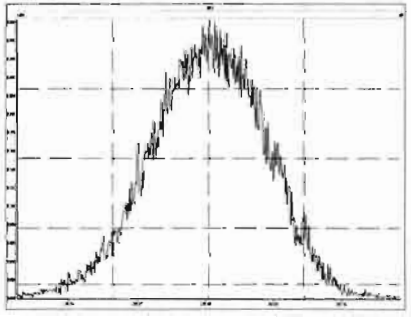

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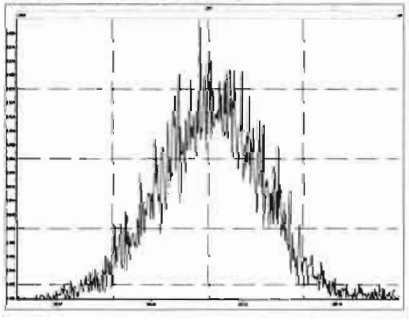

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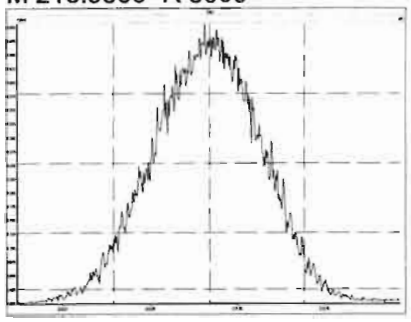

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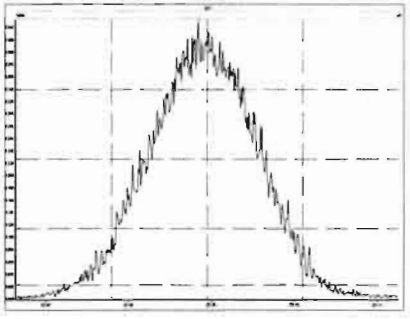

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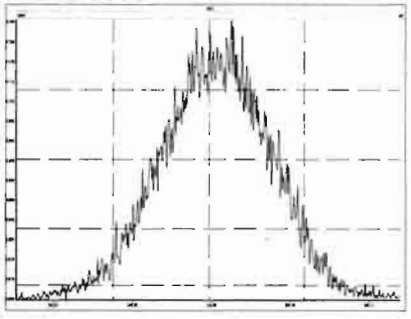

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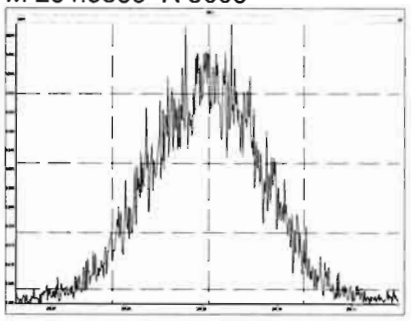

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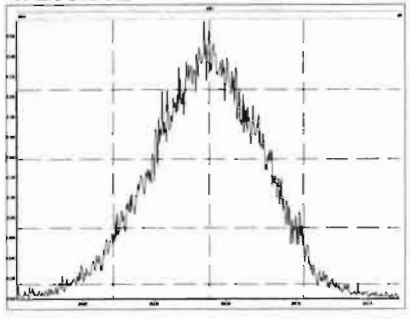

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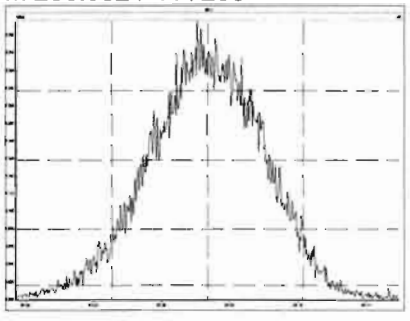

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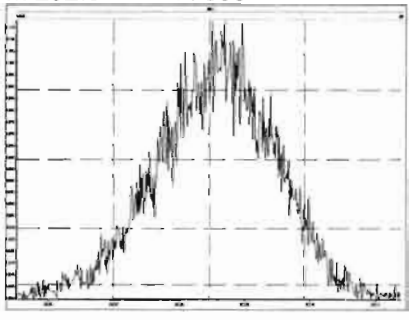

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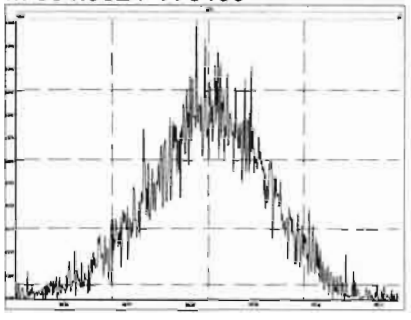

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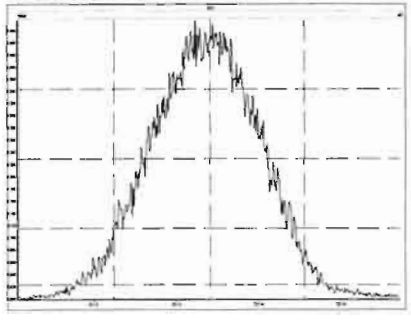

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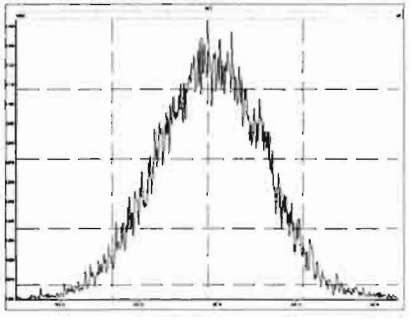

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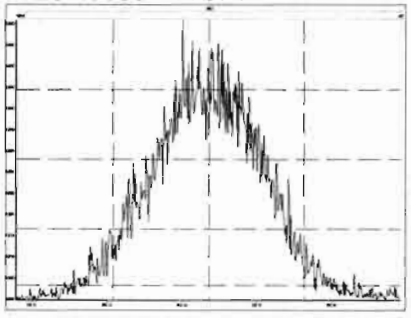

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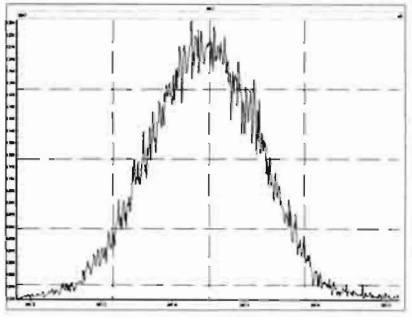

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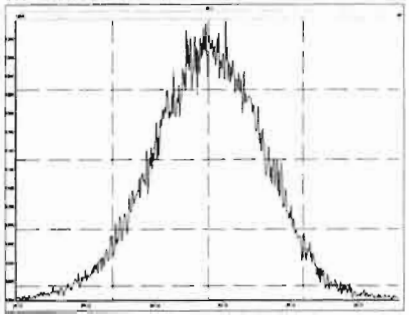

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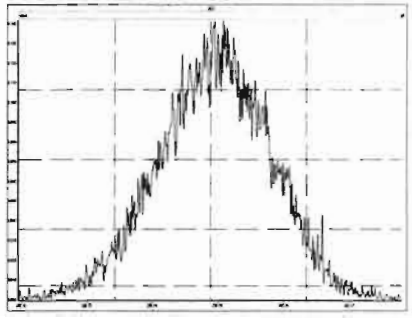

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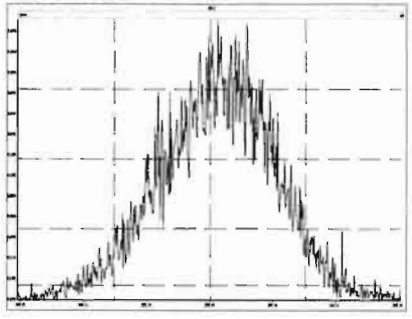

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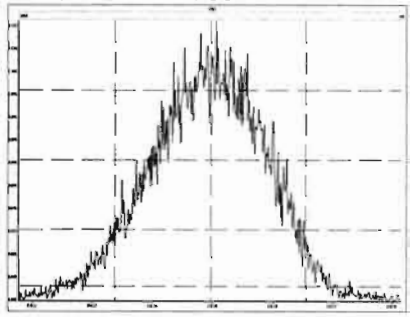

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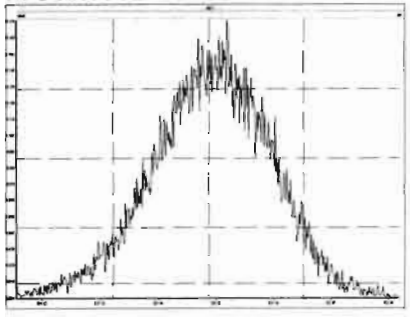

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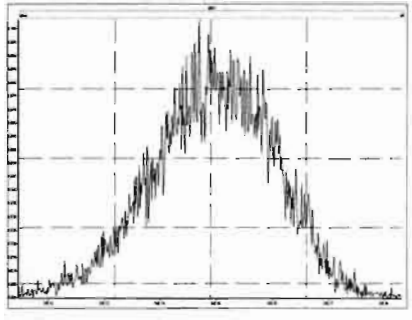

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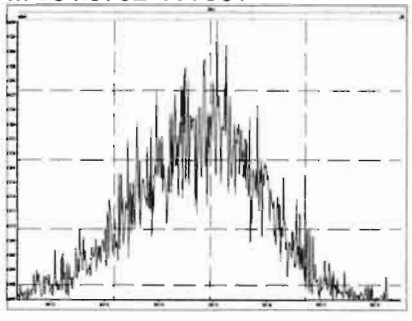

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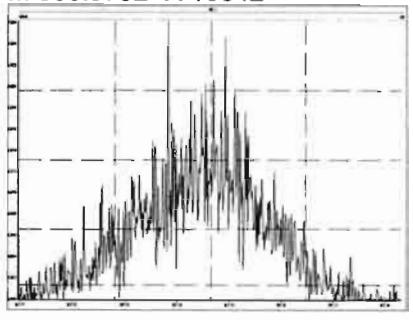

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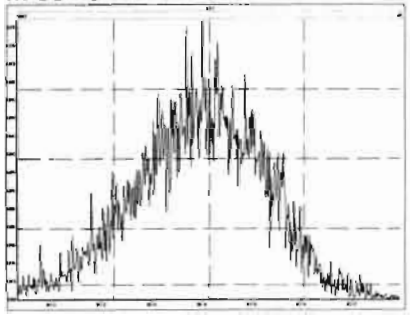

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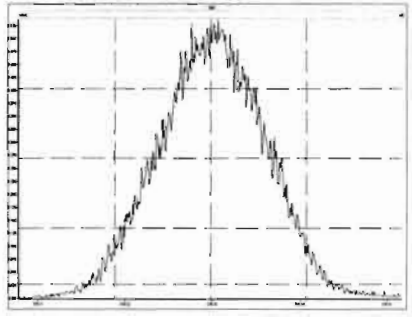

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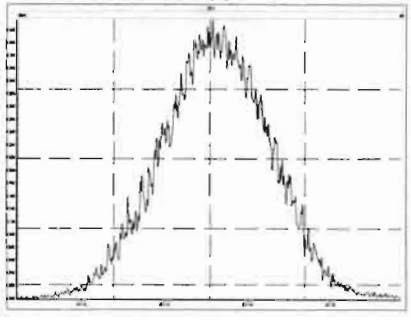

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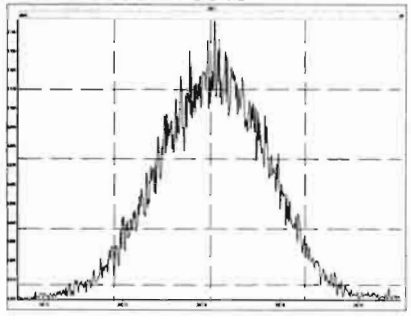

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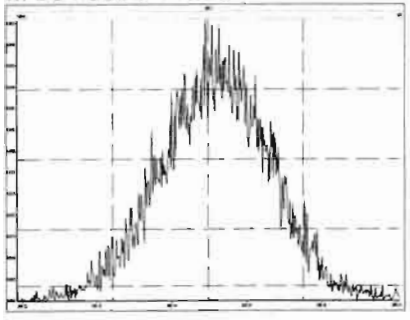
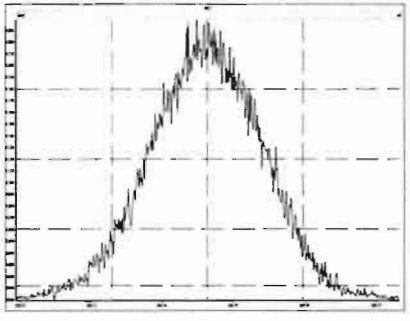
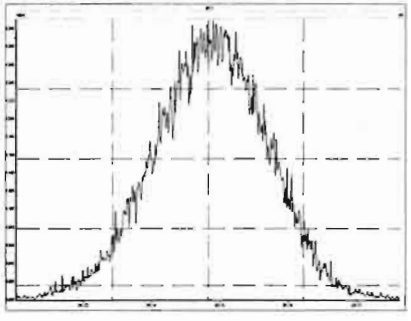


M 268.9824 R 7659



M 280.9824 R 7385



INITIAL CALIBRATION

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory

Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Inst. ID. VG-7

Data filename: 191009D1

Name	Mean RRF	%RSD	Samp# 1 0.25 RRF#1	Samp# 2 0.50 RRF#2	Samp# 3 2.0 RRF#3	Samp# 4 10 RRF#4	Samp# 5 40 RRF#5	Samp# 6 300 RRF#6
2,3,7,8-TCDD	0.9053	7.55 %	0.84	0.83	0.87	0.99	0.92	0.98
1,2,3,7,8-PeCDD	0.9027	4.95 %	0.86	0.87	0.88	0.88	0.96	0.96
1,2,3,4,7,8-HxCDD	1.1013	3.97 %	1.12	1.13	1.03	1.08	1.09	1.15
1,2,3,6,7,8-HxCDD	0.9386	7.68 %	0.83	0.88	1.01	0.92	0.98	1.00
1,2,3,7,8,9-HxCDD	0.9613	4.62 %	0.95	0.90	0.93	0.95	1.00	1.03
1,2,3,4,6,7,8-HpCDD	0.9794	5.84 %	0.90	0.97	0.95	0.96	1.03	1.06
OCDD	0.9585	4.07 %	0.93	0.94	0.92	0.94	1.01	1.01
2,3,7,8-TCDF	0.9501	8.27 %	1.09	0.90	0.89	0.89	0.95	0.99
1,2,3,7,8-PeCDF	0.9603	4.05 %	0.94	0.94	0.92	0.95	1.00	1.01
2,3,4,7,8-PeCDF	1.0148	3.01 %	1.00	0.99	1.00	1.00	1.03	1.07
1,2,3,4,7,8-HxCDF	1.1768	4.35 %	1.23	1.11	1.15	1.14	1.20	1.24
1,2,3,6,7,8-HxCDF	1.0689	3.63 %	1.01	1.07	1.06	1.05	1.12	1.11
2,3,4,6,7,8-HxCDF	1.1136	5.58 %	1.06	1.03	1.12	1.11	1.16	1.20
1,2,3,7,8,9-HxCDF	1.0616	3.91 %	1.05	1.02	1.02	1.06	1.08	1.13
1,2,3,4,6,7,8-HpCDF	1.1276	3.90 %	1.13	1.13	1.06	1.10	1.17	1.18
1,2,3,4,7,8,9-HpCDF	1.2799	3.29 %	1.30	1.24	1.25	1.25	1.31	1.34
OCDF	0.9472	3.80 %	0.95	0.92	0.91	0.92	1.00	0.98
13C-2,3,7,8-TCDD	1.0954	1.91 %	1.11	1.08	1.06	1.10	1.12	1.11
13C-1,2,3,7,8-PeCDD	0.8814	5.11 %	0.89	0.86	0.83	0.86	0.89	0.96
13C-1,2,3,4,7,8-HxCDD	0.6421	10.35 %	0.65	0.60	0.58	0.61	0.65	0.77
13C-1,2,3,6,7,8-HxCDD	0.8555	4.13 %	0.86	0.87	0.82	0.87	0.80	0.90
13C-1,2,3,7,8,9-HxCDD	0.8066	5.57 %	0.84	0.80	0.76	0.80	0.76	0.88
13C-1,2,3,4,6,7,8-HpCDD	0.6539	9.07 %	0.70	0.63	0.59	0.62	0.63	0.75
13C-OCDD	0.5797	10.98 %	0.60	0.52	0.53	0.55	0.59	0.69
13C-2,3,7,8-TCDF	1.0349	1.62 %	1.04	1.00	1.03	1.05	1.04	1.04
13C-1,2,3,7,8-PeCDF	0.8542	4.58 %	0.84	0.82	0.82	0.87	0.86	0.92
13C-2,3,4,7,8-PeCDF	0.8471	3.79 %	0.81	0.84	0.83	0.84	0.85	0.91
13C-1,2,3,4,7,8-HxCDF	0.8317	8.50 %	0.76	0.80	0.79	0.86	0.83	0.96
13C-1,2,3,6,7,8-HxCDF	1.0344	5.35 %	1.00	1.03	1.03	1.03	0.98	1.14
13C-2,3,4,6,7,8-HxCDF	0.9533	6.17 %	0.94	0.94	0.90	0.93	0.93	1.07
13C-1,2,3,7,8,9-HxCDF	0.8277	8.68 %	0.82	0.80	0.77	0.78	0.83	0.96
13C-1,2,3,4,6,7,8-HpCDF	0.7575	6.47 %	0.76	0.73	0.72	0.75	0.73	0.85
13C-1,2,3,4,7,8,9-HpCDF	0.5812	8.97 %	0.62	0.54	0.52	0.55	0.58	0.66
13C-OCDF	0.6890	12.48 %	0.69	0.62	0.62	0.65	0.72	0.85
37Cl-2,3,7,8-TCDD	1.1977	8.83 %	1.40	1.16	1.16	1.11	1.15	1.21
13C-1,2,3,4-TCDD	1.0000	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,4-TCDF	1.0000	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,4,6,9-HxCDF	1.0000	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

DB 10/10/19 CT 10/10/19

Filename: 191009D1 S: 1 Acquired: 9-OCT-19 16:13:04
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-1 1613 CS0 19C2201

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.25	1.97e+04	0.80 y	26:32	-	0.84
2	Unk	1,2,3,7,8-PeCDD	1.25	8.06e+04	0.62 y	30:54	-	0.86
3	Unk	1,2,3,4,7,8-HxCDD	1.25	7.34e+04	1.23 y	34:16	-	1.12
4	Unk	1,2,3,6,7,8-HxCDD	1.25	7.23e+04	1.12 y	34:23	-	0.83
5	Unk	1,2,3,7,8,9-HxCDD	1.25	8.01e+04	1.19 y	34:43	-	0.95
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	6.39e+04	1.06 y	38:05	-	0.90
7	Unk	OCDD	2.50	1.14e+05	0.95 y	41:28	-	0.93
8	Unk	2,3,7,8-TCDF	0.25	3.62e+04	0.85 y	25:49	-	1.09
9	Unk	1,2,3,7,8-PeCDF	1.25	1.26e+05	1.52 y	29:46	-	0.94
10	Unk	2,3,4,7,8-PeCDF	1.25	1.31e+05	1.52 y	30:40	-	1.00
11	Unk	1,2,3,4,7,8-HxCDF	1.25	9.36e+04	1.22 y	33:22	-	1.23
12	Unk	1,2,3,6,7,8-HxCDF	1.25	1.02e+05	1.11 y	33:29	-	1.01
13	Unk	2,3,4,6,7,8-HxCDF	1.25	1.01e+05	1.30 y	34:07	-	1.06
14	Unk	1,2,3,7,8,9-HxCDF	1.25	8.74e+04	1.10 y	35:08	-	1.05
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	8.63e+04	1.01 y	36:57	-	1.13
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	8.18e+04	1.14 y	38:40	-	1.30
17	Unk	OCDF	2.50	1.32e+05	0.94 y	41:43	-	0.95
36	IS	13C-2,3,7,8-TCDD	100.00	9.40e+06	0.78 y	26:32	-	1.11
37	IS	13C-1,2,3,7,8-PeCDD	100.00	7.48e+06	0.62 y	30:55	-	0.89
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	5.24e+06	1.19 y	34:15	-	0.65
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	6.96e+06	1.32 y	34:22	-	0.86
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	6.74e+06	1.31 y	34:42	-	0.84
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	5.68e+06	1.05 y	38:05	-	0.70
42	IS	13C-OCDD	200.00	9.75e+06	0.88 y	41:28	-	0.60
43	IS	13C-2,3,7,8-TCDF	100.00	1.33e+07	0.79 y	25:49	-	1.04
44	IS	13C-1,2,3,7,8-PeCDF	100.00	1.07e+07	1.58 y	29:46	-	0.84
45	IS	13C-2,3,4,7,8-PeCDF	100.00	1.05e+07	1.58 y	30:39	-	0.81
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	6.11e+06	0.51 y	33:21	-	0.76
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	8.04e+06	0.50 y	33:29	-	1.00
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	7.61e+06	0.50 y	34:07	-	0.94
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	6.66e+06	0.48 y	35:07	-	0.82
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	6.12e+06	0.42 y	36:57	-	0.76
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	5.02e+06	0.45 y	38:41	-	0.62
52	IS	13C-OCDF	200.00	1.11e+07	0.90 y	41:43	-	0.69
53	C/Up	37Cl-2,3,7,8-TCDD	0.25	2.97e+04		26:33	-	1.40
54	RS/RT	13C-1,2,3,4-TCDD	100.00	8.45e+06	0.80 y	25:59	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.28e+07	0.79 y	24:39	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	8.07e+06	0.52 y	33:47	-	1.00

JB
10/10/19

Filename: 191009D1 S: 2 Acquired: 9-OCT-19 17:00:45
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-2 1613 CS1 19C2202

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.50	3.54e+04	0.78 y	26:34	-	0.83
2	Unk	1,2,3,7,8-PeCDD	2.50	1.46e+05	0.60 y	30:56	-	0.87
3	Unk	1,2,3,4,7,8-HxCDD	2.50	1.25e+05	1.20 y	34:16	-	1.13
4	Unk	1,2,3,6,7,8-HxCDD	2.50	1.40e+05	1.22 y	34:23	-	0.88
5	Unk	1,2,3,7,8,9-HxCDD	2.50	1.33e+05	1.15 y	34:43	-	0.90
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	1.13e+05	0.97 y	38:06	-	0.97
7	Unk	OCDD	5.00	1.78e+05	0.90 y	41:28	-	0.94
8	Unk	2,3,7,8-TCDF	0.50	5.25e+04	0.74 y	25:51	-	0.90
9	Unk	1,2,3,7,8-PeCDF	2.50	2.25e+05	1.59 y	29:48	-	0.94
10	Unk	2,3,4,7,8-PeCDF	2.50	2.42e+05	1.50 y	30:40	-	0.99
11	Unk	1,2,3,4,7,8-HxCDF	2.50	1.62e+05	1.16 y	33:22	-	1.11
12	Unk	1,2,3,6,7,8-HxCDF	2.50	2.03e+05	1.20 y	33:30	-	1.07
13	Unk	2,3,4,6,7,8-HxCDF	2.50	1.79e+05	1.30 y	34:07	-	1.03
14	Unk	1,2,3,7,8,9-HxCDF	2.50	1.49e+05	1.24 y	35:08	-	1.02
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	1.51e+05	0.91 y	36:57	-	1.13
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	1.23e+05	0.94 y	38:41	-	1.24
17	Unk	OCDF	5.00	2.09e+05	0.91 y	41:43	-	0.92
36	IS	13C-2,3,7,8-TCDD	100.00	8.50e+06	0.78 y	26:34	-	1.08
37	IS	13C-1,2,3,7,8-PeCDD	100.00	6.74e+06	0.63 y	30:56	-	0.86
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	4.41e+06	1.38 y	34:16	-	0.60
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	6.35e+06	1.20 y	34:23	-	0.87
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	5.87e+06	1.26 y	34:42	-	0.80
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	4.64e+06	1.05 y	38:05	-	0.63
42	IS	13C-OCDD	200.00	7.58e+06	0.89 y	41:28	-	0.52
43	IS	13C-2,3,7,8-TCDF	100.00	1.17e+07	0.80 y	25:51	-	1.00
44	IS	13C-1,2,3,7,8-PeCDF	100.00	9.60e+06	1.59 y	29:48	-	0.82
45	IS	13C-2,3,4,7,8-PeCDF	100.00	9.80e+06	1.58 y	30:40	-	0.84
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	5.84e+06	0.52 y	33:21	-	0.80
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	7.58e+06	0.51 y	33:29	-	1.03
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	6.92e+06	0.51 y	34:07	-	0.94
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	5.84e+06	0.49 y	35:08	-	0.80
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	5.38e+06	0.43 y	36:57	-	0.73
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	3.99e+06	0.43 y	38:41	-	0.54
52	IS	13C-OCDF	200.00	9.05e+06	0.88 y	41:43	-	0.62
53	C/Up	37Cl-2,3,7,8-TCDD	0.50	4.55e+04		26:34	-	1.16
54	RS/RT	13C-1,2,3,4-TCDD	100.00	7.86e+06	0.77 y	26:01	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.17e+07	0.83 y	24:41	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	7.33e+06	0.52 y	33:47	-	1.00

DB
10/10/19

Filename: 191009D1 S: 3 Acquired: 9-OCT-19 17:48:27
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-3 1613 CS2 19C2203

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	2.00	1.35e+05	0.74 y	26:33	-	0.87
2	Unk	1,2,3,7,8-PeCDD	10.00	5.33e+05	0.64 y	30:56	-	0.88
3	Unk	1,2,3,4,7,8-HxCDD	10.00	3.94e+05	1.22 y	34:16	-	1.03
4	Unk	1,2,3,6,7,8-HxCDD	10.00	5.50e+05	1.25 y	34:23	-	1.01
5	Unk	1,2,3,7,8,9-HxCDD	10.00	4.71e+05	1.36 y	34:43	-	0.93
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	3.70e+05	1.02 y	38:06	-	0.95
7	Unk	OCDD	20.00	6.41e+05	0.90 y	41:29	-	0.92
8	Unk	2,3,7,8-TCDF	2.00	1.90e+05	0.83 y	25:49	-	0.89
9	Unk	1,2,3,7,8-PeCDF	10.00	7.88e+05	1.58 y	29:47	-	0.92
10	Unk	2,3,4,7,8-PeCDF	10.00	8.71e+05	1.56 y	30:40	-	1.00
11	Unk	1,2,3,4,7,8-HxCDF	10.00	6.02e+05	1.14 y	33:22	-	1.15
12	Unk	1,2,3,6,7,8-HxCDF	10.00	7.20e+05	1.27 y	33:30	-	1.06
13	Unk	2,3,4,6,7,8-HxCDF	10.00	6.66e+05	1.26 y	34:08	-	1.12
14	Unk	1,2,3,7,8,9-HxCDF	10.00	5.16e+05	1.16 y	35:08	-	1.02
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	5.02e+05	1.05 y	36:57	-	1.06
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	4.31e+05	1.08 y	38:41	-	1.25
17	Unk	OCDF	20.00	7.38e+05	0.91 y	41:44	-	0.91
36	IS	13C-2,3,7,8-TCDD	100.00	7.73e+06	0.78 y	26:33	-	1.06
37	IS	13C-1,2,3,7,8-PeCDD	100.00	6.03e+06	0.62 y	30:55	-	0.83
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	3.81e+06	1.24 y	34:15	-	0.58
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	5.44e+06	1.28 y	34:22	-	0.82
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	5.03e+06	1.21 y	34:42	-	0.76
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	3.89e+06	1.09 y	38:05	-	0.59
42	IS	13C-OCDD	200.00	6.97e+06	0.90 y	41:28	-	0.53
43	IS	13C-2,3,7,8-TCDF	100.00	1.08e+07	0.82 y	25:49	-	1.03
44	IS	13C-1,2,3,7,8-PeCDF	100.00	8.55e+06	1.59 y	29:47	-	0.82
45	IS	13C-2,3,4,7,8-PeCDF	100.00	8.70e+06	1.59 y	30:40	-	0.83
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	5.22e+06	0.49 y	33:21	-	0.79
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	6.80e+06	0.51 y	33:29	-	1.03
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	5.93e+06	0.52 y	34:07	-	0.90
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	5.05e+06	0.51 y	35:08	-	0.77
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	4.73e+06	0.44 y	36:57	-	0.72
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	3.46e+06	0.45 y	38:41	-	0.52
52	IS	13C-OCDF	200.00	8.15e+06	0.92 y	41:44	-	0.62
53	C/Up	37Cl-2,3,7,8-TCDD	2.00	1.69e+05		26:33	-	1.16
54	RS/RT	13C-1,2,3,4-TCDD	100.00	7.29e+06	0.77 y	25:59	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.04e+07	0.82 y	24:39	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	6.60e+06	0.52 y	33:47	-	1.00

DB
10/10/19

Filename: 191009D1 S: 4 Acquired: 9-OCT-19 18:36:09
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-4 1613 CS3 19C2204

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	10.00	8.37e+05	0.80 y	26:35	-	0.99
2	Unk	1,2,3,7,8-PeCDD	50.00	2.94e+06	0.61 y	30:56	-	0.88
3	Unk	1,2,3,4,7,8-HxCDD	50.00	2.38e+06	1.21 y	34:16	-	1.08
4	Unk	1,2,3,6,7,8-HxCDD	50.00	2.90e+06	1.19 y	34:23	-	0.92
5	Unk	1,2,3,7,8,9-HxCDD	50.00	2.74e+06	1.24 y	34:42	-	0.95
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	2.15e+06	1.03 y	38:05	-	0.96
7	Unk	OCDD	100.00	3.73e+06	0.91 y	41:28	-	0.94
8	Unk	2,3,7,8-TCDF	10.00	1.05e+06	0.80 y	25:51	-	0.89
9	Unk	1,2,3,7,8-PeCDF	50.00	4.65e+06	1.59 y	29:47	-	0.95
10	Unk	2,3,4,7,8-PeCDF	50.00	4.70e+06	1.68 y	30:40	-	1.00
11	Unk	1,2,3,4,7,8-HxCDF	50.00	3.52e+06	1.24 y	33:21	-	1.14
12	Unk	1,2,3,6,7,8-HxCDF	50.00	3.92e+06	1.25 y	33:29	-	1.05
13	Unk	2,3,4,6,7,8-HxCDF	50.00	3.74e+06	1.22 y	34:07	-	1.11
14	Unk	1,2,3,7,8,9-HxCDF	50.00	3.00e+06	1.19 y	35:07	-	1.06
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	2.97e+06	1.04 y	36:57	-	1.10
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	2.49e+06	1.07 y	38:41	-	1.25
17	Unk	OCDF	100.00	4.33e+06	0.91 y	41:43	-	0.92
36	IS	13C-2,3,7,8-TCDD	100.00	8.46e+06	0.74 y	26:33	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	6.66e+06	0.62 y	30:55	-	0.86
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	4.42e+06	1.25 y	34:15	-	0.61
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	6.30e+06	1.28 y	34:22	-	0.87
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	5.76e+06	1.27 y	34:41	-	0.80
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	4.47e+06	1.05 y	38:05	-	0.62
42	IS	13C-OCDD	200.00	7.90e+06	0.94 y	41:27	-	0.55
43	IS	13C-2,3,7,8-TCDF	100.00	1.18e+07	0.79 y	25:50	-	1.05
44	IS	13C-1,2,3,7,8-PeCDF	100.00	9.79e+06	1.62 y	29:47	-	0.87
45	IS	13C-2,3,4,7,8-PeCDF	100.00	9.43e+06	1.61 y	30:39	-	0.84
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	6.19e+06	0.50 y	33:21	-	0.86
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	7.47e+06	0.51 y	33:29	-	1.03
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	6.75e+06	0.49 y	34:06	-	0.93
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	5.64e+06	0.49 y	35:07	-	0.78
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	5.40e+06	0.43 y	36:55	-	0.75
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	3.99e+06	0.44 y	38:40	-	0.55
52	IS	13C-OCDF	200.00	9.37e+06	0.89 y	41:43	-	0.65
53	C/Up	37Cl-2,3,7,8-TCDD	10.00	8.56e+05		26:35	-	1.11
54	RS/RT	13C-1,2,3,4-TCDD	100.00	7.70e+06	0.75 y	26:00	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.13e+07	0.82 y	24:41	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	7.23e+06	0.51 y	33:47	-	1.00

DB
10/10/19

Filename: 191009D1 S: 5 Acquired: 9-OCT-19 19:23:46
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-5 1613 CS4 19C2205

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	40.00	3.53e+06	0.81 y	26:35	-	0.92
2	Unk	1,2,3,7,8-PeCDD	200.00	1.48e+07	0.63 y	30:55	-	0.96
3	Unk	1,2,3,4,7,8-HxCDD	200.00	1.19e+07	1.19 y	34:15	-	1.09
4	Unk	1,2,3,6,7,8-HxCDD	200.00	1.34e+07	1.20 y	34:22	-	0.98
5	Unk	1,2,3,7,8,9-HxCDD	200.00	1.30e+07	1.18 y	34:41	-	1.00
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	1.10e+07	1.03 y	38:04	-	1.03
7	Unk	OCDD	400.00	2.03e+07	0.91 y	41:26	-	1.01
8	Unk	2,3,7,8-TCDF	40.00	5.17e+06	0.77 y	25:52	-	0.95
9	Unk	1,2,3,7,8-PeCDF	200.00	2.24e+07	1.58 y	29:47	-	1.00
10	Unk	2,3,4,7,8-PeCDF	200.00	2.29e+07	1.55 y	30:40	-	1.03
11	Unk	1,2,3,4,7,8-HxCDF	200.00	1.69e+07	1.21 y	33:21	-	1.20
12	Unk	1,2,3,6,7,8-HxCDF	200.00	1.85e+07	1.21 y	33:29	-	1.12
13	Unk	2,3,4,6,7,8-HxCDF	200.00	1.83e+07	1.21 y	34:06	-	1.16
14	Unk	1,2,3,7,8,9-HxCDF	200.00	1.53e+07	1.22 y	35:06	-	1.08
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	1.46e+07	1.04 y	36:56	-	1.17
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	1.30e+07	1.05 y	38:39	-	1.31
17	Unk	OCDF	400.00	2.42e+07	0.91 y	41:41	-	1.00
36	IS	13C-2,3,7,8-TCDD	100.00	9.63e+06	0.75 y	26:34	-	1.12
37	IS	13C-1,2,3,7,8-PeCDD	100.00	7.72e+06	0.63 y	30:54	-	0.89
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	5.48e+06	1.31 y	34:14	-	0.65
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	6.83e+06	1.22 y	34:21	-	0.80
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	6.48e+06	1.26 y	34:40	-	0.76
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	5.36e+06	1.08 y	38:03	-	0.63
42	IS	13C-OCDD	200.00	1.01e+07	0.91 y	41:25	-	0.59
43	IS	13C-2,3,7,8-TCDF	100.00	1.36e+07	0.80 y	25:51	-	1.04
44	IS	13C-1,2,3,7,8-PeCDF	100.00	1.12e+07	1.57 y	29:46	-	0.86
45	IS	13C-2,3,4,7,8-PeCDF	100.00	1.11e+07	1.52 y	30:39	-	0.85
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	7.05e+06	0.50 y	33:20	-	0.83
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	8.28e+06	0.49 y	33:28	-	0.98
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	7.90e+06	0.51 y	34:05	-	0.93
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	7.08e+06	0.51 y	35:06	-	0.83
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	6.23e+06	0.46 y	36:55	-	0.73
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	4.95e+06	0.44 y	38:38	-	0.58
52	IS	13C-OCDF	200.00	1.22e+07	0.90 y	41:40	-	0.72
53	C/Up	37Cl-2,3,7,8-TCDD	40.00	3.96e+06		26:35	-	1.15
54	RS/RT	13C-1,2,3,4-TCDD	100.00	8.64e+06	0.78 y	26:00	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.30e+07	0.83 y	24:41	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	8.48e+06	0.51 y	33:46	-	1.00

JB
10/10/19

Filename: 191009D1 S: 6 Acquired: 9-OCT-19 20:11:17
Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Results:
Sample text: ST191009D1-6 1613 CS5 19C2206

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	300.00	2.80e+07	0.81 y	26:35	-	0.98
2	Unk	1,2,3,7,8-PeCDD	1500.00	1.19e+08	0.62 y	30:55	-	0.96
3	Unk	1,2,3,4,7,8-HxCDD	1500.00	1.04e+08	1.22 y	34:15	-	1.15
4	Unk	1,2,3,6,7,8-HxCDD	1500.00	1.07e+08	1.21 y	34:22	-	1.00
5	Unk	1,2,3,7,8,9-HxCDD	1500.00	1.06e+08	1.23 y	34:41	-	1.03
6	Unk	1,2,3,4,6,7,8-HpCDD	1500.00	9.32e+07	1.05 y	38:03	-	1.06
7	Unk	OCDD	3000.00	1.64e+08	0.92 y	41:25	-	1.01
8	Unk	2,3,7,8-TCDF	300.00	3.95e+07	0.79 y	25:52	-	0.99
9	Unk	1,2,3,7,8-PeCDF	1500.00	1.79e+08	1.58 y	29:47	-	1.01
10	Unk	2,3,4,7,8-PeCDF	1500.00	1.86e+08	1.57 y	30:39	-	1.07
11	Unk	1,2,3,4,7,8-HxCDF	1500.00	1.40e+08	1.20 y	33:21	-	1.24
12	Unk	1,2,3,6,7,8-HxCDF	1500.00	1.48e+08	1.21 y	33:29	-	1.11
13	Unk	2,3,4,6,7,8-HxCDF	1500.00	1.51e+08	1.22 y	34:06	-	1.20
14	Unk	1,2,3,7,8,9-HxCDF	1500.00	1.28e+08	1.25 y	35:06	-	1.13
15	Unk	1,2,3,4,6,7,8-HpCDF	1500.00	1.18e+08	1.03 y	36:55	-	1.18
16	Unk	1,2,3,4,7,8,9-HpCDF	1500.00	1.04e+08	1.05 y	38:38	-	1.34
17	Unk	OCDF	3000.00	1.96e+08	0.91 y	41:40	-	0.98
36	IS	13C-2,3,7,8-TCDD	100.00	9.53e+06	0.73 y	26:33	-	1.11
37	IS	13C-1,2,3,7,8-PeCDD	100.00	8.28e+06	0.64 y	30:54	-	0.96
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.01e+06	1.21 y	34:14	-	0.77
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	7.08e+06	1.32 y	34:21	-	0.90
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	6.90e+06	1.26 y	34:39	-	0.88
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	5.86e+06	1.08 y	38:03	-	0.75
42	IS	13C-OCDD	200.00	1.08e+07	0.92 y	41:25	-	0.69
43	IS	13C-2,3,7,8-TCDF	100.00	1.33e+07	0.80 y	25:51	-	1.04
44	IS	13C-1,2,3,7,8-PeCDF	100.00	1.18e+07	1.59 y	29:46	-	0.92
45	IS	13C-2,3,4,7,8-PeCDF	100.00	1.16e+07	1.60 y	30:38	-	0.91
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	7.52e+06	0.51 y	33:20	-	0.96
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	8.92e+06	0.50 y	33:28	-	1.14
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	8.38e+06	0.51 y	34:05	-	1.07
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	7.57e+06	0.52 y	35:05	-	0.96
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	6.70e+06	0.43 y	36:54	-	0.85
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	5.19e+06	0.43 y	38:37	-	0.66
52	IS	13C-OCDF	200.00	1.33e+07	0.89 y	41:39	-	0.85
53	C/Up	37Cl-2,3,7,8-TCDD	199.98	2.09e+07		26:35	-	1.21
54	RS/RT	13C-1,2,3,4-TCDD	100.00	8.62e+06	0.76 y	26:01	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	1.27e+07	0.84 y	24:41	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	7.85e+06	0.49 y	33:45	-	1.00

DB
10/10/19

Run: 191009D1 Analyte: Cal: 1613VG7-10 9-19 Inst. ID. VG-7

Data filename: 191009D1

Name	Mean RRF	%RSD	Samp# 1 RRF#1 (0.25)	Samp# 2 RRF#2 (0.50)	Samp# 3 RRF#3 (2.0)	Samp# 4 RRF#4 (10)	Samp# 5 RRF#5 (40)	Samp# 6 RRF#6 (300)
Total Tetra-Dioxins	0.9053	7.55 %	0.84	0.83	0.87	0.99	0.92	0.98
TCDD EMPC	0.9053	7.55 %	0.84	0.83	0.87	0.99	0.92	0.98
Total Penta-Dioxins	0.9027	4.95 %	0.86	0.87	0.88	0.88	0.96	0.96
PeCDD EMPC	0.9027	4.95 %	0.86	0.87	0.88	0.88	0.96	0.96
Total Hexa-Dioxins	0.9918	4.02 %	0.95	0.96	0.99	0.97	1.02	1.06
HxCDD EMPC	0.9918	4.02 %	0.95	0.96	0.99	0.97	1.02	1.06
Total Hepta-Dioxins	0.9794	5.84 %	0.90	0.97	0.95	0.96	1.03	1.06
HpCDD EMPC	0.9794	5.84 %	0.90	0.97	0.95	0.96	1.03	1.06
Total Tetra-Furans	0.9501	8.27 %	1.09	0.90	0.89	0.89	0.95	0.99
TCDF EMPC	0.9501	8.27 %	1.09	0.90	0.89	0.89	0.95	0.99
1st Func. Penta-Furans	0.9875	3.40 %	0.97	0.96	0.96	0.97	1.02	1.04
1st Func. PeCDF EMPC	0.9875	3.40 %	0.97	0.96	0.96	0.97	1.02	1.04
Total Penta-Furans	0.9875	3.40 %	0.97	0.96	0.96	0.97	1.02	1.04
PeCDF EMPC	0.9875	3.40 %	0.97	0.96	0.96	0.97	1.02	1.04
Total Hexa-Furans	1.1033	3.70 %	1.08	1.06	1.09	1.09	1.14	1.17
HxCDF EMPC	1.1033	3.70 %	1.08	1.06	1.09	1.09	1.14	1.17
Total Hepta-Furans	1.1937	3.56 %	1.21	1.17	1.14	1.16	1.23	1.25
HpCDF EMPC	1.1937	3.56 %	1.21	1.17	1.14	1.16	1.23	1.25

DB
10/10/19

Run: 191009D1 Analyte: Cal: 1613VG7-10-9-19 Inst. ID. VG-7

Data filename: 191009D1

Name	RRT Limits Lower	Upper	Samp# 1 0.25 RRT#1	Samp# 2 0.50 RRT#2	Samp# 3 2.0 RRT#3	Samp# 4 10 RRT#4	Samp# 5 40 RRT#5	Samp# 6 300 RRT#6
2,3,7,8-TCDD	0.999	1.002	1.000	1.000	1.000	1.001	1.001	1.001
1,2,3,7,8-PeCDD	0.999	1.002	0.999	1.000	1.001	1.001	1.001	1.001
1,2,3,4,7,8-HxCDD	0.999	1.001	1.000	1.000	1.001	1.000	1.000	1.000
1,2,3,6,7,8-HxCDD	0.998	1.004	1.000	1.000	1.000	1.001	1.001	1.000
1,2,3,7,8,9-HxCDD	0.998	1.004	1.001	1.000	1.000	1.000	1.001	1.001
1,2,3,4,6,7,8-HpCDD	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDD	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2,3,7,8-TCDF	0.999	1.003	1.000	1.000	1.000	1.001	1.001	1.001
1,2,3,7,8-PeCDF	0.999	1.002	1.000	1.000	1.000	1.000	1.000	1.001
2,3,4,7,8-PeCDF	0.999	1.002	1.000	1.000	1.000	1.001	1.001	1.001
1,2,3,4,7,8-HxCDF	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,6,7,8-HxCDF	0.997	1.005	1.000	1.000	1.001	1.000	1.000	1.000
2,3,4,6,7,8-HxCDF	0.999	1.001	1.000	1.000	1.000	1.001	1.001	1.000
1,2,3,7,8,9-HxCDF	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,6,7,8-HpCDF	0.999	1.001	1.000	1.000	1.000	1.001	1.000	1.000
1,2,3,4,7,8,9-HpCDF	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDF	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000
13C-2,3,7,8-TCDD	0.976	1.043	1.022	1.022	1.022	1.021	1.021	1.021
13C-1,2,3,7,8-PeCDD	1.000	1.567	1.190	1.189	1.190	1.189	1.188	1.188
13C-1,2,3,4,7,8-HxCDD	1.002	1.026	1.014	1.014	1.014	1.014	1.014	1.014
13C-1,2,3,6,7,8-HxCDD	1.007	1.029	1.017	1.018	1.018	1.017	1.017	1.018
13C-1,2,3,7,8,9-HxCDD	1.014	1.038	1.027	1.027	1.027	1.027	1.027	1.027
13C-1,2,3,4,6,7,8-HpCDD	1.117	1.141	1.127	1.127	1.128	1.127	1.127	1.127
13C-OCDD	1.085	1.365	1.227	1.227	1.228	1.227	1.227	1.227
13C-2,3,7,8-TCDF	0.923	1.103	0.994	0.994	0.994	0.994	0.994	0.994
13C-1,2,3,7,8-PeCDF	1.000	1.425	1.146	1.146	1.146	1.145	1.145	1.144
13C-2,3,4,7,8-PeCDF	1.011	1.526	1.180	1.179	1.180	1.179	1.178	1.178
13C-1,2,3,4,7,8-HxCDF	0.975	1.001	0.987	0.987	0.987	0.987	0.987	0.987
13C-1,2,3,6,7,8-HxCDF	0.979	1.005	0.991	0.991	0.991	0.991	0.991	0.991
13C-2,3,4,6,7,8-HxCDF	1.001	1.020	1.010	1.010	1.010	1.009	1.009	1.010
13C-1,2,3,7,8,9-HxCDF	1.002	1.072	1.040	1.040	1.040	1.039	1.039	1.039
13C-1,2,3,4,6,7,8-HpCDF	1.069	1.111	1.093	1.093	1.094	1.093	1.093	1.093
13C-1,2,3,4,7,8,9-HpCDF	1.098	1.192	1.145	1.145	1.145	1.145	1.144	1.144
13C-OCDF	1.091	1.371	1.235	1.234	1.235	1.235	1.234	1.234
37Cl-2,3,7,8-TCDD	0.989	1.052	1.022	1.021	1.022	1.022	1.022	1.022
13C-1,2,3,4-TCDD	0.000	0.000	*	*	*	*	*	*
13C-1,2,3,4-TCDF	0.000	0.000	*	*	*	*	*	*
13C-1,2,3,4,6,9-HxCDF	0.000	0.000	*	*	*	*	*	*

DB
10/10/19

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-9-19

RT Window Data Filename: 191009D1 S#4 Analysis Date: 9-OCT-19 Time: 18:36:09

ZB-5MS IS Data Filename: 191009D1 S#4 Analysis Date: 9-OCT-19 Time: 18:36:09

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:24	1,3,6,8-TCDF (F)	21:25
1,2,8,9-TCDD (L)	27:24	1,2,8,9-TCDF (L)	27:33
1,2,4,7,9-PeCDD (F)	28:55	1,3,4,6,8-PeCDF (F)	27:28
1,2,3,8,9-PeCDD (L)	31:17	1,2,3,8,9-PeCDF (L)	31:32
1,2,4,6,7,9-HxCDD (F)	32:41	1,2,3,4,6,8-HxCDF (F)	32:08
1,2,3,7,8,9-HxCDD (L)	34:42	1,2,3,7,8,9-HxCDF (L)	35:07
1,2,3,4,6,7,9-HpCDD (F)	37:16	1,2,3,4,6,7,8-HpCDF (F)	36:57
1,2,3,4,6,7,8-HpCDD (L)	38:05	1,2,3,4,7,8,9-HpCDF (L)	38:41

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

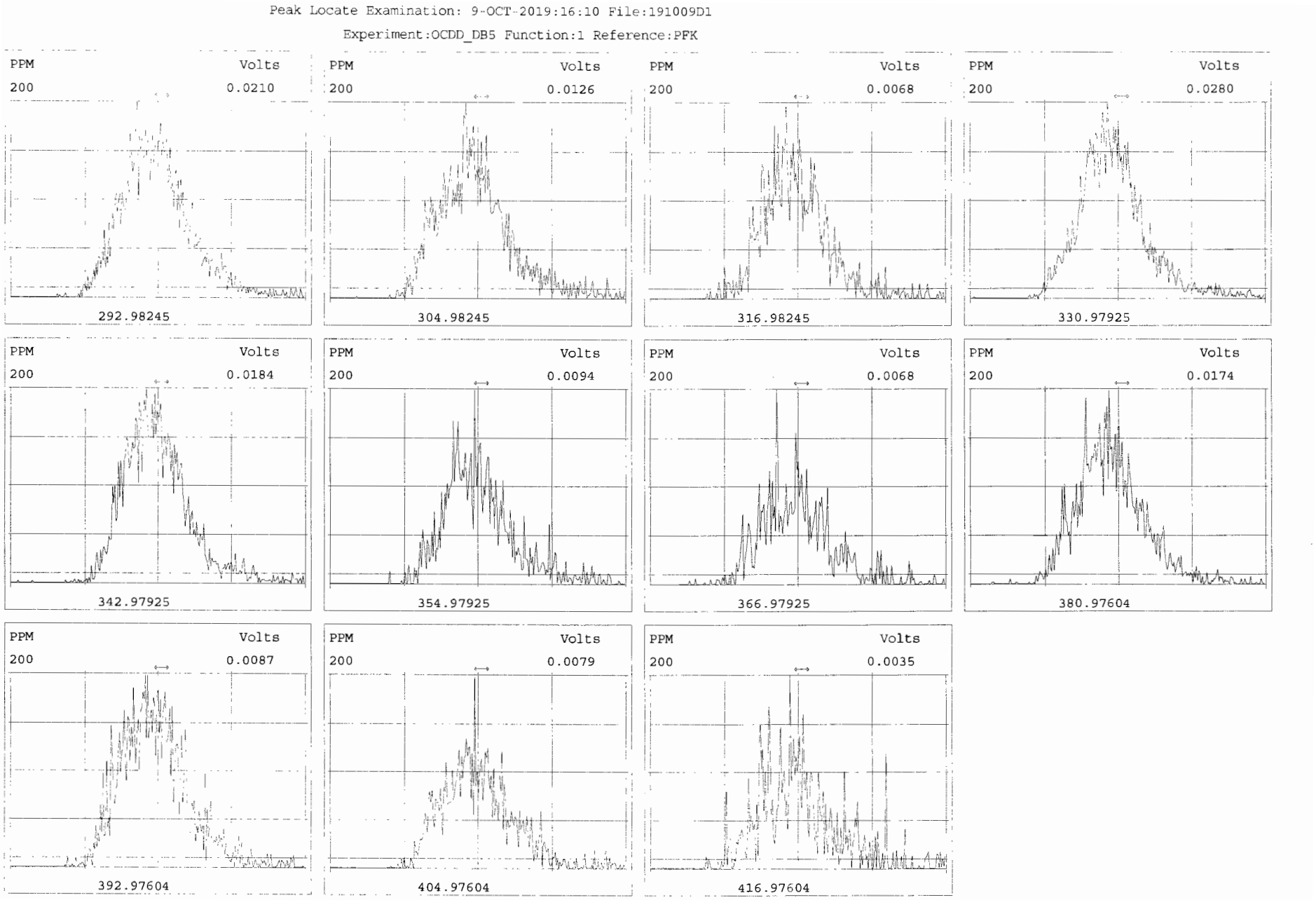
ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

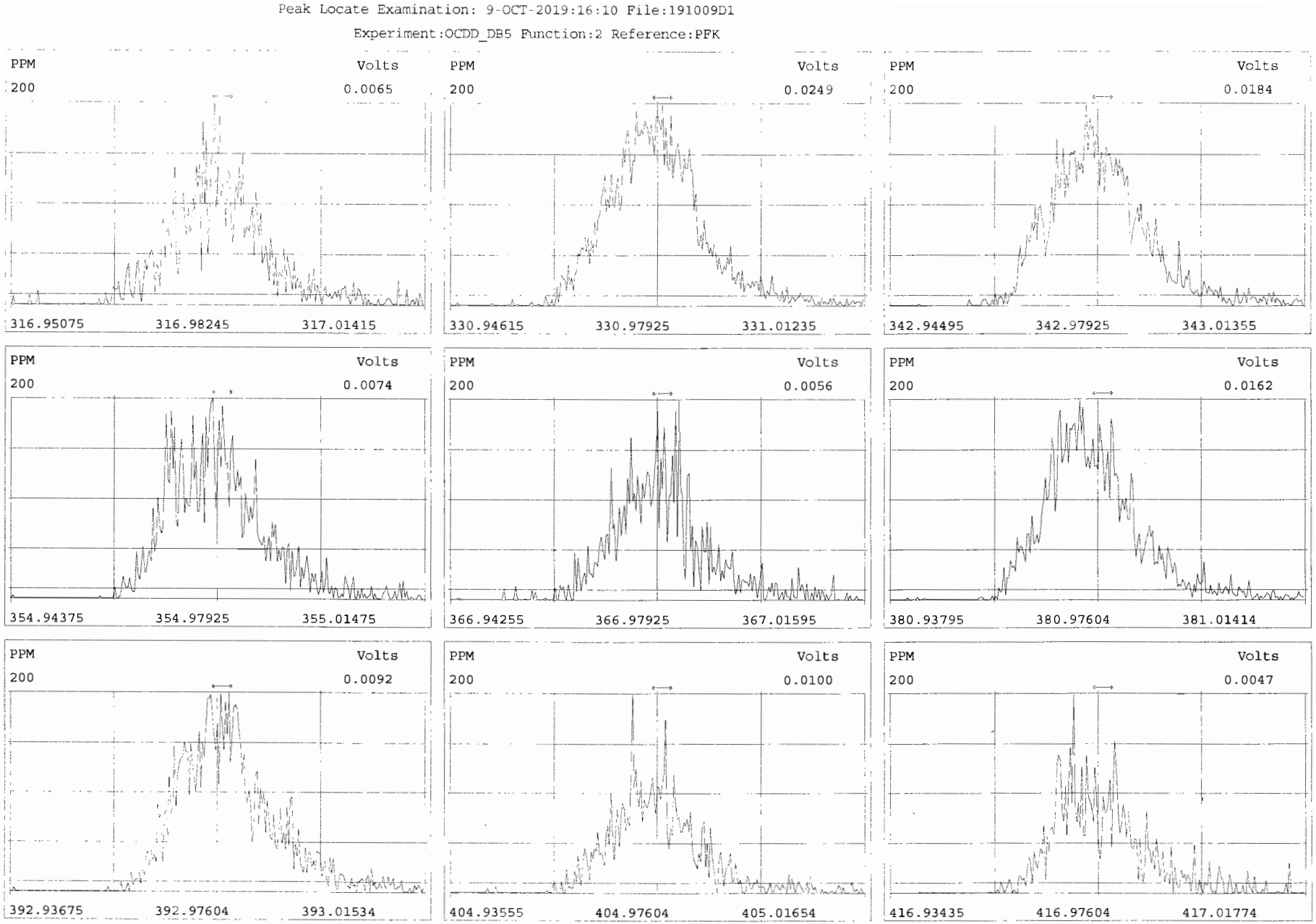
COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

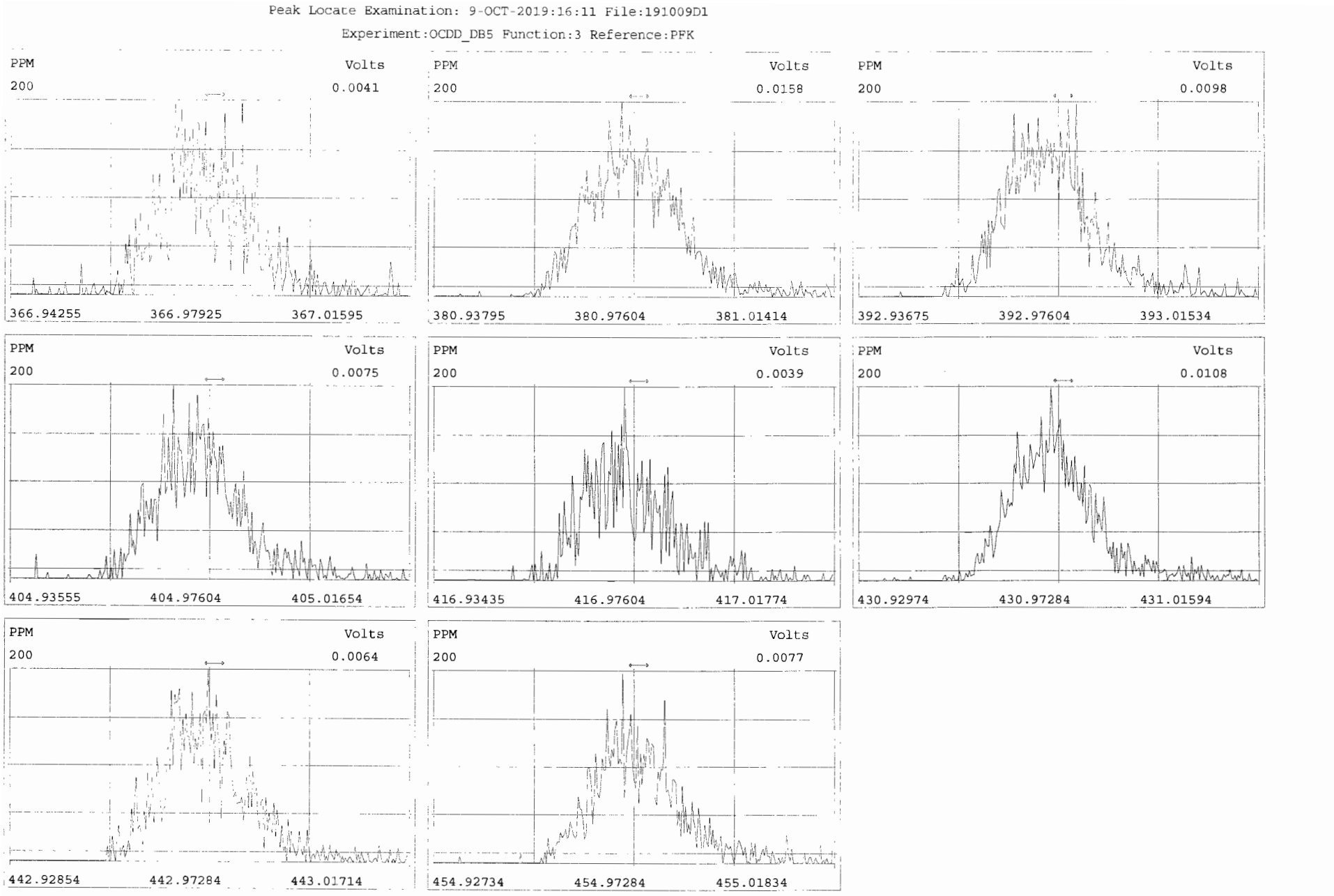
(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

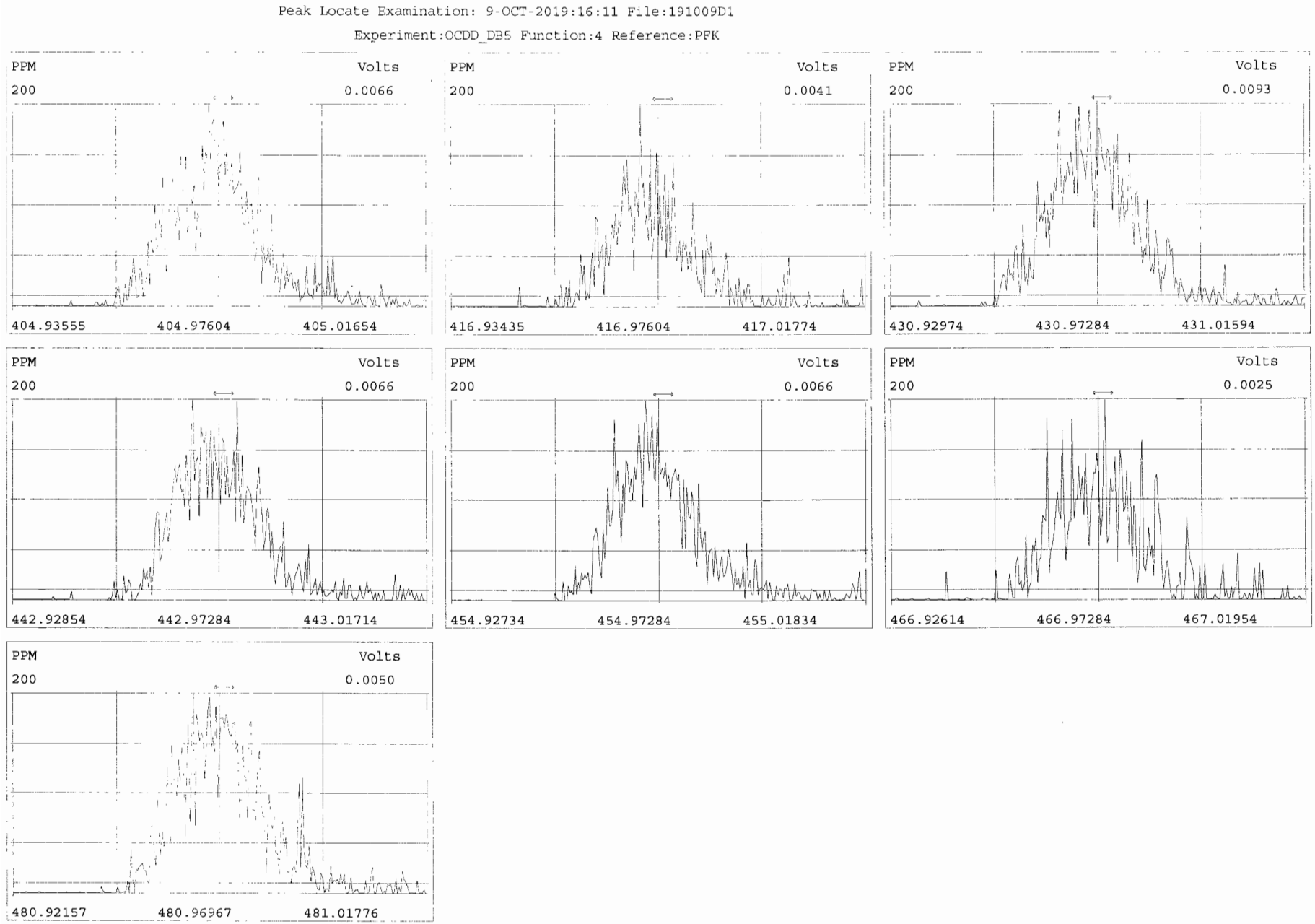
Analyst: DB

Date: 10/10/19


Peak Locate Examination: 9-OCT-2019:16:10 File:191009D1
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0210
292.98245
PPM
Volts
200
0.0126
304.98245
PPM
Volts
200
0.0068
316.98245
PPM
Volts
200
0.0280
330.97925
PPM
Volts
200
0.0184
342.97925
PPM
Volts
200
0.0094
354.97925
PPM
Volts
200
0.0068
366.97925
PPM
Volts
200
0.0174
380.97604
PPM
Volts
200
0.0087
392.97604
PPM
Volts
200
0.0079
404.97604
PPM
Volts
200
0.0035
416.97604

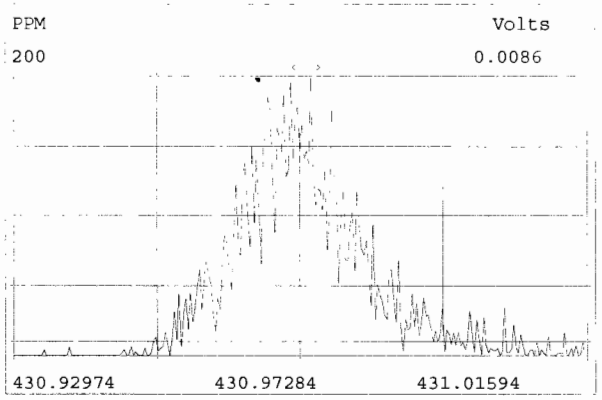

Peak Locate Examination: 9-OCT-2019:16:10 File:191009D1
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0065
316.95075
316.98245
317.01415
PPM
Volts
200
0.0249
330.94615
330.97925
331.01235
PPM
Volts
200
0.0184
342.94495
342.97925
343.01355
PPM
Volts
200
0.0074
354.94375
354.97925
355.01475
PPM
Volts
200
0.0056
366.94255
366.97925
367.01595
PPM
Volts
200
0.0162
380.93795
380.97604
381.01414
PPM
Volts
200
0.0092
392.93675
392.97604
393.01534
PPM
Volts
200
0.0100
404.93555
404.97604
405.01654
PPM
Volts
200
0.0047
416.93435
416.97604
417.01774

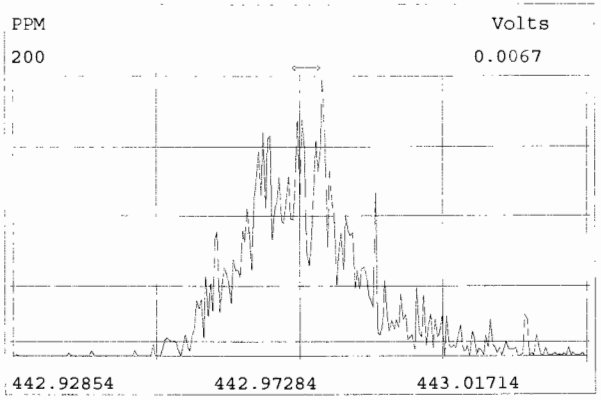

Peak Locate Examination: 9-OCT-2019:16:11 File:191009D1
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0041
366.94255
366.97925
367.01595
PPM
Volts
200
0.0158
380.93795
380.97604
381.01414
PPM
Volts
200
0.0098
392.93675
392.97604
393.01534
PPM
Volts
200
0.0075
404.93555
404.97604
405.01654
PPM
Volts
200
0.0039
416.93435
416.97604
417.01774
PPM
Volts
200
0.0108
430.92974
430.97284
431.01594
PPM
Volts
200
0.0064
442.92854
442.97284
443.01714
PPM
Volts
200
0.0077
454.92734
454.97284
455.01834

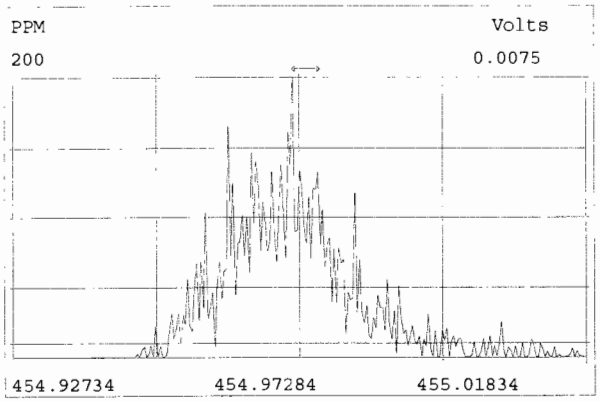

Peak Locate Examination: 9-OCT-2019:16:11 File:191009D1
Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
0.0066
404.93555
404.97604
405.01654
PPM
Volts
200
0.0041
416.93435
416.97604
417.01774
PPM
Volts
200
0.0093
430.92974
430.97284
431.01594
PPM
Volts
200
0.0066
442.92854
442.97284
443.01714
PPM
Volts
200
0.0066
454.92734
454.97284
455.01834
PPM
Volts
200
0.0025
466.92614
466.97284
467.01954
PPM
Volts
200
0.0050
480.92157
480.96967
481.01776

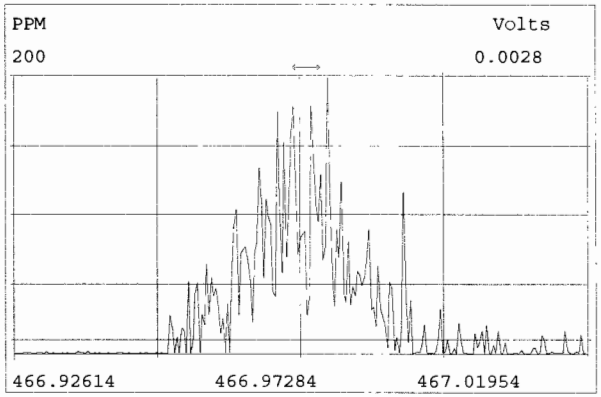
Peak Locate Examination: 9-OCT-2019:16:12 File:191009D1

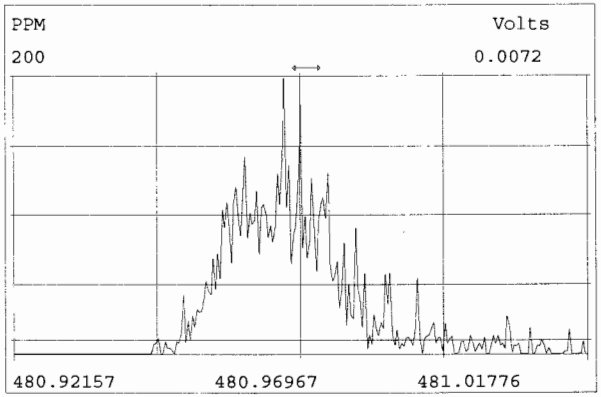
Experiment:OCDD_DB5 Function:5 Reference:PFK

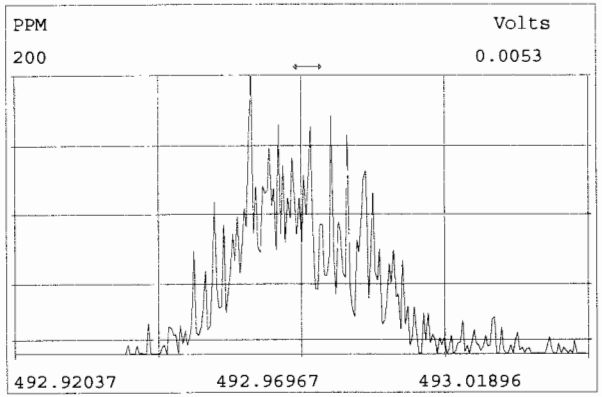


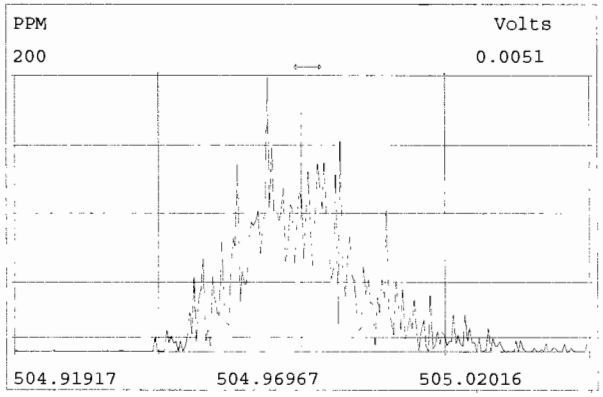


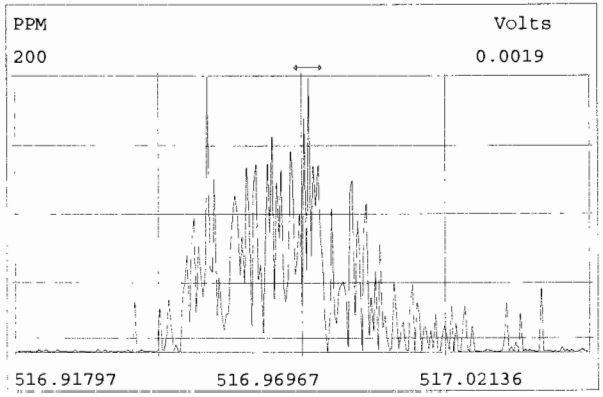








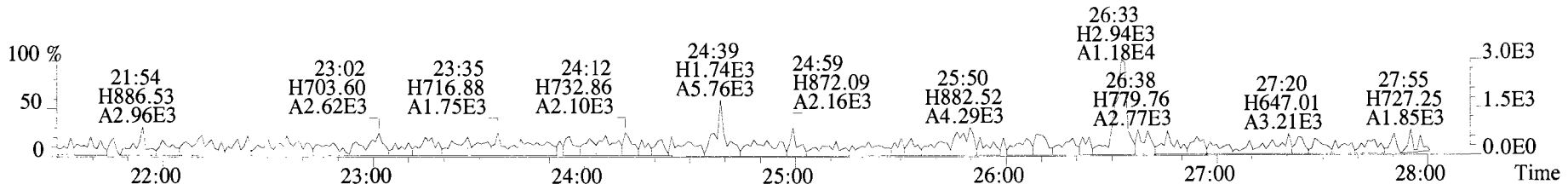




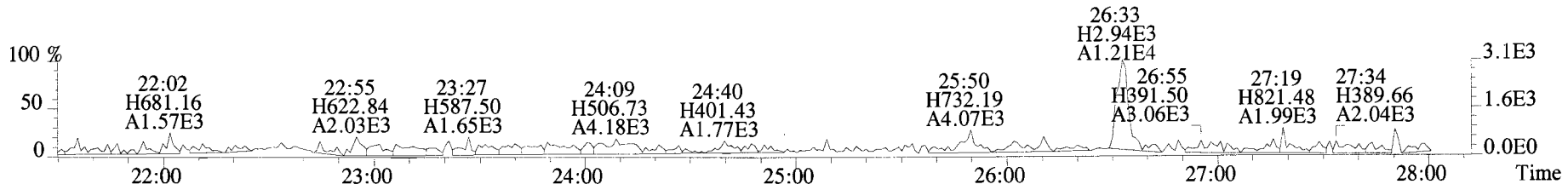
Vista Analytical Laboratory - Injection Log Run file: 191009D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191009D1	1	ST191009D1-1	DB	9-OCT-19	16:13:04	ST191009D1-4	NA
191009D1	2	ST191009D1-2	DB	9-OCT-19	17:00:45	ST191009D1-4	NA
191009D1	3	ST191009D1-3	DB	9-OCT-19	17:48:27	ST191009D1-4	NA
191009D1	4	ST191009D1-4	DB	9-OCT-19	18:36:09	ST191009D1-4	NA
191009D1	5	ST191009D1-5	DB	9-OCT-19	19:23:46	ST191009D1-4	NA
191009D1	6	ST191009D1-6	DB	9-OCT-19	20:11:17	ST191009D1-4	NA
191009D1	7	SOLVENT BLANK	DB	9-OCT-19	20:58:57	ST191009D1-4	NA
191009D1	8	SS191009D1-1	DB	9-OCT-19	21:46:34	ST191009D1-4	NA
191009D1	9	B9J0001-BS1	DB	9-OCT-19	22:34:09	ST191009D1-4	NA
191009D1	10	SOLVENT BLANK	DB	9-OCT-19	23:21:45	ST191009D1-4	NA
191009D1	11	B9J0001-BLK1	DB	10-OCT-19	00:09:30	ST191009D1-4	NA
191009D1	12	QC191007D1-1	DB	10-OCT-19	00:57:00	ST191009D1-4	NA
191009D1	13	1903285-08	DB	10-OCT-19	01:44:36	ST191009D1-4	NA
191009D1	14	1903285-09	DB	10-OCT-19	02:32:11	ST191009D1-4	NA
191009D1	15	1903285-10	DB	10-OCT-19	03:19:47	ST191009D1-4	NA
191009D1	16	1903103-02@5X	DB	10-OCT-19	04:07:23	ST191009D1-4	NA
191009D1	17	1903103-01@5X	DB	10-OCT-19	04:54:54	ST191009D1-4	NA
191009D1	18	B9I0240-DUP1@5X	DB	10-OCT-19	05:42:38	ST191009D1-4	NA

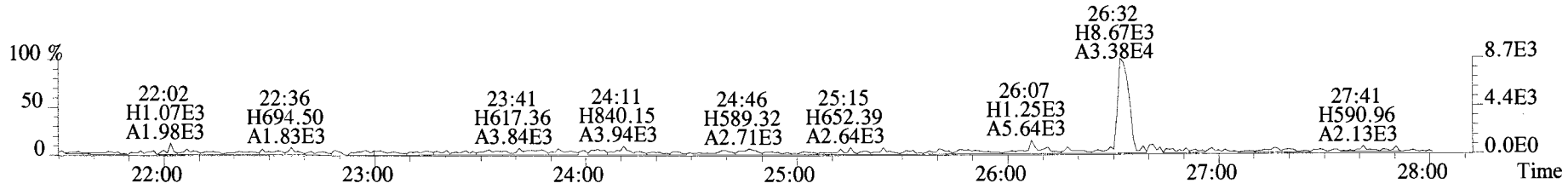
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



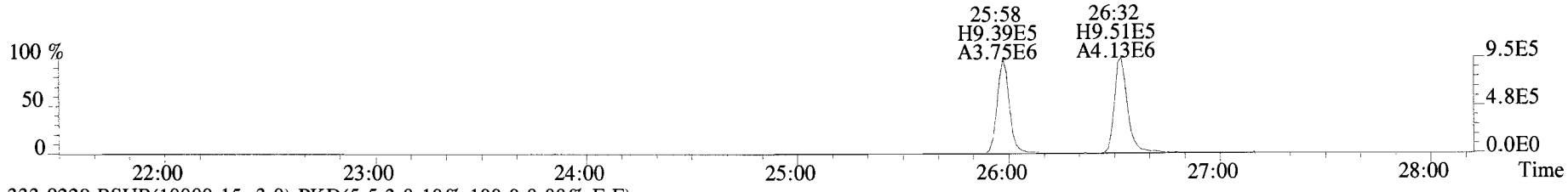
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



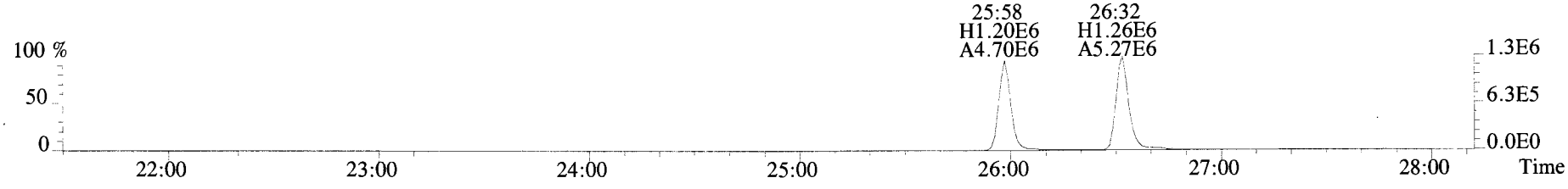
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



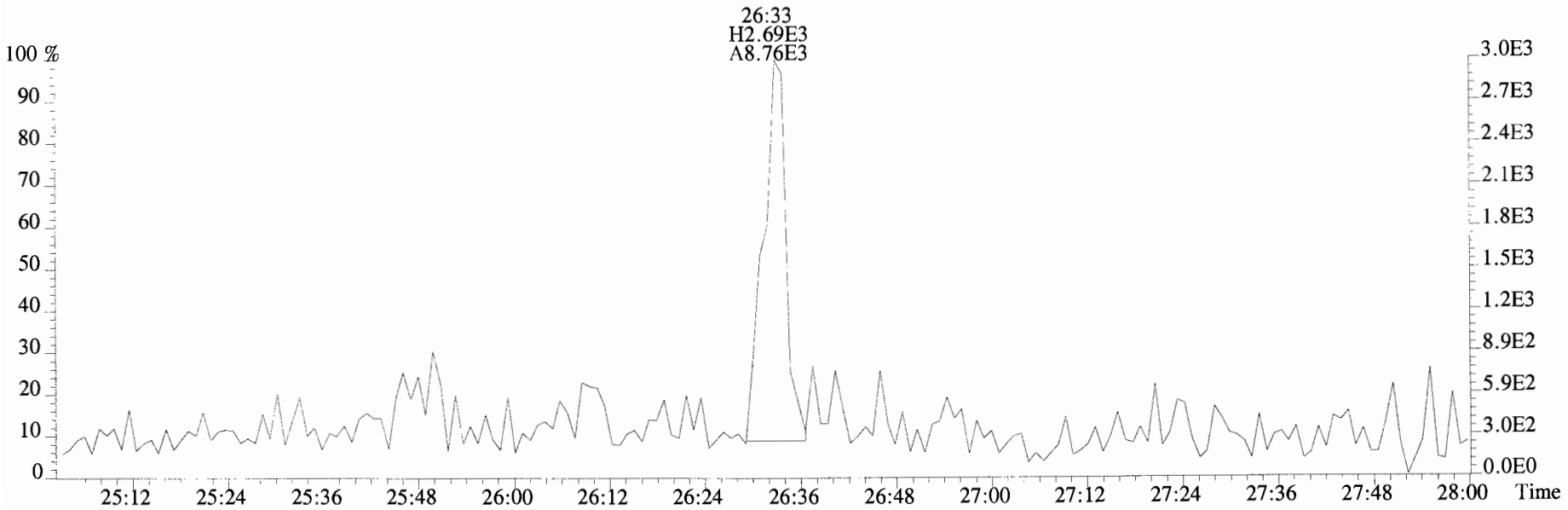
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



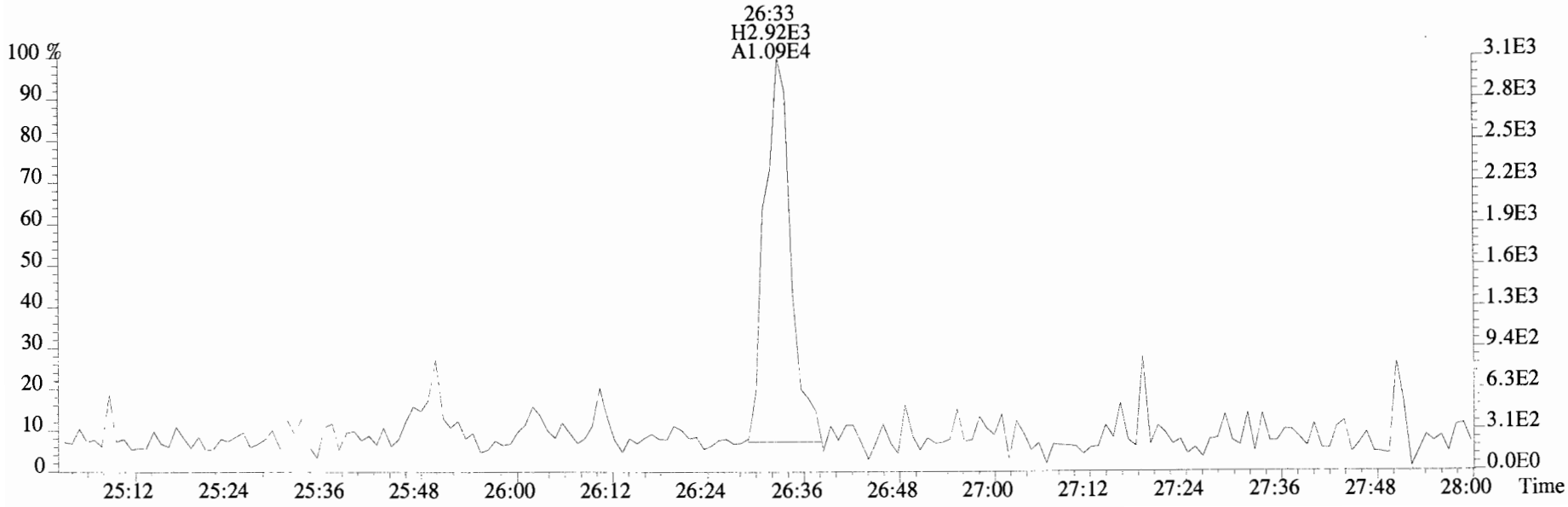
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



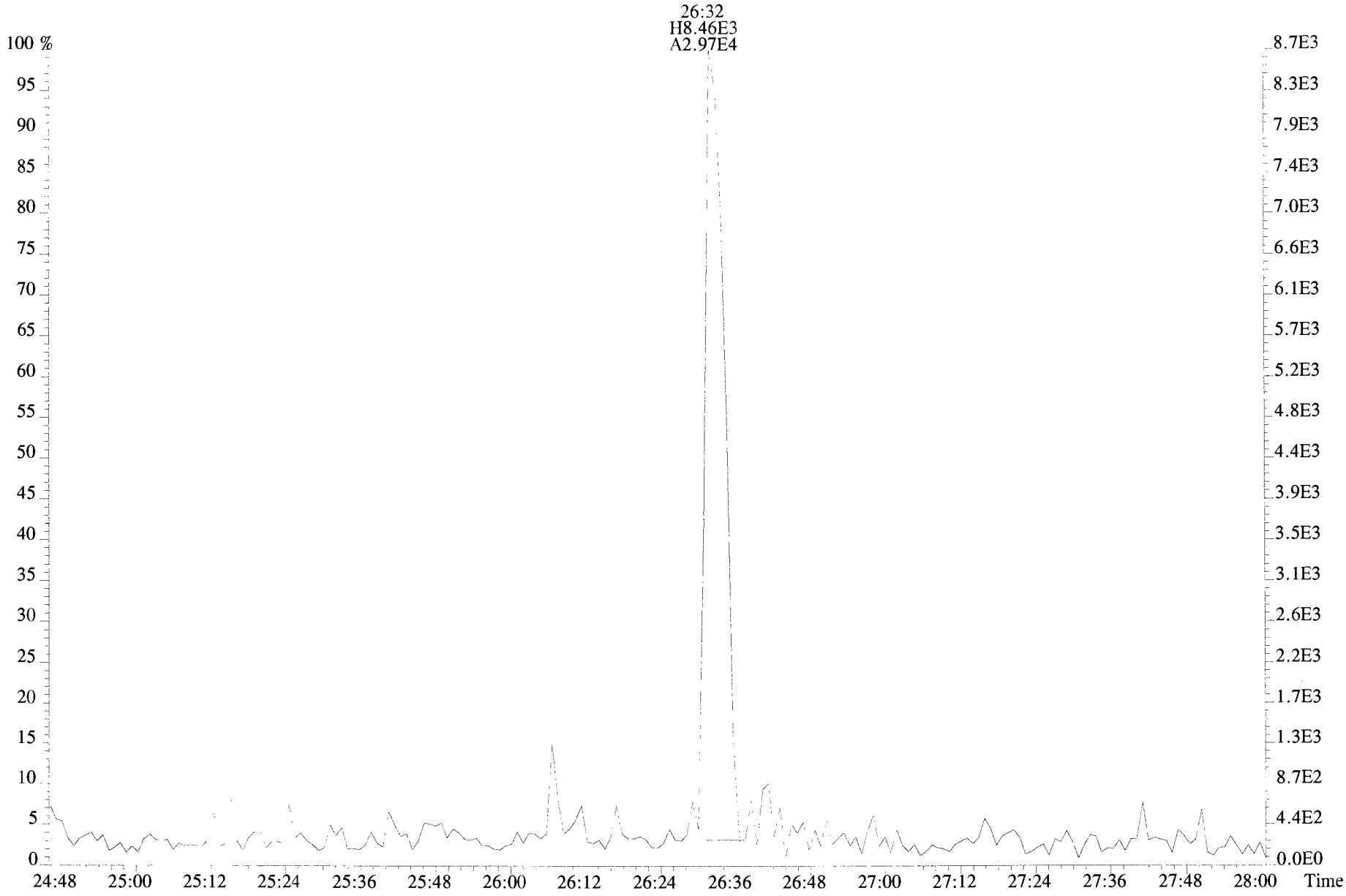
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

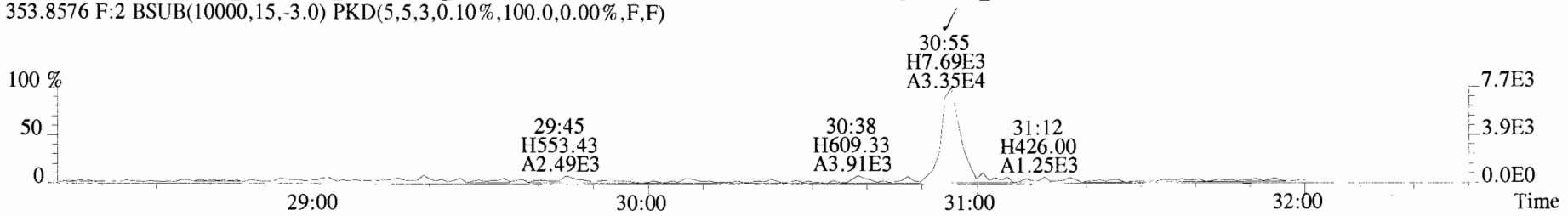


File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
327.8847 BSUB(10000,15,-3.0)

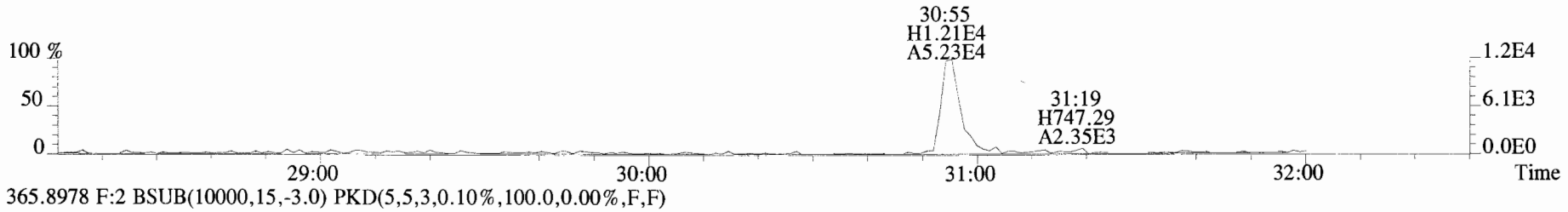


File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5

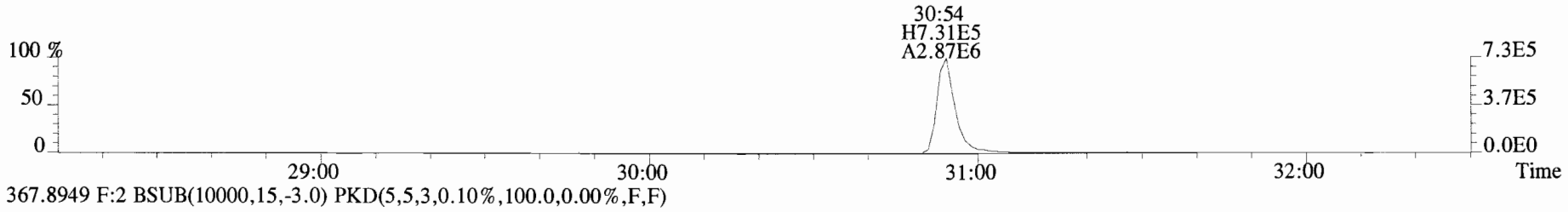
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



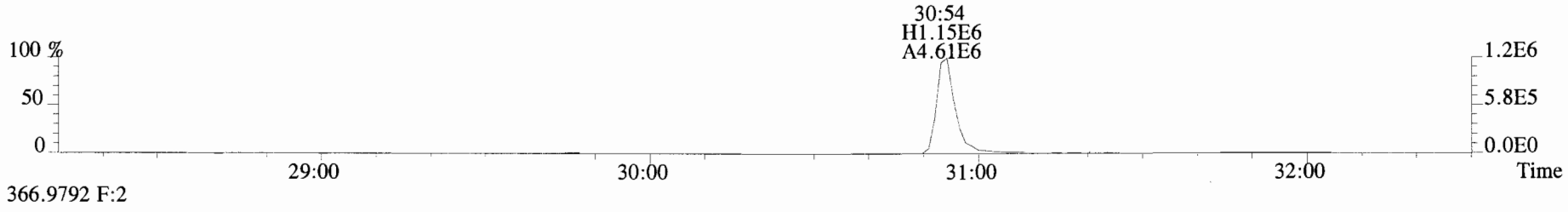
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



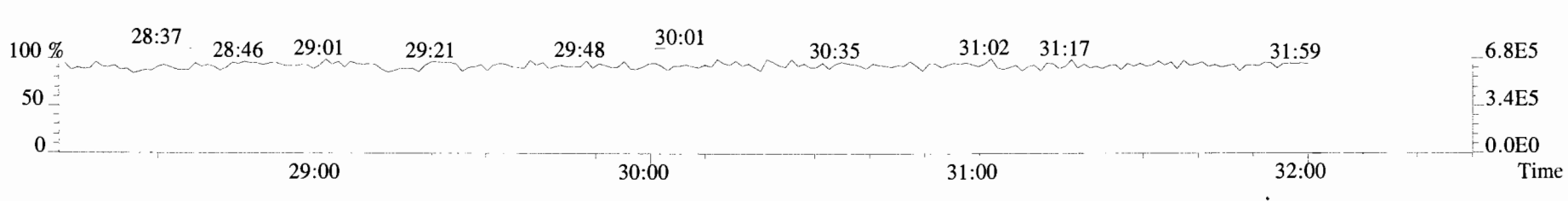
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



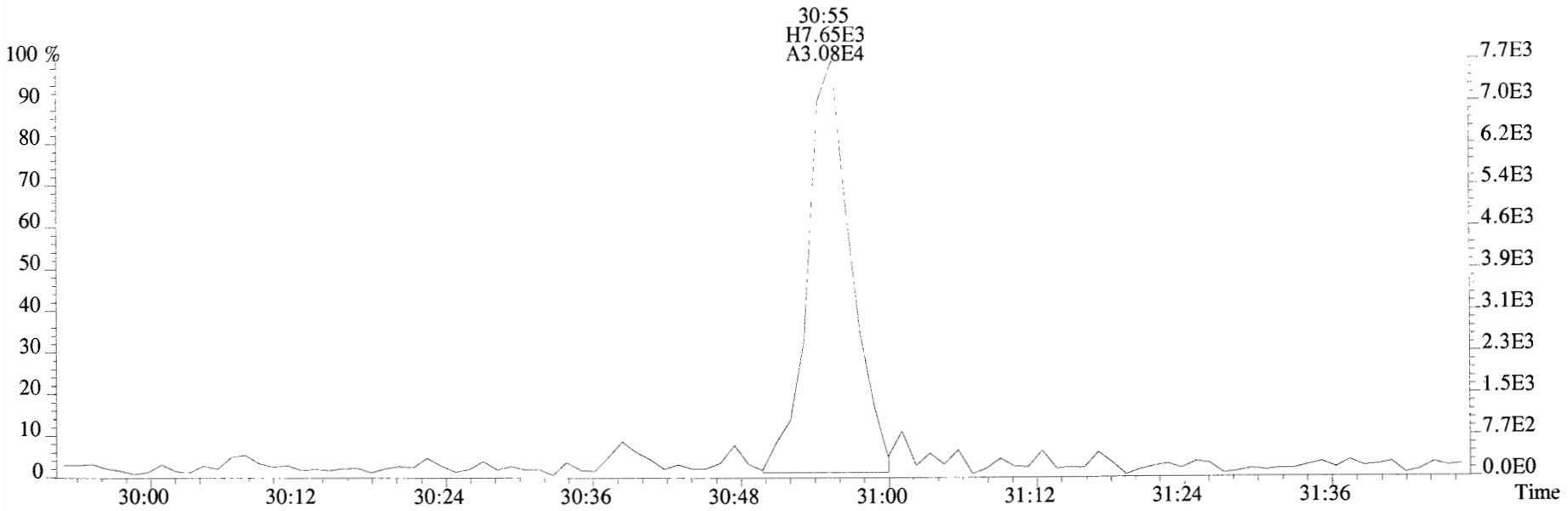
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



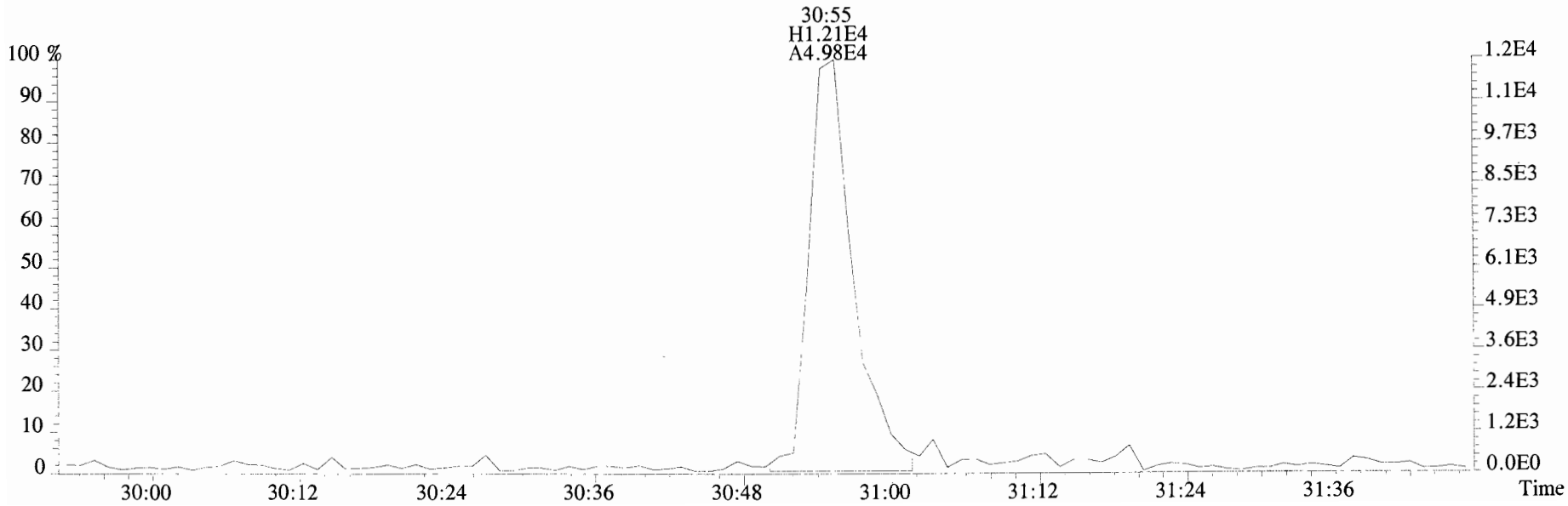
366.9792 F:2



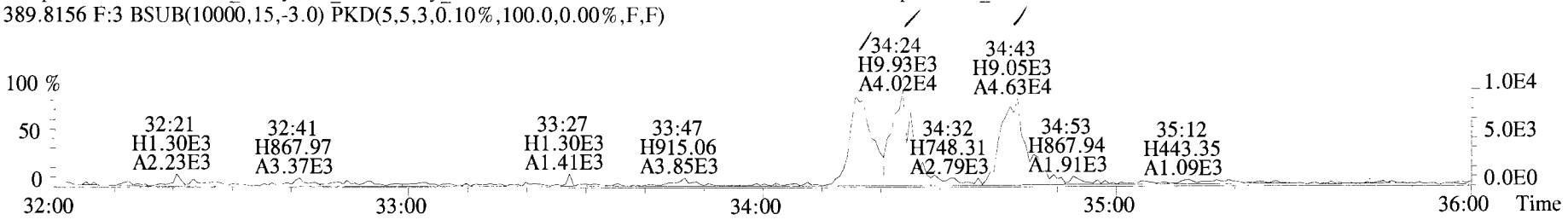
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



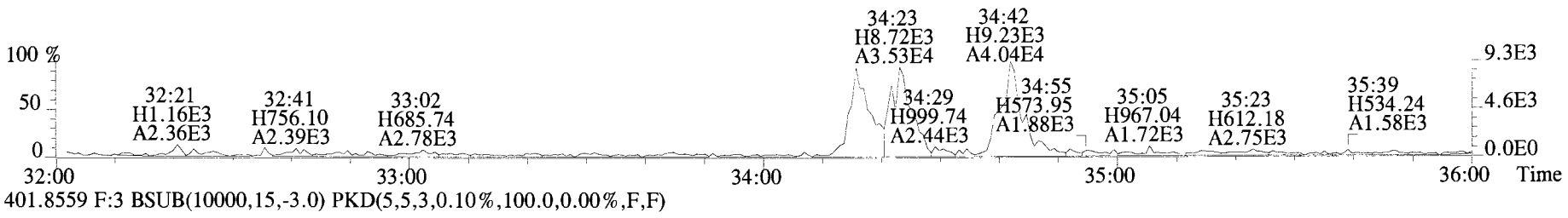
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



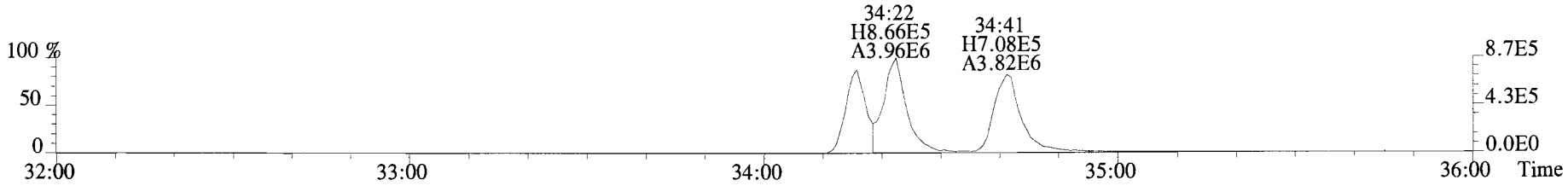
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



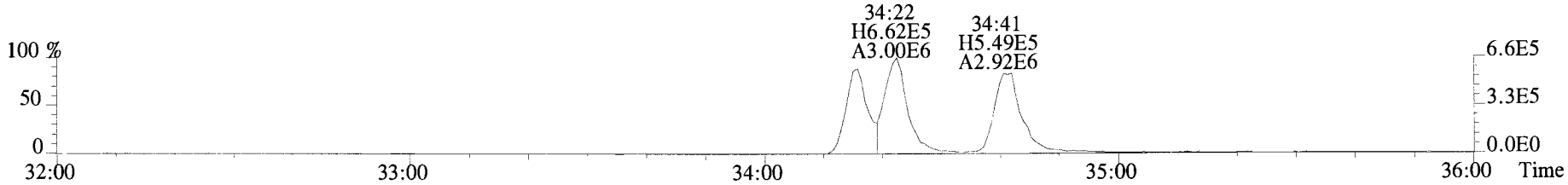
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



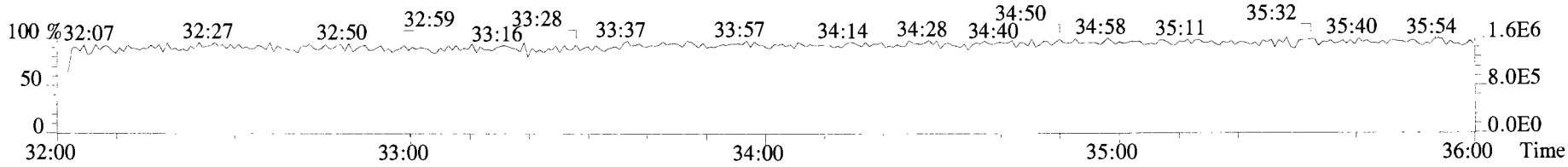
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



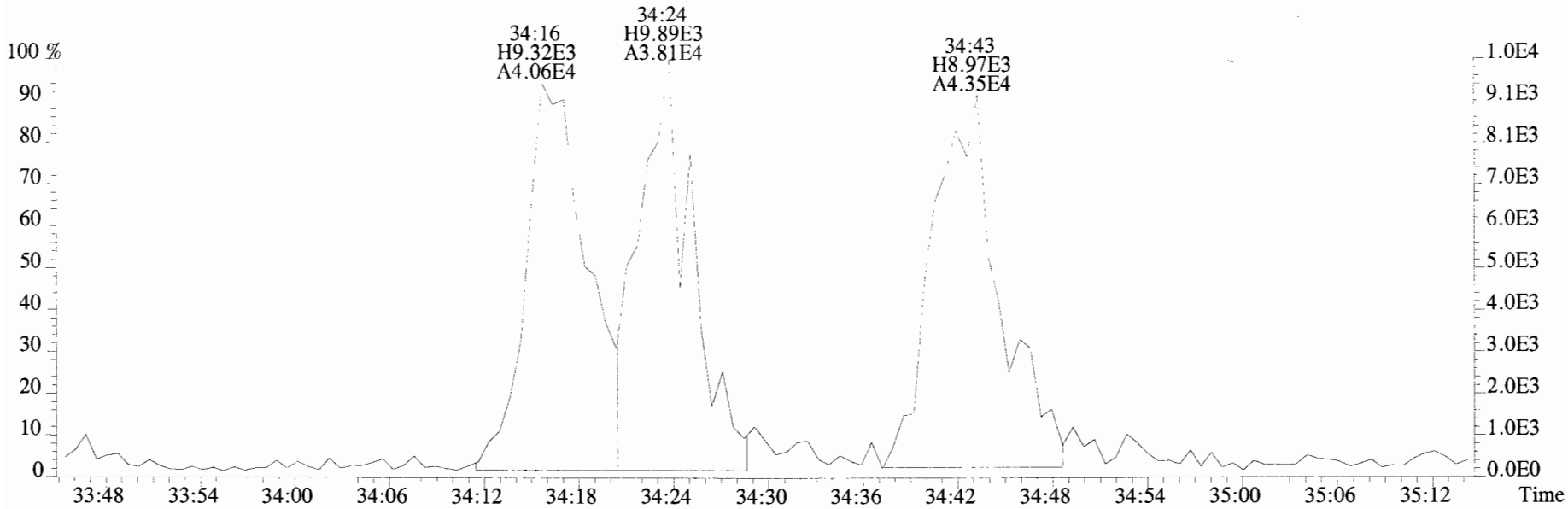
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



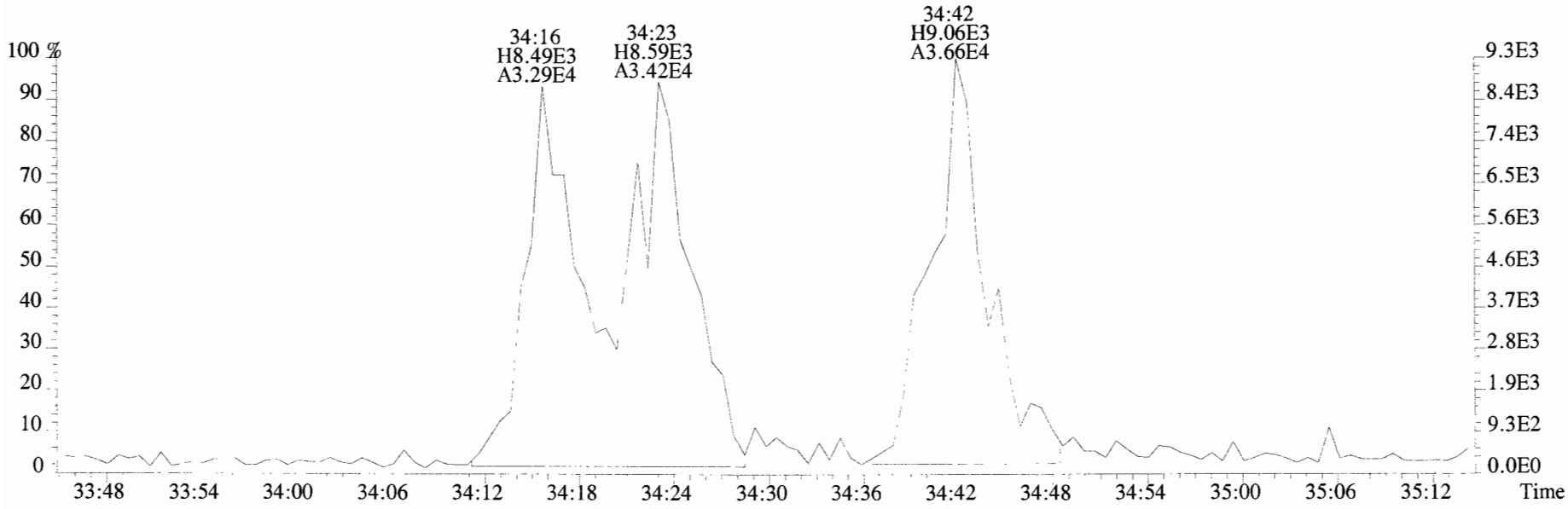
392.9760 F:3



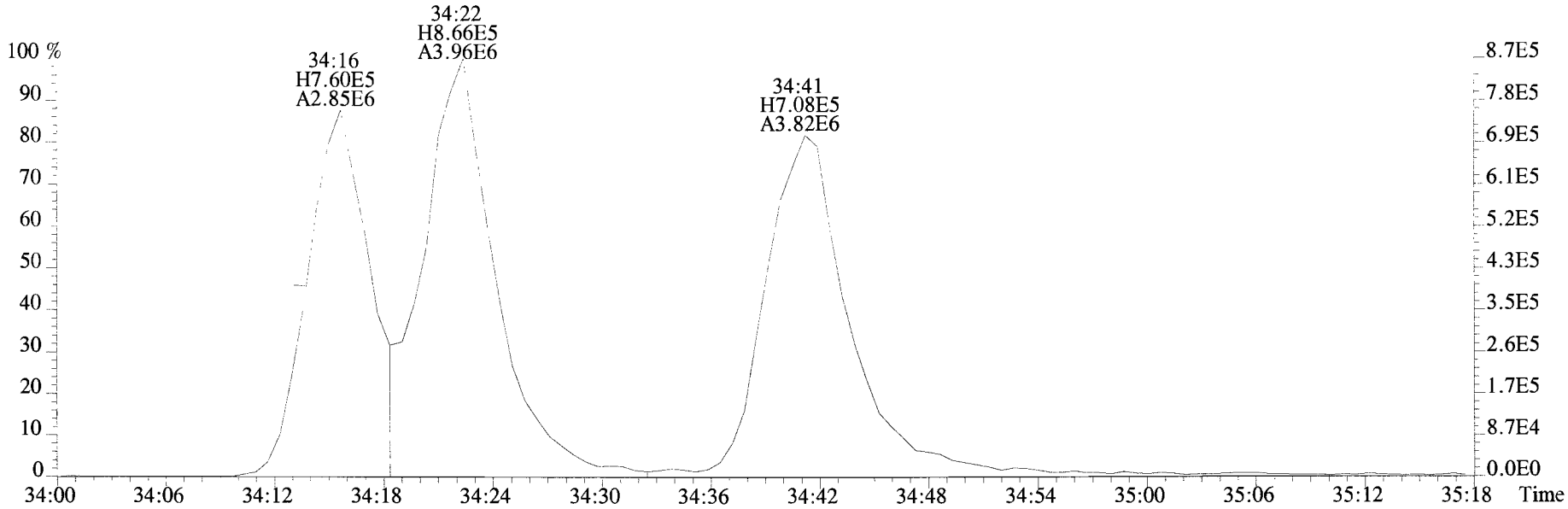
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



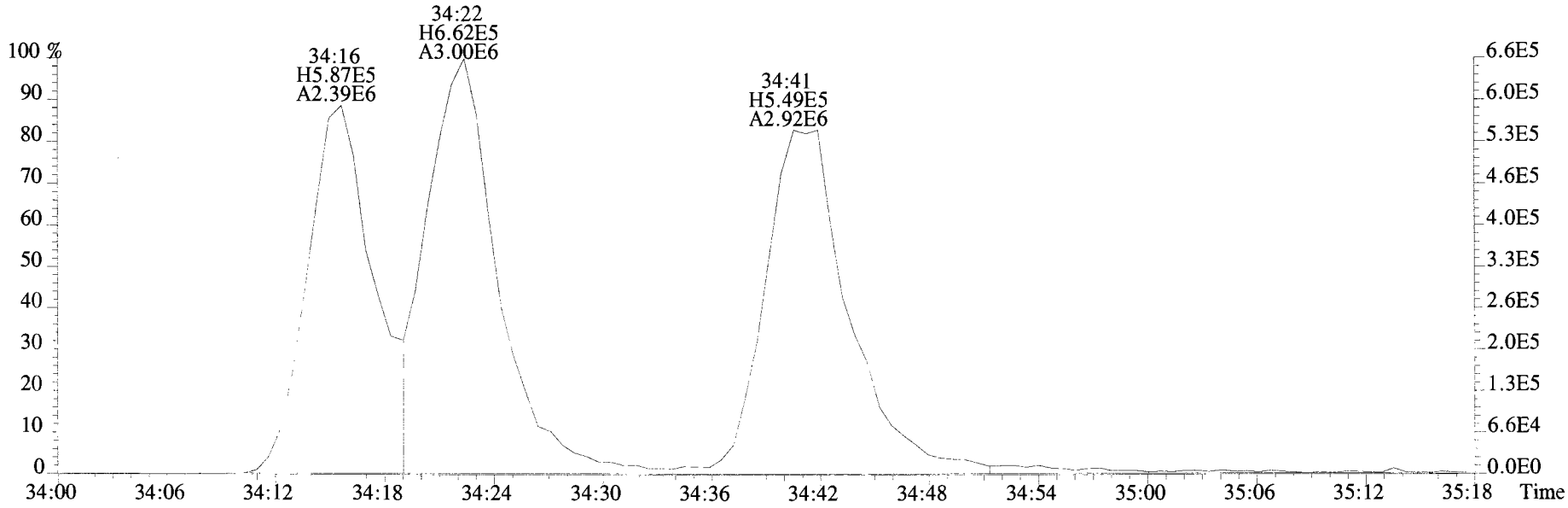
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



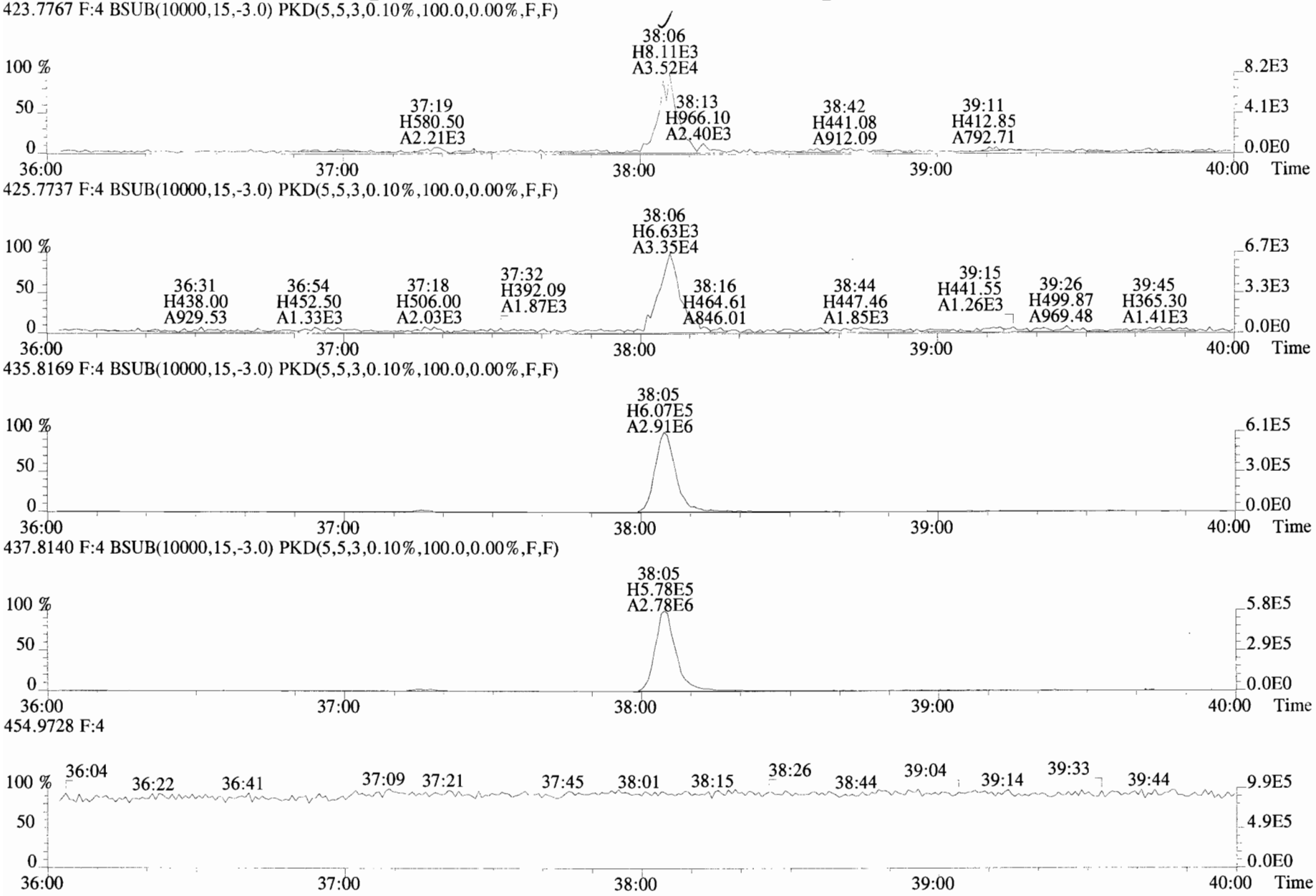
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



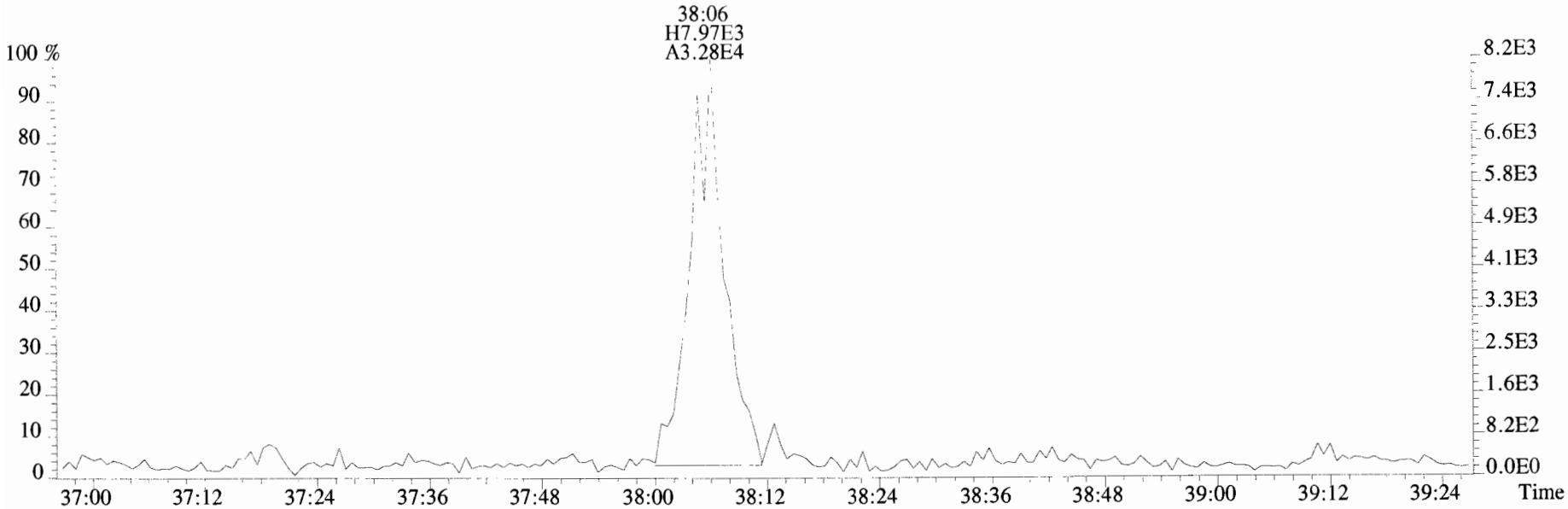
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



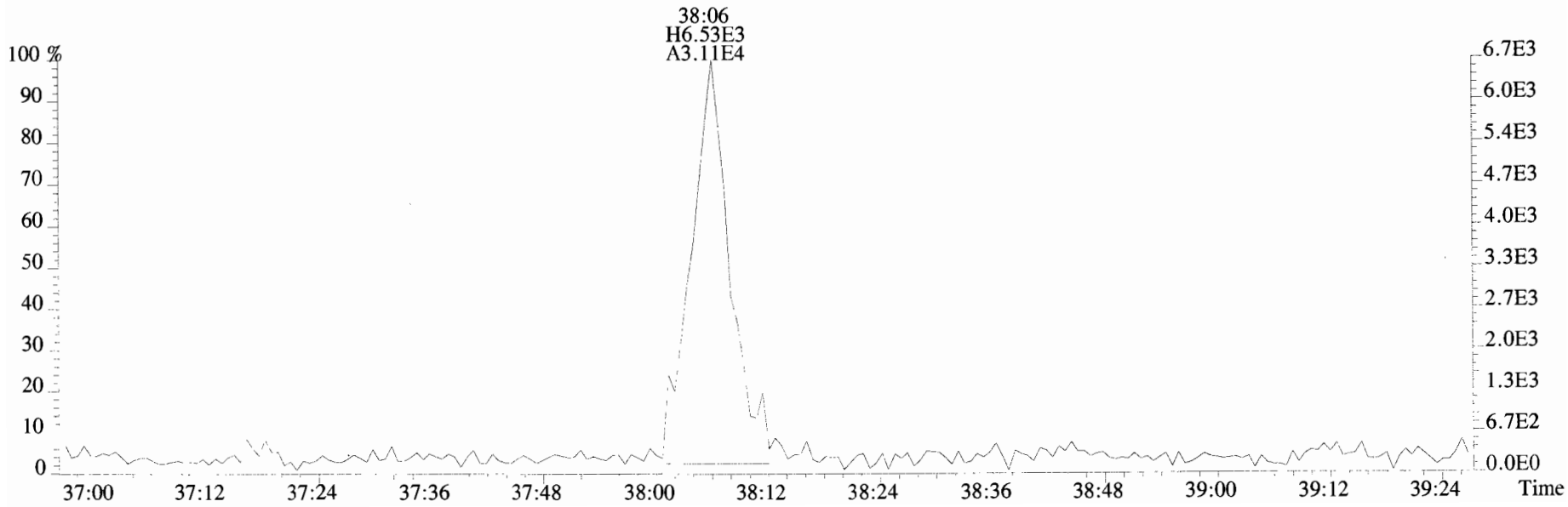
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5



File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

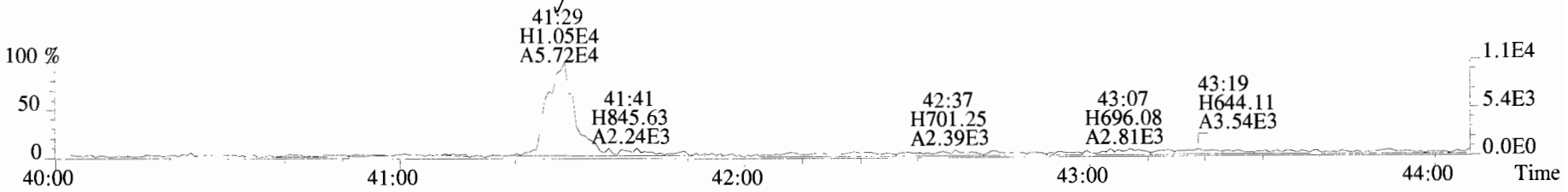


425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

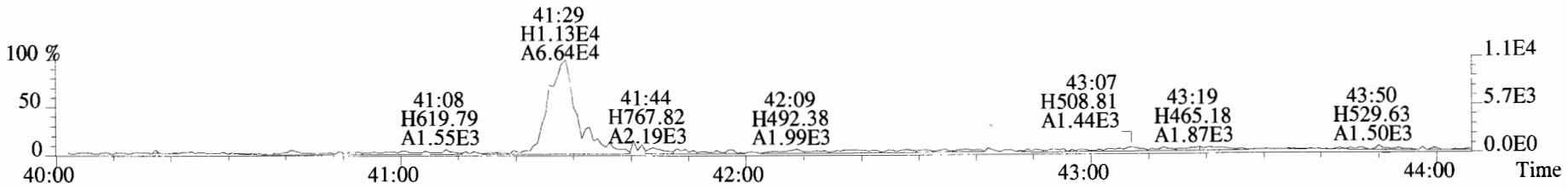


File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5

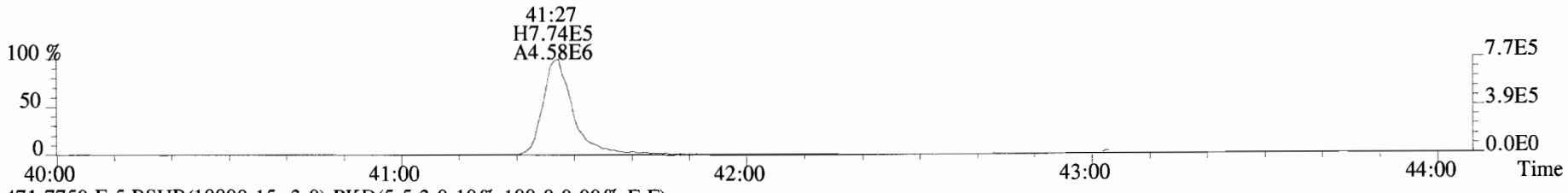
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



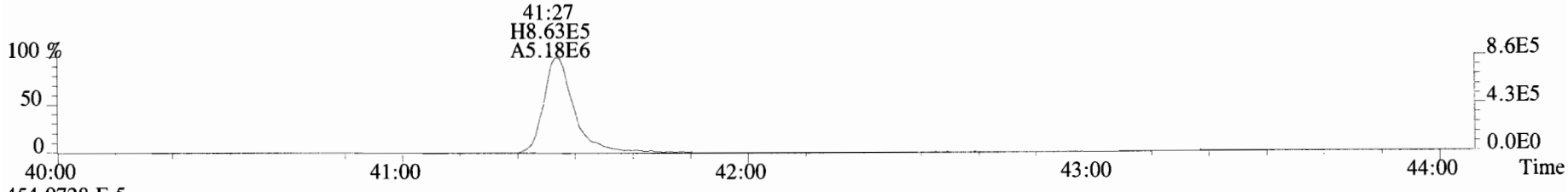
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



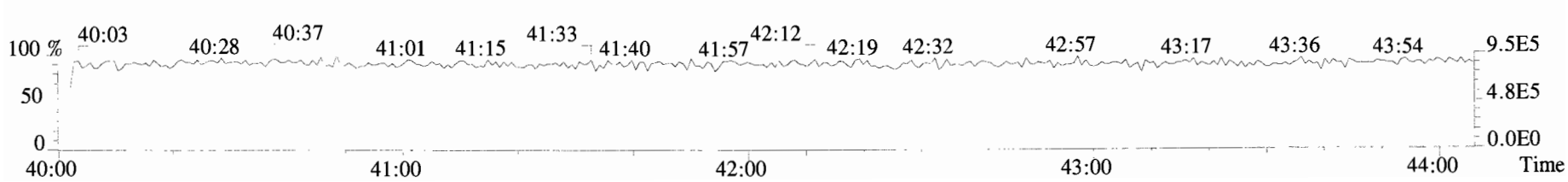
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



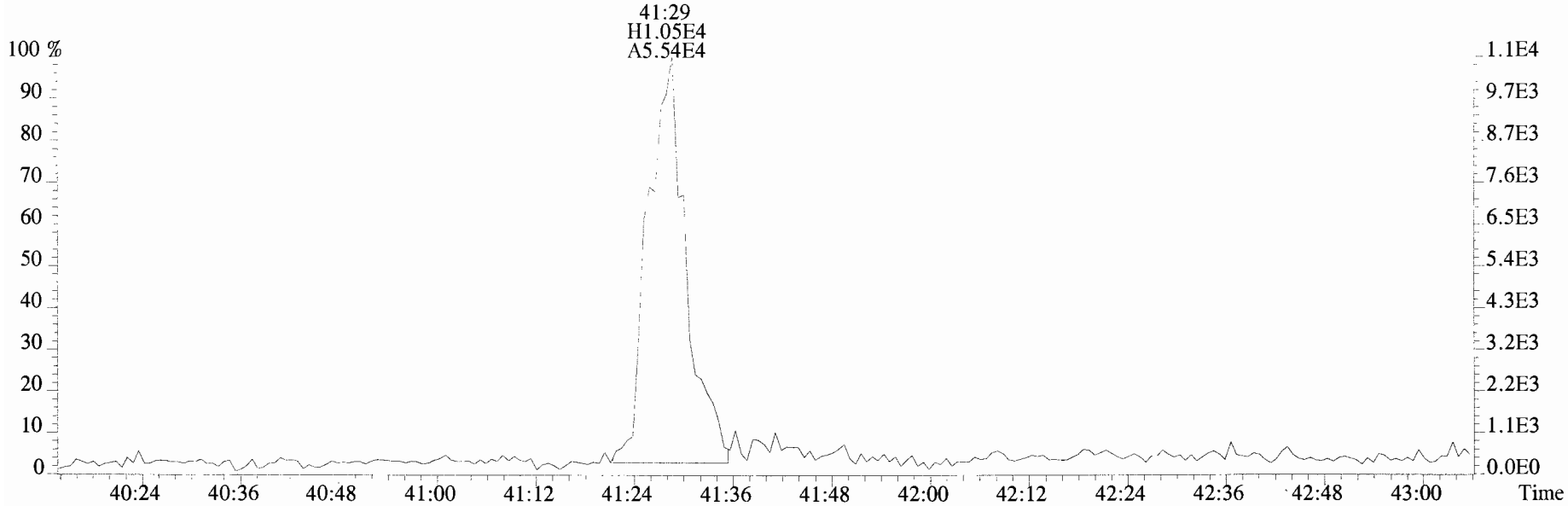
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



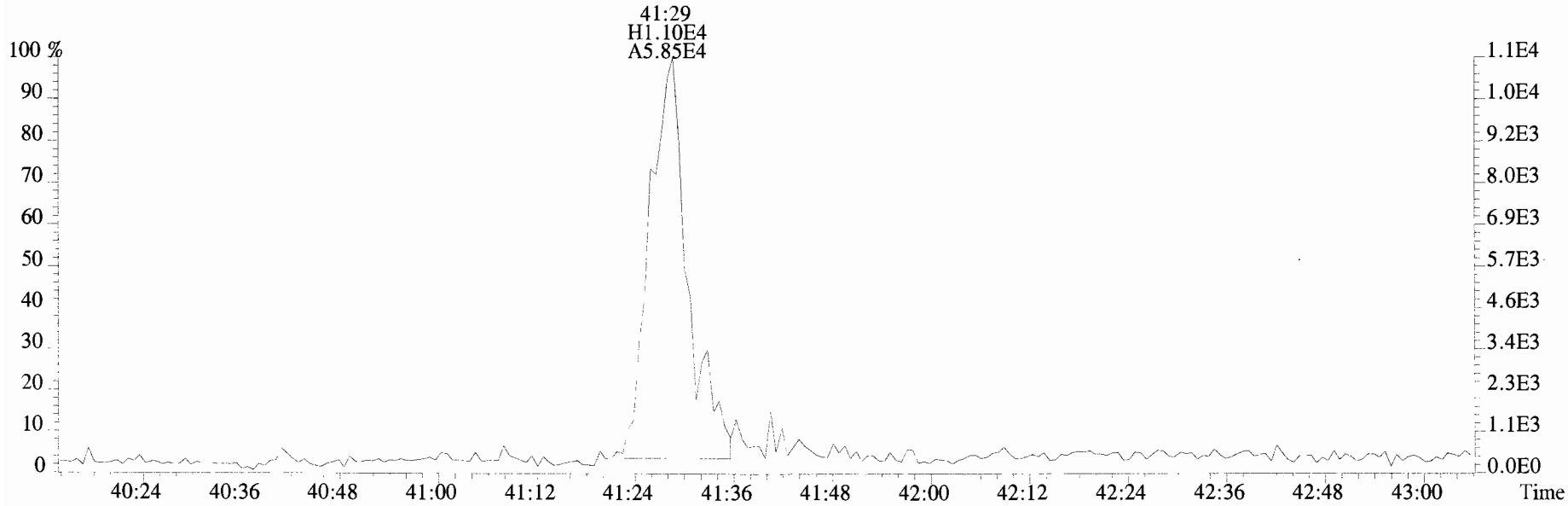
454.9728 F:5



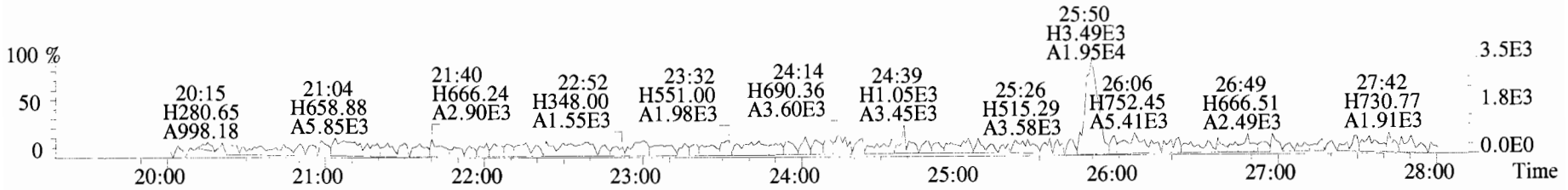
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



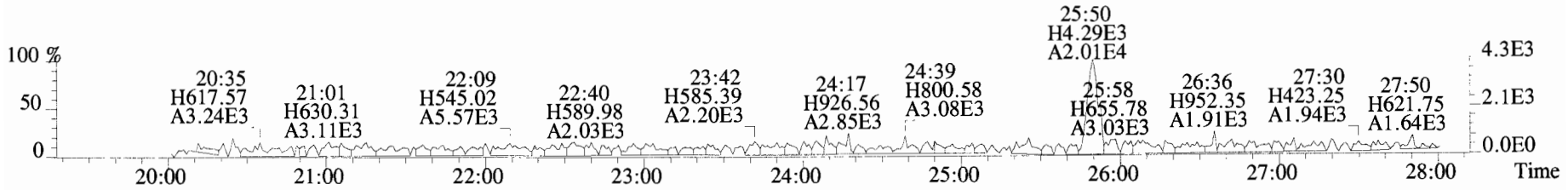
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



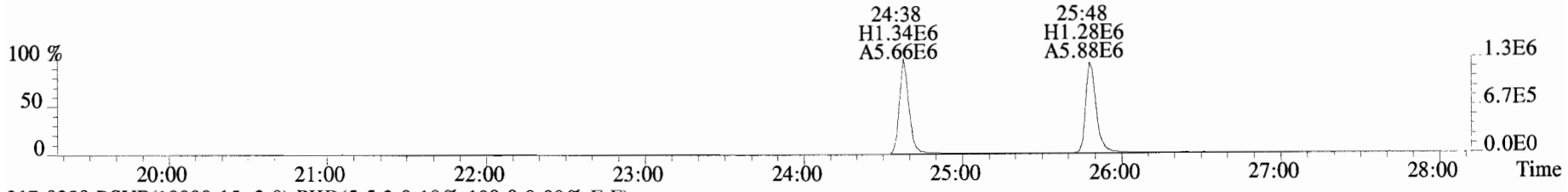
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



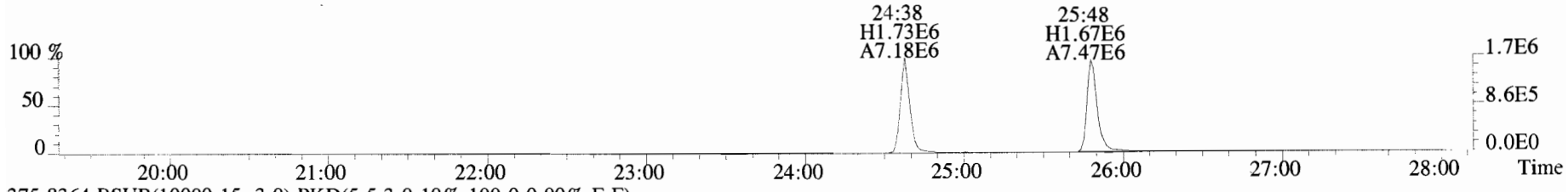
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



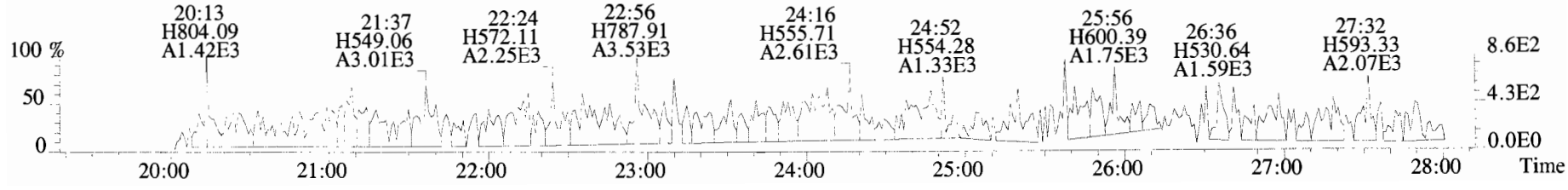
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



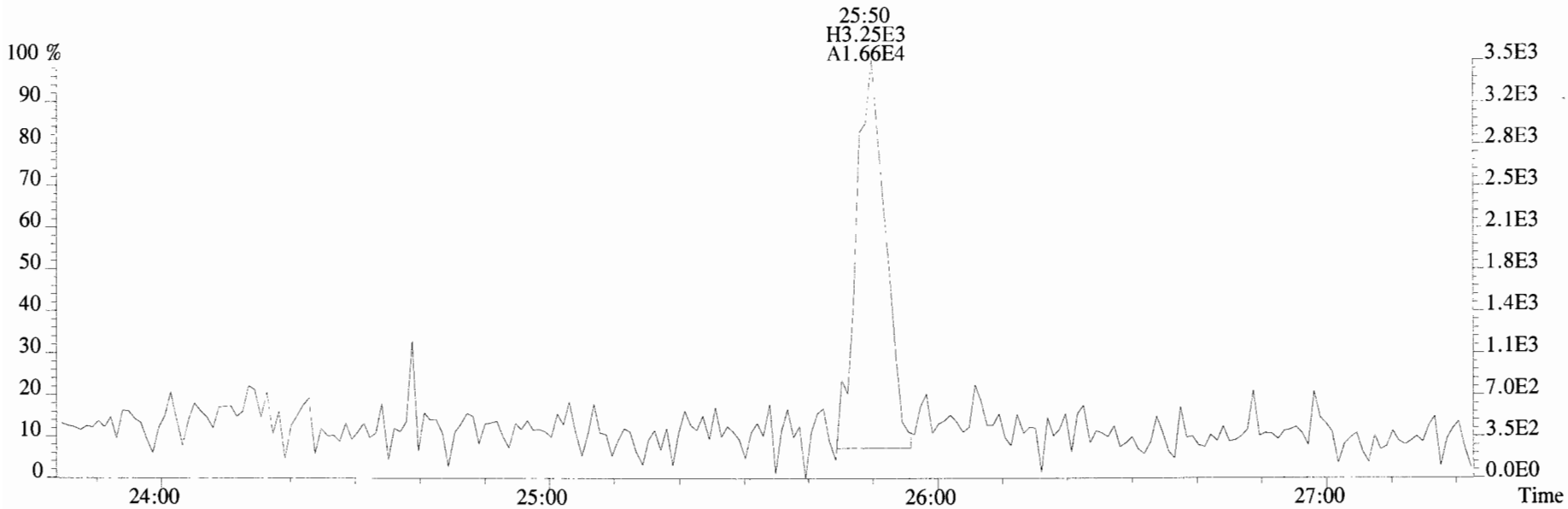
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



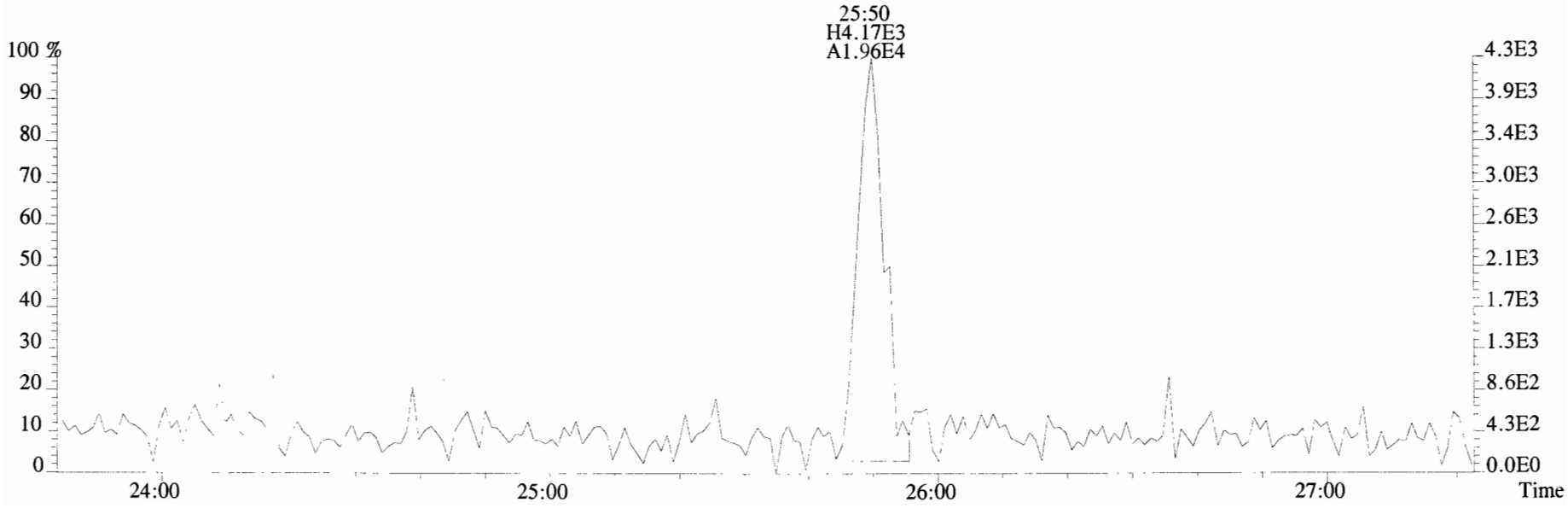
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



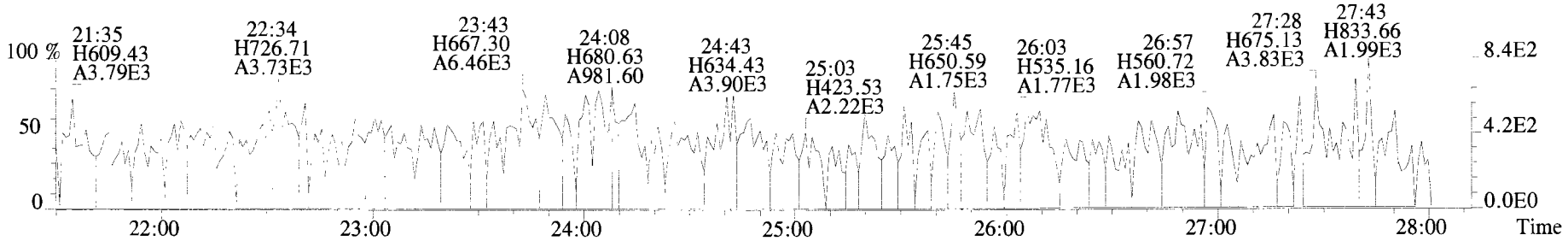
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



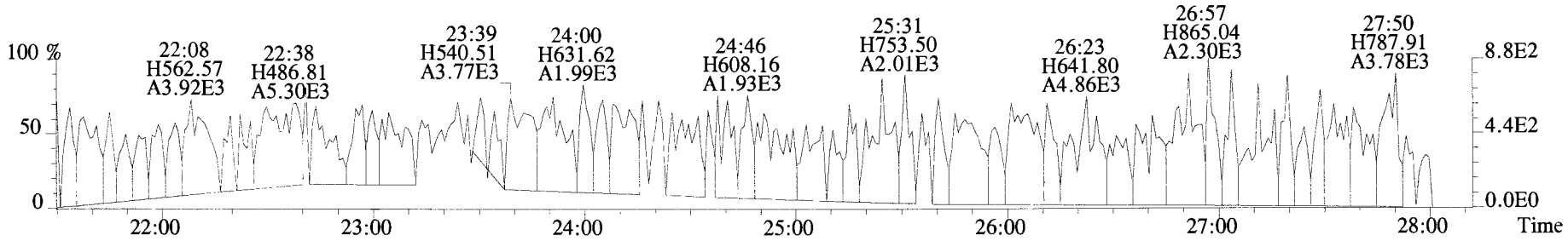
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



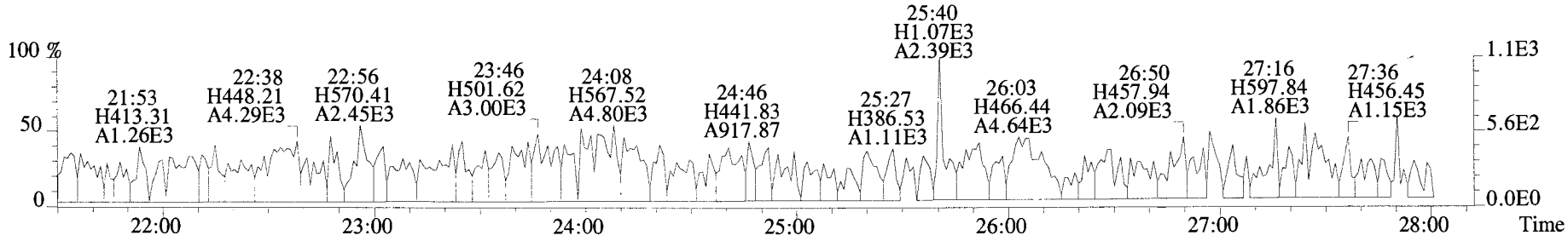
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



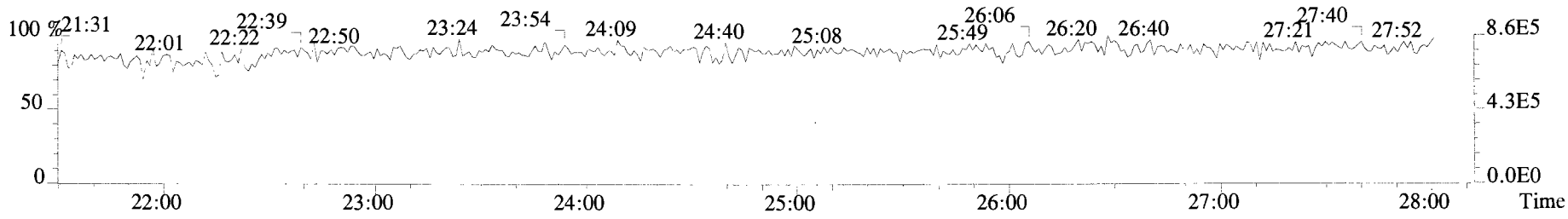
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

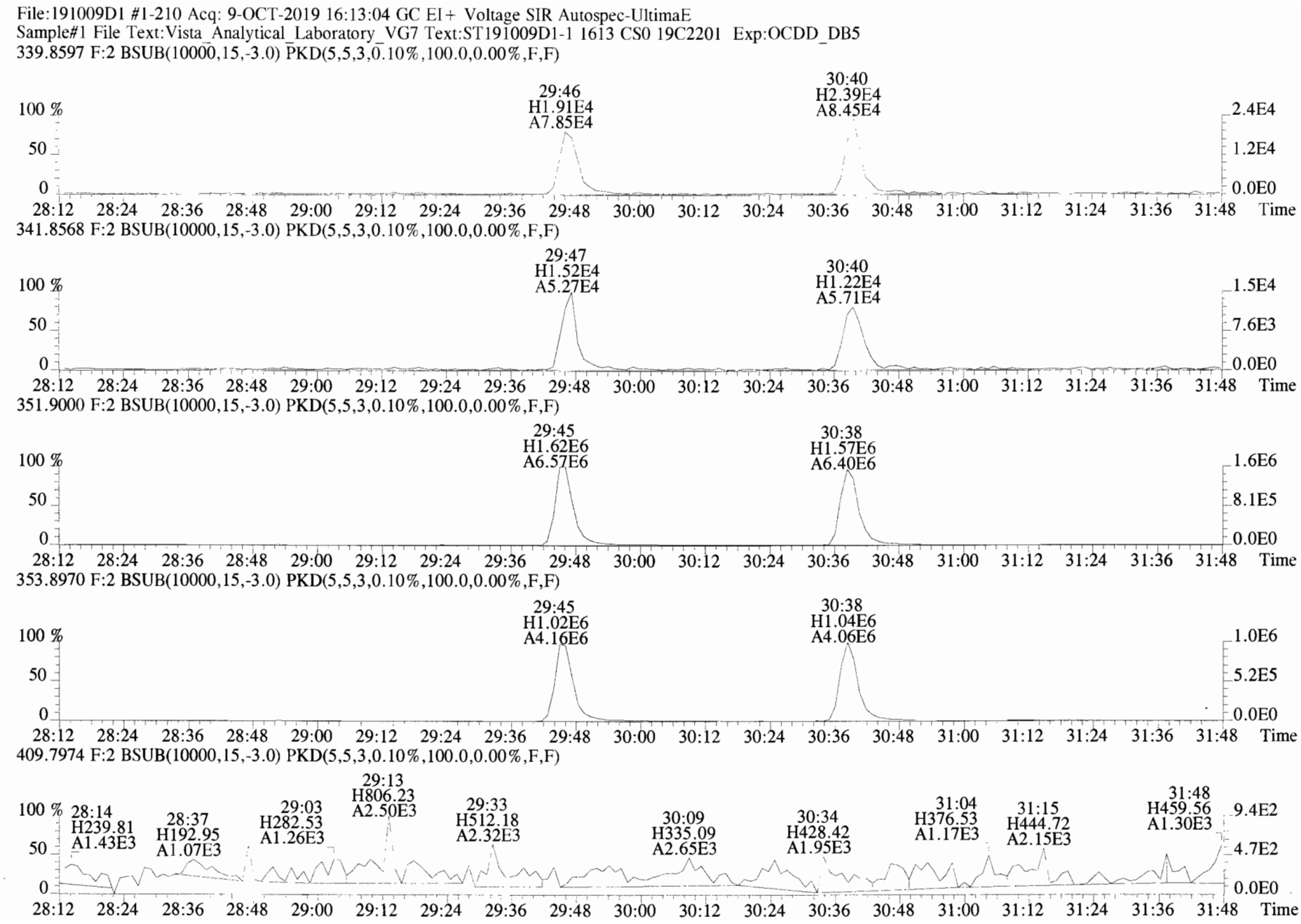


409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

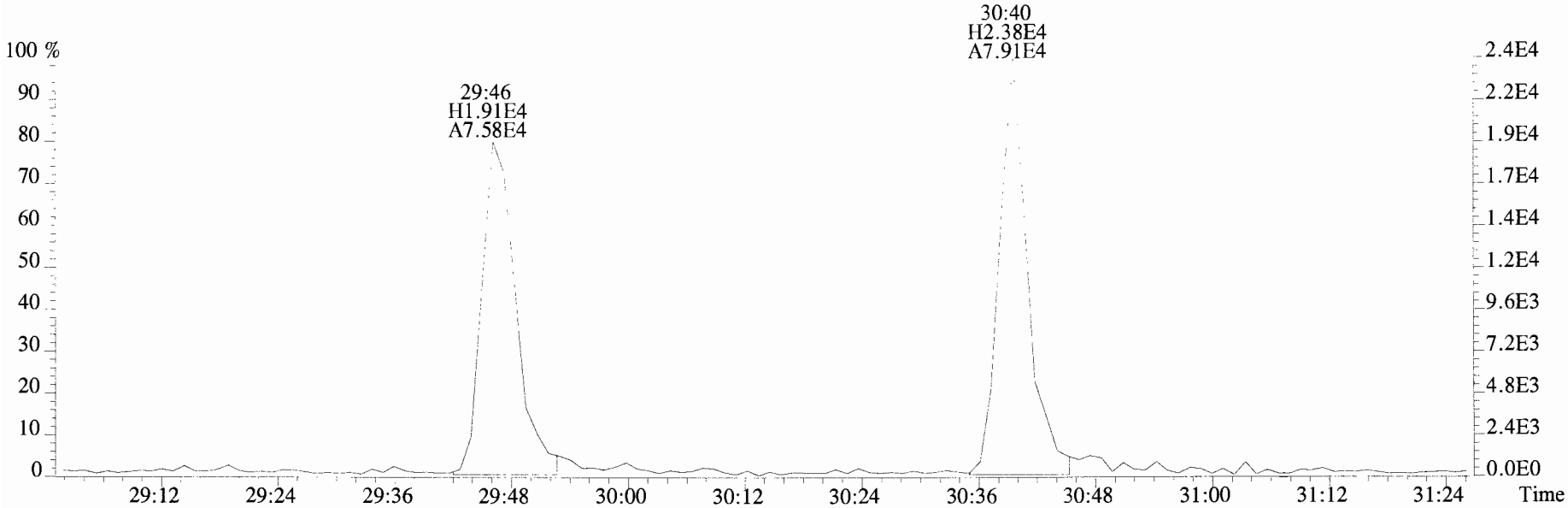


316.9824

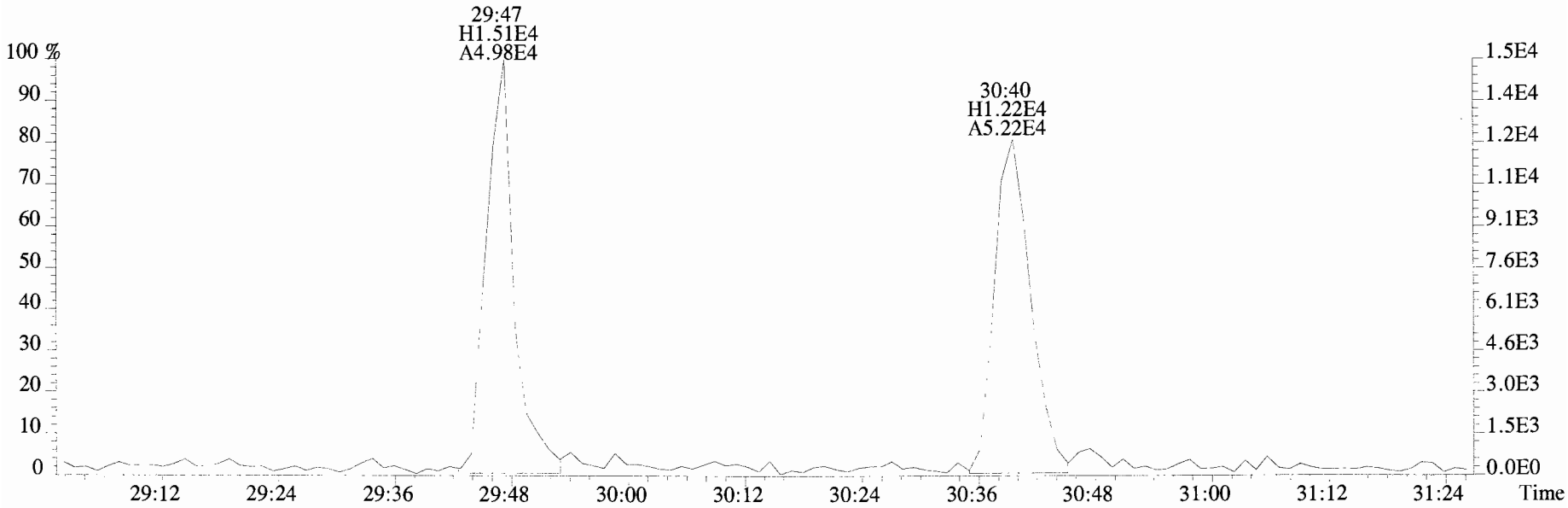



File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:46 H1.91E4 A7.85E4
30:40 H2.39E4 A8.45E4
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:47 H1.52E4 A5.27E4
30:40 H1.22E4 A5.71E4
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:45 H1.62E6 A6.57E6
30:38 H1.57E6 A6.40E6
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:45 H1.02E6 A4.16E6
30:38 H1.04E6 A4.06E6
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:14 H239.81 A1.43E3
28:37 H192.95 A1.07E3
29:03 H282.53 A1.26E3
29:13 H806.23 A2.50E3
29:33 H512.18 A2.32E3
30:09 H335.09 A2.65E3
30:34 H428.42 A1.95E3
31:04 H376.53 A1.17E3
31:15 H444.72 A2.15E3
31:48 H459.56 A1.30E3
100 %
50
0
28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48 Time
2.4E4
1.2E4
0.0E0
1.5E4
7.6E3
1.6E6
8.1E5
1.0E6
5.2E5
9.4E2
4.7E2

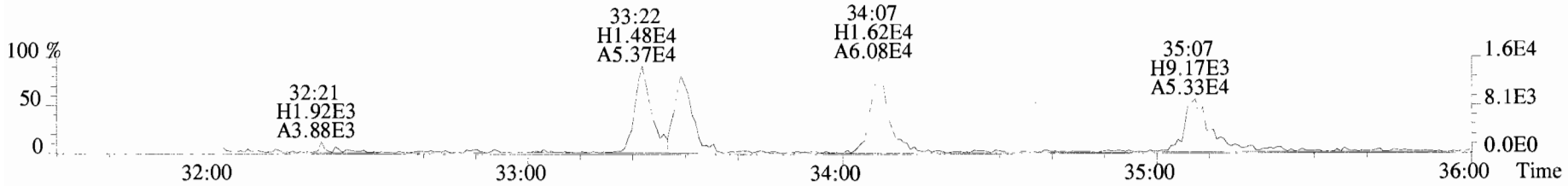
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



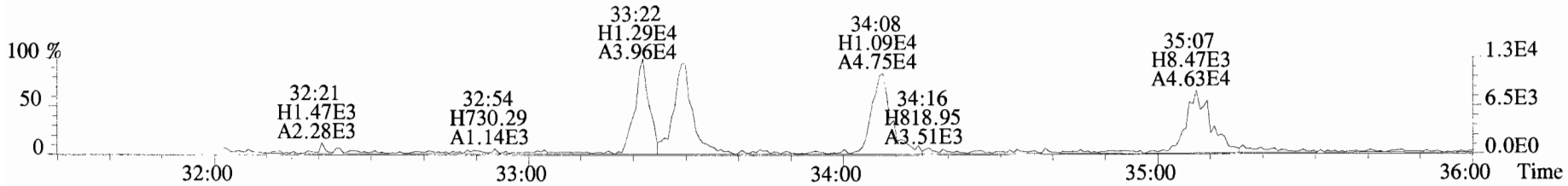
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



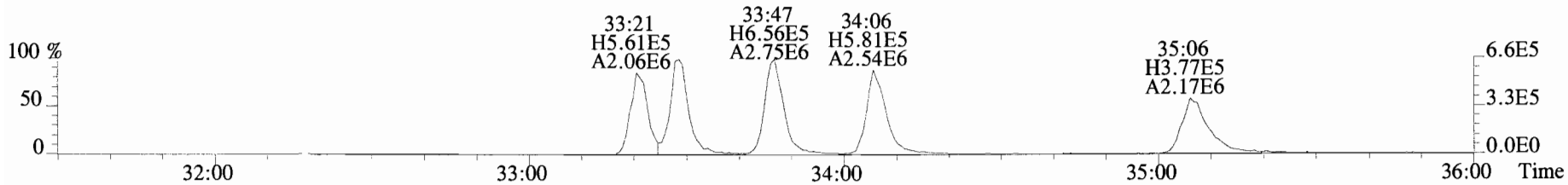
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



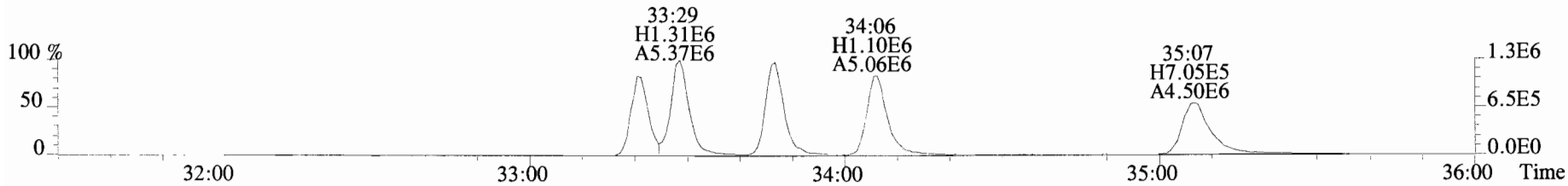
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



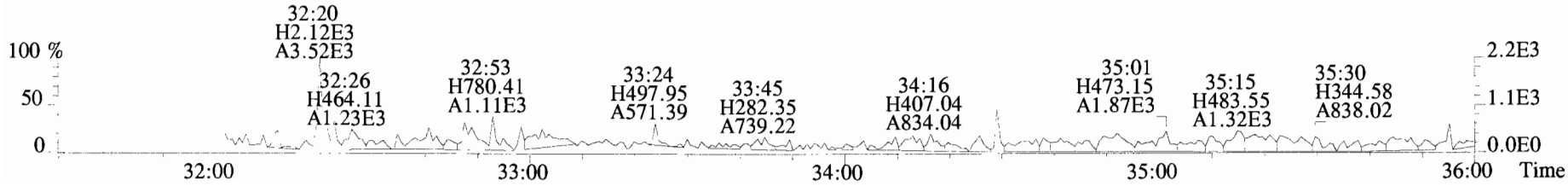
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



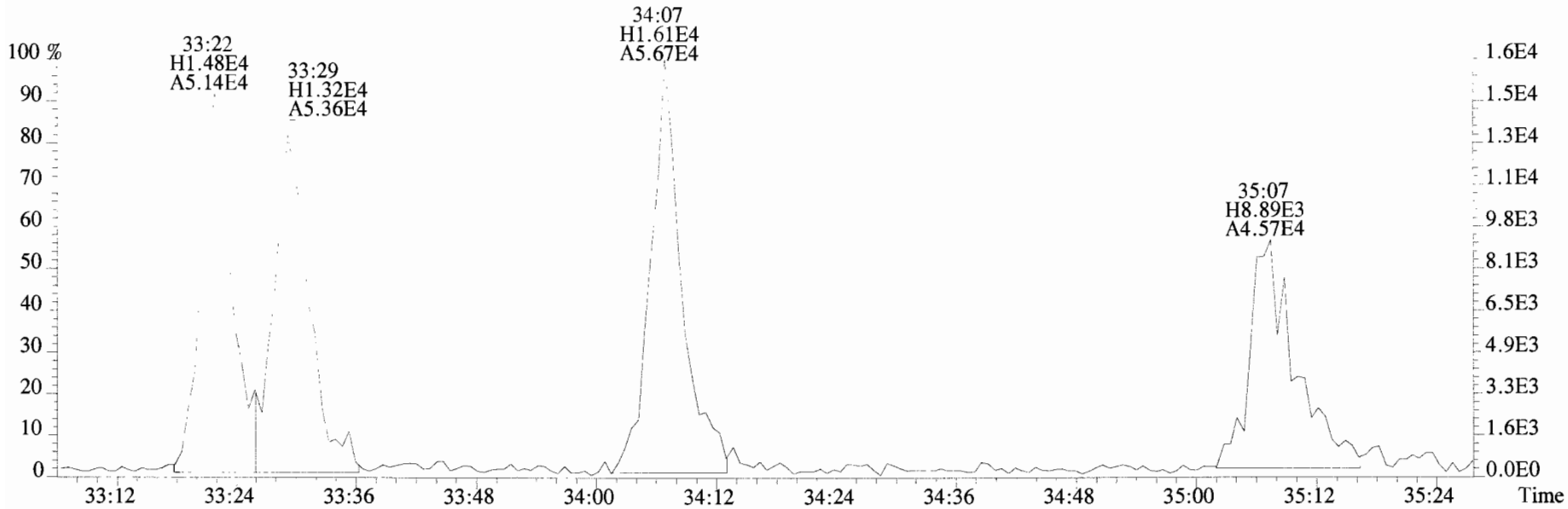
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



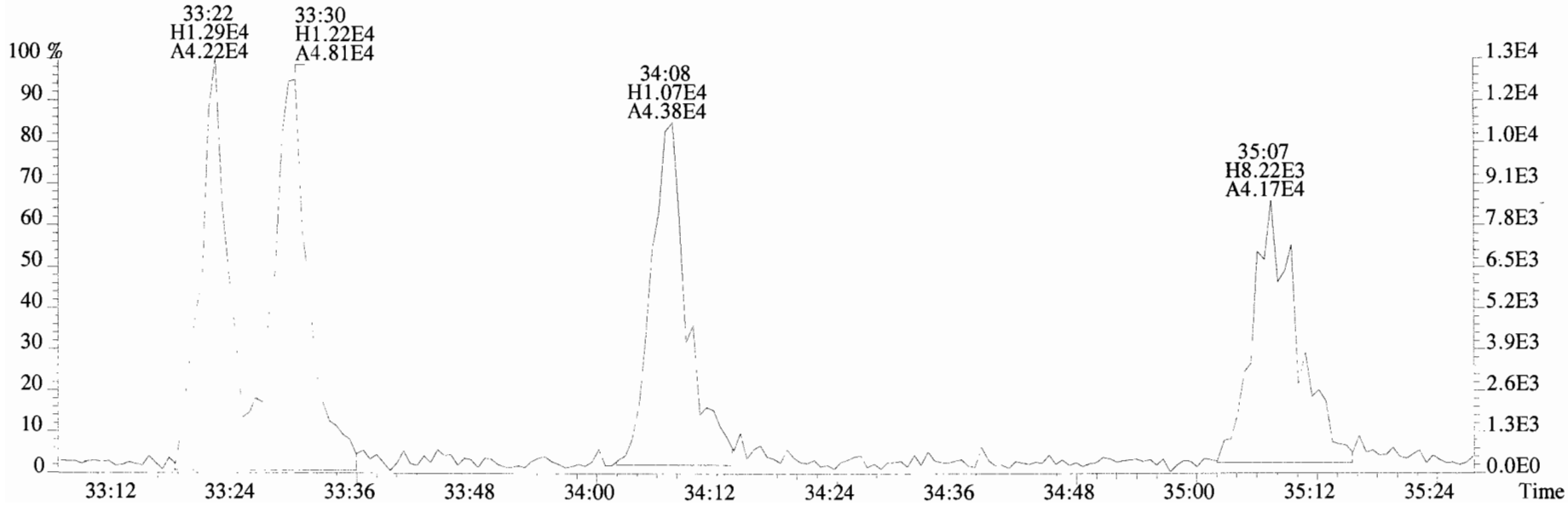
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



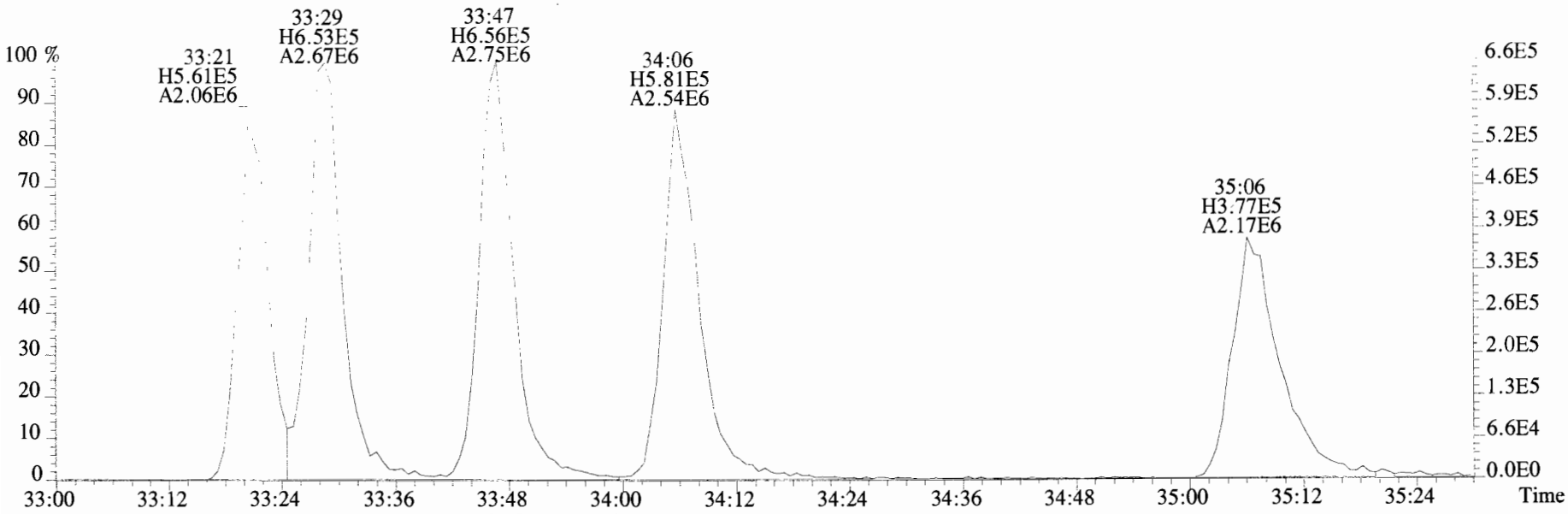
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0)



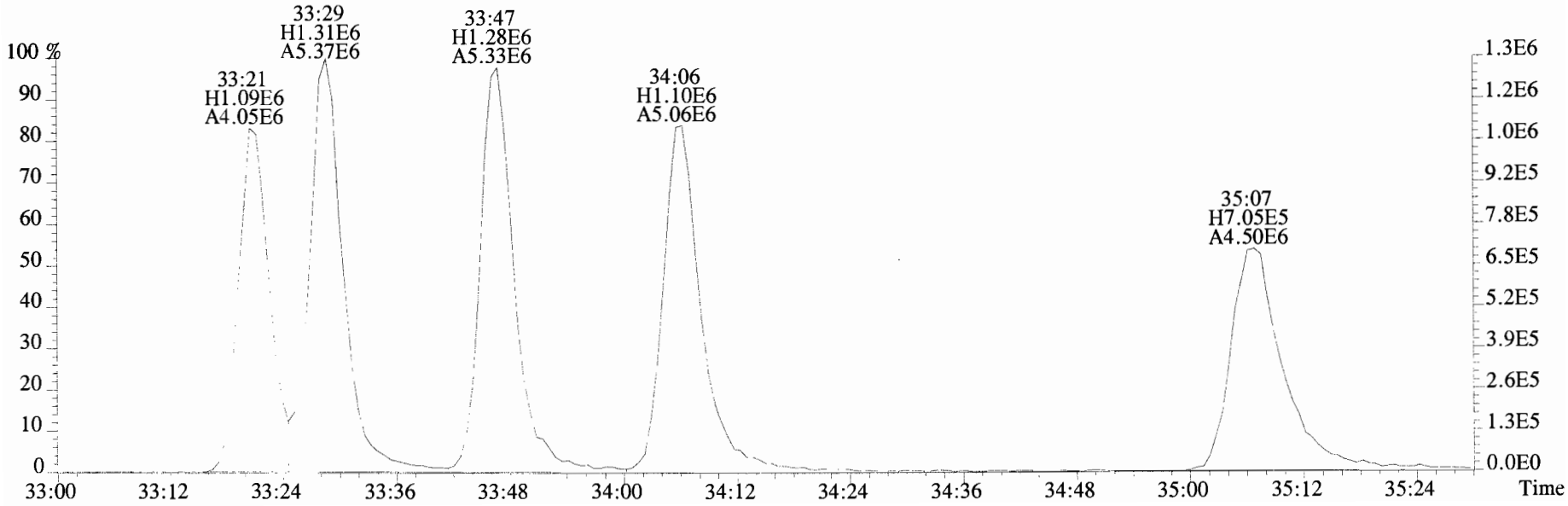
375.8178 F:3 BSUB(10000,15,-3.0)

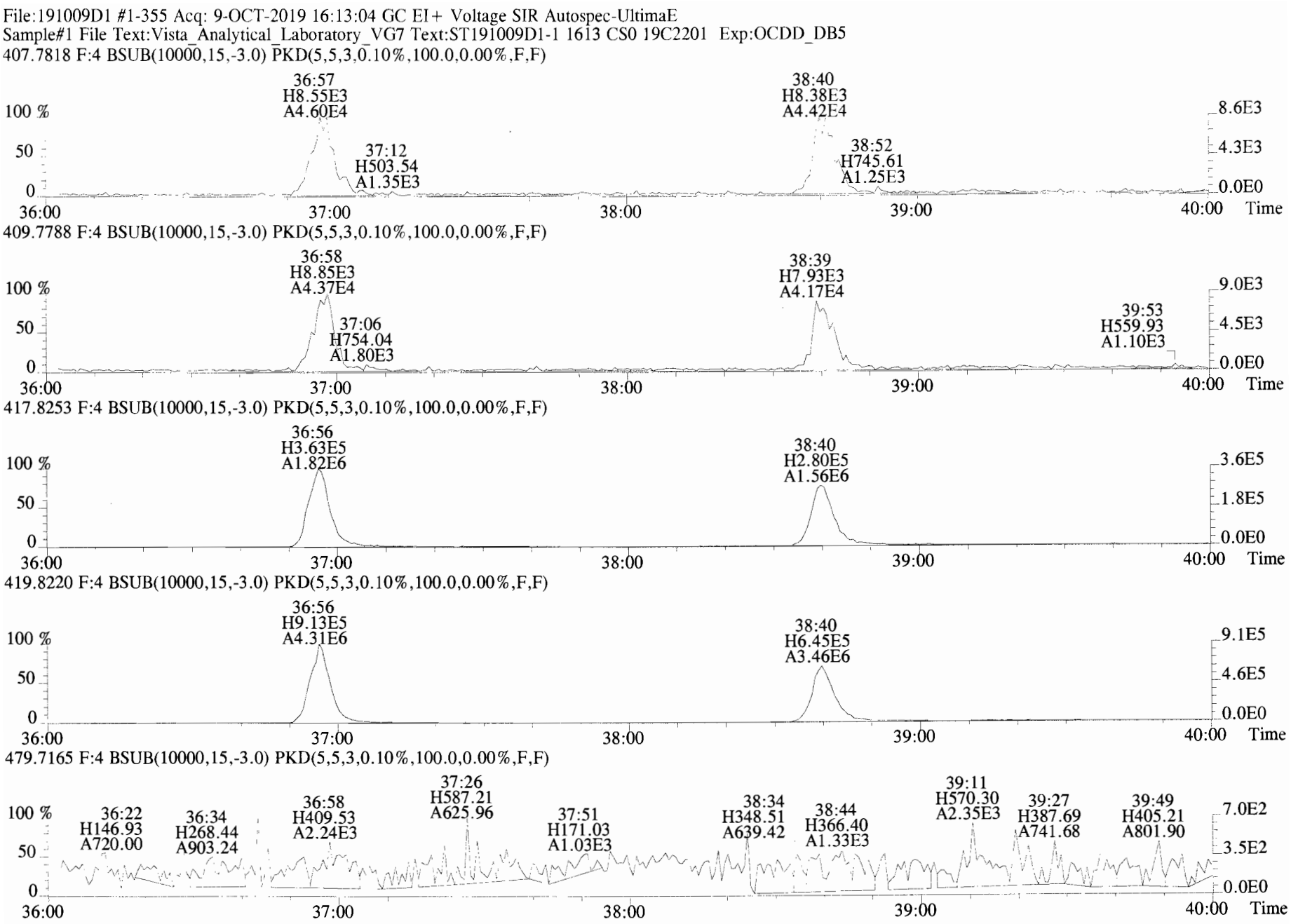


File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

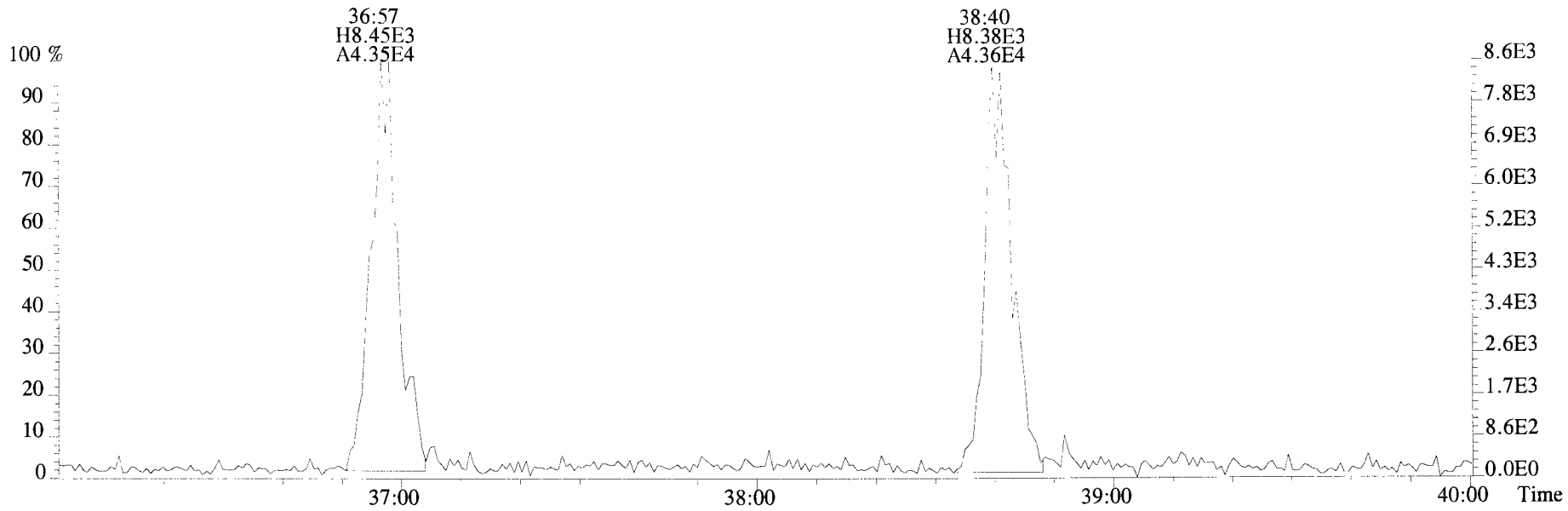


385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

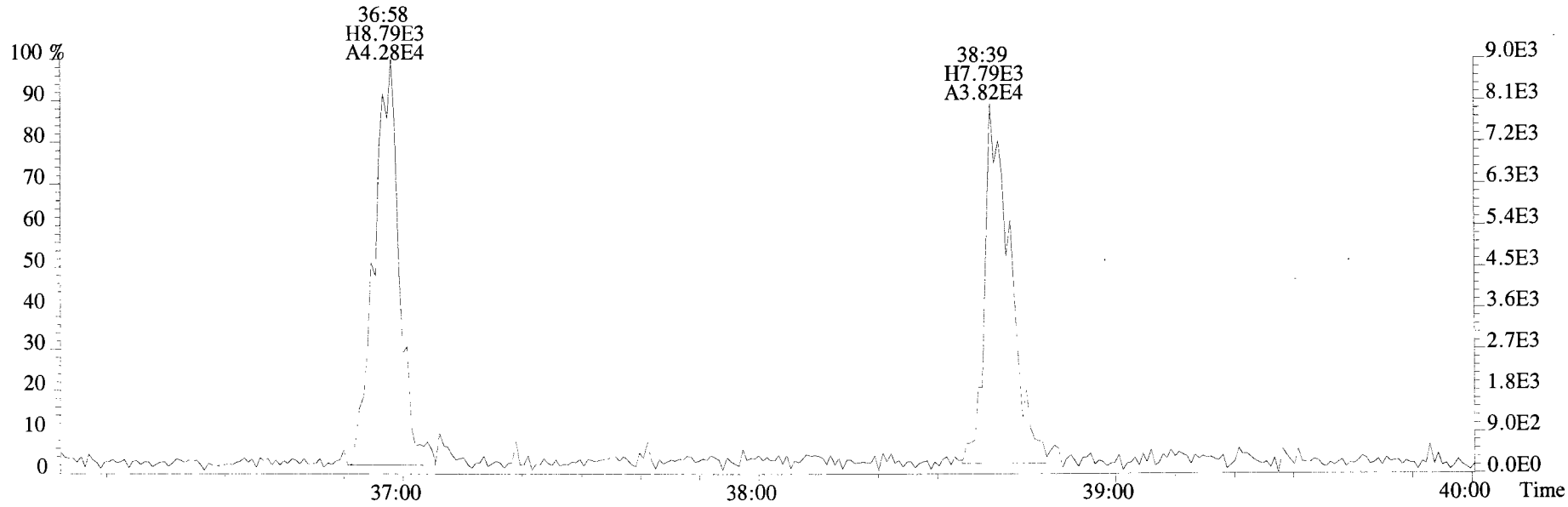



File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:57 H8.55E3 A4.60E4
37:12 H503.54 A1.35E3
38:40 H8.38E3 A4.42E4
38:52 H745.61 A1.25E3
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:58 H8.85E3 A4.37E4
37:06 H754.04 A1.80E3
38:39 H7.93E3 A4.17E4
39:53 H559.93 A1.10E3
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:56 H3.63E5 A1.82E6
38:40 H2.80E5 A1.56E6
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:56 H9.13E5 A4.31E6
38:40 H6.45E5 A3.46E6
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
36:22 H146.93 A720.00
36:34 H268.44 A903.24
36:58 H409.53 A2.24E3
37:26 H587.21 A625.96
37:51 H171.03 A1.03E3
38:34 H348.51 A639.42
38:44 H366.40 A1.33E3
39:11 H570.30 A2.35E3
39:27 H387.69 A741.68
39:49 H405.21 A801.90
100 %
50
0
36:00
37:00
38:00
39:00
40:00
Time
8.6E3
4.3E3
0.0E0
9.0E3
4.5E3
3.6E5
1.8E5
9.1E5
4.6E5
7.0E2
3.5E2

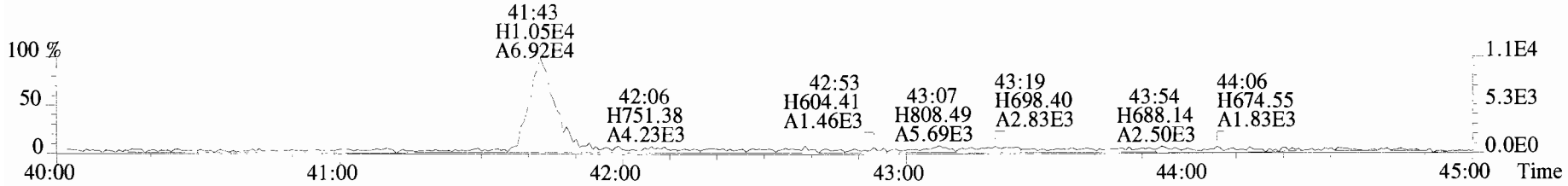
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC El+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



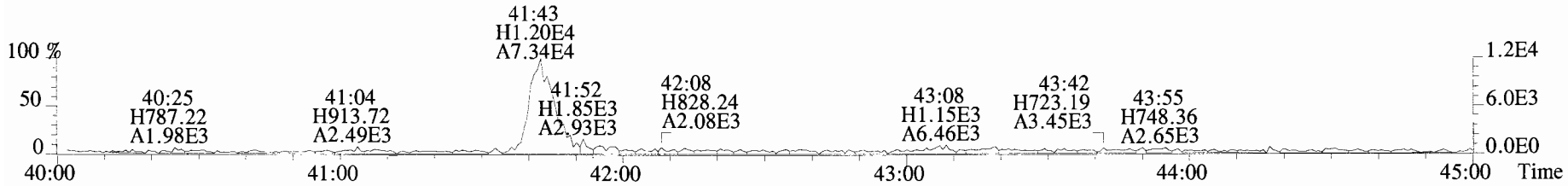
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



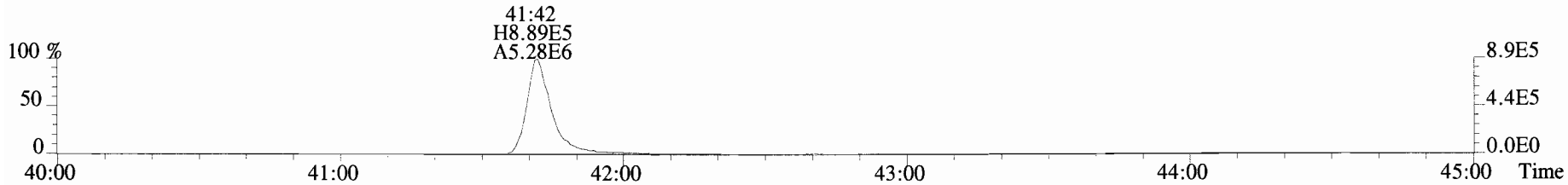
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



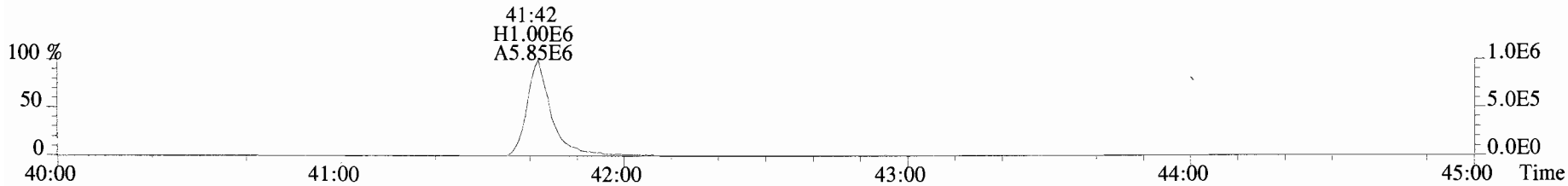
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



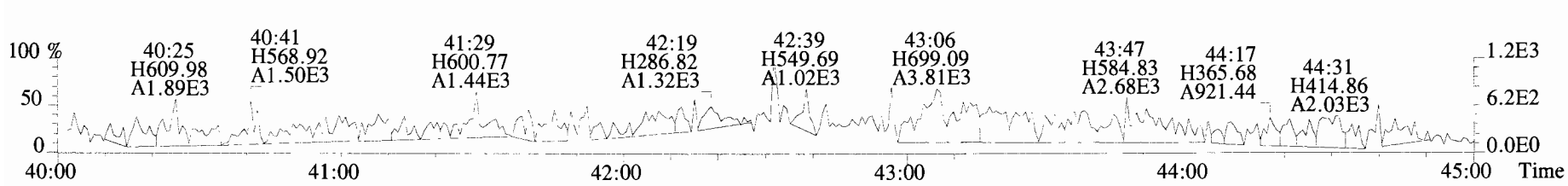
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



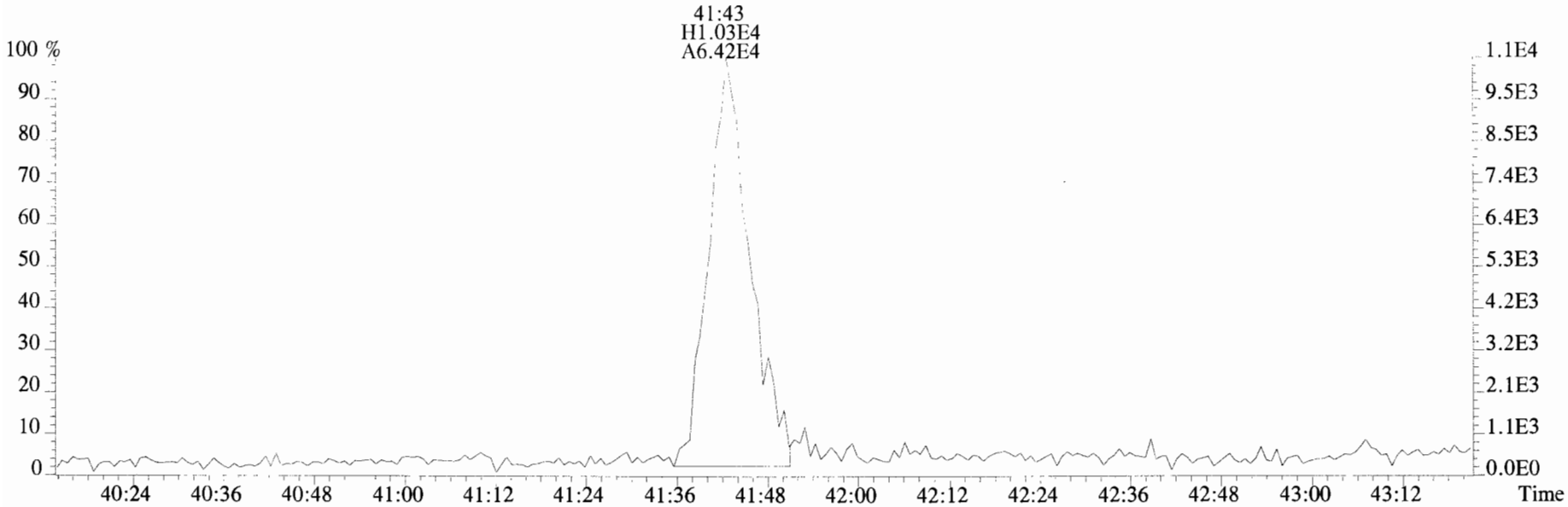
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



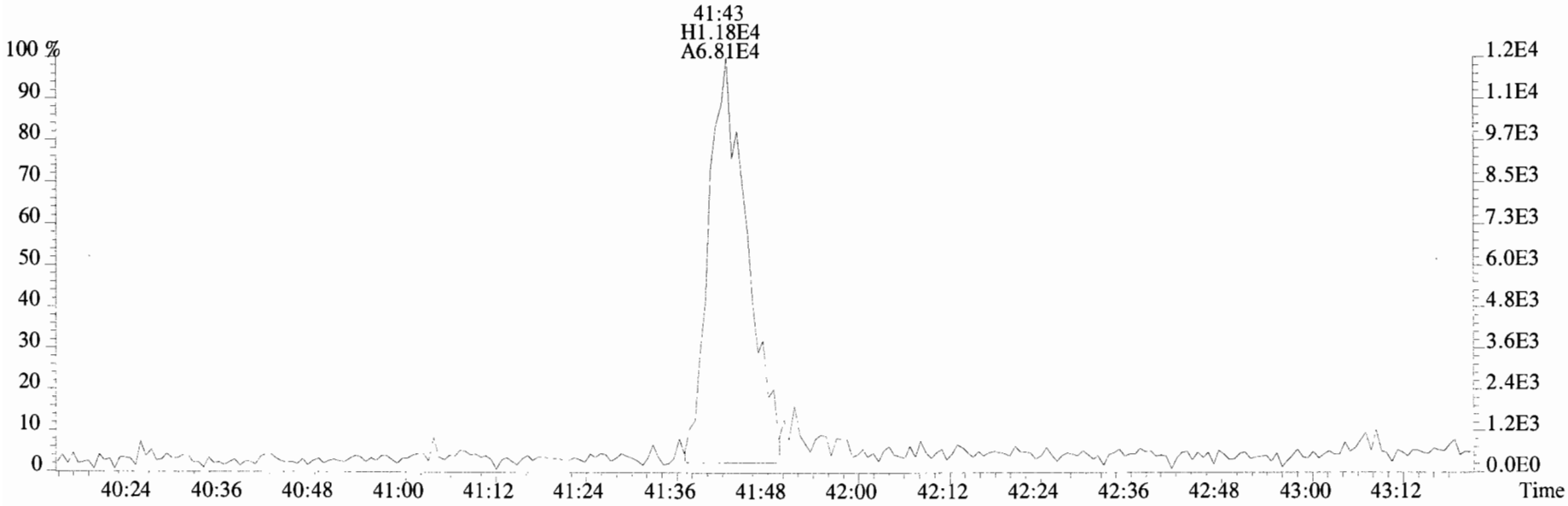
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



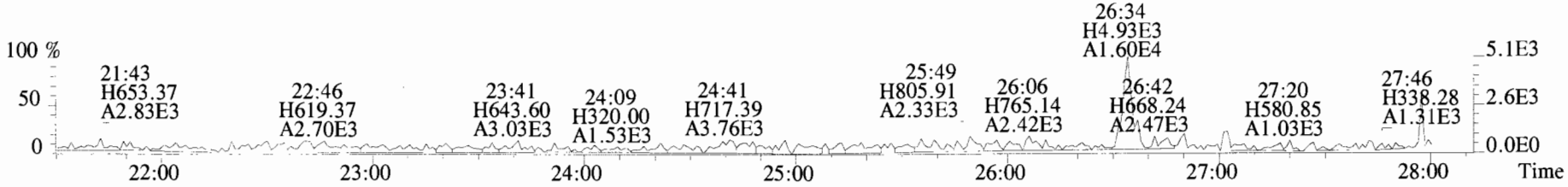
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



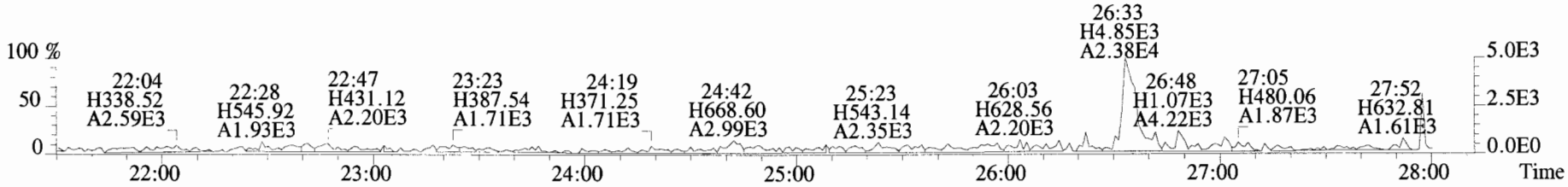
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



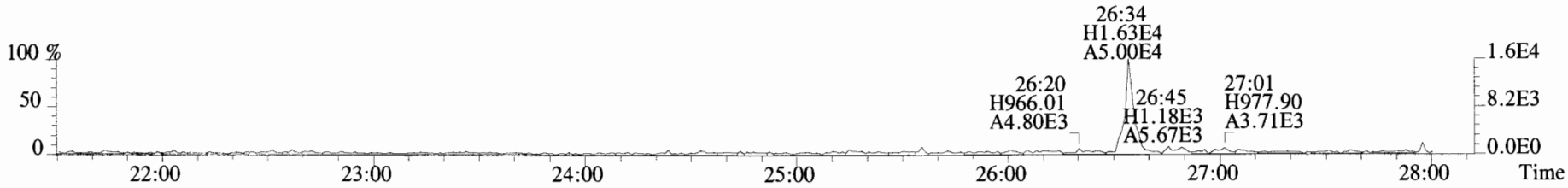
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



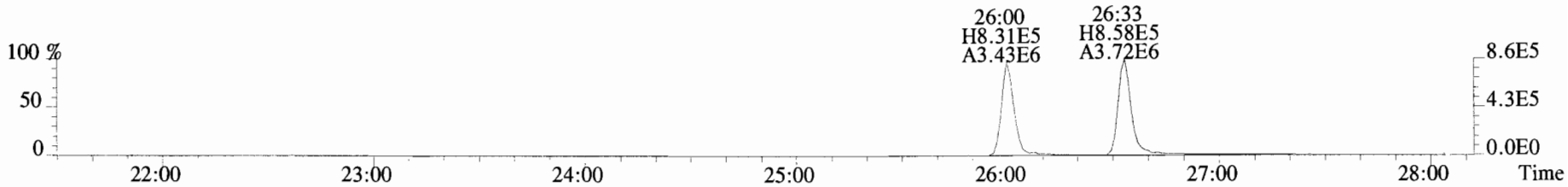
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



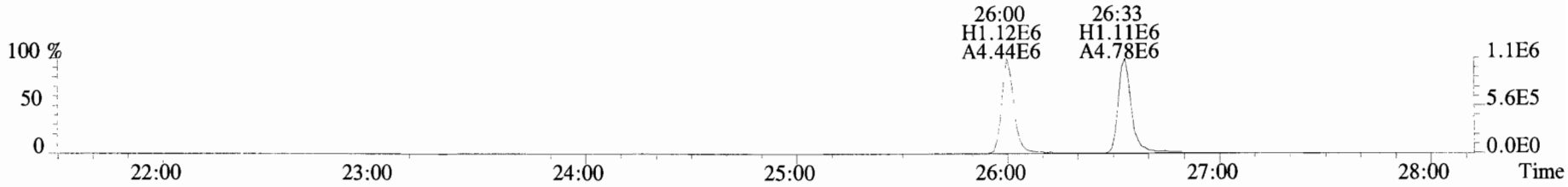
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



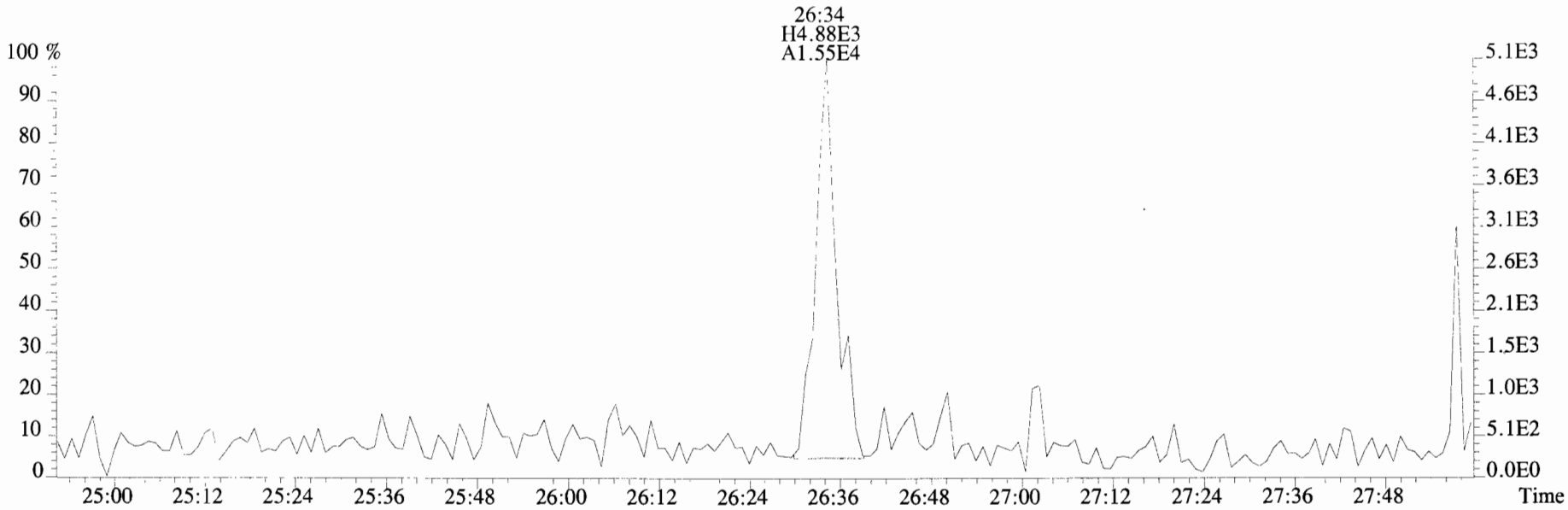
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



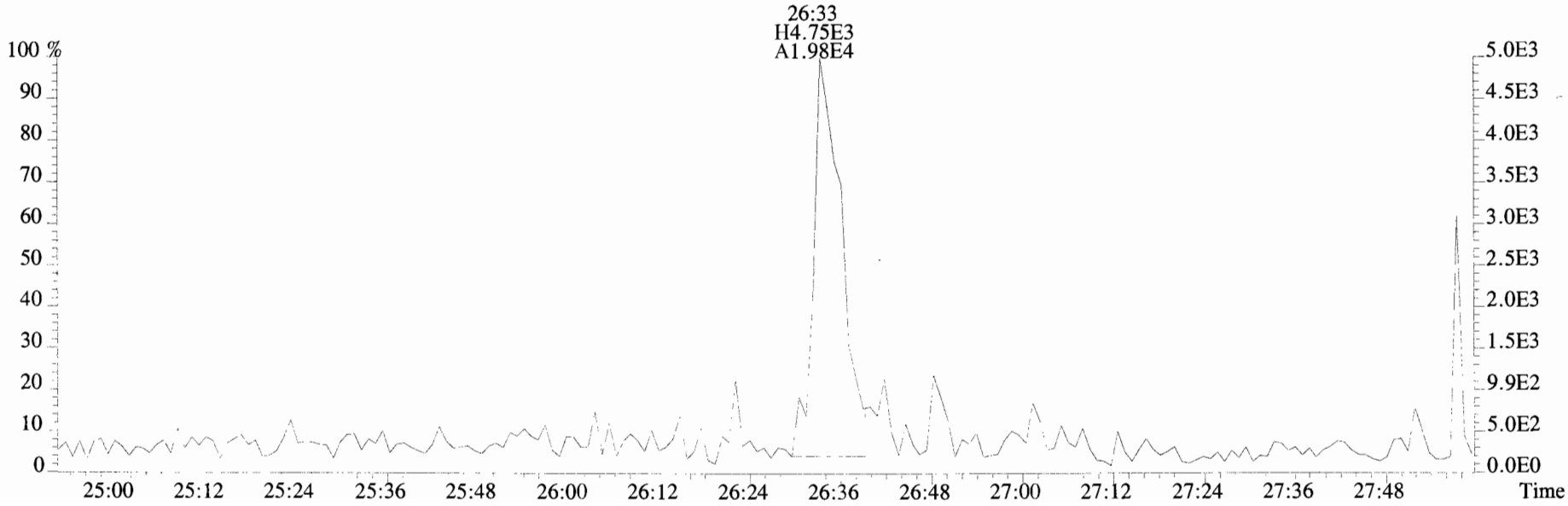
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



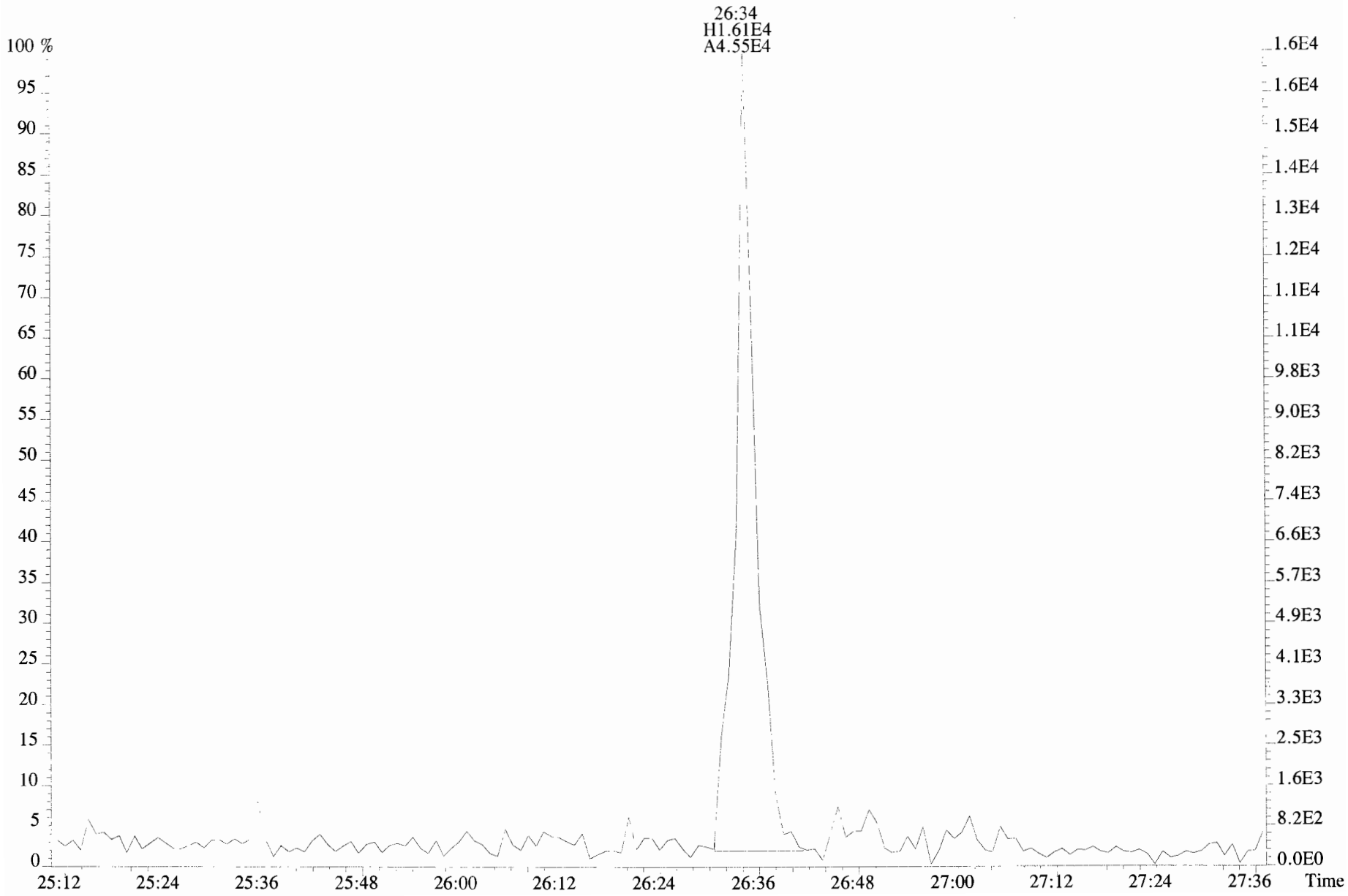
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



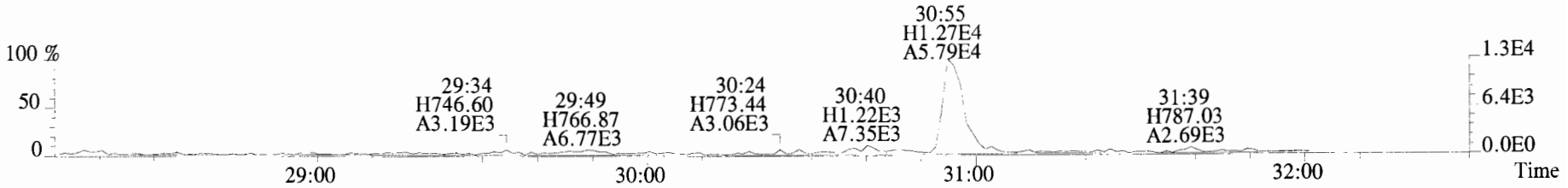
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



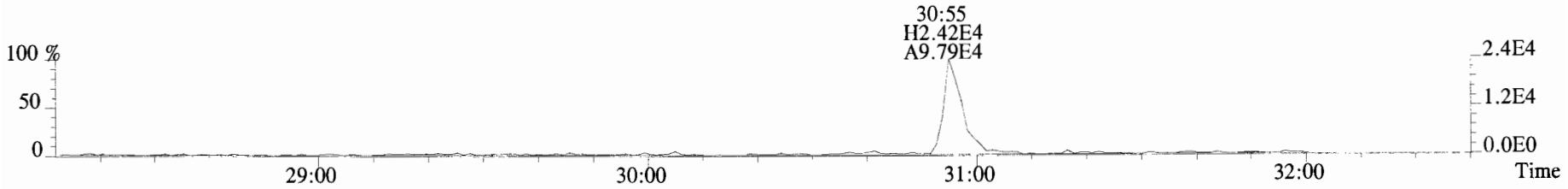
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



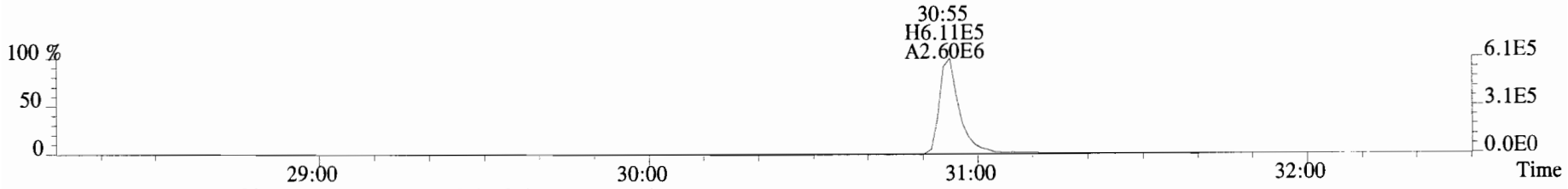
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



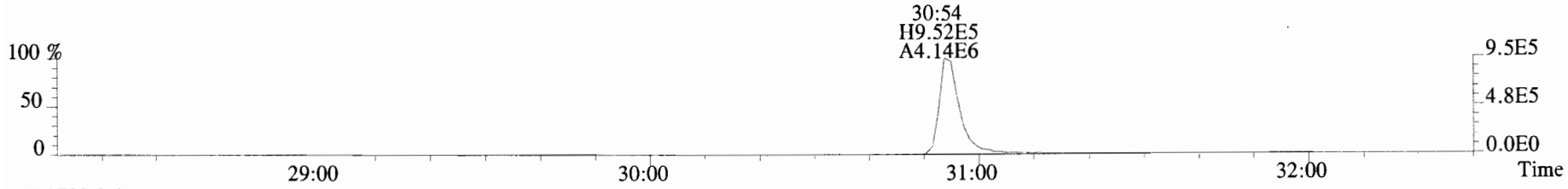
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



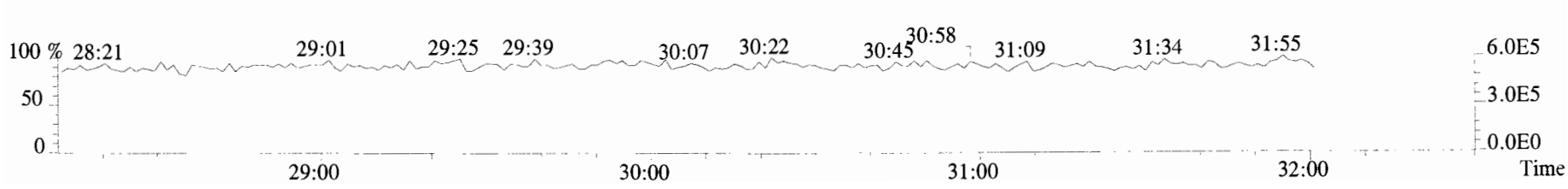
365.8978 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



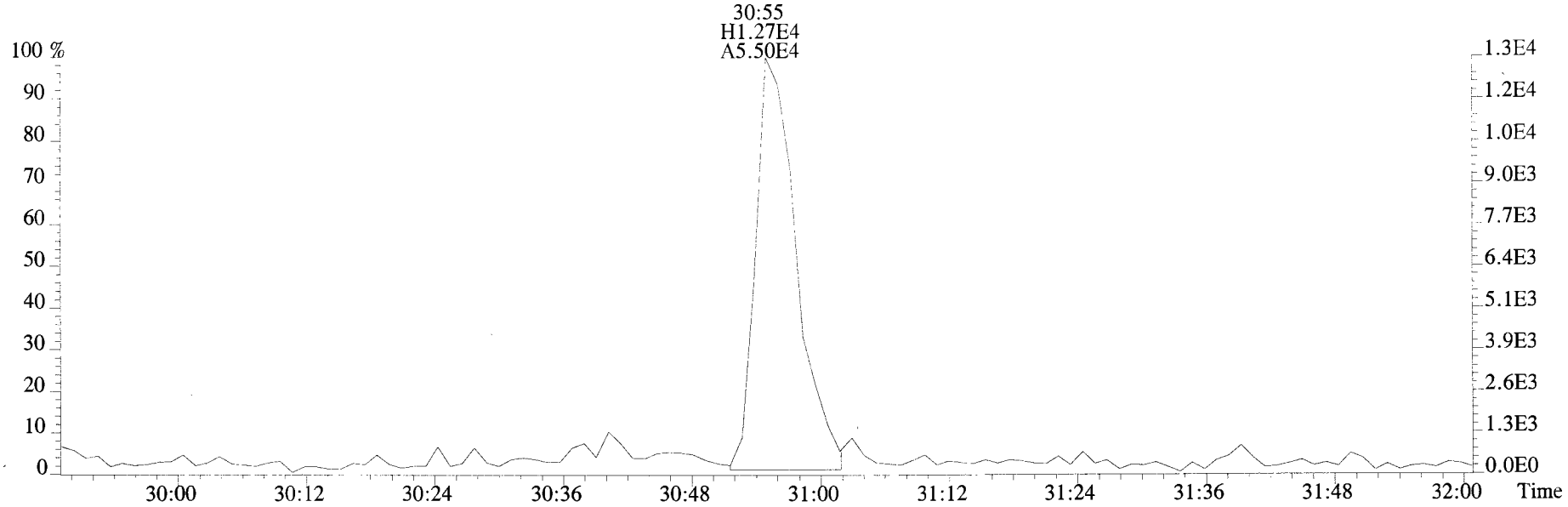
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



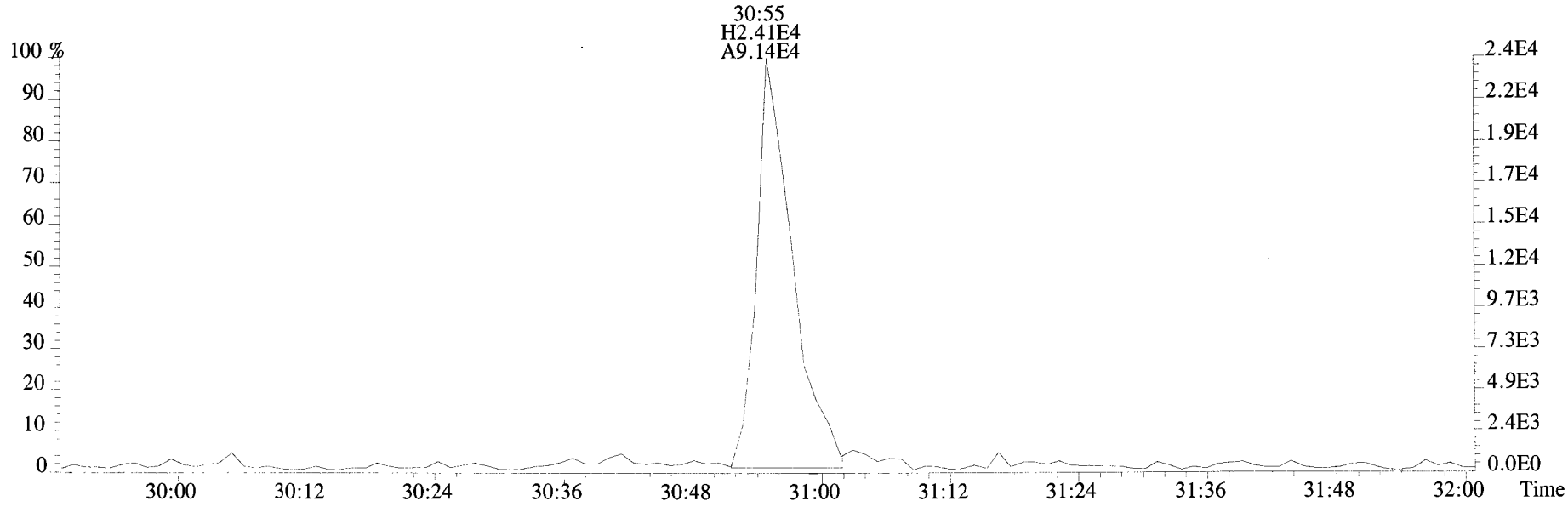
366.9792 S:2 F:2



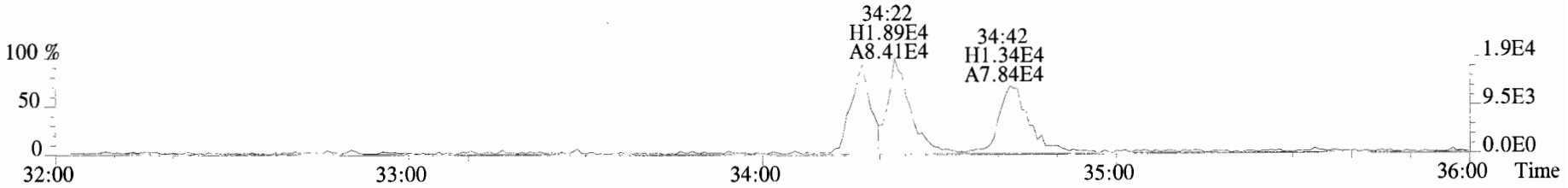
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



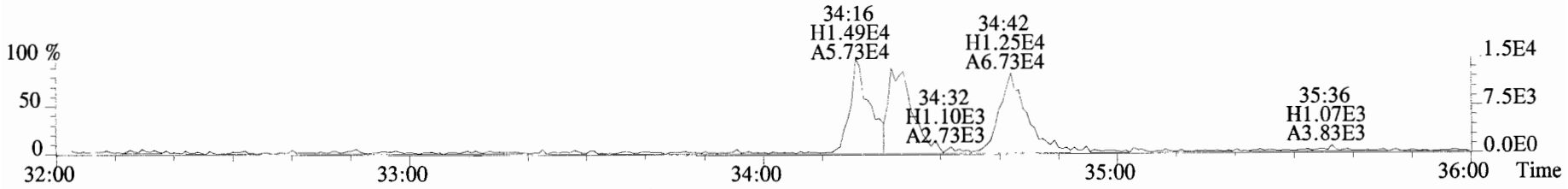
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



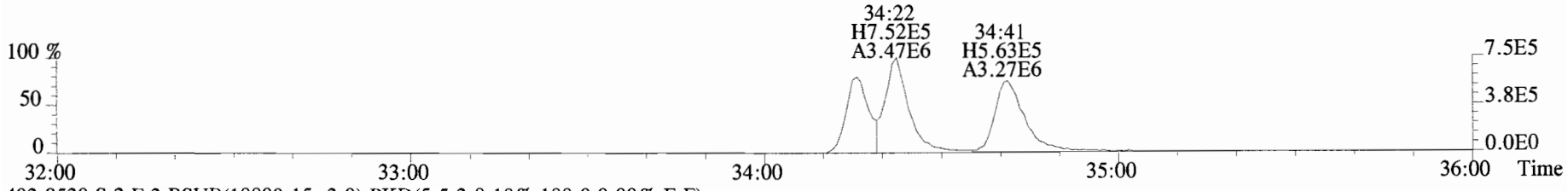
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



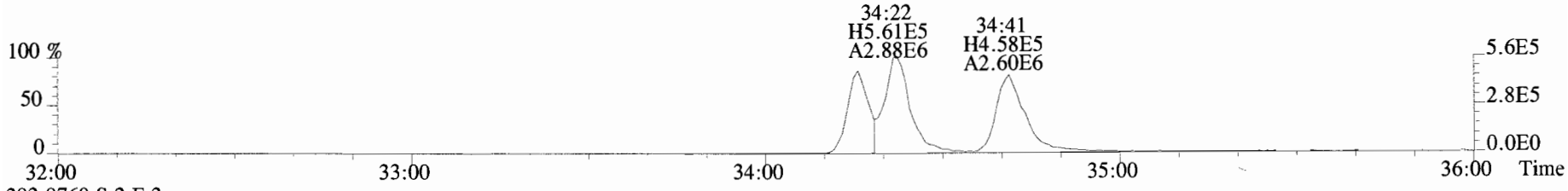
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



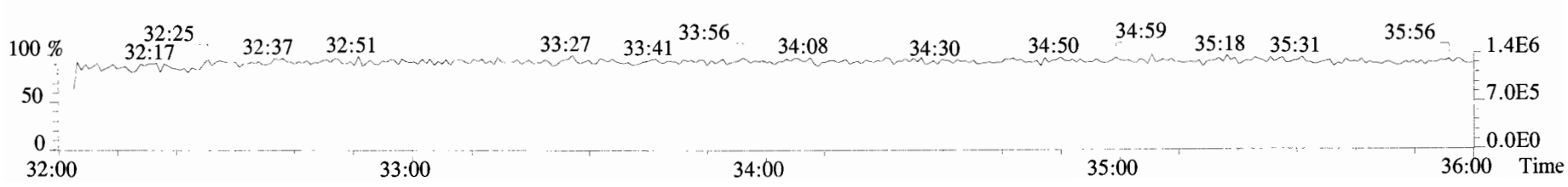
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



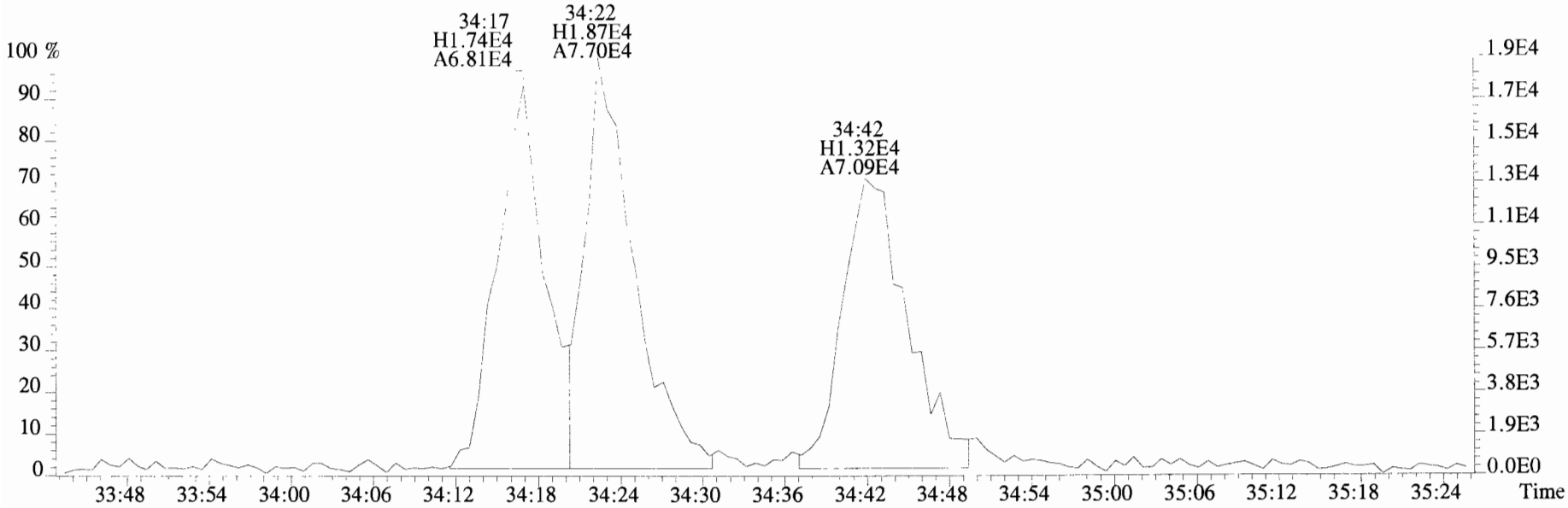
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



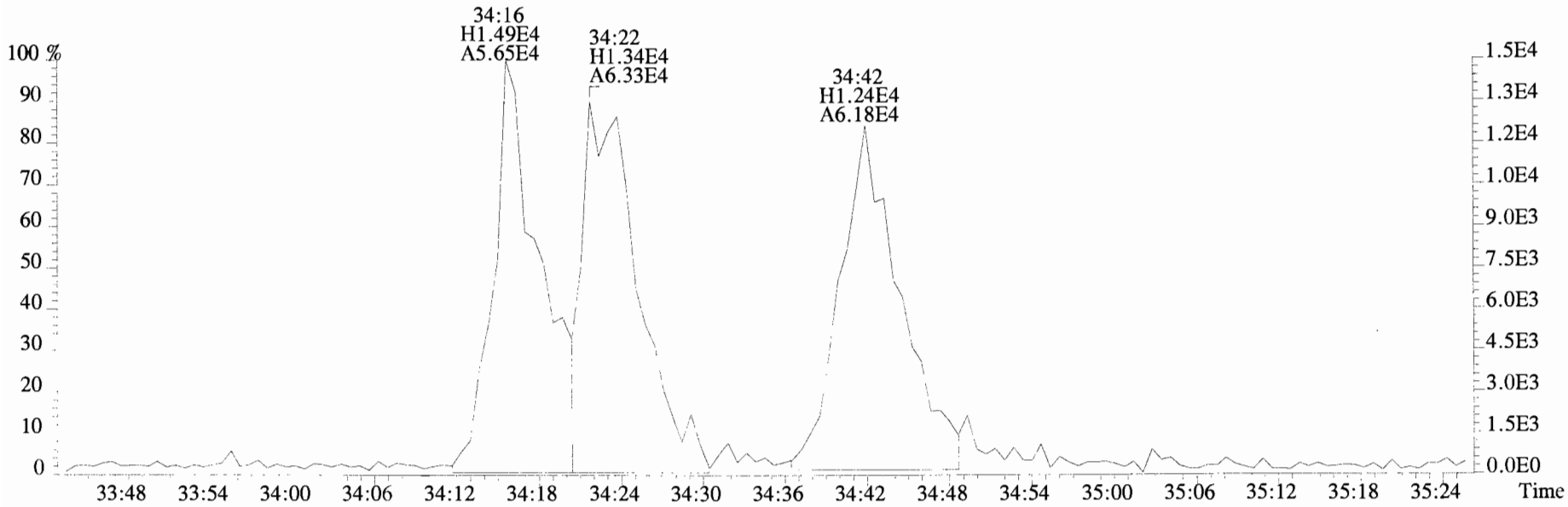
392.9760 S:2 F:3



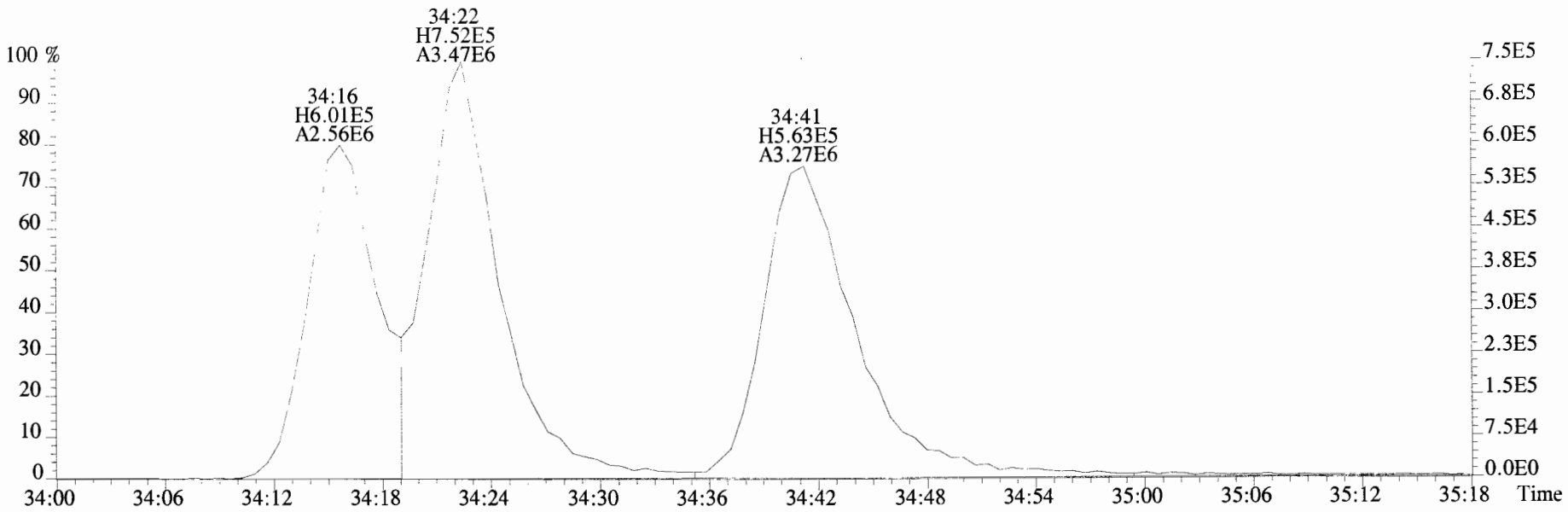
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



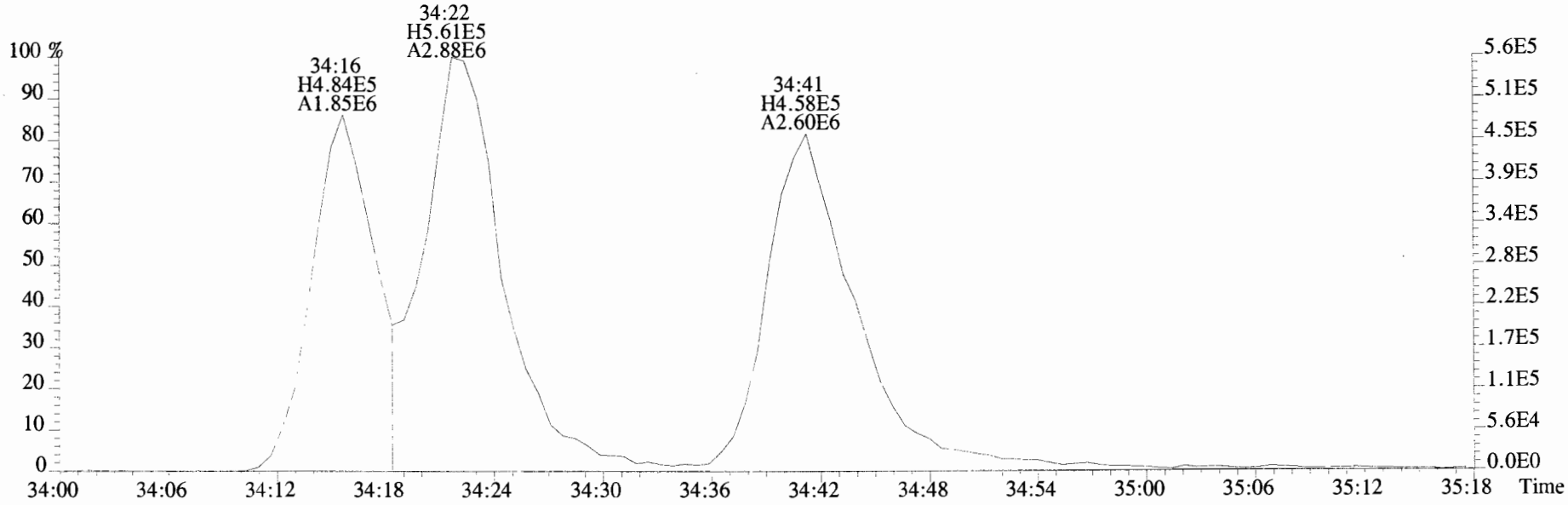
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



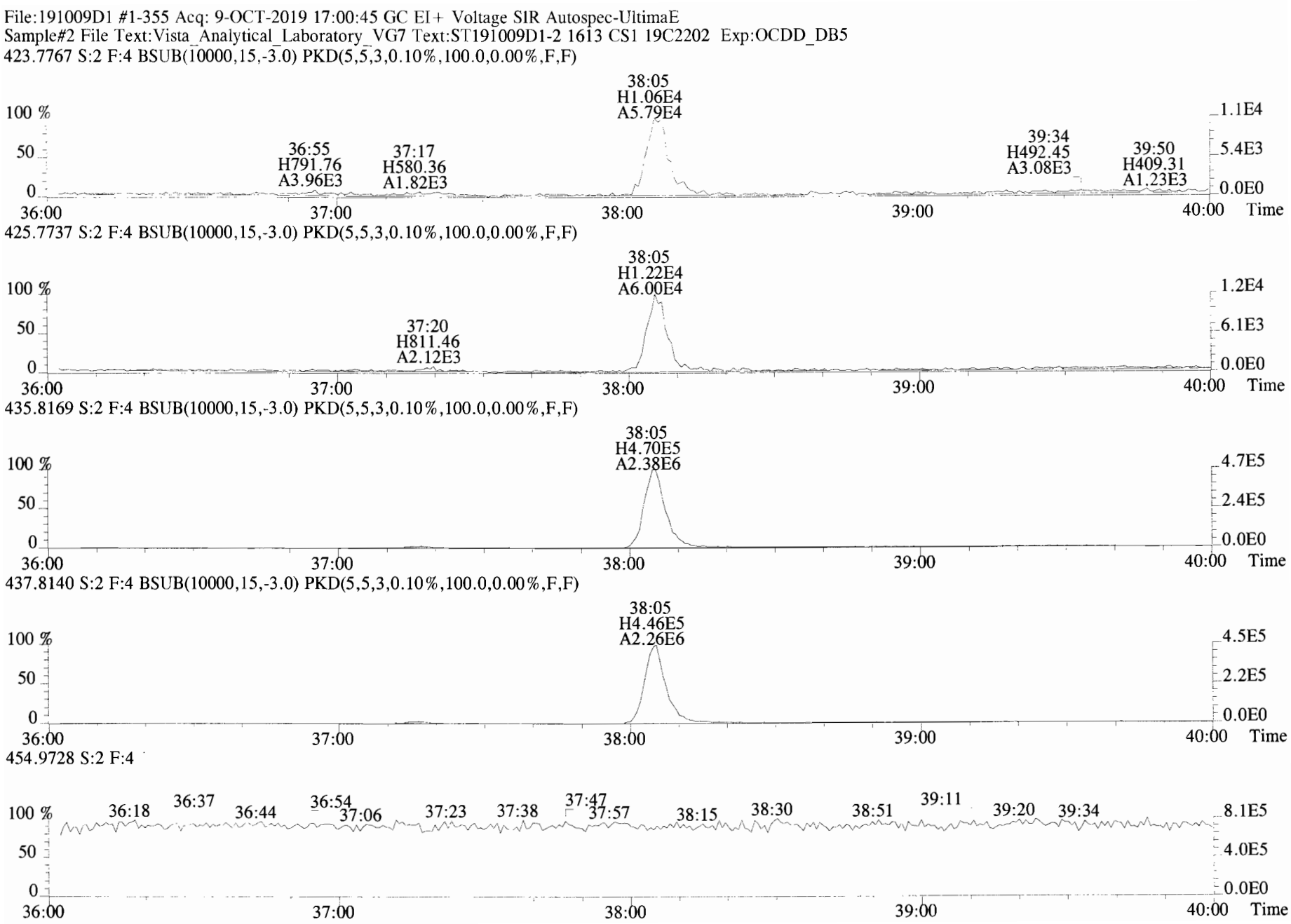
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



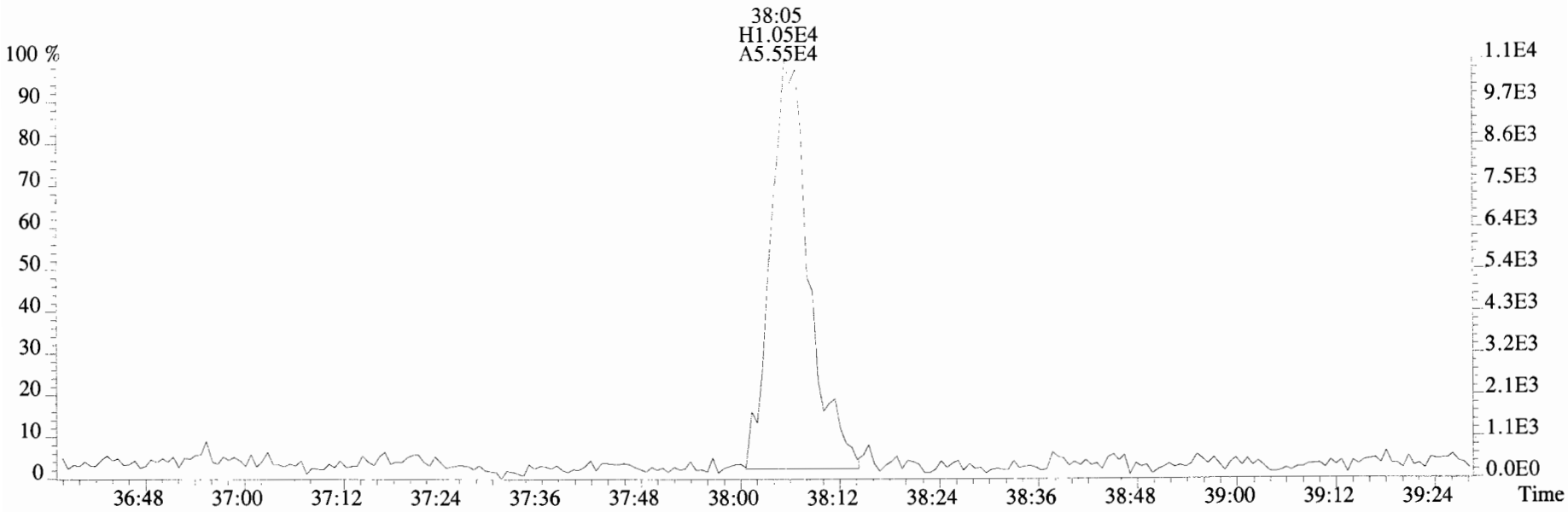
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



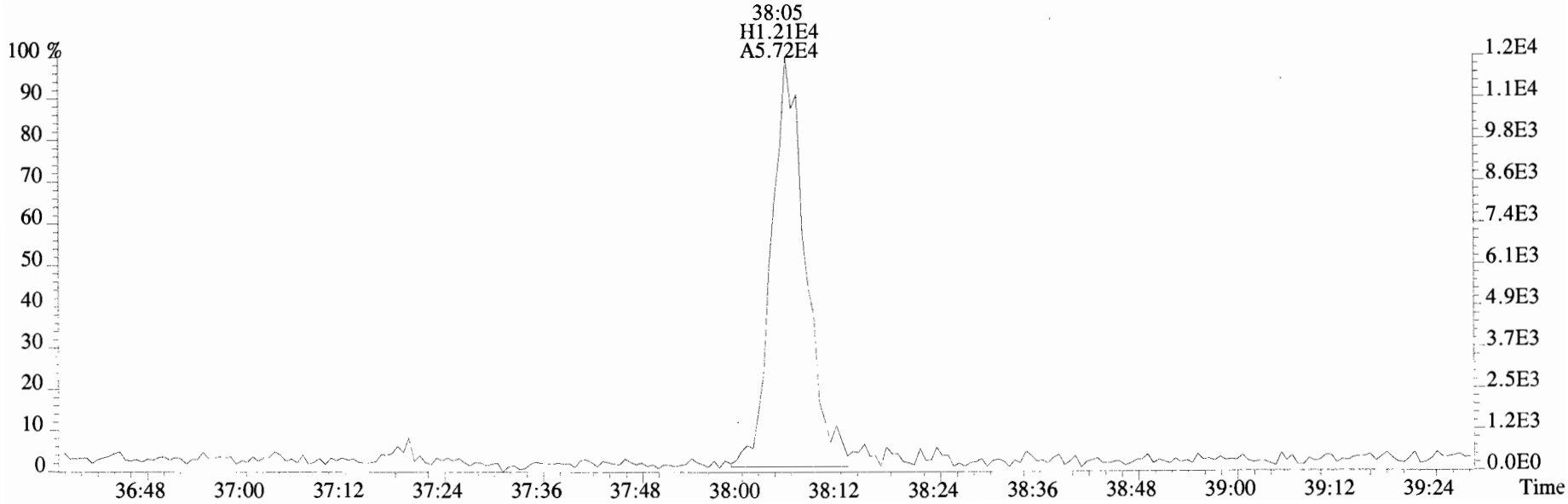
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5



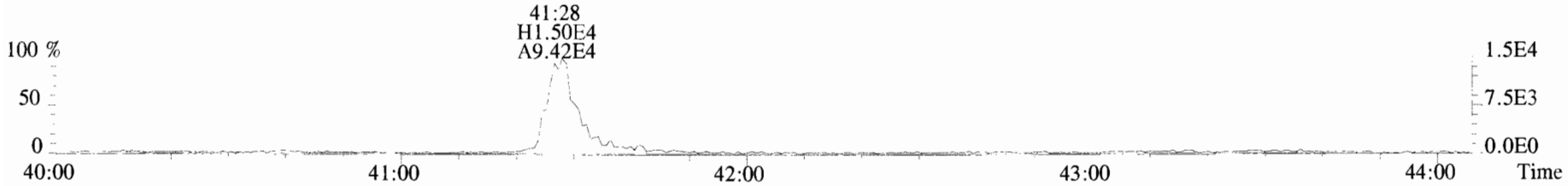
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



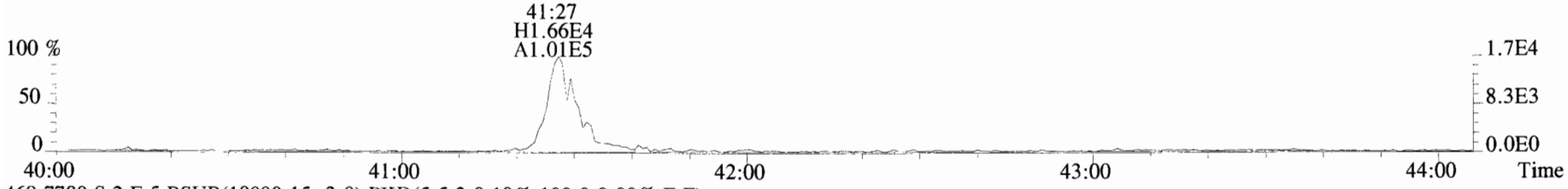
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



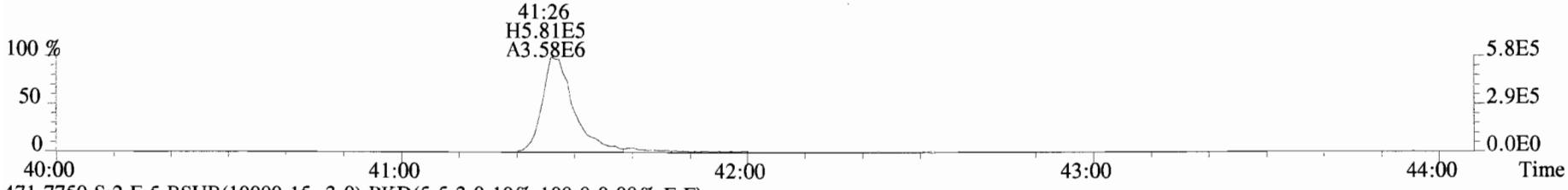
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



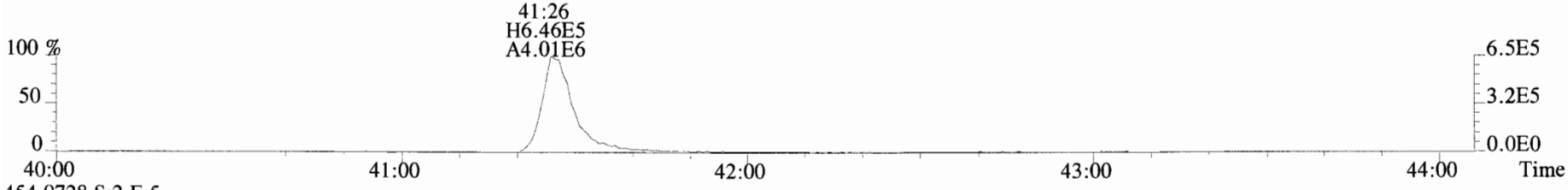
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



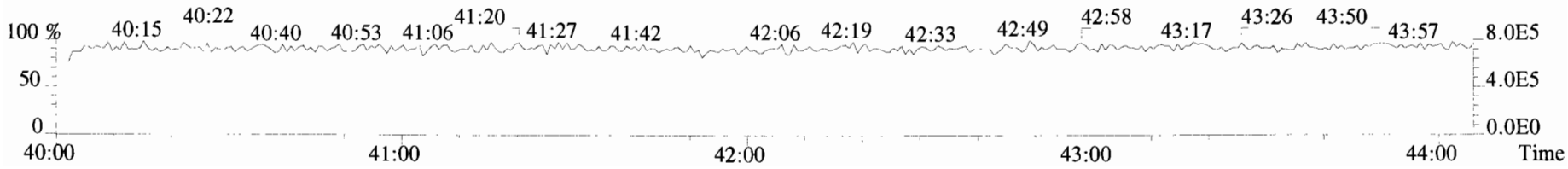
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



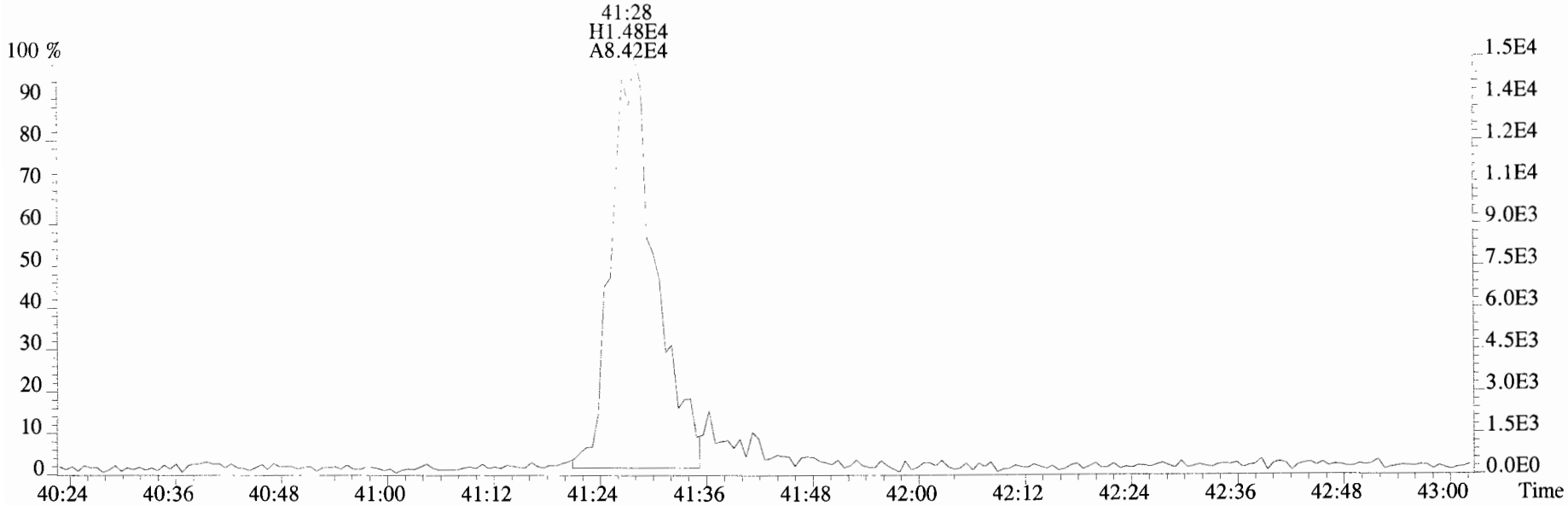
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



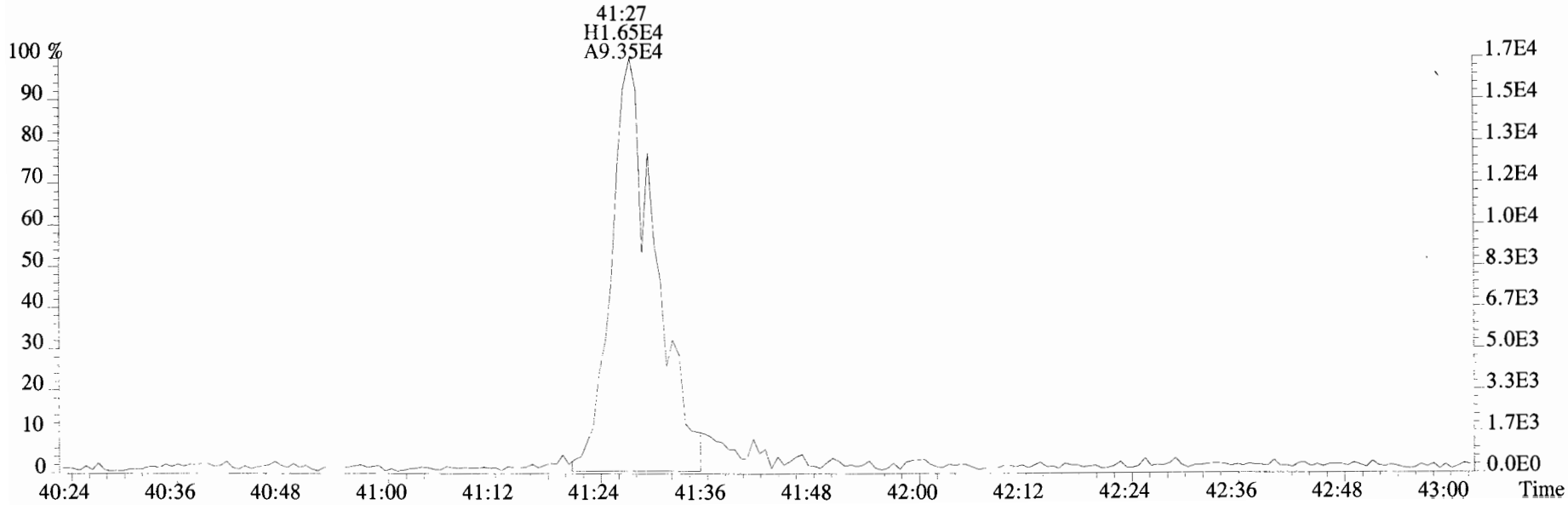
454.9728 S:2 F:5



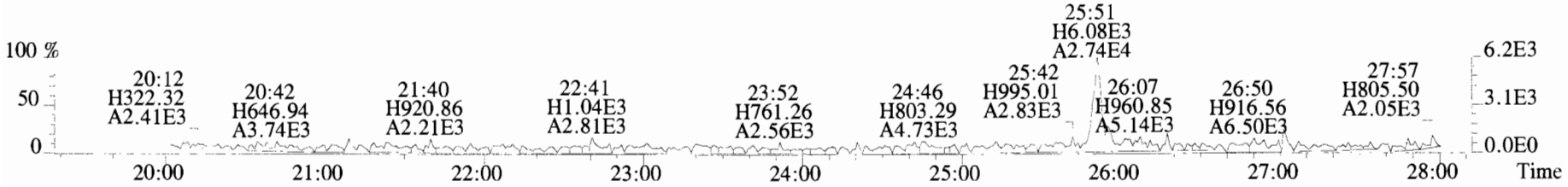
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



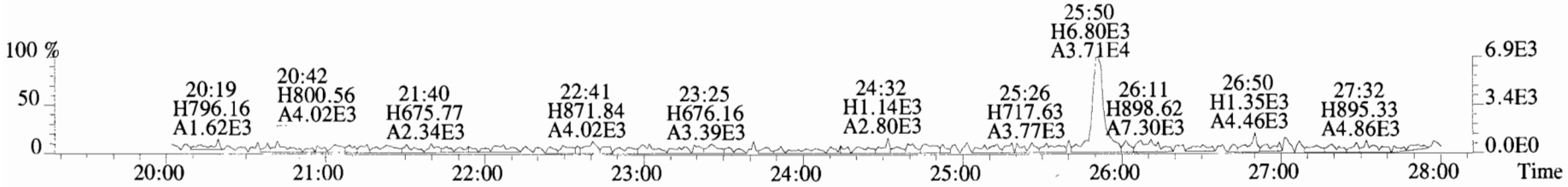
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



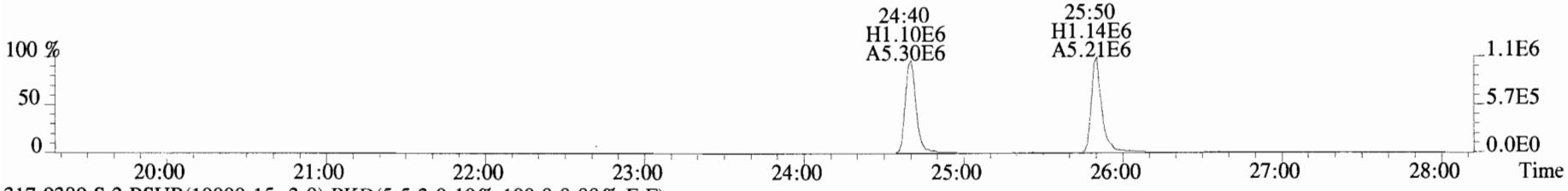
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



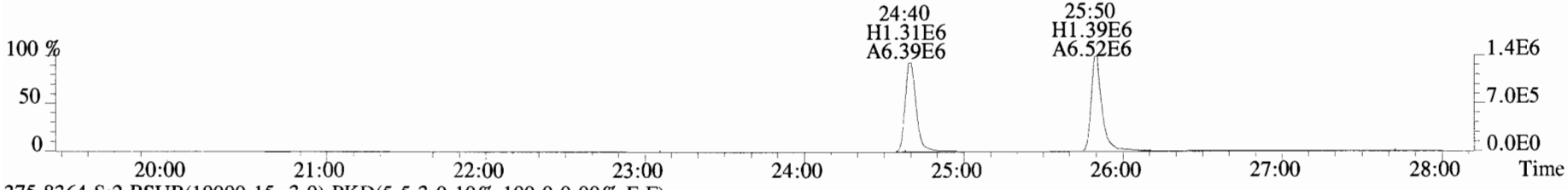
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



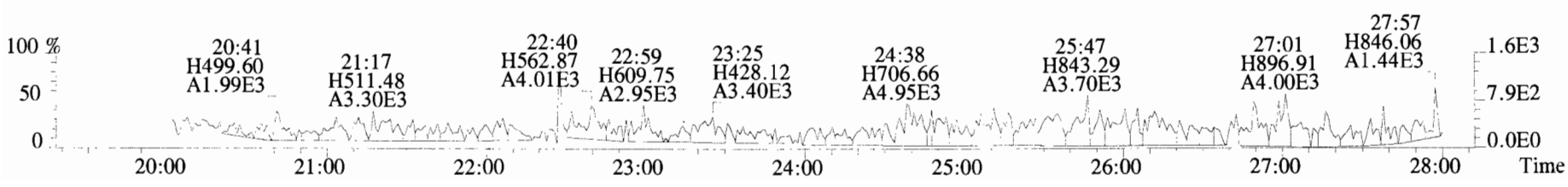
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



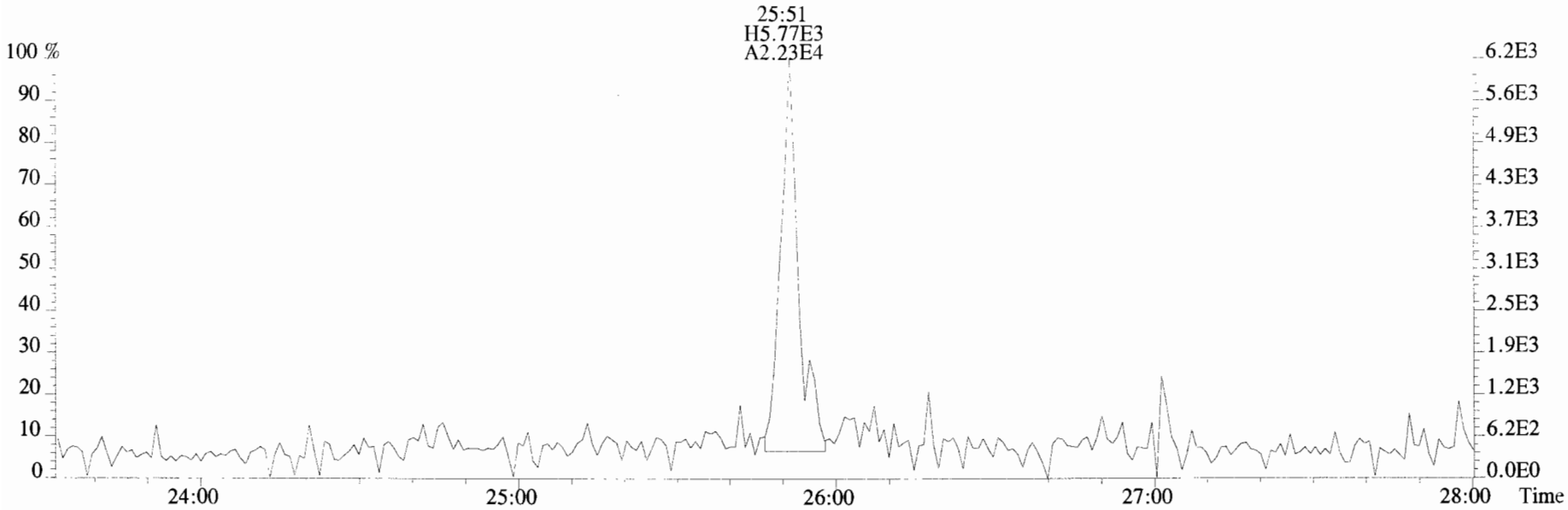
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



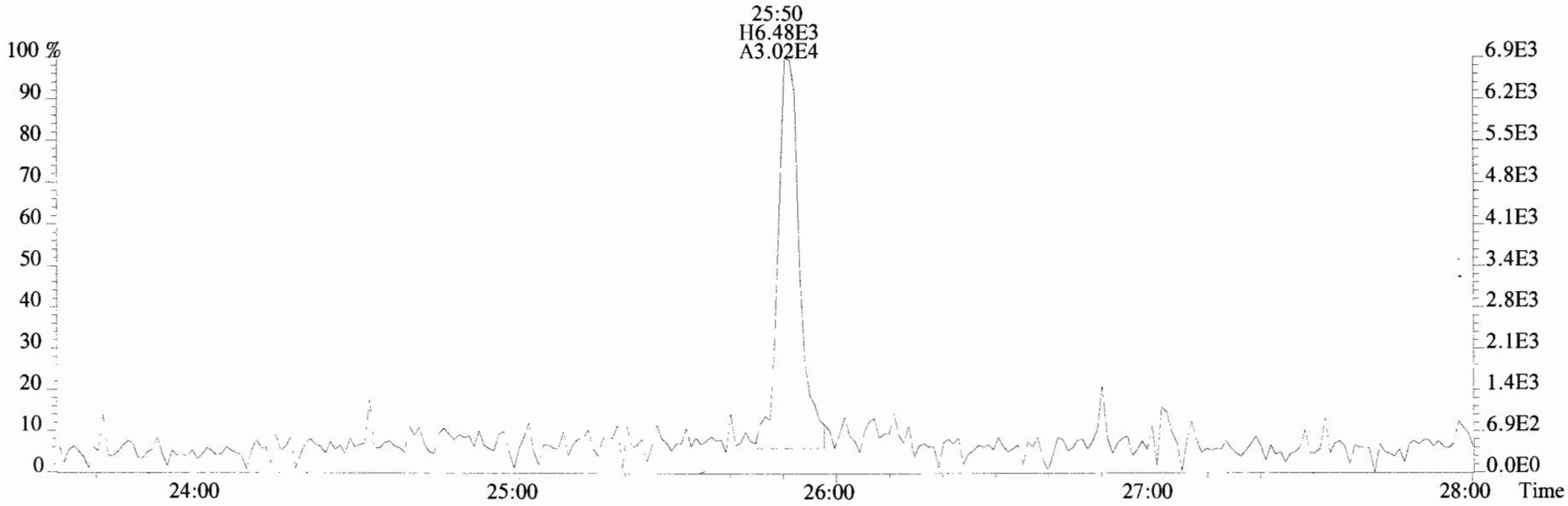
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



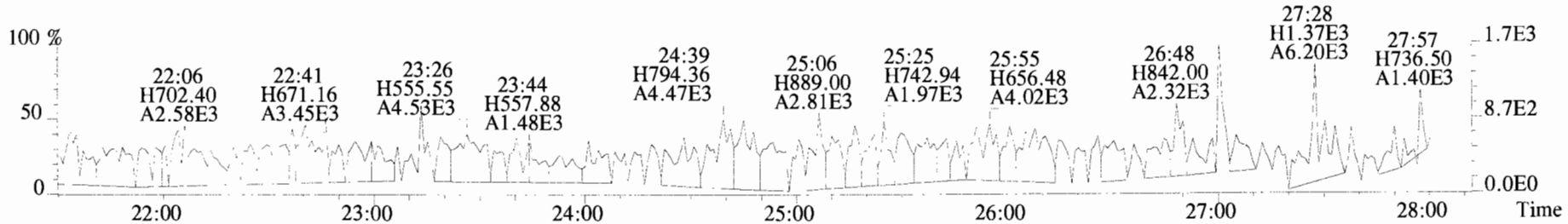
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



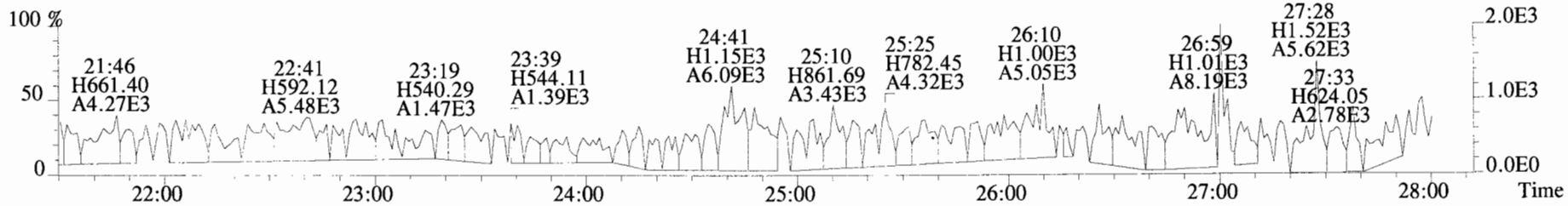
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



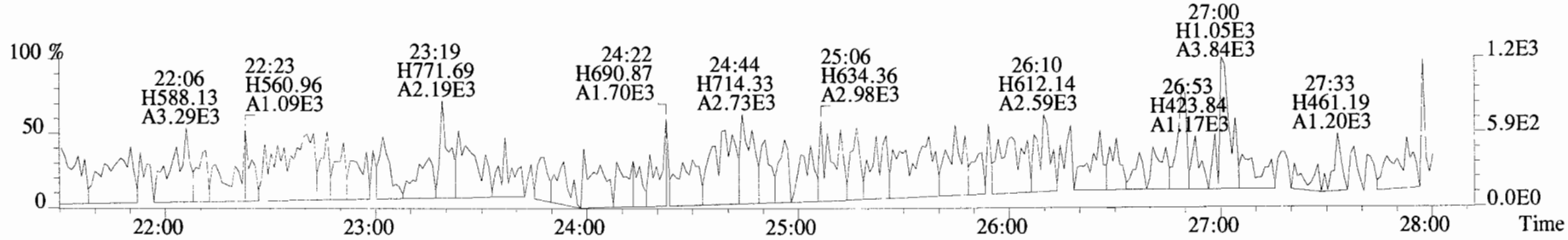
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



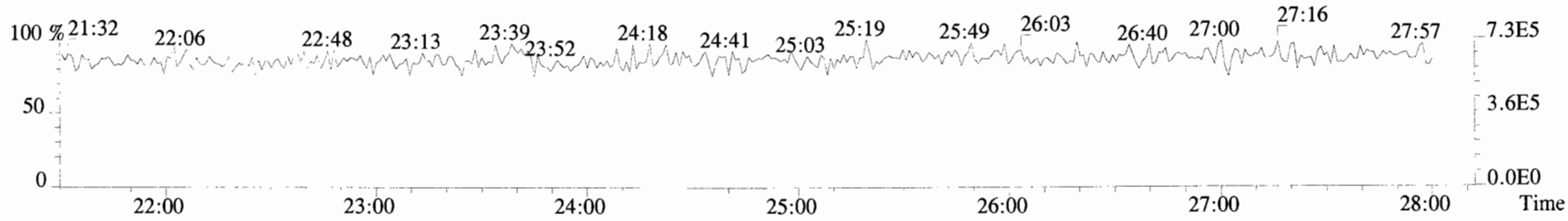
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



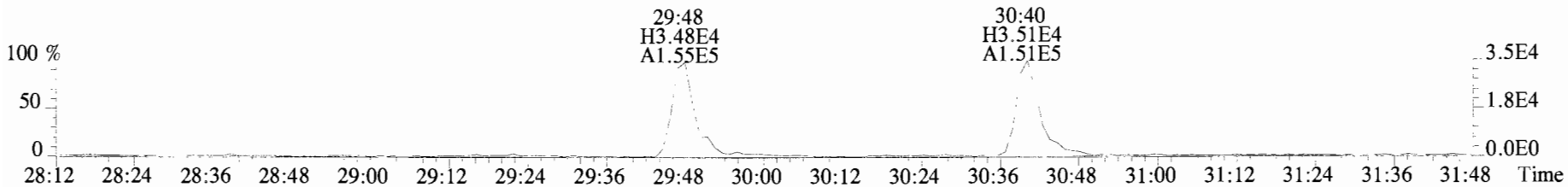
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



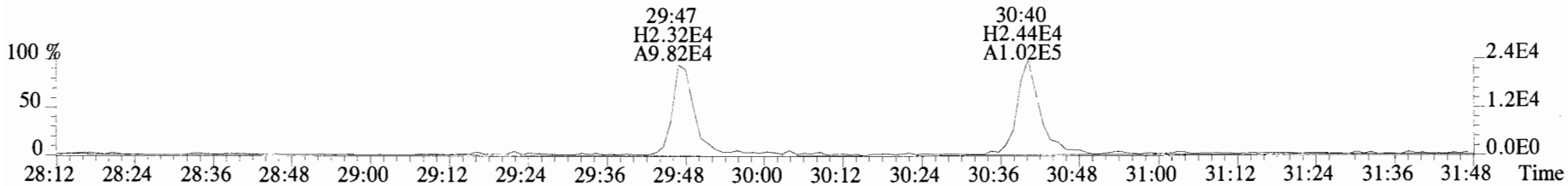
316.9824 S:2



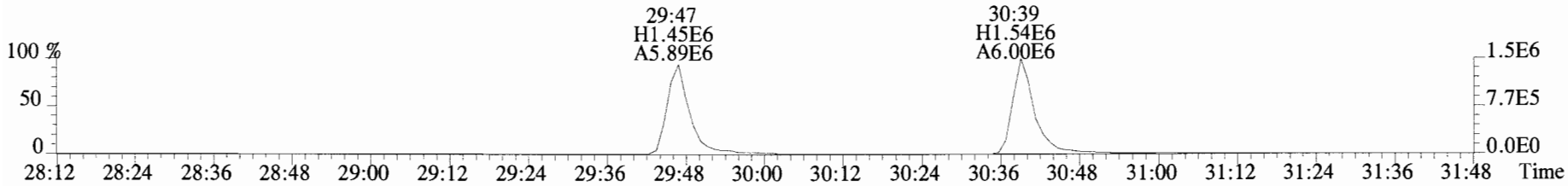
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



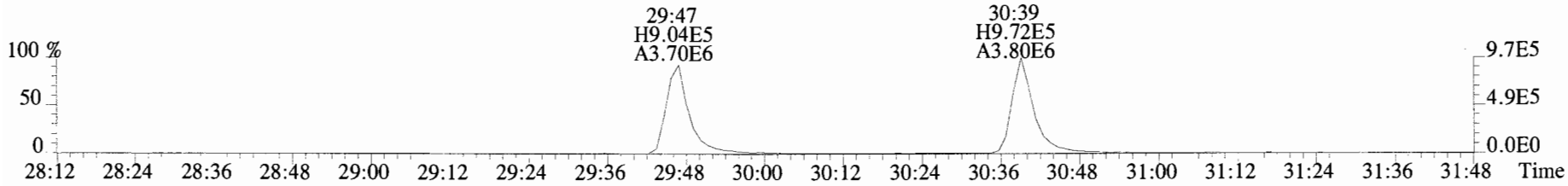
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



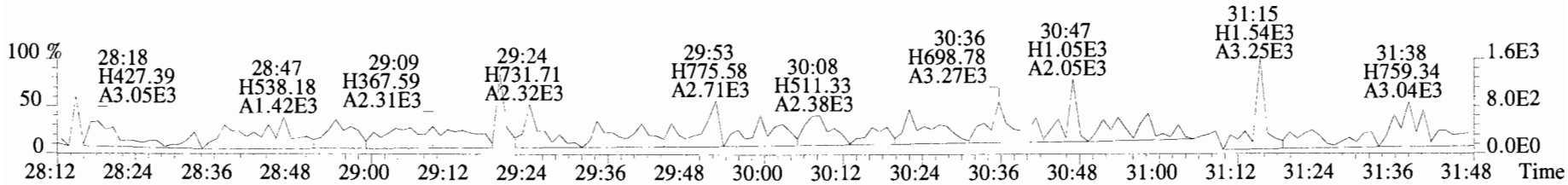
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



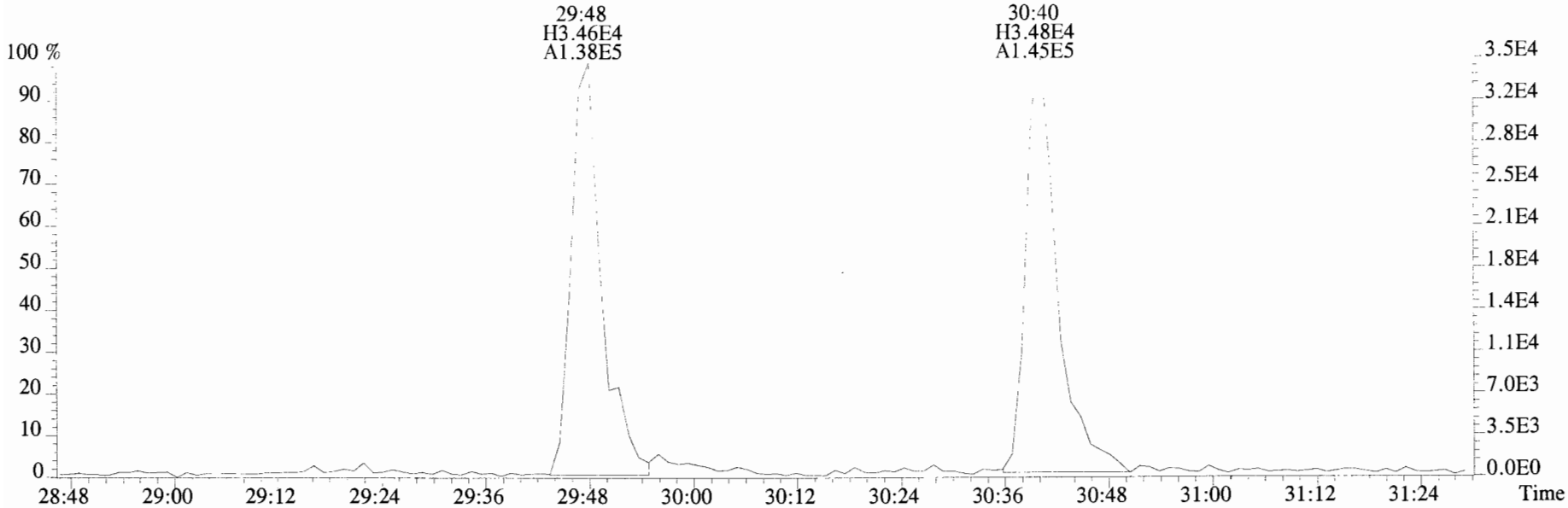
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



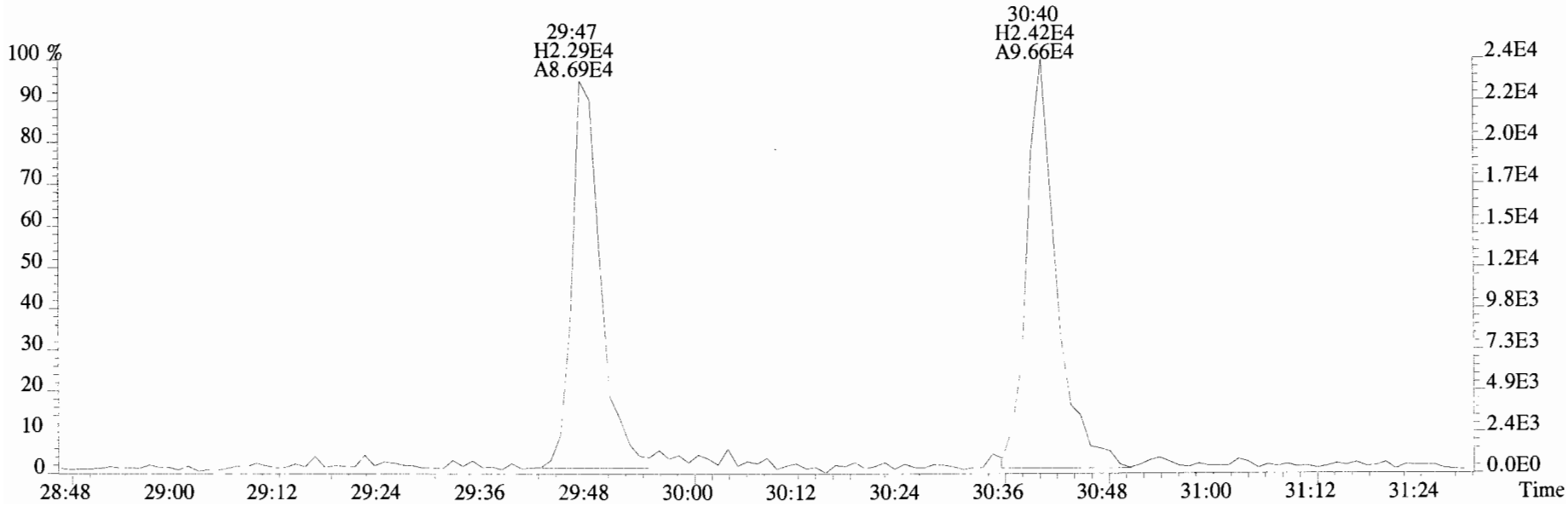
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



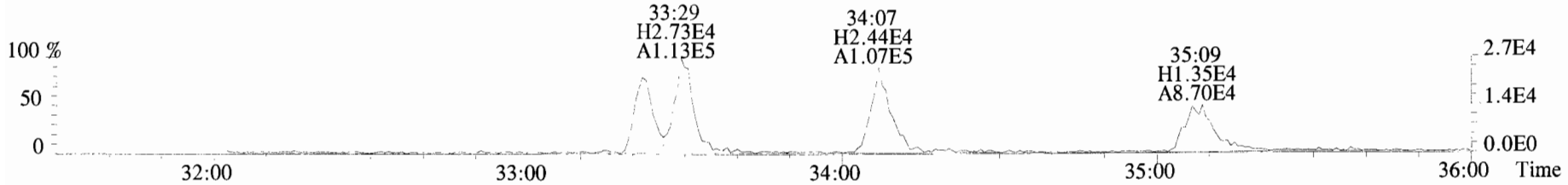
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



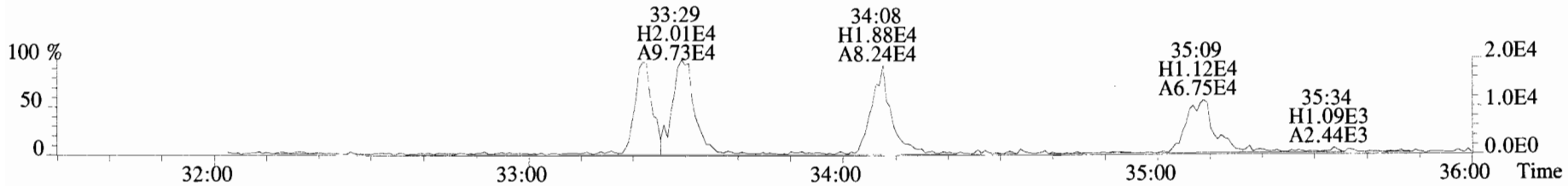
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



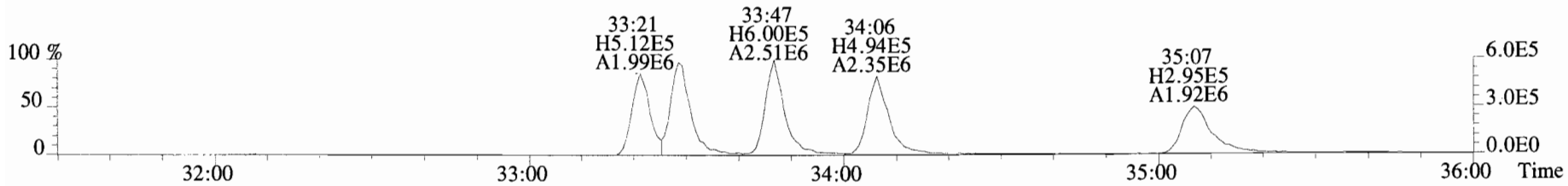
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



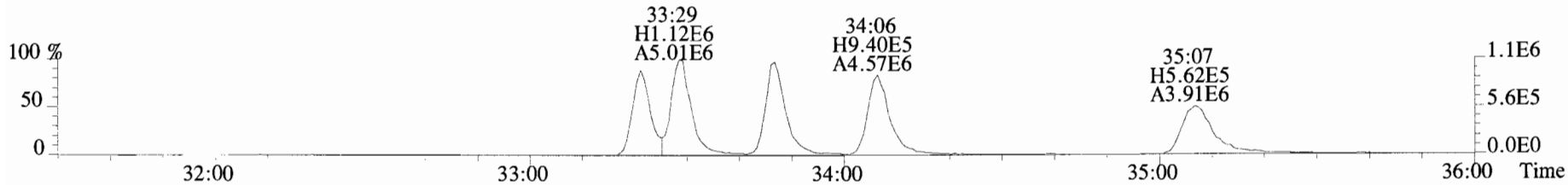
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



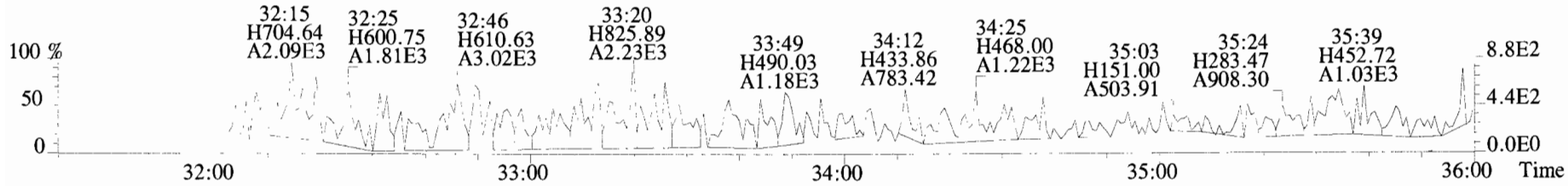
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



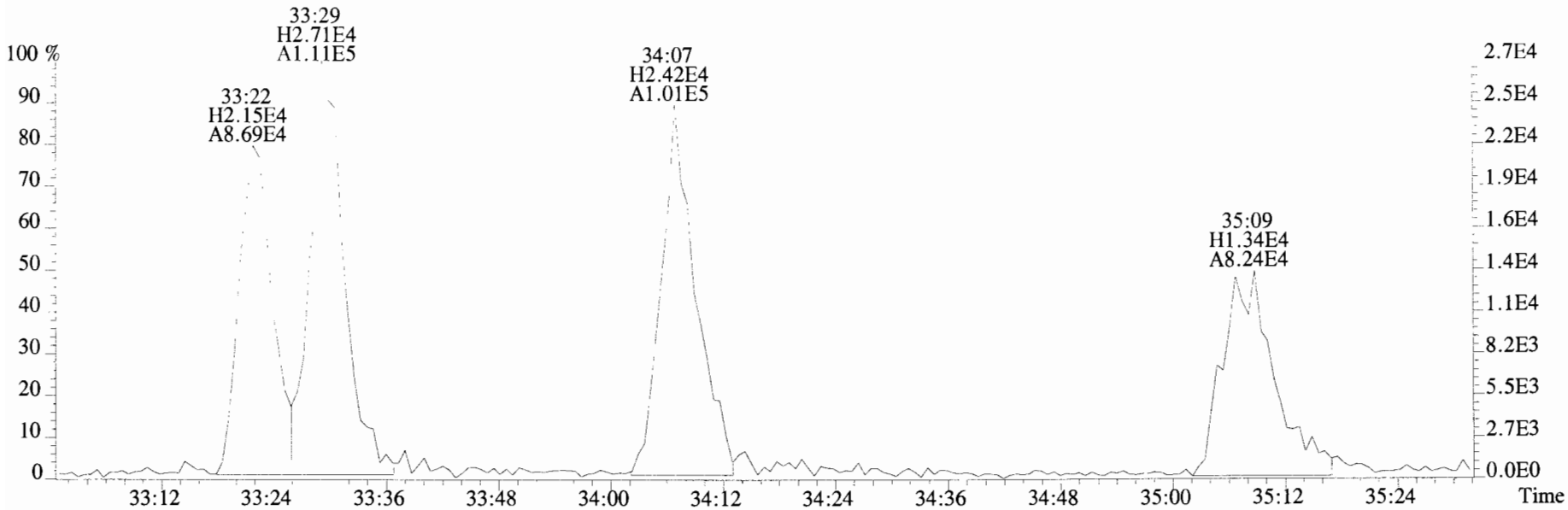
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



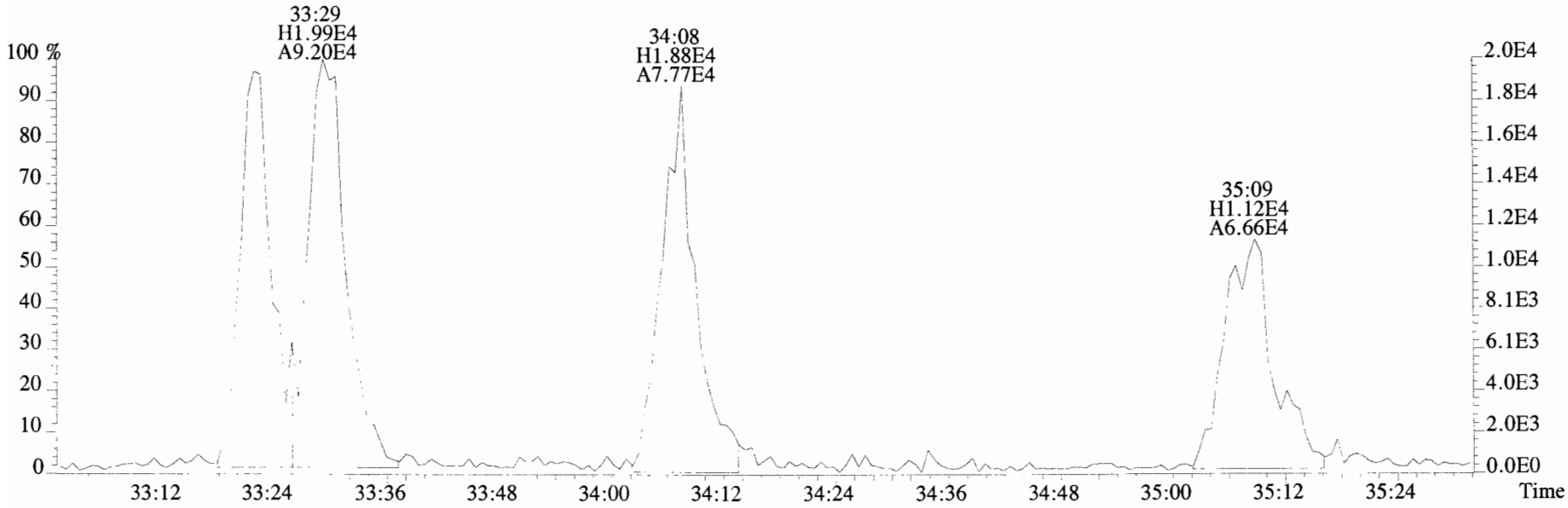
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



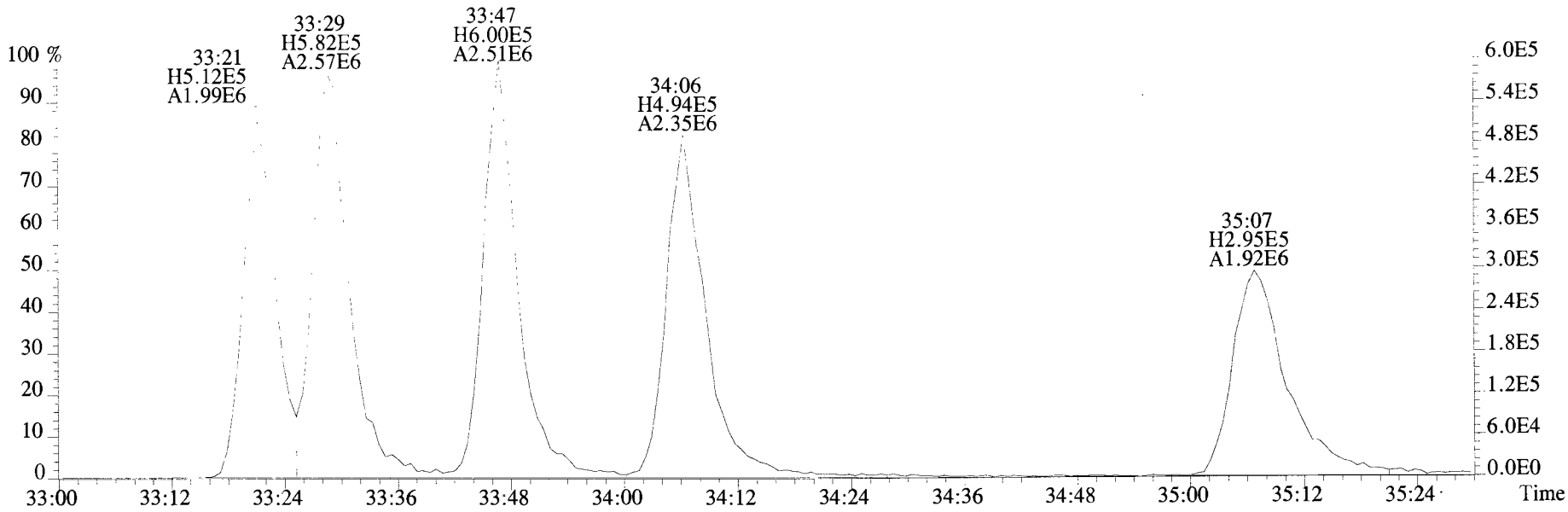
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



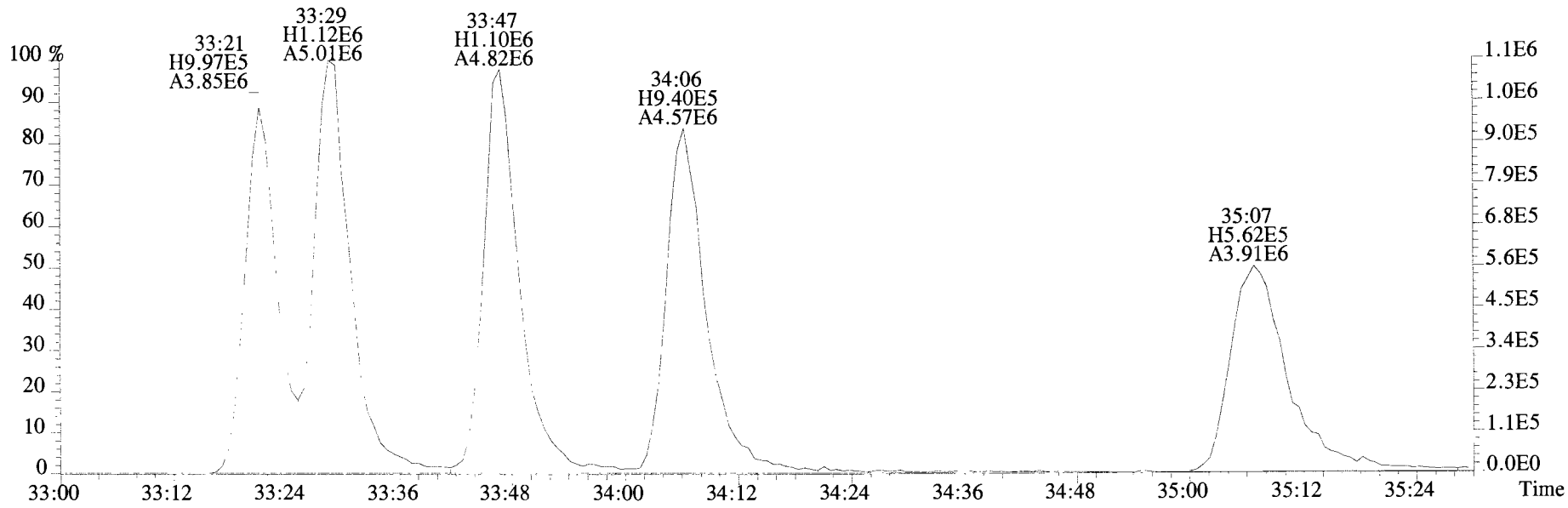
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



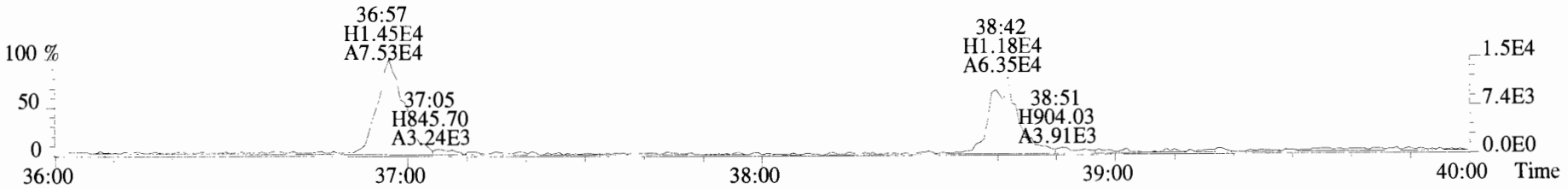
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



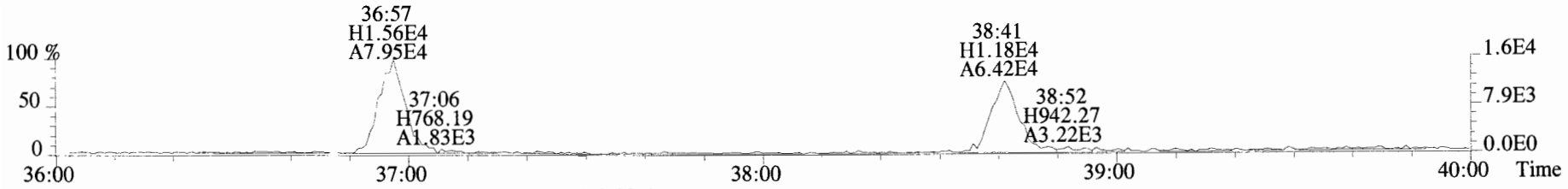
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



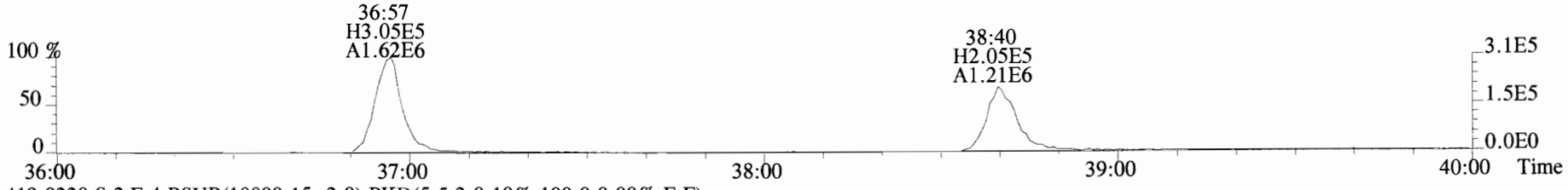
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



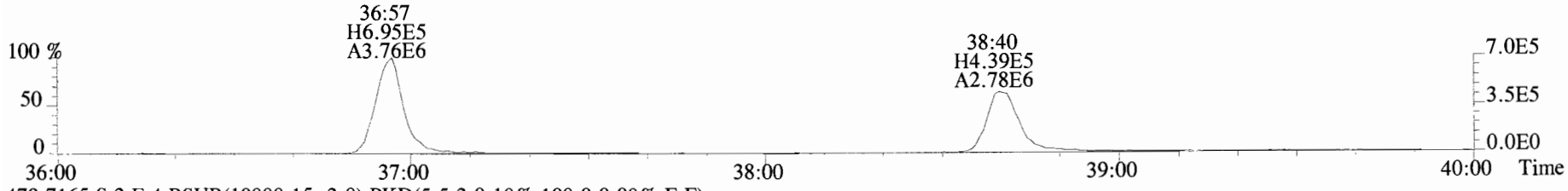
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



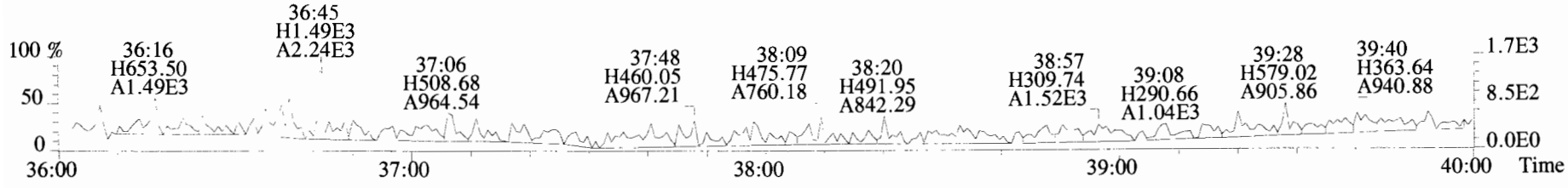
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



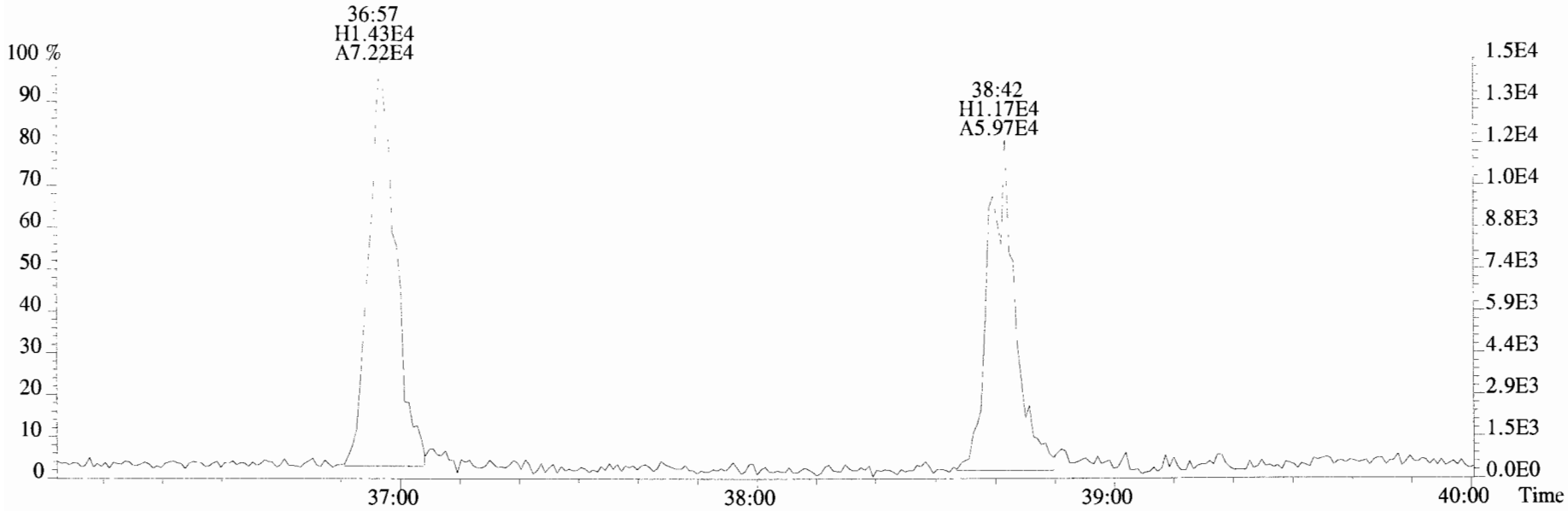
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



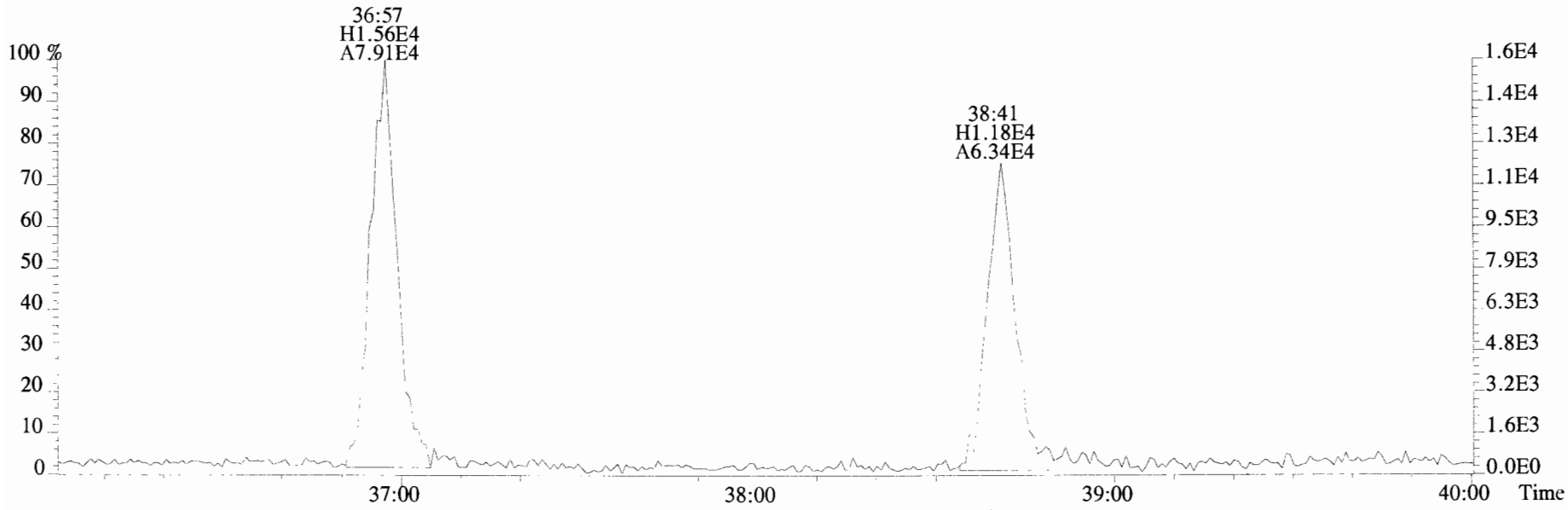
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



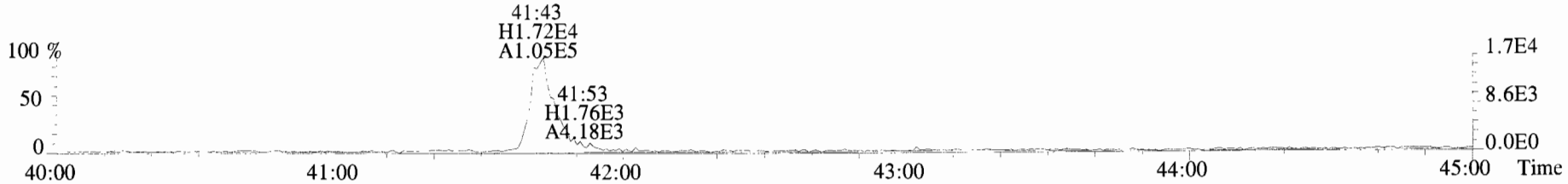
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



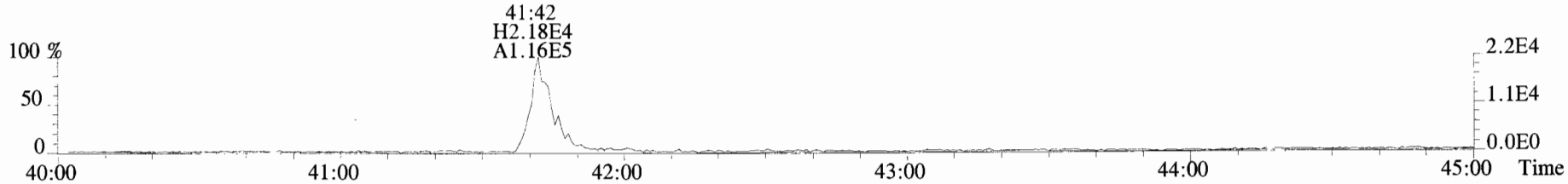
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



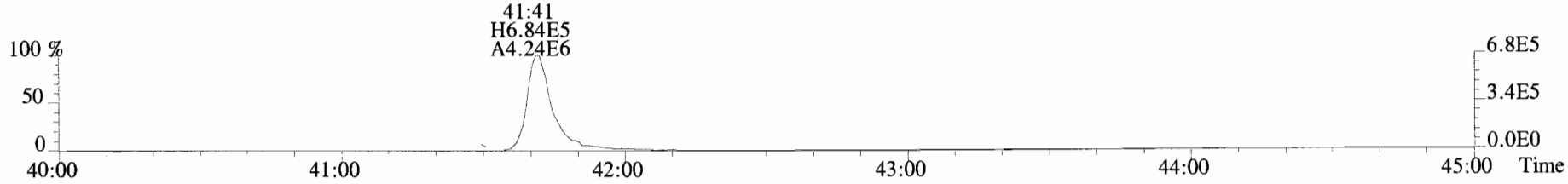
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



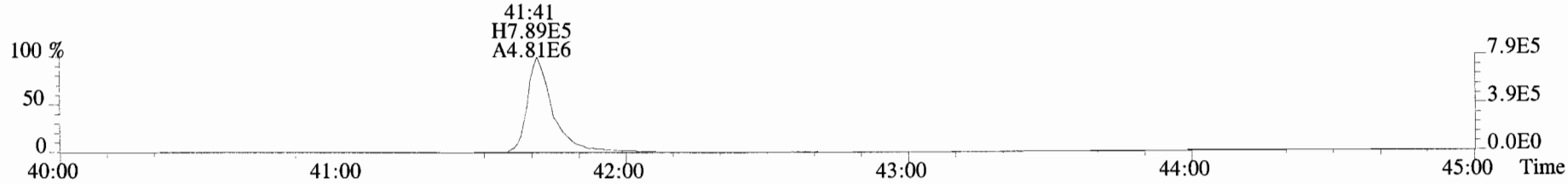
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



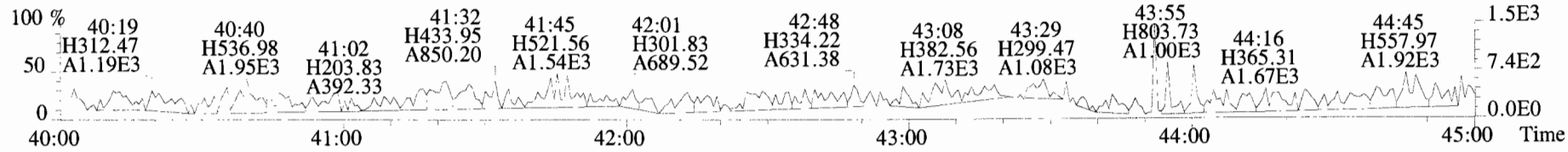
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



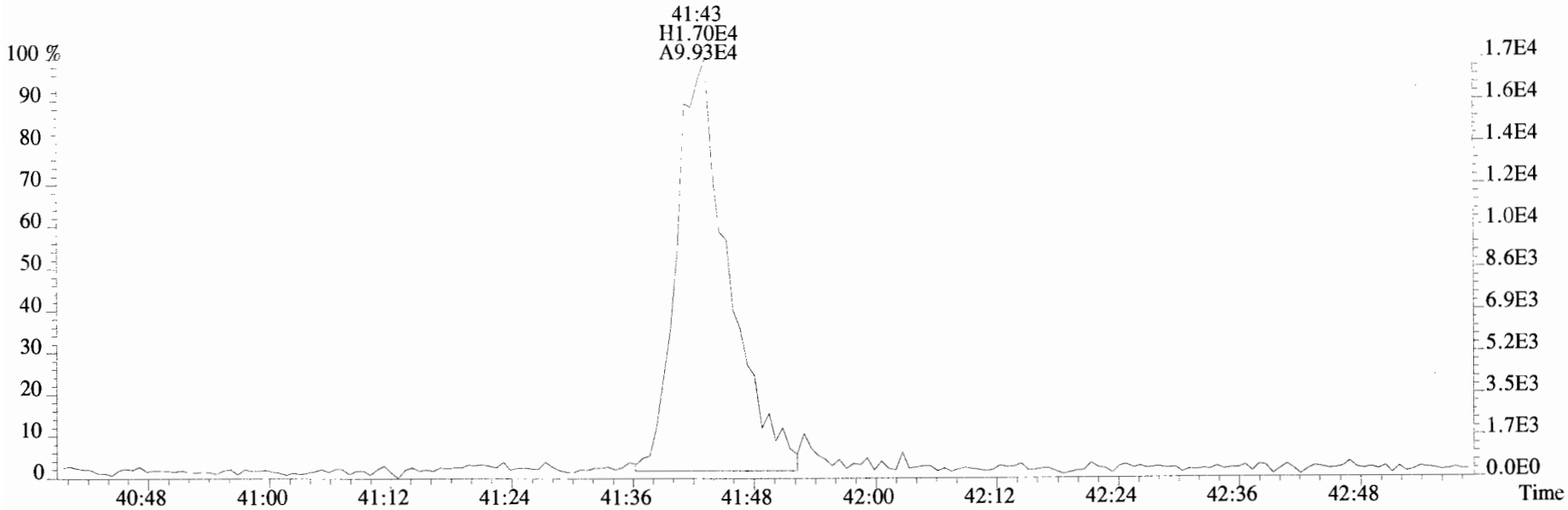
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



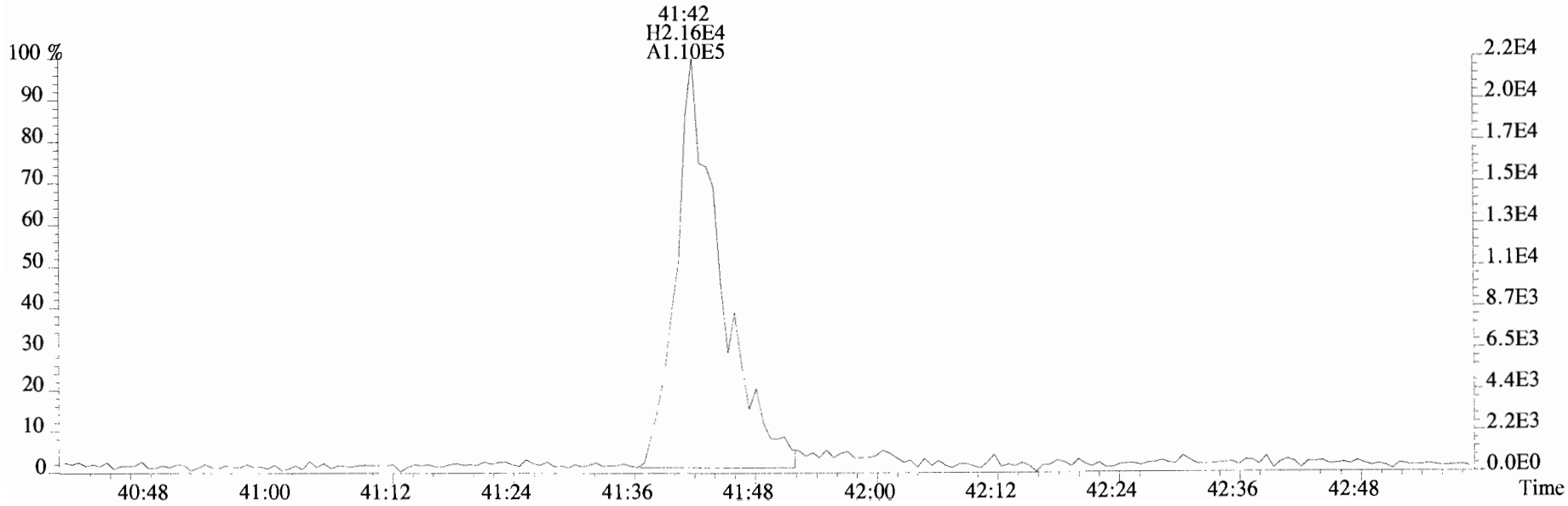
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



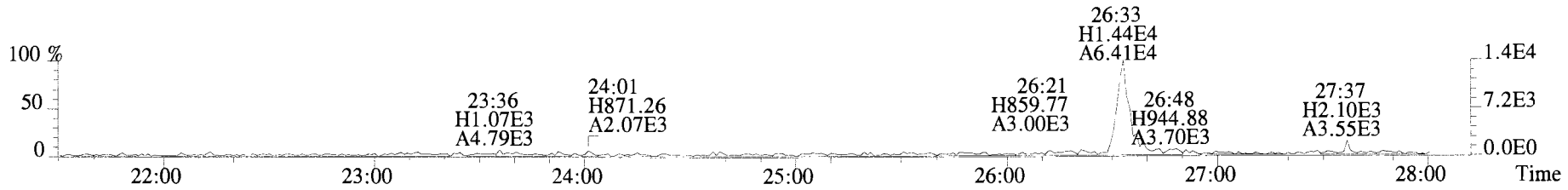
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



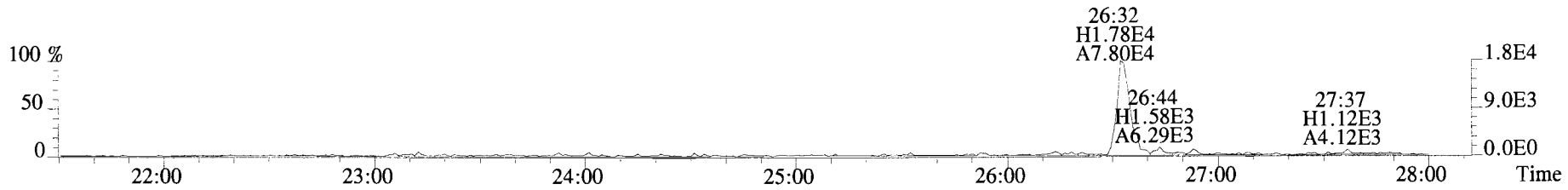
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

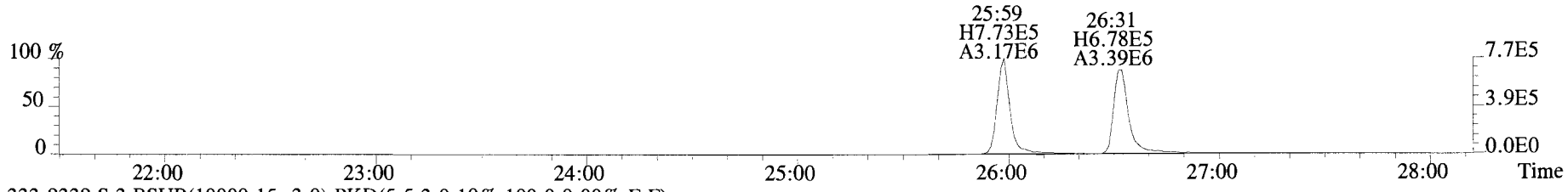


321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

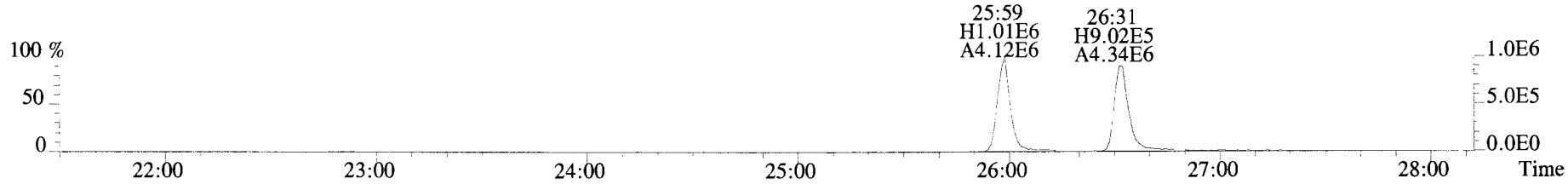


327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

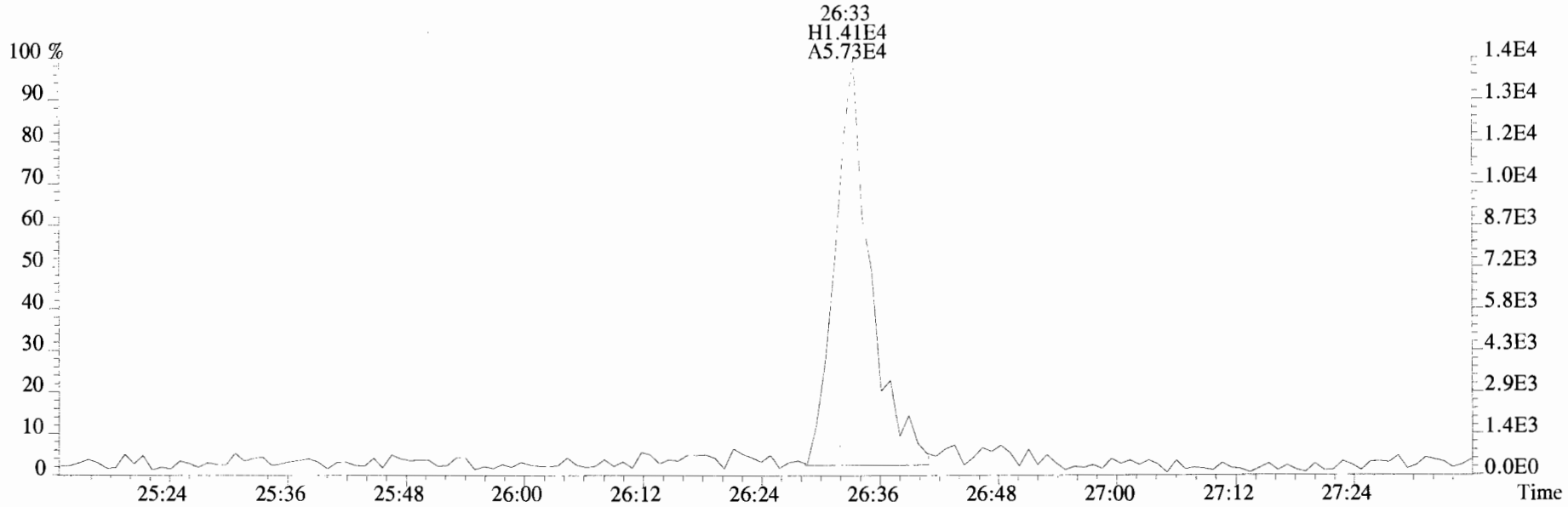
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



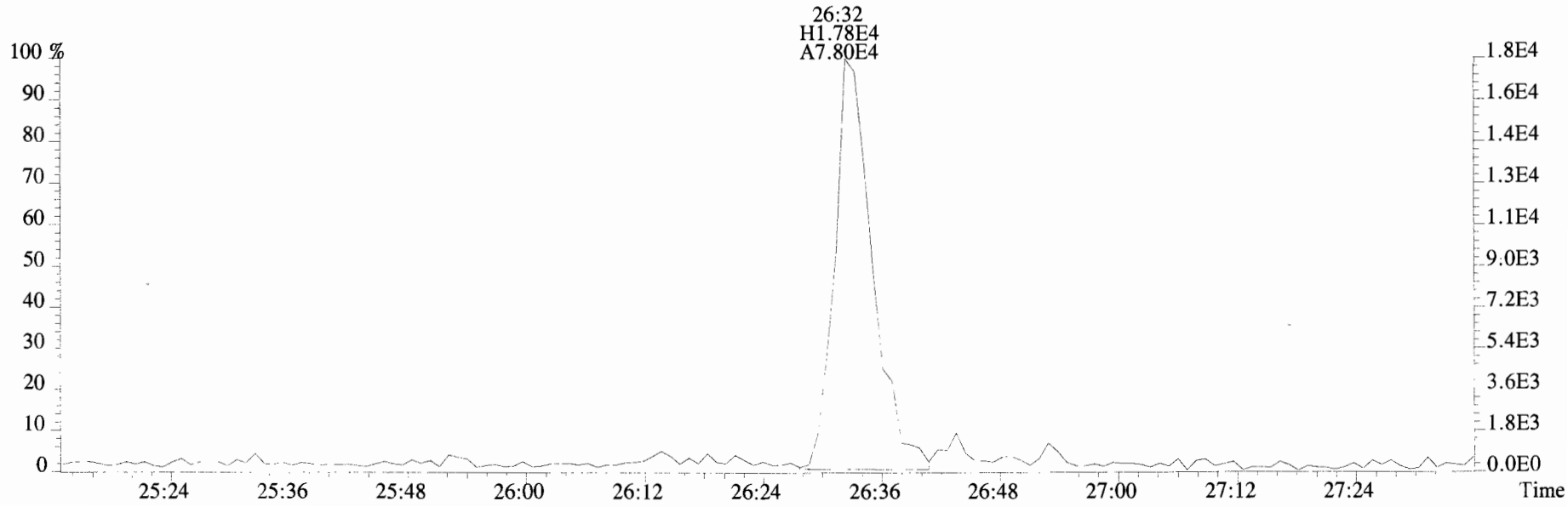
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



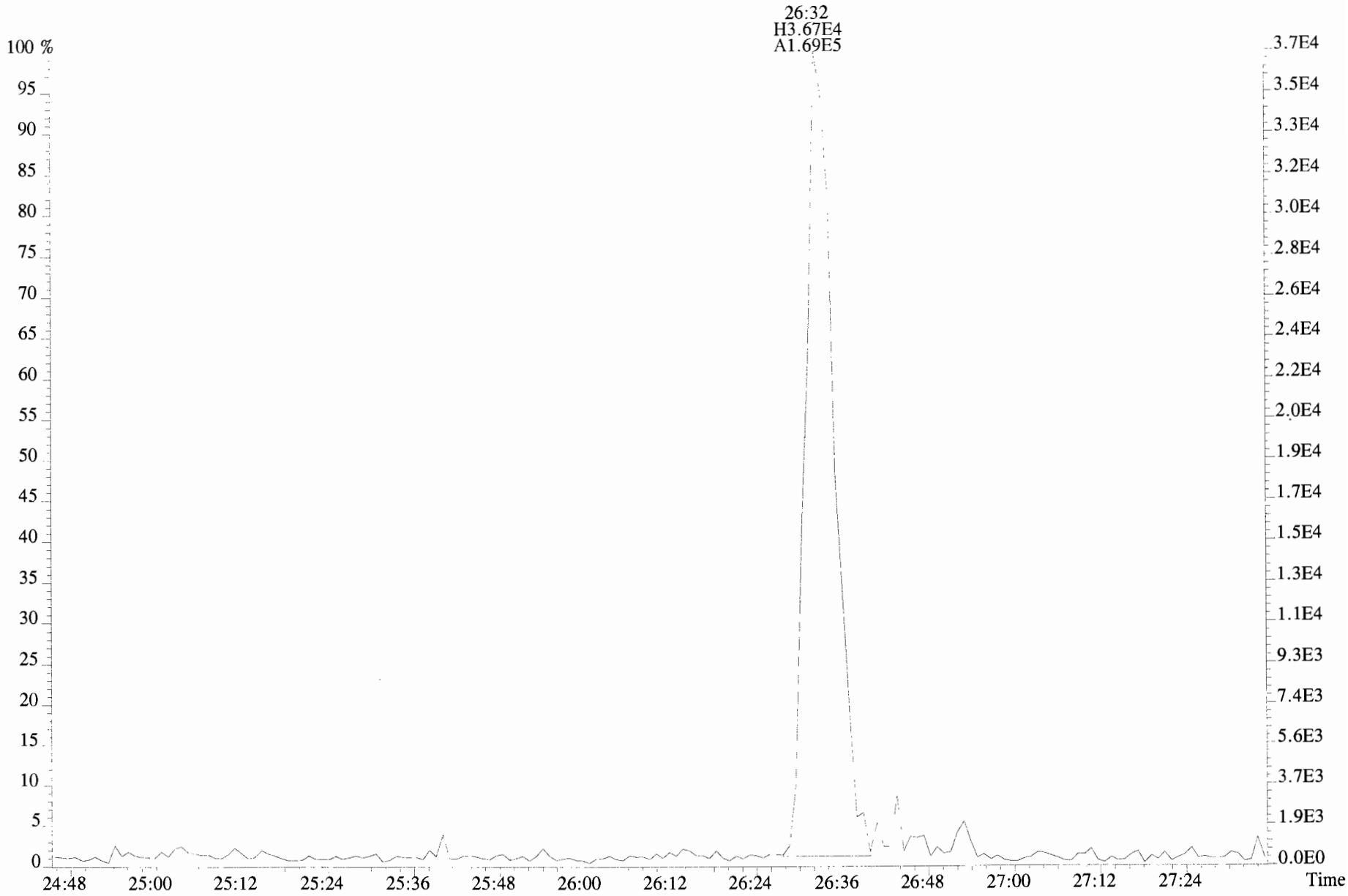
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



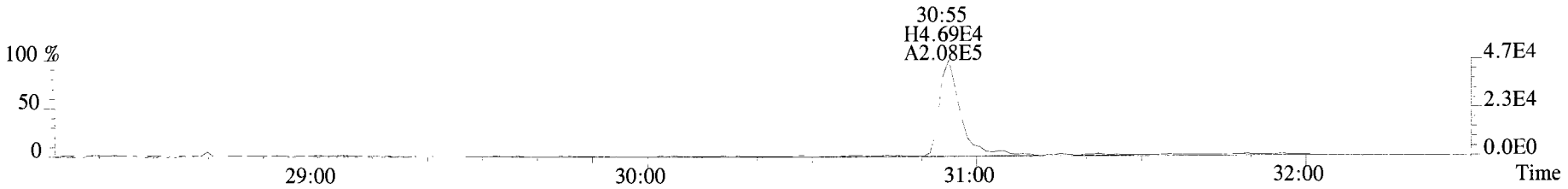
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



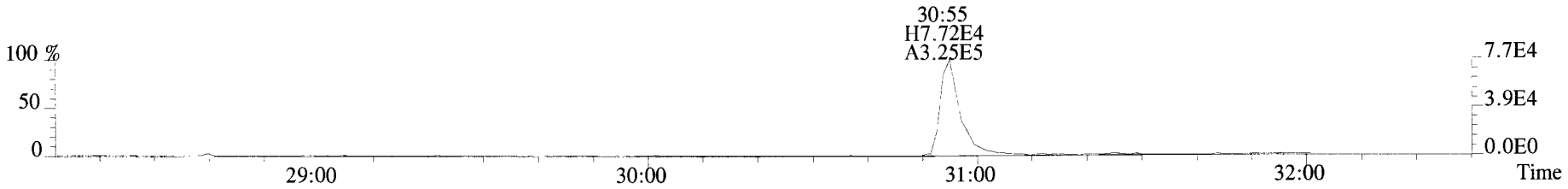
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



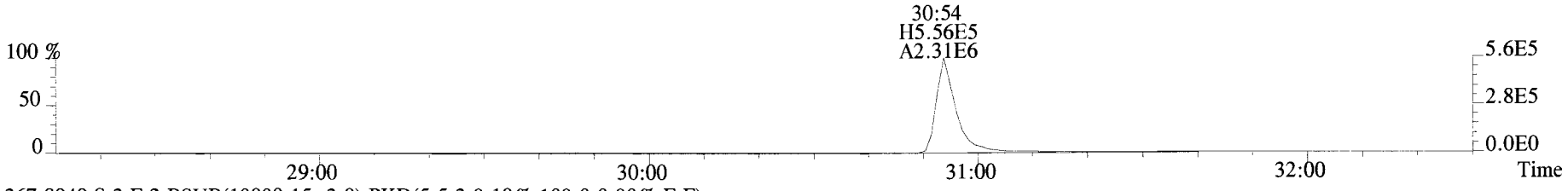
File:191009D1 #1-211 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



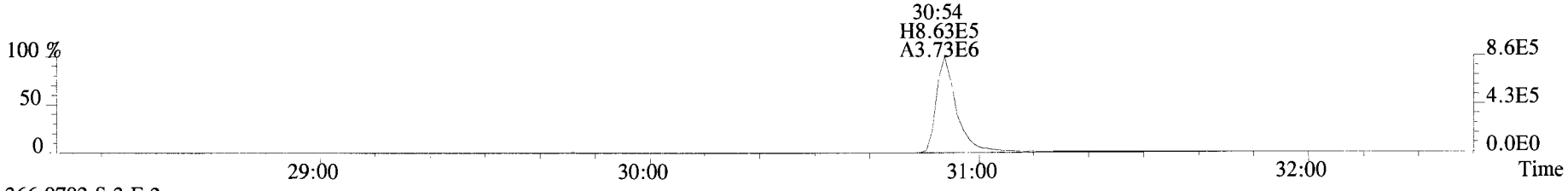
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



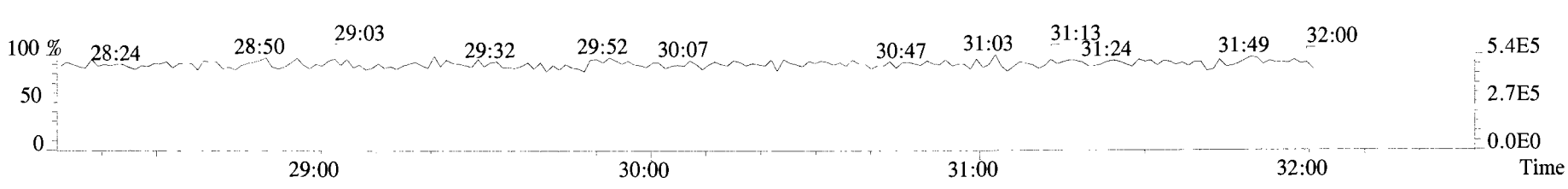
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

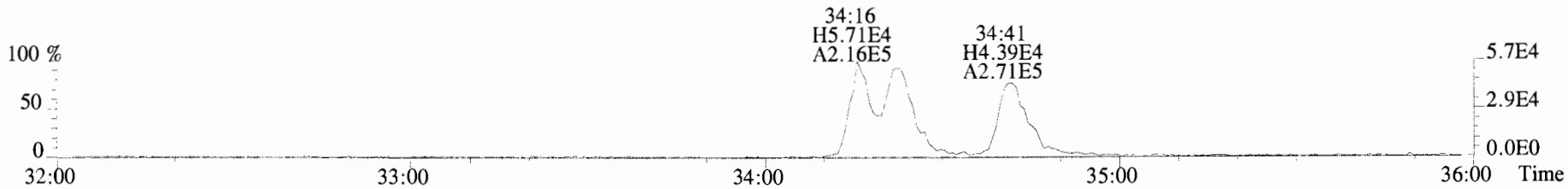


366.9792 S:3 F:2

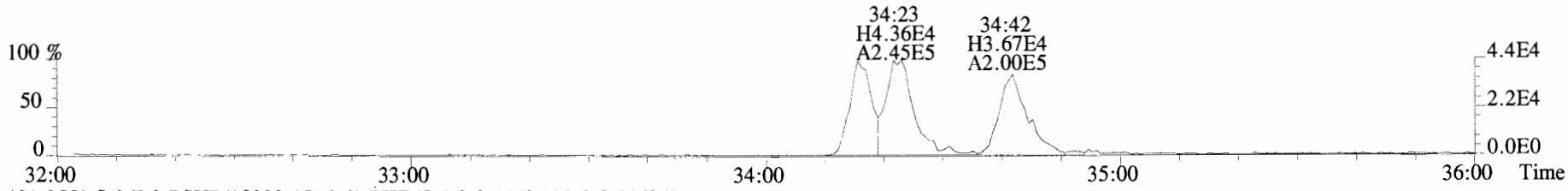


File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5

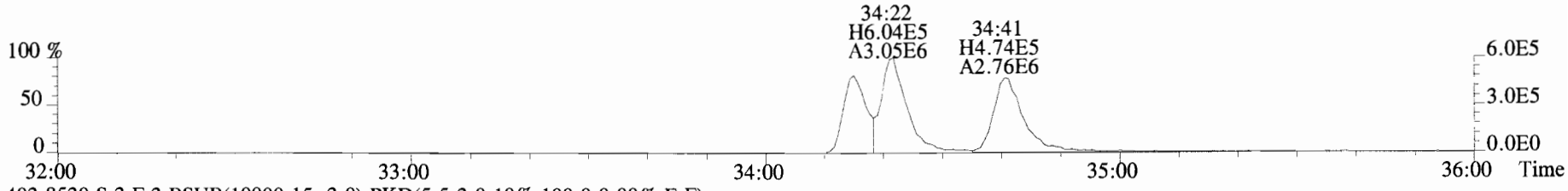
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



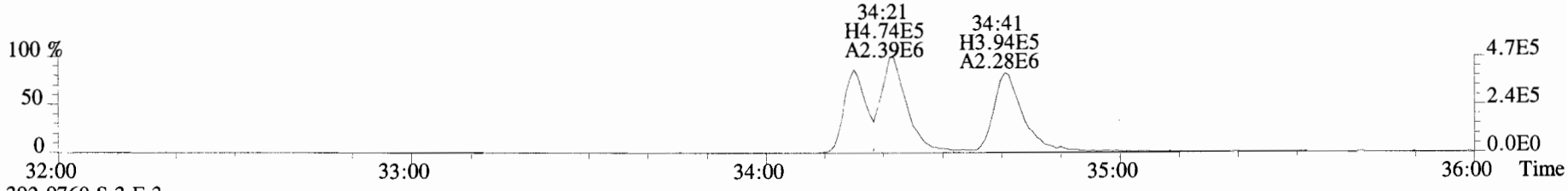
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



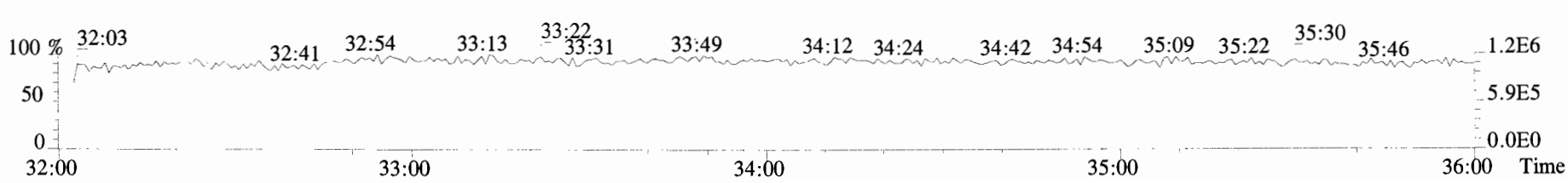
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



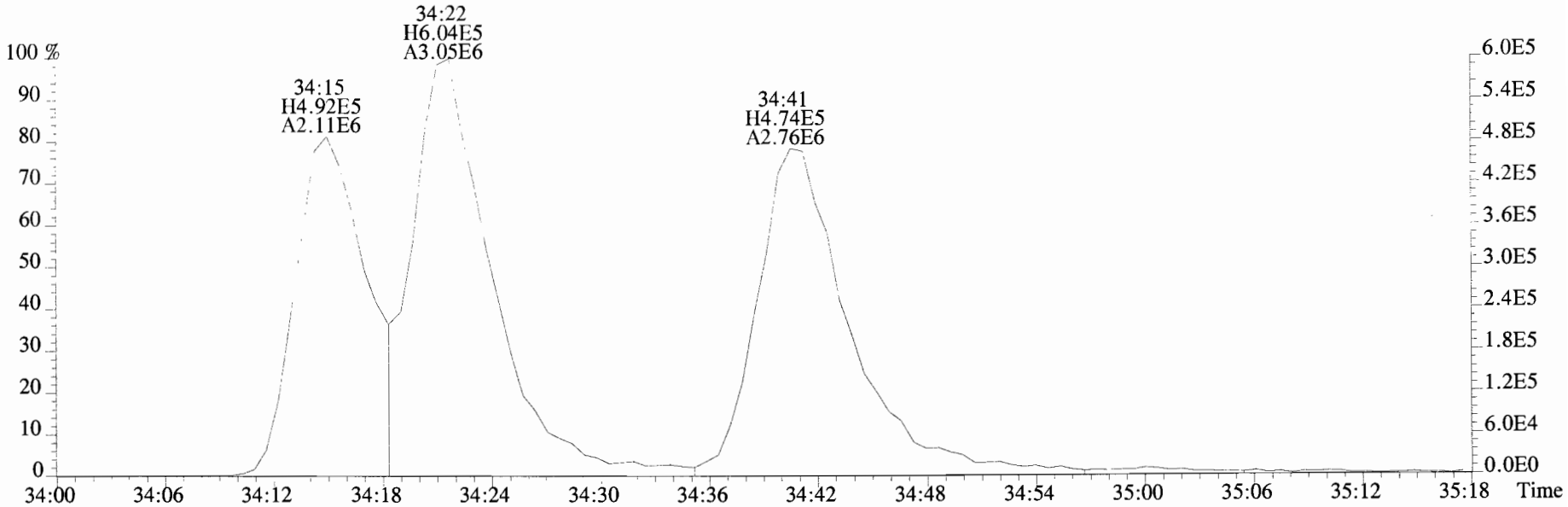
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



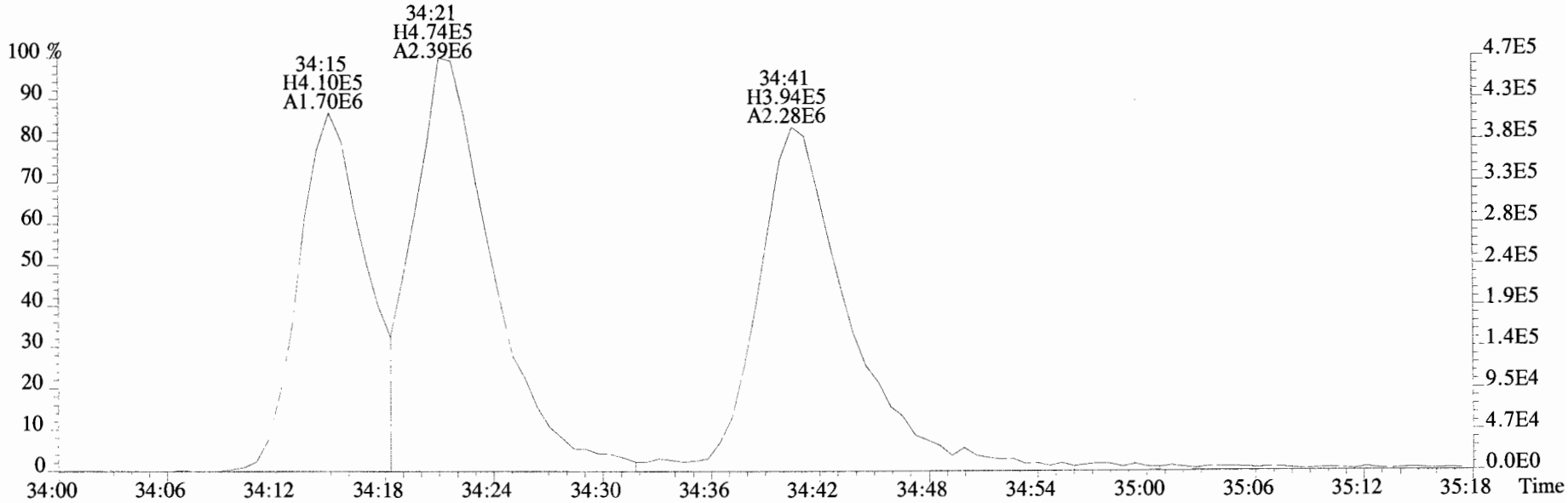
392.9760 S:3 F:3



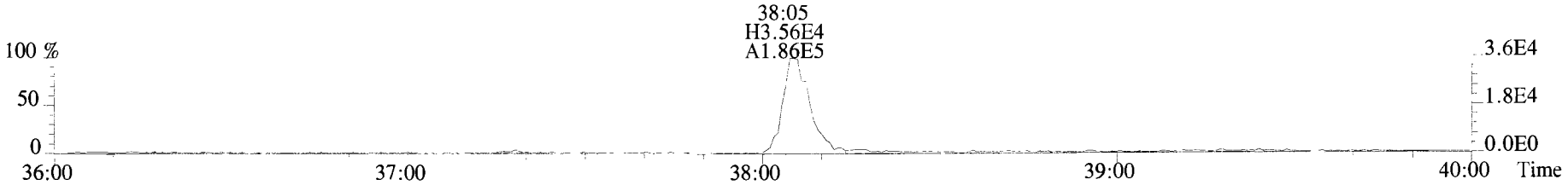
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



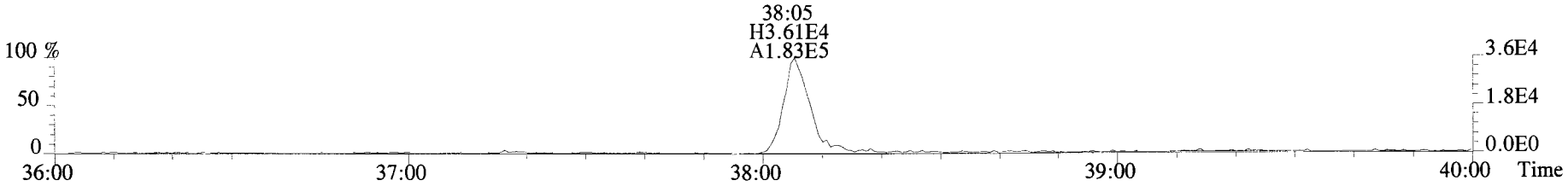
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



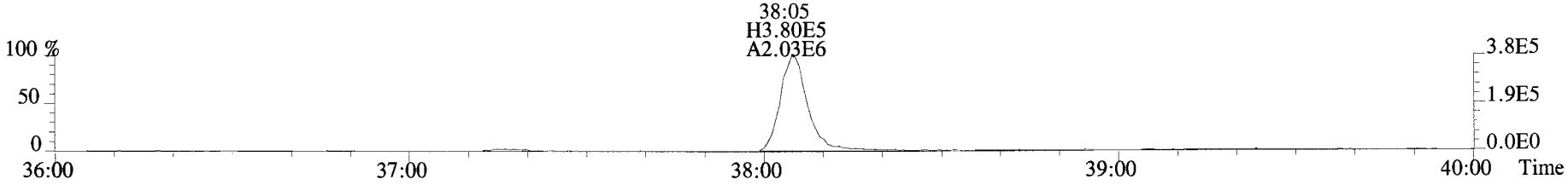
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



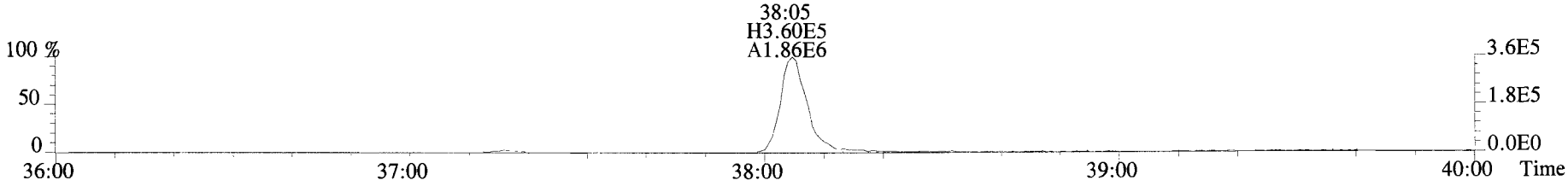
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



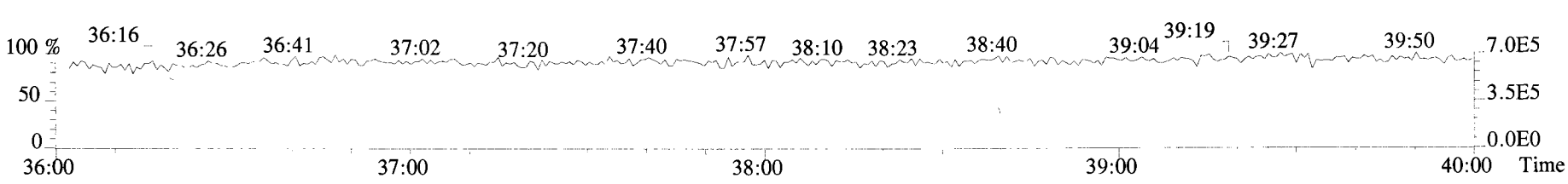
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



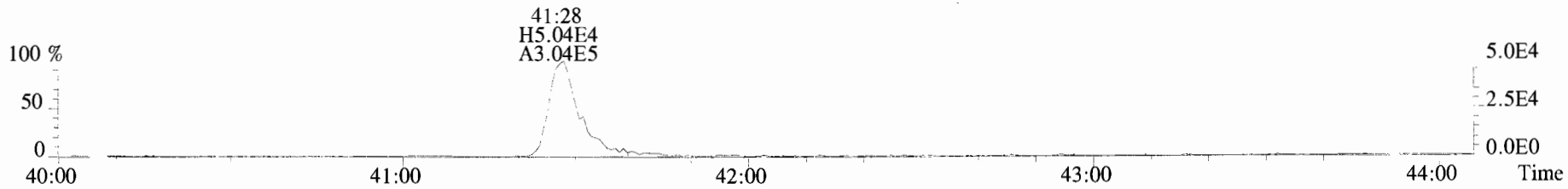
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



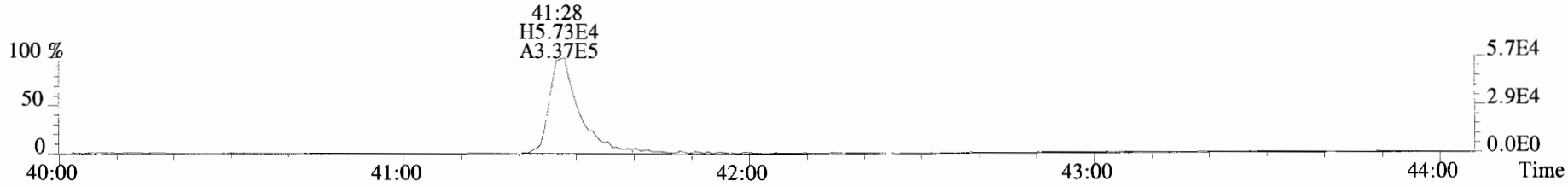
454.9728 S:3 F:4



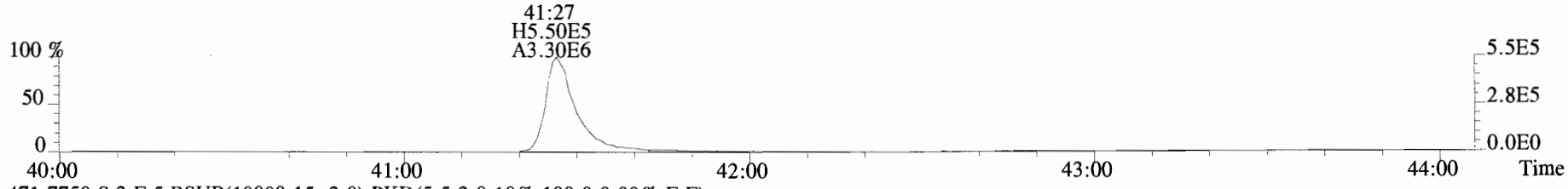
File:191009D1 #1-432 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



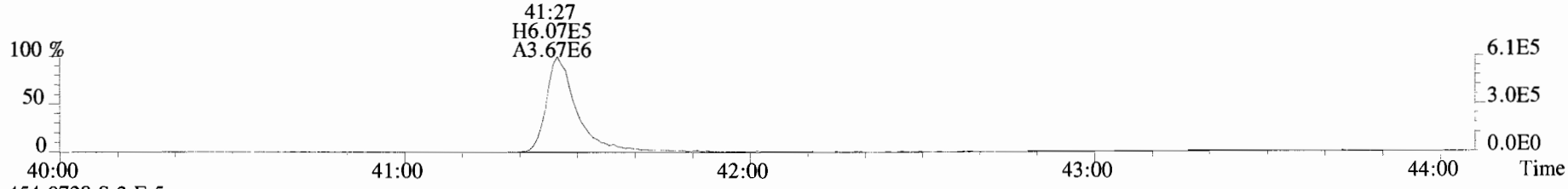
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



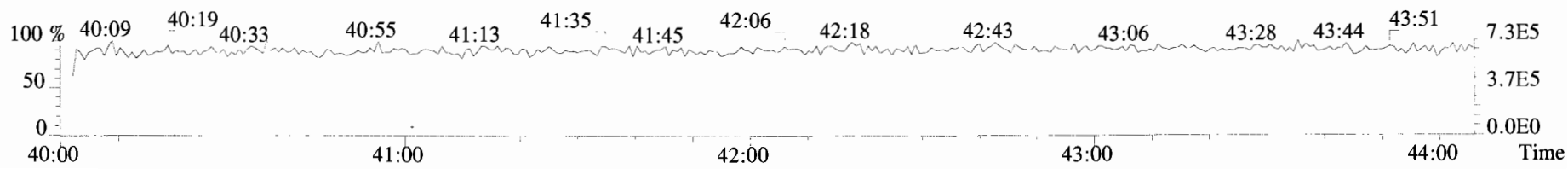
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



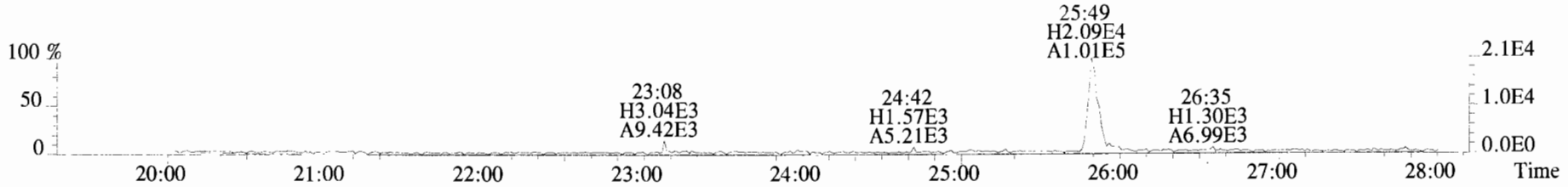
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



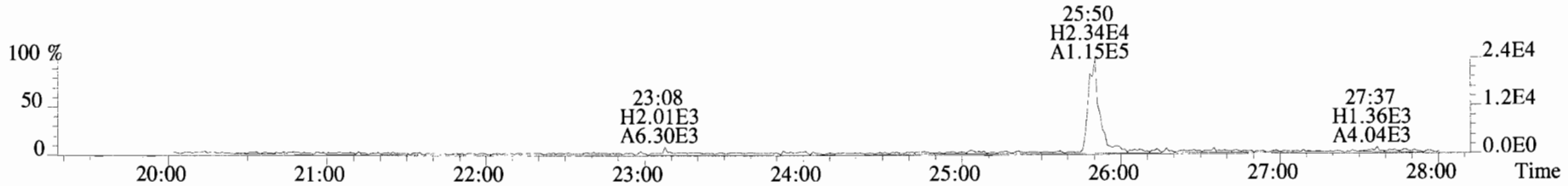
454.9728 S:3 F:5



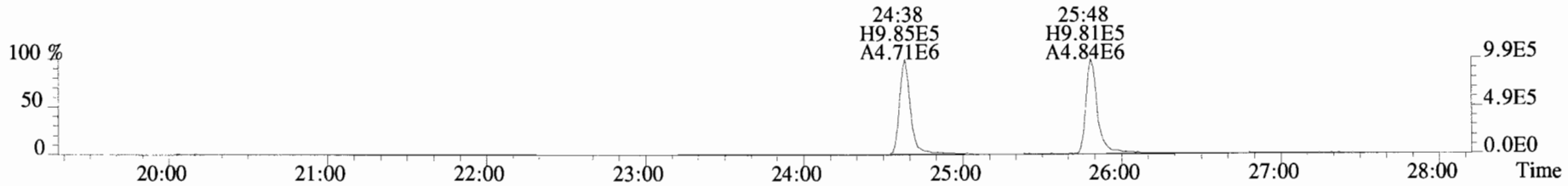
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



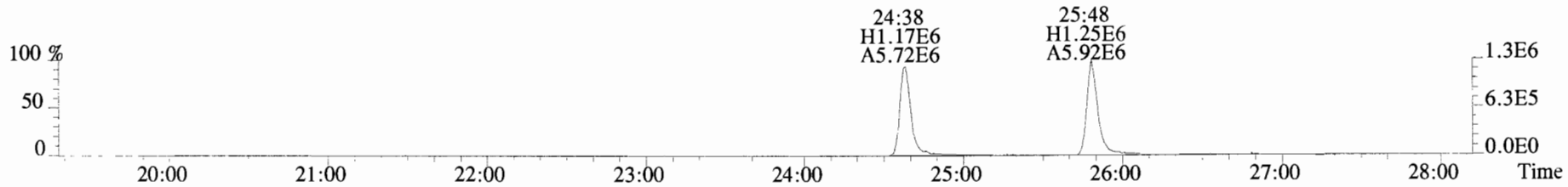
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



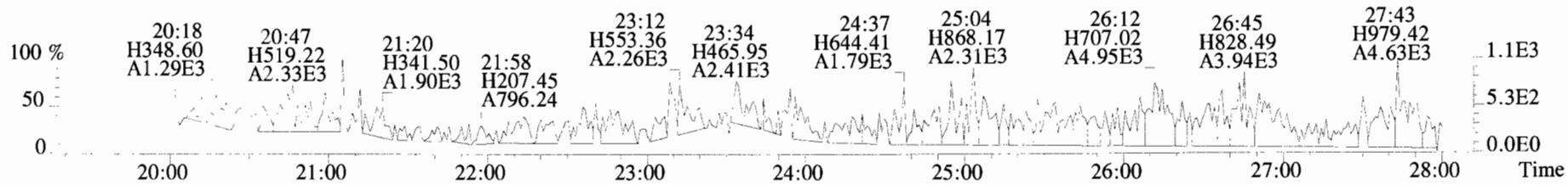
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



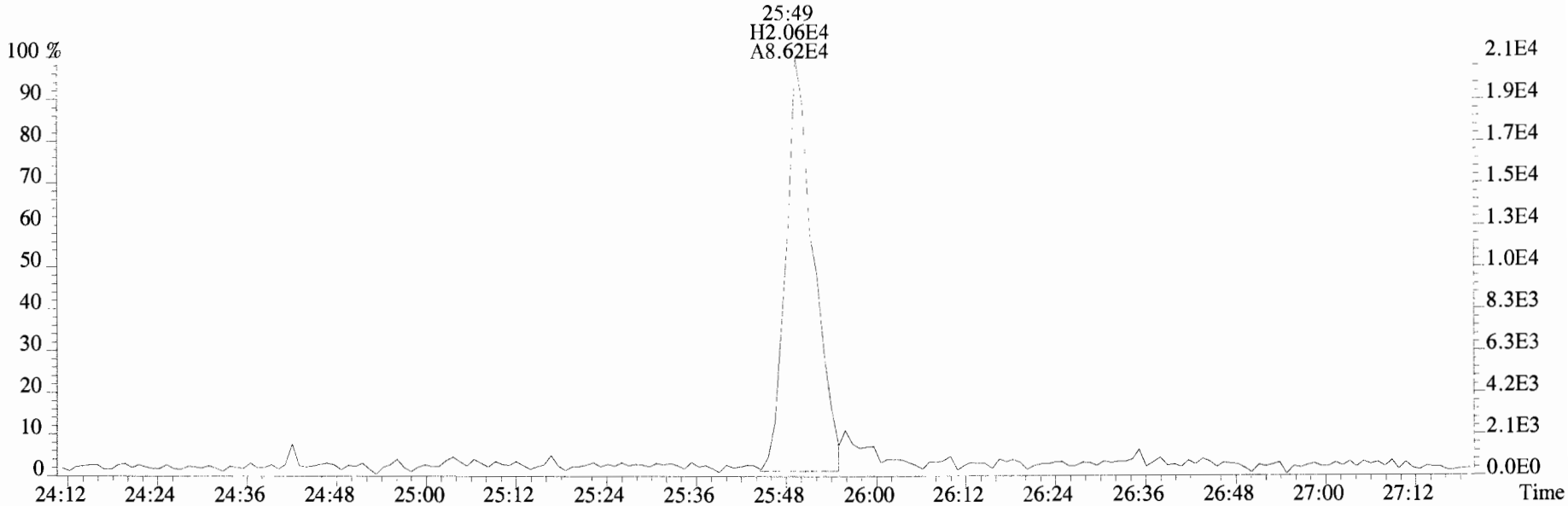
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



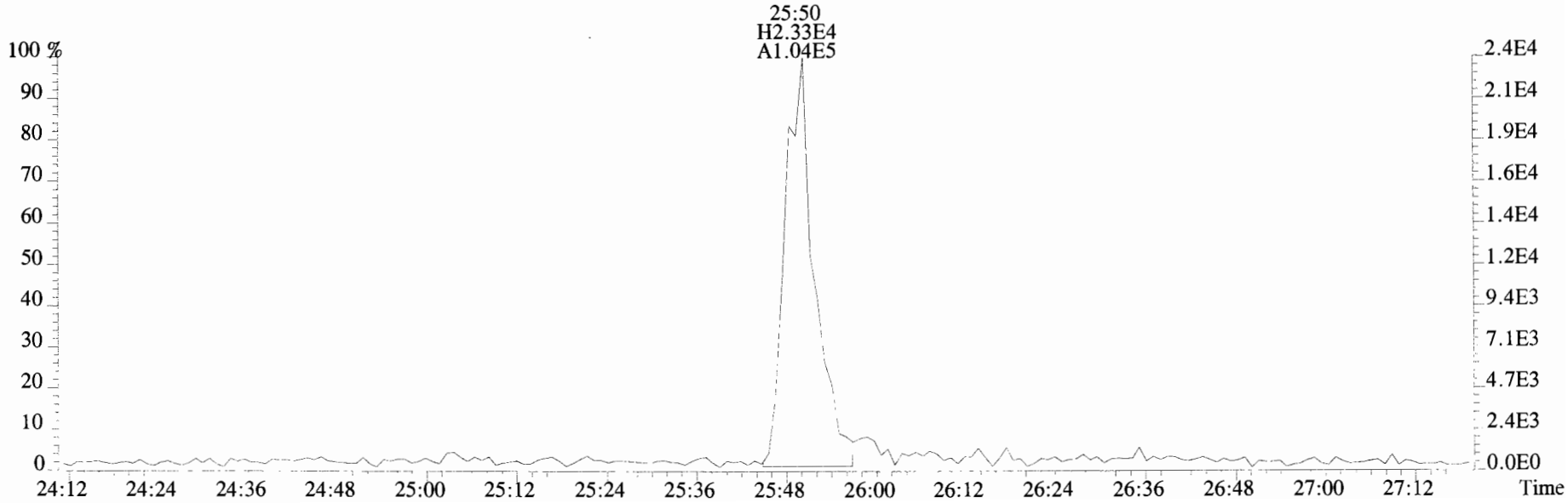
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



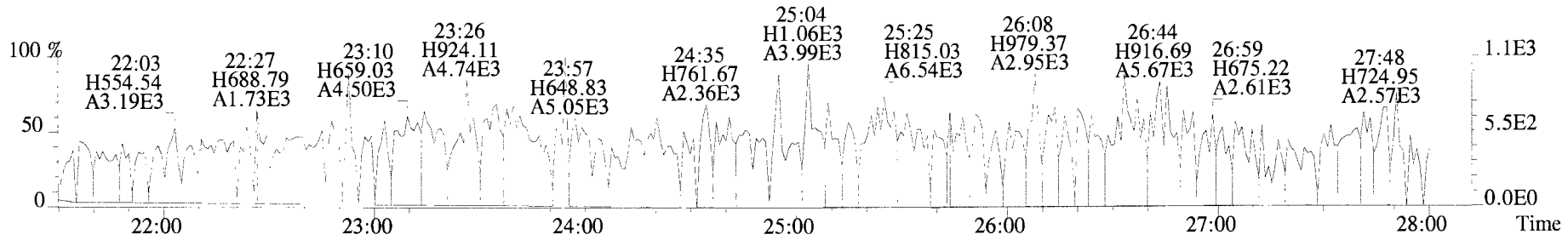
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



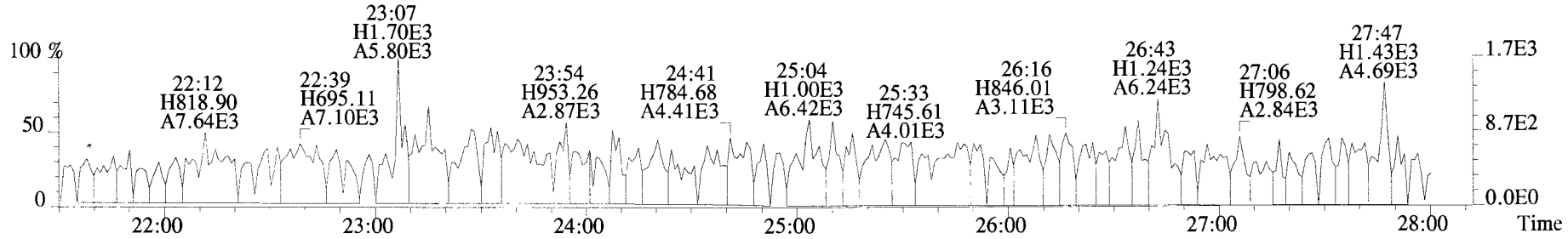
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



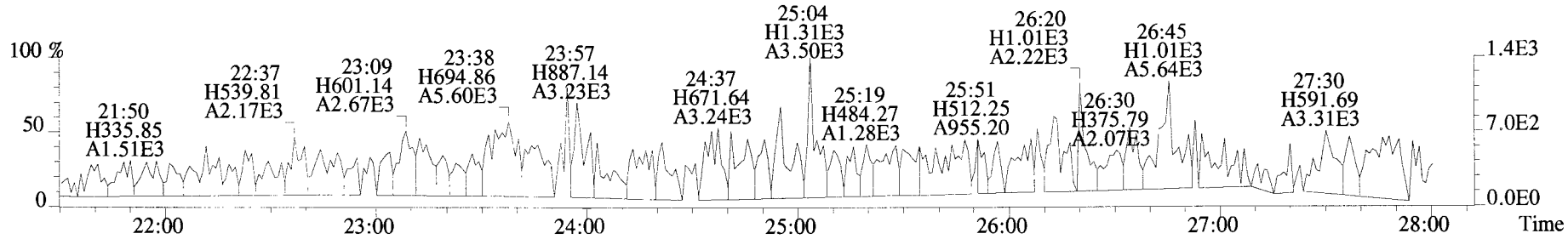
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



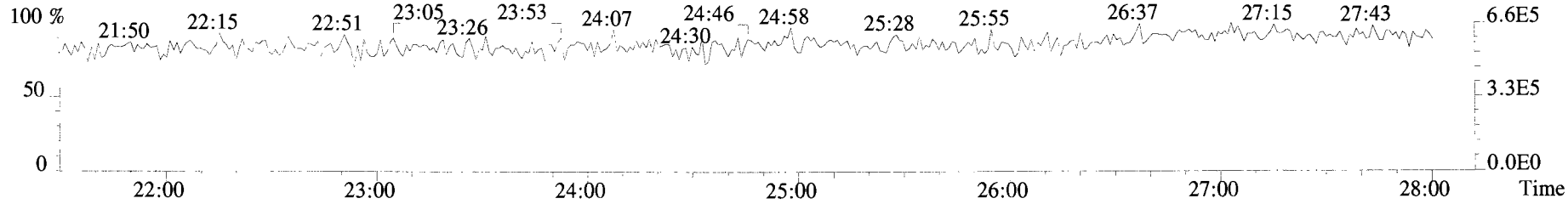
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



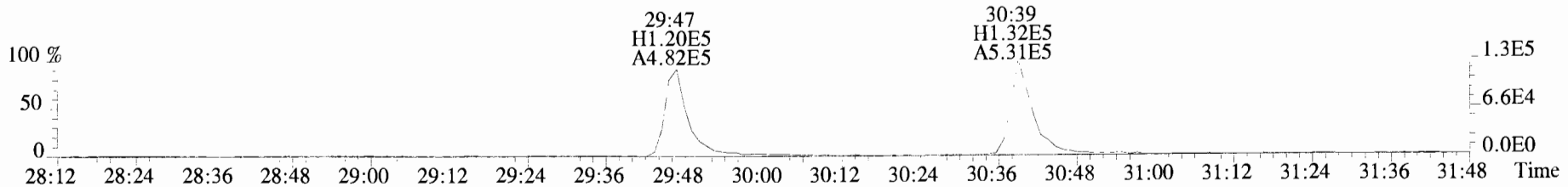
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



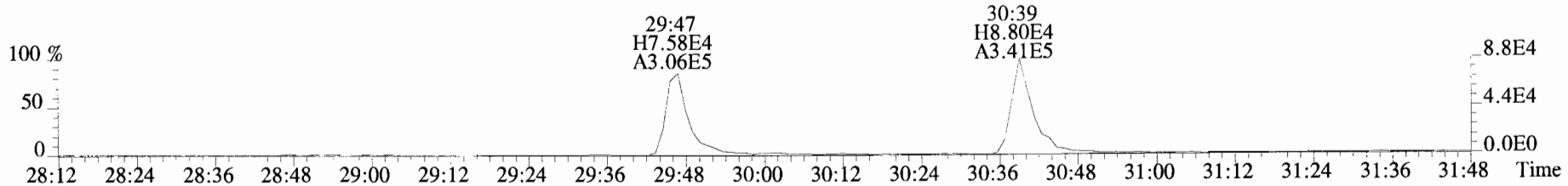
316.9824 S:3



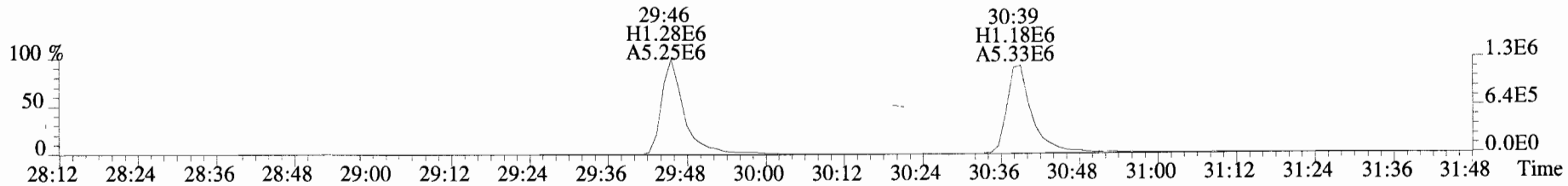
File:191009D1 #1-211 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



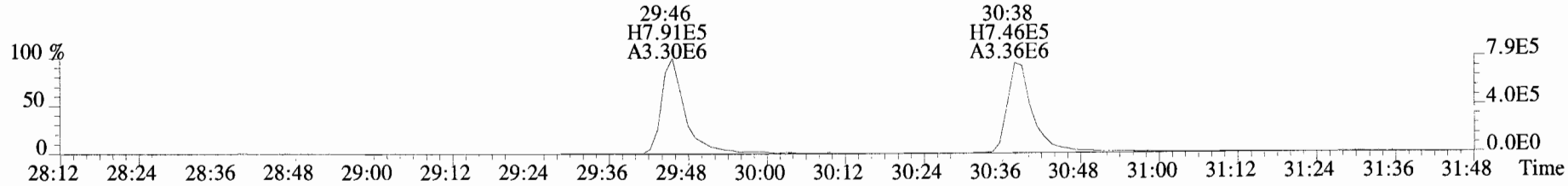
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



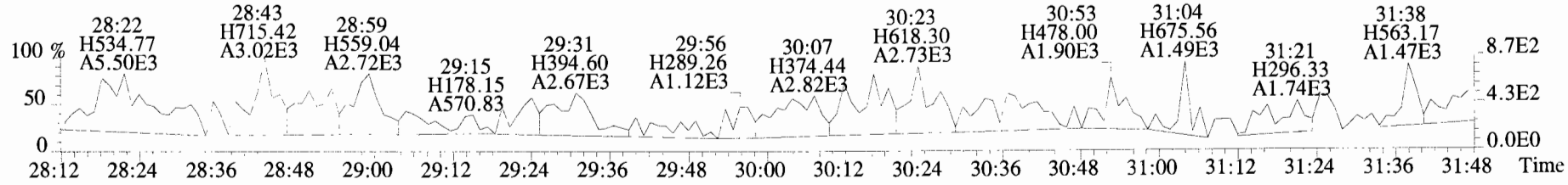
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

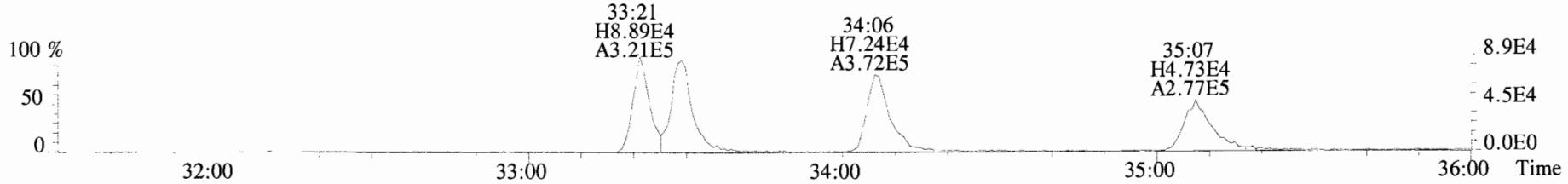


409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

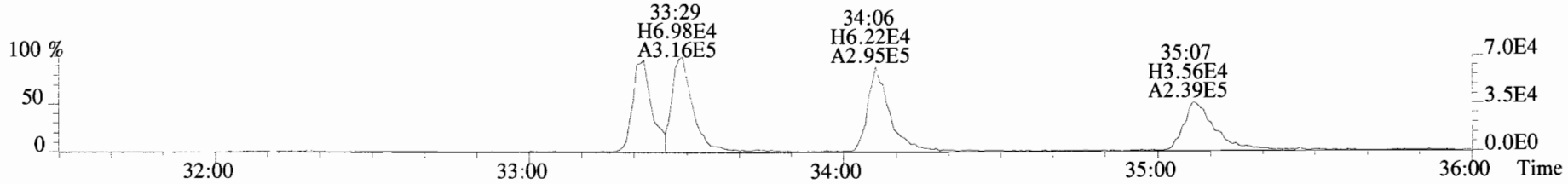


File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5

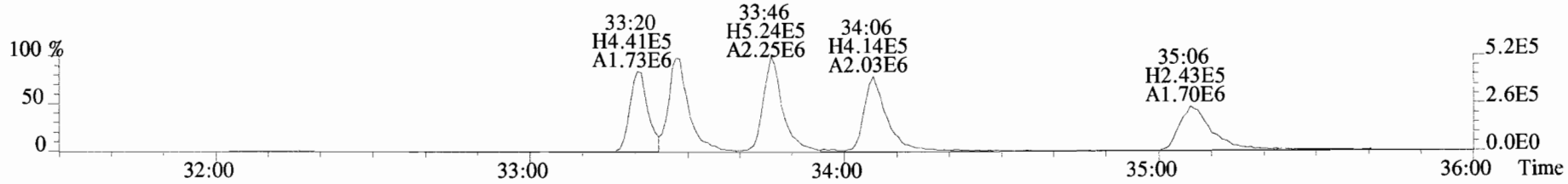
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



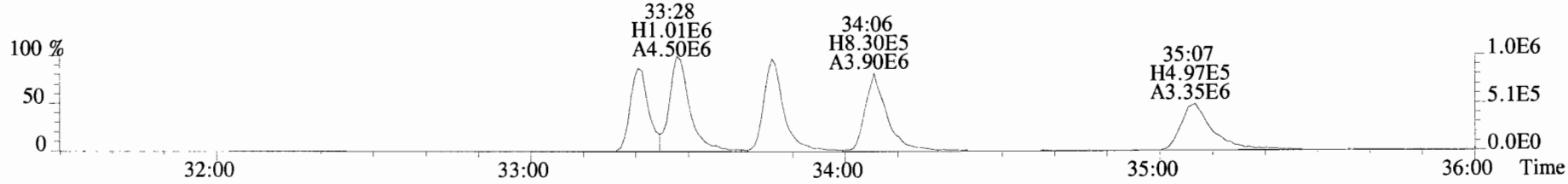
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



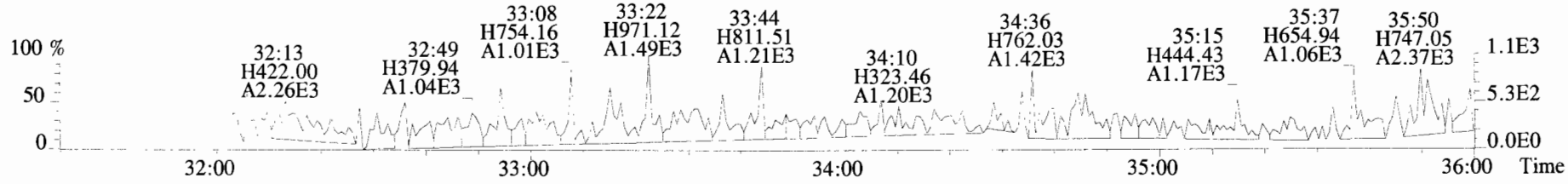
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



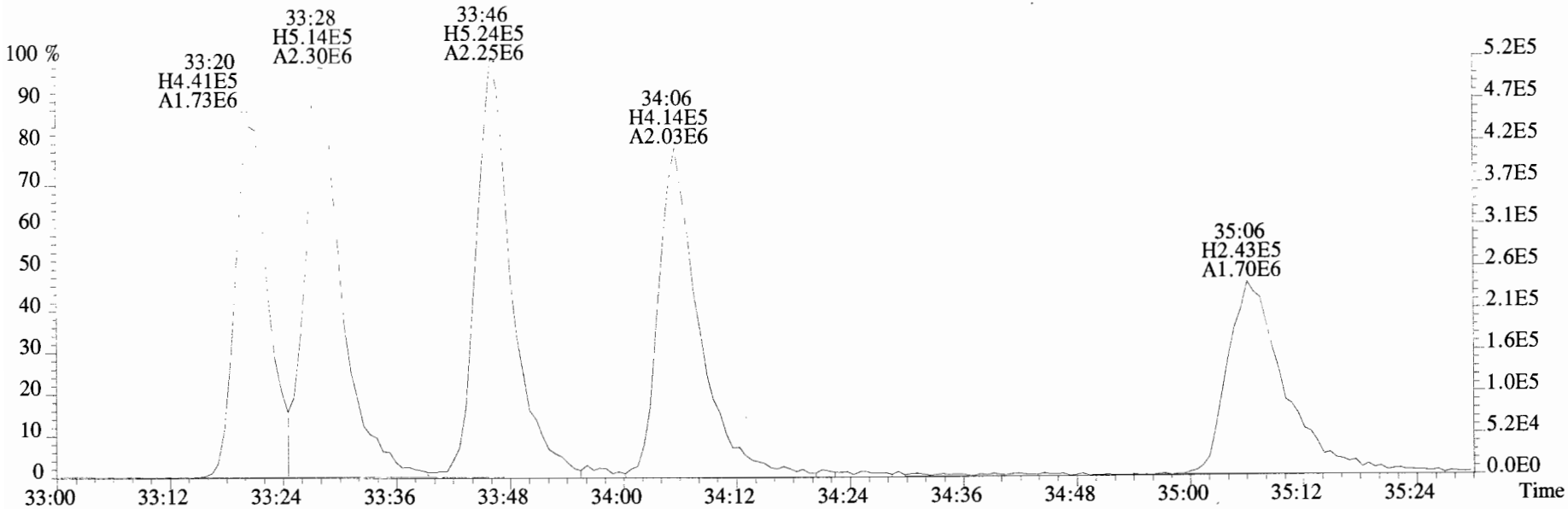
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



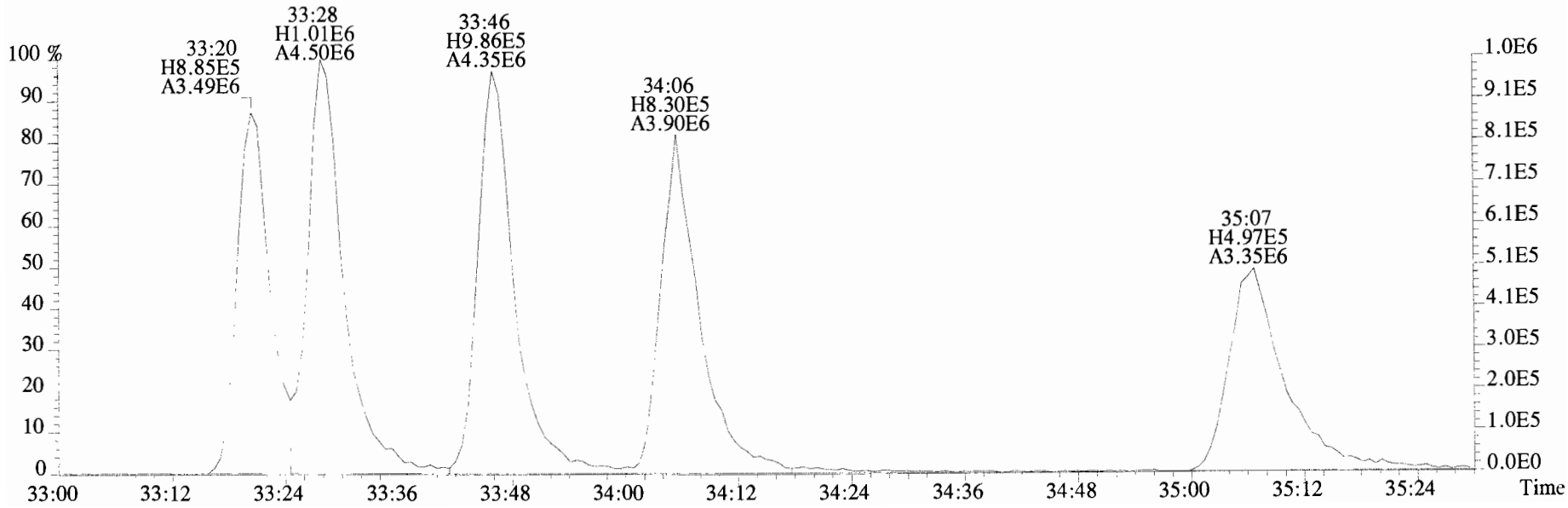
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



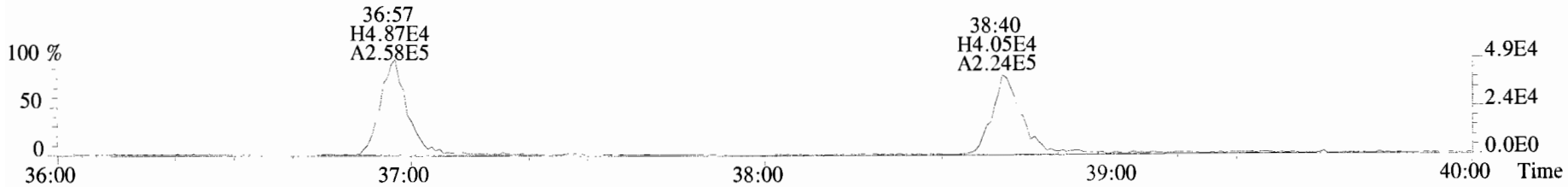
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



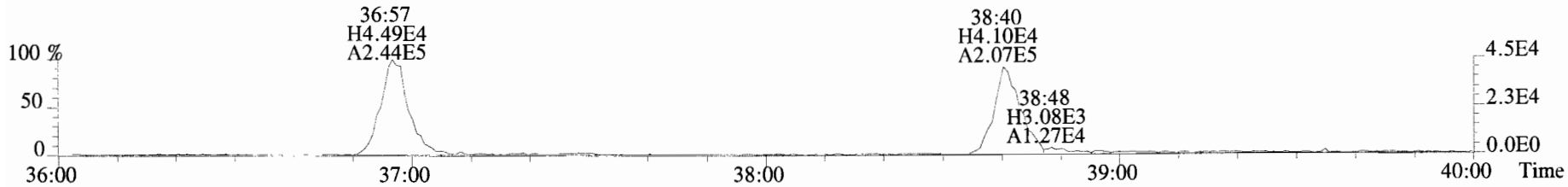
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



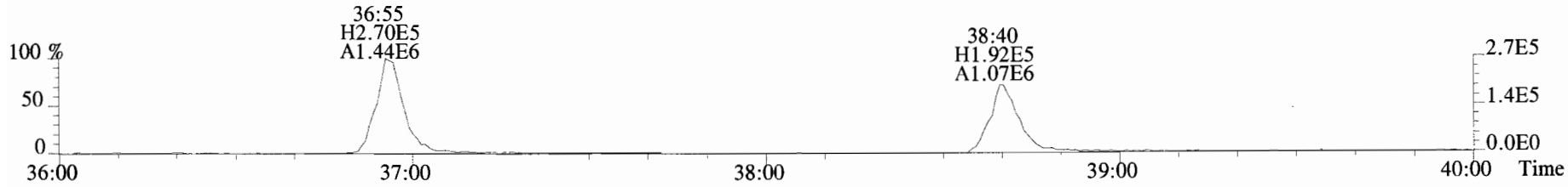
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



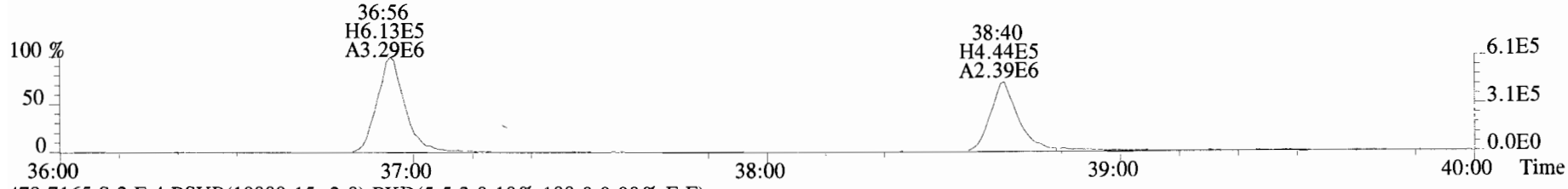
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



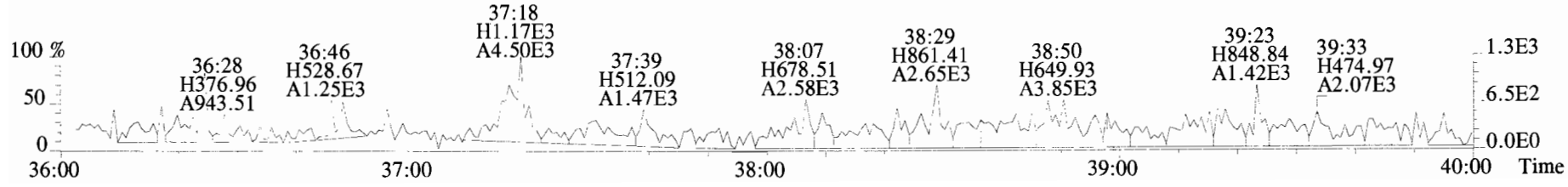
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

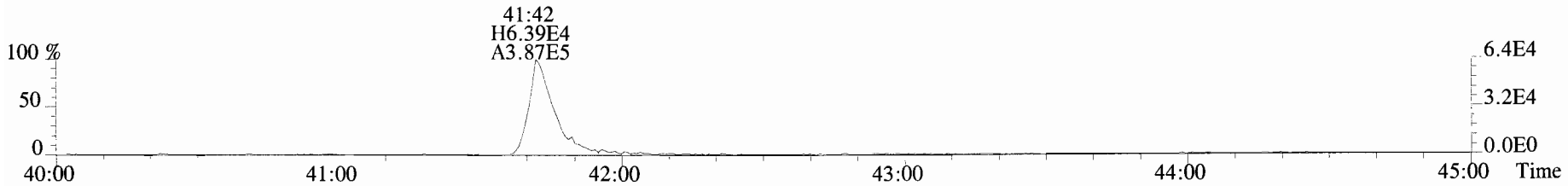


479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

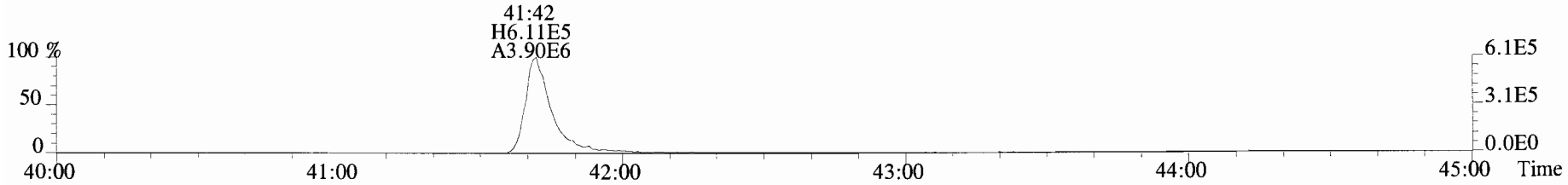


File:191009D1 #1-432 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

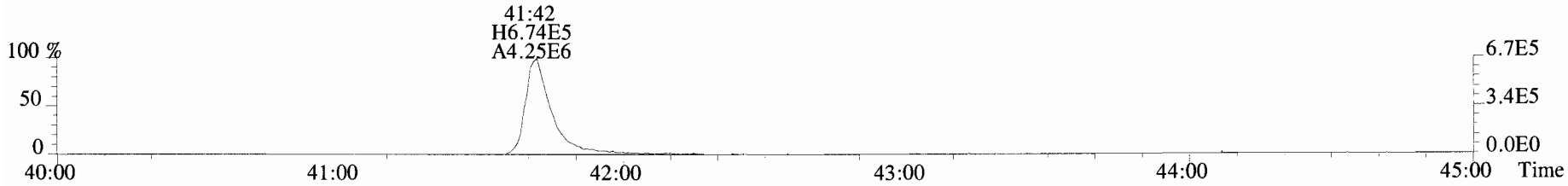
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



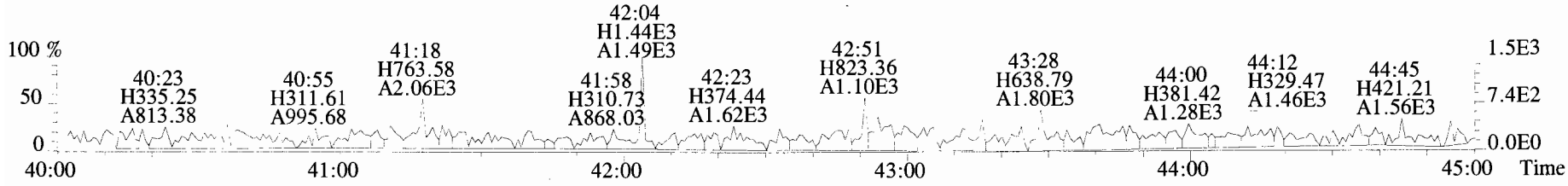
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



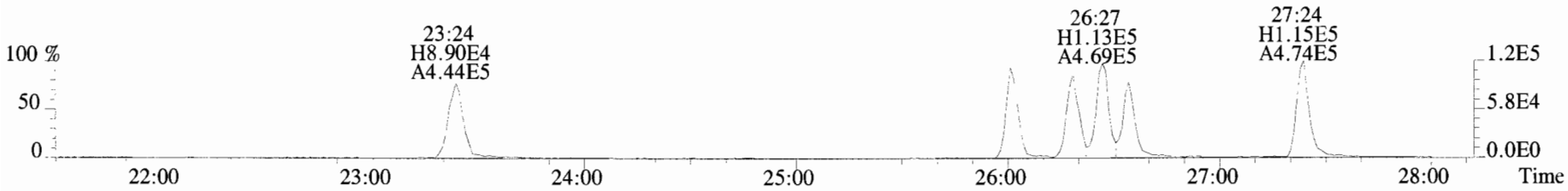
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



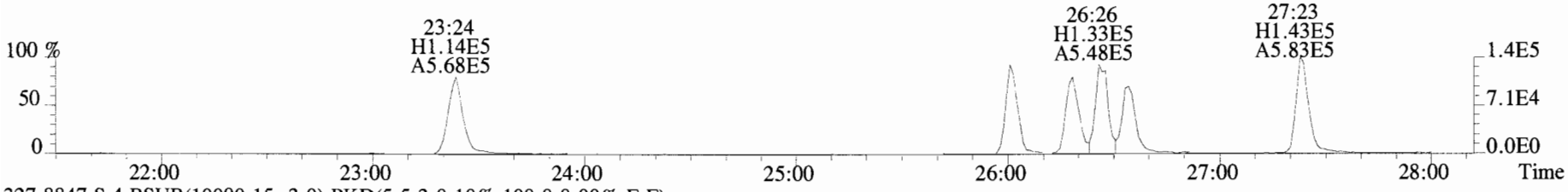
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



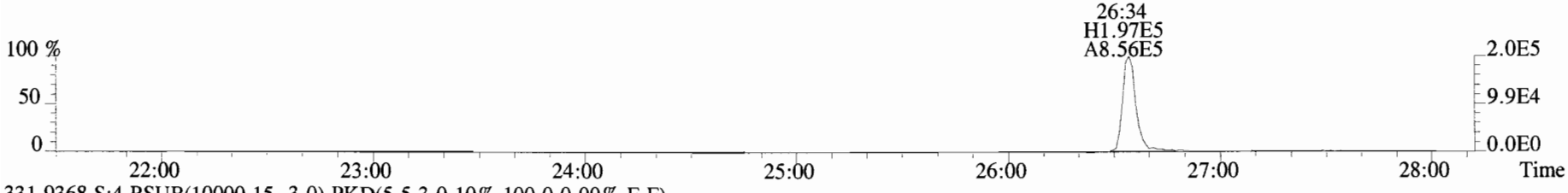
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



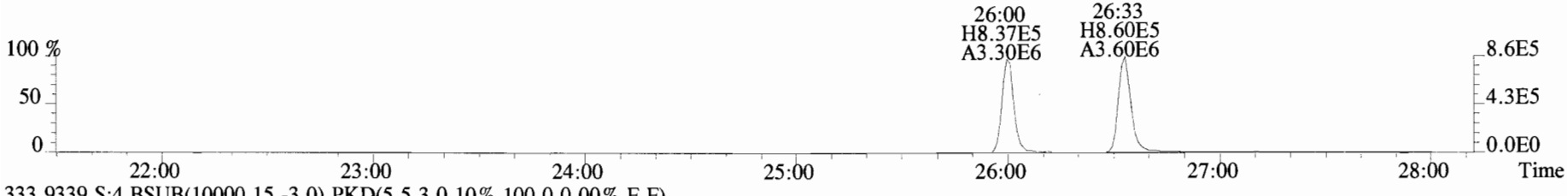
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



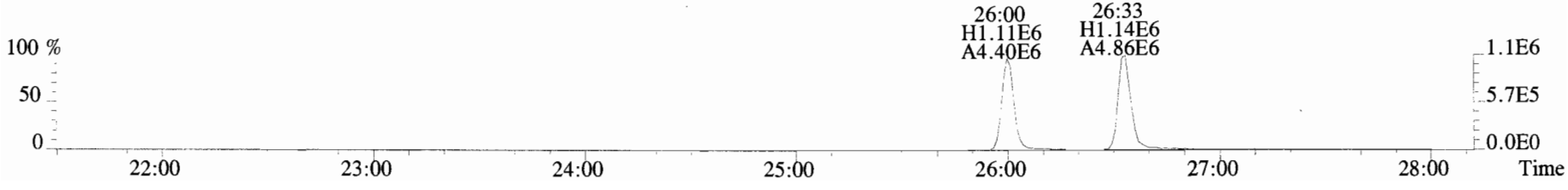
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

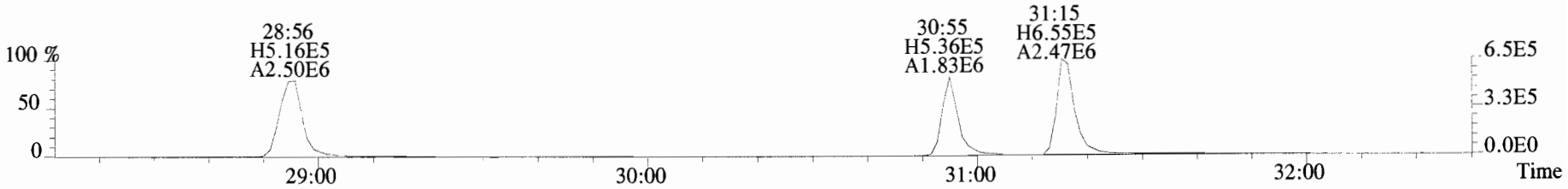


333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

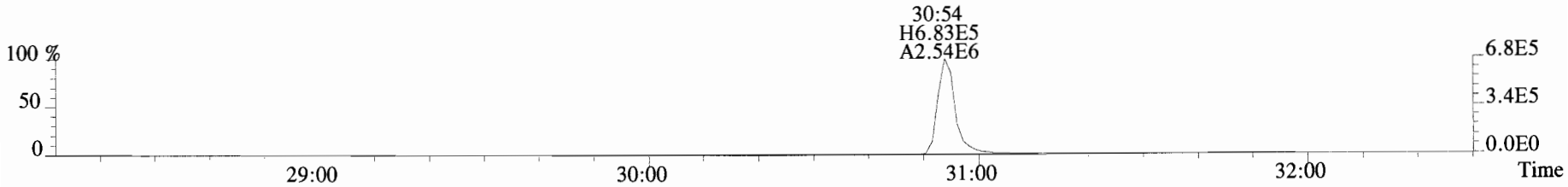


File:191009D1 #1-211 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

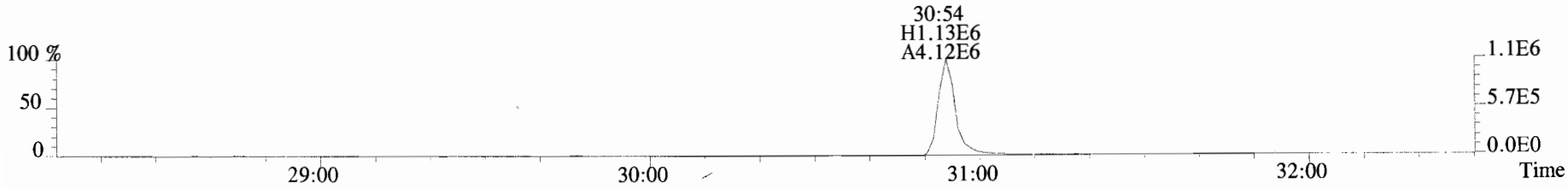
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



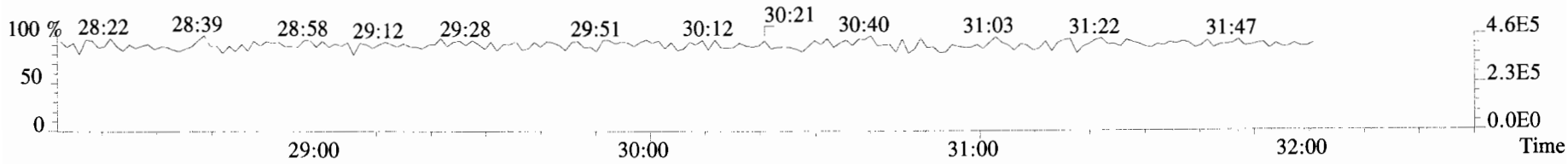
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



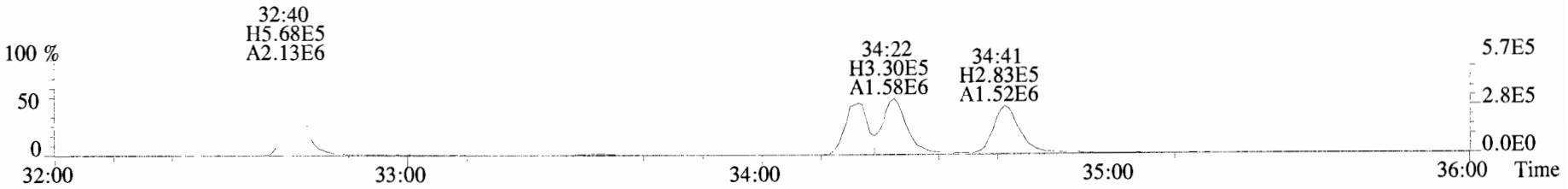
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



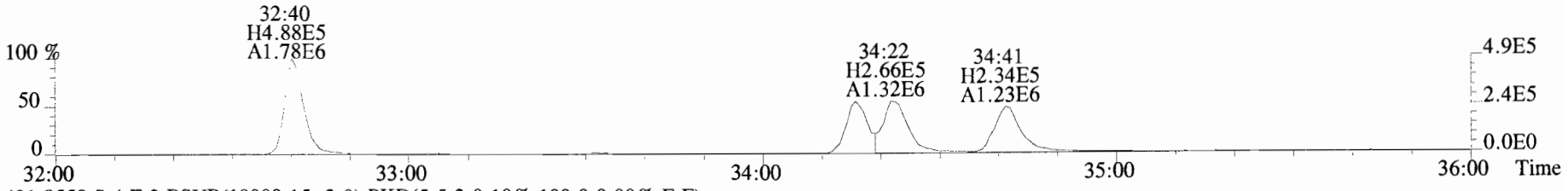
366.9792 S:4 F:2



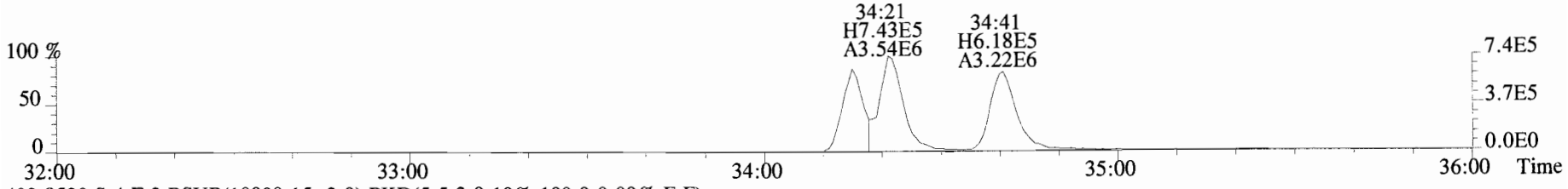
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



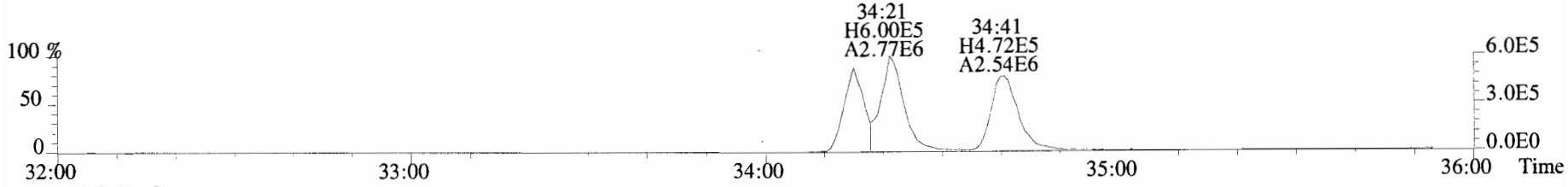
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



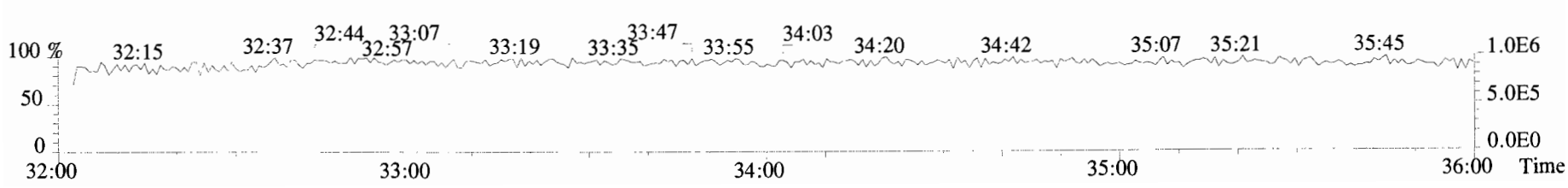
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



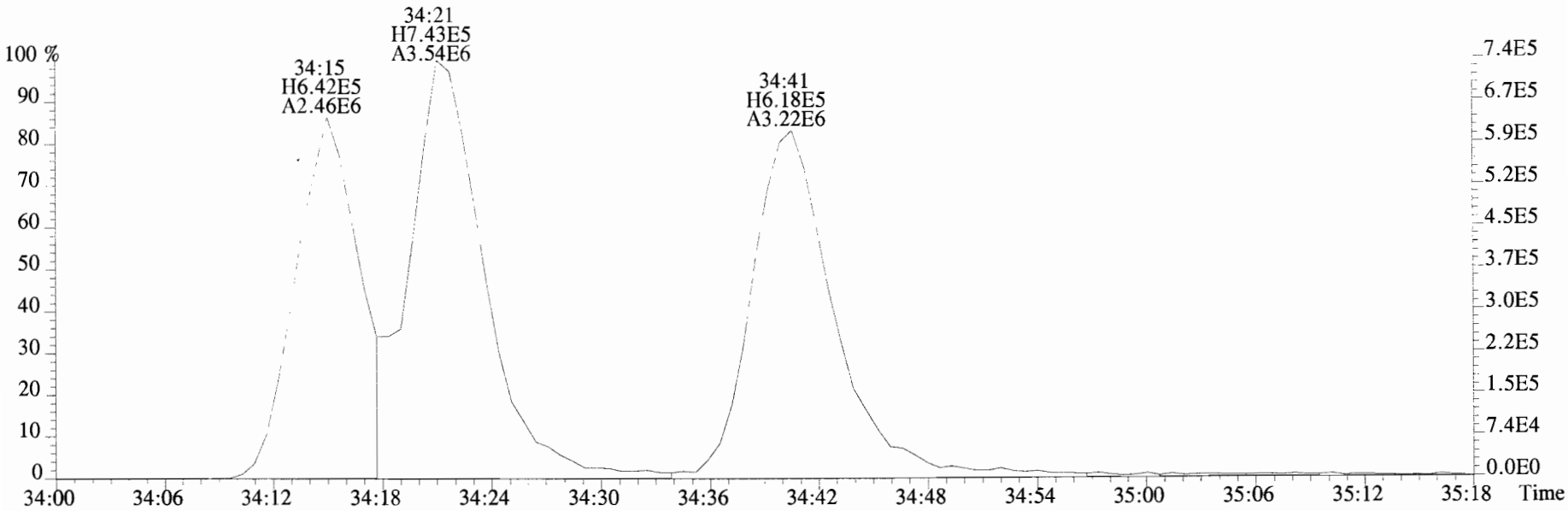
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



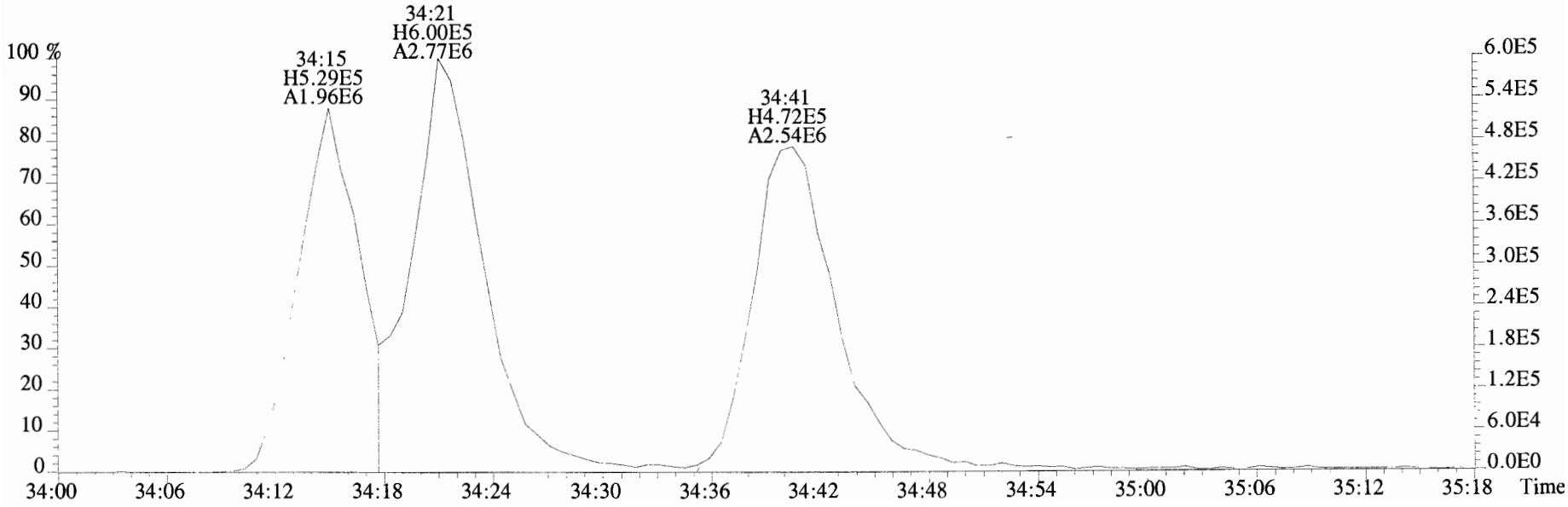
392.9760 S:4 F:3



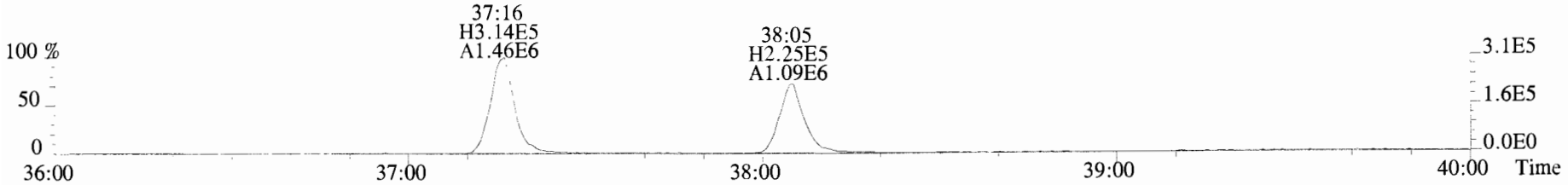
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



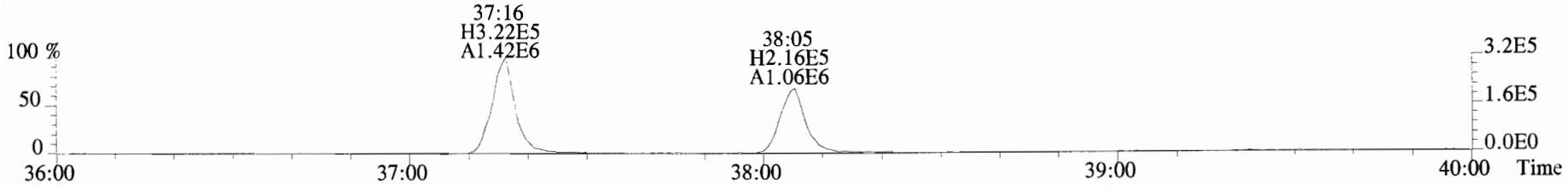
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



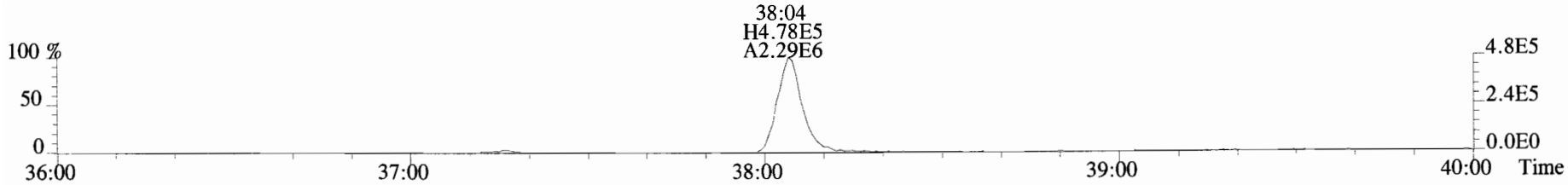
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



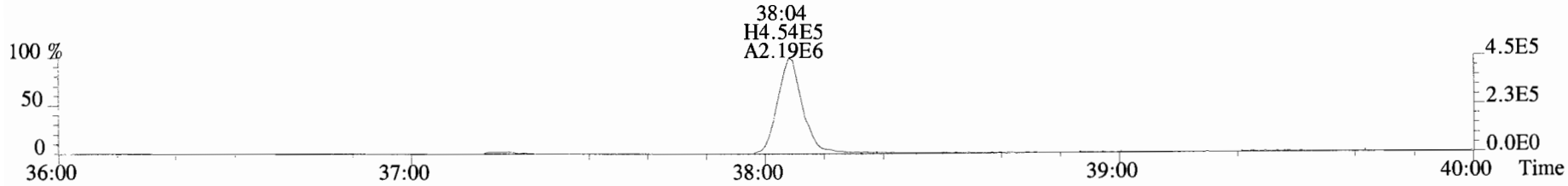
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



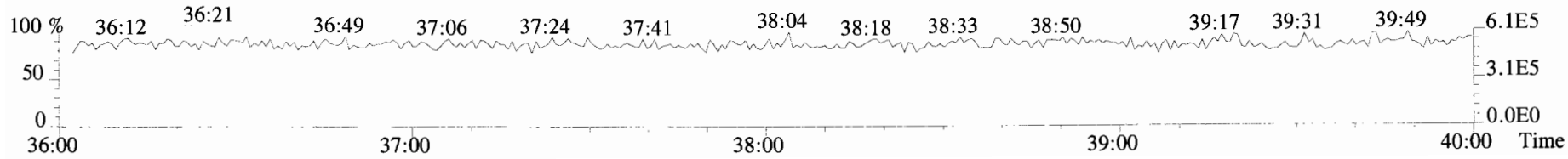
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



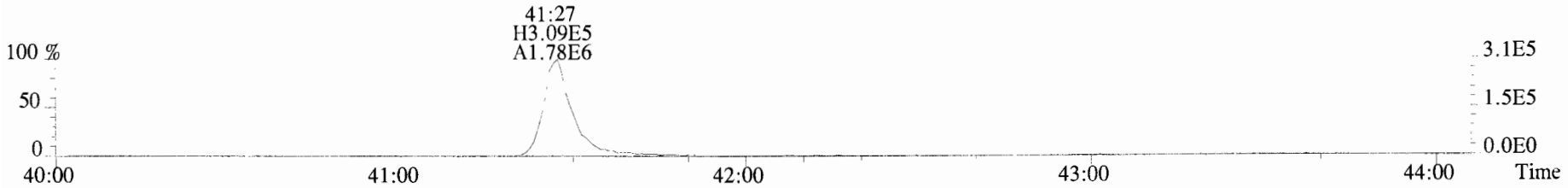
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



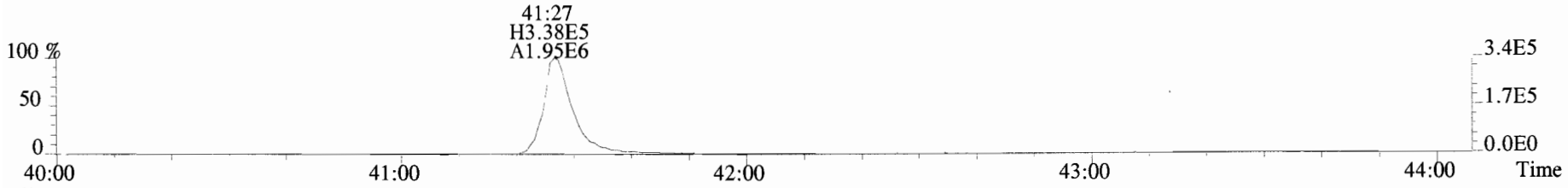
454.9728 S:4 F:4



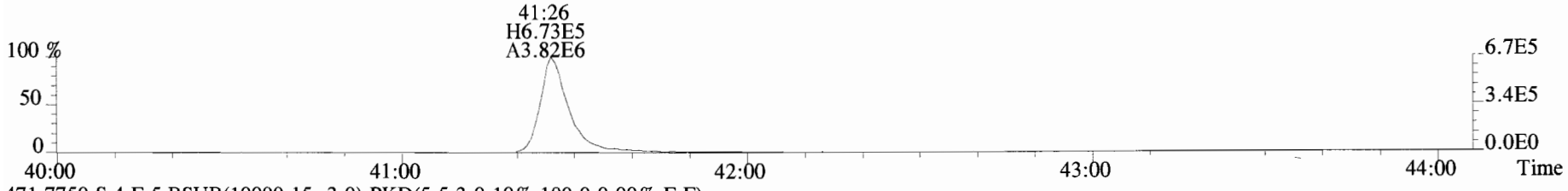
File:191009D1 #1-432 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



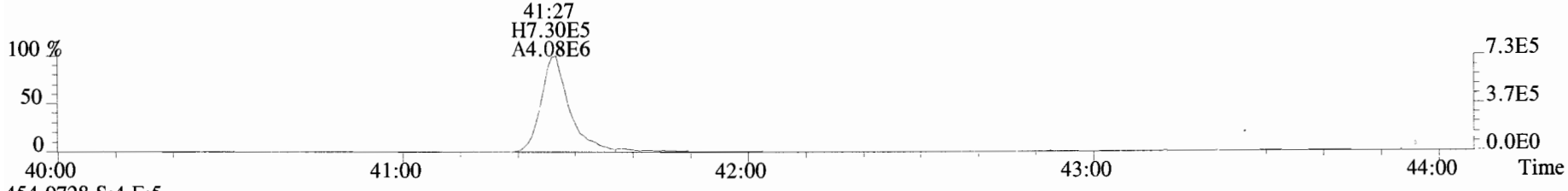
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



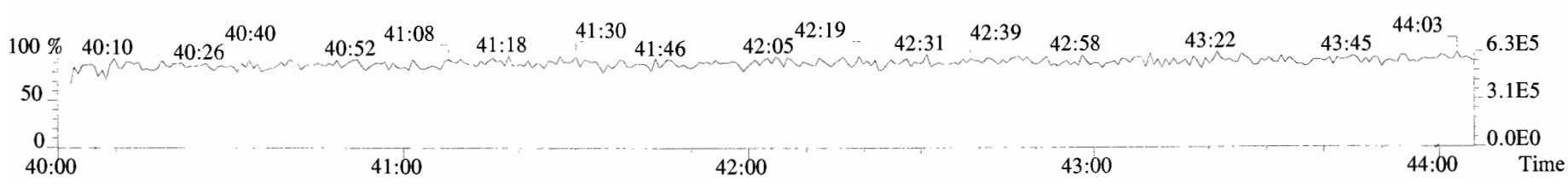
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



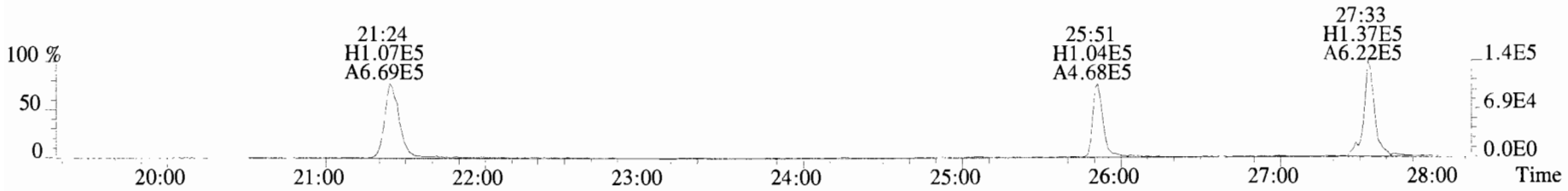
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



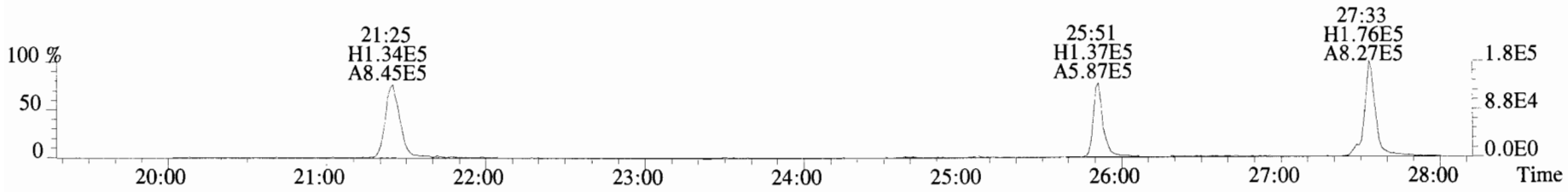
454.9728 S:4 F:5



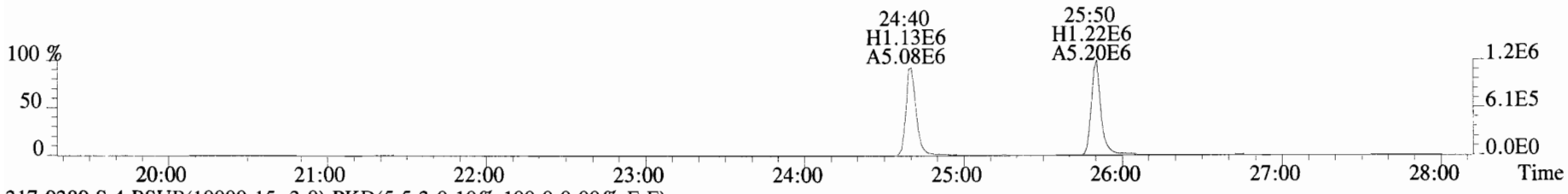
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



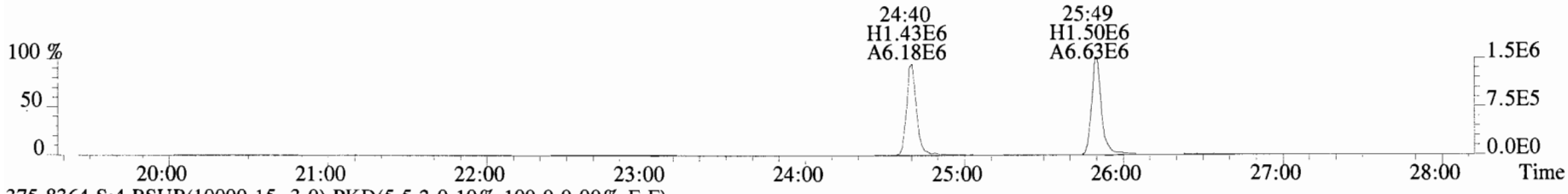
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



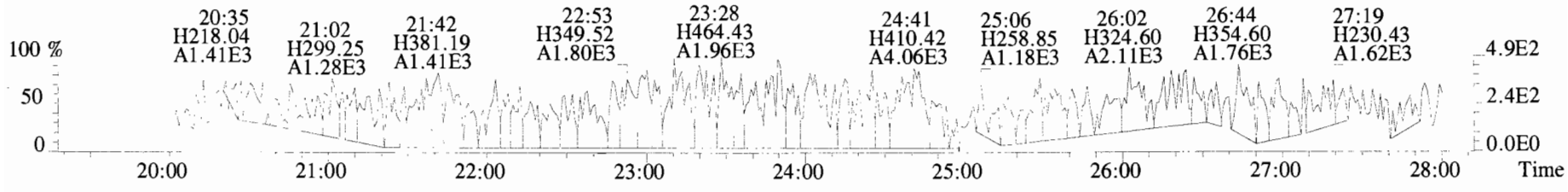
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



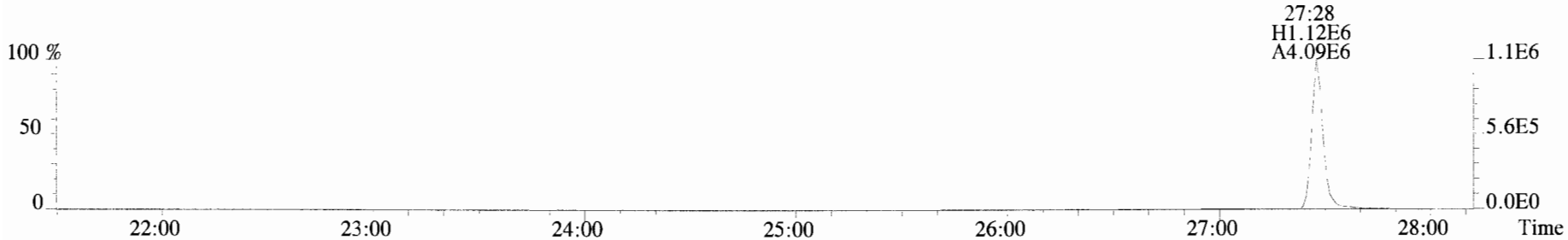
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



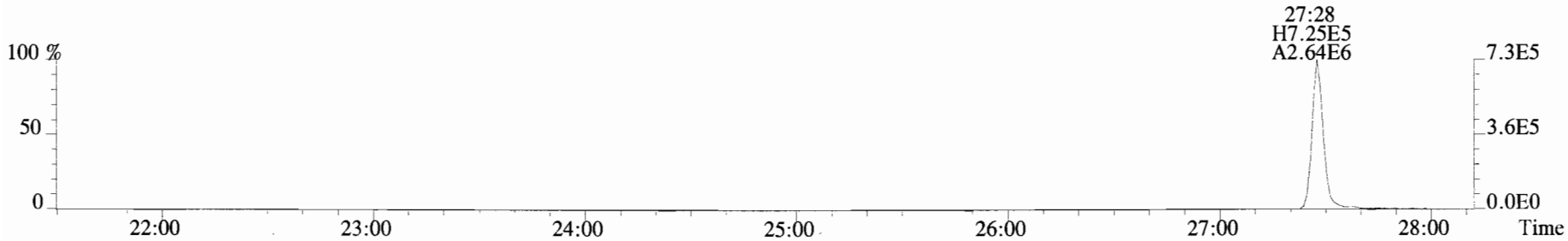
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



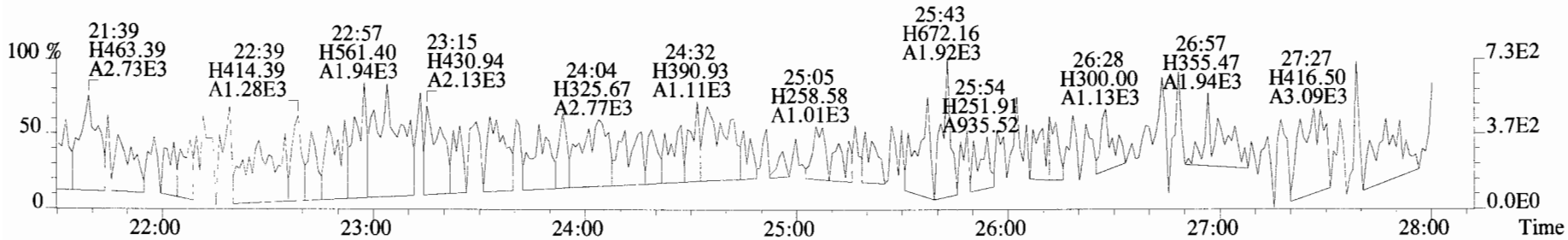
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



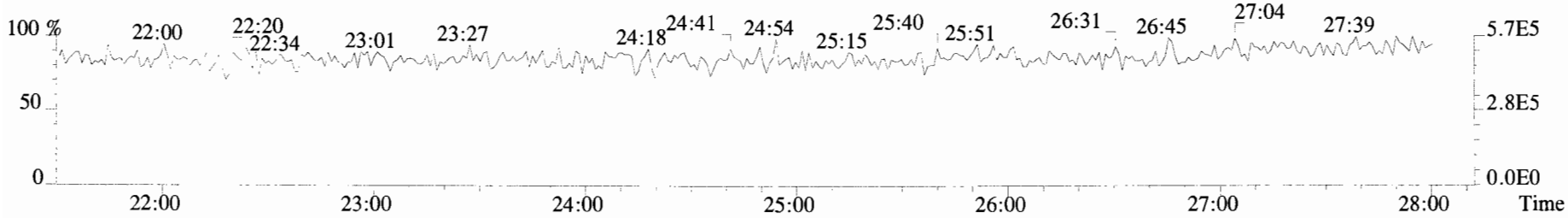
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



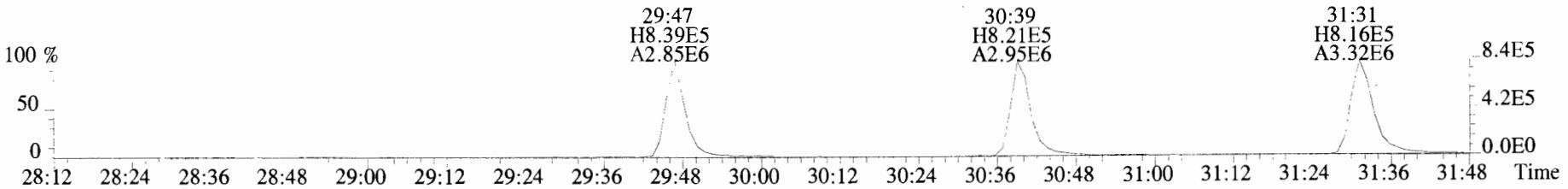
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



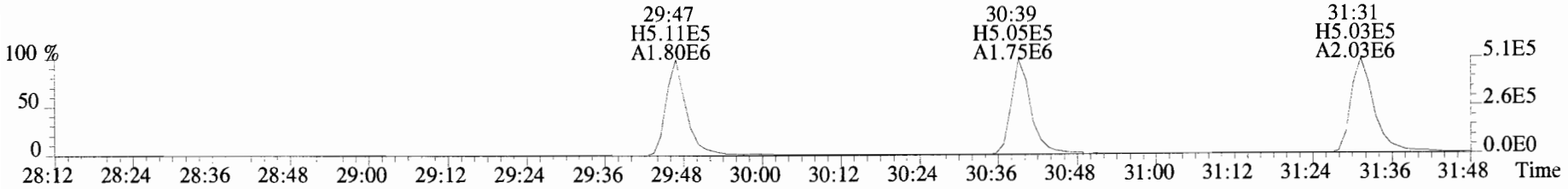
316.9824 S:4



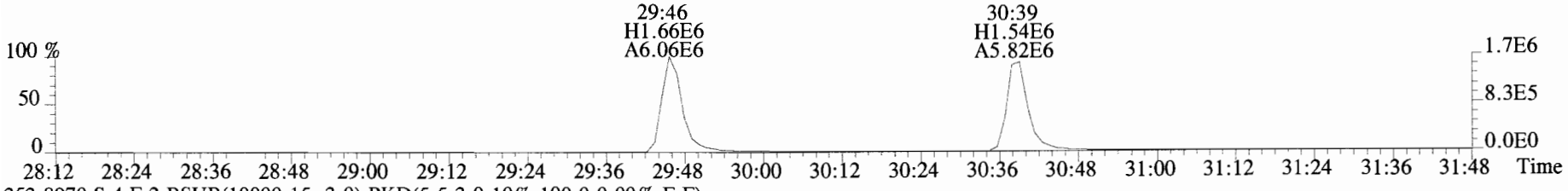
File:191009D1 #1-211 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



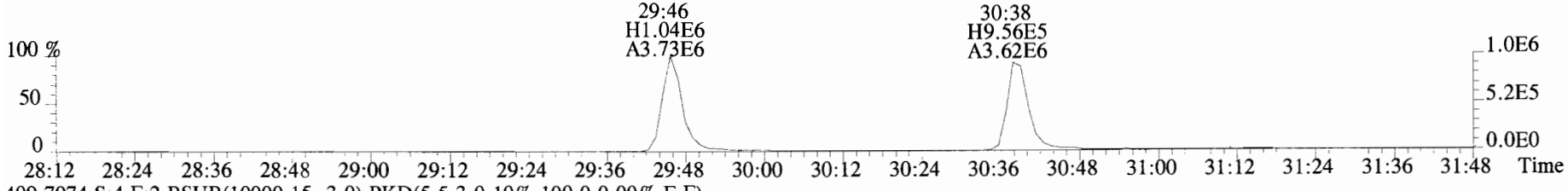
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



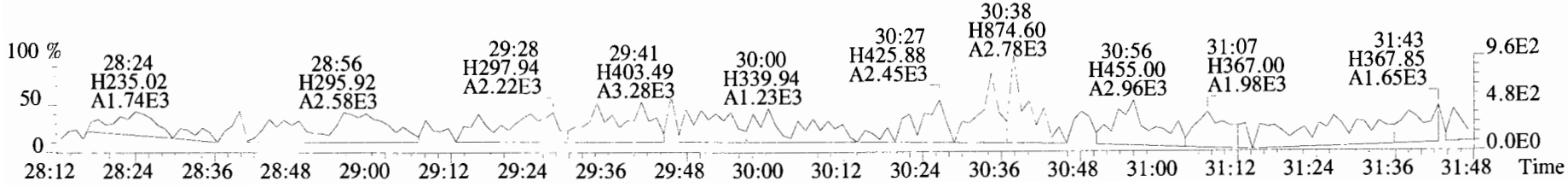
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



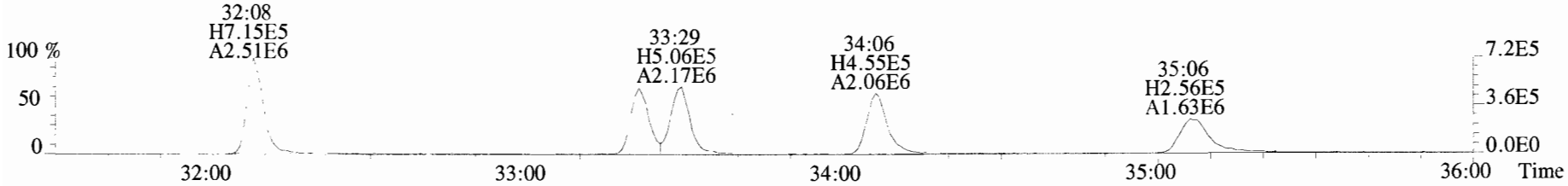
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



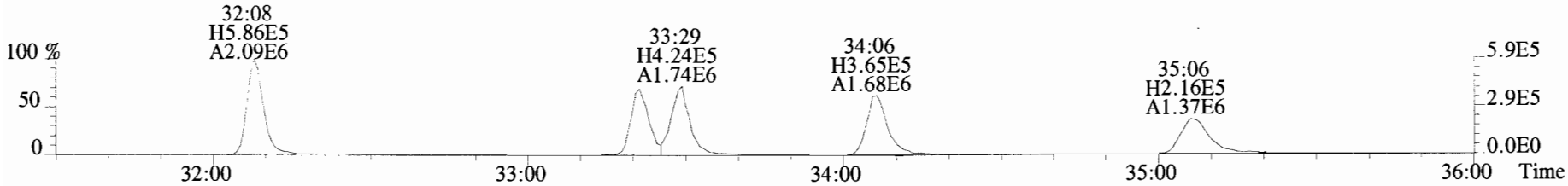
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



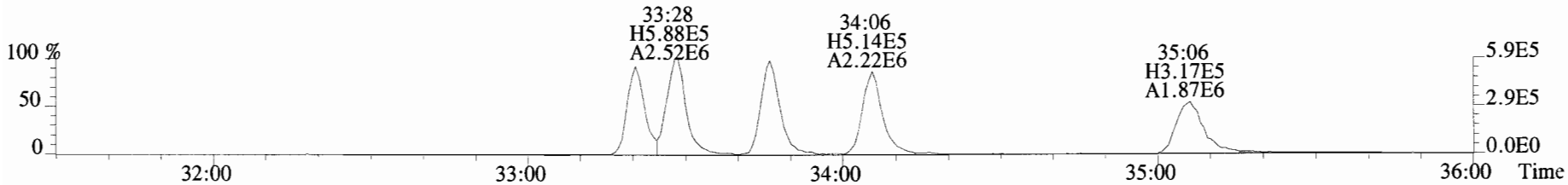
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



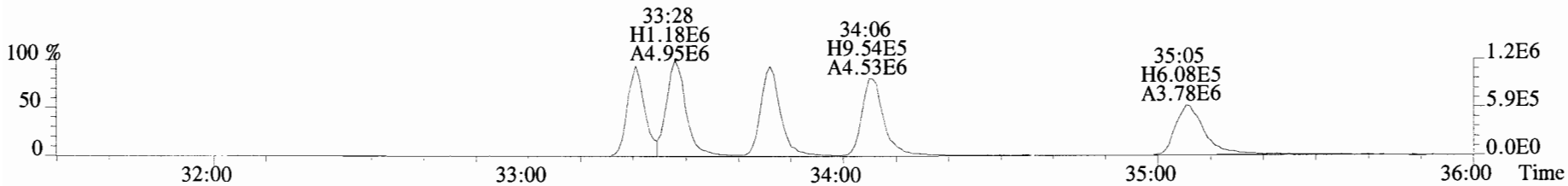
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



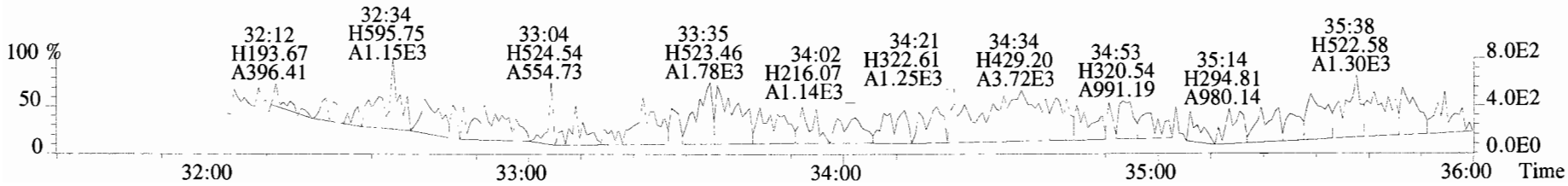
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



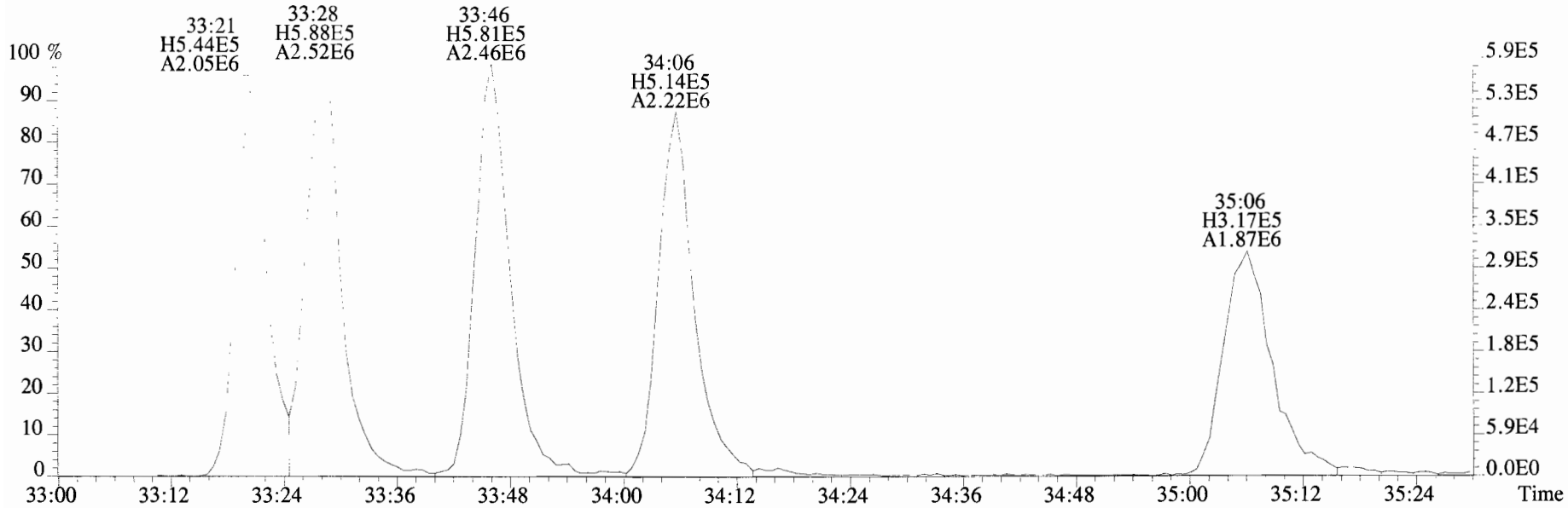
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



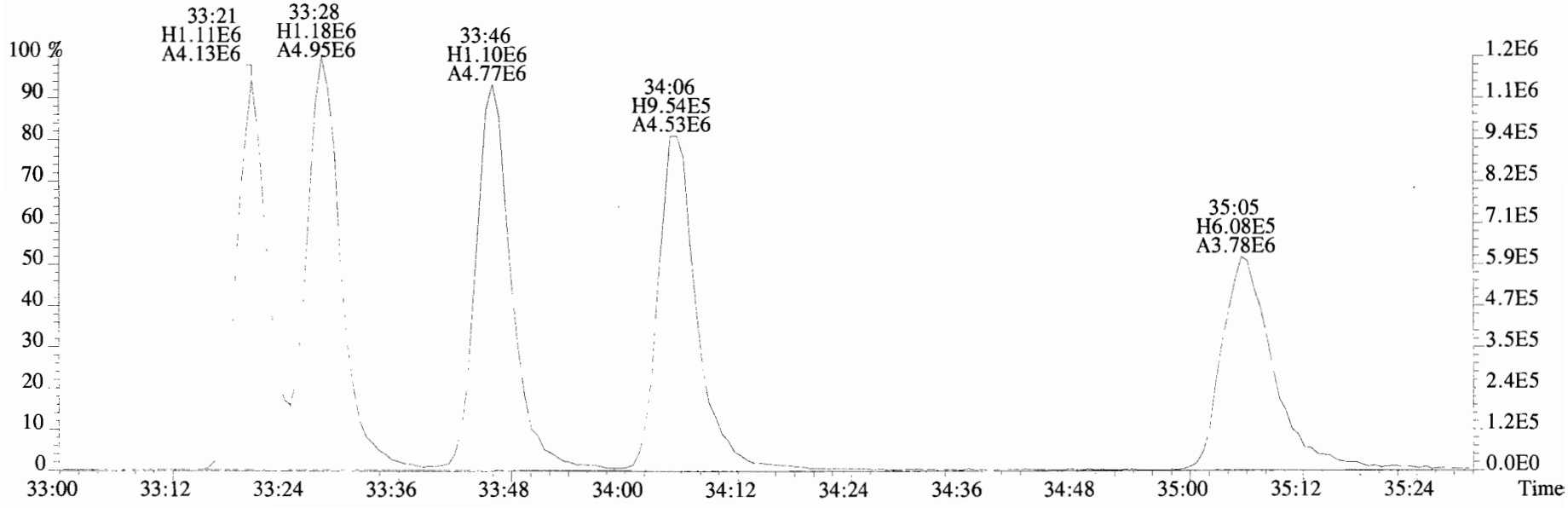
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



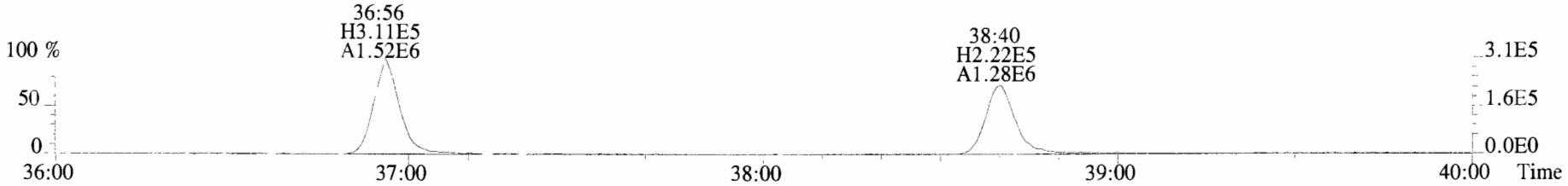
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



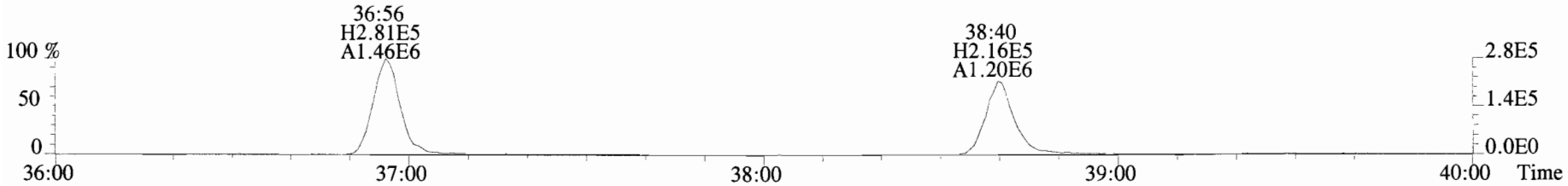
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



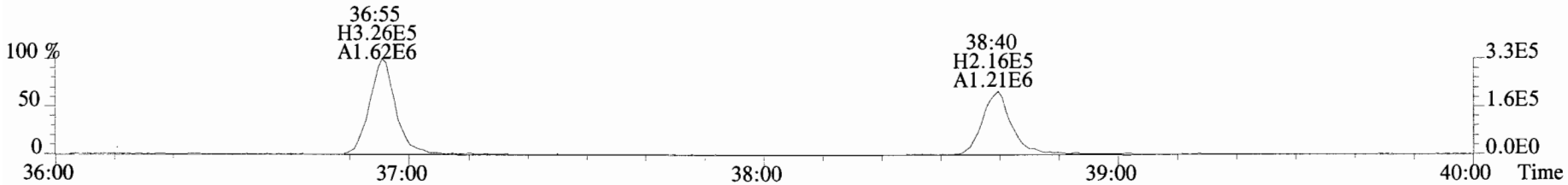
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



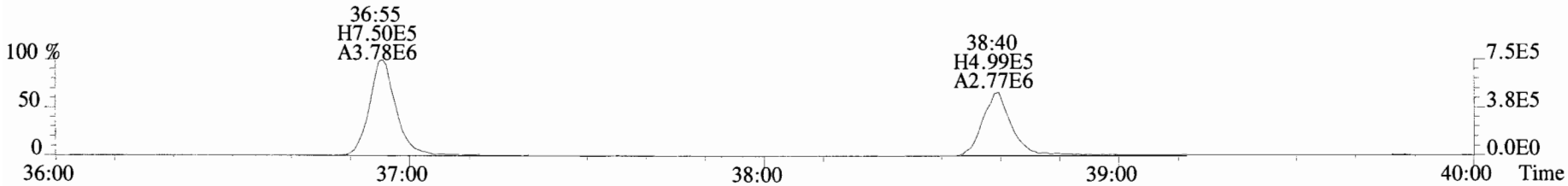
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



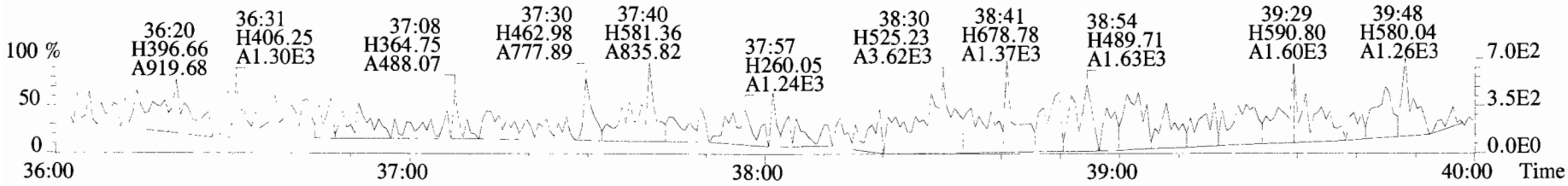
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



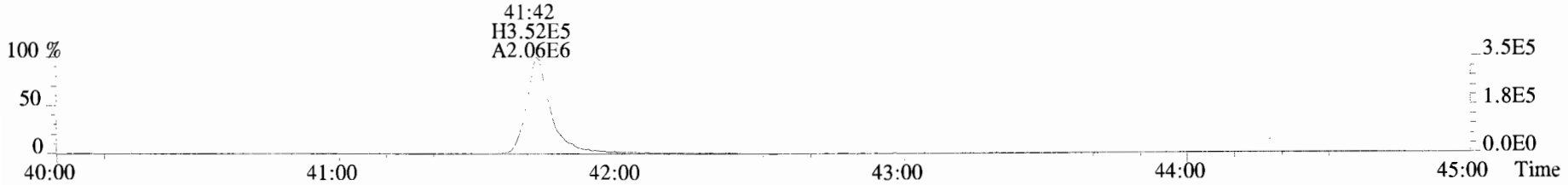
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



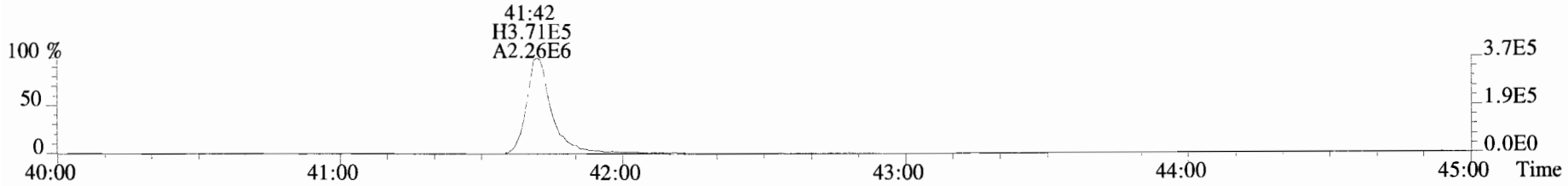
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



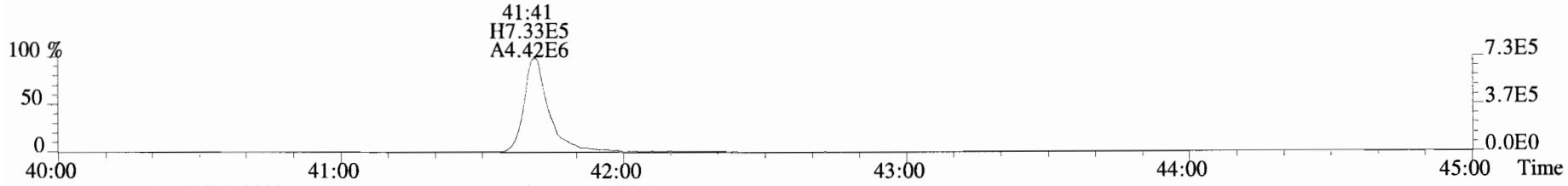
File:191009D1 #1-432 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



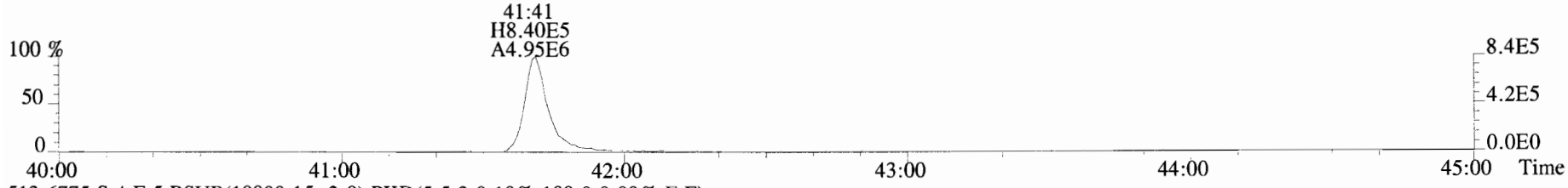
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



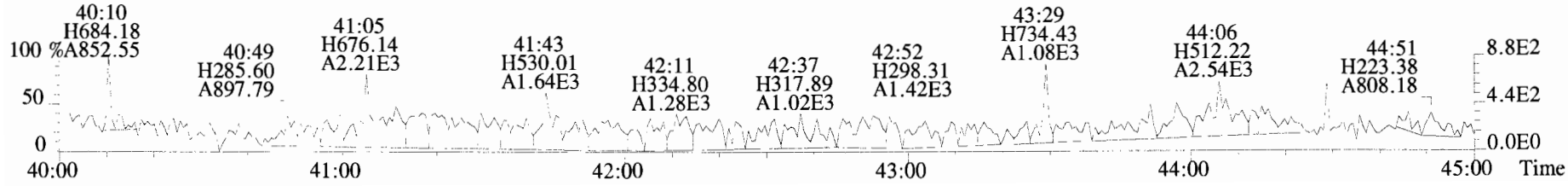
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



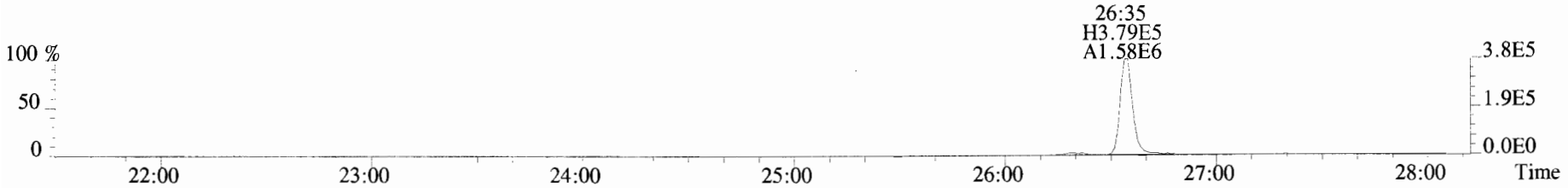
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



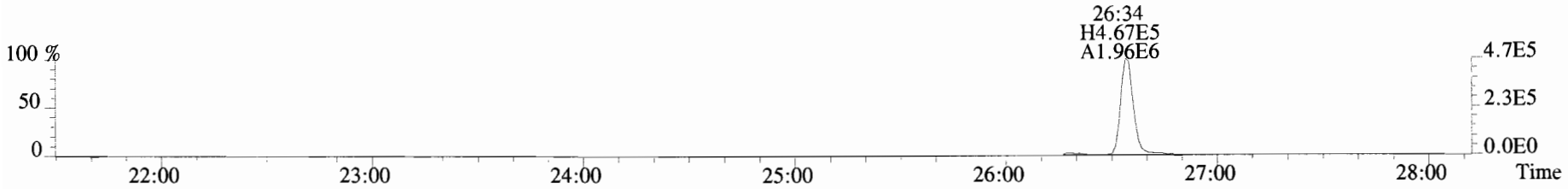
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



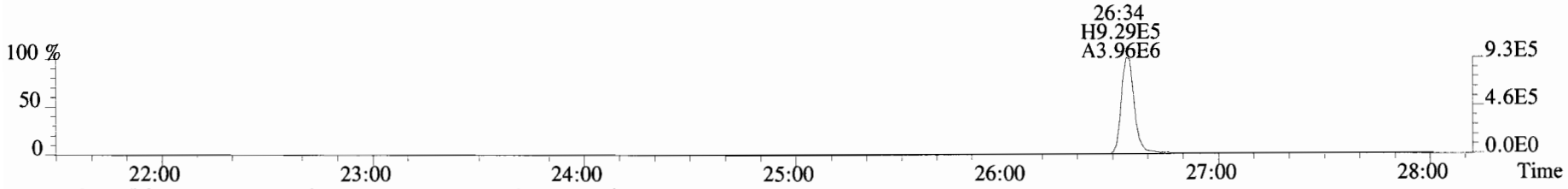
File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



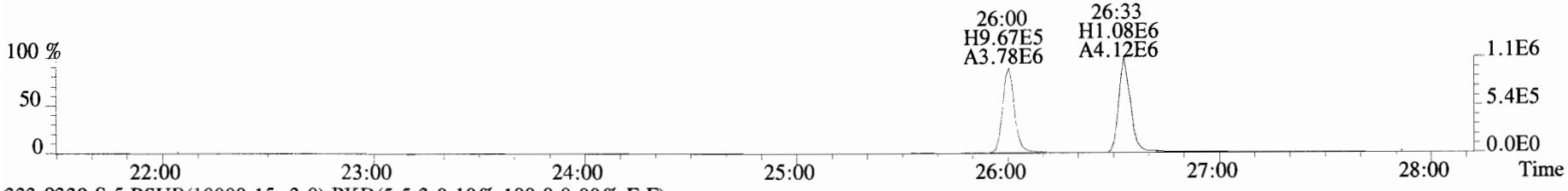
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



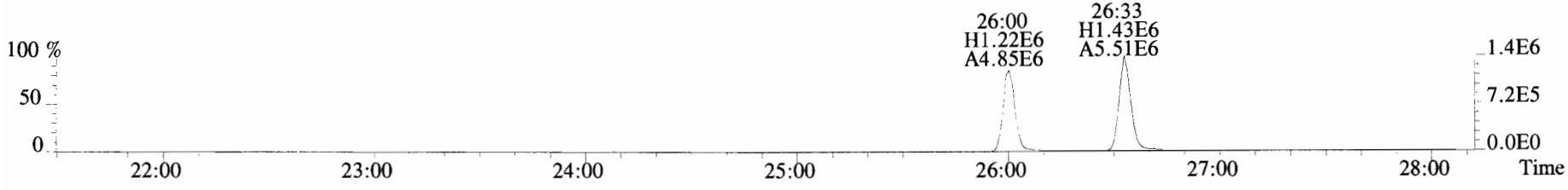
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



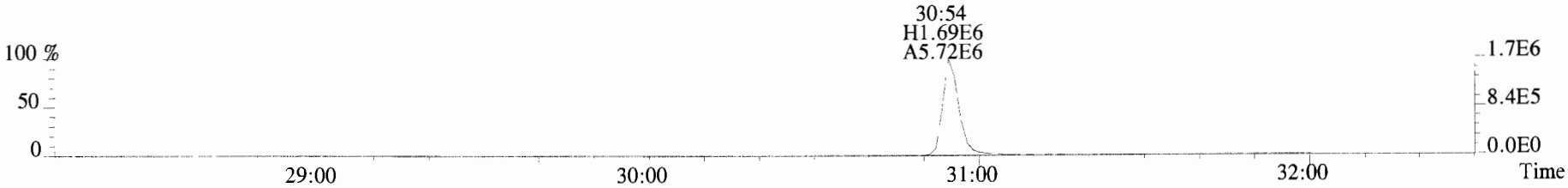
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



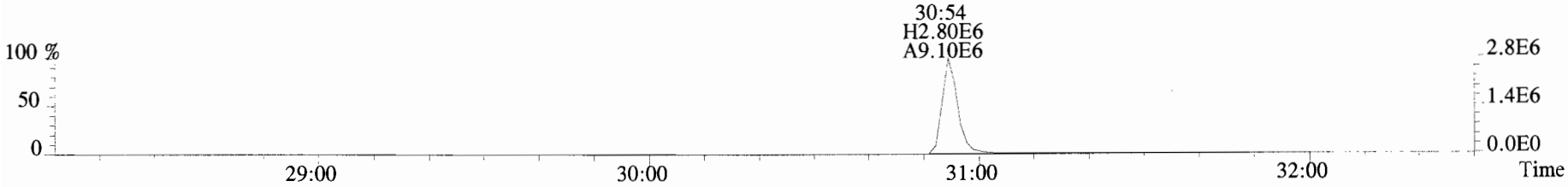
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



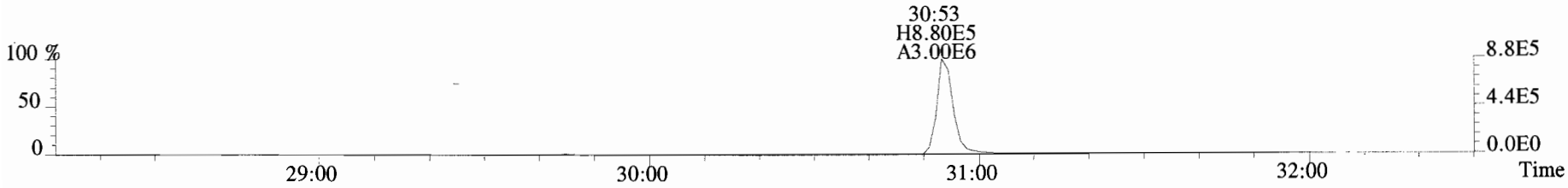
File:191009D1 #1-210 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



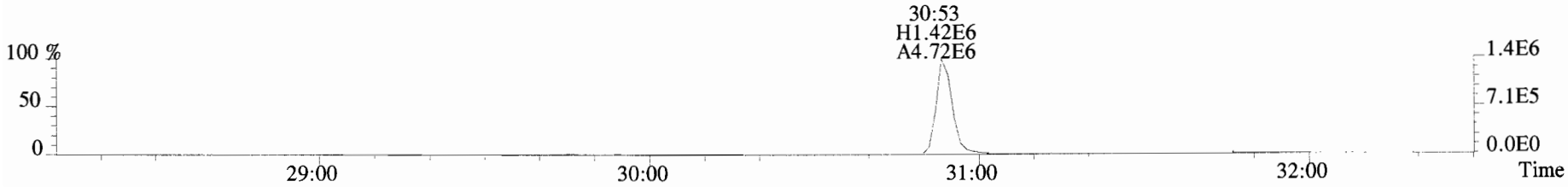
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



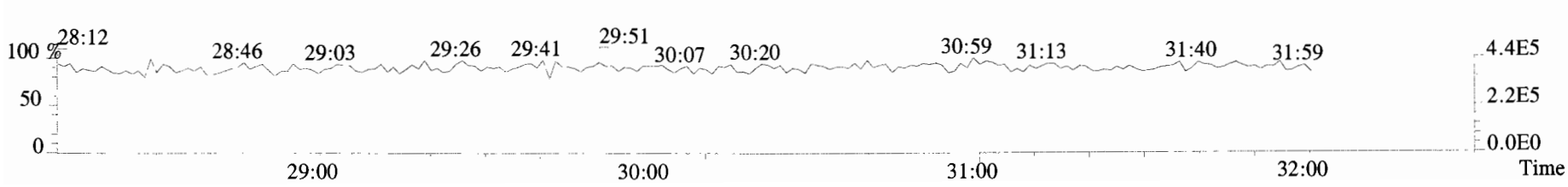
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



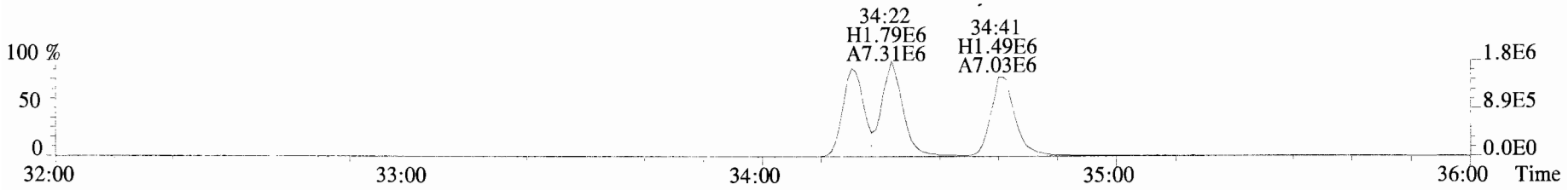
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



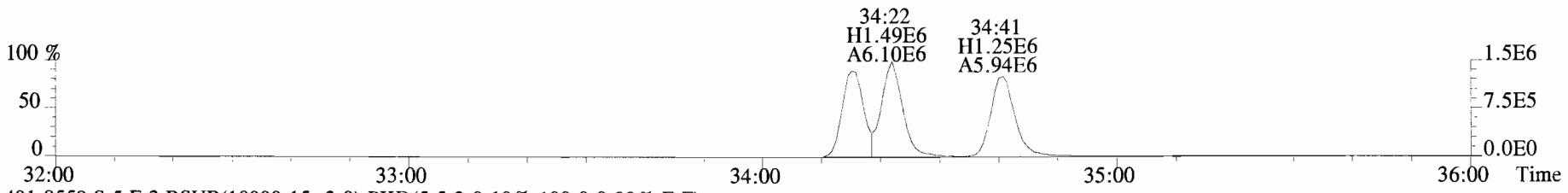
366.9792 S:5 F:2



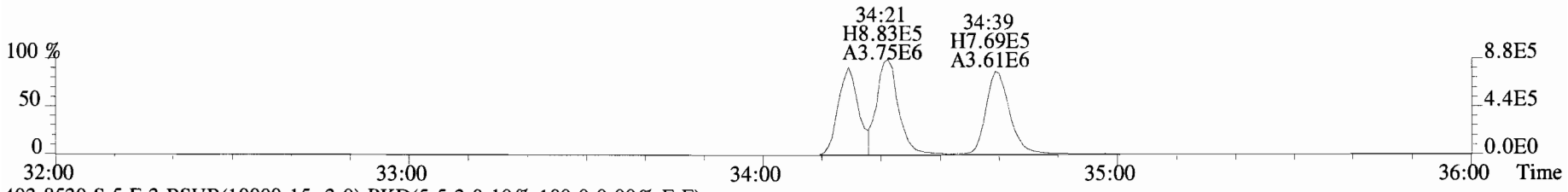
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



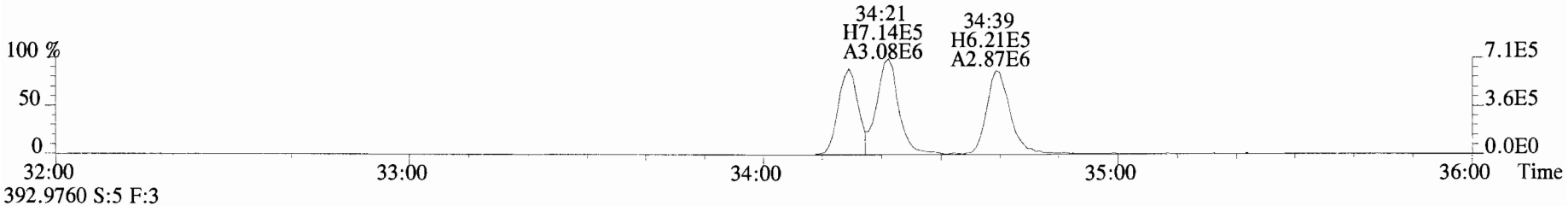
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



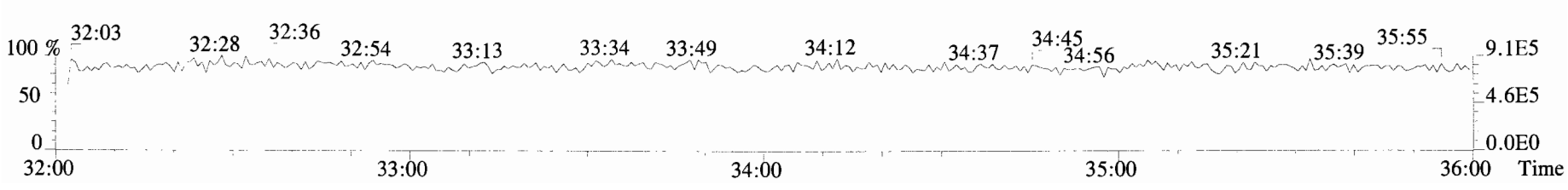
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



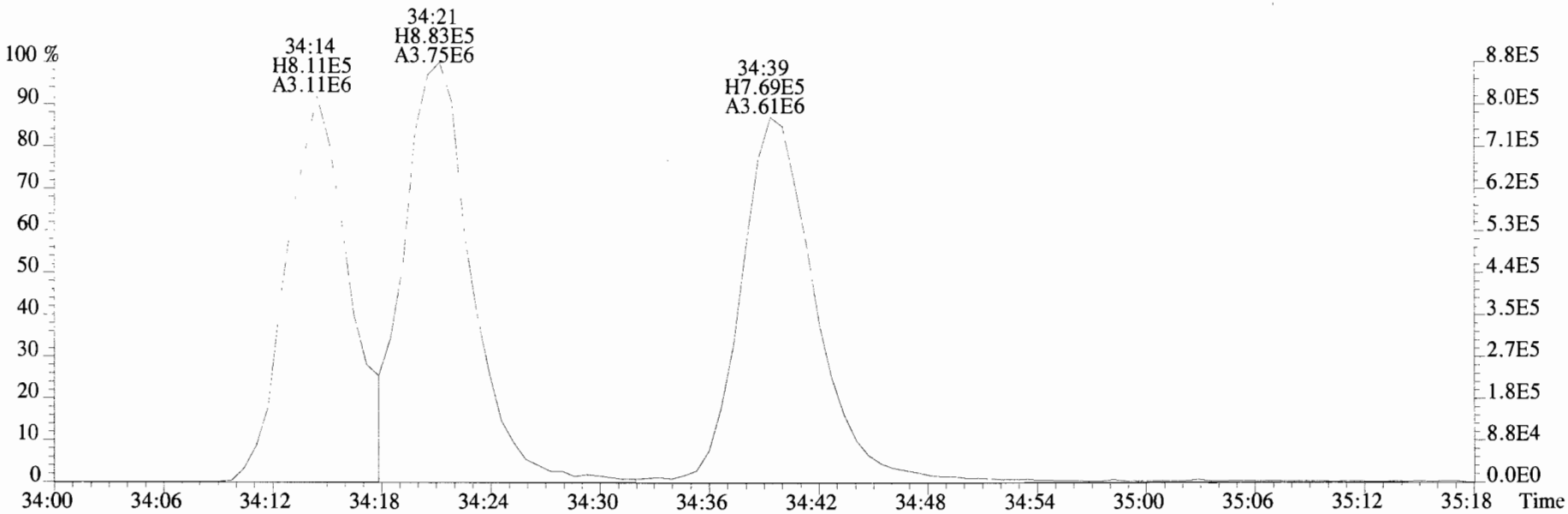
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



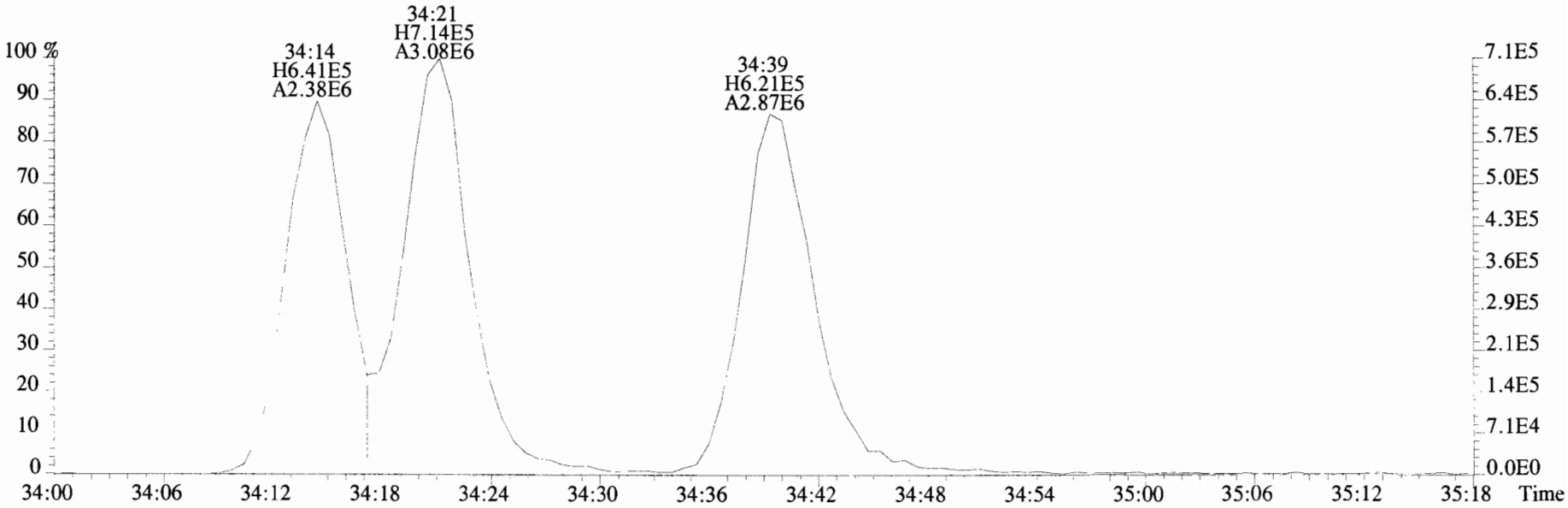
392.9760 S:5 F:3



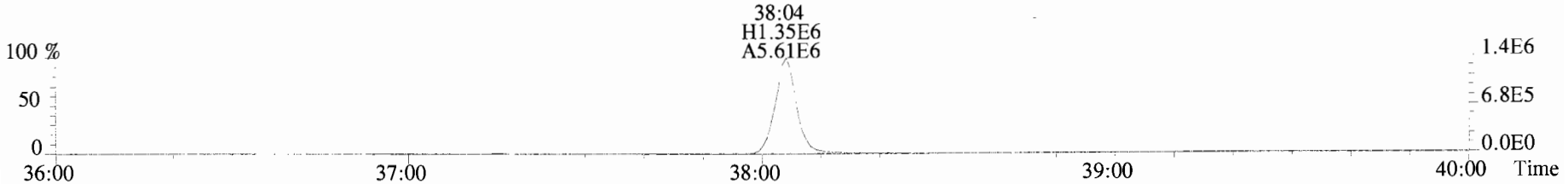
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



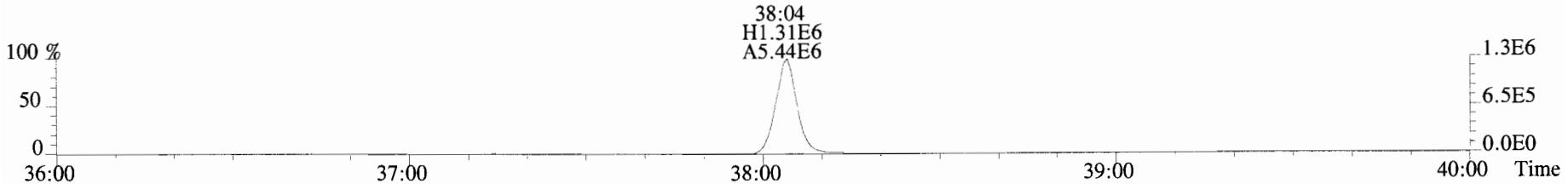
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



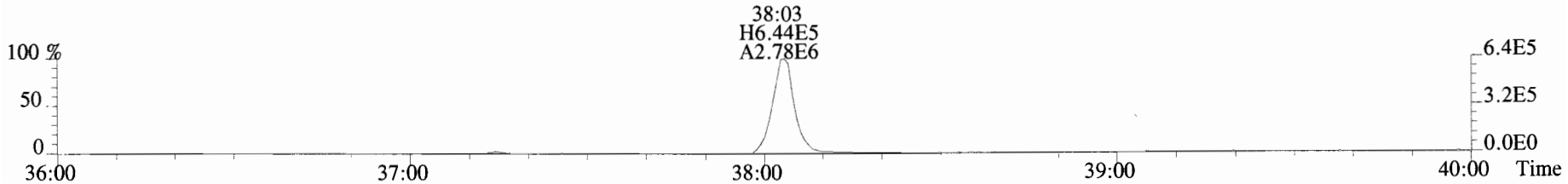
File:191009D1 #1-356 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



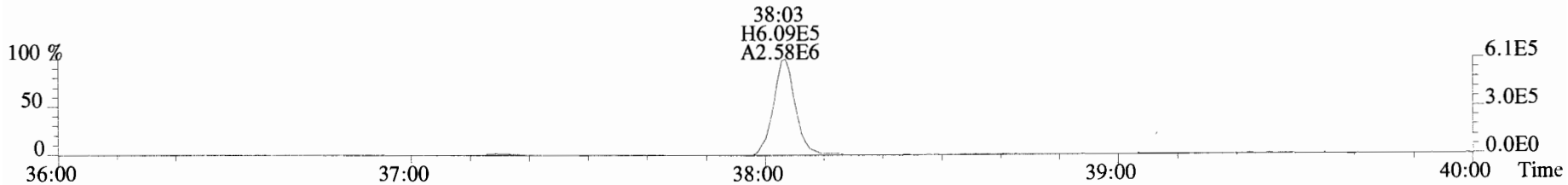
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



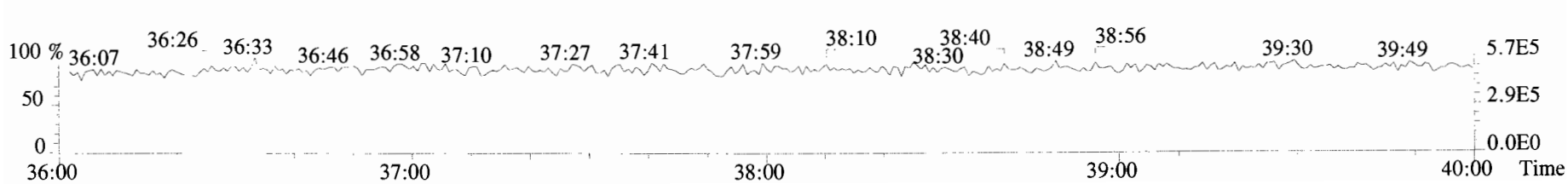
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



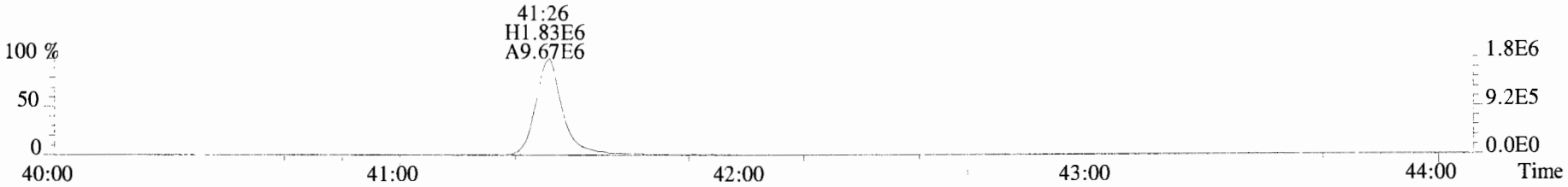
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



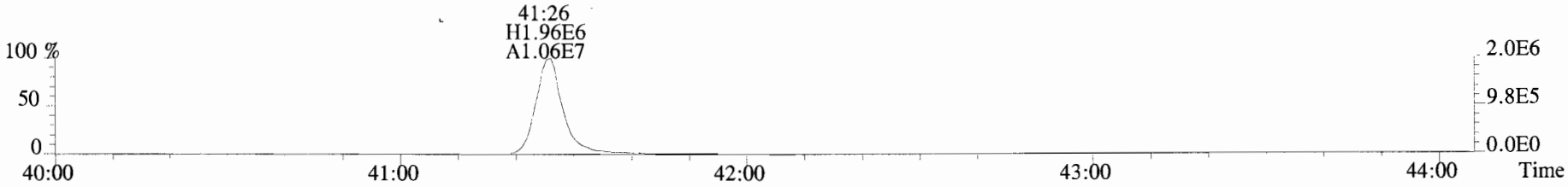
454.9728 S:5 F:4



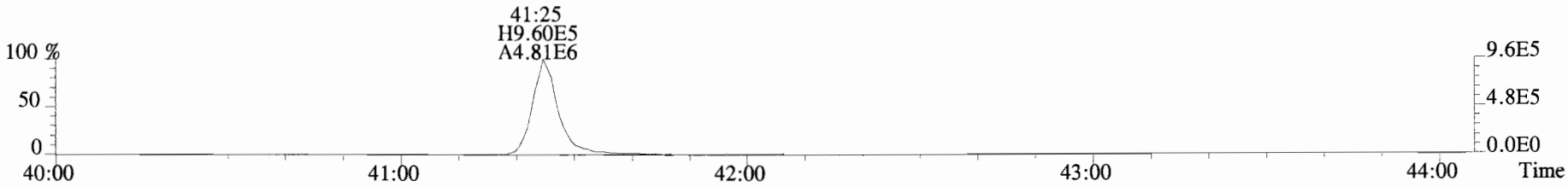
File:191009D1 #1-431 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



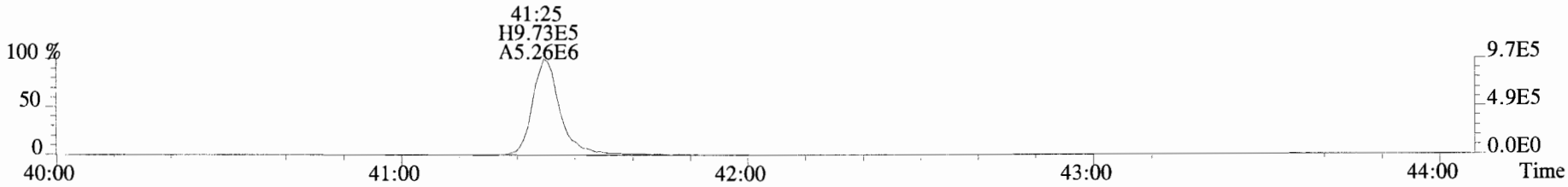
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



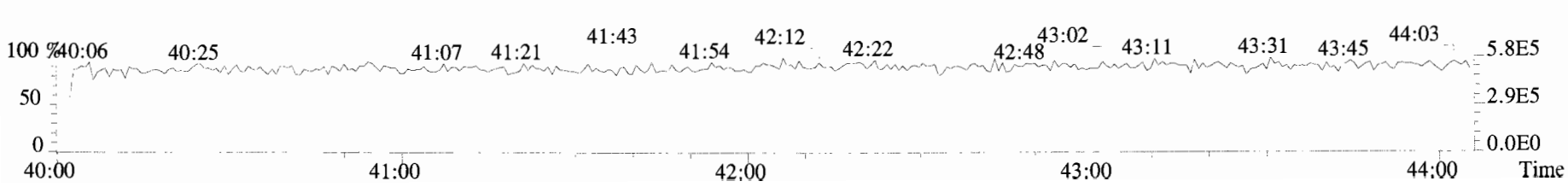
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

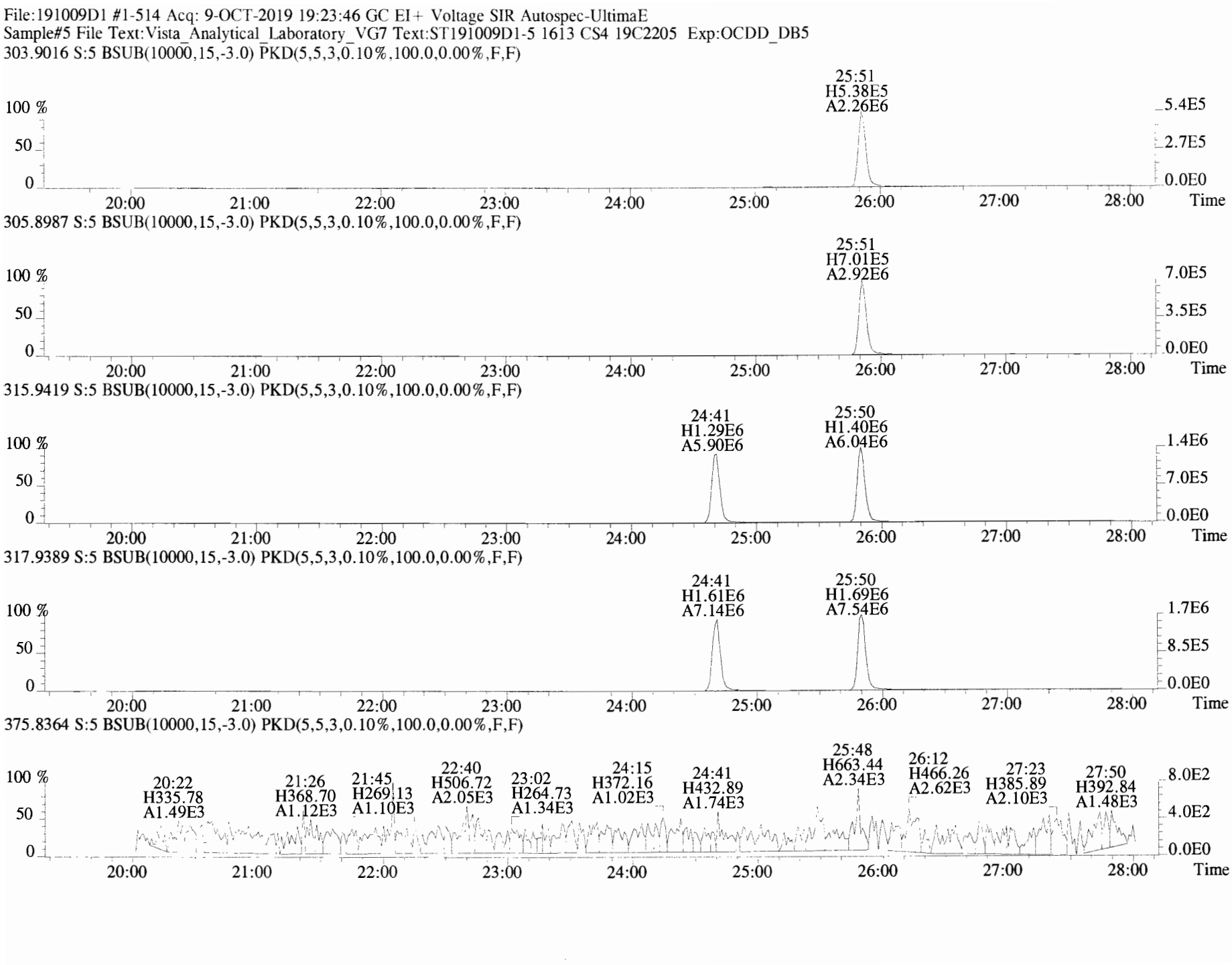


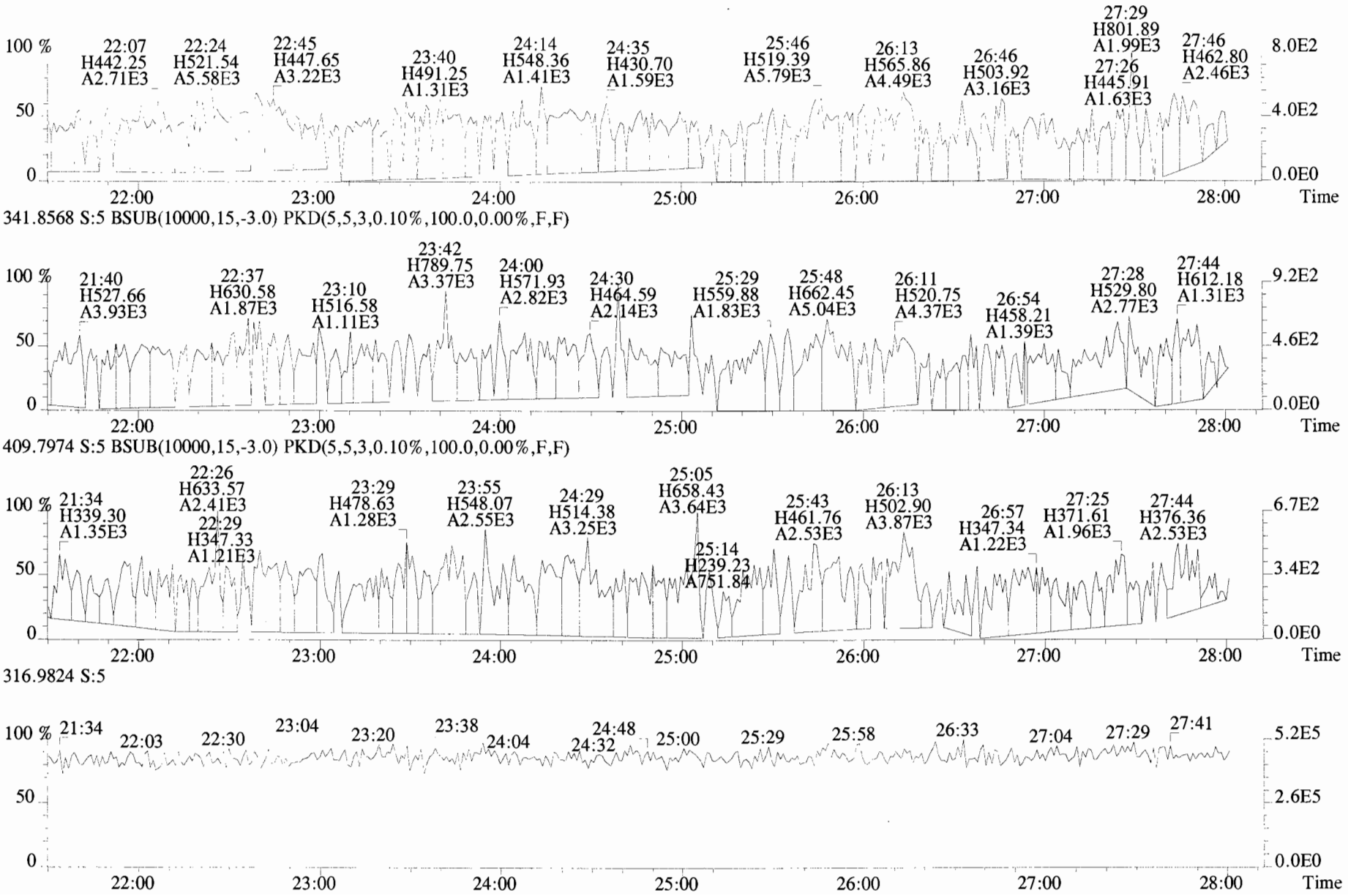
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



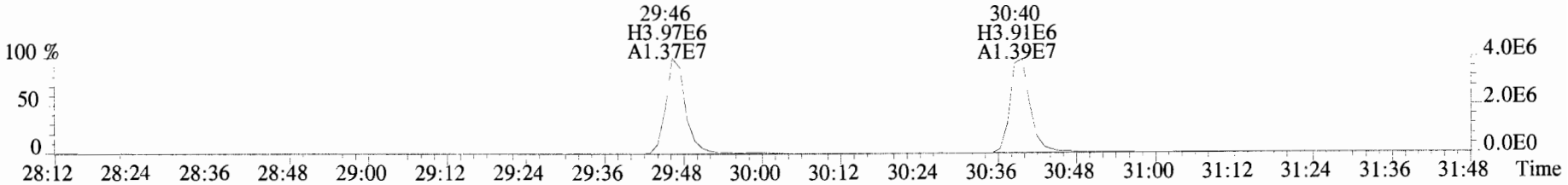
454.9728 S:5 F:5



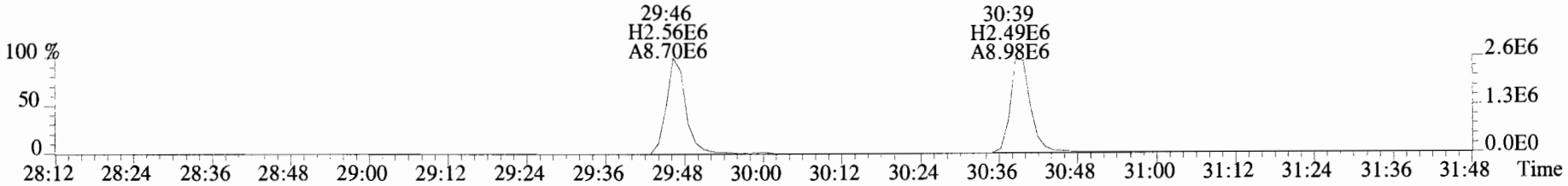

File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:51
H5.38E5
A2.26E6
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:51
H7.01E5
A2.92E6
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:41
H1.29E6
A5.90E6
25:50
H1.40E6
A6.04E6
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:41
H1.61E6
A7.14E6
25:50
H1.69E6
A7.54E6
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:22
H335.78
A1.49E3
21:26
H368.70
A1.12E3
21:45
H269.13
A1.10E3
22:40
H506.72
A2.05E3
23:02
H264.73
A1.34E3
24:15
H372.16
A1.02E3
24:41
H432.89
A1.74E3
25:48
H663.44
A2.34E3
26:12
H466.26
A2.62E3
27:23
H385.89
A2.10E3
27:50
H392.84
A1.48E3
100 %
50
0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
5.4E5
2.7E5
0.0E0
7.0E5
3.5E5
1.4E6
7.0E5
1.7E6
8.5E5
8.0E2
4.0E2


File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:07 H442.25 A2.71E3
22:24 H521.54 A5.58E3
22:45 H447.65 A3.22E3
23:40 H491.25 A1.31E3
24:14 H548.36 A1.41E3
24:35 H430.70 A1.59E3
25:46 H519.39 A5.79E3
26:13 H565.86 A4.49E3
26:46 H503.92 A3.16E3
27:26 H445.91 A1.63E3
27:29 H801.89 A1.99E3
27:46 H462.80 A2.46E3
100 %
50
0
8.0E2
4.0E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:40 H527.66 A3.93E3
22:37 H630.58 A1.87E3
23:10 H516.58 A1.11E3
23:42 H789.75 A3.37E3
24:00 H571.93 A2.82E3
24:30 H464.59 A2.14E3
25:29 H559.88 A1.83E3
25:48 H662.45 A5.04E3
26:11 H520.75 A4.37E3
26:54 H458.21 A1.39E3
27:28 H529.80 A2.77E3
27:44 H612.18 A1.31E3
100 %
50
0
9.2E2
4.6E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:34 H339.30 A1.35E3
22:26 H633.57 A2.41E3
22:29 H347.33 A1.21E3
23:29 H478.63 A1.28E3
23:55 H548.07 A2.55E3
24:29 H514.38 A3.25E3
25:05 H658.43 A3.64E3
25:14 H239.23 A751.84
25:43 H461.76 A2.53E3
26:13 H502.90 A3.87E3
26:57 H347.34 A1.22E3
27:25 H371.61 A1.96E3
27:44 H376.36 A2.53E3
100 %
50
0
6.7E2
3.4E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
316.9824 S:5
100 %
50
0
5.2E5
2.6E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time

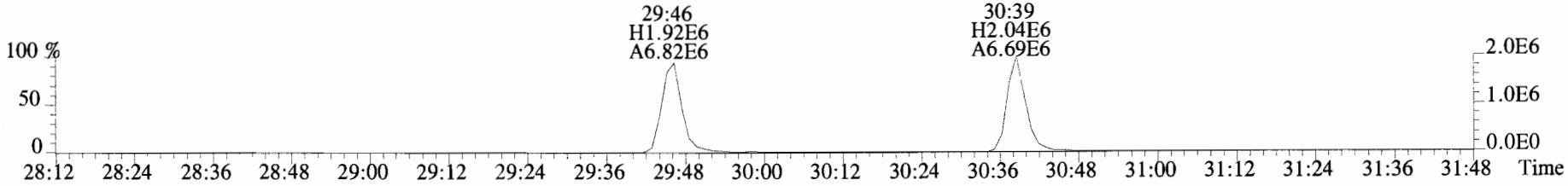
File:191009D1 #1-210 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



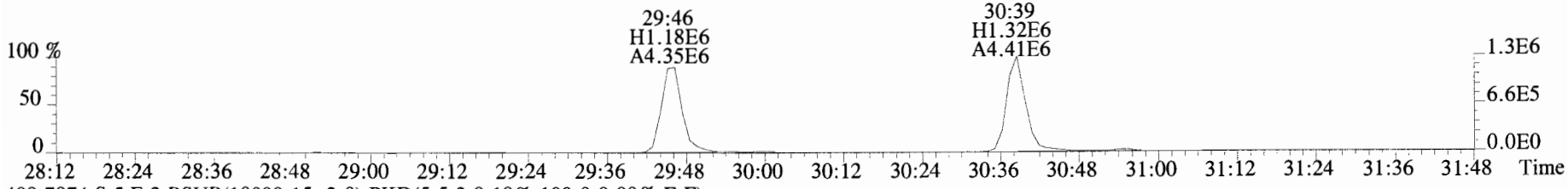
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



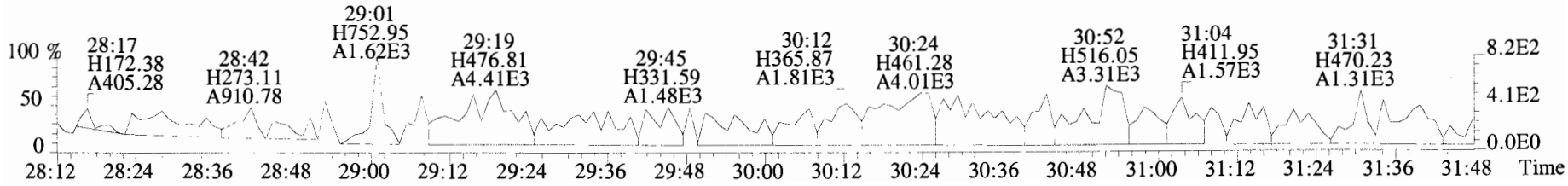
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



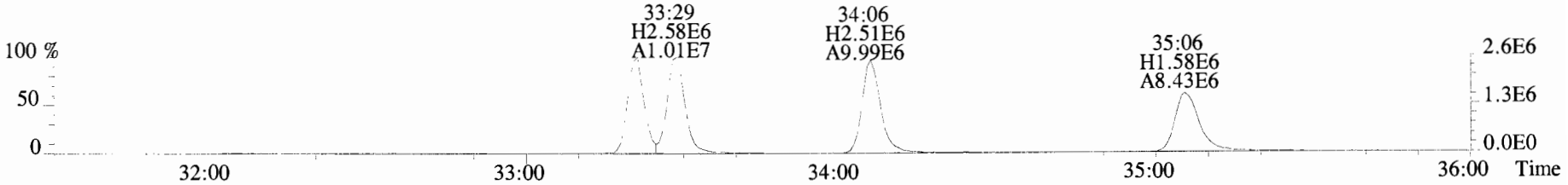
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



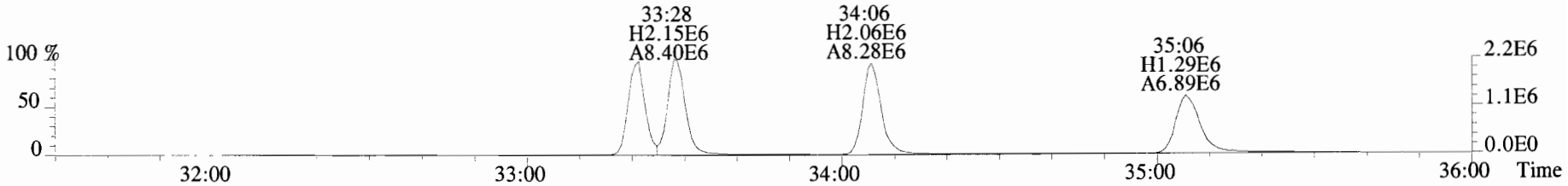
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



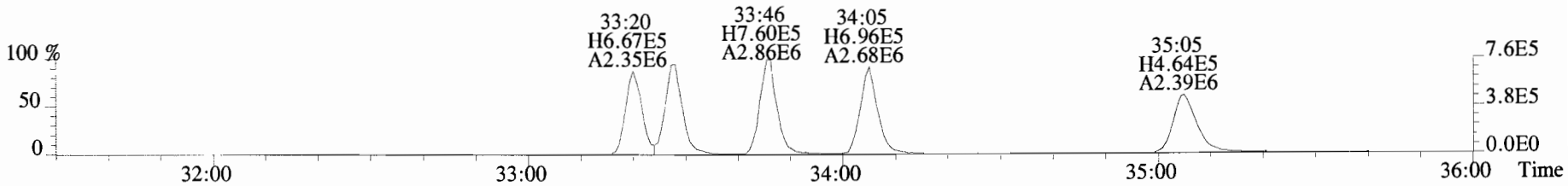
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



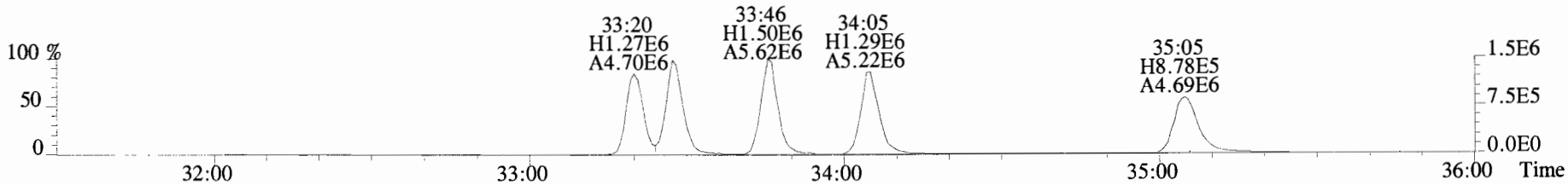
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



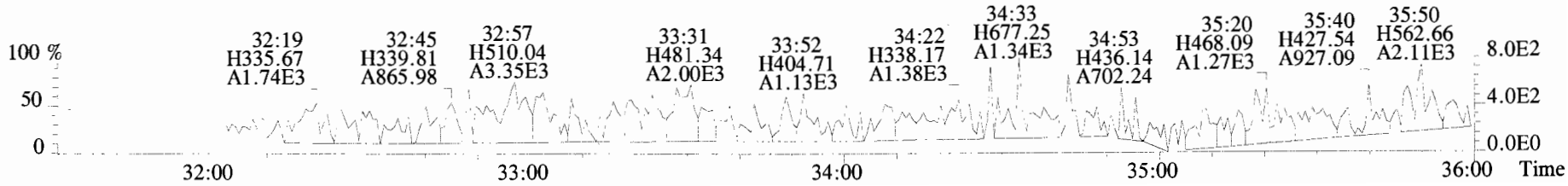
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



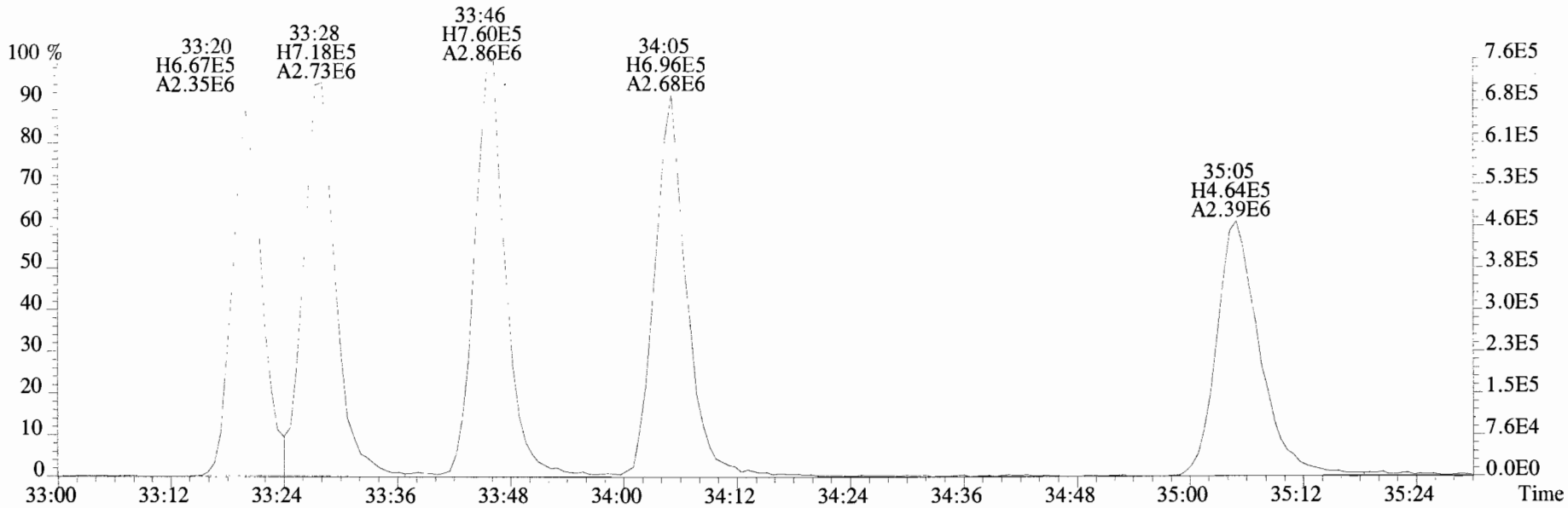
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



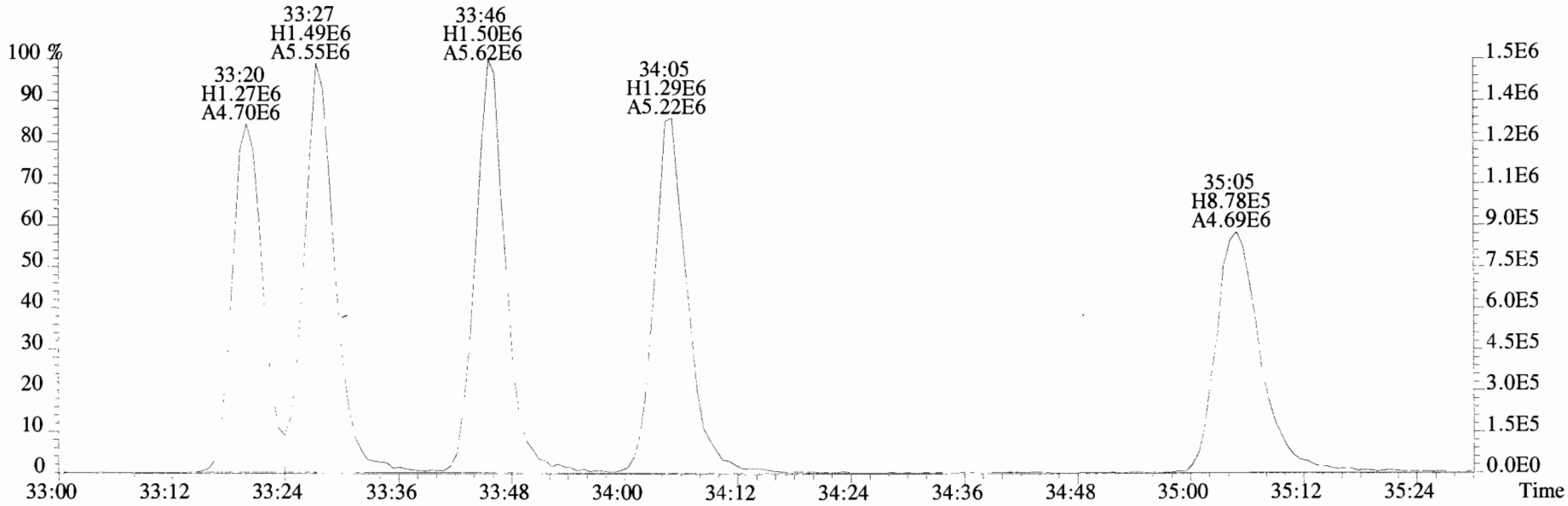
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



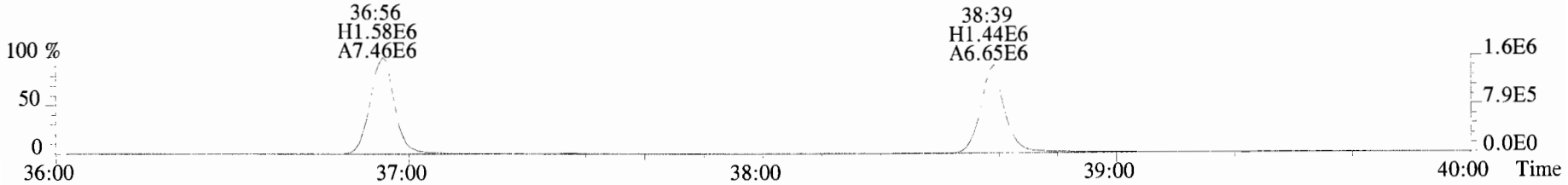
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



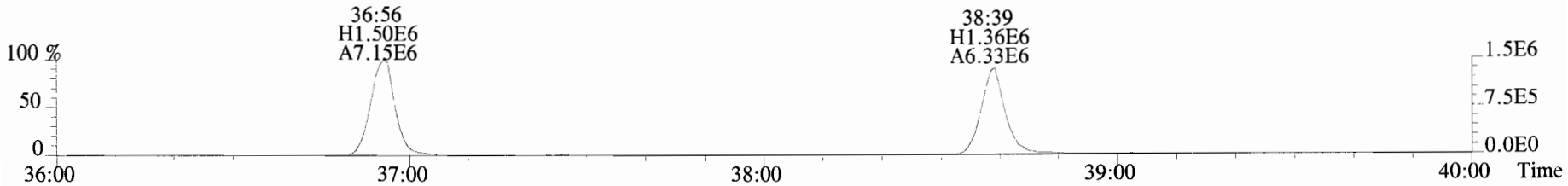
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



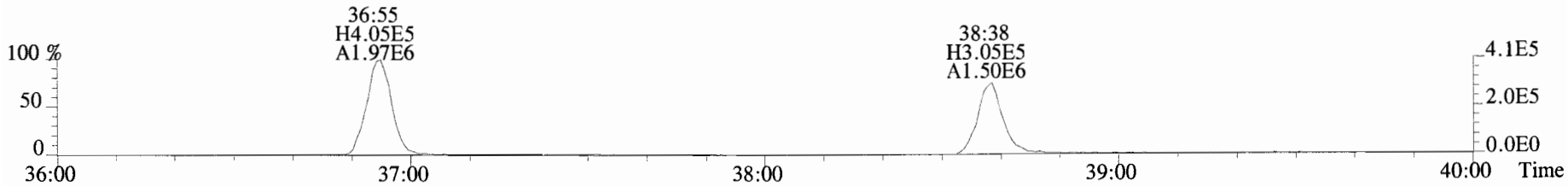
File:191009D1 #1-356 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



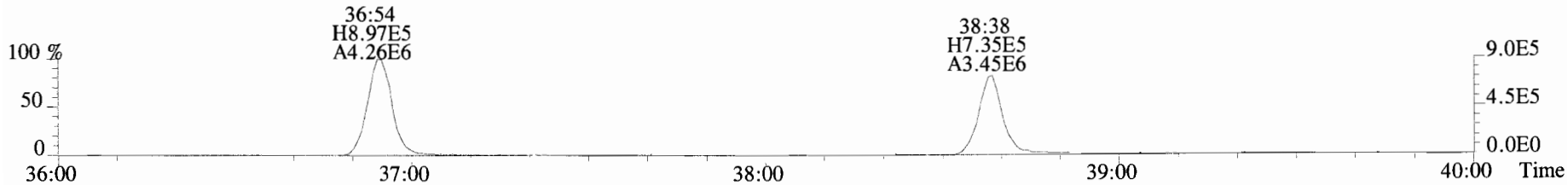
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



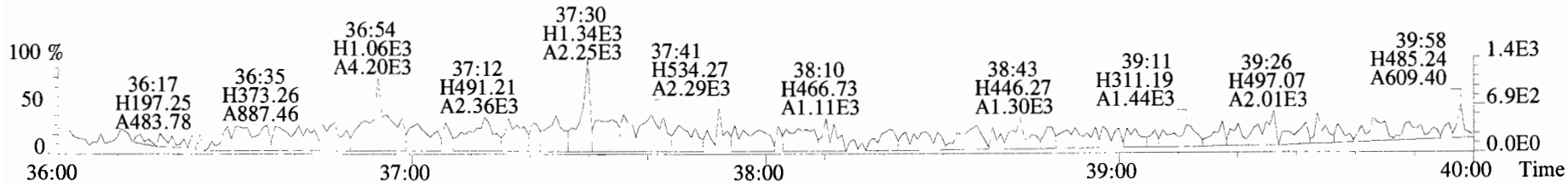
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



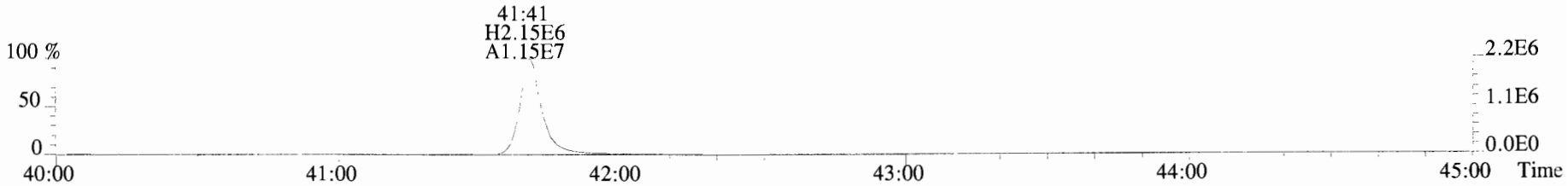
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



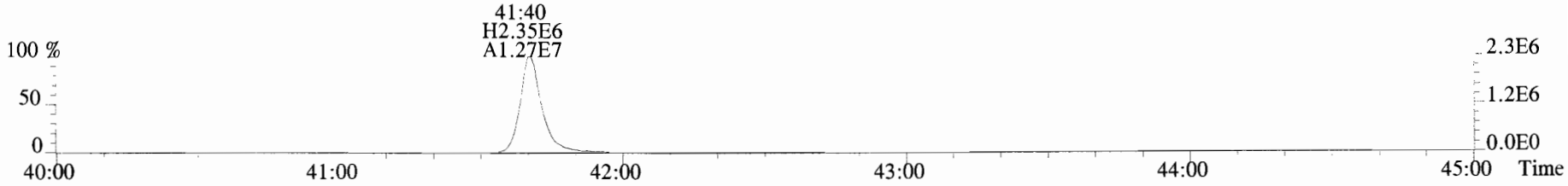
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



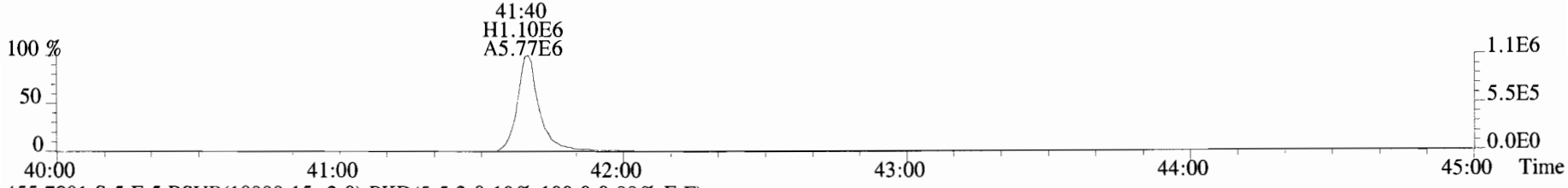
File:191009D1 #1-431 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



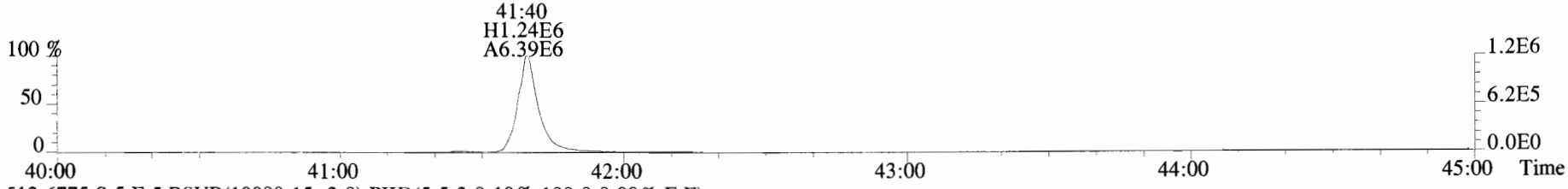
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



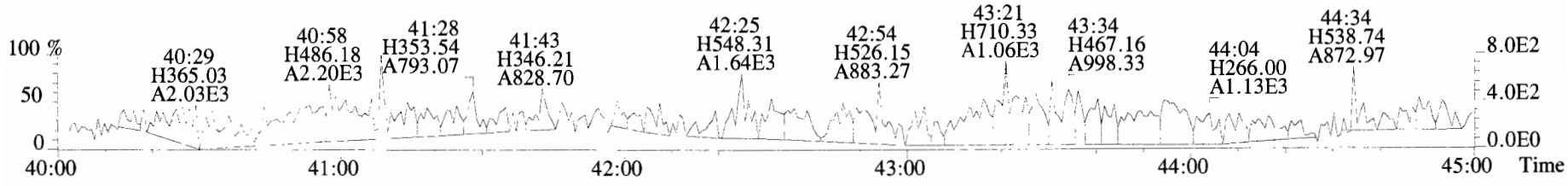
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



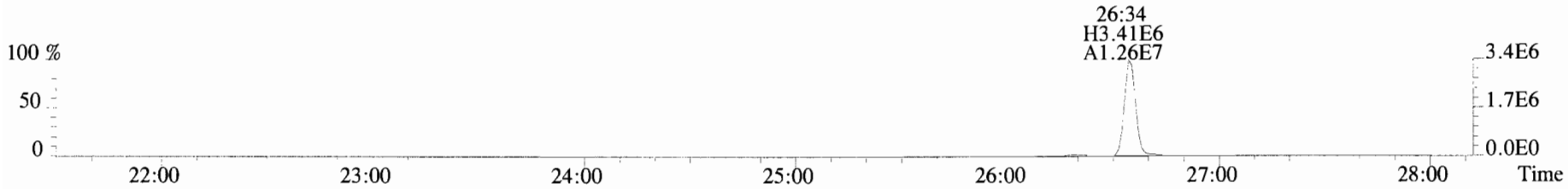
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



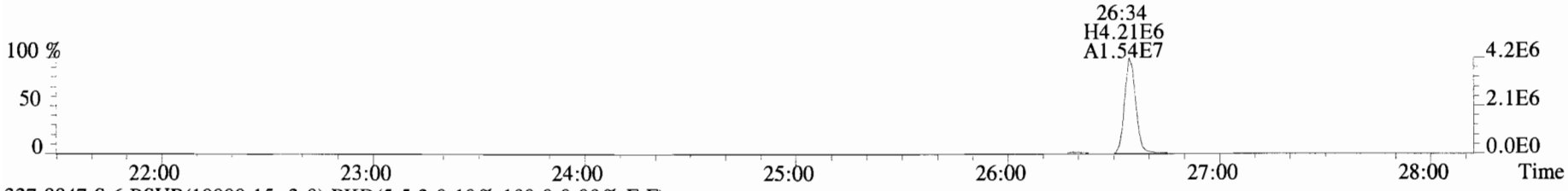
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



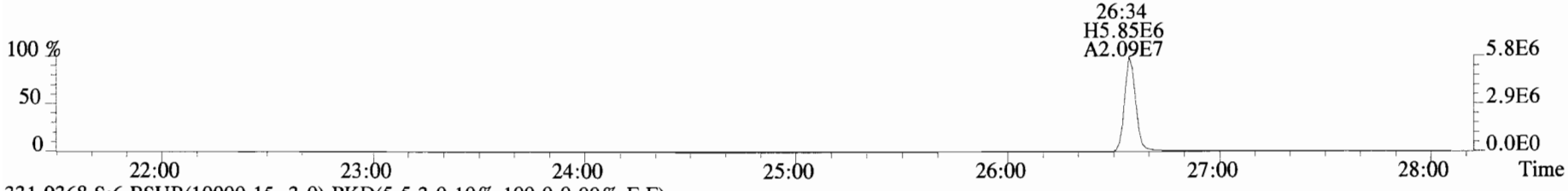
File:191009D1 #1-513 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



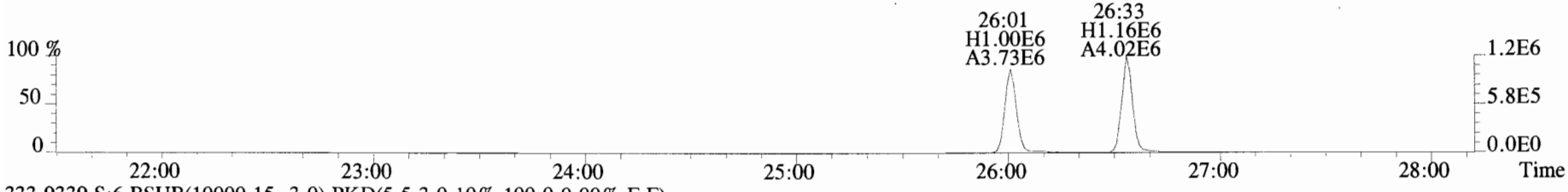
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



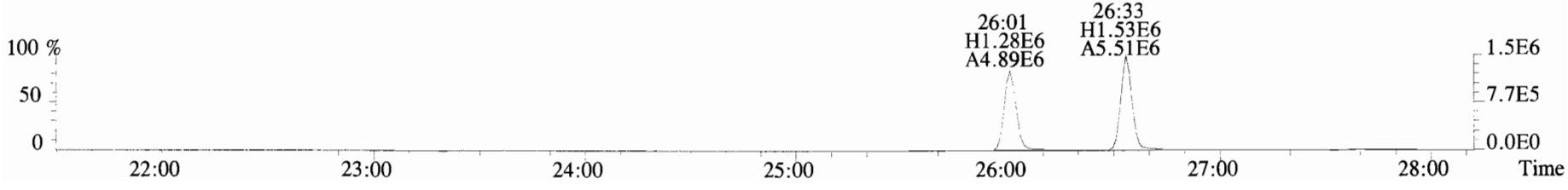
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



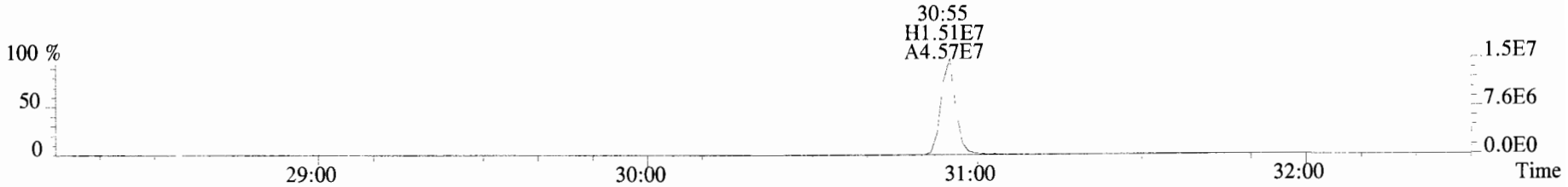
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



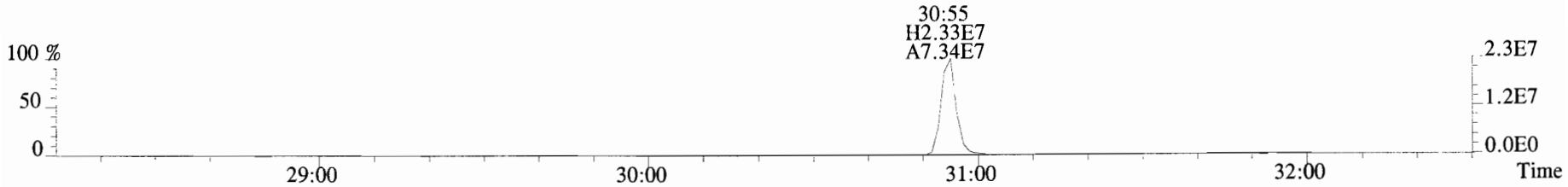
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



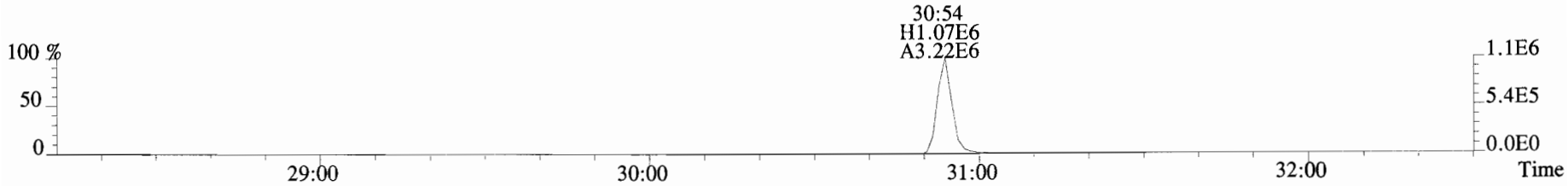
File:191009D1 #1-211 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



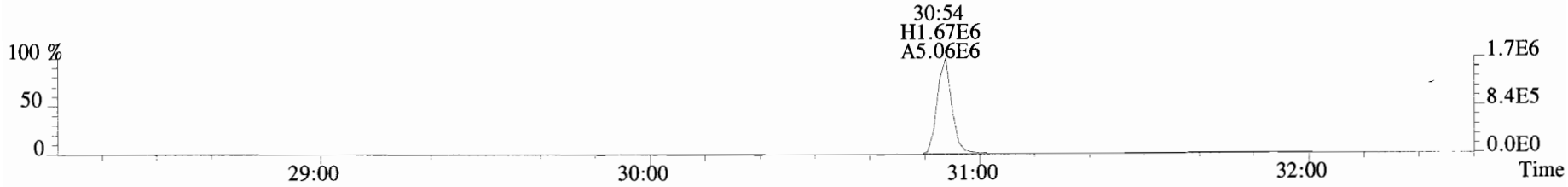
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



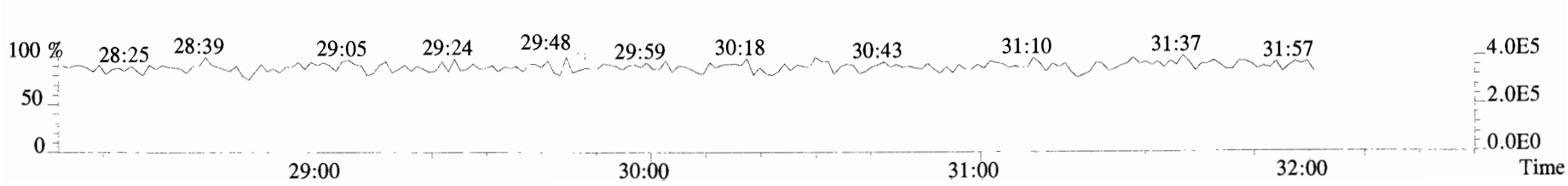
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



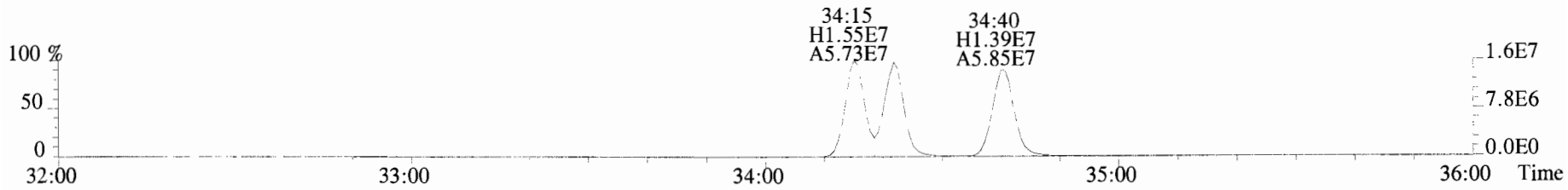
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



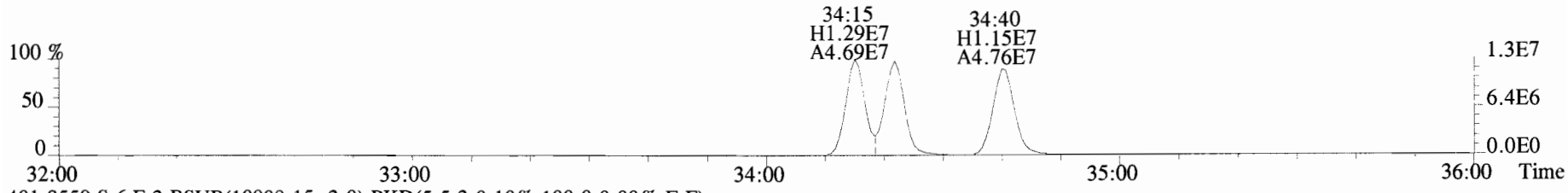
366.9792 S:6 F:2



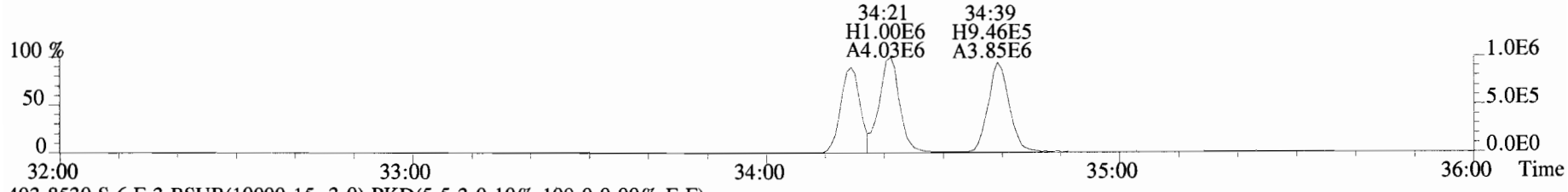
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



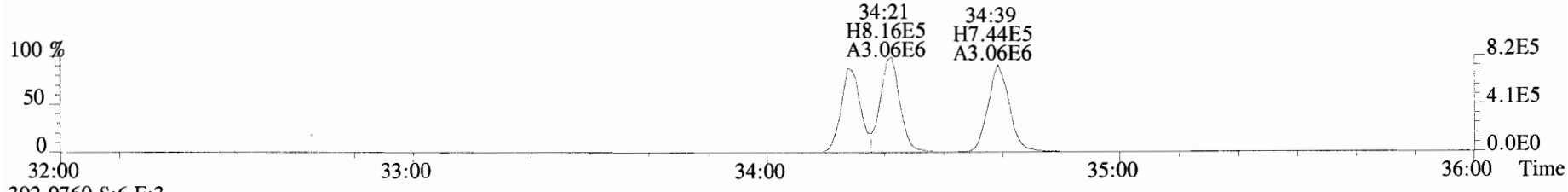
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



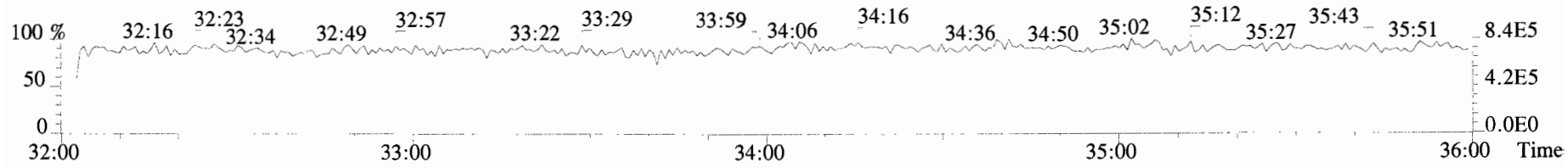
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



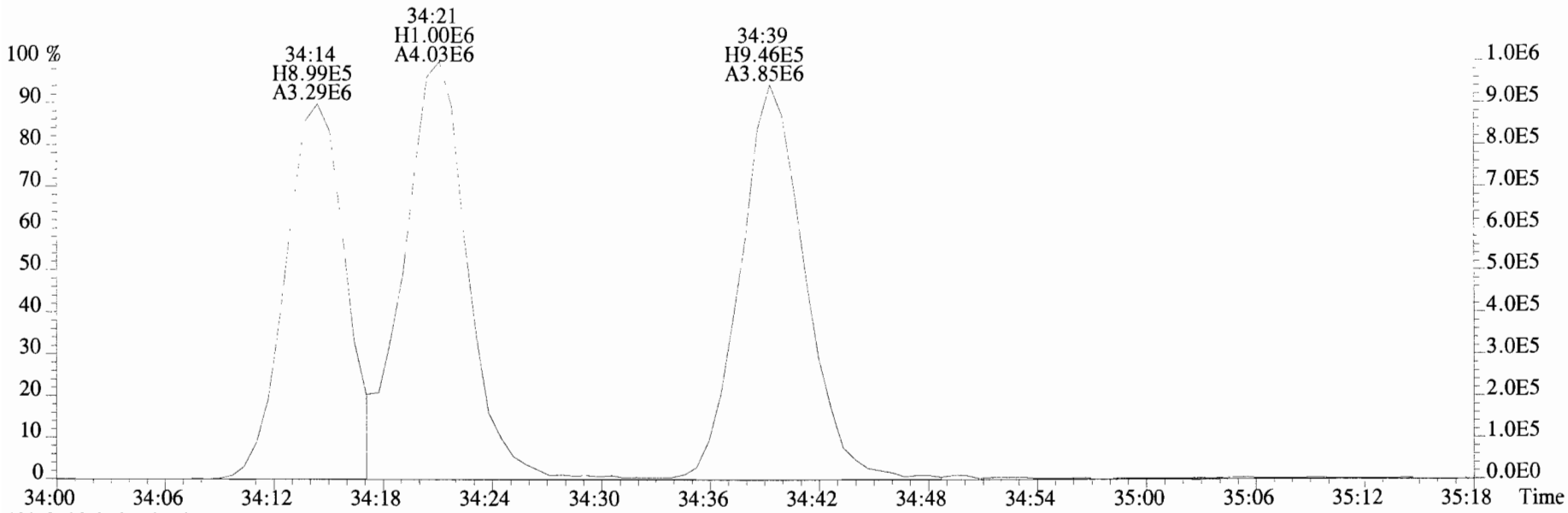
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



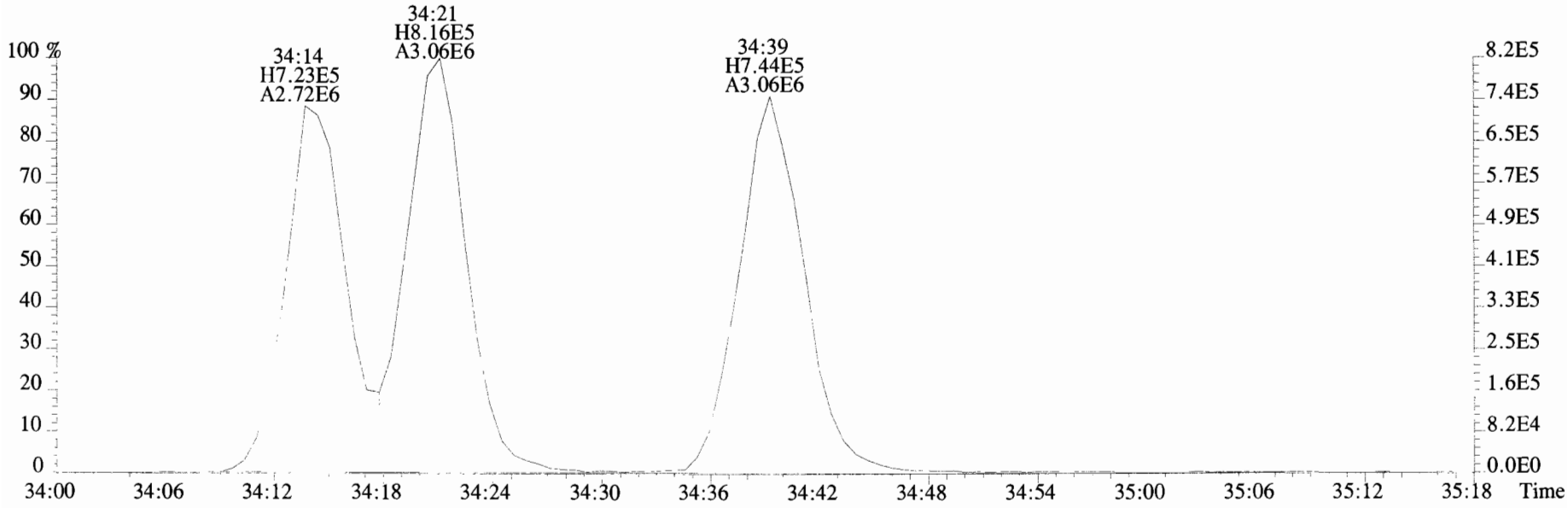
392.9760 S:6 F:3



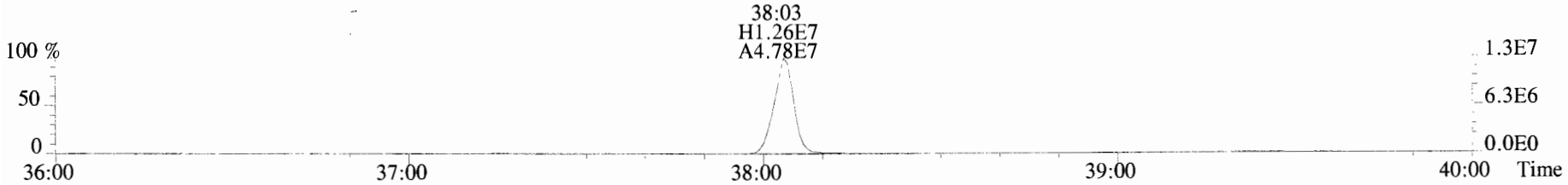
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



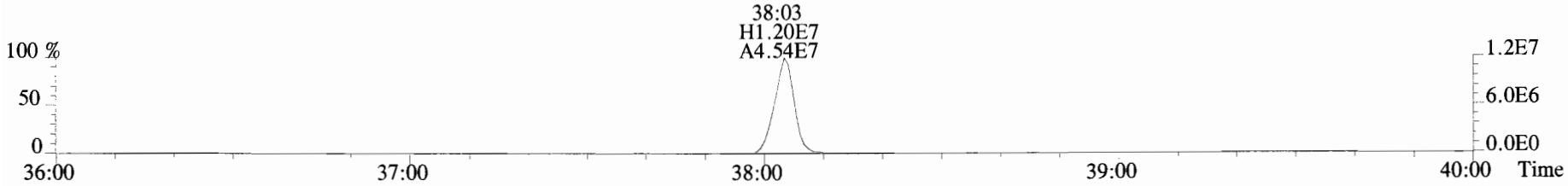
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



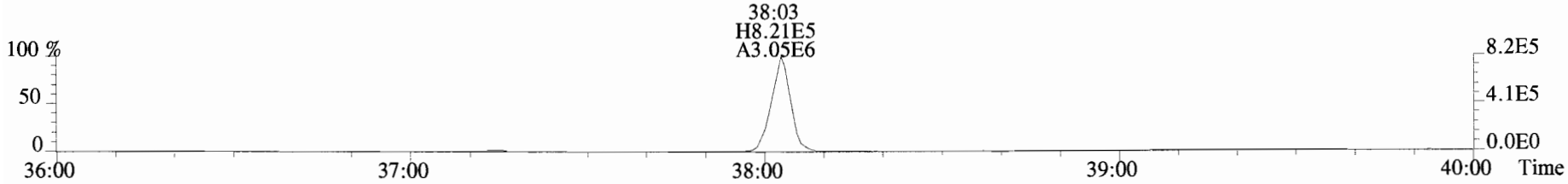
File:191009D1 #1-356 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



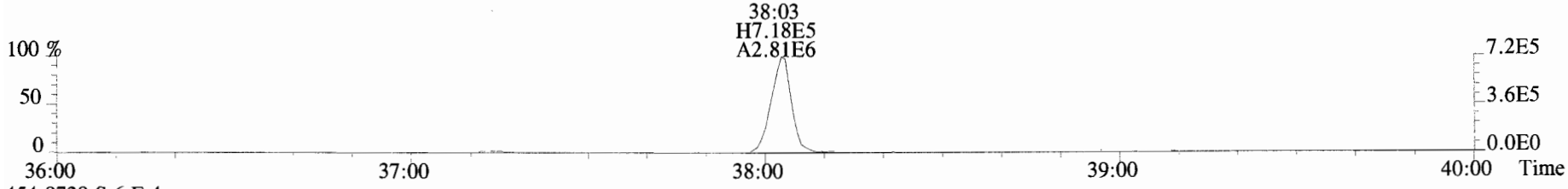
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



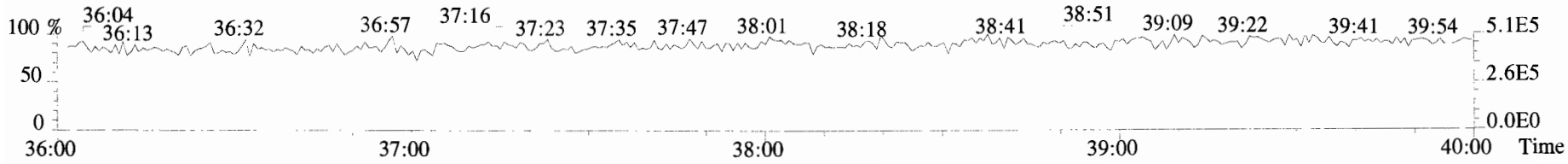
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



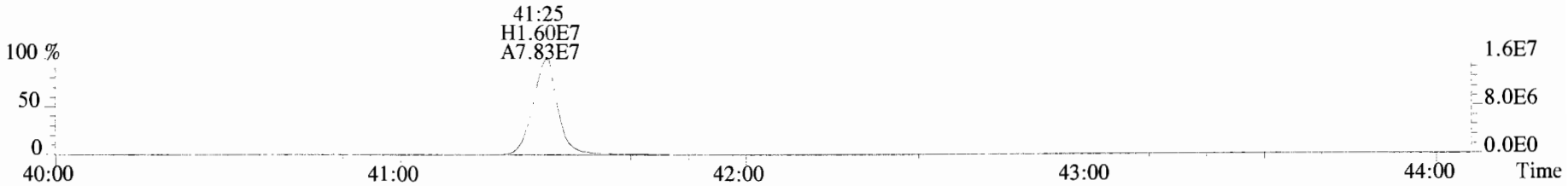
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



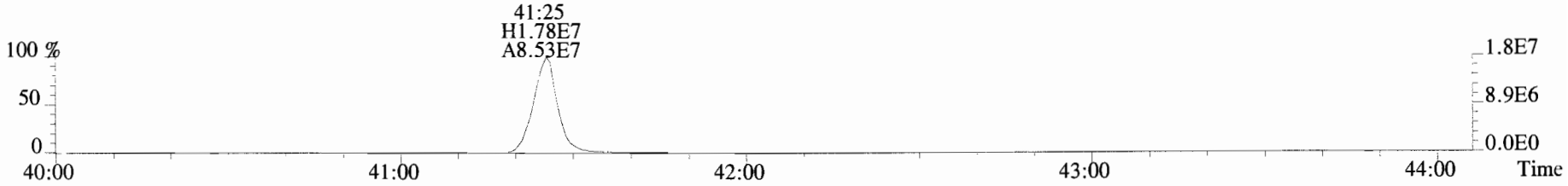
454.9728 S:6 F:4



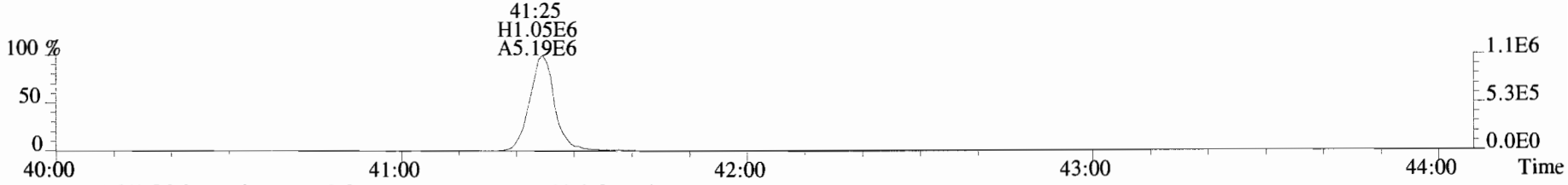
File:191009D1 #1-431 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



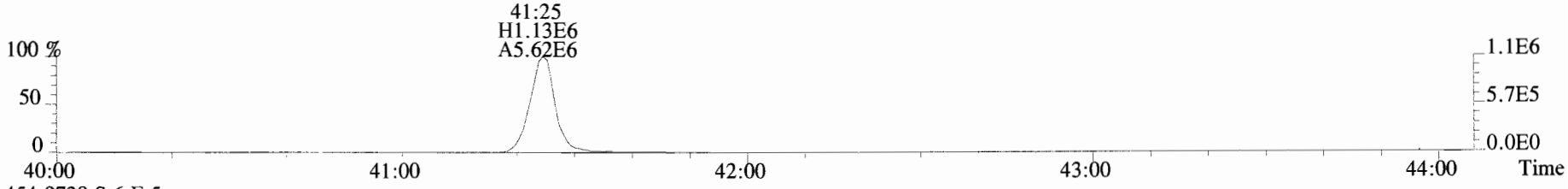
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



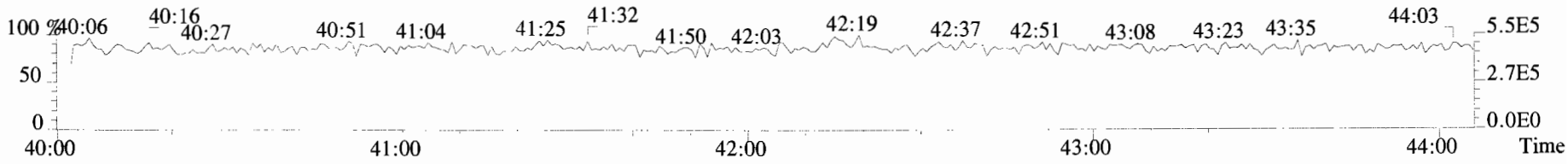
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



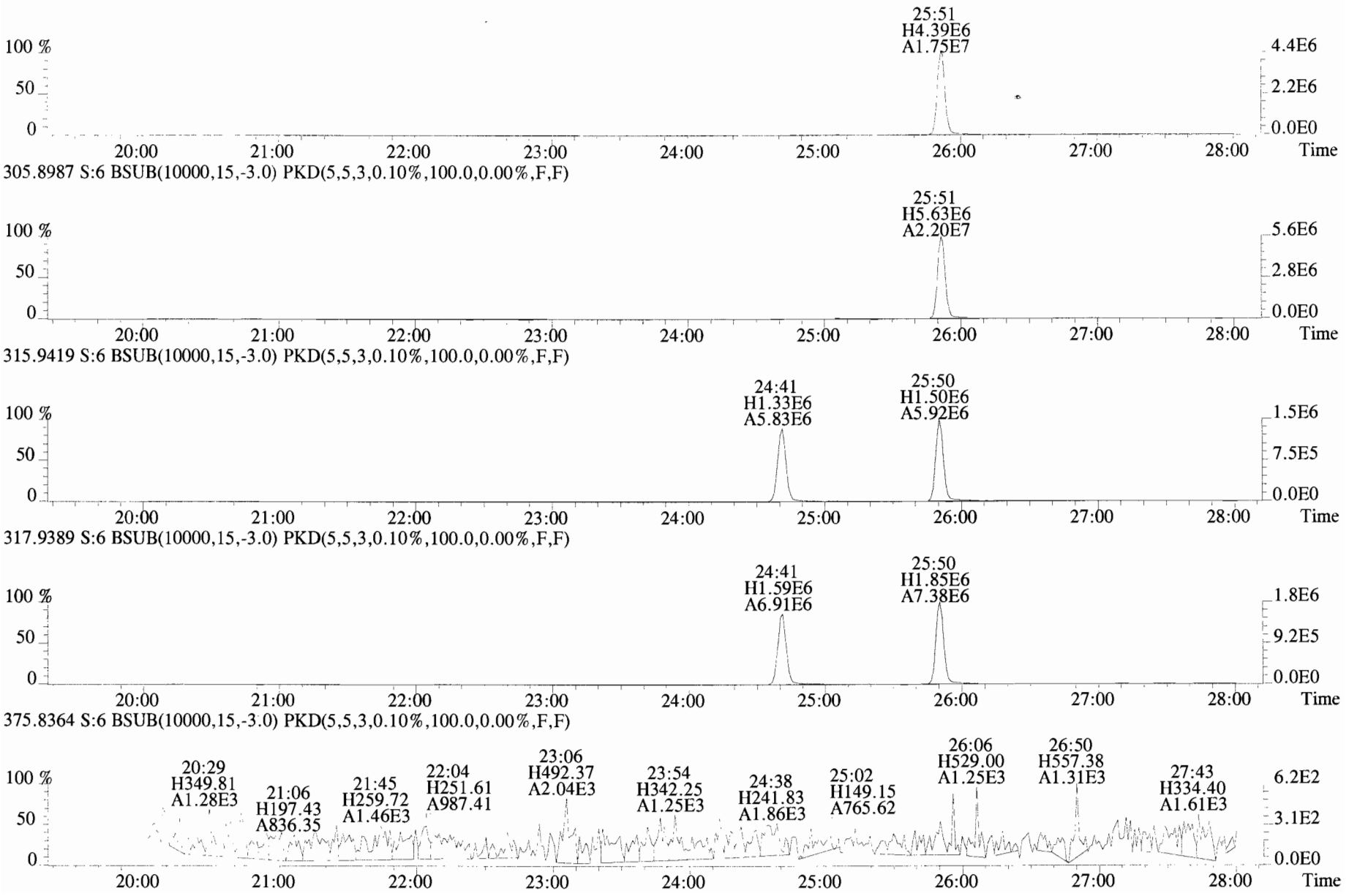
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



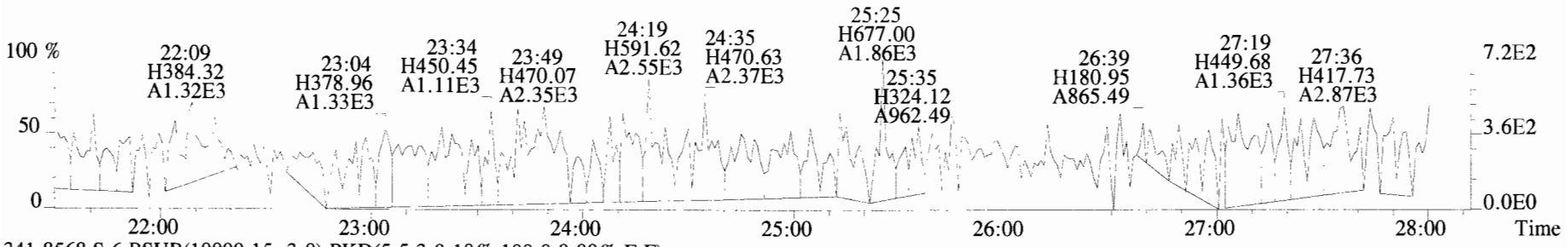
454.9728 S:6 F:5



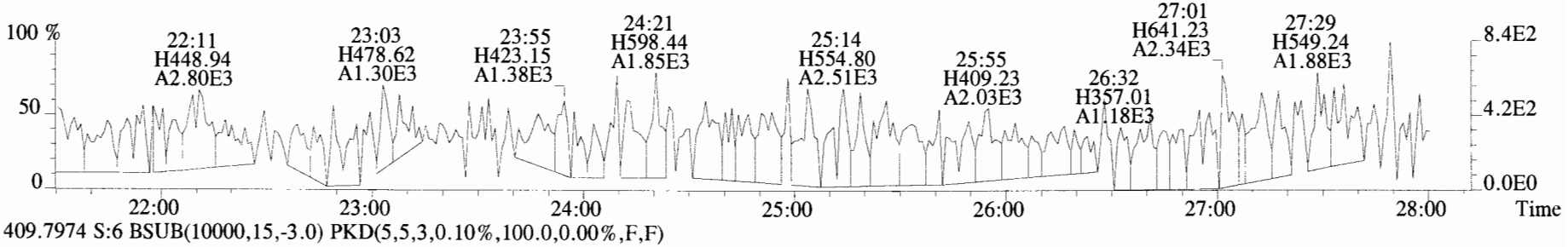
File:191009D1 #1-513 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5



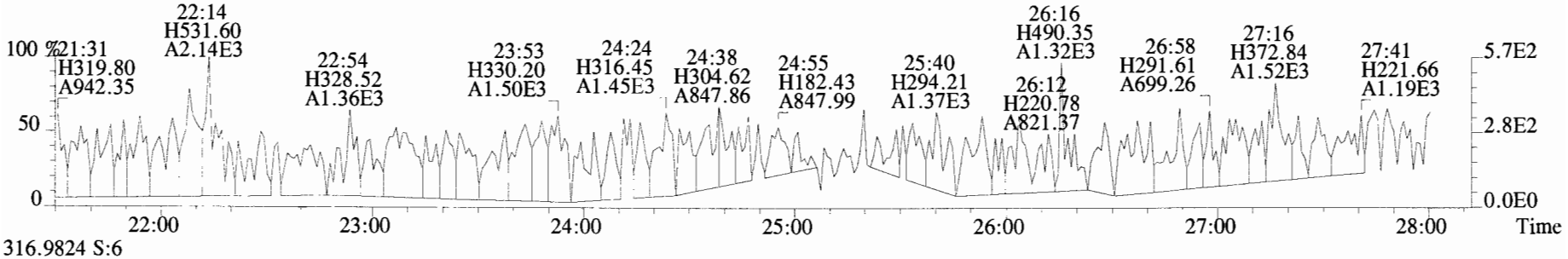
File:191009D1 #1-513 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



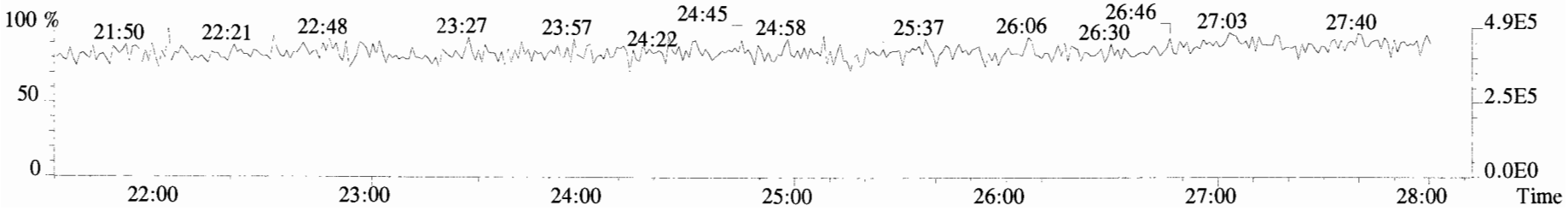
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



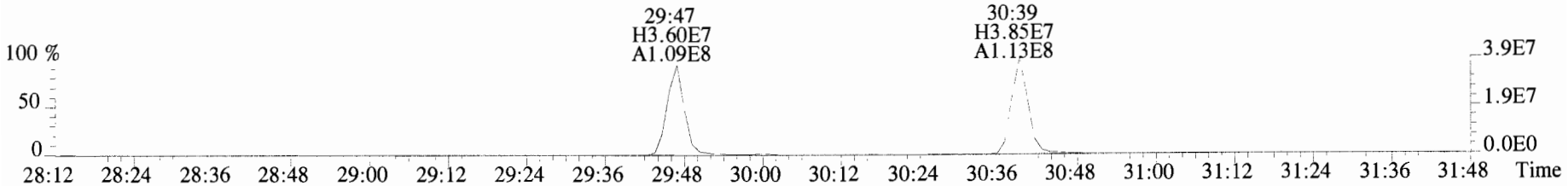
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



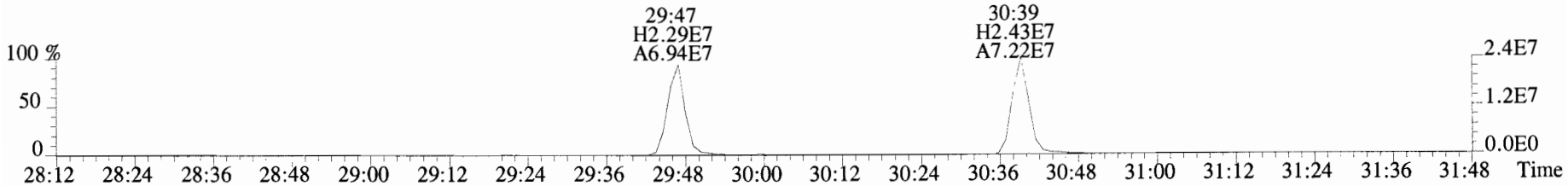
316.9824 S:6



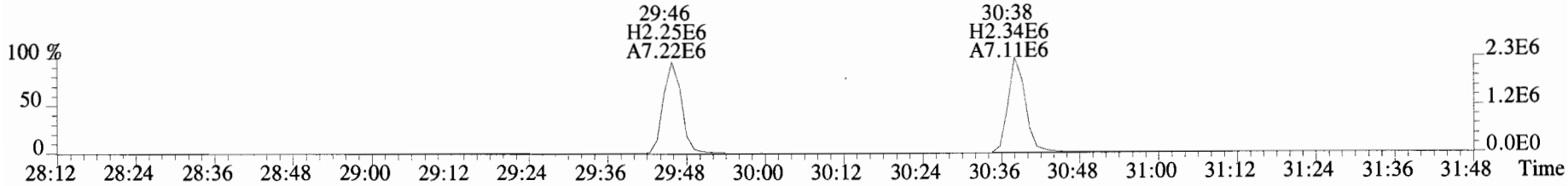
File:191009D1 #1-211 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



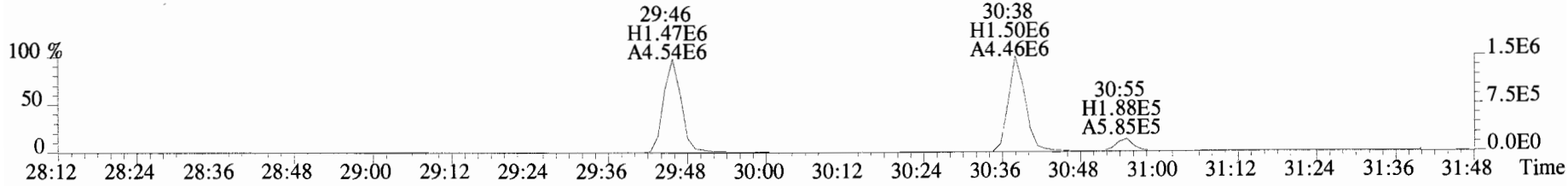
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



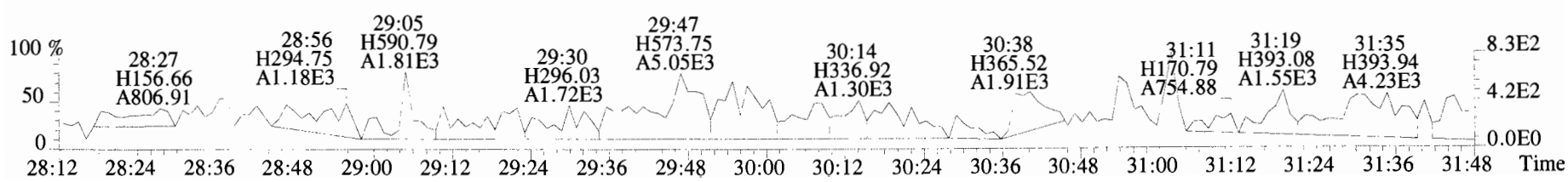
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

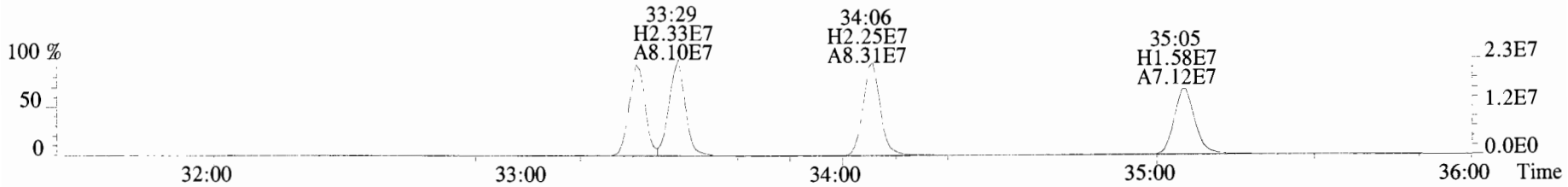


409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

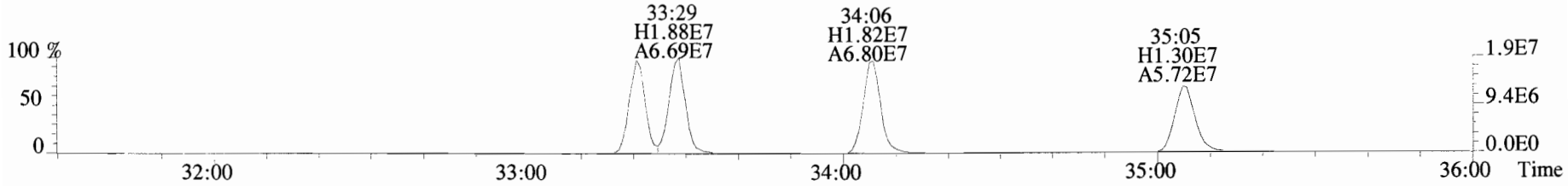


File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5

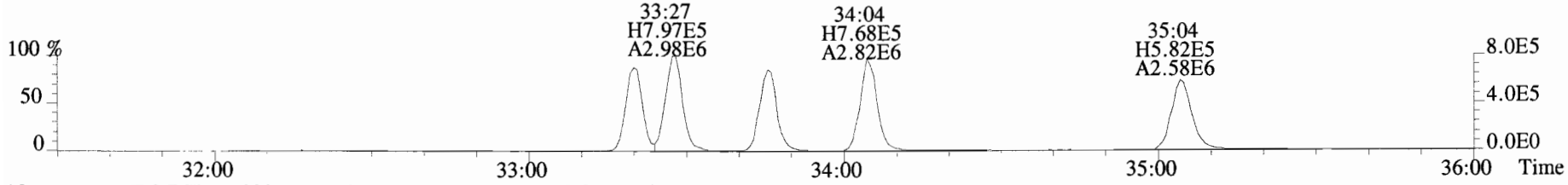
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



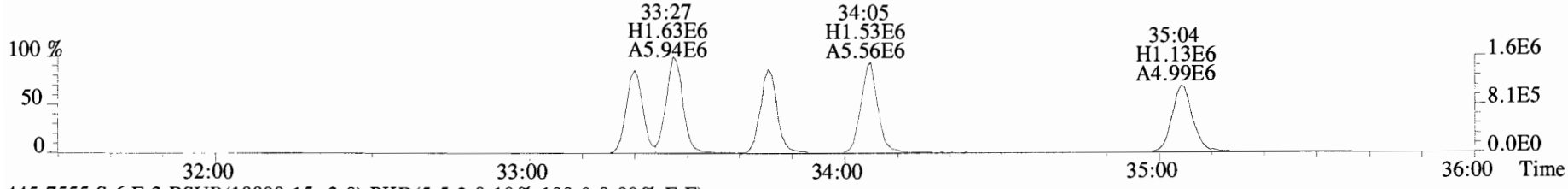
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



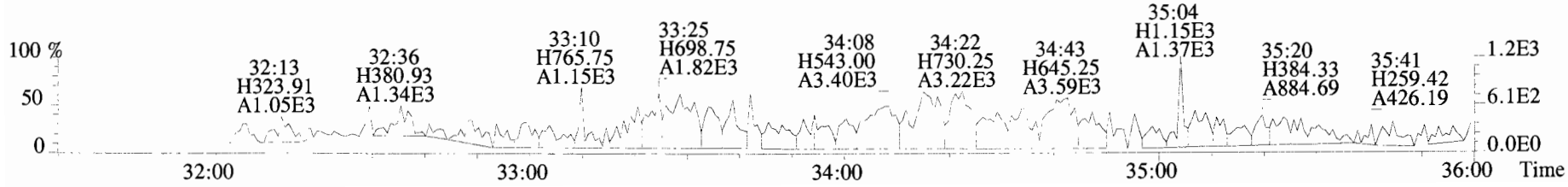
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



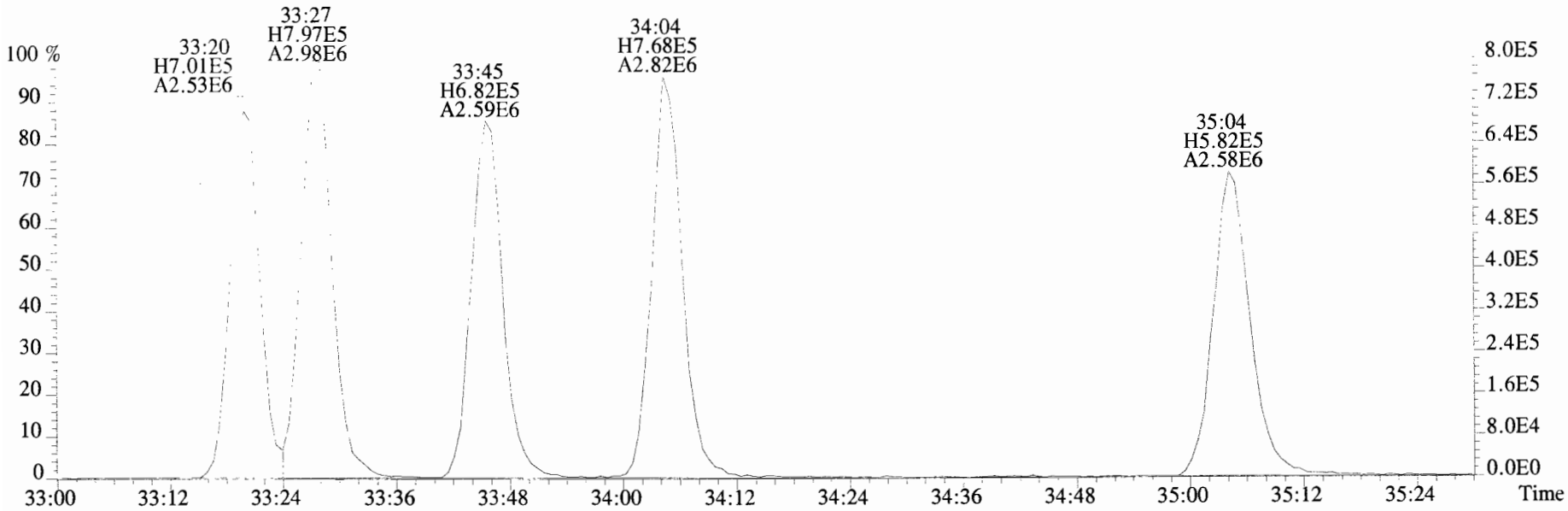
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



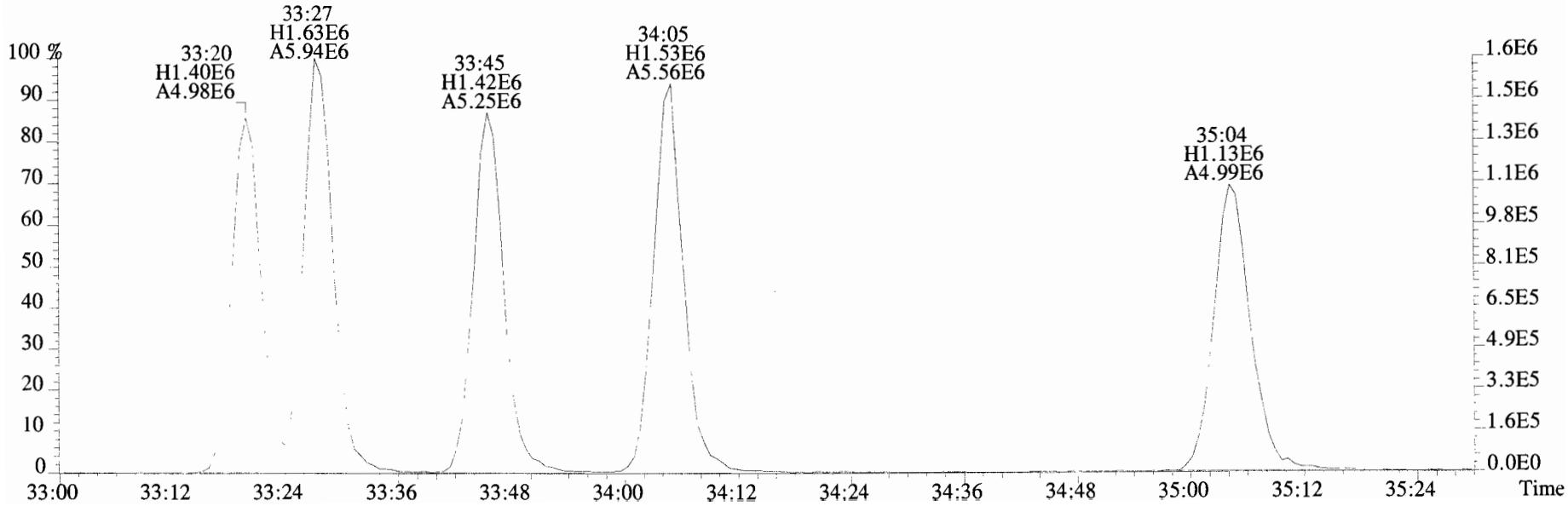
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



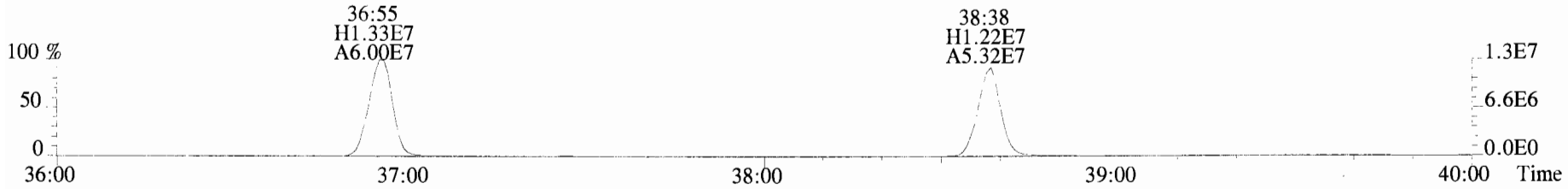
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



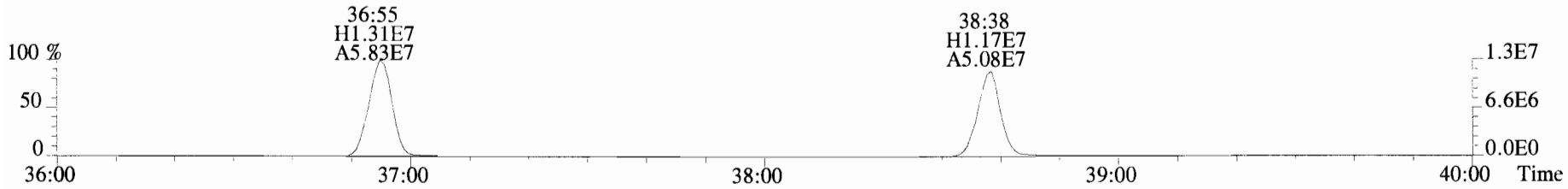
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



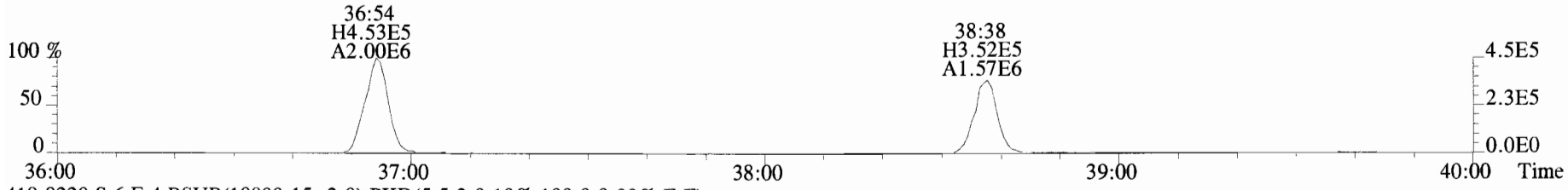
File:191009D1 #1-356 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



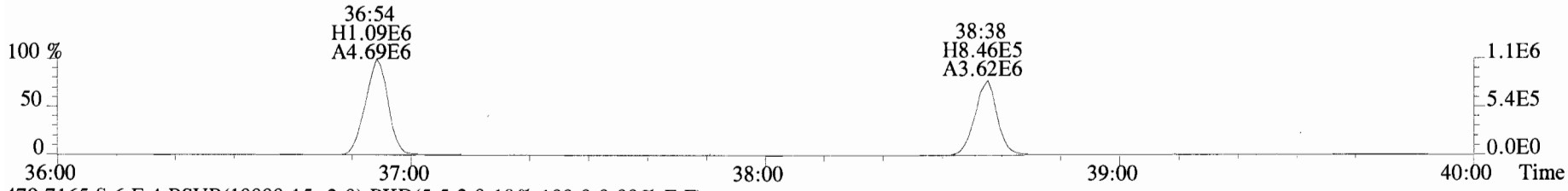
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



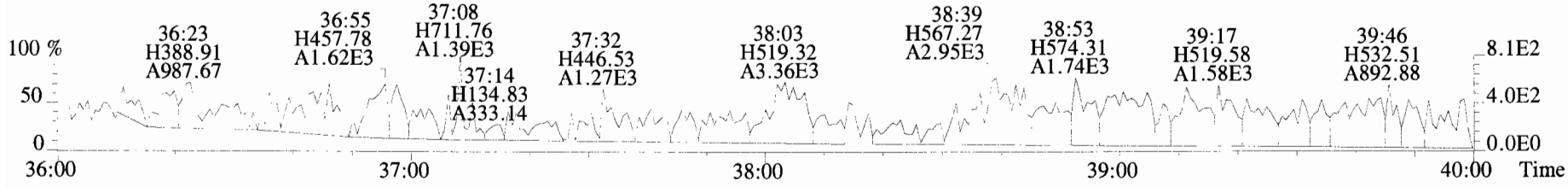
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



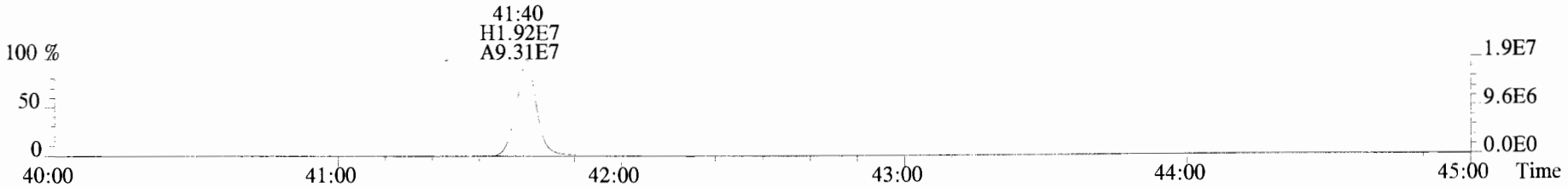
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



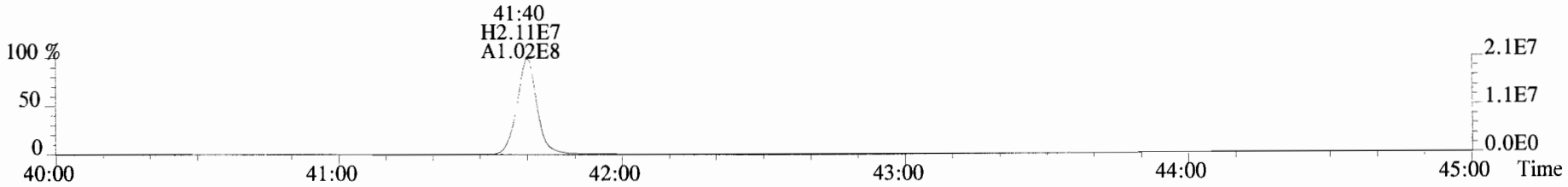
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



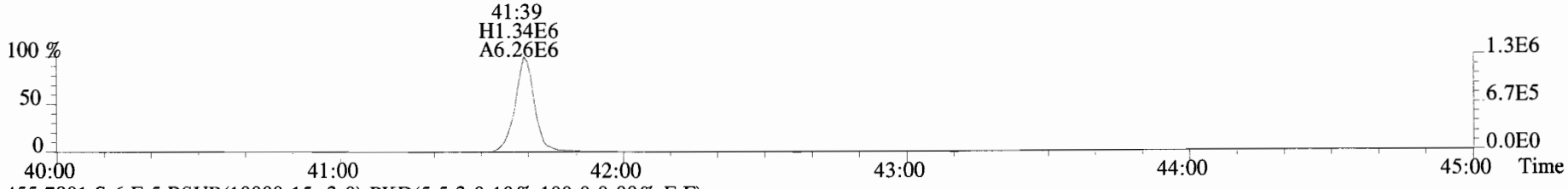
File:191009D1 #1-431 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



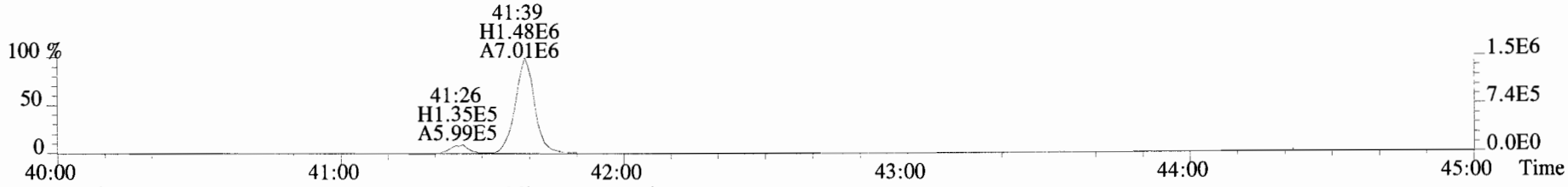
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



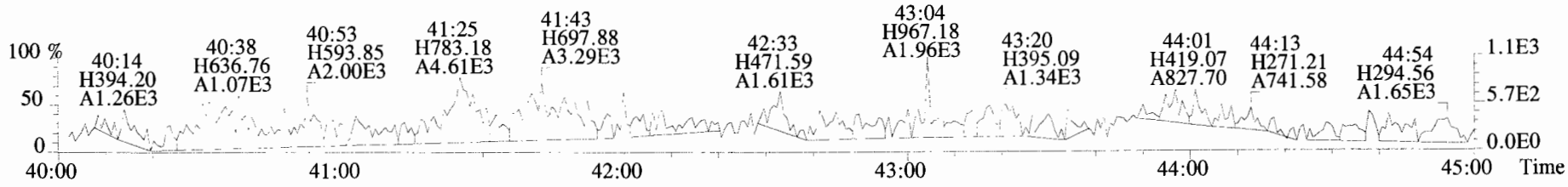
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

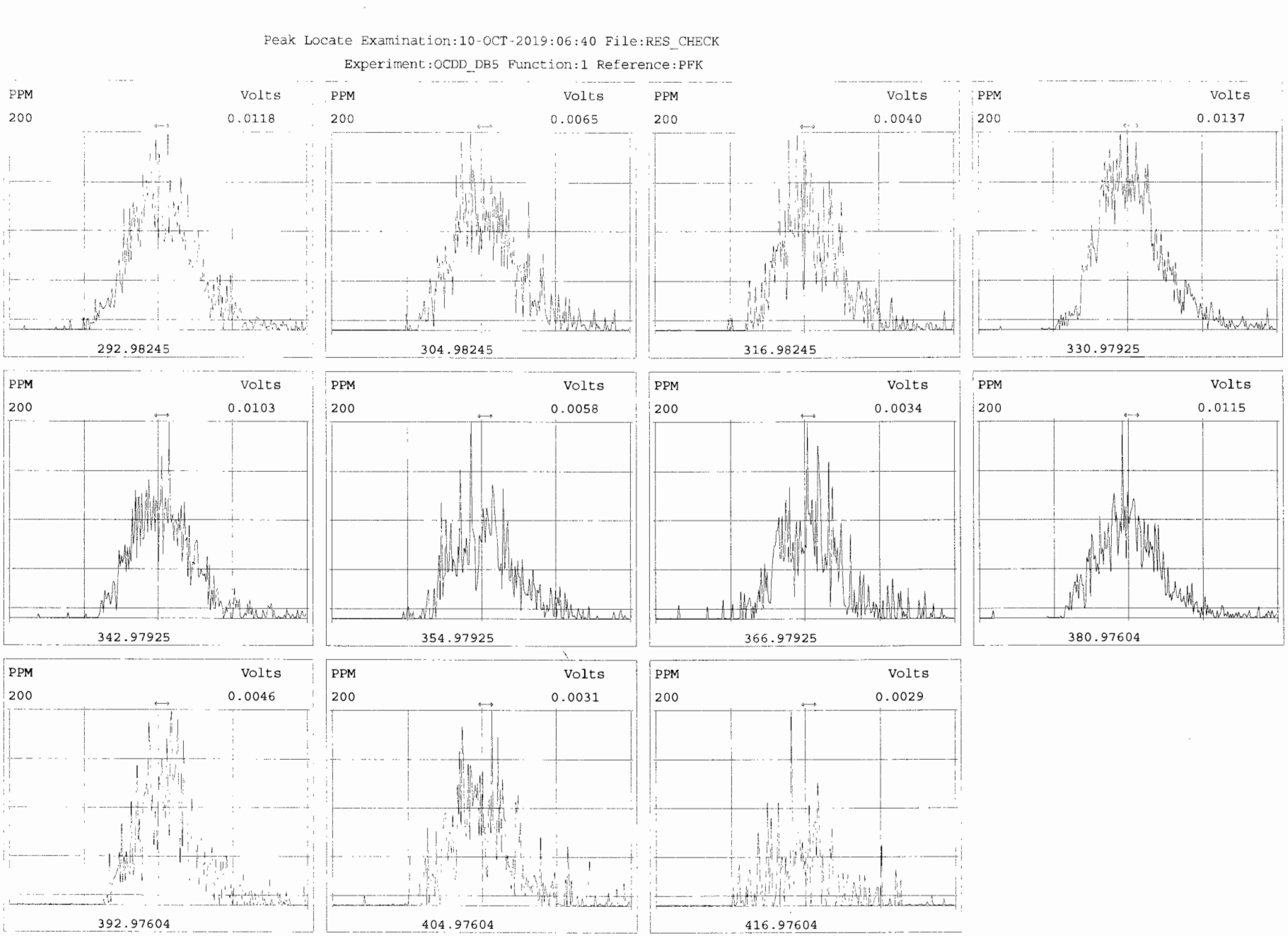


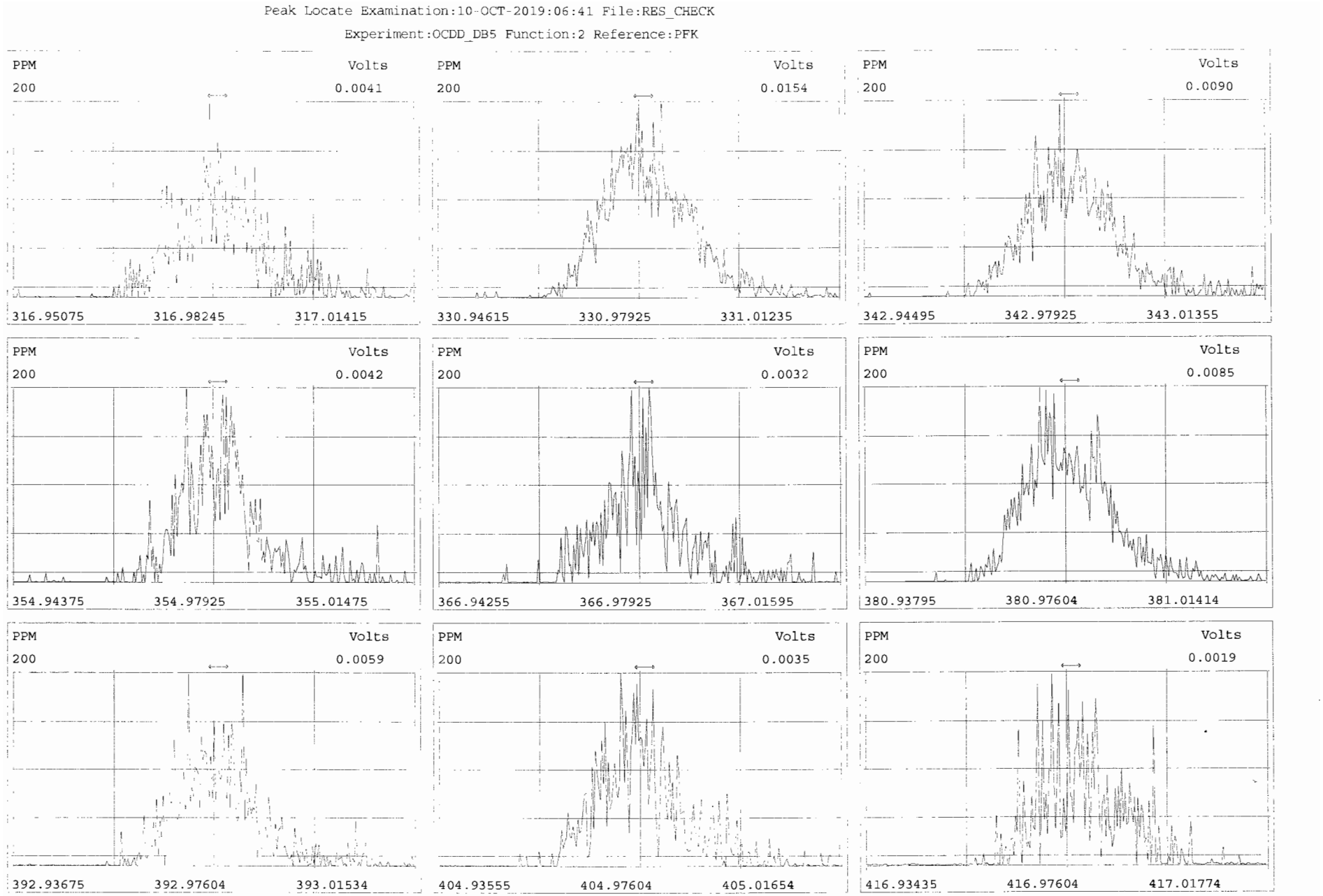
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

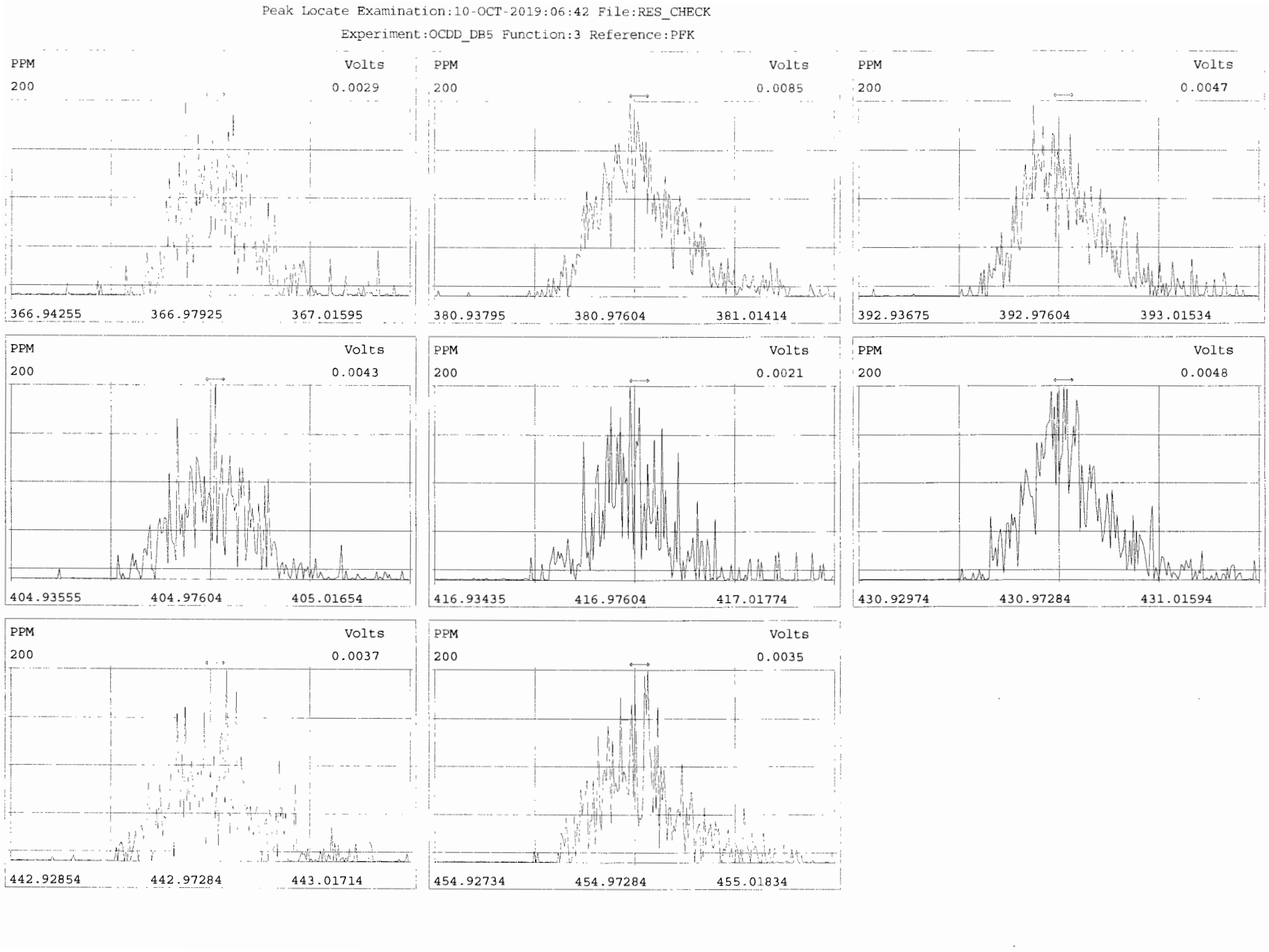


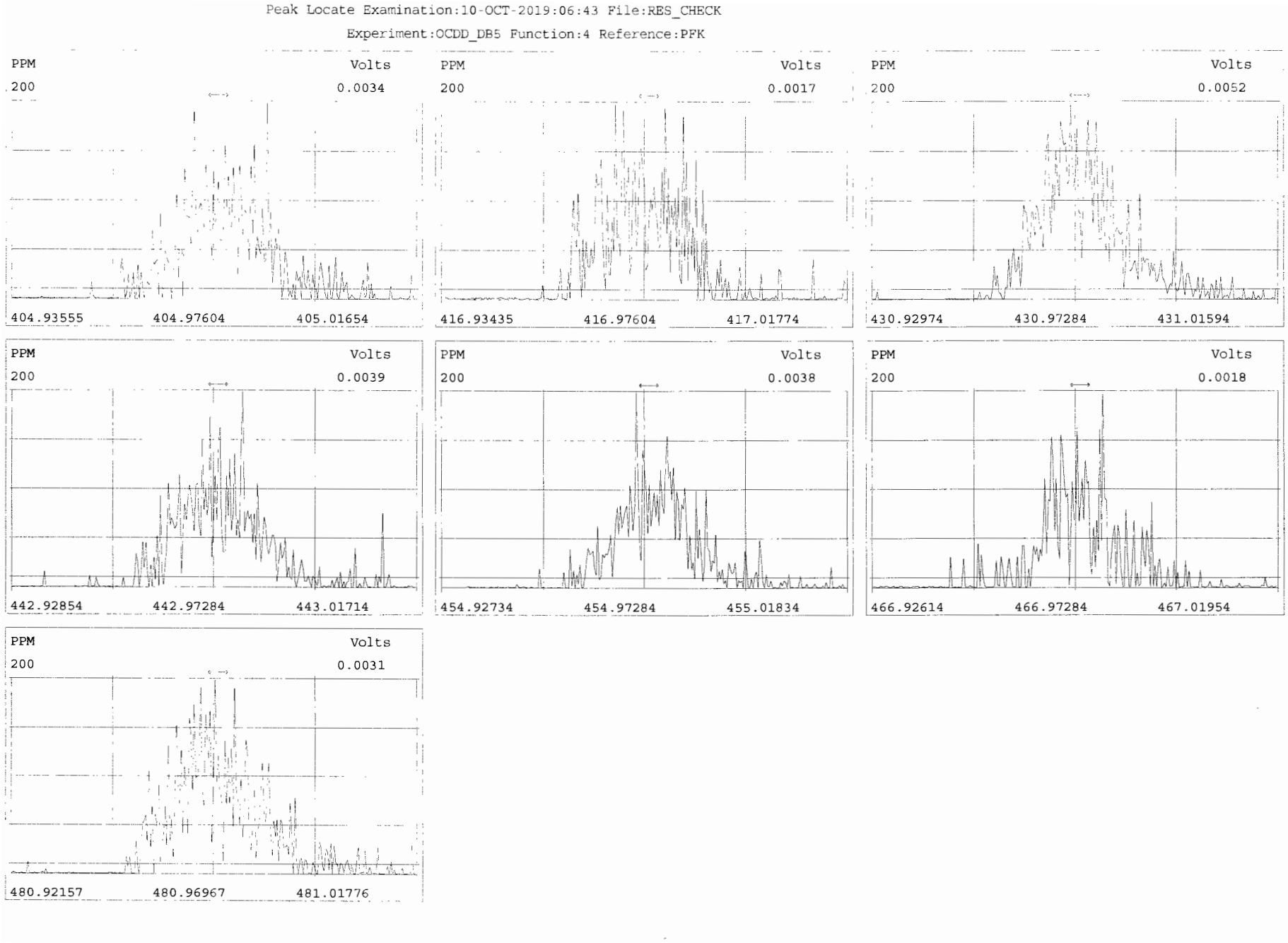
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)




Peak Locate Examination:10-OCT-2019:06:40 File:RES_CHECK
Experiment:OCDD_DB5 Function:1 Reference:PFK
PPM
Volts
200
0.0118
292.98245
PPM
Volts
200
0.0065
304.98245
PPM
Volts
200
0.0040
316.98245
PPM
Volts
200
0.0137
330.97925
PPM
Volts
200
0.0103
342.97925
PPM
Volts
200
0.0058
354.97925
PPM
Volts
200
0.0034
366.97925
PPM
Volts
200
0.0115
380.97604
PPM
Volts
200
0.0046
392.97604
PPM
Volts
200
0.0031
404.97604
PPM
Volts
200
0.0029
416.97604

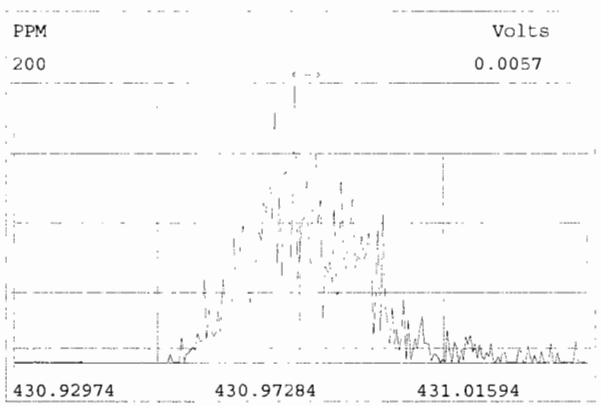

Peak Locate Examination:10-OCT-2019:06:41 File:RES_CHECK
Experiment:OCDD_DB5 Function:2 Reference:PFK
PPM
Volts
200
0.0041
316.95075
316.98245
317.01415
PPM
Volts
200
0.0154
330.94615
330.97925
331.01235
PPM
Volts
200
0.0090
342.94495
342.97925
343.01355
PPM
Volts
200
0.0042
354.94375
354.97925
355.01475
PPM
Volts
200
0.0032
366.94255
366.97925
367.01595
PPM
Volts
200
0.0085
380.93795
380.97604
381.01414
PPM
Volts
200
0.0059
392.93675
392.97604
393.01534
PPM
Volts
200
0.0035
404.93555
404.97604
405.01654
PPM
Volts
200
0.0019
416.93435
416.97604
417.01774

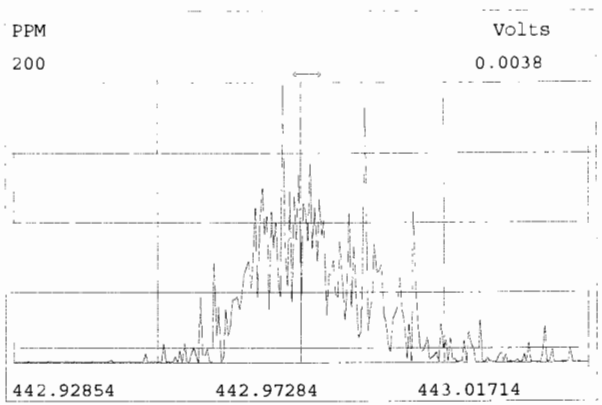

Peak Locate Examination:10-OCT-2019:06:42 File:RES_CHECK
Experiment:OCDD_DB5 Function:3 Reference:PFK
PPM
Volts
200
0.0029
366.94255
366.97925
367.01595
PPM
Volts
200
0.0085
380.93795
380.97604
381.01414
PPM
Volts
200
0.0047
392.93675
392.97604
393.01534
PPM
Volts
200
0.0043
404.93555
404.97604
405.01654
PPM
Volts
200
0.0021
416.93435
416.97604
417.01774
PPM
Volts
200
0.0048
430.92974
430.97284
431.01594
PPM
Volts
200
0.0037
442.92854
442.97284
443.01714
PPM
Volts
200
0.0035
454.92734
454.97284
455.01834

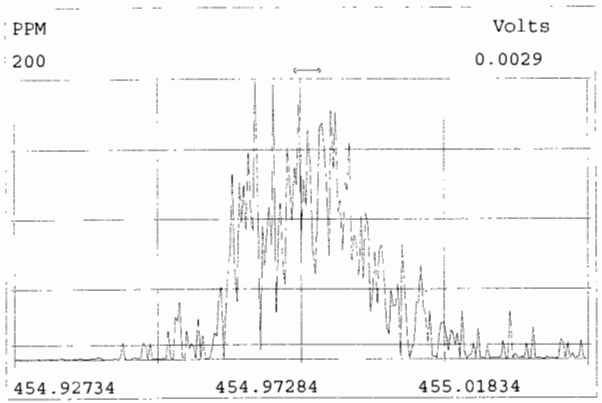

Peak Locate Examination:10-OCT-2019:06:43 File:RES_CHECK
Experiment:OCDD_DB5 Function:4 Reference:PFK
PPM
Volts
200
0.0034
404.93555
404.97604
405.01654
PPM
Volts
200
0.0017
416.93435
416.97604
417.01774
PPM
Volts
200
0.0052
430.92974
430.97284
431.01594
PPM
Volts
200
0.0039
442.92854
442.97284
443.01714
PPM
Volts
200
0.0038
454.92734
454.97284
455.01834
PPM
Volts
200
0.0018
466.92614
466.97284
467.01954
PPM
Volts
200
0.0031
480.92157
480.96967
481.01776

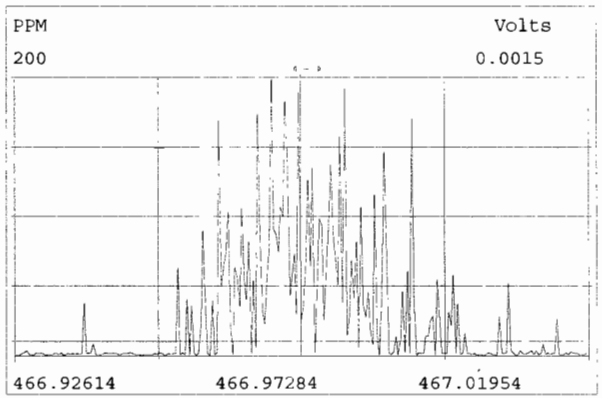
Peak Locate Examination:10-OCT-2019:06:44 File:RES_CHECK

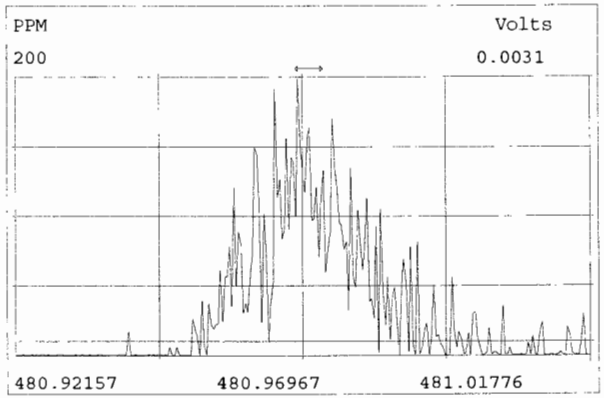
Experiment:OCDD_DB5 Function:5 Reference:PFK

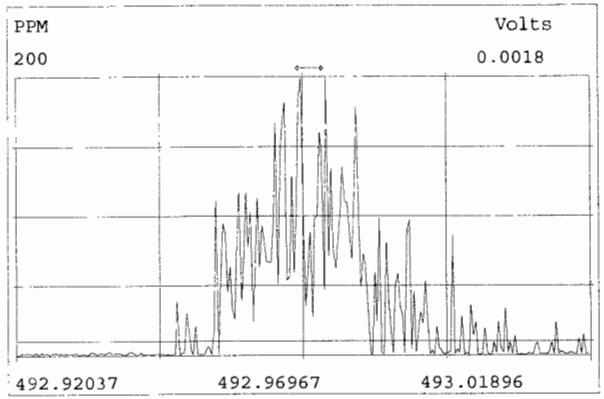


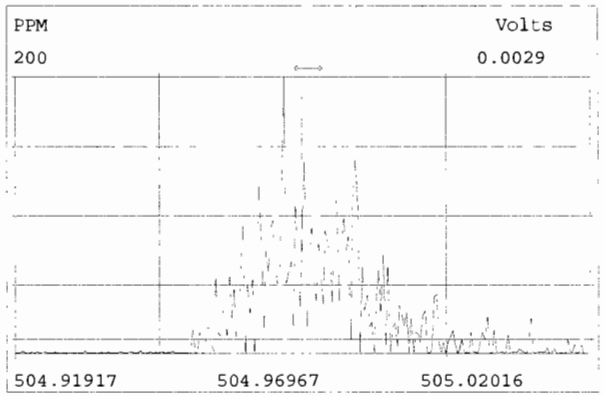


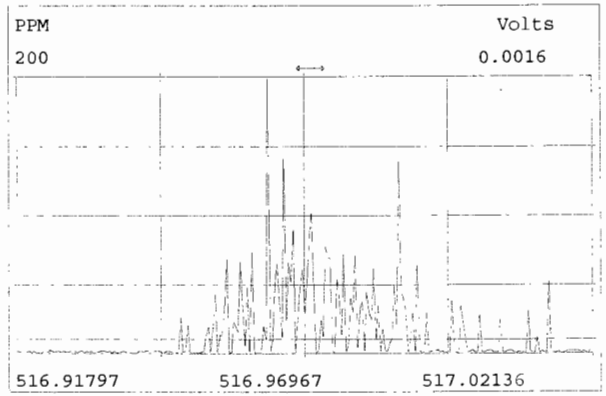












FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: SS191009D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191009D1 S#8 Analysis Date: 9-OCT-19 Time: 21:46:34

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.83	0.65-0.89	y	10.2	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	51.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	48.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.18	1.05-1.43	y	52.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.17	1.05-1.43	y	50.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	51.9	43.0 - 58.0
OCDD	M+2/M+4	0.92	0.76-1.02	y	105	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	10.3	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	50.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	56.7	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	51.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	51.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	51.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.9	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	53.0	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	50.2	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	102	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: DB

Date: 10/10/19

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191009D1 S#8 Analysis Date: 9-OCT-19 Time: 21:46:34

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.72	0.65-0.89	y	100	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	101	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	95.9	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	95.6	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	94.3	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	91.7	72.0 - 138.0
13C-OCDD	M/M+2	0.92	0.76-1.02	y	190	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	97.2	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	97.4	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	96.6	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	102	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	101	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	97.1	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	99.0	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.43	0.37-0.51	y	96.6	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	102	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	197	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.08	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: DB

Date: 10/10/19

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191009D1 S#8 Analysis Date: 9-OCT-19 Time: 21:46:34

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.189	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.994	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.145	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.179	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

Analyst: DB

Date: 10/10/19

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 191009D1 S#8 Analysis Date: 9-OCT-19 Time: 21:46:34

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.001	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.987	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.991	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.010	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.040	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.018	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.027	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.093	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.227	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.235	1.091-1.371

Analyst: DB

Date: 10/10/19

Client ID: 1613 SSS 19C2207 Filename: 191009D1 S:8 Acq: 9-OCT-19 21:46:34 ConCal: ST191009D1-4
Lab ID: SS191009D1-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	8.36e+05	0.83 y	0.91	26:36	10.234			* 2.5	*
	1,2,3,7,8-PeCDD	3.38e+06	0.63 y	0.90	30:57	51.323			* 2.5	*
	1,2,3,4,7,8-HxCDD	2.55e+06	1.31 y	1.10	34:18	48.909			* 2.5	*
	1,2,3,6,7,8-HxCDD	3.09e+06	1.18 y	0.94	34:24	52.378			* 2.5	*
	1,2,3,7,8,9-HxCDD	2.83e+06	1.17 y	0.96	34:44	50.434			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	2.34e+06	1.02 y	0.98	38:07	51.915			* 2.5	*
	OCDD	4.27e+06	0.92 y	0.96	41:30	105.37			* 2.5	*
	2,3,7,8-TCDF	1.24e+06	0.78 y	0.95	25:53	10.342			* 2.5	*
	1,2,3,7,8-PeCDF	5.03e+06	1.54 y	0.96	29:48	50.200			* 2.5	*
	2,3,4,7,8-PeCDF	5.90e+06	1.60 y	1.01	30:42	56.719			* 2.5	*
	1,2,3,4,7,8-HxCDF	3.94e+06	1.22 y	1.18	33:23	51.086			* 2.5	*
	1,2,3,6,7,8-HxCDF	4.44e+06	1.23 y	1.07	33:31	51.491			* 2.5	*
	2,3,4,6,7,8-HxCDF	4.08e+06	1.20 y	1.11	34:08	51.474			* 2.5	*
	1,2,3,7,8,9-HxCDF	3.40e+06	1.24 y	1.06	35:10	50.903			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	3.36e+06	1.05 y	1.13	36:58	53.010			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.94e+06	1.05 y	1.28	38:42	50.216			* 2.5	*
	OCDF	5.04e+06	0.92 y	0.95	41:45	102.23			* 2.5	*
IS	13C-2,3,7,8-TCDD	9.02e+06	0.72 y	1.10	26:35	100.49				
IS	13C-1,2,3,7,8-PeCDD	7.29e+06	0.64 y	0.88	30:56	100.87				
IS	13C-1,2,3,4,7,8-HxCDD	4.73e+06	1.23 y	0.64	34:16	95.948				
IS	13C-1,2,3,6,7,8-HxCDD	6.28e+06	1.25 y	0.86	34:24	95.558				
IS	13C-1,2,3,7,8,9-HxCDD	5.85e+06	1.26 y	0.81	34:43	94.306				
IS	13C-1,2,3,4,6,7,8-HpCDD	4.61e+06	1.06 y	0.65	38:06	91.680				
IS	13C-OCDD	8.45e+06	0.92 y	0.58	41:29	189.68				
IS	13C-2,3,7,8-TCDF	1.26e+07	0.78 y	1.03	25:52	97.199				
IS	13C-1,2,3,7,8-PeCDF	1.04e+07	1.62 y	0.85	29:48	97.425				
IS	13C-2,3,4,7,8-PeCDF	1.03e+07	1.59 y	0.85	30:41	96.649				
IS	13C-1,2,3,4,7,8-HxCDF	6.55e+06	0.51 y	0.83	33:22	102.43				
IS	13C-1,2,3,6,7,8-HxCDF	8.06e+06	0.51 y	1.03	33:30	101.42				
IS	13C-2,3,4,6,7,8-HxCDF	7.11e+06	0.51 y	0.95	34:08	97.073				
IS	13C-1,2,3,7,8,9-HxCDF	6.30e+06	0.51 y	0.83	35:09	98.999				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.62e+06	0.43 y	0.76	36:57	96.588				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.58e+06	0.44 y	0.58	38:42	102.46				
IS	13C-OCDF	1.04e+07	0.88 y	0.69	41:44	196.65				
C/Up	37Cl-2,3,7,8-TCDD	8.91e+05		1.20	26:36	9.0817				
RS/RT	13C-1,2,3,4-TCDD	8.20e+06	0.76 y	1.00	26:01	100.00				
RS	13C-1,2,3,4-TCDF	1.25e+07	0.82 y	1.00	24:42	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	7.68e+06	0.50 y	1.00	33:48	100.00				

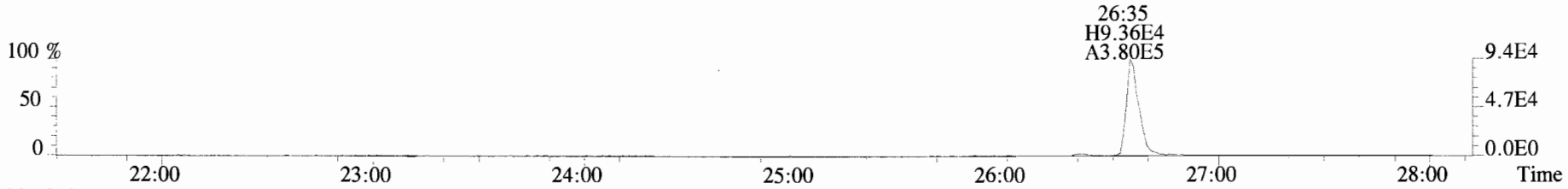
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.4	11.4		*	*
Total Penta-Dioxins	51.4	51.7		*	*
Total Hexa-Dioxins	153	153		*	*
Total Hepta-Dioxins	53.5	54.4		*	*
Total Tetra-Furans	10.7	11.4		*	*
Total Penta-Furans	110.38	111.73		*	*
Total Hexa-Furans	205	207		*	*
Total Hepta-Furans	104	106		*	*

	Rec	Qual
IS	100	
IS	101	
IS	95.9	
IS	95.6	
IS	94.3	
IS	91.7	
IS	94.8	
IS	97.2	
IS	97.4	
IS	96.6	
IS	102	
IS	101	
IS	97.1	
IS	99.0	
IS	96.6	
IS	102	
IS	98.3	
C/Up	90.8	

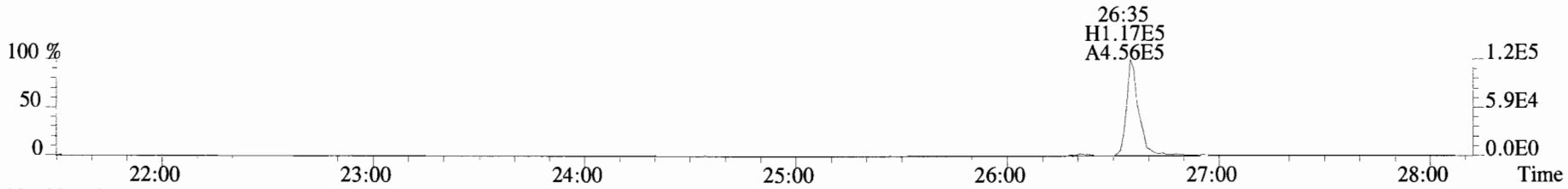
Integrations by Analyst: DB Date: 10/10/19

Reviewed by Analyst: CT Date: 10/10/19

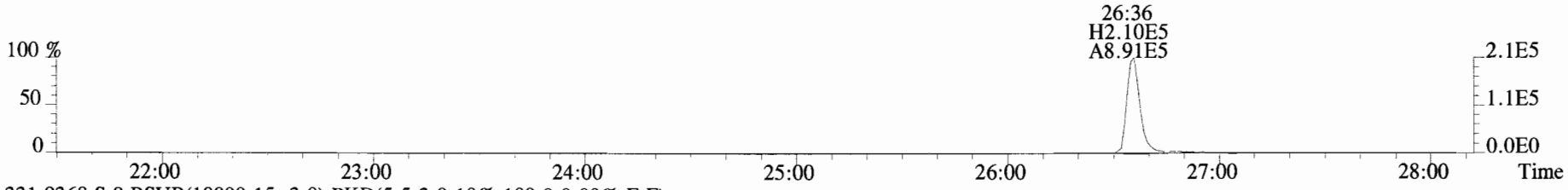
File:191009D1 #1-514 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



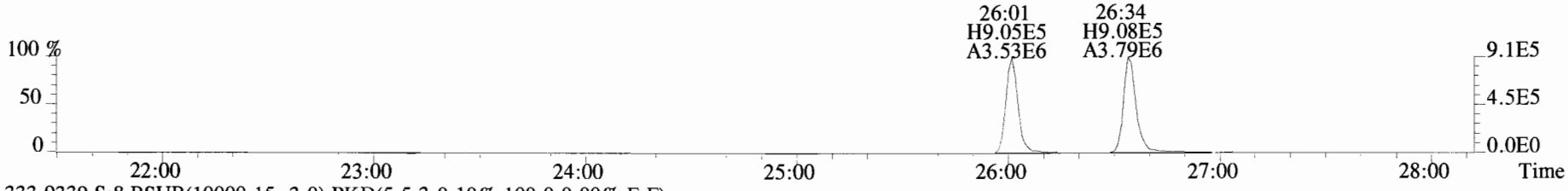
321.8936 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



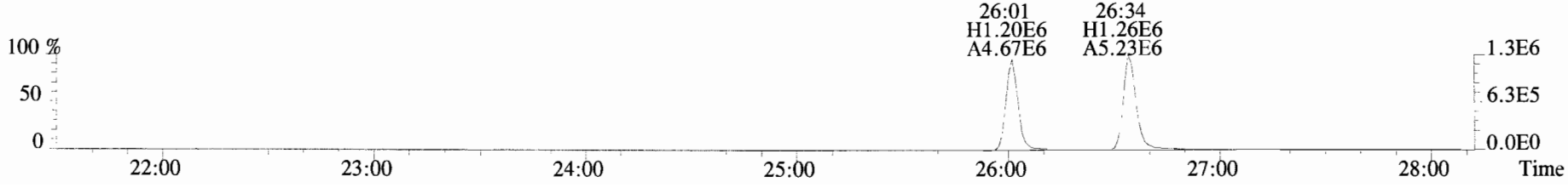
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



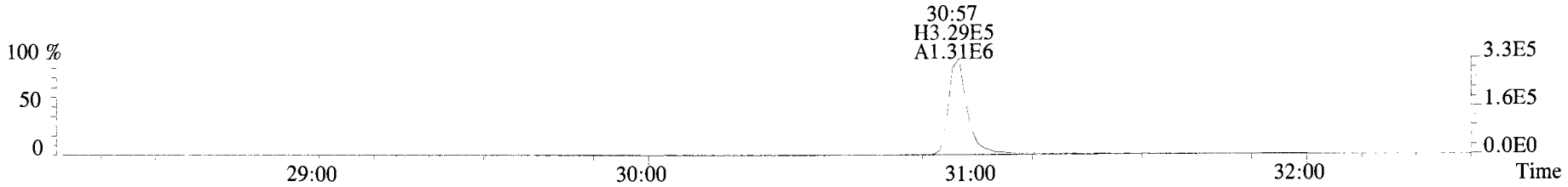
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



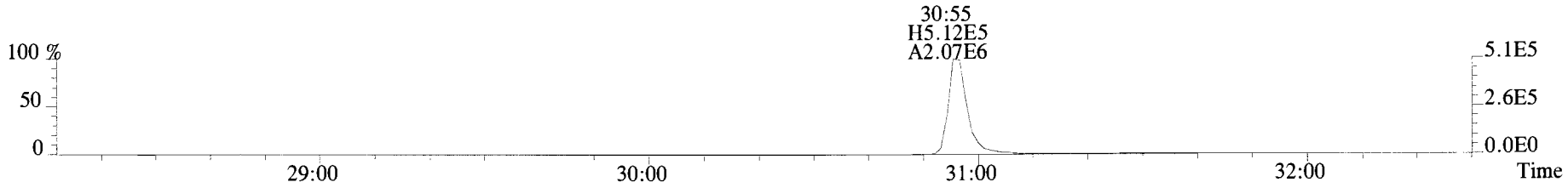
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



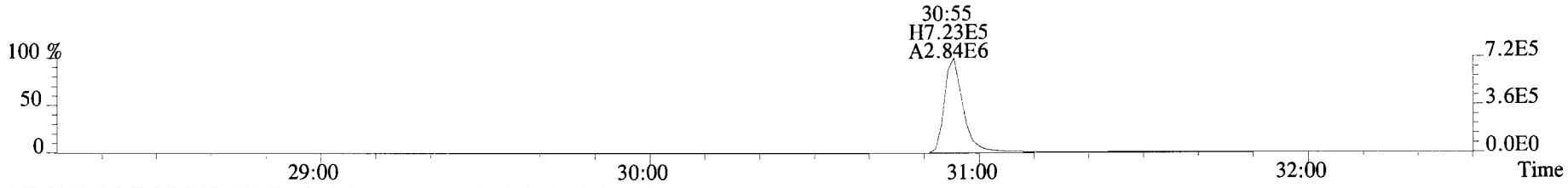
File:191009D1 #1-210 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
353.8576 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



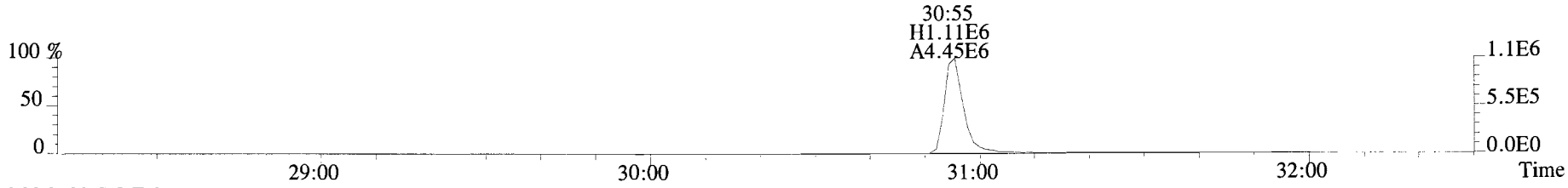
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



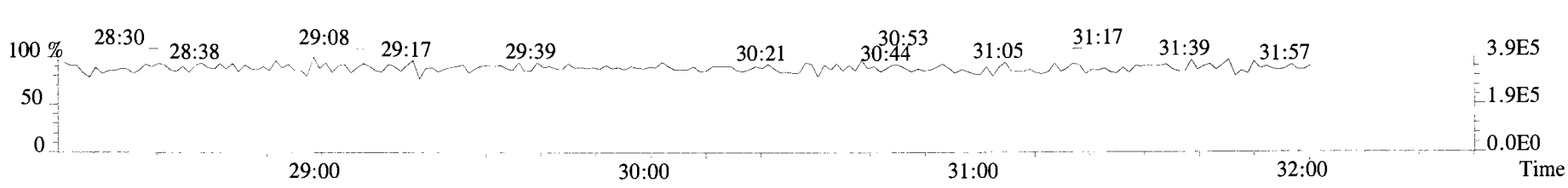
365.8978 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



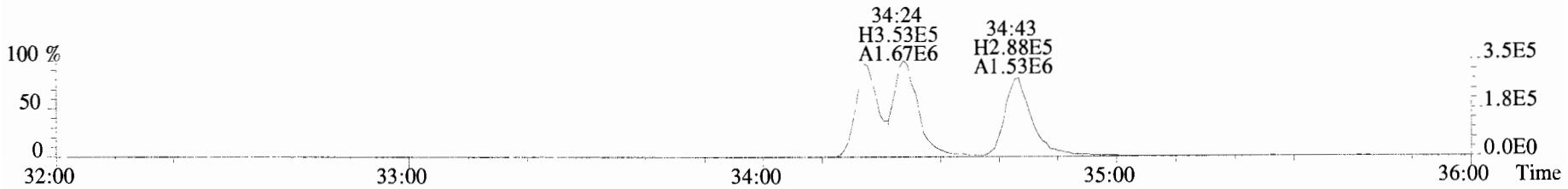
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



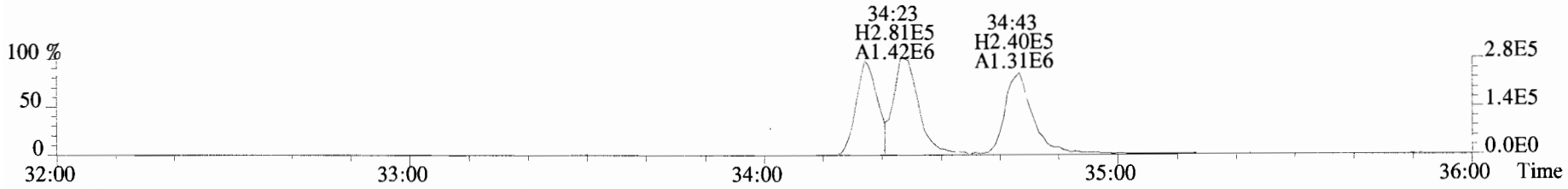
366.9792 S:8 F:2



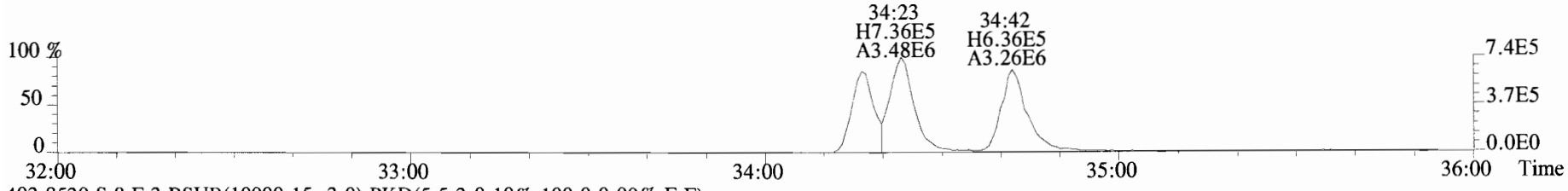
File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



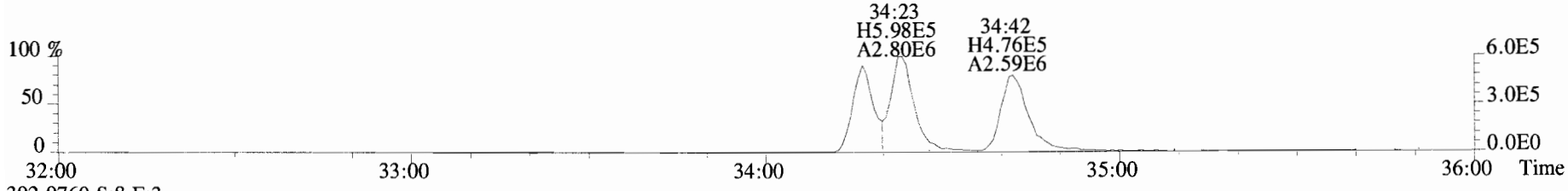
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



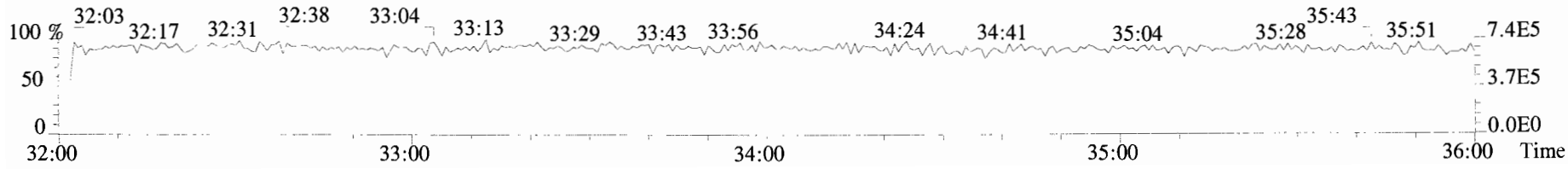
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



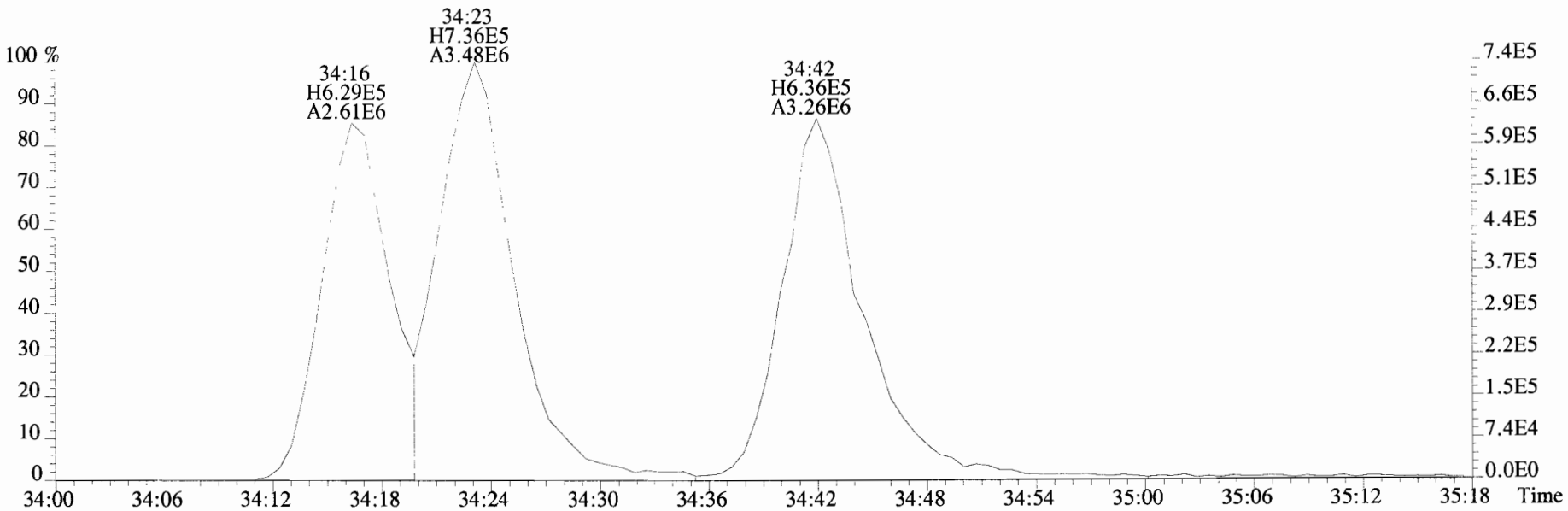
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



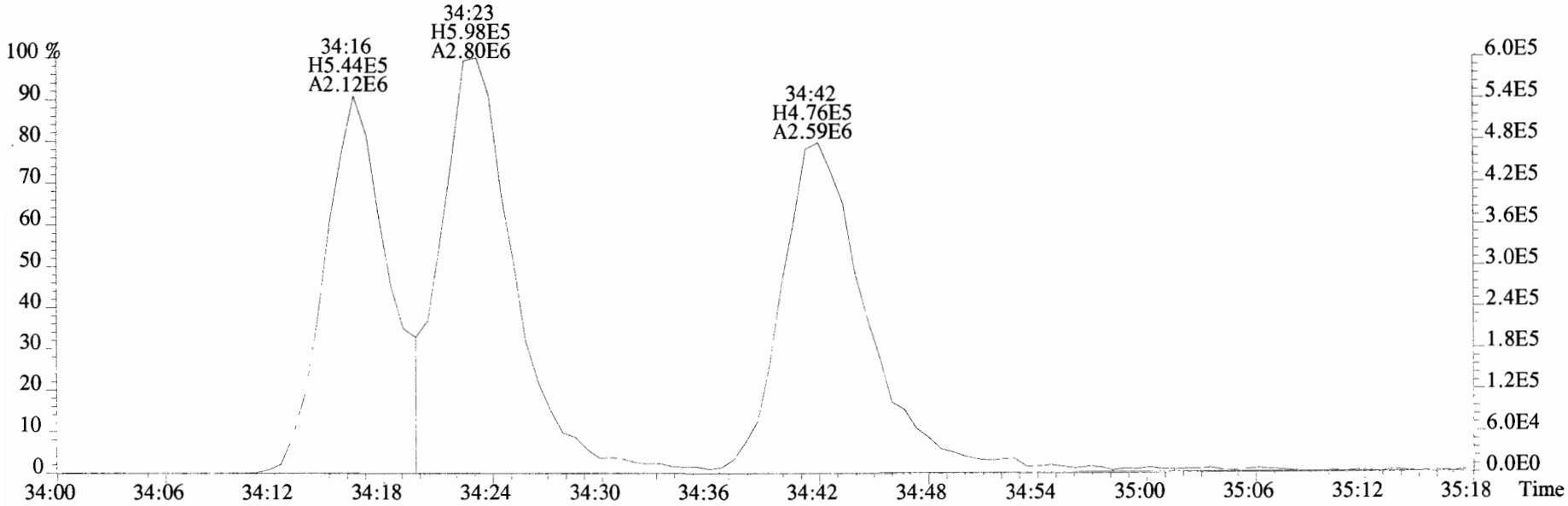
392.9760 S:8 F:3



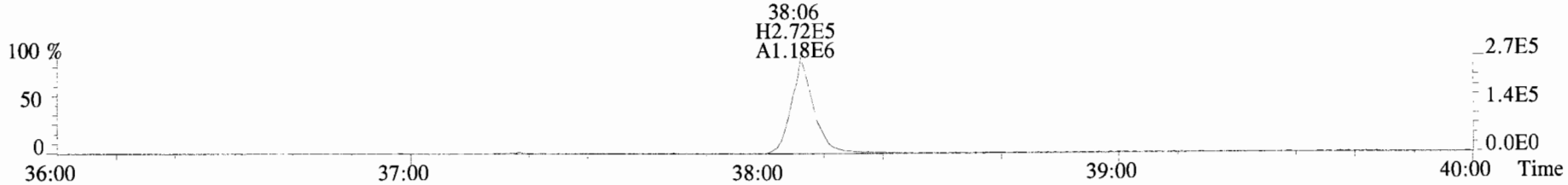
File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



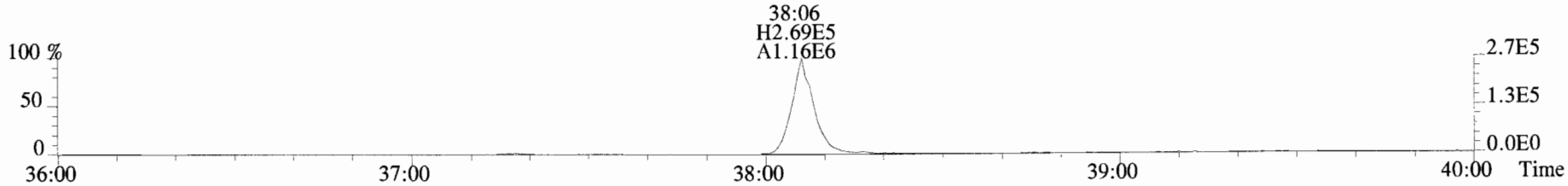
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



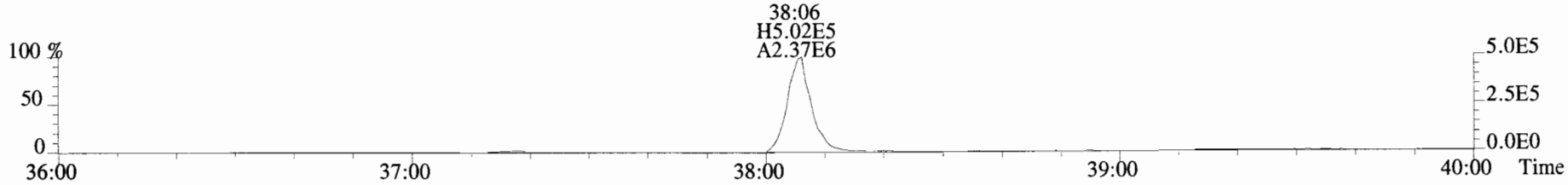
File:191009D1 #1-356 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



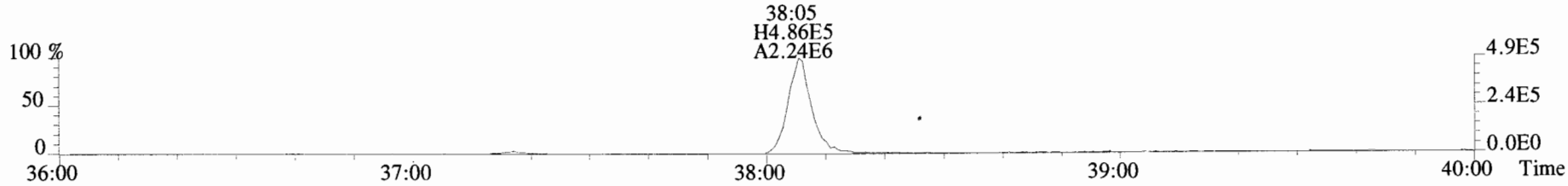
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



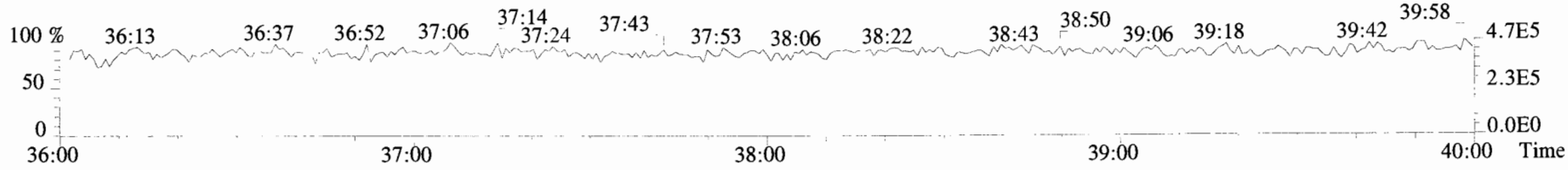
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



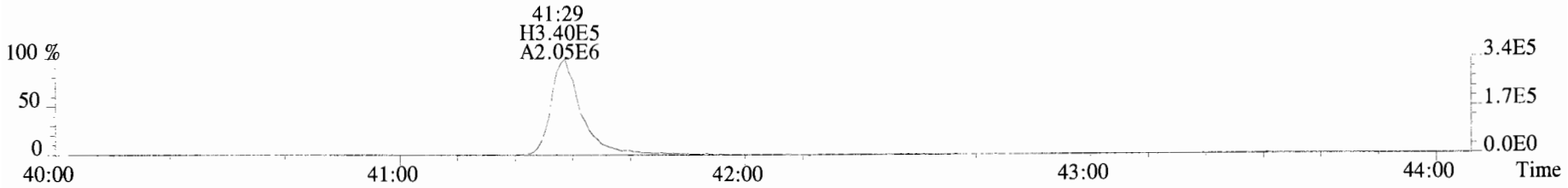
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



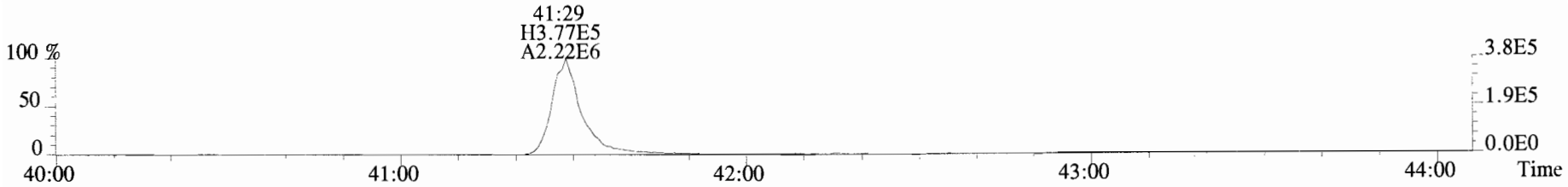
454.9728 S:8 F:4



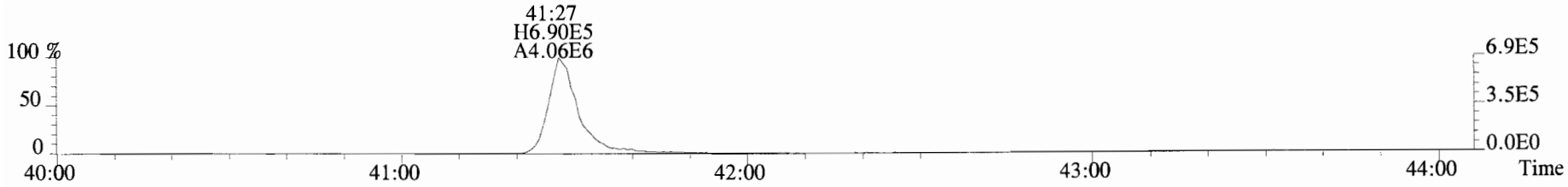
File:191009D1 #1-431 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



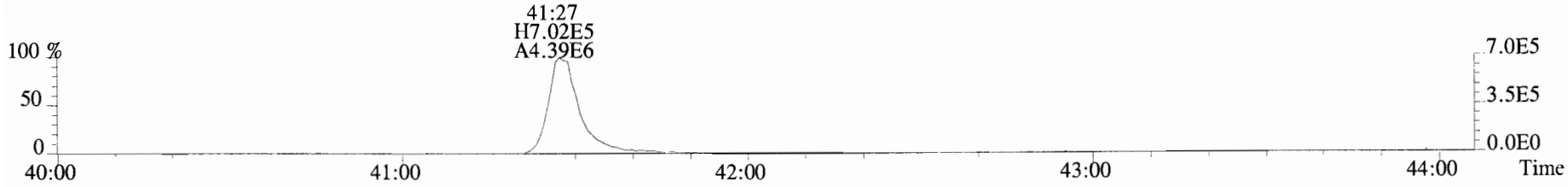
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



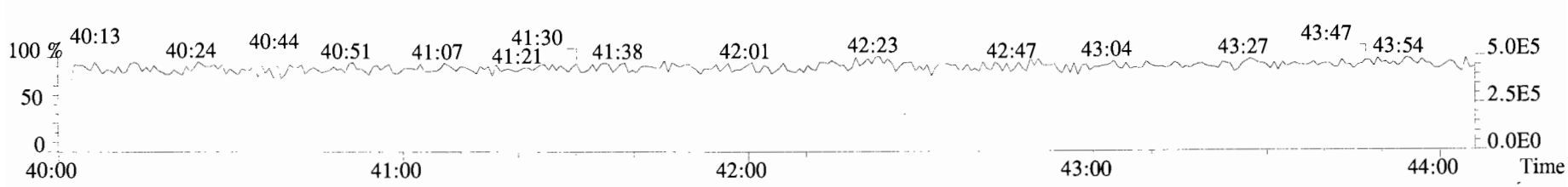
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



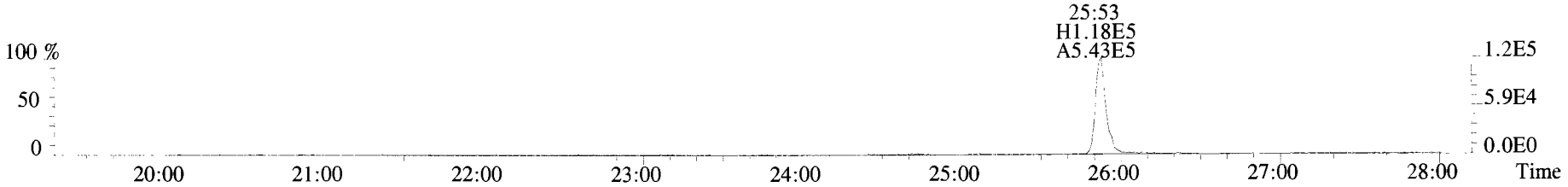
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



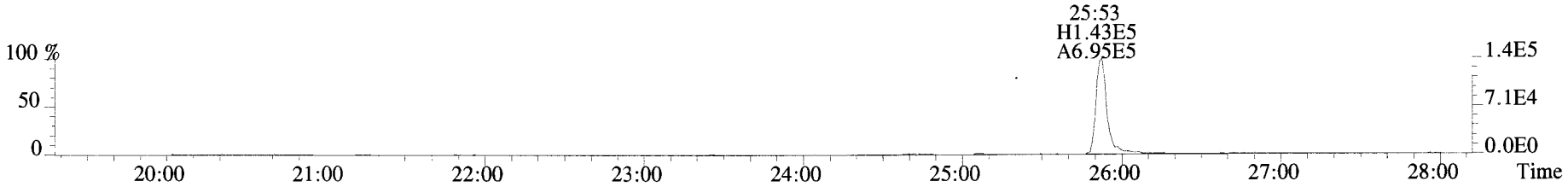
454.9728 S:8 F:5



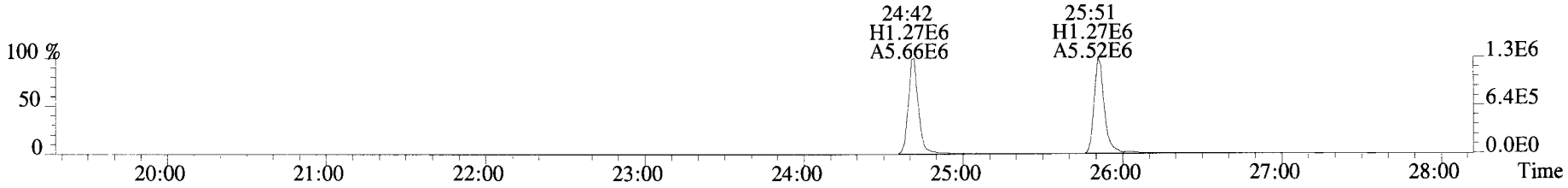
File:191009D1 #1-514 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



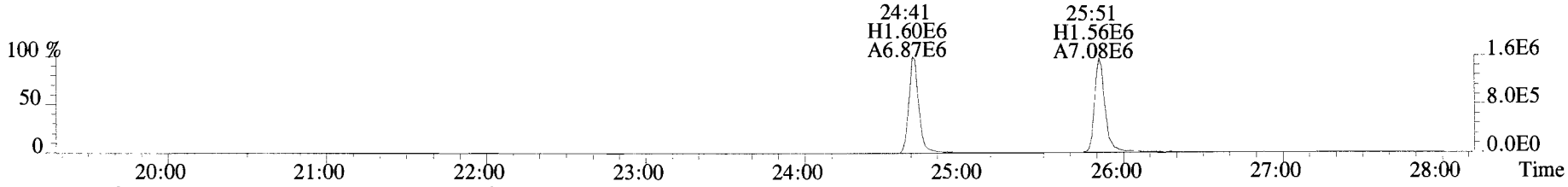
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



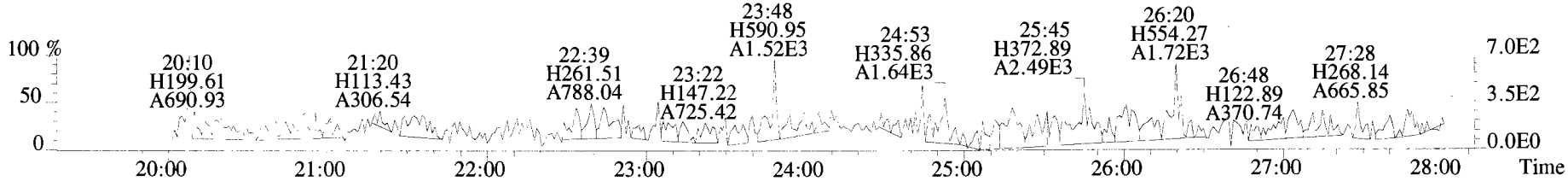
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



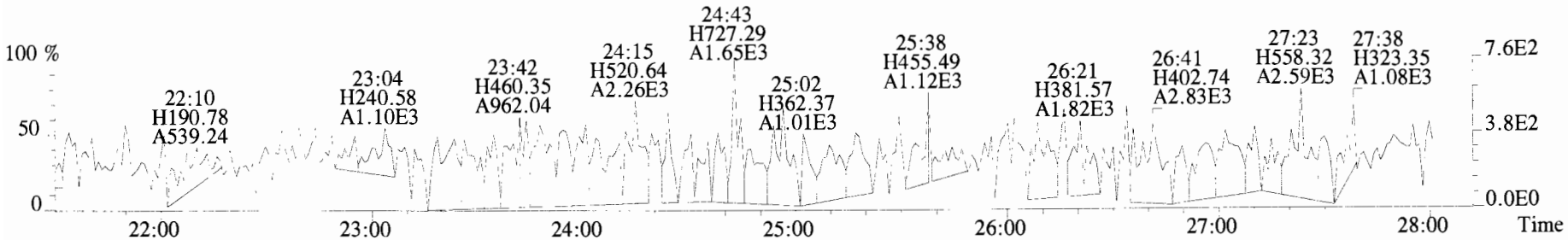
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



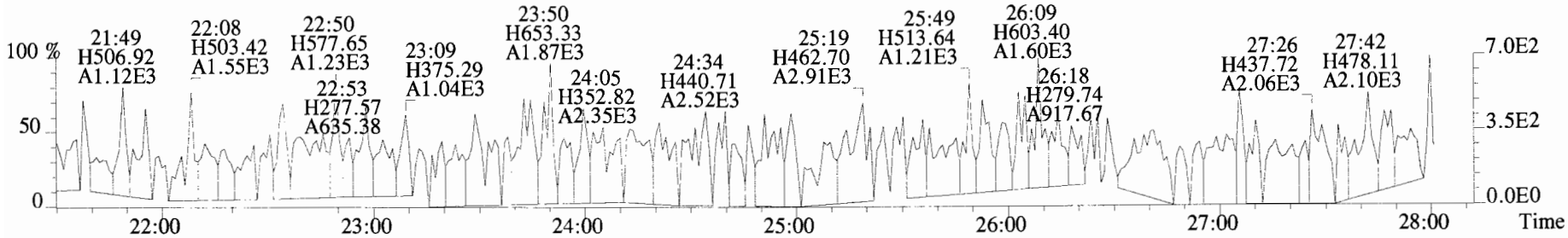
375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



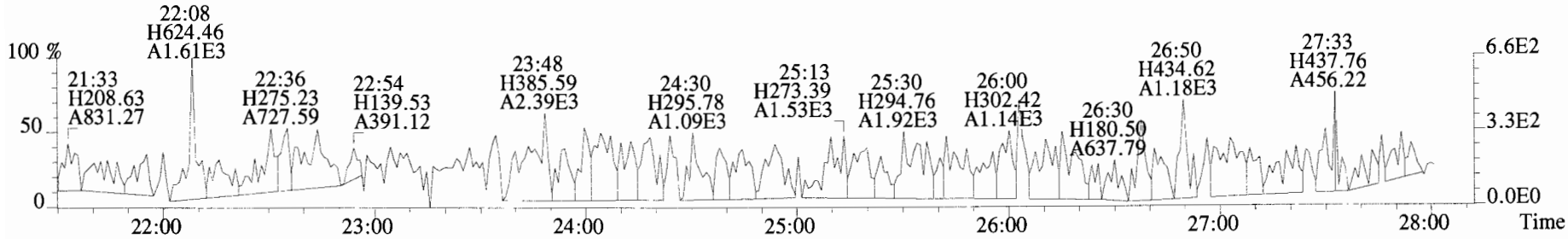
File:191009D1 #1-514 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



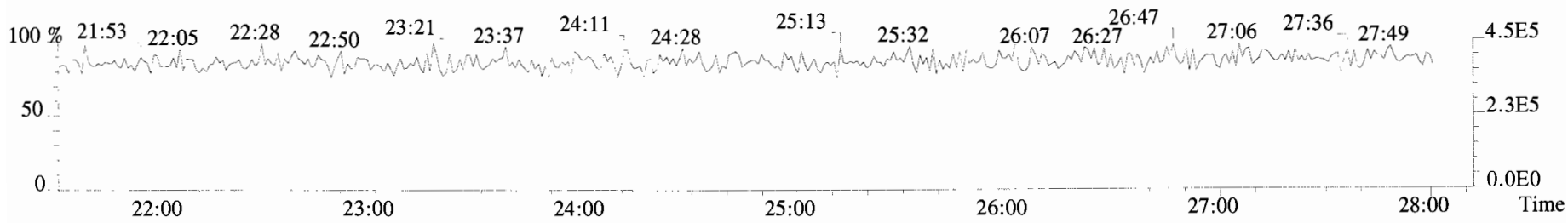
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



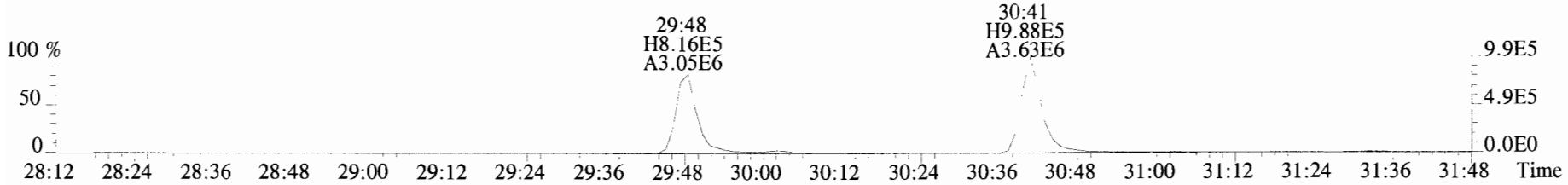
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



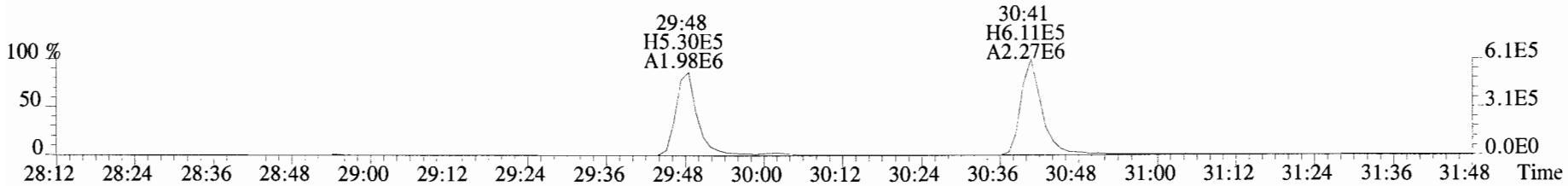
316.9824 S:8



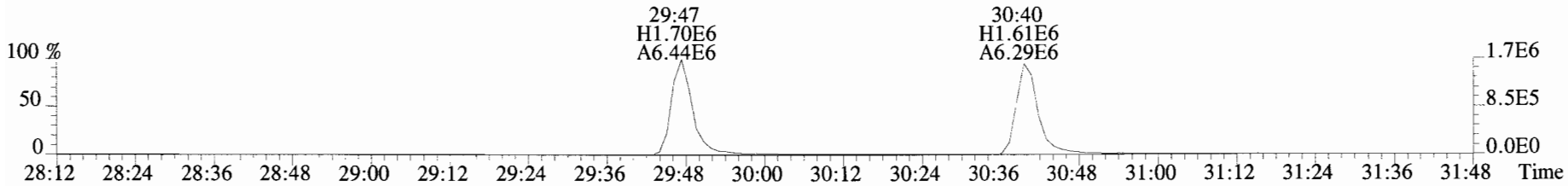
File:191009D1 #1-210 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



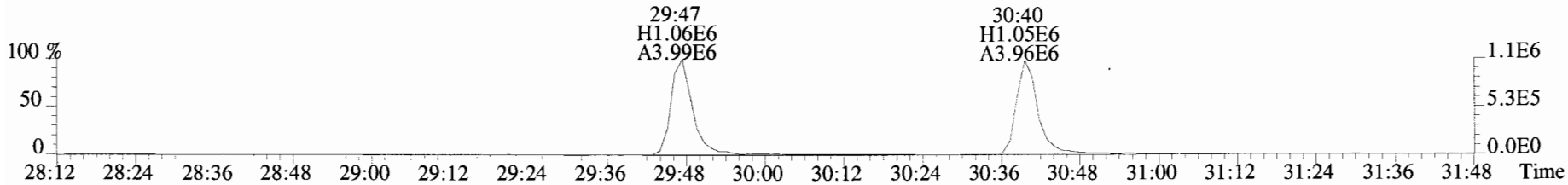
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



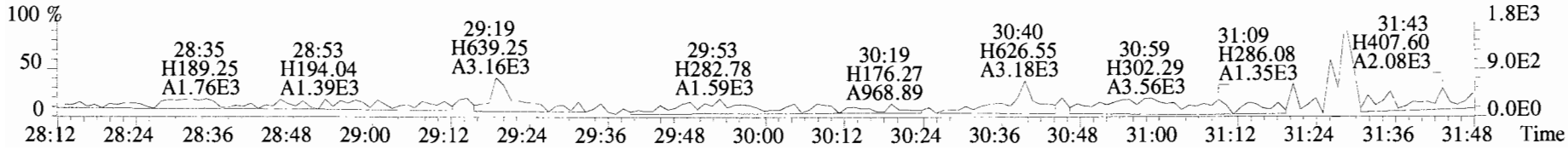
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

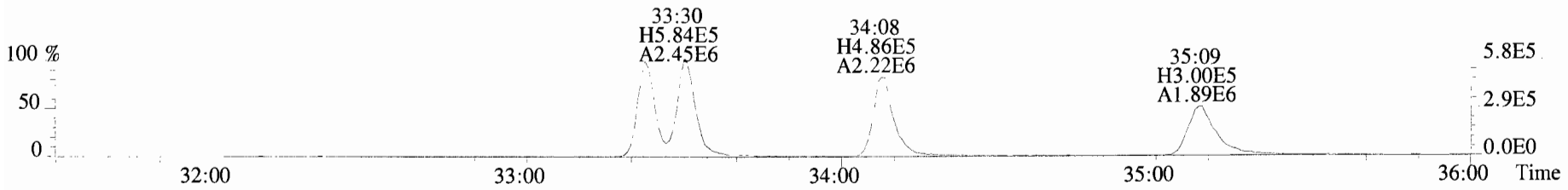


409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

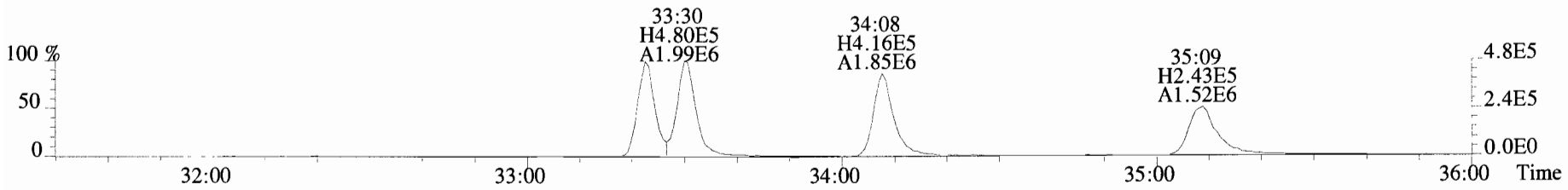


File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5

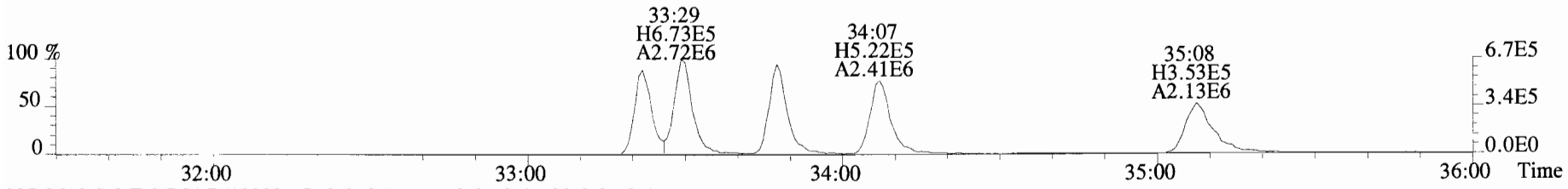
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



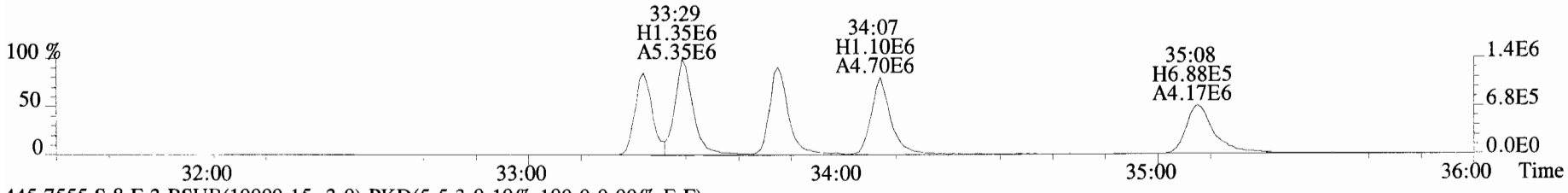
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



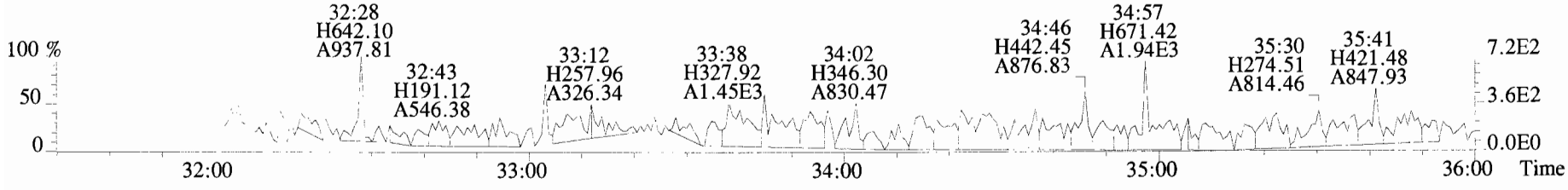
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



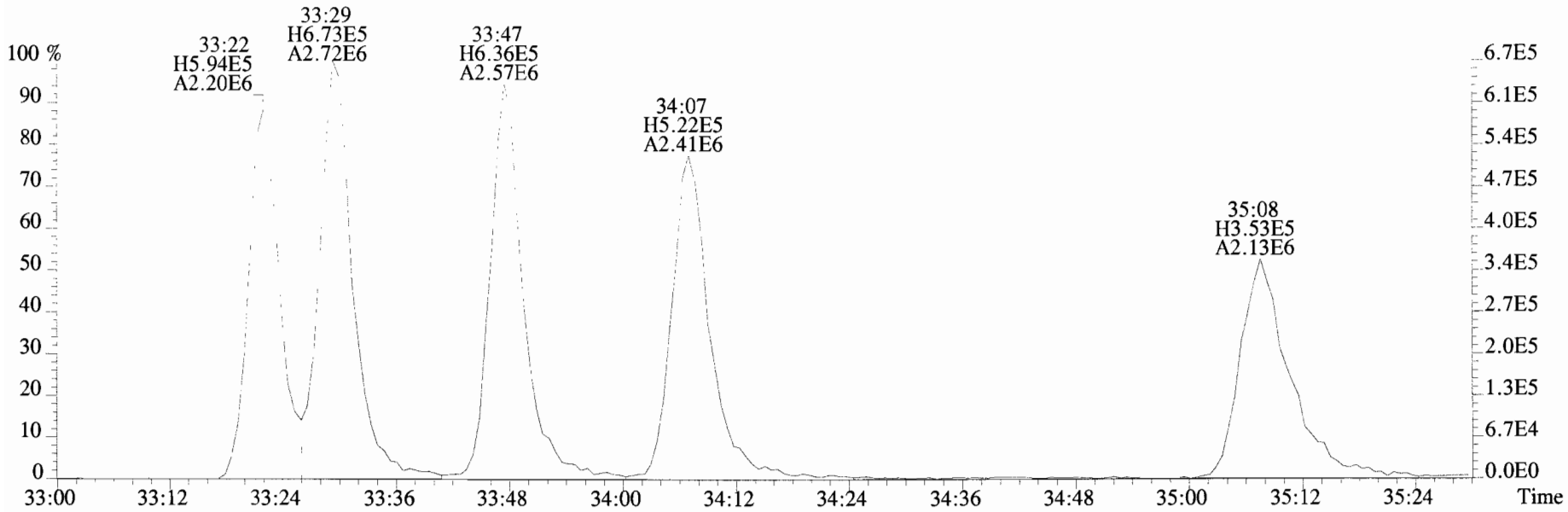
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



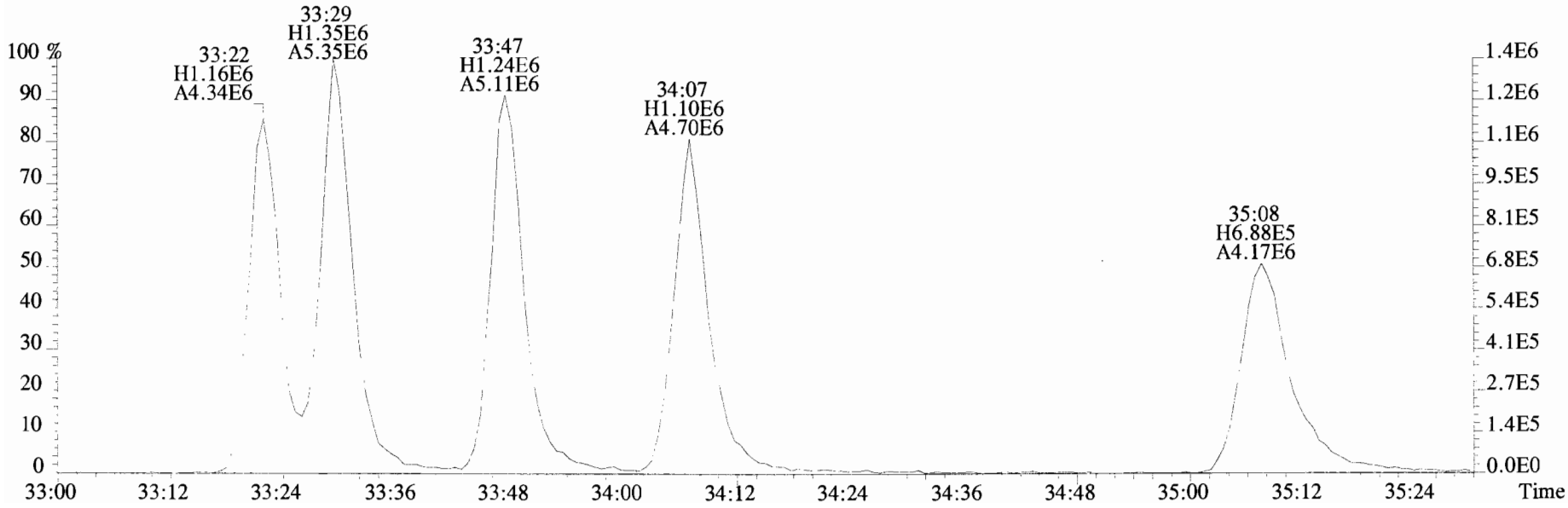
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



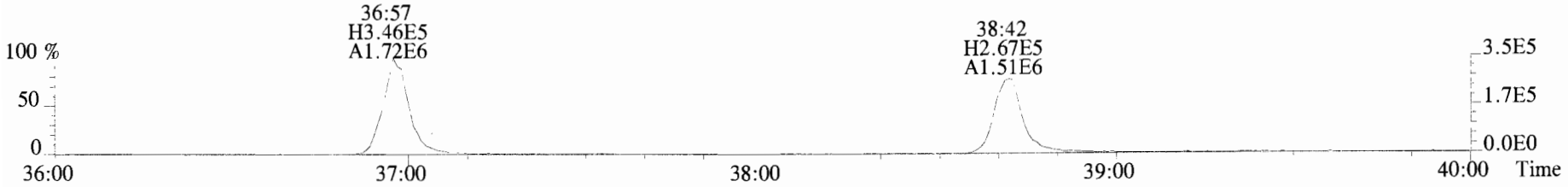
File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



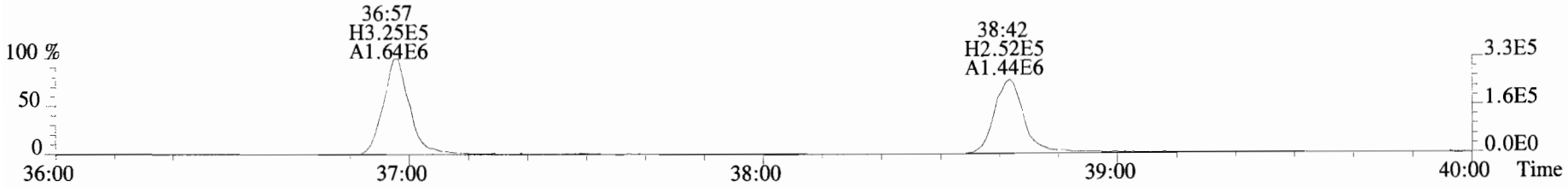
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



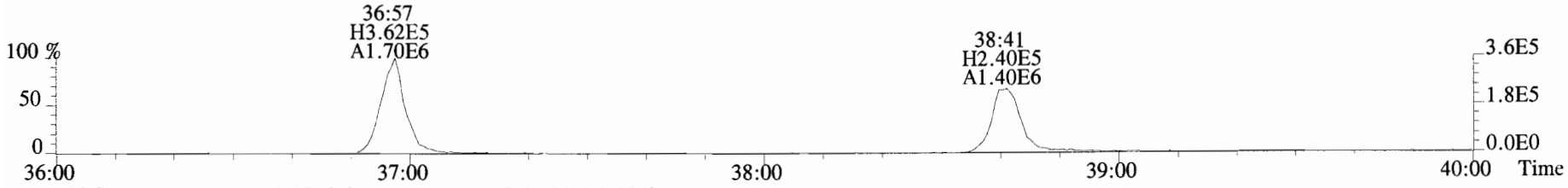
File:191009D1 #1-356 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



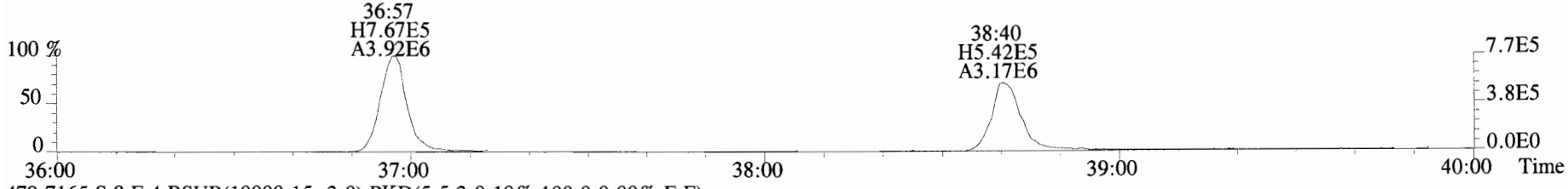
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



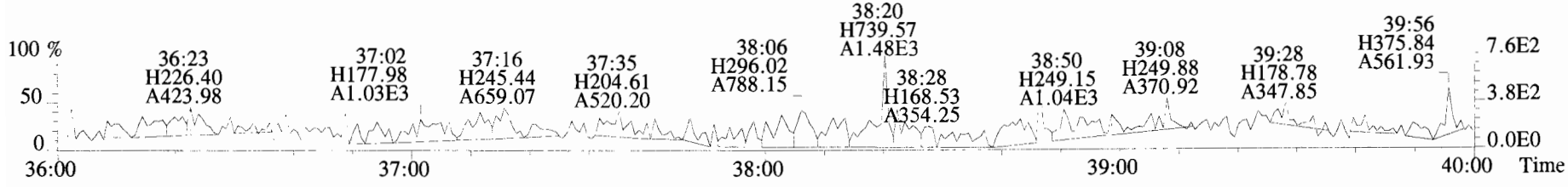
417.8253 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

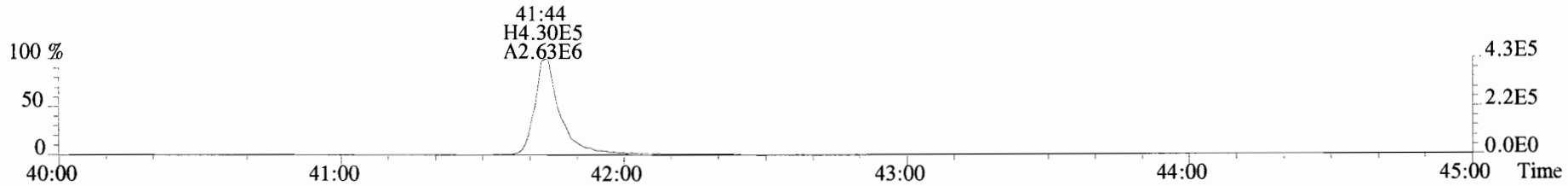


479.7165 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

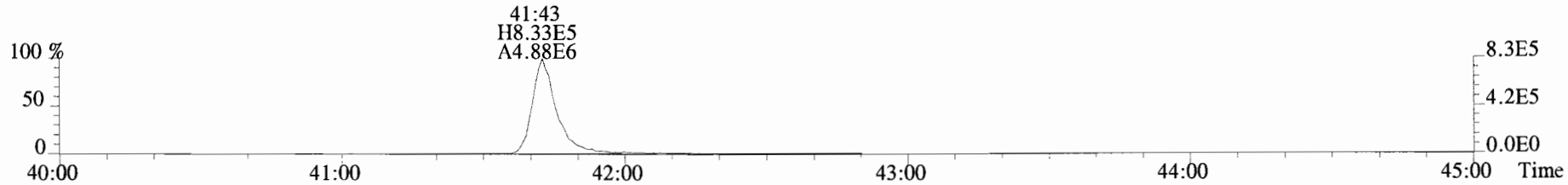


File:191009D1 #1-431 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
441.7428 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

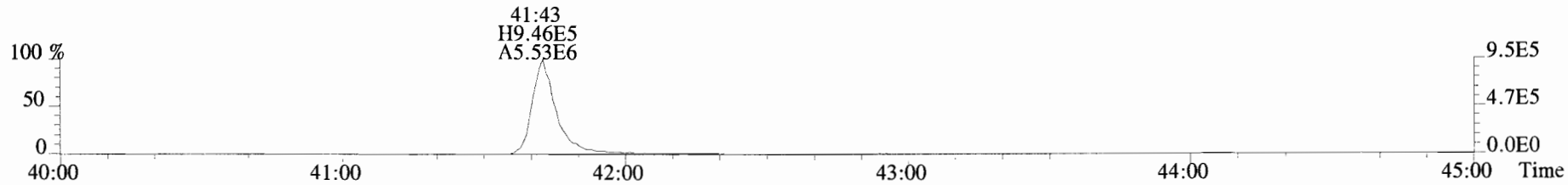
443.7398 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



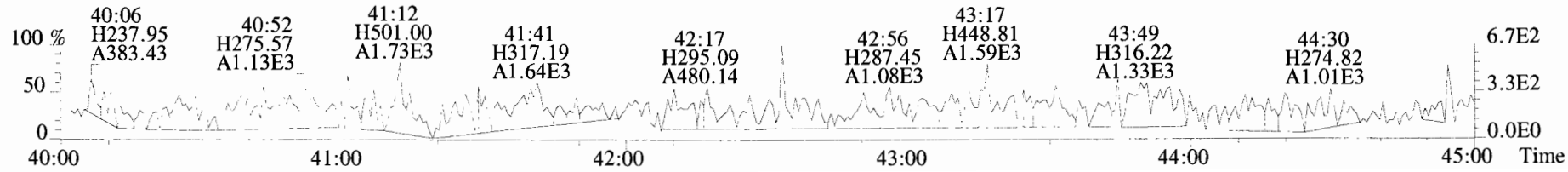
453.7831 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory

Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19 Inst. ID. VG-7

Data filename: 190530D1

			Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7	Samp# 8
			100	100	100	100	100	100
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
13C-1,2,3,4-TCDF	1.0000	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-2,3,7,8-TCDF	1.0212	4.27 %	1.07	1.04	1.03	1.05	0.98	0.96
2,3,7,8-TCDF	0.9476	9.58 %	1.12	0.93	0.88	0.87	0.97	0.92

DB 5/30/19 QT 05/31/19

Filename: 190530D1 S: 3 Acquired: 30-MAY-19 12:05:38
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-1 1613 CS0 19C2201

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.38e+07	0.80 y	15:49	-	1.00
13C-2,3,7,8-TCDF	100	1.47e+07	0.81 y	18:05	-	1.07
2,3,7,8-TCDF	0.250	4.11e+04	0.87 y	18:06	-	1.12

DB
5/30/19

Filename: 190530D1 S: 4 Acquired: 30-MAY-19 12:37:29
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-2 1613 CS1 19C2202

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.24e+07	0.82 y	15:49	-	1.00
13C-2,3,7,8-TCDF	100	1.30e+07	0.78 y	18:05	-	1.04
2,3,7,8-TCDF	0.500	6.06e+04	0.67 y	18:05	-	0.93

DB
5/30/19

Filename: 190530D1 S: 5 Acquired: 30-MAY-19 13:09:20
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-3 1613 CS2 19C2203

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.21e+07	0.82 y	15:48	-	1.00
13C-2,3,7,8-TCDF	100	1.24e+07	0.80 y	18:04	-	1.03
2,3,7,8-TCDF	2.00	2.18e+05	0.74 y	18:05	-	0.88

DB
5/30/19

Filename: 190530D1 S: 6 Acquired: 30-MAY-19 13:41:11
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-4 1613 CS3 19C2204

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.28e+07	0.81 y	15:49	-	1.00
13C-2,3,7,8-TCDF	100	1.34e+07	0.80 y	18:05	-	1.05
2,3,7,8-TCDF	10.0	1.17e+06	0.73 y	18:06	-	0.87

DB
5/30/19

Filename: 190530D1 S: 7 Acquired: 30-MAY-19 14:13:01
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-5 1613 CS4 19C2205

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.30e+07	0.81 y	15:49	-	1.00
13C-2,3,7,8-TCDF	100	1.28e+07	0.80 y	18:05	-	0.98
2,3,7,8-TCDF	40.0	4.95e+06	0.77 y	18:06	-	0.97

DB
5/30/19

Filename: 190530D1 S: 8 Acquired: 30-MAY-19 14:44:52
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-6 1613 CS5 19C2206

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	100	1.29e+07	0.80 y	15:48	-	1.00
13C-2,3,7,8-TCDF	100	1.24e+07	0.80 y	18:05	-	0.96
2,3,7,8-TCDF	300	3.42e+07	0.74 y	18:06	-	0.92

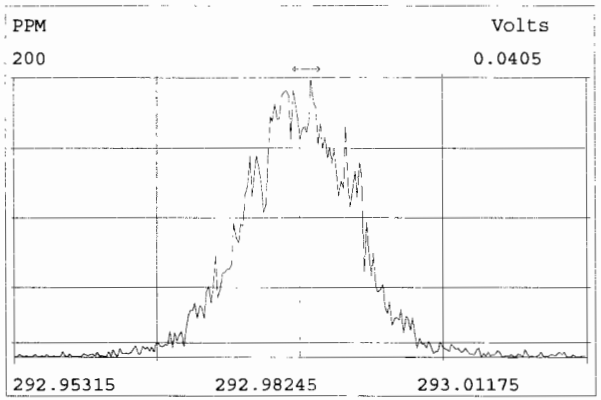
DB
5/30/19

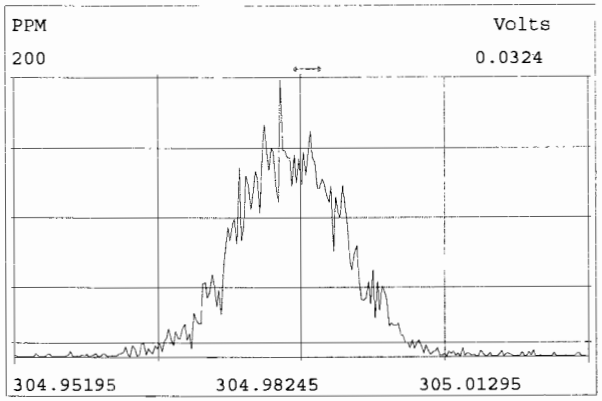
Vista Analytical Laboratory - Injection Log Run file: 190530D1 Instrument ID: VG-7 GC Column ID: DB-225

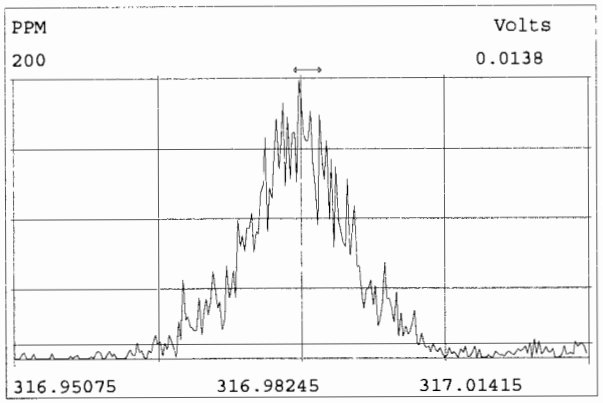
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
190530D1	1	CP190530D1-1	DB	30-MAY-19	11:02:08	ST190530D1-4	NA
190530D1	2	SOLVENT BLANK	DB	30-MAY-19	11:33:52	ST190530D1-4	NA
190530D1	3	ST190530D1-1	DB	30-MAY-19	12:05:38	ST190530D1-4	NA
190530D1	4	ST190530D1-2	DB	30-MAY-19	12:37:29	ST190530D1-4	NA
190530D1	5	ST190530D1-3	DB	30-MAY-19	13:09:20	ST190530D1-4	NA
190530D1	6	ST190530D1-4	DB	30-MAY-19	13:41:11	ST190530D1-4	NA
190530D1	7	ST190530D1-5	DB	30-MAY-19	14:13:01	ST190530D1-4	NA
190530D1	8	ST190530D1-6	DB	30-MAY-19	14:44:52	ST190530D1-4	NA
190530D1	9	SOLVENT BLANK	DB	30-MAY-19	15:16:42	ST190530D1-4	NA
190530D1	10	SS190528D1-1	DB	30-MAY-19	15:48:32	ST190530D1-4	NA
190530D1	11	SOLVENT BLANK	DB	30-MAY-19	16:20:23	ST190530D1-4	NA
190530D1	12	1901028-05RE1	DB	30-MAY-19	16:52:12	ST190530D1-4	NA
190530D1	13	1901028-07RE1	DB	30-MAY-19	17:24:02	ST190530D1-4	NA
190530D1	14	1901028-08RE1	DB	30-MAY-19	17:55:52	ST190530D1-4	NA
190530D1	15	1901028-09RE1	DB	30-MAY-19	18:27:41	ST190530D1-4	NA

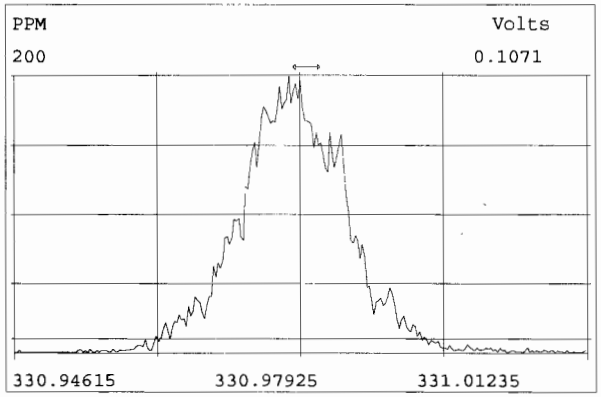
Peak Locate Examination:30-MAY-2019:11:01 File:190530D1

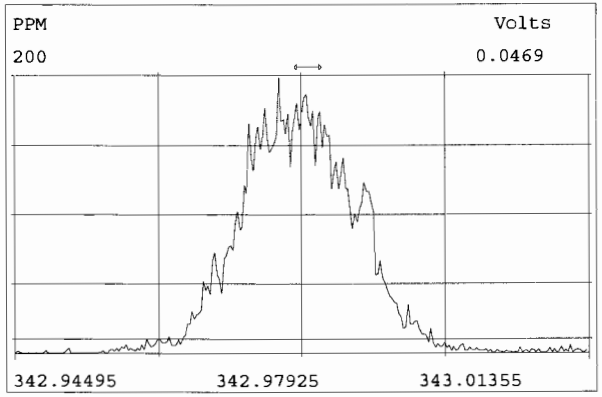
Experiment:TCDF_DB225 Function:1 Reference:PFK

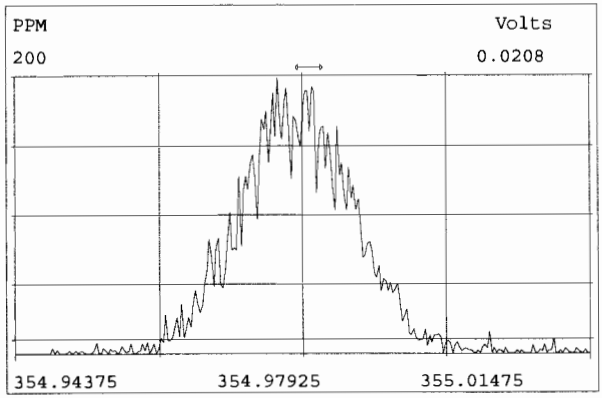


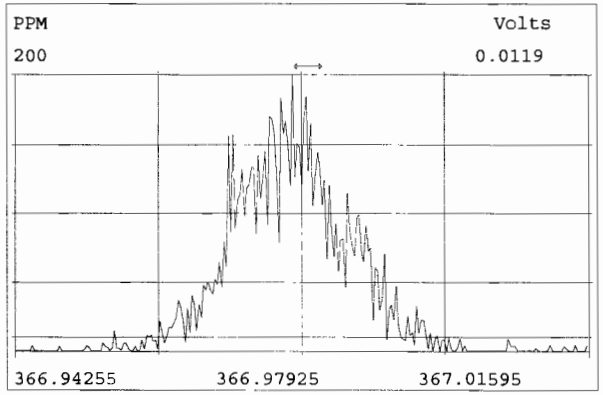


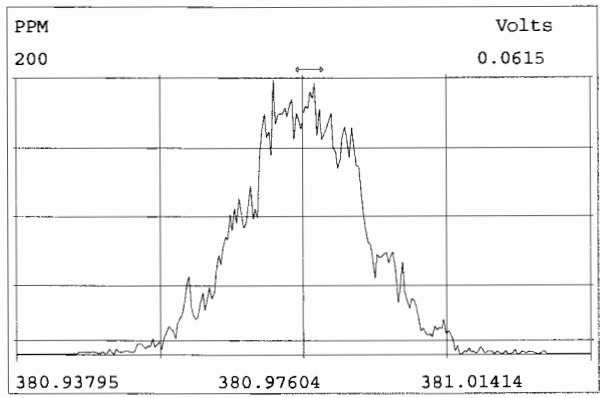




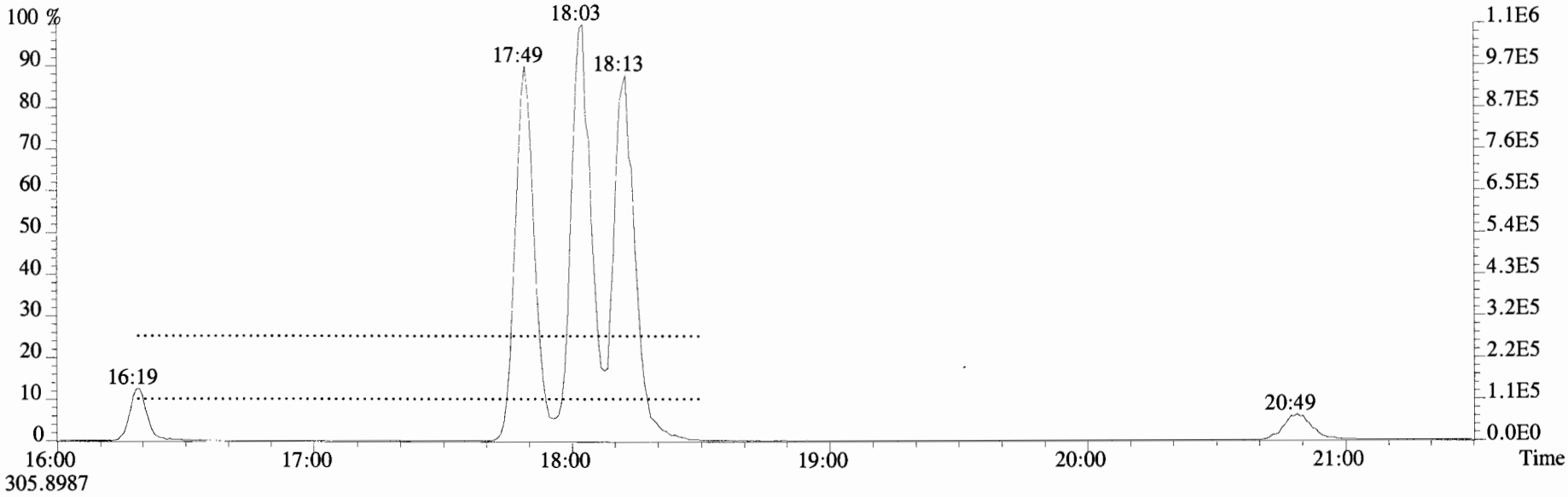




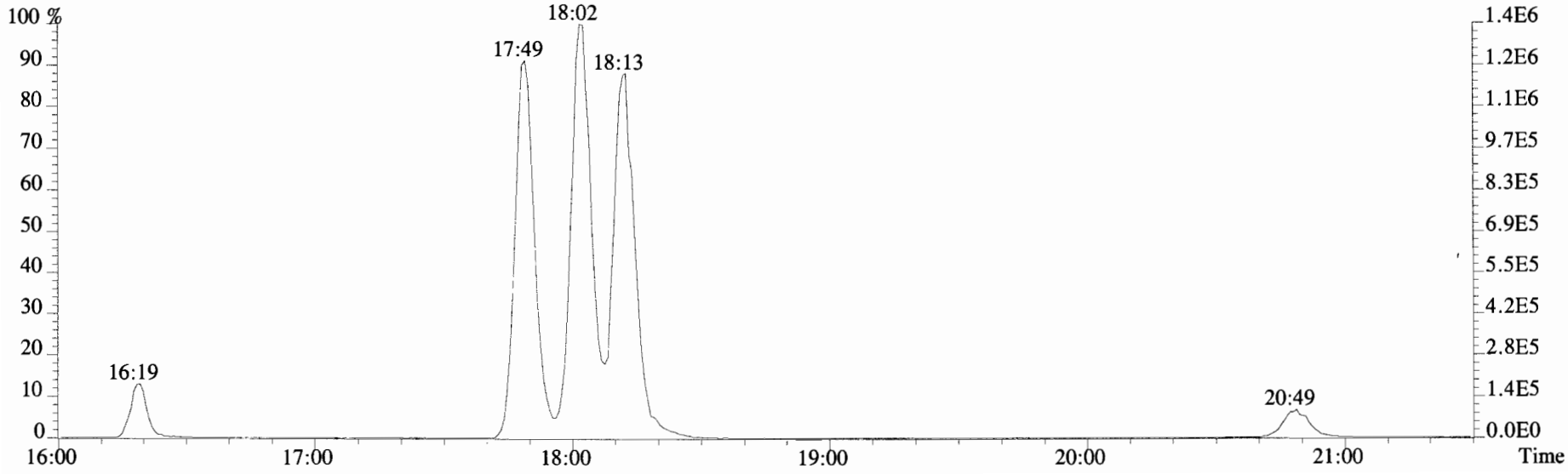


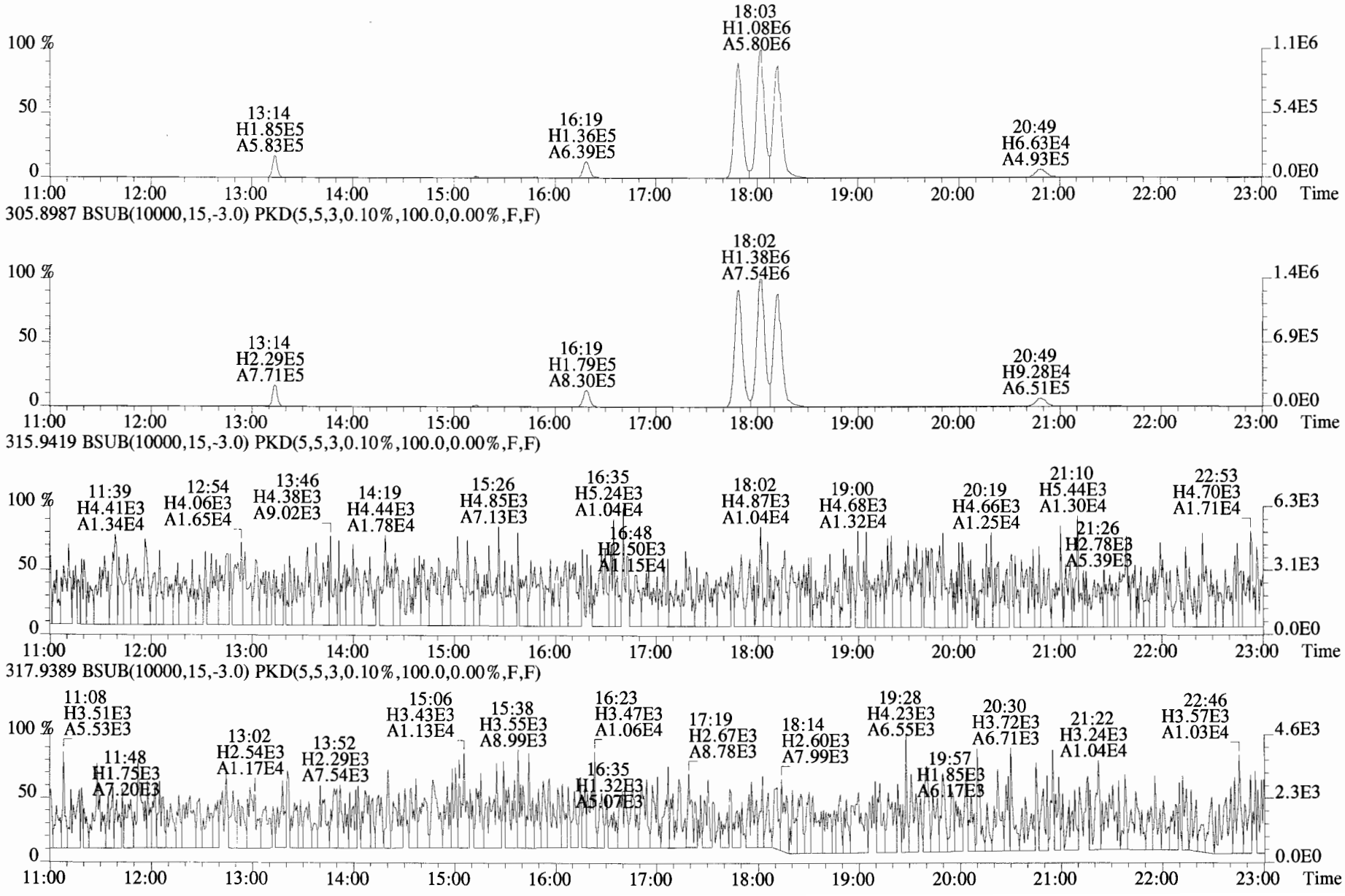


File:190530D1 #1-1559 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016

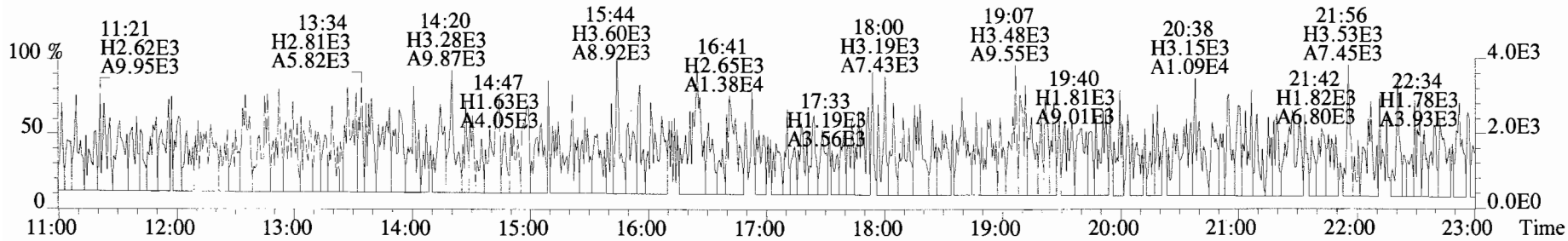


305.8987

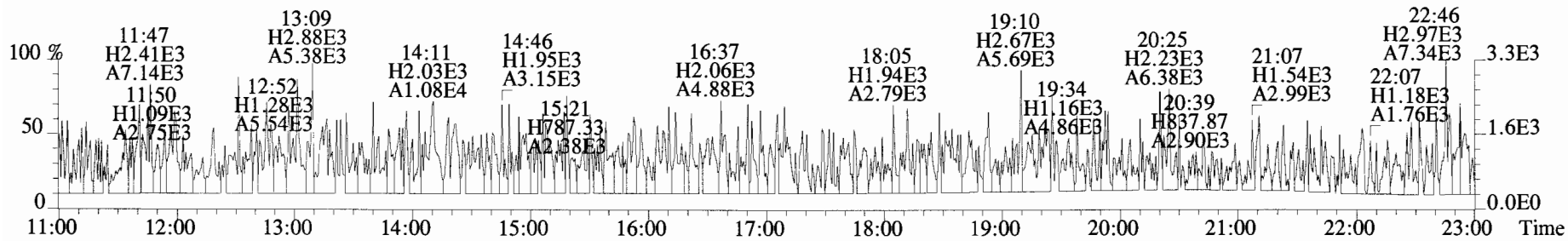



File:190530D1 #1-1682 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:03 H1.08E6 A5.80E6
13:14 H1.85E5 A5.83E5
16:19 H1.36E5 A6.39E5
20:49 H6.63E4 A4.93E5
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:02 H1.38E6 A7.54E6
13:14 H2.29E5 A7.71E5
16:19 H1.79E5 A8.30E5
20:49 H9.28E4 A6.51E5
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
11:39 H4.41E3 A1.34E4
12:54 H4.06E3 A1.65E4
13:46 H4.38E3 A9.02E3
14:19 H4.44E3 A1.78E4
15:26 H4.85E3 A7.13E3
16:35 H5.24E3 A1.04E4
16:48 H2.50E3 A1.15E4
18:02 H4.87E3 A1.04E4
19:00 H4.68E3 A1.32E4
20:19 H4.66E3 A1.25E4
21:10 H5.44E3 A1.30E4
21:26 H2.78E3 A5.39E3
22:53 H4.70E3 A1.71E4
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
11:08 H3.51E3 A5.53E3
11:48 H1.75E3 A7.20E3
13:02 H2.54E3 A1.17E4
13:52 H2.29E3 A7.54E3
15:06 H3.43E3 A1.13E4
15:38 H3.55E3 A8.99E3
16:23 H3.47E3 A1.06E4
16:35 H1.32E3 A5.07E3
17:19 H2.67E3 A8.78E3
18:14 H2.60E3 A7.99E3
19:28 H4.23E3 A6.55E3
19:57 H1.85E3 A6.17E3
20:30 H3.72E3 A6.71E3
21:22 H3.24E3 A1.04E4
22:46 H3.57E3 A1.03E4
100 %
50
0
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Time
1.1E6
5.4E5
0.0E0
1.4E6
6.9E5
6.3E3
3.1E3
4.6E3
2.3E3

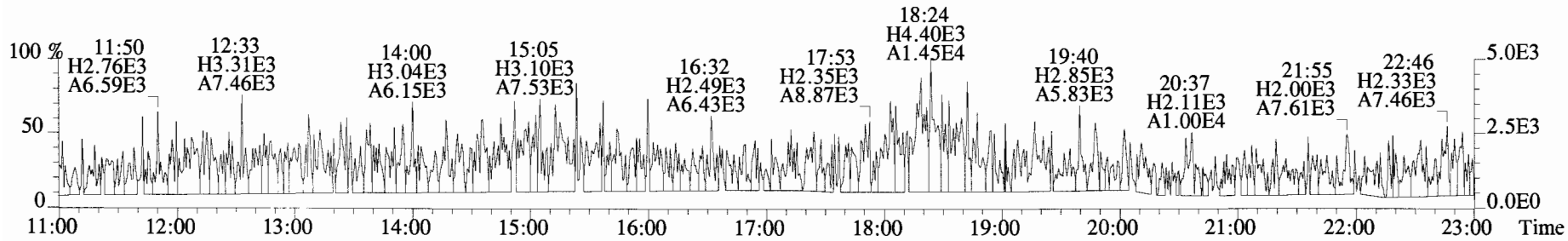
File:190530D1 #1-1682 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



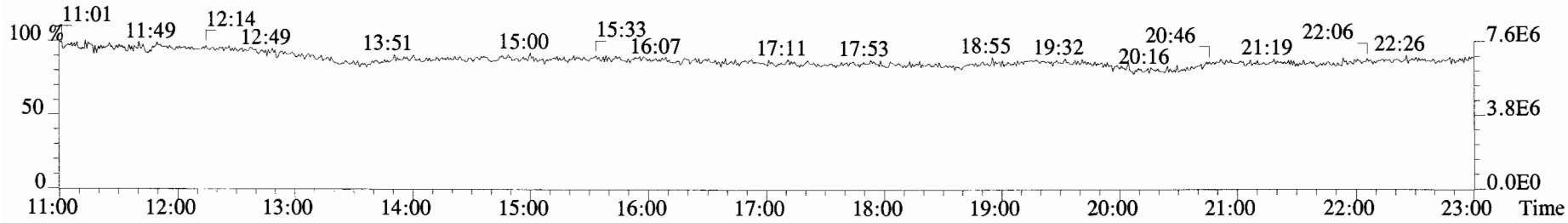
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



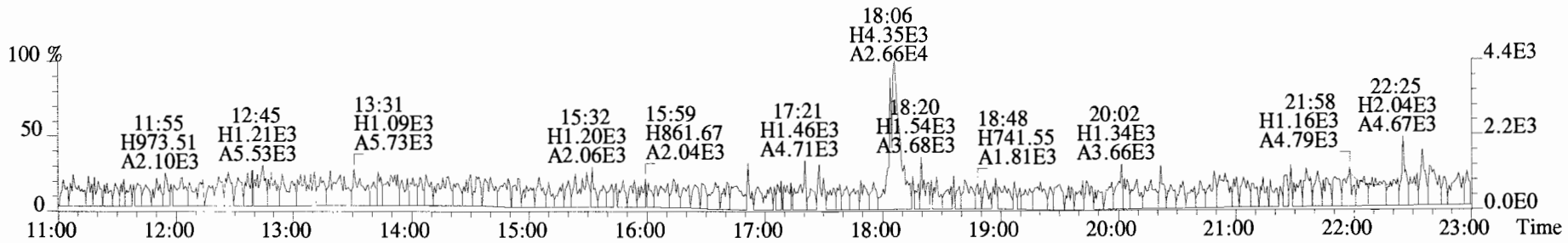
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



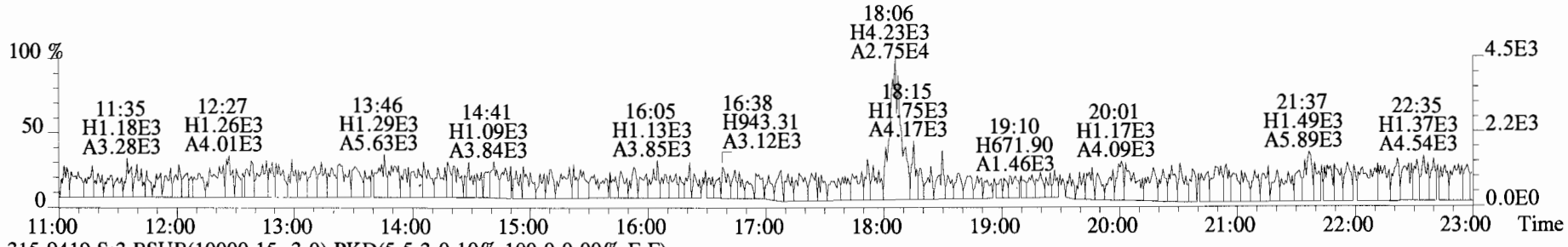
330.9792



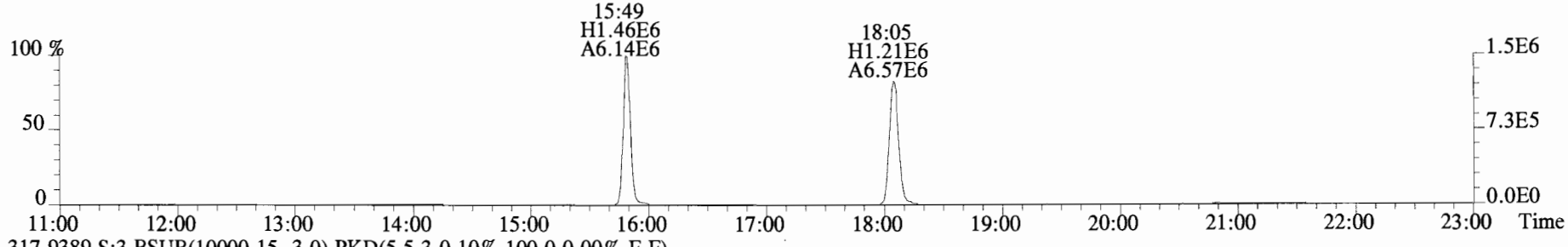
File:190530D1 #1-1682 Acq:30-MAY-2019 12:05:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



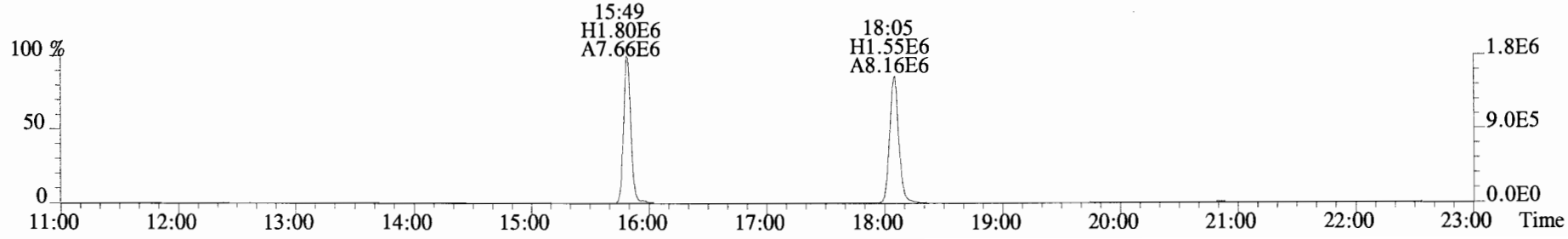
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



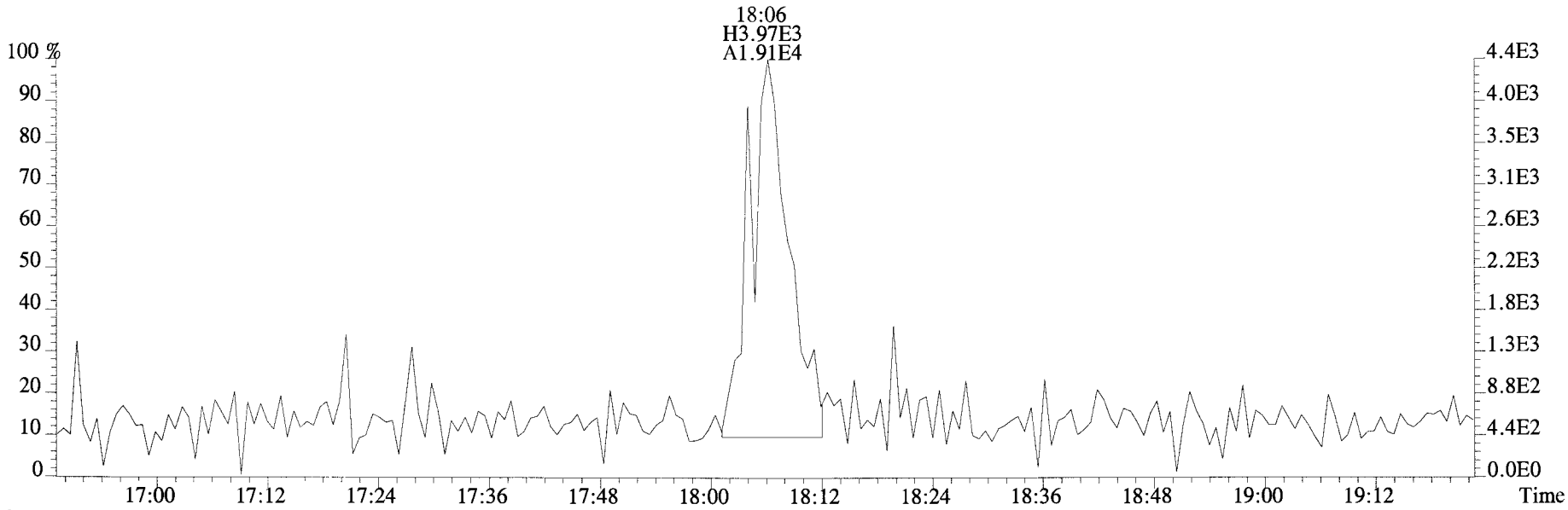
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



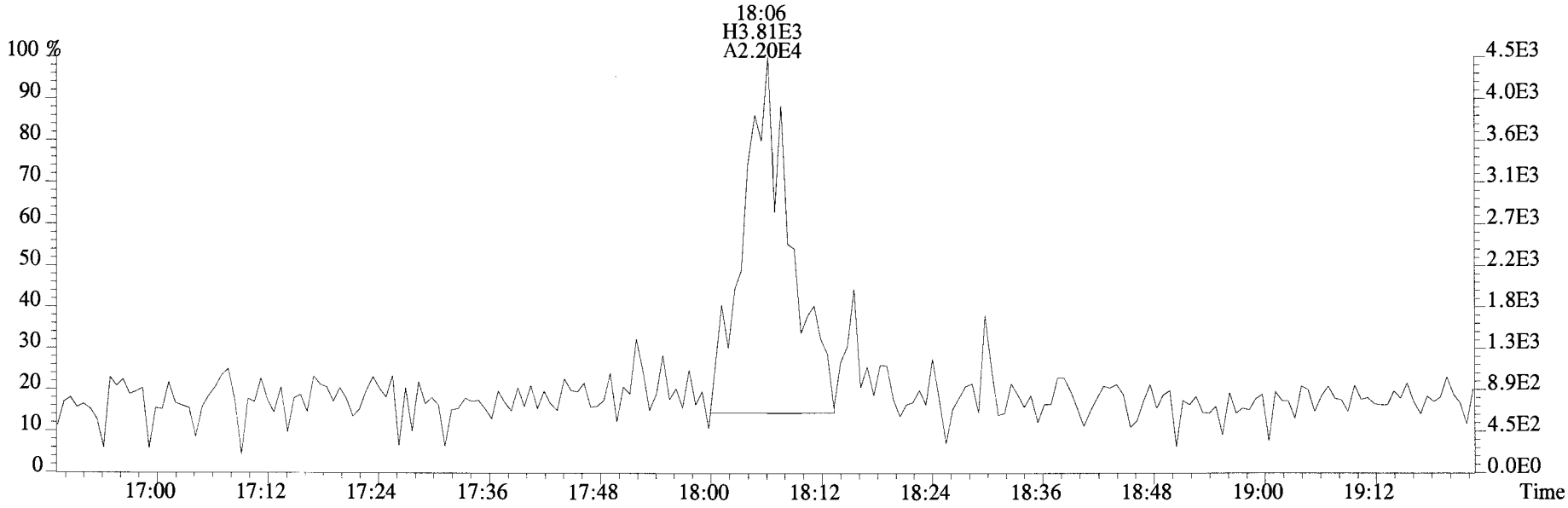
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

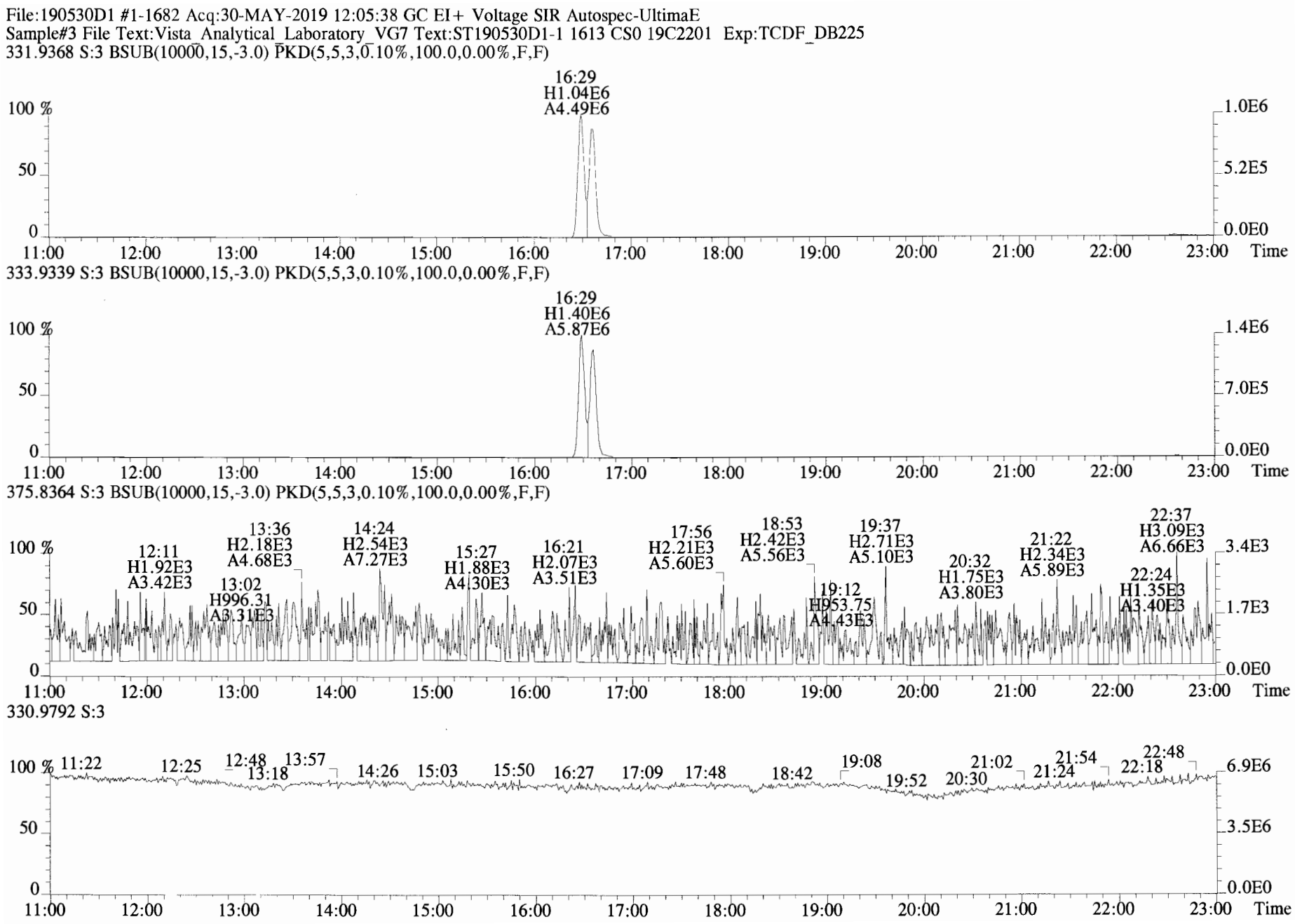


File:190530D1 #1-1682 Acq:30-MAY-2019 12:05:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

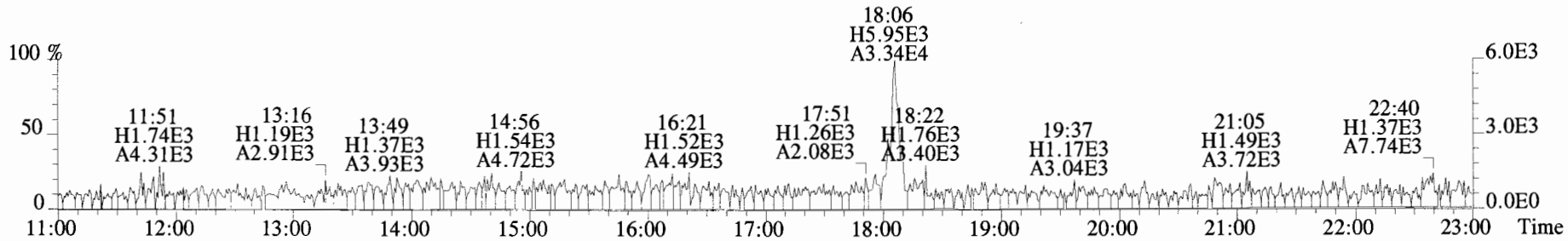


305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

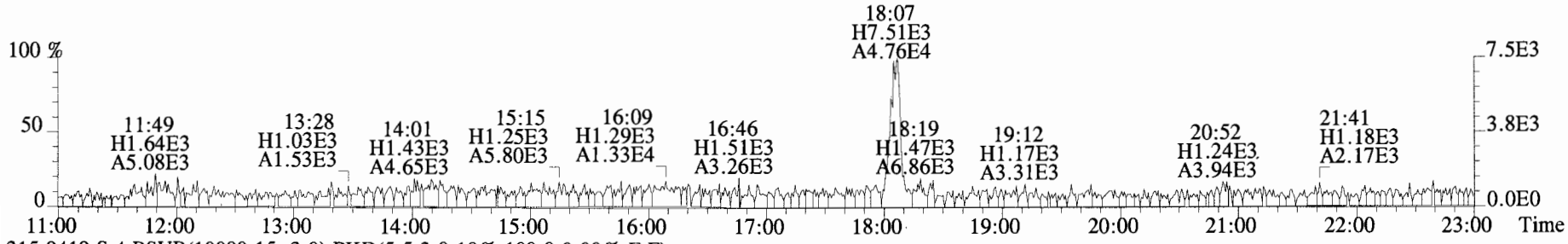



File:190530D1 #1-1682 Acq:30-MAY-2019 12:05:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H1.04E6
A4.49E6
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H1.40E6
A5.87E6
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
12:11 H1.92E3 A3.42E3
13:02 H996.31 A3.31E3
13:36 H2.18E3 A4.68E3
14:24 H2.54E3 A7.27E3
15:27 H1.88E3 A4.30E3
16:21 H2.07E3 A3.51E3
17:56 H2.21E3 A5.60E3
18:53 H2.42E3 A5.56E3
19:12 H953.75 A4.43E3
19:37 H2.71E3 A5.10E3
20:32 H1.75E3 A3.80E3
21:22 H2.34E3 A5.89E3
22:24 H1.35E3 A3.40E3
22:37 H3.09E3 A6.66E3
330.9792 S:3
11:22 12:25 12:48 13:18 13:57 14:26 15:03 15:50 16:27 17:09 17:48 18:42 19:08 19:52 20:30 21:02 21:24 21:54 22:18 22:48
100 %
50
0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
1.0E6
5.2E5
0.0E0
1.4E6
7.0E5
3.4E3
1.7E3
6.9E6
3.5E6

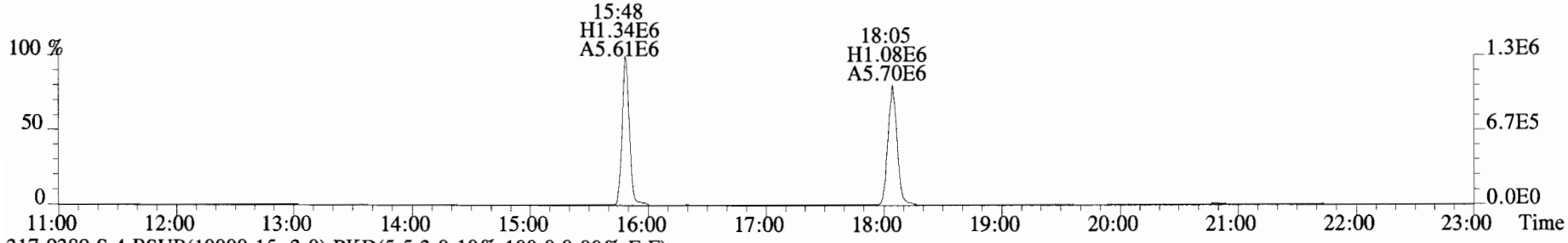
File:190530D1 #1-1683 Acq:30-MAY-2019 12:37:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-2 1613 CS1 19C2202 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



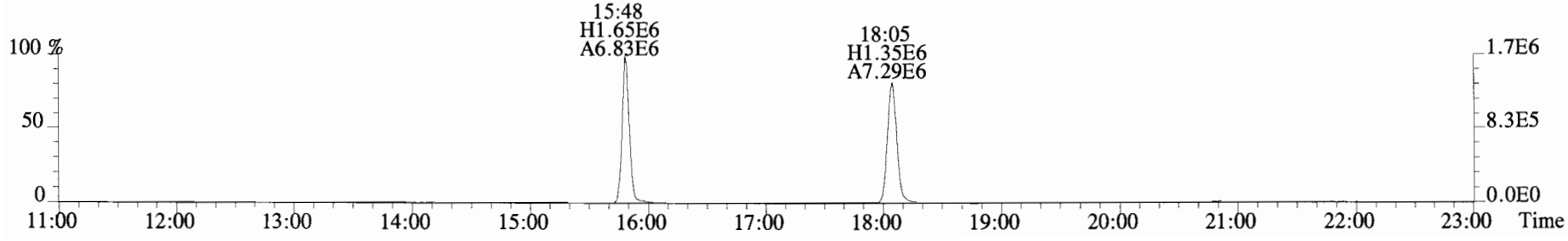
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



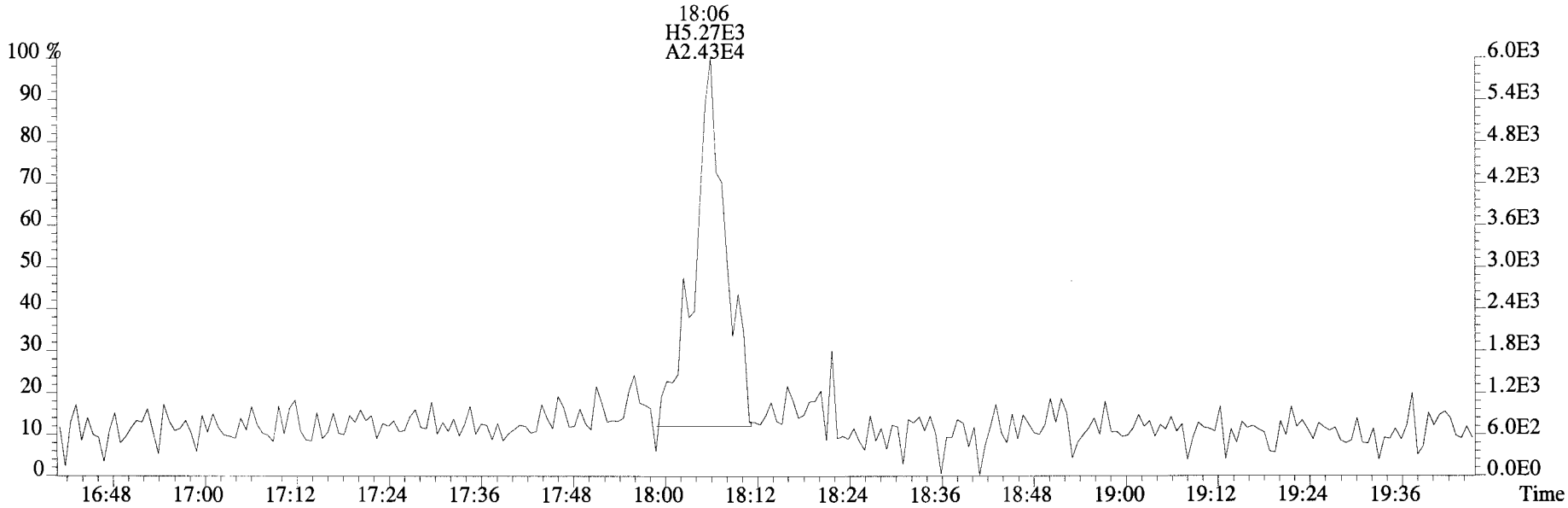
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



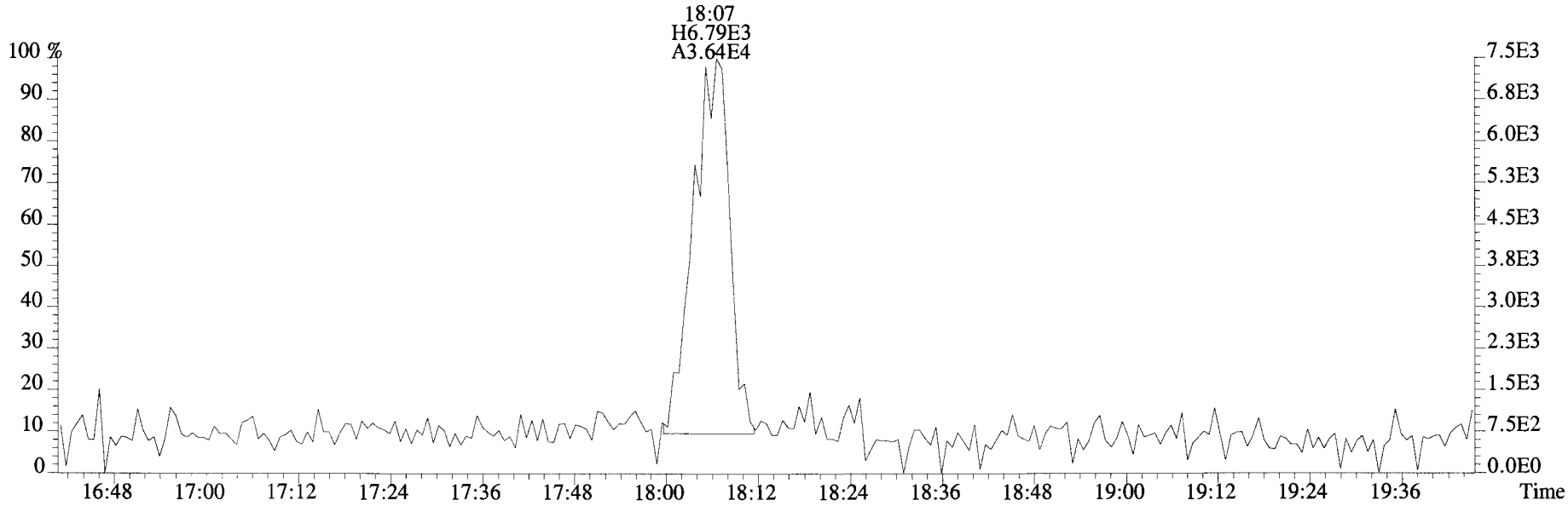
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

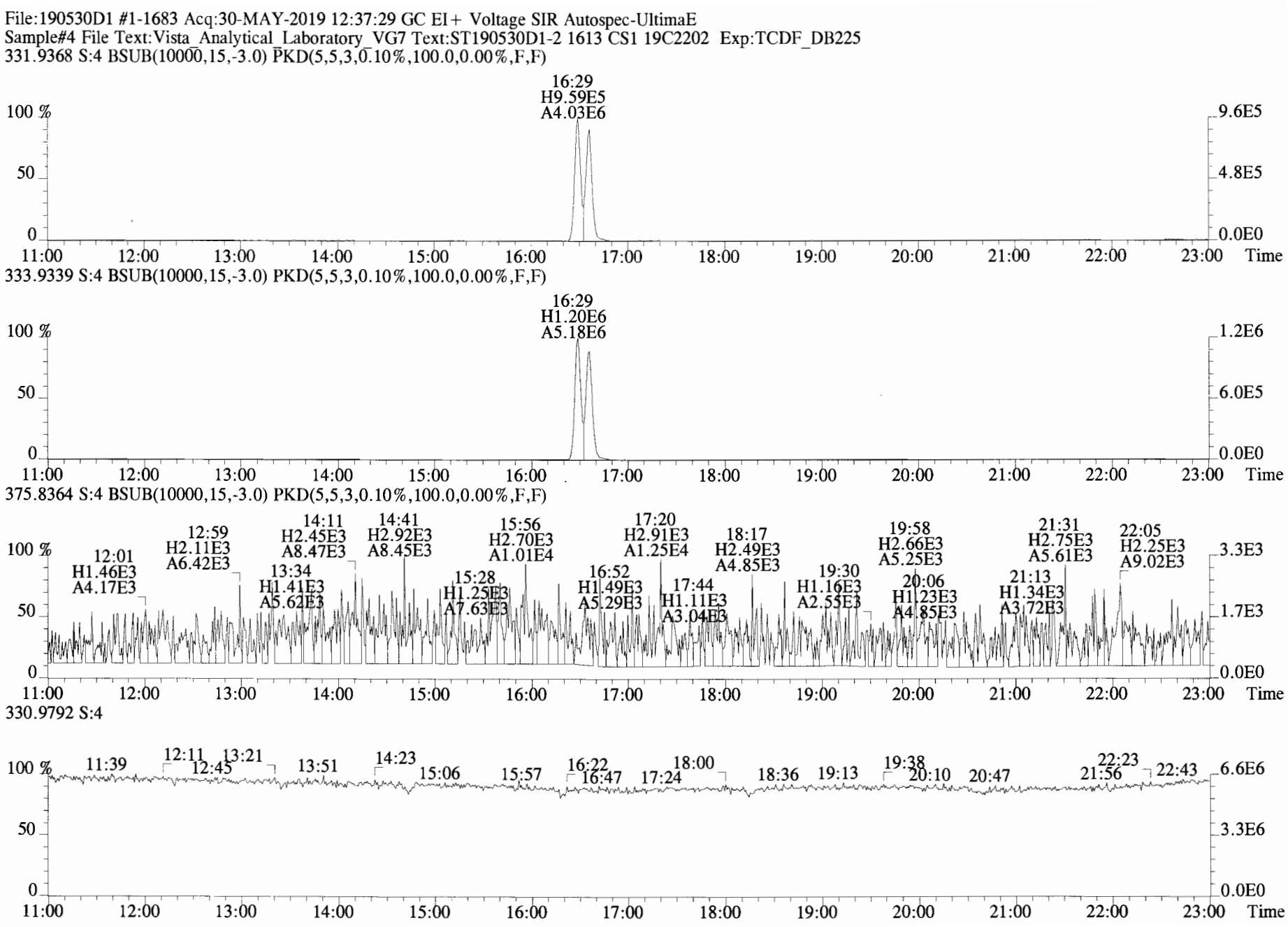


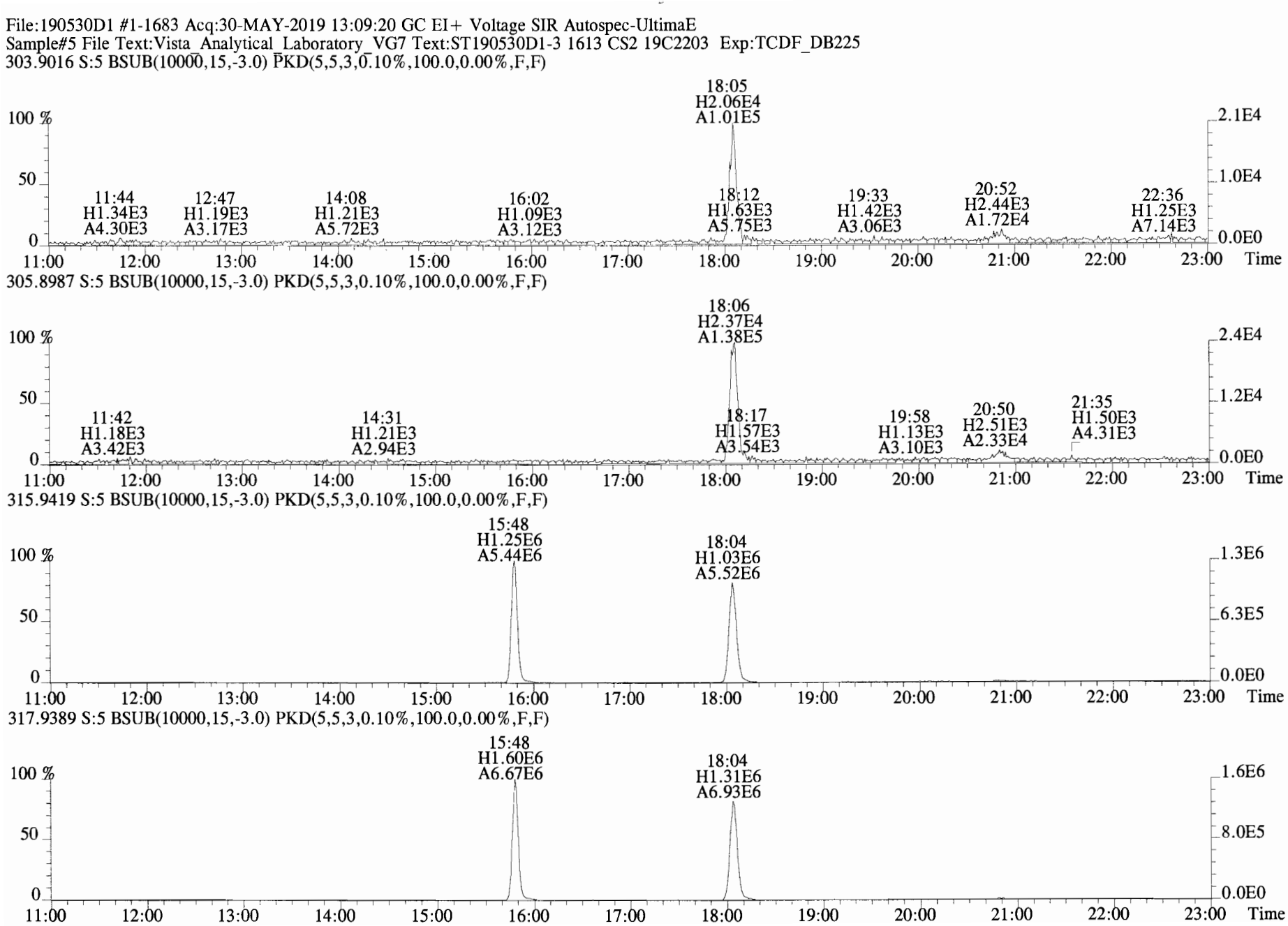
File:190530D1 #1-1683 Acq:30-MAY-2019 12:37:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-2 1613 CS1 19C2202 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

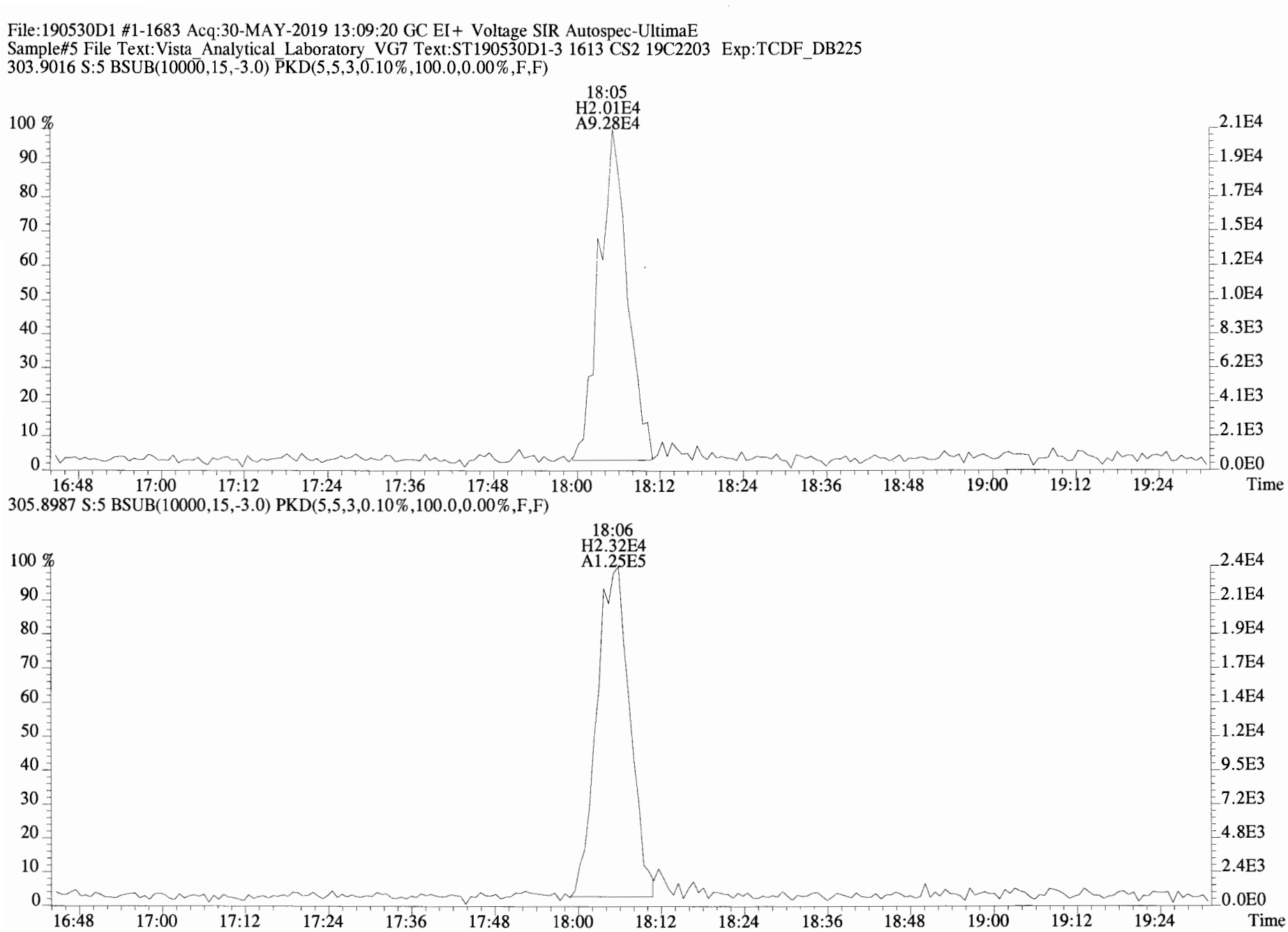


305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

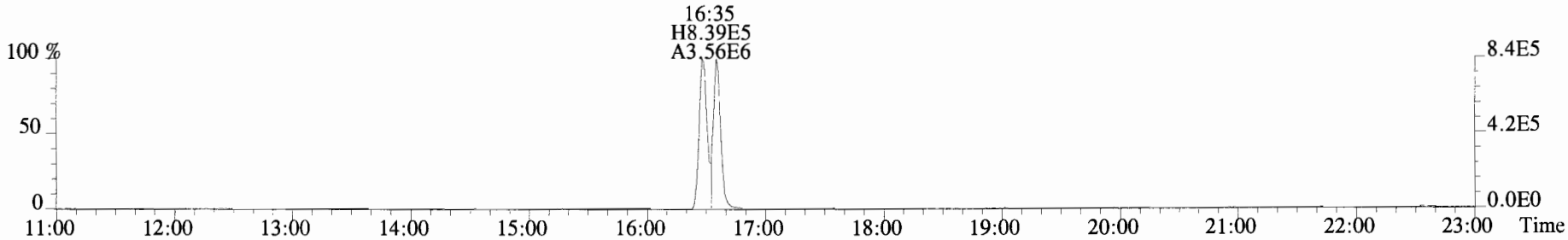



File:190530D1 #1-1683 Acq:30-MAY-2019 12:37:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-2 1613 CS1 19C2202 Exp:TCDF_DB225
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H9.59E5
A4.03E6
100 %
50
0
9.6E5
4.8E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H1.20E6
A5.18E6
100 %
50
0
1.2E6
6.0E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
12:01
H1.46E3
A4.17E3
12:59
H2.11E3
A6.42E3
13:34
H1.41E3
A5.62E3
14:11
H2.45E3
A8.47E3
14:41
H2.92E3
A8.45E3
15:28
H1.25E3
A7.63E3
15:56
H2.70E3
A1.01E4
16:52
H1.49E3
A5.29E3
17:20
H2.91E3
A1.25E4
17:44
H1.11E3
A3.04E3
18:17
H2.49E3
A4.85E3
19:30
H1.16E3
A2.55E3
19:58
H2.66E3
A5.25E3
20:06
H1.23E3
A4.85E3
21:13
H1.34E3
A3.72E3
21:31
H2.75E3
A5.61E3
22:05
H2.25E3
A9.02E3
100 %
50
0
3.3E3
1.7E3
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
330.9792 S:4
11:39
12:11
12:45
13:21
13:51
14:23
15:06
15:57
16:22
16:47
17:24
18:00
18:36
19:13
19:38
20:10
20:47
21:56
22:23
22:43
100 %
50
0
6.6E6
3.3E6
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time

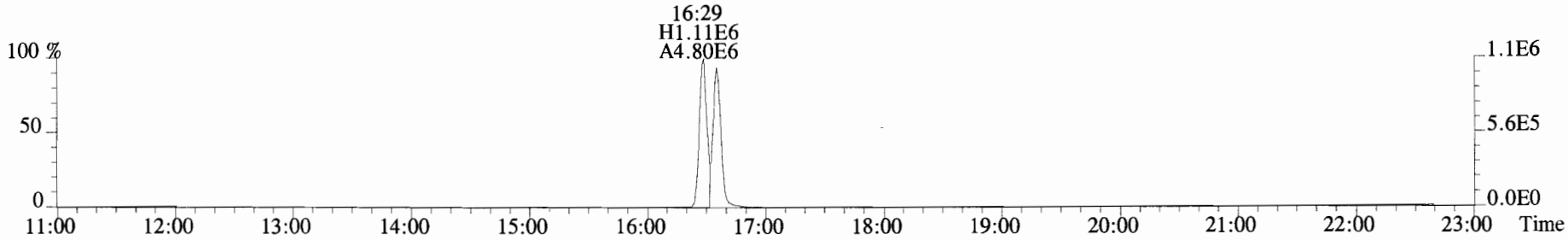

File:190530D1 #1-1683 Acq:30-MAY-2019 13:09:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-3 1613 CS2 19C2203 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:05 H2.06E4 A1.01E5
11:44 H1.34E3 A4.30E3
12:47 H1.19E3 A3.17E3
14:08 H1.21E3 A5.72E3
16:02 H1.09E3 A3.12E3
18:12 H1.63E3 A5.75E3
19:33 H1.42E3 A3.06E3
20:52 H2.44E3 A1.72E4
22:36 H1.25E3 A7.14E3
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:06 H2.37E4 A1.38E5
11:42 H1.18E3 A3.42E3
14:31 H1.21E3 A2.94E3
18:17 H1.57E3 A3.54E3
19:58 H1.13E3 A3.10E3
20:50 H2.51E3 A2.33E4
21:35 H1.50E3 A4.31E3
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:48 H1.25E6 A5.44E6
18:04 H1.03E6 A5.52E6
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:48 H1.60E6 A6.67E6
18:04 H1.31E6 A6.93E6
100 %
50
0
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Time
2.1E4
1.0E4
0.0E0
2.4E4
1.2E4
1.3E6
6.3E5
1.6E6
8.0E5


File:190530D1 #1-1683 Acq:30-MAY-2019 13:09:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-3 1613 CS2 19C2203 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:05
H2.01E4
A9.28E4
100 %
90
80
70
60
50
40
30
20
10
0
2.1E4
1.9E4
1.7E4
1.5E4
1.2E4
1.0E4
8.3E3
6.2E3
4.1E3
2.1E3
0.0E0
16:48
17:00
17:12
17:24
17:36
17:48
18:00
18:12
18:24
18:36
18:48
19:00
19:12
19:24
Time
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
18:06
H2.32E4
A1.25E5
100 %
90
80
70
60
50
40
30
20
10
0
2.4E4
2.1E4
1.9E4
1.7E4
1.4E4
1.2E4
9.5E3
7.2E3
4.8E3
2.4E3
0.0E0
16:48
17:00
17:12
17:24
17:36
17:48
18:00
18:12
18:24
18:36
18:48
19:00
19:12
19:24
Time

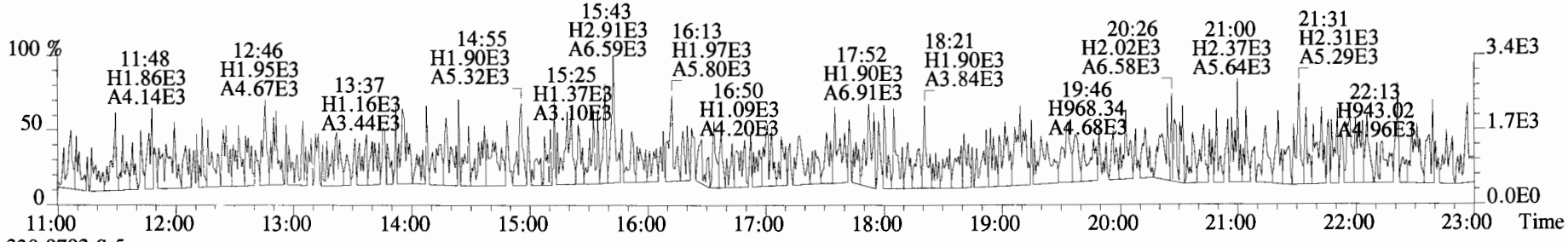
File:190530D1 #1-1683 Acq:30-MAY-2019 13:09:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-3 1613 CS2 19C2203 Exp:TCDF_DB225
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



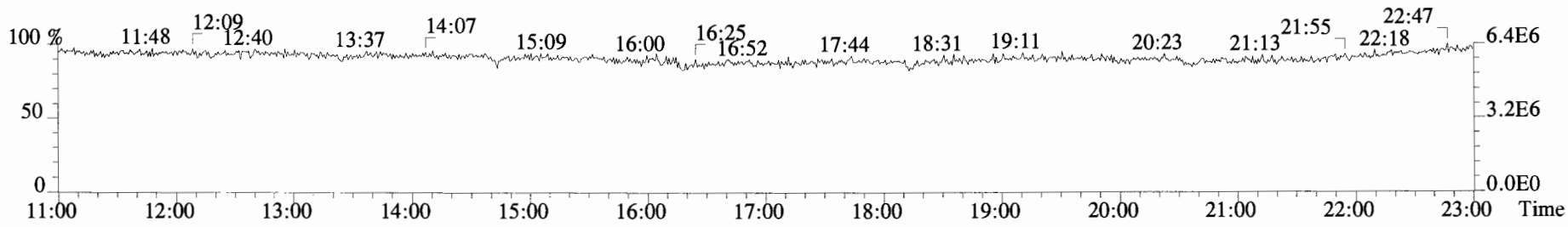
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



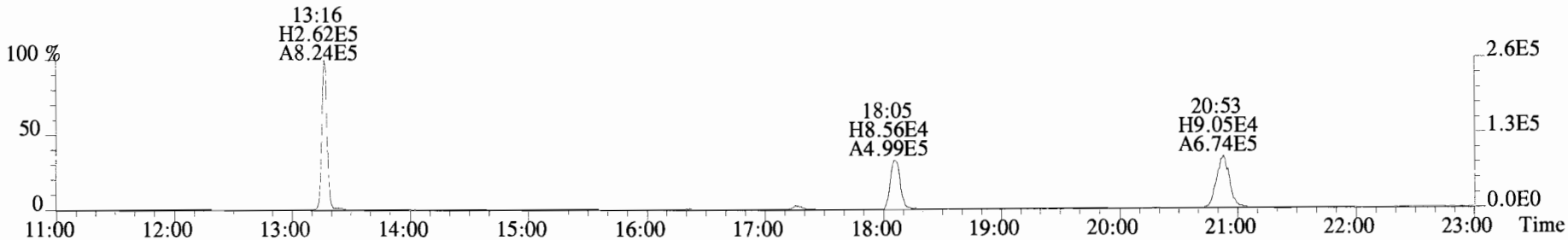
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



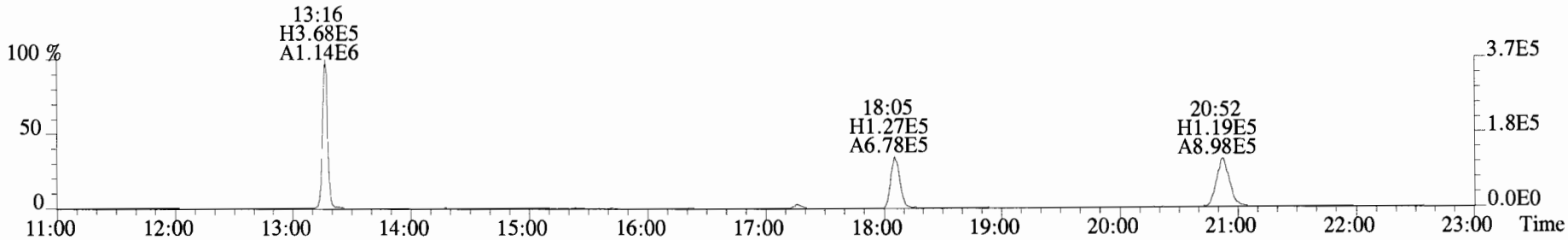
330.9792 S:5



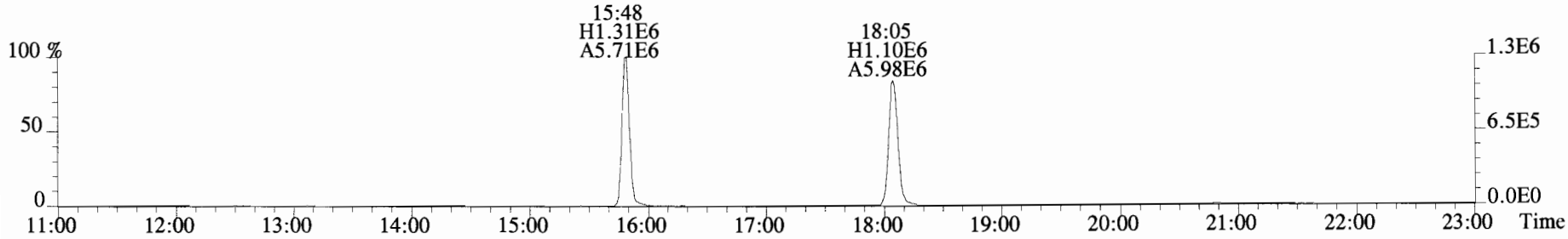
File:190530D1 #1-1682 Acq:30-MAY-2019 13:41:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-4 1613 CS3 19C2204 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



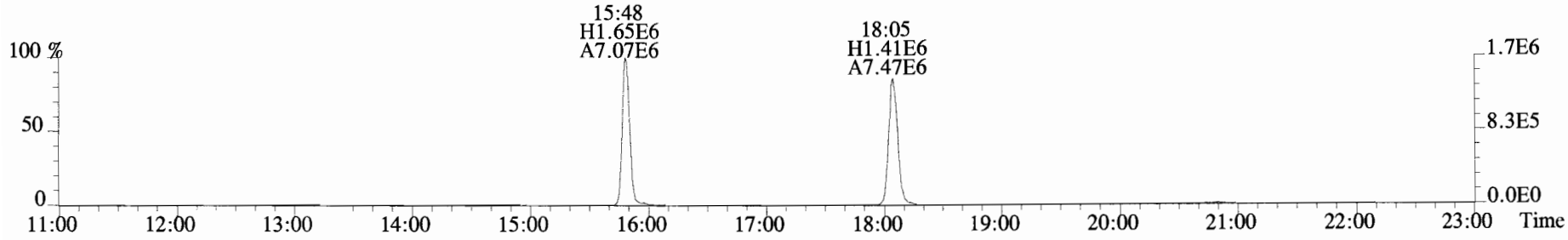
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



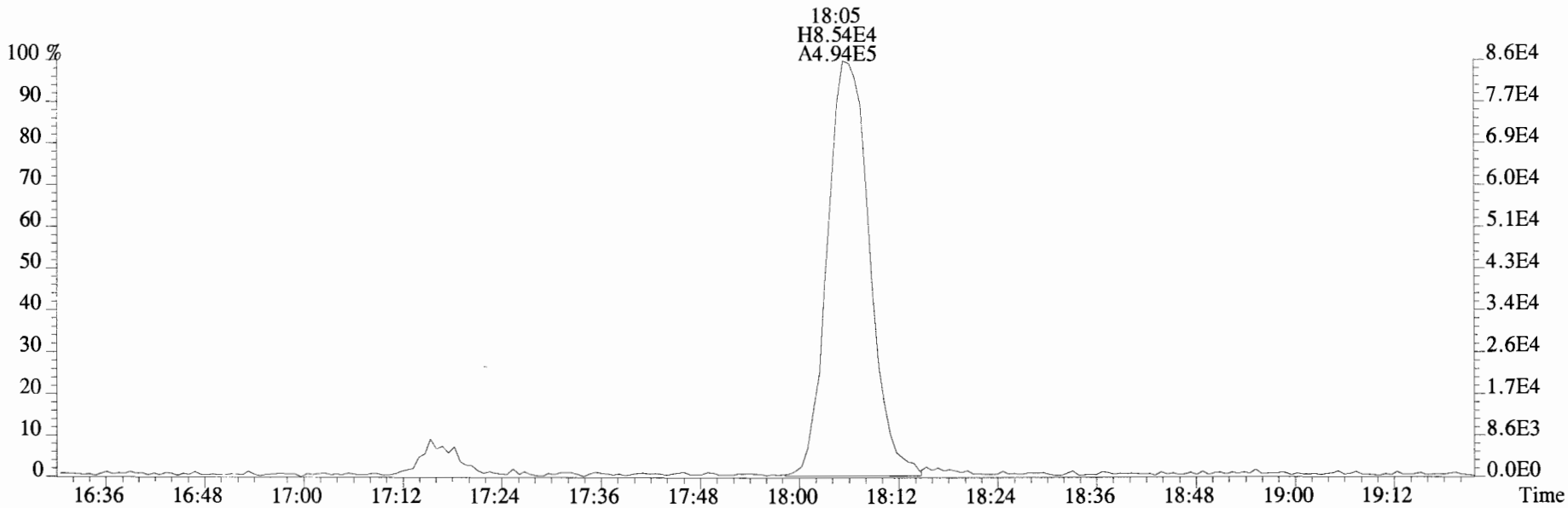
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



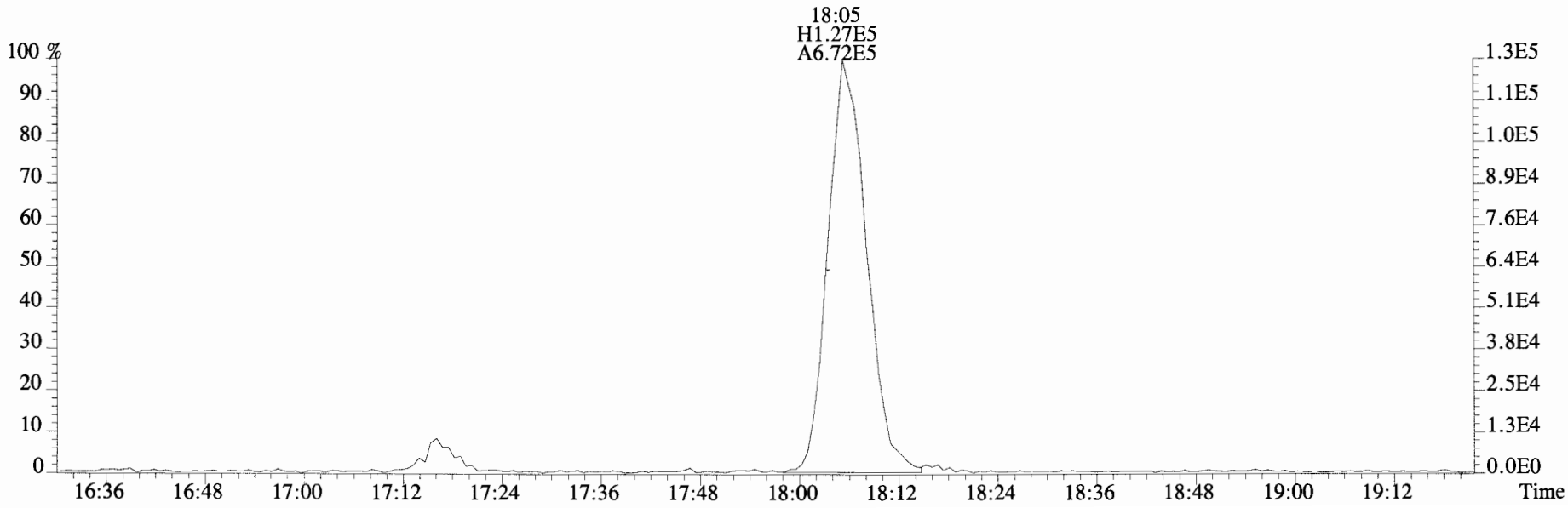
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

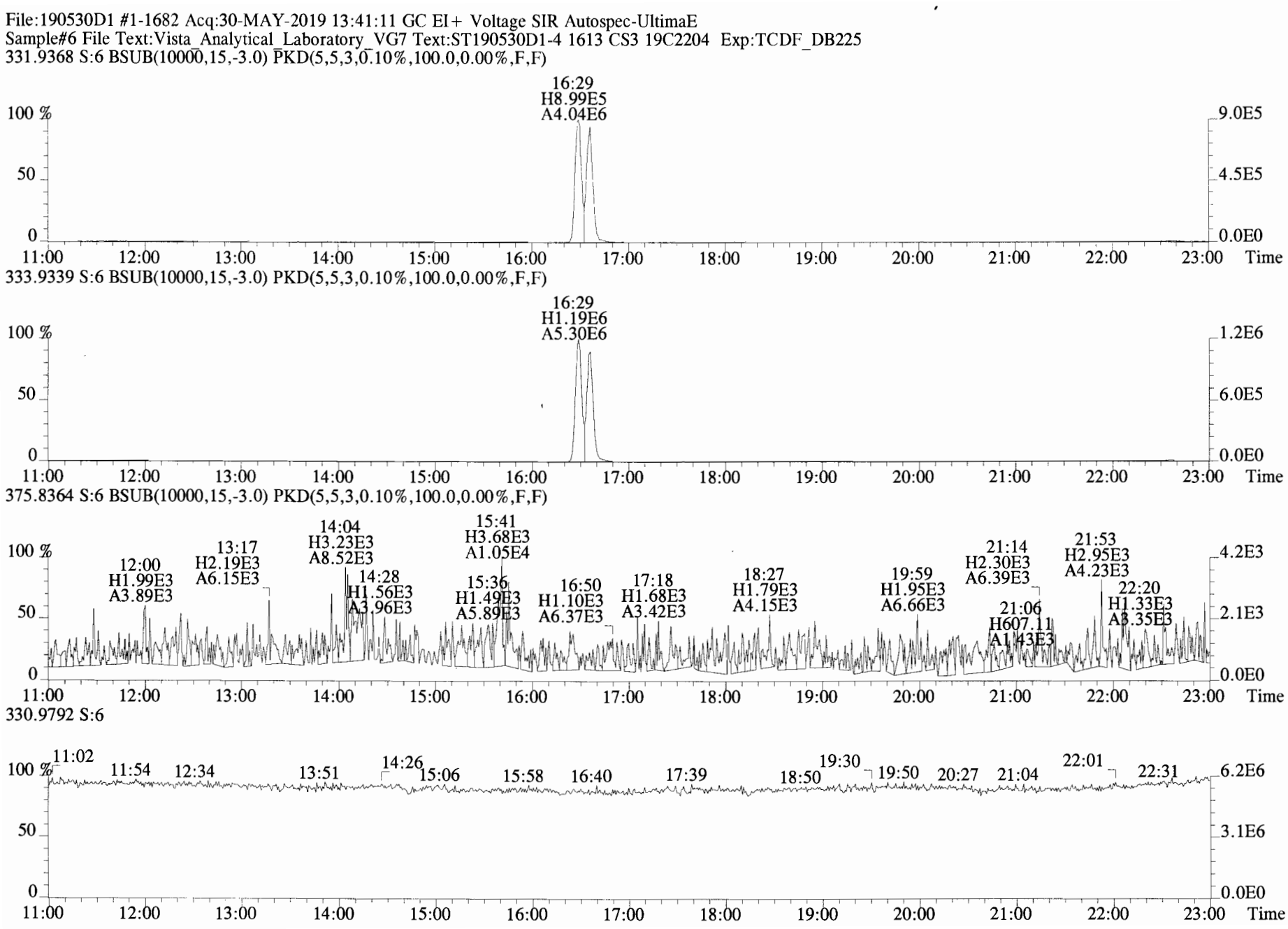


File:190530D1 #1-1682 Acq:30-MAY-2019 13:41:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-4 1613 CS3 19C2204 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

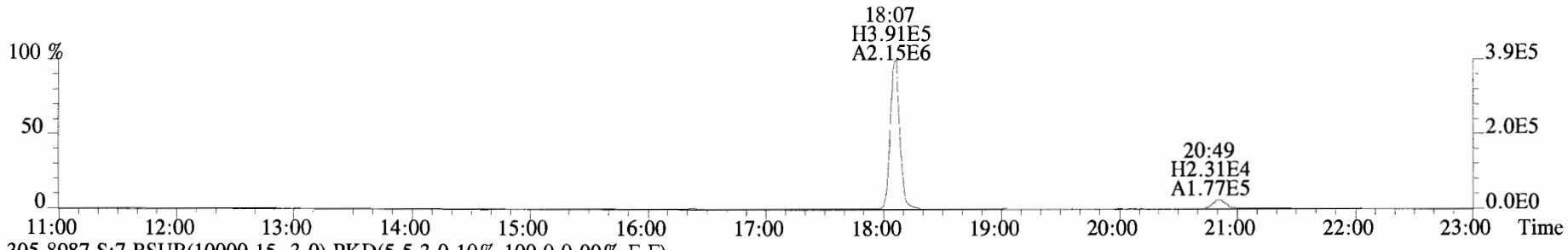


305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

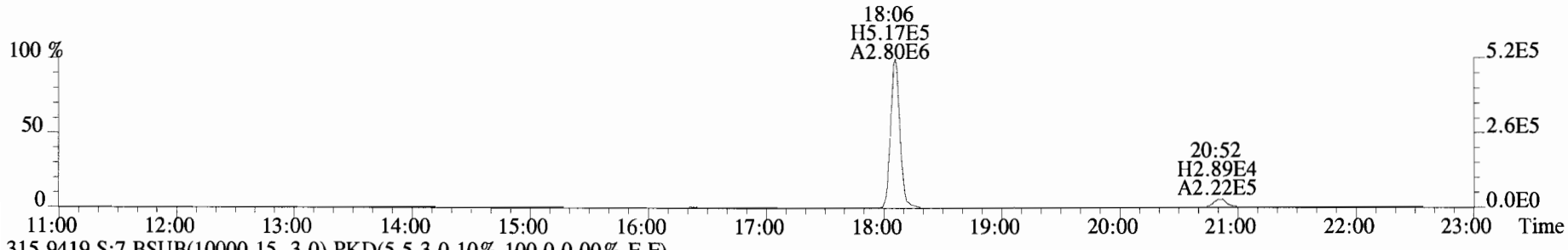



File:190530D1 #1-1682 Acq:30-MAY-2019 13:41:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-4 1613 CS3 19C2204 Exp:TCDF_DB225
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H8.99E5
A4.04E6
100 %
50
0
9.0E5
4.5E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H1.19E6
A5.30E6
100 %
50
0
1.2E6
6.0E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
12:00
H1.99E3
A3.89E3
13:17
H2.19E3
A6.15E3
14:04
H3.23E3
A8.52E3
14:28
H1.56E3
A3.96E3
15:36
H1.49E3
A5.89E3
15:41
H3.68E3
A1.05E4
16:50
H1.10E3
A6.37E3
17:18
H1.68E3
A3.42E3
18:27
H1.79E3
A4.15E3
19:59
H1.95E3
A6.66E3
21:06
H607.11
A1.43E3
21:14
H2.30E3
A6.39E3
21:53
H2.95E3
A4.23E3
22:20
H1.33E3
A3.35E3
100 %
50
0
4.2E3
2.1E3
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
330.9792 S:6
11:02
11:54
12:34
13:51
14:26
15:06
15:58
16:40
17:39
18:50
19:30
19:50
20:27
21:04
22:01
22:31
100 %
50
0
6.2E6
3.1E6
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time

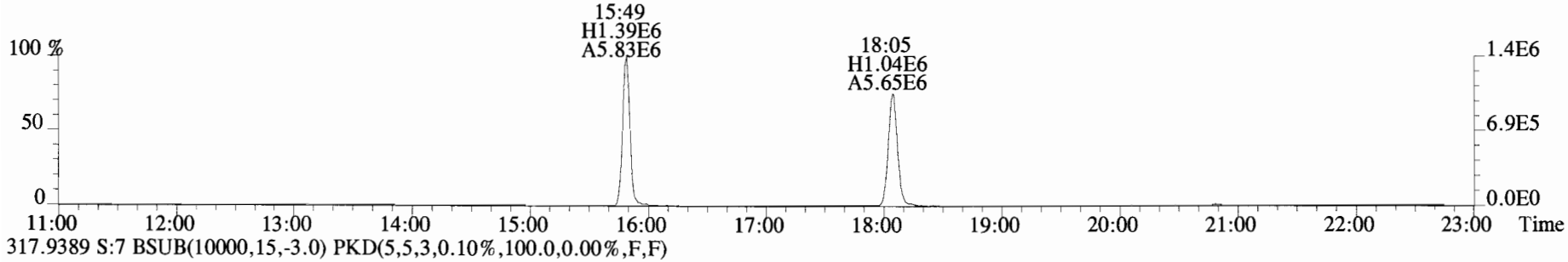
File:190530D1 #1-1682 Acq:30-MAY-2019 14:13:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-5 1613 CS4 19C2205 Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



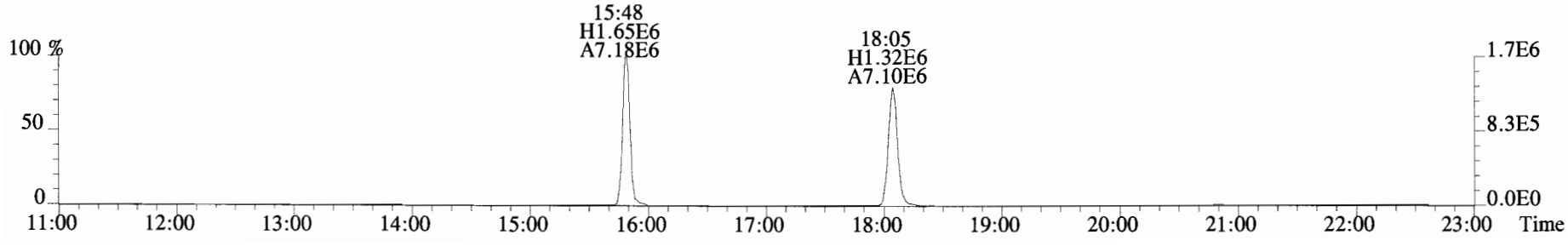
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

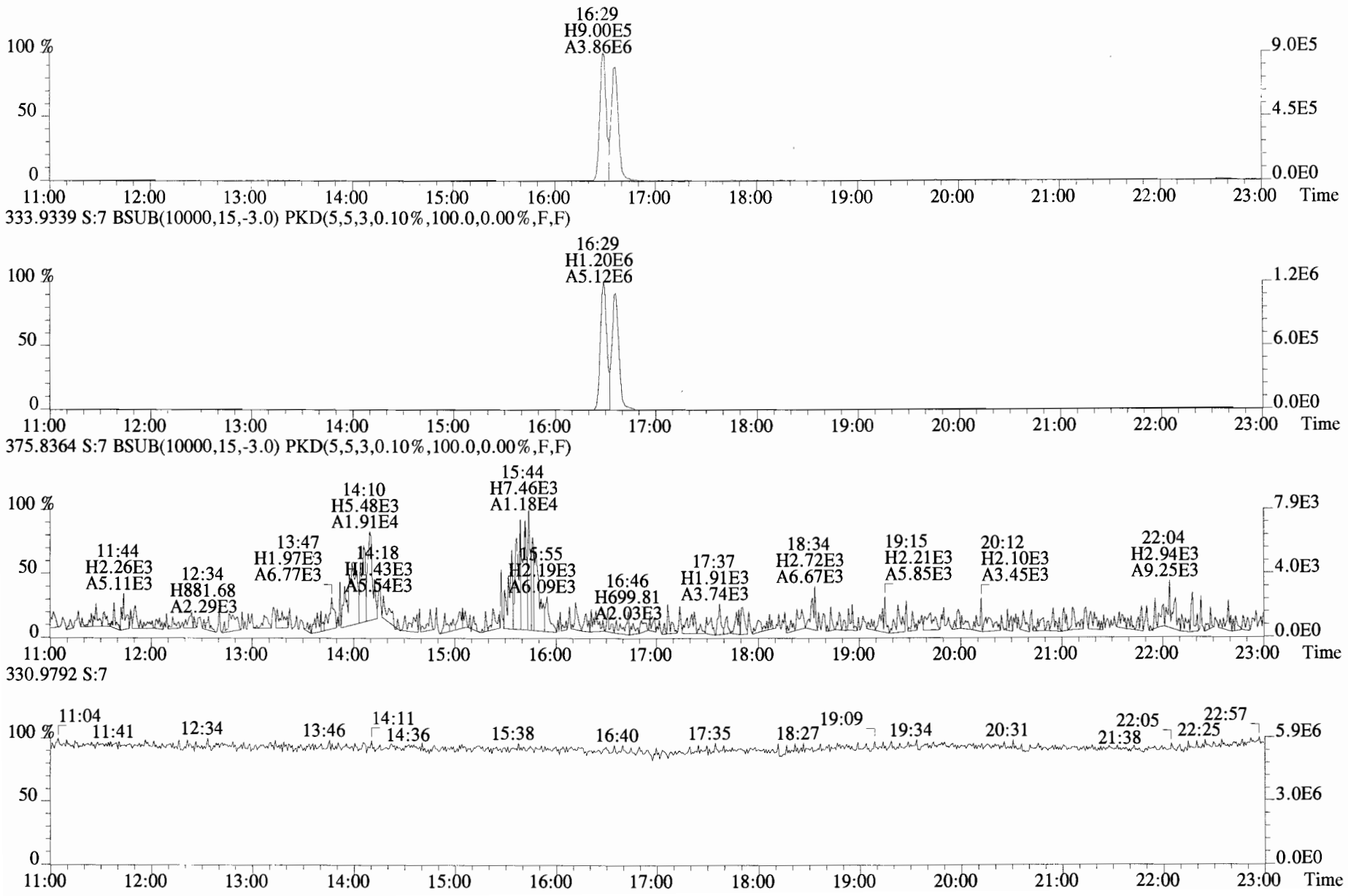


315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

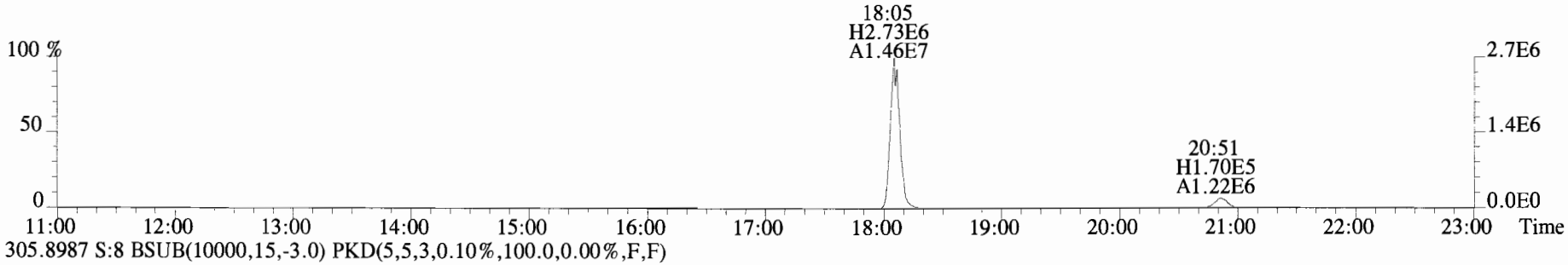


317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

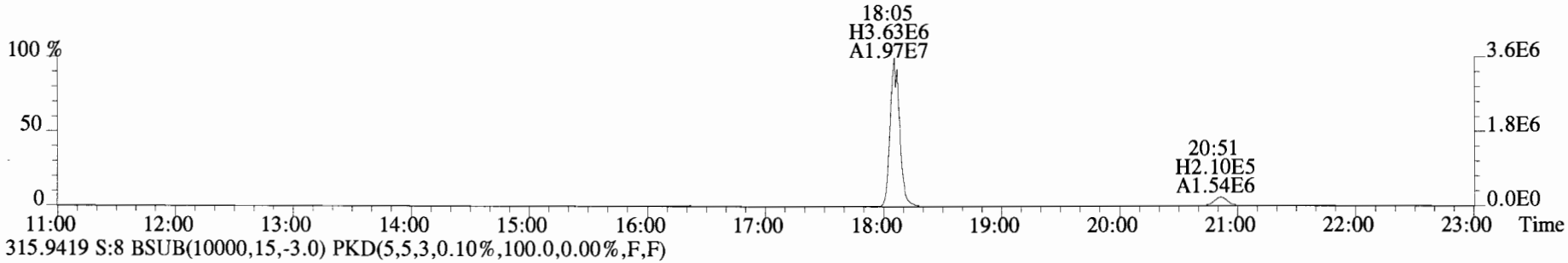



File:190530D1 #1-1682 Acq:30-MAY-2019 14:13:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-5 1613 CS4 19C2205 Exp:TCDF_DB225
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H9.00E5
A3.86E6
100 %
50
0
9.0E5
4.5E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:29
H1.20E6
A5.12E6
100 %
50
0
1.2E6
6.0E5
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:44
H7.46E3
A1.18E4
14:10
H5.48E3
A1.91E4
11:44
H2.26E3
A5.11E3
12:34
H881.68
A2.29E3
13:47
H1.97E3
A6.77E3
14:18
H1.43E3
A5.54E3
15:55
H2.19E3
A6.09E3
16:46
H699.81
A2.03E3
17:37
H1.91E3
A3.74E3
18:34
H2.72E3
A6.67E3
19:15
H2.21E3
A5.85E3
20:12
H2.10E3
A3.45E3
22:04
H2.94E3
A9.25E3
100 %
50
0
7.9E3
4.0E3
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time
330.9792 S:7
11:04
11:41
12:34
13:46
14:11
14:36
15:38
16:40
17:35
18:27
19:09
19:34
20:31
21:38
22:05
22:25
22:57
100 %
50
0
5.9E6
3.0E6
0.0E0
11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Time

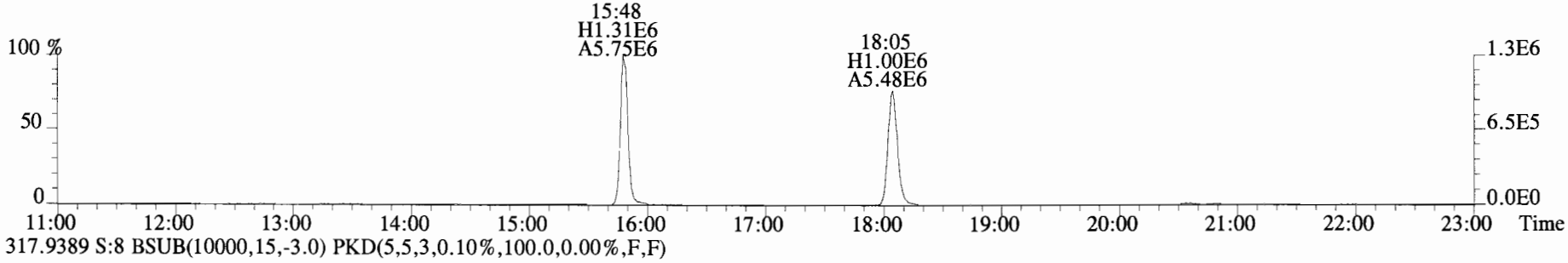
File:190530D1 #1-1682 Acq:30-MAY-2019 14:44:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-6 1613 CS5 19C2206 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



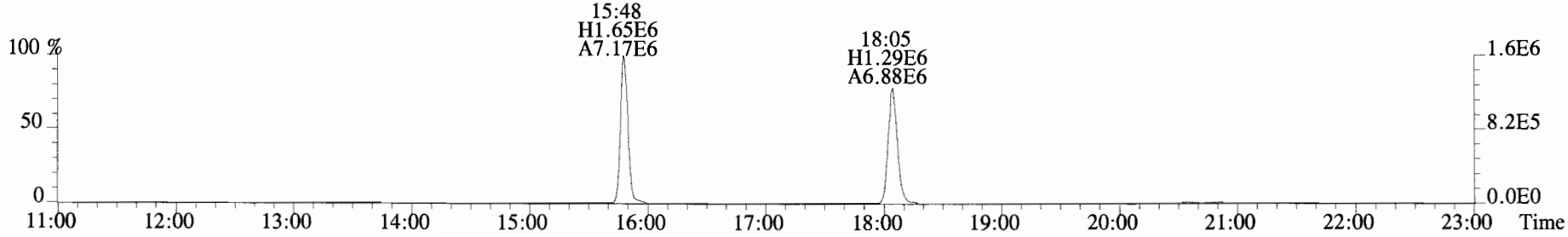
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



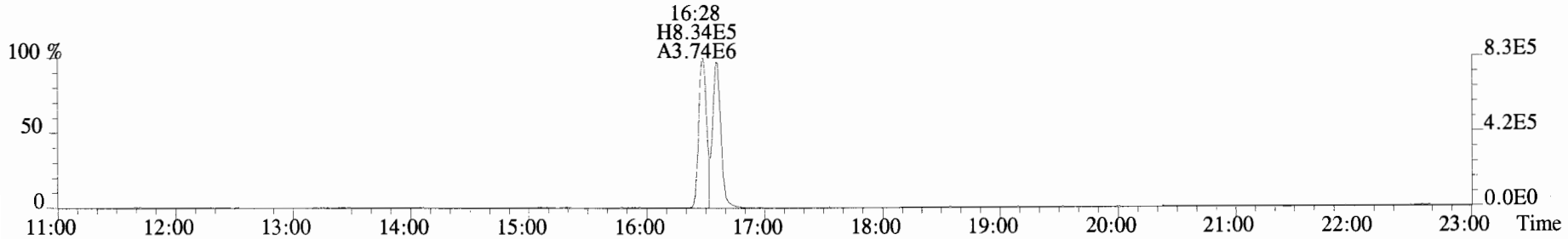
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



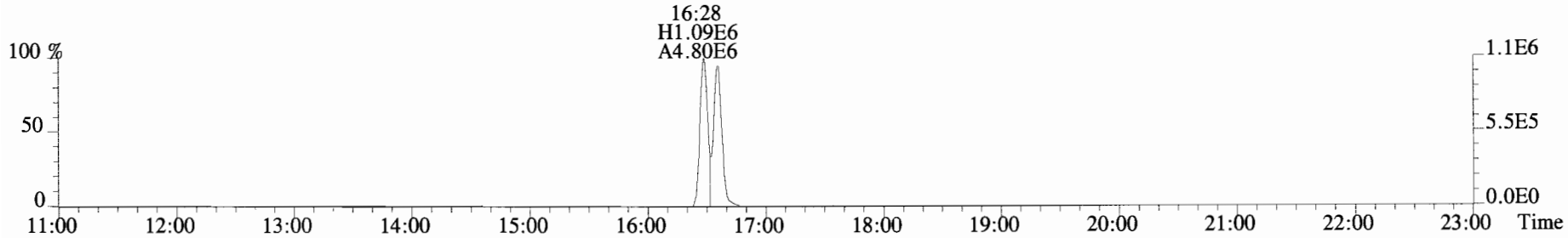
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



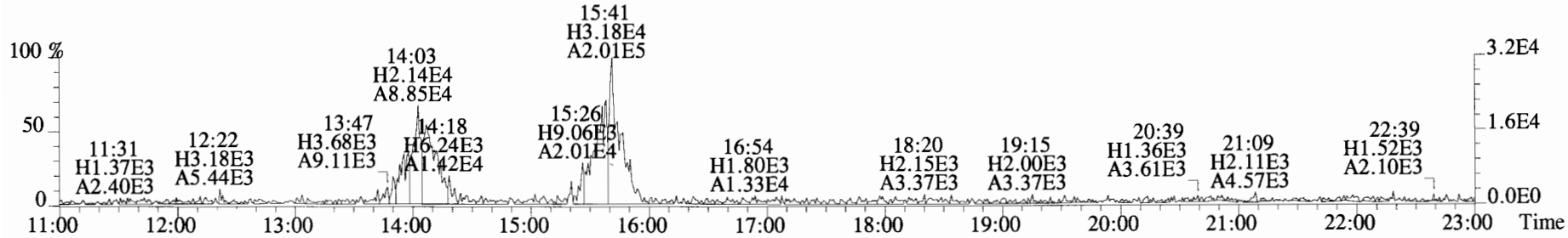
File:190530D1 #1-1682 Acq:30-MAY-2019 14:44:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:ST190530D1-6 1613 CS5 19C2206 Exp:TCDF_DB225
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



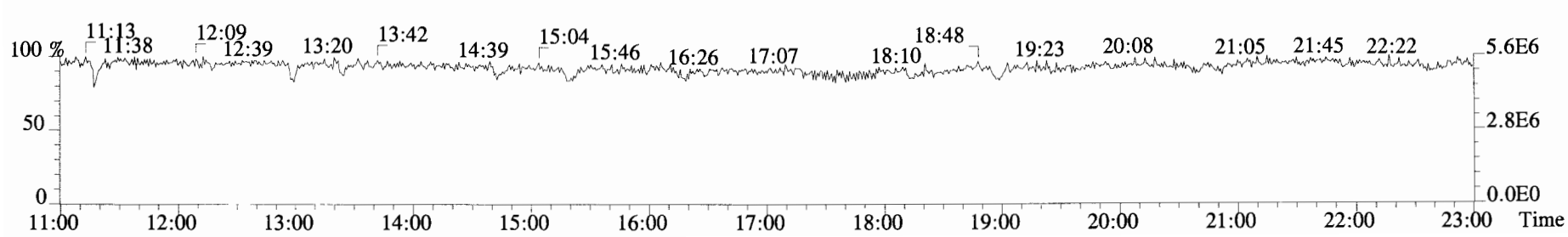
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

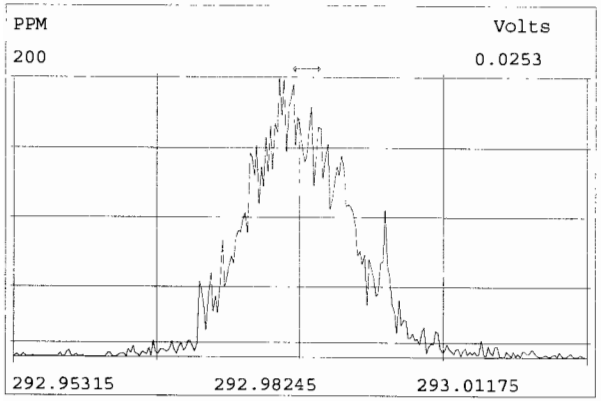


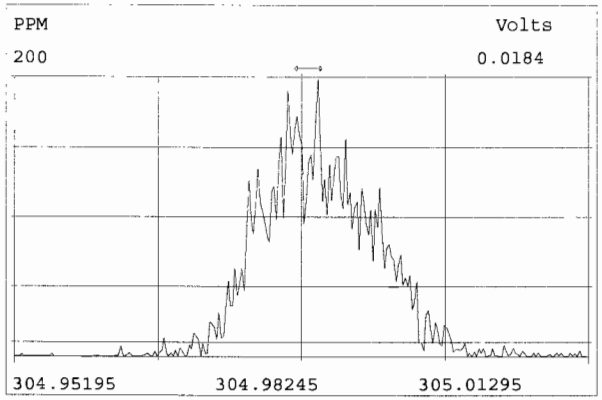
330.9792 S:8

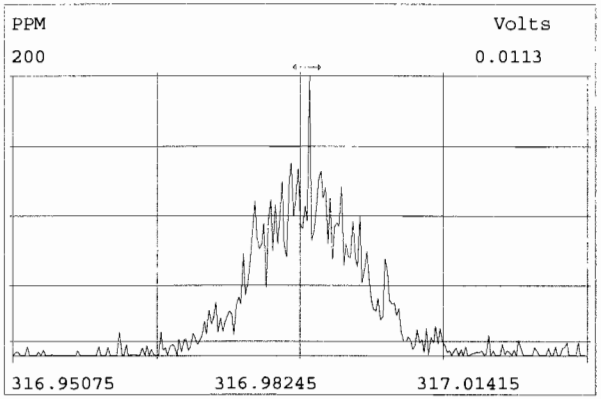


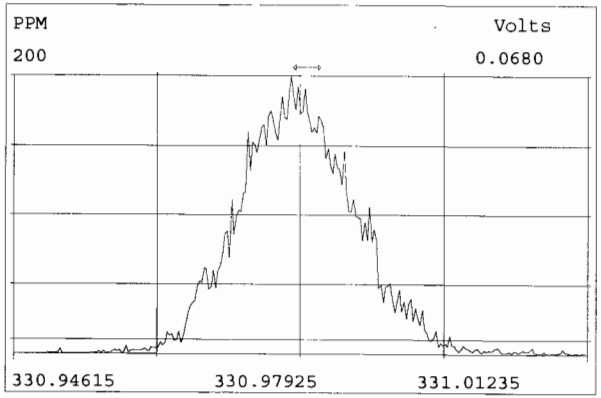
Peak Locate Examination:30-MAY-2019:19:09 File:RES_CHECK

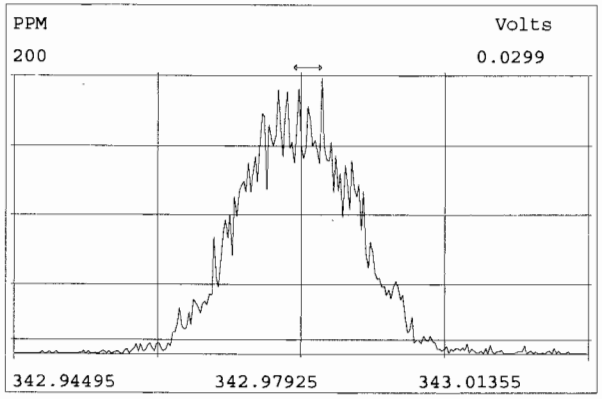
Experiment:TCDF_DB225 Function:1 Reference:PFK

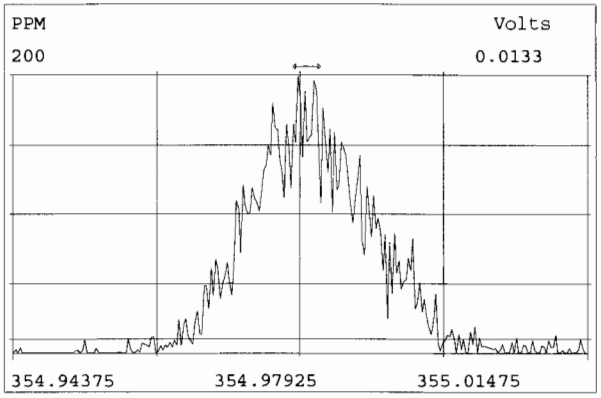


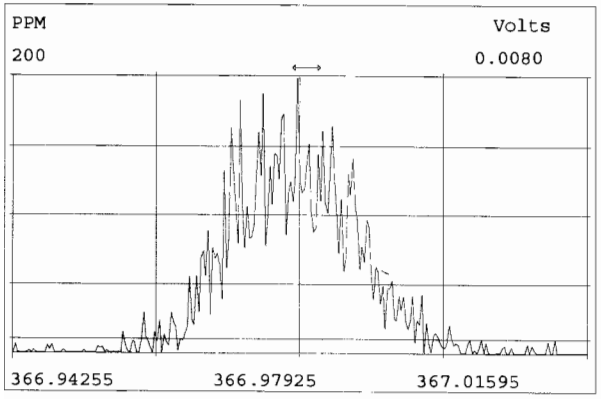


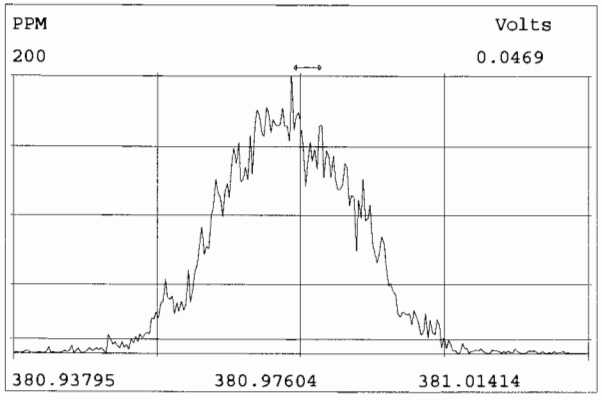












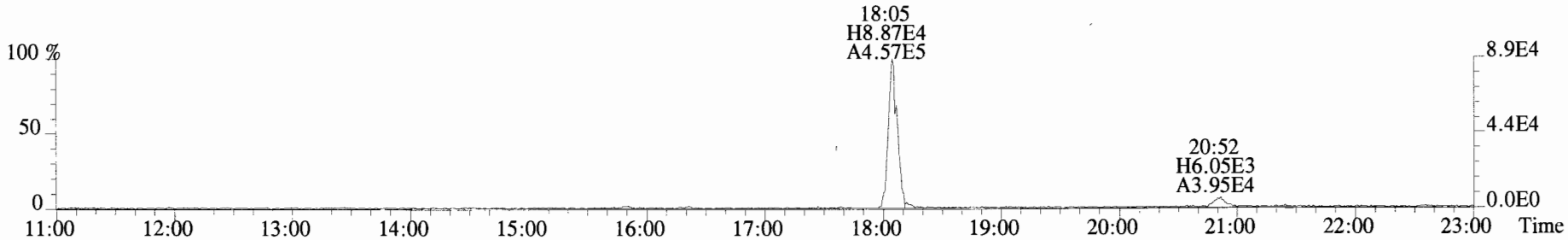
Client ID: 1613 SSS 19C2207 Filename: 190530D1 S:10 Acq:30-MAY-19 15:48:32 ConCal: ST190530D1-4
Lab ID: SS190528D1-1 GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.15e+07	0.82 y	15:48	1.00	100.0	-
13C-2,3,7,8-TCDF	1.18e+07	0.80 y	18:04	1.02	100.0	100.0
2,3,7,8-TCDF	1.08e+06	0.74 y	18:05	0.95	9.628	

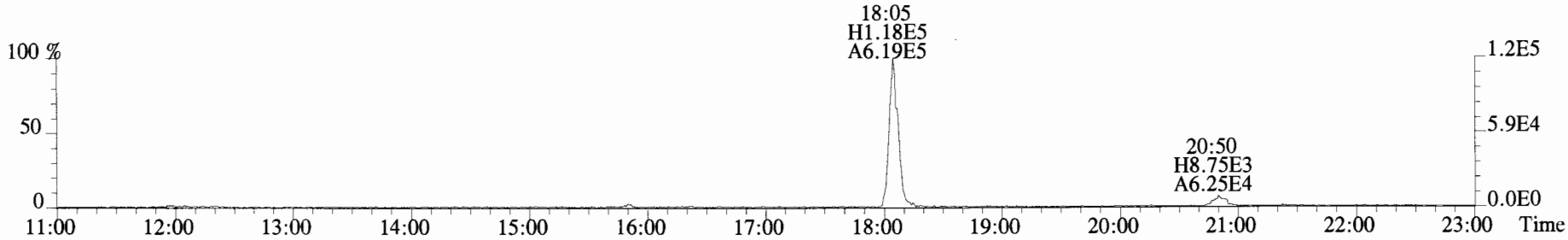
Integrations by Analyst: DB Date: 5/31/19

Reviewed by Analyst: CT Date: 05/31/19

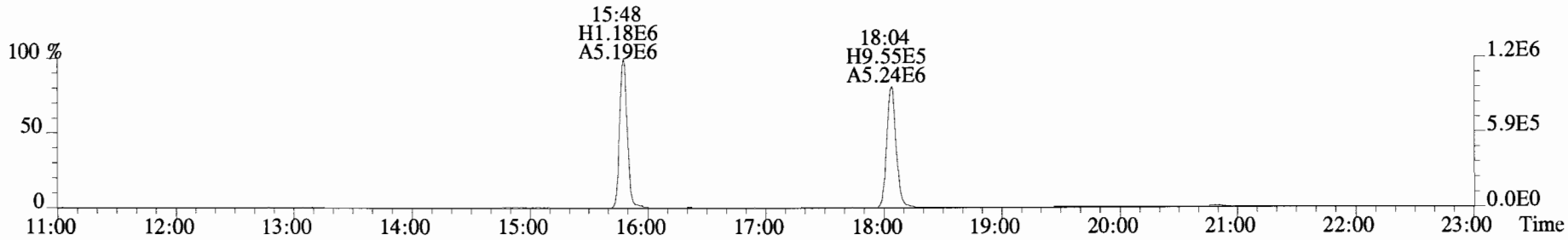
File:190530D1 #1-1682 Acq:30-MAY-2019 15:48:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista_Analytical_Laboratory_VG7 Text:SS190528D1-1 1613 SSS 19C2207 Exp:TCDF_DB225
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



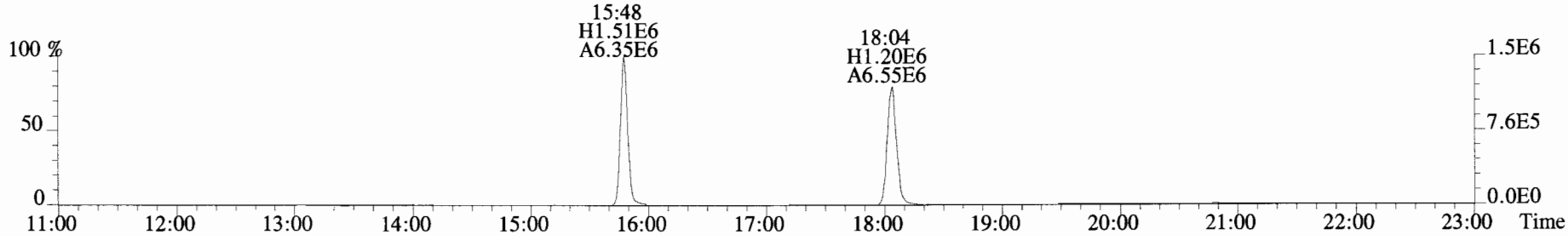
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



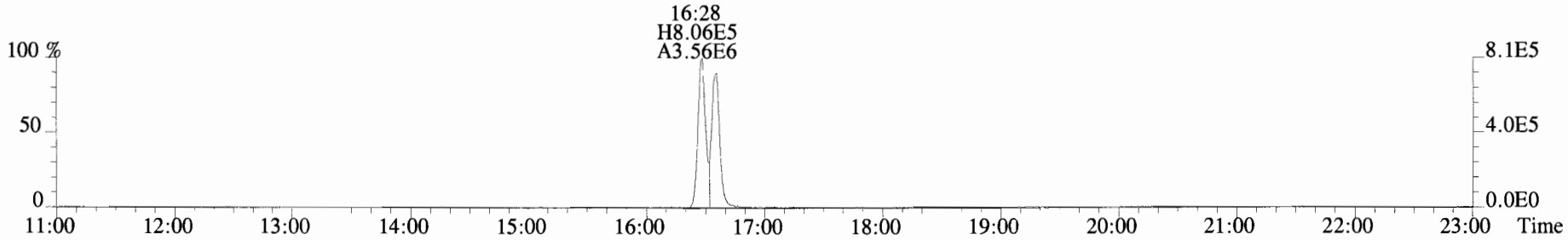
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



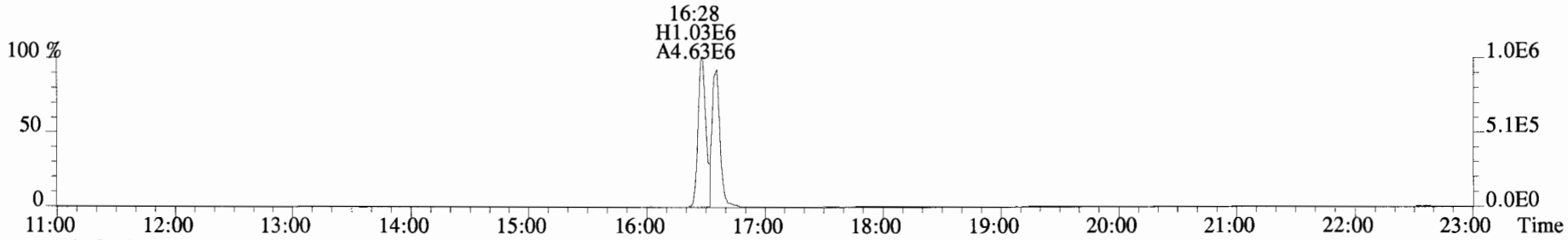
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



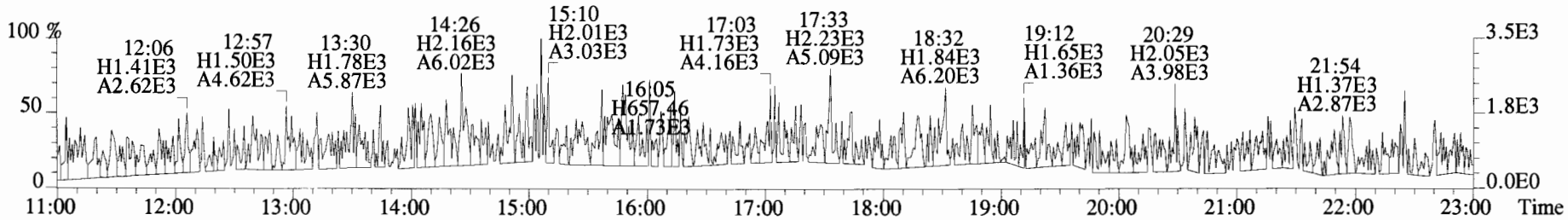
File:190530D1 #1-1682 Acq:30-MAY-2019 15:48:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista_Analytical_Laboratory_VG7 Text:SS190528D1-1 1613 SSS 19C2207 Exp:TCDF_DB225
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



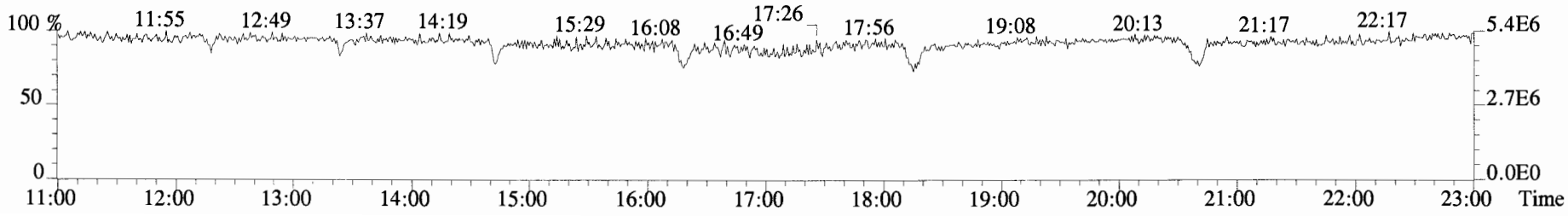
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



330.9792 S:10



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

Last Altered: Saturday, November 23, 2019 13:11:31 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:15:15 Pacific Standard Time

EL 11/23/19

Limited: High point for Endosulfan I Endosulfan II and trans-Chlordane (gamma) @ 250

GRB 11/25/19

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Compound name: Hexachlorobenzene
Response Factor: 0.874254
RRF SD: 0.0835857, Relative SD: 9.5608
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	191122K3_1	2.00	1.22	NO	22.84	1.001	6.41e4	1.75e6	2.10	5.0	0.918	bb
2	191122K3_2	10.0	1.22	NO	22.84	1.001	2.26e5	1.28e6	10.1	0.8	0.881	bb
3	191122K3_3	100	1.22	NO	22.83	1.001	2.30e6	1.62e6	81.3	-18.7	0.711	bb
4	191122K3_4	250	1.22	NO	22.83	1.001	9.73e6	2.16e6	258	3.2	0.902	bb
5	191122K3_5	1200	1.22	NO	22.83	1.000	4.84e7	2.28e6	1210	1.2	0.885	bb
6	191122K3_6	50.0	1.21	NO	22.83	1.000	1.48e6	1.56e6	54.2	8.4	0.948	bb

Compound name: Alpha-BHC
Response Factor: 0.760492
RRF SD: 0.0706404, Relative SD: 9.28877
Response type: Internal Std (Ref 35), 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	191122K3_1	2.00	2.16	NO	23.39	1.001	2.01e4	6.29e5	2.10	5.1	0.800	bb
2	191122K3_2	10.0	2.17	NO	23.39	1.001	6.88e4	4.52e5	10.0	0.1	0.761	bb
3	191122K3_3	100	2.11	NO	23.39	1.001	6.98e5	5.62e5	81.6	-18.4	0.621	bb
4	191122K3_4	250	2.11	NO	23.37	1.001	3.01e6	7.66e5	259	3.4	0.787	bb
5	191122K3_5	1200	2.10	NO	23.39	1.001	1.58e7	8.39e5	1230	2.9	0.782	bb
6	191122K3_6	50.0	2.12	NO	23.39	1.001	4.44e5	5.46e5	53.4	6.9	0.813	bb

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: Lindane (gamma-BHC)
Response Factor: 0.744411
RRF SD: 0.0792613, Relative SD: 10.6475
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	191122K3_1	2.00	2.02	NO	26.68	1.002	1.53e4	4.71e5	2.18	9.2	0.813	bb
2	191122K3_2	10.0	2.12	NO	26.66	1.001	5.05e4	3.38e5	10.0	0.5	0.748	bb
3	191122K3_3	100	2.10	NO	26.66	1.001	5.24e5	4.27e5	82.5	-17.5	0.614	bb
4	191122K3_4	250	2.10	NO	26.65	1.001	2.27e6	5.83e5	261	4.5	0.778	bb
5	191122K3_5	1200	2.10	NO	26.66	1.001	1.21e7	7.26e5	1120	-7.0	0.693	bb
6	191122K3_6	50.0	2.12	NO	26.66	1.001	3.29e5	4.01e5	55.2	10.4	0.822	bb

Compound name: Beta-BHC
Response Factor: 0.895956
RRF SD: 0.0860874, Relative SD: 9.60844
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	191122K3_1	2.00	2.18	NO	28.75	1.001	1.36e4	3.60e5	2.11	5.4	0.944	bb
2	191122K3_2	10.0	2.22	NO	28.74	1.001	4.55e4	2.57e5	9.90	-1.0	0.887	bb
3	191122K3_3	100	2.14	NO	28.74	1.001	4.67e5	3.21e5	81.2	-18.8	0.728	bb
4	191122K3_4	250	2.08	NO	28.72	1.001	2.00e6	4.29e5	260	3.8	0.930	bb
5	191122K3_5	1200	2.10	NO	28.74	1.001	1.12e7	5.05e5	1240	3.3	0.926	bb
6	191122K3_6	50.0	2.16	NO	28.74	1.001	2.94e5	3.06e5	53.6	7.3	0.961	bb

Compound name: Delta-BHC
Response Factor: 0.837358
RRF SD: 0.0835431, Relative SD: 9.97699
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	191122K3_1	2.00	2.10	NO	30.44	1.001	1.43e4	4.11e5	2.07	3.6	0.867	bb
2	191122K3_2	10.0	2.12	NO	30.44	1.001	5.03e4	2.98e5	10.1	0.9	0.845	bb

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: Delta-BHC

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	100	2.07	NO	30.42	1.000	5.09e5	3.79e5	80.2	-19.8	0.672	bb
4	191122K3_4	250	2.13	NO	30.42	1.001	2.22e6	5.08e5	261	4.5	0.875	bb
5	191122K3_5	1200	2.08	NO	30.42	1.001	1.23e7	5.97e5	1230	2.7	0.860	bb
6	191122K3_6	50.0	2.13	NO	30.42	1.000	3.23e5	3.57e5	54.0	8.1	0.905	bb

Compound name: Heptachlor
Response Factor: 0.967655
RRF SD: 0.0968214, Relative SD: 10.0058
Response type: Internal Std (Ref 39), 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	191122K3_1	2.00	1.20	NO	28.86	1.001	7.22e3	1.79e5	2.09	4.3	1.01	bb
2	191122K3_2	10.0	1.06	NO	28.86	1.001	2.37e4	1.29e5	9.49	-5.1	0.918	bb
3	191122K3_3	100	1.13	NO	28.86	1.001	2.68e5	1.69e5	82.0	-18.0	0.794	bb
4	191122K3_4	250	1.14	NO	28.86	1.002	1.25e6	2.49e5	260	4.0	1.01	bb
5	191122K3_5	1200	1.14	NO	28.86	1.001	7.33e6	2.99e5	1270	5.7	1.02	bb
6	191122K3_6	50.0	1.13	NO	28.86	1.001	1.89e5	1.79e5	54.6	9.2	1.06	bb

Compound name: Aldrin
Response Factor: 1.02364
RRF SD: 0.101448, Relative SD: 9.91054
Response type: Internal Std (Ref 40), 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	191122K3_1	2.00	1.58	NO	31.00	1.001	1.34e4	2.98e5	2.19	9.4	1.12	bb
2	191122K3_2	10.0	1.67	NO	31.00	1.001	4.39e4	2.17e5	9.90	-1.0	1.01	bb
3	191122K3_3	100	1.63	NO	30.99	1.001	4.62e5	2.78e5	81.3	-18.7	0.832	bb
4	191122K3_4	250	1.60	NO	30.99	1.001	2.03e6	3.86e5	256	2.5	1.05	bb
5	191122K3_5	1200	1.59	NO	31.00	1.001	1.05e7	4.24e5	1210	1.1	1.04	bb
6	191122K3_6	50.0	1.62	NO	31.00	1.001	3.06e5	2.80e5	53.3	6.6	1.09	bb

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Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: Oxychlordane
Response Factor: 0.992427
RRF SD: 0.0924332, Relative SD: 9.31386
Response type: Internal Std (Ref 41), 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	191122K3_1	2.00	1.78	NO	33.61	1.001	2.68e3	6.62e4	2.04	2.0	1.01	bb
2	191122K3_2	10.0	1.54	NO	33.61	1.001	9.63e3	4.83e4	10.0	0.5	0.997	bb
3	191122K3_3	100	1.57	NO	33.60	1.001	1.02e5	6.27e4	82.3	-17.7	0.817	bb
4	191122K3_4	250	1.58	NO	33.58	1.001	4.71e5	9.19e4	259	3.4	1.03	bb
5	191122K3_5	1200	1.62	NO	33.60	1.001	2.66e6	1.10e5	1220	1.7	1.01	bb
6	191122K3_6	50.0	1.56	NO	33.60	1.001	6.96e4	6.37e4	55.1	10.1	1.09	bb

Compound name: cis-Heptachlor Epoxide
Response Factor: 1.00277
RRF SD: 0.103957, Relative SD: 10.367
Response type: Internal Std (Ref 42), 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	191122K3_1	2.00	1.49	NO	34.40	1.001	3.70e3	8.51e4	2.17	8.5	1.09	bb
2	191122K3_2	10.0	1.47	NO	34.40	1.001	1.26e4	6.12e4	10.3	2.8	1.03	bb
3	191122K3_3	100	1.59	NO	34.39	1.001	1.32e5	8.22e4	79.9	-20.1	0.802	bb
4	191122K3_4	250	1.59	NO	34.39	1.001	6.15e5	1.20e5	256	2.4	1.03	bb
5	191122K3_5	1200	1.61	NO	34.39	1.000	3.40e6	1.42e5	1190	-0.6	0.996	bb
6	191122K3_6	50.0	1.58	NO	34.39	1.000	8.90e4	8.30e4	53.5	7.0	1.07	bb

Compound name: trans-Heptachlor Epoxide
Response Factor: 0.255033
RRF SD: 0.0296586, Relative SD: 11.6293
Response type: Internal Std (Ref 42), 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	191122K3_1	2.00	1.54	NO	34.88	1.015	7.47e2	8.51e4	1.72	-13.9	0.220	MM
2	191122K3_2	10.0	1.77	NO	34.90	1.015	3.49e3	6.12e4	11.2	11.7	0.285	bb

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: trans-Heptachlor Epoxide

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	100	1.48	NO	34.88	1.015	3.56e4	8.22e4	84.8	-15.2	0.216	bb
4	191122K3_4	250	1.54	NO	34.87	1.015	1.63e5	1.20e5	267	6.7	0.272	bb
5	191122K3_5	1200	1.58	NO	34.88	1.015	8.95e5	1.42e5	1230	2.8	0.262	bb
6	191122K3_6	50.0	1.63	NO	34.88	1.015	2.28e4	8.30e4	53.9	7.9	0.275	bb

Compound name: trans-Chlordane (gamma)
Response Factor: 1.08361
RRF SD: 0.142289, Relative SD: 13.1309
Response type: Internal Std (Ref 43), 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	191122K3_1	2.00	1.41	NO	35.31	1.001	3.45e3	7.10e4	2.24	12.2	1.22	bb
2	191122K3_2	10.0	1.63	NO	35.31	1.001	1.21e4	5.07e4	11.0	9.8	1.19	bb
3	191122K3_3	100	1.61	NO	35.29	1.001	1.13e5	6.61e4	78.9	-21.1	0.855	bb
4	191122K3_4	250	1.58	NO	35.29	1.001	5.25e5	9.72e4	249	-0.4	1.08	bb
5	191122K3_5	1200	1.58	NO	35.29	1.000	2.70e6	1.33e5	937	-21.9	0.846	bbX
6	191122K3_6	50.0	1.55	NO	35.29	1.000	7.45e4	6.91e4	49.7	-0.5	1.08	bb

Compound name: trans-Nonachlor
Response Factor: 1.00218
RRF SD: 0.144049, Relative SD: 14.3735
Response type: Internal Std (Ref 44), 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	191122K3_1	2.00	1.55	NO	35.50	1.001	3.75e3	7.84e4	2.39	19.4	1.20	bb
2	191122K3_2	10.0	1.51	NO	35.49	1.001	1.15e4	5.59e4	10.3	2.9	1.03	bb
3	191122K3_3	100	1.58	NO	35.48	1.000	1.18e5	7.50e4	78.6	-21.4	0.788	bb
4	191122K3_4	250	1.57	NO	35.48	1.001	5.45e5	1.09e5	251	0.2	1.00	bb
5	191122K3_5	1200	1.59	NO	35.48	1.000	2.84e6	1.32e5	1080	-10.4	0.898	bb
6	191122K3_6	50.0	1.60	NO	35.48	1.000	7.99e4	7.30e4	54.6	9.2	1.09	bb

Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: cis-Chlordane
Response Factor: 0.980978
RRF SD: 0.121108, Relative SD: 12.3456
Response type: Internal Std (Ref 44), 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	191122K3_1	2.00	1.56	NO	35.96	1.014	3.26e3	7.84e4	2.12	6.0	1.04	bd
2	191122K3_2	10.0	1.55	NO	35.98	1.014	1.16e4	5.59e4	10.6	5.9	1.04	bd
3	191122K3_3	100	1.57	NO	35.98	1.014	1.18e5	7.50e4	80.1	-19.9	0.786	bd
4	191122K3_4	250	1.61	NO	35.96	1.014	5.56e5	1.09e5	261	4.4	1.02	bd
5	191122K3_5	1200	1.58	NO	35.98	1.014	2.80e6	1.32e5	1080	-9.8	0.885	bd
6	191122K3_6	50.0	1.64	NO	35.98	1.014	8.13e4	7.30e4	56.7	13.5	1.11	bd

Compound name: Endosulfan I (alpha)
Response Factor: 1.10625
RRF SD: 0.218305, Relative SD: 19.7339
Response type: Internal Std (Ref 45), 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	191122K3_1	10.0	1.38	NO	36.08	1.000	1.37e4	4.94e4	12.5	25.1	1.38	MM
2	191122K3_2	15.0	1.71	NO	36.08	1.000	1.36e4	3.65e4	16.8	12.3	1.24	MM
3	191122K3_3	100	1.57	NO	36.08	1.001	7.92e4	4.83e4	74.2	-25.8	0.820	db
4	191122K3_4	250	1.58	NO	36.06	1.000	3.73e5	7.53e4	224	-10.4	0.992	db
5	191122K3_5	1200	1.58	NO	36.08	1.000	1.96e6	1.12e5	786	-34.5	0.725	dbX
6	191122K3_6	50.0	1.65	NO	36.08	1.001	5.38e4	4.92e4	49.4	-1.2	1.09	db

Compound name: 2,4'-DDE
Response Factor: 0.854193
RRF SD: 0.0854642, Relative SD: 10.0053
Response type: Internal Std (Ref 46), 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	191122K3_1	2.00	1.25	NO	35.96	1.000	6.80e4	1.83e6	2.17	8.4	0.926	bb
2	191122K3_2	10.0	1.30	NO	35.96	1.000	2.32e5	1.35e6	10.1	1.0	0.863	bb

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Compound name: 2,4'-DDE

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	100	1.34	NO	35.96	1.001	2.41e6	1.75e6	80.9	-19.1	0.691	bb
4	191122K3_4	250	1.34	NO	35.95	1.000	1.11e7	2.48e6	262	4.7	0.894	bb
5	191122K3_5	1200	1.34	NO	35.96	1.000	5.27e7	2.60e6	1190	-1.2	0.844	bb
6	191122K3_6	50.0	1.34	NO	35.96	1.000	1.64e6	1.80e6	53.1	6.2	0.908	bb

Compound name: 4,4'-DDE
Response Factor: 0.872751
RRF SD: 0.0898359, Relative SD: 10.2934
Response type: Internal Std (Ref 47), 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	191122K3_1	2.00	1.26	NO	37.04	1.000	4.99e4	1.33e6	2.16	7.8	0.941	bb
2	191122K3_2	10.0	1.37	NO	37.04	1.000	1.68e5	9.30e5	10.3	3.4	0.902	bb
3	191122K3_3	100	1.36	NO	37.03	1.000	1.73e6	1.24e6	80.0	-20.0	0.698	bb
4	191122K3_4	250	1.33	NO	37.03	1.000	8.18e6	1.81e6	259	3.7	0.905	bb
5	191122K3_5	1200	1.32	NO	37.04	1.001	4.08e7	1.97e6	1180	-1.3	0.861	bb
6	191122K3_6	50.0	1.34	NO	37.04	1.000	1.22e6	1.32e6	53.2	6.4	0.929	bb

Compound name: Dieldrin
Response Factor: 0.956974
RRF SD: 0.0957195, Relative SD: 10.0023
Response type: Internal Std (Ref 48), 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	191122K3_1	2.00	1.77	NO	37.54	1.000	7.71e3	1.83e5	2.20	9.9	1.05	MM
2	191122K3_2	10.0	1.61	NO	37.54	1.001	2.55e4	1.30e5	10.2	2.2	0.978	bb
3	191122K3_3	100	1.57	NO	37.53	1.000	2.60e5	1.68e5	80.7	-19.3	0.773	bb
4	191122K3_4	250	1.56	NO	37.53	1.001	1.21e6	2.44e5	259	3.8	0.993	bb
5	191122K3_5	1200	1.57	NO	37.53	1.000	5.96e6	2.60e5	1200	-0.0	0.957	bb
6	191122K3_6	50.0	1.61	NO	37.54	1.001	1.75e5	1.77e5	51.7	3.4	0.989	bb

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Compound name: Endrin
Response Factor: 0.932602
RRF SD: 0.0974821, Relative SD: 10.4527
Response type: Internal Std (Ref 49), 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	191122K3_1	2.00	1.32	NO	38.95	1.001	3.07e3	8.37e4	1.97	-1.5	0.918	bb
2	191122K3_2	10.0	1.48	NO	38.94	1.000	1.07e4	5.34e4	10.7	7.4	1.00	bb
3	191122K3_3	100	1.50	NO	38.94	1.001	1.09e5	7.32e4	79.6	-20.4	0.742	bb
4	191122K3_4	250	1.57	NO	38.94	1.001	6.06e5	1.24e5	263	5.3	0.982	bb
5	191122K3_5	1200	1.57	NO	38.94	1.000	3.35e6	1.43e5	1260	5.1	0.980	bb
6	191122K3_6	50.0	1.58	NO	38.94	1.000	7.71e4	7.93e4	52.2	4.3	0.973	bb

Compound name: cis-Nonachlor
Response Factor: 0.955617
RRF SD: 0.116667, Relative SD: 12.2085
Response type: Internal Std (Ref 50), 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	191122K3_1	2.00	1.55	NO	39.23	1.000	4.01e3	9.15e4	2.29	14.6	1.09	bb
2	191122K3_2	10.0	1.65	NO	39.23	1.000	1.21e4	6.52e4	9.69	-3.1	0.926	MM
3	191122K3_3	100	1.55	NO	39.22	1.000	1.32e5	8.59e4	80.5	-19.5	0.769	bb
4	191122K3_4	250	1.55	NO	39.22	1.000	6.41e5	1.28e5	263	5.0	1.00	bb
5	191122K3_5	1200	1.57	NO	39.23	1.000	3.22e6	1.49e5	1130	-5.9	0.899	bb
6	191122K3_6	50.0	1.62	NO	39.23	1.001	9.34e4	8.97e4	54.5	9.0	1.04	bb

Compound name: Endosulfan II (beta)
Response Factor: 1.06389
RRF SD: 0.21151, Relative SD: 19.8809
Response type: Internal Std (Ref 51), 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	191122K3_1	10.0	1.67	NO	39.96	1.000	6.92e3	2.56e4	12.7	27.1	1.35	MM
2	191122K3_2	15.0	1.60	NO	39.95	1.000	6.23e3	1.79e4	16.3	8.8	1.16	MM

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Compound name: Endosulfan II (beta)

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	100	1.53	NO	39.95	1.000	4.10e4	2.54e4	75.9	-24.1	0.808	MM
4	191122K3_4	250	1.60	NO	39.95	1.000	1.91e5	4.16e4	216	-13.6	0.920	MM
5	191122K3_5	1200	1.53	NO	39.96	1.000	1.02e6	7.55e4	633	-47.3	0.561	bbX
6	191122K3_6	50.0	1.66	NO	39.96	1.000	2.90e4	2.68e4	50.8	1.7	1.08	bb

Compound name: 2,4'-DDD
Response Factor: 0.915287
RRF SD: 0.089287, Relative SD: 9.75508
Response type: Internal Std (Ref 52), 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	191122K3_1	2.00	1.58	NO	38.18	1.000	5.40e4	1.35e6	2.19	9.5	1.00	bb
2	191122K3_2	10.0	1.63	NO	38.18	1.000	1.76e5	9.56e5	10.1	0.8	0.923	bb
3	191122K3_3	100	1.58	NO	38.18	1.000	1.87e6	1.25e6	81.7	-18.3	0.748	bb
4	191122K3_4	250	1.61	NO	38.17	1.000	8.90e6	1.91e6	254	1.6	0.930	bb
5	191122K3_5	1200	1.59	NO	38.18	1.000	5.24e7	2.40e6	1190	-0.5	0.911	bb
6	191122K3_6	50.0	1.61	NO	38.18	1.000	1.35e6	1.38e6	53.4	6.9	0.978	bb

Compound name: 2,4'-DDT
Response Factor: 0.920521
RRF SD: 0.116093, Relative SD: 12.6116
Response type: Internal Std (Ref 53), 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	191122K3_1	2.00	1.34	NO	39.31	1.000	3.32e4	7.66e5	2.36	17.8	1.08	bd
2	191122K3_2	10.0	1.61	NO	39.31	1.000	1.05e5	5.69e5	9.99	-0.1	0.919	bd
3	191122K3_3	100	1.58	NO	39.31	1.000	1.13e6	7.82e5	78.3	-21.7	0.721	bd
4	191122K3_4	250	1.59	NO	39.29	1.000	5.70e6	1.23e6	253	1.1	0.931	bd
5	191122K3_5	1200	1.57	NO	39.31	1.000	3.54e7	1.60e6	1200	0.1	0.922	bd
6	191122K3_6	50.0	1.60	NO	39.31	1.000	8.63e5	9.12e5	51.4	2.8	0.946	bd

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Compound name: 4,4'-DDD
Response Factor: 1.00391
RRF SD: 0.101312, Relative SD: 10.0918
Response type: Internal Std (Ref 54), 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	191122K3_1	2.00	1.46	NO	39.44	1.000	4.57e4	1.03e6	2.20	10.1	1.10	db
2	191122K3_2	10.0	1.61	NO	39.44	1.000	1.50e5	7.34e5	10.1	1.4	1.02	db
3	191122K3_3	100	1.61	NO	39.43	1.000	1.60e6	9.87e5	80.5	-19.5	0.809	db
4	191122K3_4	250	1.61	NO	39.43	1.000	8.01e6	1.57e6	254	1.7	1.02	db
5	191122K3_5	1200	1.59	NO	39.44	1.000	4.88e7	1.99e6	1220	1.6	1.02	db
6	191122K3_6	50.0	1.62	NO	39.44	1.000	1.21e6	1.15e6	52.3	4.7	1.05	db

Compound name: 4,4'-DDT
Response Factor: 0.986452
RRF SD: 0.0973744, Relative SD: 9.87118
Response type: Internal Std (Ref 55), 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	191122K3_1	2.00	1.50	NO	40.51	1.000	2.50e4	6.00e5	2.11	5.7	1.04	MM
2	191122K3_2	10.0	1.50	NO	40.51	1.000	8.38e4	4.15e5	10.2	2.4	1.01	MM
3	191122K3_3	100	1.57	NO	40.50	1.000	9.06e5	5.73e5	80.1	-19.9	0.790	bb
4	191122K3_4	250	1.60	NO	40.50	1.000	4.68e6	9.31e5	255	2.0	1.01	bb
5	191122K3_5	1200	1.59	NO	40.51	1.000	3.01e7	1.20e6	1270	6.0	1.05	bb
6	191122K3_6	50.0	1.62	NO	40.51	1.000	7.31e5	7.14e5	51.9	3.8	1.02	bb

Compound name: Endosulfan Sulfate
Response Factor: 0.927914
RRF SD: 0.131348, Relative SD: 14.1552
Response type: Internal Std (Ref 56), 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	191122K3_1	10.0	1.71	NO	41.70	1.000	9.29e3	4.08e4	12.3	22.7	1.14	bb
2	191122K3_2	15.0	1.42	NO	41.68	1.000	8.64e3	3.12e4	14.9	-0.5	0.923	MM

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Compound name: Endosulfan Sulfate

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	100	1.53	NO	41.68	1.000	5.68e4	3.91e4	78.3	-21.7	0.726	bb
4	191122K3_4	250	1.56	NO	41.68	1.001	2.62e5	5.52e4	255	2.2	0.948	bb
5	191122K3_5	1200	1.55	NO	41.68	1.000	1.34e6	6.17e4	1170	-2.8	0.902	bb
6	191122K3_6	50.0	1.63	NO	41.68	1.000	3.72e4	4.01e4	50.1	0.2	0.930	bb

Compound name: 4,4'-Methoxychlor
Response Factor: 1.13621
RRF SD: 0.120265, Relative SD: 10.5847
Response type: Internal Std (Ref 57), 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	191122K3_1	10.0	6.11	NO	43.56	1.000	1.37e5	5.77e6	10.5	4.7	1.19	MM
2	191122K3_2	15.0	6.05	NO	43.54	1.000	1.31e5	3.86e6	14.9	-0.6	1.13	bb
3	191122K3_3	100	5.74	NO	43.54	1.000	9.61e5	5.32e6	79.5	-20.5	0.903	bb
4	191122K3_4	250	5.84	NO	43.54	1.000	5.14e6	8.68e6	261	4.3	1.19	bb
5	191122K3_5	1200	5.91	NO	43.54	1.000	2.91e7	1.04e7	1230	2.5	1.16	bb
6	191122K3_6	50.0	5.86	NO	43.54	1.000	8.02e5	6.44e6	54.8	9.6	1.25	bb

Compound name: Mirex
Response Factor: 0.932294
RRF SD: 0.103147, Relative SD: 11.0638
Response type: Internal Std (Ref 58), 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	191122K3_1	2.00	1.45	NO	44.11	1.000	1.71e4	4.15e5	2.21	10.5	1.03	bb
2	191122K3_2	10.0	1.47	NO	44.11	1.000	5.47e4	3.03e5	9.68	-3.2	0.902	bb
3	191122K3_3	100	1.52	NO	44.09	1.000	5.77e5	3.89e5	79.6	-20.4	0.742	bb
4	191122K3_4	250	1.55	NO	44.09	1.000	2.53e6	5.26e5	258	3.3	0.963	bb
5	191122K3_5	1200	1.53	NO	44.10	1.001	1.20e7	5.25e5	1230	2.1	0.952	bb
6	191122K3_6	50.0	1.53	NO	44.10	1.000	3.71e5	3.69e5	53.9	7.7	1.00	bb

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Compound name: Endrin Aldehyde
Response Factor: 0.886746
RRF SD: 0.101396, Relative SD: 11.4346
Response type: Internal Std (Ref 59), 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	191122K3_1	10.0	0.68	NO	41.10	1.001	1.55e4	7.96e5	11.0	9.8	0.973	MM
2	191122K3_2	15.0	0.61	NO	41.08	1.000	1.53e4	5.73e5	15.1	0.4	0.890	MM
3	191122K3_3	100	0.62	NO	41.08	1.000	1.07e5	7.61e5	79.2	-20.8	0.702	MM
4	191122K3_4	250	0.62	NO	41.08	1.001	5.17e5	1.10e6	264	5.6	0.936	MM
5	191122K3_5	1200	0.63	NO	41.08	1.000	2.58e6	1.26e6	1160	-3.7	0.854	MM
6	191122K3_6	50.0	0.60	NO	41.08	1.000	8.46e4	8.76e5	54.4	8.9	0.965	MM

Compound name: Endrin Ketone
Response Factor: 0.910803
RRF SD: 0.100993, Relative SD: 11.0883
Response type: Internal Std (Ref 60), 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	191122K3_1	10.0	0.69	NO	44.25	1.000	1.08e4	5.15e5	11.5	15.4	1.05	db
2	191122K3_2	15.0	0.67	NO	44.25	1.001	1.03e4	3.77e5	15.0	0.2	0.912	bb
3	191122K3_3	100	0.62	NO	44.23	1.000	7.21e4	4.87e5	81.4	-18.6	0.741	bb
4	191122K3_4	250	0.62	NO	44.23	1.000	3.29e5	7.23e5	250	-0.0	0.911	db
5	191122K3_5	1200	0.62	NO	44.25	1.001	1.73e6	8.08e5	1170	-2.1	0.892	bb
6	191122K3_6	50.0	0.66	NO	44.25	1.001	5.23e4	5.46e5	52.6	5.1	0.958	db

Compound name: 13C6-Hexachlorobenzene
Response Factor: 0.691051
RRF SD: 0.0138932, Relative SD: 2.01044
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.27	NO	22.83	0.873	1.75e6	2.50e6	50.5	0.9	0.697	bb
2	191122K3_2	50.0	1.27	NO	22.83	0.873	1.28e6	1.84e6	50.5	1.1	0.699	bb

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Compound name: 13C6-Hexachlorobenzene

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	50.0	1.30	NO	22.81	0.873	1.62e6	2.32e6	50.5	1.0	0.698	bb
4	191122K3_4	50.0	1.28	NO	22.81	0.873	2.16e6	3.22e6	48.4	-3.2	0.669	bb
5	191122K3_5	50.0	1.27	NO	22.83	0.873	2.28e6	3.36e6	49.1	-1.8	0.678	bb
6	191122K3_6	50.0	1.28	NO	22.83	0.873	1.56e6	2.21e6	51.0	2.0	0.705	bb

Compound name: 13C6-Alpha-BHC
Response Factor: 0.245718
RRF SD: 0.00506308, Relative SD: 2.06053
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	0.80	NO	23.37	0.894	6.29e5	2.50e6	51.1	2.3	0.251	bb
2	191122K3_2	50.0	0.79	NO	23.37	0.894	4.52e5	1.84e6	50.1	0.1	0.246	bb
3	191122K3_3	50.0	0.79	NO	23.35	0.894	5.62e5	2.32e6	49.3	-1.3	0.242	bb
4	191122K3_4	50.0	0.79	NO	23.35	0.894	7.66e5	3.22e6	48.3	-3.3	0.238	bb
5	191122K3_5	50.0	0.79	NO	23.35	0.894	8.39e5	3.36e6	50.9	1.7	0.250	bb
6	191122K3_6	50.0	0.78	NO	23.35	0.894	5.46e5	2.21e6	50.3	0.5	0.247	bb

Compound name: 13C6-Lindane (gamma)
Response Factor: 0.189053
RRF SD: 0.0135624, Relative SD: 7.17387
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	0.80	NO	26.63	1.019	4.71e5	2.50e6	49.7	-0.5	0.188	bb
2	191122K3_2	50.0	0.79	NO	26.63	1.019	3.38e5	1.84e6	48.6	-2.8	0.184	bb
3	191122K3_3	50.0	0.80	NO	26.63	1.019	4.27e5	2.32e6	48.7	-2.7	0.184	bb
4	191122K3_4	50.0	0.83	NO	26.62	1.019	5.83e5	3.22e6	47.9	-4.3	0.181	bb
5	191122K3_5	50.0	0.96	NO	26.63	1.019	7.26e5	3.36e6	57.2	14.4	0.216	MM
6	191122K3_6	50.0	0.80	NO	26.63	1.019	4.01e5	2.21e6	47.9	-4.1	0.181	bb

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Compound name: 13C6-Beta-BHC
Response Factor: 0.140624
RRF SD: 0.00587083, Relative SD: 4.17484
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	0.79	NO	28.72	1.099	3.60e5	2.50e6	51.1	2.3	0.144	bb
2	191122K3_2	50.0	0.79	NO	28.72	1.099	2.57e5	1.84e6	49.7	-0.7	0.140	bb
3	191122K3_3	50.0	0.78	NO	28.70	1.098	3.21e5	2.32e6	49.2	-1.5	0.138	bb
4	191122K3_4	50.0	0.77	NO	28.70	1.099	4.29e5	3.22e6	47.3	-5.3	0.133	bb
5	191122K3_5	50.0	0.80	NO	28.70	1.098	5.05e5	3.36e6	53.5	6.9	0.150	bb
6	191122K3_6	50.0	0.79	NO	28.70	1.098	3.06e5	2.21e6	49.2	-1.7	0.138	bb

Compound name: 13C6-Delta-BHC
Response Factor: 0.164415
RRF SD: 0.00691987, Relative SD: 4.20877
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	0.78	NO	30.41	1.163	4.11e5	2.50e6	49.9	-0.2	0.164	bd
2	191122K3_2	50.0	0.78	NO	30.41	1.163	2.98e5	1.84e6	49.2	-1.5	0.162	bb
3	191122K3_3	50.0	0.76	NO	30.41	1.163	3.79e5	2.32e6	49.7	-0.6	0.163	bd
4	191122K3_4	50.0	0.79	NO	30.39	1.164	5.08e5	3.22e6	48.0	-4.1	0.158	bd
5	191122K3_5	50.0	0.79	NO	30.41	1.164	5.97e5	3.36e6	54.1	8.1	0.178	bd
6	191122K3_6	50.0	0.79	NO	30.41	1.163	3.57e5	2.21e6	49.1	-1.7	0.162	bd

Compound name: 13C10-Heptachlor
Response Factor: 0.0769571
RRF SD: 0.00705399, Relative SD: 9.16614
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.30	NO	28.83	1.103	1.79e5	2.50e6	46.5	-7.1	0.0715	bb
2	191122K3_2	50.0	1.28	NO	28.83	1.103	1.29e5	1.84e6	45.7	-8.7	0.0703	bb

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Compound name: 13C10-Heptachlor

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	50.0	1.34	NO	28.83	1.103	1.69e5	2.32e6	47.4	-5.3	0.0729	bb
4	191122K3_4	50.0	1.29	NO	28.82	1.103	2.49e5	3.22e6	50.2	0.5	0.0773	bb
5	191122K3_5	50.0	1.31	NO	28.83	1.103	2.99e5	3.36e6	57.8	15.6	0.0889	bb
6	191122K3_6	50.0	1.30	NO	28.83	1.103	1.79e5	2.21e6	52.5	4.9	0.0808	bb

Compound name: 13C12-Aldrin
Response Factor: 0.12156
RRF SD: 0.00388325, Relative SD: 3.19451
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.64	NO	30.97	1.185	2.98e5	2.50e6	49.0	-2.0	0.119	bb
2	191122K3_2	50.0	1.69	NO	30.97	1.185	2.17e5	1.84e6	48.4	-3.1	0.118	bb
3	191122K3_3	50.0	1.65	NO	30.96	1.185	2.78e5	2.32e6	49.3	-1.5	0.120	bb
4	191122K3_4	50.0	1.62	NO	30.96	1.185	3.86e5	3.22e6	49.3	-1.5	0.120	bb
5	191122K3_5	50.0	1.62	NO	30.96	1.185	4.24e5	3.36e6	52.0	3.9	0.126	bb
6	191122K3_6	50.0	1.67	NO	30.96	1.185	2.80e5	2.21e6	52.1	4.2	0.127	bb

Compound name: 13C10-Oxychlordane
Response Factor: 0.028293
RRF SD: 0.00241909, Relative SD: 8.55015
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.53	NO	33.58	1.285	6.62e4	2.50e6	46.7	-6.5	0.0264	bb
2	191122K3_2	50.0	1.57	NO	33.57	1.285	4.83e4	1.84e6	46.4	-7.2	0.0263	db
3	191122K3_3	50.0	1.64	NO	33.57	1.285	6.27e4	2.32e6	47.8	-4.4	0.0270	db
4	191122K3_4	50.0	1.62	NO	33.56	1.285	9.19e4	3.22e6	50.4	0.7	0.0285	bb
5	191122K3_5	50.0	1.64	NO	33.57	1.285	1.10e5	3.36e6	57.9	15.7	0.0327	db
6	191122K3_6	50.0	1.66	NO	33.57	1.285	6.37e4	2.21e6	50.9	1.7	0.0288	db

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Compound name: 13C10-cis-Heptachlor Epoxide
Response Factor: 0.0366273
RRF SD: 0.00327373, Relative SD: 8.93795
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.55	NO	34.37	1.315	8.51e4	2.50e6	46.4	-7.2	0.0340	bb
2	191122K3_2	50.0	1.63	NO	34.37	1.315	6.12e4	1.84e6	45.4	-9.1	0.0333	bb
3	191122K3_3	50.0	1.67	NO	34.36	1.315	8.22e4	2.32e6	48.4	-3.2	0.0355	bb
4	191122K3_4	50.0	1.59	NO	34.36	1.316	1.20e5	3.22e6	50.7	1.5	0.0372	bb
5	191122K3_5	50.0	1.67	NO	34.37	1.315	1.42e5	3.36e6	57.8	15.7	0.0424	bb
6	191122K3_6	50.0	1.58	NO	34.37	1.315	8.30e4	2.21e6	51.2	2.4	0.0375	bb

Compound name: 13C10-trans-Chlordane (gamma)
Response Factor: 0.0291657
RRF SD: 0.0014922, Relative SD: 5.11629
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.70	NO	35.28	1.350	7.10e4	2.50e6	48.6	-2.7	0.0284	bb
2	191122K3_2	50.0	1.53	NO	35.28	1.350	5.07e4	1.84e6	47.2	-5.5	0.0276	bb
3	191122K3_3	50.0	1.59	NO	35.26	1.349	6.61e4	2.32e6	48.9	-2.2	0.0285	bb
4	191122K3_4	50.0	1.80	NO	35.26	1.350	9.72e4	3.22e6	51.7	3.4	0.0302	bb
5	191122K3_5	50.0	2.22	YES	35.28	1.350	1.33e5	3.36e6	67.8	35.7	0.0396	MMX
6	191122K3_6	50.0	1.63	NO	35.28	1.350	6.91e4	2.21e6	53.5	7.1	0.0312	bb

Compound name: 13C10-trans-Nonachlor
Response Factor: 0.0333488
RRF SD: 0.0031372, Relative SD: 9.40722
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.68	NO	35.47	1.357	7.84e4	2.50e6	46.9	-6.1	0.0313	bb
2	191122K3_2	50.0	1.59	NO	35.47	1.357	5.59e4	1.84e6	45.6	-8.8	0.0304	bb

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Compound name: 13C10-trans-Nonachlor

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	50.0	1.64	NO	35.47	1.357	7.50e4	2.32e6	48.5	-2.9	0.0324	bb
4	191122K3_4	50.0	1.65	NO	35.45	1.357	1.09e5	3.22e6	50.5	1.0	0.0337	bb
5	191122K3_5	50.0	1.92	NO	35.47	1.357	1.32e5	3.36e6	58.9	17.8	0.0393	bb
6	191122K3_6	50.0	1.65	NO	35.47	1.357	7.30e4	2.21e6	49.5	-1.0	0.0330	bb

Compound name: 13C9-Endosulfan I (alpha)
Response Factor: 0.0212096
RRF SD: 0.00156476, Relative SD: 7.37759
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.70	NO	36.06	1.380	4.94e4	2.50e6	46.6	-6.9	0.0197	bb
2	191122K3_2	50.0	1.68	NO	36.06	1.380	3.65e4	1.84e6	46.8	-6.4	0.0199	bb
3	191122K3_3	50.0	1.61	NO	36.05	1.379	4.83e4	2.32e6	49.1	-1.8	0.0208	bb
4	191122K3_4	50.0	1.68	NO	36.05	1.380	7.53e4	3.22e6	55.1	10.1	0.0234	db
5	191122K3_5	50.0	1.82	NO	36.06	1.380	1.12e5	3.36e6	78.9	57.8	0.0335	dbX
6	191122K3_6	50.0	1.63	NO	36.05	1.379	4.92e4	2.21e6	52.5	4.9	0.0223	db

Compound name: 13C12-2,4'-DDE
Response Factor: 0.763215
RRF SD: 0.0311614, Relative SD: 4.08291
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.60	NO	35.95	0.996	1.83e6	2.50e6	48.0	-4.0	0.733	bb
2	191122K3_2	50.0	1.58	NO	35.95	0.996	1.35e6	1.84e6	47.9	-4.1	0.732	bb
3	191122K3_3	50.0	1.59	NO	35.93	0.996	1.75e6	2.32e6	49.4	-1.2	0.754	bb
4	191122K3_4	50.0	1.59	NO	35.93	0.996	2.48e6	3.22e6	50.5	1.0	0.771	bb
5	191122K3_5	50.0	1.61	NO	35.95	0.996	2.60e6	3.36e6	50.8	1.5	0.775	bb
6	191122K3_6	50.0	1.55	NO	35.95	0.996	1.80e6	2.21e6	53.4	6.8	0.815	bb

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Compound name: 13C12-4,4'-DDE
Response Factor: 0.552269
RRF SD: 0.035249, Relative SD: 6.38258
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.60	NO	37.03	1.026	1.33e6	2.50e6	47.9	-4.1	0.530	bb
2	191122K3_2	50.0	1.57	NO	37.03	1.026	9.30e5	1.84e6	45.8	-8.4	0.506	bb
3	191122K3_3	50.0	1.57	NO	37.01	1.026	1.24e6	2.32e6	48.3	-3.3	0.534	bb
4	191122K3_4	50.0	1.59	NO	37.01	1.026	1.81e6	3.22e6	50.7	1.5	0.560	bb
5	191122K3_5	50.0	1.62	NO	37.01	1.025	1.97e6	3.36e6	53.2	6.5	0.588	bb
6	191122K3_6	50.0	1.60	NO	37.03	1.026	1.32e6	2.21e6	53.9	7.8	0.596	bb

Compound name: 13C12-Dieldrin
Response Factor: 0.0749464
RRF SD: 0.00341953, Relative SD: 4.56264
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.62	NO	37.53	1.040	1.83e5	2.50e6	48.8	-2.4	0.0732	bb
2	191122K3_2	50.0	1.60	NO	37.51	1.039	1.30e5	1.84e6	47.3	-5.3	0.0710	bb
3	191122K3_3	50.0	1.60	NO	37.51	1.039	1.68e5	2.32e6	48.4	-3.3	0.0725	bb
4	191122K3_4	50.0	1.56	NO	37.50	1.039	2.44e5	3.22e6	50.4	0.8	0.0756	bb
5	191122K3_5	50.0	1.67	NO	37.51	1.039	2.60e5	3.36e6	51.6	3.2	0.0773	bb
6	191122K3_6	50.0	1.51	NO	37.51	1.039	1.77e5	2.21e6	53.5	7.0	0.0802	bb

Compound name: 13C12-Endrin
Response Factor: 0.0351157
RRF SD: 0.0048337, Relative SD: 13.7651
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.57	NO	38.92	1.078	8.37e4	2.50e6	47.6	-4.8	0.0334	bb
2	191122K3_2	50.0	1.51	NO	38.92	1.078	5.34e4	1.84e6	41.4	-17.3	0.0291	bb

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Compound name: 13C12-Endrin

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	50.0	1.52	NO	38.91	1.078	7.32e4	2.32e6	45.0	-10.1	0.0316	bb
4	191122K3_4	50.0	1.58	NO	38.91	1.078	1.24e5	3.22e6	54.6	9.1	0.0383	bb
5	191122K3_5	50.0	1.57	NO	38.92	1.078	1.43e5	3.36e6	60.5	20.9	0.0425	bb
6	191122K3_6	50.0	1.57	NO	38.92	1.078	7.93e4	2.21e6	51.0	2.1	0.0359	bb

Compound name: 13C10-cis-Nonachlor
Response Factor: 0.0389433
RRF SD: 0.00330138, Relative SD: 8.4774
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.62	NO	39.22	1.087	9.15e4	2.50e6	46.9	-6.1	0.0366	db
2	191122K3_2	50.0	1.72	NO	39.22	1.087	6.52e4	1.84e6	45.5	-8.9	0.0355	bb
3	191122K3_3	50.0	1.57	NO	39.20	1.086	8.59e4	2.32e6	47.6	-4.8	0.0371	bb
4	191122K3_4	50.0	1.57	NO	39.20	1.087	1.28e5	3.22e6	50.8	1.7	0.0396	bb
5	191122K3_5	50.0	1.82	NO	39.22	1.087	1.49e5	3.36e6	57.1	14.1	0.0444	db
6	191122K3_6	50.0	1.61	NO	39.20	1.086	8.97e4	2.21e6	52.1	4.1	0.0405	db

Compound name: 13C9-Endosulfan II
Response Factor: 0.0111929
RRF SD: 0.00131655, Relative SD: 11.7624
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.58	NO	39.95	1.107	2.56e4	2.50e6	45.7	-8.6	0.0102	bb
2	191122K3_2	50.0	1.55	NO	39.95	1.107	1.79e4	1.84e6	43.5	-12.9	0.00975	bb
3	191122K3_3	50.0	1.65	NO	39.93	1.106	2.54e4	2.32e6	48.9	-2.2	0.0109	bb
4	191122K3_4	50.0	1.71	NO	39.93	1.107	4.16e4	3.22e6	57.7	15.4	0.0129	bb
5	191122K3_5	50.0	2.08	YES	39.95	1.107	7.55e4	3.36e6	101	101.0	0.0225	bbX
6	191122K3_6	50.0	1.63	NO	39.95	1.107	2.68e4	2.21e6	54.2	8.4	0.0121	bb

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

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Compound name: 13C12-2,4'-DDD
Response Factor: 0.588296
RRF SD: 0.0732693, Relative SD: 12.4545
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.58	NO	38.17	1.460	1.35e6	2.50e6	45.7	-8.5	0.538	bb
2	191122K3_2	50.0	1.60	NO	38.17	1.460	9.56e5	1.84e6	44.2	-11.6	0.520	bb
3	191122K3_3	50.0	1.57	NO	38.17	1.460	1.25e6	2.32e6	45.8	-8.4	0.539	bb
4	191122K3_4	50.0	1.57	NO	38.15	1.461	1.91e6	3.22e6	50.5	0.9	0.594	bb
5	191122K3_5	50.0	1.49	NO	38.17	1.460	2.40e6	3.36e6	60.7	21.4	0.714	bb
6	191122K3_6	50.0	1.57	NO	38.17	1.460	1.38e6	2.21e6	53.1	6.3	0.625	bb

Compound name: 13C12-2,4'-DDT
Response Factor: 0.370307
RRF SD: 0.066514, Relative SD: 17.9618
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.71	NO	39.29	1.503	7.66e5	2.50e6	41.3	-17.4	0.306	bb
2	191122K3_2	50.0	1.82	NO	39.29	1.503	5.69e5	1.84e6	41.7	-16.5	0.309	bd
3	191122K3_3	50.0	1.81	NO	39.29	1.503	7.82e5	2.32e6	45.6	-8.8	0.338	bd
4	191122K3_4	50.0	1.80	NO	39.28	1.504	1.23e6	3.22e6	51.4	2.7	0.380	bd
5	191122K3_5	50.0	1.82	NO	39.29	1.504	1.60e6	3.36e6	64.4	28.7	0.477	bd
6	191122K3_6	50.0	1.80	NO	39.29	1.503	9.12e5	2.21e6	55.7	11.3	0.412	bd

Compound name: 13C12-4,4'-DDD
Response Factor: 0.473193
RRF SD: 0.075232, Relative SD: 15.8988
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.53	NO	39.43	1.509	1.03e6	2.50e6	43.6	-12.7	0.413	bb
2	191122K3_2	50.0	1.56	NO	39.43	1.509	7.34e5	1.84e6	42.2	-15.6	0.399	db

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

Last Altered: Saturday, November 23, 2019 13:11:31 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:15:15 Pacific Standard Time

Compound name: 13C12-4,4'-DDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	50.0	1.58	NO	39.41	1.508	9.87e5	2.32e6	45.0	-10.0	0.426	db
4	191122K3_4	50.0	1.59	NO	39.41	1.509	1.57e6	3.22e6	51.4	2.8	0.487	db
5	191122K3_5	50.0	1.59	NO	39.43	1.509	1.99e6	3.36e6	62.7	25.5	0.594	db
6	191122K3_6	50.0	1.55	NO	39.43	1.509	1.15e6	2.21e6	55.0	10.0	0.521	db

Compound name: 13C12-4,4'-DDT
Response Factor: 0.280272
RRF SD: 0.0521512, Relative SD: 18.6074
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.61	NO	40.50	1.550	6.00e5	2.50e6	42.7	-14.5	0.240	bb
2	191122K3_2	50.0	1.57	NO	40.50	1.550	4.15e5	1.84e6	40.2	-19.5	0.226	bb
3	191122K3_3	50.0	1.58	NO	40.48	1.549	5.73e5	2.32e6	44.1	-11.8	0.247	bb
4	191122K3_4	50.0	1.59	NO	40.48	1.550	9.31e5	3.22e6	51.5	3.0	0.289	bb
5	191122K3_5	50.0	1.61	NO	40.50	1.550	1.20e6	3.36e6	63.8	27.6	0.358	bb
6	191122K3_6	50.0	1.58	NO	40.49	1.549	7.14e5	2.21e6	57.6	15.1	0.323	bb

Compound name: 13C9-Endosulfan Sulfate
Response Factor: 0.0172919
RRF SD: 0.000800626, Relative SD: 4.63007
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.50	NO	41.68	1.155	4.08e4	2.50e6	47.1	-5.8	0.0163	bb
2	191122K3_2	50.0	1.61	NO	41.67	1.154	3.12e4	1.84e6	49.1	-1.9	0.0170	bb
3	191122K3_3	50.0	1.59	NO	41.67	1.154	3.91e4	2.32e6	48.8	-2.5	0.0169	bb
4	191122K3_4	50.0	1.58	NO	41.65	1.155	5.52e4	3.22e6	49.5	-0.9	0.0171	bb
5	191122K3_5	50.0	1.49	NO	41.67	1.154	6.17e4	3.36e6	53.2	6.3	0.0184	bb
6	191122K3_6	50.0	1.55	NO	41.67	1.154	4.01e4	2.21e6	52.4	4.8	0.0181	bb

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

Last Altered: Saturday, November 23, 2019 13:11:31 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:15:15 Pacific Standard Time

Compound name: 13C12-Methoxychlor
Response Factor: 0.256829
RRF SD: 0.0396347, Relative SD: 15.4323
Response type: Internal Std (Ref 62), 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	191122K3_1	500	19.14	NO	43.54	1.206	5.77e6	2.50e6	448	-10.3	0.230	bb
2	191122K3_2	500	18.40	NO	43.54	1.206	3.86e6	1.84e6	409	-18.2	0.210	bb
3	191122K3_3	500	20.03	NO	43.52	1.206	5.32e6	2.32e6	447	-10.6	0.229	bb
4	191122K3_4	500	20.30	NO	43.52	1.206	8.68e6	3.22e6	524	4.8	0.269	bb
5	191122K3_5	500	21.86	NO	43.52	1.206	1.04e7	3.36e6	605	20.9	0.311	bb
6	191122K3_6	500	21.35	NO	43.52	1.206	6.44e6	2.21e6	567	13.4	0.291	bb

Compound name: 13C10-Mirex
Response Factor: 0.164142
RRF SD: 0.0040543, Relative SD: 2.46999
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.60	NO	44.09	1.222	4.15e5	2.50e6	50.5	0.9	0.166	bd
2	191122K3_2	50.0	1.58	NO	44.09	1.222	3.03e5	1.84e6	50.2	0.4	0.165	bb
3	191122K3_3	50.0	1.58	NO	44.07	1.221	3.89e5	2.32e6	51.1	2.1	0.168	dd
4	191122K3_4	50.0	1.59	NO	44.07	1.222	5.26e5	3.22e6	49.7	-0.5	0.163	bb
5	191122K3_5	50.0	1.58	NO	44.07	1.221	5.25e5	3.36e6	47.7	-4.6	0.157	bb
6	191122K3_6	50.0	1.56	NO	44.09	1.222	3.69e5	2.21e6	50.9	1.7	0.167	bb

Compound name: 13C12-Endrin Aldehyde
Response Factor: 0.0345209
RRF SD: 0.00335726, Relative SD: 9.7253
Response type: Internal Std (Ref 62), 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	191122K3_1	500	0.47	NO	41.07	1.138	7.96e5	2.50e6	460	-7.9	0.0318	bd
2	191122K3_2	500	0.50	NO	41.07	1.138	5.73e5	1.84e6	451	-9.7	0.0312	bd

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-CRV.qld

Last Altered: Saturday, November 23, 2019 13:11:31 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:15:15 Pacific Standard Time

Compound name: 13C12-Endrin Aldehyde

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	191122K3_3	500	0.51	NO	41.07	1.138	7.61e5	2.32e6	476	-4.9	0.0328	bd
4	191122K3_4	500	0.52	NO	41.05	1.138	1.10e6	3.22e6	496	-0.7	0.0343	bd
5	191122K3_5	500	0.55	NO	41.07	1.138	1.26e6	3.36e6	542	8.5	0.0375	bd
6	191122K3_6	500	0.47	NO	41.07	1.138	8.76e5	2.21e6	574	14.8	0.0396	bd

Compound name: 13C12-Endrin Ketone
Response Factor: 0.0222061
RRF SD: 0.00182806, Relative SD: 8.23224
Response type: Internal Std (Ref 62), 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	191122K3_1	500	0.49	NO	44.23	1.225	5.15e5	2.50e6	463	-7.4	0.0206	bb
2	191122K3_2	500	0.51	NO	44.22	1.225	3.77e5	1.84e6	462	-7.6	0.0205	bb
3	191122K3_3	500	0.49	NO	44.22	1.225	4.87e5	2.32e6	473	-5.5	0.0210	bb
4	191122K3_4	500	0.49	NO	44.22	1.225	7.23e5	3.22e6	505	1.0	0.0224	bb
5	191122K3_5	500	0.52	NO	44.22	1.225	8.08e5	3.36e6	542	8.3	0.0241	db
6	191122K3_6	500	0.50	NO	44.22	1.225	5.46e5	2.21e6	556	11.2	0.0247	bb

Compound name: 13C-PCB-15
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 62), 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	191122K3_1	50.0	1.57	NO	26.13	1.000	2.50e6	2.50e6	50.0	0.0	1.00	bb
2	191122K3_2	50.0	1.56	NO	26.13	1.000	1.84e6	1.84e6	50.0	0.0	1.00	bb
3	191122K3_3	50.0	1.58	NO	26.13	1.000	2.32e6	2.32e6	50.0	0.0	1.00	bb
4	191122K3_4	50.0	1.56	NO	26.12	1.000	3.22e6	3.22e6	50.0	0.0	1.00	bb
5	191122K3_5	50.0	1.56	NO	26.13	1.000	3.36e6	3.36e6	50.0	0.0	1.00	bb
6	191122K3_6	50.0	1.57	NO	26.13	1.000	2.21e6	2.21e6	50.0	0.0	1.00	bb

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:17:35 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

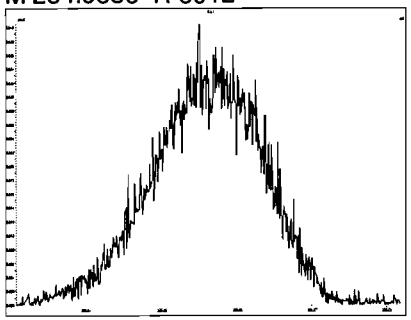
Compound name: Hexachlorobutadiene

	Name	ID	Acq.Date	Acq.Time
1	191122K3_1	ST191122K3-1 1699 CS1 19H0202	22-Nov-19	16:01:15
2	191122K3_2	ST191122K3-2 1699 CS2 19H0203	22-Nov-19	16:51:16
3	191122K3_3	ST191122K3-3 1699 CS3.5 19H0205	22-Nov-19	17:37:57
4	191122K3_4	ST191122K3-4 1699 CS4 19H0206	22-Nov-19	18:28:36
5	191122K3_5	ST191122K3-5 1699 CS5 19H0207	22-Nov-19	19:17:45
6	191122K3_6	ST191122K3-6 1699 CS3 19H0204	22-Nov-19	20:06:28
7	191122K3_7	SS191122K3-1 1699 SS 19H0208	22-Nov-19	20:56:01
8	191122K3_8	GC191122K3-1 GC BREAK	22-Nov-19	21:45:34
9	191122K3_9	B9K0146-BS1 OPR 1	22-Nov-19	22:36:26
10	191122K3_10	B9K0170-BS1 OPR 1	22-Nov-19	23:25:35
11	191122K3_11	SOLVENT BLANK	23-Nov-19	00:14:13
12	191122K3_12	B9K0146-BLK1 Method Blank 1	23-Nov-19	01:03:46
13	191122K3_13	B9K0170-BLK1 Method Blank 1	23-Nov-19	01:54:28
14	191122K3_14	1904016-01 PDI-FB-1911121146 1	23-Nov-19	02:43:38
15	191122K3_15	1904016-02 PDI-RB-1911120944 1	23-Nov-19	03:32:14
16	191122K3_16	1904021-02 PDI-142RAB-00-10-191112 1	23-Nov-19	04:21:41
17	191122K3_17	1904021-03 PDI-142RAB-10-20-191112 1	23-Nov-19	05:11:17
18	191122K3_18	1904021-05 PDI-144RAB-00-10-191113 1	23-Nov-19	06:00:48
19	191122K3_19	1904021-06 PDI-144RAB-10-20-191113 1	23-Nov-19	06:51:35
20	191122K3_20	1904021-07 PDI-144RAB-20-29-191113 1	23-Nov-19	07:40:46

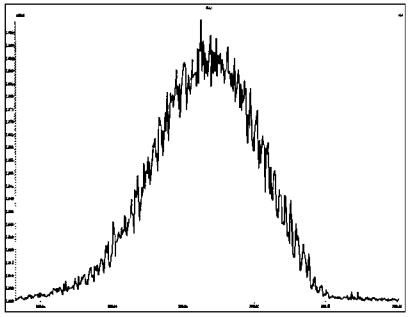
File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, November 22, 2019 15:57:51 Pacific Standard Time

M 254.9856 R 8012



M 268.9824 R 7933



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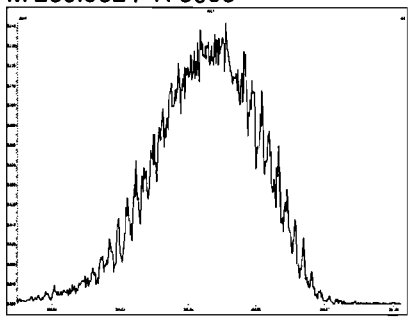
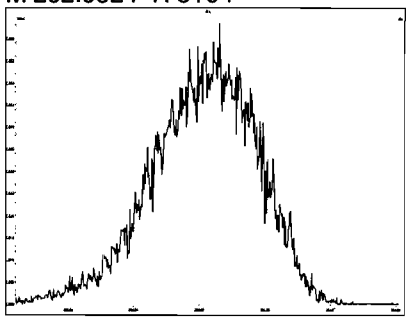


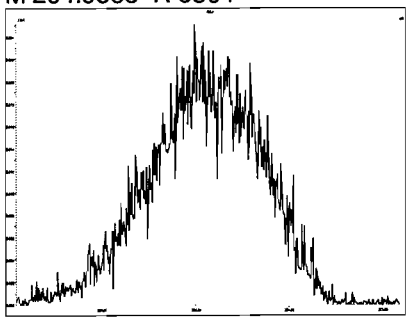
M 292.9824 R 8194



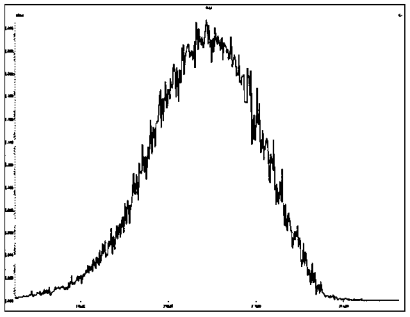
File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, November 22, 2019 15:58:24 Pacific Standard Time

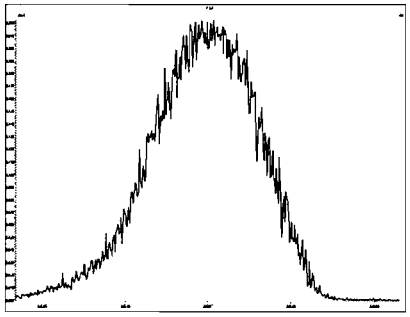
M 204.9888 R 8304



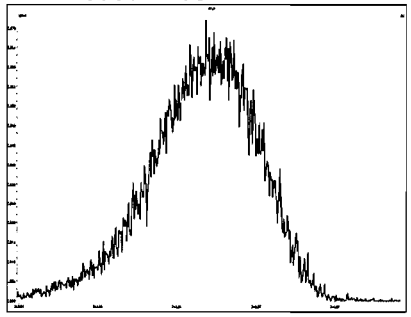
M 218.9856 R 7812



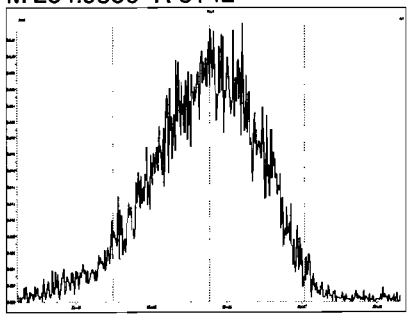
M 230.9856 R 8036



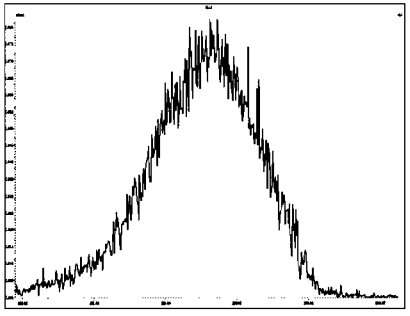
M 242.9856 R 8014



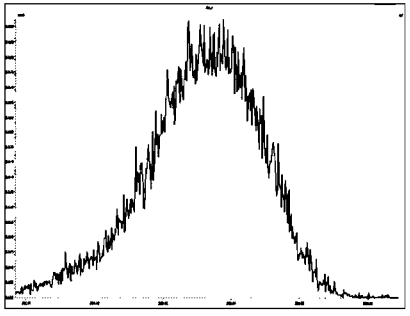
M 254.9856 R 8142



M 268.9824 R 7647



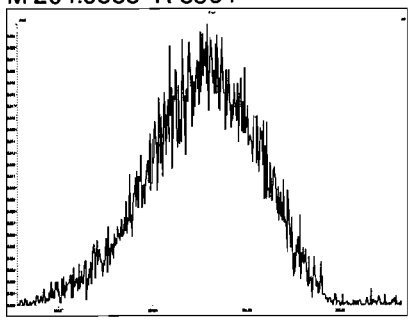
M 280.9824 R 7221



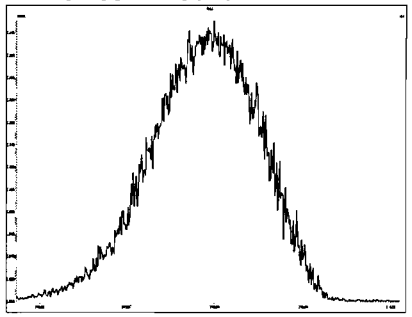
File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, November 22, 2019 15:59:03 Pacific Standard Time

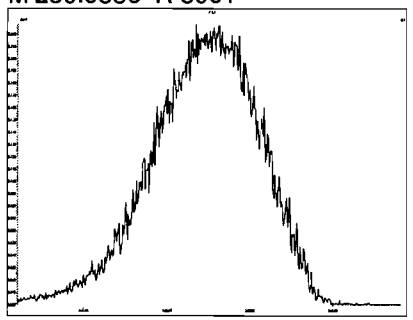
M 204.9888 R 8564



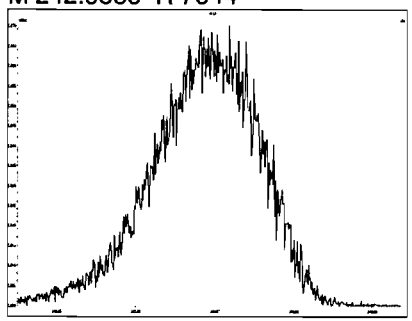
M 218.9856 R 8010



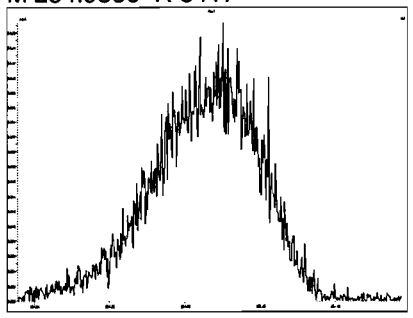
M 230.9856 R 8091



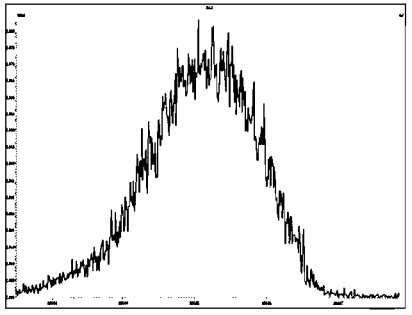
M 242.9856 R 7644



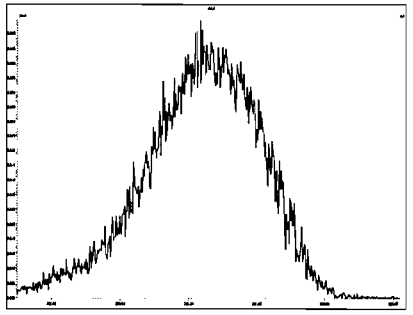
M 254.9856 R 8417



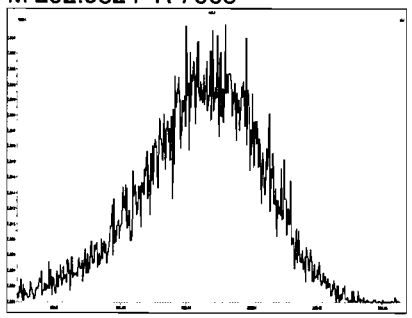
M 268.9824 R 7647



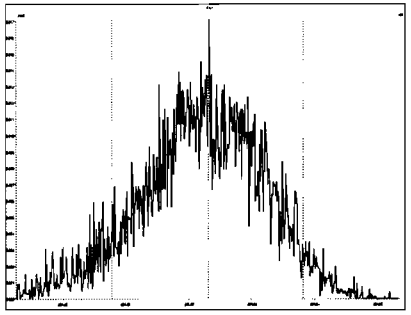
M 280.9824 R 7163



M 292.9824 R 7005



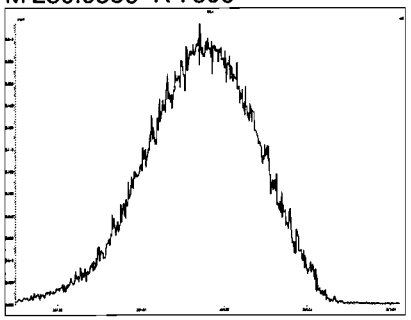
M 304.9824 R 7083



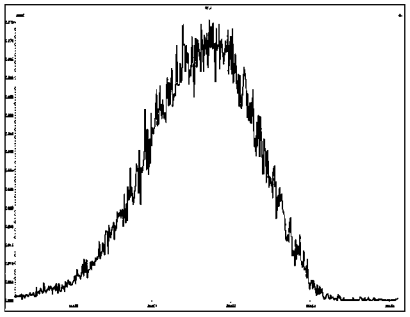
File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, November 22, 2019 16:00:02 Pacific Standard Time

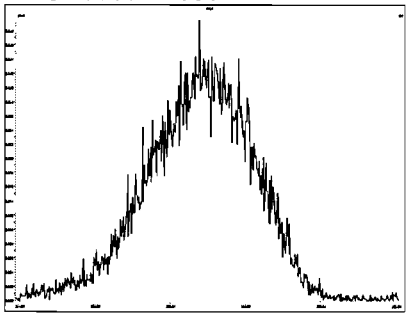
M 230.9856 R 7396



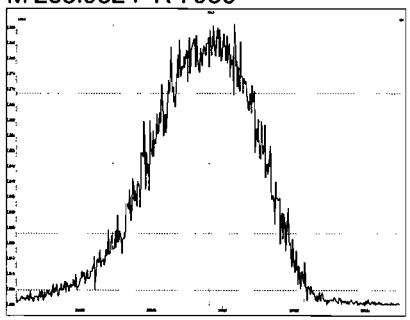
M 242.9856 R 7862



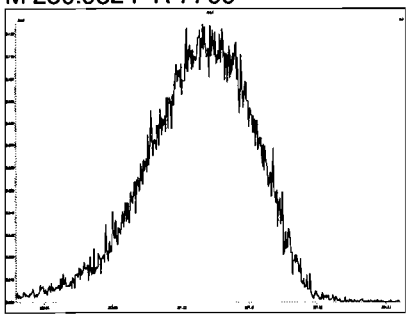
M 254.9856 R 8304



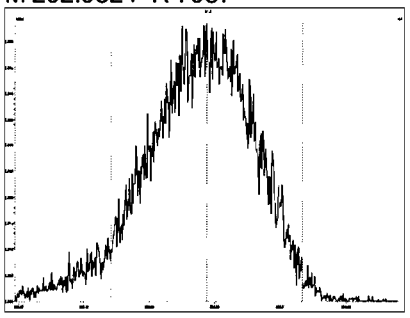
M 268.9824 R 7986



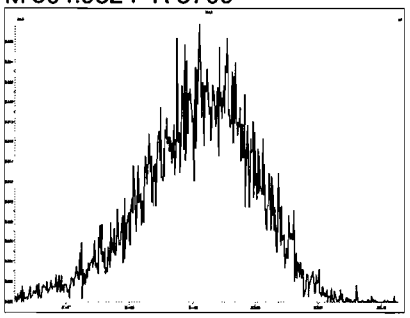
M 280.9824 R 7766



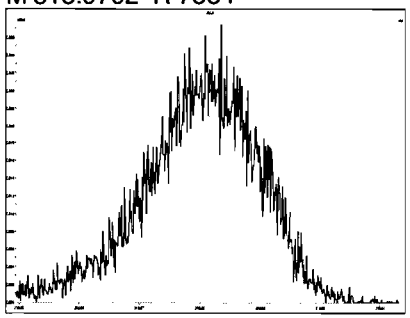
M 292.9824 R 7937



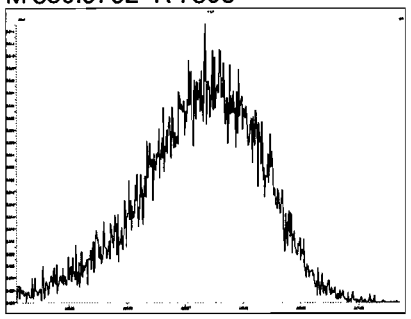
M 304.9824 R 8709



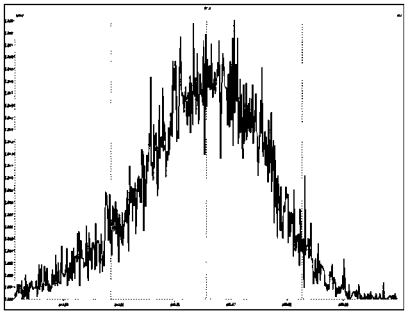
M 318.9792 R 7884



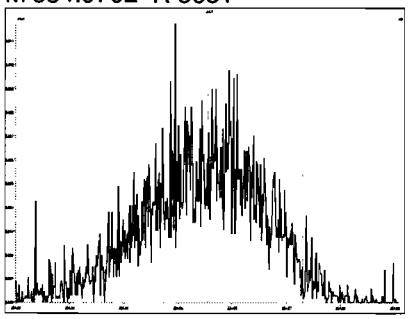
M 330.9792 R 7396



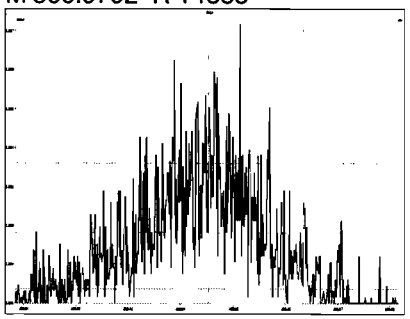
M 342.9792 R 6943



M 354.9792 R 8681



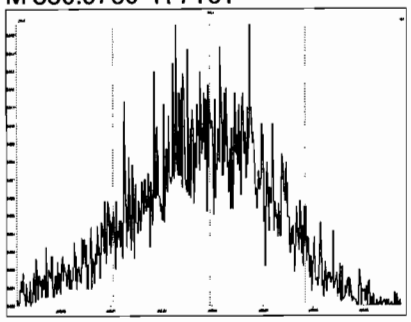
M 366.9792 R 14533



File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, November 22, 2019 16:00:02 Pacific Standard Time

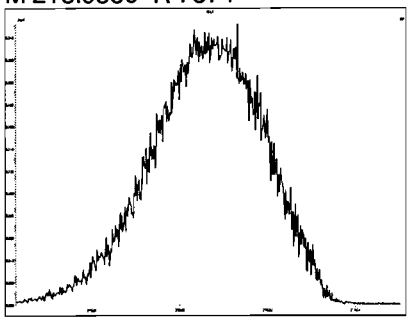
M 380.9760 R 7161



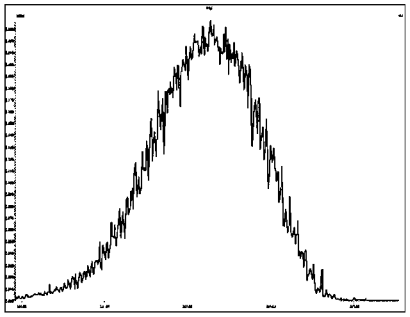
File: Experiment: 1699_ZB50_10K.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, November 22, 2019 16:00:42 Pacific Standard Time

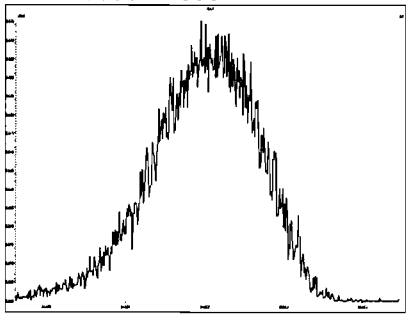
M 218.9856 R 7374



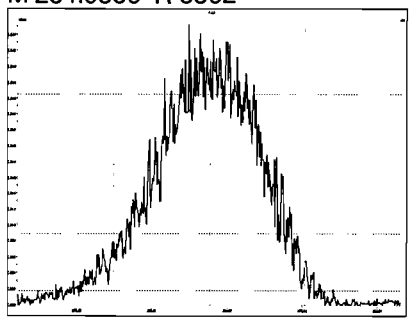
M 230.9856 R 8038



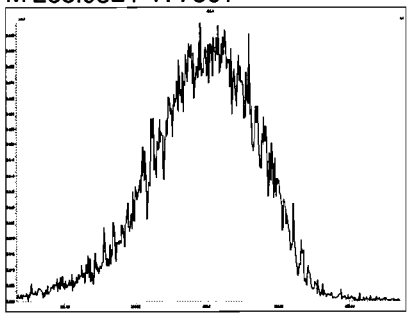
M 242.9856 R 8562



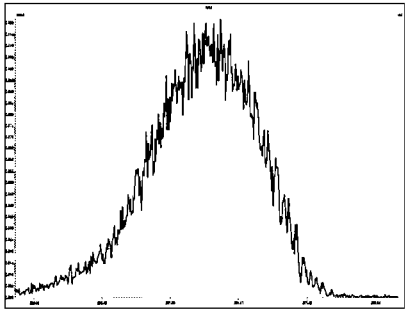
M 254.9856 R 8362



M 268.9824 R 7861



M 280.9824 R 8010



Vista Analytical Laboratory

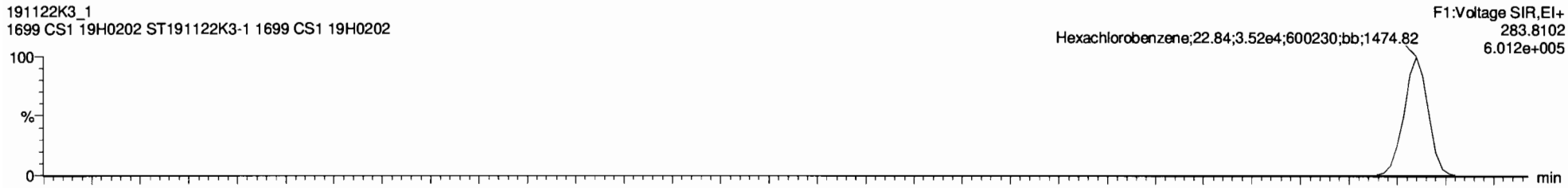
Dataset: Untitled

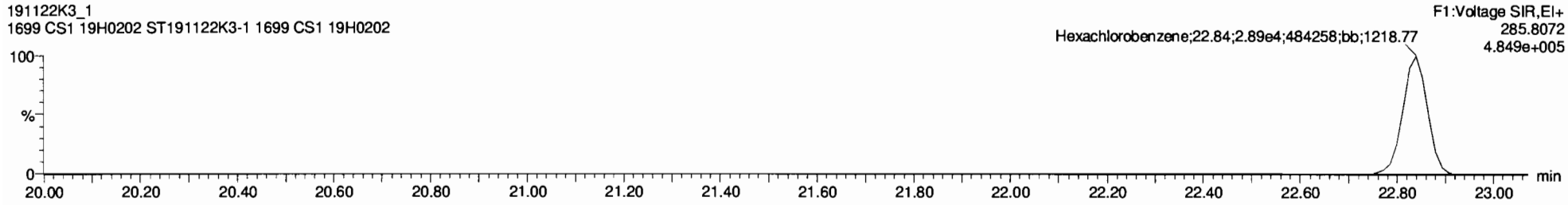
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

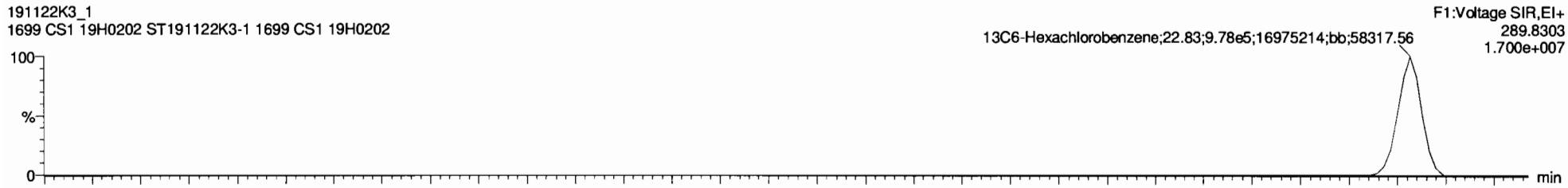
Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

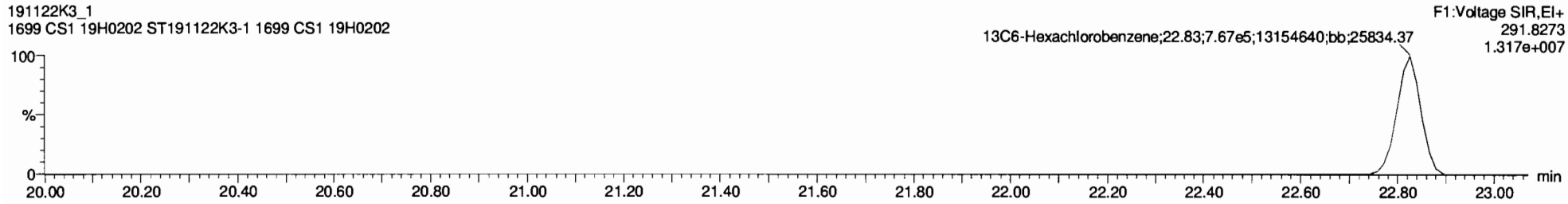
Hexachlorobenzene





13C6-Hexachlorobenzene





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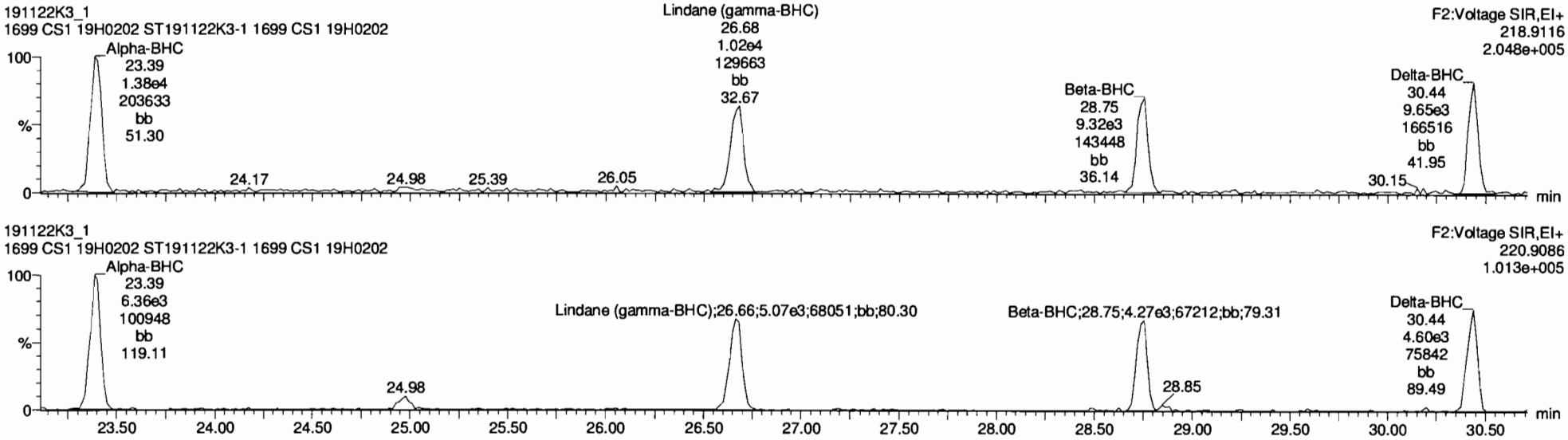
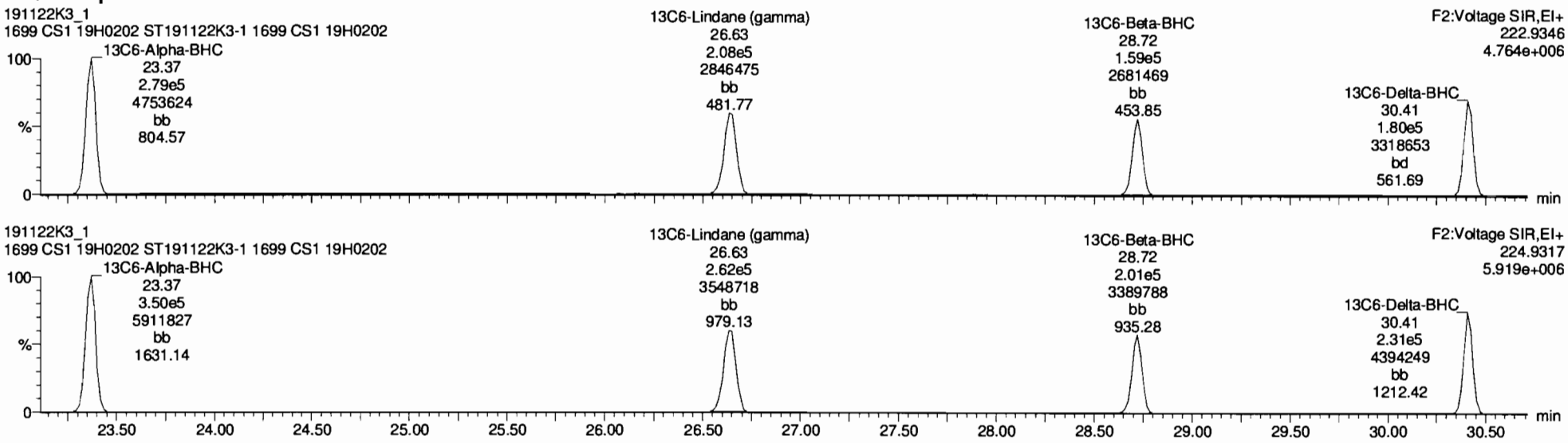
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

BHC Totals



BHC-isotopes



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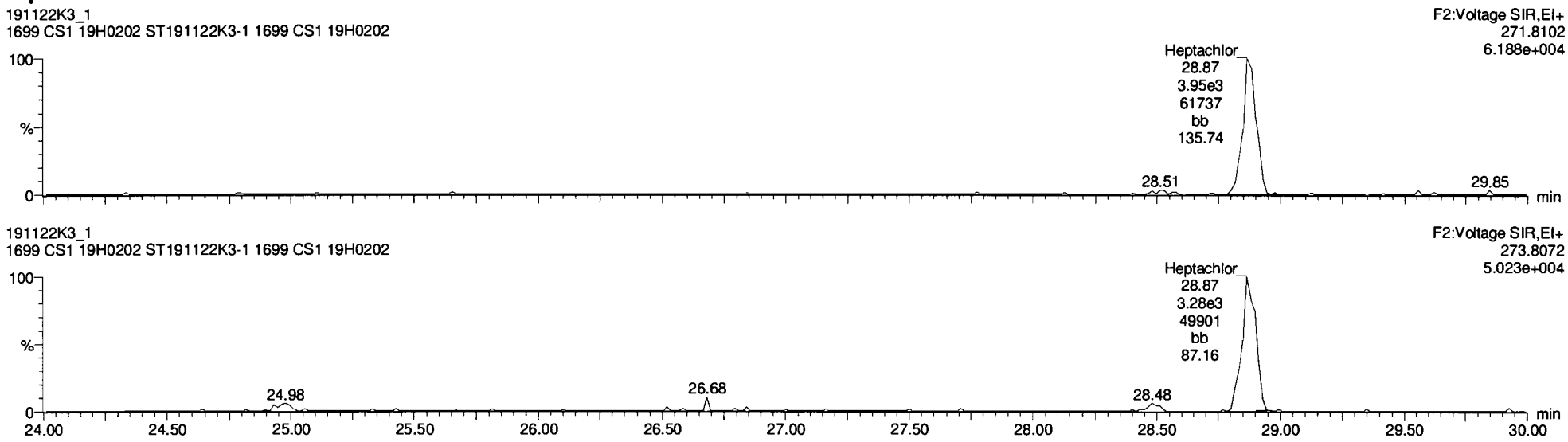
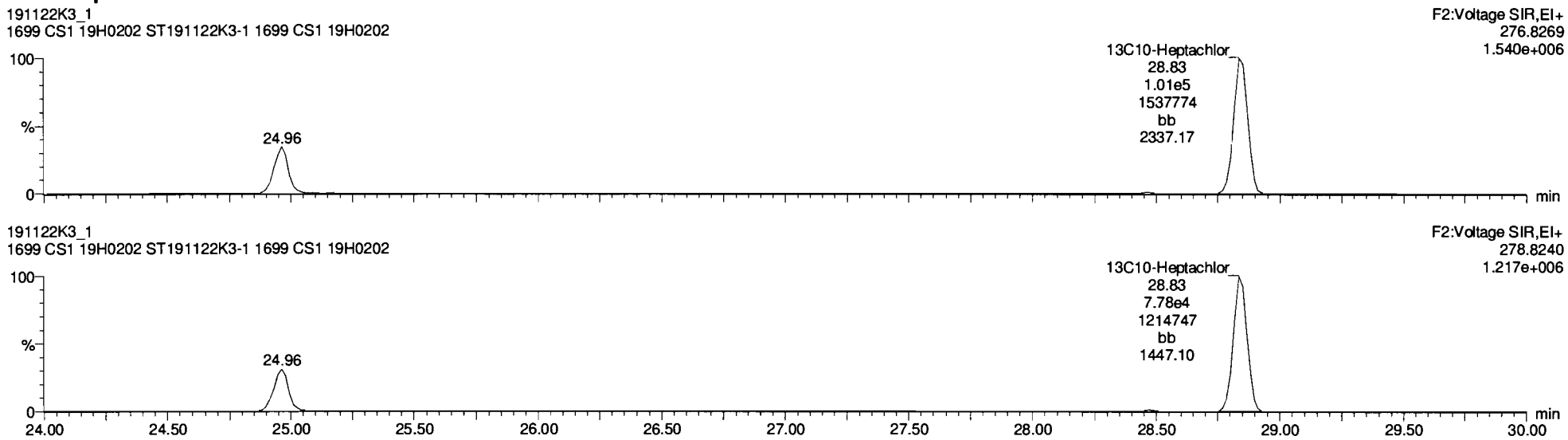
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

Heptachlor



13C10-Heptachlor



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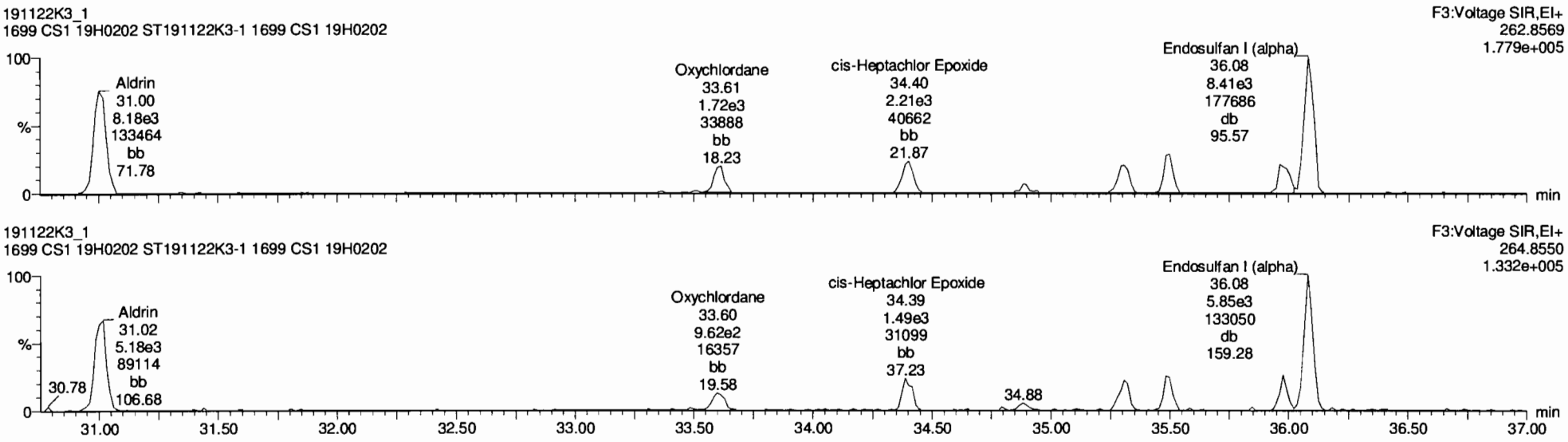
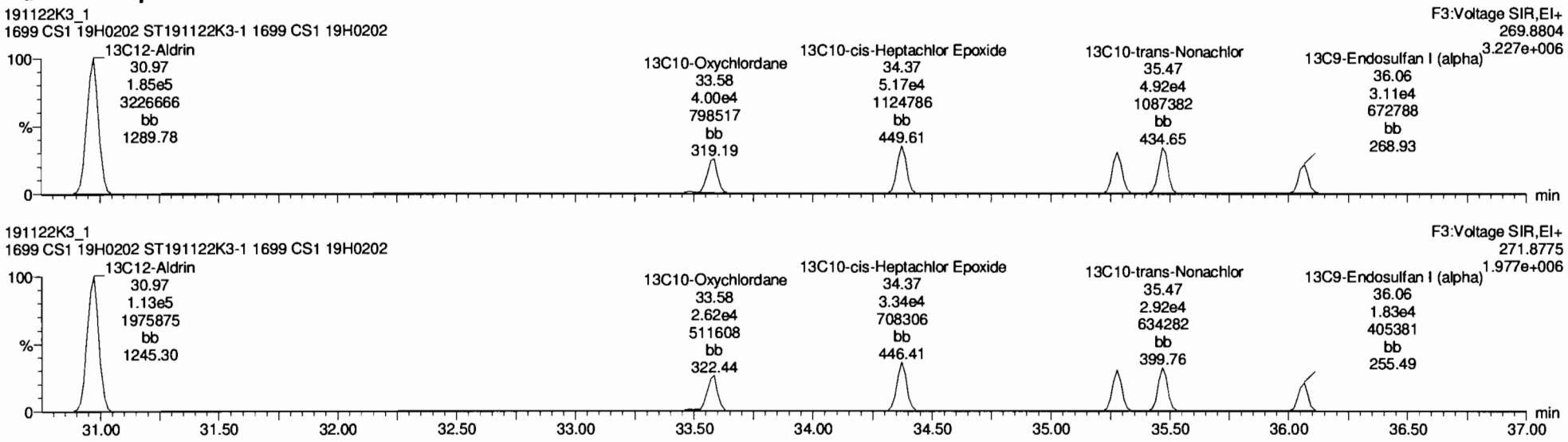
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

Aldrin-EI



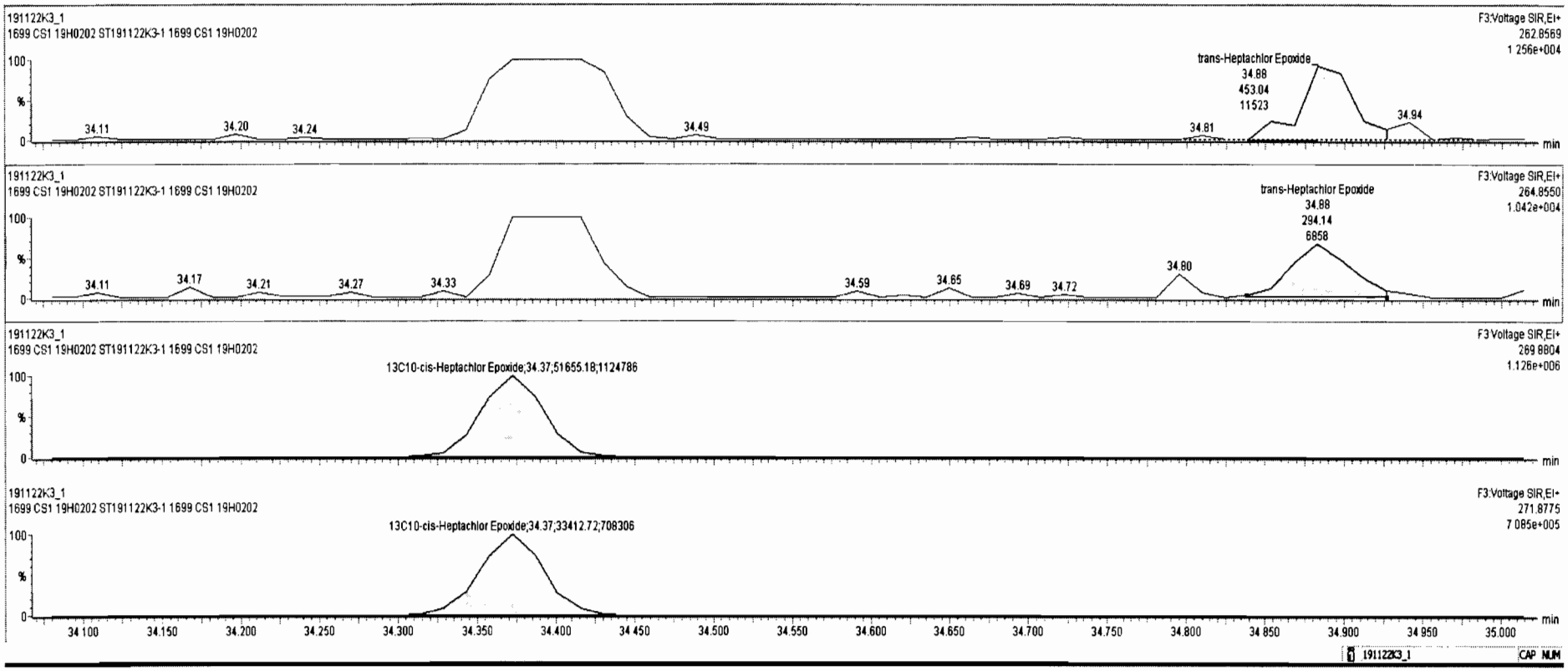
Aldrin-EI-isotopes



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

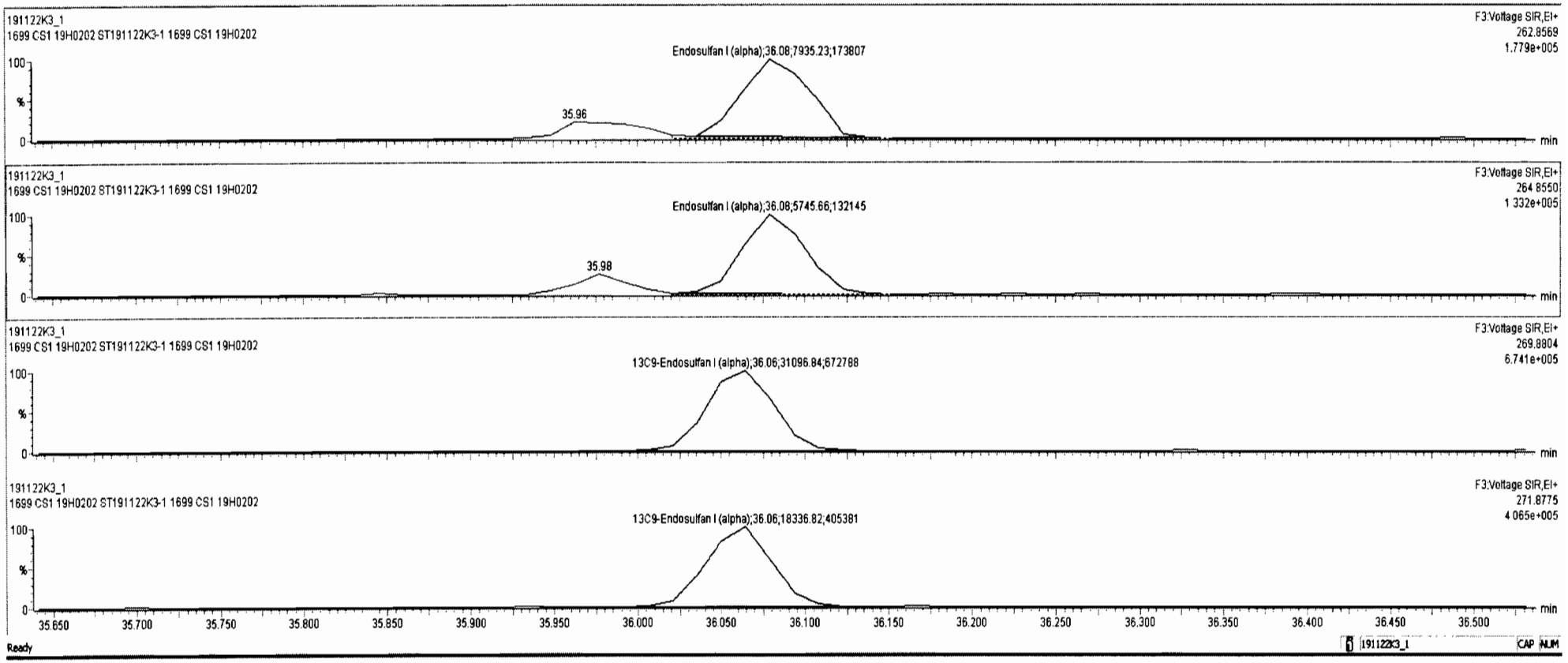
	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
1	1	Hexachlorobutadiene	10.23	0.054	YES	5.7668e4	3.4107e6	10.000	371.5	185	0.179	0.332
2	2	Hexachlorobenzene	22.84	1.218	NO	6.4119e4	1.7455e6	2.000	5.0	9.56	0.874	0.0836
3	3	Alpha-BHC	23.39	2.162	NO	2.0117e4	6.2896e5	2.000	5.1	9.29	0.760	0.0706
4	4	Lindane (gamma-BHC)	26.68	2.015	NO	1.5299e4	4.7065e5	2.000	9.3	10.7	0.744	0.0799
5	5	Beta-BHC	28.75	2.183	NO	1.3595e4	3.5998e5	2.000	5.4	9.61	0.896	0.0861
6	6	Delta-BHC	30.44	2.098	NO	1.4252e4	4.1089e5	2.000	3.6	9.98	0.837	0.0835
7	7	Heptachlor	28.86	1.204	NO	7.2238e3	1.7901e5	2.000	4.3	10.0	0.968	0.0968
8	8	4,4'-DDNU	30.36	2.960	NO	2.2211e4	4.1089e5	2.000	6.7	11.3	1.27	0.143
9	9	Aldrin	31.00	1.580	NO	1.3357e4	2.9606e5	2.000	9.4	9.91	1.02	0.101
10	10	Oxychlordane	33.61	1.785	NO	2.6791e3	6.6194e4	2.000	2.0	9.31	0.992	0.0924
11	11	cis-Heptachlor Epoxide	34.40	1.488	NO	3.7015e3	8.5068e4	2.000	8.5	10.4	1.00	0.104
12	12	trans-Heptachlor Epoxide	34.88	1.540	NO	7.4718e2	8.5068e4	2.000	-13.8	11.8	0.255	0.0297
13	13	trans-Chlordane (gamma)	35.31	1.410	NO	3.4530e3	7.1012e4	2.000	12.2	13.1	1.08	0.142
14	14	trans-Nonachlor	35.50	1.555	NO	3.7510e3	7.8362e4	2.000	19.4	14.4	1.00	0.144
15	15	cis-Chlordane	35.96	1.560	NO	3.2583e3	7.8362e4	2.000	6.0	12.3	0.981	0.121
16	16	Endosulfan I (alpha)	36.08	1.381	NO	1.3681e4	4.9434e4	10.000	25.2	19.7	1.10	0.217



TargetLynx - 191122K3 CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	?...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
1	1	Hexachlorobutadiene	10.23	0.054	YES	5.7668e4	3.4107e6	10.000	371.5	185	0.179	0.332
2	2	Hexachlorobenzene	22.84	1.218	NO	6.4119e4	1.7455e6	2.000	5.0	9.56	0.874	0.0836
3	3	Alpha-BHC	23.39	2.162	NO	2.0117e4	6.2896e5	2.000	5.1	9.29	0.760	0.0706
4	4	Lindane (gamma-BHC)	26.68	2.015	NO	1.5299e4	4.7065e5	2.000	9.3	10.7	0.744	0.0799
5	5	Beta-BHC	26.75	2.183	NO	1.3595e4	3.5898e5	2.000	5.4	9.61	0.896	0.0861
6	6	Delta-BHC	30.44	2.098	NO	1.4252e4	4.1089e5	2.000	3.6	9.98	0.837	0.0835
7	7	Heptachlor	26.86	1.204	NO	7.2236e3	1.7901e5	2.000	4.3	10.0	0.968	0.0968
8	8	4,4'-DDNU	30.36	2.960	NO	2.2211e4	4.1089e5	2.000	6.7	11.3	1.27	0.143
9	9	Aldrin	31.00	1.580	NO	1.3357e4	2.9808e5	2.000	9.4	9.91	1.02	0.101
10	10	Oxychlordane	33.61	1.785	NO	2.6791e3	6.6194e4	2.000	2.0	9.31	0.992	0.0924
11	11	cis-Heptachlor Epoxide	34.40	1.488	NO	3.7015e3	8.5068e4	2.000	8.5	10.4	1.00	0.104
12	12	trans-Heptachlor Epoxide	34.88	1.540	NO	7.4718e2	8.5068e4	2.000	-13.9	11.6	0.255	0.0297
13	13	trans-Chlordane (gamma)	35.31	1.410	NO	3.4530e3	7.1012e4	2.000	12.2	13.1	1.08	0.142
14	14	trans-Nonachlor	35.50	1.555	NO	3.7510e3	7.8362e4	2.000	19.4	14.4	1.00	0.144
15	15	cis-Chlordane	35.96	1.560	NO	3.2583e3	7.8362e4	2.000	6.0	12.3	0.981	0.121
16	16	Endosulfan I (alpha)	36.08	1.381	NO	1.3681e4	4.9434e4	10.000	25.2	19.7	1.10	0.217

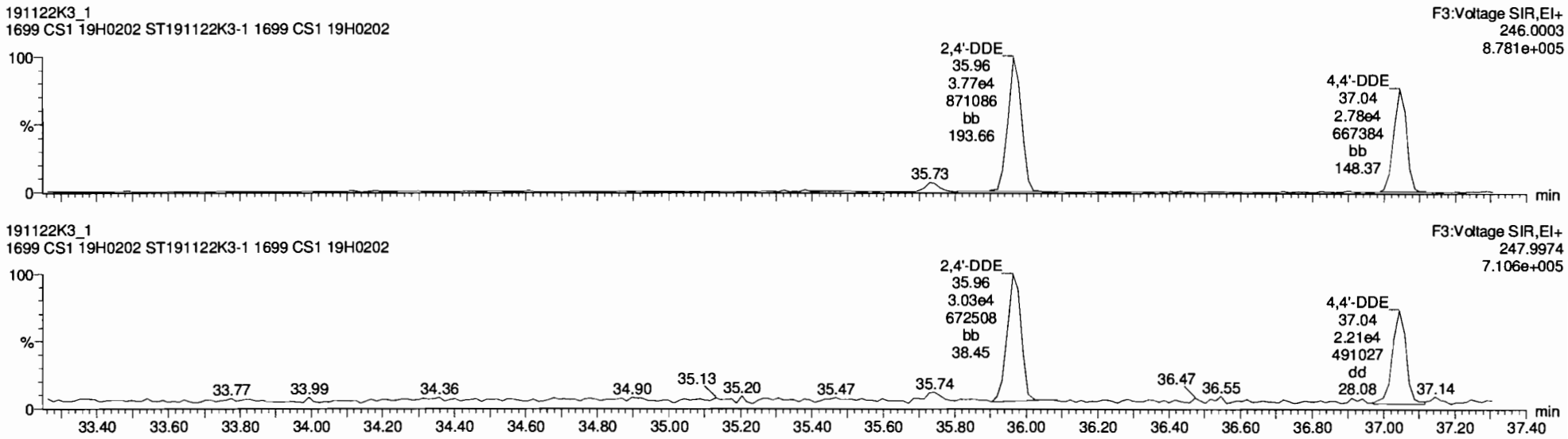


Dataset: Untitled

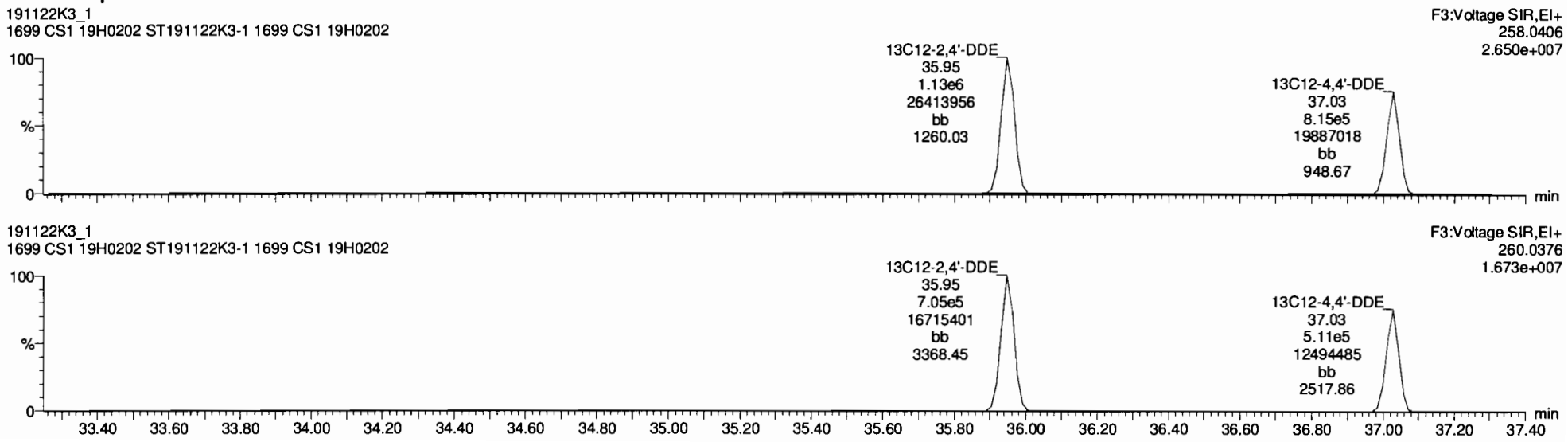
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

DDMU-DDE



DDE-isotopes



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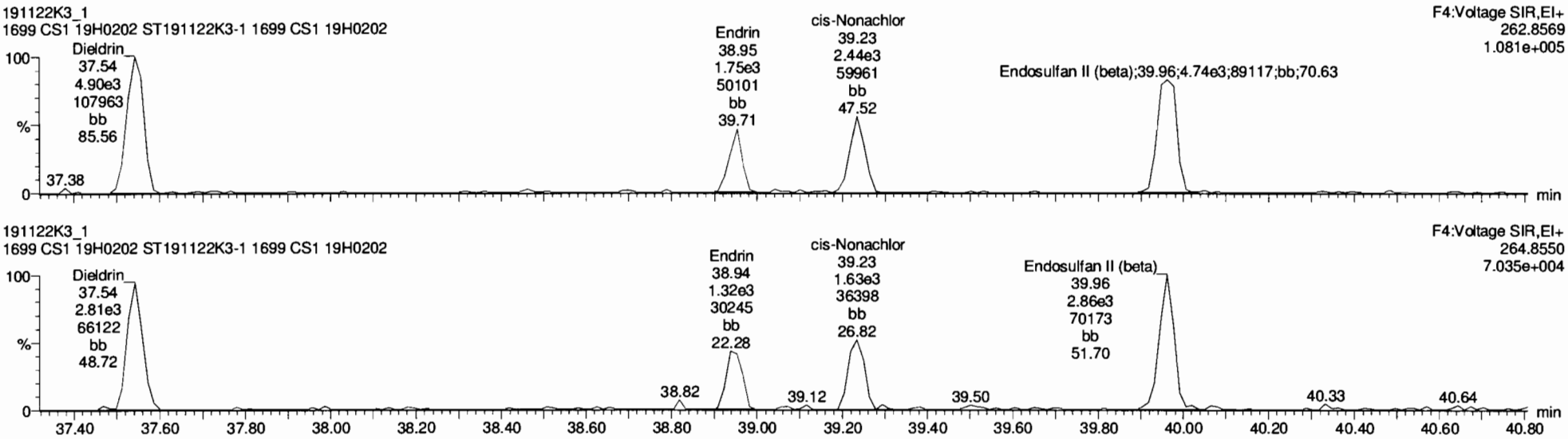
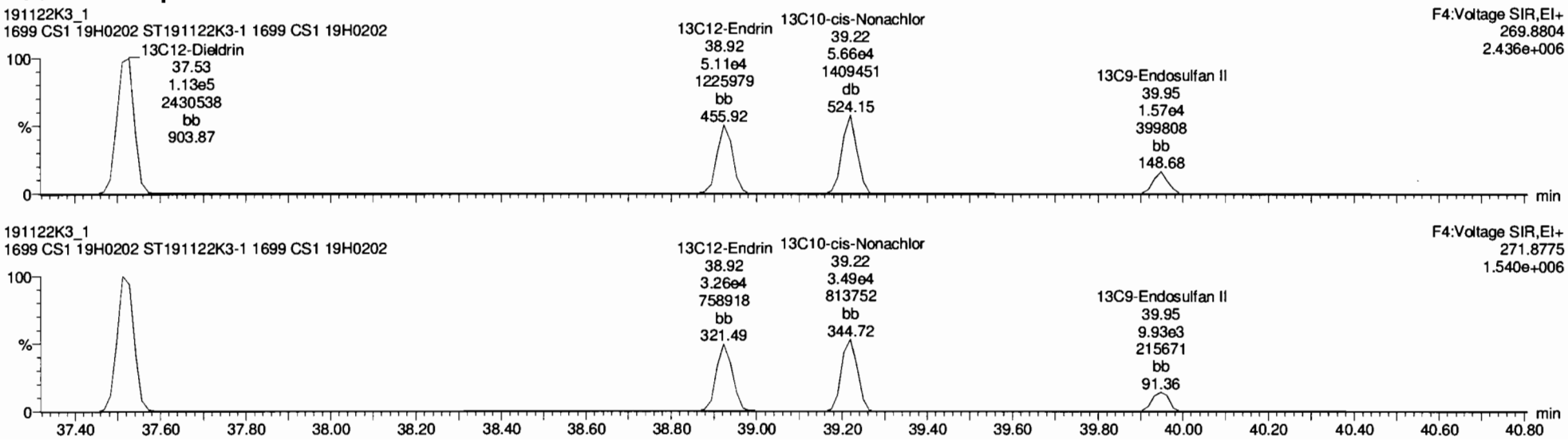
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

Dieldrin-EII



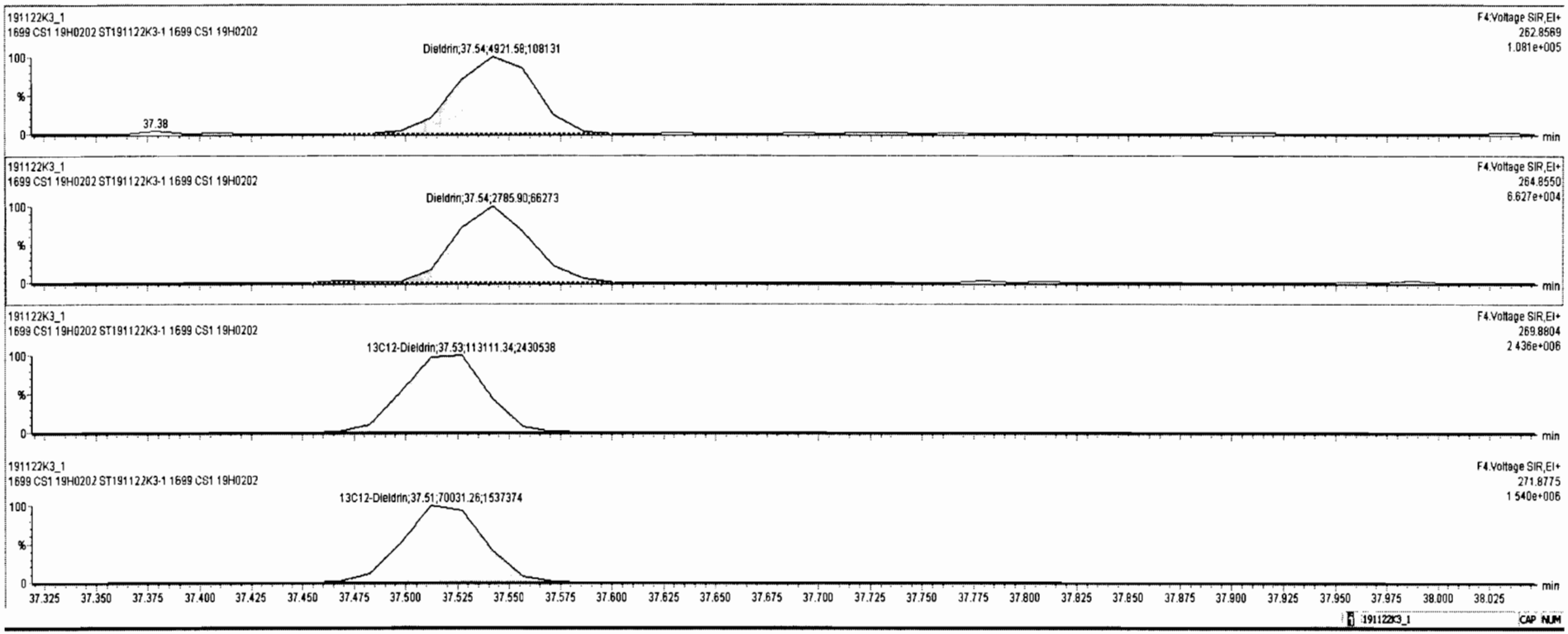
Dieldrin-EII-isotopes



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

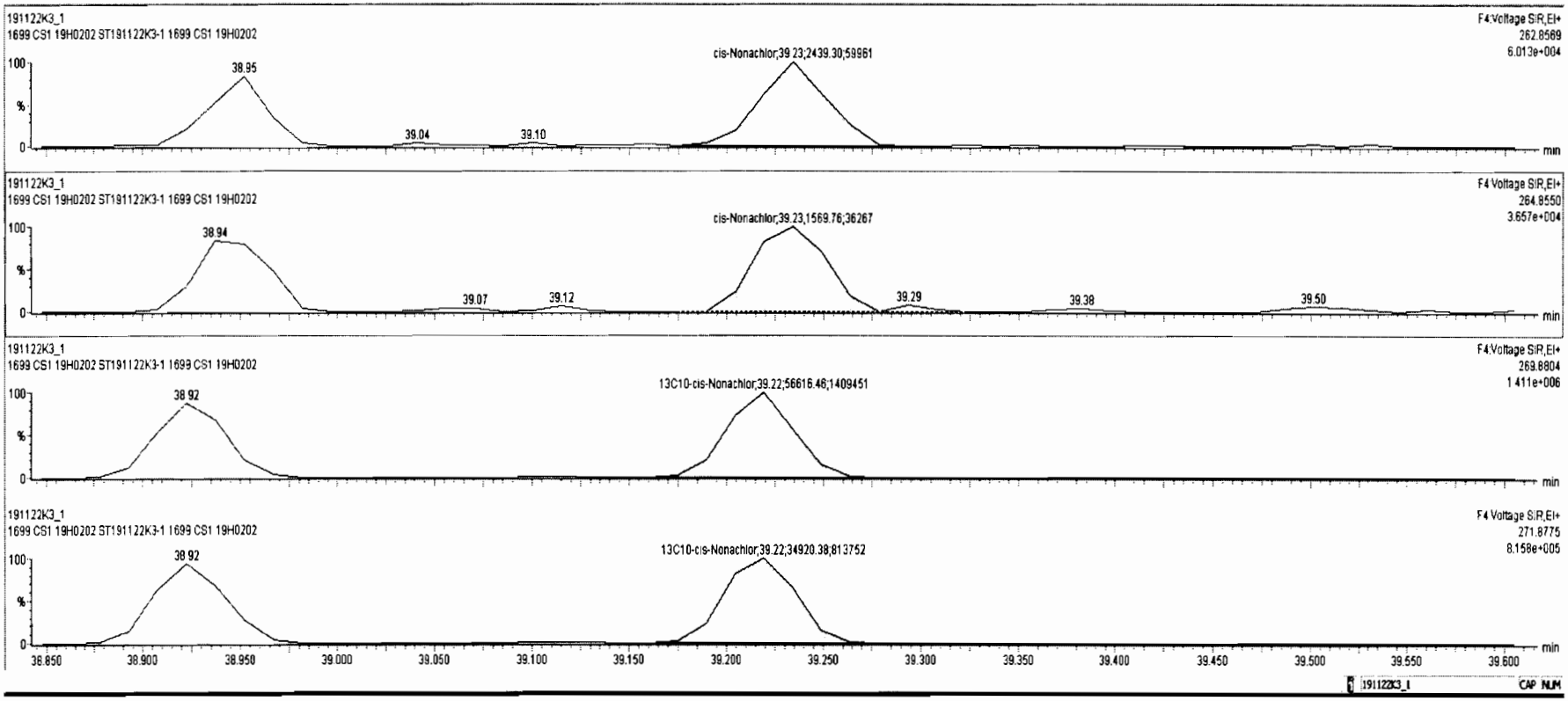
	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc.	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.246	NO	6.7980e4	1.8350e6	2.000	8.4	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.256	NO	4.9887e4	1.3258e6	2.000	7.8	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.787	NO	7.7075e3	1.8314e5	2.000	9.8	10.6	0.957	0.0957
21	21	Endrin	38.95	1.322	NO	3.0745e3	8.3694e4	2.000	-1.5	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.554	NO	4.0091e3	9.1537e4	2.000	14.6	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.98	1.868	NO	6.9248e3	2.5598e4	10.000	27.1	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.578	NO	5.3980e4	1.3488e6	2.000	9.5	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.337	NO	3.3212e4	7.6577e5	2.000	17.8	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.459	NO	4.5704e4	1.0340e6	2.000	10.1	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	2.5004e4	5.9879e5	2.000	5.6	9.88	0.987	0.0975
28	28	Endosulfan Sulfate	41.70	1.707	NO	9.2659e3	4.0770e4	10.000	22.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.56	6.035	NO	1.3575e5	5.7669e6	10.000	3.8	10.5	1.13	0.119
30	30	Mirex	44.11	1.448	NO	1.7089e4	4.1469e5	2.000	10.5	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.10	0.679	NO	1.5488e4	7.9563e5	10.000	-0.2	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.688	NO	1.0818e4	5.1456e5	10.000	15.4	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.259	NO	3.4107e6	2.5033e6	500.000	-1.4	17.5	0.136	0.0241



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

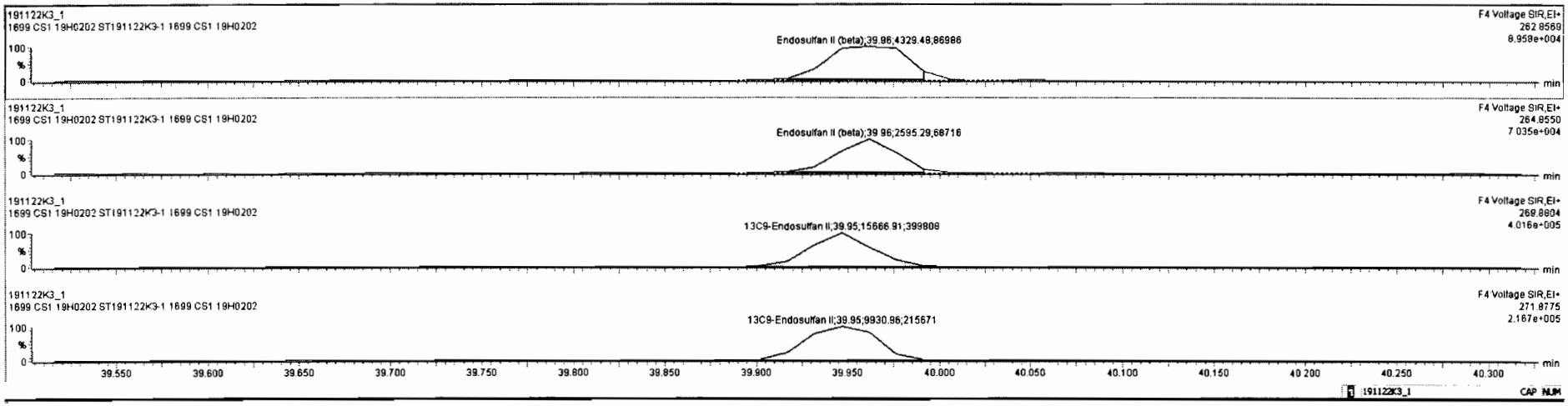
	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	2,4'-DDE	35.96	1.246	NO	6.7980e4	1.8350e6	2.000	8.4	10.0	0.854	0.0855
19	4,4'-DDE	37.04	1.256	NO	4.9887e4	1.3258e6	2.000	7.8	10.3	0.873	0.0898
20	Dieldrin	37.54	1.767	NO	7.7075e3	1.8314e5	2.000	9.9	10.0	0.957	0.0957
21	Endrin	38.95	1.322	NO	3.0745e3	8.3694e4	2.000	-1.5	10.5	0.933	0.0975
22	cis-Nonachlor	39.23	1.554	NO	4.009[illegible]e3	9.1537e4	2.000	14.6	12.2	0.958	0.117
23	Endosulfan II (beta)	39.96	1.668	NO	6.9248e3	2.5598e4	10.000	27.1	19.9	1.06	0.212
24	2,4'-DDD	38.18	1.578	NO	5.3980e4	1.3468e6	2.000	9.5	9.76	0.915	0.0893
25	2,4'-DDT	39.31	1.337	NO	3.3212e4	7.6577e5	2.000	17.8	12.6	0.921	0.116
26	4,4'-DDD	39.44	1.459	NO	4.5704e4	1.0340e6	2.000	10.1	10.1	1.00	0.101
27	4,4'-DDT	40.51	1.504	NO	2.5004e4	5.9979e5	2.000	5.6	9.88	0.967	0.0975
28	Endosulfan Sulfate	41.70	1.707	NO	9.2859e3	4.0770e4	10.000	22.8	14.2	0.927	0.131
29	4,4'-Methoxychlor	43.56	6.035	NO	1.3575e5	5.7669e6	10.000	3.8	10.5	1.13	0.119
30	Mirex	44.11	1.448	NO	1.7089e4	4.1469e5	2.000	10.5	11.1	0.932	0.103
31	Endrin Aldehyde	41.10	0.679	NO	1.5488e4	7.9563e5	10.000	-0.2	9.50	0.975	0.0926
32	Endrin Ketone	44.25	0.688	NO	1.0818e4	5.1456e5	10.000	15.4	11.1	0.911	0.101
33	13C4-Hexachlorobutadiene	10.21	1.259	NO	3.4107e6	2.5033e6	500.000	-1.4	17.5	0.136	0.0241



Target1.pnx untitled * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	RA	rdy	RRF	wtVol	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
15	15	cis-Chlordane	3.26e3	1.58	NO	0.9810	1.000	35.97	35.96	1.014	1.014	NO	2.119	106	0.198	2.119
16	16	Endosulfan I (alpha)	1.37e4	1.38	NO	1.1048	1.000	36.09	36.06	1.001	1.000	NO	12.52	125	0.265	12.52
17	17	4,4'-DDMU	4.91e4	3.17	NO	0.6167	1.000	35.74	35.74	0.994	0.994	NO	2.168	108	0.0368	2.168
18	18	2,4'-DDE	6.80e4	1.25	NO	0.8542	1.000	35.96	35.96	1.000	1.000	NO	2.169	108	0.0750	2.169
19	19	4,4'-DDE	4.99e4	1.26	NO	0.8728	1.000	37.05	37.04	1.000	1.000	NO	2.158	108	0.0974	2.158
20	20	Dieldrin	7.72e3	1.74	NO	0.9572	1.000	37.55	37.54	1.000	1.000	NO	2.201	110	0.0869	2.201
21	21	Endrin	3.07e3	1.32	NO	0.9326	1.000	36.92	36.95	1.000	1.001	NO	1.970	98.5	0.175	1.970
22	22	cis-Nonachlor	4.07e3	1.50	NO	0.9583	1.000	39.23	39.23	1.000	1.000	NO	2.319	116	0.150	2.319
23	23	Endosulfan II (beta)	6.92e3	1.67	NO	1.0639	1.000	39.96	39.96	1.000	1.000	NO	12.71	127	0.471	12.71
24	24	2,4'-DDD	5.40e4	1.58	NO	0.9153	1.000	38.17	38.18	1.000	1.000	NO	2.190	109	0.127	2.190
25	25	2,4'-DDT	3.32e4	1.34	NO	0.9205	1.000	39.31	39.31	1.000	1.000	NO	2.356	118	0.231	2.356
26	26	4,4'-DDD	4.63e4	1.41	NO	1.0064	1.000	39.45	39.44	1.000	1.000	NO	2.226	111	0.136	2.226
27	27	4,4'-DDT	2.57e4	1.57	NO	0.9914	1.000	40.52	40.51	1.000	1.000	NO	2.157	108	0.236	2.157
28	28	Endosulfan Sulfate	9.29e3	1.71	NO	0.9273	1.000	41.68	41.70	1.000	1.000	NO	12.28	123	0.359	12.28
29	29	4,4'-Methoxychlor	1.37e5	5.76	NO	1.1355	1.000	43.55	43.56	1.000	1.000	NO	10.44	104	0.0929	10.44
30	30	Mirex	1.71e4	1.45	NO	0.9323	1.000	44.11	44.11	1.000	1.000	NO	2.210	111	0.0563	2.210
31	31	Endrin Aldehyde	1.60e4	0.70	NO	0.9805	1.000	41.09	41.10	1.000	1.001	NO	10.27	103	0.263	10.27
32	32	Endrin Ketone	1.06e4	0.69	NO	0.9108	1.000	44.23	44.25	1.000	1.000	NO	11.54	115	0.456	11.54
33	33	13C4-Hexachlorobutadiene	3.41e6	1.26	NO	0.1382	1.000	10.19	10.21	0.390	0.391	NO	493.1	98.6	0.0237	
34	34	13C6-Hexachlorobenzene	1.75e6	1.28	NO	0.6911	1.000	22.83	22.83	0.874	0.873	NO	50.45	101	0.00414	
35	35	13C6-Alpha-BHC	6.29e5	0.79	NO	0.2457	1.000	23.38	23.37	0.895	0.894	NO	51.13	102	0.139	
36	36	13C6-Lindane (gamma)	4.71e5	0.80	NO	0.1893	1.000	26.64	26.63	1.020	1.019	NO	49.66	99.3	0.180	
37	37	13C6-Beta-BHC	3.80e5	0.79	NO	0.1406	1.000	28.70	28.72	1.098	1.099	NO	51.13	102	0.242	
38	38	13C6-Delta-BHC	4.11e5	0.78	NO	0.1644	1.000	30.40	30.41	1.163	1.164	NO	49.92	99.8	0.207	
39	39	13C10-Heptachlor	1.79e5	1.30	NO	0.0770	1.000	28.83	28.83	1.103	1.103	NO	46.46	92.9	0.0895	



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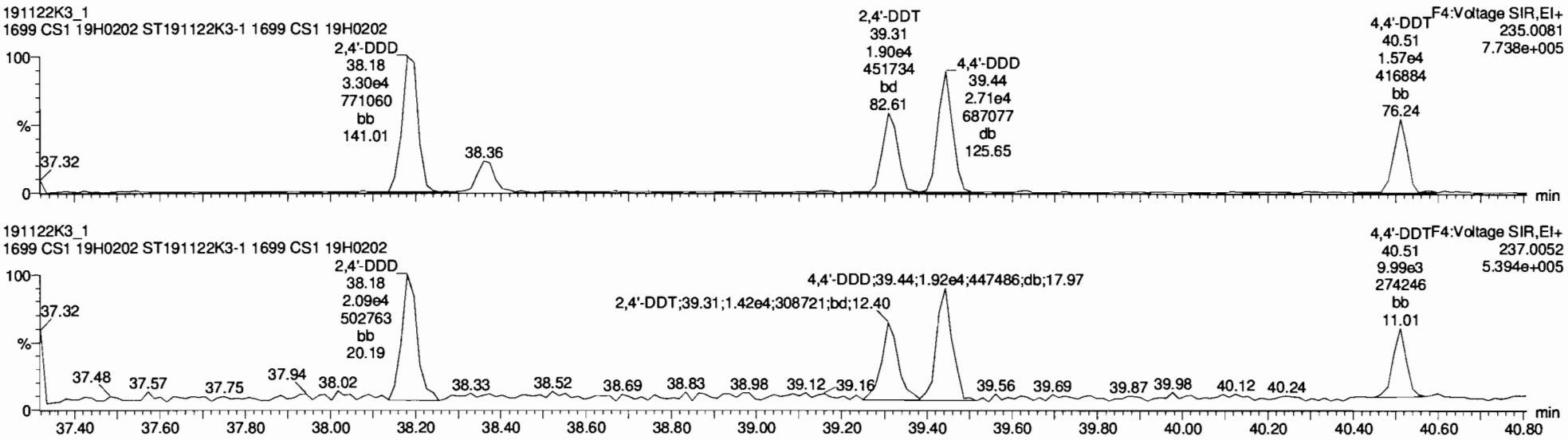
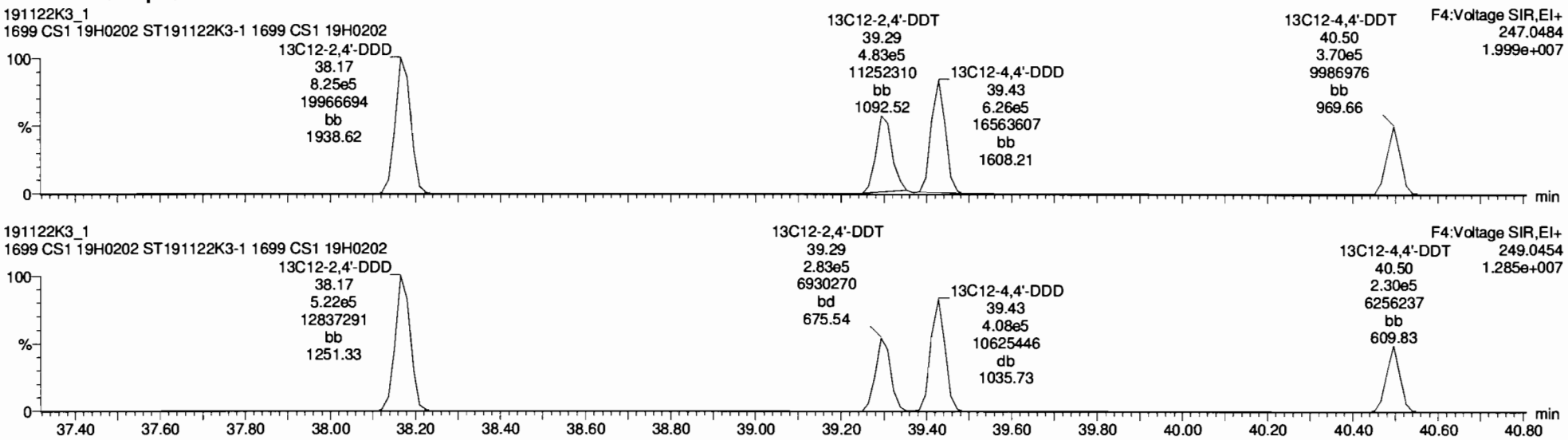
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

DDD-DDT



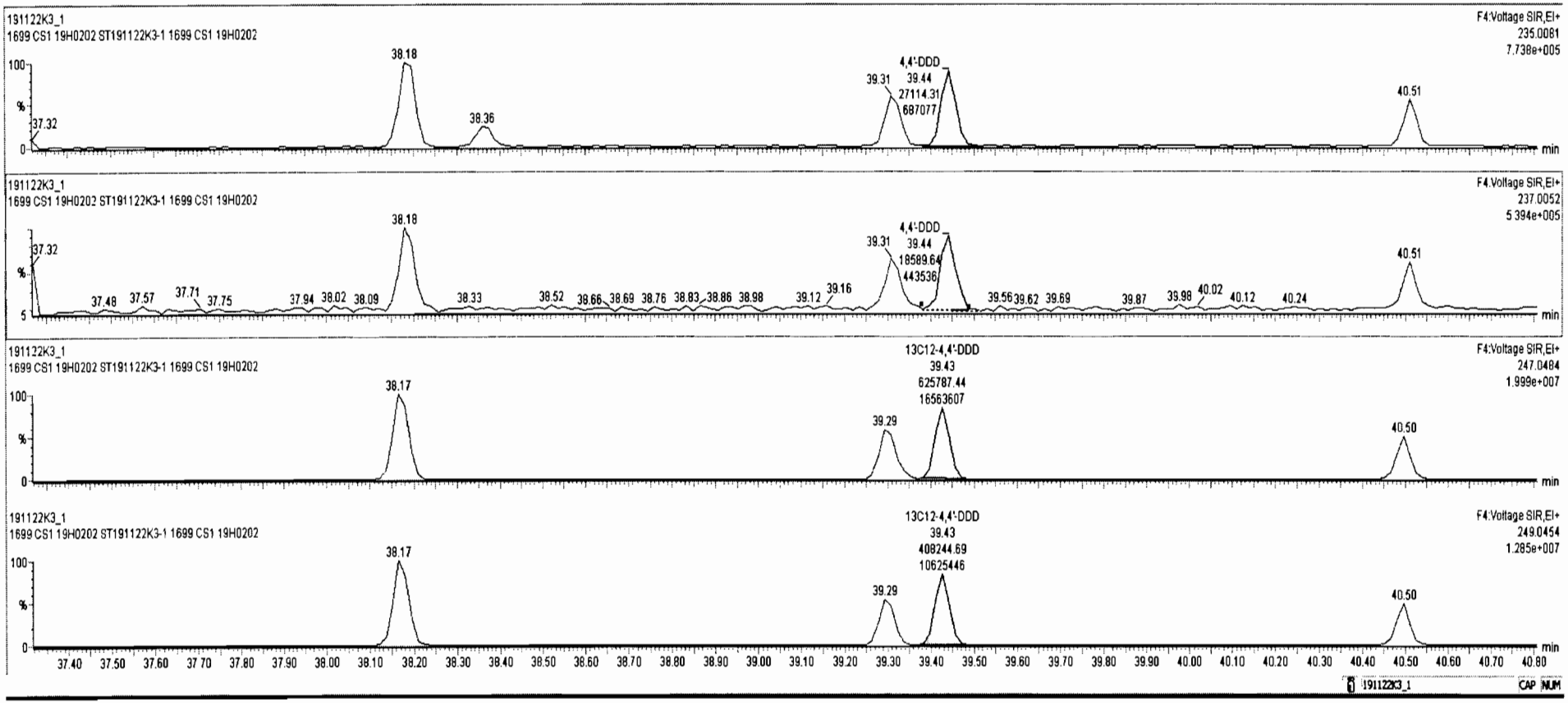
DDD-DDT-isotopes



TargetLynx - 191122K3.CRY.qld * - [Chromatogram]

File Edit View Display Processing Window Help

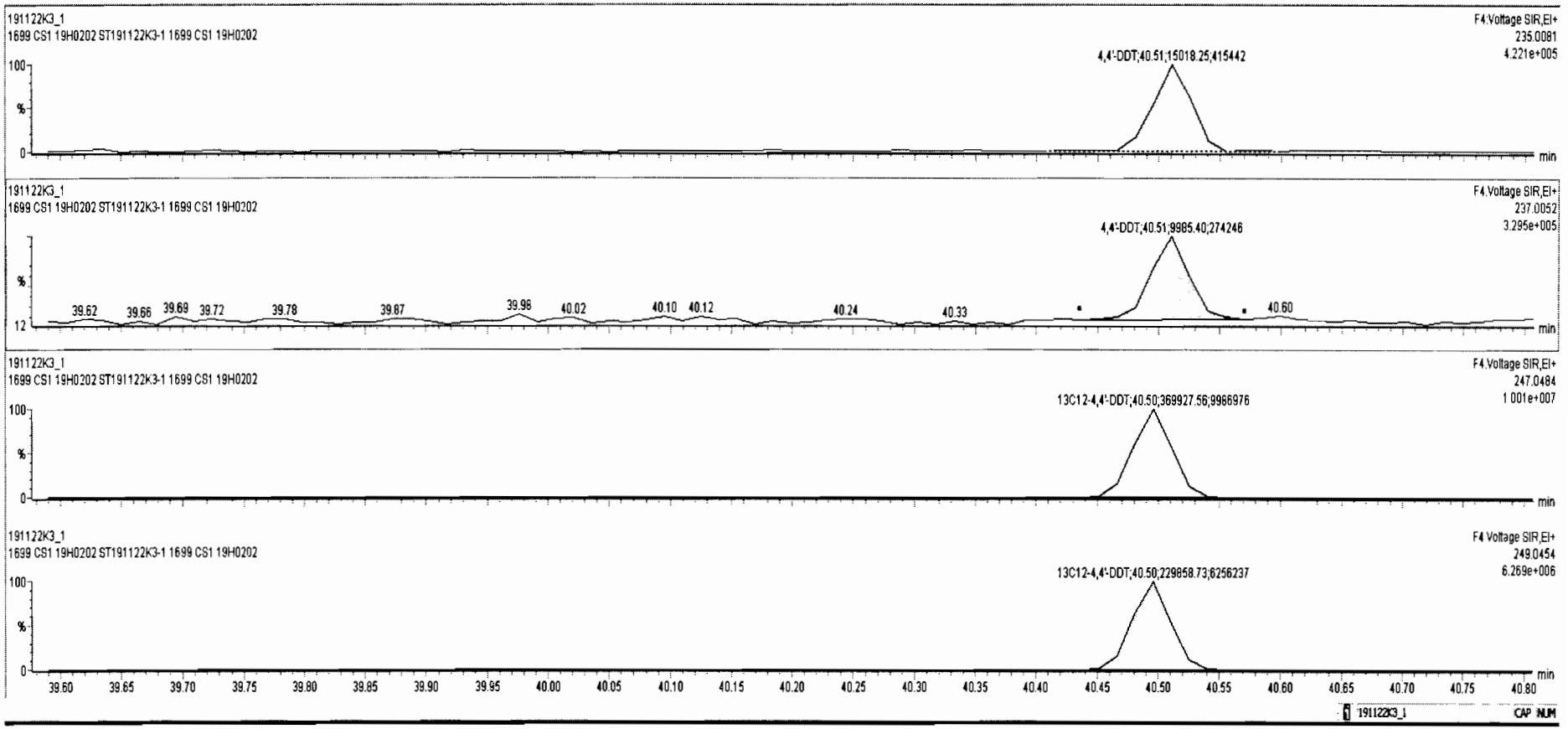
	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.246	NO	6.7980e4	1.8350e6	2.000	8.4	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.256	NO	4.9887e4	1.3258e6	2.000	7.8	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.767	NO	7.7075e3	1.8314e5	2.000	9.9	10.0	0.957	0.0957
21	21	Endrin	38.95	1.322	NO	3.0745e3	8.3694e4	2.000	-1.5	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.554	NO	4.0091e3	9.1537e4	2.000	14.6	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.96	1.668	NO	6.9248e3	2.5598e4	10.000	27.1	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.578	NO	5.3980e4	1.3468e6	2.000	9.5	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.337	NO	3.3212e4	7.6577e5	2.000	17.8	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.459	NO	4.5704e4	1.0340e6	2.000	10.1	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	2.5004e4	5.9979e5	2.000	5.6	9.88	0.987	0.0975
28	28	Endosulfan Sulfate	41.70	1.707	NO	9.2859e3	4.0770e4	10.000	22.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.56	6.035	NO	1.3575e5	5.7669e6	10.000	3.8	10.5	1.13	0.119
30	30	Mirex	44.11	1.448	NO	1.7089e4	4.1469e5	2.000	10.5	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.10	0.679	NO	1.5468e4	7.9563e5	10.000	-0.2	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.688	NO	1.0818e4	5.1456e5	10.000	15.4	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.259	NO	3.4107e6	2.5033e6	500.000	-1.4	17.5	0.138	0.0241



TargetLynx - 191122K3 CRV.qld * [Chromatogram]

File Edit View Display Processing Window Help

		Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.246	NO	6.7980e4	1.8350e6	2.000	8.4	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.256	NO	4.9887e4	1.3258e6	2.000	7.8	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.767	NO	7.7075e3	1.8314e5	2.000	9.9	10.0	0.957	0.0957
21	21	Endrin	38.95	1.322	NO	3.0745e3	8.3694e4	2.000	-1.5	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.554	NO	4.0091e3	9.1537e4	2.000	14.6	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.96	1.668	NO	6.9248e3	2.5598e4	10.000	27.1	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.578	NO	5.3980e4	1.3468e6	2.000	9.5	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.337	NO	3.3212e4	7.6577e5	2.000	17.8	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.459	NO	4.5704e4	1.0340e6	2.000	10.1	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	2.5004e4	5.9978e5	2.000	5.8	9.86	0.967	0.0975
28	28	Endosulfan Sulfate	41.70	1.707	NO	9.2659e3	4.0770e4	10.000	22.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.56	6.035	NO	1.3575e5	5.7669e6	10.000	3.8	10.5	1.13	0.119
30	30	Mirex	44.11	1.448	NO	1.7089e4	4.1469e5	2.000	10.5	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.10	0.679	NO	1.5488e4	7.9563e5	10.000	-0.2	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.688	NO	1.0818e4	5.1456e5	10.000	15.4	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.259	NO	3.4107e6	2.5033e6	500.000	-1.4	17.5	0.138	0.0241



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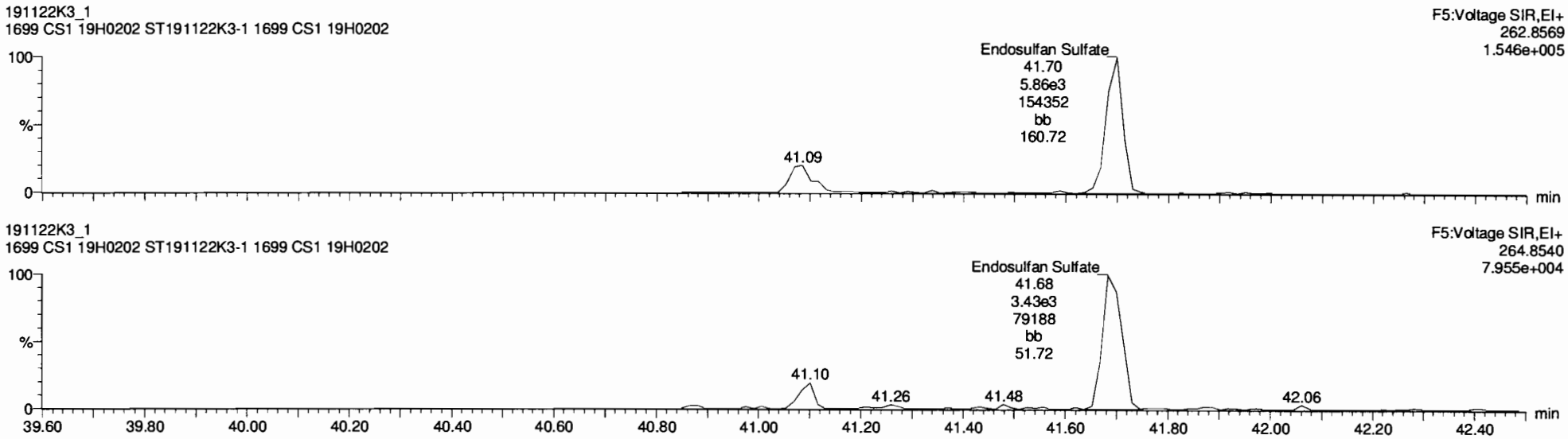
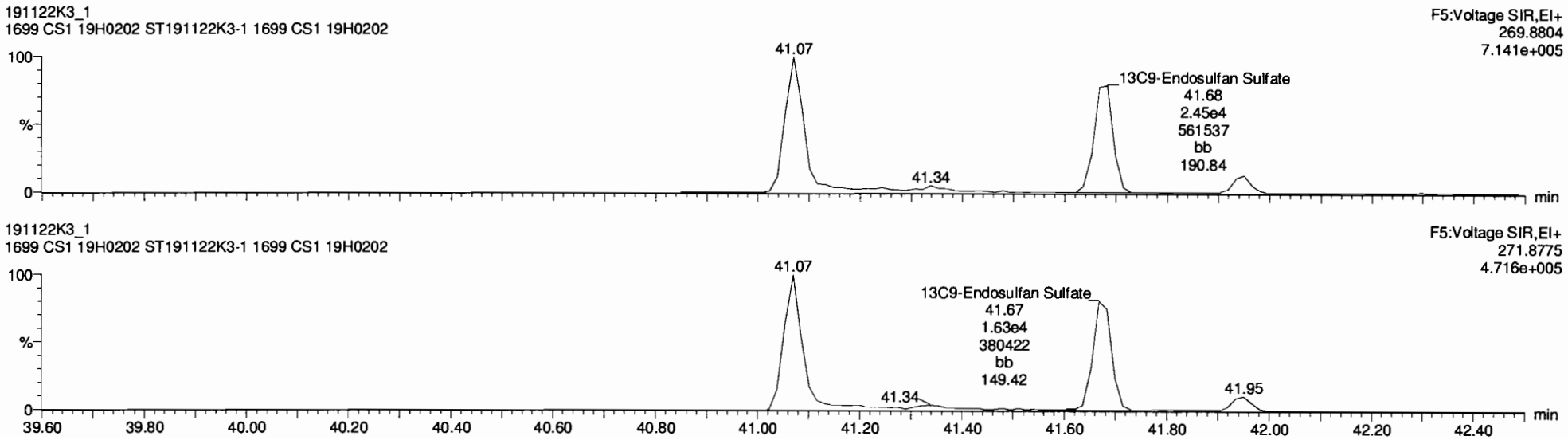
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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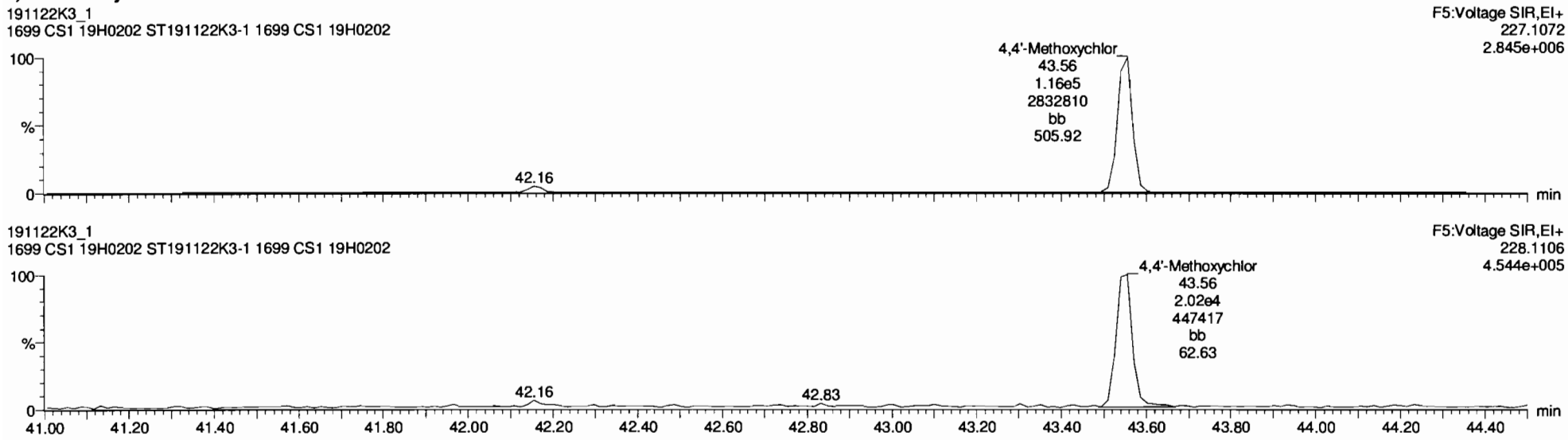
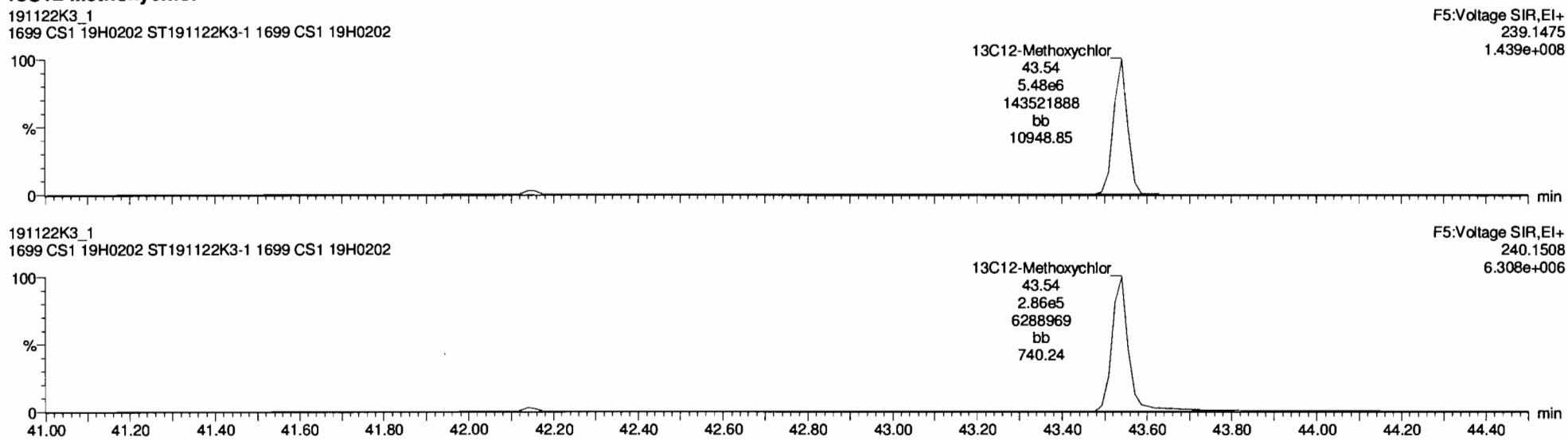
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

4,4'-Methoxychlor



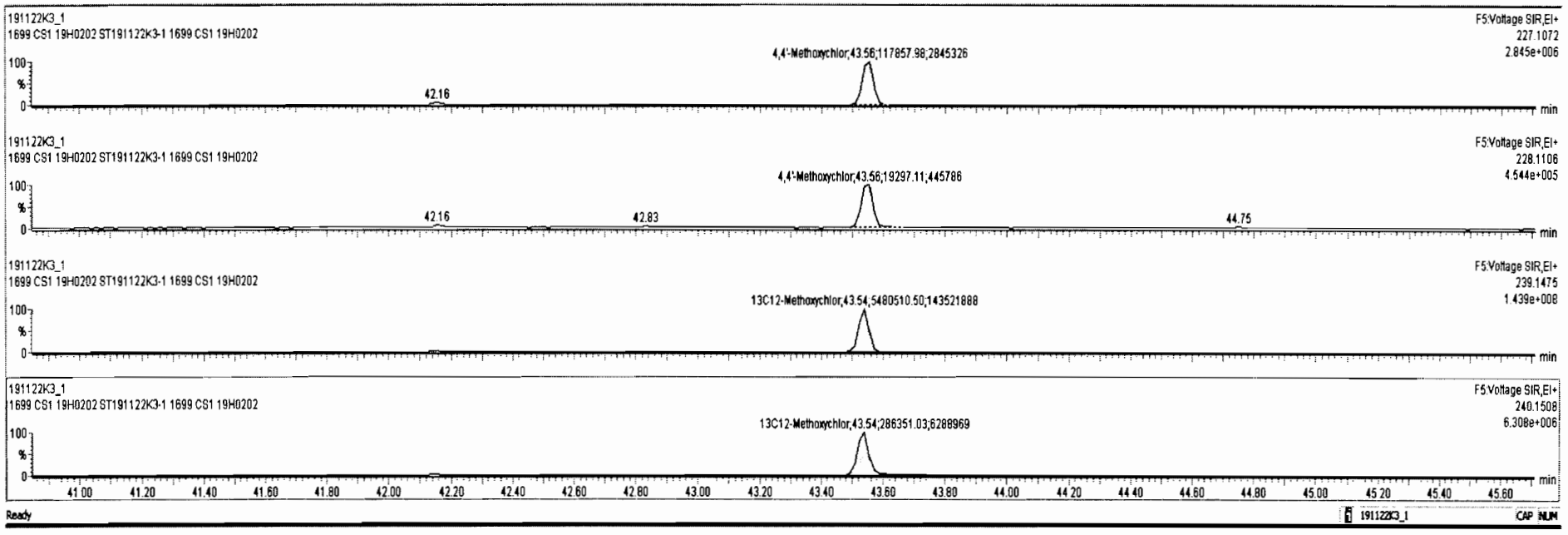
13C12-Methoxychlor



TargetLynx - 191122K3 CRV.qld - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	RA	rAy	RRF	wtVol	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
17	17	4,4'-DDMU	4.91e4	3.17	NO	0.6167	1.000	35.74	35.74	0.994	0.994	NO	2.168	108	0.0441	2.168
18	18	2,4'-DDE	6.80e4	1.25	NO	0.8542	1.000	35.96	35.96	1.000	1.000	NO	2.169	108	0.0900	2.168
19	19	4,4'-DDE	4.99e4	1.26	NO	0.8728	1.000	37.05	37.04	1.000	1.000	NO	2.156	108	0.117	2.155
20	20	Dieldrin	7.71e3	1.77	NO	0.9570	1.000	37.55	37.54	1.000	1.000	NO	2.199	110	0.104	2.199
21	21	Endrin	3.07e3	1.32	NO	0.9326	1.000	38.92	38.95	1.000	1.001	NO	1.970	98.5	0.210	1.970
22	22	cis-Nonachlor	4.01e3	1.55	NO	0.9556	1.000	39.23	39.23	1.000	1.000	NO	2.292	115	0.180	2.292
23	23	Endosulfan II (beta)	6.92e3	1.67	NO	1.0639	1.000	39.95	39.96	1.000	1.000	NO	12.71	127	0.565	12.71
24	24	2,4'-DDD	5.40e4	1.58	NO	0.9153	1.000	38.17	38.18	1.000	1.000	NO	2.190	109	0.153	2.189
25	25	2,4'-DDT	3.32e4	1.34	NO	0.9205	1.000	39.31	39.31	1.000	1.000	NO	2.356	118	0.277	2.356
26	26	4,4'-DDD	4.57e4	1.46	NO	1.0039	1.000	39.45	39.44	1.000	1.000	NO	2.201	110	0.166	2.201
27	27	4,4'-DDT	2.50e4	1.50	NO	0.9885	1.000	40.52	40.51	1.000	1.000	NO	2.113	106	0.285	2.113
28	28	Endosulfan Sulfate	9.29e3	1.71	NO	0.9279	1.000	41.68	41.70	1.000	1.000	NO	12.27	123	0.431	12.27
29	29	4,4'-Methoxychlor	1.37e5	6.11	NO	1.1362	1.000	43.55	43.56	1.000	1.000	NO	10.47	105	0.111	10.47
30	30	Mirex	1.71e4	1.45	NO	0.9323	1.000	44.11	44.11	1.000	1.000	NO	2.210	111	0.0676	2.210
31	31	Endrin Aldehyde	1.55e4	0.68	NO	0.8867	1.000	41.09	41.10	1.000	1.001	NO	10.98	110	0.349	10.98
32	32	Endrin Ketone	1.08e4	0.69	NO	0.9108	1.000	44.23	44.25	1.000	1.000	NO	11.54	115	0.548	11.54
33	33	13C4-Hexachlorobutadiene	3.41e6	1.26	NO	0.1382	1.000	10.19	10.21	0.390	0.391	NO	493.1	98.6	0.0264	
34	34	13C6-Hexachlorobenzene	1.75e6	1.27	NO	0.6911	1.000	22.83	22.83	0.874	0.873	NO	50.45	101	0.00497	
35	35	13C6-Alpha-BHC	6.29e5	0.80	NO	0.2457	1.000	23.38	23.37	0.895	0.894	NO	51.13	102	0.166	
36	36	13C6-Lindane (gamma)	4.71e5	0.80	NO	0.1891	1.000	26.64	26.63	1.020	1.019	NO	49.73	99.5	0.216	
37	37	13C6-Beta-BHC	3.60e5	0.79	NO	0.1406	1.000	28.70	28.72	1.098	1.099	NO	51.13	102	0.291	
38	38	13C6-Delta-BHC	4.11e5	0.78	NO	0.1644	1.000	30.40	30.41	1.163	1.163	NO	49.92	99.8	0.249	
39	39	13C10-Heptachlor	1.79e5	1.30	NO	0.0770	1.000	28.83	28.83	1.103	1.103	NO	46.46	92.9	0.0834	
40	40	13C12-Aldrin	2.98e5	1.64	NO	0.1216	1.000	30.94	30.97	1.184	1.185	NO	48.98	98.0	0.144	
41	41	13C10-Oxychlordane	6.62e4	1.53	NO	0.0283	1.000	33.55	33.58	1.284	1.285	NO	46.73	93.5	0.620	



Ready

191122K3_1 CAP NUM

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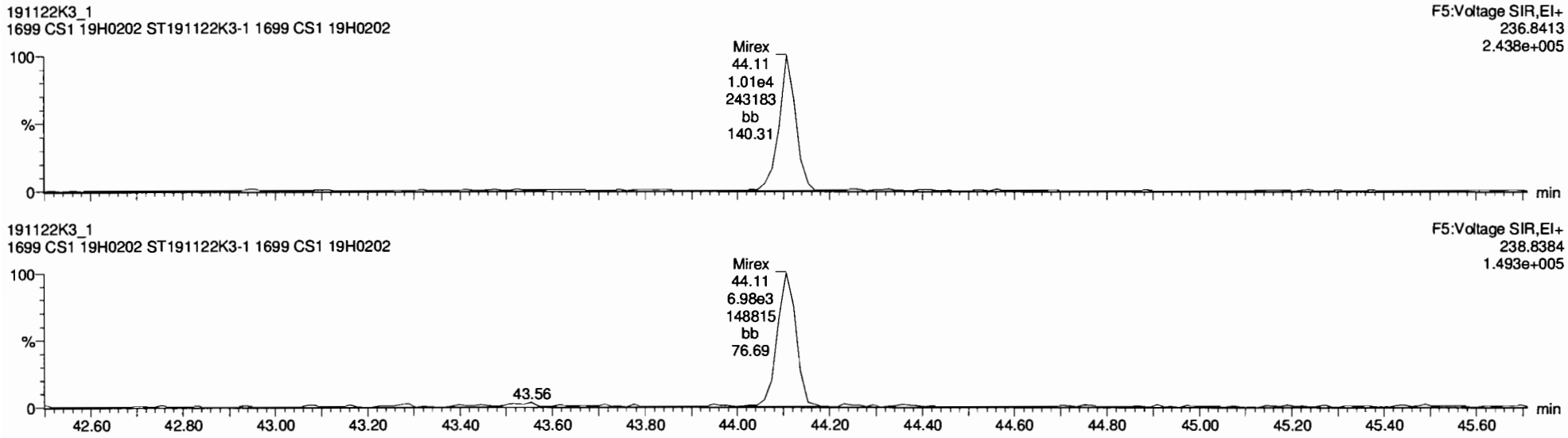
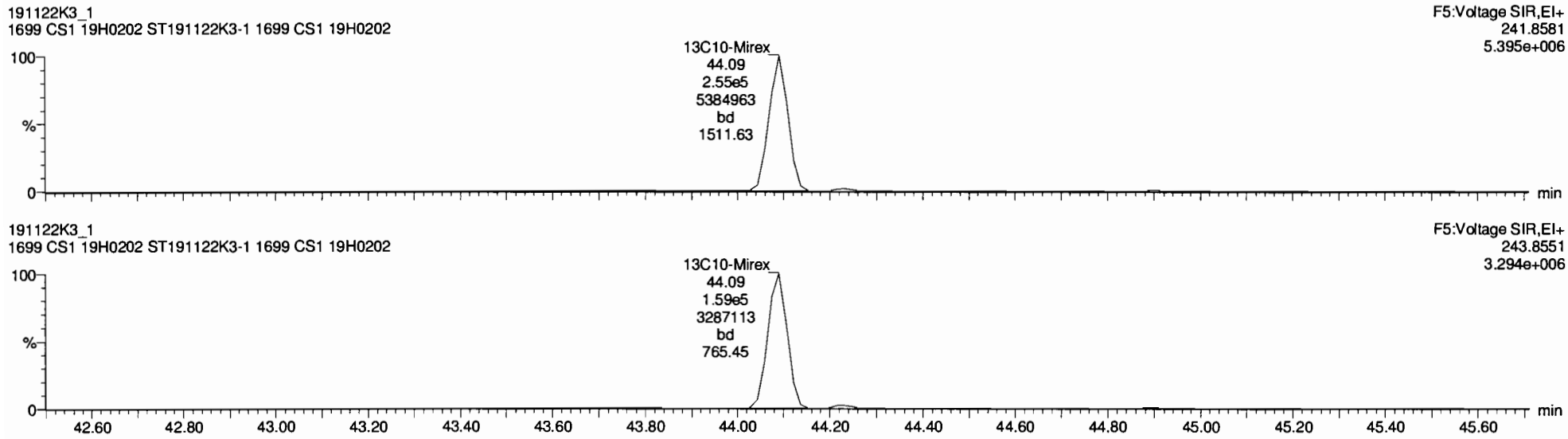
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

Mirex



13C10-Mirex



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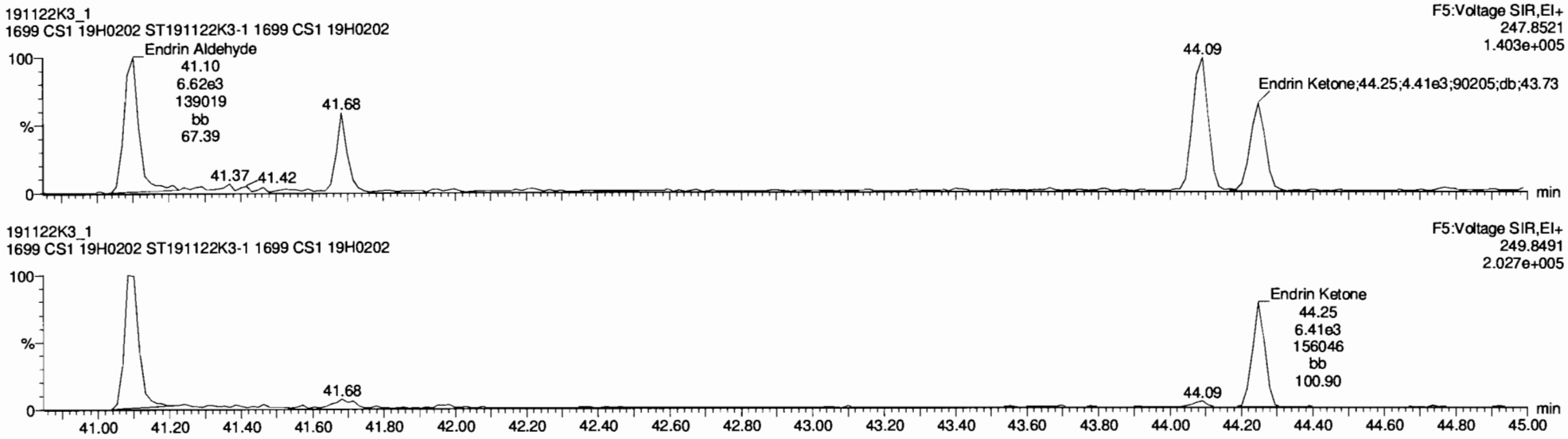
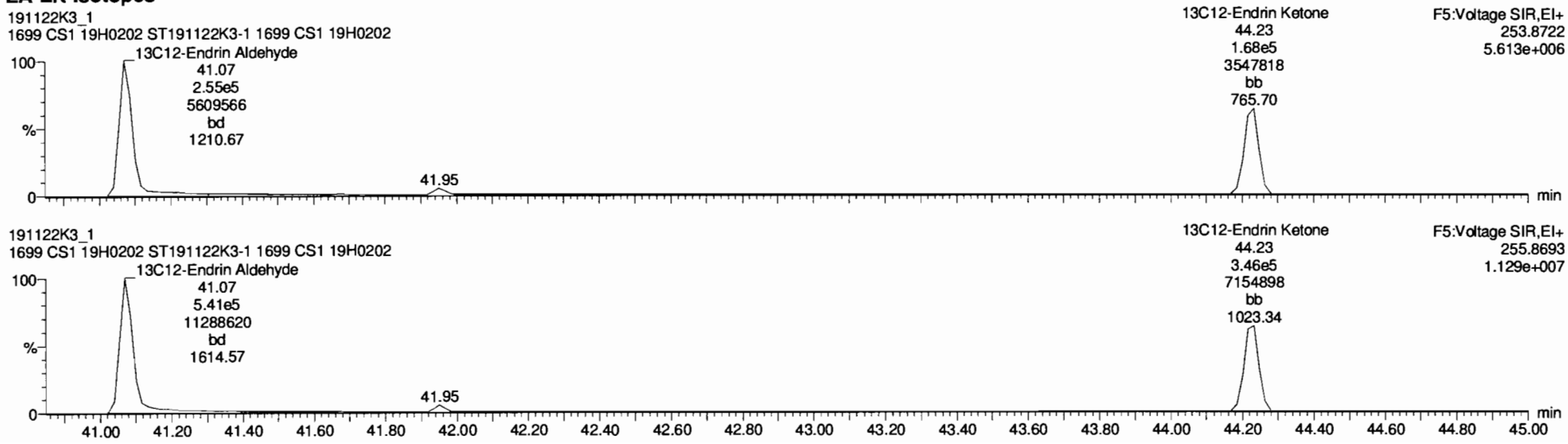
Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

EA-EK



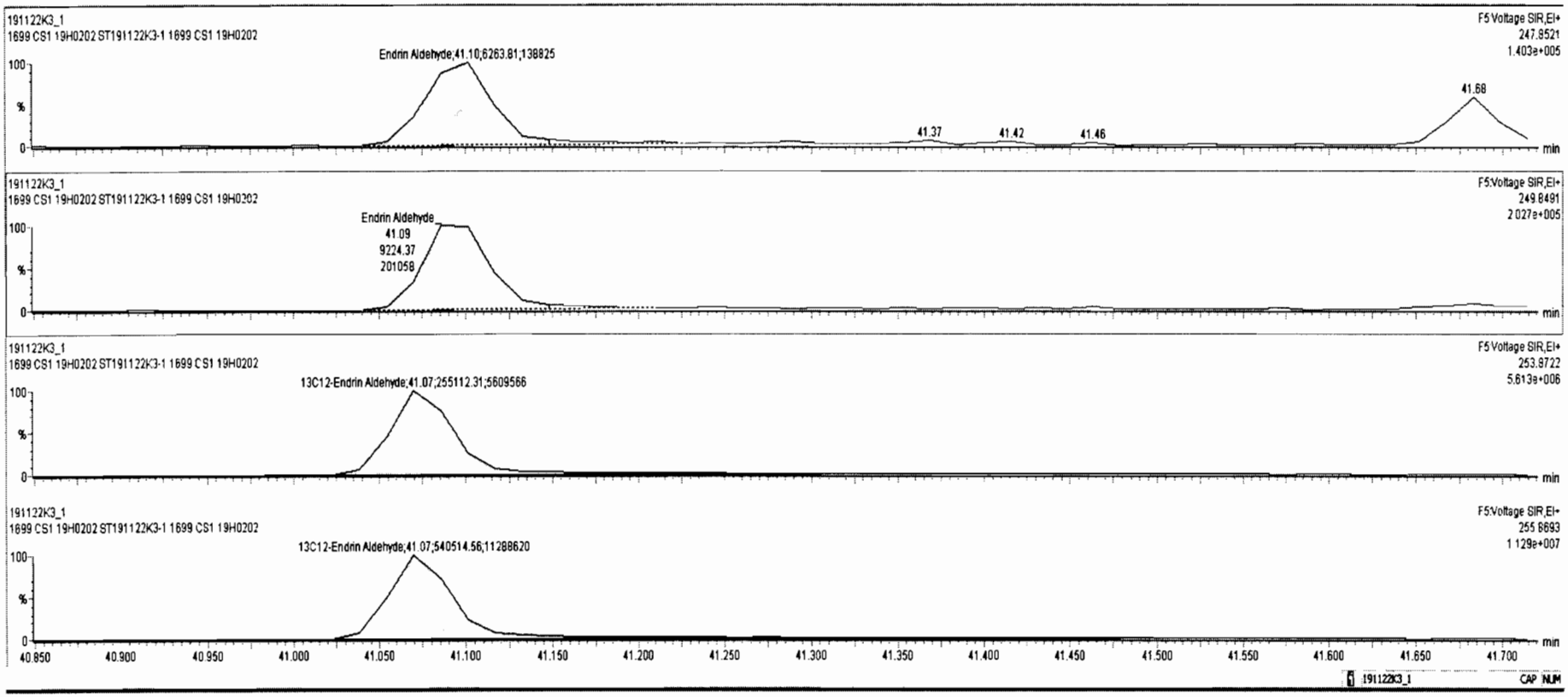
EA-EK-isotopes



TargetLynx - 191122K3 CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	R...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.248	NO	6.7980e4	1.8350e6	2.000	8.4	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.256	NO	4.9887e4	1.3258e6	2.000	7.8	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.767	NO	7.7075e3	1.8314e5	2.000	9.9	10.0	0.957	0.0957
21	21	Endrin	38.95	1.322	NO	3.0745e3	8.3694e4	2.000	-1.5	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.554	NO	4.0091e3	9.1537e4	2.000	14.6	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.96	1.668	NO	6.9248e3	2.5596e4	10.000	27.1	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.578	NO	5.3980e4	1.3468e6	2.000	9.5	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.337	NO	3.3212e4	7.6577e5	2.000	17.8	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.459	NO	4.5704e4	1.0340e6	2.000	10.1	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	2.5004e4	5.9979e5	2.000	5.6	9.88	0.987	0.0975
28	28	Endosulfan Sulfate	41.70	1.707	NO	9.2659e3	4.0770e4	10.000	22.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.56	6.108	NO	1.3716e5	5.7669e6	10.000	4.7	10.8	1.14	0.120
30	30	Mirex	44.11	1.448	NO	1.7089e4	4.1469e5	2.000	10.5	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.10	0.679	NO	1.5488e4	7.9563e5	10.000	-0.2	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.688	NO	1.0818e4	5.1456e5	10.000	15.4	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.259	NO	3.4107e6	2.5033e6	500.000	-1.4	17.5	0.138	0.0241



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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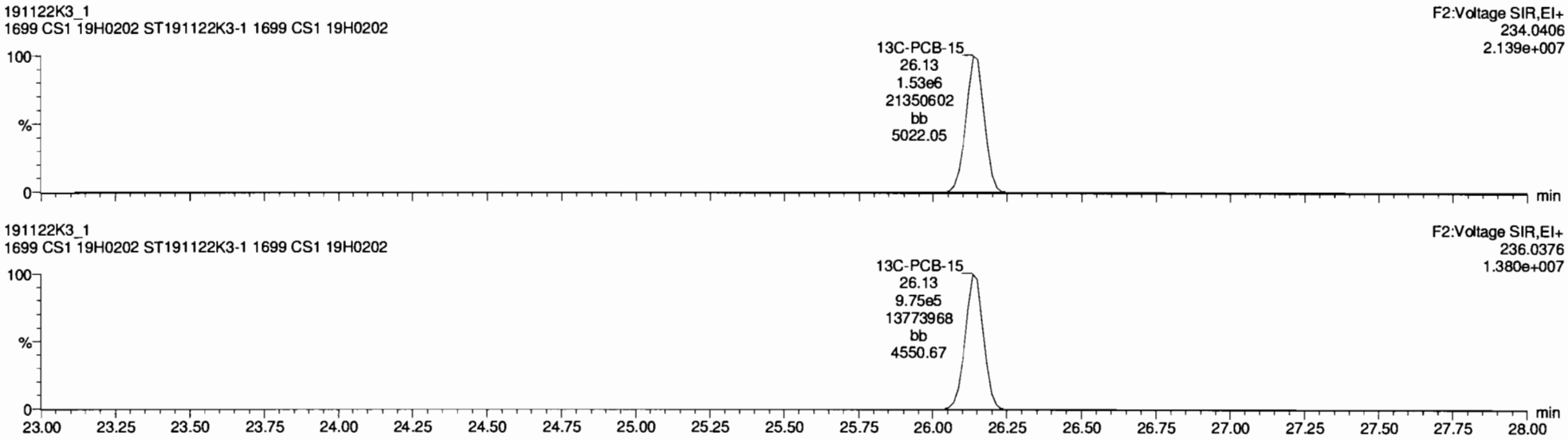
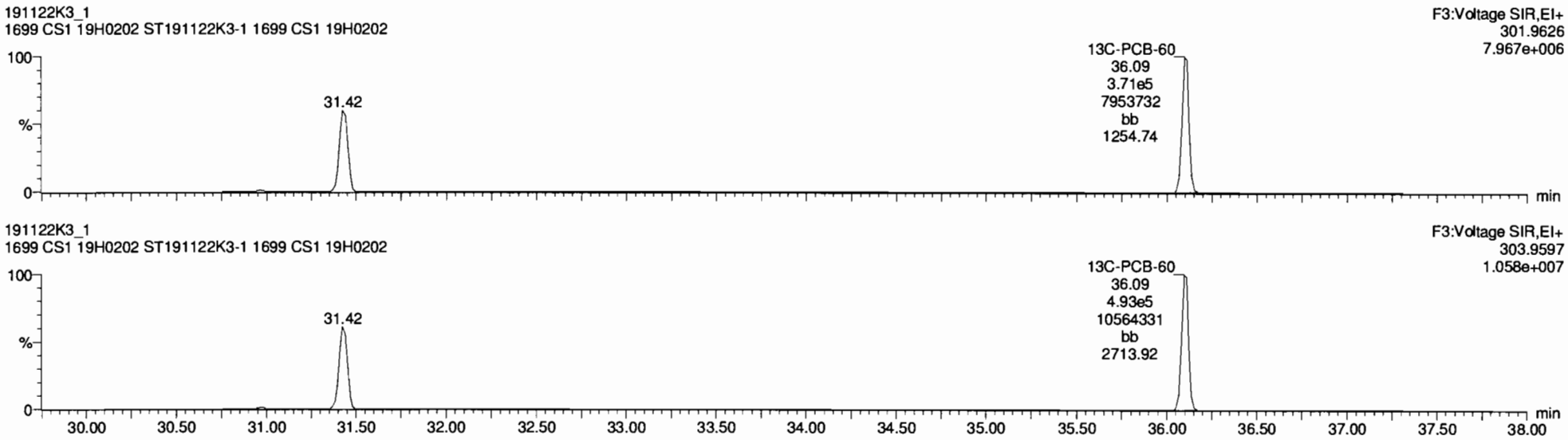
Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

13C-PCB-15



13C-PCB-60



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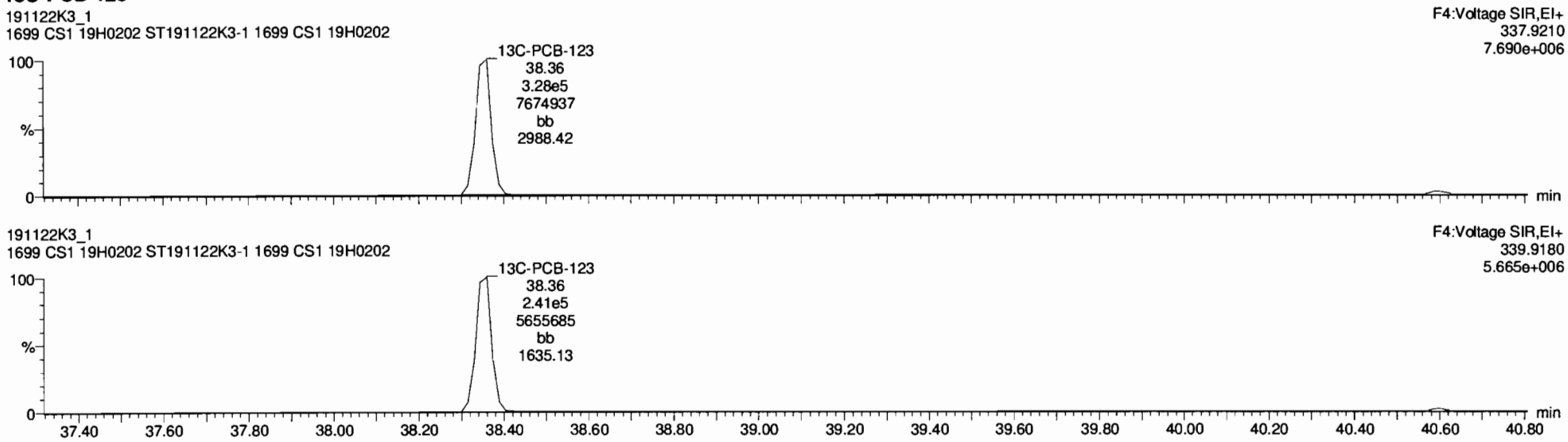
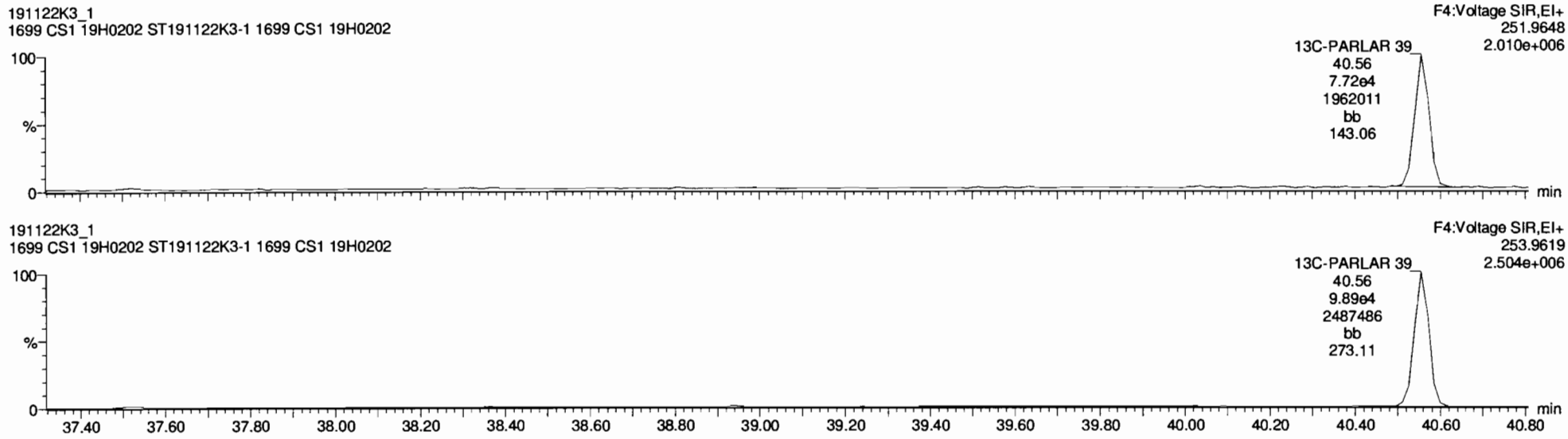
13C-PCB-123



13C-PARLAR 39



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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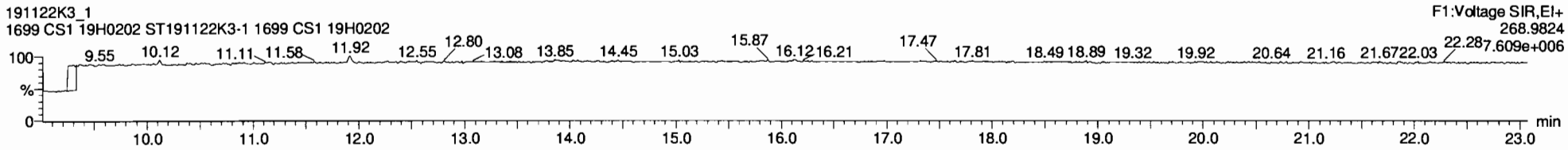
Name: 191122K3_1, Date: 22-Nov-2019, Time: 16:01:15, ID: ST191122K3-1 1699 CS1 19H0202, Description: 1699 CS1 19H0202

PFK1



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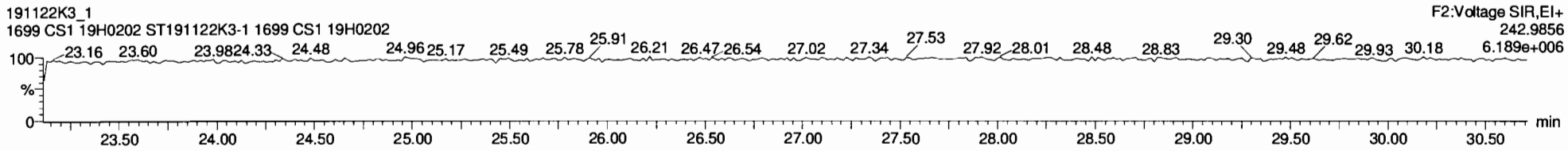

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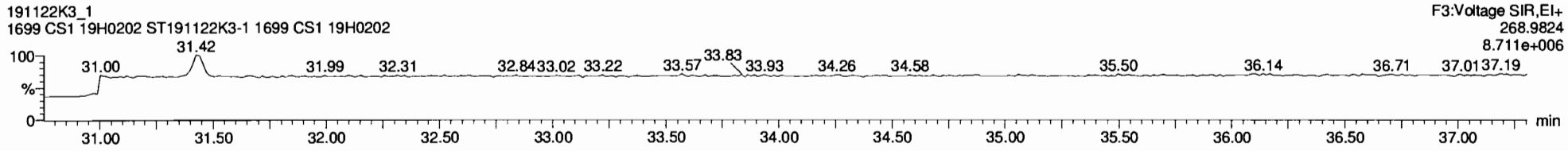
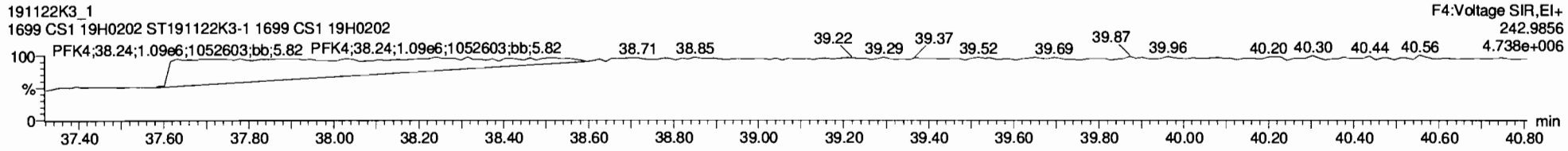
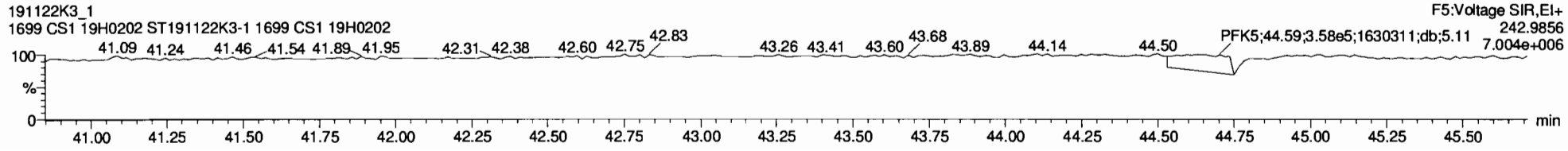


PFK4



PFK5



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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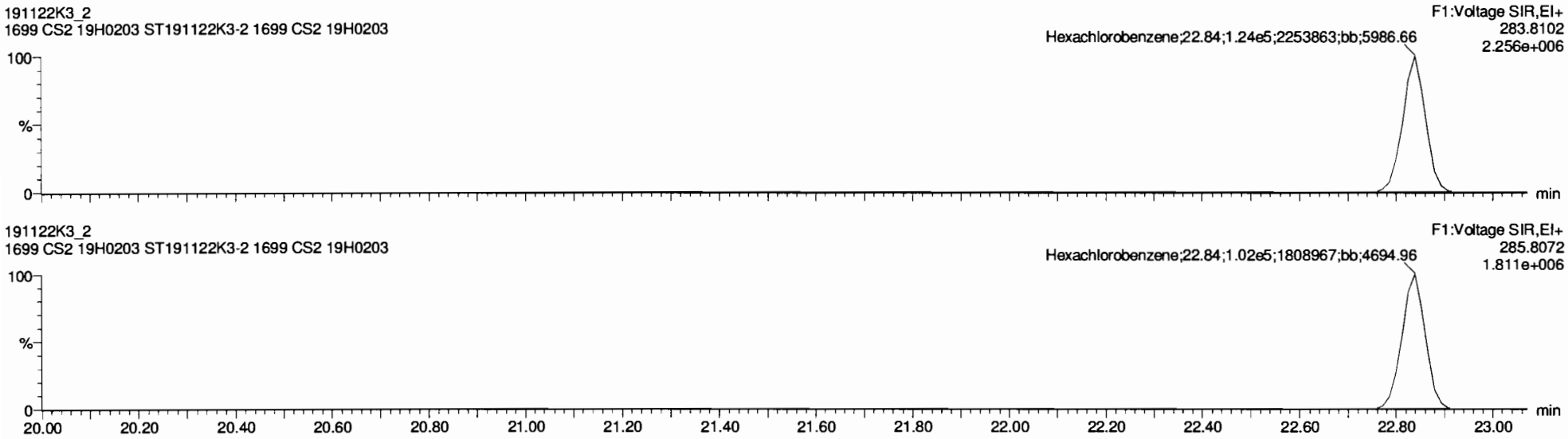
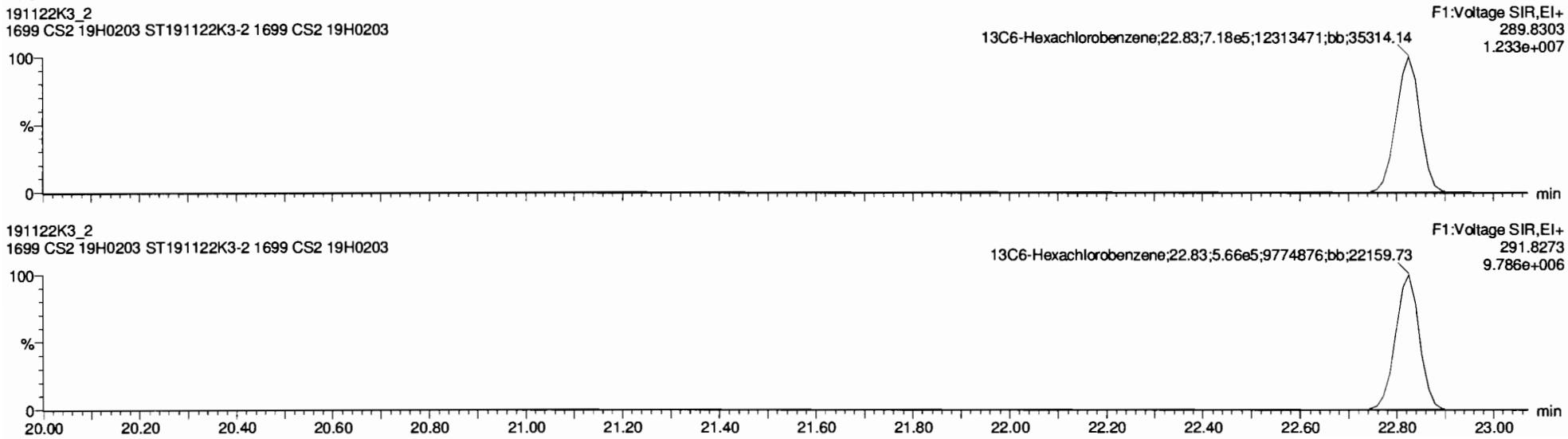
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Hexachlorobenzene



13C6-Hexachlorobenzene



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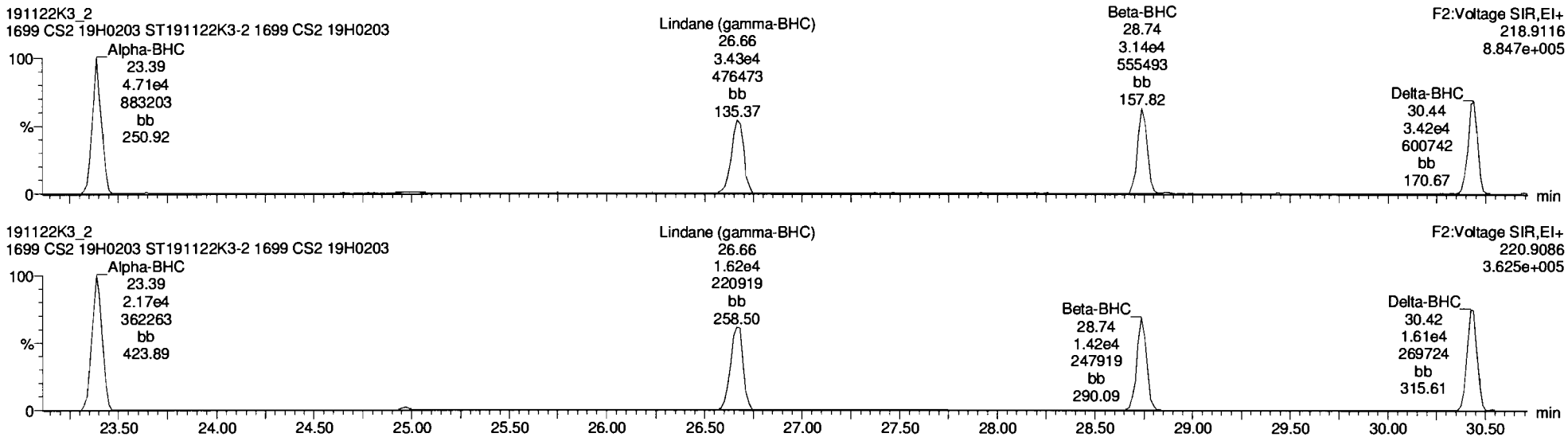
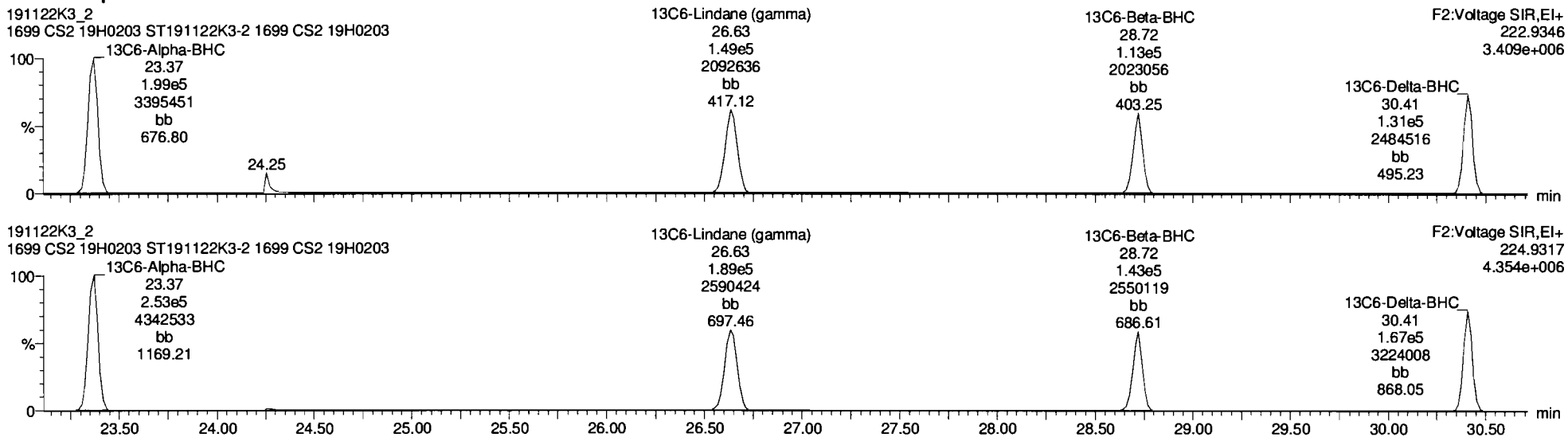
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

BHC Totals



BHC-isotopes



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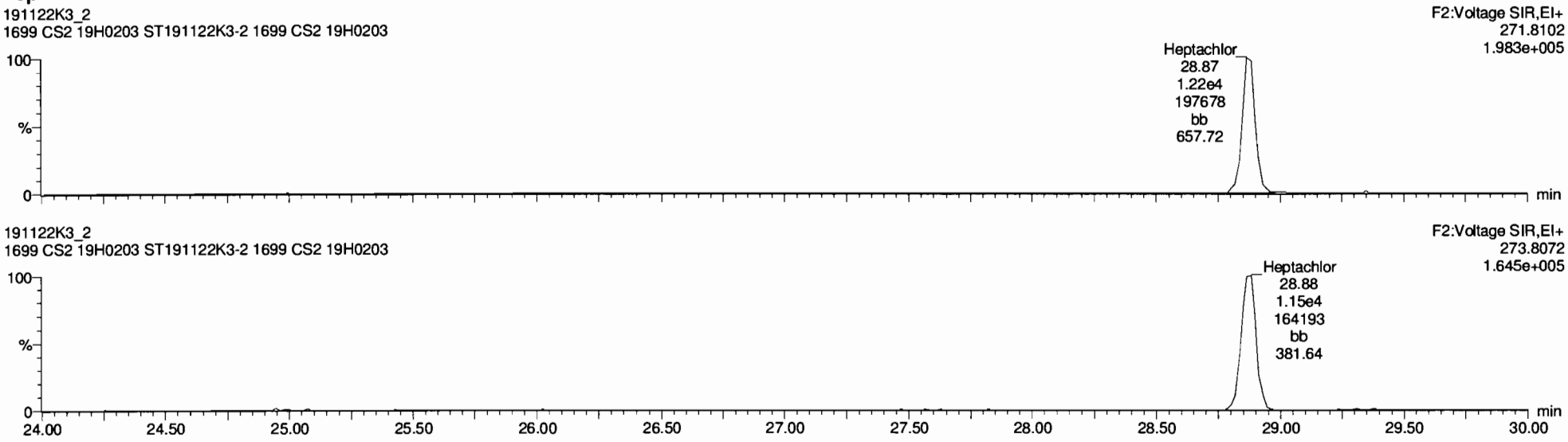
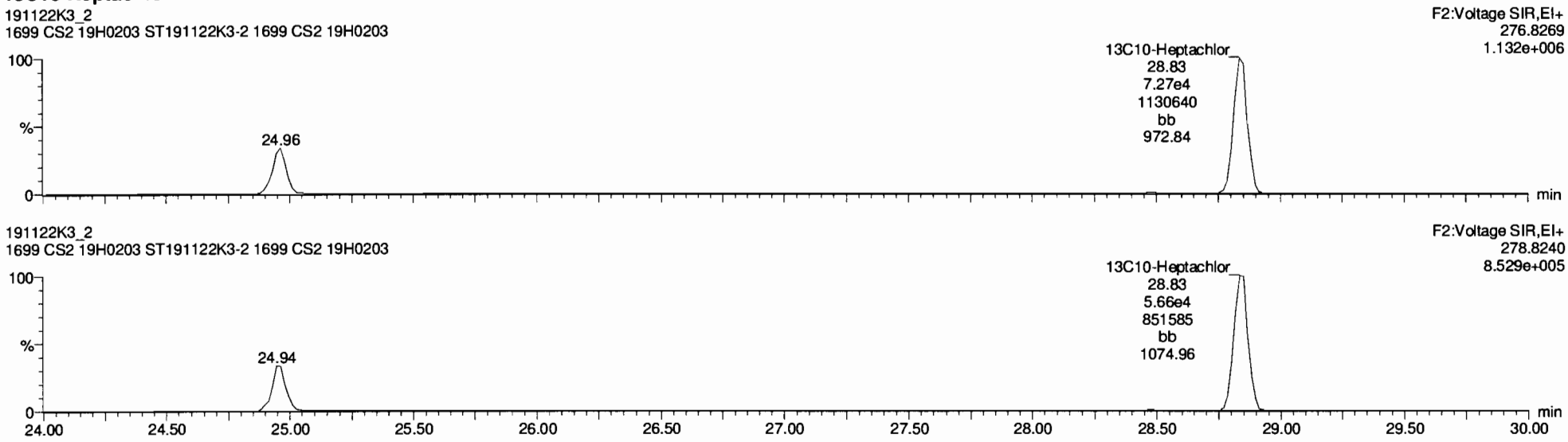
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Heptachlor



13C10-Heptachlor



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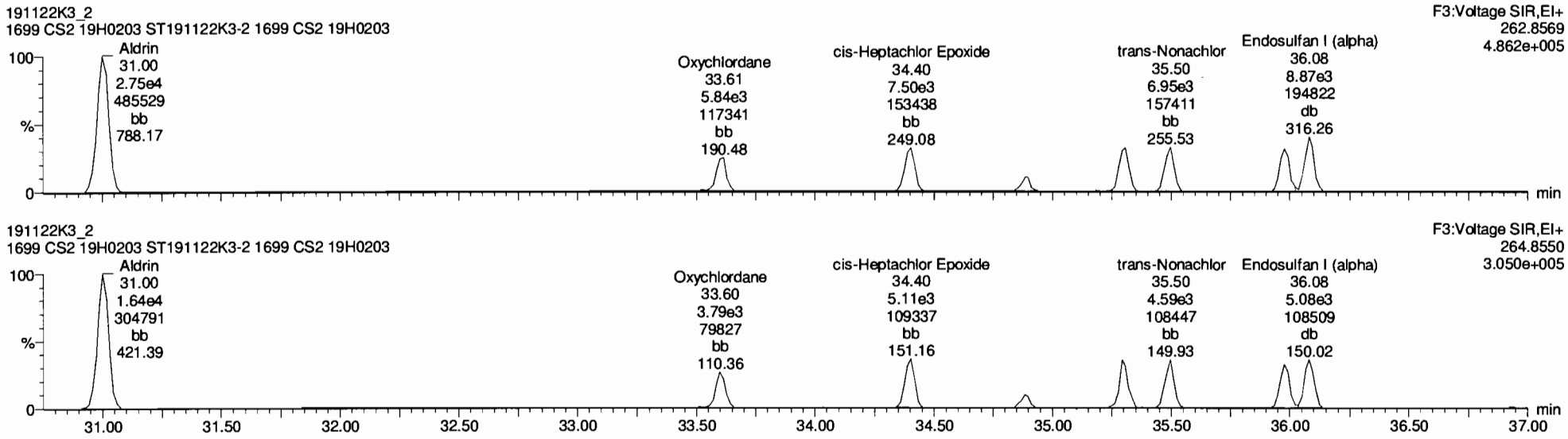
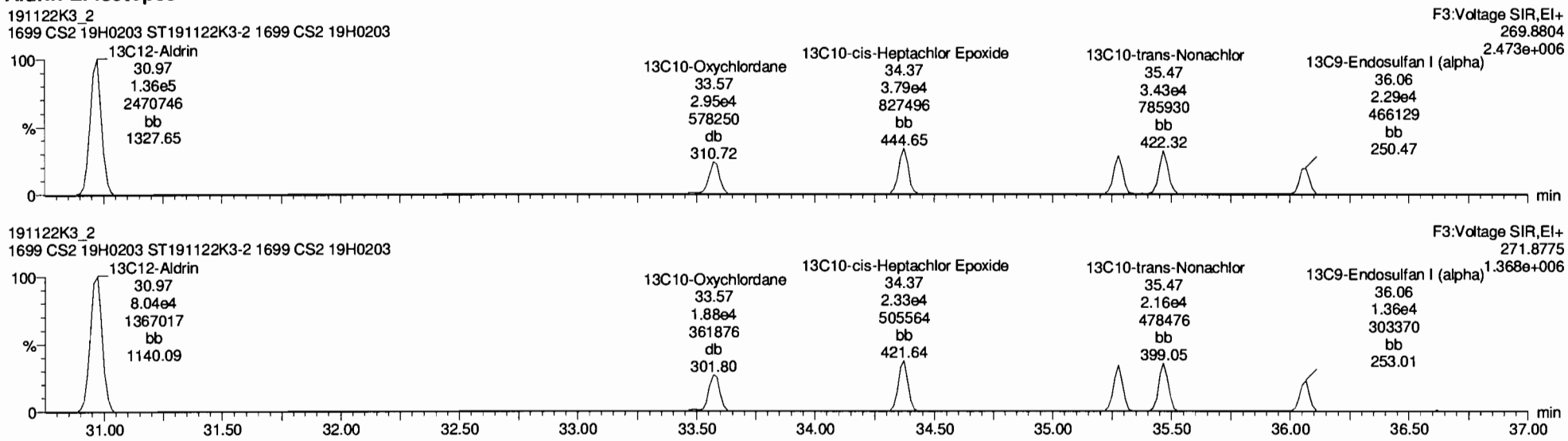
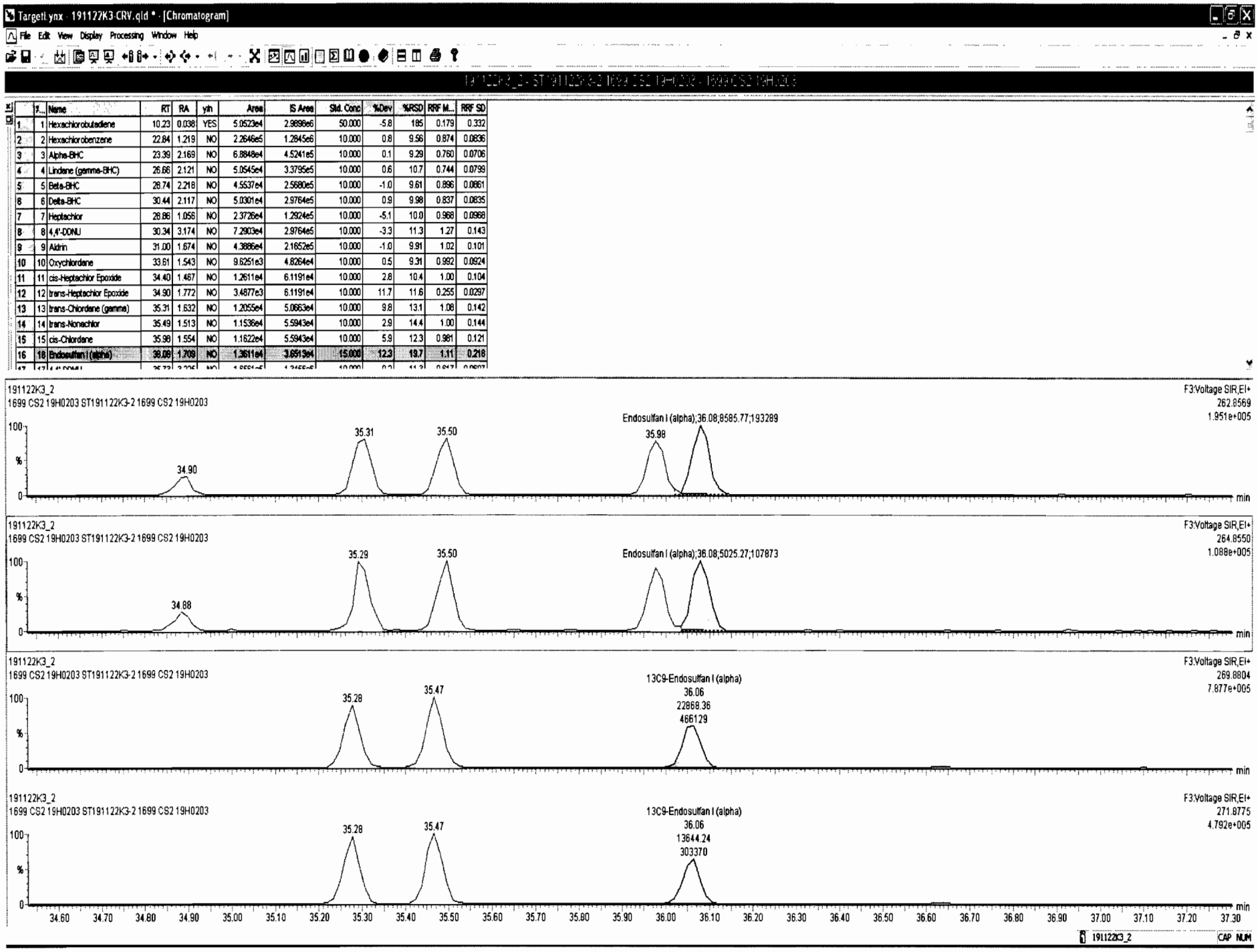
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Aldrin-EI



Aldrin-EI-isotopes





	?...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
1	1	Hexachlorobutadiene	10.23	0.038	YES	5.0523e4	2.9898e6	50.000	-5.8	185	0.179	0.332
2	2	Hexachlorobenzene	22.84	1.219	NO	2.2646e5	1.2845e6	10.000	0.8	9.56	0.874	0.0836
3	3	Alpha-BHC	23.39	2.169	NO	6.8848e4	4.5241e5	10.000	0.1	9.29	0.760	0.0706
4	4	Lindane (gamma-BHC)	26.66	2.121	NO	5.0545e4	3.3795e5	10.000	0.6	10.7	0.744	0.0799
5	5	Beta-BHC	28.74	2.218	NO	4.5537e4	2.5680e5	10.000	-1.0	9.61	0.896	0.0861
6	6	Delta-BHC	30.44	2.117	NO	5.0301e4	2.9764e5	10.000	0.9	9.98	0.837	0.0835
7	7	Heptachlor	28.86	1.056	NO	2.3726e4	1.2924e5	10.000	-5.1	10.0	0.968	0.0968
8	8	4,4'-DDNU	30.34	3.174	NO	7.2903e4	2.9764e5	10.000	-3.3	11.3	1.27	0.143
9	9	Aldrin	31.00	1.674	NO	4.3886e4	2.1652e5	10.000	-1.0	9.91	1.02	0.101
10	10	Oxychlordane	33.61	1.543	NO	9.6251e3	4.8264e4	10.000	0.5	9.31	0.992	0.0924
11	11	cis-Heptachlor Epoxide	34.40	1.467	NO	1.2611e4	6.1191e4	10.000	2.8	10.4	1.00	0.104
12	12	trans-Heptachlor Epoxide	34.90	1.772	NO	3.4877e3	6.1191e4	10.000	11.7	11.6	0.255	0.0297
13	13	trans-Chlordane (gamma)	35.31	1.632	NO	1.2055e4	5.0663e4	10.000	9.8	13.1	1.08	0.142
14	14	trans-Nonachlor	35.49	1.513	NO	1.1536e4	5.5943e4	10.000	2.9	14.4	1.00	0.144
15	15	cis-Chlordane	35.98	1.554	NO	1.1622e4	5.5943e4	10.000	5.9	12.3	0.981	0.121
16	16	Endosulfan I (alpha)	36.08	1.709	NO	1.3611e4	3.6513e4	15.000	12.3	19.7	1.11	0.218

Dataset: Untitled

Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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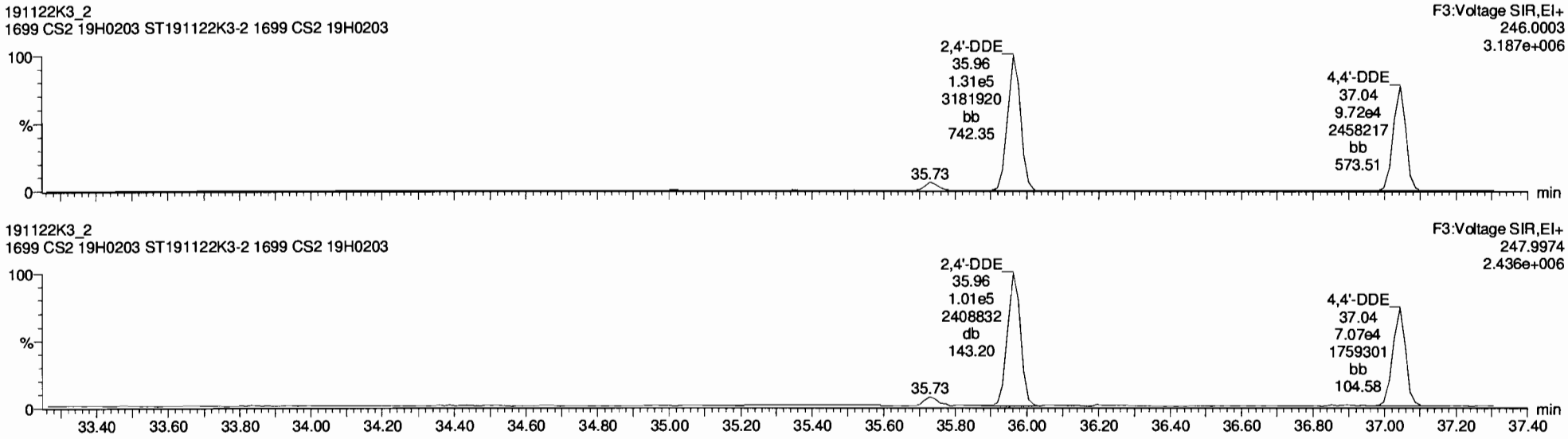
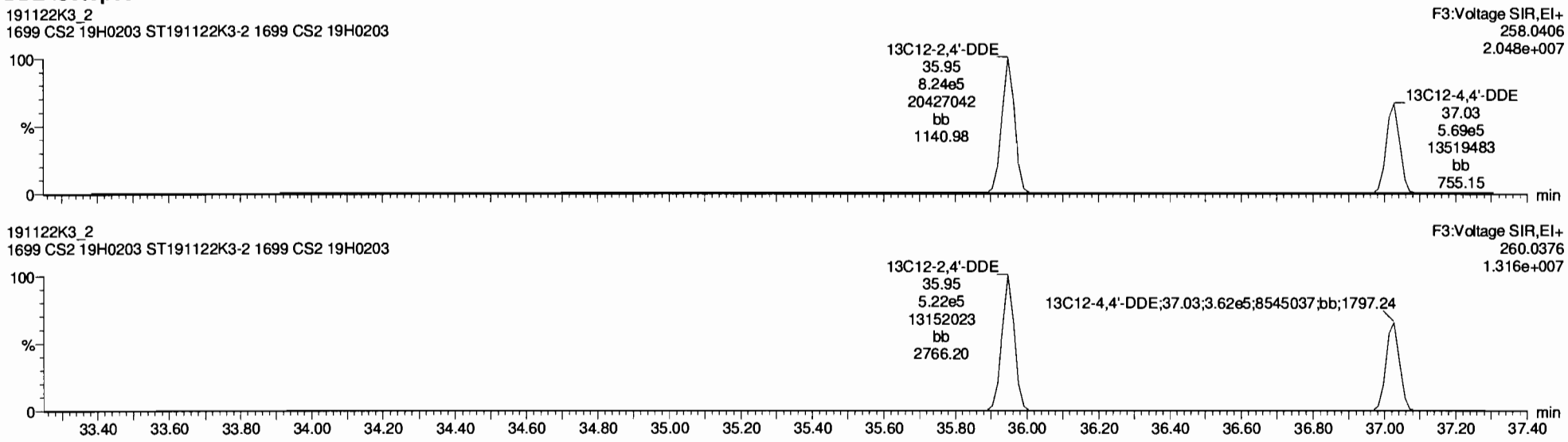
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

DDMU-DDE



DDE-isotopes



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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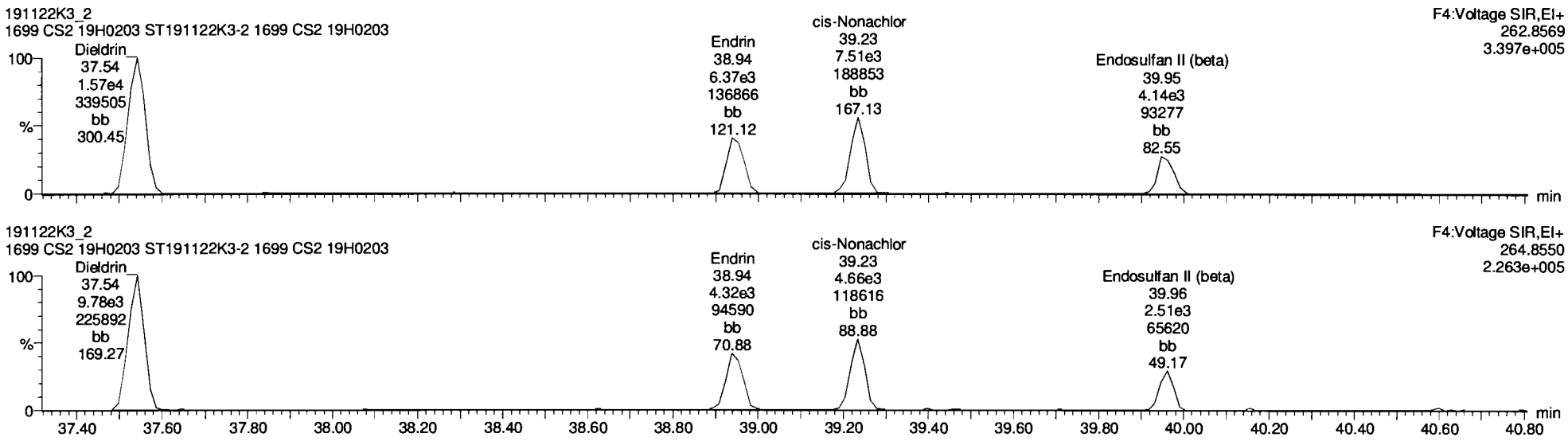
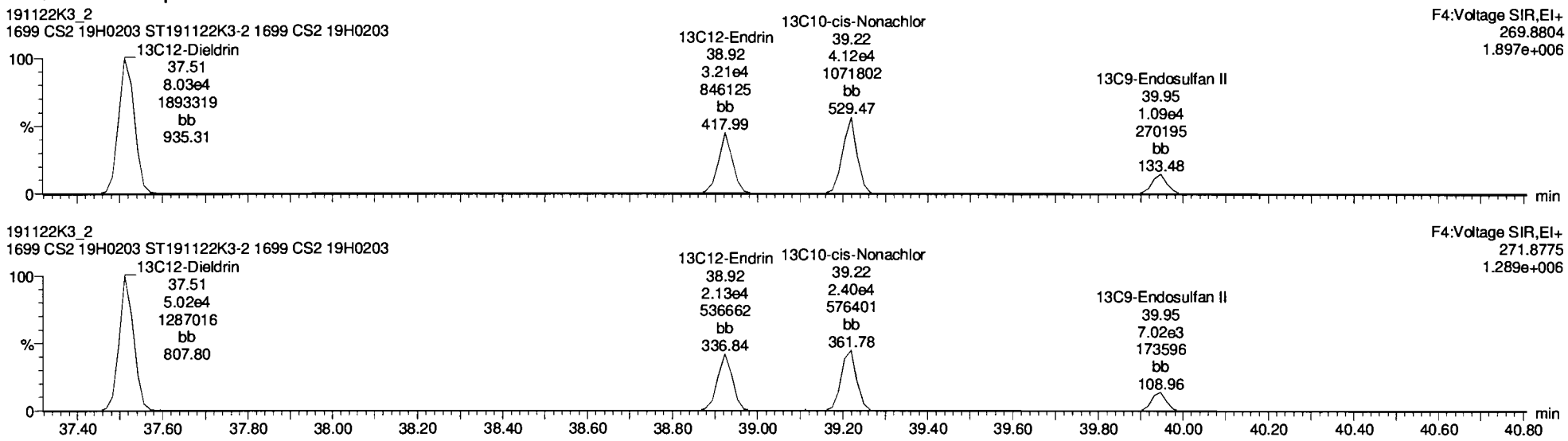
Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Dieldrin-EII



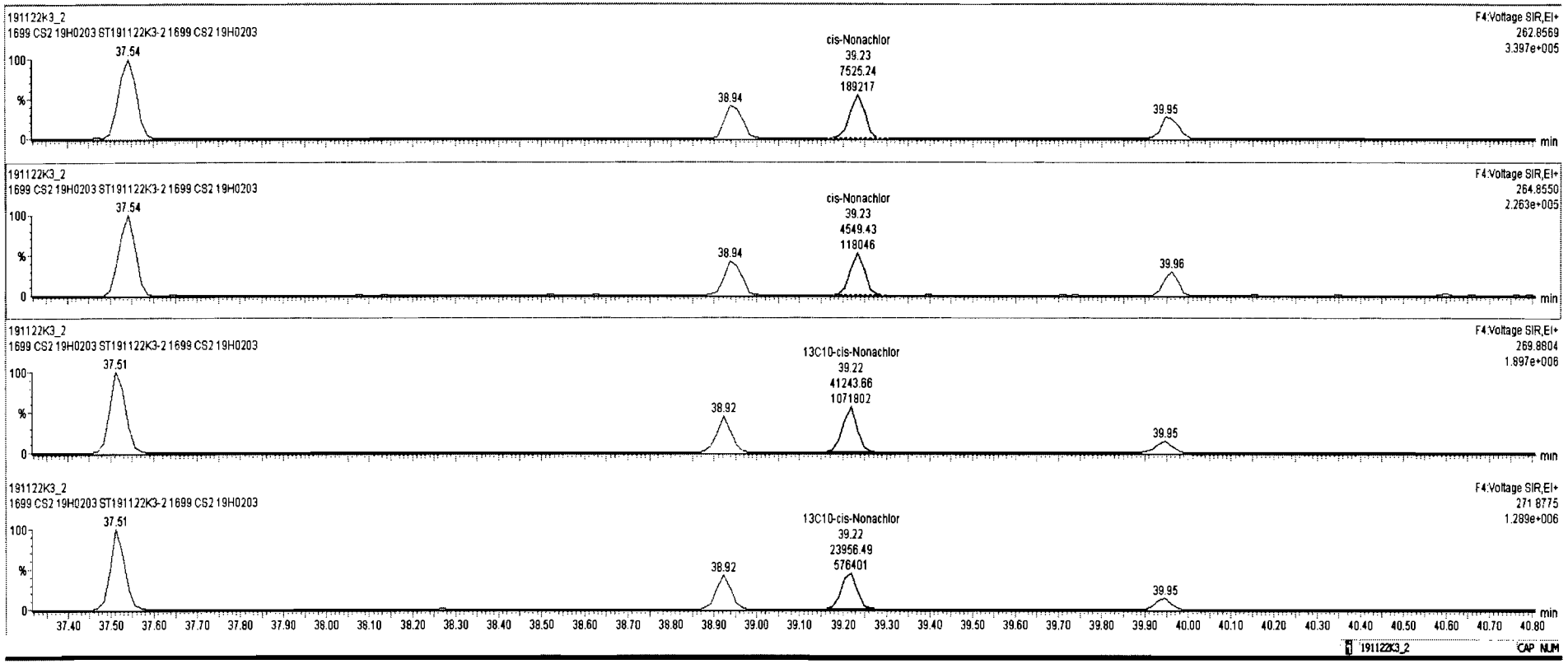
Dieldrin-EII-isotopes



TargetLynx - 191122K3 CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.303	NO	2.3218e5	1.3456e6	10.000	1.0	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.374	NO	1.6789e5	9.3035e5	10.000	3.4	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.610	NO	2.5515e4	1.3047e5	10.000	2.2	10.0	0.957	0.0957
21	21	Endrin	38.94	1.475	NO	1.0695e4	5.3413e4	10.000	7.4	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.854	NO	1.2075e4	6.5200e4	10.000	-3.1	12.2	0.969	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	6.2265e3	1.7924e4	15.000	8.8	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.531	NO	1.7650e5	9.5627e5	10.000	0.8	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.614	NO	1.0451e5	5.6851e5	10.000	-0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.611	NO	1.4956e5	7.3427e5	10.000	1.4	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.458	NO	8.4008e4	4.1469e5	10.000	2.6	9.88	0.967	0.0975
28	28	Endosulfan Sulfate	41.88	1.410	NO	8.6070e3	3.1191e4	15.000	-0.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.54	6.051	NO	1.3092e5	3.8629e6	15.000	-0.6	10.6	1.14	0.120
30	30	Mirex	44.11	1.469	NO	5.4663e4	3.0294e5	10.000	-3.2	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.08	0.649	NO	1.6591e4	5.7292e5	15.000	-1.0	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.667	NO	1.0325e4	3.7719e5	15.000	0.2	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.274	NO	2.9898e6	1.8386e6	500.000	17.7	17.5	0.138	0.0241



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

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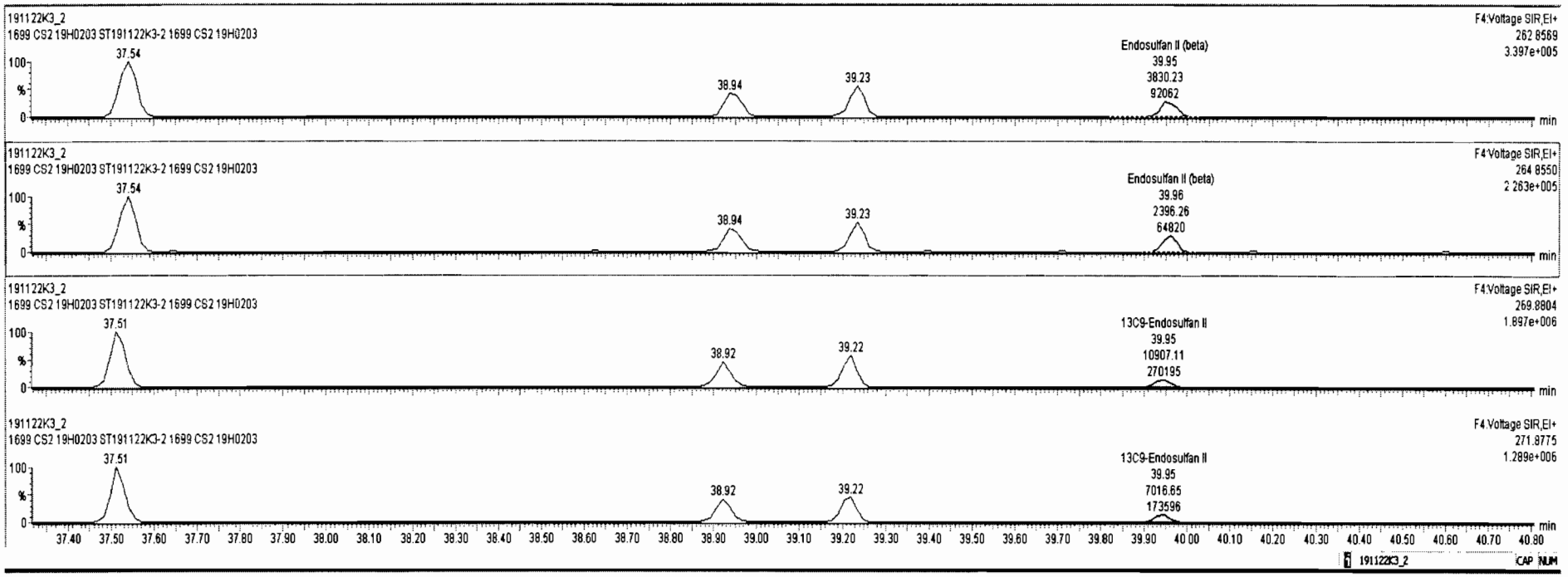
18	18	2,4'-DDE	35.96	1.303	NO	2.3218e5	1.3456e6	10.000	1.0	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.374	NO	1.6789e5	9.3035e5	10.000	3.4	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.610	NO	2.5515e4	1.3047e5	10.000	2.2	10.0	0.957	0.0957
21	21	Endrin	38.94	1.475	NO	1.0695e4	5.3413e4	10.000	7.4	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.654	NO	1.2075e4	6.5200e4	10.000	-3.1	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	6.2288e3	1.7824e4	15.000	8.8	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.631	NO	1.7650e5	9.5627e5	10.000	0.8	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.614	NO	1.0451e5	5.6851e5	10.000	-0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.611	NO	1.4956e5	7.3427e5	10.000	1.4	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.458	NO	8.4008e4	4.1469e5	10.000	2.6	9.88	0.987	0.0975
28	28	Endosulfan Sulfate	41.68	1.410	NO	8.6070e3	3.1191e4	15.000	-0.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.54	6.051	NO	1.3092e5	3.8629e6	15.000	-0.6	10.6	1.14	0.120
30	30	Mirex	44.11	1.469	NO	5.4663e4	3.0294e5	10.000	-3.2	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.08	0.649	NO	1.6591e4	5.7292e5	15.000	-1.0	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.667	NO	1.0325e4	3.7719e5	15.000	0.2	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.274	NO	2.9898e6	1.8386e6	500.000	17.7	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.269	NO	1.2845e6	1.8386e6	50.000	1.1	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.37	0.785	NO	4.5241e5	1.8386e6	50.000	0.1	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.786	NO	3.3795e5	1.8386e6	50.000	-2.9	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.72	0.792	NO	2.5680e5	1.8386e6	50.000	-0.7	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.783	NO	2.9764e5	1.8386e6	50.000	-1.5	4.21	0.164	0.00692
39	39	13C10-Heptachlor	26.83	1.264	NO	1.2924e5	1.8386e6	50.000	-8.7	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.97	1.692	NO	2.1652e5	1.8386e6	50.000	-3.1	3.19	0.122	0.00388



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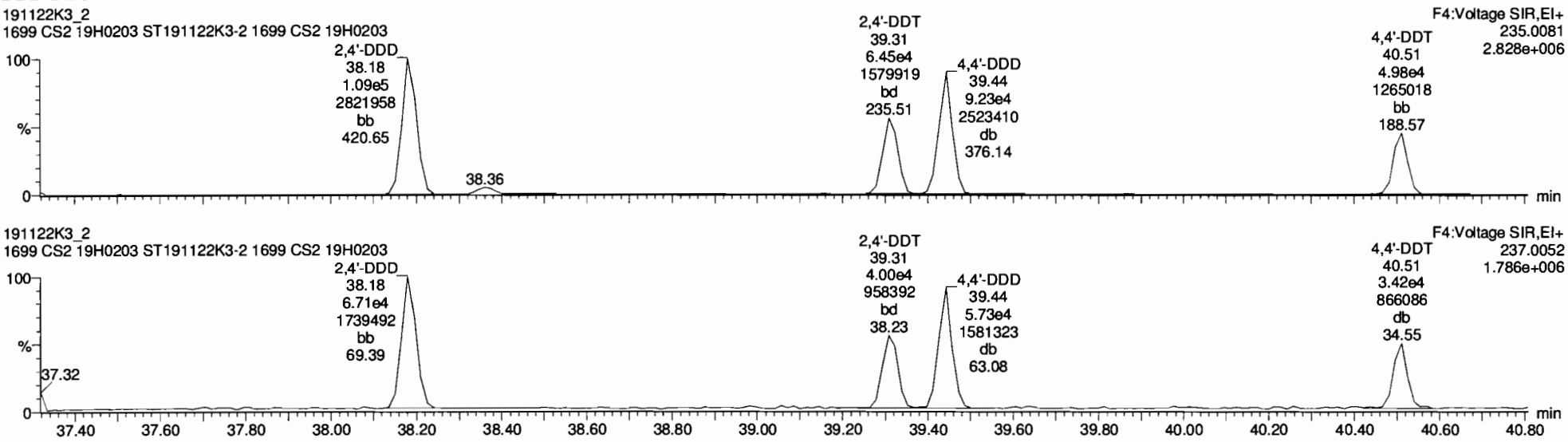
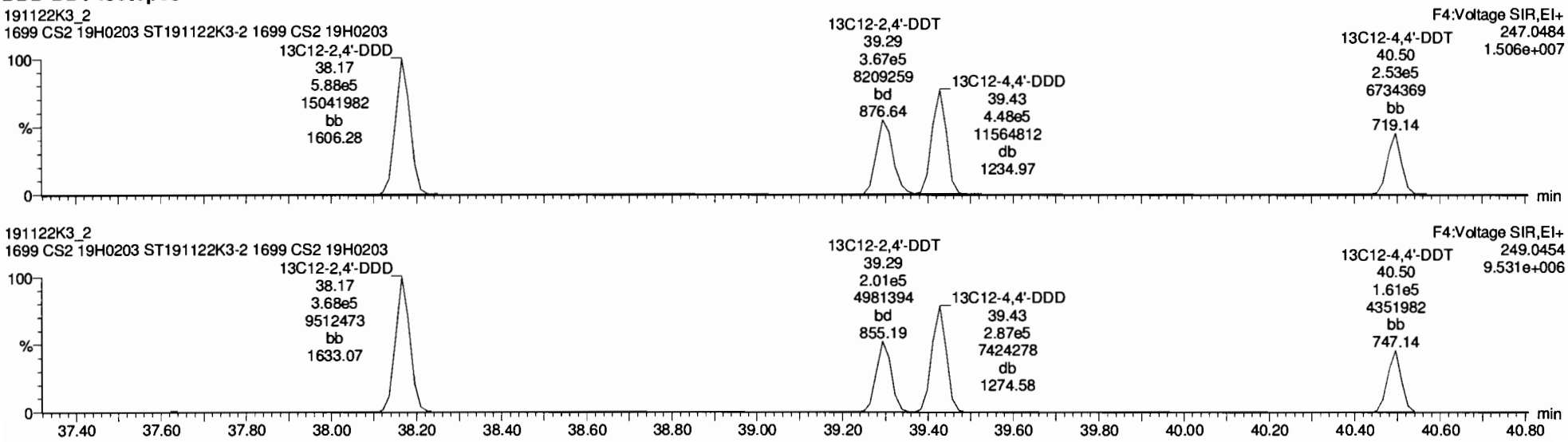
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

DDD-DDT



DDD-DDT-isotopes



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

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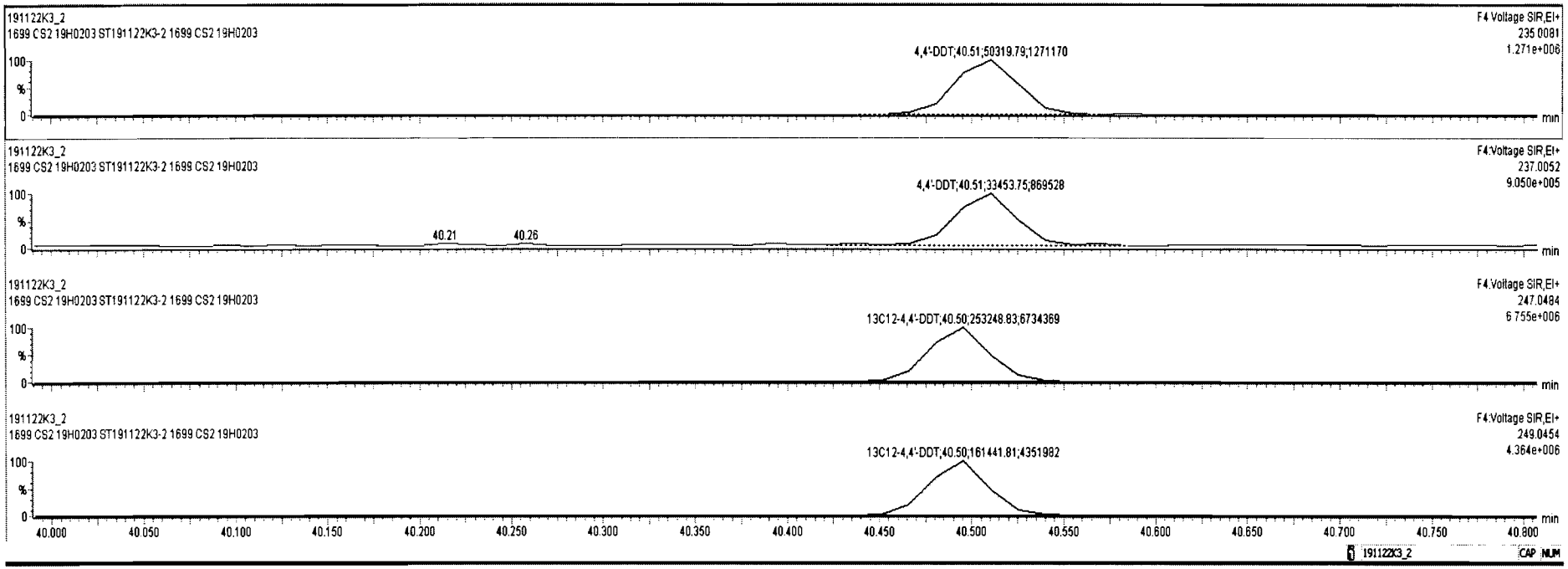
18	18	2,4'-DDE	35.96	1.303	NO	2.3218e5	1.3456e6	10.000	1.0	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.374	NO	1.6789e5	9.3035e5	10.000	3.4	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.610	NO	2.5515e4	1.3047e5	10.000	2.2	10.0	0.957	0.0957
21	21	Endrin	38.94	1.475	NO	1.0695e4	5.3413e4	10.000	7.4	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.654	NO	1.2075e4	6.5200e4	10.000	-3.1	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	6.2265e3	1.7924e4	15.000	8.8	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.631	NO	1.7650e5	9.5627e5	10.000	0.8	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.614	NO	1.0451e5	5.6851e5	10.000	-0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.611	NO	1.4956e5	7.3427e5	10.000	1.4	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	6.3774e4	4.1469e5	10.000	2.4	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.410	NO	8.5070e3	3.1191e4	15.000	-0.8	14.2	0.927	0.131
29	29	4,4'-Methoxychlor	43.54	6.051	NO	1.3092e5	3.8629e6	15.000	-0.6	10.6	1.14	0.120
30	30	Mirex	44.11	1.469	NO	5.4663e4	3.0294e5	10.000	-3.2	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.08	0.649	NO	1.6591e4	5.7292e5	15.000	-1.0	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.667	NO	1.0325e4	3.7719e5	15.000	0.2	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.274	NO	2.9898e6	1.8386e6	500.000	17.7	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.269	NO	1.2845e6	1.8386e6	50.000	1.1	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.37	0.785	NO	4.5241e5	1.8386e6	50.000	0.1	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.786	NO	3.3795e5	1.8386e6	50.000	-2.9	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.72	0.792	NO	2.5680e5	1.8386e6	50.000	-0.7	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.783	NO	2.9764e5	1.8386e6	50.000	-1.5	4.21	0.164	0.00692
39	39	13C10-Heptachlor	28.83	1.264	NO	1.2924e5	1.8386e6	50.000	-8.7	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.97	1.692	NO	2.1652e5	1.8386e6	50.000	-3.1	3.19	0.122	0.00388



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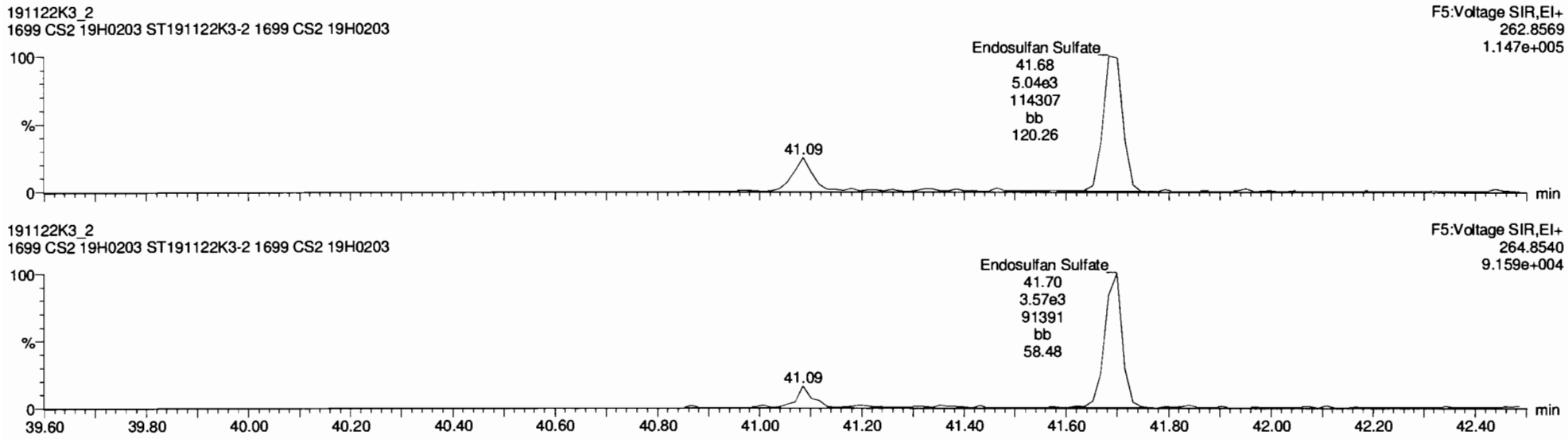
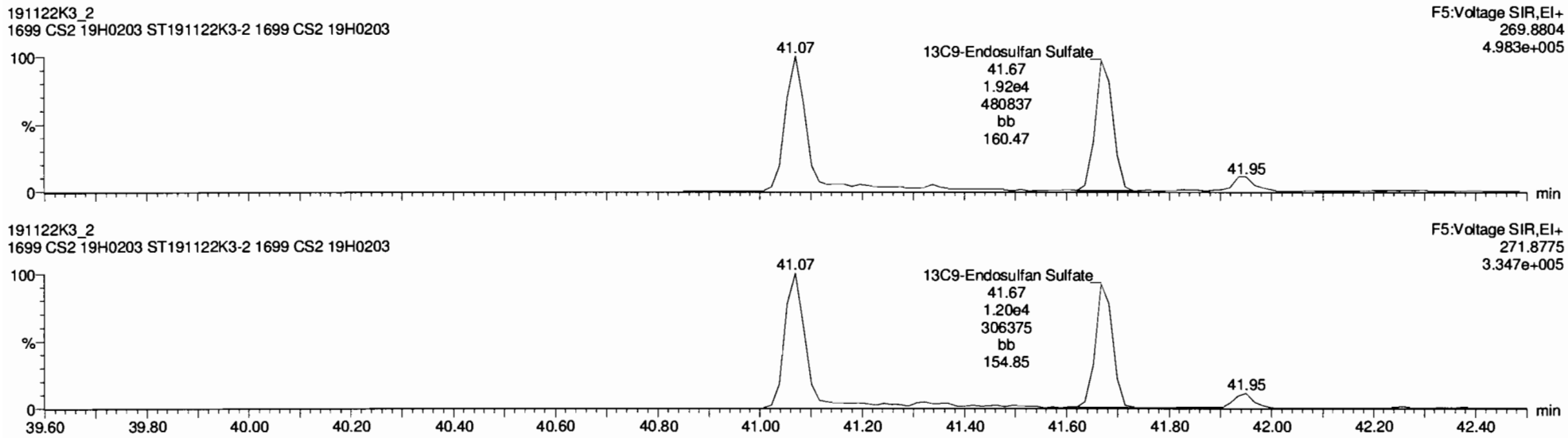
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Endosulfan Sulfate



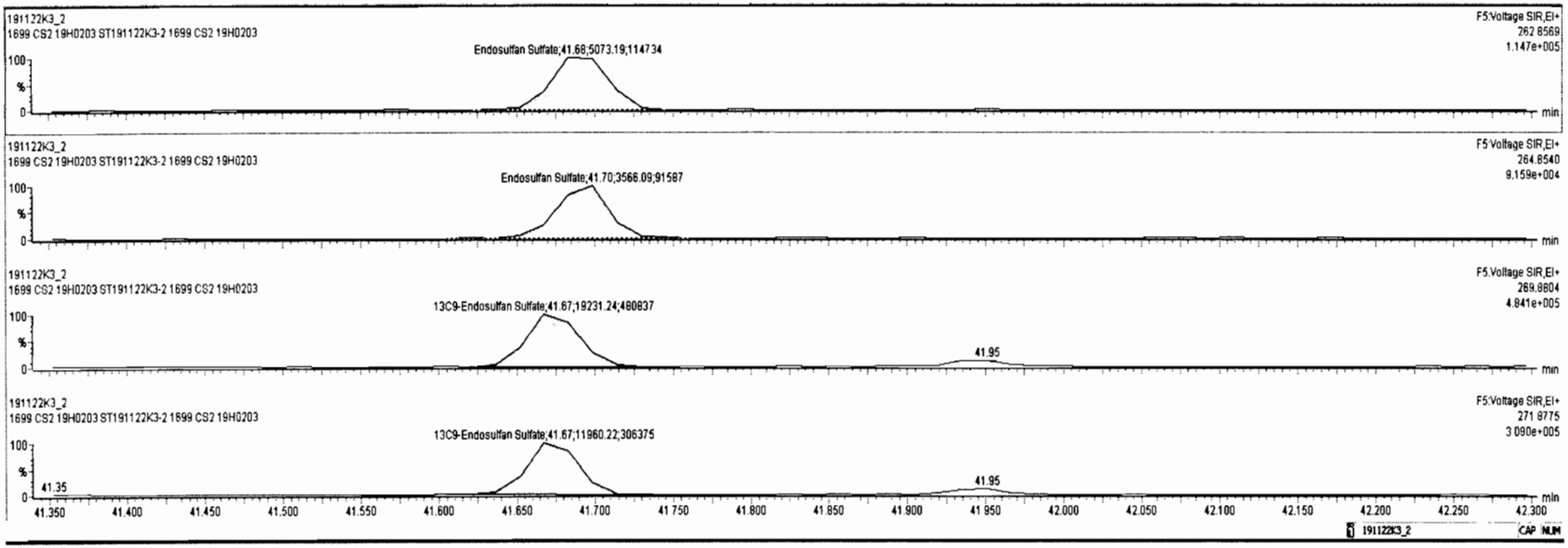
13C9-Endosulfan Sulfate



TargetLynx - 191127K3 CRV.qld * [Chromatogram]

File Edit View Display Processing Window Help

	7...	Name	RT	RA	y/n	Area	IS Area	Std. Conc.	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.303	NO	2.3218e5	1.3456e6	10.000	1.0	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.374	NO	1.6789e5	9.3035e5	10.000	3.4	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.610	NO	2.5515e4	1.3047e5	10.000	2.2	10.0	0.957	0.0957
21	21	Endrin	38.94	1.475	NO	1.0695e4	5.3413e4	10.000	7.4	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.654	NO	1.2075e4	6.5200e4	10.000	-3.1	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	6.2265e3	1.7924e4	15.000	8.8	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.631	NO	1.7650e5	9.5627e5	10.000	0.8	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.614	NO	1.0451e5	5.6851e5	10.000	-0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.611	NO	1.4956e5	7.3427e5	10.000	1.4	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	8.3774e4	4.1469e5	10.000	2.4	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.423	NO	8.6383e3	3.1191e4	15.000	-0.5	14.2	0.926	0.131
29	29	4,4'-Methoxychlor	43.54	6.051	NO	1.3092e5	3.8629e6	15.000	-0.6	10.6	1.14	0.120
30	30	Mirex	44.11	1.469	NO	5.4663e4	3.0294e5	10.000	-3.2	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.08	0.649	NO	1.6591e4	5.7292e5	15.000	-1.0	9.50	0.975	0.0926
32	32	Endrin Ketone	44.25	0.667	NO	1.0325e4	3.7719e5	15.000	0.2	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.274	NO	2.9898e6	1.8386e6	500.000	17.7	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.269	NO	1.2845e6	1.8386e6	50.000	1.1	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.37	0.785	NO	4.5241e5	1.8386e6	50.000	0.1	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.786	NO	3.3795e5	1.8386e6	50.000	-2.9	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	26.72	0.792	NO	2.5680e5	1.8386e6	50.000	-0.7	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.783	NO	2.9764e5	1.8386e6	50.000	-1.5	4.21	0.164	0.00692
39	39	13C10-Heptachlor	28.83	1.284	NO	1.2924e5	1.8386e6	50.000	-8.7	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.97	1.692	NO	2.1652e5	1.8386e6	50.000	-3.1	3.19	0.122	0.00388

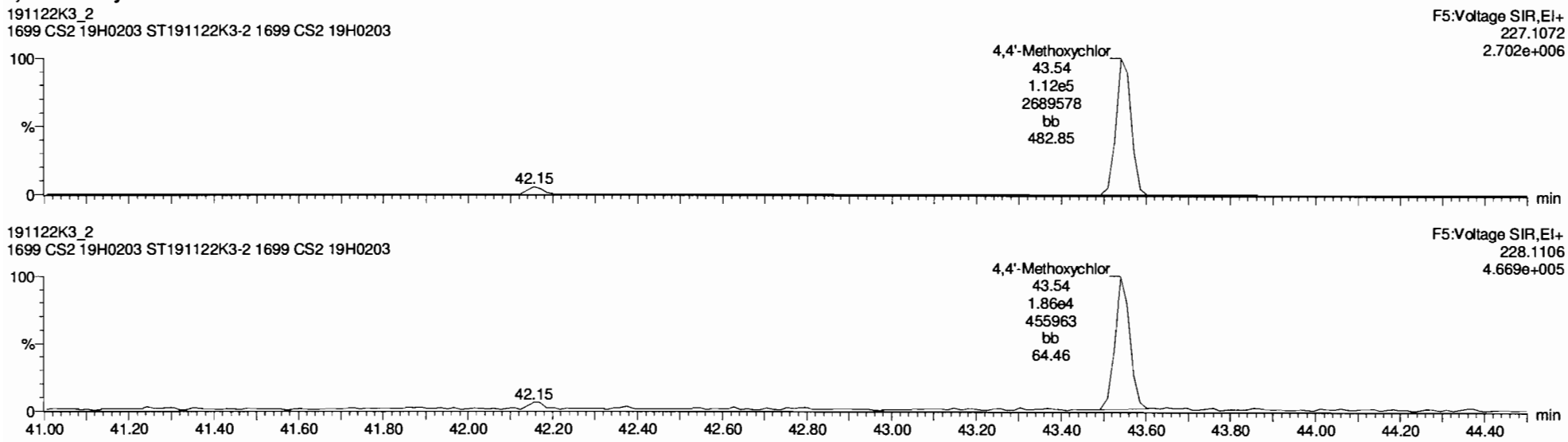


Dataset: Untitled

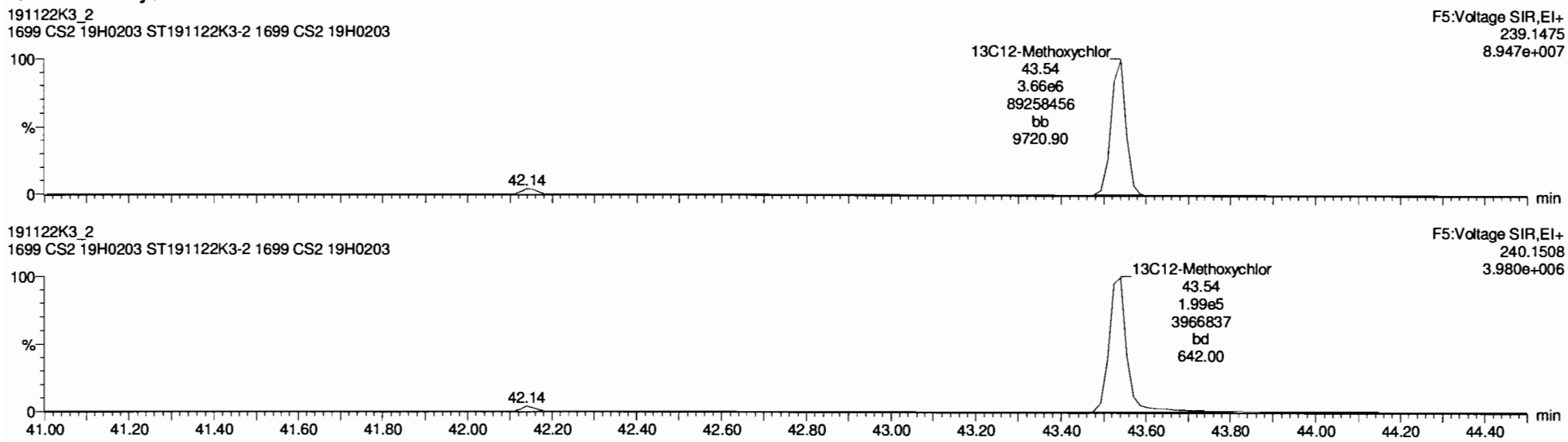
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

4,4'-Methoxychlor



13C12-Methoxychlor

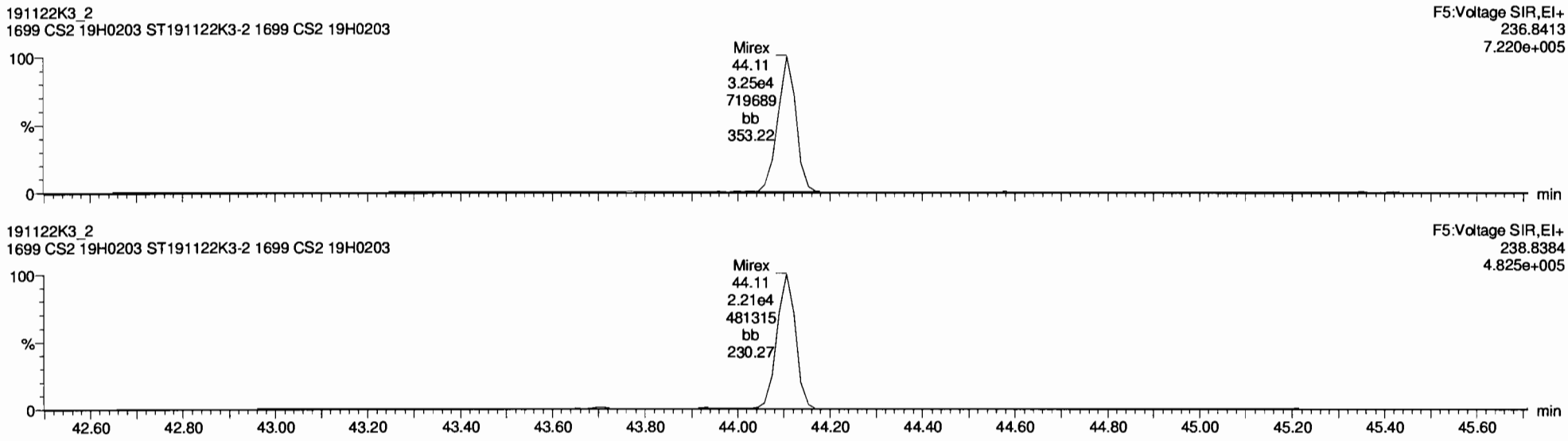


Dataset: Untitled

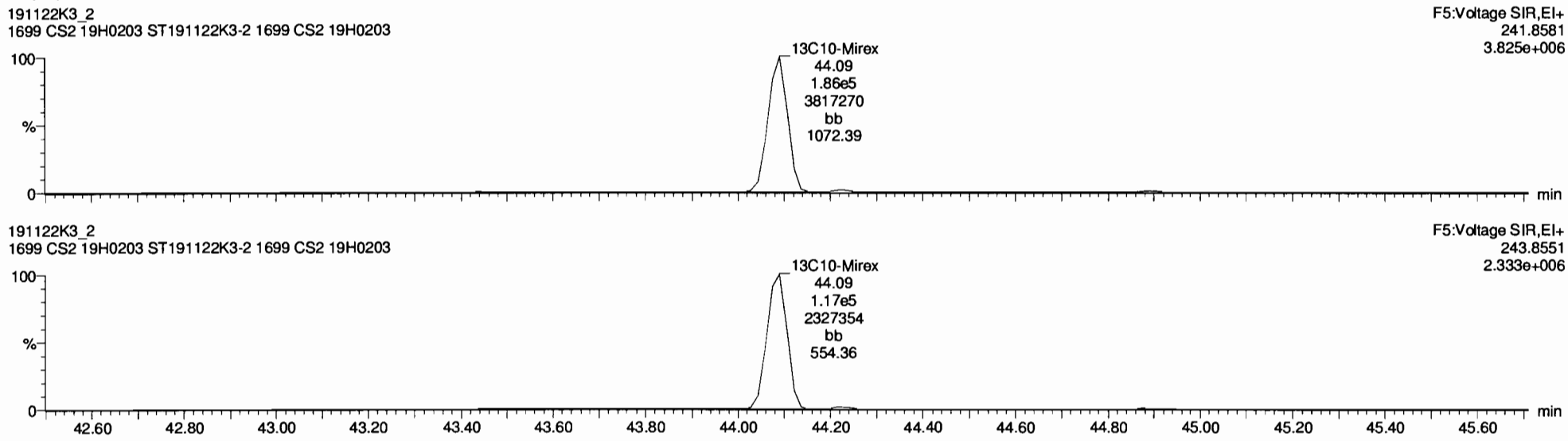
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

Mirex



13C10-Mirex



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

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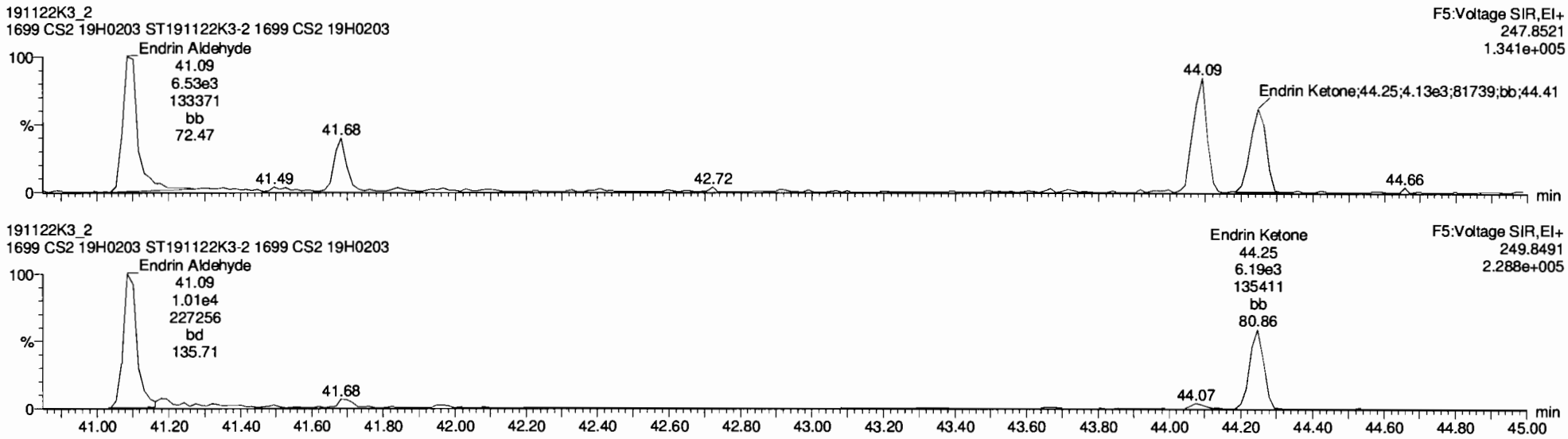
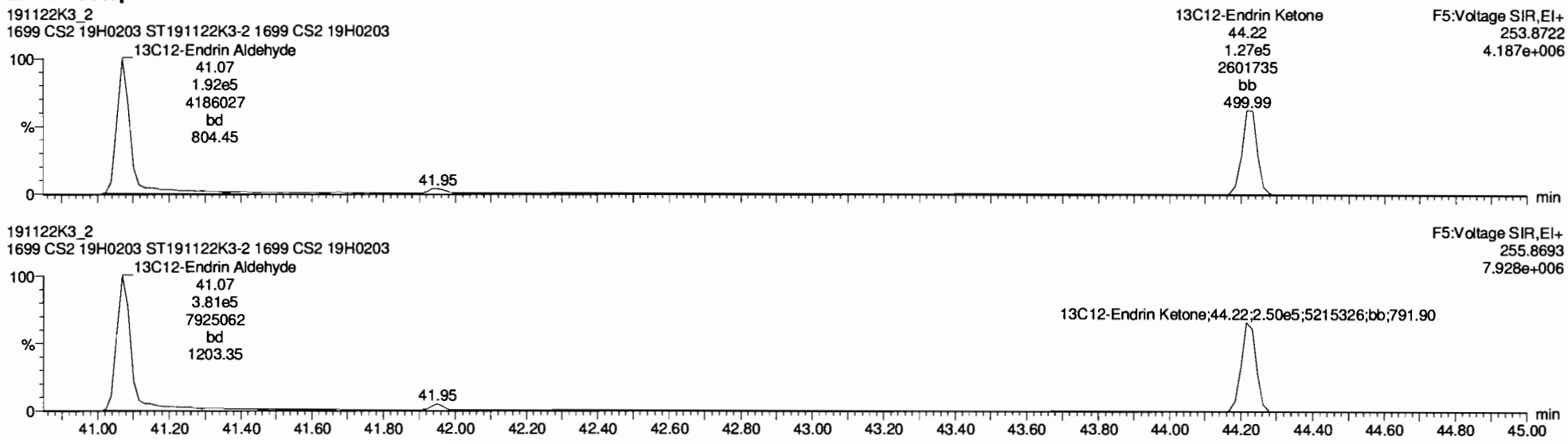
EA-EK



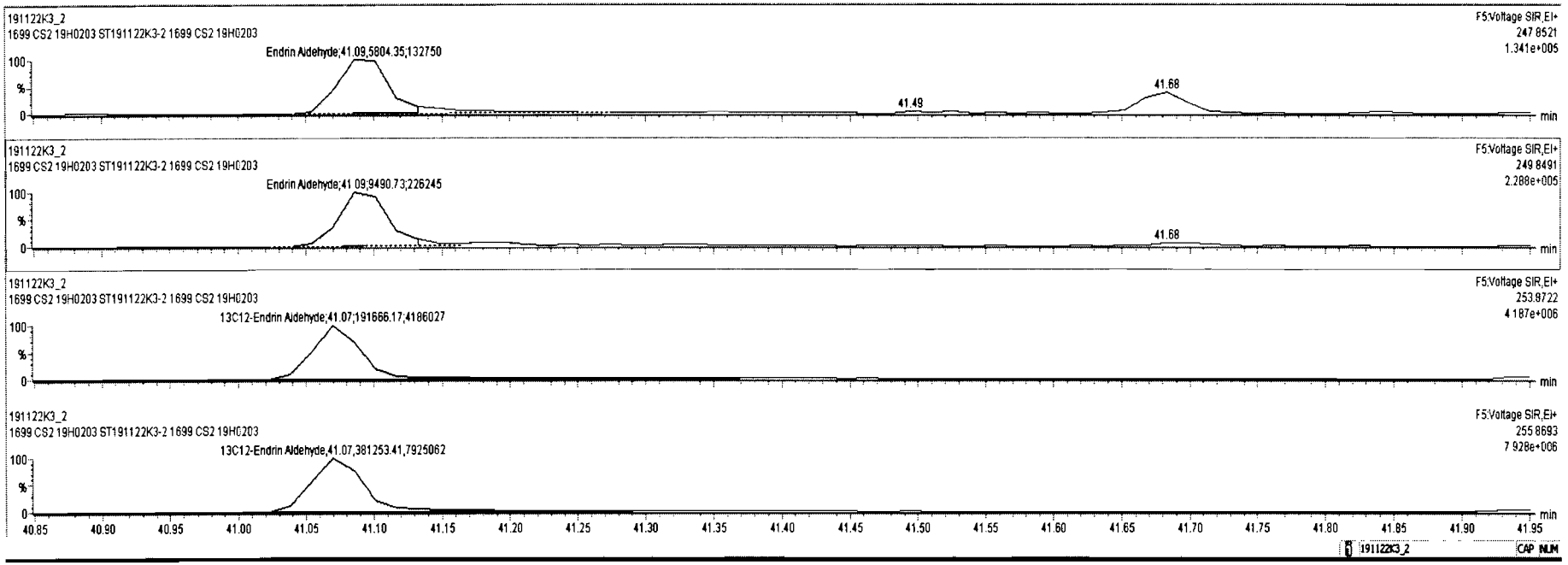
EA-EK-isotopes



TargetLynx 191122K3 CRV.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
18	18	2,4'-DDE	35.96	1.303	NO	2.3218e5	1.3456e6	10.000	1.0	10.0	0.854	0.0855
19	19	4,4'-DDE	37.04	1.374	NO	1.6789e5	9.3035e5	10.000	3.4	10.3	0.873	0.0898
20	20	Dieldrin	37.54	1.610	NO	2.5515e4	1.3047e5	10.000	2.2	10.0	0.957	0.0957
21	21	Endrin	38.94	1.475	NO	1.0695e4	5.3413e4	10.000	7.4	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.23	1.654	NO	1.2075e4	6.5200e4	10.000	-3.1	12.2	0.956	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	6.2265e3	1.7924e4	15.000	8.8	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.631	NO	1.7650e5	9.5627e5	10.000	0.8	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.614	NO	1.0451e5	5.6851e5	10.000	-0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.611	NO	1.4956e5	7.3427e5	10.000	1.4	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.504	NO	8.3774e4	4.1469e5	10.000	2.4	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.423	NO	8.6393e3	3.1191e4	15.000	-0.5	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	6.051	NO	1.3092e5	3.8629e6	15.000	-0.6	10.6	1.14	0.120
30	30	Mirex	44.11	1.469	NO	5.4683e4	3.0294e5	10.000	-3.2	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.09	0.812	NO	1.5286e4	5.7282e5	15.000	-7.5	10.3	0.982	0.0990
32	32	Endrin Ketone	44.25	0.667	NO	1.0325e4	3.7719e5	15.000	0.2	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.274	NO	2.9896e6	1.8386e6	500.000	17.7	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.269	NO	1.2845e6	1.8386e6	50.000	1.1	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.37	0.785	NO	4.5241e5	1.8386e6	50.000	0.1	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.786	NO	3.3795e5	1.8386e6	50.000	-2.9	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.72	0.792	NO	2.5680e5	1.8386e6	50.000	-0.7	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.783	NO	2.9764e5	1.8386e6	50.000	-1.5	4.21	0.164	0.00692
39	39	13C10-Heptachlor	28.83	1.284	NO	1.2924e5	1.8386e6	50.000	-8.7	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.97	1.692	NO	2.1652e5	1.8386e6	50.000	-3.1	3.19	0.122	0.00388



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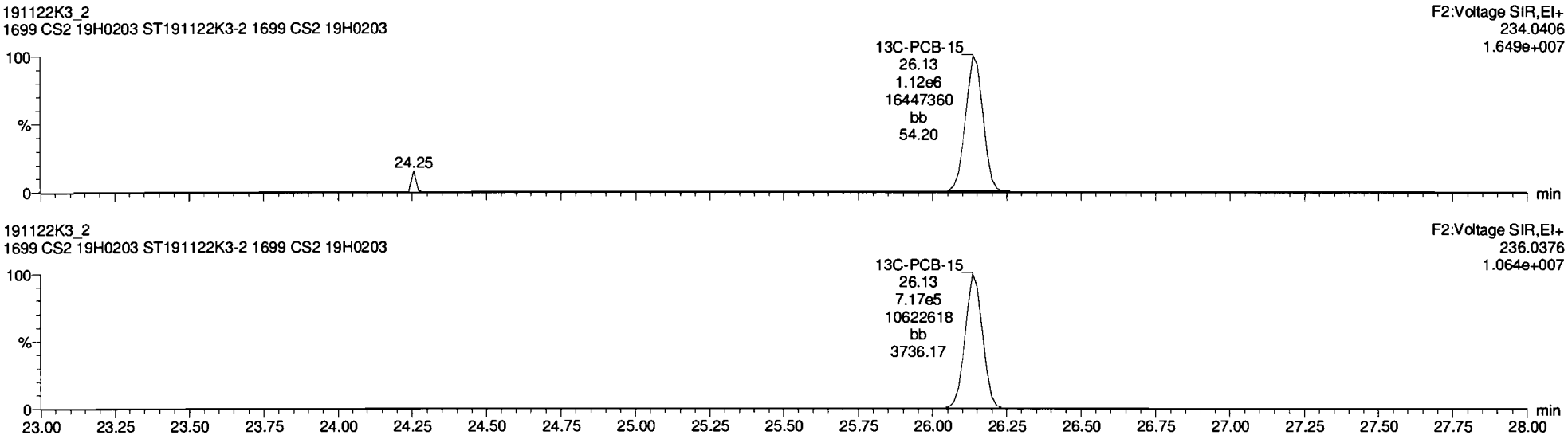
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_2, Date: 22-Nov-2019, Time: 16:51:16, ID: ST191122K3-2 1699 CS2 19H0203, Description: 1699 CS2 19H0203

13C-PCB-15



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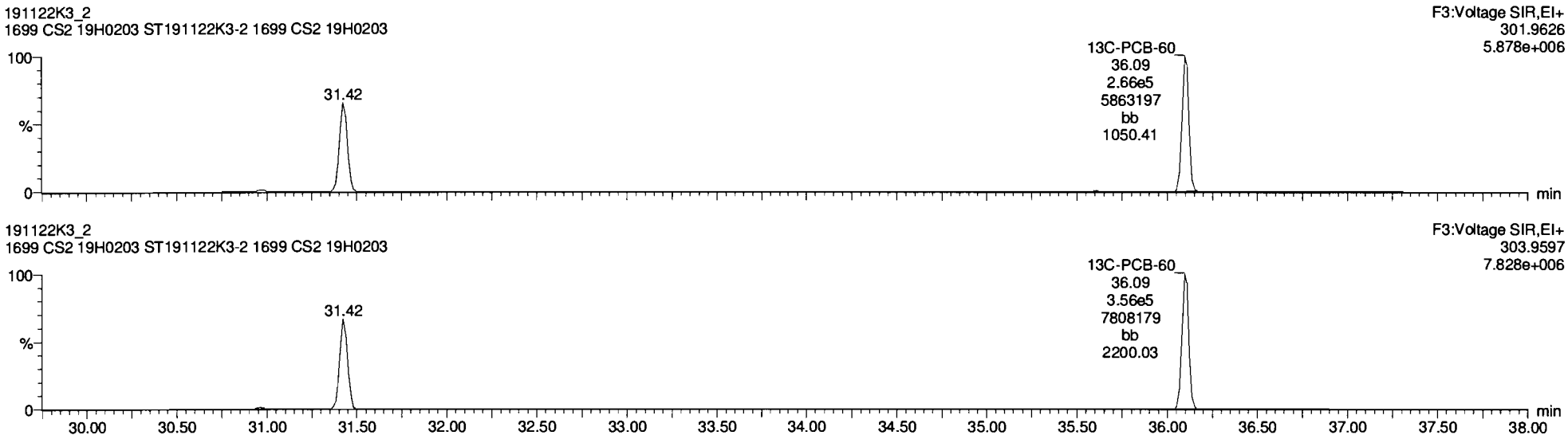

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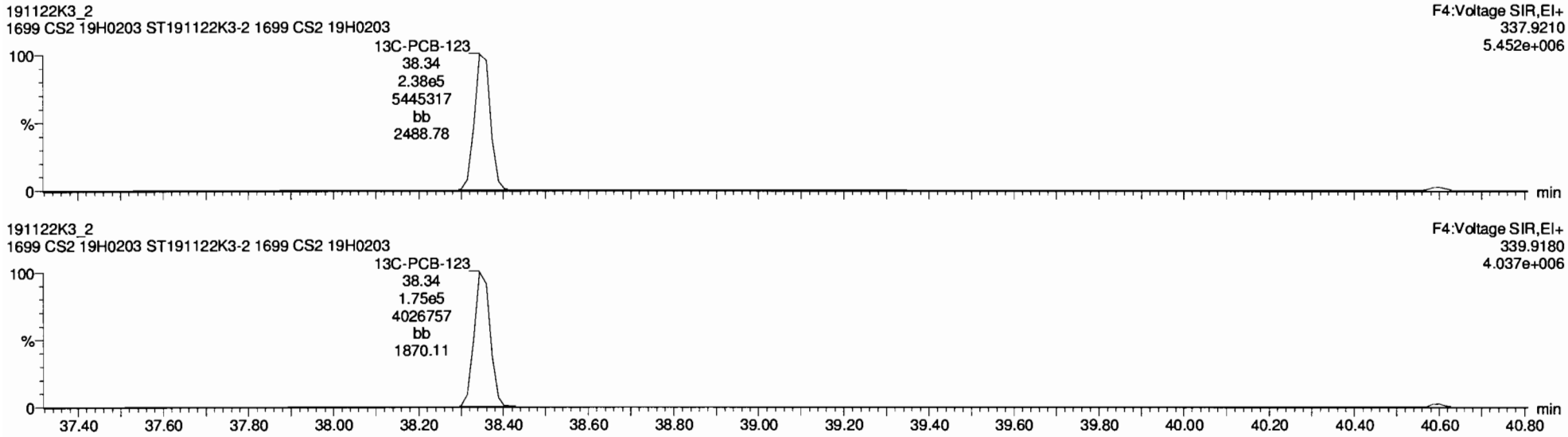
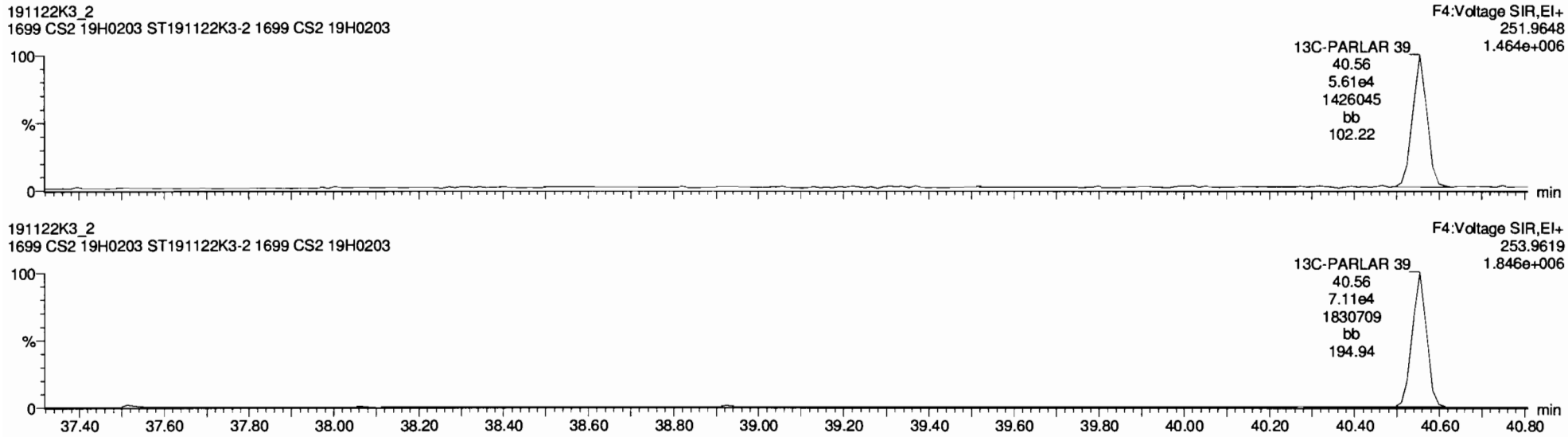
13C-PCB-123



13C-PARLAR 39



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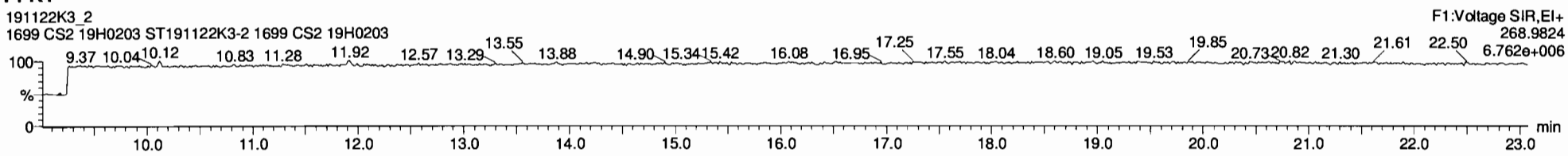
PFK1



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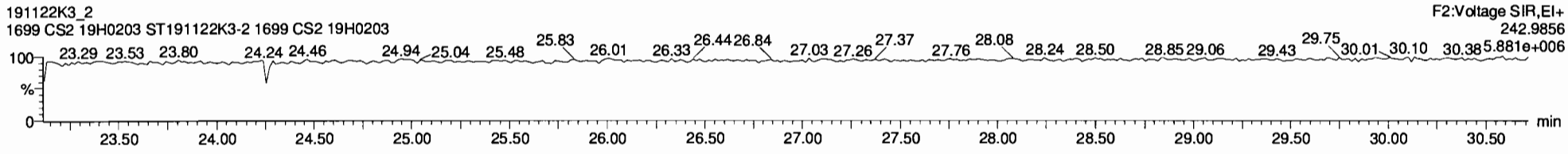

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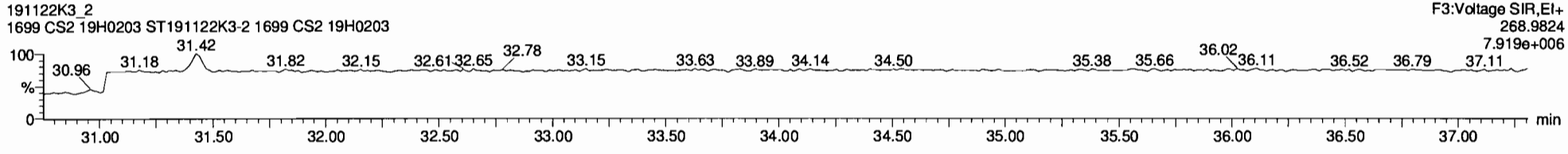

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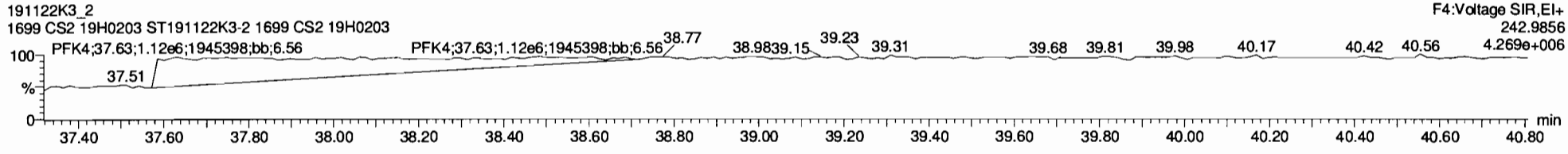

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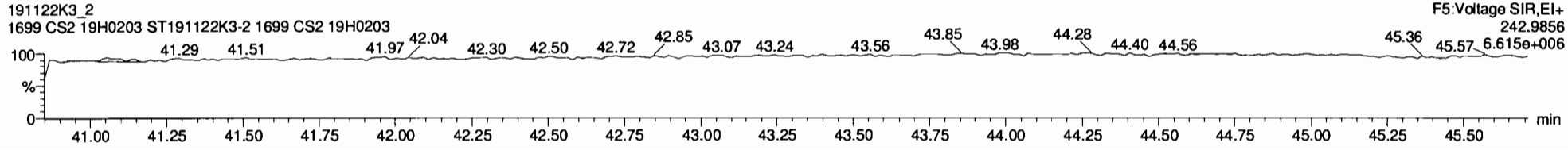

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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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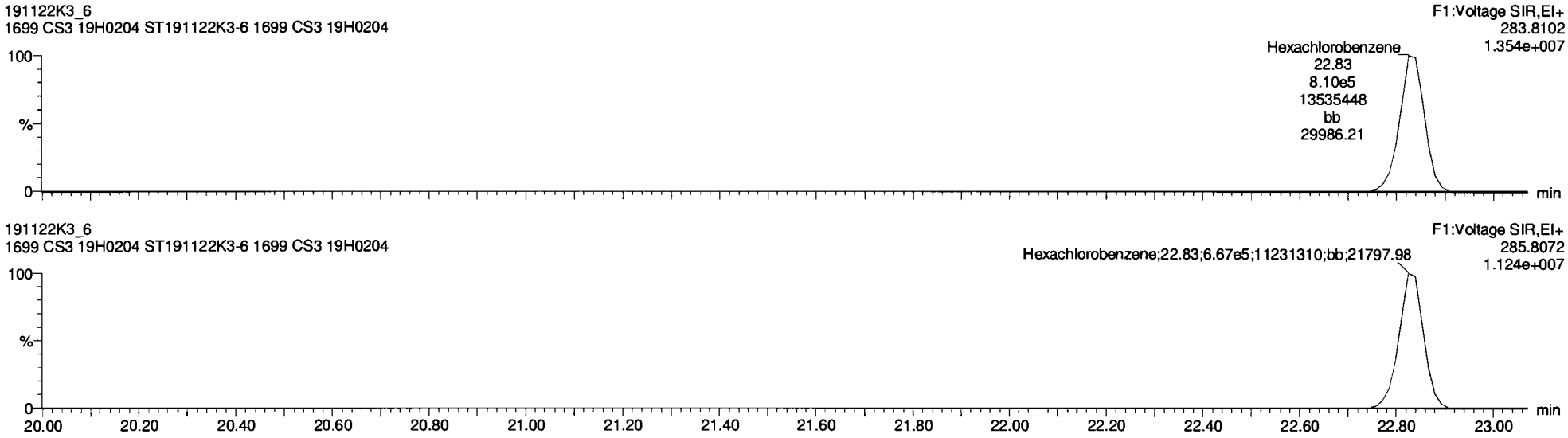
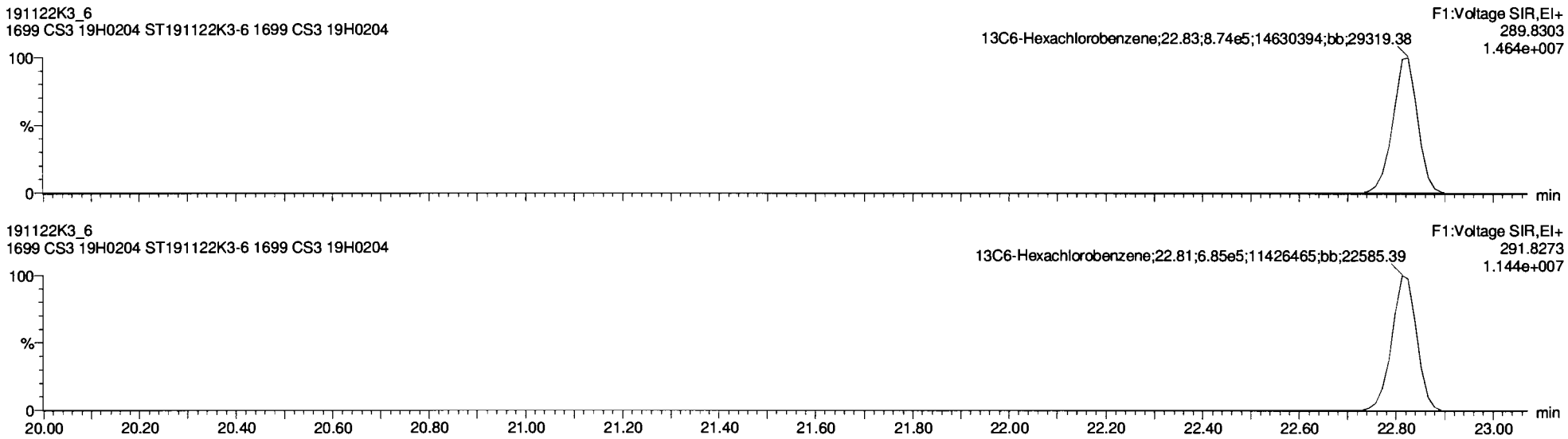
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

Hexachlorobenzene



13C6-Hexachlorobenzene



Vista Analytical Laboratory

Dataset: Untitled

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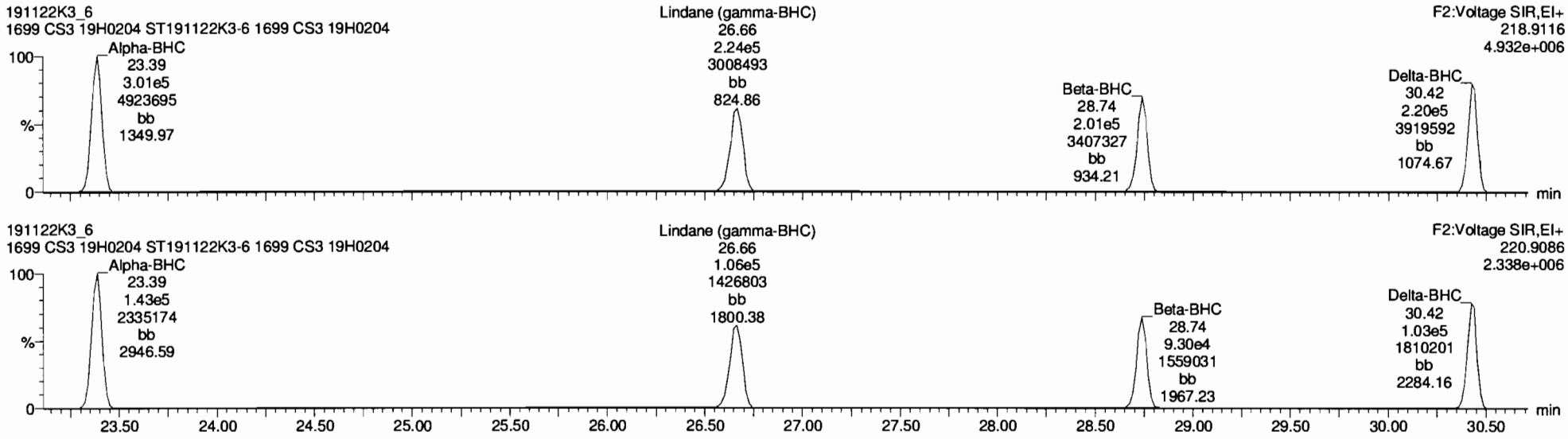
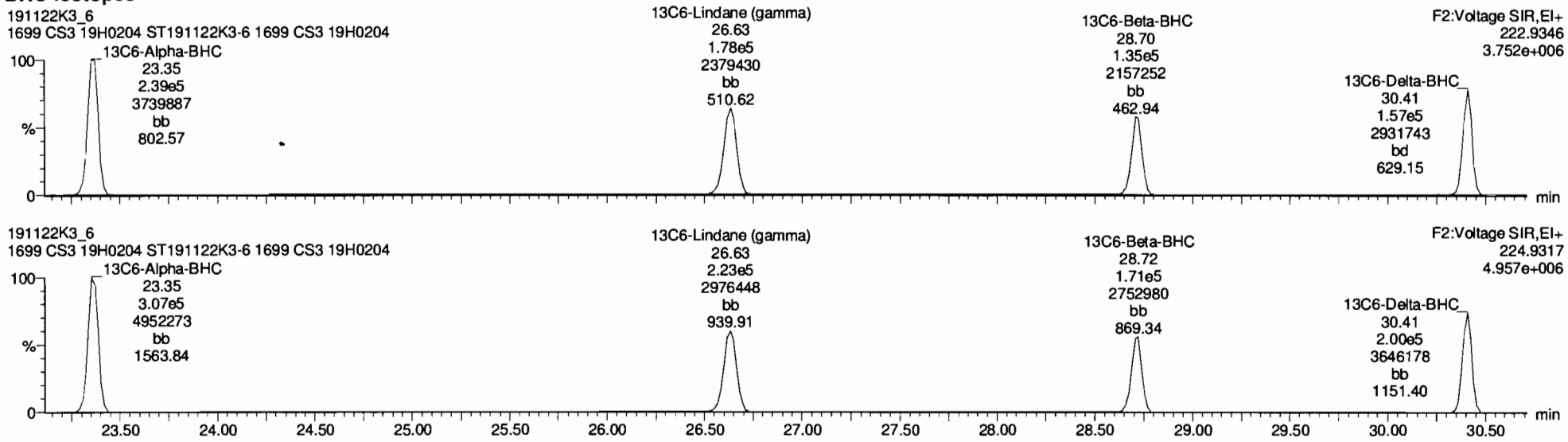
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

BHC Totals



BHC-isotopes



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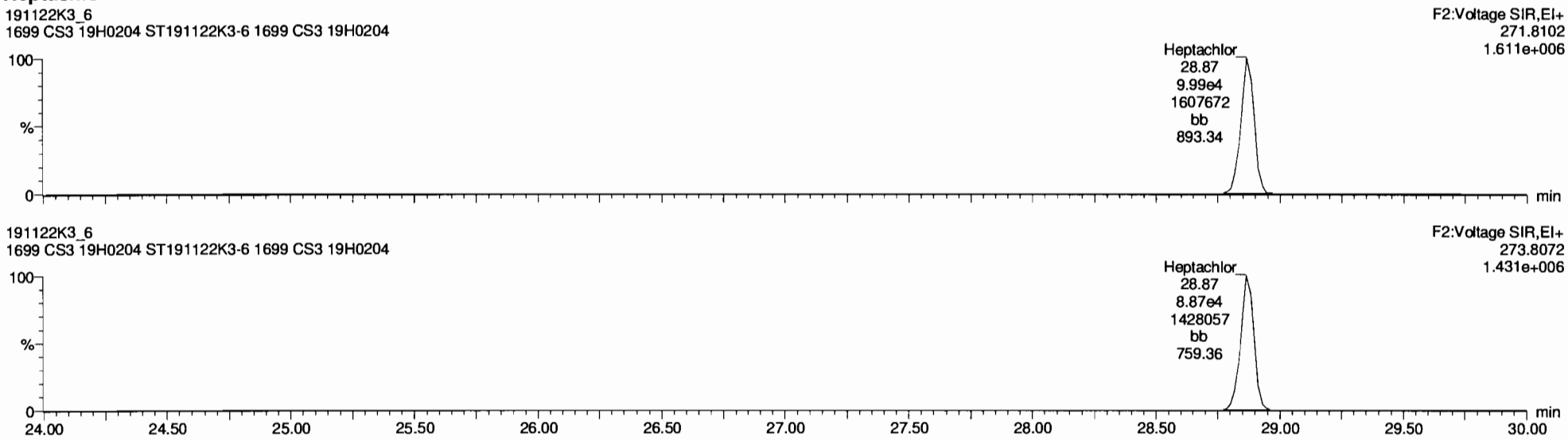
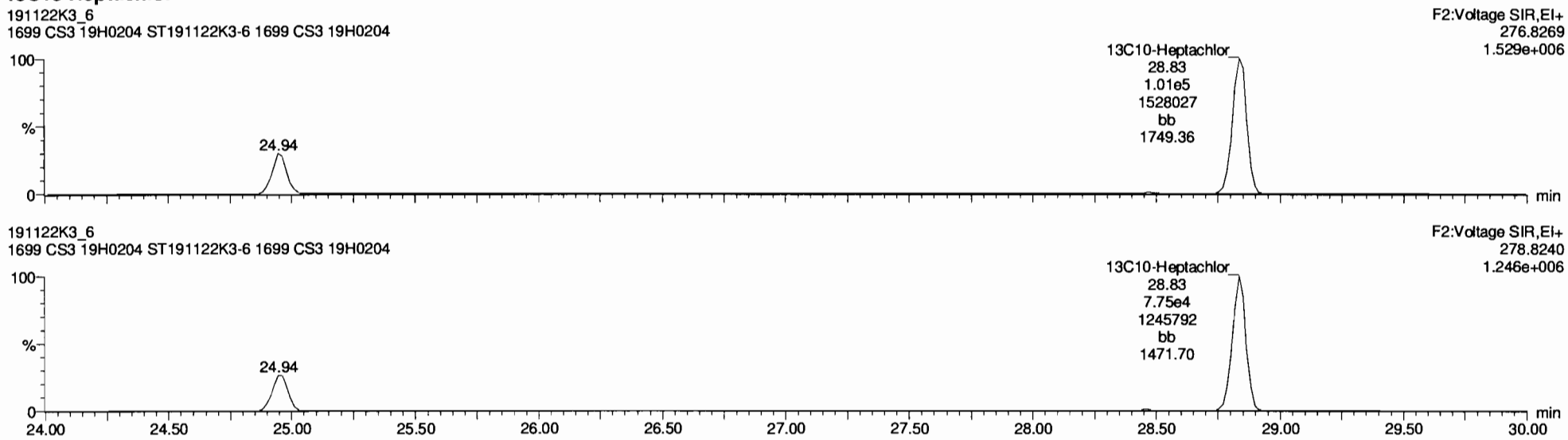
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

Heptachlor



13C10-Heptachlor



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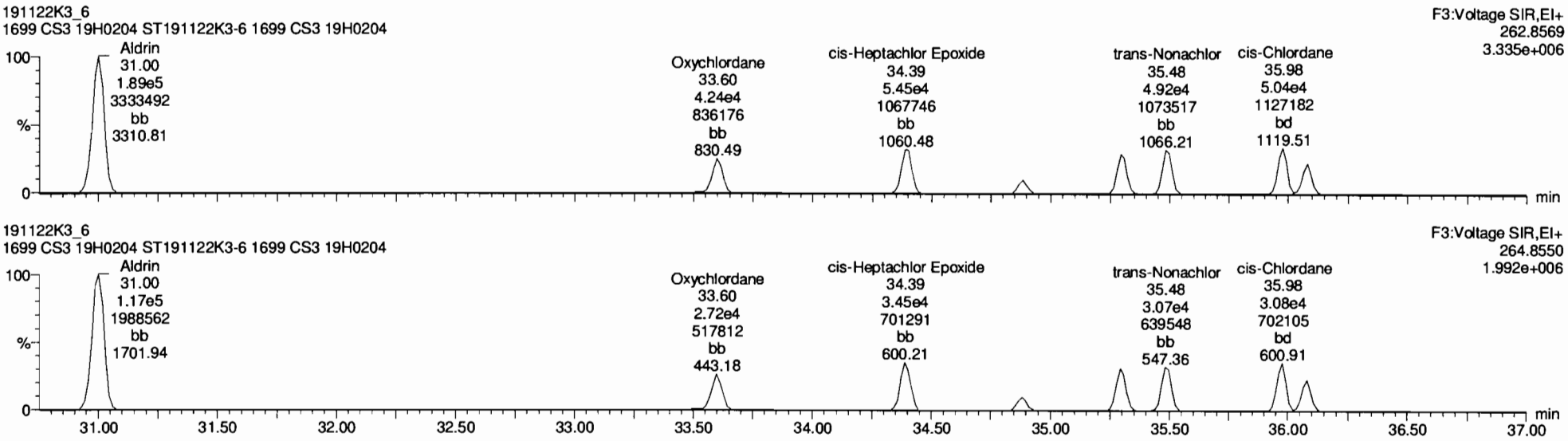
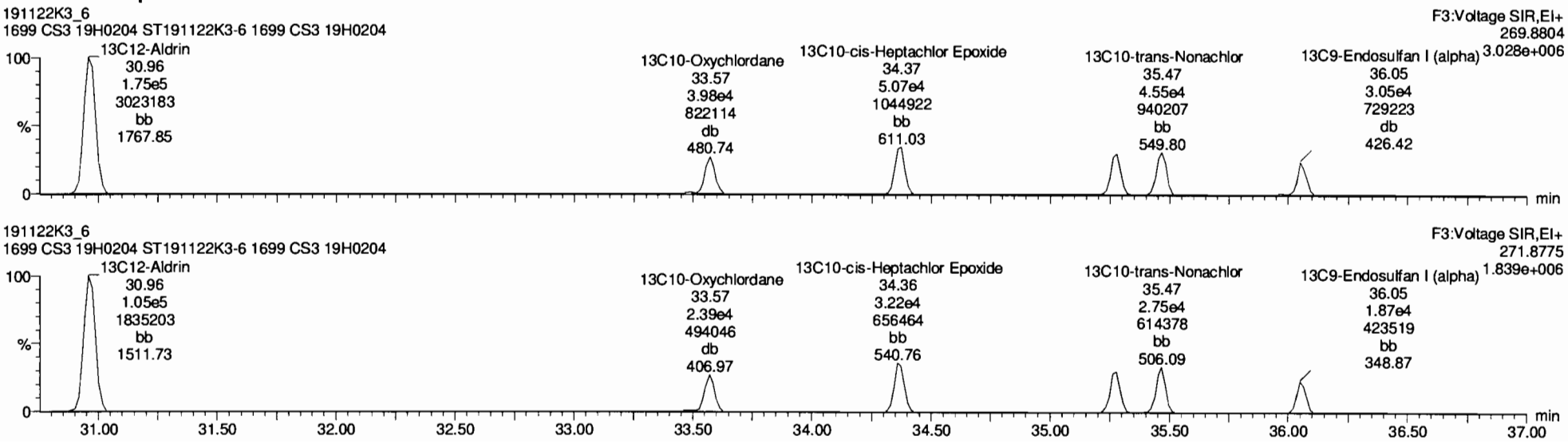
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

Aldrin-EI



Aldrin-EI-isotopes



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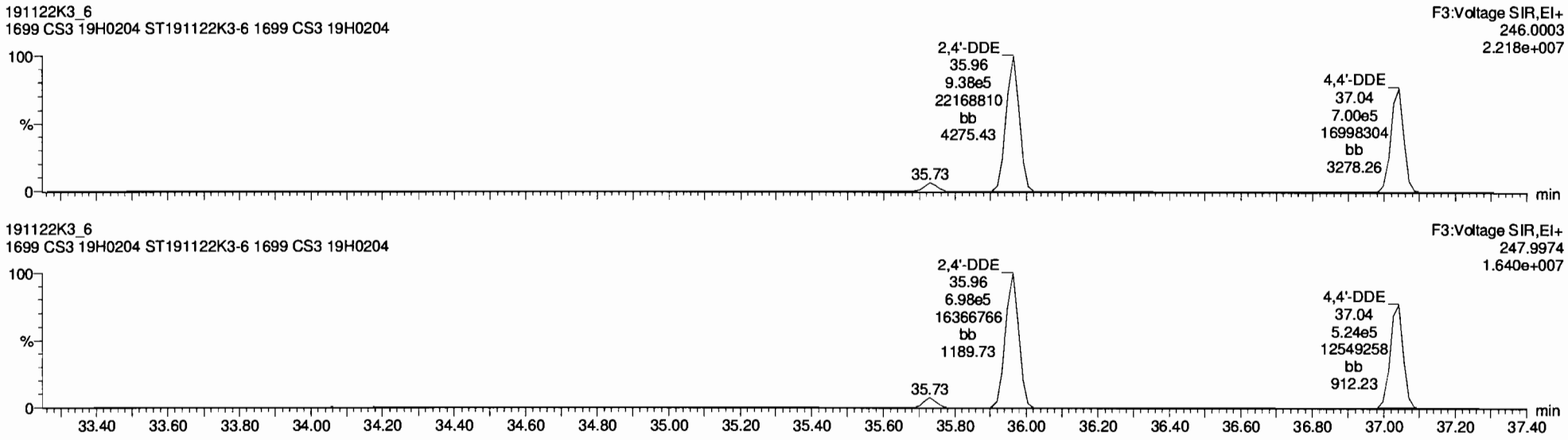
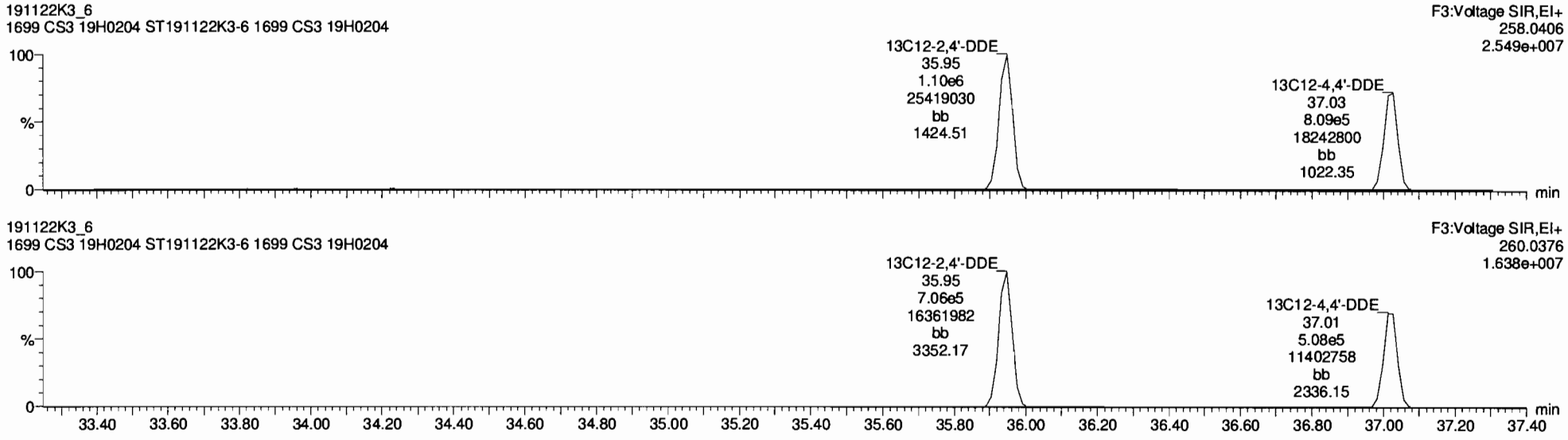
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

DDMU-DDE



DDE-isotopes



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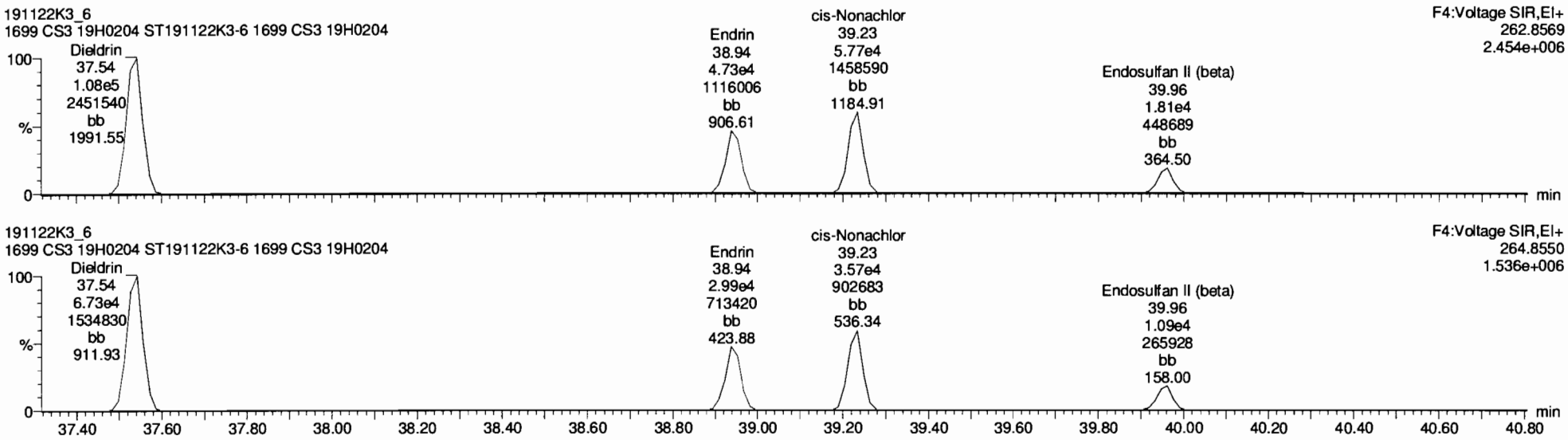
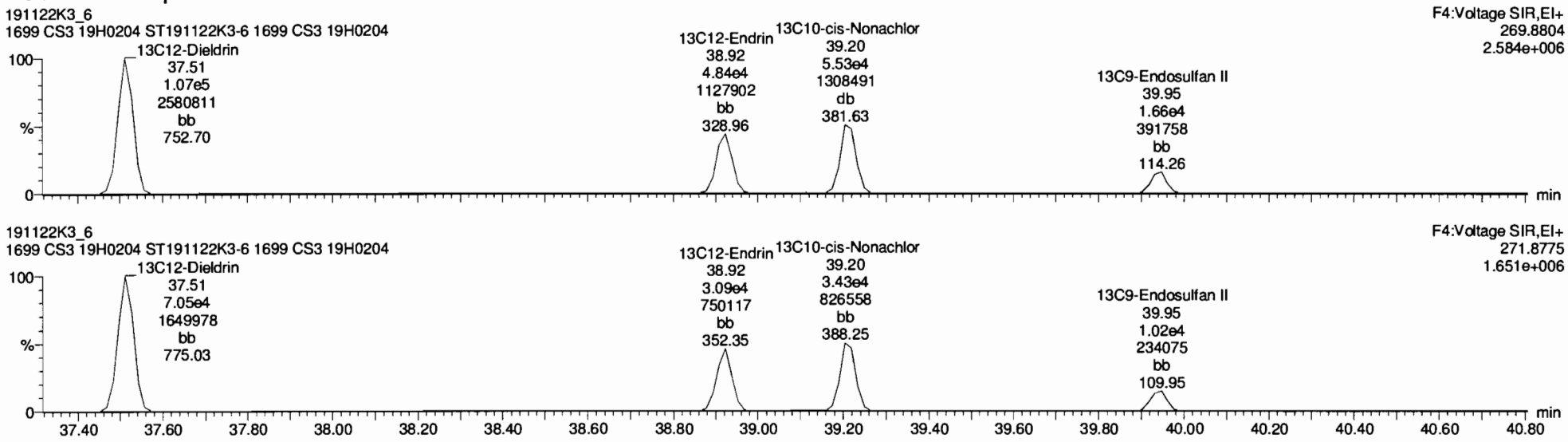
Dieldrin-EII



Dieldrin-EII-isotopes



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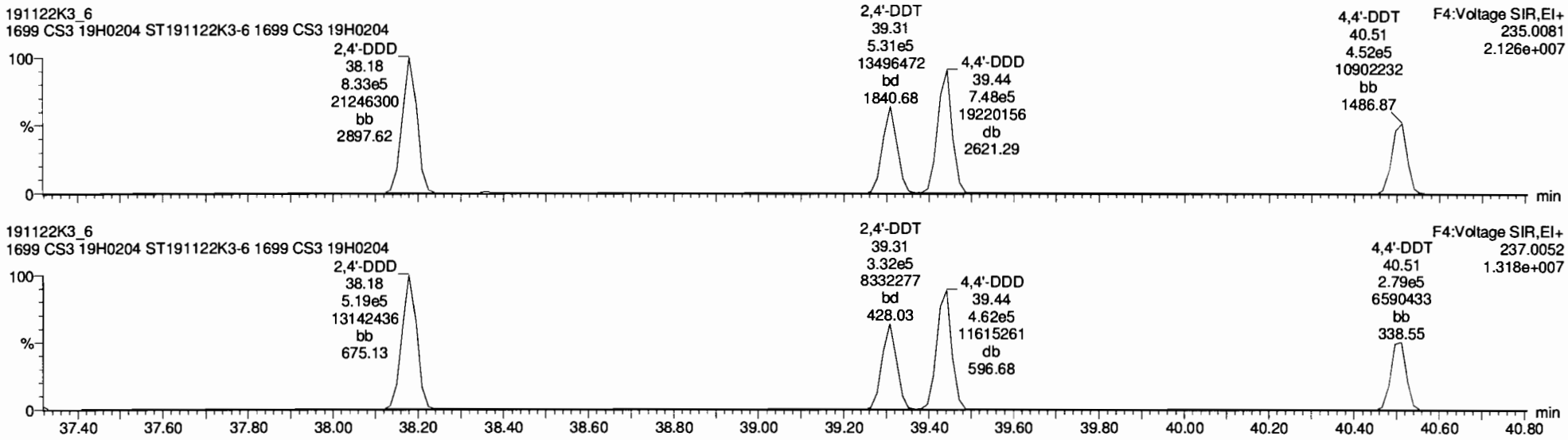
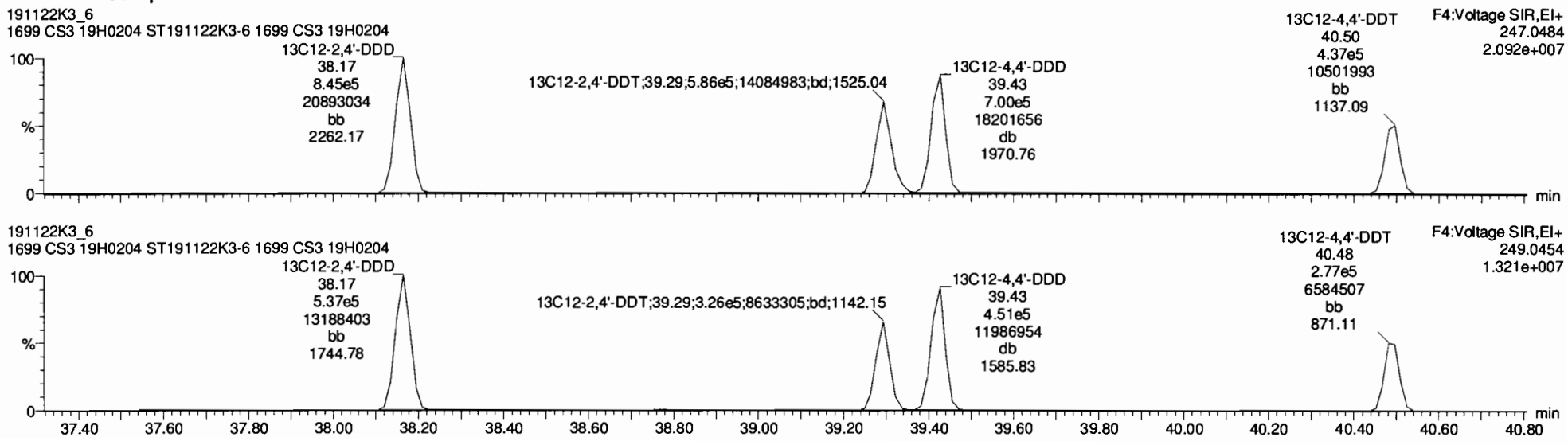
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

DDD-DDT



DDD-DDT-isotopes



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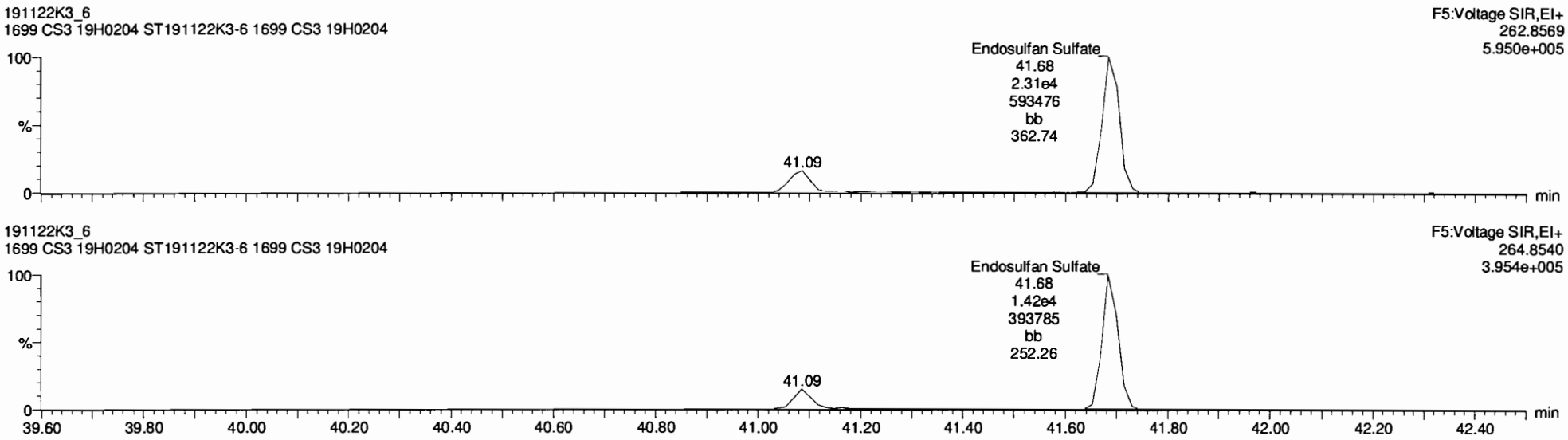
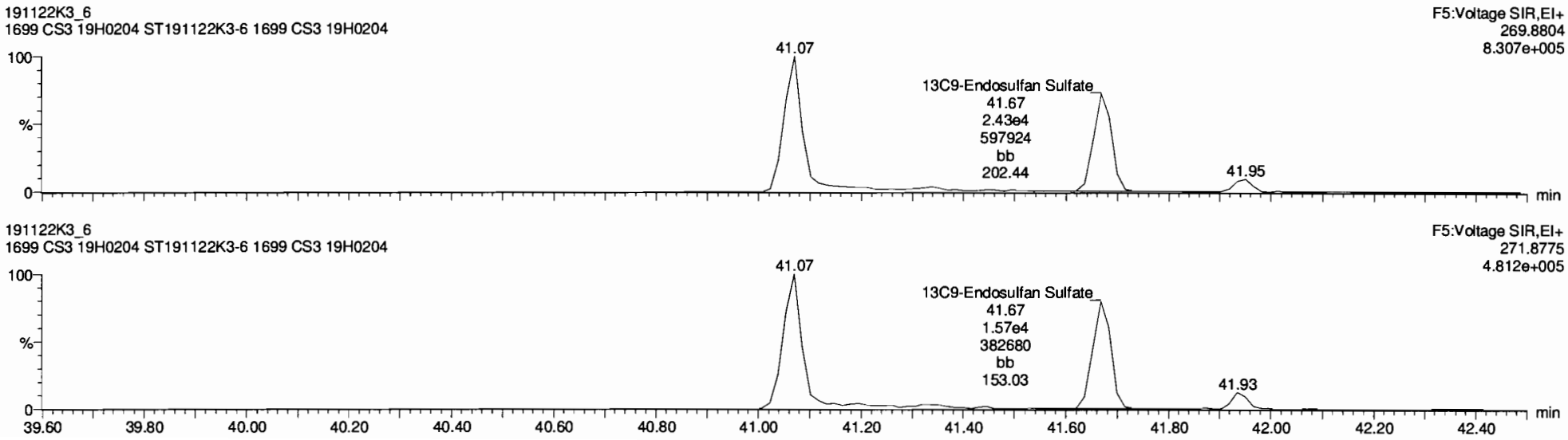
Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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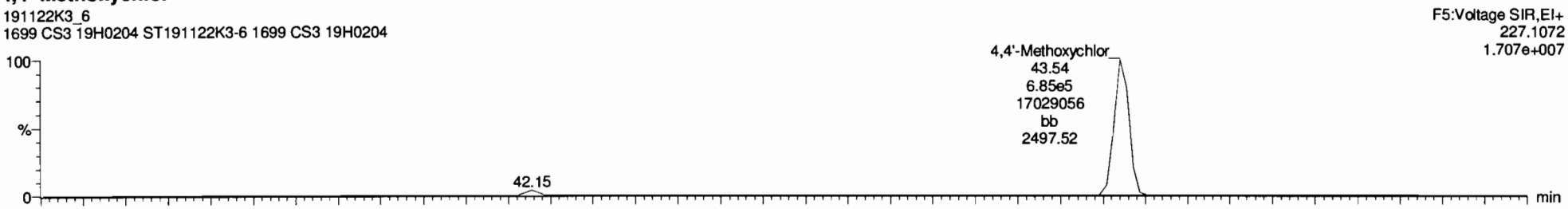
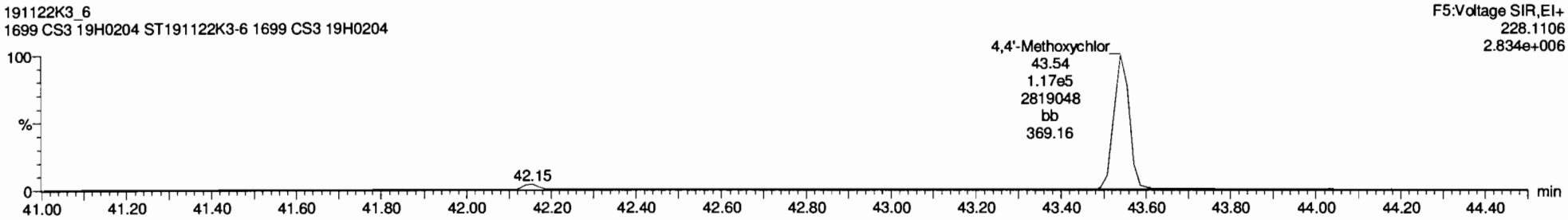
4,4'-Methoxychlor





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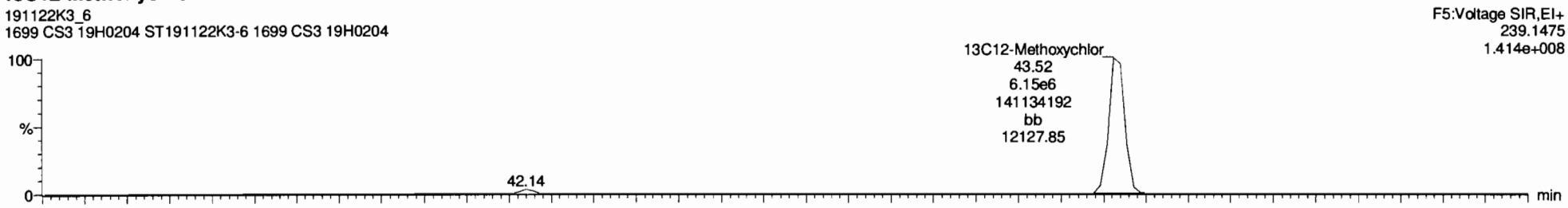

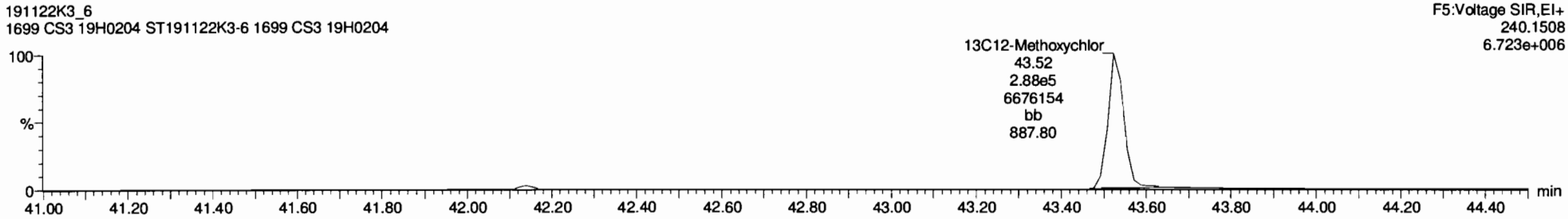

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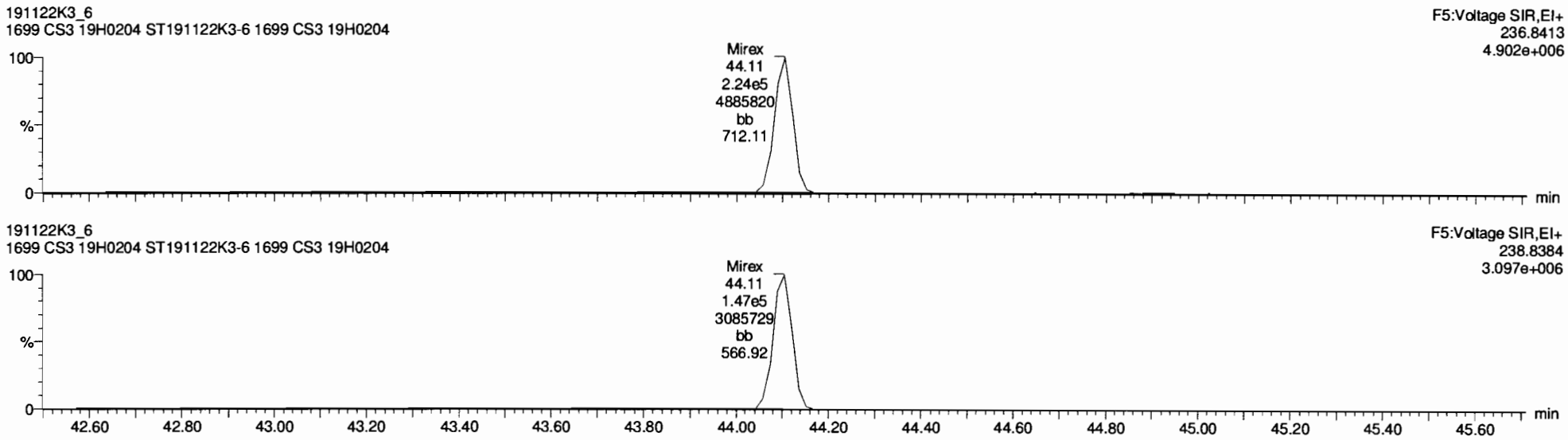
Mirex



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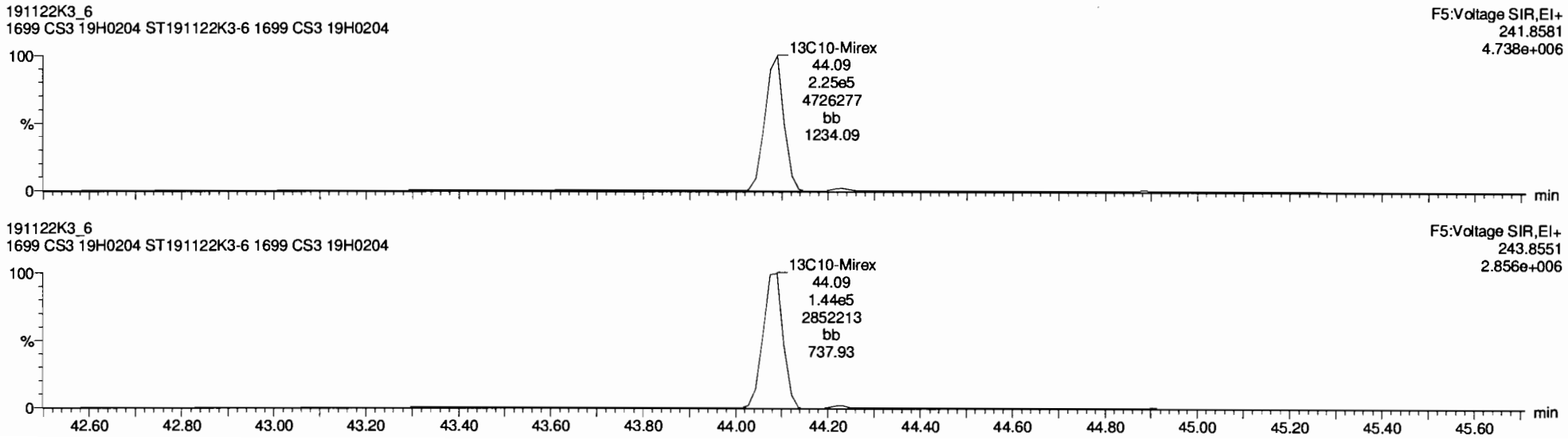

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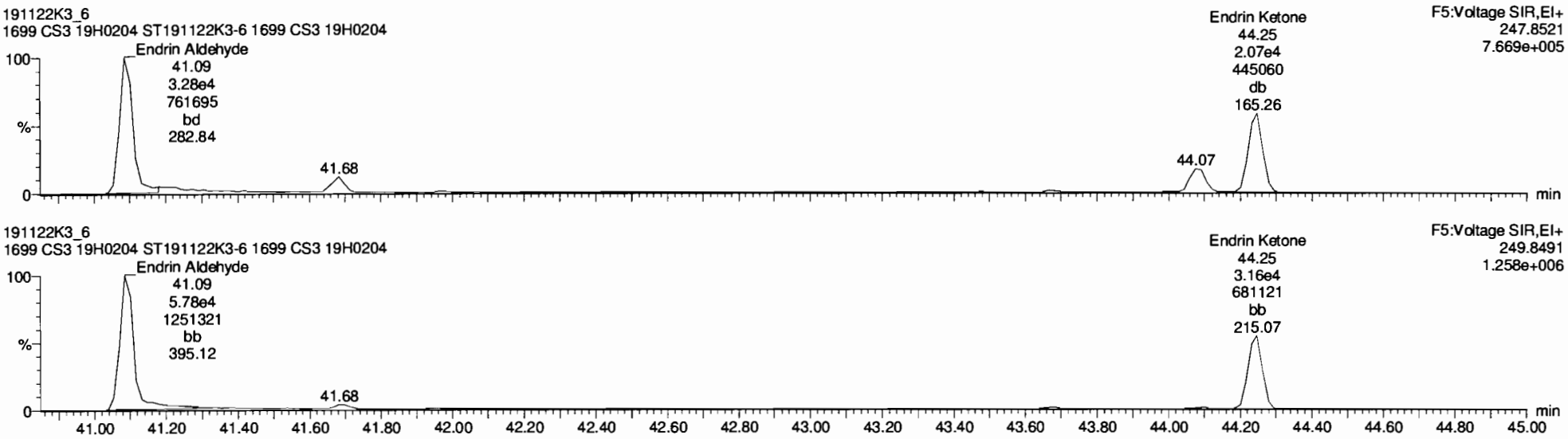
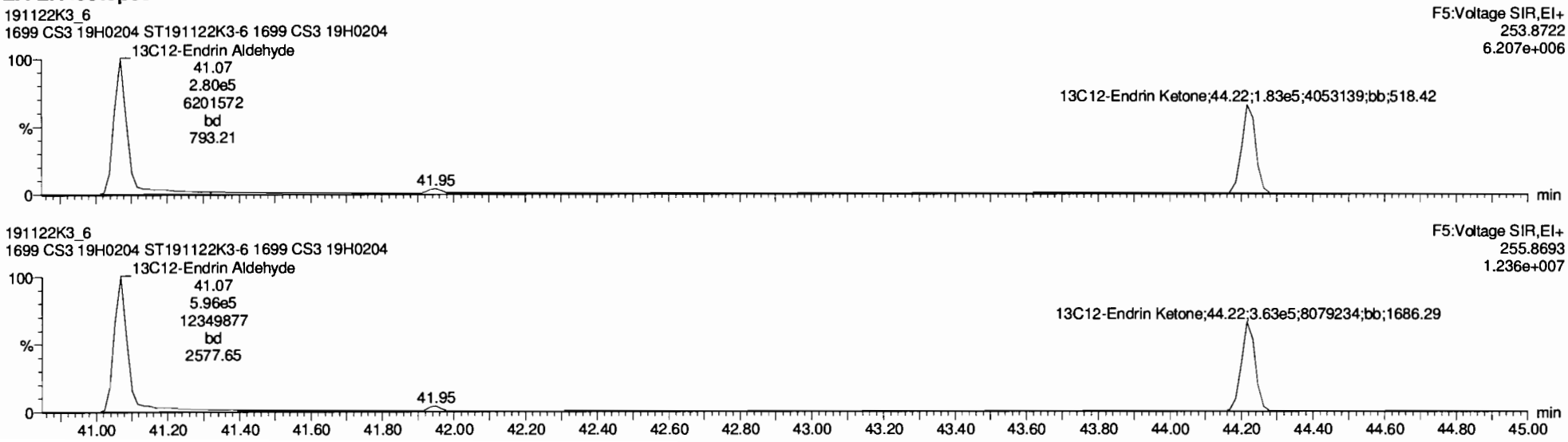
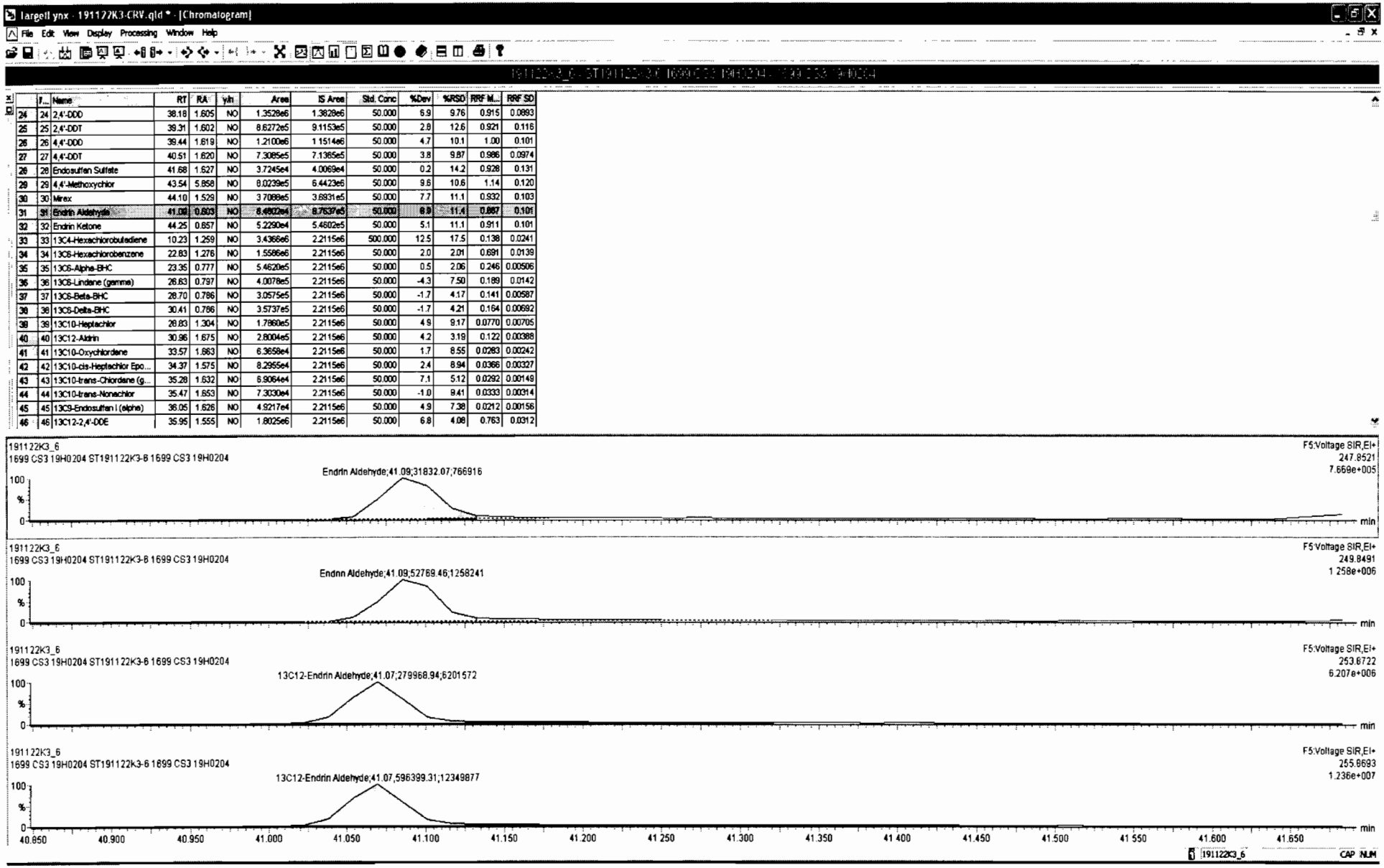
EA-EK



EA-EK-isotopes





	P...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
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25	25	2,4'-DDT	39.31	1.602	NO	8.6272e5	9.1153e5	50.000	2.8	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.619	NO	1.2100e6	1.1514e6	50.000	4.7	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.620	NO	7.3085e5	7.1365e5	50.000	3.8	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.627	NO	3.7245e4	4.0069e4	50.000	0.2	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	5.858	NO	8.0239e5	6.4423e6	50.000	9.6	10.6	1.14	0.120
30	30	Mirex	44.10	1.529	NO	3.7088e5	3.6931e5	50.000	7.7	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.09	0.803	NO	8.4802e4	8.7637e5	50.000	8.9	11.4	0.887	0.101
32	32	Endrin Ketone	44.25	0.857	NO	5.2290e4	5.4602e5	50.000	5.1	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.23	1.259	NO	3.4366e6	2.2115e6	500.000	12.5	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.276	NO	1.5586e6	2.2115e6	50.000	2.0	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.35	0.777	NO	5.4620e5	2.2115e6	50.000	0.5	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.83	0.797	NO	4.0078e5	2.2115e6	50.000	-4.3	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.70	0.786	NO	3.0575e5	2.2115e6	50.000	-1.7	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.786	NO	3.5737e5	2.2115e6	50.000	-1.7	4.21	0.164	0.00692
39	39	13C10-Heptachlor	26.83	1.304	NO	1.7860e5	2.2115e6	50.000	4.9	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.96	1.675	NO	2.8004e5	2.2115e6	50.000	4.2	3.19	0.122	0.00388
41	41	13C10-Oxychlordane	33.57	1.663	NO	6.3658e4	2.2115e6	50.000	1.7	8.55	0.0283	0.00242
42	42	13C10-cis-Heptachlor Epo...	34.37	1.575	NO	8.2955e4	2.2115e6	50.000	2.4	8.94	0.0366	0.00327
43	43	13C10-trans-Chlordane (g...	35.28	1.632	NO	6.9064e4	2.2115e6	50.000	7.1	5.12	0.0292	0.00149
44	44	13C10-trans-Nonachlor	35.47	1.653	NO	7.3030e4	2.2115e6	50.000	-1.0	9.41	0.0333	0.00314
45	45	13C9-Endosulfan I (alpha)	36.05	1.626	NO	4.9217e4	2.2115e6	50.000	4.9	7.38	0.0212	0.00156
46	46	13C12-2,4'-DDE	35.95	1.555	NO	1.8025e6	2.2115e6	50.000	6.8	4.08	0.763	0.0312

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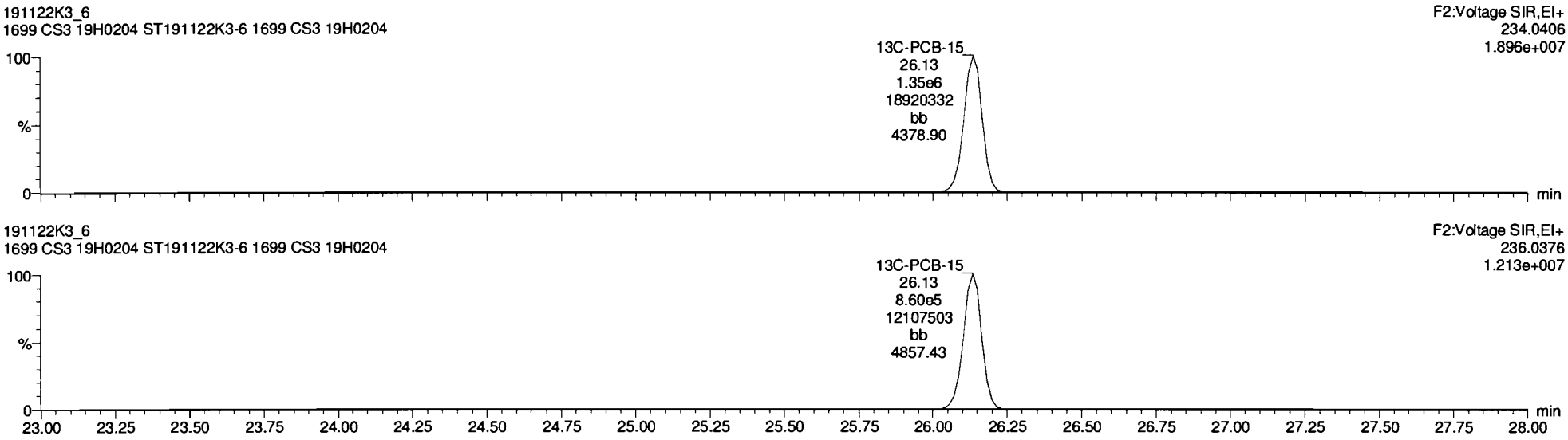
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_6, Date: 22-Nov-2019, Time: 20:06:28, ID: ST191122K3-6 1699 CS3 19H0204, Description: 1699 CS3 19H0204

13C-PCB-15



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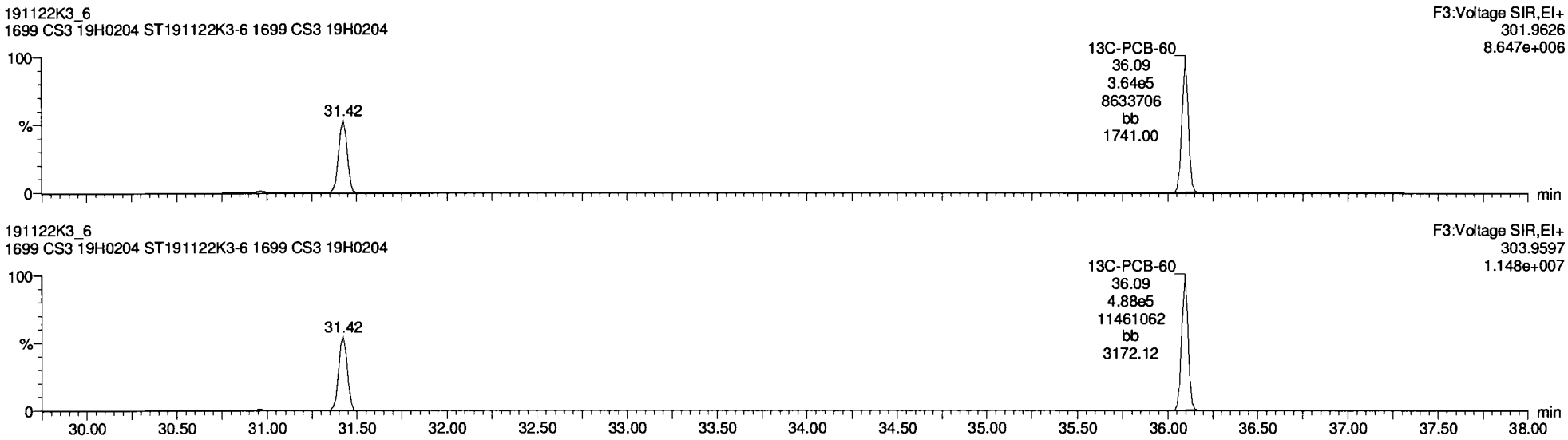

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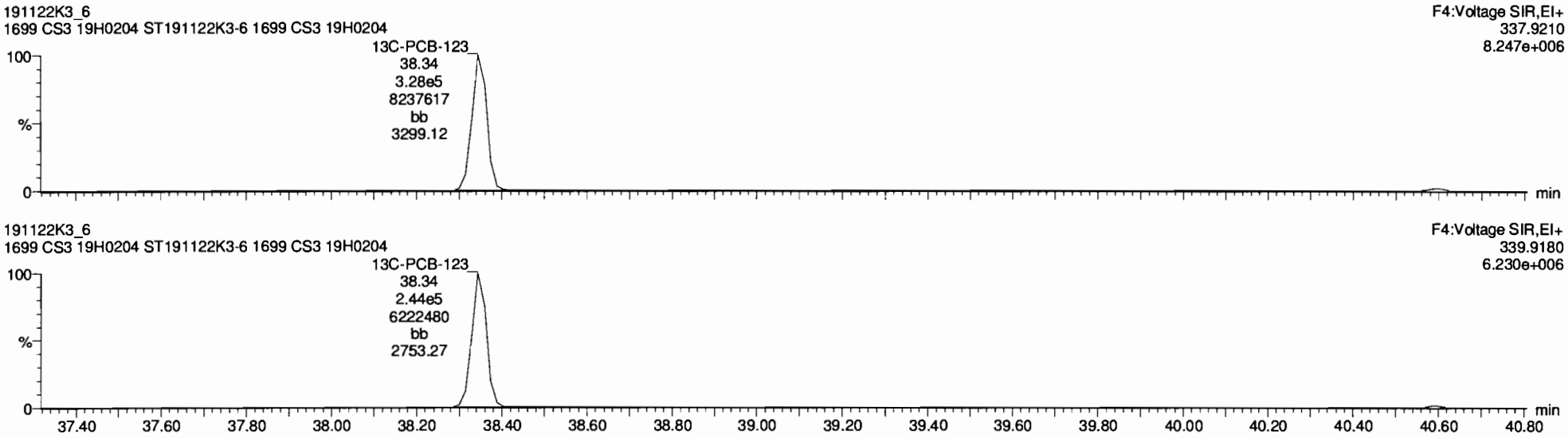
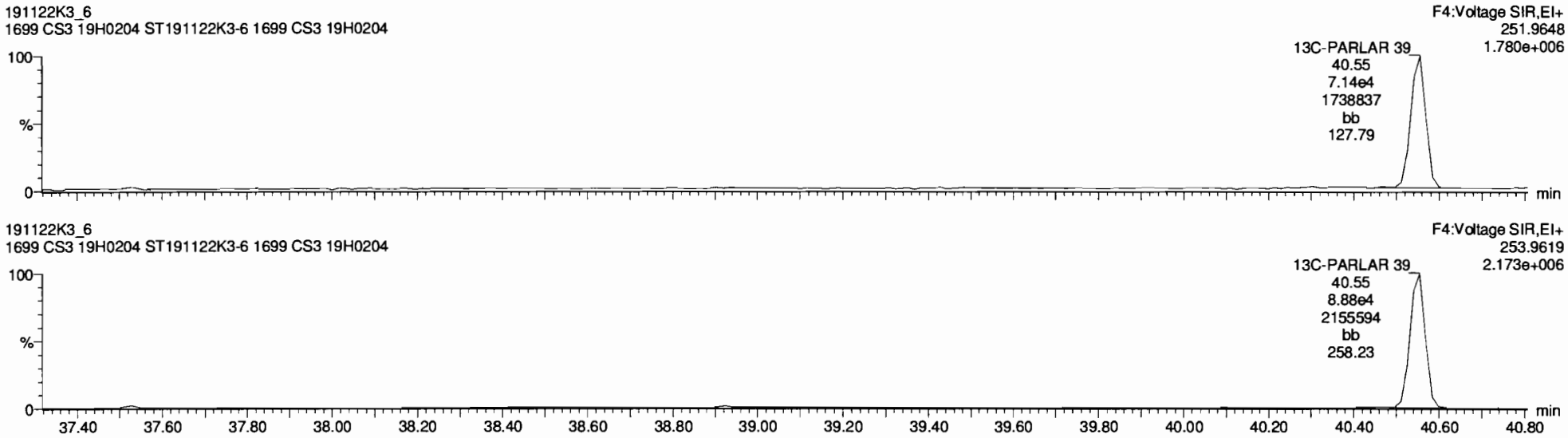


13C-PARLAR 39



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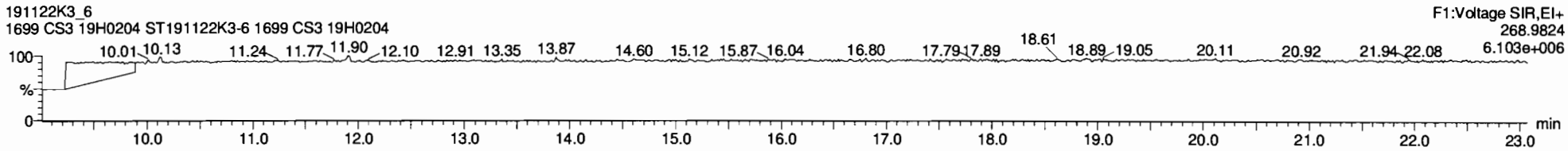
PFK1



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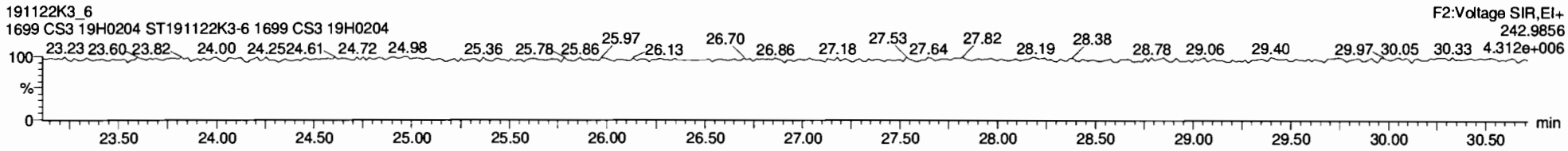

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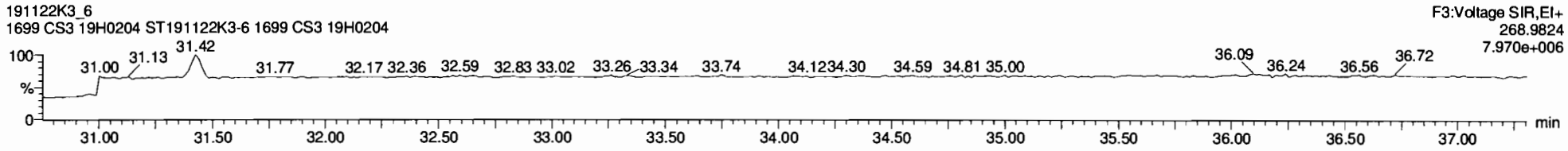

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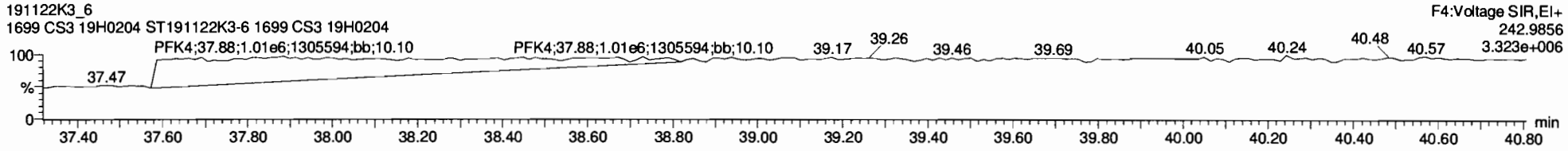

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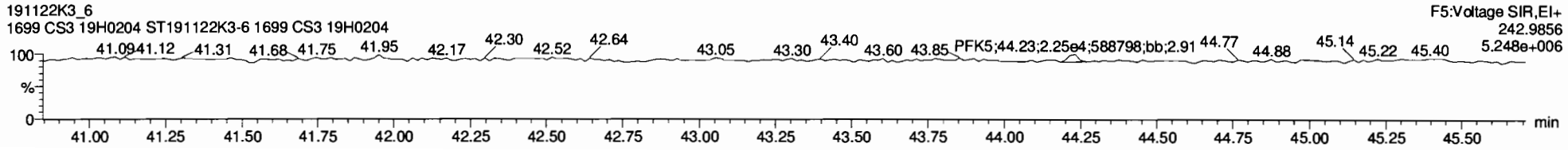

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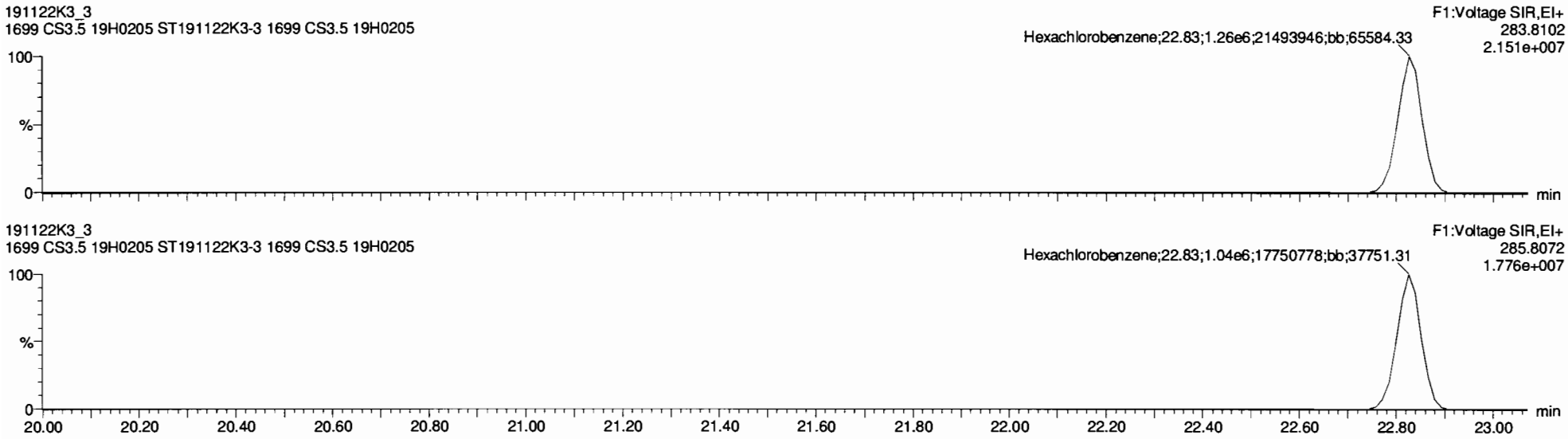
Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

Hexachlorobenzene



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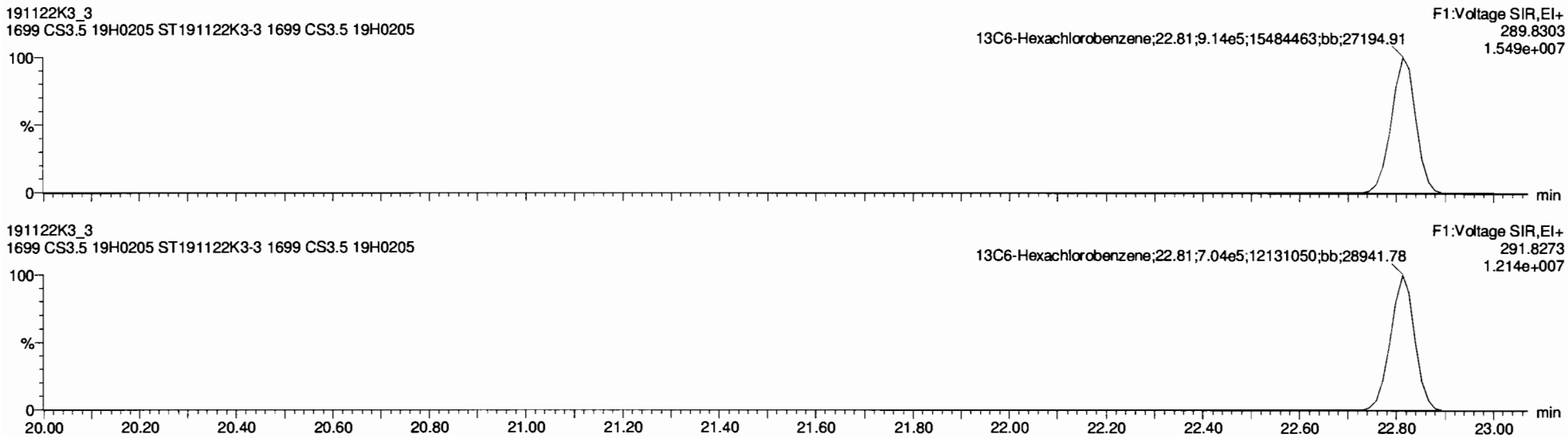

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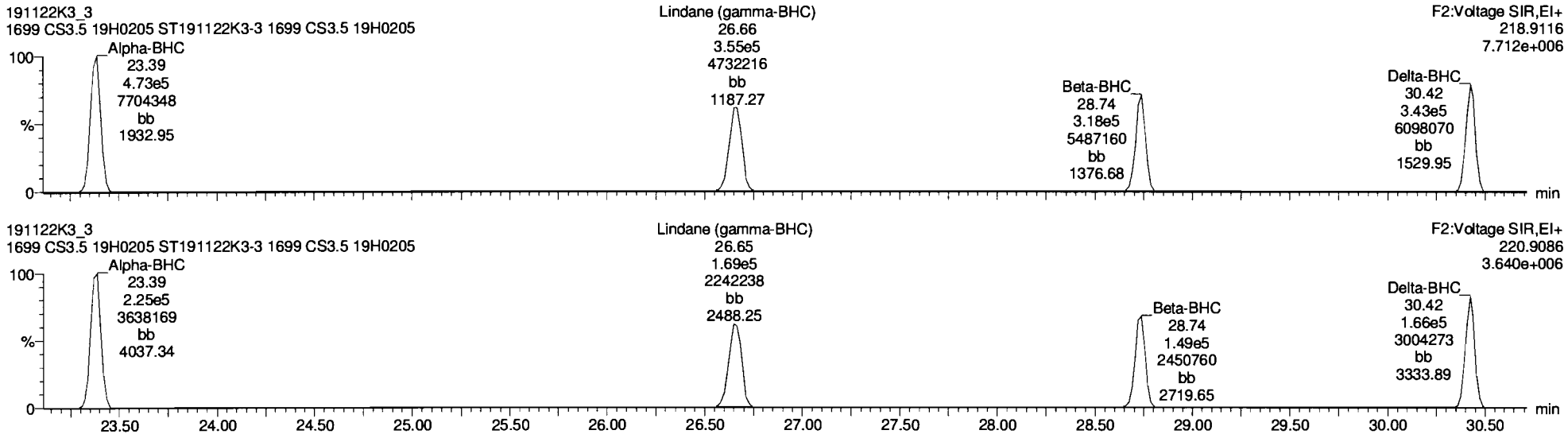
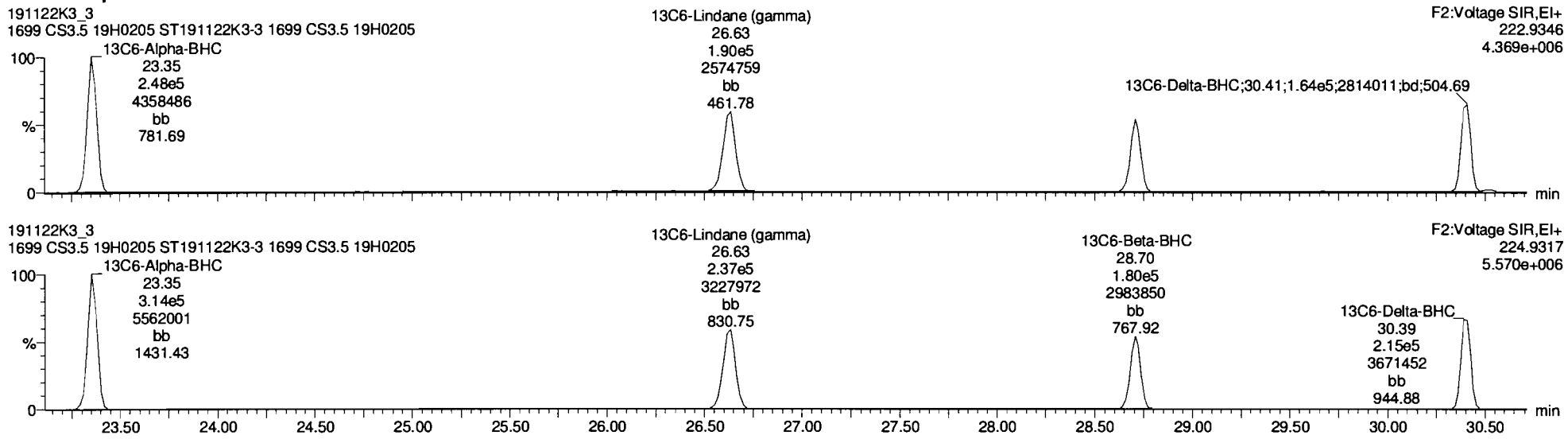
BHC Totals



BHC-isotopes



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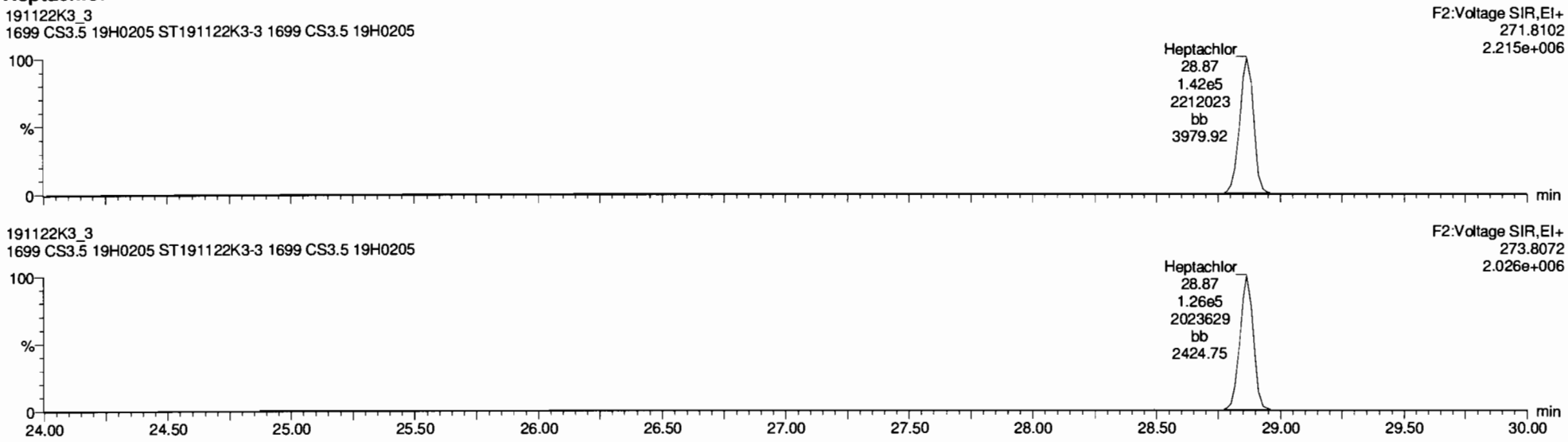
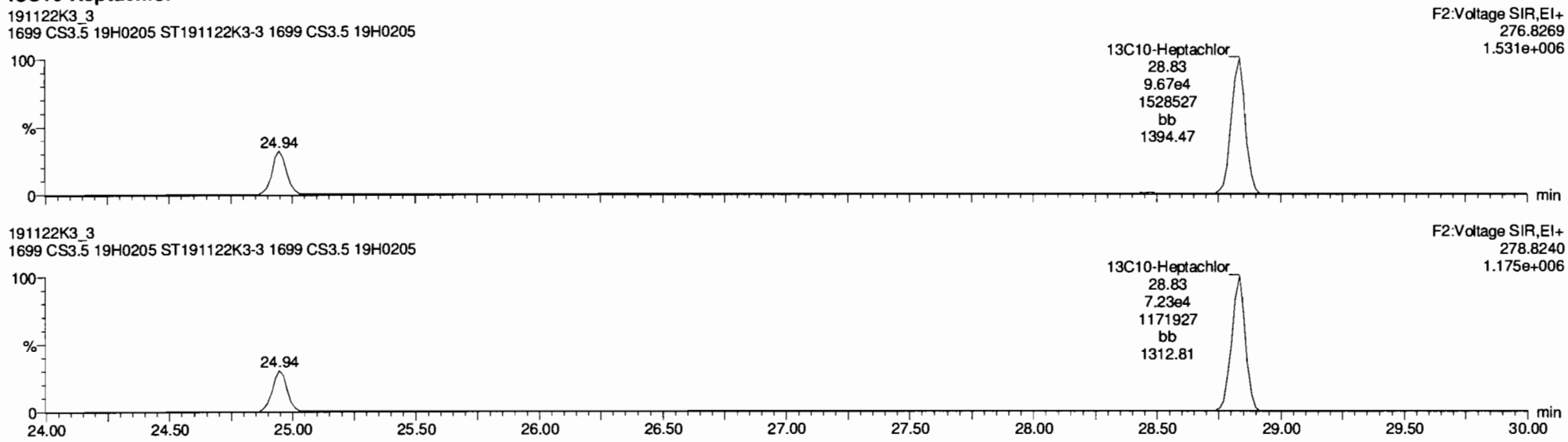
Heptachlor



13C10-Heptachlor



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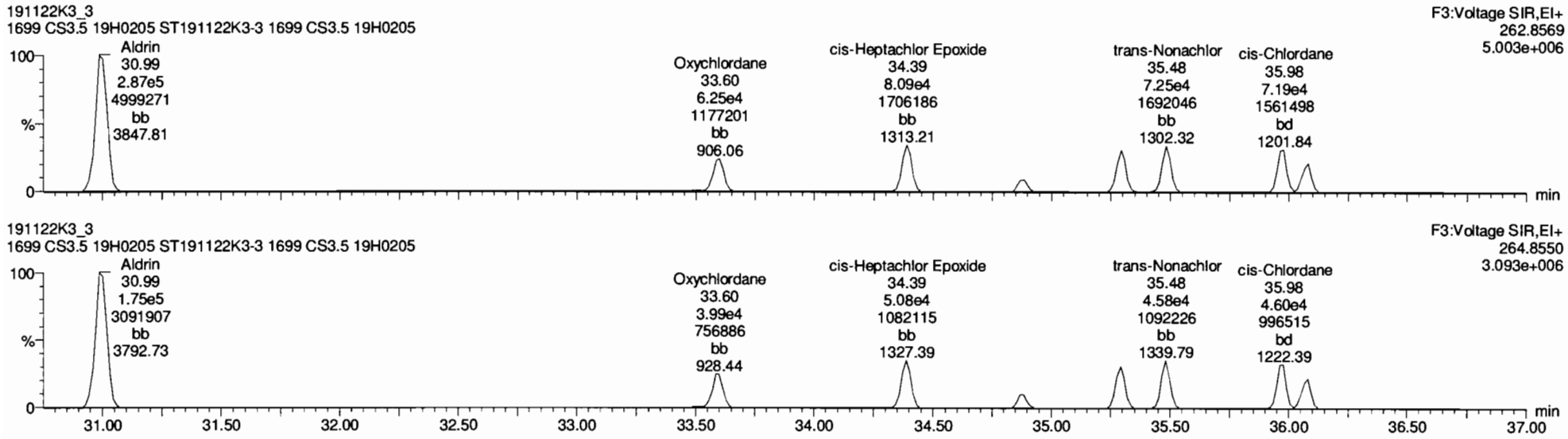
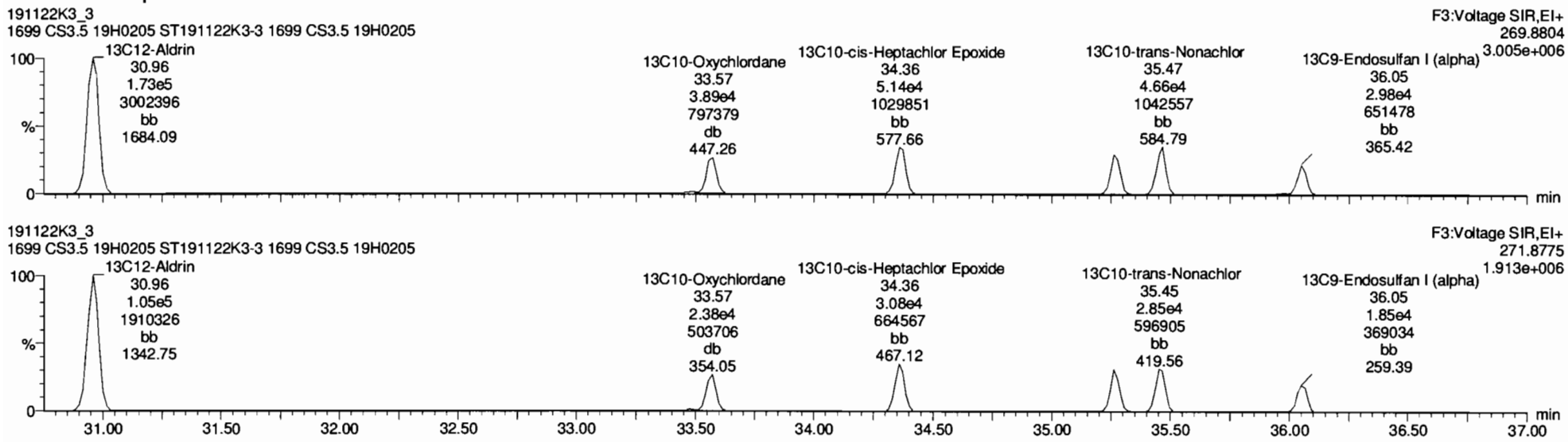
Aldrin-EI



Aldrin-EI-isotopes



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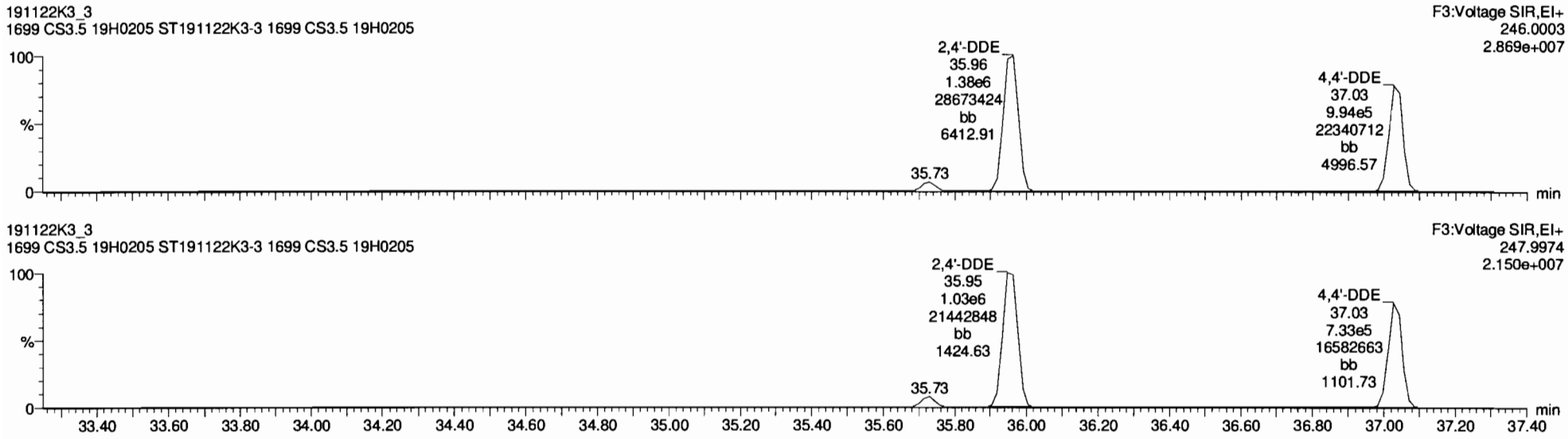
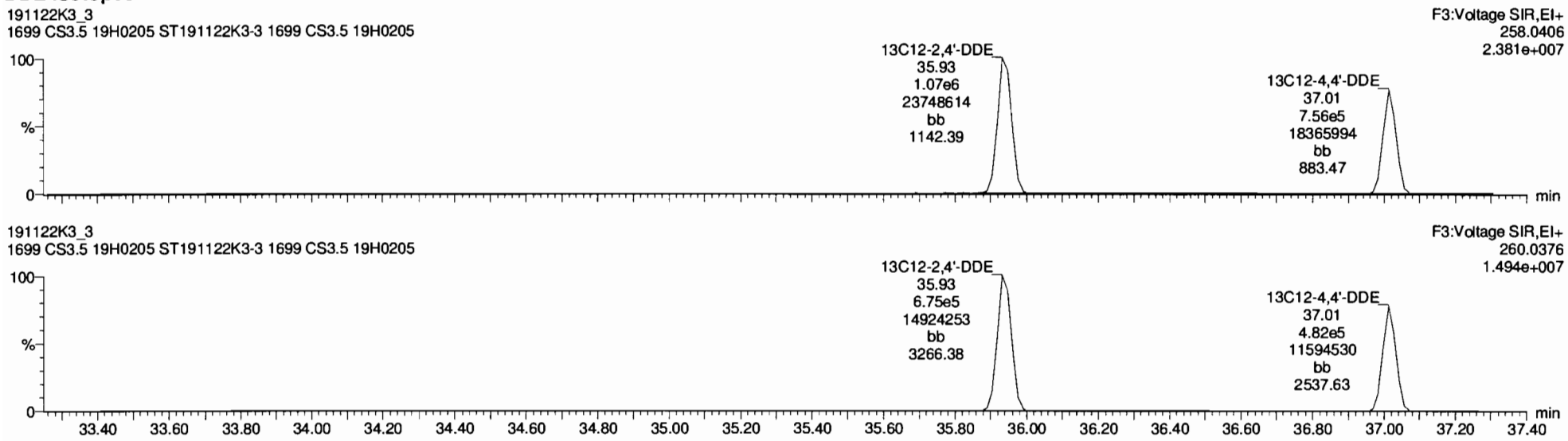
DDMU-DDE



DDE-isotopes



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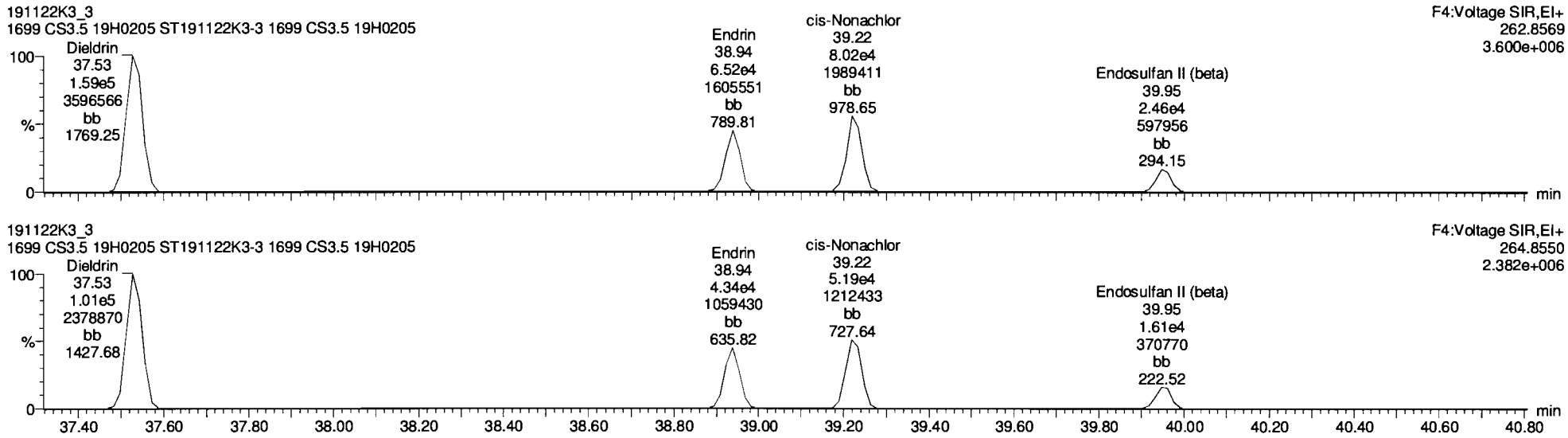
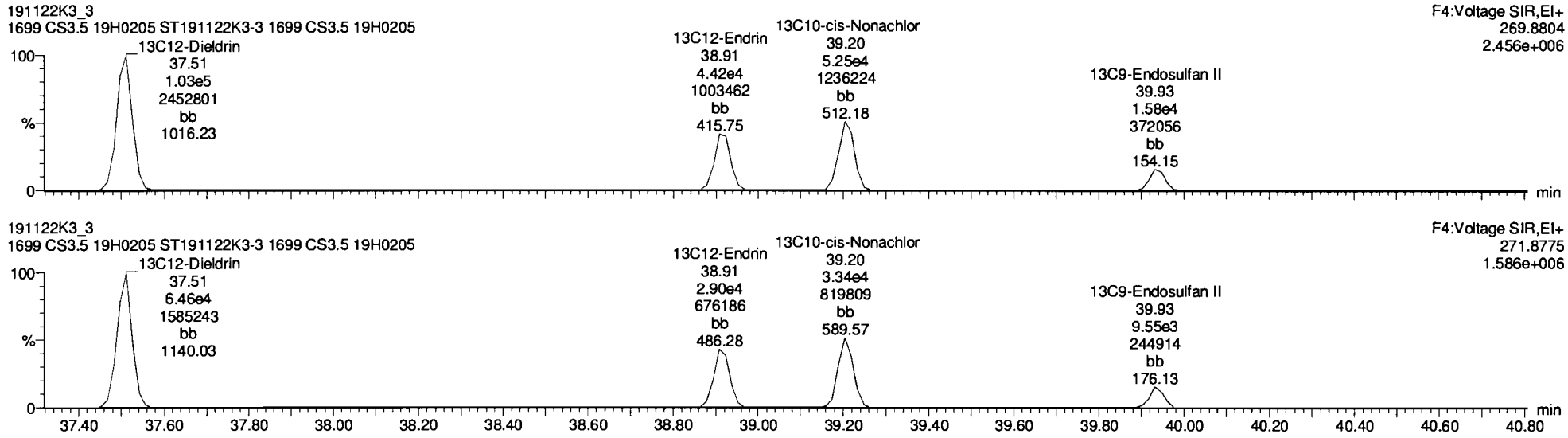
Dieldrin-EII



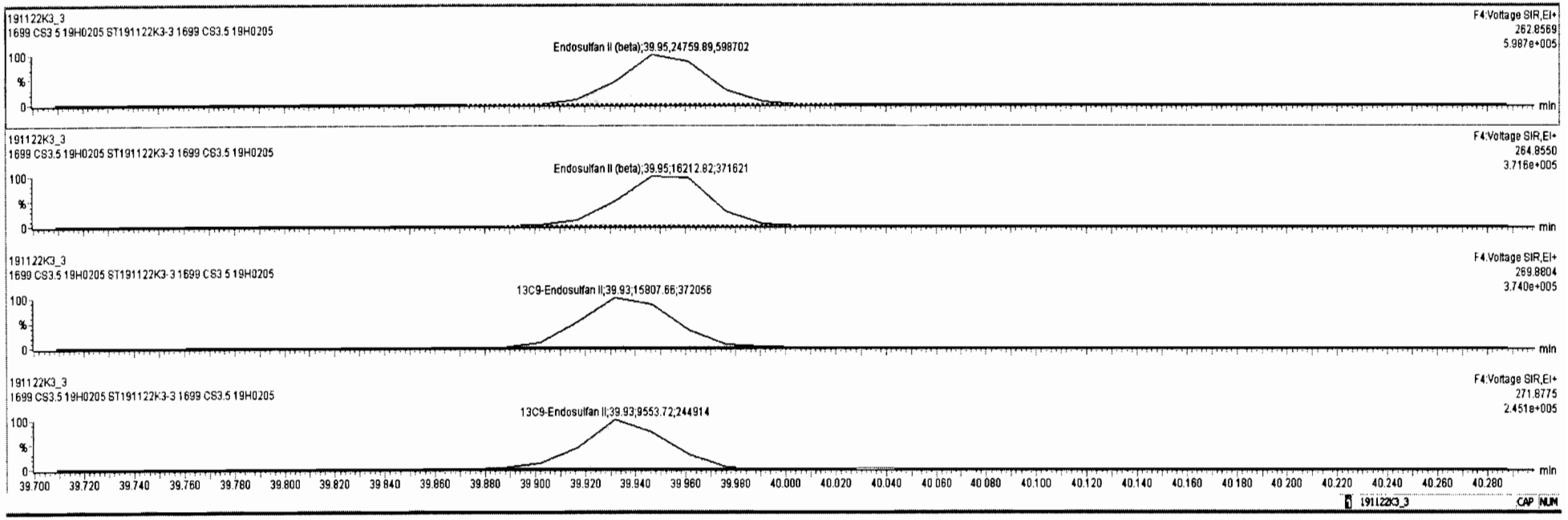
Dieldrin-EII-isotopes



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
23	23	Endosulfan II (beta)	39.95	1.627	NO	4.0873e4	2.5361e4	100.000	-24.1	18.9	1.08	0.212
24	24	2,4'-DDD	38.18	1.575	NO	1.8671e6	1.2485e6	100.000	-18.3	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.577	NO	1.1283e6	7.8240e5	100.000	-21.7	12.6	0.921	0.116
26	26	4,4'-DDD	39.43	1.606	NO	1.5959e6	9.8684e5	100.000	-19.5	10.1	1.00	0.101
27	27	4,4'-DDT	40.50	1.572	NO	9.0626e5	5.7323e5	100.000	-19.9	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.533	NO	5.6775e4	3.9088e4	100.000	-21.7	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	5.745	NO	9.6083e5	5.3194e6	100.000	-20.5	10.6	1.14	0.120
30	30	Mirex	44.09	1.522	NO	5.7675e5	3.8862e5	100.000	-20.4	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.08	0.610	NO	1.2363e5	7.6100e5	100.000	-15.6	10.3	0.962	0.0990
32	32	Endrin Ketone	44.23	0.622	NO	7.2134e4	4.8655e5	100.000	-18.6	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.266	NO	3.4922e6	2.3179e6	500.000	9.0	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.81	1.298	NO	1.6177e6	2.3179e6	50.000	1.0	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.35	0.790	NO	5.6196e5	2.3179e6	50.000	-1.3	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.800	NO	4.2654e5	2.3179e6	50.000	-2.8	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.70	0.783	NO	3.2100e5	2.3179e6	50.000	-1.5	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.764	NO	3.7866e5	2.3179e6	50.000	-0.6	4.21	0.164	0.00692
39	39	13C10-Heptachlor	28.83	1.337	NO	1.6900e5	2.3179e6	50.000	-5.3	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.96	1.648	NO	2.7768e5	2.3179e6	50.000	-1.5	3.19	0.122	0.00388
41	41	13C10-Oxychlordane	33.57	1.638	NO	6.2669e4	2.3179e6	50.000	-4.4	8.55	0.0283	0.00242
42	42	13C10-cis-Heptachlor Epo...	34.36	1.668	NO	8.2178e4	2.3179e6	50.000	-3.2	8.94	0.0366	0.00327
43	43	13C10-trans-Chlordane (g...	35.26	1.585	NO	6.6092e4	2.3179e6	50.000	-2.2	5.12	0.0292	0.00149
44	44	13C10-trans-Nonachlor	35.47	1.637	NO	7.5026e4	2.3179e6	50.000	-2.9	9.41	0.0333	0.00314
45	45	13C9-Endosulfan I (alpha)	36.05	1.611	NO	4.8289e4	2.3179e6	50.000	-1.8	7.38	0.0212	0.00156



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Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

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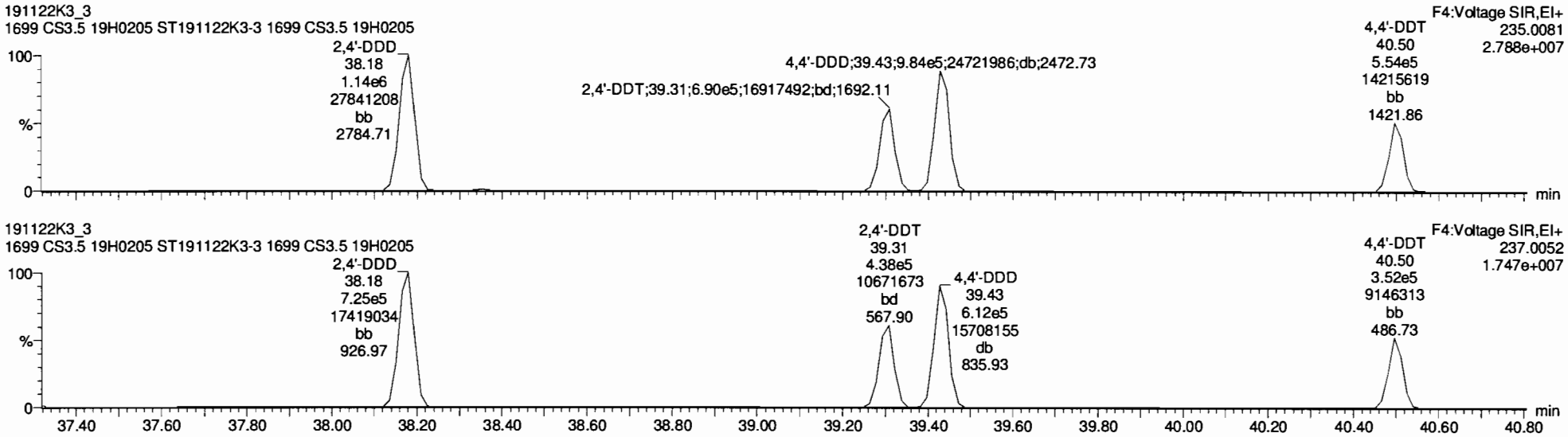
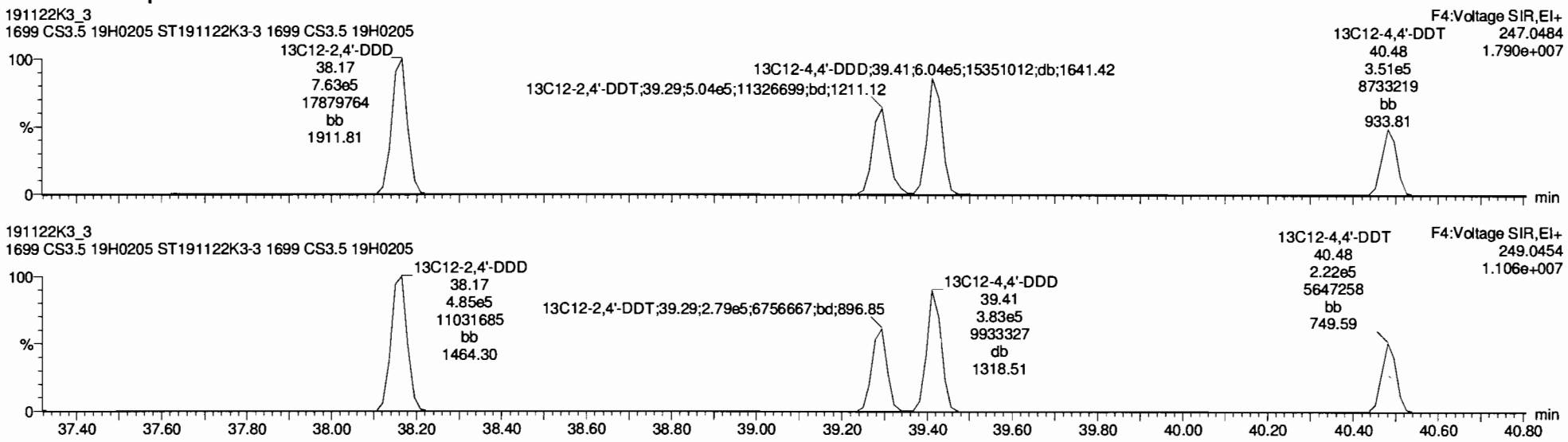


DDD-DDT-isotopes



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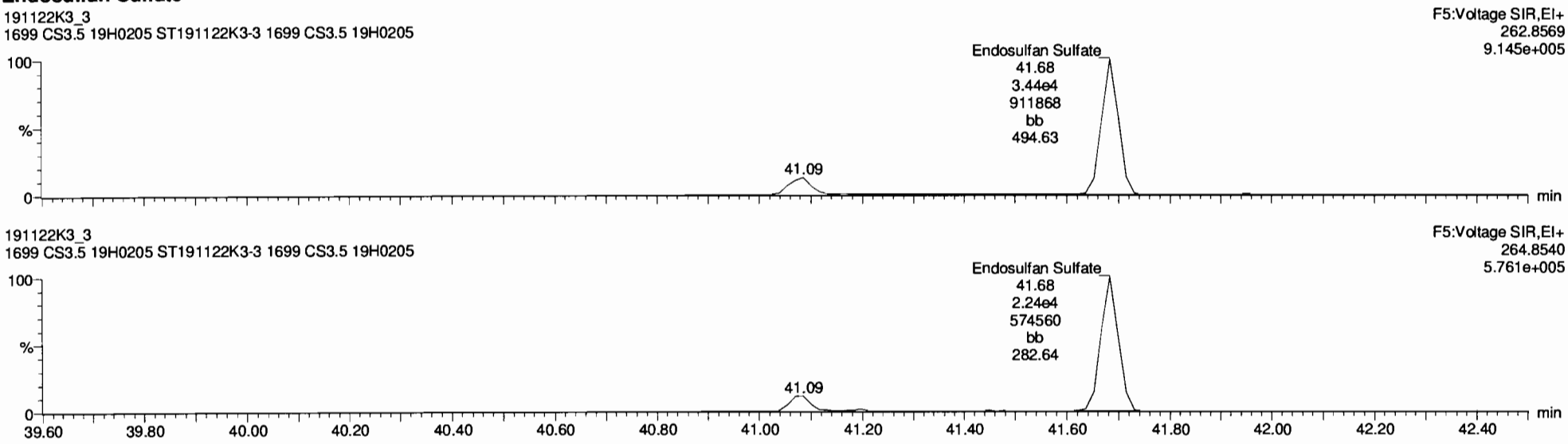
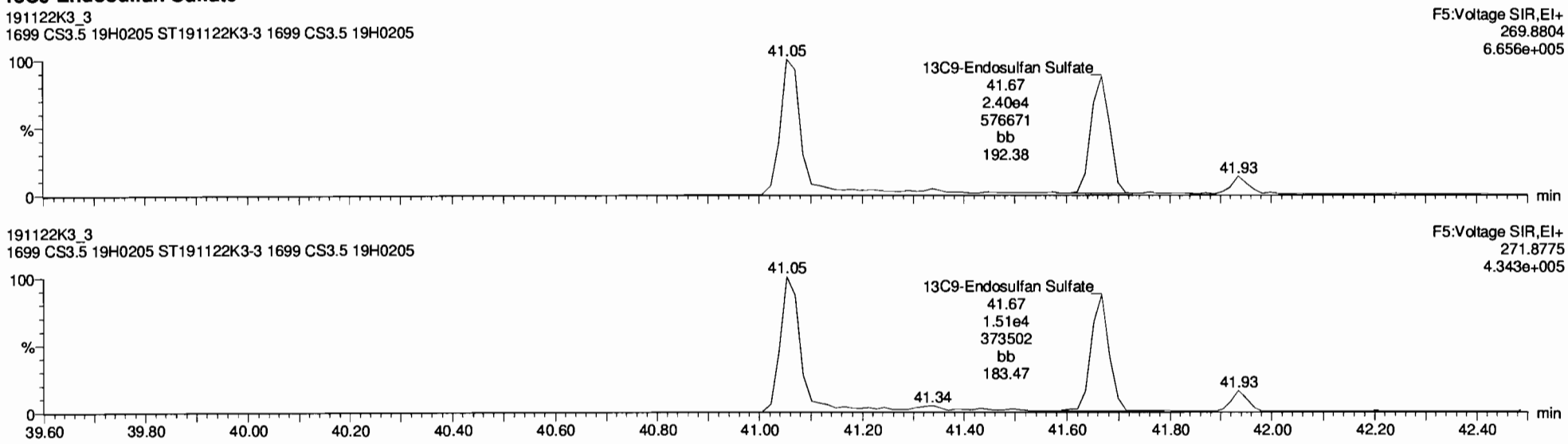
Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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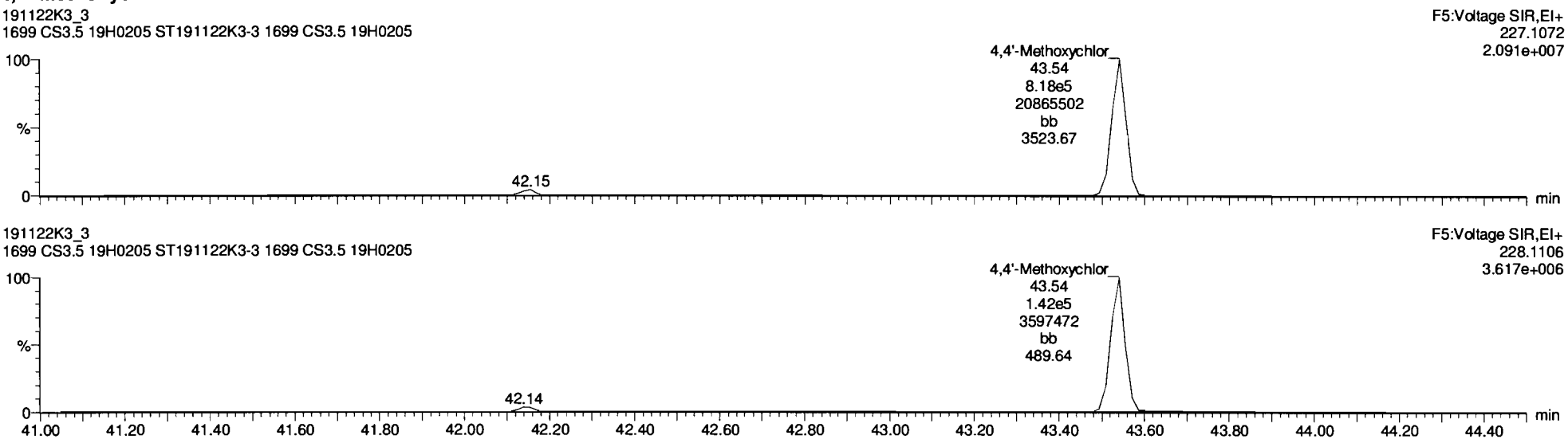
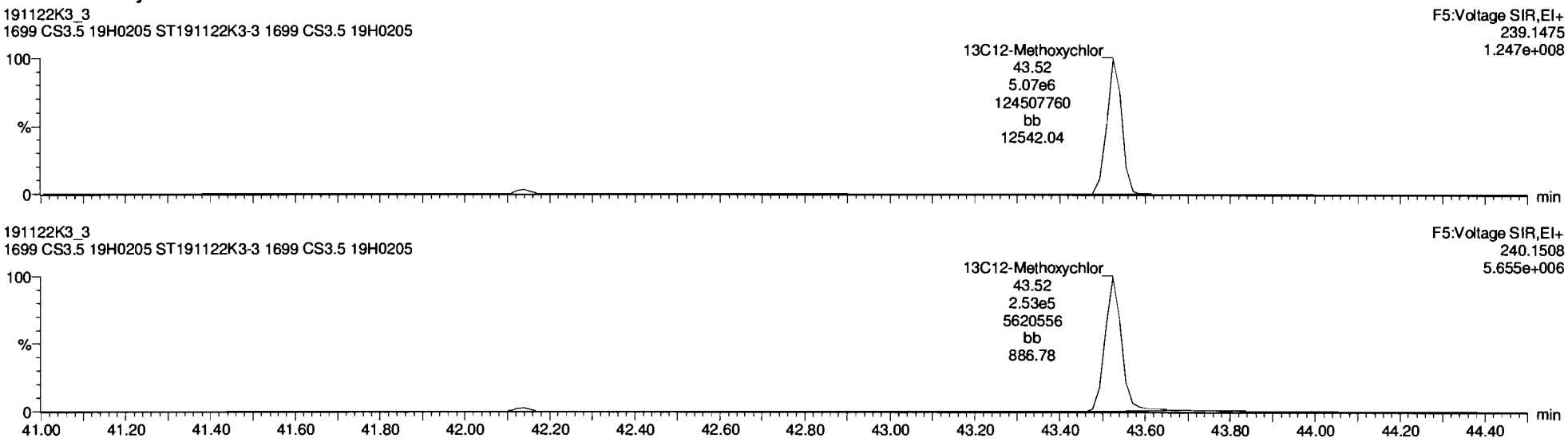
4,4'-Methoxychlor



13C12-Methoxychlor



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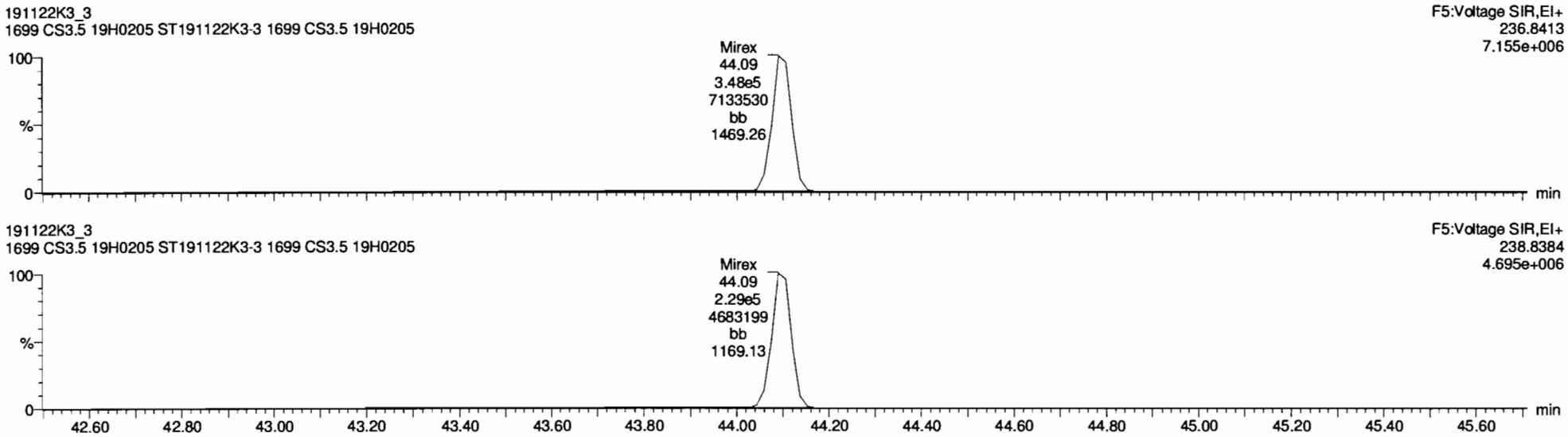
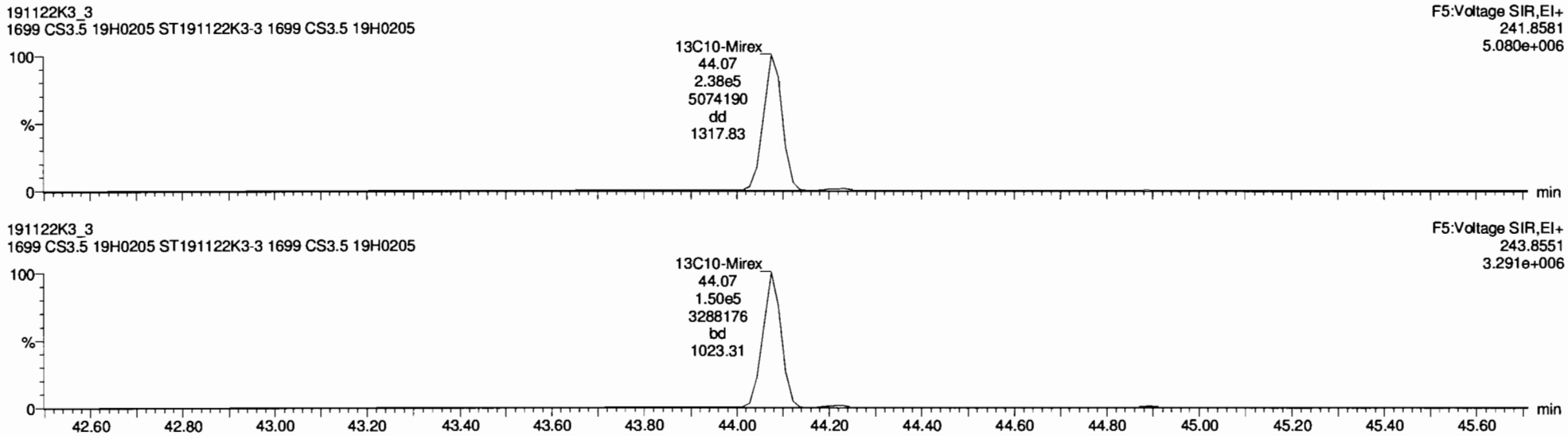
Mirex



13C10-Mirex



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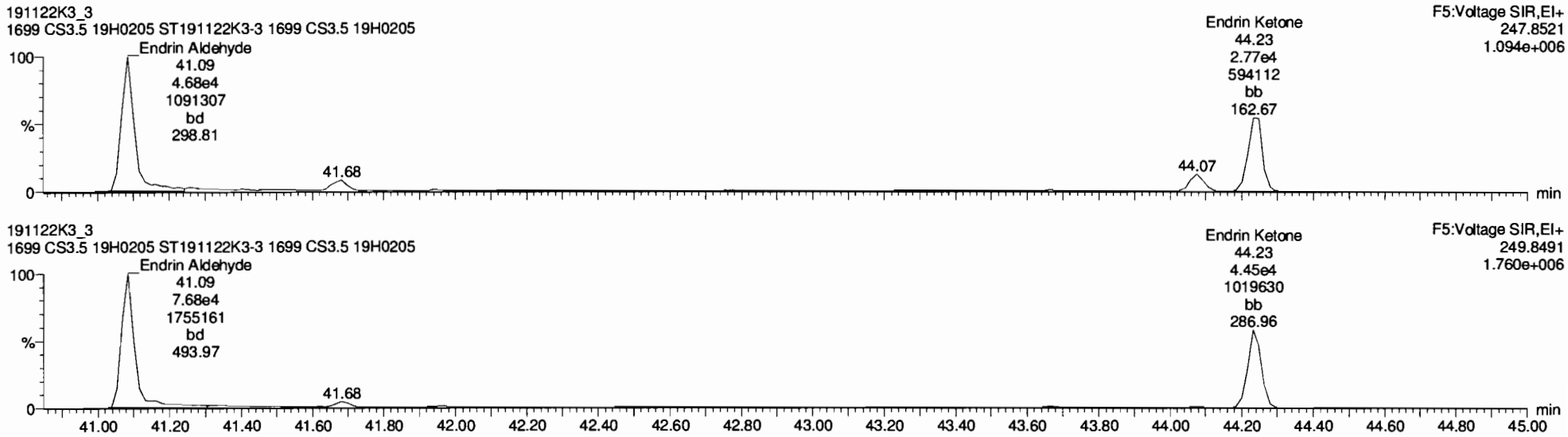
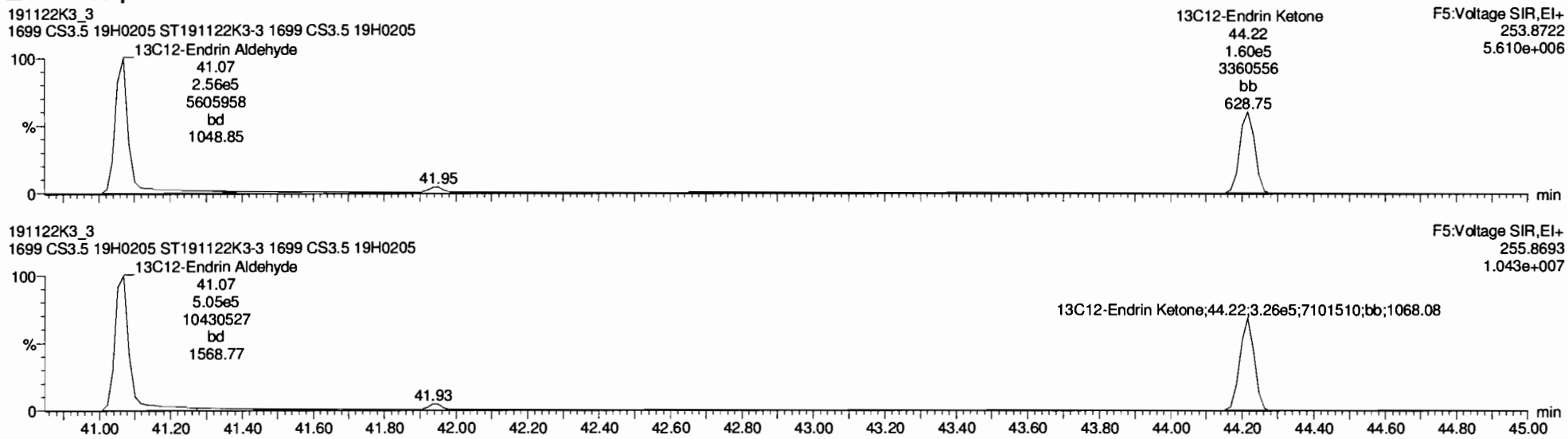
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

EA-EK



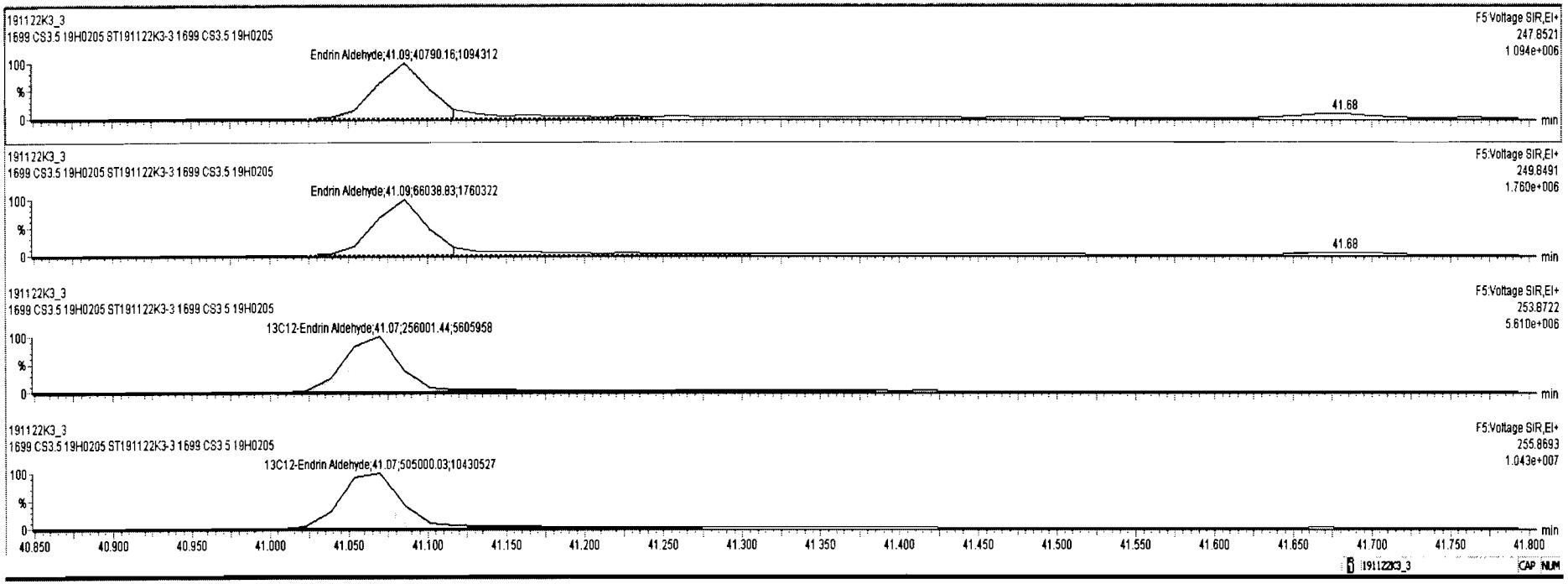
EA-EK-isotopes



TargetLynx 191122K3-CRV.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
23	23	Endosulfan II (beta)	39.95	1.527	NO	4.0973e4	2.5361e4	100.000	-24.1	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.575	NO	1.8671e6	1.2485e6	100.000	-18.3	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.577	NO	1.1283e6	7.8240e5	100.000	-21.7	12.6	0.921	0.116
26	26	4,4'-DDD	39.43	1.606	NO	1.5959e6	9.8684e5	100.000	-19.5	10.1	1.00	0.101
27	27	4,4'-DDT	40.50	1.572	NO	9.0626e5	5.7323e5	100.000	-19.9	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.533	NO	5.6775e4	3.9088e4	100.000	-21.7	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	5.745	NO	9.6083e5	5.3194e6	100.000	-20.5	10.6	1.14	0.120
30	30	Mirex	44.09	1.522	NO	5.7675e5	3.8862e5	100.000	-20.4	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.09	0.818	NO	1.0683e5	7.8100e5	100.000	-25.5	14.4	0.944	0.136
32	32	Endrin Ketone	44.23	0.622	NO	7.2134e4	4.8655e5	100.000	-18.6	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.266	NO	3.4922e6	2.3179e6	500.000	9.0	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.81	1.298	NO	1.6177e6	2.3179e6	50.000	1.0	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.35	0.790	NO	5.8196e5	2.3179e6	50.000	-1.3	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.800	NO	4.2654e5	2.3179e6	50.000	-2.8	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	26.70	0.783	NO	3.2100e5	2.3179e6	50.000	-1.5	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.764	NO	3.7866e5	2.3179e6	50.000	-0.6	4.21	0.164	0.00692
39	39	13C10-Heptachlor	26.83	1.337	NO	1.6900e5	2.3179e6	50.000	-5.3	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.96	1.648	NO	2.7768e5	2.3179e6	50.000	-1.5	3.19	0.122	0.00388
41	41	13C10-Oxychlordane	33.57	1.638	NO	6.2669e4	2.3179e6	50.000	-4.4	8.55	0.0283	0.00242
42	42	13C10-cis-Heptachlor Epo...	34.36	1.668	NO	8.2178e4	2.3179e6	50.000	-3.2	8.94	0.0366	0.00327
43	43	13C10-trans-Chlordane (g...	35.26	1.585	NO	6.6092e4	2.3179e6	50.000	-2.2	5.12	0.0292	0.00149
44	44	13C10-trans-Nonachlor	35.47	1.637	NO	7.5026e4	2.3179e6	50.000	-2.9	9.41	0.0333	0.00314
45	45	13C9-Endosulfan I (alpha)	36.05	1.611	NO	4.8269e4	2.3179e6	50.000	-1.8	7.38	0.0212	0.00156



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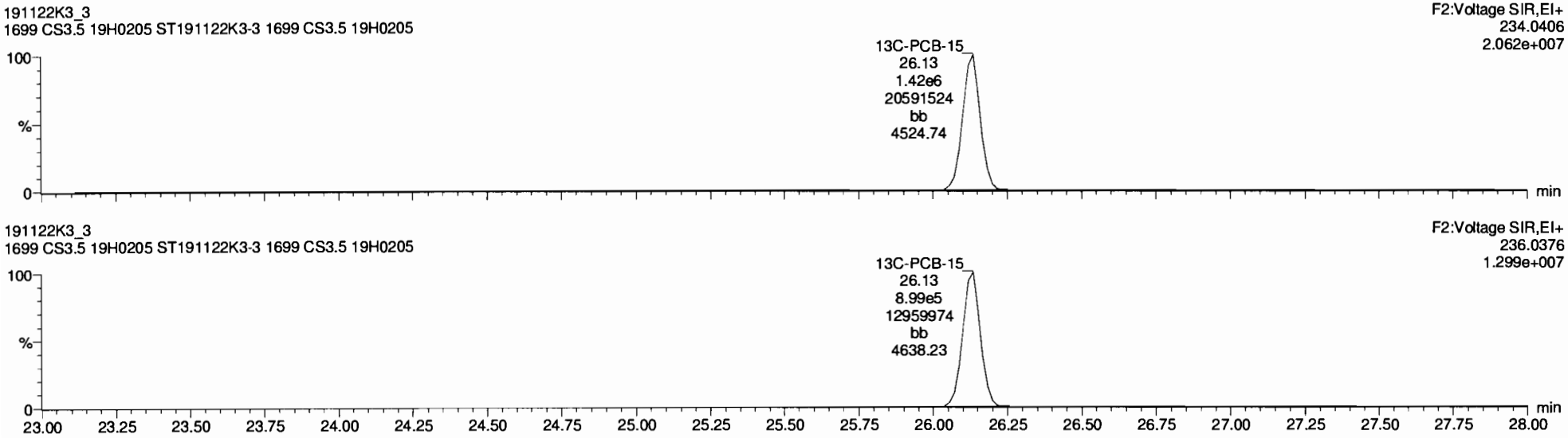
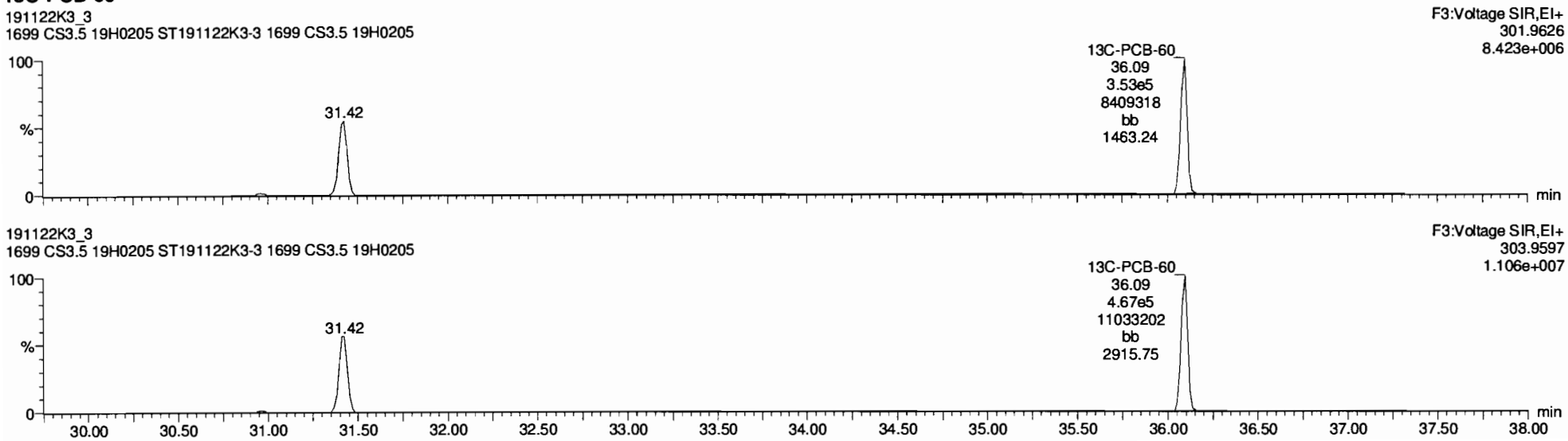
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

13C-PCB-15



13C-PCB-60



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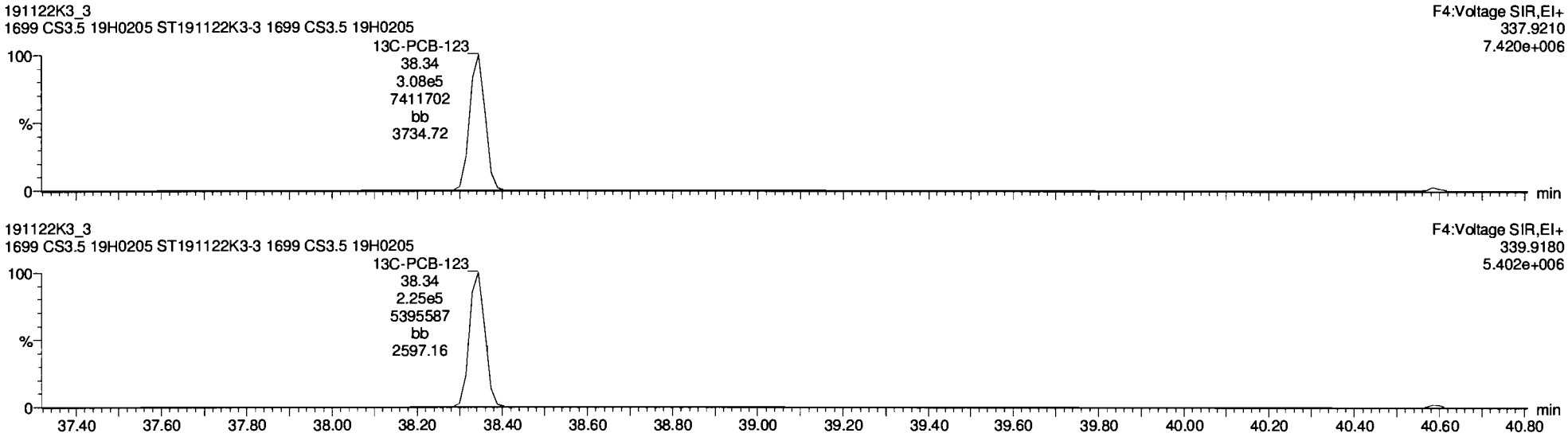
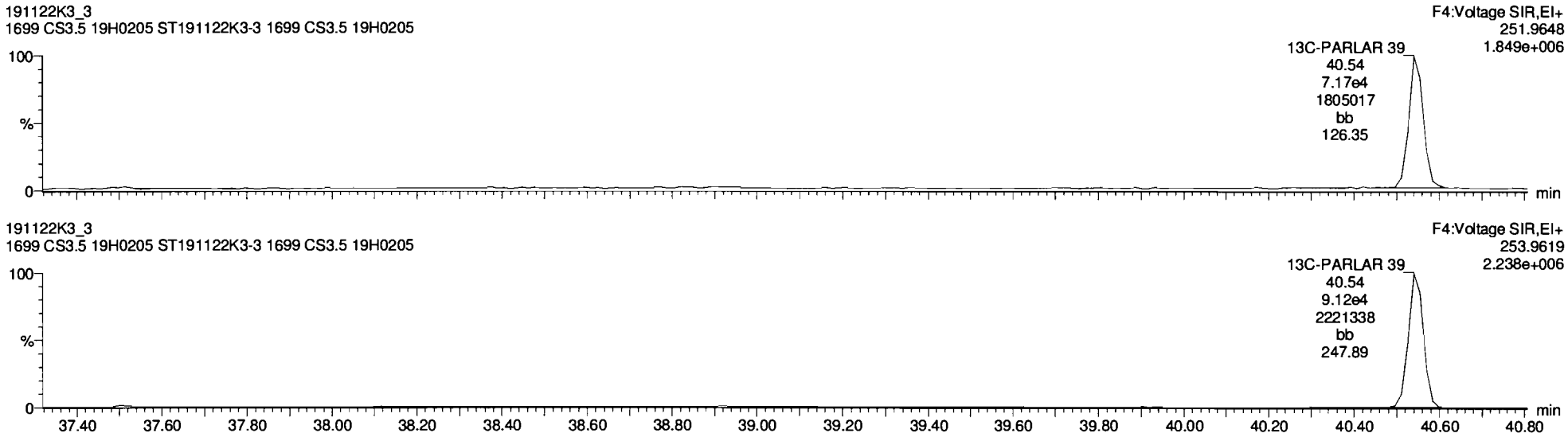
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

13C-PCB-123



13C-PARLAR 39



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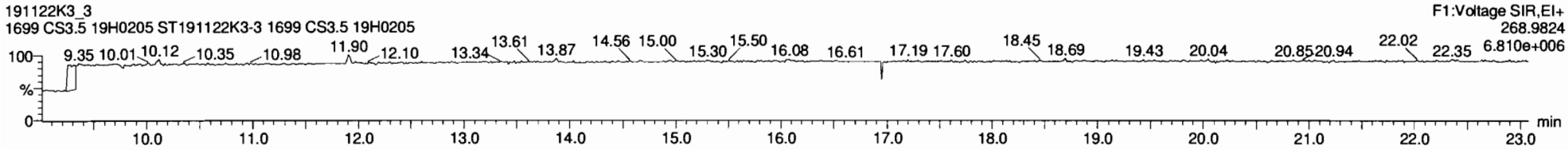
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_3, Date: 22-Nov-2019, Time: 17:37:57, ID: ST191122K3-3 1699 CS3.5 19H0205, Description: 1699 CS3.5 19H0205

PFK1



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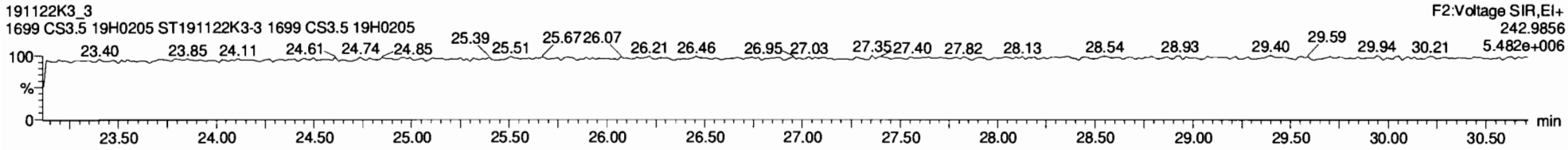

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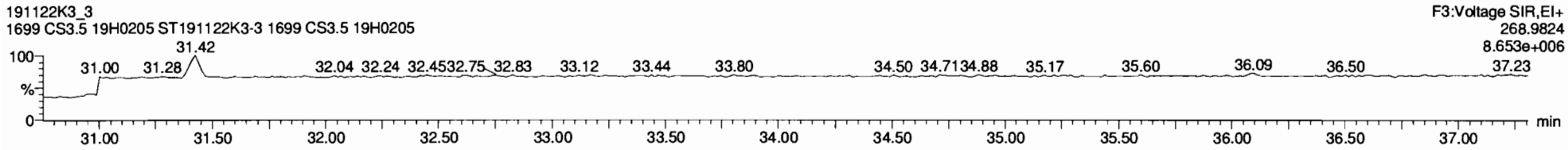

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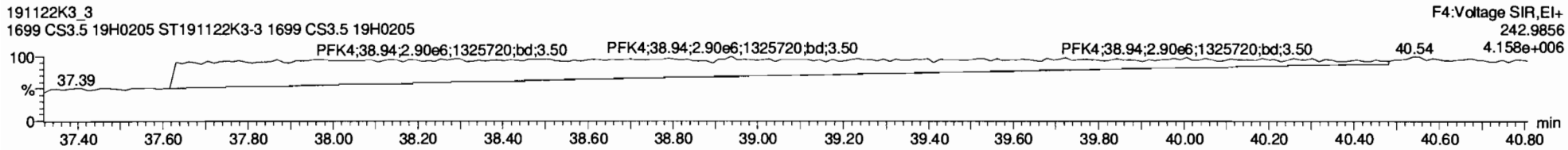
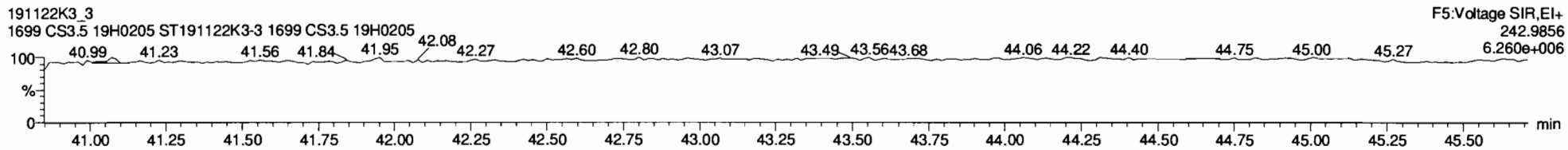


PFK5



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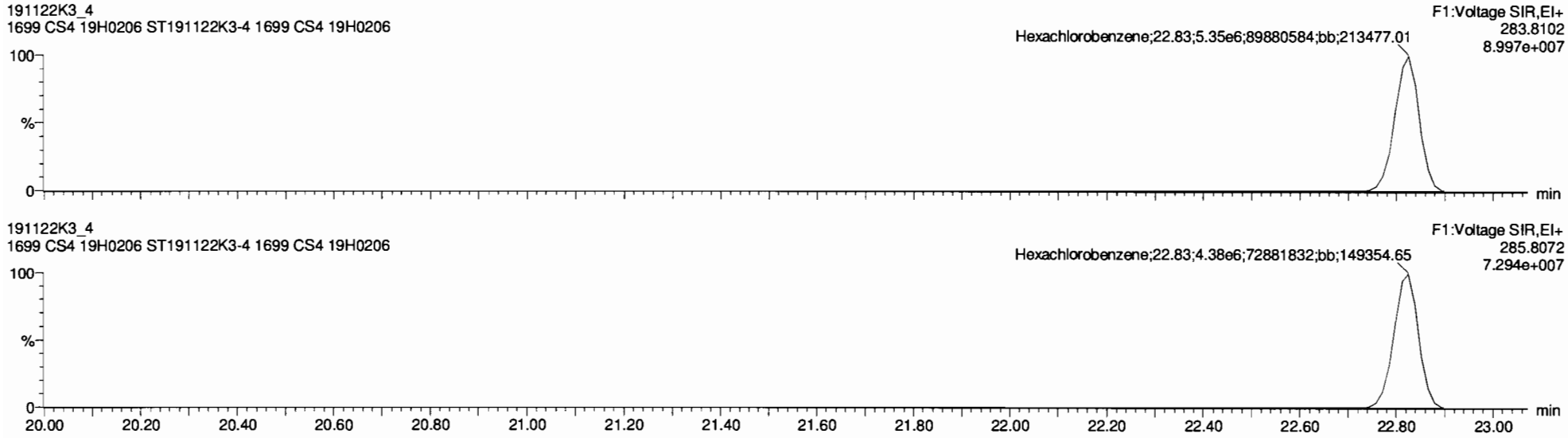
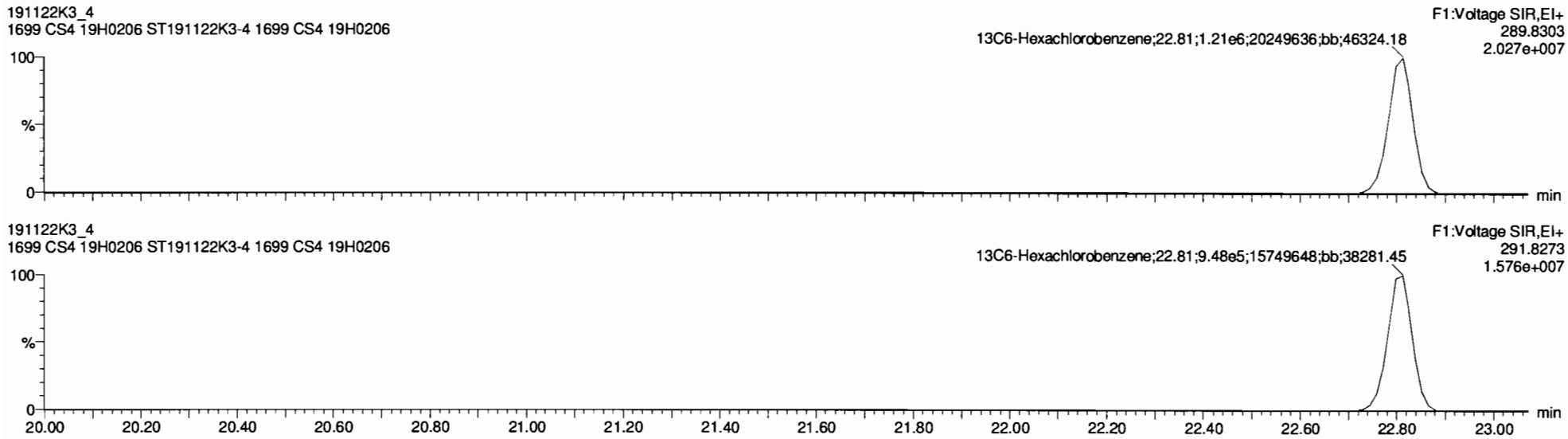
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Hexachlorobenzene



13C6-Hexachlorobenzene



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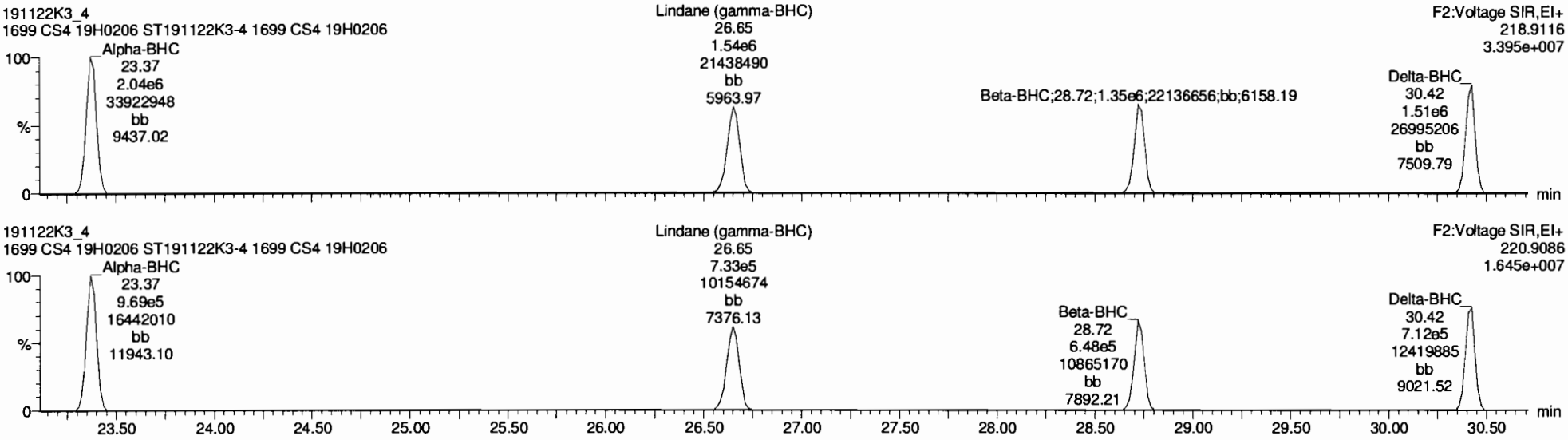
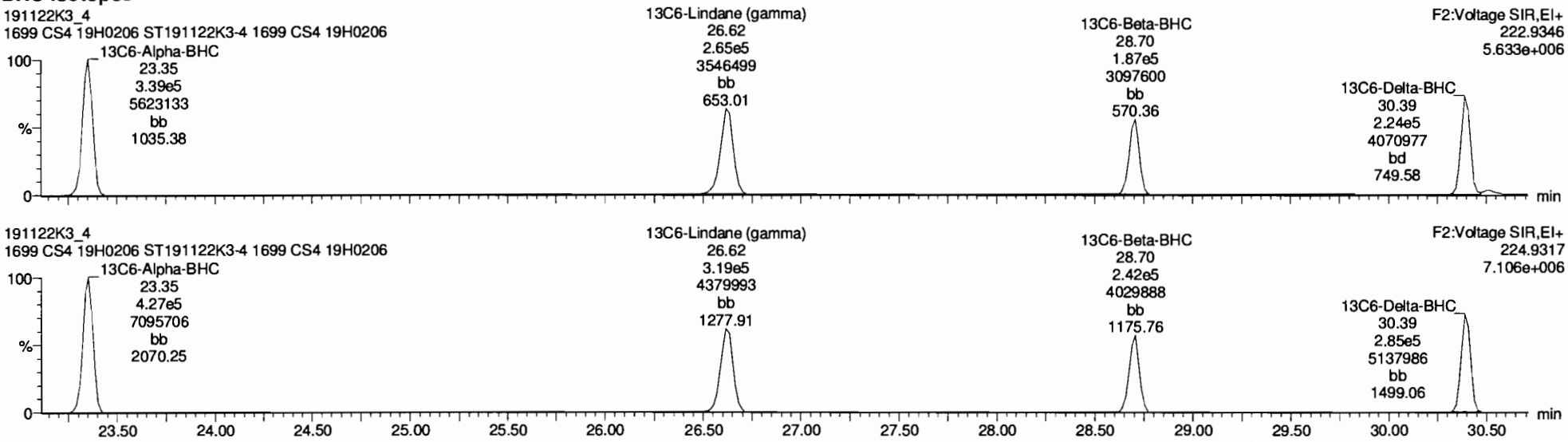
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

BHC Totals



BHC-isotopes



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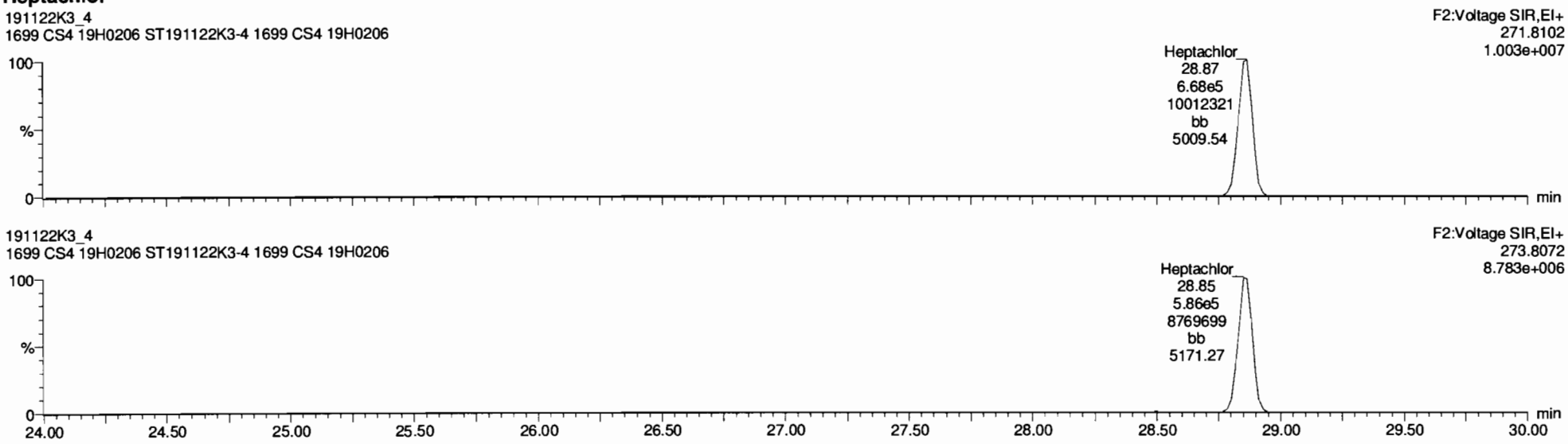
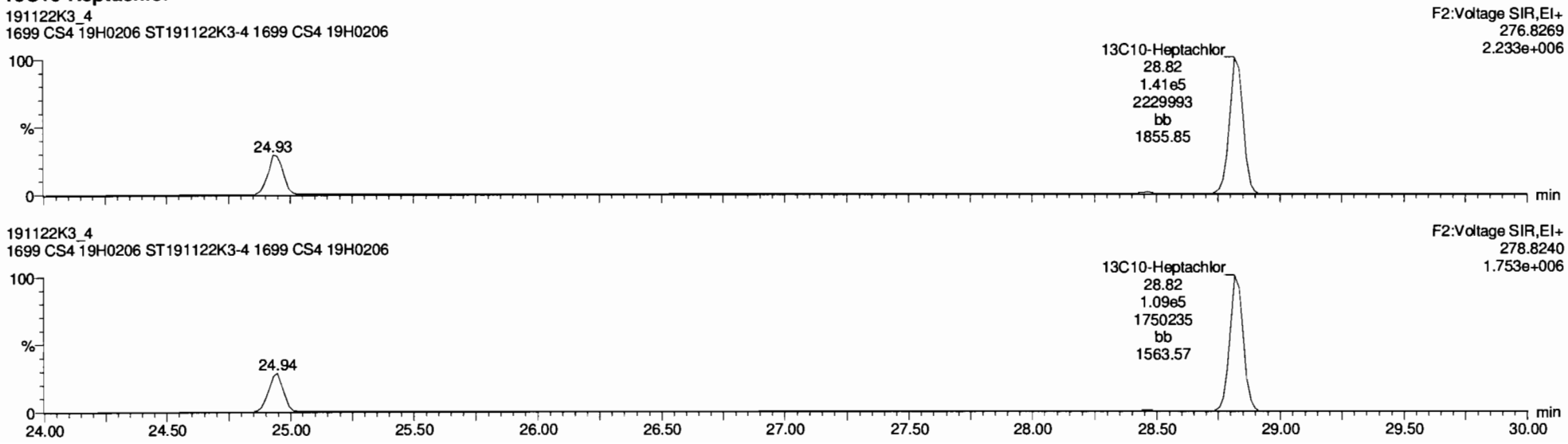
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Heptachlor



13C10-Heptachlor



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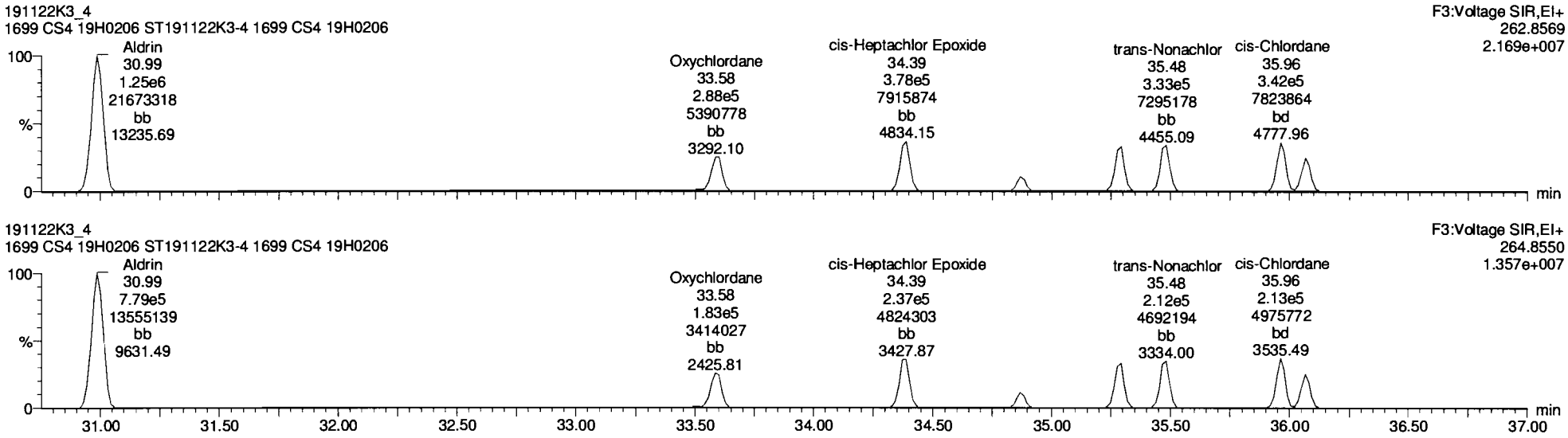
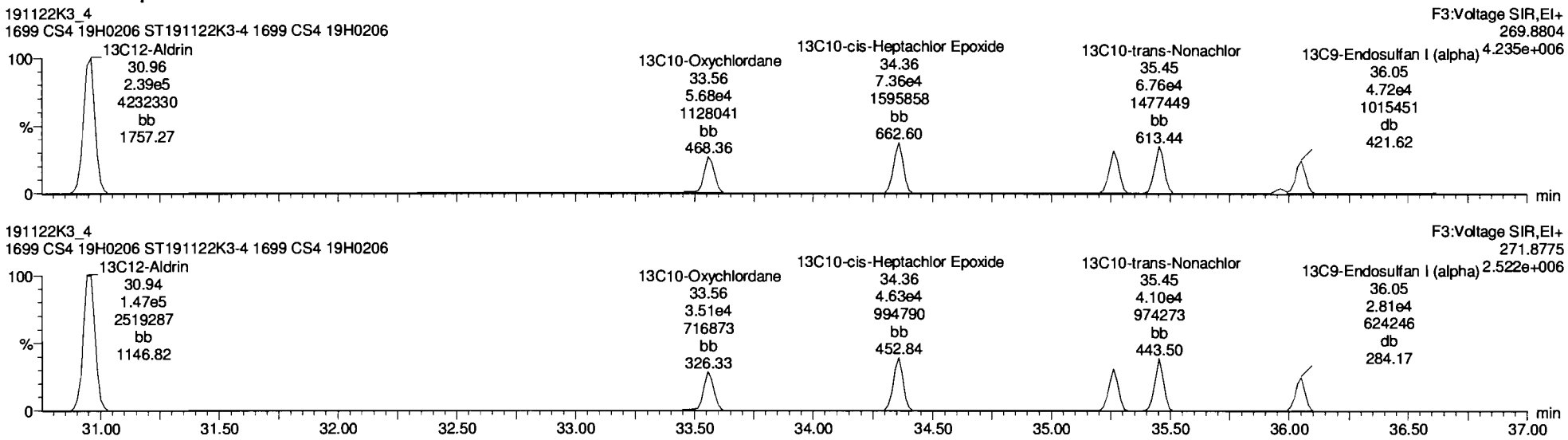
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Aldrin-EI



Aldrin-EI-isotopes



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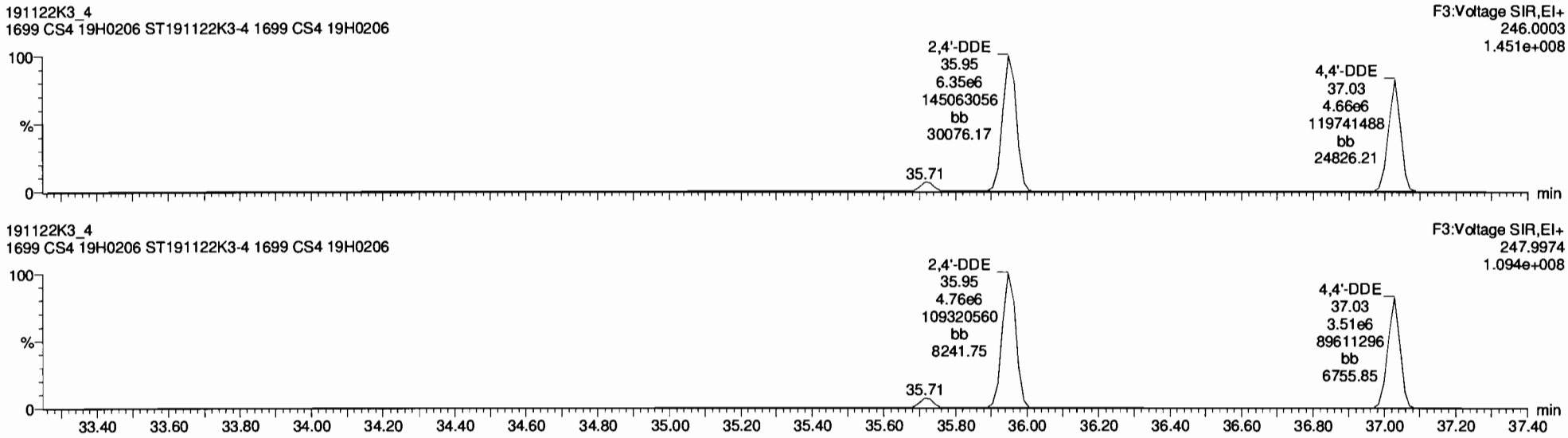
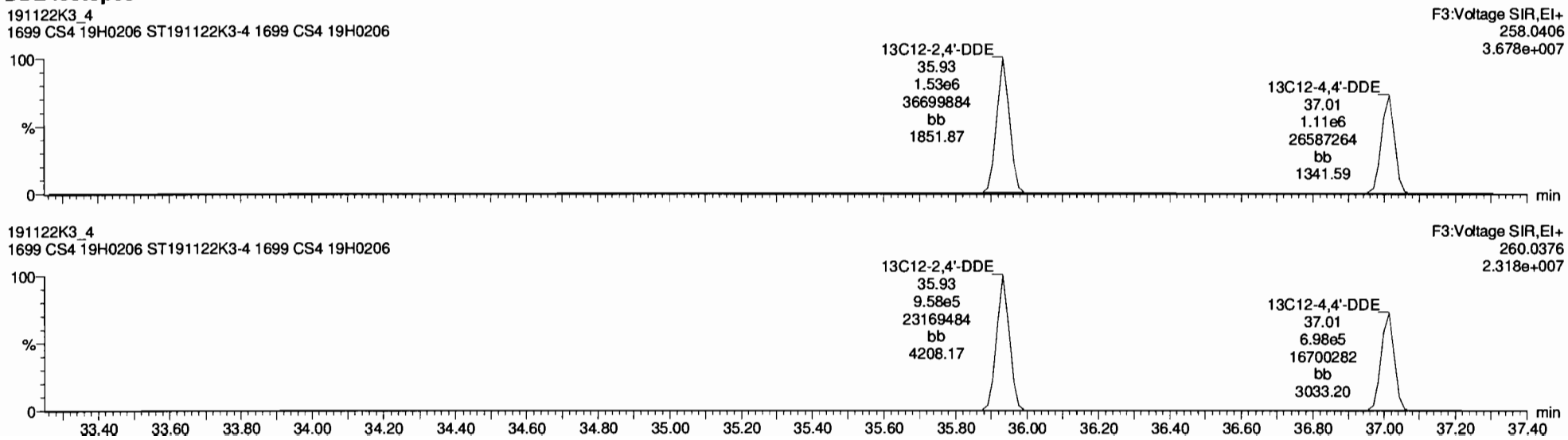
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

DDMU-DDE



DDE-isotopes



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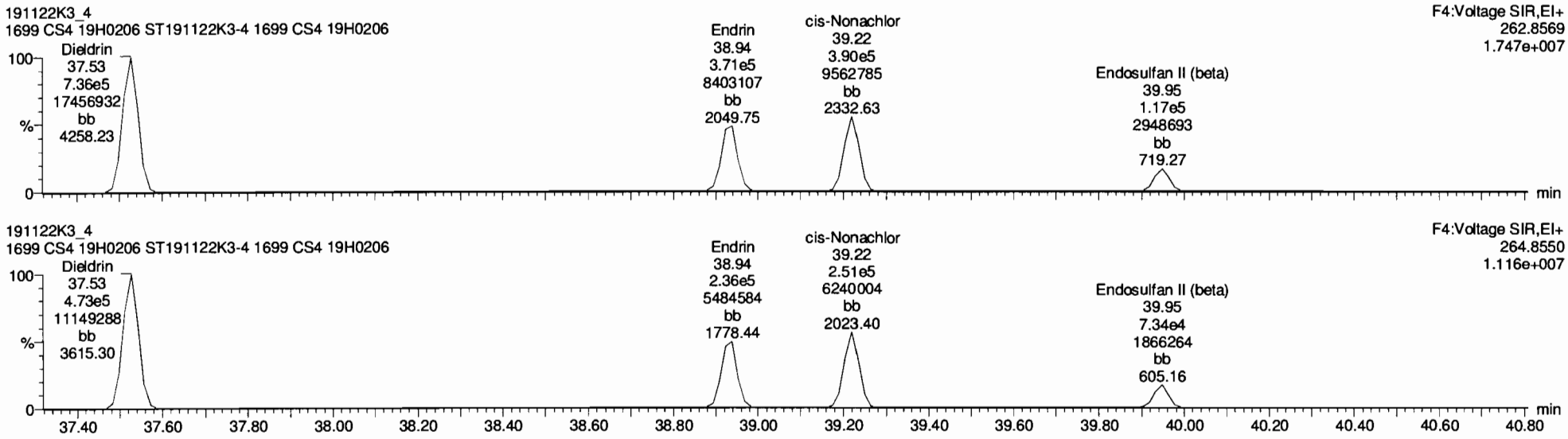
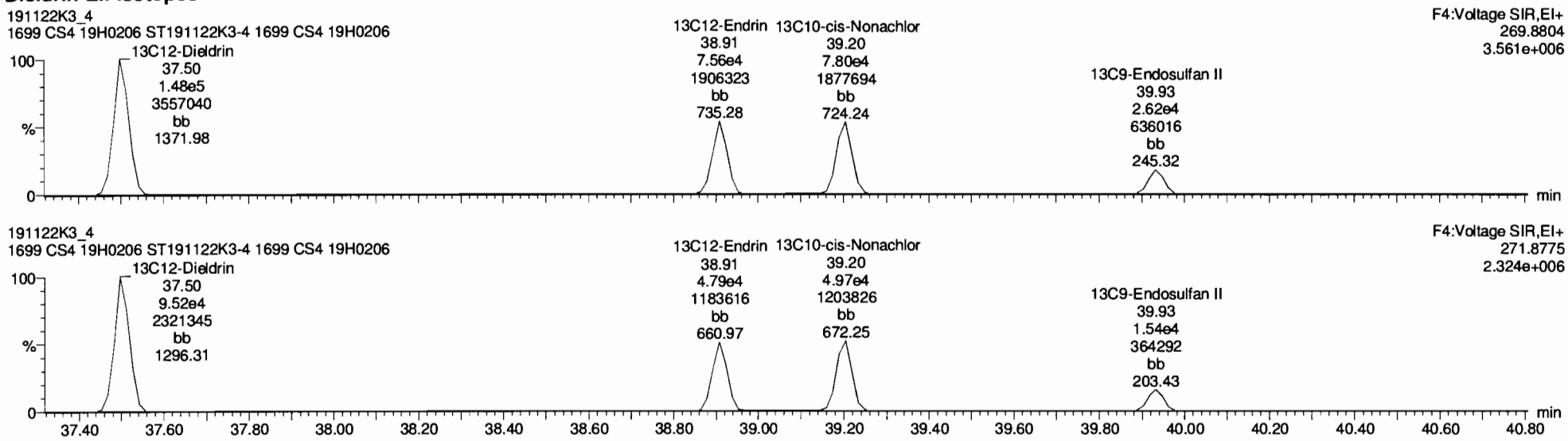
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Dieldrin-EII



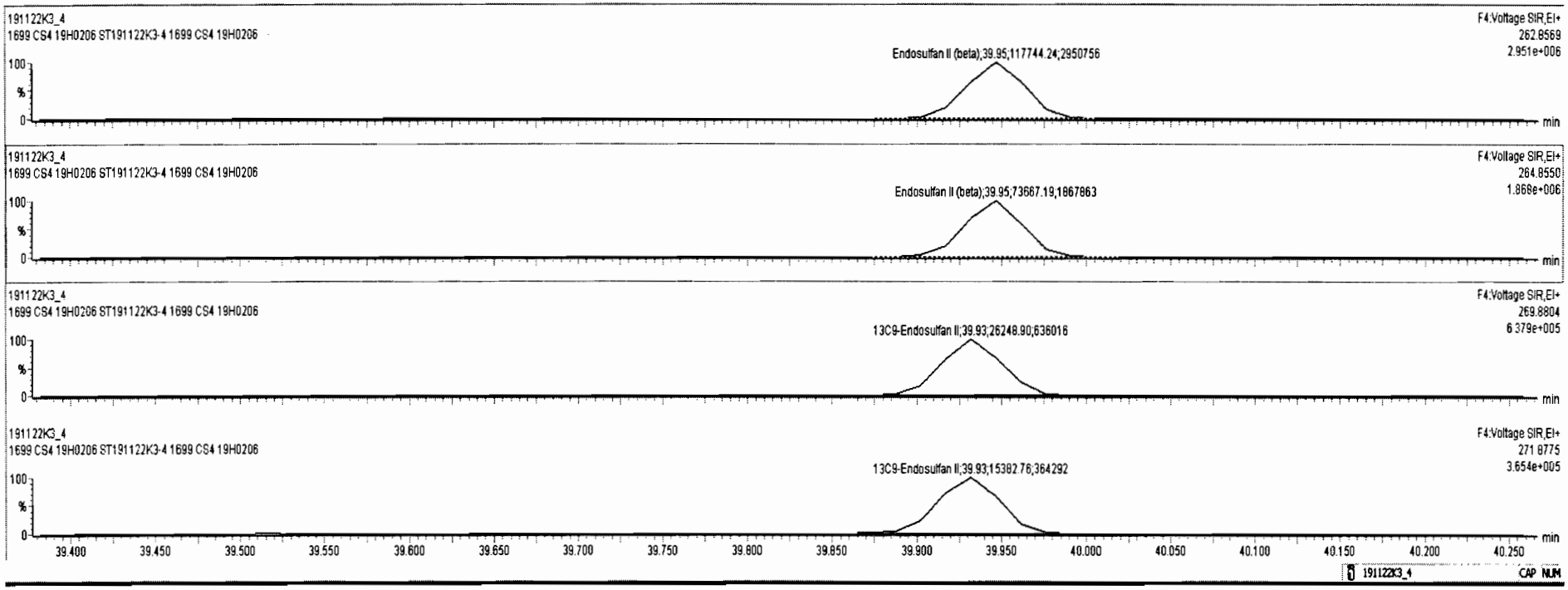
Dieldrin-EII-isotopes



TargetLynx - 191122K3 CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	R...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
1	1	Hexachlorobutadiene	10.23	0.047	YES	7.3897e4	4.1143e6	1250.000	-96.0	185	0.179	0.332
2	2	Hexachlorobenzene	22.83	1.223	NO	9.7321e6	2.1575e6	250.000	3.2	9.56	0.874	0.0836
3	3	Alpha-BHC	23.37	2.107	NO	3.0118e6	7.6581e5	250.000	3.4	9.29	0.760	0.0706
4	4	Lindane (gamma-BHC)	26.65	2.097	NO	2.2688e6	5.8348e5	250.000	4.6	10.7	0.744	0.0799
5	5	Beta-BHC	28.72	2.062	NO	1.9969e6	4.2923e5	250.000	3.8	9.61	0.896	0.0861
6	6	Delta-BHC	30.42	2.126	NO	2.2247e6	5.0843e5	250.000	4.5	9.98	0.837	0.0835
7	7	Heptachlor	28.86	1.141	NO	1.2544e6	2.4927e5	250.000	4.0	10.0	0.968	0.0968
8	8	4,4'-DDMU	30.34	3.166	NO	3.3648e6	5.0843e5	250.000	4.5	11.3	1.27	0.143
9	9	Aldrin	30.99	1.601	NO	2.0264e6	3.8608e5	250.000	2.5	9.91	1.02	0.101
10	10	Oxychlordane	33.58	1.576	NO	4.7150e5	9.1878e4	250.000	3.4	9.31	0.992	0.0924
11	11	cis-Heptachlor Epoxide	34.39	1.593	NO	6.1540e5	1.1982e5	250.000	2.4	10.4	1.00	0.104
12	12	trans-Heptachlor Epoxide	34.87	1.542	NO	1.6301e5	1.1982e5	250.000	6.7	11.6	0.255	0.0297
13	13	trans-Chlordane (gamma)	35.29	1.578	NO	5.2482e5	9.7237e4	250.000	-0.4	13.1	1.08	0.142
14	14	trans-Nonachlor	35.48	1.568	NO	5.4536e5	1.0858e5	250.000	0.2	14.4	1.00	0.144
15	15	cis-Chlordane	35.96	1.605	NO	5.5577e5	1.0858e5	250.000	4.4	12.3	0.981	0.121
16	16	Endosulfan I (alpha)	36.06	1.577	NO	3.7325e5	7.5267e4	250.000	-10.4	19.7	1.11	0.218
17	17	4,4'-DDMU	35.73	3.165	NO	7.8377e6	2.4840e6	250.000	2.3	11.3	0.617	0.0697
18	18	2,4'-DDE	35.95	1.335	NO	1.1105e7	2.4840e6	250.000	4.7	10.0	0.854	0.0855
19	19	4,4'-DDE	37.03	1.327	NO	8.1778e6	1.8068e6	250.000	3.7	10.3	0.873	0.0898
20	20	Deldrin	37.53	1.557	NO	1.2095e6	2.4361e5	250.000	3.8	10.0	0.957	0.0957
21	21	Endrin	38.94	1.573	NO	6.0629e5	1.2354e5	250.000	5.3	10.5	0.933	0.0975
22	22	cis-Nonachlor	39.22	1.553	NO	6.4054e5	1.2764e5	250.000	5.0	12.2	0.958	0.117
23	23	Endosulfan II (beta)	39.95	1.598	NO	1.9141e5	4.1632e4	250.000	-13.6	19.9	1.06	0.212



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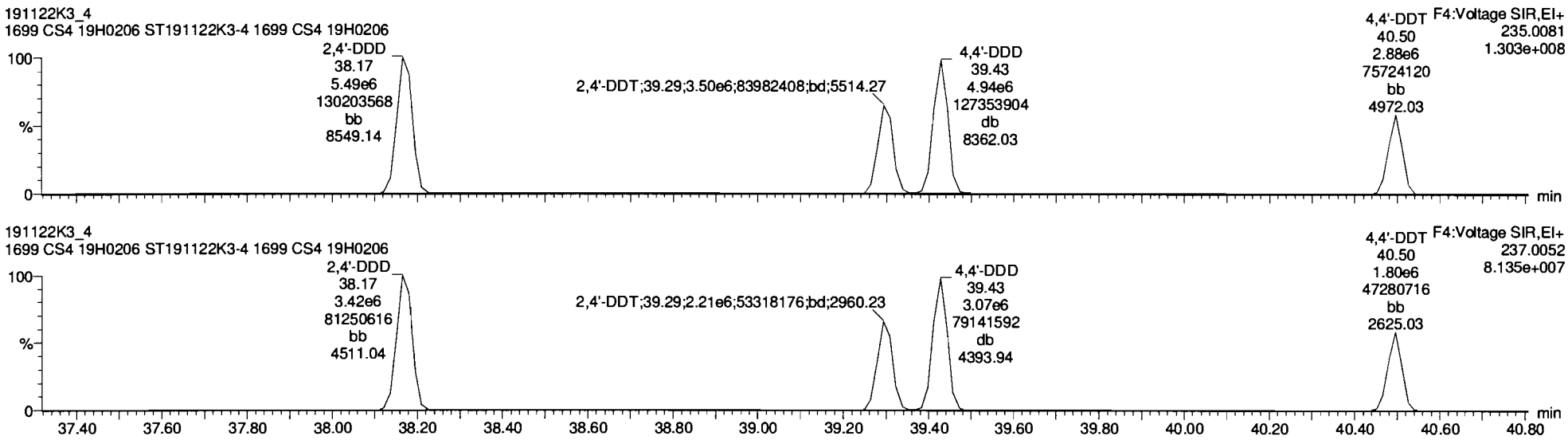
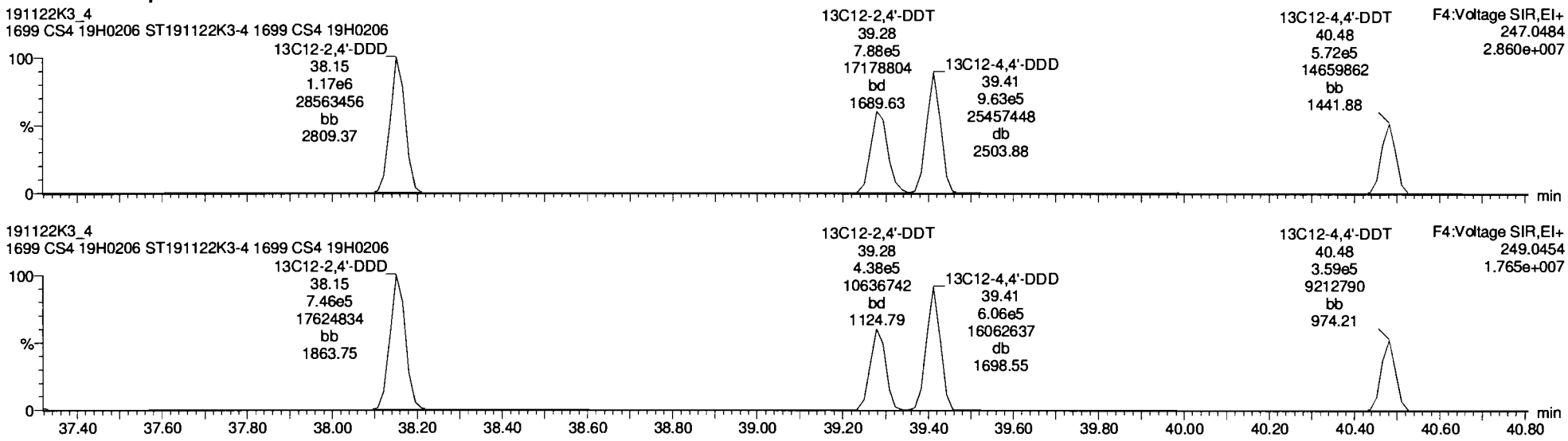
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

DDD-DDT



DDD-DDT-isotopes



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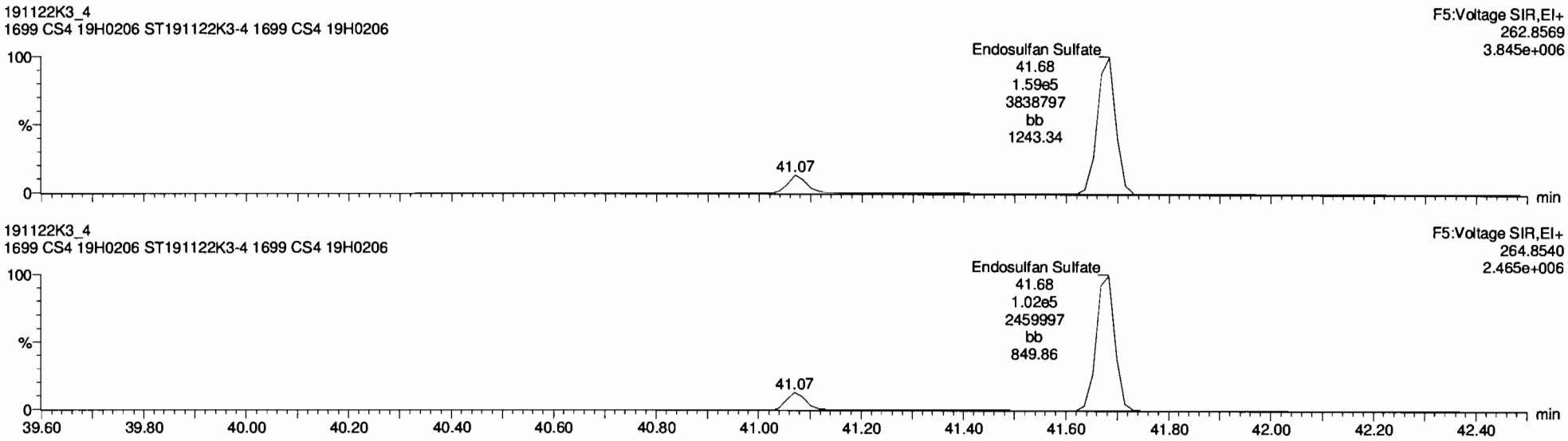
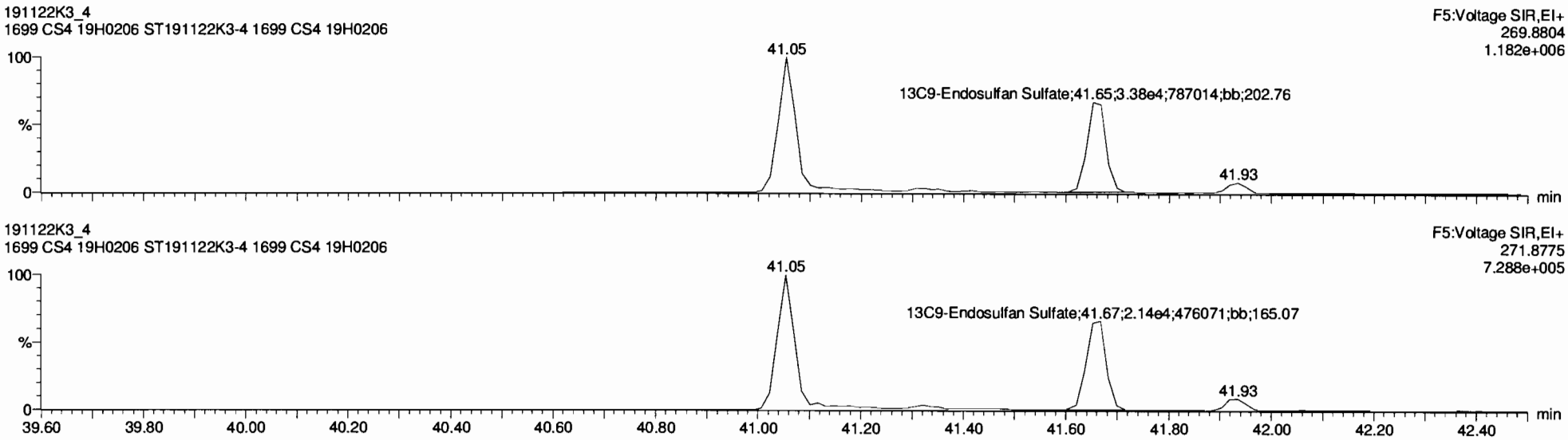
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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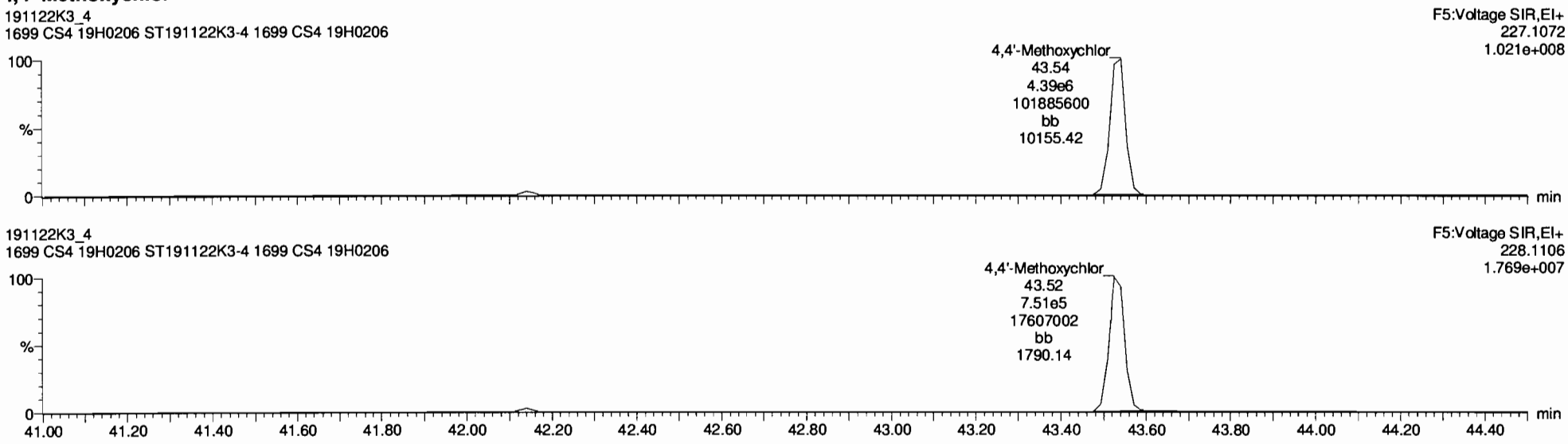
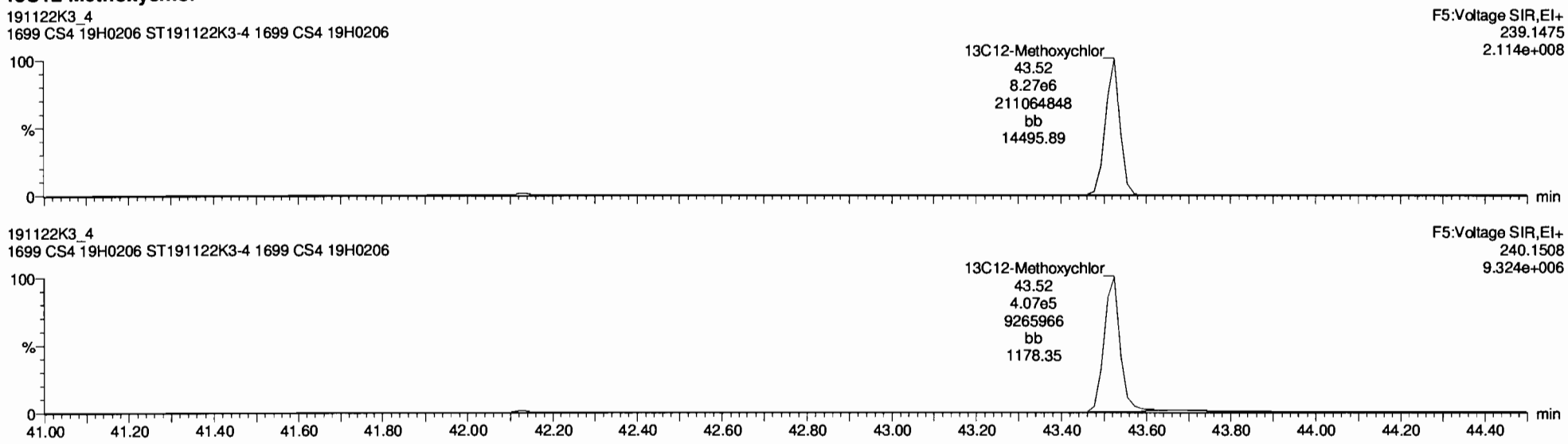
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

4,4'-Methoxychlor



13C12-Methoxychlor



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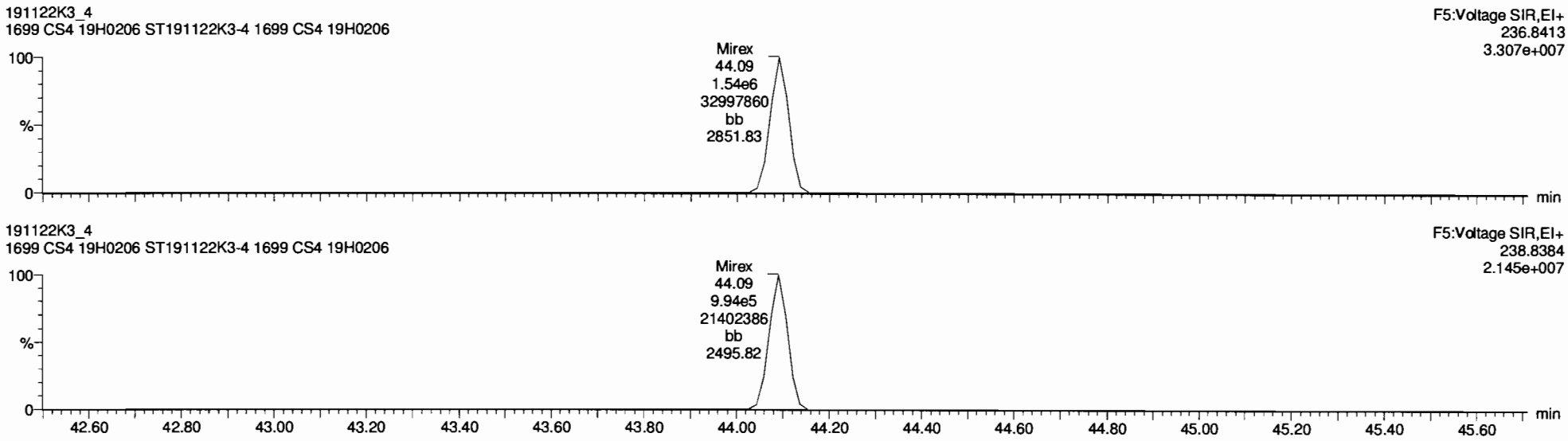
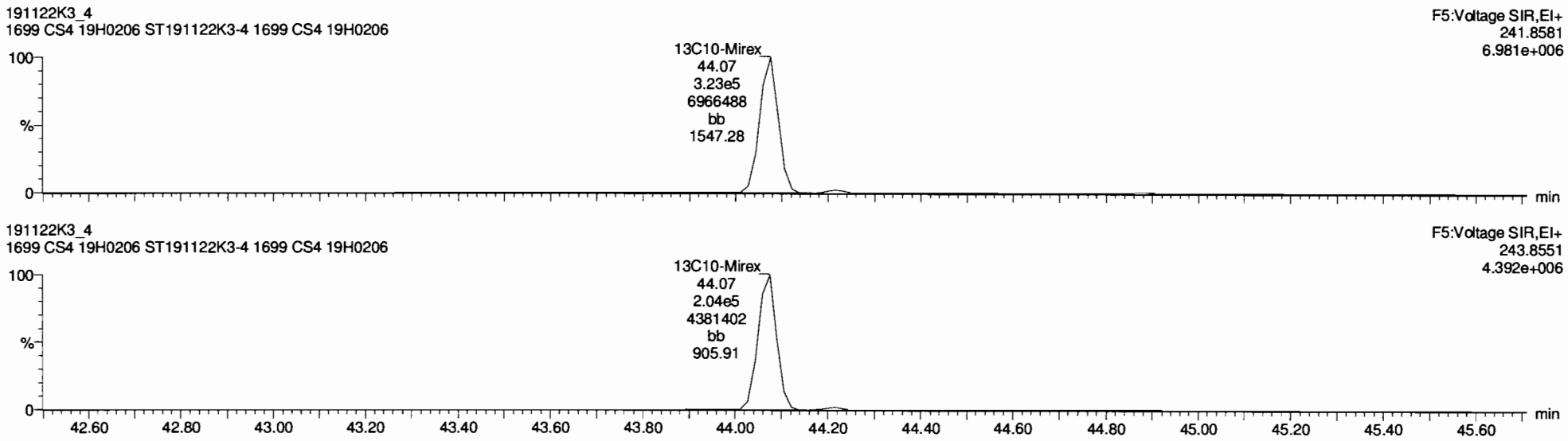
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

Mirex



13C10-Mirex



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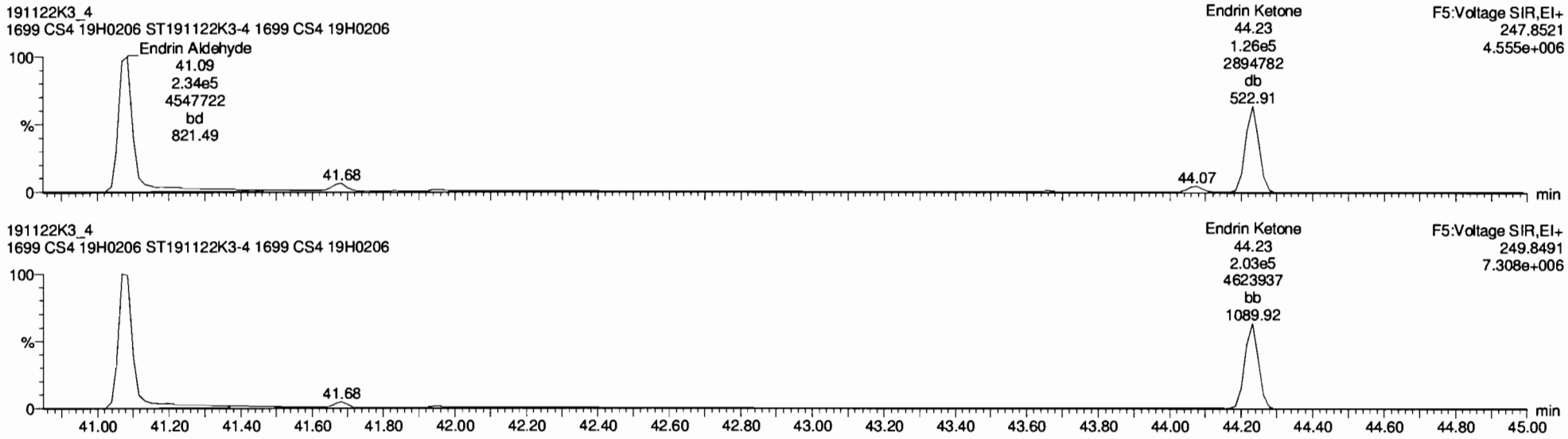
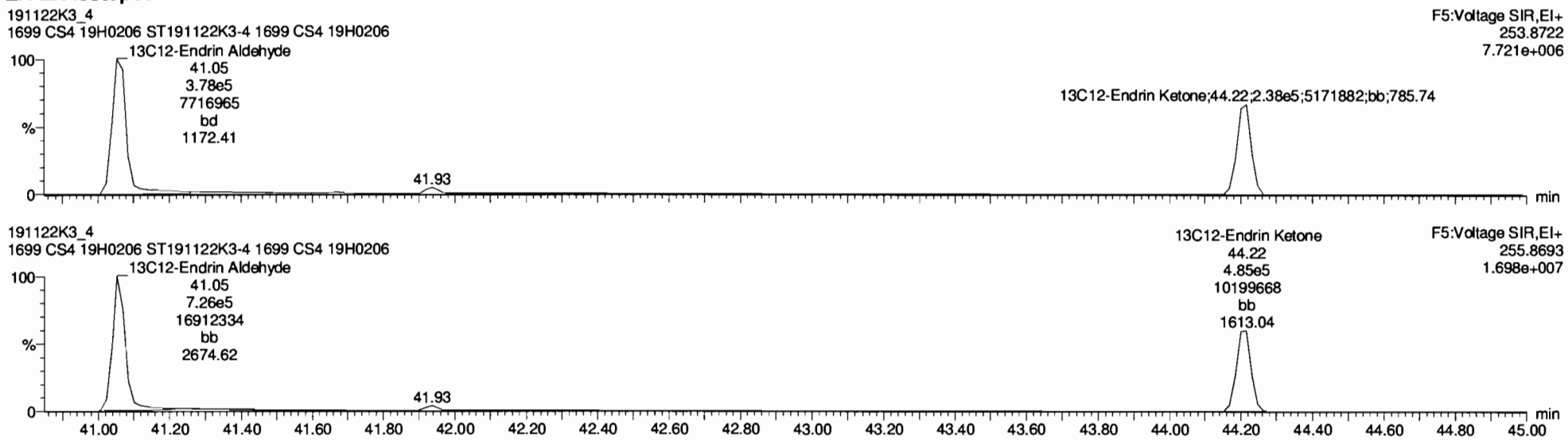
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

EA-EK



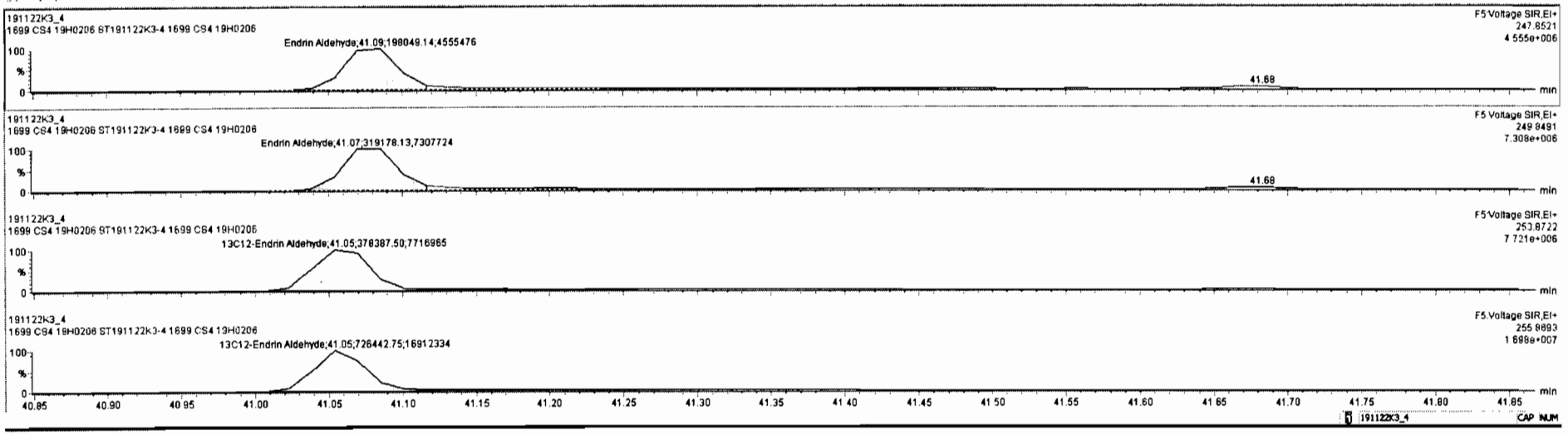
EA-EK-isotopes



TargetLynx 191122K3 CRV.qld * [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	RT	RA	Y/N	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
24	24	2,4'-DDD	38.17	1.605	NO	8.9033e6	1.9142e6	250.000	1.6	9.76	0.915	0.0893
25	25	2,4'-DDT	39.29	1.587	NO	5.7048e6	1.2261e6	250.000	1.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.43	1.607	NO	8.0051e6	1.5684e6	250.000	1.7	10.1	1.00	0.101
27	27	4,4'-DDT	40.50	1.598	NO	4.8826e6	9.3104e5	250.000	2.0	9.87	0.966	0.0974
28	28	Endosulfan Sulfate	41.68	1.558	NO	2.6177e5	5.5229e4	250.000	2.2	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	5.845	NO	5.1427e6	8.6776e6	250.000	4.3	10.6	1.14	0.120
30	30	Mirex	44.09	1.550	NO	2.5343e6	5.2631e5	250.000	3.3	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.09	0.620	NO	5.1723e6	1.1048e6	250.000	1.9	12.7	0.919	0.116
32	32	Endrin Ketone	44.23	0.620	NO	3.2917e5	7.2298e5	250.000	-0.0	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.262	NO	4.1143e6	3.2237e6	500.000	-7.6	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.81	1.276	NO	2.1575e6	3.2237e6	50.000	-3.2	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.35	0.794	NO	7.5581e5	3.2237e6	50.000	-3.3	2.06	0.246	0.00508
36	36	13C6-Lindane (gamma)	26.82	0.831	NO	5.8348e5	3.2237e6	50.000	-4.4	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.70	0.773	NO	4.2923e5	3.2237e6	50.000	-5.3	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.39	0.786	NO	5.0843e5	3.2237e6	50.000	-4.1	4.21	0.164	0.00692
39	39	13C10-Heptachlor	26.82	1.294	NO	2.4927e5	3.2237e6	50.000	0.5	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.96	1.623	NO	3.8608e5	3.2237e6	50.000	-1.5	3.19	0.122	0.00388
41	41	13C10-Oxychlordane	33.56	1.617	NO	9.1878e4	3.2237e6	50.000	0.7	8.55	0.0283	0.00242
42	42	13C10-cis-Heptachlor Epo...	34.36	1.591	NO	1.1982e5	3.2237e6	50.000	1.5	9.94	0.0366	0.00327
43	43	13C10-trans-Chlordane (g...	35.26	1.796	NO	9.7237e4	3.2237e6	50.000	3.4	5.12	0.0292	0.00149
44	44	13C10-trans-Nonachlor	35.45	1.648	NO	1.0858e5	3.2237e6	50.000	1.0	9.41	0.0333	0.00314
45	45	13C9-Endosulfan I (alpha)	36.05	1.682	NO	7.5287e4	3.2237e6	50.000	10.1	7.38	0.0212	0.00156
46	46	13C12-2,4'-DDE	35.93	1.592	NO	2.4840e6	3.2237e6	50.000	1.0	4.08	0.763	0.0312



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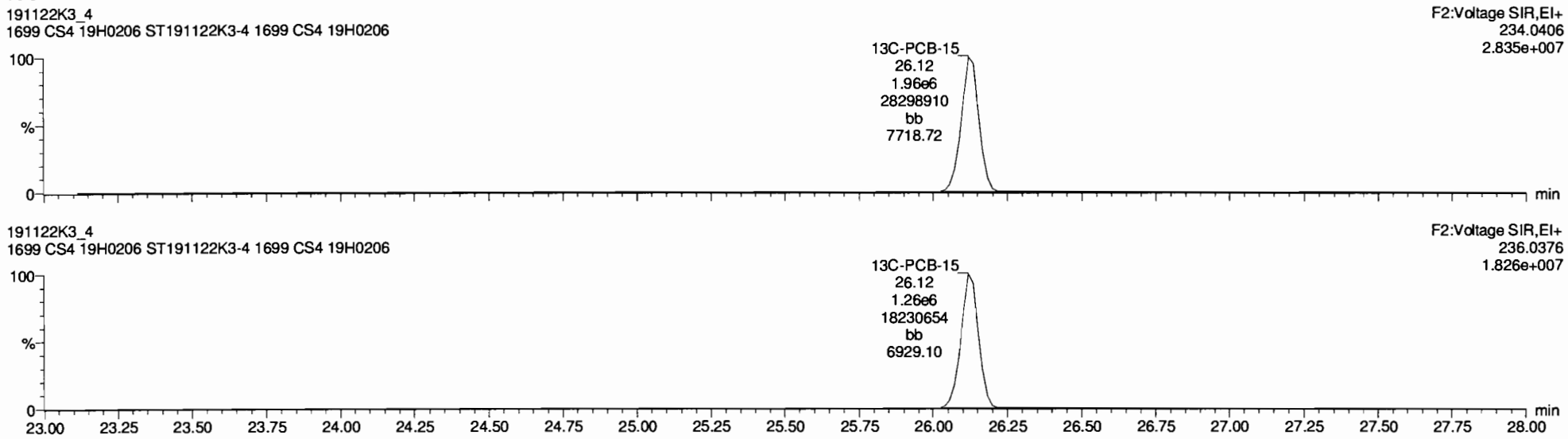
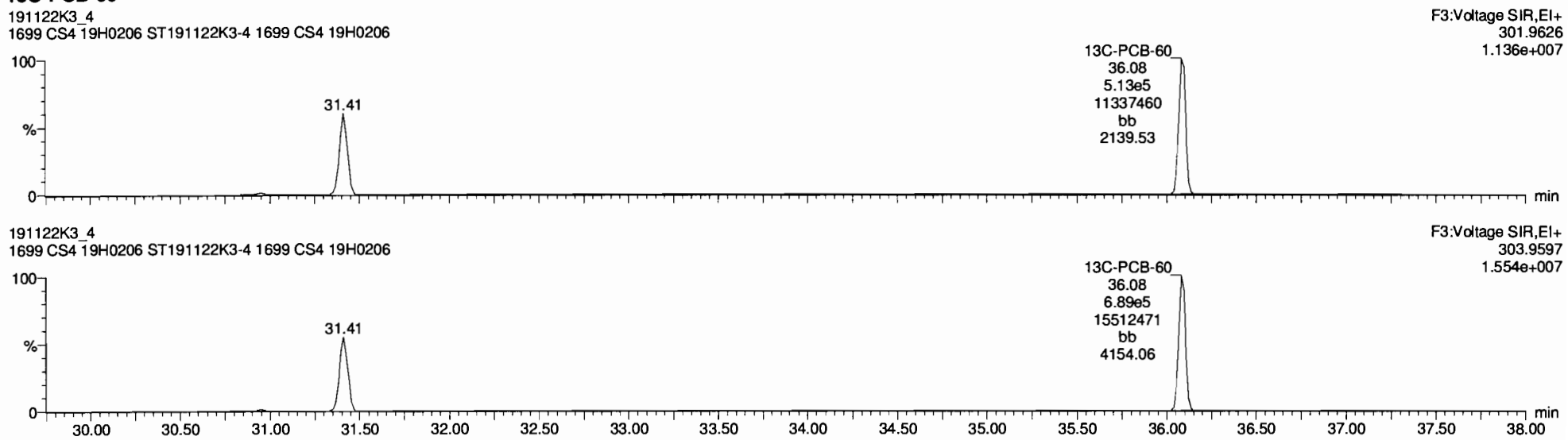
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

13C-PCB-15



13C-PCB-60



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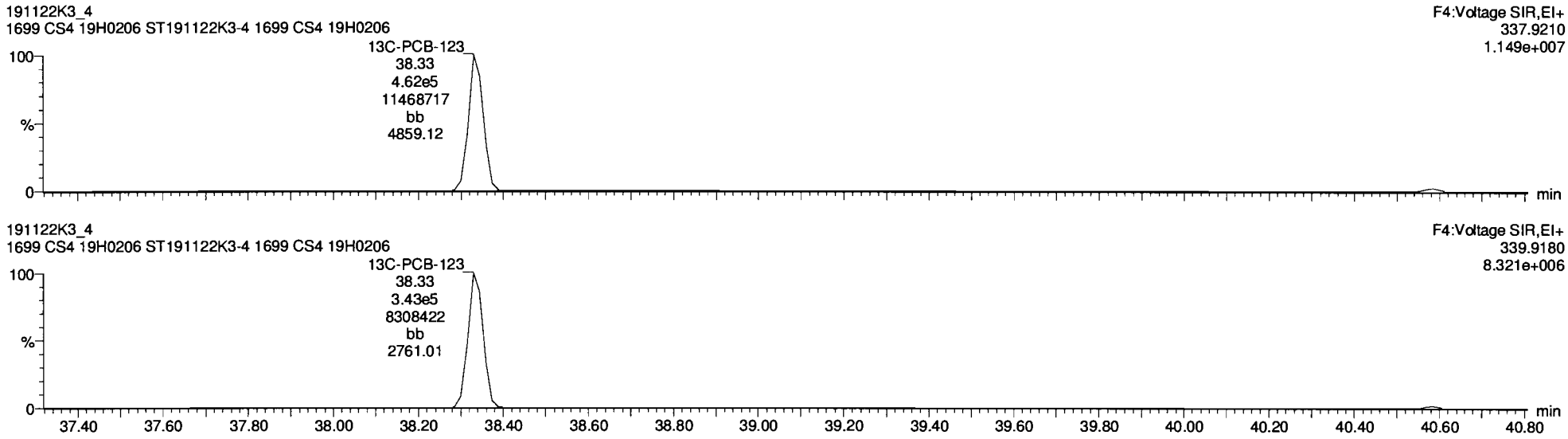
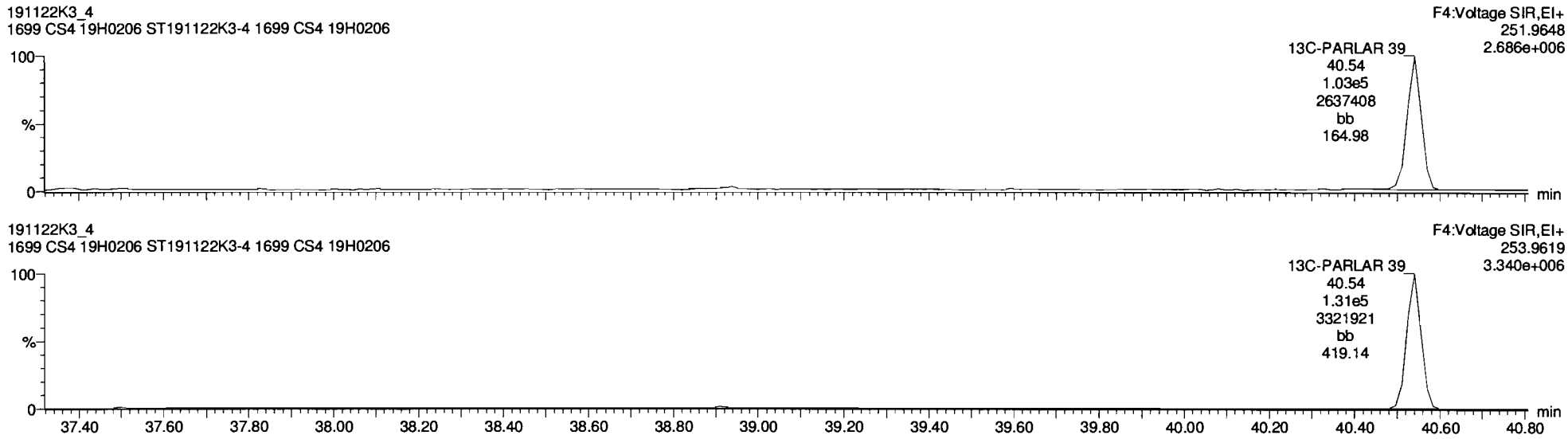
13C-PCB-123



13C-PARLAR 39



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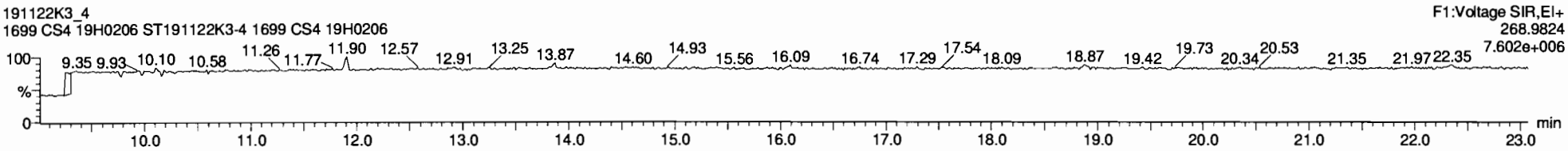
Name: 191122K3_4, Date: 22-Nov-2019, Time: 18:28:36, ID: ST191122K3-4 1699 CS4 19H0206, Description: 1699 CS4 19H0206

PFK1



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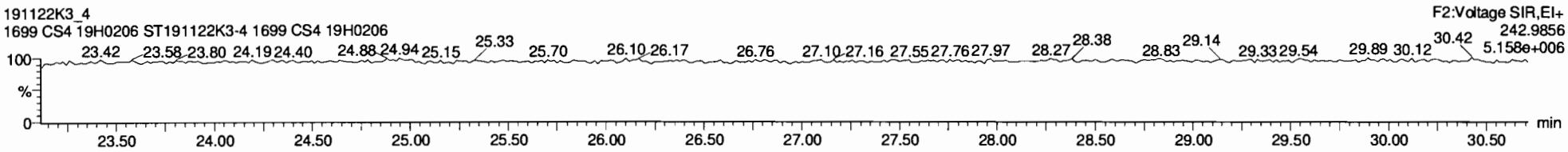

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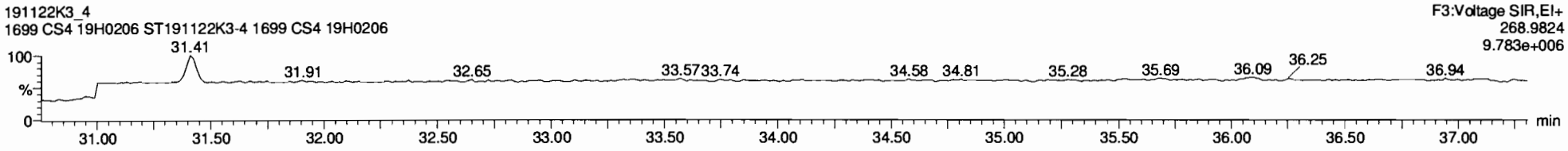

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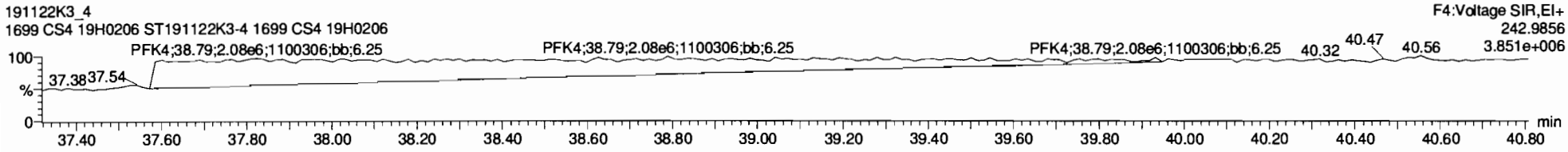
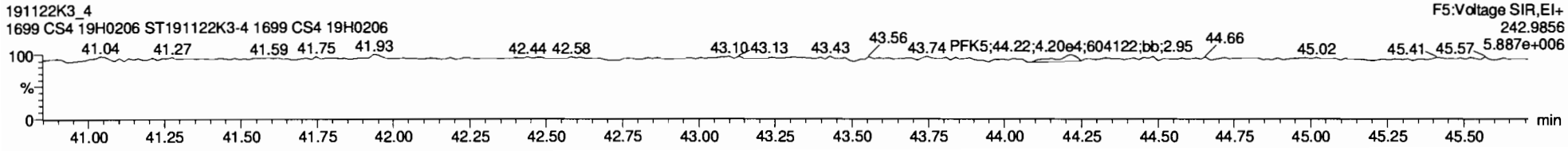


PFK5



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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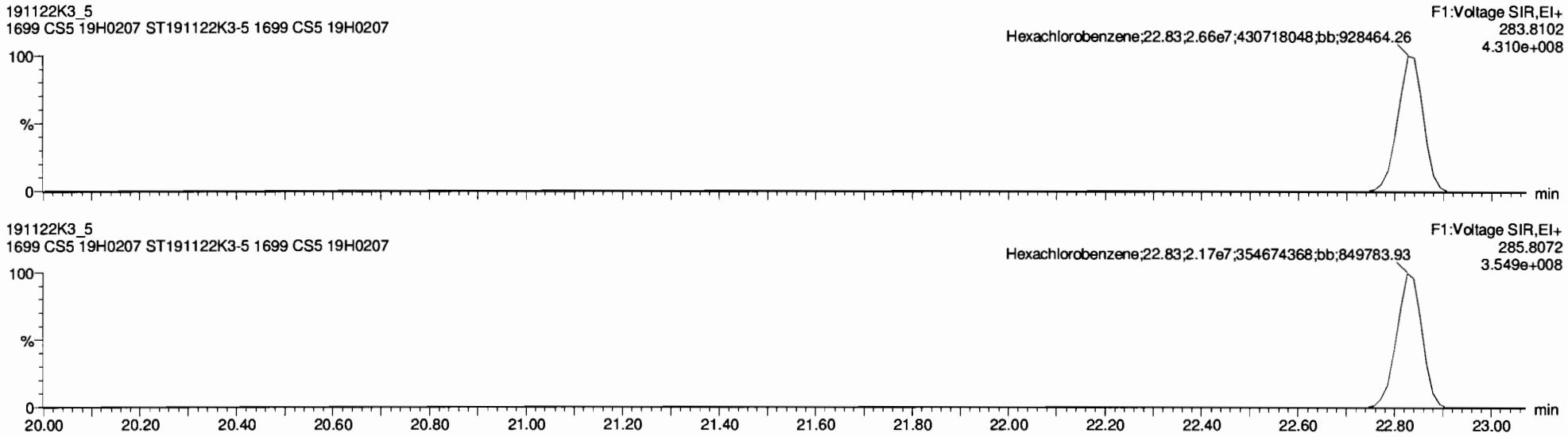
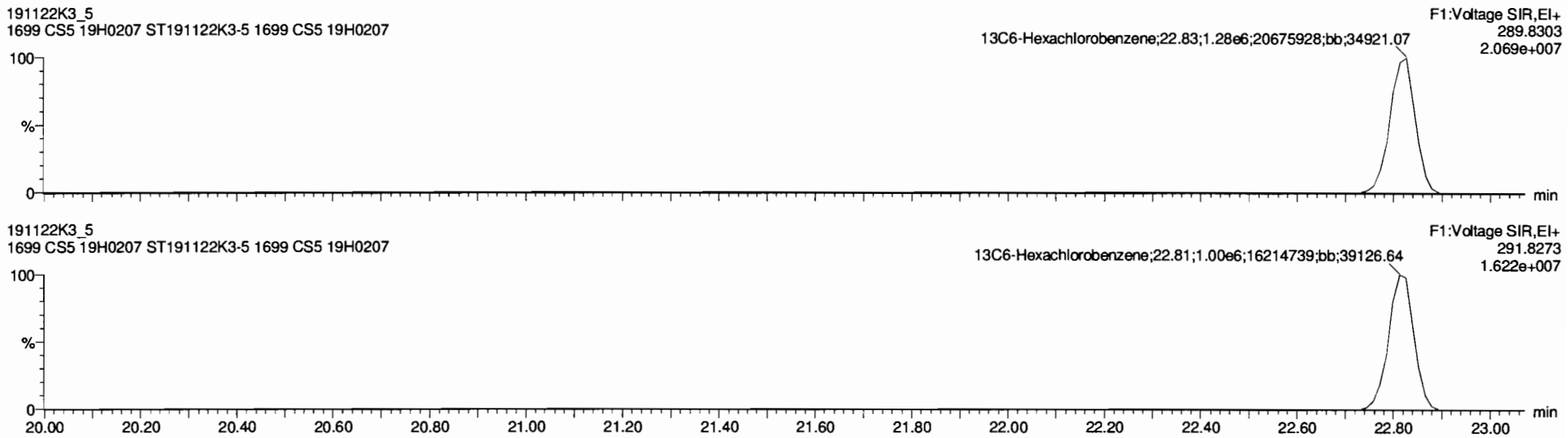
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Hexachlorobenzene



13C6-Hexachlorobenzene



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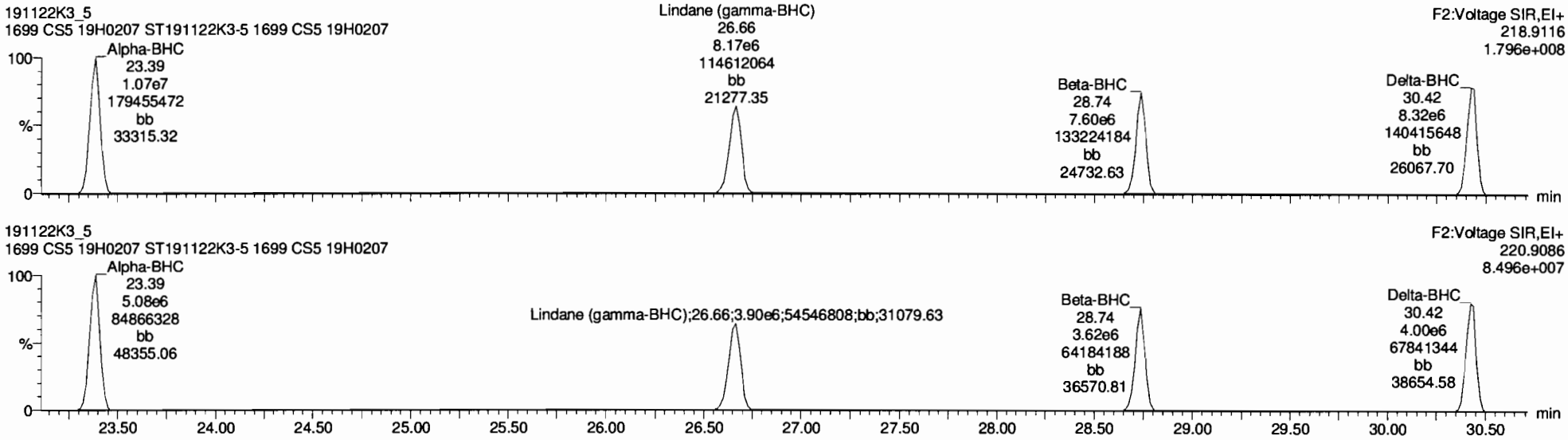
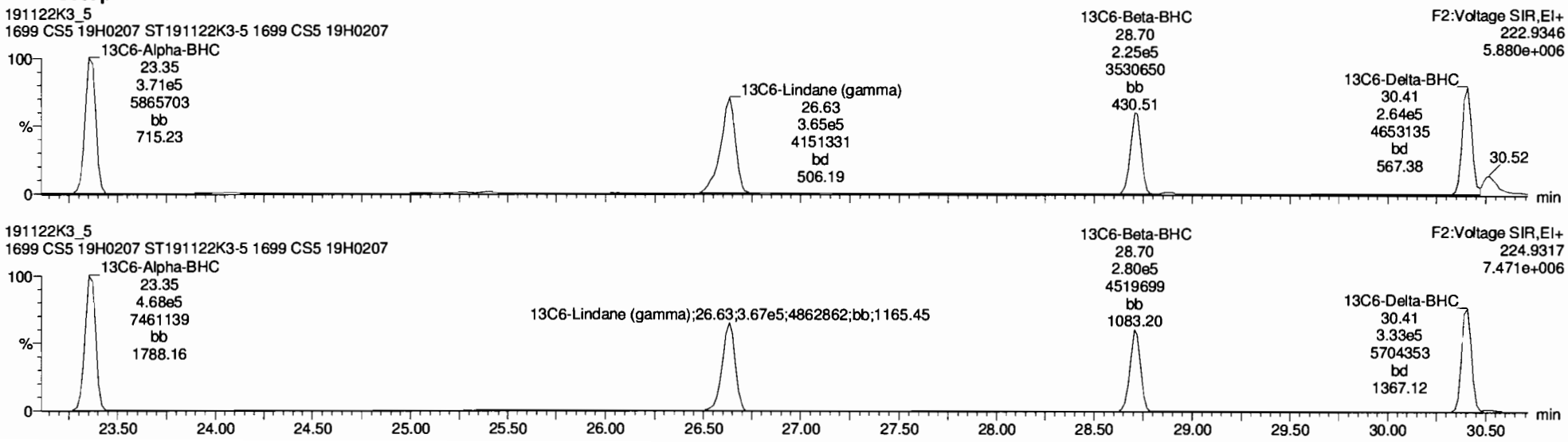
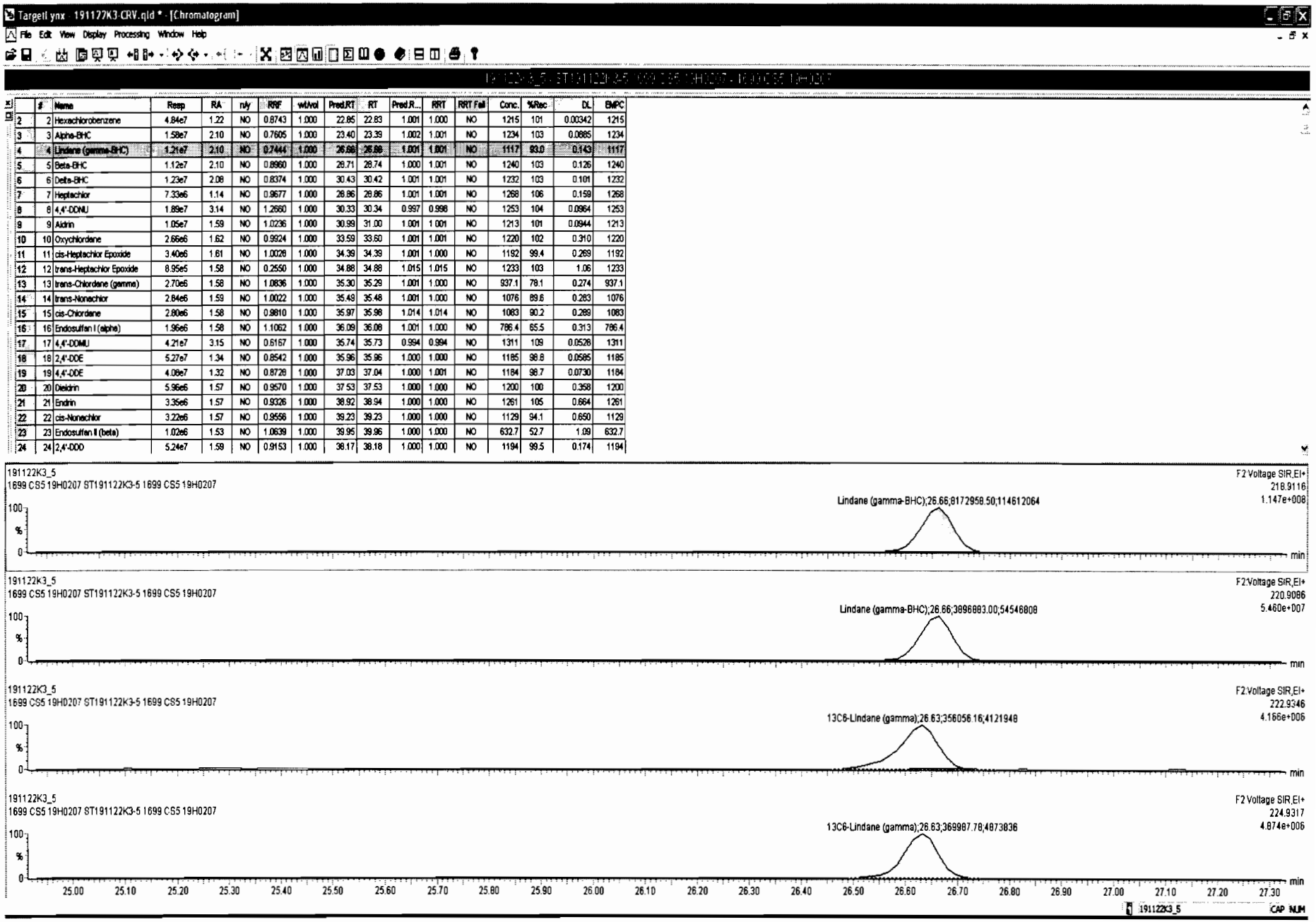
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

BHC Totals



BHC-isotopes





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2	2	Hexachlorobenzene	4.84e7	1.22	NO	0.8743	1.000	22.85	22.83	1.001	1.000	NO	1215	101	0.00342	1215
3	3	Alpha-BHC	1.58e7	2.10	NO	0.7605	1.000	23.40	23.39	1.002	1.001	NO	1234	103	0.0885	1234
4	4	Lindane (gamma-BHC)	1.21e7	2.10	NO	0.7444	1.000	26.66	26.66	1.001	1.001	NO	1117	93.0	0.143	1117
5	5	Beta-BHC	1.12e7	2.10	NO	0.8960	1.000	26.71	26.74	1.000	1.001	NO	1240	103	0.126	1240
6	6	Delta-BHC	1.23e7	2.08	NO	0.8374	1.000	30.43	30.42	1.001	1.001	NO	1232	103	0.101	1232
7	7	Heptachlor	7.33e6	1.14	NO	0.9677	1.000	26.86	26.86	1.001	1.001	NO	1268	106	0.159	1268
8	8	4,4'-DDMU	1.89e7	3.14	NO	1.2660	1.000	30.33	30.34	0.997	0.998	NO	1253	104	0.0964	1253
9	9	Aldrin	1.05e7	1.59	NO	1.0236	1.000	30.99	31.00	1.001	1.001	NO	1213	101	0.0944	1213
10	10	Oxychlordane	2.66e6	1.62	NO	0.9924	1.000	33.59	33.60	1.001	1.001	NO	1220	102	0.310	1220
11	11	cis-Heptachlor Epoxide	3.40e6	1.61	NO	1.0026	1.000	34.39	34.39	1.001	1.000	NO	1192	99.4	0.269	1192
12	12	trans-Heptachlor Epoxide	8.95e5	1.58	NO	0.2550	1.000	34.88	34.88	1.015	1.015	NO	1233	103	1.06	1233
13	13	trans-Chlordane (gamma)	2.70e6	1.58	NO	1.0836	1.000	35.30	35.29	1.001	1.000	NO	937.1	78.1	0.274	937.1
14	14	trans-Nonachlor	2.84e6	1.59	NO	1.0022	1.000	35.49	35.48	1.001	1.000	NO	1076	89.6	0.263	1076
15	15	cis-Chlordane	2.80e6	1.58	NO	0.9810	1.000	35.97	35.98	1.014	1.014	NO	1083	90.2	0.289	1083
16	16	Endosulfan I (alpha)	1.96e6	1.58	NO	1.1062	1.000	36.09	36.08	1.001	1.000	NO	786.4	65.5	0.313	786.4
17	17	4,4'-DDMU	4.21e7	3.15	NO	0.6167	1.000	35.74	35.73	0.994	0.994	NO	1311	109	0.0528	1311
18	18	2,4'-DDE	5.27e7	1.34	NO	0.8542	1.000	35.96	35.96	1.000	1.000	NO	1185	98.8	0.0585	1185
19	19	4,4'-DDE	4.08e7	1.32	NO	0.8728	1.000	37.03	37.04	1.000	1.001	NO	1184	98.7	0.0730	1184
20	20	Dieldrin	5.96e6	1.57	NO	0.9570	1.000	37.53	37.53	1.000	1.000	NO	1200	100	0.358	1200
21	21	Endrin	3.35e6	1.57	NO	0.9326	1.000	38.92	38.94	1.000	1.000	NO	1261	105	0.664	1261
22	22	cis-Nonachlor	3.22e6	1.57	NO	0.9558	1.000	39.23	39.23	1.000	1.000	NO	1129	94.1	0.650	1129
23	23	Endosulfan II (beta)	1.02e6	1.53	NO	1.0639	1.000	39.95	39.96	1.000	1.000	NO	632.7	52.7	1.09	632.7
24	24	2,4'-DDD	5.24e7	1.59	NO	0.9153	1.000	38.17	38.18	1.000	1.000	NO	1194	99.5	0.174	1194

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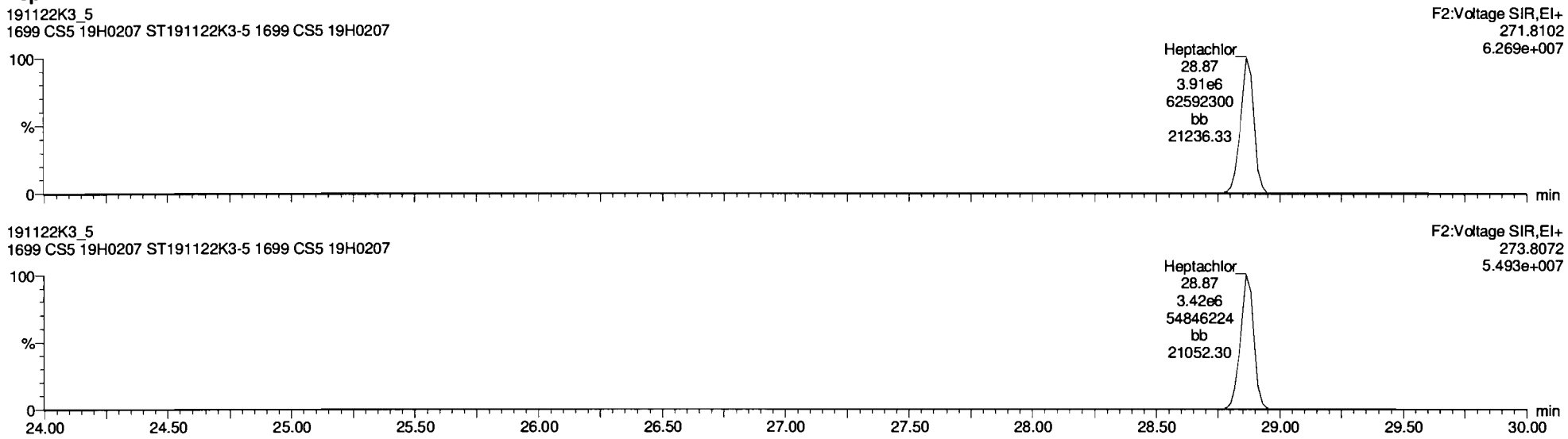
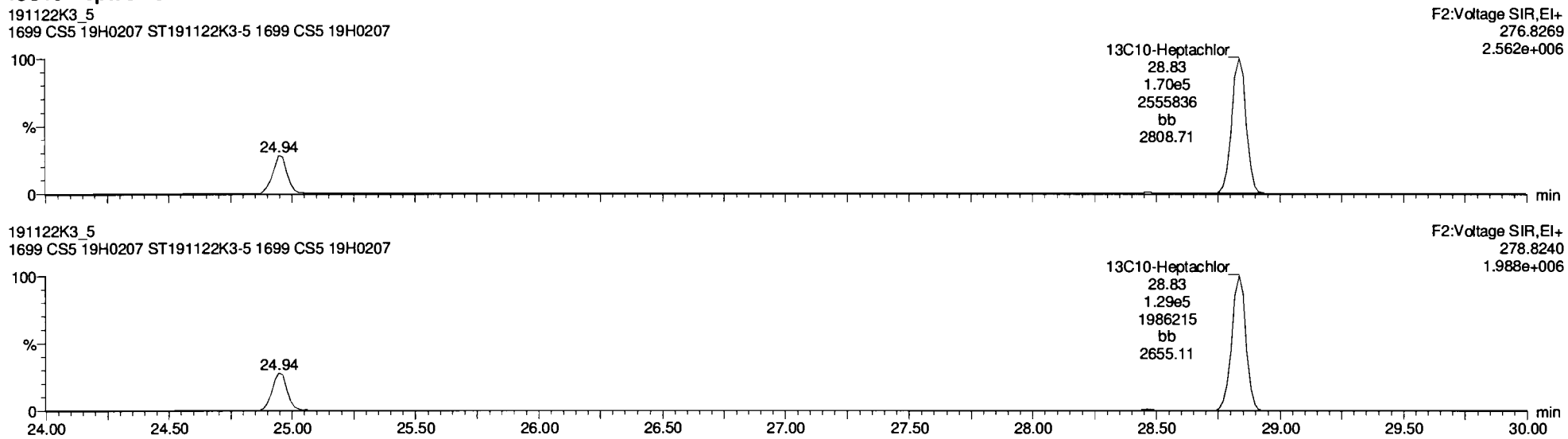
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Heptachlor



13C10-Heptachlor



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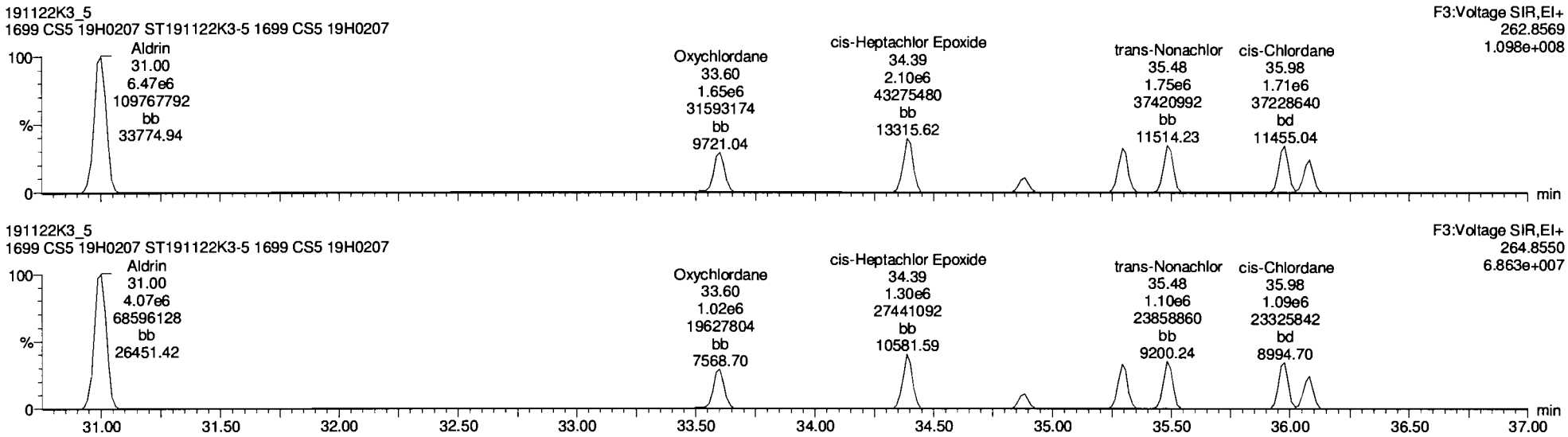
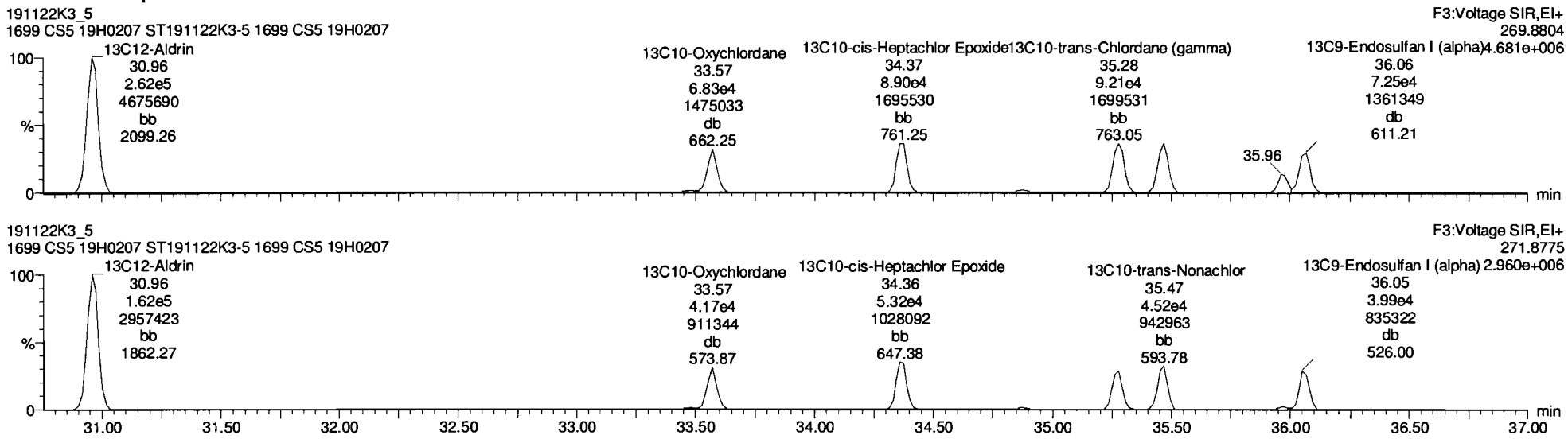
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Aldrin-EI



Aldrin-EI-isotopes



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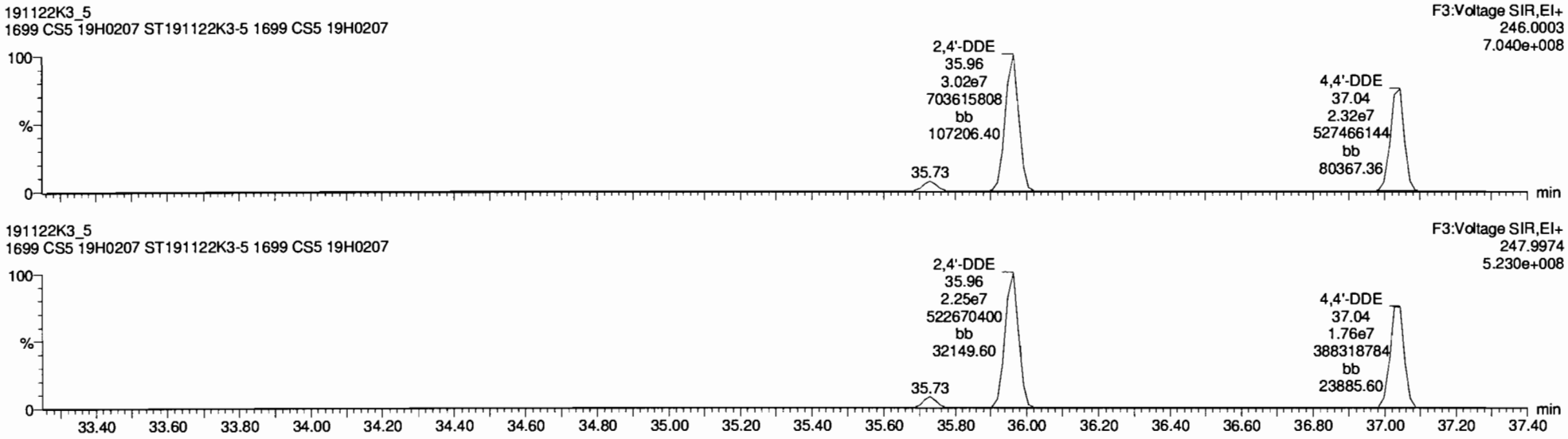
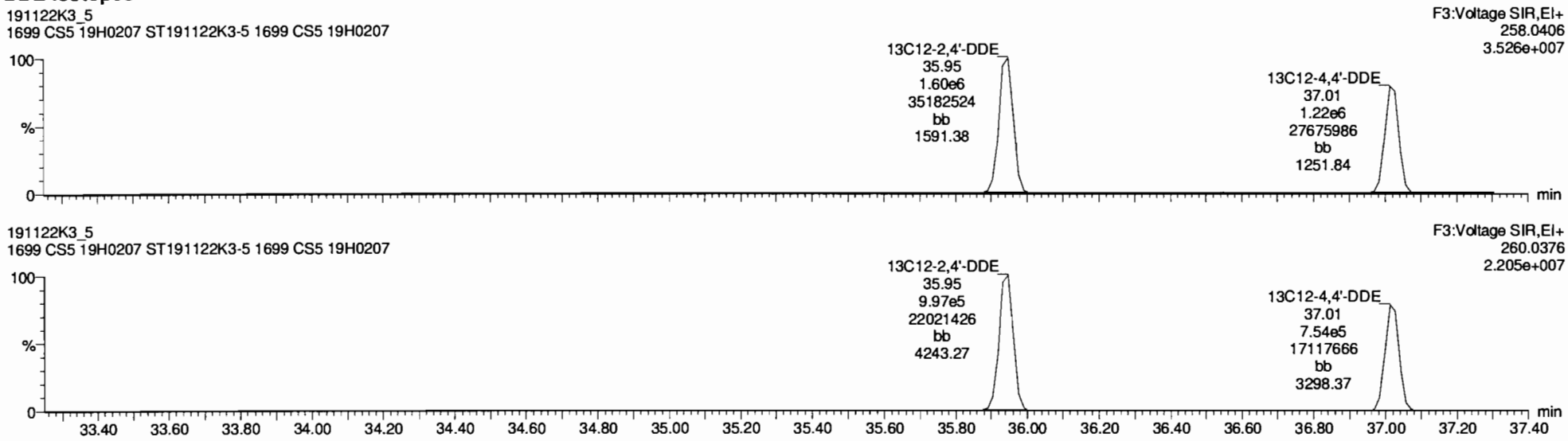
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

DDMU-DDE



DDE-isotopes



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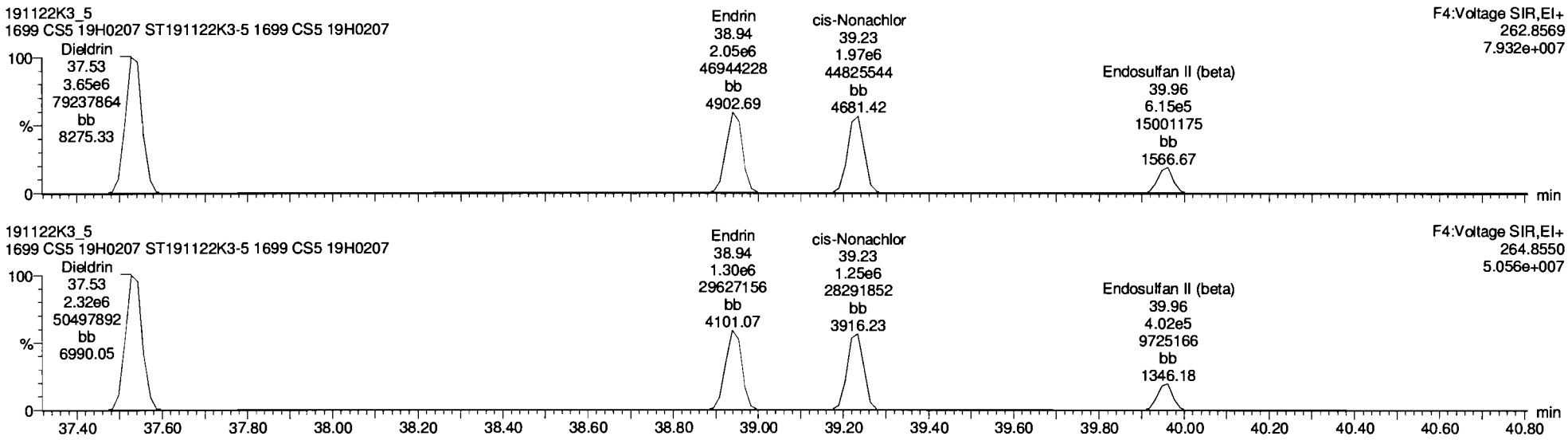
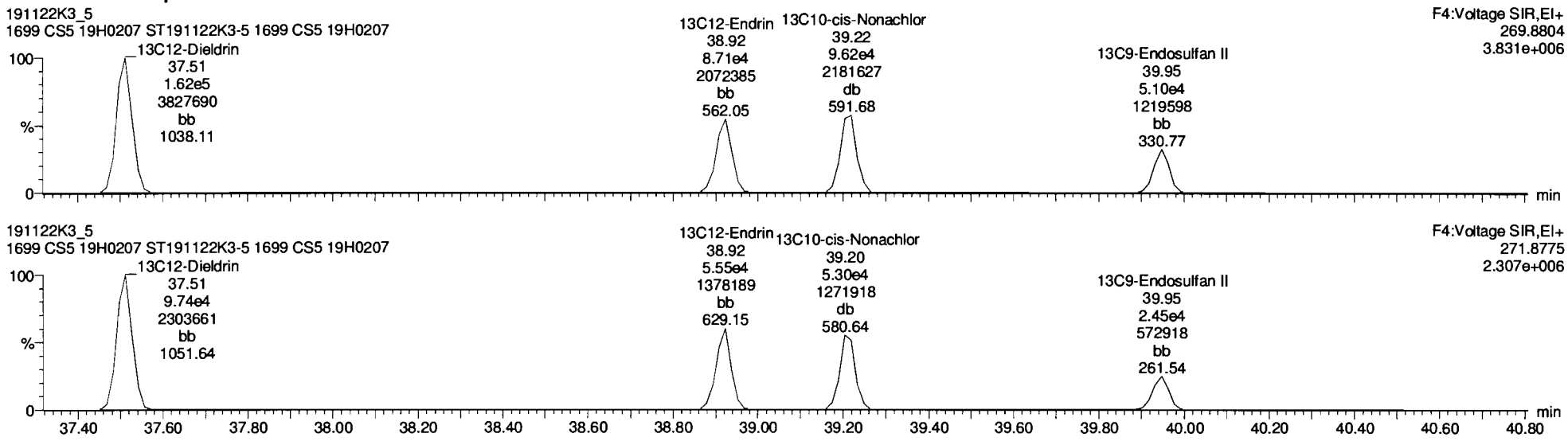
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Dieldrin-EII



Dieldrin-EII-isotopes



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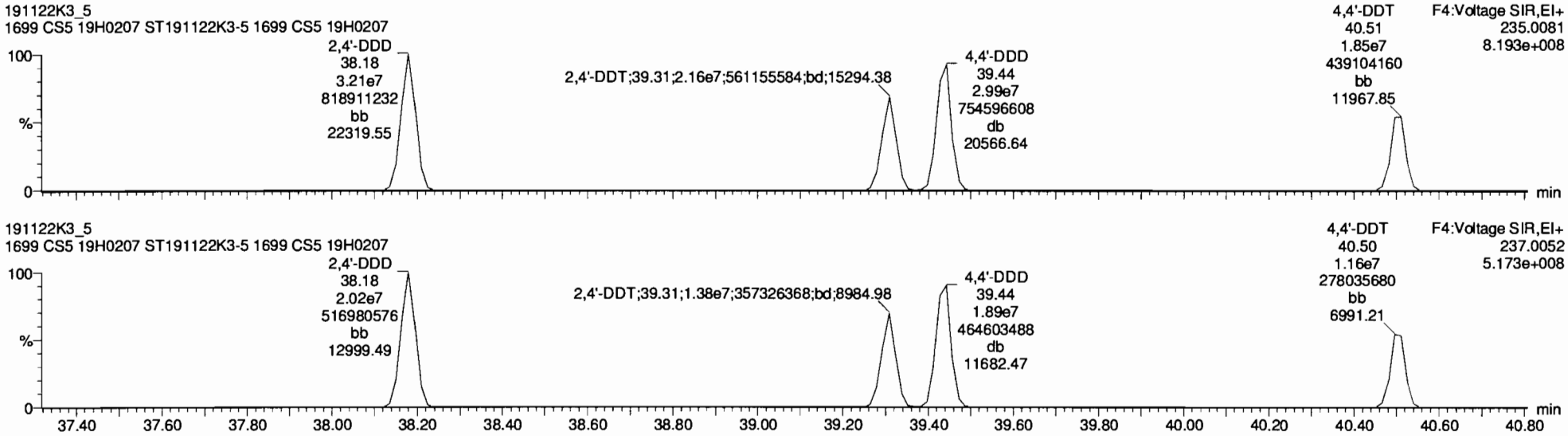
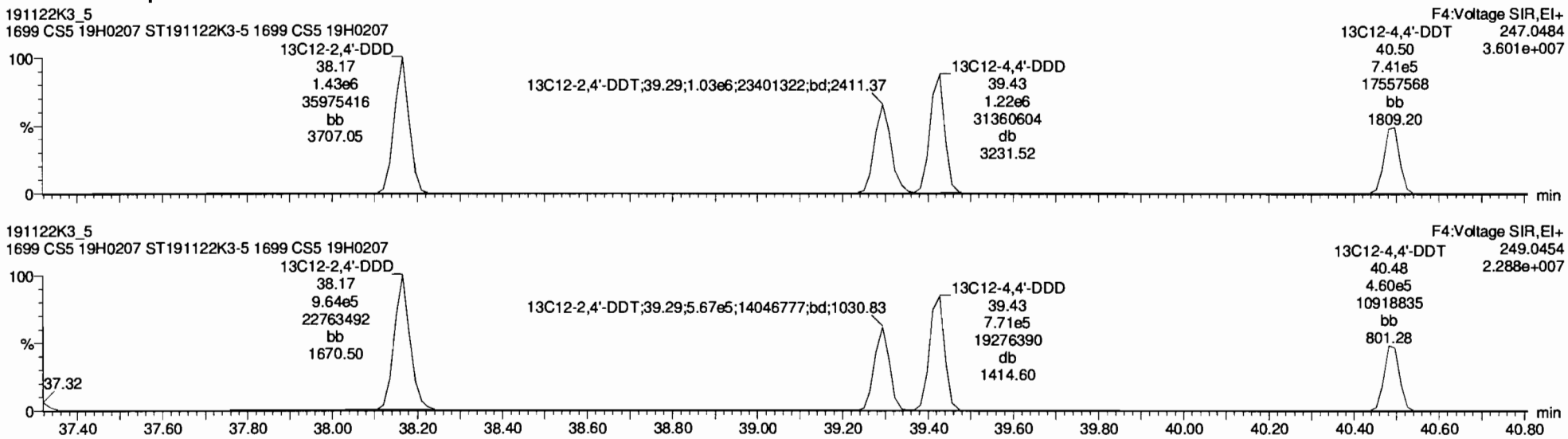
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

DDD-DDT



DDD-DDT-isotopes



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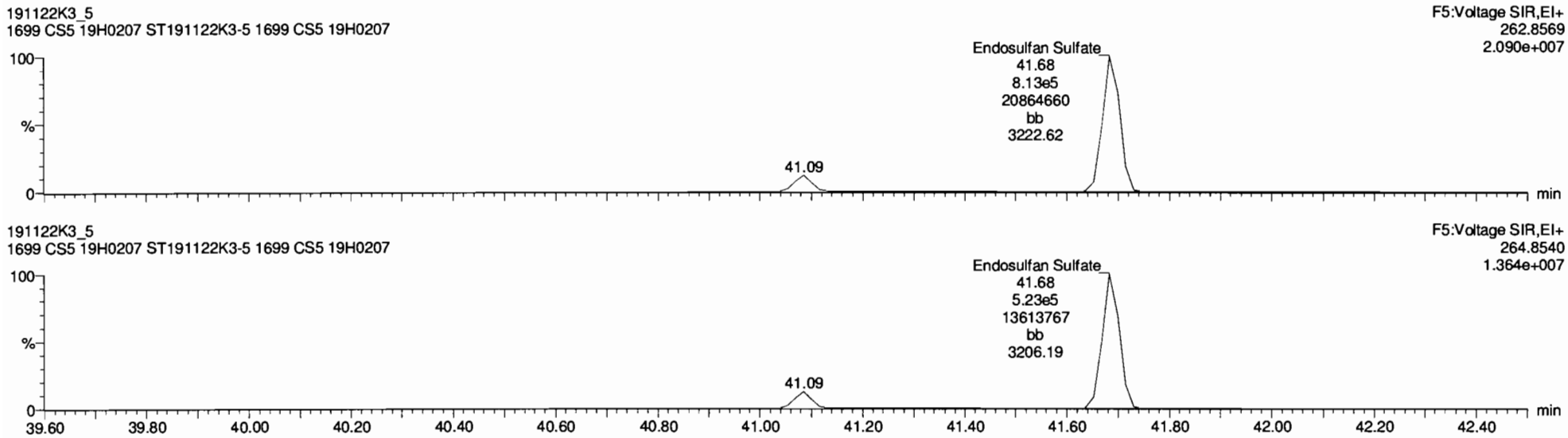
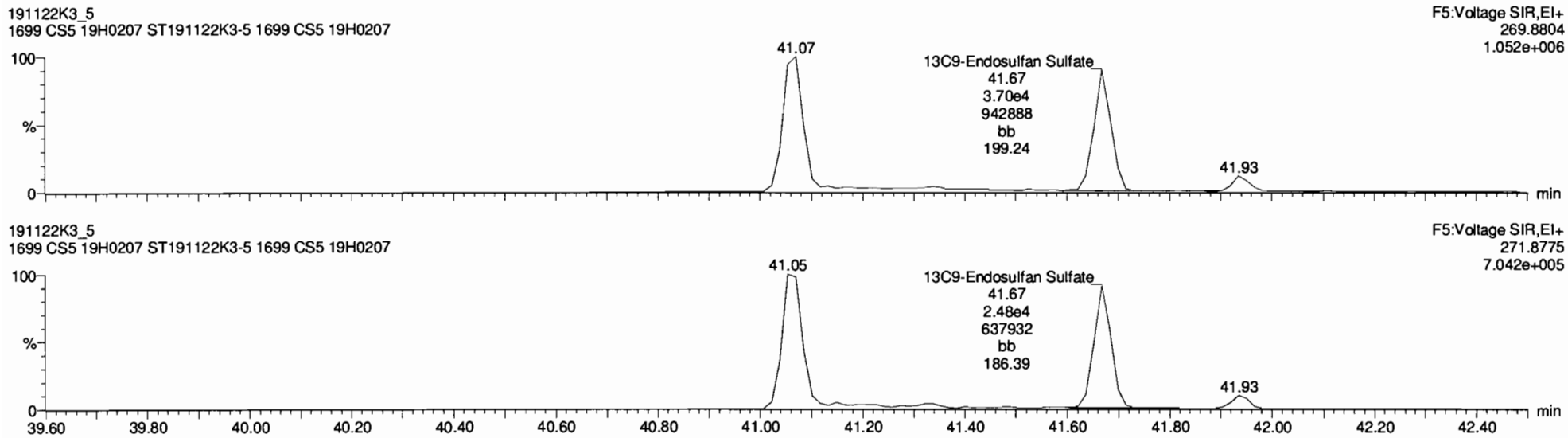
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
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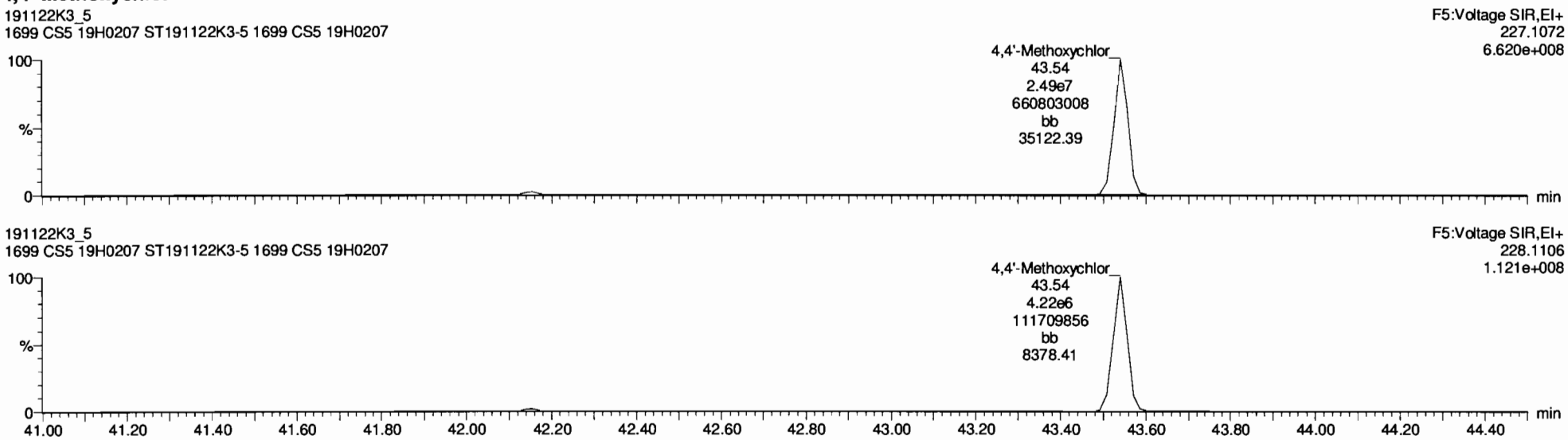
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

4,4'-Methoxychlor



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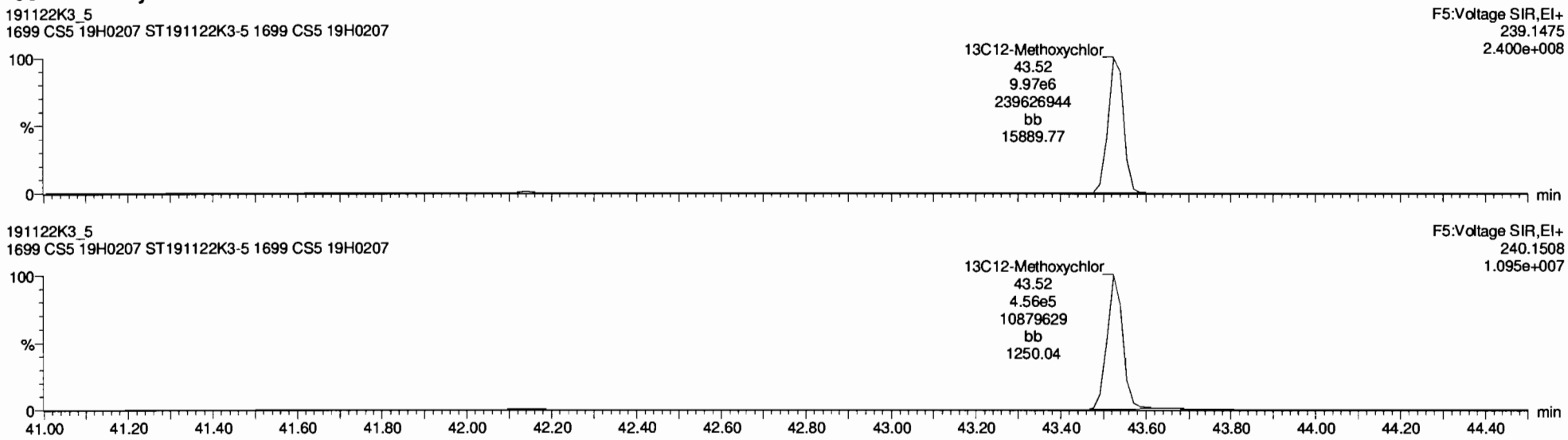

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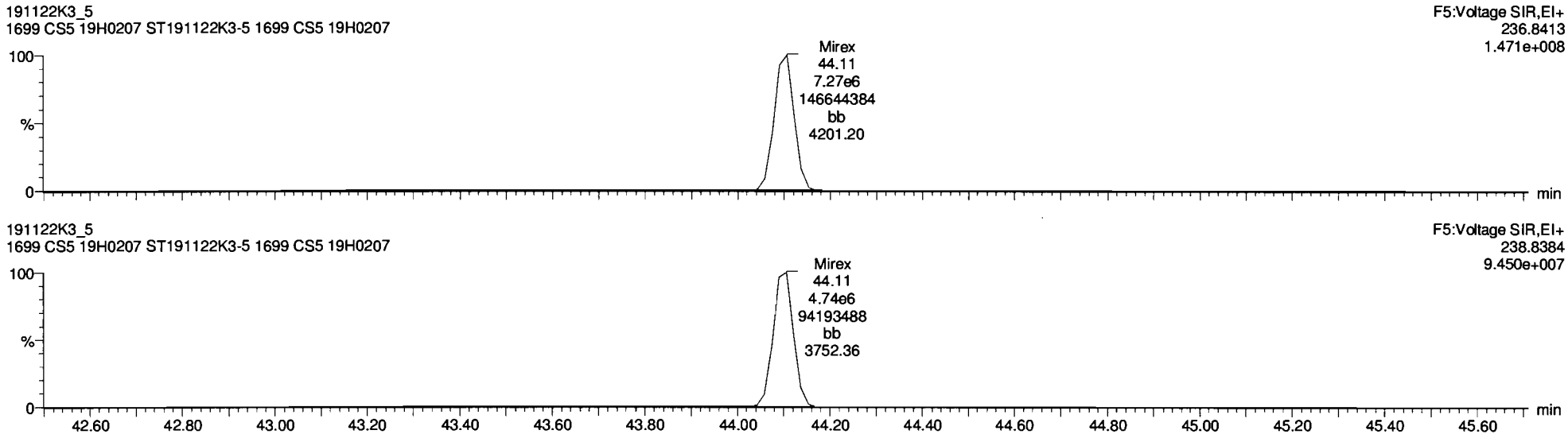
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

Mirex



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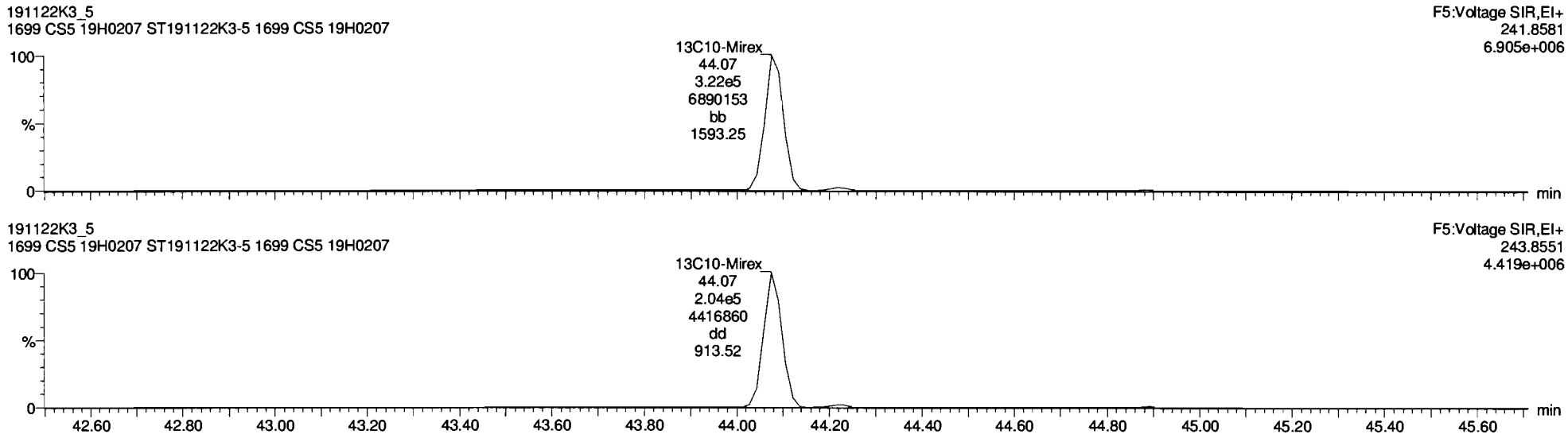

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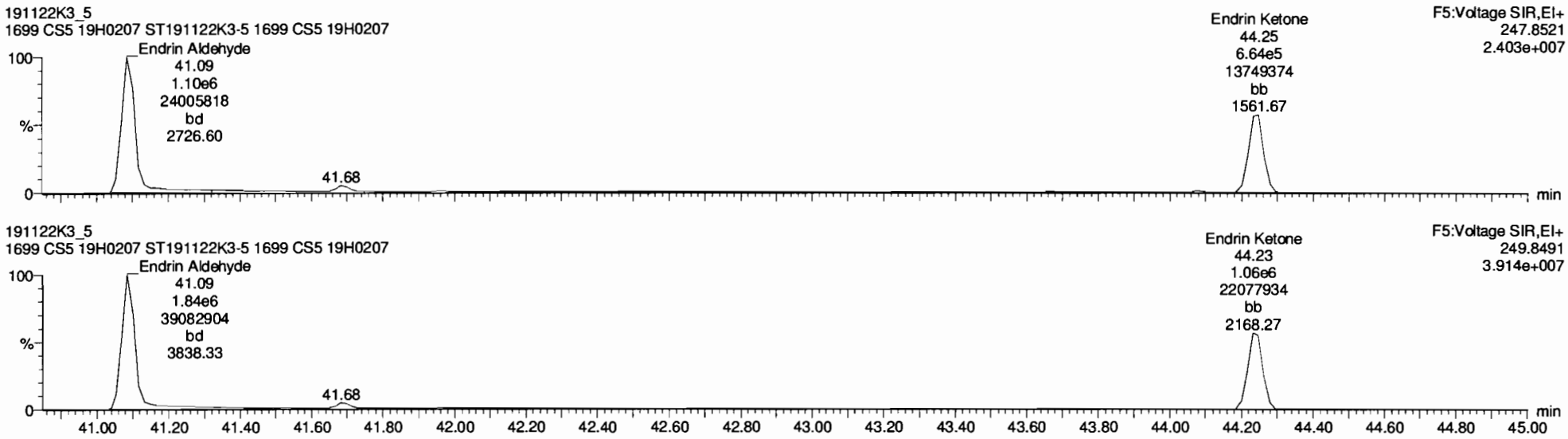
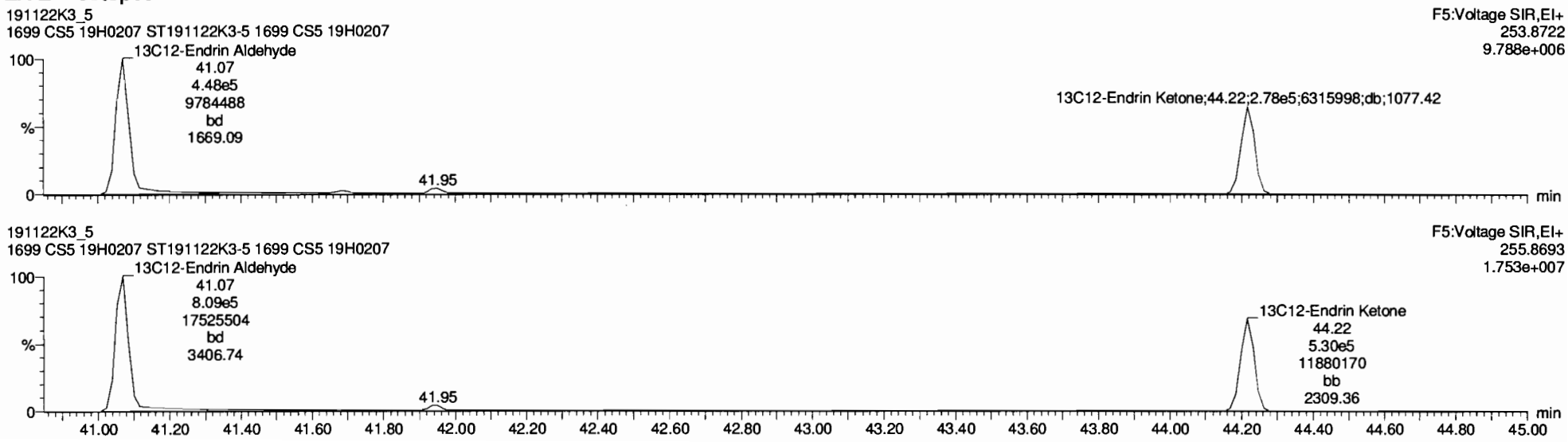
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

EA-EK



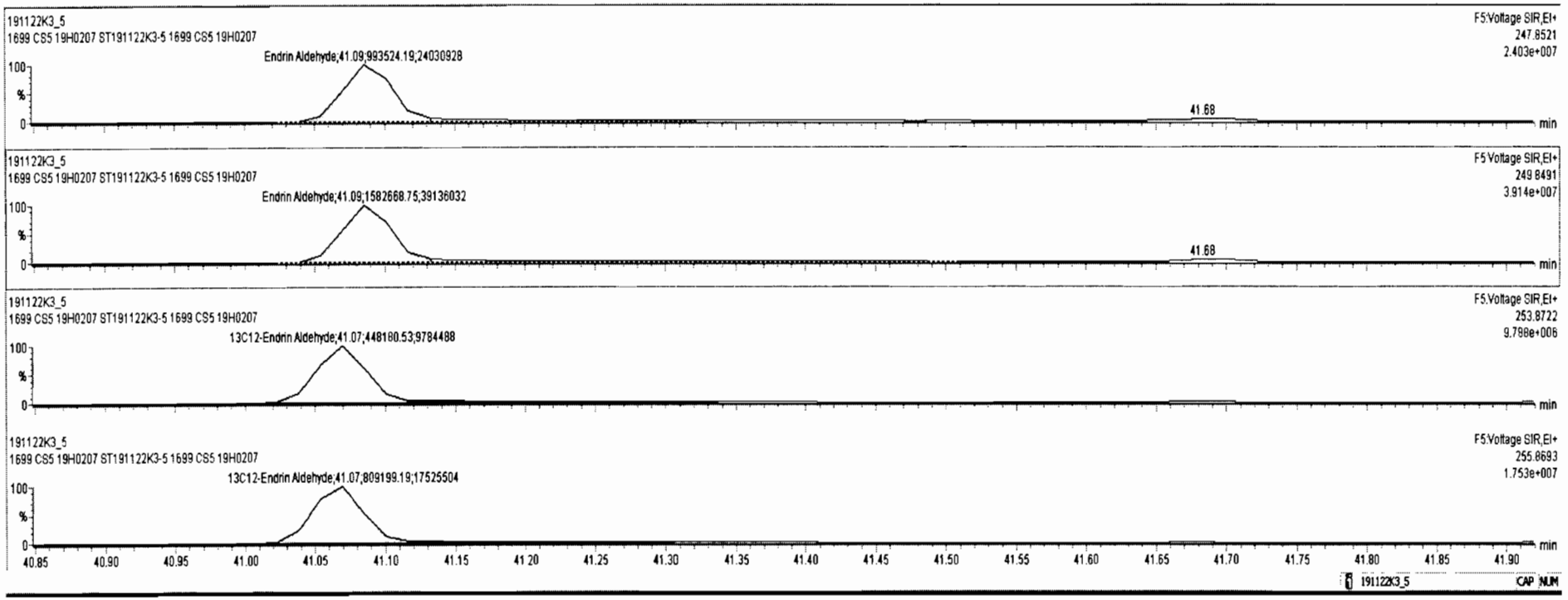
EA-EK-isotopes



TargetLynx - 191122K3-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	I...	Name	RT	RA	y/n	Area	IS Area	Std. Conc	%Dev	%RSD	RRF M...	RRF SD
23	23	Endosulfan II (beta)	39.96	1.531	NO	1.0170e6	7.5548e4	1200.000	-47.3	19.9	1.06	0.212
24	24	2,4'-DDD	38.18	1.586	NO	5.2388e7	2.3972e6	1200.000	-0.5	9.76	0.915	0.0893
25	25	2,4'-DDT	39.31	1.570	NO	3.5400e7	1.6004e6	1200.000	0.1	12.6	0.921	0.116
26	26	4,4'-DDD	39.44	1.587	NO	4.8791e7	1.9938e6	1200.000	1.6	10.1	1.00	0.101
27	27	4,4'-DDT	40.51	1.591	NO	3.0146e7	1.2009e6	1200.000	6.0	9.87	0.986	0.0974
28	28	Endosulfan Sulfate	41.68	1.554	NO	1.3359e6	6.1730e4	1200.000	-2.8	14.2	0.928	0.131
29	29	4,4'-Methoxychlor	43.54	5.906	NO	2.9138e7	1.0426e7	1200.000	2.5	10.6	1.14	0.120
30	30	Mirex	44.10	1.534	NO	1.2006e7	5.2549e5	1200.000	2.1	11.1	0.932	0.103
31	31	Endrin Aldehyde	41.09	0.628	NO	2.5762e6	1.2574e6	1200.000	-5.0	12.8	0.898	0.115
32	32	Endrin Ketone	44.25	0.624	NO	1.7287e6	8.0776e5	1200.000	-2.1	11.1	0.911	0.101
33	33	13C4-Hexachlorobutadiene	10.21	1.264	NO	3.2374e6	3.3575e6	500.000	-30.2	17.5	0.138	0.0241
34	34	13C6-Hexachlorobenzene	22.83	1.275	NO	2.2779e6	3.3575e6	50.000	-1.8	2.01	0.691	0.0139
35	35	13C6-Alpha-BHC	23.35	0.793	NO	8.3940e5	3.3575e6	50.000	1.7	2.06	0.246	0.00506
36	36	13C6-Lindane (gamma)	26.63	0.994	YES	7.3129e5	3.3575e6	50.000	15.1	7.50	0.189	0.0142
37	37	13C6-Beta-BHC	28.70	0.803	NO	5.0490e5	3.3575e6	50.000	6.9	4.17	0.141	0.00587
38	38	13C6-Delta-BHC	30.41	0.791	NO	5.9694e5	3.3575e6	50.000	8.1	4.21	0.164	0.00692
39	39	13C10-Heptachlor	28.83	1.315	NO	2.9863e5	3.3575e6	50.000	15.6	9.17	0.0770	0.00705
40	40	13C12-Aldrin	30.96	1.622	NO	4.2417e5	3.3575e6	50.000	3.9	3.19	0.122	0.00388
41	41	13C10-Oxychlordane	33.57	1.638	NO	1.0993e5	3.3575e6	50.000	15.7	8.55	0.0283	0.00242
42	42	13C10-cis-Heptachlor Epo...	34.37	1.673	NO	1.4225e5	3.3575e6	50.000	15.7	8.94	0.0366	0.00327
43	43	13C10-trans-Chlordane (g...	35.28	2.223	YES	1.3267e5	3.3575e6	50.000	35.7	5.12	0.0292	0.00149
44	44	13C10-trans-Nonachlor	35.47	1.920	NO	1.3192e5	3.3575e6	50.000	17.8	9.41	0.0333	0.00314
45	45	13C9-Endosulfan I (alpha)	36.06	1.817	NO	1.1240e5	3.3575e6	50.000	57.8	7.38	0.0212	0.00156



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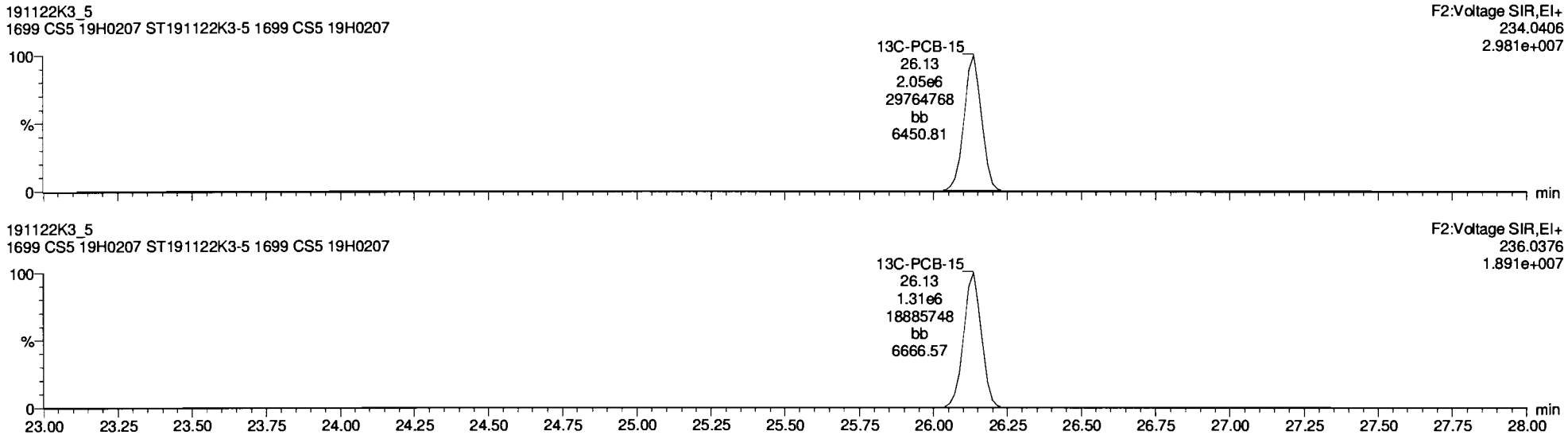
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

13C-PCB-15



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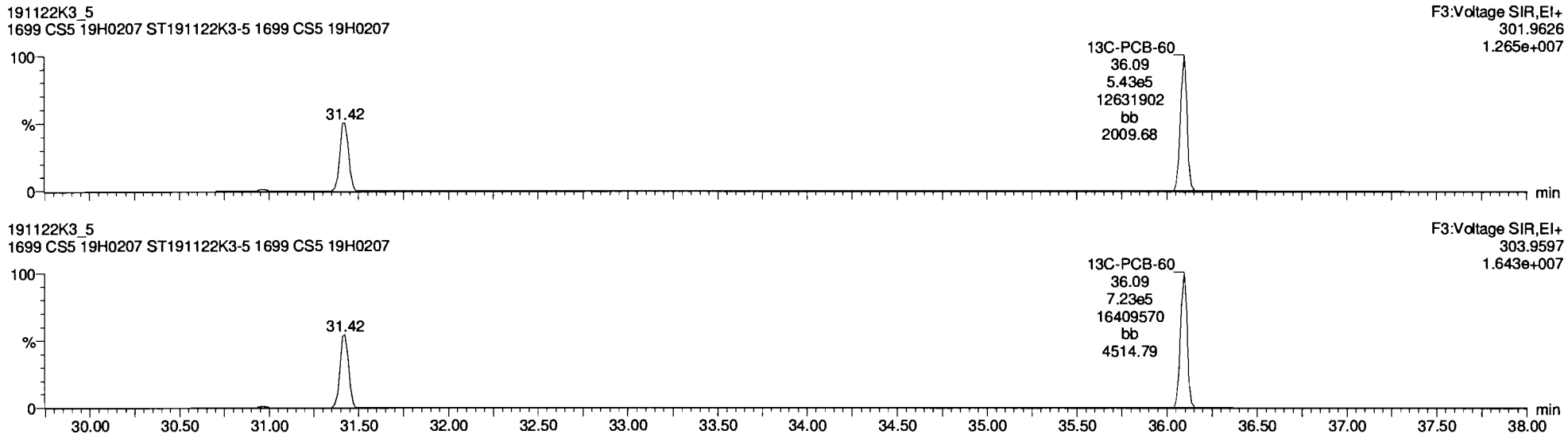

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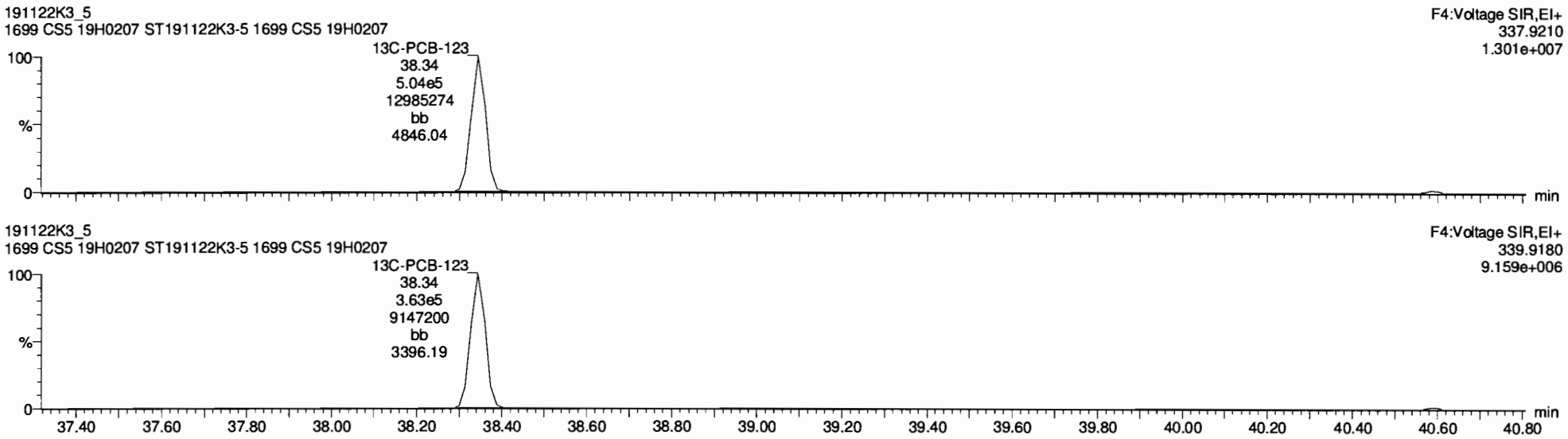
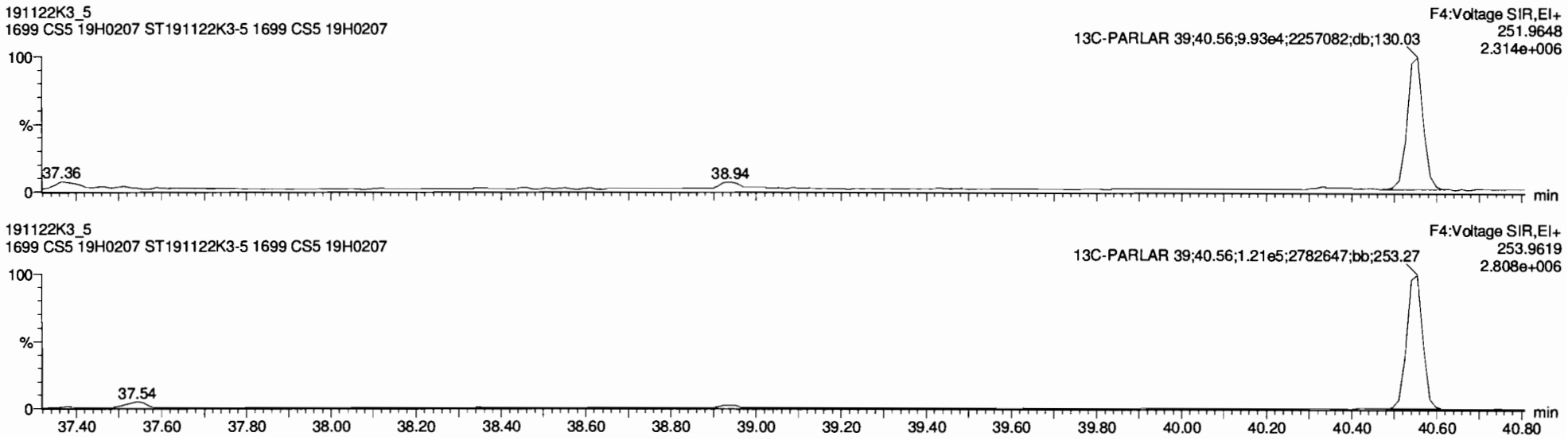
13C-PCB-123



13C-PARLAR 39



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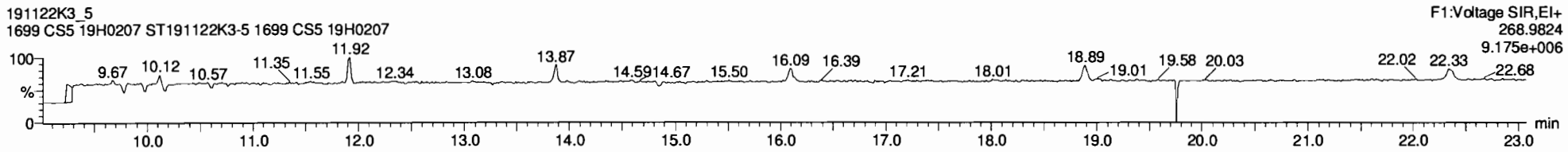
Name: 191122K3_5, Date: 22-Nov-2019, Time: 19:17:45, ID: ST191122K3-5 1699 CS5 19H0207, Description: 1699 CS5 19H0207

PFK1



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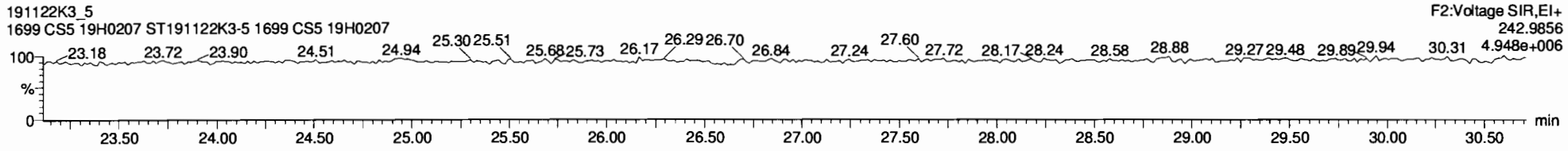

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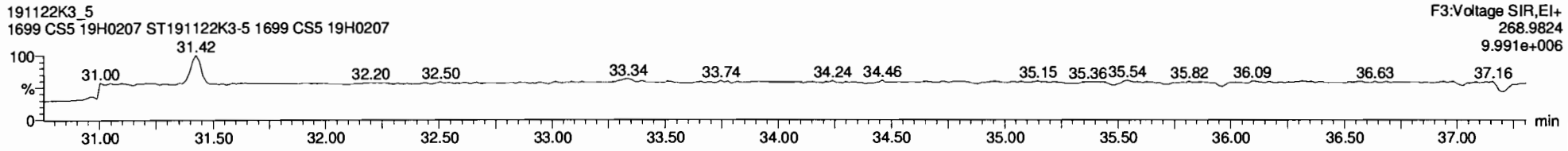

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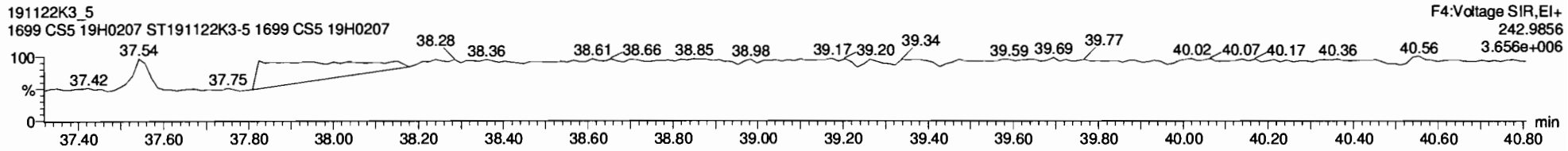

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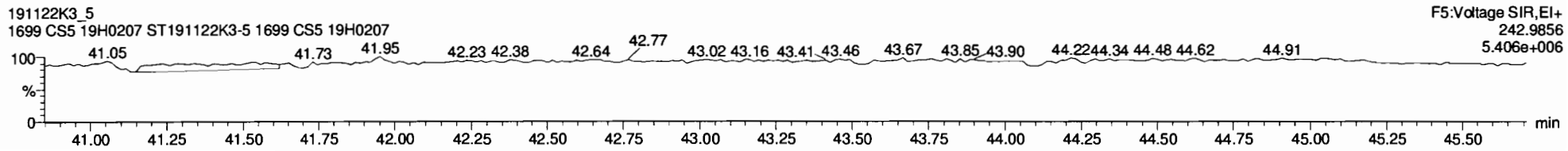

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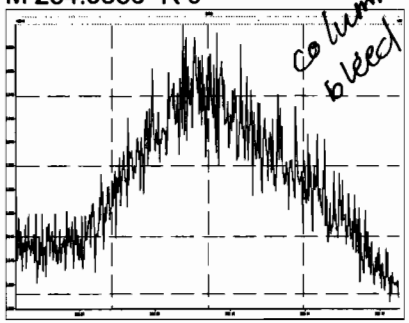

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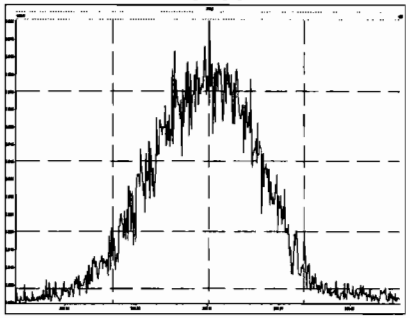

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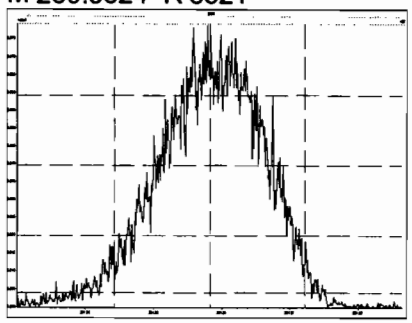

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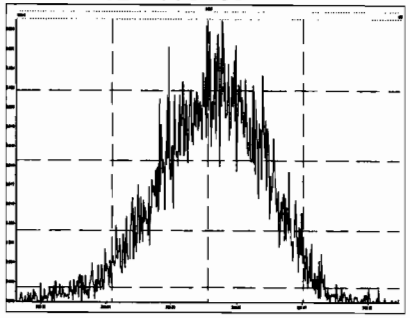

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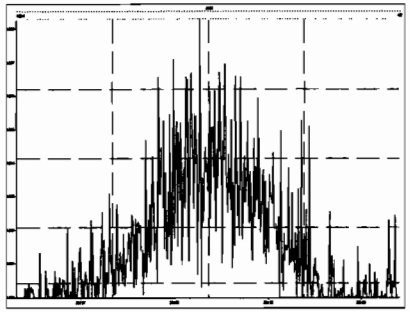

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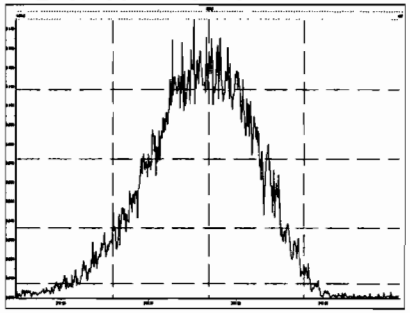

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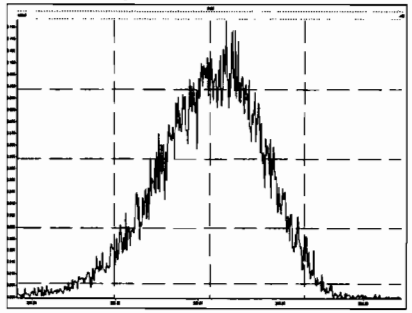

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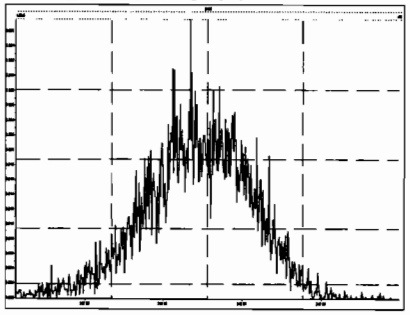

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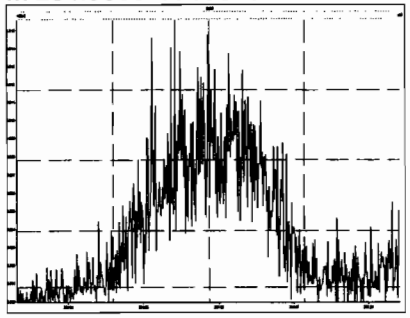

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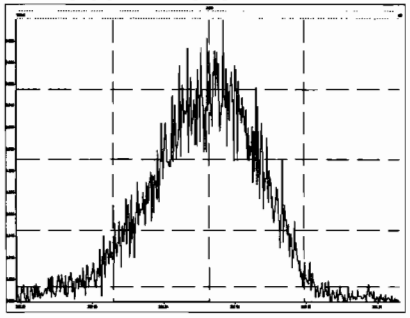

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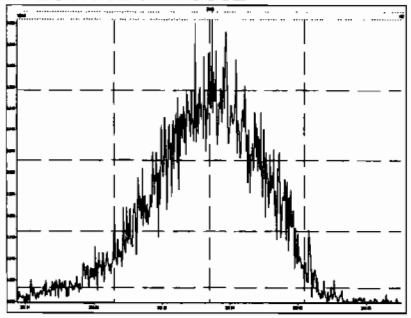

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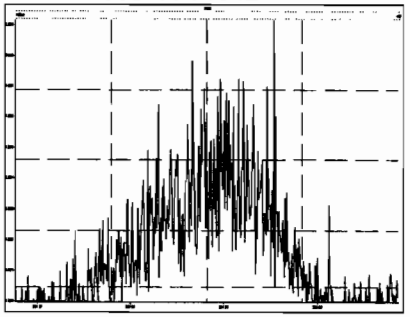

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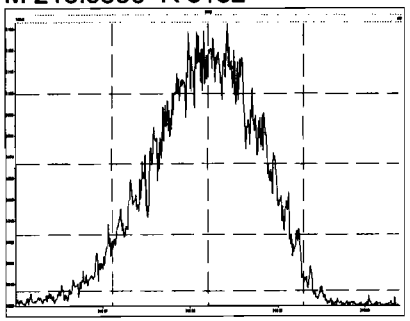

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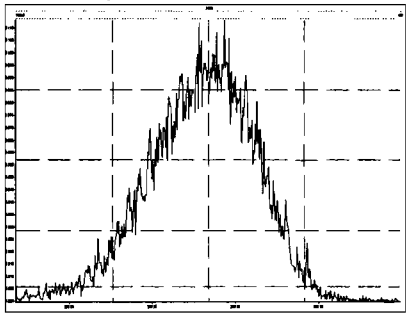

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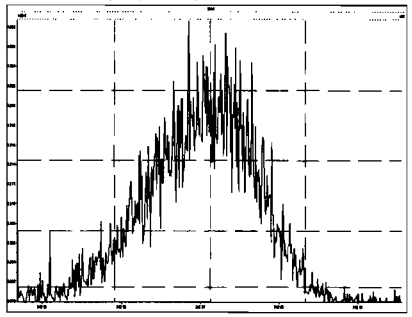

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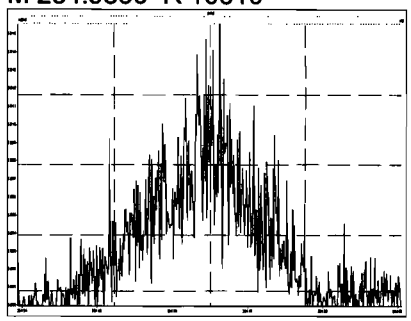

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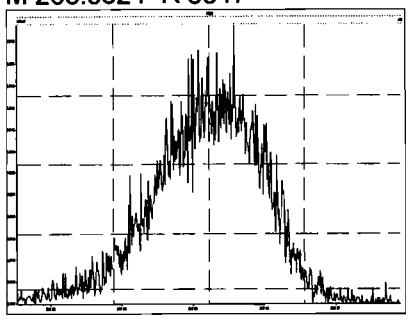

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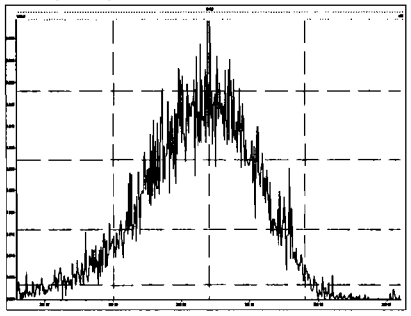

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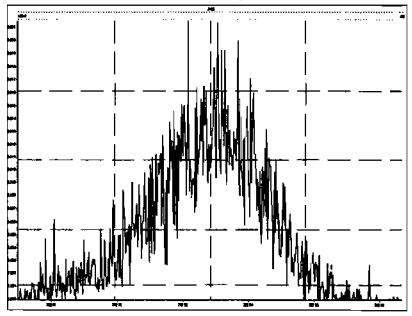
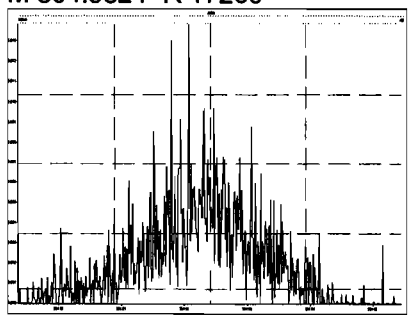
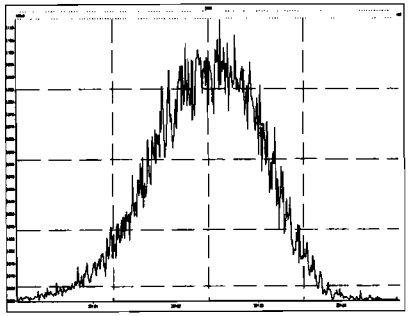


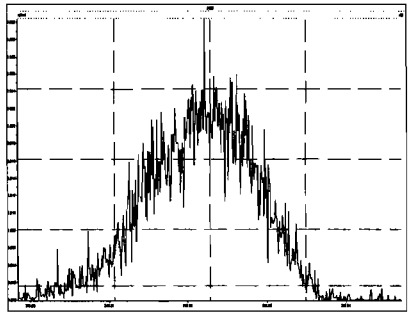
M 304.9824 R 17250



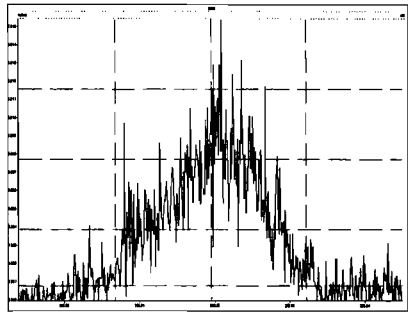
M 230.9856 R 7900



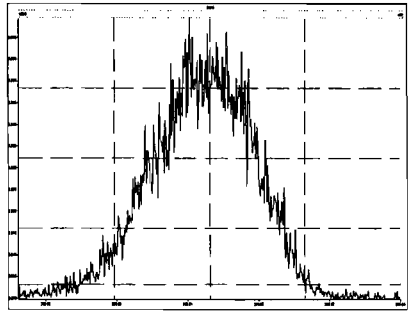
M 242.9856 R 9260



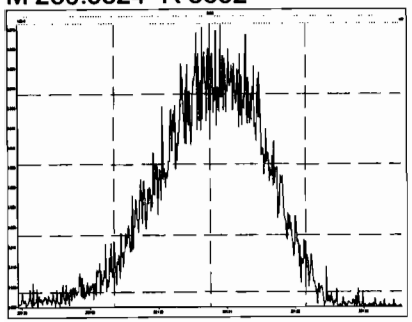
M 254.9856 R 10600



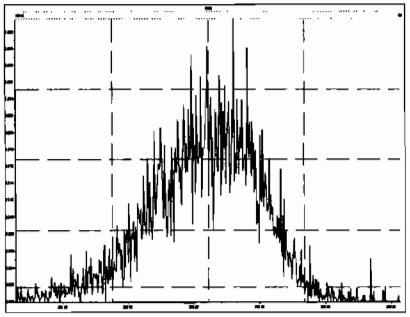
M 268.9824 R 8504



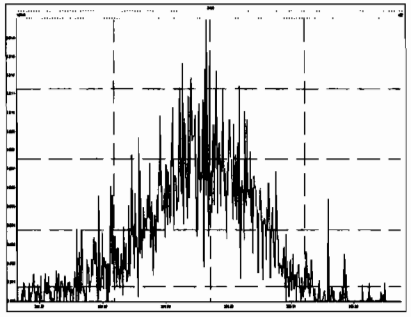
M 280.9824 R 8532



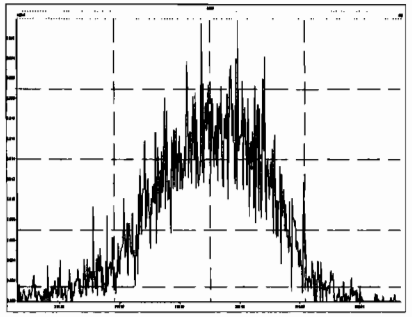
M 292.9824 R 9765



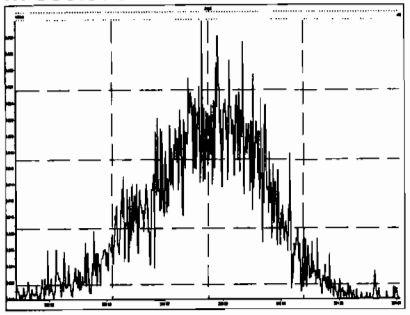
M 304.9824 R 12191



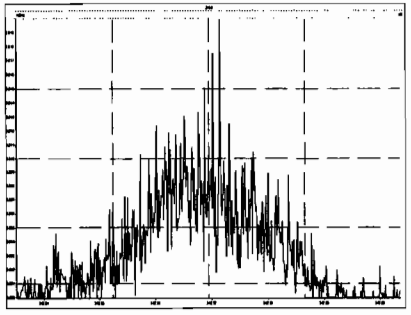
M 318.9792 R 9225



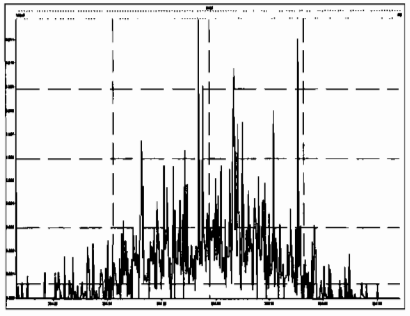
M 330.9792 R 10260



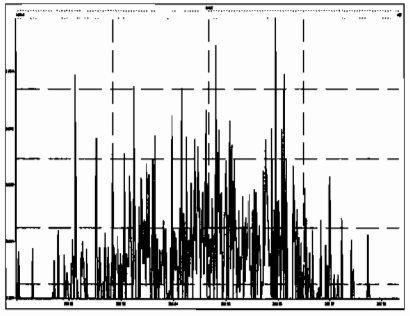
M 342.9792 R 11078



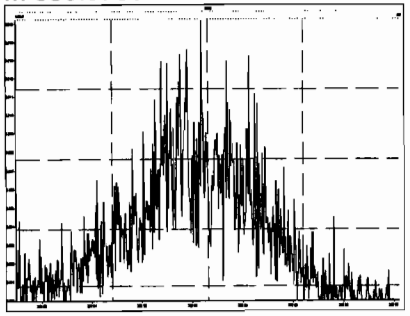
M 354.9792 R 34950



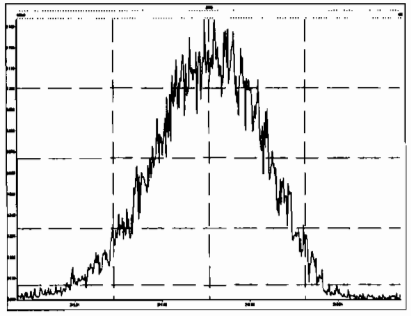
M 366.9792 R 458333



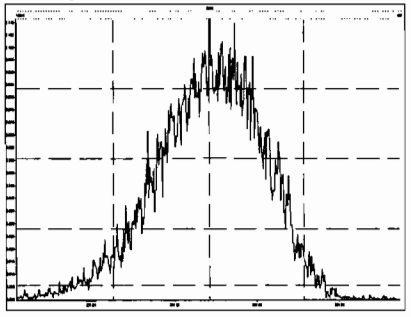
M 380.9760 R 9711



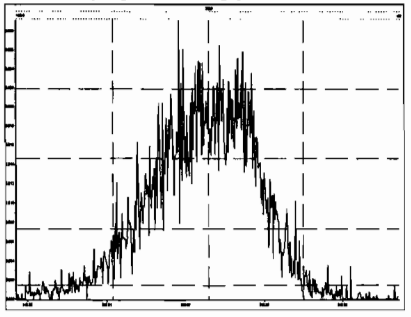
M 218.9856 R 8116



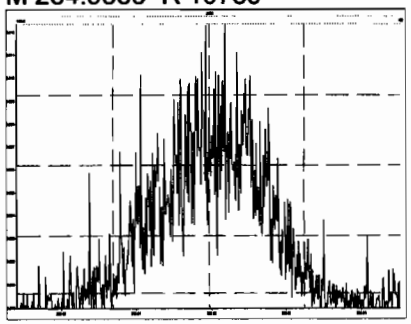
M 230.9856 R 8225



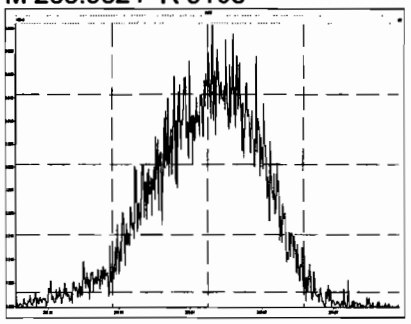
M 242.9856 R 8880



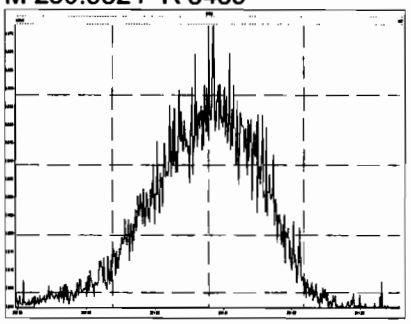
M 254.9856 R 10759



M 268.9824 R 9105



M 280.9824 R 8489



Vista Analytical Laboratory VG-11

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-8.qld

Last Altered: Saturday, November 23, 2019 12:02:33 Pacific Standard Time
Printed: Saturday, November 23, 2019 14:03:02 Pacific Standard Time

EL 11/23/19

GRB 11/25/19

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 22 Nov 2019 15:38:12
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 11:37:06

Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

	#	Name	Resp	RA	n/y	RT
1	1	Endrin Aldehyde	1.66e4	0.59	NO	41.07
2	2	Endrin Ketone	1.37e4	0.62	NO	44.23
3	3	Endrin	3.59e5	1.59	NO	38.92
4	4	4,4'-DDE			NO	
5	5	4,4'-DDD	1.86e5	1.62	NO	39.43
6	6	4,4'-DDT	6.03e6	1.59	NO	40.50
7	7	PFK4				
8	8	PFK5				

$$\left(\frac{EA + EK}{Endrin}\right) \times 100\% = 8.4\%$$

$$\left(\frac{4,4'\text{-DDD}}{4,4'\text{-DDT}}\right) \times 100\% = 3.1\%$$

Vista Analytical Laboratory VG-11

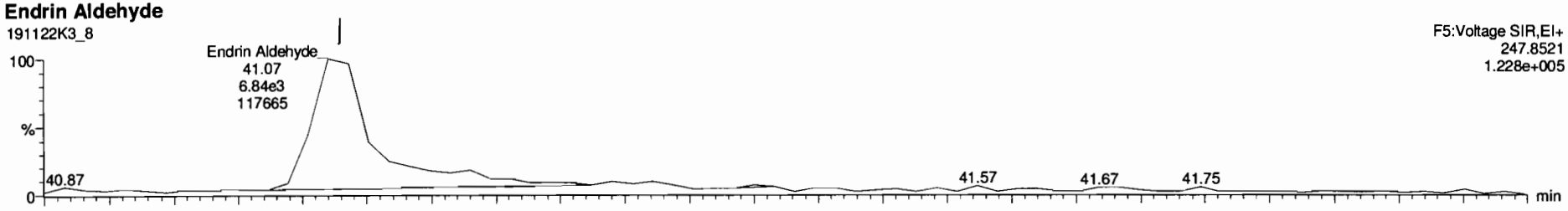
Dataset: Untitled

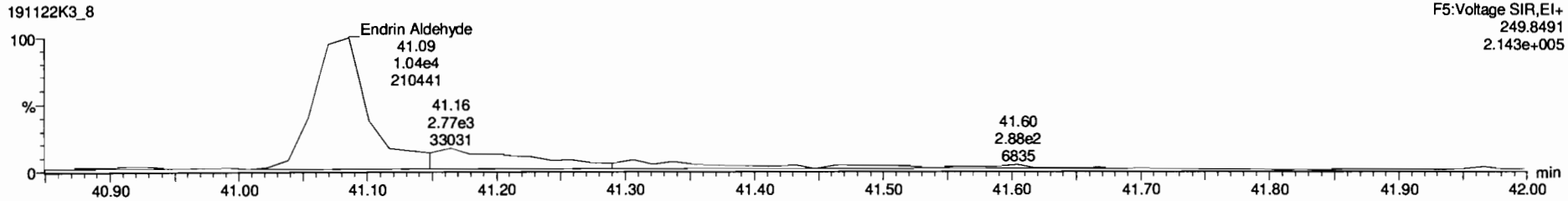
Last Altered: Saturday, November 23, 2019 13:58:41 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:59:12 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 22 Nov 2019 15:38:12
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

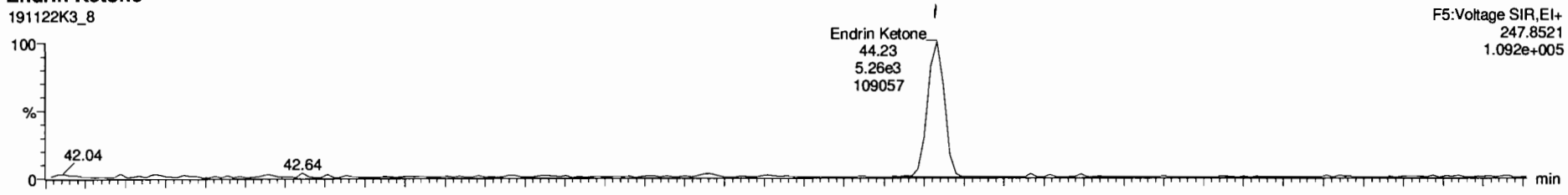
Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

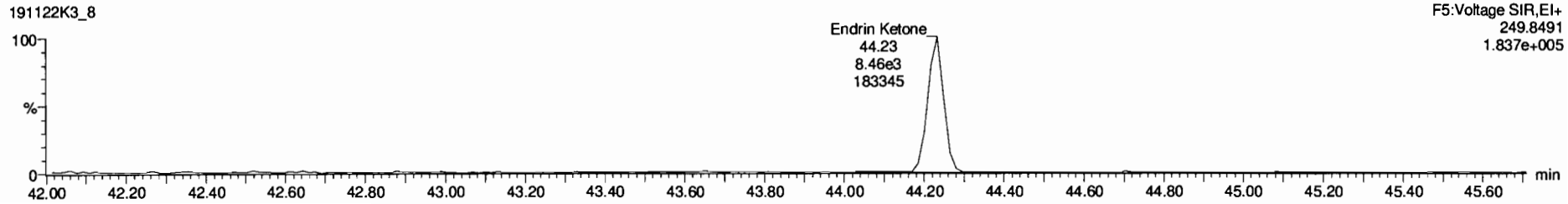
Endrin Aldehyde





Endrin Ketone

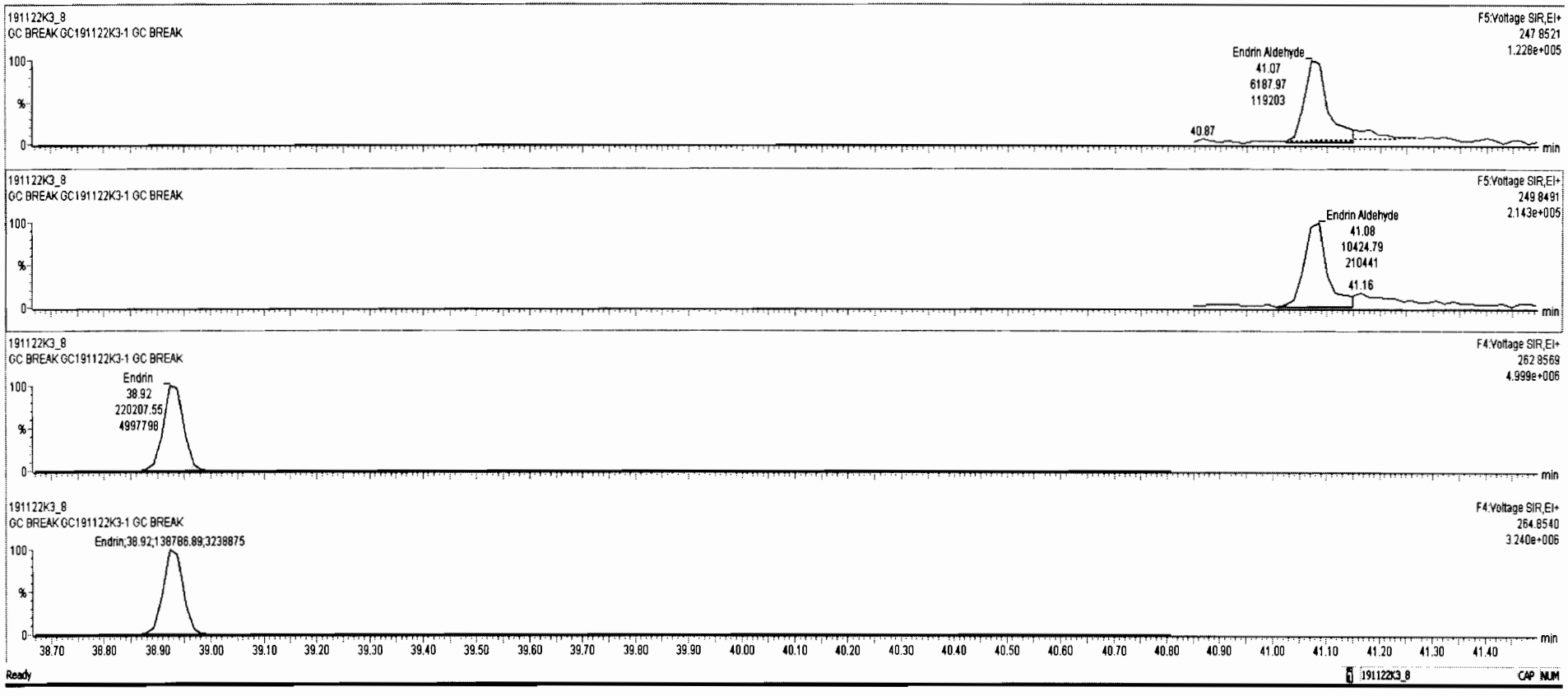




TargetLynx - 191122K3-8.qld [Chromatogram]

File Edit View Display Processing Window Help

	Name	Resp	RA	n/y	RRF	wtAvg	RT	RRT	Conc.	%Rec	DL	EMPC
1	Endrin Aldehyde	1.66e4	0.59	NO		1.000	41.07	0.000				
2	Endrin Ketone	1.37e4	0.62	NO		1.000	44.23	0.000				
3	Endrin	3.59e5	1.59	NO		1.000	38.92	0.000				
4	4,4'-DDE			NO		1.000						
5	4,4'-DDD	1.86e5	1.62	NO		1.000	39.43	0.000				
6	4,4'-DDT	6.03e6	1.59	NO		1.000	40.50	0.000				
7	PFK4					1.000						
8	PFK5											



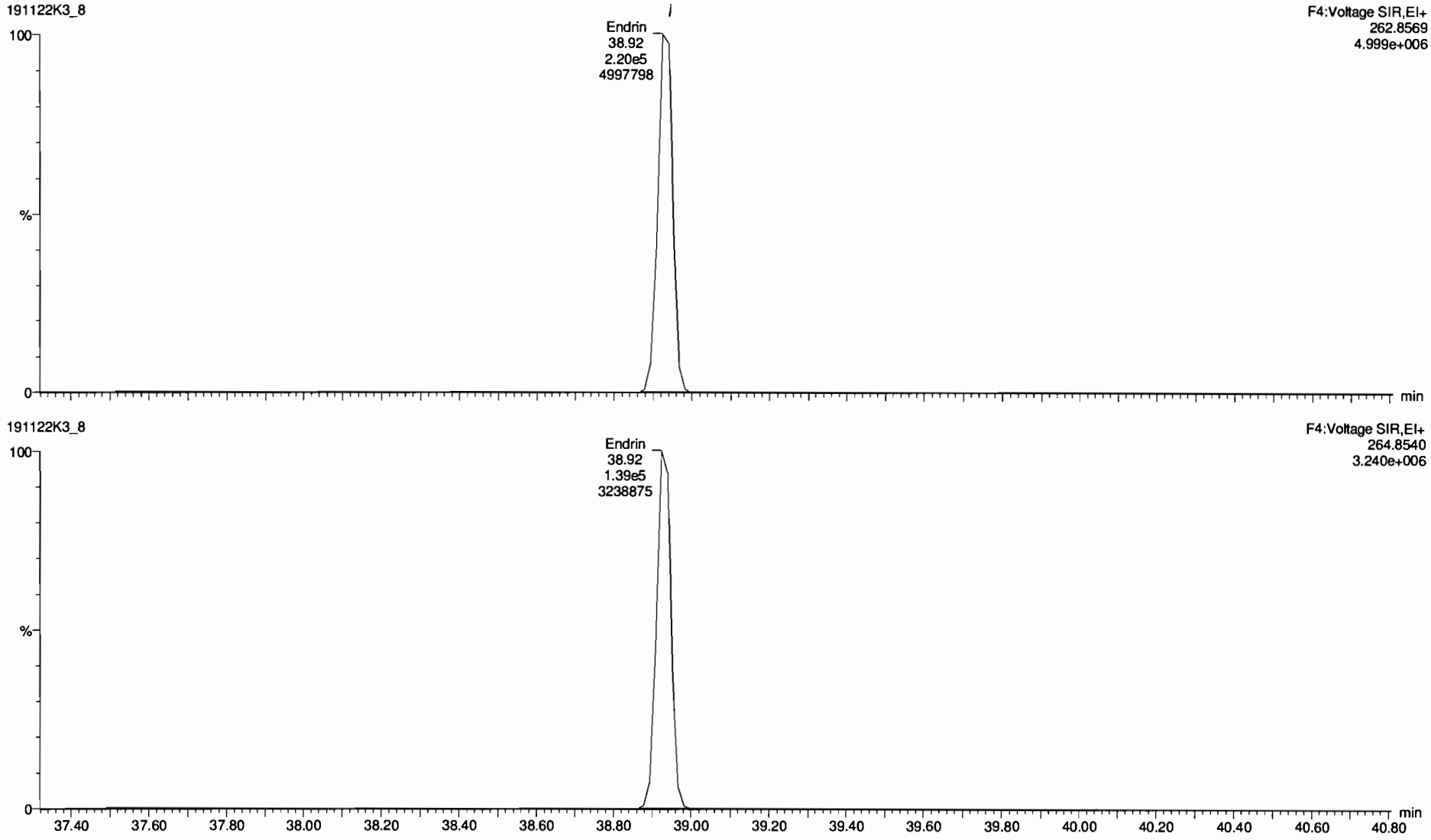
Ready 191122K3_8 CAP NUM

Dataset: Untitled

Last Altered: Saturday, November 23, 2019 13:58:41 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:59:12 Pacific Standard Time

Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

Endrin

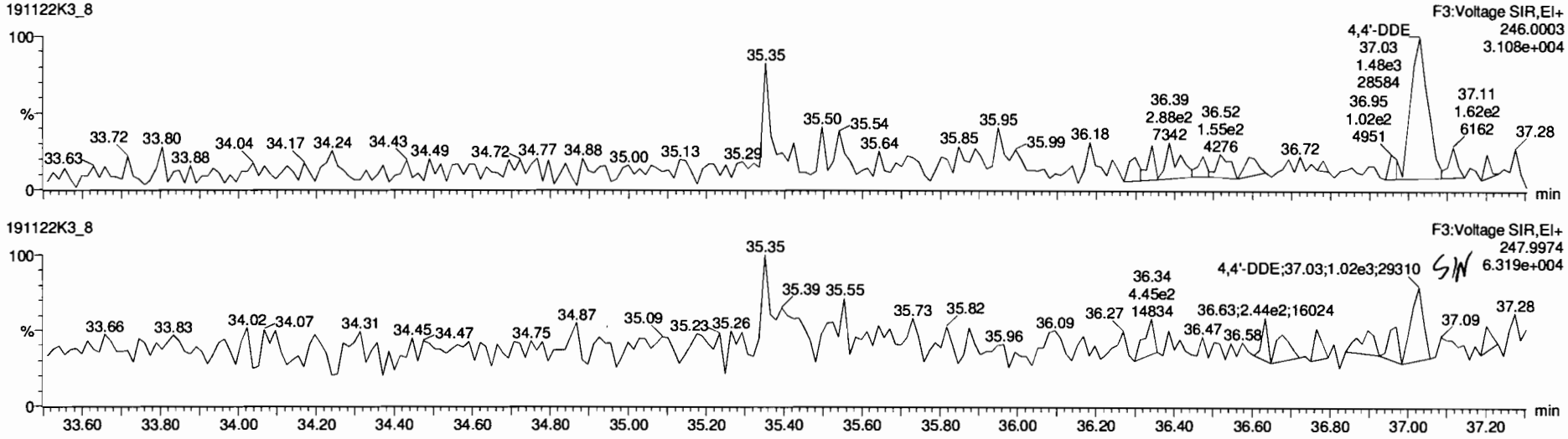


Dataset: Untitled

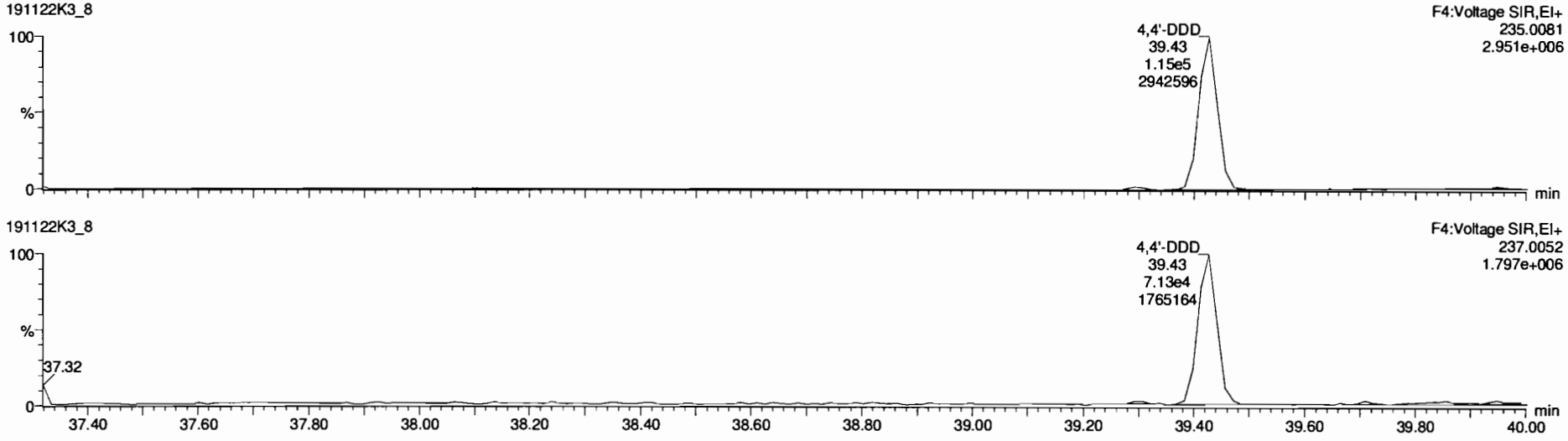
Last Altered: Saturday, November 23, 2019 13:58:41 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:59:12 Pacific Standard Time

Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

4,4'-DDE



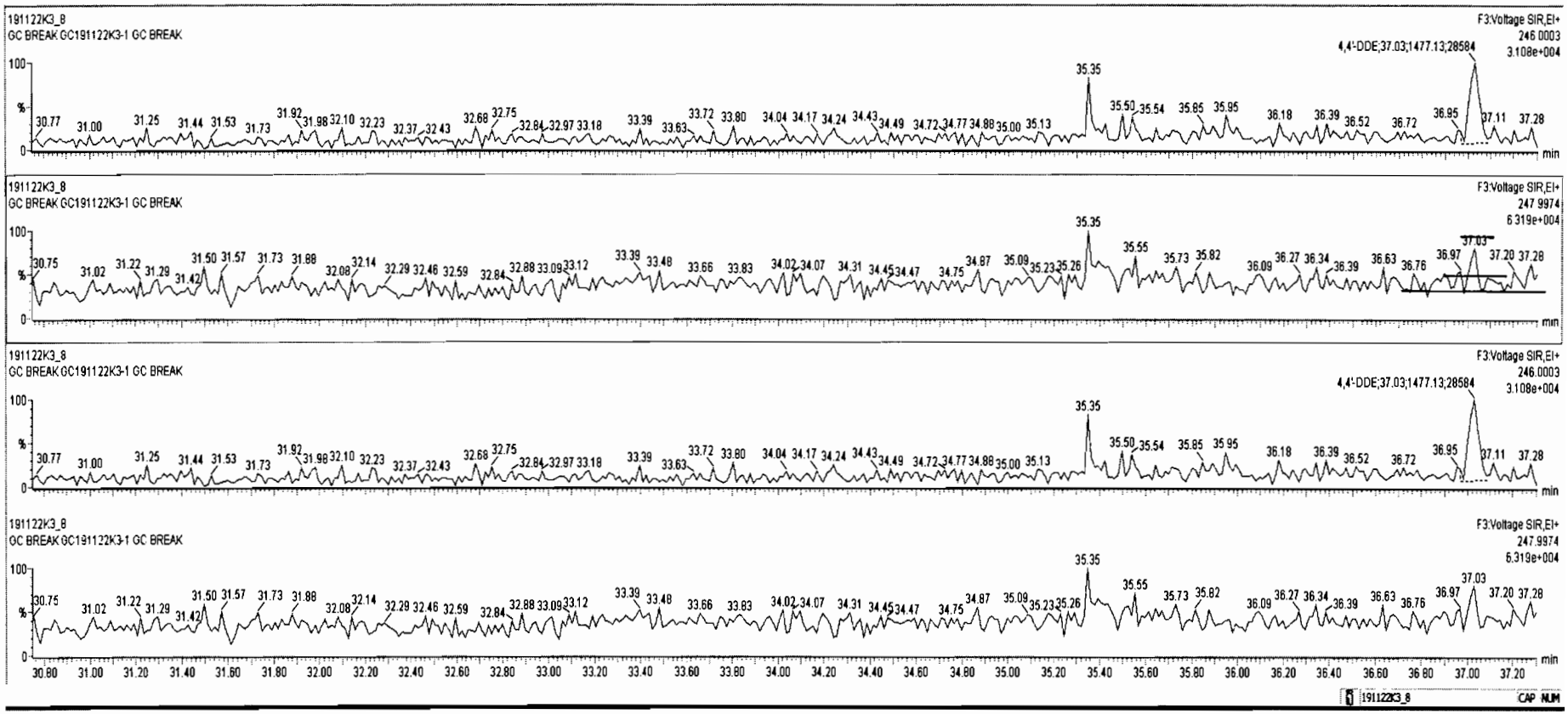
4,4'-DDD



TargetLynx - 191122K3-8.qld [Chromatogram]

File Edit View Display Processing Window Help

	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	Endrin Aldehyde	1.66e4	0.59	NO		1.000	41.07	0.000				
2	Endrin Ketone	1.37e4	0.62	NO		1.000	44.23	0.000				
3	Endrin	3.59e5	1.59	NO		1.000	38.92	0.000				
4	4,4'-DDE			NO		1.000						
5	4,4'-DDD	1.86e5	1.62	NO		1.000	39.43	0.000				
6	4,4'-DDT	6.03e6	1.59	NO		1.000	40.50	0.000				
7	PFK4					1.000						
8	PFK5											

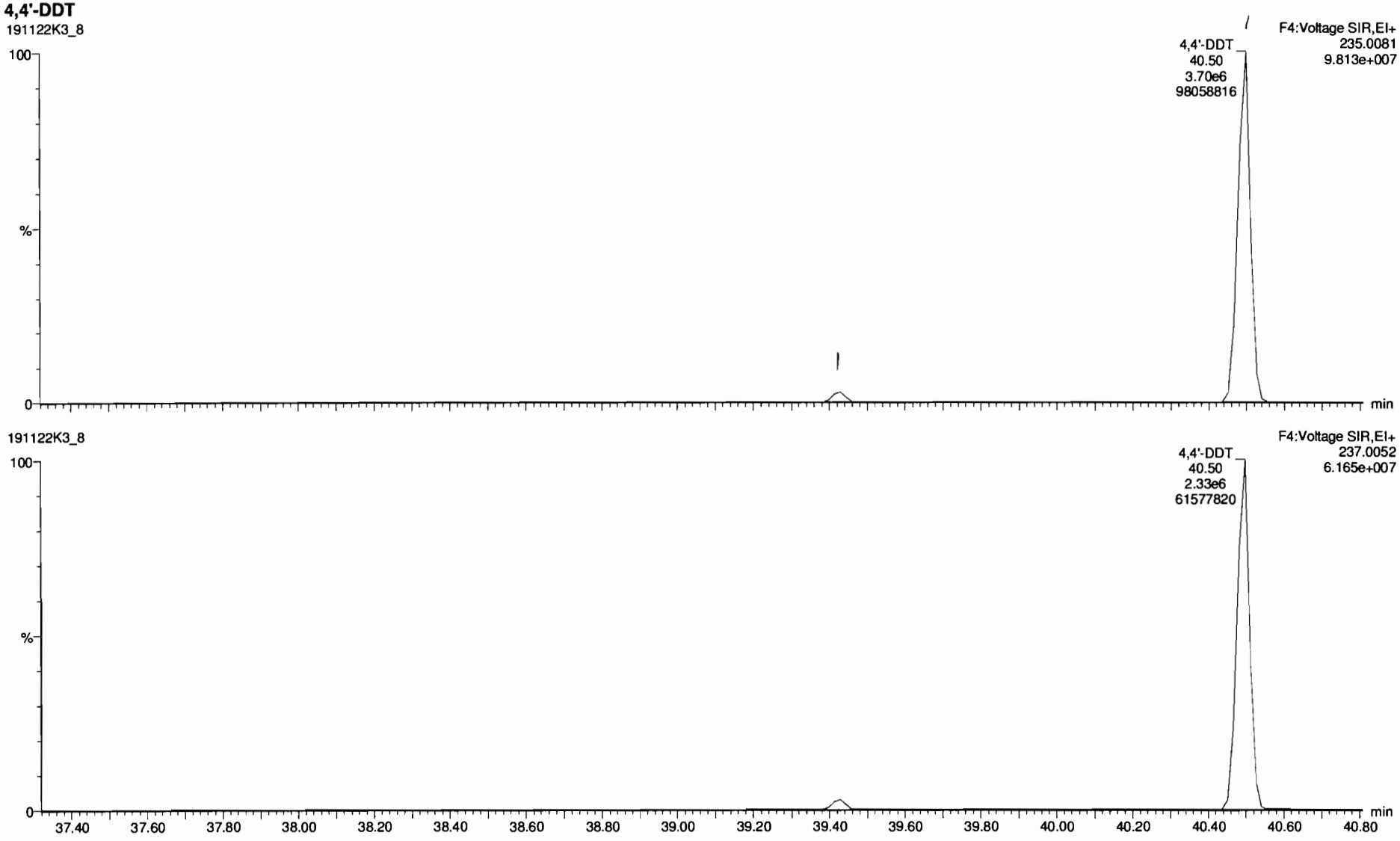


Dataset: Untitled

Last Altered: Saturday, November 23, 2019 13:58:41 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:59:12 Pacific Standard Time

Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

4,4'-DDT



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-7.qld

Last Altered: Saturday, November 23, 2019 13:54:18 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:55:25 Pacific Standard Time

EL 11/23/19

GRB 11/25/19

Method: U:\VG11.PRO\MethDB\1699rrt-11-21-19.mdb 21 Nov 2019 11:39:32
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-11-22-19-LIMITEDB.cdb 23 Nov 2019 13:11:31

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

	#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.R...	RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	2	Hexachlorobenzene	2.95e6	1.22	NO	0.874	1.000	22.83	22.83	1.001	1.001	NO	106.2	106	75-125% 0.00353	106.2
2	3	Alpha-BHC	9.01e5	2.11	NO	0.760	1.000	23.40	23.39	1.002	1.001	NO	107.6	108	0.0771	107.6
3	4	Lindane (gamma-BHC)	6.62e5	2.11	NO	0.744	1.000	26.65	26.65	1.001	1.001	NO	109.6	110	0.126	109.6
4	5	Beta-BHC	5.83e5	2.09	NO	0.896	1.000	28.71	28.72	1.000	1.001	NO	106.0	106	0.116	106.0
5	6	Delta-BHC	6.46e5	2.12	NO	0.837	1.000	30.41	30.42	1.001	1.001	NO	107.5	108	0.0980	107.5
6	7	Heptachlor	3.69e5	1.14	NO	0.968	1.000	28.85	28.85	1.001	1.001	NO	106.8	107	0.0922	106.8
7	9	Aldrin	6.01e5	1.59	NO	1.02	1.000	30.99	30.99	1.001	1.001	NO	104.6	105	0.0500	104.6
8	10	Oxychlordane	1.36e5	1.64	NO	0.992	1.000	33.58	33.58	1.001	1.001	NO	108.4	108	0.210	108.4
9	11	cis-Heptachlor Epoxide	1.72e5	1.60	NO	1.00	1.000	34.38	34.39	1.001	1.001	NO	103.3	103	0.149	103.3
10	12	trans-Heptachlor Epoxide	4.72e4	1.60	NO	0.255	1.000	34.87	34.88	1.015	1.015	NO	111.2	111	0.588	111.2
11	13	trans-Chlordane (gamma)	1.46e5	1.62	NO	1.08	1.000	35.28	35.29	1.001	1.001	NO	102.1	102	0.168	102.1
12	14	trans-Nonachlor	1.56e5	1.63	NO	1.00	1.000	35.47	35.48	1.001	1.001	NO	105.1	105	0.150	105.1
13	15	cis-Chlordane	1.62e5	1.58	NO	0.981	1.000	35.96	35.96	1.014	1.014	NO	111.5	111	0.154	111.5
14	16	Endosulfan I (alpha)	1.06e5	1.59	NO	1.11	1.000	36.07	36.06	1.001	1.000	NO	98.71	98.7	0.235	98.71
15	18	2,4'-DDE	3.26e6	1.34	NO	0.854	1.000	35.94	35.95	1.000	1.000	NO	107.6	108	0.0625	107.6
16	19	4,4'-DDE	2.33e6	1.33	NO	0.873	1.000	37.03	37.03	1.000	1.000	NO	104.2	104	0.0757	104.2
17	20	Dieldrin	3.49e5	1.57	NO	0.957	1.000	37.52	37.53	1.000	1.001	NO	105.5	105	0.133	105.5
18	21	Endrin	1.39e5	1.54	NO	0.933	1.000	38.91	38.94	1.000	1.001	NO	100.5	100	0.293	100.5
19	22	cis-Nonachlor	1.76e5	1.51	NO	0.956	1.000	39.22	39.22	1.000	1.000	NO	103.4	103	0.236	103.4
20	23	Endosulfan II (beta)	5.49e4	1.55	NO	1.06	1.000	39.93	39.95	1.000	1.000	NO	93.39	93.4	0.704	93.39
21	24	2,4'-DDD	2.55e6	1.59	NO	0.915	1.000	38.15	38.17	1.000	1.000	NO	103.7	104	0.130	103.7
22	25	2,4'-DDT	1.61e6	1.61	NO	0.921	1.000	39.30	39.29	1.000	1.000	NO	109.9	110	0.226	109.9
23	26	4,4'-DDD	2.23e6	1.63	NO	1.00	1.000	39.43	39.43	1.000	1.000	NO	102.8	103	0.140	102.8
24	27	4,4'-DDT	1.32e6	1.59	NO	0.986	1.000	40.50	40.50	1.000	1.000	NO	104.6	105	0.236	104.6
25	28	Endosulfan Sulfate	7.98e4	1.63	NO	0.928	1.000	41.65	41.68	1.000	1.001	NO	107.4	107	0.610	107.4
26	29	4,4'-Methoxychlor	1.41e6	5.90	NO	1.14	1.000	43.53	43.54	1.000	1.000	NO	100.5	100	0.0952	100.5
27	30	Mirex	7.55e5	1.54	NO	0.932	1.000	44.10	44.09	1.000	1.000	NO	103.2	103	0.197	103.2
28	31	Endrin Aldehyde	1.70e5	0.63	NO	0.887	1.000	41.07	41.09	1.000	1.001	NO	108.2	108	0.475	108.2
29	32	Endrin Ketone	1.19e5	0.61	NO	0.911	1.000	44.22	44.23	1.000	1.000	NO	118.3	118	0.695	118.3
30	34	13C6-Hexachlorobenzene	1.59e6	1.28	NO	0.691	1.000	22.82	22.81	0.874	0.873	NO	49.35	98.7	0.00400	
31	35	13C6-Alpha-BHC	5.51e5	0.78	NO	0.246	1.000	23.37	23.35	0.895	0.894	NO	48.04	96.1	0.129	

Dataset: U:\VG11.PRO\Results\191122K3\191122K3-7.qld

Last Altered: Saturday, November 23, 2019 13:54:18 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:55:25 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

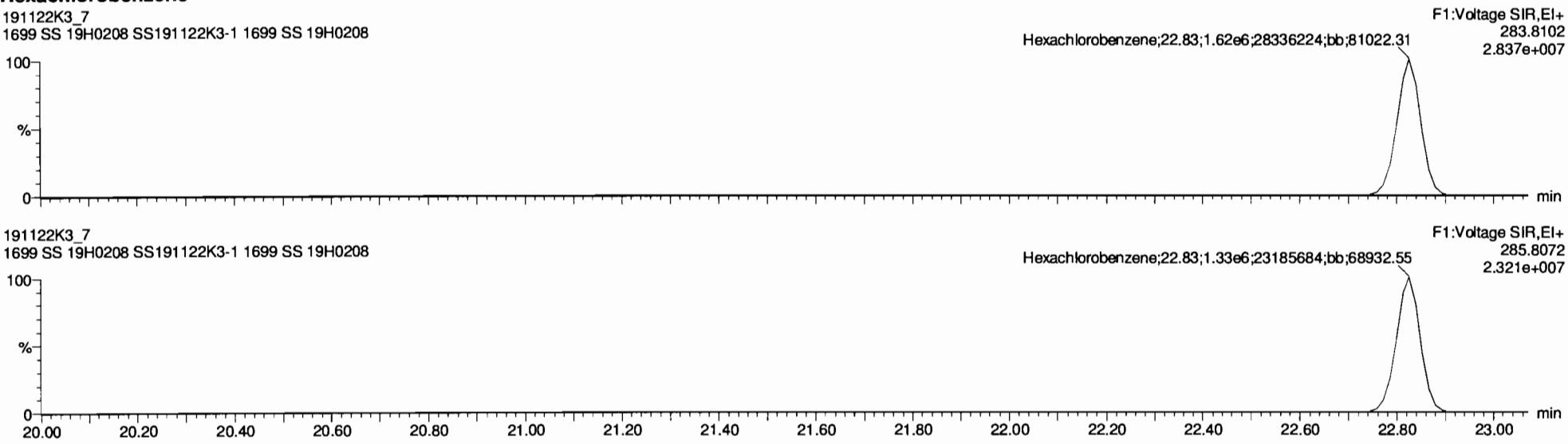
	#	Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.R...	RRT	Check RRT	Conc.	%Rec	DL	EMPC
32	36	13C6-Lindane (gamma)	4.05e5	0.80	NO	0.189	1.000	26.63	26.62	1.020	1.019	NO	45.97	91.9	0.167	
33	37	13C6-Beta-BHC	3.07e5	0.77	NO	0.141	1.000	28.68	28.70	1.098	1.099	NO	46.78	93.6	0.225	
34	38	13C6-Delta-BHC	3.59e5	0.78	NO	0.164	1.000	30.38	30.39	1.163	1.164	NO	46.80	93.6	0.192	
35	39	13C10-Heptachlor	1.79e5	1.34	NO	0.0770	1.000	28.81	28.82	1.103	1.103	NO	49.78	99.6	0.0775	
36	40	13C12-Aldrin	2.81e5	1.61	NO	0.122	1.000	30.93	30.96	1.184	1.185	NO	49.48	99.0	0.0933	
37	41	13C10-Oxychlordane	6.33e4	1.65	NO	0.0283	1.000	33.53	33.56	1.284	1.285	NO	47.99	96.0	0.401	
38	42	13C10-cis-Heptachlor Ep...	8.32e4	1.63	NO	0.0366	1.000	34.32	34.36	1.314	1.315	NO	48.72	97.4	0.310	
39	43	13C10-trans-Chlordane (...	6.61e4	1.75	NO	0.0292	1.000	35.23	35.26	1.349	1.350	NO	48.61	97.2	0.389	
40	44	13C10-trans-Nonachlor	7.39e4	1.62	NO	0.0333	1.000	35.42	35.45	1.356	1.357	NO	47.50	95.0	0.340	
41	45	13C9-Endosulfan I (alpha)	4.87e4	1.58	NO	0.0212	1.000	36.00	36.05	1.378	1.380	NO	49.20	98.4	0.535	
42	46	13C12-2,4'-DDE	1.78e6	1.59	NO	0.763	1.000	35.94	35.93	0.996	0.996	NO	49.88	99.8	0.0953	
43	47	13C12-4,4'-DDE	1.28e6	1.56	NO	0.552	1.000	37.00	37.01	1.026	1.026	NO	49.74	99.5	0.132	
44	48	13C12-Dieldrin	1.73e5	1.61	NO	0.0749	1.000	37.50	37.50	1.039	1.039	NO	49.49	99.0	0.187	
45	49	13C12-Endrin	7.44e4	1.58	NO	0.0351	1.000	38.90	38.91	1.078	1.078	NO	45.44	90.9	0.399	
46	50	13C10-cis-Nonachlor	8.93e4	1.61	NO	0.0389	1.000	39.19	39.20	1.086	1.087	NO	49.15	98.3	0.360	
47	51	13C9-Endosulfan II	2.76e4	1.65	NO	0.0112	1.000	39.91	39.93	1.106	1.107	NO	52.88	106	1.25	
48	52	13C12-2,4'-DDD	1.34e6	1.58	NO	0.588	1.000	38.10	38.15	1.459	1.461	NO	48.91	97.8	0.0990	
49	53	13C12-2,4'-DDT	7.97e5	1.58	NO	0.370	1.000	39.23	39.28	1.502	1.504	NO	46.14	92.3	0.157	
50	54	13C12-4,4'-DDD	1.08e6	1.58	NO	0.473	1.000	39.35	39.41	1.507	1.509	NO	48.87	97.7	0.123	
51	55	13C12-4,4'-DDT	6.41e5	1.57	NO	0.280	1.000	40.41	40.48	1.547	1.550	NO	49.00	98.0	0.208	
52	56	13C9-Endosulfan Sulfate	4.00e4	1.68	NO	0.0173	1.000	41.64	41.65	1.154	1.154	NO	49.61	99.2	1.26	
53	57	13C12-Methoxychlor	6.19e6	20.65	NO	0.257	1.000	43.51	43.52	1.206	1.206	NO	517.1	103	0.300	
54	58	13C10-Mirex	3.92e5	1.59	NO	0.164	1.000	44.06	44.07	1.221	1.222	NO	51.25	102	0.198	
55	59	13C12-Endrin Aldehyde	8.89e5	0.49	NO	0.0345	1.000	41.04	41.05	1.138	1.138	NO	552.1	110	1.25	
56	60	13C12-Endrin Ketone	5.51e5	0.53	NO	0.0222	1.000	44.20	44.22	1.225	1.226	NO	531.7	106	1.94	
57	62	13C-PCB-15	2.33e6	1.57	NO	1.00	1.000	26.18	26.12	1.000	1.000	NO	50.00	100	0.0230	

Dataset: Untitled

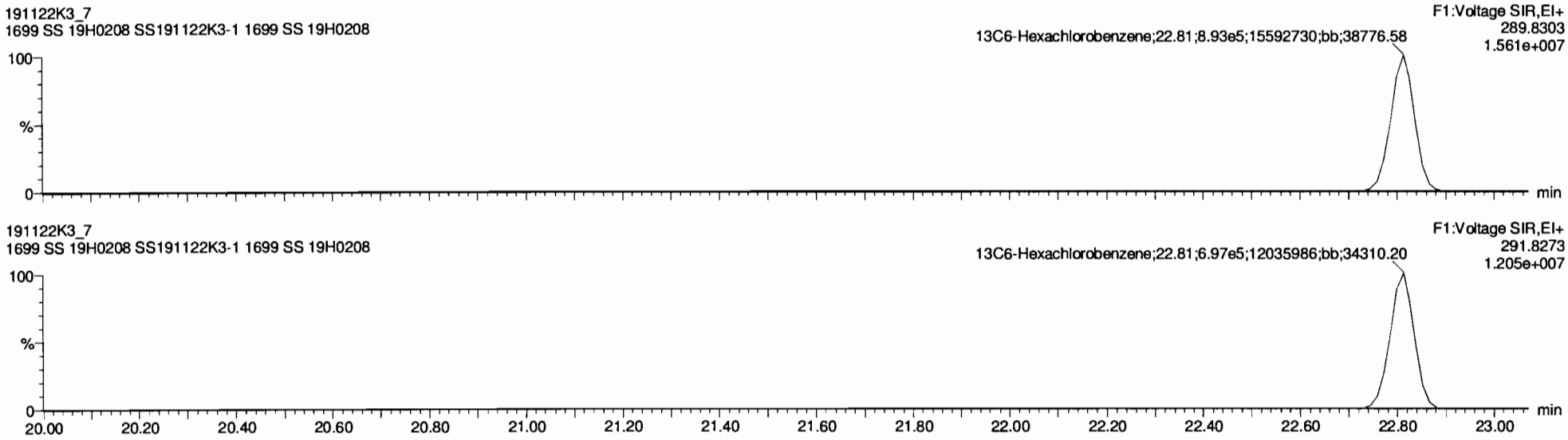
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Hexachlorobenzene



13C6-Hexachlorobenzene



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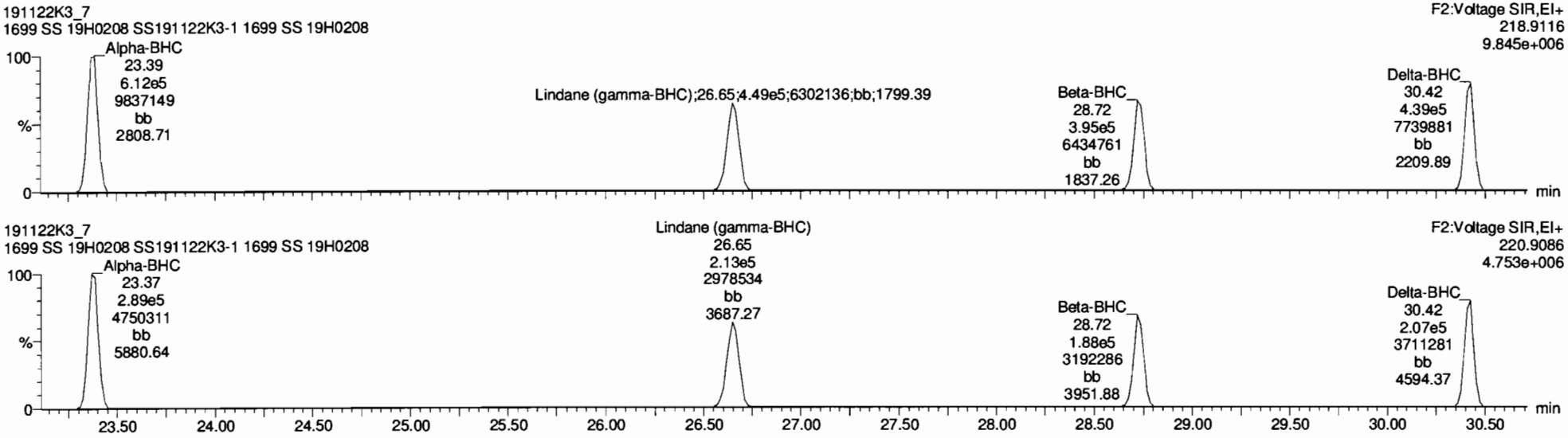
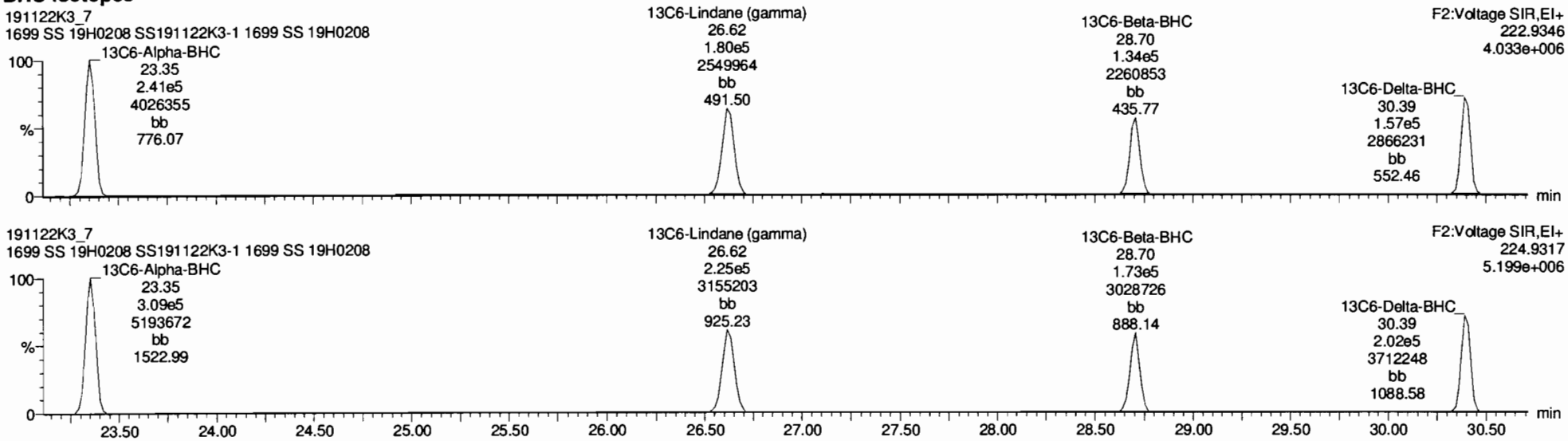
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

BHC Totals



BHC-isotopes



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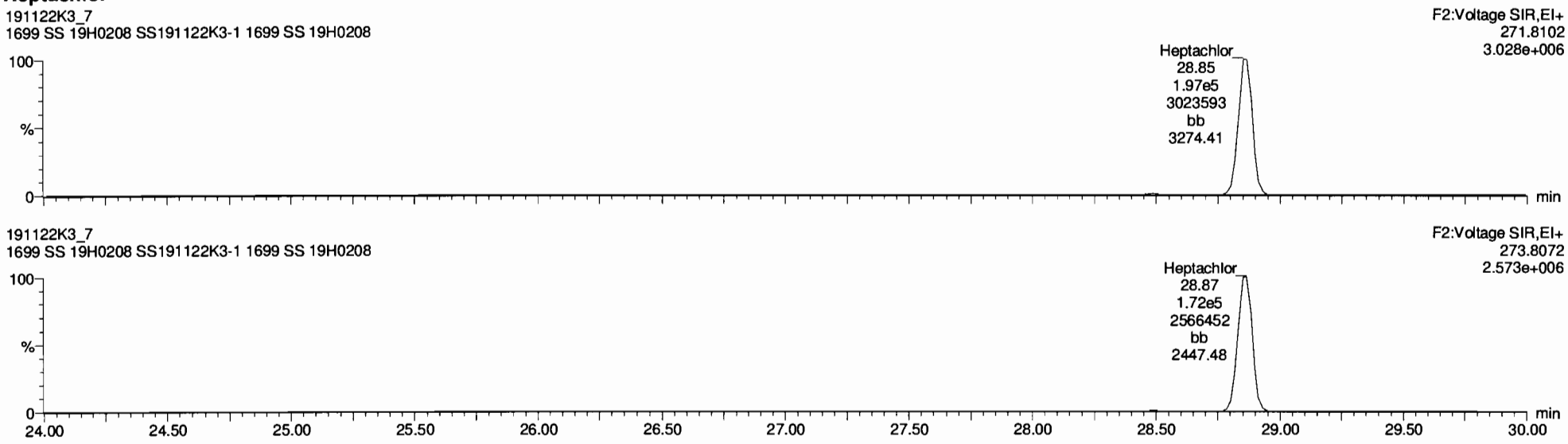
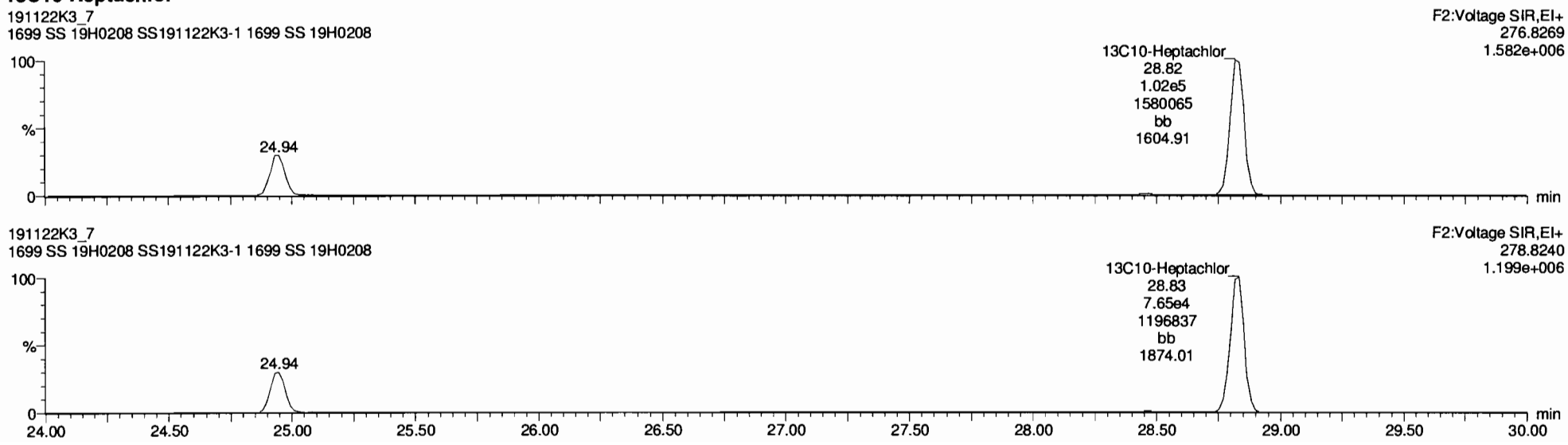
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Heptachlor



13C10-Heptachlor



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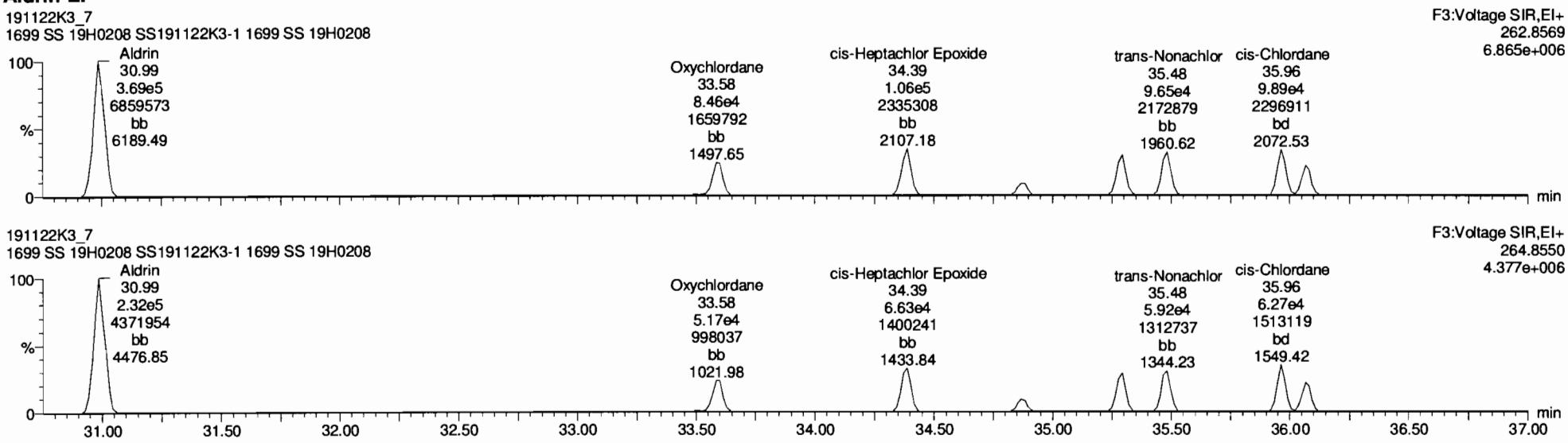
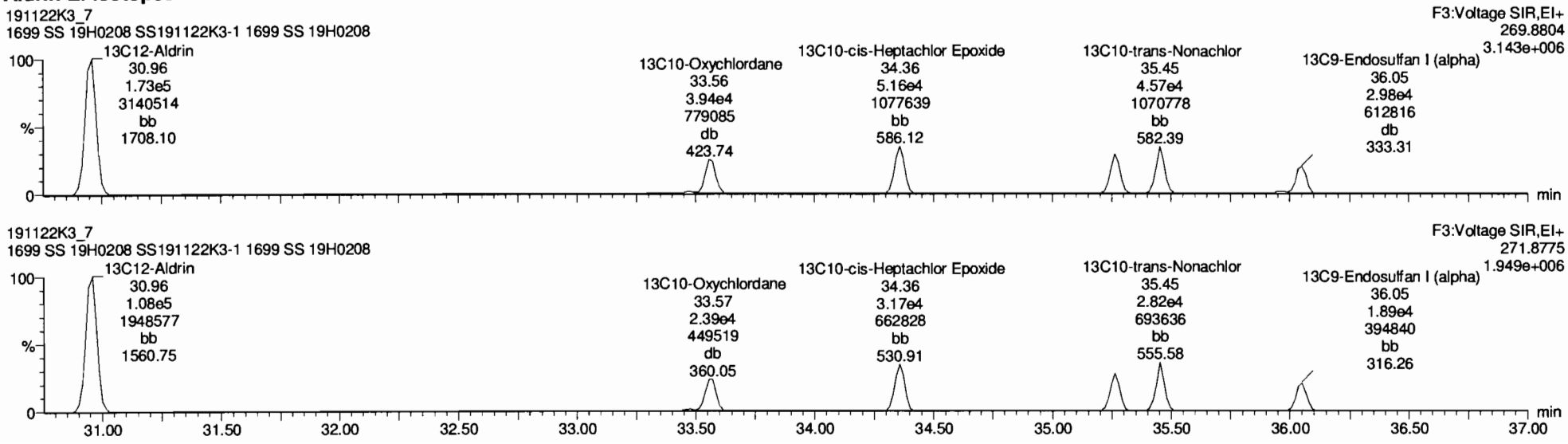
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Aldrin-EI



Aldrin-EI-isotopes



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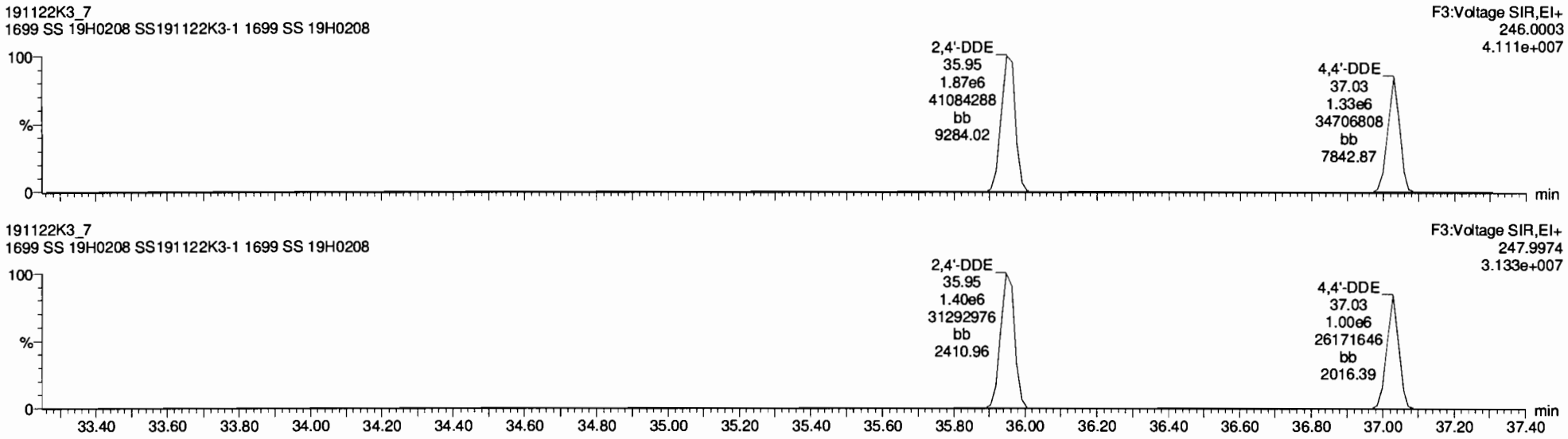
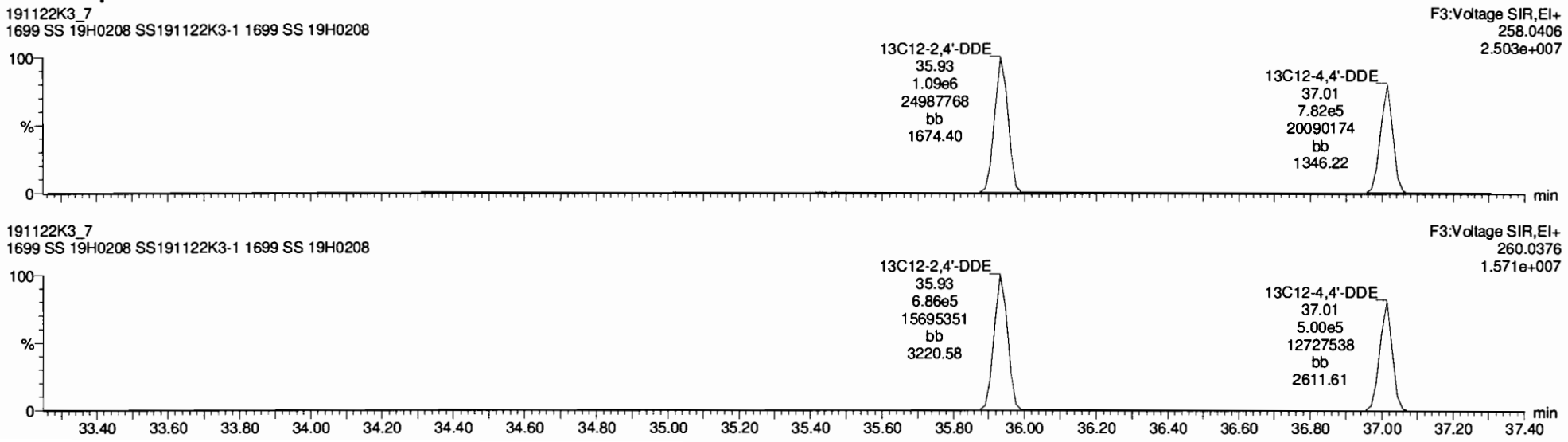
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

DDMU-DDE



DDE-isotopes



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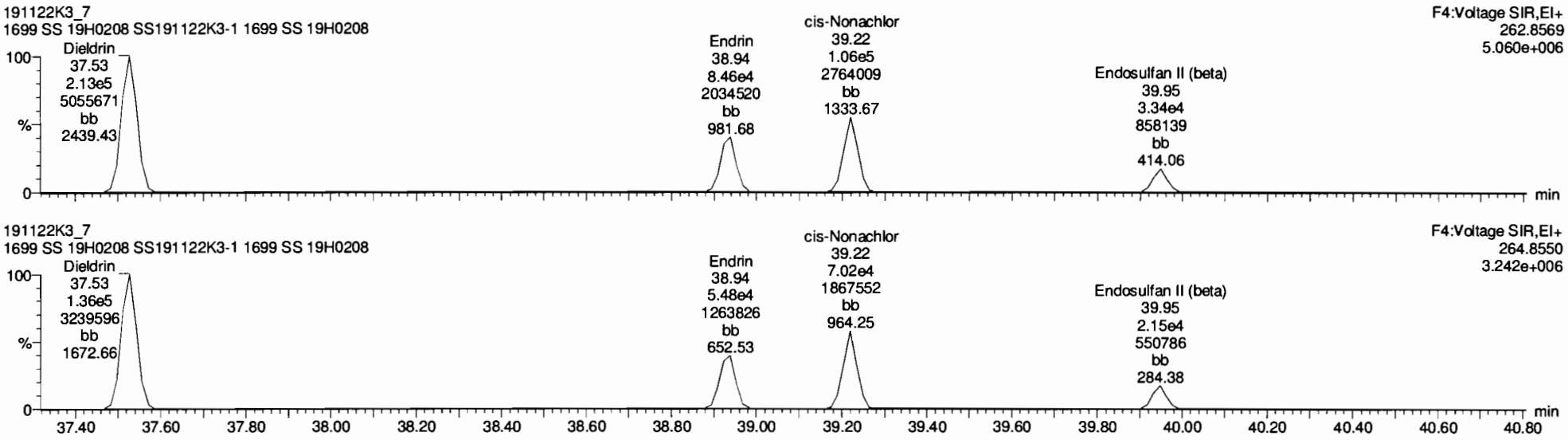
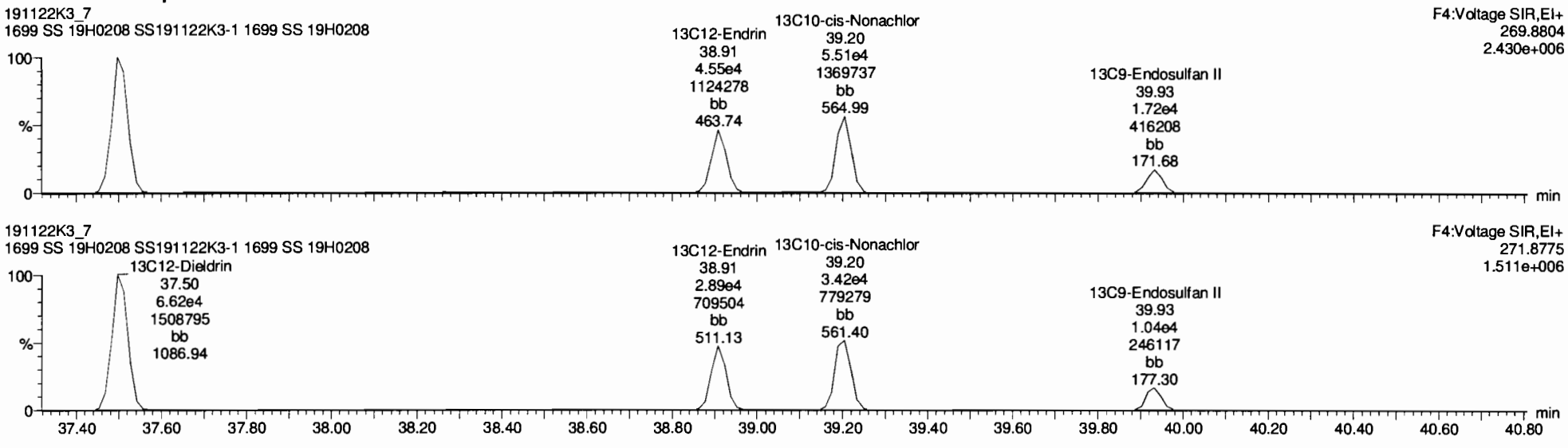
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Dieldrin-EII



Dieldrin-EII-isotopes



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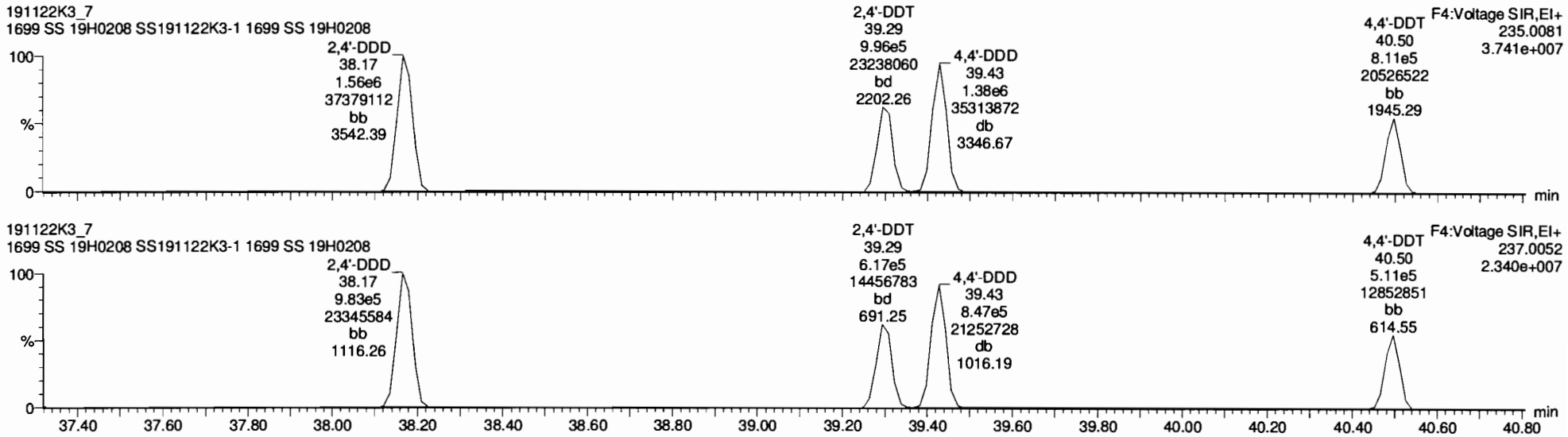
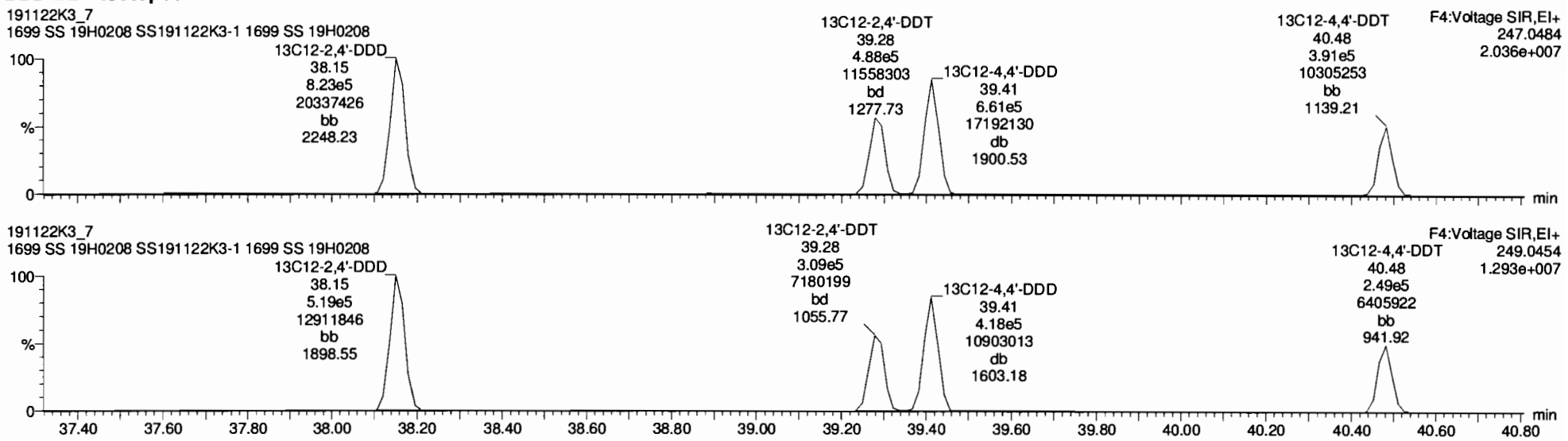
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

DDD-DDT



DDD-DDT-isotopes



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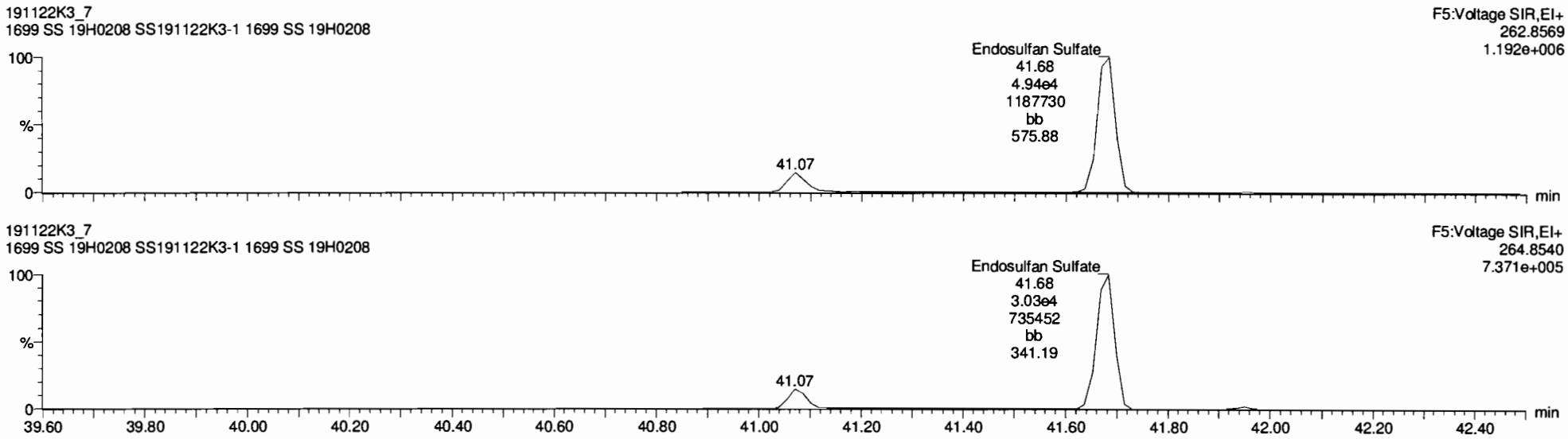
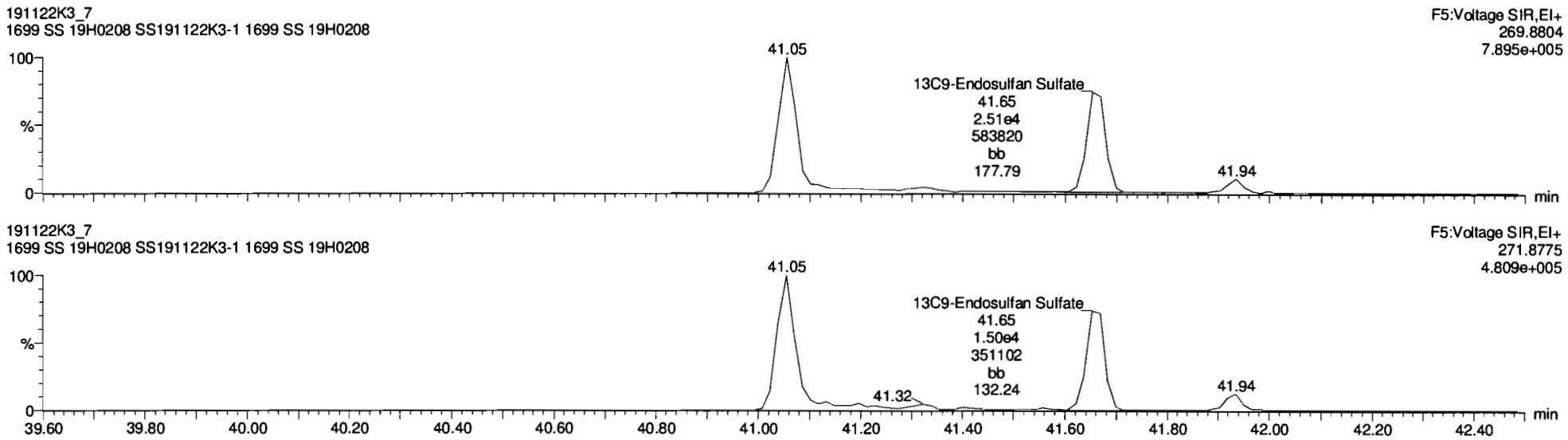
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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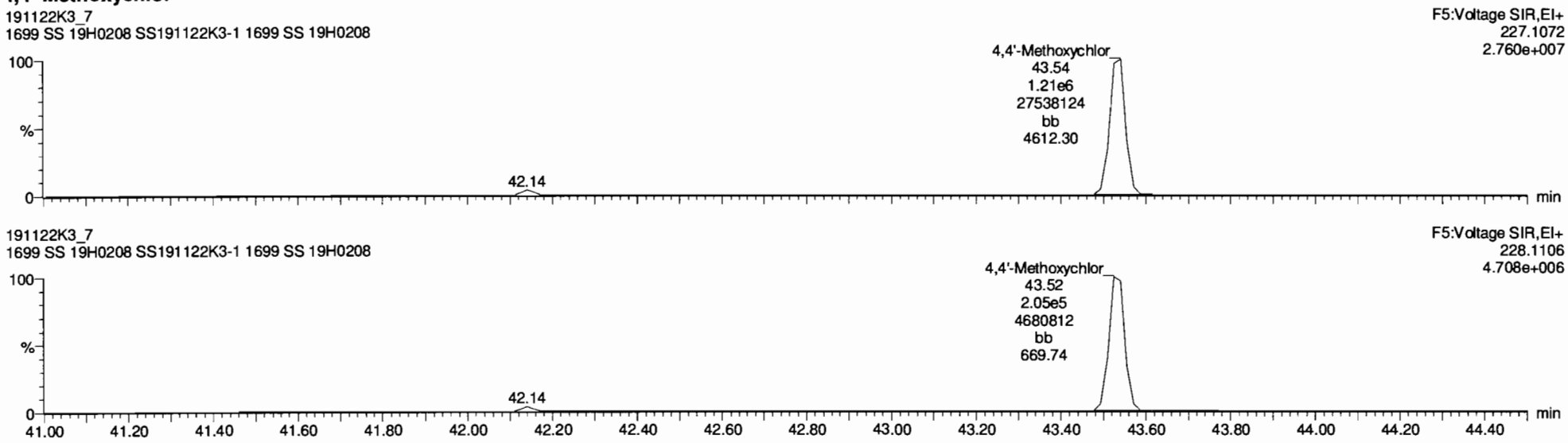
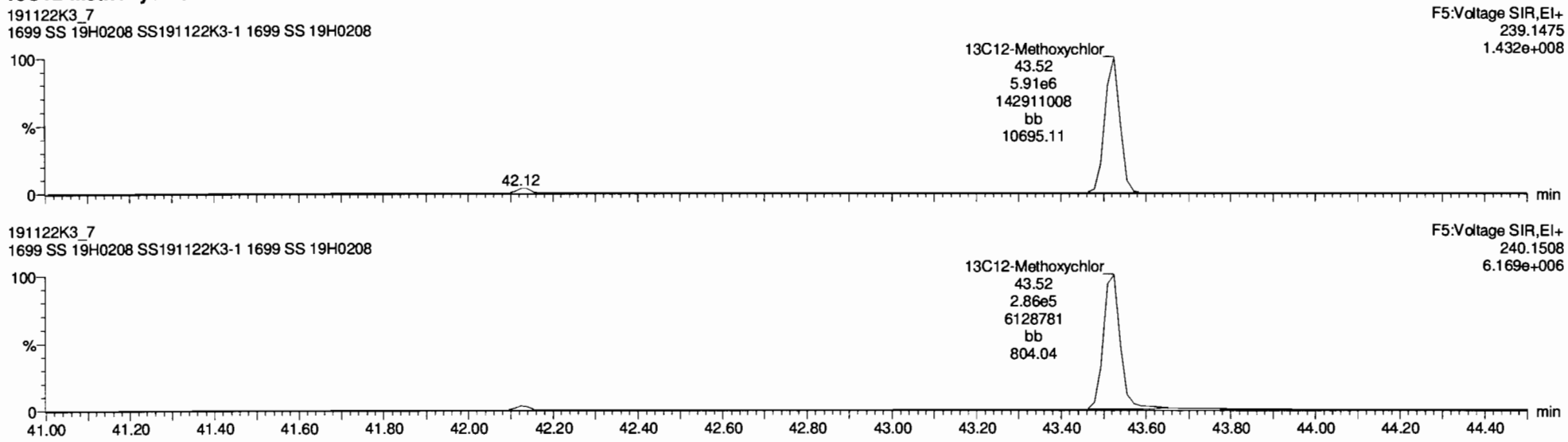
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

4,4'-Methoxychlor



13C12-Methoxychlor



Vista Analytical Laboratory

Dataset: Untitled

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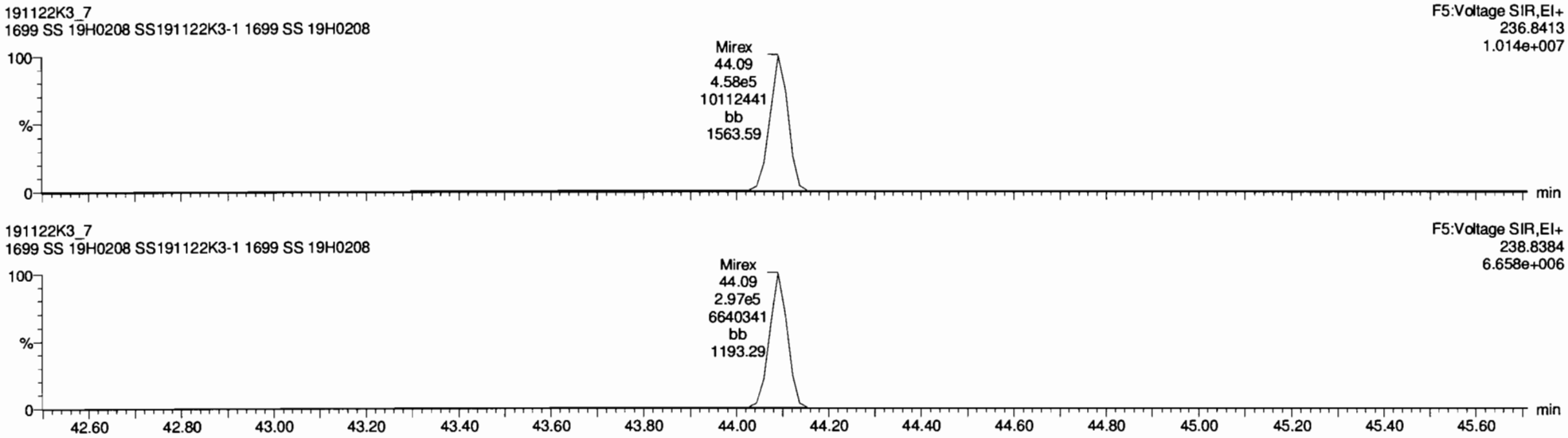
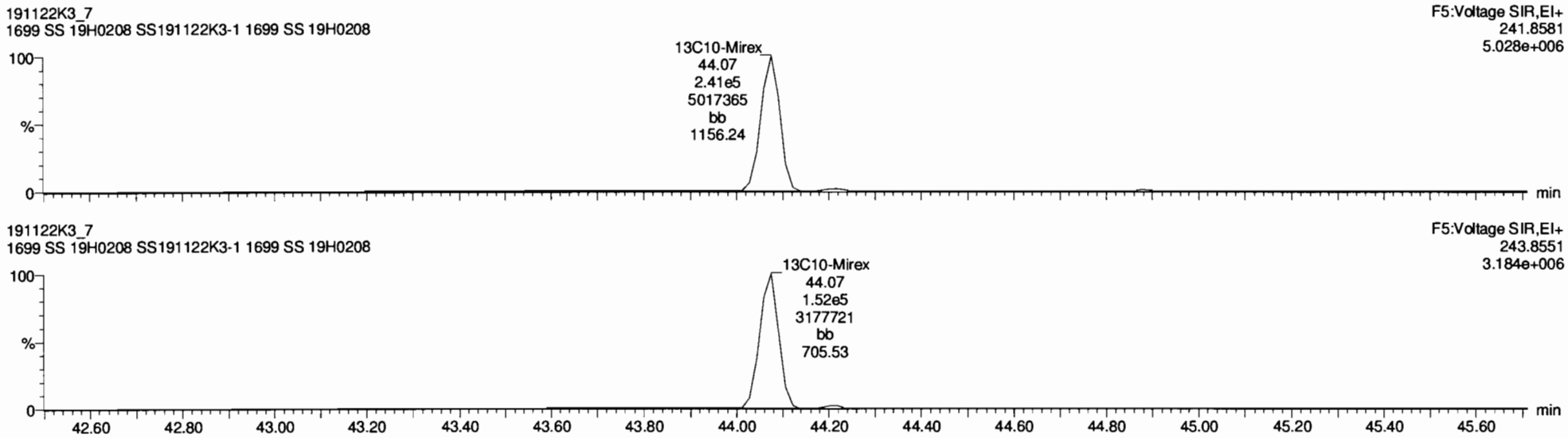
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Mirex



13C10-Mirex



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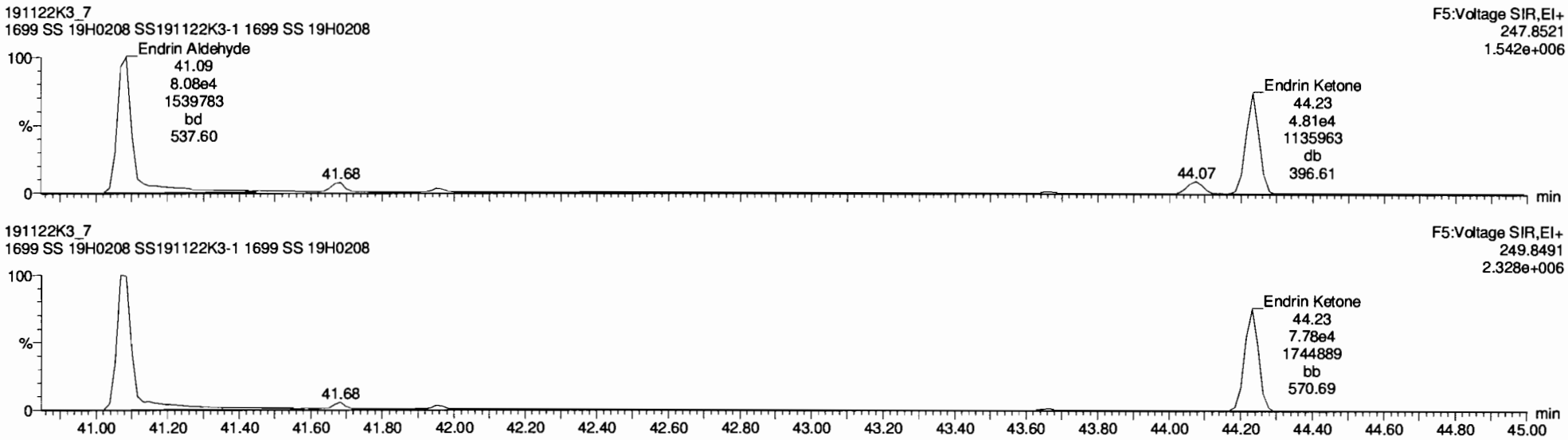
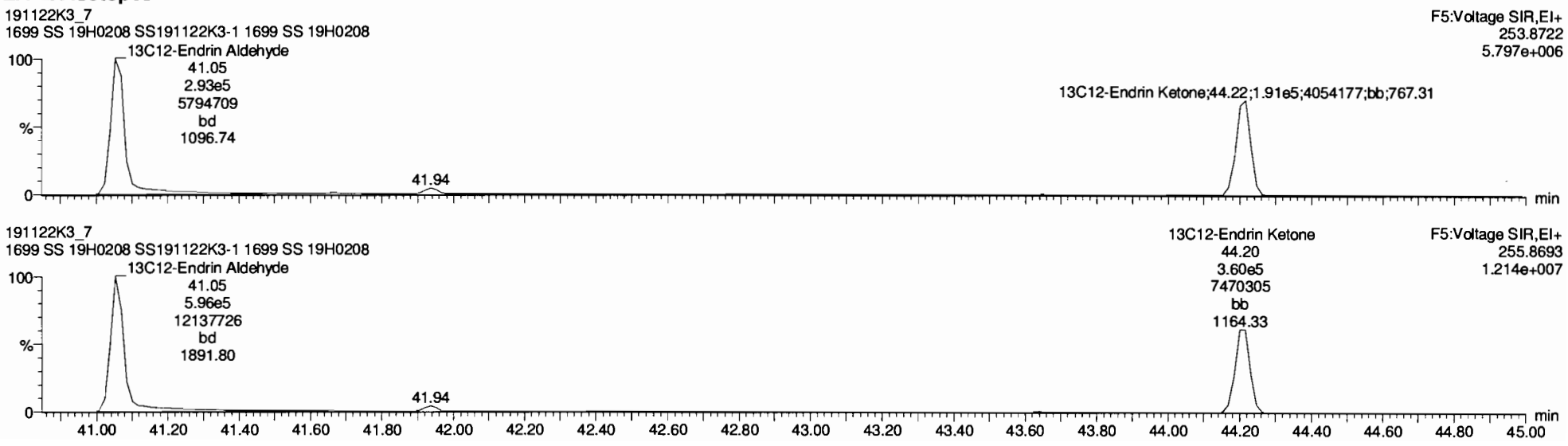
Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

EA-EK



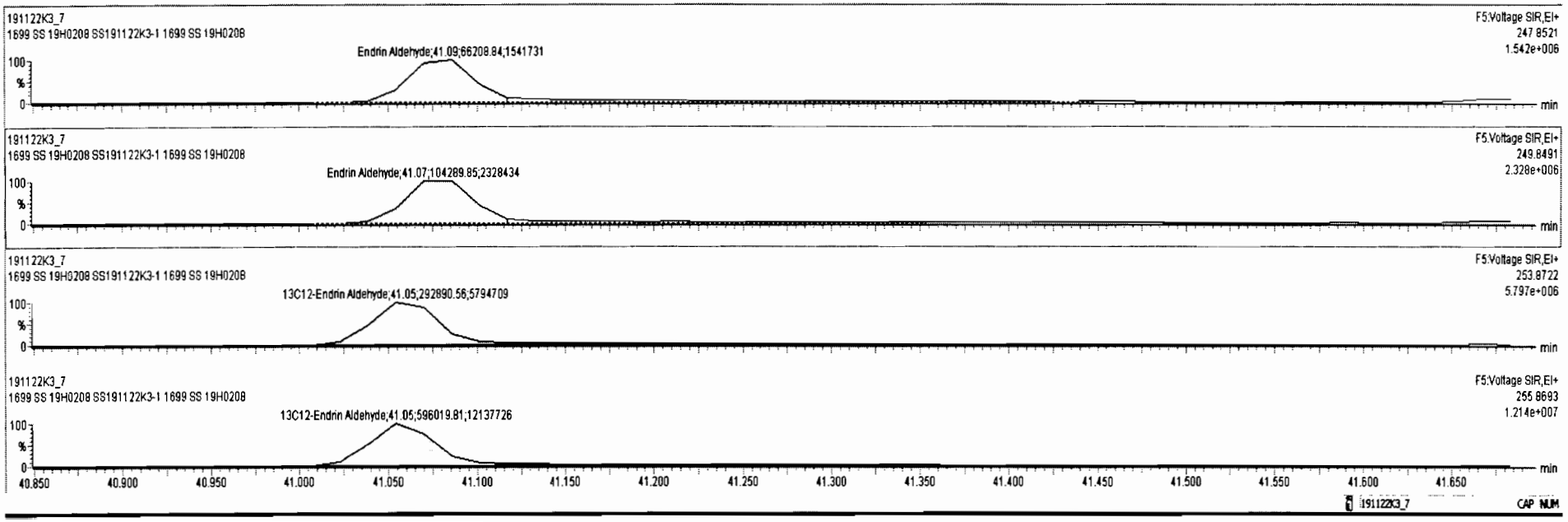
EA-EK-isotopes



TargetLynx - 191122K3_7.qld * [Chromatogram]

File Edit View Display Processing Window Help

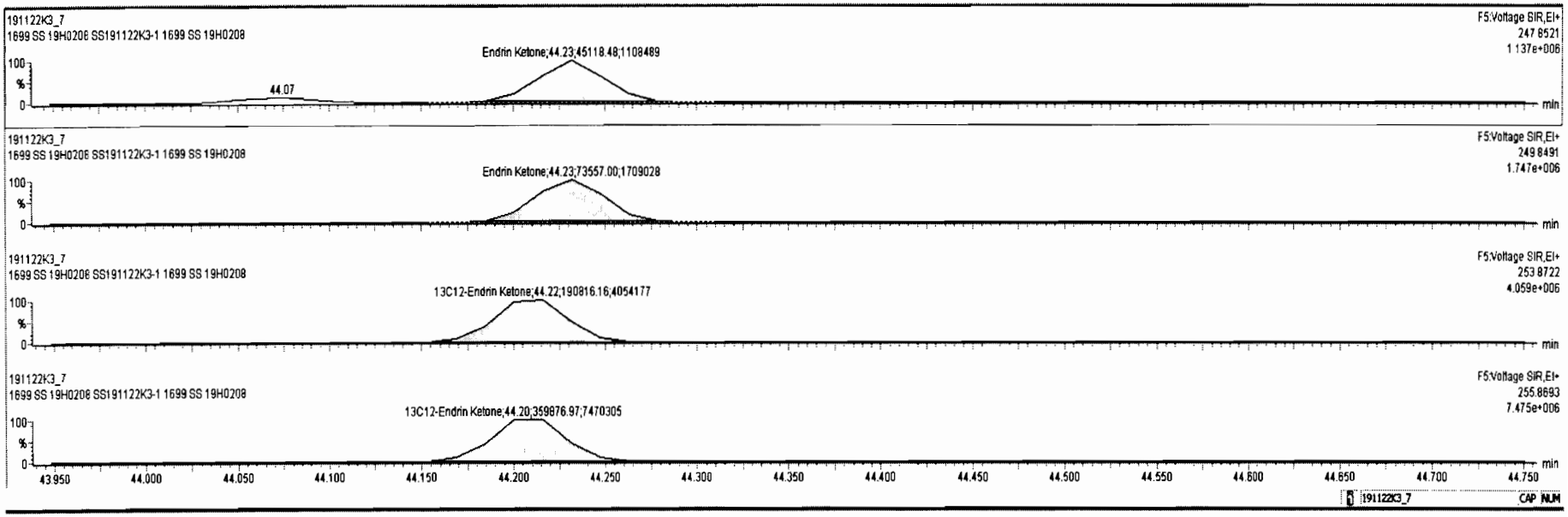
	#	Name	Resp	RA	nAy	RRF	wt/vol	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
15	15	cis-Chlordane	1.62e5	1.58	NO	0.9810	1.000	35.96	35.96	1.014	1.014	NO	111.5	111	0.154	111.5
16	16	Endosulfan I (alpha)	1.06e5	1.59	NO	1.1062	1.000	36.07	36.06	1.001	1.000	NO	98.71	98.7	0.235	98.71
17	17	4,4'-DDMU	2.22e3	2.58	NO	0.6167	1.000	35.72	35.73	0.994	0.994	NO	0.1012	0.101	0.0372	0.1012
18	18	2,4'-DDE	3.26e6	1.34	NO	0.8542	1.000	35.94	35.95	1.000	1.000	NO	107.6	108	0.0625	107.6
19	19	4,4'-DDE	2.33e6	1.33	NO	0.8726	1.000	37.03	37.03	1.000	1.000	NO	104.2	104	0.0757	104.2
20	20	Dieldrin	3.49e5	1.57	NO	0.9570	1.000	37.52	37.53	1.000	1.001	NO	105.5	105	0.133	105.5
21	21	Endrin	1.39e5	1.54	NO	0.9326	1.000	38.91	38.94	1.000	1.001	NO	100.5	100	0.293	100.5
22	22	cis-Nonachlor	1.76e5	1.51	NO	0.9556	1.000	39.22	39.22	1.000	1.000	NO	103.4	103	0.236	103.4
23	23	Endosulfan II (beta)	5.49e4	1.55	NO	1.0639	1.000	39.93	39.95	1.000	1.000	NO	93.39	93.4	0.704	93.39
24	24	2,4'-DDD	2.55e6	1.59	NO	0.9153	1.000	38.15	38.17	1.000	1.000	NO	103.7	104	0.130	103.7
25	25	2,4'-DDT	1.61e6	1.61	NO	0.9205	1.000	39.30	39.29	1.000	1.000	NO	109.9	110	0.226	109.9
26	26	4,4'-DDD	2.23e6	1.63	NO	1.0039	1.000	39.43	39.43	1.000	1.000	NO	102.8	103	0.140	102.8
27	27	4,4'-DDT	1.32e6	1.59	NO	0.9865	1.000	40.50	40.50	1.000	1.000	NO	104.6	105	0.236	104.6
28	28	Endosulfan Sulfate	7.98e4	1.63	NO	0.9279	1.000	41.65	41.68	1.000	1.001	NO	107.4	107	0.610	107.4
29	29	4,4'-Methoxychlor	1.41e6	5.90	NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	100.5	100	0.0952	100.5
30	30	Mirex	7.55e5	1.54	NO	0.9323	1.000	44.10	44.09	1.000	1.000	NO	103.2	103	0.197	103.2
31	31	Endrin Aldehyde	1.70e5	0.63	NO	0.8987	1.000	41.07	41.09	1.000	1.001	NO	106.2	106	0.475	106.2
32	32	Endrin Ketone	1.19e5	0.61	NO	0.9108	1.000	44.22	44.23	1.000	1.000	NO	118.3	118	0.695	118.3
33	33	13C4-Hexachlorobutadiene	3.33e6	1.26	NO	0.1382	1.000	10.19	10.20	0.390	0.391	NO	516.7	103	0.0227	
34	34	13C6-Hexachlorobenzene	1.59e6	1.28	NO	0.6911	1.000	22.82	22.81	0.874	0.873	NO	49.35	98.7	0.00400	
35	35	13C6-Alpha-BHC	5.51e5	0.78	NO	0.2457	1.000	23.37	23.35	0.895	0.894	NO	48.04	96.1	0.129	
36	36	13C6-Lindane (gamma)	4.05e5	0.80	NO	0.1891	1.000	26.63	26.62	1.020	1.019	NO	45.97	91.9	0.167	
37	37	13C6-Beta-BHC	3.07e5	0.77	NO	0.1406	1.000	26.68	26.70	1.098	1.099	NO	46.78	93.6	0.225	
38	38	13C6-Delta-BHC	3.59e5	0.78	NO	0.1644	1.000	30.38	30.39	1.163	1.164	NO	46.80	93.6	0.192	
39	39	13C10-Heptachlor	1.79e5	1.34	NO	0.0770	1.000	26.81	26.82	1.103	1.103	NO	49.78	99.6	0.0775	



TargetLynx 191122K3-7.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	RA	rdy	RRF	wtAvg	Pred.RT	RT	Pred.R...	RRT	RRT Fail	Conc.	%Rec	DL	EMPC
15	15	cis-Chlordane	1.62e5	1.58	NO	0.9810	1.000	35.96	35.96	1.014	1.014	NO	111.5	111	0.154	111.5
16	16	Endosulfan I (alpha)	1.06e5	1.59	NO	1.1062	1.000	36.07	36.06	1.001	1.000	NO	98.71	98.7	0.235	98.71
17	17	4,4'-DDMU	2.22e3	2.58	NO	0.6167	1.000	35.72	35.73	0.994	0.994	NO	0.1012	0.101	0.0372	0.1012
18	18	2,4'-DDE	3.26e6	1.34	NO	0.8542	1.000	35.94	35.95	1.000	1.000	NO	107.6	108	0.0625	107.6
19	19	4,4'-DDE	2.33e6	1.33	NO	0.8726	1.000	37.03	37.03	1.000	1.000	NO	104.2	104	0.0757	104.2
20	20	Dieldrin	3.49e5	1.57	NO	0.9570	1.000	37.52	37.53	1.000	1.001	NO	105.5	105	0.133	105.5
21	21	Endrin	1.39e5	1.54	NO	0.9326	1.000	38.91	38.94	1.000	1.001	NO	100.5	100	0.293	100.5
22	22	cis-Nonachlor	1.76e5	1.51	NO	0.9556	1.000	39.22	39.22	1.000	1.000	NO	103.4	103	0.236	103.4
23	23	Endosulfan II (beta)	5.49e4	1.55	NO	1.0639	1.000	39.93	39.95	1.000	1.000	NO	93.39	93.4	0.704	93.39
24	24	2,4'-DDD	2.55e6	1.59	NO	0.9153	1.000	38.15	38.17	1.000	1.000	NO	103.7	104	0.130	103.7
25	25	2,4'-DDT	1.61e6	1.61	NO	0.9205	1.000	39.30	39.29	1.000	1.000	NO	109.9	110	0.226	109.9
26	26	4,4'-DDD	2.23e6	1.63	NO	1.0039	1.000	39.43	39.43	1.000	1.000	NO	102.8	103	0.140	102.8
27	27	4,4'-DDT	1.32e6	1.59	NO	0.9665	1.000	40.50	40.50	1.000	1.000	NO	104.6	105	0.236	104.6
28	28	Endosulfan Sulfate	7.98e4	1.63	NO	0.9279	1.000	41.65	41.66	1.000	1.001	NO	107.4	107	0.610	107.4
29	29	4,4'-Methoxychlor	1.41e6	5.90	NO	1.1362	1.000	43.53	43.54	1.000	1.000	NO	100.5	100	0.0952	100.5
30	30	Mirex	7.55e5	1.54	NO	0.9323	1.000	44.10	44.09	1.000	1.000	NO	103.2	103	0.197	103.2
31	31	Endrin Aldehyde	1.70e5	0.63	NO	0.8867	1.000	41.07	41.09	1.000	1.001	NO	106.2	106	0.475	106.2
32	32	Endrin Ketone	1.10e5	0.61	NO	0.9198	1.000	44.22	44.23	1.003	1.000	NO	118.3	118	0.895	118.3
33	33	13C4-Hexachlorobutadiene	3.33e6	1.26	NO	0.1382	1.000	10.19	10.20	0.390	0.391	NO	516.7	103	0.0227	
34	34	13C6-Hexachlorobenzene	1.59e6	1.28	NO	0.6911	1.000	22.82	22.81	0.874	0.873	NO	49.35	98.7	0.00400	
35	35	13C6-Alpha-BHC	5.51e5	0.78	NO	0.2457	1.000	23.37	23.35	0.895	0.894	NO	48.04	96.1	0.129	
36	36	13C6-Lindane (gamma)	4.05e5	0.80	NO	0.1891	1.000	26.63	26.62	1.020	1.019	NO	45.97	91.9	0.187	
37	37	13C6-Beta-BHC	3.07e5	0.77	NO	0.1406	1.000	28.68	28.70	1.098	1.099	NO	46.78	93.6	0.225	
38	38	13C6-Delta-BHC	3.59e5	0.78	NO	0.1644	1.000	30.38	30.38	1.163	1.164	NO	46.80	93.6	0.192	
39	39	13C10-Heptachlor	1.79e5	1.34	NO	0.0770	1.000	26.81	26.82	1.103	1.103	NO	49.78	99.6	0.0775	



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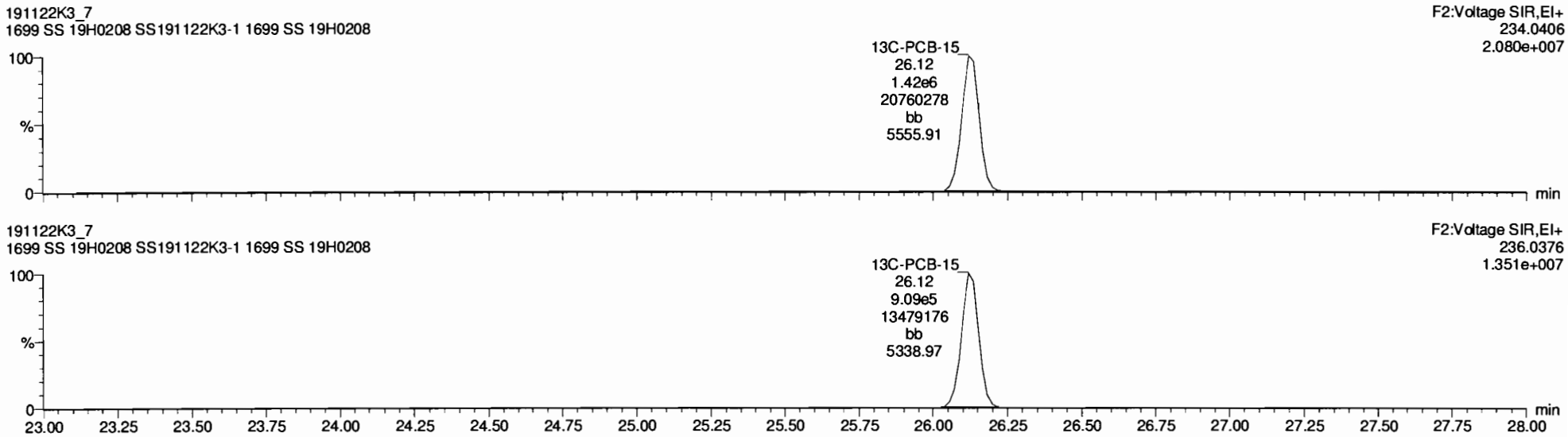
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

Name: 191122K3_7, Date: 22-Nov-2019, Time: 20:56:01, ID: SS191122K3-1 1699 SS 19H0208, Description: 1699 SS 19H0208

13C-PCB-15



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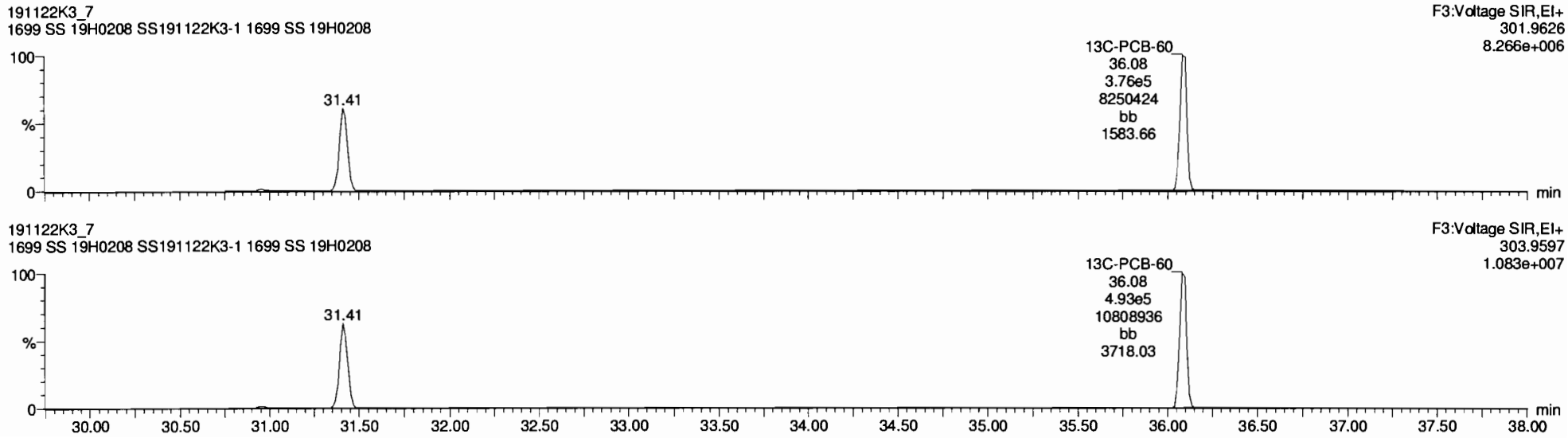

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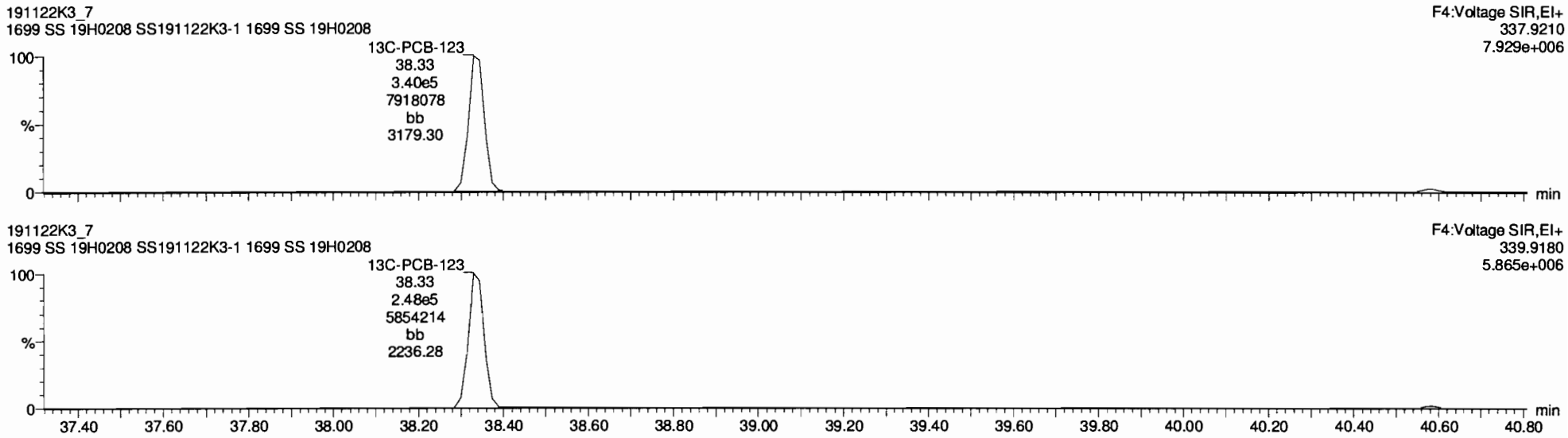
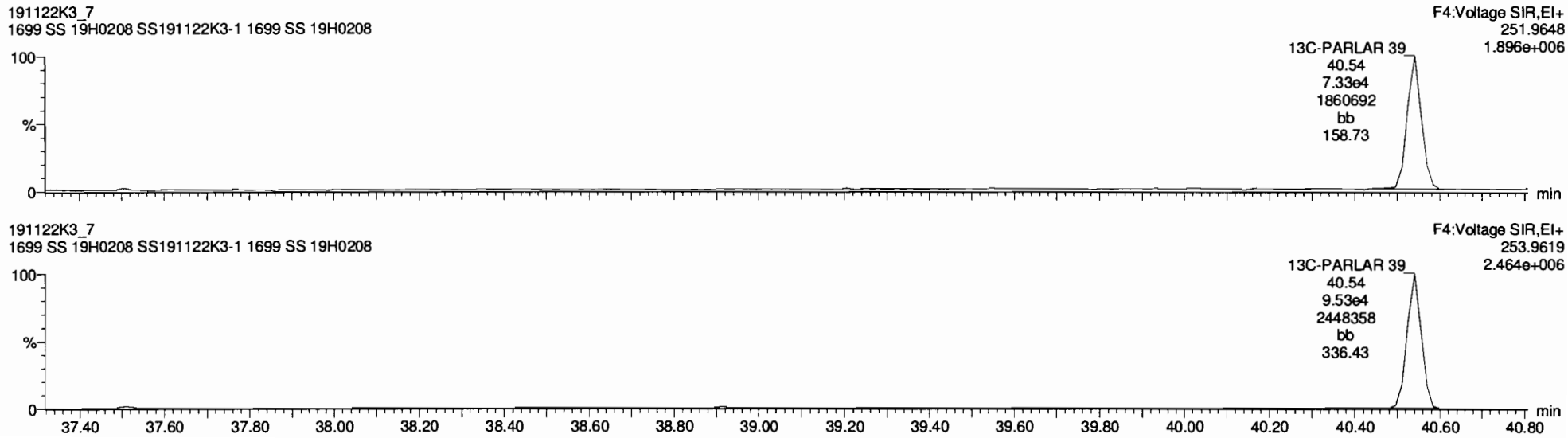


13C-PARLAR 39



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Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

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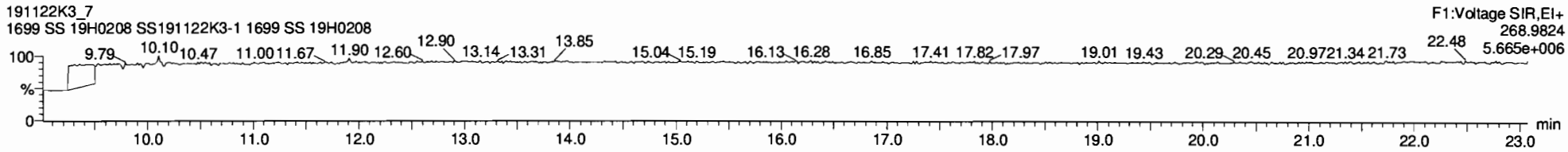
PFK1



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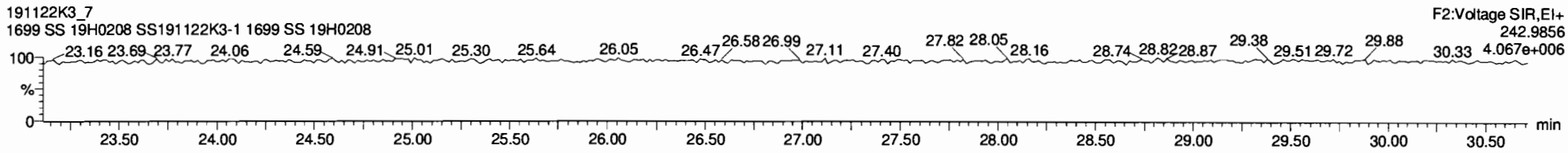

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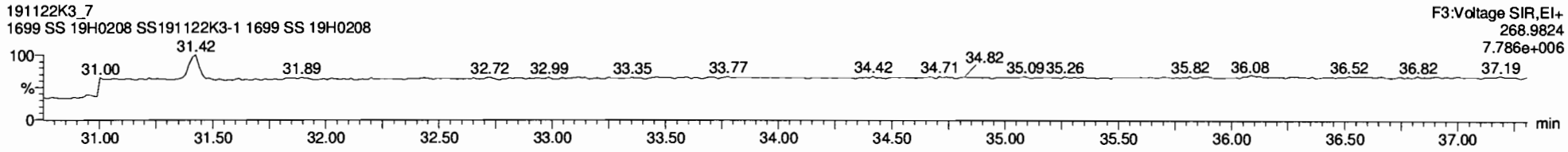

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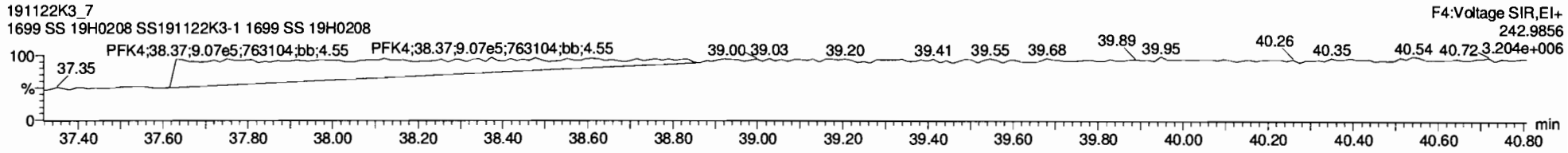

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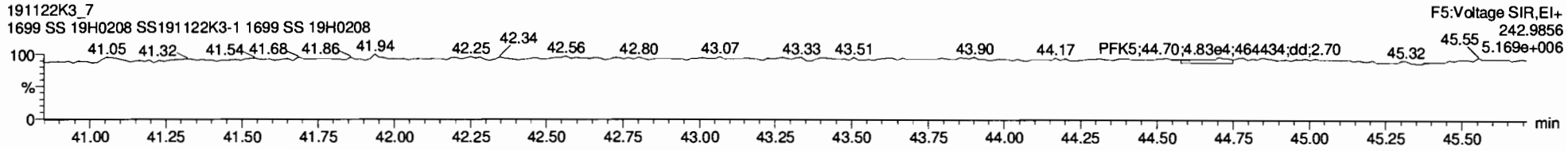

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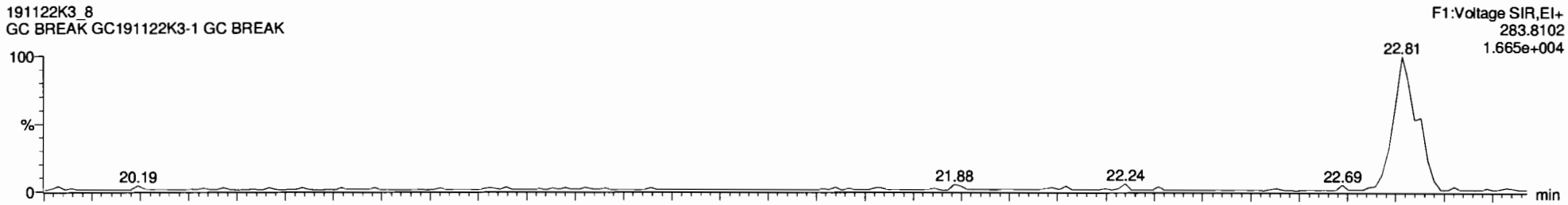
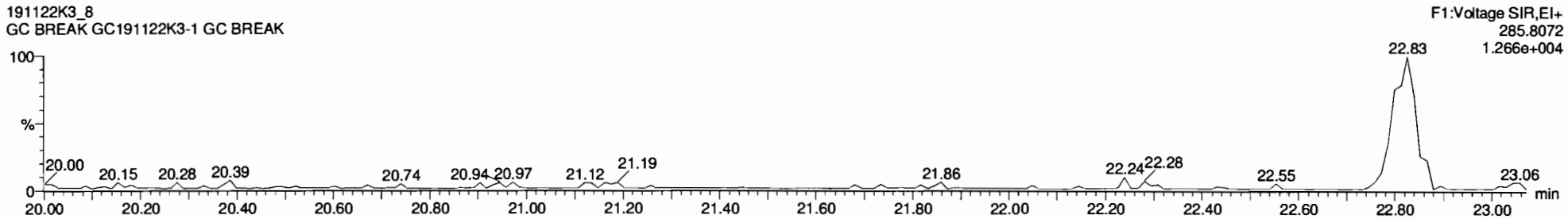
Last Altered: Saturday, November 23, 2019 13:17:08 Pacific Standard Time
Printed: Saturday, November 23, 2019 13:23:12 Pacific Standard Time

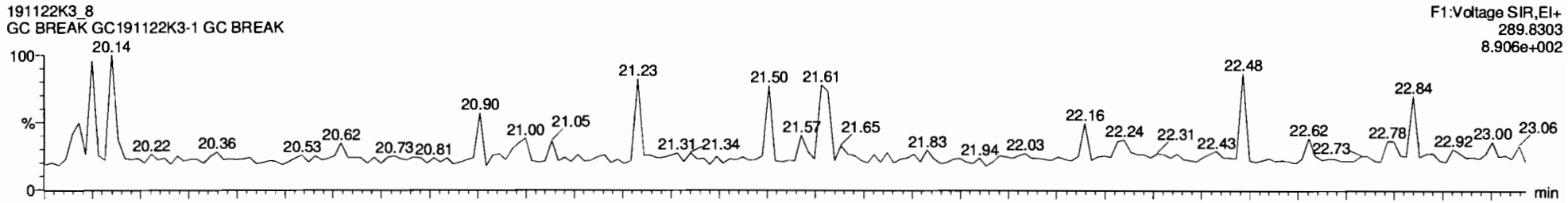
Name: 191122K3_8, Date: 22-Nov-2019, Time: 21:45:34, ID: GC191122K3-1 GC BREAK, Description: GC BREAK

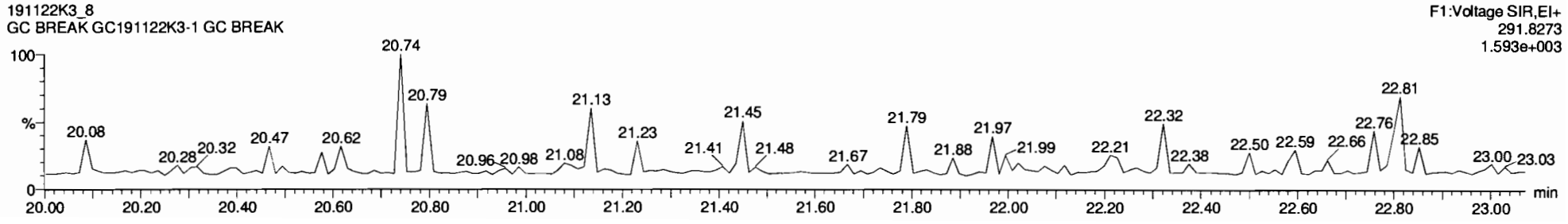
Hexachlorobenzene





13C6-Hexachlorobenzene





Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
Printed: Monday, January 27, 2020 09:10:05 Pacific Standard Time

HC 1.27.2020 CT 01/27/2020

limited
new high point for:
- trans-chlordane (gamma)
- Endosulfan I (alpha)
- Endosulfan II (beta)
} @ 250

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Compound name: Hexachlorobenzene
Response Factor: 0.996909
RRF SD: 0.0391556, Relative SD: 3.9277
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	200125K1_1		1.29	NO	22.65	1.001	4.01e4	1.08e6	1.86	-7.0	0.928	bb
2	200125K1_2	10.0	1.27	NO	22.65	1.001	3.30e5	1.59e6	10.4	3.9	1.04	bb
3	200125K1_3	100	1.25	NO	22.66	1.001	2.52e6	1.29e6	98.0	-2.0	0.977	bb
4	200125K1_4	250	1.24	NO	22.65	1.001	9.58e6	1.98e6	242	-3.0	0.967	bb
5	200125K1_5	1200	1.24	NO	22.66	1.001	2.98e7	1.29e6	1160	-3.5	0.962	bb
6	200125K1_6	50.0	1.25	NO	22.65	1.001	1.07e6	1.03e6	52.3	4.6	1.04	bb

Compound name: Alpha-BHC
Response Factor: 0.861729
RRF SD: 0.0306851, Relative SD: 3.56087
Response type: Internal Std (Ref 35), 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	200125K1_1		2.26	NO	23.20	1.001	1.43e4	4.07e5	2.04	1.8	0.878	bb
2	200125K1_2	10.0	2.17	NO	23.20	1.001	1.05e5	5.98e5	10.2	2.0	0.879	bb
3	200125K1_3	100	2.13	NO	23.20	1.001	8.26e5	4.93e5	97.2	-2.8	0.838	bb
4	200125K1_4	250	2.11	NO	23.20	1.001	3.14e6	7.46e5	244	-2.4	0.841	bb
5	200125K1_5	1200	2.10	NO	23.20	1.001	1.01e7	5.01e5	1170	-2.2	0.843	bb
6	200125K1_6	50.0	2.15	NO	23.20	1.001	3.43e5	3.78e5	52.7	5.4	0.908	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
Printed: Monday, January 27, 2020 09:10:05 Pacific Standard Time

Compound name: Lindane (gamma-BHC)
Response Factor: 0.868971
RRF SD: 0.0249496, Relative SD: 2.87116
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	200125K1_1		2.01	NO	26.49	1.001	9.75e3	3.08e5	1.82	-8.8	0.792	MM
2	200125K1_2	10.0	2.11	NO	26.51	1.001	8.21e4	4.71e5	10.0	0.2	0.871	bb
3	200125K1_3	100	2.10	NO	26.51	1.001	6.40e5	3.79e5	97.1	-2.9	0.844	bb
4	200125K1_4	250	2.09	NO	26.51	1.001	2.57e6	5.99e5	247	-1.4	0.857	bb
5	200125K1_5	1200	2.10	NO	26.51	1.001	8.06e6	3.89e5	1190	-0.7	0.863	bb
6	200125K1_6	50.0	2.20	NO	26.51	1.001	2.76e5	3.04e5	52.4	4.7	0.910	bb

Compound name: Beta-BHC
Response Factor: 1.01731
RRF SD: 0.0367395, Relative SD: 3.61143
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	200125K1_1		2.10	NO	28.55	1.001	9.64e3	2.40e5	1.98	-1.1	1.01	bb
2	200125K1_2	10.0	2.14	NO	28.55	1.001	7.24e4	3.58e5	9.93	-0.7	1.01	bb
3	200125K1_3	100	2.15	NO	28.55	1.001	5.84e5	2.94e5	97.6	-2.4	0.993	bb
4	200125K1_4	250	2.11	NO	28.57	1.001	2.33e6	4.74e5	241	-3.5	0.982	bb
5	200125K1_5	1200	2.13	NO	28.57	1.001	7.42e6	3.01e5	1210	0.8	1.03	bb
6	200125K1_6	50.0	2.19	NO	28.55	1.001	2.45e5	2.28e5	52.9	5.7	1.08	bb

Compound name: Delta-BHC
Response Factor: 0.952053
RRF SD: 0.0288312, Relative SD: 3.02832
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	200125K1_1		1.91	NO	30.24	1.001	9.90e3	2.72e5	1.91	-4.5	0.909	MM
2	200125K1_2	10.0	2.09	NO	30.24	1.001	8.28e4	4.23e5	10.3	2.6	0.977	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
Printed: Monday, January 27, 2020 09:10:05 Pacific Standard Time

Compound name: Delta-BHC

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	100	2.06	NO	30.24	1.001	6.46e5	3.50e5	97.0	-3.0	0.923	bb
4	200125K1_4	250	2.11	NO	30.24	1.000	2.59e6	5.54e5	245	-1.9	0.934	bb
5	200125K1_5	1200	2.09	NO	30.24	1.000	8.11e6	3.61e5	1180	-1.6	0.937	bb
6	200125K1_6	50.0	2.10	NO	30.24	1.001	2.66e5	2.69e5	51.9	3.8	0.988	bb

Compound name: Heptachlor
Response Factor: 1.07868
RRF SD: 0.020999, Relative SD: 1.94673
Response type: Internal Std (Ref 39), 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	200125K1_1		1.15	NO	28.68	1.001	6.85e3	1.52e5	2.09	4.6	1.13	bb
2	200125K1_2	10.0	1.15	NO	28.68	1.001	5.32e4	2.44e5	10.1	1.1	1.09	bb
3	200125K1_3	100	1.19	NO	28.69	1.002	4.21e5	1.99e5	97.8	-2.2	1.06	bb
4	200125K1_4	250	1.16	NO	28.68	1.001	1.73e6	3.27e5	245	-2.0	1.06	bb
5	200125K1_5	1200	1.16	NO	28.69	1.001	5.49e6	2.10e5	1210	0.9	1.09	bb
6	200125K1_6	50.0	1.20	NO	28.68	1.001	1.69e5	1.53e5	51.1	2.1	1.10	bb

Compound name: Aldrin
Response Factor: 1.11111
RRF SD: 0.0326228, Relative SD: 2.93604
Response type: Internal Std (Ref 40), 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	200125K1_1		1.47	NO	30.80	1.001	8.12e3	2.01e5	1.81	-9.3	1.01	bb
2	200125K1_2	10.0	1.60	NO	30.80	1.001	6.96e4	3.07e5	10.2	2.0	1.13	bb
3	200125K1_3	100	1.61	NO	30.80	1.001	5.43e5	2.54e5	96.1	-3.9	1.07	bb
4	200125K1_4	250	1.58	NO	30.80	1.001	2.13e6	3.87e5	247	-1.1	1.10	bb
5	200125K1_5	1200	1.60	NO	30.80	1.001	6.58e6	2.49e5	1190	-0.8	1.10	bb
6	200125K1_6	50.0	1.56	NO	30.80	1.001	2.24e5	1.94e5	51.9	3.7	1.15	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
Printed: Monday, January 27, 2020 09:10:05 Pacific Standard Time

Compound name: Oxychlordane
Response Factor: 1.0939
RRF SD: 0.0288743, Relative SD: 2.63958
Response type: Internal Std (Ref 41), 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	200125K1_1		1.50	NO	33.37	1.000	1.98e3	4.42e4	2.04	2.1	1.12	bb
2	200125K1_2	10.0	1.56	NO	33.38	1.001	1.58e4	7.08e4	10.2	2.3	1.12	MM
3	200125K1_3	100	1.64	NO	33.38	1.001	1.27e5	5.99e4	96.5	-3.5	1.06	MM
4	200125K1_4	250	1.59	NO	33.38	1.001	5.13e5	9.58e4	245	-2.1	1.07	MM
5	200125K1_5	1200	1.58	NO	33.38	1.001	1.64e6	6.16e4	1210	1.2	1.11	MM
6	200125K1_6	50.0	1.53	NO	33.38	1.001	5.25e4	4.70e4	51.1	2.1	1.12	MM

Compound name: cis-Heptachlor Epoxide
Response Factor: 1.13181
RRF SD: 0.0430955, Relative SD: 3.80767
Response type: Internal Std (Ref 42), 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	200125K1_1		1.57	NO	34.17	1.001	2.58e3	5.90e4	1.93	-3.6	1.09	bb
2	200125K1_2	10.0	1.52	NO	34.17	1.001	2.17e4	9.14e4	10.5	5.0	1.19	bb
3	200125K1_3	100	1.62	NO	34.17	1.001	1.64e5	7.55e4	96.0	-4.0	1.09	bb
4	200125K1_4	250	1.60	NO	34.17	1.001	6.78e5	1.23e5	243	-2.6	1.10	bb
5	200125K1_5	1200	1.59	NO	34.17	1.001	2.24e6	8.33e4	1190	-1.2	1.12	bb
6	200125K1_6	50.0	1.54	NO	34.17	1.001	6.89e4	5.91e4	51.5	2.9	1.16	bb

Compound name: trans-Heptachlor Epoxide
Response Factor: 0.260336
RRF SD: 0.0144991, Relative SD: 5.5694
Response type: Internal Std (Ref 42), 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	200125K1_1		1.43	NO	34.65	1.015	6.19e2	5.90e4	2.01	0.7	0.262	MM
2	200125K1_2	10.0	1.71	NO	34.67	1.015	5.05e3	9.14e4	10.6	6.0	0.276	bb

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Compound name: trans-Heptachlor Epoxide

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	100	1.59	NO	34.67	1.015	3.85e4	7.55e4	98.1	-1.9	0.255	bb
4	200125K1_4	250	1.60	NO	34.67	1.015	1.53e5	1.23e5	239	-4.4	0.249	bb
5	200125K1_5	1200	1.59	NO	34.67	1.015	4.92e5	8.33e4	1130	-5.5	0.246	bb
6	200125K1_6	50.0	1.72	NO	34.67	1.015	1.63e4	5.91e4	52.9	5.8	0.276	bb

Compound name: trans-Chlordane (gamma)
Response Factor: 1.17798
RRF SD: 0.0241175, Relative SD: 2.04735
Response type: Internal Std (Ref 43), 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	200125K1_1		1.95	NO	35.08	1.001	1.82e3	4.25e4	1.82	-9.2	1.07	MM
2	200125K1_2	10.0	1.58	NO	35.08	1.001	1.56e4	6.53e4	10.2	1.6	1.20	bb
3	200125K1_3	100	1.63	NO	35.08	1.001	1.26e5	5.32e4	100	0.2	1.18	bb
4	200125K1_4	250	1.57	NO	35.08	1.000	4.91e5	8.60e4	243	-3.0	1.14	bb
5	200125K1_5	1200	1.58	NO	35.07	1.000	1.57e6	6.99e4	951	-20.8	0.933	bbX
6	200125K1_6	50.0	1.60	NO	35.08	1.001	5.03e4	4.23e4	50.5	1.1	1.19	bb

Compound name: trans-Nonachlor
Response Factor: 1.07661
RRF SD: 0.0870651, Relative SD: 8.08693
Response type: Internal Std (Ref 44), 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	200125K1_1		1.47	NO	35.26	1.001	1.94e3	4.87e4	1.85	-7.6	0.995	MM
2	200125K1_2	10.0	1.56	NO	35.26	1.001	1.56e4	7.51e4	9.61	-3.9	1.04	bb
3	200125K1_3	100	1.62	NO	35.26	1.001	1.33e5	6.43e4	96.3	-3.7	1.04	bb
4	200125K1_4	250	1.60	NO	35.26	1.001	5.28e5	9.90e4	248	-0.9	1.07	bb
5	200125K1_5	1200	1.58	NO	35.26	1.000	1.70e6	6.95e4	1130	-5.6	1.02	bb
6	200125K1_6	50.0	1.66	NO	35.26	1.001	5.56e4	4.52e4	57.1	14.1	1.23	bb

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Compound name: cis-Chlordane
Response Factor: 1.10797
RRF SD: 0.0945856, Relative SD: 8.53684
Response type: Internal Std (Ref 44), 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	200125K1_1		1.77	NO	35.75	1.015	2.20e3	4.87e4	2.03	1.7	1.13	MM
2	200125K1_2	10.0	1.68	NO	35.75	1.015	1.71e4	7.51e4	10.3	2.6	1.14	bd
3	200125K1_3	100	1.63	NO	35.75	1.015	1.35e5	6.43e4	94.6	-5.4	1.05	bd
4	200125K1_4	250	1.59	NO	35.75	1.015	5.31e5	9.90e4	242	-3.2	1.07	bd
5	200125K1_5	1200	1.59	NO	35.74	1.014	1.71e6	6.95e4	1110	-7.7	1.02	bd
6	200125K1_6	50.0	1.46	NO	35.75	1.015	5.69e4	4.52e4	56.8	13.6	1.26	bd

Compound name: Endosulfan I (alpha)
Response Factor: 1.15523
RRF SD: 0.117323, Relative SD: 10.1558
Response type: Internal Std (Ref 45), 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	200125K1_1		1.66	NO	35.85	1.000	9.54e3	3.14e4	13.2	31.8	1.52	MM
2	200125K1_2	15.0	1.66	NO	35.85	1.000	1.91e4	4.89e4	16.9	12.5	1.30	db
3	200125K1_3	100	1.62	NO	35.85	1.000	9.26e4	4.08e4	98.1	-1.9	1.13	db
4	200125K1_4	250	1.59	NO	35.86	1.001	3.67e5	7.23e4	220	-12.1	1.02	db
5	200125K1_5	1200	1.56	NO	35.86	1.000	1.17e6	6.99e4	726	-39.5	0.699	dbX
6	200125K1_6	50.0	1.51	NO	35.85	1.000	3.77e4	3.21e4	50.7	1.5	1.17	db

Compound name: 2,4'-DDE
Response Factor: 0.984089
RRF SD: 0.0386239, Relative SD: 3.92484
Response type: Internal Std (Ref 46), 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	200125K1_1		1.28	NO	35.73	1.000	4.38e4	1.16e6	1.92	-4.1	0.944	bb
2	200125K1_2	10.0	1.40	NO	35.73	1.000	3.60e5	1.76e6	10.4	3.7	1.02	bb

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Compound name: 2,4'-DDE

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	100	1.41	NO	35.73	1.000	2.84e6	1.48e6	97.7	-2.3	0.962	bb
4	200125K1_4	250	1.40	NO	35.73	1.000	1.09e7	2.29e6	242	-3.3	0.952	bb
5	200125K1_5	1200	1.40	NO	35.73	1.000	3.49e7	1.52e6	1160	-3.0	0.955	bb
6	200125K1_6	50.0	1.42	NO	35.73	1.000	1.15e6	1.12e6	52.4	4.9	1.03	bb

Compound name: 4,4'-DDE
Response Factor: 0.996133
RRF SD: 0.0368034, Relative SD: 3.69463
Response type: Internal Std (Ref 47), 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	200125K1_1		1.32	NO	36.81	1.000	3.10e4	8.27e5	1.88	-5.8	0.939	bb
2	200125K1_2	10.0	1.40	NO	36.80	1.000	2.66e5	1.28e6	10.4	4.2	1.04	bb
3	200125K1_3	100	1.39	NO	36.80	1.000	2.07e6	1.07e6	97.2	-2.8	0.968	bb
4	200125K1_4	250	1.40	NO	36.81	1.000	7.88e6	1.64e6	241	-3.7	0.959	bb
5	200125K1_5	1200	1.41	NO	36.81	1.001	2.63e7	1.11e6	1180	-1.4	0.982	bb
6	200125K1_6	50.0	1.38	NO	36.80	1.000	8.47e5	8.20e5	51.9	3.7	1.03	bb

Compound name: Dieldrin
Response Factor: 1.09337
RRF SD: 0.0319396, Relative SD: 2.92121
Response type: Internal Std (Ref 48), 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	200125K1_1		1.66	NO	37.31	1.001	4.72e3	1.14e5	1.89	-5.6	1.03	bb
2	200125K1_2	10.0	1.70	NO	37.30	1.000	3.99e4	1.77e5	10.3	3.2	1.13	bb
3	200125K1_3	100	1.55	NO	37.30	1.000	3.18e5	1.51e5	96.4	-3.6	1.05	bb
4	200125K1_4	250	1.58	NO	37.31	1.001	1.21e6	2.26e5	245	-2.2	1.07	bb
5	200125K1_5	1200	1.57	NO	37.31	1.001	3.75e6	1.43e5	1200	-0.1	1.09	bb
6	200125K1_6	50.0	1.53	NO	37.30	1.000	1.27e5	1.13e5	51.3	2.6	1.12	bb

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Compound name: Endrin
Response Factor: 1.05663
RRF SD: 0.0215905, Relative SD: 2.04333
Response type: Internal Std (Ref 49), 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	200125K1_1		1.37	NO	38.71	1.000	2.55e3	6.78e4	1.78	-10.9	0.941	bb
2	200125K1_2	10.0	1.56	NO	38.71	1.000	2.38e4	1.13e5	9.96	-0.4	1.05	bb
3	200125K1_3	100	1.56	NO	38.71	1.000	1.95e5	9.37e4	98.5	-1.5	1.04	bb
4	200125K1_4	250	1.54	NO	38.71	1.000	7.46e5	1.42e5	248	-0.8	1.05	bb
5	200125K1_5	1200	1.56	NO	38.71	1.000	2.34e6	9.30e4	1190	-1.0	1.05	bb
6	200125K1_6	50.0	1.57	NO	38.71	1.000	7.48e4	6.84e4	51.8	3.6	1.09	bb

Compound name: cis-Nonachlor
Response Factor: 1.07721
RRF SD: 0.0418195, Relative SD: 3.88219
Response type: Internal Std (Ref 50), 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	200125K1_1		1.39	NO	38.99	1.000	2.37e3	5.51e4	2.00	-0.2	1.07	bb
2	200125K1_2	10.0	1.58	NO	38.99	1.000	1.92e4	8.89e4	10.0	-0.0	1.08	bb
3	200125K1_3	100	1.55	NO	38.99	1.000	1.64e5	7.43e4	103	2.5	1.10	bb
4	200125K1_4	250	1.56	NO	39.00	1.001	6.09e5	1.16e5	244	-2.4	1.05	bb
5	200125K1_5	1200	1.54	NO	39.00	1.001	1.96e6	7.98e4	1140	-5.0	1.02	bb
6	200125K1_6	50.0	1.58	NO	38.99	1.000	6.36e4	5.63e4	52.4	4.9	1.13	bb

Compound name: Endosulfan II (beta)
Response Factor: 1.11017
RRF SD: 0.178297, Relative SD: 16.0603
Response type: Internal Std (Ref 51), 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	200125K1_1		1.85	NO	39.73	1.001	4.62e3	1.66e4	12.5	25.3	1.39	bb
2	200125K1_2	15.0	1.85	NO	39.73	1.000	1.03e4	2.59e4	17.9	19.3	1.32	bb

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Compound name: Endosulfan II (beta)

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	100	1.65	NO	39.73	1.000	4.87e4	2.40e4	91.5	-8.5	1.02	bb
4	200125K1_4	250	1.54	NO	39.73	1.000	1.92e5	4.18e4	207	-17.1	0.921	bb
5	200125K1_5	1200	1.53	NO	39.73	1.000	6.42e5	5.23e4	553	-53.9	0.512	bbX
6	200125K1_6	50.0	1.58	NO	39.73	1.001	1.99e4	1.69e4	53.1	6.2	1.18	bb

Compound name: 2,4'-DDD
Response Factor: 1.04824
RRF SD: 0.0356036, Relative SD: 3.3965
Response type: Internal Std (Ref 52), 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	200125K1_1		1.47	NO	37.95	1.000	4.14e4	1.07e6	1.85	-7.5	0.970	bb
2	200125K1_2	10.0	1.49	NO	37.94	1.000	3.69e5	1.70e6	10.3	3.3	1.08	bb
3	200125K1_3	100	1.54	NO	37.95	1.000	2.93e6	1.44e6	96.8	-3.2	1.01	bb
4	200125K1_4	250	1.53	NO	37.95	1.000	1.15e7	2.26e6	243	-3.0	1.02	bb
5	200125K1_5	1200	1.53	NO	37.95	1.000	3.82e7	1.53e6	1190	-1.0	1.04	bb
6	200125K1_6	50.0	1.52	NO	37.94	1.000	1.20e6	1.11e6	51.9	3.8	1.09	bb

Compound name: 2,4'-DDT
Response Factor: 1.02896
RRF SD: 0.041268, Relative SD: 4.01064
Response type: Internal Std (Ref 53), 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	200125K1_1		1.45	NO	39.08	1.000	2.57e4	6.79e5	1.84	-7.9	0.947	bb
2	200125K1_2	10.0	1.42	NO	39.06	1.000	2.43e5	1.14e6	10.4	4.0	1.07	bd
3	200125K1_3	100	1.52	NO	39.06	1.000	1.99e6	1.01e6	96.1	-3.9	0.989	bd
4	200125K1_4	250	1.54	NO	39.08	1.000	7.57e6	1.52e6	242	-3.2	0.996	MM
5	200125K1_5	1200	1.50	NO	39.08	1.000	2.67e7	1.10e6	1180	-1.5	1.01	bb
6	200125K1_6	50.0	1.47	NO	39.06	1.000	8.18e5	7.61e5	52.3	4.5	1.08	bd

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Compound name: 4,4'-DDD
Response Factor: 1.12418
RRF SD: 0.046972, Relative SD: 4.17832
Response type: Internal Std (Ref 54), 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	200125K1_1		1.24	NO	39.21	1.001	3.96e4	8.88e5	1.98	-0.9	1.11	bb
2	200125K1_2	10.0	1.50	NO	39.20	1.000	3.44e5	1.45e6	10.5	5.3	1.18	db
3	200125K1_3	100	1.54	NO	39.20	1.000	2.76e6	1.27e6	96.9	-3.1	1.09	db
4	200125K1_4	250	1.52	NO	39.20	1.000	1.07e7	1.97e6	241	-3.7	1.08	bb
5	200125K1_5	1200	1.51	NO	39.20	1.000	3.73e7	1.42e6	1170	-2.3	1.10	bb
6	200125K1_6	50.0	1.52	NO	39.20	1.000	1.11e6	9.54e5	51.9	3.8	1.17	db

Compound name: 4,4'-DDT
Response Factor: 1.13363
RRF SD: 0.0349379, Relative SD: 3.08193
Response type: Internal Std (Ref 55), 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	200125K1_1		1.25	NO	40.28	1.001	2.43e4	5.47e5	1.96	-2.2	1.11	bb
2	200125K1_2	10.0	1.48	NO	40.27	1.000	2.10e5	9.04e5	10.2	2.5	1.16	bb
3	200125K1_3	100	1.54	NO	40.27	1.000	1.75e6	7.94e5	97.0	-3.0	1.10	bb
4	200125K1_4	250	1.54	NO	40.28	1.000	6.80e6	1.24e6	243	-3.0	1.10	bb
5	200125K1_5	1200	1.53	NO	40.28	1.000	2.46e7	9.05e5	1200	-0.2	1.13	bb
6	200125K1_6	50.0	1.53	NO	40.27	1.000	7.28e5	6.19e5	51.9	3.7	1.18	bb

Compound name: Endosulfan Sulfate
Response Factor: 0.987135
RRF SD: 0.0246482, Relative SD: 2.49695
Response type: Internal Std (Ref 56), 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	200125K1_1		1.47	NO	41.45	1.000	5.68e3	2.72e4	10.6	5.9	1.05	bb
2	200125K1_2	15.0	1.45	NO	41.45	1.000	1.33e4	4.42e4	15.2	1.4	1.00	bb

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Compound name: Endosulfan Sulfate

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	100	1.52	NO	41.45	1.000	6.89e4	3.49e4	99.9	-0.1	0.986	bb
4	200125K1_4	250	1.54	NO	41.47	1.001	2.73e5	5.44e4	254	1.7	1.00	bb
5	200125K1_5	1200	1.55	NO	41.47	1.000	8.97e5	3.96e4	1150	-4.3	0.945	bb
6	200125K1_6	50.0	1.49	NO	41.45	1.000	2.82e4	2.82e4	50.7	1.4	1.00	bb

Compound name: 4,4'-Methoxychlor
Response Factor: 1.26684
RRF SD: 0.0407232, Relative SD: 3.21456
Response type: Internal Std (Ref 57), 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	200125K1_1		6.15	NO	43.32	1.000	1.51e5	6.22e6	9.59	-4.1	1.22	bb
2	200125K1_2	15.0	6.15	NO	43.32	1.000	4.08e5	1.04e7	15.5	3.0	1.31	bb
3	200125K1_3	100	5.98	NO	43.32	1.000	2.22e6	9.01e6	97.2	-2.8	1.23	bb
4	200125K1_4	250	5.99	NO	43.34	1.000	8.46e6	1.37e7	243	-2.7	1.23	bb
5	200125K1_5	1200	6.01	NO	43.34	1.000	3.01e7	1.00e7	1180	-1.4	1.25	bb
6	200125K1_6	50.0	6.03	NO	43.32	1.000	9.23e5	7.01e6	51.9	3.9	1.32	bb

Compound name: Mirex
Response Factor: 1.04354
RRF SD: 0.0357547, Relative SD: 3.42629
Response type: Internal Std (Ref 58), 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	200125K1_1		1.57	NO	43.90	1.000	1.09e4	2.79e5	1.86	-6.8	0.972	bb
2	200125K1_2	10.0	1.56	NO	43.91	1.001	9.44e4	4.37e5	10.4	3.6	1.08	bb
3	200125K1_3	100	1.55	NO	43.91	1.001	7.71e5	3.85e5	95.9	-4.1	1.00	bb
4	200125K1_4	250	1.55	NO	43.90	1.000	2.71e6	5.29e5	245	-1.9	1.02	bb
5	200125K1_5	1200	1.56	NO	43.90	1.000	9.65e6	3.90e5	1190	-1.1	1.03	bb
6	200125K1_6	50.0	1.58	NO	43.90	1.001	3.33e5	3.08e5	51.8	3.6	1.08	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

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Compound name: Endrin Aldehyde
Response Factor: 1.05818
RRF SD: 0.0383086, Relative SD: 3.62024
Response type: Internal Std (Ref 59), 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	200125K1_1		0.63	NO	40.85	1.000	1.18e4	5.31e5	10.5	4.8	1.11	MM
2	200125K1_2	15.0	0.62	NO	40.85	1.000	2.86e4	8.88e5	15.2	1.6	1.07	MM
3	200125K1_3	100	0.62	NO	40.85	1.000	1.49e5	7.39e5	95.1	-4.9	1.01	MM
4	200125K1_4	250	0.63	NO	40.85	1.000	5.87e5	1.14e6	244	-2.4	1.03	MM
5	200125K1_5	1200	0.62	NO	40.85	1.000	2.07e6	8.04e5	1220	1.4	1.07	bb
6	200125K1_6	50.0	0.63	NO	40.85	1.000	6.28e4	5.69e5	52.1	4.3	1.10	MM

Compound name: Endrin Ketone
Response Factor: 0.974063
RRF SD: 0.0321525, Relative SD: 3.30087
Response type: Internal Std (Ref 60), 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	200125K1_1		0.65	NO	44.05	1.001	9.15e3	4.59e5	10.2	2.4	0.998	bb
2	200125K1_2	15.0	0.66	NO	44.03	1.000	2.33e4	7.73e5	15.5	3.4	1.01	db
3	200125K1_3	100	0.63	NO	44.03	1.000	1.19e5	6.41e5	95.2	-4.8	0.928	bb
4	200125K1_4	250	0.62	NO	44.05	1.001	4.60e5	9.61e5	246	-1.7	0.958	db
5	200125K1_5	1200	0.63	NO	44.05	1.001	1.51e6	6.43e5	1210	0.6	0.979	bb
6	200125K1_6	50.0	0.60	NO	44.03	1.000	4.92e4	4.93e5	51.2	2.5	0.998	bb

Compound name: 13C6-Hexachlorobenzene
Response Factor: 0.674087
RRF SD: 0.0027005, Relative SD: 0.400616
Response type: Internal Std (Ref 62), 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	200125K1_1		1.27	NO	22.64	0.871	1.08e6	1.59e6	50.5	1.0	0.681	bb
2	200125K1_2	50.0	1.27	NO	22.64	0.871	1.59e6	2.37e6	49.8	-0.4	0.671	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

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Compound name: 13C6-Hexachlorobenzene

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	50.0	1.28	NO	22.65	0.872	1.29e6	1.91e6	50.1	0.2	0.675	bb
4	200125K1_4	50.0	1.28	NO	22.64	0.871	1.98e6	2.95e6	49.8	-0.4	0.672	bb
5	200125K1_5	50.0	1.29	NO	22.65	0.872	1.29e6	1.92e6	50.0	0.0	0.674	bb
6	200125K1_6	50.0	1.27	NO	22.64	0.871	1.03e6	1.51e6	50.3	0.6	0.678	bb

Compound name: 13C6-Alpha-BHC
Response Factor: 0.254768
RRF SD: 0.00463291, Relative SD: 1.81848
Response type: Internal Std (Ref 62), 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	200125K1_1		0.80	NO	23.17	0.892	4.07e5	1.59e6	50.4	0.7	0.257	bb
2	200125K1_2	50.0	0.80	NO	23.17	0.892	5.98e5	2.37e6	49.5	-0.9	0.252	bb
3	200125K1_3	50.0	0.80	NO	23.17	0.892	4.93e5	1.91e6	50.6	1.2	0.258	bb
4	200125K1_4	50.0	0.78	NO	23.18	0.892	7.46e5	2.95e6	49.5	-0.9	0.252	bb
5	200125K1_5	50.0	0.78	NO	23.18	0.892	5.01e5	1.92e6	51.3	2.6	0.261	bb
6	200125K1_6	50.0	0.79	NO	23.18	0.892	3.78e5	1.51e6	49.1	-1.9	0.250	bb

Compound name: 13C6-Lindane (gamma)
Response Factor: 0.200677
RRF SD: 0.00216003, Relative SD: 1.07637
Response type: Internal Std (Ref 62), 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	200125K1_1		0.79	NO	26.48	1.019	3.08e5	1.59e6	48.3	-3.4	0.194	bb
2	200125K1_2	50.0	0.81	NO	26.48	1.019	4.71e5	2.37e6	49.6	-0.9	0.199	bb
3	200125K1_3	50.0	0.78	NO	26.48	1.019	3.79e5	1.91e6	49.4	-1.2	0.198	bb
4	200125K1_4	50.0	0.79	NO	26.48	1.019	5.99e5	2.95e6	50.5	1.0	0.203	bb
5	200125K1_5	50.0	0.80	NO	26.48	1.019	3.89e5	1.92e6	50.6	1.1	0.203	bb
6	200125K1_6	50.0	0.80	NO	26.48	1.019	3.04e5	1.51e6	50.0	-0.0	0.201	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

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Compound name: 13C6-Beta-BHC
Response Factor: 0.154634
RRF SD: 0.00424038, Relative SD: 2.7422
Response type: Internal Std (Ref 62), 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	200125K1_1		0.79	NO	28.53	1.098	2.40e5	1.59e6	48.8	-2.4	0.151	bb
2	200125K1_2	50.0	0.78	NO	28.53	1.098	3.58e5	2.37e6	48.9	-2.3	0.151	bb
3	200125K1_3	50.0	0.80	NO	28.53	1.098	2.94e5	1.91e6	49.7	-0.6	0.154	bb
4	200125K1_4	50.0	0.79	NO	28.53	1.098	4.74e5	2.95e6	51.9	3.8	0.161	bd
5	200125K1_5	50.0	0.79	NO	28.53	1.098	3.01e5	1.92e6	50.9	1.7	0.157	bd
6	200125K1_6	50.0	0.78	NO	28.53	1.098	2.28e5	1.51e6	48.7	-2.7	0.151	bb

Compound name: 13C6-Delta-BHC
Response Factor: 0.183006
RRF SD: 0.00482764, Relative SD: 2.63796
Response type: Internal Std (Ref 62), 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	200125K1_1		0.78	NO	30.20	1.163	2.72e5	1.59e6	46.9	-6.2	0.172	bb
2	200125K1_2	50.0	0.80	NO	30.20	1.163	4.23e5	2.37e6	48.8	-2.4	0.179	bb
3	200125K1_3	50.0	0.80	NO	30.21	1.163	3.50e5	1.91e6	50.0	0.0	0.183	bb
4	200125K1_4	50.0	0.78	NO	30.22	1.163	5.54e5	2.95e6	51.2	2.4	0.187	bb
5	200125K1_5	50.0	0.79	NO	30.22	1.163	3.61e5	1.92e6	51.4	2.8	0.188	bb
6	200125K1_6	50.0	0.79	NO	30.20	1.163	2.69e5	1.51e6	48.5	-2.9	0.178	bb

Compound name: 13C10-Heptachlor
Response Factor: 0.105699
RRF SD: 0.00420388, Relative SD: 3.97723
Response type: Internal Std (Ref 62), 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	200125K1_1		1.27	NO	28.65	1.103	1.52e5	1.59e6	45.3	-9.4	0.0957	bb
2	200125K1_2	50.0	1.28	NO	28.65	1.103	2.44e5	2.37e6	48.6	-2.7	0.103	bb

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Compound name: 13C10-Heptachlor

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	50.0	1.31	NO	28.65	1.103	1.99e5	1.91e6	49.3	-1.4	0.104	bb
4	200125K1_4	50.0	1.30	NO	28.65	1.103	3.27e5	2.95e6	52.4	4.7	0.111	bb
5	200125K1_5	50.0	1.32	NO	28.66	1.103	2.10e5	1.92e6	51.8	3.6	0.110	bb
6	200125K1_6	50.0	1.32	NO	28.65	1.103	1.53e5	1.51e6	47.9	-4.3	0.101	bb

Compound name: 13C12-Aldrin
Response Factor: 0.130263
RRF SD: 0.00178091, Relative SD: 1.36717
Response type: Internal Std (Ref 62), 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	200125K1_1		1.60	NO	30.77	1.184	2.01e5	1.59e6	48.7	-2.5	0.127	bb
2	200125K1_2	50.0	1.64	NO	30.77	1.184	3.07e5	2.37e6	49.7	-0.6	0.130	bb
3	200125K1_3	50.0	1.61	NO	30.76	1.184	2.54e5	1.91e6	51.0	2.0	0.133	bb
4	200125K1_4	50.0	1.66	NO	30.77	1.184	3.87e5	2.95e6	50.3	0.5	0.131	bb
5	200125K1_5	50.0	1.64	NO	30.77	1.184	2.49e5	1.92e6	49.8	-0.4	0.130	bb
6	200125K1_6	50.0	1.64	NO	30.77	1.184	1.94e5	1.51e6	49.2	-1.6	0.128	bb

Compound name: 13C10-Oxychlordane
Response Factor: 0.0313758
RRF SD: 0.000999045, Relative SD: 3.18413
Response type: Internal Std (Ref 62), 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	200125K1_1		1.76	NO	33.35	1.284	4.42e4	1.59e6	44.4	-11.1	0.0279	bb
2	200125K1_2	50.0	1.67	NO	33.35	1.284	7.08e4	2.37e6	47.6	-4.7	0.0299	MM
3	200125K1_3	50.0	1.70	NO	33.35	1.284	5.99e4	1.91e6	50.0	-0.1	0.0313	MM
4	200125K1_4	50.0	1.71	NO	33.35	1.284	9.58e4	2.95e6	51.7	3.3	0.0324	MM
5	200125K1_5	50.0	1.58	NO	33.35	1.284	6.16e4	1.92e6	51.2	2.4	0.0321	MM
6	200125K1_6	50.0	1.60	NO	33.35	1.284	4.70e4	1.51e6	49.5	-1.0	0.0311	MM

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Compound name: 13C10-cis-Heptachlor Epoxide
Response Factor: 0.0404493
RRF SD: 0.00205783, Relative SD: 5.08744
Response type: Internal Std (Ref 62), 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	200125K1_1		1.61	NO	34.14	1.314	5.90e4	1.59e6	45.9	-8.1	0.0372	bb
2	200125K1_2	50.0	1.62	NO	34.14	1.314	9.14e4	2.37e6	47.7	-4.6	0.0386	bb
3	200125K1_3	50.0	1.61	NO	34.14	1.314	7.55e4	1.91e6	48.8	-2.5	0.0395	bb
4	200125K1_4	50.0	1.64	NO	34.14	1.314	1.23e5	2.95e6	51.5	3.0	0.0416	bb
5	200125K1_5	50.0	1.67	NO	34.14	1.314	8.33e4	1.92e6	53.7	7.5	0.0435	bb
6	200125K1_6	50.0	1.69	NO	34.14	1.314	5.91e4	1.51e6	48.3	-3.4	0.0391	bb

Compound name: 13C10-trans-Chlordane (gamma)
Response Factor: 0.0281098
RRF SD: 0.000684159, Relative SD: 2.43388
Response type: Internal Std (Ref 62), 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	200125K1_1		1.55	NO	35.05	1.349	4.25e4	1.59e6	47.7	-4.6	0.0268	bb
2	200125K1_2	50.0	1.58	NO	35.04	1.349	6.53e4	2.37e6	49.0	-2.0	0.0276	bb
3	200125K1_3	50.0	1.74	NO	35.05	1.349	5.32e4	1.91e6	49.5	-1.0	0.0278	bb
4	200125K1_4	50.0	1.74	NO	35.06	1.349	8.60e4	2.95e6	51.8	3.5	0.0291	bb
5	200125K1_5	50.0	2.14	YES	35.06	1.349	6.99e4	1.92e6	64.9	29.8	0.0365	bbX
6	200125K1_6	50.0	1.67	NO	35.05	1.349	4.23e4	1.51e6	49.7	-0.6	0.0279	bb

Compound name: 13C10-trans-Nonachlor
Response Factor: 0.0330011
RRF SD: 0.00238929, Relative SD: 7.24003
Response type: Internal Std (Ref 62), 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	200125K1_1		1.71	NO	35.24	1.356	4.87e4	1.59e6	46.5	-7.0	0.0307	bb
2	200125K1_2	50.0	1.63	NO	35.24	1.356	7.51e4	2.37e6	48.0	-3.9	0.0317	bb

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Compound name: 13C10-trans-Nonachlor

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	50.0	1.64	NO	35.24	1.356	6.43e4	1.91e6	50.9	1.9	0.0336	bb
4	200125K1_4	50.0	1.63	NO	35.24	1.356	9.90e4	2.95e6	50.8	1.6	0.0335	bb
5	200125K1_5	50.0	1.87	NO	35.25	1.357	6.95e4	1.92e6	55.0	9.9	0.0363	bb
6	200125K1_6	50.0	1.58	NO	35.24	1.356	4.52e4	1.51e6	45.3	-9.5	0.0299	bb

Compound name: 13C9-Endosulfan I (alpha)
Response Factor: 0.02193
RRF SD: 0.00174117, Relative SD: 7.93965
Response type: Internal Std (Ref 62), 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	200125K1_1		1.60	NO	35.83	1.379	3.14e4	1.59e6	45.0	-9.9	0.0198	bb
2	200125K1_2	50.0	1.56	NO	35.83	1.379	4.89e4	2.37e6	47.1	-5.9	0.0206	bb
3	200125K1_3	50.0	1.74	NO	35.83	1.379	4.08e4	1.91e6	48.7	-2.6	0.0214	db
4	200125K1_4	50.0	1.70	NO	35.83	1.379	7.23e4	2.95e6	55.9	11.7	0.0245	db
5	200125K1_5	50.0	1.99	YES	35.85	1.380	6.99e4	1.92e6	83.2	66.4	0.0365	MMX
6	200125K1_6	50.0	1.54	NO	35.83	1.379	3.21e4	1.51e6	48.4	-3.2	0.0212	bb

Compound name: 13C12-2,4'-DDE
Response Factor: 0.765322
RRF SD: 0.0231163, Relative SD: 3.02046
Response type: Internal Std (Ref 62), 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	200125K1_1		1.58	NO	35.72	0.996	1.16e6	1.59e6	47.7	-4.5	0.731	bb
2	200125K1_2	50.0	1.57	NO	35.72	0.996	1.76e6	2.37e6	48.6	-2.8	0.744	bb
3	200125K1_3	50.0	1.59	NO	35.72	0.996	1.48e6	1.91e6	50.4	0.8	0.772	bb
4	200125K1_4	50.0	1.58	NO	35.72	0.996	2.29e6	2.95e6	50.7	1.5	0.776	bb
5	200125K1_5	50.0	1.58	NO	35.72	0.996	1.52e6	1.92e6	51.9	3.8	0.795	bb
6	200125K1_6	50.0	1.58	NO	35.72	0.996	1.12e6	1.51e6	48.3	-3.4	0.740	bb

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Compound name: 13C12-4,4'-DDE
Response Factor: 0.555764
RRF SD: 0.0164836, Relative SD: 2.96594
Response type: Internal Std (Ref 62), 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	200125K1_1		1.58	NO	36.80	1.026	8.27e5	1.59e6	46.9	-6.3	0.521	bb
2	200125K1_2	50.0	1.58	NO	36.78	1.026	1.28e6	2.37e6	48.7	-2.7	0.541	bb
3	200125K1_3	50.0	1.58	NO	36.78	1.026	1.07e6	1.91e6	50.2	0.4	0.558	bb
4	200125K1_4	50.0	1.60	NO	36.80	1.026	1.64e6	2.95e6	50.0	0.1	0.556	bb
5	200125K1_5	50.0	1.57	NO	36.78	1.025	1.11e6	1.92e6	52.3	4.7	0.582	bb
6	200125K1_6	50.0	1.58	NO	36.78	1.026	8.20e5	1.51e6	48.8	-2.5	0.542	bb

Compound name: 13C12-Dieldrin
Response Factor: 0.0759012
RRF SD: 0.00187938, Relative SD: 2.47609
Response type: Internal Std (Ref 62), 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	200125K1_1		1.68	NO	37.28	1.039	1.14e5	1.59e6	47.5	-5.0	0.0721	bb
2	200125K1_2	50.0	1.60	NO	37.28	1.040	1.77e5	2.37e6	49.2	-1.6	0.0747	bb
3	200125K1_3	50.0	1.64	NO	37.28	1.040	1.51e5	1.91e6	52.0	4.0	0.0789	bb
4	200125K1_4	50.0	1.54	NO	37.28	1.039	2.26e5	2.95e6	50.5	0.9	0.0766	bb
5	200125K1_5	50.0	1.59	NO	37.28	1.039	1.43e5	1.92e6	49.2	-1.6	0.0747	bb
6	200125K1_6	50.0	1.58	NO	37.28	1.040	1.13e5	1.51e6	49.1	-1.7	0.0746	bb

Compound name: 13C12-Endrin
Response Factor: 0.0476942
RRF SD: 0.00149895, Relative SD: 3.14283
Response type: Internal Std (Ref 62), 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	200125K1_1		1.69	NO	38.69	1.079	6.78e4	1.59e6	44.8	-10.4	0.0427	bb
2	200125K1_2	50.0	1.59	NO	38.69	1.079	1.13e5	2.37e6	49.9	-0.2	0.0476	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
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Compound name: 13C12-Endrin

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	50.0	1.64	NO	38.69	1.079	9.37e4	1.91e6	51.4	2.8	0.0490	bb
4	200125K1_4	50.0	1.63	NO	38.69	1.079	1.42e5	2.95e6	50.5	1.0	0.0482	bb
5	200125K1_5	50.0	1.65	NO	38.69	1.079	9.30e4	1.92e6	50.9	1.7	0.0485	bb
6	200125K1_6	50.0	1.63	NO	38.69	1.079	6.84e4	1.51e6	47.4	-5.3	0.0452	bb

Compound name: 13C10-cis-Nonachlor
Response Factor: 0.0388918
RRF SD: 0.001762, Relative SD: 4.5305
Response type: Internal Std (Ref 62), 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	200125K1_1		1.62	NO	38.97	1.086	5.51e4	1.59e6	44.7	-10.7	0.0347	bb
2	200125K1_2	50.0	1.60	NO	38.97	1.087	8.89e4	2.37e6	48.2	-3.5	0.0375	bb
3	200125K1_3	50.0	1.59	NO	38.97	1.087	7.43e4	1.91e6	49.9	-0.1	0.0388	bb
4	200125K1_4	50.0	1.61	NO	38.97	1.086	1.16e5	2.95e6	50.5	0.9	0.0393	db
5	200125K1_5	50.0	1.77	NO	38.97	1.086	7.98e4	1.92e6	53.5	7.1	0.0416	bb
6	200125K1_6	50.0	1.65	NO	38.97	1.087	5.63e4	1.51e6	47.8	-4.3	0.0372	bb

Compound name: 13C9-Endosulfan II
Response Factor: 0.0121897
RRF SD: 0.00148309, Relative SD: 12.1668
Response type: Internal Std (Ref 62), 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	200125K1_1		1.53	NO	39.70	1.107	1.66e4	1.59e6	42.9	-14.2	0.0105	bb
2	200125K1_2	50.0	1.56	NO	39.72	1.107	2.59e4	2.37e6	44.8	-10.4	0.0109	bb
3	200125K1_3	50.0	1.64	NO	39.72	1.107	2.40e4	1.91e6	51.4	2.9	0.0125	bb
4	200125K1_4	50.0	1.90	NO	39.72	1.107	4.18e4	2.95e6	58.0	16.0	0.0141	bb
5	200125K1_5	50.0	2.09	YES	39.72	1.107	5.23e4	1.92e6	112	123.7	0.0273	MMX
6	200125K1_6	50.0	1.67	NO	39.70	1.107	1.69e4	1.51e6	45.8	-8.5	0.0112	bb

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
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Compound name: 13C12-2,4'-DDD
Response Factor: 0.754394
RRF SD: 0.0318454, Relative SD: 4.22132
Response type: Internal Std (Ref 62), 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	200125K1_1		1.59	NO	37.94	1.460	1.07e6	1.59e6	44.6	-10.9	0.672	bb
2	200125K1_2	50.0	1.57	NO	37.92	1.460	1.70e6	2.37e6	47.6	-4.7	0.719	bb
3	200125K1_3	50.0	1.60	NO	37.94	1.460	1.44e6	1.91e6	50.0	0.0	0.755	bb
4	200125K1_4	50.0	1.59	NO	37.94	1.460	2.26e6	2.95e6	50.8	1.6	0.766	bb
5	200125K1_5	50.0	1.57	NO	37.94	1.460	1.53e6	1.92e6	53.1	6.1	0.800	bb
6	200125K1_6	50.0	1.59	NO	37.92	1.460	1.11e6	1.51e6	48.5	-3.0	0.732	bb

Compound name: 13C12-2,4'-DDT
Response Factor: 0.519269
RRF SD: 0.0341364, Relative SD: 6.57394
Response type: Internal Std (Ref 62), 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	200125K1_1		1.83	NO	39.06	1.504	6.79e5	1.59e6	41.2	-17.6	0.428	bd
2	200125K1_2	50.0	1.81	NO	39.06	1.504	1.14e6	2.37e6	46.2	-7.6	0.480	bd
3	200125K1_3	50.0	1.83	NO	39.06	1.504	1.01e6	1.91e6	50.8	1.6	0.527	bd
4	200125K1_4	50.0	1.82	NO	39.06	1.504	1.52e6	2.95e6	49.5	-0.9	0.514	bd
5	200125K1_5	50.0	1.82	NO	39.06	1.504	1.10e6	1.92e6	55.1	10.1	0.572	bd
6	200125K1_6	50.0	1.83	NO	39.05	1.503	7.61e5	1.51e6	48.4	-3.1	0.503	bd

Compound name: 13C12-4,4'-DDD
Response Factor: 0.662419
RRF SD: 0.0481815, Relative SD: 7.27357
Response type: Internal Std (Ref 62), 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	200125K1_1		1.60	NO	39.18	1.508	8.88e5	1.59e6	42.2	-15.5	0.560	db
2	200125K1_2	50.0	1.59	NO	39.18	1.508	1.45e6	2.37e6	46.3	-7.4	0.613	db

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
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Compound name: 13C12-4,4'-DDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	50.0	1.60	NO	39.18	1.508	1.27e6	1.91e6	50.0	-0.0	0.662	db
4	200125K1_4	50.0	1.62	NO	39.18	1.508	1.97e6	2.95e6	50.3	0.7	0.667	db
5	200125K1_5	50.0	1.59	NO	39.18	1.508	1.42e6	1.92e6	55.8	11.5	0.739	db
6	200125K1_6	50.0	1.60	NO	39.18	1.508	9.54e5	1.51e6	47.6	-4.8	0.630	db

Compound name: 13C12-4,4'-DDT
Response Factor: 0.419275
RRF SD: 0.032986, Relative SD: 7.86739
Response type: Internal Std (Ref 62), 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	200125K1_1		1.62	NO	40.25	1.549	5.47e5	1.59e6	41.1	-17.7	0.345	bb
2	200125K1_2	50.0	1.60	NO	40.25	1.549	9.04e5	2.37e6	45.5	-9.1	0.381	bb
3	200125K1_3	50.0	1.63	NO	40.25	1.549	7.94e5	1.91e6	49.5	-1.0	0.415	bb
4	200125K1_4	50.0	1.63	NO	40.27	1.550	1.24e6	2.95e6	49.9	-0.2	0.419	bb
5	200125K1_5	50.0	1.59	NO	40.27	1.550	9.05e5	1.92e6	56.3	12.6	0.472	bb
6	200125K1_6	50.0	1.63	NO	40.25	1.549	6.19e5	1.51e6	48.8	-2.4	0.409	bb

Compound name: 13C9-Endosulfan Sulfate
Response Factor: 0.0189184
RRF SD: 0.000974443, Relative SD: 5.15078
Response type: Internal Std (Ref 62), 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	200125K1_1		1.52	NO	41.44	1.155	2.72e4	1.59e6	45.2	-9.5	0.0171	bb
2	200125K1_2	50.0	1.54	NO	41.44	1.155	4.42e4	2.37e6	49.3	-1.4	0.0186	bb
3	200125K1_3	50.0	1.56	NO	41.44	1.155	3.49e4	1.91e6	48.3	-3.5	0.0183	bb
4	200125K1_4	50.0	1.56	NO	41.44	1.155	5.44e4	2.95e6	48.7	-2.6	0.0184	bb
5	200125K1_5	50.0	1.52	NO	41.45	1.155	3.96e4	1.92e6	54.6	9.1	0.0206	bb
6	200125K1_6	50.0	1.77	NO	41.44	1.155	2.82e4	1.51e6	49.2	-1.6	0.0186	bb

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Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

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Compound name: 13C12-Methoxychlor
Response Factor: 0.472511
RRF SD: 0.030676, Relative SD: 6.49213
Response type: Internal Std (Ref 62), 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	200125K1_1		22.08	NO	43.32	1.208	6.22e6	1.59e6	415	-17.0	0.392	bb
2	200125K1_2	500	23.75	NO	43.32	1.208	1.04e7	2.37e6	466	-6.9	0.440	bb
3	200125K1_3	500	23.77	NO	43.31	1.208	9.01e6	1.91e6	499	-0.3	0.471	bb
4	200125K1_4	500	23.54	NO	43.32	1.207	1.37e7	2.95e6	492	-1.6	0.465	bb
5	200125K1_5	500	24.25	NO	43.32	1.207	1.00e7	1.92e6	554	10.7	0.523	bb
6	200125K1_6	500	23.73	NO	43.31	1.208	7.01e6	1.51e6	490	-1.9	0.463	bb

Compound name: 13C10-Mirex
Response Factor: 0.194392
RRF SD: 0.0117794, Relative SD: 6.05964
Response type: Internal Std (Ref 62), 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	200125K1_1		1.55	NO	43.89	1.223	2.79e5	1.59e6	45.2	-9.5	0.176	bb
2	200125K1_2	50.0	1.55	NO	43.87	1.223	4.37e5	2.37e6	47.4	-5.2	0.184	bd
3	200125K1_3	50.0	1.58	NO	43.87	1.223	3.85e5	1.91e6	51.8	3.7	0.202	bd
4	200125K1_4	50.0	1.58	NO	43.89	1.223	5.29e5	2.95e6	46.1	-7.8	0.179	bd
5	200125K1_5	50.0	1.58	NO	43.89	1.223	3.90e5	1.92e6	52.3	4.6	0.203	bd
6	200125K1_6	50.0	1.58	NO	43.87	1.223	3.08e5	1.51e6	52.4	4.8	0.204	bb

Compound name: 13C12-Endrin Aldehyde
Response Factor: 0.0388433
RRF SD: 0.00180374, Relative SD: 4.64362
Response type: Internal Std (Ref 62), 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	200125K1_1		0.48	NO	40.84	1.138	5.31e5	1.59e6	431	-13.8	0.0335	MM
2	200125K1_2	500	0.48	NO	40.84	1.139	8.88e5	2.37e6	482	-3.5	0.0375	MM

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Dataset: U:\VG11.PRO\Results\200125K1\200125K1-CRV.qld

Last Altered: Monday, January 27, 2020 09:02:26 Pacific Standard Time
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Compound name: 13C12-Endrin Aldehyde

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200125K1_3	500	0.48	NO	40.84	1.139	7.39e5	1.91e6	498	-0.5	0.0387	MM
4	200125K1_4	500	0.46	NO	40.84	1.138	1.14e6	2.95e6	496	-0.8	0.0385	MM
5	200125K1_5	500	0.47	NO	40.84	1.138	8.04e5	1.92e6	540	7.9	0.0419	bb
6	200125K1_6	500	0.47	NO	40.84	1.139	5.69e5	1.51e6	484	-3.2	0.0376	MM

Compound name: 13C12-Endrin Ketone
Response Factor: 0.032955
RRF SD: 0.000524904, Relative SD: 1.59279
Response type: Internal Std (Ref 62), 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	200125K1_1		0.47	NO	44.01	1.227	4.59e5	1.59e6	439	-12.3	0.0289	bb
2	200125K1_2	500	0.50	NO	44.02	1.227	7.73e5	2.37e6	495	-1.1	0.0326	bb
3	200125K1_3	500	0.49	NO	44.02	1.227	6.41e5	1.91e6	508	1.7	0.0335	bb
4	200125K1_4	500	0.48	NO	44.01	1.227	9.61e5	2.95e6	493	-1.3	0.0325	bb
5	200125K1_5	500	0.47	NO	44.01	1.227	6.43e5	1.92e6	509	1.8	0.0335	db
6	200125K1_6	500	0.50	NO	44.01	1.227	4.93e5	1.51e6	495	-1.1	0.0326	bb

Compound name: 13C-PCB-15
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 62), 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	200125K1_1		1.58	NO	25.98	1.000	1.59e6	1.59e6	50.0	0.0	1.00	bb
2	200125K1_2	50.0	1.57	NO	25.98	1.000	2.37e6	2.37e6	50.0	0.0	1.00	bb
3	200125K1_3	50.0	1.57	NO	25.98	1.000	1.91e6	1.91e6	50.0	0.0	1.00	bb
4	200125K1_4	50.0	1.58	NO	25.98	1.000	2.95e6	2.95e6	50.0	0.0	1.00	bb
5	200125K1_5	50.0	1.57	NO	25.98	1.000	1.92e6	1.92e6	50.0	0.0	1.00	bb
6	200125K1_6	50.0	1.59	NO	25.98	1.000	1.51e6	1.51e6	50.0	0.0	1.00	bb

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Dataset: Untitled

Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

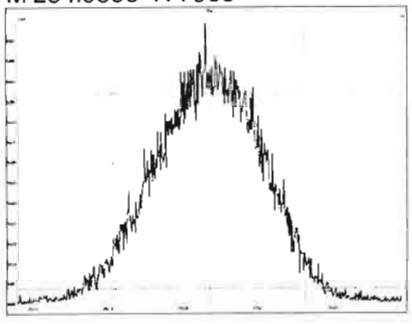
Compound name: Hexachlorobutadiene

	Name	ID	Acq.Date	Acq.Time
1	200125K1_1	ST200125K1-1 1699 CS1 19K1307	25-Jan-20	13:03:00
2	200125K1_2	ST200125K1-2 1699 CS2 19K1308	25-Jan-20	13:58:18
3	200125K1_3	ST200125K1-3 1699 CS3.5 19K1310	25-Jan-20	14:45:00
4	200125K1_4	ST200125K1-4 1699 CS4 19K1311	25-Jan-20	15:34:14
5	200125K1_5	ST200125K1-5 1699 CS5 19K1312	25-Jan-20	16:23:25
6	200125K1_6	ST200125K1-6 1699 CS3 19K1309	25-Jan-20	17:12:38
7	200125K1_7	SS200125K1-1 1699 SS 19H0208	25-Jan-20	18:01:50
8	200125K1_8	GC200125K1-1 GC BREAK	25-Jan-20	18:51:12
9	200125K1_9	B9L0269-BS7 OPR 1	25-Jan-20	19:41:10
10	200125K1_10	B9L0288-BS8 OPR 1	25-Jan-20	20:29:22
11	200125K1_11	B0A0032-BS1 OPR 1	25-Jan-20	21:18:29
12	200125K1_12	B9L0270-BS1 OPR 1	25-Jan-20	22:09:02
13	200125K1_13	SOLVENT BLANK	25-Jan-20	22:58:08
14	200125K1_14	B9L0270-BLK1 Method Blank 1	25-Jan-20	23:46:59
15	200125K1_15	B9L0269-BLK1 Method Blank 1	26-Jan-20	00:35:09
16	200125K1_16	B0A0032-BLK1 Method Blank 1	26-Jan-20	01:25:42
17	200125K1_17	1904235-01RE1 WPD-27777 DOM-OF-001 (S...	26-Jan-20	02:14:33
18	200125K1_18	1904016-06RE2@20X PDI-141RAB-10-17.7-1...	26-Jan-20	03:02:51
19	200125K1_19	1904021-01RE1@20X PDI-1142RAB-20-30.4-...	26-Jan-20	03:52:03
20	200125K1_20	1904021-04RE2@20X PDI-142RAB-20-30.4-1...	26-Jan-20	04:41:17

File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Saturday, January 25, 2020 12:59:31 Pacific Standard Time

M 254.9856 R 7936



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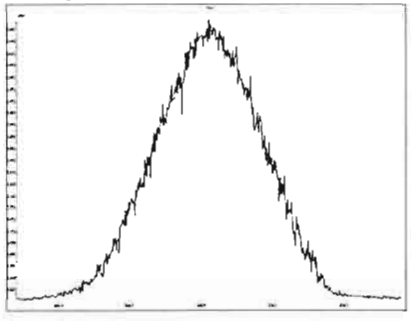

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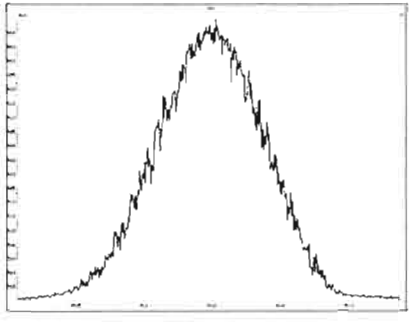
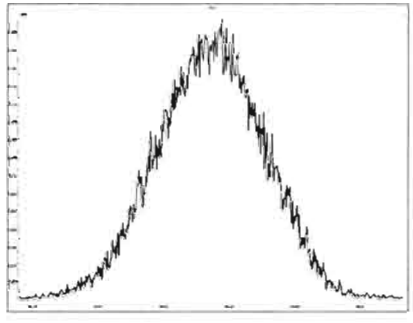


M 292.9824 R 8195



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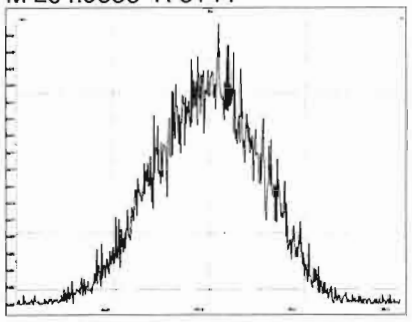
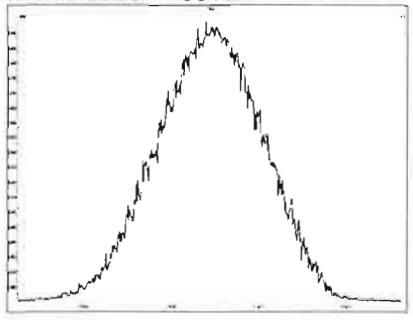
Printed: Saturday, January 25, 2020 13:00:08 Pacific Standard Time

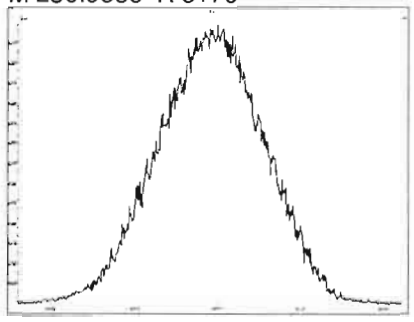
M 204.9888 R 8144



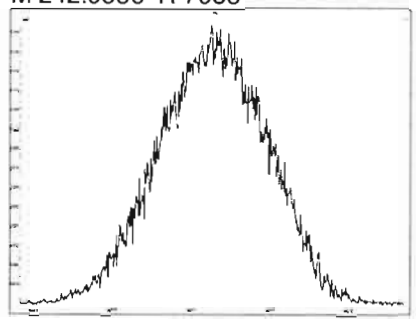
M 218.9856 R 8012



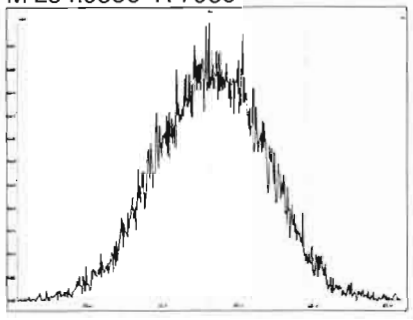
M 230.9856 R 8170



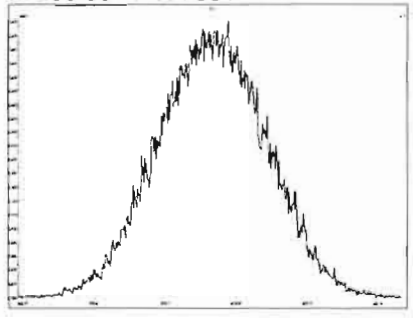
M 242.9856 R 7935



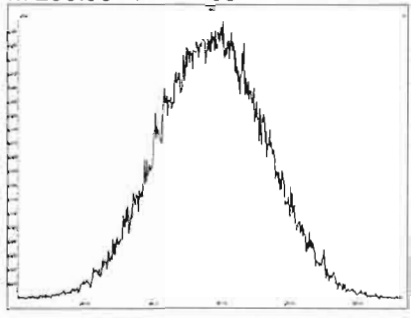
M 254.9856 R 7986



M 268.9824 R 7551



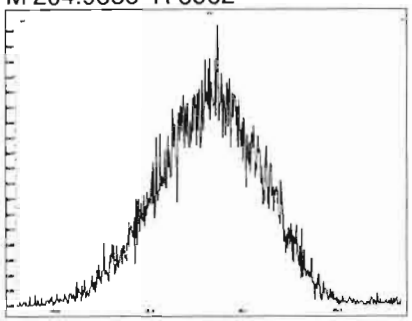
M 280.9824 R 7765



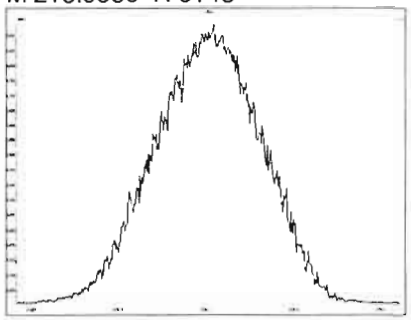
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Saturday, January 25, 2020 13:00:51 Pacific Standard Time

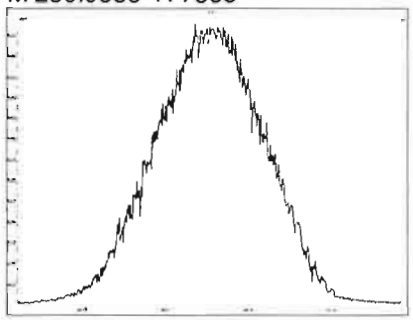
M 204.9888 R 8562



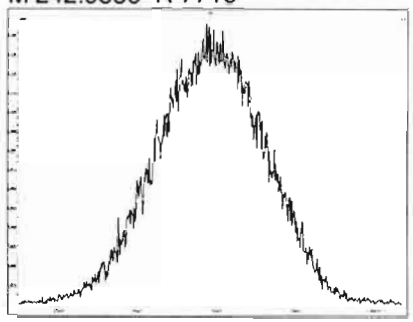
M 218.9856 R 8143



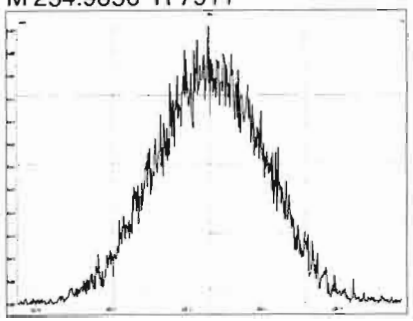
M 230.9856 R 7835



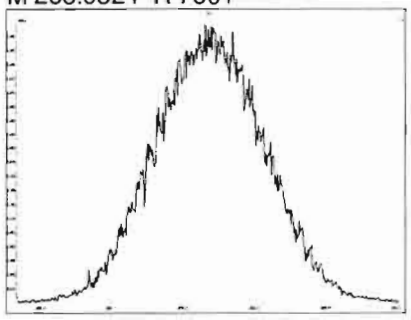
M 242.9856 R 7715



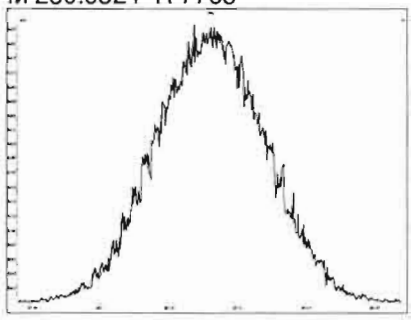
M 254.9856 R 7911



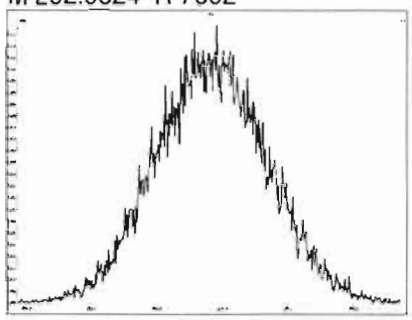
M 268.9824 R 7601



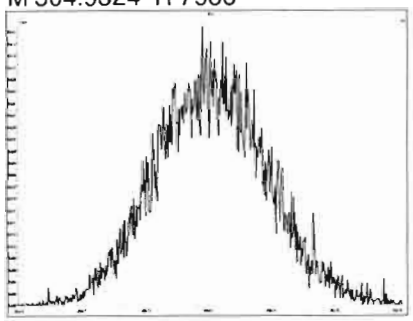
M 280.9824 R 7765



M 292.9824 R 7692



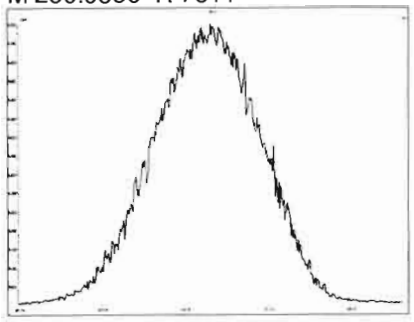
M 304.9824 R 7986



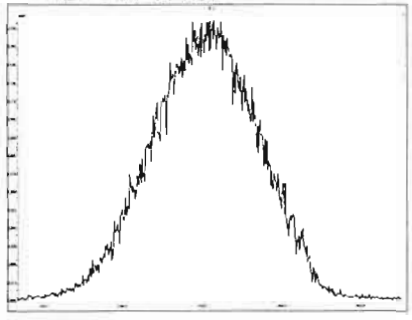
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Saturday, January 25, 2020 13:01:44 Pacific Standard Time

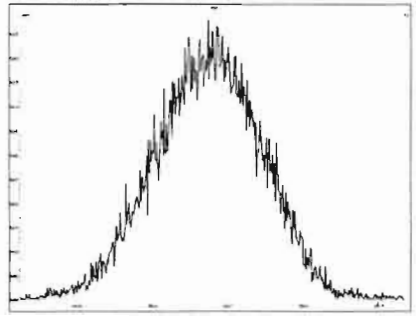
M 230.9856 R 7811



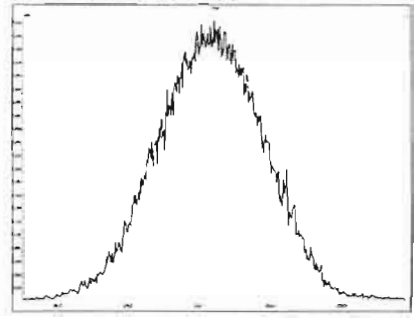
M 242.9856 R 7837



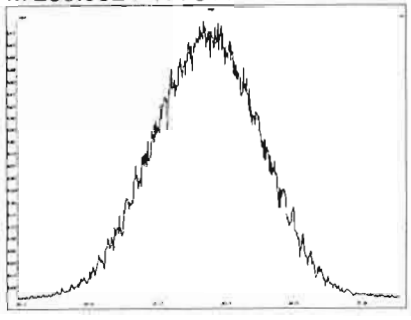
M 254.9856 R 8115



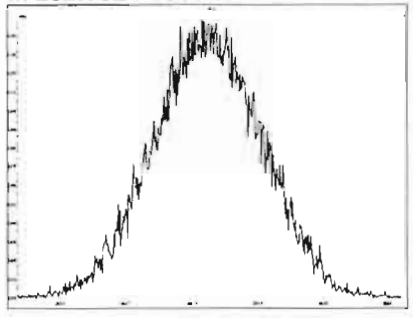
M 268.9824 R 7911



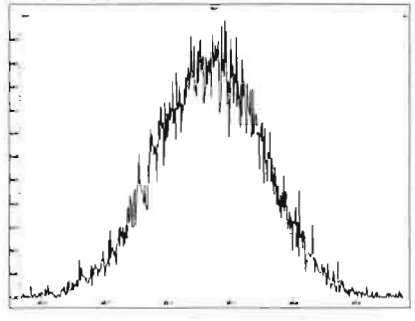
M 280.9824 R 7811



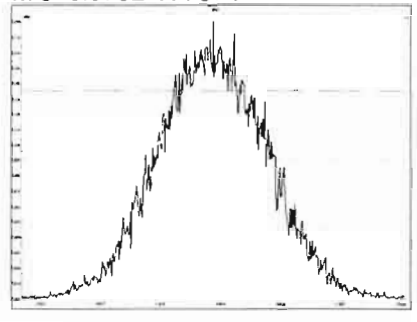
M 292.9824 R 7741



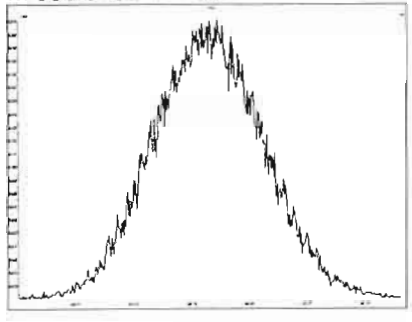
M 304.9824 R 8034



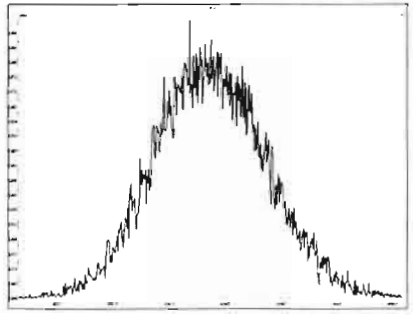
M 318.9792 R 7374



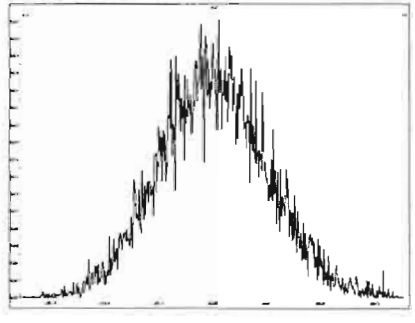
M 330.9792 R 7694



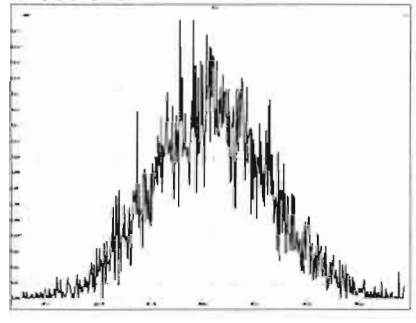
M 342.9792 R 7508



M 354.9792 R 7986



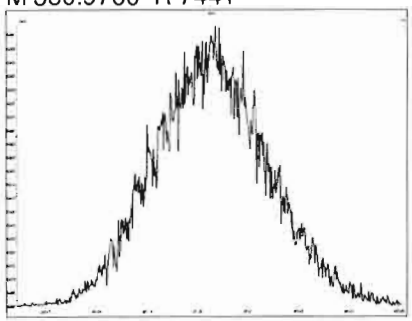
M 366.9792 R 8062



File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed: Saturday, January 25, 2020 13:01:44 Pacific Standard Time

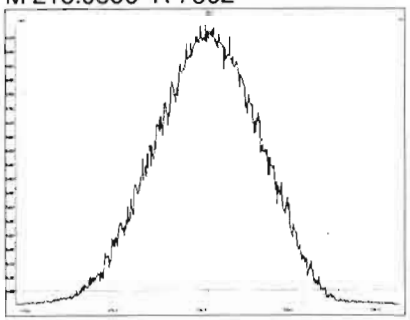
M 380.9760 R 7441



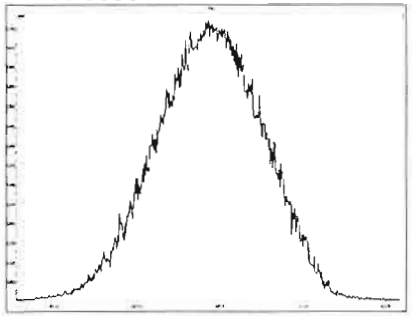
File: Experiment: 1699_ZB50_10K.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Saturday, January 25, 2020 13:02:30 Pacific Standard Time

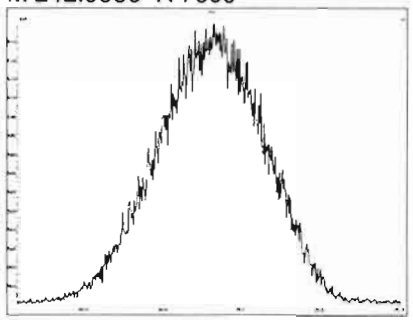
M 218.9856 R 7862



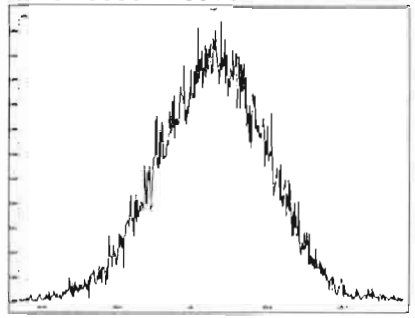
M 230.9856 R 8012



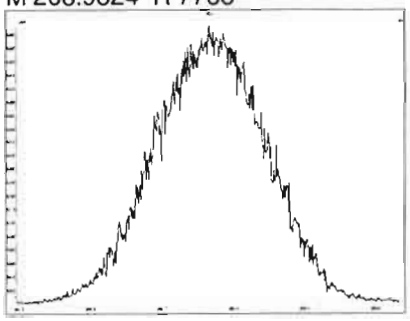
M 242.9856 R 7669



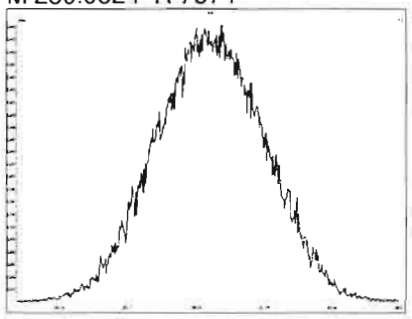
M 254.9856 R 8011



M 268.9824 R 7788



M 280.9824 R 7574



Vista Analytical Laboratory VG-9

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-8.qld

Last Altered: Monday, January 27, 2020 09:06:14 Pacific Standard Time
Printed: Monday, January 27, 2020 09:06:33 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 26 Jan 2020 09:58:44
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_8, Date: 25-Jan-2020, Time: 18:51:12, ID: GC200125K1-1 GC BREAK, Description: GC BREAK

	# Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	1 Endrin Aldehyde	1.05e4	0.62	NO		1.000	40.85	0.000				
2	2 Endrin Ketone	9.78e3	0.63	NO		1.000	44.03	0.000				
3	3 Endrin	3.98e5	1.59	NO		1.000	38.71	0.000				
4	4 4,4'-DDE			NO		1.000						
5	5 4,4'-DDD	4.74e4	1.38	NO		1.000	39.20	0.000				
6	6 4,4'-DDT	8.20e6	1.53	NO		1.000	40.27	0.000				

$\frac{EA + EK}{E} \times 100\% = 5.10\%$ HC 1-27-2020

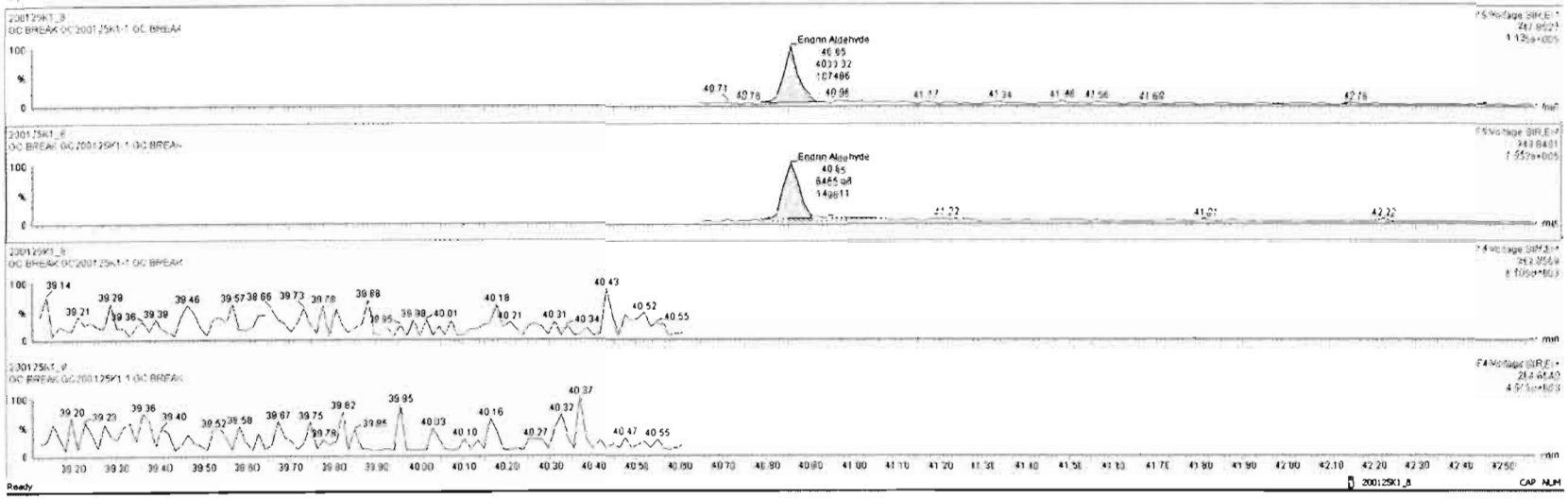
CT 01/27/2020

$\frac{DDE + DDD}{DDT} \times 100\% = 0.58\%$

Target1.ynx - 200125K1-8.qld * - [Chromatogram]

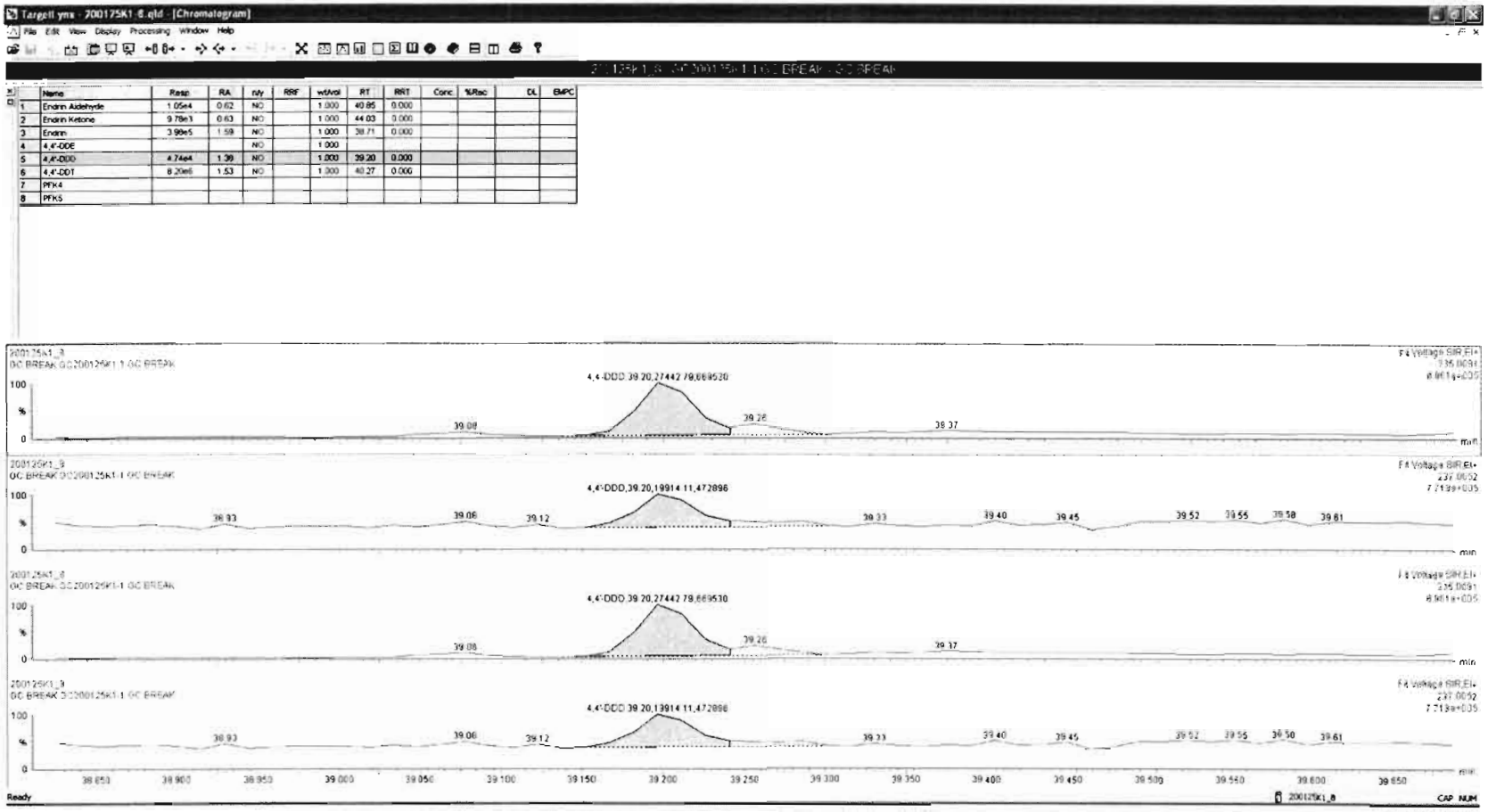
File Edit View Display Processing Window Help

	Name	Resp	RA	rVy	RRF	wtVol	RT	RRT	Conc.	%Rec	DL	EMPC
1	Endrin Aldehyde	1.05e4	0.82	NO		1.000	40.85	0.000				
2	Endrin Ketone	9.78e3	0.63	NO		1.000	44.03	0.000				
3	Endrin	3.86e5	1.59	NO		1.000	38.71	0.000				
4	4,4'-DDE	3.00e3		NO		1.000	36.81	0.000				
5	4,4-DDD	5.52e4	1.35	NO		1.000	39.20	0.000				
6	4,4'-DDT	8.18e6	1.53	NO		1.000	40.27	0.000				
7	PFK4					1.000						
8	PFK5											



Ready

200125K1_8 CAP NUM



	Name	Resp	RA	rAy	RRF	wtAvg	RT	RRT	Conc	%Rec	DL	EMPC
1	Endrin Aldehyde	1.05e4	0.62	NO		1.000	40.85	0.000				
2	Endrin Ketone	9.78e3	0.63	NO		1.000	44.03	0.000				
3	Endrin	3.98e5	1.59	NO		1.000	38.71	0.000				
4	4,4'-DDE			NO		1.000						
5	4,4'-DDD	4.74e4	1.39	NO		1.000	39.20	0.000				
6	4,4'-DDT	8.20e6	1.53	NO		1.000	40.27	0.000				
7	PFK4											
8	PFK5											

Vista Analytical Laboratory VG-11

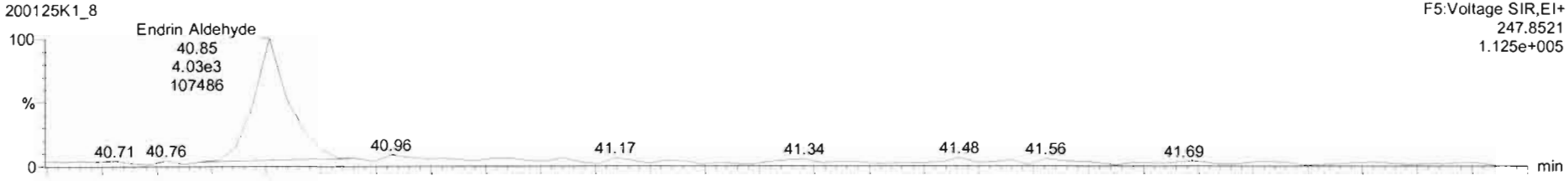
Dataset: Untitled

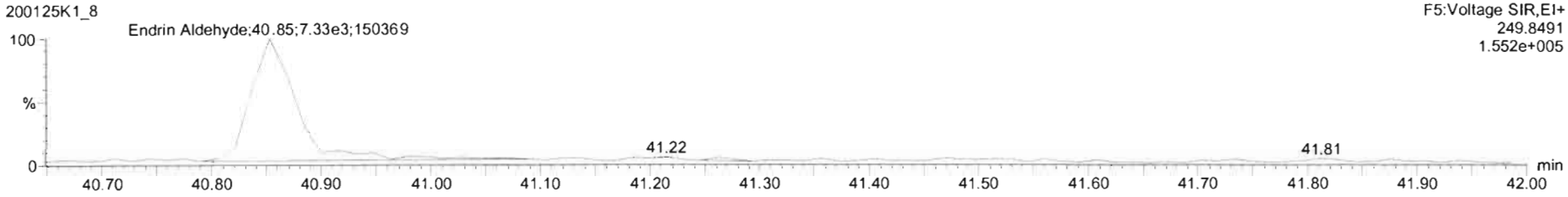
Last Altered: Monday, January 27, 2020 09:07:33 Pacific Standard Time
Printed: Monday, January 27, 2020 09:07:49 Pacific Standard Time

Method: U:\VG11.PRO\MethDB\1699_GC-break.mdb 26 Jan 2020 09:58:44
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

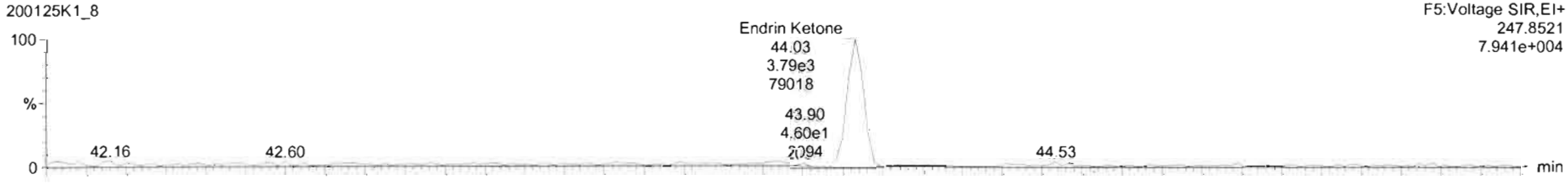
Name: 200125K1_8, Date: 25-Jan-2020, Time: 18:51:12, ID: GC200125K1-1 GC BREAK, Description: GC BREAK

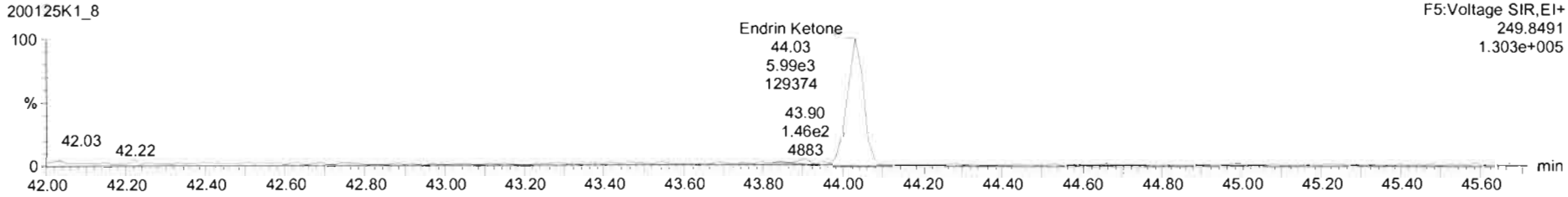
Endrin Aldehyde





Endrin Ketone



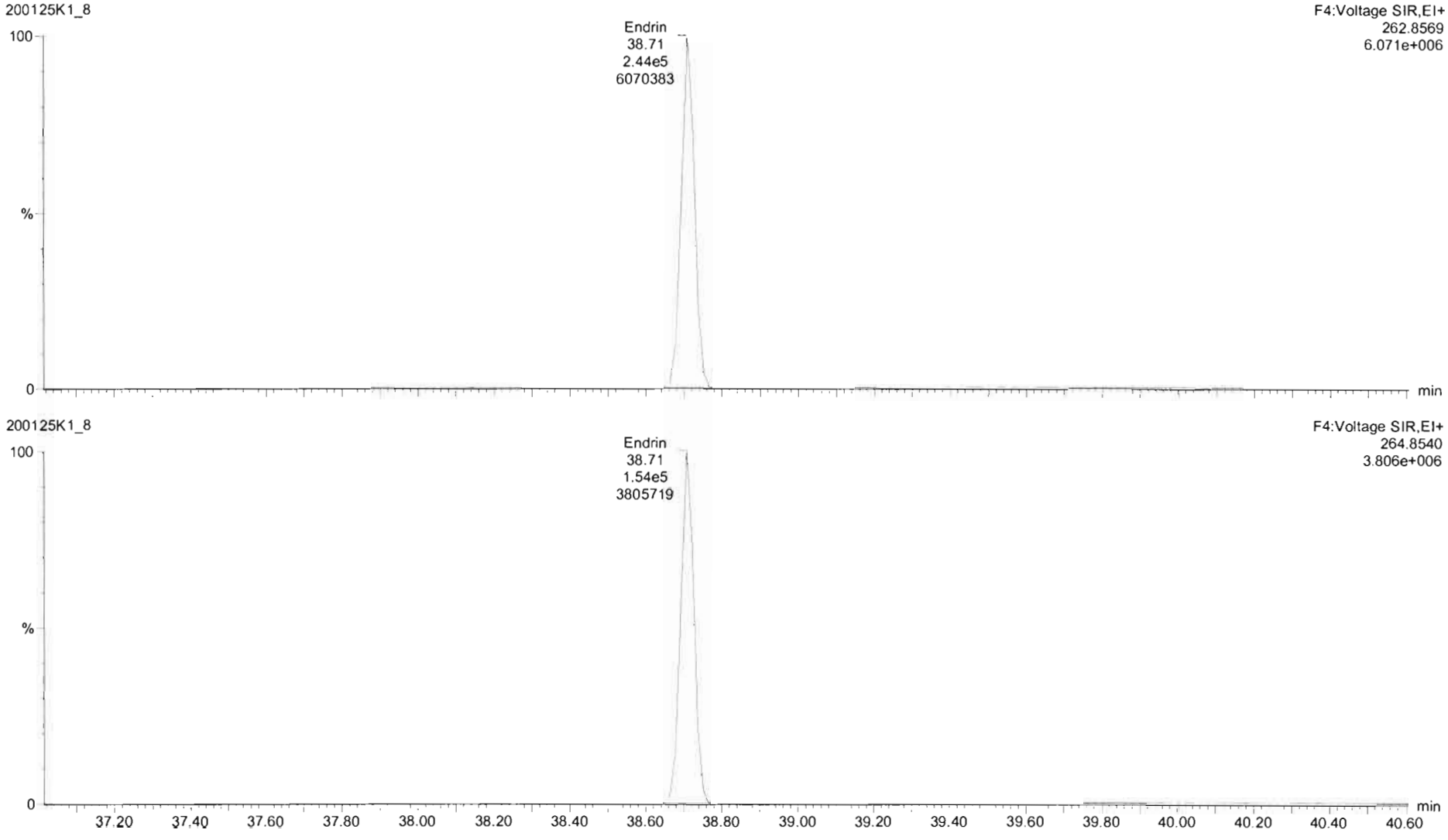


Dataset: Untitled

Last Altered: Monday, January 27, 2020 09:07:33 Pacific Standard Time
Printed: Monday, January 27, 2020 09:07:49 Pacific Standard Time

Name: 200125K1_8, Date: 25-Jan-2020, Time: 18:51:12, ID: GC200125K1-1 GC BREAK, Description: GC BREAK

Endrin

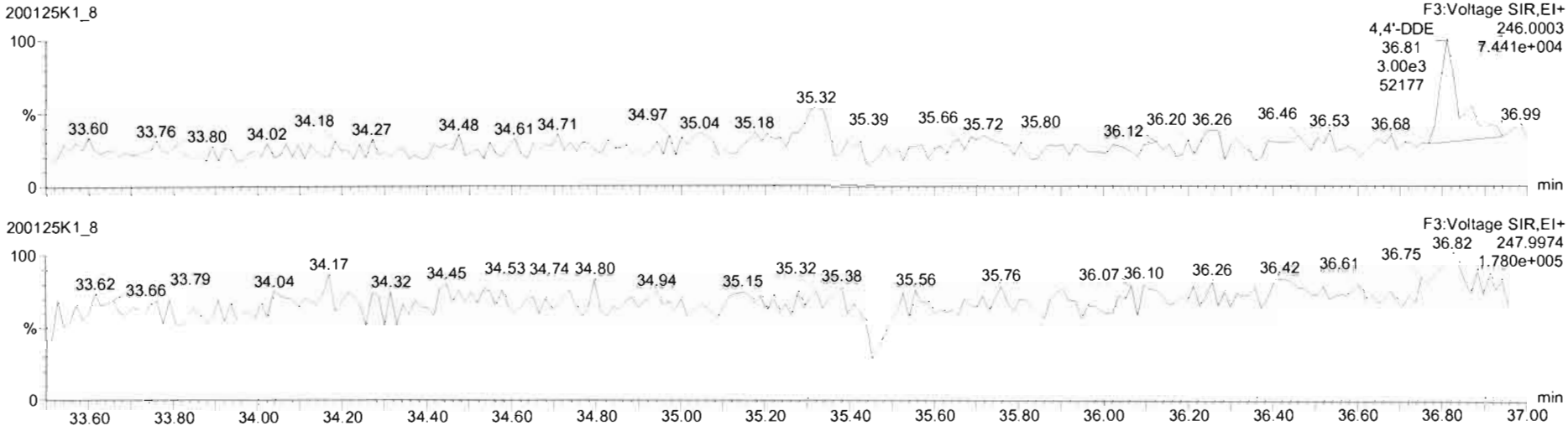


Dataset: Untitled

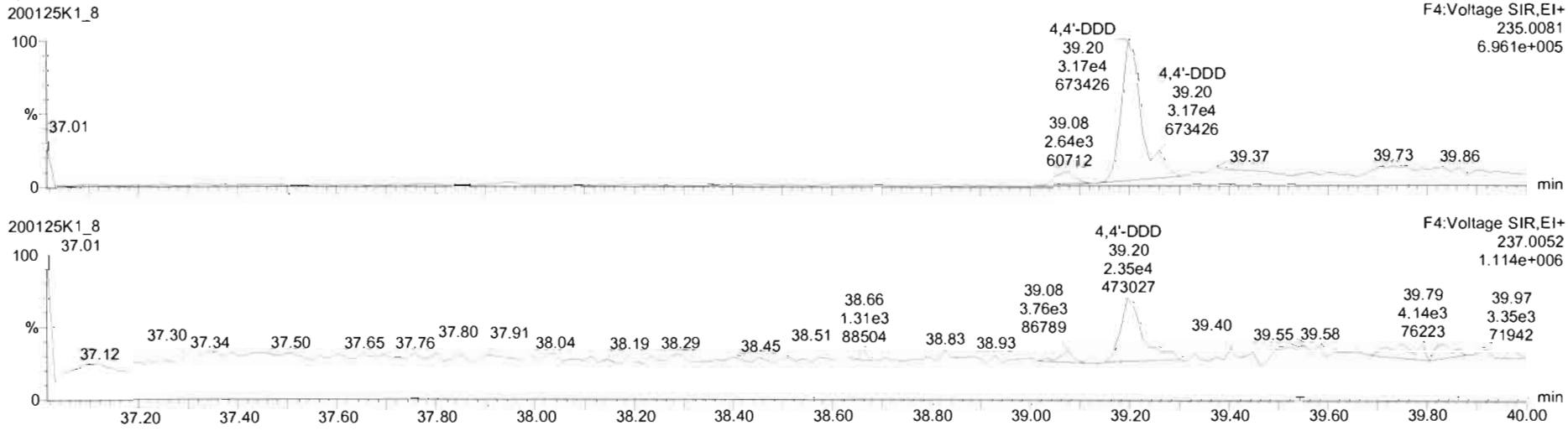
Last Altered: Monday, January 27, 2020 09:07:33 Pacific Standard Time
Printed: Monday, January 27, 2020 09:07:49 Pacific Standard Time

Name: 200125K1_8, Date: 25-Jan-2020, Time: 18:51:12, ID: GC200125K1-1 GC BREAK, Description: GC BREAK

4,4'-DDE



4,4'-DDD

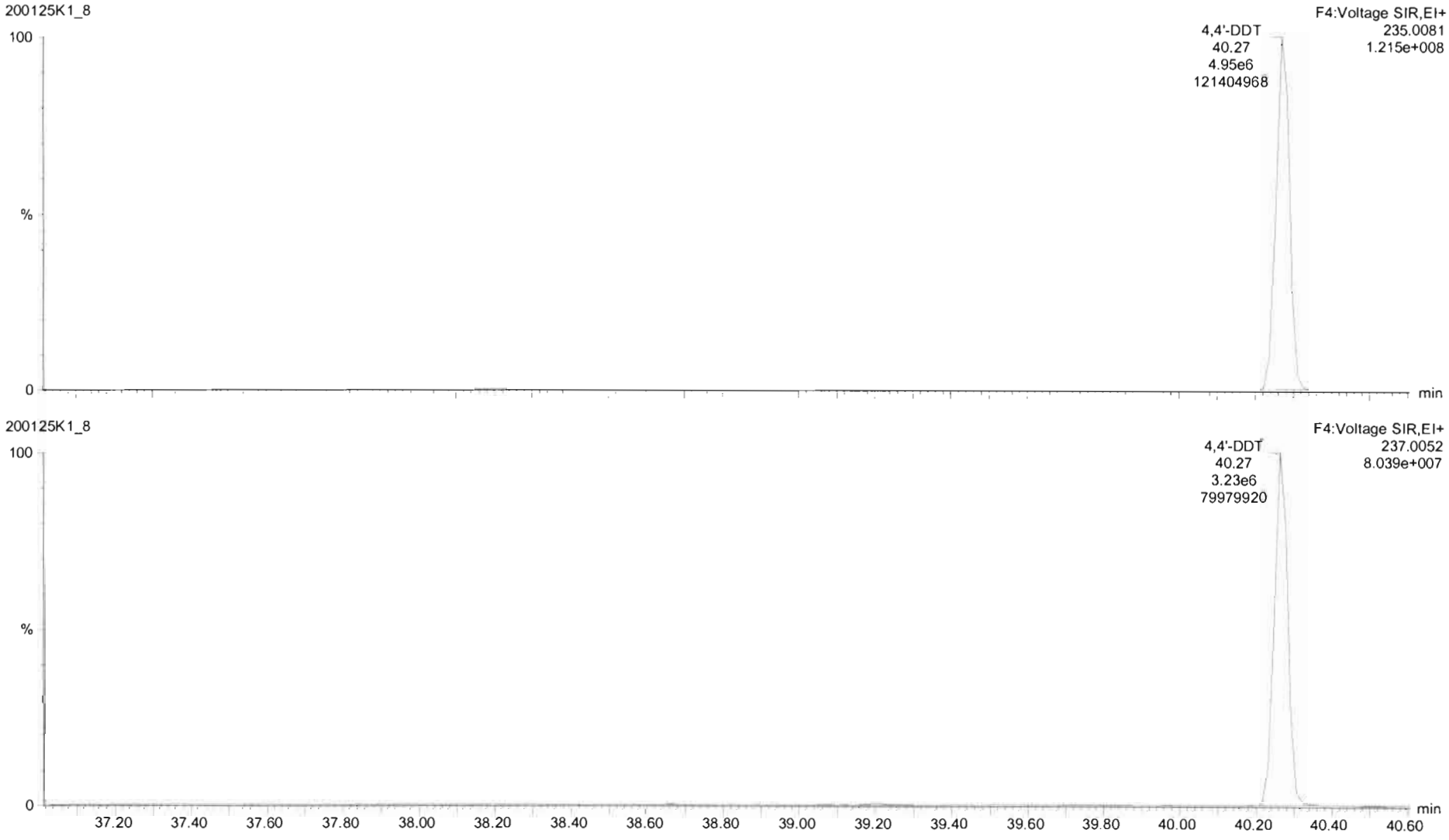


Dataset: Untitled

Last Altered: Monday, January 27, 2020 09:07:33 Pacific Standard Time
Printed: Monday, January 27, 2020 09:07:49 Pacific Standard Time

Name: 200125K1_8, Date: 25-Jan-2020, Time: 18:51:12, ID: GC200125K1-1 GC BREAK, Description: GC BREAK

4,4'-DDT



Vista Analytical Laboratory

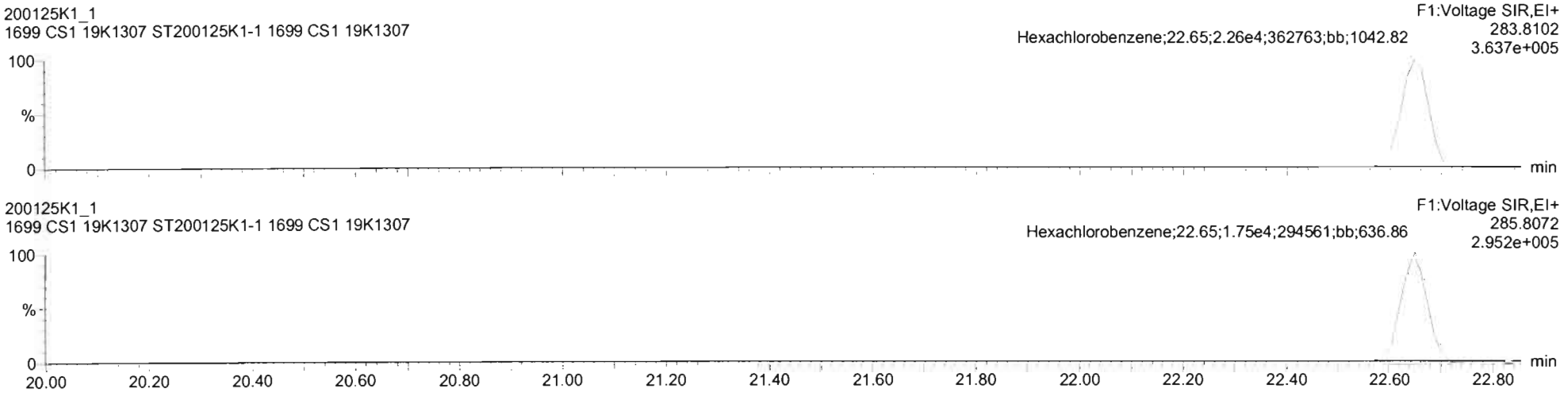
Dataset: Untitled

Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

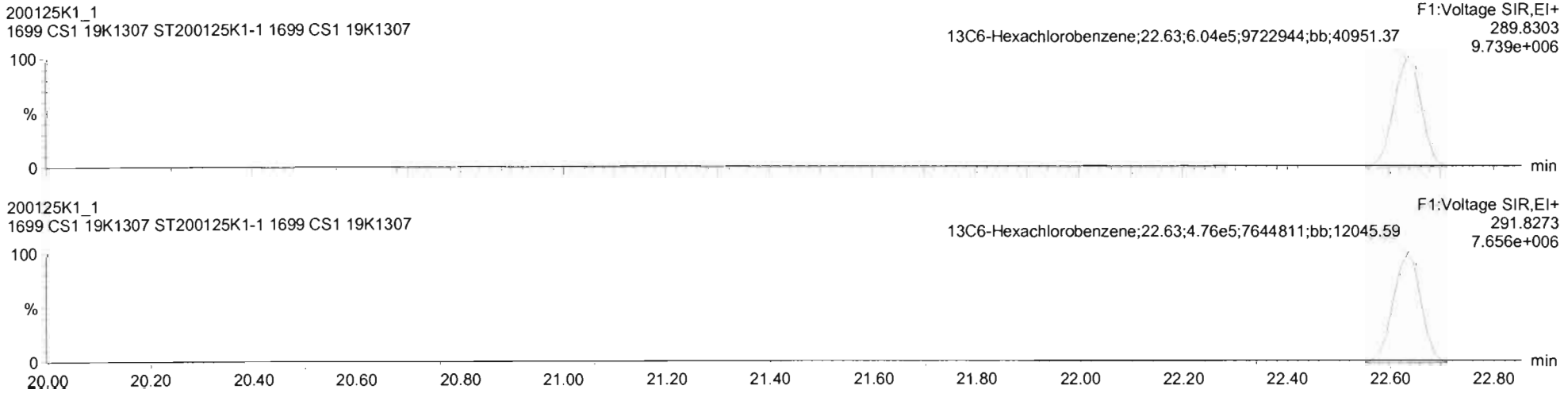
Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

Hexachlorobenzene



13C6-Hexachlorobenzene



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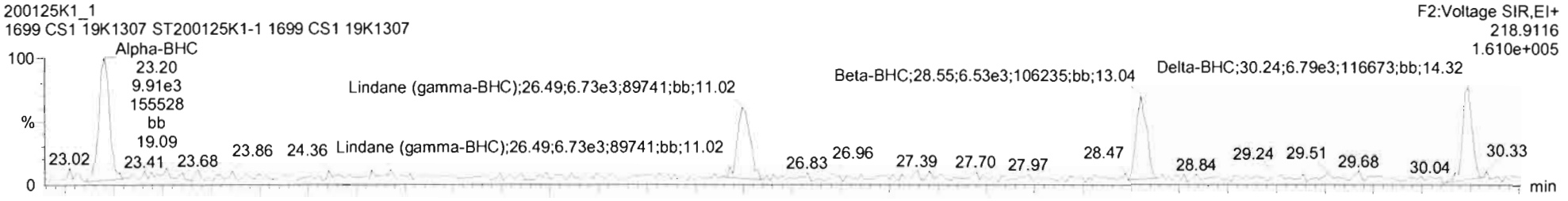
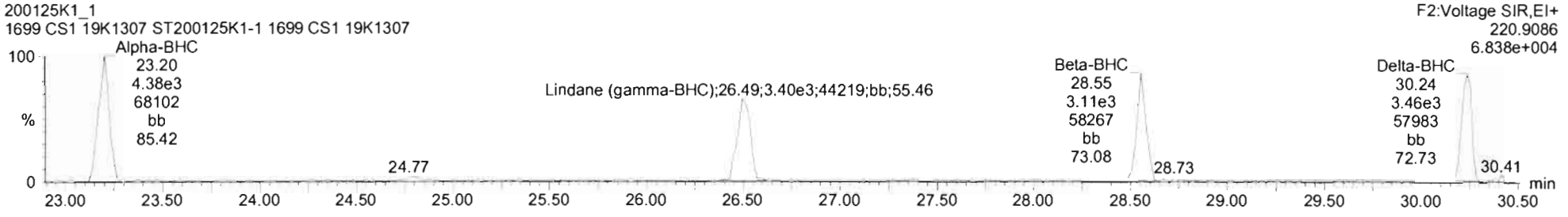
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

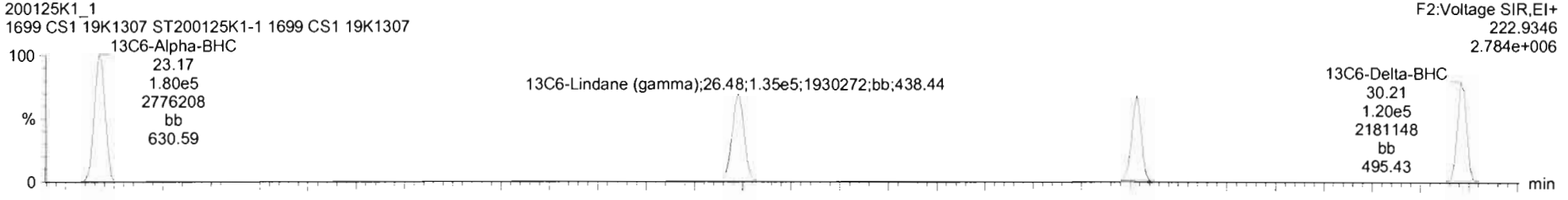
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

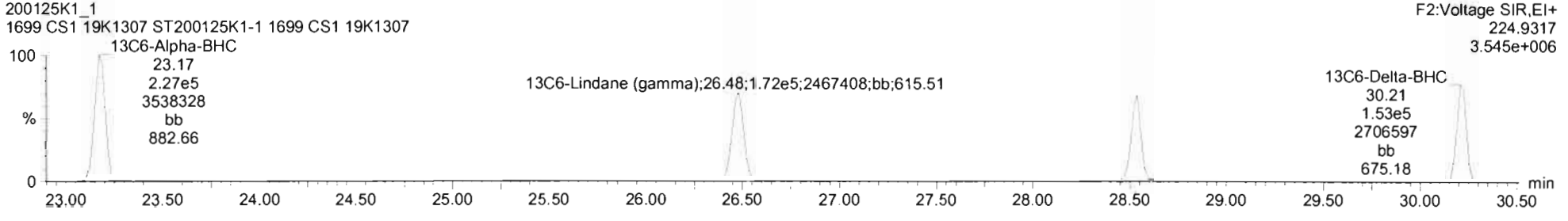
BHC Totals





BHC-isotopes





TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

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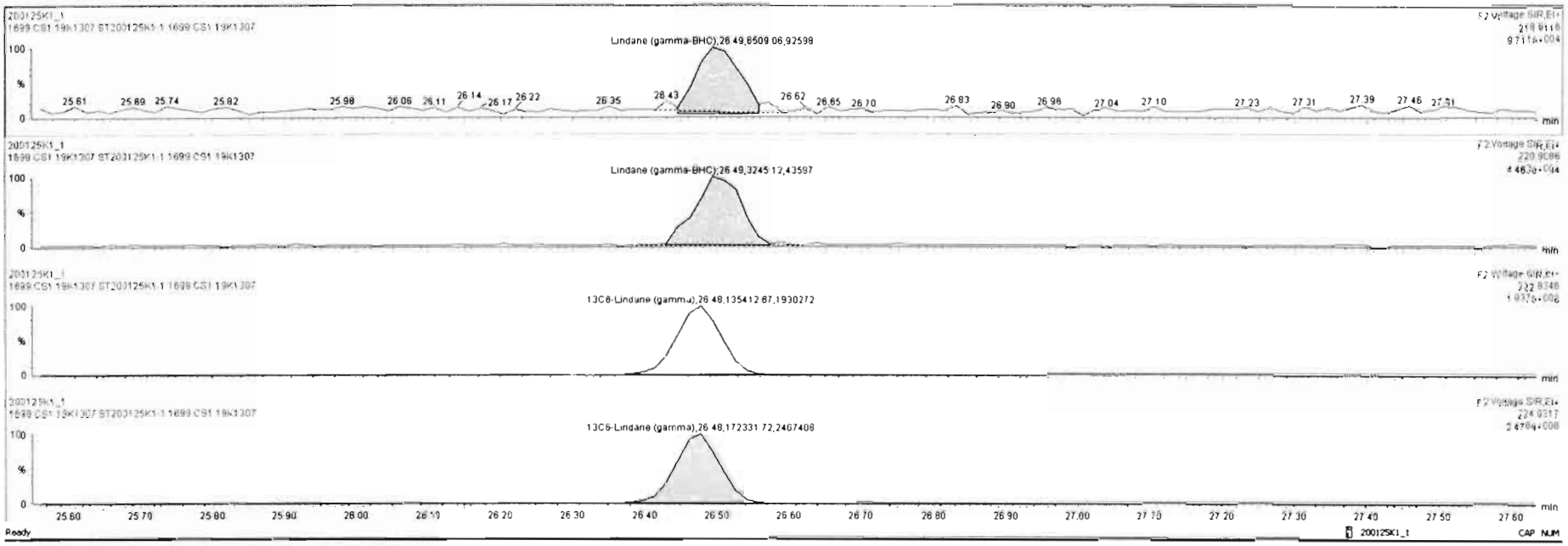
200125K1_1 - ST200125K1-1 1699-CS1 19K1307 - 1699-CS1 19K1307

	#	Name	Resp	IS Resp	ISt	RA	nAy	RRF	wtVol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	2	Hexachlorobenzene	4.01e4	1.08e6	34	1.29	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.005...	1.86
3	3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4	Lindane (gamma-BHC)	9.75e3	3.06e5	36	2.01	NO	0.8690	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	5	Beta-BHC	9.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	6	Delta-BHC	1.03e4	2.72e5	38	1.97	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.98	98.8	0.237	1.98
7	7	Heptachlor	6.85e3	1.52e5	39	1.15	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	2.09	105	0.0352	2.09
8	8	4,4'-DDMU	1.33e4	2.72e5	38	2.76	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	1.94	96.8	0.150	1.94
9	9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12	trans-Heptachlor Epoxide	8.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.665	2.01
13	13	trans-Chlordane (gamm	1.78e3	4.25e4	43	1.94	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	1.77	88.6	0.185	1.77
14	14	trans-Nonachlor	1.98e3	4.87e4	44	1.49	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	1.88	94.2	0.176	1.88
15	15	cis-Chlordane	2.13e3	4.87e4	44	1.77	NO	1.1058	1.000	35.74	35.75	1.015	1.014	NO	1.96	99.0	0.171	1.98



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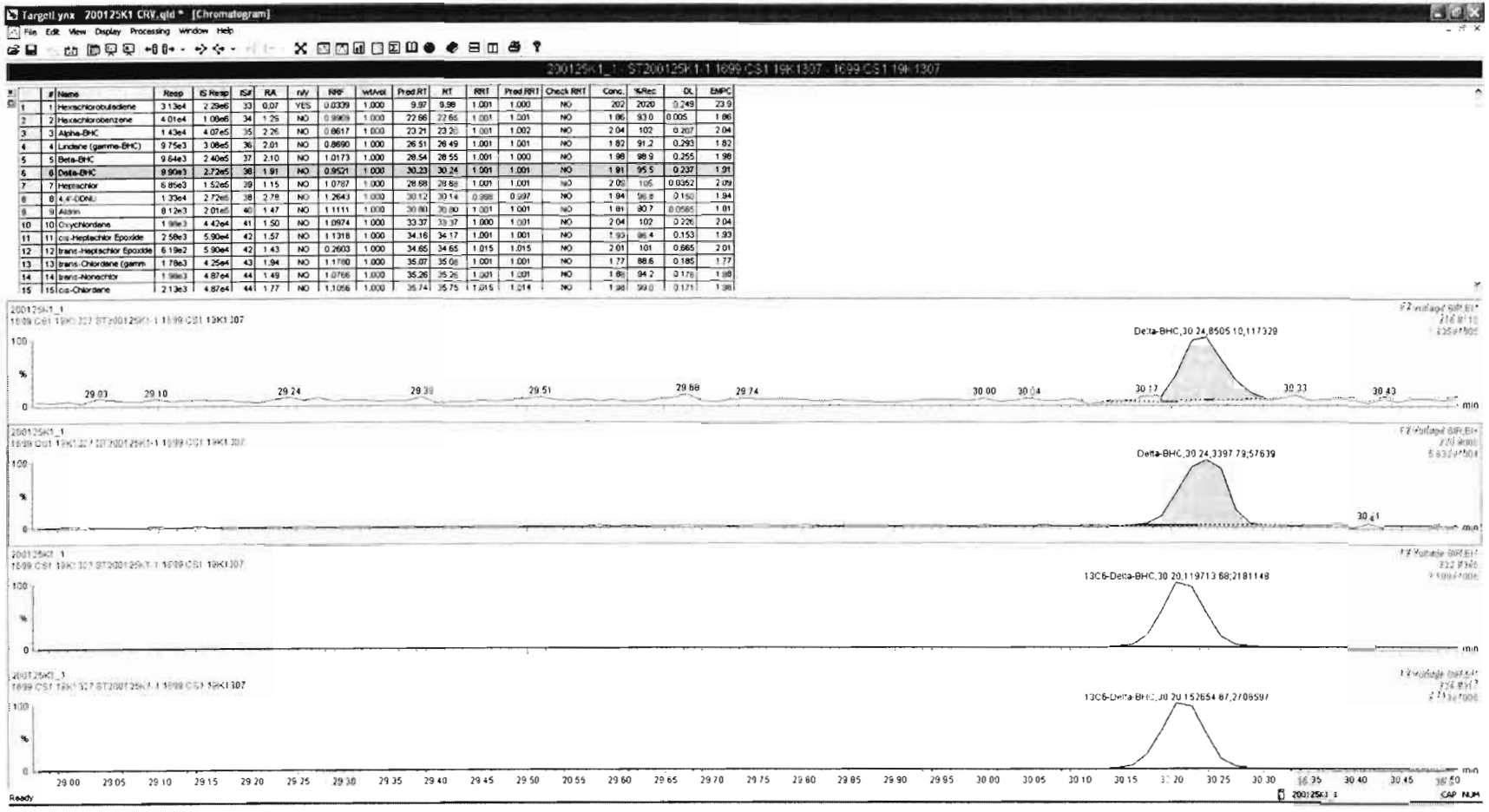

#	Name	Resp	IS Resp	ISf	RA	nIV	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	Hexachlorobenzene	4.01e4	1.08e6	34	1.29	NO	0.9909	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.005	1.86
3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	Lindane (gamma-BHC)	9.75e3	3.08e5	36	2.01	NO	0.8690	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	Beta-BHC	9.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	Delta-BHC	9.80e3	2.72e5	38	1.91	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	Heptachlor	6.85e3	1.52e5	39	1.15	NO	1.0787	1.000	28.88	28.88	1.001	1.001	NO	2.09	105	0.0352	2.09
8	4,4'-DDNU	1.33e4	2.72e5	38	2.78	NO	1.2643	1.000	30.12	30.14	0.999	0.997	NO	1.94	96.8	0.150	1.94
9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.665	2.01
13	trans-Chlordane (gamm	1.78e3	4.25e4	43	1.94	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	1.77	88.6	0.185	1.77
14	trans-Nonachlor	1.99e3	4.87e4	44	1.49	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	1.88	94.2	0.178	1.88
15	cis-Chlordane	2.13e3	4.87e4	44	1.77	NO	1.1056	1.000	35.74	35.75	1.015	1.014	NO	1.98	99.0	0.171	1.98

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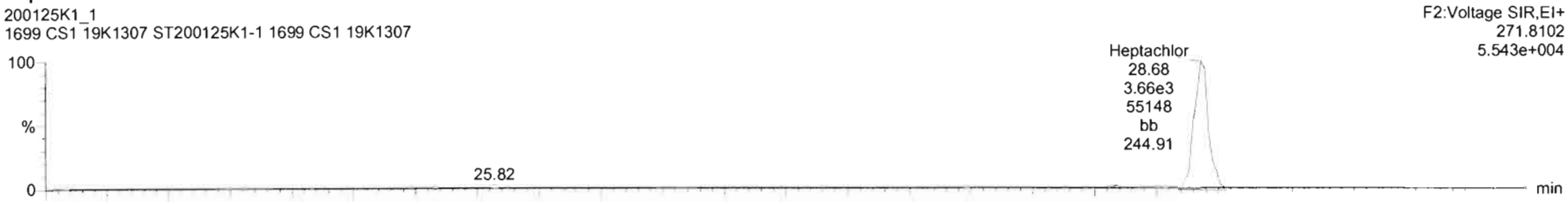
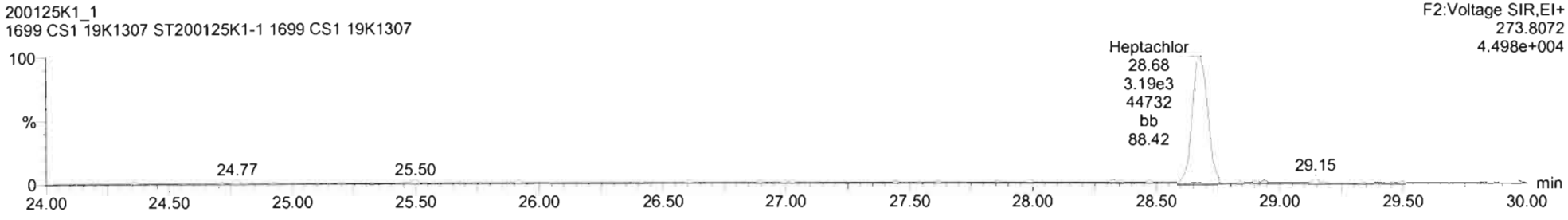
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

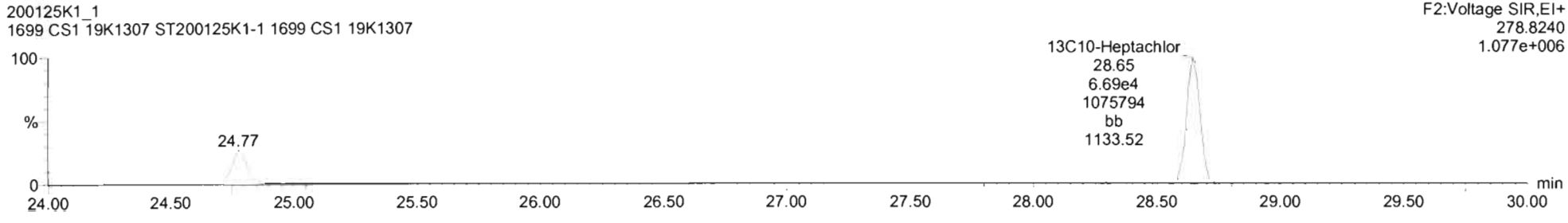
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

Heptachlor





13C10-Heptachlor



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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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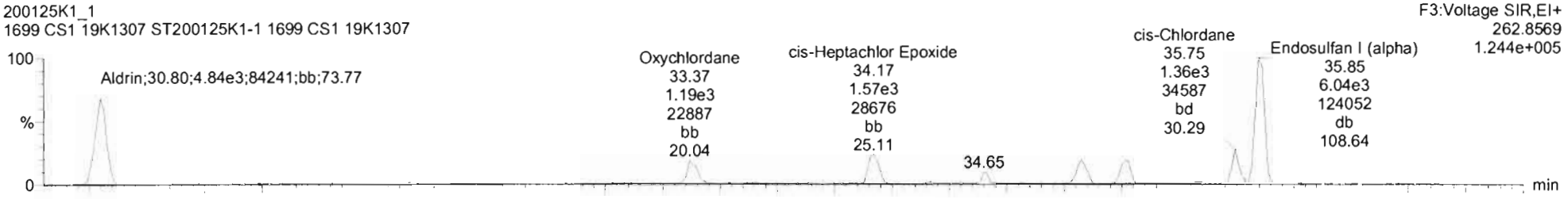
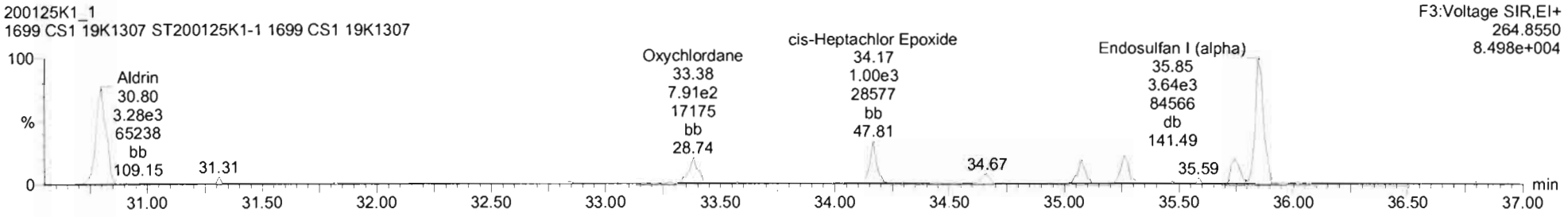
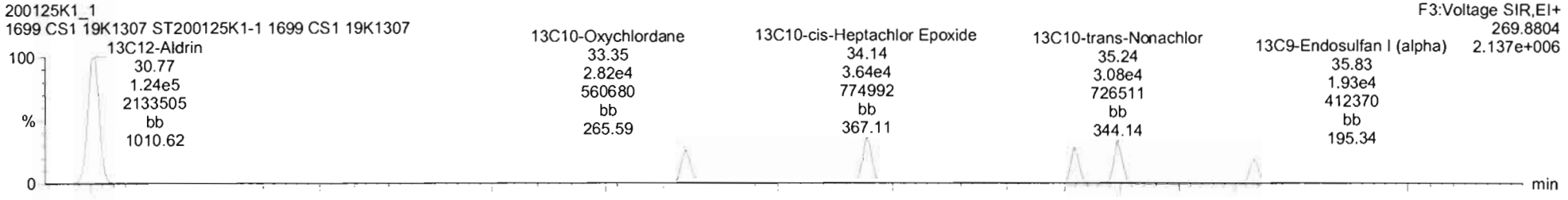
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

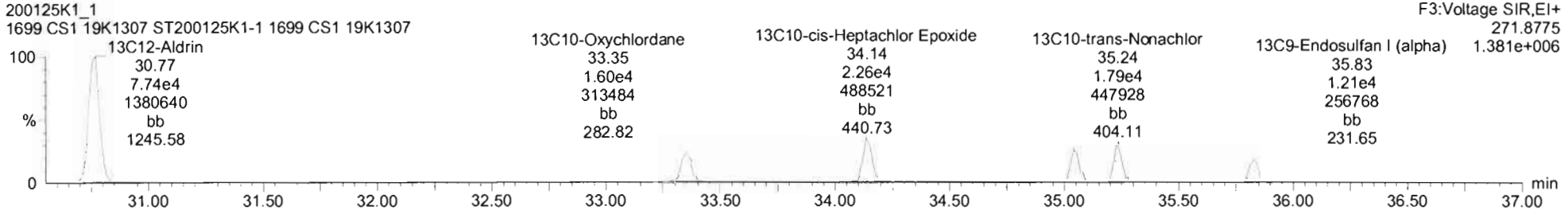
Aldrin-EI

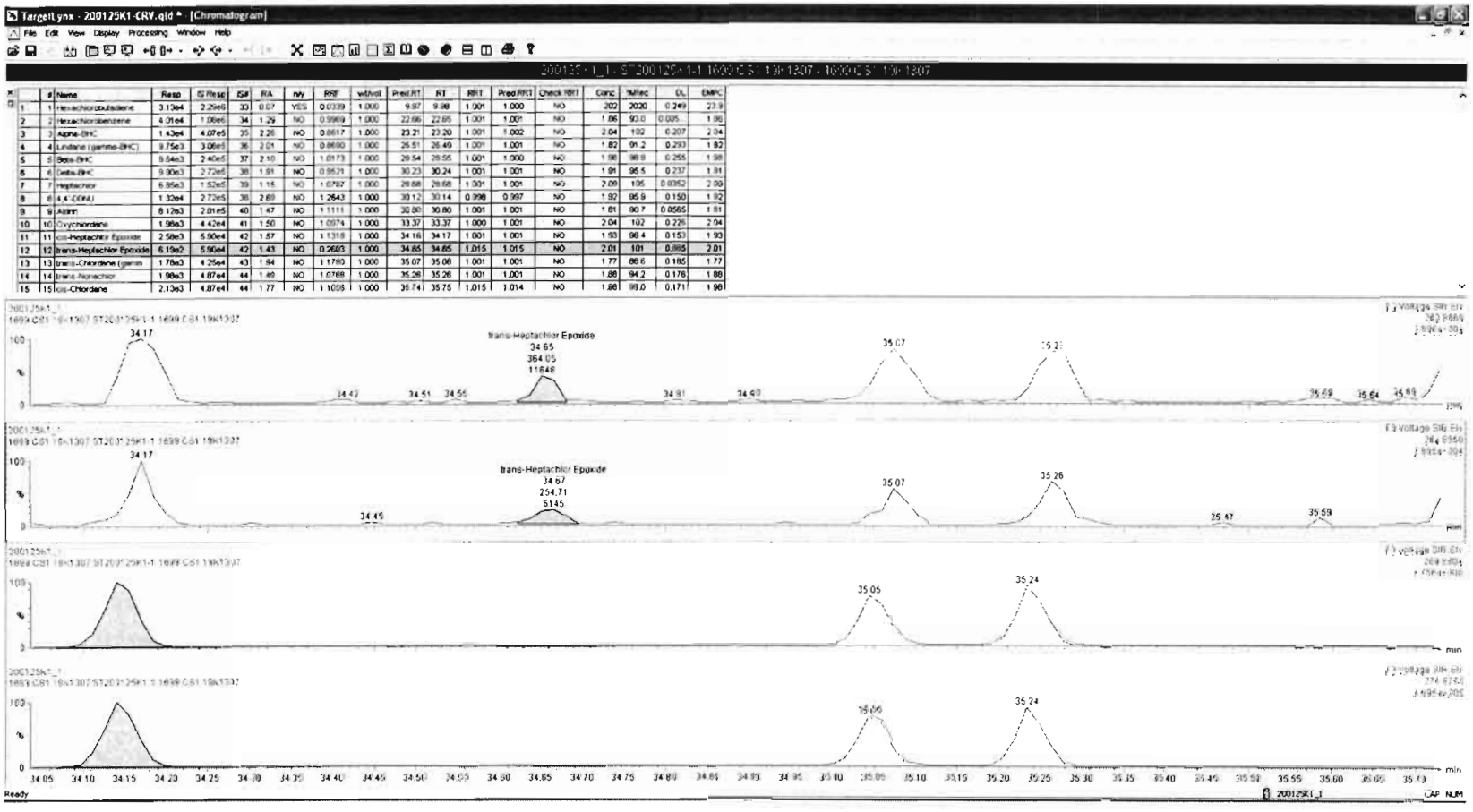




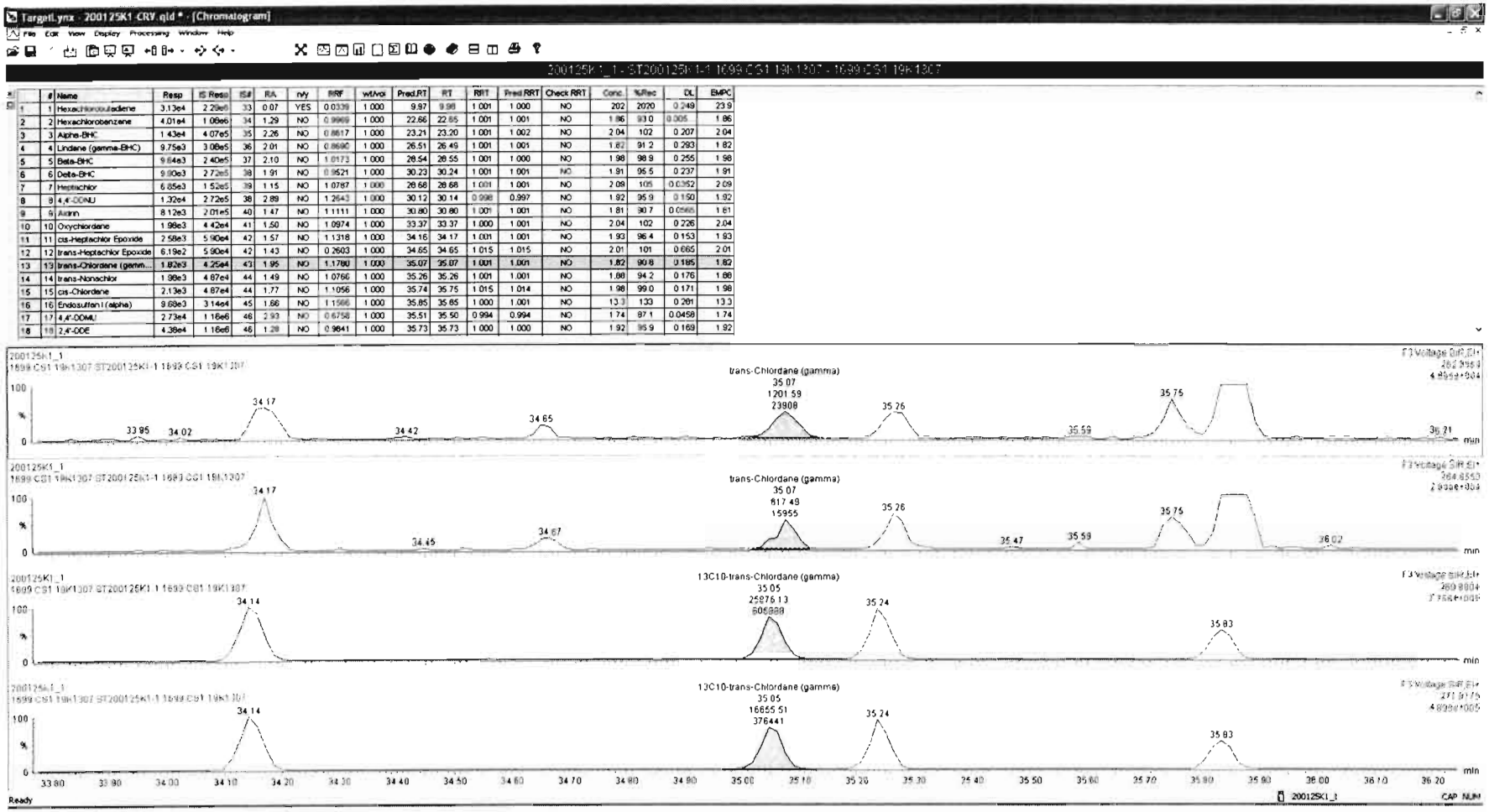
Aldrin-EI-isotopes



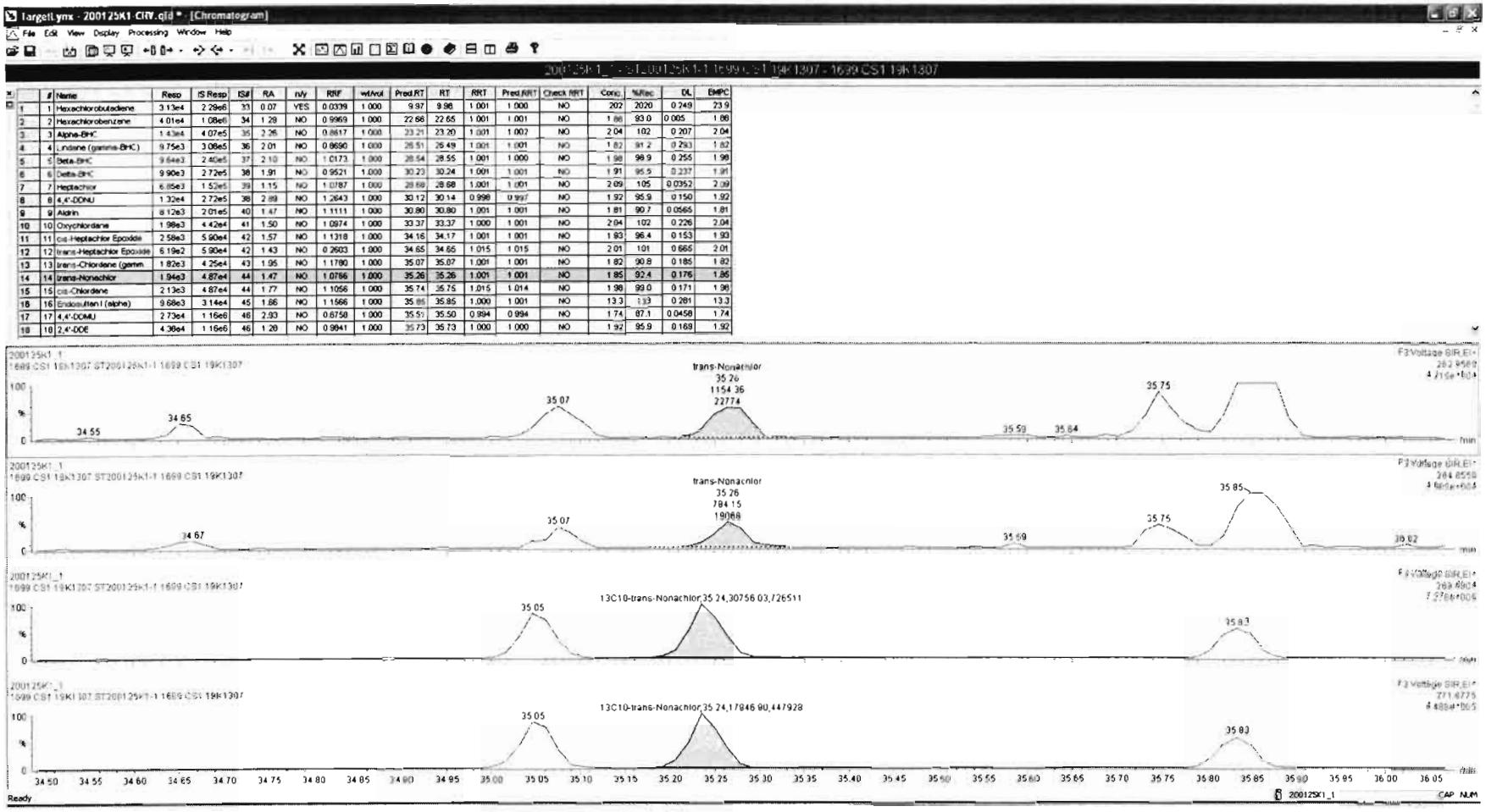




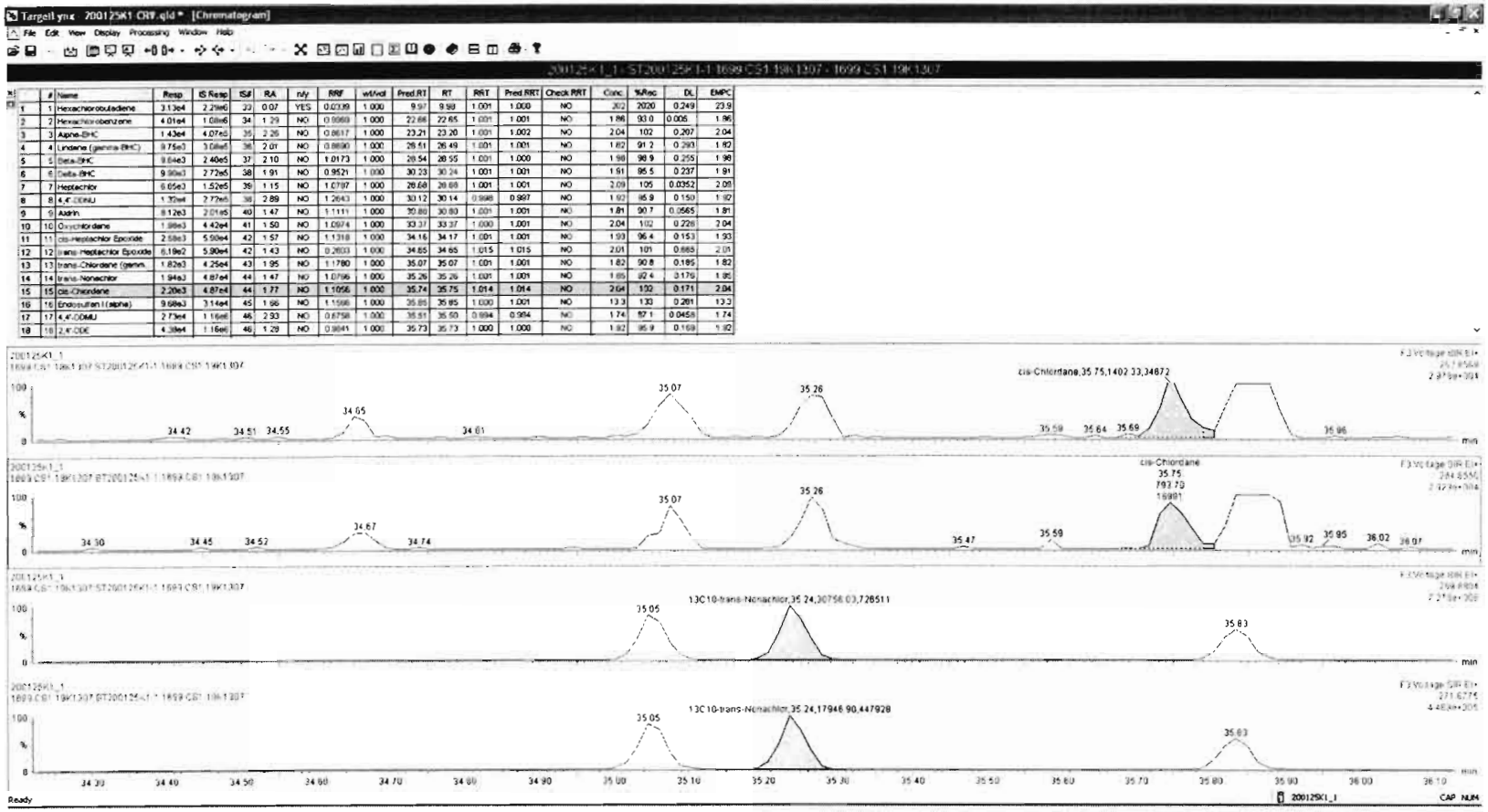
#	Name	Resp	S/Resp	ISR	RA	rdy	RSF	wtVal	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1 Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	2 Hexachlorobenzene	4.01e4	1.08e6	34	1.29	NO	0.0969	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.025	1.86
3	3 Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.0617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4 Lindane (gamma-BHC)	8.75e3	3.06e5	36	2.01	NO	0.0650	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	5 Beta-BHC	8.64e3	2.40e5	37	2.10	NO	0.0773	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	6 Delta-BHC	9.90e3	2.72e5	38	1.91	NO	0.0621	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	7 Heptachlor	6.85e3	1.52e5	39	1.15	NO	0.0787	1.000	28.68	28.68	1.001	1.001	NO	2.06	105	0.0352	2.06
8	8 4,4'-DDMU	1.32e4	2.72e5	38	2.69	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	1.92	95.9	0.150	1.92
9	9 Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10 Oxychlordane	1.96e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	11 cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12 trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.885	2.01
13	13 trans-Chlordene (gamma	1.78e3	4.25e4	43	1.94	NO	1.1760	1.000	35.07	35.08	1.001	1.001	NO	1.77	88.6	0.185	1.77
14	14 trans-Nonachlor	1.90e3	4.87e4	44	1.49	NO	1.0768	1.000	35.26	35.26	1.001	1.001	NO	1.88	94.2	0.178	1.88
15	15 cis-Chlordane	2.13e3	4.87e4	44	1.77	NO	1.1006	1.000	35.74	35.75	1.015	1.014	NO	1.98	99.0	0.171	1.98



	#	Name	Resp	IS Resp	IS#	RA	rvy	RRF	wt/vol	Pred.RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorocyclodiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	2	Hexachlorobenzene	4.01e4	1.06e6	34	1.29	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.005	1.86
3	3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4	Lindane (gamma-BHC)	9.75e3	3.08e5	36	2.01	NO	0.8690	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	5	Beta-BHC	9.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	6	Delta-BHC	9.90e3	2.72e5	38	1.91	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	7	Heptachlor	6.85e3	1.52e5	39	1.15	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	2.09	105	0.0352	2.09
8	8	4,4'-DDNU	1.32e4	2.72e5	38	2.89	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	1.92	95.9	0.150	1.92
9	9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12	trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.665	2.01
13	13	trans-Chlordane (gamm...	1.82e3	4.25e4	43	1.95	NO	1.1780	1.000	35.07	35.07	1.001	1.001	NO	1.82	90.8	0.185	1.82
14	14	trans-Nonachlor	1.98e3	4.87e4	44	1.49	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	1.98	94.2	0.176	1.98
15	15	cis-Chlordane	2.13e3	4.87e4	44	1.77	NO	1.1056	1.000	35.74	35.75	1.015	1.014	NO	1.98	99.0	0.171	1.98
16	16	Endosulfan I (alpha)	9.68e3	3.14e4	45	1.66	NO	1.1566	1.000	35.85	35.85	1.000	1.001	NO	13.3	133	0.261	13.3
17	17	4,4'-DDMU	2.73e4	1.16e6	46	2.93	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	1.74	87.1	0.0458	1.74
18	18	2,4'-DDE	4.38e4	1.16e6	46	1.28	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	1.92	95.9	0.169	1.92



	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/Vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	2	Hexachlorobenzene	4.01e4	1.08e6	34	1.28	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.065	1.86
3	3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4	Lindane (gamma-BHC)	9.75e3	3.06e5	36	2.01	NO	0.8690	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	5	Beta-BHC	9.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	6	Delta-BHC	9.90e3	2.72e5	38	1.91	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	7	Heptachlor	6.85e3	1.52e5	39	1.15	NO	1.0787	1.000	28.69	28.68	1.001	1.001	NO	2.09	105	0.0352	2.09
8	8	4,4'-DDMU	1.32e4	2.72e5	38	2.89	NO	1.2843	1.000	30.12	30.14	0.998	0.997	NO	1.92	95.9	0.150	1.92
9	9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12	trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.665	2.01
13	13	trans-Chlordane (gamm	1.82e3	4.25e4	43	1.95	NO	1.1780	1.000	35.07	35.07	1.001	1.001	NO	1.82	90.8	0.185	1.82
14	14	trans-Nonachlor	1.94e3	4.87e4	44	1.47	NO	1.0786	1.000	35.26	35.26	1.001	1.001	NO	1.85	92.4	0.176	1.85
15	15	cis-Chlordane	2.13e3	4.87e4	44	1.77	NO	1.1056	1.000	35.74	35.75	1.015	1.014	NO	1.98	99.0	0.171	1.98
16	16	Endosulfan I (alpha)	9.68e3	3.14e4	45	1.86	NO	1.1566	1.000	35.86	35.85	1.000	1.001	NO	13.3	133	0.281	13.3
17	17	4,4'-DDMU	2.73e4	1.16e6	46	2.93	NO	0.6750	1.000	35.51	35.50	0.994	0.994	NO	1.74	87.1	0.0458	1.74
18	18	2,4'-DDE	4.36e4	1.16e6	46	1.28	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	1.92	95.9	0.169	1.92



	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	w/v/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0289	1.000	9.97	9.98	1.001	1.000	NO	202	2020	0.249	23.9
2	2	Hexachlorobenzene	4.01e4	1.68e6	34	1.29	NO	0.0660	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.005	1.86
3	3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.0617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4	Lindane (gamma-BHC)	9.75e3	5.08e5	36	2.01	NO	0.0690	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.82
5	5	Beta-BHC	9.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	1.98	98.9	0.255	1.98
6	6	Delta-BHC	9.90e3	2.72e5	38	1.91	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	7	Heptachlor	6.65e3	1.52e5	39	1.15	NO	1.0797	1.000	28.68	28.68	1.001	1.001	NO	2.09	105	0.0352	2.09
8	8	4,4'-DDMU	1.32e4	2.77e5	38	2.89	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	1.92	95.9	0.150	1.92
9	9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0974	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.228	2.04
11	11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12	trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2603	1.000	34.65	34.65	1.015	1.015	NO	2.01	101	0.668	2.01
13	13	trans-Chlordane (gamm...	1.82e3	4.25e4	43	1.95	NO	1.1780	1.000	35.07	35.07	1.001	1.001	NO	1.82	90.8	0.185	1.82
14	14	trans-Nonachlor	1.94e3	4.87e4	44	1.47	NO	1.0796	1.000	35.26	35.26	1.001	1.001	NO	1.85	92.4	3.179	1.85
15	15	cis-Chlordane	2.20e3	4.87e4	44	1.77	NO	1.1056	1.000	35.74	35.75	1.014	1.014	NO	2.64	132	0.171	2.64
16	16	Endosulfan I (alpha)	9.68e3	3.14e4	45	1.98	NO	1.1566	1.000	35.85	35.85	1.000	1.001	NO	13.3	133	0.201	13.3
17	17	4,4'-DDMU	2.73e4	1.16e6	46	2.93	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	1.74	87.1	0.0458	1.74
18	18	2,4'-DDE	4.38e4	1.16e6	46	1.29	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	1.82	90.9	0.169	1.82

TargetLynx 200125K1-CRV.qld * [Chromatogram]

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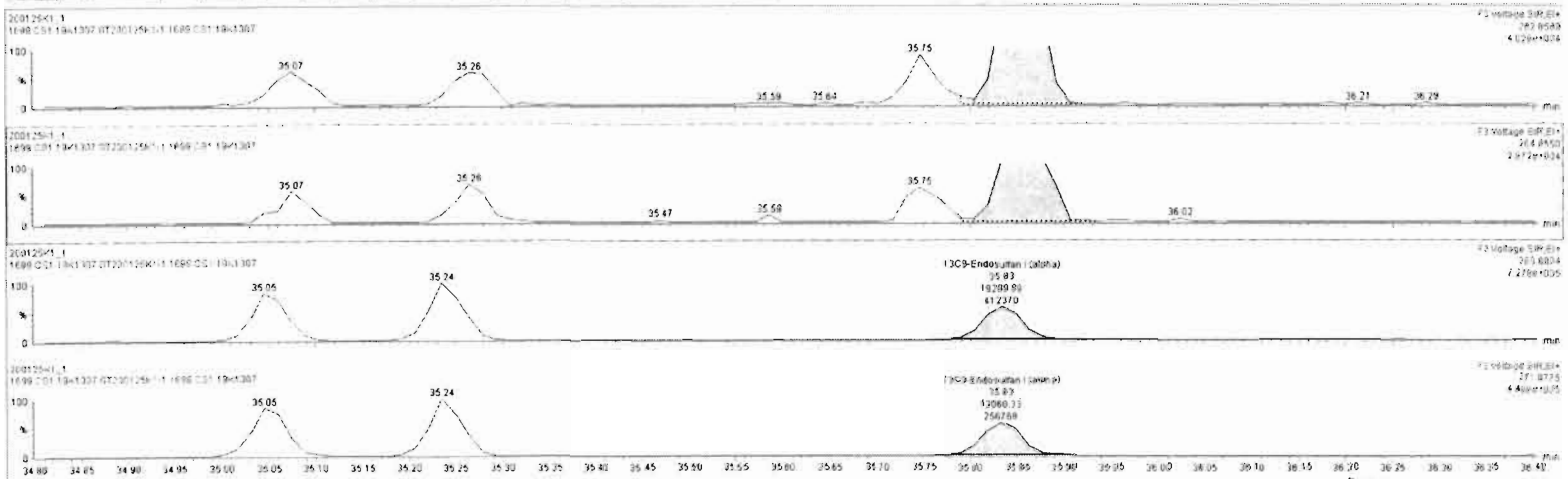
	#	Name	Resp	IS Resp	Ent	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.13e4	2.29e6	33	0.07	YES	0.0339	1.000	9.97	9.96	1.001	1.000	NO	202	2020	0.249	23.9
2	2	Hexachlorobenzene	4.01e4	1.09e6	34	1.29	NO	0.9989	1.000	22.66	22.65	1.001	1.001	NO	1.86	93.0	0.005	1.86
3	3	Alpha-BHC	1.43e4	4.07e5	35	2.26	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	2.04	102	0.207	2.04
4	4	Lindane (gamma-BHC)	9.75e3	3.08e5	36	2.01	NO	0.8890	1.000	26.51	26.49	1.001	1.001	NO	1.82	91.2	0.293	1.87
5	5	Beta-BHC	5.64e3	2.40e5	37	2.10	NO	1.0173	1.000	28.54	28.56	1.001	1.000	NO	1.98	98.9	0.265	1.98
6	6	Delta-BHC	9.90e3	2.72e5	38	1.91	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	1.91	95.5	0.237	1.91
7	7	Heptachlor	6.85e3	1.52e5	39	1.15	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	2.09	105	0.0352	2.09
8	8	4,4'-DDMU	1.32e4	2.72e5	38	2.89	NO	1.2543	1.000	30.12	30.14	0.998	0.997	NO	1.92	95.9	0.150	1.92
9	9	Aldrin	8.12e3	2.01e5	40	1.47	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1.81	90.7	0.0565	1.81
10	10	Oxychlordane	1.98e3	4.42e4	41	1.50	NO	1.0874	1.000	33.37	33.37	1.000	1.001	NO	2.04	102	0.226	2.04
11	11	cis-Heptachlor Epoxide	2.58e3	5.90e4	42	1.57	NO	1.1316	1.000	34.16	34.17	1.001	1.001	NO	1.93	96.4	0.153	1.93
12	12	trans-Heptachlor Epoxide	6.19e2	5.90e4	42	1.43	NO	0.2600	1.000	34.65	34.66	1.015	1.015	NO	2.01	101	0.665	2.01
13	13	trans-Chlordane (gamm	1.82e3	4.25e4	43	1.95	NO	1.1780	1.000	35.07	35.07	1.001	1.001	NO	1.82	90.8	0.185	1.82
14	14	trans-Nonachlor	1.94e3	4.87e4	44	1.47	NO	1.0786	1.000	35.26	35.26	1.001	1.001	NO	1.85	92.4	0.176	1.85
15	15	cis-Chlordane	2.20e3	4.87e4	44	1.77	NO	1.1056	1.000	35.74	35.75	1.014	1.014	NO	2.04	102	0.171	2.04
16	16	Endosulfan I (alpha)	8.54e3	3.14e4	45	1.86	NO	1.1566	1.000	35.85	35.86	1.000	1.001	NO	13.2	132	0.281	13.2
17	17	4,4'-DDMU	2.73e4	1.16e6	46	2.93	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	1.74	87.1	0.0458	1.74
18	18	2,4'-DDE	4.38e4	1.16e6	46	1.28	NO	0.9641	1.000	35.73	35.73	1.000	1.000	NO	1.92	95.9	0.169	1.92



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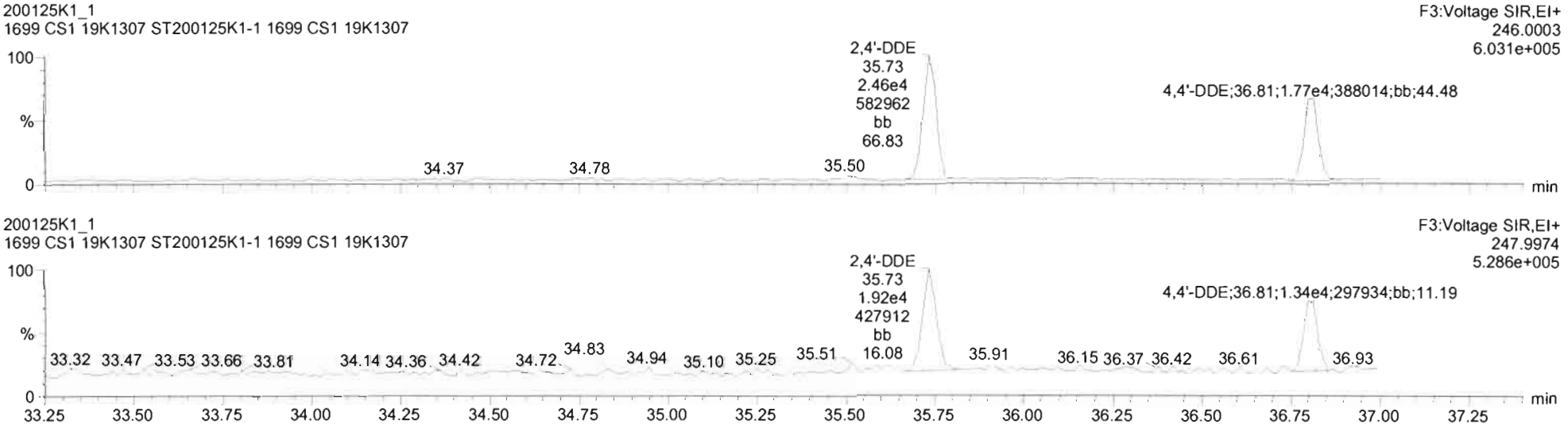

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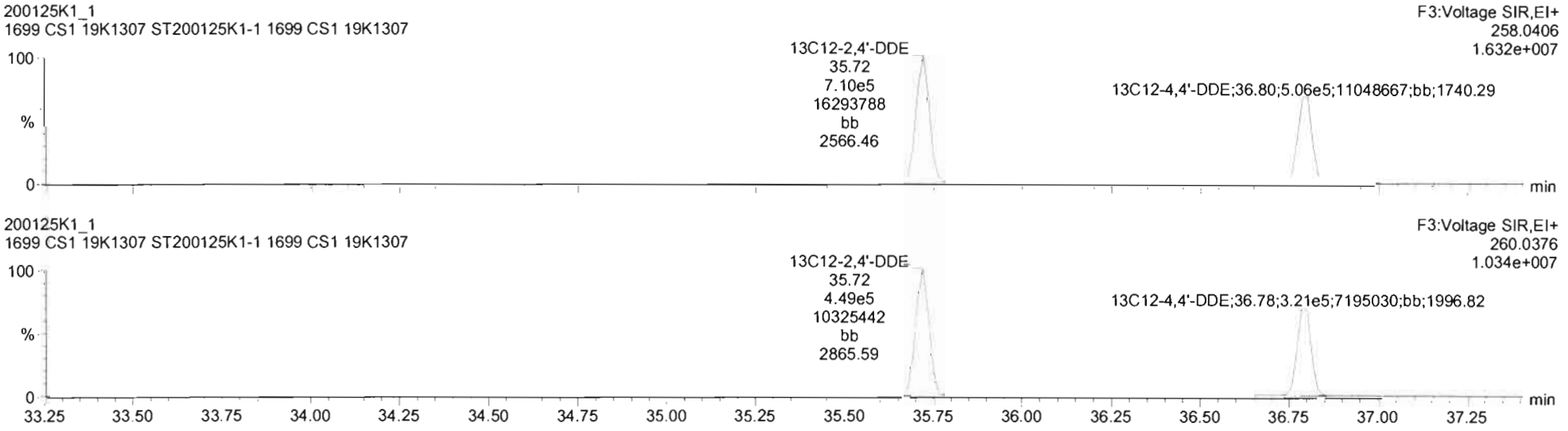

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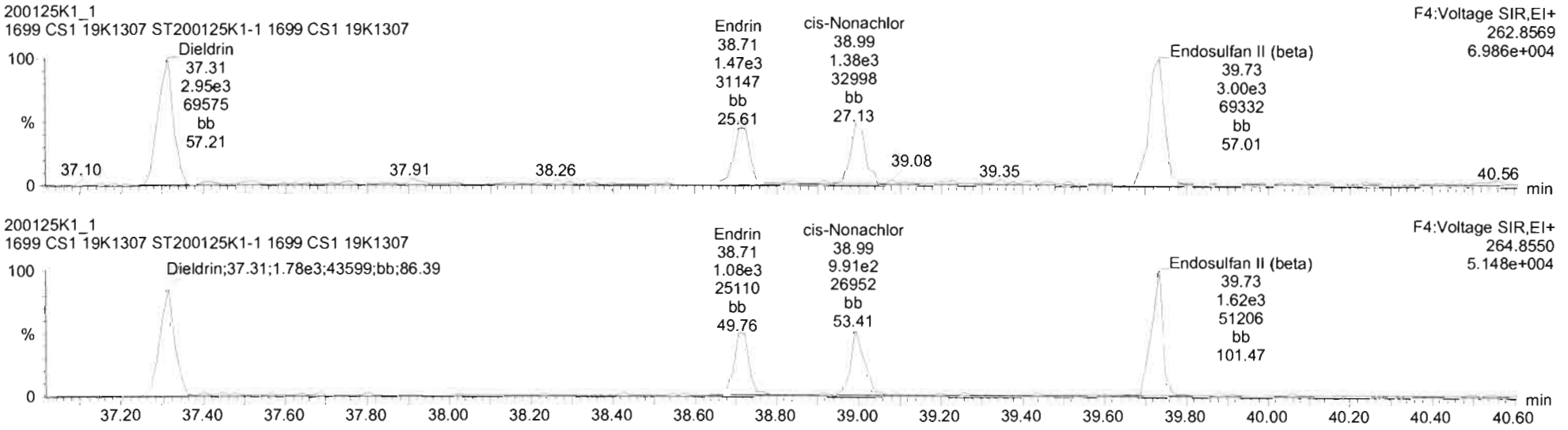

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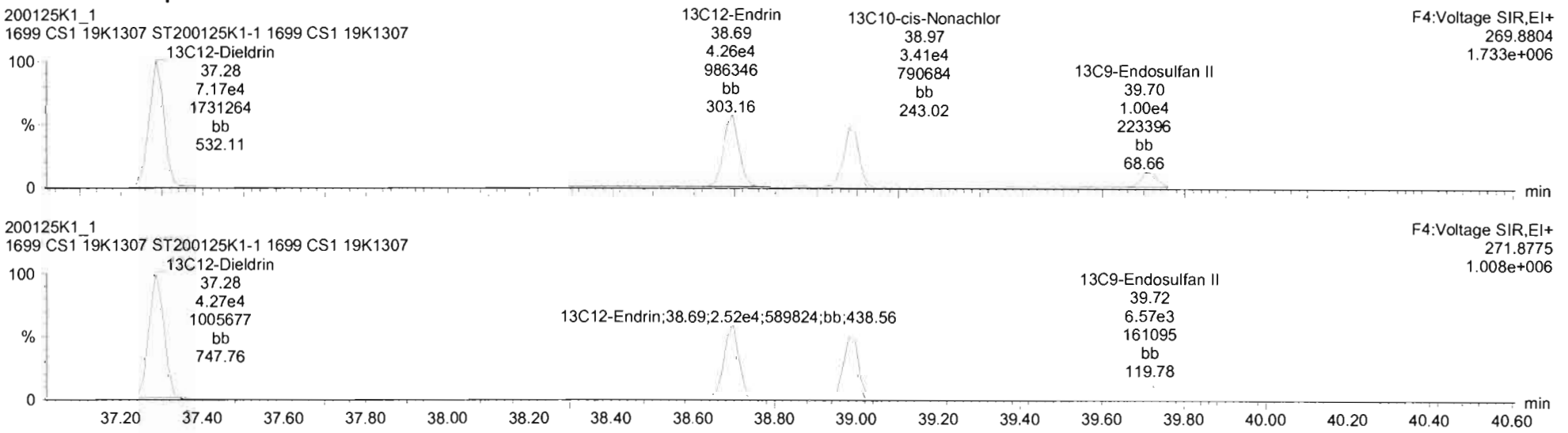

Quantify Sample Report **MassLynx 4.1 SCN815**
Vista Analytical Laboratory

Dataset: Untitled

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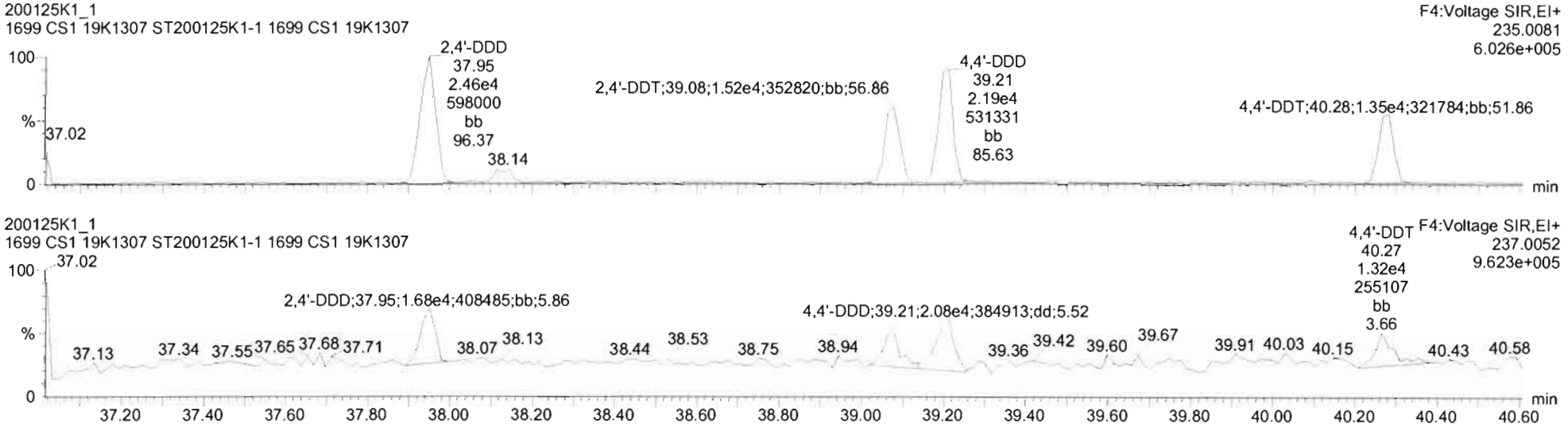
DDD-DDT



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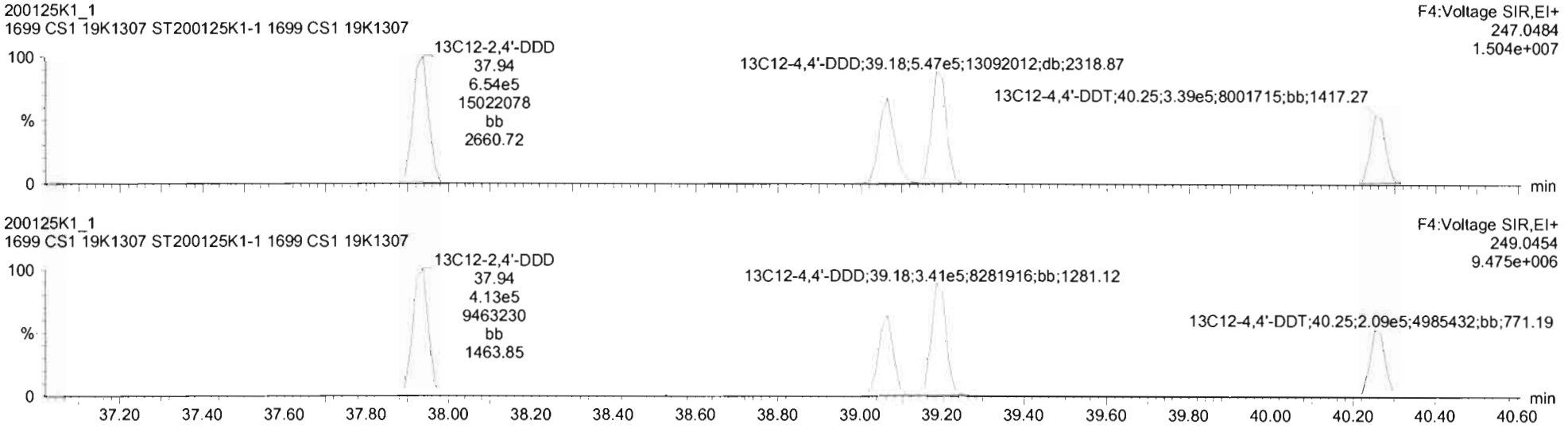
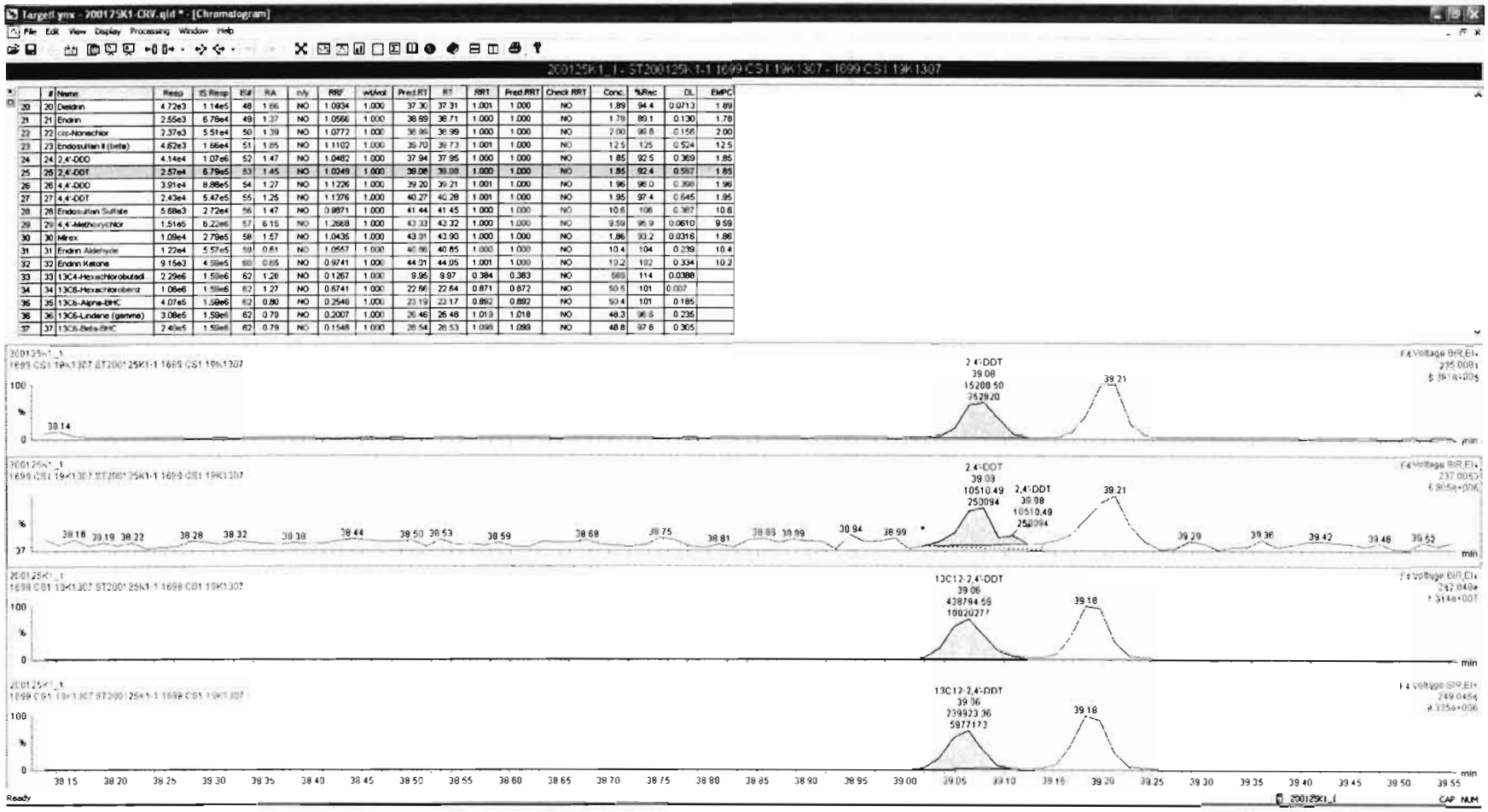
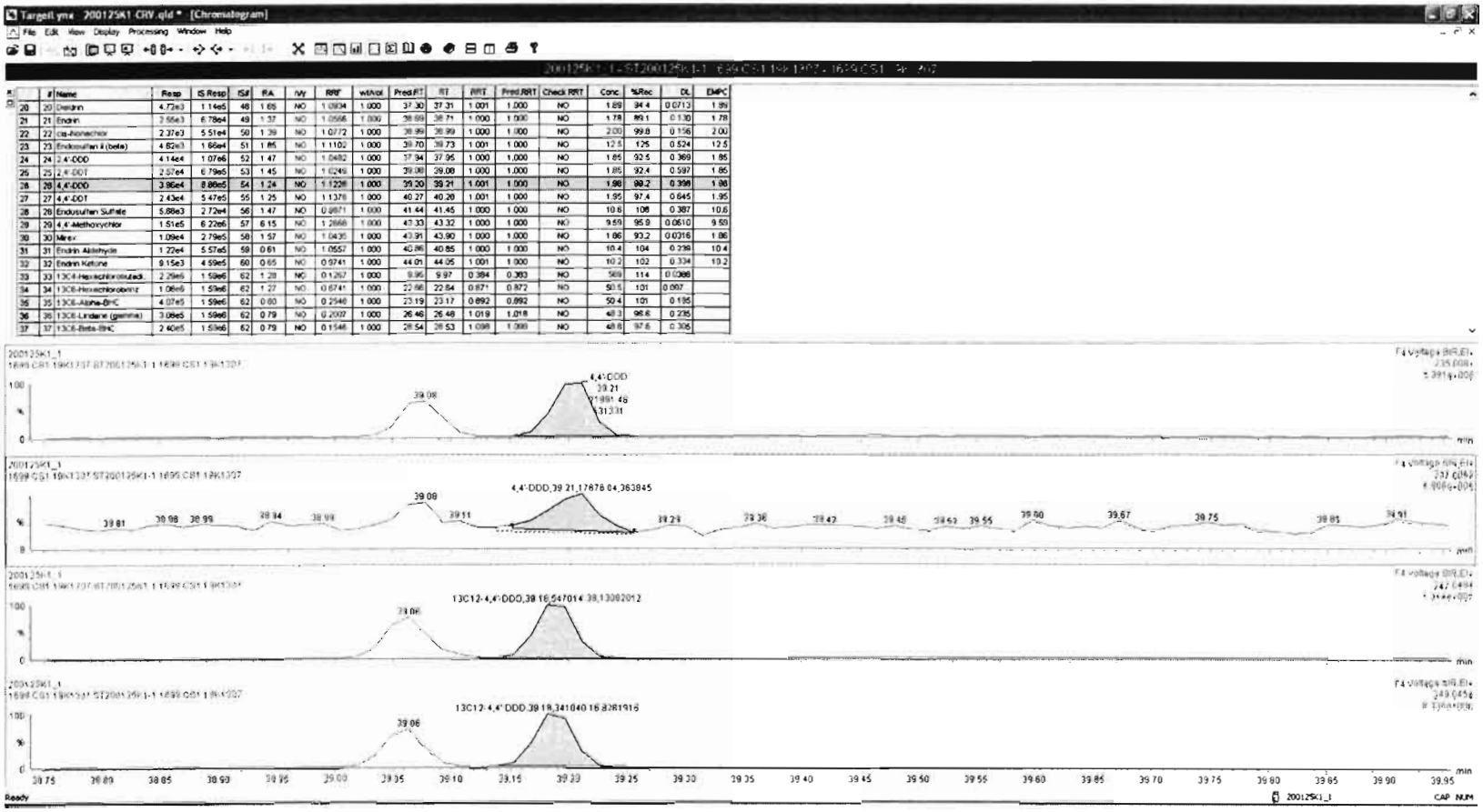




	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	4.72e3	1.14e5	48	1.66	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1.89	94.4	0.0713	1.89
21	21	Endrin	2.55e3	6.78e4	49	1.37	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	1.78	89.1	0.130	1.78
22	22	cis-Nonachlor	2.37e3	5.51e4	50	1.39	NO	1.0772	1.000	38.96	38.99	1.000	1.000	NO	2.00	99.8	0.156	2.00
23	23	Endosulfan II (beta)	4.62e3	1.86e4	51	1.85	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	12.5	125	0.524	12.5
24	24	2,4'-DDD	4.14e4	1.07e6	52	1.47	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1.85	92.5	0.369	1.85
25	25	2,4'-DDT	2.57e4	6.79e5	53	1.45	NO	1.0249	1.000	39.08	39.08	1.000	1.000	NO	1.85	92.4	0.587	1.85
26	26	4,4'-DDD	3.91e4	8.88e5	54	1.27	NO	1.1226	1.000	39.20	39.21	1.001	1.000	NO	1.96	98.0	0.398	1.96
27	27	4,4'-DDT	2.43e4	5.47e5	55	1.25	NO	1.1376	1.000	40.27	40.28	1.001	1.000	NO	1.95	97.4	0.645	1.95
28	28	Endosulfan Sulfate	5.68e3	2.72e4	56	1.47	NO	0.8971	1.000	41.44	41.45	1.000	1.000	NO	10.6	106	0.387	10.6
29	29	4,4'-Methoxychlor	1.51e5	8.22e6	57	6.15	NO	1.2688	1.000	43.33	43.32	1.000	1.000	NO	9.59	95.9	0.0610	9.59
30	30	Mirex	1.09e4	2.79e5	58	1.57	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1.86	93.2	0.0316	1.86
31	31	Endrin Aldehyde	1.22e4	5.57e5	59	0.61	NO	1.0557	1.000	40.66	40.65	1.000	1.000	NO	10.4	104	0.239	10.4
32	32	Endrin Ketone	9.15e3	4.59e5	60	0.65	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	10.2	102	0.334	10.2
33	33	13C4-Hexachlorobutad	2.29e6	1.59e6	62	1.28	NO	0.1267	1.000	9.96	9.97	0.384	0.383	NO	569	114	0.0388	
34	34	13C6-Hexachlorobenz	1.08e6	1.59e6	62	1.27	NO	0.6741	1.000	22.66	22.64	0.871	0.872	NO	50.5	101	0.007	
35	35	13C6-Alpha-BHC	4.07e5	1.59e6	62	0.80	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	50.4	101	0.185	
36	36	13C6-Lindane (gamma)	3.08e5	1.59e6	62	0.79	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	48.3	96.6	0.235	
37	37	13C6-Beta-BHC	2.40e5	1.59e6	62	0.79	NO	0.1548	1.000	26.54	26.53	1.096	1.099	NO	48.8	97.6	0.305	



	#	Name	Resp	IS Resp	ISd	RA	rVr	RRF	wtVal	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	4.72e3	1.14e5	48	1.65	NO	1.0804	1.000	37.30	37.31	1.001	1.000	NO	1.89	94.4	0.0713	1.89
21	21	Endrin	3.66e3	8.78e4	49	1.57	NO	1.0666	1.000	38.99	38.71	1.000	1.000	NO	1.78	89.1	0.130	1.78
22	22	cis-Nonachlor	2.37e3	5.51e4	50	1.39	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	2.00	99.8	0.156	2.00
23	23	Endosulfan II (beta)	4.82e3	1.66e4	51	1.85	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	12.5	125	0.524	12.5
24	24	2,4'-DDD	4.14e4	1.07e6	52	1.47	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1.85	92.5	0.369	1.85
25	25	2,4'-DDT	2.57e4	6.79e5	53	1.45	NO	1.0249	1.000	39.08	39.08	1.000	1.000	NO	1.85	92.4	0.597	1.85
26	26	4,4'-DDD	3.96e4	8.86e5	54	1.24	NO	1.1228	1.000	39.20	39.21	1.001	1.000	NO	1.98	98.2	0.398	1.98
27	27	4,4'-DDT	2.43e4	5.47e5	55	1.25	NO	1.1378	1.000	40.27	40.28	1.001	1.000	NO	1.95	97.4	0.645	1.95
28	28	Endosulfan Sulfate	5.88e3	2.72e4	56	1.47	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	10.6	106	0.387	10.6
29	29	4,4'-Methoxychlor	1.51e5	6.22e6	57	6.15	NO	1.2668	1.000	43.33	43.32	1.000	1.000	NO	9.59	95.9	0.0610	9.59
30	30	Mirex	1.09e4	2.79e5	58	1.57	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1.86	93.2	0.0316	1.86
31	31	Endrin Aldehyde	1.22e4	5.57e5	59	0.61	NO	1.0557	1.000	40.86	40.85	1.000	1.000	NO	10.4	104	0.238	10.4
32	32	Endrin Ketone	9.15e3	4.59e5	60	0.65	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	10.2	102	0.334	10.2
33	33	13C4-Hexachlorobutadi	2.29e6	1.59e6	62	1.28	NO	0.1267	1.000	9.96	9.97	0.384	0.383	NO	569	114	0.0088	
34	34	13C6-Hexachlorobenz	1.08e6	1.57e6	62	1.27	NO	0.6741	1.000	22.86	22.84	0.871	0.872	NO	50.5	101	0.007	
35	35	13C6-Alpha-BHC	4.07e5	1.59e6	62	0.80	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	50.4	101	0.195	
36	36	13C6-Lindane (gamma)	3.08e5	1.59e6	62	0.79	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	48.3	96.6	0.235	
37	37	13C6-Beta-BHC	2.40e5	1.59e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	48.6	97.6	0.305	

Target1.ynx - 200125K1-CRV.qld * - [Chromatogram]

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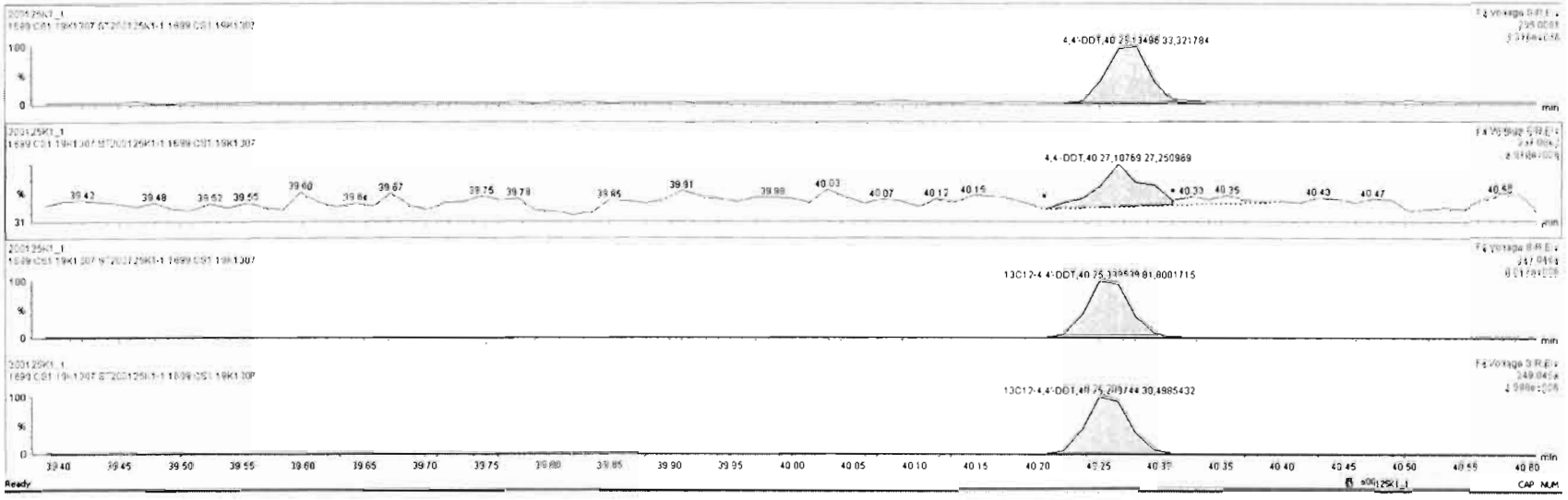
200125K1_1 - ST200125K1-1 1699 CS1 19K1307 - 1699 CS1 19K1307

	#	Name	Resp	IS Resp	IS#	RA	nAy	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	4.72e3	1.14e5	48	1.66	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1.89	94.4	0.0713	1.89
21	21	Endrin	2.55e3	6.78e4	49	1.37	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	1.78	89.1	0.130	1.78
22	22	cis-Nonachlor	2.37e3	5.51e4	50	1.39	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	2.00	99.8	0.156	2.00
23	23	Endosulfan II (beta)	4.62e3	1.66e4	51	1.85	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	12.5	125	0.524	12.5
24	24	2,4'-DDD	4.14e4	1.07e6	52	1.47	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1.85	92.5	0.369	1.85
25	25	2,4'-DDT	2.57e4	6.79e5	53	1.45	NO	1.0249	1.000	39.08	39.08	1.000	1.000	NO	1.85	92.4	0.597	1.85
26	26	4,4'-DDD	3.96e4	8.88e5	54	1.24	NO	1.1226	1.000	39.20	39.21	1.001	1.000	NO	1.98	99.2	0.399	1.98
27	27	4,4'-DDT	2.43e4	5.47e5	55	1.25	NO	1.1375	1.000	40.27	40.28	1.001	1.000	NO	1.95	97.4	0.645	1.95
28	28	Endosulfan Sulfate	5.68e3	2.72e4	56	1.47	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	10.6	106	0.367	10.6
29	29	4,4'-Methoxychlor	1.51e5	6.22e6	57	6.15	NO	1.2668	1.000	43.33	43.32	1.000	1.000	NO	9.59	95.9	0.0610	9.59
30	30	Mirex	1.09e4	2.79e5	58	1.57	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1.86	93.2	0.0316	1.86
31	31	Endrin Aldehyde	1.22e4	5.57e5	59	0.61	NO	1.0567	1.000	40.86	40.85	1.000	1.000	NO	10.4	104	0.239	10.4
32	32	Endrin Ketone	9.15e3	4.59e5	60	0.65	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	10.2	102	0.334	10.2
33	33	13C4-Hexachlorobutadi	2.29e6	1.59e6	62	1.28	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	569	114	0.0388	
34	34	13C6-Hexachlorobenz	1.08e6	1.59e6	62	1.27	NO	0.6741	1.000	22.66	22.64	0.871	0.872	NO	50.5	101	0.007	
35	35	13C6-Alpha BHC	4.07e5	1.59e6	62	0.80	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	50.4	101	0.185	
36	36	13C6-Lindane (gamma)	3.08e5	1.59e6	62	0.79	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	48.3	96.6	0.235	
37	37	13C6-Beta-BHC	2.40e5	1.59e6	62	0.79	NO	0.1548	1.000	28.54	28.53	1.098	1.099	NO	48.8	97.8	0.305	



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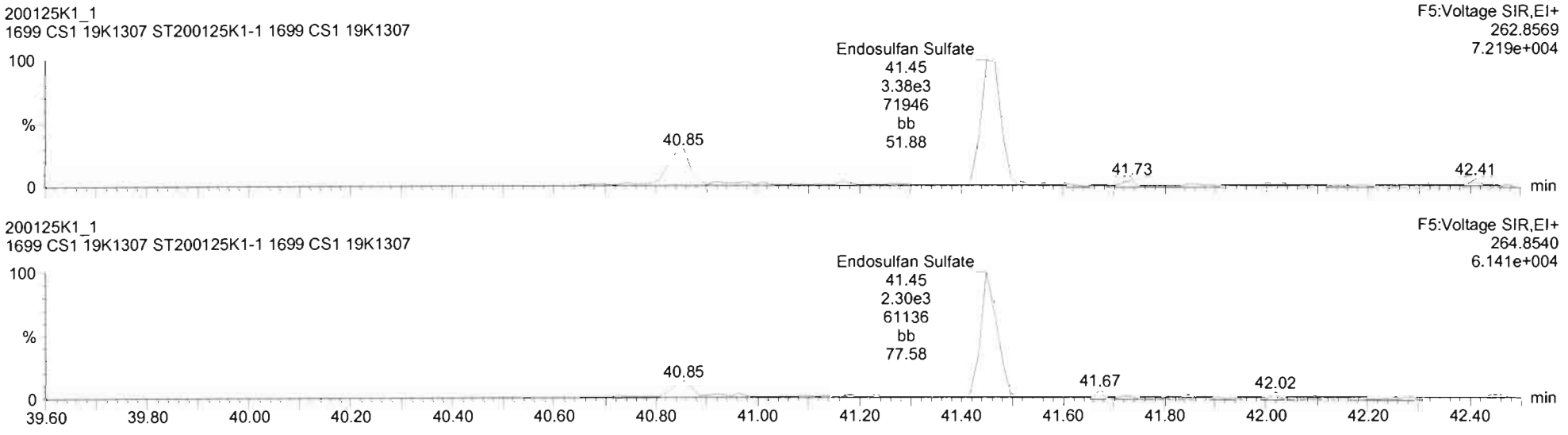
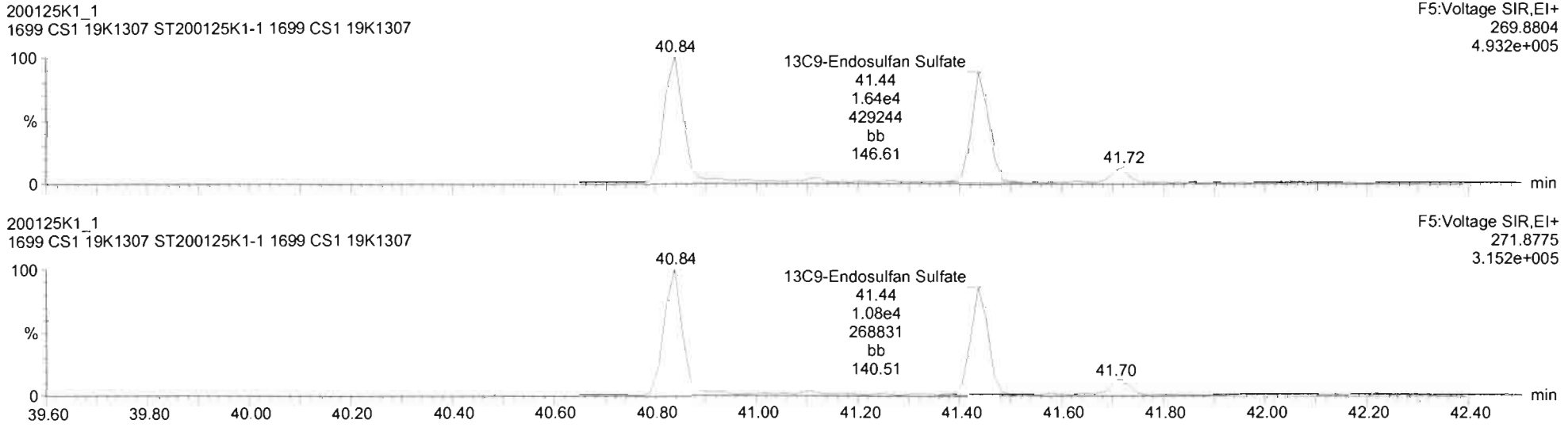
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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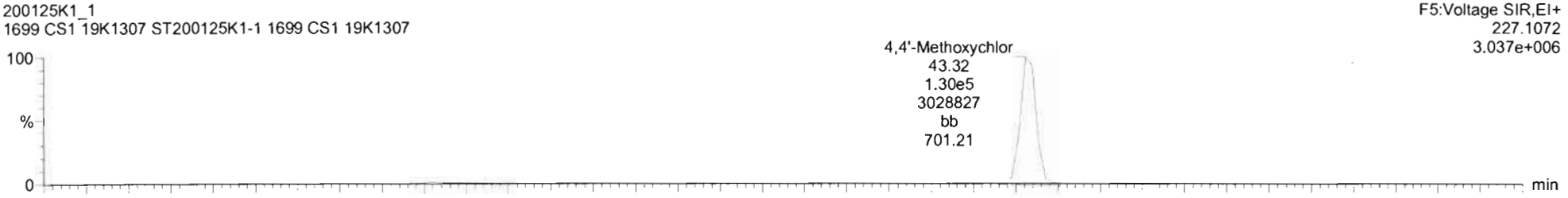
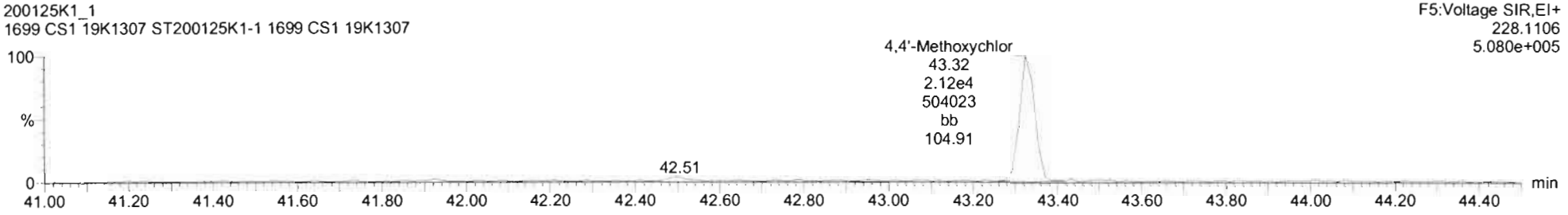
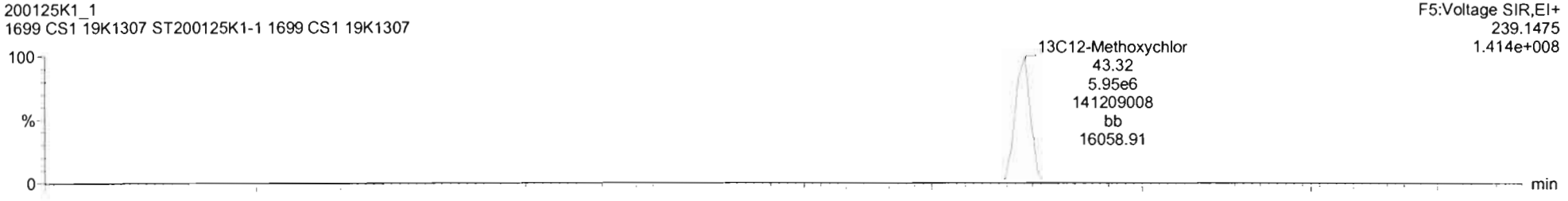
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

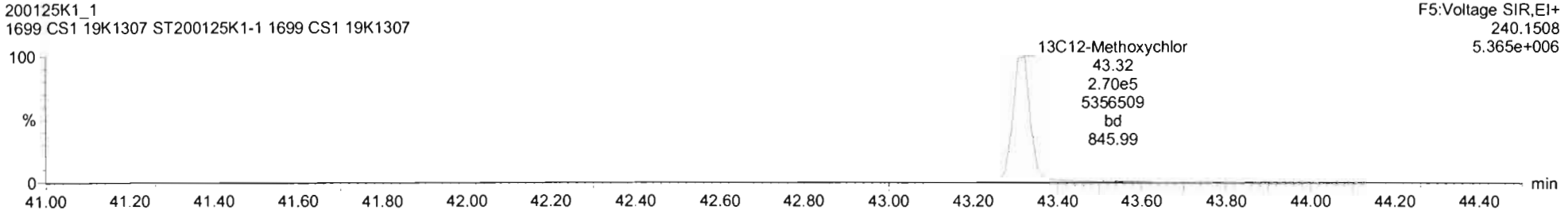
4,4'-Methoxychlor





13C12-Methoxychlor





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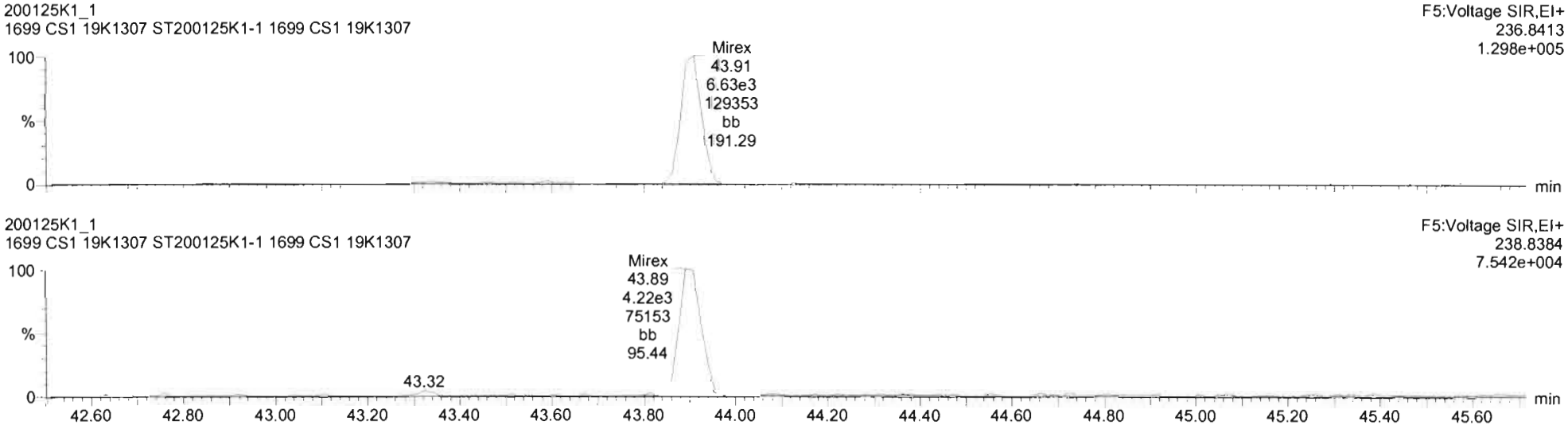
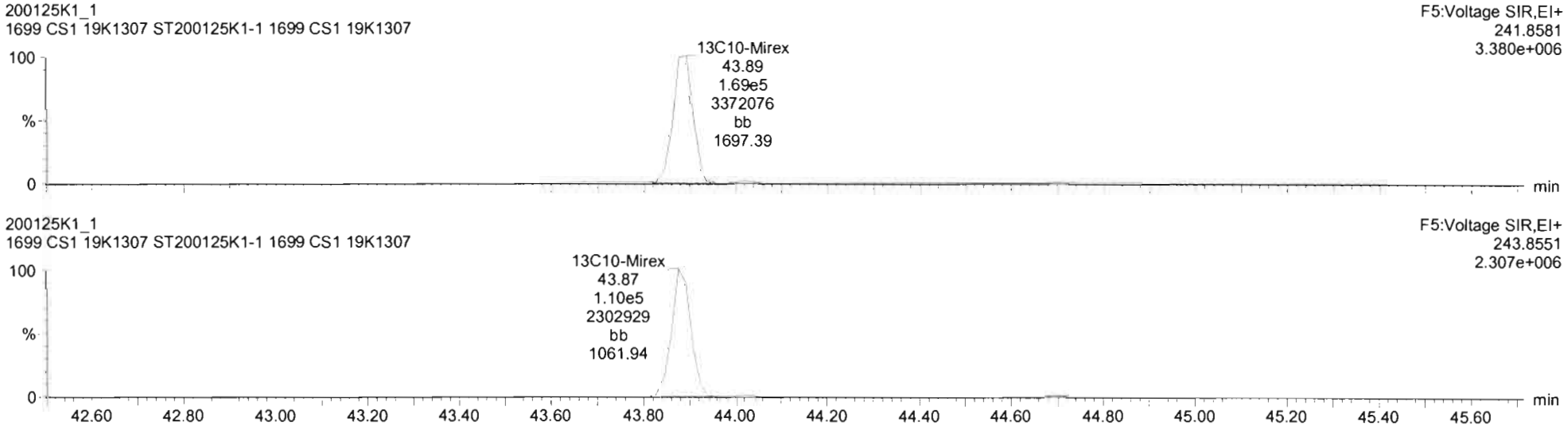
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

Mirex



13C10-Mirex



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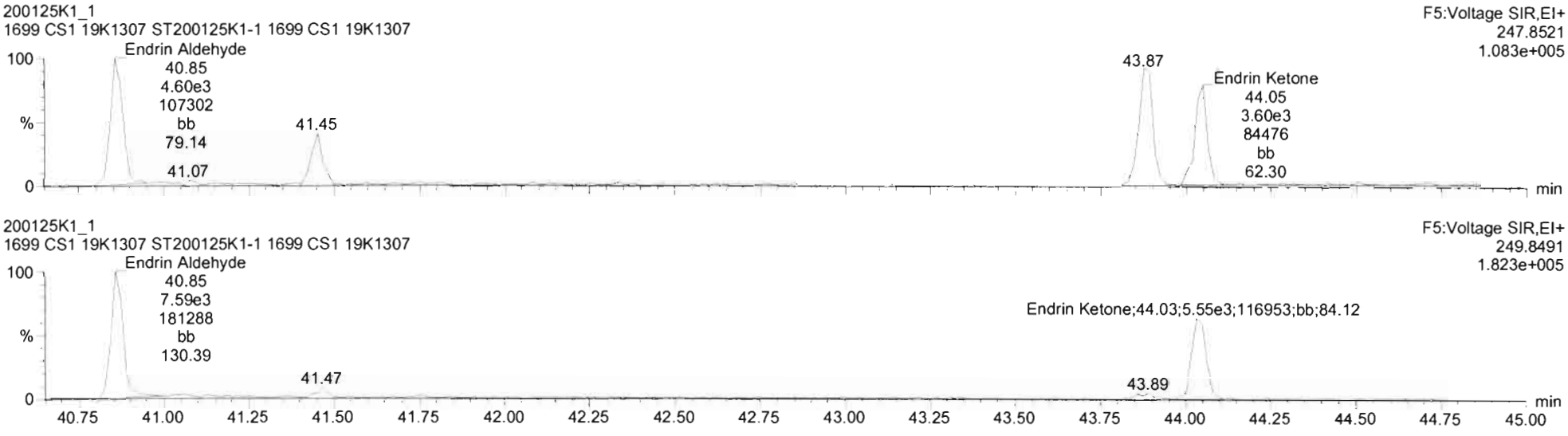
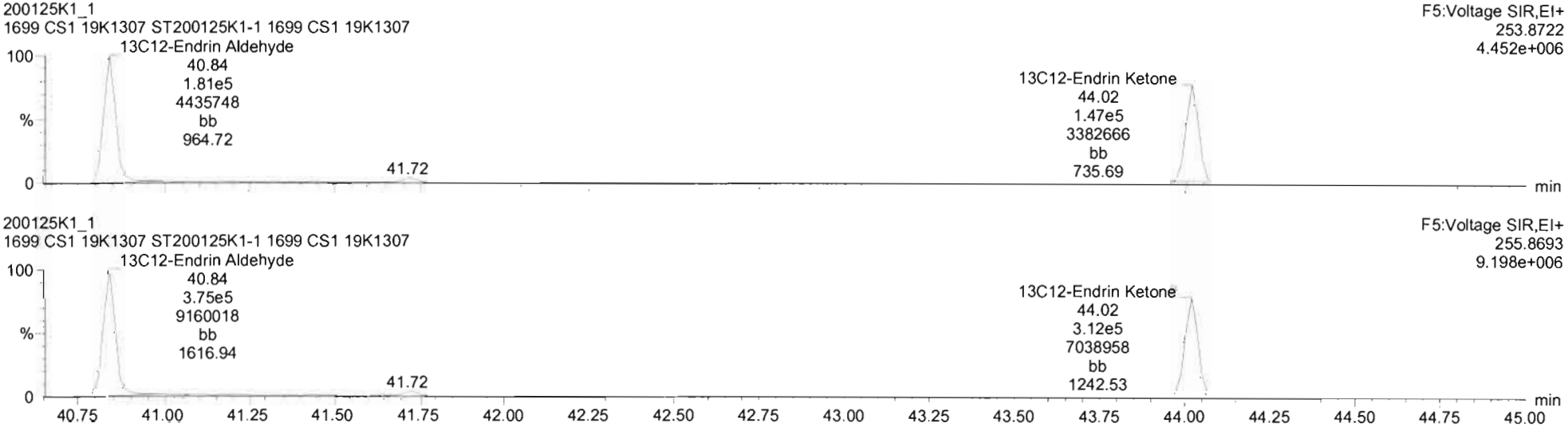
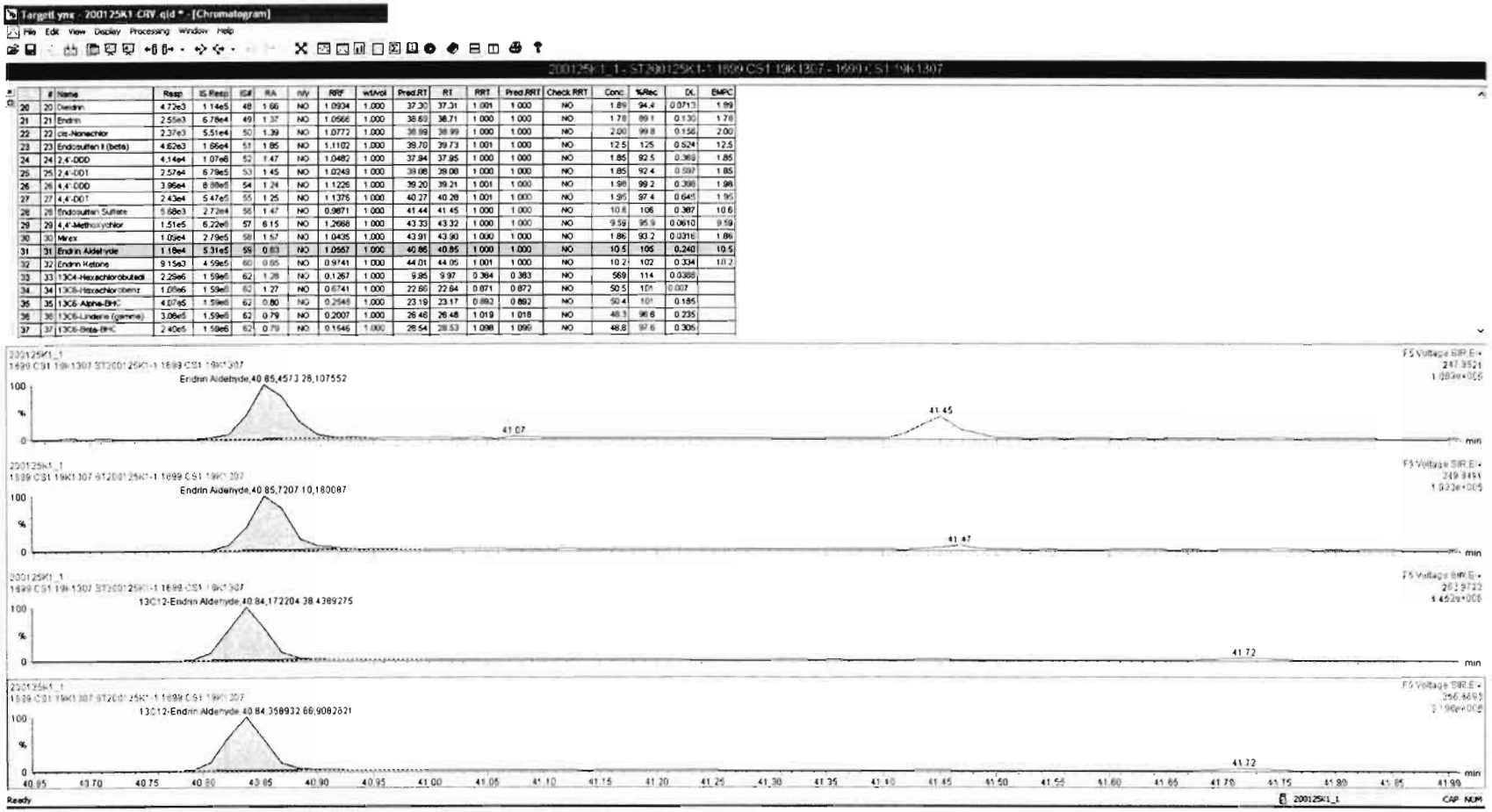
Name: 200125K1_1, Date: 25-Jan-2020, Time: 13:03:00, ID: ST200125K1-1 1699 CS1 19K1307, Description: 1699 CS1 19K1307

EA-EK



EA-EK-isotopes





	#	Name	Resp	IS Resp	ISR	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	4.72e3	1.14e5	48	1.66	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1.89	94.4	0.0713	1.89
21	21	Endrin	2.55e3	6.78e4	49	1.37	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	1.78	89.1	0.130	1.78
22	22	cis-Nonachlor	2.37e3	5.51e4	50	1.39	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	2.00	99.8	0.158	2.00
23	23	Endosulfan II (beta)	4.62e3	1.66e4	51	1.85	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	12.5	125	0.524	12.5
24	24	2,4'-DDD	4.14e4	1.07e6	52	1.47	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1.85	92.5	0.369	1.85
25	25	2,4'-DDT	2.57e4	6.78e5	53	1.45	NO	1.0249	1.000	39.08	39.08	1.000	1.000	NO	1.85	92.4	0.597	1.85
26	26	4,4'-DDD	3.96e4	8.88e5	54	1.24	NO	1.1226	1.000	39.20	39.21	1.001	1.000	NO	1.98	99.2	0.398	1.98
27	27	4,4'-DDT	2.43e4	5.47e5	55	1.25	NO	1.1376	1.000	40.27	40.28	1.001	1.000	NO	1.95	97.4	0.645	1.95
28	28	Endosulfan Sulfate	5.68e3	2.72e4	56	1.47	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	10.6	106	0.387	10.6
29	29	4,4'-Methoxychlor	1.51e5	6.22e6	57	6.15	NO	1.2668	1.000	43.33	43.32	1.000	1.000	NO	9.59	95.9	0.0610	9.59
30	30	Mirex	1.09e4	2.79e5	58	1.57	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1.86	93.2	0.0316	1.86
31	31	Endrin Aldehyde	1.18e4	5.31e5	59	0.83	NO	1.0567	1.000	40.86	40.85	1.000	1.000	NO	10.5	105	0.240	10.5
32	32	Endrin Ketone	9.15e3	4.59e5	60	0.65	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	10.2	102	0.334	10.2
33	33	13C4-Hexachlorobutadi	2.29e6	1.59e8	62	1.28	NO	0.1267	1.000	9.85	9.97	0.364	0.383	NO	569	114	0.0388	
34	34	13C6-Hexachlorobenz	1.08e6	1.59e8	62	1.27	NO	0.6741	1.000	22.86	22.84	0.871	0.872	NO	50.5	101	0.007	
35	35	13C6-Alpha-BHC	4.07e5	1.59e8	62	0.80	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	50.4	101	0.185	
36	36	13C6-Lindane (gamma)	3.06e5	1.59e8	62	0.79	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	48.3	96.6	0.235	
37	37	13C6-Beta-BHC	2.40e5	1.59e8	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	48.8	97.6	0.305	

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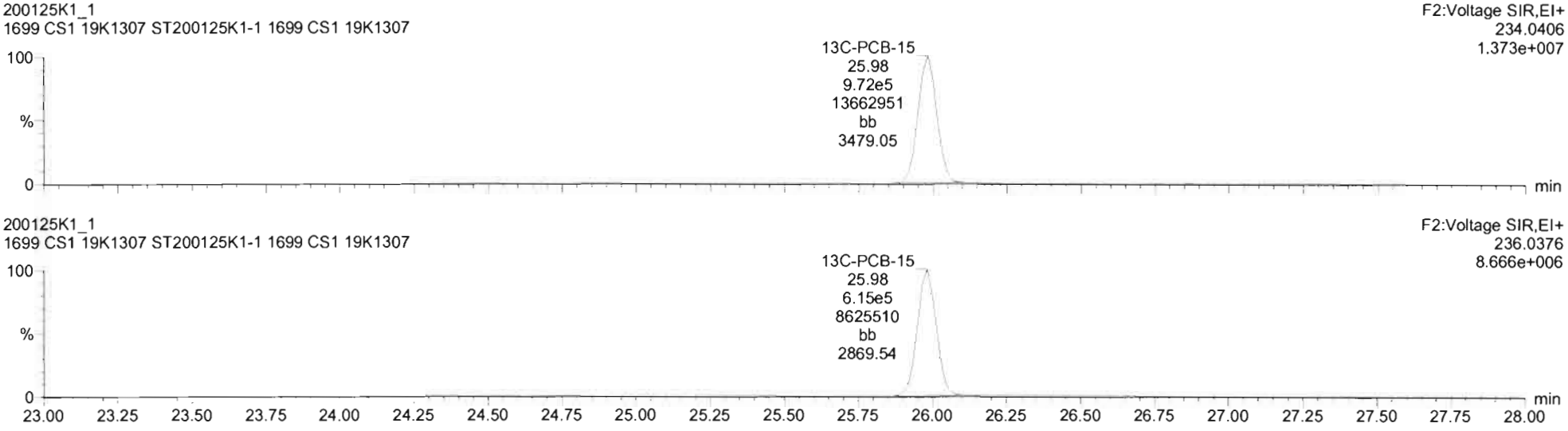
13C-PCB-15



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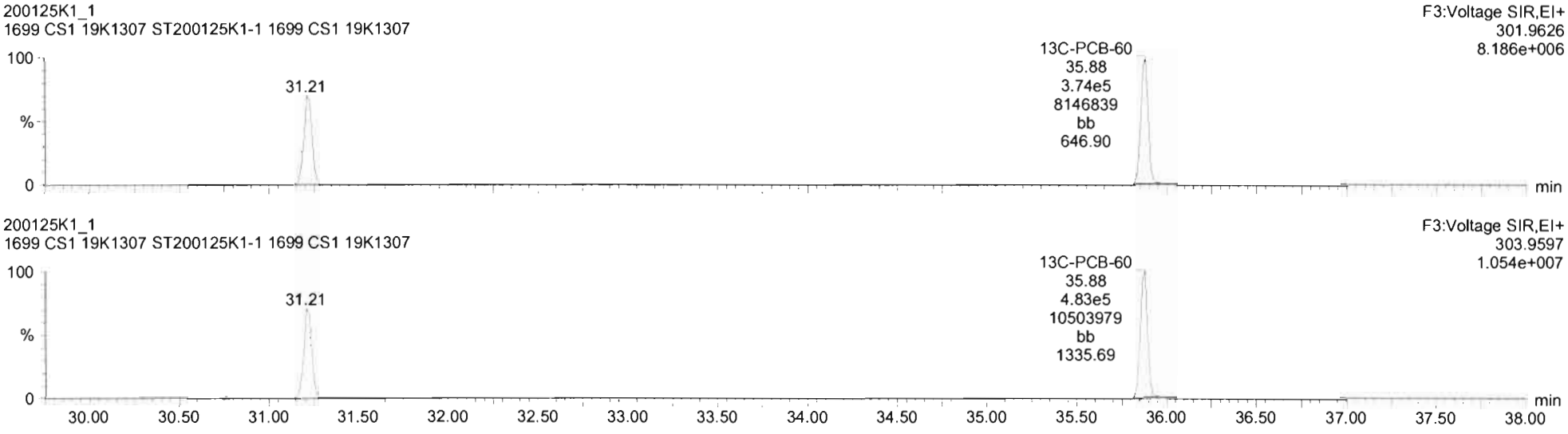

Vista Analytical Laboratory

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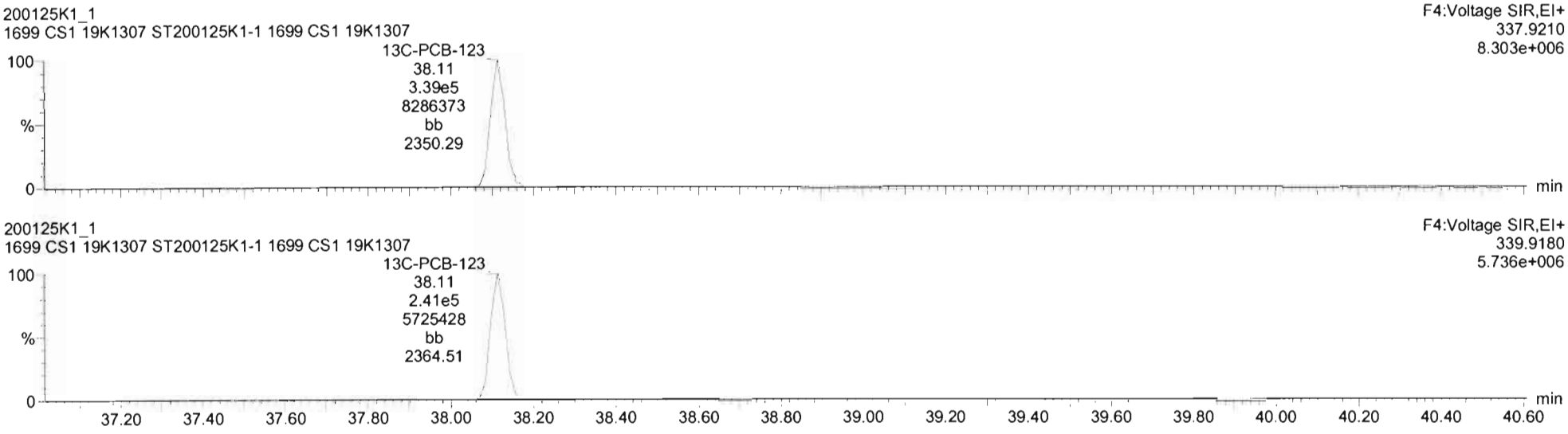
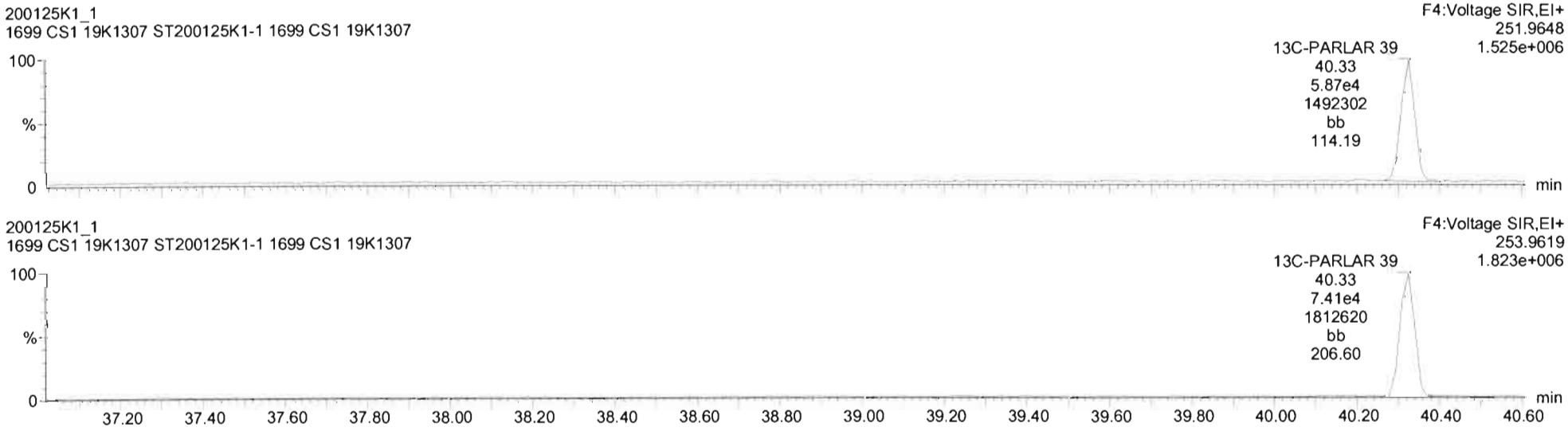
13C-PCB-123



13C-PARLAR 39



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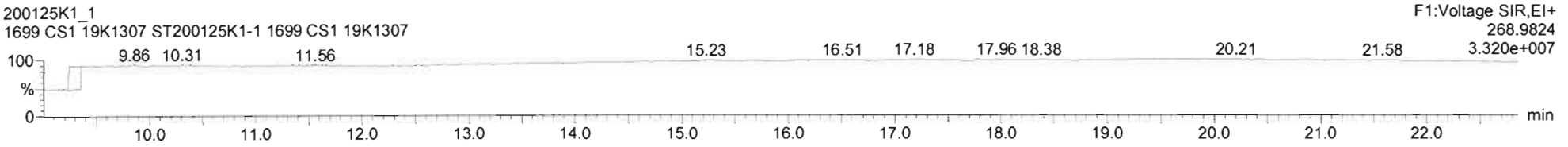
PFK1



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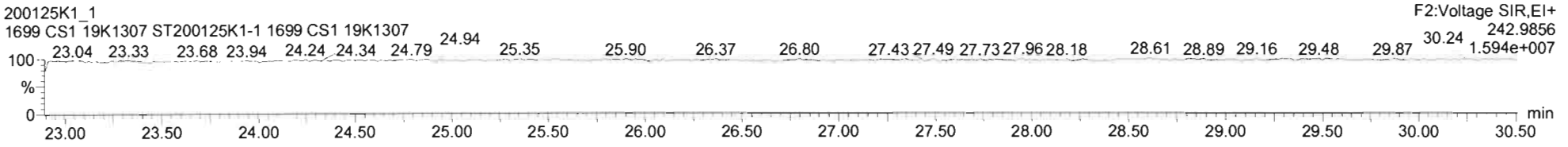

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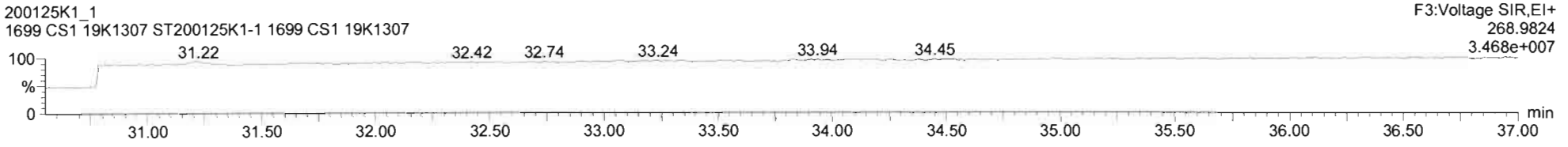

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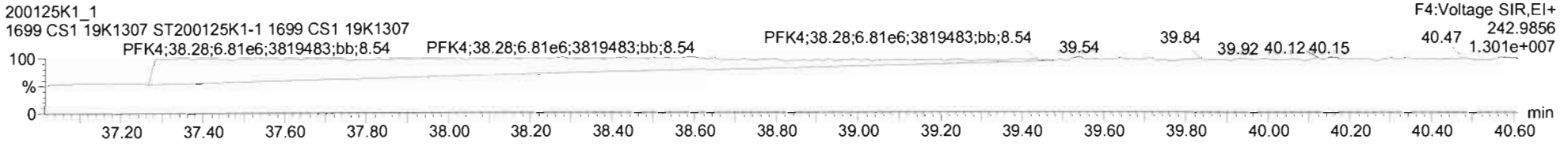

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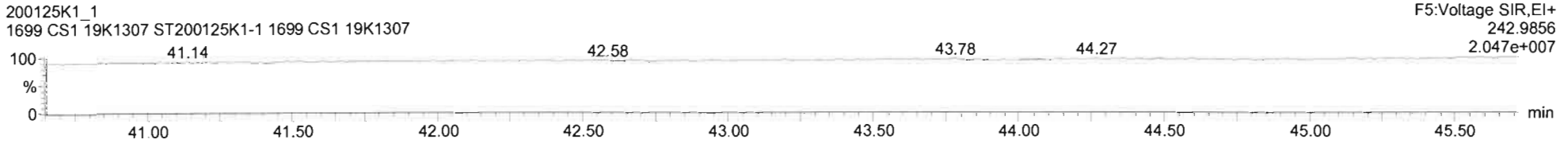

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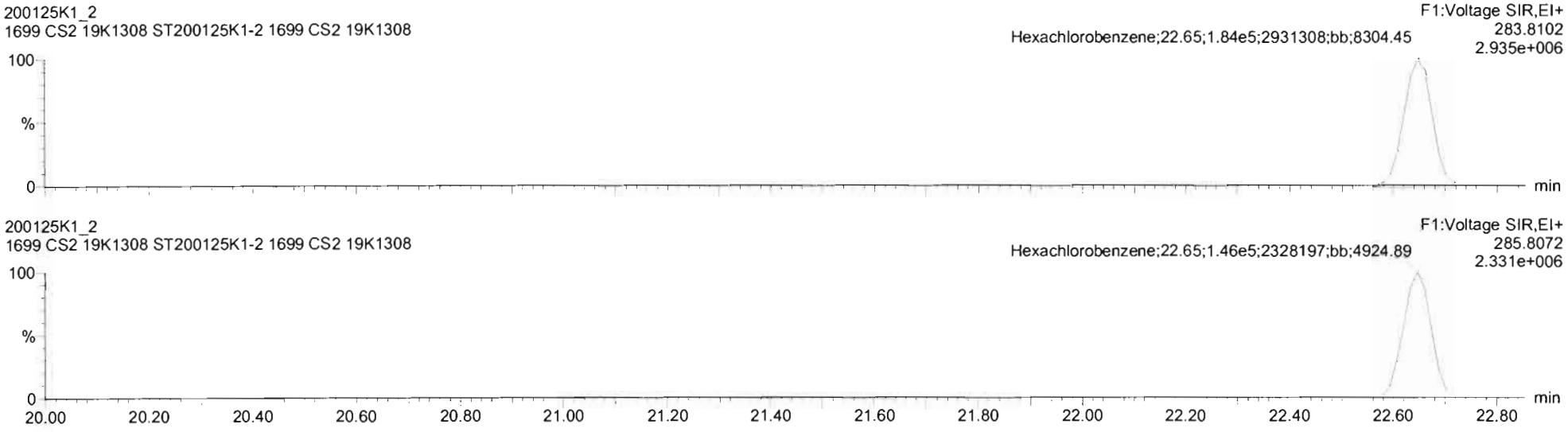
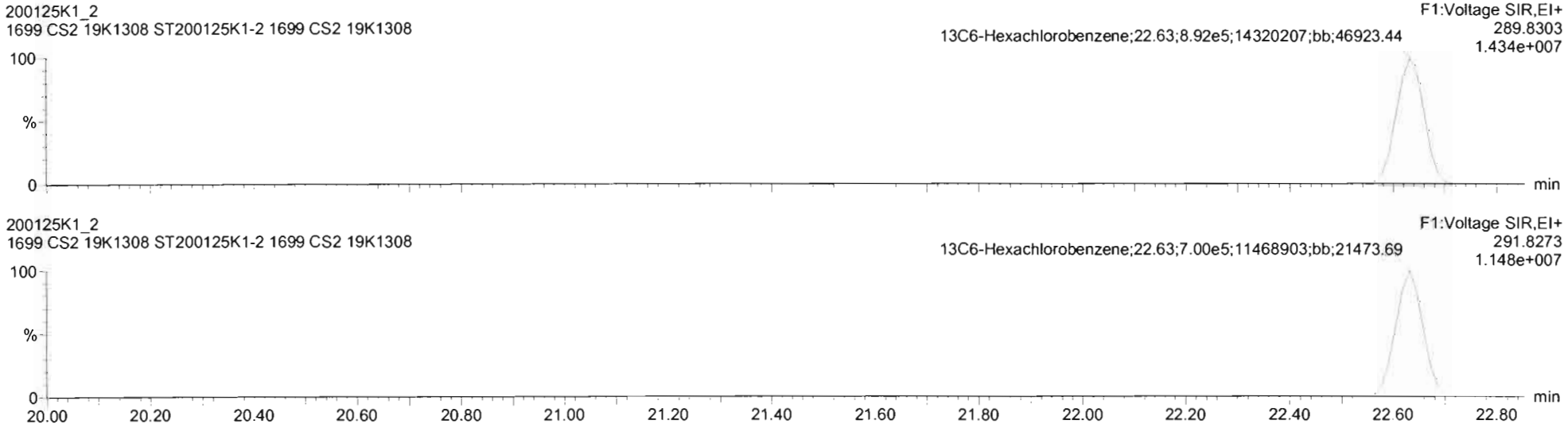
Hexachlorobenzene



13C6-Hexachlorobenzene



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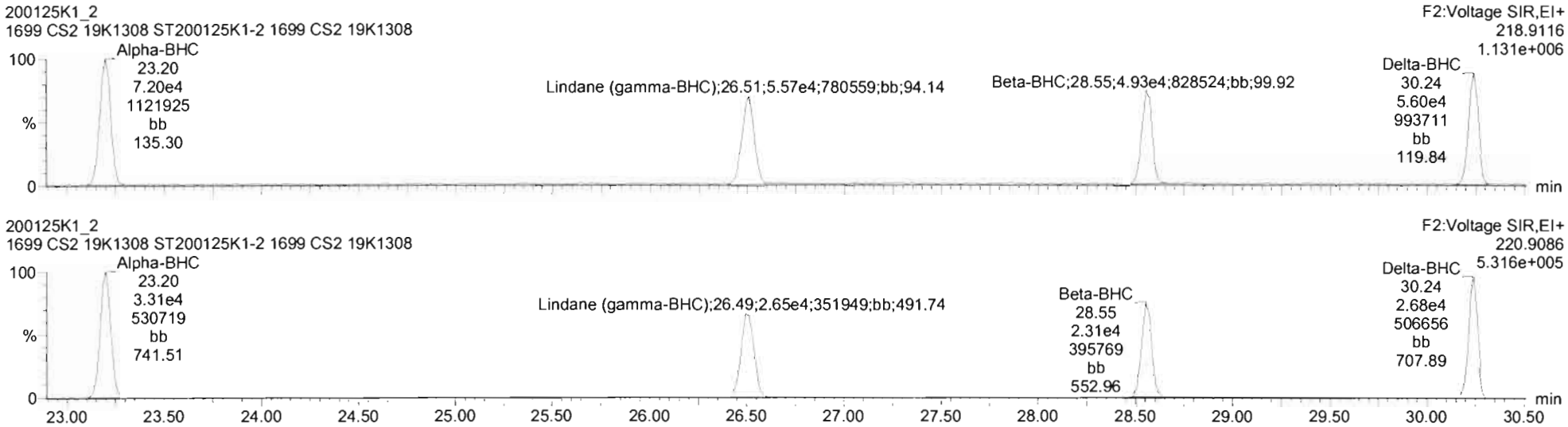
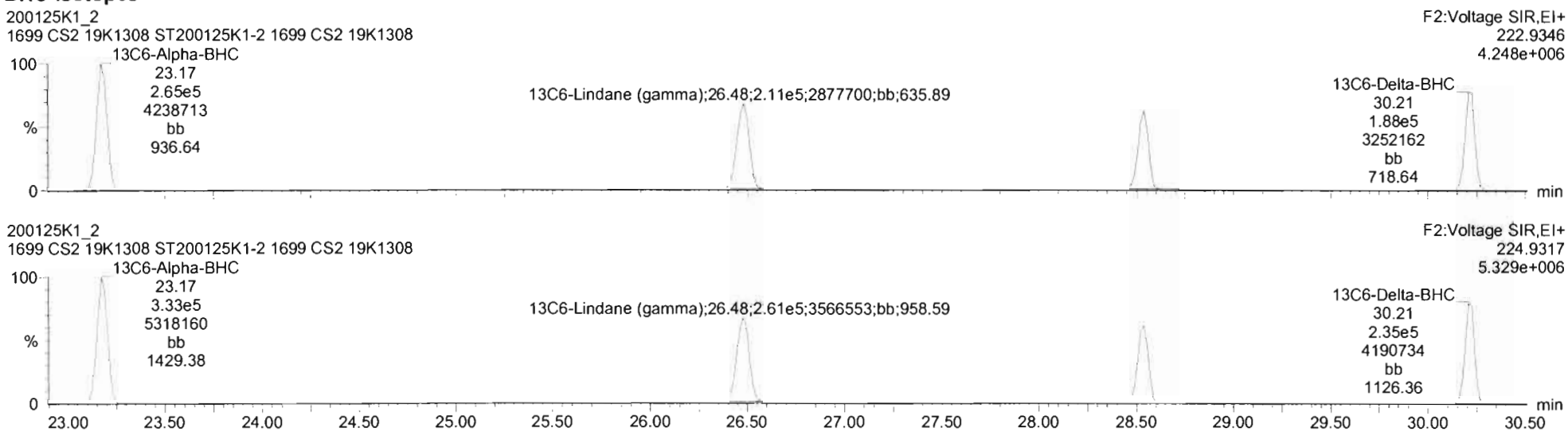
BHC Totals



BHC-isotopes



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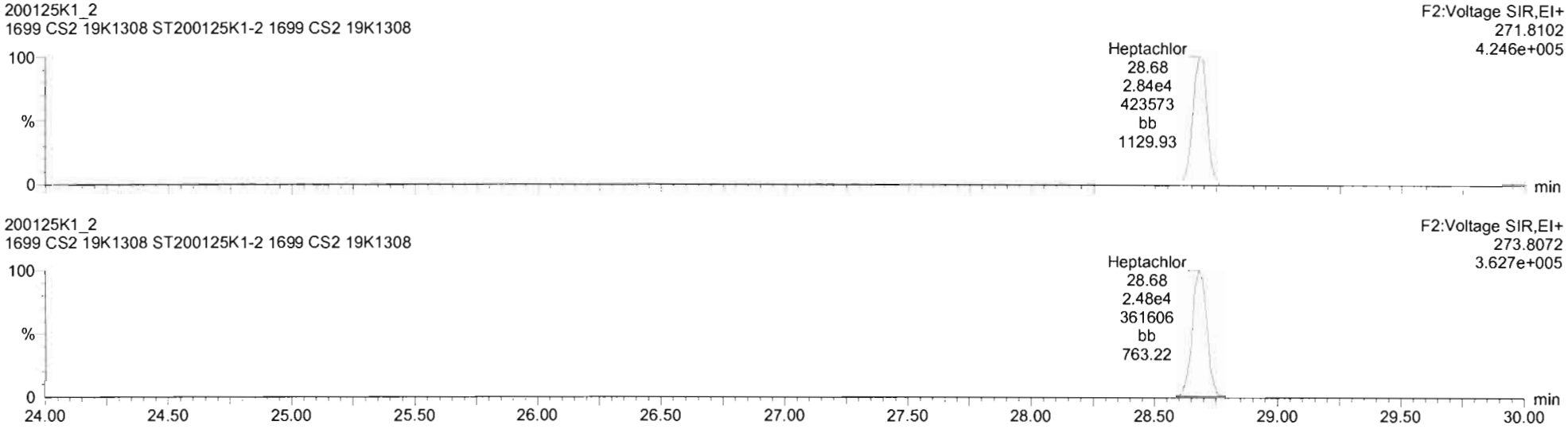
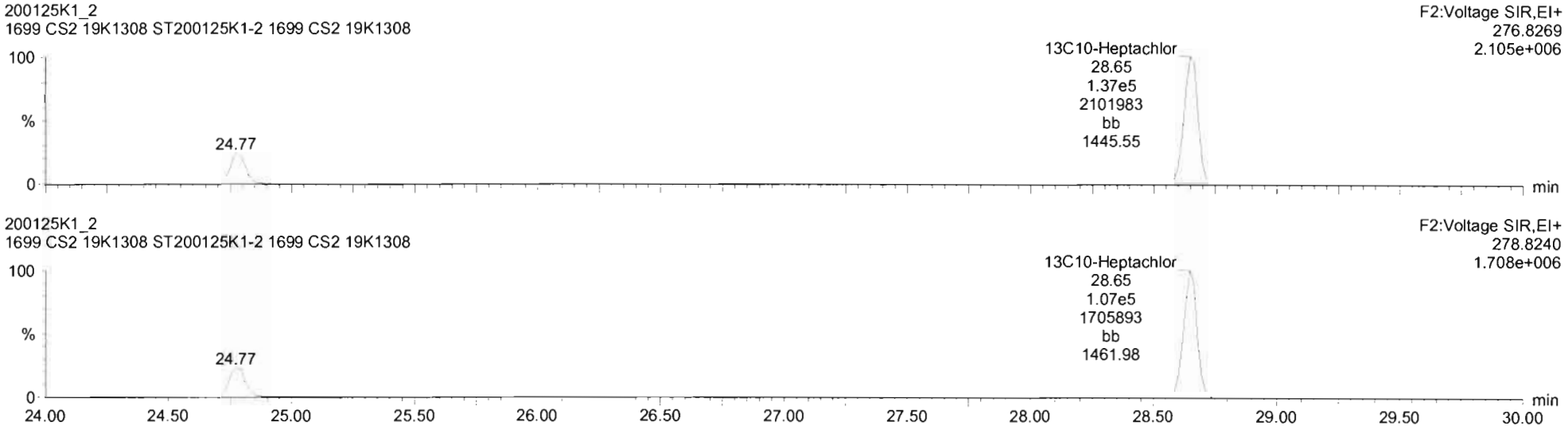
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

Heptachlor



13C10-Heptachlor



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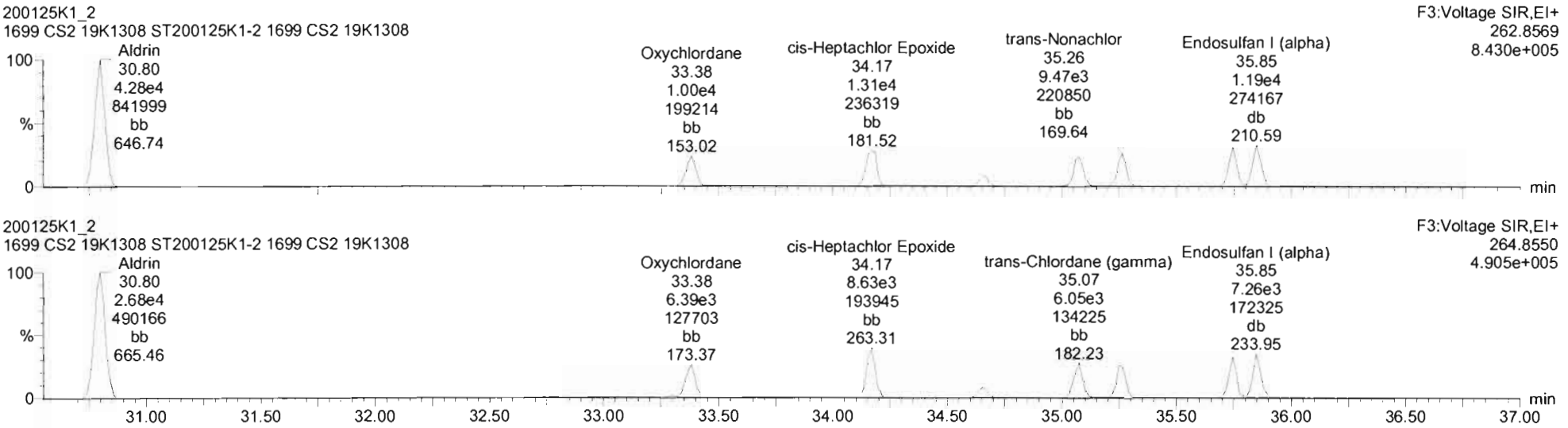
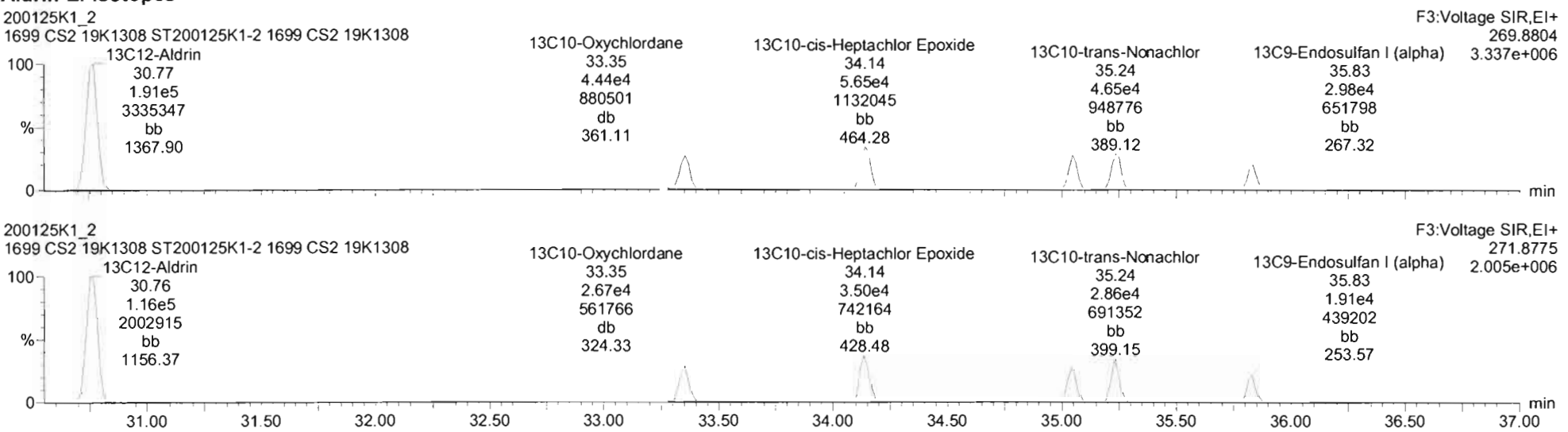
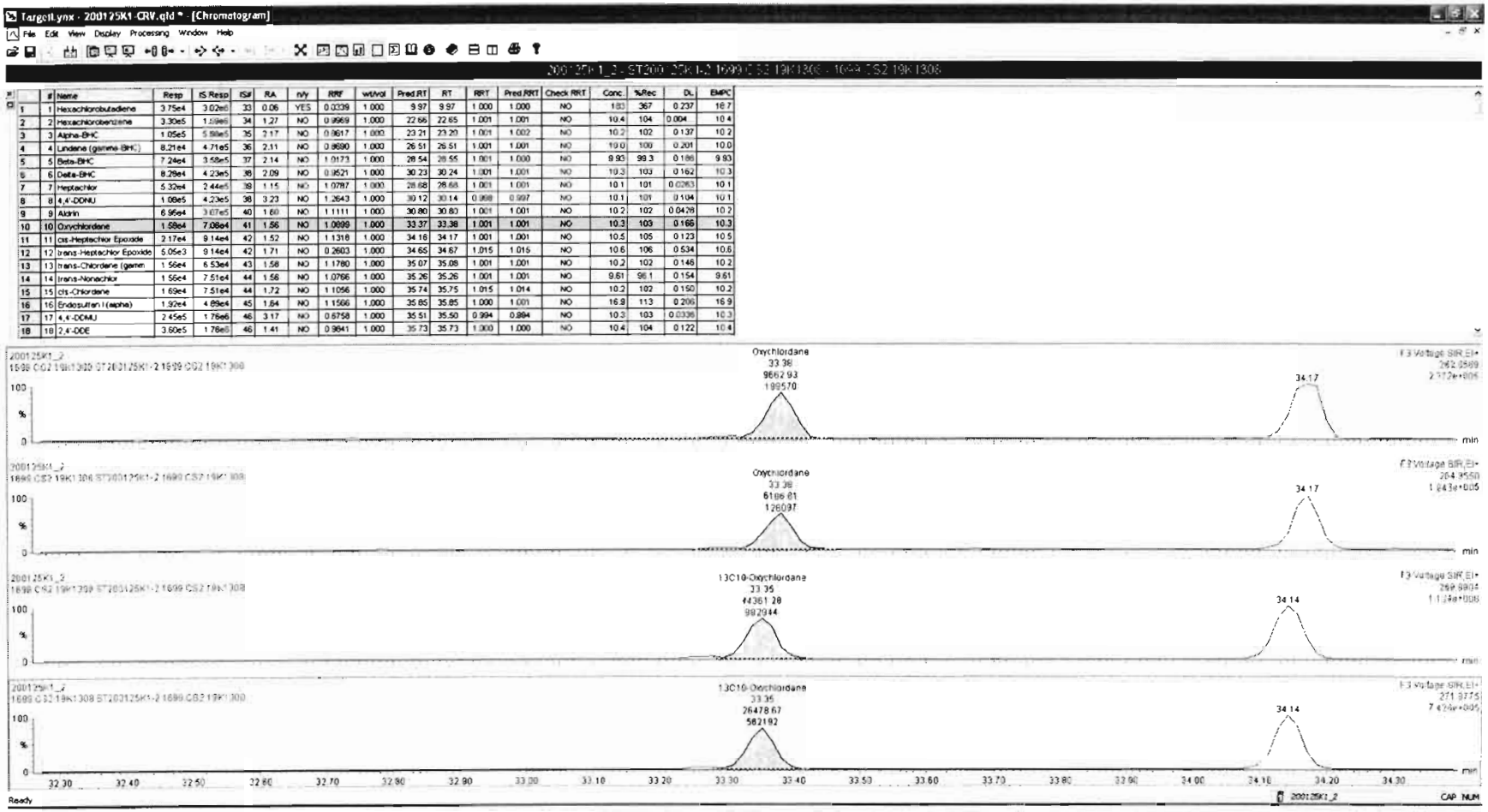
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

Aldrin-EI



Aldrin-EI-isotopes





#	Name	Resp	IS Resp	ISd	RA	n/y	RRF	w/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	Hexachlorobutadiene	3.75e4	3.02e6	33	0.06	YES	0.0339	1.000	9.97	9.97	1.000	1.000	NO	10.1	101	0.237	10.7
2	Hexachlorobenzene	3.30e5	1.89e6	34	1.27	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	10.4	104	0.004	10.4
3	Alpha-BHC	1.05e5	5.59e5	35	2.17	NO	0.9617	1.000	23.21	23.20	1.001	1.002	NO	10.2	102	0.137	10.2
4	Lindane (gamma-BHC)	8.21e4	4.71e5	36	2.11	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	10.0	100	0.201	10.0
5	Beta-BHC	7.24e4	3.58e5	37	2.14	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	9.93	99.3	0.186	9.93
6	Delta-BHC	8.29e4	4.23e5	38	2.09	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	10.3	103	0.162	10.3
7	Heptachlor	5.32e4	2.44e5	39	1.15	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	10.1	101	0.0263	10.1
8	4,4'-DDMU	1.08e5	4.23e5	38	3.23	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	10.1	101	0.104	10.1
9	Aldrin	6.96e4	3.07e5	40	1.60	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	10.2	102	0.0428	10.2
10	Oxychlordane	1.58e4	7.08e4	41	1.56	NO	1.0899	1.000	33.37	33.38	1.001	1.001	NO	10.3	103	0.166	10.3
11	cis-Heptachlor Epoxide	2.17e4	9.14e4	42	1.52	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	10.5	105	0.123	10.5
12	trans-Heptachlor Epoxide	5.05e3	9.14e4	42	1.71	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	10.6	106	0.534	10.6
13	trans-Chlordane (gamm	1.56e4	6.53e4	43	1.58	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	10.2	102	0.146	10.2
14	trans-Nonachlor	1.56e4	7.51e4	44	1.58	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	9.61	96.1	0.154	9.61
15	cis-Chlordane	1.69e4	7.51e4	44	1.72	NO	1.1056	1.000	35.74	35.75	1.015	1.014	NO	10.2	102	0.150	10.2
16	Endosulfan I (alpha)	1.92e4	4.89e4	45	1.64	NO	1.1566	1.000	35.85	35.85	1.000	1.001	NO	16.9	113	0.206	16.9
17	4,4-DDMU	2.45e5	1.76e6	46	3.17	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	10.3	103	0.0336	10.3
18	2,4'-DDE	3.60e5	1.76e6	46	1.41	NO	0.9641	1.000	35.73	35.73	1.000	1.000	NO	10.4	104	0.122	10.4

TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

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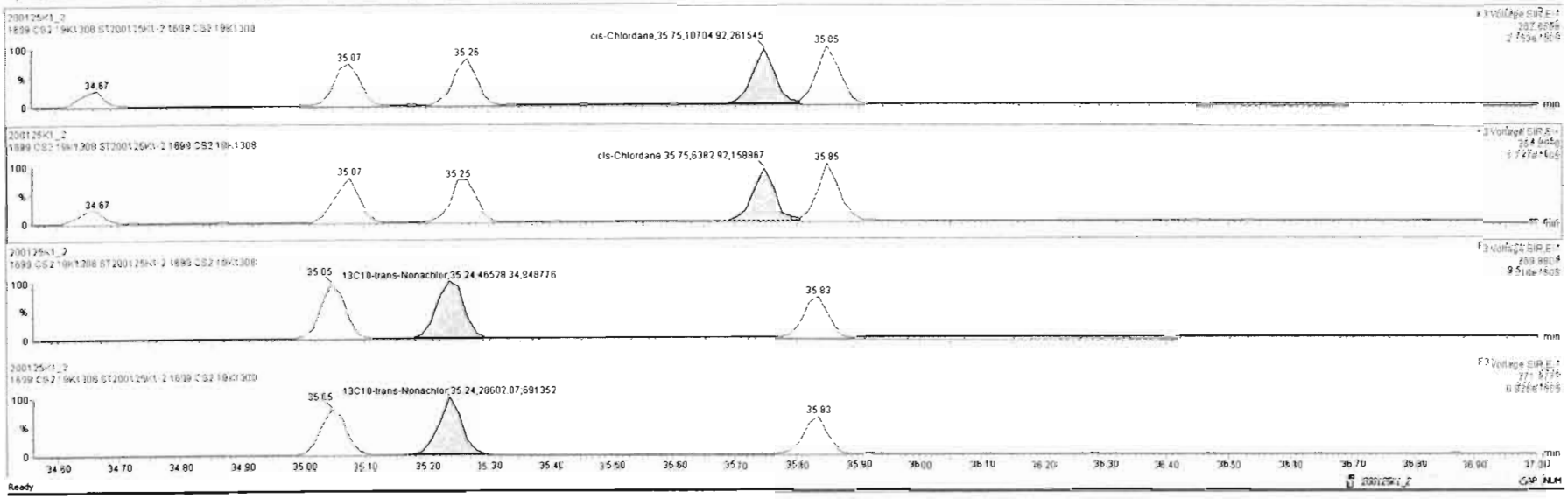
200125K1_2 - ST200125K1-2 1699 CS2 19K1308 - 1699 CS2 19K1308

	#	Name	Resp	IS Resp	ISt#	RA	n/y	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.75e4	3.02e6	33	0.06	YES	0.0339	1.000	9.97	9.97	1.000	1.000	NO	10.3	103	0.237	10.7
2	2	Hexachlorobenzene	3.30e5	1.59e6	34	1.27	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	10.4	104	0.004	10.4
3	3	Alpha-BHC	1.05e5	5.98e5	35	2.17	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	10.2	102	0.137	10.2
4	4	Lindane (gamma-BHC)	8.21e4	4.71e5	36	2.11	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	10.0	100	0.201	10.0
5	5	Beta-BHC	7.24e4	3.58e5	37	2.14	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	9.93	99.3	0.186	9.93
6	6	Delta-BHC	8.28e4	4.23e5	38	2.09	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	10.3	103	0.162	10.3
7	7	Heptachlor	5.32e4	2.44e5	39	1.15	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	10.1	101	0.0293	10.1
8	8	4,4'-DDMU	1.08e5	4.23e5	38	3.23	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	10.1	101	0.104	10.1
9	9	Aldrin	6.96e4	3.07e5	40	1.60	NO	1.1111	1.000	30.86	30.80	1.001	1.001	NO	10.2	102	0.0428	10.2
10	10	Oxychlordane	1.58e4	7.08e4	41	1.56	NO	1.0999	1.000	33.37	33.38	1.001	1.001	NO	10.3	103	0.166	10.3
11	11	cis-Heptachlor Epoxide	2.17e4	9.14e4	42	1.52	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	10.5	105	0.123	10.5
12	12	trans-Heptachlor Epoxide	5.05e3	9.14e4	42	1.71	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	10.6	106	0.534	10.6
13	13	trans-Chlordane (gamm...	1.56e4	6.53e4	43	1.58	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	10.2	102	0.148	10.2
14	14	trans-Nonachlor	1.56e4	7.51e4	44	1.56	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	9.61	96.1	0.154	9.61
15	15	cis-Chlordane	1.71e4	7.51e4	44	1.88	NO	1.1080	1.000	35.74	35.75	1.015	1.014	NO	10.3	103	0.150	10.3
16	16	Endosulfan I (alpha)	1.92e4	4.89e4	45	1.64	NO	1.1566	1.000	35.85	35.85	1.000	1.001	NO	16.9	113	0.206	16.9
17	17	4,4'-DDMU	2.45e5	1.76e6	46	3.17	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	10.3	103	0.0336	10.3
18	18	2,4'-DDE	3.60e5	1.76e6	46	1.41	NO	0.9941	1.000	35.73	35.73	1.000	1.000	NO	10.4	104	0.122	10.4



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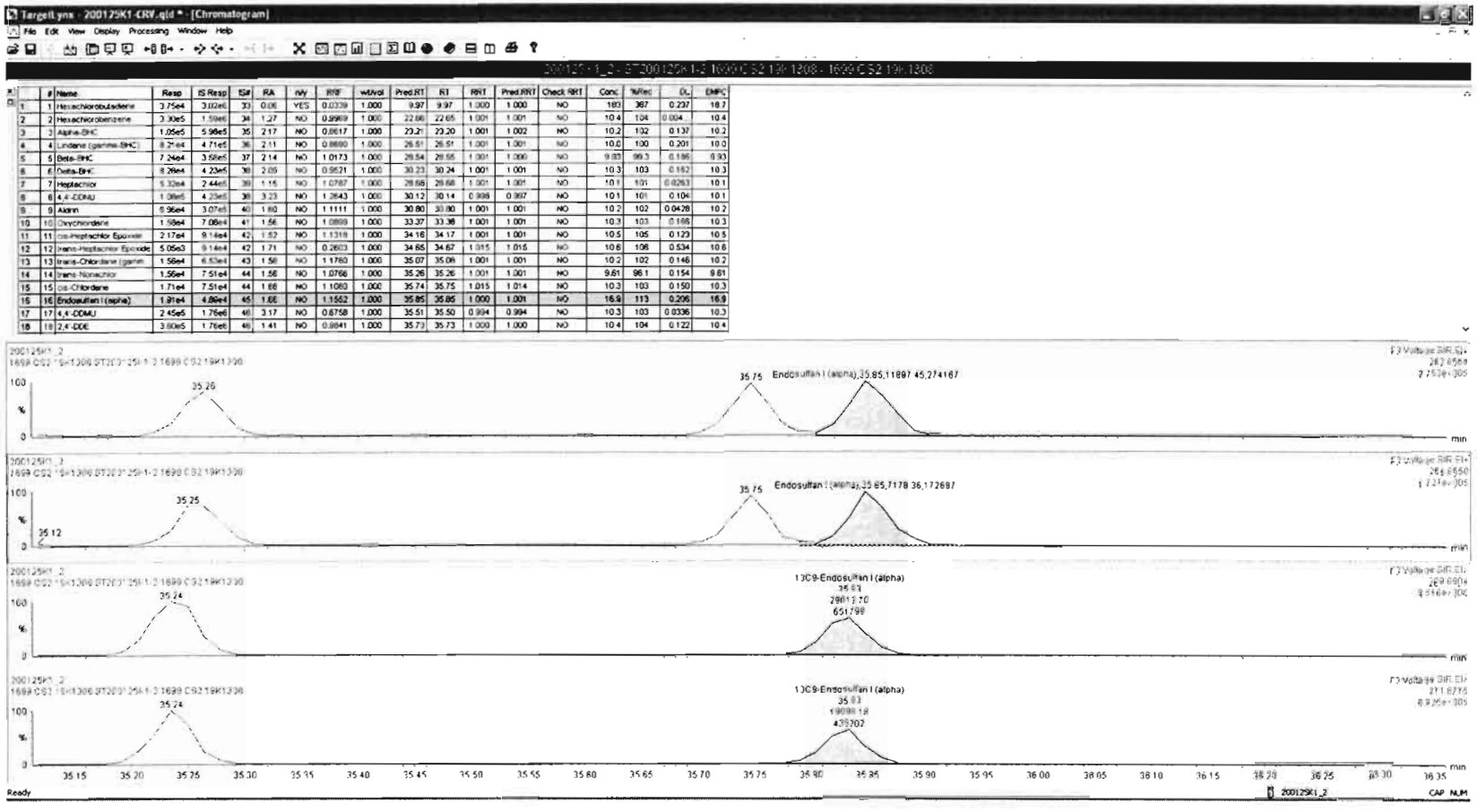

	#	Name	Resp	IS Resp	ISt	RA	nAy	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.75e4	3.02e6	33	0.06	YES	0.0339	1.000	9.97	9.97	1.000	1.000	NO	183	367	0.237	18.7
2	2	Hexachlorobenzene	3.30e5	1.59e6	34	1.27	NO	0.3989	1.000	22.66	22.65	1.001	1.001	NO	10.4	104	0.004	10.4
3	3	Alpha-BHC	1.05e5	5.96e5	35	2.17	NO	0.0617	1.000	23.21	23.20	1.001	1.002	NO	10.2	102	0.137	10.2
4	4	Lindane (gamma-BHC)	8.21e4	4.71e5	36	2.11	NO	0.0600	1.000	26.51	26.51	1.001	1.001	NO	10.0	100	0.201	10.0
5	5	Beta-BHC	7.24e4	3.58e5	37	2.14	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	9.93	99.3	0.186	9.93
6	6	Delta-BHC	8.26e4	4.23e5	38	2.05	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	10.3	103	0.162	10.3
7	7	Heptachlor	5.32e4	2.44e5	39	1.15	NO	1.0787	1.000	28.66	28.68	1.001	1.001	NO	10.1	101	0.0263	10.1
8	8	4,4'-DDMU	1.08e5	4.23e5	39	3.23	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	10.1	101	0.104	10.1
9	9	Aldrin	9.96e4	3.07e5	40	1.60	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	10.2	102	0.0428	10.2
10	10	Oxychlordane	1.08e4	7.06e4	41	1.56	NO	1.0899	1.000	33.37	33.38	1.001	1.001	NO	10.3	103	0.166	10.3
11	11	cis-Heptachlor Epoxide	2.17e4	9.14e4	42	1.52	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	10.5	105	0.123	10.5
12	12	trans-Heptachlor Epoxide	5.05e3	9.14e4	42	1.71	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	10.6	106	0.534	10.6
13	13	trans-Chlordane (gamma	1.56e4	6.53e4	43	1.58	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	10.2	102	0.146	10.2
14	14	trans-Nonachlor	1.56e4	7.51e4	44	1.58	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	9.61	96.1	0.154	9.61
15	15	cis-Chlordane	1.71e4	7.51e4	44	1.68	NO	1.1080	1.000	35.74	35.75	1.015	1.014	NO	10.3	103	0.150	10.3
16	16	Endosulfan I (alpha)	1.91e4	4.89e4	45	1.66	NO	1.1552	1.000	35.85	35.85	1.000	1.001	NO	16.9	113	0.206	16.9
17	17	4,4'-DDMU	2.45e5	1.76e6	46	3.17	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	10.3	103	0.0336	10.3
18	18	2,4'-DDE	3.80e5	1.76e6	46	1.41	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	10.4	104	0.122	10.4

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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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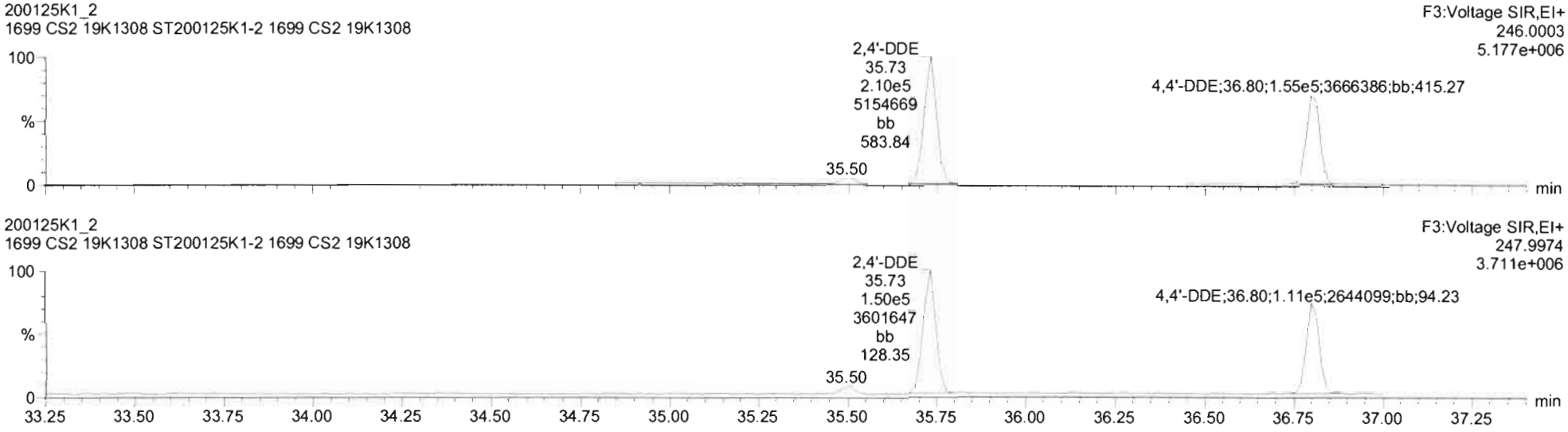
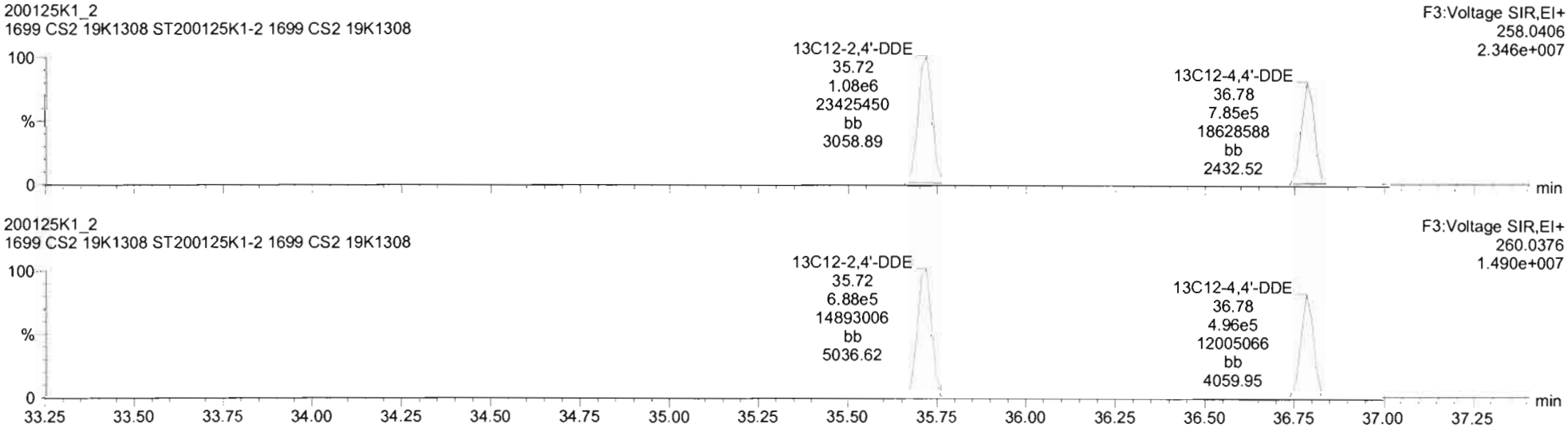
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

DDMU-DDE



DDE-isotopes



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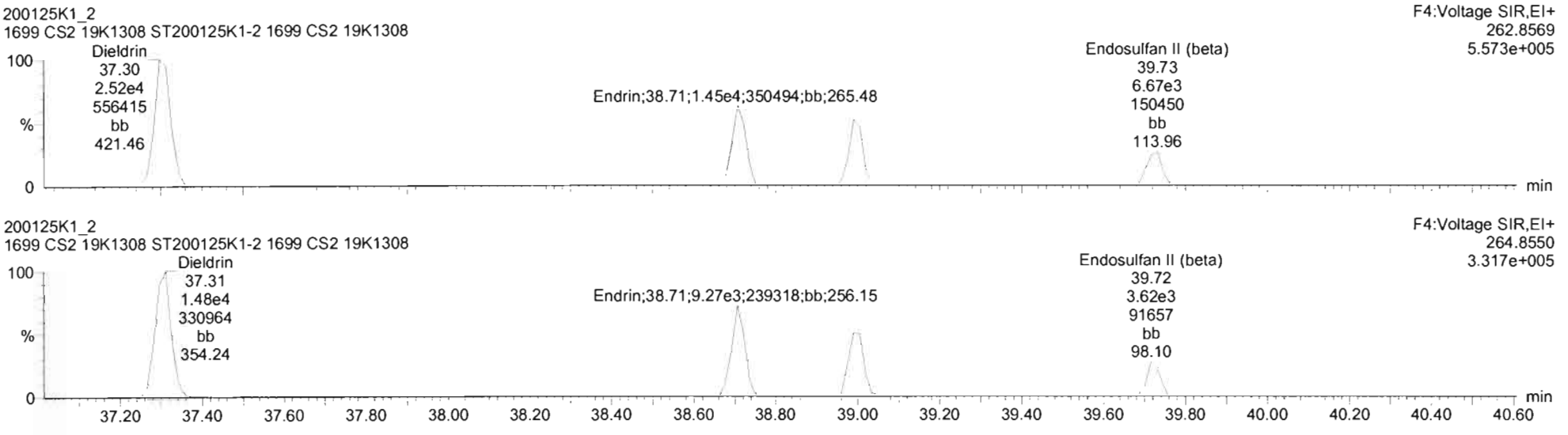
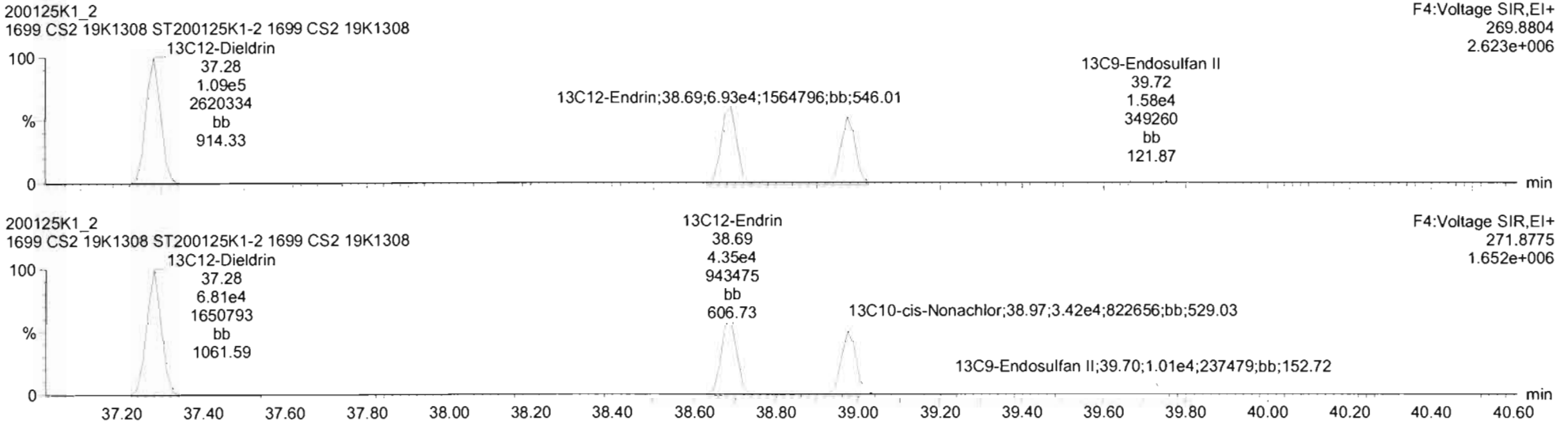
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

Dieldrin-EII



Dieldrin-EII-isotopes



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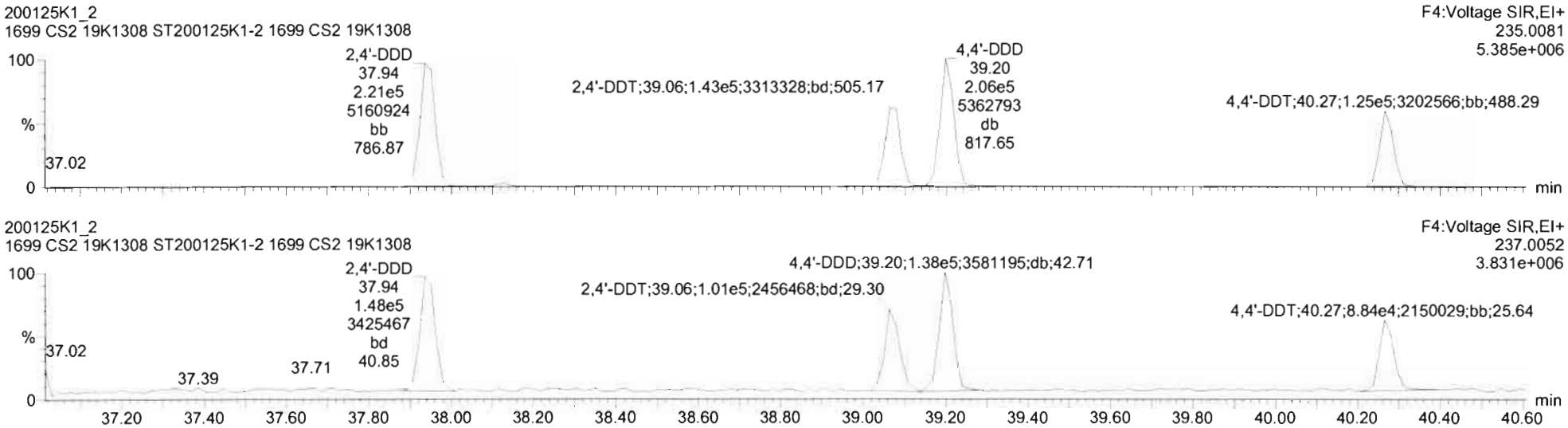
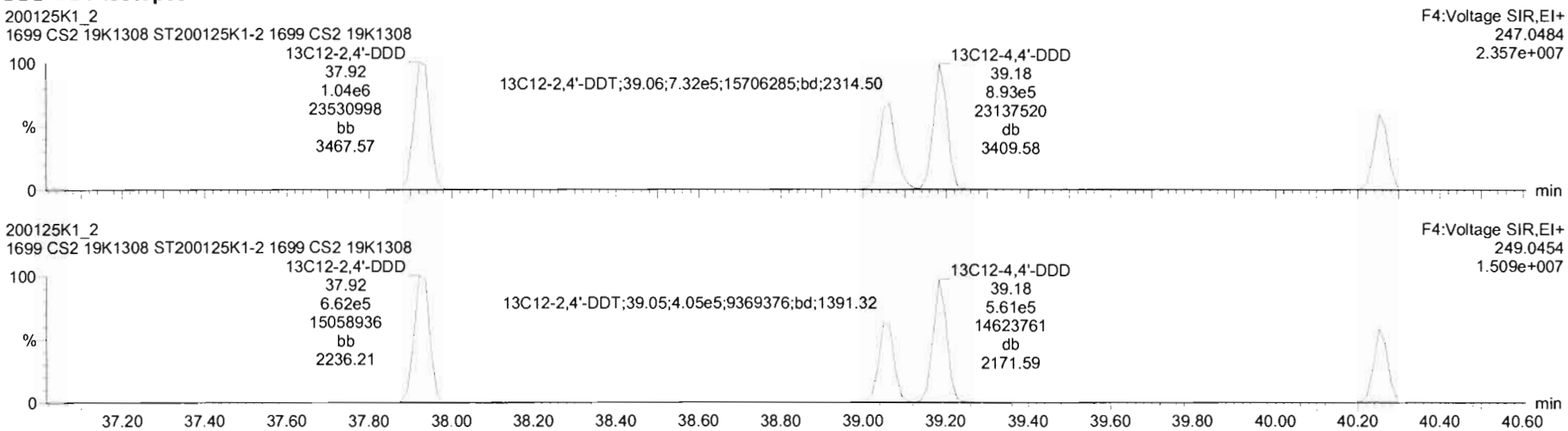
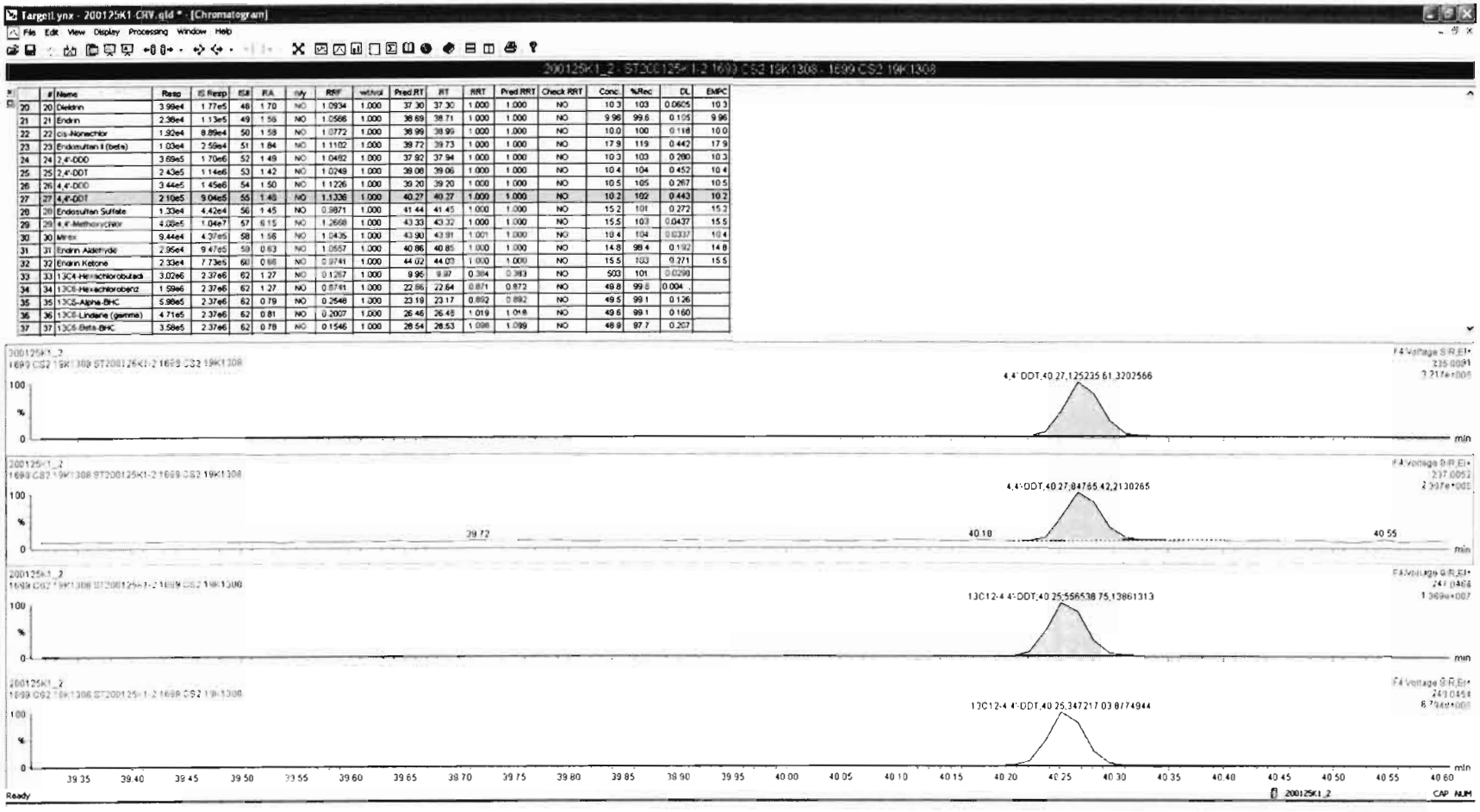
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

DDD-DDT



DDD-DDT-isotopes





	#	Name	Resp	IS Resp	IS#	RA	flAy	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	3.98e4	1.77e5	48	1.70	NO	1.0934	1.000	37.30	37.30	1.000	1.000	NO	10.3	103	0.0605	10.3
21	21	Endrin	2.36e4	1.13e5	49	1.56	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	9.96	99.6	0.105	9.96
22	22	cis-Nonachlor	1.92e4	8.89e4	50	1.58	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	10.0	100	0.118	10.0
23	23	Endosulfan II (beta)	1.03e4	2.59e4	51	1.84	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	17.9	119	0.442	17.9
24	24	2,4'-DDD	3.69e5	1.70e6	52	1.49	NO	1.0482	1.000	37.92	37.94	1.000	1.000	NO	10.3	103	0.280	10.3
25	25	2,4'-DDT	2.43e5	1.14e6	53	1.42	NO	1.0249	1.000	39.08	39.06	1.000	1.000	NO	10.4	104	0.452	10.4
26	26	4,4'-DDD	3.44e5	1.45e6	54	1.50	NO	1.1226	1.000	39.20	39.20	1.000	1.000	NO	10.5	105	0.267	10.5
27	27	4,4'-DDT	2.10e5	9.04e5	55	1.48	NO	1.1338	1.000	40.27	40.27	1.000	1.000	NO	10.2	102	0.443	10.2
28	28	Endosulfan Sulfate	1.33e4	4.42e4	56	1.45	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	15.2	101	0.272	15.2
29	29	4,4'-Methoxychlor	4.08e5	1.04e7	57	6.15	NO	1.2668	1.000	43.33	43.32	1.000	1.000	NO	15.5	103	0.0437	15.5
30	30	Mirex	9.44e4	4.37e5	58	1.56	NO	1.0435	1.000	43.90	43.91	1.001	1.000	NO	10.4	104	0.0337	10.4
31	31	Endrin Aldehyde	2.95e4	9.47e5	59	0.63	NO	1.0557	1.000	40.86	40.85	1.000	1.000	NO	14.8	98.4	0.192	14.8
32	32	Endrin Ketone	2.33e4	7.73e5	60	0.66	NO	0.9741	1.000	44.02	44.03	1.000	1.000	NO	15.5	103	0.271	15.5
33	33	13C4-Hexachlorobutadi	3.02e6	2.37e6	62	1.27	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	503	101	0.0290	
34	34	13C6-Hexachlorobenz	1.59e6	2.37e6	62	1.27	NO	0.6741	1.000	22.86	22.84	0.871	0.872	NO	49.8	99.6	0.004	
35	35	13C6-Alpha-BHC	5.98e5	2.37e6	62	0.79	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	49.5	99.1	0.126	
36	36	13C6-Lindane (gamma)	4.71e5	2.37e6	62	0.81	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	49.6	99.1	0.160	
37	37	13C6-Beta-BHC	3.58e5	2.37e6	62	0.78	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	48.9	97.7	0.207	

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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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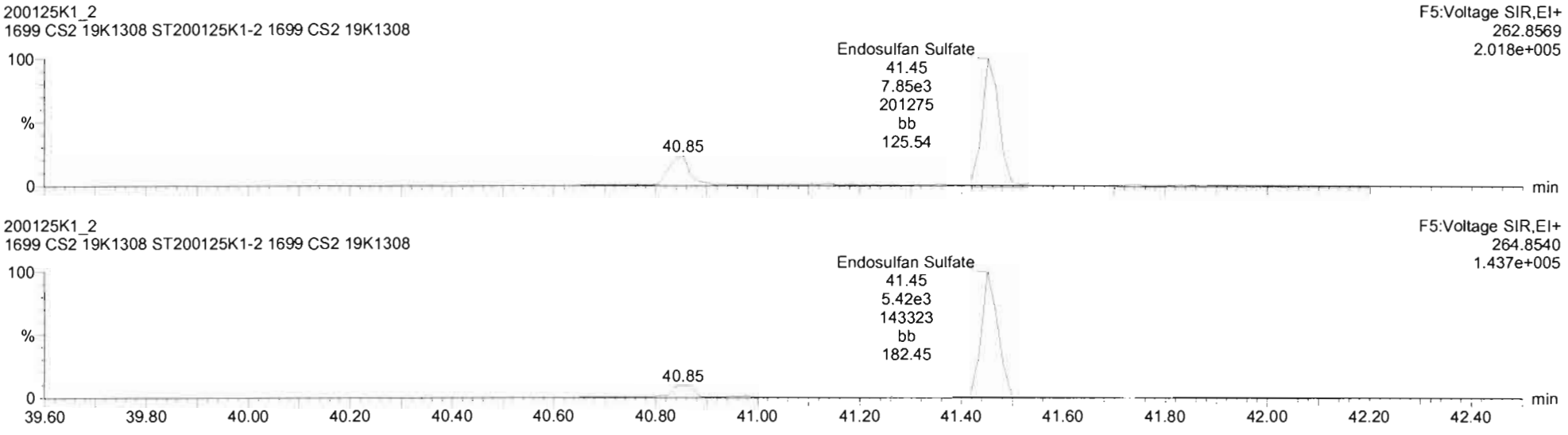
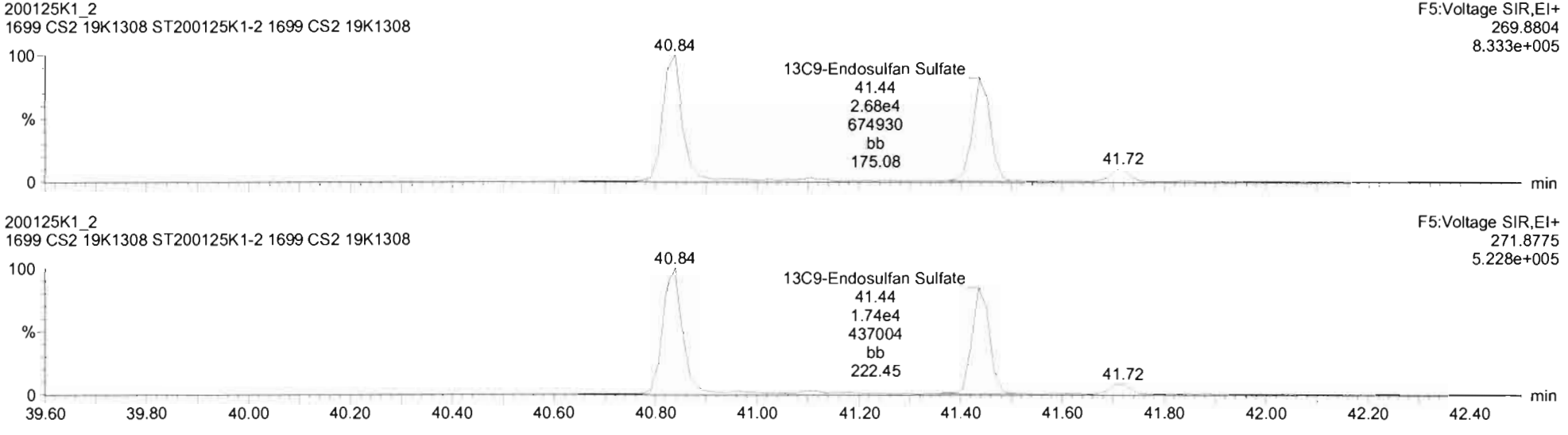
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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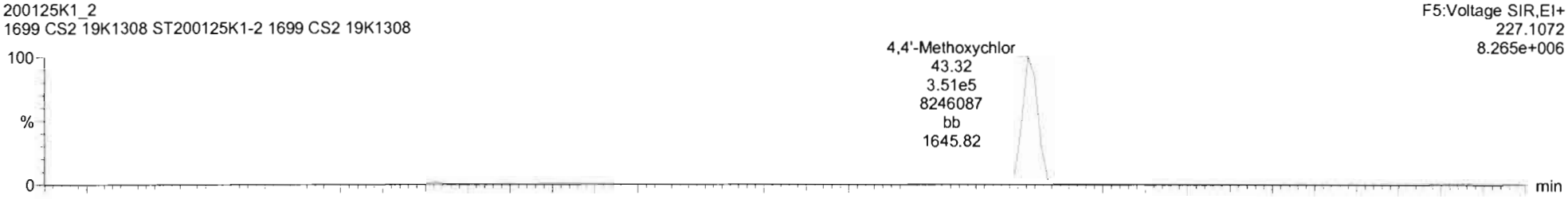
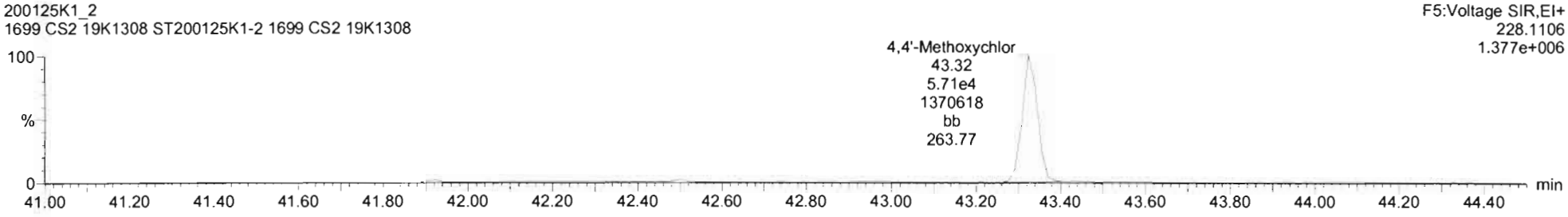
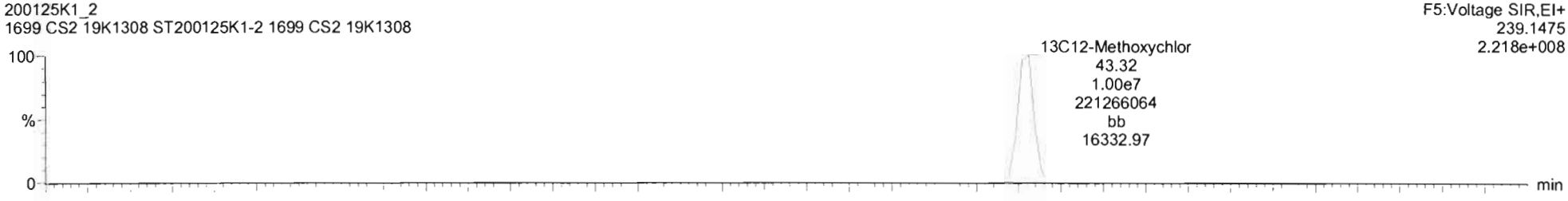
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

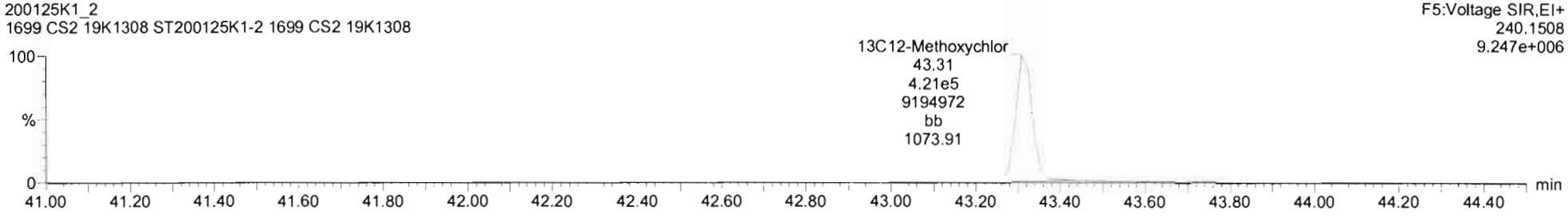
4,4'-Methoxychlor





13C12-Methoxychlor





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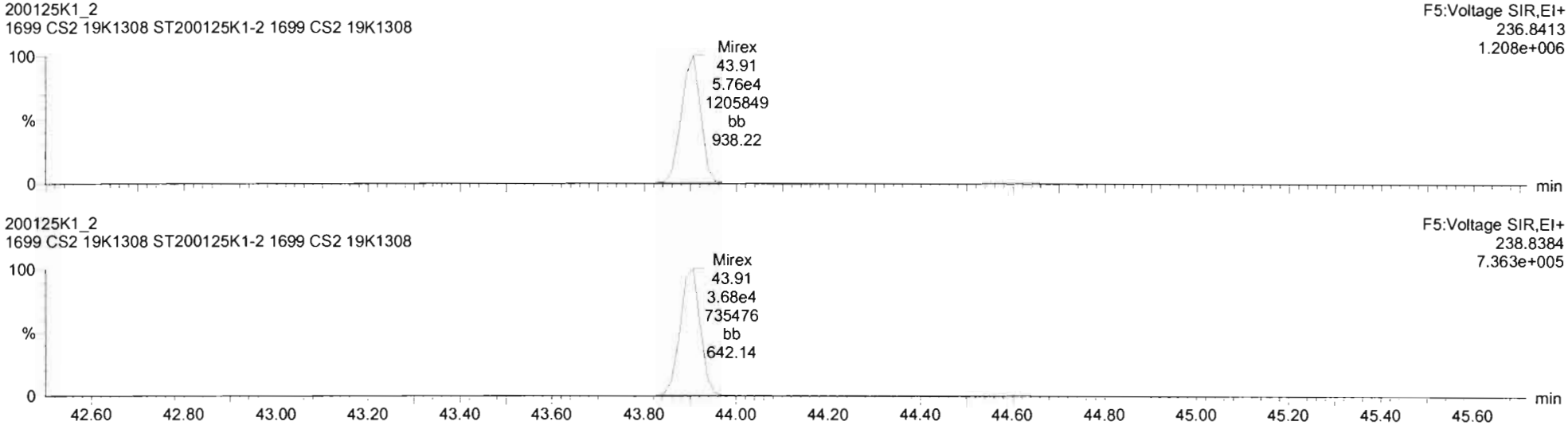
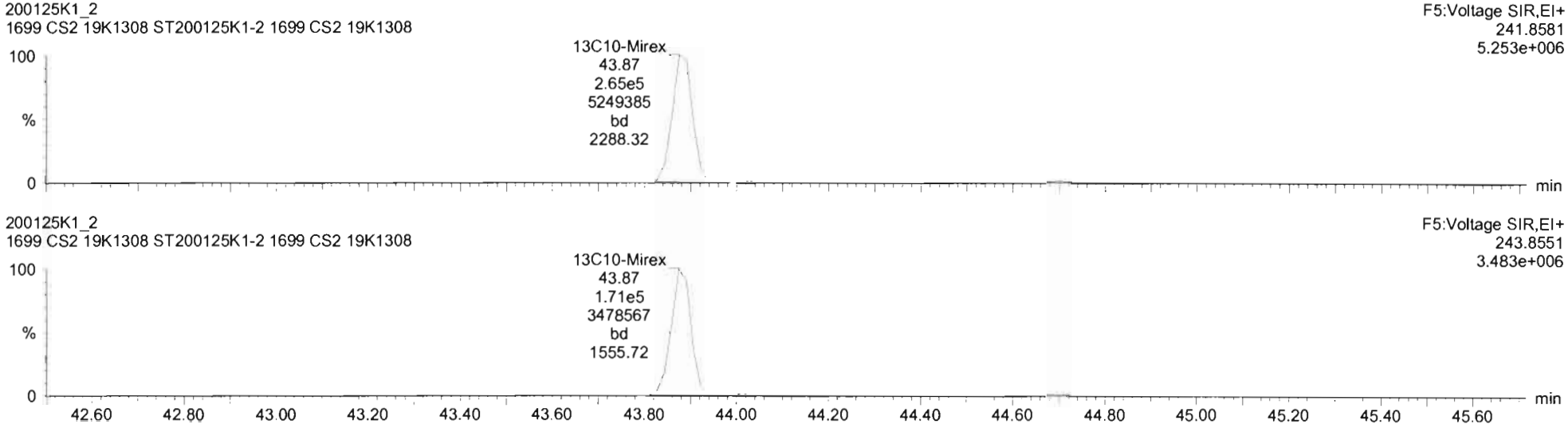
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

Mirex



13C10-Mirex



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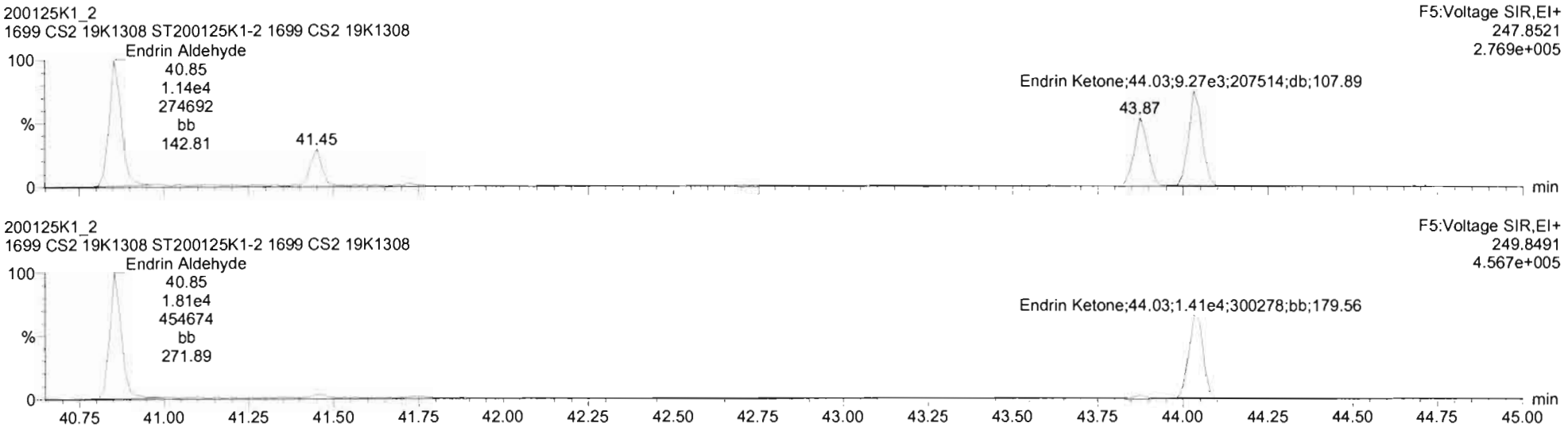
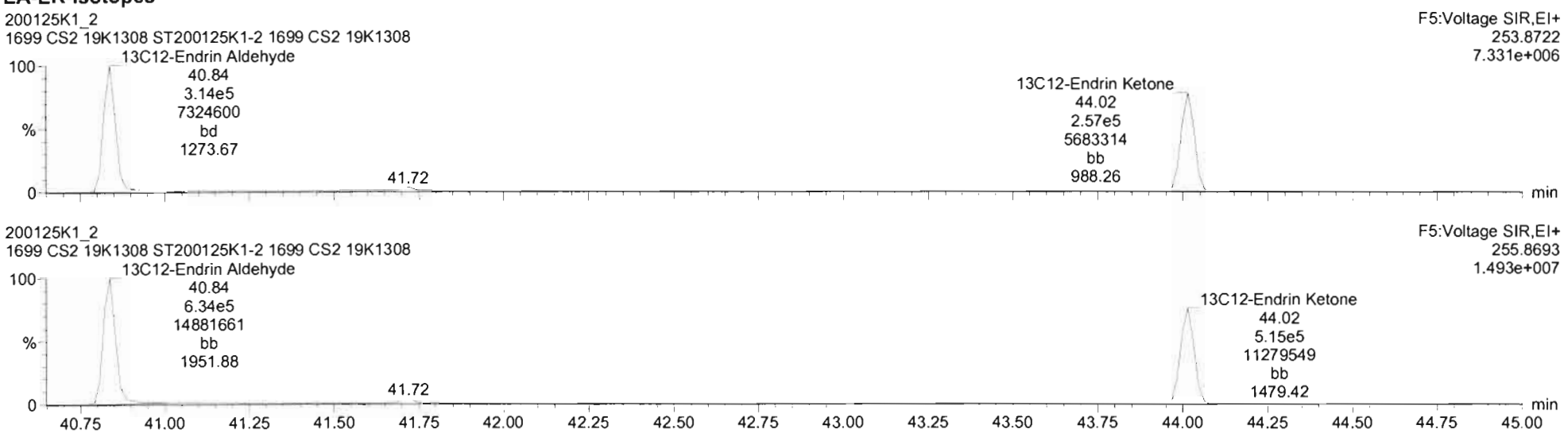
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

EA-EK



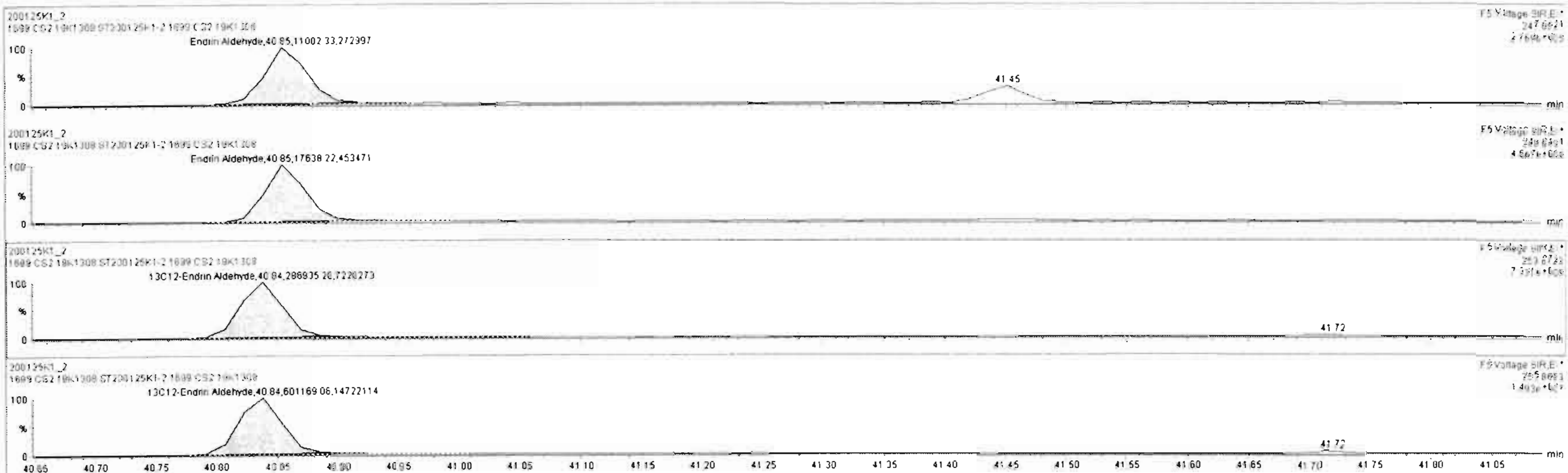
EA-EK-isotopes



TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	3.99e4	1.77e5	48	1.70	NO	1.0934	1.000	37.30	37.30	1.000	1.000	NO	10.3	103	0.0605	10.3
21	21	Endrin	2.38e4	1.13e5	49	1.56	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	9.96	99.6	0.105	9.96
22	22	cis-Nonachlor	1.92e4	8.89e4	50	1.58	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	10.0	100	0.116	10.0
23	23	Endosulfan II (beta)	1.03e4	2.59e4	51	1.84	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	17.9	119	0.442	17.9
24	24	2,4'-DDD	3.69e5	1.70e6	52	1.49	NO	1.0482	1.000	37.92	37.94	1.000	1.000	NO	10.3	103	0.280	10.3
25	25	2,4'-DDT	2.43e5	1.14e6	53	1.42	NO	1.0249	1.000	39.08	39.06	1.000	1.000	NO	10.4	104	0.452	10.4
26	26	4,4'-DDD	3.44e5	1.45e6	54	1.50	NO	1.1226	1.000	39.20	39.20	1.000	1.000	NO	10.5	105	0.287	10.5
27	27	4,4'-DDT	2.10e5	9.04e5	55	1.48	NO	1.1336	1.000	40.27	40.27	1.000	1.000	NO	10.2	102	0.443	10.2
28	28	Endosulfan Sulfate	1.33e4	4.42e4	56	1.45	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	15.2	101	0.272	15.2
29	29	4,4'-Methoxychlor	4.08e5	1.04e7	57	6.15	NO	1.2668	1.000	43.33	43.32	1.000	1.000	NO	15.5	103	0.0437	15.5
30	30	Mirex	9.44e4	4.37e5	58	1.56	NO	1.0435	1.000	43.90	43.91	1.001	1.000	NO	10.4	104	0.0337	10.4
31	31	Endrin Aldehyde	2.86e4	8.88e5	59	0.62	NO	1.0630	1.000	40.86	40.85	1.000	1.000	NO	15.2	101	0.189	15.2
32	32	Endrin Ketone	2.33e4	7.73e5	60	0.86	NO	0.9741	1.000	44.02	44.03	1.000	1.000	NO	15.5	103	0.271	15.5
33	33	13C4-Hexachlorobutadi	3.02e6	2.37e6	62	1.27	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	503	101	0.0290	
34	34	13C6-Hexachlorobenz	1.59e6	2.37e6	62	1.27	NO	0.6741	1.000	22.66	22.64	0.871	0.872	NO	49.8	99.6	0.004	
35	35	13C6-Alpha-BHC	5.98e5	2.37e6	62	0.79	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	49.5	99.1	0.126	
36	36	13C6-Lindane (gamma)	4.71e5	2.37e6	62	0.81	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	49.5	99.1	0.160	
37	37	13C6-Beta-BHC	3.58e5	2.37e6	62	0.78	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	48.9	97.7	0.207	



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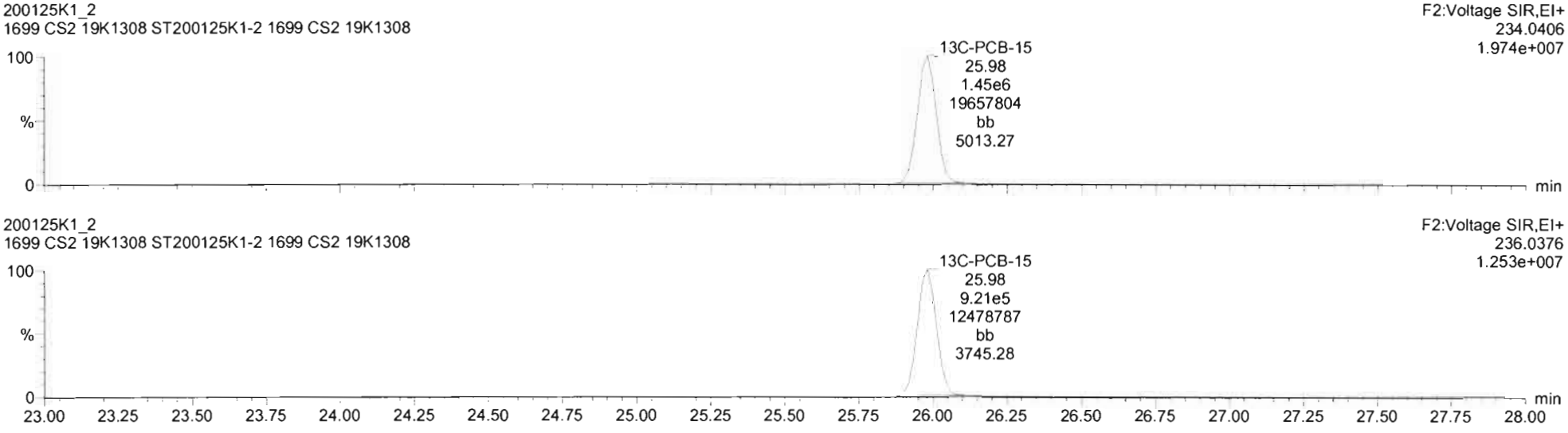
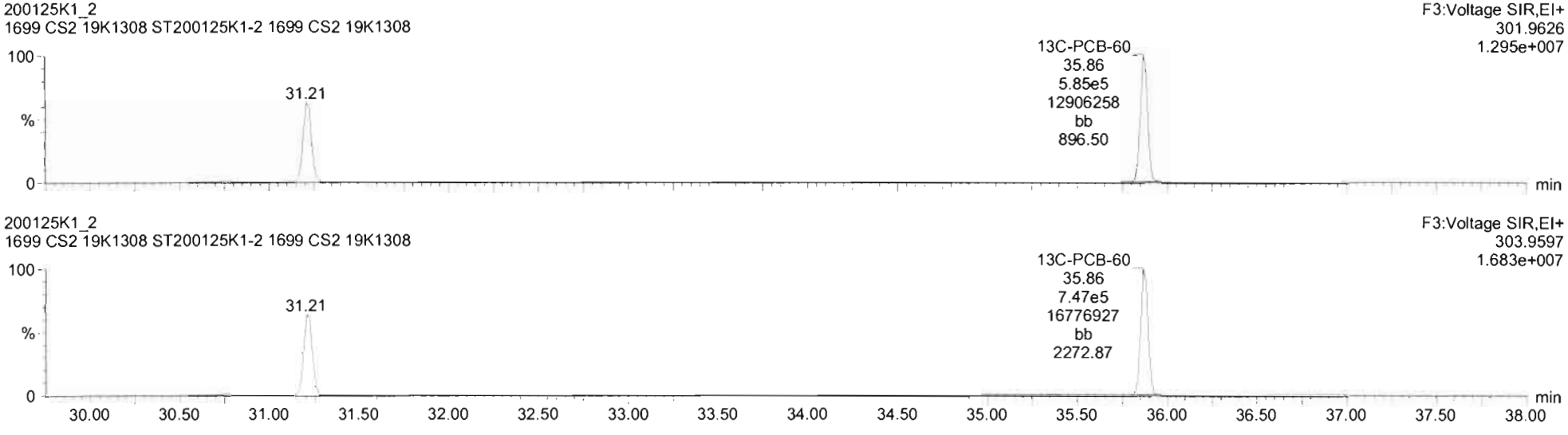
Name: 200125K1_2, Date: 25-Jan-2020, Time: 13:58:18, ID: ST200125K1-2 1699 CS2 19K1308, Description: 1699 CS2 19K1308

13C-PCB-15



13C-PCB-60



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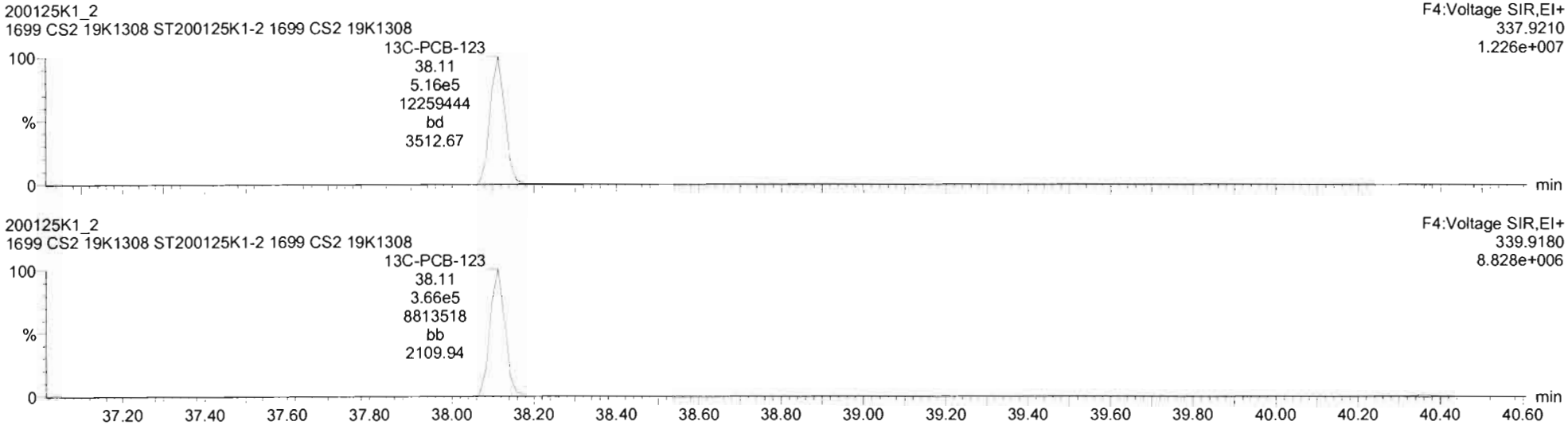
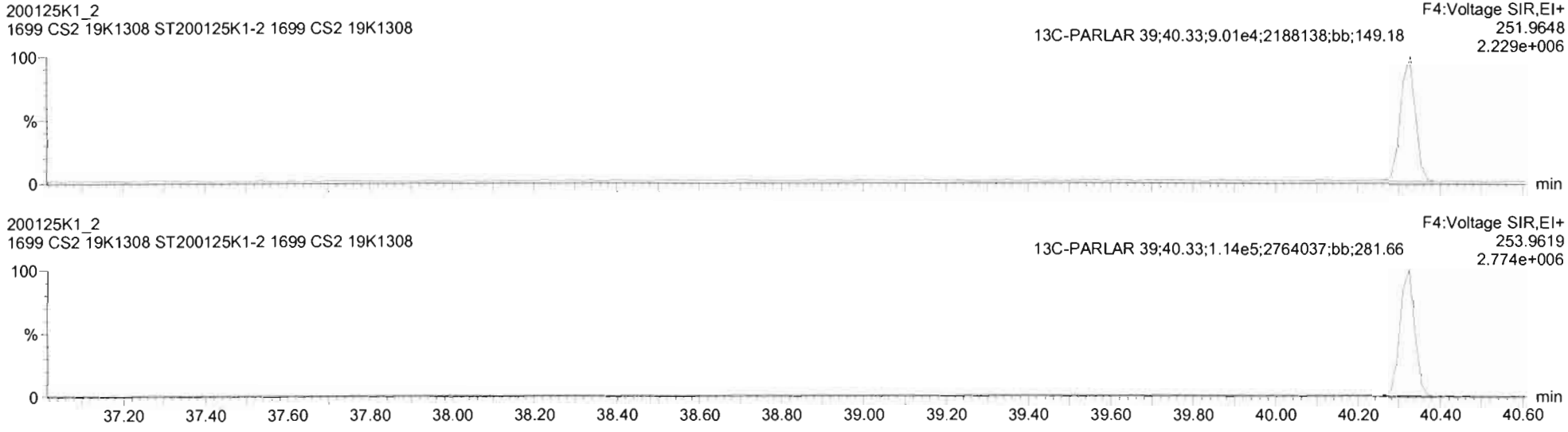
13C-PCB-123



13C-PARLAR 39



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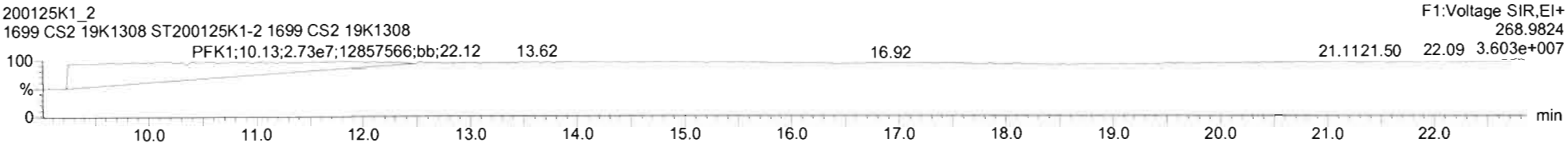
PFK1



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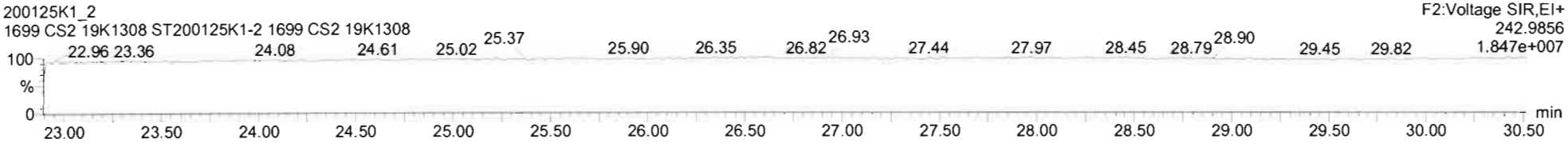

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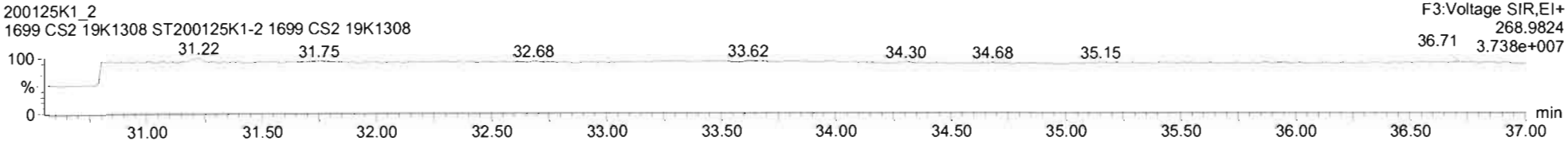

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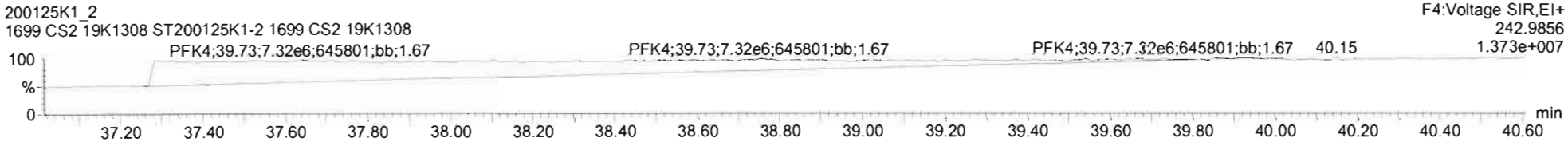

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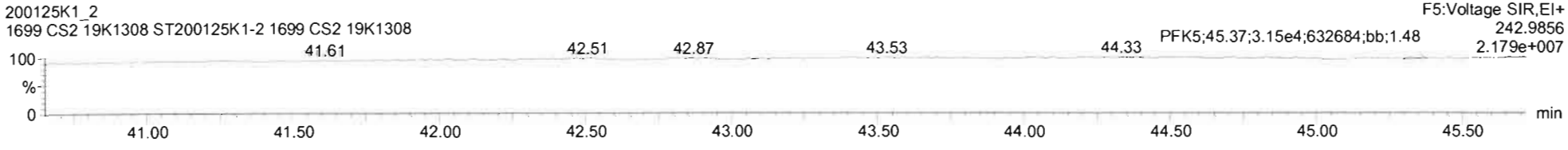

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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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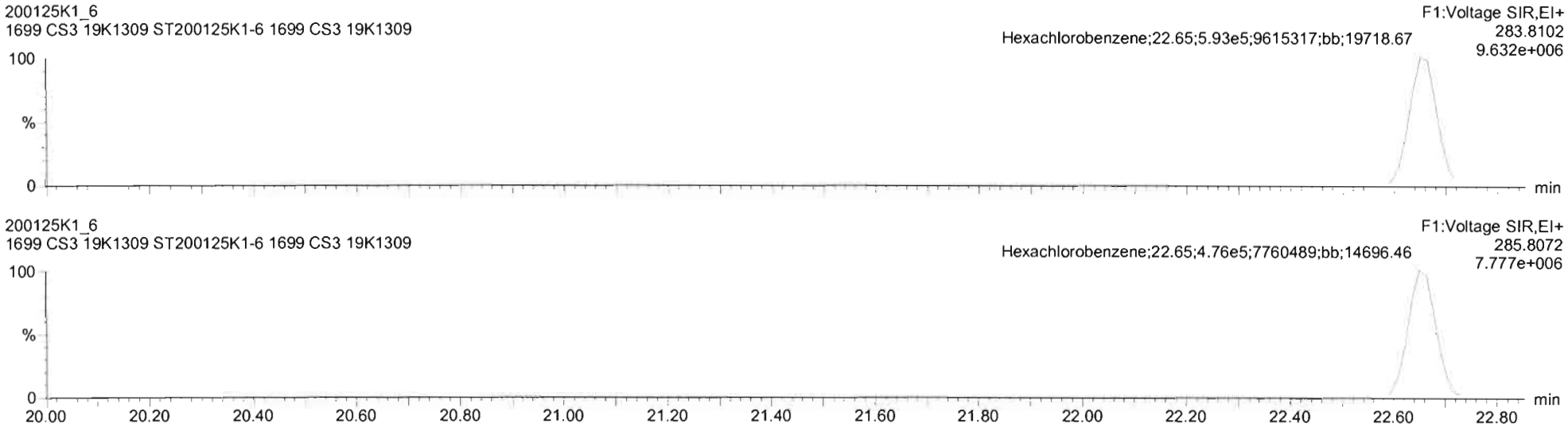
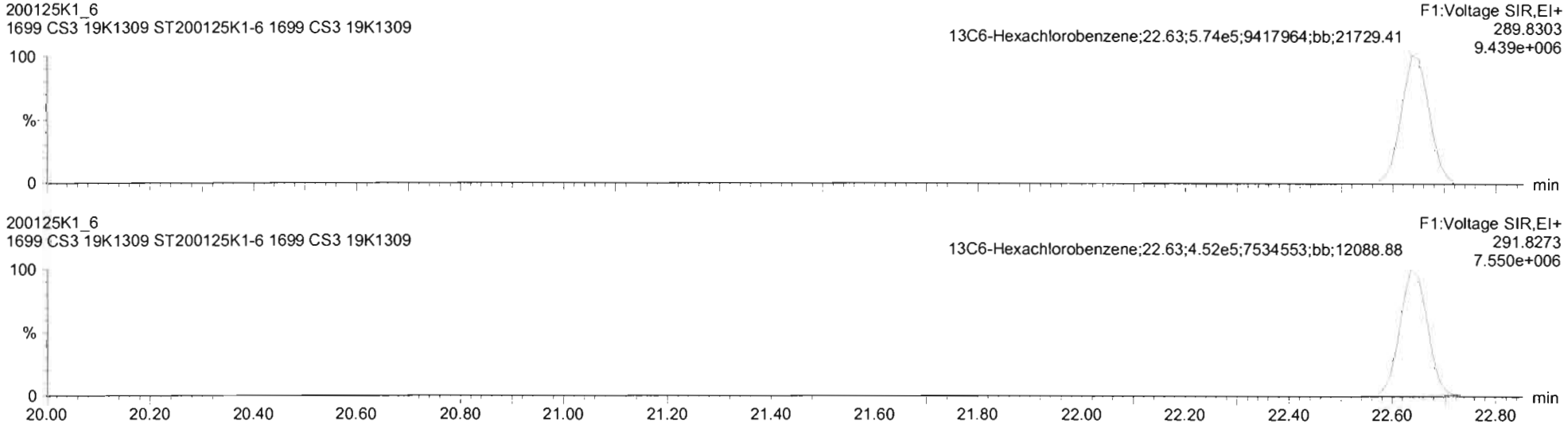
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Hexachlorobenzene



13C6-Hexachlorobenzene



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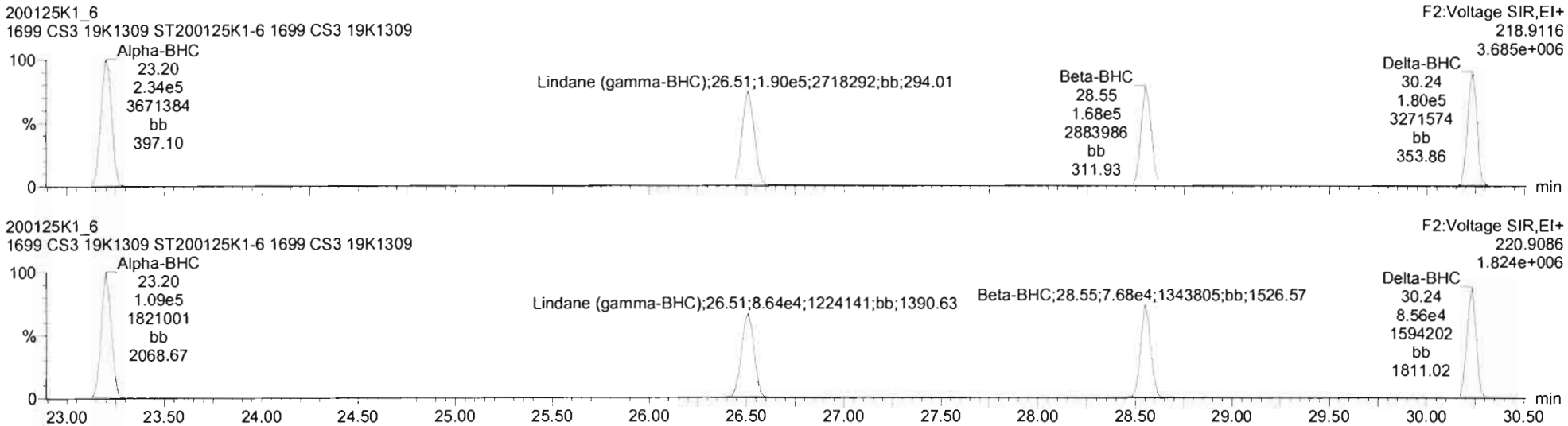
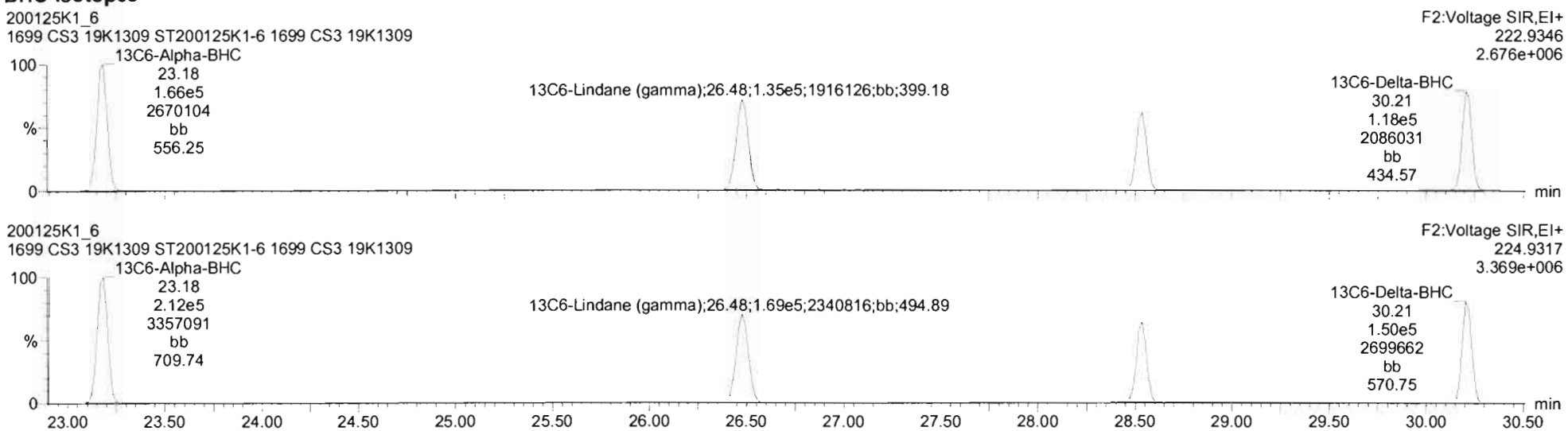
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

BHC Totals



BHC-isotopes



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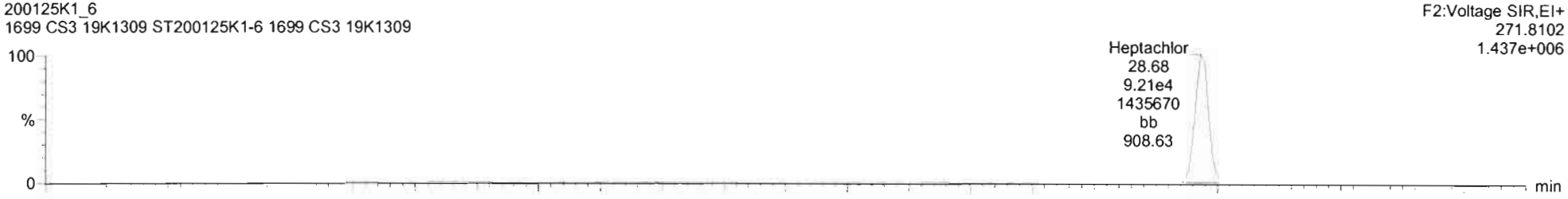
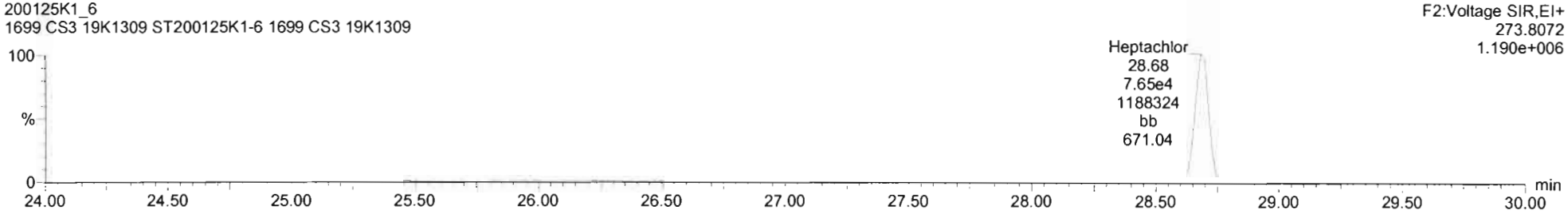
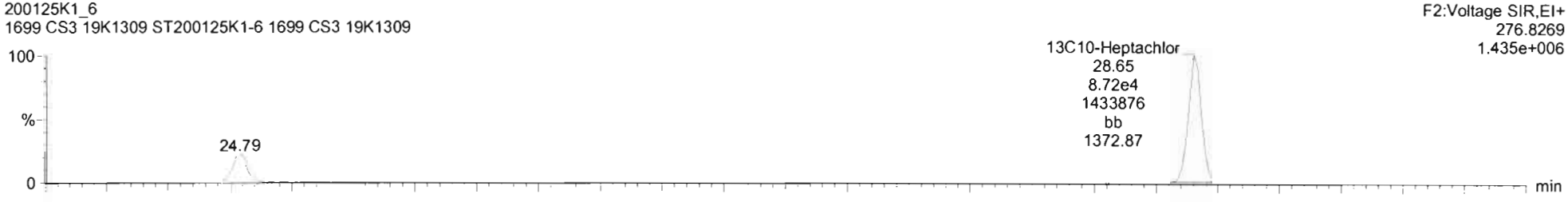
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

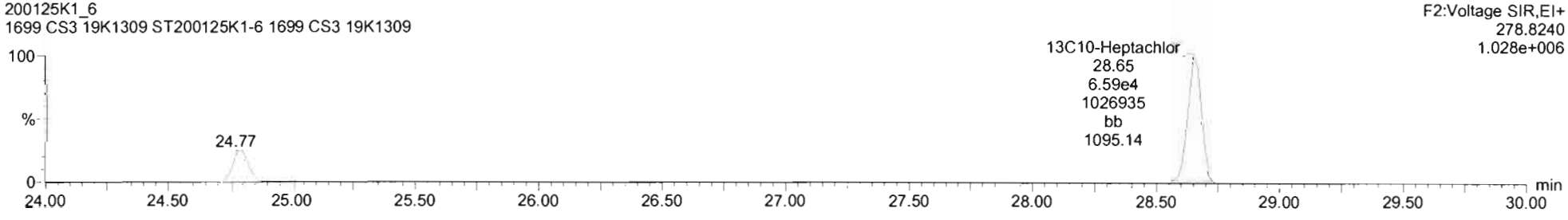
Heptachlor





13C10-Heptachlor





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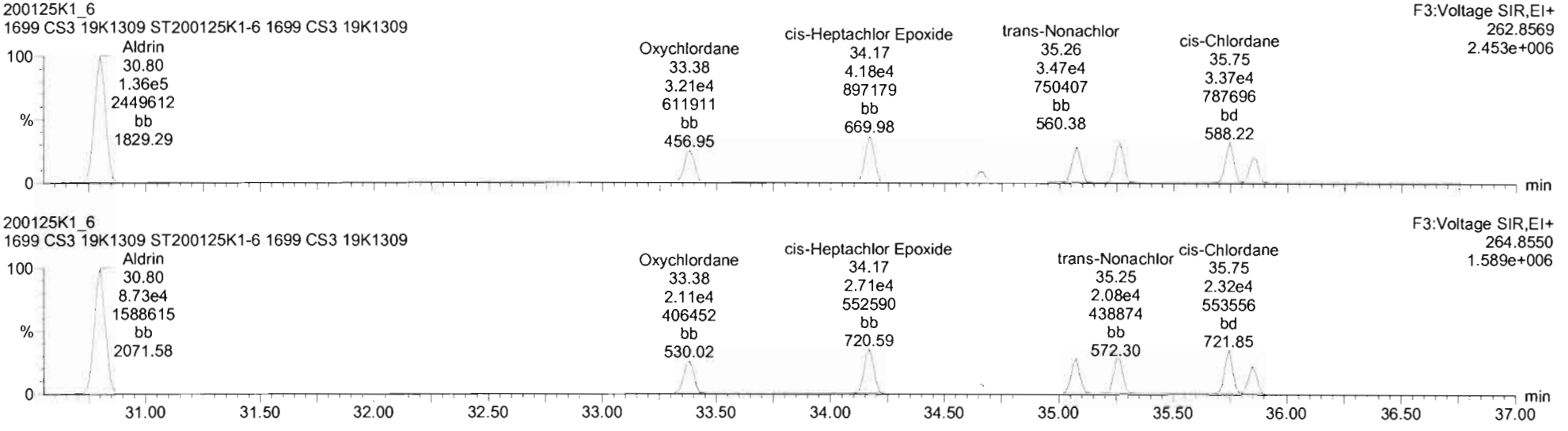
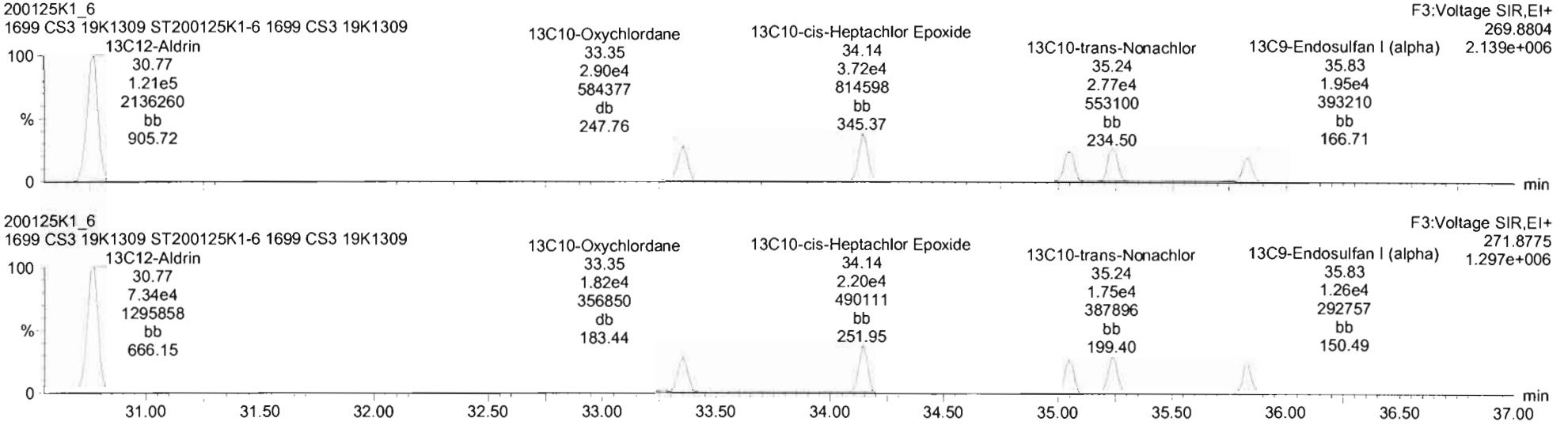
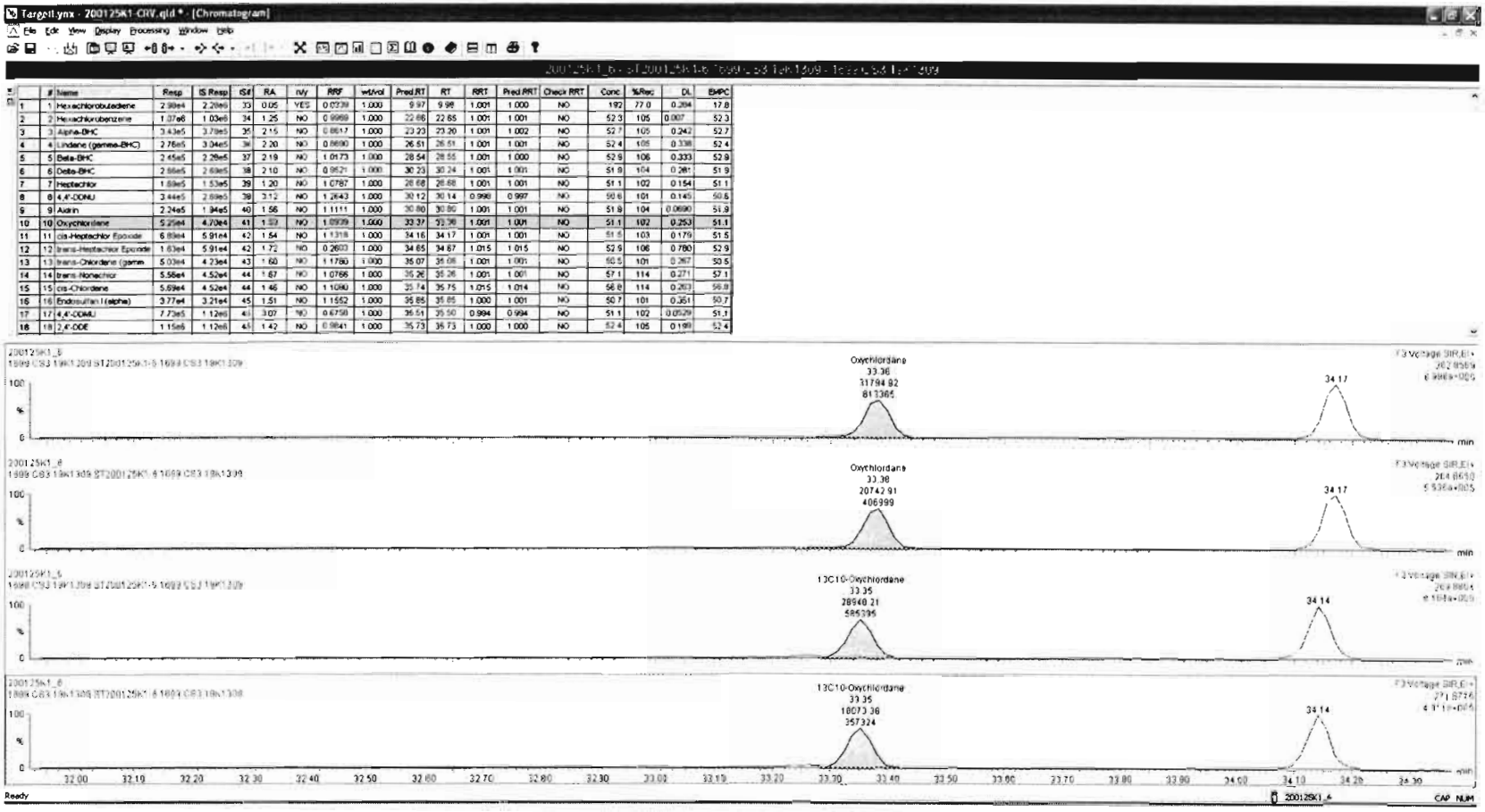
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Aldrin-EI



Aldrin-EI-isotopes





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1	1	Hexachlorobutadiene	2.90e4	2.20e6	33	0.05	YES	0.0239	1.000	9.97	9.98	1.001	1.000	NO	192	77.0	0.204	17.8
2	2	Hexachlorobenzene	1.07e6	1.03e6	34	1.25	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	52.3	105	0.007	52.3
3	3	Alpha-BHC	3.43e5	3.78e5	35	2.15	NO	0.8617	1.000	23.23	23.20	1.001	1.002	NO	52.7	105	0.242	52.7
4	4	Lindane (gamma-BHC)	2.76e5	3.04e5	36	2.20	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	52.4	105	0.338	52.4
5	5	Beta-BHC	2.45e5	2.26e5	37	2.19	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	52.9	106	0.333	52.9
6	6	Delta-BHC	2.66e5	2.69e5	38	2.10	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	51.9	104	0.281	51.9
7	7	Heptachlor	1.69e5	1.53e5	39	1.20	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	51.1	102	0.154	51.1
8	8	4,4'-DDMU	3.44e5	2.89e5	39	3.12	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	50.6	101	0.145	50.6
9	9	Aldrin	2.24e5	1.94e5	40	1.56	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	51.9	104	0.0690	51.9
10	10	Oxychlordane	5.25e4	4.70e4	41	1.33	NO	1.0939	1.000	33.37	33.36	1.001	1.001	NO	51.1	102	0.253	51.1
11	11	cis-Heptachlor Epoxide	6.86e4	5.91e4	42	1.54	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	51.5	103	0.179	51.5
12	12	trans-Heptachlor Epoxide	1.63e4	5.91e4	42	1.72	NO	0.2693	1.000	34.65	34.67	1.015	1.015	NO	52.9	106	0.780	52.9
13	13	trans-Chlordane (gamm	5.03e4	4.23e4	43	1.60	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	50.5	101	0.267	50.5
14	14	trans-Nonachlor	5.58e4	4.52e4	44	1.67	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	57.1	114	0.271	57.1
15	15	cis-Chlordane	5.69e4	4.52e4	44	1.46	NO	1.1080	1.000	35.74	35.75	1.015	1.014	NO	56.8	114	0.253	56.8
16	16	Endosulfan I (alpha)	3.77e4	3.21e4	45	1.51	NO	1.1552	1.000	35.85	35.85	1.000	1.001	NO	50.7	101	0.351	50.7
17	17	4,4'-DDMU	7.73e5	1.12e6	46	3.07	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	51.1	102	0.0529	51.1
18	18	2,4'-DDE	1.15e6	1.12e6	46	1.42	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	52.4	105	0.199	52.4

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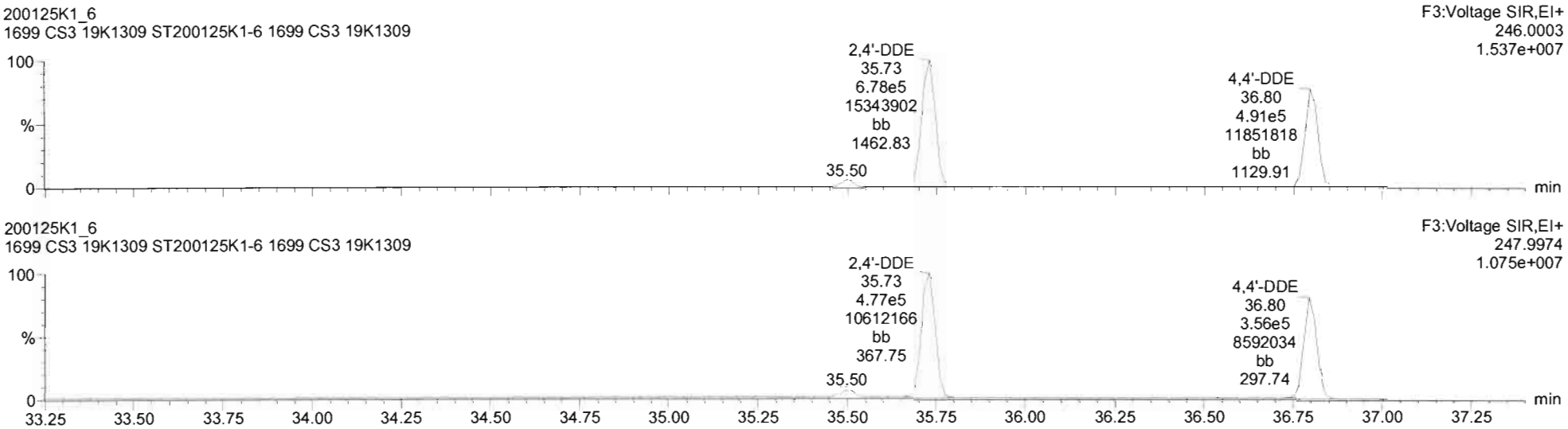
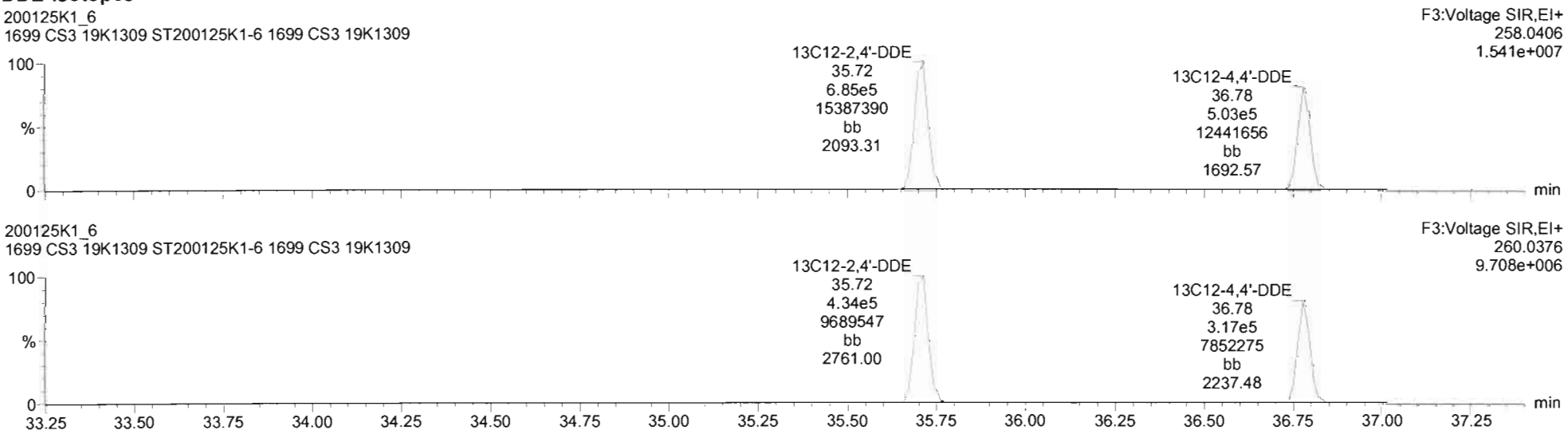
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

DDMU-DDE



DDE-isotopes



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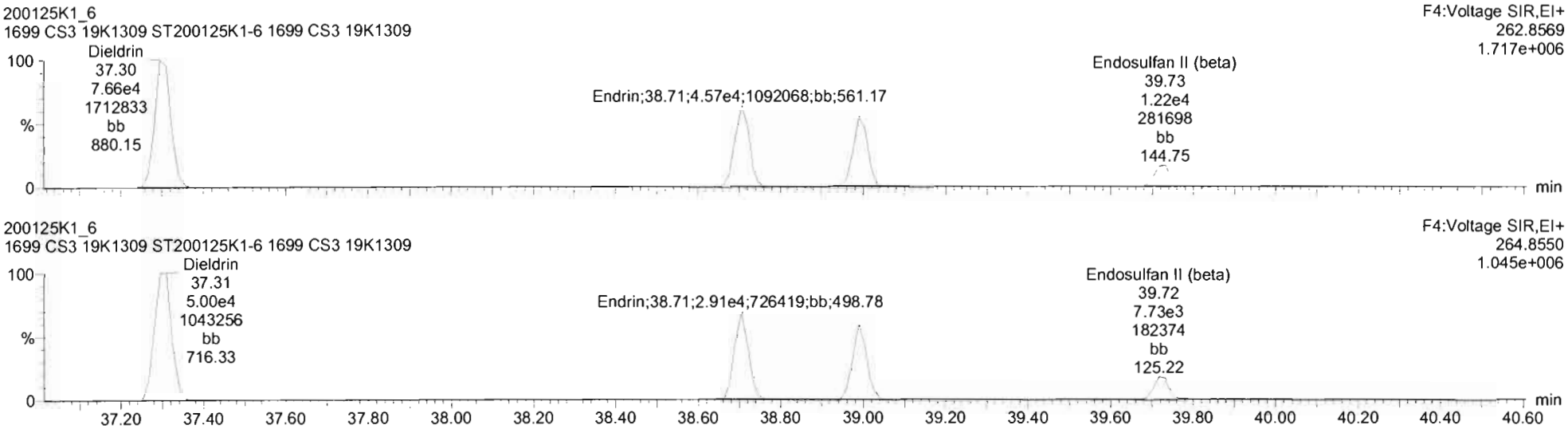
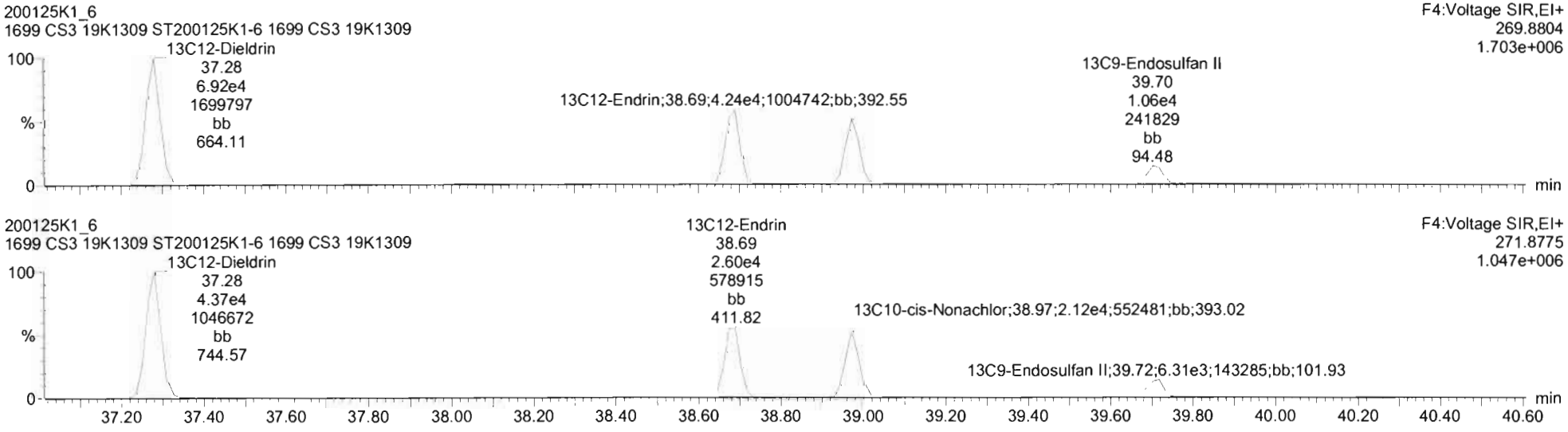
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Dieldrin-EII



Dieldrin-EII-isotopes



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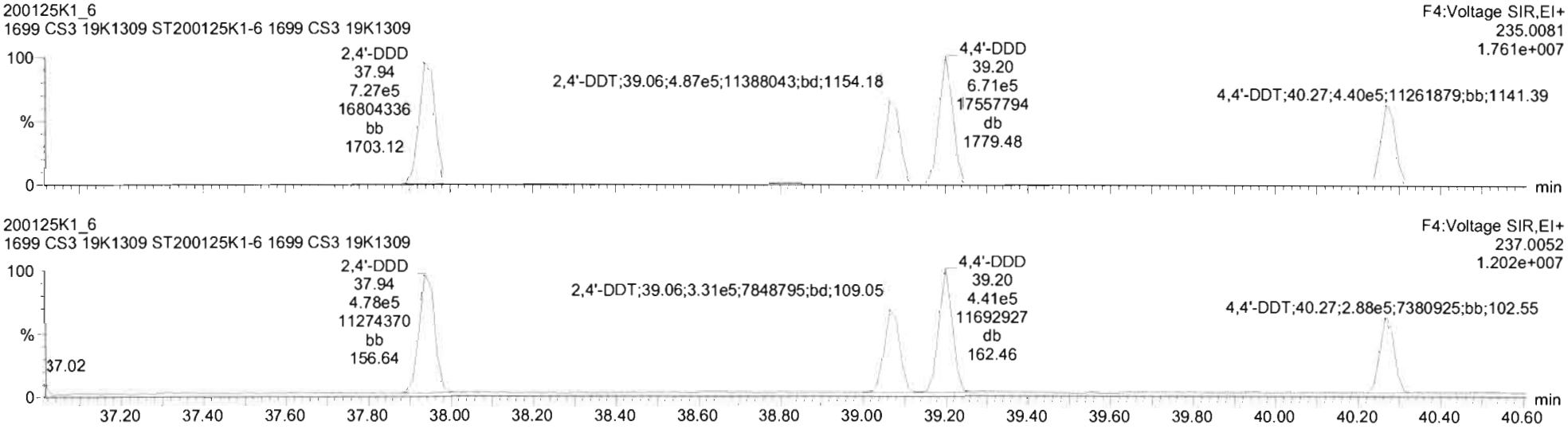
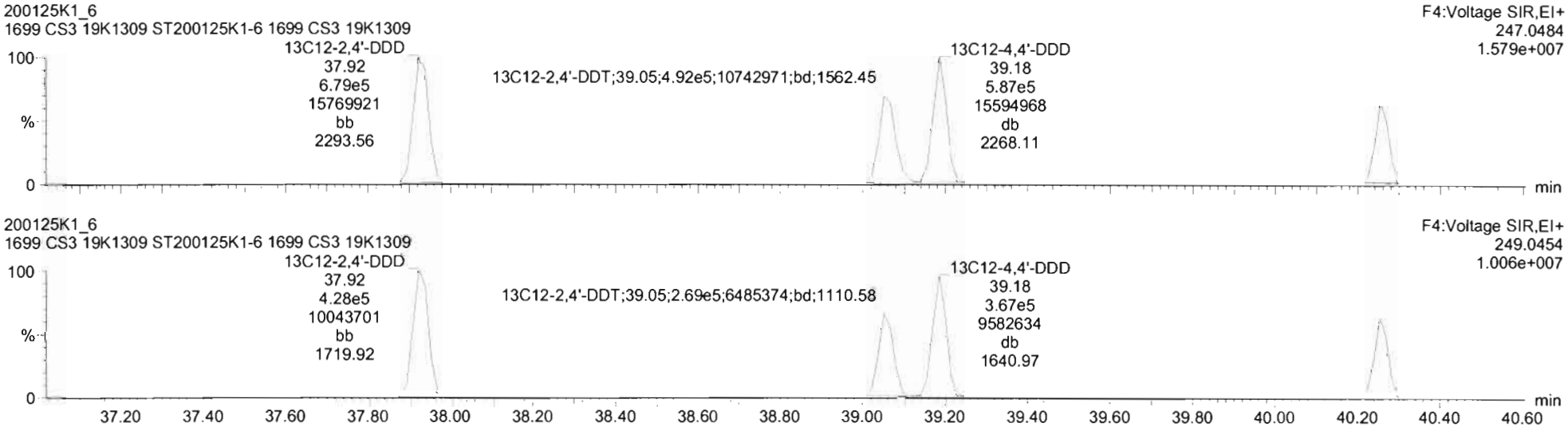
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

DDD-DDT



DDD-DDT-isotopes



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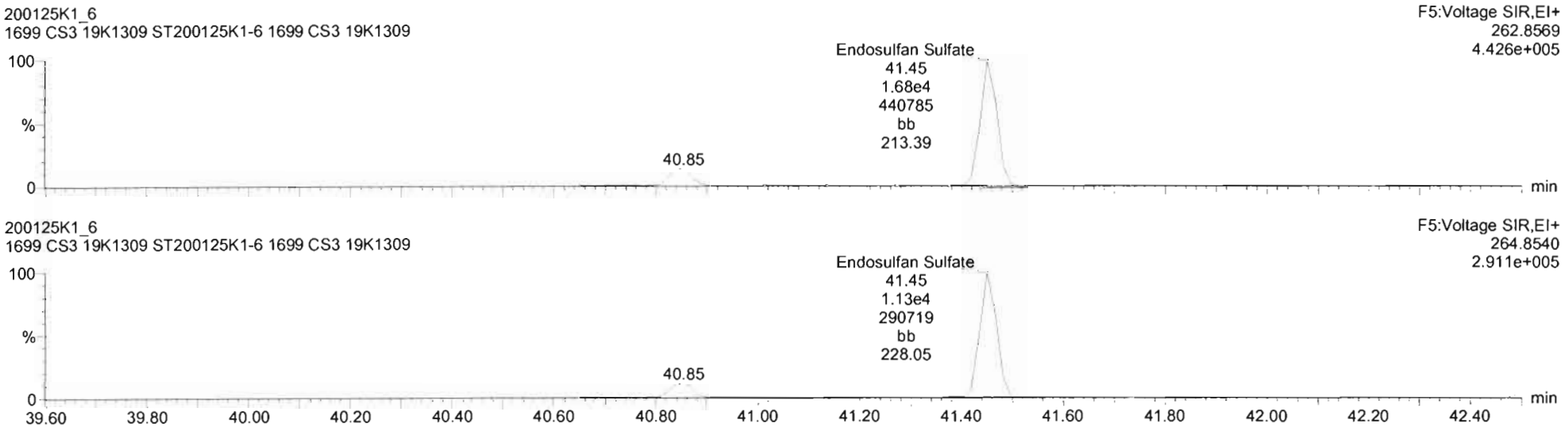
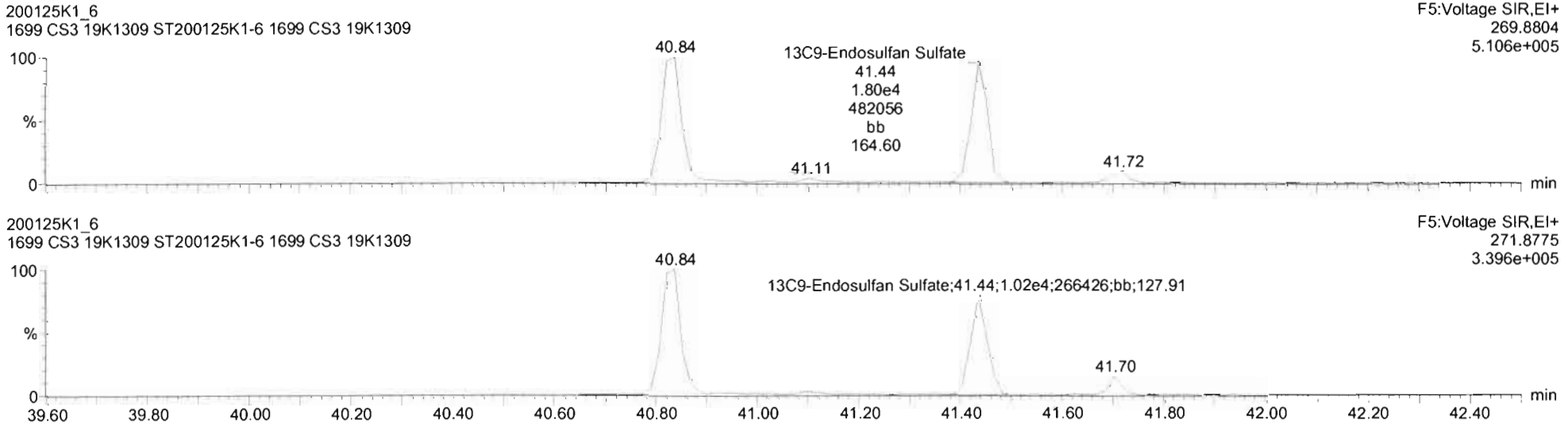
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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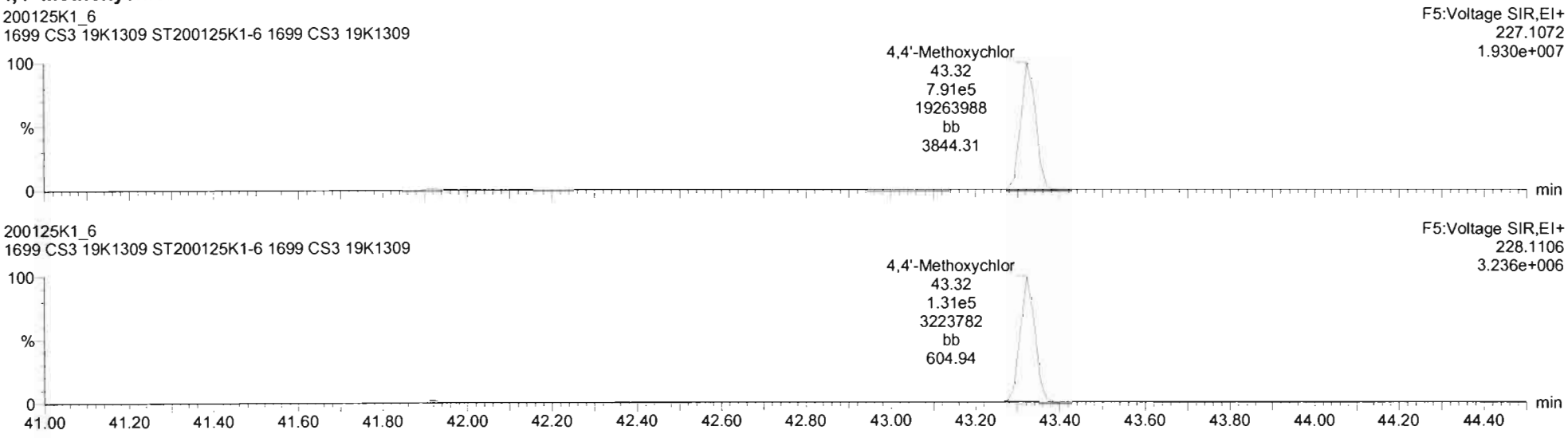
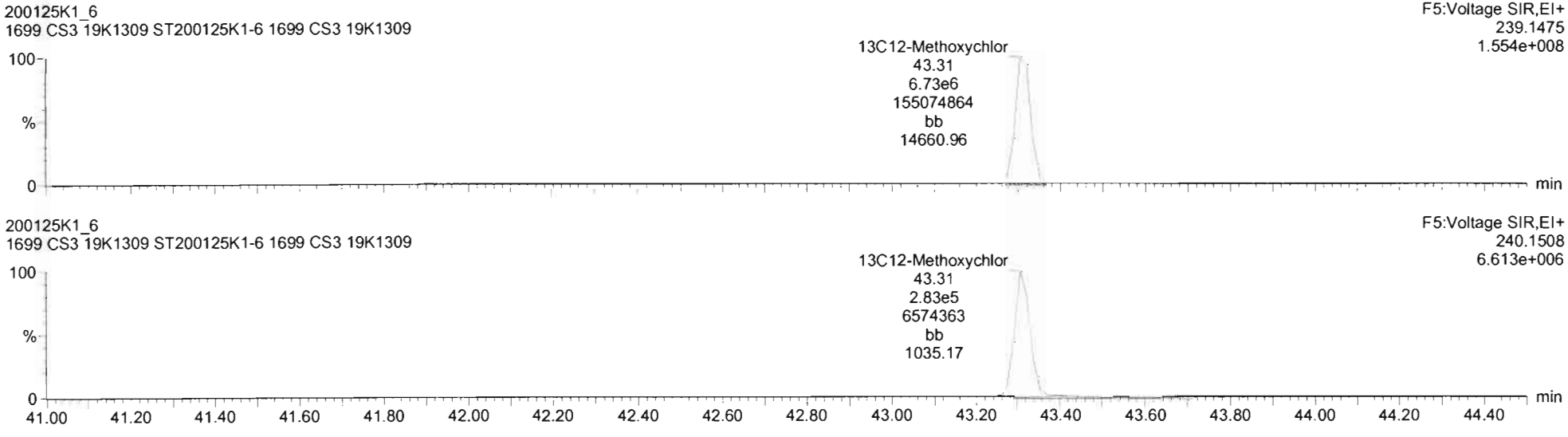
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

4,4'-Methoxychlor



13C12-Methoxychlor



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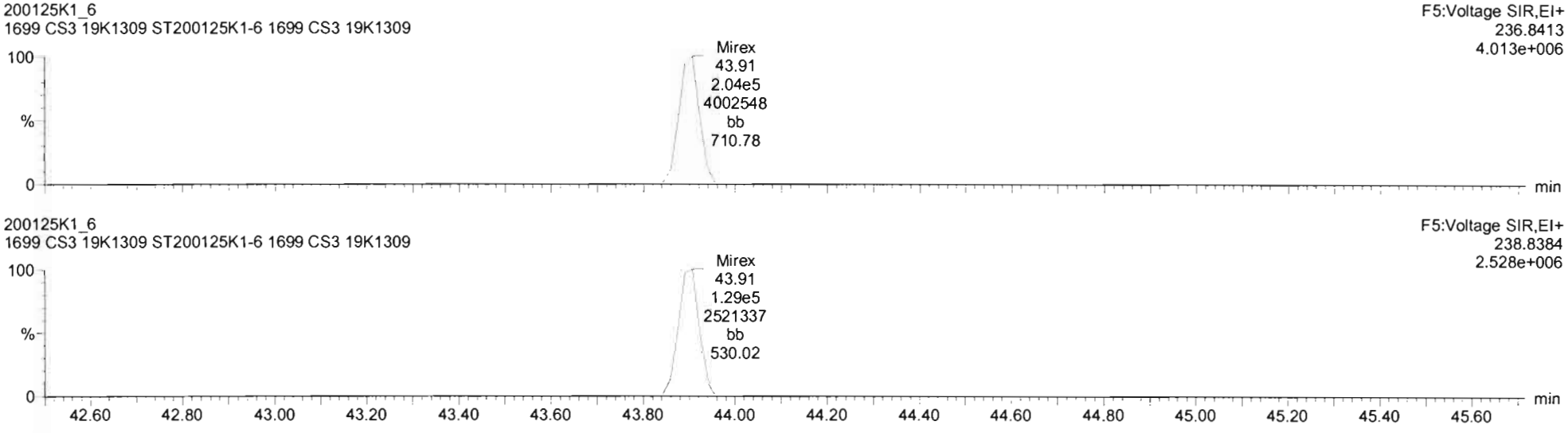
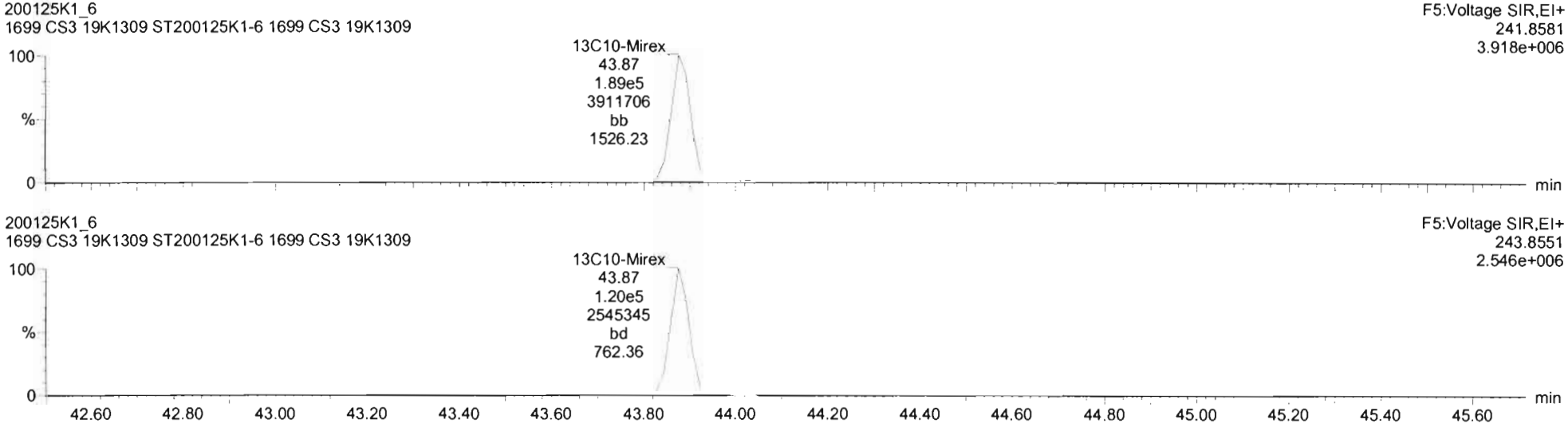
Mirex



13C10-Mirex



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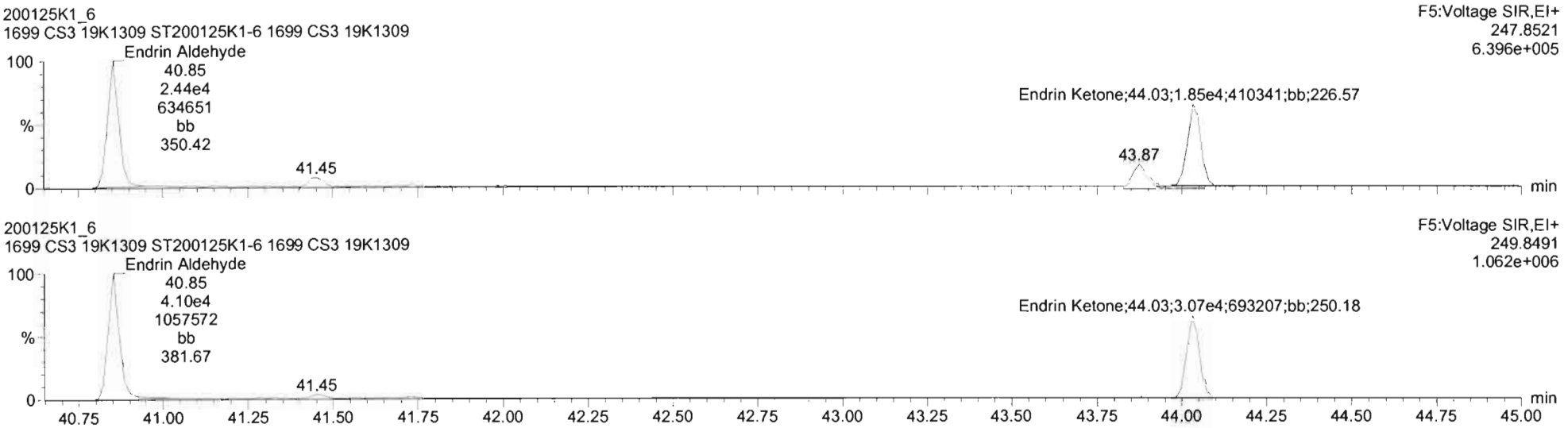
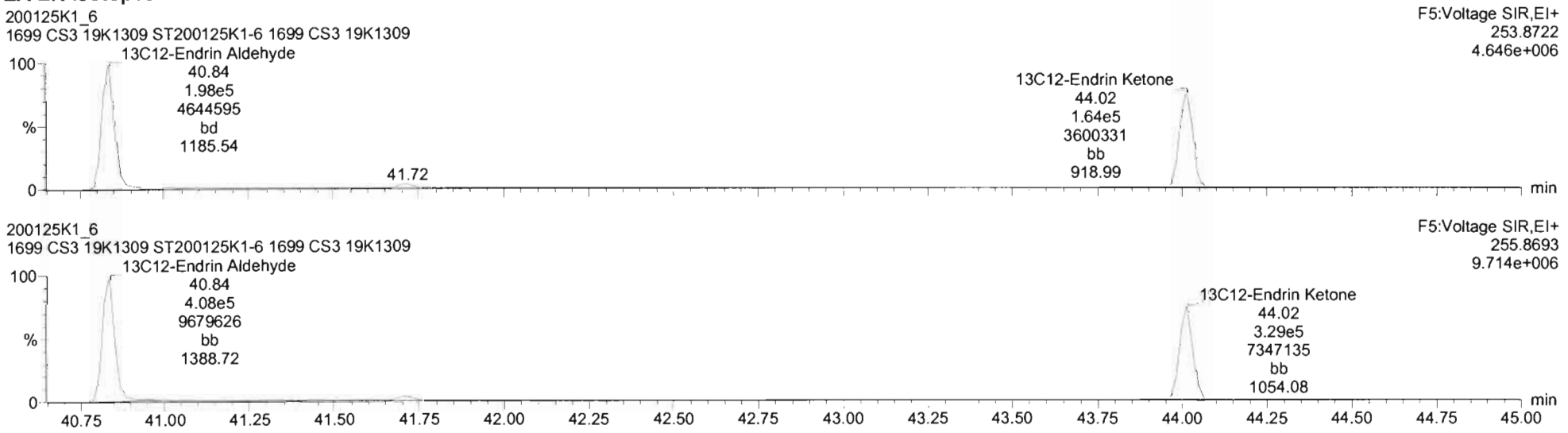
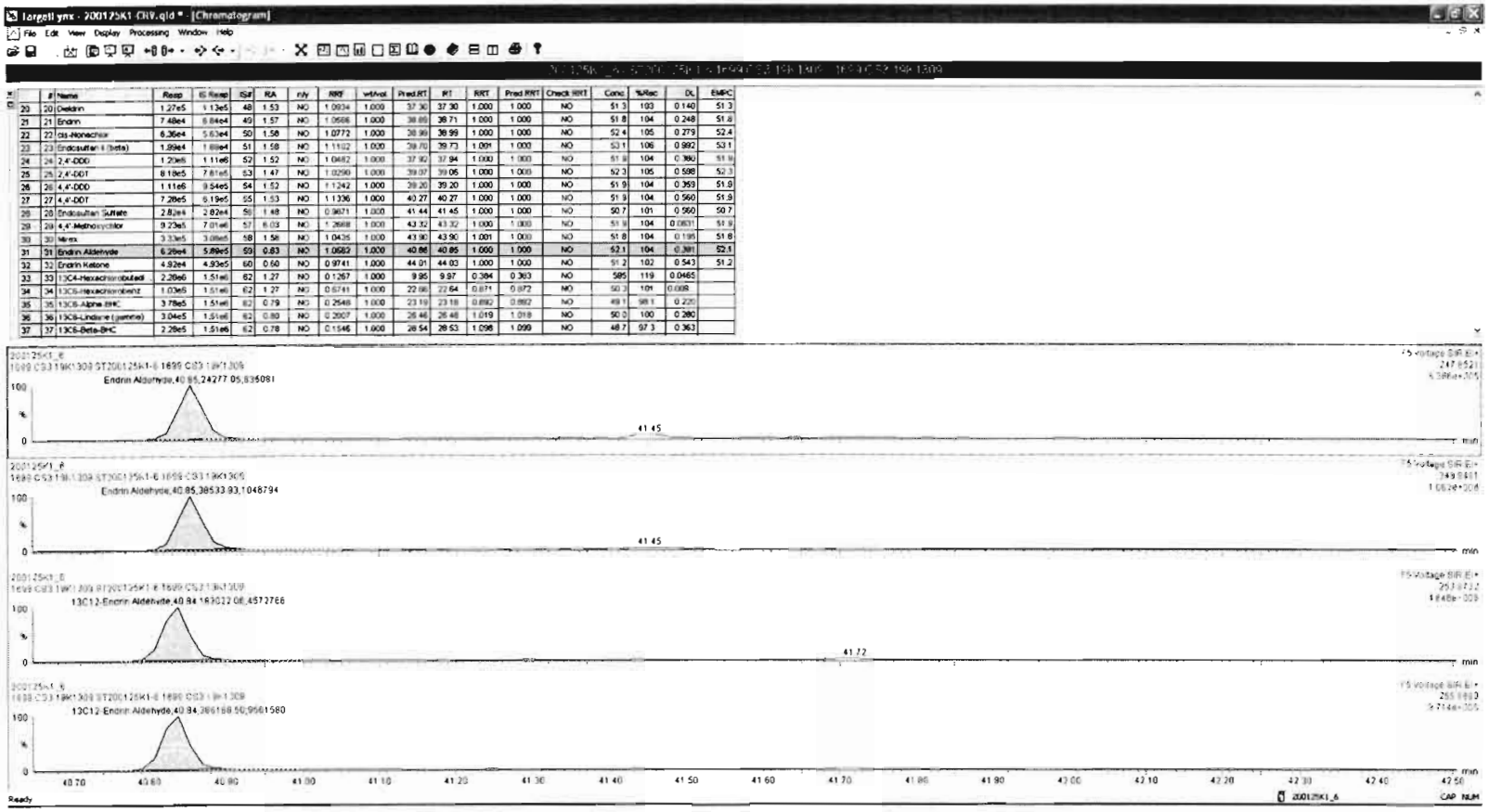
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

EA-EK



EA-EK-isotopes





	#	Name	Resp	IS Resp	ISR	RA	r/y	RRT	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	1.27e5	1.13e5	48	1.53	NO	1.0034	1.000	37.30	37.30	1.000	1.000	NO	51.3	103	0.140	51.3
21	21	Endrin	7.48e4	6.84e4	49	1.57	NO	1.0606	1.000	38.85	38.71	1.000	1.000	NO	51.8	104	0.248	51.8
22	22	cis-Nonachlor	6.36e4	5.63e4	50	1.58	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	52.4	105	0.279	52.4
23	23	Endosulfan II (beta)	1.89e4	1.68e4	51	1.58	NO	1.1102	1.000	39.70	39.73	1.001	1.000	NO	53.1	106	0.892	53.1
24	24	2,4'-DDD	1.20e5	1.11e5	52	1.52	NO	1.0482	1.000	37.92	37.94	1.000	1.000	NO	51.8	104	0.366	51.8
25	25	2,4'-DDT	8.18e5	7.61e5	53	1.47	NO	1.0290	1.000	39.07	39.06	1.000	1.000	NO	52.3	105	0.588	52.3
26	26	4,4'-DDD	1.11e6	9.54e5	54	1.52	NO	1.1242	1.000	39.20	39.20	1.000	1.000	NO	51.9	104	0.353	51.9
27	27	4,4'-DDT	7.26e5	6.19e5	55	1.53	NO	1.1336	1.000	40.27	40.27	1.000	1.000	NO	51.9	104	0.560	51.9
28	28	Endosulfan Sulfate	2.82e4	2.82e4	56	1.48	NO	0.9671	1.000	41.44	41.45	1.000	1.000	NO	50.7	101	0.560	50.7
29	29	4,4'-Methoxychlor	9.23e5	7.01e5	57	6.03	NO	1.2668	1.000	43.32	43.32	1.000	1.000	NO	51.9	104	0.0831	51.9
30	30	Mirex	3.33e5	3.08e5	58	1.56	NO	1.0435	1.000	43.90	43.90	1.001	1.000	NO	51.8	104	0.195	51.8
31	31	Endrin Aldehyde	6.26e4	5.89e5	59	0.83	NO	1.0652	1.000	40.86	40.85	1.000	1.000	NO	52.1	104	0.391	52.1
32	32	Endrin Ketone	4.92e4	4.93e5	60	0.60	NO	0.9741	1.000	44.01	44.03	1.000	1.000	NO	51.2	102	0.543	51.2
33	33	13C4-Hexachlorobutadi	2.26e6	1.51e6	62	1.27	NO	0.1267	1.000	9.95	9.97	0.364	0.363	NO	595	119	0.0465	
34	34	13C6-Hexachlorobenz	1.03e6	1.51e6	62	1.27	NO	0.5741	1.000	22.66	22.64	0.871	0.872	NO	50.3	101	0.008	
35	35	13C6-Alpha-BHC	3.78e5	1.51e6	62	0.79	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	49.1	98.1	0.220	
36	36	13C6-Lindane (gamma)	3.04e5	1.51e6	62	0.80	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	50.0	100	0.280	
37	37	13C6-Beta-BHC	2.28e5	1.51e6	62	0.78	NO	0.1546	1.000	26.54	26.53	1.098	1.099	NO	48.7	97.3	0.363	

Dataset: Untitled

Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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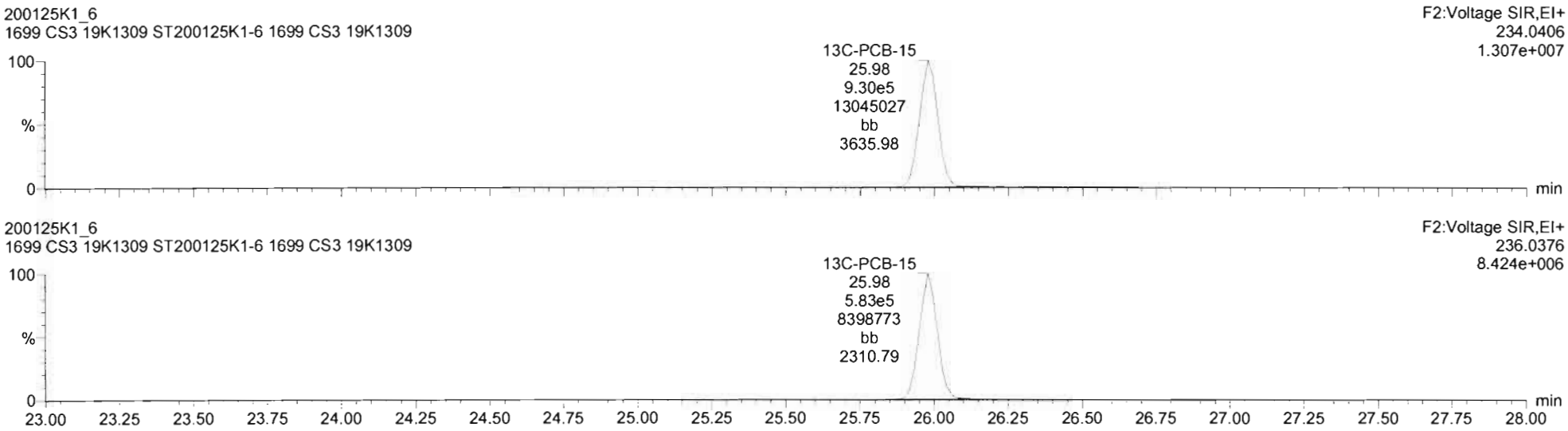
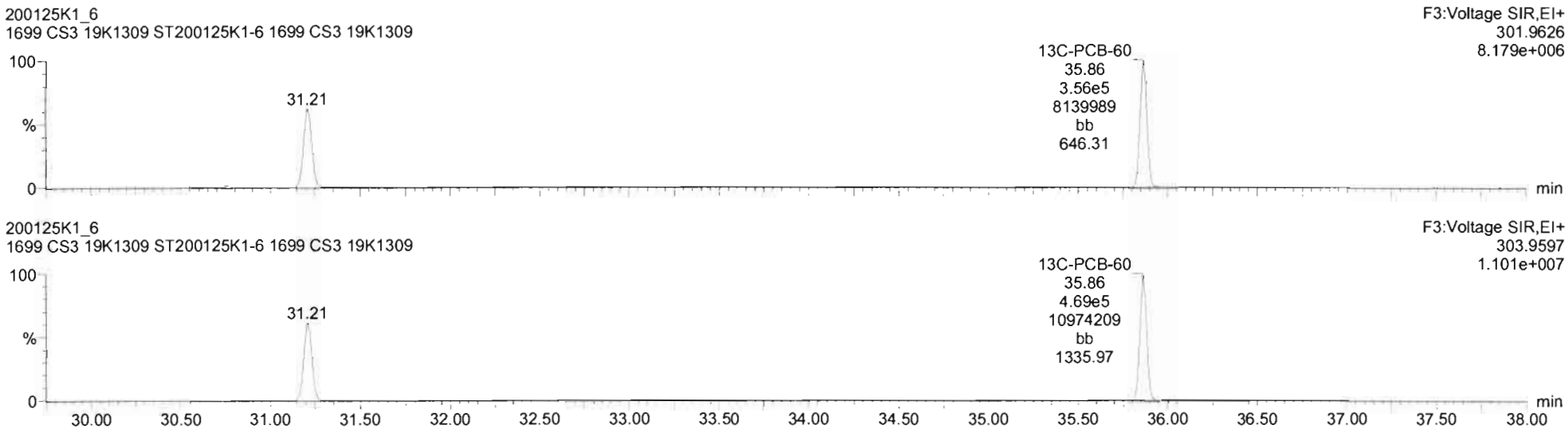
Name: 200125K1_6, Date: 25-Jan-2020, Time: 17:12:38, ID: ST200125K1-6 1699 CS3 19K1309, Description: 1699 CS3 19K1309

13C-PCB-15



13C-PCB-60



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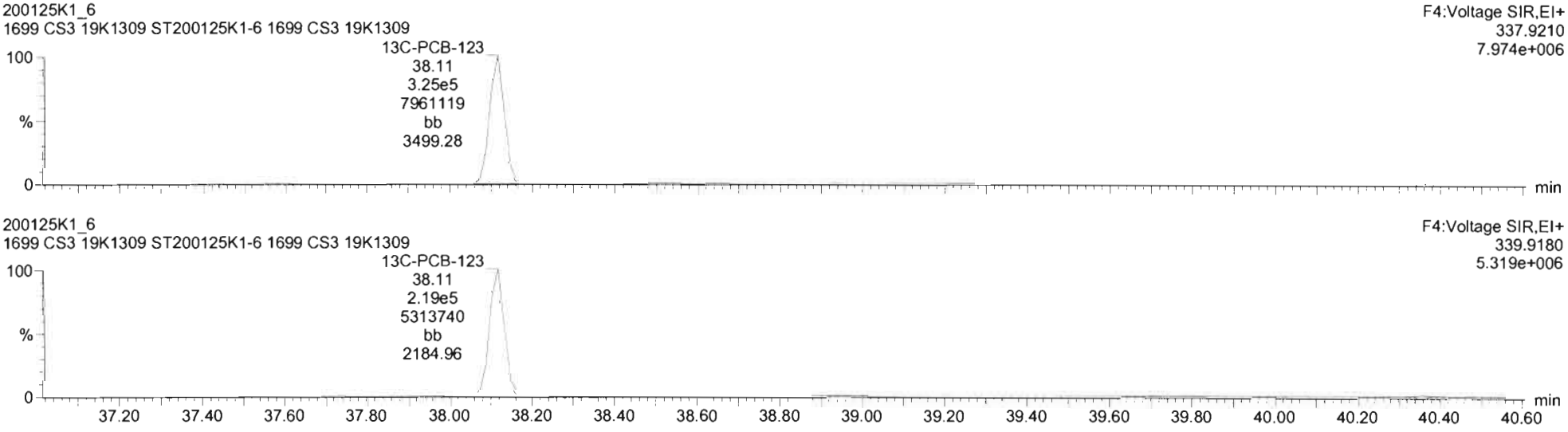
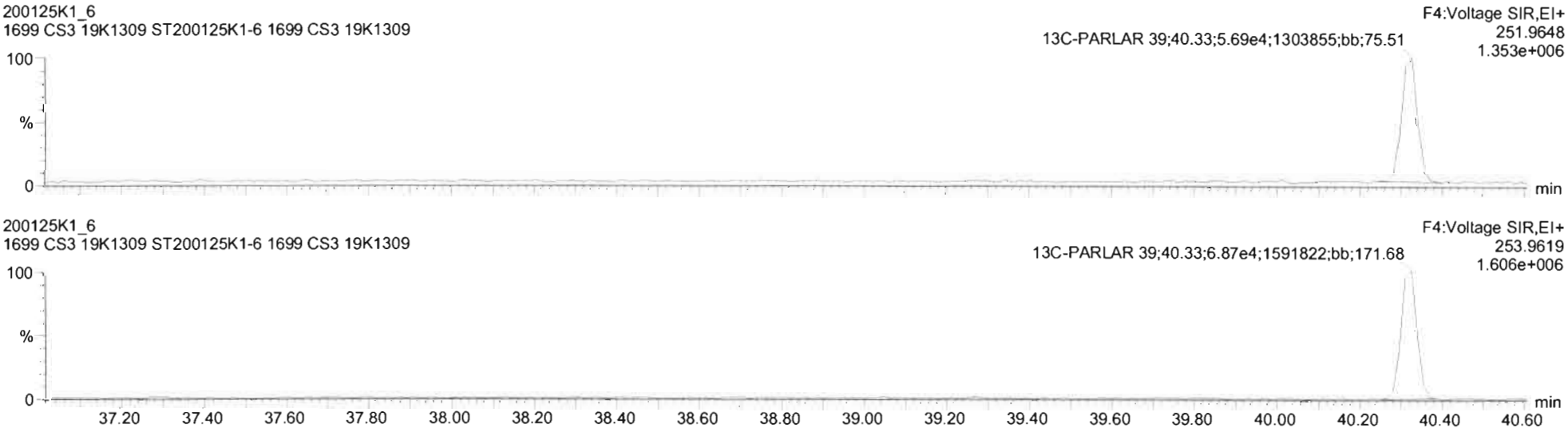
13C-PCB-123



13C-PARLAR 39



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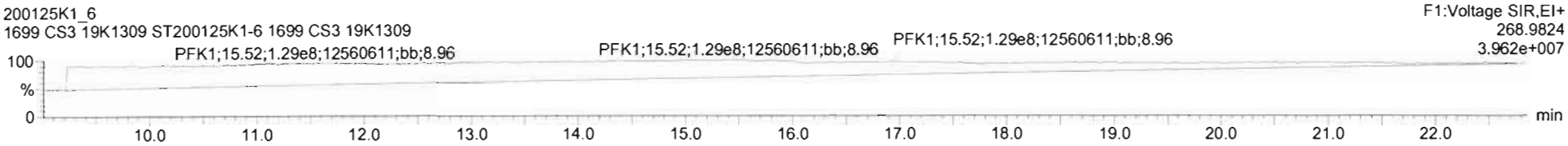
PFK1



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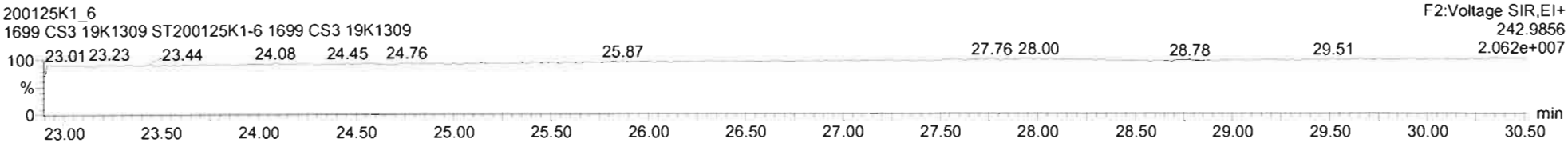

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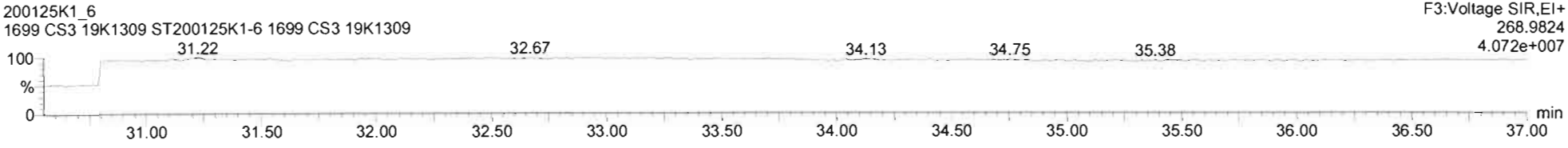

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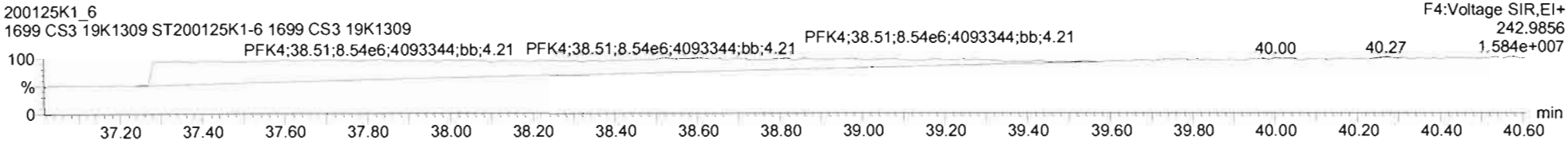
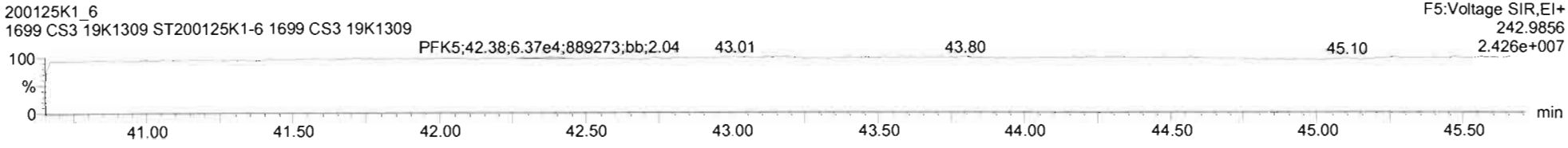


PFK5



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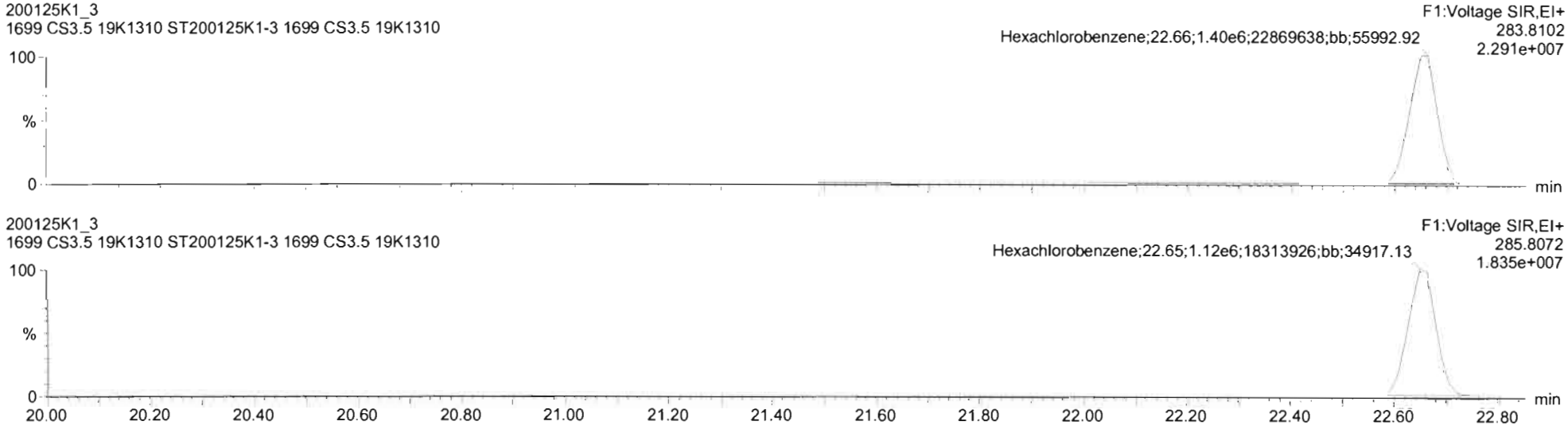
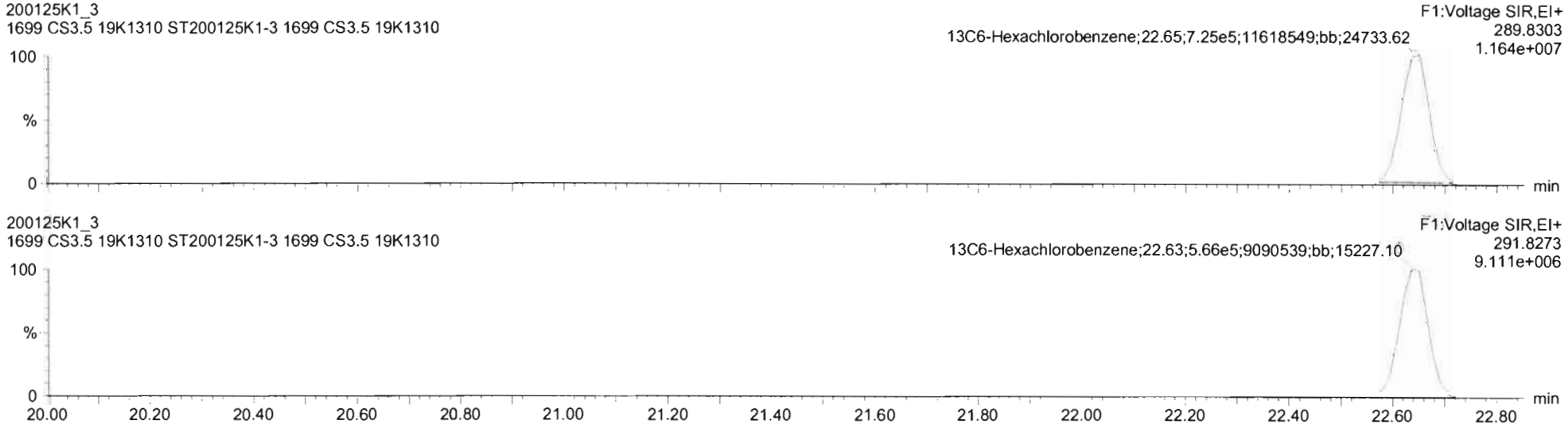
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Hexachlorobenzene



13C6-Hexachlorobenzene



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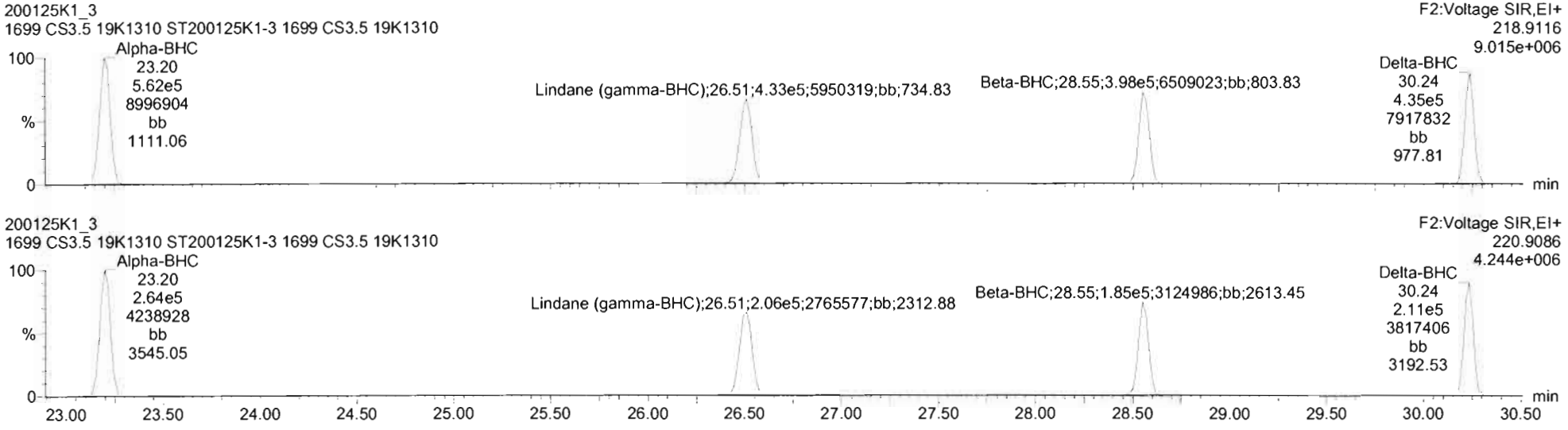
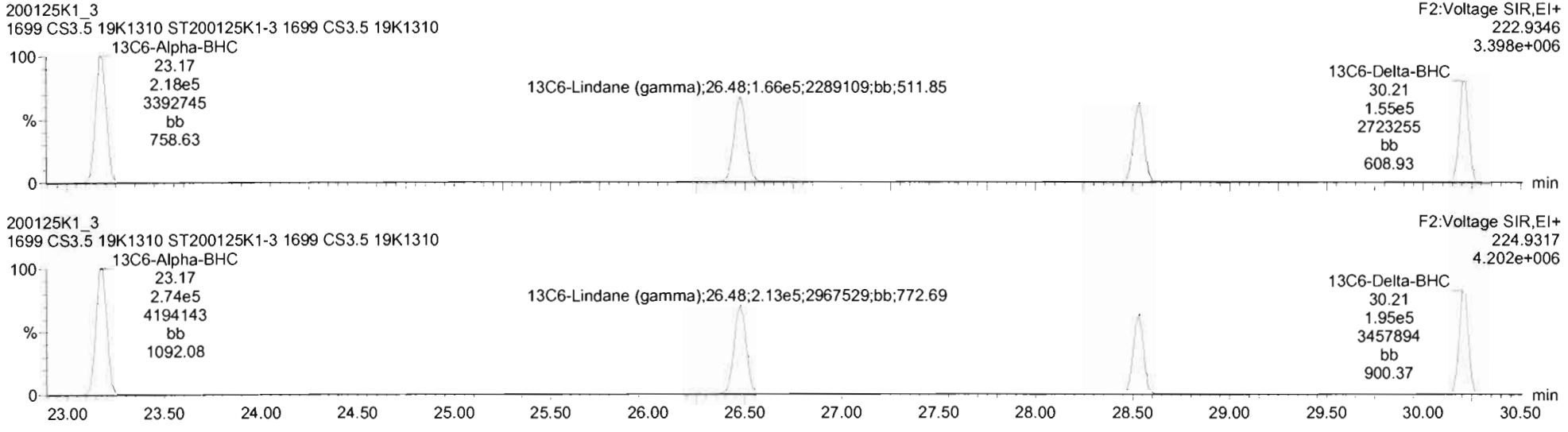
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

BHC Totals



BHC-isotopes



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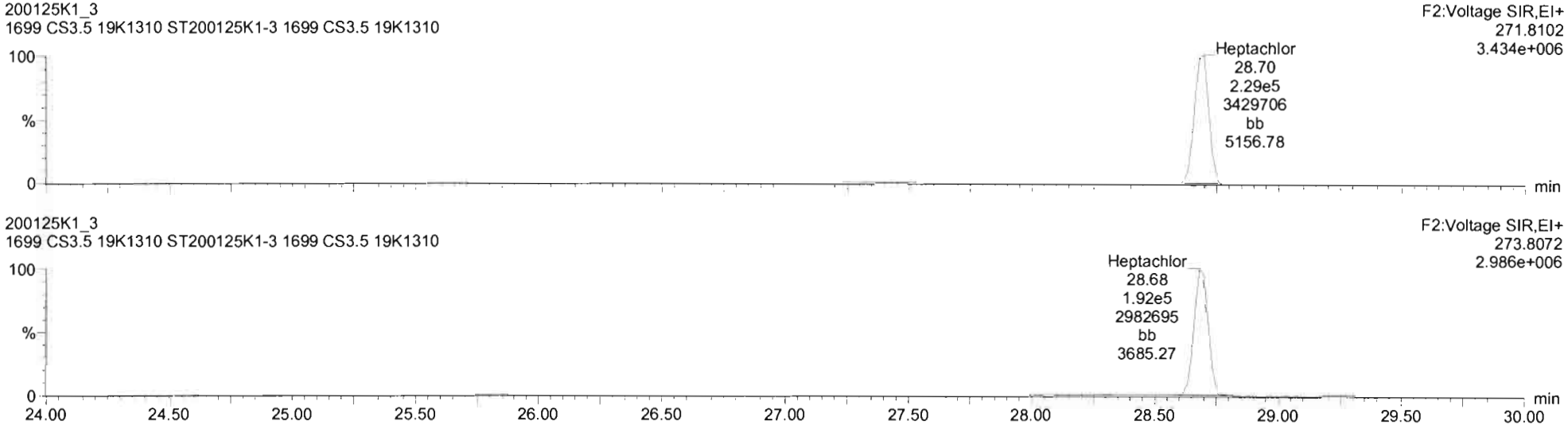
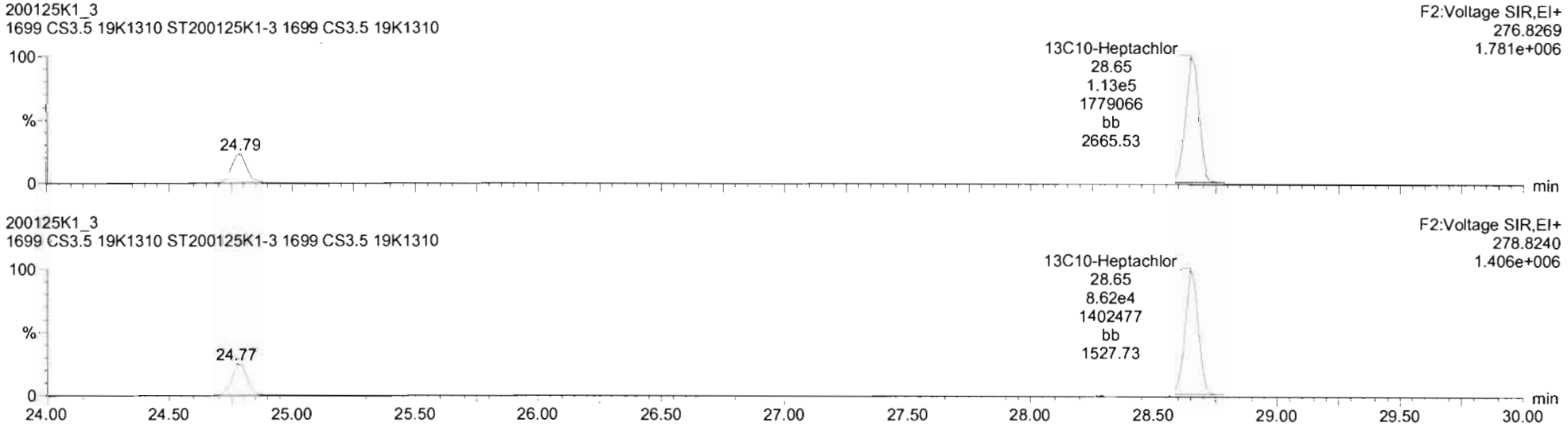
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Heptachlor



13C10-Heptachlor



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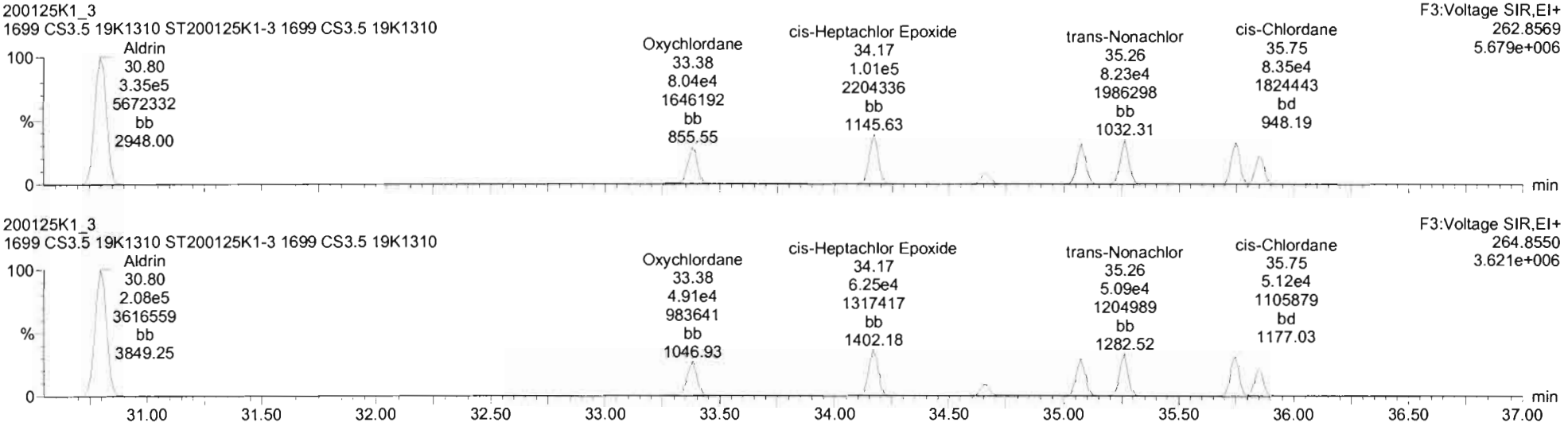
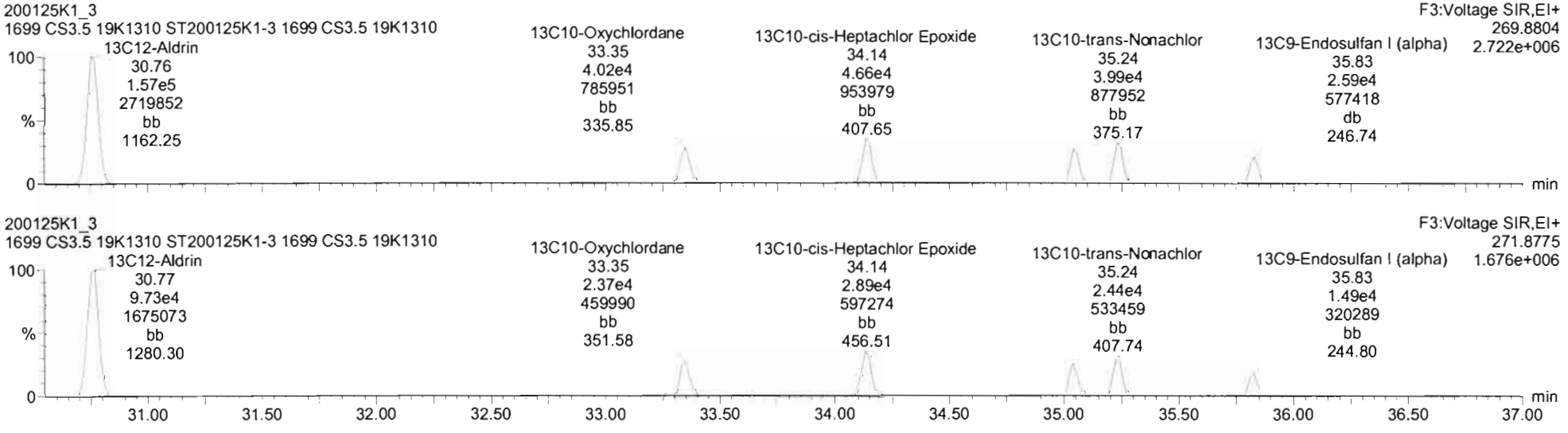
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Aldrin-EI



Aldrin-EI-isotopes



TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

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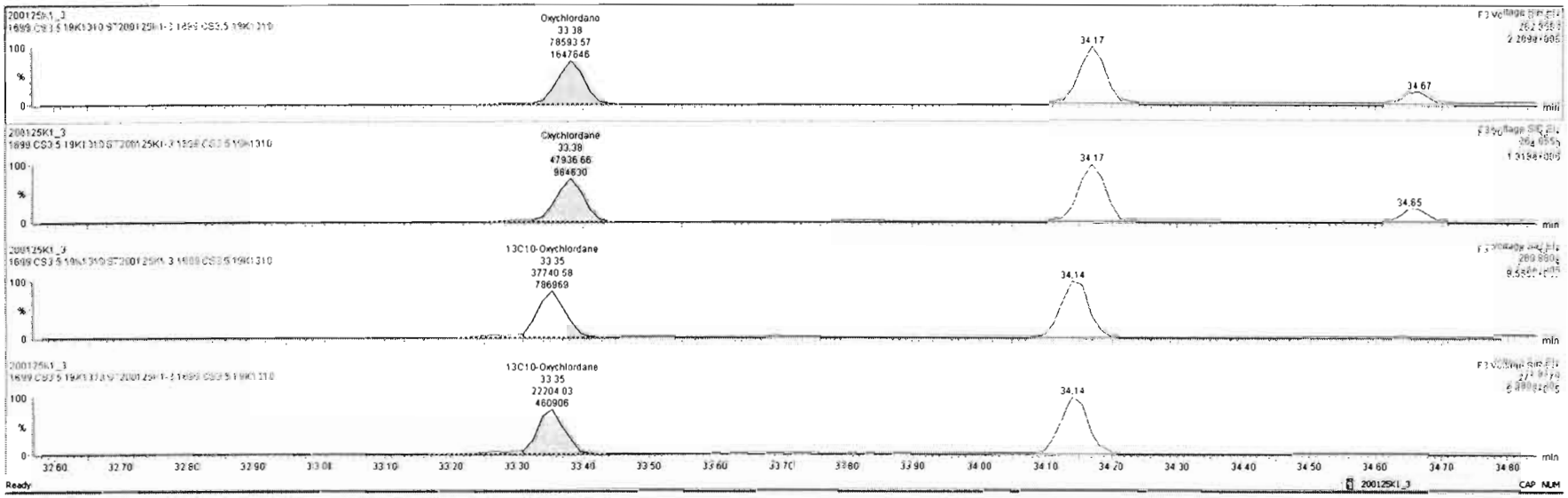
200125K1_2 - ST200125K1-2 1699 CS3.5 19K1310 - 1699 CS3.5 19K1310

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	3.09e4	2.47e6	33	0.06	YES	0.0339	1.000	9.97	9.97	1.000	1.000	NO	184	36.9	0.276	18.4
2	2	Hexachlorobenzene	2.52e6	1.29e6	34	1.25	NO	0.9989	1.000	22.67	22.66	1.001	1.001	NO	98.0	98.0	0.005..	98.0
3	3	Alpha-BHC	8.26e5	4.93e5	35	2.13	NO	0.8617	1.000	23.21	23.20	1.001	1.002	NO	97.2	97.2	0.176	97.2
4	4	Lindane (gamma-BHC)	6.40e5	3.79e5	36	2.10	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	97.1	97.1	0.255	97.1
5	5	Beta-BHC	5.84e5	2.94e5	37	2.15	NO	1.0173	1.000	28.54	28.55	1.001	1.000	NO	97.6	97.6	0.235	97.6
6	6	Delta-BHC	6.48e5	3.50e5	38	2.06	NO	0.9521	1.000	30.23	30.24	1.001	1.001	NO	97.0	97.0	0.193	97.0
7	7	Heptachlor	4.21e5	1.99e5	39	1.19	NO	1.0787	1.000	28.68	28.69	1.002	1.001	NO	97.8	97.8	0.0545	97.8
8	8	4,4'-DDMU	8.59e5	3.50e5	38	3.11	NO	1.2643	1.000	30.12	30.14	0.998	0.997	NO	97.0	97.0	0.121	97.0
9	9	Aldrin	5.43e5	2.54e5	40	1.81	NO	1.1111	1.000	30.79	30.80	1.001	1.001	NO	96.1	96.1	0.0731	96.1
10	10	Oxychlordane	1.27e5	5.99e4	41	1.64	NO	1.0960	1.000	33.37	33.38	1.001	1.001	NO	96.1	96.1	0.261	96.1
11	11	cis-Heptachlor Epoxide	1.64e5	7.55e4	42	1.62	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	96.0	96.0	0.205	96.0
12	12	trans-Heptachlor Epoxide	3.85e4	7.55e4	42	1.59	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	98.1	98.1	0.889	98.1
13	13	trans-Chlordane (gamm.	1.26e5	5.32e4	43	1.63	NO	1.1780	1.000	35.07	35.08	1.001	1.001	NO	100	100	0.260	100
14	14	trans-Nonachlor	1.33e5	6.43e4	44	1.62	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	96.3	96.3	0.235	96.3
15	15	cis-Chlordane	1.35e5	6.43e4	44	1.63	NO	1.1080	1.000	35.74	35.75	1.015	1.014	NO	94.8	94.8	0.228	94.6
16	16	Endosulfan I (alpha)	9.26e4	4.00e4	45	1.62	NO	1.1552	1.000	35.86	35.85	1.000	1.001	NO	98.1	98.1	0.341	98.1
17	17	4,4'-DDMU	1.93e6	1.48e6	46	3.16	NO	0.6758	1.000	35.51	35.50	0.994	0.994	NO	97.0	97.0	0.0443	97.0
18	18	2,4'-DDE	2.84e6	1.48e6	46	1.41	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	97.7	97.7	0.147	97.7



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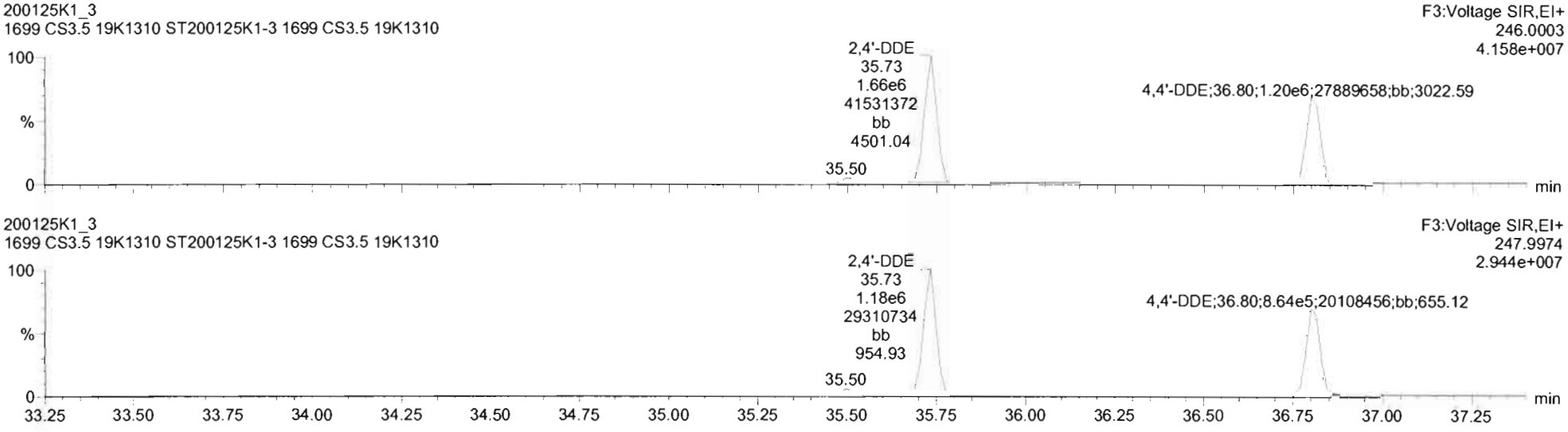
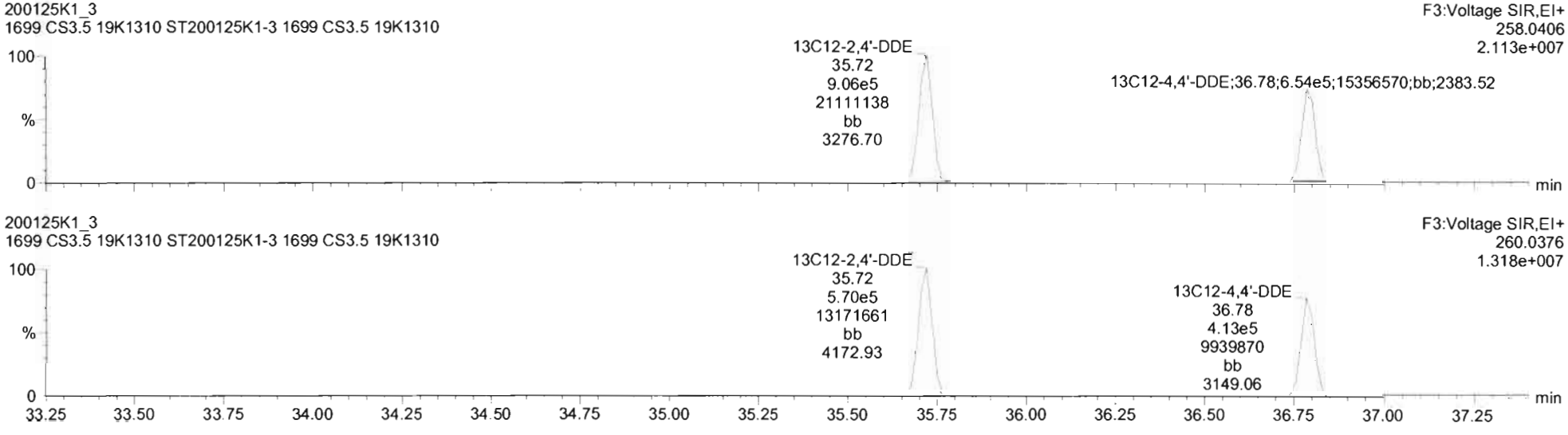
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

DDMU-DDE



DDE-isotopes



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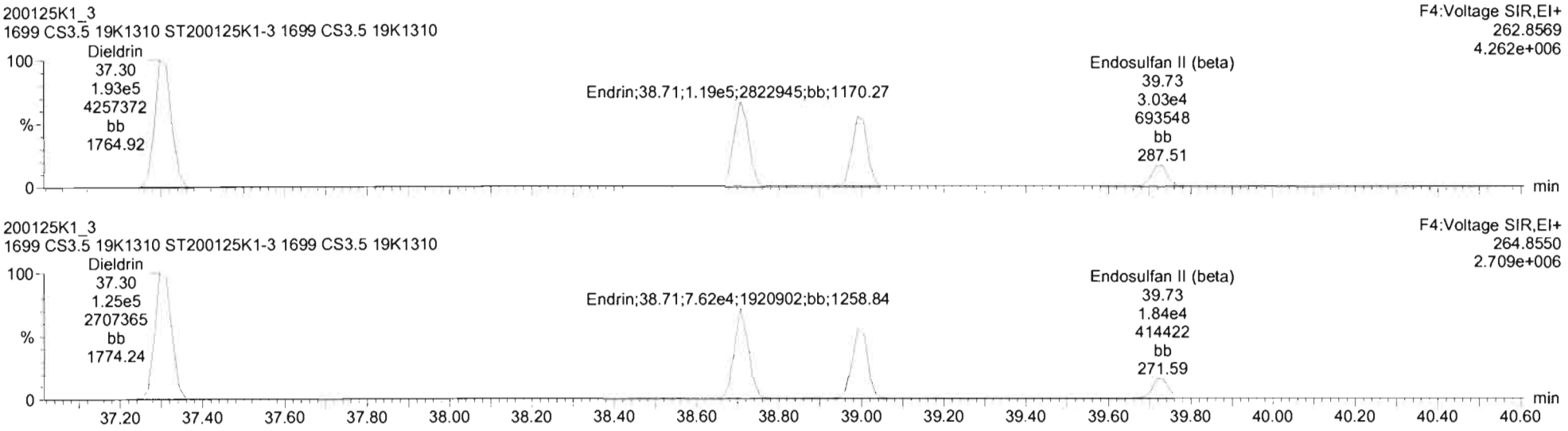
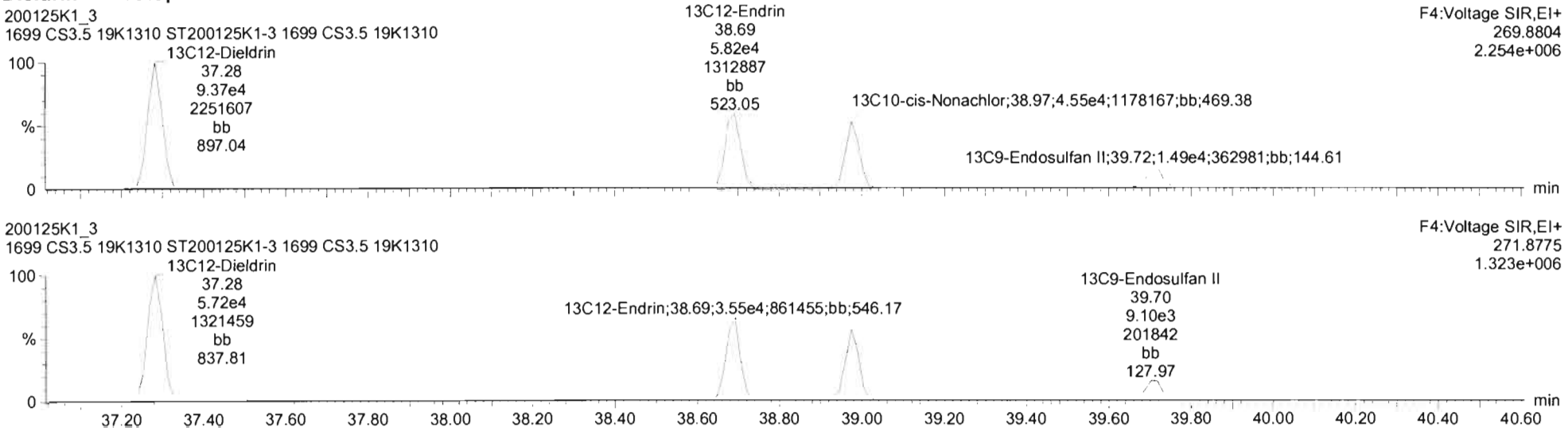
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Dieldrin-EII



Dieldrin-EII-isotopes



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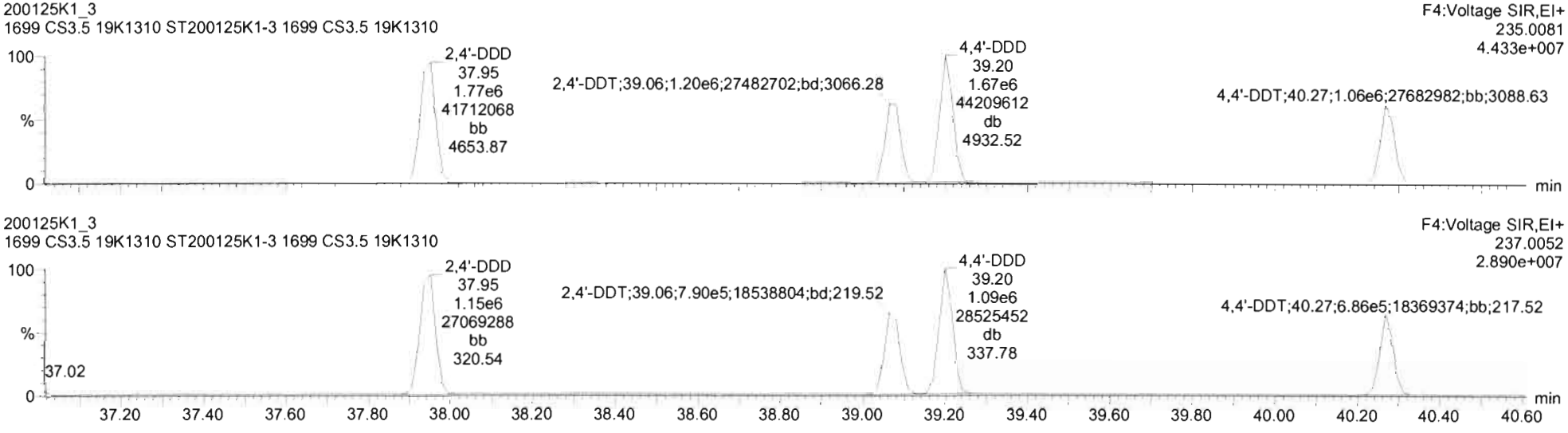
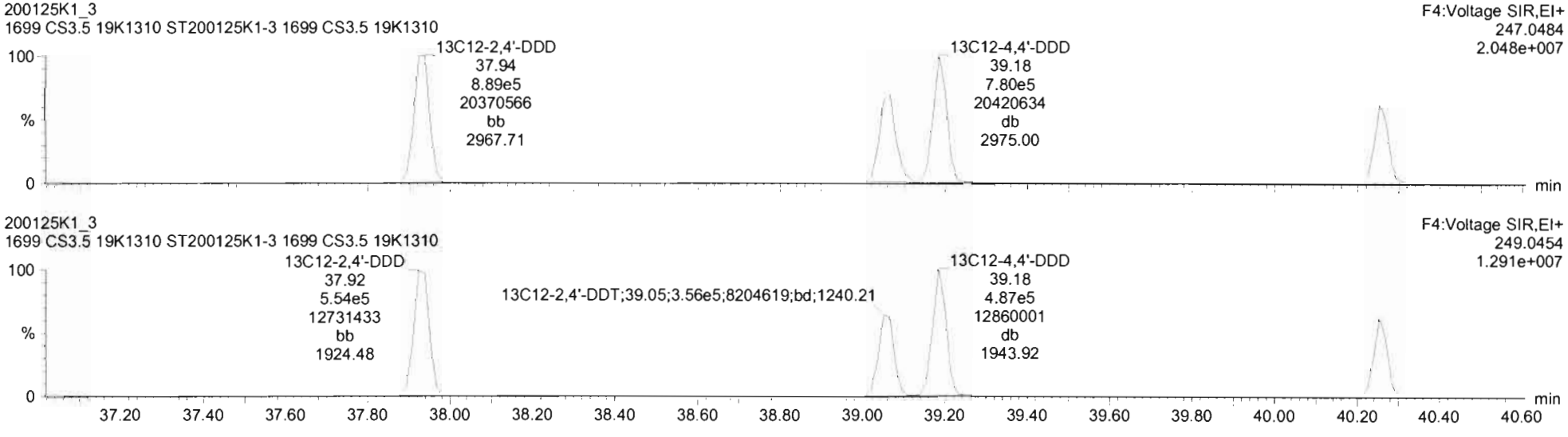
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

DDD-DDT



DDD-DDT-isotopes



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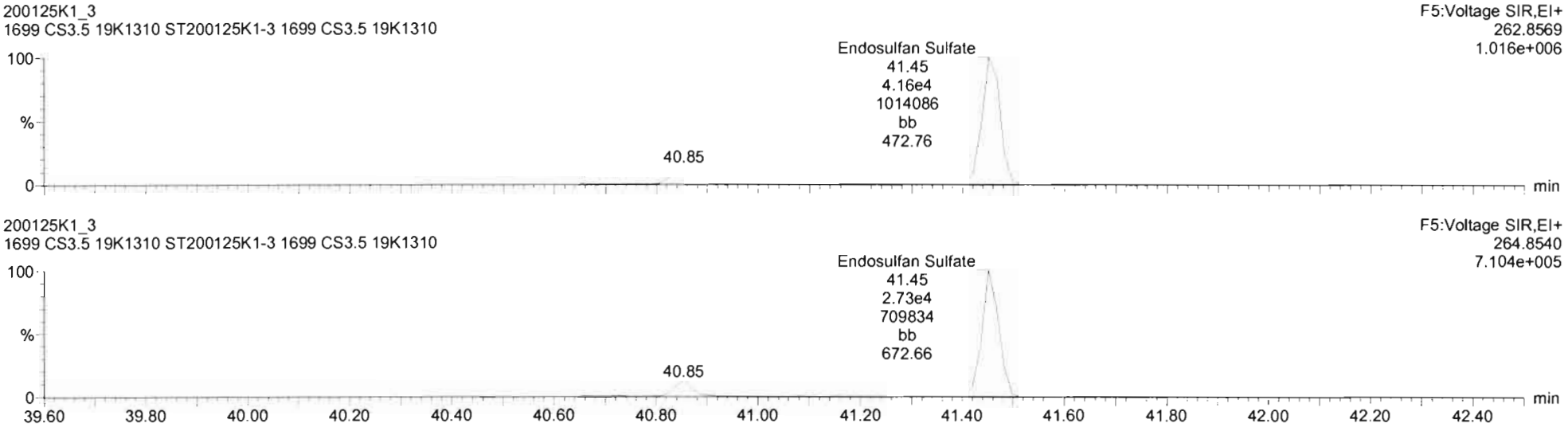
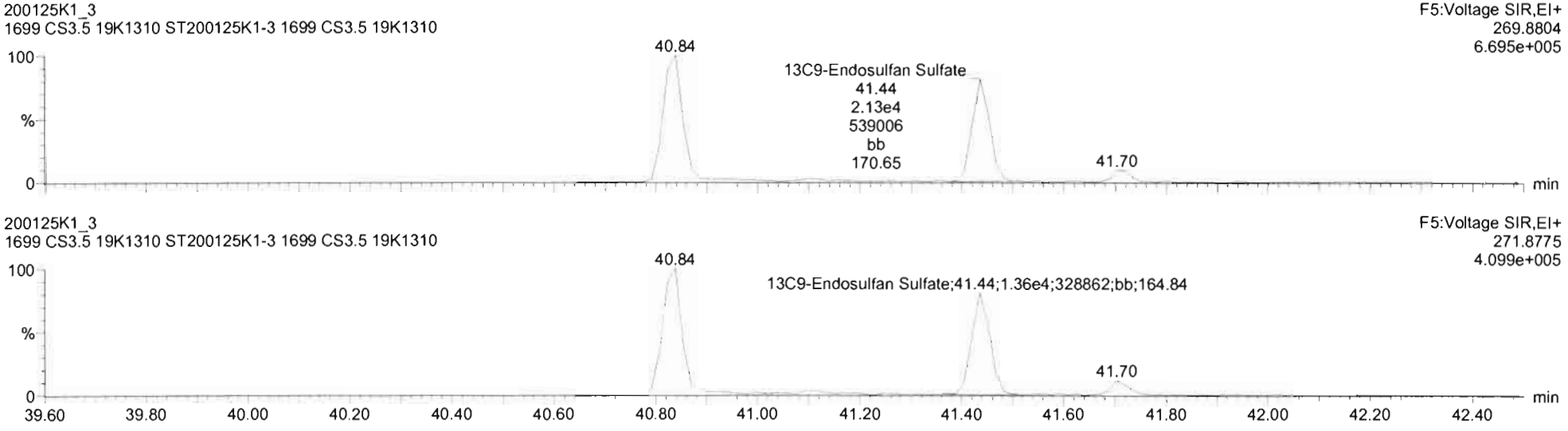
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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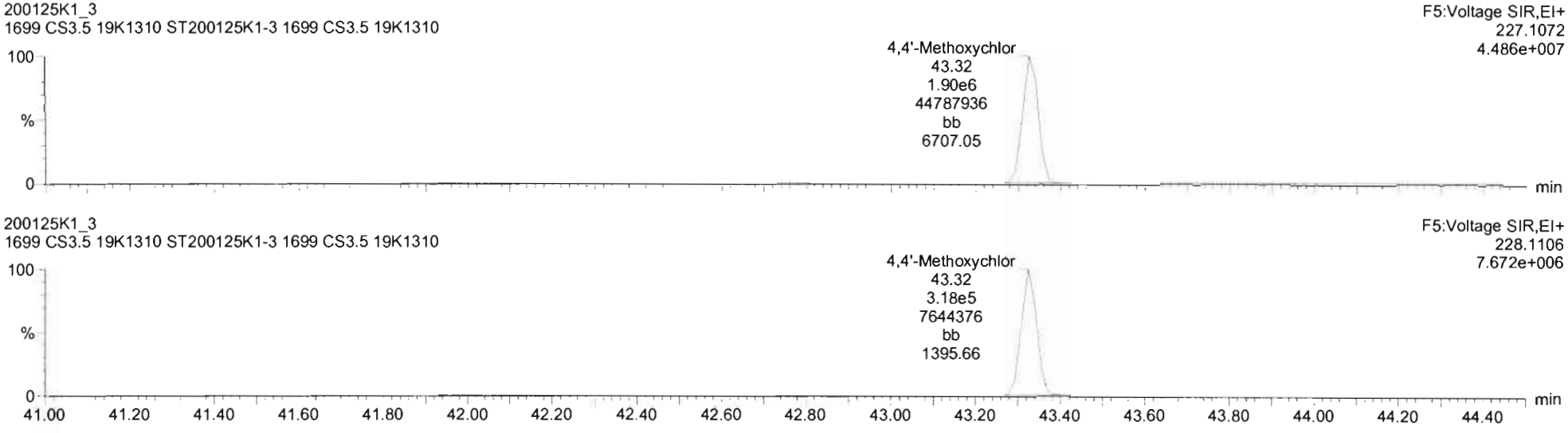
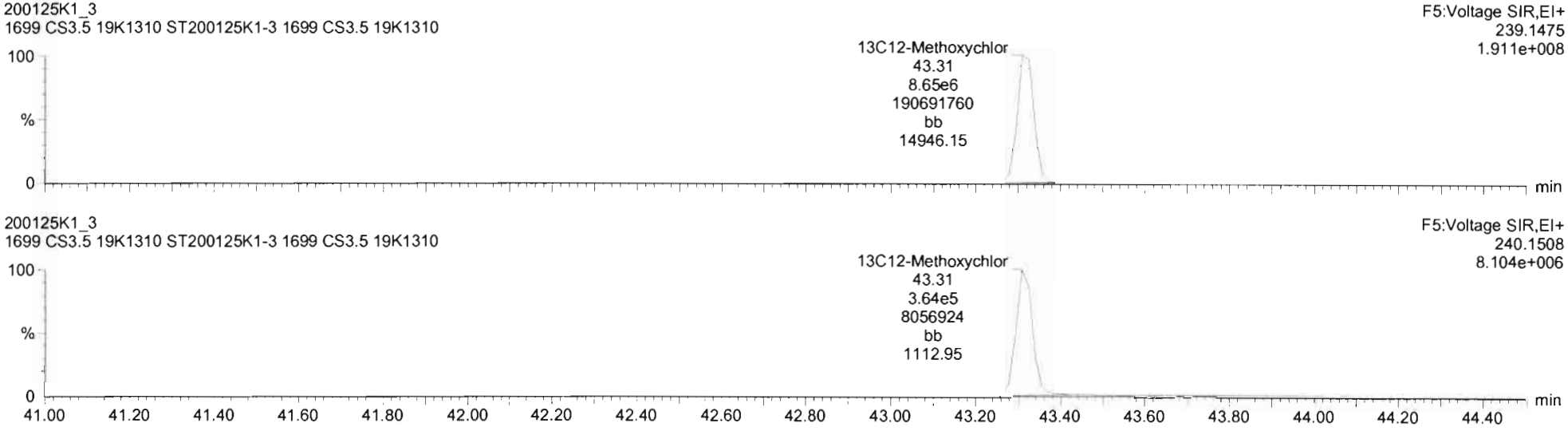
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

4,4'-Methoxychlor



13C12-Methoxychlor



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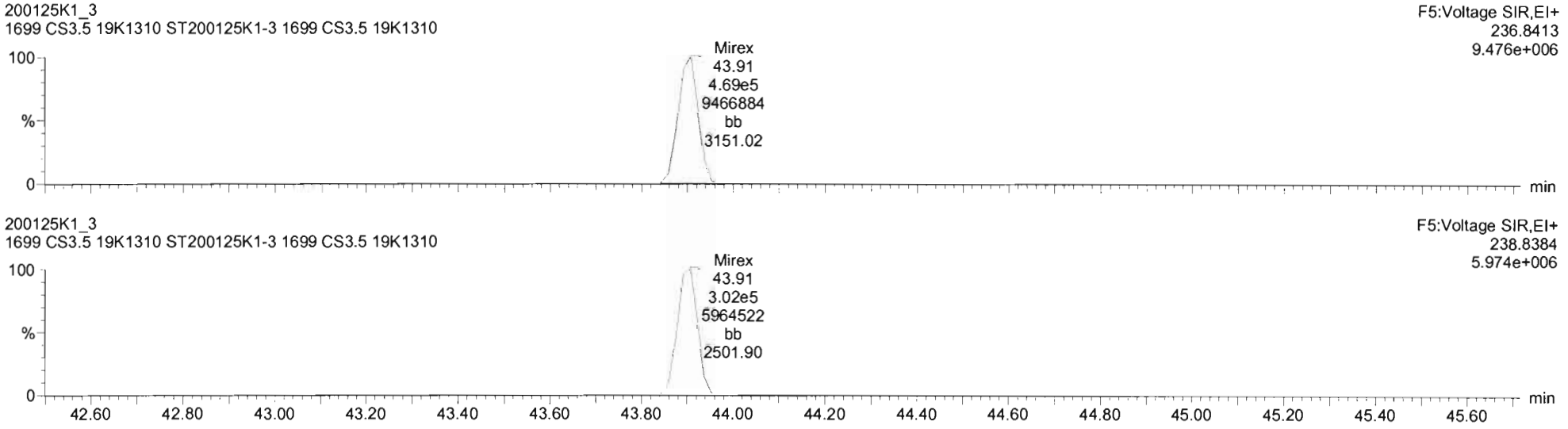
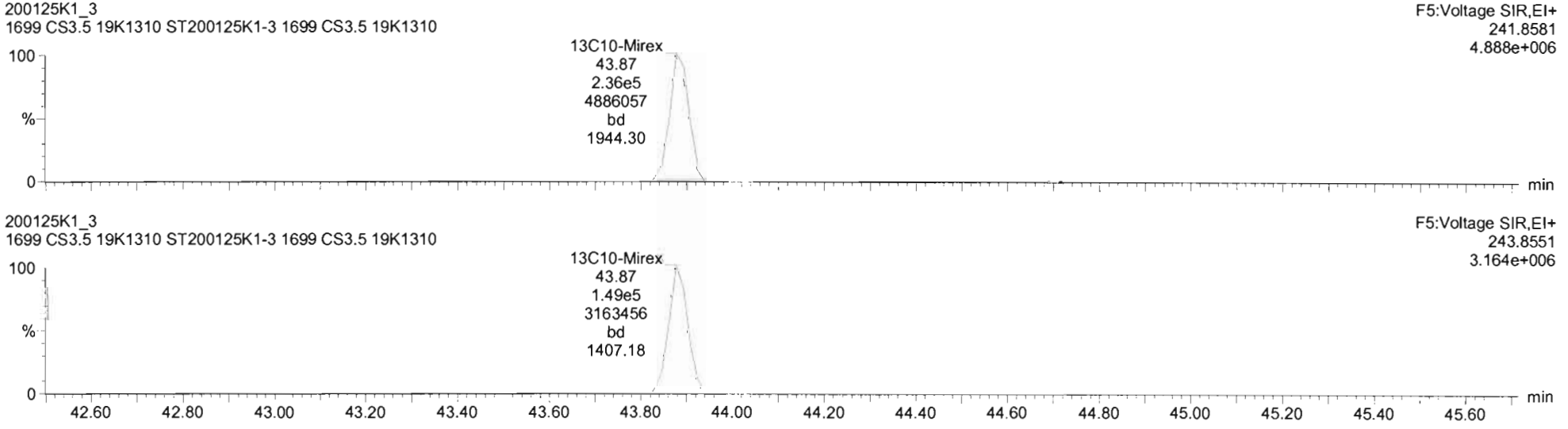
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

Mirex



13C10-Mirex



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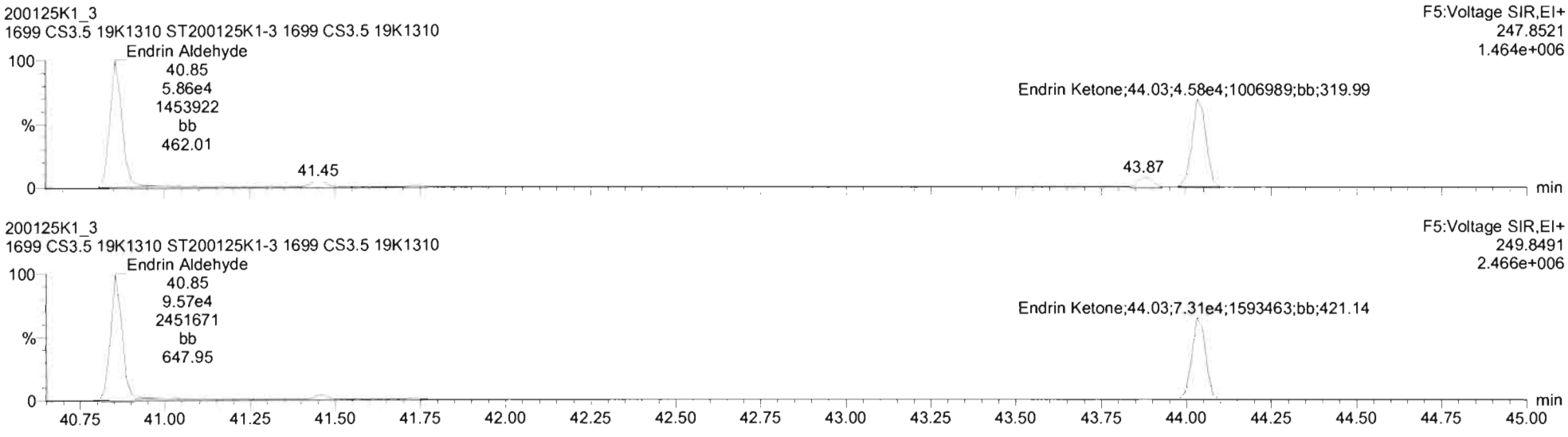
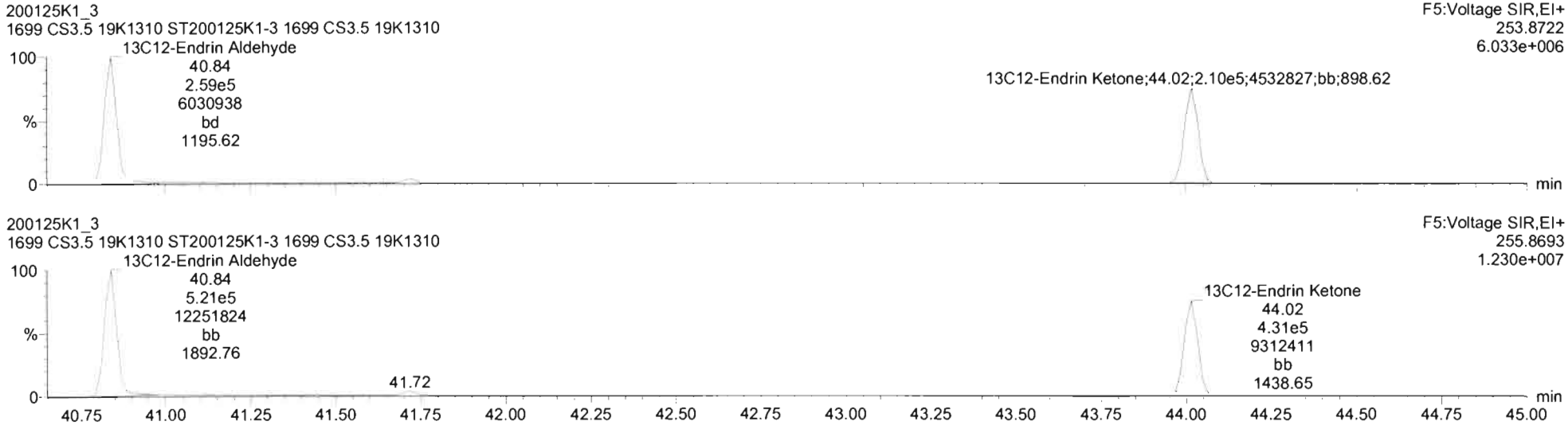
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

EA-EK



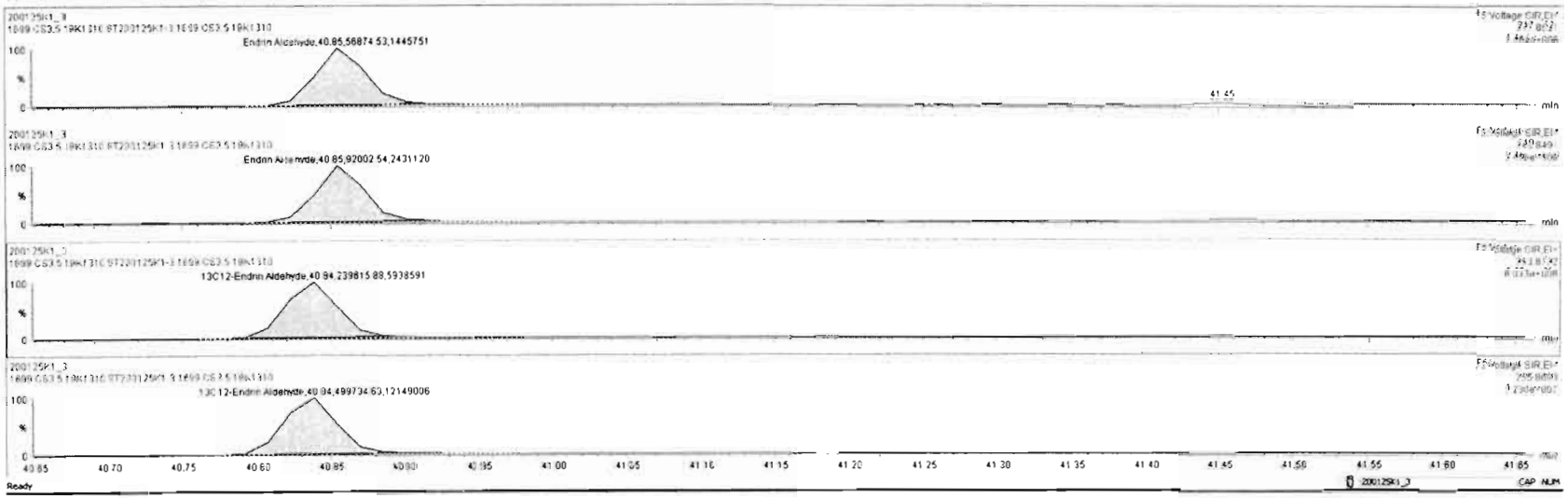
EA-EK-isotopes



TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

	#	Name	Resp	IS Resp	ISR	RA	rW	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	3.18e5	1.51e5	48	1.55	NO	1.0934	1.000	37.30	37.30	1.000	1.000	NO	98.4	98.4	0.124	98.4
21	21	Endrin	1.95e5	9.37e4	49	1.58	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	98.5	98.5	0.220	98.5
22	22	cis-Nonachlor	1.64e5	7.43e4	50	1.55	NO	1.0772	1.000	38.99	38.99	1.000	1.000	NO	103	103	0.238	103
23	23	Endosulfan II (beta)	4.07e4	2.40e4	51	1.65	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	91.5	91.5	0.758	91.5
24	24	2,4'-DDD	2.93e6	1.44e6	52	1.54	NO	1.0402	1.000	37.94	37.95	1.000	1.000	NO	96.8	96.8	0.337	96.8
25	25	2,4'-DDT	1.99e6	1.01e6	53	1.52	NO	1.0249	1.000	39.08	39.06	1.000	1.000	NO	96.5	96.5	0.523	96.5
26	26	4,4'-DDD	2.76e6	1.27e6	54	1.54	NO	1.1726	1.000	39.20	39.20	1.000	1.000	NO	97.1	97.1	0.314	97.1
27	27	4,4'-DDT	1.75e6	7.94e5	55	1.54	NO	1.1336	1.000	40.27	40.27	1.000	1.000	NO	97.0	97.0	0.498	97.0
28	28	Endosulfan Sulfate	6.89e4	3.49e4	56	1.52	NO	0.9871	1.000	41.44	41.45	1.000	1.000	NO	99.9	99.9	0.459	99.9
29	29	4,4'-Methoxychlor	2.22e6	8.01e6	57	5.98	NO	1.2668	1.000	43.32	43.32	1.000	1.000	NO	97.2	97.2	0.0604	97.2
30	30	Mirex	7.71e5	3.85e5	58	1.55	NO	1.0435	1.000	43.90	43.91	1.001	1.000	NO	95.9	95.9	0.0809	95.9
31	31	Endrin Aldehyde	1.49e5	7.39e5	59	0.62	NO	1.0663	1.000	40.86	40.85	1.000	1.000	NO	94.4	94.4	0.443	94.4
32	32	Endrin Ketone	1.19e5	6.41e5	60	0.63	NO	0.9741	1.000	44.02	44.03	1.000	1.000	NO	95.2	95.2	0.643	95.2
33	33	13C4-Hexachlorobutadi	2.47e6	1.91e6	62	1.28	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	509	102	0.0365	
34	34	13C6-Hexachlorobenz...	1.29e6	1.91e6	62	1.28	NO	0.6741	1.000	22.66	22.65	0.872	0.872	NO	50.1	100	0.007	
35	35	13C6-Alpha-BHC	4.83e5	1.91e6	62	0.80	NO	0.2548	1.000	23.19	23.17	0.892	0.892	NO	50.6	101	0.157	
36	36	13C6-Lindane (gamma)	3.79e5	1.91e6	62	0.78	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	49.4	98.8	0.199	
37	37	13C6-Beta-BHC	2.94e5	1.91e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	49.7	99.4	0.258	



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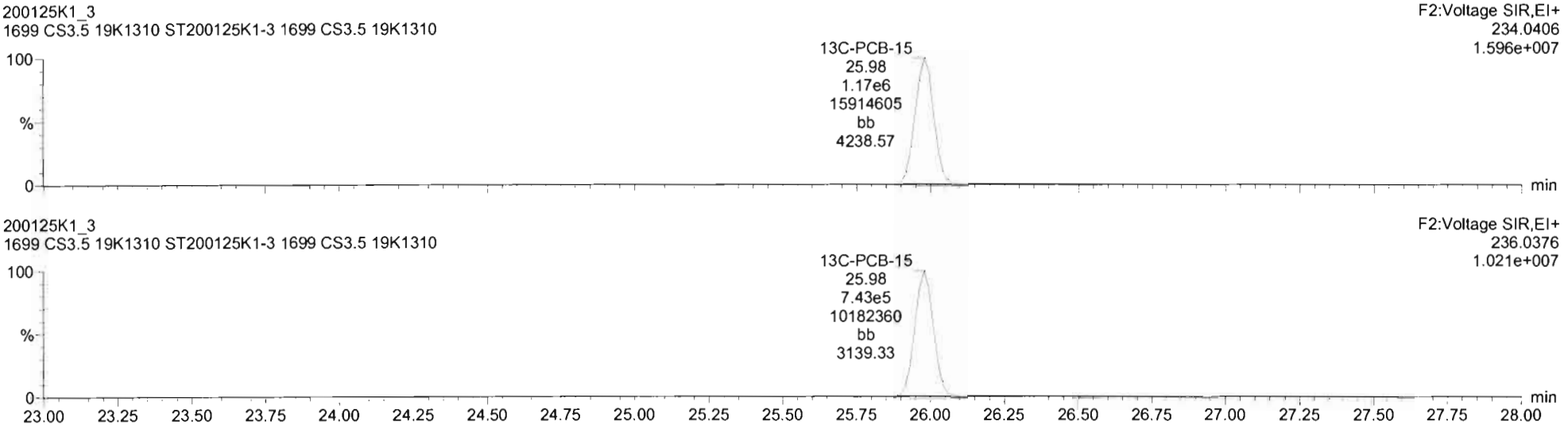
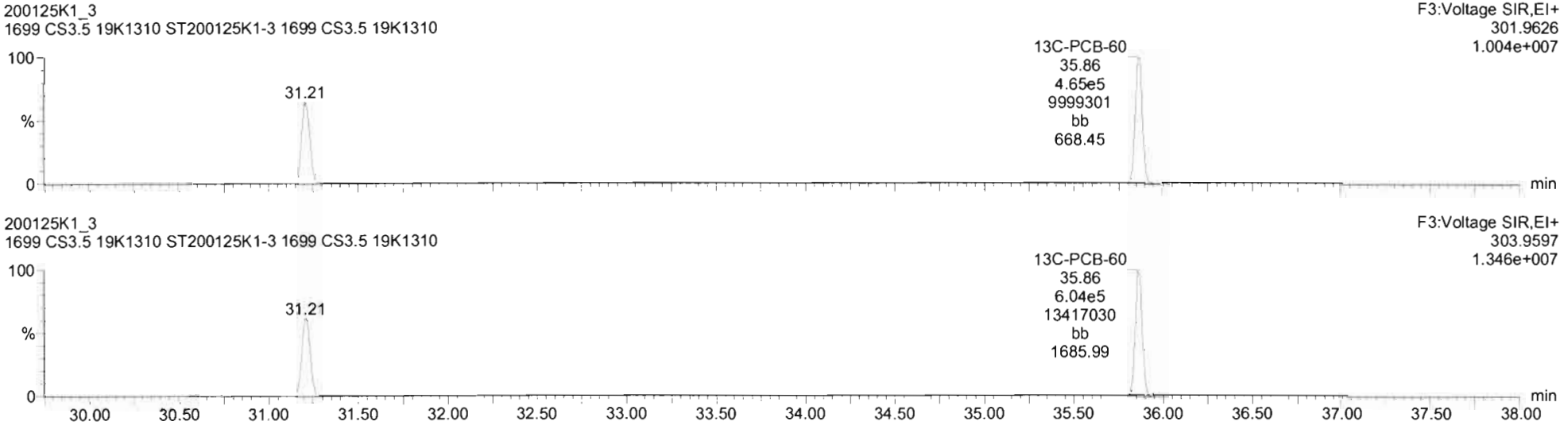
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

13C-PCB-15



13C-PCB-60



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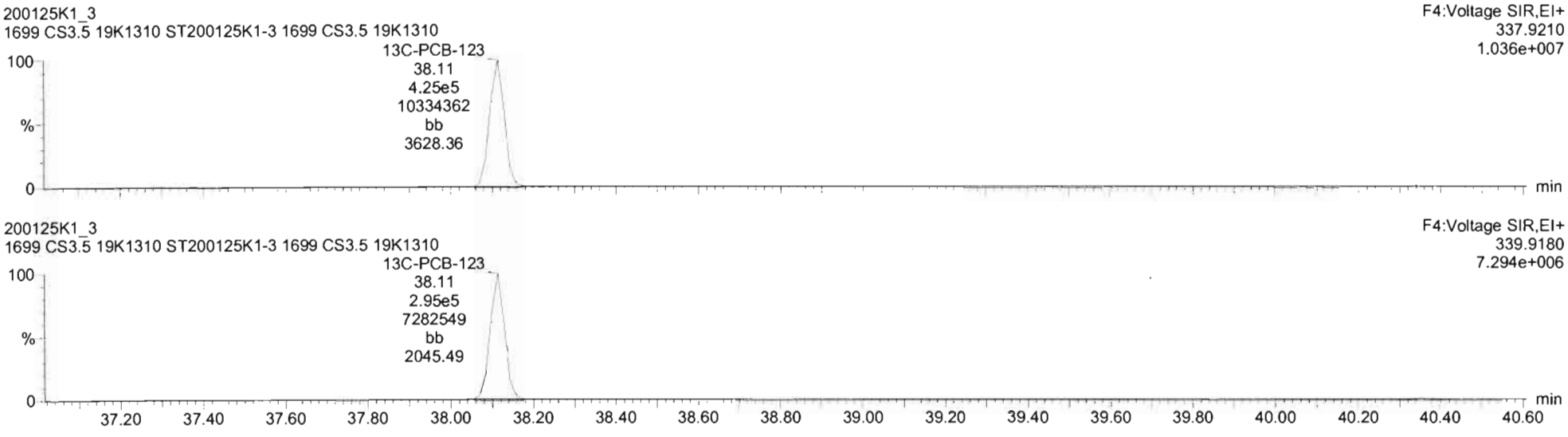
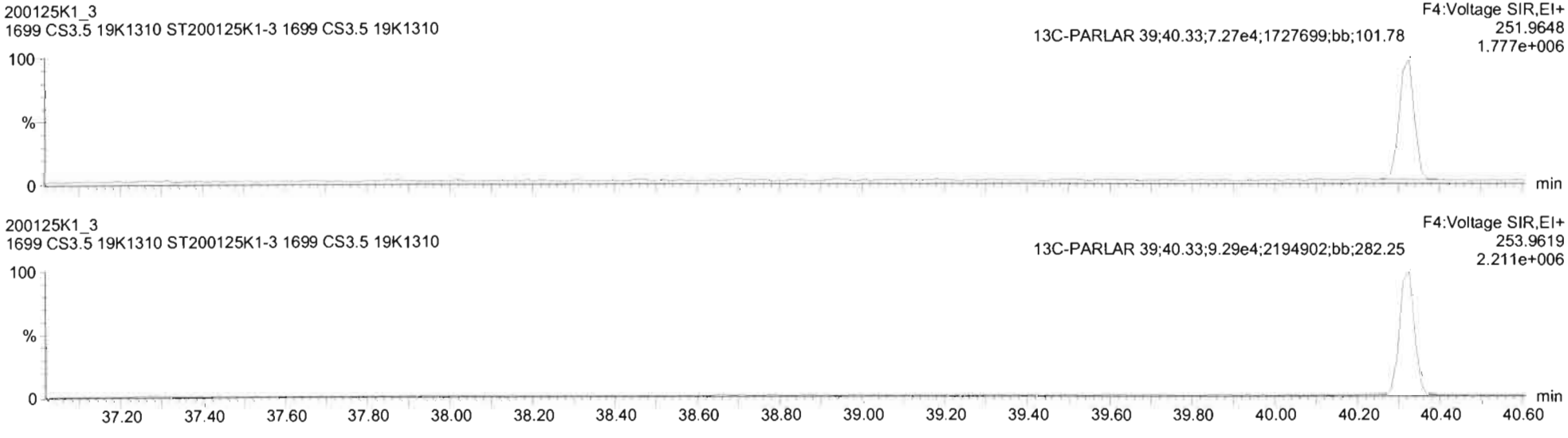
13C-PCB-123



13C-PARLAR 39



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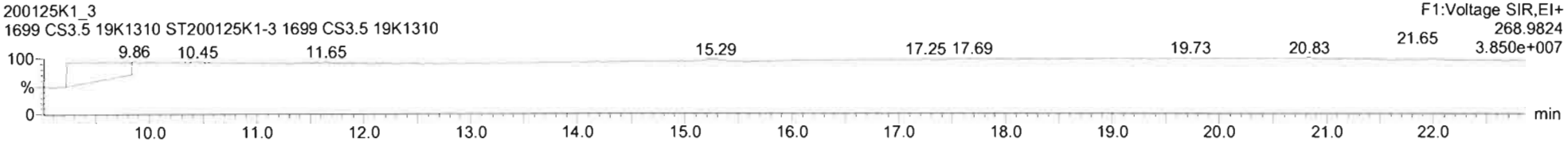
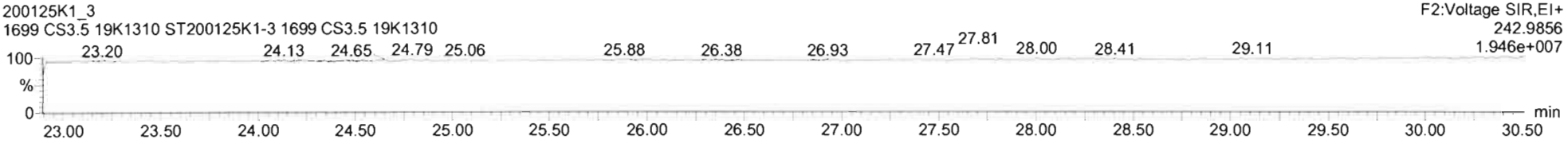
Name: 200125K1_3, Date: 25-Jan-2020, Time: 14:45:00, ID: ST200125K1-3 1699 CS3.5 19K1310, Description: 1699 CS3.5 19K1310

PFK1



PFK2



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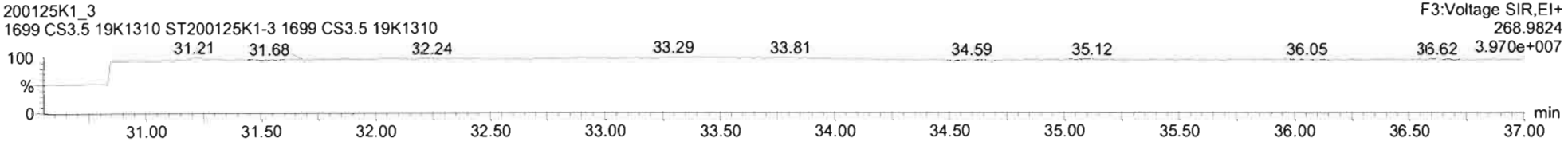
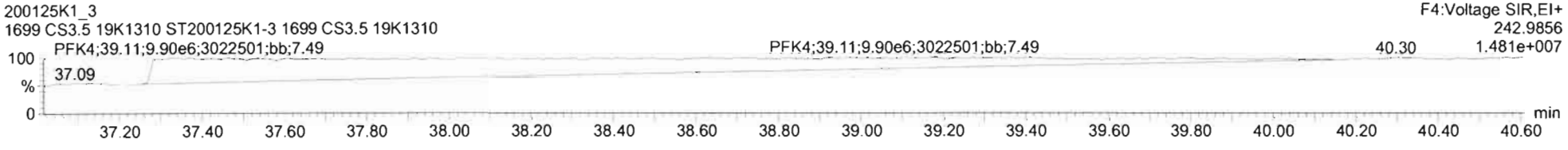
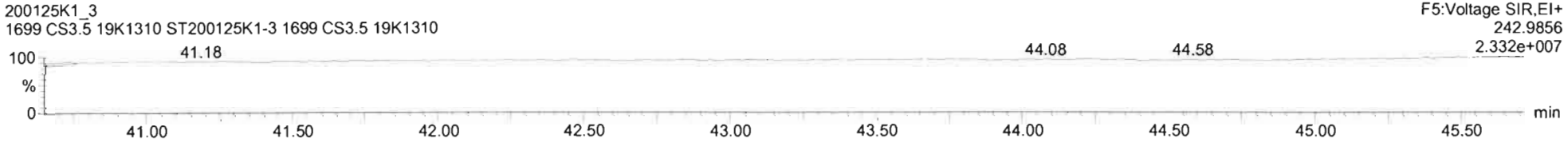


PFK4



PFK5



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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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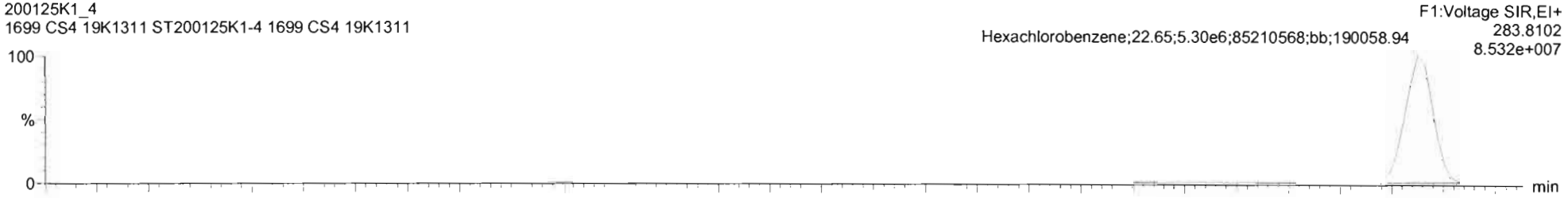
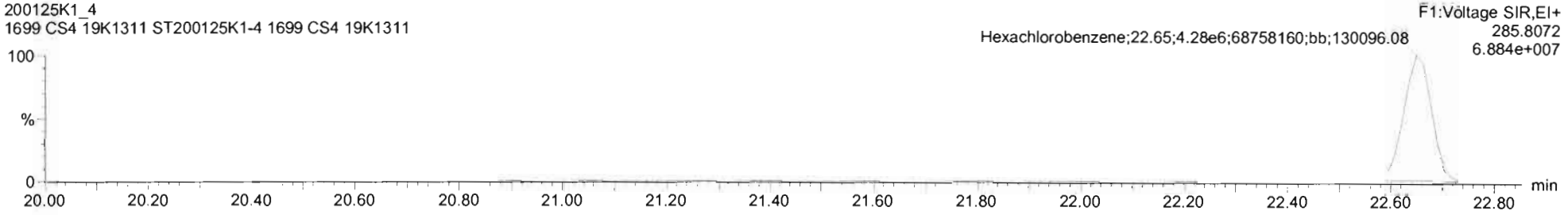
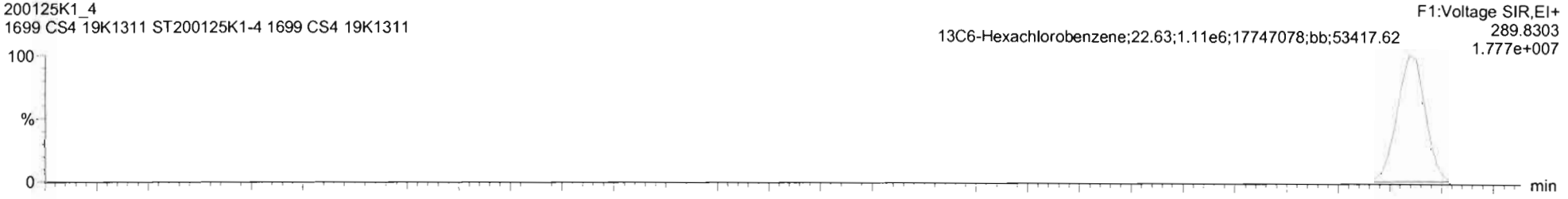
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

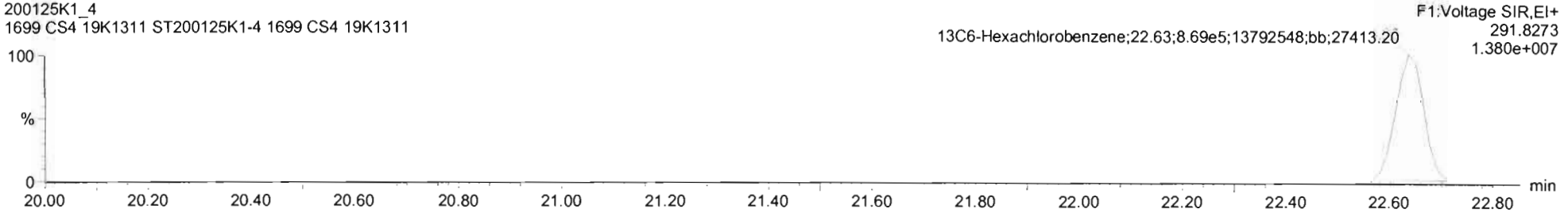
Hexachlorobenzene





13C6-Hexachlorobenzene





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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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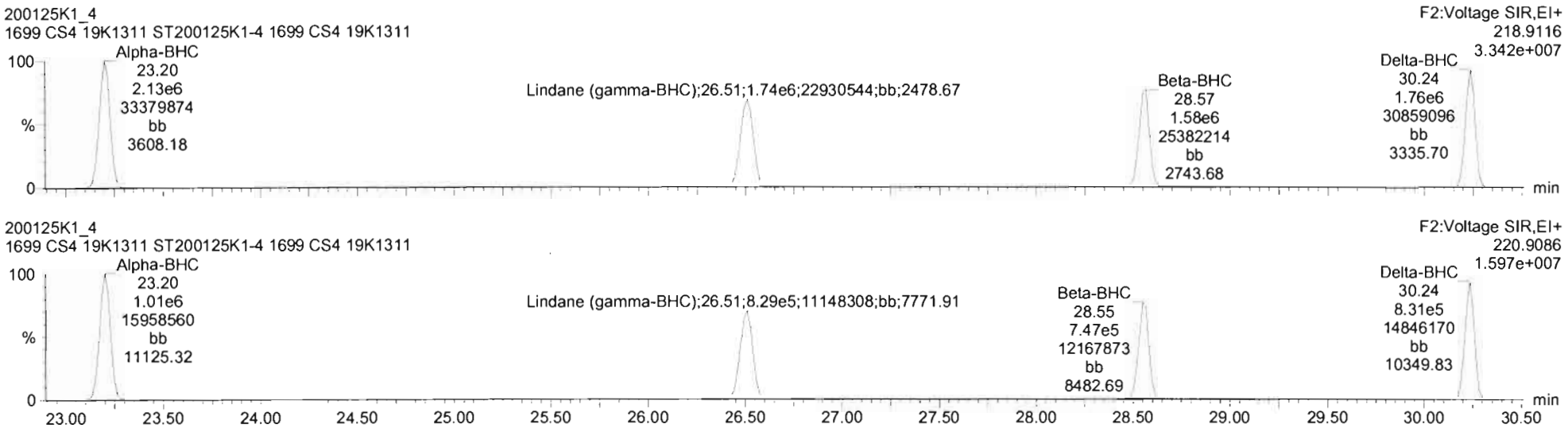
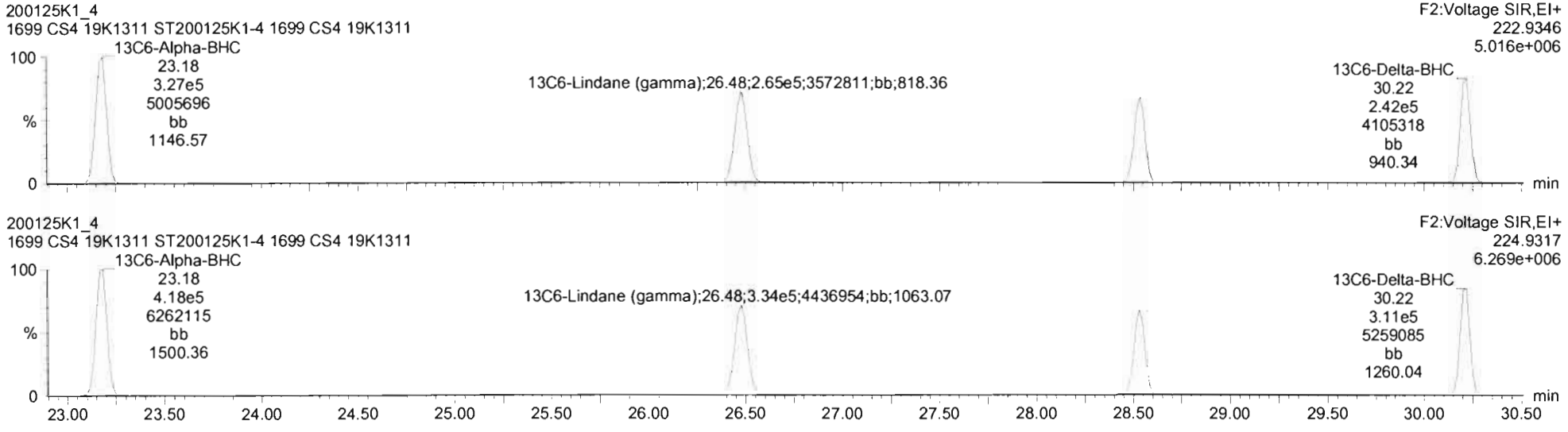
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

BHC Totals



BHC-isotopes



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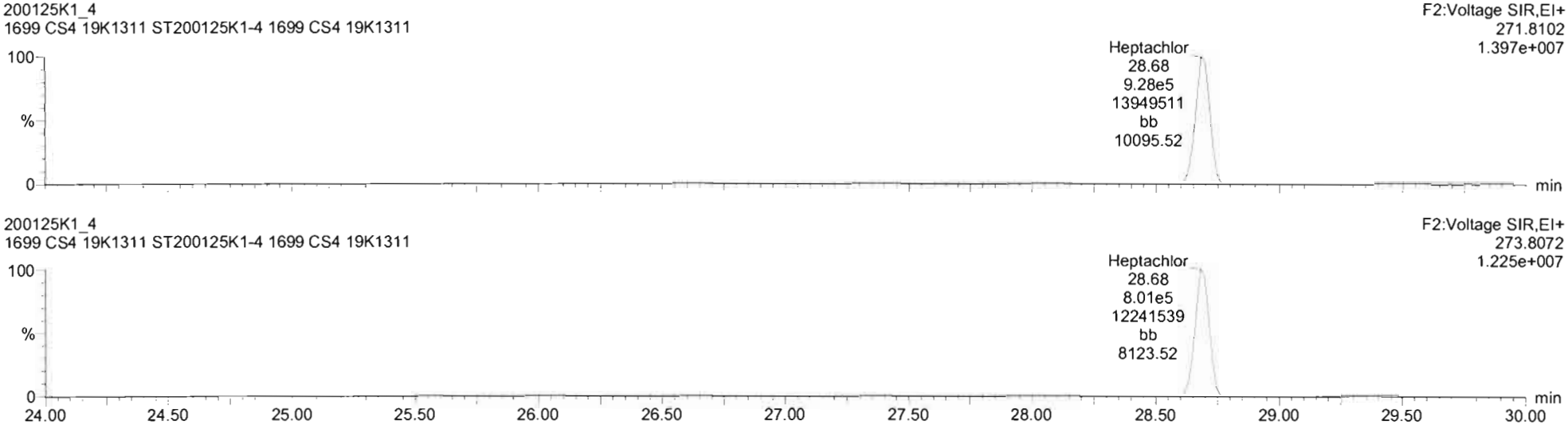
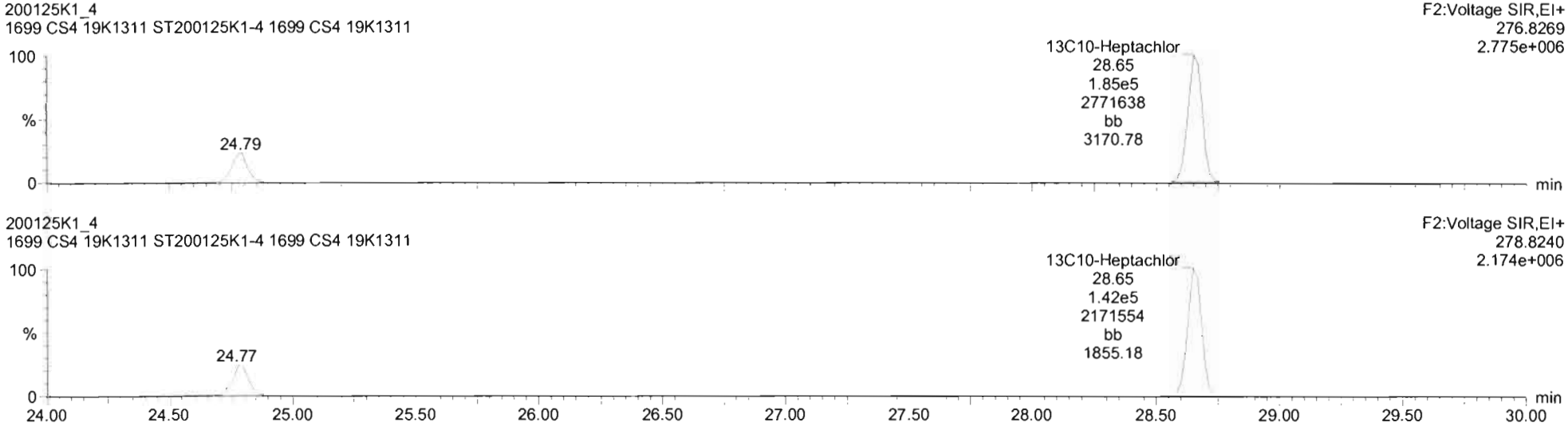
Heptachlor



13C10-Heptachlor



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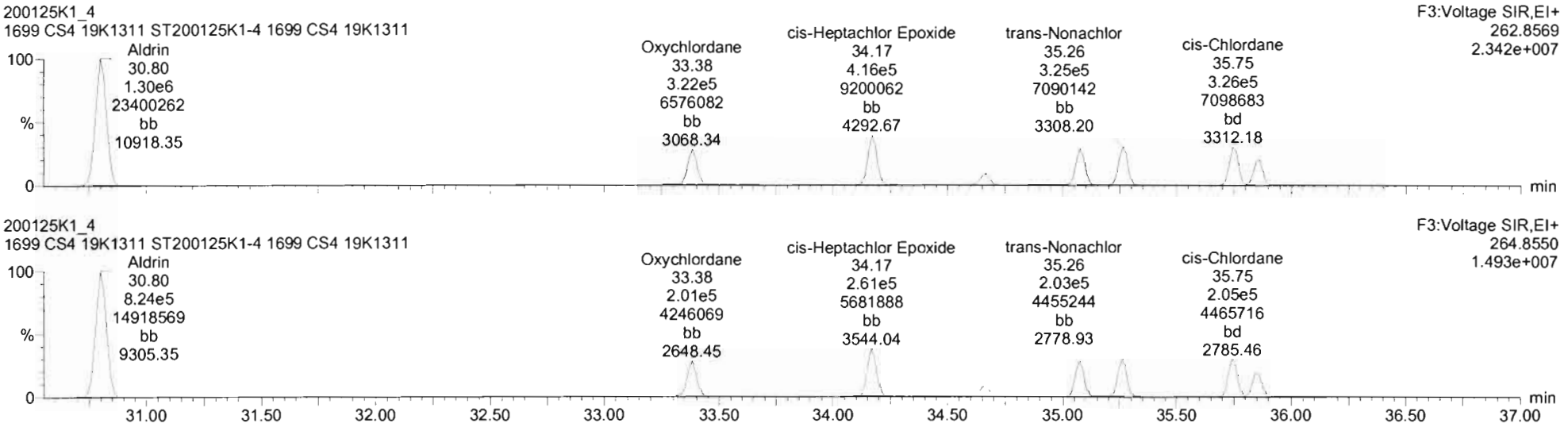
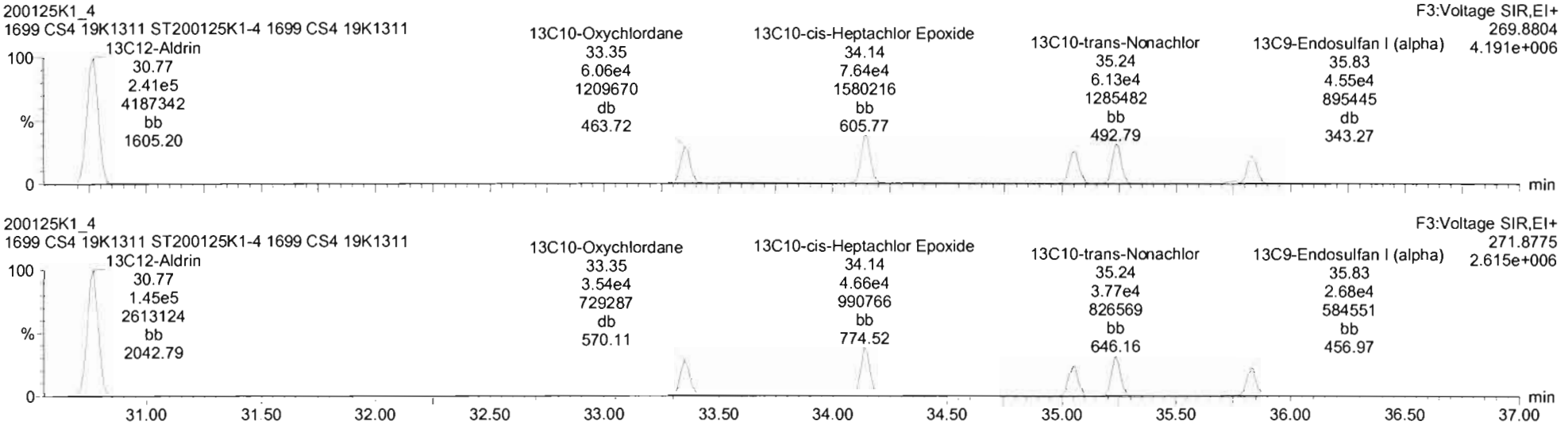
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

Aldrin-EI



Aldrin-EI-isotopes



TargetLynx - 200125K1 CRV.qld * - [Chromatogram]

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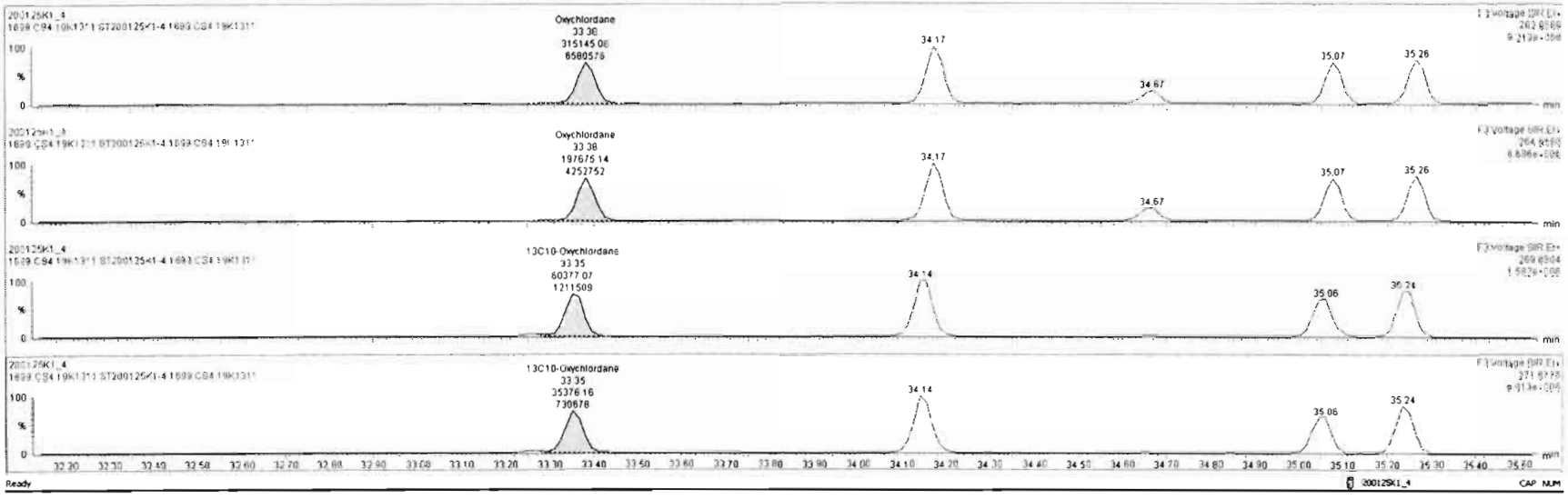
200125K1_4 - ST200125K1-4 1699 CS4 19K1311 - 1699 CS4 19K1311

	#	Name	Resp	IS Resp	ISt	RA	nAv	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	4.76e4	3.52e6	33	0.06	YES	0.0339	1.000	9.98	9.98	1.000	1.000	NO	199	15.9	0.201	18.7
2	2	Hexachlorobenzene	9.58e6	1.98e6	34	1.24	NO	0.9969	1.000	22.66	22.65	1.001	1.001	NO	242	97.0	0.003	242
3	3	Alpha-BHC	3.14e6	7.48e5	35	2.11	NO	0.8617	1.000	23.23	23.20	1.001	1.002	NO	244	97.8	0.136	244
4	4	Lindane (gamma-BHC)	2.57e6	5.98e5	36	2.09	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	247	98.6	0.190	247
5	5	Beta-BHC	2.33e6	4.74e5	37	2.11	NO	1.0173	1.000	28.54	28.57	1.001	1.000	NO	241	96.5	0.171	241
6	6	Delta-BHC	2.59e6	5.54e5	38	2.11	NO	0.9521	1.000	30.24	30.24	1.001	1.001	NO	245	98.1	0.150	245
7	7	Heptachlor	1.73e6	3.27e5	39	1.16	NO	1.0787	1.000	28.68	28.68	1.001	1.001	NO	245	98.0	0.0684	245
8	8	4,4'-DDMU	3.40e6	5.54e5	38	3.13	NO	1.2643	1.000	30.14	30.16	0.998	0.997	NO	243	97.1	0.0827	243
9	9	Aldrin	2.13e6	3.87e5	40	1.59	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	247	98.9	0.0628	247
10	10	Oxychlordane	5.13e5	9.58e4	41	1.59	NO	1.0944	1.000	33.37	33.38	1.001	1.001	NO	245	97.9	0.223	245
11	11	cis-Heptachlor Epoxide	6.78e5	1.23e5	42	1.60	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	243	97.4	0.163	243
12	12	trans-Heptachlor Epoxide	1.53e5	1.23e5	42	1.60	NO	0.2603	1.000	34.66	34.67	1.015	1.015	NO	239	95.6	0.707	239
13	13	trans-Chlordane (gamm...	4.91e5	8.60e4	43	1.57	NO	1.1780	1.000	35.08	35.08	1.000	1.001	NO	243	97.0	0.238	243
14	14	trans-Nonachlor	5.28e5	9.90e4	44	1.60	NO	1.0766	1.000	35.26	35.26	1.001	1.001	NO	248	99.1	0.210	248
15	15	cis-Chlordane	5.31e5	9.90e4	44	1.59	NO	1.1080	1.000	35.74	35.75	1.015	1.014	NO	242	96.8	0.204	242
16	16	Endosulfan I (alpha)	3.87e5	7.23e4	45	1.59	NO	1.1552	1.000	35.85	35.86	1.001	1.001	NO	220	87.9	0.285	220
17	17	4,4'-DDMU	7.51e6	2.29e6	46	3.08	NO	0.6758	1.000	35.51	35.51	0.994	0.994	NO	242	96.9	0.0264	242
18	18	2,4'-DDE	1.09e7	2.29e6	46	1.40	NO	0.9541	1.000	35.73	35.73	1.000	1.000	NO	242	96.7	0.0969	242



Ready

200125K1_4

CAP NUM

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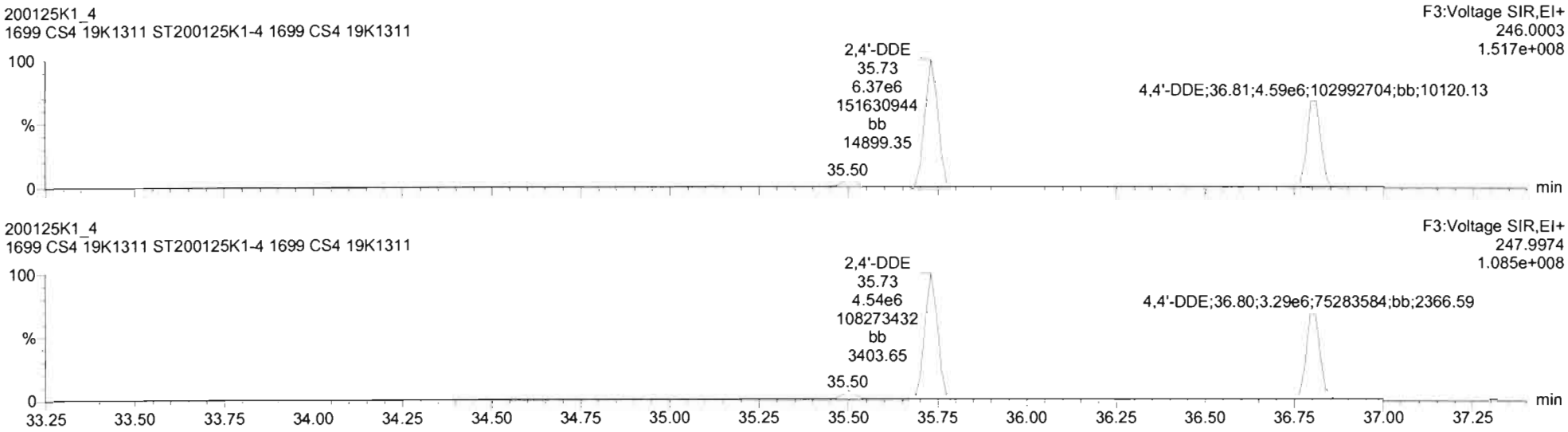
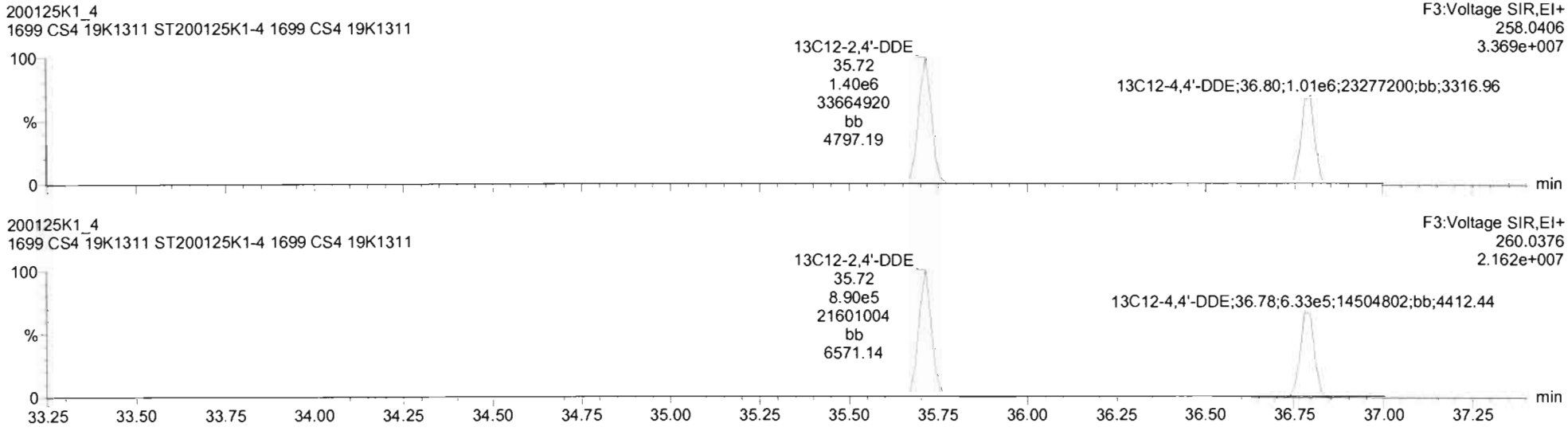
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

DDMU-DDE



DDE-isotopes



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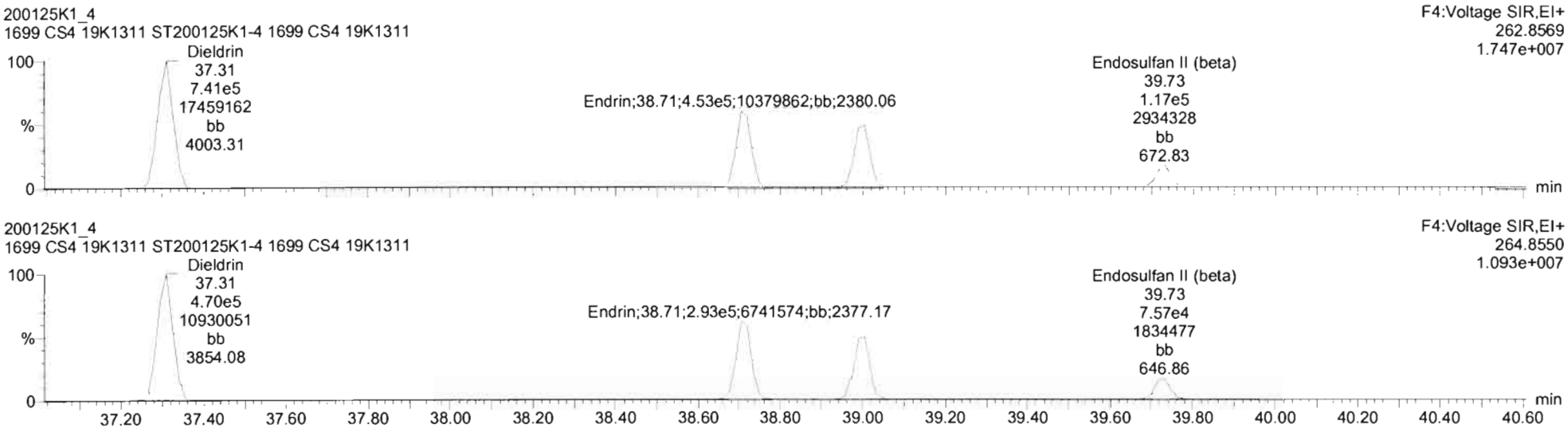
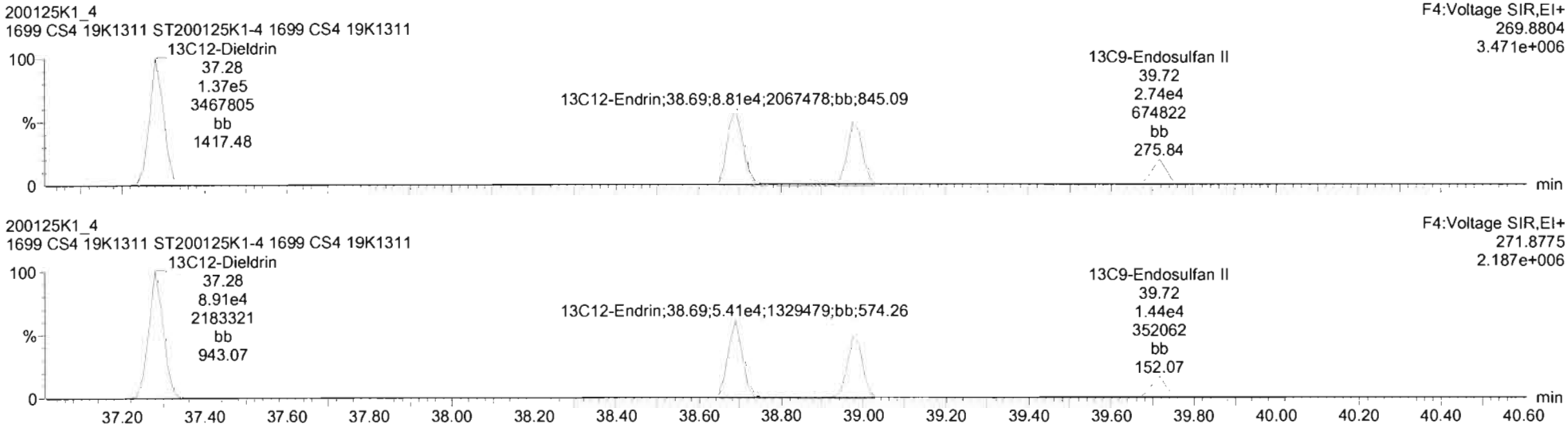
Dieldrin-EII



Dieldrin-EII-isotopes



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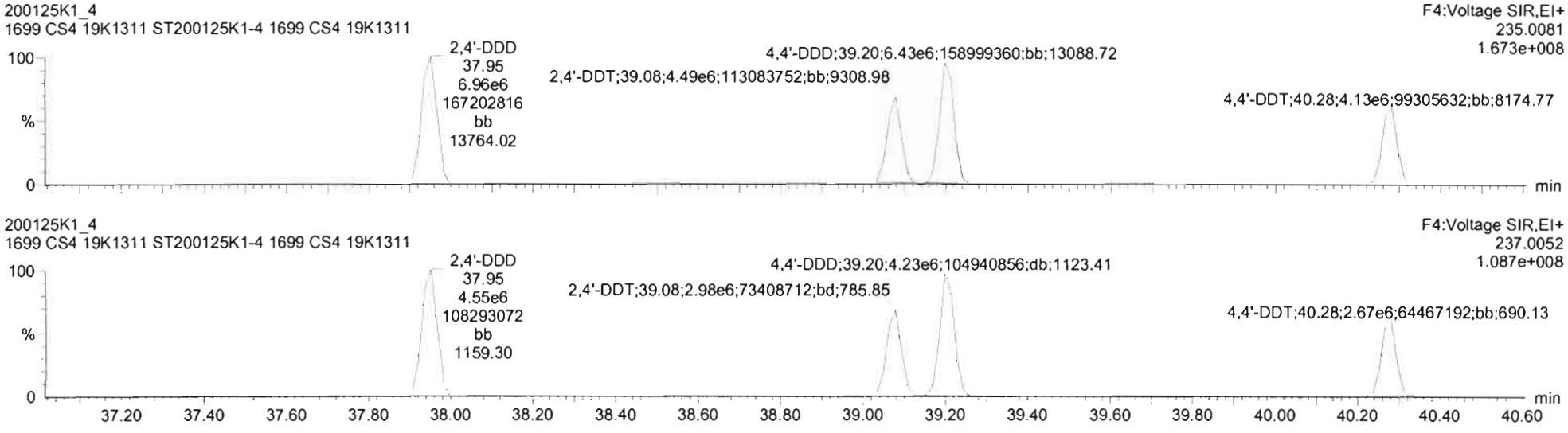
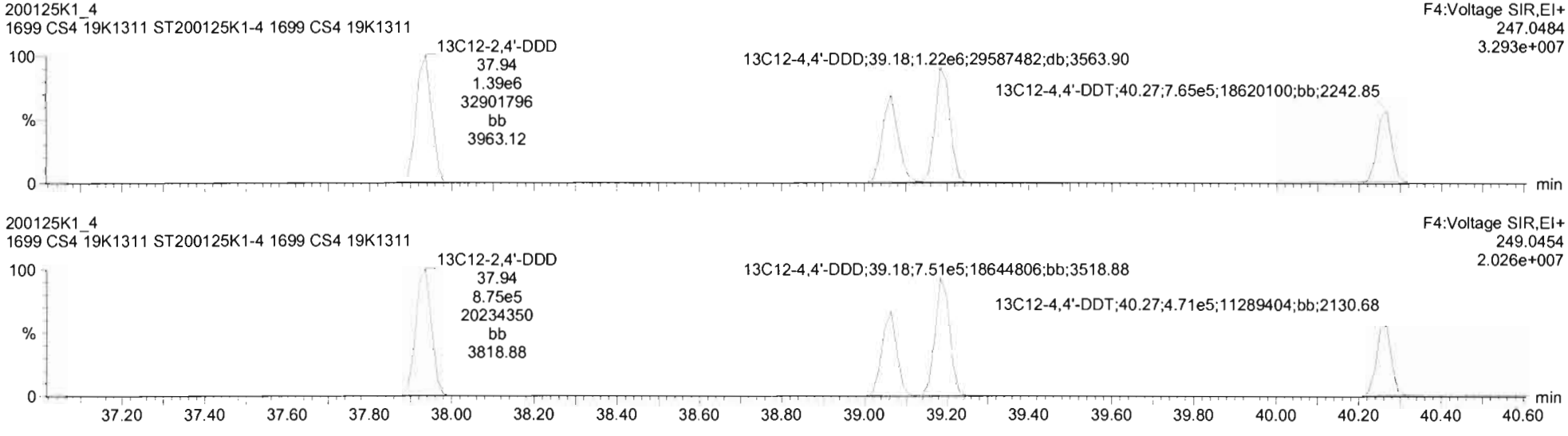
DDD-DDT



DDD-DDT-isotopes

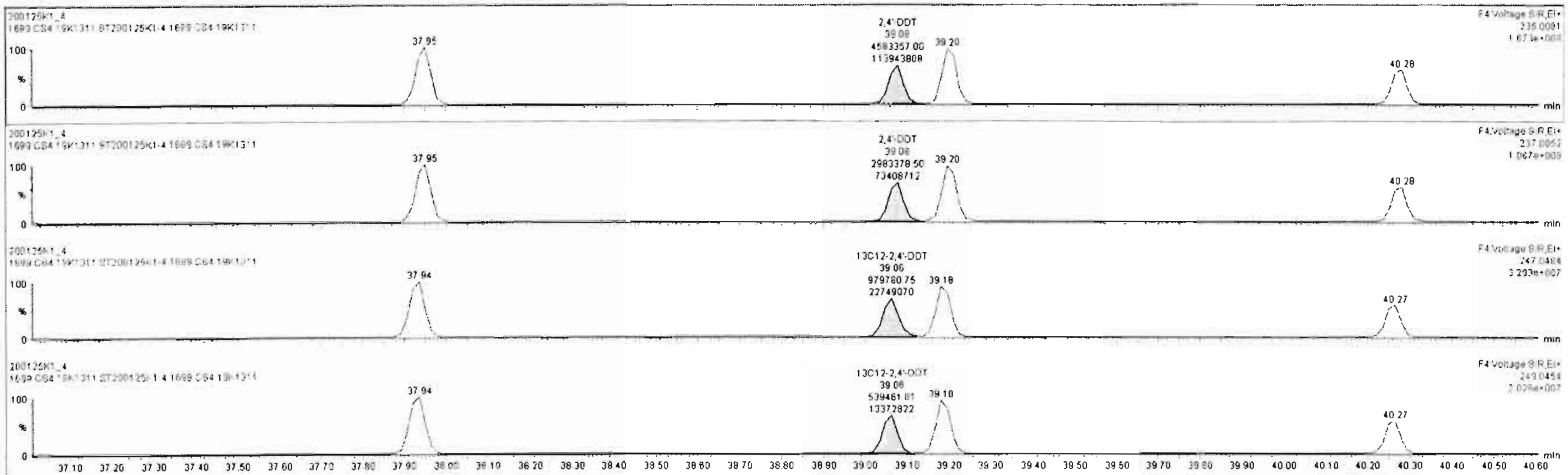


TargetLynx - 200125K1-CRV.qld * - [Chromatogram]

File Edit View Display Processing Window Help

200125K1_4 : ST200125K1-4 1699 CS4 19K1311 : 1699 CS4 19K1311

	#	Name	Resp	IS Resp	IS#	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	1.21e6	2.26e5	48	1.58	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	245	97.8	0.144	245
21	21	Endrin	7.46e5	1.42e5	49	1.54	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	248	99.2	0.255	248
22	22	cis-Nonachlor	6.09e5	1.18e5	50	1.56	NO	1.0772	1.000	38.99	39.00	1.001	1.000	NO	244	97.6	0.301	244
23	23	Endosulfan I (beta)	1.92e5	4.18e4	51	1.54	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	207	82.9	0.787	207
24	24	2,4'-DDD	1.15e7	2.26e6	52	1.53	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	243	97.0	0.235	243
25	25	2,4'-DDT	7.57e6	1.52e6	53	1.54	NO	1.0274	1.000	39.08	39.06	1.000	1.000	NO	242	97.0	0.384	242
26	26	4,4'-DDD	1.07e7	1.97e6	54	1.52	NO	1.1226	1.000	39.20	39.20	1.000	1.000	NO	241	96.4	0.246	241
27	27	4,4'-DDT	6.80e6	1.24e6	55	1.55	NO	1.1336	1.000	40.29	40.28	1.000	1.000	NO	243	97.0	0.387	243
28	28	Endosulfan Sulfate	2.73e5	5.44e4	56	1.54	NO	0.9871	1.000	41.44	41.47	1.001	1.000	NO	254	102	0.581	254
29	29	4,4'-Methoxychlor	8.46e6	1.37e7	57	5.99	NO	1.2688	1.000	43.33	43.34	1.000	1.000	NO	243	97.3	0.0522	243
30	30	Mirex	2.71e6	5.29e5	58	1.56	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	245	98.1	0.109	245
31	31	Endrin Aldehyde	6.45e5	1.17e6	59	0.64	NO	1.0683	1.000	40.86	40.85	1.000	1.000	NO	257	103	0.441	257
32	32	Endrin Ketone	4.60e5	9.61e5	60	0.62	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	246	98.3	0.657	246
33	33	13C4-Hexachlorobutadi	3.52e6	2.95e6	62	1.27	NO	0.1267	1.000	9.96	9.98	0.384	0.383	NO	471	94.2	0.0214	
34	34	13C6-Hexachlorobenz	1.98e6	2.95e6	62	1.28	NO	0.6741	1.000	22.66	22.64	0.871	0.872	NO	49.8	99.6	0.003 .	
35	35	13C6-Alpha-BHC	7.46e5	2.95e6	62	0.78	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	49.5	99.1	0.105	
36	36	13C6-Lindane (gamma)	5.99e5	2.95e6	62	0.79	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	50.5	101	0.134	
37	37	13C6-Beta-BHC	4.74e5	2.95e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	51.9	104	0.174	



Ready 200125K1_4 CAP NUM

Vista Analytical Laboratory

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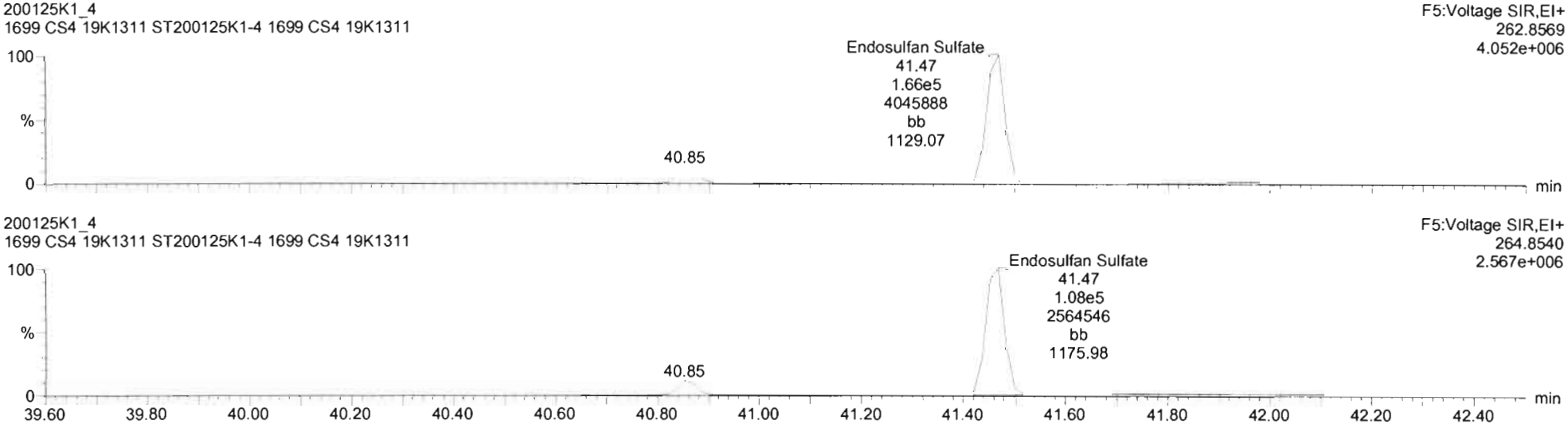
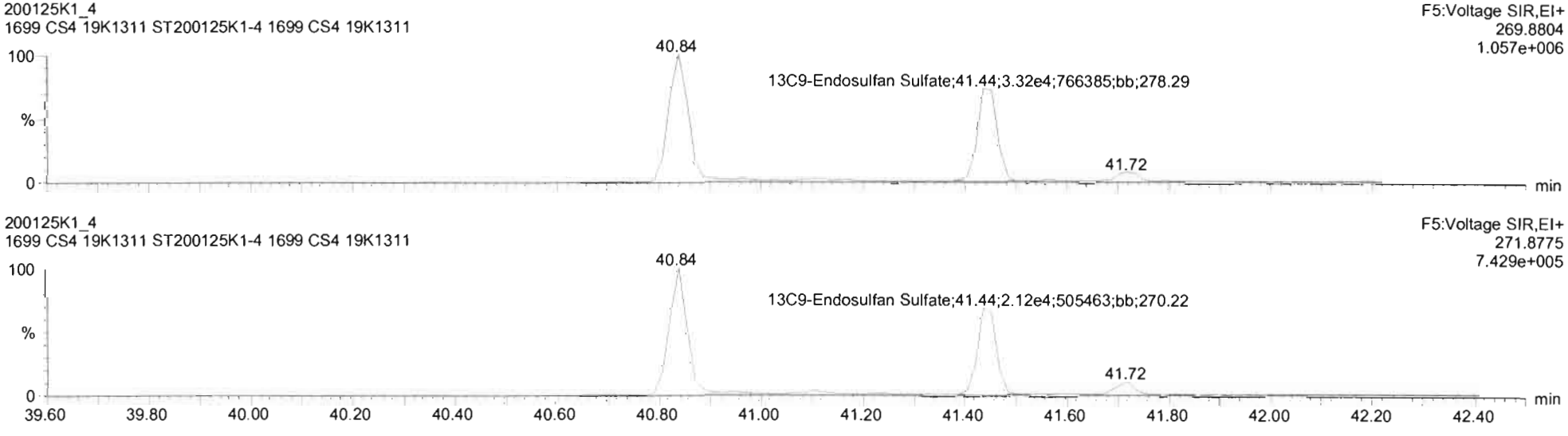
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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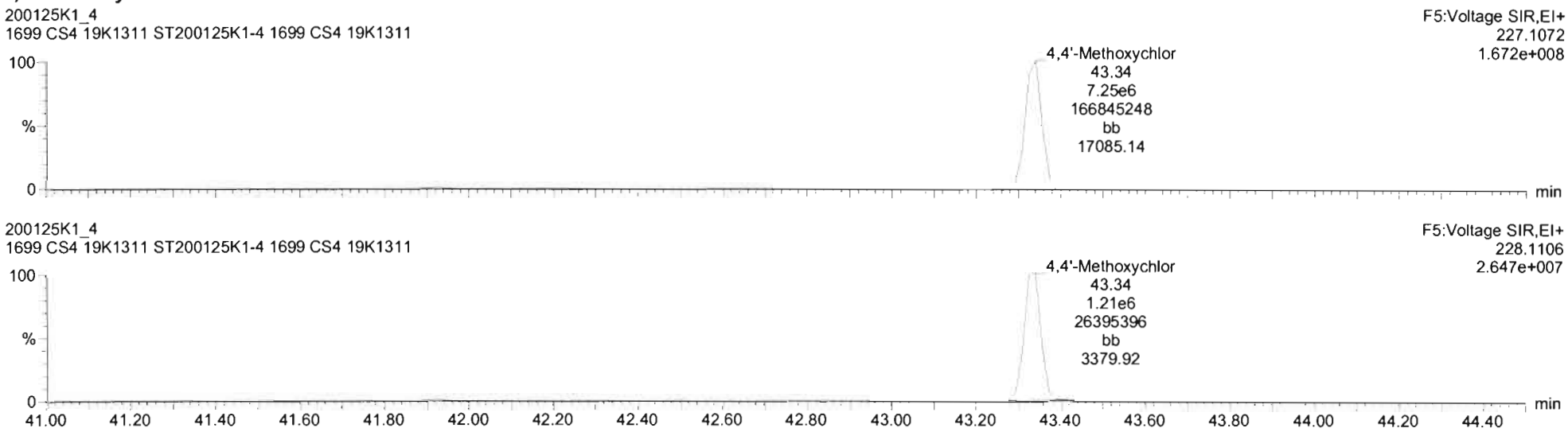
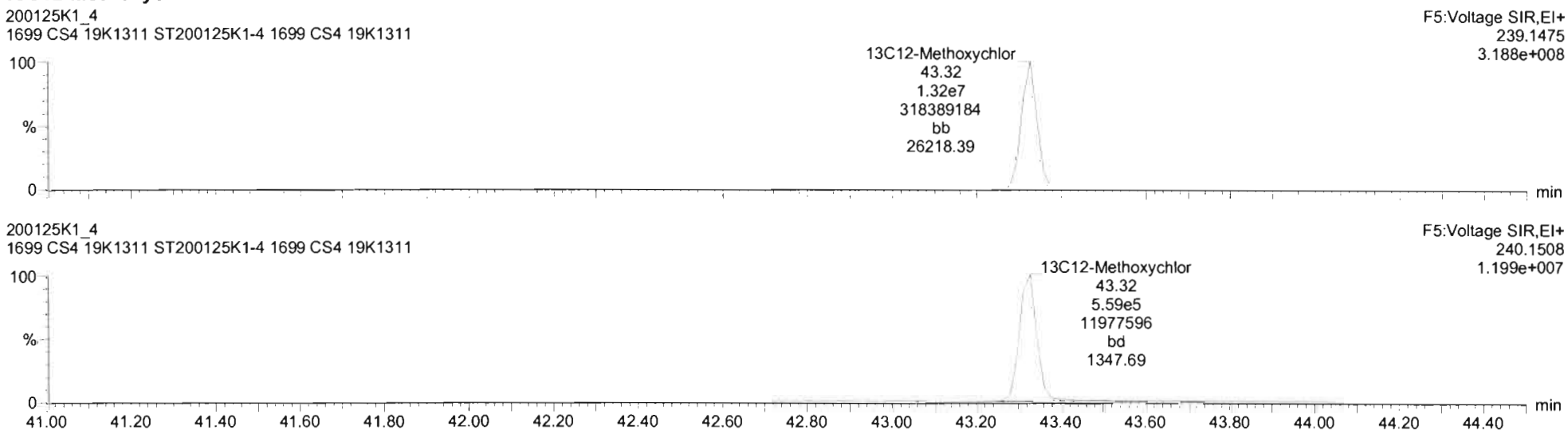
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

4,4'-Methoxychlor



13C12-Methoxychlor



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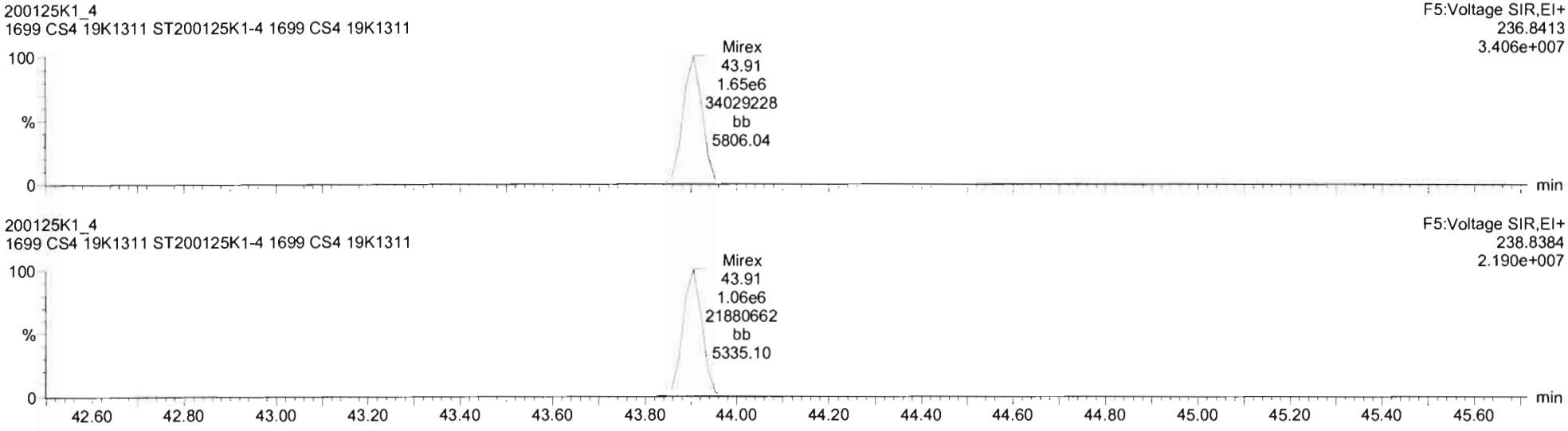
Mirex



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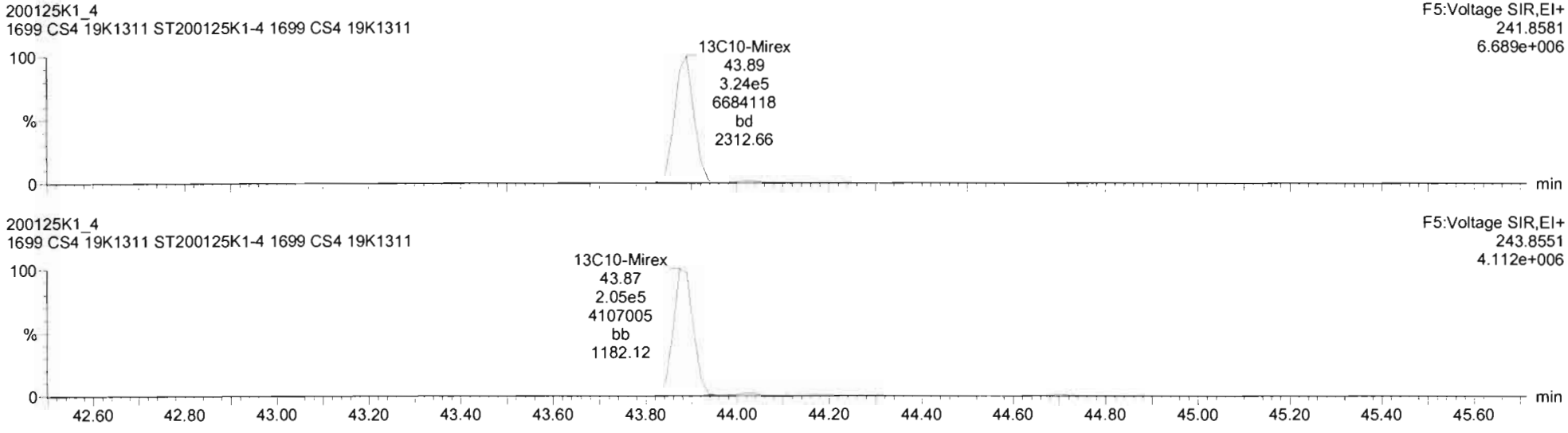

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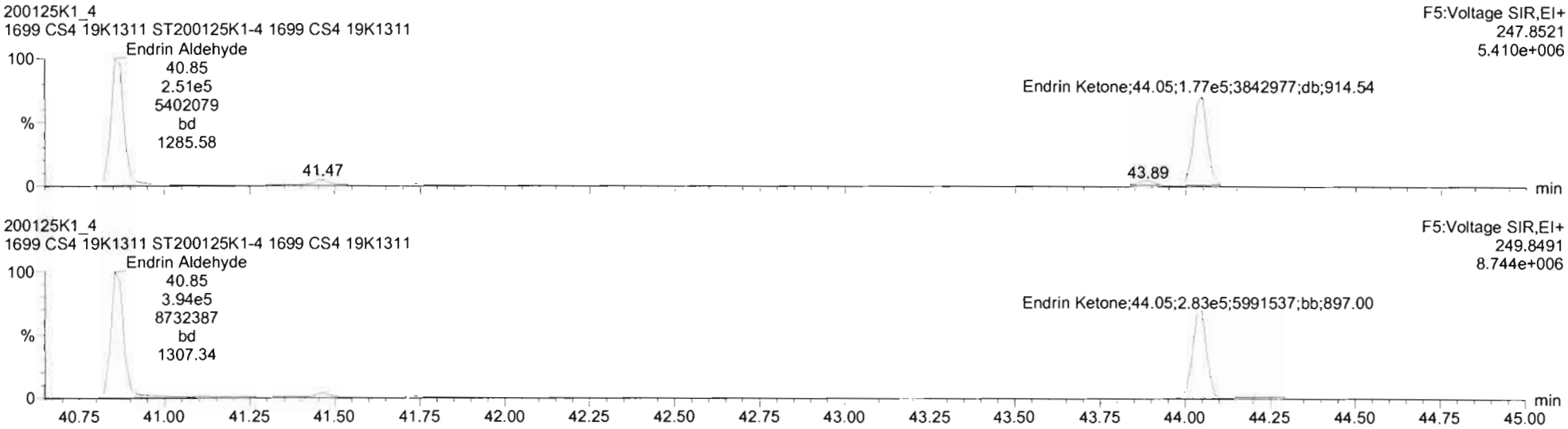
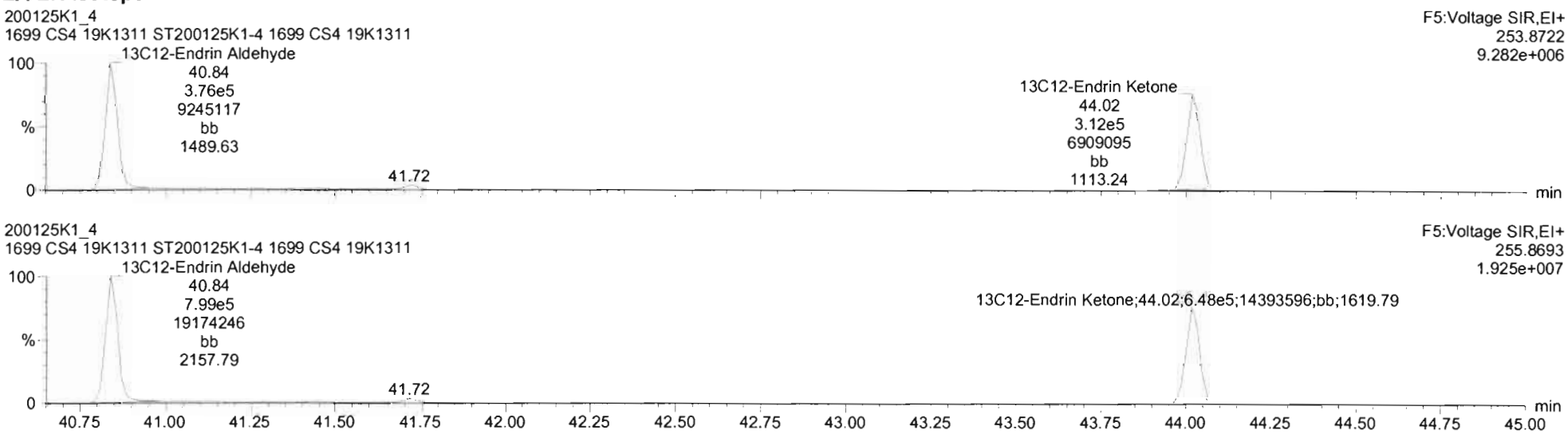
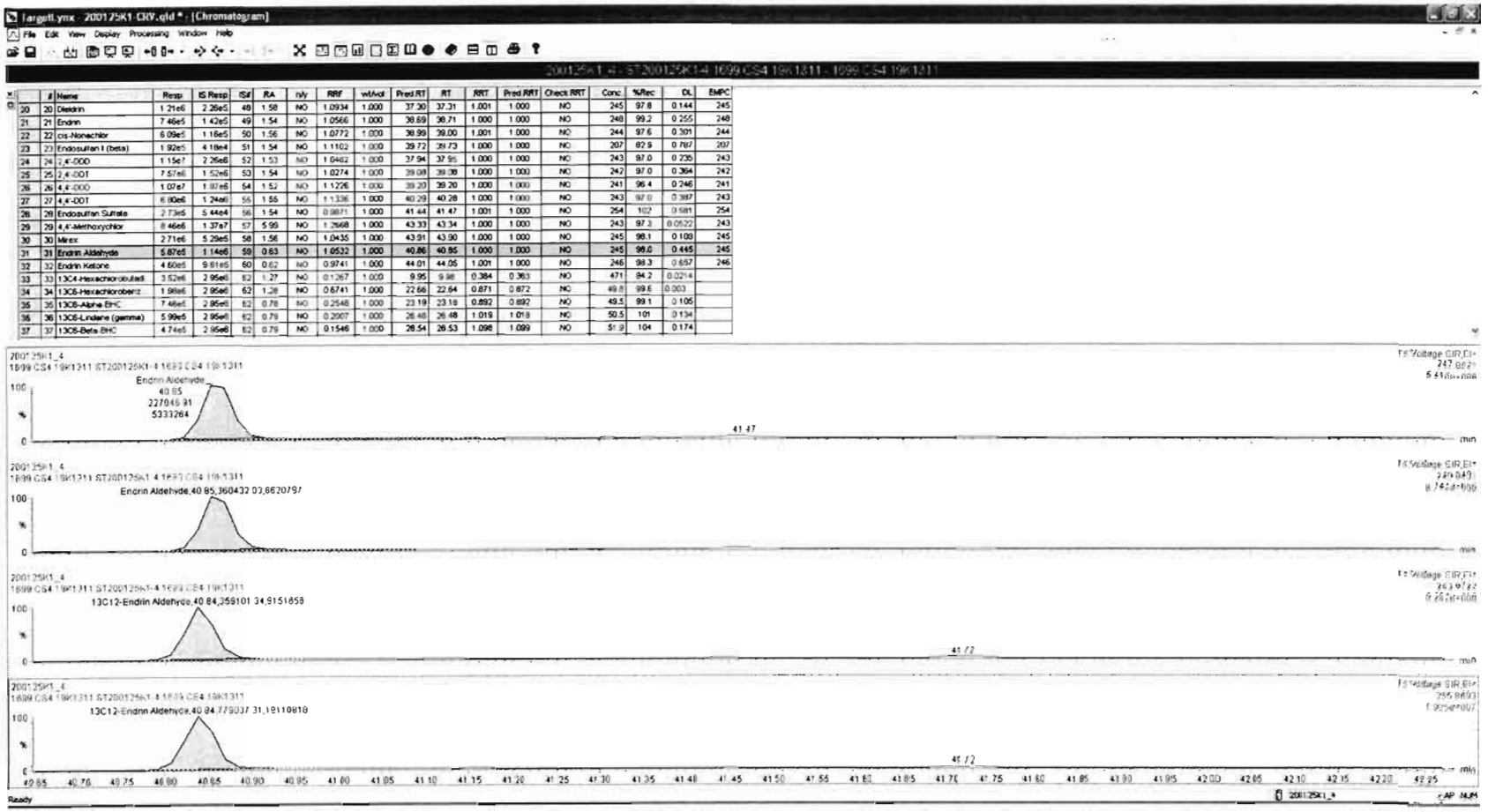
EA-EK



EA-EK-isotopes





	#	Name	Resp	IS Resp	ISd	RA	n/y	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	1.21e6	2.26e5	48	1.58	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	245	97.8	0.144	245
21	21	Endrin	7.46e5	1.42e5	49	1.54	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	248	99.2	0.255	248
22	22	cis-Nonachlor	6.09e5	1.16e5	50	1.56	NO	1.0772	1.000	38.99	39.00	1.001	1.000	NO	244	97.6	0.301	244
23	23	Endosulfan I (beta)	1.92e5	4.18e4	51	1.54	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	207	82.9	0.767	207
24	24	2,4'-DDD	1.15e7	2.26e6	52	1.53	NO	1.0462	1.000	37.94	37.95	1.000	1.000	NO	243	97.0	0.235	243
25	25	2,4'-DDT	7.57e6	1.52e6	53	1.54	NO	1.0274	1.000	39.08	39.08	1.000	1.000	NO	242	97.0	0.364	242
26	26	4,4'-DDD	1.07e7	1.97e6	54	1.52	NO	1.1226	1.000	39.20	39.20	1.000	1.000	NO	241	96.4	0.246	241
27	27	4,4'-DDT	6.80e6	1.24e6	55	1.55	NO	1.1336	1.000	40.29	40.28	1.000	1.000	NO	243	97.0	0.397	243
28	28	Endosulfan Sulfate	2.73e5	5.44e4	56	1.54	NO	0.9871	1.000	41.44	41.47	1.001	1.000	NO	254	102	0.581	254
29	29	4,4'-Methoxychlor	8.46e6	1.37e7	57	5.99	NO	1.2668	1.000	43.33	43.34	1.000	1.000	NO	243	97.3	0.0522	243
30	30	Mirex	2.71e6	5.29e5	58	1.56	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	245	98.1	0.108	245
31	31	Endrin Aldehyde	5.87e5	1.14e6	59	0.63	NO	1.0532	1.000	40.86	40.85	1.000	1.000	NO	245	98.0	0.445	245
32	32	Endrin Ketone	4.60e5	9.81e5	60	0.62	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	246	98.3	0.657	246
33	33	13C4-Hexachlorobutadi	3.52e6	2.95e6	62	1.27	NO	0.1267	1.000	9.95	9.98	0.364	0.363	NO	471	94.2	0.0214	
34	34	13C6-Hexachlorobenz	1.98e6	2.95e6	62	1.28	NO	0.6741	1.000	22.66	22.64	0.871	0.872	NO	49.8	99.6	0.003	
35	35	13C6-Alpha BHC	7.46e5	2.95e6	62	0.78	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	49.5	99.1	0.105	
36	36	13C6-Lindane (gamma)	5.99e5	2.95e6	62	0.79	NO	0.2007	1.000	26.48	26.48	1.019	1.019	NO	50.5	101	0.134	
37	37	13C6-Beta BHC	4.74e5	2.95e6	62	0.79	NO	0.1546	1.000	26.54	26.53	1.098	1.099	NO	51.9	104	0.174	

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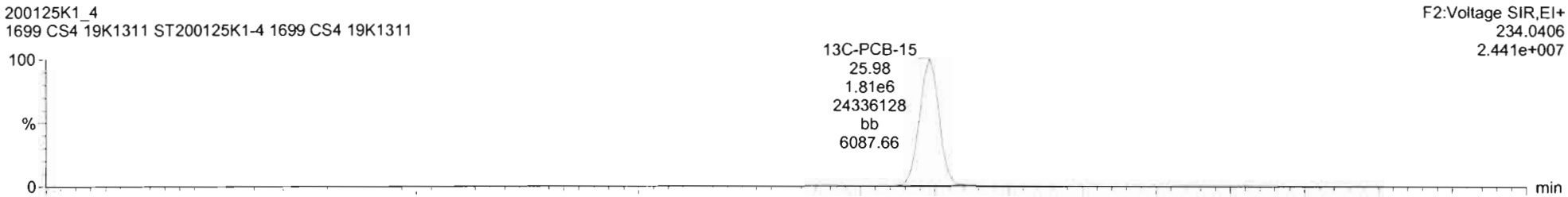
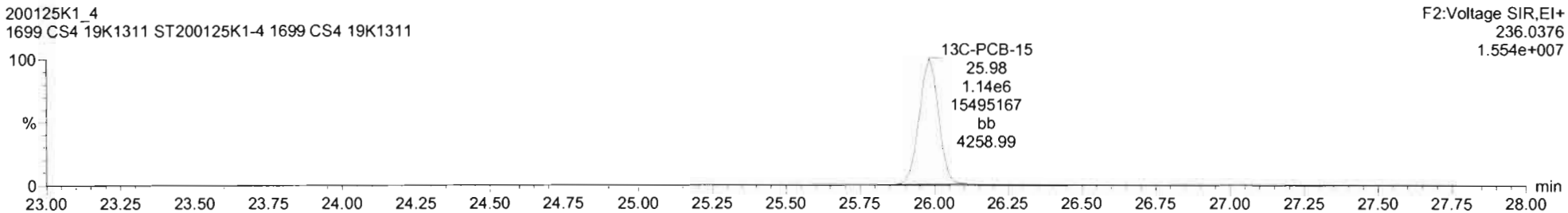
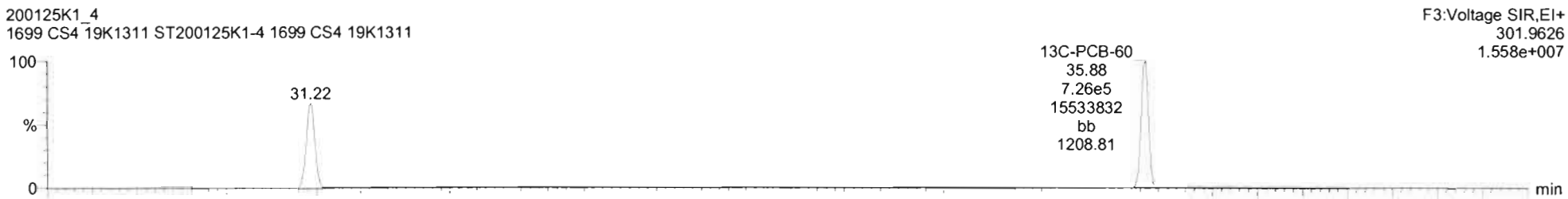
Name: 200125K1_4, Date: 25-Jan-2020, Time: 15:34:14, ID: ST200125K1-4 1699 CS4 19K1311, Description: 1699 CS4 19K1311

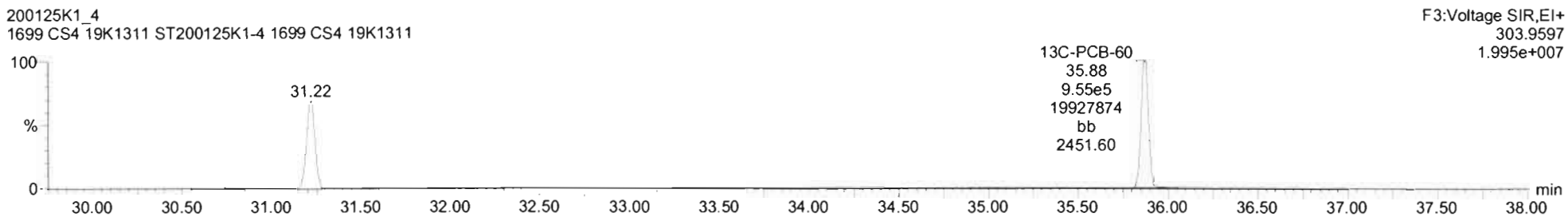
13C-PCB-15





13C-PCB-60





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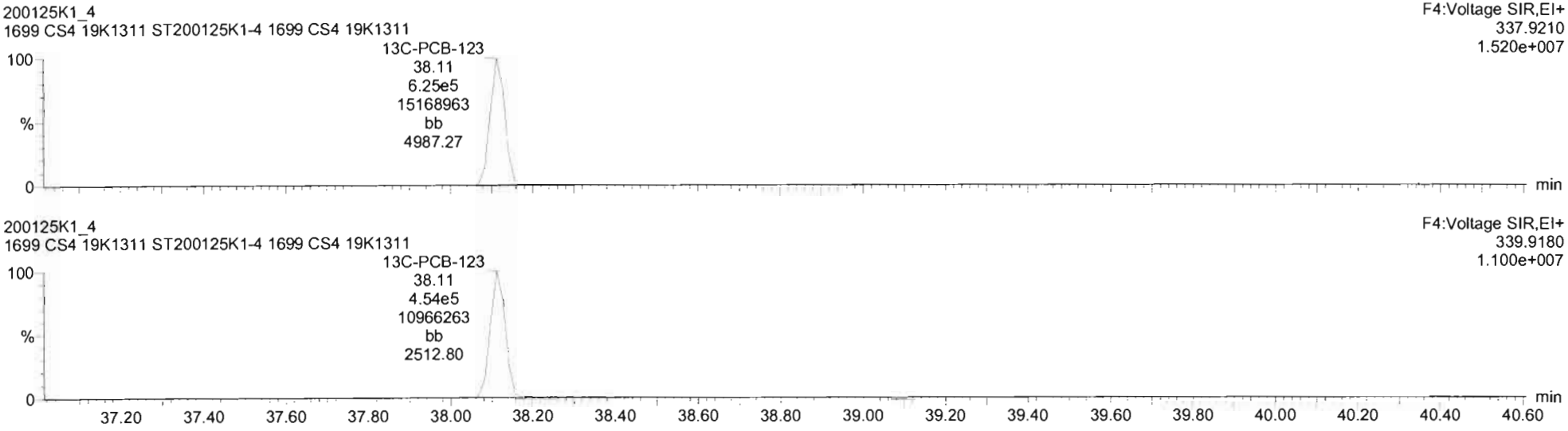
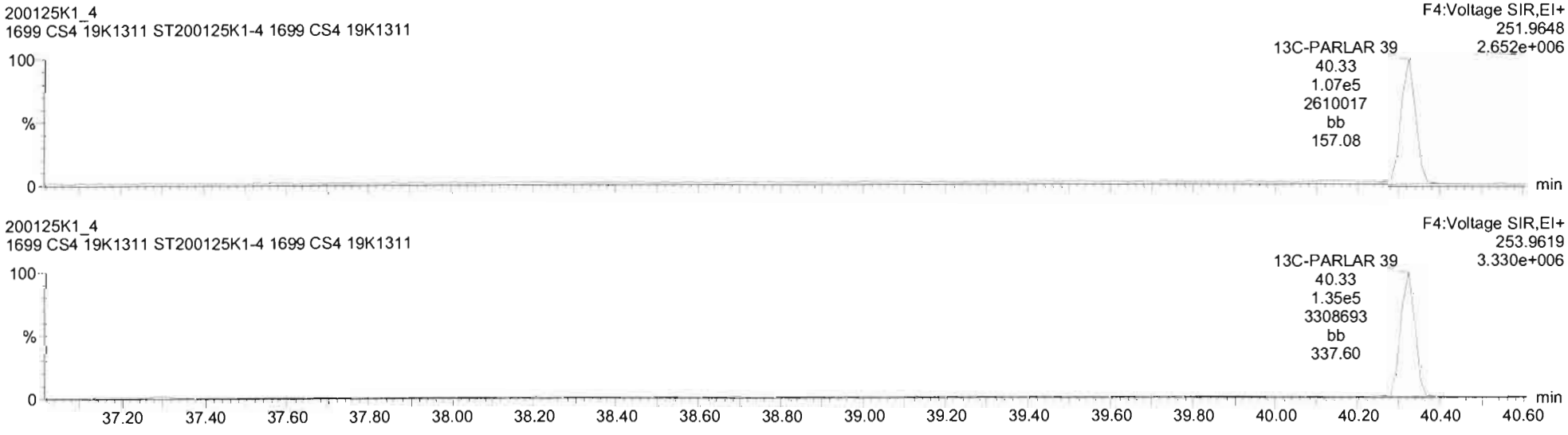
13C-PCB-123



13C-PARLAR 39



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Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

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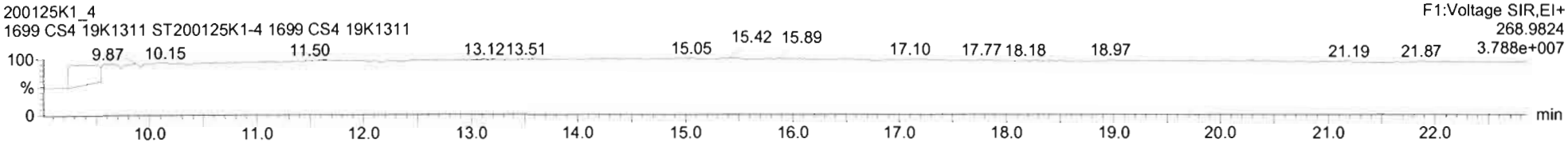
PFK1



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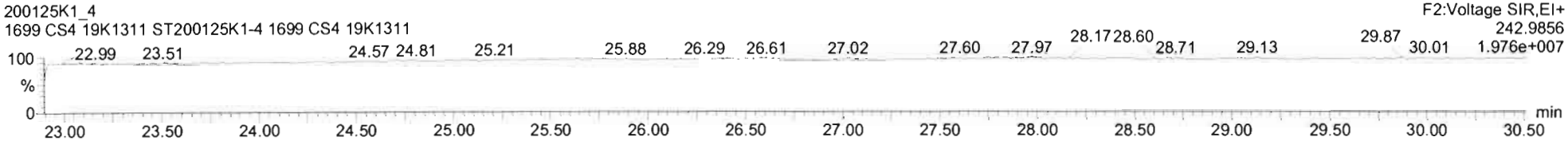

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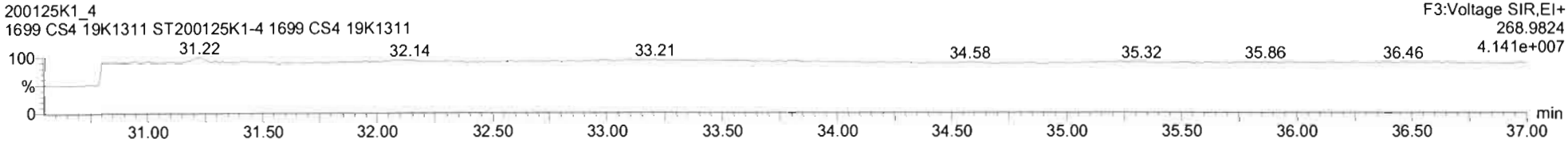

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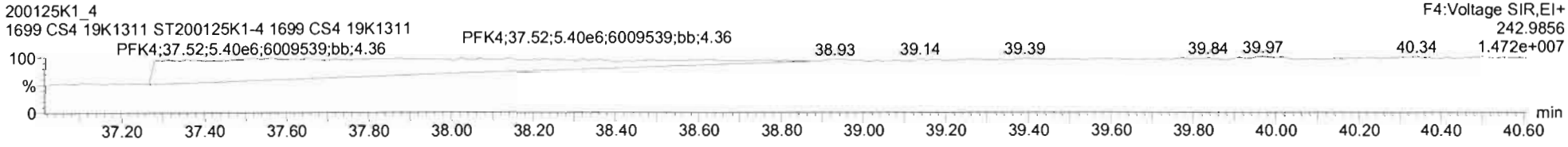
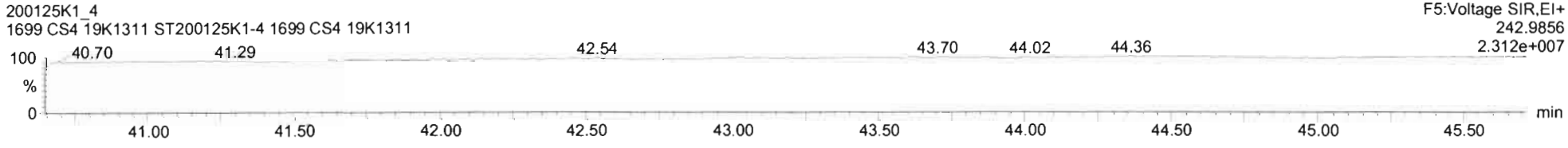


PFK5



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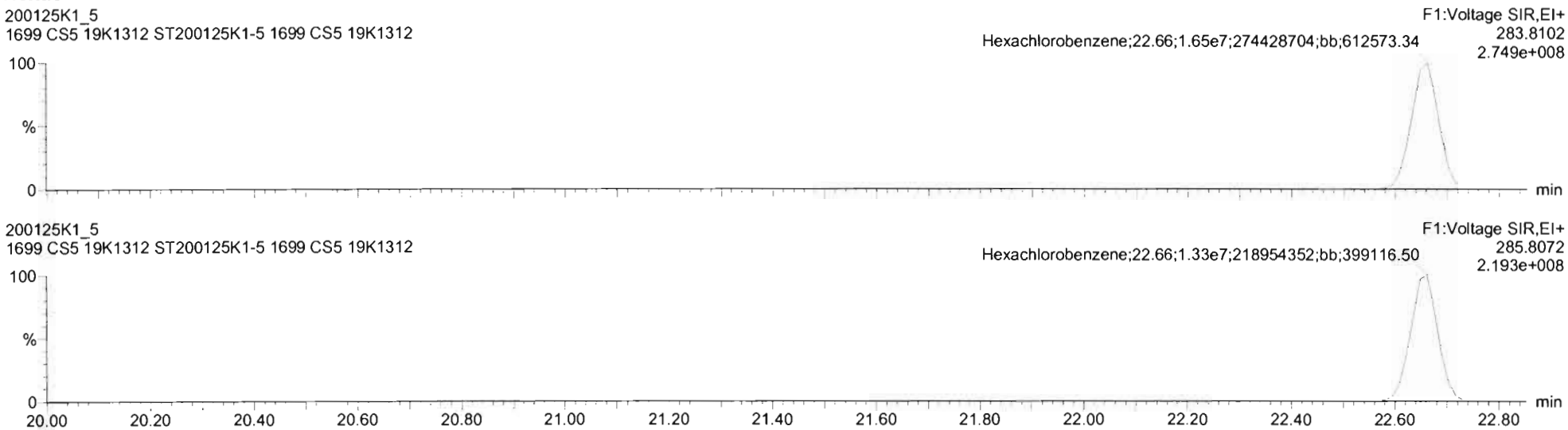
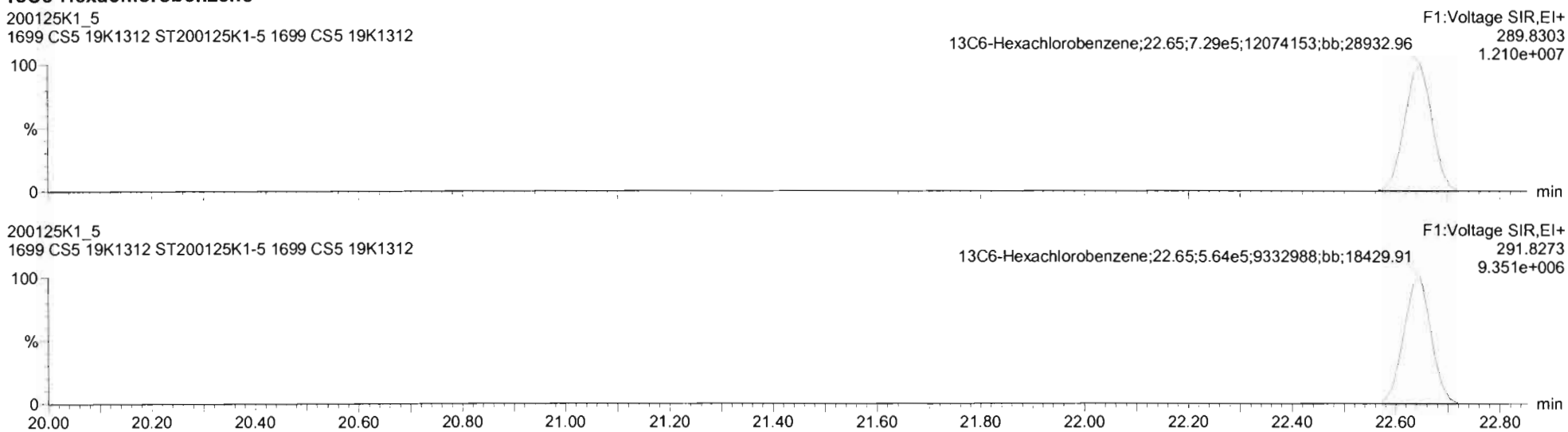
Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

Hexachlorobenzene



13C6-Hexachlorobenzene



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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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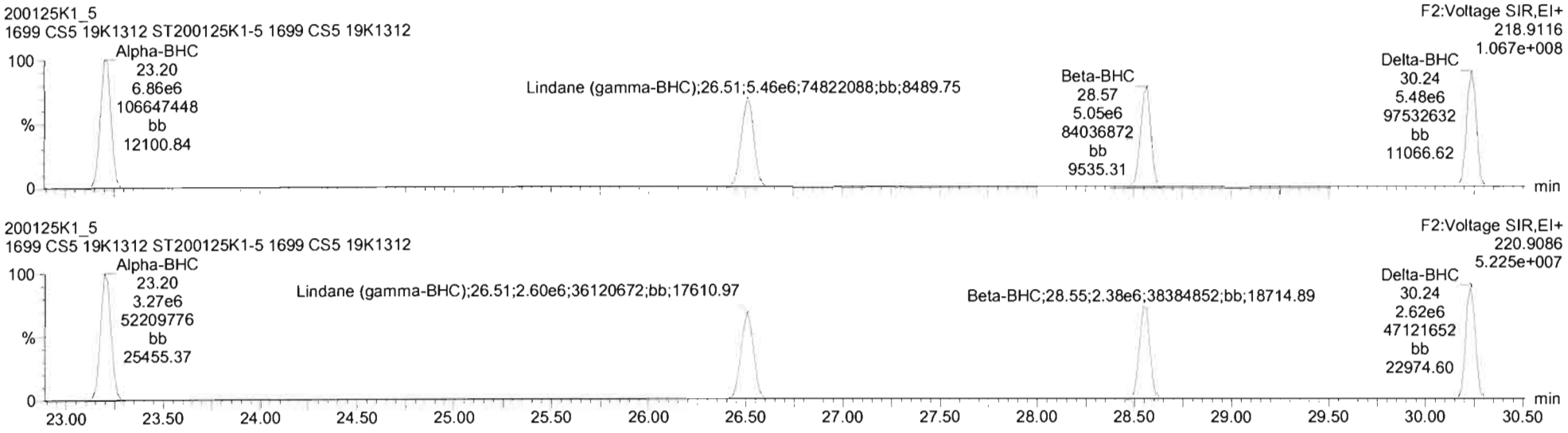
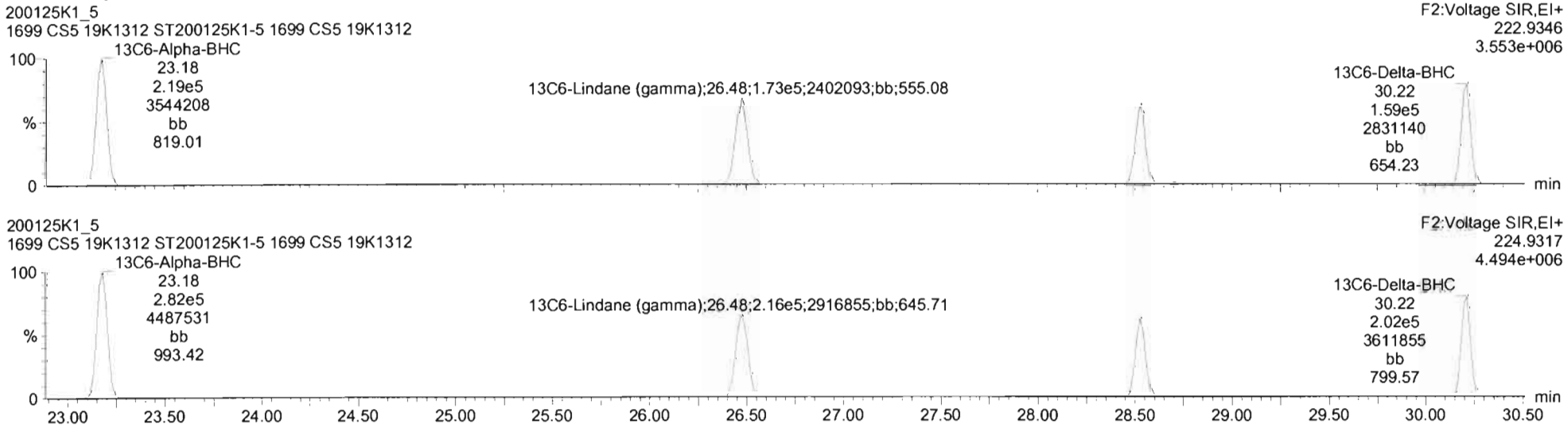
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

BHC Totals



BHC-isotopes



Vista Analytical Laboratory

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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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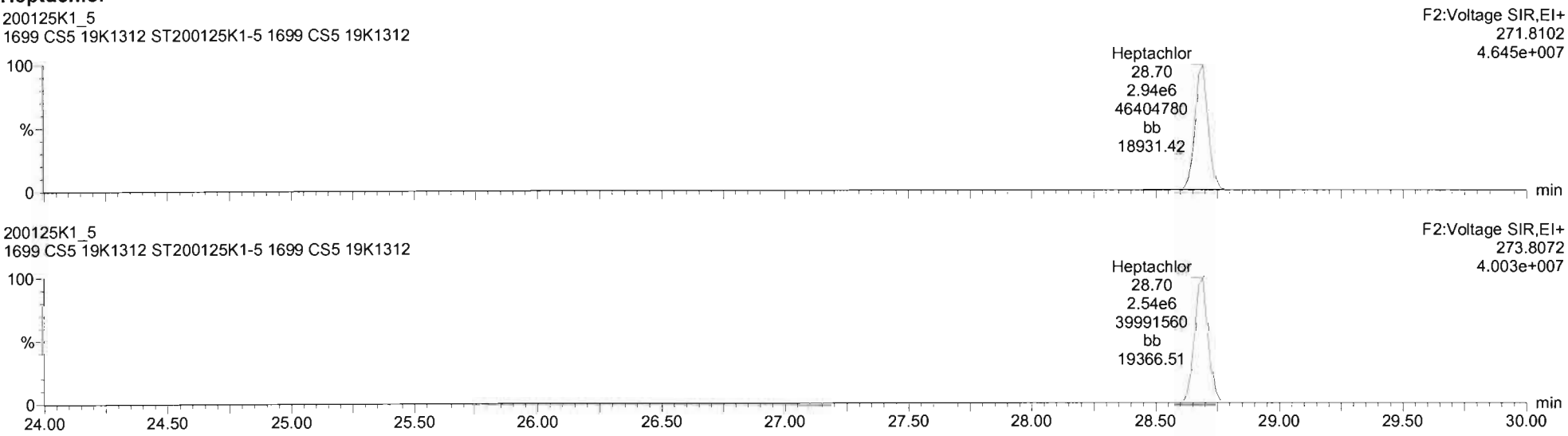
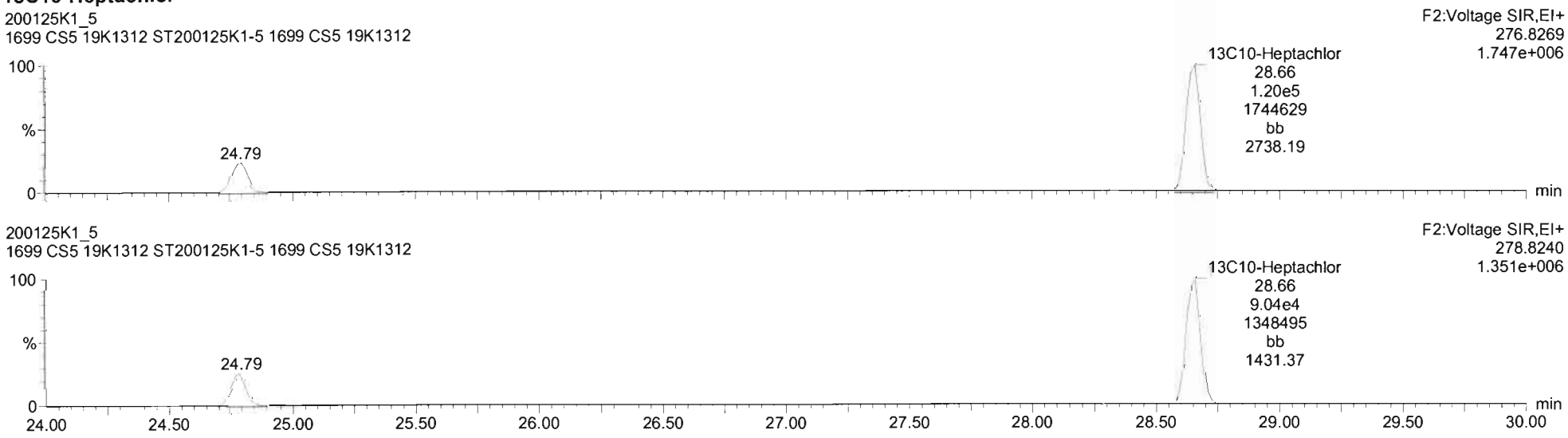
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

Heptachlor



13C10-Heptachlor



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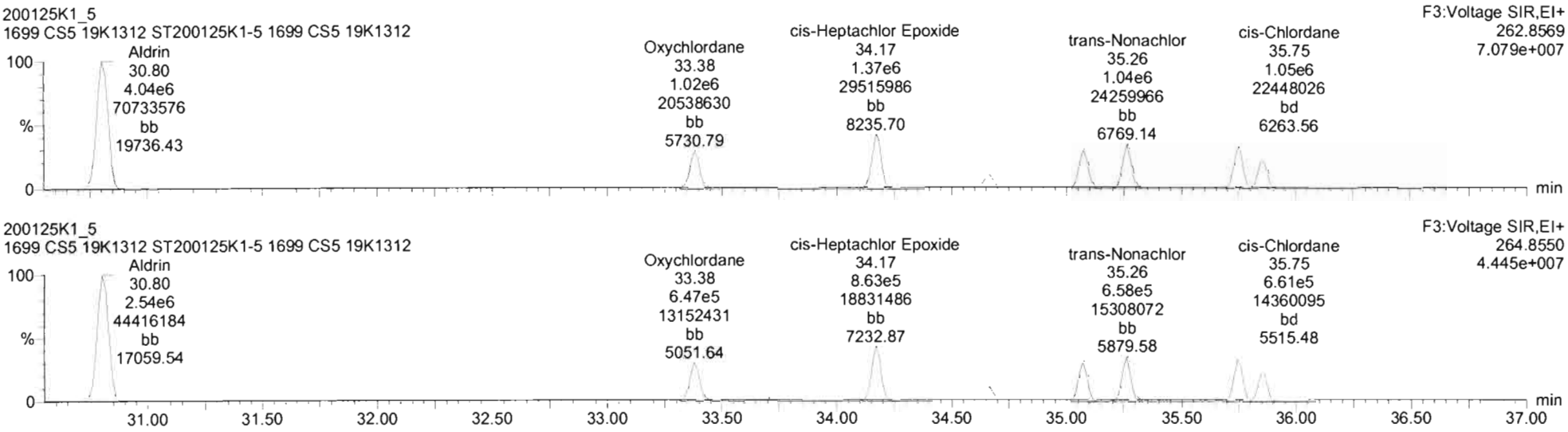
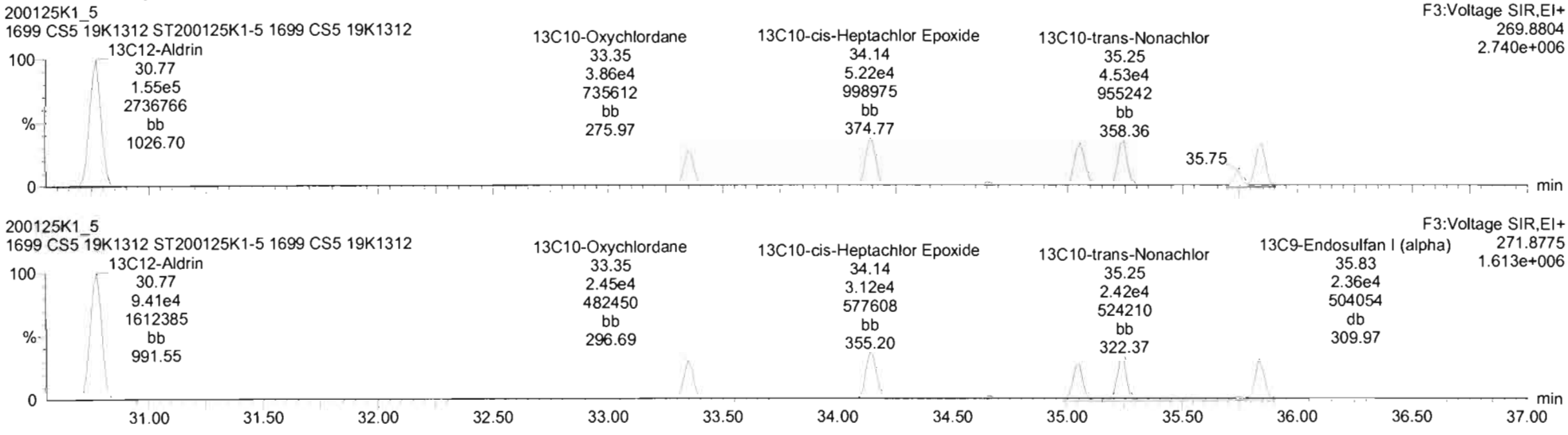
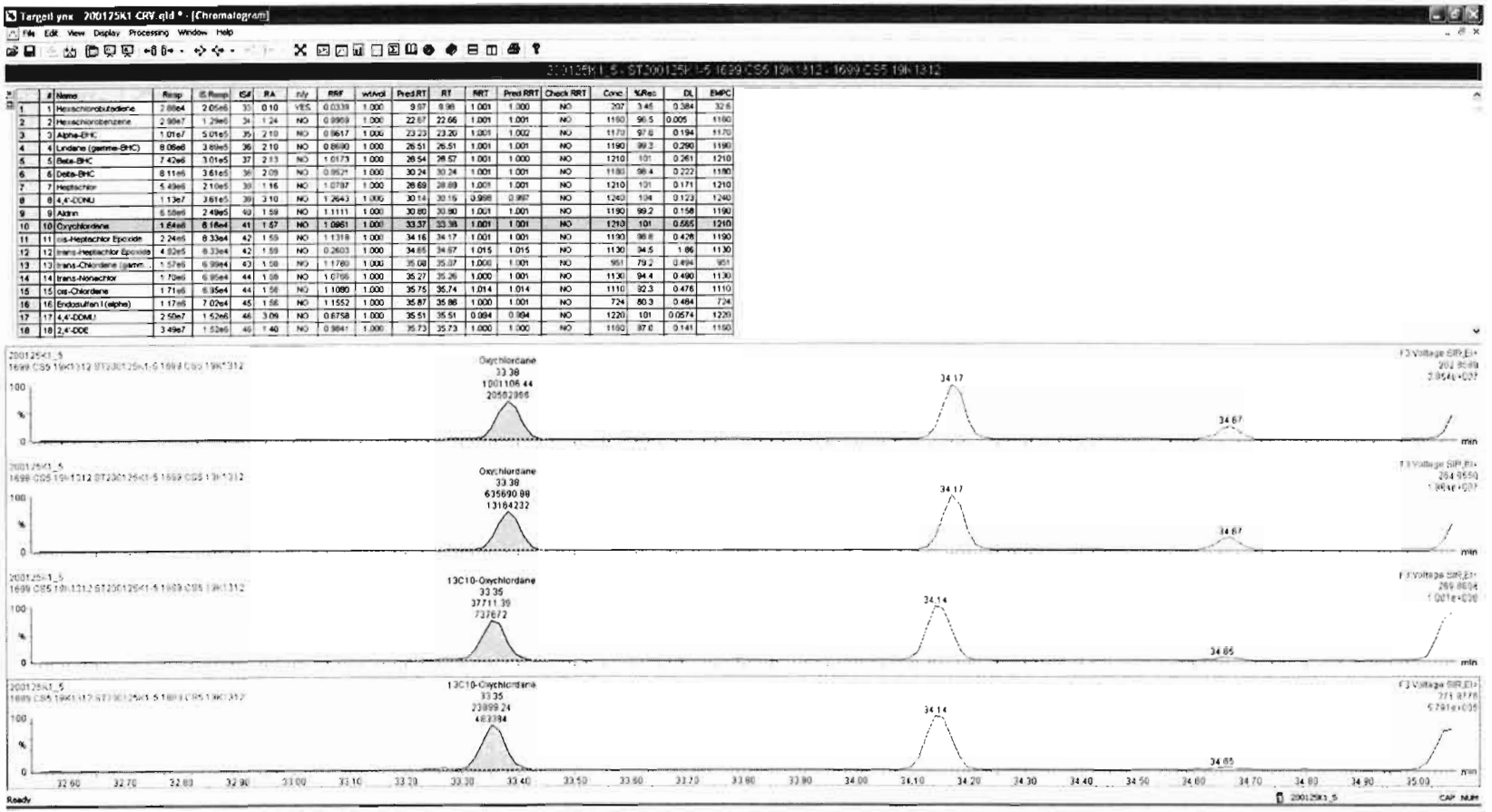
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

Aldrin-EI

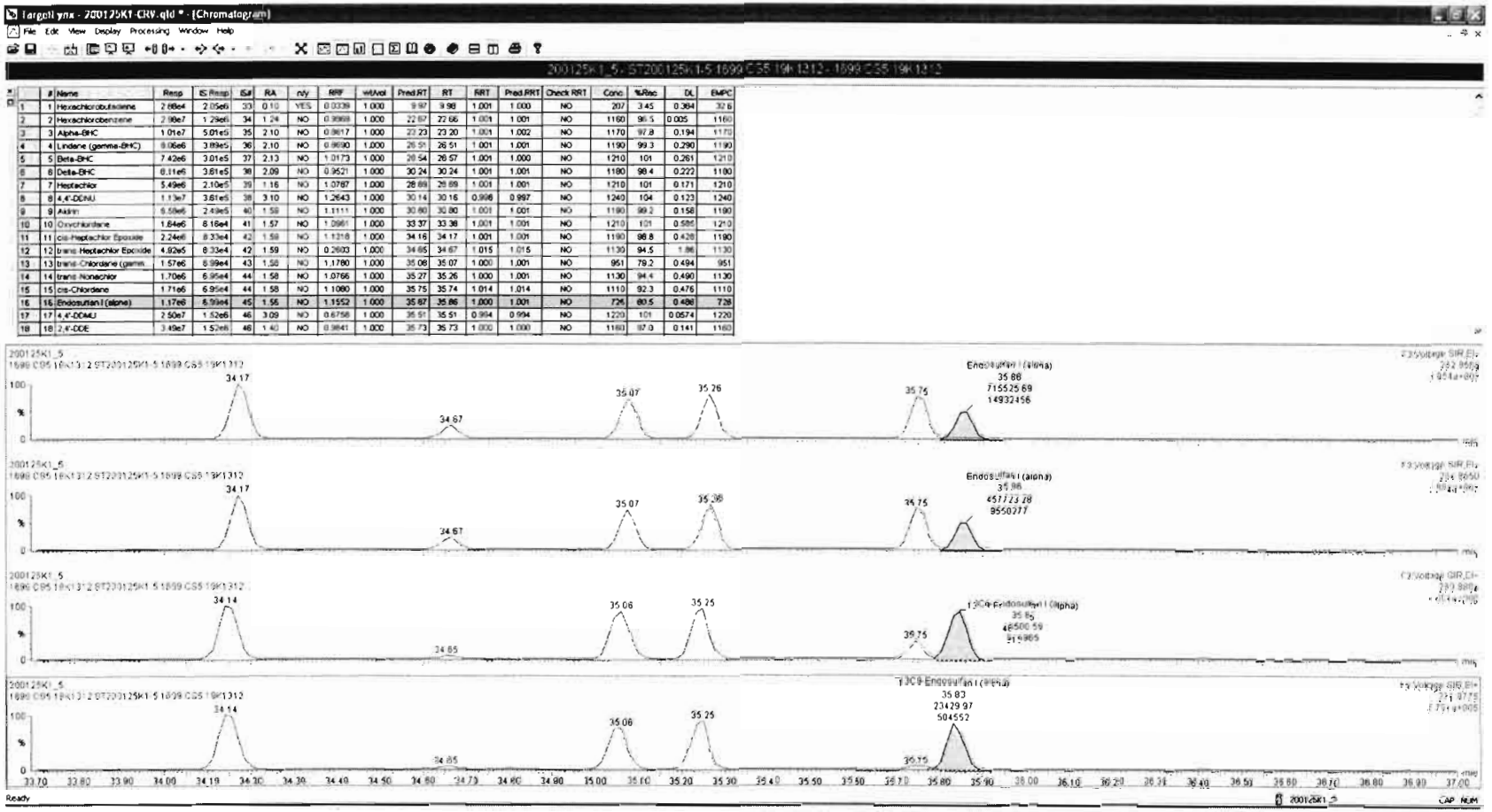


Aldrin-EI-isotopes





#	Name	Resp	IS Resp	ISd	RA	rdy	RRF	wtVal	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	Hexachlorobutadiene	2.88e4	2.05e6	33	0.10	YES	0.0338	1.000	9.97	9.98	1.001	1.000	NO	297	3.46	0.384	328
2	Hexachlorobenzene	2.90e7	1.29e6	34	1.24	NO	0.9909	1.000	22.67	22.66	1.001	1.001	NO	1160	96.5	0.005	1160
3	Alpha-BHC	1.01e7	5.01e5	35	2.10	NO	0.9617	1.000	23.23	23.20	1.001	1.002	NO	1170	97.6	0.194	1170
4	Lindane (gamma-BHC)	8.08e6	3.89e5	36	2.10	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	1190	99.3	0.290	1190
5	Beta-BHC	7.42e6	3.01e5	37	2.13	NO	1.0173	1.000	26.54	26.57	1.001	1.000	NO	1210	101	0.261	1210
6	Delta-BHC	8.11e6	3.61e5	38	2.09	NO	0.9521	1.000	30.24	30.24	1.001	1.001	NO	1180	98.4	0.222	1180
7	Heptachlor	5.49e6	2.10e5	39	1.16	NO	1.0787	1.000	28.69	28.69	1.001	1.001	NO	1210	101	0.171	1210
8	4,4'-DDMU	1.13e7	3.61e5	39	3.10	NO	1.2643	1.000	30.14	30.15	0.999	0.997	NO	1240	104	0.123	1240
9	Aldrin	6.58e6	2.49e5	40	1.59	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1190	99.2	0.158	1190
10	Oxychlordane	1.64e6	6.16e4	41	1.67	NO	1.0861	1.000	33.37	33.38	1.001	1.001	NO	1210	101	0.565	1210
11	cis-Heptachlor Epoxide	2.24e6	8.33e4	42	1.59	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1190	98.8	0.428	1190
12	trans-Heptachlor Epoxide	4.82e5	8.33e4	42	1.59	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	1130	94.5	1.86	1130
13	trans-Chlordane (gamm...	1.57e6	6.99e4	43	1.58	NO	1.1780	1.000	35.08	35.07	1.000	1.001	NO	951	79.2	0.494	951
14	trans-Nonachlor	1.70e6	6.95e4	44	1.59	NO	1.0756	1.000	35.27	35.26	1.000	1.001	NO	1130	94.4	0.490	1130
15	cis-Chlordane	1.71e6	6.95e4	44	1.56	NO	1.1080	1.000	35.75	35.74	1.014	1.014	NO	1110	92.3	0.476	1110
16	Endosulfan I (alpha)	1.17e6	7.02e4	45	1.56	NO	1.1552	1.000	35.87	35.88	1.000	1.001	NO	724	80.3	0.484	724
17	4,4'-DDMU	2.50e7	1.52e6	46	3.09	NO	0.6758	1.000	35.51	35.51	0.994	0.994	NO	1220	101	0.0574	1220
18	2,4'-DDE	3.49e7	1.52e6	46	1.40	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	1160	97.0	0.141	1160



	#	Name	Resp	IS Resp	IS#	RA	rdy	RRF	wtVol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
1	1	Hexachlorobutadiene	2.68e4	2.05e6	33	0.10	YES	0.0339	1.000	9.97	9.98	1.001	1.000	NO	207	3.45	0.364	326
2	2	Hexachlorobenzene	2.98e7	1.29e6	34	1.24	NO	0.9999	1.000	22.67	22.66	1.001	1.001	NO	1160	96.5	0.005	1160
3	3	Alpha-BHC	1.01e7	5.01e5	35	2.10	NO	0.9617	1.000	23.23	23.20	1.001	1.002	NO	1170	97.8	0.194	1170
4	4	Lindane (gamma-BHC)	9.06e6	3.89e5	36	2.10	NO	0.8690	1.000	26.51	26.51	1.001	1.001	NO	1190	99.3	0.290	1190
5	5	Beta-BHC	7.42e6	3.01e5	37	2.13	NO	1.0173	1.000	26.54	26.57	1.001	1.000	NO	1210	101	0.261	1210
6	6	Delta-BHC	8.11e6	3.61e5	38	2.09	NO	0.9521	1.000	30.24	30.24	1.001	1.001	NO	1180	98.4	0.222	1180
7	7	Heptachlor	5.49e6	2.10e5	39	1.16	NO	1.0787	1.000	28.89	28.89	1.001	1.001	NO	1210	101	0.171	1210
8	8	4,4'-DDMU	1.13e7	3.61e5	38	3.10	NO	1.2643	1.000	30.14	30.16	0.998	0.997	NO	1240	104	0.123	1240
9	9	Aldrin	6.58e6	2.49e5	40	1.58	NO	1.1111	1.000	30.80	30.80	1.001	1.001	NO	1190	99.2	0.158	1190
10	10	Oxychlordane	1.84e6	8.18e4	41	1.57	NO	1.0961	1.000	33.37	33.38	1.001	1.001	NO	1210	101	0.585	1210
11	11	cis-Heptachlor Epoxide	2.24e6	8.33e4	42	1.59	NO	1.1318	1.000	34.16	34.17	1.001	1.001	NO	1190	98.8	0.420	1190
12	12	trans-Heptachlor Epoxide	4.92e5	8.33e4	42	1.59	NO	0.2603	1.000	34.65	34.67	1.015	1.015	NO	1130	94.5	1.86	1130
13	13	trans-Chlordane (gamm	1.57e6	8.99e4	43	1.58	NO	1.1780	1.000	35.08	35.07	1.000	1.001	NO	951	79.2	0.494	951
14	14	trans-Nonachlor	1.70e6	6.95e4	44	1.58	NO	1.0766	1.000	35.27	35.26	1.000	1.001	NO	1130	94.4	0.490	1130
15	15	cis-Chlordane	1.71e6	6.95e4	44	1.58	NO	1.1080	1.000	35.75	35.74	1.014	1.014	NO	1110	92.3	0.476	1110
16	16	Endosulfan I (alpha)	1.17e6	6.99e4	45	1.55	NO	1.1552	1.000	35.87	35.86	1.000	1.001	NO	726	60.5	0.488	728
17	17	4,4'-DDMU	2.50e7	1.52e6	46	3.09	NO	0.6758	1.000	35.51	35.51	0.994	0.994	NO	1220	101	0.0574	1220
18	18	2,4'-DDE	3.49e7	1.52e6	46	1.40	NO	0.9841	1.000	35.73	35.73	1.000	1.000	NO	1160	97.0	0.141	1160

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Last Altered: Monday, January 27, 2020 09:15:59 Pacific Standard Time
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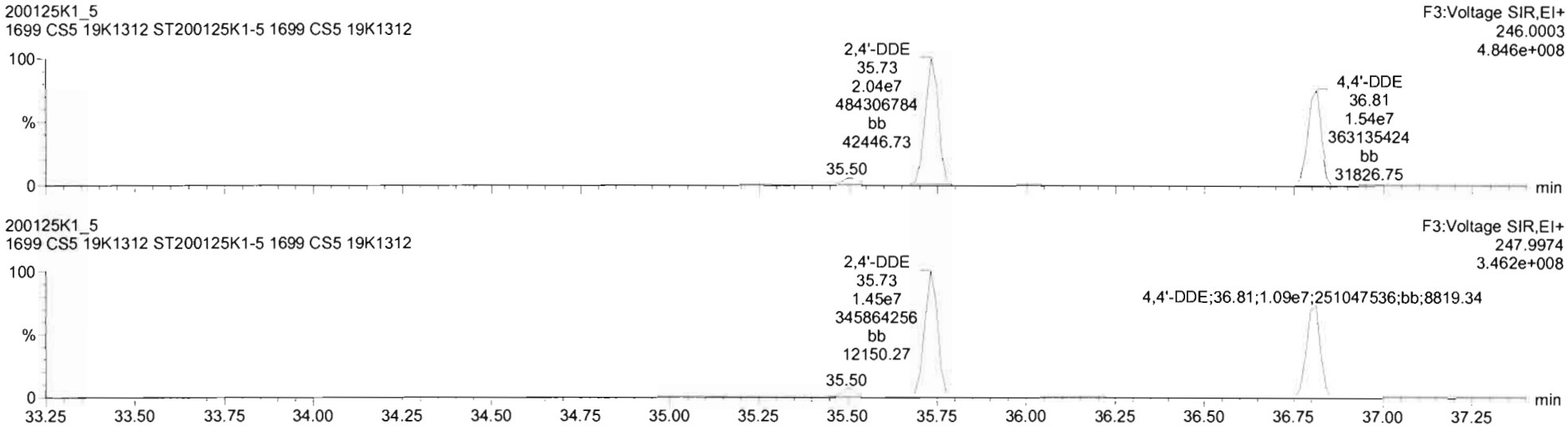
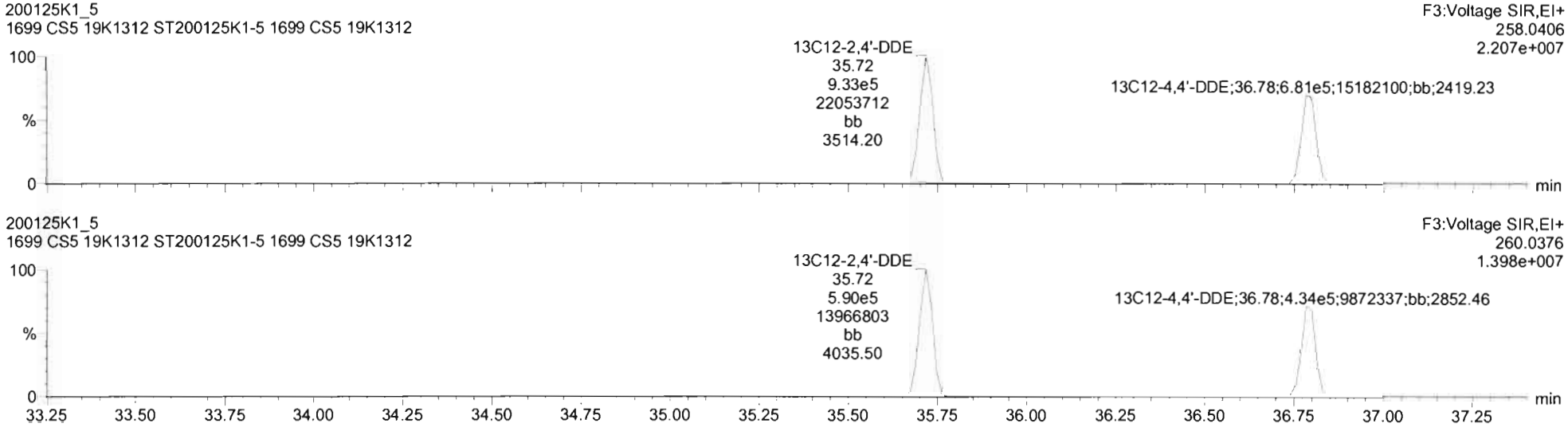
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

DDMU-DDE



DDE-isotopes



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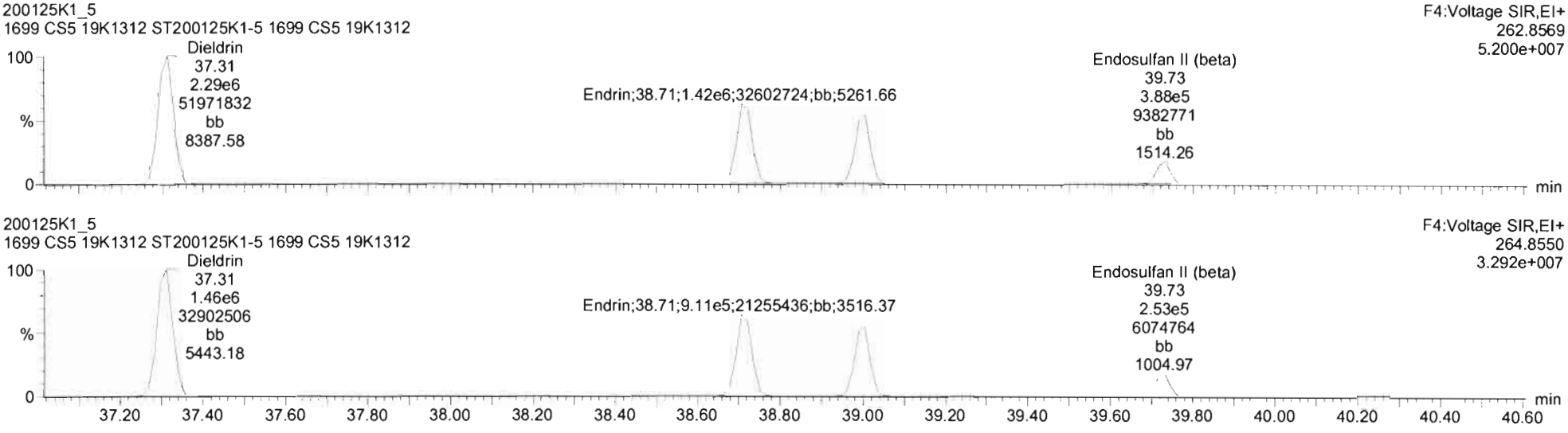
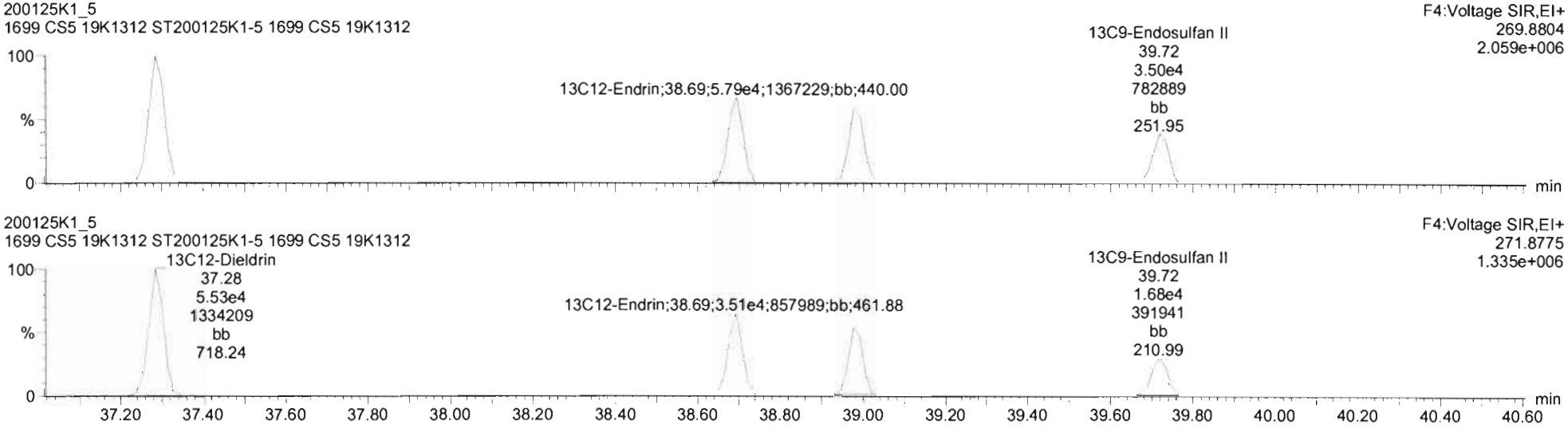
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

Dieldrin-EII



Dieldrin-EII-isotopes



TargetLynx - 200125K1 CRV.qld * - [Chromatogram]

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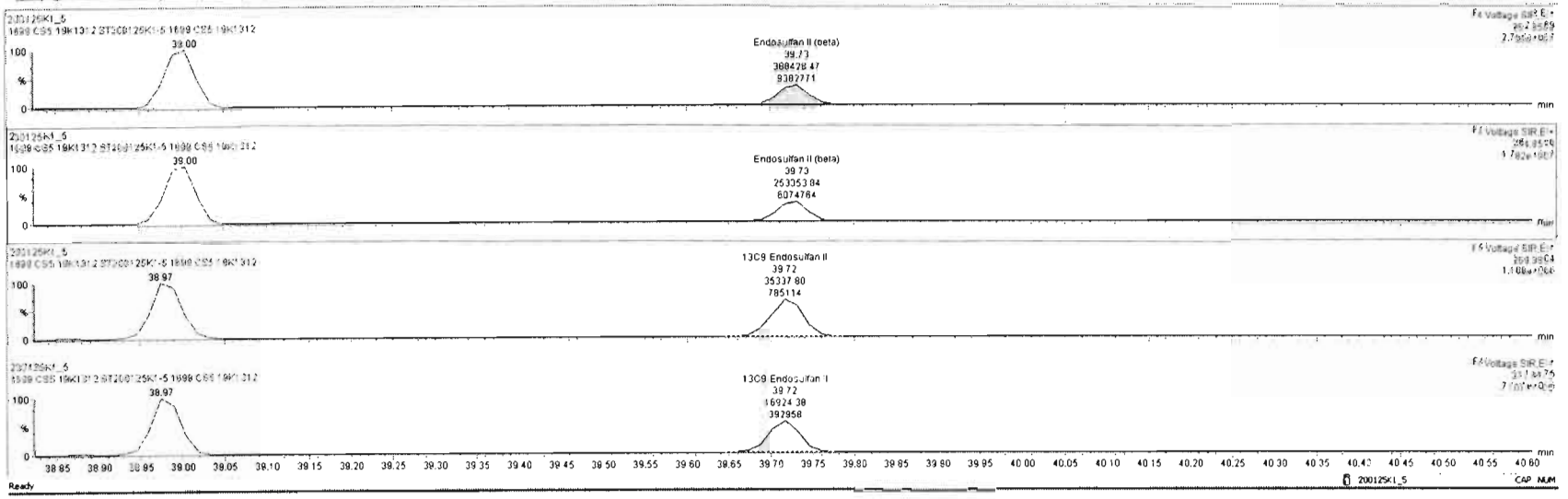
200125K1_5 - ST200125K1-5 1699 CS5 19K1312 - 1699 CS5 19K1312

	#	Name	Resp	IS Resp	IS#	RA	nVy	RRF	wt/vol	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	3.75e6	1.43e5	48	1.57	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1200	99.9	0.418	1200
21	21	Endrin	2.34e6	9.30e4	49	1.56	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	1190	99.0	0.659	1190
22	22	cis-Nonachlor	1.96e6	7.98e4	50	1.55	NO	1.0772	1.000	38.99	39.00	1.001	1.000	NO	1140	95.0	0.766	1140
23	23	Endosulfan II (beta)	6.42e5	5.23e4	51	1.53	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	553	46.1	1.19	553
24	24	2,4'-DDD	3.82e7	1.53e6	52	1.53	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1190	99.0	0.276	1190
25	25	2,4'-DDT	2.65e7	1.10e6	53	1.53	NO	1.0274	1.000	39.08	39.09	1.000	1.000	NO	1180	97.9	0.413	1180
26	26	4,4'-DDD	3.71e7	1.42e6	54	1.54	NO	1.1226	1.000	39.20	39.20	1.000	1.000	NO	1170	97.2	0.292	1170
27	27	4,4'-DDT	2.46e7	9.05e5	55	1.53	NO	1.1306	1.000	40.29	40.28	1.000	1.000	NO	1200	99.8	0.441	1200
28	28	Endosulfan Sulfate	8.97e5	3.96e4	56	1.56	NO	0.9871	1.000	41.45	41.47	1.000	1.000	NO	1150	95.7	1.44	1150
29	29	4,4'-Methoxychlor	3.01e7	1.30e7	57	6.01	NO	1.2668	1.000	43.33	43.34	1.000	1.000	NO	1180	98.6	0.0937	1180
30	30	Mirex	9.85e6	3.90e5	58	1.56	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1190	98.9	0.388	1190
31	31	Endrin Aldehyde	2.07e6	8.04e5	59	0.62	NO	1.0532	1.000	40.86	40.85	1.000	1.000	NO	1220	102	1.18	1220
32	32	Endrin Ketone	1.51e6	6.43e5	60	0.63	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	1210	101	1.75	1210
33	33	13C4-Hexachlorobutadi...	2.05e6	1.92e6	62	1.27	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	422	84.4	0.0310	
34	34	13C6-Hexachlorobenz	1.29e6	1.92e6	62	1.29	NO	0.6741	1.000	22.66	22.65	0.872	0.872	NO	50.0	100	0.006	
35	35	13C6-Alpha-BHC	5.01e5	1.92e6	62	0.78	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	51.3	103	0.159	
36	36	13C6-Lindane (gamma)	3.89e5	1.92e6	62	0.80	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	50.8	101	0.202	
37	37	13C6-Beta-BHC	3.01e5	1.92e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	50.9	102	0.262	



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200125K1_5

CAP NUM

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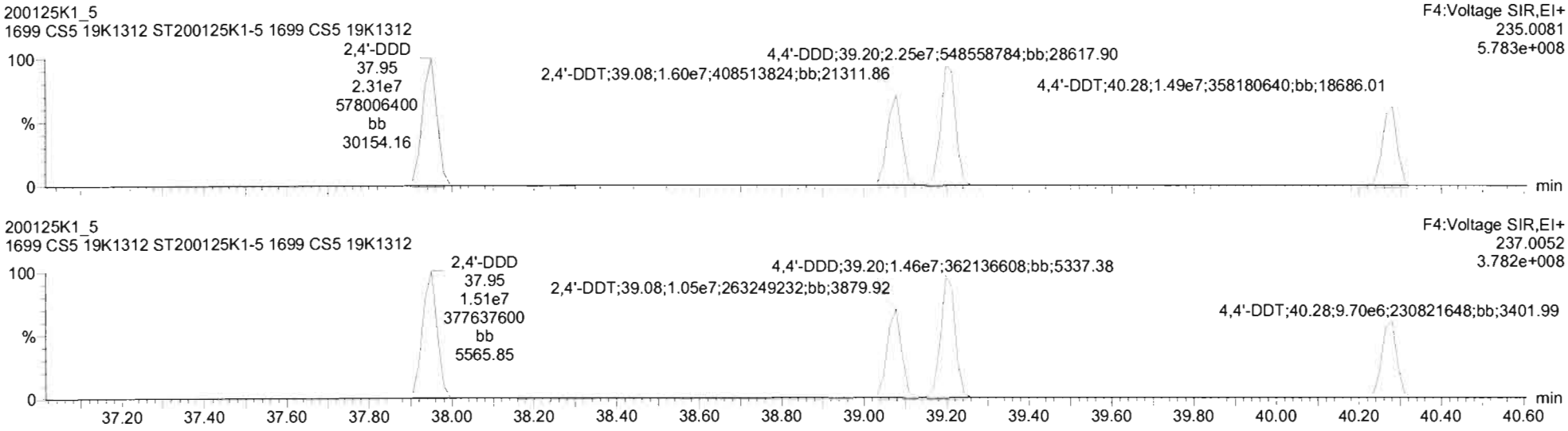
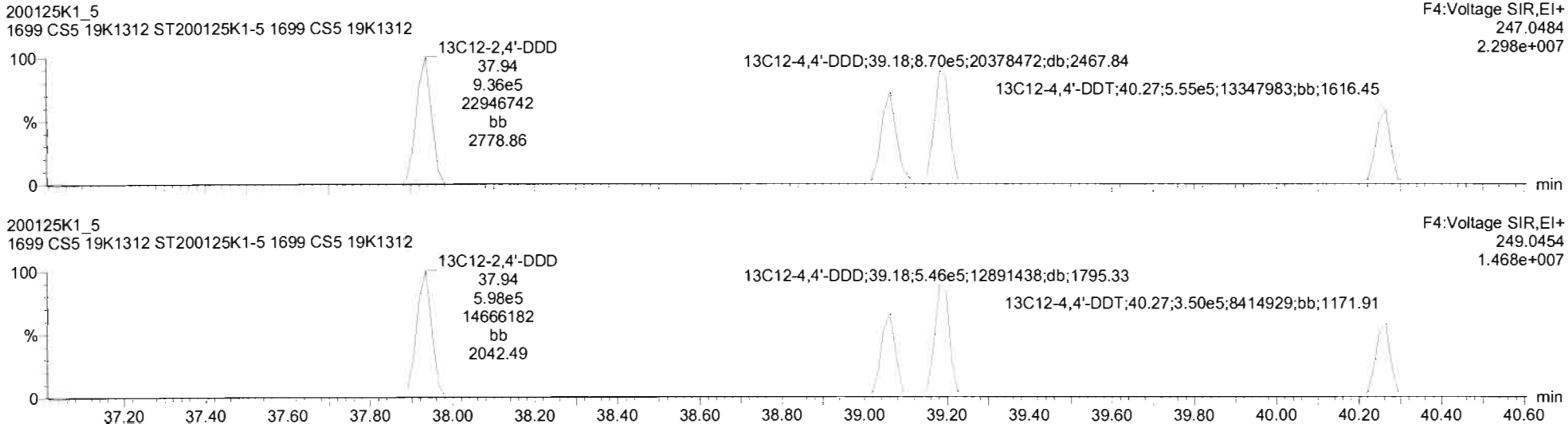
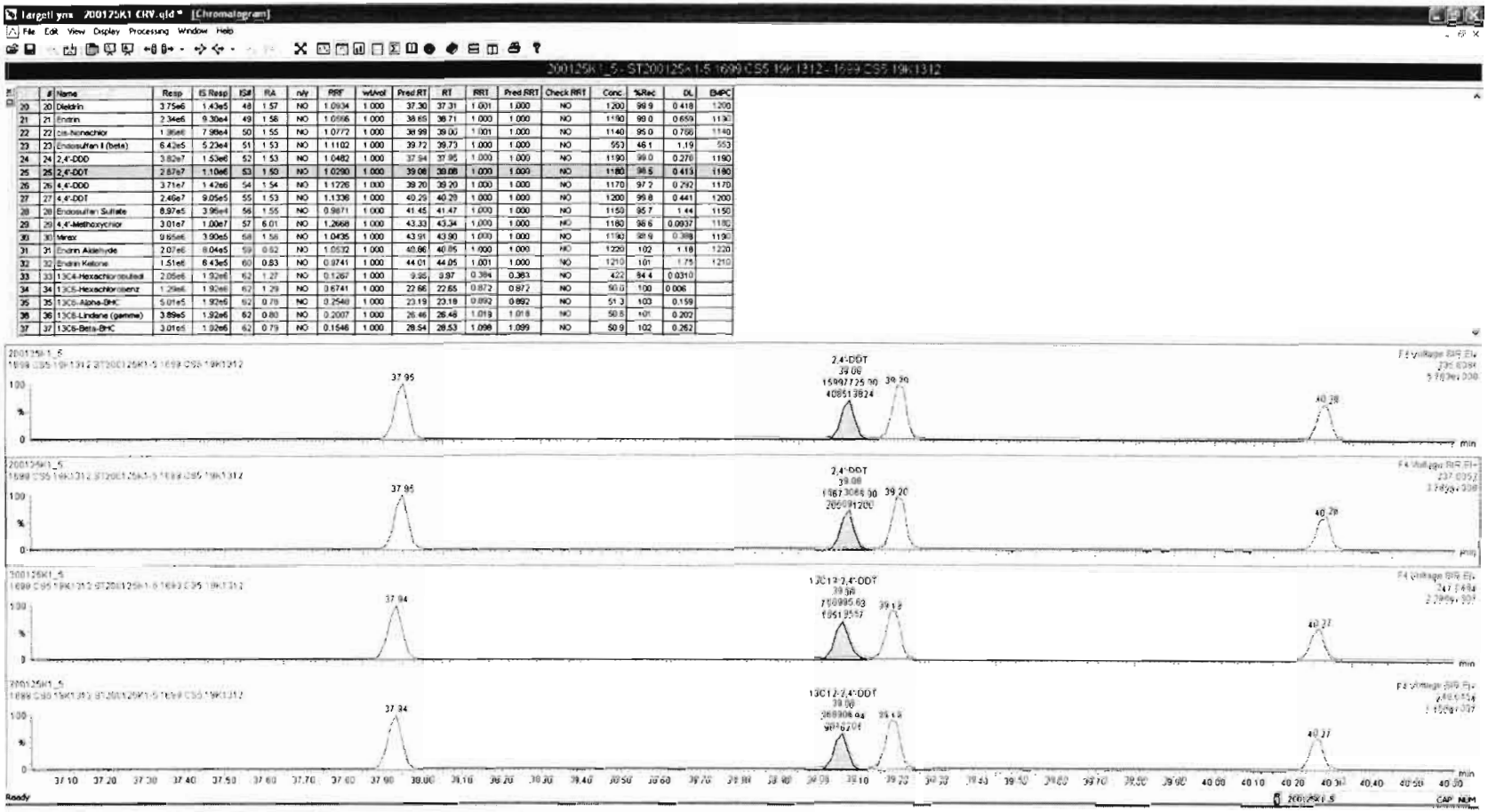
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

DDD-DDT



DDD-DDT-isotopes





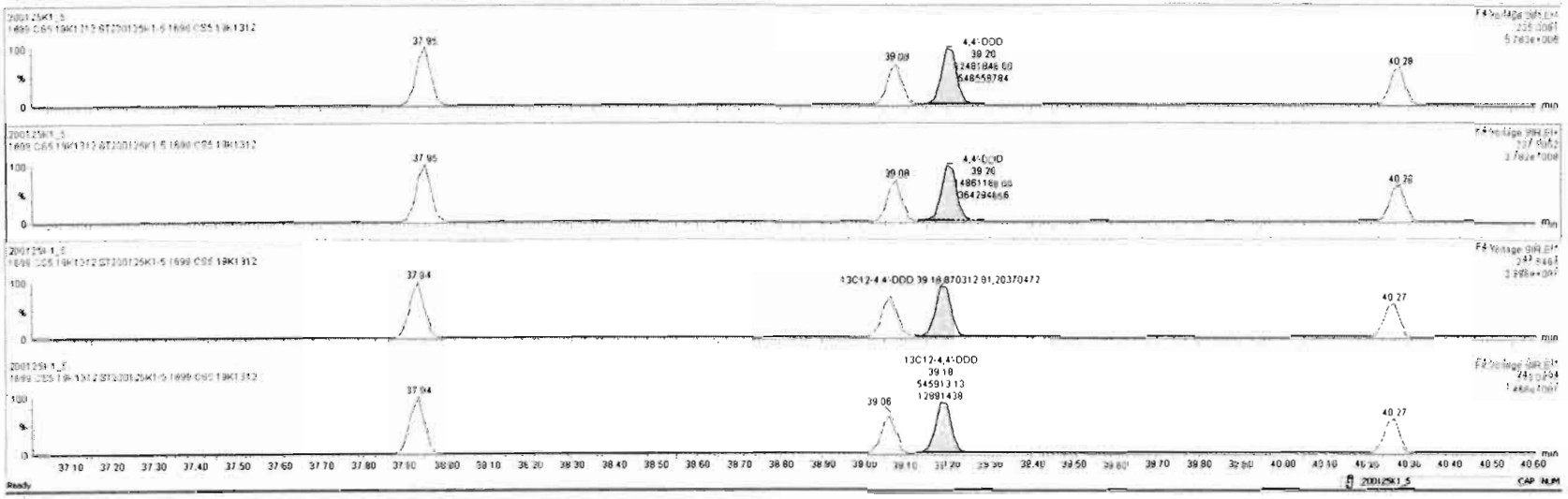
	#	Name	Resp	IS Resp	IS#	RA	nW	RRT	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc.	%Rec	DL	EMPC
20	20	Dieldrin	3.75e6	1.43e5	48	1.57	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1200	99.9	0.418	1200
21	21	Endrin	2.34e6	9.30e4	49	1.58	NO	1.0996	1.000	38.65	38.71	1.000	1.000	NO	1190	99.0	0.659	1190
22	22	cis-Nonachlor	1.86e6	7.98e4	50	1.55	NO	1.0772	1.000	38.99	39.00	1.001	1.000	NO	1140	95.0	0.766	1140
23	23	Endosulfan II (beta)	6.42e5	5.23e4	51	1.53	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	553	46.1	1.19	553
24	24	2,4'-DDD	3.82e7	1.53e6	52	1.53	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1190	99.0	0.270	1190
25	25	2,4'-DDT	2.87e7	1.10e6	53	1.50	NO	1.0290	1.000	39.08	39.08	1.000	1.000	NO	1180	98.5	0.413	1180
26	26	4,4'-DDD	3.71e7	1.42e6	54	1.54	NO	1.1726	1.000	39.20	39.20	1.000	1.000	NO	1170	97.2	0.292	1170
27	27	4,4'-DDT	2.46e7	9.05e5	55	1.53	NO	1.1336	1.000	40.29	40.29	1.000	1.000	NO	1200	99.8	0.441	1200
28	28	Endosulfan Sulfate	8.97e5	3.96e4	56	1.55	NO	0.9871	1.000	41.45	41.47	1.000	1.000	NO	1150	95.7	1.44	1150
29	29	4,4'-Methoxychlor	3.01e7	1.00e7	57	6.01	NO	1.2668	1.000	43.33	43.34	1.000	1.000	NO	1180	98.6	0.0937	1180
30	30	Mirex	9.65e6	3.90e5	58	1.56	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1190	99.9	0.388	1190
31	31	Endrin Aldehyde	2.07e6	8.04e5	59	0.62	NO	1.0532	1.000	40.86	40.85	1.000	1.000	NO	1220	102	1.16	1220
32	32	Endrin Ketone	1.51e6	6.43e5	60	0.83	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	1210	101	1.75	1210
33	33	13C4-Hexachlorobutadi	2.05e6	1.92e6	62	1.27	NO	0.1267	1.000	9.95	9.97	0.384	0.383	NO	422	84.4	0.0310	
34	34	13C6-Hexachlorobenz	1.29e6	1.92e6	62	1.29	NO	0.6741	1.000	22.66	22.65	0.872	0.872	NO	50.0	100	0.006	
35	35	13C6-Alpha-BHC	5.01e5	1.92e6	62	0.78	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	51.3	103	0.159	
36	36	13C6-Lindane (gamma)	3.89e5	1.92e6	62	0.80	NO	0.2007	1.000	26.46	26.48	1.019	1.018	NO	50.8	101	0.202	
37	37	13C6-Beta-BHC	3.01e5	1.92e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	50.9	102	0.262	

TargetLynx 200125K1 CNF.qld * [Chromatogram]

File Edit View Display Processing Window Help

200125K1_5 - ST20125K1-5 1699 CS5 19K1312 - 1699 CS5 19K1312

	#	Name	Resp	IS Resp	ISR	RA	nAy	RRF	wtAvg	Pred RT	RT	RRT	Pred RRT	Check RRT	Conc	%Rec	DL	EMPC
20	20	Dieldrin	3.75e6	1.43e5	48	1.57	NO	1.0934	1.000	37.30	37.31	1.001	1.000	NO	1200	99.8	0.418	1200
21	21	Endrin	2.34e6	9.30e4	49	1.56	NO	1.0566	1.000	38.69	38.71	1.000	1.000	NO	1190	99.0	0.659	1190
22	22	cis-Nonachlor	1.91e6	7.98e4	50	1.55	NO	1.0772	1.000	38.99	39.00	1.001	1.000	NO	1140	95.0	0.766	1140
23	23	Endosulfan II (beta)	6.42e5	5.23e4	51	1.53	NO	1.1102	1.000	39.72	39.73	1.000	1.000	NO	553	46.1	1.19	553
24	24	2,4'-DDD	3.82e7	1.53e6	52	1.53	NO	1.0482	1.000	37.94	37.95	1.000	1.000	NO	1190	99.0	0.276	1190
25	25	2,4'-DDT	2.67e7	1.10e6	53	1.50	NO	1.0290	1.000	39.08	39.08	1.000	1.000	NO	1180	98.5	0.413	1180
26	26	4,4'-DDD	3.73e7	1.42e6	54	1.51	NO	1.1242	1.000	39.20	39.20	1.000	1.000	NO	1170	97.7	0.292	1170
27	27	4,4'-DDT	2.46e7	9.05e5	55	1.53	NO	1.1336	1.000	40.29	40.28	1.000	1.000	NO	1200	99.8	0.441	1200
28	28	Endosulfan Sulfate	8.97e5	3.96e4	56	1.55	NO	0.9871	1.000	41.45	41.47	1.000	1.000	NO	1150	95.7	1.44	1150
29	29	4,4'-Methoxychlor	3.01e7	1.00e7	57	6.01	NO	1.2668	1.000	43.33	43.34	1.000	1.000	NO	1180	98.6	0.0937	1180
30	30	Mirex	9.65e6	3.90e5	58	1.58	NO	1.0435	1.000	43.91	43.90	1.000	1.000	NO	1190	98.9	0.398	1190
31	31	Endrin Aldehyde	2.07e6	8.04e5	59	0.62	NO	1.0532	1.000	40.86	40.85	1.000	1.000	NO	1220	102	1.18	1220
32	32	Endrin Ketone	1.51e6	6.43e5	60	0.93	NO	0.9741	1.000	44.01	44.05	1.001	1.000	NO	1210	101	1.75	1210
33	33	13C4-Hexachlorobutadi	2.05e6	1.92e6	62	1.27	NO	0.1257	1.000	9.95	9.97	0.384	0.383	NO	422	84.4	0.0310	
34	34	13C6-Hexachlorobenz	1.29e6	1.92e6	62	1.28	NO	0.6741	1.000	22.66	22.65	0.872	0.872	NO	50.0	100	0.006	
35	35	13C6-Alpha-BHC	5.01e5	1.92e6	62	0.78	NO	0.2548	1.000	23.19	23.18	0.892	0.892	NO	51.3	103	0.158	
36	36	13C6-Lindane (gamma)	3.89e5	1.92e6	62	0.80	NO	0.2007	1.000	26.46	26.48	1.019	1.010	NO	50.6	101	0.202	
37	37	13C6-Beta-BHC	3.01e5	1.92e6	62	0.79	NO	0.1546	1.000	28.54	28.53	1.098	1.099	NO	50.9	102	0.262	



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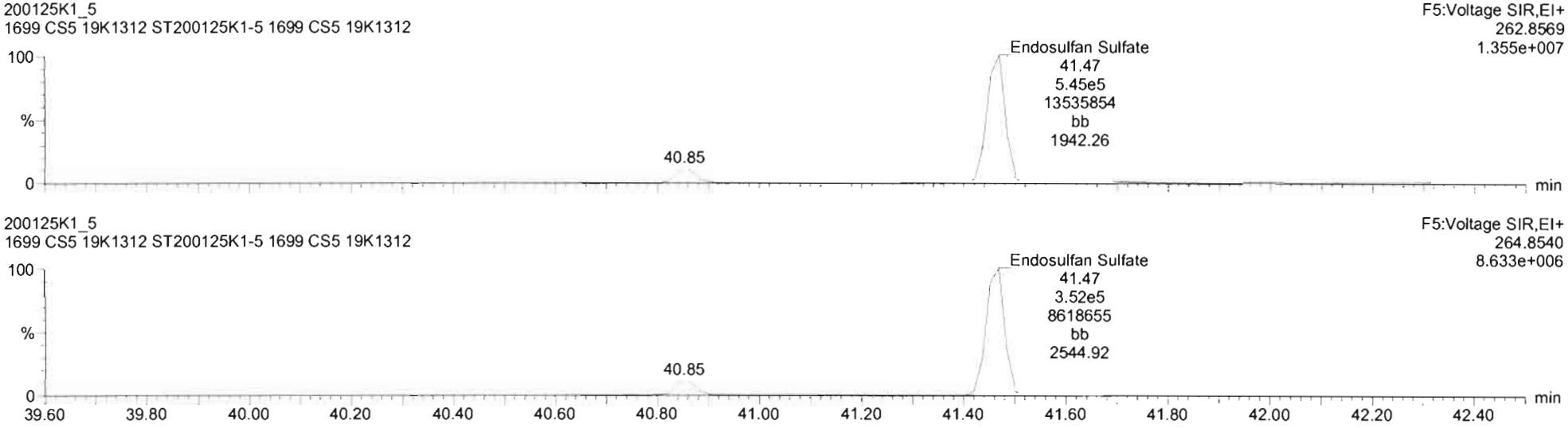
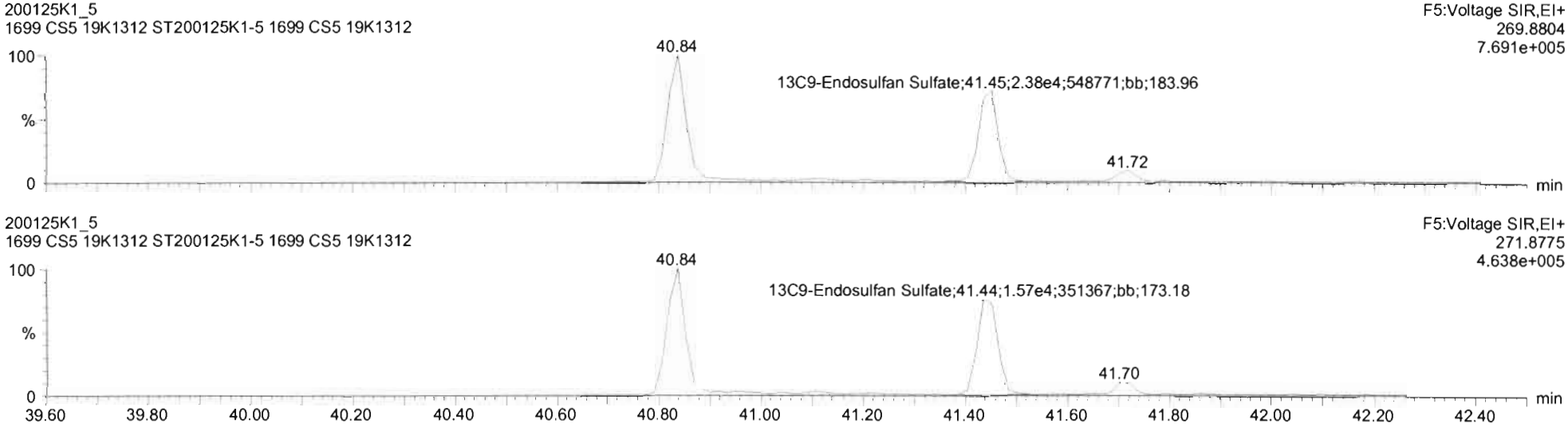
Printed: Monday, January 27, 2020 09:17:37 Pacific Standard Time

Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

Endosulfan Sulfate



13C9-Endosulfan Sulfate



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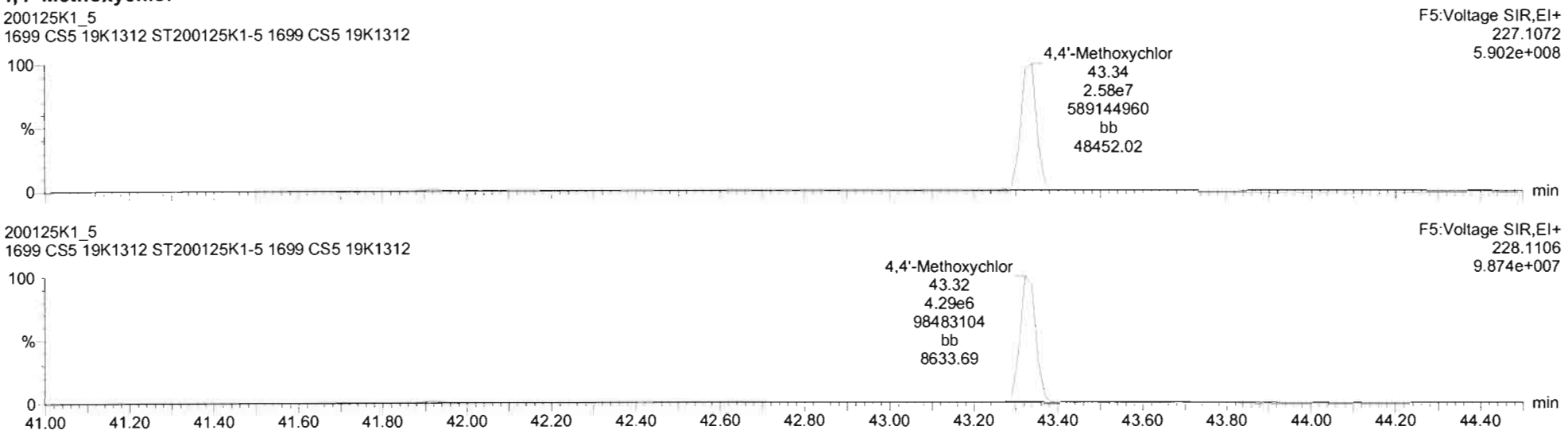
Name: 200125K1_5, Date: 25-Jan-2020, Time: 16:23:25, ID: ST200125K1-5 1699 CS5 19K1312, Description: 1699 CS5 19K1312

4,4'-Methoxychlor



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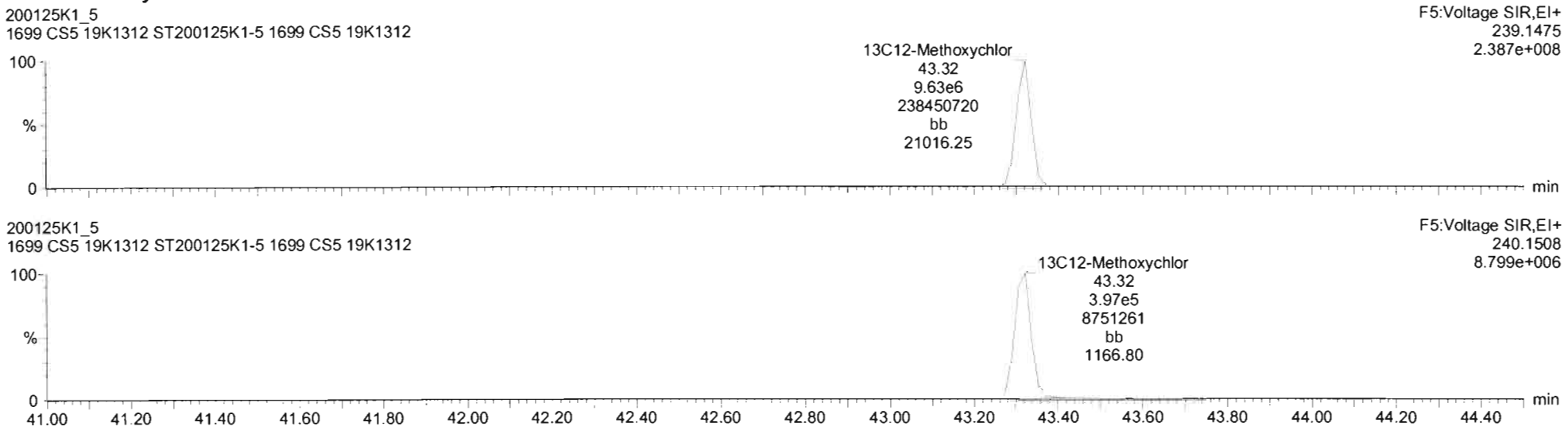

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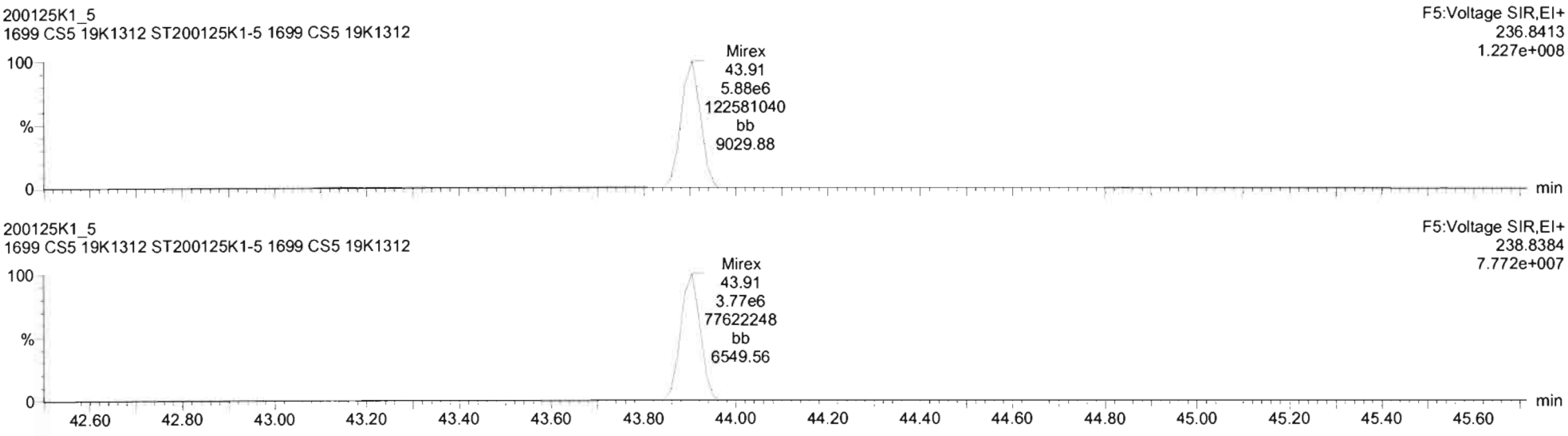
Mirex



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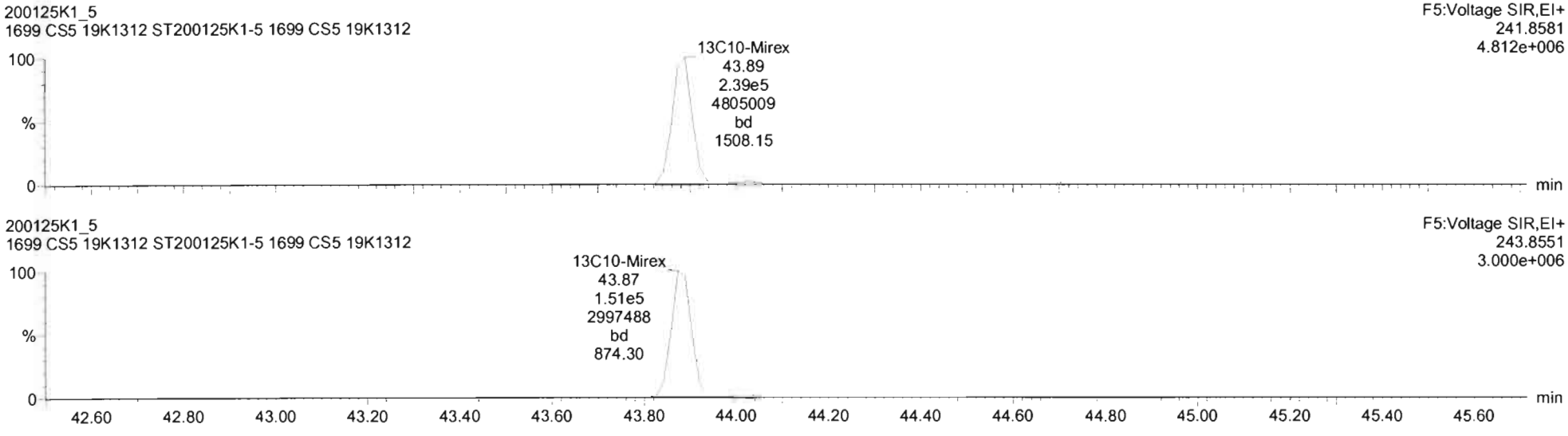

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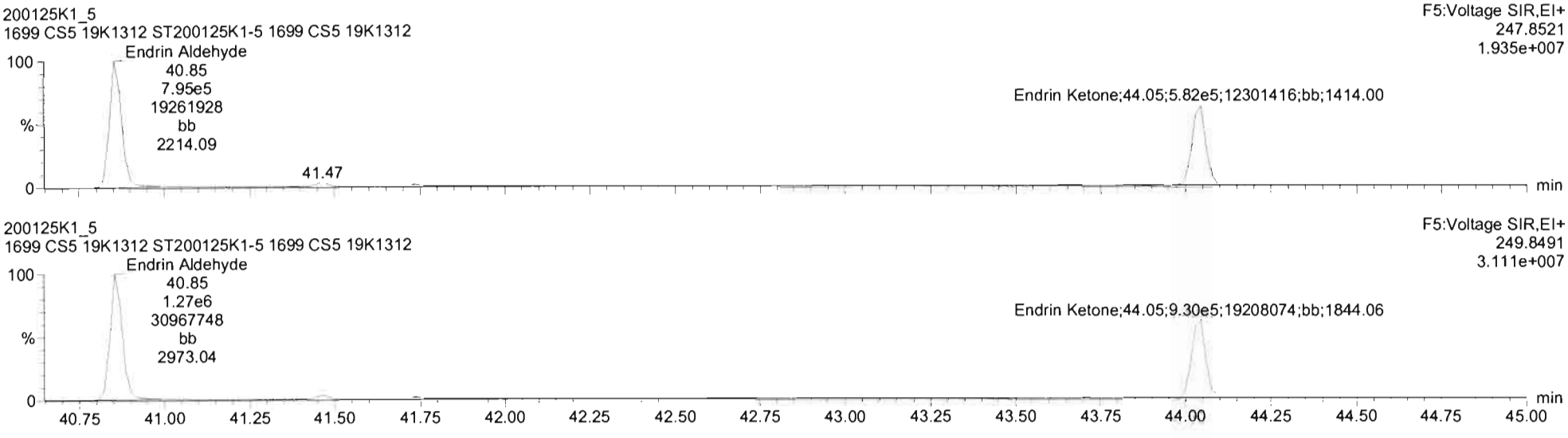
EA-EK



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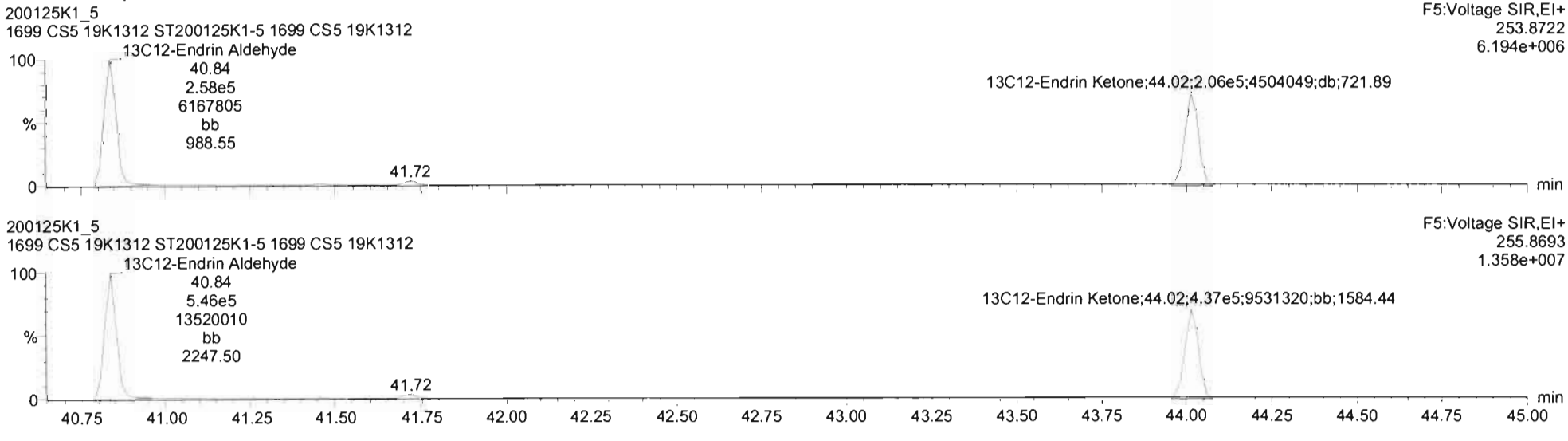

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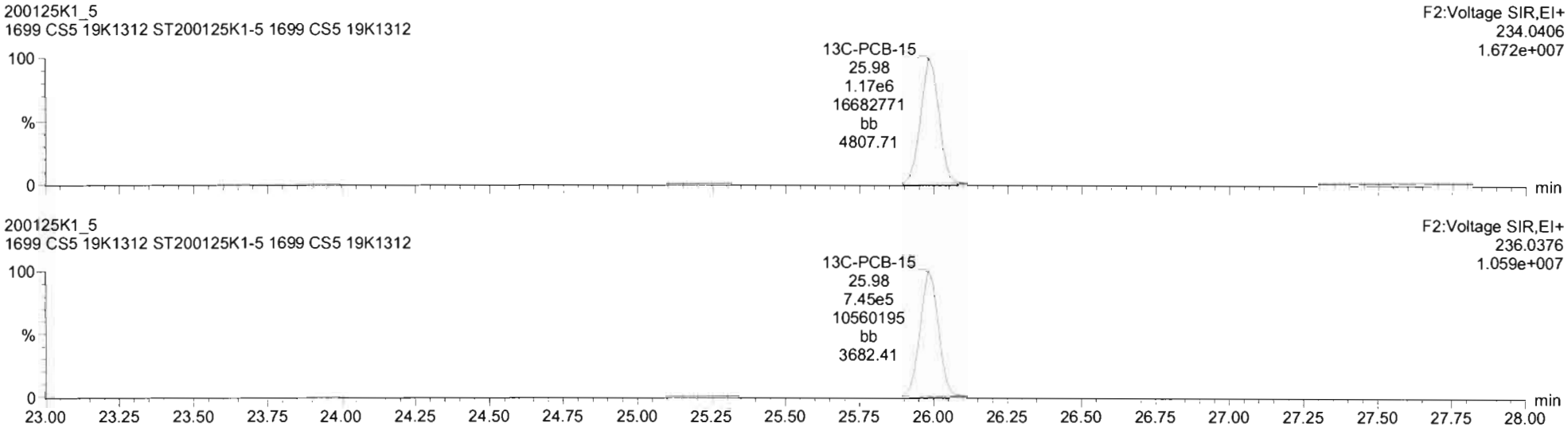
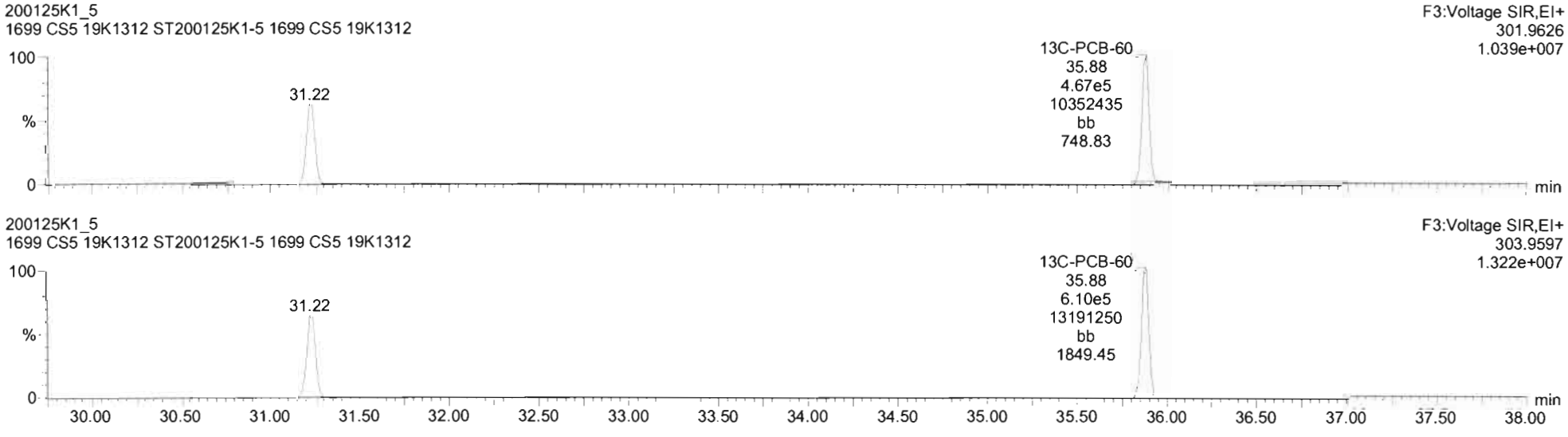
13C-PCB-15



13C-PCB-60



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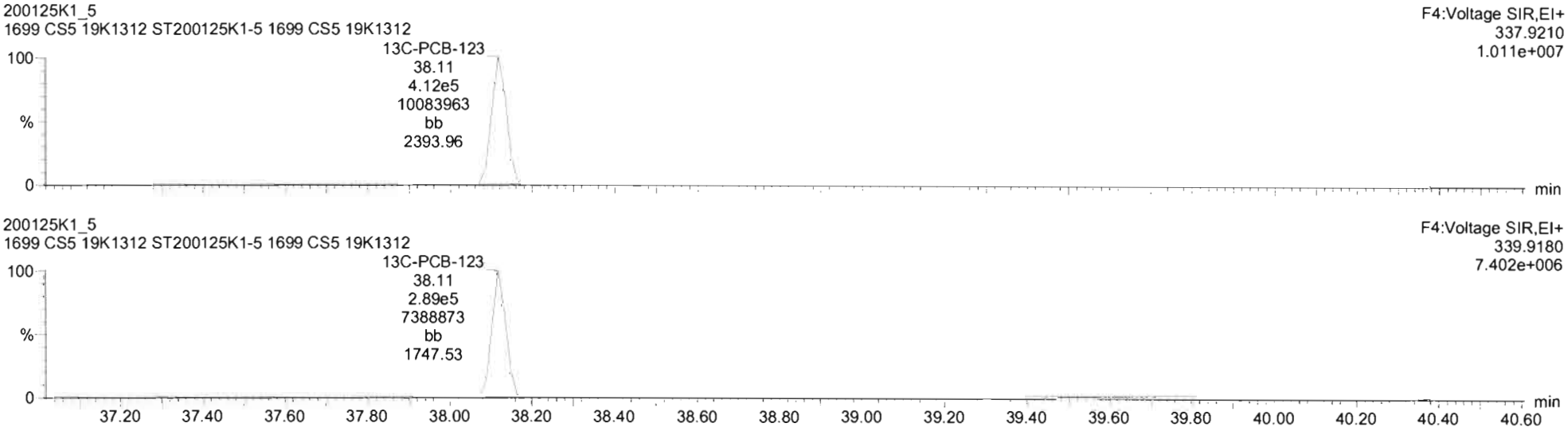
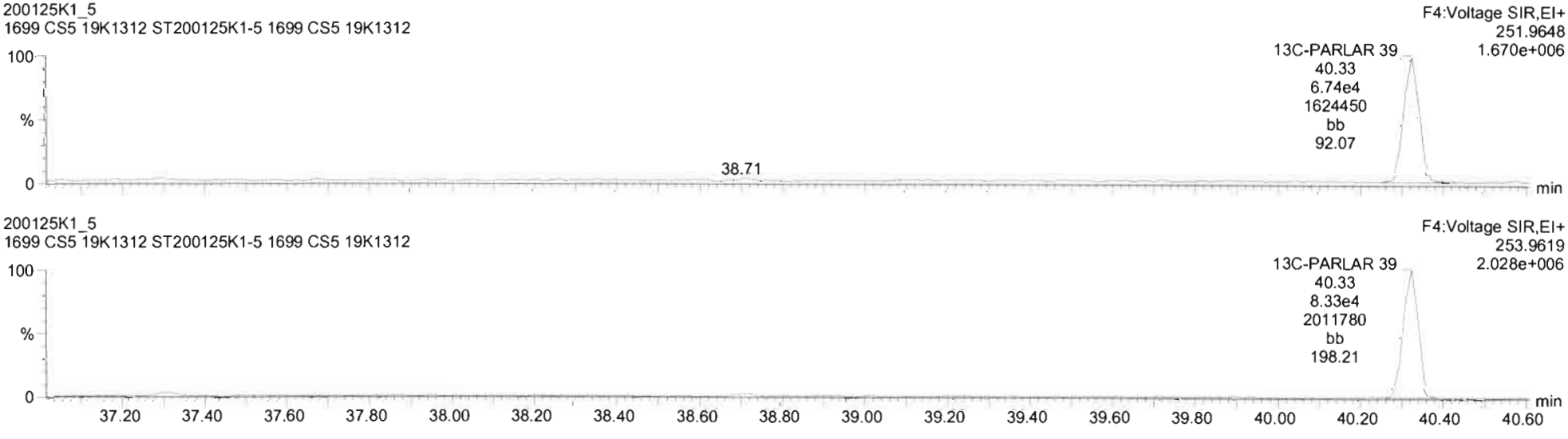


13C-PARLAR 39



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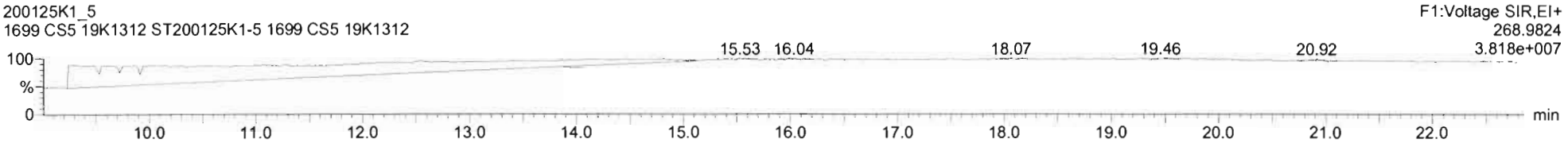
PFK1



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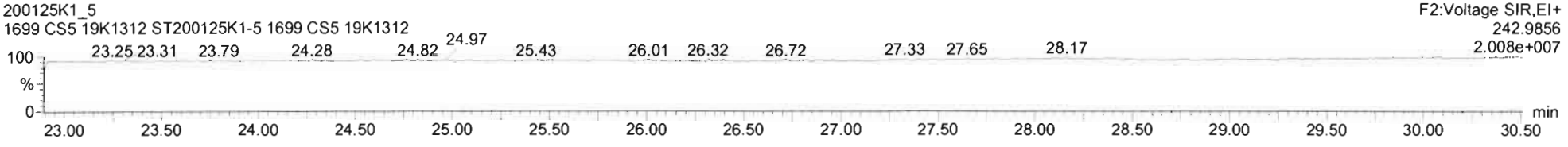

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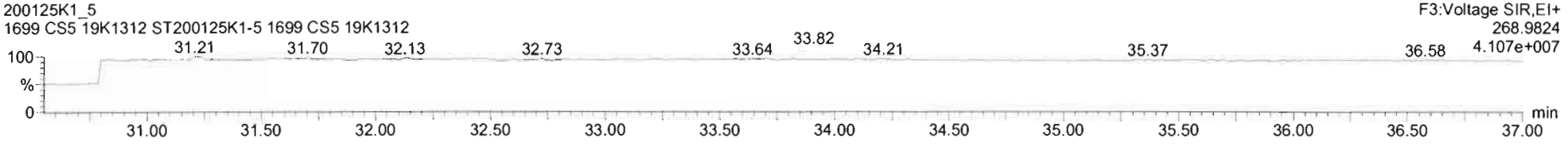

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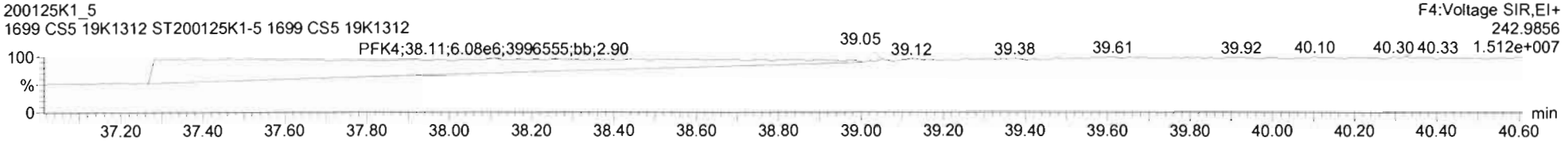

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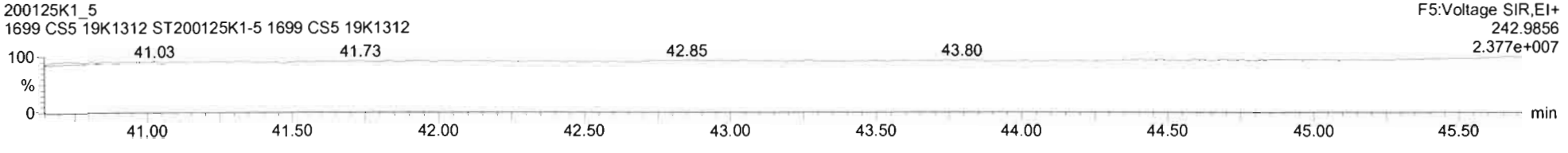

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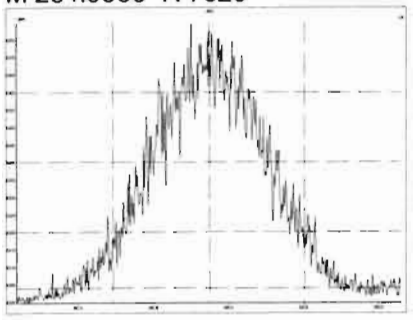
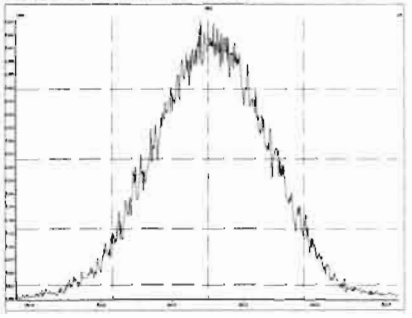


M 268.9824 R 7309



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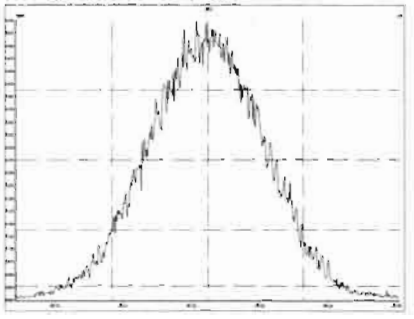

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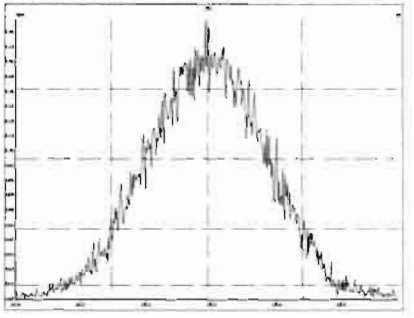

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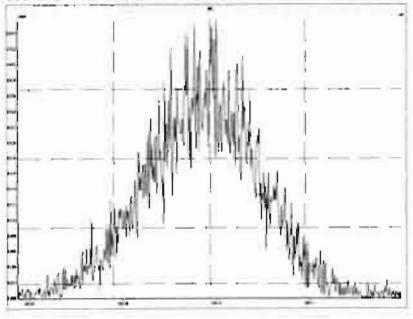

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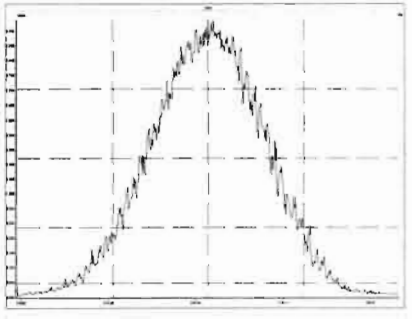

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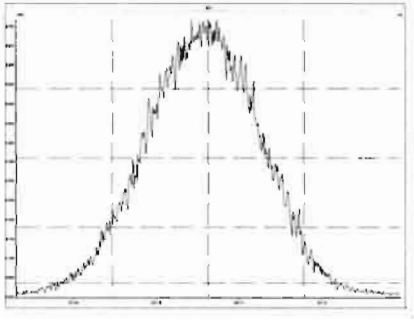

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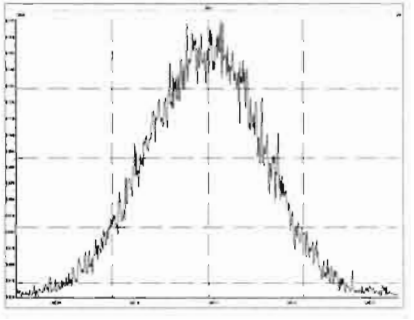

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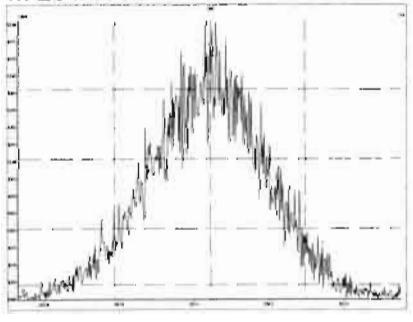

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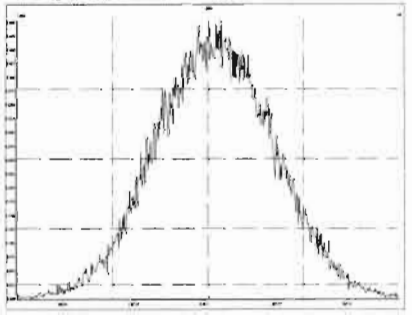

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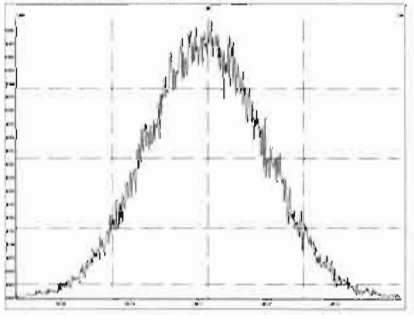

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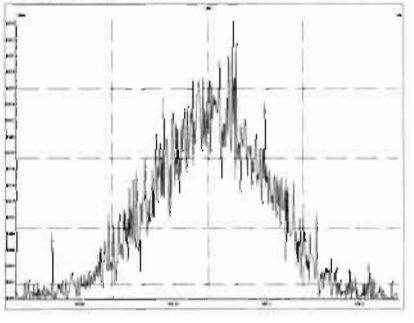

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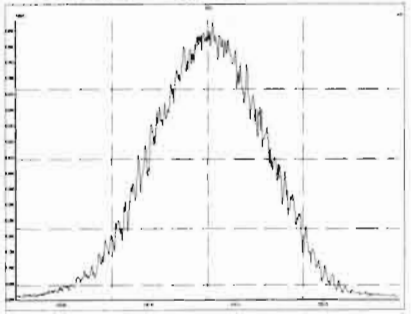
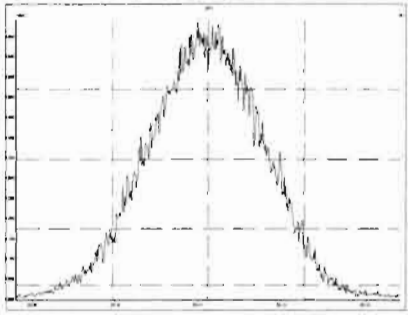
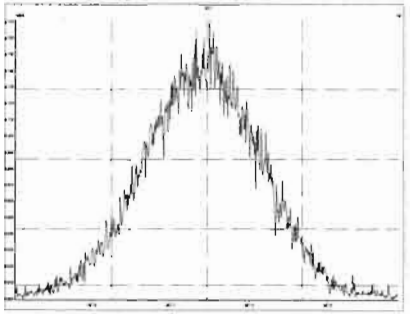


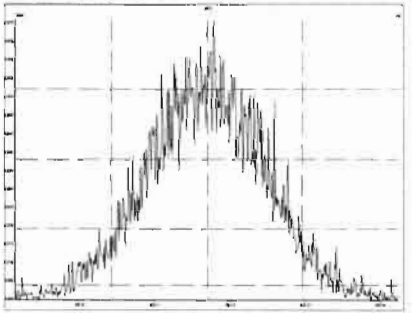
M 230.9856 R 7104



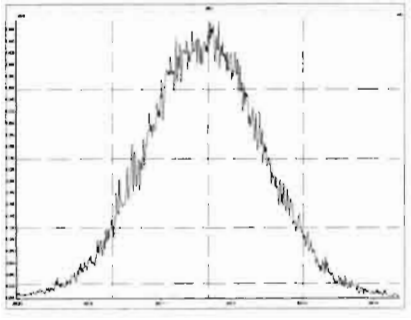
M 242.9856 R 7320



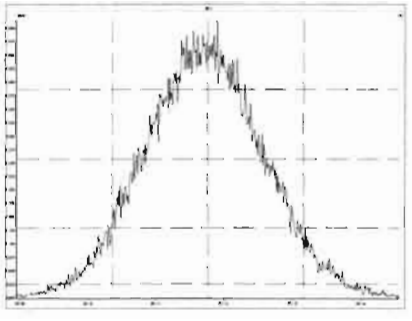
M 254.9856 R 7752



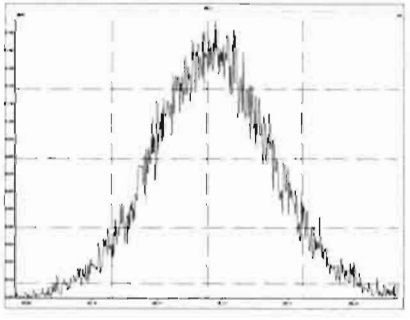
M 268.9824 R 6993



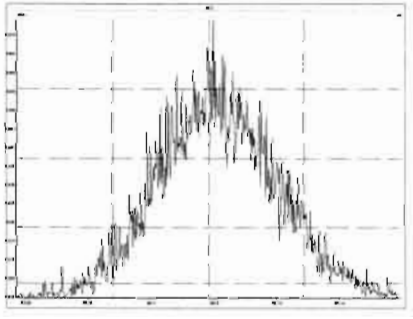
M 280.9824 R 6935



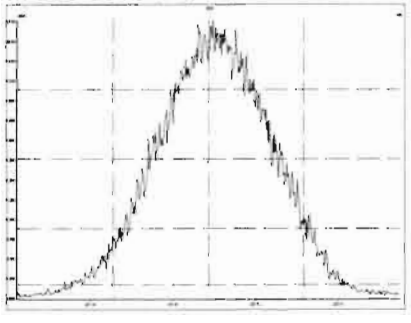
M 292.9824 R 7197



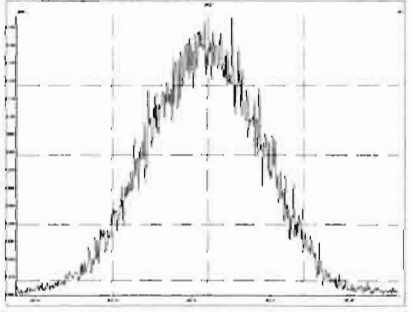
M 304.9824 R 7487



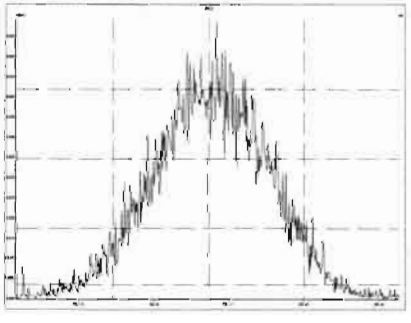
M 230.9856 R 7102



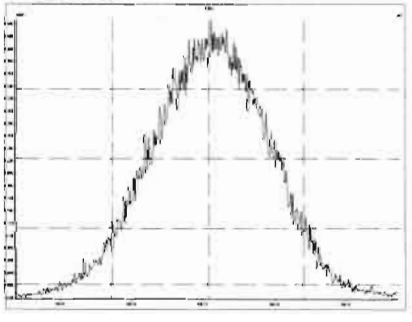
M 242.9856 R 7508



M 254.9856 R 7518



M 268.9824 R 7288



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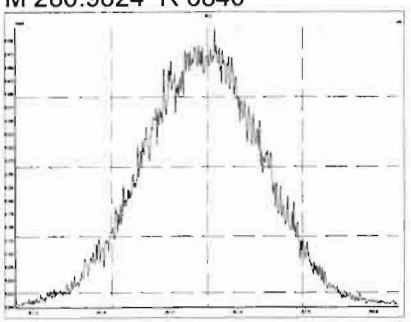
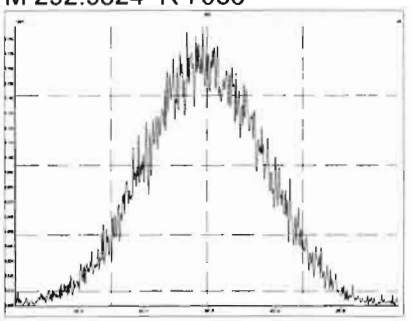
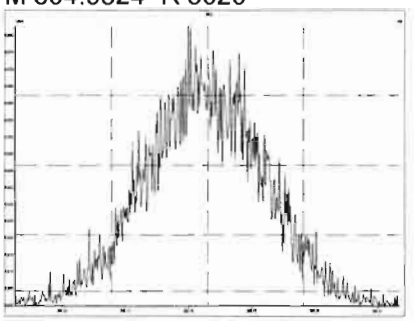


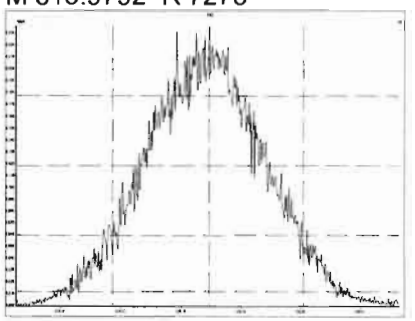
M 292.9824 R 7056



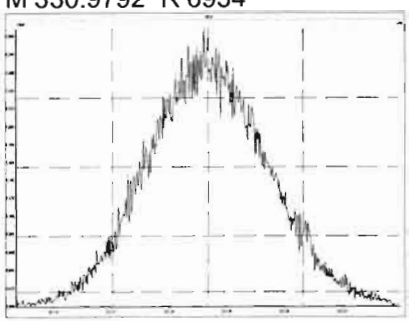
M 304.9824 R 8020



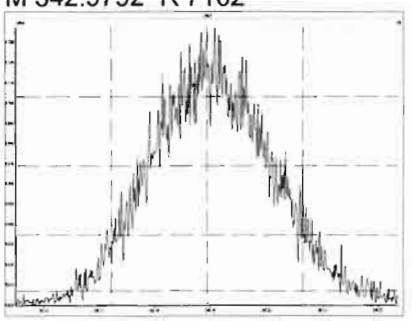
M 318.9792 R 7278



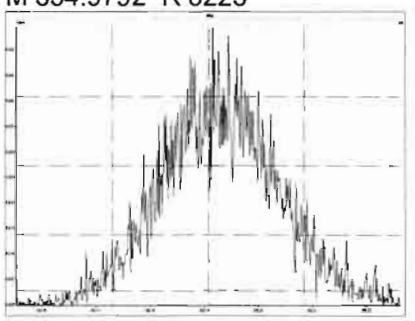
M 330.9792 R 6954



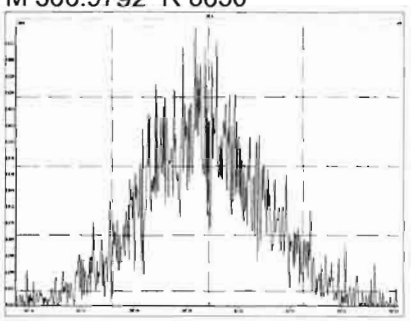
M 342.9792 R 7102



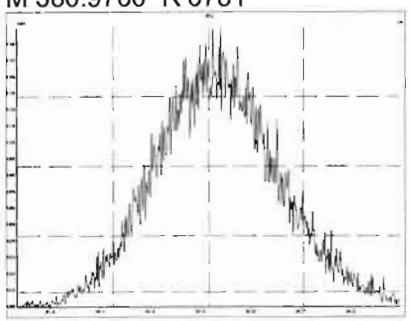
M 354.9792 R 8223



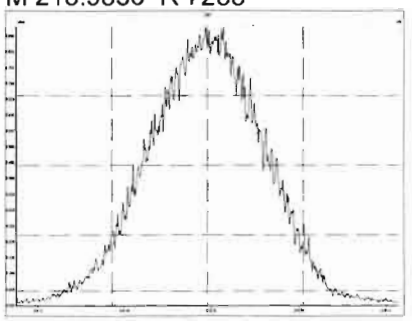
M 366.9792 R 8650



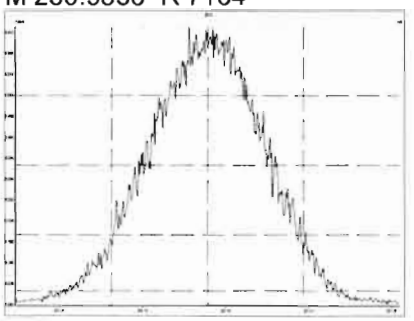
M 380.9760 R 6781



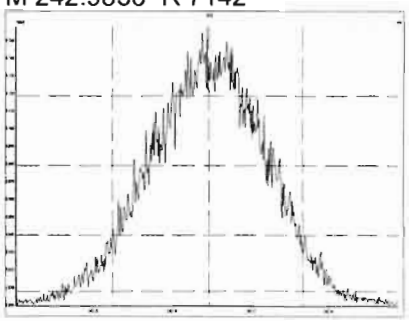
M 218.9856 R 7288



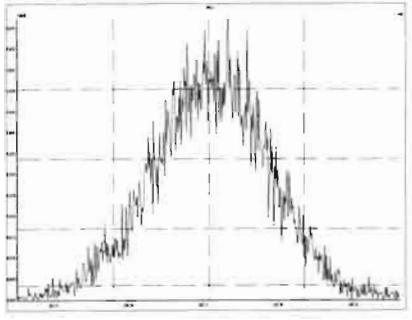
M 230.9856 R 7164



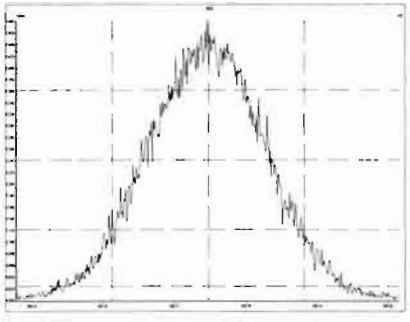
M 242.9856 R 7142



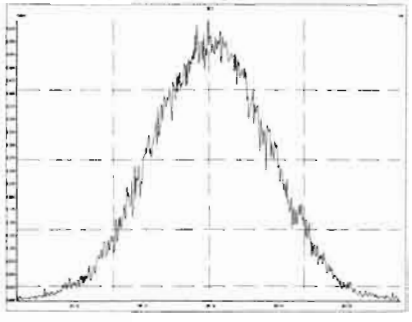
M 254.9856 R 7419



M 268.9824 R 7072



M 280.9824 R 7196



Vista Analytical Laboratory

Dataset: U:\VG11.PRO\Results\200125K1\200125K1-7.qld

Last Altered: Monday, January 27, 2020 09:04:10 Pacific Standard Time
Printed: Monday, January 27, 2020 09:56:10 Pacific Standard Time

HC 1.27.2020 CT 01/27/2020

Method: U:\VG11.PRO\MethDB\1699rrt-01-25-2020.mdb 25 Jan 2020 13:55:51
Calibration: U:\VG11.PRO\CurveDB\db_50_1699vg11-1-25-20-LIMITED.cdb 27 Jan 2020 09:02:26

Name: 200125K1_7, Date: 25-Jan-2020, Time: 18:01:50, ID: SS200125K1-1 1699 SS 19H0208, Description: 1699 SS 19H0208

	#	Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
1	2	Hexachlorobenzene	2.44e6	1.31e6	1.24	NO	0.997	1.000	22.67	22.66	1.001	1.001	NO	93.2	93.2	0.00649	93.2
2	3	Alpha-BHC	7.88e5	4.89e5	2.10	NO	0.862	1.000	23.23	23.20	1.001	1.002	NO	93.4	93.4	0.196	93.4
3	4	Lindane (gamma-BHC)	6.43e5	3.93e5	2.13	NO	0.869	1.000	26.51	26.51	1.001	1.001	NO	94.1	94.1	0.280	94.1
4	5	Beta-BHC	5.60e5	2.98e5	2.13	NO	1.02	1.000	28.54	28.55	1.001	1.000	NO	92.4	92.4	0.248	92.4
5	6	Delta-BHC	6.31e5	3.53e5	2.16	NO	0.952	1.000	30.24	30.24	1.000	1.001	NO	93.9	93.9	0.213	93.9
6	7	Heptachlor	3.98e5	1.98e5	1.16	NO	1.08	1.000	28.68	28.69	1.002	1.001	NO	93.0	93.0	0.0790	93.0
7	9	Aldrin	5.43e5	2.61e5	1.58	NO	1.11	1.000	30.80	30.80	1.001	1.001	NO	93.4	93.4	0.0580	93.4
8	10	Oxychlordane	1.25e5	6.24e4	1.64	NO	1.09	1.000	33.37	33.38	1.001	1.001	NO	91.3	91.3	0.227	91.3
9	11	cis-Heptachlor Epoxide	1.65e5	7.99e4	1.54	NO	1.13	1.000	34.16	34.17	1.001	1.001	NO	91.1	91.1	0.163	91.1
10	12	trans-Heptachlor Epox...	3.74e4	7.99e4	1.52	NO	0.260	1.000	34.65	34.67	1.015	1.015	NO	90.0	90.0	0.708	90.0
11	13	trans-Chlordane (gam...	1.24e5	5.48e4	1.61	NO	1.18	1.000	35.08	35.08	1.000	1.001	NO	96.2	96.2	0.215	96.2
12	14	trans-Nonachlor	1.31e5	6.49e4	1.58	NO	1.08	1.000	35.26	35.26	1.001	1.001	NO	93.8	93.8	0.193	93.8
13	15	cis-Chlordane	1.33e5	6.49e4	1.64	NO	1.11	1.000	35.74	35.75	1.015	1.014	NO	92.2	92.2	0.187	92.2
14	16	Endosulfan I (alpha)	9.27e4	4.38e4	1.59	NO	1.16	1.000	35.85	35.85	1.000	1.001	NO	91.5	91.5	0.269	91.5
15	18	2,4'-DDE	2.73e6	1.49e6	1.39	NO	0.984	1.000	35.73	35.73	1.000	1.000	NO	93.3	93.3	0.167	93.3
16	19	4,4'-DDE	2.00e6	1.08e6	1.41	NO	0.996	1.000	36.80	36.81	1.001	1.000	NO	93.3	93.3	0.241	93.3
17	20	Dieldrin	3.13e5	1.50e5	1.54	NO	1.09	1.000	37.30	37.31	1.001	1.000	NO	95.1	95.1	0.121	95.1
18	21	Endrin	1.72e5	8.49e4	1.60	NO	1.06	1.000	38.69	38.71	1.000	1.000	NO	96.1	96.1	0.212	96.1
19	22	cis-Nonachlor	1.57e5	7.38e4	1.55	NO	1.08	1.000	38.99	38.99	1.000	1.000	NO	99.1	99.1	0.250	99.1
20	23	Endosulfan II (beta)	4.99e4	2.39e4	1.61	NO	1.11	1.000	39.72	39.73	1.000	1.000	NO	94.1	94.1	0.792	94.1
21	24	2,4'-DDD	2.76e6	1.42e6	1.52	NO	1.05	1.000	37.94	37.95	1.000	1.000	NO	92.8	92.8	0.276	92.8
22	25	2,4'-DDT	1.88e6	9.08e5	1.50	NO	1.03	1.000	39.08	39.08	1.000	1.000	NO	100	100	0.441	100
23	26	4,4'-DDD	2.57e6	1.22e6	1.53	NO	1.12	1.000	39.20	39.20	1.000	1.000	NO	93.4	93.4	0.287	93.4
24	27	4,4'-DDT	1.66e6	7.92e5	1.55	NO	1.13	1.000	40.29	40.27	1.000	1.000	NO	92.6	92.6	0.466	92.6
25	28	Endosulfan Sulfate	7.10e4	3.65e4	1.61	NO	0.987	1.000	41.44	41.47	1.001	1.000	NO	98.6	98.6	0.418	98.6
26	29	4,4'-Methoxychlor	2.06e6	8.74e6	6.08	NO	1.27	1.000	43.33	43.32	1.000	1.000	NO	92.9	92.9	0.0546	92.9
27	30	Mirex	7.52e5	3.78e5	1.54	NO	1.04	1.000	43.90	43.90	1.001	1.000	NO	95.4	95.4	0.138	95.4
28	31	Endrin Aldehyde	1.76e5	7.69e5	0.63	NO	1.06	1.000	40.86	40.85	1.000	1.000	NO	108	108	0.454	108
29	32	Endrin Ketone	1.46e5	6.50e5	0.62	NO	0.974	1.000	44.01	44.03	1.000	1.000	NO	115	115	0.618	115
30	34	13C6-Hexachlorobenz...	1.31e6	2.03e6	1.27	NO	0.674	1.000	22.66	22.65	0.872	0.872	NO	48.1	96.2	0.00546	
31	35	13C6-Alpha-BHC	4.89e5	2.03e6	0.79	NO	0.255	1.000	23.19	23.18	0.892	0.892	NO	47.4	94.7	0.167	

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Dataset: U:\VG11.PRO\Results\200125K1\200125K1-7.qld

Last Altered: Monday, January 27, 2020 09:04:10 Pacific Standard Time
Printed: Monday, January 27, 2020 09:56:10 Pacific Standard Time

Name: 200125K1_7, Date: 25-Jan-2020, Time: 18:01:50, ID: SS200125K1-1 1699 SS 19H0208, Description: 1699 SS 19H0208

	#-Name	Resp	IS Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	RRT	Pred.RRT	RRT Fail	Conc.	%Rec	DL	EMPC
32	36 13C6-Lindane (gamma)	3.93e5	2.03e6	0.80	NO	0.201	1.000	26.45	26.48	1.019	1.018	NO	48.3	96.6	0.212	
33	37 13C6-Beta-BHC	2.98e5	2.03e6	0.78	NO	0.155	1.000	28.54	28.53	1.098	1.099	NO	47.5	95.0	0.275	
34	38 13C6-Delta-BHC	3.53e5	2.03e6	0.79	NO	0.183	1.000	30.23	30.22	1.163	1.164	NO	47.6	95.2	0.232	
35	39 13C10-Heptachlor	1.98e5	2.03e6	1.28	NO	0.106	1.000	28.67	28.65	1.103	1.104	NO	46.3	92.6	0.105	
36	40 13C12-Aldrin	2.61e5	2.03e6	1.62	NO	0.130	1.000	30.78	30.77	1.184	1.185	NO	49.5	99.0	0.137	
37	41 13C10-Oxychlordane	6.24e4	2.03e6	1.65	NO	0.0314	1.000	33.38	33.35	1.284	1.285	NO	49.1	98.1	0.570	
38	42 13C10-cis-Heptachlor ...	7.99e4	2.03e6	1.70	NO	0.0404	1.000	34.17	34.14	1.314	1.315	NO	48.7	97.5	0.442	
39	43 13C10-trans-Chlordan...	5.48e4	2.03e6	1.71	NO	0.0281	1.000	35.08	35.06	1.349	1.350	NO	48.1	96.2	0.636	
40	44 13C10-trans-Nonachlor	6.49e4	2.03e6	1.60	NO	0.0330	1.000	35.27	35.24	1.356	1.357	NO	48.5	97.0	0.542	
41	45 13C9-Endosulfan I (al...	4.38e4	2.03e6	1.67	NO	0.0219	1.000	35.85	35.83	1.379	1.380	NO	49.3	98.6	0.816	
42	46 13C12-2,4'-DDE	1.49e6	2.03e6	1.57	NO	0.765	1.000	35.69	35.72	0.996	0.995	NO	48.0	96.0	0.0596	
43	47 13C12-4,4'-DDE	1.08e6	2.03e6	1.58	NO	0.556	1.000	36.77	36.78	1.026	1.025	NO	47.7	95.4	0.0820	
44	48 13C12-Dieldrin	1.50e5	2.03e6	1.59	NO	0.0759	1.000	37.28	37.28	1.040	1.040	NO	48.8	97.7	0.288	
45	49 13C12-Endrin	8.49e4	2.03e6	1.62	NO	0.0477	1.000	38.68	38.69	1.079	1.079	NO	43.9	87.8	0.458	
46	50 13C10-cis-Nonachlor	7.38e4	2.03e6	1.60	NO	0.0389	1.000	38.97	38.97	1.087	1.087	NO	46.8	93.5	0.562	
47	51 13C9-Endosulfan II	2.39e4	2.03e6	1.76	NO	0.0122	1.000	39.70	39.72	1.107	1.107	NO	48.3	96.6	1.79	
48	52 13C12-2,4'-DDD	1.42e6	2.03e6	1.60	NO	0.754	1.000	37.95	37.94	1.460	1.461	NO	46.4	92.8	0.0740	
49	53 13C12-2,4'-DDT	9.08e5	2.03e6	1.62	NO	0.519	1.000	39.08	39.06	1.504	1.504	NO	43.1	86.2	0.108	
50	54 13C12-4,4'-DDD	1.22e6	2.03e6	1.61	NO	0.662	1.000	39.21	39.18	1.508	1.509	NO	45.5	91.0	0.0843	
51	55 13C12-4,4'-DDT	7.92e5	2.03e6	1.60	NO	0.419	1.000	40.28	40.27	1.550	1.551	NO	46.6	93.1	0.133	
52	56 13C9-Endosulfan Sulf...	3.65e4	2.03e6	1.63	NO	0.0189	1.000	41.44	41.44	1.155	1.156	NO	47.5	95.1	1.40	
53	57 13C12-Methoxychlor	8.74e6	2.03e6	24.13	NO	0.473	1.000	43.30	43.32	1.208	1.207	NO	456	91.3	0.147	
54	58 13C10-Mirex	3.78e5	2.03e6	1.58	NO	0.194	1.000	43.87	43.87	1.223	1.223	NO	47.9	95.8	0.127	
55	59 13C12-Endrin Aldehyde	7.69e5	2.03e6	0.46	NO	0.0388	1.000	40.84	40.84	1.139	1.139	NO	488	97.6	1.59	
56	60 13C12-Endrin Ketone	6.50e5	2.03e6	0.48	NO	0.0330	1.000	44.03	44.01	1.227	1.228	NO	486	97.3	1.87	
57	62 13C-PCB-15	2.03e6	2.03e6	1.61	NO	1.00	1.000	25.96	25.98	1.000	1.000	NO	50.0	100	0.0320	

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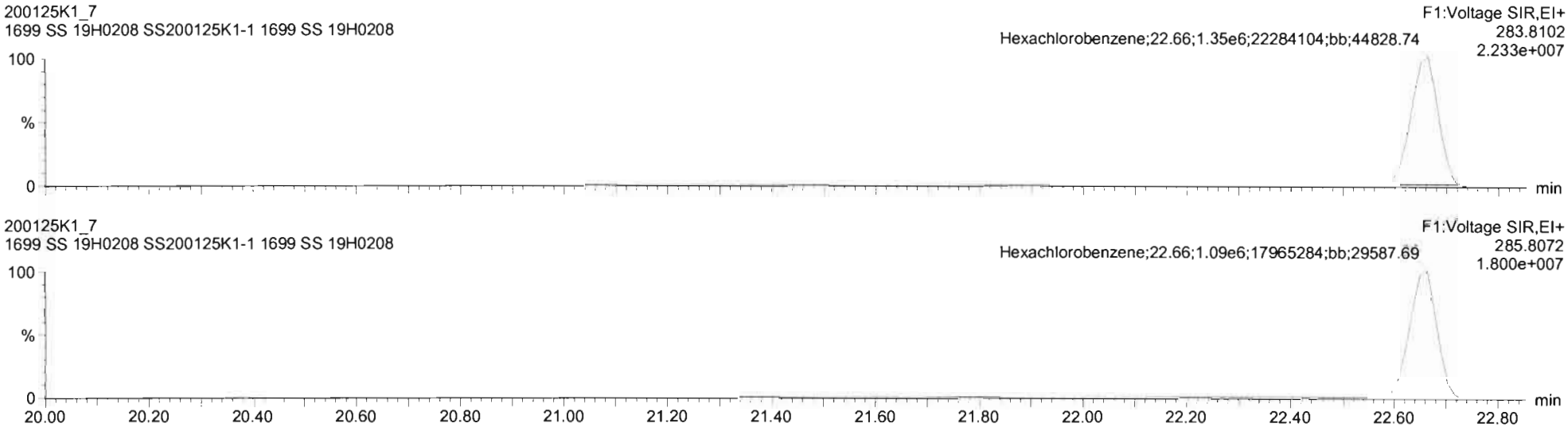
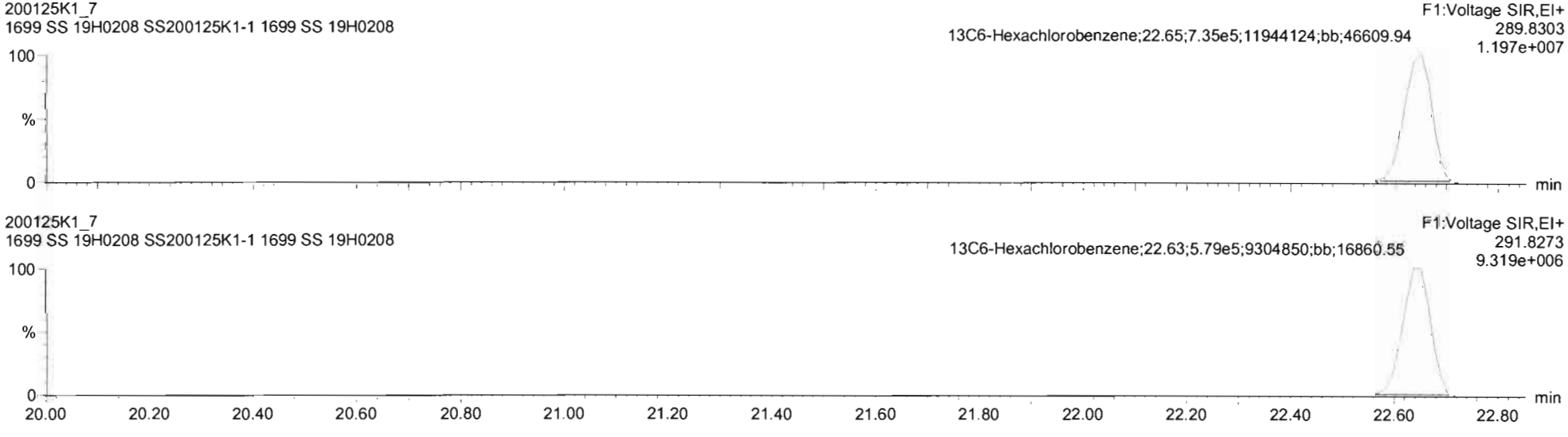
Name: 200125K1_7, Date: 25-Jan-2020, Time: 18:01:50, ID: SS200125K1-1 1699 SS 19H0208, Description: 1699 SS 19H0208

Hexachlorobenzene



13C6-Hexachlorobenzene



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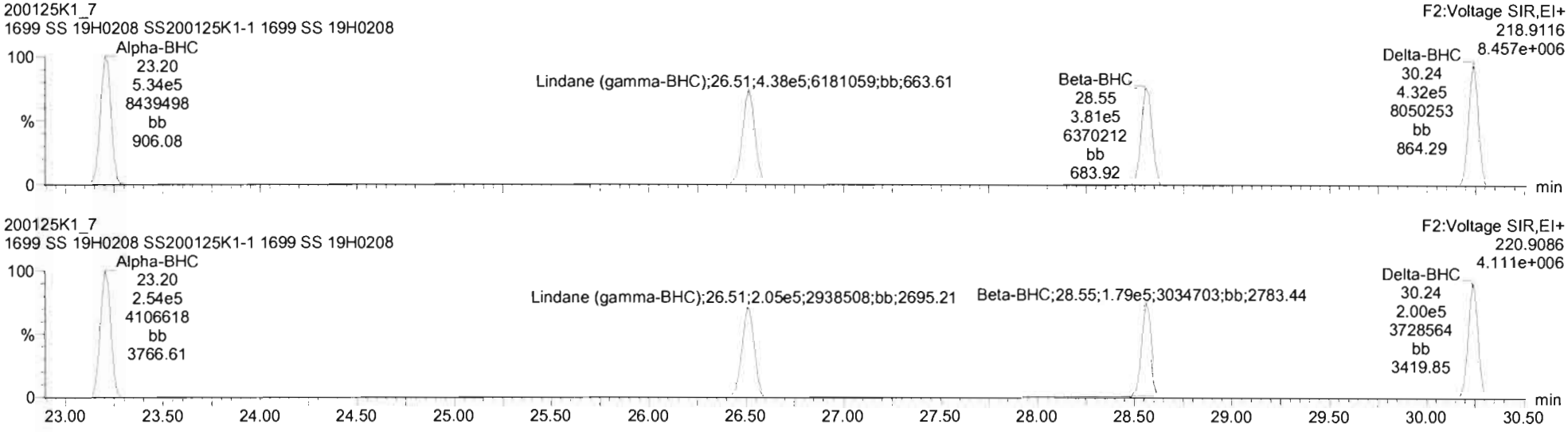
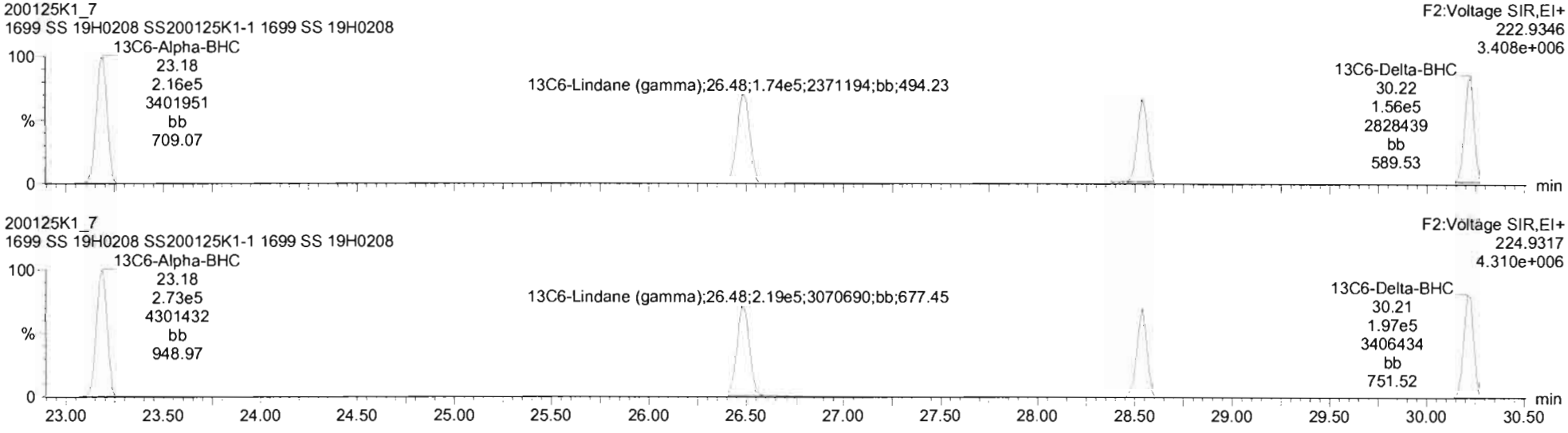
BHC Totals



BHC-isotopes



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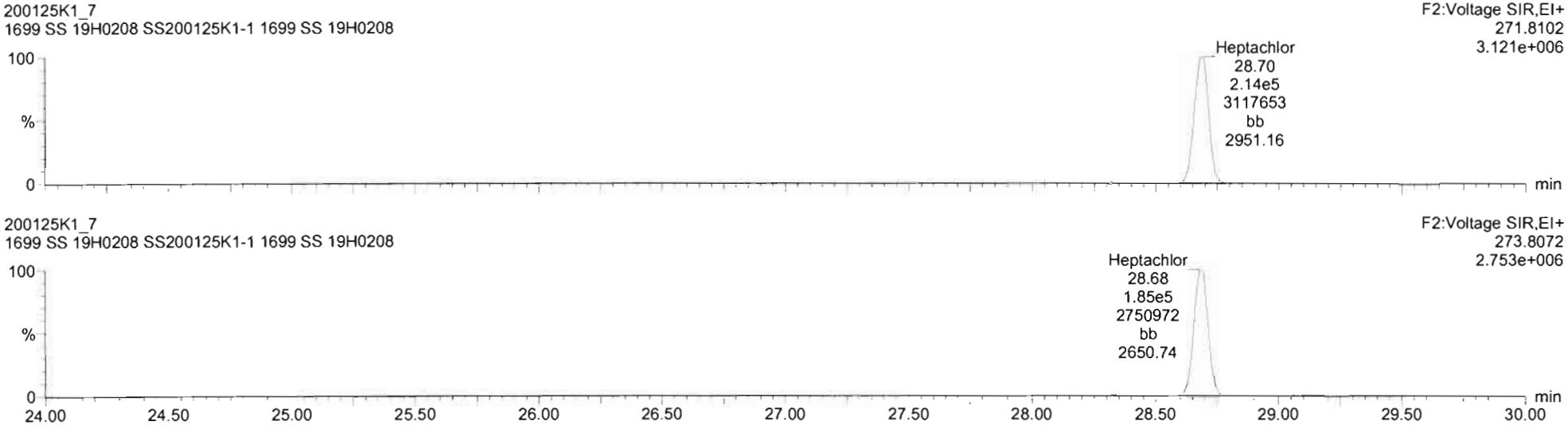
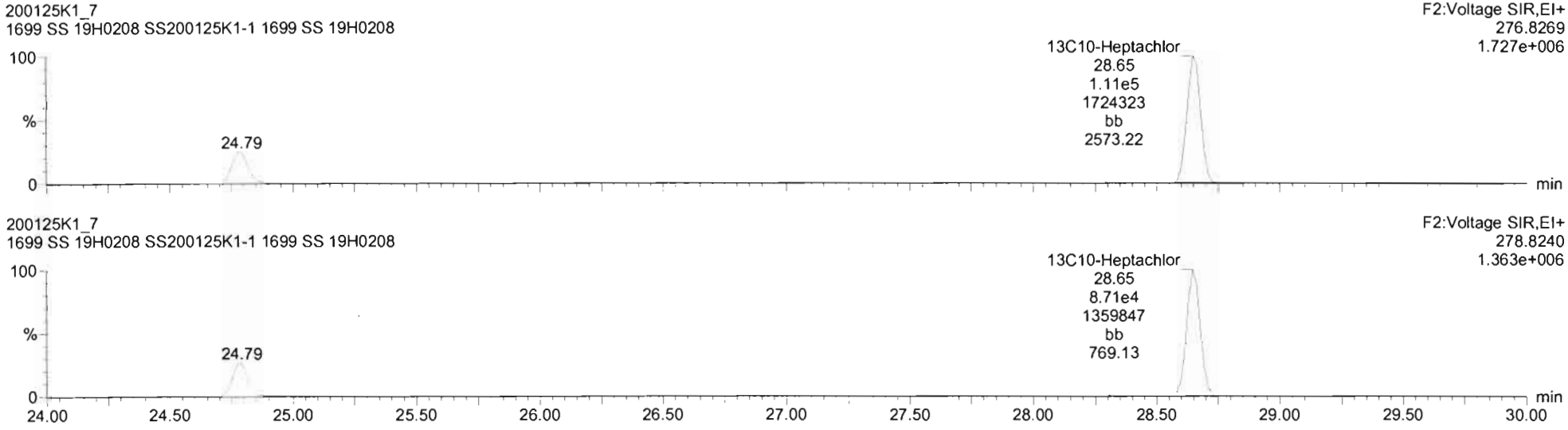
Heptachlor



13C10-Heptachlor



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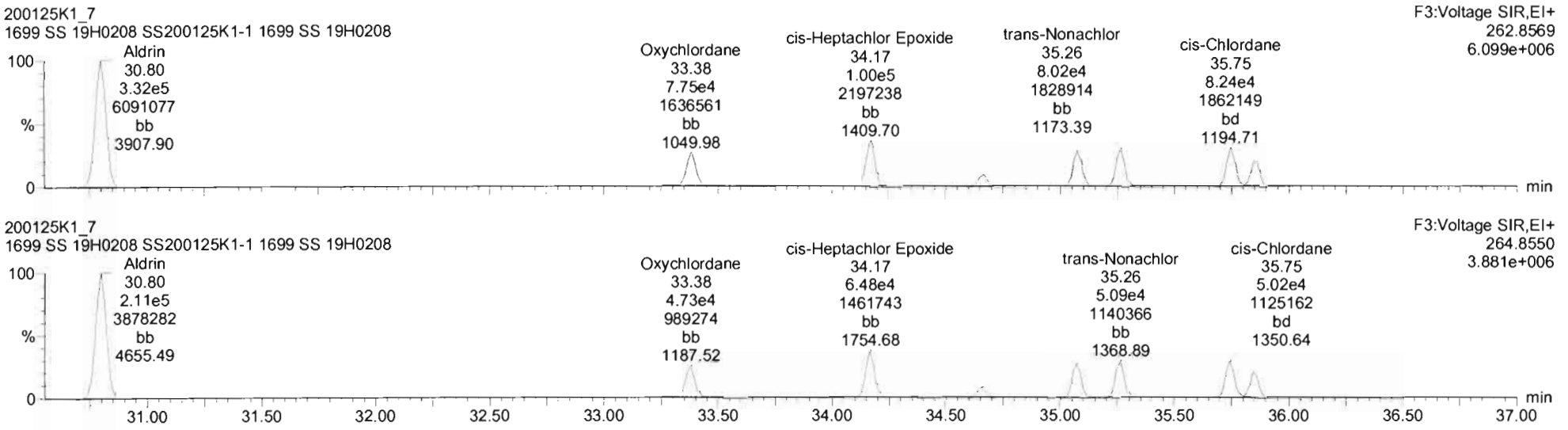
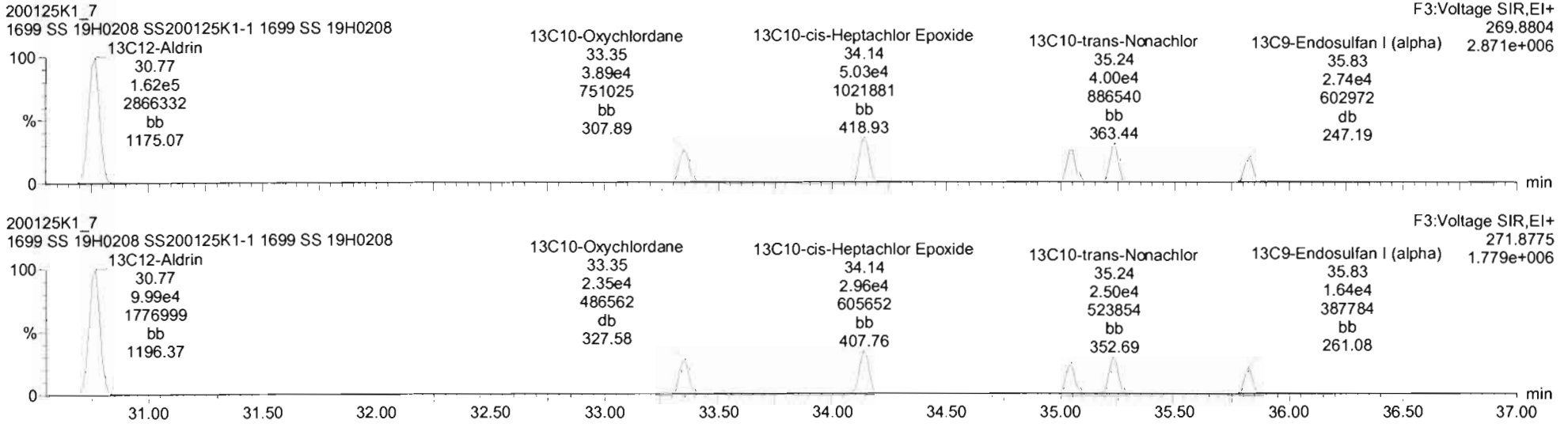
Aldrin-EI



Aldrin-EI-isotopes



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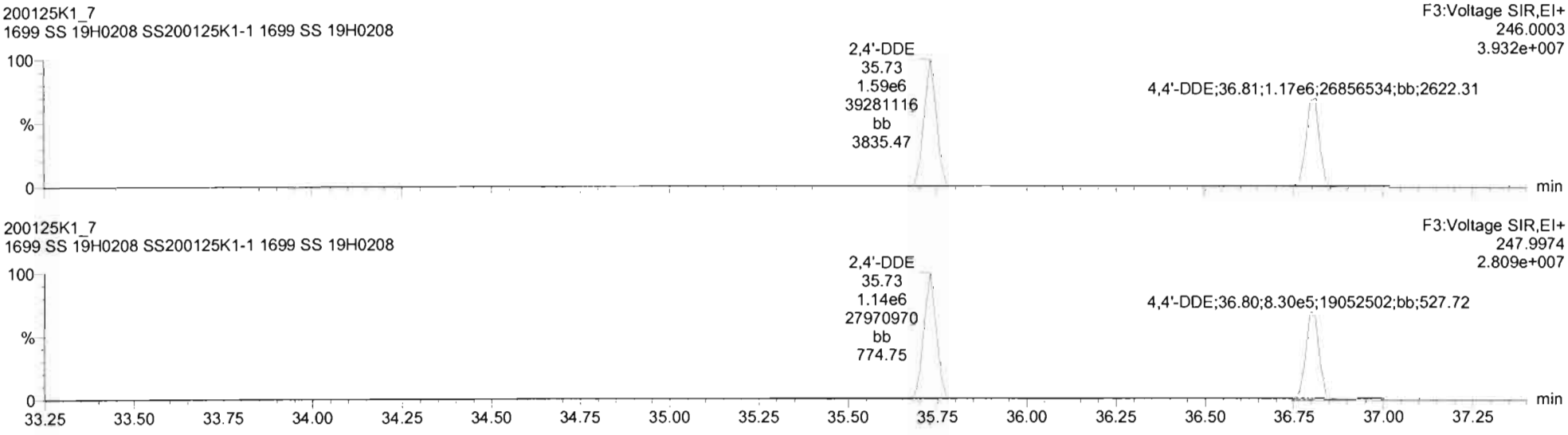
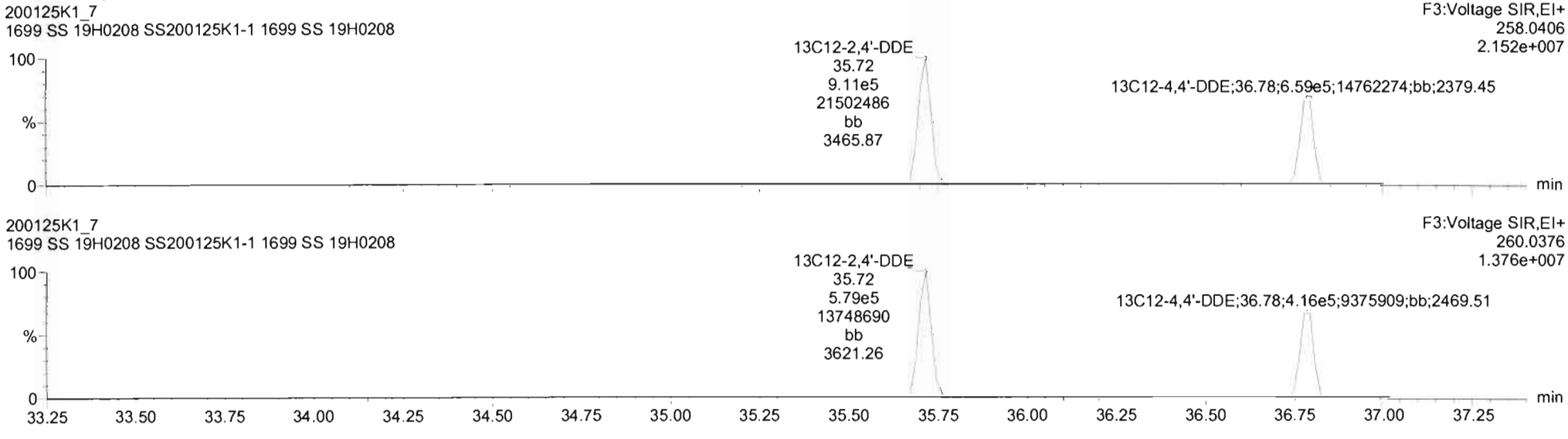
DDMU-DDE



DDE-isotopes



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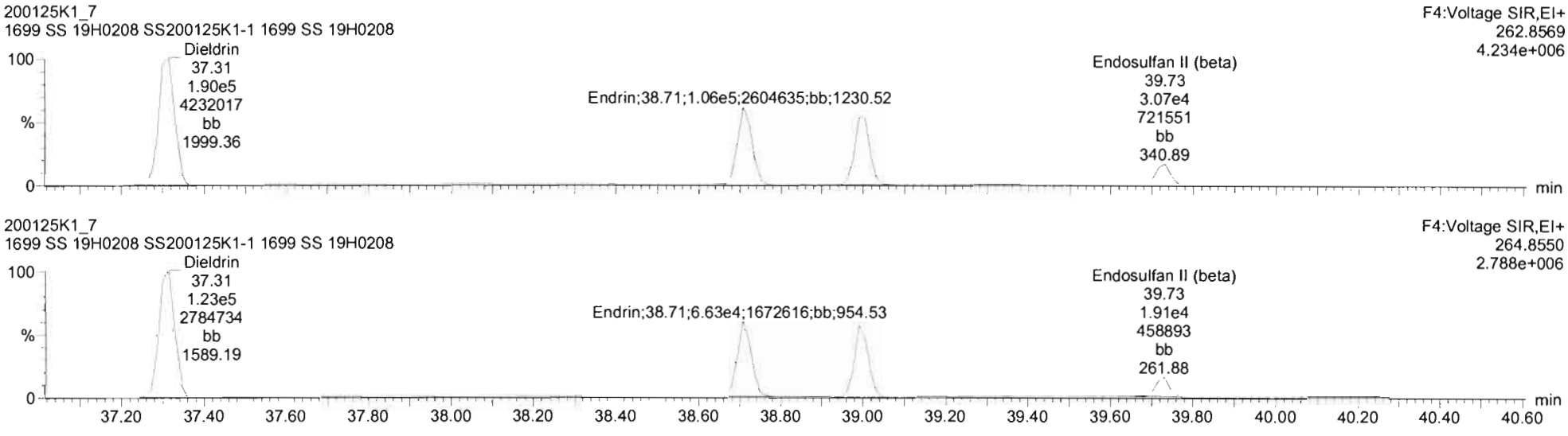
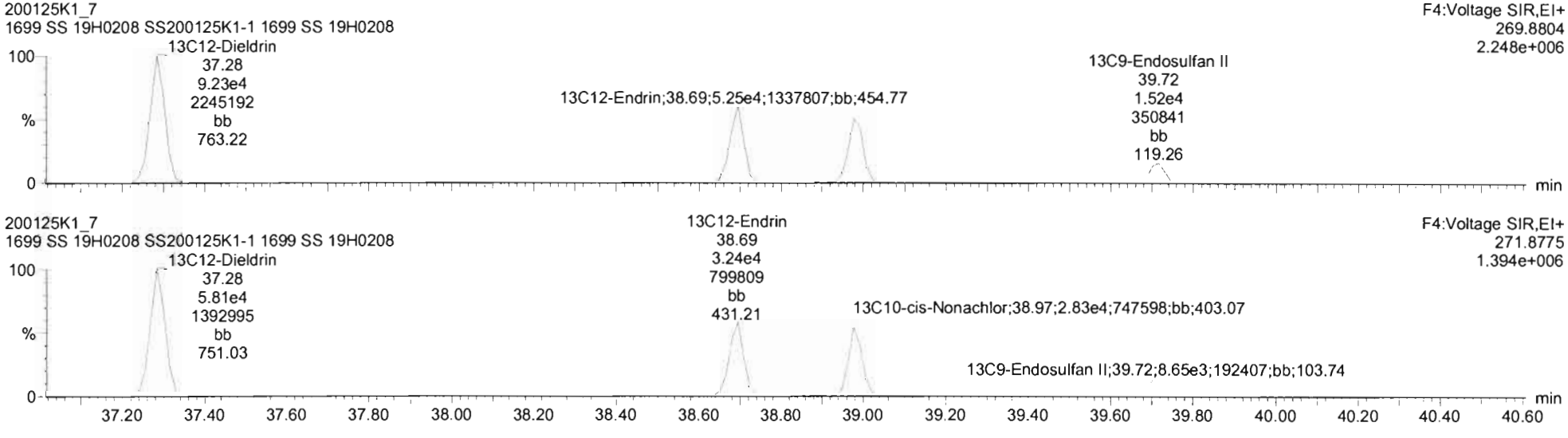
Dieldrin-EII



Dieldrin-EII-isotopes



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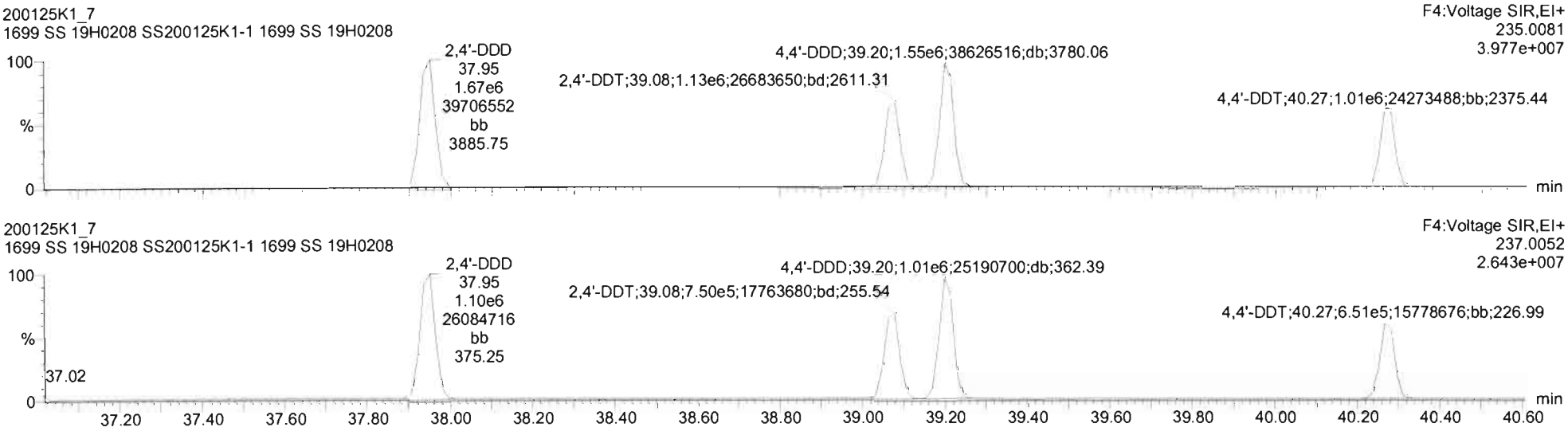
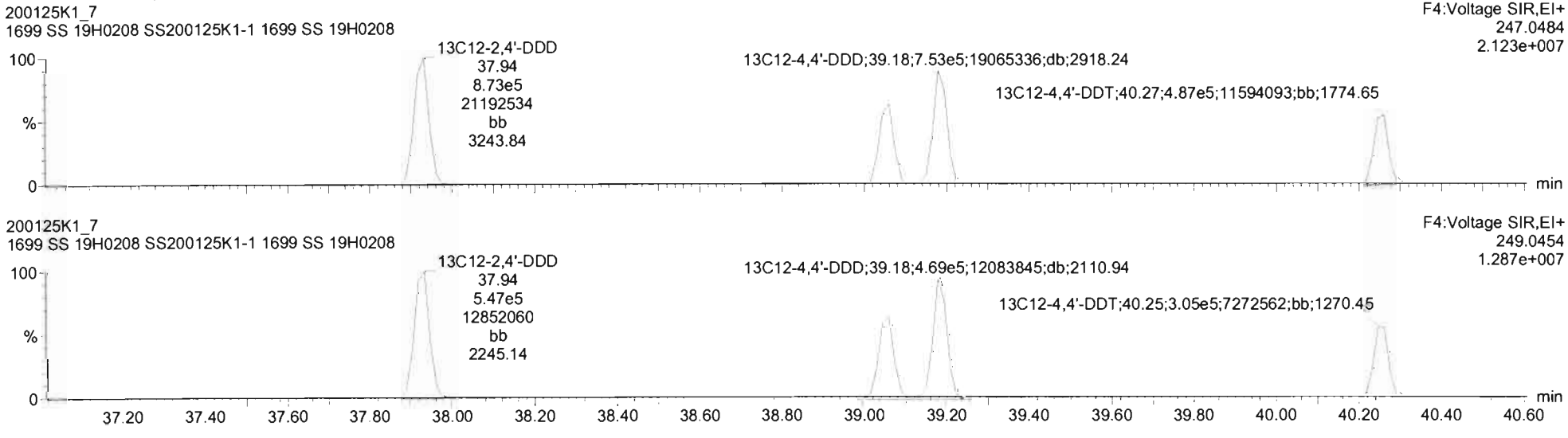
DDD-DDT



DDD-DDT-isotopes



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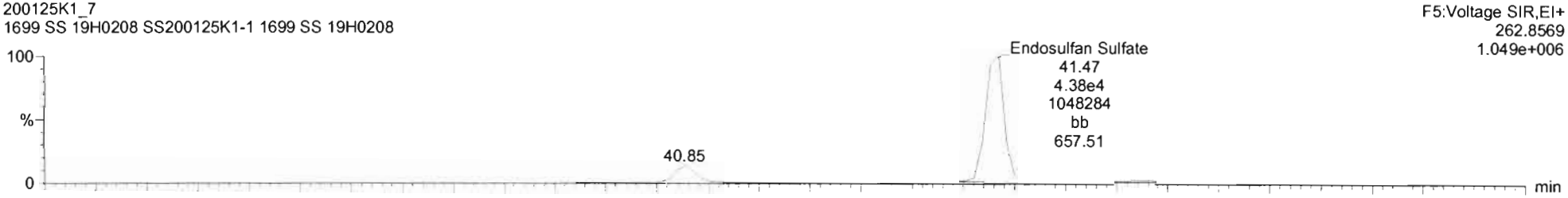
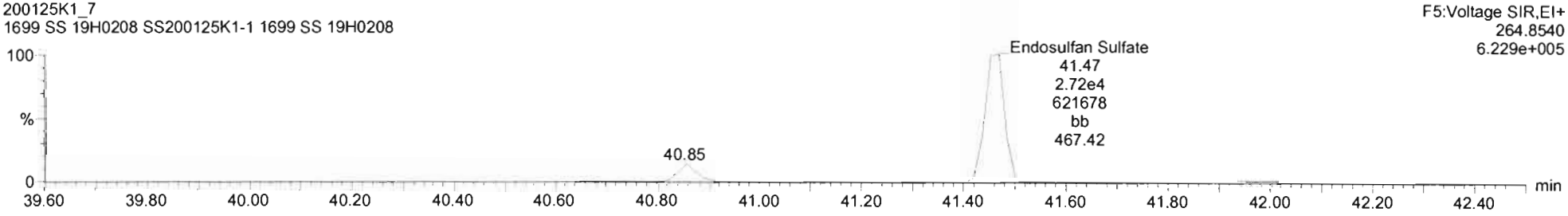
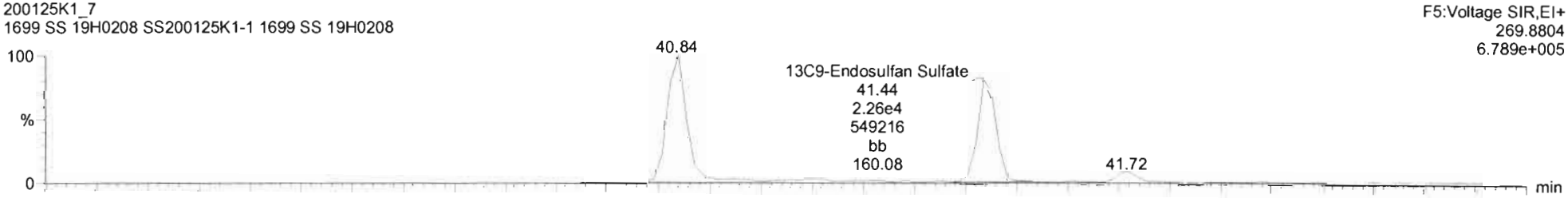
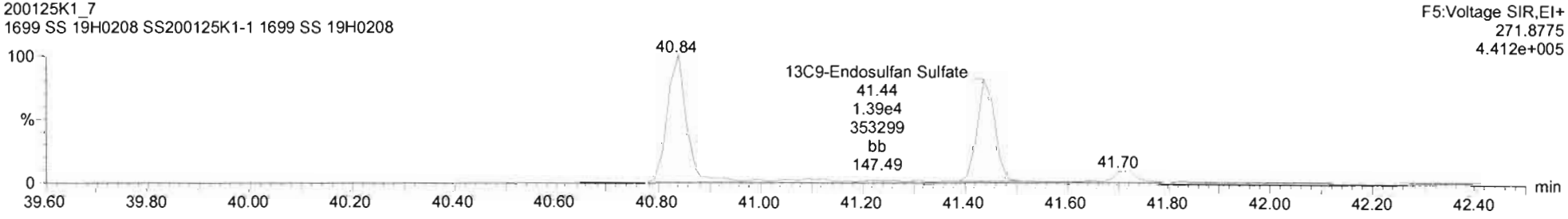
Endosulfan Sulfate





13C9-Endosulfan Sulfate





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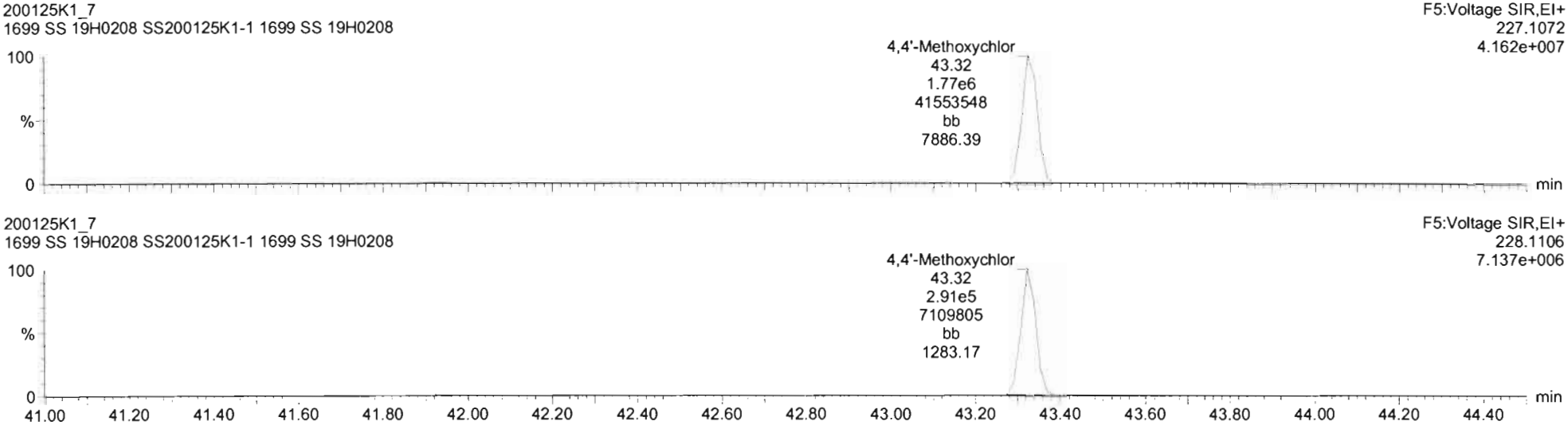
4,4'-Methoxychlor



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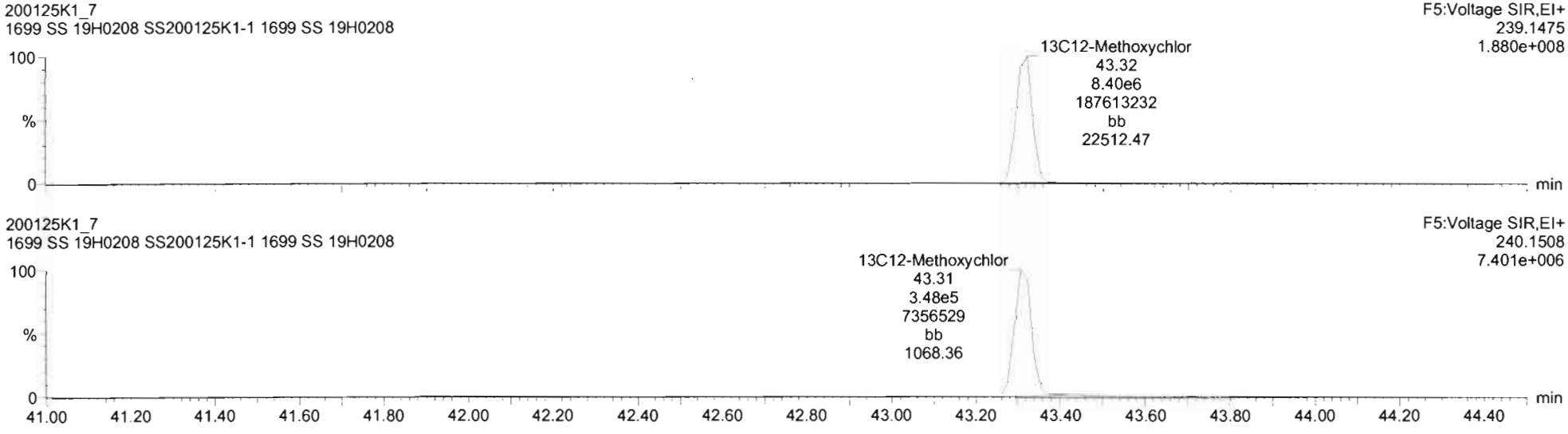

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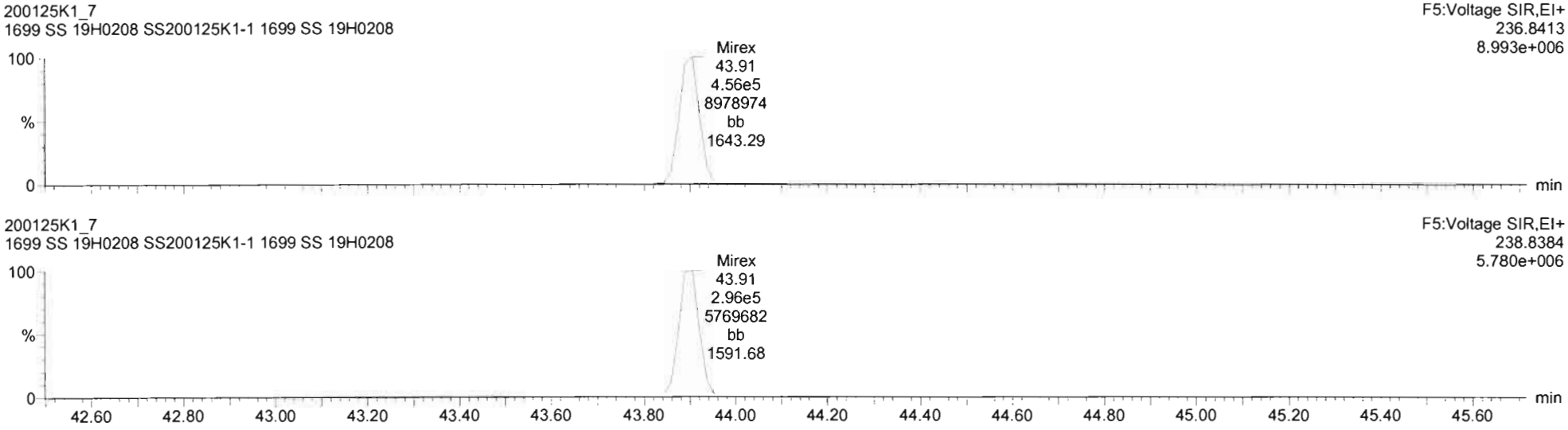
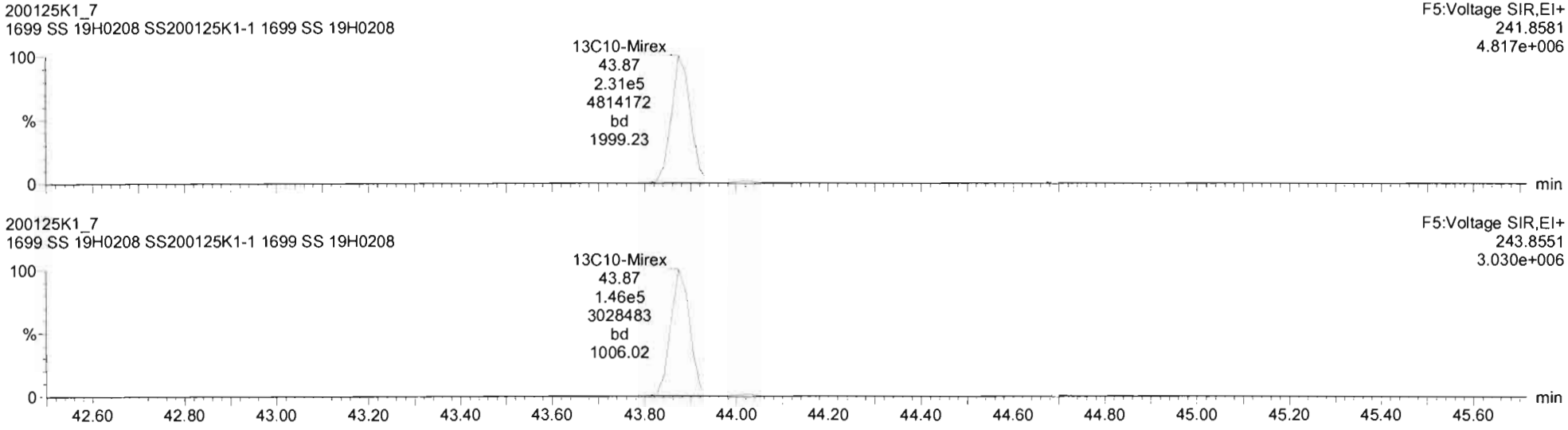
Mirex



13C10-Mirex



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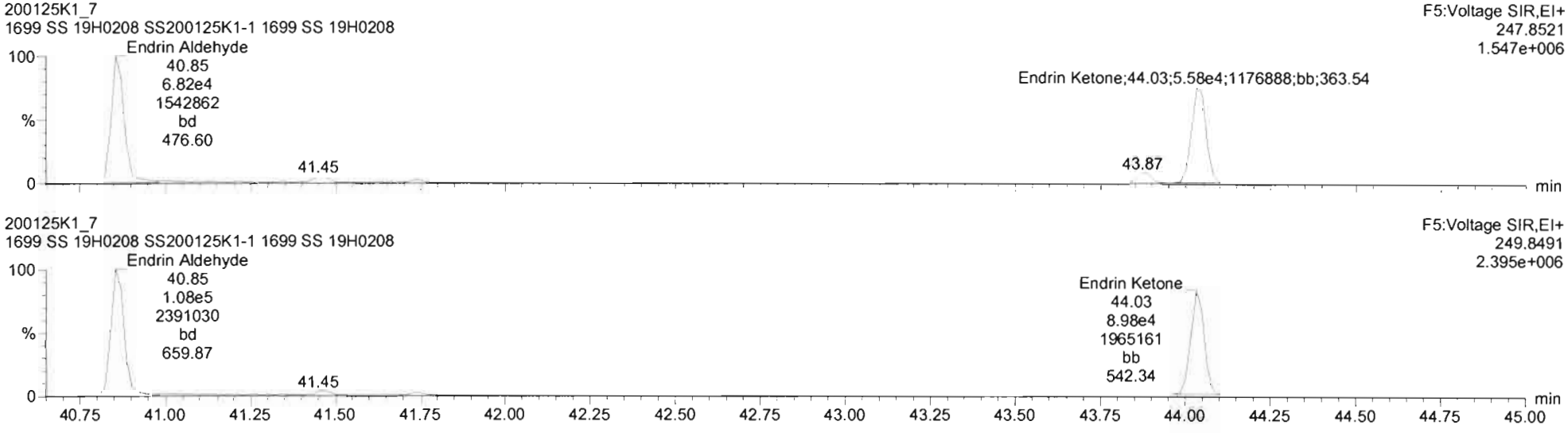
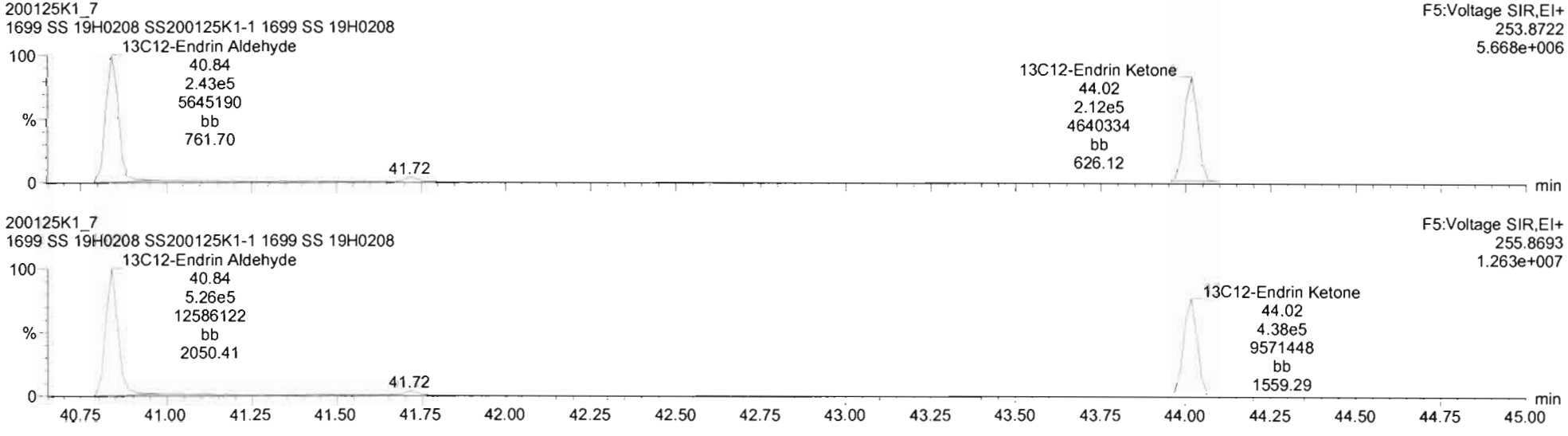
EA-EK



EA-EK-isotopes



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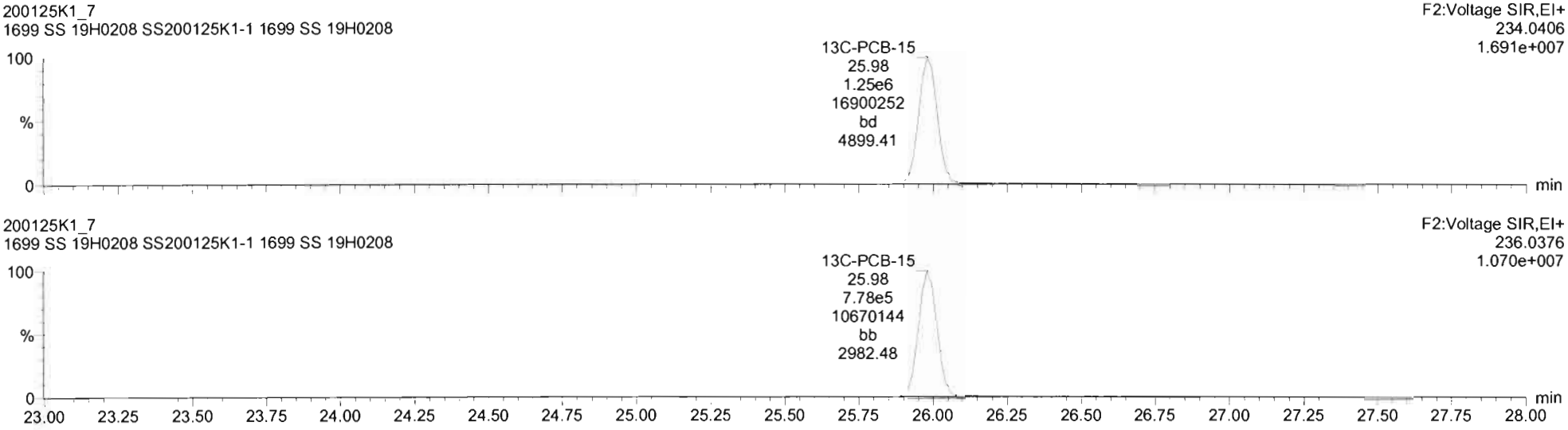
13C-PCB-15



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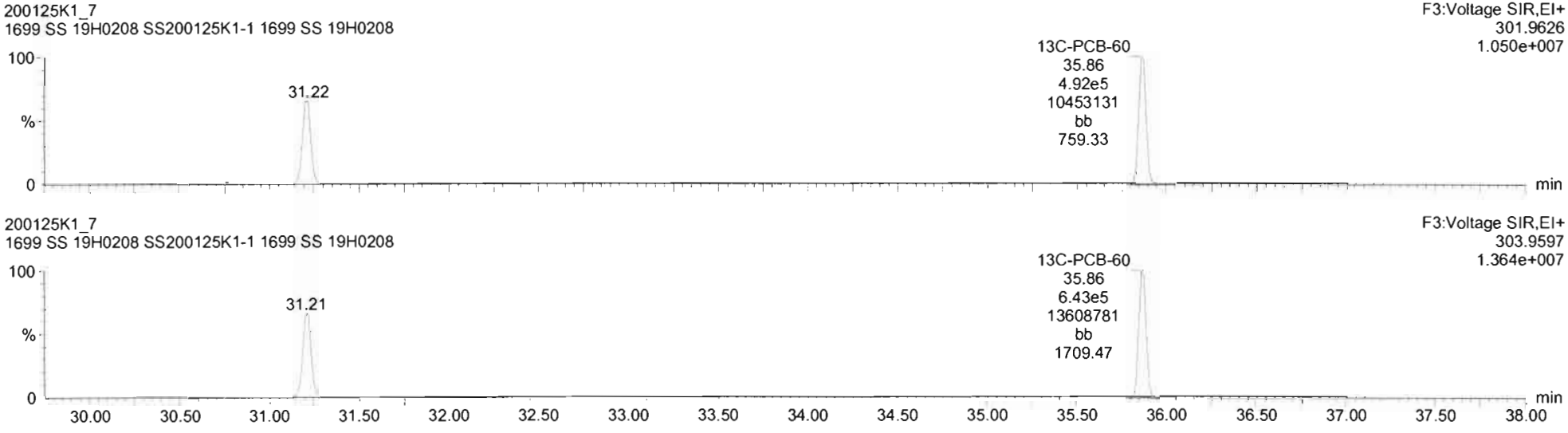

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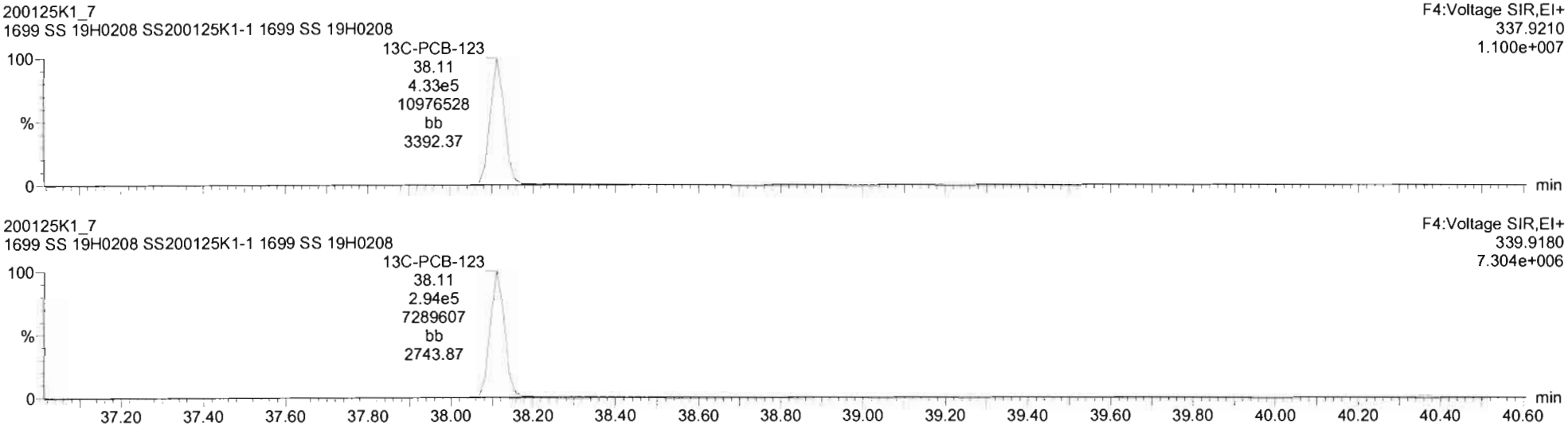
13C-PCB-123



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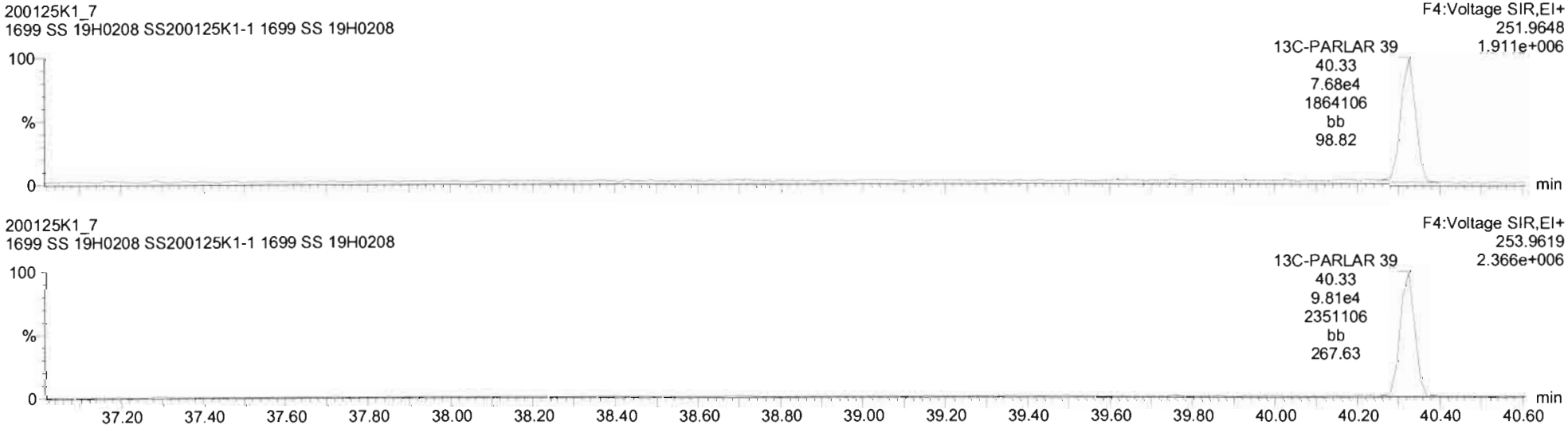

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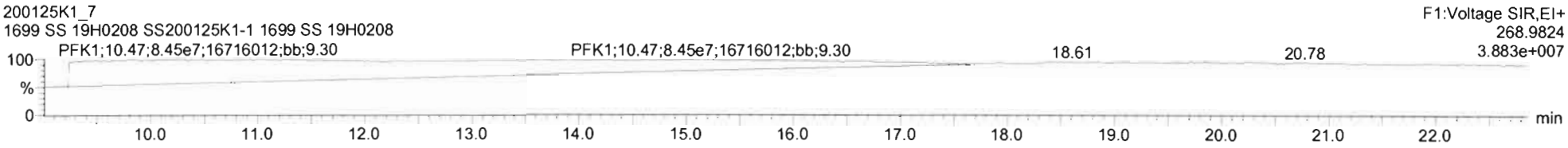
PFK1



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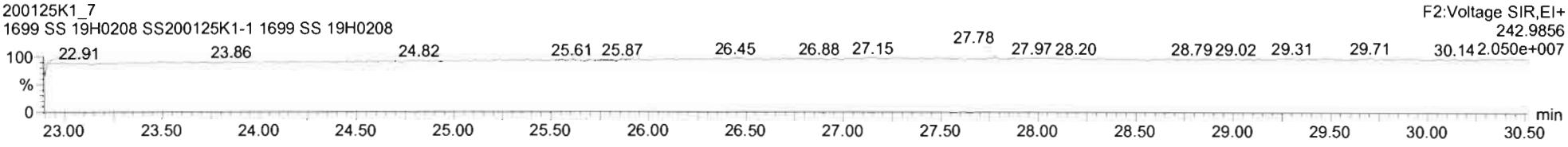

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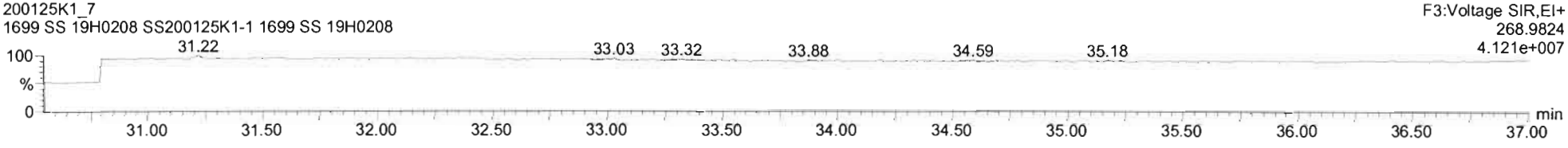

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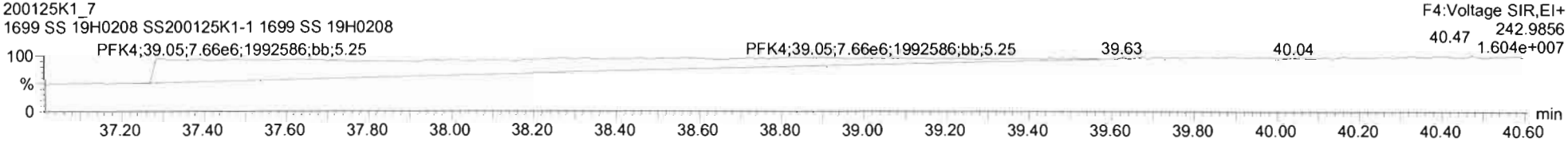

PFK5