



December 05, 2019

Vista Work Order No. 1903565

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 October 08, 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. 1903565

Case Narrative

Sample Condition on Receipt:

Seventeen sediment samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. Sample "PDI-081SC-B-08-10-191002" was listed on the Chain of Custody (CoC), but not received. The client was notified by email on October 11, 2019. The client responded that the sample was not shipped.

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 by EPA Method 1613B 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 in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

As requested, a Duplicate was performed on sample "PDI-0825SC-B-06-08-191002". The RPDs were out of the acceptance criteria for OCDD, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF and OCDF.

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

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1903565-01	PDI-081SC-B-08-10-191002	02-Oct-19 09:03	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-02	PDI-082SC-A-14-15-191002	02-Oct-19 14:14	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-03	PDI-082SC-A-15-16.1-191002	02-Oct-19 14:14	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-04	PDI-082SC-B-00-02-191002	02-Oct-19 14:21	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-05	PDI-082SC-B-02-04-191002	02-Oct-19 14:22	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-06	PDI-082SC-B-04-06-191002	02-Oct-19 14:23	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-07	PDI-082SC-B-06-08-191002	DUP02-Oct-19 14:25	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-08	PDI-1082SC-B-04-06-191002	02-Oct-19 00:00	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-09	PDI-084SC-A-15-16-191002	02-Oct-19 11:23	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-10	PDI-084SC-A-16-17-191002	02-Oct-19 11:23	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-11	PDI-084SC-B-00-02-191002	02-Oct-19 11:20	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-12	PDI-084SC-B-02-04-191002	02-Oct-19 11:22	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-13	PDI-084SC-B-04-06-191002	02-Oct-19 11:33	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-14	PDI-084SC-B-06-08-191002	02-Oct-19 11:39	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-15	PDI-095SC-B-00-02-191002	02-Oct-19 16:45	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-16	PDI-095SC-B-02-04-191002	02-Oct-19 16:46	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-17	PDI-095SC-B-04-06-191002	02-Oct-19 16:47	08-Oct-19 10:03	Amber Glass, 120 mL
1903565-18	PDI-095SC-B-06-08-191002	02-Oct-19 16:48	08-Oct-19 10:03	Amber Glass, 120 mL

ANALYTICAL RESULTS

Sample ID: Method Blank					EPA Method 1613B				
Matrix: Solid Sample Size: 10.0 g		QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02		Lab Sample: B9J0288-BLK1 Date Analyzed: 31-Oct-19 17:06 Column: ZB-5MS					
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers	
2,3,7,8-TCDD	ND	0.0895			IS 13C-2,3,7,8-TCDD	97.8	25 - 164		
1,2,3,7,8-PeCDD	ND	0.120			13C-1,2,3,7,8-PeCDD	103	25 - 181		
1,2,3,4,7,8-HxCDD	ND	0.119			13C-1,2,3,4,7,8-HxCDD	91.7	32 - 141		
1,2,3,6,7,8-HxCDD	ND	0.124			13C-1,2,3,6,7,8-HxCDD	79.0	28 - 130		
1,2,3,7,8,9-HxCDD	ND	0.119			13C-1,2,3,7,8,9-HxCDD	85.7	32 - 141		
1,2,3,4,6,7,8-HpCDD	ND	0.127			13C-1,2,3,4,6,7,8-HpCDD	101	23 - 140		
OCDD	ND	0.209			13C-OCDD	88.6	17 - 157		
2,3,7,8-TCDF	ND	0.0664			13C-2,3,7,8-TCDF	94.5	24 - 169		
1,2,3,7,8-PeCDF	ND	0.0708			13C-1,2,3,7,8-PeCDF	101	24 - 185		
2,3,4,7,8-PeCDF	ND	0.0702			13C-2,3,4,7,8-PeCDF	95.6	21 - 178		
1,2,3,4,7,8-HxCDF	ND	0.0499			13C-1,2,3,4,7,8-HxCDF	92.3	26 - 152		
1,2,3,6,7,8-HxCDF	ND	0.0507			13C-1,2,3,6,7,8-HxCDF	86.8	26 - 123		
2,3,4,6,7,8-HxCDF	ND	0.0525			13C-2,3,4,6,7,8-HxCDF	90.4	28 - 136		
1,2,3,7,8,9-HxCDF	ND	0.0633			13C-1,2,3,7,8,9-HxCDF	97.9	29 - 147		
1,2,3,4,6,7,8-HpCDF	ND	0.0728			13C-1,2,3,4,6,7,8-HpCDF	99.3	28 - 143		
1,2,3,4,7,8,9-HpCDF	ND	0.0613			13C-1,2,3,4,7,8,9-HpCDF	109	26 - 138		
OCDF	ND	0.148			13C-OCDF	97.3	17 - 157		
					CRS 37Cl-2,3,7,8-TCDD	99.9	35 - 197		
					Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)				
					TEQMinWHO2005Dioxin		0.00		
TOTALS									
Total TCDD	ND	0.0895							
Total PeCDD	ND	0.120							
Total HxCDD	ND	0.121							
Total HpCDD	ND	0.127							
Total TCDF	ND	0.0664							
Total PeCDF	ND	0.0704							
Total HxCDF	ND	0.0539							
Total HpCDF	ND	0.0674							

DL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

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

Sample ID: OPR					EPA Method 1613B		
Matrix: Solid Sample Size: 10.0 g		QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02		Lab Sample: B9J0288-BS1 Date Analyzed: 31-Oct-19 13:55 Column: ZB-5MS			
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	23.3	20.0	116	67 - 158	IS 13C-2,3,7,8-TCDD	99.7	20 - 175
1,2,3,7,8-PeCDD	109	100	109	70 - 142	13C-1,2,3,7,8-PeCDD	108	21 - 227
1,2,3,4,7,8-HxCDD	100	100	100	70 - 164	13C-1,2,3,4,7,8-HxCDD	97.3	21 - 193
1,2,3,6,7,8-HxCDD	109	100	109	76 - 134	13C-1,2,3,6,7,8-HxCDD	84.0	25 - 163
1,2,3,7,8,9-HxCDD	104	100	104	64 - 162	13C-1,2,3,7,8,9-HxCDD	90.5	21 - 193
1,2,3,4,6,7,8-HpCDD	104	100	104	70 - 140	13C-1,2,3,4,6,7,8-HpCDD	115	26 - 166
OCDD	212	200	106	78 - 144	13C-OCDD	109	13 - 199
2,3,7,8-TCDF	20.5	20.0	102	75 - 158	13C-2,3,7,8-TCDF	92.9	22 - 152
1,2,3,7,8-PeCDF	108	100	108	80 - 134	13C-1,2,3,7,8-PeCDF	107	21 - 192
2,3,4,7,8-PeCDF	105	100	105	68 - 160	13C-2,3,4,7,8-PeCDF	104	13 - 328
1,2,3,4,7,8-HxCDF	103	100	103	72 - 134	13C-1,2,3,4,7,8-HxCDF	103	19 - 202
1,2,3,6,7,8-HxCDF	103	100	103	84 - 130	13C-1,2,3,6,7,8-HxCDF	96.1	21 - 159
2,3,4,6,7,8-HxCDF	105	100	105	70 - 156	13C-2,3,4,6,7,8-HxCDF	96.3	22 - 176
1,2,3,7,8,9-HxCDF	106	100	106	78 - 130	13C-1,2,3,7,8,9-HxCDF	99.0	17 - 205
1,2,3,4,6,7,8-HpCDF	98.8	100	98.8	82 - 122	13C-1,2,3,4,6,7,8-HpCDF	106	21 - 158
1,2,3,4,7,8,9-HpCDF	97.9	100	97.9	78 - 138	13C-1,2,3,4,7,8,9-HpCDF	123	20 - 186
OCDF	205	200	102	63 - 170	13C-OCDF	118	13 - 199
					CRS 37Cl-2,3,7,8-TCDD	94.7	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: B9K0034 Date Extracted: 05-Nov-2019 7:54		Lab Sample: B9K0034-BLK1 Date Analyzed: 19-Nov-19 19:53 Column: ZB-5MS				
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0541			IS 13C-2,3,7,8-TCDD	95.1	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0766			13C-1,2,3,7,8-PeCDD	88.9	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0998			13C-1,2,3,4,7,8-HxCDD	96.0	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.109			13C-1,2,3,6,7,8-HxCDD	81.6	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.108			13C-1,2,3,7,8,9-HxCDD	84.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	0.0905			13C-1,2,3,4,6,7,8-HpCDD	93.5	23 - 140	
OCDD	ND	0.0694			13C-OCDD	96.2	17 - 157	
2,3,7,8-TCDF	ND	0.0528			13C-2,3,7,8-TCDF	97.5	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0839			13C-1,2,3,7,8-PeCDF	84.5	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0788			13C-2,3,4,7,8-PeCDF	82.3	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0354			13C-1,2,3,4,7,8-HxCDF	105	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0379			13C-1,2,3,6,7,8-HxCDF	93.3	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0390			13C-2,3,4,6,7,8-HxCDF	96.7	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.0496			13C-1,2,3,7,8,9-HxCDF	101	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.0432			13C-1,2,3,4,6,7,8-HpCDF	101	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0367			13C-1,2,3,4,7,8,9-HpCDF	112	26 - 138	
OCDF	ND	0.0884			13C-OCDF	107	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	97.0	35 - 197	
					Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)			
					TEQMinWHO2005Dioxin 0.00			
TOTALS								
Total TCDD	ND	0.0541						
Total PeCDD	ND	0.0766						
Total HxCDD	ND	0.106						
Total HpCDD	ND	0.0905						
Total TCDF	ND	0.0528						
Total PeCDF	ND	0.0813						
Total HxCDF	ND	0.0402						
Total HpCDF	ND	0.0402						

DL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

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

Sample ID: OPR					EPA Method 1613B		
Matrix: Solid	QC Batch: B9K0034	Lab Sample: B9K0034-BS1					
Sample Size: 10.0 g	Date Extracted: 05-Nov-2019 7:54	Date Analyzed: 19-Nov-19 15:54	Column: ZB-5MS				
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	20.8	20.0	104	67 - 158	IS 13C-2,3,7,8-TCDD	97.7	20 - 175
1,2,3,7,8-PeCDD	102	100	102	70 - 142	13C-1,2,3,7,8-PeCDD	89.4	21 - 227
1,2,3,4,7,8-HxCDD	101	100	101	70 - 164	13C-1,2,3,4,7,8-HxCDD	92.7	21 - 193
1,2,3,6,7,8-HxCDD	103	100	103	76 - 134	13C-1,2,3,6,7,8-HxCDD	82.4	25 - 163
1,2,3,7,8,9-HxCDD	103	100	103	64 - 162	13C-1,2,3,7,8,9-HxCDD	85.9	21 - 193
1,2,3,4,6,7,8-HpCDD	102	100	102	70 - 140	13C-1,2,3,4,6,7,8-HpCDD	92.4	26 - 166
OCDD	198	200	98.8	78 - 144	13C-OCDD	89.8	13 - 199
2,3,7,8-TCDF	19.4	20.0	97.1	75 - 158	13C-2,3,7,8-TCDF	98.8	22 - 152
1,2,3,7,8-PeCDF	104	100	104	80 - 134	13C-1,2,3,7,8-PeCDF	89.3	21 - 192
2,3,4,7,8-PeCDF	104	100	104	68 - 160	13C-2,3,4,7,8-PeCDF	87.7	13 - 328
1,2,3,4,7,8-HxCDF	97.0	100	97.0	72 - 134	13C-1,2,3,4,7,8-HxCDF	103	19 - 202
1,2,3,6,7,8-HxCDF	96.8	100	96.8	84 - 130	13C-1,2,3,6,7,8-HxCDF	93.9	21 - 159
2,3,4,6,7,8-HxCDF	100	100	100	70 - 156	13C-2,3,4,6,7,8-HxCDF	93.9	22 - 176
1,2,3,7,8,9-HxCDF	97.0	100	97.0	78 - 130	13C-1,2,3,7,8,9-HxCDF	98.8	17 - 205
1,2,3,4,6,7,8-HpCDF	95.3	100	95.3	82 - 122	13C-1,2,3,4,6,7,8-HpCDF	96.2	21 - 158
1,2,3,4,7,8,9-HpCDF	90.4	100	90.4	78 - 138	13C-1,2,3,4,7,8,9-HpCDF	99.0	20 - 186
OCDF	193	200	96.5	63 - 170	13C-OCDF	96.9	13 - 199
					CRS 37Cl-2,3,7,8-TCDD	97.7	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: PDI-082SC-A-14-15-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-02 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 16.4 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:14	% Solids: 61.0	Date Analyzed : 01-Nov-19 01:18 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0731			IS 13C-2,3,7,8-TCDD	95.7	25 - 164	
1,2,3,7,8-PeCDD	ND	0.106			13C-1,2,3,7,8-PeCDD	83.7	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.150			13C-1,2,3,4,7,8-HxCDD	96.4	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.159			13C-1,2,3,6,7,8-HxCDD	80.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.159			13C-1,2,3,7,8,9-HxCDD	88.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.65			J	13C-1,2,3,4,6,7,8-HpCDD	101	23 - 140	
OCDD	13.8				13C-OCDD	92.5	17 - 157	
2,3,7,8-TCDF	ND	0.0715			13C-2,3,7,8-TCDF	92.7	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0878			13C-1,2,3,7,8-PeCDF	96.8	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0811			13C-2,3,4,7,8-PeCDF	94.8	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0419			13C-1,2,3,4,7,8-HxCDF	103	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0449			13C-1,2,3,6,7,8-HxCDF	92.9	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0478			13C-2,3,4,6,7,8-HxCDF	90.8	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.0575			13C-1,2,3,7,8,9-HxCDF	103	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND		0.0889		13C-1,2,3,4,6,7,8-HpCDF	111	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0459			13C-1,2,3,4,7,8,9-HpCDF	123	26 - 138	
OCDF	ND	0.160			13C-OCDF	105	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	88.7	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
 TEQMinWHO2005Dioxin 0.0206

TOTALS			
Total TCDD	0.531		0.692
Total PeCDD	ND		0.241
Total HxCDD	1.91		
Total HpCDD	4.63		
Total TCDF	ND		0.302
Total PeCDF	ND	0.0843	
Total HxCDF	ND	0.0478	
Total HpCDF	ND		0.0889

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

LCL-UCL- Lower control limit - upper control limit
 The results are reported in dry weight. The sample size is reported in wet weight.
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-082SC-A-15-16.1-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-03 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 14.0 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:14	% Solids: 71.5	Date Analyzed : 01-Nov-19 02:06 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0643			IS 13C-2,3,7,8-TCDD	103	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0965			13C-1,2,3,7,8-PeCDD	101	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.102			13C-1,2,3,4,7,8-HxCDD	96.1	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.112			13C-1,2,3,6,7,8-HxCDD	78.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.113			13C-1,2,3,7,8,9-HxCDD	85.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	0.924			J	13C-1,2,3,4,6,7,8-HpCDD	93.7	23 - 140	
OCDD	8.43				13C-OCDD	86.3	17 - 157	
2,3,7,8-TCDF	ND	0.0604			13C-2,3,7,8-TCDF	98.2	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0814			13C-1,2,3,7,8-PeCDF	109	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0777			13C-2,3,4,7,8-PeCDF	107	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0401			13C-1,2,3,4,7,8-HxCDF	103	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0403			13C-1,2,3,6,7,8-HxCDF	95.7	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0424			13C-2,3,4,6,7,8-HxCDF	96.0	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.0550			13C-1,2,3,7,8,9-HxCDF	102	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.0503			13C-1,2,3,4,6,7,8-HpCDF	102	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0435			13C-1,2,3,4,7,8,9-HpCDF	110	26 - 138	
OCDF	ND	0.113			13C-OCDF	99.1	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	97.2	35 - 197	

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

TEQMinWHO2005Dioxin 0.0118

TOTALS			
Total TCDD	ND	0.0643	
Total PeCDD	ND	0.0965	
Total HxCDD	0.764		0.944
Total HpCDD	2.59		
Total TCDF	ND	0.0604	
Total PeCDF	ND	0.0795	
Total HxCDF	ND	0.0441	
Total HpCDF	ND	0.0471	

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-082SC-B-00-02-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-04 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 20.1 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:21	% Solids: 49.9	Date Analyzed : 01-Nov-19 02:54 Column: ZB-5MS 05-Nov-19 15:24 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	1.12				IS 13C-2,3,7,8-TCDD	111	25 - 164	
1,2,3,7,8-PeCDD	2.01			J	13C-1,2,3,7,8-PeCDD	99.8	25 - 181	
1,2,3,4,7,8-HxCDD	1.89			J	13C-1,2,3,4,7,8-HxCDD	104	32 - 141	
1,2,3,6,7,8-HxCDD	11.2				13C-1,2,3,6,7,8-HxCDD	87.2	28 - 130	
1,2,3,7,8,9-HxCDD	4.95				13C-1,2,3,7,8,9-HxCDD	97.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	177				13C-1,2,3,4,6,7,8-HpCDD	106	23 - 140	
OCDD	1640				13C-OCDD	97.8	17 - 157	
2,3,7,8-TCDF	32.5				13C-2,3,7,8-TCDF	104	24 - 169	
1,2,3,7,8-PeCDF	44.4				13C-1,2,3,7,8-PeCDF	108	24 - 185	
2,3,4,7,8-PeCDF	11.8				13C-2,3,4,7,8-PeCDF	107	21 - 178	
1,2,3,4,7,8-HxCDF	75.6				13C-1,2,3,4,7,8-HxCDF	109	26 - 152	
1,2,3,6,7,8-HxCDF	18.4				13C-1,2,3,6,7,8-HxCDF	101	26 - 123	
2,3,4,6,7,8-HxCDF	6.11				13C-2,3,4,6,7,8-HxCDF	105	28 - 136	
1,2,3,7,8,9-HxCDF	3.31				13C-1,2,3,7,8,9-HxCDF	112	29 - 147	
1,2,3,4,6,7,8-HpCDF	45.3				13C-1,2,3,4,6,7,8-HpCDF	113	28 - 143	
1,2,3,4,7,8,9-HpCDF	11.5				13C-1,2,3,4,7,8,9-HpCDF	123	26 - 138	
OCDF	111				13C-OCDF	109	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	98.4	35 - 197	

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

TEQMinWHO2005Dioxin 26.3

TOTALS		
Total TCDD	10.0	10.7
Total PeCDD	14.3	17.1
Total HxCDD	76.7	
Total HpCDD	366	
Total TCDF	120	129
Total PeCDF	136	138
Total HxCDF	159	
Total HpCDF	119	121

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-082SC-B-02-04-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-05 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 17.2 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:22	% Solids: 58.3	Date Analyzed : 01-Nov-19 03:42 Column: ZB-5MS 06-Nov-19 13:17 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	0.859				IS 13C-2,3,7,8-TCDD	98.8	25 - 164	
1,2,3,7,8-PeCDD	1.48			J	13C-1,2,3,7,8-PeCDD	91.3	25 - 181	
1,2,3,4,7,8-HxCDD	1.65			J	13C-1,2,3,4,7,8-HxCDD	94.5	32 - 141	
1,2,3,6,7,8-HxCDD	11.1				13C-1,2,3,6,7,8-HxCDD	77.1	28 - 130	
1,2,3,7,8,9-HxCDD	4.68				13C-1,2,3,7,8,9-HxCDD	84.0	32 - 141	
1,2,3,4,6,7,8-HpCDD	373				13C-1,2,3,4,6,7,8-HpCDD	92.8	23 - 140	
OCDD	5830			D	13C-OCDD	86.3	17 - 157	D
2,3,7,8-TCDF	115				13C-2,3,7,8-TCDF	97.8	24 - 169	
1,2,3,7,8-PeCDF	196				13C-1,2,3,7,8-PeCDF	102	24 - 185	
2,3,4,7,8-PeCDF	58.5				13C-2,3,4,7,8-PeCDF	98.8	21 - 178	
1,2,3,4,7,8-HxCDF	303				13C-1,2,3,4,7,8-HxCDF	95.9	26 - 152	
1,2,3,6,7,8-HxCDF	82.0				13C-1,2,3,6,7,8-HxCDF	85.2	26 - 123	
2,3,4,6,7,8-HxCDF	24.5				13C-2,3,4,6,7,8-HxCDF	89.3	28 - 136	
1,2,3,7,8,9-HxCDF	12.4				13C-1,2,3,7,8,9-HxCDF	100	29 - 147	
1,2,3,4,6,7,8-HpCDF	189				13C-1,2,3,4,6,7,8-HpCDF	95.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	56.4				13C-1,2,3,4,7,8,9-HpCDF	111	26 - 138	
OCDF	431				13C-OCDF	94.9	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	94.7	35 - 197	

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

TEQMinWHO2005Dioxin 89.3

TOTALS								
Total TCDD	7.09		8.65					
Total PeCDD	10.8		15.3					
Total HxCDD	87.1							
Total HpCDD	891							
Total TCDF	319		339	P				
Total PeCDF	529			P				
Total HxCDF	586							
Total HpCDF	491							

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-082SC-B-04-06-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-06 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 13.6 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:23	% Solids: 73.6	Date Analyzed : 01-Nov-19 04:29 Column: ZB-5MS 05-Nov-19 15:56 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.228		IS 13C-2,3,7,8-TCDD	104	25 - 164	
1,2,3,7,8-PeCDD	ND	0.158			13C-1,2,3,7,8-PeCDD	102	25 - 181	
1,2,3,4,7,8-HxCDD	0.382			J	13C-1,2,3,4,7,8-HxCDD	98.1	32 - 141	
1,2,3,6,7,8-HxCDD	1.83			J	13C-1,2,3,6,7,8-HxCDD	80.8	28 - 130	
1,2,3,7,8,9-HxCDD	0.846			J	13C-1,2,3,7,8,9-HxCDD	87.0	32 - 141	
1,2,3,4,6,7,8-HpCDD	42.5				13C-1,2,3,4,6,7,8-HpCDD	98.4	23 - 140	
OCDD	694				13C-OCDD	91.7	17 - 157	
2,3,7,8-TCDF	38.3				13C-2,3,7,8-TCDF	105	24 - 169	
1,2,3,7,8-PeCDF	197				13C-1,2,3,7,8-PeCDF	113	24 - 185	
2,3,4,7,8-PeCDF	60.7				13C-2,3,4,7,8-PeCDF	110	21 - 178	
1,2,3,4,7,8-HxCDF	334				13C-1,2,3,4,7,8-HxCDF	105	26 - 152	
1,2,3,6,7,8-HxCDF	76.8				13C-1,2,3,6,7,8-HxCDF	96.9	26 - 123	
2,3,4,6,7,8-HxCDF	19.3				13C-2,3,4,6,7,8-HxCDF	94.0	28 - 136	
1,2,3,7,8,9-HxCDF	10.7				13C-1,2,3,7,8,9-HxCDF	106	29 - 147	
1,2,3,4,6,7,8-HpCDF	81.0				13C-1,2,3,4,6,7,8-HpCDF	102	28 - 143	
1,2,3,4,7,8,9-HpCDF	31.7				13C-1,2,3,4,7,8,9-HpCDF	114	26 - 138	
OCDF	84.4				13C-OCDF	105	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	96.9	35 - 197	

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

TEQMinWHO2005Dioxin 74.1

TOTALS		
Total TCDD	0.161	1.59
Total PeCDD	0.864	1.99
Total HxCDD	14.5	
Total HpCDD	103	
Total TCDF	99.1	104
Total PeCDF	426	
Total HxCDF	528	
Total HpCDF	169	

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-082SC-B-06-08-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-07 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 17.0 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 14:25	% Solids: 58.8	Date Analyzed : 01-Nov-19 05:17 Column: ZB-5MS 05-Nov-19 16:59 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.757		IS 13C-2,3,7,8-TCDD	86.5	25 - 164	
1,2,3,7,8-PeCDD	1.44			J	13C-1,2,3,7,8-PeCDD	79.9	25 - 181	
1,2,3,4,7,8-HxCDD	1.40			J	13C-1,2,3,4,7,8-HxCDD	78.4	32 - 141	
1,2,3,6,7,8-HxCDD	9.06				13C-1,2,3,6,7,8-HxCDD	67.6	28 - 130	
1,2,3,7,8,9-HxCDD	3.97				13C-1,2,3,7,8,9-HxCDD	68.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	274				13C-1,2,3,4,6,7,8-HpCDD	78.1	23 - 140	
OCDD	3970				13C-OCDD	64.6	17 - 157	
2,3,7,8-TCDF	68.9				13C-2,3,7,8-TCDF	80.8	24 - 169	
1,2,3,7,8-PeCDF	112				13C-1,2,3,7,8-PeCDF	87.4	24 - 185	
2,3,4,7,8-PeCDF	36.8				13C-2,3,4,7,8-PeCDF	83.2	21 - 178	
1,2,3,4,7,8-HxCDF	164				13C-1,2,3,4,7,8-HxCDF	79.6	26 - 152	
1,2,3,6,7,8-HxCDF	44.7				13C-1,2,3,6,7,8-HxCDF	73.0	26 - 123	
2,3,4,6,7,8-HxCDF	13.3				13C-2,3,4,6,7,8-HxCDF	72.1	28 - 136	
1,2,3,7,8,9-HxCDF	8.12				13C-1,2,3,7,8,9-HxCDF	84.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	110				13C-1,2,3,4,6,7,8-HpCDF	78.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	27.8				13C-1,2,3,4,7,8,9-HpCDF	85.8	26 - 138	
OCDF	241				13C-OCDF	69.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	83.3	35 - 197	

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

TEQMinWHO2005Dioxin 52.6

TOTALS		
Total TCDD	10.5	12.3
Total PeCDD	9.89	14.6
Total HxCDD	77.6	
Total HpCDD	662	
Total TCDF	274	285
Total PeCDF	332	
Total HxCDF	346	
Total HpCDF	308	

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: Duplicate					EPA Method 1613B			
Source Client ID: PDI-082SC-B-06-08-191002		QC Batch: B9J0288		Lab Sample: B9J0288-DUP1				
Source LabNumber: 1903565-07		Date Extracted: 28-Oct-2019 7:02		Date Analyzed: 01-Nov-19 06:05 Column: ZB-5MS				
Matrix: Solid				05-Nov-19 17:31 Column: ZB-5MS				
Sample Size: 17.0 g								
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	1.01				IS 13C-2,3,7,8-TCDD	97.0	25 - 164	
1,2,3,7,8-PeCDD	1.60			J	13C-1,2,3,7,8-PeCDD	98.6	25 - 181	
1,2,3,4,7,8-HxCDD	1.72			J	13C-1,2,3,4,7,8-HxCDD	96.4	32 - 141	
1,2,3,6,7,8-HxCDD	9.40				13C-1,2,3,6,7,8-HxCDD	77.5	28 - 130	
1,2,3,7,8,9-HxCDD	3.99				13C-1,2,3,7,8,9-HxCDD	84.5	32 - 141	
1,2,3,4,6,7,8-HpCDD	215				13C-1,2,3,4,6,7,8-HpCDD	96.7	23 - 140	
OCDD	3010				13C-OCDD	90.2	17 - 157	
2,3,7,8-TCDF	86.7				13C-2,3,7,8-TCDF	84.2	24 - 169	
1,2,3,7,8-PeCDF	209				13C-1,2,3,7,8-PeCDF	99.3	24 - 185	
2,3,4,7,8-PeCDF	60.4				13C-2,3,4,7,8-PeCDF	103	21 - 178	
1,2,3,4,7,8-HxCDF	716				13C-1,2,3,4,7,8-HxCDF	92.9	26 - 152	
1,2,3,6,7,8-HxCDF	197				13C-1,2,3,6,7,8-HxCDF	82.7	26 - 123	
2,3,4,6,7,8-HxCDF	39.9				13C-2,3,4,6,7,8-HxCDF	87.2	28 - 136	
1,2,3,7,8,9-HxCDF	14.3				13C-1,2,3,7,8,9-HxCDF	102	29 - 147	
1,2,3,4,6,7,8-HpCDF	368				13C-1,2,3,4,6,7,8-HpCDF	100	28 - 143	
1,2,3,4,7,8,9-HpCDF	118				13C-1,2,3,4,7,8,9-HpCDF	115	26 - 138	
OCDF	509				13C-OCDF	102	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	89.1	35 - 197	
					Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)			
					TEQMinWHO2005Dioxin 142			
TOTALS								
Total TCDD	13.4		15.0					
Total PeCDD	9.66		18.7					
Total HxCDD	78.9							
Total HpCDD	553							
Total TCDF	325		340	P				
Total PeCDF	538							
Total HxCDF	1200		1200					
Total HpCDF	759							

DL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

The sample size is reported in wet weight.

Sample ID: Duplicate					EPA Method 1613B				
Source Client ID: PDI-082SC-B-06-08-191002					Duplicate Lab Sample: B9J0288-DUP1				
Source LabNumber: 1903565-07									
Matrix: Solid									
Analyte	Dup Conc. (pg/g)	Source Conc.	RPD	RPD Limits	Labeled Standard	Dup %R	Source %R	LCL-UCL	
2,3,7,8-TCDD	1.01	ND	#	25	IS 13C-2,3,7,8-TCDD	97.0	86.5	25 - 164	
1,2,3,7,8-PeCDD	1.60	1.44	10.2	25	13C-1,2,3,7,8-PeCDD	98.6	79.9	25 - 181	
1,2,3,4,7,8-HxCDD	1.72	1.40	20.2	25	13C-1,2,3,4,7,8-HxCDD	96.4	78.4	32 - 141	
1,2,3,6,7,8-HxCDD	9.40	9.06	3.69	25	13C-1,2,3,6,7,8-HxCDD	77.5	67.6	28 - 130	
1,2,3,7,8,9-HxCDD	3.99	3.97	0.569	25	13C-1,2,3,7,8,9-HxCDD	84.5	68.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	215	274	23.8	25	13C-1,2,3,4,6,7,8-HpCDD	96.7	78.1	23 - 140	
OCDD	3010	3970	27.6	25	13C-OCDD	90.2	64.6	17 - 157	
2,3,7,8-TCDF	86.7	84.2	2.96	25	13C-2,3,7,8-TCDF	84.2	80.8	24 - 169	
1,2,3,7,8-PeCDF	209	112	60.2	25	13C-1,2,3,7,8-PeCDF	99.3	87.4	24 - 185	
2,3,4,7,8-PeCDF	60.4	36.8	48.5	25	13C-2,3,4,7,8-PeCDF	103	83.2	21 - 178	
1,2,3,4,7,8-HxCDF	716	164	126	25	13C-1,2,3,4,7,8-HxCDF	92.9	79.6	26 - 152	
1,2,3,6,7,8-HxCDF	197	44.7	126	25	13C-1,2,3,6,7,8-HxCDF	82.7	73.0	26 - 123	
2,3,4,6,7,8-HxCDF	39.9	13.3	99.9	25	13C-2,3,4,6,7,8-HxCDF	87.2	72.1	28 - 136	
1,2,3,7,8,9-HxCDF	14.3	8.12	54.9	25	13C-1,2,3,7,8,9-HxCDF	102	84.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	368	110	108	25	13C-1,2,3,4,6,7,8-HpCDF	100	78.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	118	27.8	123	25	13C-1,2,3,4,7,8,9-HpCDF	115	85.8	26 - 138	
OCDF	509	241	71.5	25	13C-OCDF	102	69.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	89.1	83.3	35 - 197	

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

Sample ID: PDI-1082SC-B-04-06-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-08 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 20.4 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 0:00	% Solids: 49.0	Date Analyzed : 01-Nov-19 06:53 Column: ZB-5MS 05-Nov-19 16:28 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	0.472			J	IS 13C-2,3,7,8-TCDD	81.0	25 - 164	
1,2,3,7,8-PeCDD	ND		0.547		13C-1,2,3,7,8-PeCDD	65.2	25 - 181	
1,2,3,4,7,8-HxCDD	ND		0.582		13C-1,2,3,4,7,8-HxCDD	88.0	32 - 141	
1,2,3,6,7,8-HxCDD	3.55				13C-1,2,3,6,7,8-HxCDD	76.3	28 - 130	
1,2,3,7,8,9-HxCDD	ND		1.21		13C-1,2,3,7,8,9-HxCDD	85.3	32 - 141	
1,2,3,4,6,7,8-HpCDD	94.3				13C-1,2,3,4,6,7,8-HpCDD	104	23 - 140	
OCDD	1520				13C-OCDD	98.6	17 - 157	
2,3,7,8-TCDF	35.2				13C-2,3,7,8-TCDF	75.2	24 - 169	
1,2,3,7,8-PeCDF	58.3				13C-1,2,3,7,8-PeCDF	69.8	24 - 185	
2,3,4,7,8-PeCDF	21.0				13C-2,3,4,7,8-PeCDF	68.7	21 - 178	
1,2,3,4,7,8-HxCDF	114				13C-1,2,3,4,7,8-HxCDF	99.4	26 - 152	
1,2,3,6,7,8-HxCDF	29.0				13C-1,2,3,6,7,8-HxCDF	87.3	26 - 123	
2,3,4,6,7,8-HxCDF	9.05				13C-2,3,4,6,7,8-HxCDF	88.0	28 - 136	
1,2,3,7,8,9-HxCDF	4.71				13C-1,2,3,7,8,9-HxCDF	94.1	29 - 147	
1,2,3,4,6,7,8-HpCDF	59.7				13C-1,2,3,4,6,7,8-HpCDF	103	28 - 143	
1,2,3,4,7,8,9-HpCDF	17.2				13C-1,2,3,4,7,8,9-HpCDF	122	26 - 138	
OCDF	118				13C-OCDF	111	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	79.2	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
TEQMinWHO2005Dioxin 30.3

TOTALS			
Total TCDD	3.48		4.51
Total PeCDD	1.06		6.40
Total HxCDD	26.9		28.7
Total HpCDD	218		
Total TCDF	125		130
Total PeCDF	150		171
Total HxCDF	219		220
Total HpCDF	149		150

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-A-15-16-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-09 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 15.1 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:23	% Solids: 66.5	Date Analyzed: 01-Nov-19 21:09 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0837			IS 13C-2,3,7,8-TCDD	61.1	25 - 164	
1,2,3,7,8-PeCDD	ND	0.134			13C-1,2,3,7,8-PeCDD	63.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.213			13C-1,2,3,4,7,8-HxCDD	60.3	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.242			13C-1,2,3,6,7,8-HxCDD	48.9	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.222			13C-1,2,3,7,8,9-HxCDD	57.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	0.228			13C-1,2,3,4,6,7,8-HpCDD	56.0	23 - 140	
OCDD	1.68			J	13C-OCDD	59.1	17 - 157	
2,3,7,8-TCDF	ND	0.0899			13C-2,3,7,8-TCDF	60.5	24 - 169	
1,2,3,7,8-PeCDF	ND	0.140			13C-1,2,3,7,8-PeCDF	73.3	24 - 185	
2,3,4,7,8-PeCDF	ND	0.133			13C-2,3,4,7,8-PeCDF	69.4	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0558			13C-1,2,3,4,7,8-HxCDF	74.4	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0652			13C-1,2,3,6,7,8-HxCDF	62.4	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0705			13C-2,3,4,6,7,8-HxCDF	57.8	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.0992			13C-1,2,3,7,8,9-HxCDF	60.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.130			13C-1,2,3,4,6,7,8-HpCDF	55.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.111			13C-1,2,3,4,7,8,9-HpCDF	61.3	26 - 138	
OCDF	ND	0.245			13C-OCDF	62.3	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	92.2	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
 TEQMinWHO2005Dioxin 0.000504

TOTALS								
Total TCDD	ND	0.0837						
Total PeCDD	ND	0.134						
Total HxCDD	ND		0.883					
Total HpCDD	ND	0.228						
Total TCDF	ND	0.0899						
Total PeCDF	ND	0.136						
Total HxCDF	ND	0.0710						
Total HpCDF	ND	0.121						

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

LCL-UCL- Lower control limit - upper control limit
 The results are reported in dry weight. The sample size is reported in wet weight.
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-A-16-17-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-10 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 15.9 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:23	% Solids: 63.1	Date Analyzed: 01-Nov-19 08:29 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0619			IS 13C-2,3,7,8-TCDD	102	25 - 164	
1,2,3,7,8-PeCDD	ND	0.136			13C-1,2,3,7,8-PeCDD	97.1	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.221			13C-1,2,3,4,7,8-HxCDD	91.8	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.234			13C-1,2,3,6,7,8-HxCDD	77.1	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.230			13C-1,2,3,7,8,9-HxCDD	84.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.35			J	13C-1,2,3,4,6,7,8-HpCDD	90.2	23 - 140	
OCDD	13.5				13C-OCDD	84.3	17 - 157	
2,3,7,8-TCDF	ND	0.0675			13C-2,3,7,8-TCDF	99.6	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0882			13C-1,2,3,7,8-PeCDF	105	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0851			13C-2,3,4,7,8-PeCDF	99.7	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0683			13C-1,2,3,4,7,8-HxCDF	116	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0747			13C-1,2,3,6,7,8-HxCDF	101	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0818			13C-2,3,4,6,7,8-HxCDF	98.1	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.107			13C-1,2,3,7,8,9-HxCDF	102	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.141			13C-1,2,3,4,6,7,8-HpCDF	99.2	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.118			13C-1,2,3,4,7,8,9-HpCDF	109	26 - 138	
OCDF	ND	0.123			13C-OCDF	98.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	99.3	35 - 197	

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

TEQMinWHO2005Dioxin 0.0176

TOTALS			
Total TCDD	0.477		
Total PeCDD	ND	0.136	
Total HxCDD	1.45		
Total HpCDD	3.85		
Total TCDF	0.207		
Total PeCDF	ND	0.0866	
Total HxCDF	ND	0.0818	
Total HpCDF	ND	0.130	

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-B-00-02-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-11 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 20.4 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:20	% Solids: 49.0	Date Analyzed : 01-Nov-19 09:16 Column: ZB-5MS 05-Nov-19 14:21 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.435		IS 13C-2,3,7,8-TCDD	120	25 - 164	
1,2,3,7,8-PeCDD	1.06			J	13C-1,2,3,7,8-PeCDD	116	25 - 181	
1,2,3,4,7,8-HxCDD	ND		0.837		13C-1,2,3,4,7,8-HxCDD	104	32 - 141	
1,2,3,6,7,8-HxCDD	5.38				13C-1,2,3,6,7,8-HxCDD	88.2	28 - 130	
1,2,3,7,8,9-HxCDD	2.52				13C-1,2,3,7,8,9-HxCDD	99.5	32 - 141	
1,2,3,4,6,7,8-HpCDD	88.9				13C-1,2,3,4,6,7,8-HpCDD	106	23 - 140	
OCDD	811				13C-OCDD	105	17 - 157	
2,3,7,8-TCDF	10.9				13C-2,3,7,8-TCDF	117	24 - 169	
1,2,3,7,8-PeCDF	18.2				13C-1,2,3,7,8-PeCDF	120	24 - 185	
2,3,4,7,8-PeCDF	7.70				13C-2,3,4,7,8-PeCDF	112	21 - 178	
1,2,3,4,7,8-HxCDF	30.6				13C-1,2,3,4,7,8-HxCDF	130	26 - 152	
1,2,3,6,7,8-HxCDF	7.45				13C-1,2,3,6,7,8-HxCDF	114	26 - 123	
2,3,4,6,7,8-HxCDF	2.59				13C-2,3,4,6,7,8-HxCDF	113	28 - 136	
1,2,3,7,8,9-HxCDF	1.48			J	13C-1,2,3,7,8,9-HxCDF	118	29 - 147	
1,2,3,4,6,7,8-HpCDF	20.9				13C-1,2,3,4,6,7,8-HpCDF	117	28 - 143	
1,2,3,4,7,8,9-HpCDF	5.43				13C-1,2,3,4,7,8,9-HpCDF	129	26 - 138	
OCDF	47.1				13C-OCDF	118	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	115	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
 TEQMinWHO2005Dioxin 11.4

TOTALS			
Total TCDD	2.58		3.33
Total PeCDD	4.24		7.95
Total HxCDD	38.0		40.3
Total HpCDD	194		
Total TCDF	41.3		42.9
Total PeCDF	51.4		53.7
Total HxCDF	66.2		66.5
Total HpCDF	52.5		53.0

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

LCL-UCL- Lower control limit - upper control limit
 The results are reported in dry weight. The sample size is reported in wet weight.
 Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-B-02-04-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-12 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 19.5 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:22	% Solids: 51.2	Date Analyzed : 01-Nov-19 10:04 Column: ZB-5MS 05-Nov-19 18:35 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	2.80				IS 13C-2,3,7,8-TCDD	108	25 - 164	
1,2,3,7,8-PeCDD	4.32				13C-1,2,3,7,8-PeCDD	103	25 - 181	
1,2,3,4,7,8-HxCDD	3.81				13C-1,2,3,4,7,8-HxCDD	103	32 - 141	
1,2,3,6,7,8-HxCDD	22.6				13C-1,2,3,6,7,8-HxCDD	85.5	28 - 130	
1,2,3,7,8,9-HxCDD	9.40				13C-1,2,3,7,8,9-HxCDD	93.4	32 - 141	
1,2,3,4,6,7,8-HpCDD	464				13C-1,2,3,4,6,7,8-HpCDD	104	23 - 140	
OCDD	5780				13C-OCDD	112	17 - 157	
2,3,7,8-TCDF	301				13C-2,3,7,8-TCDF	117	24 - 169	
1,2,3,7,8-PeCDF	491				13C-1,2,3,7,8-PeCDF	123	24 - 185	
2,3,4,7,8-PeCDF	206				13C-2,3,4,7,8-PeCDF	113	21 - 178	
1,2,3,4,7,8-HxCDF	834				13C-1,2,3,4,7,8-HxCDF	128	26 - 152	
1,2,3,6,7,8-HxCDF	215				13C-1,2,3,6,7,8-HxCDF	111	26 - 123	
2,3,4,6,7,8-HxCDF	56.4				13C-2,3,4,6,7,8-HxCDF	106	28 - 136	
1,2,3,7,8,9-HxCDF	32.8				13C-1,2,3,7,8,9-HxCDF	114	29 - 147	
1,2,3,4,6,7,8-HpCDF	402				13C-1,2,3,4,6,7,8-HpCDF	110	28 - 143	
1,2,3,4,7,8,9-HpCDF	153				13C-1,2,3,4,7,8,9-HpCDF	126	26 - 138	
OCDF	788				13C-OCDF	122	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	106	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
TEQMinWHO2005Dioxin 243

TOTALS								
Total TCDD	22.5		24.7					
Total PeCDD	34.1		38.5					
Total HxCDD	176							
Total HpCDD	1100							
Total TCDF	989		1020					P
Total PeCDF	1300							P
Total HxCDF	1490							
Total HpCDF	963							

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-B-04-06-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-13 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 17.6 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:33	% Solids: 56.9	Date Analyzed : 01-Nov-19 10:52 Column: ZB-5MS 05-Nov-19 14:52 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.399		IS 13C-2,3,7,8-TCDD	100	25 - 164	
1,2,3,7,8-PeCDD	0.589			J	13C-1,2,3,7,8-PeCDD	101	25 - 181	
1,2,3,4,7,8-HxCDD	ND		0.574		13C-1,2,3,4,7,8-HxCDD	88.3	32 - 141	
1,2,3,6,7,8-HxCDD	3.66				13C-1,2,3,6,7,8-HxCDD	74.8	28 - 130	
1,2,3,7,8,9-HxCDD	1.39			J	13C-1,2,3,7,8,9-HxCDD	83.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	103				13C-1,2,3,4,6,7,8-HpCDD	86.2	23 - 140	
OCDD	1490				13C-OCDD	91.2	17 - 157	
2,3,7,8-TCDF	24.0				13C-2,3,7,8-TCDF	95.4	24 - 169	
1,2,3,7,8-PeCDF	63.5				13C-1,2,3,7,8-PeCDF	100	24 - 185	
2,3,4,7,8-PeCDF	25.8				13C-2,3,4,7,8-PeCDF	96.7	21 - 178	
1,2,3,4,7,8-HxCDF	106				13C-1,2,3,4,7,8-HxCDF	115	26 - 152	
1,2,3,6,7,8-HxCDF	29.5				13C-1,2,3,6,7,8-HxCDF	96.9	26 - 123	
2,3,4,6,7,8-HxCDF	9.17				13C-2,3,4,6,7,8-HxCDF	94.8	28 - 136	
1,2,3,7,8,9-HxCDF	6.30				13C-1,2,3,7,8,9-HxCDF	100	29 - 147	
1,2,3,4,6,7,8-HpCDF	68.0				13C-1,2,3,4,6,7,8-HpCDF	94.2	28 - 143	
1,2,3,4,7,8,9-HpCDF	21.4				13C-1,2,3,4,7,8,9-HpCDF	109	26 - 138	
OCDF	169				13C-OCDF	104	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	100	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
TEQMinWHO2005Dioxin 30.7

TOTALS		
Total TCDD	0.480	3.16
Total PeCDD	2.64	5.60
Total HxCDD	28.3	29.2
Total HpCDD	255	
Total TCDF	80.6	83.7
Total PeCDF	169	
Total HxCDF	215	
Total HpCDF	188	

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-084SC-B-06-08-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-14 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 16.6 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 11:39	% Solids: 60.4	Date Analyzed : 01-Nov-19 21:57 Column: ZB-5MS 02-Dec-19 13:11 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0644			IS 13C-2,3,7,8-TCDD	81.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.132			13C-1,2,3,7,8-PeCDD	80.8	25 - 181	
1,2,3,4,7,8-HxCDD	0.258			J	13C-1,2,3,4,7,8-HxCDD	78.4	32 - 141	
1,2,3,6,7,8-HxCDD	1.41			J	13C-1,2,3,6,7,8-HxCDD	66.2	28 - 130	
1,2,3,7,8,9-HxCDD	0.513			J	13C-1,2,3,7,8,9-HxCDD	77.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	41.3				13C-1,2,3,4,6,7,8-HpCDD	74.0	23 - 140	
OCDD	566				13C-OCDD	72.9	17 - 157	
2,3,7,8-TCDF	11.8				13C-2,3,7,8-TCDF	81.1	24 - 169	
1,2,3,7,8-PeCDF	18.4				13C-1,2,3,7,8-PeCDF	93.6	24 - 185	
2,3,4,7,8-PeCDF	9.06				13C-2,3,4,7,8-PeCDF	87.7	21 - 178	
1,2,3,4,7,8-HxCDF	24.7				13C-1,2,3,4,7,8-HxCDF	88.6	26 - 152	
1,2,3,6,7,8-HxCDF	6.79				13C-1,2,3,6,7,8-HxCDF	78.1	26 - 123	
2,3,4,6,7,8-HxCDF	2.44			J	13C-2,3,4,6,7,8-HxCDF	76.7	28 - 136	
1,2,3,7,8,9-HxCDF	1.27			J	13C-1,2,3,7,8,9-HxCDF	79.7	29 - 147	
1,2,3,4,6,7,8-HpCDF	15.9				13C-1,2,3,4,6,7,8-HpCDF	74.9	28 - 143	
1,2,3,4,7,8,9-HpCDF	4.61				13C-1,2,3,4,7,8,9-HpCDF	82.7	26 - 138	
OCDF	38.2				13C-OCDF	79.0	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	95.1	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
TEQMinWHO2005Dioxin 8.99

TOTALS			
Total TCDD	1.21		
Total PeCDD	1.30	2.06	
Total HxCDD	11.1		
Total HpCDD	96.4		
Total TCDF	37.1	39.9	
Total PeCDF	52.9	53.8	
Total HxCDF	50.6	52.6	
Total HpCDF	44.7		

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-095SC-B-00-02-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-15 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 19.7 g	QC Batch: B9K0034 Date Extracted: 05-Nov-2019 7:54
Date Collected: 02-Oct-2019 16:45	% Solids: 50.9	Date Analyzed : 18-Nov-19 17:56 Column: DB-225 20-Nov-19 23:34 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	2.21				IS 13C-2,3,7,8-TCDD	101	25 - 164	
1,2,3,7,8-PeCDD	1.99			J	13C-1,2,3,7,8-PeCDD	102	25 - 181	
1,2,3,4,7,8-HxCDD	2.30			J	13C-1,2,3,4,7,8-HxCDD	101	32 - 141	
1,2,3,6,7,8-HxCDD	14.9				13C-1,2,3,6,7,8-HxCDD	84.6	28 - 130	
1,2,3,7,8,9-HxCDD	6.61				13C-1,2,3,7,8,9-HxCDD	88.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	341				13C-1,2,3,4,6,7,8-HpCDD	92.8	23 - 140	
OCDD	5660				13C-OCDD	91.2	17 - 157	
2,3,7,8-TCDF	45.9				13C-2,3,7,8-TCDF	98.1	24 - 169	
1,2,3,7,8-PeCDF	71.4				13C-1,2,3,7,8-PeCDF	98.9	24 - 185	
2,3,4,7,8-PeCDF	22.6				13C-2,3,4,7,8-PeCDF	97.9	21 - 178	
1,2,3,4,7,8-HxCDF	209				13C-1,2,3,4,7,8-HxCDF	106	26 - 152	
1,2,3,6,7,8-HxCDF	63.9				13C-1,2,3,6,7,8-HxCDF	93.1	26 - 123	
2,3,4,6,7,8-HxCDF	17.9				13C-2,3,4,6,7,8-HxCDF	93.6	28 - 136	
1,2,3,7,8,9-HxCDF	8.07				13C-1,2,3,7,8,9-HxCDF	96.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	215				13C-1,2,3,4,6,7,8-HpCDF	85.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	45.7				13C-1,2,3,4,7,8,9-HpCDF	101	26 - 138	
OCDF	403				13C-OCDF	95.1	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	95.3	35 - 197	

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

TEQMinWHO2005Dioxin 57.8

TOTALS				
Total TCDD	24.6		26.7	
Total PeCDD	18.8		28.0	
Total HxCDD	139			
Total HpCDD	870			
Total TCDF	164		172	P
Total PeCDF	273			P
Total HxCDF	473			P
Total HpCDF	491			

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-095SC-B-02-04-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-16 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 18.7 g	QC Batch: B9J0288 Date Extracted: 28-Oct-2019 7:02
Date Collected: 02-Oct-2019 16:46	% Solids: 53.7	Date Analyzed : 06-Nov-19 14:05 Column: ZB-5MS 07-Nov-19 13:29 Column: DB-225

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.288			IS 13C-2,3,7,8-TCDD	49.0	25 - 164	
1,2,3,7,8-PeCDD	ND	0.188			13C-1,2,3,7,8-PeCDD	52.7	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.380			13C-1,2,3,4,7,8-HxCDD	57.5	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.389			13C-1,2,3,6,7,8-HxCDD	49.0	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.352			13C-1,2,3,7,8,9-HxCDD	54.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	16.3				13C-1,2,3,4,6,7,8-HpCDD	56.2	23 - 140	
OCDD	133				13C-OCDD	54.6	17 - 157	
2,3,7,8-TCDF	4.93				13C-2,3,7,8-TCDF	41.4	24 - 169	
1,2,3,7,8-PeCDF	4.90				13C-1,2,3,7,8-PeCDF	46.6	24 - 185	
2,3,4,7,8-PeCDF	2.59				13C-2,3,4,7,8-PeCDF	44.2	21 - 178	
1,2,3,4,7,8-HxCDF	6.24				13C-1,2,3,4,7,8-HxCDF	58.2	26 - 152	
1,2,3,6,7,8-HxCDF	1.63			J	13C-1,2,3,6,7,8-HxCDF	52.5	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.247			13C-2,3,4,6,7,8-HxCDF	51.5	28 - 136	
1,2,3,7,8,9-HxCDF	0.545			J	13C-1,2,3,7,8,9-HxCDF	53.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	3.80				13C-1,2,3,4,6,7,8-HpCDF	49.9	28 - 143	
1,2,3,4,7,8,9-HpCDF	1.06			J	13C-1,2,3,4,7,8,9-HpCDF	55.2	26 - 138	
OCDF	8.19				13C-OCDF	54.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	83.9	35 - 197	

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

TEQMinWHO2005Dioxin 2.51

TOTALS								
Total TCDD	ND	0.288						
Total PeCDD	ND		0.727					
Total HxCDD	1.97		3.70					
Total HpCDD	38.2							
Total TCDF	11.2		13.0					
Total PeCDF	13.0		15.4					
Total HxCDF	9.56		12.3	P				
Total HpCDF	4.86		9.76					

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-095SC-B-04-06-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-17 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 17.4 g	QC Batch: B9K0034 Date Extracted: 05-Nov-2019 7:54
Date Collected: 02-Oct-2019 16:47	% Solids: 57.8	Date Analyzed : 18-Nov-19 17:24 Column: DB-225 28-Nov-19 02:15 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		1.06		IS 13C-2,3,7,8-TCDD	94.0	25 - 164	
1,2,3,7,8-PeCDD	ND		1.63		13C-1,2,3,7,8-PeCDD	91.1	25 - 181	
1,2,3,4,7,8-HxCDD	1.71			J	13C-1,2,3,4,7,8-HxCDD	95.9	32 - 141	
1,2,3,6,7,8-HxCDD	13.3				13C-1,2,3,6,7,8-HxCDD	79.6	28 - 130	
1,2,3,7,8,9-HxCDD	4.44				13C-1,2,3,7,8,9-HxCDD	83.3	32 - 141	
1,2,3,4,6,7,8-HpCDD	689				13C-1,2,3,4,6,7,8-HpCDD	87.7	23 - 140	
OCDD	7280			D	13C-OCDD	91.8	17 - 157	D
2,3,7,8-TCDF	37.8				13C-2,3,7,8-TCDF	92.9	24 - 169	
1,2,3,7,8-PeCDF	49.0				13C-1,2,3,7,8-PeCDF	91.4	24 - 185	
2,3,4,7,8-PeCDF	16.6				13C-2,3,4,7,8-PeCDF	91.6	21 - 178	
1,2,3,4,7,8-HxCDF	70.1				13C-1,2,3,4,7,8-HxCDF	98.0	26 - 152	
1,2,3,6,7,8-HxCDF	23.1				13C-1,2,3,6,7,8-HxCDF	88.7	26 - 123	
2,3,4,6,7,8-HxCDF	13.5				13C-2,3,4,6,7,8-HxCDF	85.7	28 - 136	
1,2,3,7,8,9-HxCDF	5.99				13C-1,2,3,7,8,9-HxCDF	90.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	148				13C-1,2,3,4,6,7,8-HpCDF	79.2	28 - 143	
1,2,3,4,7,8,9-HpCDF	16.6				13C-1,2,3,4,7,8,9-HpCDF	93.7	26 - 138	
OCDF	334				13C-OCDF	81.6	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	95.9	35 - 197	

Toxic Equivalent Quotient (TEQ) Data (pg/g dry wt)
TEQMinWHO2005Dioxin 34.3

TOTALS								
Total TCDD	17.4		23.2					
Total PeCDD	29.1		32.8					
Total HxCDD	144							
Total HpCDD	1490							
Total TCDF	182		187	P				
Total PeCDF	316			P				
Total HxCDF	285		287	P				
Total HpCDF	388							

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: PDI-095SC-B-06-08-191002 **EPA Method 1613B**

Client Data	Sample Data	Laboratory Data
Name: Anchor QEA, LLC	Matrix: Sediment	Lab Sample: 1903565-18 Date Received: 08-Oct-2019 10:03
Project: Gasco PDI	Sample Size: 18.0 g	QC Batch: B9K0034 Date Extracted: 05-Nov-2019 7:54
Date Collected: 02-Oct-2019 16:48	% Solids: 55.9	Date Analyzed : 18-Nov-19 16:20 Column: DB-225 28-Nov-19 03:03 Column: ZB-5MS

Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	0.652				IS 13C-2,3,7,8-TCDD	95.2	25 - 164	
1,2,3,7,8-PeCDD	2.33			J	13C-1,2,3,7,8-PeCDD	94.8	25 - 181	
1,2,3,4,7,8-HxCDD	ND		1.50		13C-1,2,3,4,7,8-HxCDD	96.3	32 - 141	
1,2,3,6,7,8-HxCDD	19.2				13C-1,2,3,6,7,8-HxCDD	80.5	28 - 130	
1,2,3,7,8,9-HxCDD	5.83				13C-1,2,3,7,8,9-HxCDD	83.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	459				13C-1,2,3,4,6,7,8-HpCDD	87.7	23 - 140	
OCDD	6250			D	13C-OCDD	83.8	17 - 157	D
2,3,7,8-TCDF	1.71				13C-2,3,7,8-TCDF	89.1	24 - 169	
1,2,3,7,8-PeCDF	2.16			J	13C-1,2,3,7,8-PeCDF	95.5	24 - 185	
2,3,4,7,8-PeCDF	4.53				13C-2,3,4,7,8-PeCDF	94.8	21 - 178	
1,2,3,4,7,8-HxCDF	11.4				13C-1,2,3,4,7,8-HxCDF	100	26 - 152	
1,2,3,6,7,8-HxCDF	25.6				13C-1,2,3,6,7,8-HxCDF	89.0	26 - 123	
2,3,4,6,7,8-HxCDF	17.4				13C-2,3,4,6,7,8-HxCDF	87.5	28 - 136	
1,2,3,7,8,9-HxCDF	1.67			J	13C-1,2,3,7,8,9-HxCDF	91.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	563				13C-1,2,3,4,6,7,8-HpCDF	81.2	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND		6.74		13C-1,2,3,4,7,8,9-HpCDF	92.8	26 - 138	
OCDF	391				13C-OCDF	79.9	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	94.4	35 - 197	

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

TEQMinWHO2005Dioxin 24.9

TOTALS								
Total TCDD	10.7		12.8					
Total PeCDD	38.5		39.6					
Total HxCDD	181		183					
Total HpCDD	1070							
Total TCDF	104		105	P				
Total PeCDF	236		237	P				
Total HxCDF	444			P				
Total HpCDF	1050		1060					

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

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight. The sample size is reported in wet weight.
Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

DATA QUALIFIERS & ABBREVIATIONS

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

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

Vista Analytical Laboratory Certifications

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

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

NELAP Accredited Test Methods

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

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

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

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

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

1903565 2.30C

POC: # Delaney Peterson (360-715-2707)

Project: Gasco PDI

COC ID:

VISTA-20191002-173916

1605 Cornwall Avenue, Bellingham, WA 98225

Client: NW Natural

Sample Custodian:

dep

Lab:

VISTA

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected		Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
				Date	Time						
016	PDI-081SC-B-08-10-191002	N	SE	10/02/2019	9:03	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
017	PDI-082SC-A-14-15-191002	N	SE	10/02/2019	14:14	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
018	PDI-082SC-A-15-16.1-191002	N	SE	10/02/2019	14:14	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
019	PDI-082SC-B-00-02-191002	N	SE	10/02/2019	14:21	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
020	PDI-082SC-B-02-04-191002	N	SE	10/02/2019	14:22	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
021	PDI-082SC-B-04-06-191002	N	SE	10/02/2019	14:23	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
022	PDI-082SC-B-06-08-191002	N	SE	10/02/2019	14:25	1	<input checked="" type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
023	PDI-1082SC-B-04-06-191002	FD	SE	10/02/2019		1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C

Comment:

Relinquished By: Signature <i>[Signature]</i>	Received By: Signature <i>[Signature]</i>	Relinquished By: Signature	Received By: Signature	Relinquished By: Signature	Received By: Signature
Print Name D. Peterson	Print Name Hayden Gunn	Print Name	Print Name	Print Name	Print Name
Company AQ	Company VA	Company	Company	Company	Company
Date/Time 10.4.19 10W	Date/Time 10/8/19 10:03	Date/Time	Date/Time	Date/Time	Date/Time

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

1903565

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

Project: Gasco PDI
Client: NW Natural

COC ID: VISTA-20191002-173916
Sample Custodian: dep
Lab: VISTA

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
023	PDI-1082SC-B-04-06-191002	FD	SE	10/02/2019		1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
024	PDI-084SC-A-15-16-191002	N	SE	10/02/2019	11:23	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
025	PDI-084SC-A-16-17-191002	N	SE	10/02/2019	11:23	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
026	PDI-084SC-B-00-02-191002	N	SE	10/02/2019	11:20	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
027	PDI-084SC-B-02-04-191002	N	SE	10/02/2019	11:22	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
028	PDI-084SC-B-04-06-191002	N	SE	10/02/2019	11:33	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
029	PDI-084SC-B-06-08-191002	N	SE	10/02/2019	11:39	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
030	PDI-095SC-B-00-02-191002	N	SE	10/02/2019	16:45	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Signature:	Signature:	Signature:	Signature:
Print Name: D. Peterson	Print Name: Hayden Gann	Print Name:	Print Name:	Print Name:	Print Name:
Company: AP	Company: VA	Company:	Company:	Company:	Company:
Date/Time: 10.4.19 10:00	Date/Time: 10/8/19 10:03	Date/Time:	Date/Time:	Date/Time:	Date/Time:

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

1903565

POC: # Delaney Peterson (360-715-2707)

Project: Gasco PDI

COC ID:

VISTA-20191002-173916

1605 Cornwall Avenue, Bellingham, WA 98225

Client: NW Natural

Sample Custodian:

dep

Lab:

VISTA

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected		Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
				Date	Time						
030	PDI-095SC-B-00-02-191002	N	SE	10/02/2019	16:45	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
031	PDI-095SC-B-02-04-191002	N	SE	10/02/2019	16:46	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
032	PDI-095SC-B-04-06-191002	N	SE	10/02/2019	16:47	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
033	PDI-095SC-B-06-08-191002	N	SE	10/02/2019	16:48	1	<input type="checkbox"/>	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C

Comment:

Comment:					
Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature <i>[Signature]</i>	Signature <i>[Signature]</i>	Signature	Signature	Signature	Signature
Print Name D. Peterson	Print Name Hayden Crana	Print Name	Print Name	Print Name	Print Name
Company AQ	Company VA	Company	Company	Company	Company
Date/Time 10.4.19 1000	Date/Time 10/8/19/ 10:03	Date/Time	Date/Time	Date/Time	Date/Time

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 1903565 TAT 28 days

Samples Arrival:	Date/Time		Initials:		Location: <u>WR-2</u>		
	<u>10/8/19 10:03</u>		<u>HOG</u>		Shelf/Rack: <u>NA</u>		
Delivered By:	<u>FedEx</u>	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		<u>Blue Ice</u>		Dry Ice		None
Temp °C: <u>2.3</u>	(uncorrected)		Probe used: Y / <u>N</u>			Thermometer ID: <u>IR-3</u>	
Temp °C: <u>2.3</u>	(corrected)						

	YES	NO	NA
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airbill	Trk # <u>7765 7000 6403</u>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Container	Vista	<u>Client</u>	Retain
		<u>Return</u>	Dispose
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chain of Custody / Sample Documentation Complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Holding Time Acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Logged In:	Date/Time		Initials:		Location: <u>WR-2</u>		
	<u>10/08/19 1008</u>		<u>AP</u>		Shelf/Rack: <u>A-1</u>		
COC Anomaly/Sample Acceptance Form completed?				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Comments:

CoC/Label Reconciliation Report WO# 1903565

LabNumber	CoC Sample ID	Label ID matches COCID	Label ID doesn't match COCID SampleAlias	Sampled	Label Sampled matches	Sampled doesn't match	Container	Container Correct	BaseMatrix	ReportMatrix
① 1903565-01	A PDI-081SC-B-08-10-191002	<input type="checkbox"/>		02-Oct-19 09:03	<input type="checkbox"/>		Amber Glass, 120 mL	<input type="checkbox"/>	Solid	Sediment
1903565-02	A PDI-082SC-A-14-15-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:14	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-03	A PDI-082SC-A-15-16.1-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:14	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-04	A PDI-082SC-B-00-02-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:21	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-05	A PDI-082SC-B-02-04-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:22	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-06	A PDI-082SC-B-04-06-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:23	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-07	A PDI-082SC-B-06-08-191002	<input checked="" type="checkbox"/>		02-Oct-19 14:25	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-08	A PDI-1082SC-B-04-06-191002	<input checked="" type="checkbox"/>		02-Oct-19 00:00	<input type="checkbox"/>	14:23	Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-09	A PDI-084SC-A-15-16-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:23	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-10	A PDI-084SC-A-16-17-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:23	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-11	A PDI-084SC-B-00-02-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:20	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-12	A PDI-084SC-B-02-04-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:22	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-13	A PDI-084SC-B-04-06-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:33	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-14	A PDI-084SC-B-06-08-191002	<input checked="" type="checkbox"/>		02-Oct-19 11:39	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-15	A PDI-095SC-B-00-02-191002	<input checked="" type="checkbox"/>		02-Oct-19 16:45	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-16	A PDI-095SC-B-02-04-191002	<input checked="" type="checkbox"/>		02-Oct-19 16:46	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-17	A PDI-095SC-B-04-06-191002	<input checked="" type="checkbox"/>		02-Oct-19 16:47	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment
1903565-18	A PDI-095SC-B-06-08-191002	<input checked="" type="checkbox"/>		02-Oct-19 16:48	<input checked="" type="checkbox"/>		Amber Glass, 120 mL	<input checked="" type="checkbox"/>	Solid	Sediment

	Yes	No	NA
Sample Container Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample Custody Seals Intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adequate Sample Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preservation Documented: Na2S2O3 Trizma <u>None</u> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Chlorinated or Drinking Water Samples, Acceptable Preservation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

① Missing Container

Verified by/Date: M.E. 10/09/19

Chain of Custody Anomaly/Sample Acceptance Form



Client: Anchor QEA, LLC
Contact: Delaney Peterson
Email: dpeterson@anchorqea.com
Phone:

Workorder Number: 1903565
Date Received: 08-Oct-19 10:03
Documented by/date: A. Prakash 10/09/2019

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

- Sample Collection Date and/or Time not provided
- Temperature outside Method Requirement (WI-PHT)
Temperature _____ °C Ice Present? Yes No Melted
- Sample ID Not Reconcilable
- Sample Holding Time Missed
- Insufficient Sample Size
- All Sample Container(s) Broken
- Drinking Water Incorrect Container Type
- Chain-of-Custody not received, illegible or destroyed
- Other: See comments below.

Comments/Samples Affected:

Sample ID: PDI-081SC-B-08-10-191002 is noted on the COC but not received.

Client Authorization	
Proceed with Analysis: <input checked="" type="radio"/> YES NO	Signature and Date <u><i>A. Prakash</i></u> 10/11/19
Client Comments/Instructions <u>Per Delaney Peterson via email on 10/11/19, sample was not sent.</u>	

EXTRACTION INFORMATION

Process Sheet
Workorder: 1903565

RX

10.29.19

Prep Expiration: 2020-10-01
 Client: Anchor QEA, LLC

Workorder Due: 05-Nov-19 00:00

TAT: 28 21 HC 10.25.19

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

Prep Batch: B9J0288

Prep Data Entered: AZ 10/30/19
Date and Initials

Initial Sequence: S9J0083

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1903565-02	<input checked="" type="checkbox"/>	PDI-082SC-A-14-15-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-03	<input checked="" type="checkbox"/>	PDI-082SC-A-15-16.1-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-04	<input checked="" type="checkbox"/>	PDI-082SC-B-00-02-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-05	<input checked="" type="checkbox"/>	PDI-082SC-B-02-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-06	<input checked="" type="checkbox"/>	PDI-082SC-B-04-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-07	<input checked="" type="checkbox"/>	PDI-082SC-B-06-08-191002	08-Oct-19 10:03	WR-2 A-1	DUP
1903565-08	<input checked="" type="checkbox"/>	PDI-1082SC-B-04-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-09	<input checked="" type="checkbox"/>	PDI-084SC-A-15-16-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-10	<input checked="" type="checkbox"/>	PDI-084SC-A-16-17-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-11	<input checked="" type="checkbox"/>	PDI-084SC-B-00-02-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-12	<input checked="" type="checkbox"/>	PDI-084SC-B-02-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-13	<input checked="" type="checkbox"/>	PDI-084SC-B-04-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-14	<input checked="" type="checkbox"/>	PDI-084SC-B-06-08-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-15	<input checked="" type="checkbox"/>	PDI-095SC-B-00-02-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-16	<input checked="" type="checkbox"/>	PDI-095SC-B-02-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-17	<input checked="" type="checkbox"/>	PDI-095SC-B-04-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-18	<input checked="" type="checkbox"/>	PDI-095SC-B-06-08-191002	08-Oct-19 10:03	WR-2 A-1	

**WO Comments: ~~Pest - 1g extraction (dry weight)~~
 Dioxin - 10g (dry weight)
 PCB - 5g extraction (dry weight)**

Pre-Prep Check Out: N/A
 Pre-Prep Check In: N/A

Prep Check Out: AZ 10/28/19
 Prep Check In: AZ 10/28/19

Prep Reconciled Initials/Date: AZ 10/28/19
 Spike Reconciled Initials/Date: AD 10/28/19
 VialBoxID: Rise Against

PREPARATION BENCH SHEET

B9J0288

Chemist: K

Matrix: Solid

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 28-Oct-19 07:02

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
<input type="checkbox"/>	B9J0288-BLK1	NA	(10.00)	<u>K</u> <u>10/28/19</u>	<u>ao</u> <u>10/29/19</u>	<u>N/A</u>	<u>10/29/19</u>	<u>10/29/19</u>	<u>10/29/19</u>	<u>K</u> <u>AZ</u> <u>10/30/19</u>
<input type="checkbox"/>	B9J0288-BS1	NA	(10.00)							
<input type="checkbox"/>	B9J0288-DUPI 1903565-07RE1	16.99	17.00							
<input type="checkbox"/>	1903565-02RE1	16.38	16.40							
<input type="checkbox"/>	1903565-03RE1	13.98	13.98							
<input type="checkbox"/>	1903565-04RE1	20.02	20.05							
<input type="checkbox"/>	1903565-05RE1	17.15	17.21							
<input type="checkbox"/>	1903565-06RE1	13.59	13.62							
<input type="checkbox"/>	1903565-07RE1	16.99	16.99							
<input type="checkbox"/>	1903565-08RE1	20.40	20.41							
<input type="checkbox"/>	1903565-09RE1	15.05	15.08							
<input type="checkbox"/>	1903565-10RE1	15.85	15.89							
<input type="checkbox"/>	1903565-11RE1	20.39	20.39							
<input type="checkbox"/>	1903565-12RE1	19.52	19.52							
<input type="checkbox"/>	1903565-13RE1	17.58	17.62							

IS Name <u>V3</u>	NS Name <u>V6</u>	CRS Name <u>V7</u>	RS Name <u>V3</u>	Cycle Time	APP: SEFUN SOX <u>SDS</u>	Check Out: Chemist/Date: <u>K</u> <u>10/28/19</u>
PCDD/F <u>19C1902, 10µL</u>	PCDD/F <u>18F1913, 10µL</u>	PCDD/F <u>19I1602, 10µL</u>	PCDD/F <u>19I1603, 10µL</u>	Start Date/Time <u>10/28/19</u> <u>14:45</u>	SOLV: <u>tol</u>	Check In: Chemist/Date: <u>K</u> <u>10/28/19</u>
PCB _____	PCB _____	PCB _____	PCB _____	Stop Date/Time <u>10/29/19</u> <u>06:45</u>	Other <u>NA</u>	Balance ID: <u>HRMS-8</u>
PAH _____	PAH _____	PAH _____	PAH _____	Final Volume(s) <u>C14</u> <u>20µL</u>		

Comments:

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

PREPARATION BENCH SHEET

Matrix: Solid

B9J0288

Chemist: K

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 28-Oct-19 07:02

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisol CHEM/ DATE	RS CHEM/WIT DATE
<input type="checkbox"/>	1903565-14RE1	16.57	16.58	<u>K</u> <u>10/28/19</u>	<u>AO</u> <u>10/29/19</u>	<u>N/A</u>	<u>10/29/19</u>	<u>10/29/19</u>	<u>10/29/19</u>	<u>K</u> <u>AZ</u> <u>10/30/19</u>
<input type="checkbox"/>	1903565-15RE1	19.63	19.63	↓	↓	↓	↓	↓	↓	↓
<input type="checkbox"/>	1903565-16RE1 ^(A)	18.63	18.66	↓	↓	↓	↓	↓	↓	↓
<input type="checkbox"/>	1903565-17RE1	17.31	17.37	↓	↓	↓	↓	↓	↓	↓
<input type="checkbox"/>	1903565-18RE1	17.90	17.90	↓	↓	↓	↓	↓	↓	↓

^(A) 1:20 Dilution - AZ 10/30/19

IS Name <u>V₁</u>	NS Name <u>V₆</u>	CRS Name <u>V₇</u>	RS Name <u>V₇</u>	Cycle Time	APP: SEFUN SOX <u>(SDS)</u>	Check Out: <u>K</u> <u>10/28/19</u>
PCDD/F <u>19C1602, 10 µL</u>	PCDD/F <u>18F1913, 10 µL</u>	PCDD/F <u>19I1602, 10 µL</u>	PCDD/F <u>19F1603, 10 µL</u>	Start Date/Time <u>10/28/19</u> <u>14:40</u>	SOLV: <u>tol</u>	Check In: <u>K</u> <u>10/28/19</u>
PCB _____	PCB _____	PCB _____	PCB _____	Stop Date/Time <u>10/29/19</u> <u>14:5</u>	Other <u>NA</u>	Balance ID: <u>HRMS-8</u>
PAH _____	PAH _____	PAH _____	PAH _____	Final Volume(s) <u>C14</u> <u>20 µL</u>		

Comments:

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

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B9J0106

Analyst: TL	Test Code: %Moist/%Solids	
Analyte: Dried at 110°C +/- 5°C	Units: %	Data Entry Verified by: TL 10/24/19
Oven ID: 01 02		(Initial and Date) TL 10/23 TL 10/24/19

Inst HRMS-9 Date/Time IN: 10/11/19 1045 Date/Time OUT: 10/15/19 1256

B	C	D	E	F	G	H	I	K	L	M	N	O	P	
Particle Size	SampID	SampType	Initial and Date:		Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	TL 10/11/19		NA			TL 10/11/19
			Pan Tare Wt. (gms)						Visual Inspection	Cl-	pH Before	pH After	Acid Added	Sample Homogenized*
	1903565-01	Sample												
	1903565-02	Sample	1.2400 ✓		6.0400 ✓	4.1700 ✓	2.9300	61.04	MUD	NA	NA	NA	X	
	1903565-03	Sample	1.2400 ✓		10.7600 ✓	8.0500 ✓	6.8100	71.53	MUD	NA	NA	NA	X	
	1903565-04	Sample	1.2400 ✓		11.1900 ✓	6.2100 ✓	4.9700	49.95	MUD	NA	NA	NA	X	
	1903565-05	Sample	1.2400 ✓		9.8000 ✓	6.2300 ✓	4.9900	58.29	MUD	NA	NA	NA	X	
	1903565-06	Sample	1.2300 ✓		7.1000 ✓	5.5500 ✓	4.3200	73.59	MUD	NA	NA	NA	X	
	1903565-07	Sample	1.2400 ✓		10.2300 ✓	6.5300 ✓	5.2900	58.84	MUD	NA	NA	NA	X	
	1903565-08	Sample	1.2400 ✓		8.4400 ✓	4.7700 ✓	3.5300	49.03	MUD	NA	NA	NA	X	
	1903565-09	Sample	1.2400 ✓		18.2600 ✓	12.5500 ✓	11.3100	66.45	MUD	NA	NA	NA	X	
	1903565-10	Sample	1.2700 ✓		11.3000 ✓	7.6000 ✓	6.3300	63.11	MUD	NA	NA	NA	X	
	1903565-11	Sample	1.2400 ✓		10.6200 ✓	5.8400 ✓	4.6000	49.04	MUD	NA	NA	NA	X	
	1903565-12	Sample	1.2500 ✓		11.5000 ✓	6.5000 ✓	5.2500	51.22	MUD	NA	NA	NA	X	
	1903565-13	Sample	1.2500 ✓		11.1100 ✓	6.8600 ✓	5.6100	56.90	MUD	NA	NA	NA	X	
	1903565-14	Sample	1.2400 ✓		8.6300 ✓	5.7000 ✓	4.4600	60.35	MUD	NA	NA	NA	X	
	1903565-15	Sample	1.2400 ✓		8.1900 ✓	4.7800 ✓	3.5400	50.94	MUD	NA	NA	NA	X	
	1903565-16	Sample	1.2400 ✓		7.0900 ✓	4.3800 ✓	3.1400	53.68	MUD	NA	NA	NA	X	
	1903565-17	Sample	1.2300 ✓		9.6600 ✓	6.1000 ✓	4.8700	57.77	MUD	NA	NA	NA	X	
	1903565-18	Sample	1.2400 ✓		8.8300 ✓	5.4800 ✓	4.2400	55.86	MUD	NA	NA	NA	X	

*Sample homogenized in sample container unless otherwise noted.

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B9J0106

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

Inst HRMS-9 Date/Time IN: 10/11/19 10:45 Date/Time OUT: 10/15/19 12:56

B		C	D	E		F	G	H	I	K	L	M	N	O	P
Particle Size	SampleID	SampType	Initial and Date:	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- Before	pH After	pH Added	Acid Added	Sample Homogenized*	
	1903565-02	A	TL 10/11/19	1.24	6.04	10/15/19	4.17		TL	NA	NA	NA	NA	TL 10/11/19	
	1903565-03	A		1.24	10.76		8.05							X	
	1903565-04	A		1.24	11.19		6.21							X	
	1903565-05	A		1.24	9.80		6.23							X	
	1903565-06	A		1.23	7.10		5.55							X	
	1903565-07	A		1.24	10.23		6.53							X	
	1903565-08	A		1.24	8.44		4.77							X	
	1903565-09	A		1.24	18.26		12.55							X	
	1903565-10	A		1.27	11.30		7.60							X	
	1903565-11	A		1.24	10.62		5.84							X	
	1903565-12	A		1.25	11.50		6.50							X	
	1903565-13	A		1.25	11.11		6.86							X	
	1903565-14	A		1.24	8.63		5.70							X	
	1903565-15	A		1.24	8.19		4.78							X	
	1903565-16	A		1.24	7.09		4.38							X	
	1903565-17	A		1.23	9.66		6.10							X	
	1903565-18	A		1.24	8.83		5.48							X	

*Sample homogenized in sample container unless otherwise noted.

Batch: B9J0288

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1903565-02RE1	16.4	61.04167	10.0108	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-03RE1	13.98	71.53362	10.0004	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-04RE1	20.05	49.94975	10.0149	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-05RE1	17.21	58.29439	10.0325	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-06RE1	13.62	73.59455	10.0236	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-07RE1	16.99	58.84316	9.9975	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-08RE1	20.41	49.02778	10.0066	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-09RE1	15.08	66.45123	10.0208	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-10RE1	15.89	63.11066	10.0283	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-11RE1	20.39	49.04051	9.9994	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-12RE1	19.52	51.21951	9.9980	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-13RE1	17.62	56.89656	10.0252	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-14RE1	16.58	60.35182	10.0063	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-15RE1	19.63	50.93526	9.9986	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-16RE1	18.66	53.67521	10.0158	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-17RE1	17.37	57.76987	10.0346	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-18RE1	17.9	55.86298	9.9995	20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
B9J0288-BLK1	10			20	28-Oct-19 07:02	JJC				QC
B9J0288-BS1	10			20	28-Oct-19 07:02	JJC	18F1913	10		QC
B9J0288-DUP1	17			20	28-Oct-19 07:02	JJC				QC

All bolded data on report verified against written benchsheet by (initial/date) AZ 10/31/19

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1903565-02RE1	16.4			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-03RE1	13.98			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-04RE1	20.05			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-05RE1	17.21			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-06RE1	13.62			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-07RE1	16.99			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-08RE1	20.41			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-09RE1	15.08			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-10RE1	15.89			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-11RE1	20.39			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-12RE1	19.52			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-13RE1	17.62			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-14RE1	16.58			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-15RE1	19.63			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-16RE1	18.66			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-17RE1	17.37			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
1903565-18RE1	17.9			20	28-Oct-19 07:02	JJC			Sediment	1613 Full List
B9J0288-BLK1	10			20	28-Oct-19 07:02	JJC				QC
B9J0288-BS1	10			20	28-Oct-19 07:02	JJC	18F1913	10		QC
B9J0288-DUP1	17			20	28-Oct-19 07:02	JJC				QC

All bolded data on report verified against written benchsheet by (initial/date) AZ 10/30/19



Process Sheet
 Workorder: **1903565**

RX
 (D) 11/04/19

Prep Expiration: 2020-10-01
 Client: Anchor QEA, LLC

Workorder Due: **05-Nov-19 00:00**

TAT: 28

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

Prep Batch: B9 K0034

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

Initial Sequence: S9K 0033

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1903565-01	<input type="checkbox"/>	PDI-062SC-A-14-15-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-03	<input type="checkbox"/>	PDI-062SC-A-15-16-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-04	<input type="checkbox"/>	PDI-062SC-B-08-09-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-05	<input type="checkbox"/>	PDI-062SC-B-02-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-06	<input type="checkbox"/>	PDI-062SC-B-04-05-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-07	<input type="checkbox"/>	PDI-062SC-B-06-07-191002	08-Oct-19 10:03	WR-2 A-1	DUP
1903565-08	<input type="checkbox"/>	PDI-062SC-B-07-08-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-09	<input type="checkbox"/>	PDI-064SC-A-14-15-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-10	<input type="checkbox"/>	PDI-064SC-A-16-17-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-11	<input type="checkbox"/>	PDI-064SC-B-00-02-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-12	<input type="checkbox"/>	PDI-064SC-B-03-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-13	<input type="checkbox"/>	PDI-064SC-B-05-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-14	<input type="checkbox"/>	PDI-064SC-B-07-08-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-15	A <input checked="" type="checkbox"/>	PDI-095SC-B-00-02-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-16	<input type="checkbox"/>	PDI-095SC-B-03-04-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-17	A <input checked="" type="checkbox"/>	PDI-095SC-B-04-06-191002	08-Oct-19 10:03	WR-2 A-1	
1903565-18	A <input checked="" type="checkbox"/>	PDI-095SC-B-06-08-191002	08-Oct-19 10:03	WR-2 A-1	

WO Comments: ~~Post 1g extraction (dry weight)~~
Dioxin - 10g (dry weight)
~~PCB - 5g extraction (dry weight)~~

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

Prep Check Out: TL 11/05/19
 Prep Check In: TL 11/05/19

Prep Reconciled Inits/Date: TL 11/05/19
 Spike Reconciled Inits/Date: TL 11/05/19
 VialBoxID: Rise Against

PREPARATION BENCH SHEET

Matrix: Solid

B9K0034

Chemist: TL

Method: 1613 Full List
Method: 8290 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 05-Nov-19 07:54

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
<input type="checkbox"/>	B9K0034-BLK1	NA	(10.00)	TL 11/05/19	AO 11/06/19	NA	11/06/19	11/06/19	DF 11/11/19	11/14/19
<input type="checkbox"/>	B9K0034-BS1	NA	(10.00)							
<input type="checkbox"/>	1903565-15RET- ^(B)	19.63	19.65							
<input type="checkbox"/>	1903565-17RET- ^(B)	17.31	17.42							
<input type="checkbox"/>	1903565-18RET- ^(B)	17.90	17.95							
<input type="checkbox"/>	1903770-01	12.45	12.62							
<input type="checkbox"/>	1903770-02 ^(A)	11.43	11.55							
<input type="checkbox"/>	1903829-01	14.50	14.67							
<input type="checkbox"/>	1903829-02	14.37	14.66							
<input type="checkbox"/>	1903829-03	14.15	14.20							
<input type="checkbox"/>	1903829-04	14.63	14.68							

^(A) sample poured through glass wool to remove particulate. 11/06/19

^(B) REZ 11/06/19

IS Name ^(V2)	NS Name ^(V3)	CRS Name ^(V2)	RS Name ^(V2)	Cycle Time	APP: SEFUN SOX ^(SDS)	Check Out: Chemist/Date: TL 11/09/19
PCDD/F 19L1902 10uL	PCDD/F 18F1913 10uL	PCDD/F 19I1602 10uL	PCDD/F 19I1603 10uL	Start Date/Time 11/05/19 1350	SOLV: Toluene	Check In: Chemist/Date: TL 11/05/19
PCB	PCB	PCB	PCB	Stop Date/Time 11/06/19 600	Other NA	Balance ID: HRMS-8
PAH	PAH	PAH	PAH		Final Volume(s) C14 20uL	

...ed dryness on rotovap
... rotovap; lost < 5%
...gh Na2SO4 to remove water
... Final Volume

5 = Sample homogenized in secondary container
6 = Sample clogged during extraction; pipetted and used Nitrogen to assist

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B9J0106

Analyst: TL	Test Code: %Moist/%Solids	Data Entry Verified by: <u>TL 10/24/19</u> (Initial and Date) <u>TL 10/23</u> <u>TL 10/24/19</u>
Analyte:	Units: %	
Oven ID: <u>01</u> <u>02</u>	Dried at 110°C+/-5°C	

Inst HRMS-9 Date/Time IN: 10/11/19 1045 Date/Time OUT: 10/15/19 1256

Particle Size	SampID	SampType	E		F		H		K		M		N		O		P	
			Initial and Date:	TL 10/11/19	AO 10/15/19	Dry Sample Weight (g)	%Solids RawVal	Visual Inspection	CI-	pH Before	pH After	Acid Added	TL 10/11/19					
	1903565-01	Sample																
	1903565-02	Sample	1.2400 /	6.0400 /	4.1700 /	2.9300	61.04	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-03	Sample	1.2400 /	10.7600 /	8.0500 /	6.8100	71.53	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-04	Sample	1.2400 /	11.1900 /	6.2100 /	4.9700	49.95	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-05	Sample	1.2400 /	9.8000 /	6.2300 /	4.9900	58.29	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-06	Sample	1.2300 /	7.1000 /	5.5500 /	4.3200	73.59	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-07	Sample	1.2400 /	10.2300 /	6.5300 /	5.2900	58.84	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-08	Sample	1.2400 /	8.4400 /	4.7700 /	3.5300	49.03	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-09	Sample	1.2400 /	18.2600 /	12.5500 /	11.3100	66.45	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-10	Sample	1.2700 /	11.3000 /	7.6000 /	6.3300	63.11	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-11	Sample	1.2400 /	10.6200 /	5.8400 /	4.6000	49.04	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-12	Sample	1.2500 /	11.5000 /	6.5000 /	5.2500	51.22	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-13	Sample	1.2500 /	11.1100 /	6.8600 /	5.6100	56.90	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-14	Sample	1.2400 /	8.6300 /	5.7000 /	4.4600	60.35	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-15	Sample	1.2400 /	8.1900 /	4.7800 /	3.5400	50.94	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-16	Sample	1.2400 /	7.0900 /	4.3800 /	3.1400	53.68	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-17	Sample	1.2300 /	9.6600 /	6.1000 /	4.8700	57.77	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	
	1903565-18	Sample	1.2400 /	8.8300 /	5.4800 /	4.2400	55.86	MUD	NA	NA	NA	NA	NA	NA	NA	NA	X	

*Sample homogenized in sample container unless otherwise noted.

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B9J0106

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

Inst HRMS-9 Date/Time IN: 10/11/19 10:45 Date/Time OUT: 10/15/19 12:56

Particle Size	SampID	SampType	Initial and Date: <u>TL 10/11/19</u>		Initial and Date: <u>GO 10/15/19</u>		Dry Sample Weight (g)	%Solids RawVal	Initial and Date: <u>TL 10/11/19</u>					Initial and Date: <u>TL 10/11/19</u>	
			Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Visual Inspection			Cl- Before	pH After	pH After	Acid Added	Sample Homogenized*	Sample Homogenized*	
	1903565-02	A	1.24	6.04	4.7	[Large handwritten 'Z' or '7' symbol]	[Large handwritten 'Z' or '7' symbol]	Mud	NA	NA	NA	NA	X	X	
	1903565-03	A	1.24	10.76	8.05			X							
	1903565-04	A	1.24	11.19	6.21			X							
	1903565-05	A	1.24	9.80	6.23			X							
	1903565-06	A	1.23	7.10	5.55			X							
	1903565-07	A	1.24	10.23	6.53			X							
	1903565-08	A	1.24	8.44	4.77			X							
	1903565-09	A	1.24	18.26	12.55			X							
	1903565-10	A	1.27	11.30	7.60			X							
	1903565-11	A	1.24	10.62	5.84			X							
	1903565-12	A	1.25	11.50	6.50			X							
	1903565-13	A	1.25	11.11	6.86			X							
	1903565-14	A	1.24	8.63	5.70			X							
	1903565-15	A	1.24	8.19	4.78			X							
	1903565-16	A	1.24	7.09	4.38			X							
	1903565-17	A	1.23	9.66	6.10			X							
	1903565-18	A	1.24	8.83	5.48			X							

*Sample homogenized in sample container unless otherwise noted.

Batch: B9K0034

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1903565-15RE2	19.65 ✓	50.93526	10.0088	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903565-17RE2	17.42 ✓	57.76987	10.0635	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903565-18RE2	17.95 ✓	55.86298	10.0274	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903770-01	12.62 ✓	80.33282	10.1380	20	05-Nov-19 07:54	TL			Clay	8290 Full List
1903770-02	11.55 ✓	87.52418	10.1090	20	05-Nov-19 07:54	TL			Clay	8290 Full List
1903829-01	14.67 ✓	68.95887	10.1163	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903829-02	14.66 ✓	69.83204	10.2374	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903829-03	14.2 ✓	70.66176	10.0340	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
1903829-04	14.68 ✓	68.3573	10.0349	20	05-Nov-19 07:54	TL			Sediment	1613 Full List
B9K0034-BLK1	10 ✓			20	05-Nov-19 07:54	TL				QC
B9K0034-BS1	10 ✓			20	05-Nov-19 07:54	TL	18F1913 ✓	10 ✓		QC

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

SAMPLE DATA – EPA METHOD 1613

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	*	* n	0.91	NotF η	*		123	2.5	0.0895
1,2,3,7,8-PeCDD	*	* n	0.90	NotF η	*		171	2.5	0.120
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF η	*		127	2.5	0.119
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF η	*		127	2.5	0.124
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF η	*		127	2.5	0.119
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotF η	*		144	2.5	0.127
OCDD	*	* n	0.96	NotF η	*		156	2.5	0.209
2,3,7,8-TCDF	*	* n	0.95	NotF η	*		146	2.5	0.0664
1,2,3,7,8-PeCDF	*	* n	0.96	NotF η	*		113	2.5	0.0708
2,3,4,7,8-PeCDF	*	* n	1.01	NotF η	*		113	2.5	0.0702
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF η	*		121	2.5	0.0499
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF η	*		121	2.5	0.0507
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF η	*		121	2.5	0.0525
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF η	*		121	2.5	0.0633
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF η	*		122	2.5	0.0728
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF η	*		122	2.5	0.0613
OCDF	*	* n	0.95	NotF η	*		146	2.5	0.148

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		123	0.0895
Total Penta-Dioxins	*	*		171	0.120
Total Hexa-Dioxins	*	*		127	0.121
Total Hepta-Dioxins	*	*		144	0.127
Total Tetra-Furans	*	*		146	0.0664
Total Penta-Furans	0.0000	0.0000		113	0.0704
Total Hexa-Furans	*	*		121	0.0539
Total Hepta-Furans	*	*		122	0.0674

IS	13C-2,3,7,8-TCDD	4.83e+06	0.75	y	1.10	26:16	195.54
IS	13C-1,2,3,7,8-PeCDD	4.08e+06	0.64	y	0.88	30:45	205.23
IS	13C-1,2,3,4,7,8-HxCDD	3.88e+06	1.23	y	0.64	34:04	183.31
IS	13C-1,2,3,6,7,8-HxCDD	4.45e+06	1.25	y	0.86	34:11	157.94
IS	13C-1,2,3,7,8,9-HxCDD	4.55e+06	1.25	y	0.81	34:29	171.40
IS	13C-1,2,3,4,6,7,8-HpCDD	4.33e+06	1.06	y	0.65	37:55	201.30
IS	13C-OCDD	6.77e+06	0.92	y	0.58	41:13	354.47
IS	13C-2,3,7,8-TCDF	7.45e+06	0.78	y	1.03	25:29	188.91
IS	13C-1,2,3,7,8-PeCDF	6.58e+06	1.60	y	0.85	29:35	202.08
IS	13C-2,3,4,7,8-PeCDF	6.17e+06	1.62	y	0.85	30:28	191.16
IS	13C-1,2,3,4,7,8-HxCDF	5.06e+06	0.52	y	0.83	33:11	184.60
IS	13C-1,2,3,6,7,8-HxCDF	5.91e+06	0.50	y	1.03	33:18	173.62
IS	13C-2,3,4,6,7,8-HxCDF	5.67e+06	0.51	y	0.95	33:54	180.76
IS	13C-1,2,3,7,8,9-HxCDF	5.34e+06	0.51	y	0.83	34:51	195.77
IS	13C-1,2,3,4,6,7,8-HpCDF	4.95e+06	0.42	y	0.76	36:43	198.65
IS	13C-1,2,3,4,7,8,9-HpCDF	4.17e+06	0.42	y	0.58	38:28	217.72
IS	13C-OCDF	8.83e+06	0.89	y	0.69	41:27	389.24
C/Up	37Cl-2,3,7,8-TCDD	2.16e+06			1.20	26:17	79.911
RS/RT	13C-1,2,3,4-TCDD	4.51e+06	0.75	y	1.00	25:42	200.00
RS	13C-1,2,3,4-TCDF	7.62e+06	0.86	y	1.00	24:17	200.00
RS/RT	13C-1,2,3,4,6,9-HxCDF	6.59e+06	0.51	y	1.00	33:36	200.00

Rec Qual

97.8
103
91.7
79.0
85.7
101
88.6
94.5
101
95.6
92.3
86.8
90.4
97.9
99.3
109
97.3

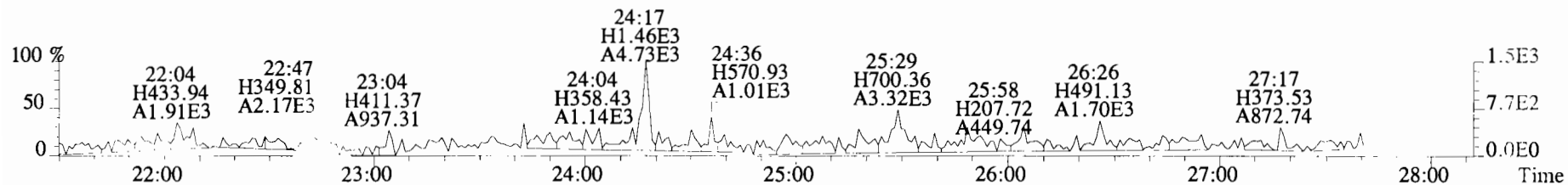
Integrations
by
Analyst: DB

Reviewed
by
Analyst: CT

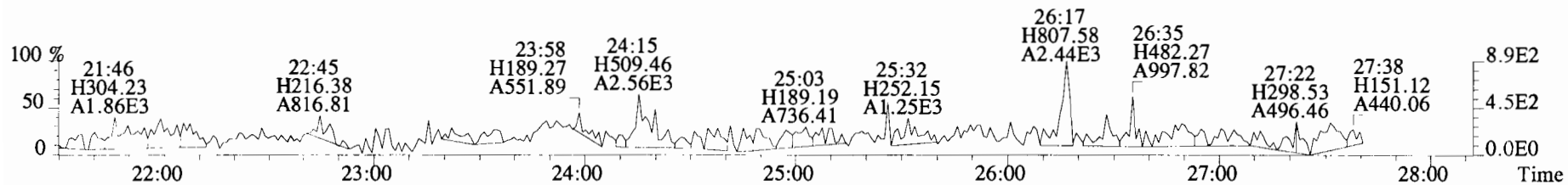
Date: 11/1/19

Date: 12/03/19

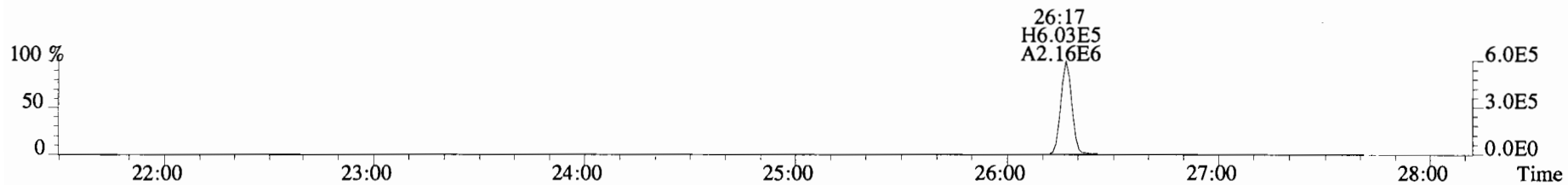
File:191031D1 #1-493 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



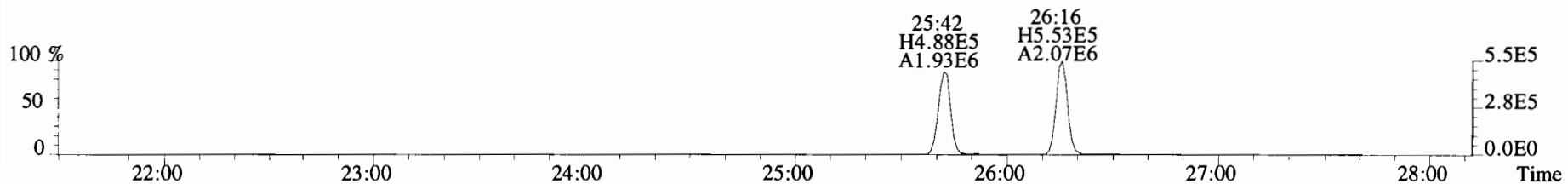
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



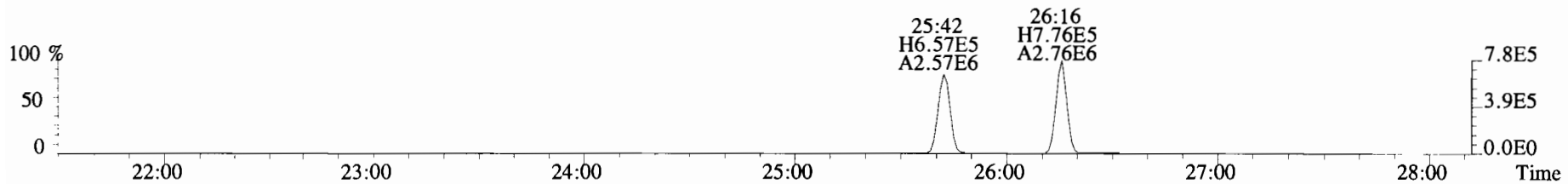
327.8847 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



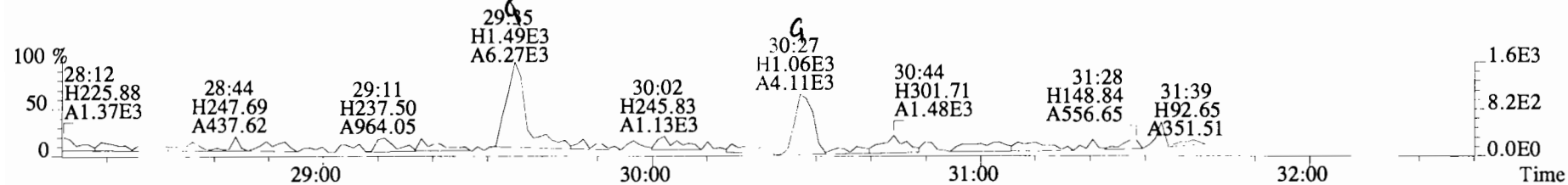
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



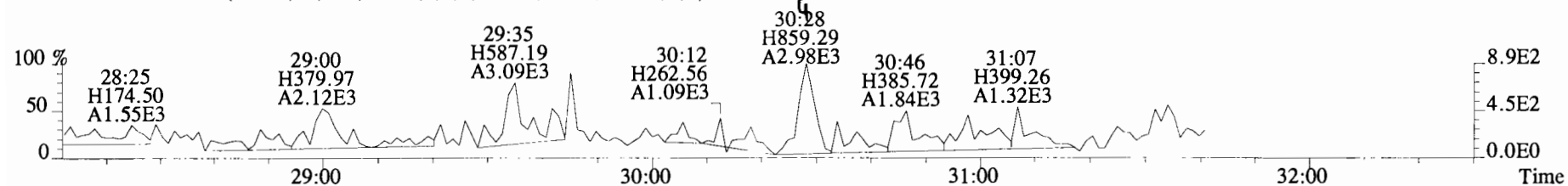
333.9339 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



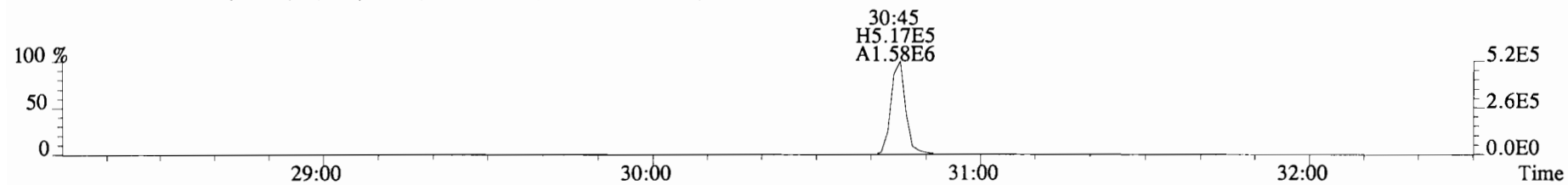
File:191031D1 #1-211 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
 353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



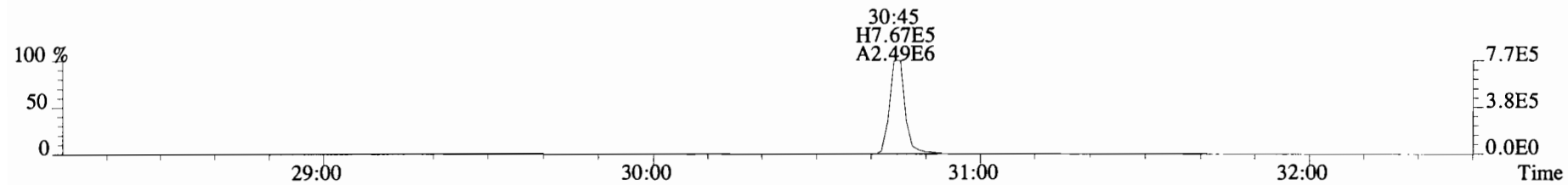
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



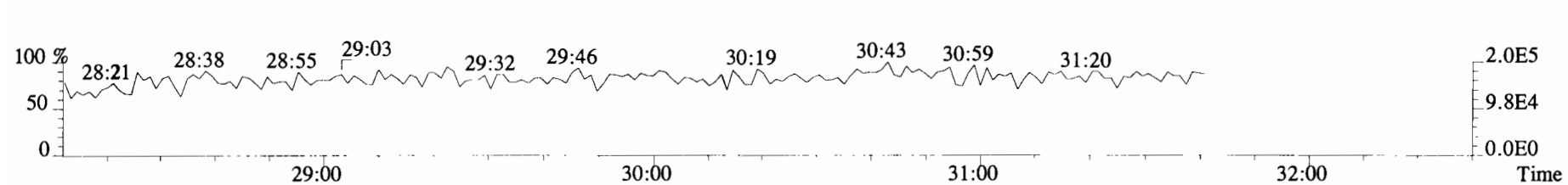
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



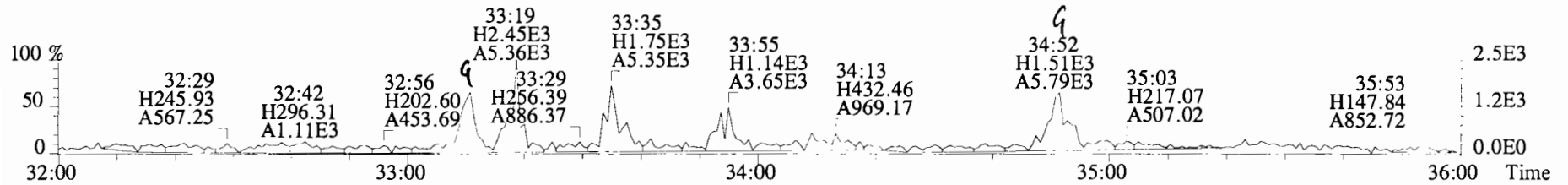
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



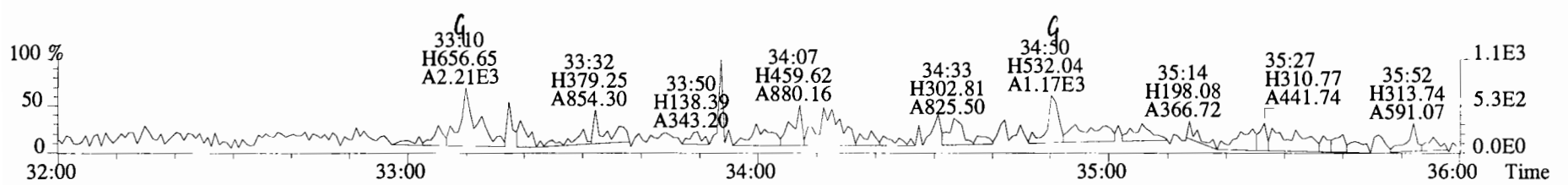
366.9792 S:9 F:2



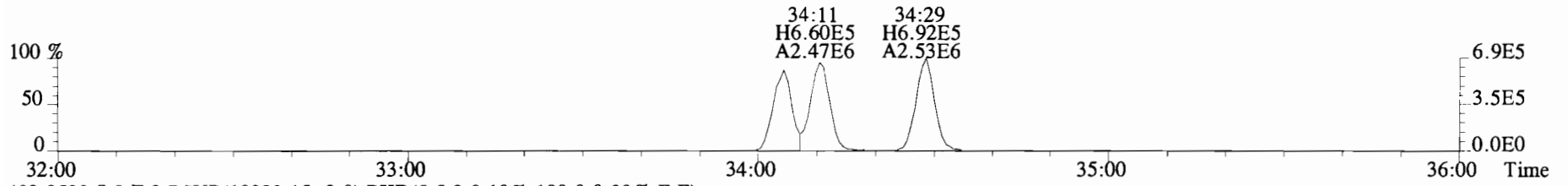
File:191031D1 #1-384 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



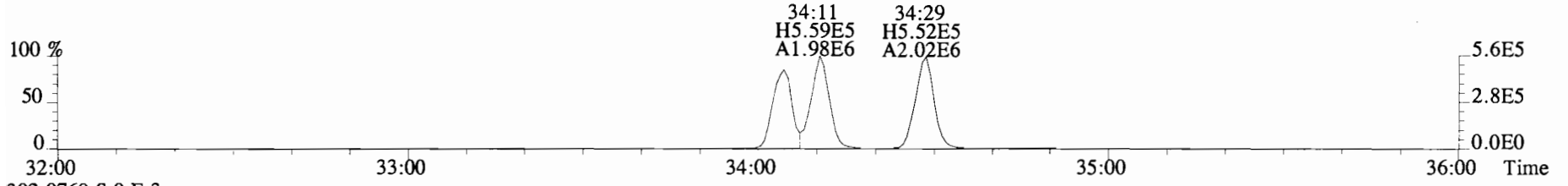
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



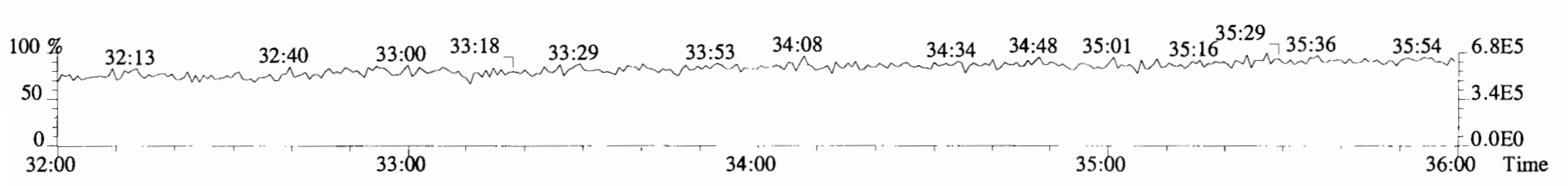
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



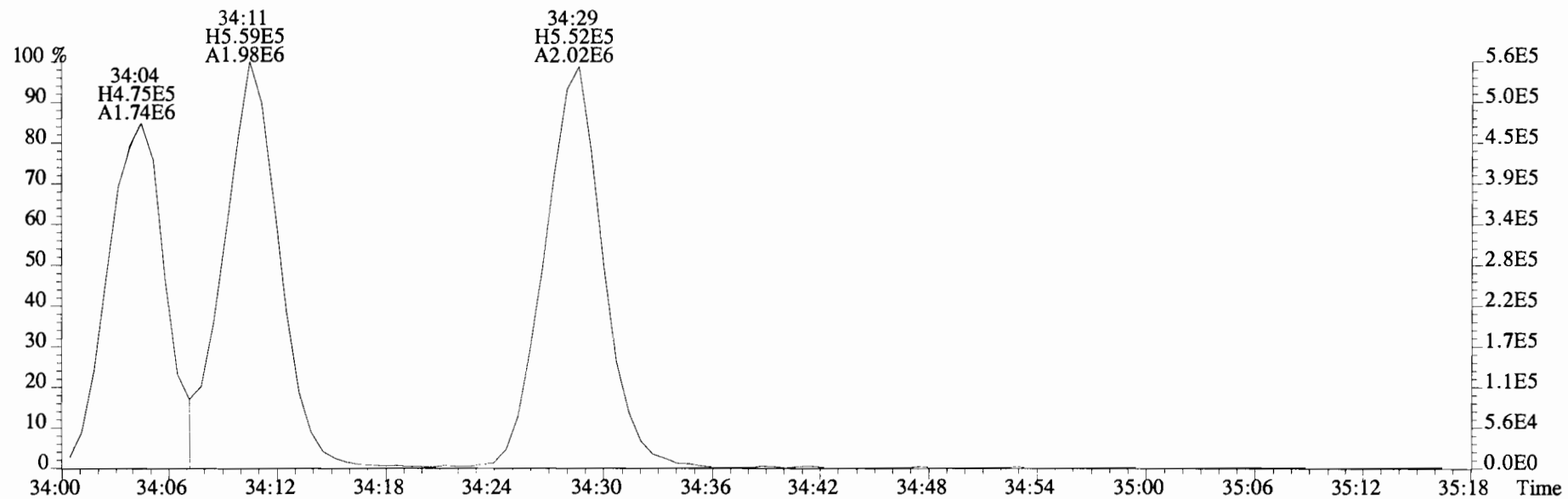
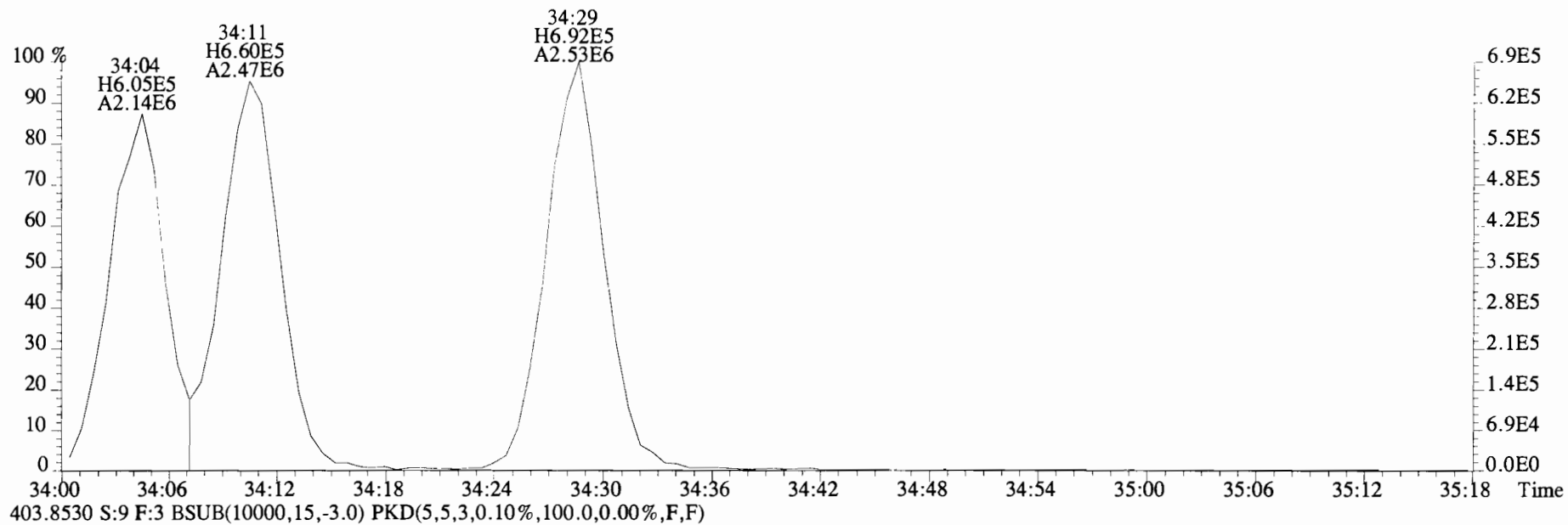
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



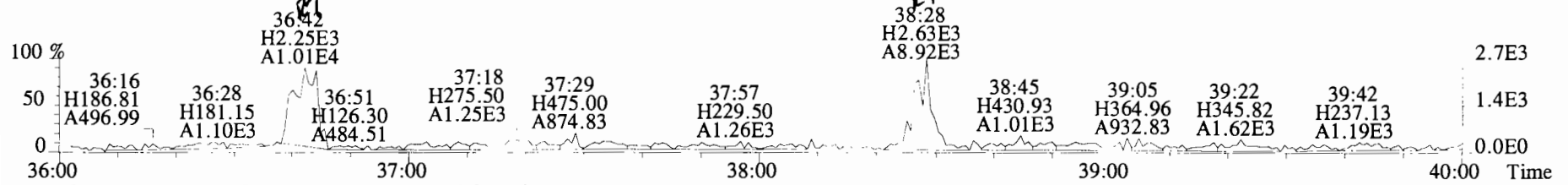
392.9760 S:9 F:3



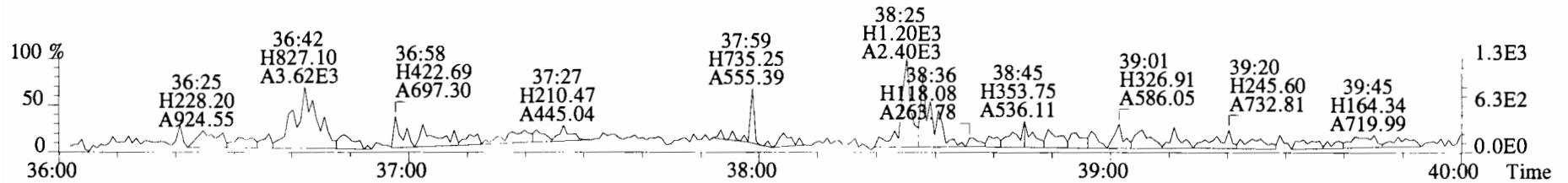
File:191031D1 #1-384 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



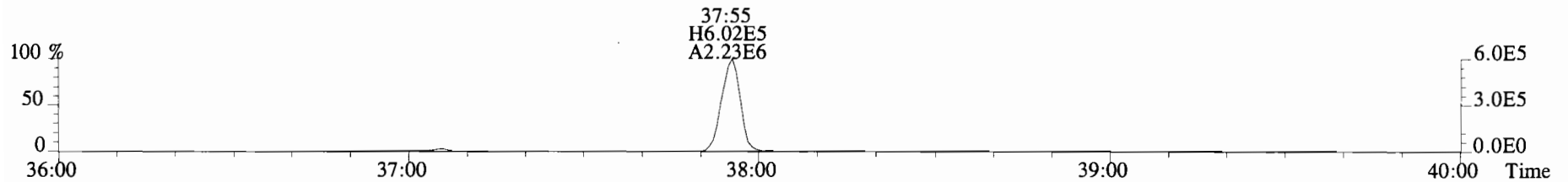
File:191031D1 #1-356 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



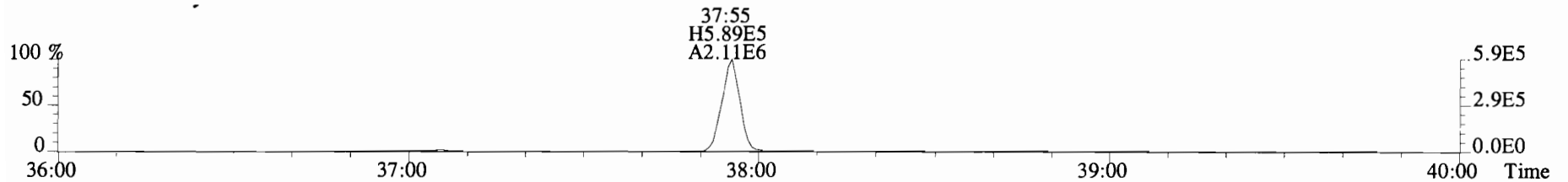
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



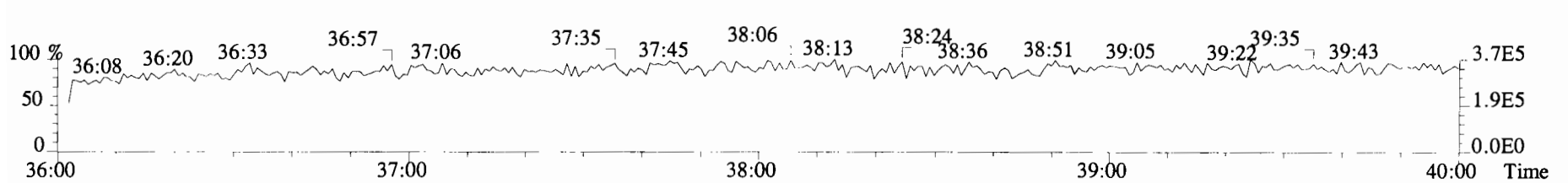
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



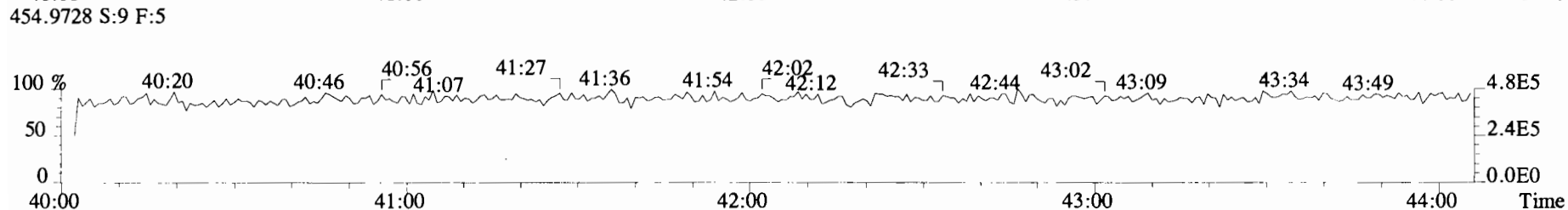
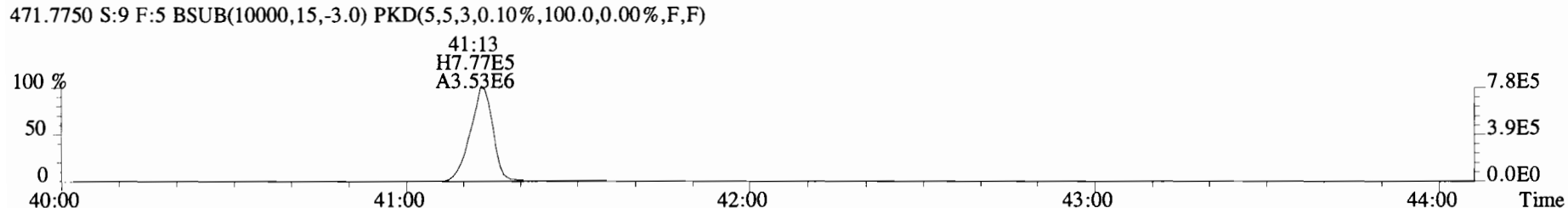
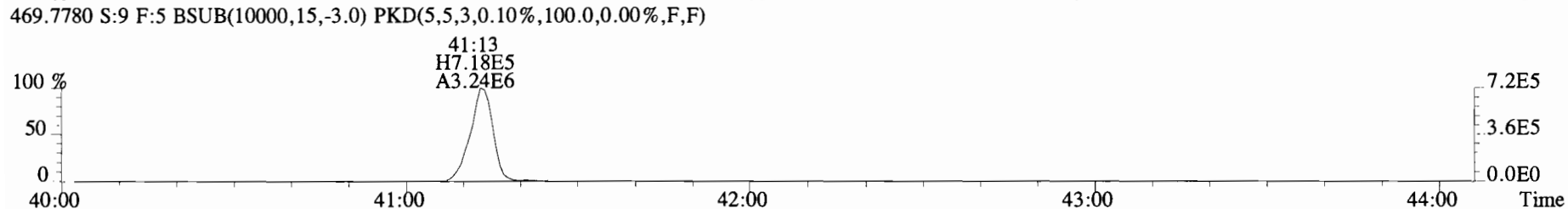
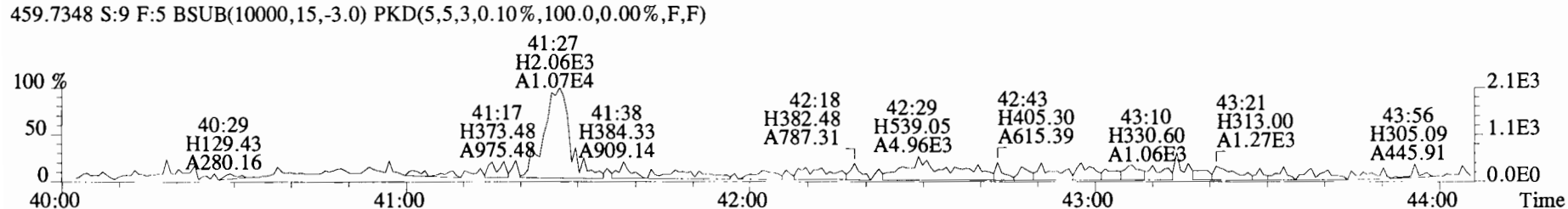
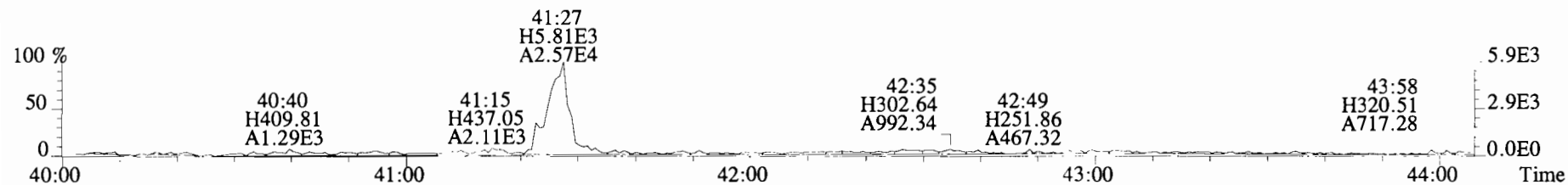
437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



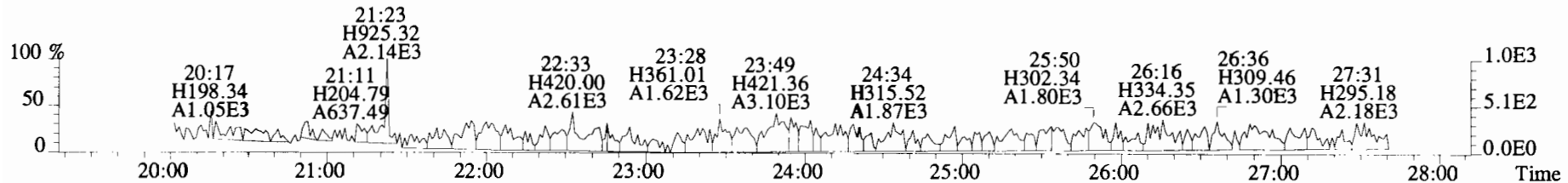
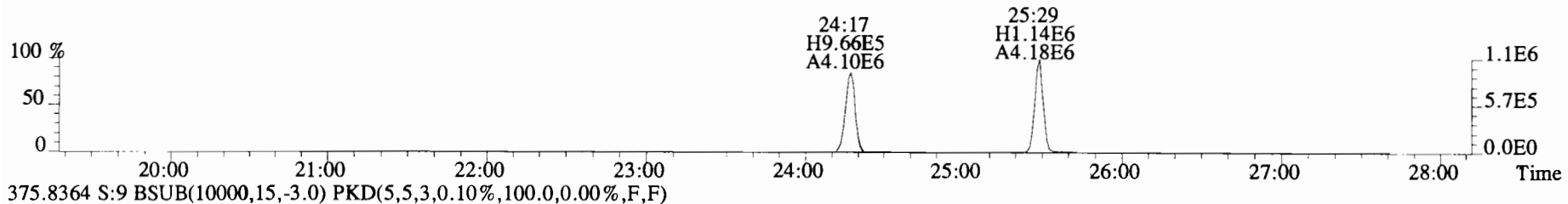
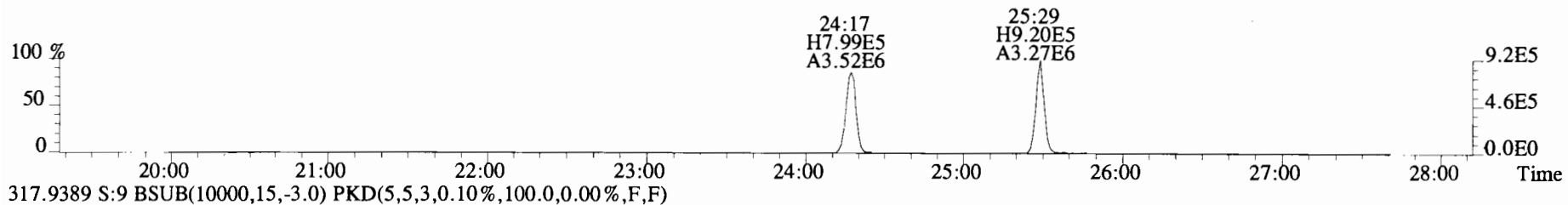
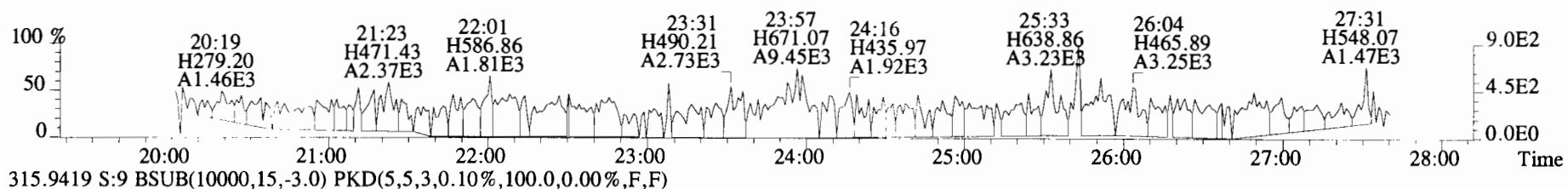
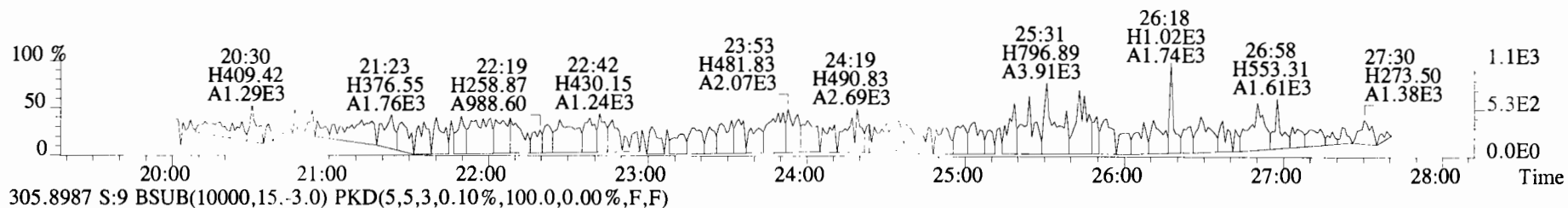
454.9728 S:9 F:4



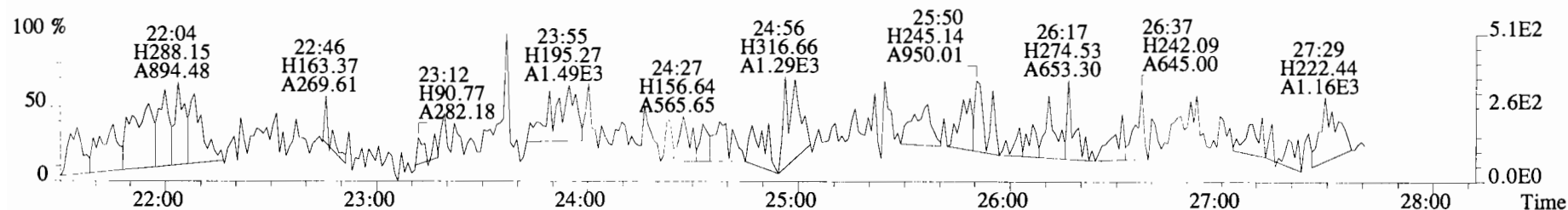
File:191031D1 #1-431 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



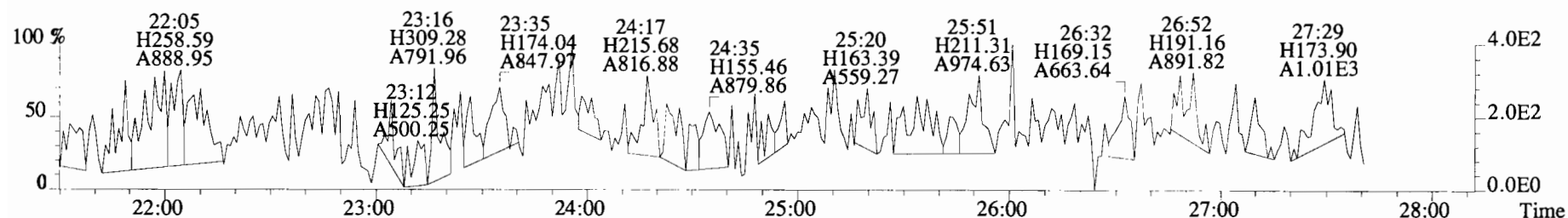
File:191031D1 #1-493 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



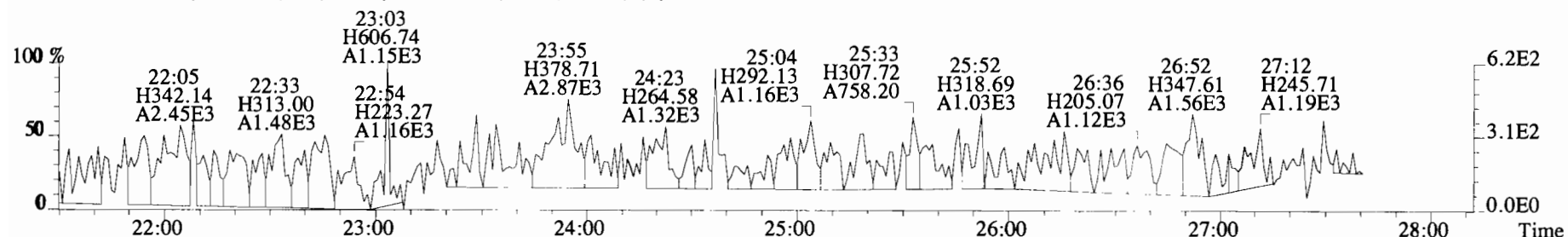
File:191031D1 #1-493 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
 339.8597 S:9 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



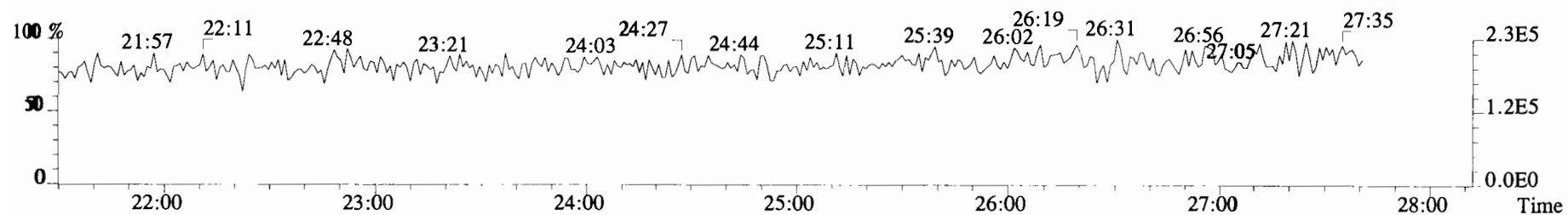
341.8568 S:9 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



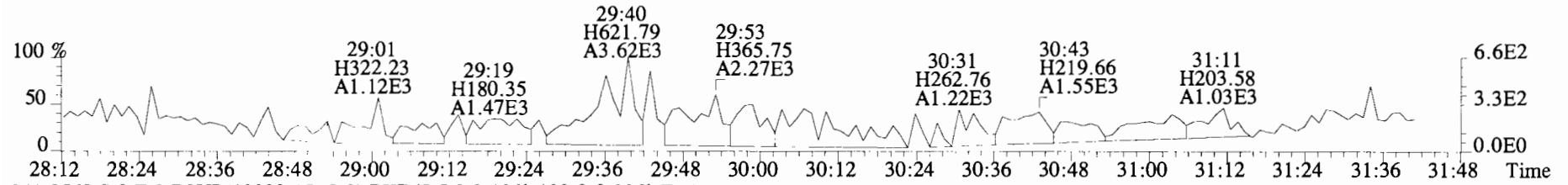
409.7974 S:9 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



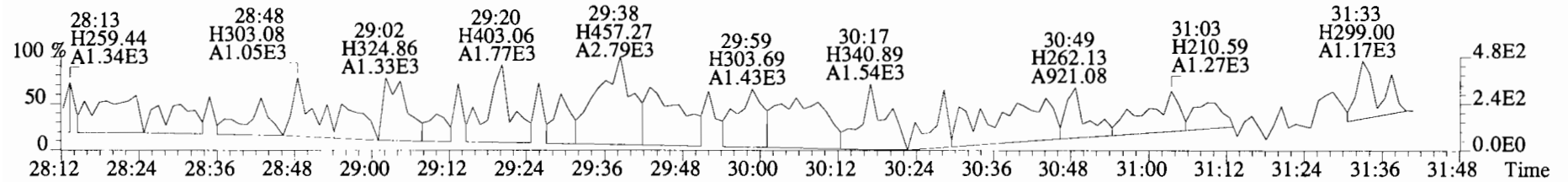
316.9824 S:9



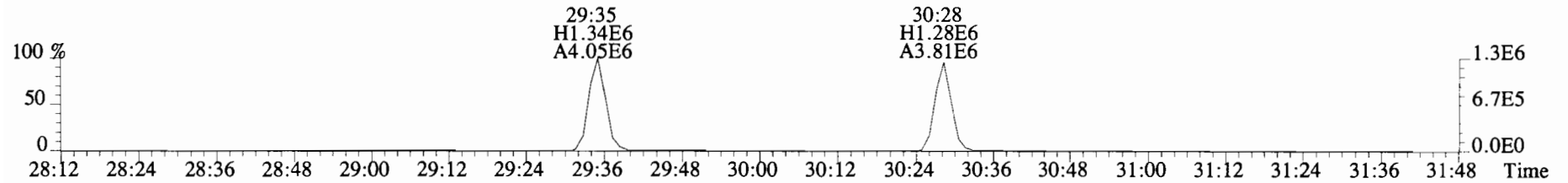
File:191031D1 #1-211 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
 339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



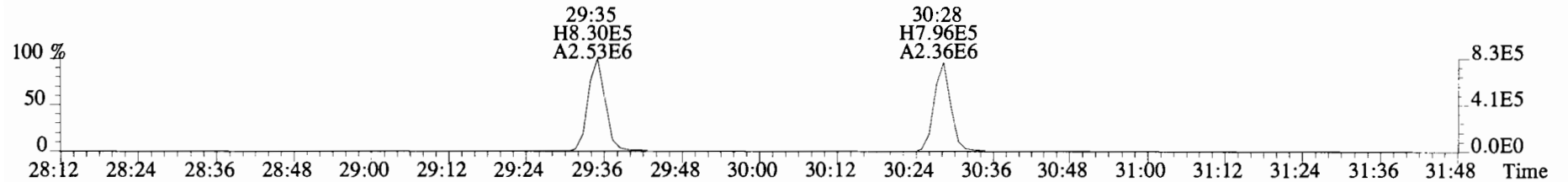
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



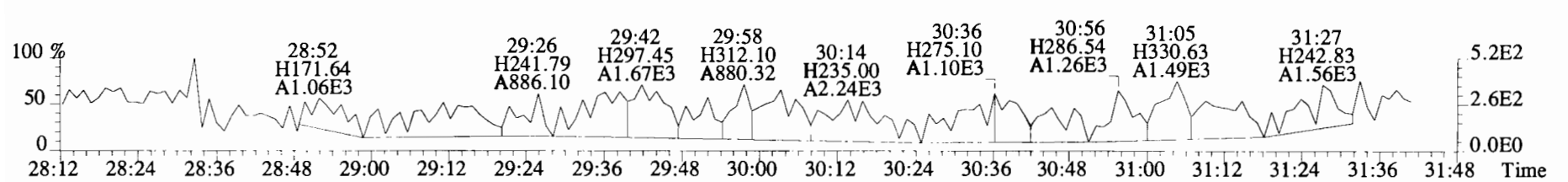
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



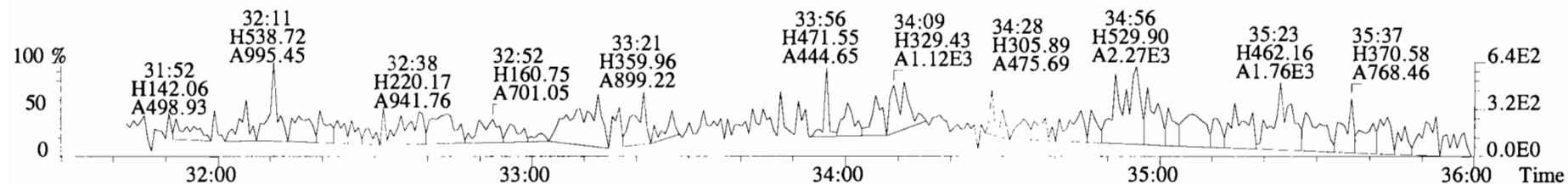
353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



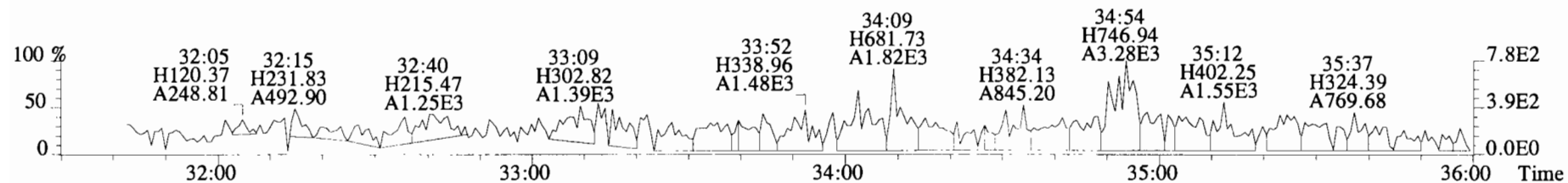
409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



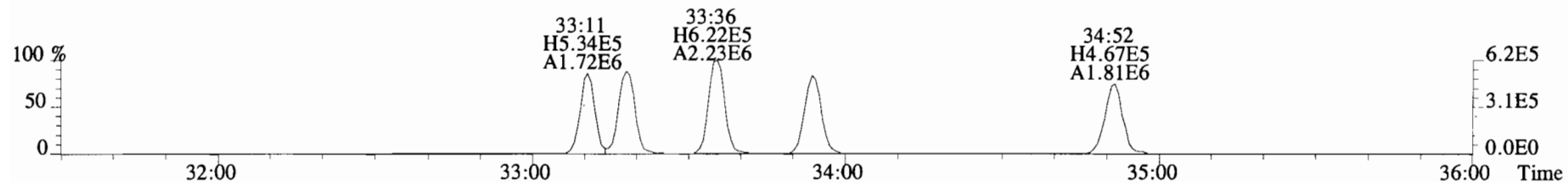
File:191031D1 #1-384 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
 373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



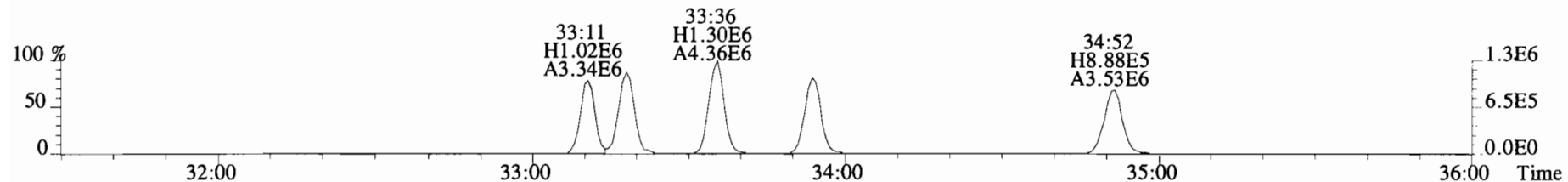
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



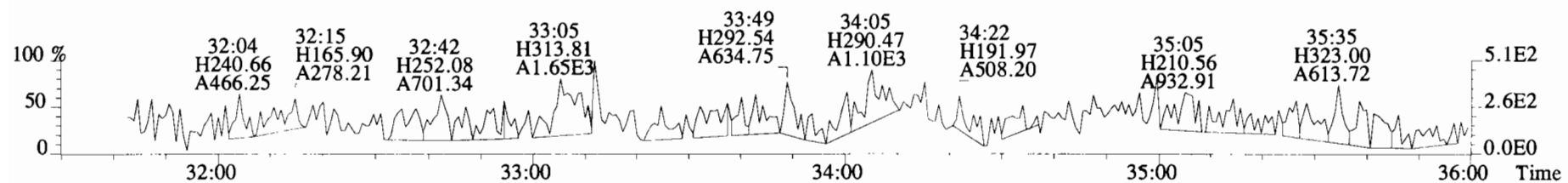
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



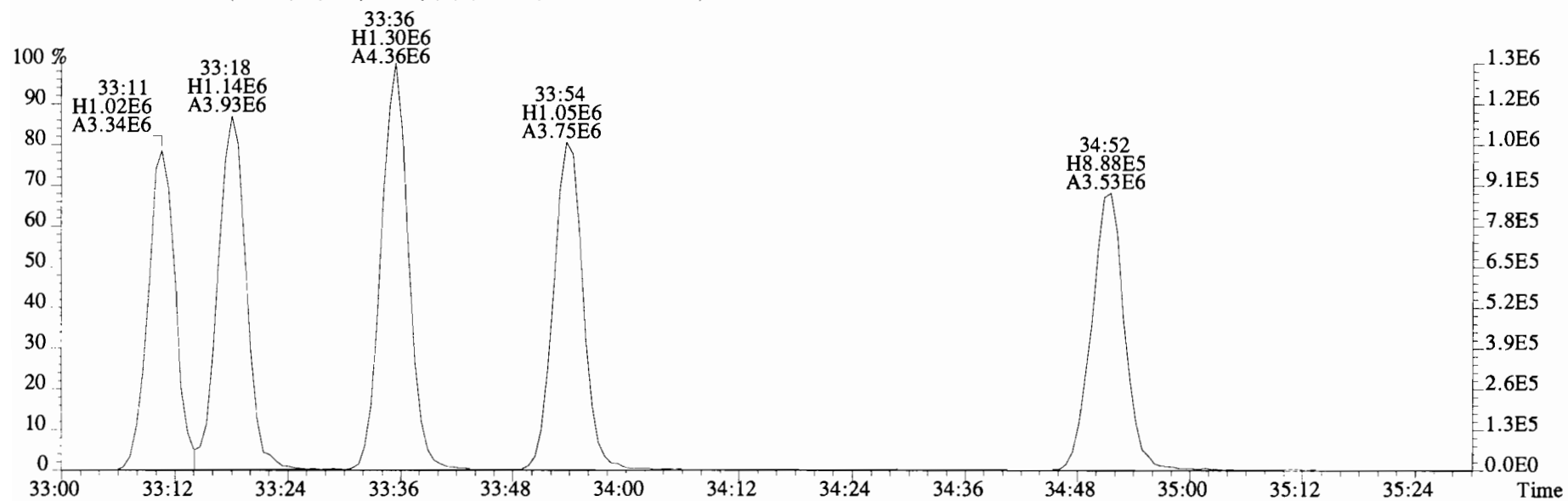
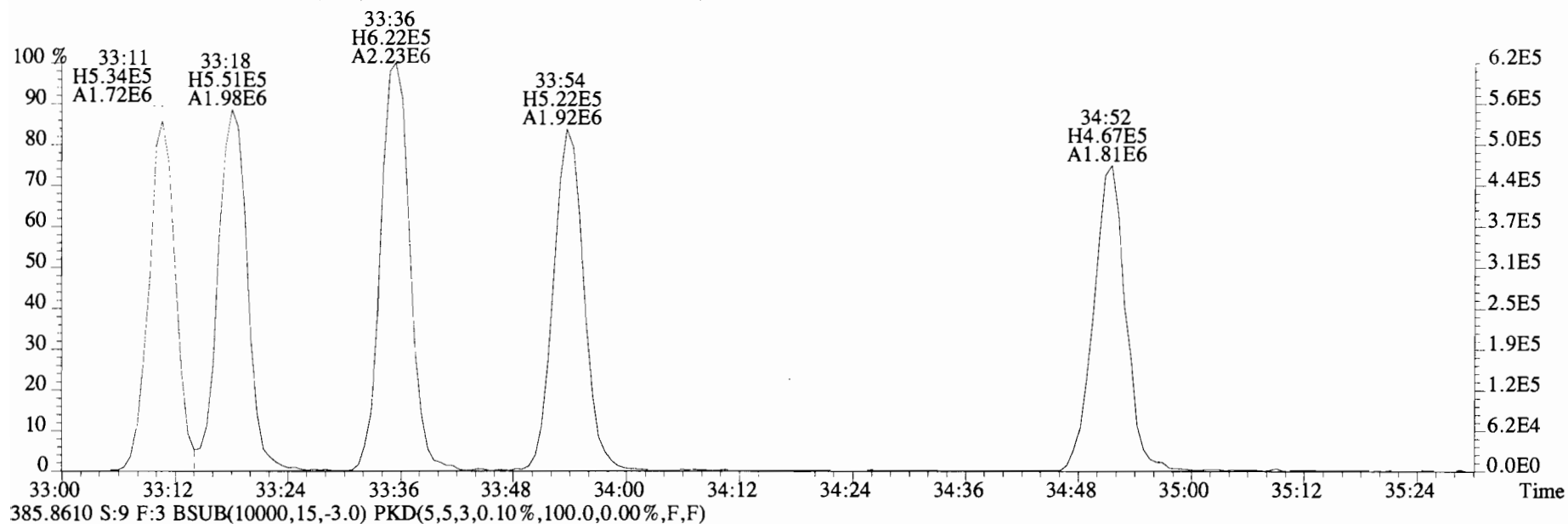
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



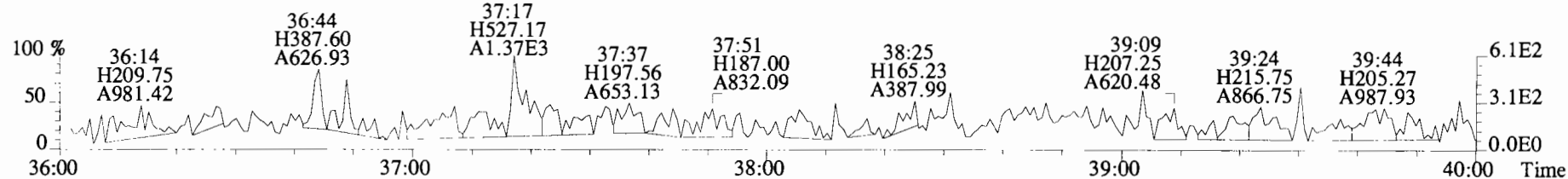
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



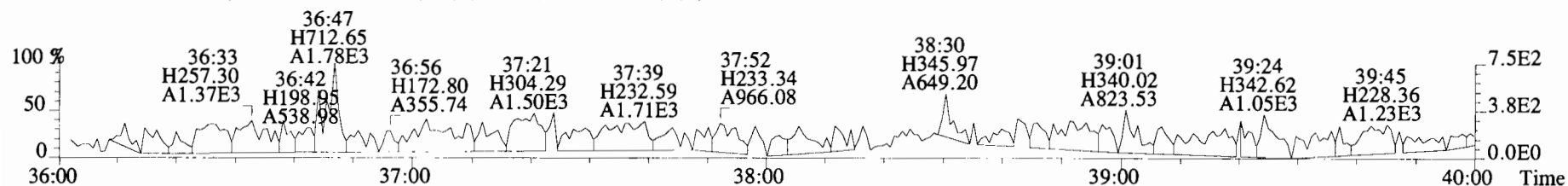
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Sample#9 File Text:Viata Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



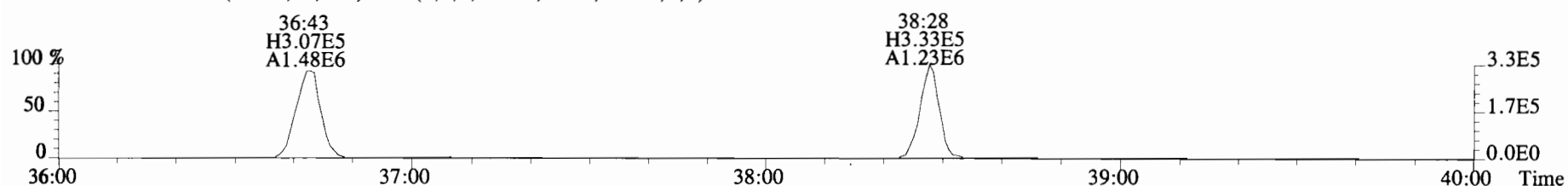
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Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



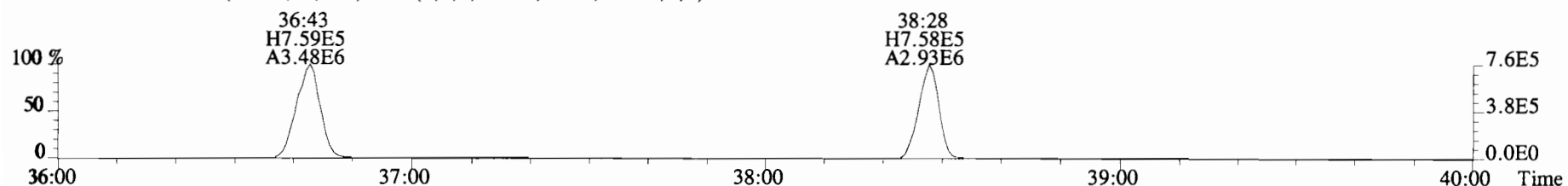
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



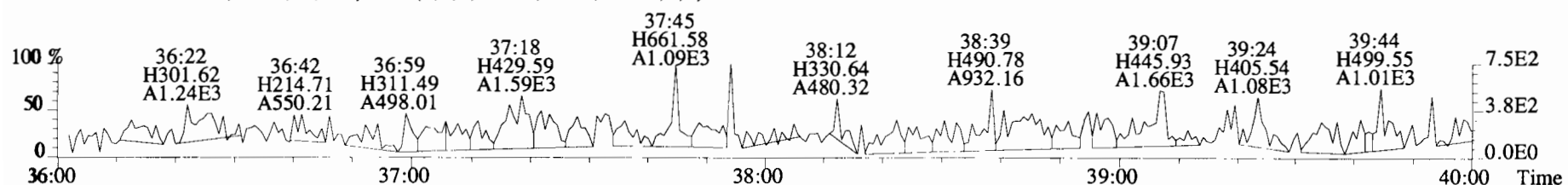
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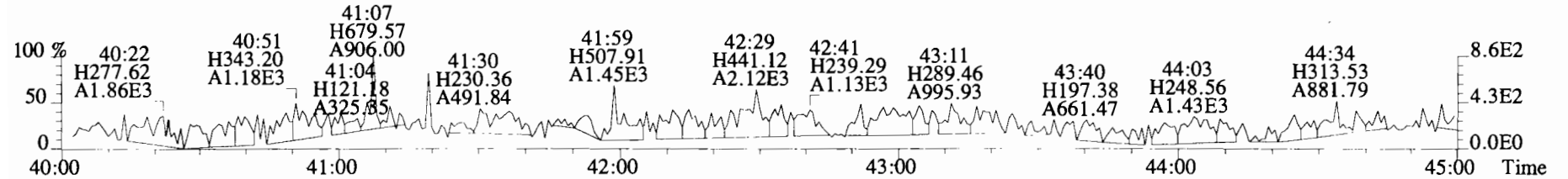
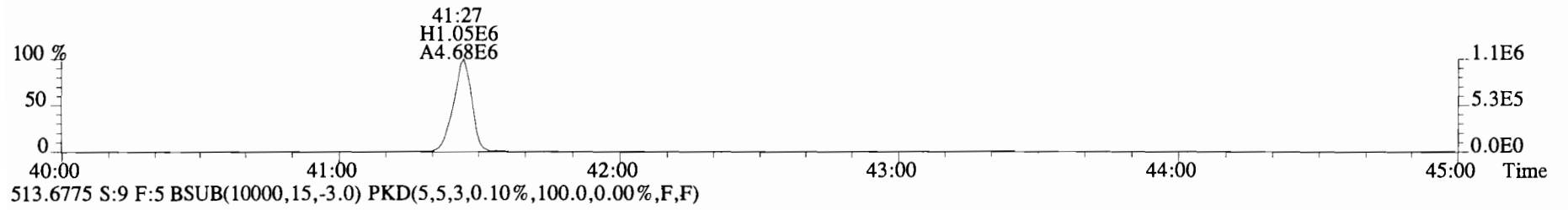
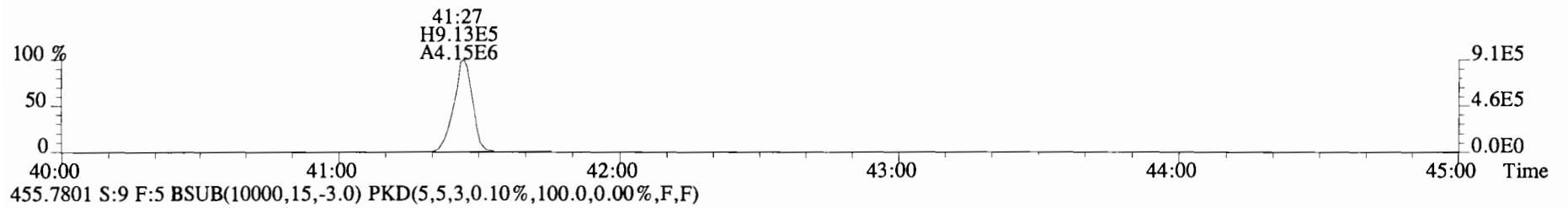
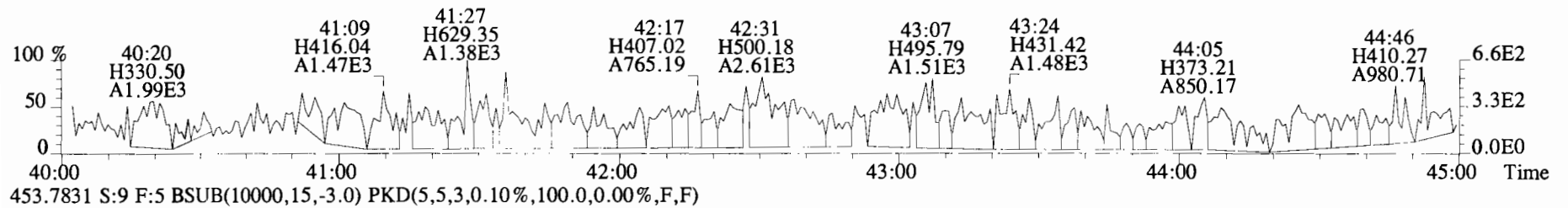
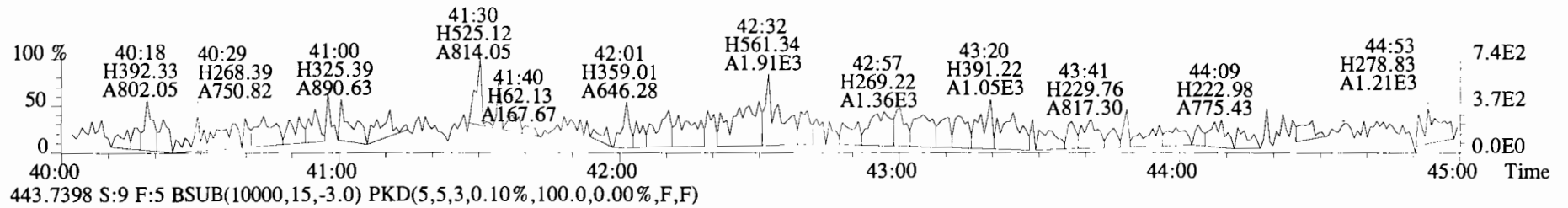
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D1 #1-431 Acq:31-OCT-2019 17:06:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BLK1 Method Blank 10 Exp:OCDD_DB5
441.7428 S:9 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: B9J0288-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 191031D1-5

Ext. Date: Shift: Day Analysis Date: 31-OCT-19 Time: 13:55:05

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	11.6	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	54.3	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	54.5	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	51.8	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	51.8	35.0 - 70.0
OCDD	100	106	78.0 - 144.0
2,3,7,8-TCDF	10	10.2	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	54.1	40.0 - 67.0
2,3,4,7,8-PeCDF	50	52.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	51.4	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	51.4	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	52.7	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	52.8	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.4	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.9	39.0 - 69.0
OCDF	100	102	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: 11/1/19

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B9J0288-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 191031D1-5

Ext. Date: Shift: Day Analysis Date: 31-OCT-19 Time: 13:55:05

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	99.7	20.0 - 175.0 25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	108	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	97.3	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	84.0	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	90.5	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	115	26.0 - 166.0
13C-OCDD	200	217	26.0 - 397.0
13C-2,3,7,8-TCDF	100	92.9	22.0 - 152.0 26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	107	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	104	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	103	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	96.1	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	96.3	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	99.0	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	106	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	123	20.0 - 186.0
13C-OCDF	200	235	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	37.9	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: 11/1/19

Client ID: OPR
Lab ID: B9J0288-BS1

Filename: 191031D1 S:5 Acq:31-OCT-19 13:55:05
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

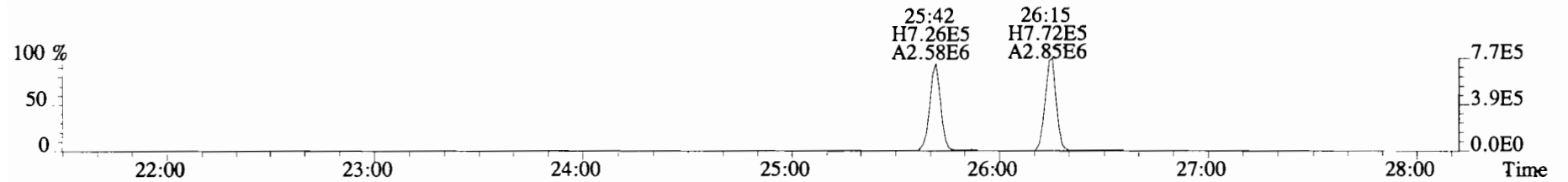
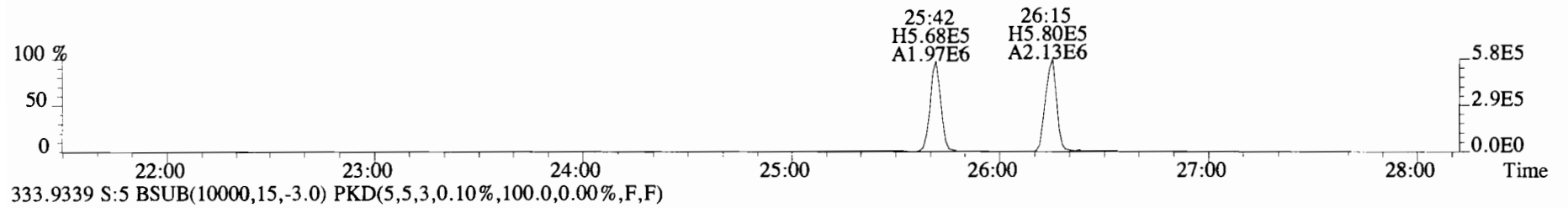
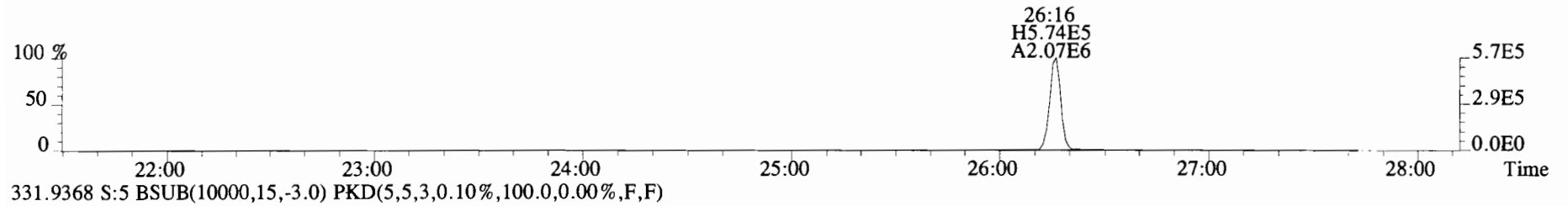
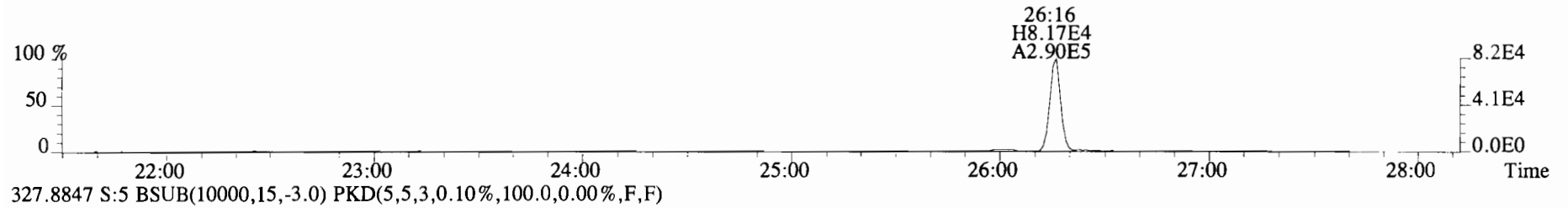
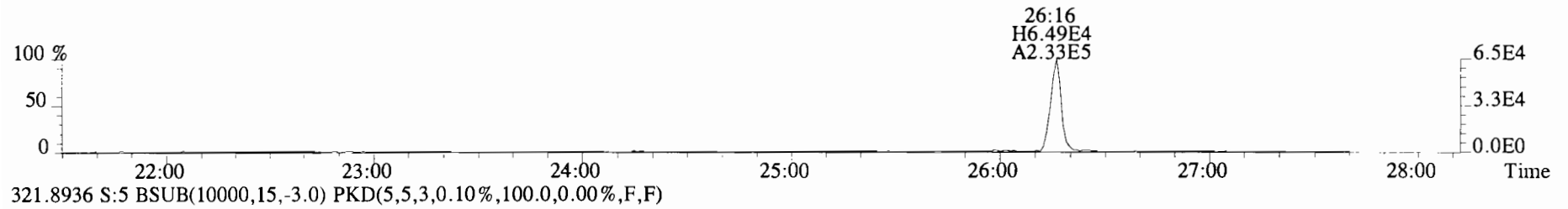
ConCal: ST191031D1-1
EndCAL: NA

Page 2 of 3

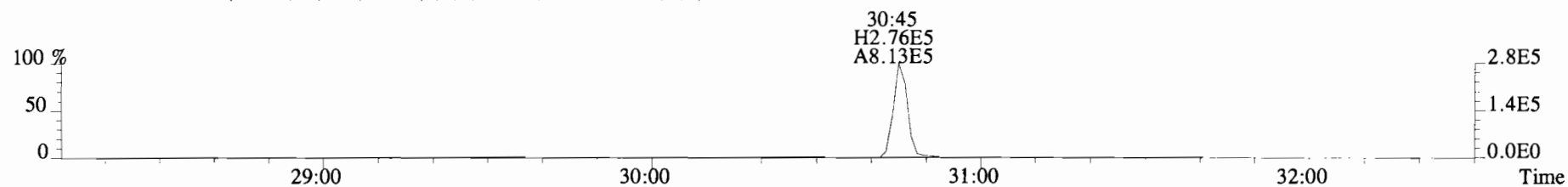
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	5.24e+05	0.80 y	0.91	26:16	11.631			* 2.5	*	Total Tetra-Dioxins	12.3	14.0	*	*	
1,2,3,7,8-PeCDD	2.12e+06	0.62 y	0.90	30:45	54.313			* 2.5	*	Total Penta-Dioxins	54.3	54.6	*	*	
1,2,3,4,7,8-HxCDD	2.06e+06	1.21 y	1.10	34:04	50.171			* 2.5	*	Total Hexa-Dioxins	156	158	*	*	
1,2,3,6,7,8-HxCDD	2.19e+06	1.18 y	0.94	34:11	54.458			* 2.5	*	Total Hepta-Dioxins	52.0	53.5	*	*	
1,2,3,7,8,9-HxCDD	2.17e+06	1.20 y	0.96	34:29	51.830			* 2.5	*	Total Tetra-Furans	11.2	13.7	*	*	
1,2,3,4,6,7,8-HpCDD	2.27e+06	1.04 y	0.98	37:55	51.751			* 2.5	*	Total Penta-Furans	106.60	108.16	*	*	
OCDD	3.81e+06	0.93 y	0.96	41:13	106.01			* 2.5	*	Total Hexa-Furans	209	209	*	*	
2,3,7,8-TCDF	7.11e+05	0.80 y	0.95	25:29	10.239			* 2.5	*	Total Hepta-Furans	98.4	100	*	*	
1,2,3,7,8-PeCDF	3.59e+06	1.58 y	0.96	29:35	54.087			* 2.5	*						
2,3,4,7,8-PeCDF	3.55e+06	1.62 y	1.01	30:29	52.373			* 2.5	*						
1,2,3,4,7,8-HxCDF	3.10e+06	1.22 y	1.18	33:11	51.446			* 2.5	*						
1,2,3,6,7,8-HxCDF	3.25e+06	1.23 y	1.07	33:18	51.378			* 2.5	*						
2,3,4,6,7,8-HxCDF	3.21e+06	1.21 y	1.11	33:54	52.728			* 2.5	*						
1,2,3,7,8,9-HxCDF	2.74e+06	1.25 y	1.06	34:52	52.848			* 2.5	*						
1,2,3,4,6,7,8-HpCDF	2.68e+06	1.00 y	1.13	36:43	49.401			* 2.5	*						
1,2,3,4,7,8,9-HpCDF	2.66e+06	1.00 y	1.28	38:27	48.950			* 2.5	*						
OCDF	4.68e+06	0.91 y	0.95	41:26	102.29			* 2.5	*						
IS	13C-2,3,7,8-TCDD	4.97e+06	0.75 y	1.10	26:15	99.684				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	4.33e+06	0.62 y	0.88	30:44	107.72				99.7					
IS	13C-1,2,3,4,7,8-HxCDD	3.72e+06	1.23 y	0.64	34:03	97.328				108					
IS	13C-1,2,3,6,7,8-HxCDD	4.28e+06	1.25 y	0.86	34:10	83.959				97.3					
IS	13C-1,2,3,7,8,9-HxCDD	4.35e+06	1.22 y	0.81	34:28	90.503				84.0					
IS	13C-1,2,3,4,6,7,8-HpCDD	4.47e+06	1.05 y	0.65	37:54	114.67				90.5					
IS	13C-OCDD	7.51e+06	0.90 y	0.58	41:12	217.28				115					
IS	13C-2,3,7,8-TCDF	7.31e+06	0.80 y	1.03	25:28	92.883				109					
IS	13C-1,2,3,7,8-PeCDF	6.92e+06	1.59 y	0.85	29:34	106.50				92.9					
IS	13C-2,3,4,7,8-PeCDF	6.68e+06	1.63 y	0.85	30:28	103.73				107					
IS	13C-1,2,3,4,7,8-HxCDF	5.11e+06	0.52 y	0.83	33:10	103.19				104					
IS	13C-1,2,3,6,7,8-HxCDF	5.93e+06	0.50 y	1.03	33:18	96.120				103					
IS	13C-2,3,4,6,7,8-HxCDF	5.47e+06	0.51 y	0.95	33:53	96.340				96.1					
IS	13C-1,2,3,7,8,9-HxCDF	4.88e+06	0.51 y	0.83	34:51	99.001				96.3					
IS	13C-1,2,3,4,6,7,8-HpCDF	4.81e+06	0.40 y	0.76	36:42	106.45				99.0					
IS	13C-1,2,3,4,7,8,9-HpCDF	4.25e+06	0.42 y	0.58	38:27	122.64				106					
IS	13C-OCDF	9.66e+06	0.91 y	0.69	41:25	235.27				123					
C/Up	37Cl-2,3,7,8-TCDD	2.07e+06		1.20	26:16	37.882				118					
RS/RT	13C-1,2,3,4-TCDD	4.56e+06	0.76 y	1.00	25:41	100.00				94.7					
RS	13C-1,2,3,4-TCDF	7.60e+06	0.82 y	1.00	24:16	100.00									
RS/RT	13C-1,2,3,4,6,9-HxCDF	5.96e+06	0.51 y	1.00	33:35	100.00									

Integrations Reviewed
by Analyst: DB by Analyst: CT
Date: 11/1/19 Date: 12/03/19

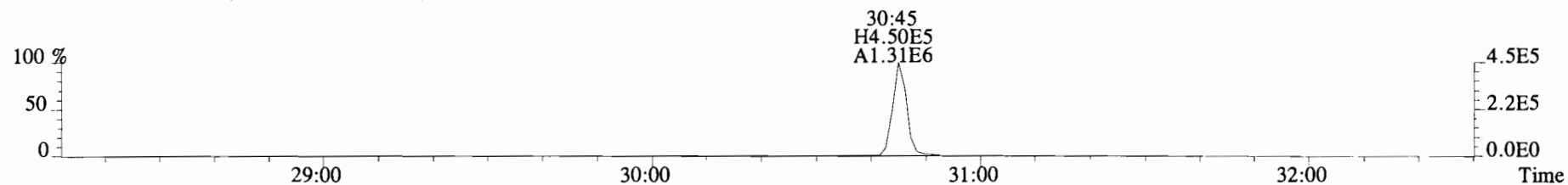
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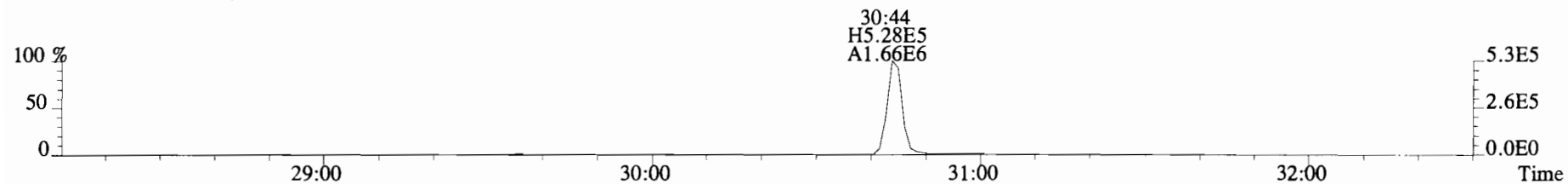
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353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



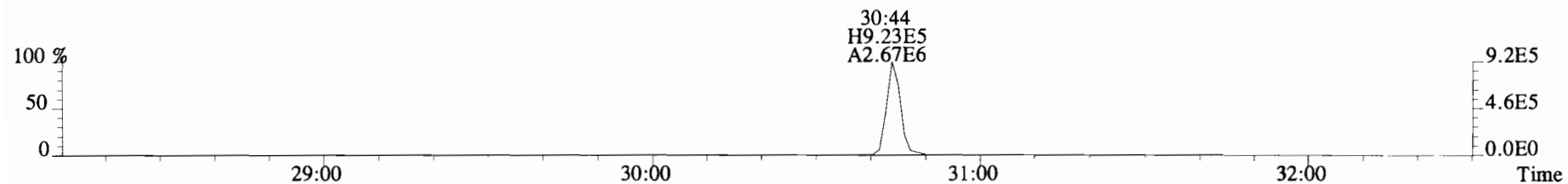
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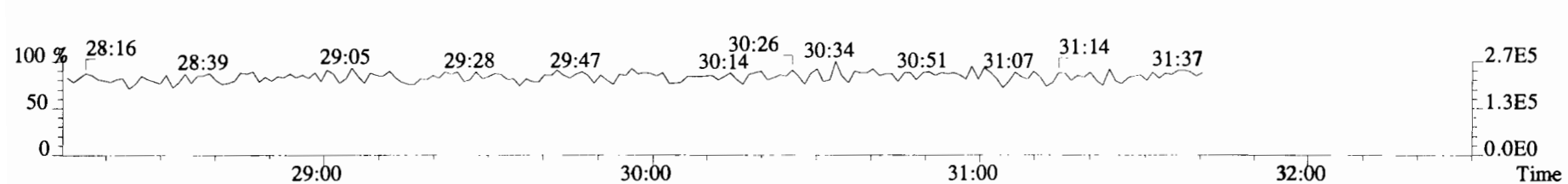
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



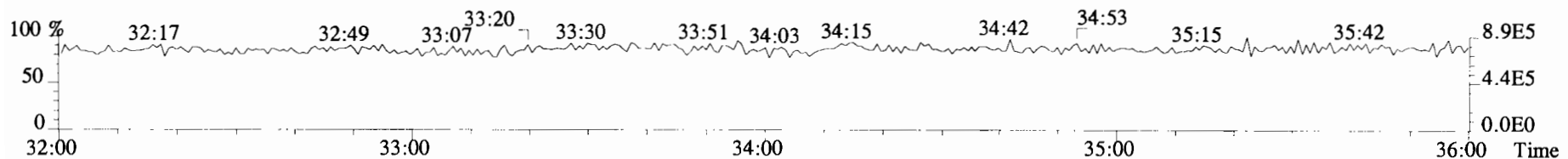
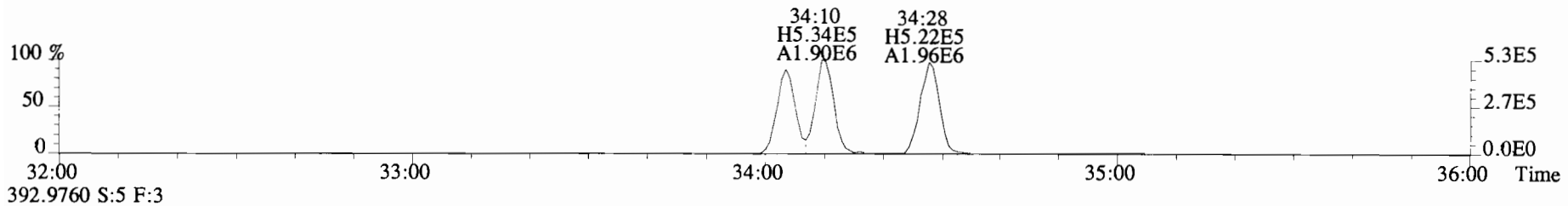
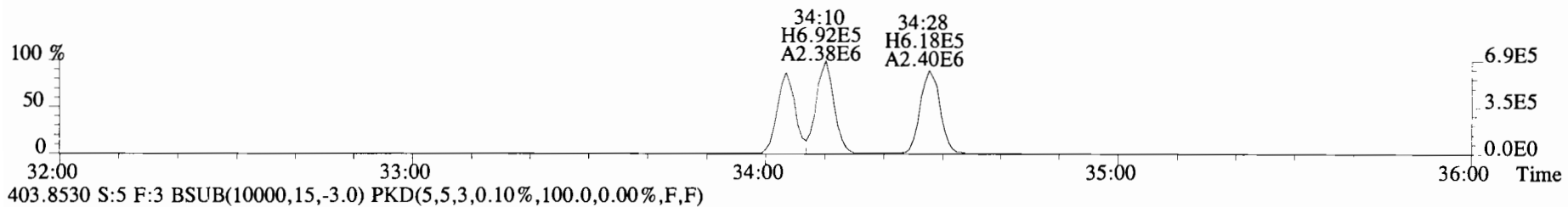
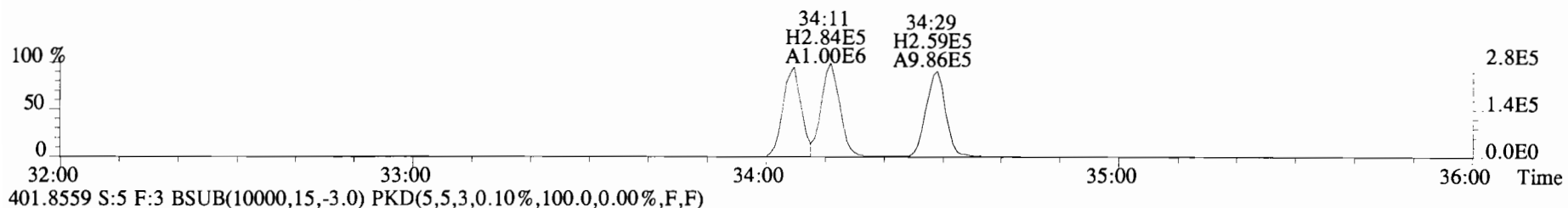
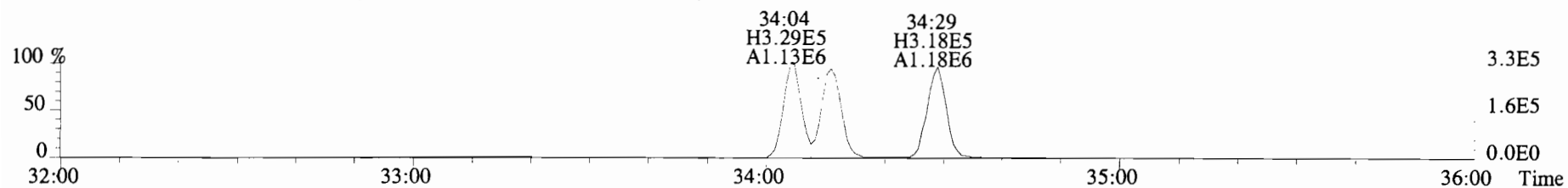
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



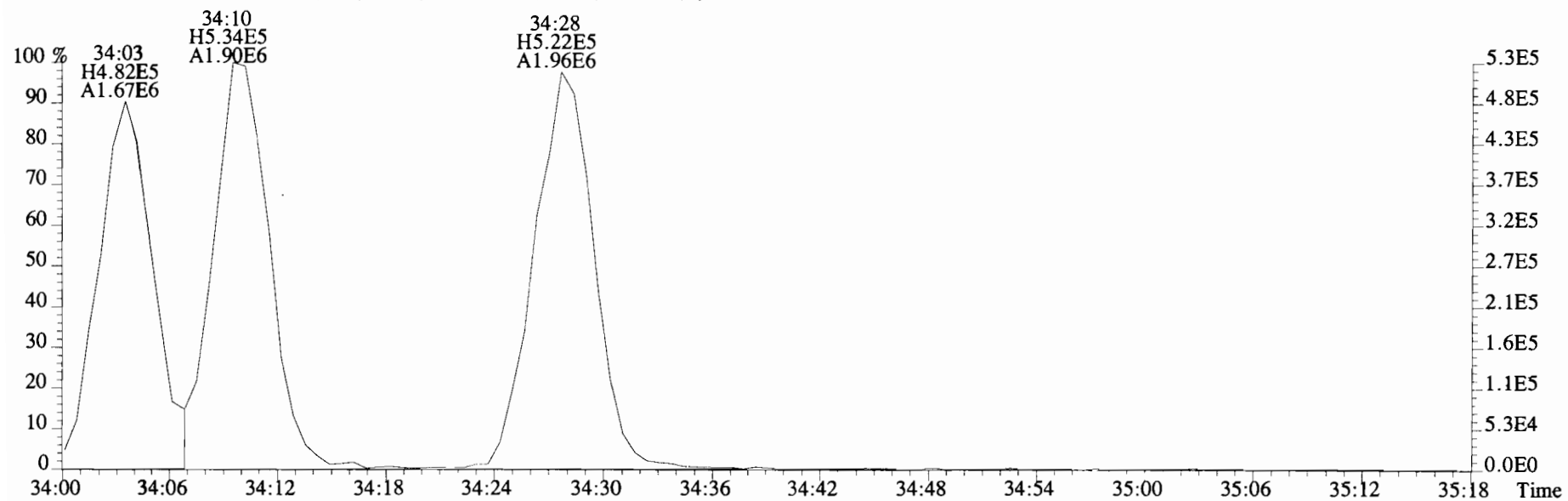
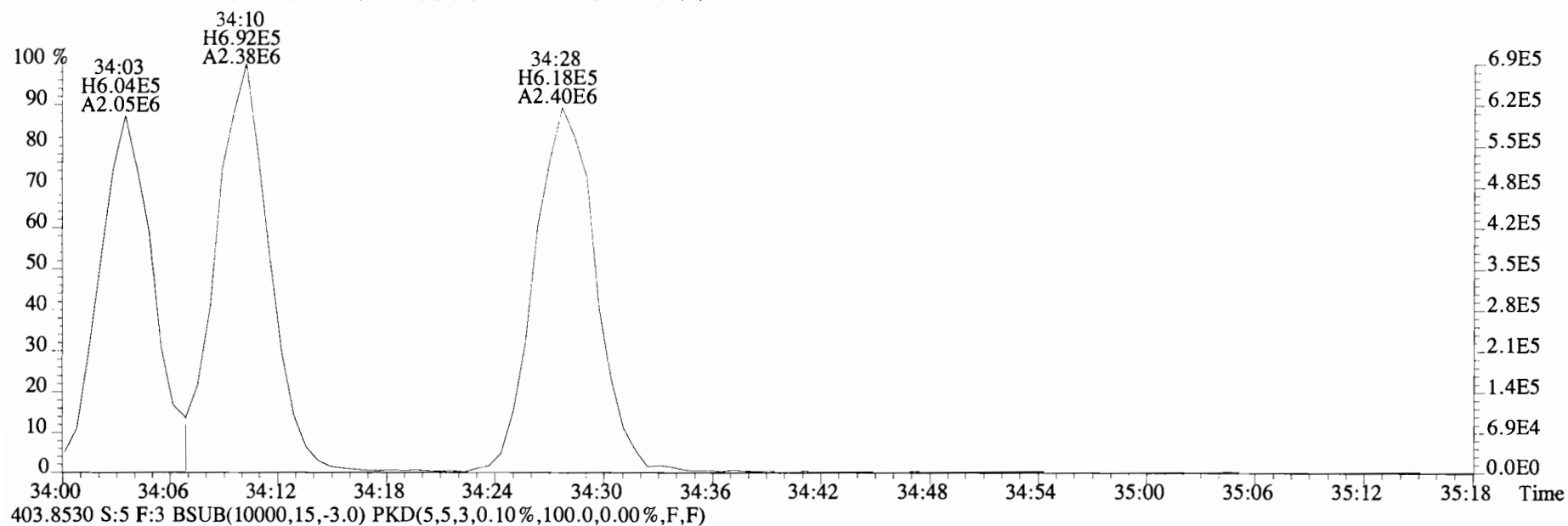
366.9792 S:5 F:2



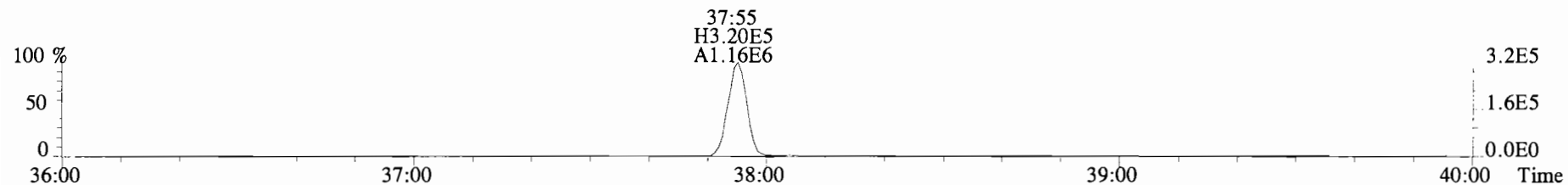
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389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



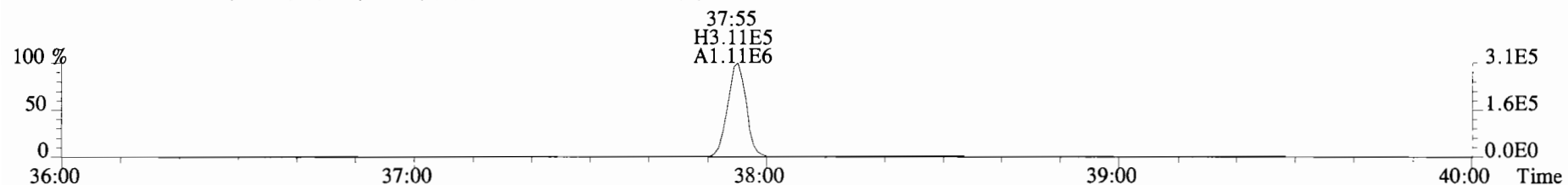
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401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



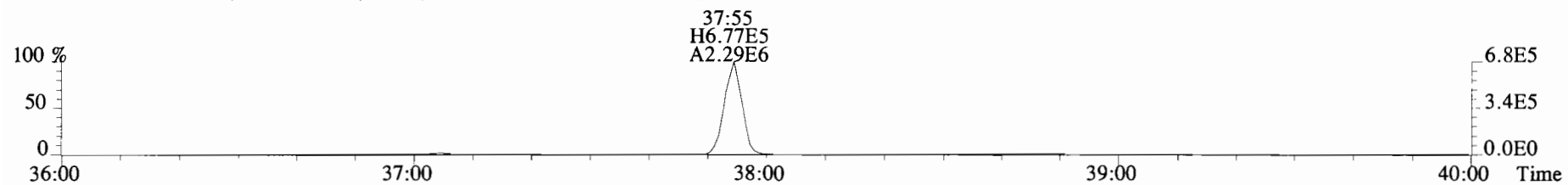
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Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



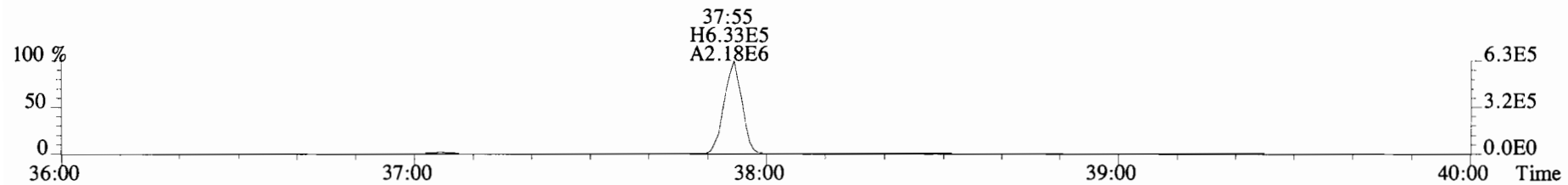
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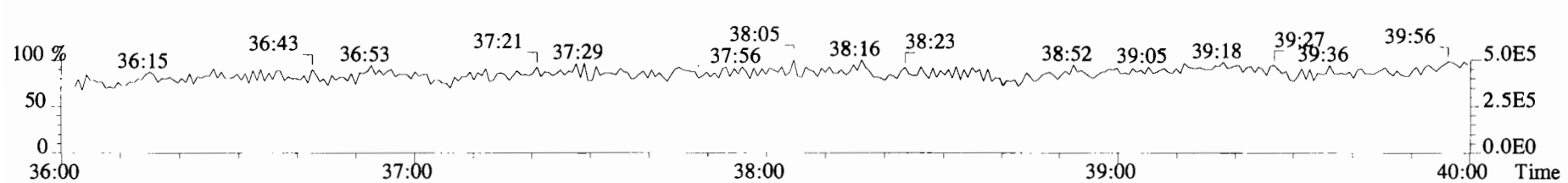
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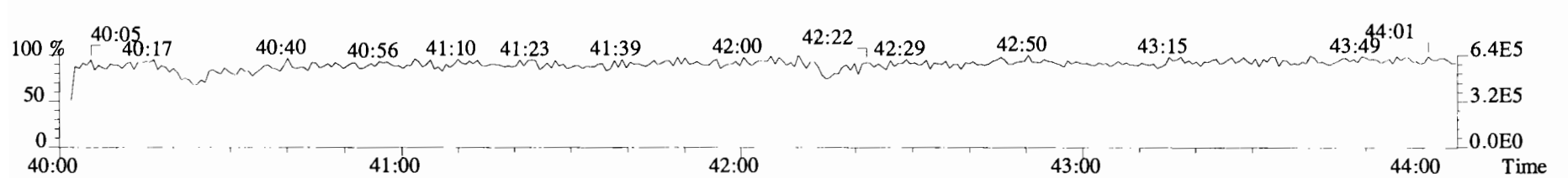
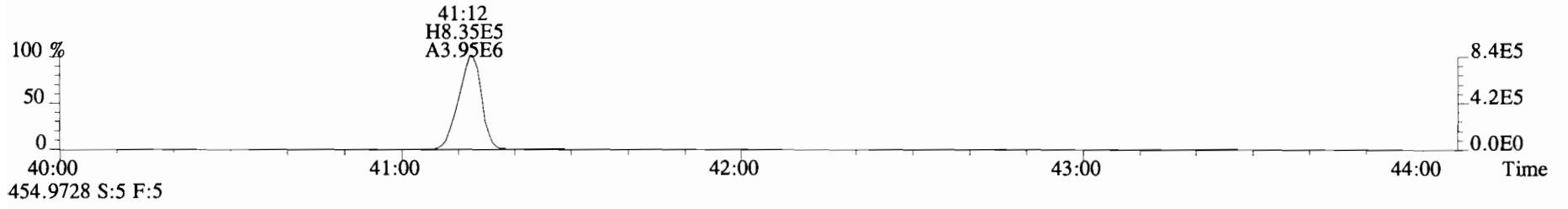
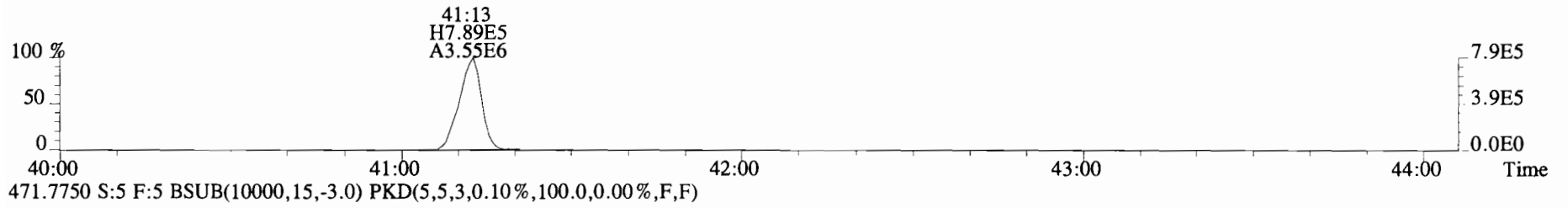
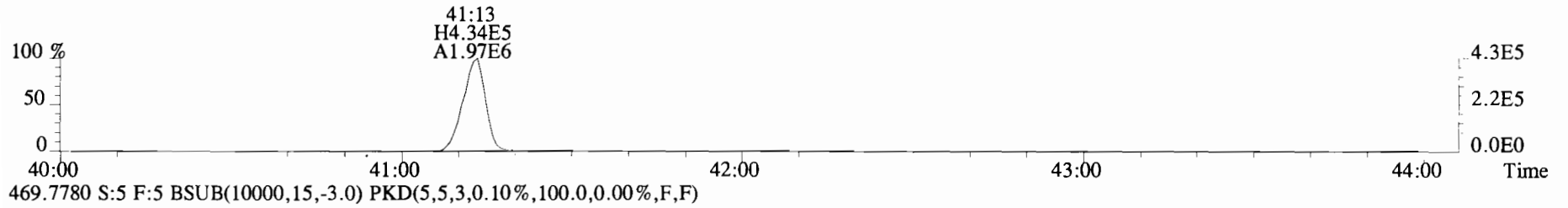
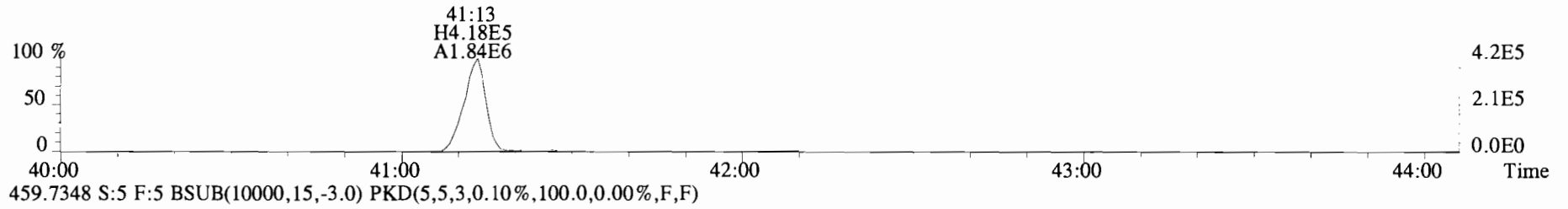
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



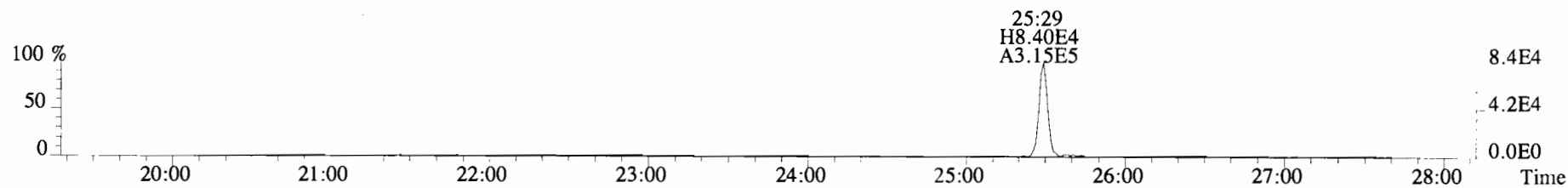
454.9728 S:5 F:4



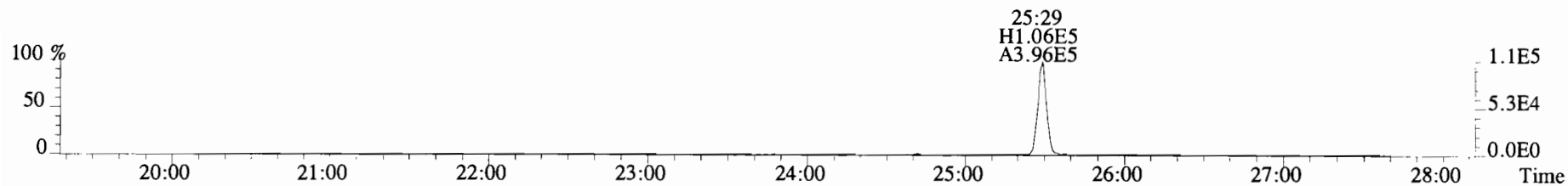
File:191031D1 #1-432 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



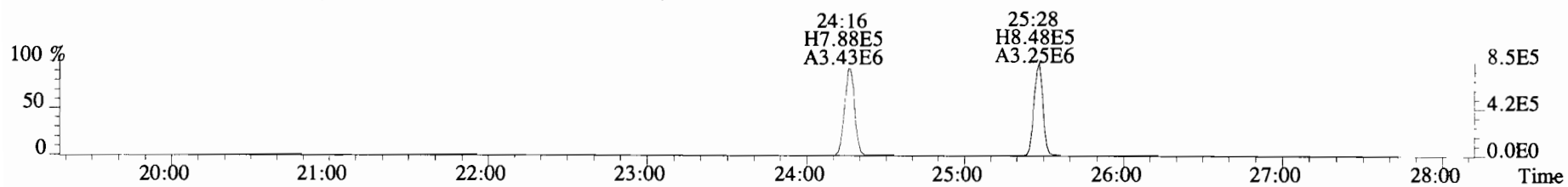
File:191031D1 #1-492 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



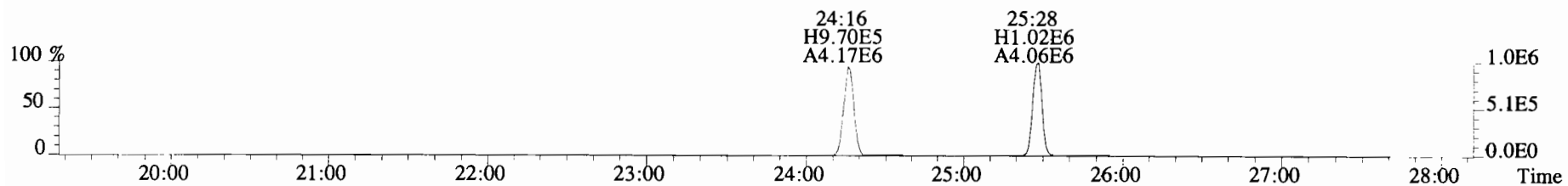
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



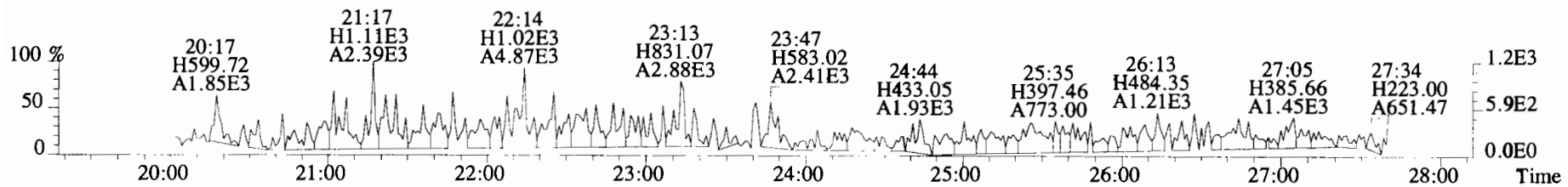
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



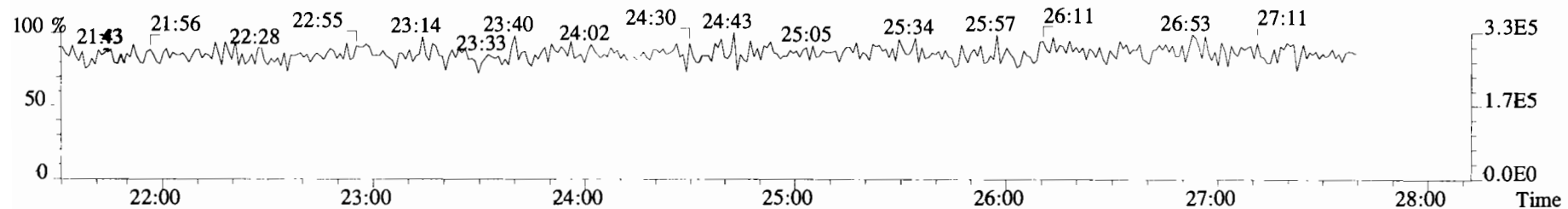
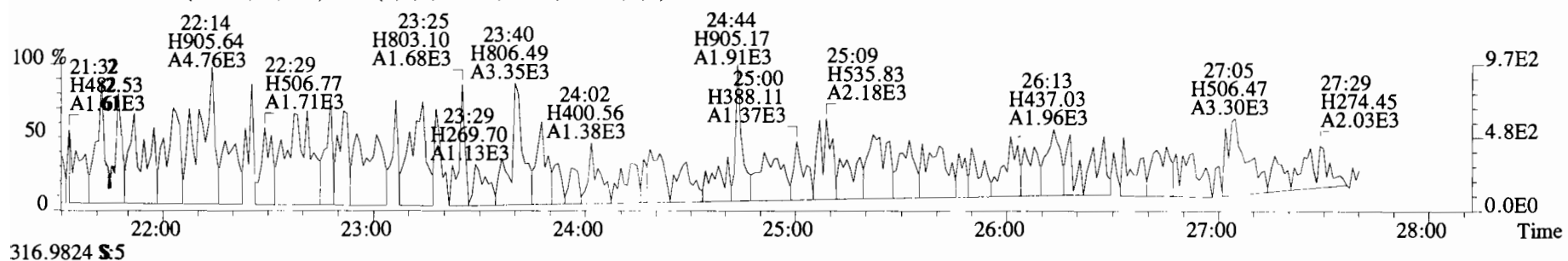
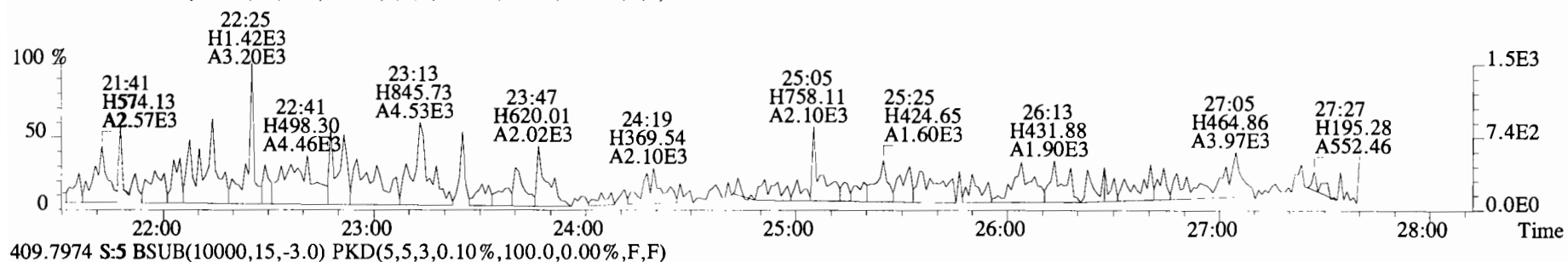
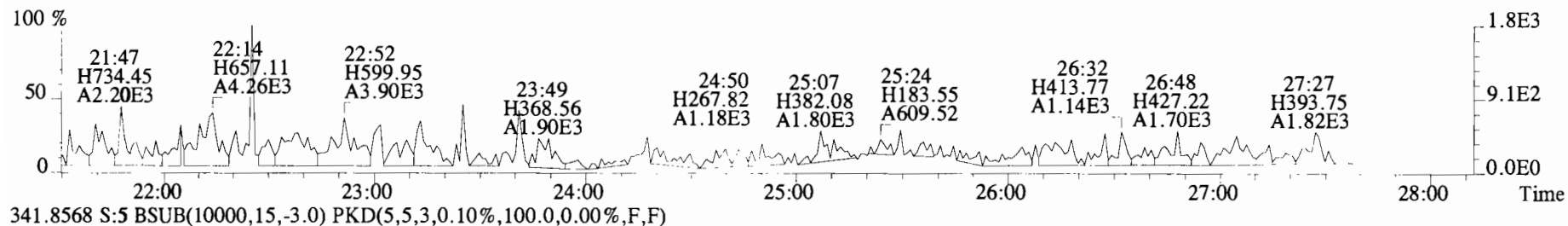
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



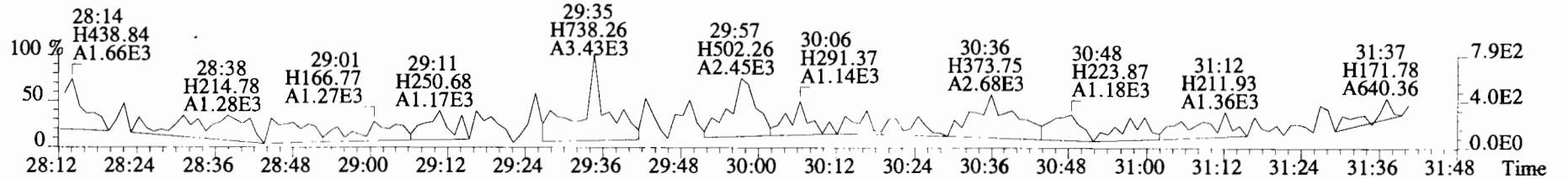
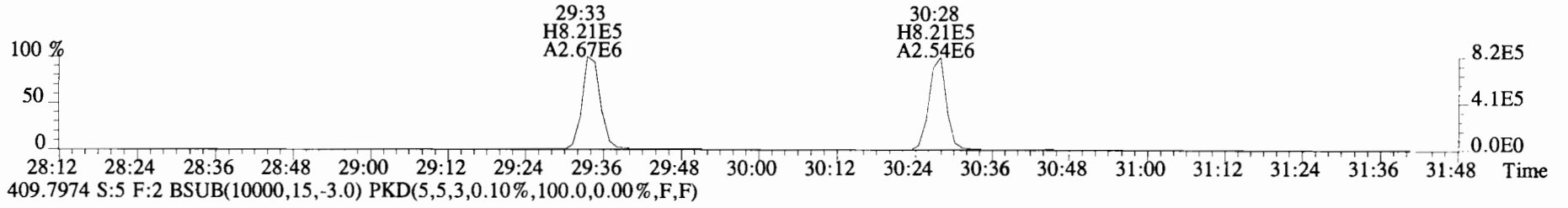
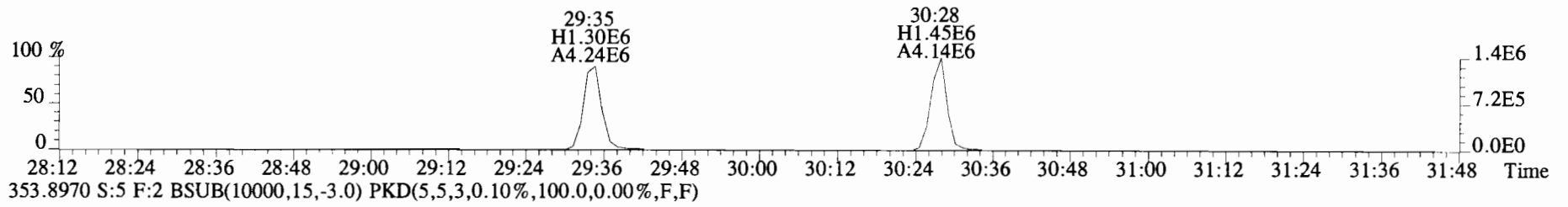
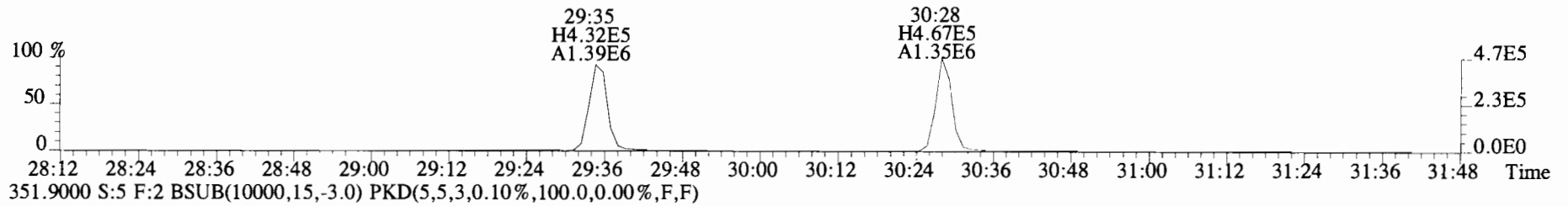
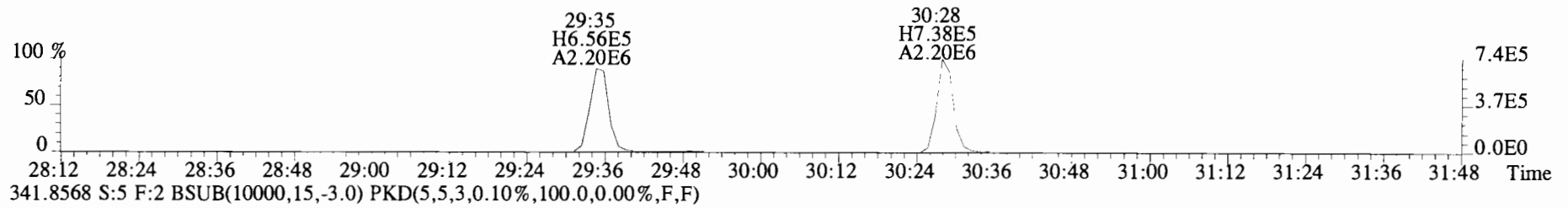
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



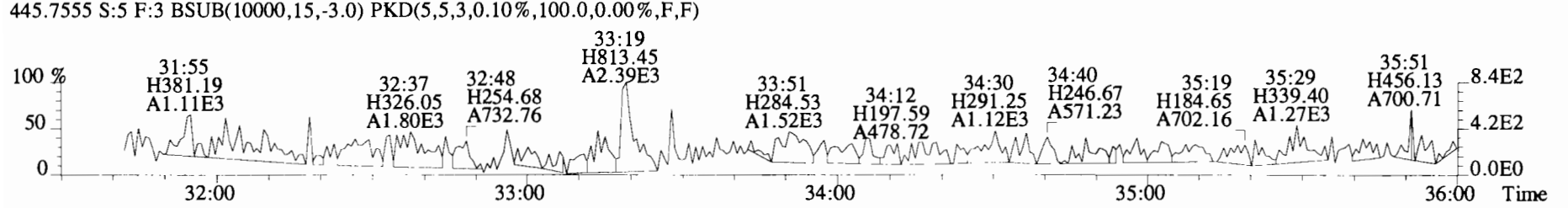
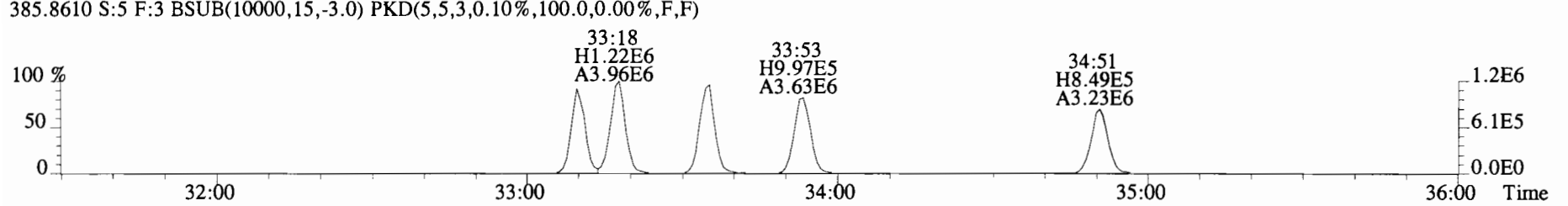
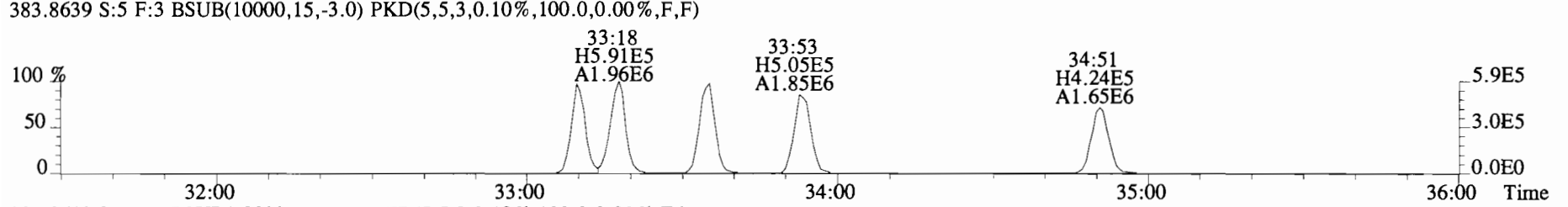
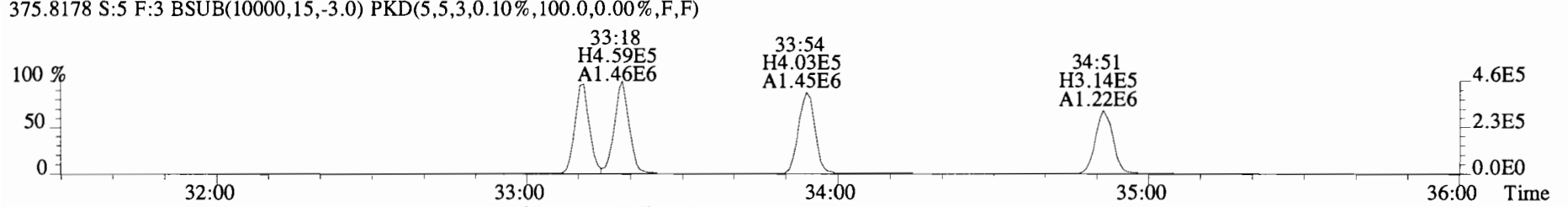
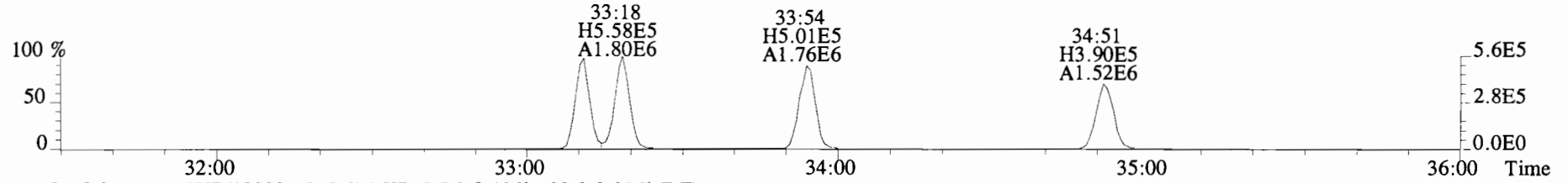
File:191031D1 #1-492 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



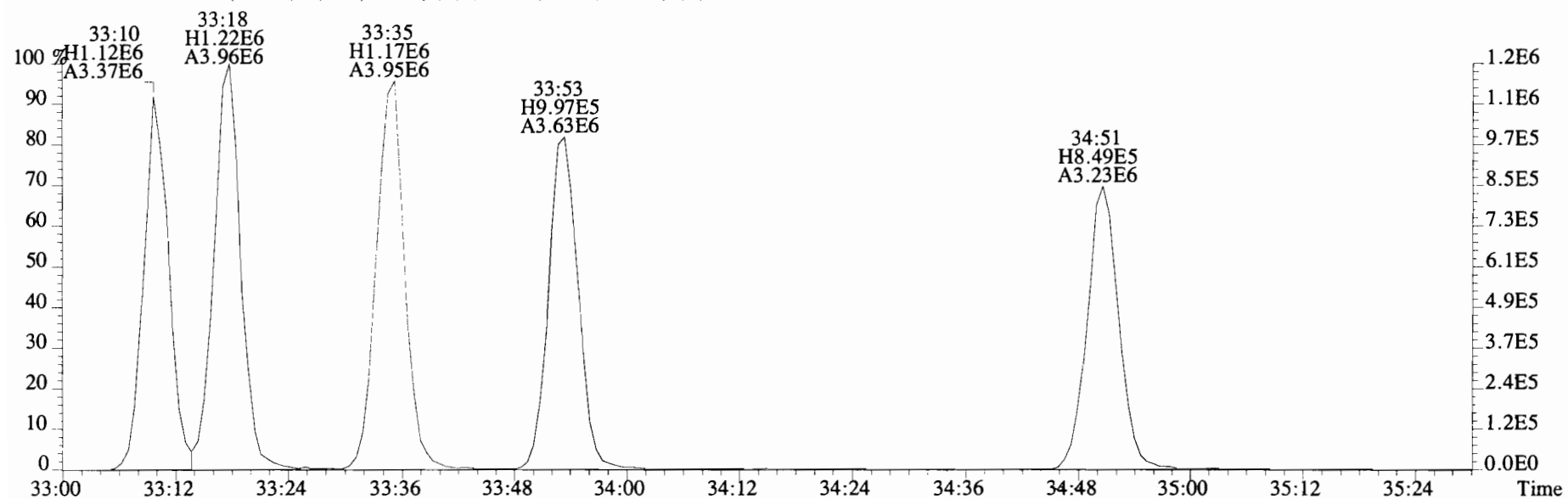
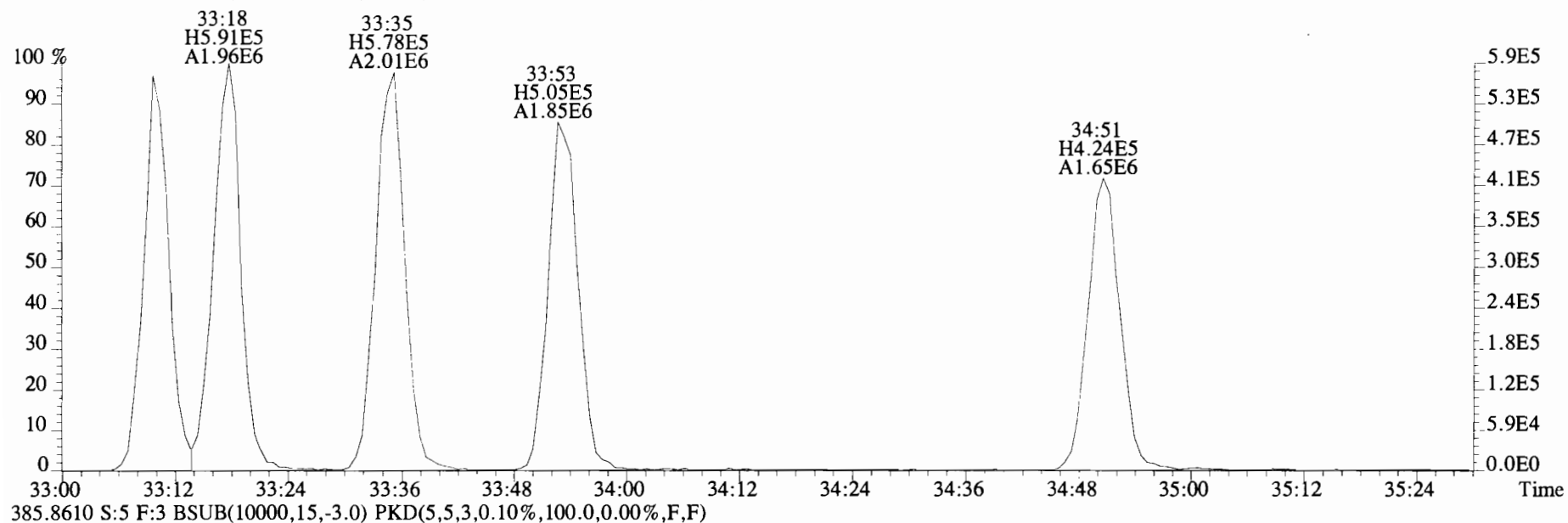
File:191031D1 #1-211 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
 339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



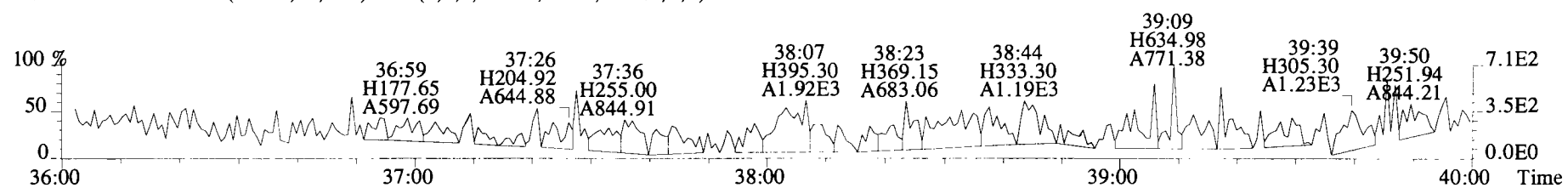
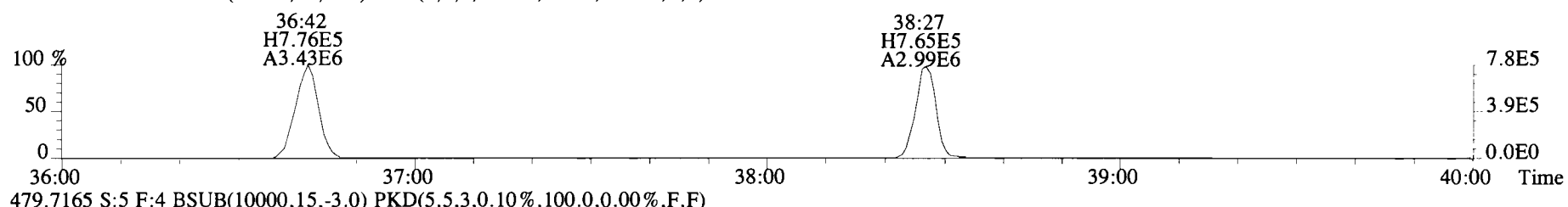
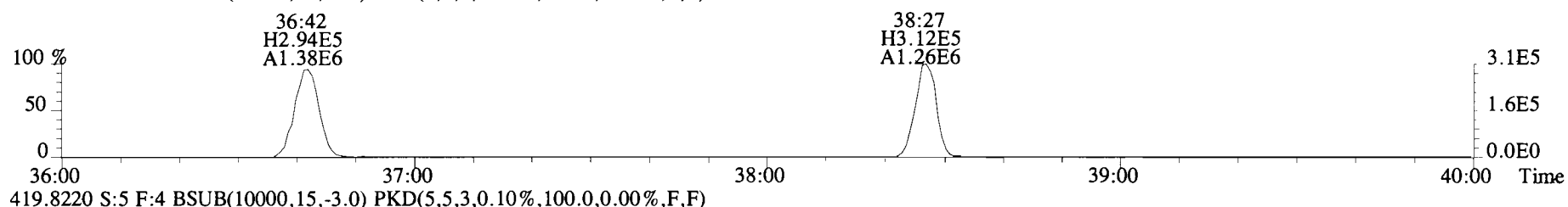
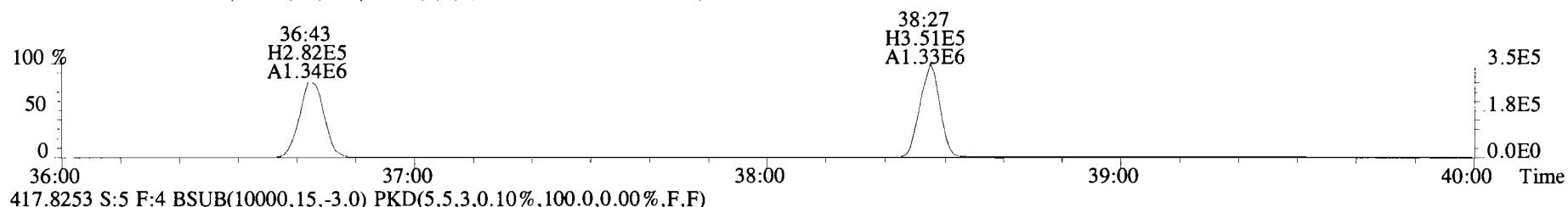
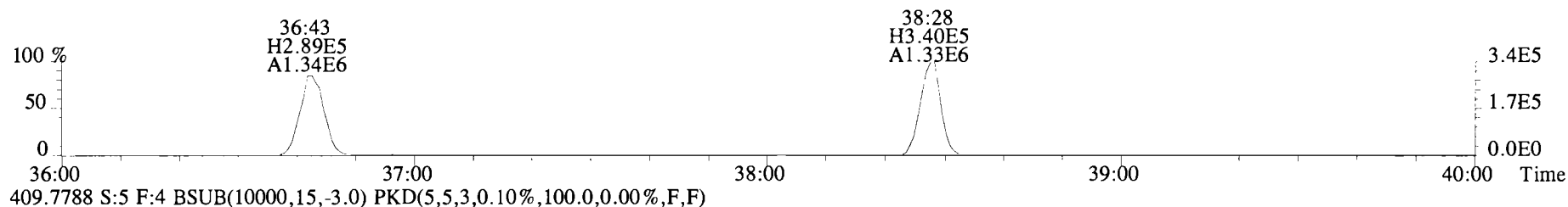
File:191031D1 #1-385 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



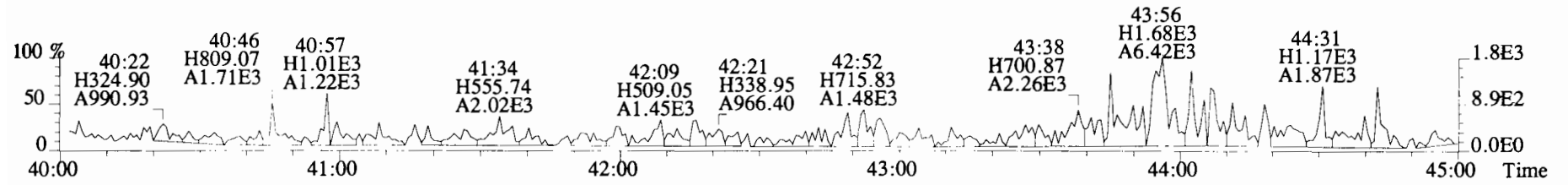
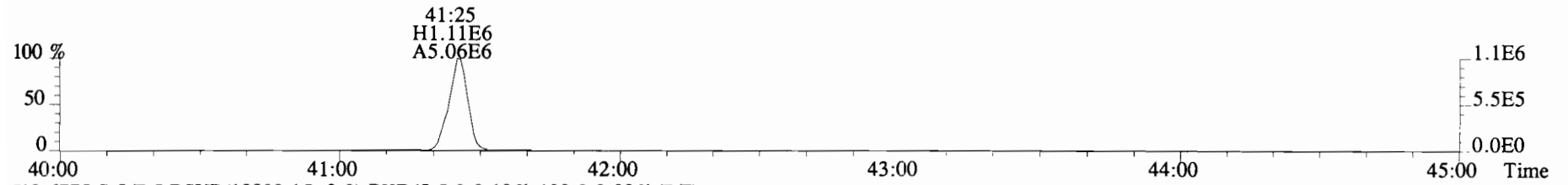
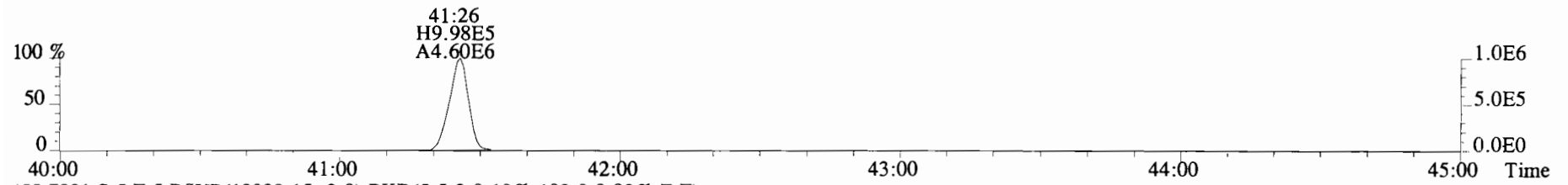
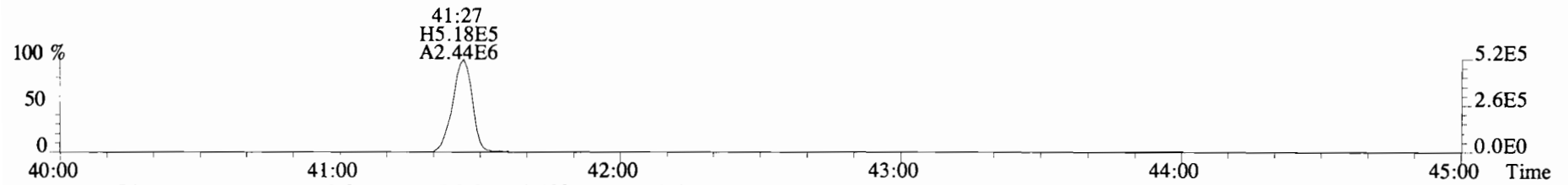
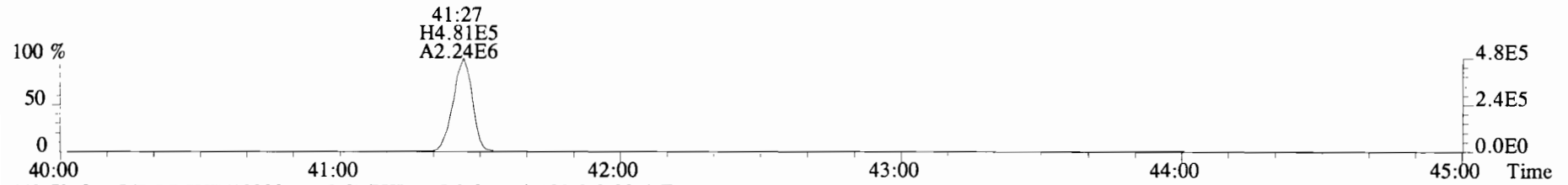
File:191031D1 #1-385 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-BS1 OPR 10 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D1 #1-355 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-BS1 OPR 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)



File:191031D1 #1-432 Acq:31-OCT-2019 13:55:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-BS1 OPR 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)



Client ID: Method Blank
Lab ID: B9K0034-BLK1

Filename: 191119D1 S:10 Acq:19-NOV-19 19:53:57
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol:10.000

ConCal: ST191119D1-1
EndCAL: NA

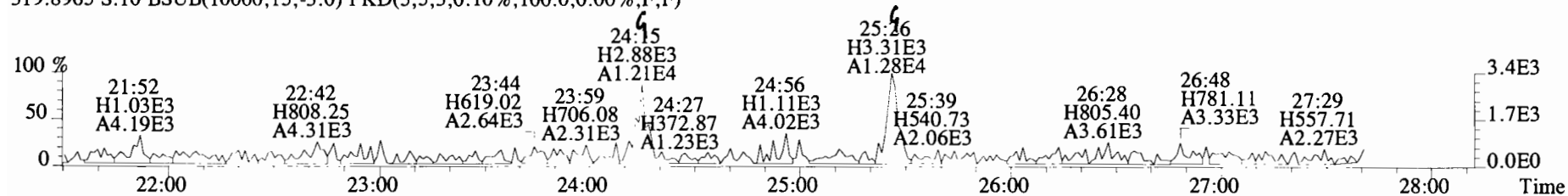
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	*	* n	0.91	NotF η	*		197	2.5	0.0541
1,2,3,7,8-PeCDD	*	* n	0.90	NotF η	*		277	2.5	0.0766
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF η	*		226	2.5	0.0998
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF η	*		226	2.5	0.109
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF η	*		226	2.5	0.108
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotF η	*		190	2.5	0.0905
OCDD	*	* n	0.96	NotF η	*		116	2.5	0.0694
2,3,7,8-TCDF	*	* n	0.95	NotF η	*		294	2.5	0.0528
1,2,3,7,8-PeCDF	*	* n	0.96	NotF η	*		276	2.5	0.0839
2,3,4,7,8-PeCDF	*	* n	1.01	NotF η	*		276	2.5	0.0788
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF η	*		203	2.5	0.0354
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF η	*		203	2.5	0.0379
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF η	*		203	2.5	0.0390
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF η	*		203	2.5	0.0496
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF η	*		149	2.5	0.0432
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF η	*		149	2.5	0.0367
OCDF	*	* n	0.95	NotF η	*		194	2.5	0.0884

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		197	0.0541
Total Penta-Dioxins	*	*		277	0.0766
Total Hexa-Dioxins	*	*		226	0.106
Total Hepta-Dioxins	*	*		190	0.0905
Total Tetra-Furans	*	*		294	0.0528
Total Penta-Furans	0.0000	0.0000		276	0.0813
Total Hexa-Furans	*	*		203	0.0402
Total Hepta-Furans	*	*		149	0.0402

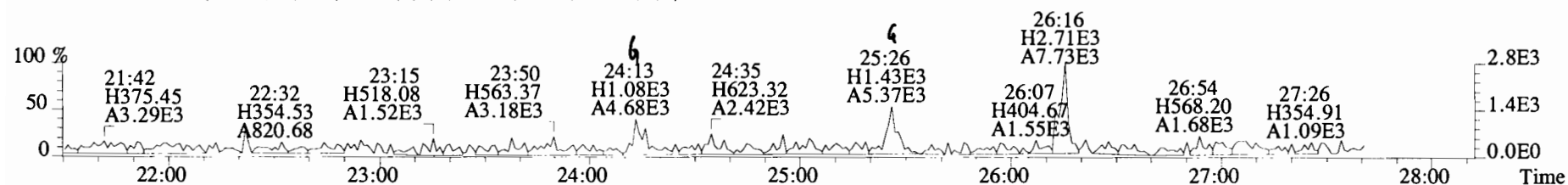
IS	13C-2,3,7,8-TCDD	1.26e+07	0.75 y	1.10	26:13	190.16	Rec	Qual
IS	13C-1,2,3,7,8-PeCDD	9.48e+06	0.63 y	0.88	30:42	177.70	95.1	
IS	13C-1,2,3,4,7,8-HxCDD	8.56e+06	1.29 y	0.64	34:00	192.02	88.9	
IS	13C-1,2,3,6,7,8-HxCDD	9.70e+06	1.27 y	0.86	34:07	163.25	96.0	
IS	13C-1,2,3,7,8,9-HxCDD	9.51e+06	1.24 y	0.81	34:24	169.83	81.6	
IS	13C-1,2,3,4,6,7,8-HpCDD	8.50e+06	1.08 y	0.65	37:51	187.10	84.9	
IS	13C-OCDD	1.55e+07	0.90 y	0.58	41:08	384.87	93.5	
IS	13C-2,3,7,8-TCDF	2.06e+07	0.81 y	1.03	25:27	195.06	96.2	
IS	13C-1,2,3,7,8-PeCDF	1.48e+07	1.62 y	0.85	29:33	169.05	97.5	
IS	13C-2,3,4,7,8-PeCDF	1.43e+07	1.60 y	0.85	30:26	164.64	84.5	
IS	13C-1,2,3,4,7,8-HxCDF	1.22e+07	0.52 y	0.83	33:07	210.46	82.3	
IS	13C-1,2,3,6,7,8-HxCDF	1.34e+07	0.52 y	1.03	33:15	186.59	105	
IS	13C-2,3,4,6,7,8-HxCDF	1.28e+07	0.52 y	0.95	33:51	193.39	93.3	
IS	13C-1,2,3,7,8,9-HxCDF	1.16e+07	0.53 y	0.83	34:47	202.29	96.7	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.06e+07	0.44 y	0.76	36:38	202.03	101	
IS	13C-1,2,3,4,7,8,9-HpCDF	9.02e+06	0.44 y	0.58	38:24	223.51	101	
IS	13C-OCDF	2.06e+07	0.91 y	0.69	41:21	429.98	112	
C/Up	37Cl-2,3,7,8-TCDD	5.63e+06		1.20	26:14	77.593	107	
RS/RT	13C-1,2,3,4-TCDD	1.21e+07	0.78 y	1.00	25:40	200.00	97.0	
RS	13C-1,2,3,4-TCDF	2.05e+07	0.79 y	1.00	24:15	200.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.39e+07	0.51 y	1.00	33:32	200.00		

Integrations
by DB
Analyst: DB
Date: 11/20/19
Reviewed
by CT
Analyst: CT
Date: 11/27/19

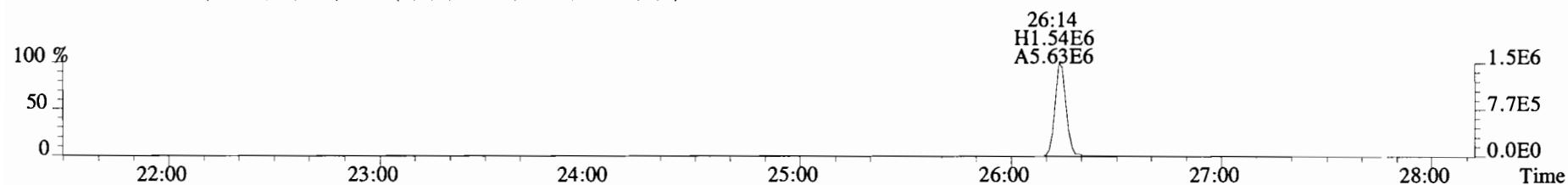
File:191119D1 #1-492 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



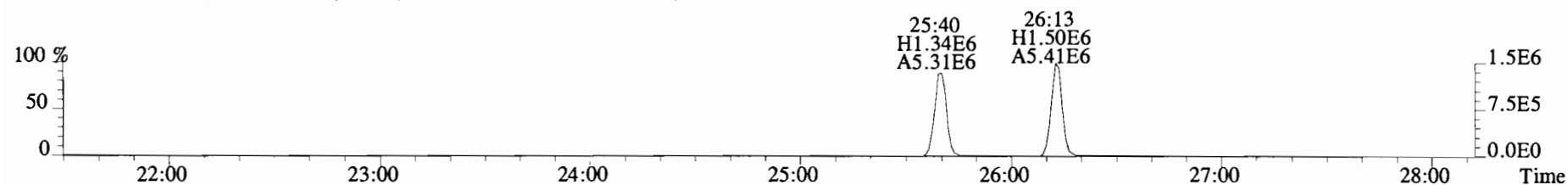
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



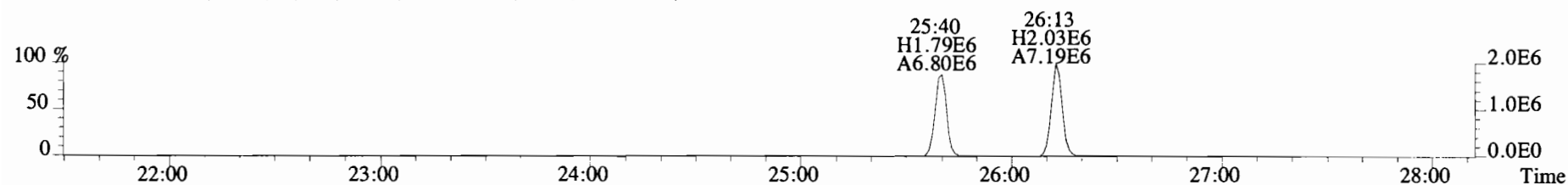
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



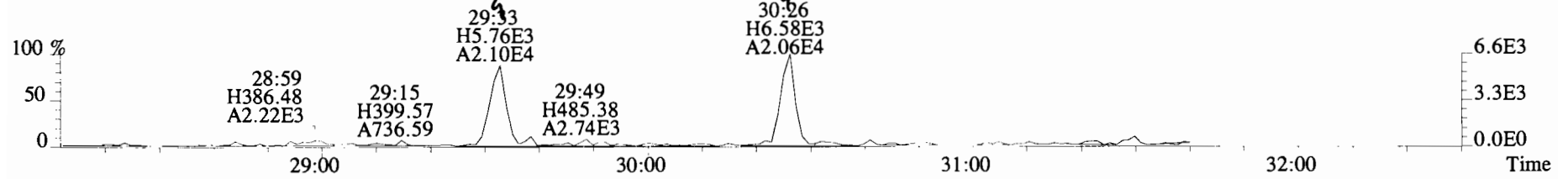
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



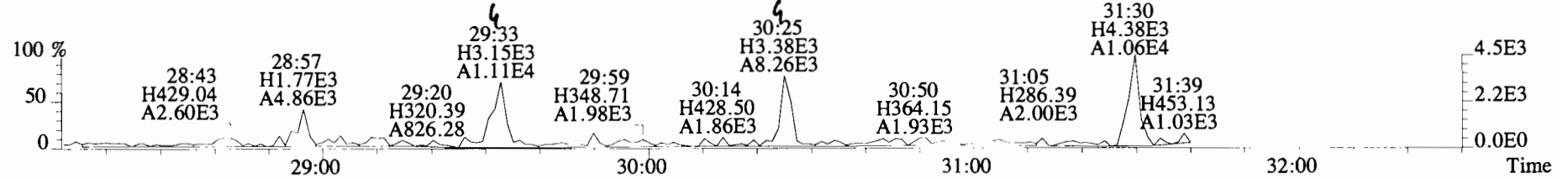
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



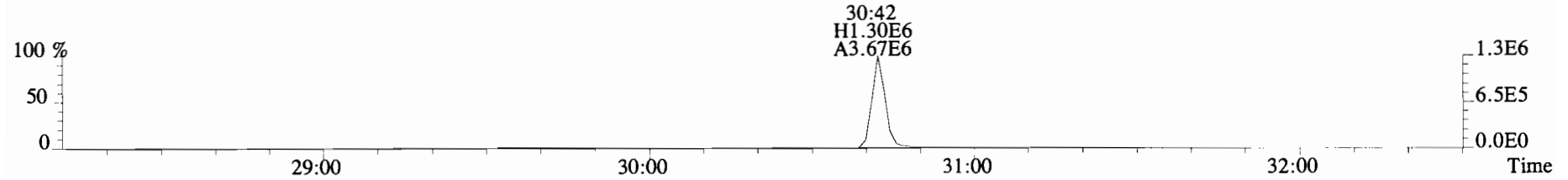
File:191119D1 #1-210 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
 353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



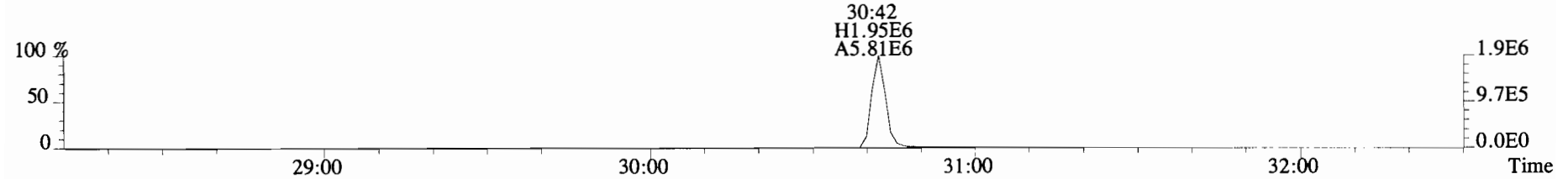
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



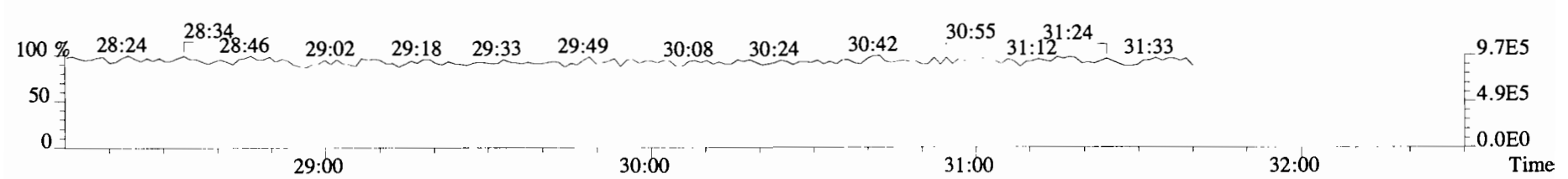
365.8978 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



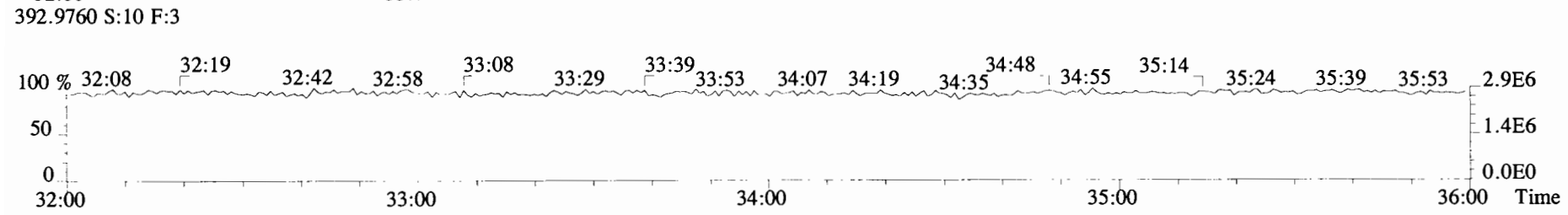
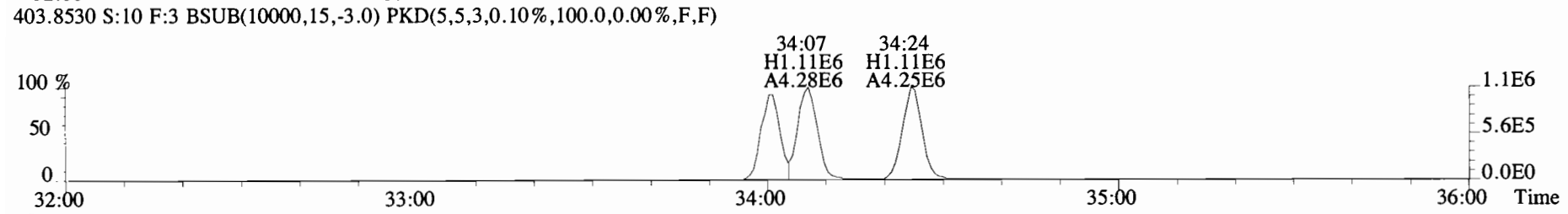
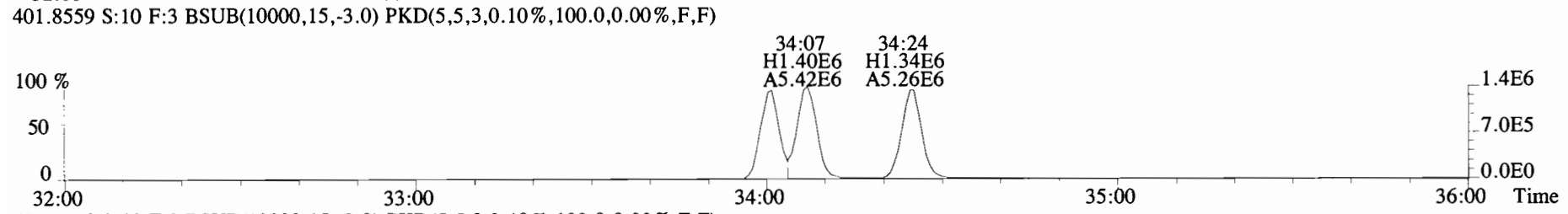
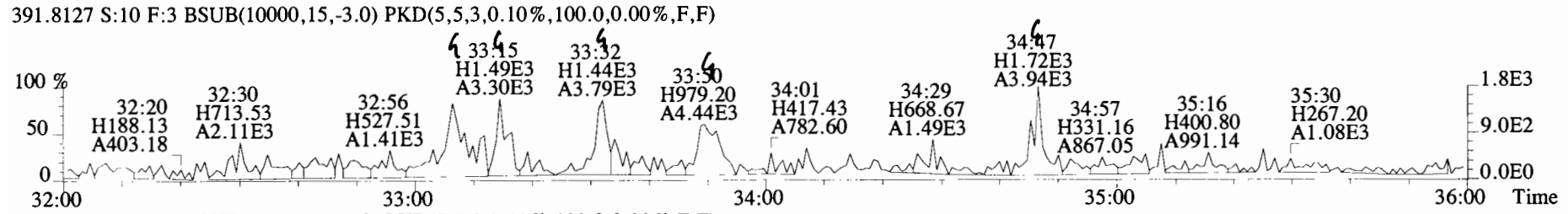
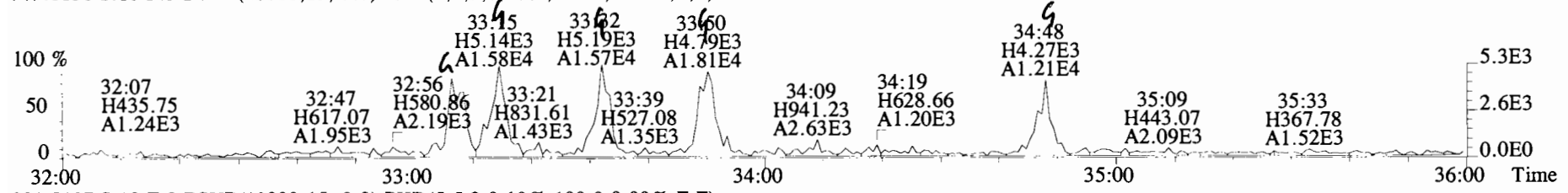
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



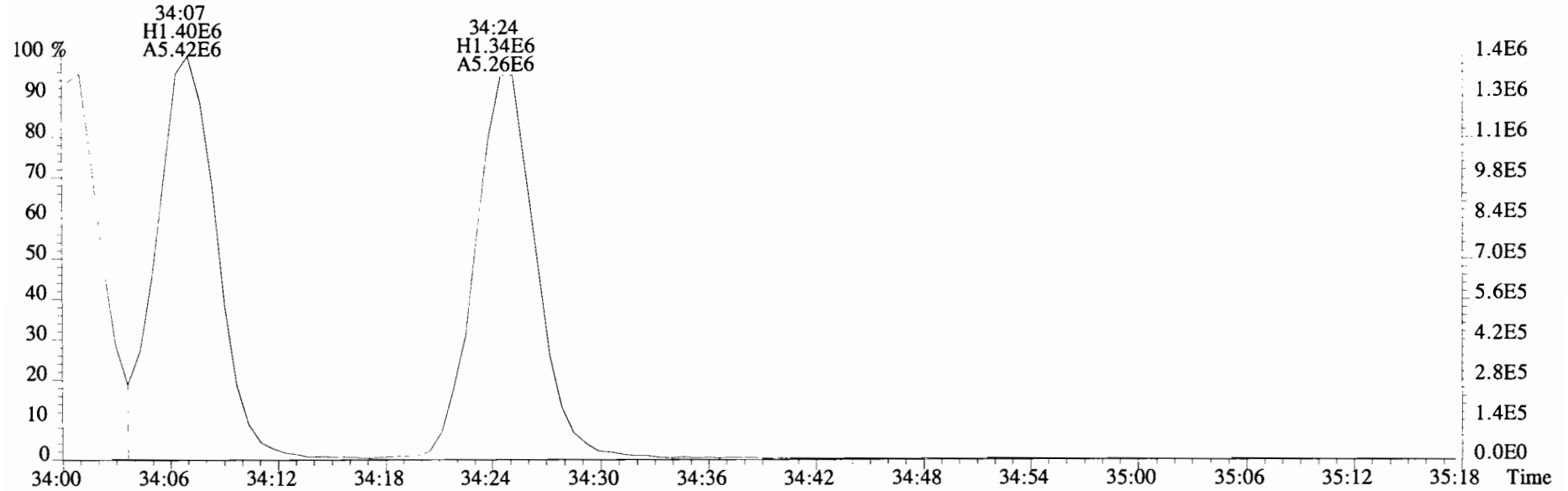
366.9792 S:10 F:2



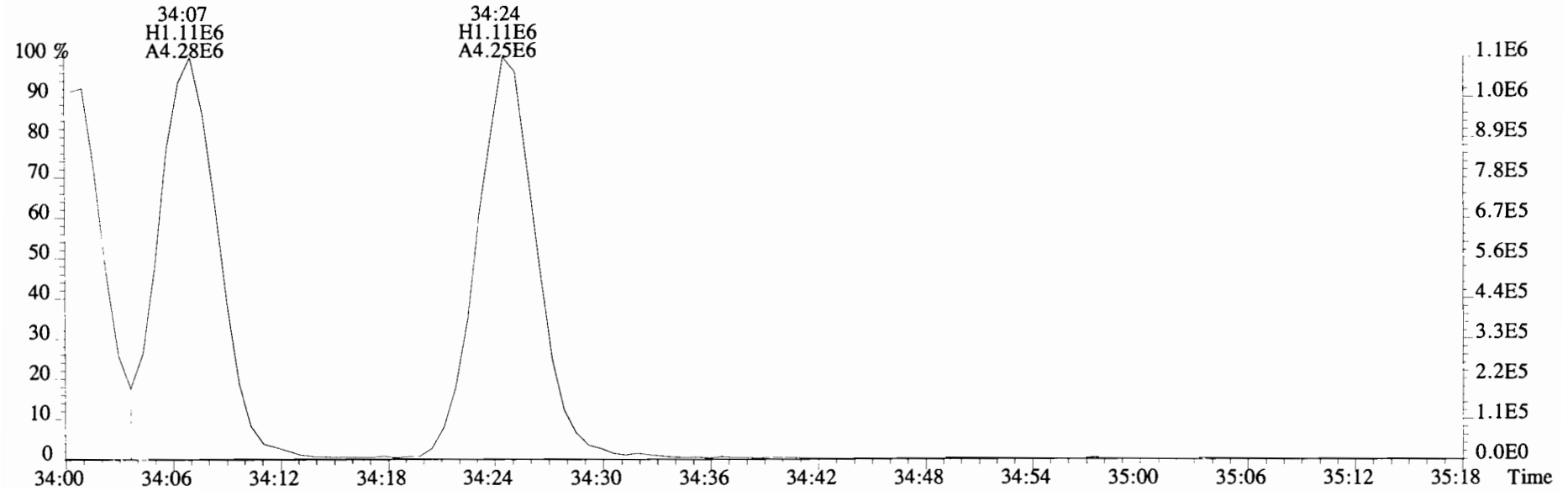
File:191119D1 #1-385 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



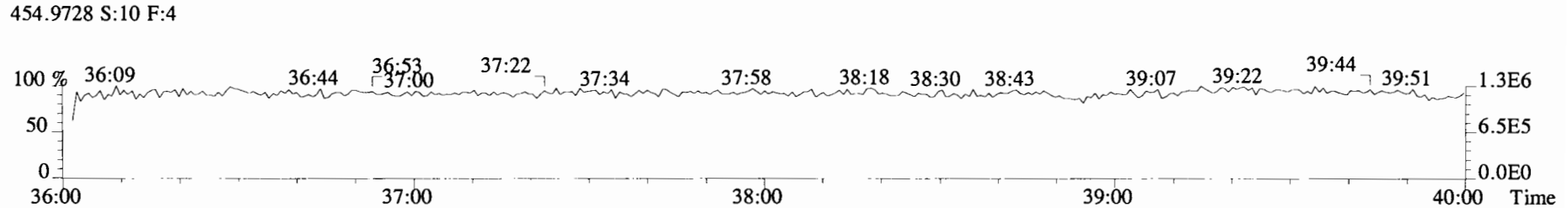
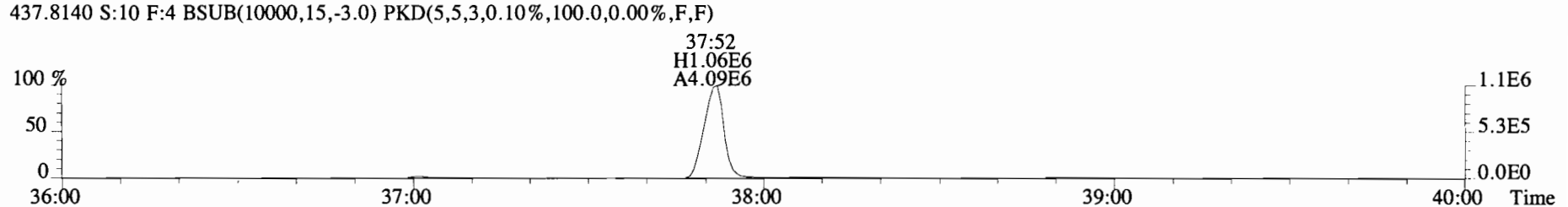
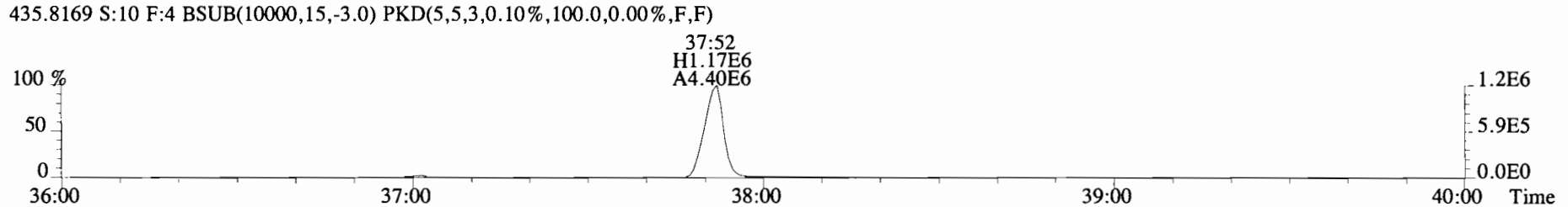
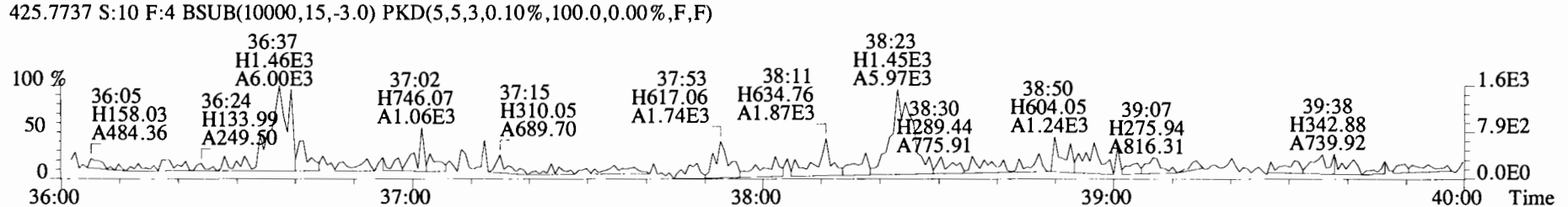
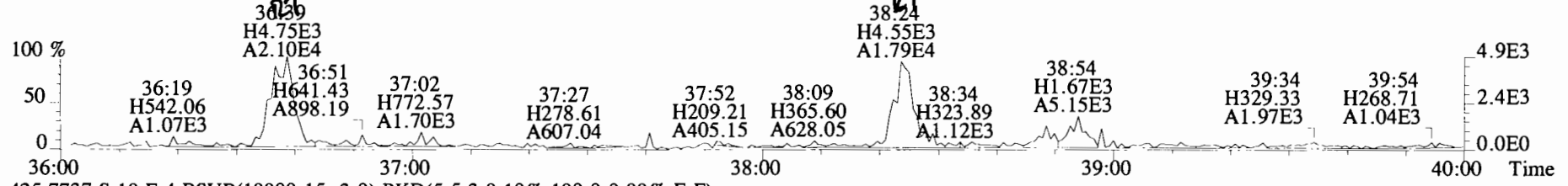
File:191119D1 #1-385 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



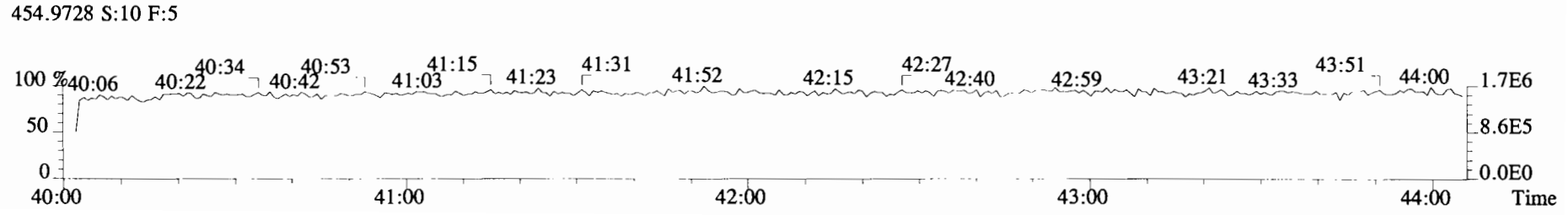
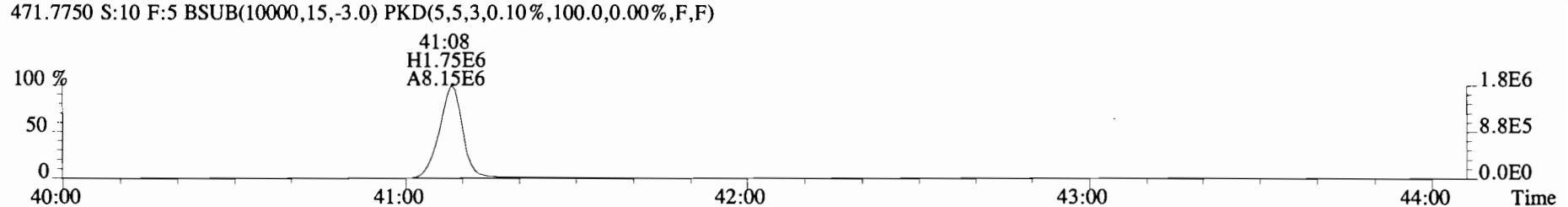
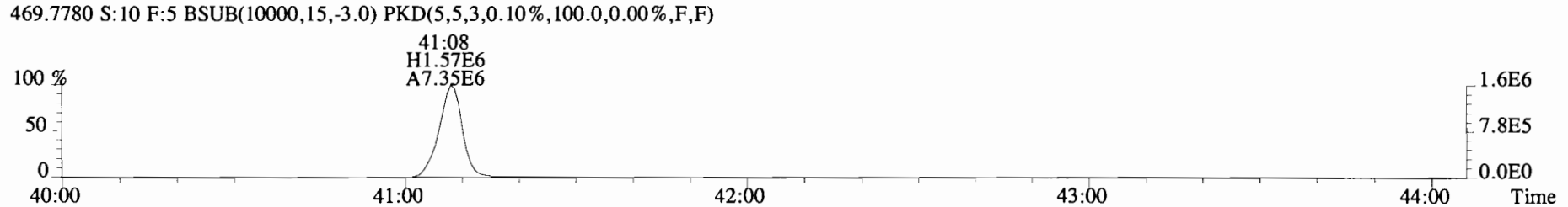
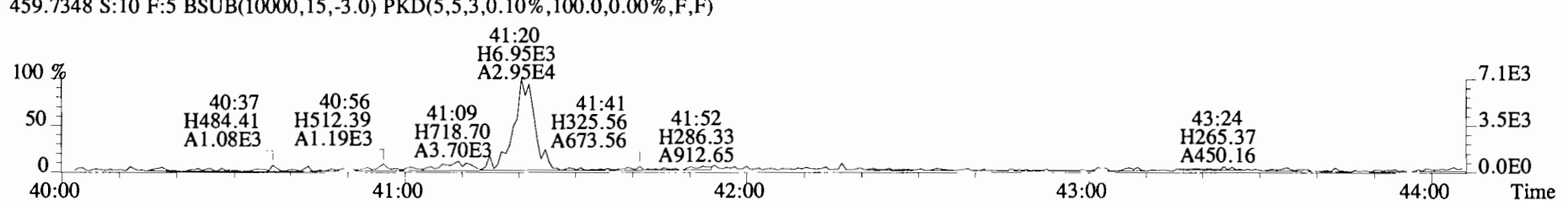
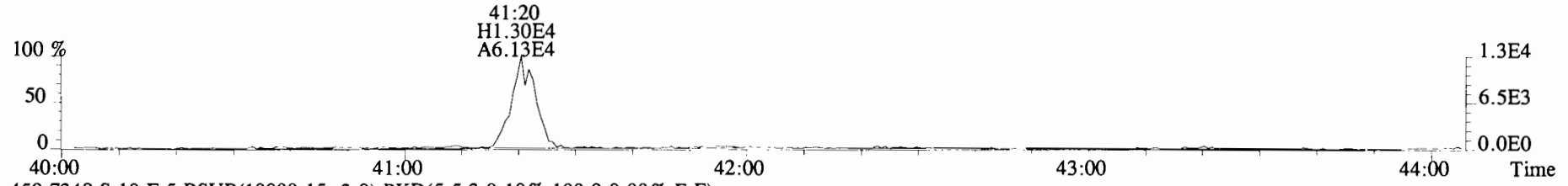
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



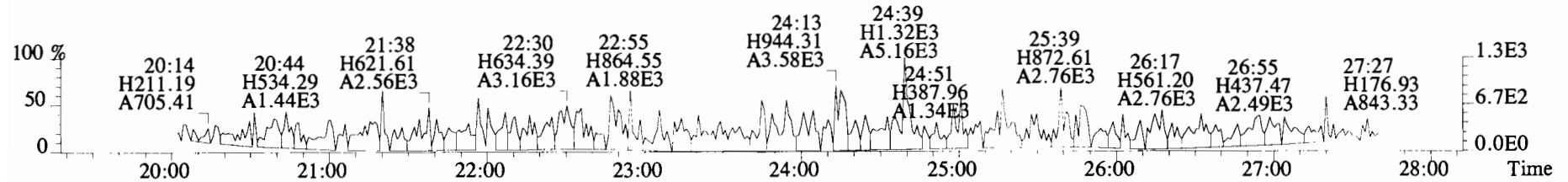
File:191119D1 #1-356 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
 423.7767 S:10 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



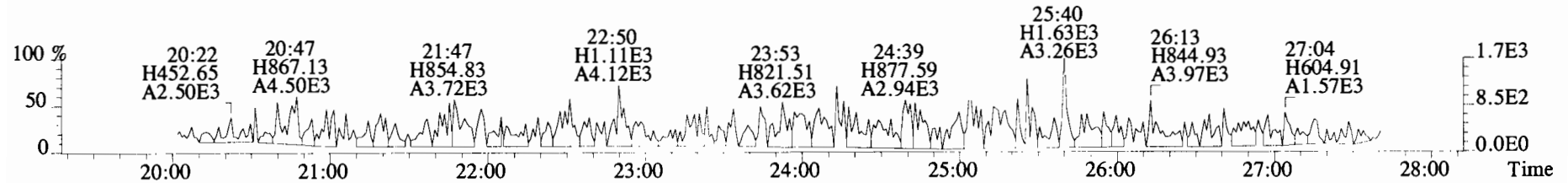
File:191119D1 #1-431 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



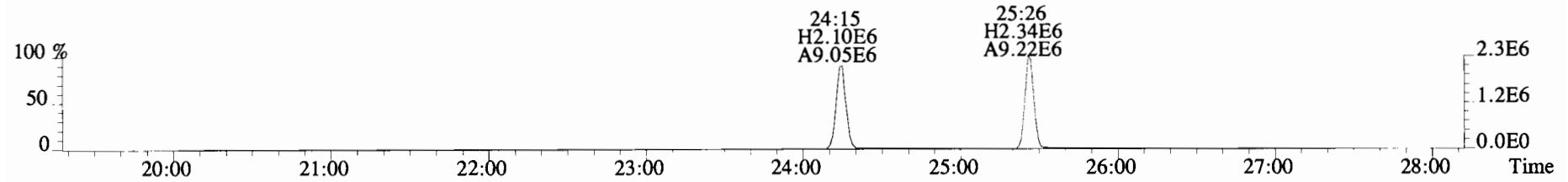
File:191119D1 #1-492 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



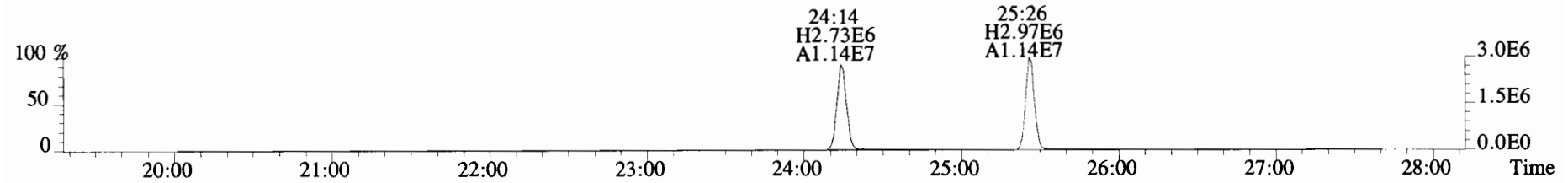
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



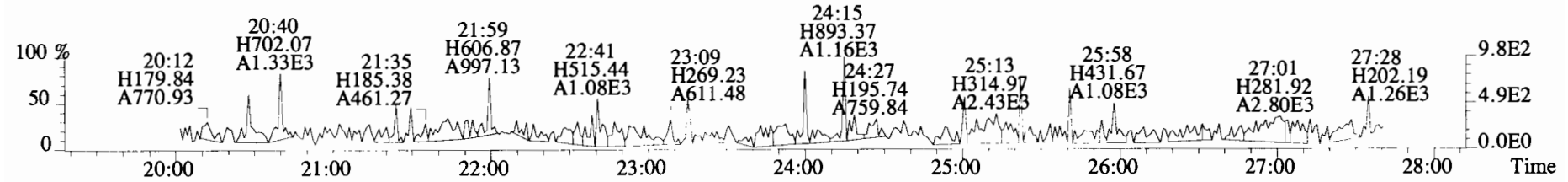
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



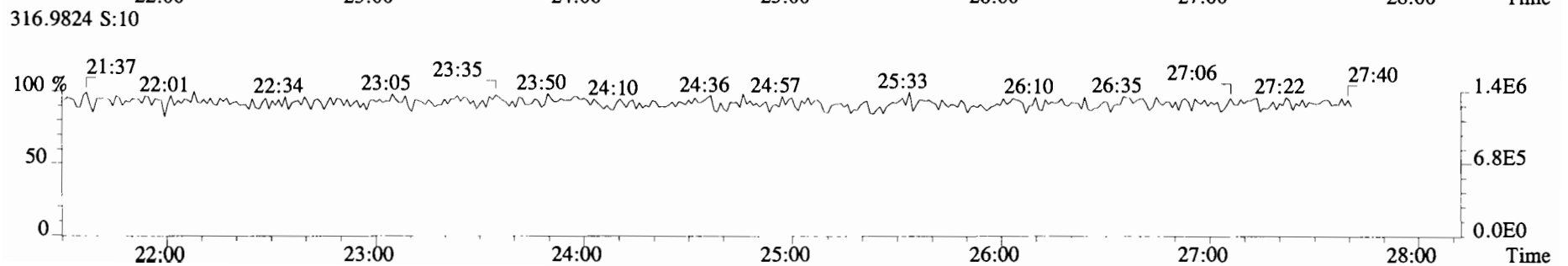
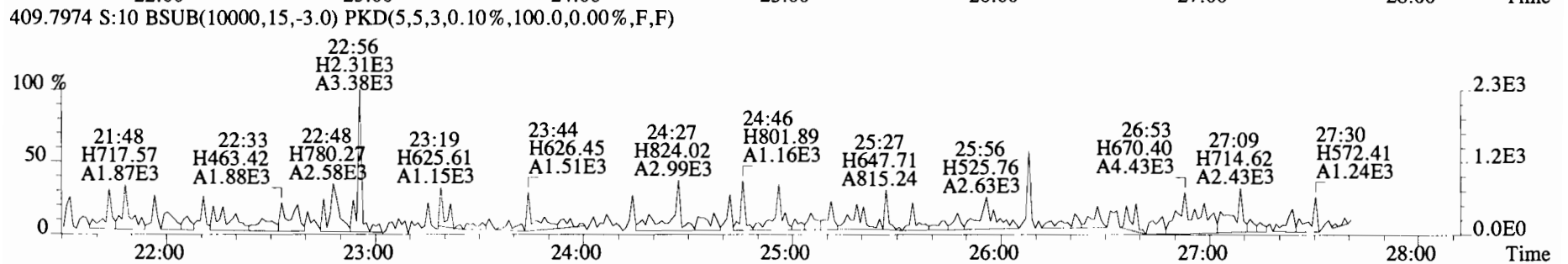
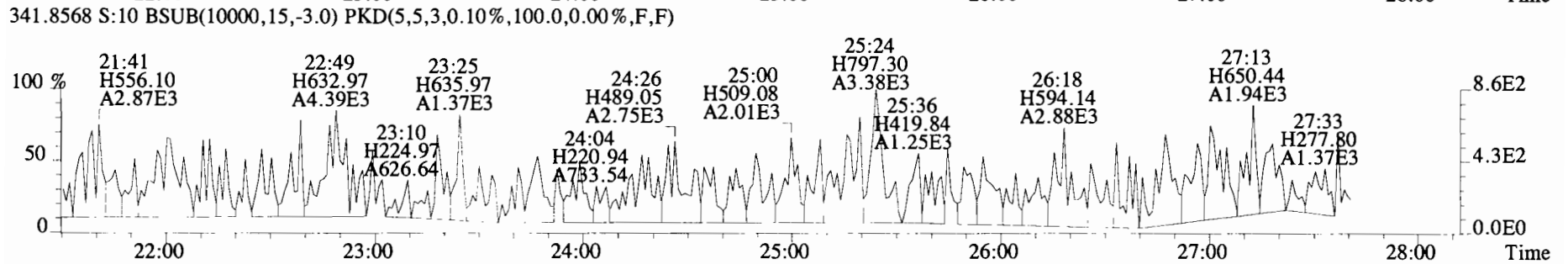
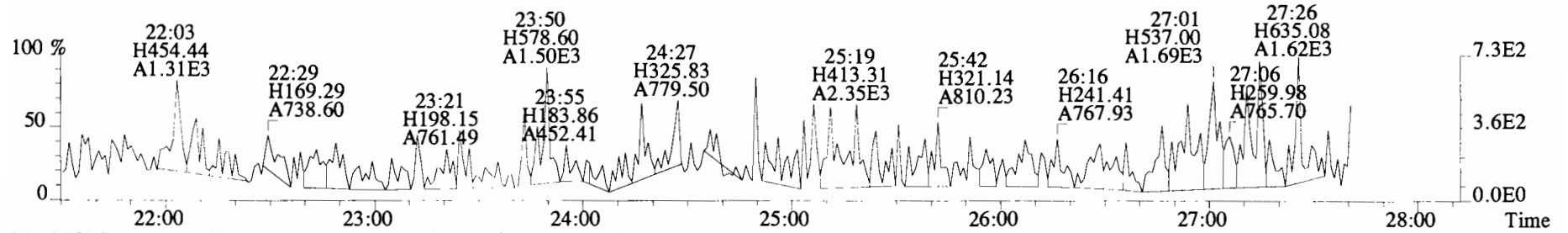
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



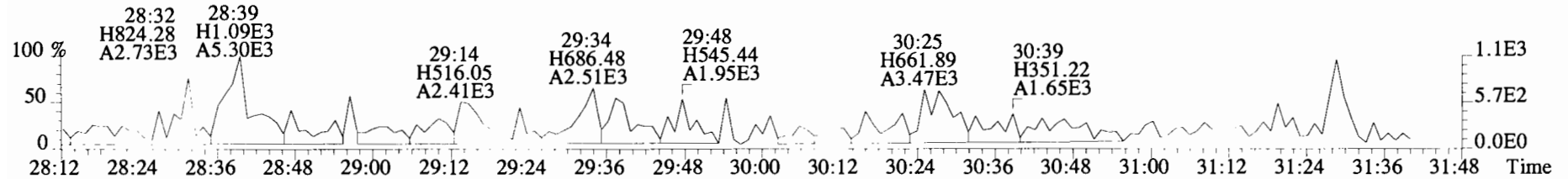
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



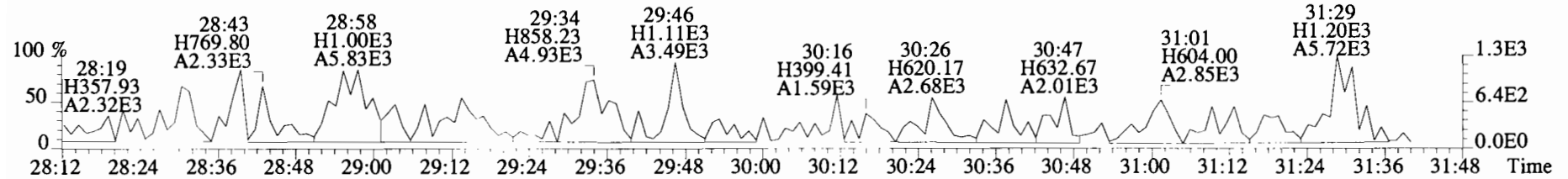
File:191119D1 #1-492 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
 339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



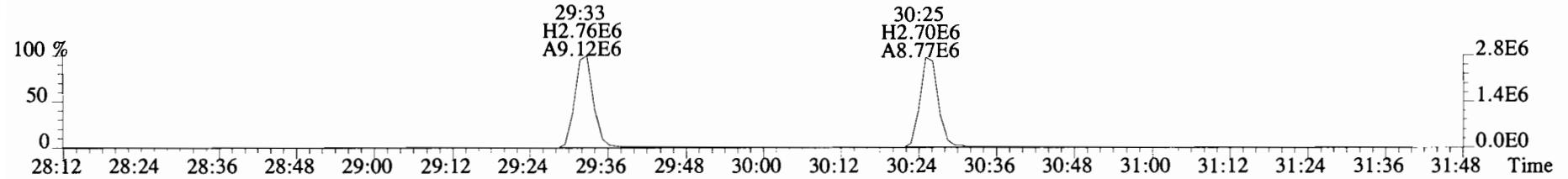
File:191119D1 #1-210 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



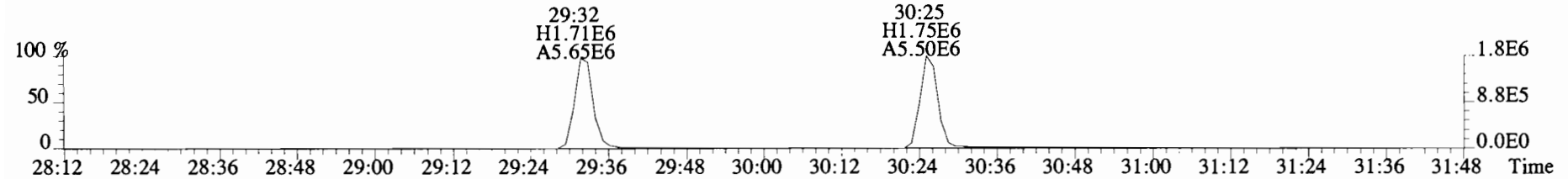
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



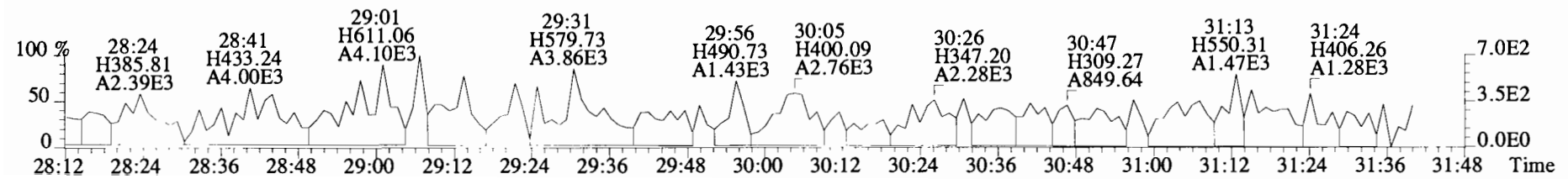
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



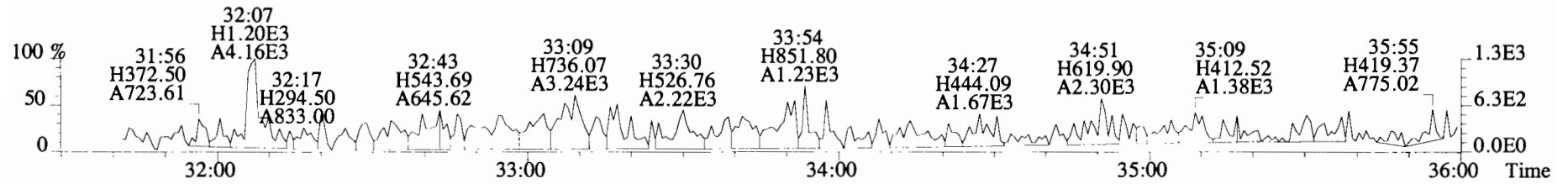
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



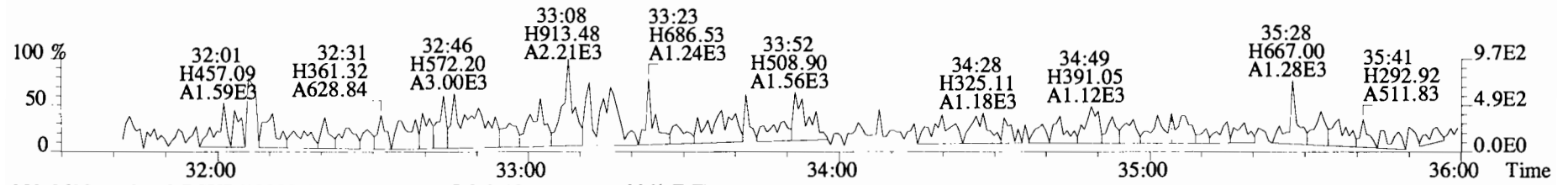
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



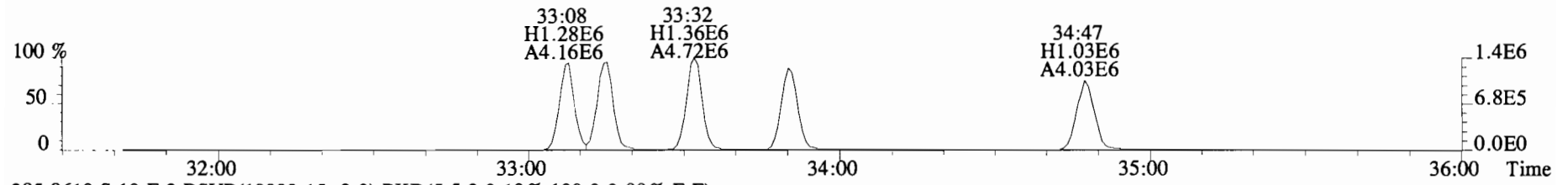
File:191119D1 #1-385 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
 373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



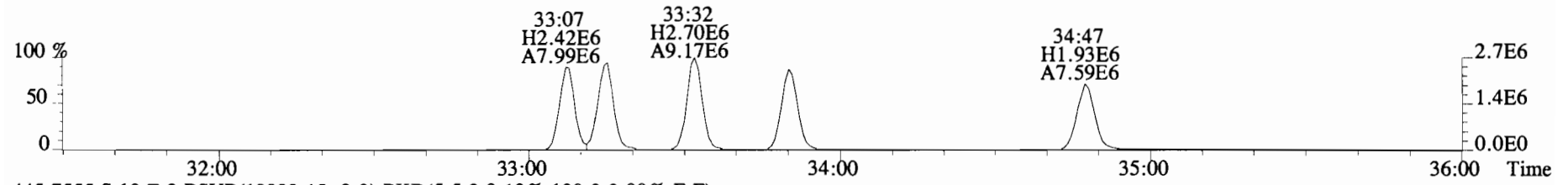
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



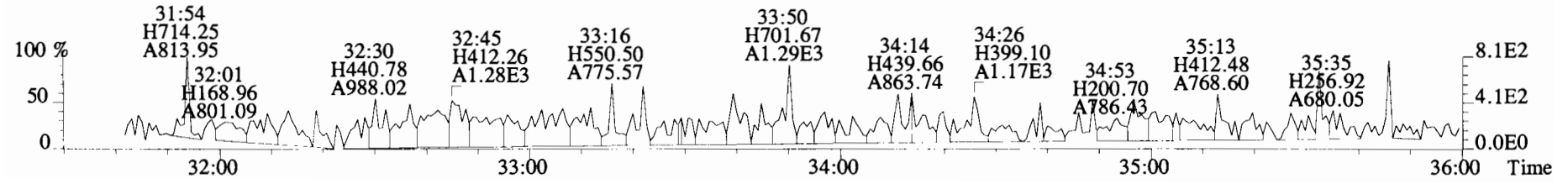
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



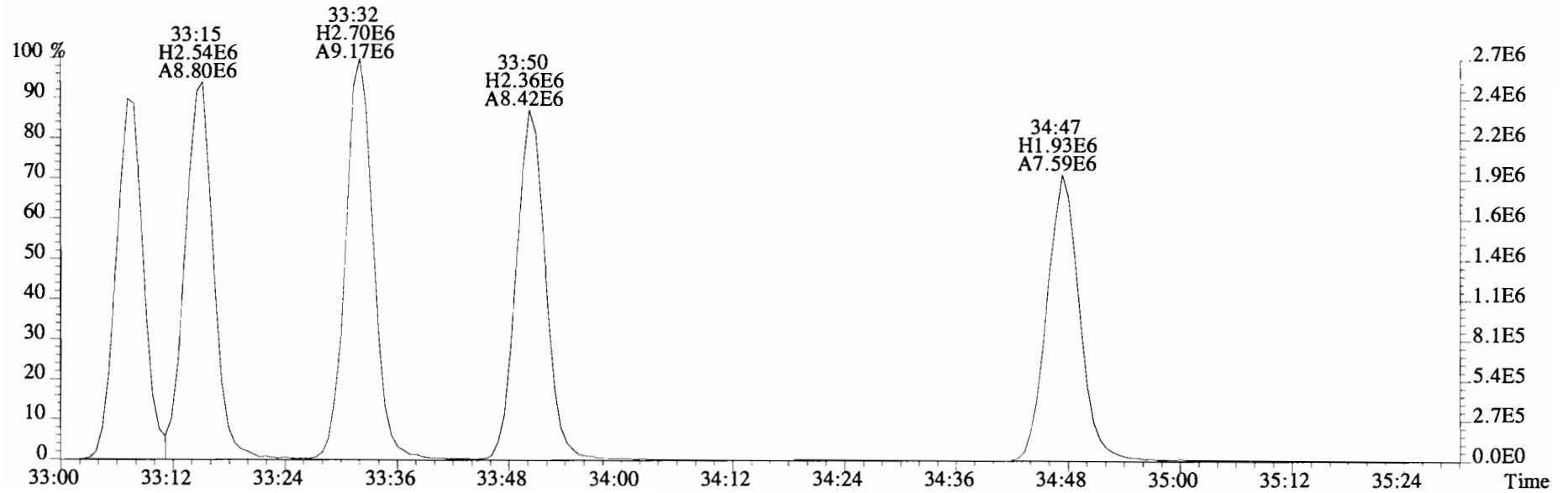
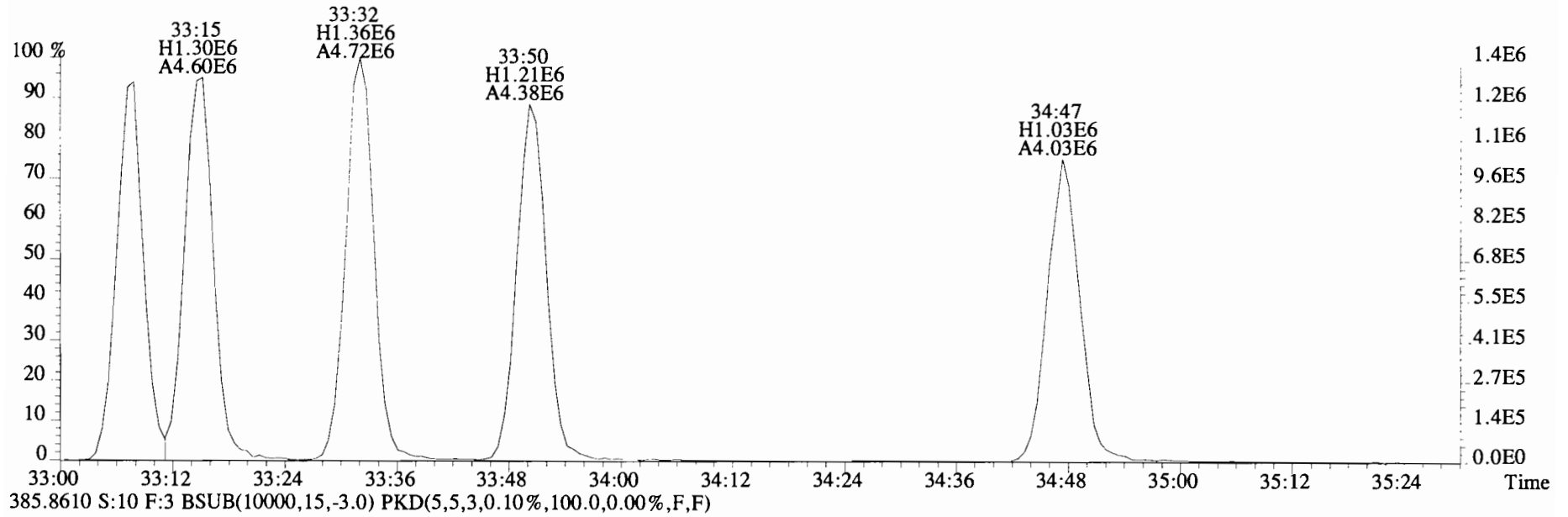
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



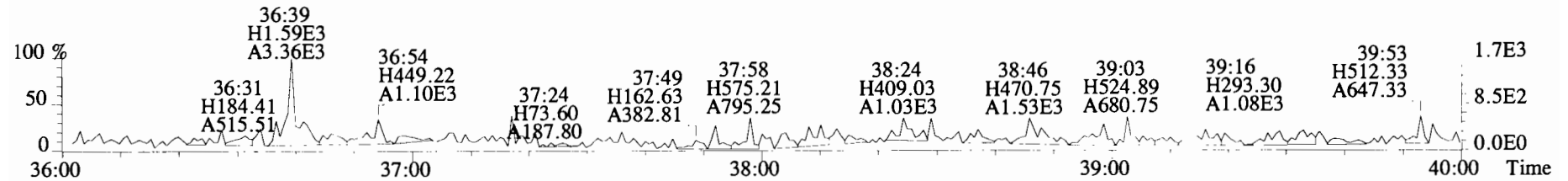
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



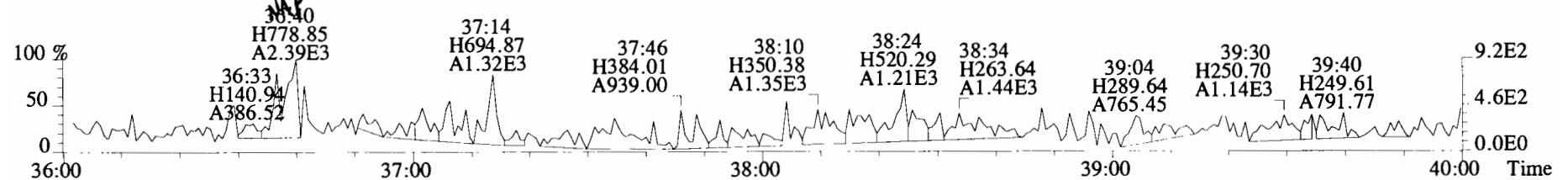
File:191119D1 #1-385 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



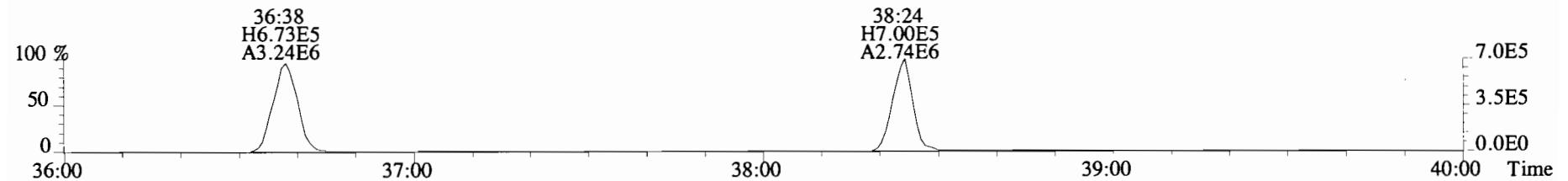
File:191119D1 #1-356 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



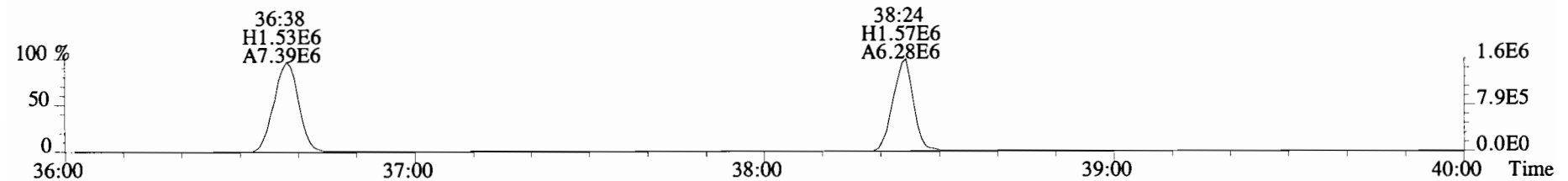
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



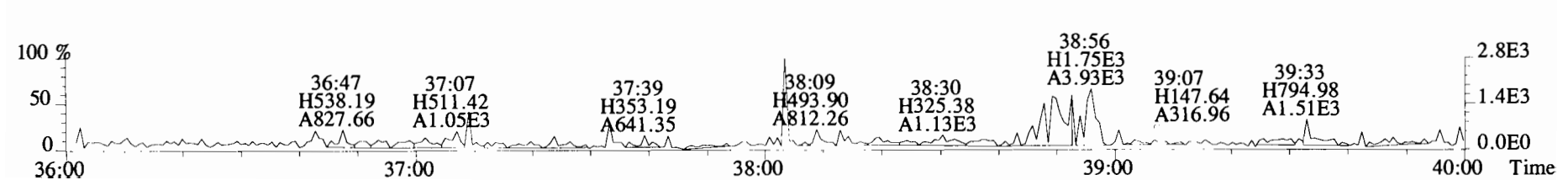
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



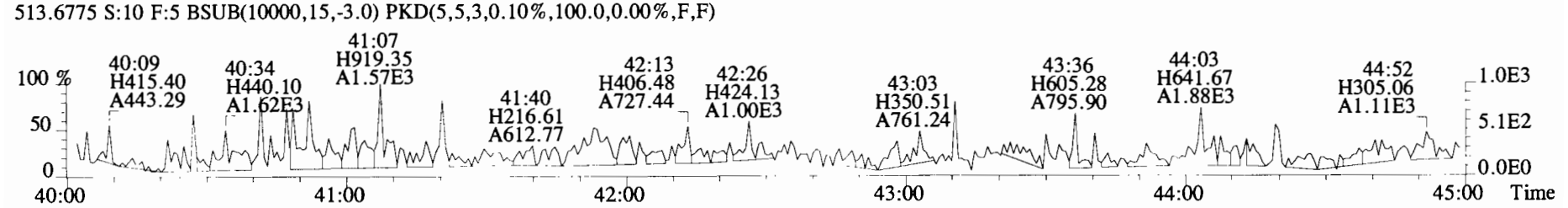
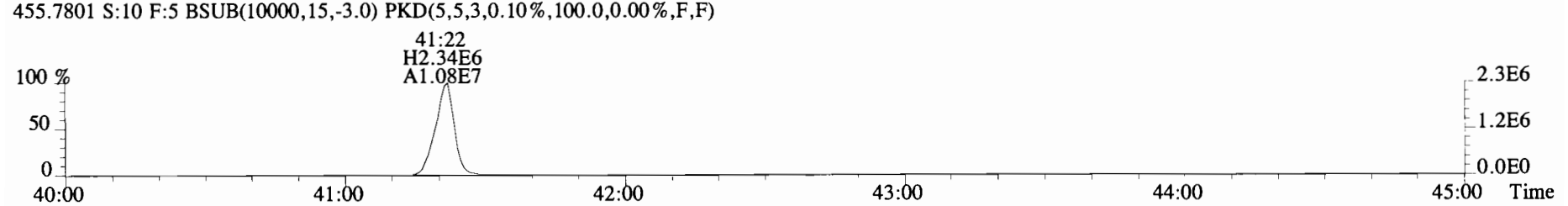
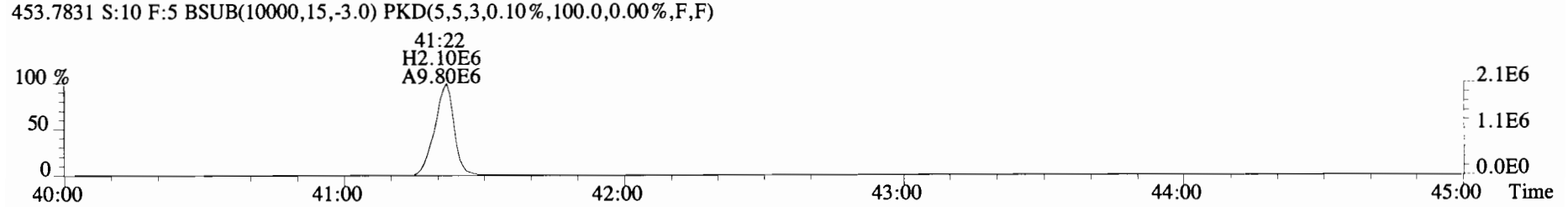
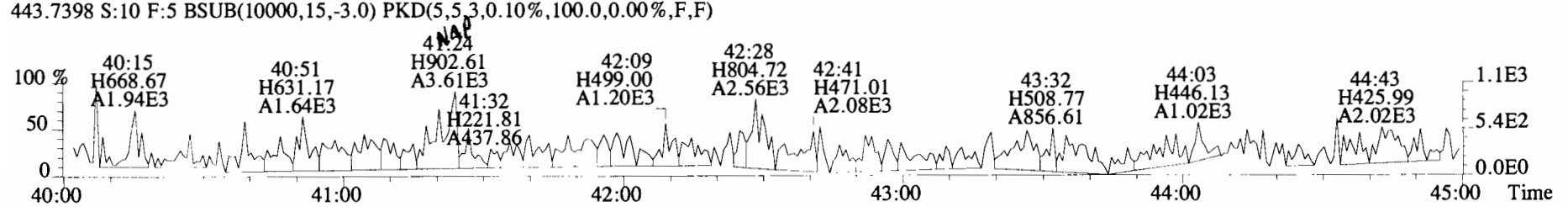
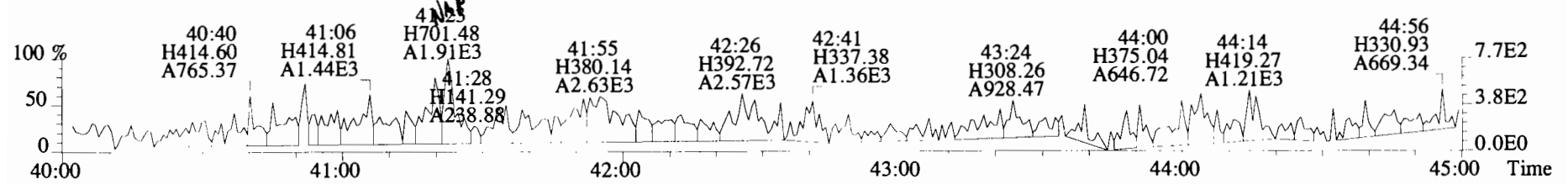
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191119D1 #1-431 Acq:19-NOV-2019 19:53:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BLK1 Method Blank 10 Exp:OCDD_DB5
441.7428 S:10 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: B9K0034-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 191119D1-5

Ext. Date: Shift: Day Analysis Date: 19-NOV-19 Time: 15:54:57

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	10.4	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	51.0	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	50.6	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	51.5	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	51.5	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	51.1	35.0 - 70.0
OCDD	100	98.8	78.0 - 144.0
2,3,7,8-TCDF	10	9.71	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	51.8	40.0 - 67.0
2,3,4,7,8-PeCDF	50	51.8	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	48.5	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	48.4	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	50.1	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	48.5	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	47.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	45.2	39.0 - 69.0
OCDF	100	96.5	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: 11/19/19

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B9K0034-BS1
 Contract No.: SAS No.:
 Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 191119D1-5
 Ext. Date: Shift: Day Analysis Date: 19-NOV-19 Time: 15:54:57

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	97.7	20.0 - 175.0 25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	89.4	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	92.7	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	82.4	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	85.9	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	92.4	26.0 - 166.0
13C-OCDD	200	180	26.0 - 397.0
13C-2,3,7,8-TCDF	100	98.8	22.0 - 152.0 26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	89.3	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	87.7	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	103	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	93.9	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	93.9	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	98.8	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	96.2	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	99.0	20.0 - 186.0
13C-OCDF	200	194	26.0 - 397.0
CLEANUP STANDARD			
37C1-2,3,7,8-TCDD	40	39.1	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: 11/19/19

Client ID: OPR
Lab ID: B9K0034-BS1

Filename: 191119D1 S:5 Acq:19-NOV-19 15:54:57
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191119D1-1
EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	1.41e+06	0.78 y	0.91	26:13	10.382	*	2.5	*	*
1,2,3,7,8-PeCDD	5.08e+06	0.61 y	0.90	30:43	51.031	*	2.5	*	*
1,2,3,4,7,8-HxCDD	5.18e+06	1.22 y	1.10	34:01	50.583	*	2.5	*	*
1,2,3,6,7,8-HxCDD	5.32e+06	1.24 y	0.94	34:08	51.506	*	2.5	*	*
1,2,3,7,8,9-HxCDD	5.36e+06	1.24 y	0.96	34:25	51.504	*	2.5	*	*
1,2,3,4,6,7,8-HpCDD	4.72e+06	1.01 y	0.98	37:52	51.129	*	2.5	*	*
OCDD	7.69e+06	0.91 y	0.96	41:08	98.783	*	2.5	*	*
2,3,7,8-TCDF	2.09e+06	0.80 y	0.95	25:27	9.7088	*	2.5	*	*
1,2,3,7,8-PeCDF	8.42e+06	1.57 y	0.96	29:33	51.812	*	2.5	*	*
2,3,4,7,8-PeCDF	8.68e+06	1.57 y	1.01	30:26	51.844	*	2.5	*	*
1,2,3,4,7,8-HxCDF	7.66e+06	1.25 y	1.18	33:08	48.519	*	2.5	*	*
1,2,3,6,7,8-HxCDF	7.84e+06	1.23 y	1.07	33:15	48.380	*	2.5	*	*
2,3,4,6,7,8-HxCDF	7.79e+06	1.24 y	1.11	33:51	50.098	*	2.5	*	*
1,2,3,7,8,9-HxCDF	6.57e+06	1.24 y	1.06	34:48	48.477	*	2.5	*	*
1,2,3,4,6,7,8-HpCDF	6.11e+06	1.07 y	1.13	36:39	47.661	*	2.5	*	*
1,2,3,4,7,8,9-HpCDF	5.20e+06	1.02 y	1.28	38:24	45.175	*	2.5	*	*
OCDF	9.52e+06	0.89 y	0.95	41:22	96.464	*	2.5	*	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.5	11.3	*	*	*
Total Penta-Dioxins	51.2	51.7	*	*	*
Total Hexa-Dioxins	154	154	*	*	*
Total Hepta-Dioxins	51.2	53.0	*	*	*
Total Tetra-Furans	9.97	10.5	*	*	*
Total Penta-Furans	104.53	105.58	*	*	*
Total Hexa-Furans	196	196	*	*	*
Total Hepta-Furans	93.2	94.3	*	*	*

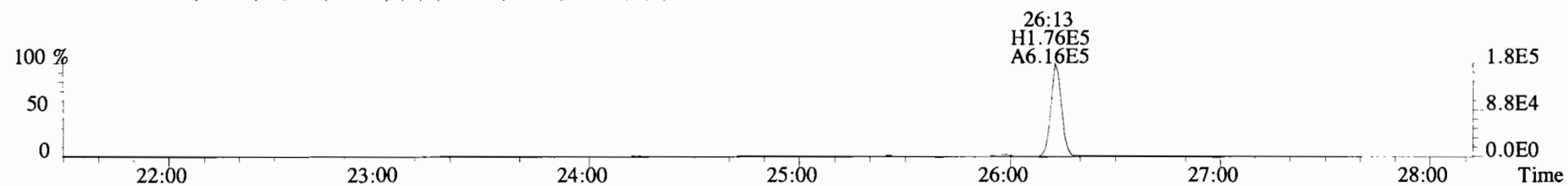
IS	13C-2,3,7,8-TCDD	1.50e+07	0.78 y	1.10	26:12	97.720
IS	13C-1,2,3,7,8-PeCDD	1.10e+07	0.64 y	0.88	30:42	89.374
IS	13C-1,2,3,4,7,8-HxCDD	9.30e+06	1.25 y	0.64	34:00	92.746
IS	13C-1,2,3,6,7,8-HxCDD	1.10e+07	1.27 y	0.86	34:07	82.375
IS	13C-1,2,3,7,8,9-HxCDD	1.08e+07	1.26 y	0.81	34:25	85.905
IS	13C-1,2,3,4,6,7,8-HpCDD	9.43e+06	0.96 y	0.65	37:51	92.415
IS	13C-OCDD	1.63e+07	0.91 y	0.58	41:07	179.59
IS	13C-2,3,7,8-TCDF	2.27e+07	0.80 y	1.03	25:25	98.796
IS	13C-1,2,3,7,8-PeCDF	1.69e+07	1.58 y	0.85	29:32	89.258
IS	13C-2,3,4,7,8-PeCDF	1.65e+07	1.62 y	0.85	30:25	87.712
IS	13C-1,2,3,4,7,8-HxCDF	1.34e+07	0.52 y	0.83	33:07	103.36
IS	13C-1,2,3,6,7,8-HxCDF	1.52e+07	0.52 y	1.03	33:15	93.903
IS	13C-2,3,4,6,7,8-HxCDF	1.40e+07	0.51 y	0.95	33:50	93.880
IS	13C-1,2,3,7,8,9-HxCDF	1.28e+07	0.51 y	0.83	34:47	98.801
IS	13C-1,2,3,4,6,7,8-HpCDF	1.14e+07	0.44 y	0.76	36:38	96.216
IS	13C-1,2,3,4,7,8,9-HpCDF	8.99e+06	0.43 y	0.58	38:24	99.049
IS	13C-OCDF	2.08e+07	0.90 y	0.69	41:21	193.71
C/Up	37C1-2,3,7,8-TCDD	6.55e+06		1.20	26:13	39.065
RS/RT	13C-1,2,3,4-TCDD	1.40e+07	0.77 y	1.00	25:38	100.00
RS	13C-1,2,3,4-TCDF	2.22e+07	0.77 y	1.00	24:13	100.00
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.56e+07	0.52 y	1.00	33:32	100.00

Rec Qual
97.7
89.4
92.7
82.4
85.9
92.4
89.8
98.8
89.3
87.7
103
93.9
93.9
98.8
96.2
99.0
96.9

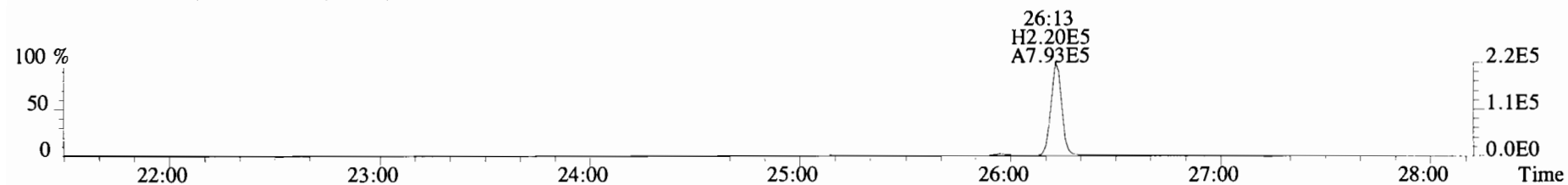
Integrations
by DB
Analyst: DB
Date: 11/19/19

Reviewed
by CT
Analyst: CT
Date: 11/27/19

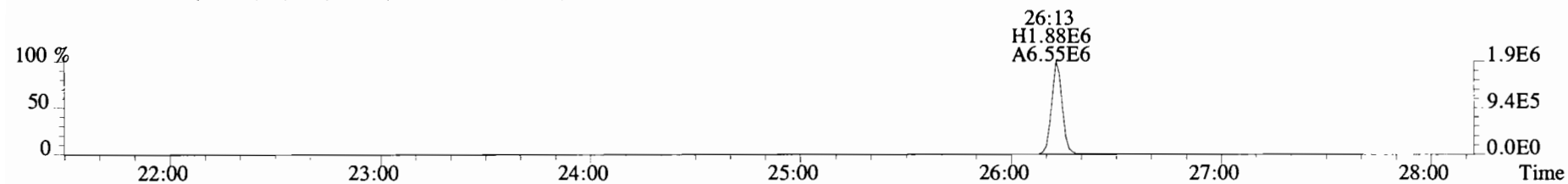
File:191119D1 #1-492 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



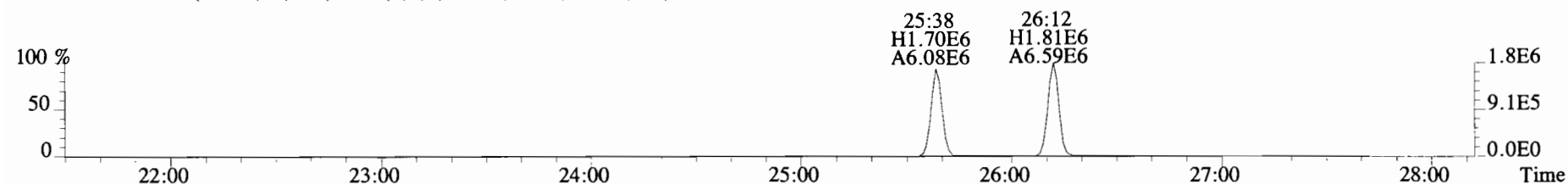
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



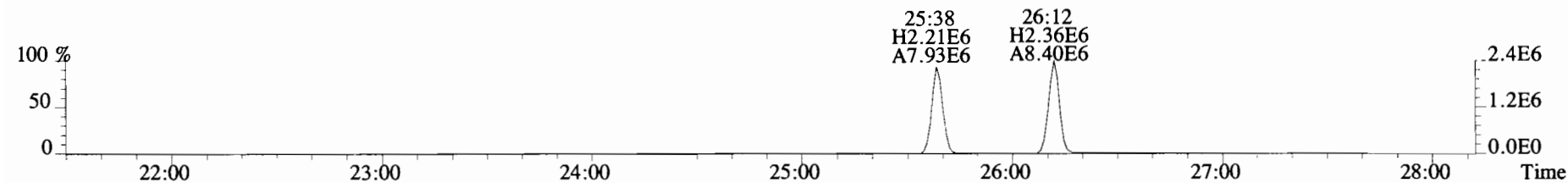
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



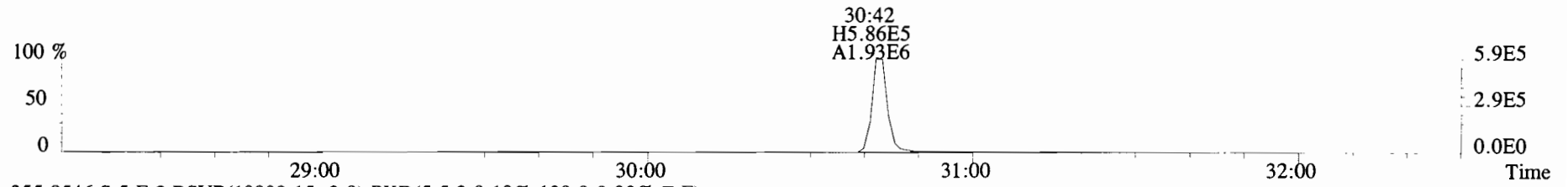
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



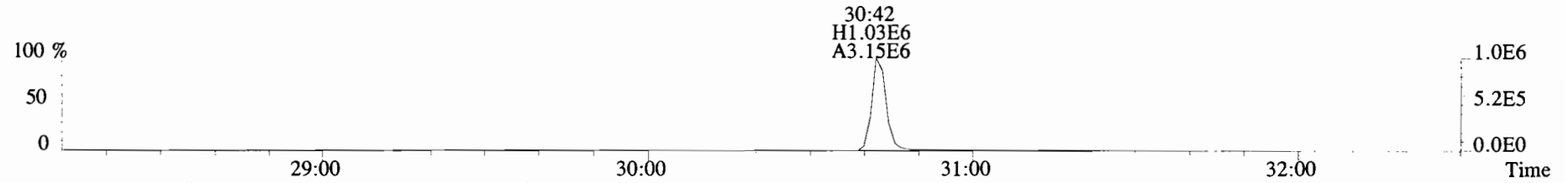
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



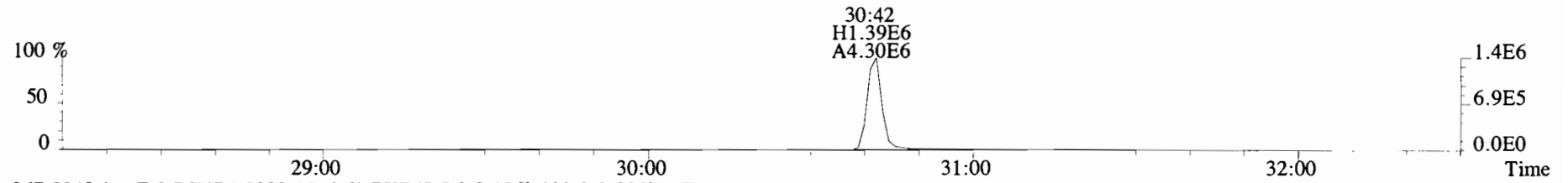
File:191119D1 #1-210 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



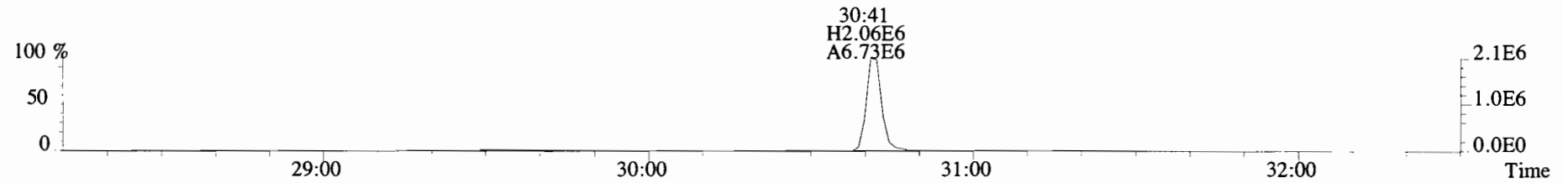
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



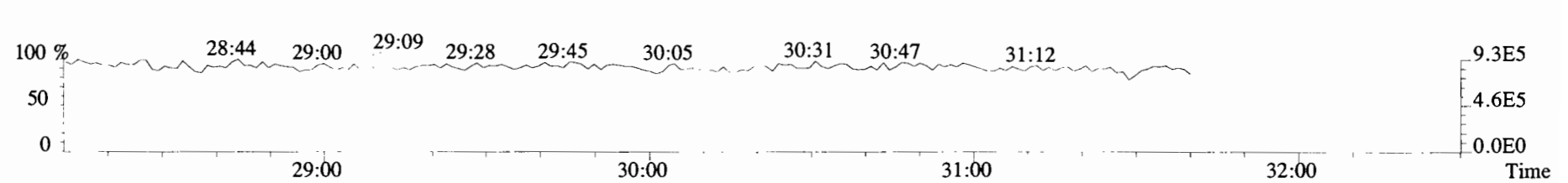
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



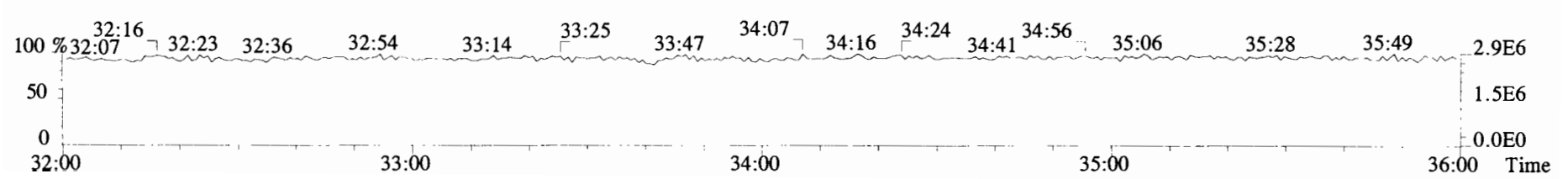
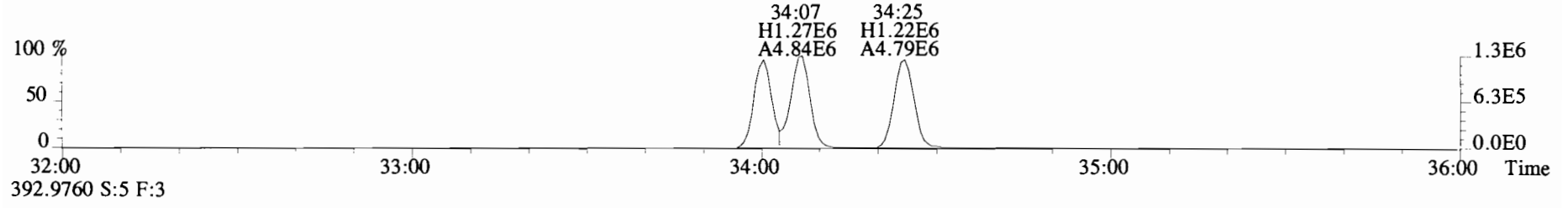
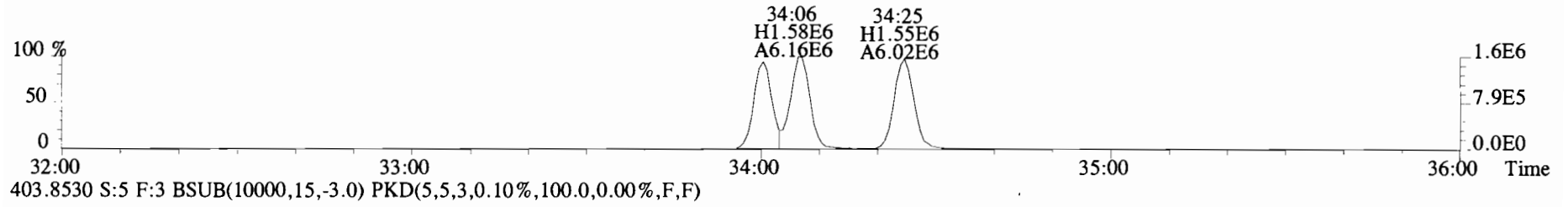
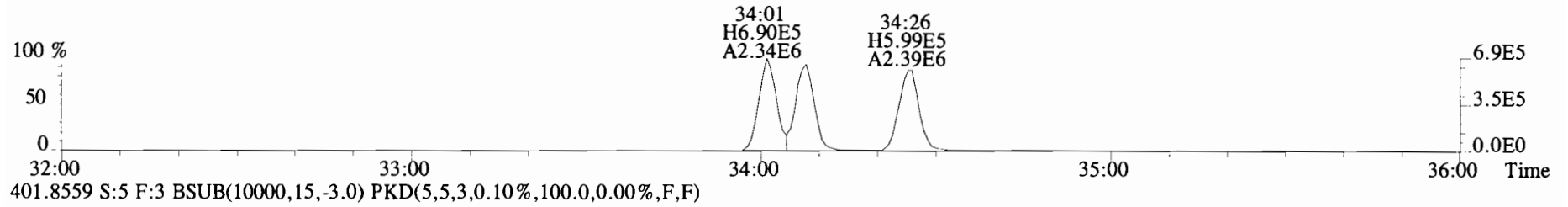
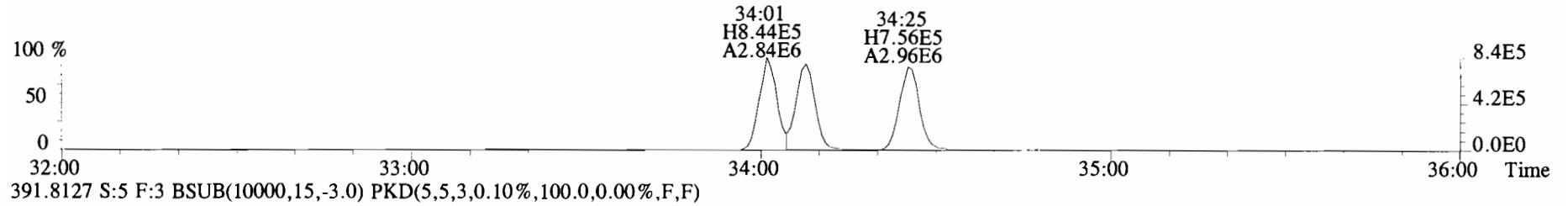
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



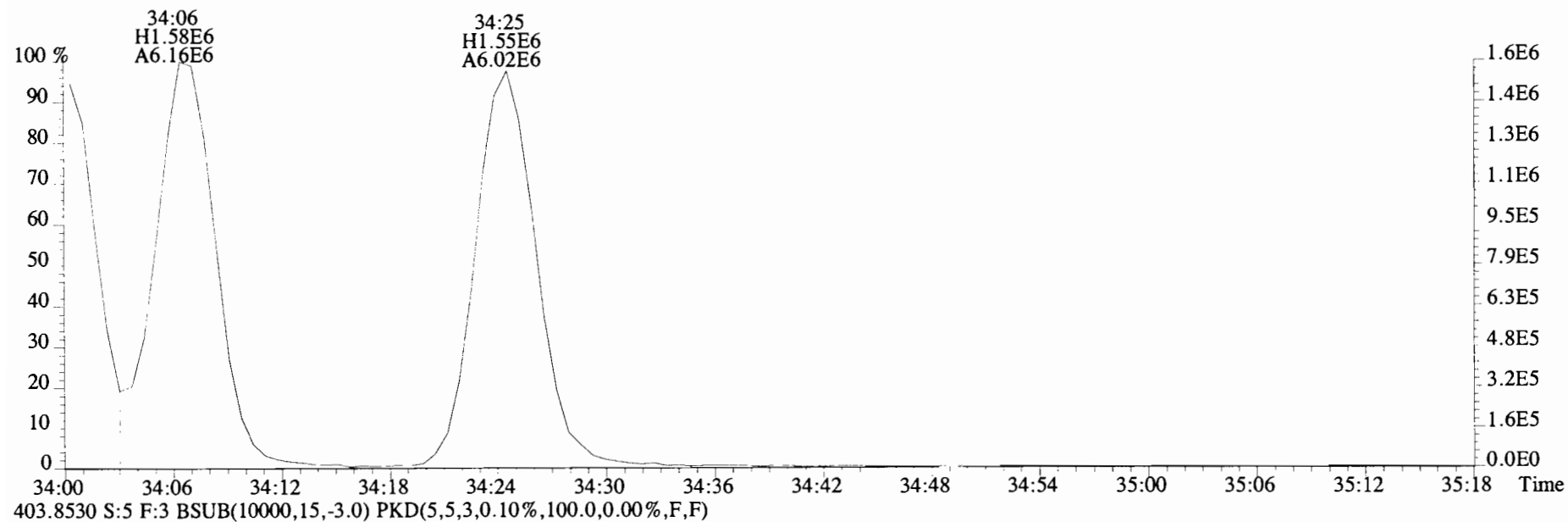
366.9792 S:5 F:2



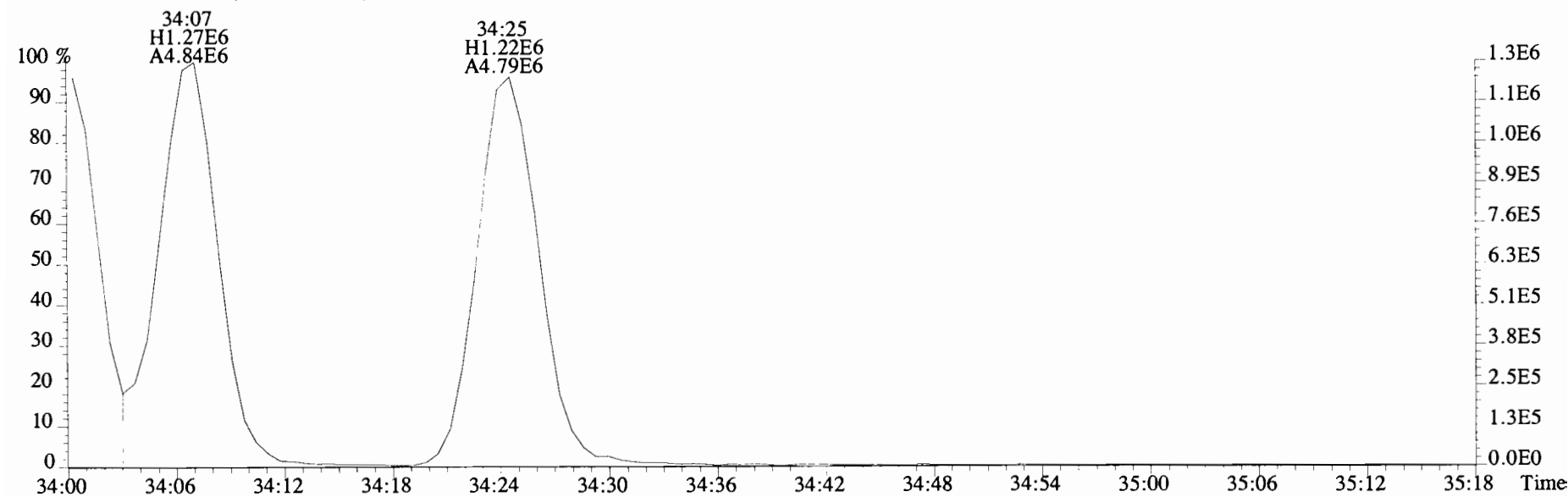
File:191119D1 #1-385 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



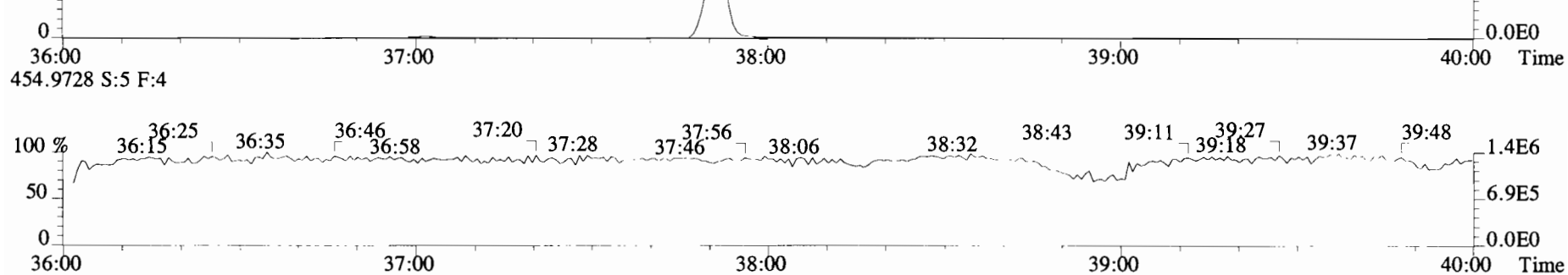
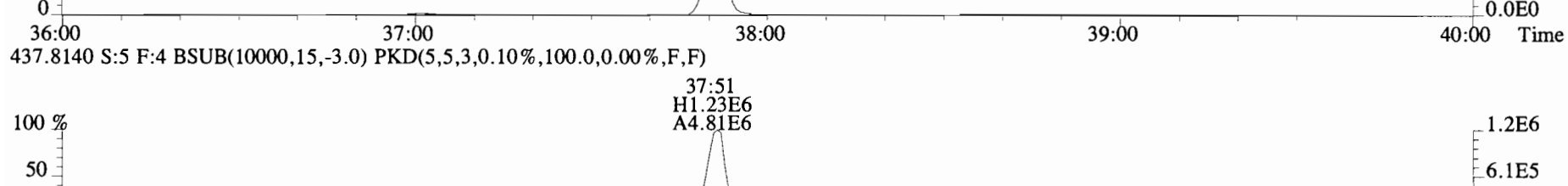
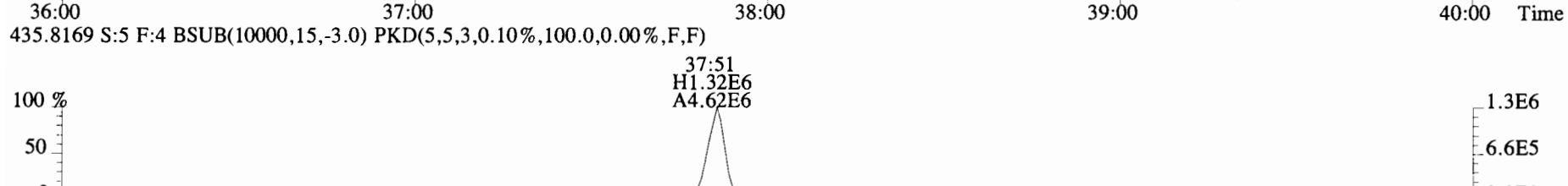
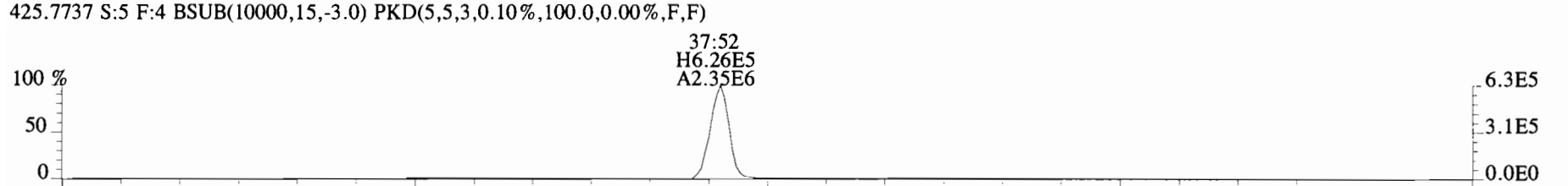
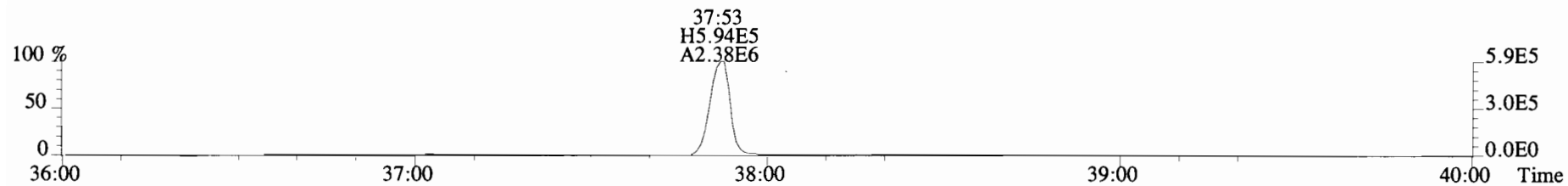
File:191119D1 #1-385 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



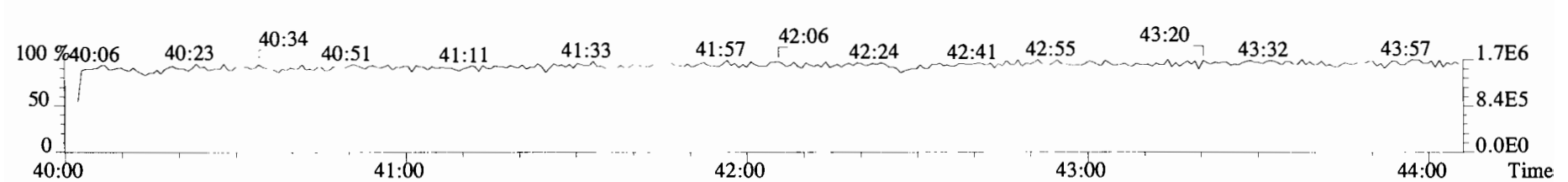
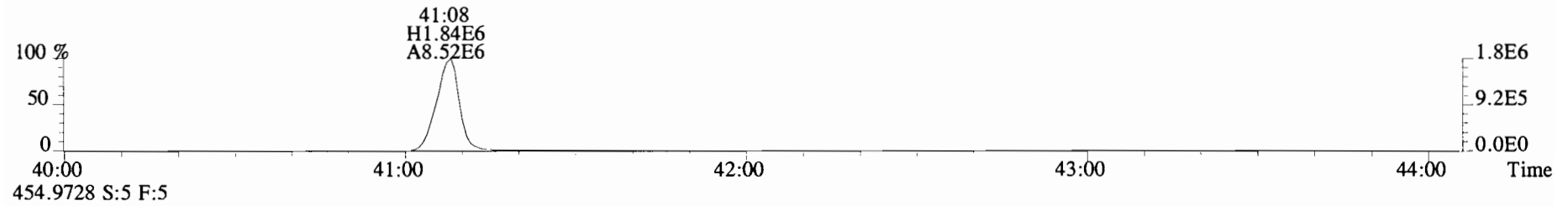
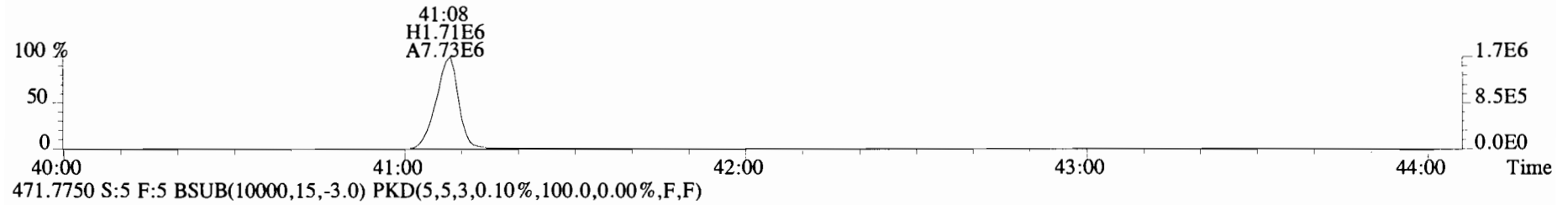
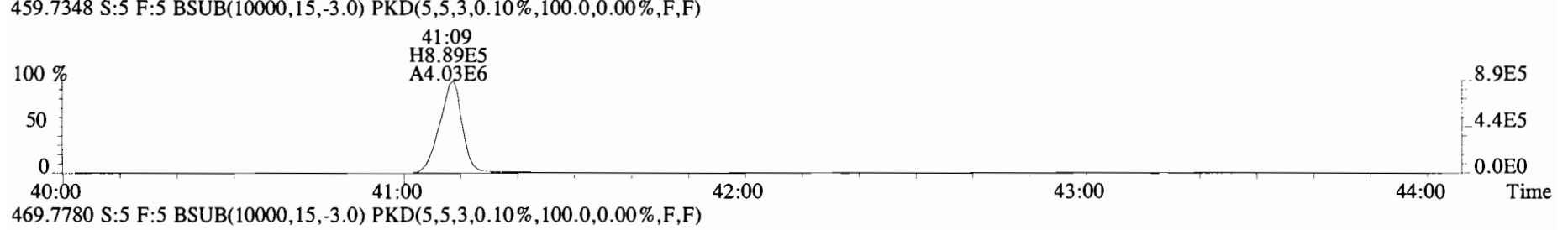
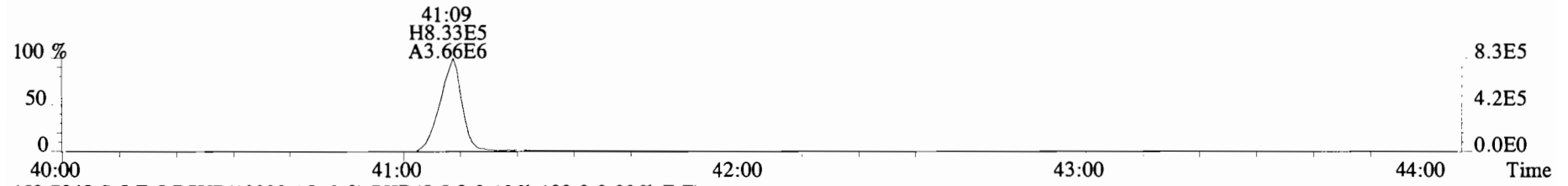
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



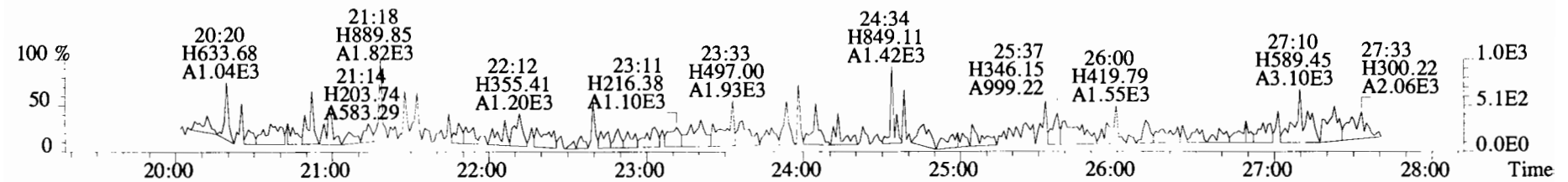
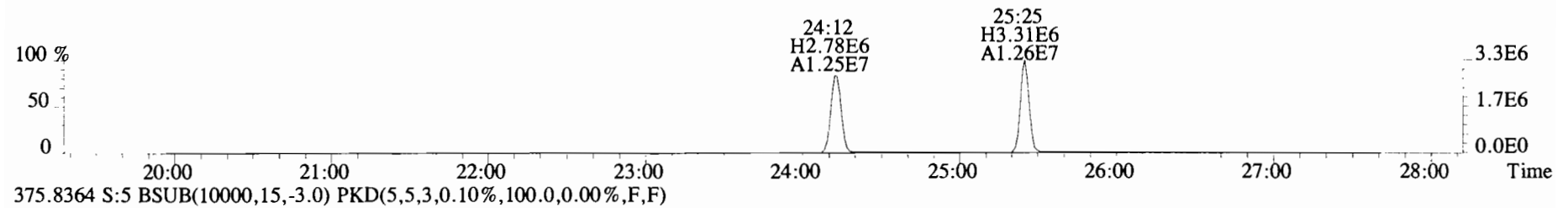
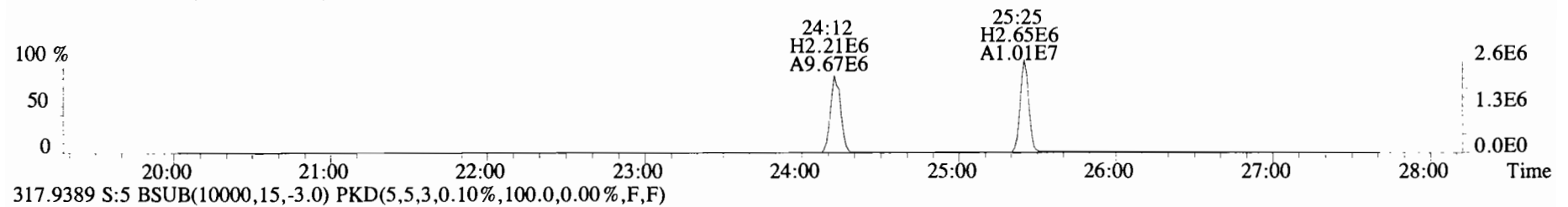
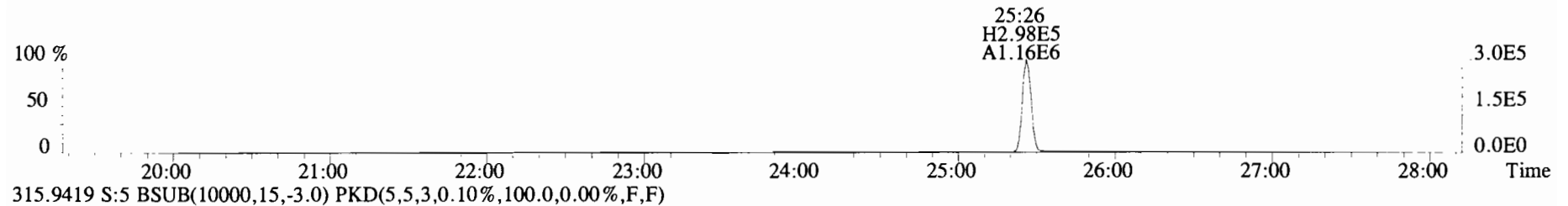
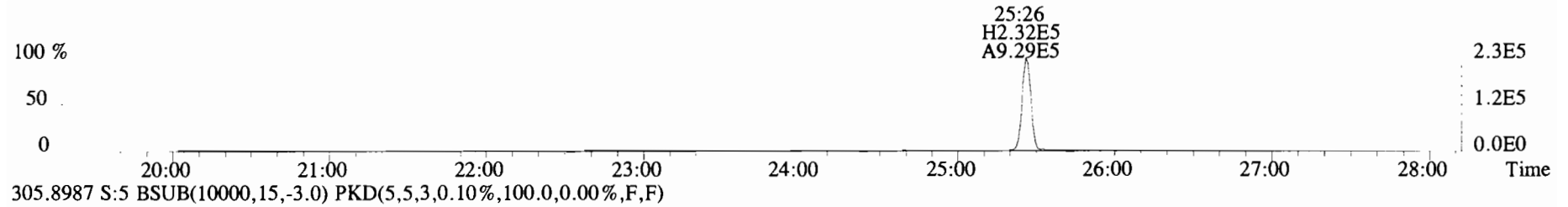
File:191119D1 #1-356 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



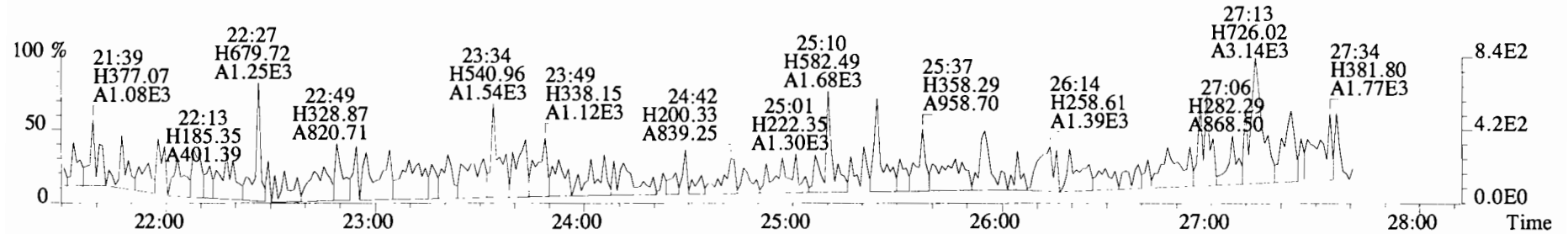
File:191119D1 #1-431 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



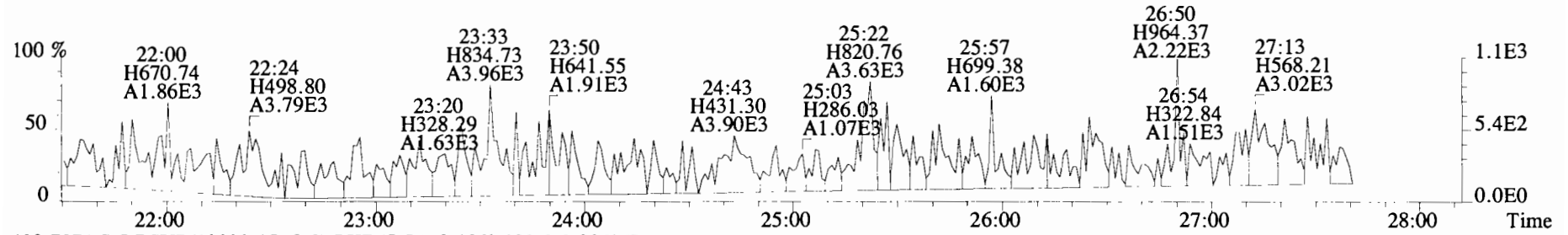
File:191119D1 #1-492 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



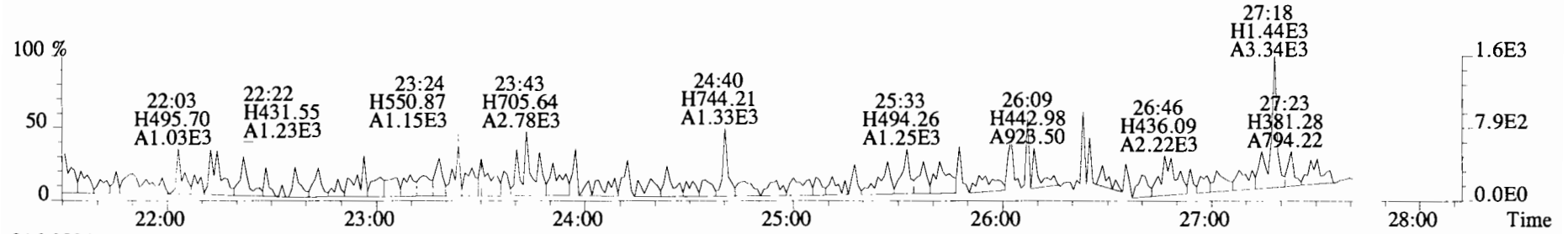
File:191119D1 #1-492 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



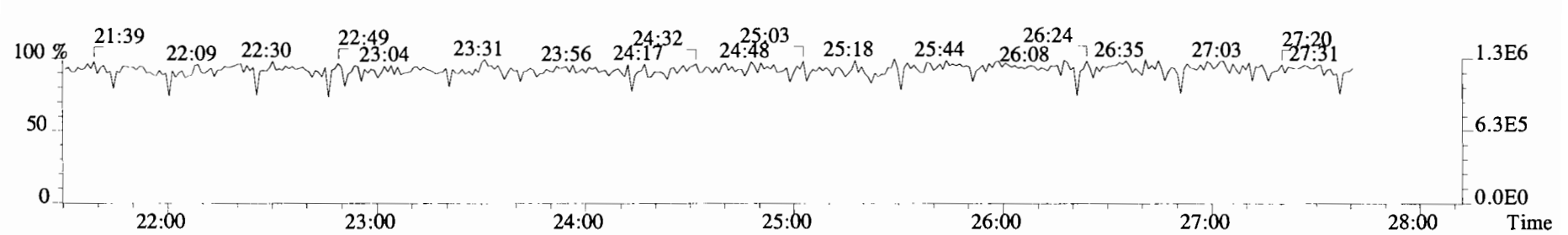
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



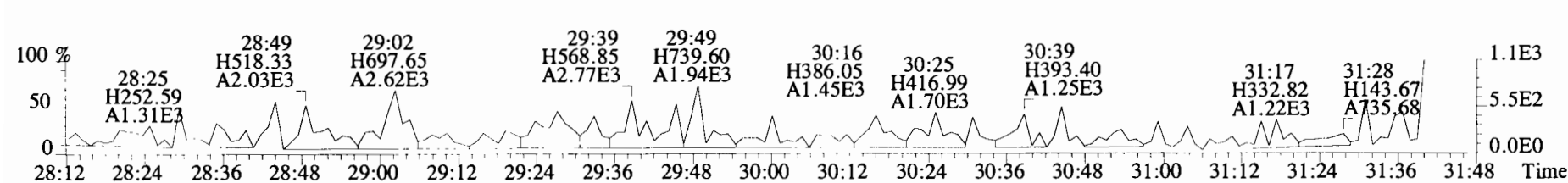
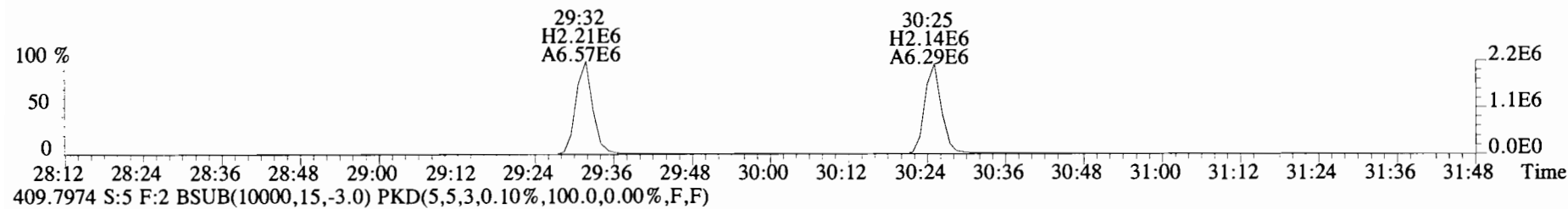
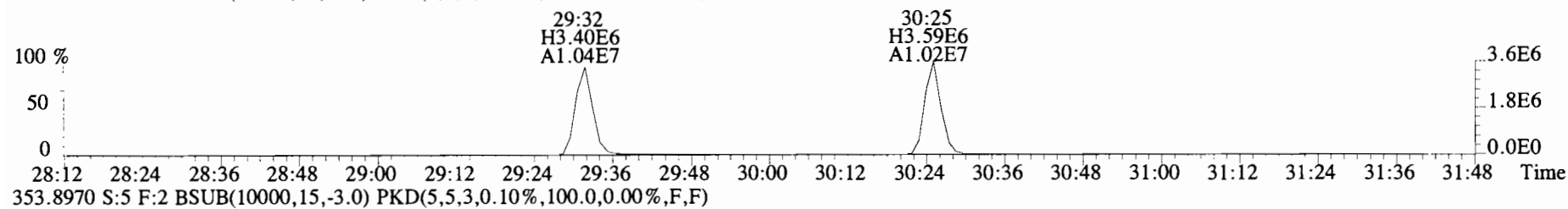
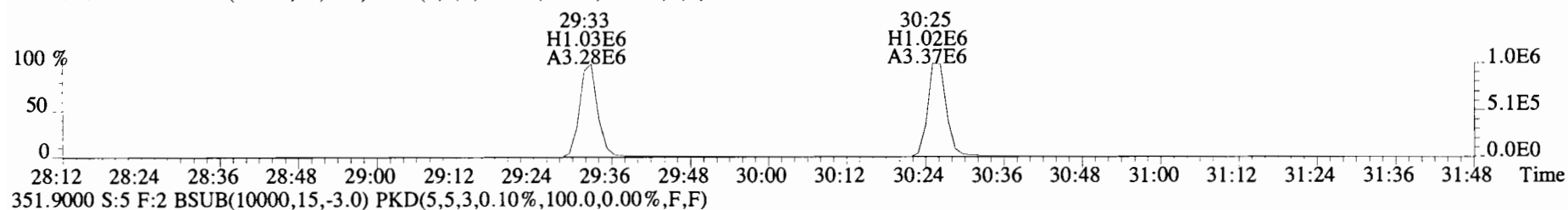
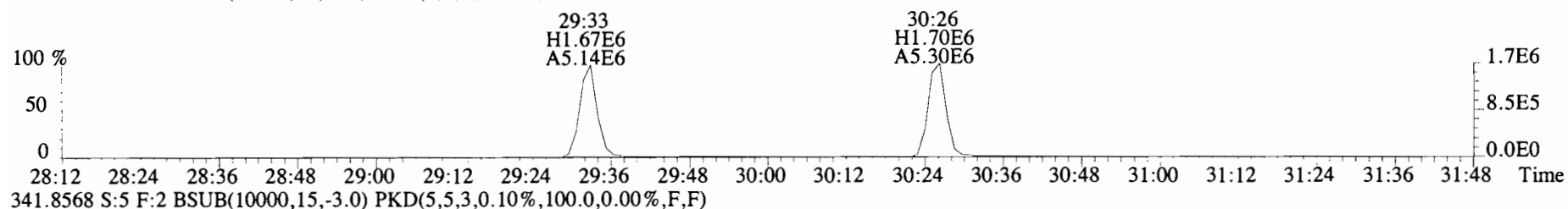
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



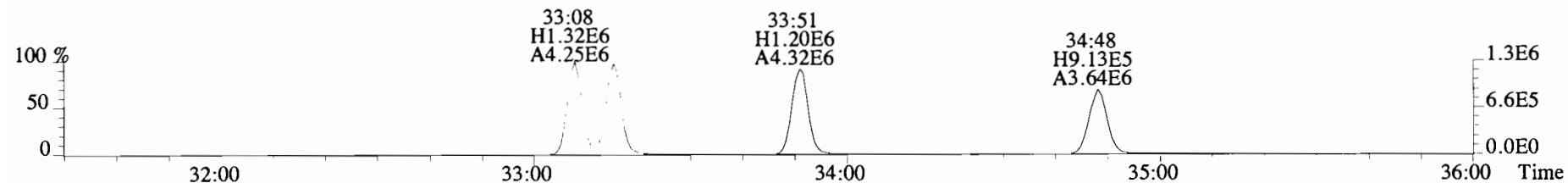
316.9824 S:5



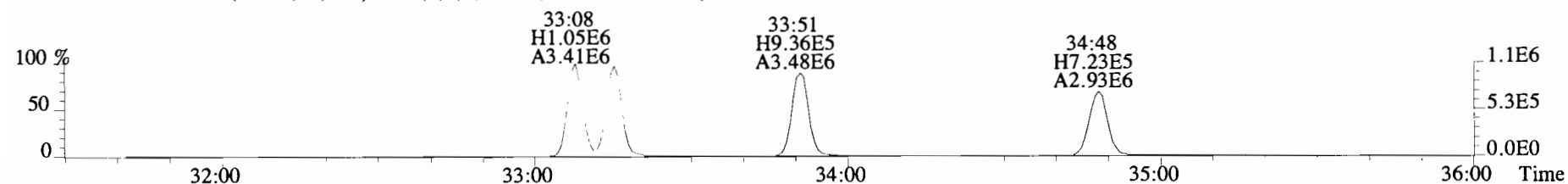
File:191119D1 #1-210 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



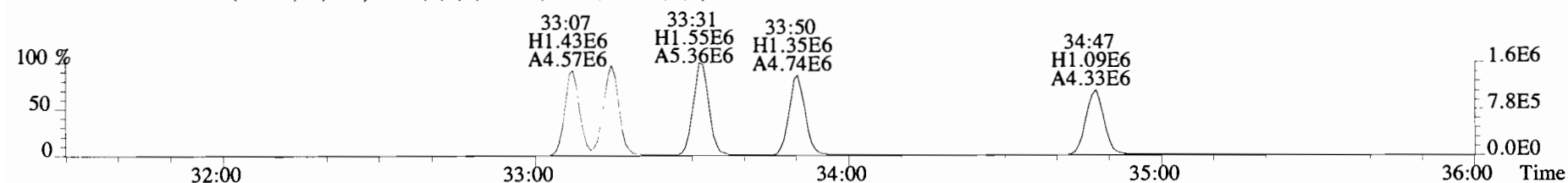
File:191119D1 #1-385 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
 373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



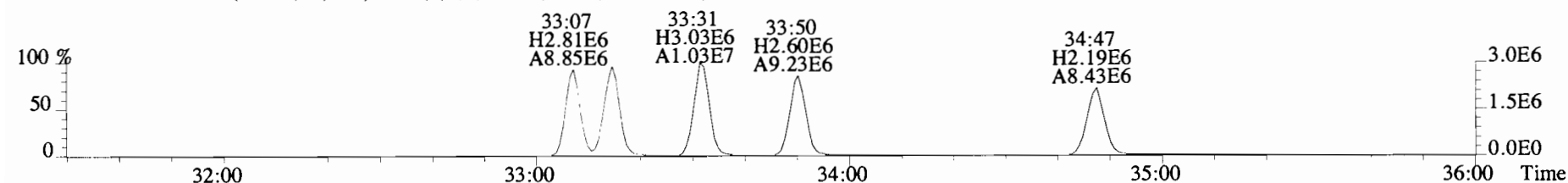
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



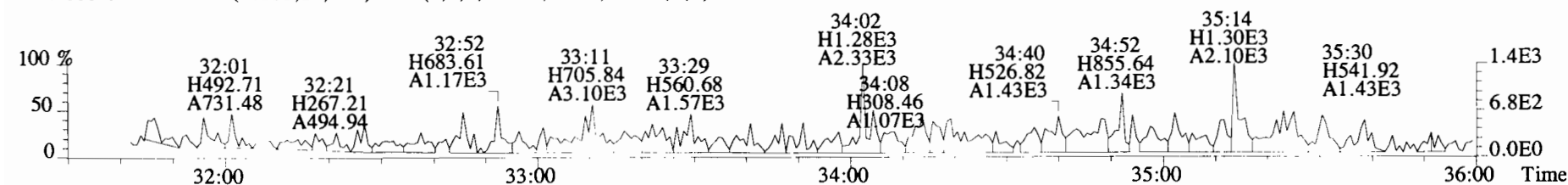
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



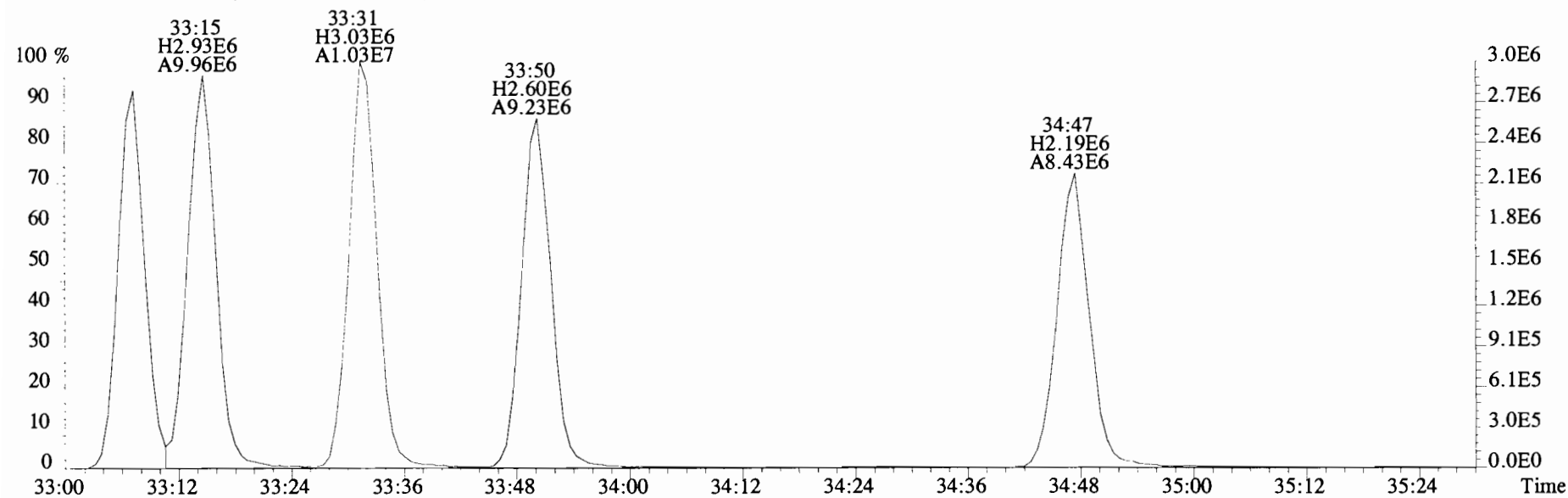
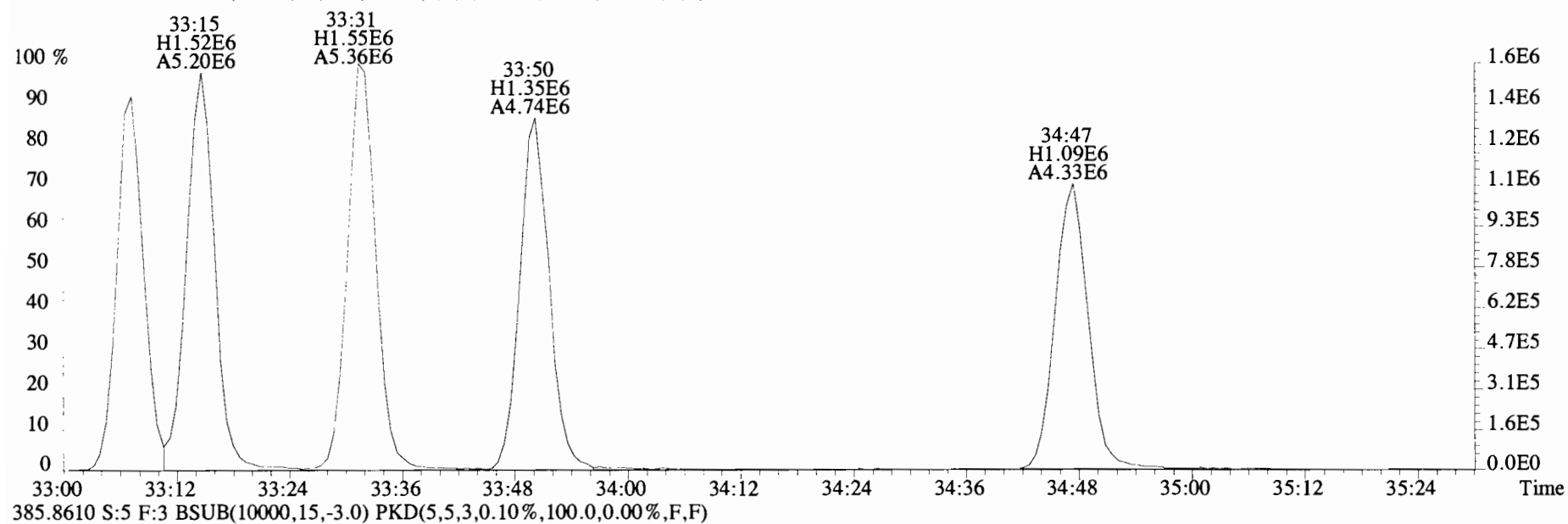
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



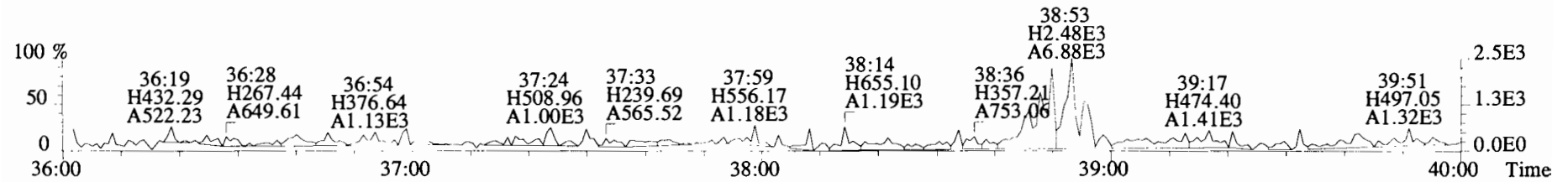
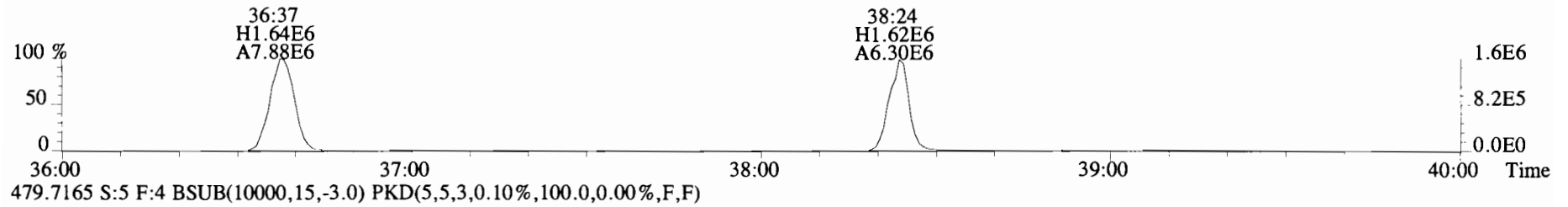
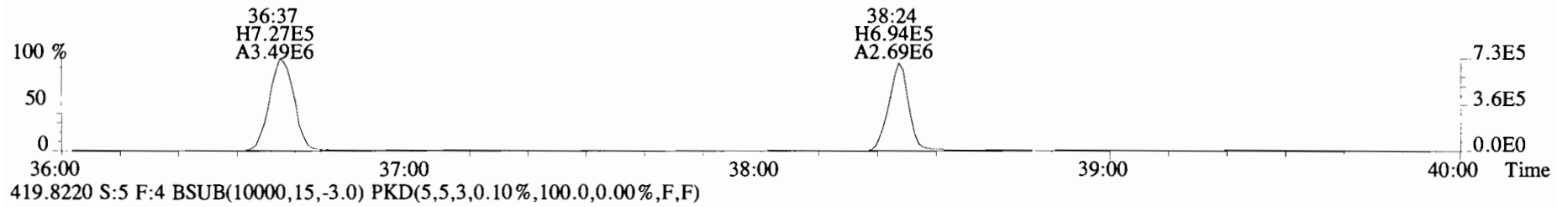
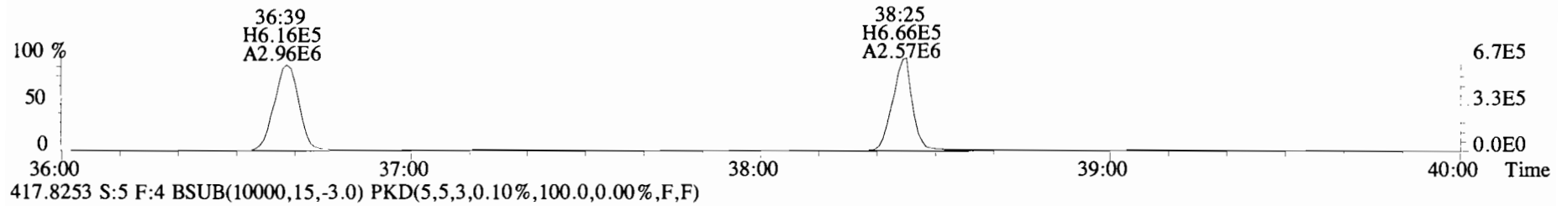
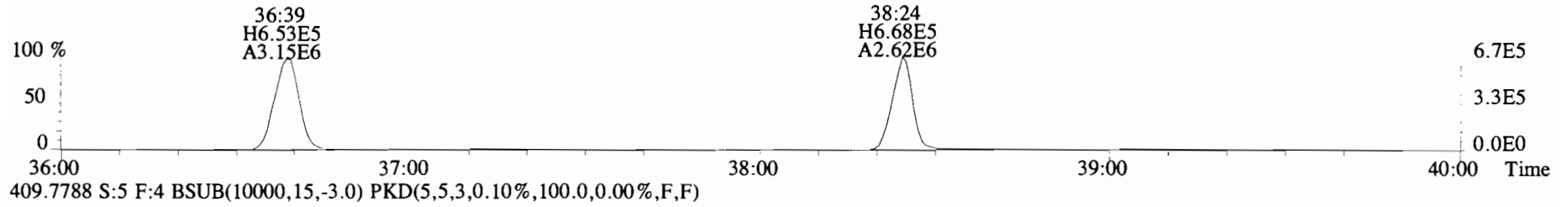
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



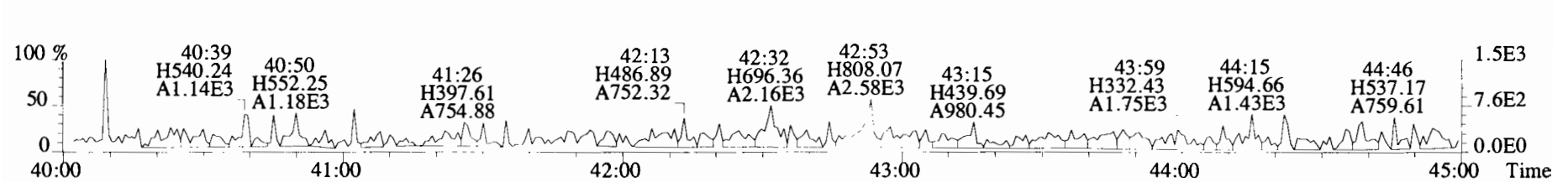
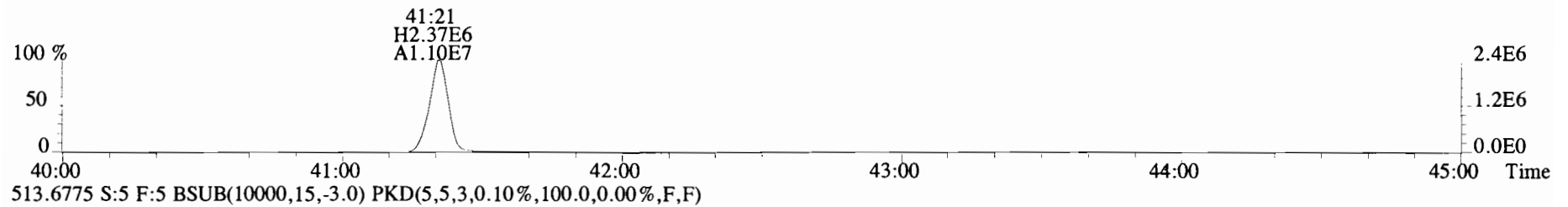
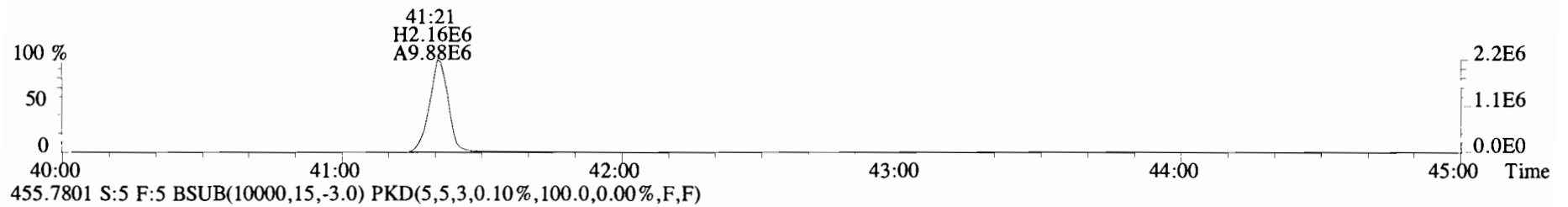
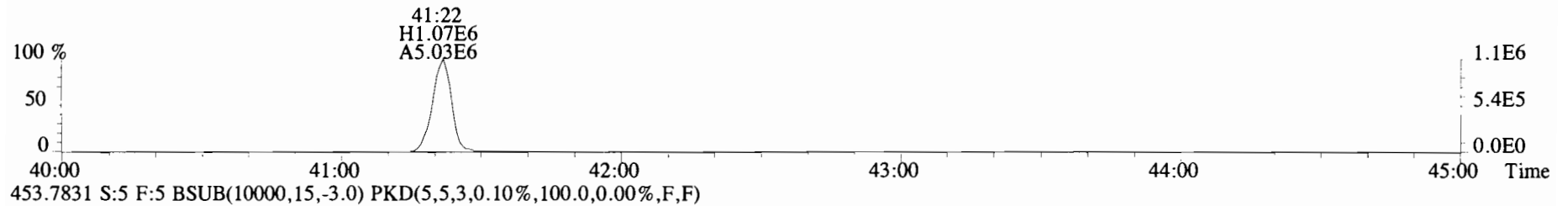
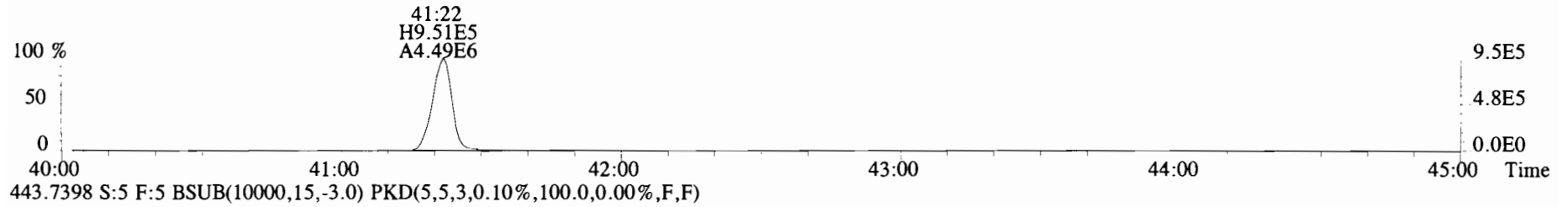
File:191119D1 #1-385 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:B9K0034-BS1 OPR 10 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191119D1 #1-356 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 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)



File:191119D1 #1-431 Acq:19-NOV-2019 15:54:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:B9K0034-BS1 OPR 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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	*	* n	0.91	Not F η	*		116	2.5	0.0731
1,2,3,7,8-PeCDD	*	* n	0.90	Not F η	*		157	2.5	0.106
1,2,3,4,7,8-HxCDD	*	* n	1.10	Not F η	*		176	2.5	0.150
1,2,3,6,7,8-HxCDD	*	* n	0.94	Not F η	*		176	2.5	0.159
1,2,3,7,8,9-HxCDD	*	* n	0.96	Not F η	*		176	2.5	0.159
1,2,3,4,6,7,8-HpCDD	3.67e+04	0.91 y	0.98	37:56	1.6471		*	2.5	*
OCDD	2.44e+05	0.89 y	0.96	41:14	13.752		*	2.5	*
2,3,7,8-TCDF	*	* n	0.95	Not F η	*		172	2.5	0.0715
1,2,3,7,8-PeCDF	*	* n	0.96	Not F η	*		160	2.5	0.0878
2,3,4,7,8-PeCDF	*	* n	1.01	Not F η	*		160	2.5	0.0811
1,2,3,4,7,8-HxCDF	*	* n	1.18	Not F η	*		122	2.5	0.0419
1,2,3,6,7,8-HxCDF	*	* n	1.07	Not F η	*		122	2.5	0.0449
2,3,4,6,7,8-HxCDF	*	* n	1.11	Not F η	*		122	2.5	0.0478
1,2,3,7,8,9-HxCDF	*	* n	1.06	Not F η	*		122	2.5	0.0575
1,2,3,4,6,7,8-HpCDF	2.91e+03	0.83 n	1.13	36:44	0.088908		*	2.5	*
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	Not F η	*		106	2.5	0.0459
OCDF	*	* n	0.95	Not F η	*		178	2.5	0.160

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	0.531	0.692	*	*	*
Total Penta-Dioxins	*	0.241	*	*	*
Total Hexa-Dioxins	1.91	1.91	*	*	*
Total Hepta-Dioxins	4.63	4.63	*	*	*
Total Tetra-Furans	*	0.302	*	*	*
Total Penta-Furans	0.0000	0.0000		160	0.0843
Total Hexa-Furans	*	*		122	0.0478
Total Hepta-Furans	*	0.0889	*	*	*

IS	13C-2,3,7,8-TCDD	5.76e+06	0.81 y	1.10	26:17	191.27	95.7
IS	13C-1,2,3,7,8-PeCDD	4.05e+06	0.65 y	0.88	30:46	167.18	83.7
IS	13C-1,2,3,4,7,8-HxCDD	4.26e+06	1.22 y	0.64	34:05	192.54	96.4
IS	13C-1,2,3,6,7,8-HxCDD	4.76e+06	1.21 y	0.86	34:11	161.31	80.7
IS	13C-1,2,3,7,8,9-HxCDD	4.89e+06	1.24 y	0.81	34:29	175.92	88.1
IS	13C-1,2,3,4,6,7,8-HpCDD	4.54e+06	1.06 y	0.65	37:56	201.31	101
IS	13C-OCDD	7.39e+06	0.92 y	0.58	41:13	369.48	92.5
IS	13C-2,3,7,8-TCDF	8.27e+06	0.77 y	1.03	25:30	185.22	92.7
IS	13C-1,2,3,7,8-PeCDF	7.13e+06	1.60 y	0.85	29:36	193.32	96.8
IS	13C-2,3,4,7,8-PeCDF	6.92e+06	1.58 y	0.85	30:29	189.41	94.8
IS	13C-1,2,3,4,7,8-HxCDF	5.93e+06	0.51 y	0.83	33:11	206.68	103
IS	13C-1,2,3,6,7,8-HxCDF	6.62e+06	0.51 y	1.03	33:19	185.61	92.9
IS	13C-2,3,4,6,7,8-HxCDF	5.97e+06	0.50 y	0.95	33:54	181.49	90.8
IS	13C-1,2,3,7,8,9-HxCDF	5.85e+06	0.49 y	0.83	34:52	205.06	103
IS	13C-1,2,3,4,6,7,8-HpCDF	5.80e+06	0.43 y	0.76	36:43	221.94	111
IS	13C-1,2,3,4,7,8,9-HpCDF	4.94e+06	0.43 y	0.58	38:28	246.27	123
IS	13C-OCDF	9.93e+06	0.90 y	0.69	41:26	418.01	105

Rec Qual

88.7

Integrations
 by
 Analyst: DB

Reviewed
 by
 Analyst: CT

Date: 11/6/19

Date: 12/03/19

C/Up	37Cl-2,3,7,8-TCDD	2.33e+06		1.20	26:18	70.897	
RS/RT	13C-1,2,3,4-TCDD	5.49e+06	0.83 y	1.00	25:43	199.78	
RS	13C-1,2,3,4-TCDF	8.62e+06	0.81 y	1.00	24:18	199.78	
RS/RT	13C-1,2,3,4,6,9-HxCDF	6.89e+06	0.51 y	1.00	33:36	199.78	

Totals class: TCDD EMPC

Entry #: 19

Run: 8 File: 191031D2 S: 3 I: 1 F: 1
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 0.69197

Unnamed Concentration: 0.692

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
23:42	2.829e+03	2.373e+03	1.19	n	4.201e+03	0.16090
24:26	5.841e+03	8.024e+03	0.73	y	1.386e+04	0.53107

Totals class: PeCDD EMPC

Entry #: 21

Run: 8 File: 191031D2 S: 3 I: 1 F: 2
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 0.24073

Unnamed Concentration: 0.241

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
29:11	2.280e+03	2.704e+03	0.84 n	4.408e+03	0.24073

Totals class: HxCDD EMPC

Entry #: 23

Run: 8 File: 191031D2 S: 3 I: 1 F: 3
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 1.9089

Unnamed Concentration: 1.909

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:33	1.653e+04	1.432e+04	1.15 y		3.086e+04	1.3398
33:23	7.154e+03	5.952e+03	1.20 y		1.311e+04	0.56907

Totals class: HpCDD EMPC

Entry #: 25

Run: 8 File: 191031D2 S: 3 I: 1 F: 4
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 4.6317

Unnamed Concentration: 2.985

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:06	3.298e+04	3.345e+04	0.99 y	6.643e+04	2.9846
37:56	1.745e+04	1.922e+04	0.91 y	3.666e+04	1.6471 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 8 File: 191031D2 S: 3 I: 1 F: 1
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 0.30151

Unnamed Concentration: 0.302

RT	ml Resp	m2 Resp	RA	Resp Concentration	Name
22:02	7.033e+03	6.701e+03	1.05 n	1.186e+04	0.30151

Totals class: HpCDF EMPC

Entry #: 35

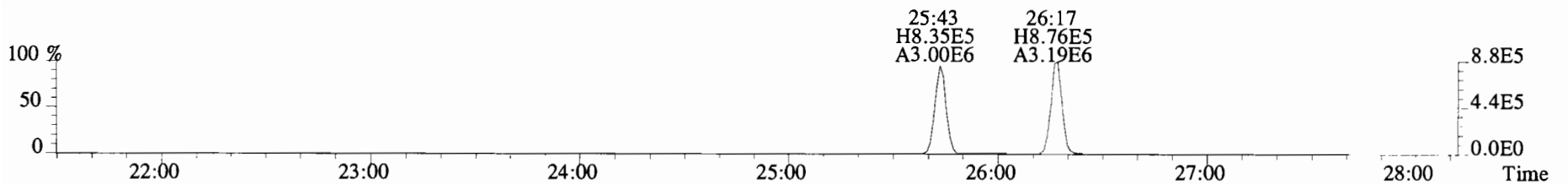
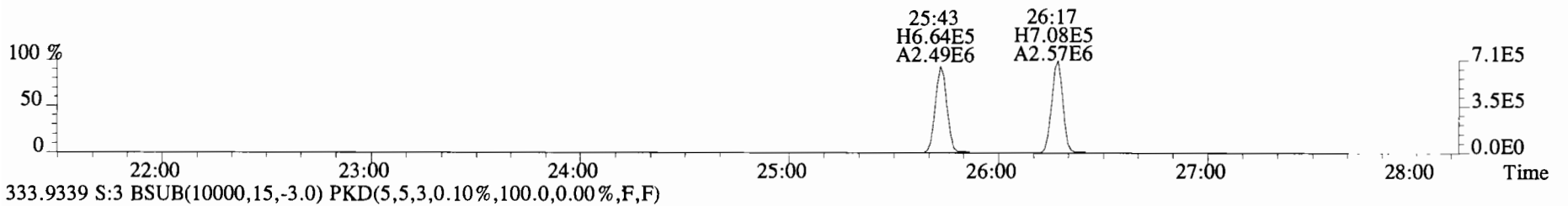
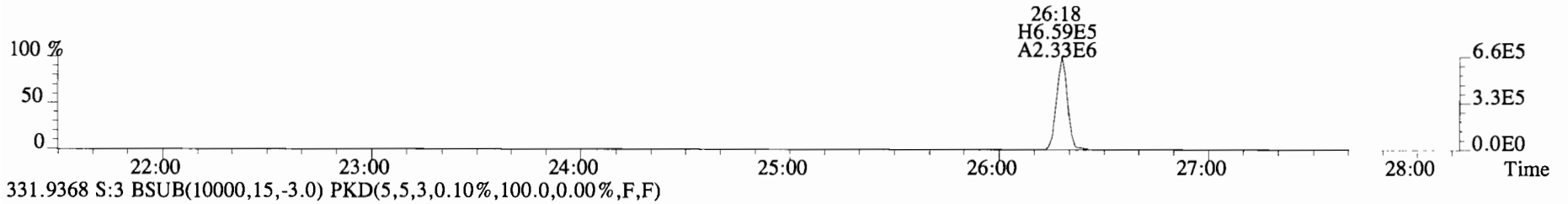
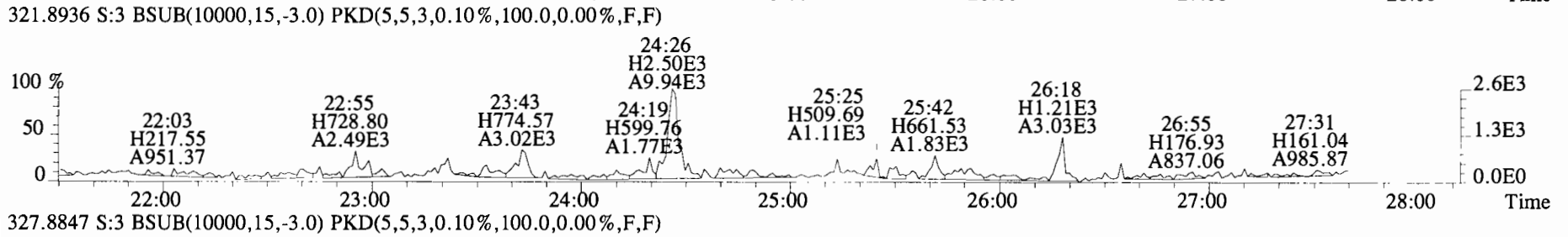
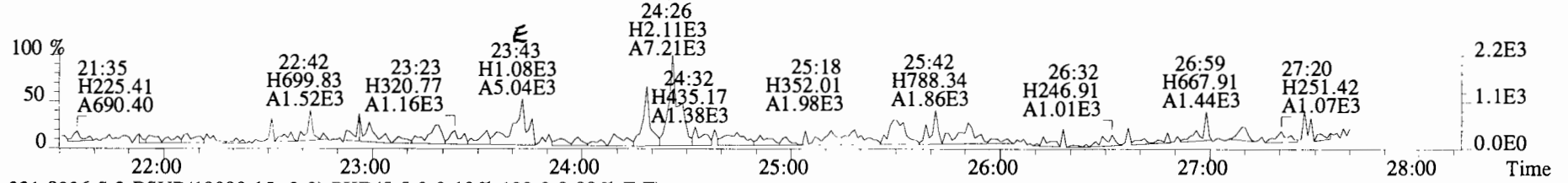
Run: 8 File: 191031D2 S: 3 I: 1 F: 4
Acquired: 1-NOV-19 01:18:40 Processed: 1-NOV-19 12:03:14

Total Concentration: 0.088908

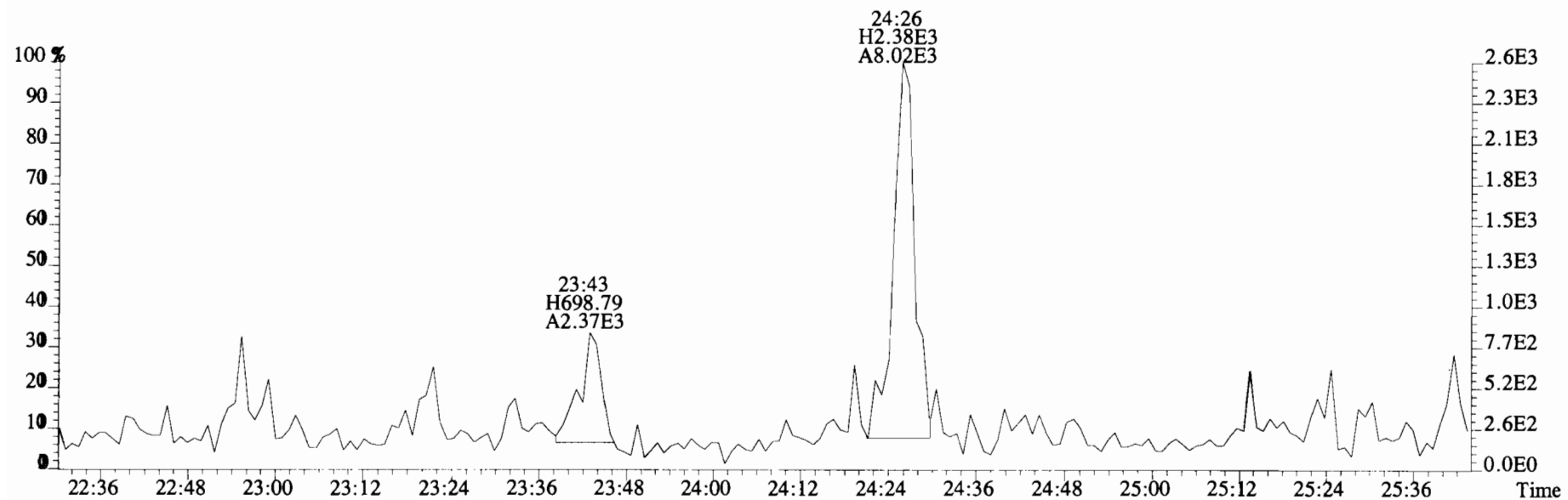
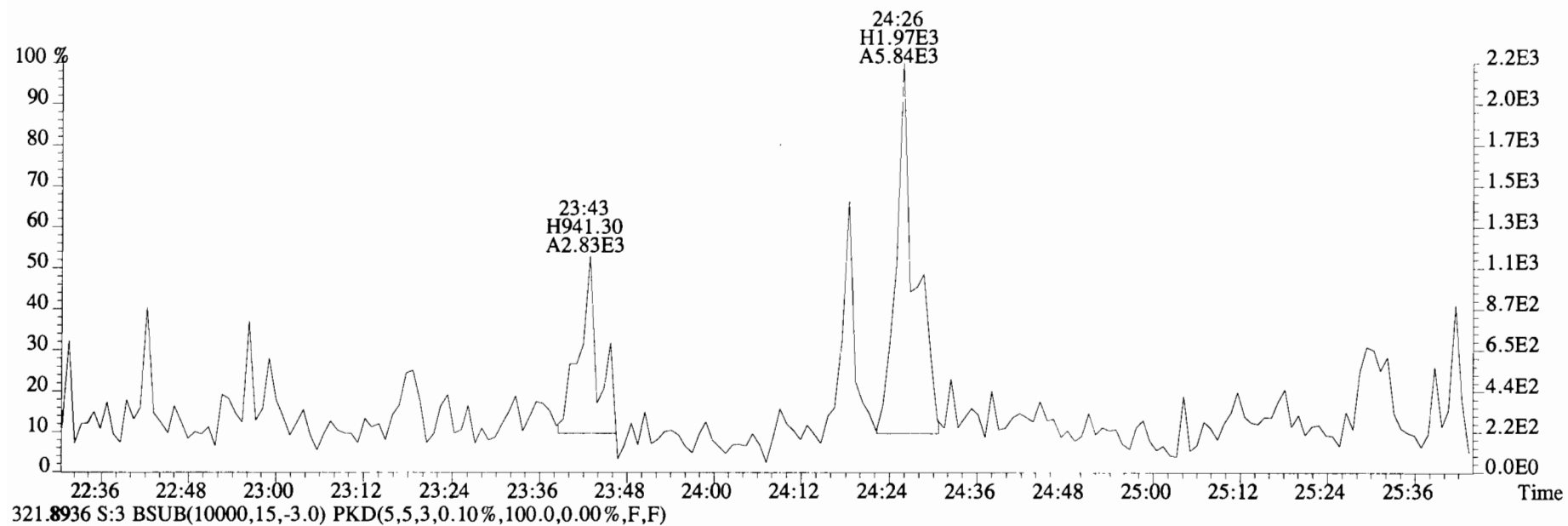
Unnamed Concentration: *

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
36:44	1.483e+03	1.793e+03	0.83 n	2.909e+03 0.088908	1,2,3,4,6,7,8-HpCDF

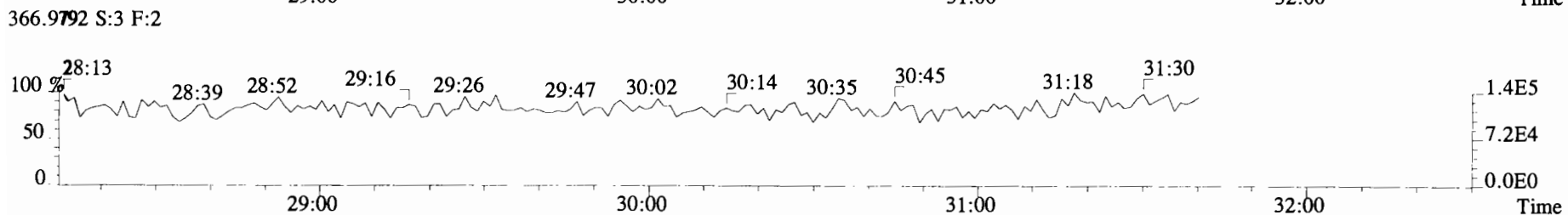
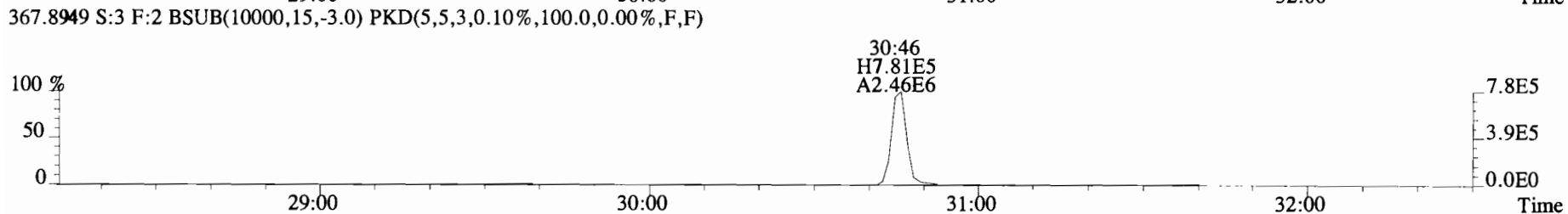
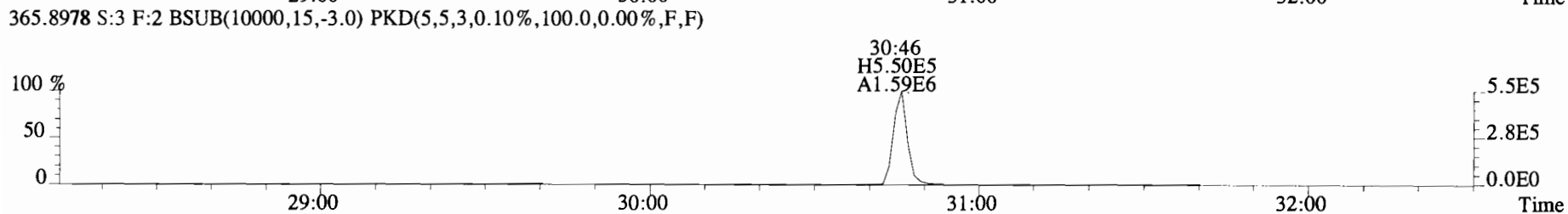
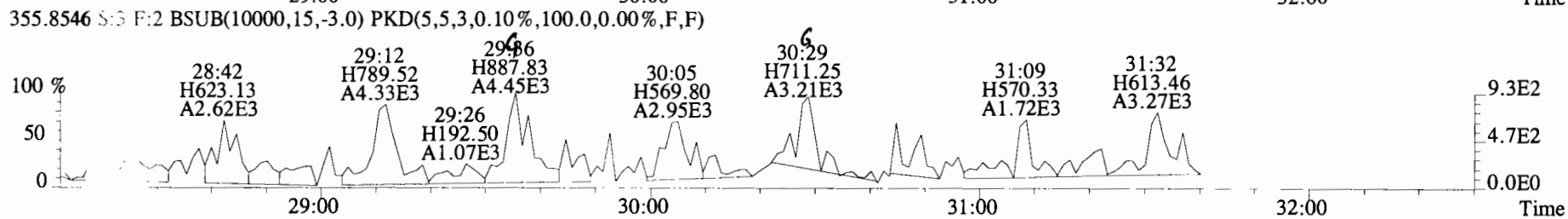
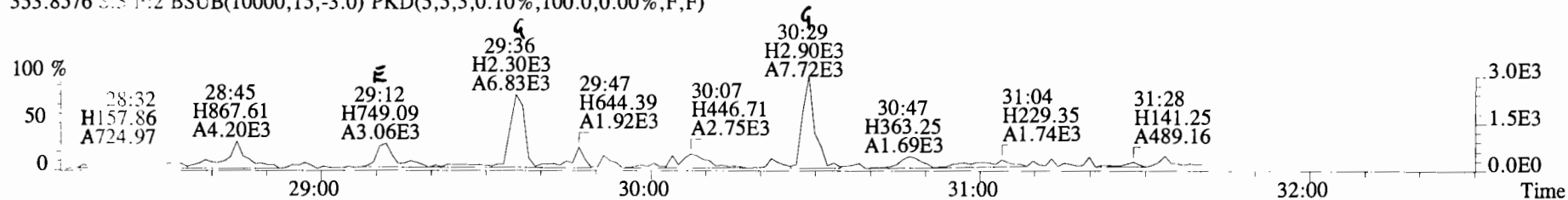
File:191031D2 #1-492 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) ✓



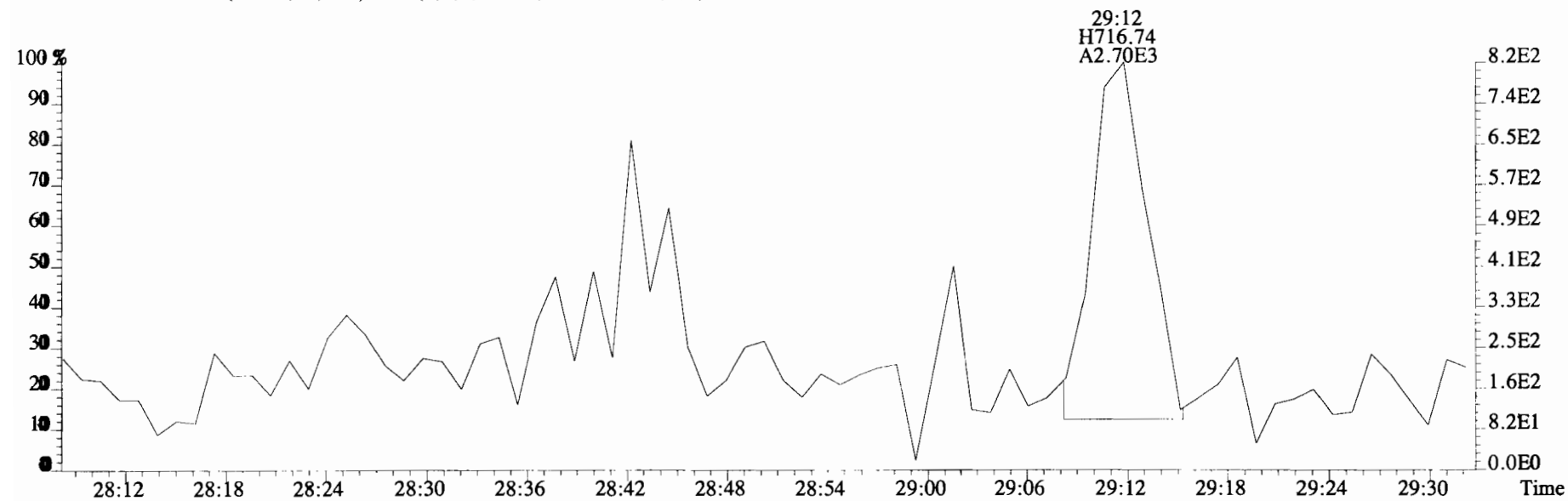
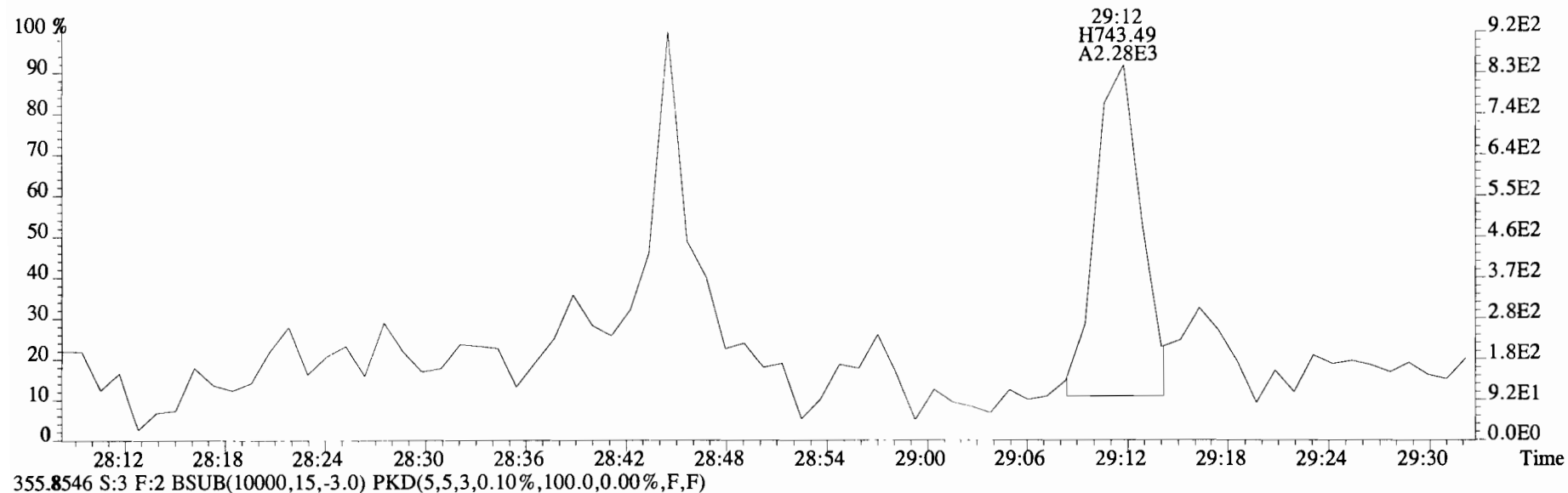
File:191031D2 #1-492 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



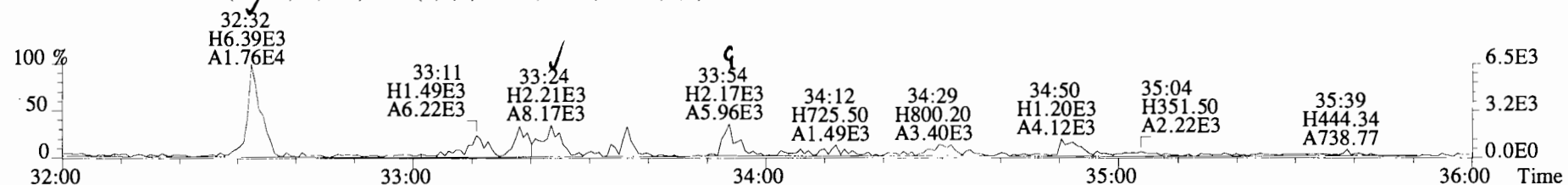
File:1910.MD1 #1-211 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



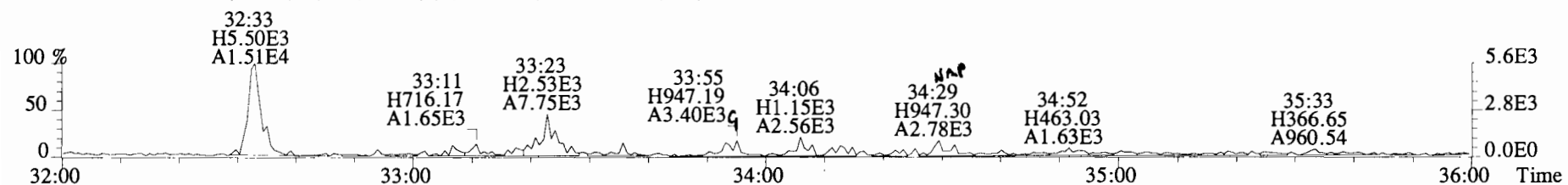
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Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



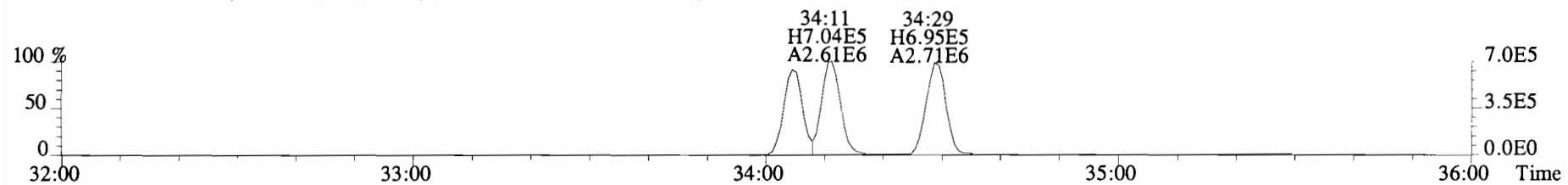
File:191031D2 #1-385 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



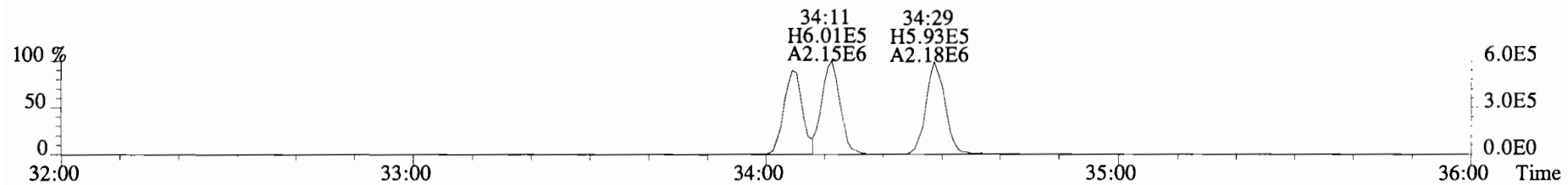
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



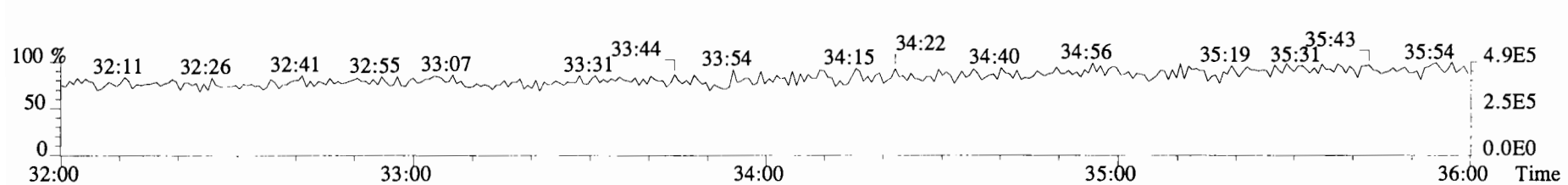
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



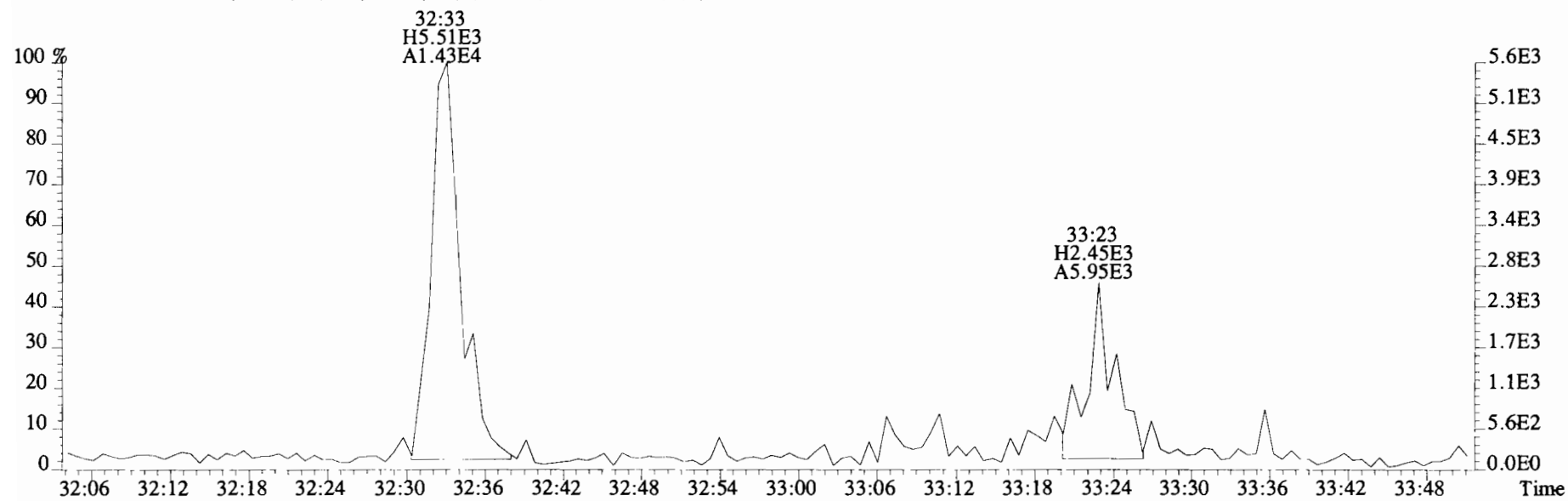
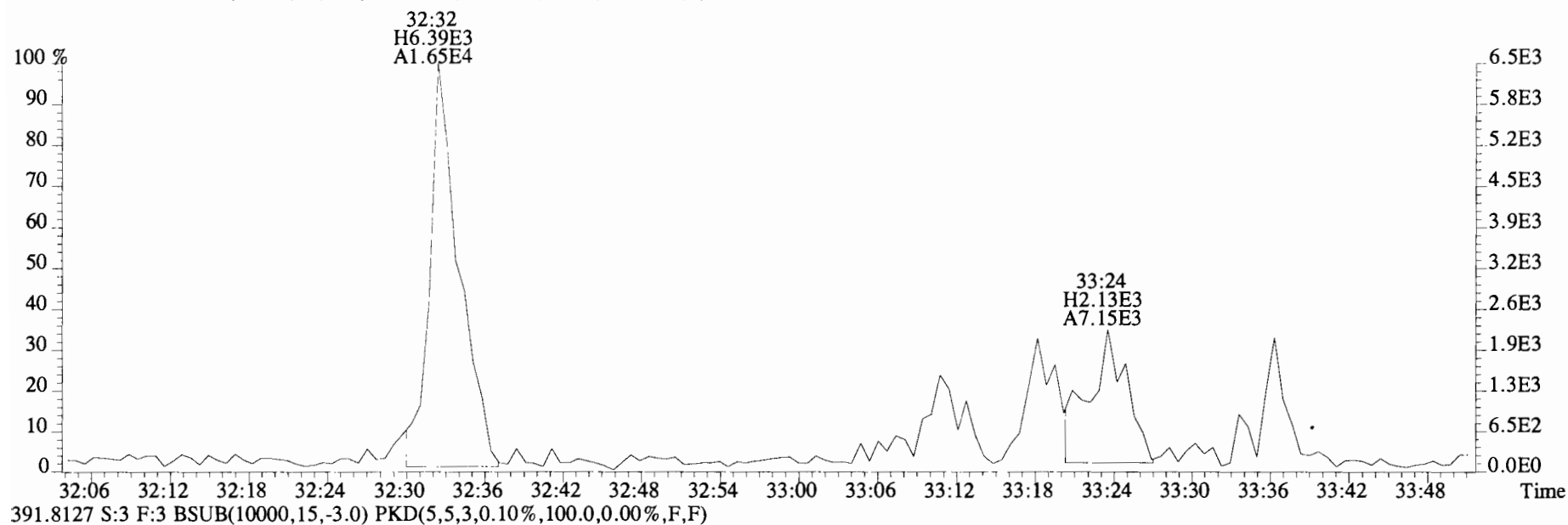
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



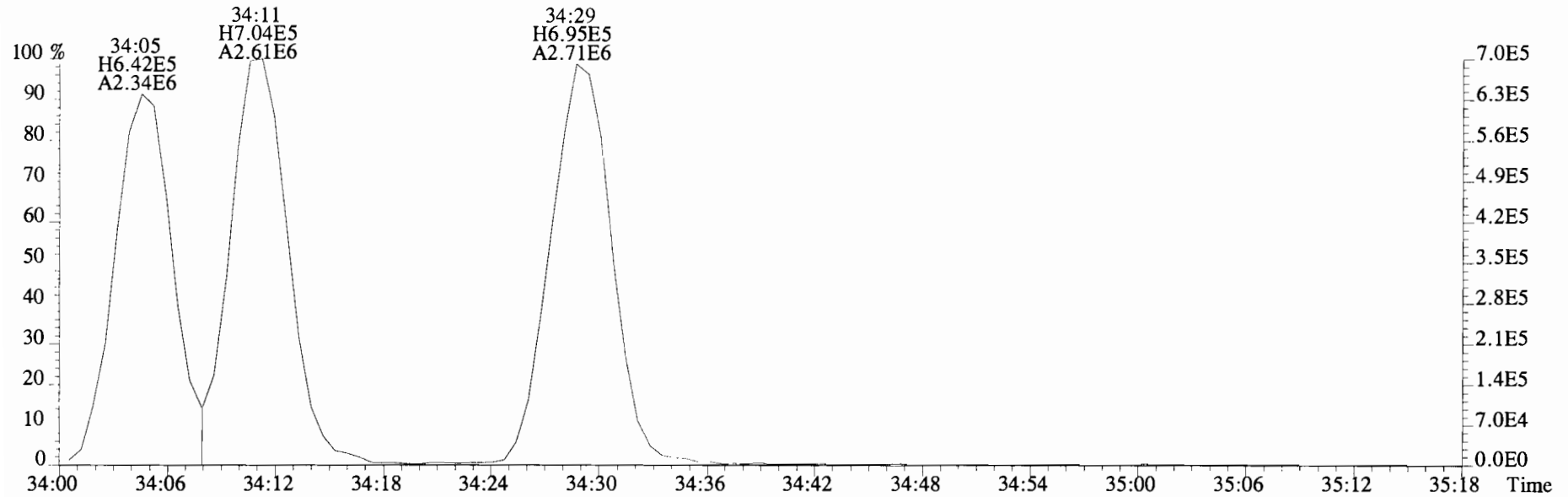
392.9760 S:3 F:3



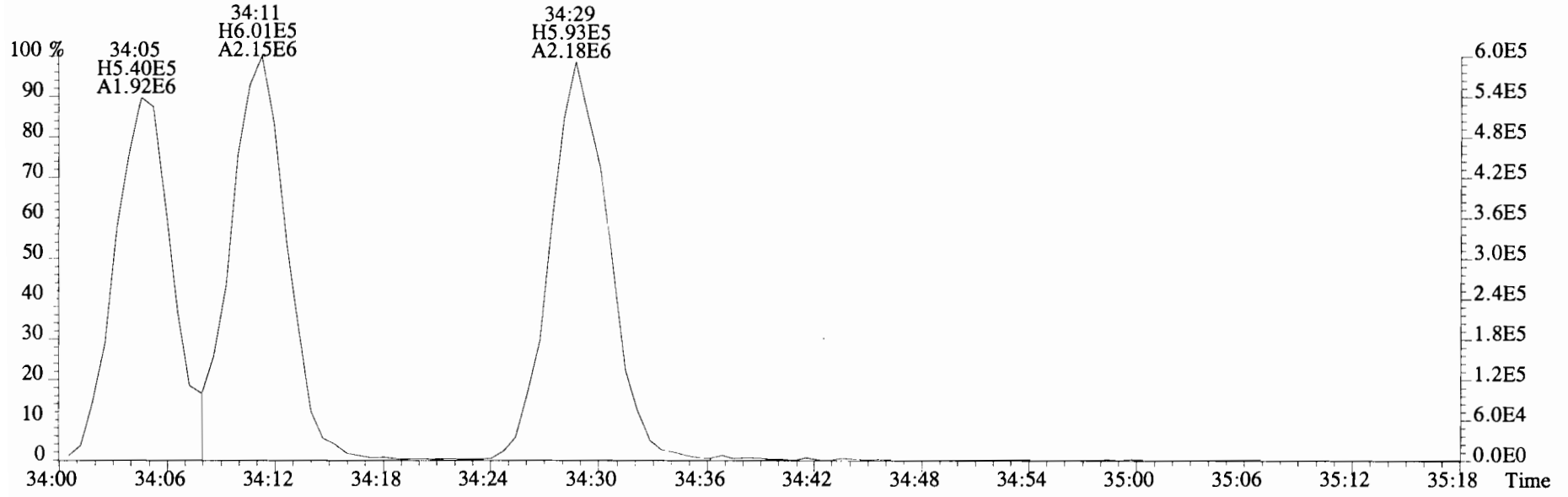
File:191031D2 #1-385 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



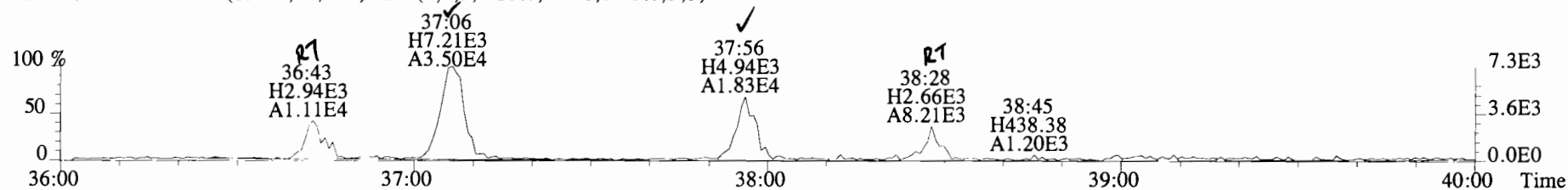
File:191031D2 #1-385 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



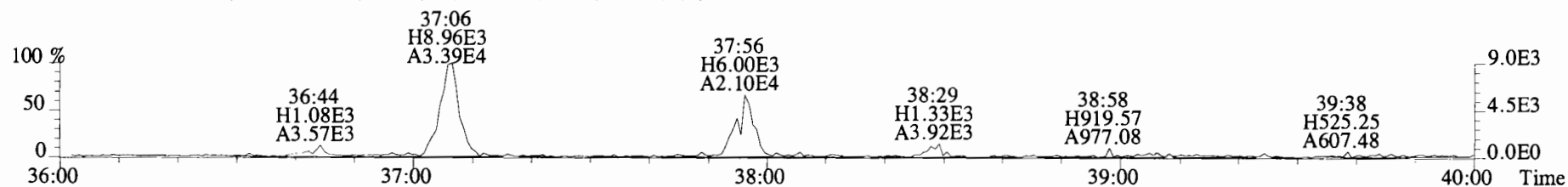
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



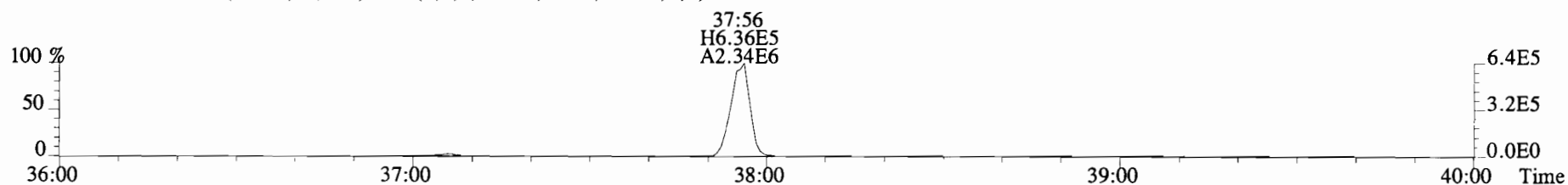
File:191031D2 #1-356 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



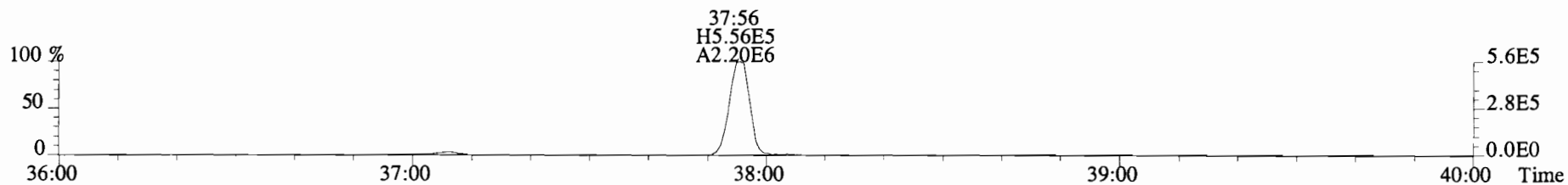
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



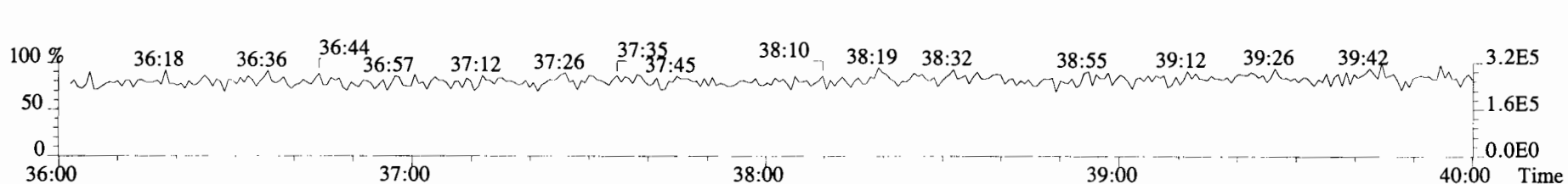
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



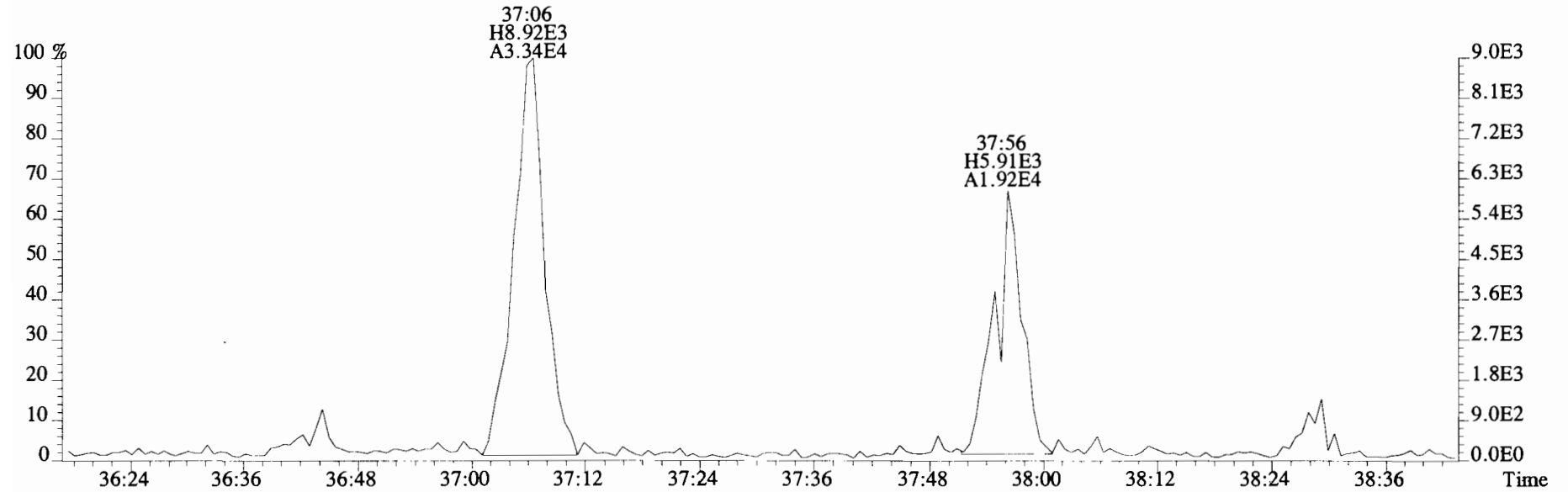
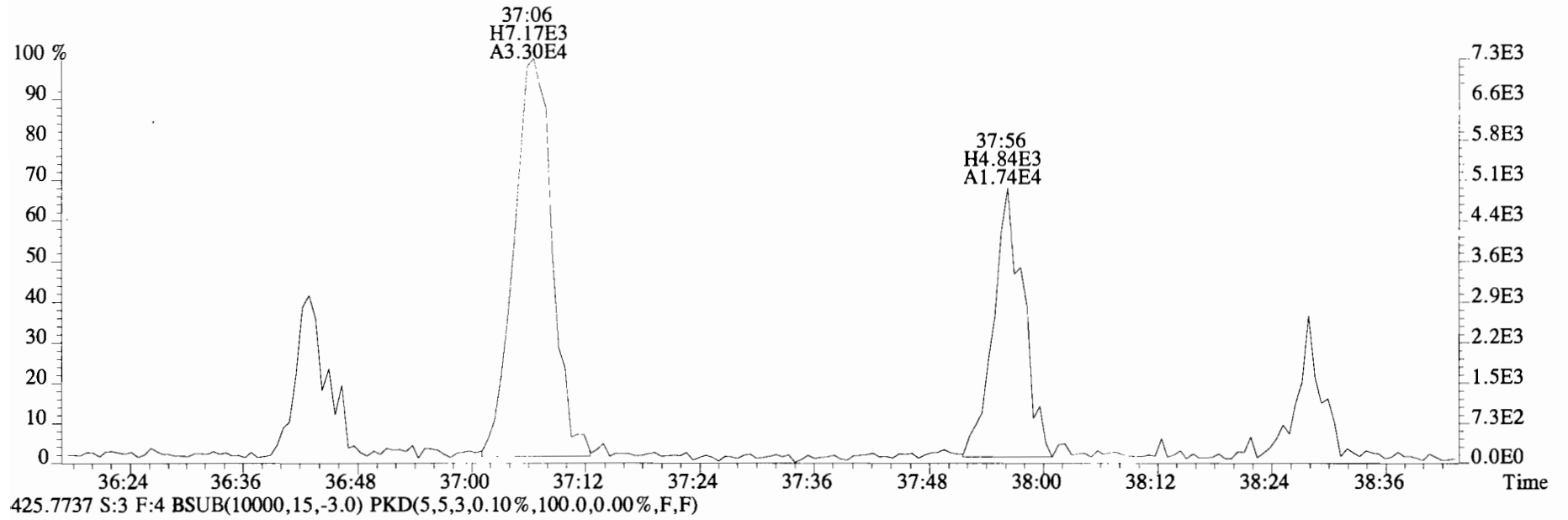
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



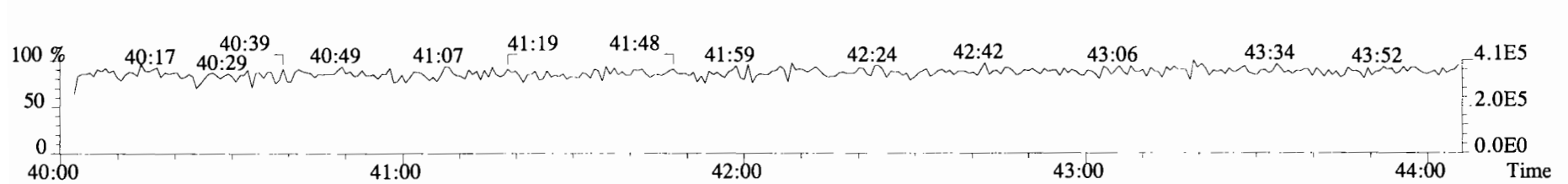
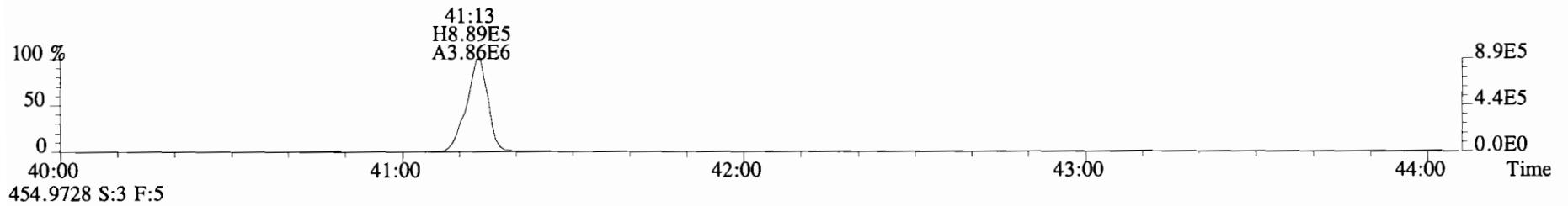
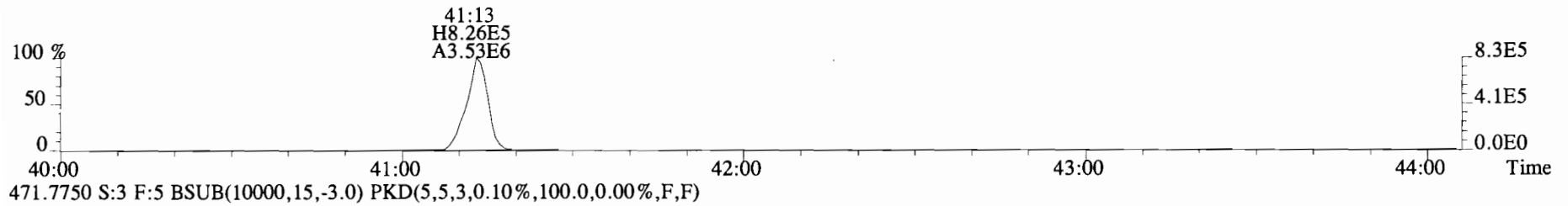
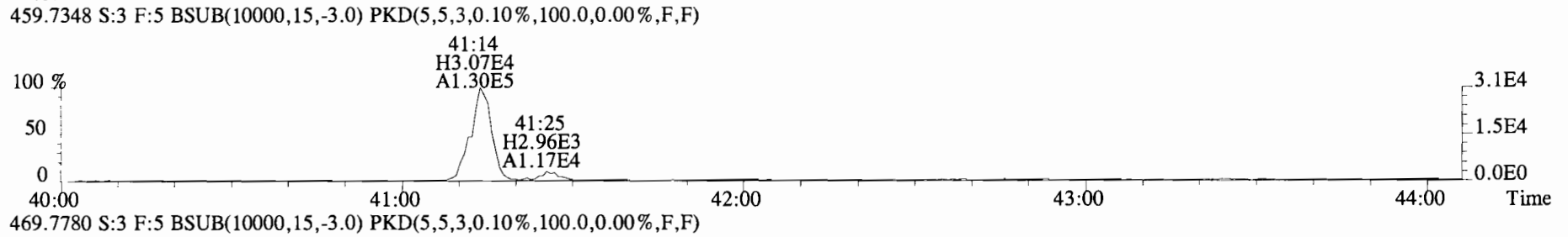
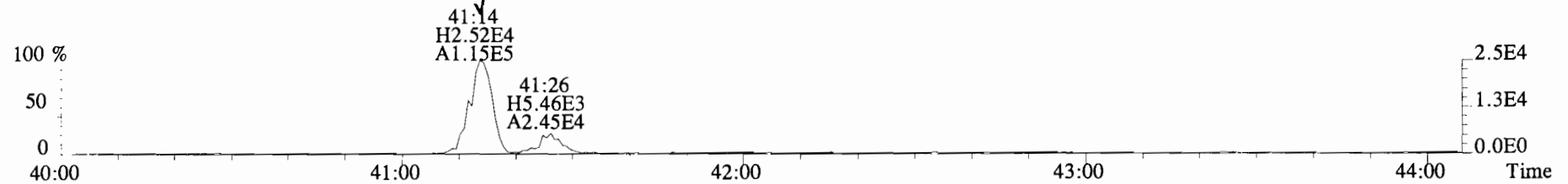
454.9728 S:3 F:4



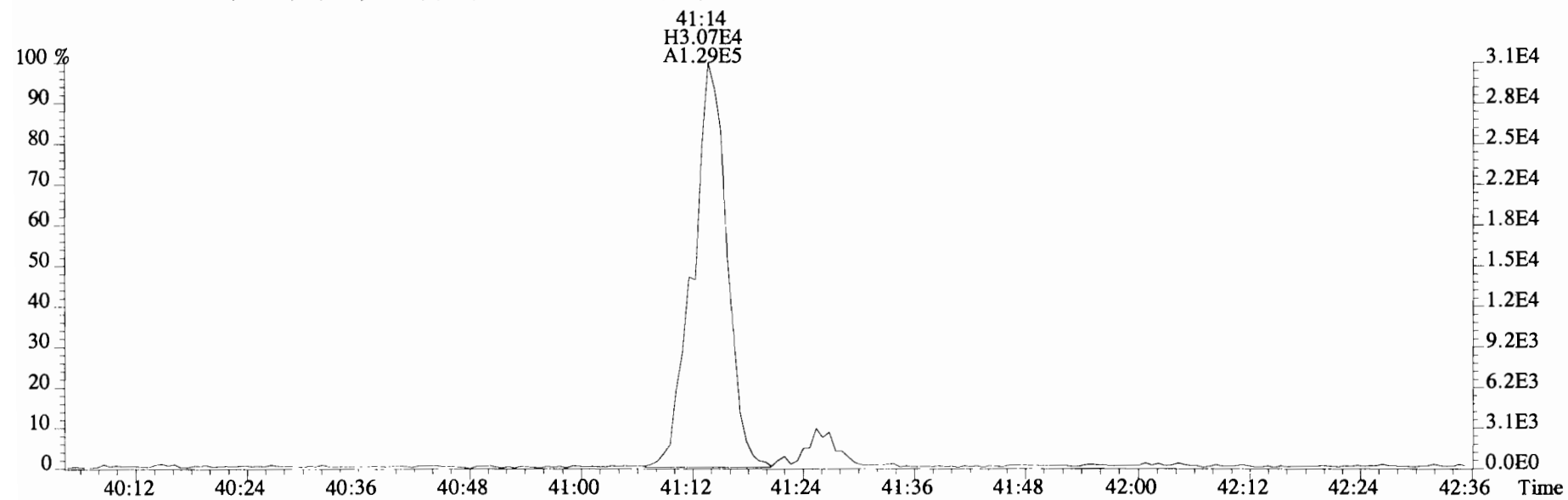
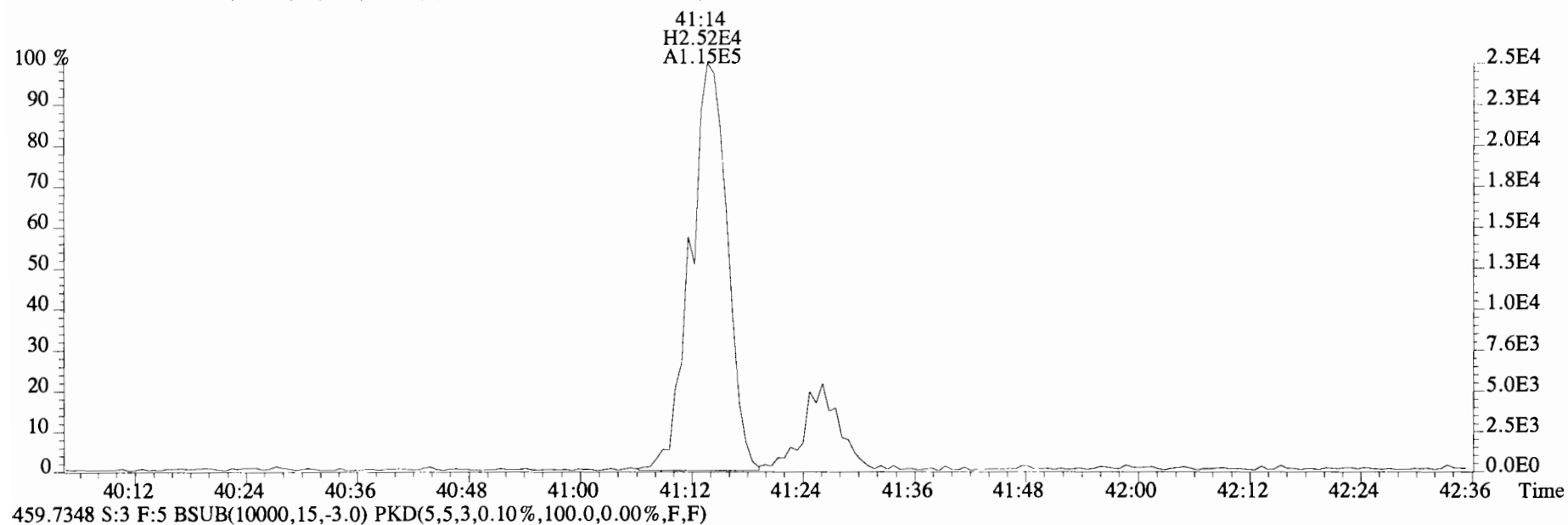
File:191031D2 #1-356 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
423.7767 S:3 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



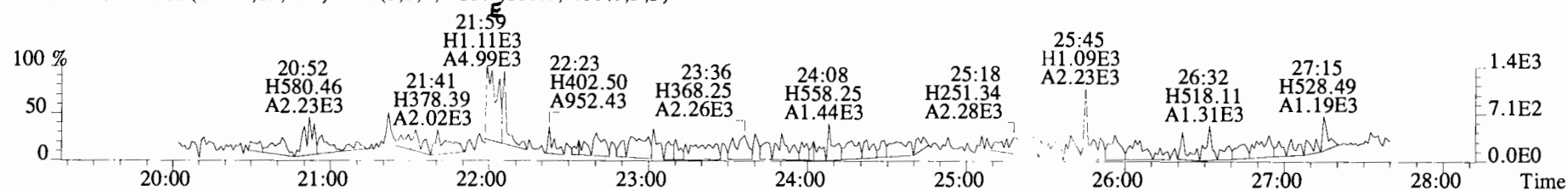
File:191031D2 #1-431 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
457.7377 S:3 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



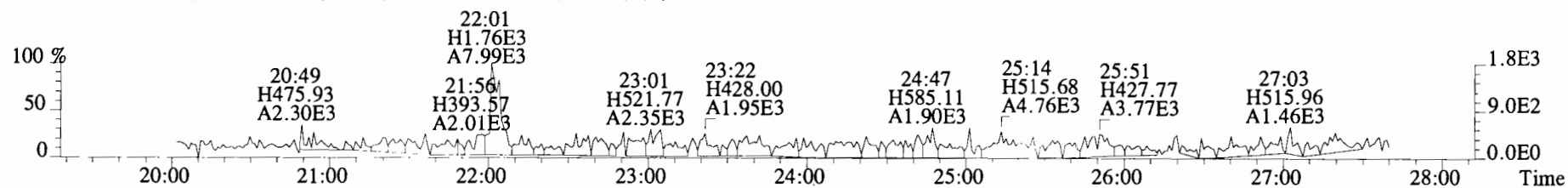
File:191031D2 #1-431 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



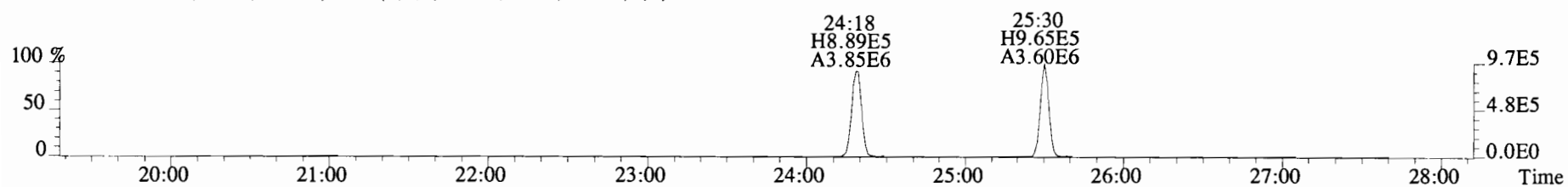
File:191031D2 #1-492 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



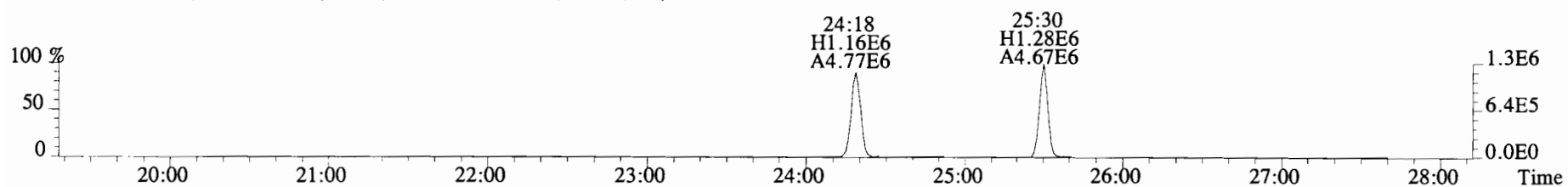
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



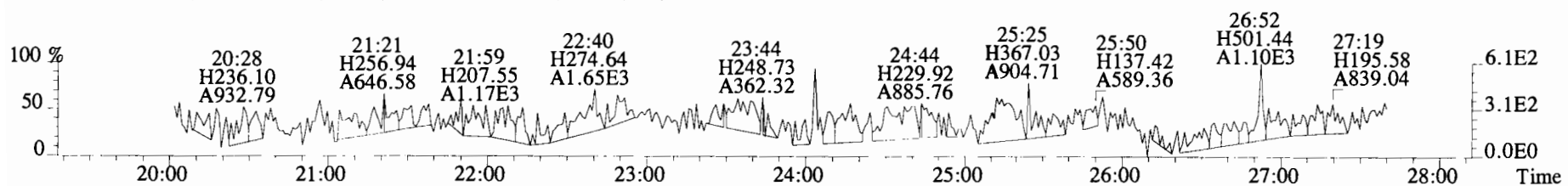
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



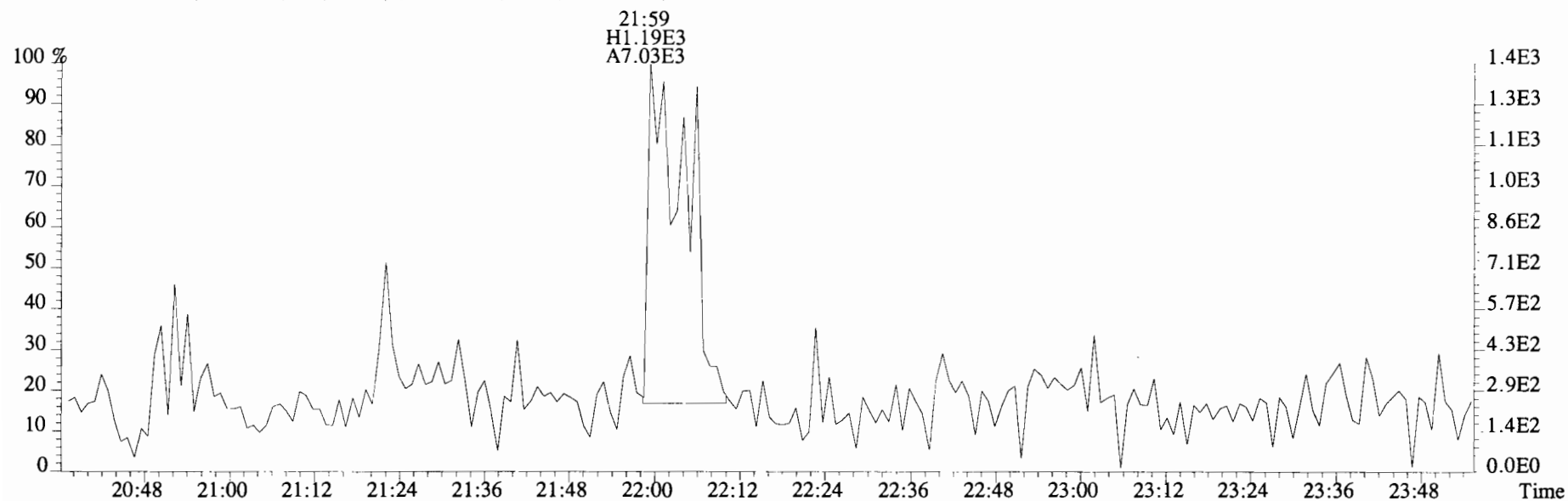
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



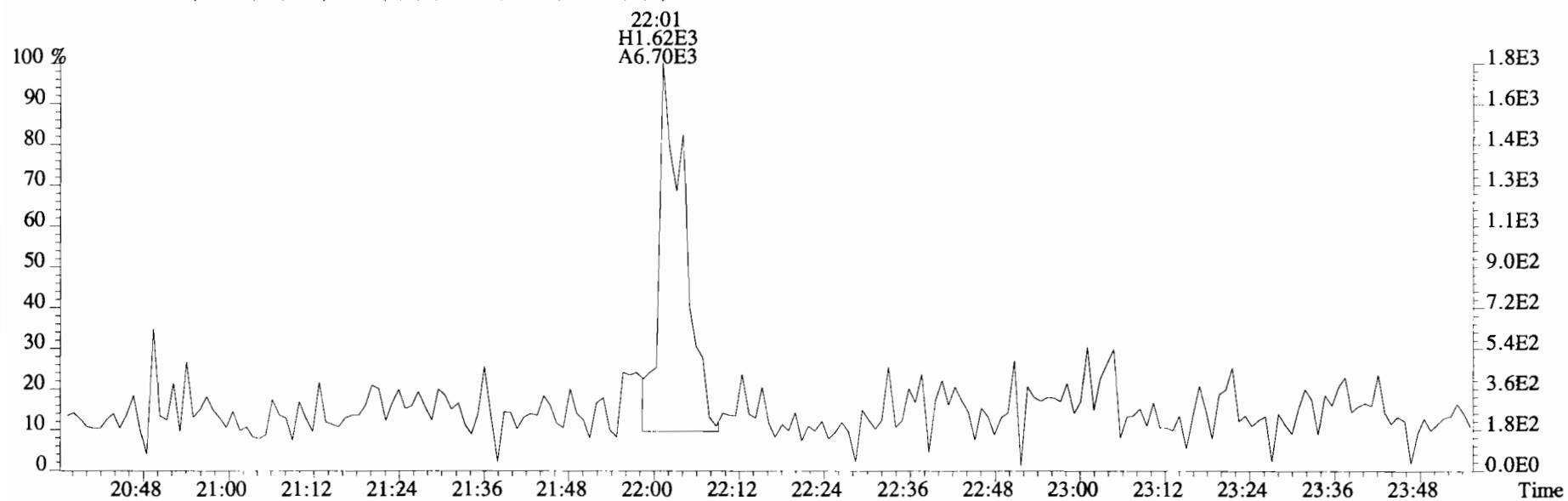
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



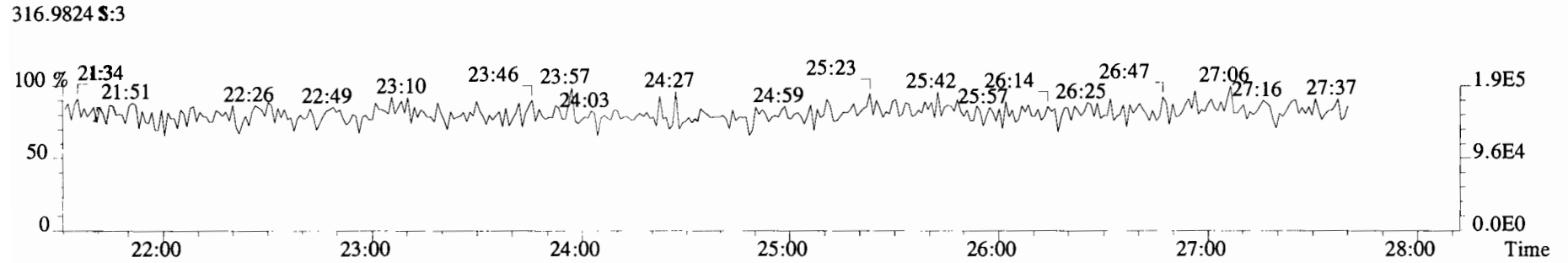
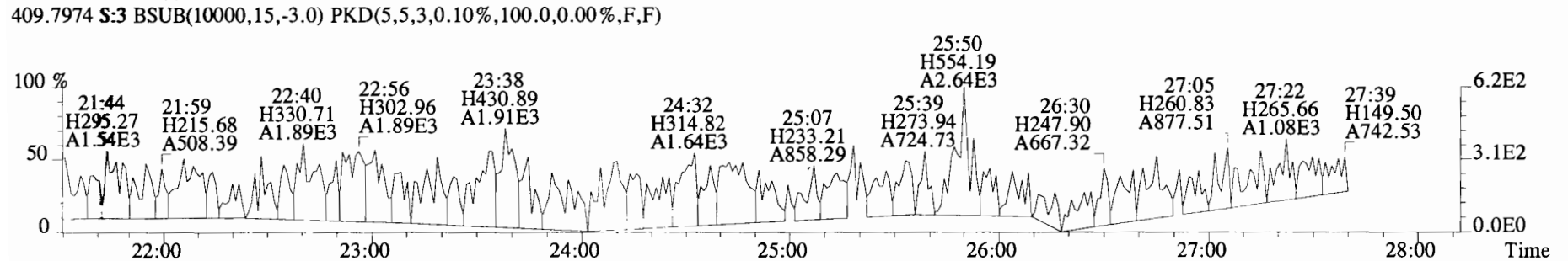
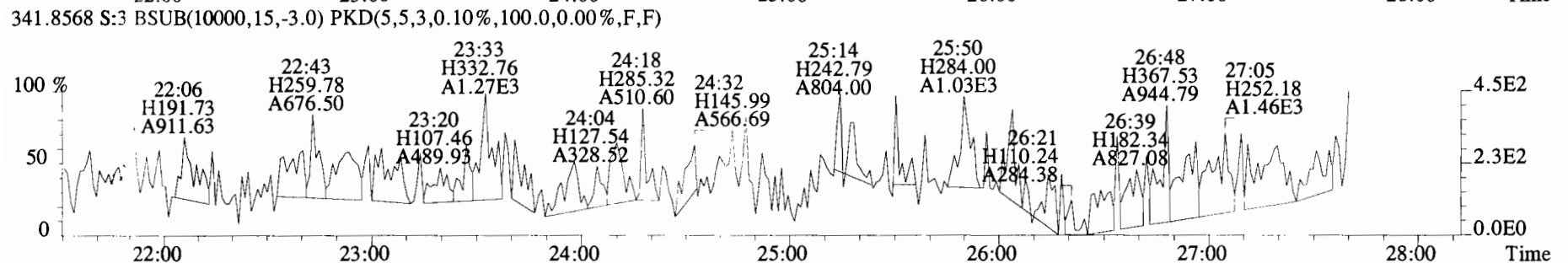
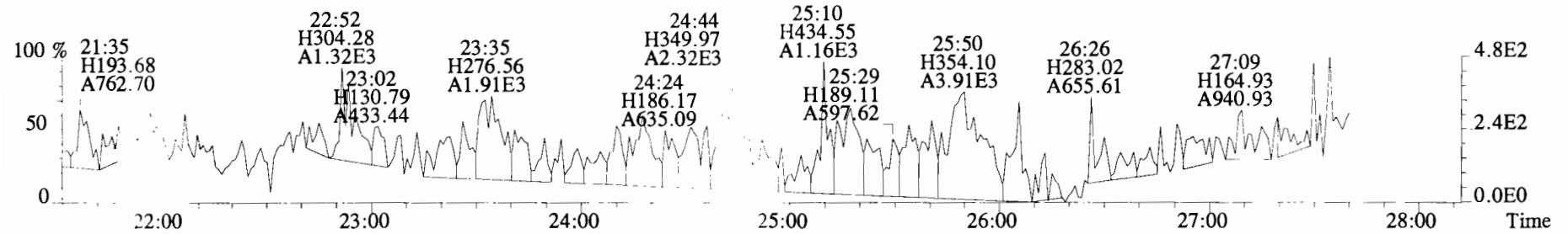
File:191031D2 #1-492 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



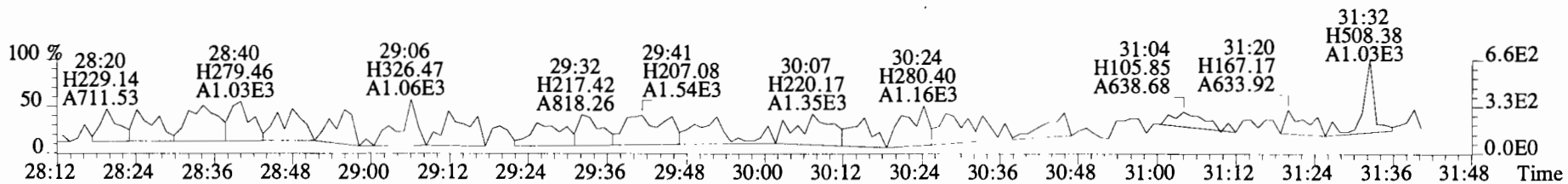
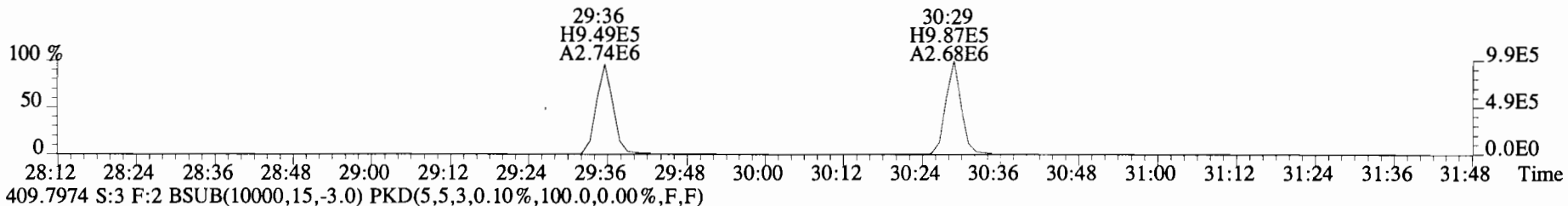
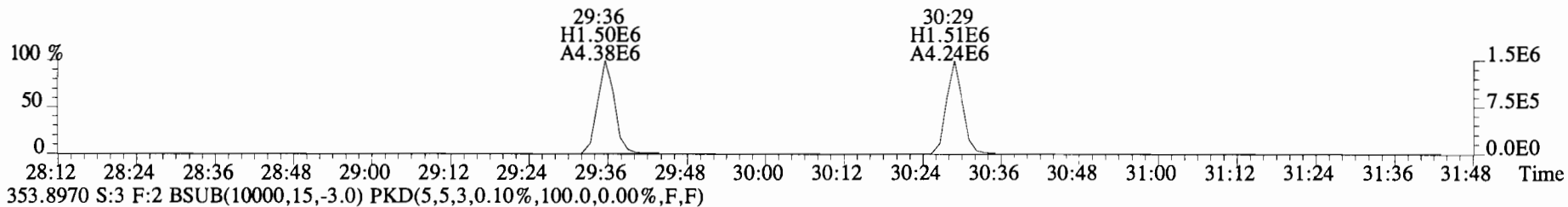
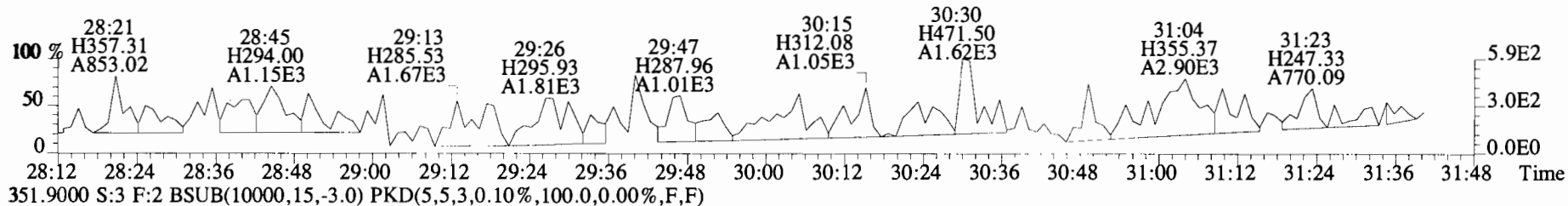
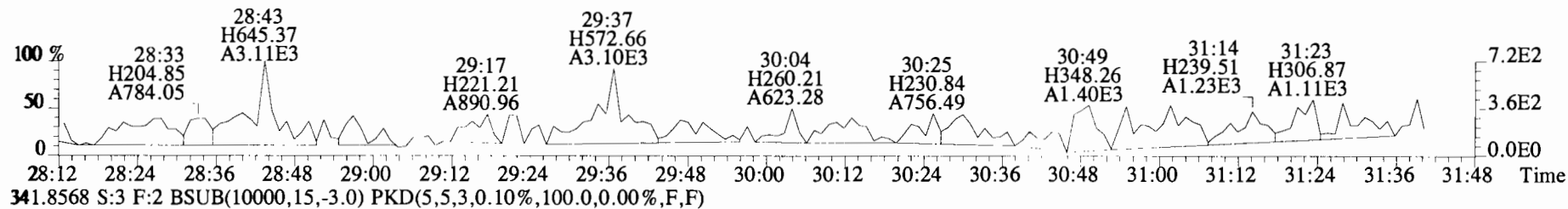
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



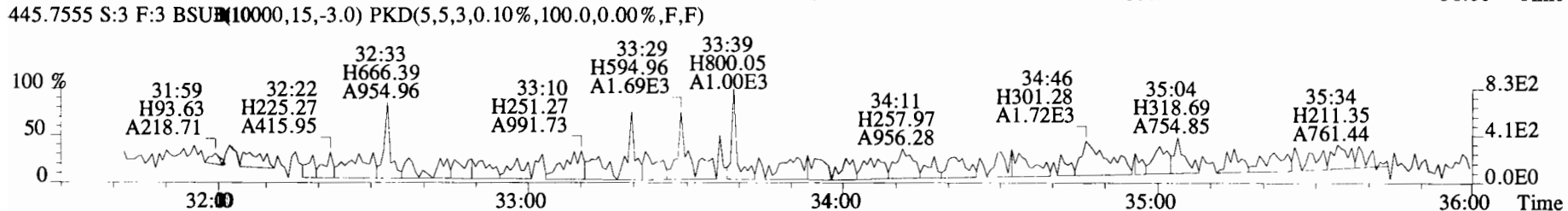
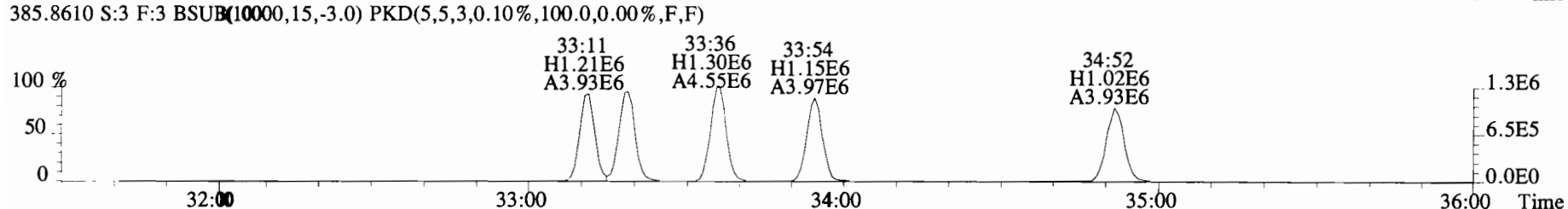
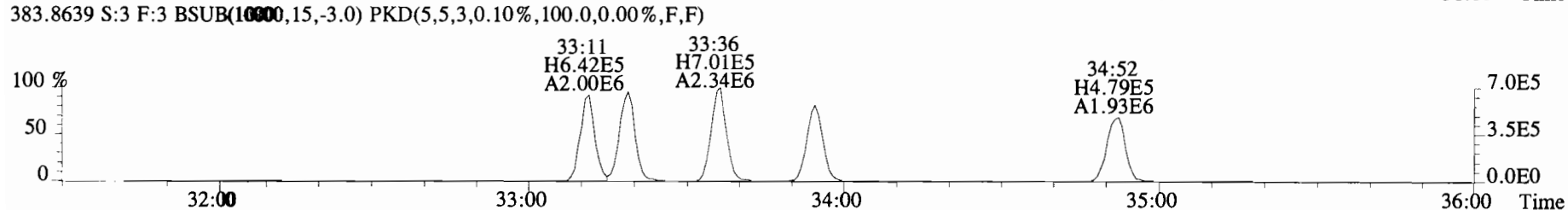
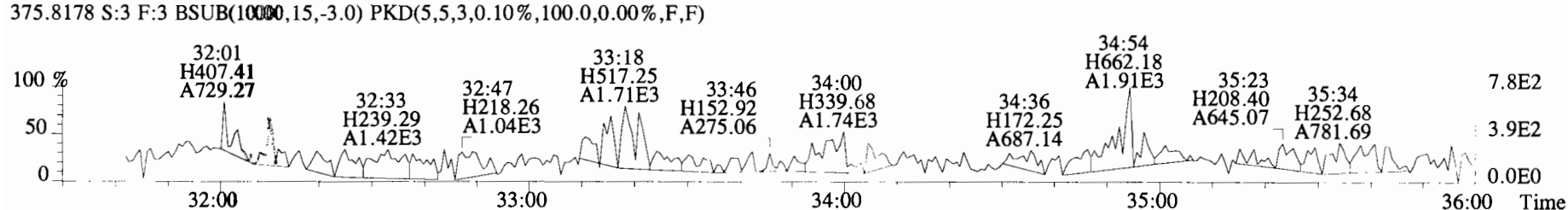
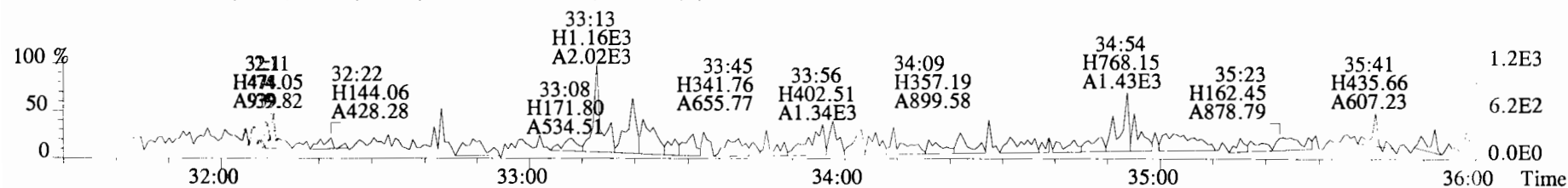
File:191031D2 #1-492 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



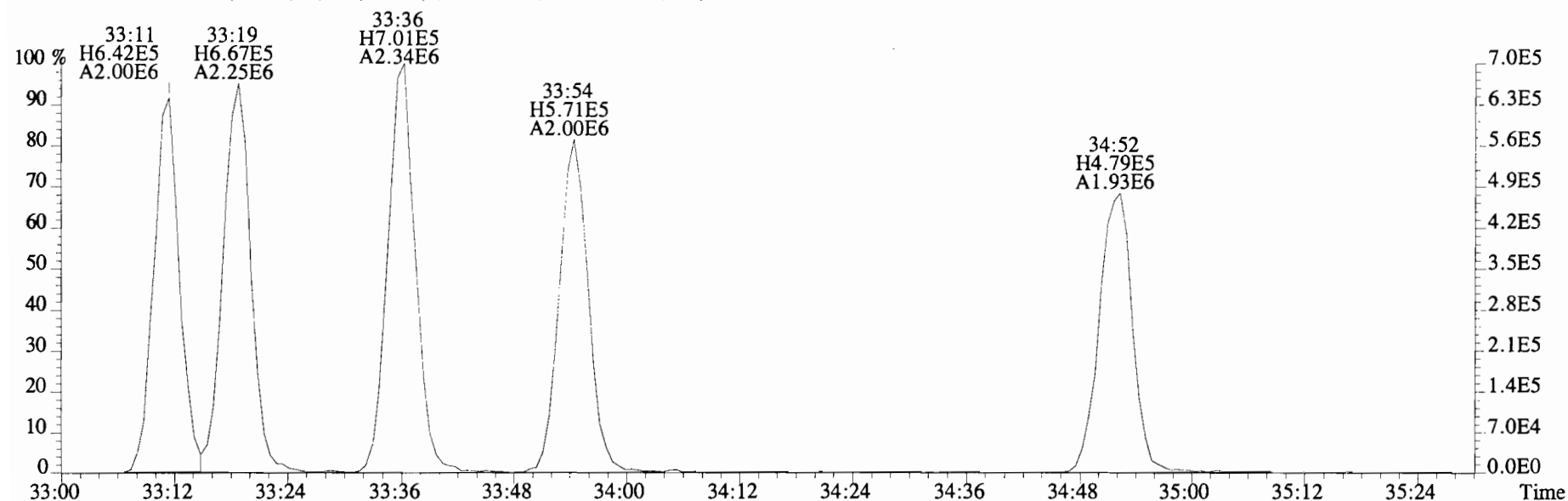
File:191031D2 #1-211 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



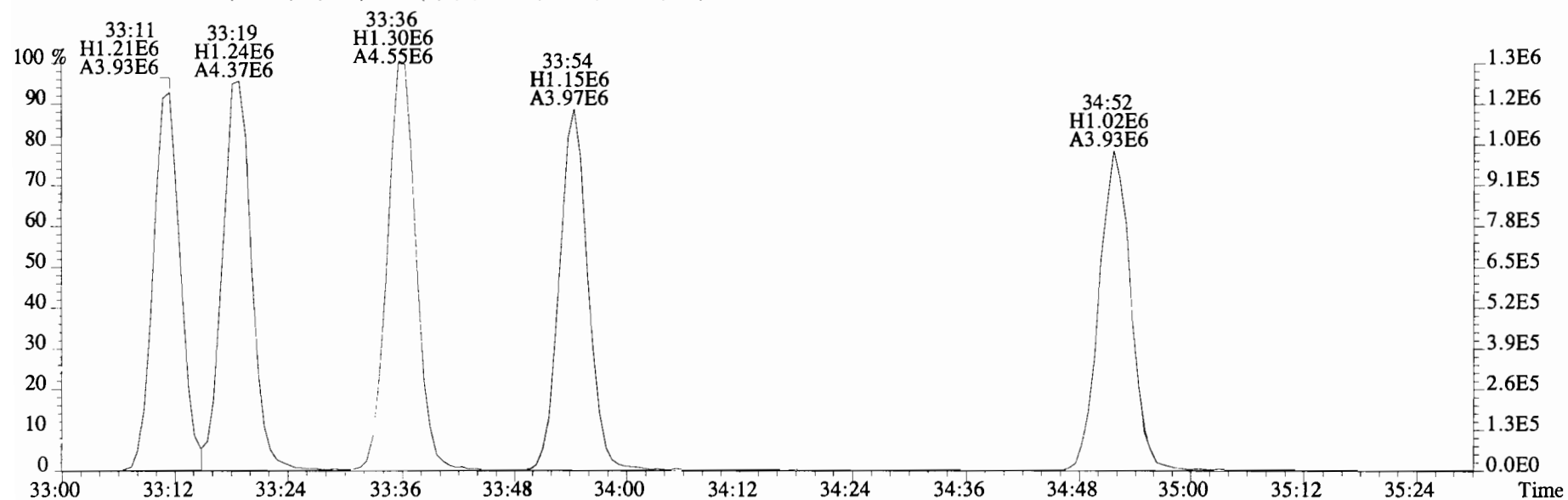
File:191031D2 #1-385 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



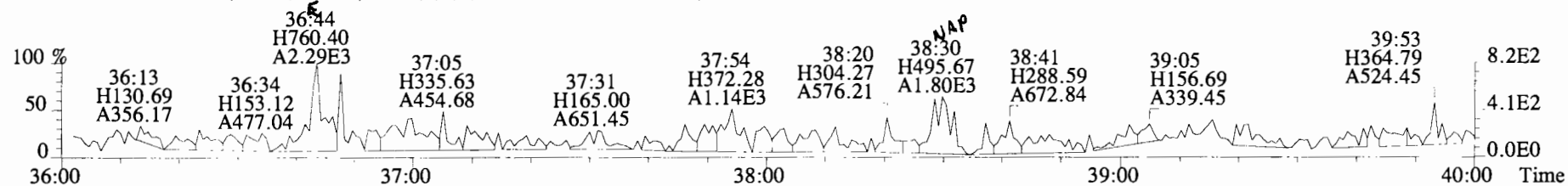
File:191031D2 #1-385 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



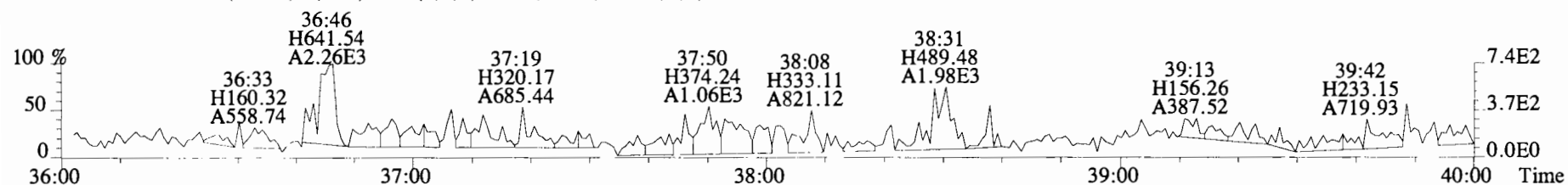
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



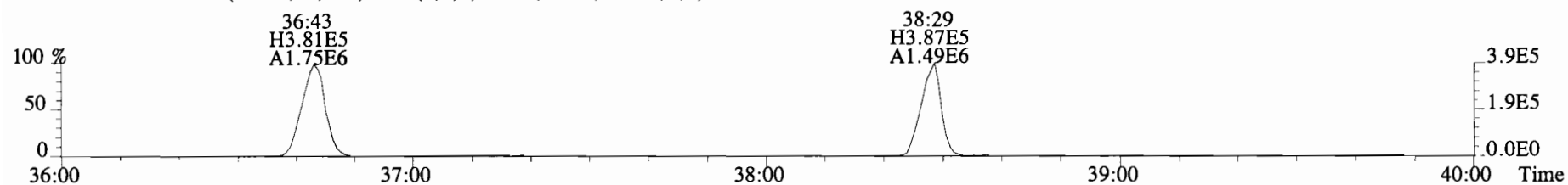
File:191031D2 #1-356 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
 407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



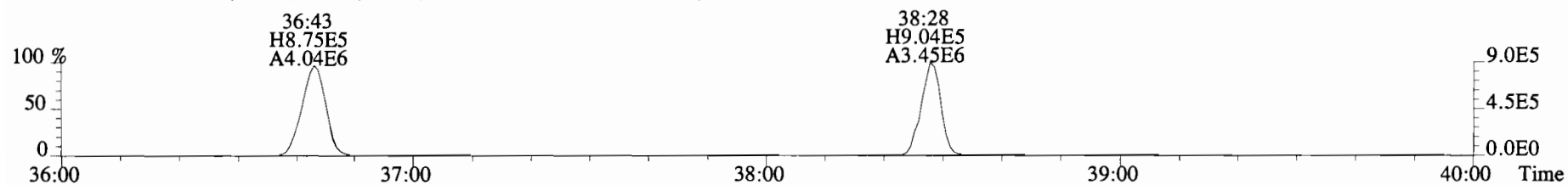
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



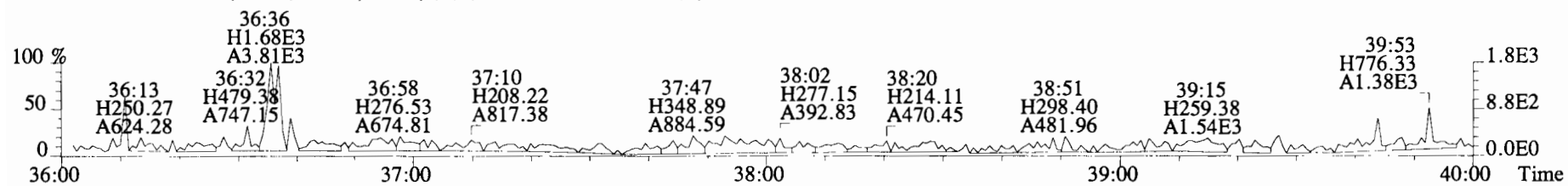
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



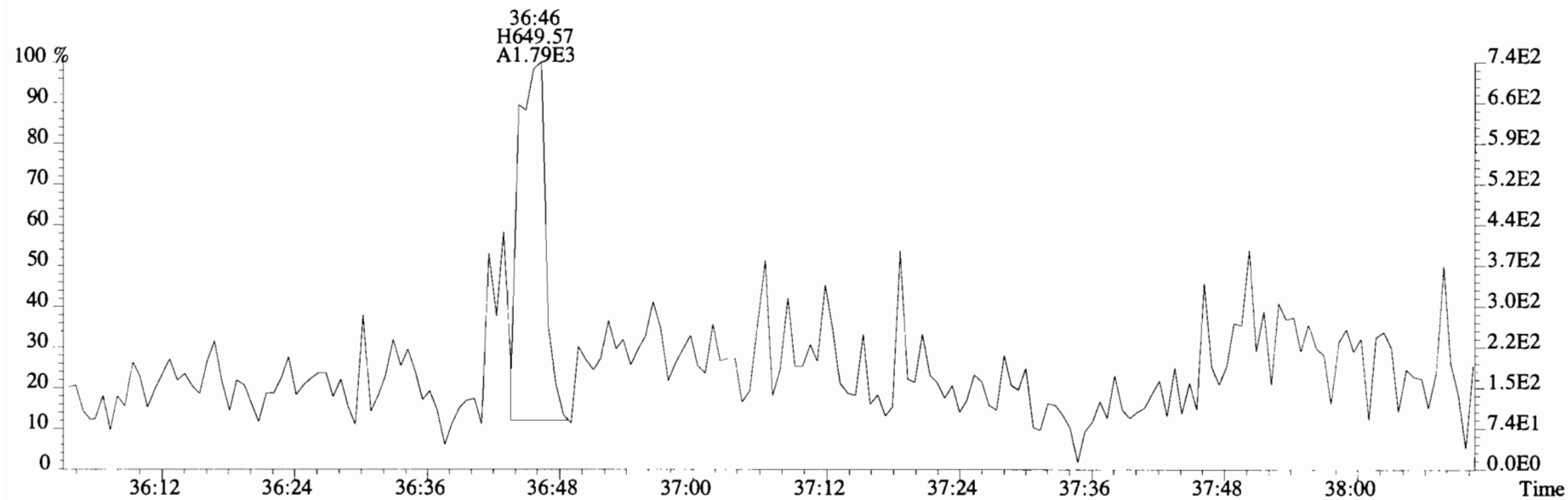
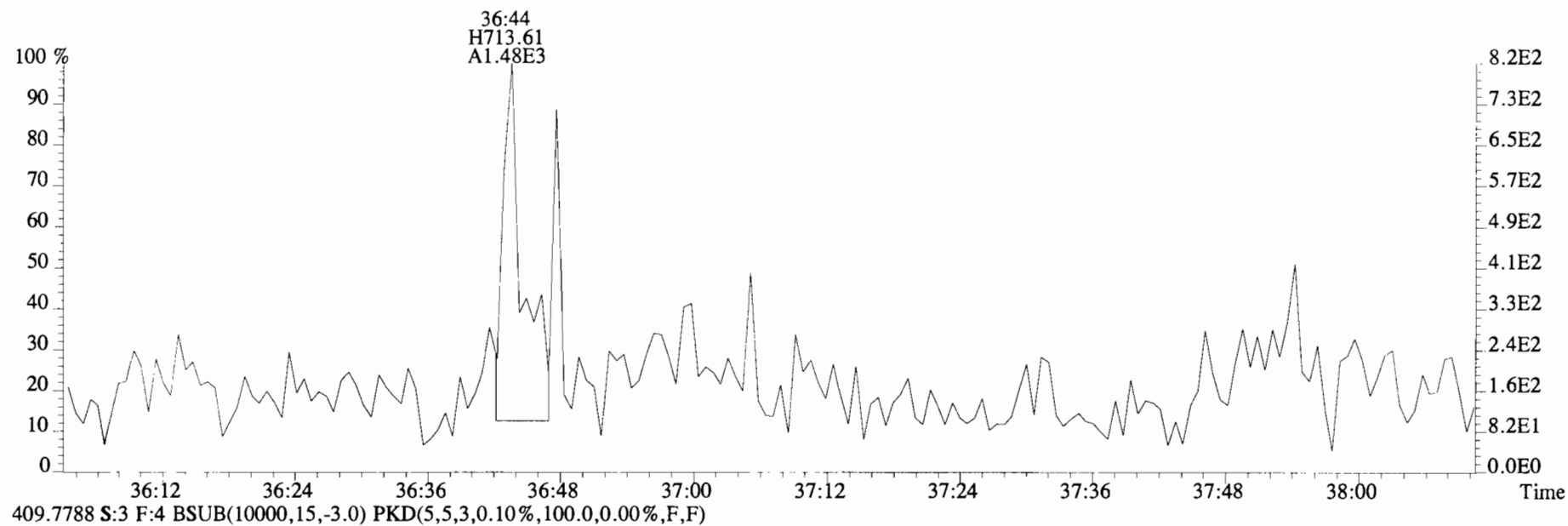
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



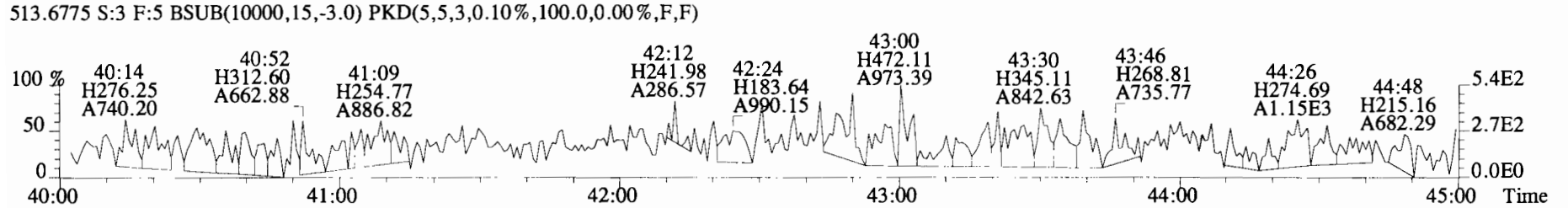
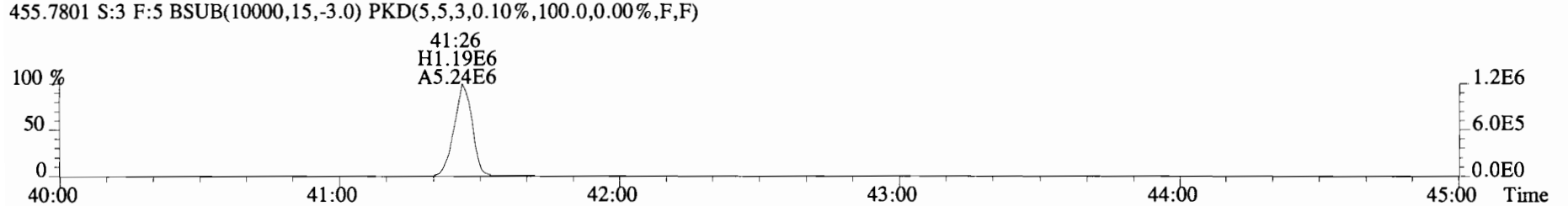
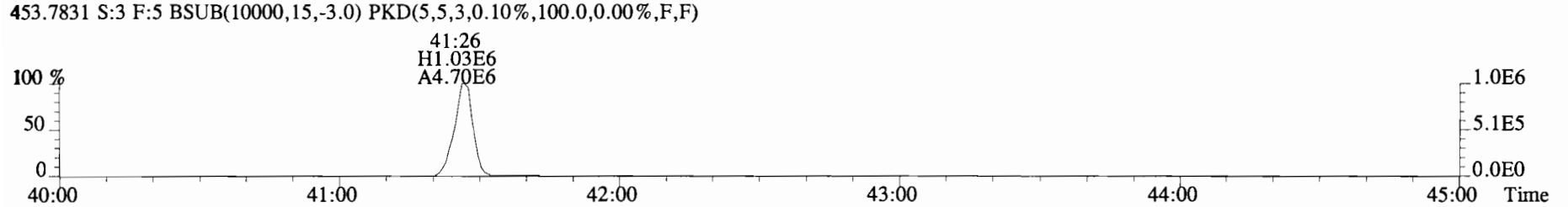
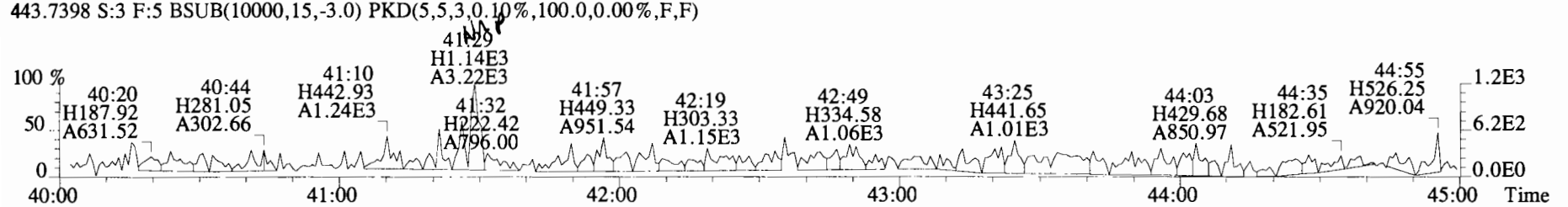
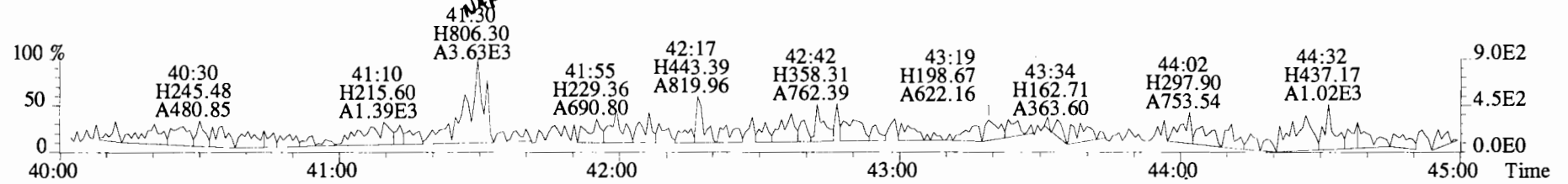
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-356 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-431 Acq: 1-NOV-2019 01:18:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-02RE1 PDI-082SC-A-14-15-191002 16.4 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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	*	* n	0.91	NotF7	*		137	2.5	0.0643
1,2,3,7,8-PeCDD	*	* n	0.90	NotF7	*		213	2.5	0.0965
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF7	*		145	2.5	0.102
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF7	*		145	2.5	0.112
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF7	*		145	2.5	0.113
1,2,3,4,6,7,8-HpCDD	2.35e+04	1.01 y	0.98	37:56	0.92364		*	2.5	*
OCDD	1.71e+05	0.90 y	0.96	41:13	8.4259		*	2.5	*
2,3,7,8-TCDF	*	* n	0.95	NotF7	*		153	2.5	0.0604
1,2,3,7,8-PeCDF	*	* n	0.96	NotF7	*		164	2.5	0.0814
2,3,4,7,8-PeCDF	*	* n	1.01	NotF7	*		164	2.5	0.0777
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF7	*		136	2.5	0.0401
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF7	*		136	2.5	0.0403
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF7	*		136	2.5	0.0424
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF7	*		136	2.5	0.0550
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF7	*		111	2.5	0.0503
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF7	*		111	2.5	0.0435
OCDF	*	* n	0.95	NotF7	*		142	2.5	0.113

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		137	0.0643
Total Penta-Dioxins	*	*		213	0.0965
Total Hexa-Dioxins	0.764	0.944		*	*
Total Hepta-Dioxins	2.59	2.59		*	*
Total Tetra-Furans	*	*		153	0.0604
Total Penta-Furans	0.0000	0.0000		164	0.0795
Total Hexa-Furans	*	*		136	0.0441
Total Hepta-Furans	*	*		111	0.0471

IS	13C-2,3,7,8-TCDD	7.22e+06	0.78 y	1.10	26:16	206.16
IS	13C-1,2,3,7,8-PeCDD	5.71e+06	0.63 y	0.88	30:45	202.67
IS	13C-1,2,3,4,7,8-HxCDD	5.23e+06	1.30 y	0.64	34:04	192.15
IS	13C-1,2,3,6,7,8-HxCDD	5.71e+06	1.28 y	0.86	34:11	157.47
IS	13C-1,2,3,7,8,9-HxCDD	5.87e+06	1.24 y	0.81	34:29	171.52
IS	13C-1,2,3,4,6,7,8-HpCDD	5.20e+06	1.03 y	0.65	37:55	187.30
IS	13C-OCDD	8.48e+06	0.93 y	0.58	41:13	344.99
IS	13C-2,3,7,8-TCDF	9.41e+06	0.78 y	1.03	25:30	196.30
IS	13C-1,2,3,7,8-PeCDF	8.64e+06	1.53 y	0.85	29:36	218.26
IS	13C-2,3,4,7,8-PeCDF	8.44e+06	1.62 y	0.85	30:29	214.95
IS	13C-1,2,3,4,7,8-HxCDF	7.27e+06	0.52 y	0.83	33:11	206.02
IS	13C-1,2,3,6,7,8-HxCDF	8.40e+06	0.53 y	1.03	33:19	191.48
IS	13C-2,3,4,6,7,8-HxCDF	7.77e+06	0.52 y	0.95	33:54	192.07
IS	13C-1,2,3,7,8,9-HxCDF	7.16e+06	0.53 y	0.83	34:51	204.05
IS	13C-1,2,3,4,6,7,8-HpCDF	6.53e+06	0.42 y	0.76	36:43	203.13
IS	13C-1,2,3,4,7,8,9-HpCDF	5.42e+06	0.42 y	0.58	38:28	219.71
IS	13C-OCDF	1.16e+07	0.90 y	0.69	41:26	396.39
C/Up	37Cl-2,3,7,8-TCDD	2.98e+06		1.20	26:17	77.745
RS/RT	13C-1,2,3,4-TCDD	6.40e+06	0.79 y	1.00	25:43	199.99
RS	13C-1,2,3,4-TCDF	9.27e+06	0.79 y	1.00	24:18	199.99
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.48e+06	0.52 y	1.00	33:36	199.99

Rec	Qual
103	
101	
96.1	
78.7	
85.8	
93.7	
86.3	
98.2	
109	
107	
103	
95.7	
96.0	
102	
102	
110	
99.1	
97.2	

Integrations Reviewed
 by DB by CT
 Analyst: DB Analyst: CT
 Date: 11/6/19 Date: 12/03/19

Totals class: HxCDD EMPC

Entry #: 23

Run: 9 File: 191031D2 S: 4 I: 1 F: 3
Acquired: 1-NOV-19 02:06:31 Processed: 1-NOV-19 12:03:14

Total Concentration: 0.94357

Unnamed Concentration: 0.944

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:33	1.211e+04	9.135e+03	1.33	y	2.125e+04	0.76430
33:23	2.759e+03	3.593e+03	0.77	n	4.983e+03	0.17928

Totals class: HpCDD EMPC

Entry #: 25

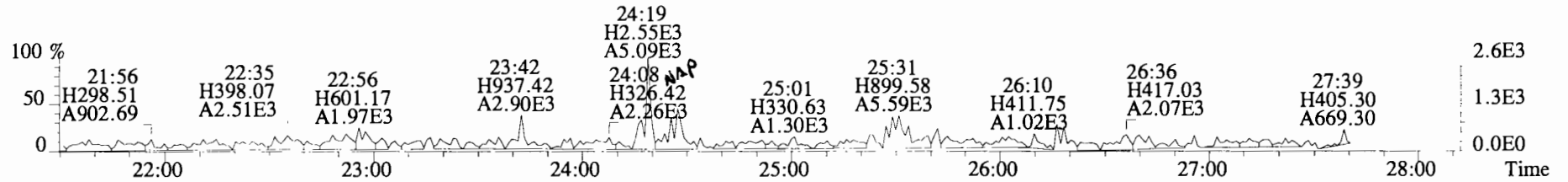
Run: 9 File: 191031D2 S: 4 I: 1 F: 4
Acquired: 1-NOV-19 02:06:31 Processed: 1-NOV-19 12:03:14

Total Concentration: 2.5883

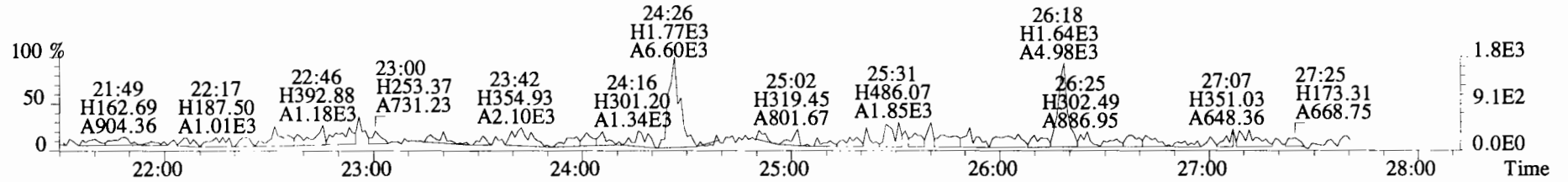
Unnamed Concentration: 1.665

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:06	2.186e+04	2.050e+04	1.07 y	4.235e+04	1.6647	
37:56	1.183e+04	1.167e+04	1.01 y	2.350e+04	0.92364	1,2,3,4,6,7,8-HpCDD

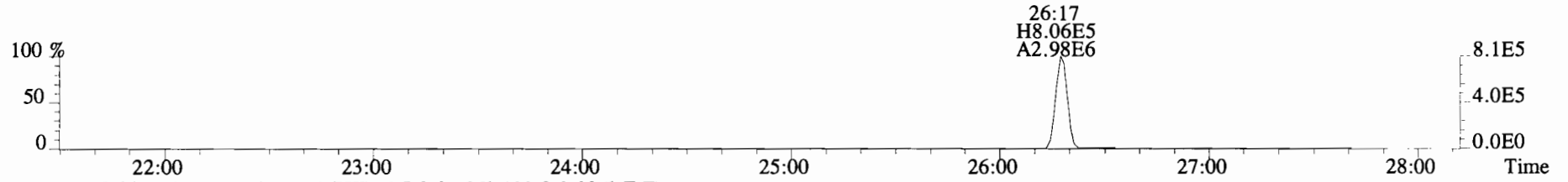
File:191031D2 #1-493 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



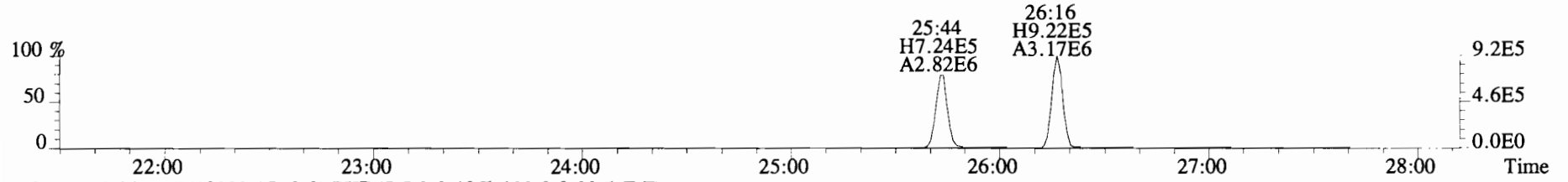
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



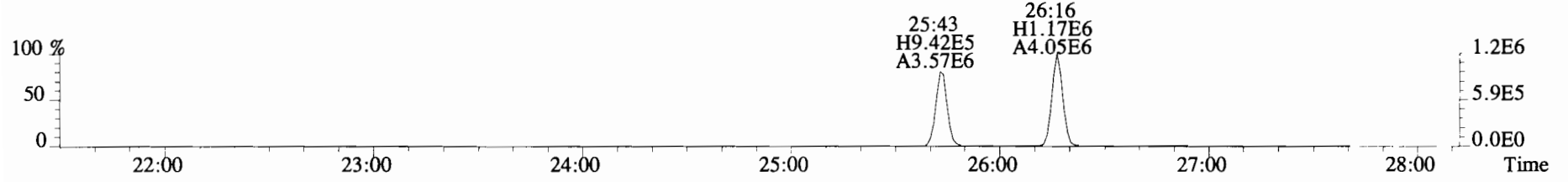
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



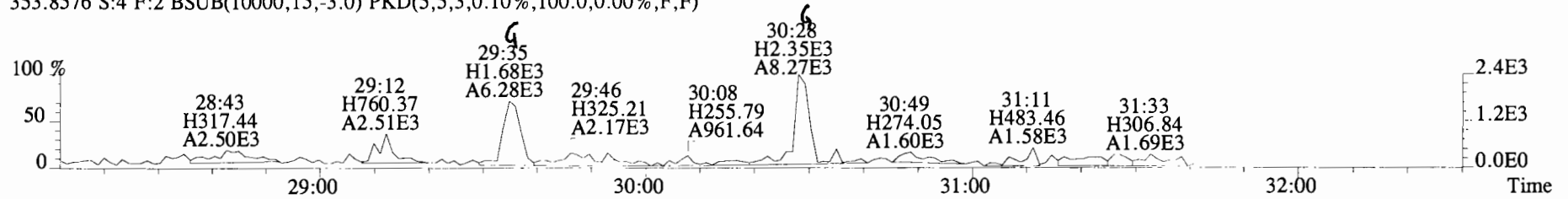
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



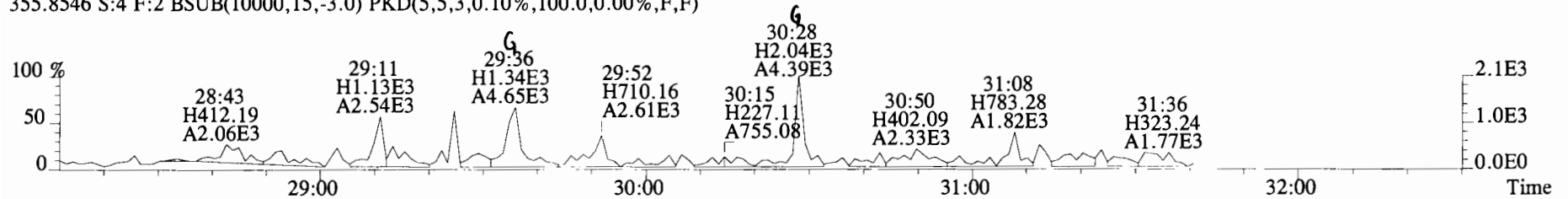
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



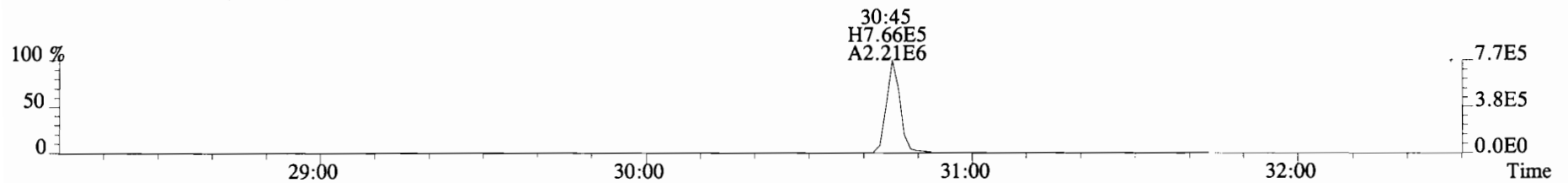
File:191031D2 #1-211 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



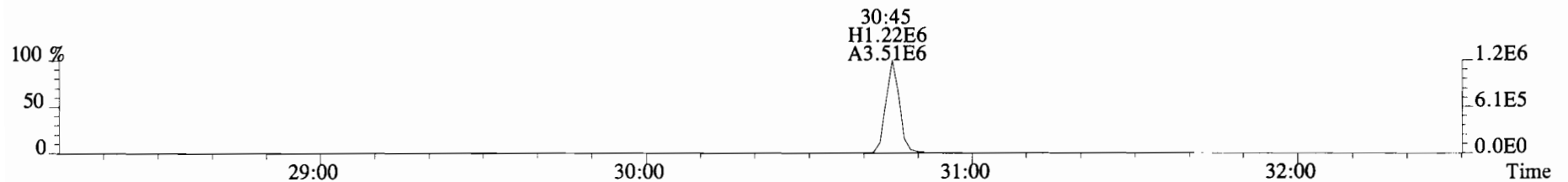
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



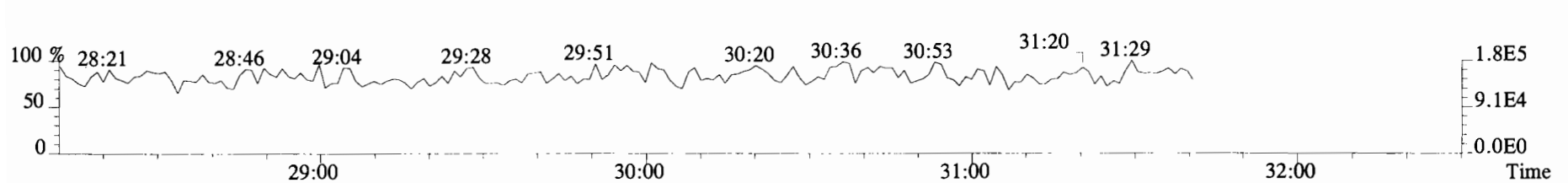
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



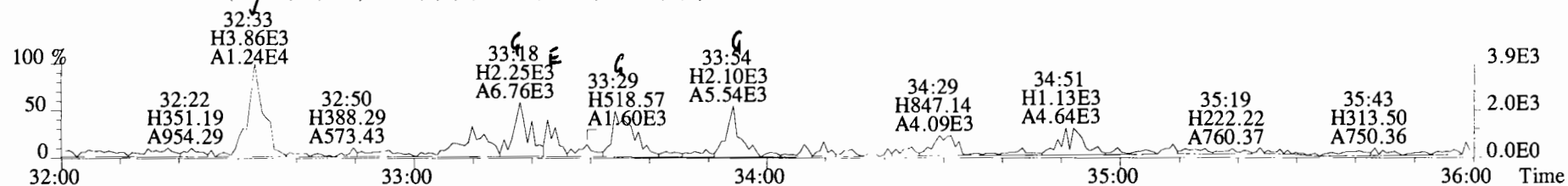
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



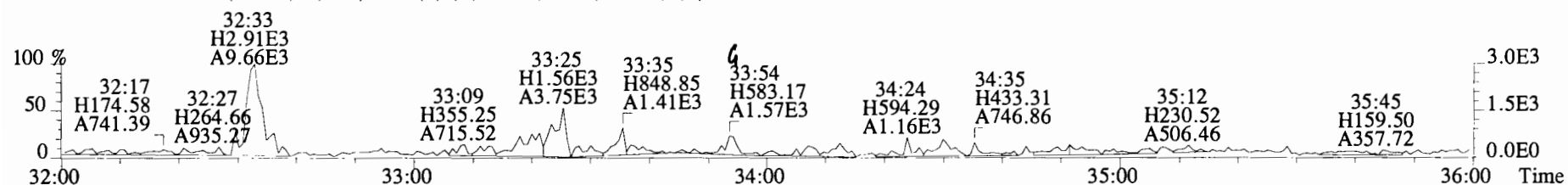
366.9792 S:4 F:2



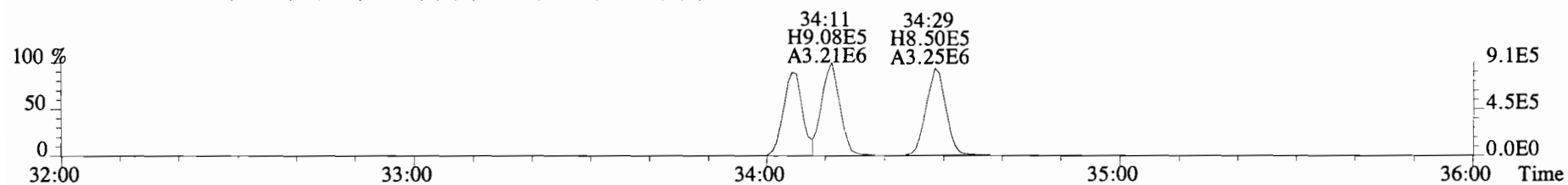
File:191031D2 #1-384 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



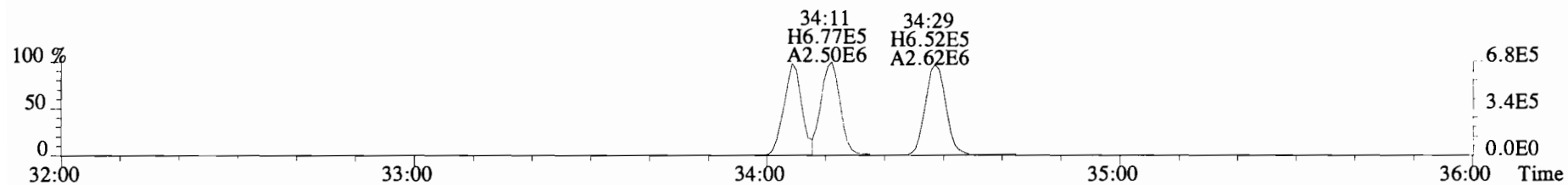
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



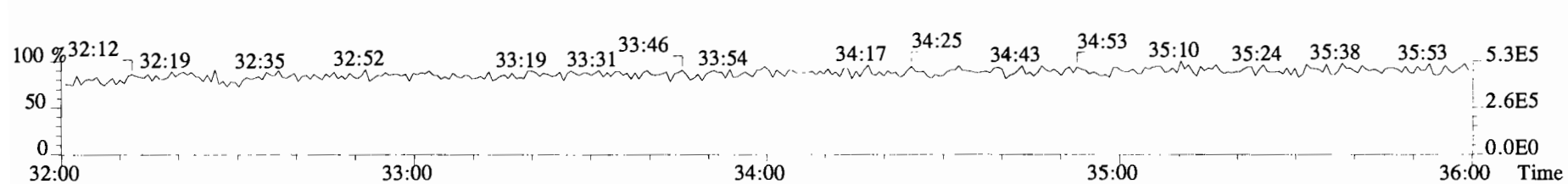
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



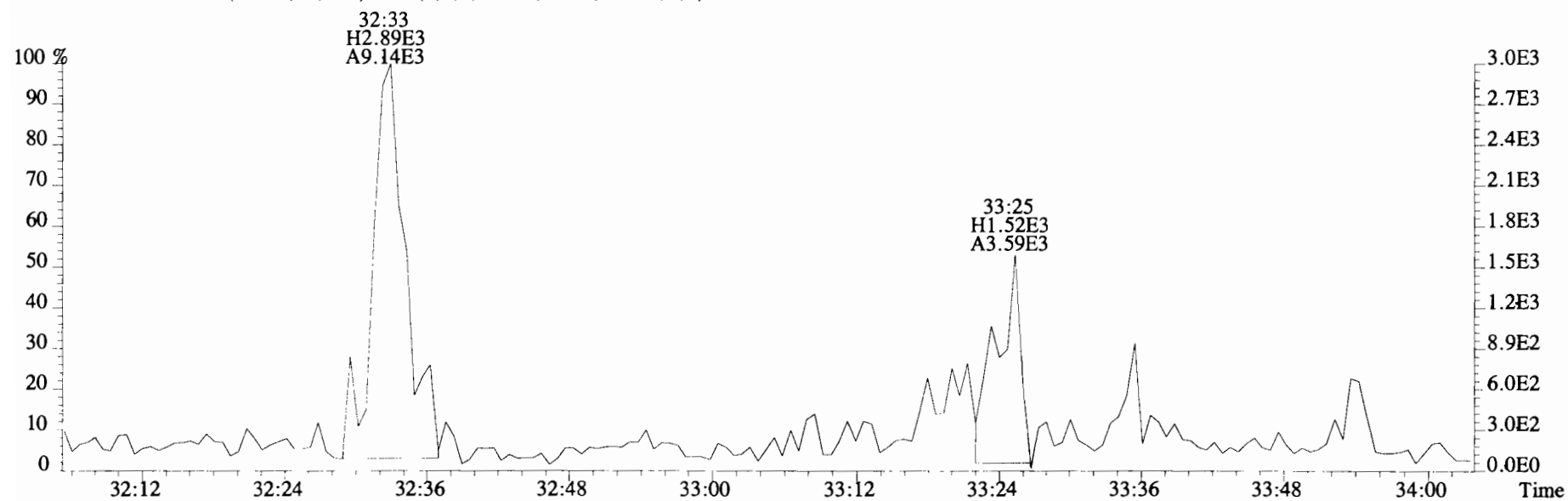
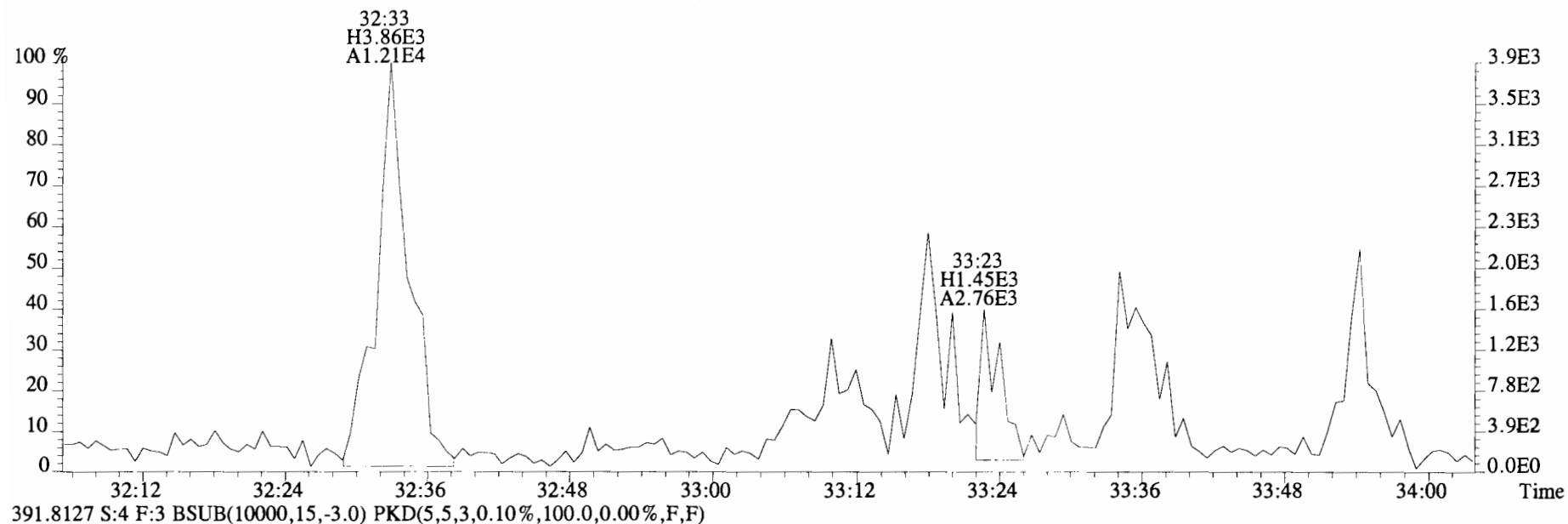
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



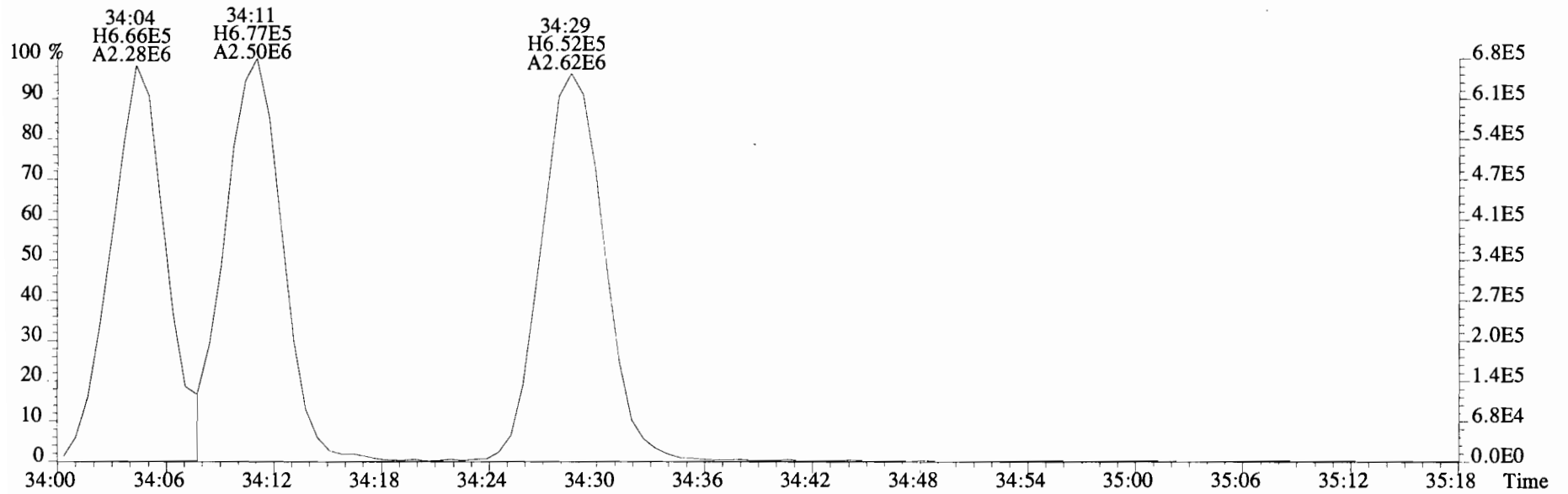
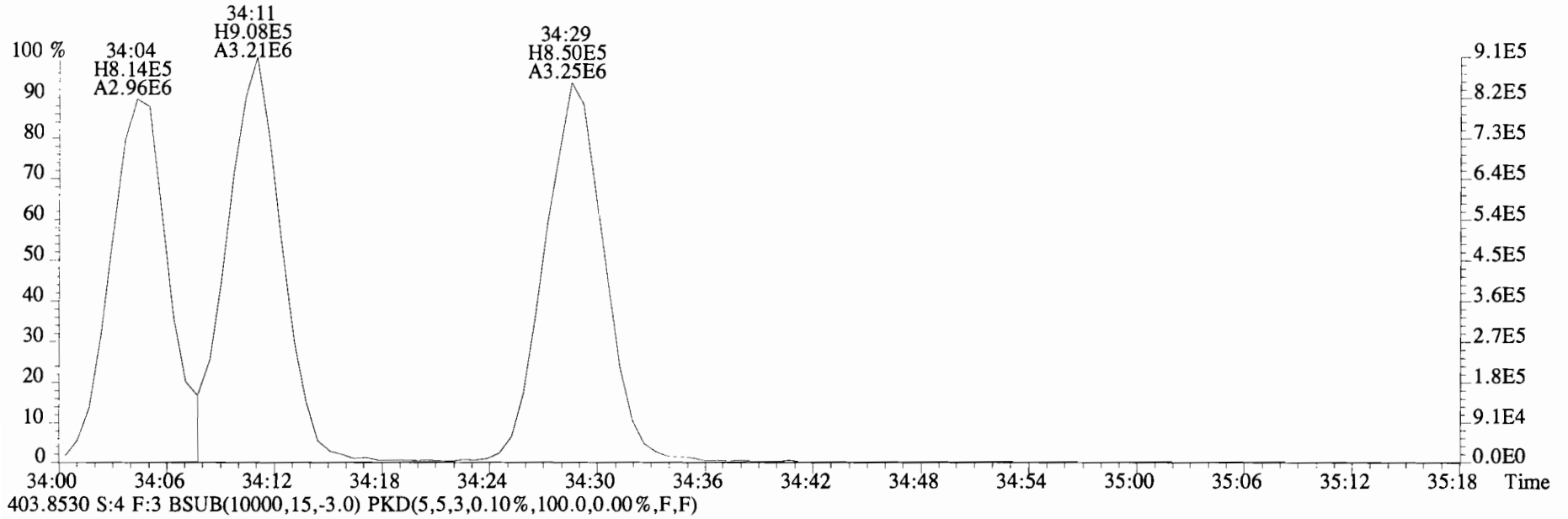
392.9760 S:4 F:3



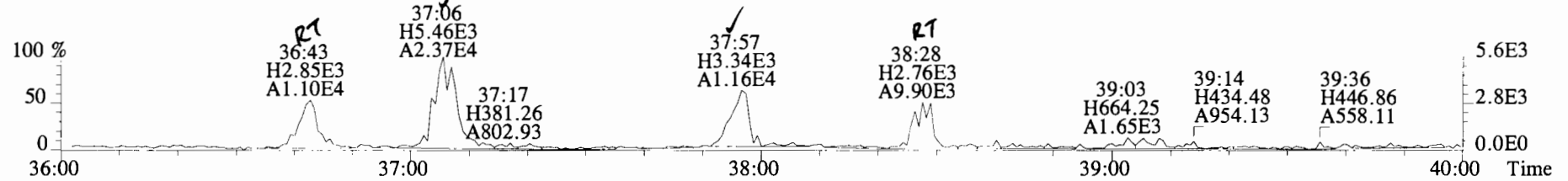
File:191031D2 #1-384 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



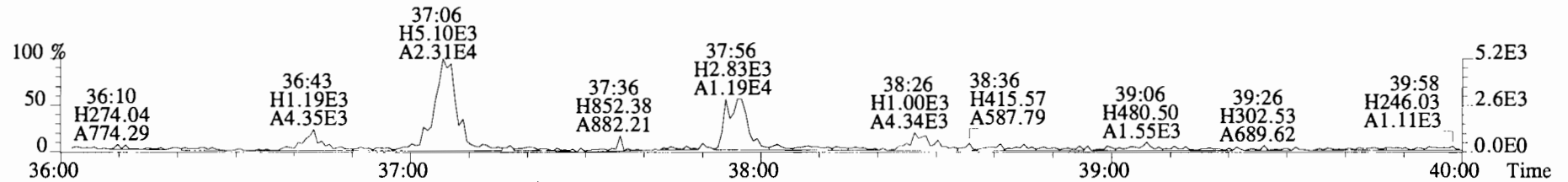
File:191031D2 #1-384 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



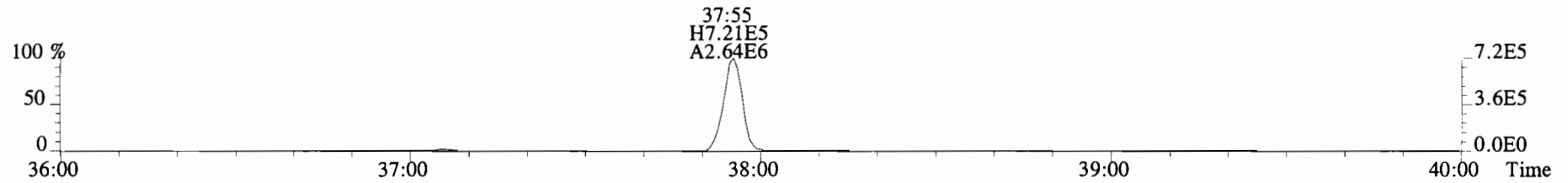
File:191031D2 #1-356 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



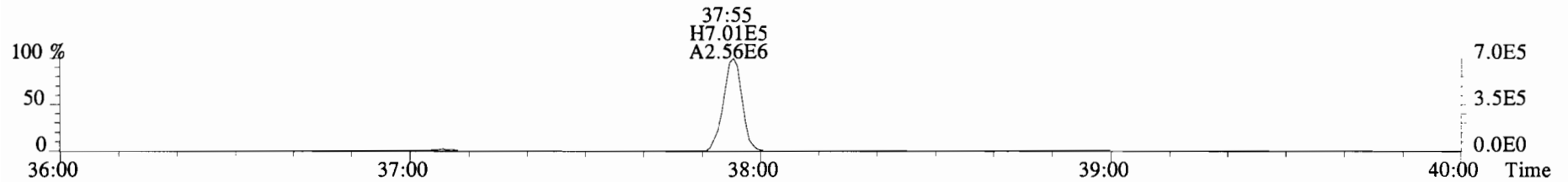
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



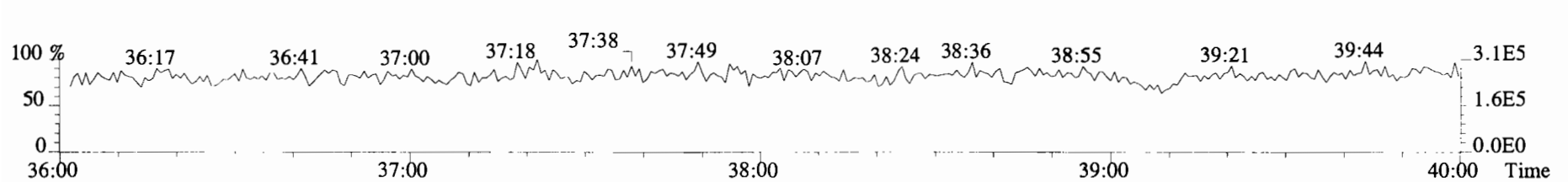
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



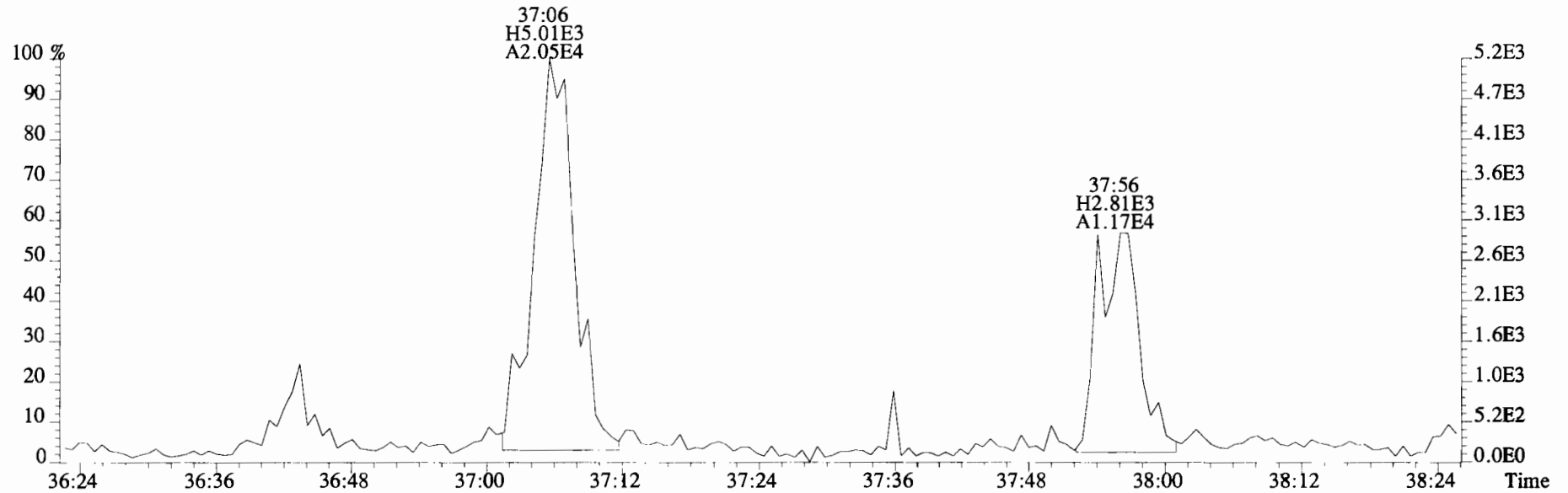
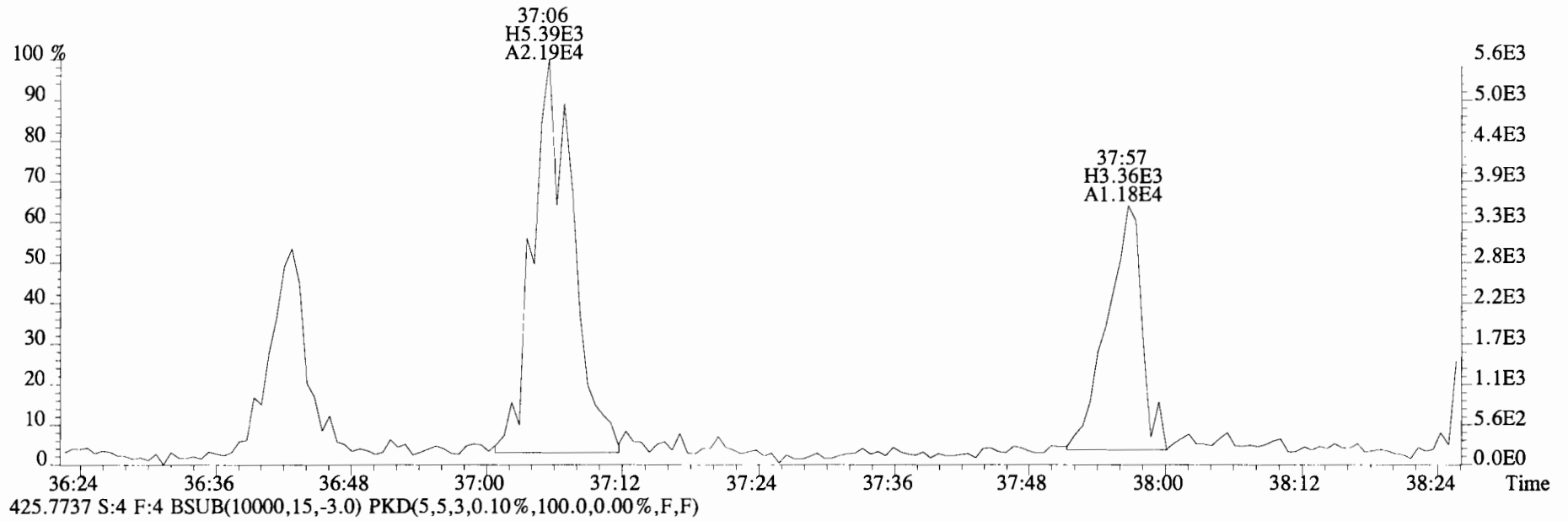
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



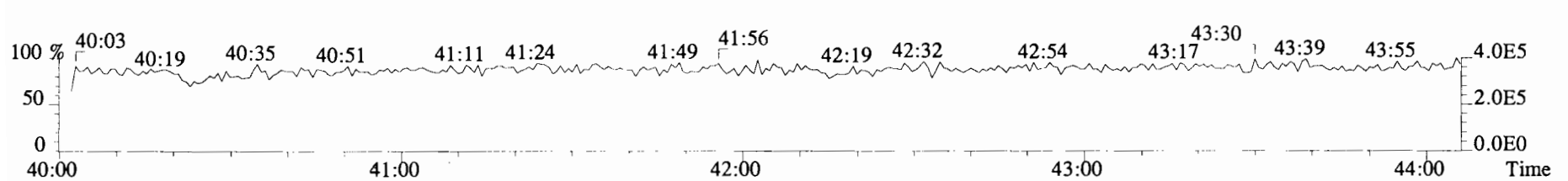
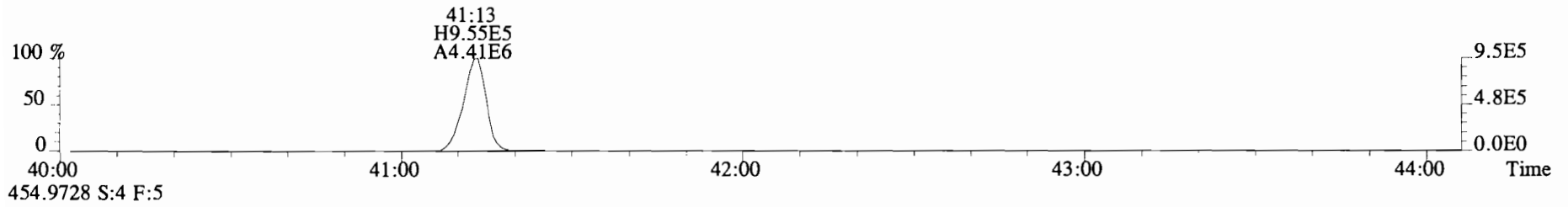
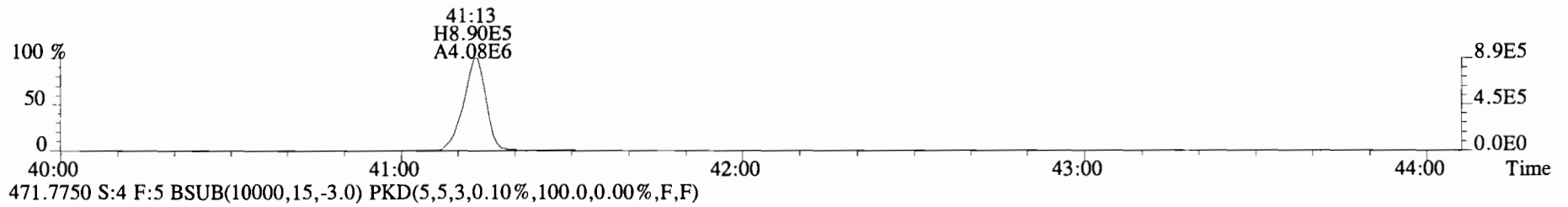
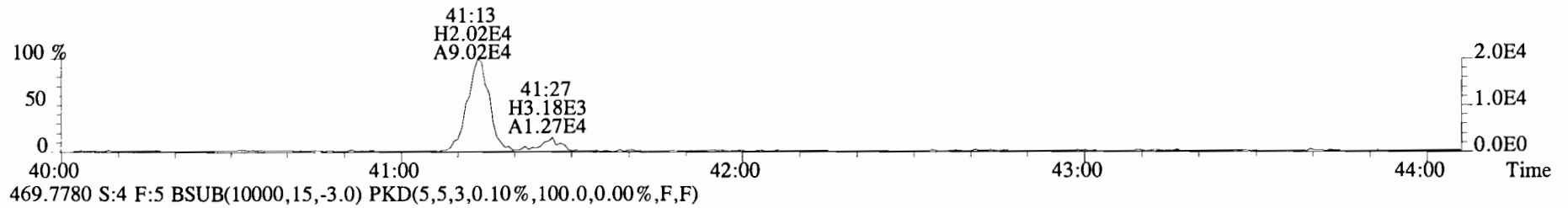
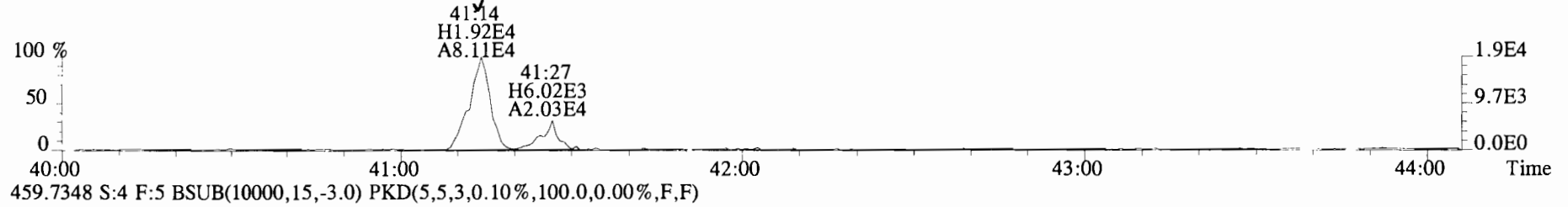
454.9728 S:4 F:4



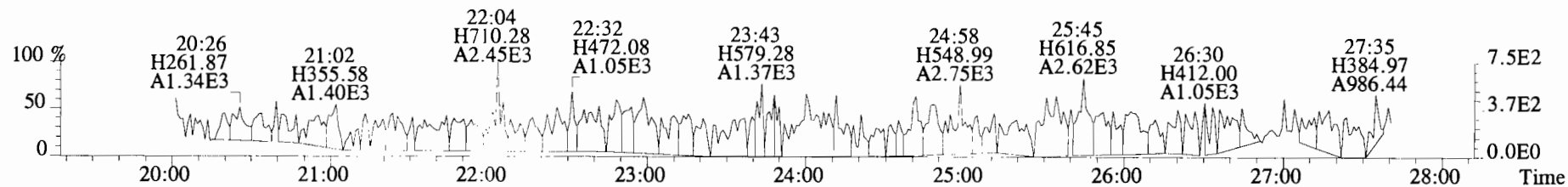
File:191031D2 #1-356 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
423.7767 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



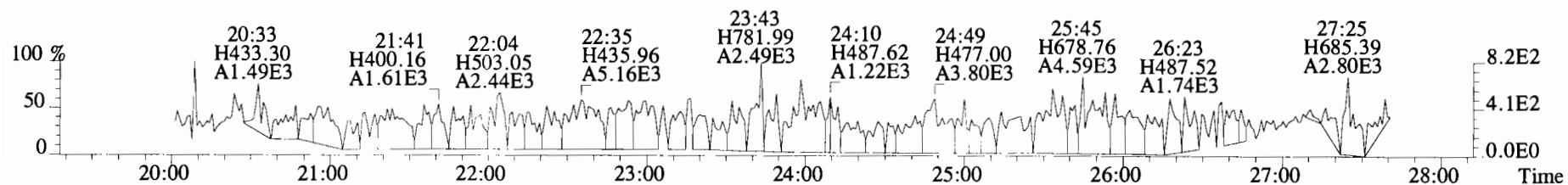
File:191031D2 #1-432 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
457.7377 S:4 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



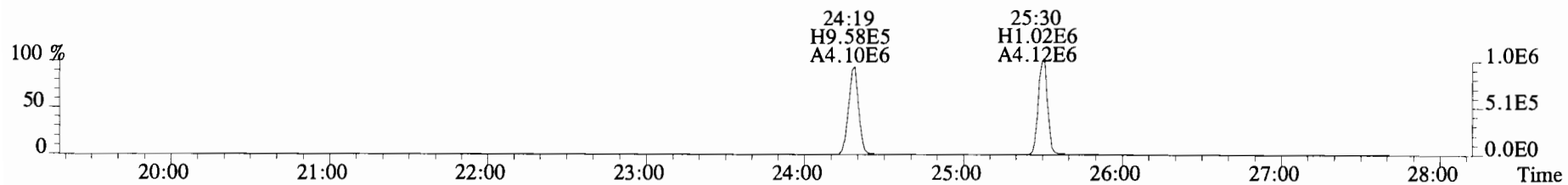
File:191031D2 #1-493 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



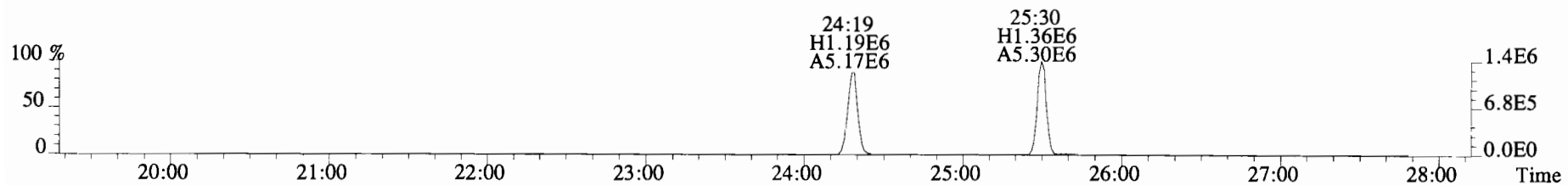
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



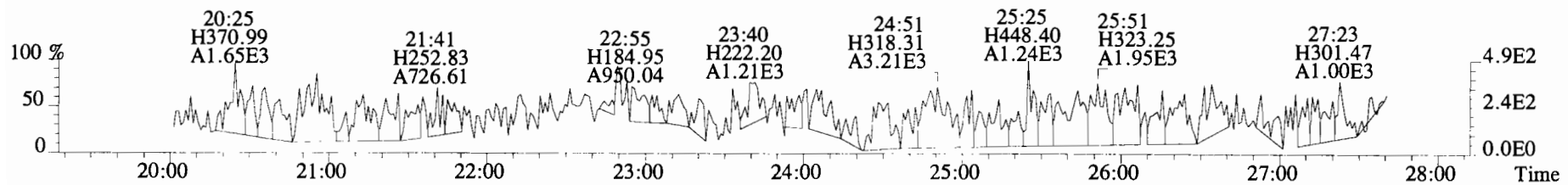
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



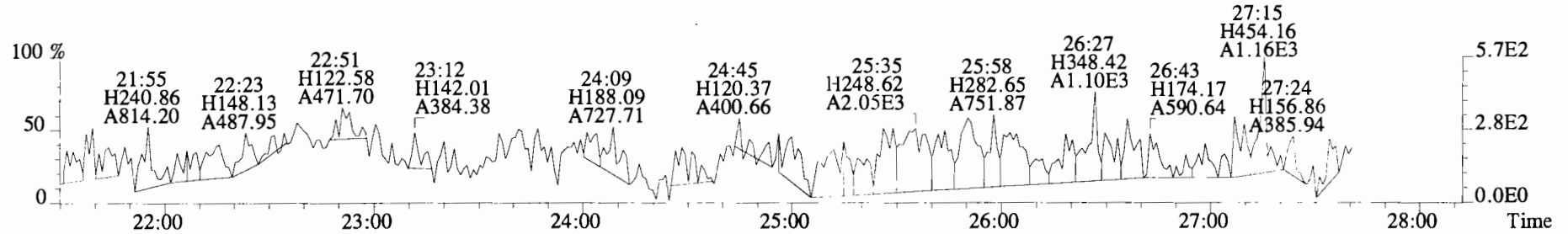
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



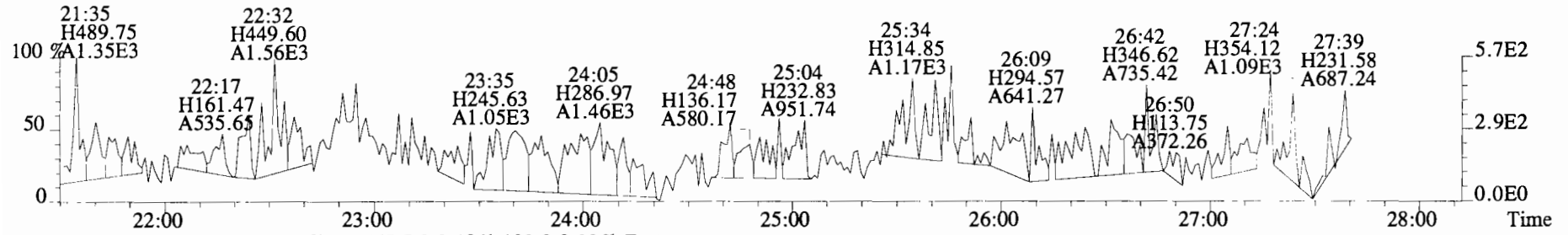
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



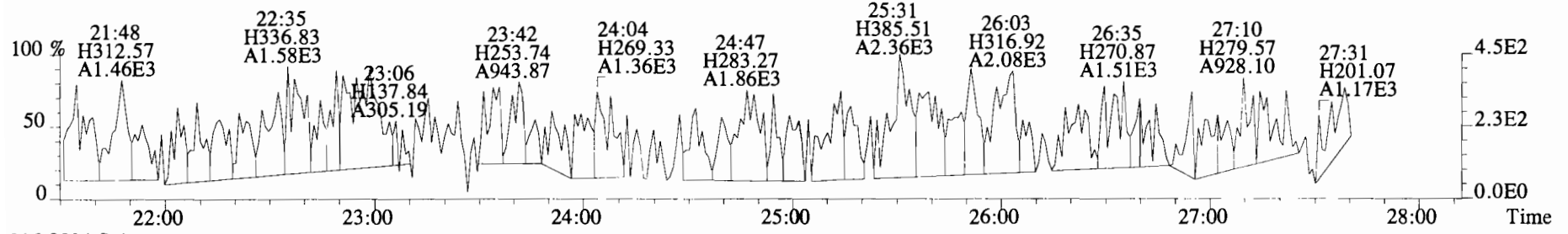
File:191031D2 #1-493 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



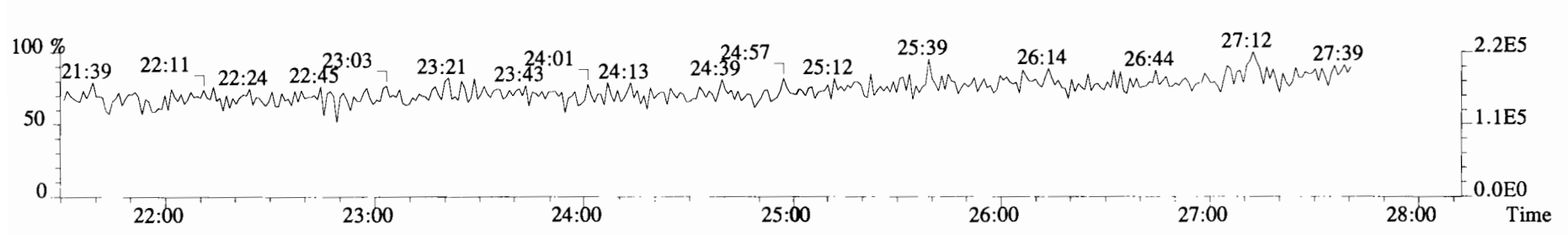
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



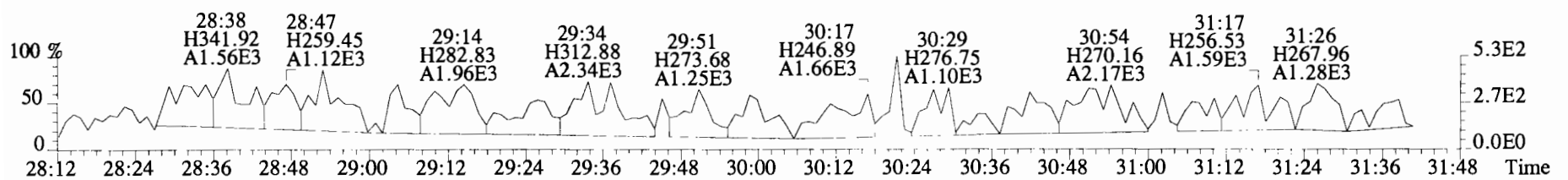
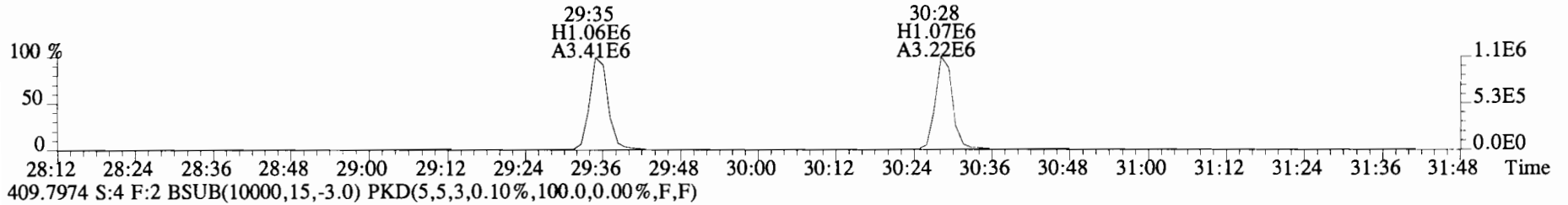
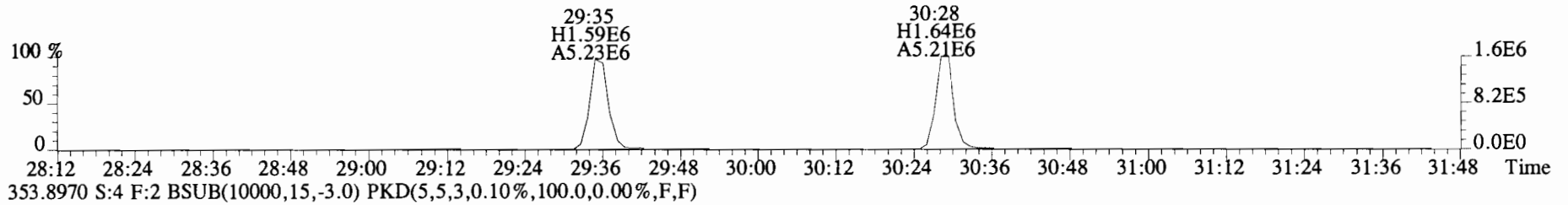
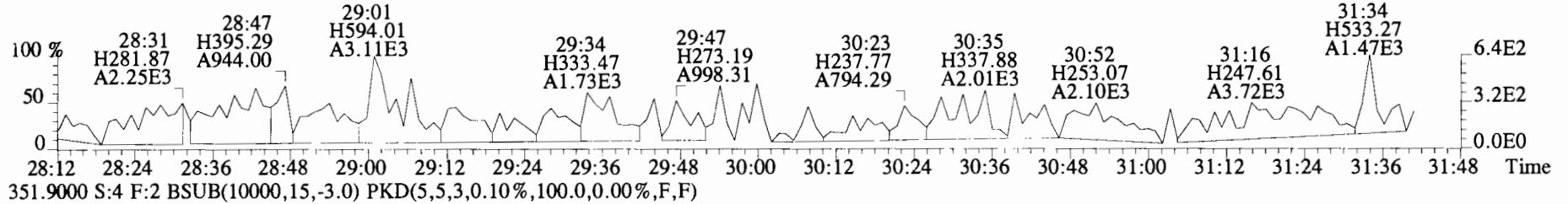
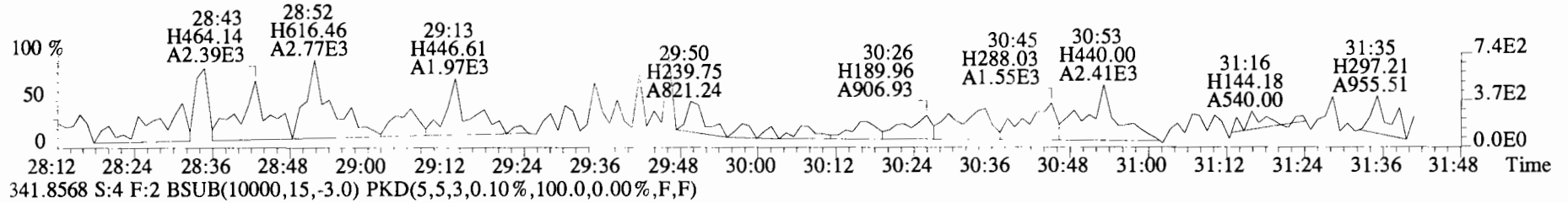
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



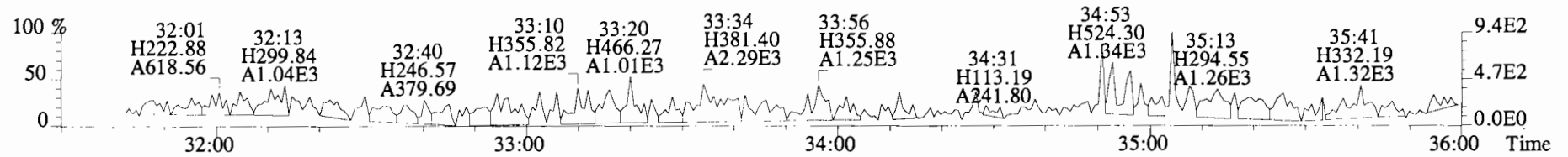
316.9824 S:4



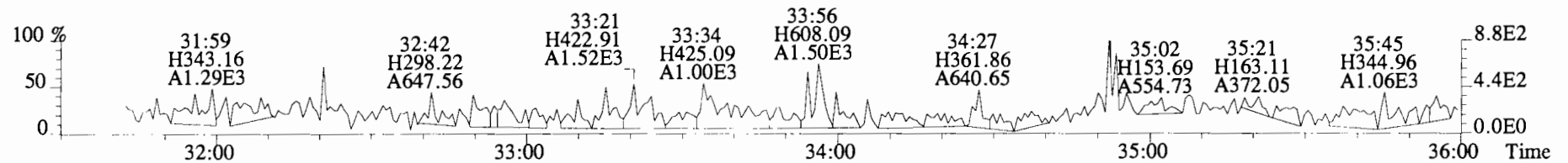
File:191031D2 #1-211 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



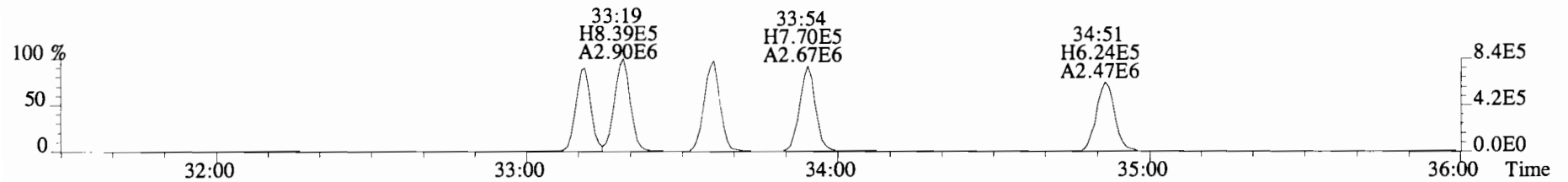
File:191031D2 #1-384 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



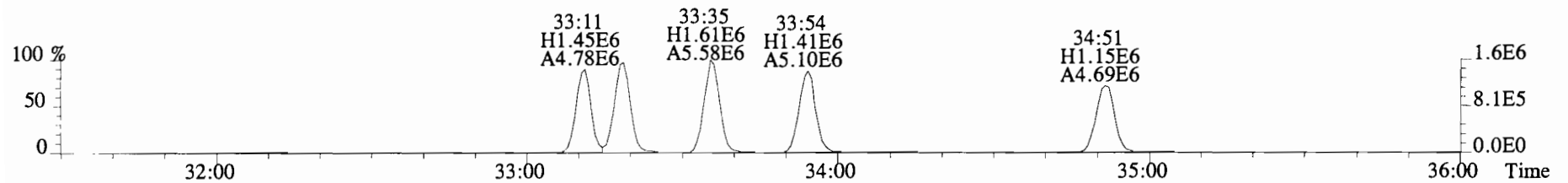
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



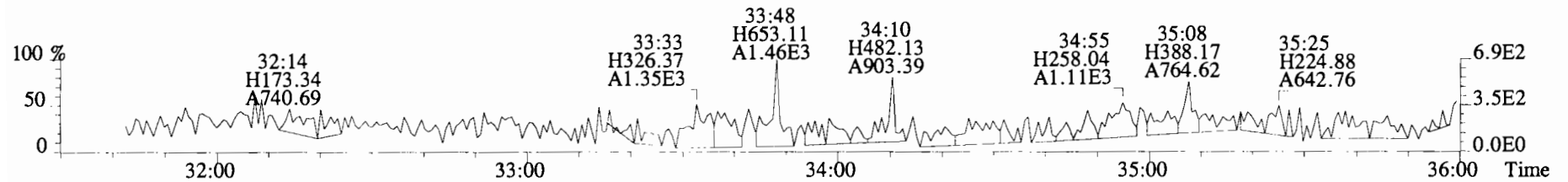
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



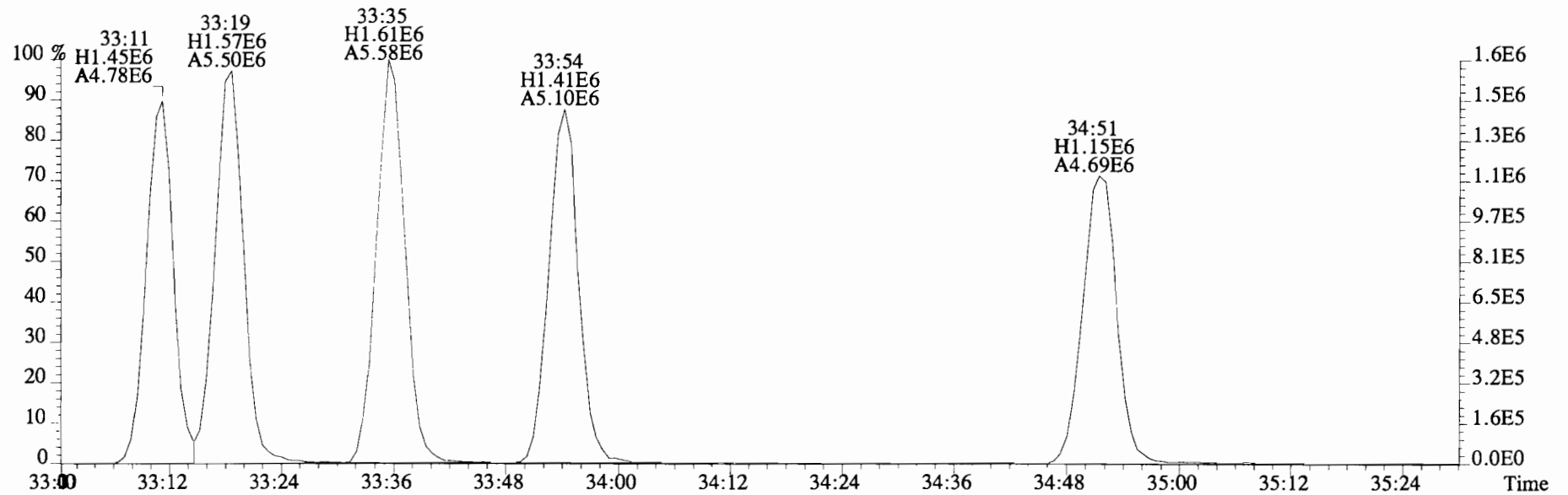
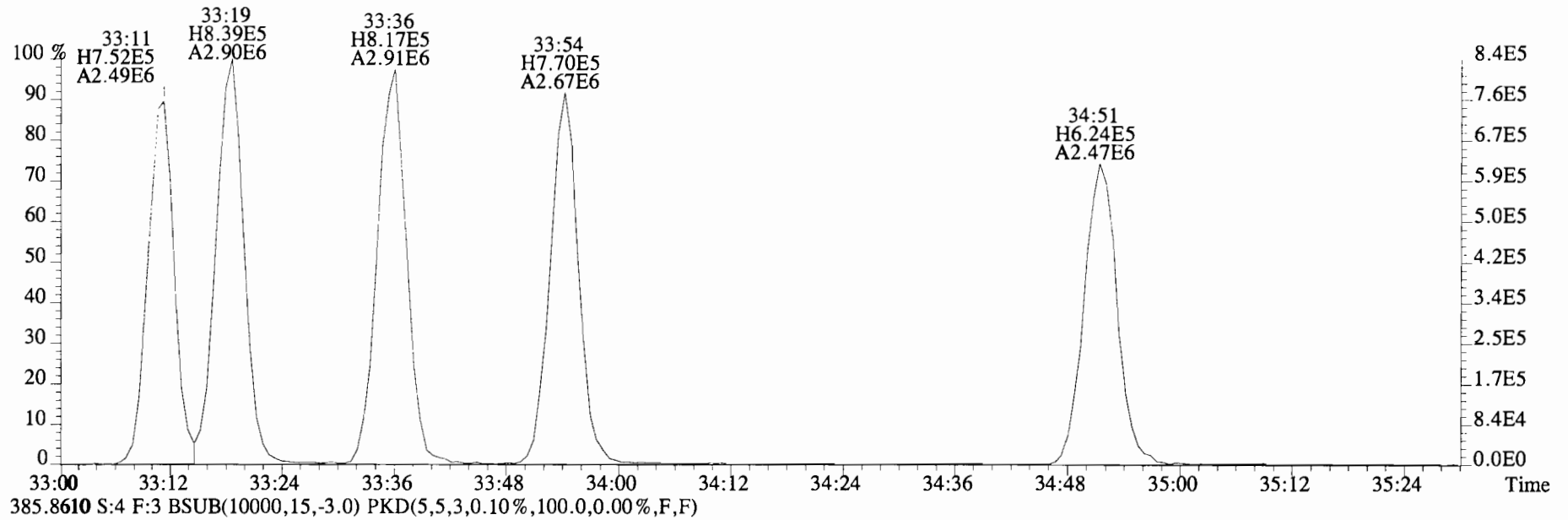
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



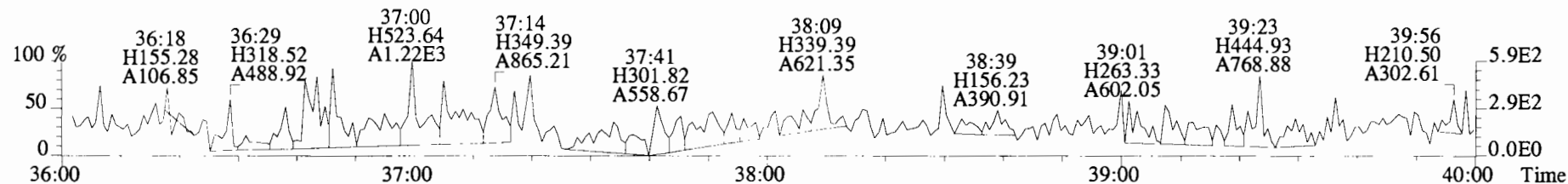
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



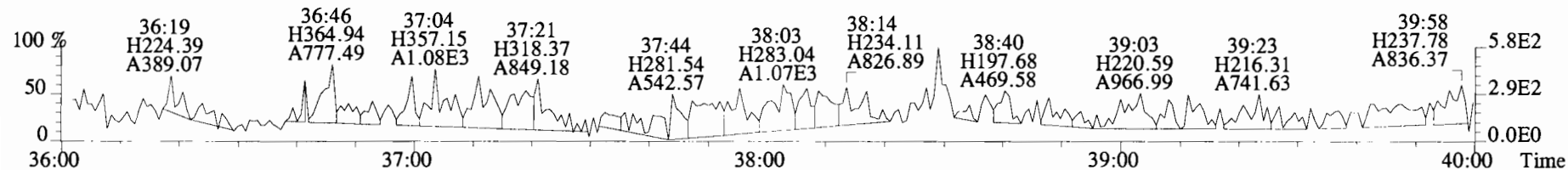
File:191031D2 #1-384 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



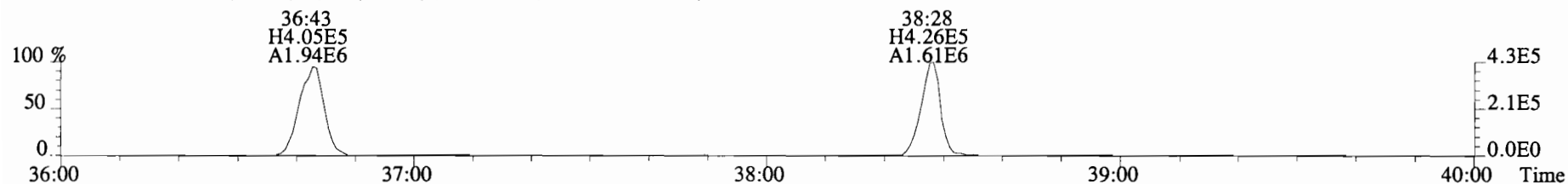
File:191031D2 #1-356 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 407.7818 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



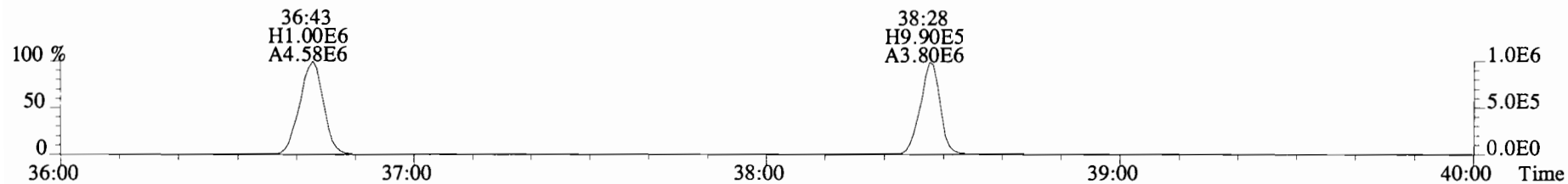
409.7788 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



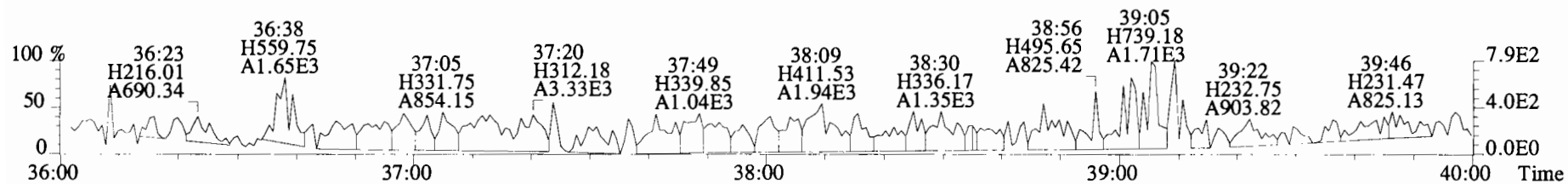
417.8253 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



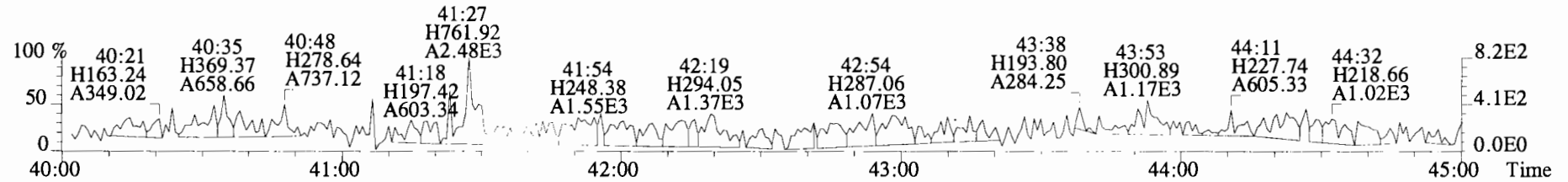
419.8220 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



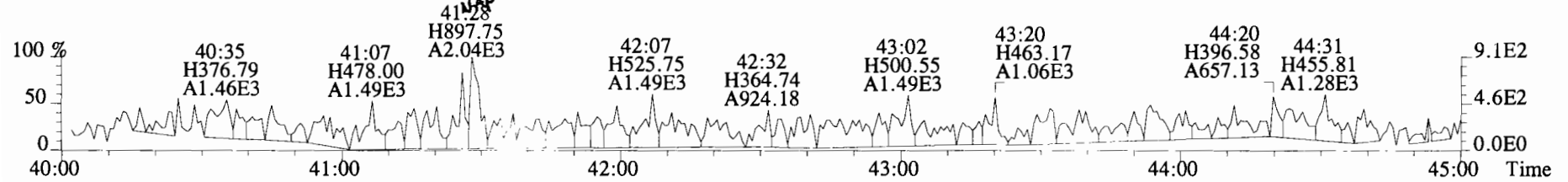
479.7165 S:4 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



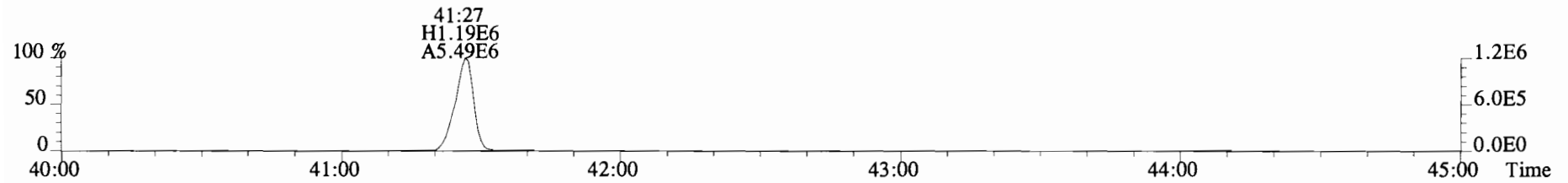
File:191031D2 #1-432 Acq: 1-NOV-2019 02:06:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-03RE1 PDI-082SC-A-15-16.1-191002 13.98 Exp:OCDD_DB5
 441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



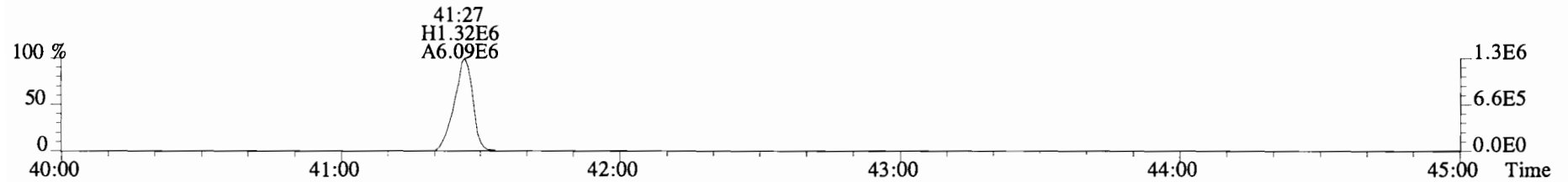
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



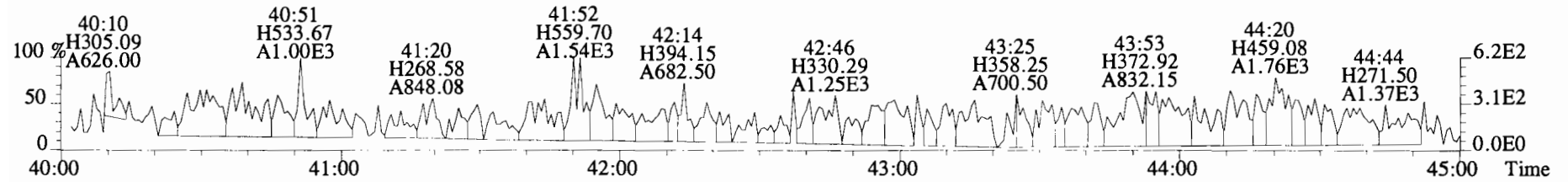
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	5.20e+04	0.76 y	0.91	26:17	1.1198	*	2.5	*	*	Total Tetra-Dioxins	10.0	10.7	*	*	*
1,2,3,7,8-PeCDD	6.70e+04	0.72 y	0.90	30:46	2.0052	*	2.5	*	*	Total Penta-Dioxins	14.3	17.1	*	*	*
1,2,3,4,7,8-HxCDD	7.54e+04	1.25 y	1.10	34:05	1.8945	*	2.5	*	*	Total Hexa-Dioxins	76.7	76.7	*	*	*
1,2,3,6,7,8-HxCDD	4.25e+05	1.24 y	0.94	34:11	11.191	*	2.5	*	*	Total Hepta-Dioxins	366	366	*	*	*
1,2,3,7,8,9-HxCDD	2.03e+05	1.29 y	0.96	34:29	4.9466	*	2.5	*	*	Total Tetra-Furans	120	129	*	*	*
1,2,3,4,6,7,8-HpCDD	6.52e+06	1.04 y	0.98	37:56	176.50	*	2.5	*	*	Total Penta-Furans	136.26	137.66	*	*	*
OCDD	4.84e+07	0.91 y	0.96	41:14	1644.7	*	2.5	*	*	Total Hexa-Furans	159	159	*	*	*
										Total Hepta-Furans	119	121	*	*	*
2,3,7,8-TCDF	2.42e+06	0.80 y	0.95	25:31	37.167 (32.53)	*	2.5	*	*						
1,2,3,7,8-PeCDF	2.51e+06	1.69 y	0.96	29:36	44.440	*	2.5	*	*						
2,3,4,7,8-PeCDF	6.91e+05	1.66 y	1.01	30:28	11.771	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	4.39e+06	1.24 y	1.18	33:11	75.576	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	1.12e+06	1.25 y	1.07	33:19	18.427	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	3.68e+05	1.31 y	1.11	33:54	6.1057	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	1.76e+05	1.06 y	1.06	34:52	3.3071	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	2.38e+06	1.03 y	1.13	36:43	45.293	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	5.69e+05	1.00 y	1.28	38:28	11.516	*	2.5	*	*						
OCDF	4.27e+06	0.89 y	0.95	41:27	111.18	*	2.5	*	*						
										Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.02e+07	0.78 y	1.10	26:17	222.28				111					
IS	13C-1,2,3,7,8-PeCDD	7.39e+06	0.61 y	0.88	30:45	199.36				99.8					
IS	13C-1,2,3,4,7,8-HxCDD	7.22e+06	1.26 y	0.64	34:04	207.31				104					
IS	13C-1,2,3,6,7,8-HxCDD	8.08e+06	1.22 y	0.86	34:11	174.18				87.2					
IS	13C-1,2,3,7,8,9-HxCDD	8.52e+06	1.27 y	0.81	34:29	194.89				97.6					
IS	13C-1,2,3,4,6,7,8-HpCDD	7.53e+06	1.05 y	0.65	37:55	212.31				106					
IS	13C-OCDD	1.23e+07	0.90 y	0.58	41:13	390.49				97.8					
IS	13C-2,3,7,8-TCDF	1.37e+07	0.80 y	1.03	25:30	207.82				104					
IS	13C-1,2,3,7,8-PeCDF	1.18e+07	1.59 y	0.85	29:35	216.09				108					
IS	13C-2,3,4,7,8-PeCDF	1.16e+07	1.58 y	0.85	30:29	214.00				107					
IS	13C-1,2,3,4,7,8-HxCDF	9.85e+06	0.51 y	0.83	33:11	218.42				109					
IS	13C-1,2,3,6,7,8-HxCDF	1.13e+07	0.53 y	1.03	33:18	202.15				101					
IS	13C-2,3,4,6,7,8-HxCDF	1.08e+07	0.52 y	0.95	33:54	209.04				105					
IS	13C-1,2,3,7,8,9-HxCDF	1.00e+07	0.52 y	0.83	34:51	223.34				112					
IS	13C-1,2,3,4,6,7,8-HpCDF	9.29e+06	0.44 y	0.76	36:43	226.26				113					
IS	13C-1,2,3,4,7,8,9-HpCDF	7.71e+06	0.42 y	0.58	38:28	244.66				123					
IS	13C-OCDF	1.62e+07	0.89 y	0.69	41:27	433.60				109					
C/Up	37Cl-2,3,7,8-TCDD	3.96e+06		1.20	26:18	78.606				98.4					
RS/RT	13C-1,2,3,4-TCDD	8.40e+06	0.78 y	1.00	25:43	199.70									
RS	13C-1,2,3,4-TCDF	1.27e+07	0.81 y	1.00	24:18	199.70									
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.08e+07	0.52 y	1.00	33:36	199.70									

Integrations
 by DB
 Analyst: DB
 Reviewed
 by CT
 Analyst: CT
 Date: 11/6/19
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 10 File: 191031D2 S: 5 I: 1 F: 1
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 10.672

Unnamed Concentration: 9.552

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
22:57	5.384e+04	6.095e+04	0.88	y	1.148e+05	2.4725	
23:18	2.481e+04	3.109e+04	0.80	y	5.591e+04	1.2042	
23:42	1.061e+04	1.467e+04	0.72	y	2.529e+04	0.54469	
24:26	7.402e+03	7.675e+03	0.96	n	1.359e+04	0.29263	
24:38	1.267e+04	1.655e+04	0.77	y	2.922e+04	0.62945	
24:49	1.642e+04	2.502e+04	0.66	y	4.144e+04	0.89266	
25:00	3.360e+03	3.472e+03	0.97	n	6.145e+03	0.13236	
25:13	6.115e+03	7.854e+03	0.78	y	1.397e+04	0.30088	
25:23	7.272e+03	8.951e+03	0.81	y	1.622e+04	0.34942	
25:42	5.490e+03	6.591e+03	0.83	y	1.208e+04	0.26022	
25:49	2.119e+03	3.088e+03	0.69	y	5.208e+03	0.11217	
26:04	4.208e+04	5.624e+04	0.75	y	9.832e+04	2.1177	
26:17	2.242e+04	2.957e+04	0.76	y	5.199e+04	1.1198	2,3,7,8-TCDD
26:34	7.108e+03	6.375e+03	1.11	n	1.128e+04	0.24304	

Totals class: PeCDD EMPC

Entry #: 21

Run: 10 File: 191031D2 S: 5 I: 1 F: 2
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 17.133 Unnamed Concentration: 15.127

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
28:43	6.312e+04	1.047e+05	0.60	y	1.678e+05	5.0230	
29:11	1.152e+04	1.947e+04	0.59	y	3.099e+04	0.92752	
29:37	3.186e+04	4.585e+04	0.69	y	7.771e+04	2.3260	
29:46	2.651e+04	4.180e+04	0.63	y	6.830e+04	2.0444	
29:51	1.607e+04	2.273e+04	0.71	y	3.879e+04	1.1611	
30:03	3.441e+04	4.441e+04	0.77	n	7.238e+04	2.1664	
30:22	5.722e+03	9.206e+03	0.62	y	1.493e+04	0.44679	
30:28	8.998e+03	3.246e+03	2.77	n	5.290e+03	0.15834	
30:46	2.809e+04	3.890e+04	0.72	y	6.699e+04	2.0052	1,2,3,7,8-PeCDD
30:50	4.353e+03	6.595e+03	0.66	y	1.095e+04	0.32768	
31:07	7.052e+03	1.372e+04	0.51	n	1.825e+04	0.54612	

Totals class: HxCDD EMPC

Entry #: 23

Run: 10 File: 191031D2 S: 5 I: 1 F: 3
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 76.723

Unnamed Concentration: 58.692

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Concentration	Name
32:32	4.273e+05	3.687e+05	1.16 y	7.961e+05	20.189	
33:07	6.837e+04	5.081e+04	1.35 y	1.192e+05	3.0223	
33:22	7.304e+05	5.958e+05	1.23 y	1.326e+06	33.631	
33:30	2.175e+04	1.694e+04	1.28 y	3.869e+04	0.98126	
34:05	4.184e+04	3.357e+04	1.25 y	7.540e+04	1.8945	1,2,3,4,7,8-HxCDD
34:11	2.352e+05	1.898e+05	1.24 y	4.249e+05	11.191	1,2,3,6,7,8-HxCDD
34:23	1.770e+04	1.651e+04	1.07 y	3.421e+04	0.86767	
34:29	1.144e+05	8.852e+04	1.29 y	2.030e+05	4.9466	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 10 File: 191031D2 S: 5 I: 1 F: 4
Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 366.00 Unnamed Concentration: 189.498

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:06	3.561e+06	3.435e+06	1.04 y	6.996e+06	189.50
37:56	3.314e+06	3.202e+06	1.04 y	6.516e+06	176.50 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 10 File: 191031D2 S: 5 I: 1 F: 1
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 128.78 Unnamed Concentration: 91.615

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:50	1.974e+04	2.110e+04	0.94	n	3.736e+04	0.57263
21:25	3.976e+04	4.596e+04	0.87	y	8.572e+04	1.3140
22:02	1.521e+05	1.750e+05	0.87	y	3.271e+05	5.0139
22:33	1.278e+05	1.634e+05	0.78	y	2.912e+05	4.4636
22:55	3.368e+05	4.361e+05	0.77	y	7.729e+05	11.847
23:20	1.142e+05	1.365e+05	0.84	y	2.508e+05	3.8443
23:27	3.875e+04	5.196e+04	0.75	y	9.071e+04	1.3904
23:36	8.322e+04	9.645e+04	0.86	y	1.797e+05	2.7542
23:57	1.920e+04	2.537e+04	0.76	y	4.457e+04	0.68328
24:04	2.163e+04	3.008e+04	0.72	y	5.171e+04	0.79261
24:12	8.555e+04	1.043e+05	0.82	y	1.898e+05	2.9100
24:18	2.112e+05	2.574e+05	0.82	y	4.686e+05	7.1833
24:44	9.156e+05	1.126e+06	0.81	y	2.042e+06	31.296
24:59	5.428e+04	5.756e+04	0.94	n	1.019e+05	1.5617
25:09	2.160e+04	2.203e+04	0.98	n	3.899e+04	0.59765
25:19	2.012e+04	2.160e+04	0.93	n	3.824e+04	0.58613
25:25	1.652e+05	2.056e+05	0.80	y	3.708e+05	5.6847
25:31	1.081e+06	1.344e+06	0.80	y	2.425e+06	37.167
25:50	9.003e+04	1.095e+05	0.82	y	1.995e+05	3.0589
26:04	2.162e+04	2.925e+04	0.74	y	5.087e+04	0.77973
27:16	2.290e+05	1.946e+05	1.18	n	3.444e+05	5.2800

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 10 File: 191031D2 S: 5 I: 1 F: 1
Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 12.931 Unnamed Concentration: 12.931

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:16	4.536e+05	2.921e+05	1.55 y	7.457e+05	12.931

Totals class: PeCDF EMPC

Entry #: 31

Run: 10 File: 191031D2 S: 5 I: 1 F: 2
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 124.73 Unnamed Concentration: 68.518

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
28:33	7.070e+04	5.117e+04	1.38	y	1.219e+05	2.1132	
28:41	9.789e+05	6.039e+05	1.62	y	1.583e+06	27.446	
29:03	1.428e+04	1.160e+04	1.23	n	2.349e+04	0.40736	
29:14	1.810e+05	1.046e+05	1.73	y	2.855e+05	4.9510	
29:25	1.722e+05	1.004e+05	1.72	y	2.726e+05	4.7275	
29:36	1.581e+06	9.341e+05	1.69	y	2.515e+06	44.440	1,2,3,7,8-PeCDF
29:50	5.493e+05	3.284e+05	1.67	y	8.777e+05	15.219	
30:23	2.217e+04	1.431e+04	1.55	y	3.648e+04	0.63264	
30:28	4.315e+05	2.598e+05	1.66	y	6.913e+05	11.771	2,3,4,7,8-PeCDF
30:31	4.327e+05	2.610e+05	1.66	y	6.937e+05	12.029	
31:21	4.998e+04	2.246e+04	2.23	n	5.726e+04	0.99296	

Totals class: HxCDF EMPC

Entry #: 33

Run: 10 File: 191031D2 S: 5 I: 1 F: 3
 Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

Total Concentration: 159.30 Unnamed Concentration: 55.886

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:00	2.014e+05	1.664e+05	1.21 y	3.678e+05	6.3379
32:10	6.370e+05	4.969e+05	1.28 y	1.134e+06	19.539
32:32	2.017e+04	1.524e+04	1.32 y	3.541e+04	0.61018
32:42	7.171e+05	5.865e+05	1.22 y	1.304e+06	22.465
33:05	3.186e+04	2.449e+04	1.30 y	5.635e+04	0.97108
33:11	2.426e+06	1.960e+06	1.24 y	4.386e+06	75.576 1,2,3,4,7,8-HxCDF
33:19	6.219e+05	4.964e+05	1.25 y	1.118e+06	18.427 1,2,3,6,7,8-HxCDF
33:36	1.705e+04	1.410e+04	1.21 y	3.115e+04	0.53685
33:54	2.085e+05	1.594e+05	1.31 y	3.678e+05	6.1057 2,3,4,6,7,8-HxCDF
34:52	9.078e+04	8.543e+04	1.06 y	1.762e+05	3.3071 1,2,3,7,8,9-HxCDF
34:55	1.730e+05	1.418e+05	1.22 y	3.148e+05	5.4251

Totals class: HpCDF EMPC

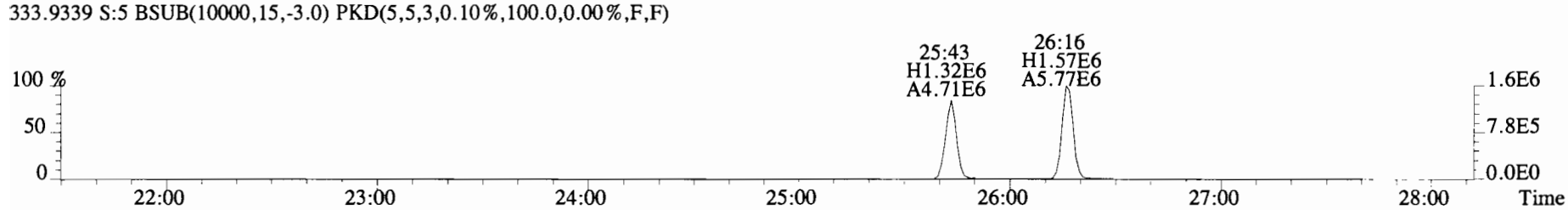
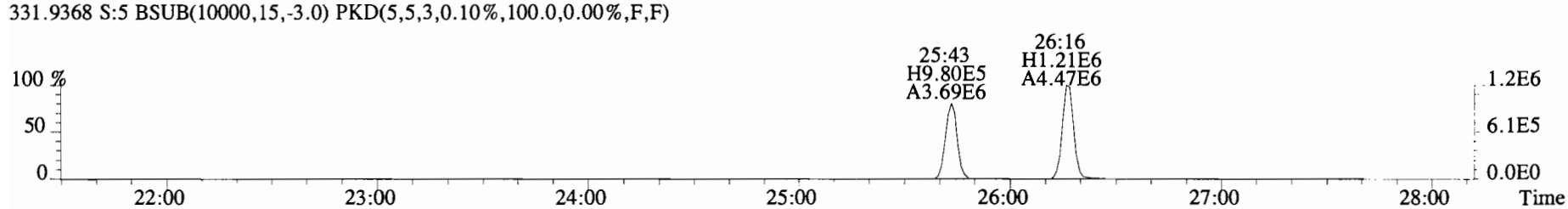
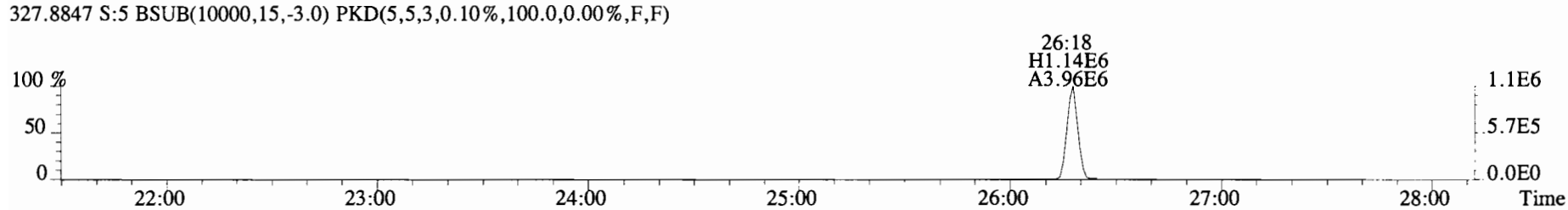
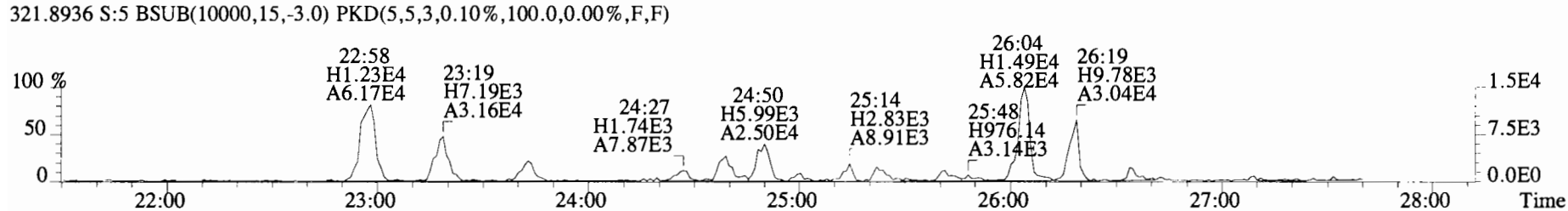
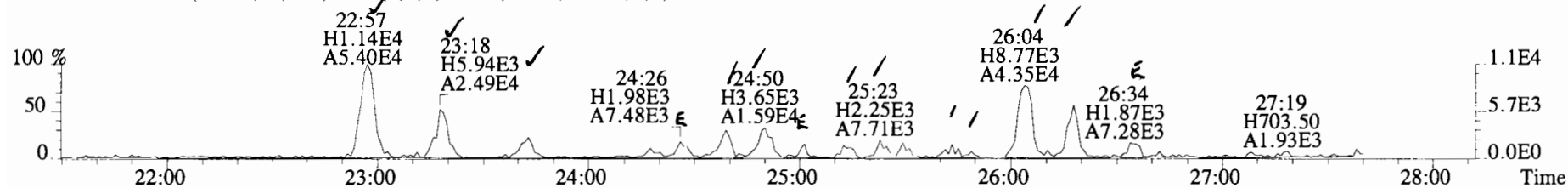
Entry #: 35

Run: 10 File: 191031D2 S: 5 I: 1 F: 4
Acquired: 1-NOV-19 02:54:17 Processed: 1-NOV-19 12:03:15

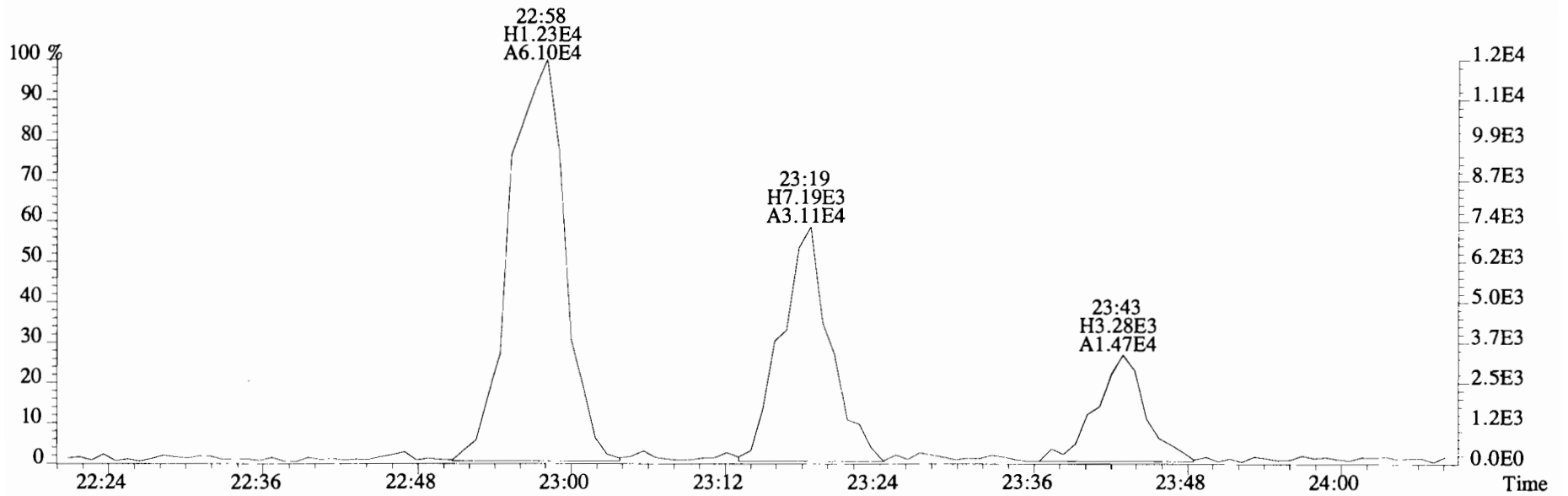
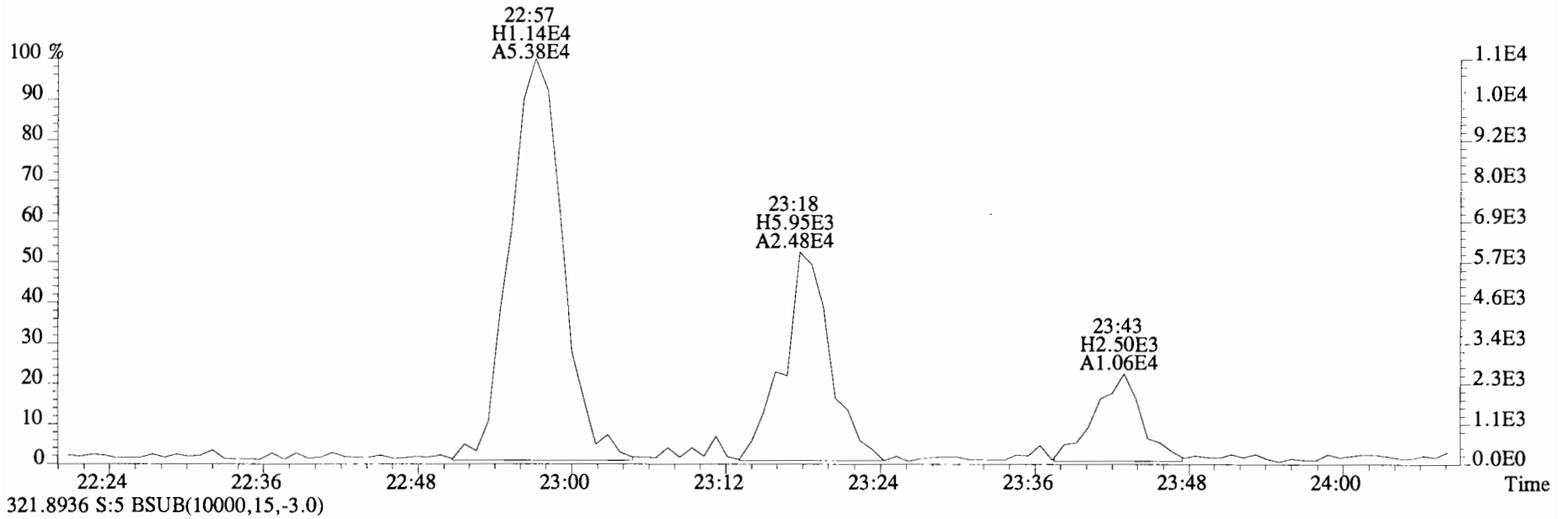
Total Concentration: 120.63 Unnamed Concentration: 63.820

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
36:43	1.206e+06	1.170e+06	1.03	y	2.376e+06	45.293	1,2,3,4,6,7,8-HpCDF
37:06	3.053e+04	3.606e+04	0.85	n	5.988e+04	1.1785	
37:17	1.622e+06	1.561e+06	1.04	y	3.183e+06	62.641	
38:28	2.842e+05	2.848e+05	1.00	y	5.690e+05	11.516	1,2,3,4,7,8,9-HpCDF

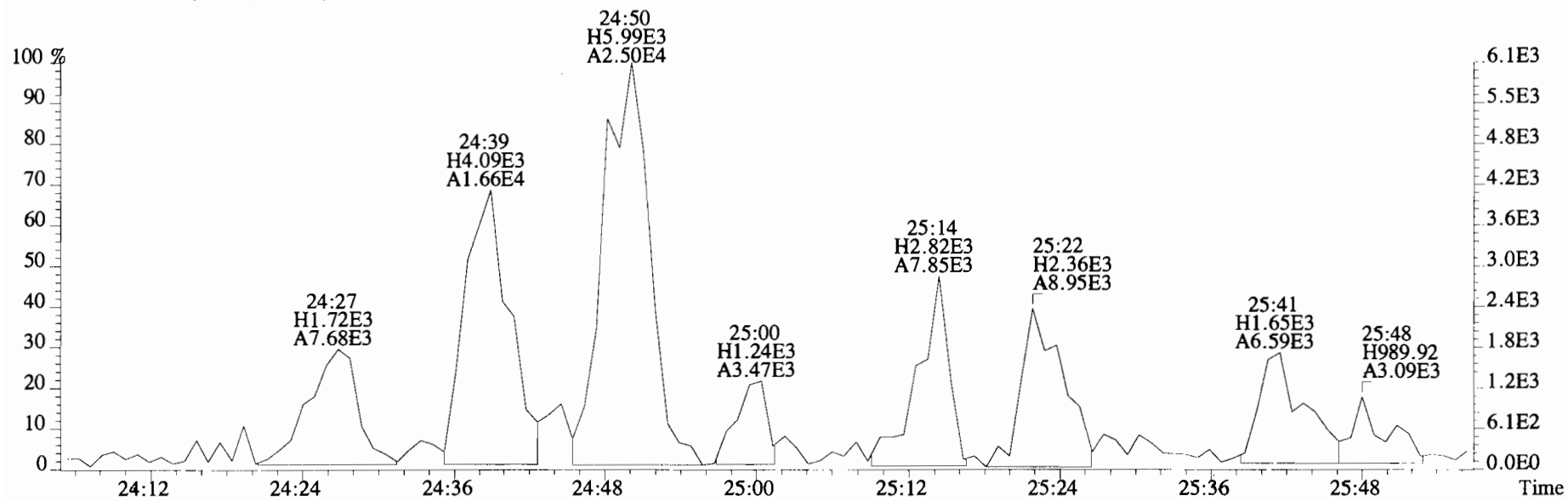
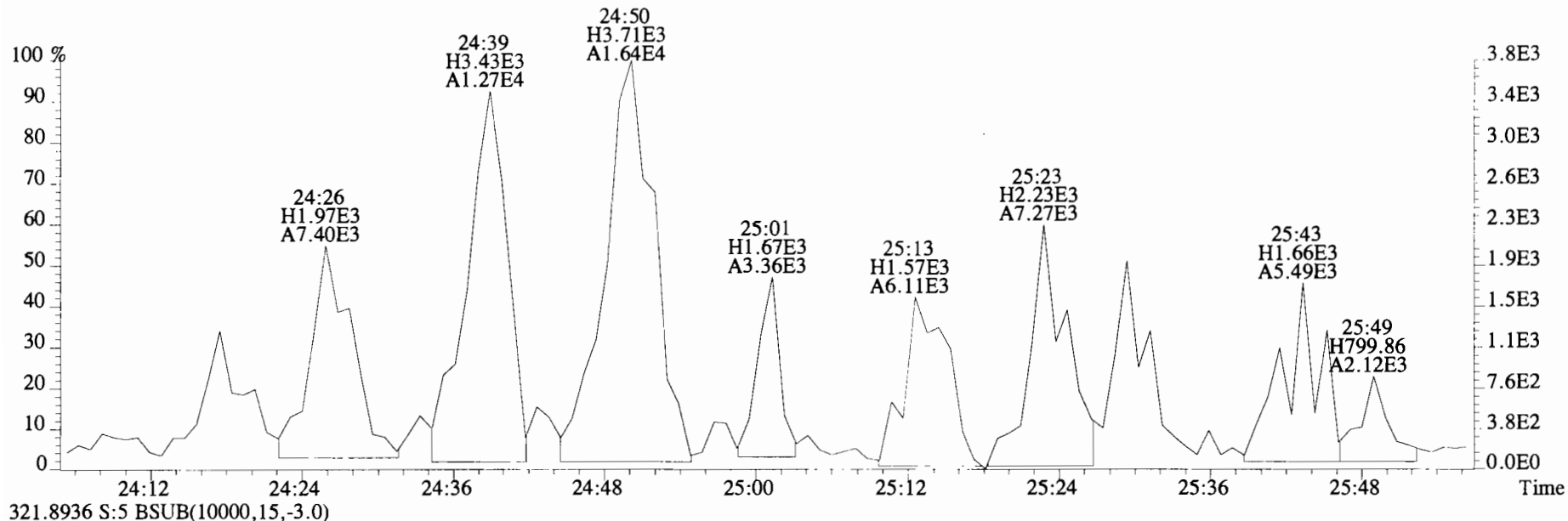
File: 191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text: Viata_Analytical_Laboratory_VG7 Text: 1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp: OCDD_DB5
 319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



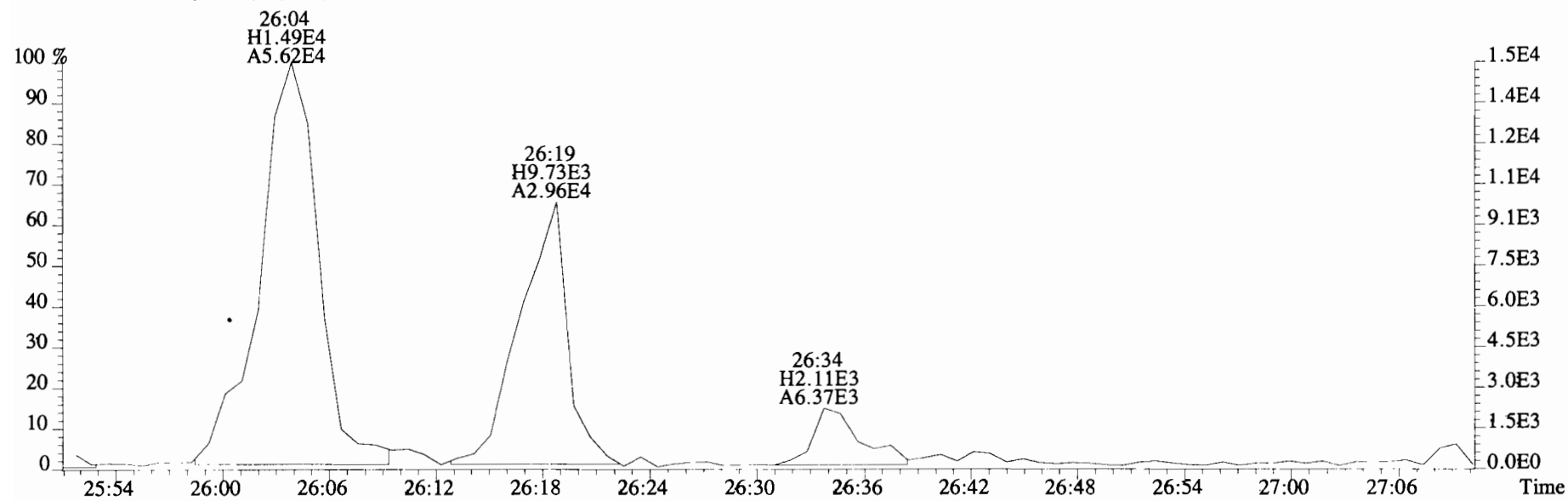
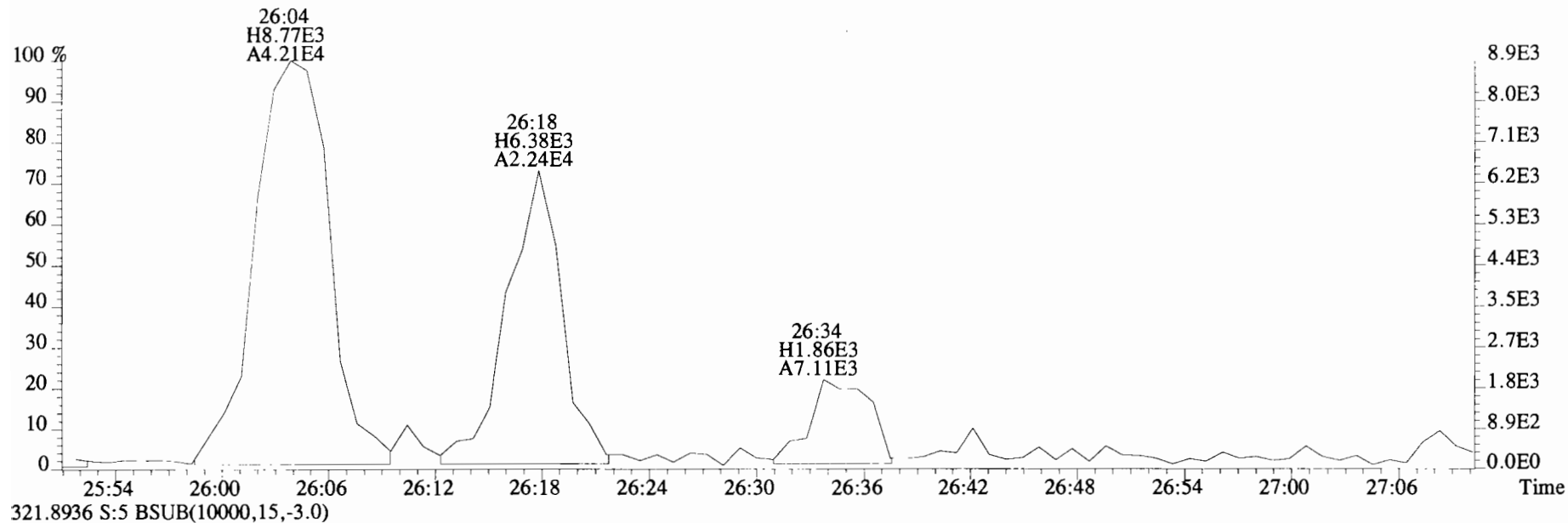
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Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0)



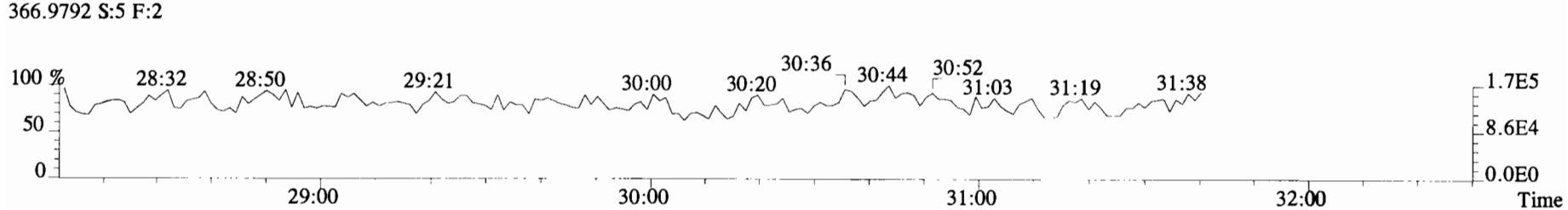
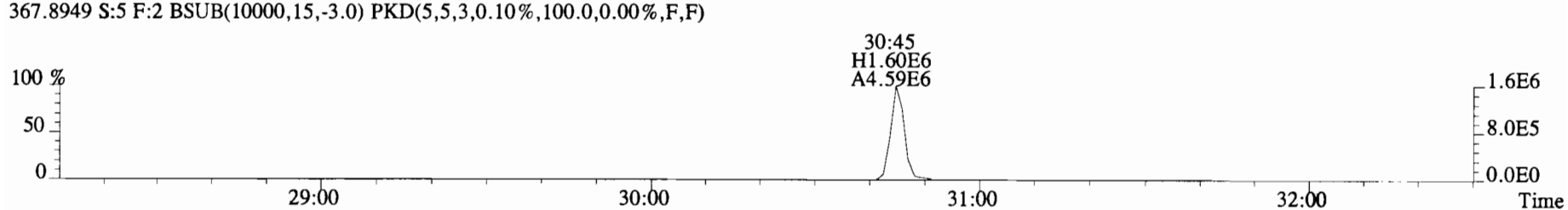
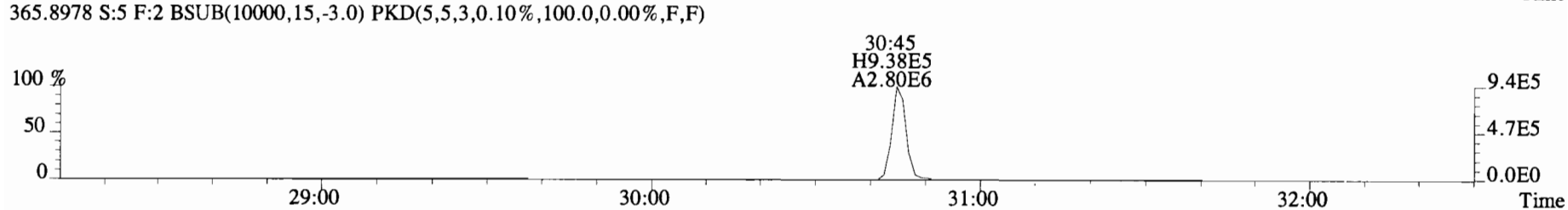
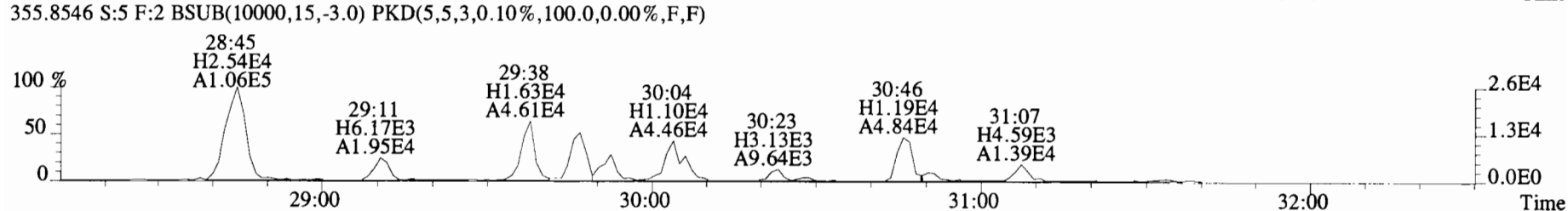
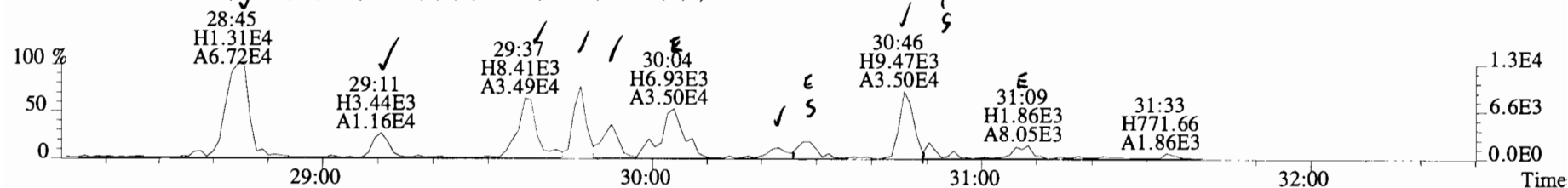
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 319.8965 S:5 BSUB(10000,15,-3.0)



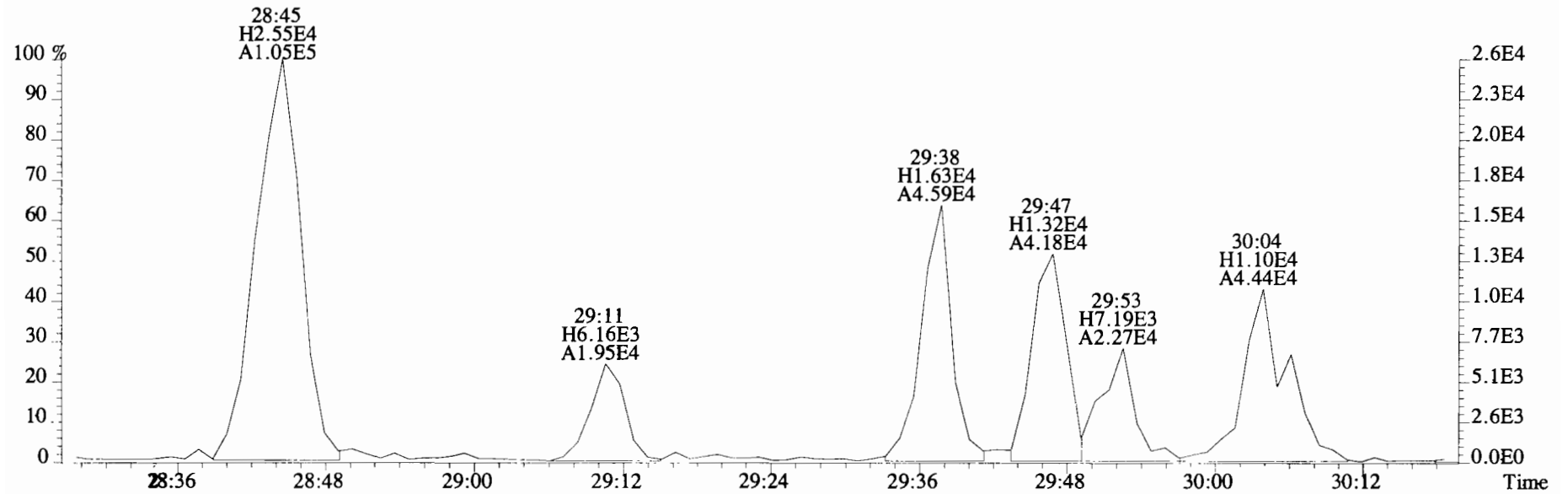
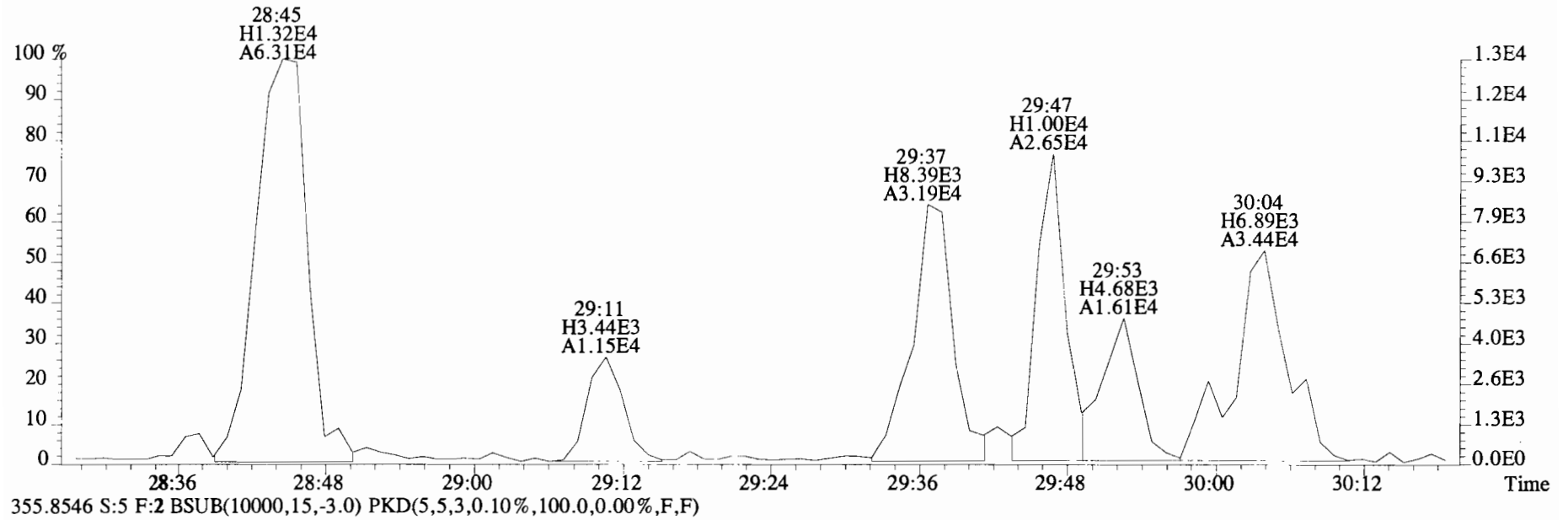
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 319.8965 S:5 BSUB(10000,15,-3.0)



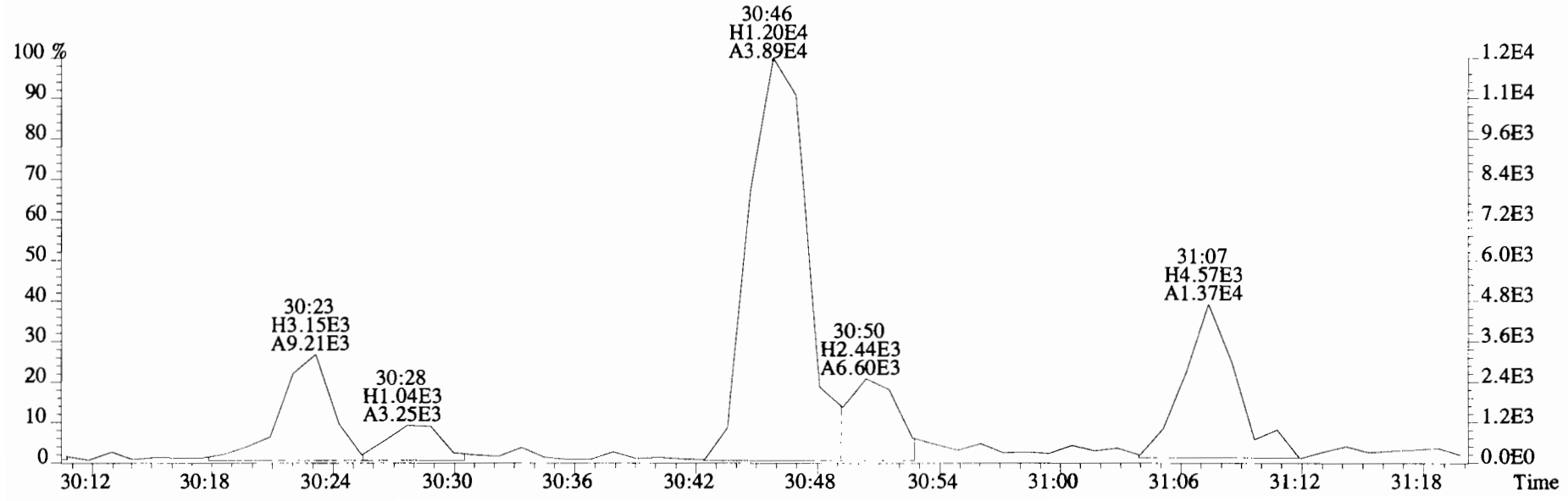
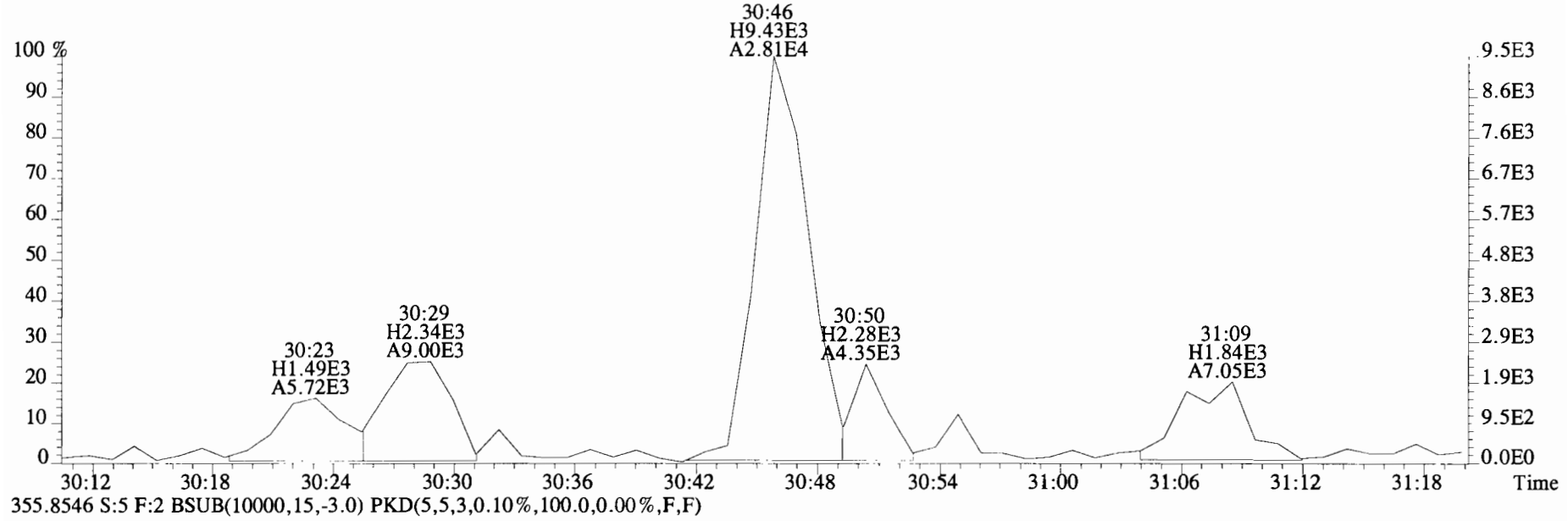
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



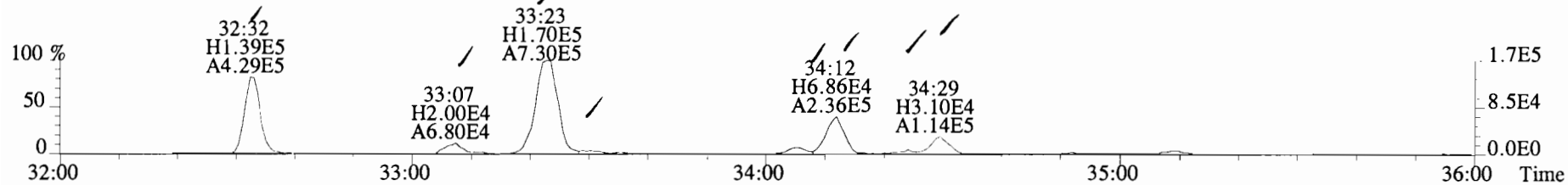
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



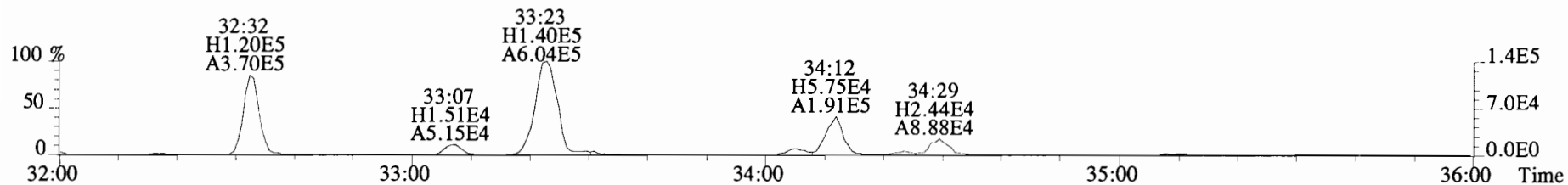
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 353.8576 S:5 F:2 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



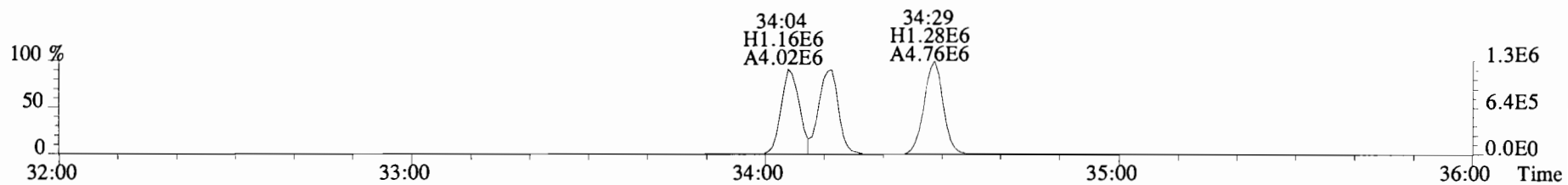
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



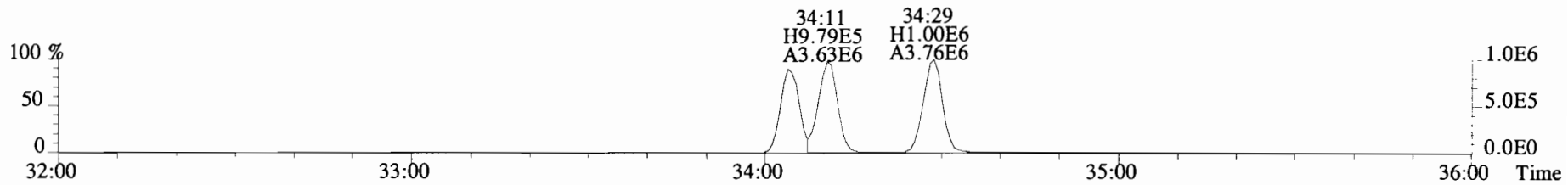
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



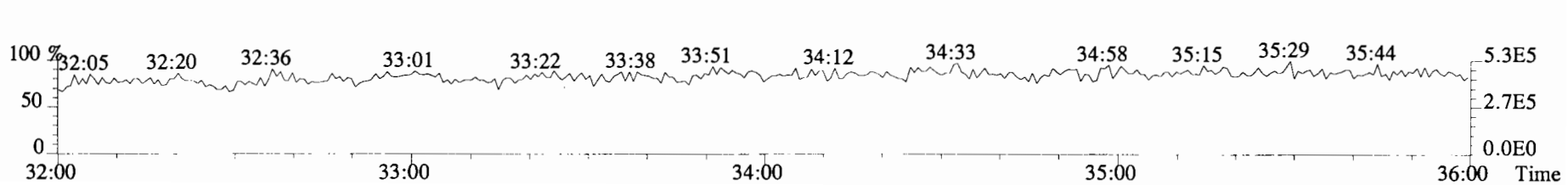
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



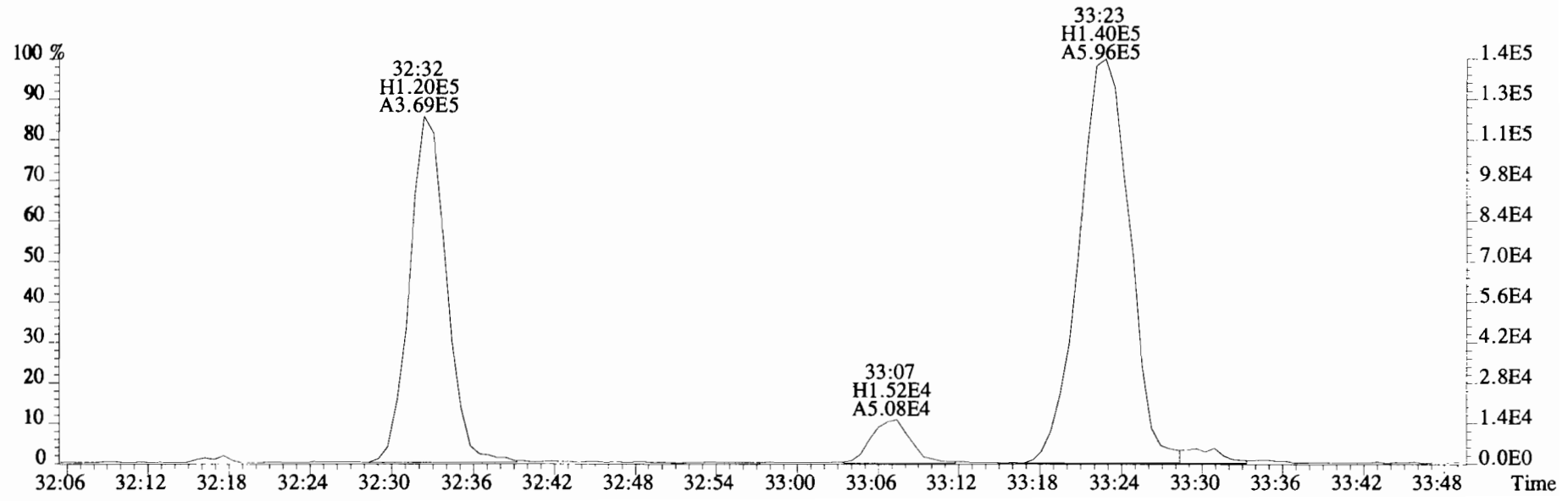
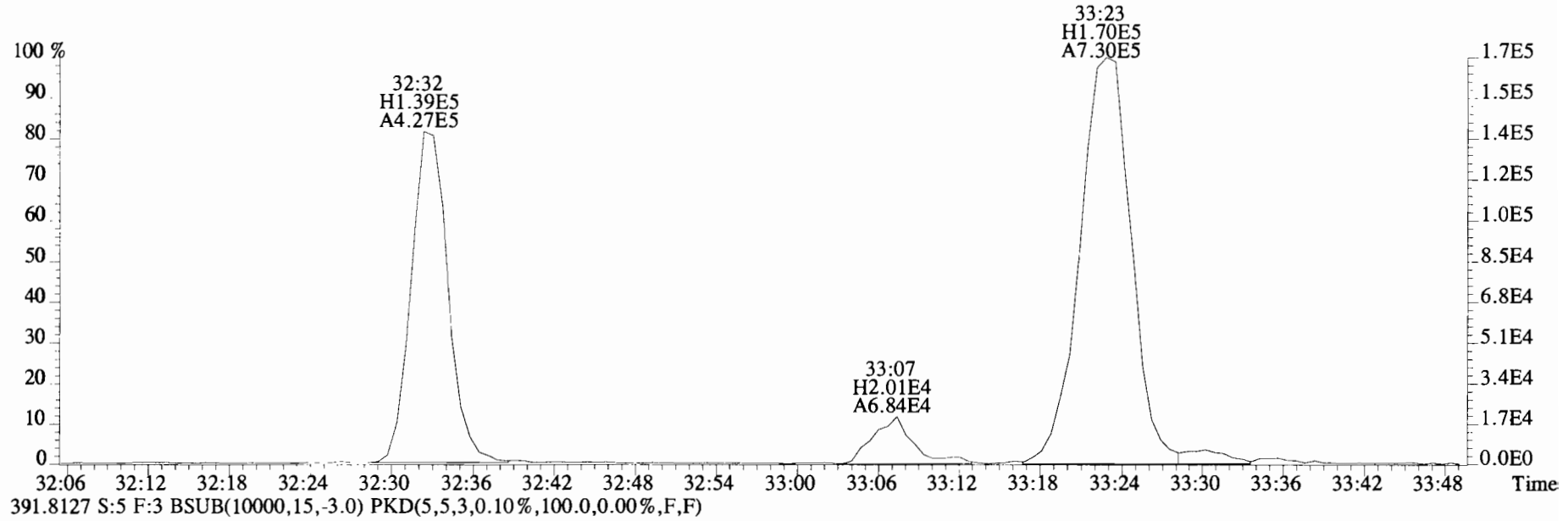
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



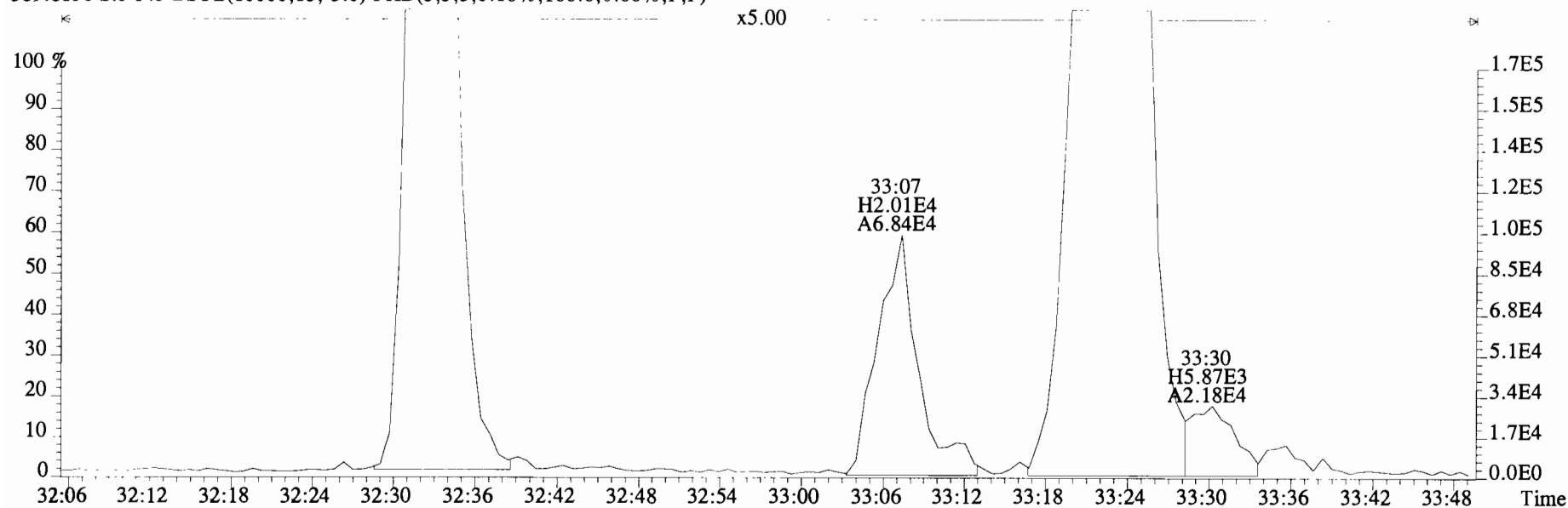
392.9760 S:5 F:3



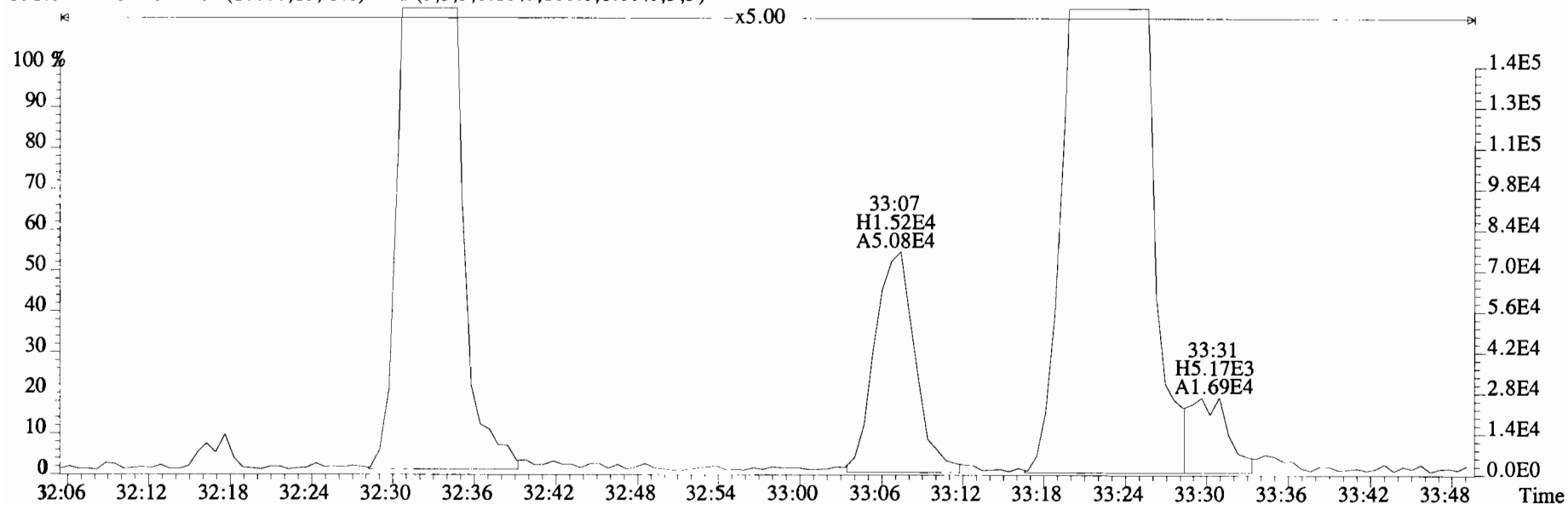
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



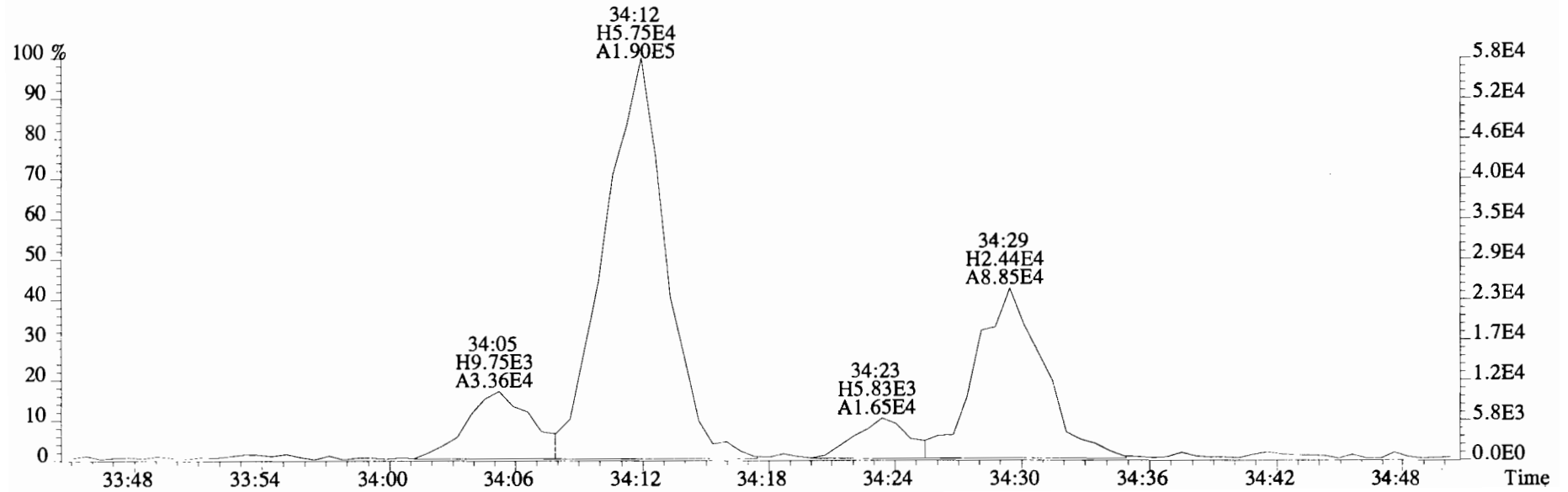
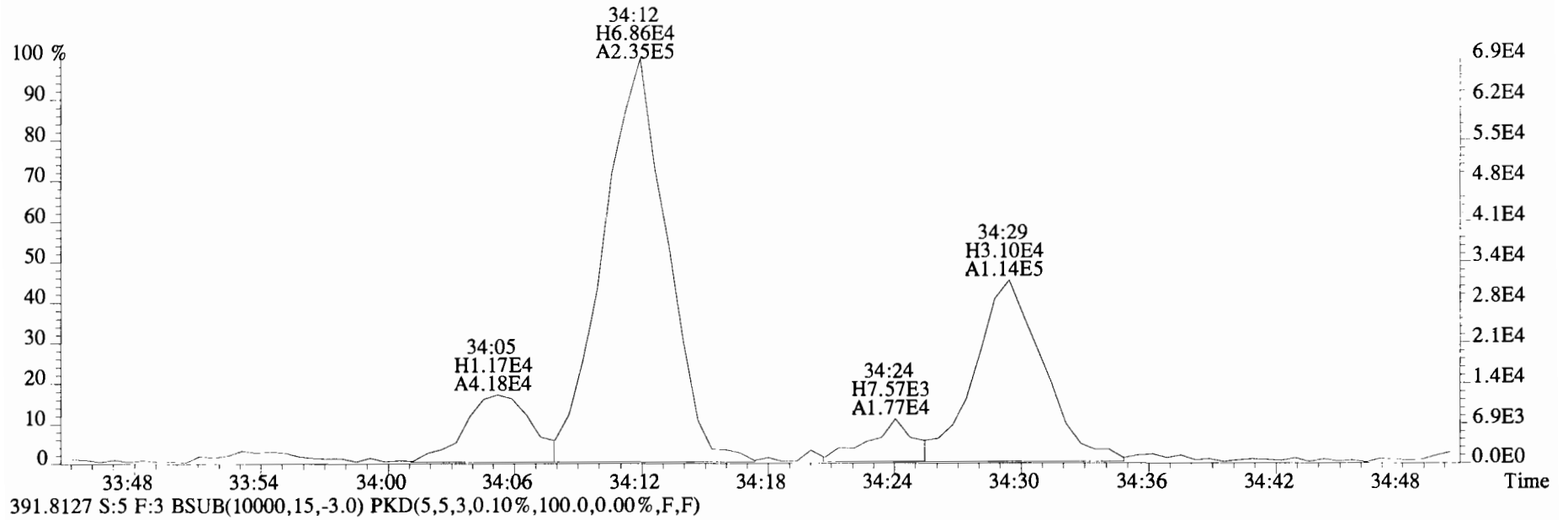
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



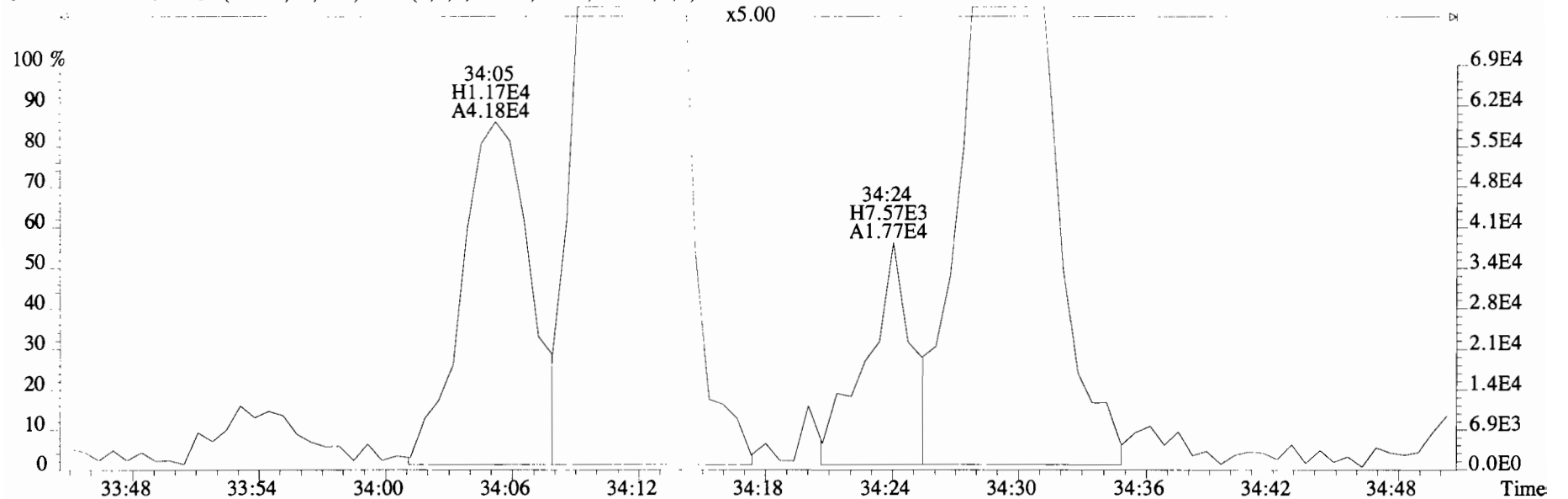
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



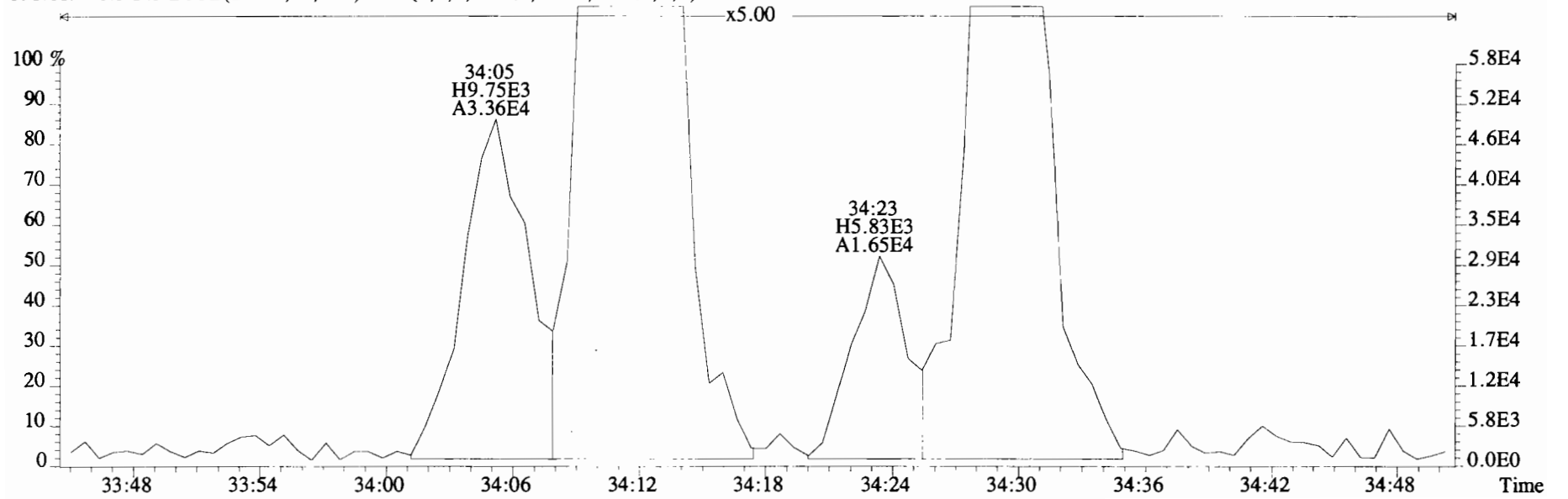
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Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



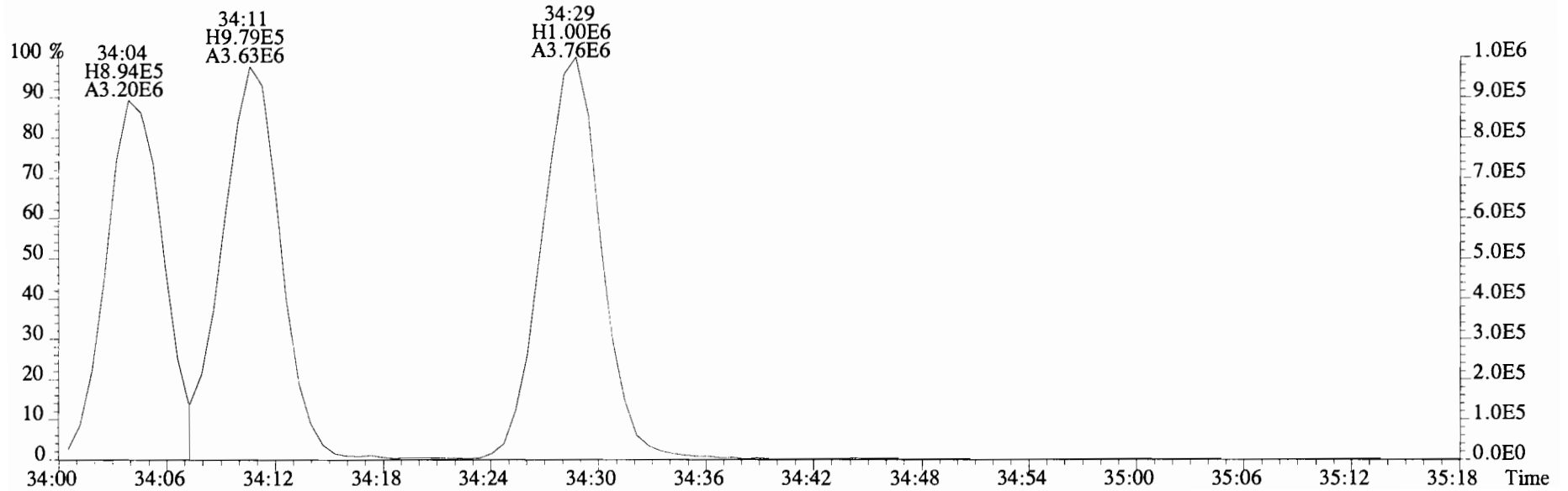
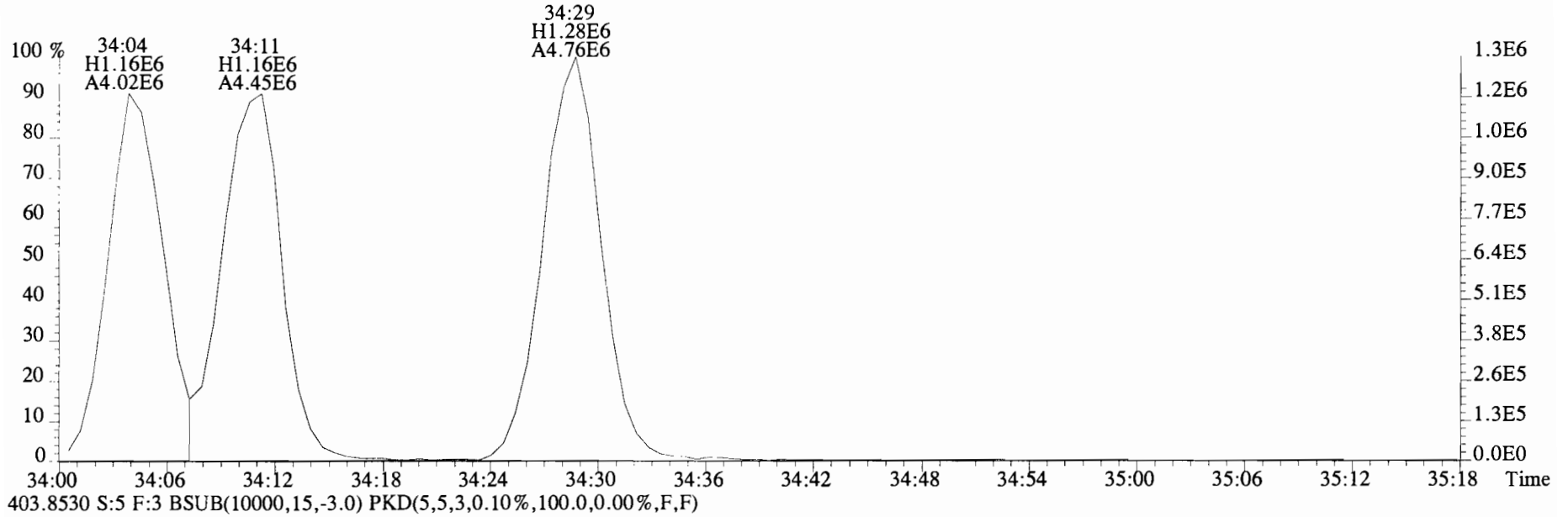
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Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



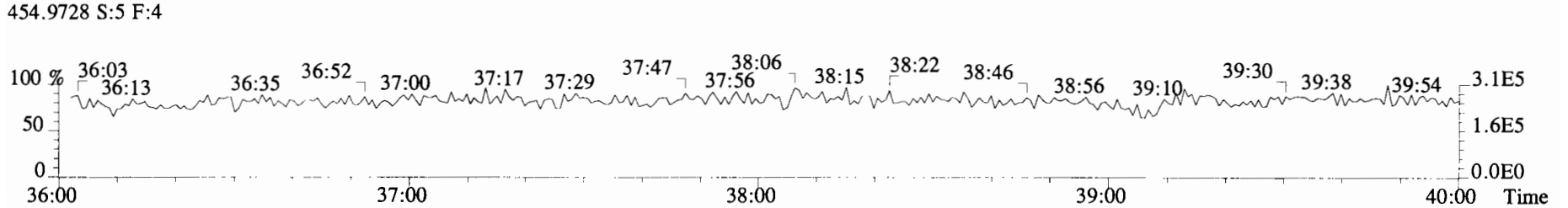
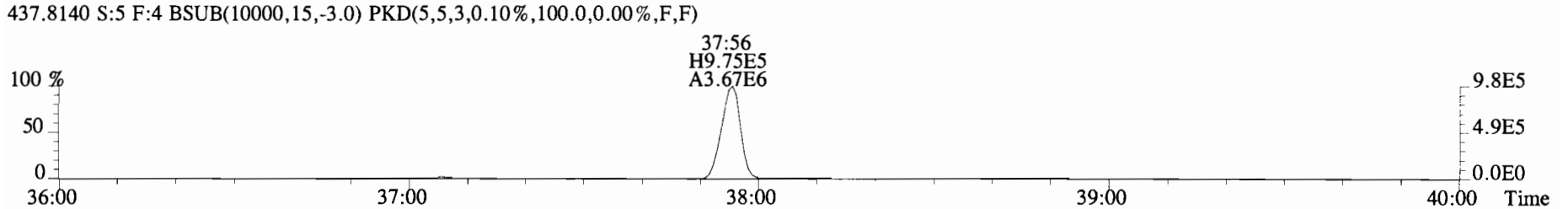
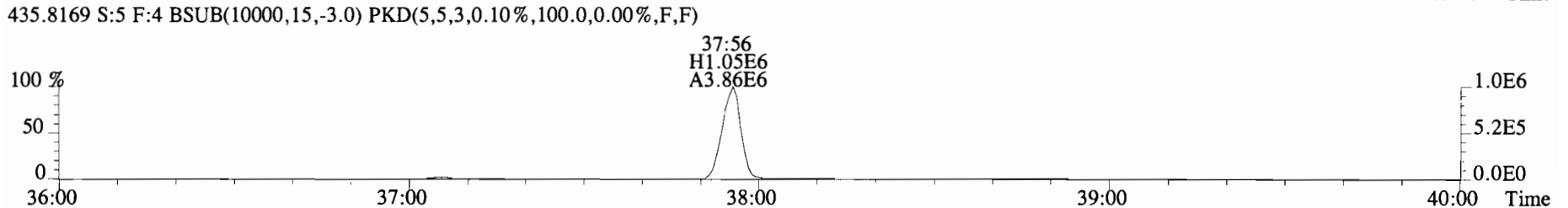
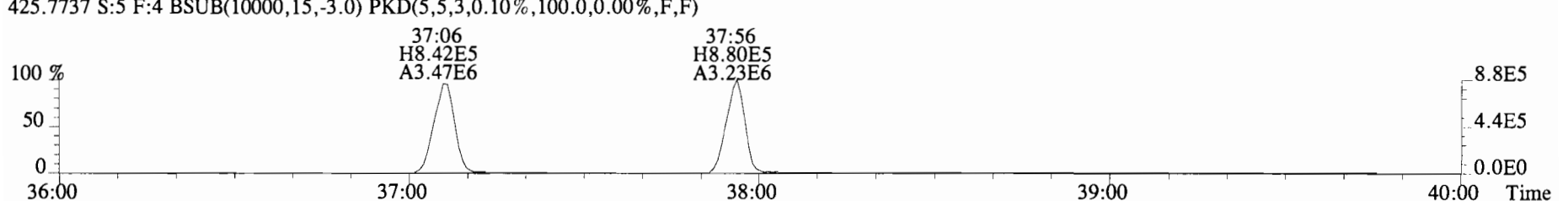
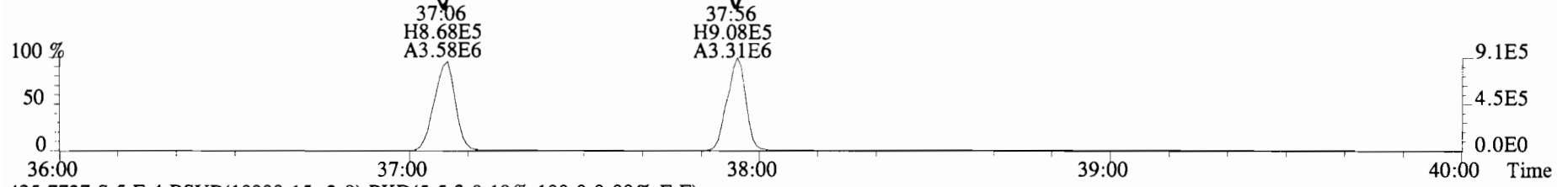
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



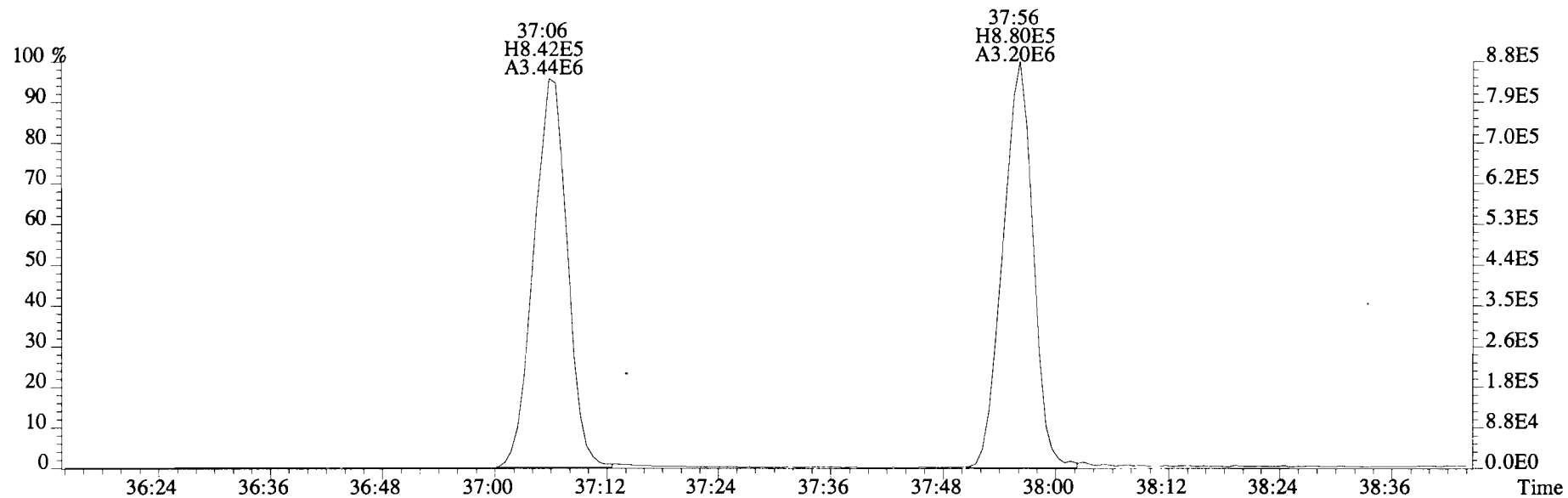
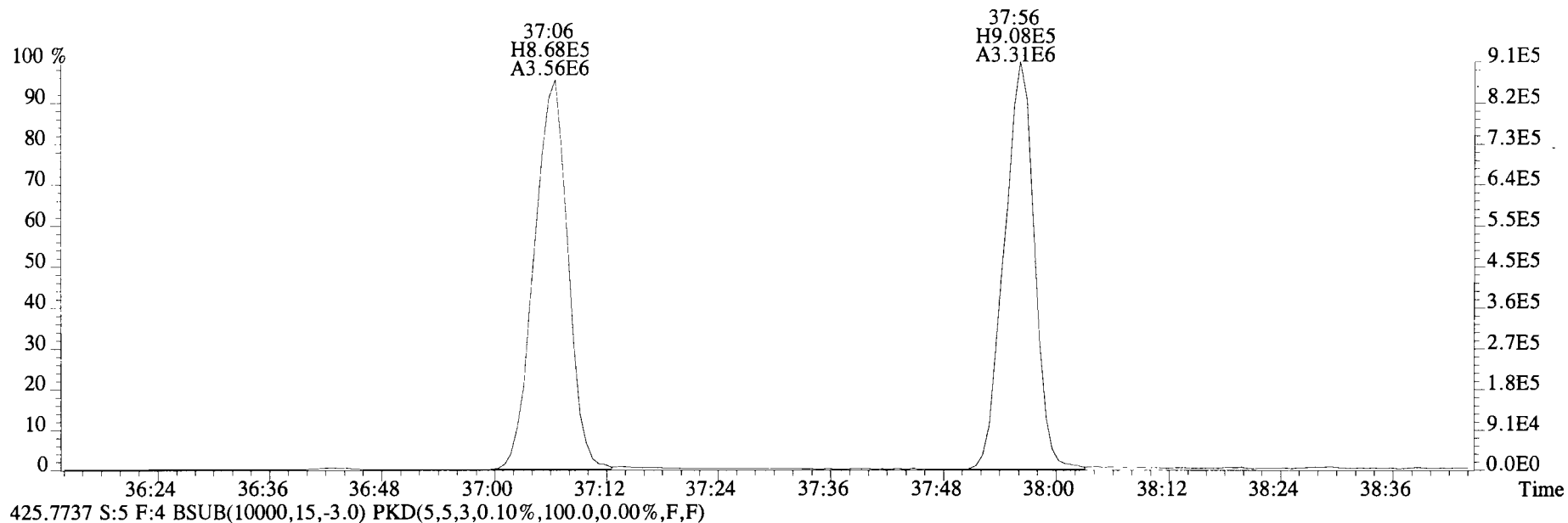
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
401.8559 S:5 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



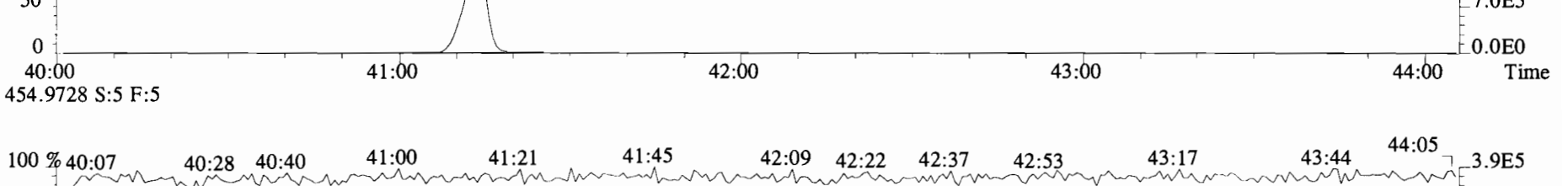
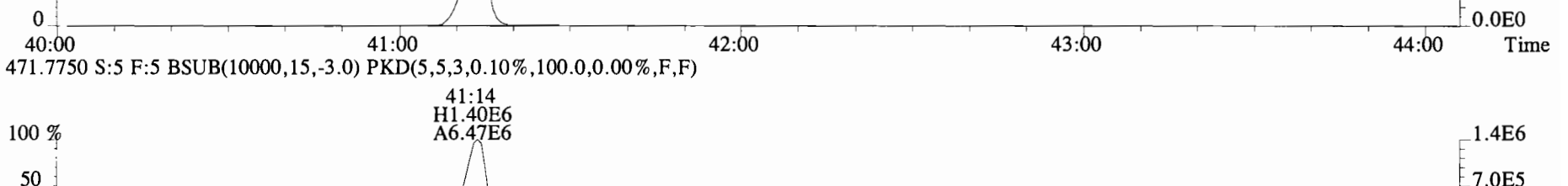
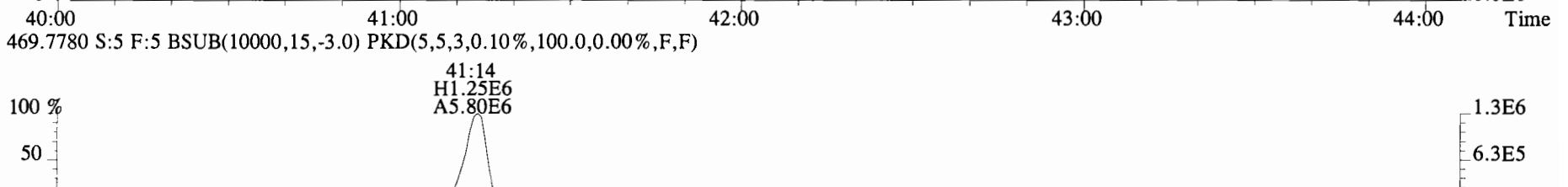
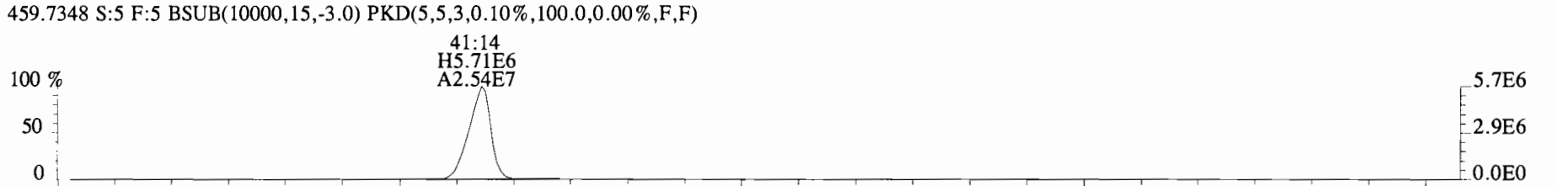
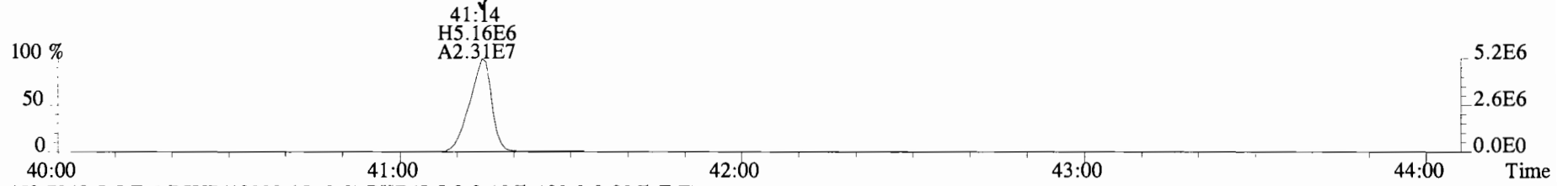
File: 191031D2 #1-356 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Viata Analytical Laboratory_VG7 Text: 1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp: OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



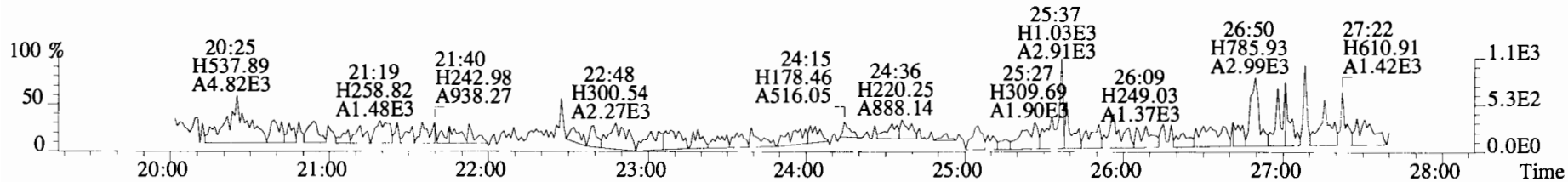
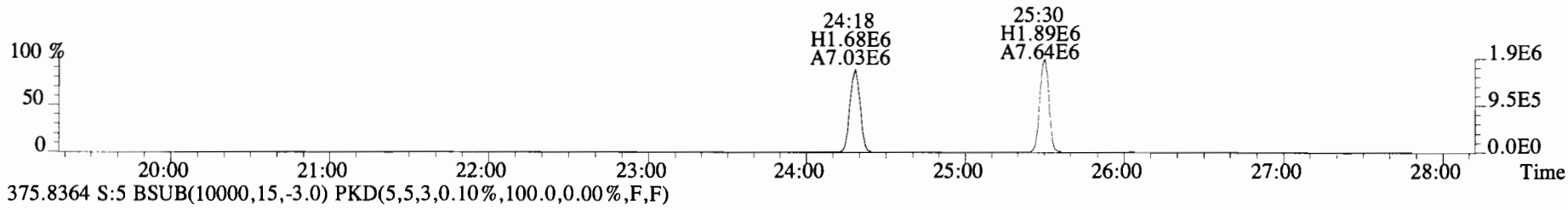
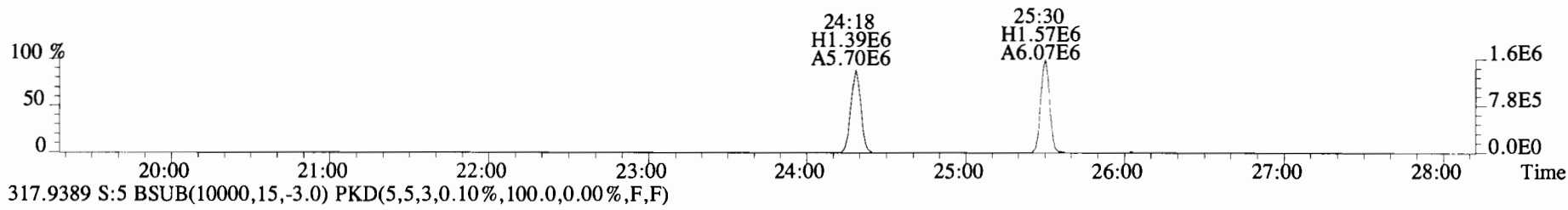
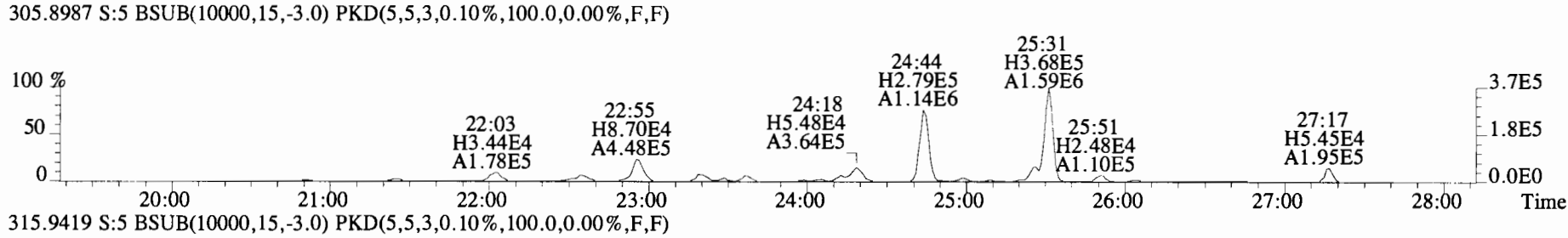
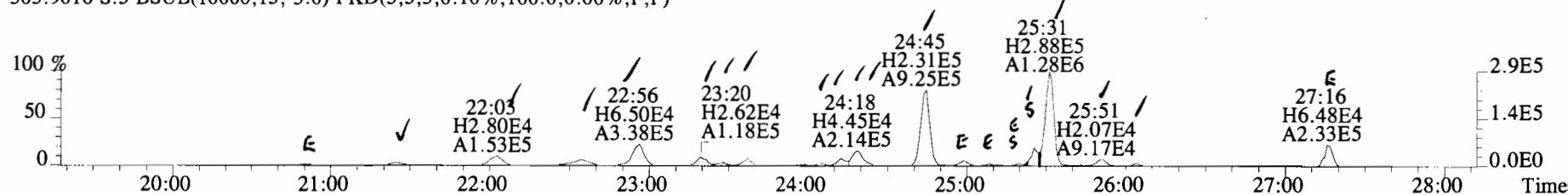
File:191031D2 #1-356 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



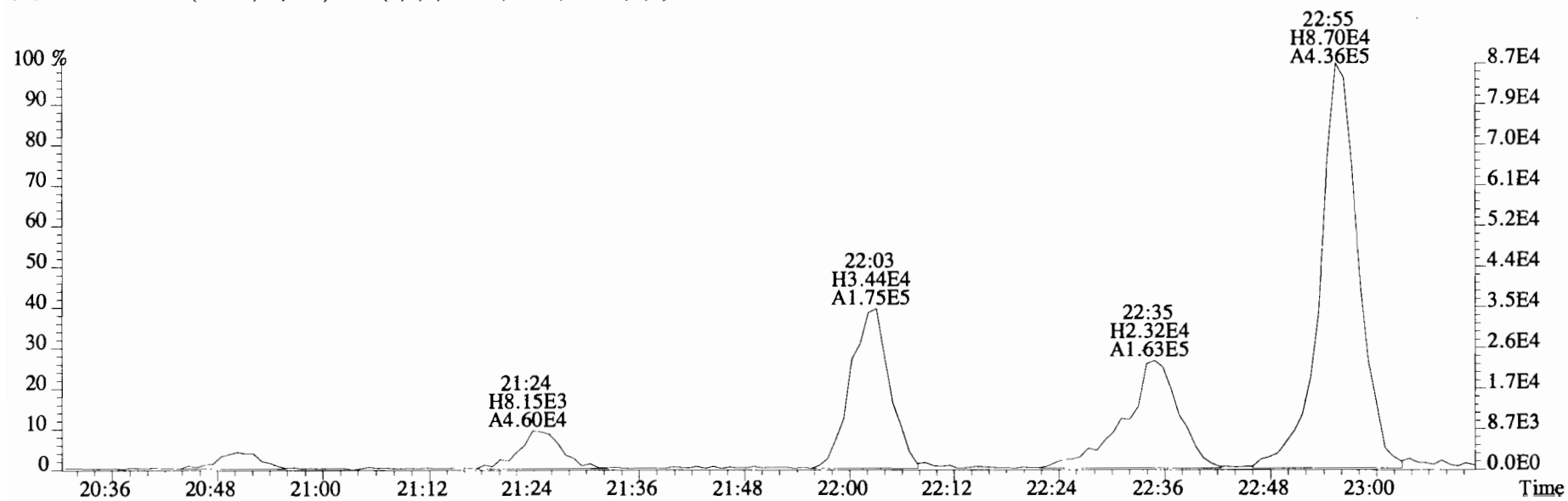
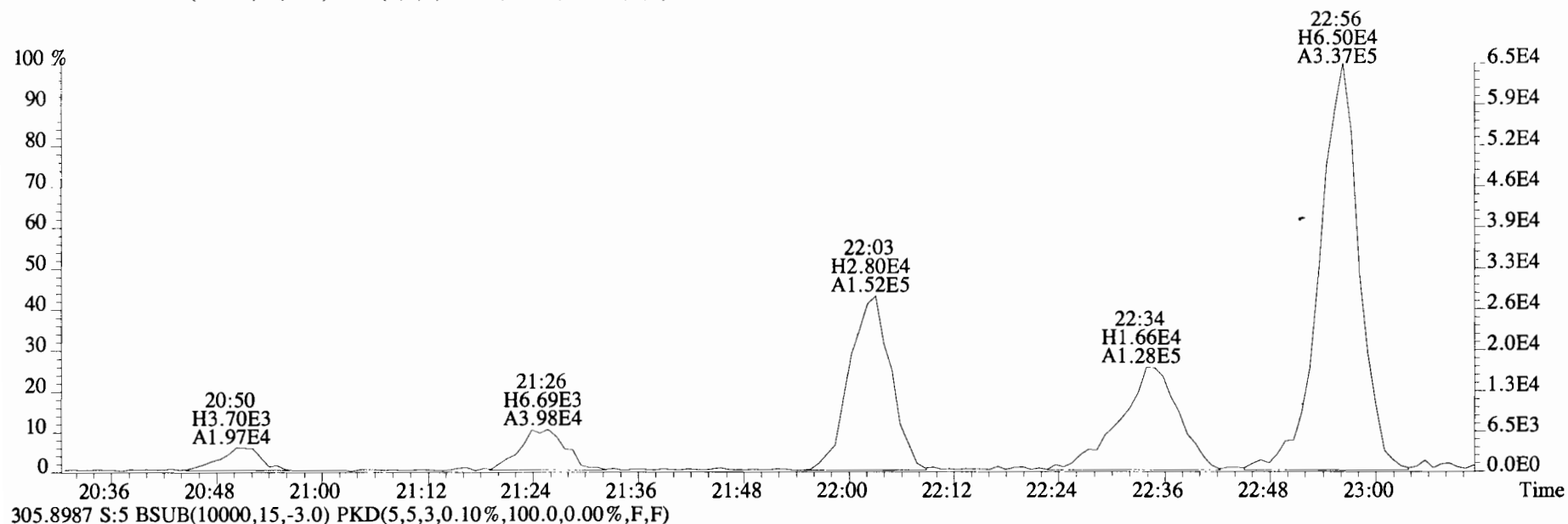
File:191031D2 #1-431 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



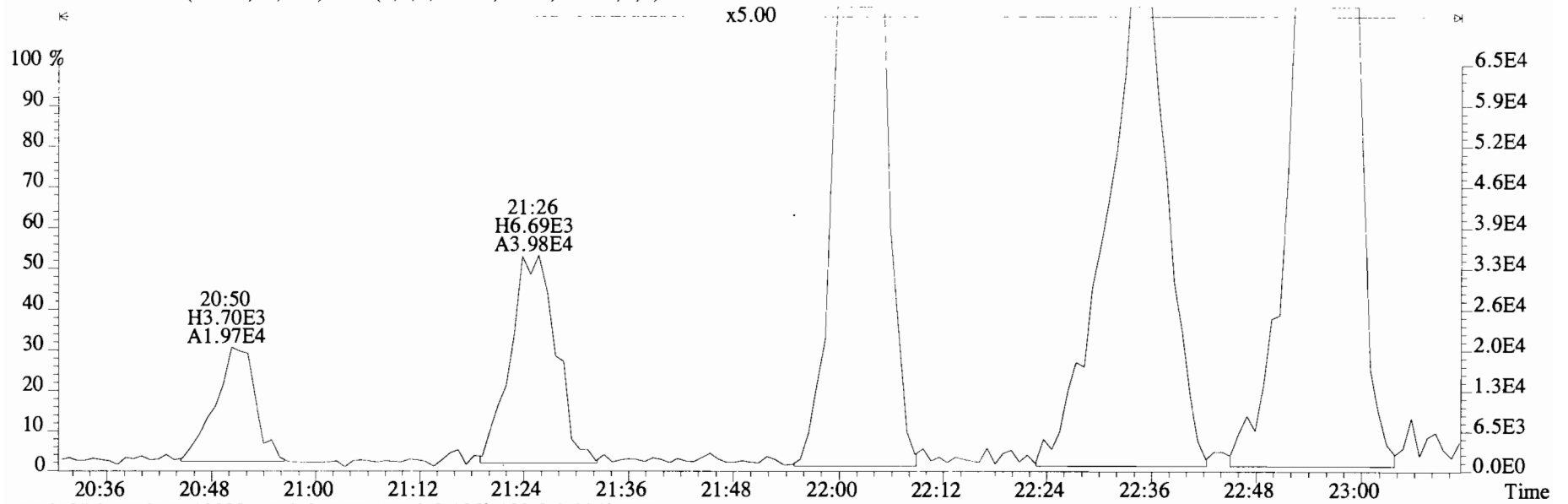
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



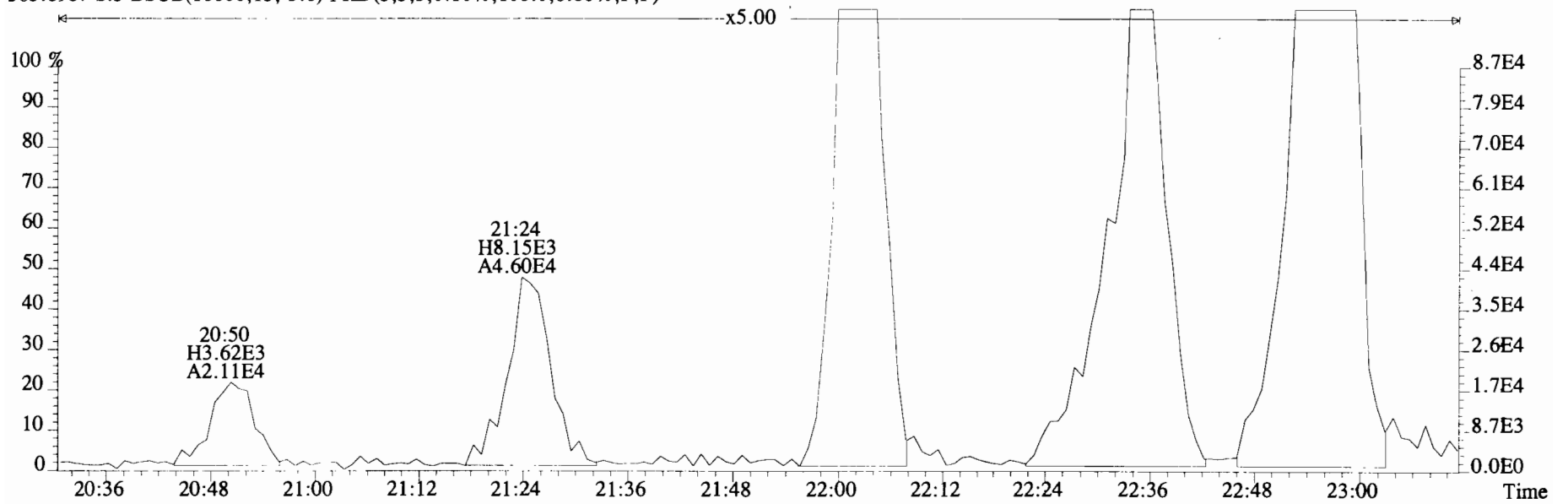
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



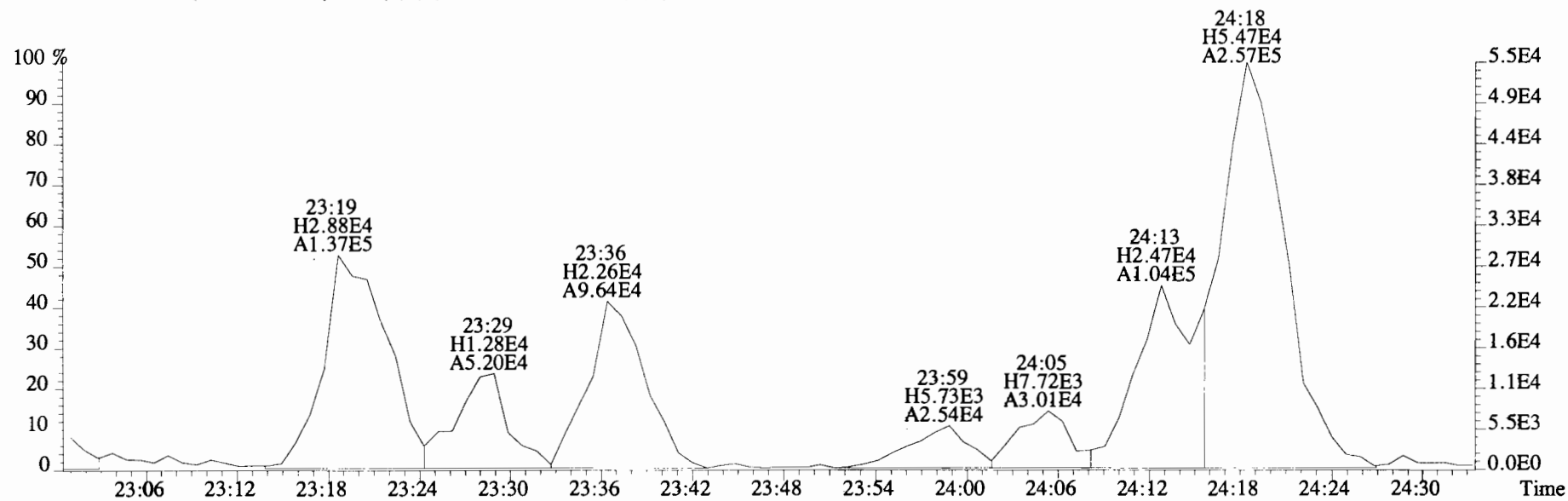
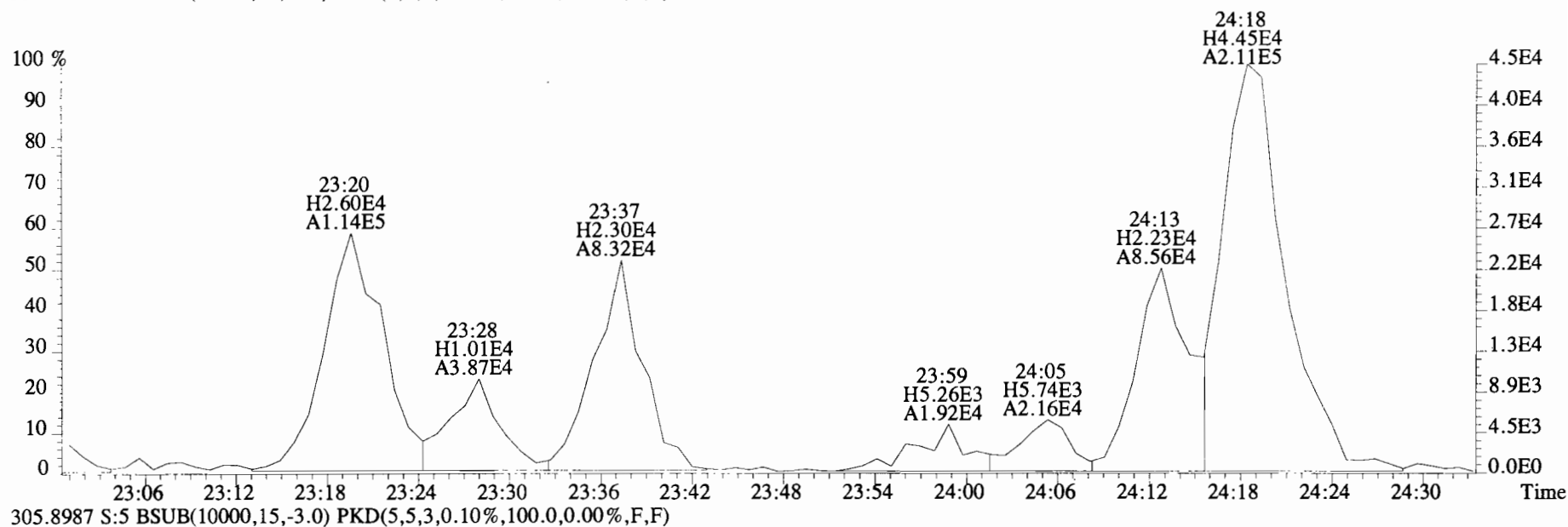
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



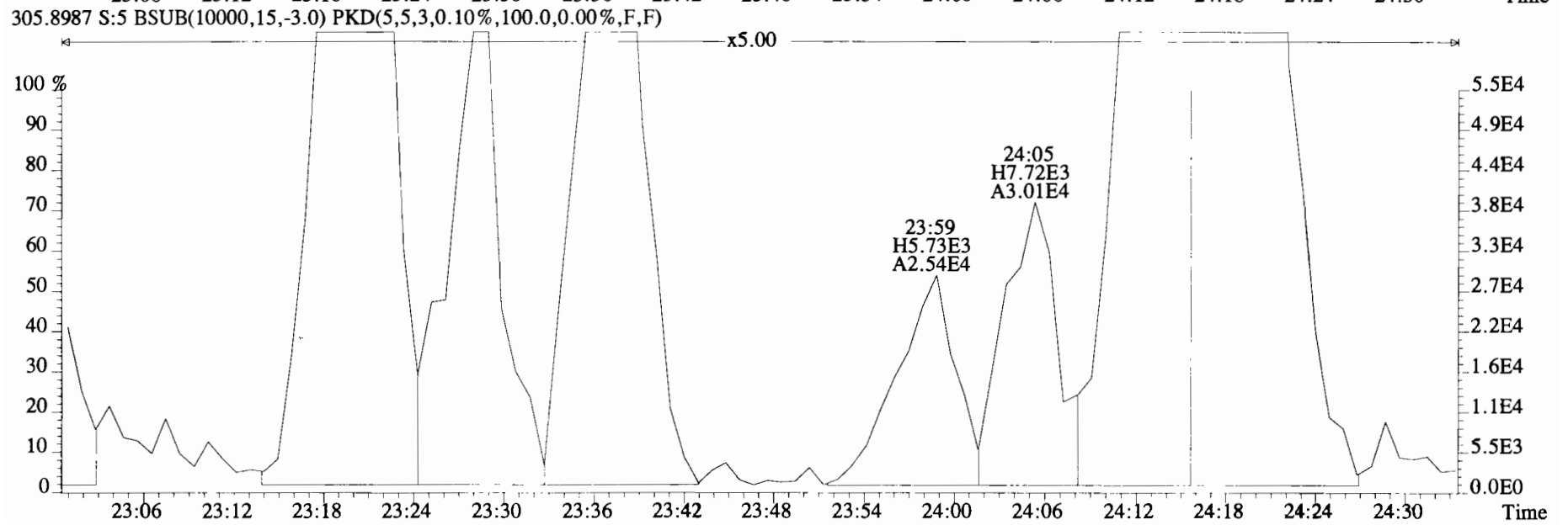
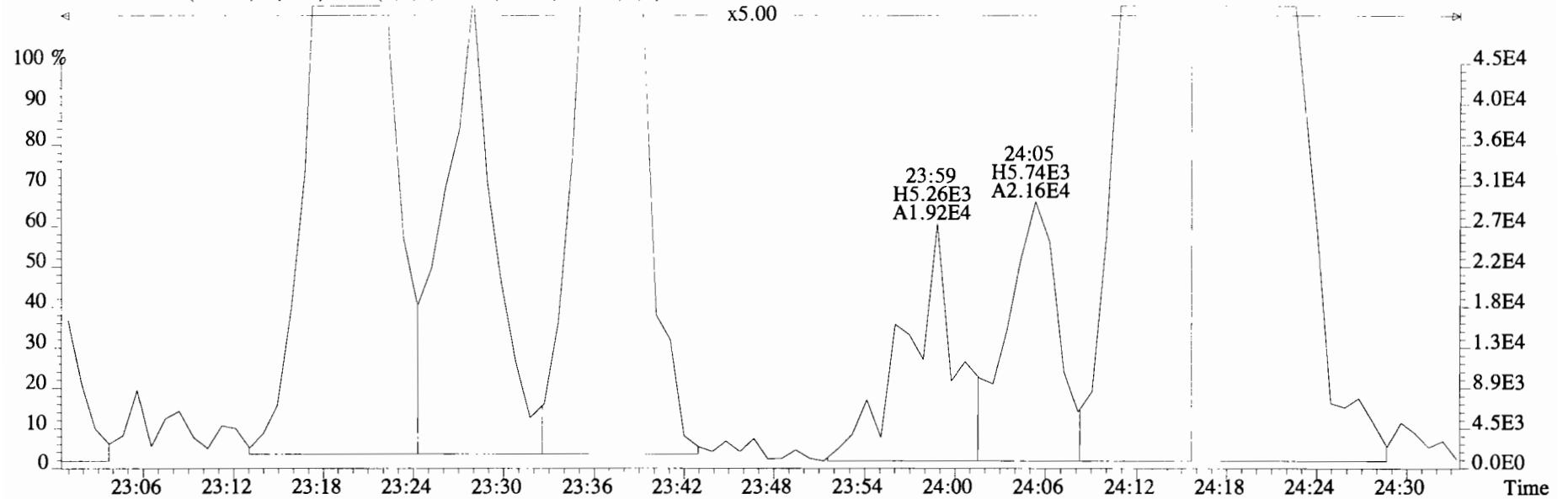
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



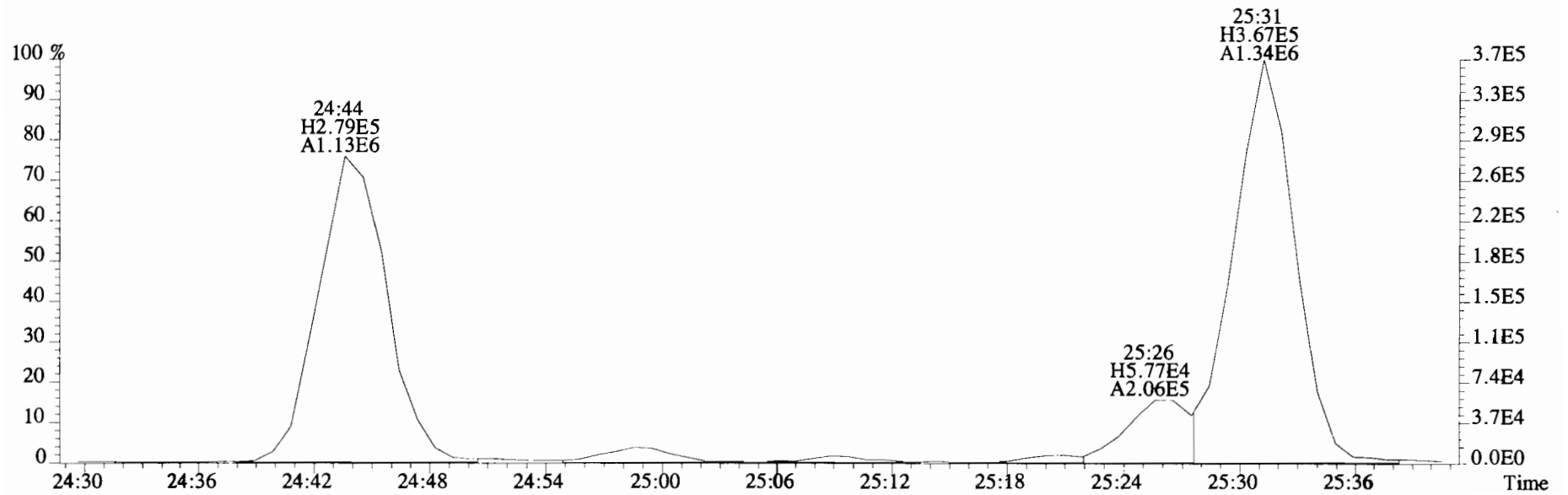
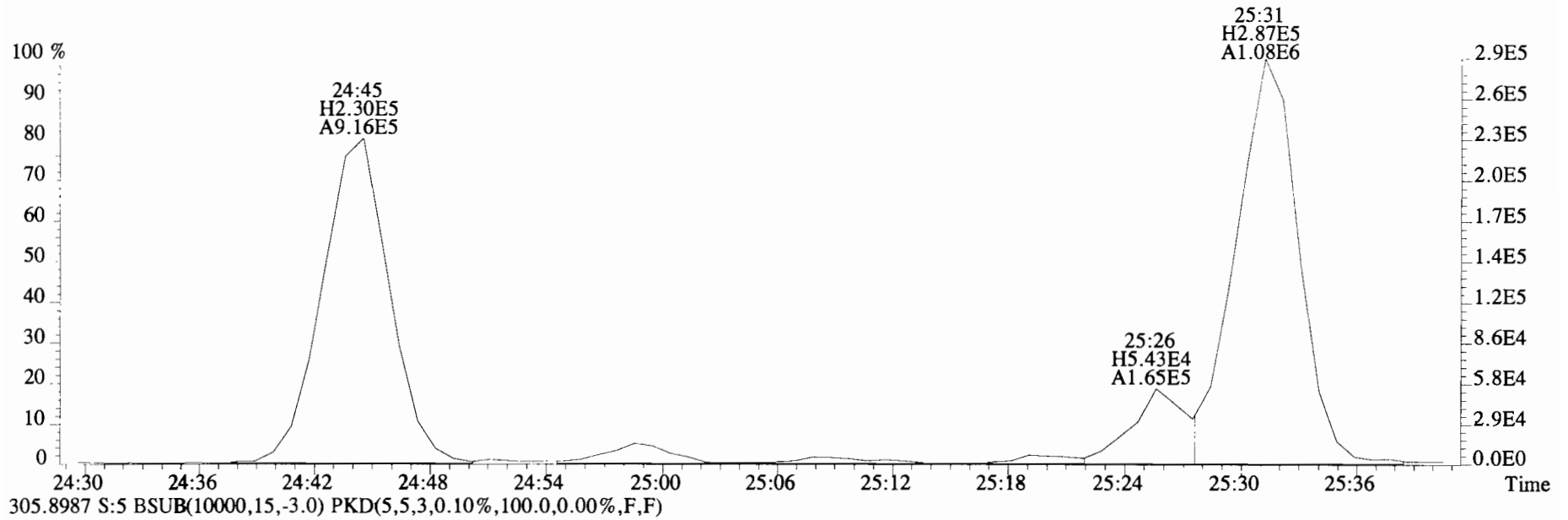
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



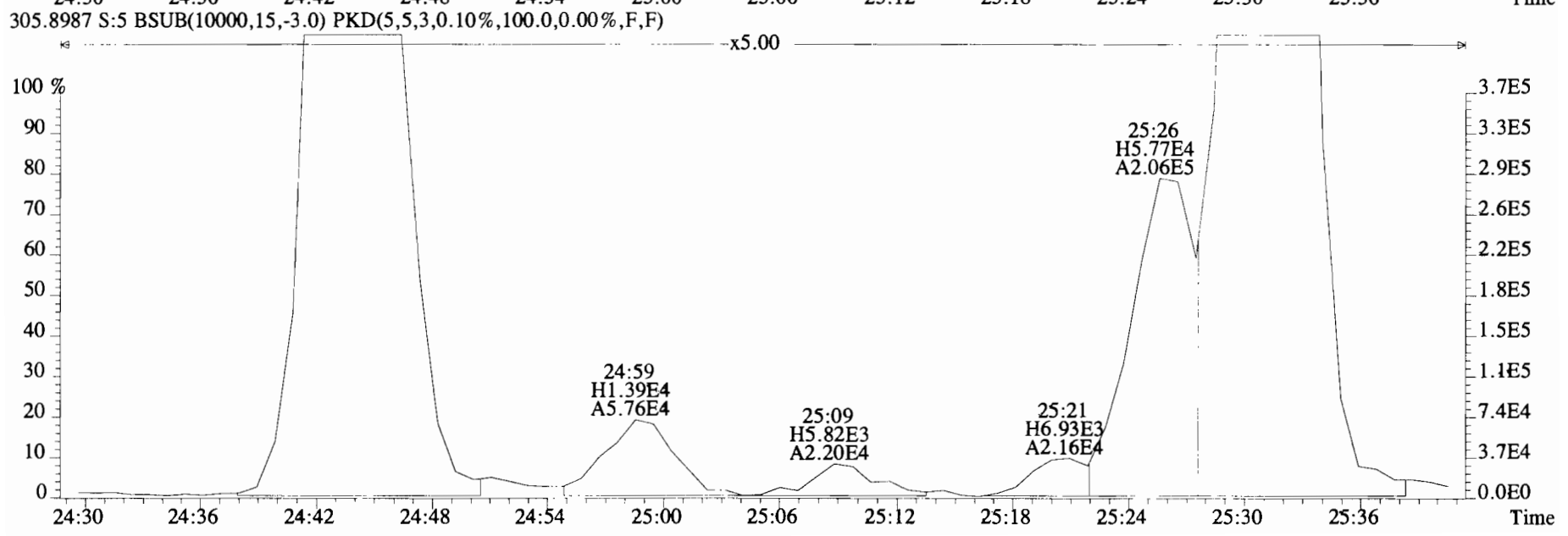
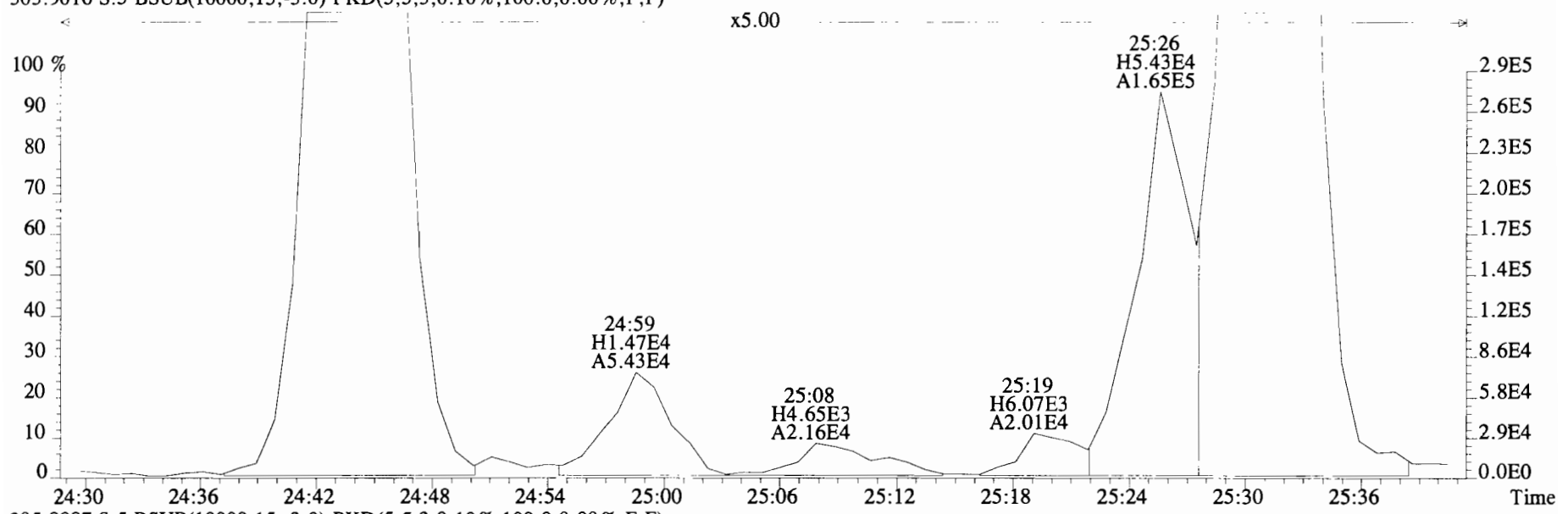
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



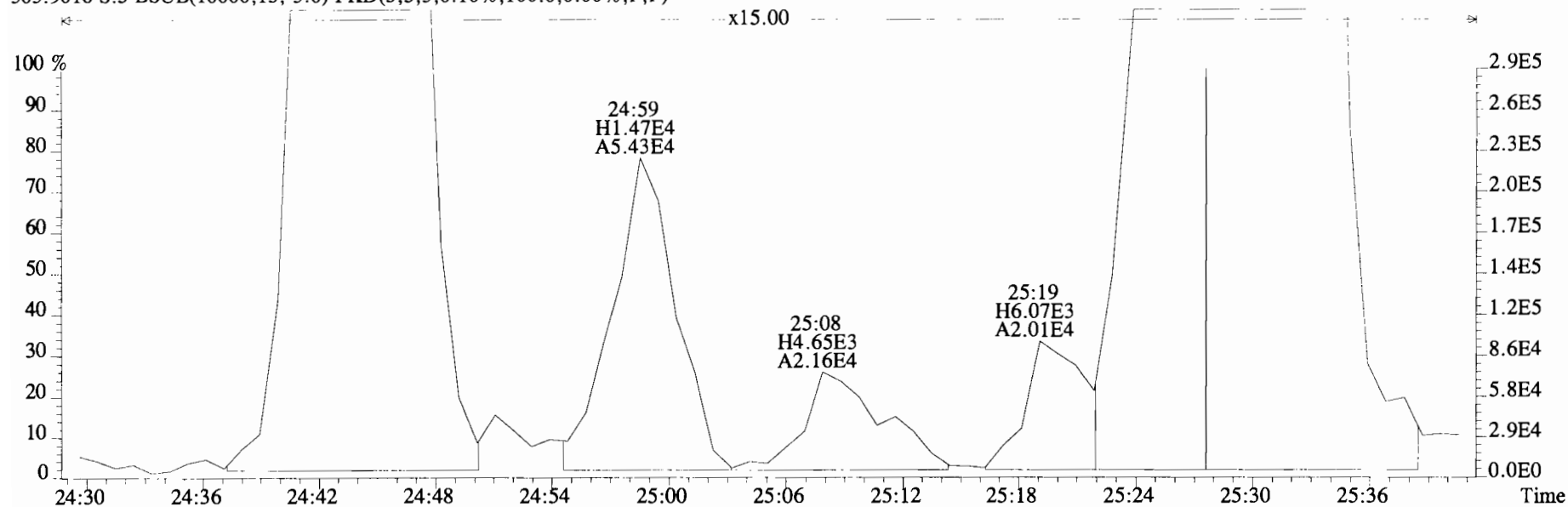
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



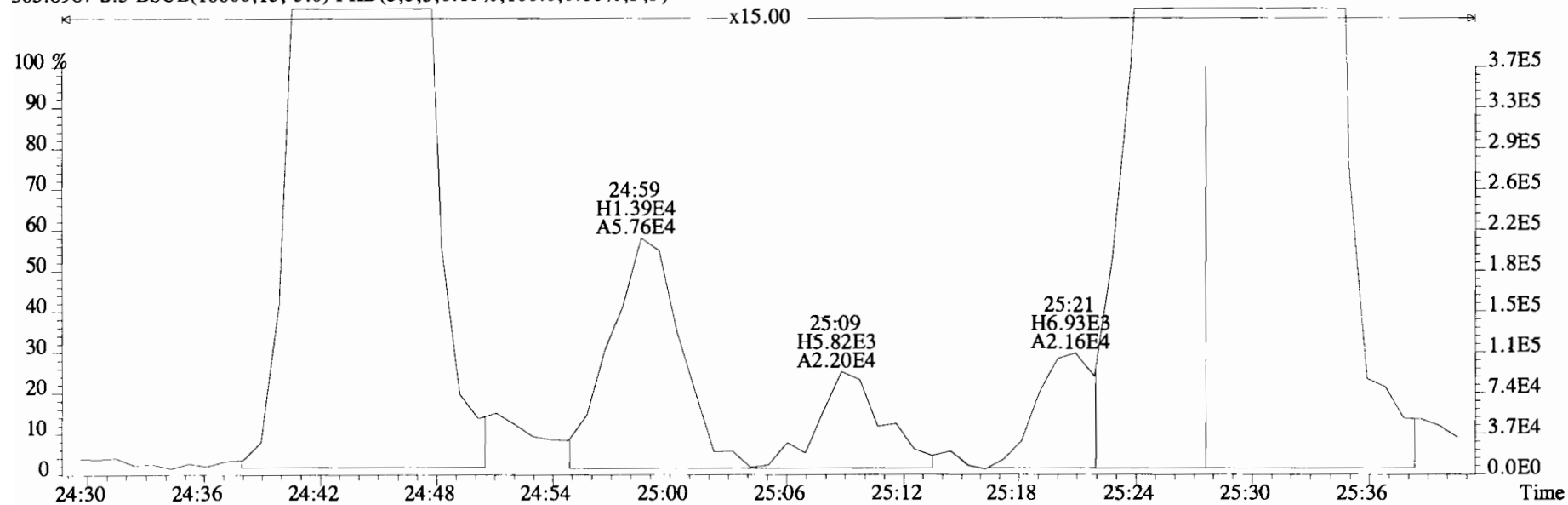
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



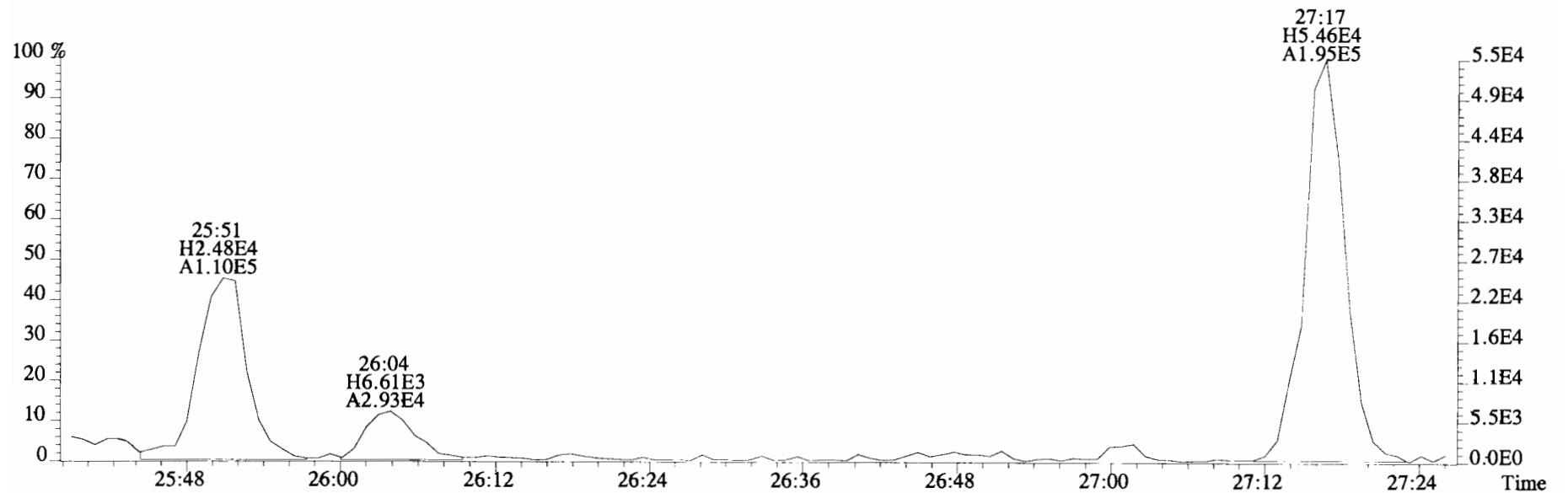
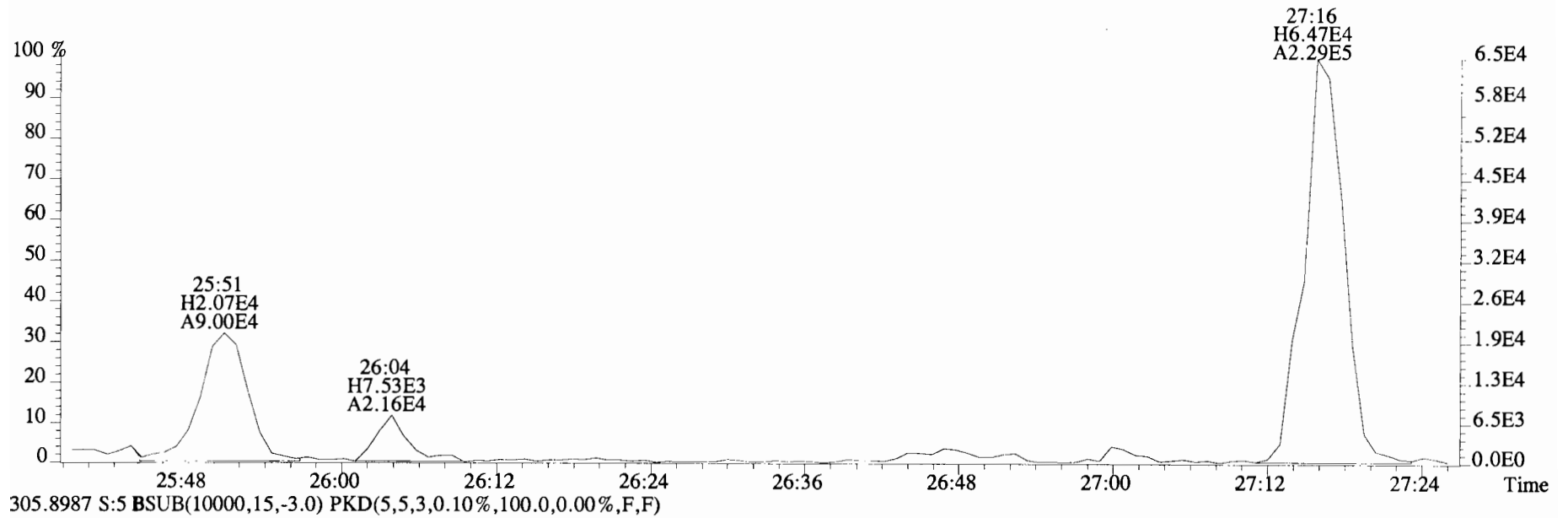
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



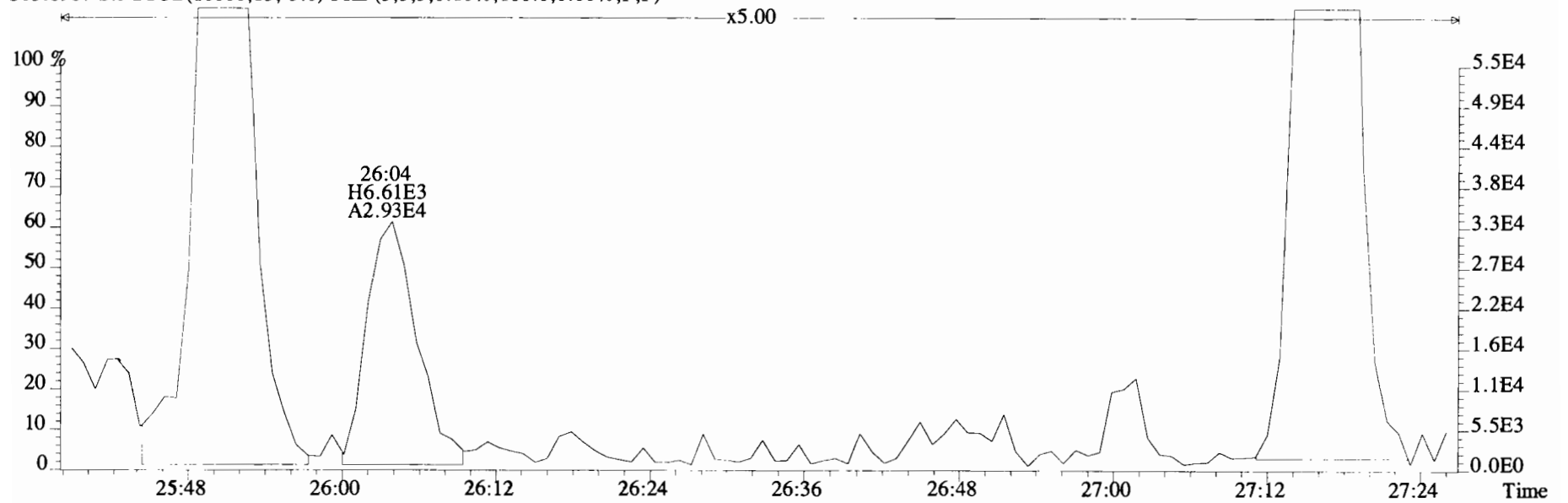
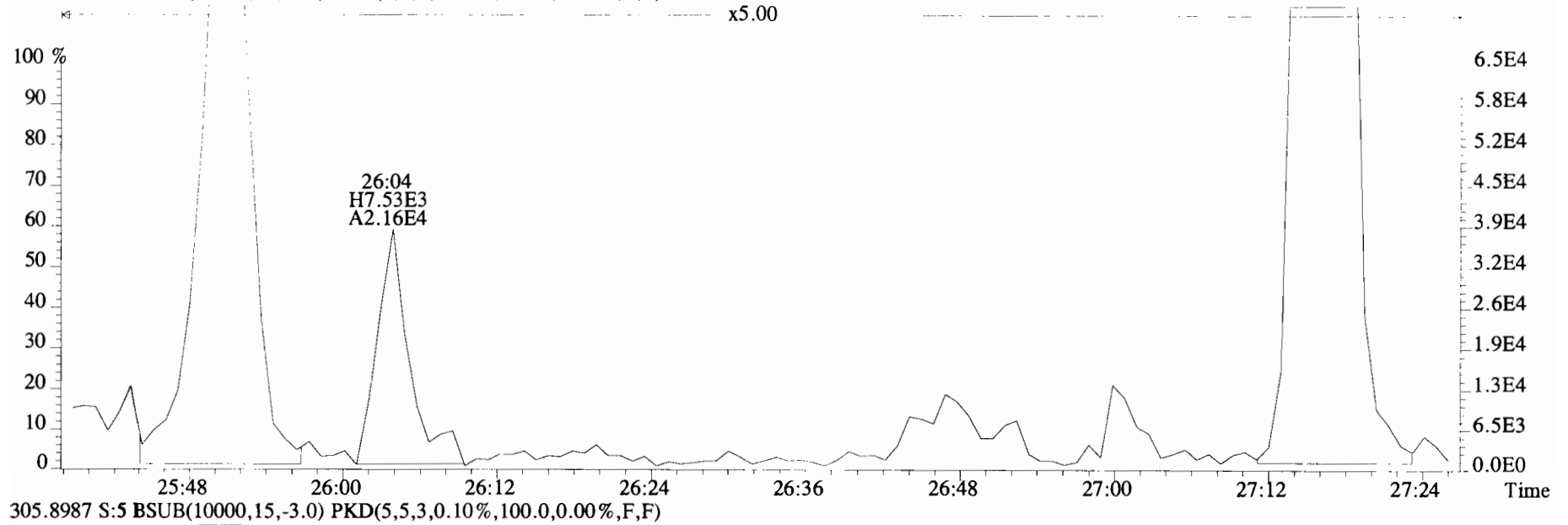
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



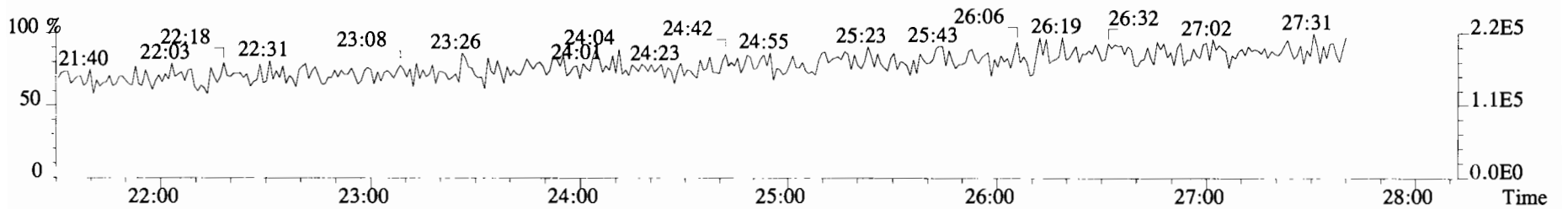
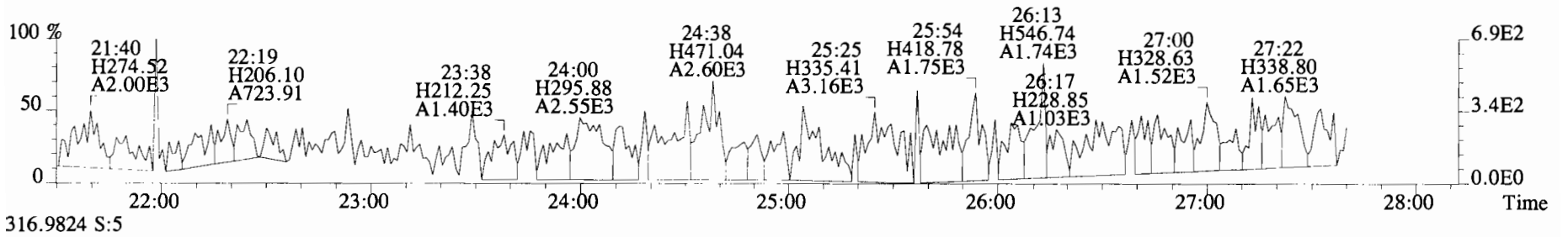
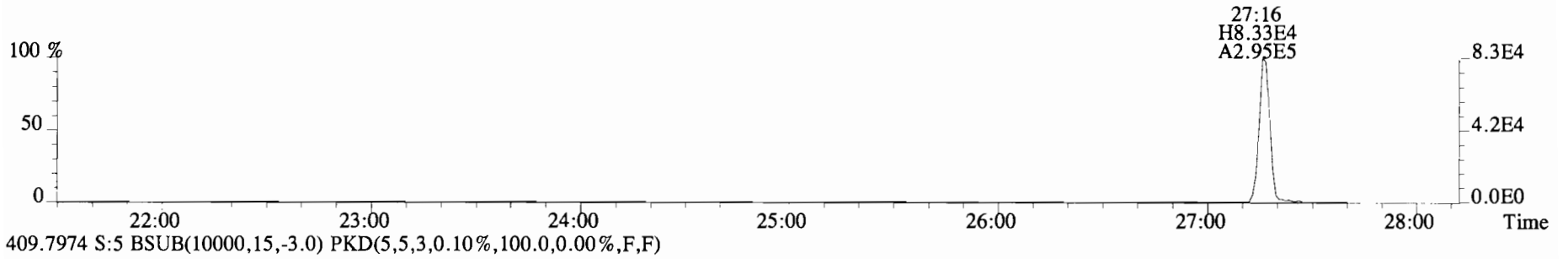
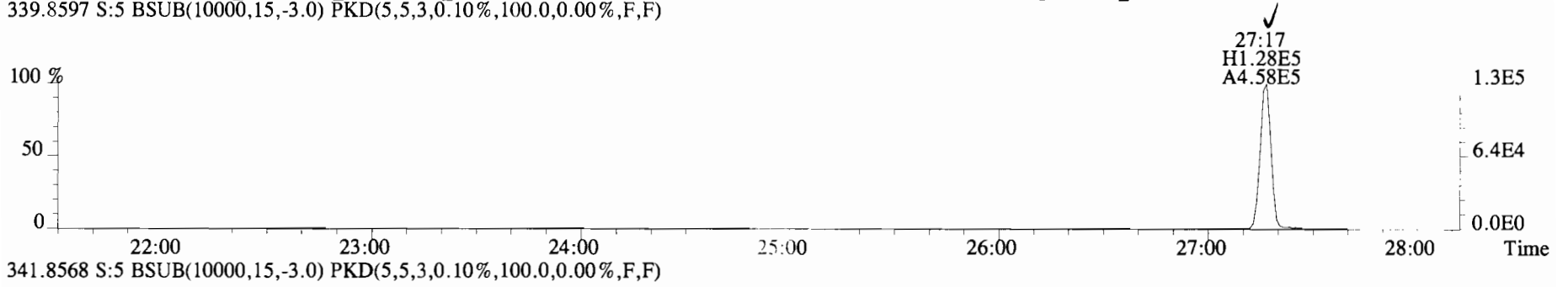
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



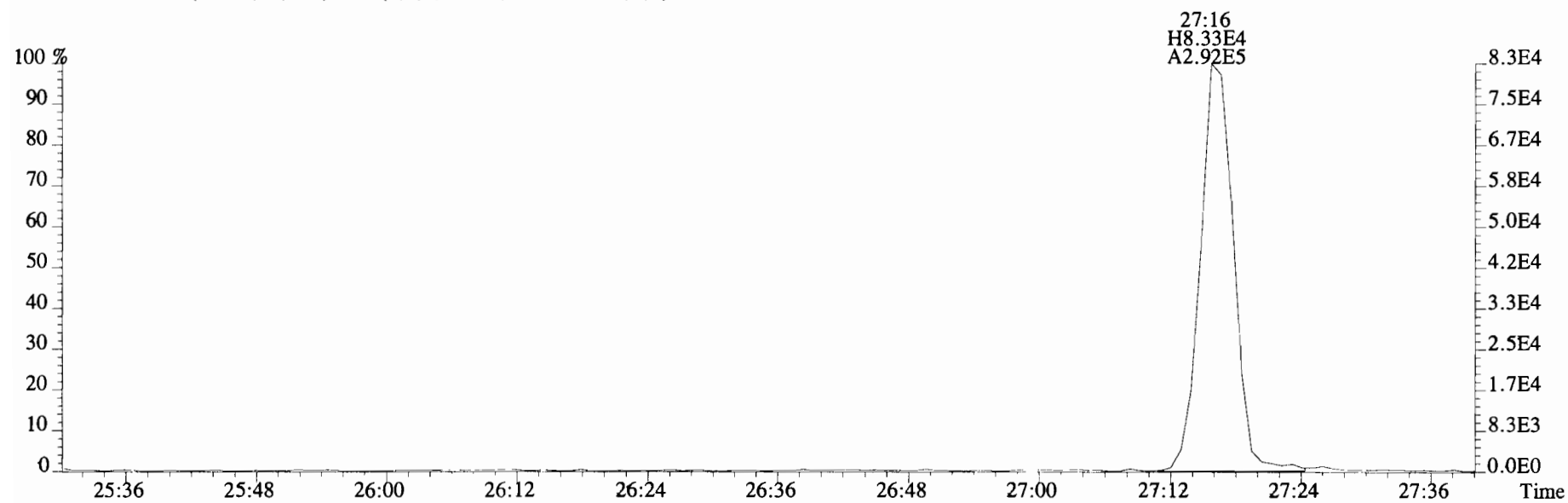
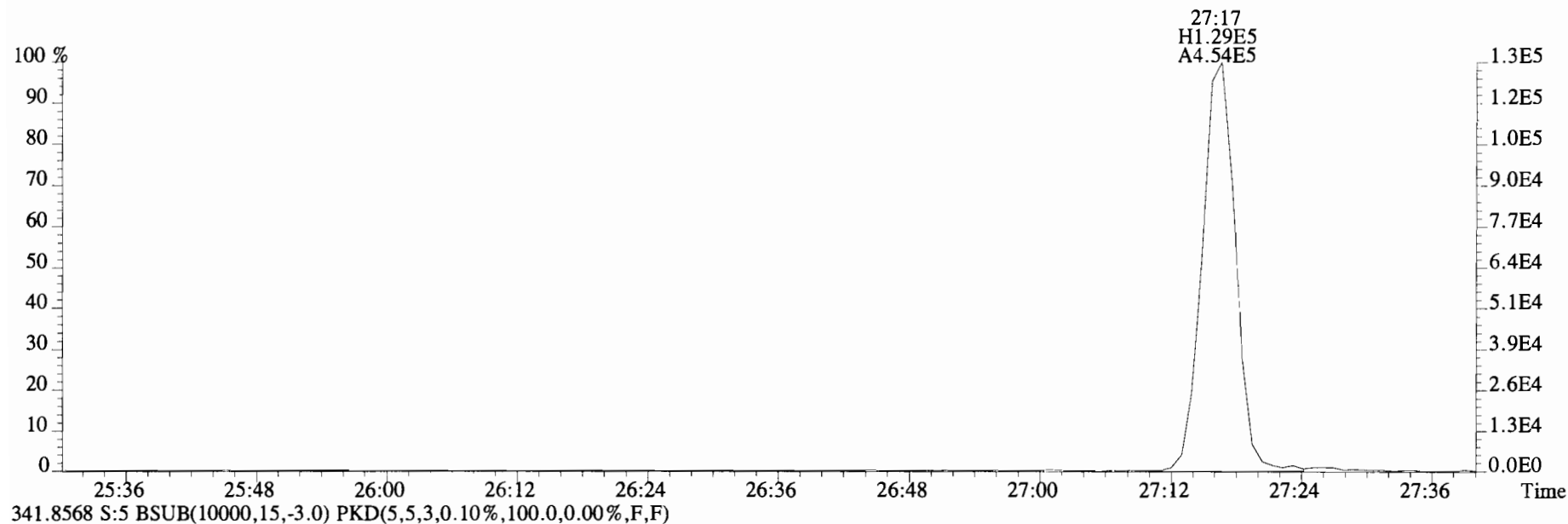
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Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



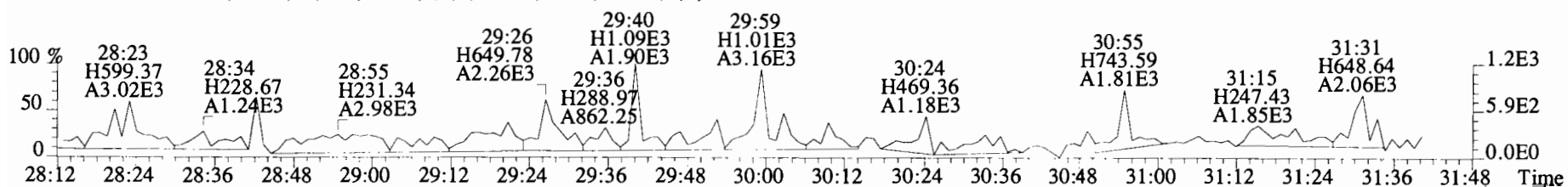
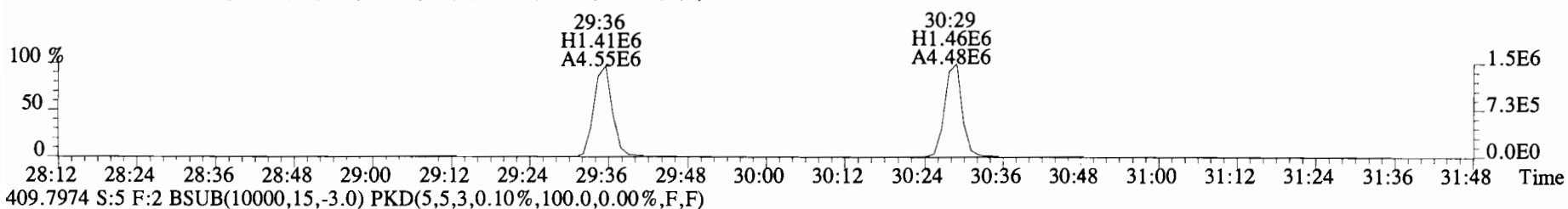
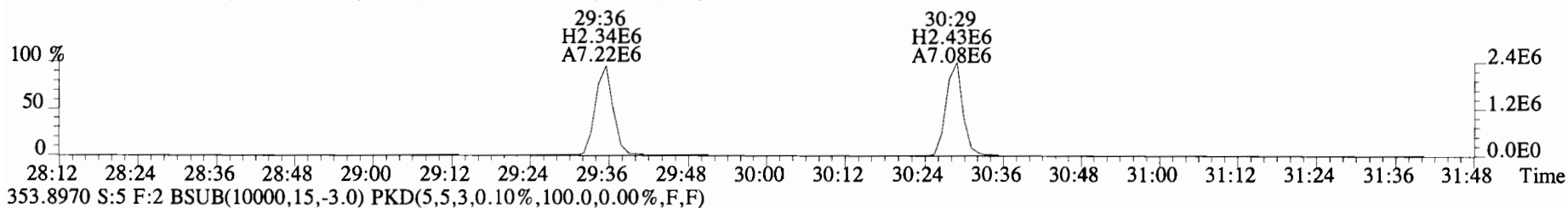
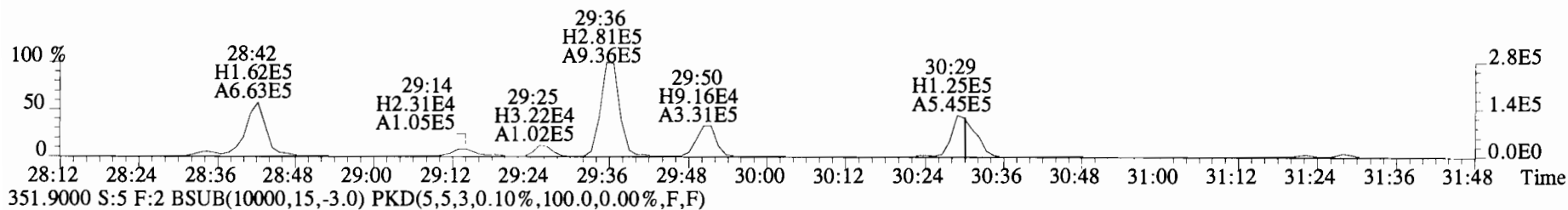
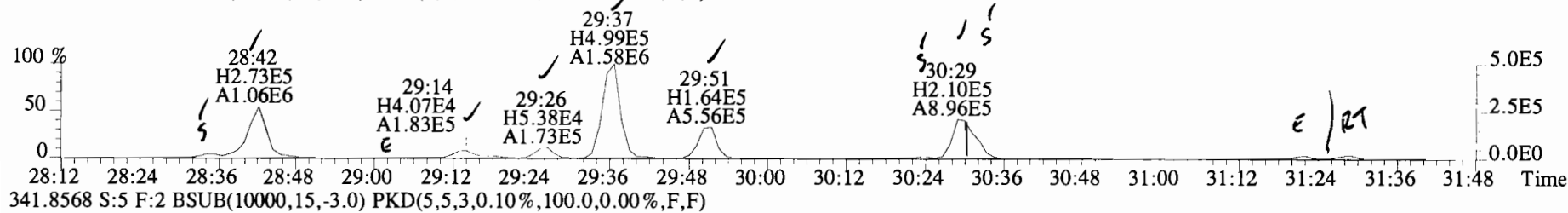
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



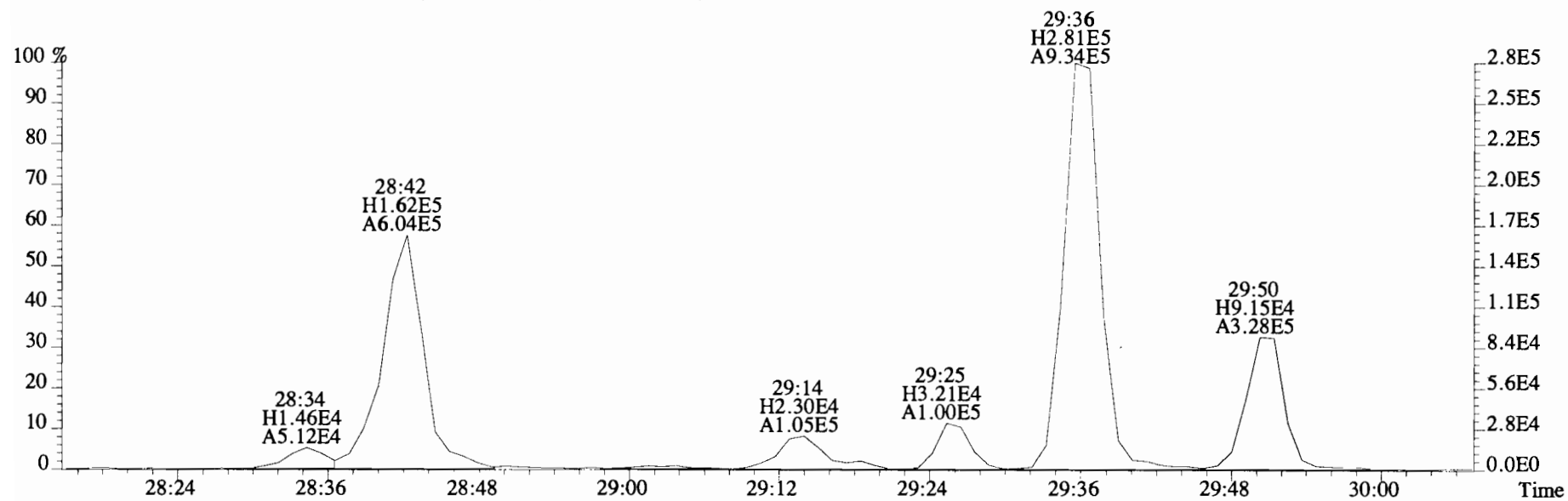
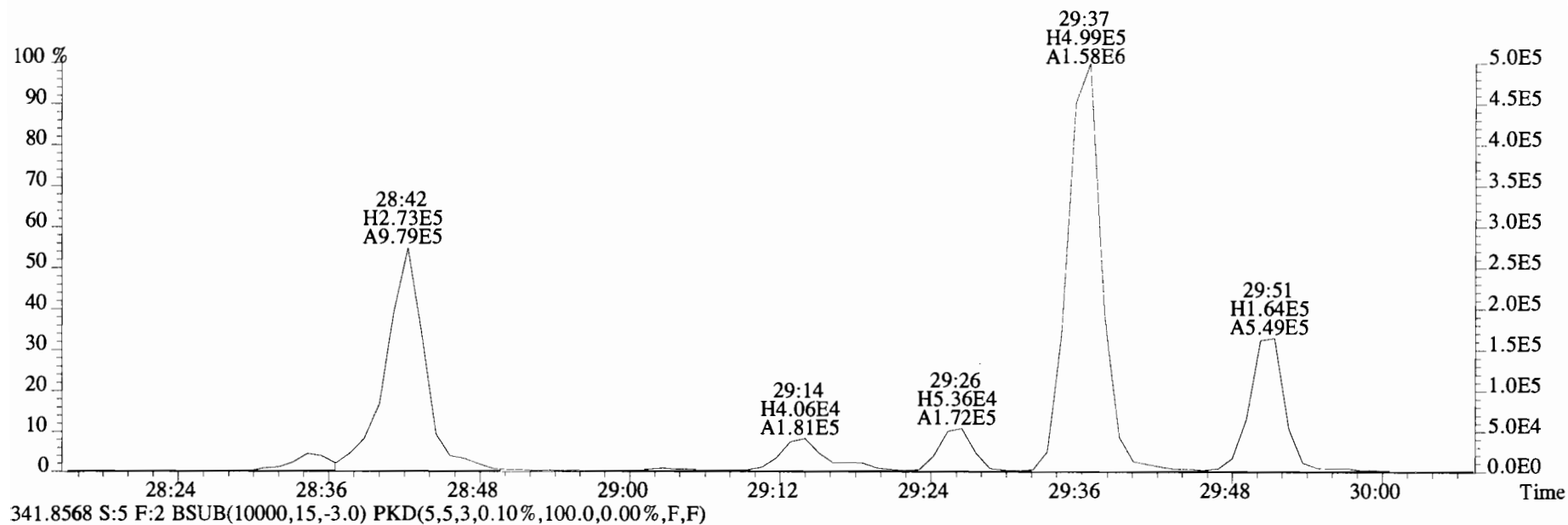
File:191031D2 #1-492 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



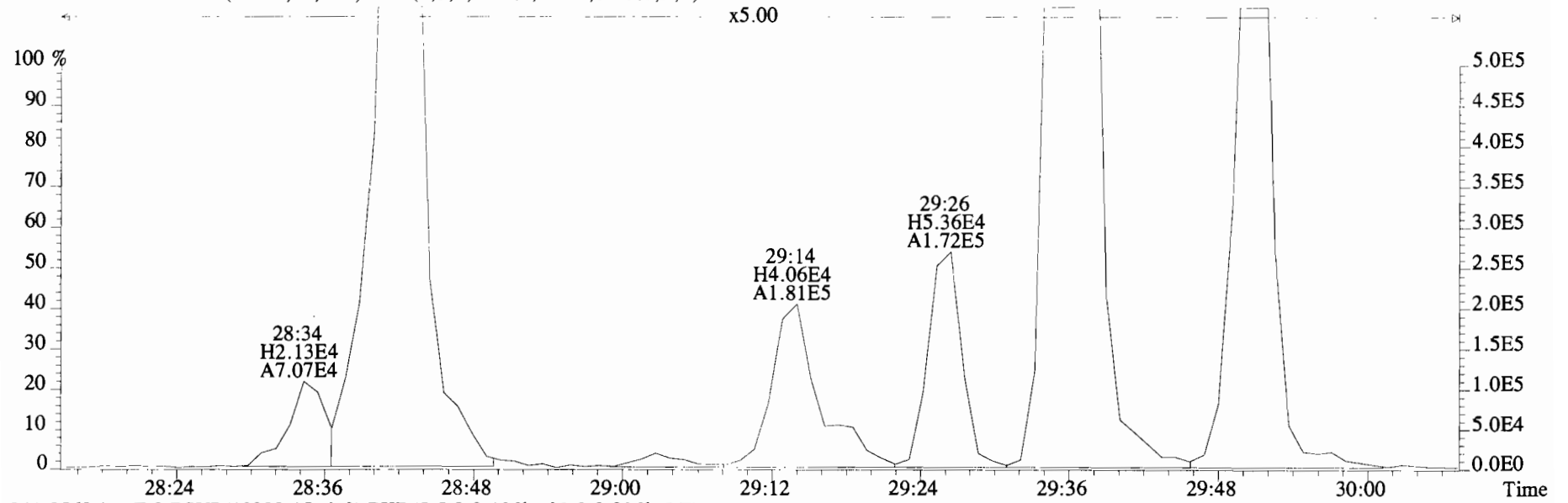
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



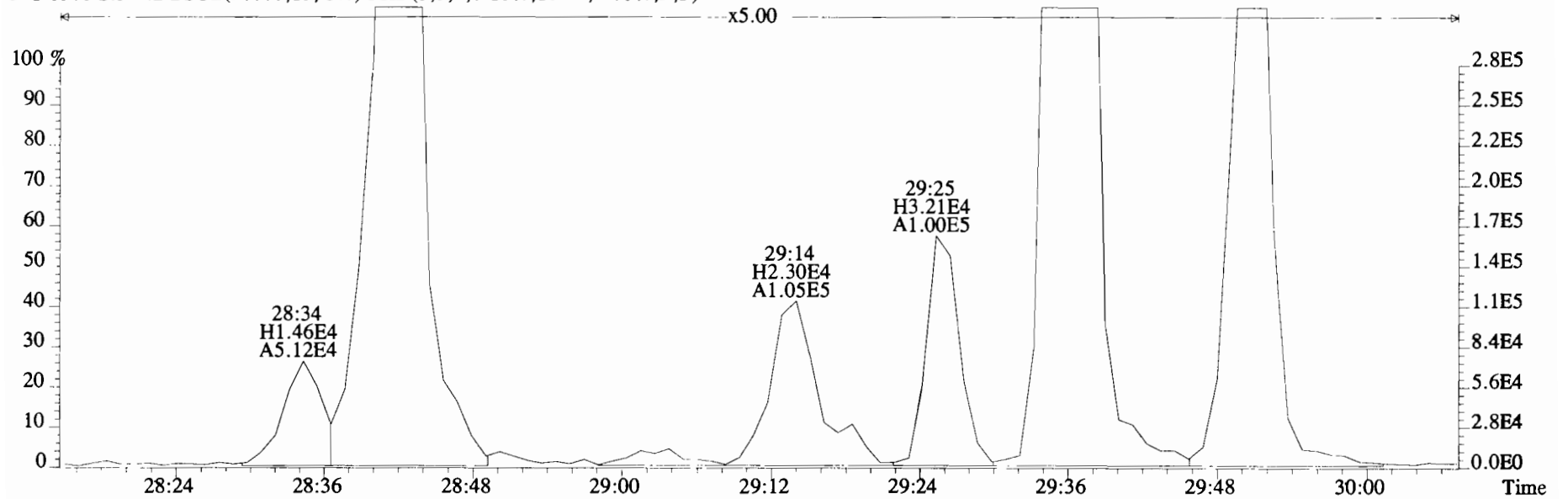
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



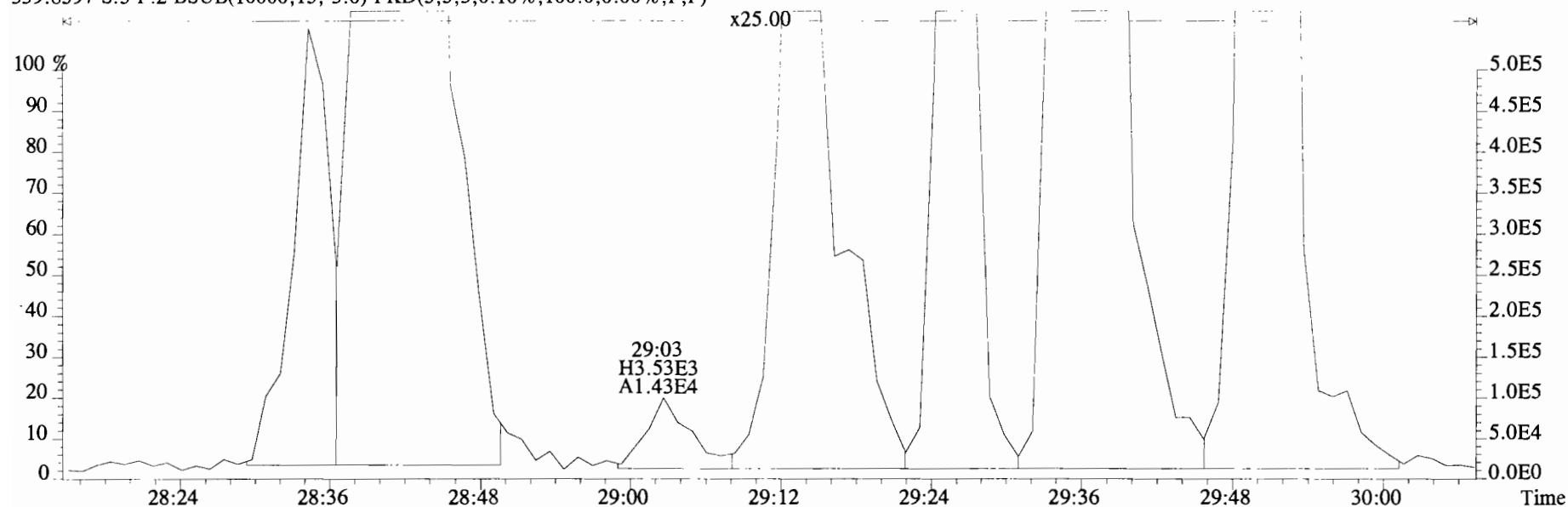
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



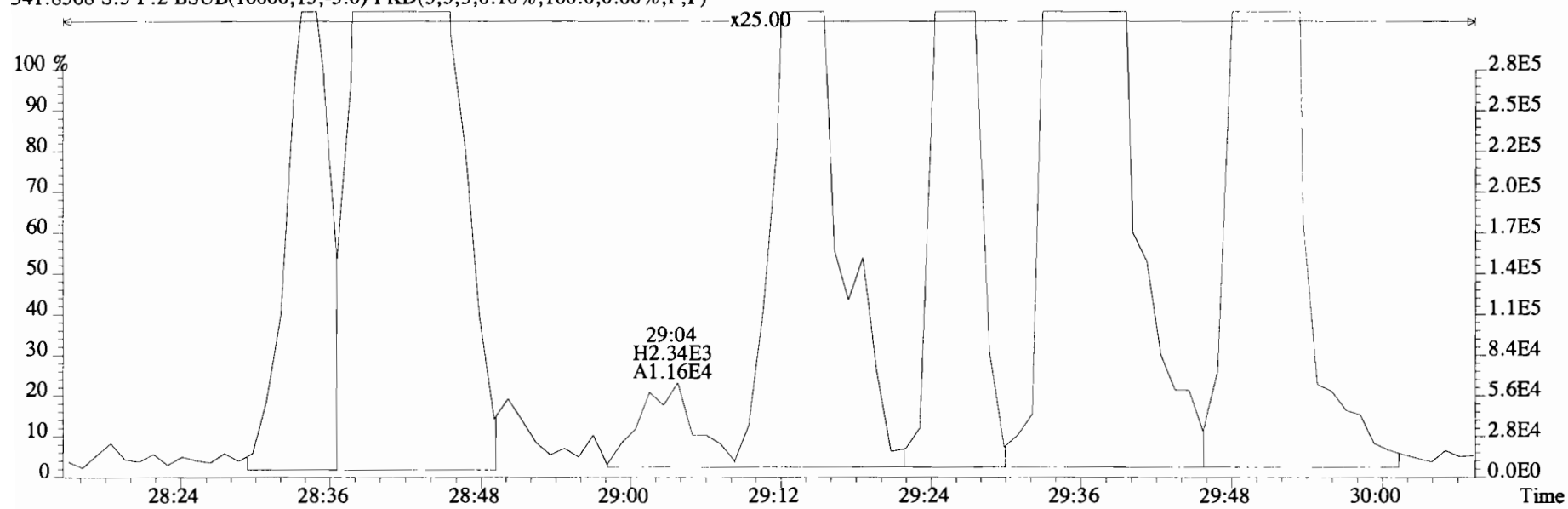
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



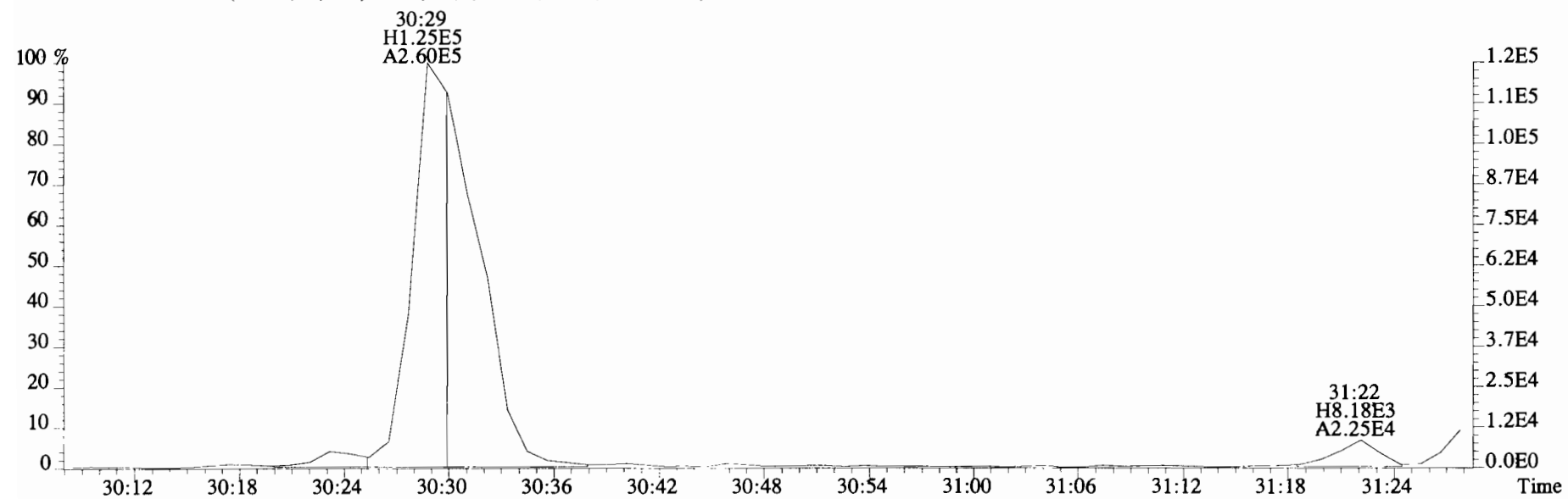
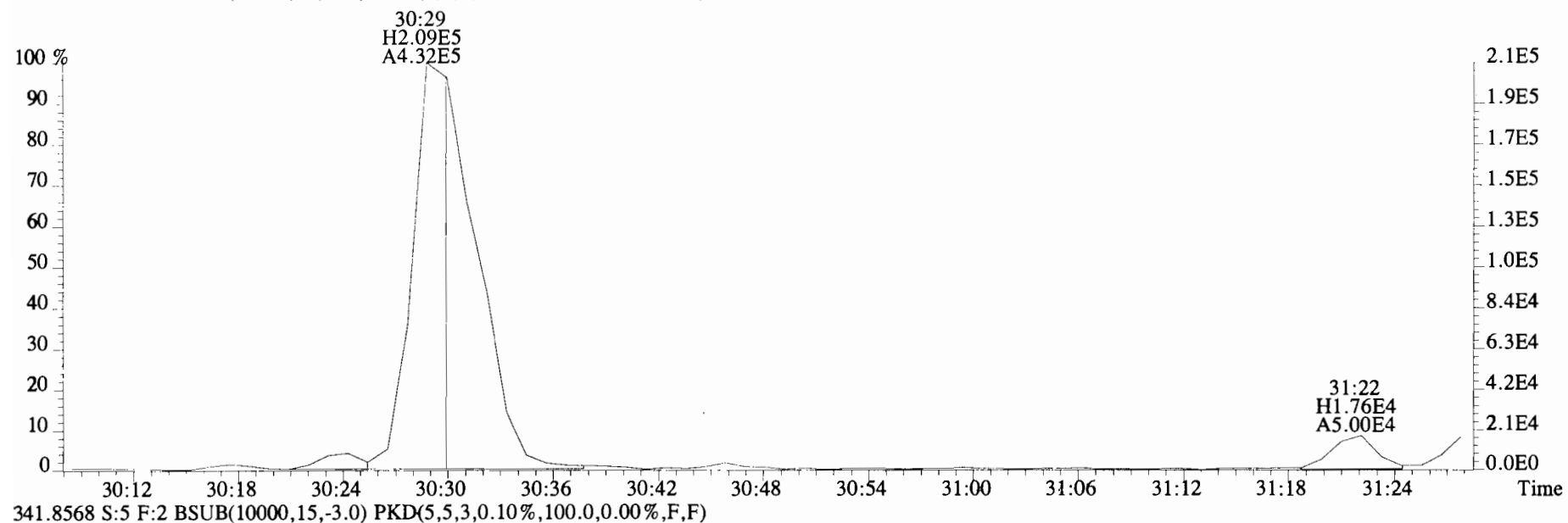
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



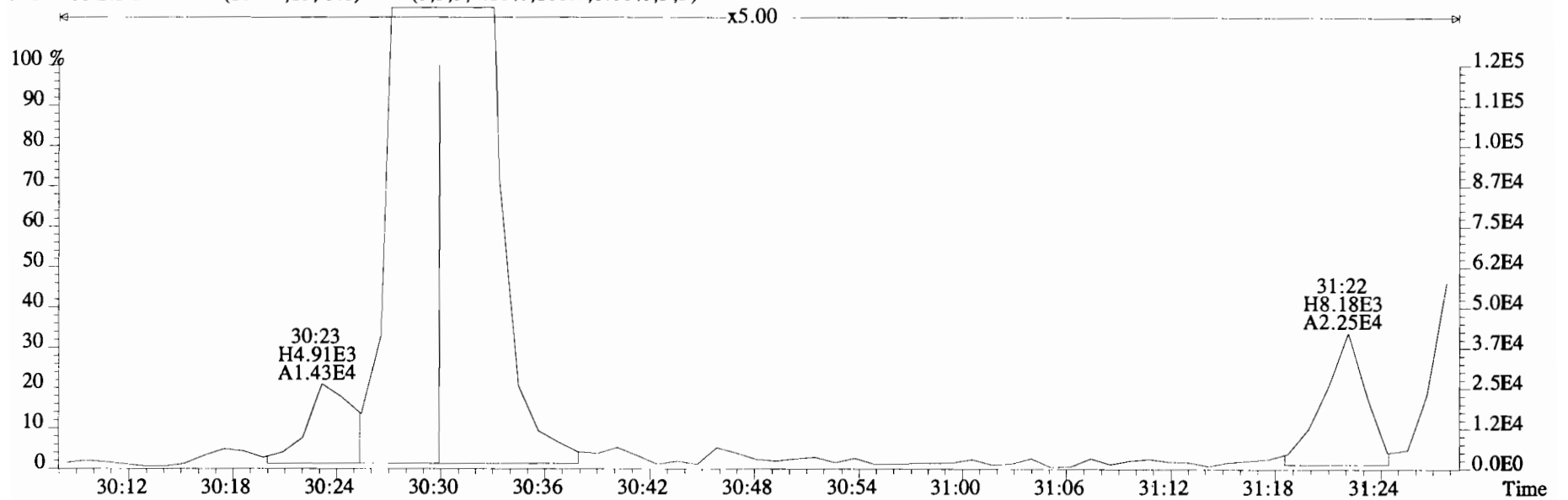
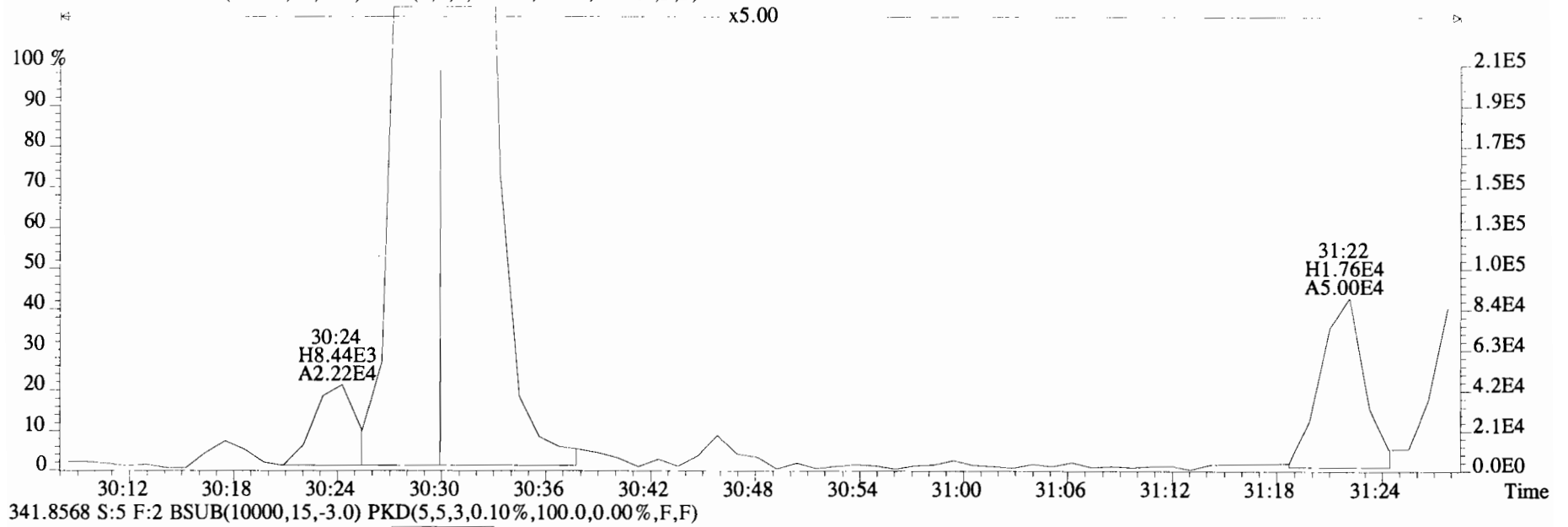
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



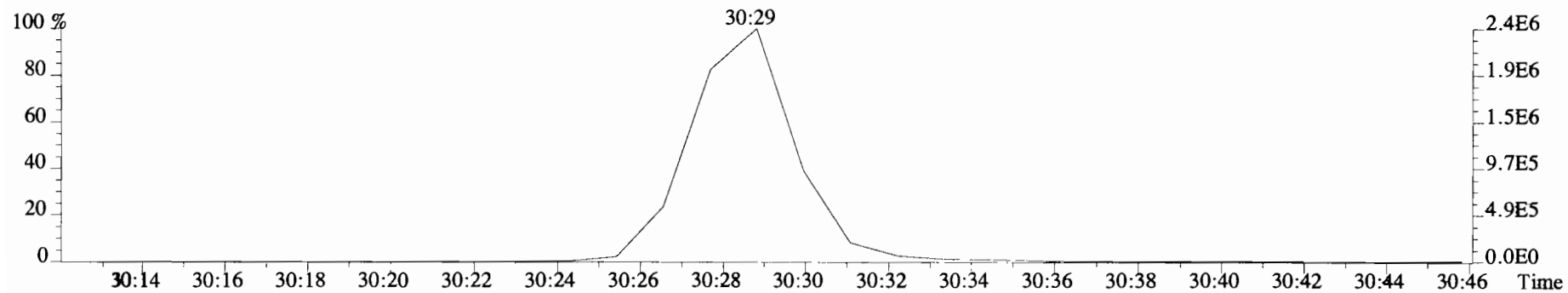
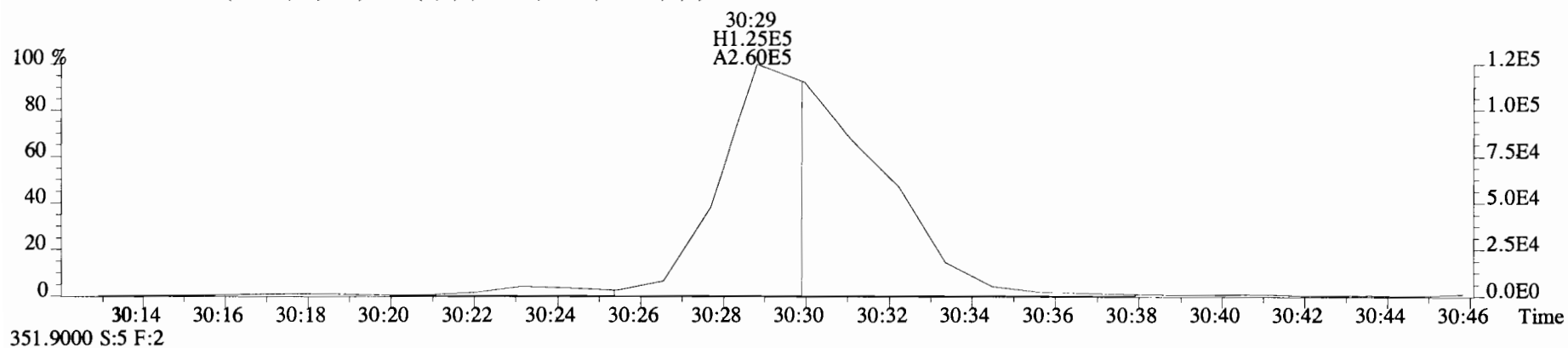
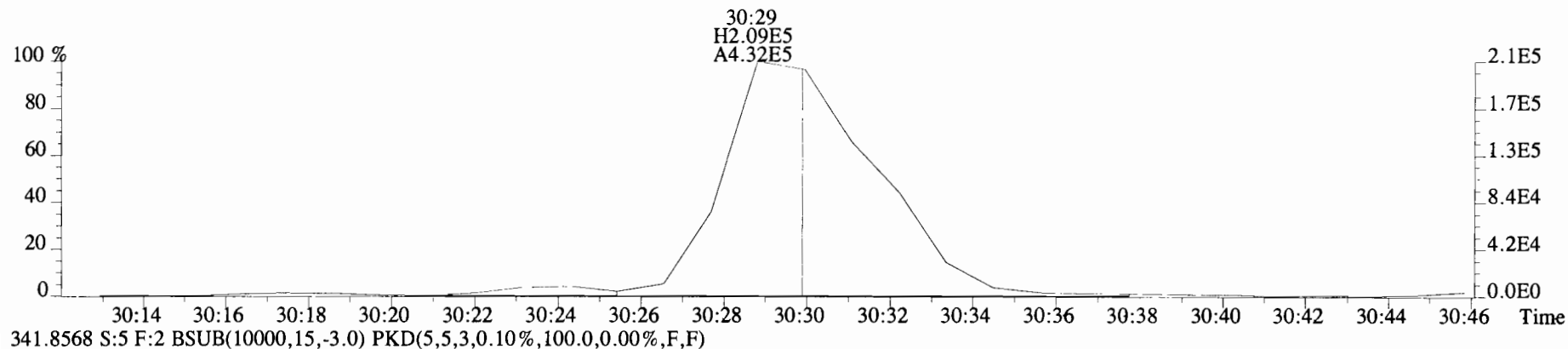
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



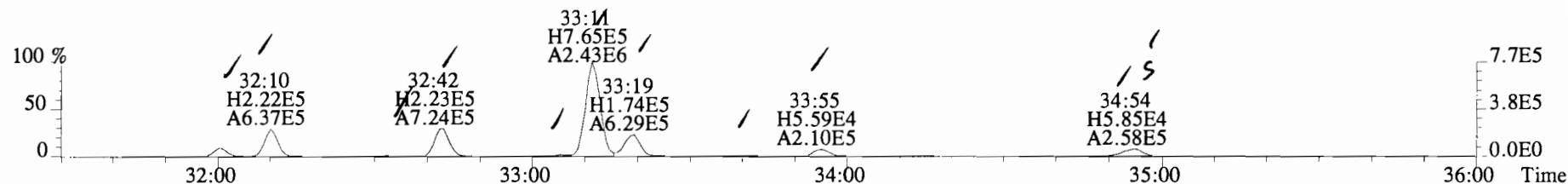
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



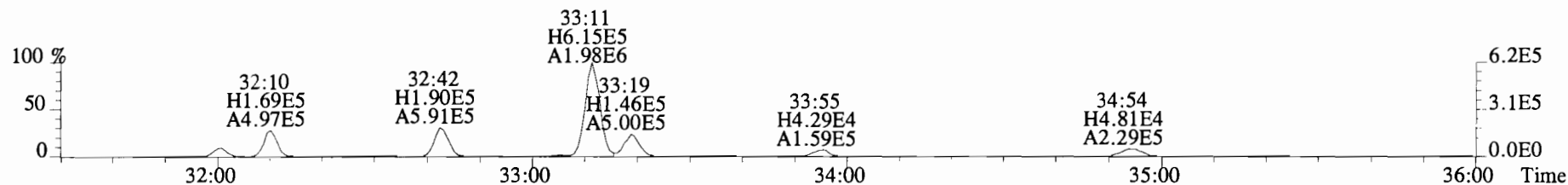
File:191031D2 #1-211 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



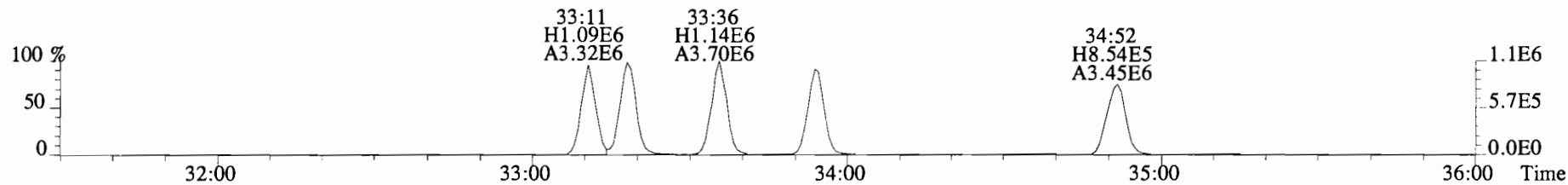
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



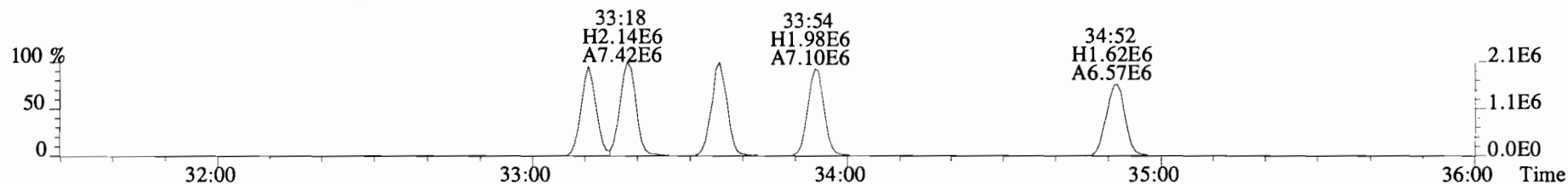
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



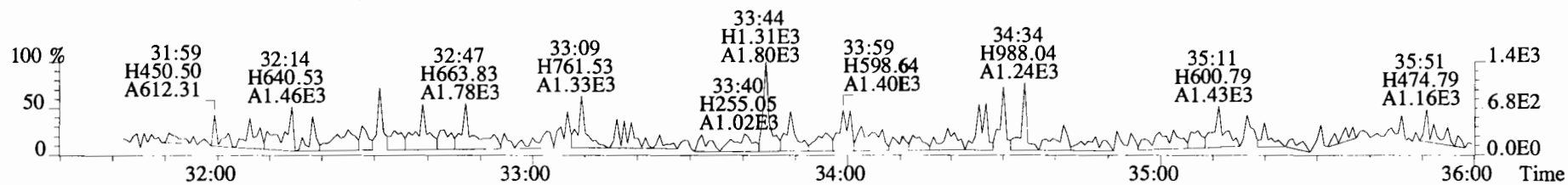
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



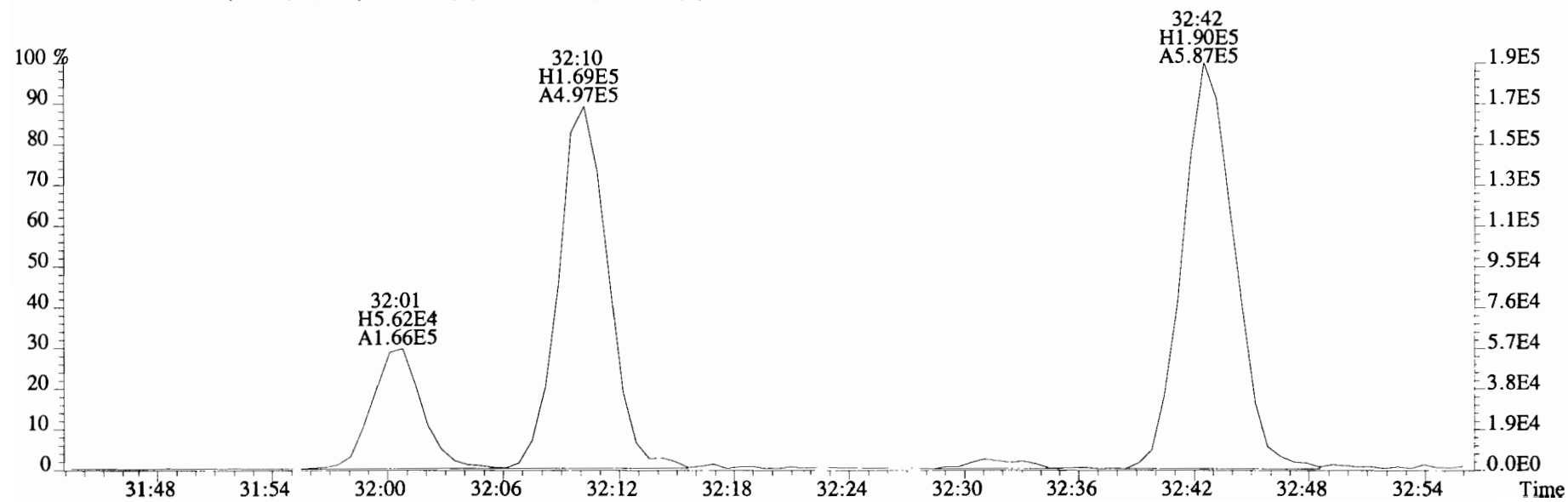
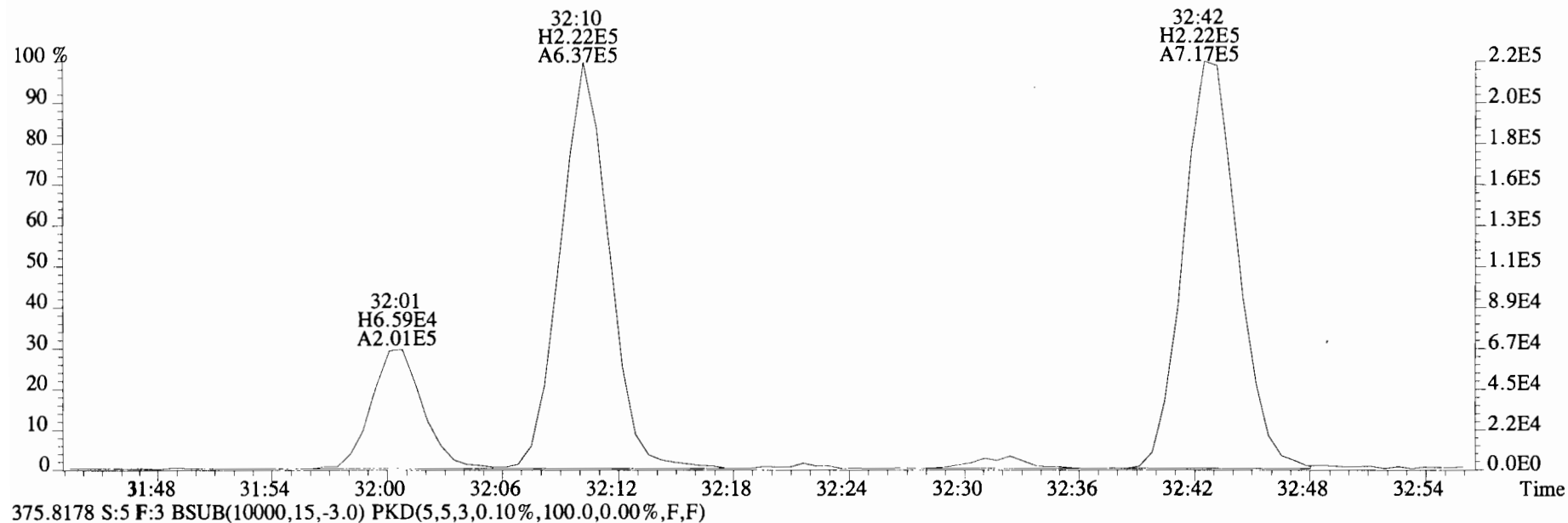
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



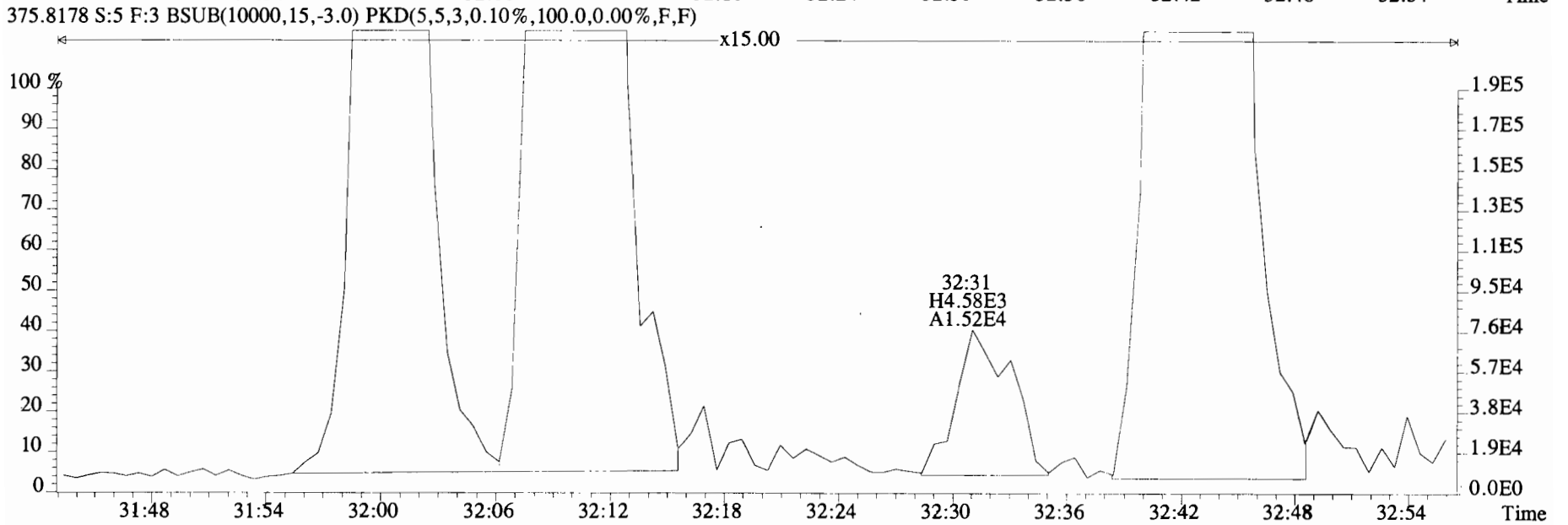
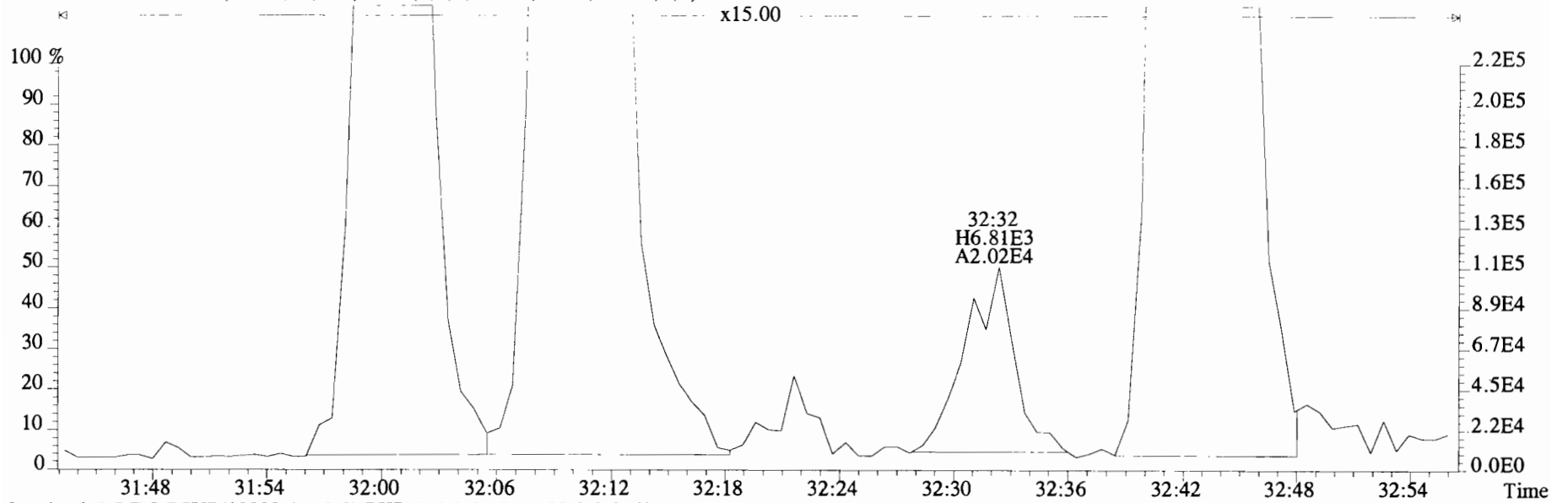
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



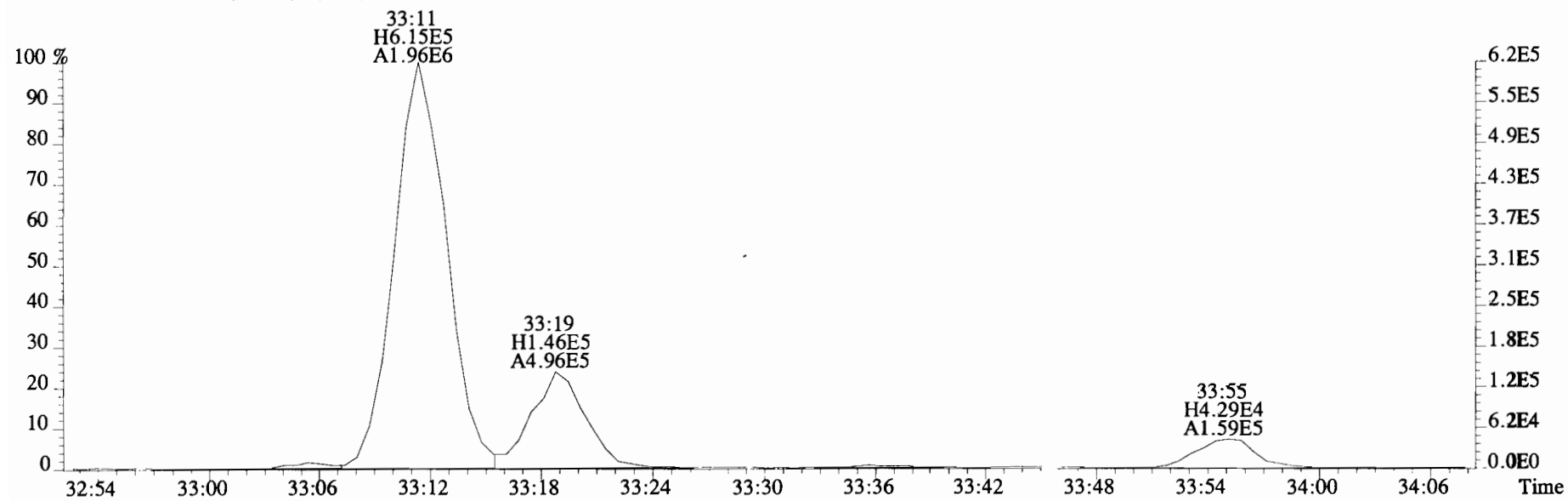
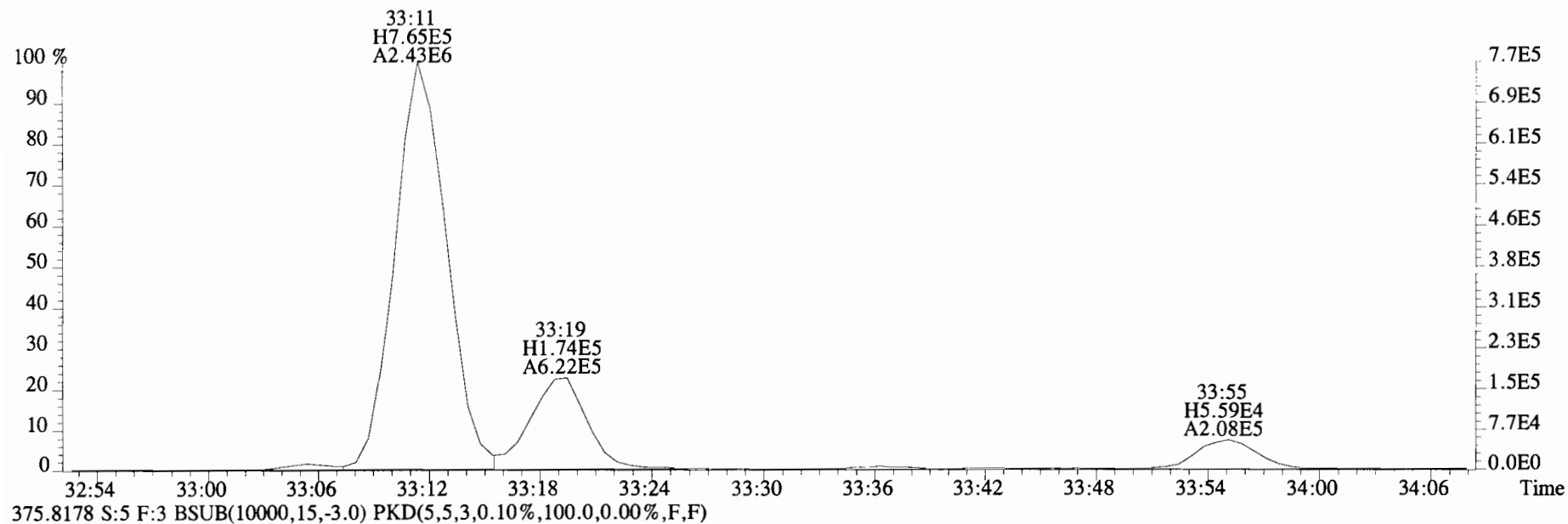
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



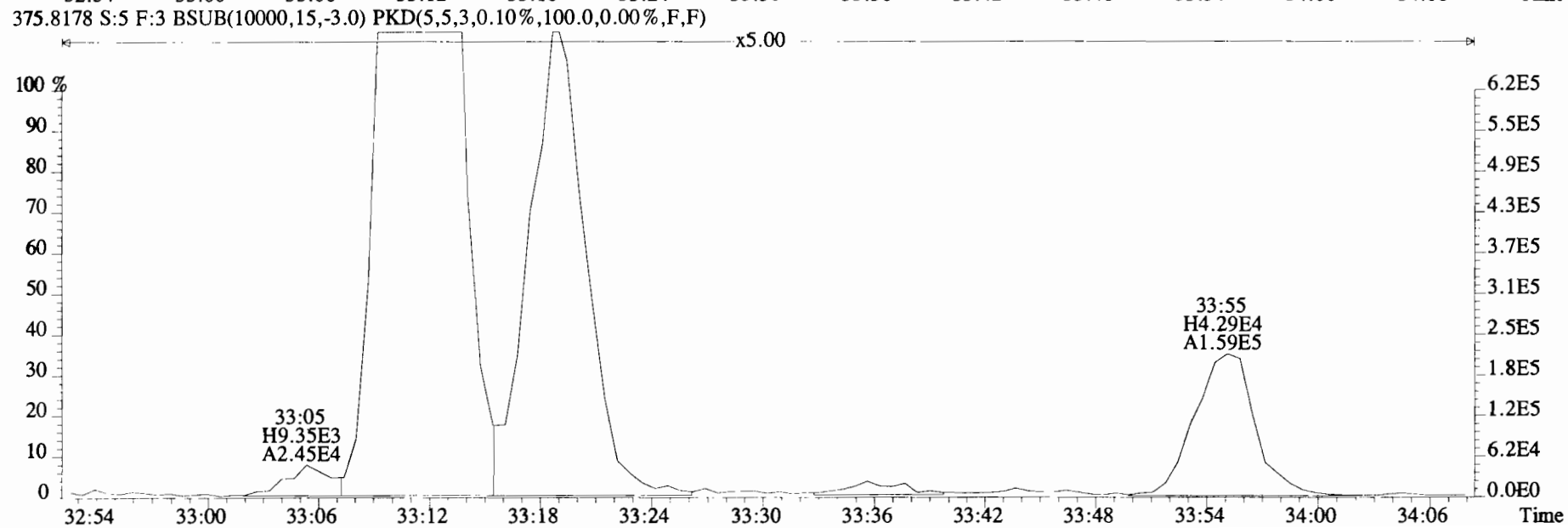
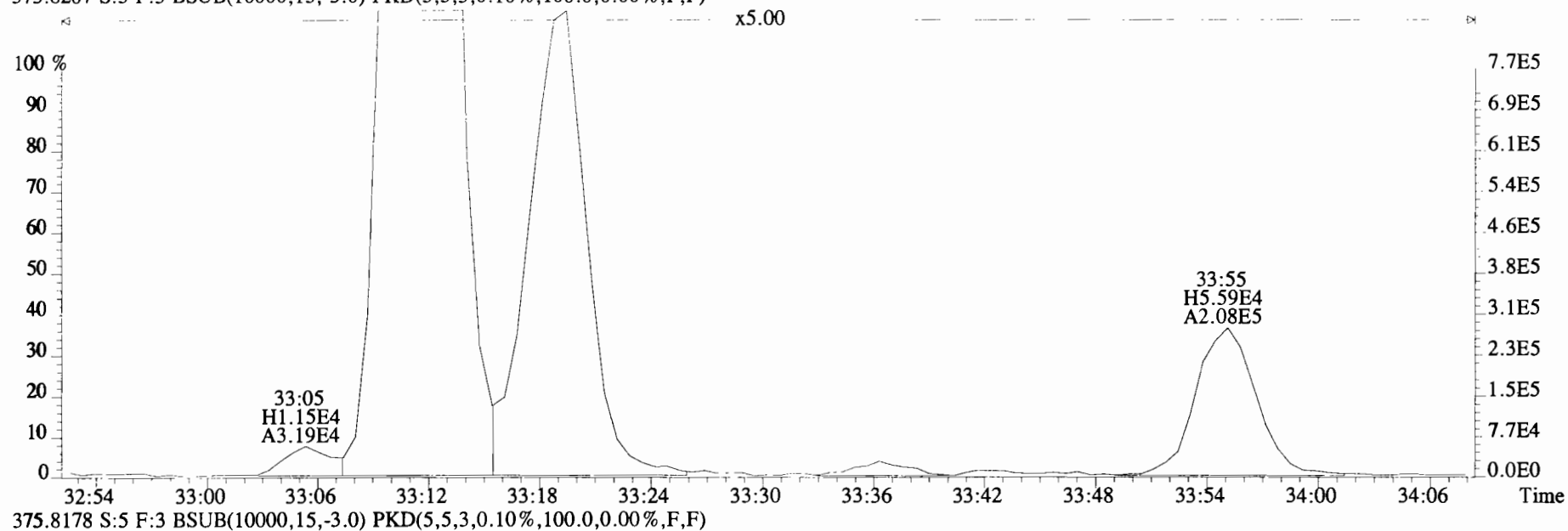
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



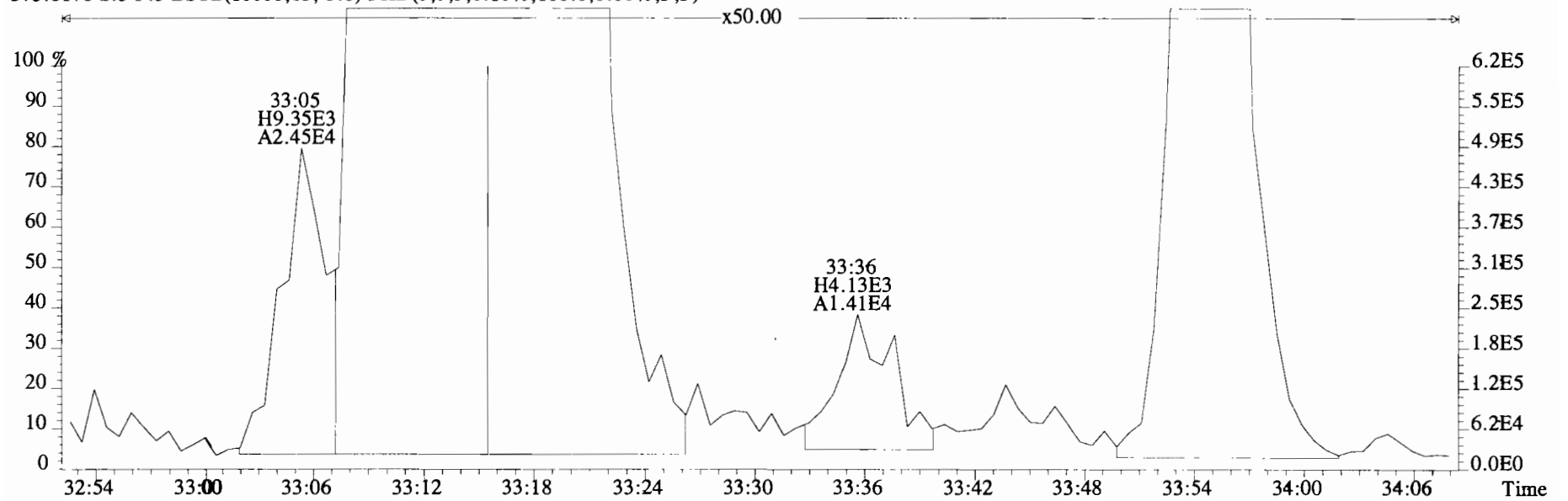
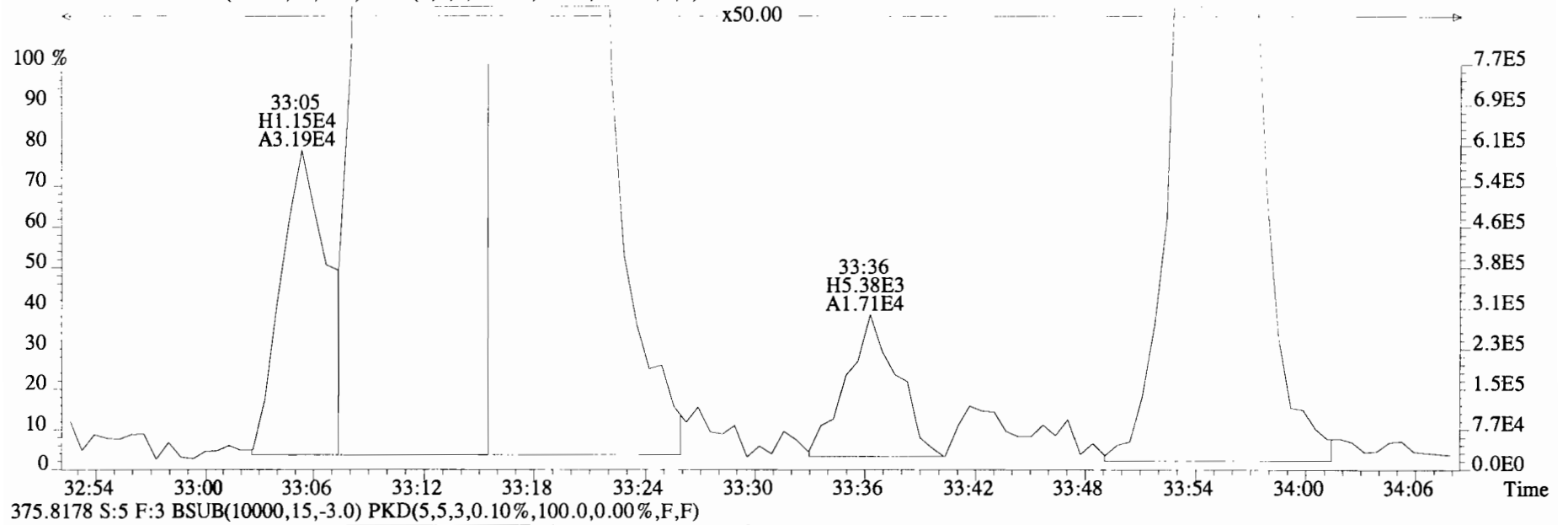
File: 191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Viata Analytical Laboratory VG7 Text: 1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp: OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



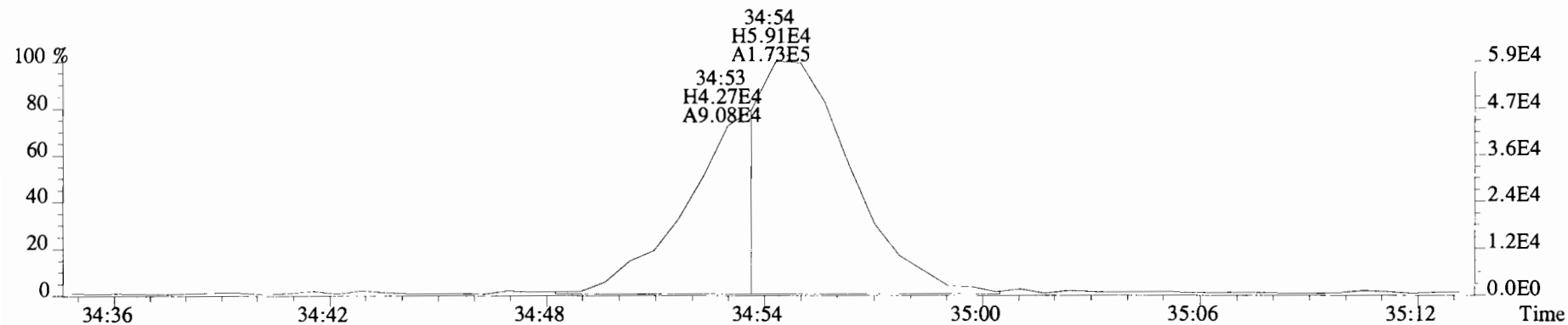
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



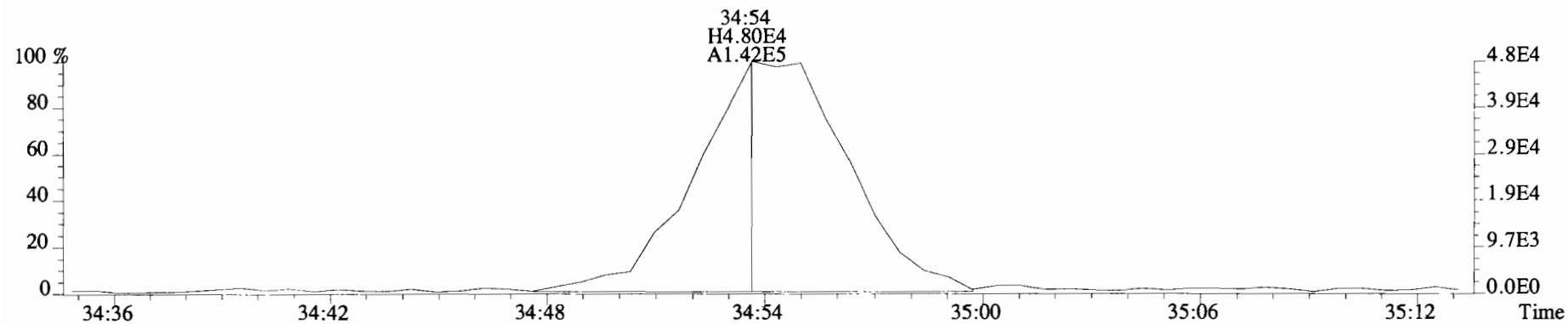
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



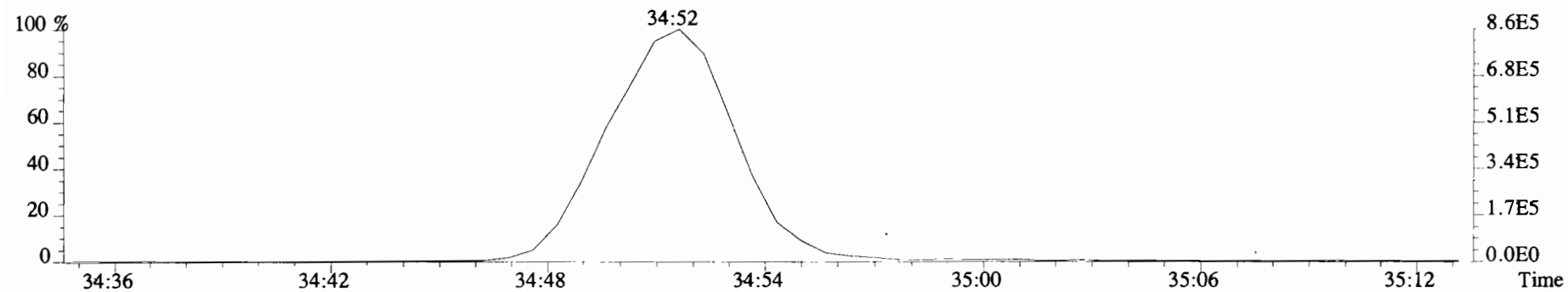
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



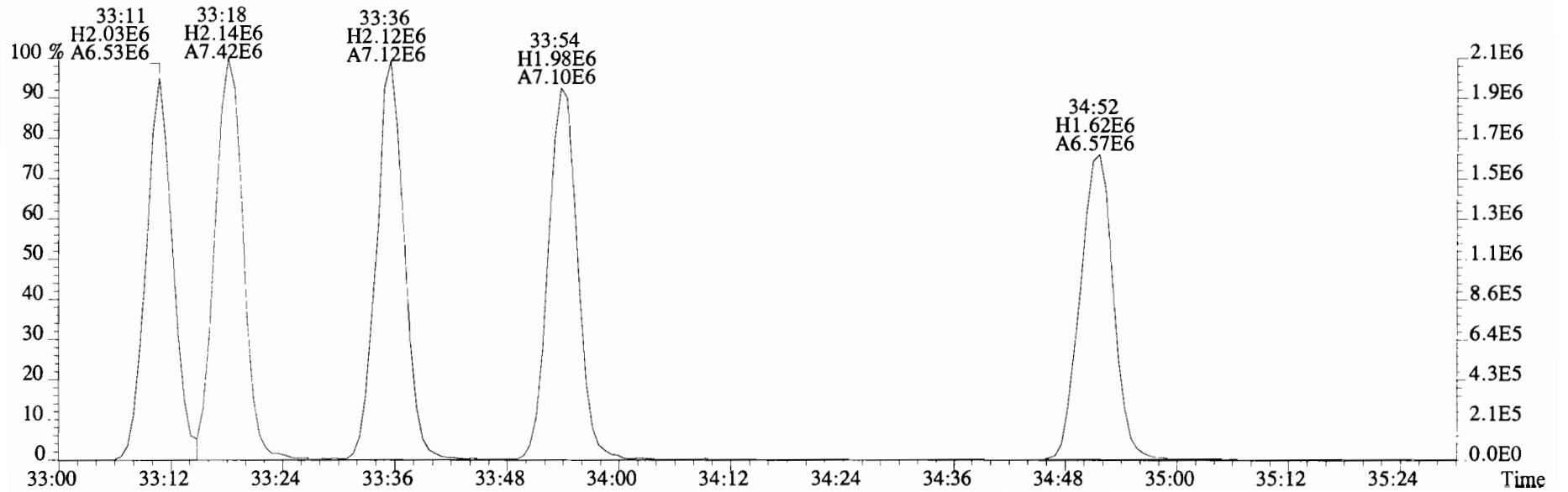
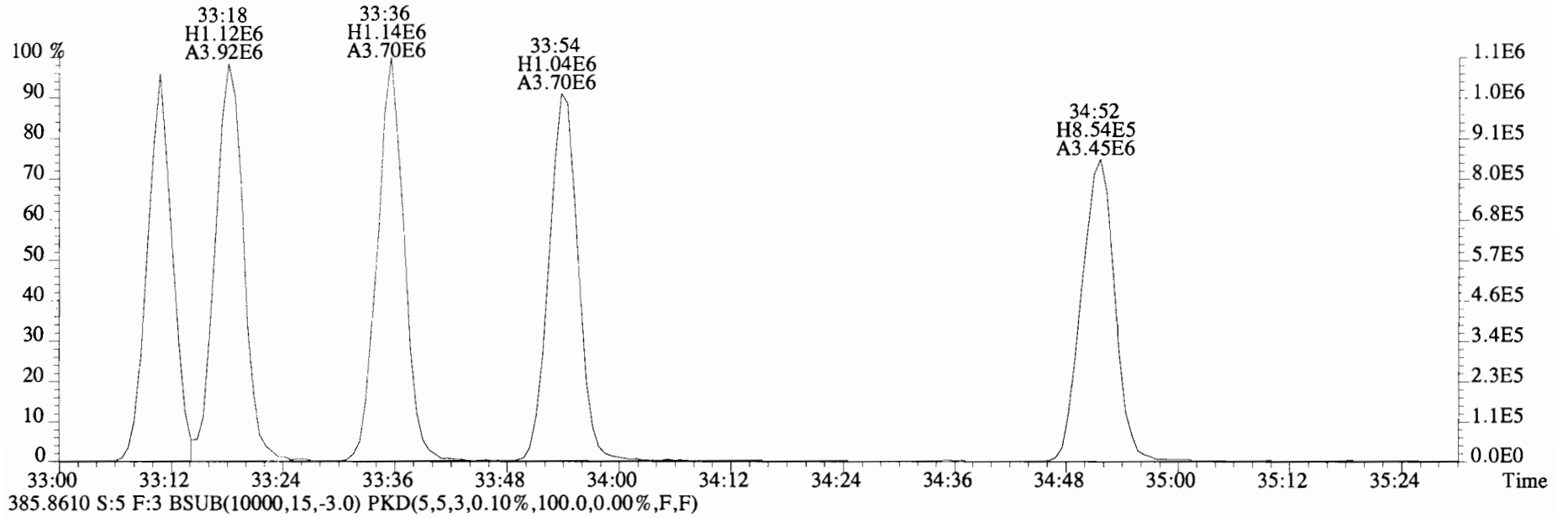
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



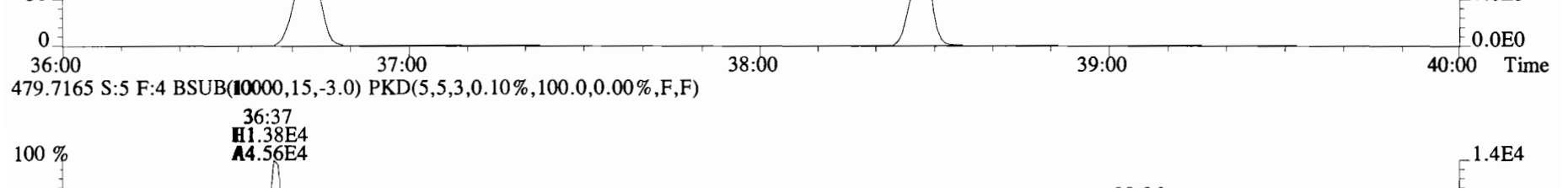
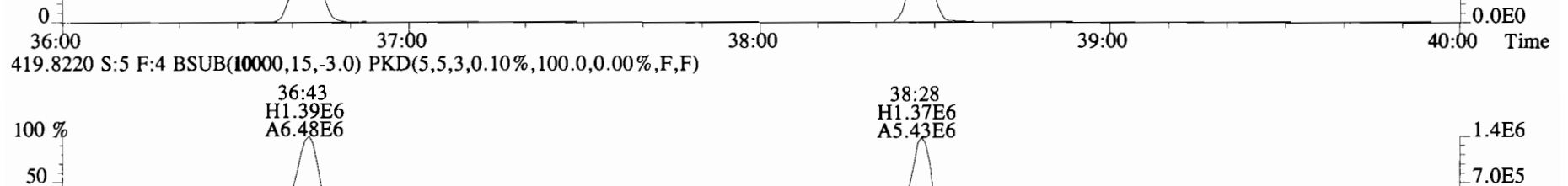
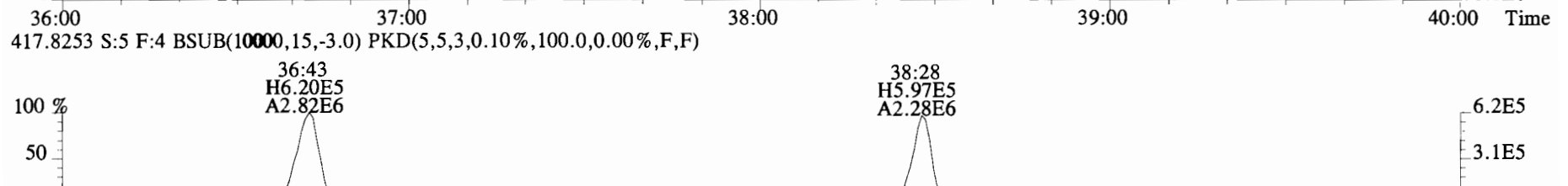
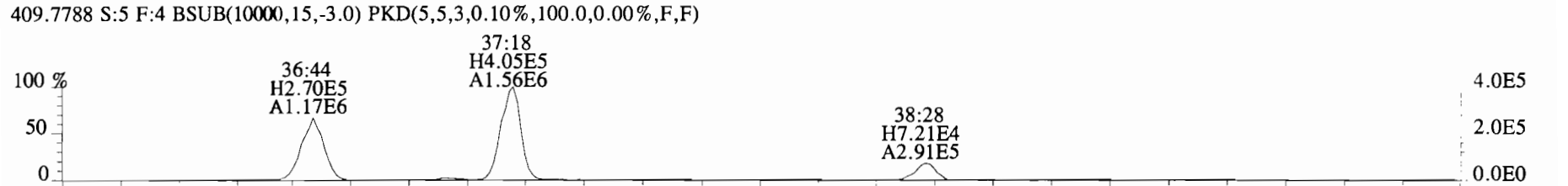
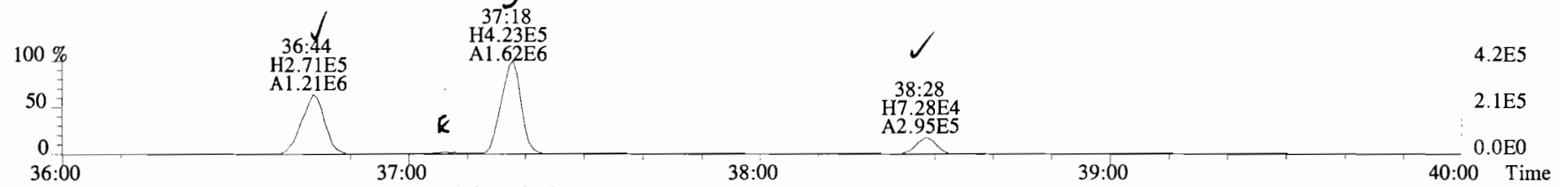
383.8639 S:5 F:3



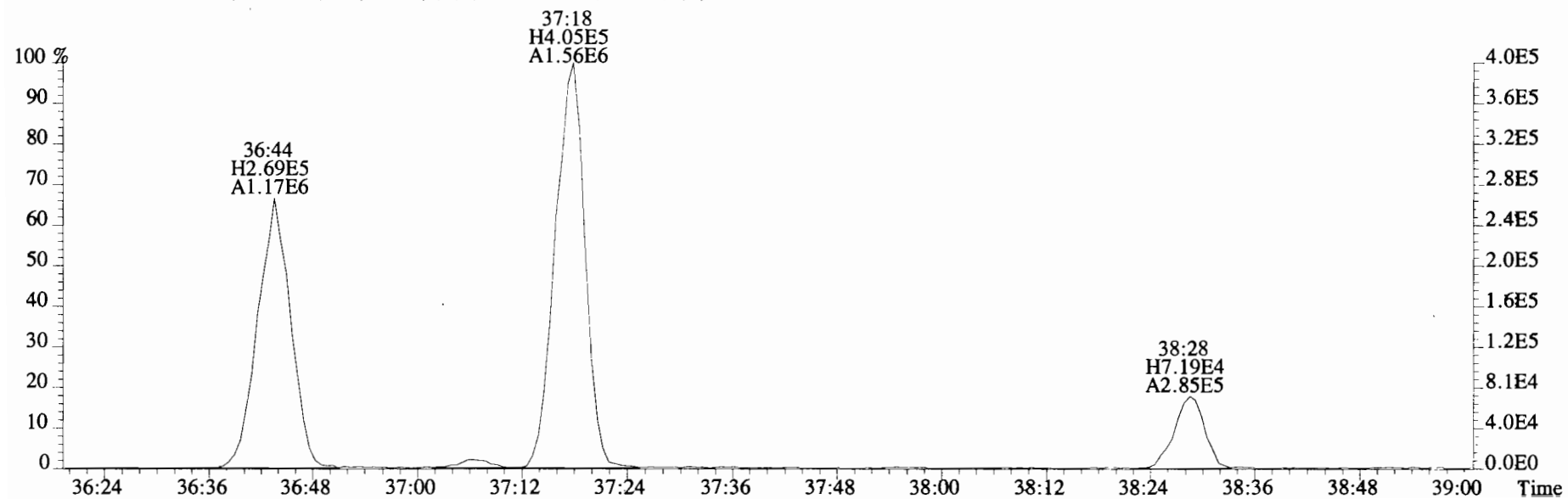
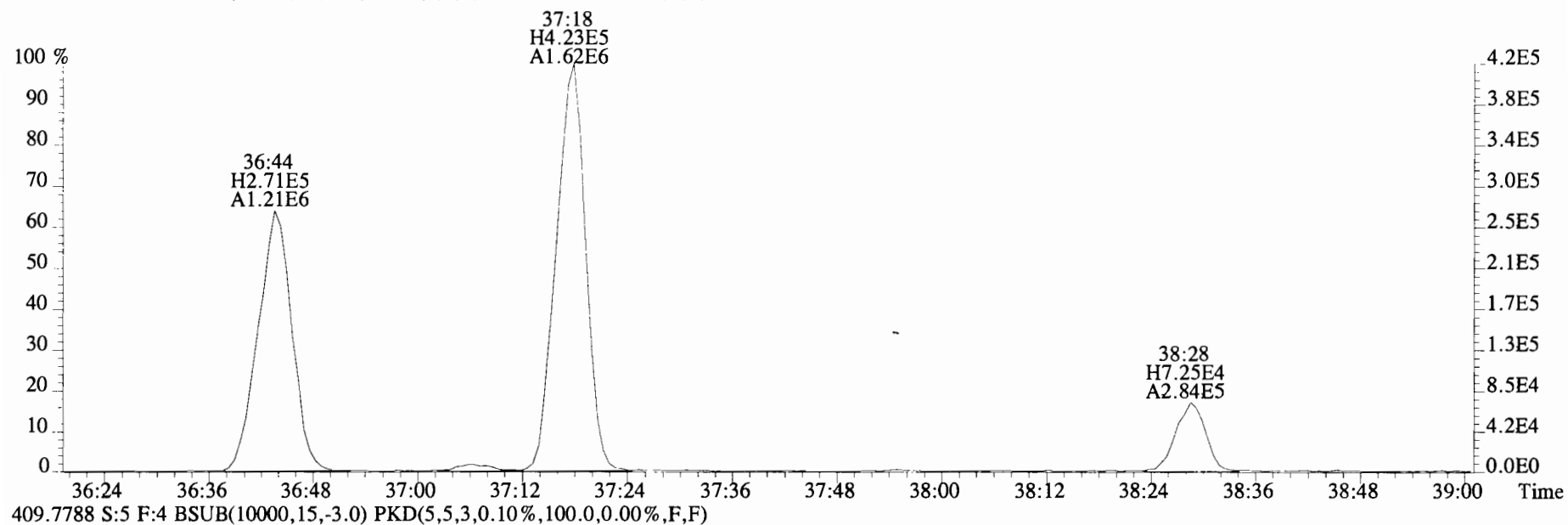
File:191031D2 #1-385 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



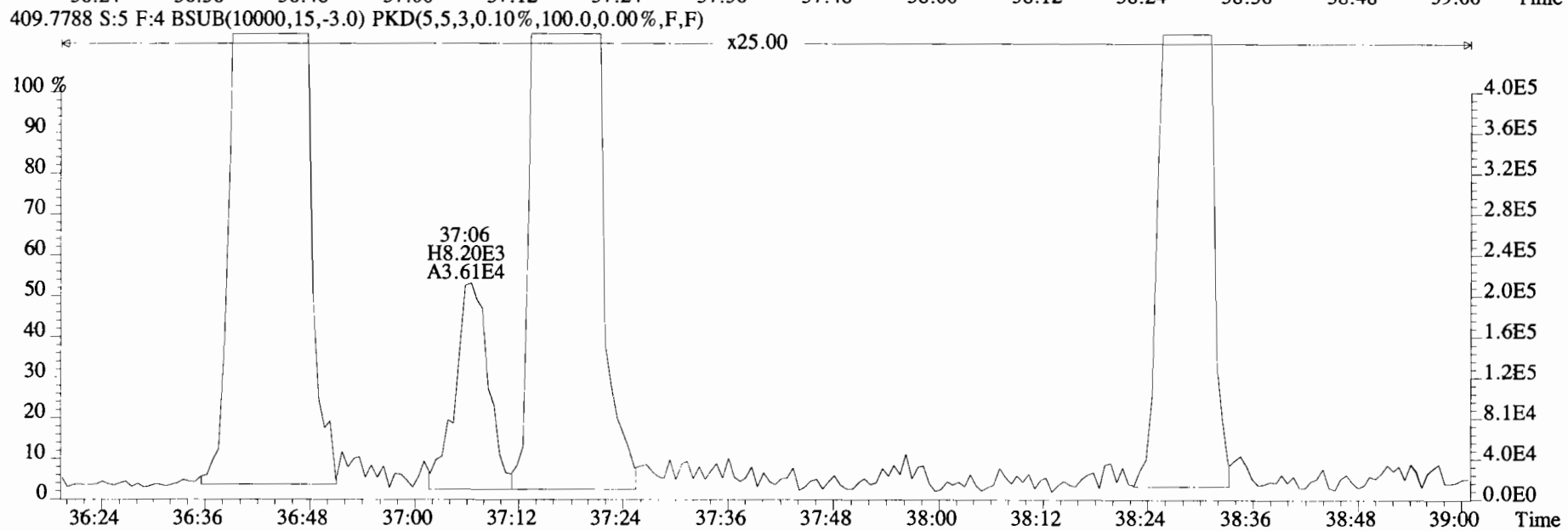
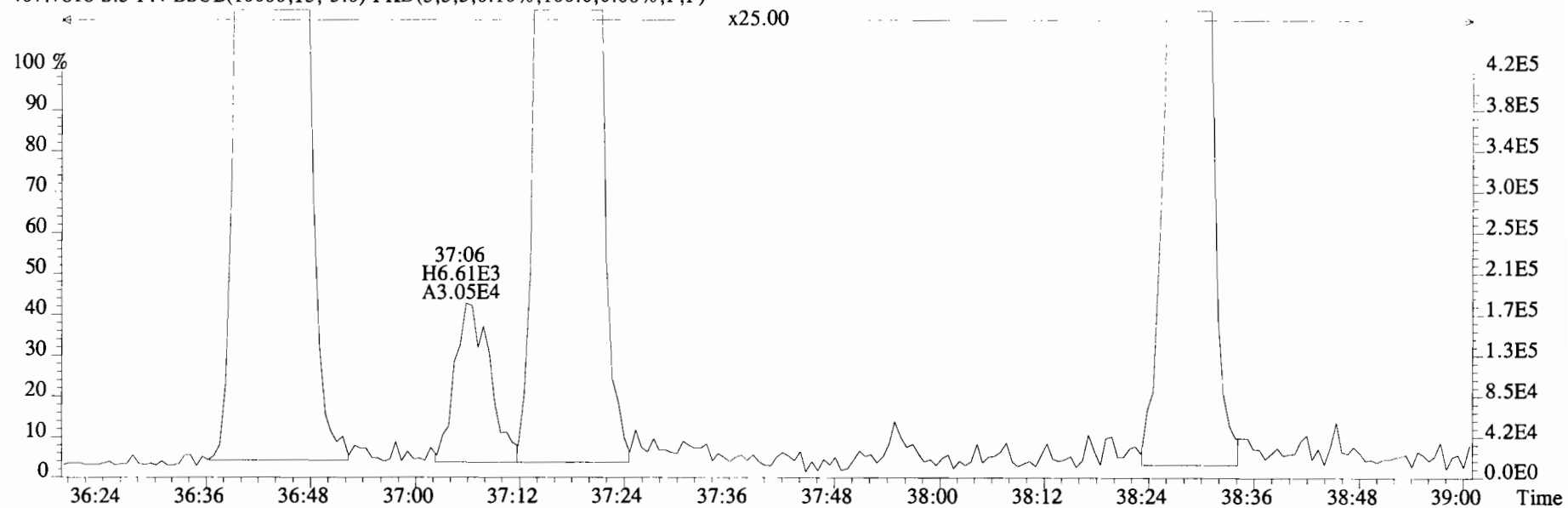
File:191031D2 #1-356 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
 407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



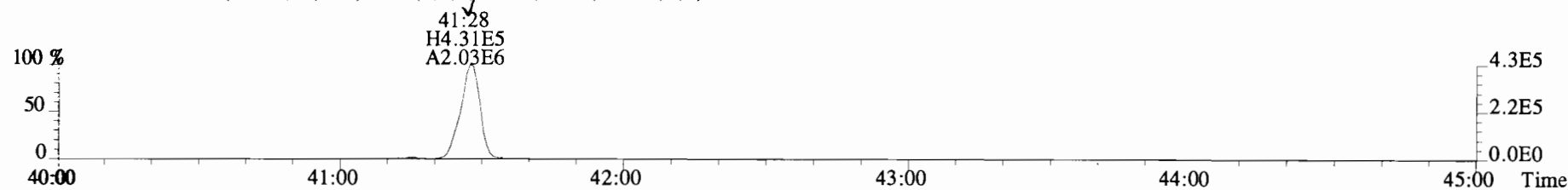
File:191031D2 #1-356 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



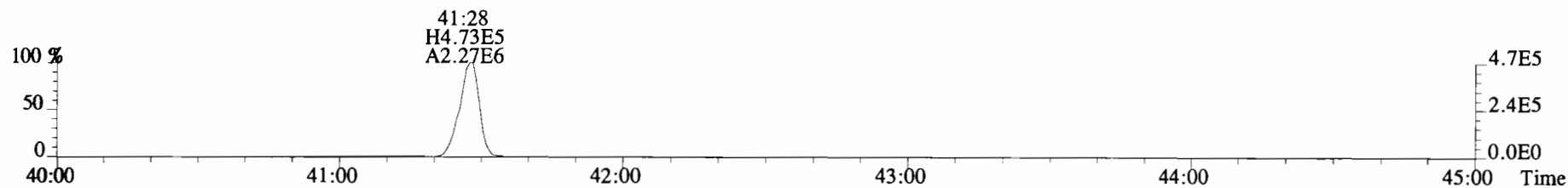
File:191031D2 #1-356 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



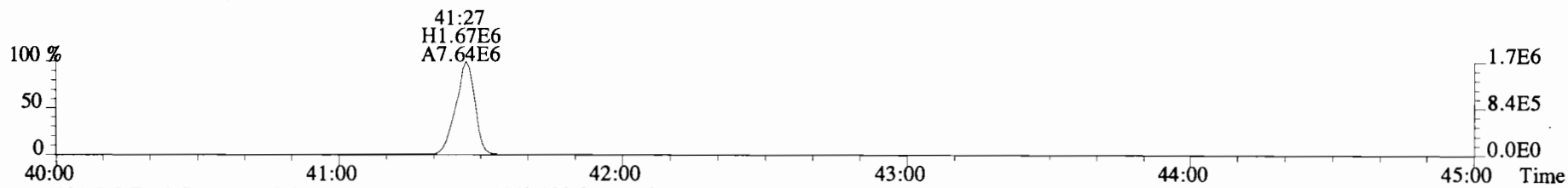
File:191031D2 #1-431 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



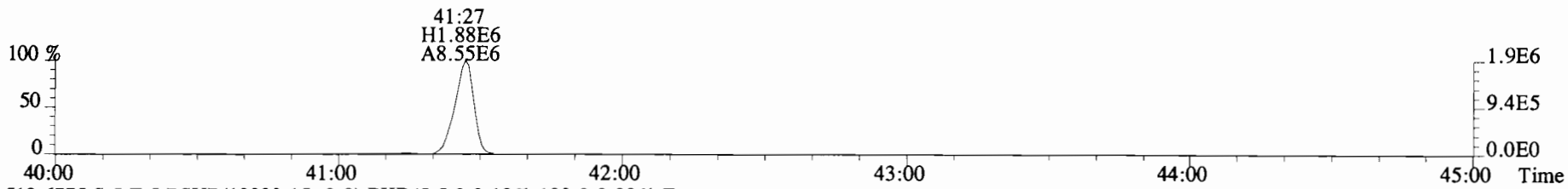
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



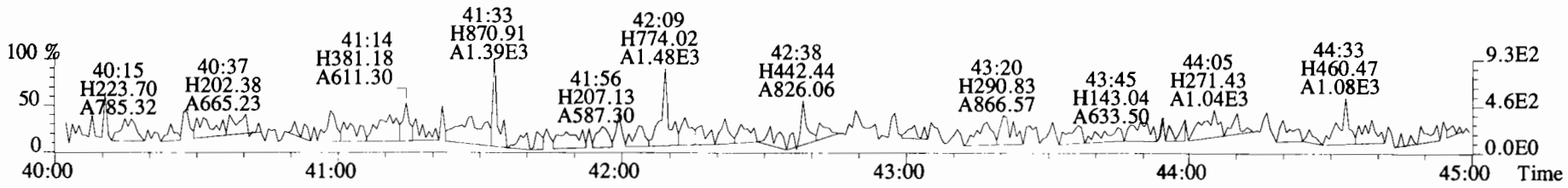
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



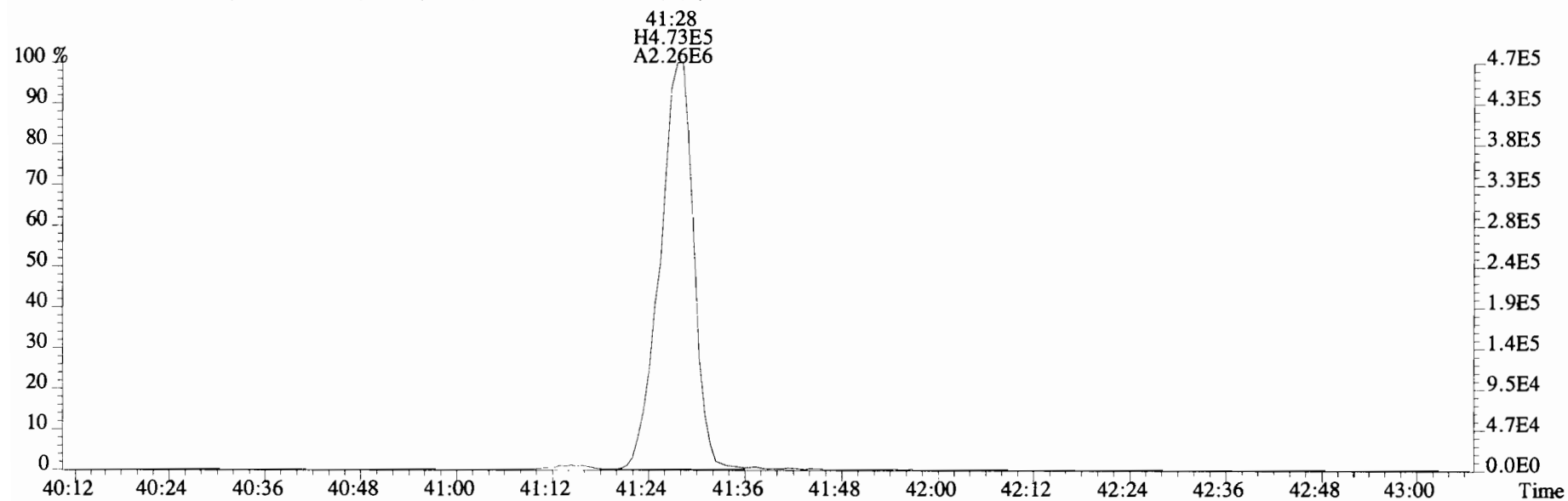
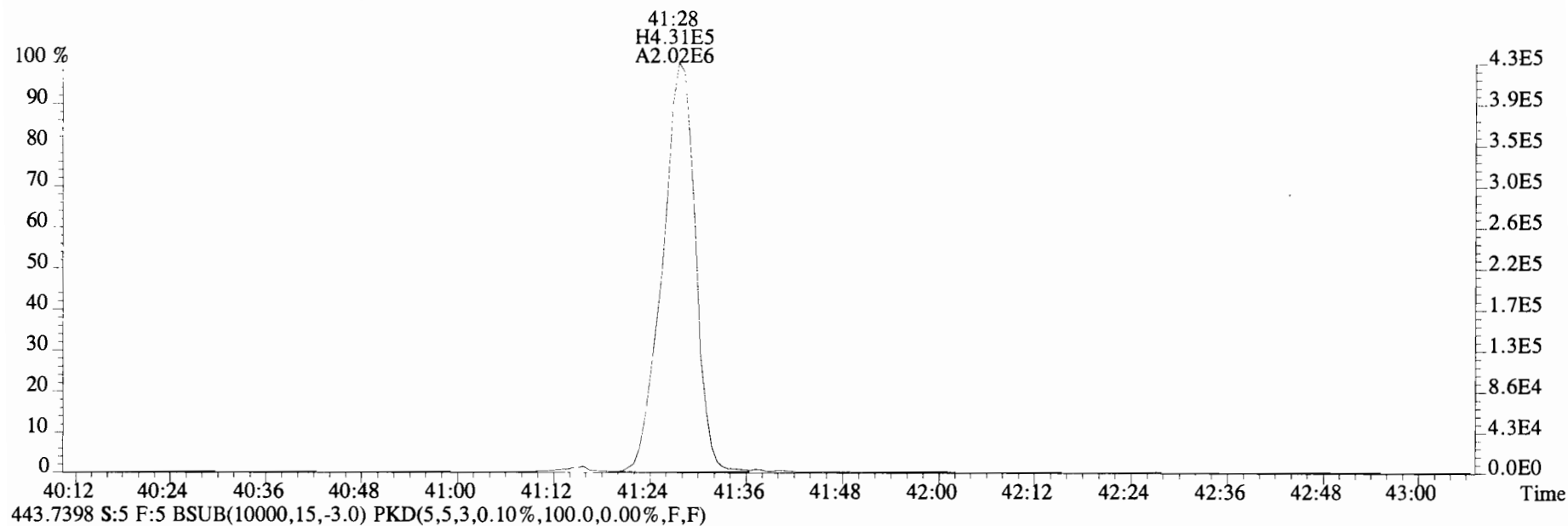
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



File:191031D2 #1-431 Acq: 1-NOV-2019 02:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE1 PDI-082SC-B-00-02-191002 20.05 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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	3.58e+04	0.67 y	0.91	26:16	0.85934	*	2.5	*	*	Total Tetra-Dioxins	7.09	8.65	*	*	*
1,2,3,7,8-PeCDD	4.57e+04	0.55 y	0.90	30:46	1.4798	*	2.5	*	*	Total Penta-Dioxins	10.8	15.3	*	*	*
1,2,3,4,7,8-HxCDD	5.81e+04	1.19 y	1.10	34:05	1.6458	*	2.5	*	*	Total Hexa-Dioxins	87.1	87.1	*	*	*
1,2,3,6,7,8-HxCDD	3.63e+05	1.19 y	0.94	34:12	11.104	*	2.5	*	*	Total Hepta-Dioxins	891	891	*	*	*
1,2,3,7,8,9-HxCDD	1.61e+05	1.30 y	0.96	34:29	4.6792	*	2.5	*	*	Total Tetra-Furans	319	339	*	*	*P
1,2,3,4,6,7,8-HpCDD	1.17e+07	1.01 y	0.98	37:56	372.83	*	2.5	*	*	Total Penta-Furans	529.47	529.47	*	*	*P
OCDD	1.63e+08	0.90 y	0.96	41:13	6444.7	E *	2.5	*	*	Total Hexa-Furans	586	586	*	*	*
2,3,7,8-TCDF	7.50e+06	0.78 y	0.95	25:31	122.78	(115)	2.5	*	*	Total Hepta-Furans	491	491	*	*	*
1,2,3,7,8-PeCDF	1.04e+07	1.65 y	0.96	29:36	195.90	*	2.5	*	*						
2,3,4,7,8-PeCDF	3.16e+06	1.58 y	1.01	30:28	58.483	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	1.50e+07	1.20 y	1.18	33:11	302.93	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	4.08e+06	1.25 y	1.07	33:19	82.016	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	1.23e+06	1.23 y	1.11	33:55	24.482	*	2.5	*	*	* see dilution					
1,2,3,7,8,9-HxCDF	5.77e+05	1.15 y	1.06	34:52	12.401	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	8.12e+06	1.02 y	1.13	36:43	189.42	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	2.46e+06	1.03 y	1.28	38:28	56.437	*	2.5	*	*						
OCDF	1.41e+07	0.91 y	0.95	41:27	431.17	*	2.5	*	*						
IS	13C-2,3,7,8-TCDD	9.17e+06	0.79 y	1.10	26:16	196.92				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	6.82e+06	0.62 y	0.88	30:45	182.07				98.8					
IS	13C-1,2,3,4,7,8-HxCDD	6.39e+06	1.25 y	0.64	34:04	188.30				91.3					
IS	13C-1,2,3,6,7,8-HxCDD	6.95e+06	1.23 y	0.86	34:11	153.64				94.5					
IS	13C-1,2,3,7,8,9-HxCDD	7.13e+06	1.26 y	0.81	34:29	167.37				77.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	6.39e+06	1.04 y	0.65	37:55	184.93				84.0					
IS	13C-OCDD	1.05e+07	0.91 y	0.58	41:13	343.32				92.8					
IS	13C-2,3,7,8-TCDF	1.28e+07	0.80 y	1.03	25:30	194.97				86.1	*				
IS	13C-1,2,3,7,8-PeCDF	1.10e+07	1.61 y	0.85	29:36	202.44				97.8					
IS	13C-2,3,4,7,8-PeCDF	1.06e+07	1.58 y	0.85	30:28	196.92				102					
IS	13C-1,2,3,4,7,8-HxCDF	8.40e+06	0.52 y	0.83	33:11	191.09				98.8					
IS	13C-1,2,3,6,7,8-HxCDF	9.28e+06	0.51 y	1.03	33:18	169.75				95.9					
IS	13C-2,3,4,6,7,8-HxCDF	8.97e+06	0.52 y	0.95	33:54	177.99				85.2					
IS	13C-1,2,3,7,8,9-HxCDF	8.74e+06	0.53 y	0.83	34:51	199.80				89.3					
IS	13C-1,2,3,4,6,7,8-HpCDF	7.58e+06	0.42 y	0.76	36:43	189.41				100					
IS	13C-1,2,3,4,7,8,9-HpCDF	6.78e+06	0.43 y	0.58	38:28	220.72				95.0					
IS	13C-OCDF	1.38e+07	0.89 y	0.69	41:26	378.41				111					
C/Up	37C1-2,3,7,8-TCDD	3.84e+06		1.20	26:17	75.517				94.7					
RS/RT	13C-1,2,3,4-TCDD	8.47e+06	0.82 y	1.00	25:43	199.35					Integrations	Reviewed			
RS	13C-1,2,3,4-TCDF	1.27e+07	0.78 y	1.00	24:18	199.35					by <u>DB</u>	by <u>CT</u>			
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.05e+07	0.52 y	1.00	33:35	199.35					Analyst: <u>DB</u>	Analyst: <u>CT</u>			
											Date: <u>11/6/19</u>	Date: <u>12/04/19</u>			

Totals class: TCDD EMPC

Entry #: 19

Run: 11 File: 191031D2 S: 6 I: 1 F: 1
 Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 8.6535 Unnamed Concentration: 7.794

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:57	6.962e+04	9.024e+04	0.77	y	1.599e+05	3.8394
23:18	1.526e+04	2.194e+04	0.70	y	3.720e+04	0.89350
23:42	8.164e+03	1.045e+04	0.78	y	1.861e+04	0.44706
24:26	4.599e+03	6.220e+03	0.74	y	1.082e+04	0.25984
24:38	6.583e+03	8.883e+03	0.74	y	1.547e+04	0.37146
24:50	9.229e+03	9.880e+03	0.93	n	1.749e+04	0.42001
25:14	4.297e+03	4.321e+03	0.99	n	7.647e+03	0.18368
25:22	4.110e+03	5.673e+03	0.72	y	9.783e+03	0.23498
25:41	3.124e+03	4.688e+03	0.67	y	7.812e+03	0.18763
26:03	1.294e+04	2.052e+04	0.63	n	2.974e+04	0.71427
26:16	1.430e+04	2.148e+04	0.67	y	3.578e+04	0.85934
26:34	5.406e+03	5.699e+03	0.95	n	1.009e+04	0.24227

2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 11 File: 191031D2 S: 6 I: 1 F: 2
 Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 15.271 Unnamed Concentration: 13.792

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:44	5.261e+04	8.581e+04	0.61	y	1.384e+05	4.4813
29:10	1.208e+04	2.013e+04	0.60	y	3.221e+04	1.0428
29:37	4.751e+04	5.204e+04	0.91	n	8.482e+04	2.7460
29:46	2.012e+04	2.830e+04	0.71	y	4.842e+04	1.5676
29:52	1.154e+04	2.201e+04	0.52	n	2.987e+04	0.96688
30:04	2.325e+04	3.446e+04	0.67	y	5.771e+04	1.8683
30:21	5.954e+03	6.605e+03	0.90	n	1.077e+04	0.34855
30:46	1.627e+04	2.944e+04	0.55	y	4.571e+04	1.4798
30:51	4.207e+03	6.958e+03	0.60	y	1.116e+04	0.36145
31:07	7.114e+03	7.749e+03	0.92	n	1.263e+04	0.40891

1,2,3,7,8-PeCDD

Totals class: HxCDD EMPC

Entry #: 23

Run: 11 File: 191031D2 S: 6 I: 1 F: 3
Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 87.053

Unnamed Concentration: 69.624

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:33	5.831e+05	4.692e+05	1.24	y	1.052e+06	31.004
33:07	8.188e+04	6.965e+04	1.18	y	1.515e+05	4.4645
33:23	6.030e+05	4.794e+05	1.26	y	1.082e+06	31.891
33:30	2.130e+04	1.876e+04	1.14	y	4.007e+04	1.1805
34:05	3.160e+04	2.648e+04	1.19	y	5.808e+04	1.6458 1,2,3,4,7,8-HxCDD
34:12	1.972e+05	1.659e+05	1.19	y	3.631e+05	11.104 1,2,3,6,7,8-HxCDD
34:23	1.966e+04	1.715e+04	1.15	y	3.681e+04	1.0846
34:29	9.095e+04	7.002e+04	1.30	y	1.610e+05	4.6792 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 11 File: 191031D2 S: 6 I: 1 F: 4

Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 890.96

Unnamed Concentration: 518.125

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:06	8.209e+06	8.056e+06	1.02 y	1.627e+07	518.13
37:56	5.874e+06	5.830e+06	1.01 y	1.170e+07	372.83 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 11 File: 191031D2 S: 6 I: 1 F: 1
 Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 339.10 Unnamed Concentration: 216.318

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:51	1.073e+04	1.490e+04	0.72	y	2.562e+04	0.41930
21:25	4.023e+04	5.097e+04	0.79	y	9.120e+04	1.4923
22:02	1.445e+05	1.823e+05	0.79	y	3.269e+05	5.3484
22:34	1.614e+05	2.131e+05	0.76	y	3.745e+05	6.1280
22:56	8.087e+05	1.004e+06	0.81	y	1.813e+06	29.661
23:19	2.708e+05	3.235e+05	0.84	y	5.944e+05	9.7261
23:28	2.805e+04	2.752e+04	1.02	n	4.871e+04	0.79711
23:37	1.210e+05	1.456e+05	0.83	y	2.666e+05	4.3617
23:58	2.845e+04	3.883e+04	0.73	y	6.728e+04	1.1009
24:04	1.778e+04	2.174e+04	0.82	y	3.952e+04	0.64663
24:12	1.292e+05	1.712e+05	0.75	y	3.004e+05	4.9159
24:18	2.973e+05	3.714e+05	0.80	y	6.687e+05	10.942
24:43	2.812e+06	3.521e+06	0.80	y	6.332e+06	103.62
24:58	1.265e+05	1.483e+05	0.85	y	2.747e+05	4.4956
25:09	1.739e+04	2.414e+04	0.72	y	4.153e+04	0.67958
25:20	3.580e+04	5.310e+04	0.67	y	8.890e+04	1.4546
25:25	2.750e+05	3.659e+05	0.75	y	6.409e+05	10.487
25:31	3.281e+06	4.222e+06	0.78	y	7.503e+06	122.78
25:50	1.525e+05	1.674e+05	0.91	n	2.963e+05	4.8480
26:03	2.708e+04	3.708e+04	0.73	y	6.416e+04	1.0498
26:47	5.121e+04	4.269e+04	1.20	n	7.555e+04	1.2363
27:00	1.677e+04	1.635e+04	1.03	n	2.894e+04	0.47349
27:16	4.504e+05	4.293e+05	1.05	n	7.599e+05	12.434

2,3,7,8-TCDF

p
p

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 11 File: 191031D2 S: 6 I: 1 F: 1
Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 26.495 Unnamed Concentration: 26.495

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:16	8.627e+05	5.540e+05	1.56 y	1.417e+06	26.495

Totals class: PeCDF EMPC

Entry #: 31

Run: 11 File: 191031D2 S: 6 I: 1 F: 2
 Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 502.98

Unnamed Concentration: 248.591

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:34	1.189e+05	7.686e+04	1.55	y	1.958e+05	3.6616
28:42	3.268e+06	1.962e+06	1.67	y	5.230e+06	97.810
29:14	2.675e+05	1.633e+05	1.64	y	4.309e+05	8.0581
29:26	6.732e+05	4.147e+05	1.62	y	1.088e+06	20.345
29:36	6.460e+06	3.911e+06	1.65	y	1.037e+07	195.90
29:51	2.206e+06	1.378e+06	1.60	y	3.584e+06	67.019
30:24	5.332e+04	3.217e+04	1.66	y	8.548e+04	1.5987
30:28	1.934e+06	1.222e+06	1.58	y	3.156e+06	58.483
30:32	1.527e+06	8.932e+05	1.71	y	2.421e+06	45.269
31:21	1.593e+05	9.901e+04	1.61	y	2.583e+05	4.8302

1,2,3,7,8-PeCDF

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2,3,4,7,8-PeCDF

Totals class: HxCDF EMPC

Entry #: 33

Run: 11 File: 191031D2 S: 6 I: 1 F: 3

Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

Total Concentration: 586.28

Unnamed Concentration: 164.447

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:01	2.127e+05	1.712e+05	1.24 y	3.839e+05	7.8424
32:05	1.392e+05	1.140e+05	1.22 y	2.532e+05	5.1732
32:12	1.586e+06	1.253e+06	1.27 y	2.839e+06	57.999
32:32	3.095e+04	2.935e+04	1.05 y	6.031e+04	1.2319
32:43	1.610e+06	1.304e+06	1.23 y	2.914e+06	59.526
33:05	1.077e+05	8.522e+04	1.26 y	1.929e+05	3.9408
33:11	8.200e+06	6.817e+06	1.20 y	1.502e+07	302.93 1,2,3,4,7,8-HxCDF
33:19	2.268e+06	1.813e+06	1.25 y	4.080e+06	82.016 1,2,3,6,7,8-HxCDF
33:36	5.876e+04	4.364e+04	1.35 y	1.024e+05	2.0918
33:55	6.765e+05	5.495e+05	1.23 y	1.226e+06	24.482 2,3,4,6,7,8-HxCDF
34:52	3.092e+05	2.678e+05	1.15 y	5.771e+05	12.401 1,2,3,7,8,9-HxCDF
34:55	7.296e+05	5.746e+05	1.27 y	1.304e+06	26.642

Totals class: HpCDF EMPC

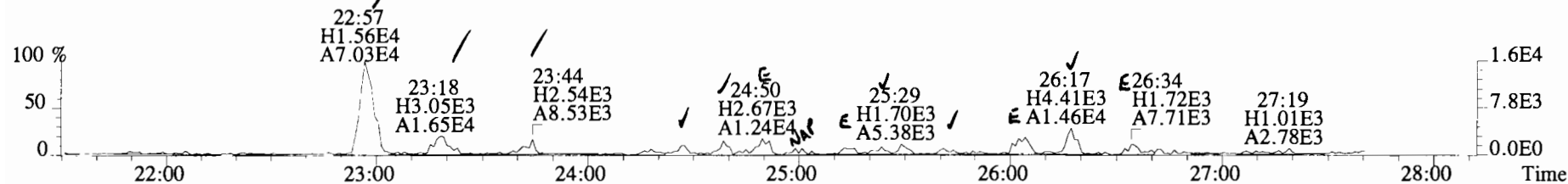
Entry #: 35

Run: 11 File: 191031D2 S: 6 I: 1 F: 4
 Acquired: 1-NOV-19 03:42:09 Processed: 1-NOV-19 12:03:16

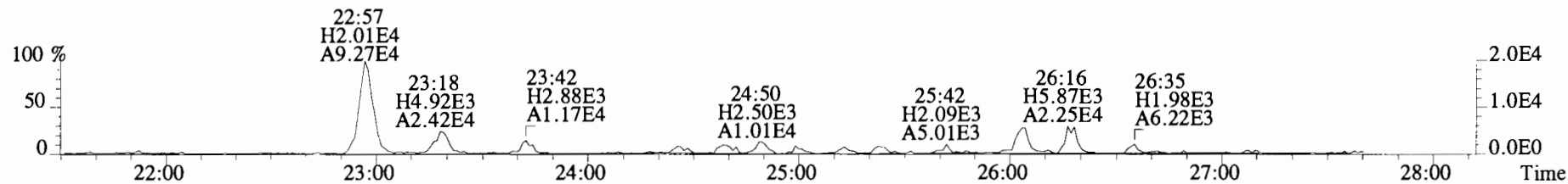
Total Concentration: 491.32 Unnamed Concentration: 245.459

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Concentration	Name
36:43	4.103e+06	4.020e+06	1.02 y	8.122e+06	189.42	1,2,3,4,6,7,8-HpCDF
37:06	8.255e+04	8.625e+04	0.96 y	1.688e+05	3.9264	
37:17	5.222e+06	5.162e+06	1.01 y	1.038e+07	241.53	
38:28	1.248e+06	1.208e+06	1.03 y	2.456e+06	56.437	1,2,3,4,7,8,9-HpCDF

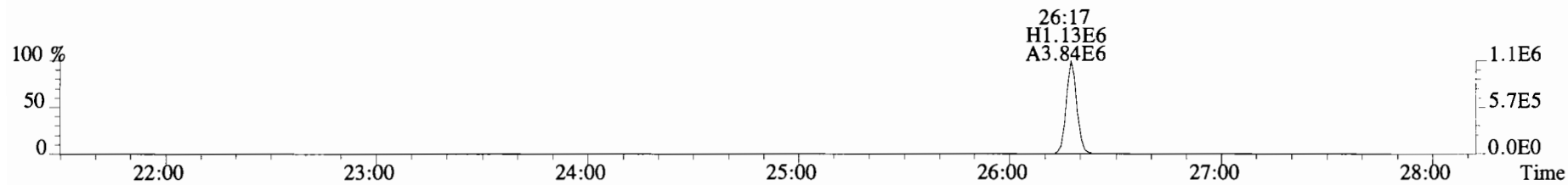
File:191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



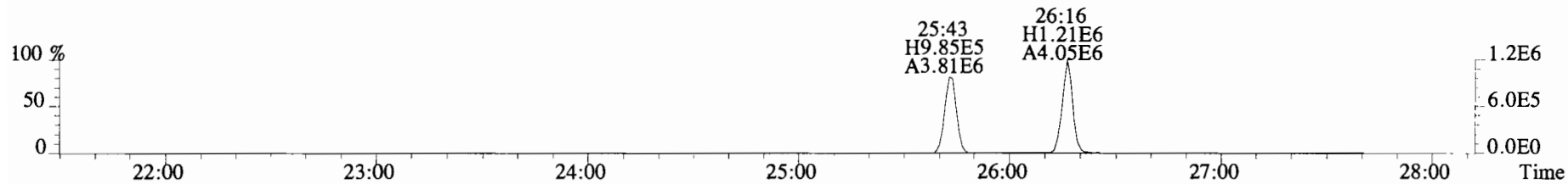
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



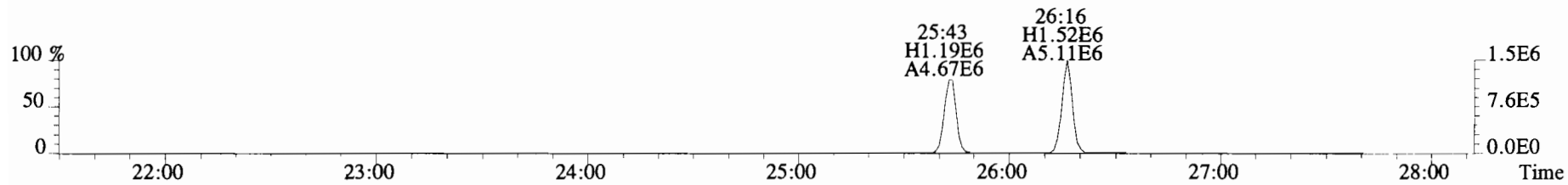
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



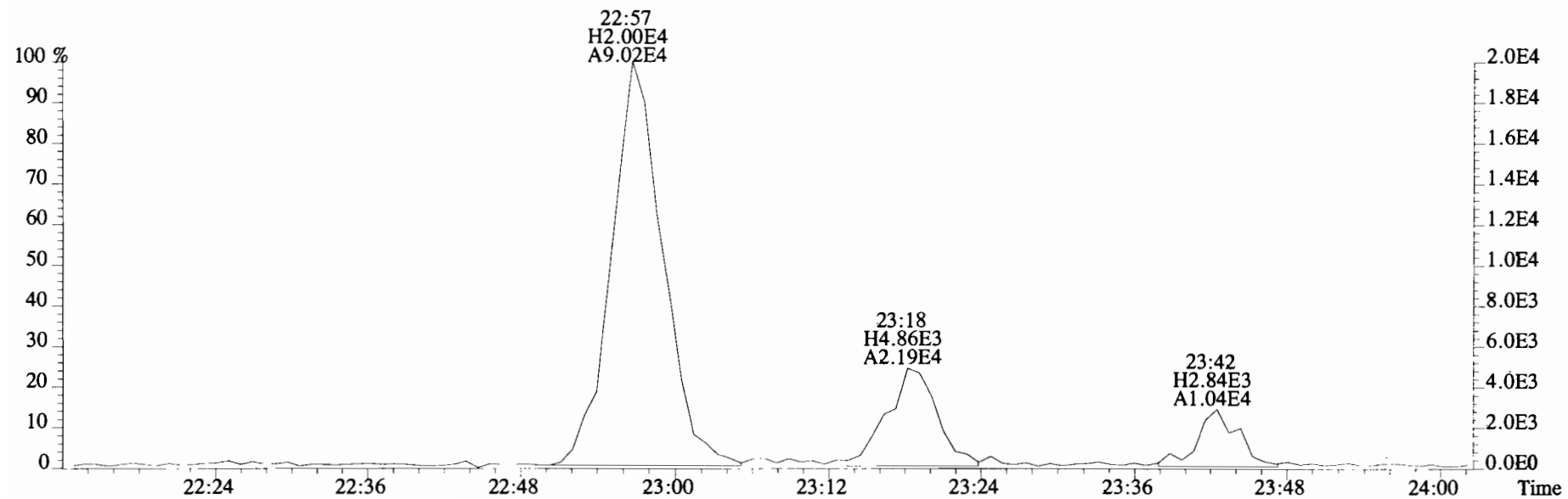
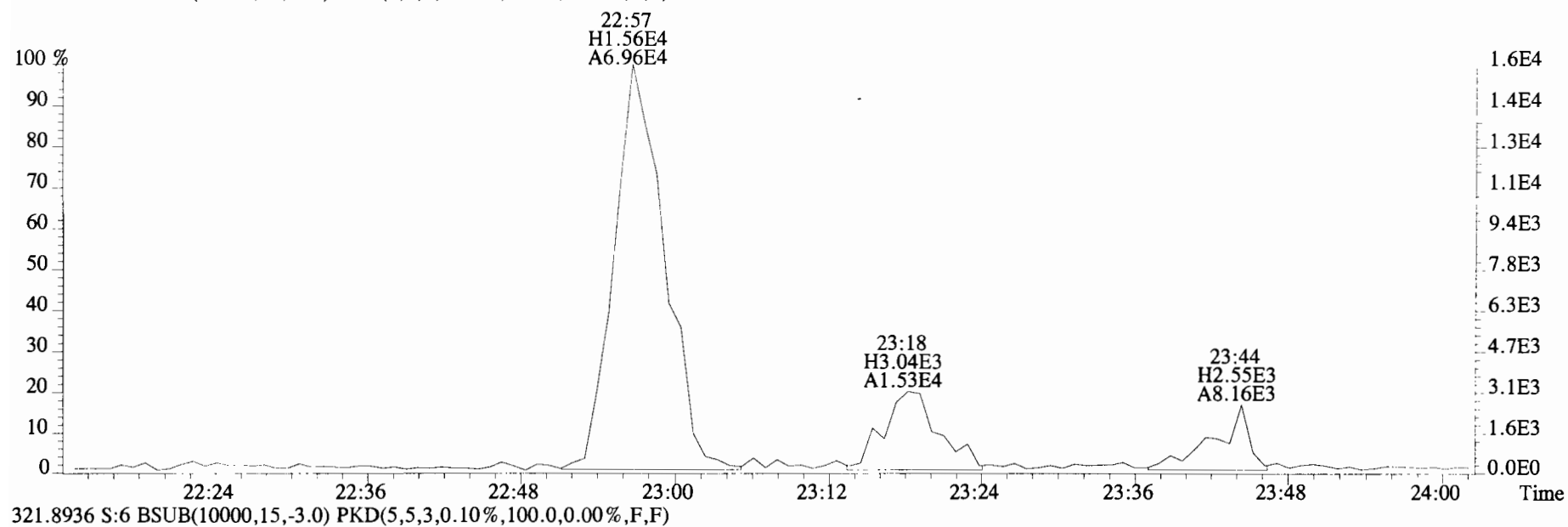
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



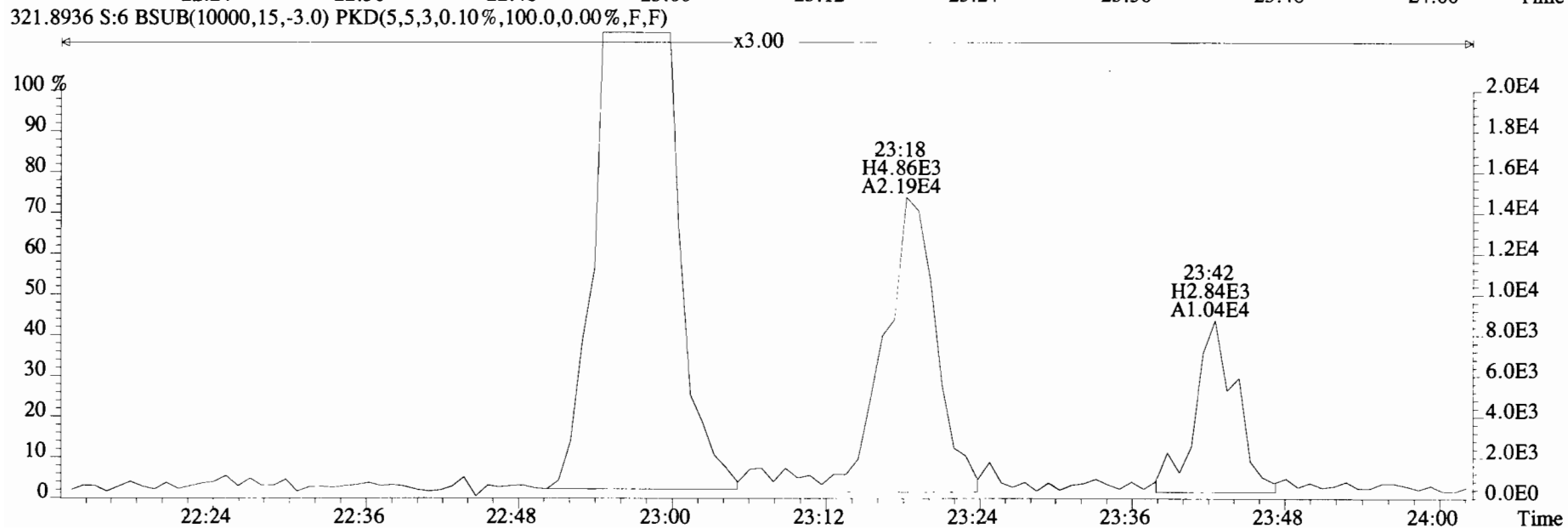
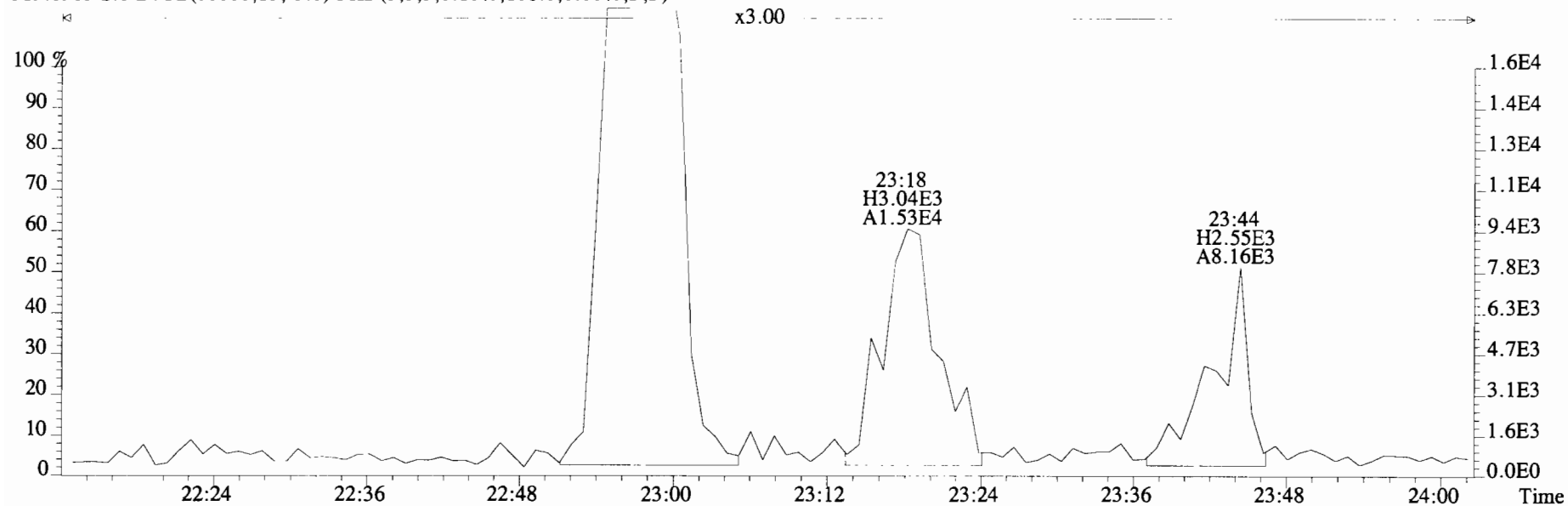
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



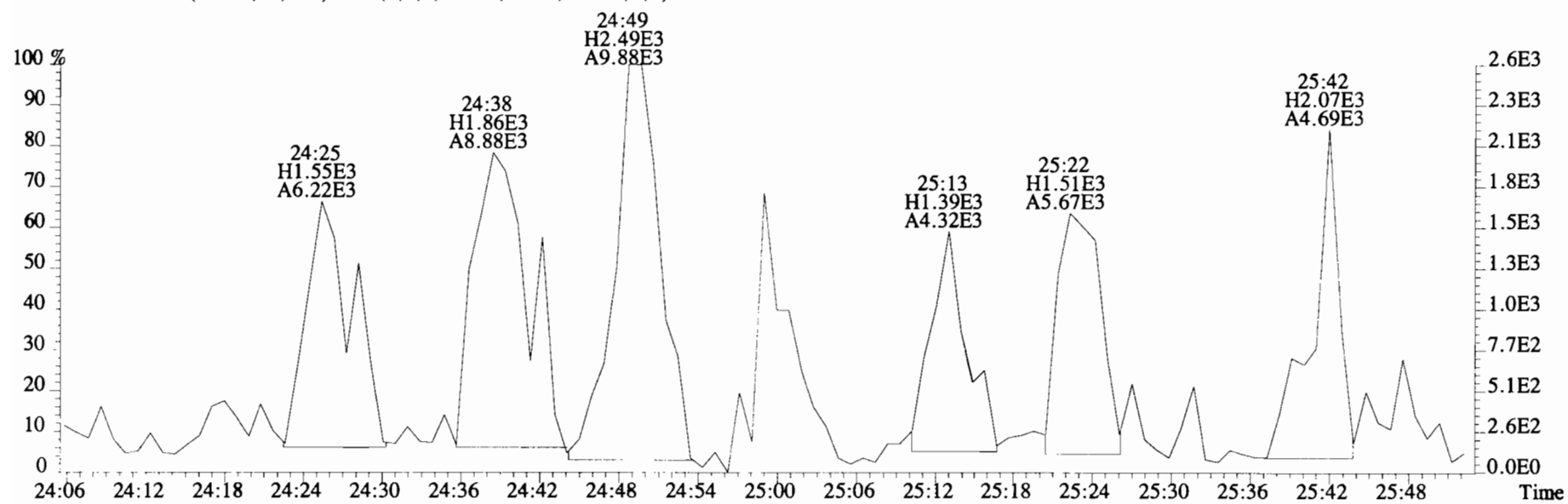
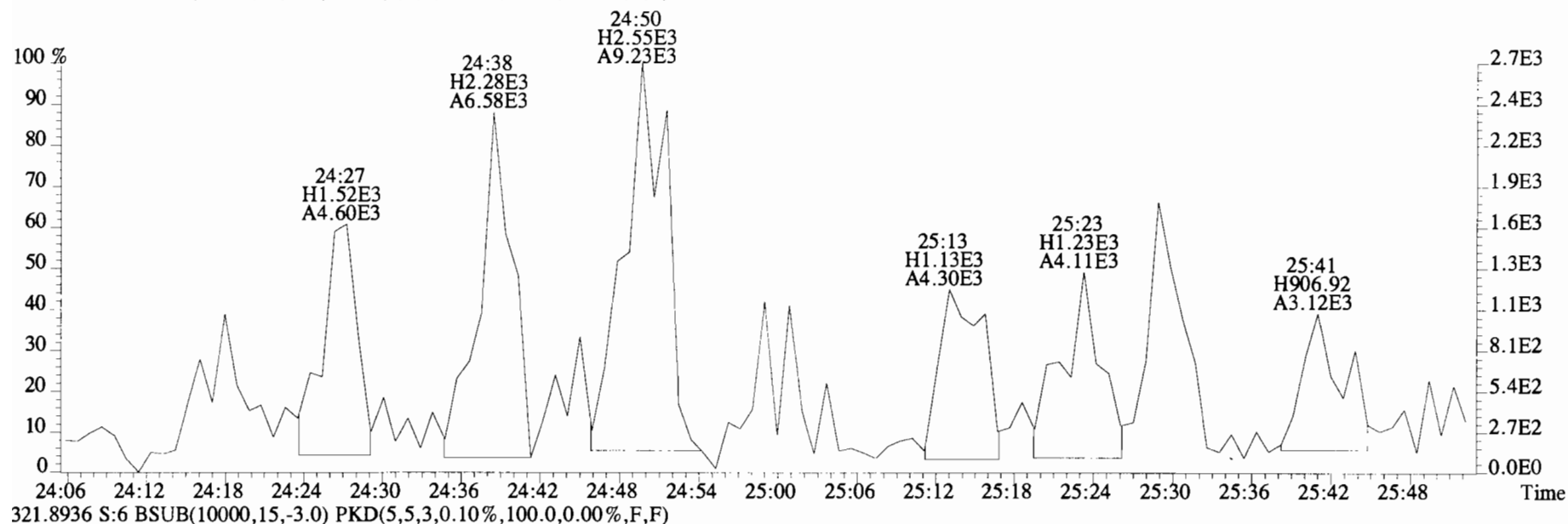
File:191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



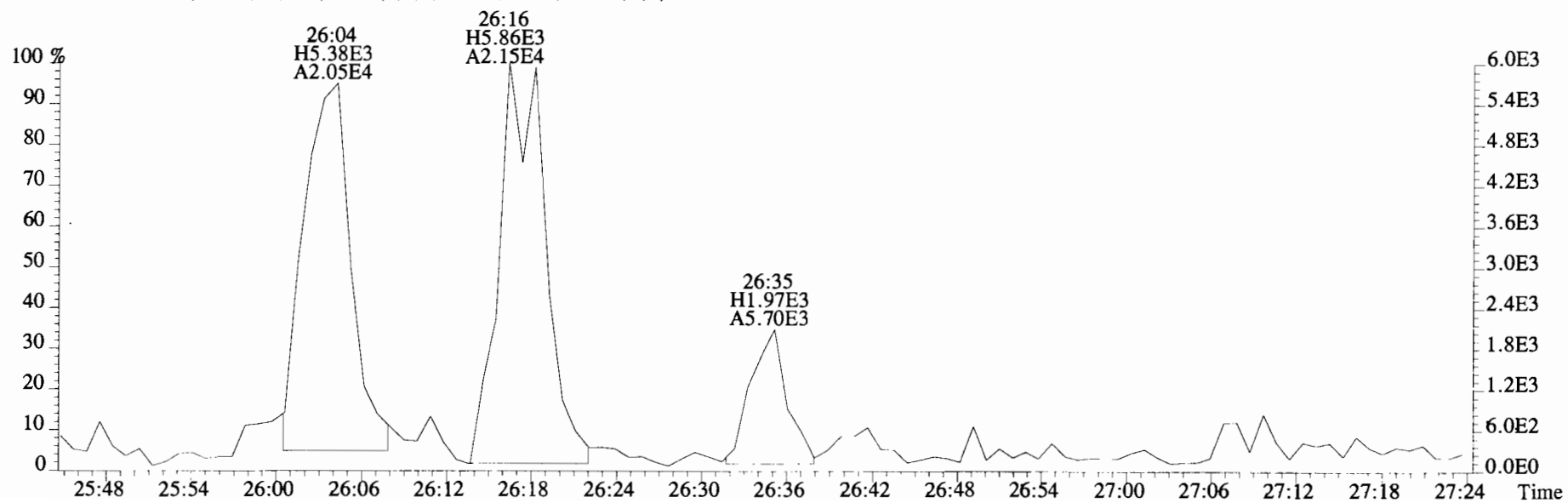
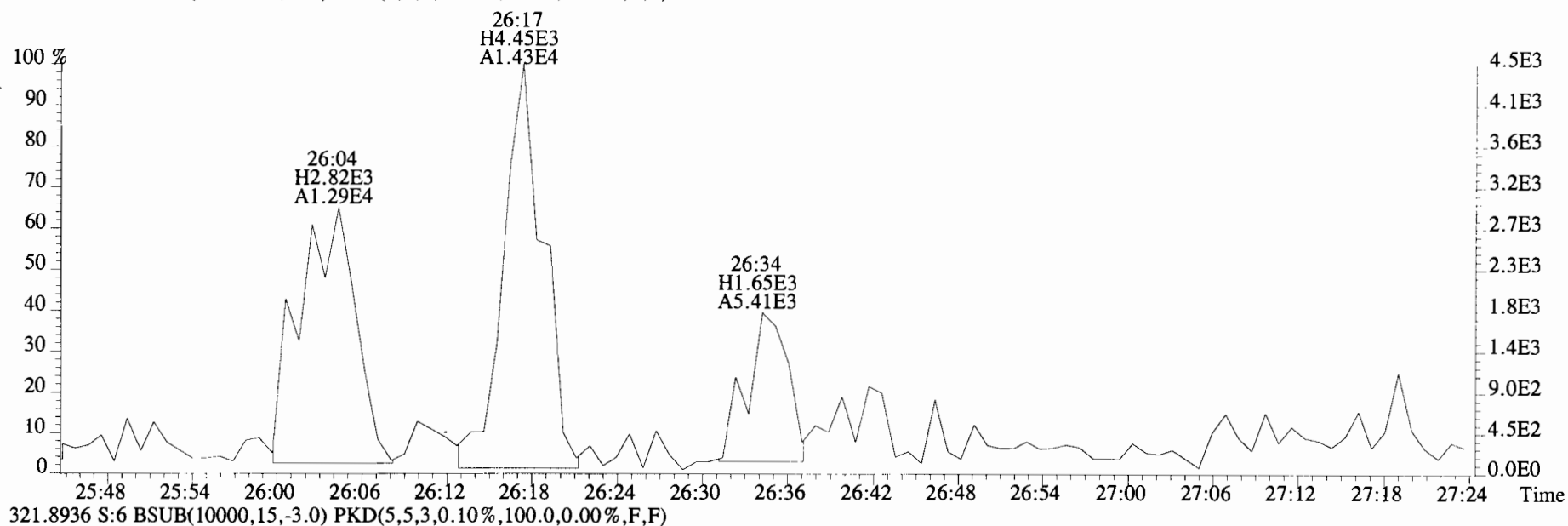
File:191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



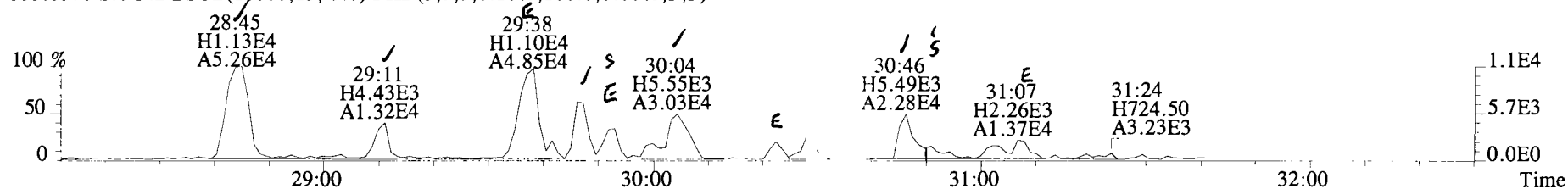
File:191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



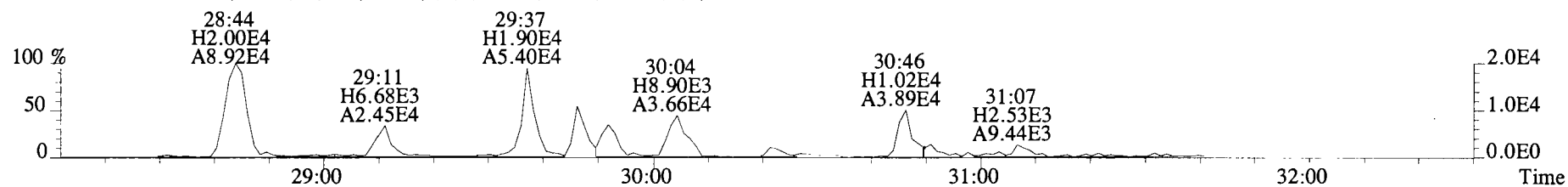
File: 191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text: Viata Analytical Laboratory VG7 Text: 1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp: OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



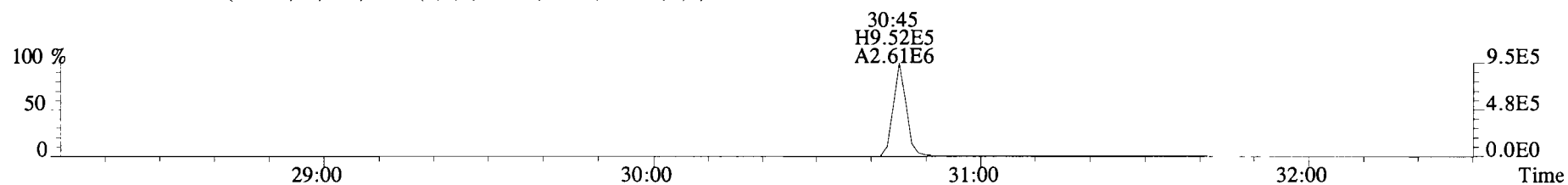
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-Ultimate
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



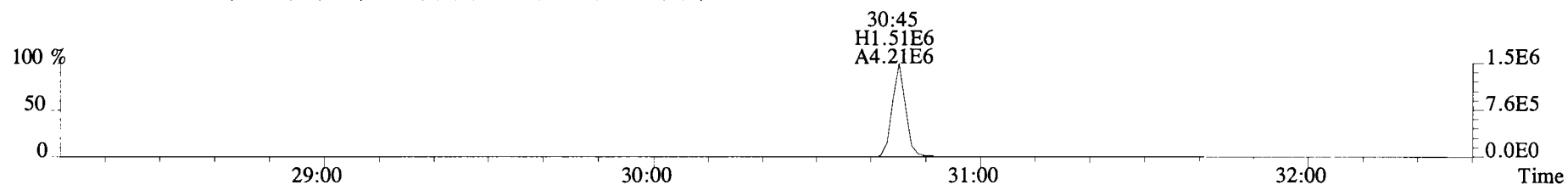
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



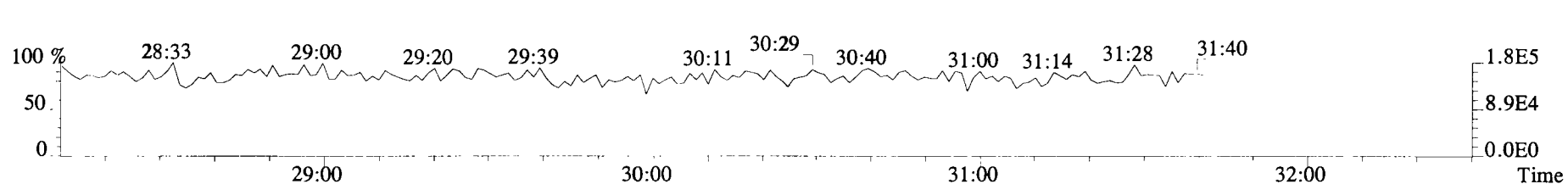
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



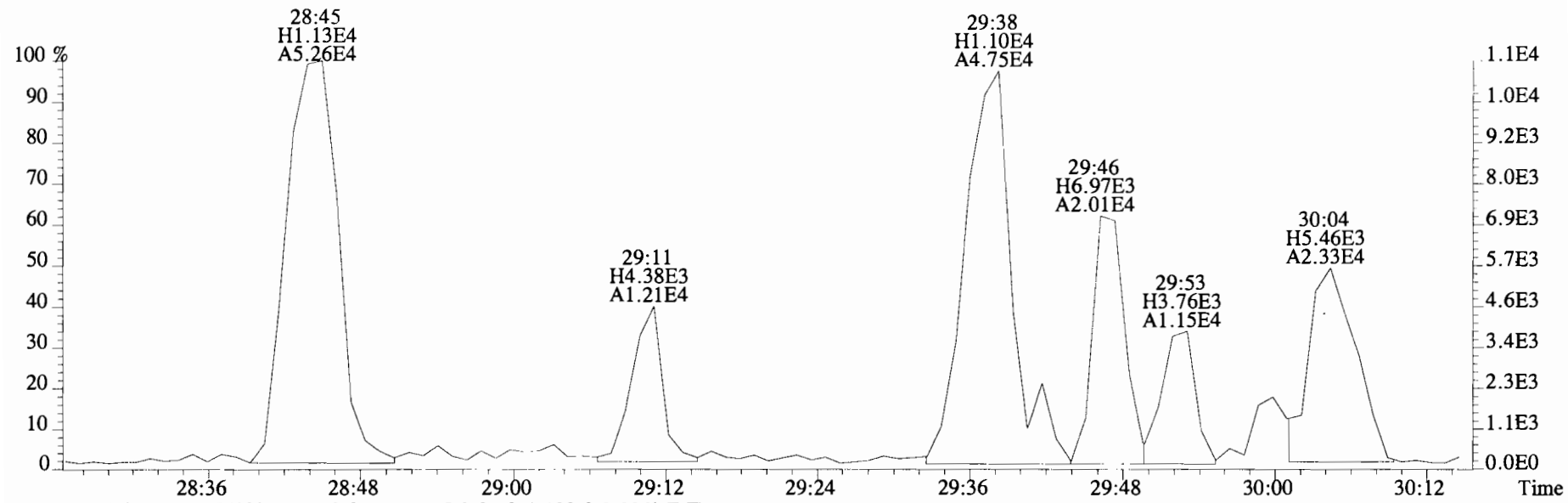
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



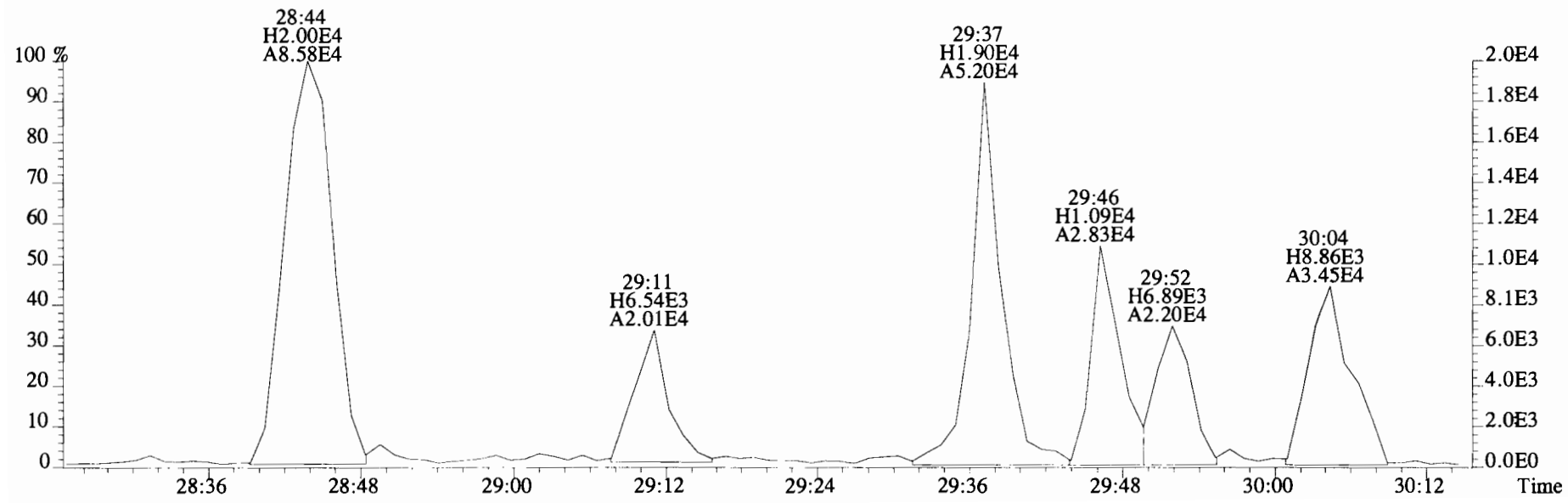
366.9792 S:6 F:2



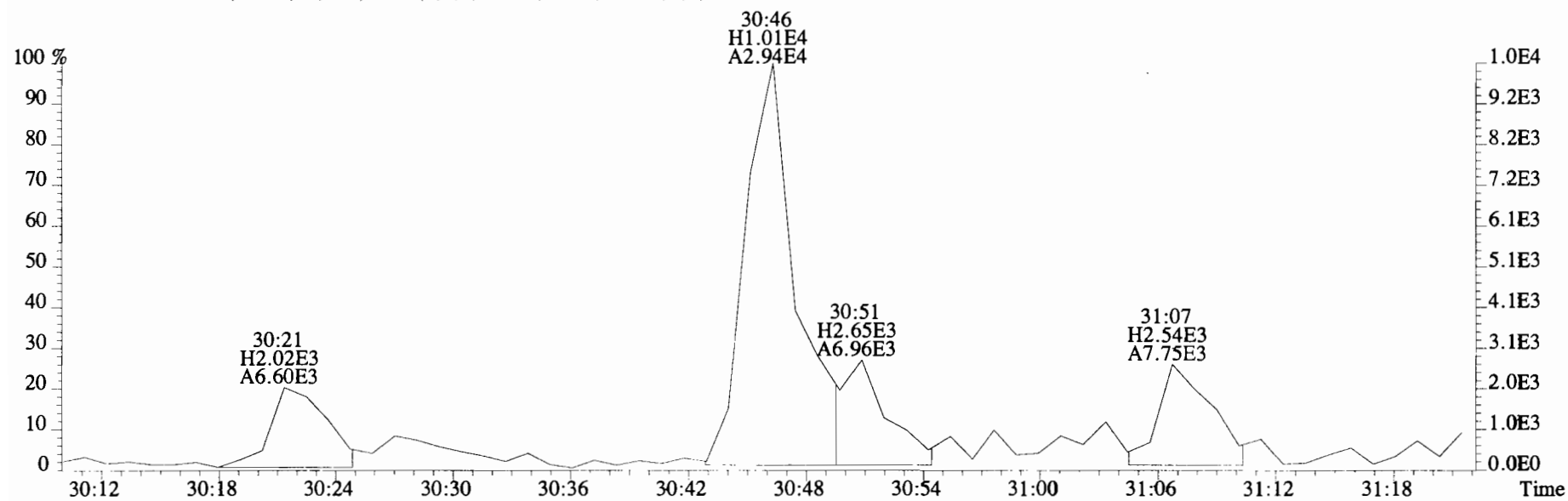
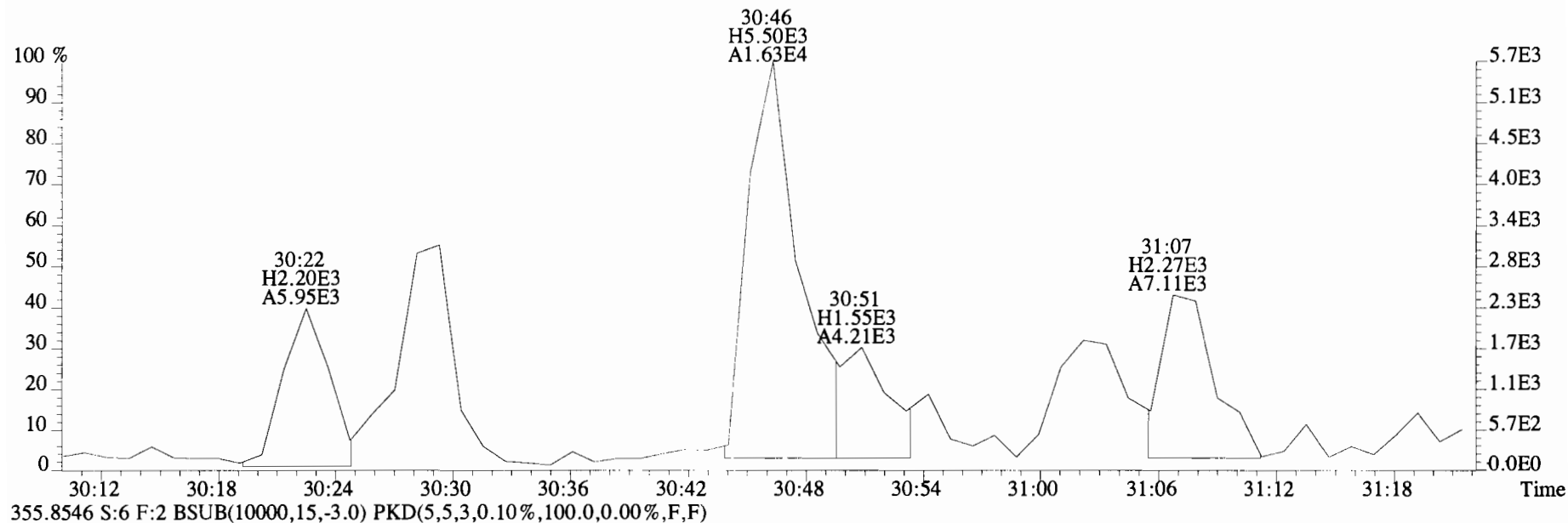
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



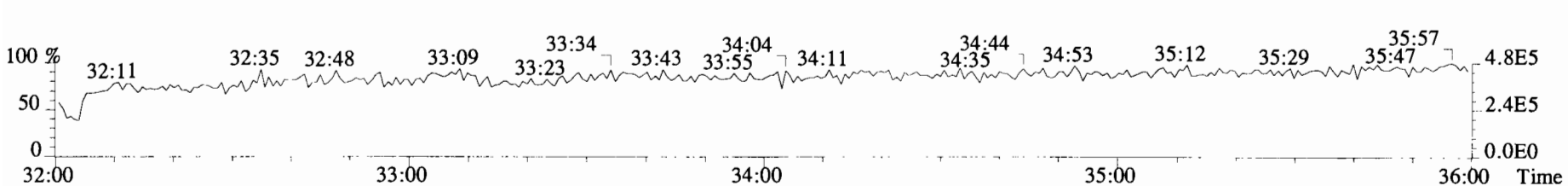
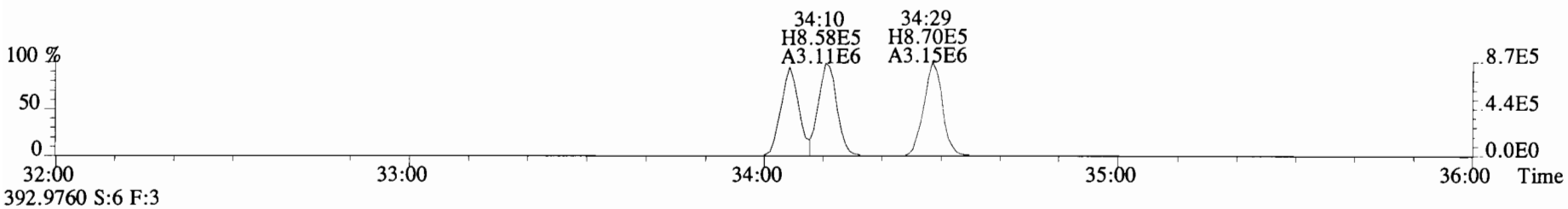
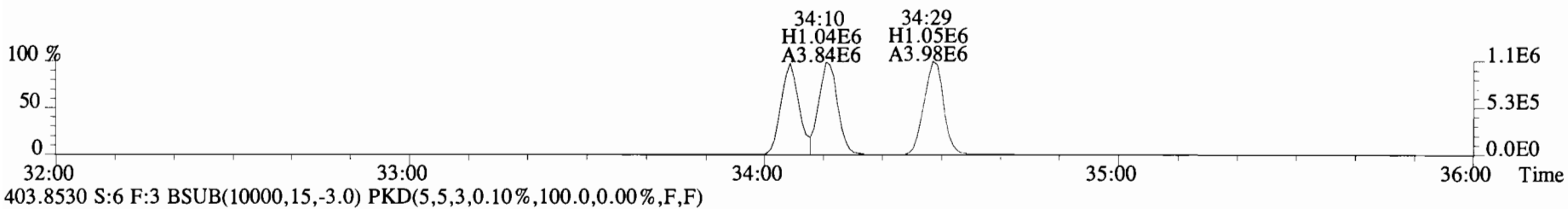
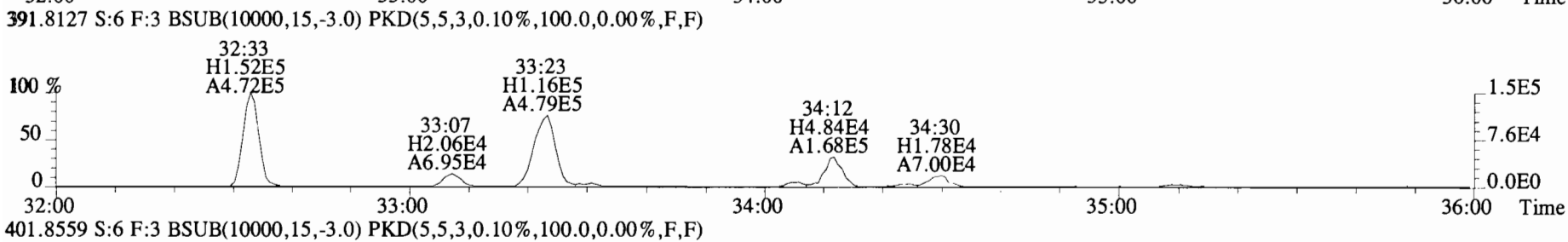
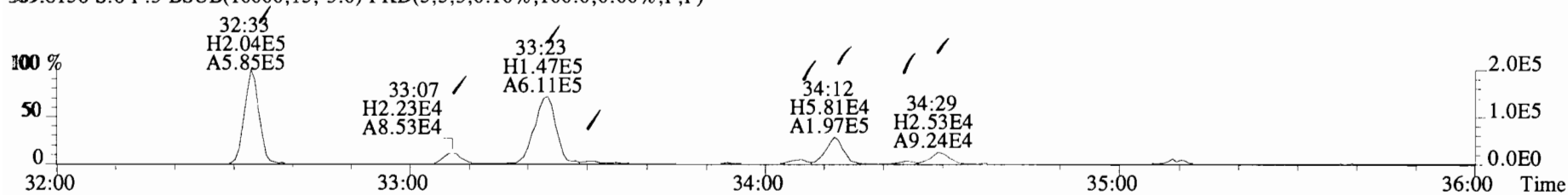
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



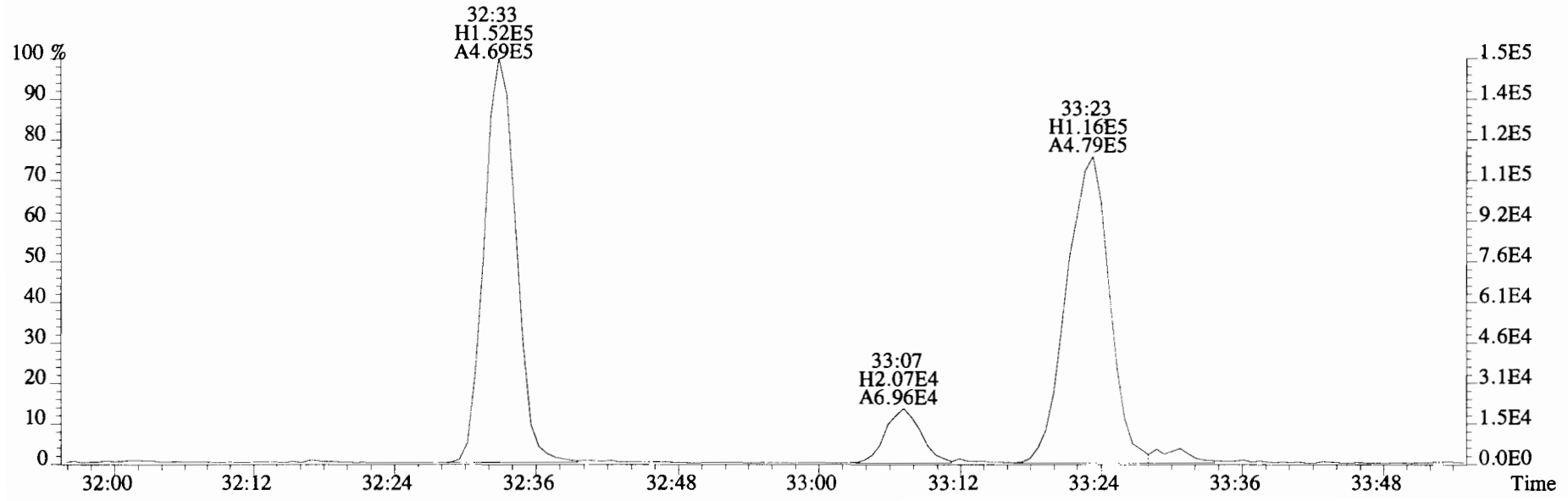
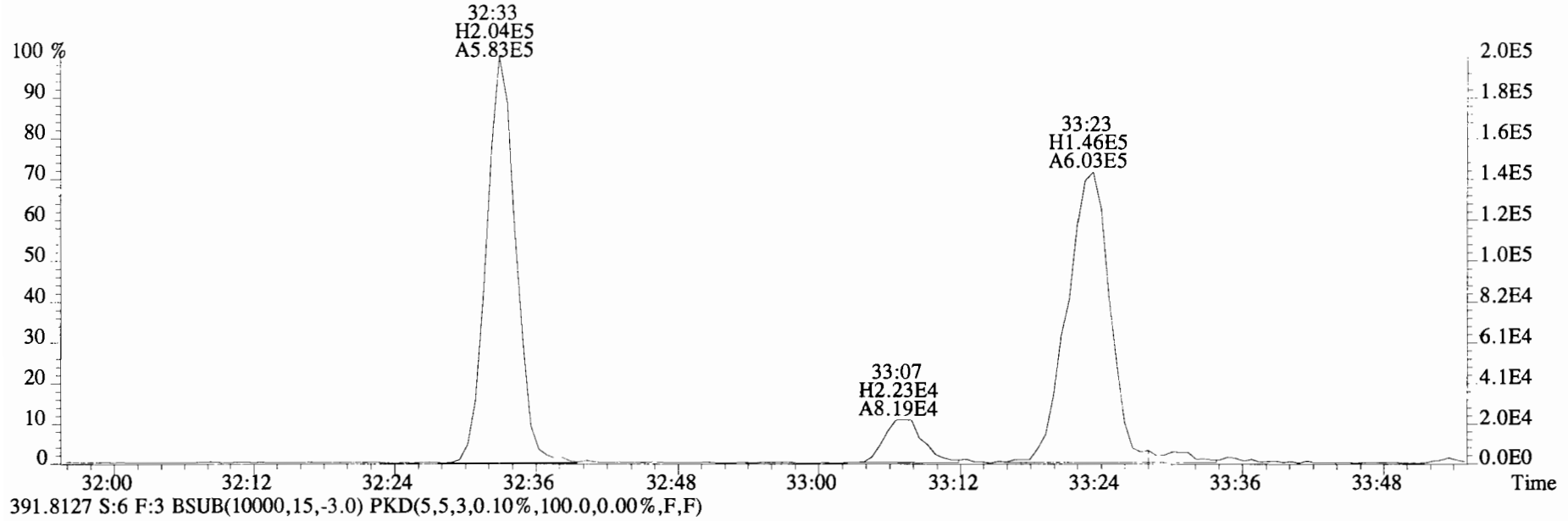
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 353.8576 S:6 F:2 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



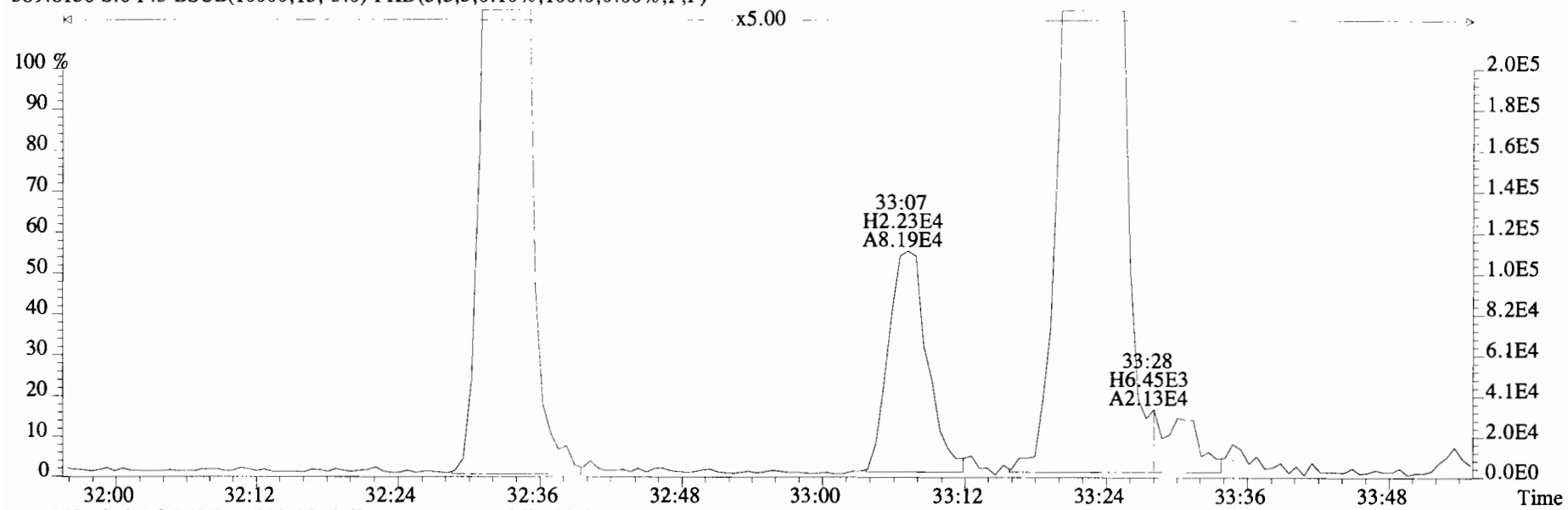
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



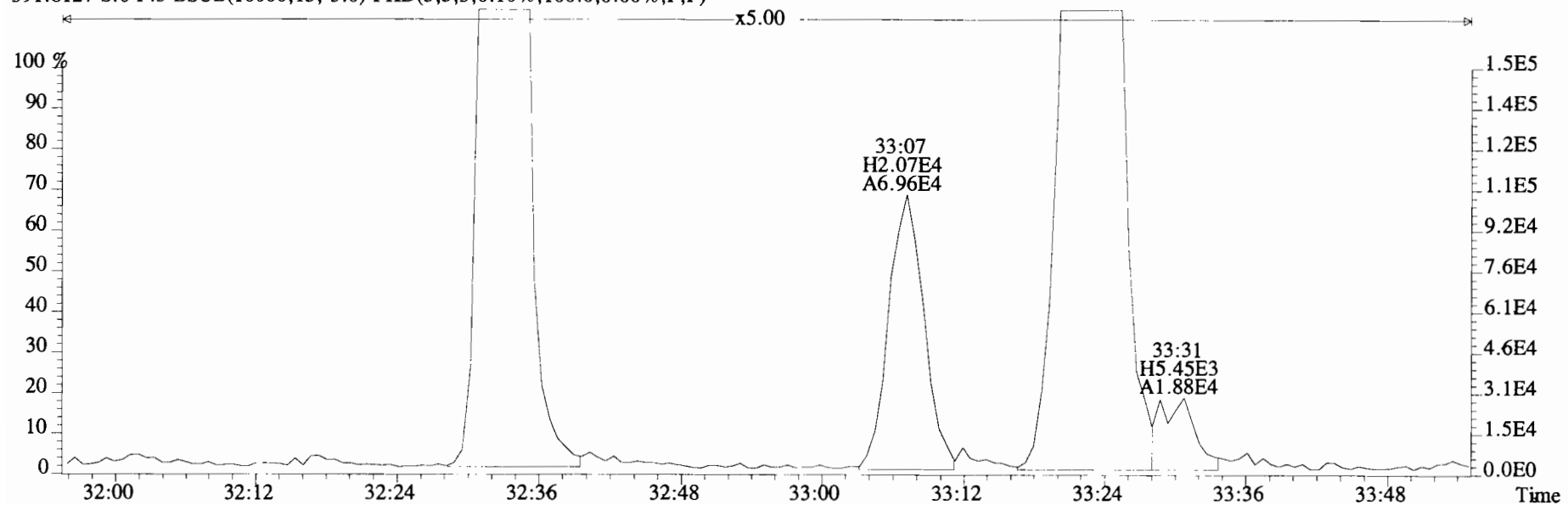
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



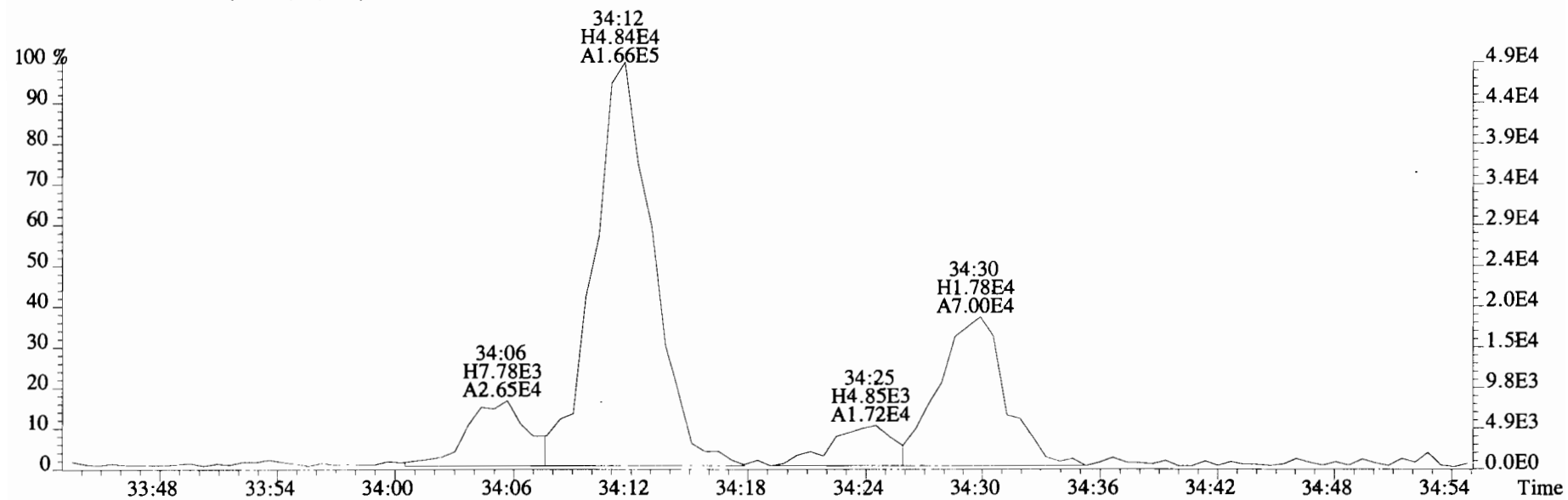
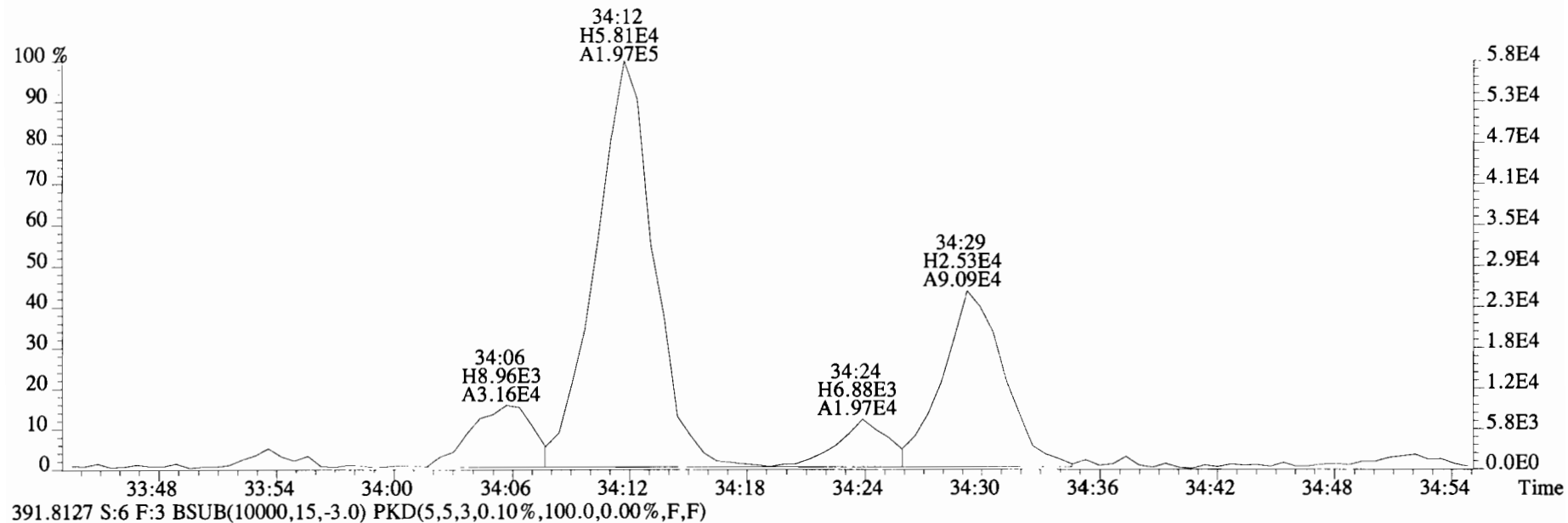
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



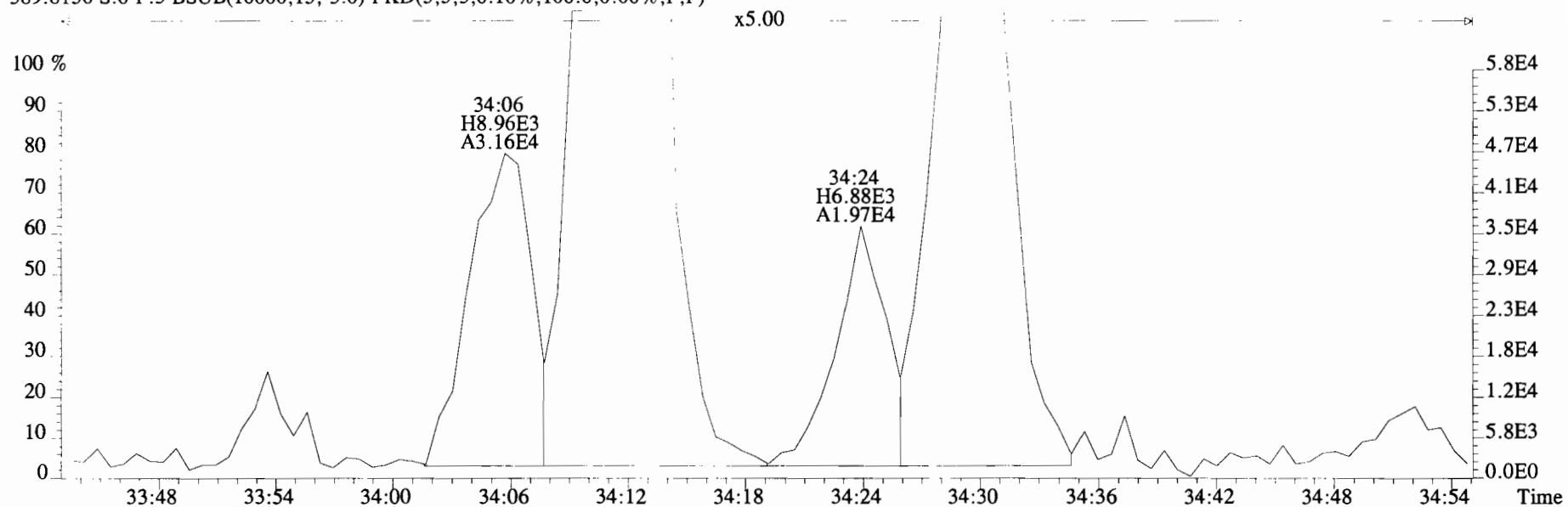
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



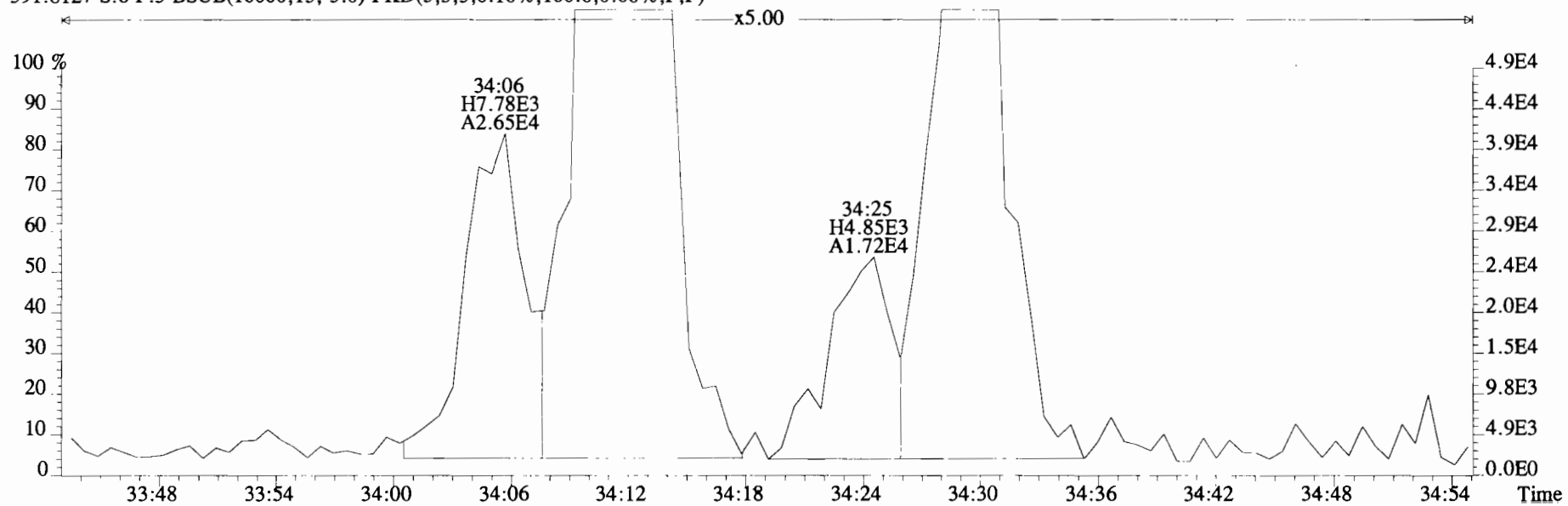
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



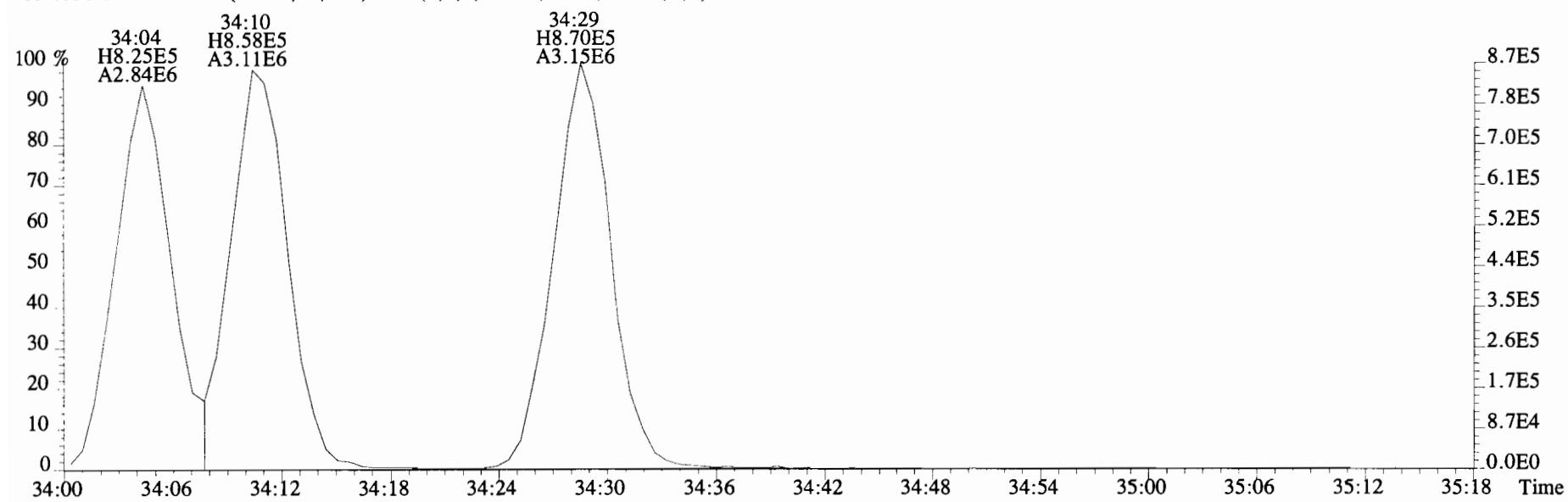
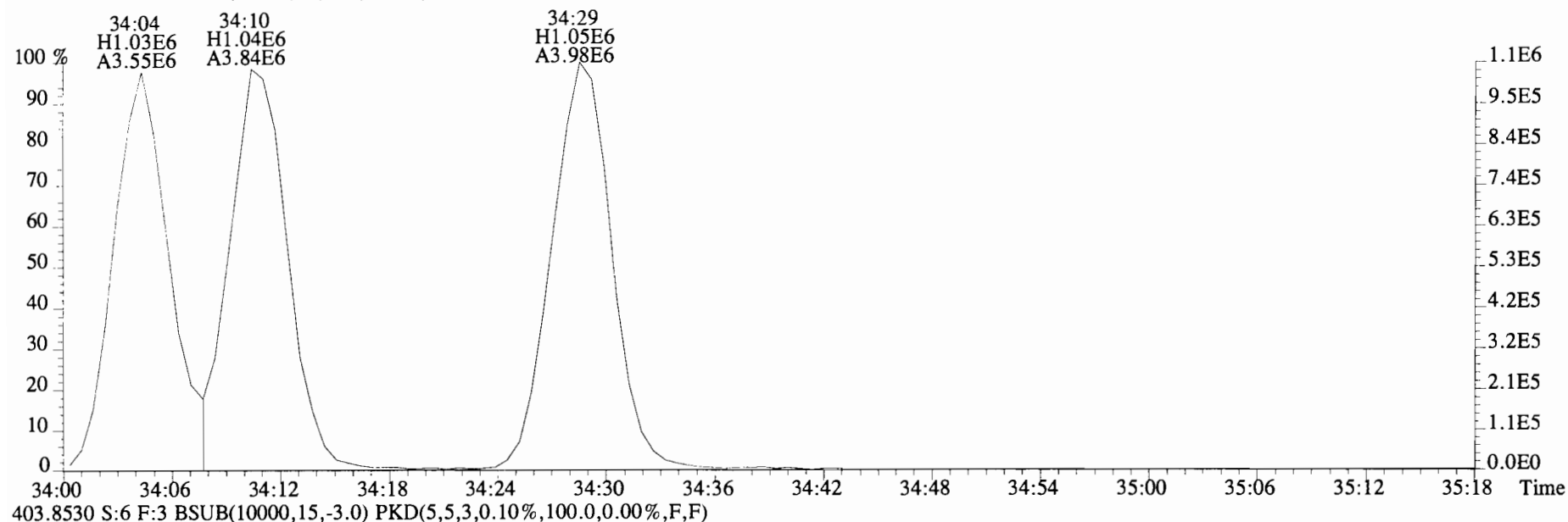
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



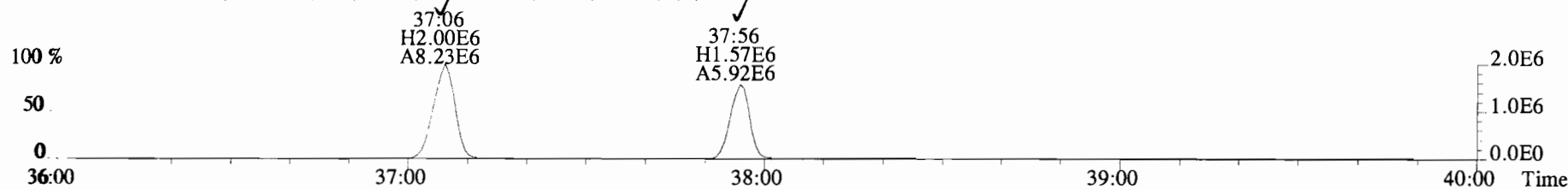
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



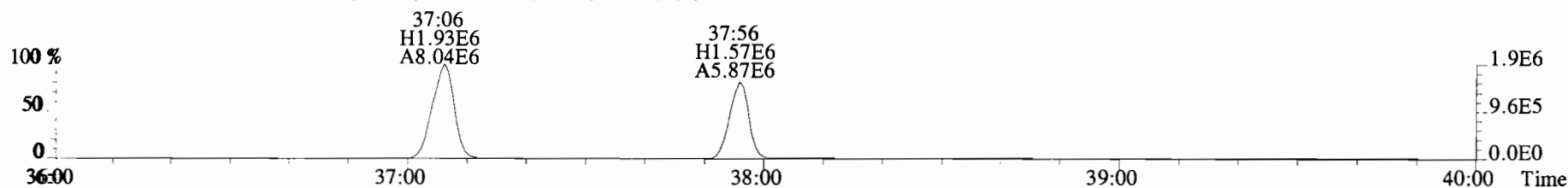
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



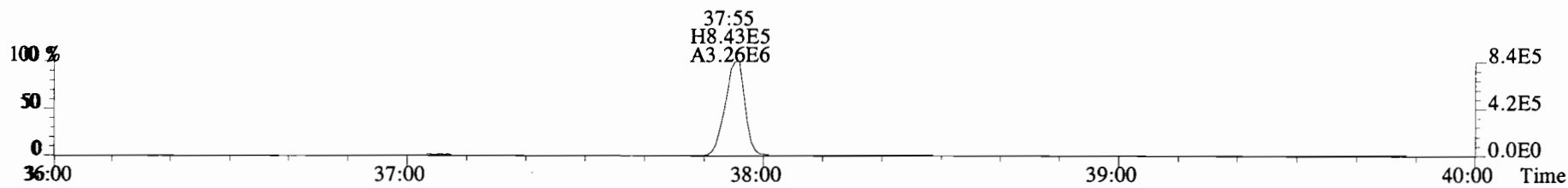
File:191031D2 #1-356 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
423.7767 S:6 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



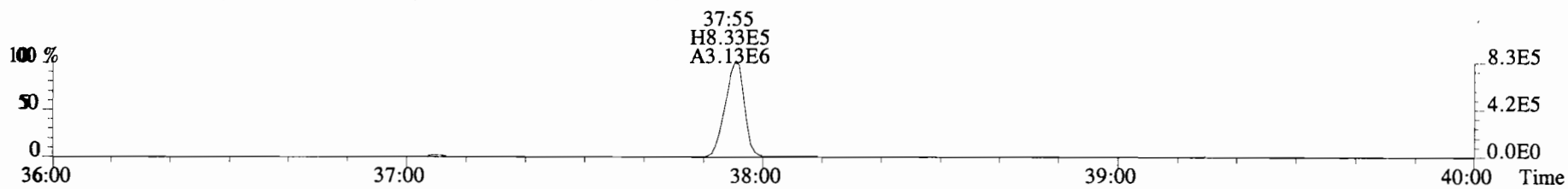
425.7737 S:6 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



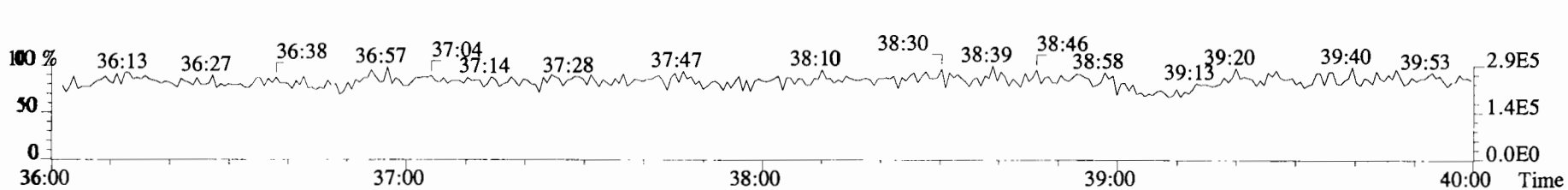
435.8169 S:6 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



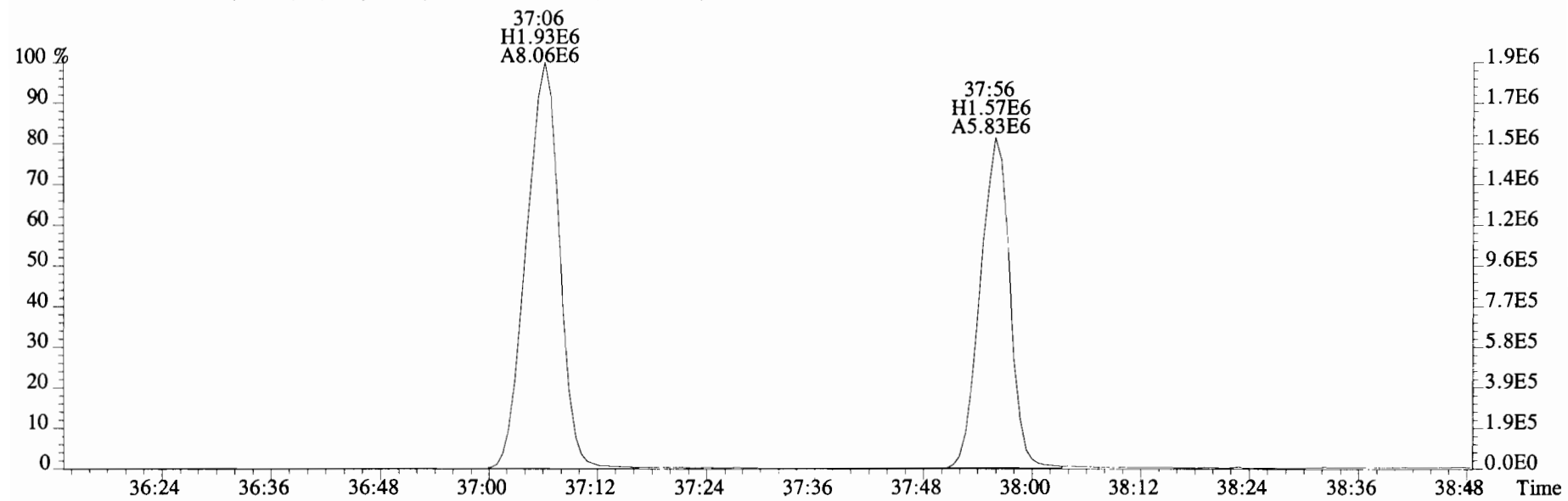
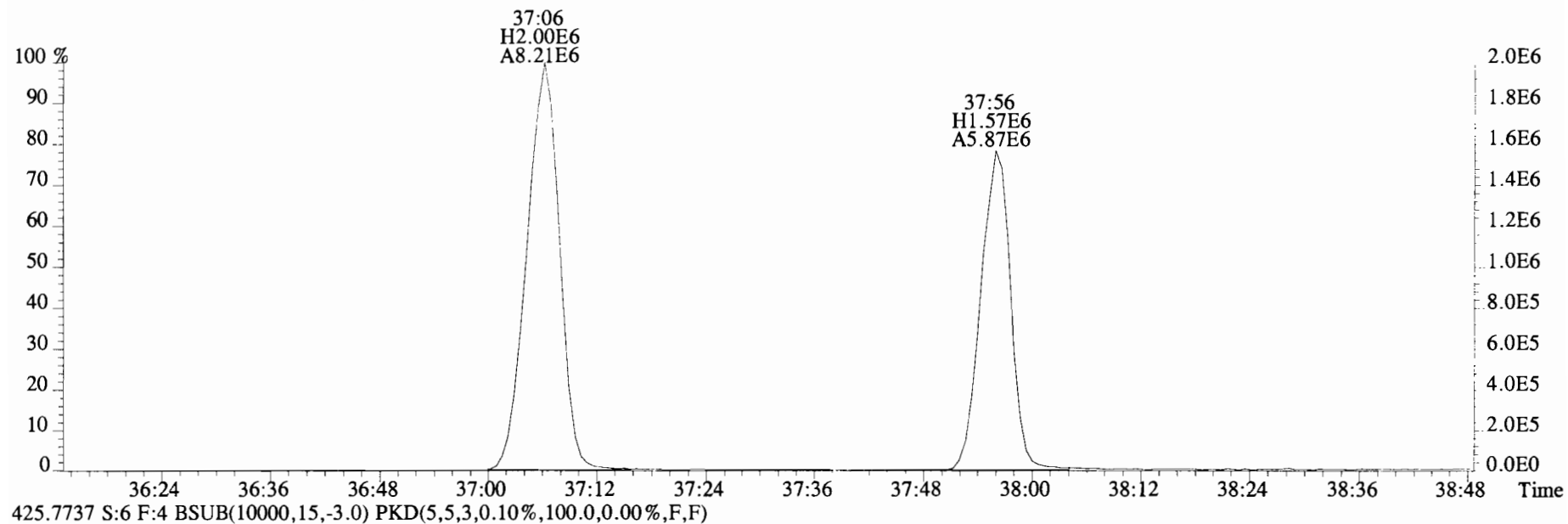
437.8140 S:6 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



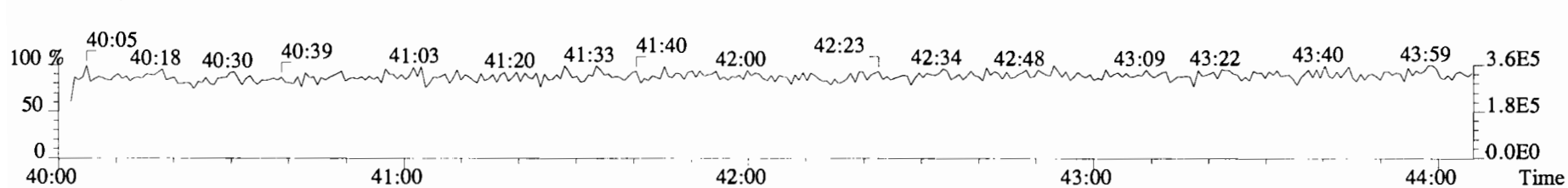
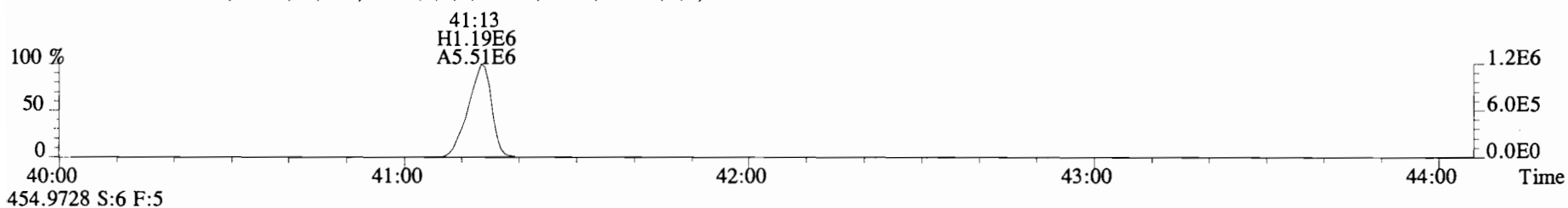
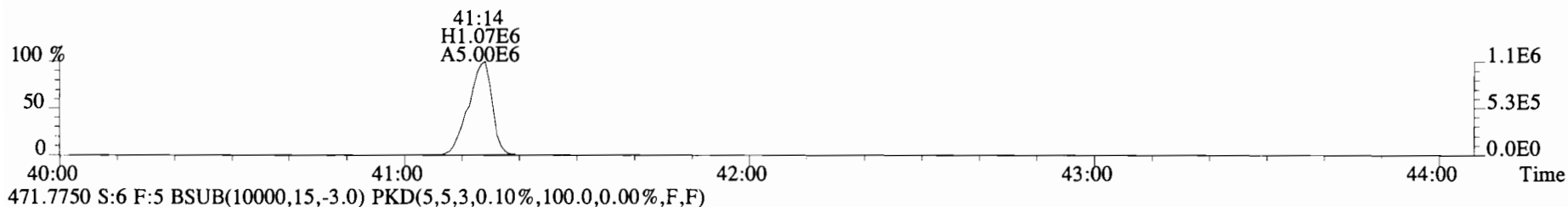
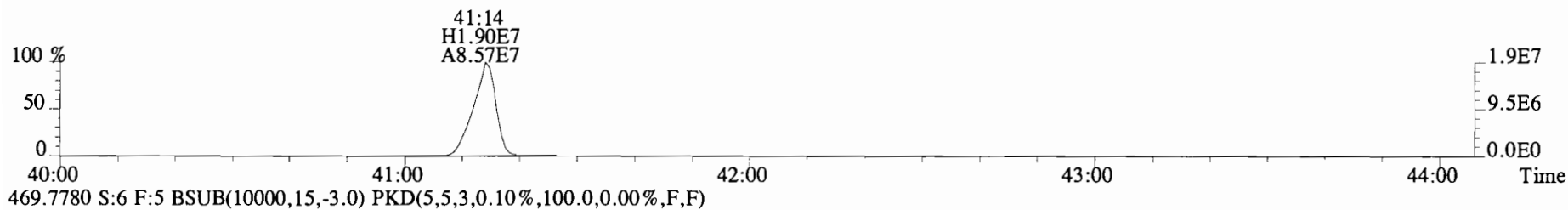
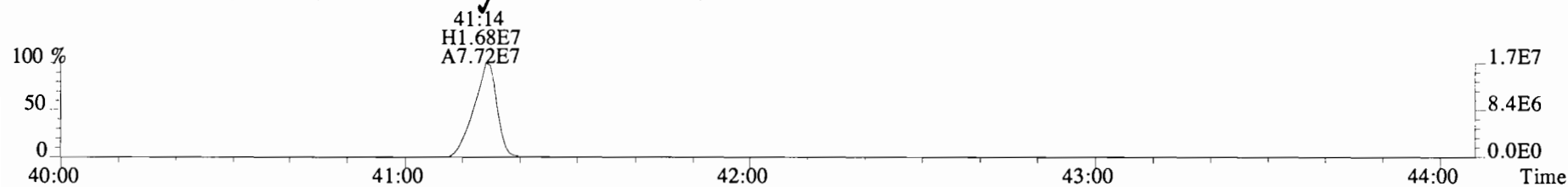
454.9728 S:6 F:4



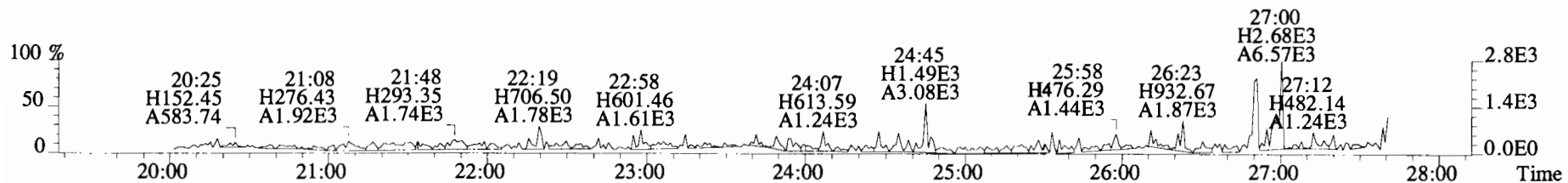
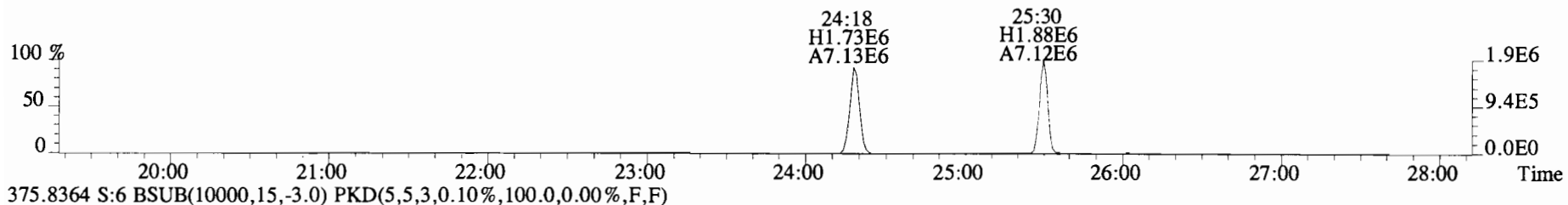
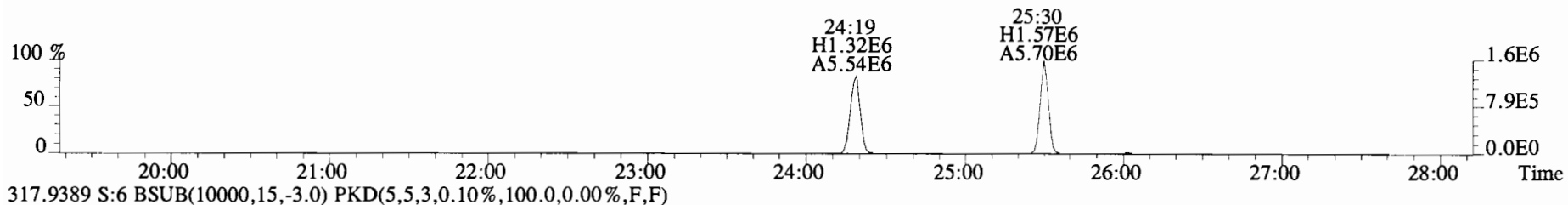
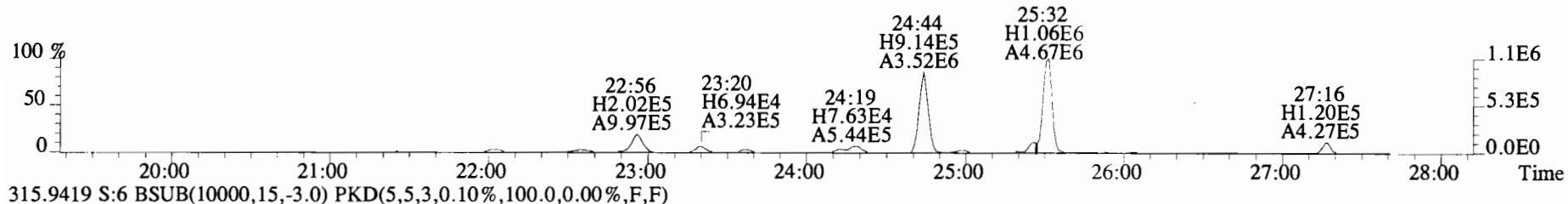
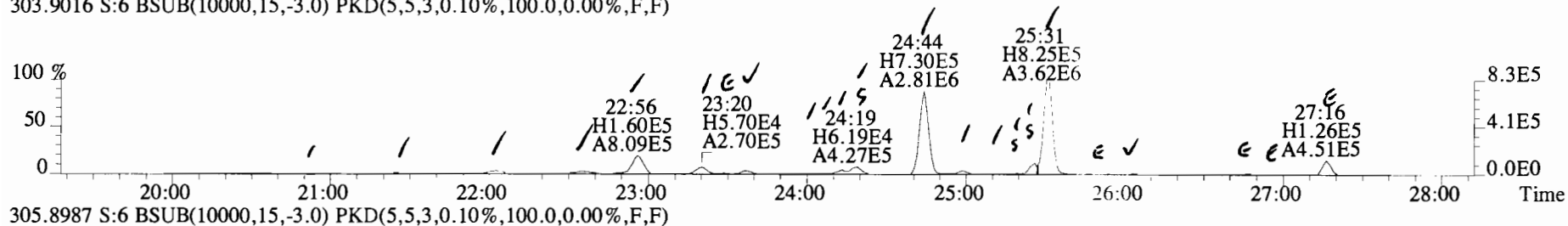
File:191031D2 #1-356 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



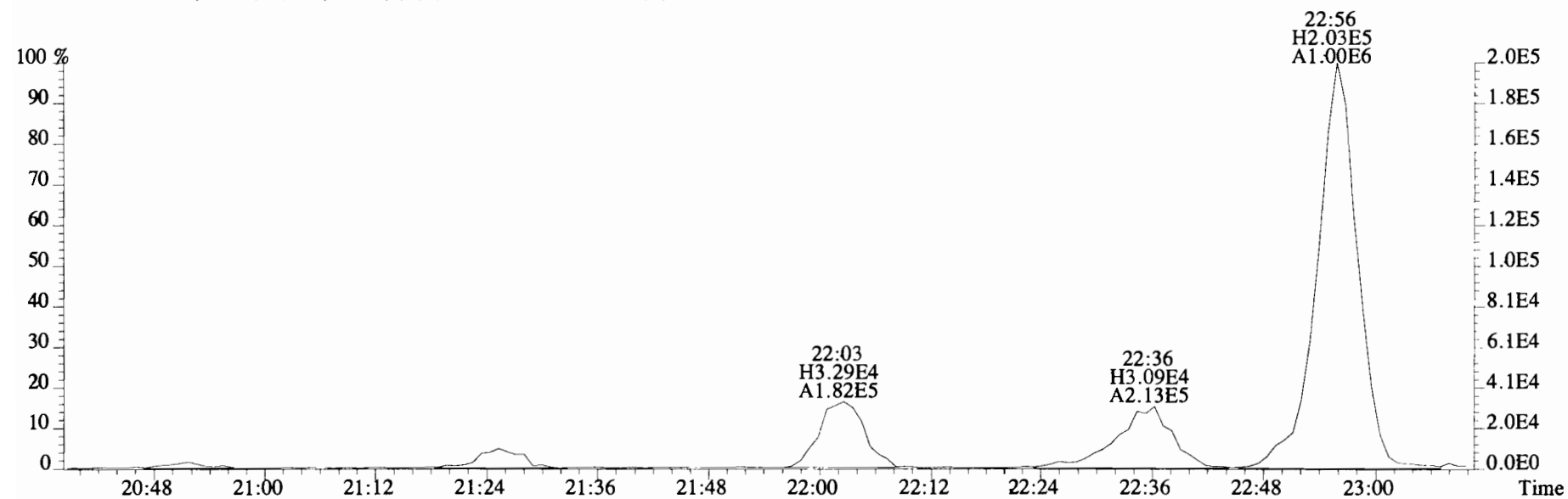
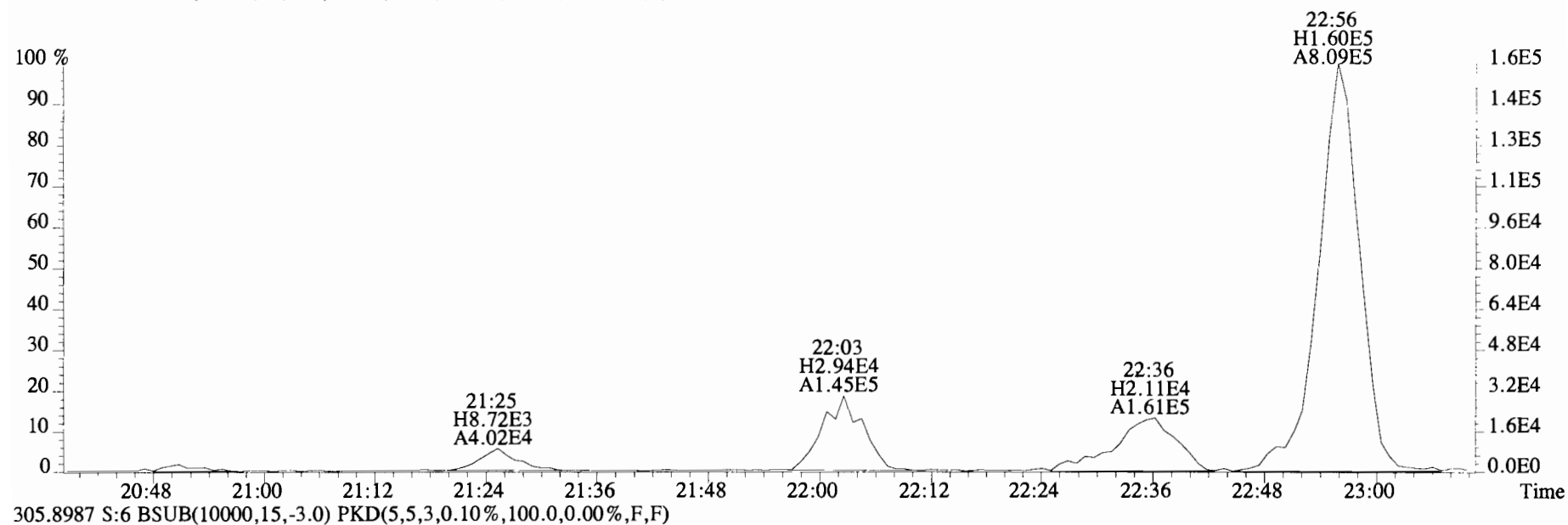
File:191031D2 #1-432 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



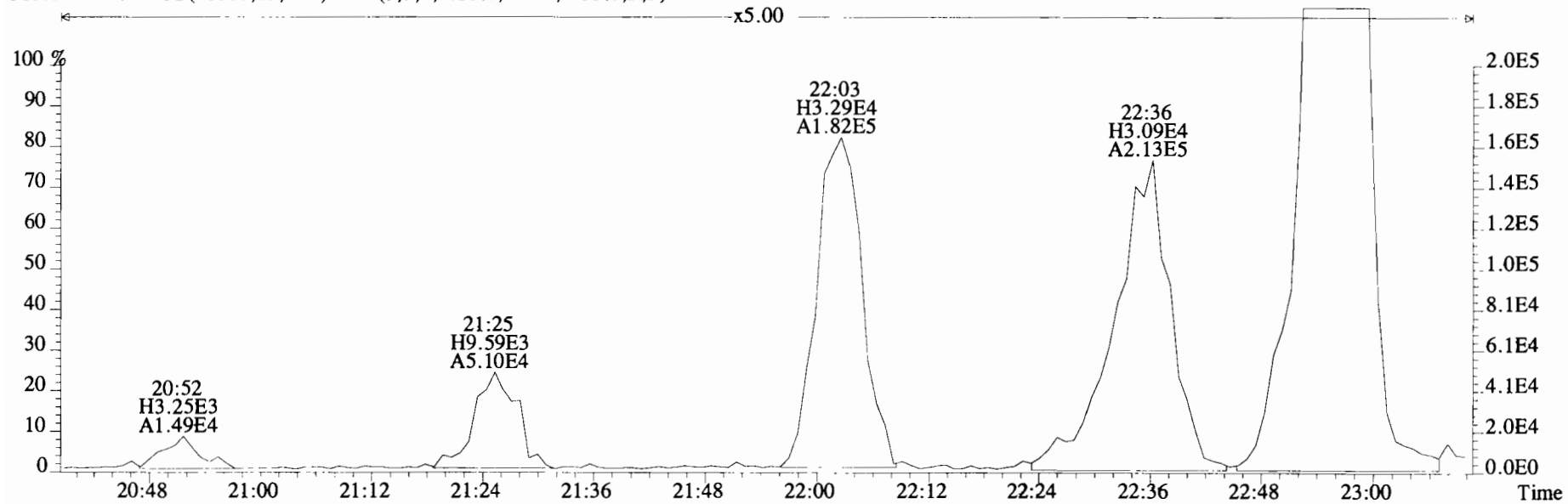
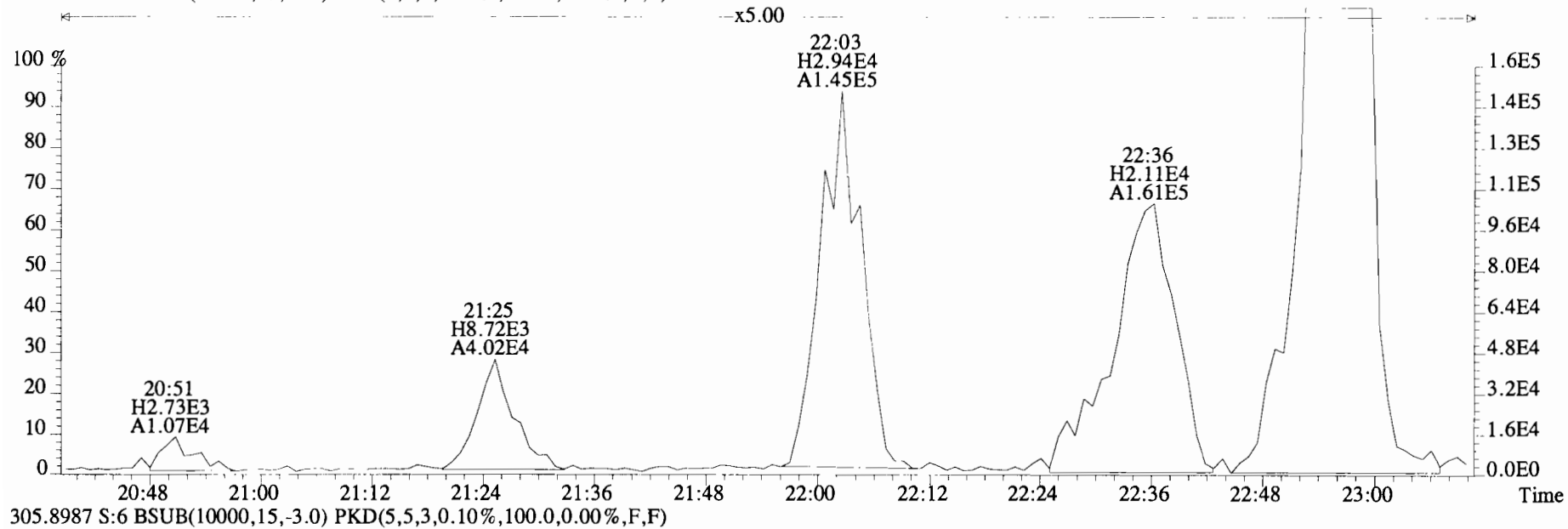
File:191031D2 #1-493 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



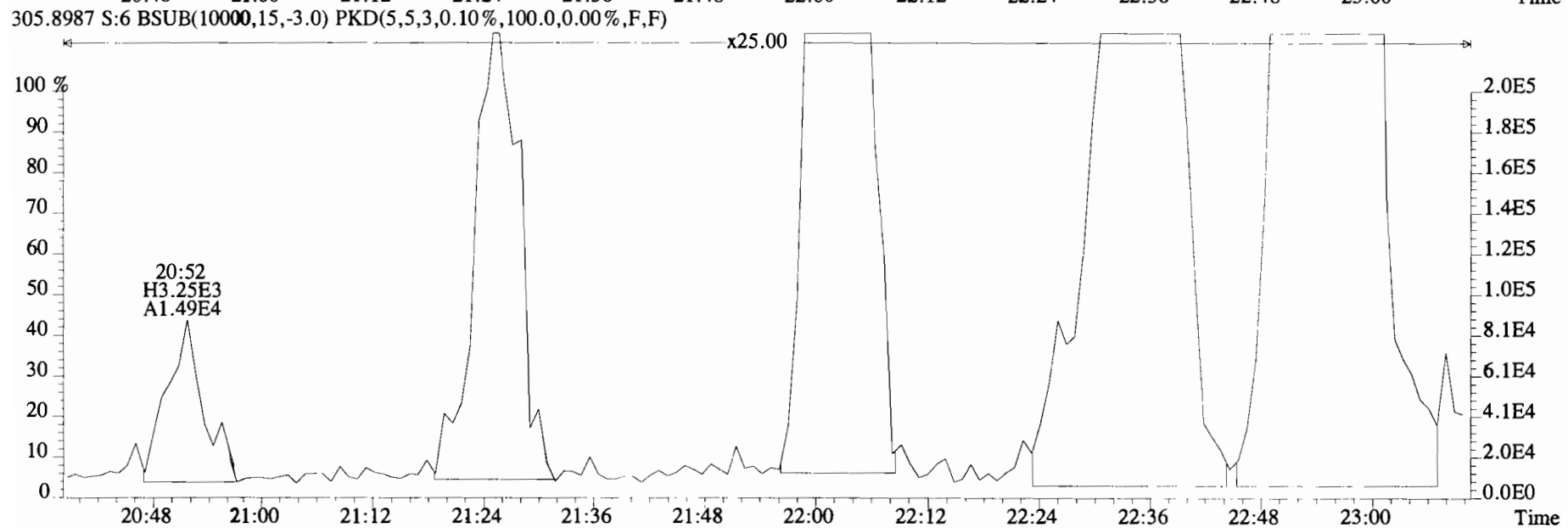
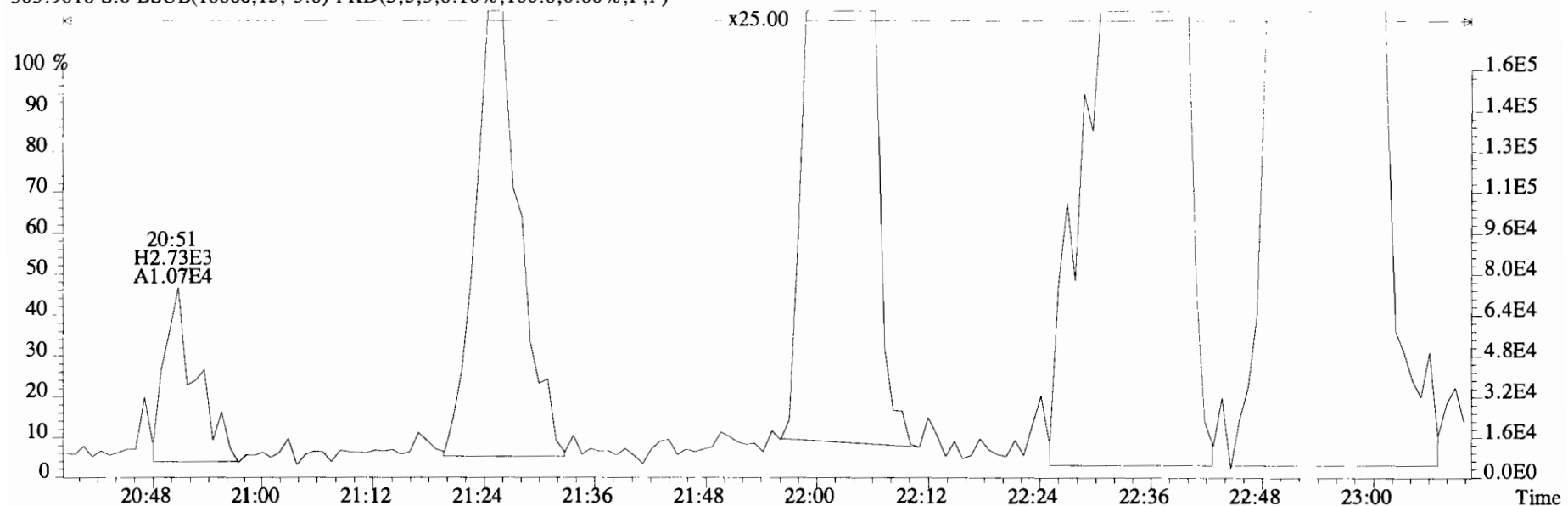
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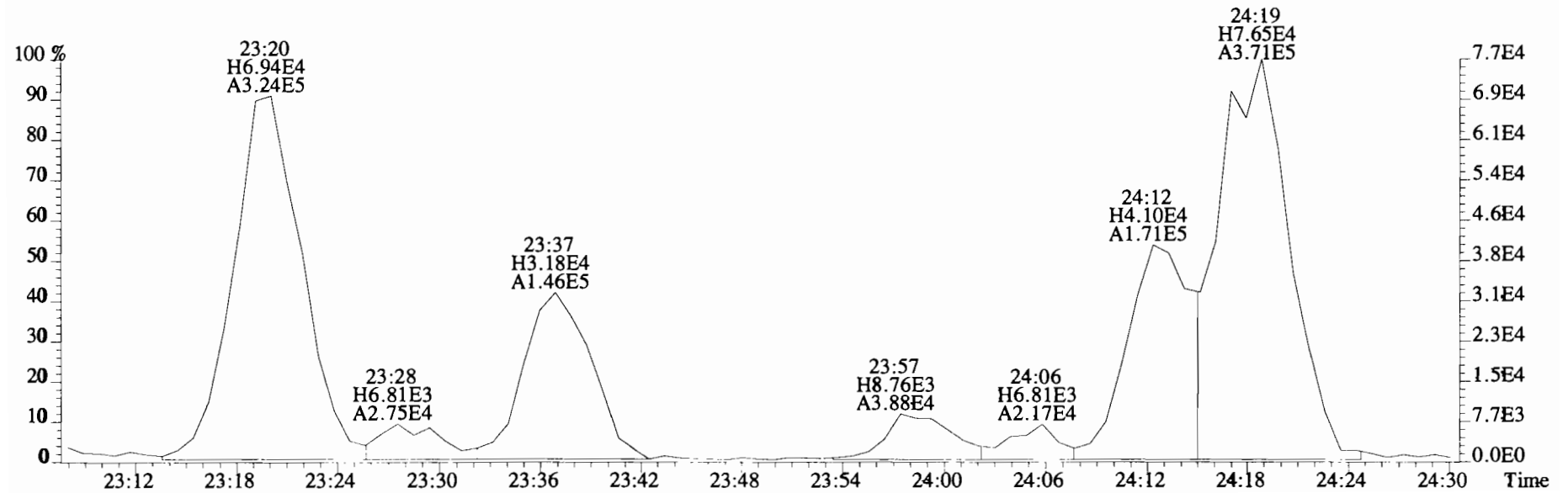
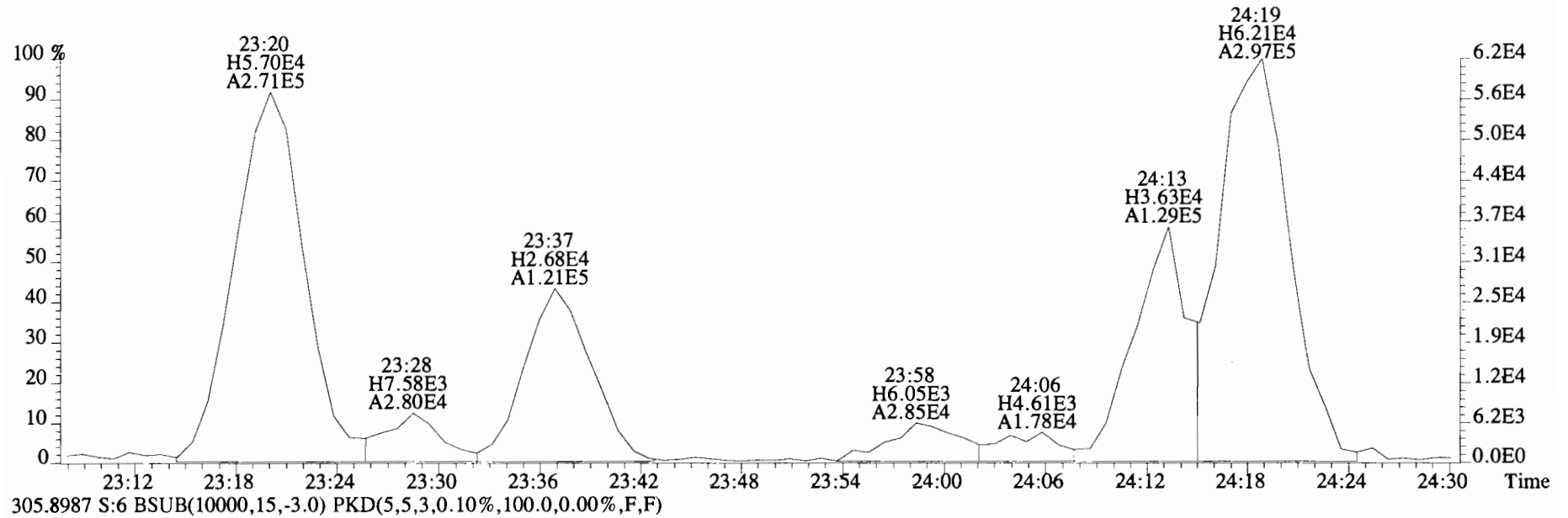
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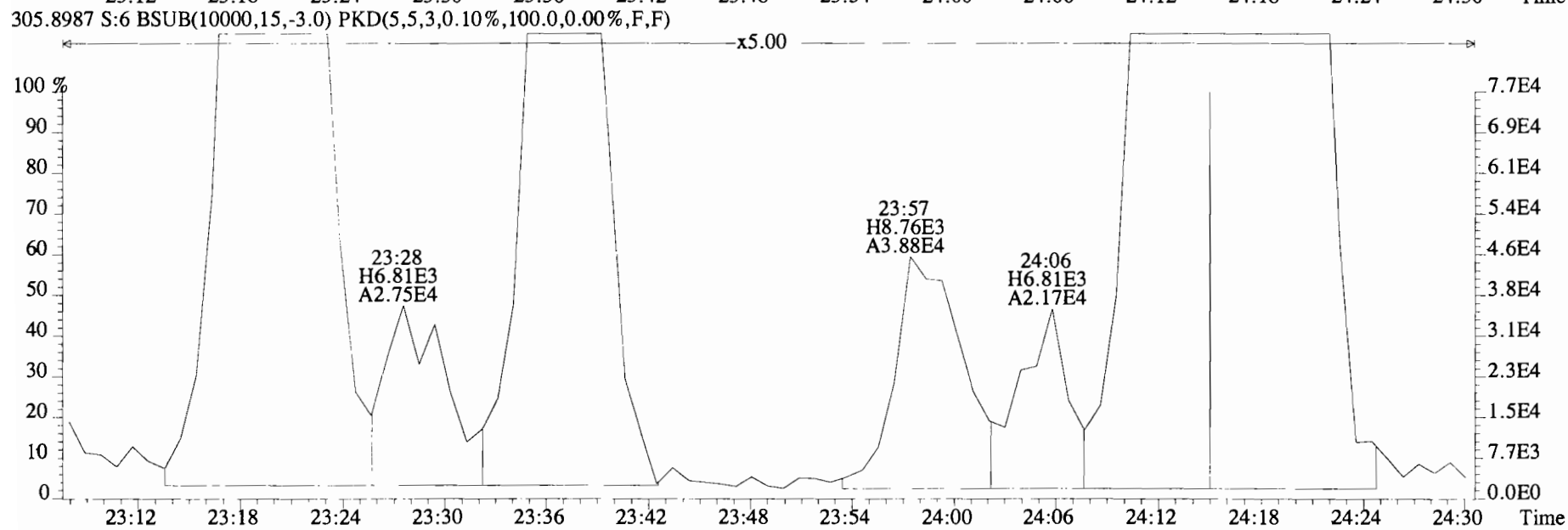
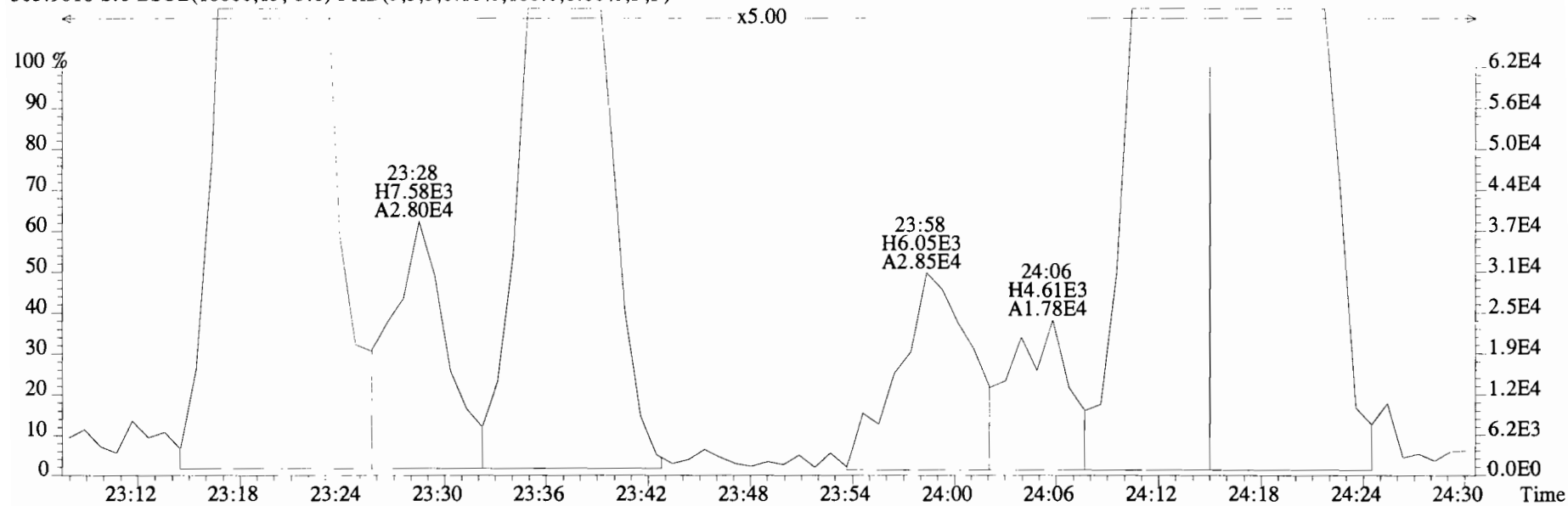
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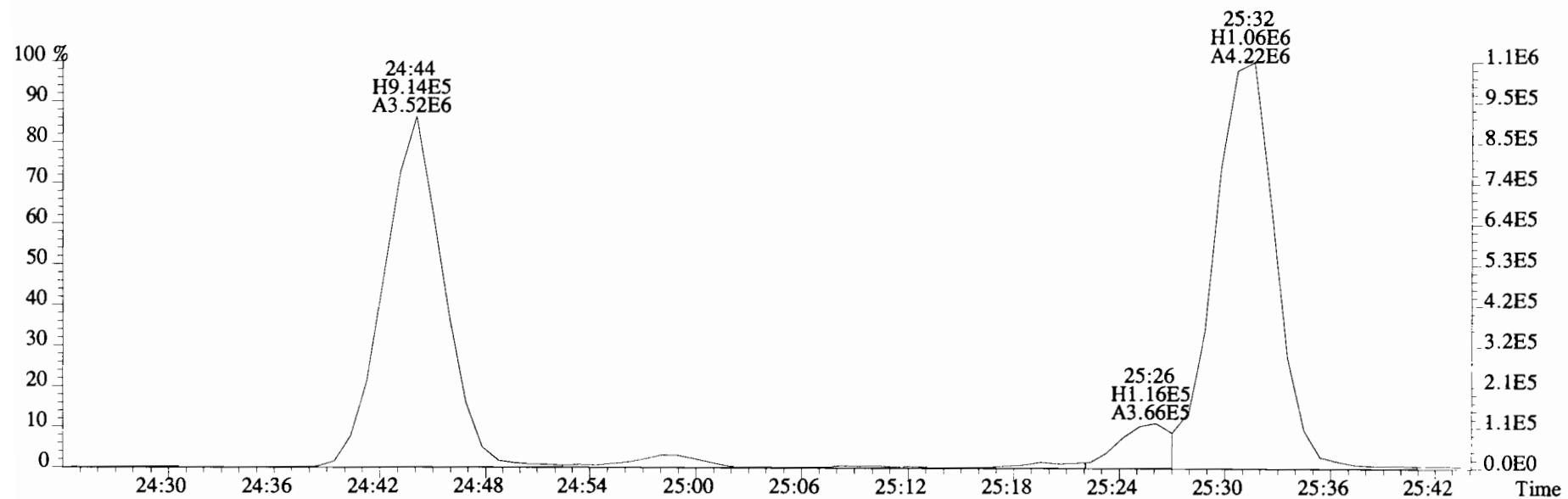
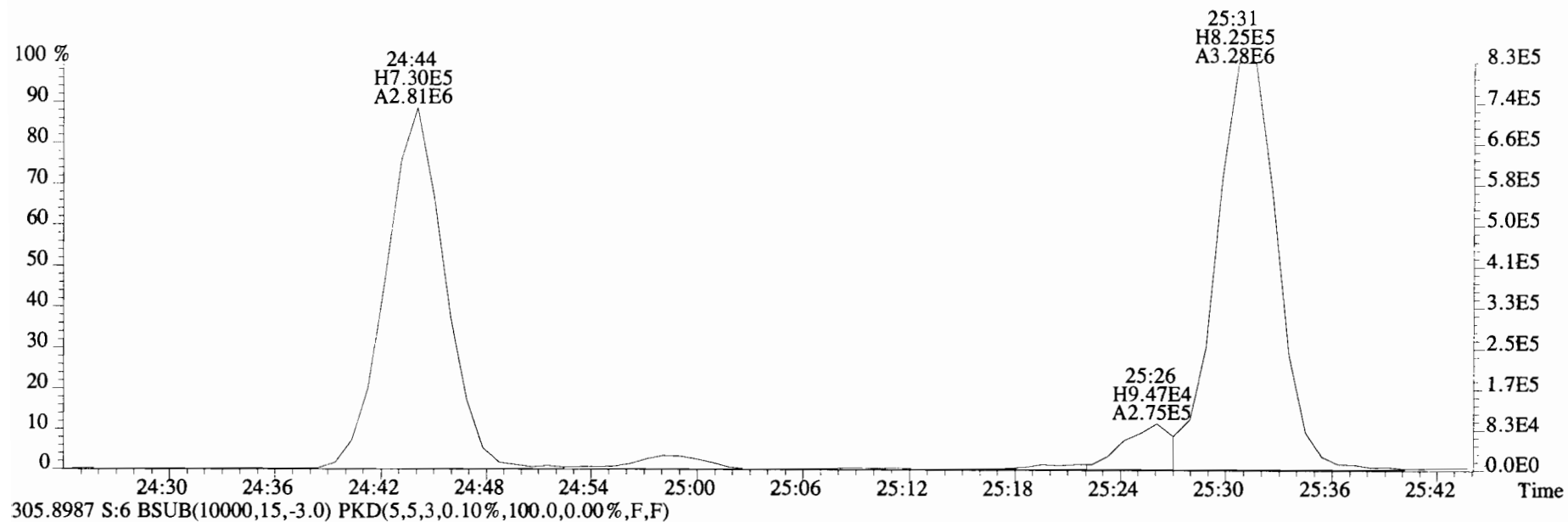
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303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



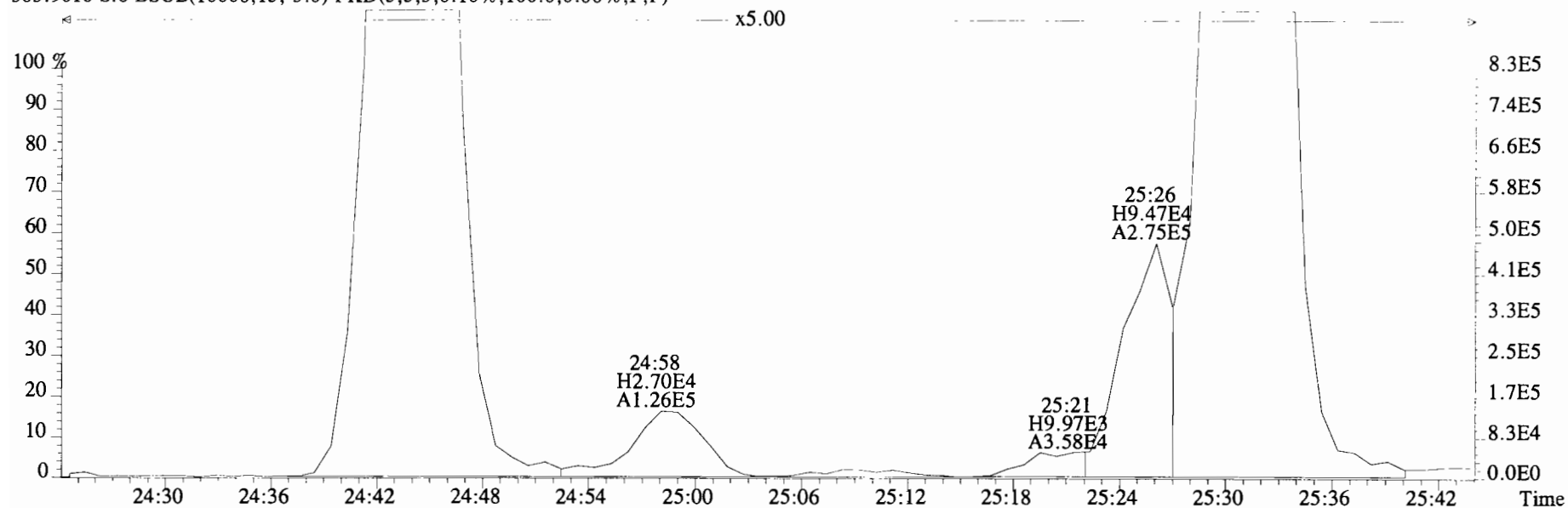
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 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



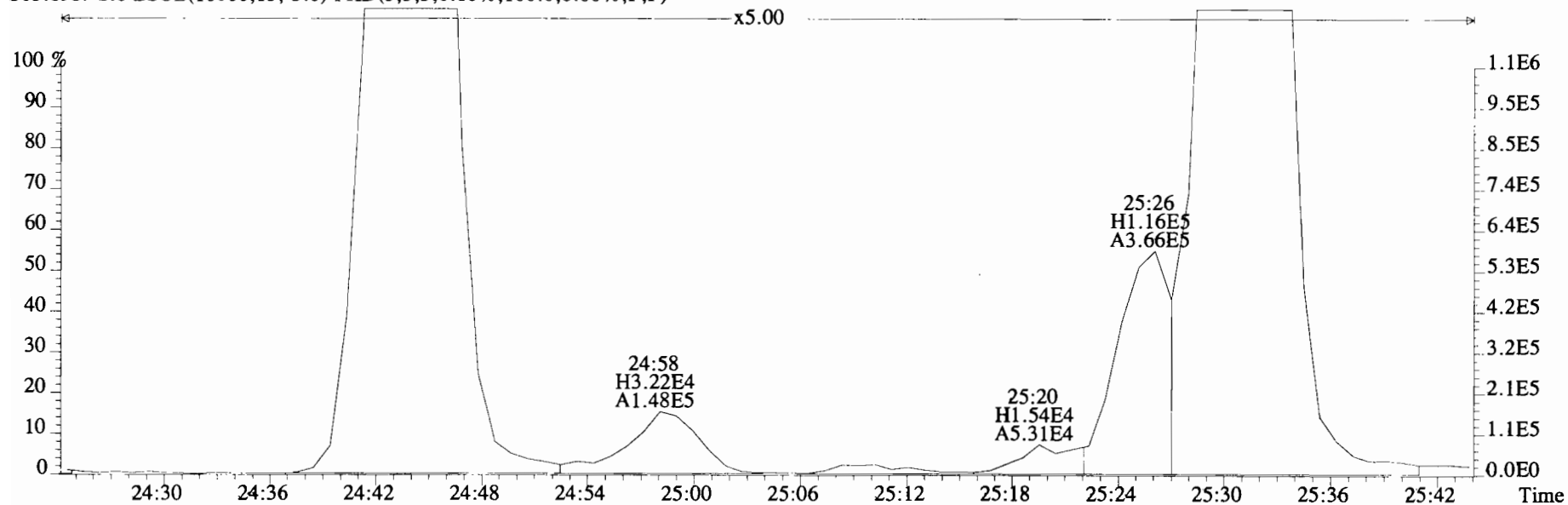
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Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
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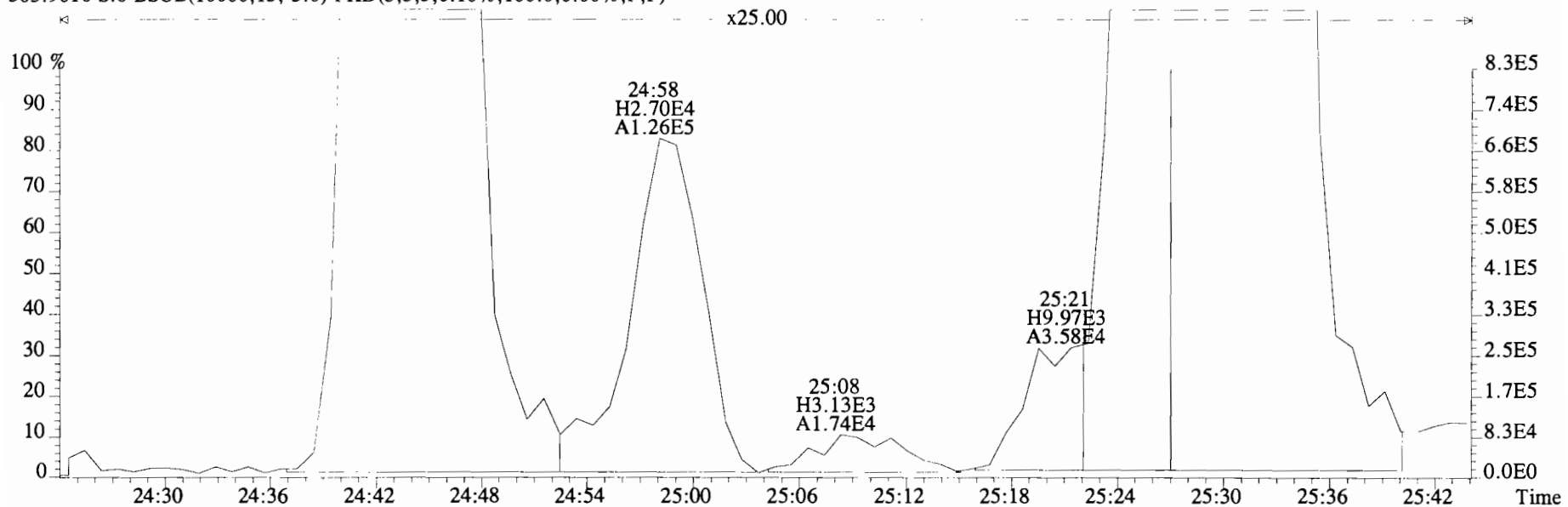
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 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
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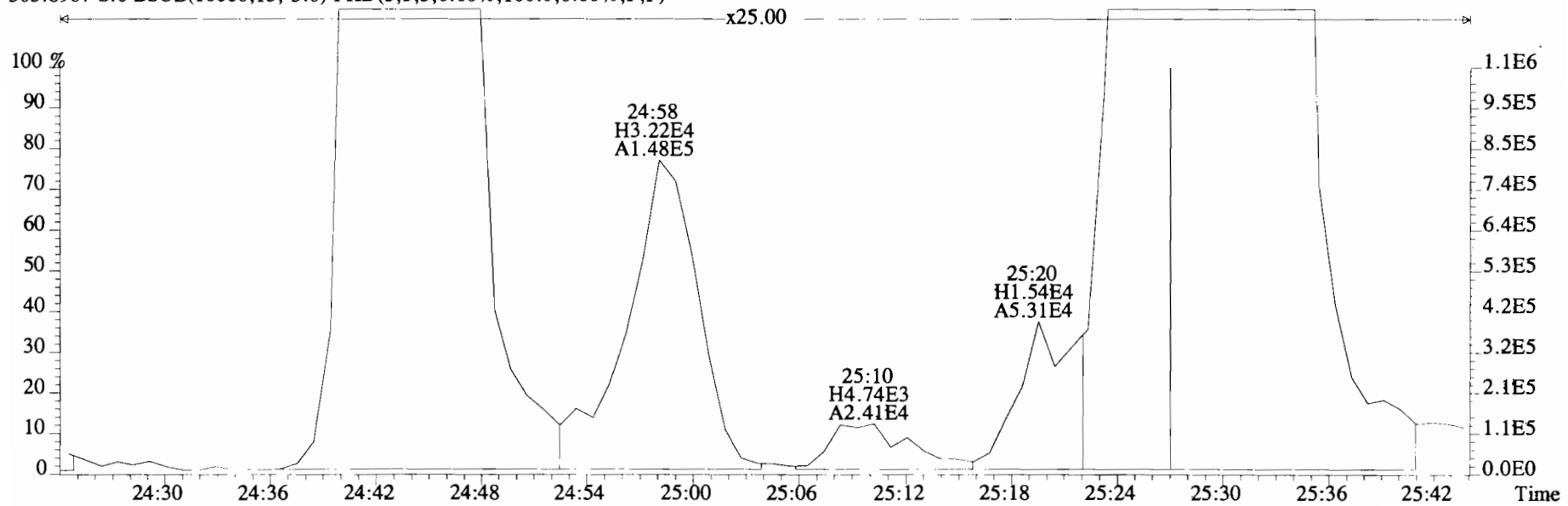
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



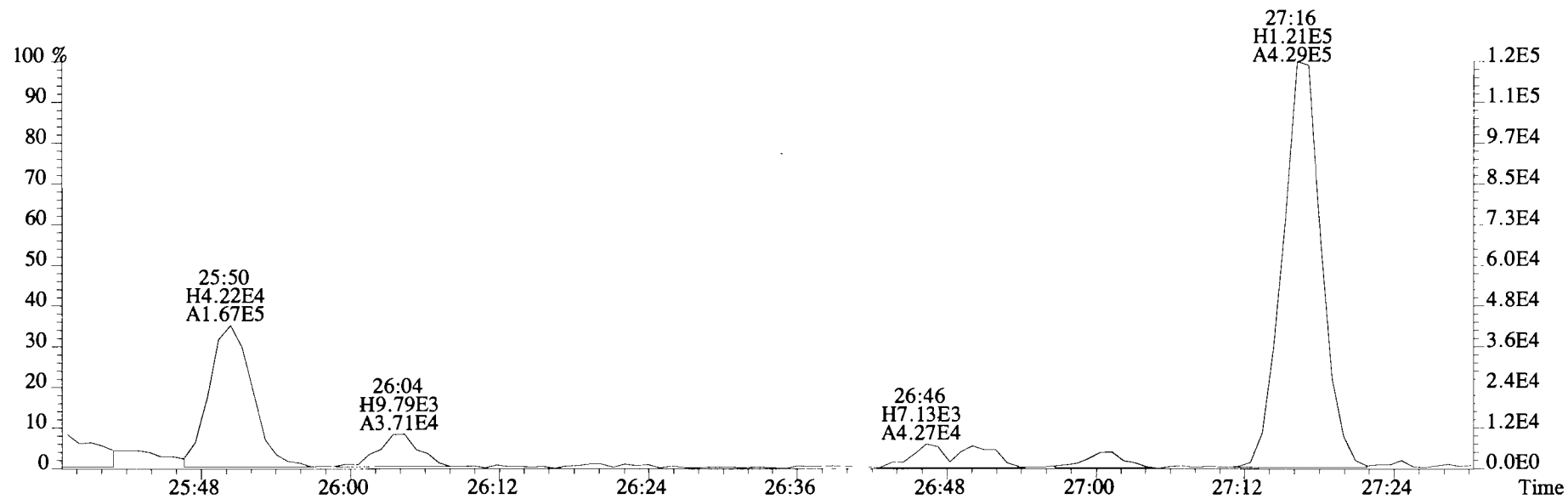
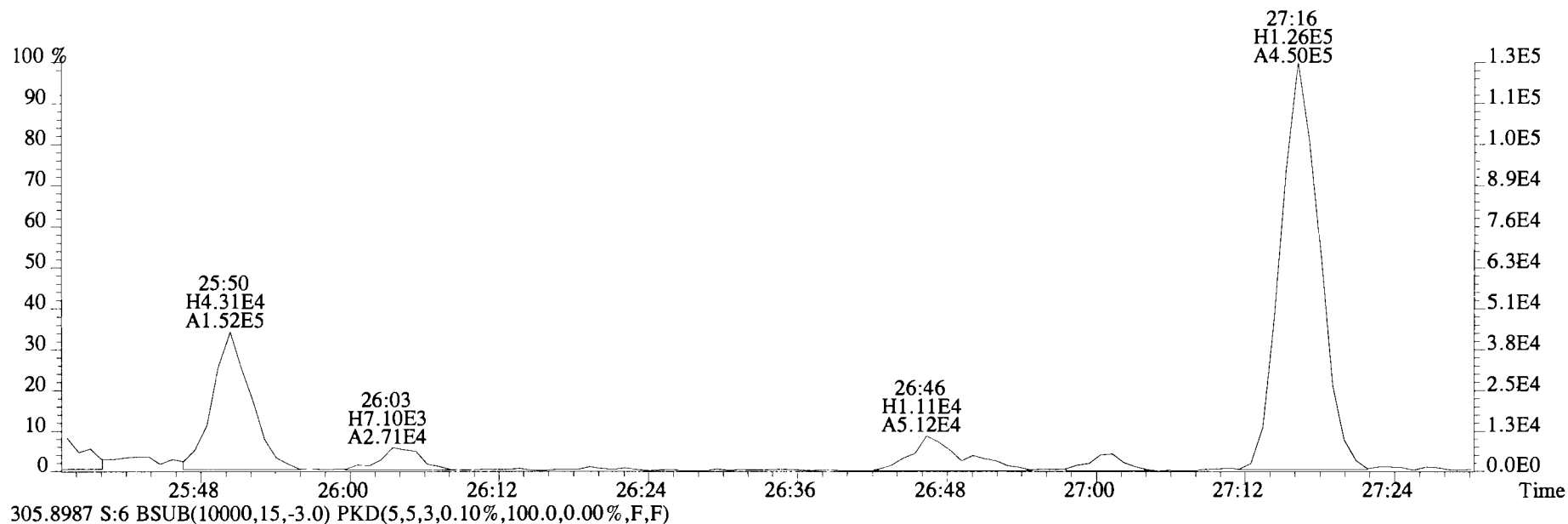
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 Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



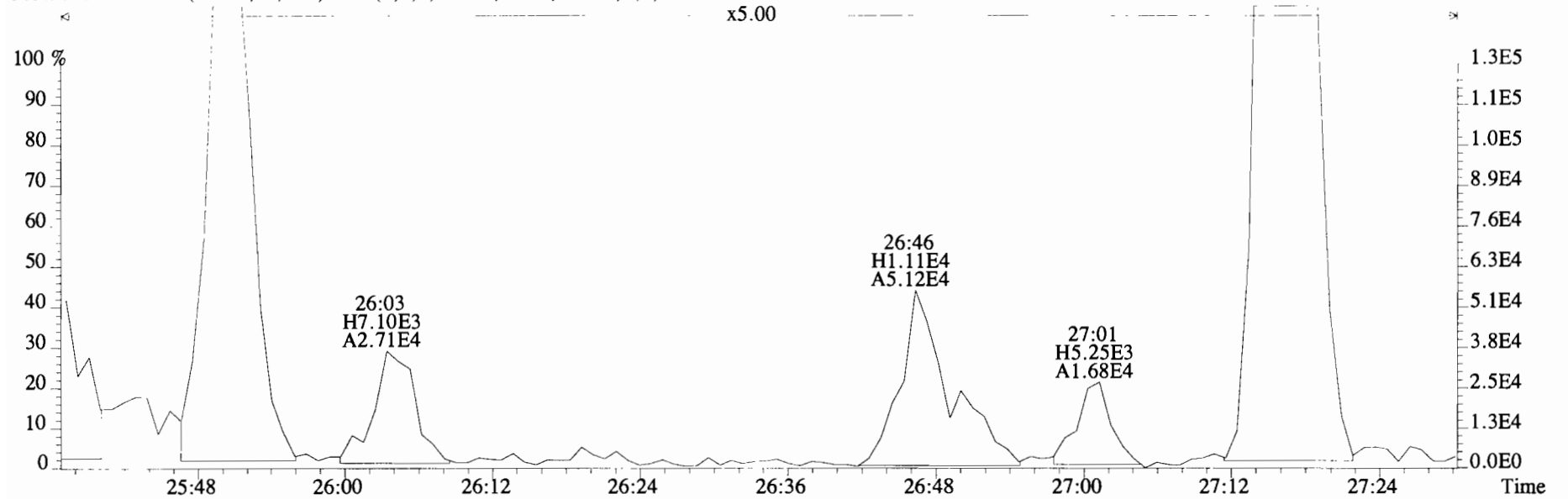
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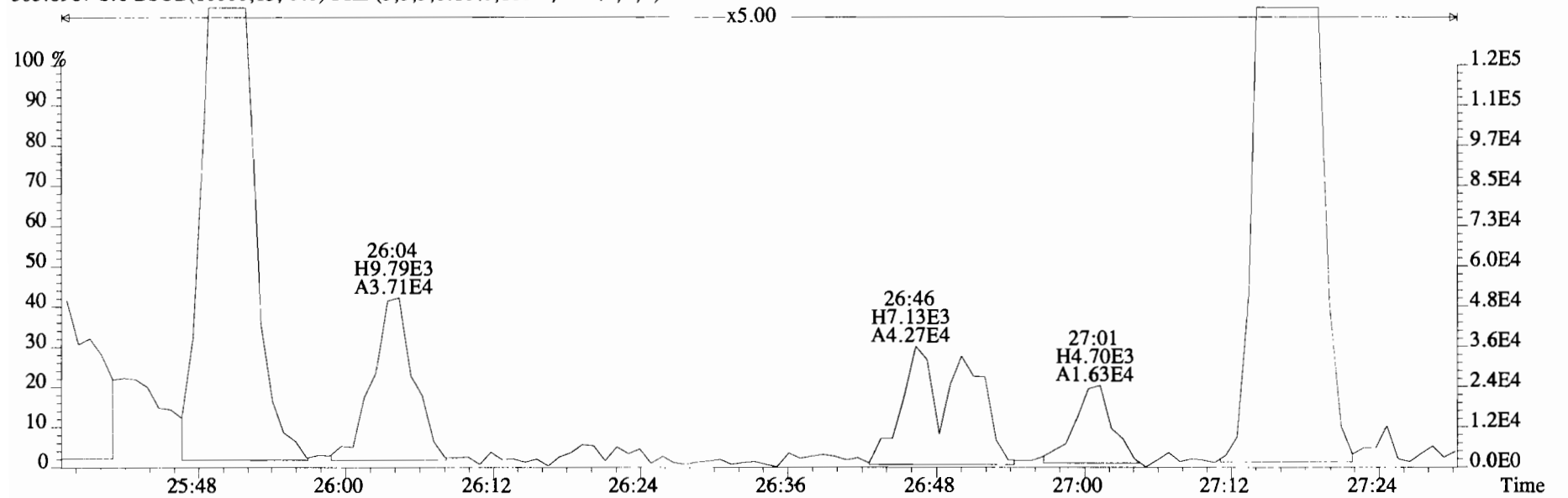
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Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
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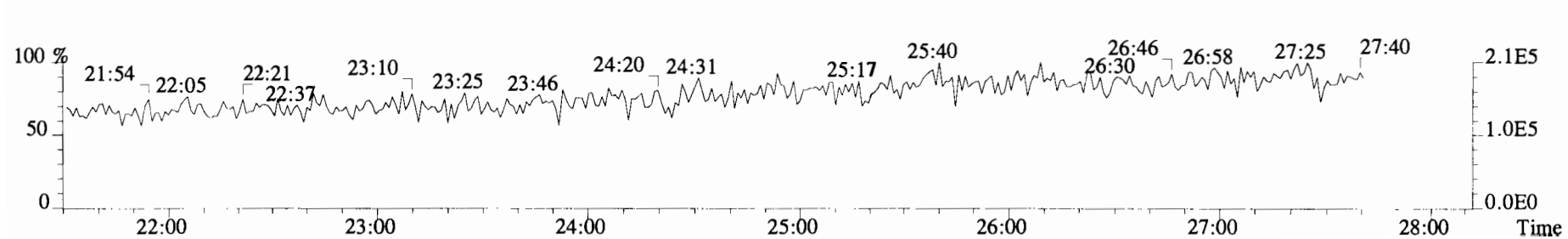
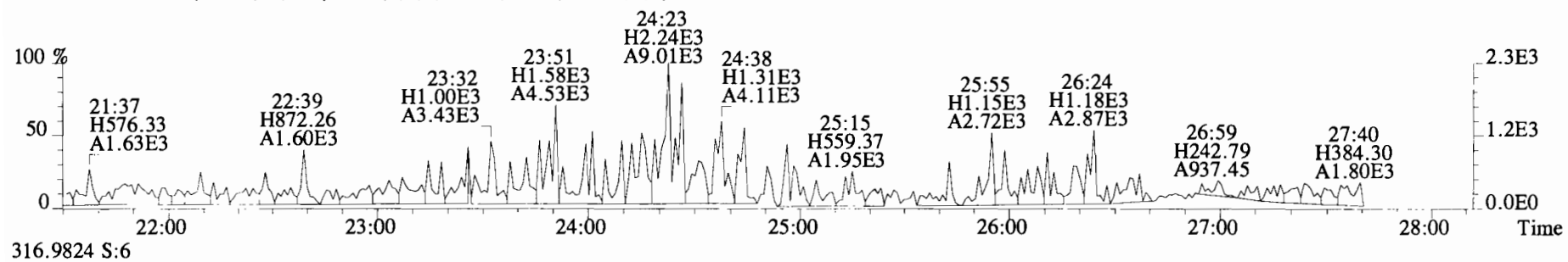
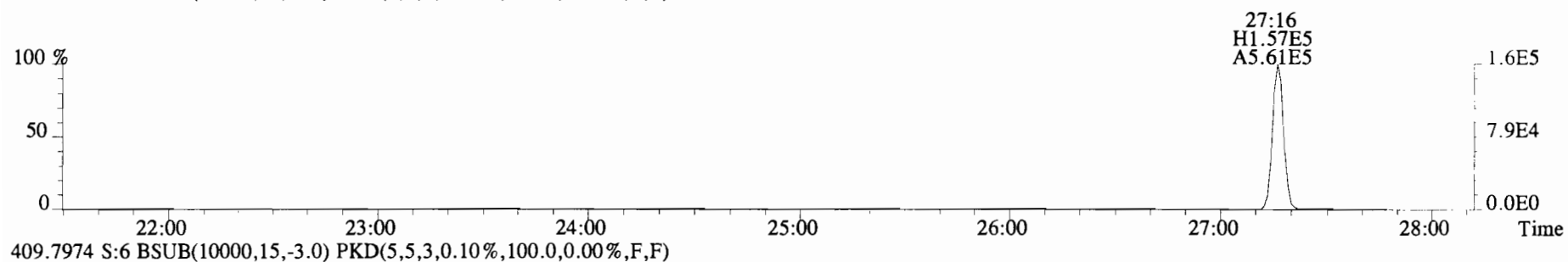
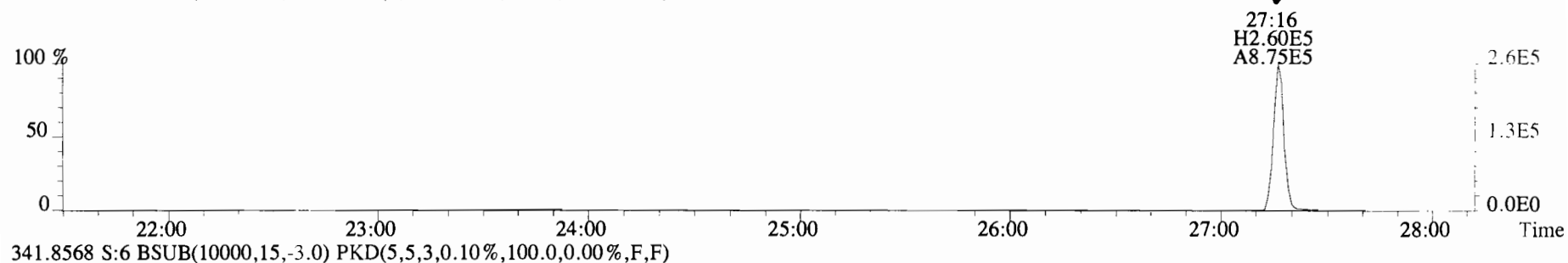
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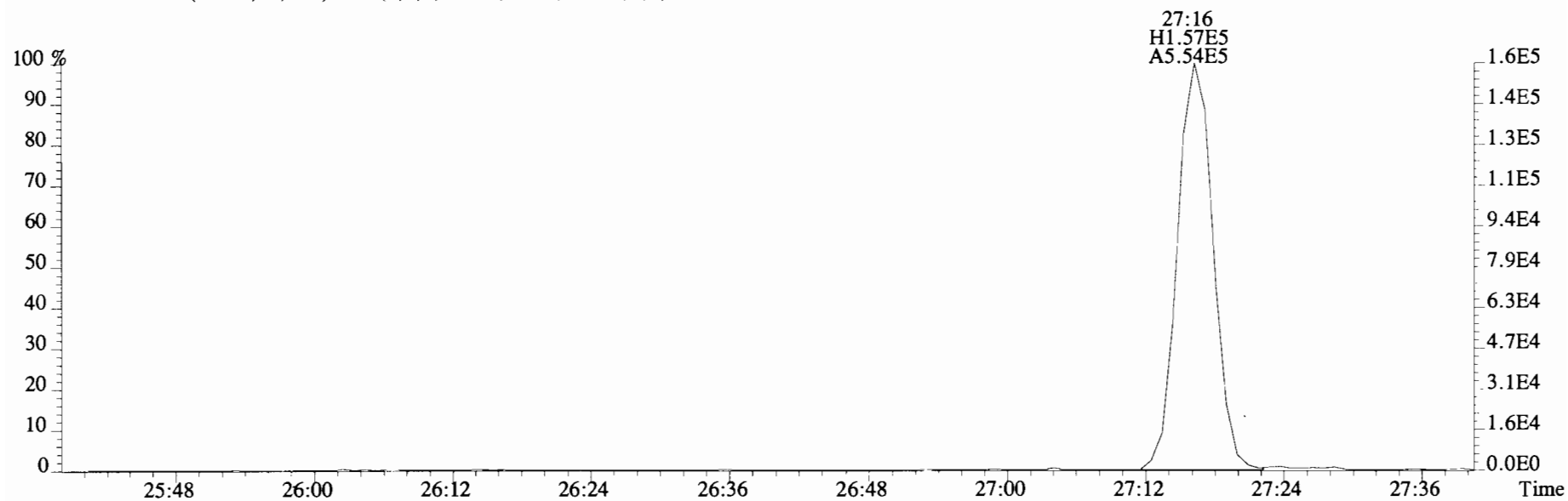
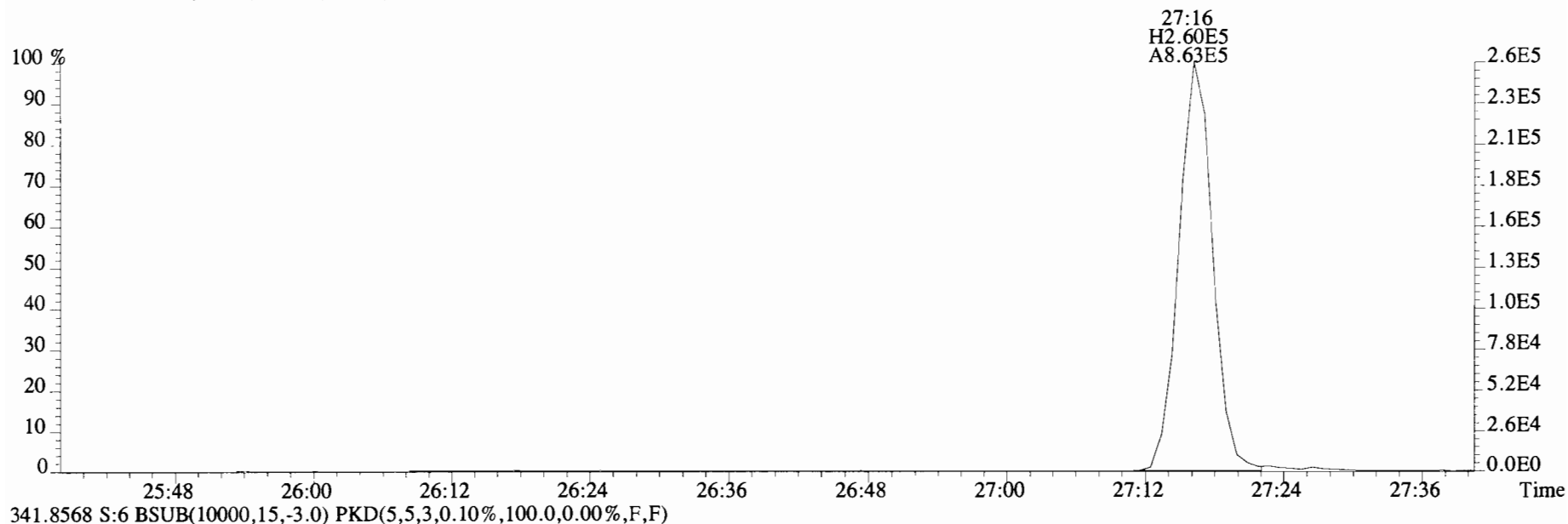
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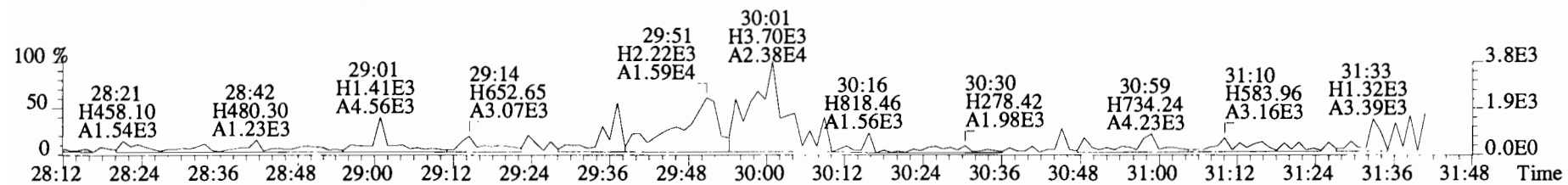
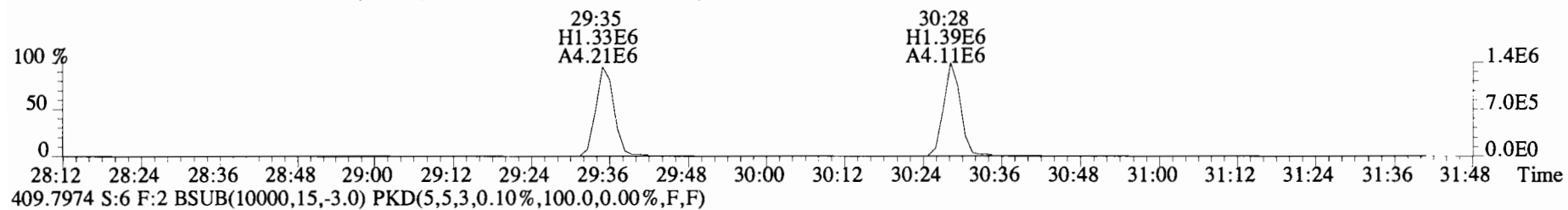
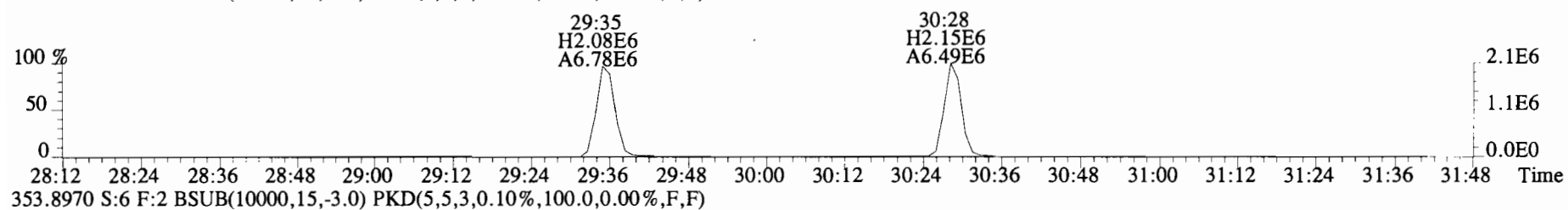
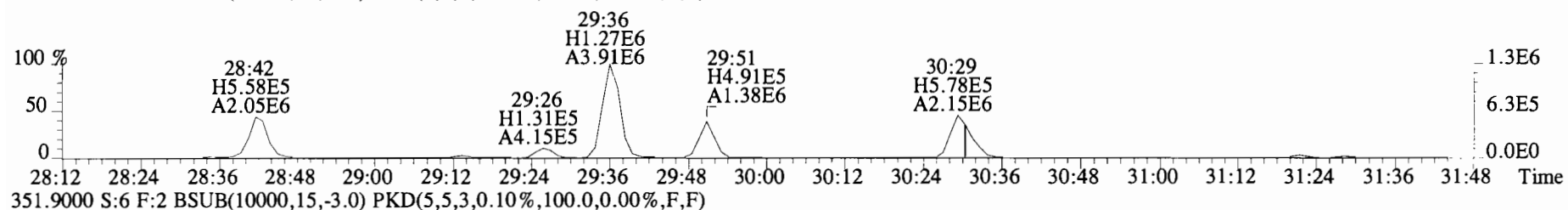
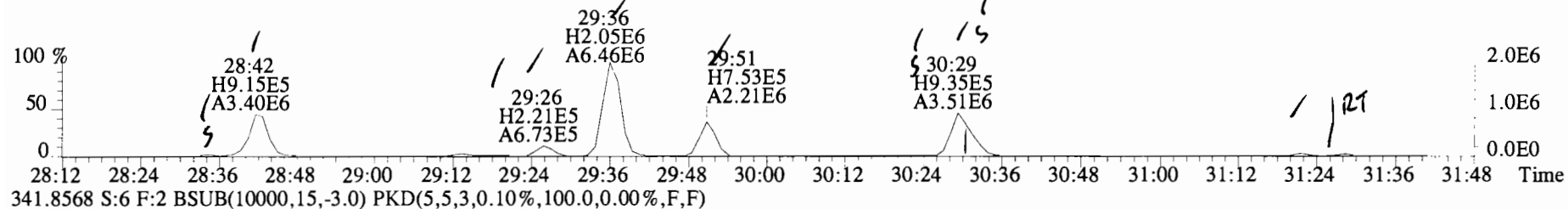
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 Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



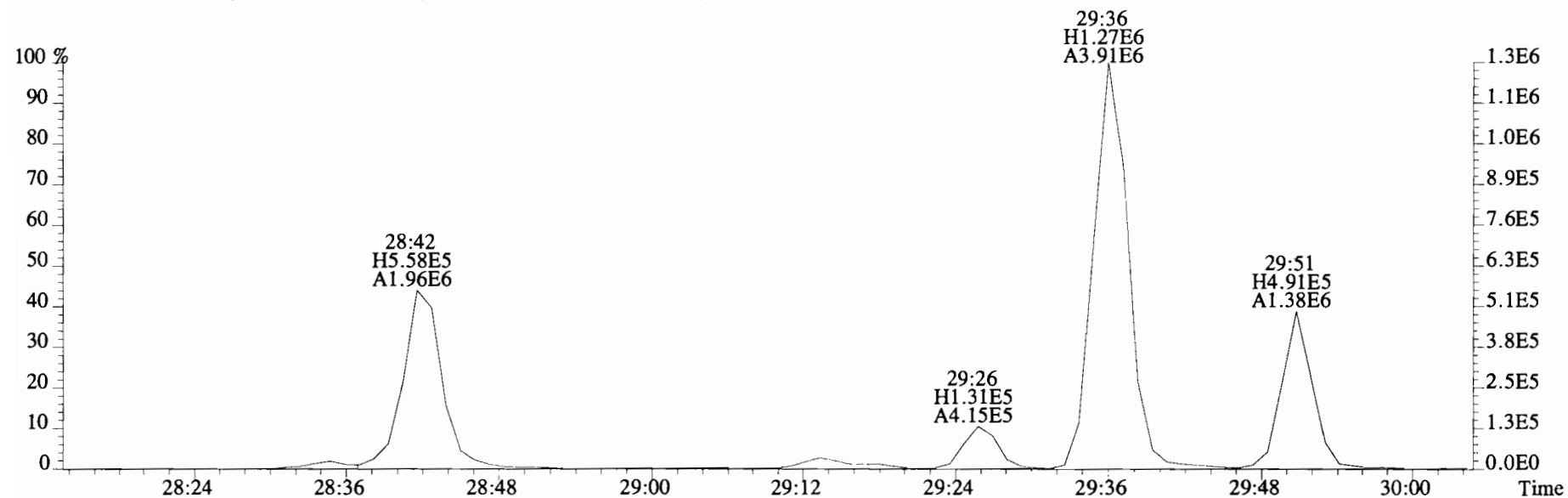
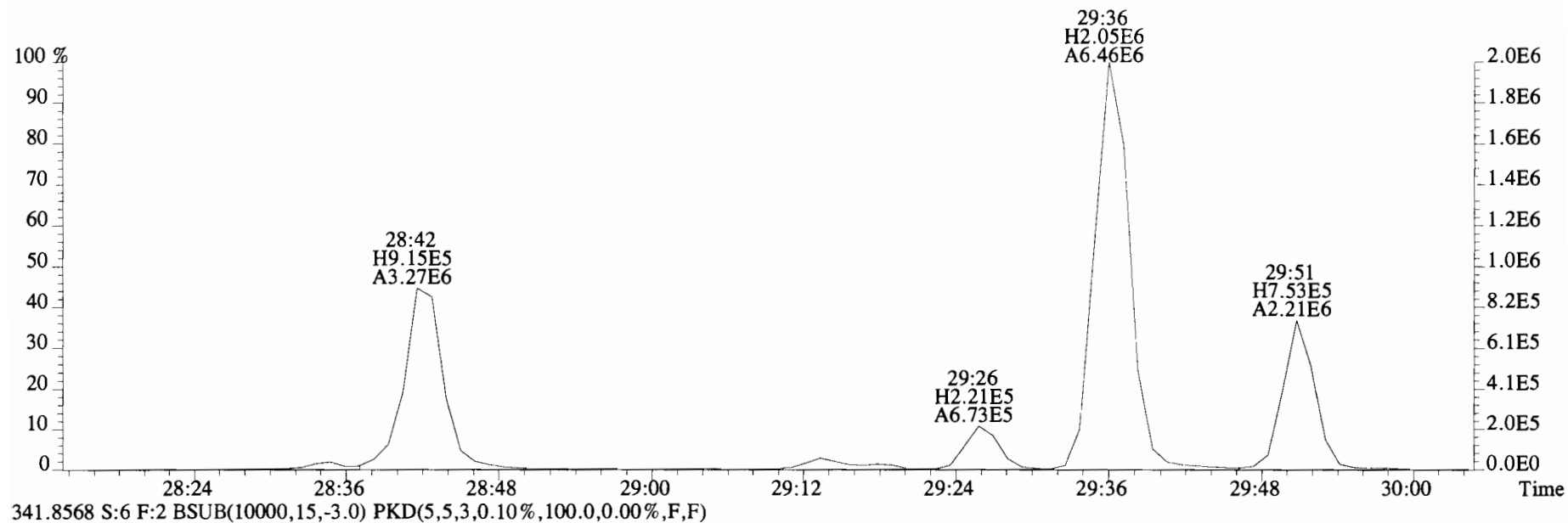
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Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



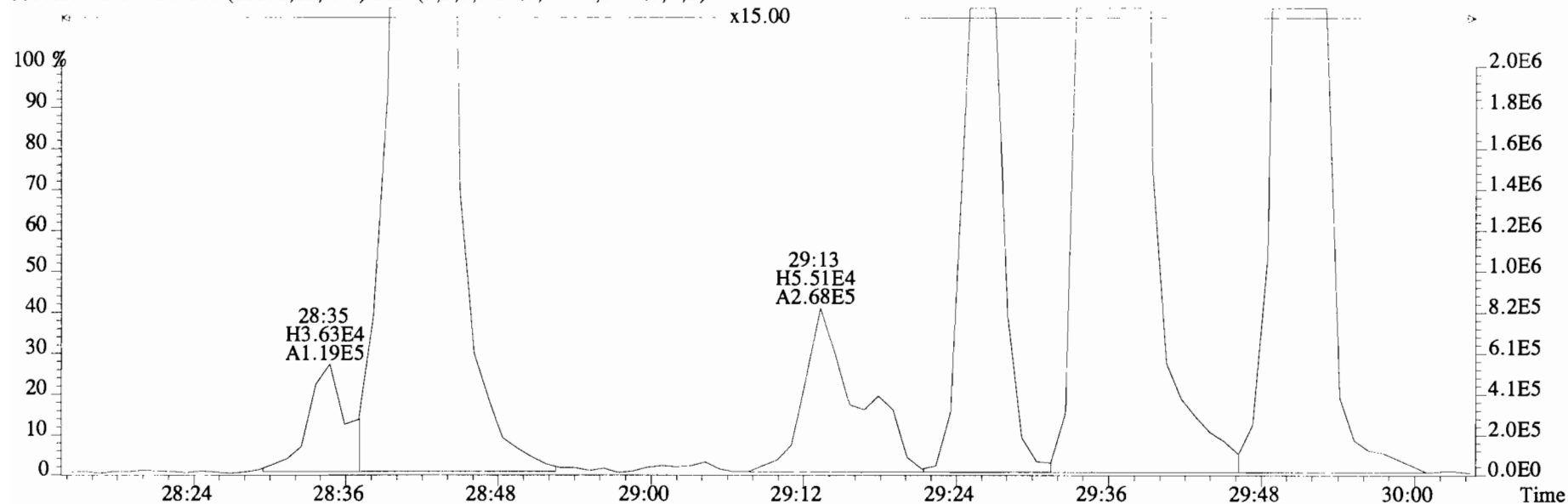
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 Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



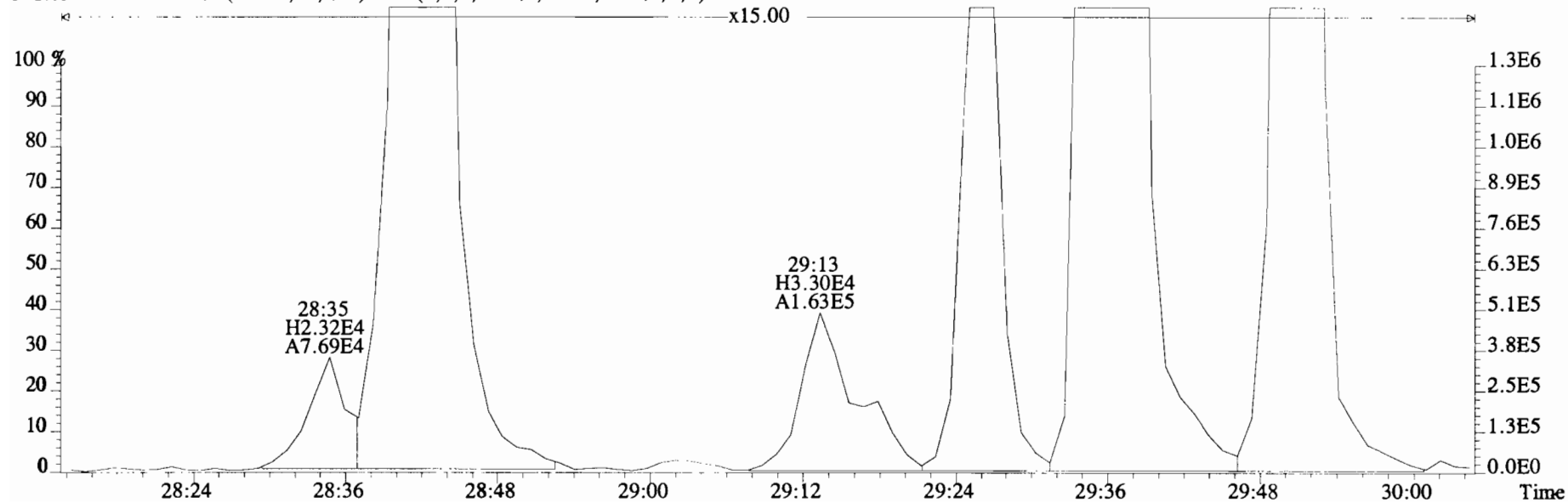
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Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



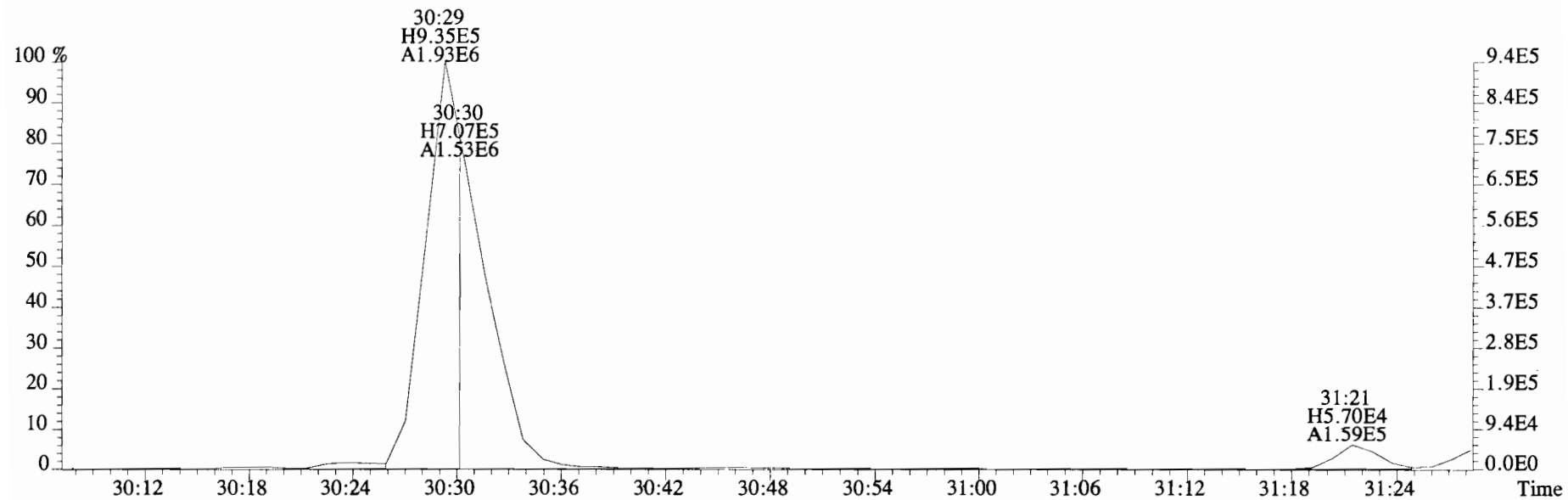
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



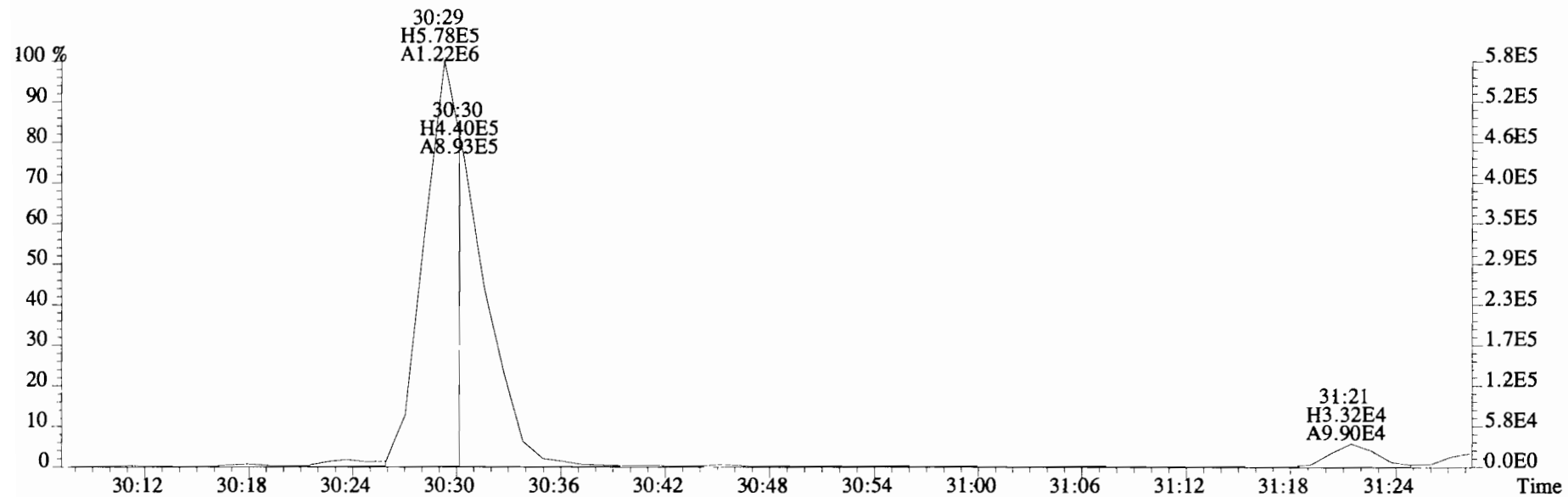
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



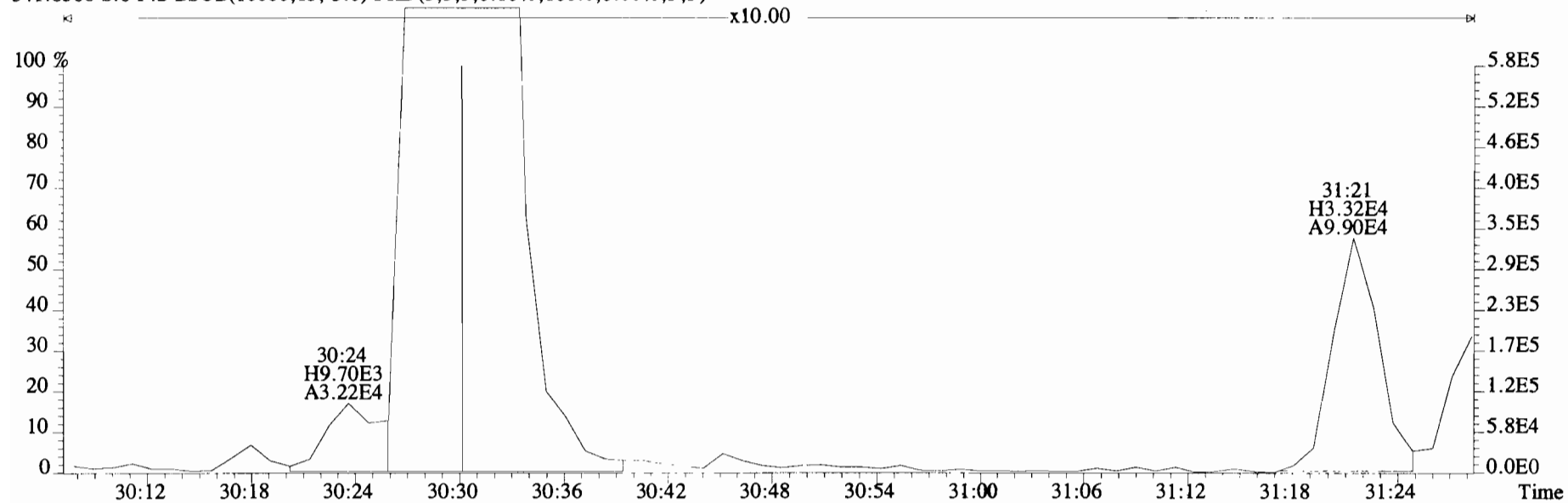
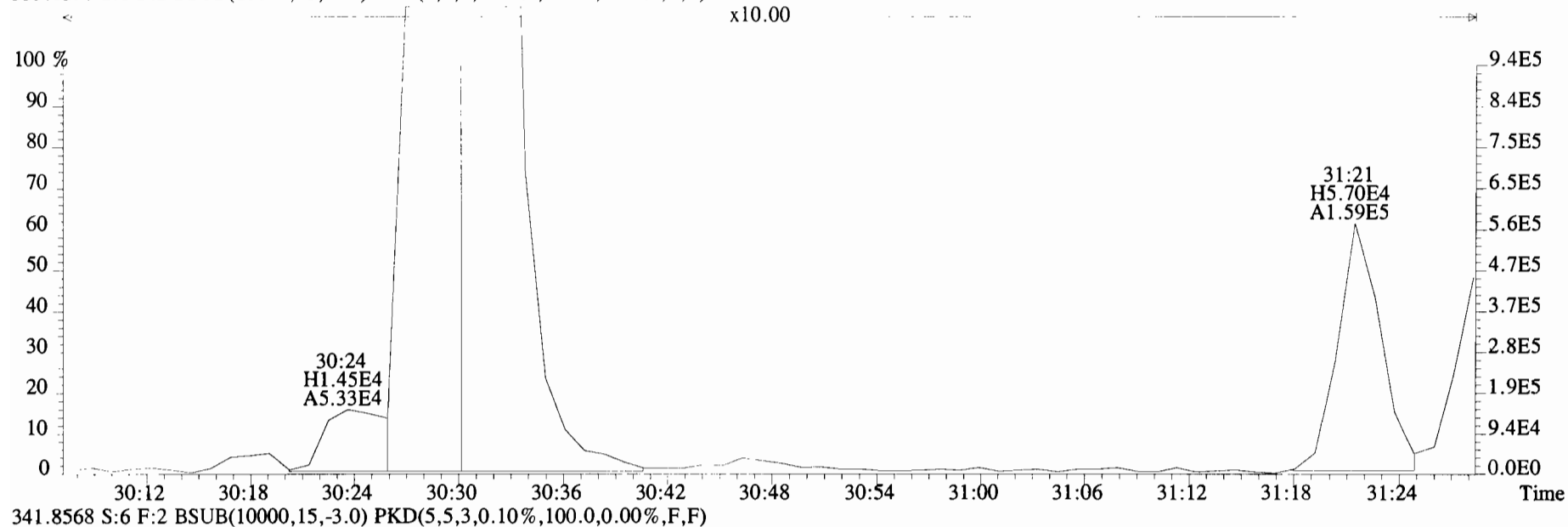
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Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



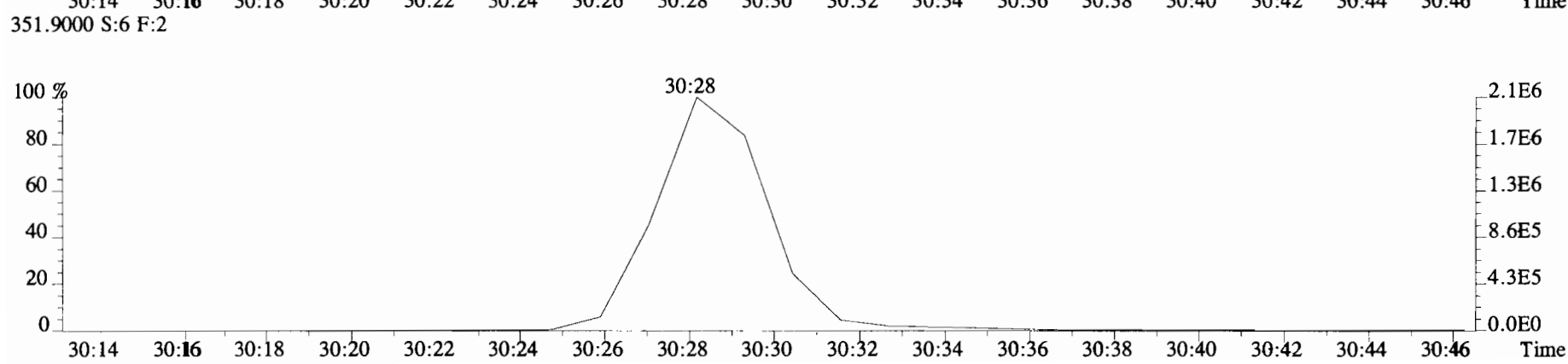
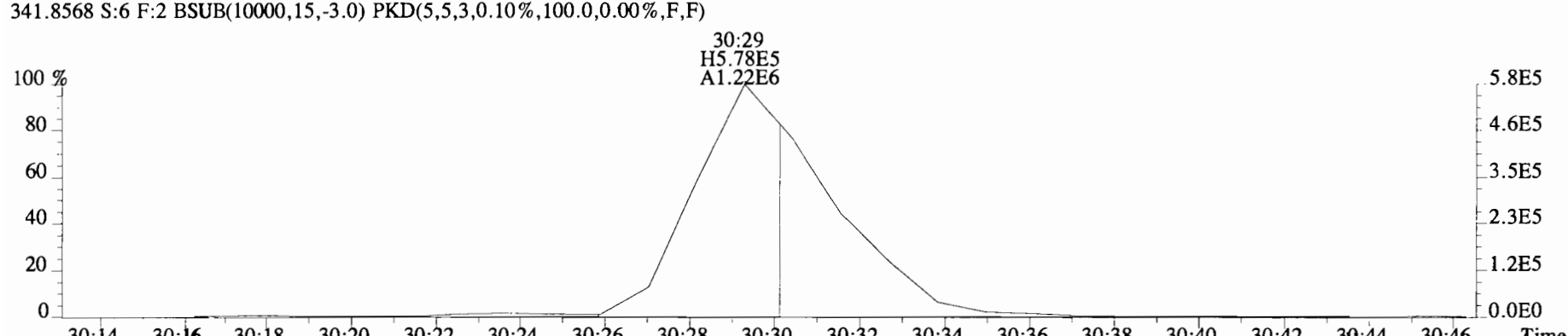
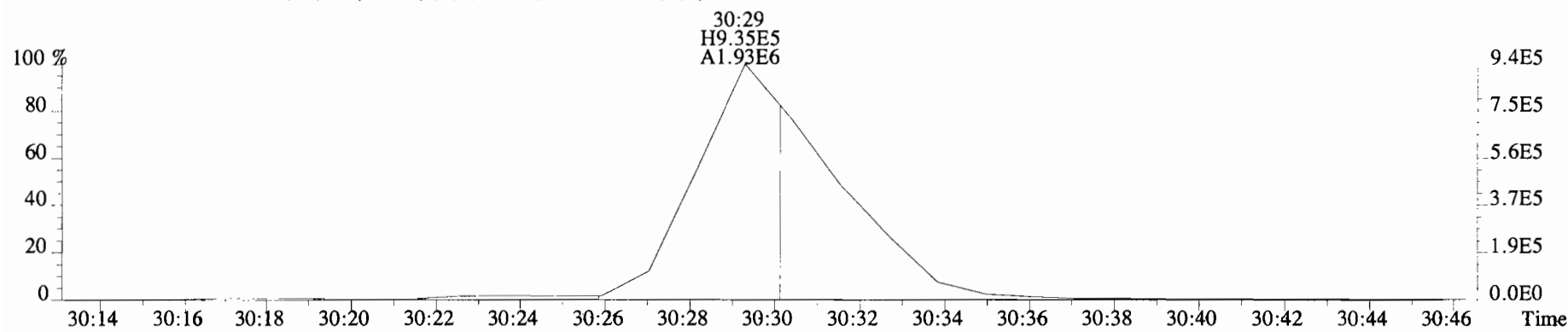
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



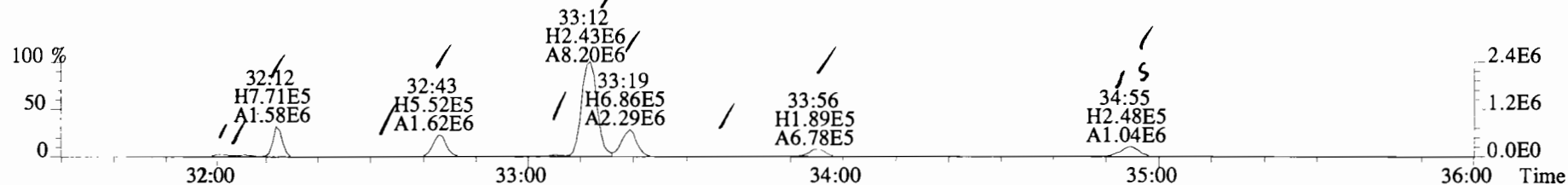
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



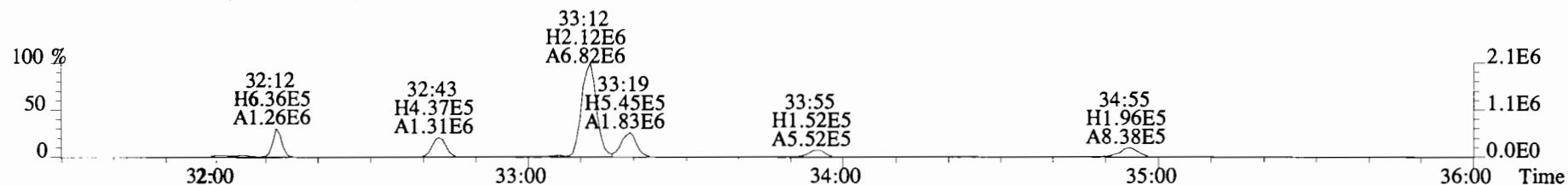
File:191031D2 #1-211 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



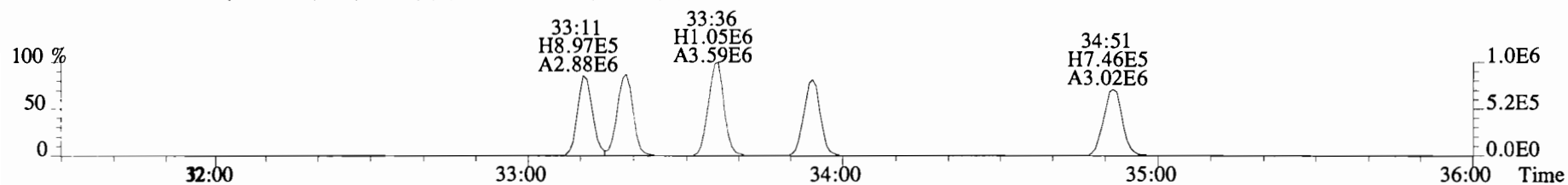
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



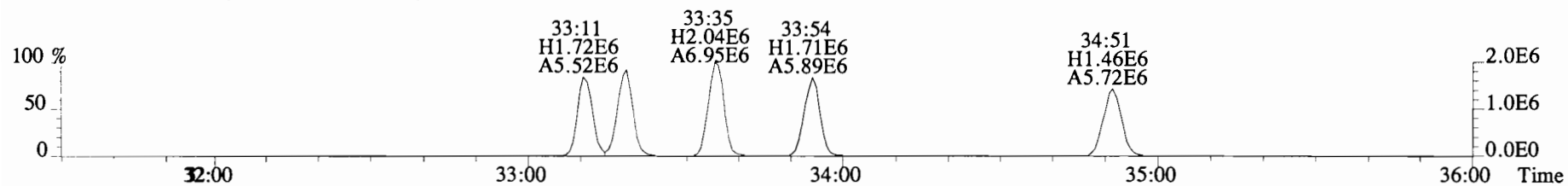
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



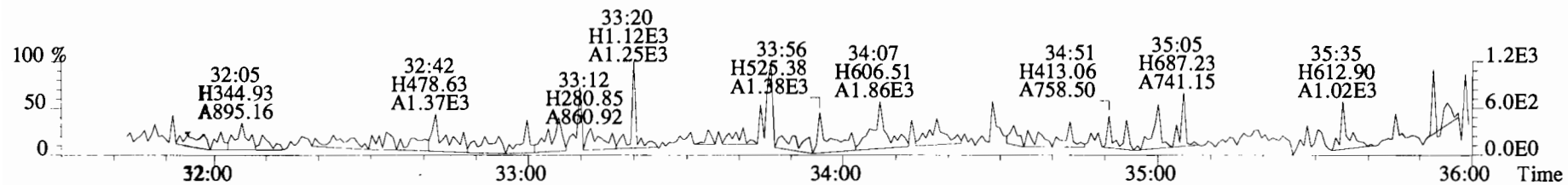
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



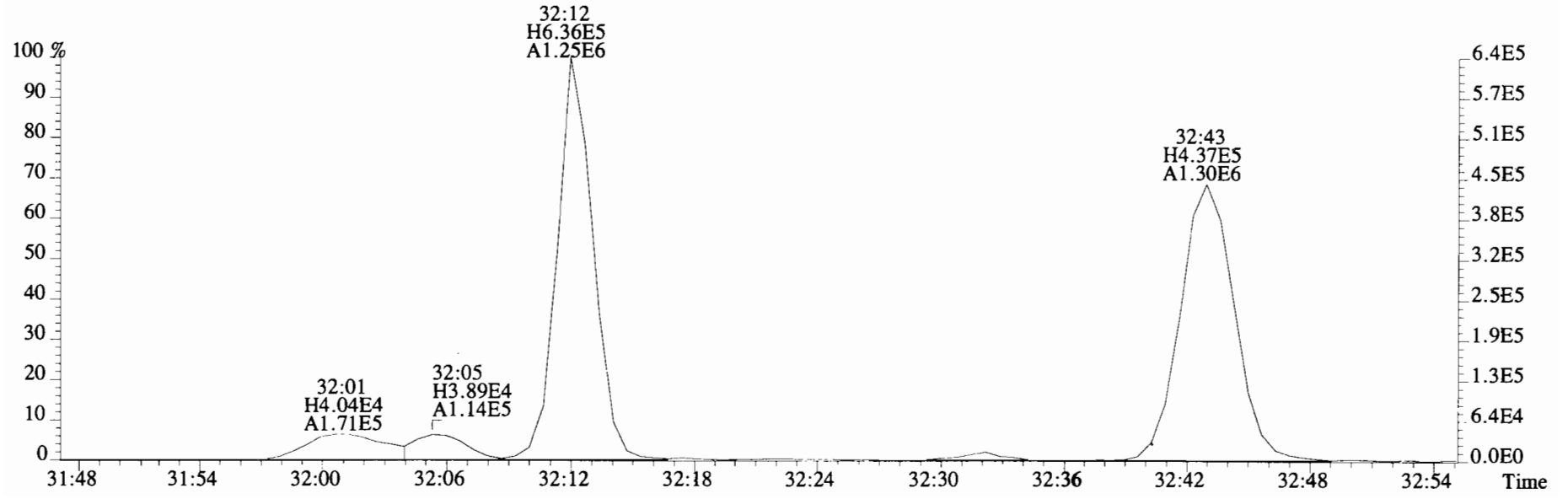
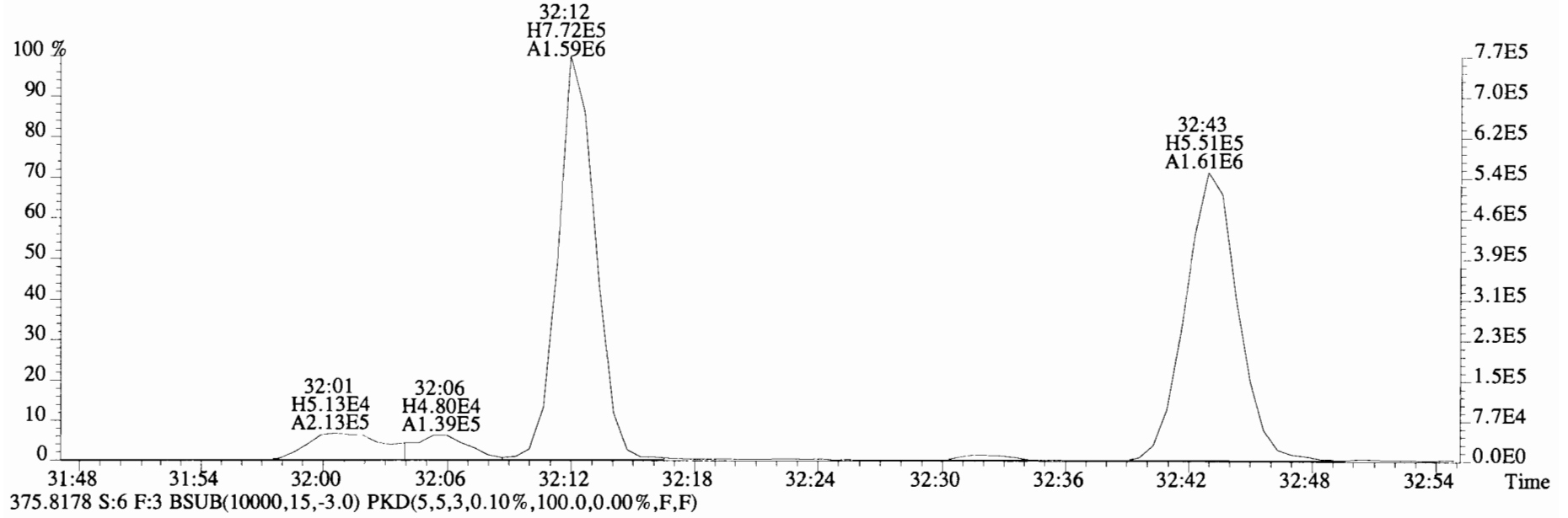
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



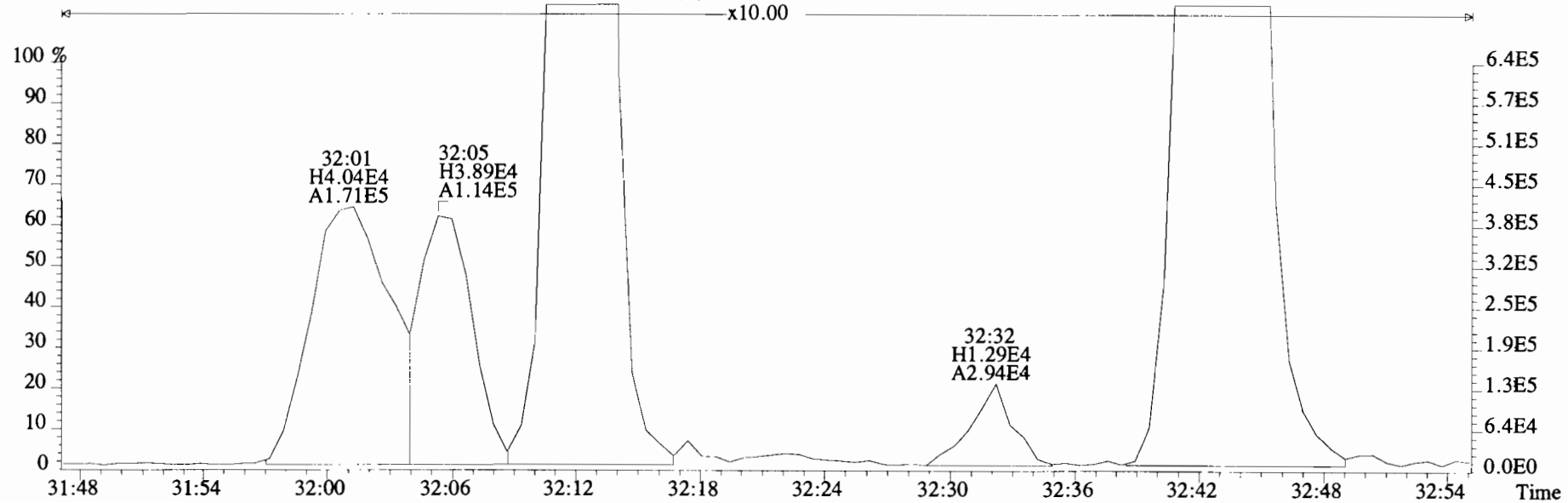
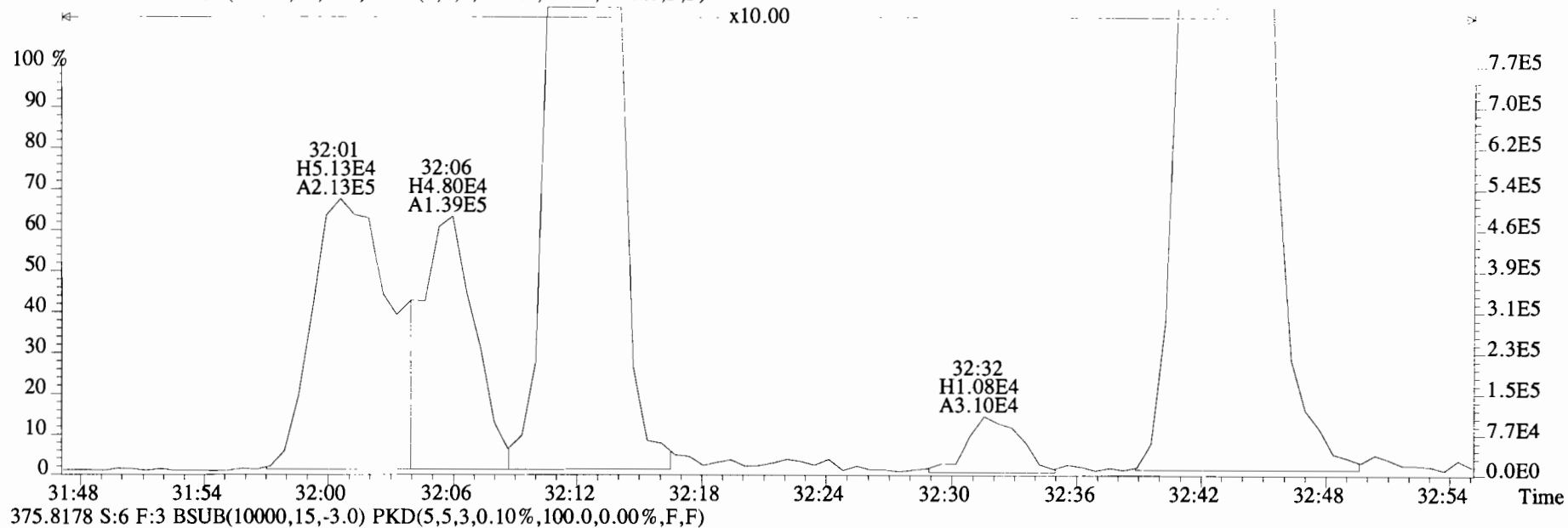
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



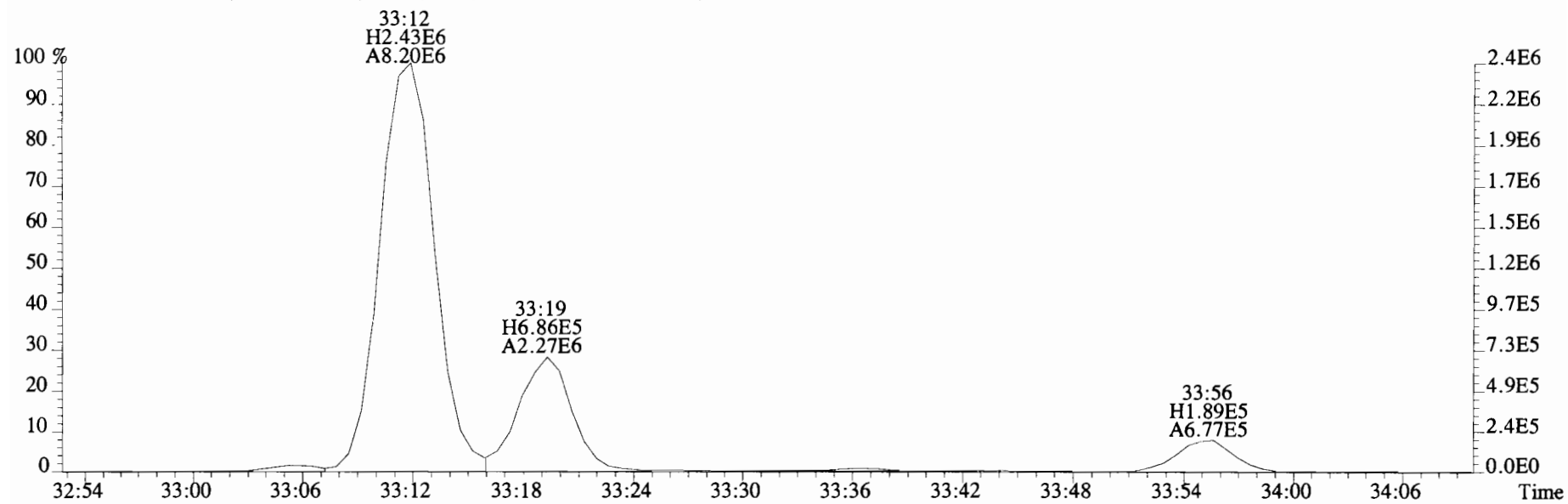
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



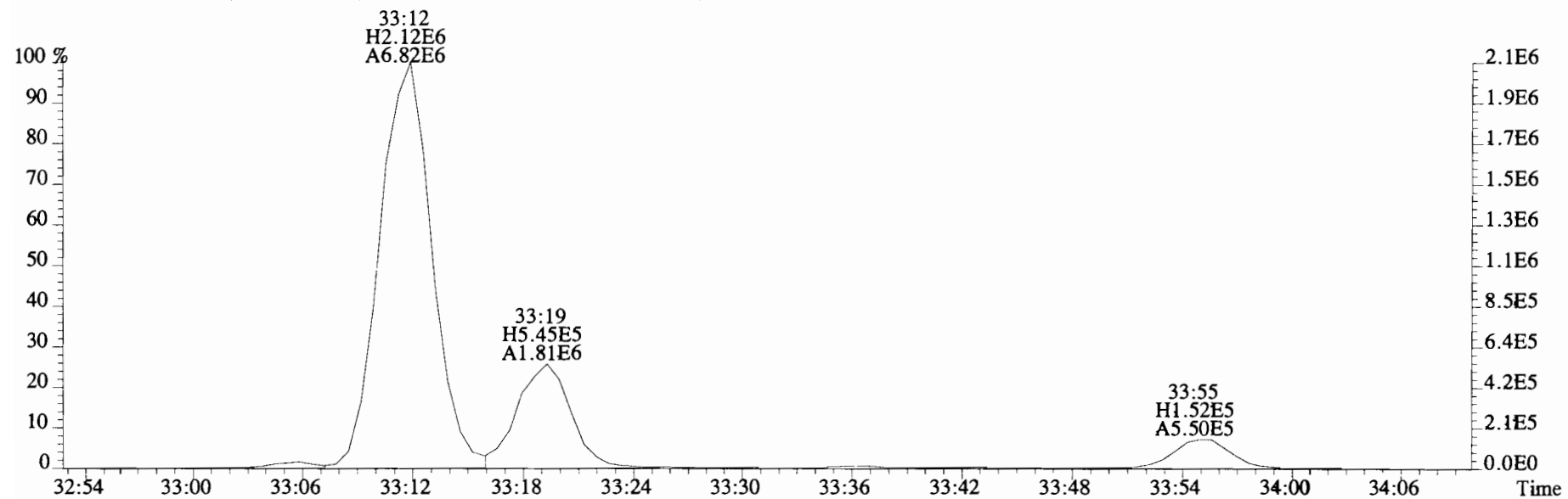
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 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
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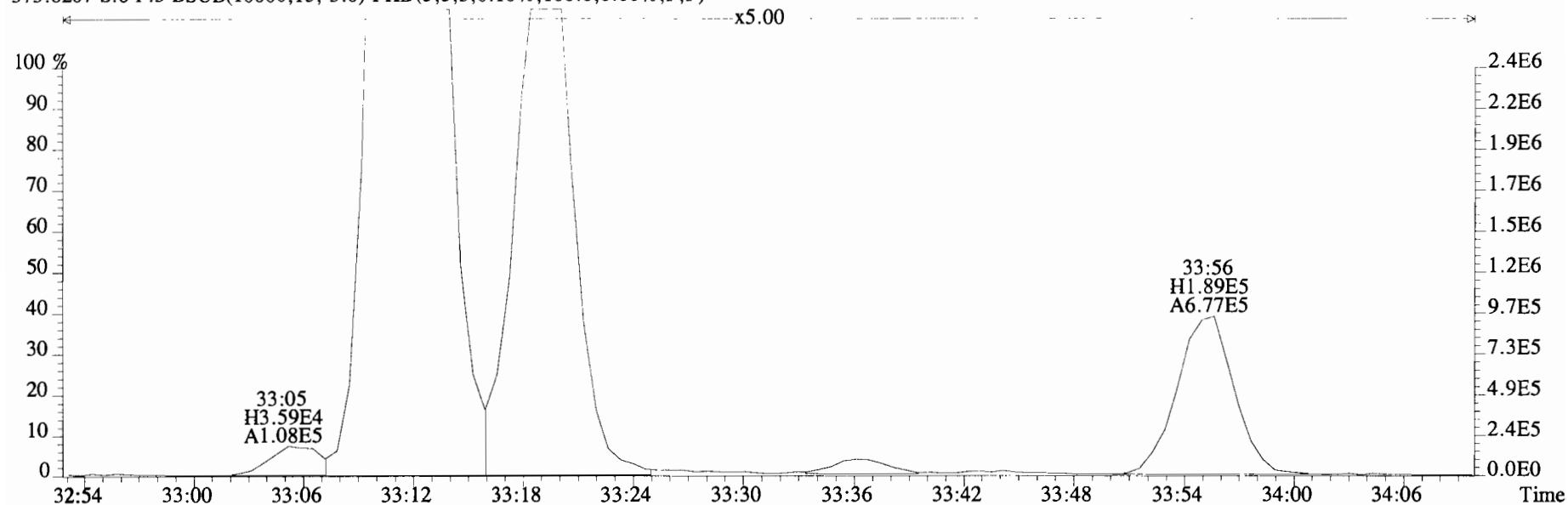
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



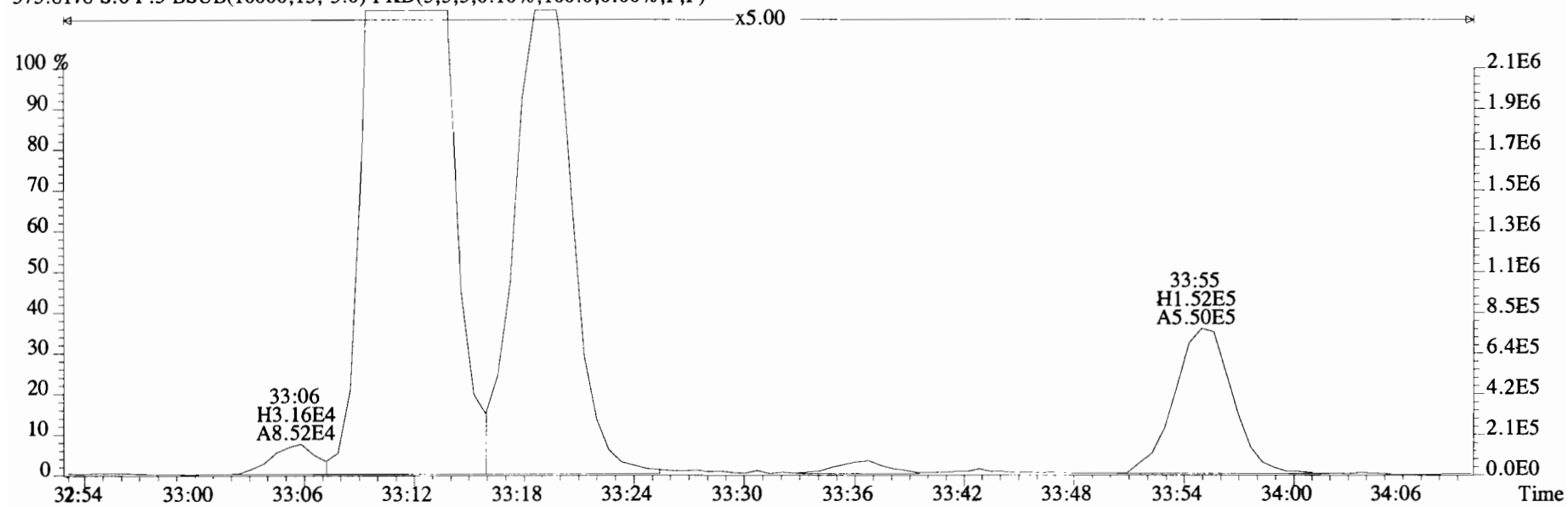
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



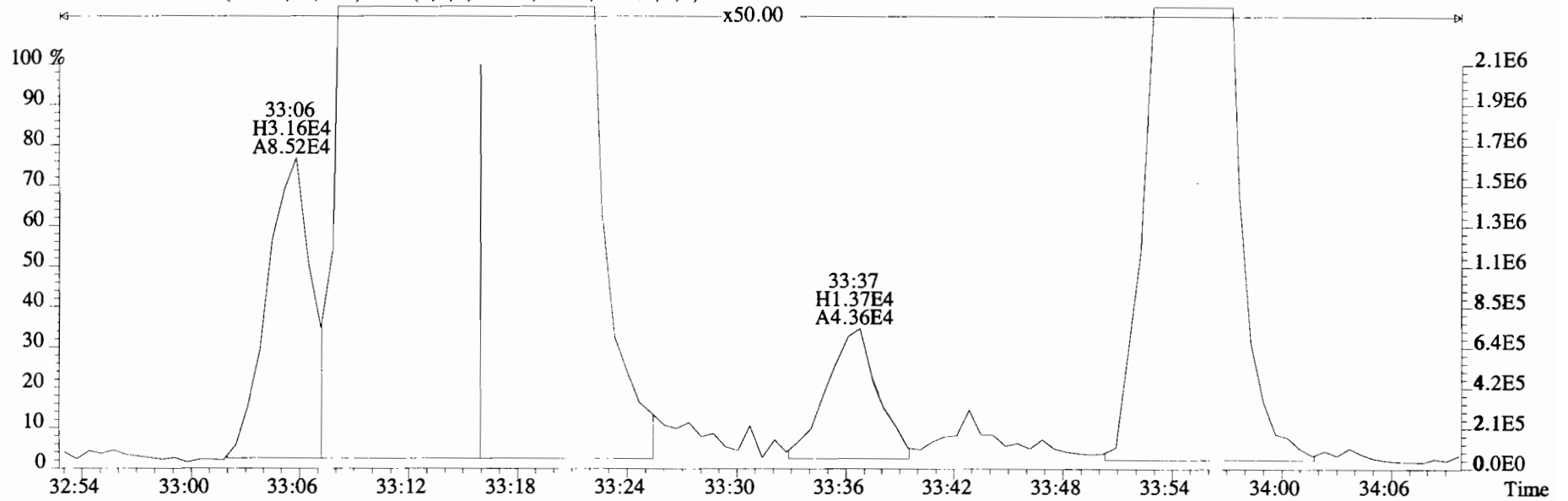
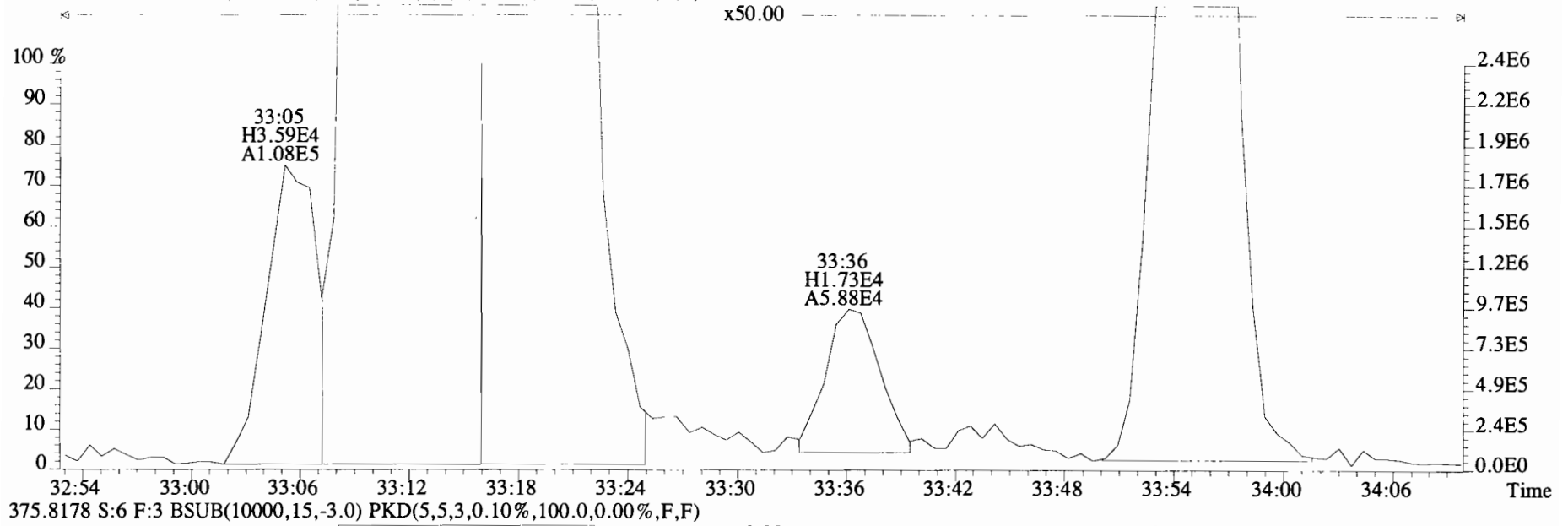
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



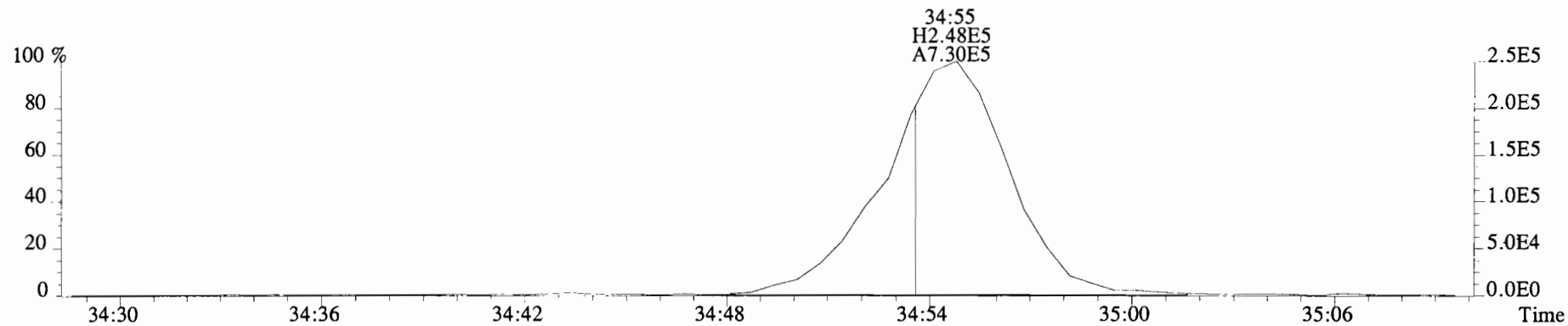
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



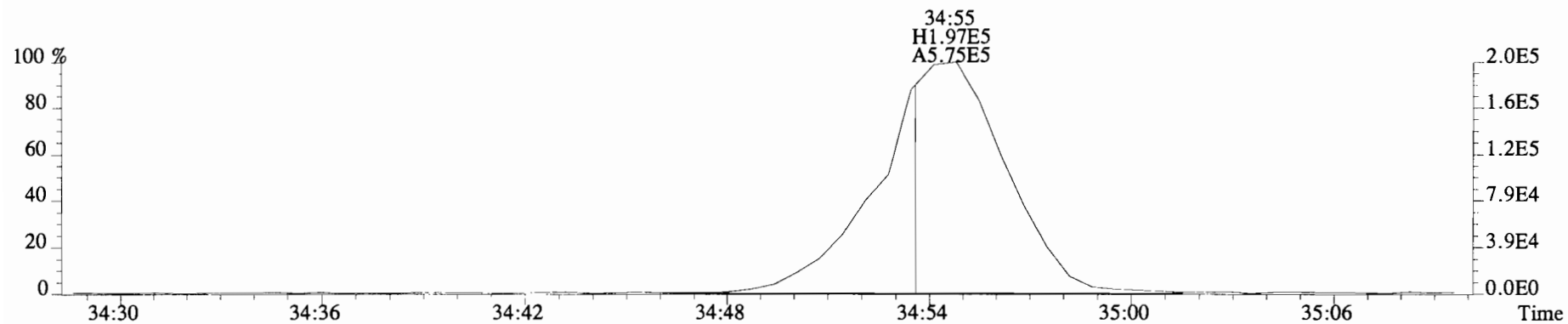
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



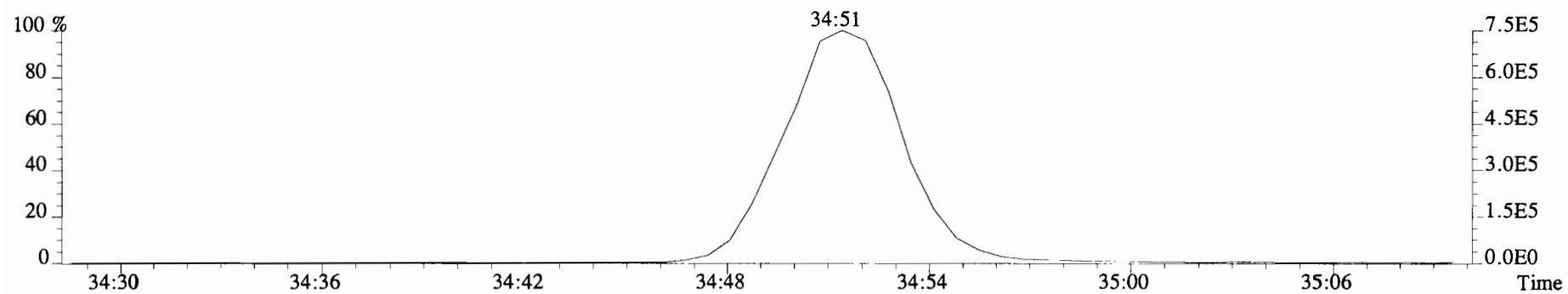
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



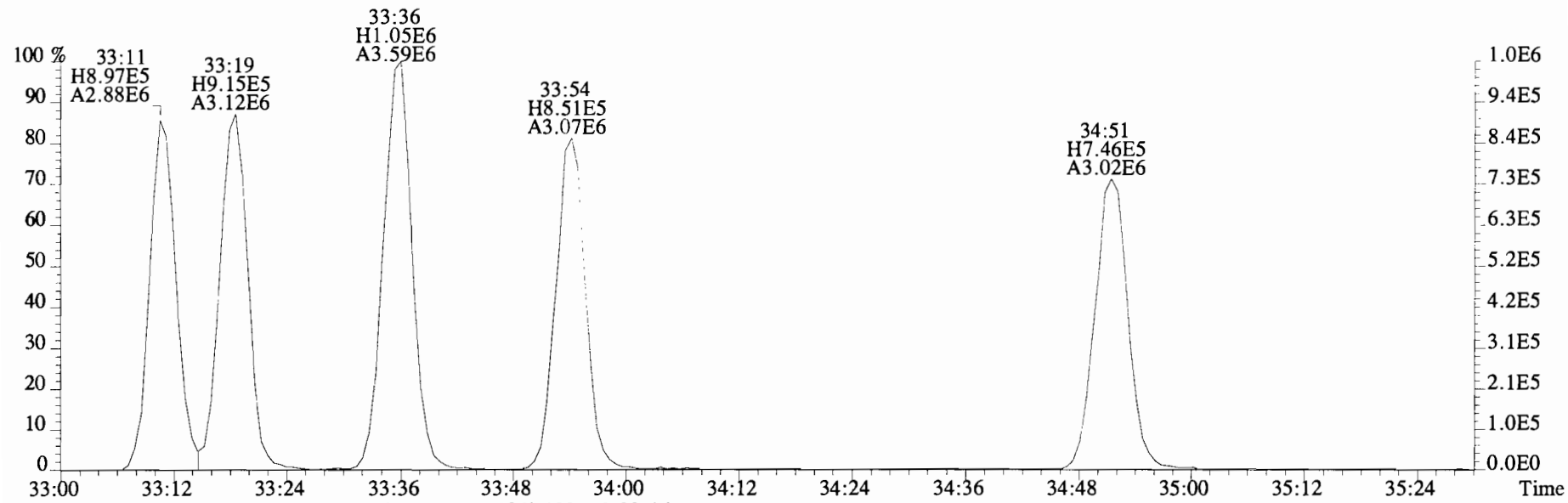
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



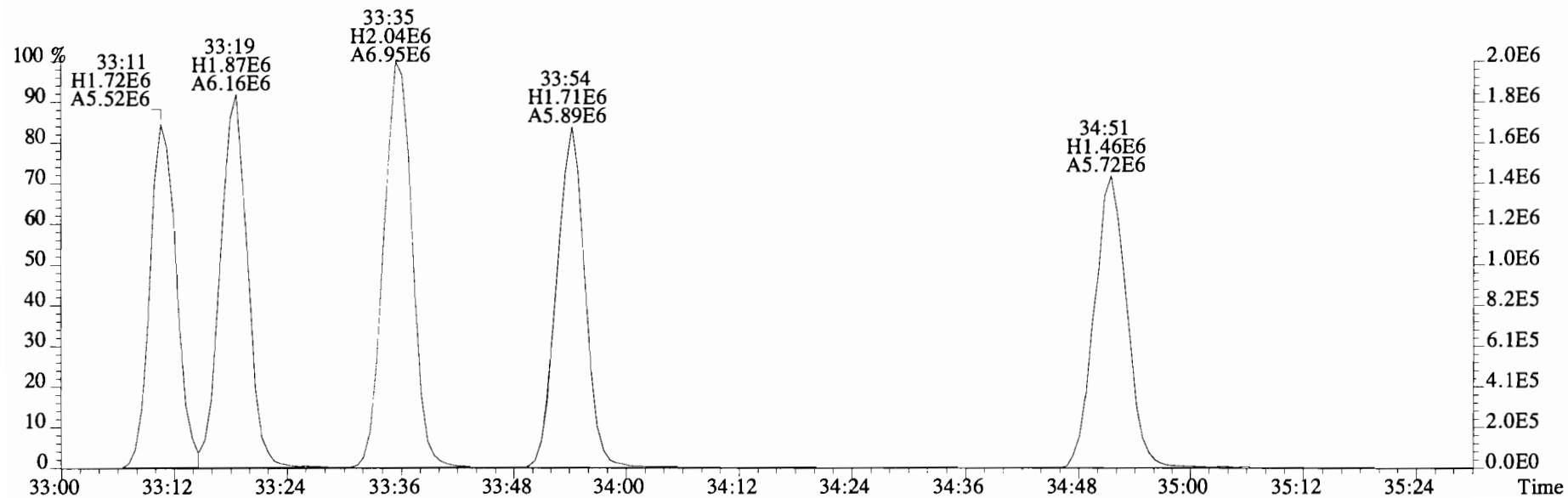
383.8639 S:6 F:3



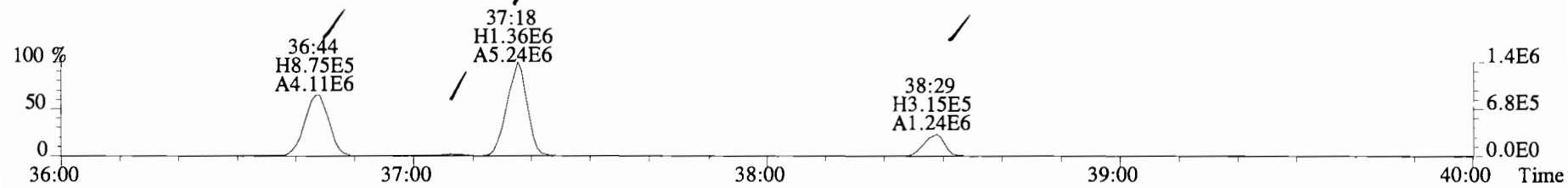
File:191031D2 #1-384 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



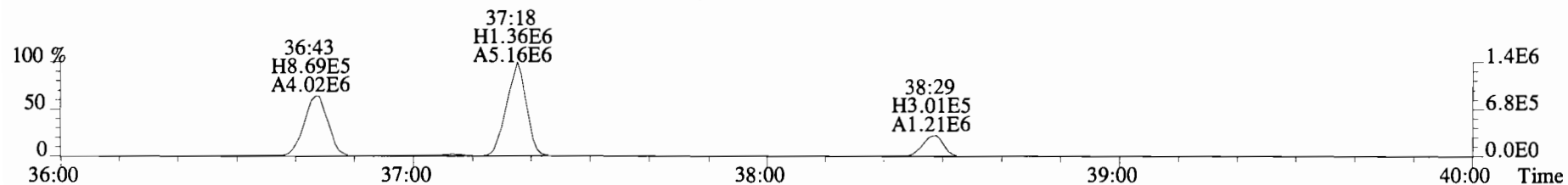
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



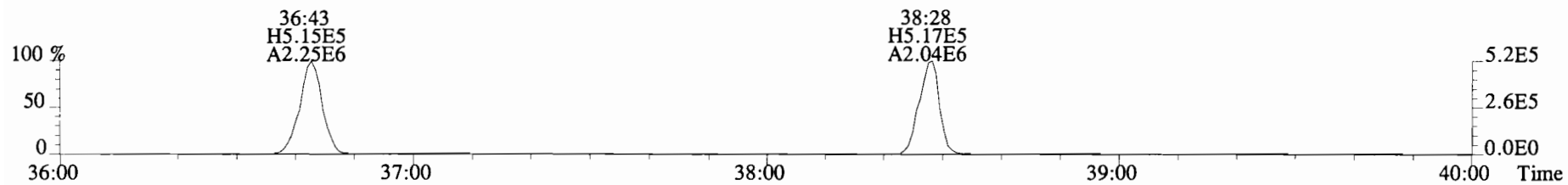
File:191031D2 #1-356 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



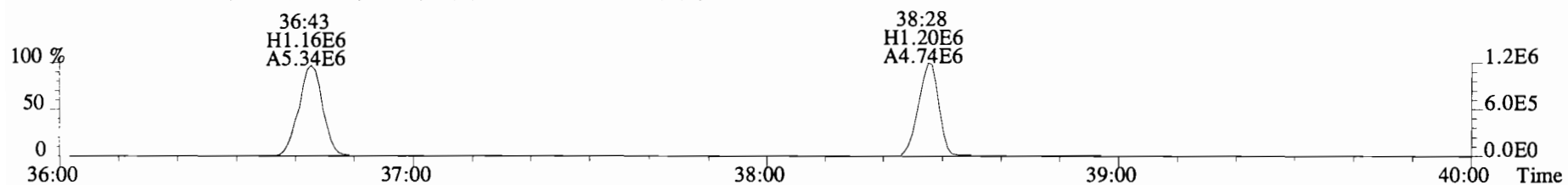
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



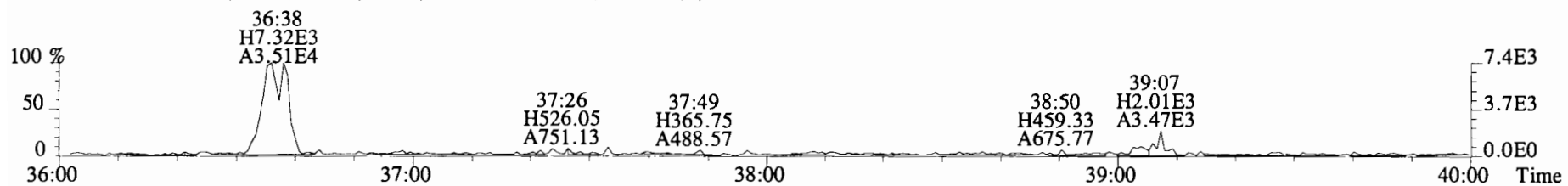
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



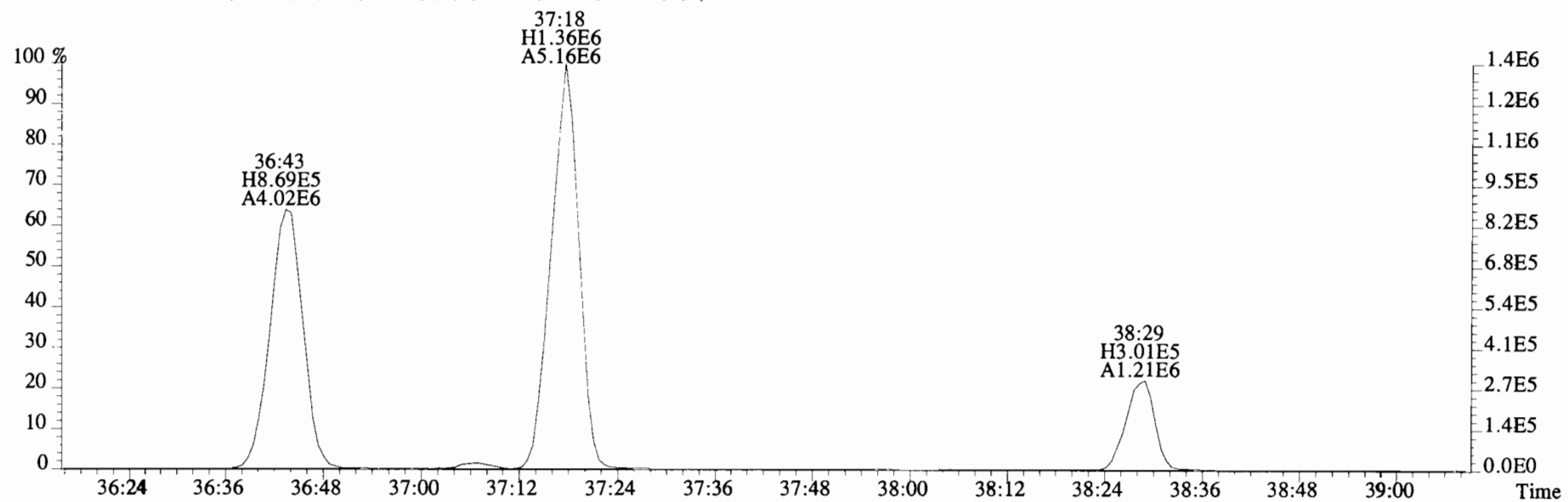
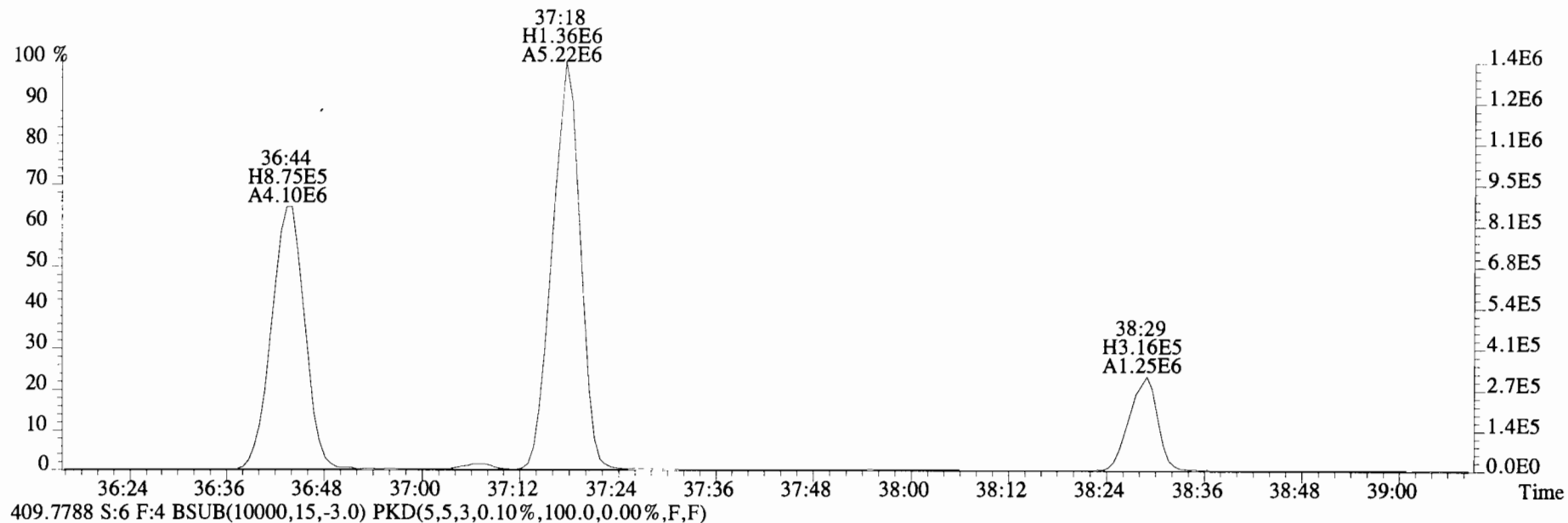
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



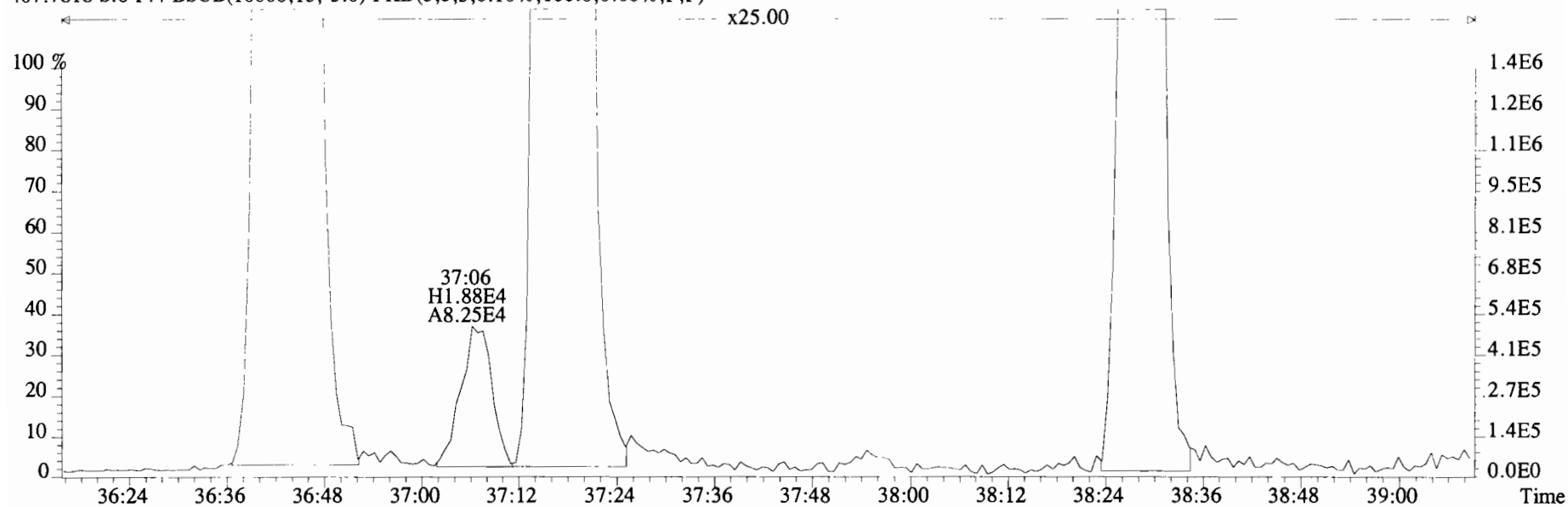
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



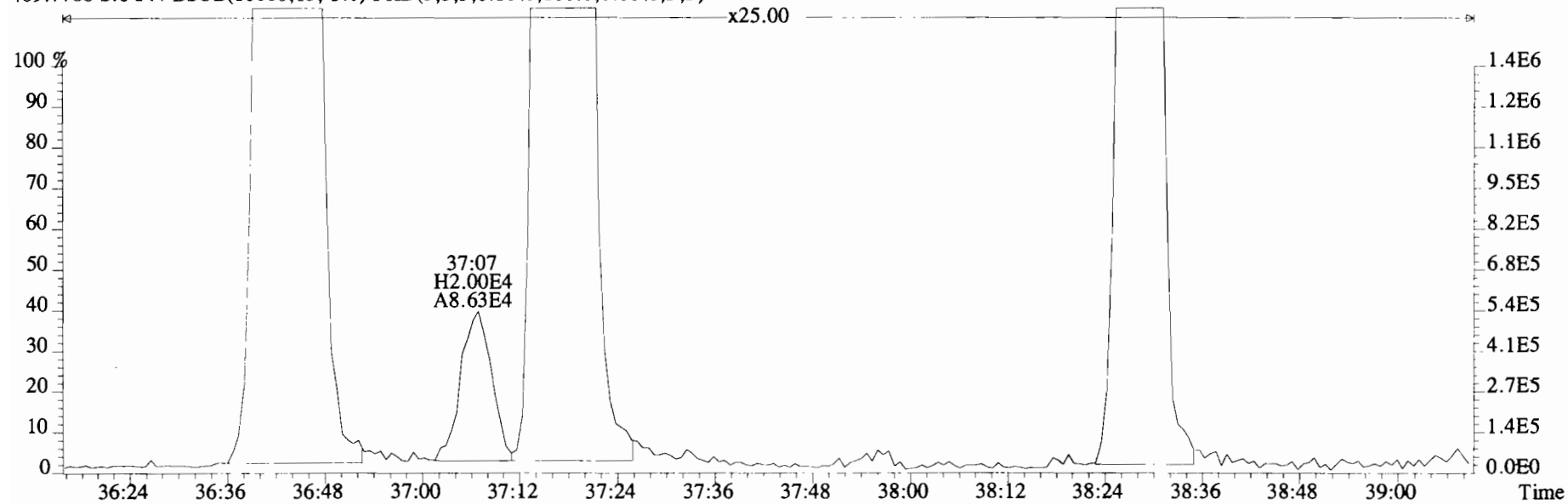
File:191031D2 #1-356 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



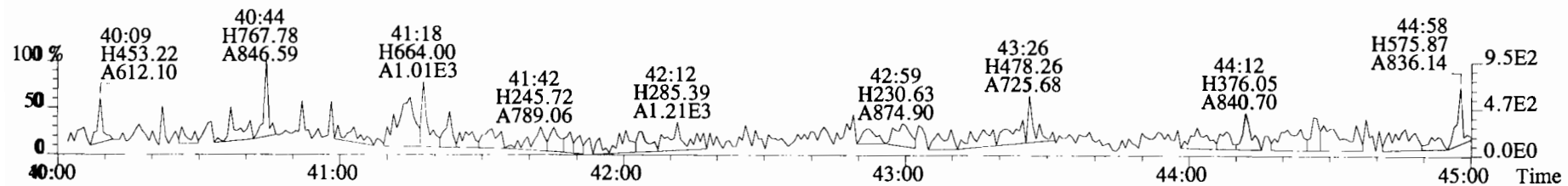
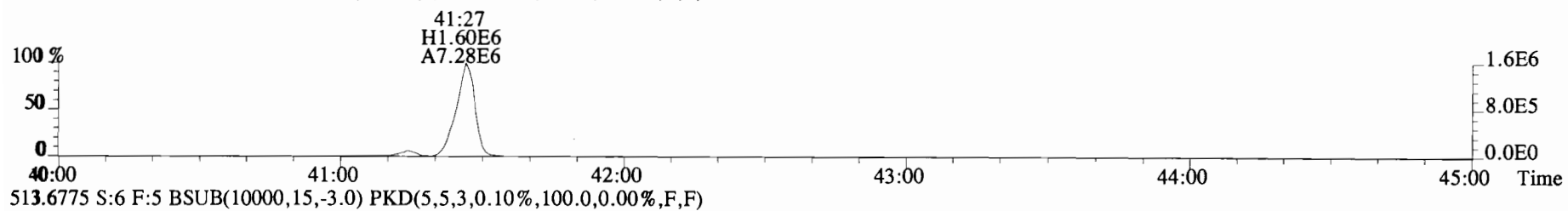
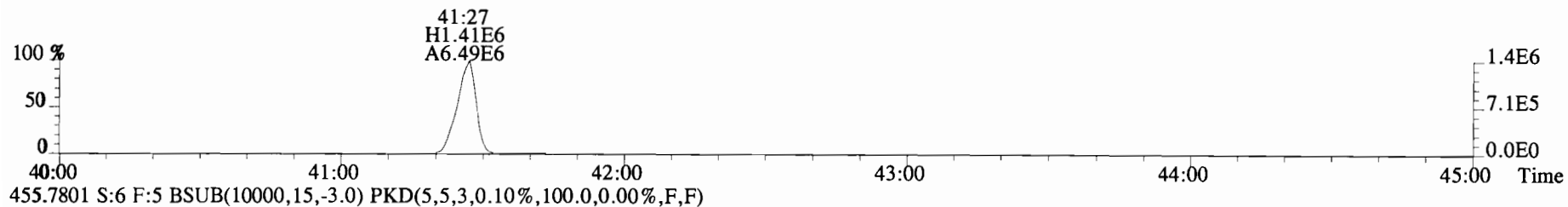
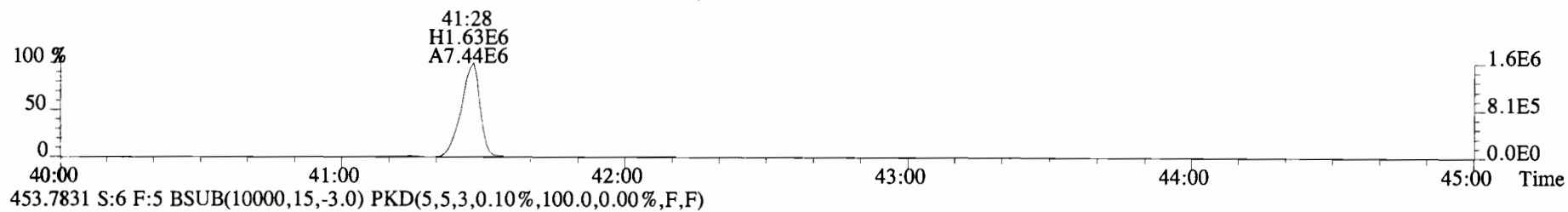
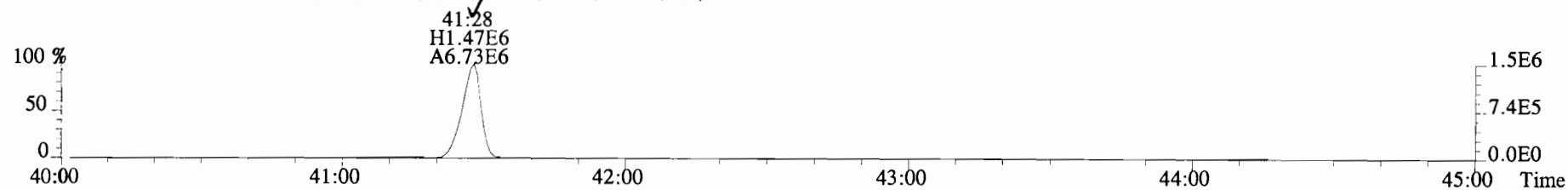
File:191031D2 #1-356 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



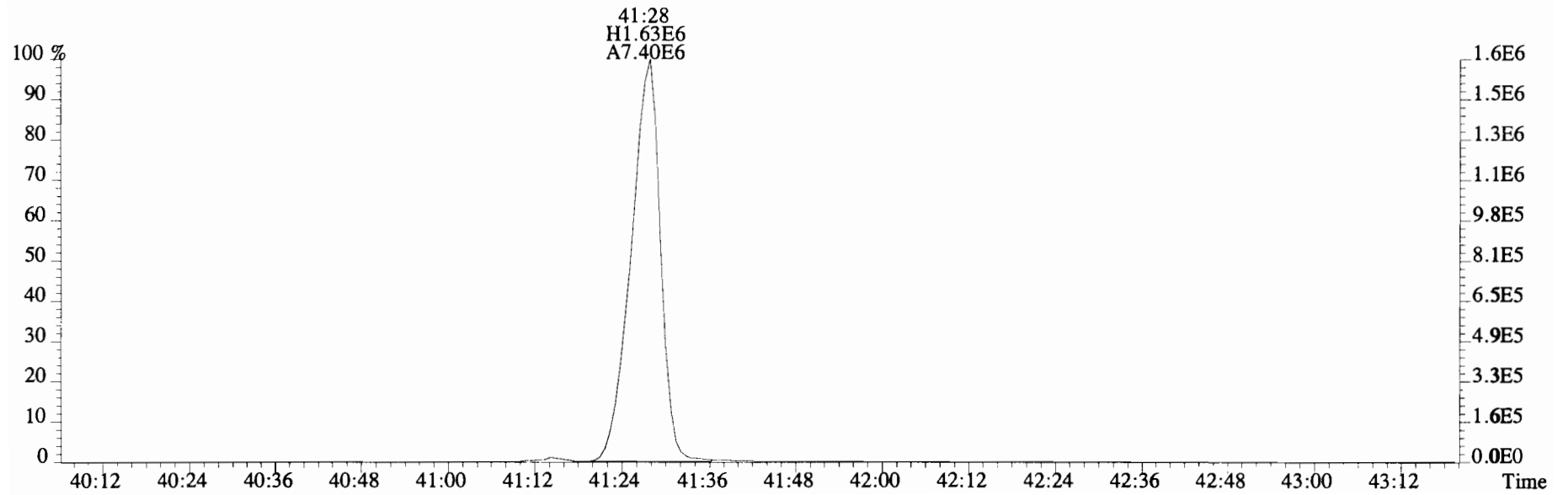
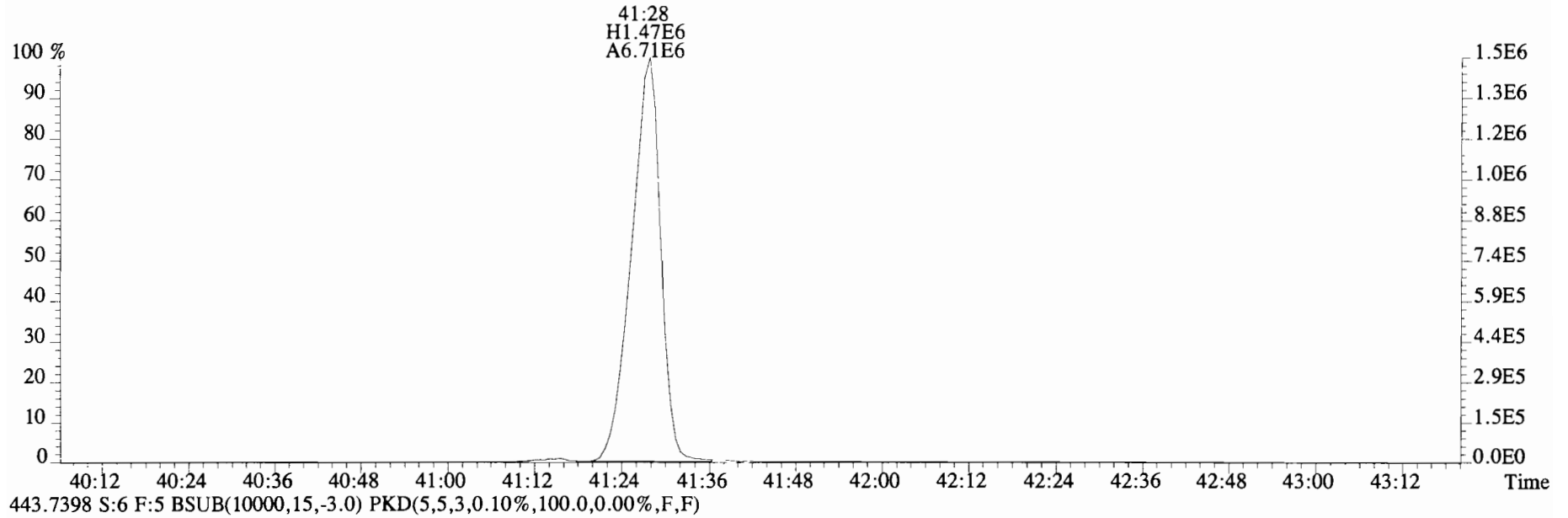
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 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)



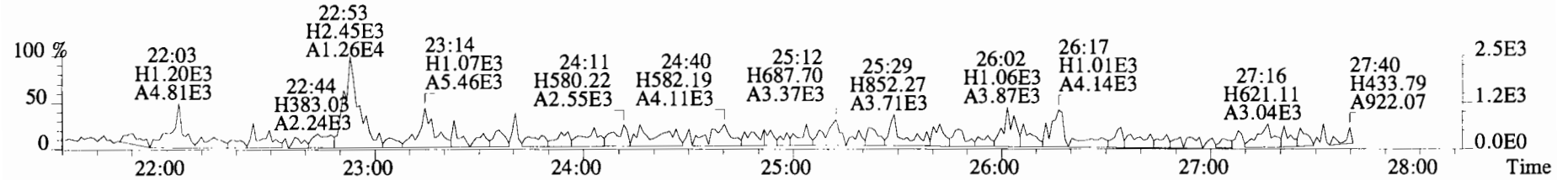
File:191031D2 #1-432 Acq: 1-NOV-2019 03:42:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1 PDI-082SC-B-02-04-191002 17.21 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



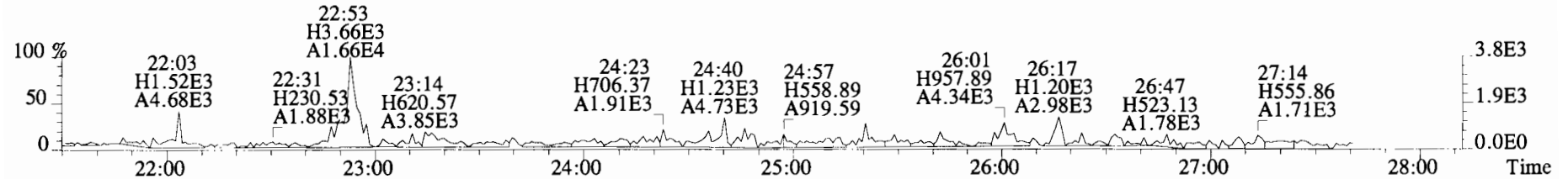
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotF η	*	*	2.5	*	*	Total Tetra-Dioxins	*	*	*	*	*
1,2,3,7,8-PeCDD	*	* n	0.90	NotF η	*	*	2.5	*	*	Total Penta-Dioxins	*	*	*	*	*
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF η	*	*	2.5	*	*	Total Hexa-Dioxins	*	*	*	*	*
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF η	*	*	2.5	*	*	Total Hepta-Dioxins	*	*	*	*	*
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF η	*	*	2.5	*	*	Total Tetra-Furans	*	*	*	*	*
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotF η	*	*	2.5	*	*	Total Penta-Furans	0.0000	0.0000	*	*	*
OCDD	1.68e+07	0.87 y	0.96	41:14	5831.1	*	2.5	*	*	Total Hexa-Furans	*	*	*	*	*
										Total Hepta-Furans	*	*	*	*	*
2,3,7,8-TCDF	*	* n	0.95	NotF η	*	*	2.5	*	*						
1,2,3,7,8-PeCDF	*	* n	0.96	NotF η	*	*	2.5	*	*						
2,3,4,7,8-PeCDF	*	* n	1.01	NotF η	*	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF η	*	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF η	*	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF η	*	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF η	*	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF η	*	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF η	*	*	2.5	*	*						
OCDF	*	* n	0.95	NotF η	*	*	2.5	*	*						
										Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.18e+06	0.81 y	1.10	26:15	183.65				92.1					
IS	13C-1,2,3,7,8-PeCDD	9.10e+05	0.63 y	0.88	30:45	175.46				88.0					
IS	13C-1,2,3,4,7,8-HxCDD	7.44e+05	1.25 y	0.64	34:05	193.12				96.9					
IS	13C-1,2,3,6,7,8-HxCDD	8.72e+05	1.33 y	0.86	34:11	169.86				85.2					
IS	13C-1,2,3,7,8,9-HxCDD	8.59e+05	1.26 y	0.81	34:29	177.36				89.0					
IS	13C-1,2,3,4,6,7,8-HpCDD	7.34e+05	1.07 y	0.65	37:56	186.93				93.8					
IS	13C-OCDD	1.20e+06	0.87 y	0.58	41:14	344.10				86.3					
IS	13C-2,3,7,8-TCDF	1.96e+06	0.79 y	1.03	25:28	190.53				95.6					
IS	13C-1,2,3,7,8-PeCDF	1.38e+06	1.65 y	0.85	29:35	162.33				81.4					
IS	13C-2,3,4,7,8-PeCDF	1.36e+06	1.69 y	0.85	30:28	161.56				81.0					
IS	13C-1,2,3,4,7,8-HxCDF	9.80e+05	0.52 y	0.83	33:11	196.22				98.4					
IS	13C-1,2,3,6,7,8-HxCDF	1.11e+06	0.55 y	1.03	33:19	178.60				89.6					
IS	13C-2,3,4,6,7,8-HxCDF	1.02e+06	0.50 y	0.95	33:55	178.70				89.6					
IS	13C-1,2,3,7,8,9-HxCDF	9.26e+05	0.52 y	0.83	34:52	186.39				93.5					
IS	13C-1,2,3,4,6,7,8-HpCDF	7.13e+05	0.44 y	0.76	36:43	156.83				78.7					
IS	13C-1,2,3,4,7,8,9-HpCDF	6.51e+05	0.46 y	0.58	38:29	186.49				93.6					
IS	13C-OCDF	1.37e+06	0.94 y	0.69	41:27	330.68				82.9					
C/Up	37C1-2,3,7,8-TCDD	5.14e+05		1.20	26:16	72.893				91.4					
RS/RT	13C-1,2,3,4-TCDD	1.17e+06	0.81 y	1.00	25:42	199.34									
RS	13C-1,2,3,4-TCDF	1.99e+06	0.83 y	1.00	24:16	199.34									
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.20e+06	0.53 y	1.00	33:36	199.34									

Integrations
 by DB
 Analyst: DB
 Reviewed
 by CT
 Analyst: CT
 Date: 11/6/19
 Date: 12/04/19

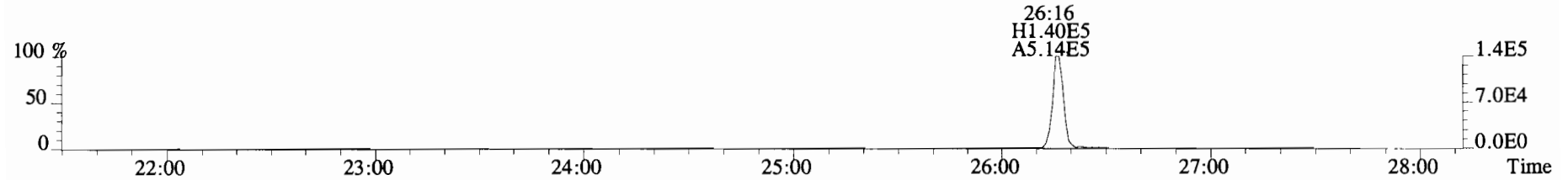
File:191106D1 #1-493 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



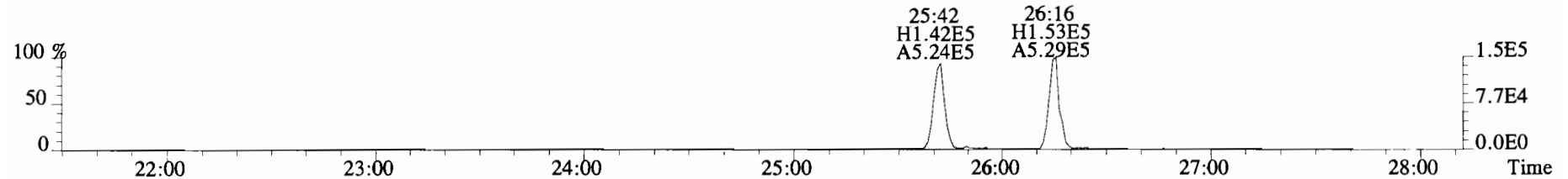
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



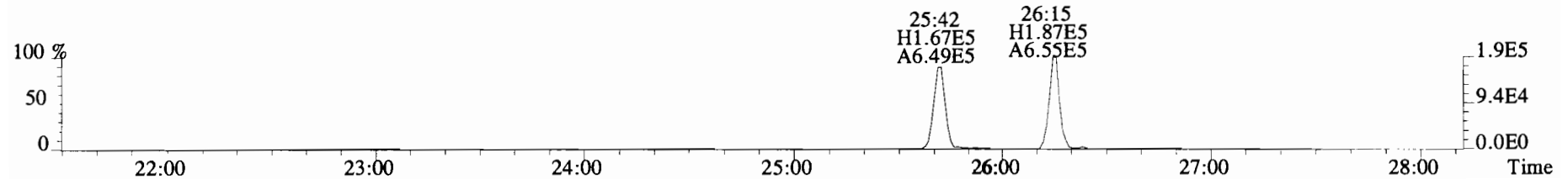
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



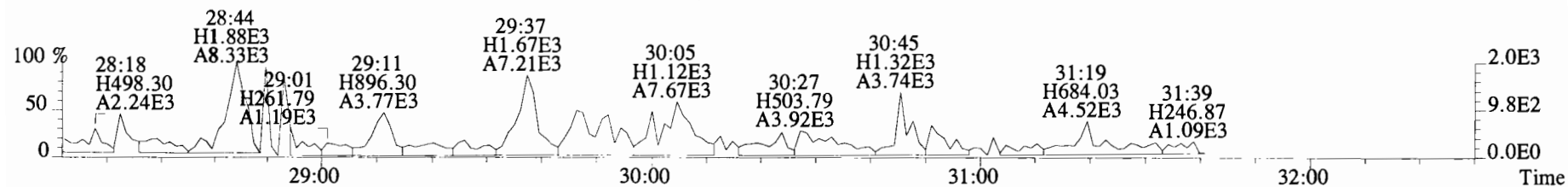
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



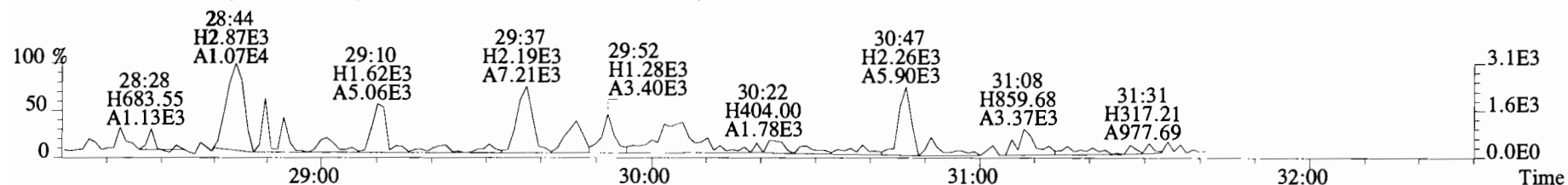
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



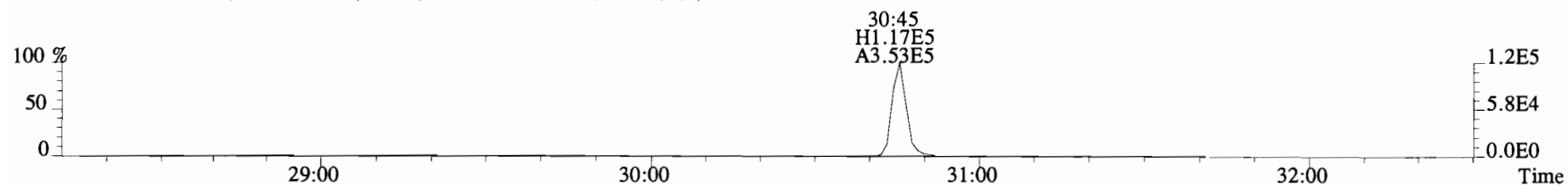
File:191106D1 #1-211 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
 353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



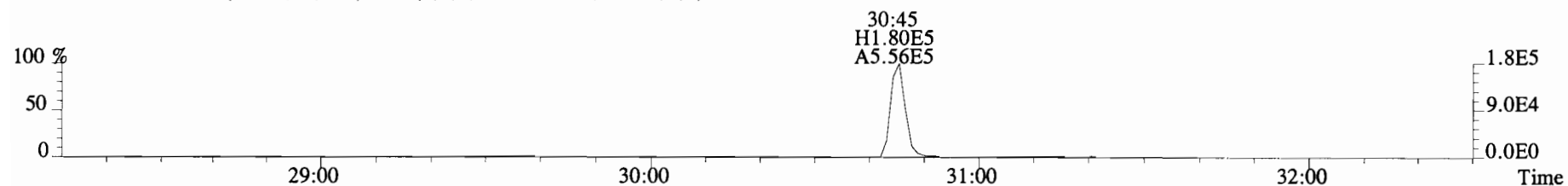
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



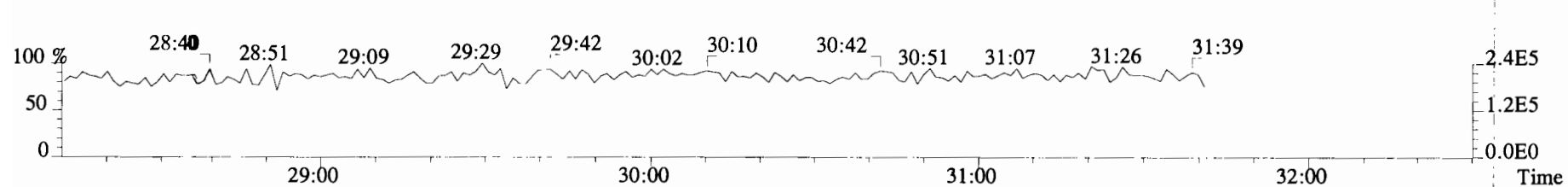
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



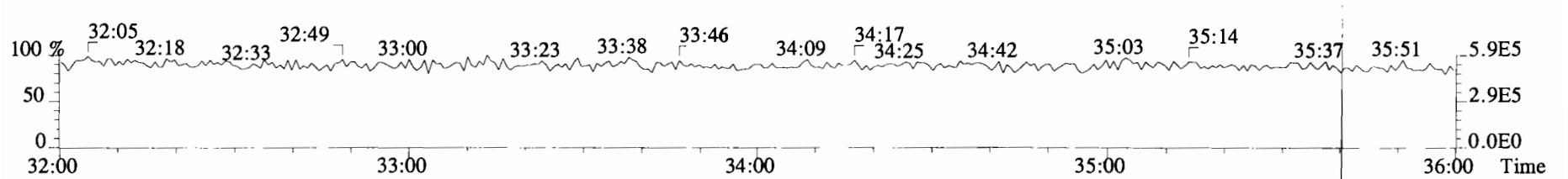
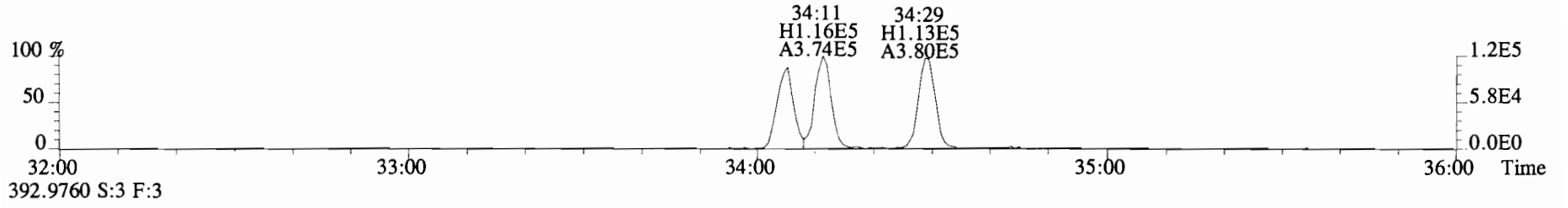
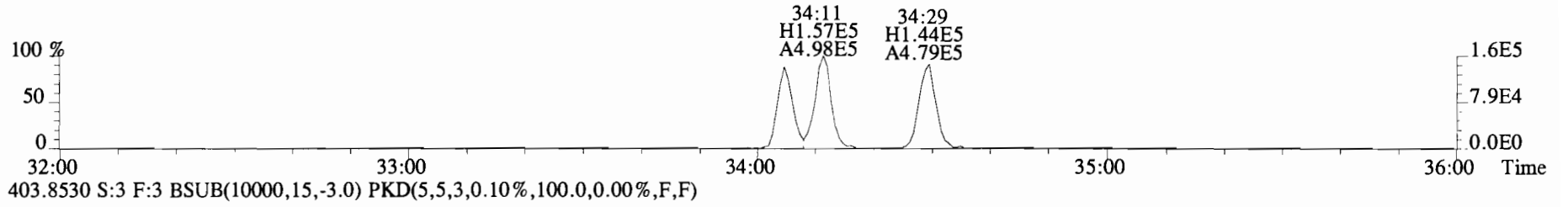
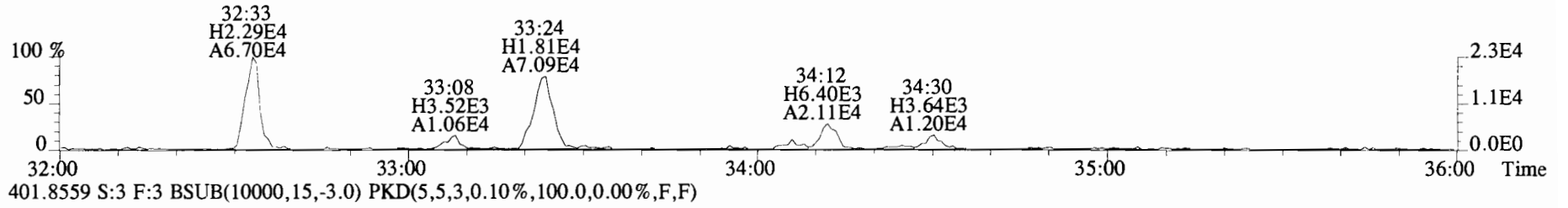
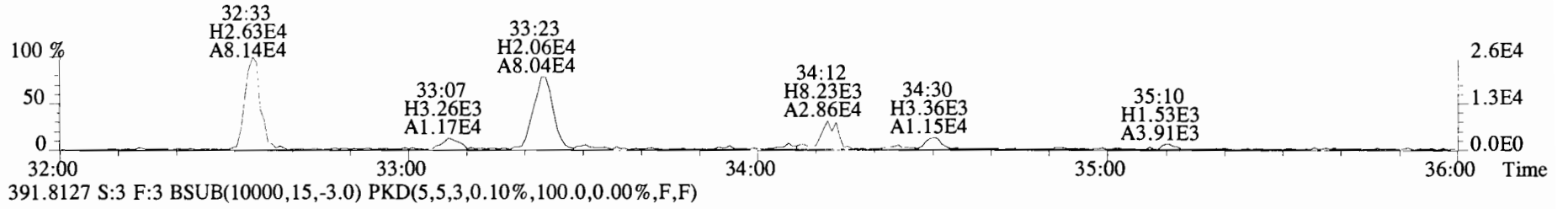
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



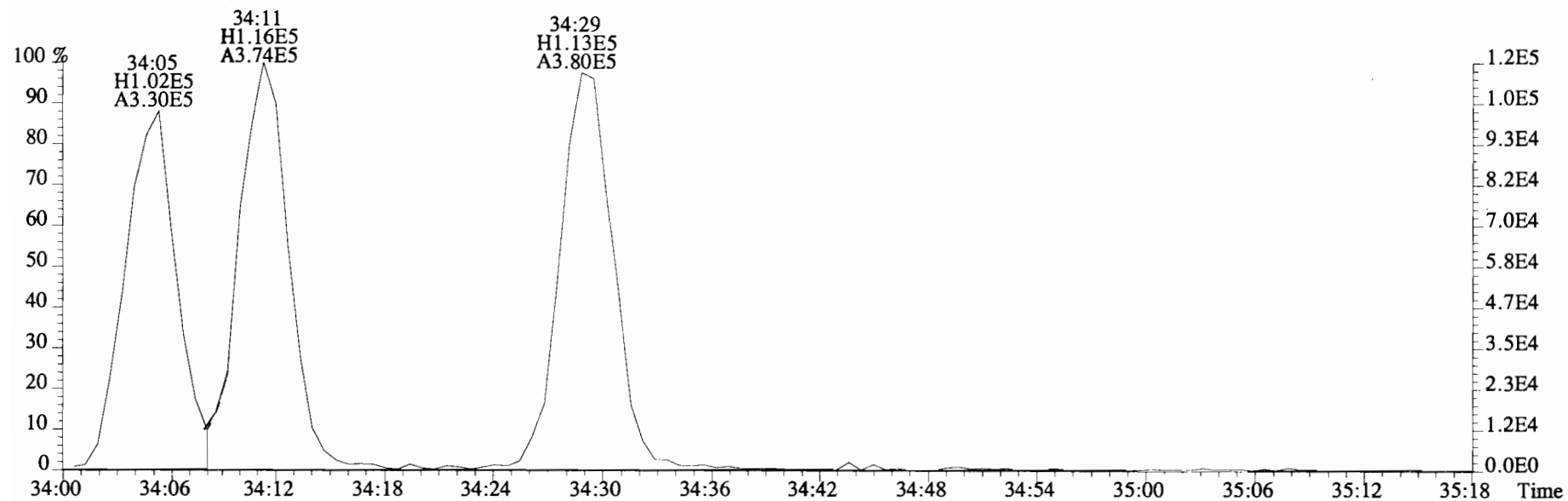
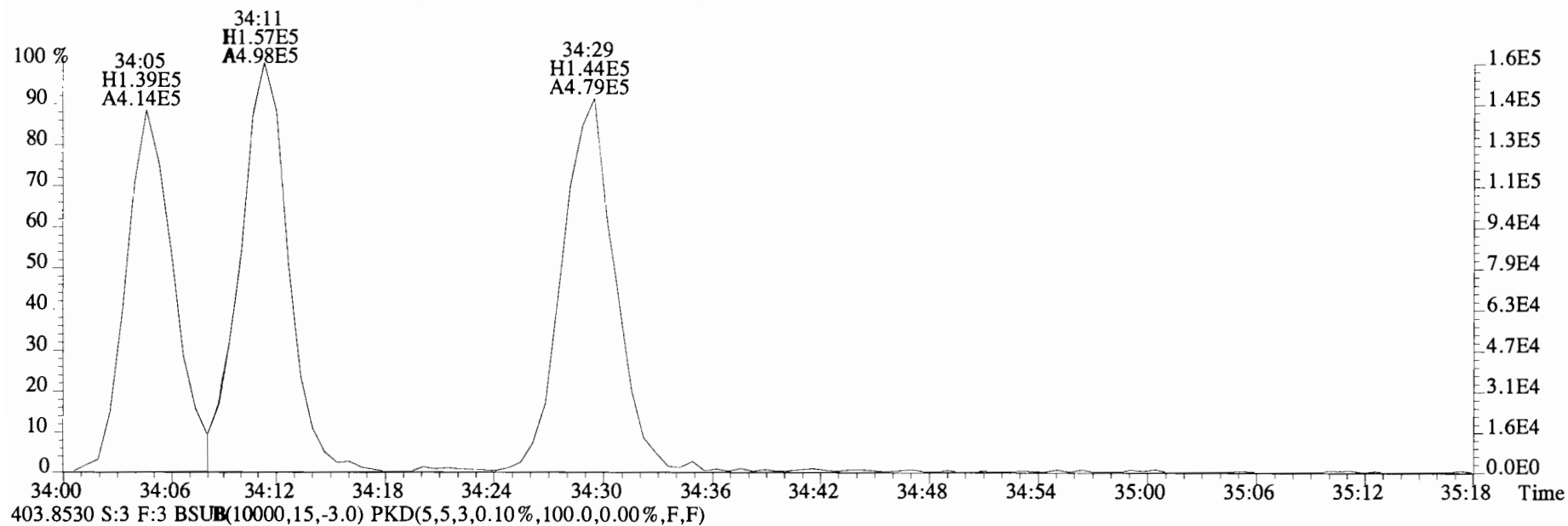
366.9792 S:3 F:2



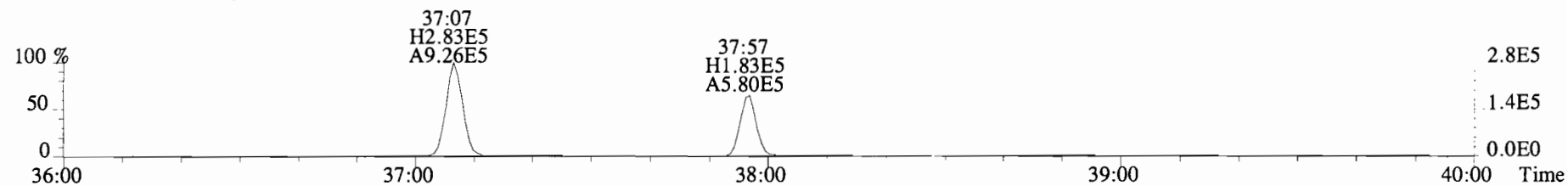
File:191106D1 #1-384 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCD£
 389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



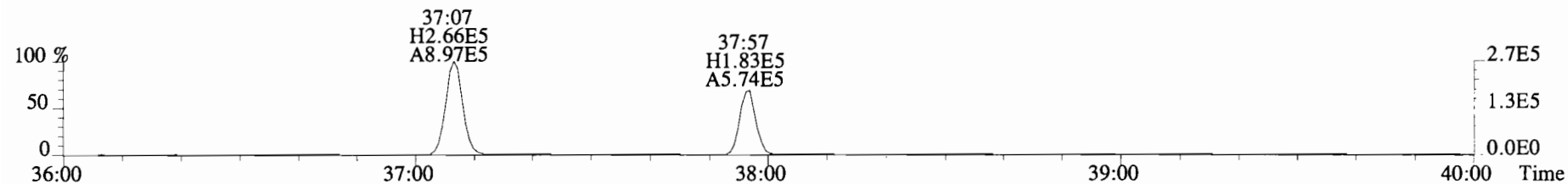
File:191106D1 #1-384 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



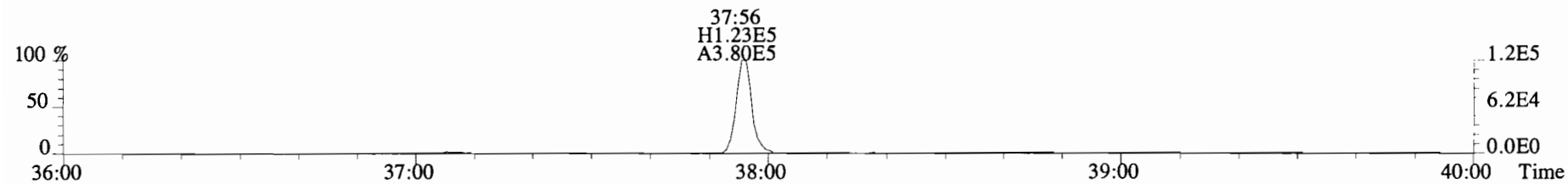
File:191106D1 #1-356 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



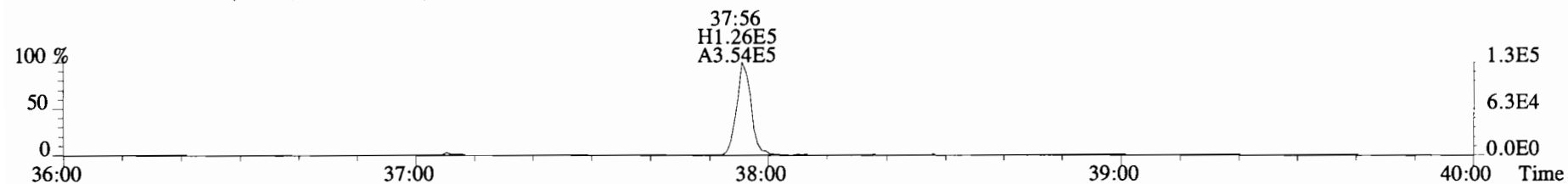
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



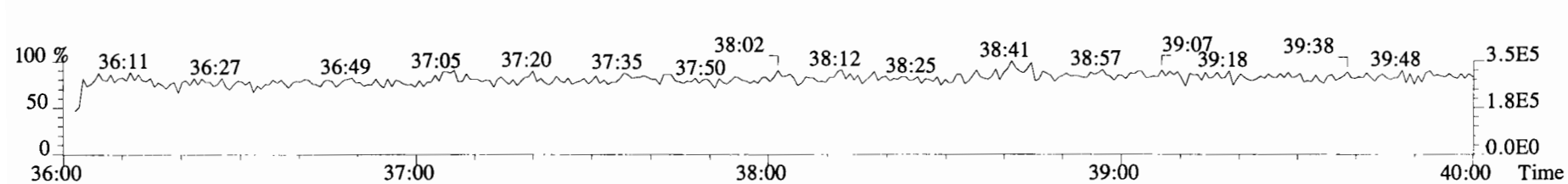
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



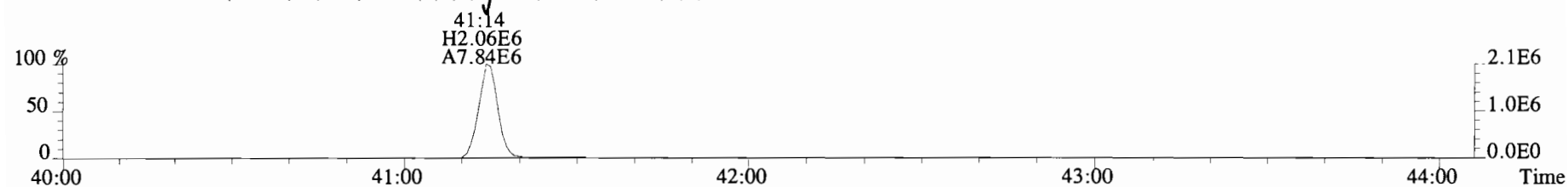
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



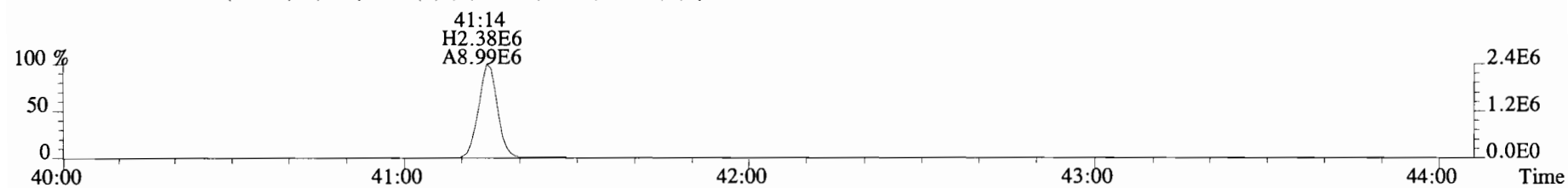
454.9728 S:3 F:4



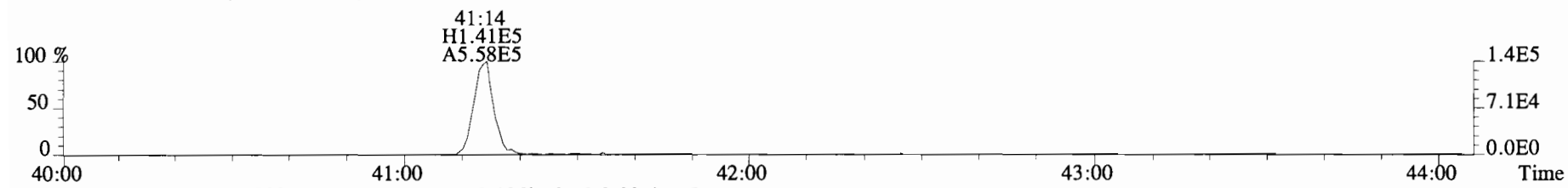
File:191106D1 #1-431 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCD£
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



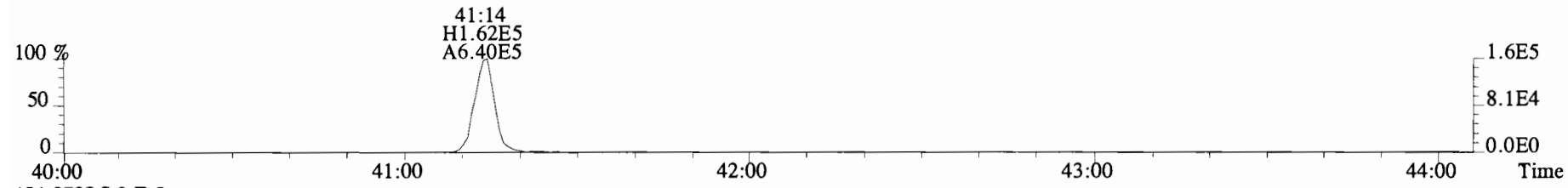
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



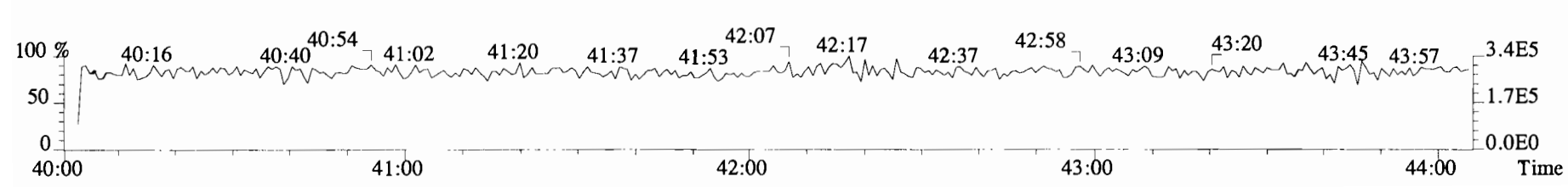
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



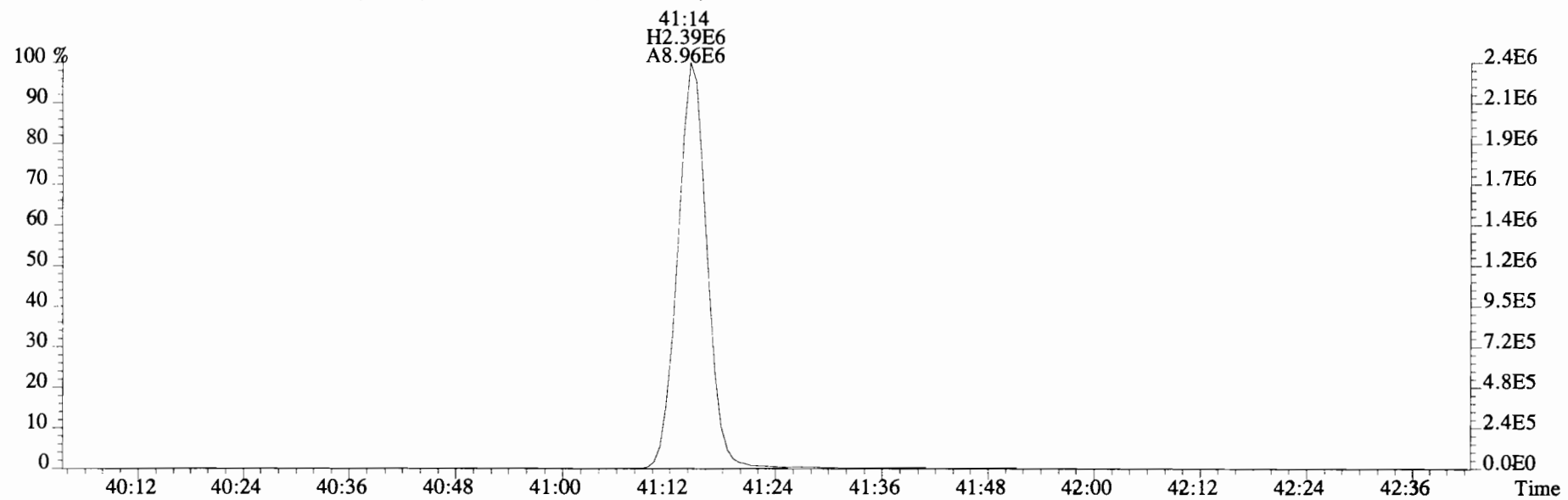
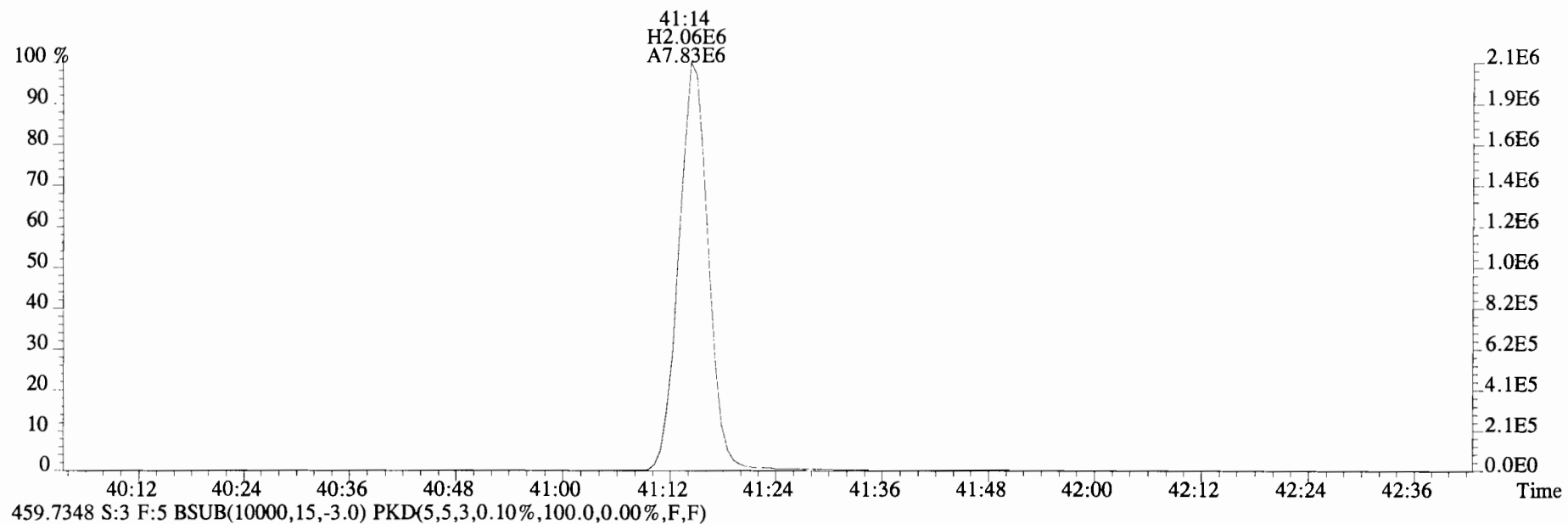
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



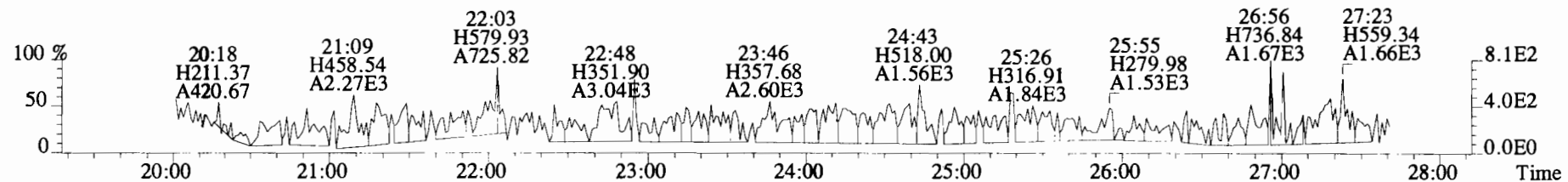
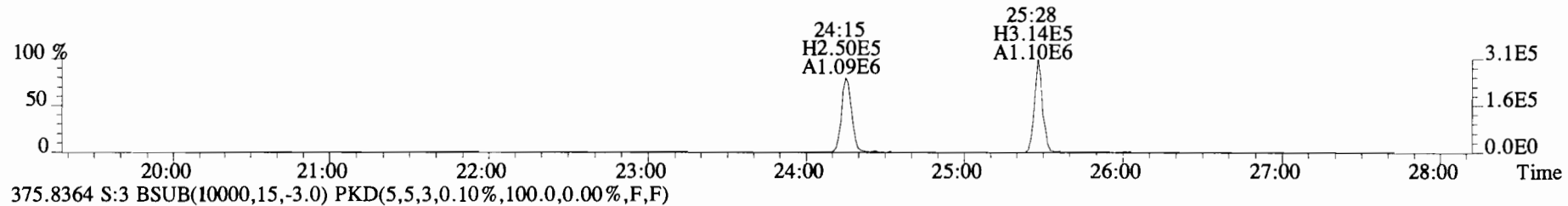
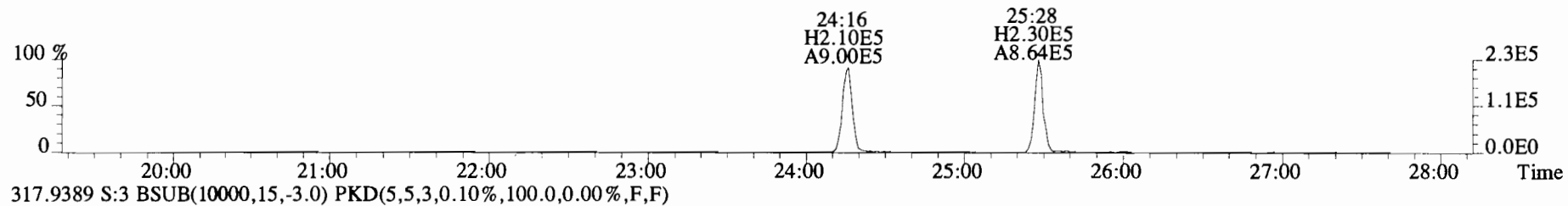
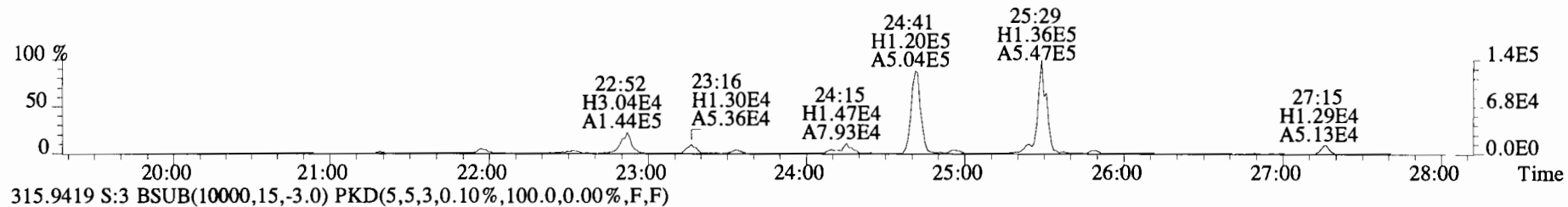
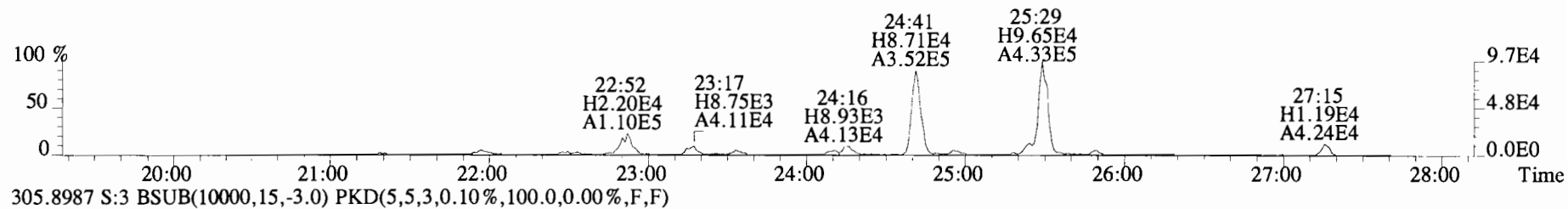
454.9728 S:3 F:5



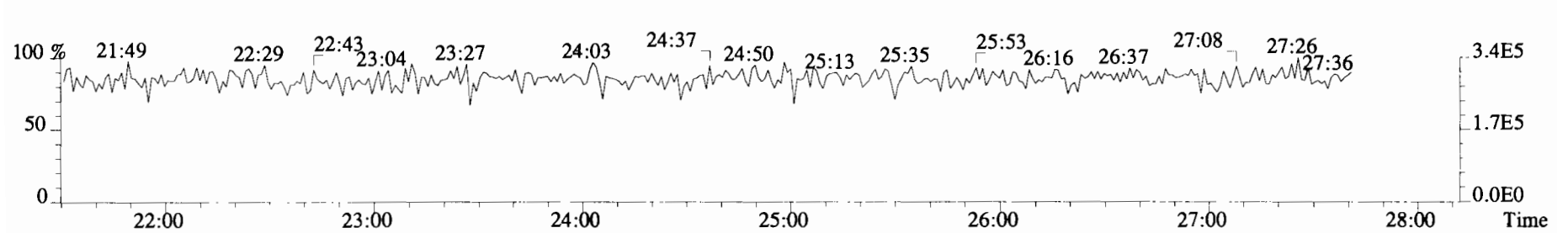
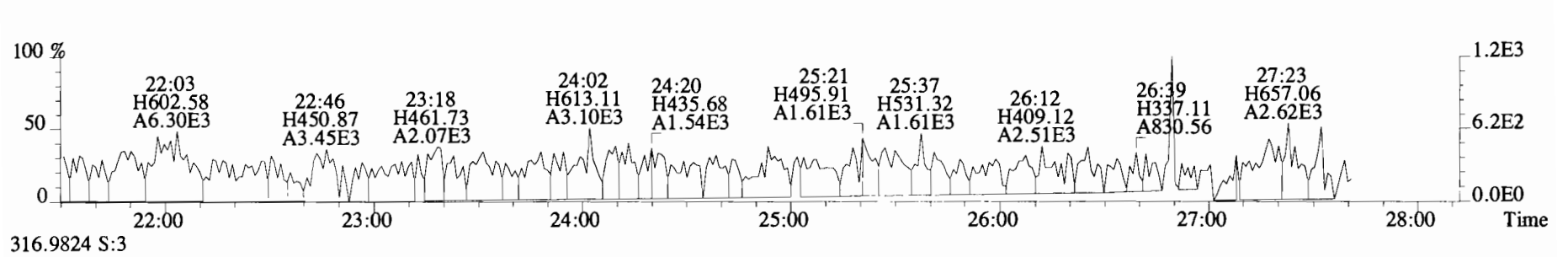
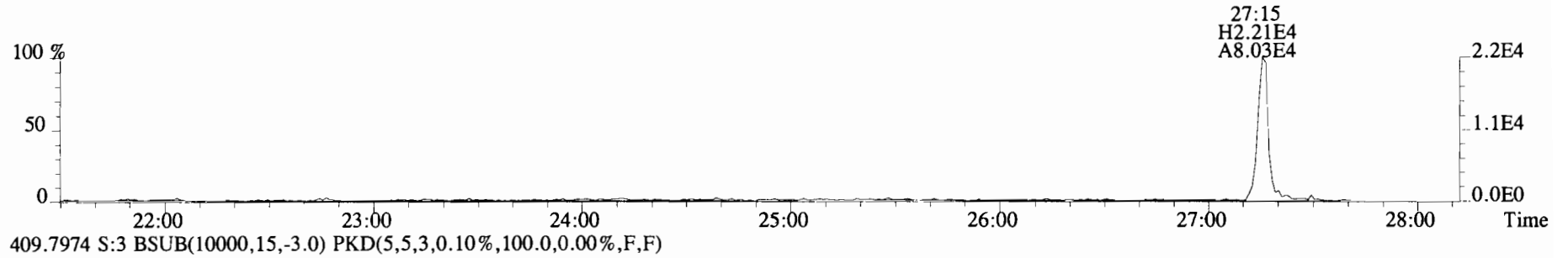
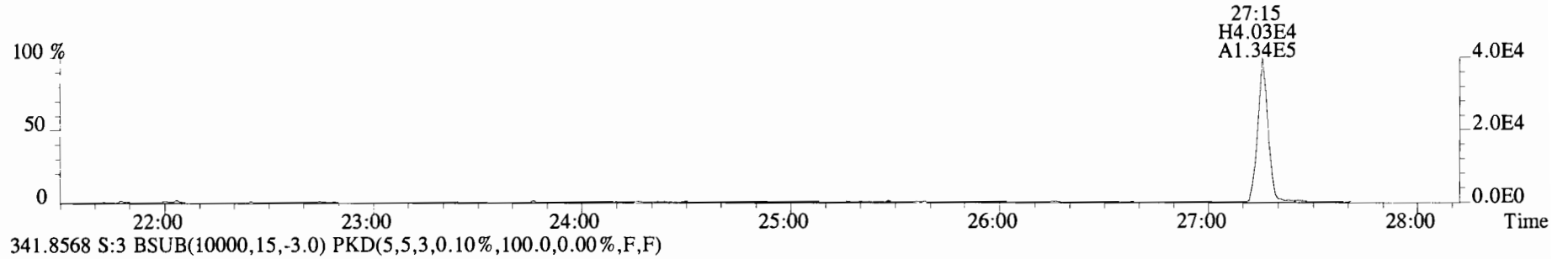
File:191106D1 #1-431 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDF
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



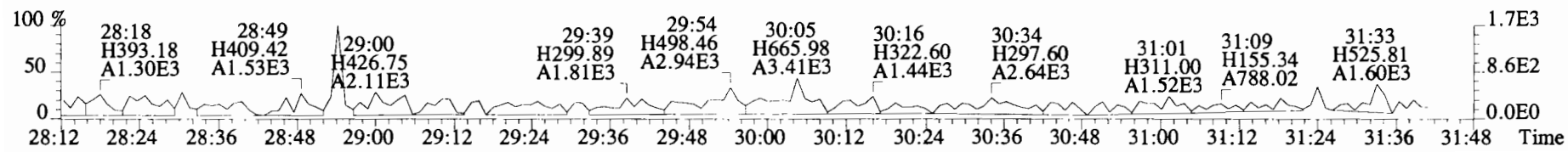
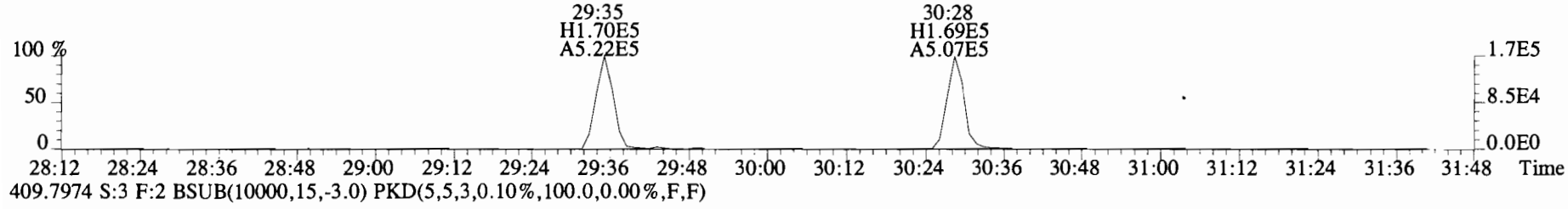
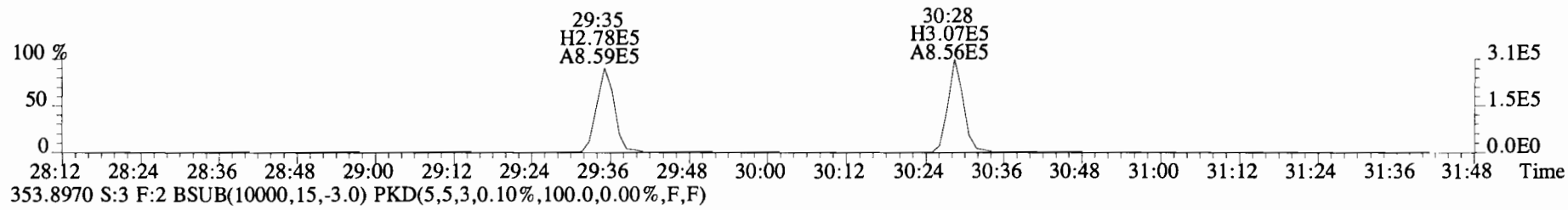
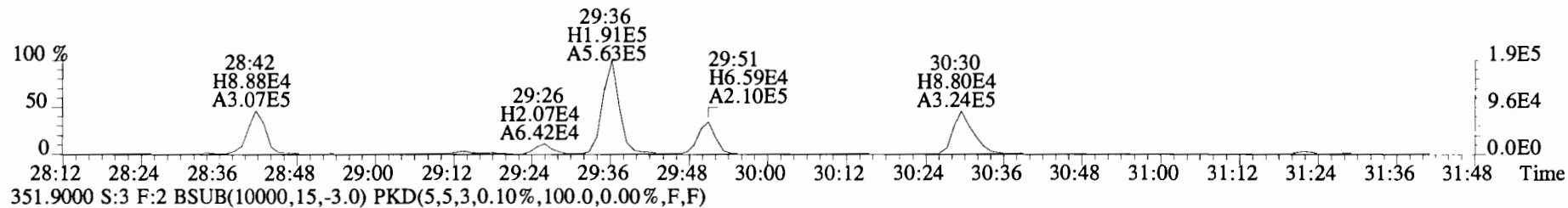
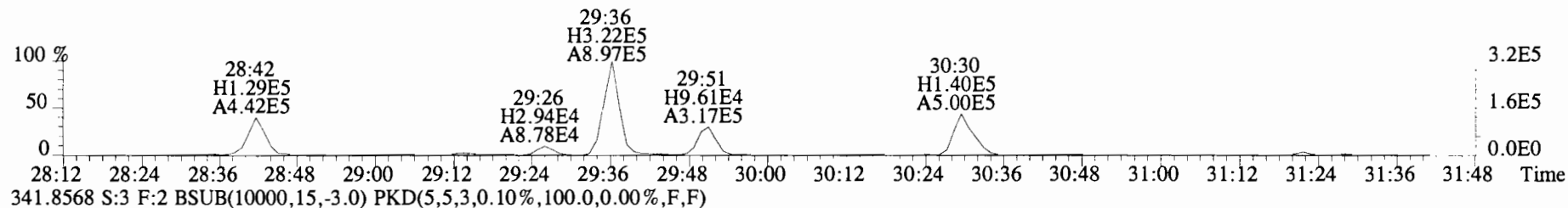
File:191106D1 #1-493 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
 303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



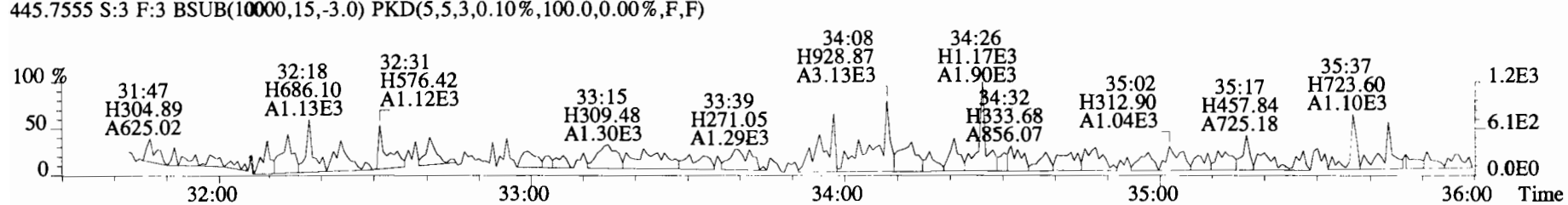
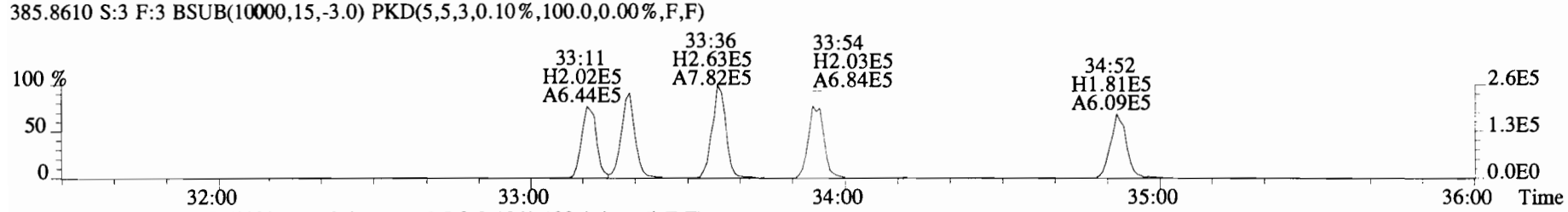
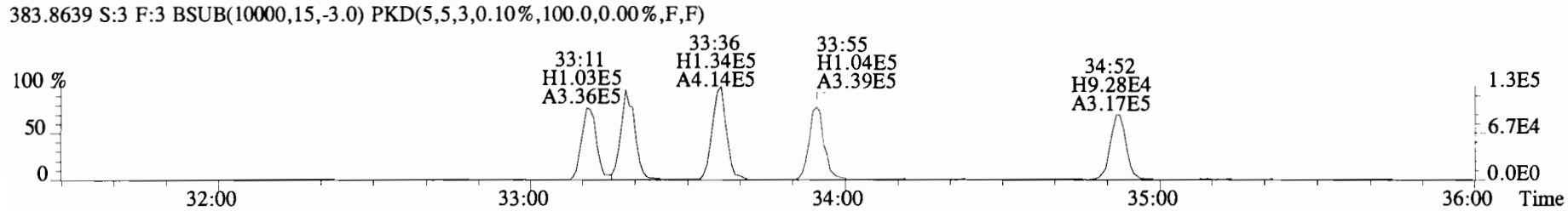
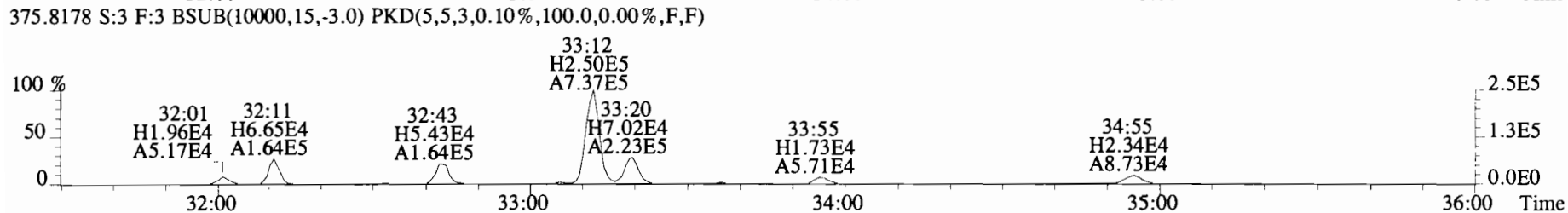
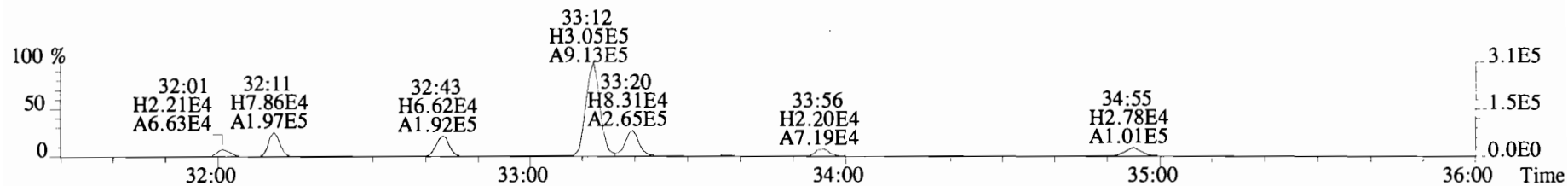
File:191106D1 #1-493 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
 339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



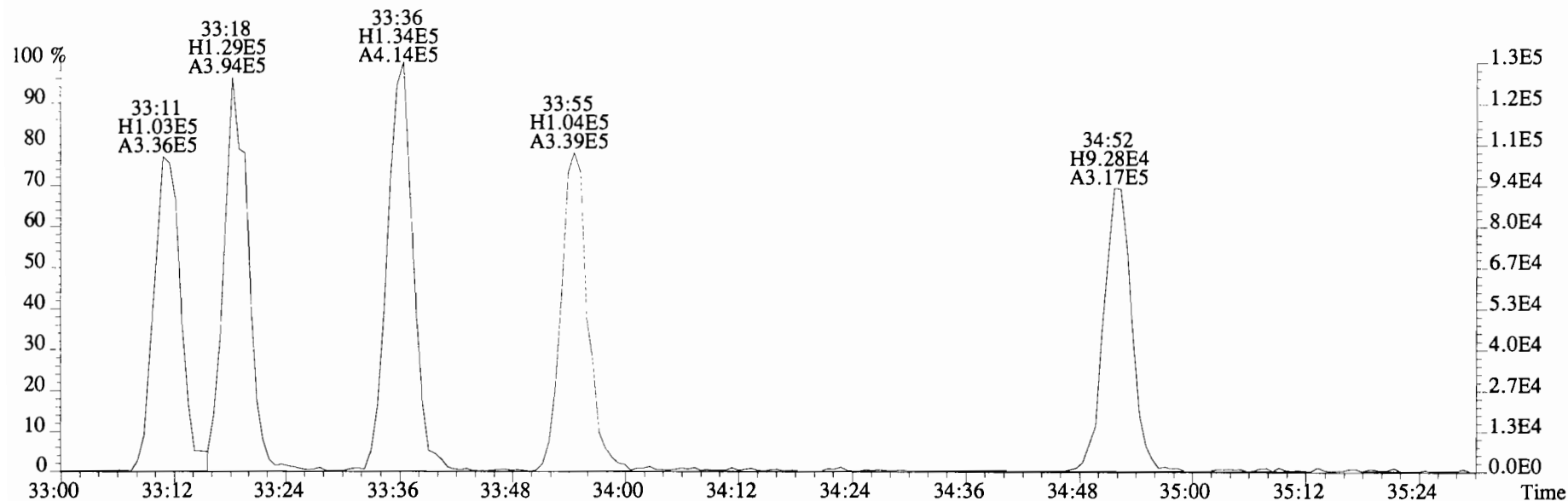
File:191106D1 #1-211 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCD£
 339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



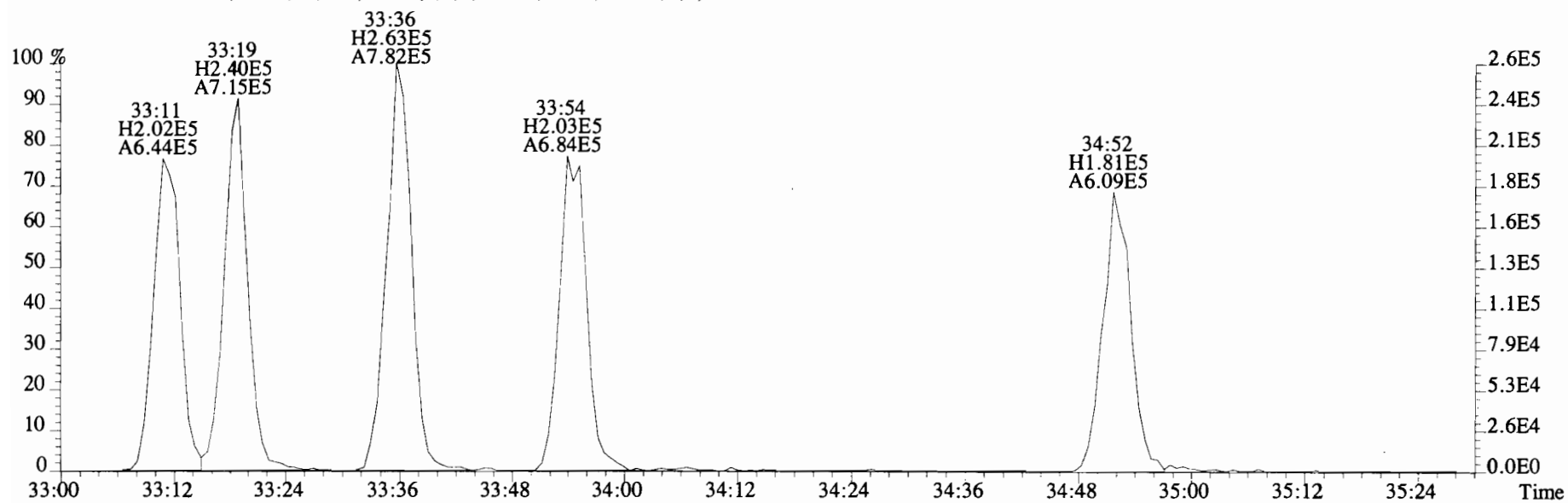
File:191106D1 #1-384 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCD£
 373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



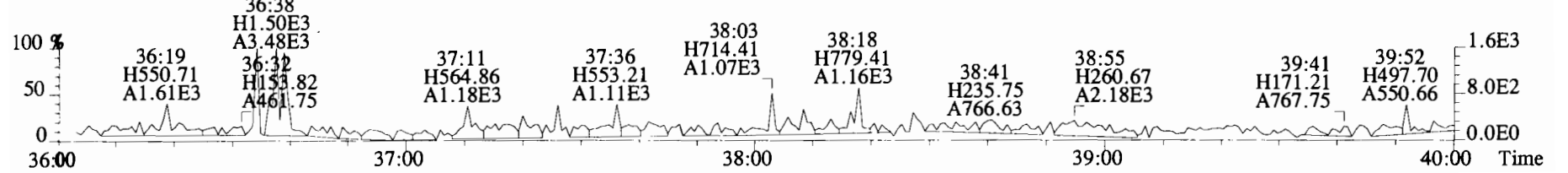
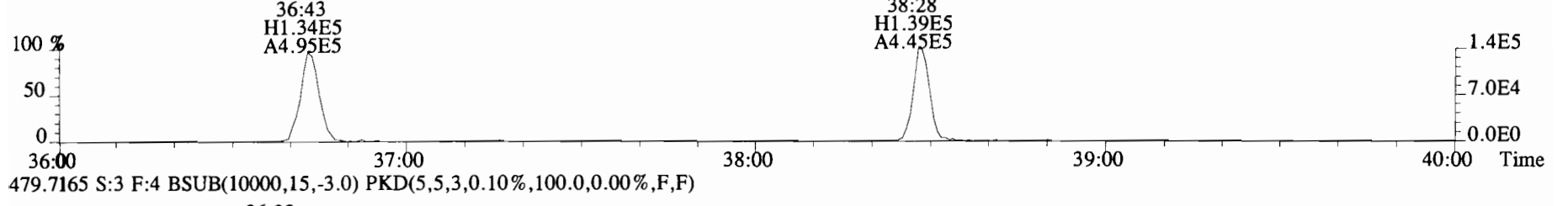
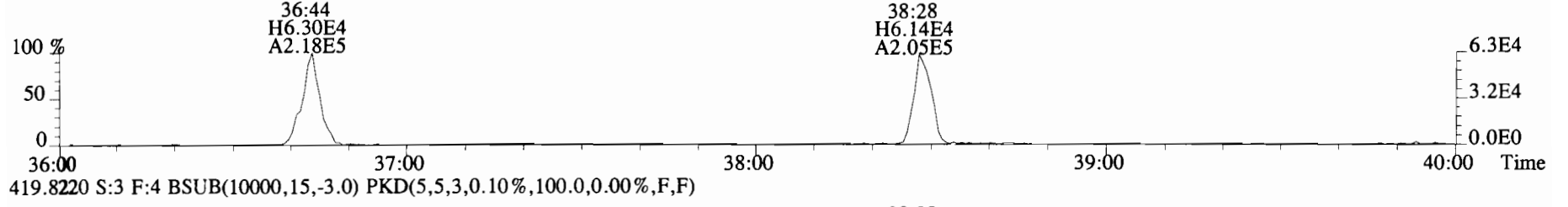
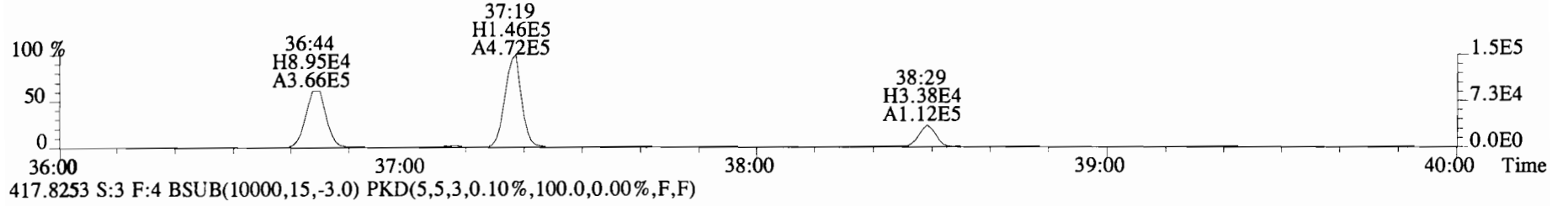
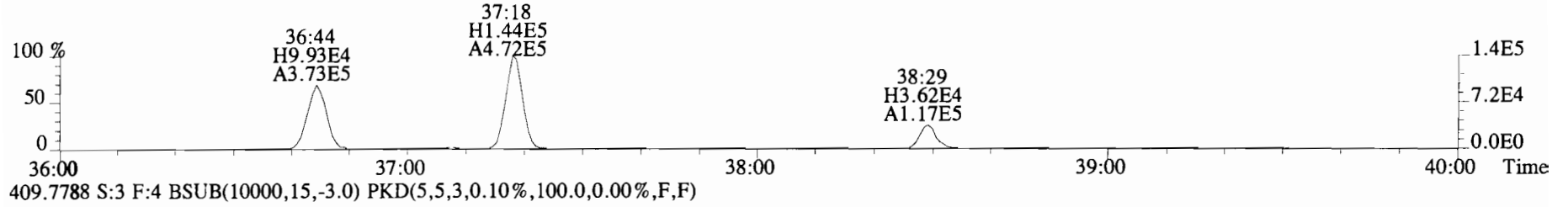
File:191106D1 #1-384 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



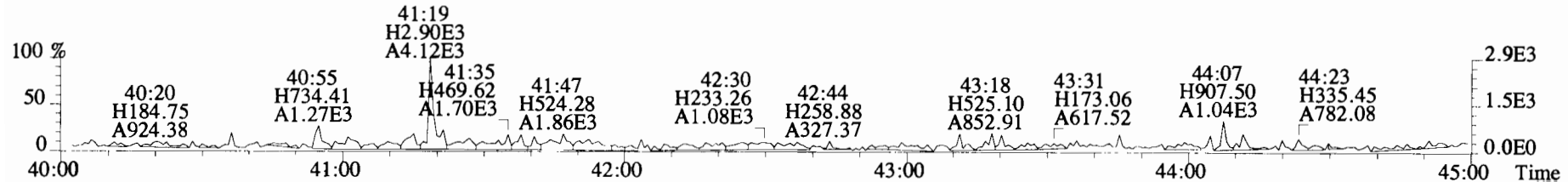
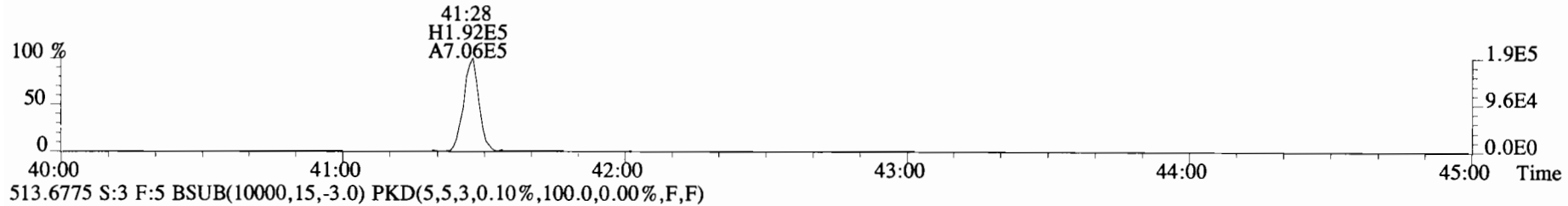
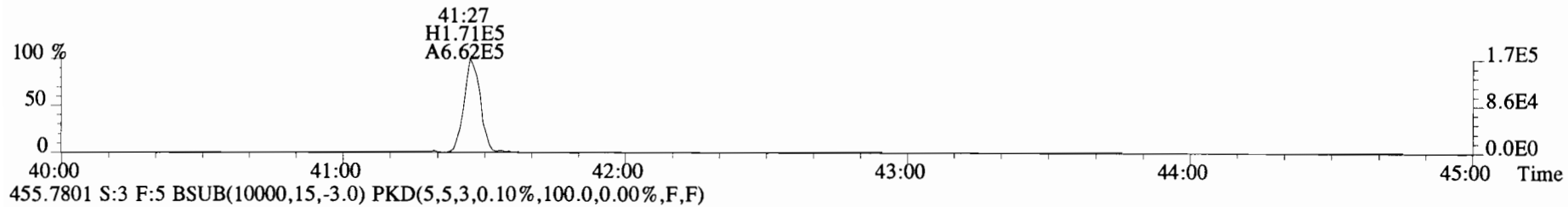
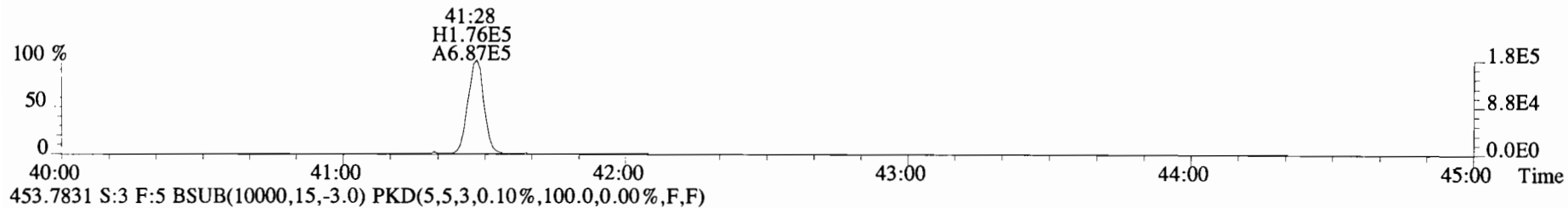
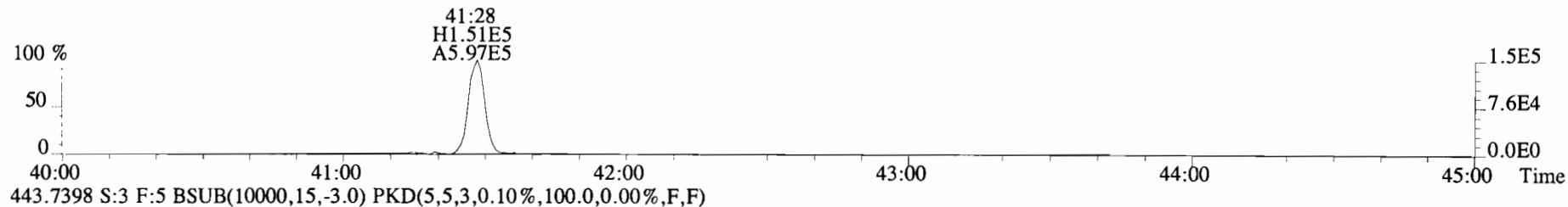
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191106D1 #1-356 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDF
 407.7818 S:3 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191106D1 #1-431 Acq: 6-NOV-2019 13:17:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-05RE1@5X PDI-082SC-B-02-04-191022 1:5 10.03225 Exp:OCDf
 441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	9.05e+03	0.46 n	0.91	26:17	0.22777	*	2.5	*	*	Total Tetra-Dioxins	0.161	1.59	*	*	*
1,2,3,7,8-PeCDD	*	* n	0.90	NotF η	*	429	2.5	0.158	*	Total Penta-Dioxins	0.864	1.99	*	*	*
1,2,3,4,7,8-HxCDD	1.38e+04	1.25 y	1.10	34:04	0.38240	*	2.5	*	*	Total Hexa-Dioxins	14.5	14.5	*	*	*
1,2,3,6,7,8-HxCDD	6.21e+04	1.06 y	0.94	34:11	1.8324	*	2.5	*	*	Total Hepta-Dioxins	103	103	*	*	*
1,2,3,7,8,9-HxCDD	2.98e+04	1.24 y	0.96	34:29	0.84582	*	2.5	*	*	Total Tetra-Furans	99.1	104	*	*	*
1,2,3,4,6,7,8-HpCDD	1.40e+06	1.01 y	0.98	37:55	42.467	*	2.5	*	*	Total Penta-Furans	425.55	425.55	*	*	*
OCDD	1.85e+07	0.90 y	0.96	41:13	694.09	*	2.5	*	*	Total Hexa-Furans	528	528	*	*	*
2,3,7,8-TCDF	2.54e+06	0.77 y	0.95	25:31	42.827 (38,32)	*	2.5	*	*	Total Hepta-Furans	169	169	*	*	*
1,2,3,7,8-PeCDF	1.05e+07	1.57 y	0.96	29:35	196.64	*	2.5	*	*						
2,3,4,7,8-PeCDF	3.30e+06	1.62 y	1.01	30:29	60.734	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	1.79e+07	1.23 y	1.18	33:11	333.88	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	4.29e+06	1.25 y	1.07	33:19	76.796	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	1.01e+06	1.22 y	1.11	33:54	19.341	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	5.18e+05	1.17 y	1.06	34:51	10.667	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	3.67e+06	1.03 y	1.13	36:43	80.981	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	1.40e+06	1.07 y	1.28	38:28	31.744	*	2.5	*	*						
OCDF	3.01e+06	0.91 y	0.95	41:26	84.381	*	2.5	*	*						
IS	13C-2,3,7,8-TCDD	8.76e+06	0.78 y	1.10	26:16	206.73				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	6.93e+06	0.63 y	0.88	30:44	203.20				104					
IS	13C-1,2,3,4,7,8-HxCDD	6.56e+06	1.27 y	0.64	34:04	195.77				102					
IS	13C-1,2,3,6,7,8-HxCDD	7.20e+06	1.23 y	0.86	34:10	161.26				98.1					
IS	13C-1,2,3,7,8,9-HxCDD	7.31e+06	1.25 y	0.81	34:28	173.59				80.8					
IS	13C-1,2,3,4,6,7,8-HpCDD	6.70e+06	1.06 y	0.65	37:55	196.32				87.0					
IS	13C-OCDD	1.11e+07	0.92 y	0.58	41:12	365.88				98.4					
IS	13C-2,3,7,8-TCDF	1.24e+07	0.77 y	1.03	25:30	208.94				91.7					
IS	13C-1,2,3,7,8-PeCDF	1.11e+07	1.55 y	0.85	29:35	225.23				105					
IS	13C-2,3,4,7,8-PeCDF	1.07e+07	1.62 y	0.85	30:28	219.53				113					
IS	13C-1,2,3,4,7,8-HxCDF	9.08e+06	0.51 y	0.83	33:10	209.26				110					
IS	13C-1,2,3,6,7,8-HxCDF	1.04e+07	0.52 y	1.03	33:18	193.28				105					
IS	13C-2,3,4,6,7,8-HxCDF	9.33e+06	0.52 y	0.95	33:54	187.59				96.9					
IS	13C-1,2,3,7,8,9-HxCDF	9.13e+06	0.52 y	0.83	34:51	211.35				94.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	8.03e+06	0.43 y	0.76	36:42	203.11				106					
IS	13C-1,2,3,4,7,8,9-HpCDF	6.88e+06	0.43 y	0.58	38:27	226.73				102					
IS	13C-OCDF	1.50e+07	0.92 y	0.69	41:26	417.80				114					
C/Up	37C1-2,3,7,8-TCDD	3.58e+06		1.20	26:18	77.347				105					
RS/RT	13C-1,2,3,4-TCDD	7.72e+06	0.80 y	1.00	25:43	199.53				96.9					
RS	13C-1,2,3,4-TCDF	1.15e+07	0.81 y	1.00	24:18	199.53									
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.04e+07	0.51 y	1.00	33:35	199.53									

Integrations
 by JB
 Analyst: JB
 Date: 11/8/19
 Reviewed
 by CT
 Analyst: CT
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 12 File: 191031D2 S: 7 I: 1 F: 1
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 1.5948

Unnamed Concentration: 1.367

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:57	2.019e+04	1.922e+04	1.05	n	3.401e+04	0.85576
23:18	5.976e+03	5.977e+03	1.00	n	1.058e+04	0.26618
24:49	2.644e+03	3.750e+03	0.71	y	6.395e+03	0.16088
26:03	1.967e+03	1.891e+03	1.04	n	3.347e+03	0.084205
26:17	3.938e+03	8.520e+03	0.46	n	9.053e+03	0.22777 2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 12 File: 191031D2 S: 7 I: 1 F: 2
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 1.9889

Unnamed Concentration: 1.989

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:43	1.028e+04	1.681e+04	0.61 y	2.709e+04	0.86428
29:36	1.449e+04	1.664e+04	0.87 n	2.713e+04	0.86529
29:46	4.823e+03	4.988e+03	0.97 n	8.130e+03	0.25936

Totals class: HxCDD EMPC

Entry #: 23

Run: 12 File: 191031D2 S: 7 I: 1 F: 3
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 14.481

Unnamed Concentration: 11.420

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:32	9.688e+04	7.839e+04	1.24	y	1.753e+05	5.0217
33:08	1.980e+04	1.430e+04	1.38	y	3.409e+04	0.97684
33:22	1.043e+05	7.805e+04	1.34	y	1.824e+05	5.2257
34:04	7.679e+03	6.166e+03	1.25	y	1.384e+04	0.38240 1,2,3,4,7,8-HxCDD
34:11	3.192e+04	3.014e+04	1.06	y	6.205e+04	1.8324 1,2,3,6,7,8-HxCDD
34:22	3.863e+03	2.980e+03	1.30	y	6.843e+03	0.19606
34:29	1.648e+04	1.330e+04	1.24	y	2.978e+04	0.84582 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 12 File: 191031D2 S: 7 I: 1 F: 4
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 103.39

Unnamed Concentration: 60.928

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:06	1.022e+06	9.820e+05	1.04 y		2.003e+06	60.928
37:55	7.005e+05	6.959e+05	1.01 y		1.396e+06	42.467 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 12 File: 191031D2 S: 7 I: 1 F: 1
 Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 103.66 Unnamed Concentration: 60.829

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
21:25	9.098e+03	7.523e+03	1.21 n	1.331e+04	0.22475	
22:02	3.636e+04	4.853e+04	0.75 y	8.490e+04	1.4330	
22:34	4.166e+04	4.873e+04	0.85 y	9.039e+04	1.5257	
22:55	2.320e+05	2.906e+05	0.80 y	5.226e+05	8.8218	
23:20	6.877e+04	8.432e+04	0.82 y	1.531e+05	2.5840	
23:37	3.283e+04	4.073e+04	0.81 y	7.356e+04	1.2416	
24:13	3.460e+04	4.243e+04	0.82 y	7.703e+04	1.3002	
24:18	5.772e+04	7.473e+04	0.77 y	1.325e+05	2.2358	
24:44	8.937e+05	1.166e+06	0.77 y	2.060e+06	34.769	
24:59	2.537e+04	3.078e+04	0.82 y	5.616e+04	0.94790	
25:25	3.988e+04	6.872e+04	0.58 n	9.167e+04	1.5473	
25:31	1.104e+06	1.433e+06	0.77 y	2.537e+06	42.827	2,3,7,8-TCDF
25:50	2.848e+04	3.845e+04	0.74 y	6.692e+04	1.1297	
26:03	7.343e+03	9.488e+03	0.77 y	1.683e+04	0.28411	
27:16	9.411e+04	9.319e+04	1.01 n	1.650e+05	2.7843	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 12 File: 191031D2 S: 7 I: 1 F: 1
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 6.3140 Unnamed Concentration: 6.314

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:16	2.035e+05	1.366e+05	1.49 y	3.401e+05	6.3140

Totals class: PeCDF EMPC

Entry #: 31

Run: 12 File: 191031D2 S: 7 I: 1 F: 2
 Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 419.23 Unnamed Concentration: 161.860

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
28:33	4.504e+04	2.741e+04	1.64	y	7.244e+04	1.3448	
28:42	2.521e+06	1.499e+06	1.68	y	4.019e+06	74.617	
29:14	6.002e+04	4.000e+04	1.50	y	1.000e+05	1.8568	
29:25	3.595e+05	2.165e+05	1.66	y	5.760e+05	10.692	
29:35	6.405e+06	4.072e+06	1.57	y	1.048e+07	196.64	1,2,3,7,8-PeCDF
29:50	1.679e+06	1.052e+06	1.60	y	2.731e+06	50.704	
30:17	1.489e+04	1.045e+04	1.43	y	2.533e+04	0.47028	
30:23	1.540e+04	8.993e+03	1.71	y	2.439e+04	0.45281	
30:29	2.043e+06	1.262e+06	1.62	y	3.305e+06	60.734	2,3,4,7,8-PeCDF
30:32	6.036e+05	3.761e+05	1.60	y	9.796e+05	18.186	
31:21	1.163e+05	7.422e+04	1.57	y	1.905e+05	3.5364	

Totals class: HxCDF EMFC

Entry #: 33

Run: 12 File: 191031D2 S: 7 I: 1 F: 3
 Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

Total Concentration: 528.25 Unnamed Concentration: 87.567

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:00	1.495e+05	1.213e+05	1.23 y	2.708e+05	5.1578
32:10	9.148e+05	7.291e+05	1.25 y	1.644e+06	31.316
32:31	1.925e+04	1.477e+04	1.30 y	3.402e+04	0.64810
32:42	5.585e+05	4.569e+05	1.22 y	1.015e+06	19.343
33:04	6.657e+04	5.093e+04	1.31 y	1.175e+05	2.2382
33:11	9.870e+06	8.014e+06	1.23 y	1.788e+07	333.88 1,2,3,4,7,8-HxCDF
33:19	2.386e+06	1.906e+06	1.25 y	4.292e+06	76.796 1,2,3,6,7,8-HxCDF
33:35	2.718e+04	2.025e+04	1.34 y	4.743e+04	0.90354
33:42	1.052e+04	8.769e+03	1.20 y	1.929e+04	0.36748
33:54	5.528e+05	4.544e+05	1.22 y	1.007e+06	19.341 2,3,4,6,7,8-HxCDF
34:51	2.796e+05	2.385e+05	1.17 y	5.181e+05	10.667 1,2,3,7,8,9-HxCDF
34:55	8.121e+05	6.365e+05	1.28 y	1.449e+06	27.594

Totals class: HpCDF EMPC

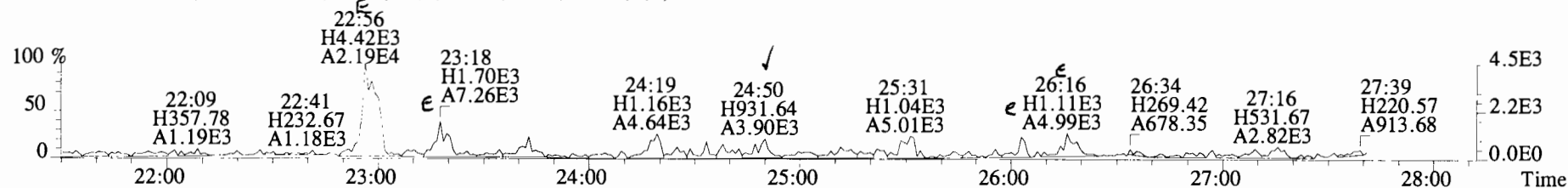
Entry #: 35

Run: 12 File: 191031D2 S: 7 I: 1 F: 4
Acquired: 1-NOV-19 04:29:56 Processed: 1-NOV-19 12:03:17

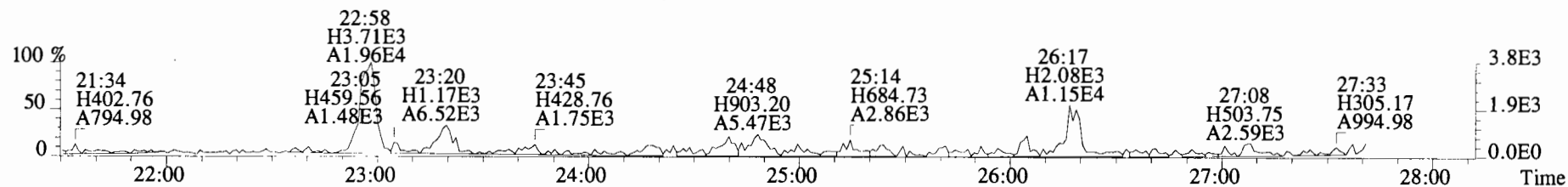
Total Concentration: 169.11 Unnamed Concentration: 56.383

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
36:43	1.862e+06	1.812e+06	1.03 y	3.674e+06	80.981	1,2,3,4,6,7,8-HpCDF
37:06	5.269e+04	4.963e+04	1.06 y	1.023e+05	2.2949	
37:17	1.216e+06	1.196e+06	1.02 y	2.411e+06	54.088	
38:28	7.227e+05	6.775e+05	1.07 y	1.400e+06	31.744	1,2,3,4,7,8,9-HpCDF

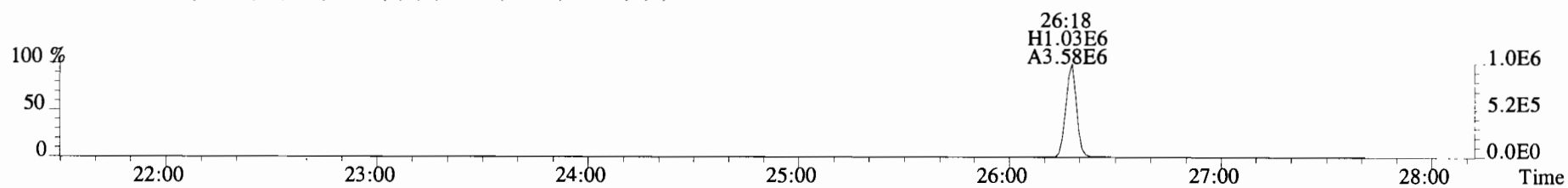
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



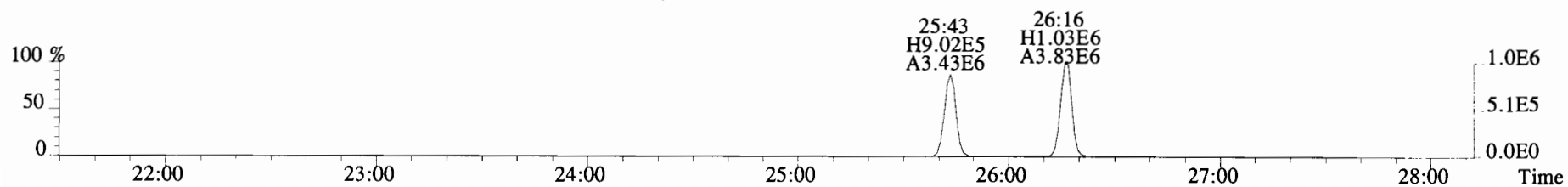
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



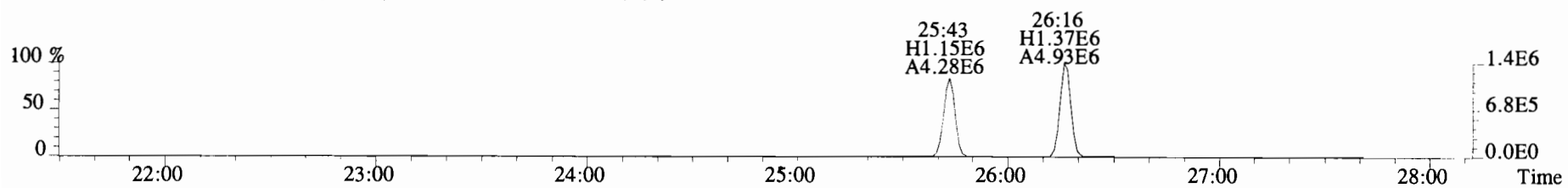
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



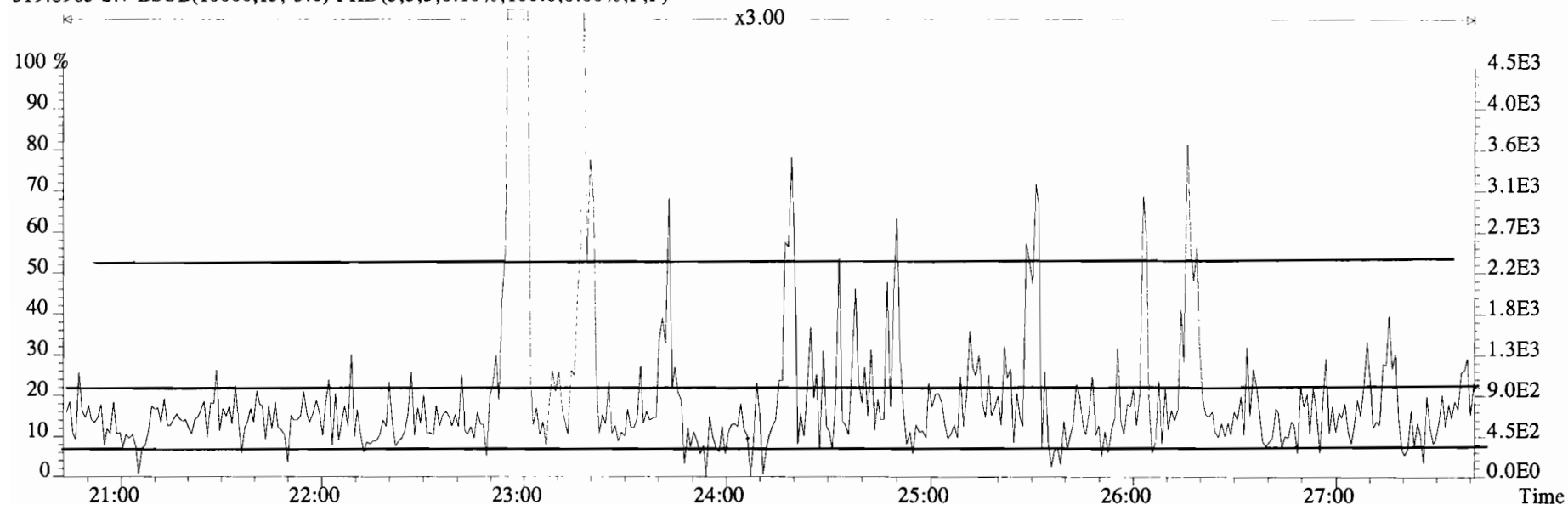
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



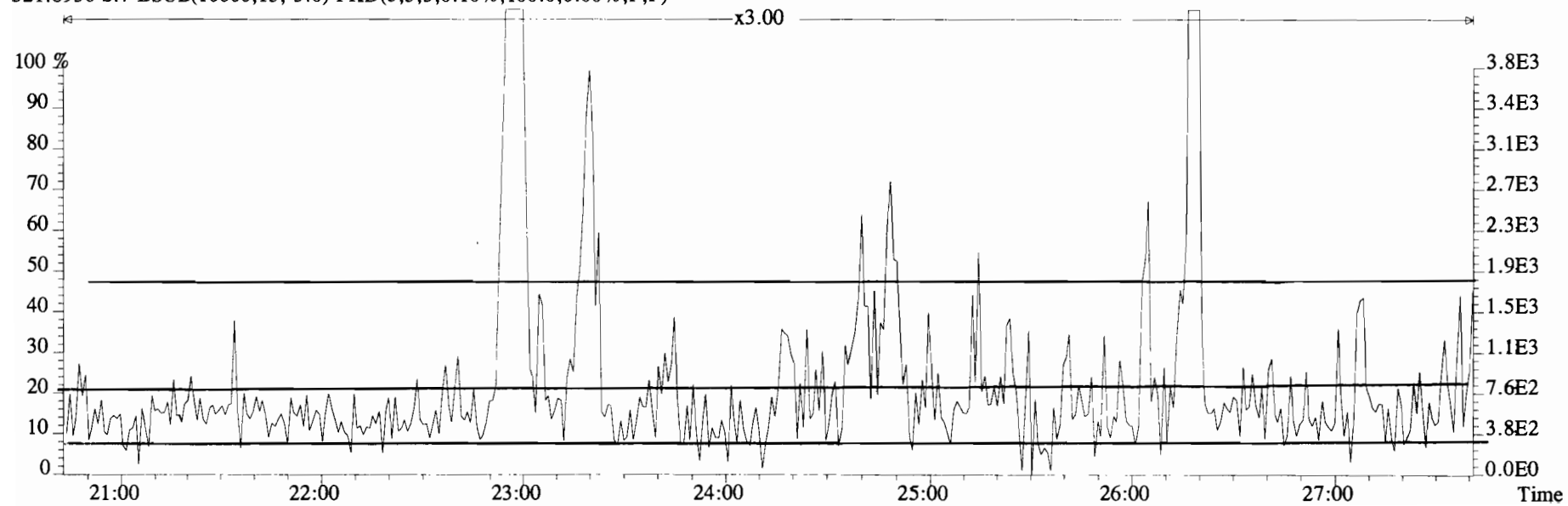
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



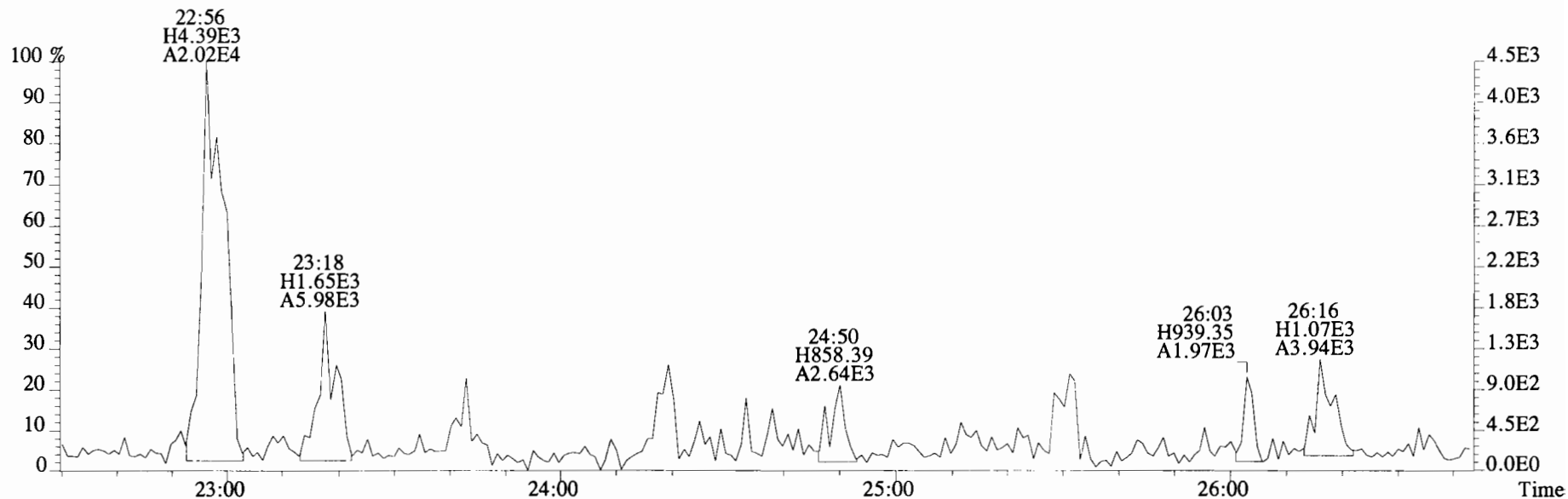
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



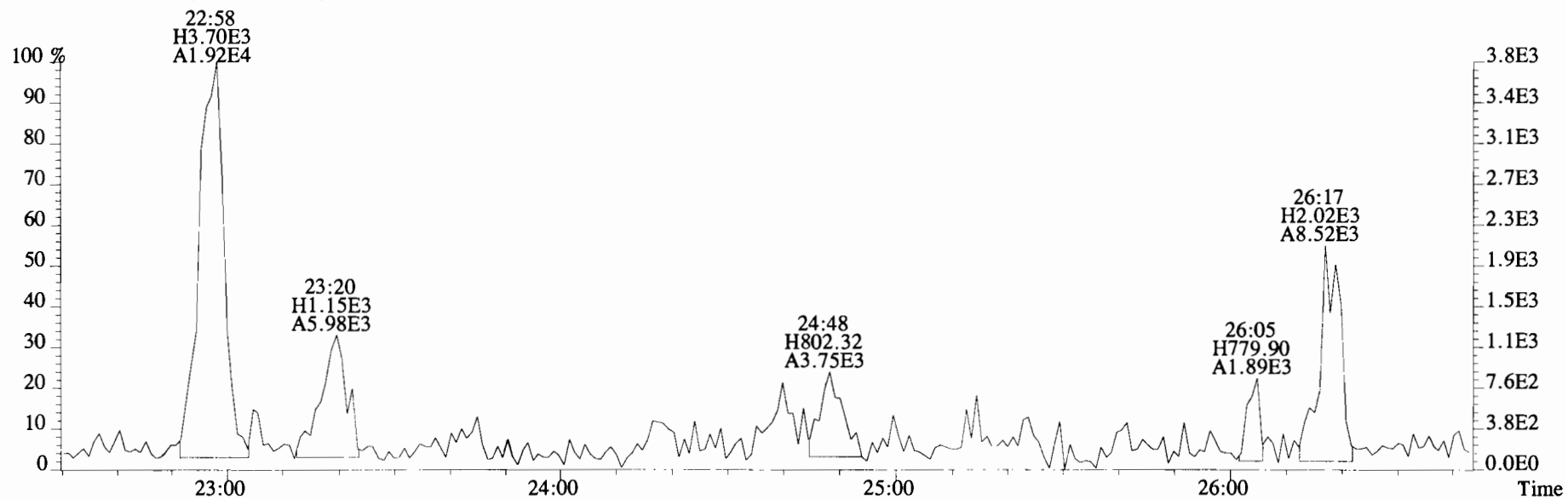
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



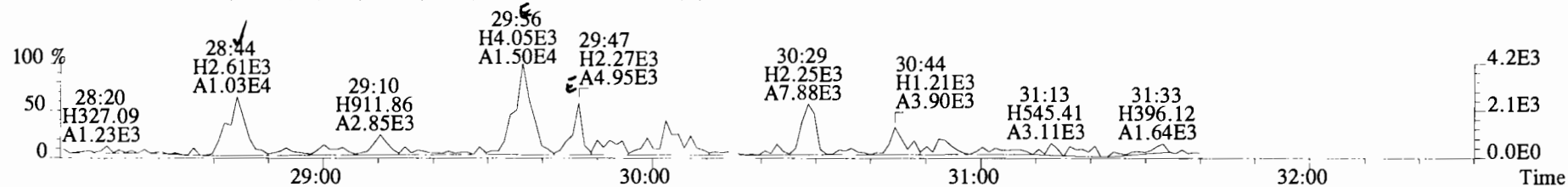
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 319.8965 S:7 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



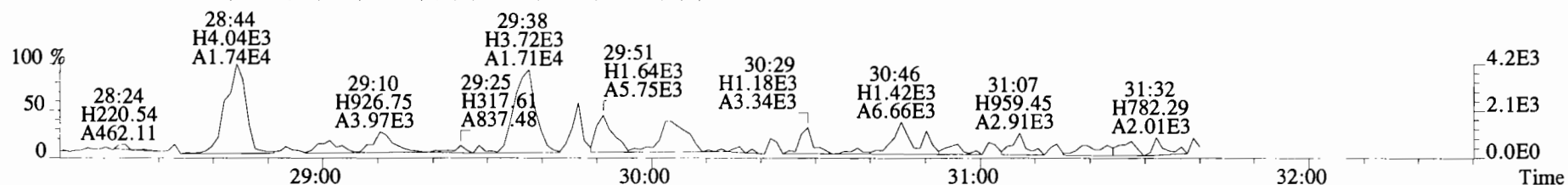
321.8936 S:7 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



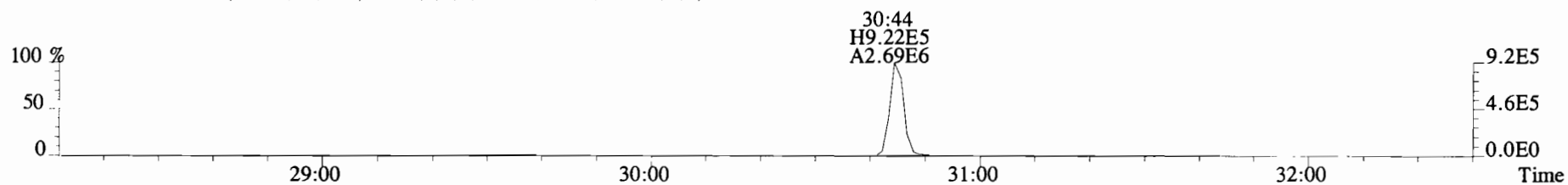
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



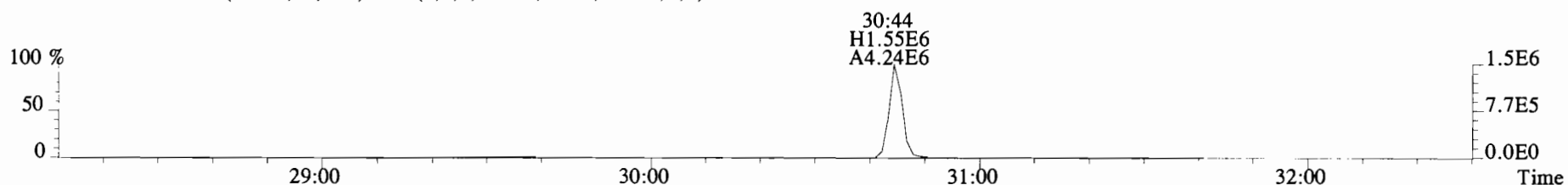
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



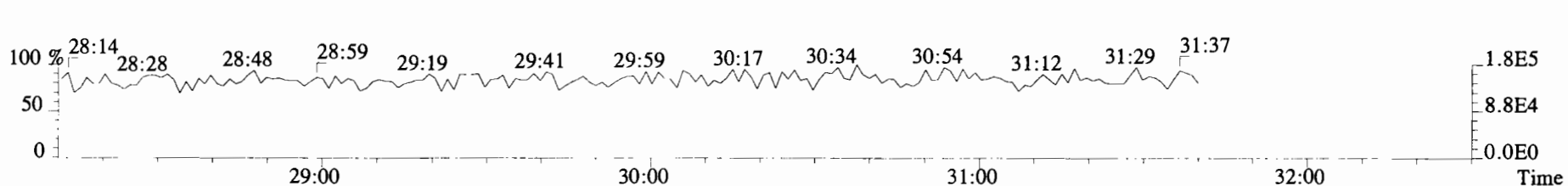
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



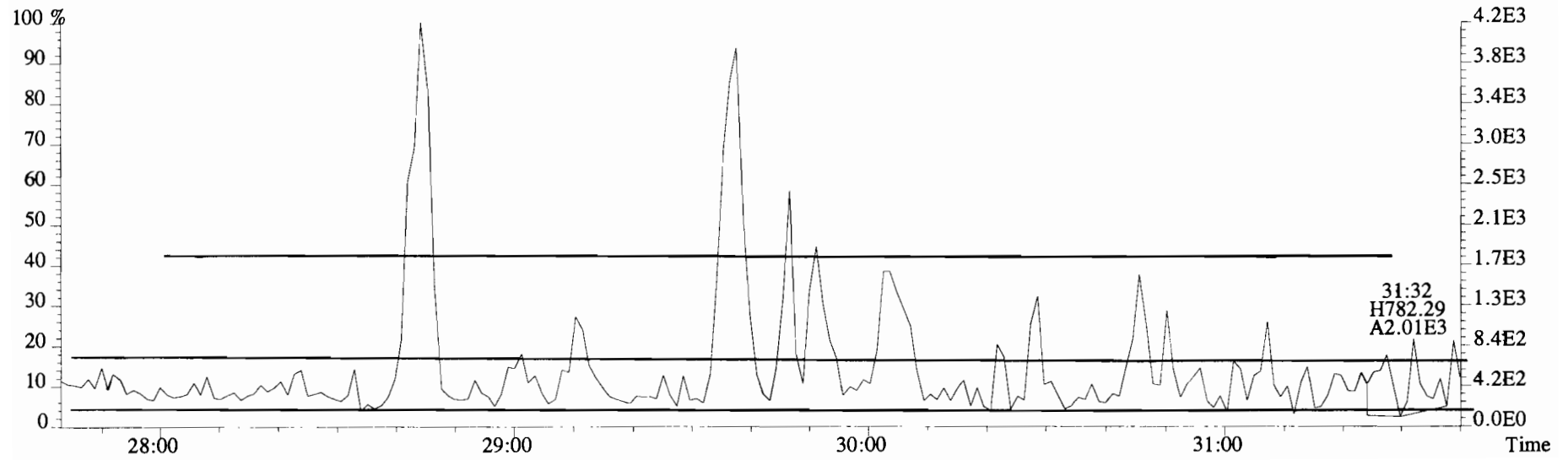
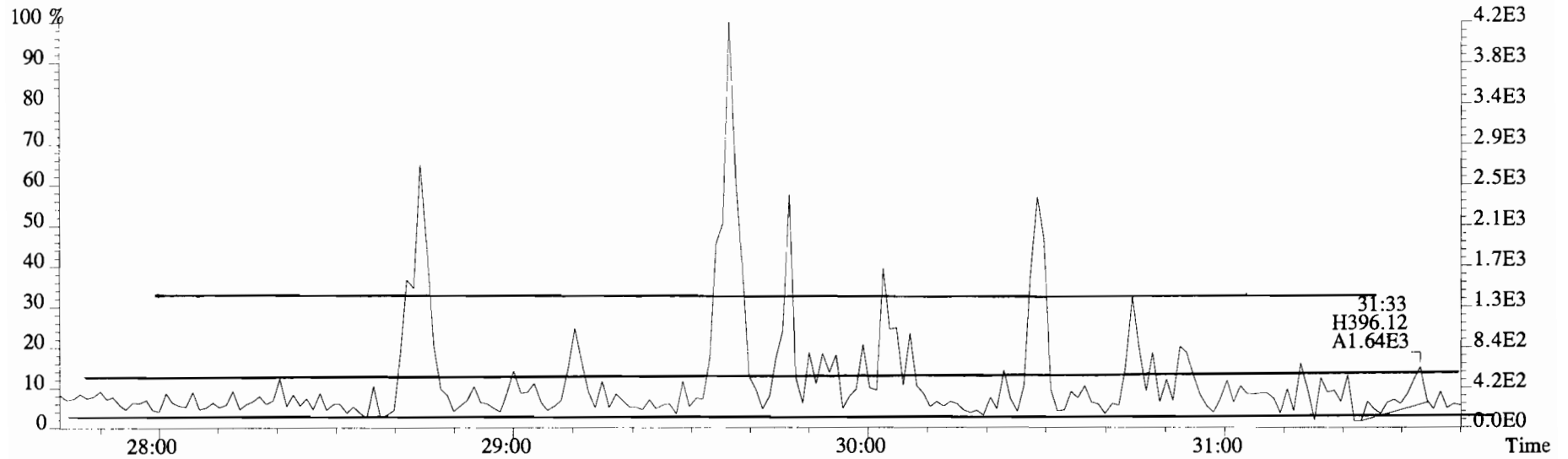
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



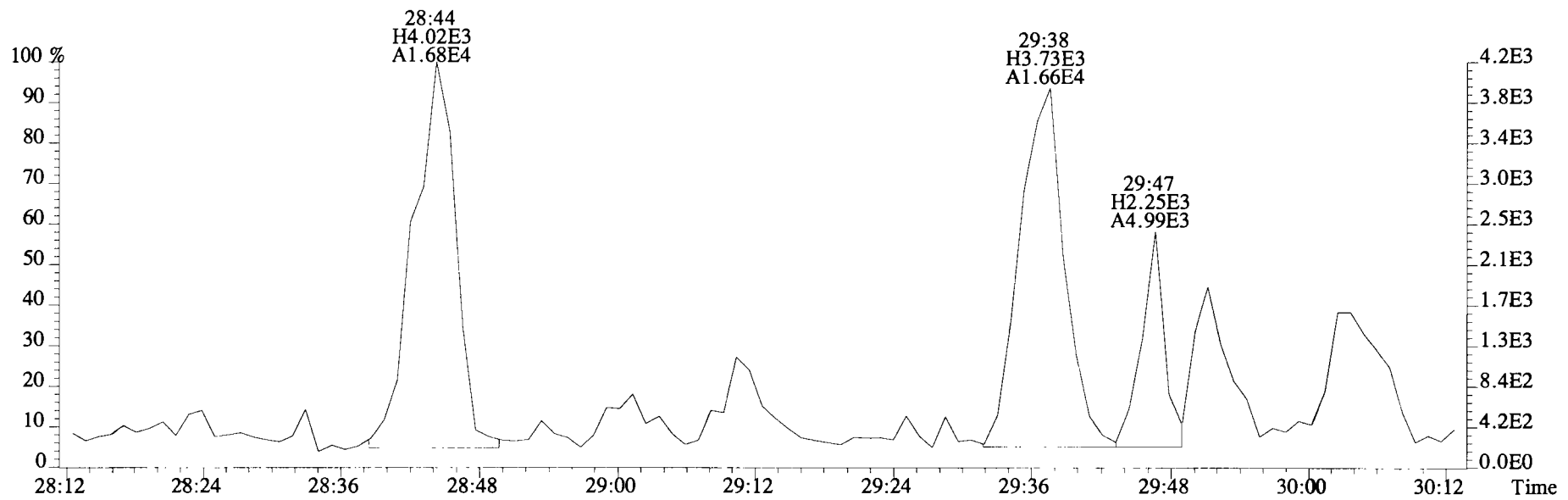
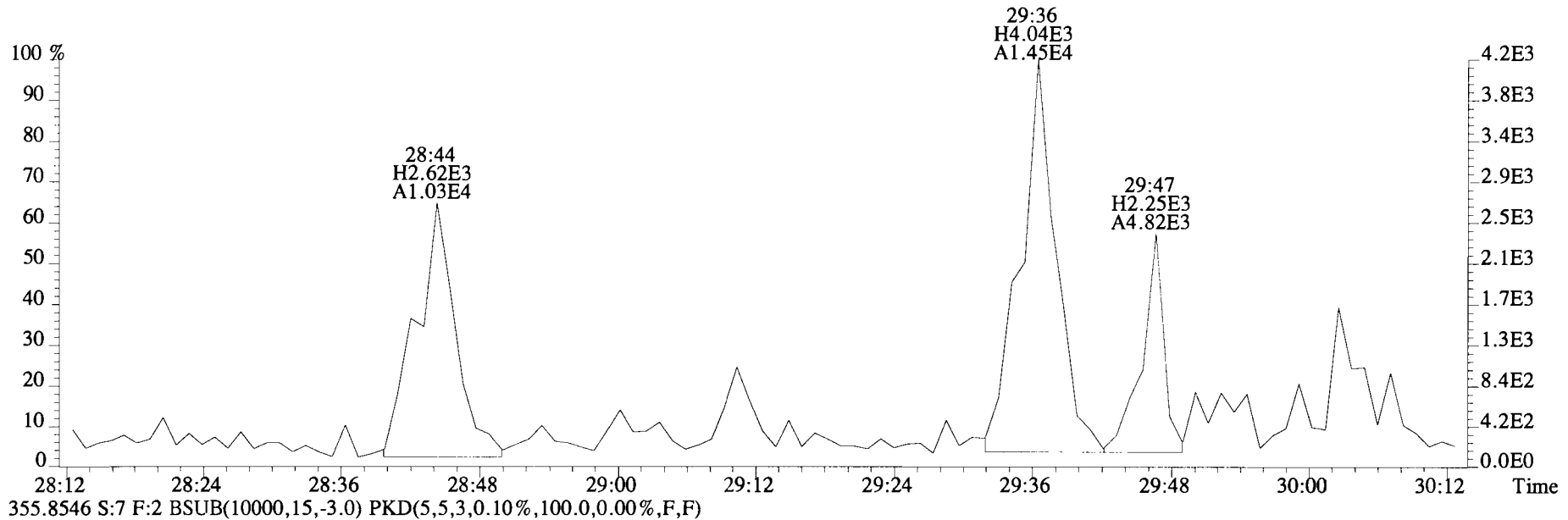
366.9792 S:7 F:2



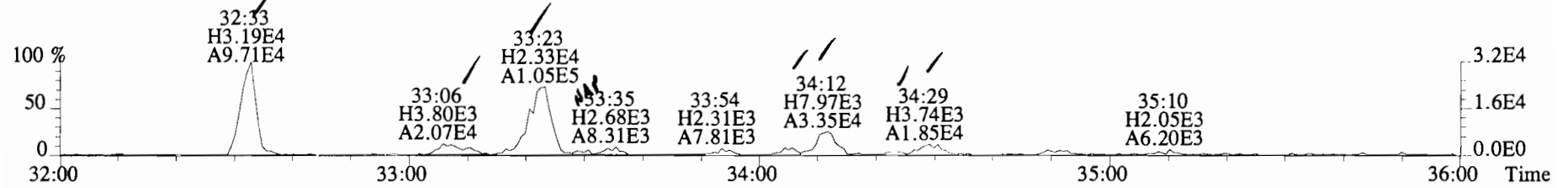
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



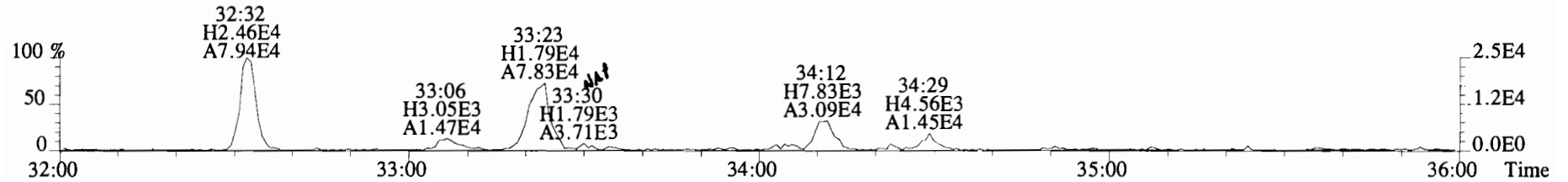
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



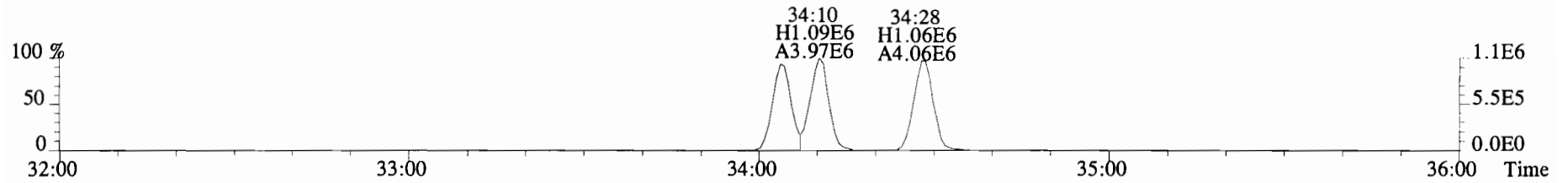
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



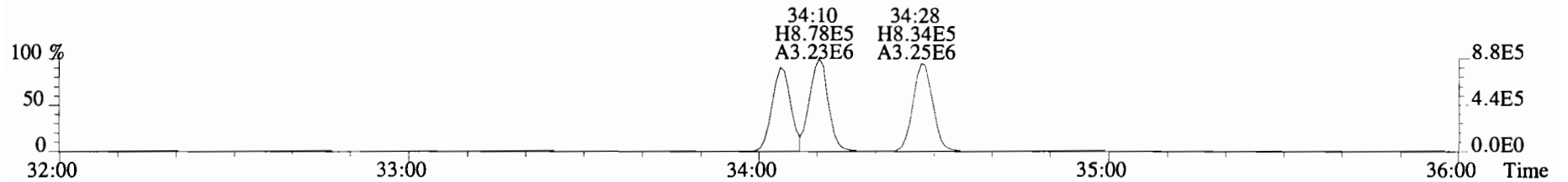
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



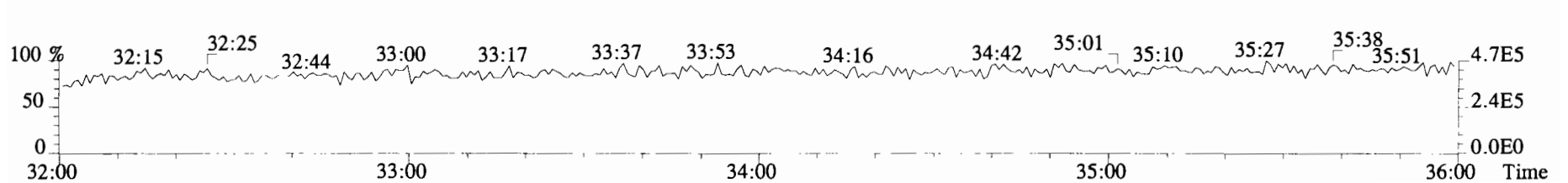
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



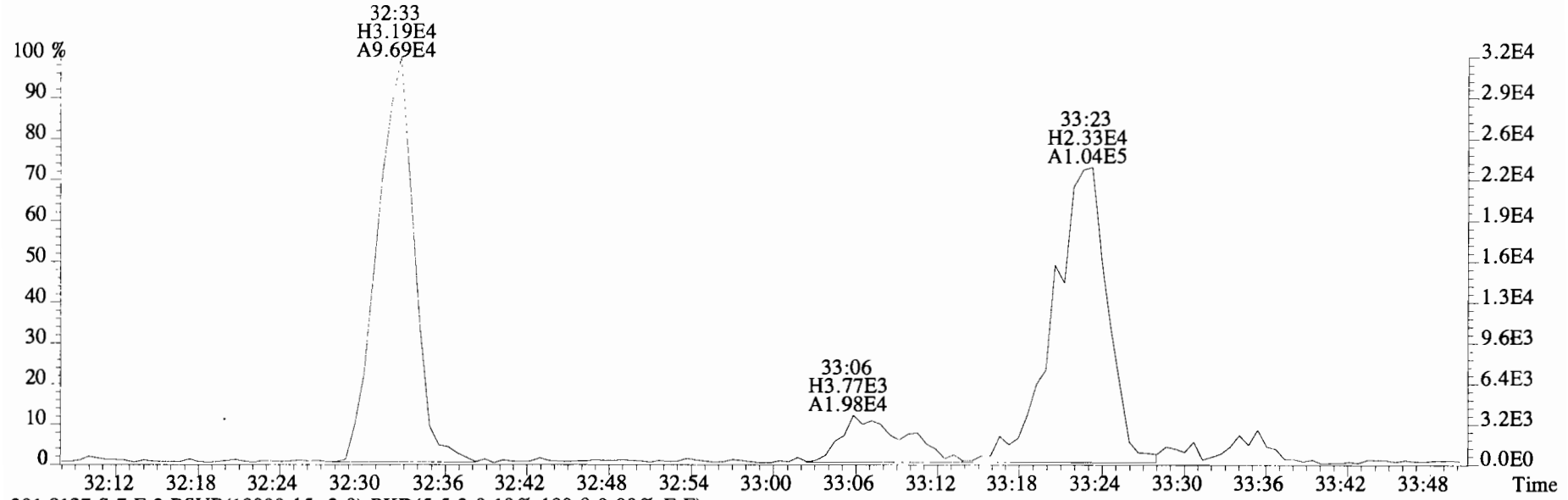
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



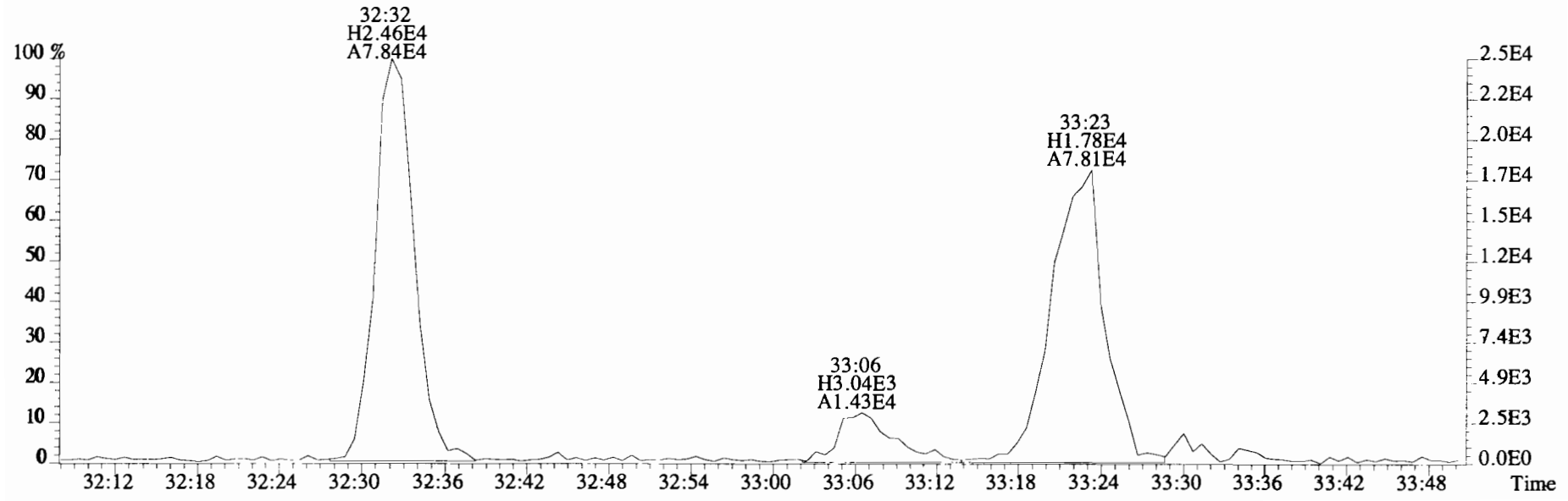
392.9760 S:7 F:3



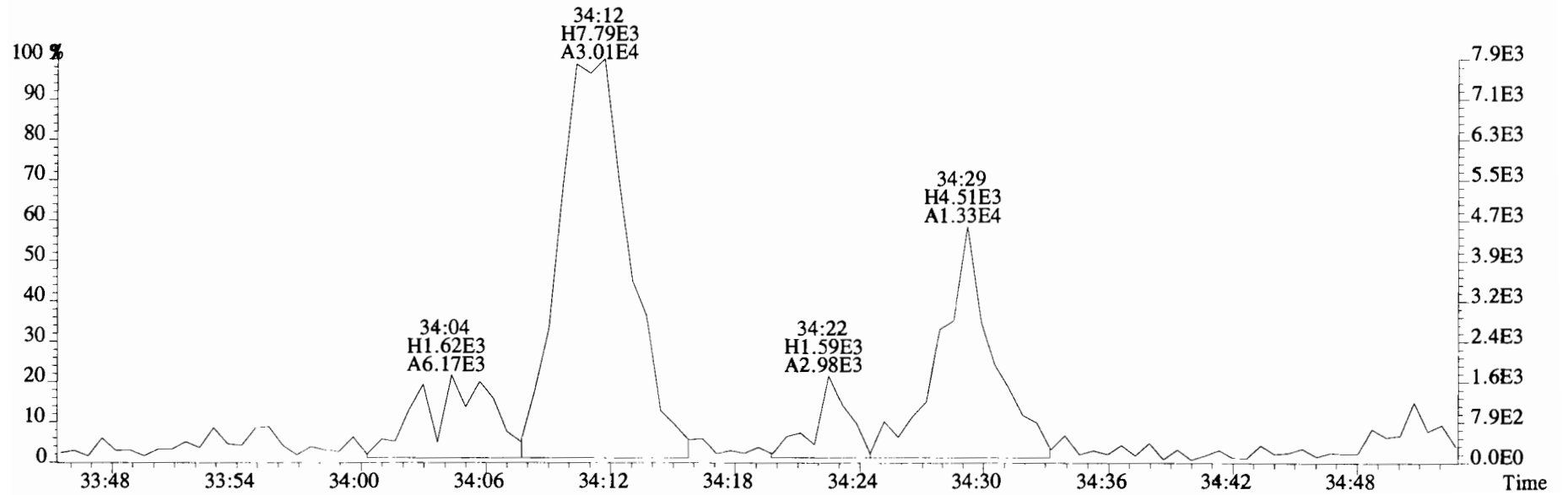
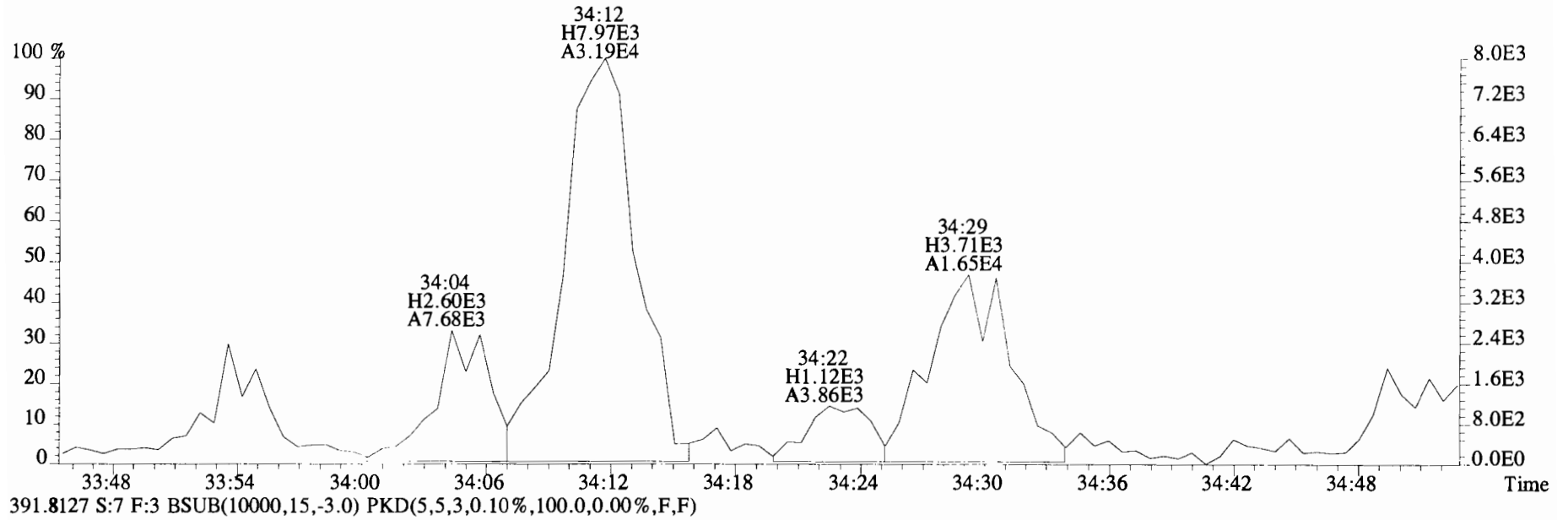
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



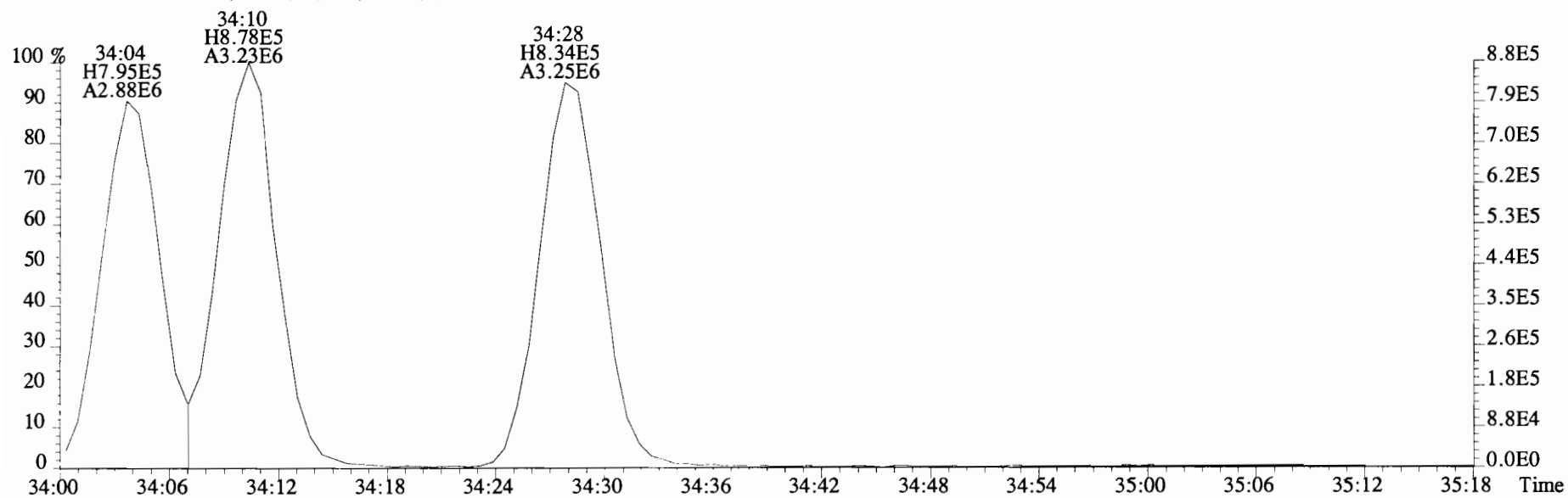
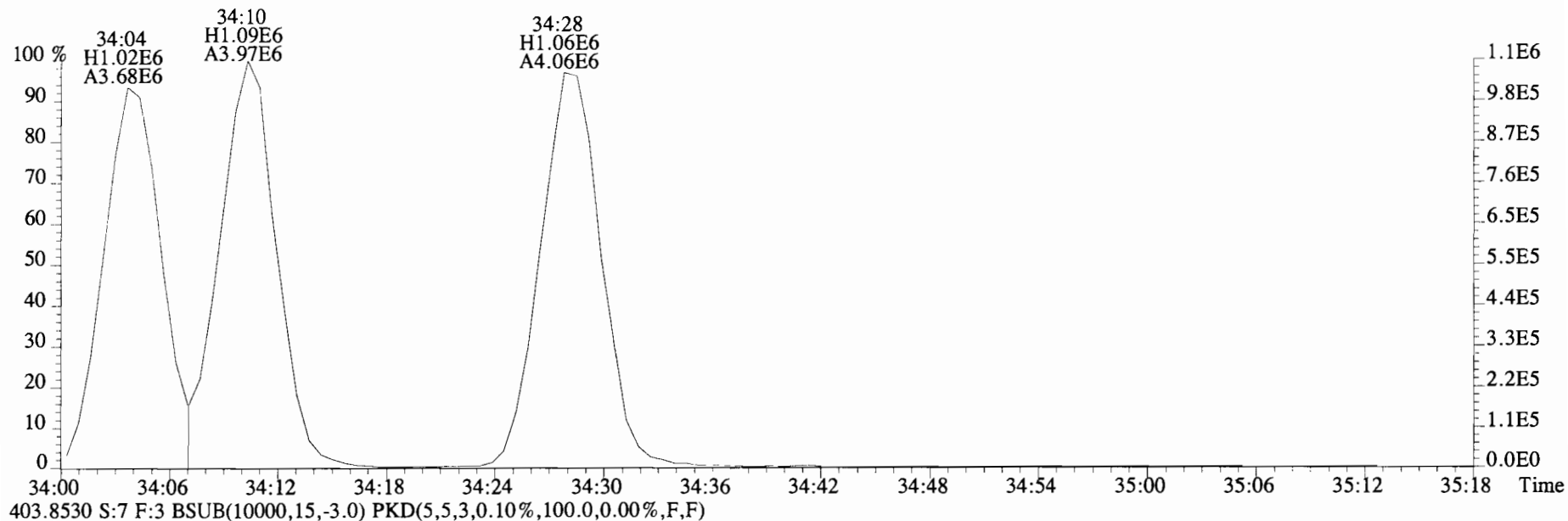
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



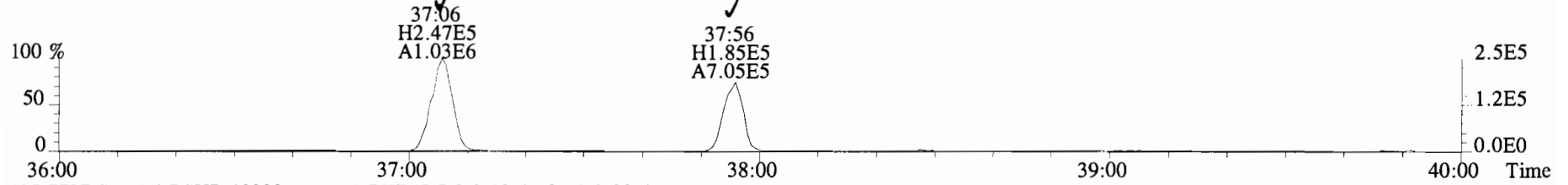
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



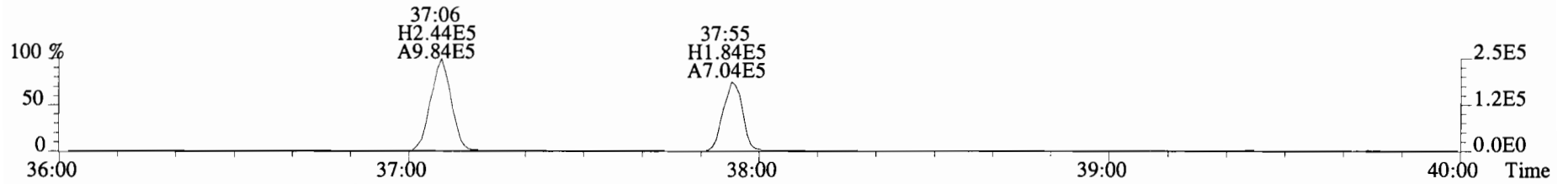
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



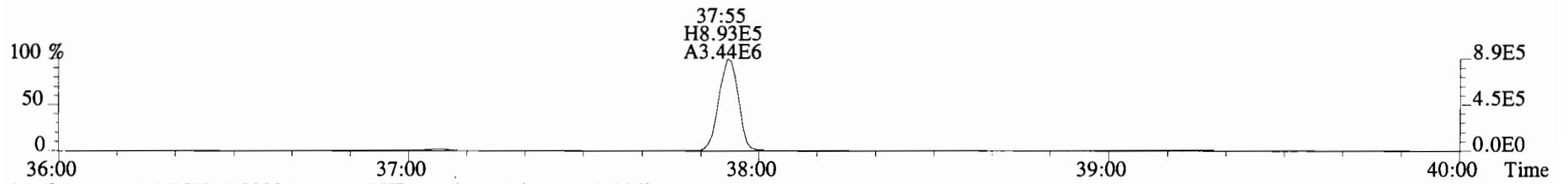
File:191031D2 #1-356 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



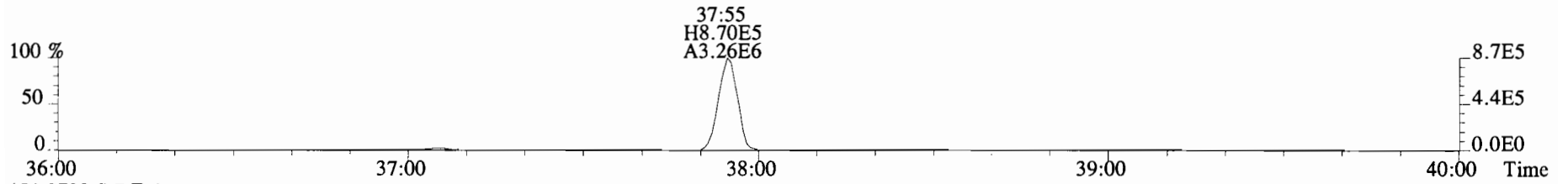
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



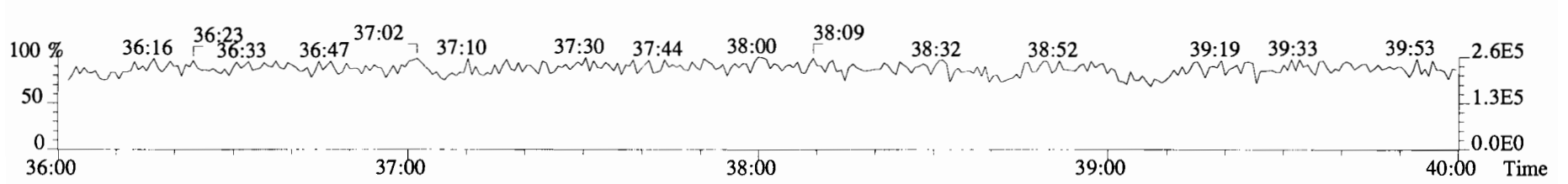
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



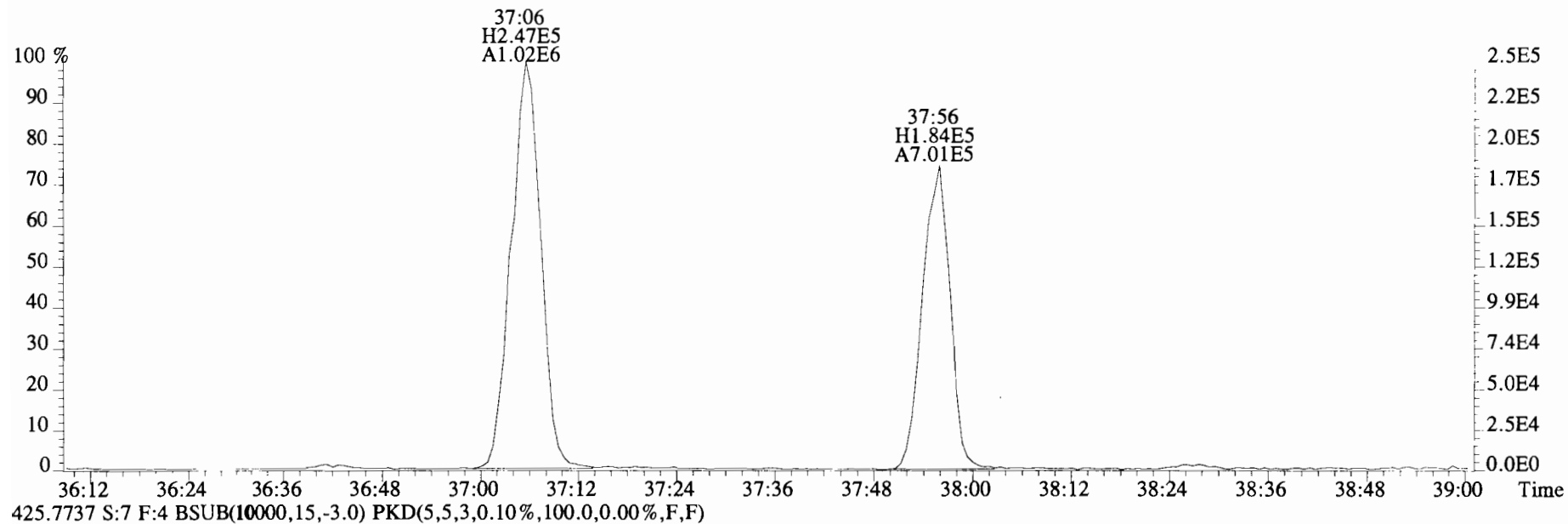
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



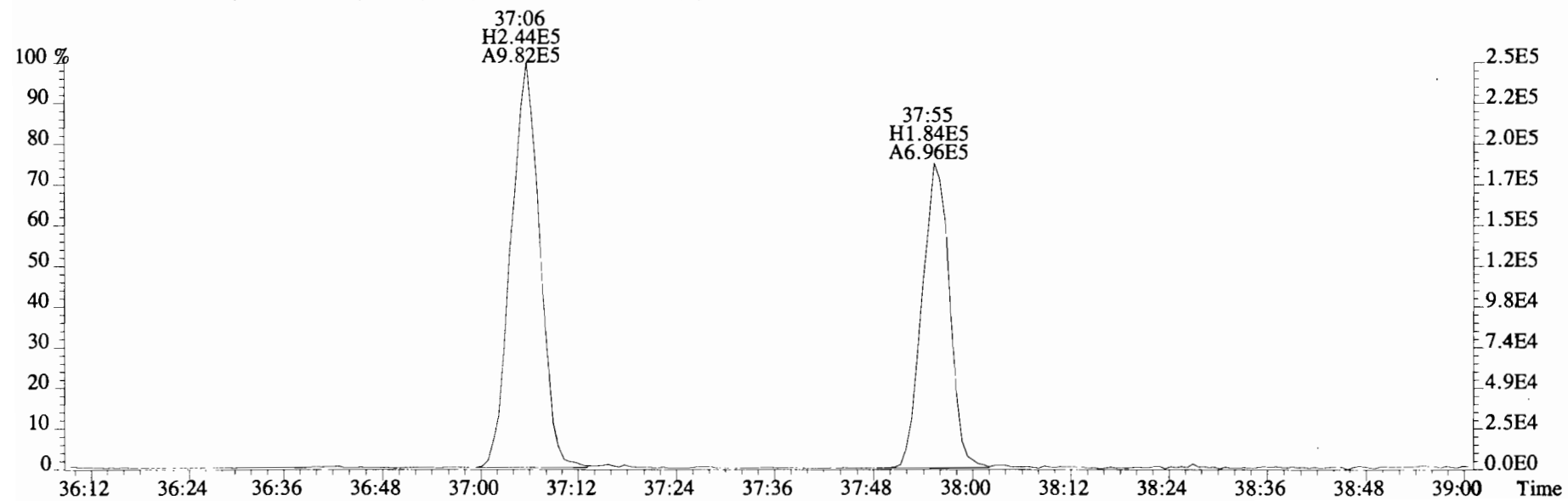
454.9728 S:7 F:4



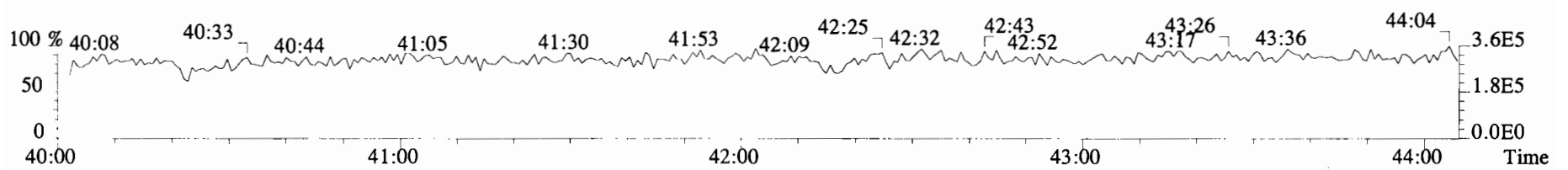
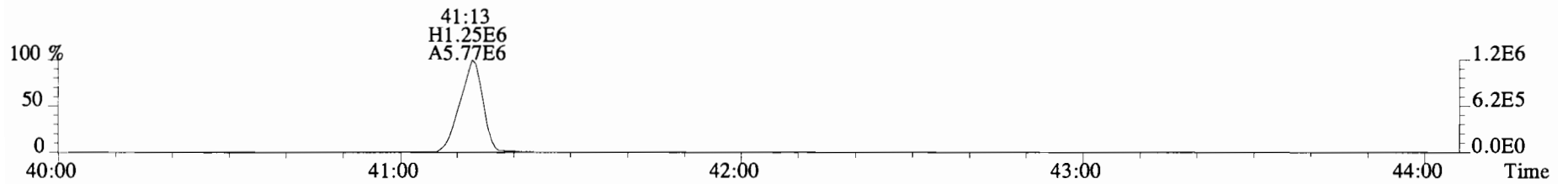
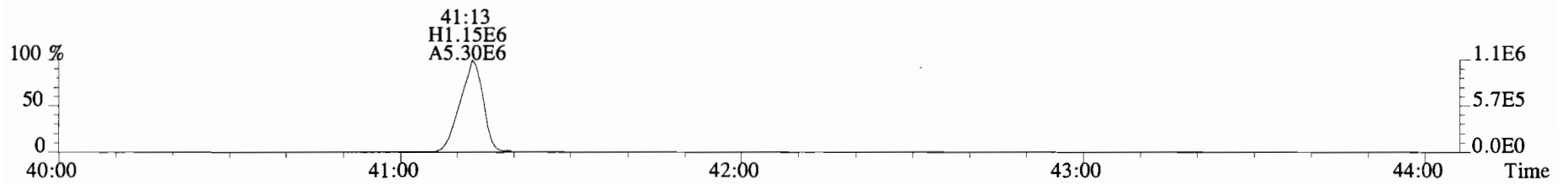
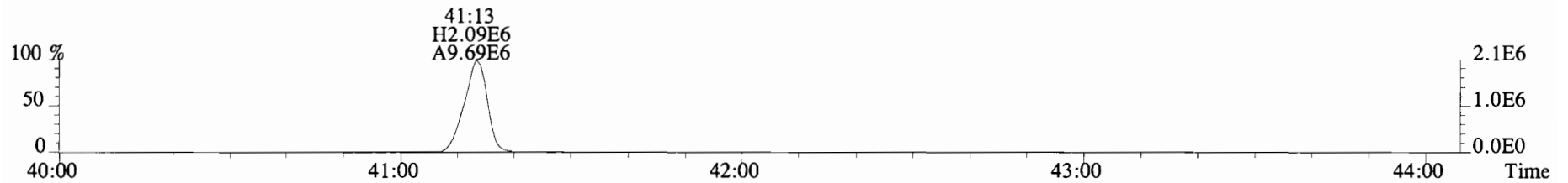
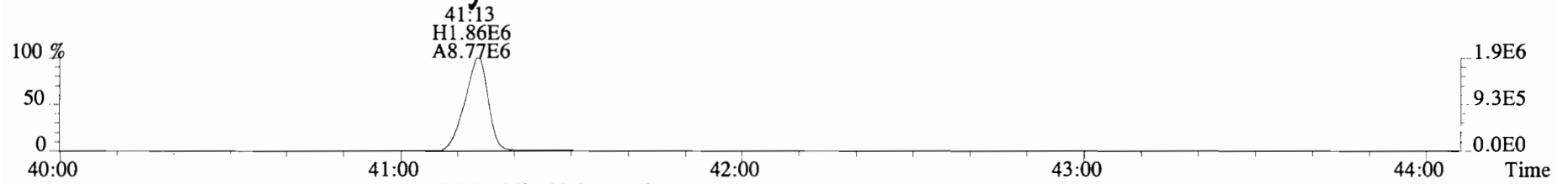
File:191031D2 #1-356 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



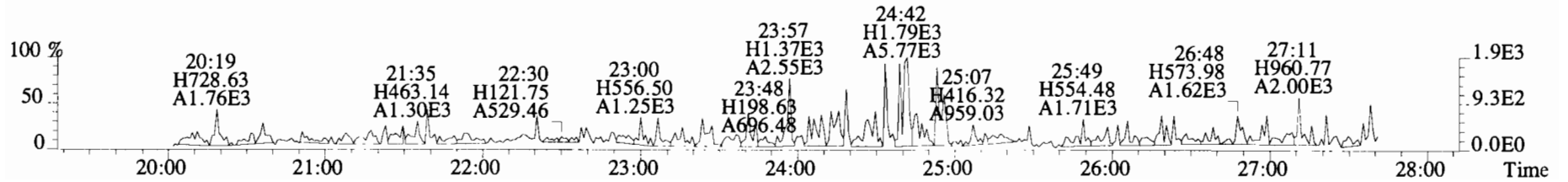
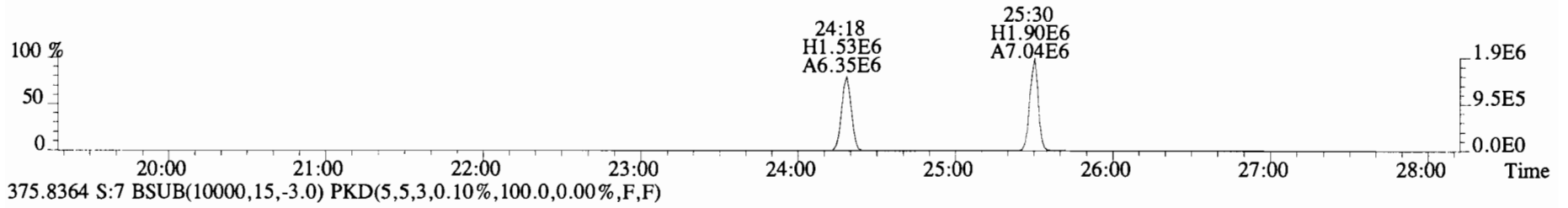
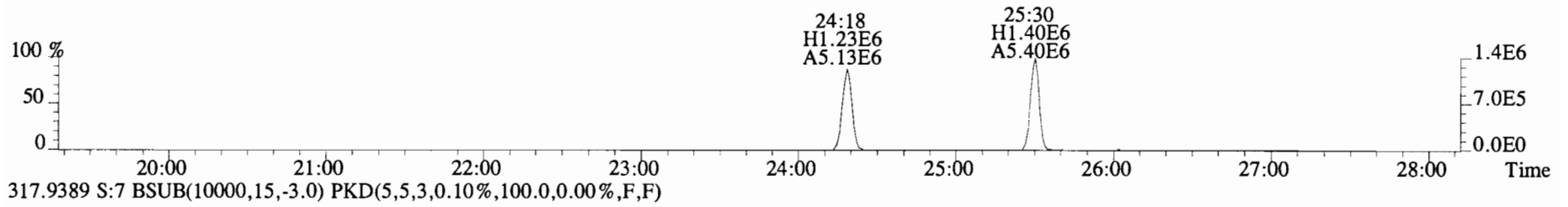
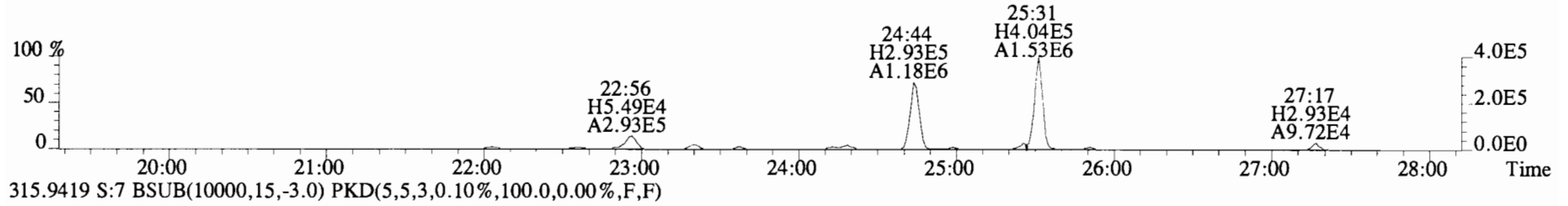
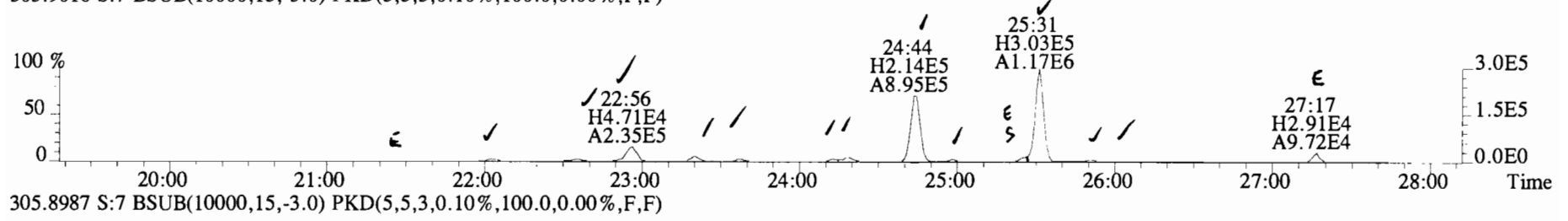
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



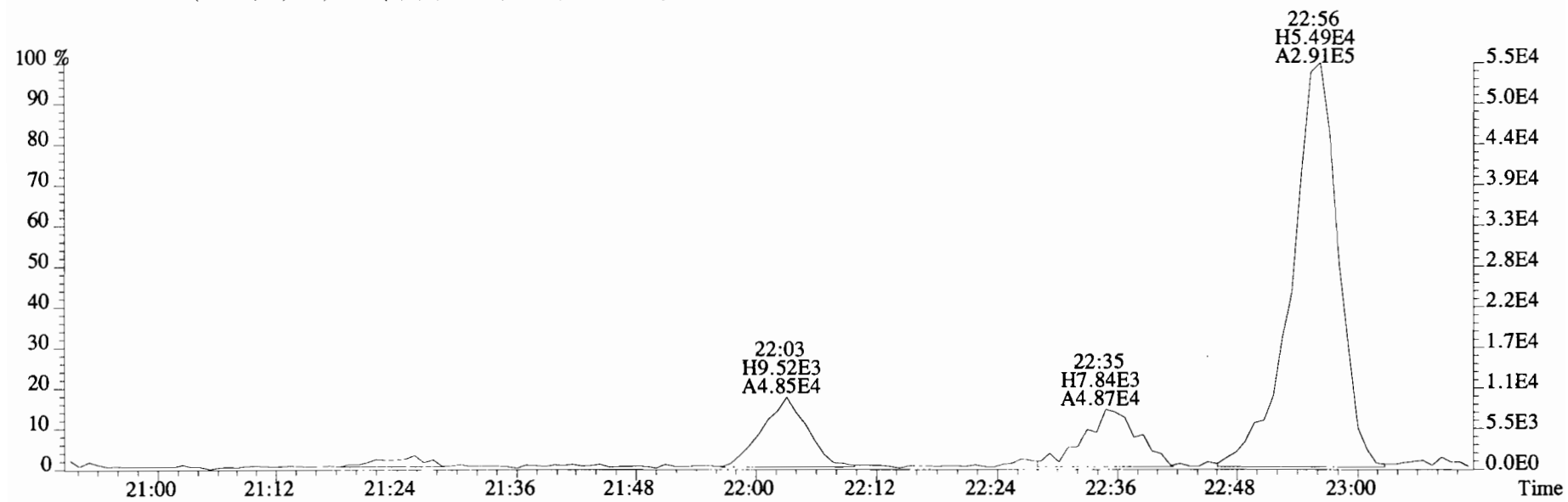
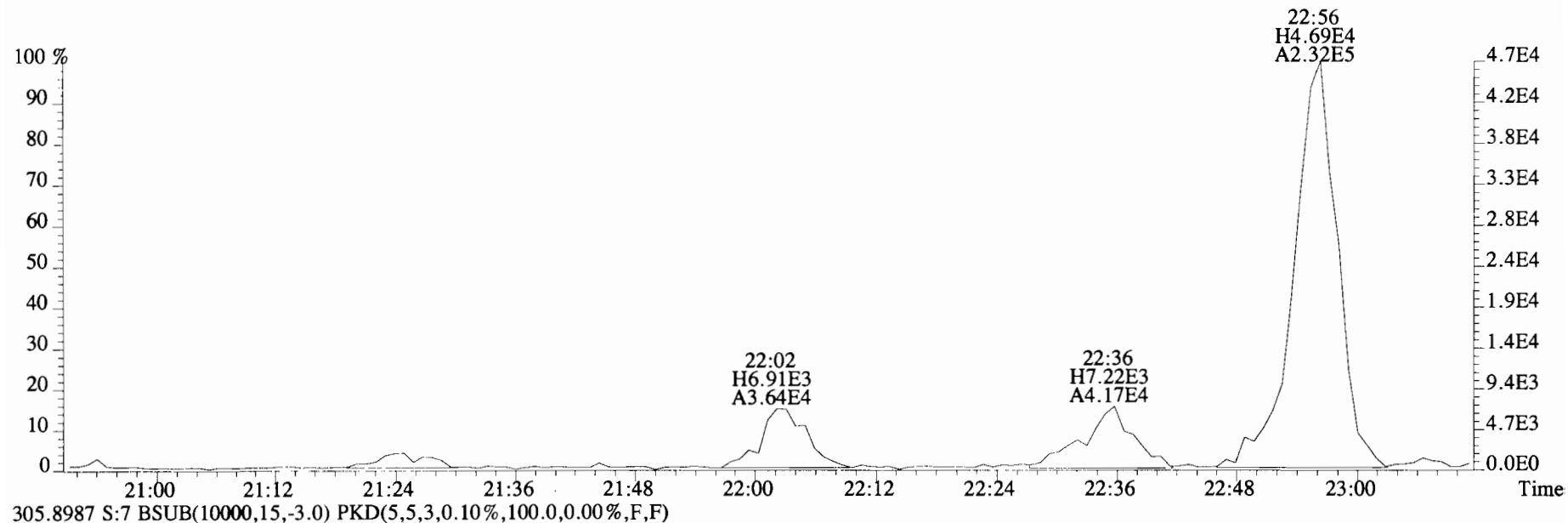
File:191031D2 #1-432 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



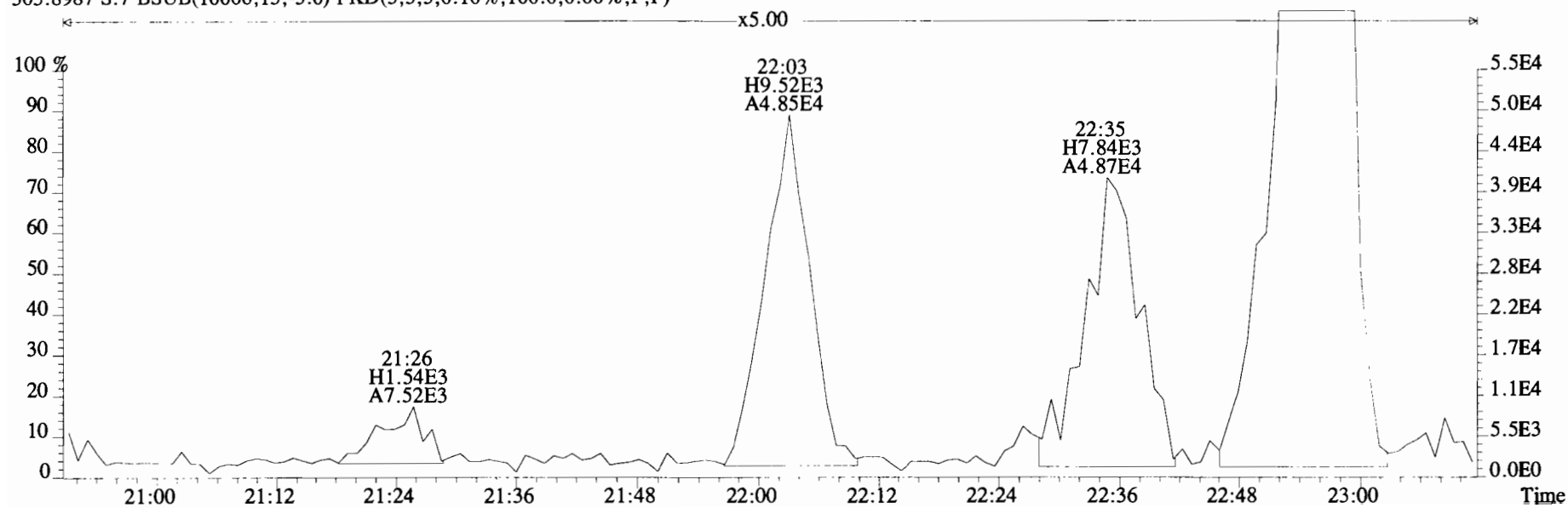
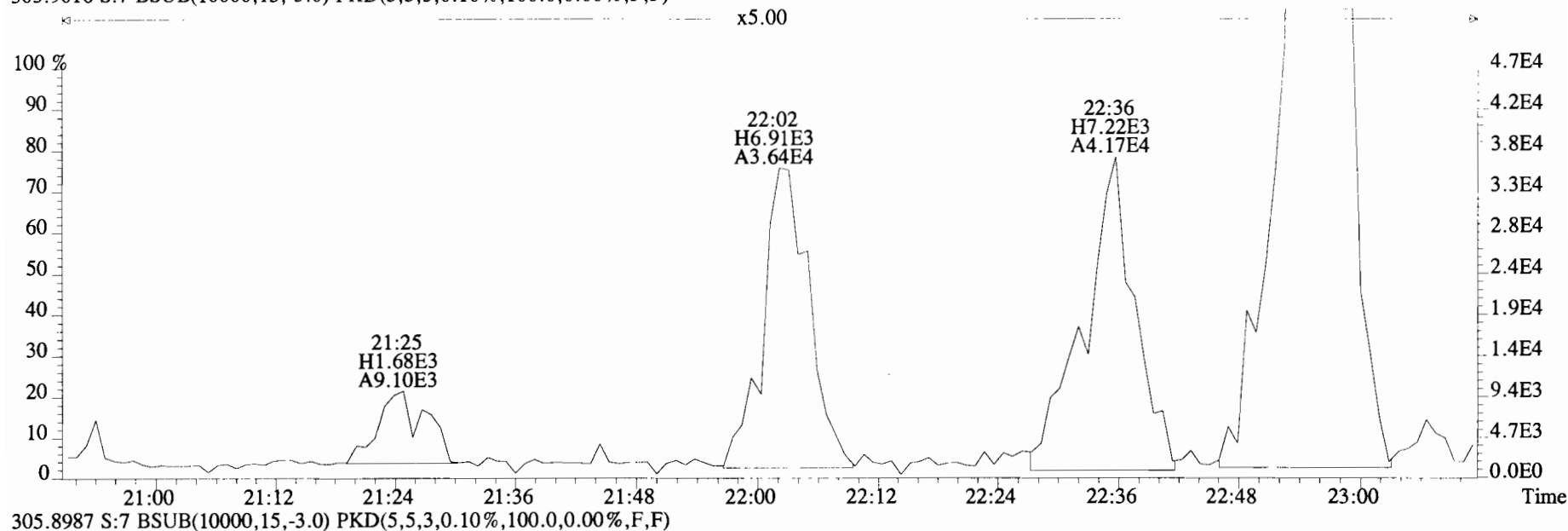
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



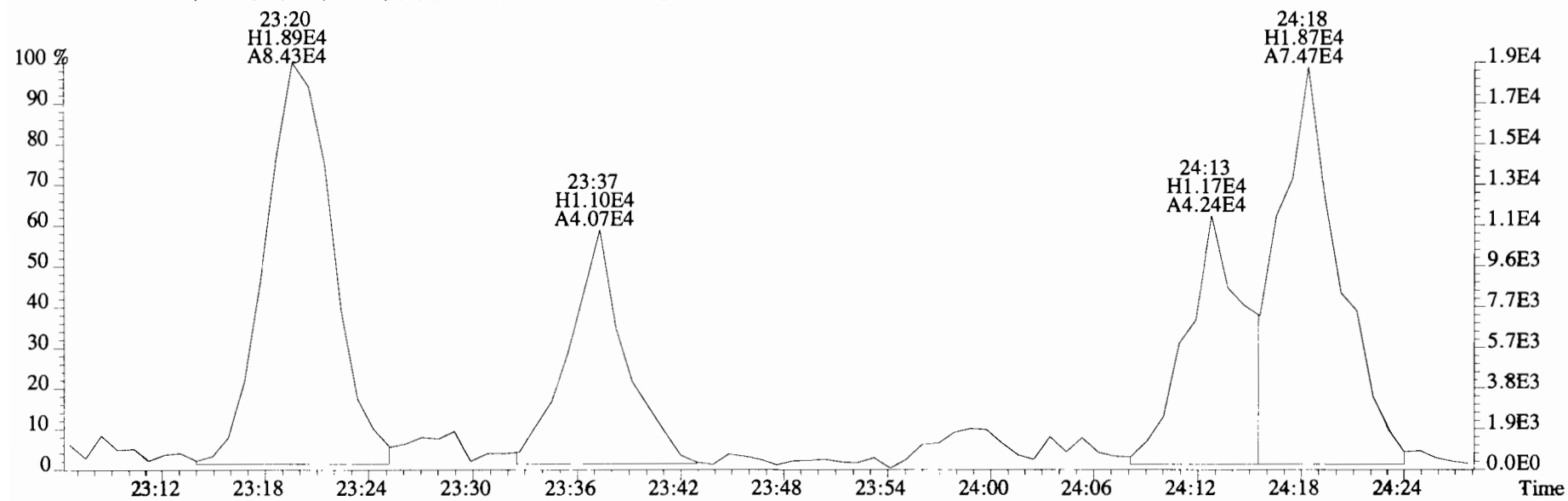
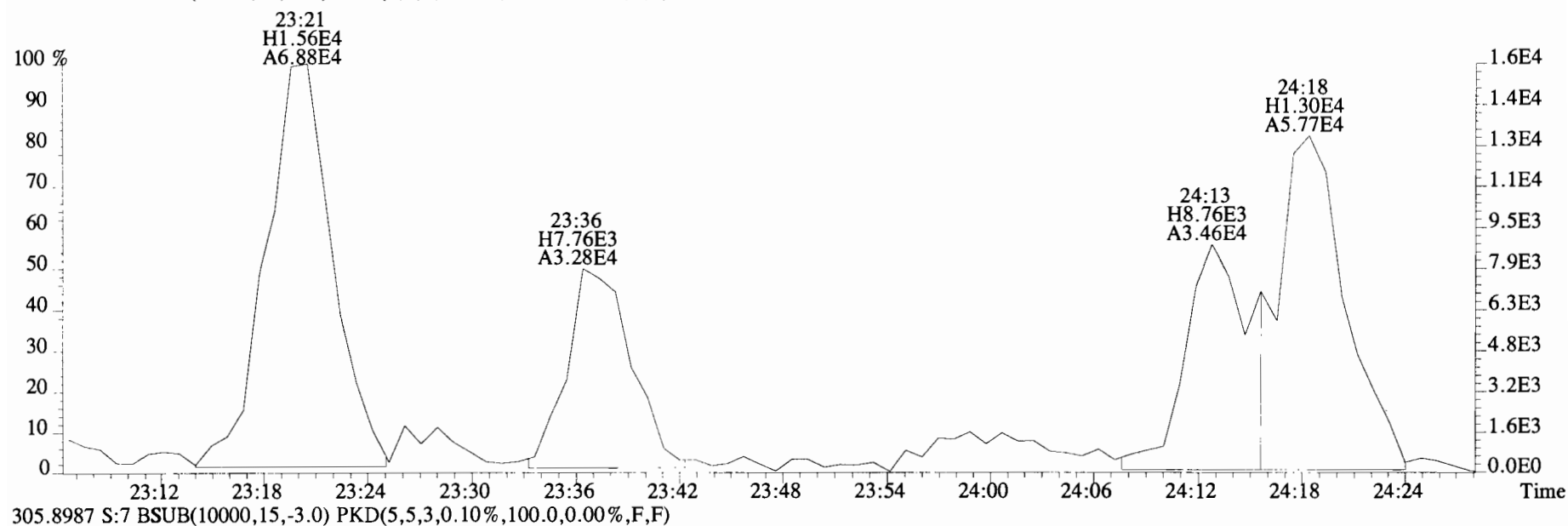
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



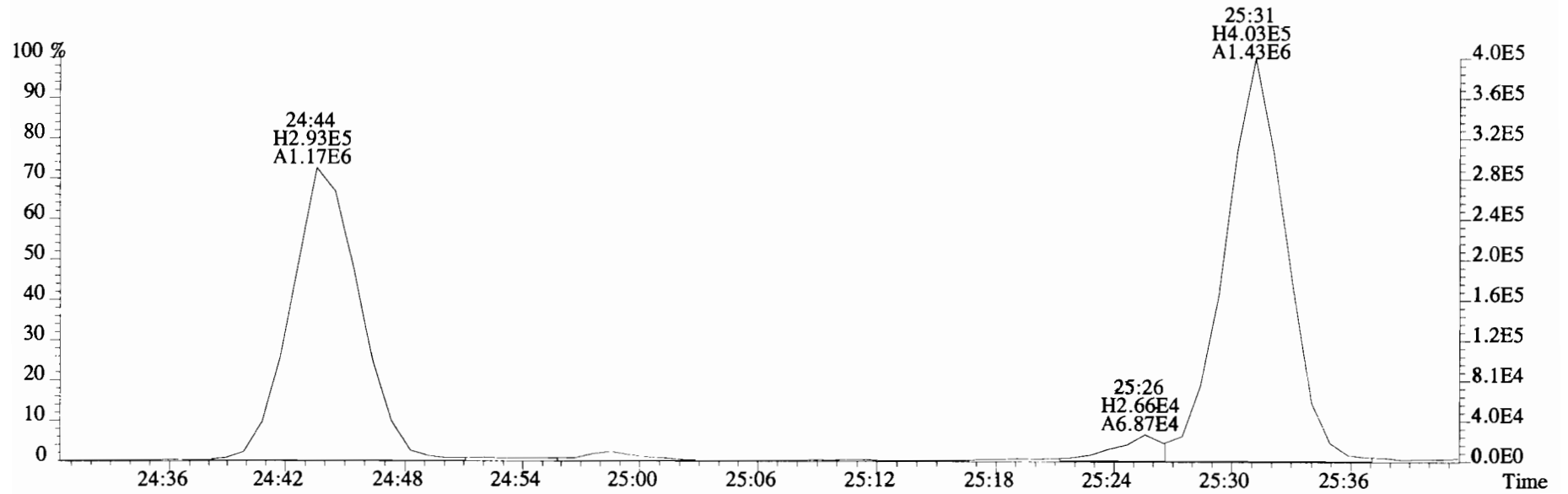
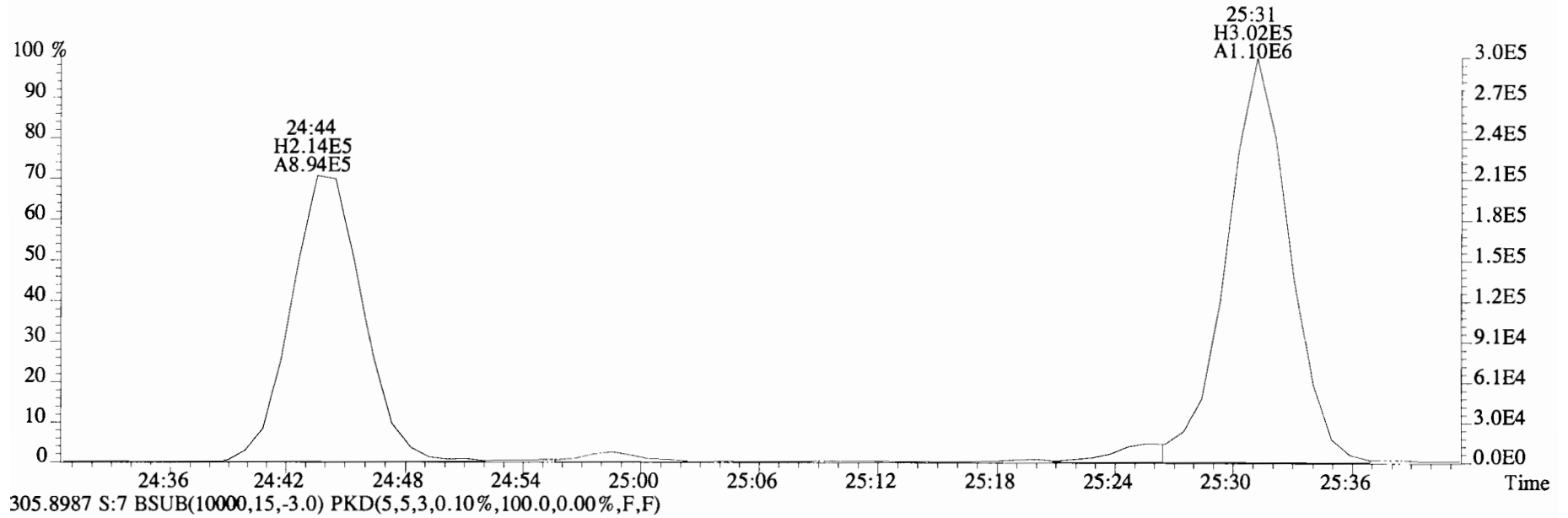
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



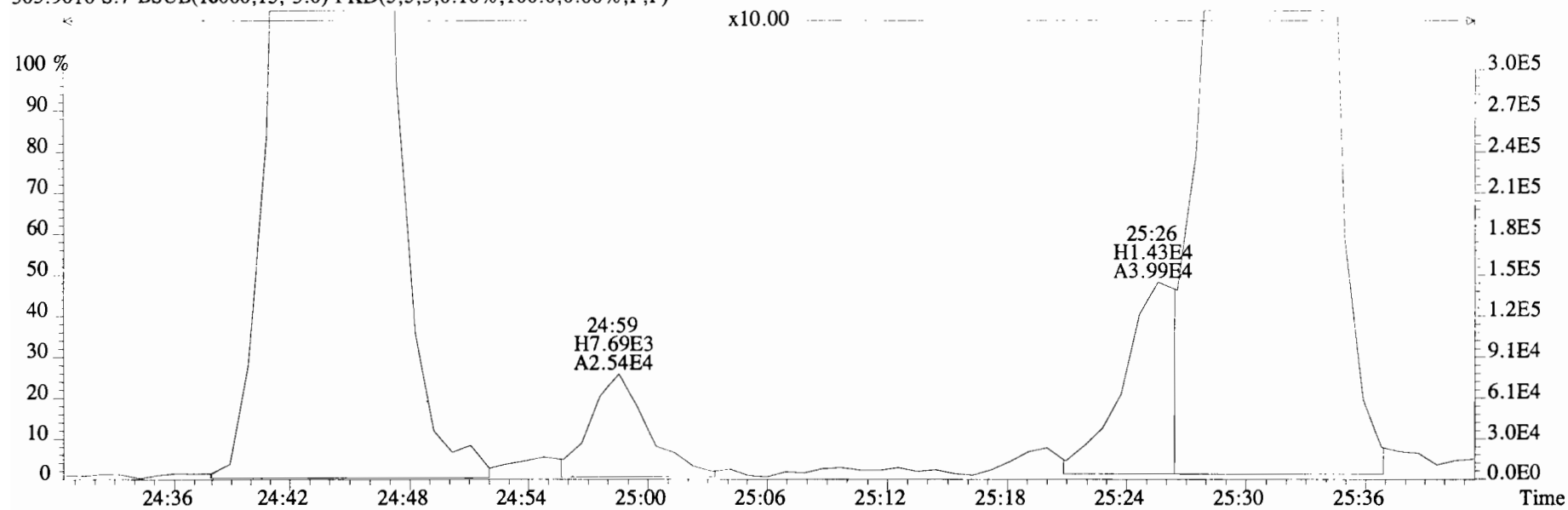
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Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



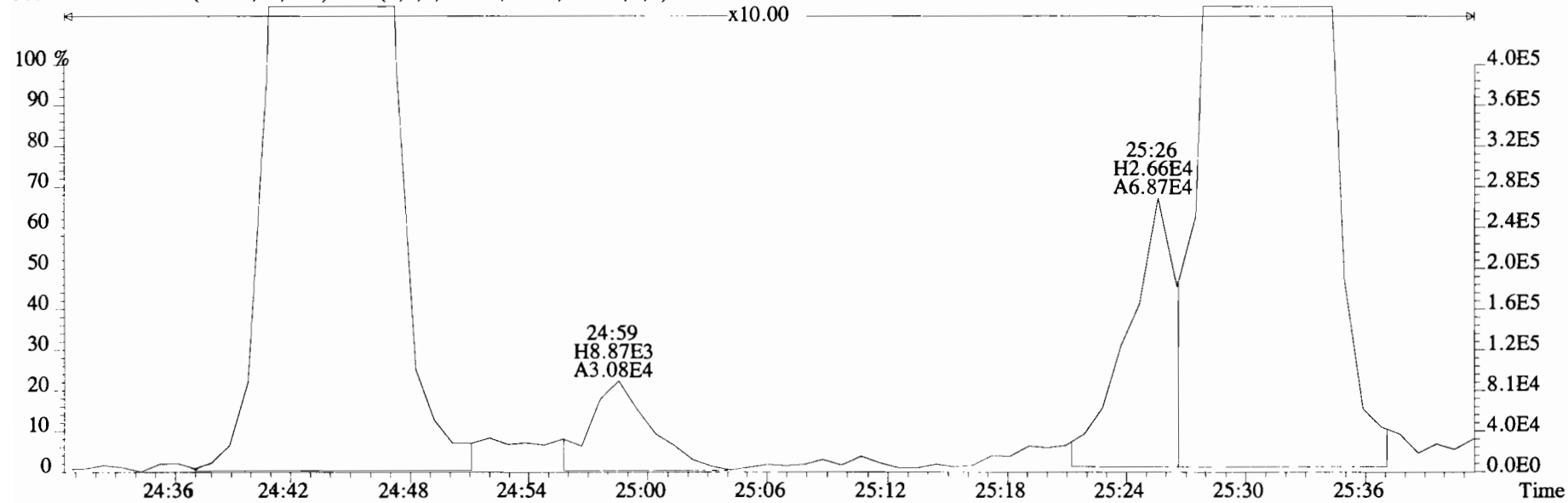
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



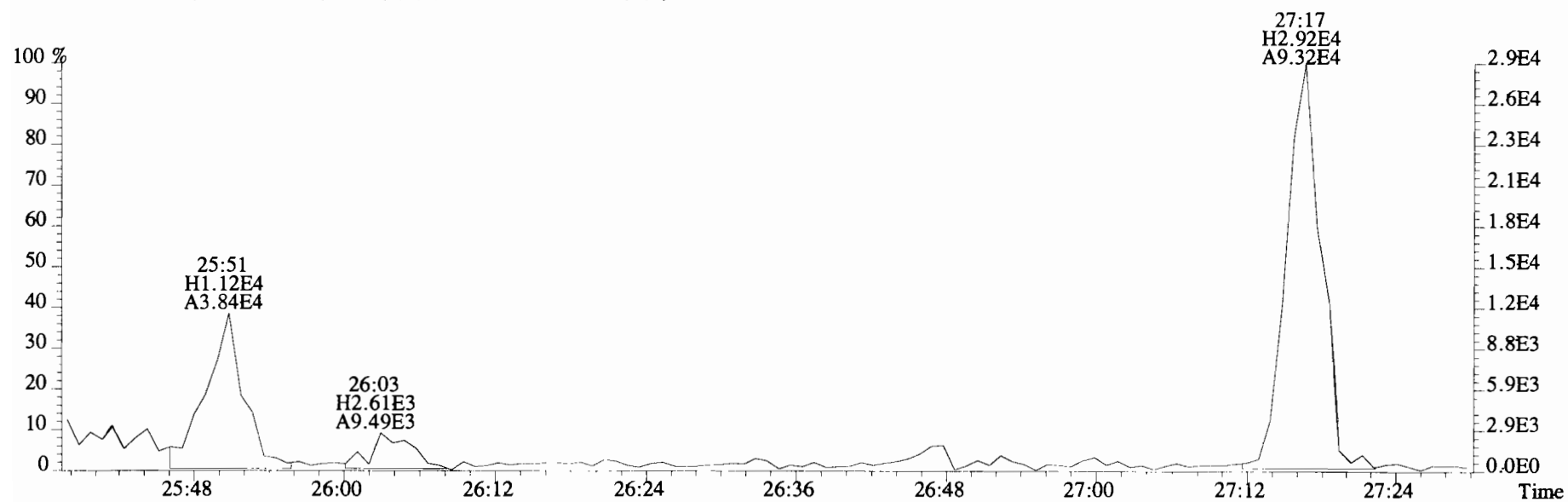
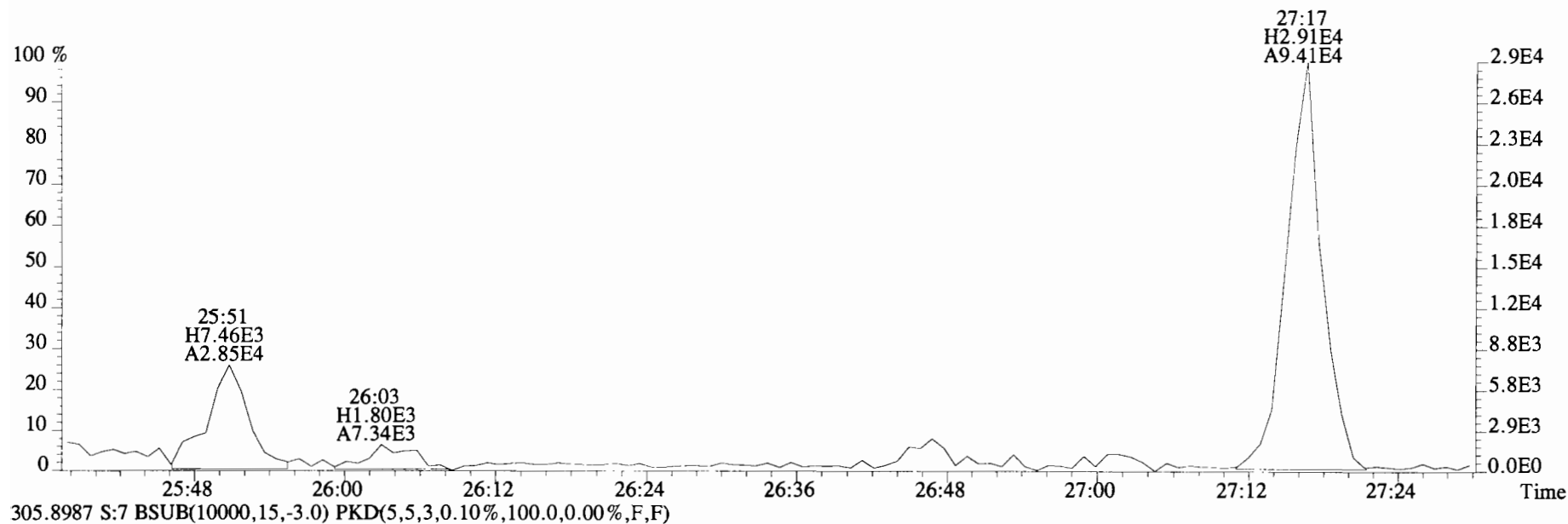
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Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



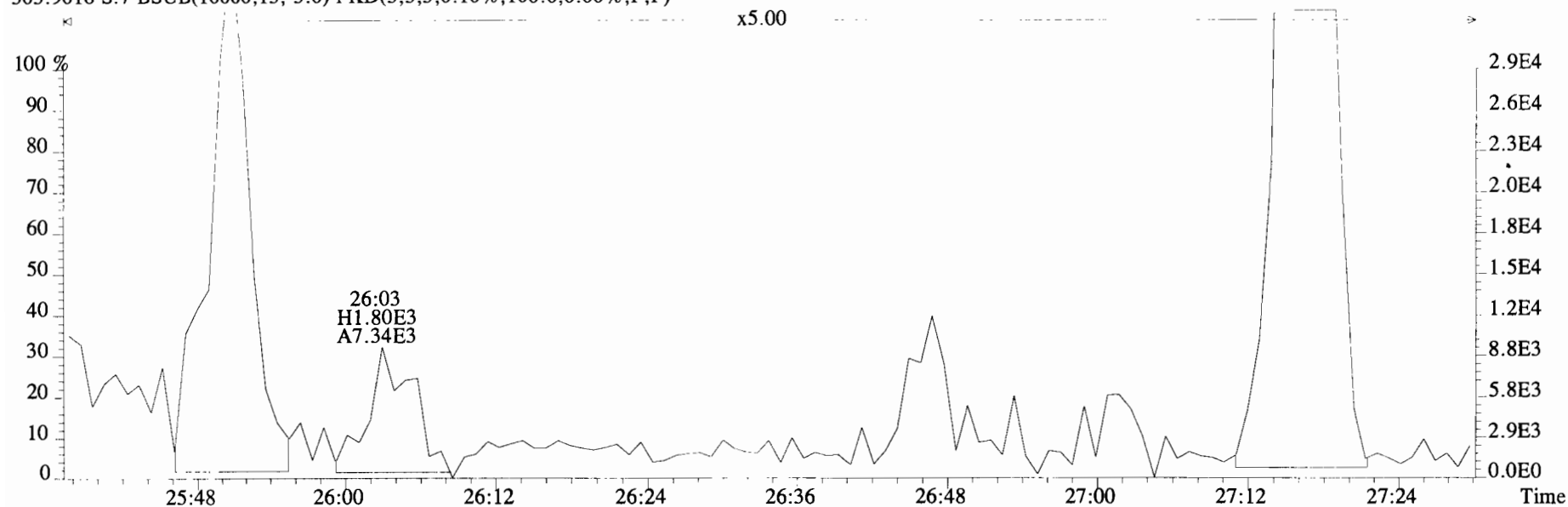
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



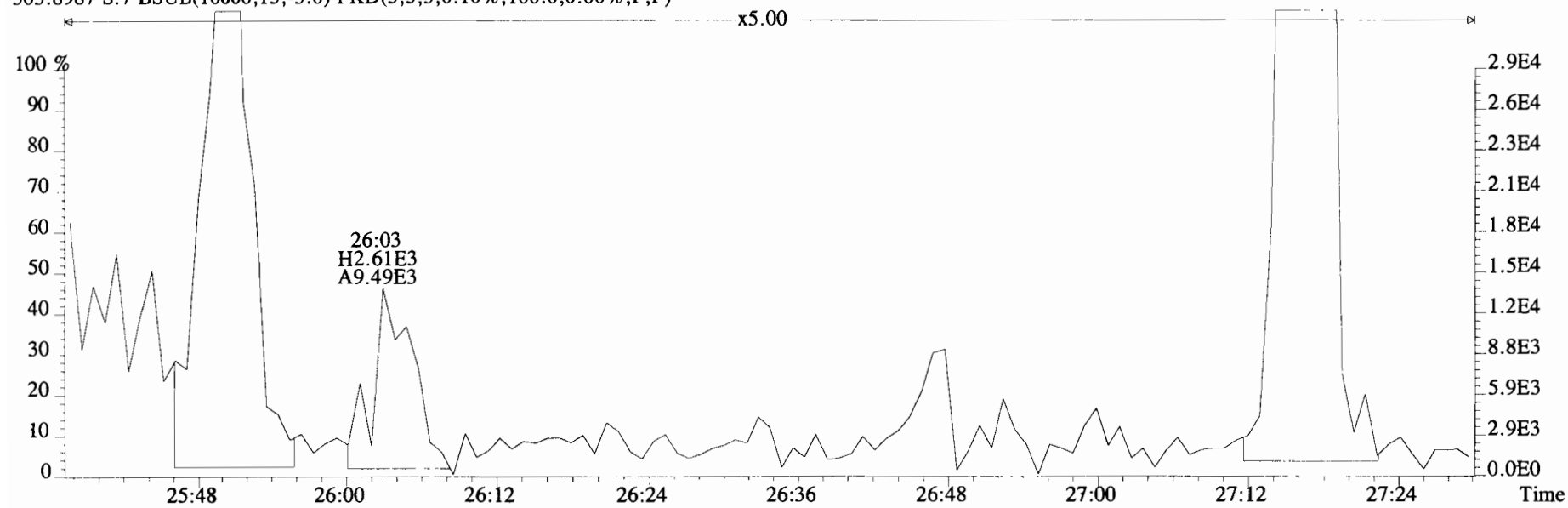
File:191031D2 #1-493 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



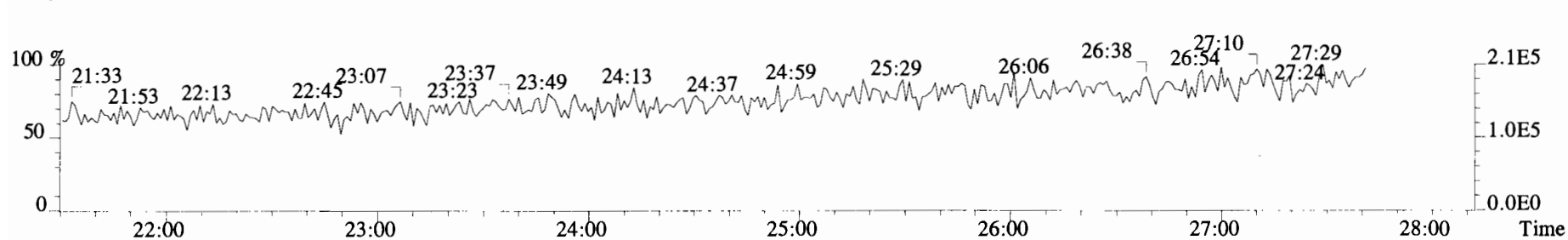
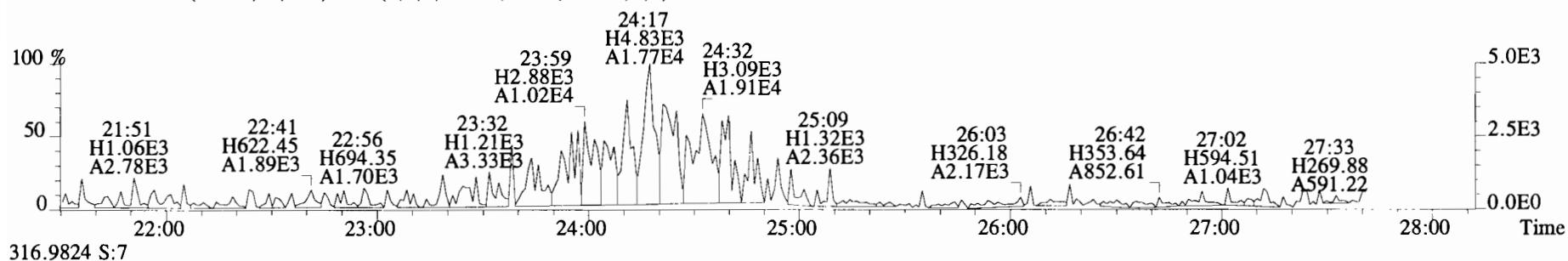
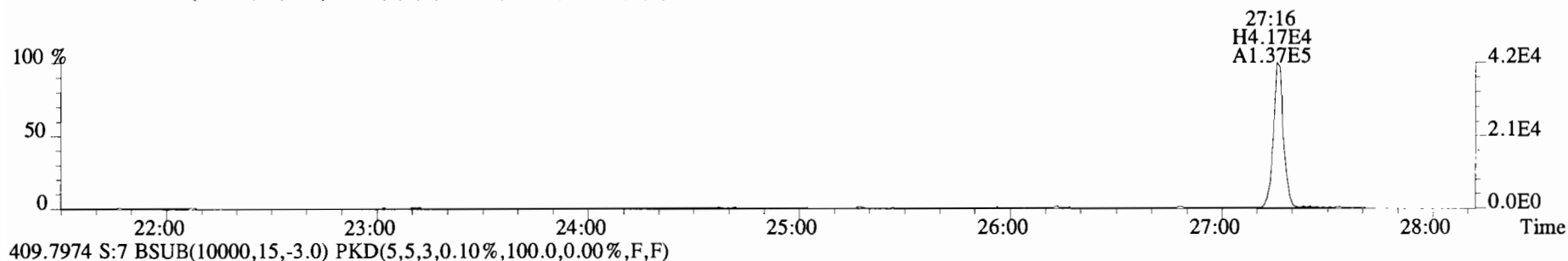
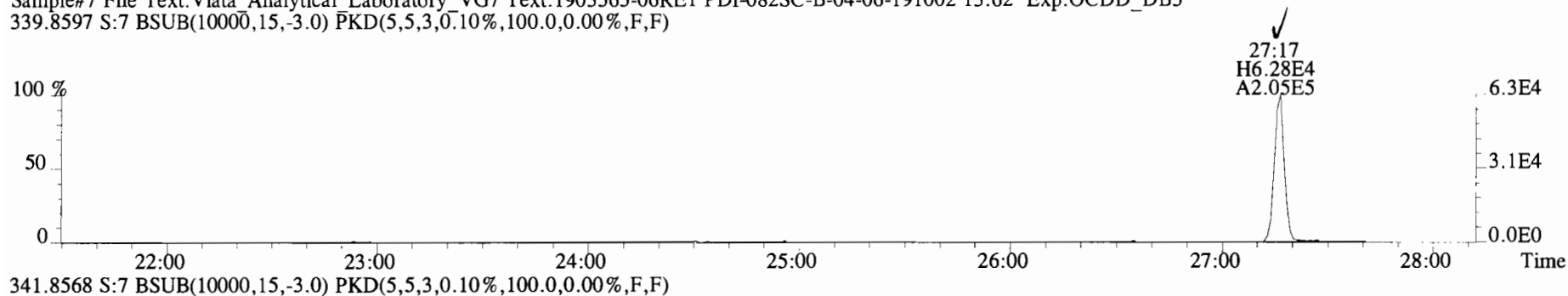
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



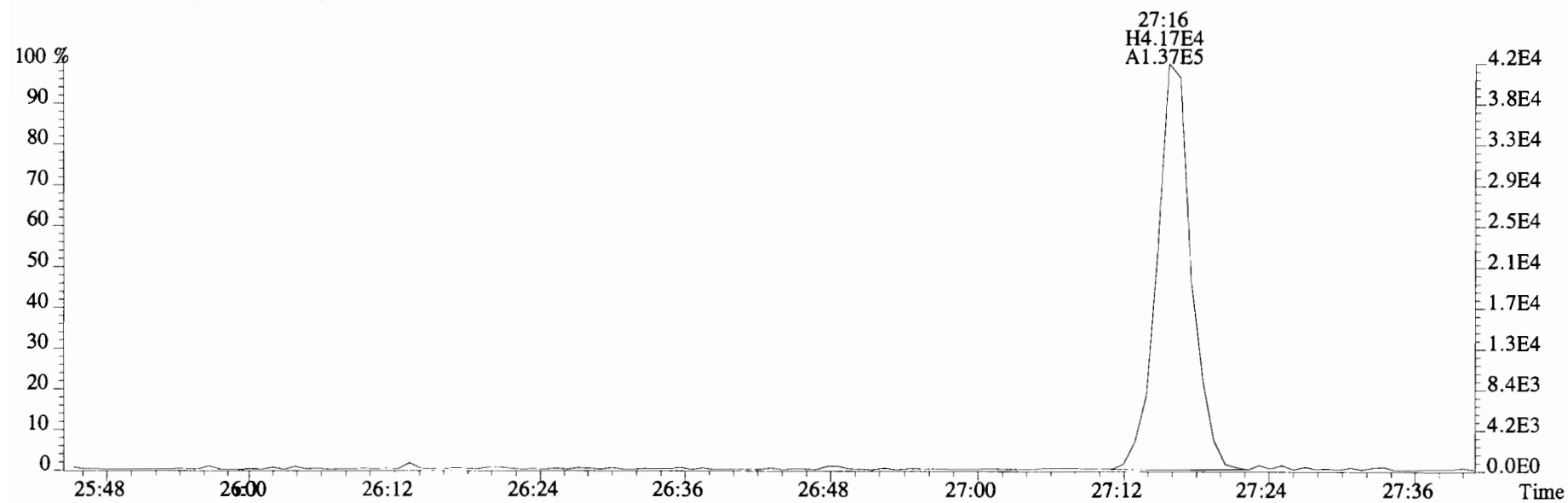
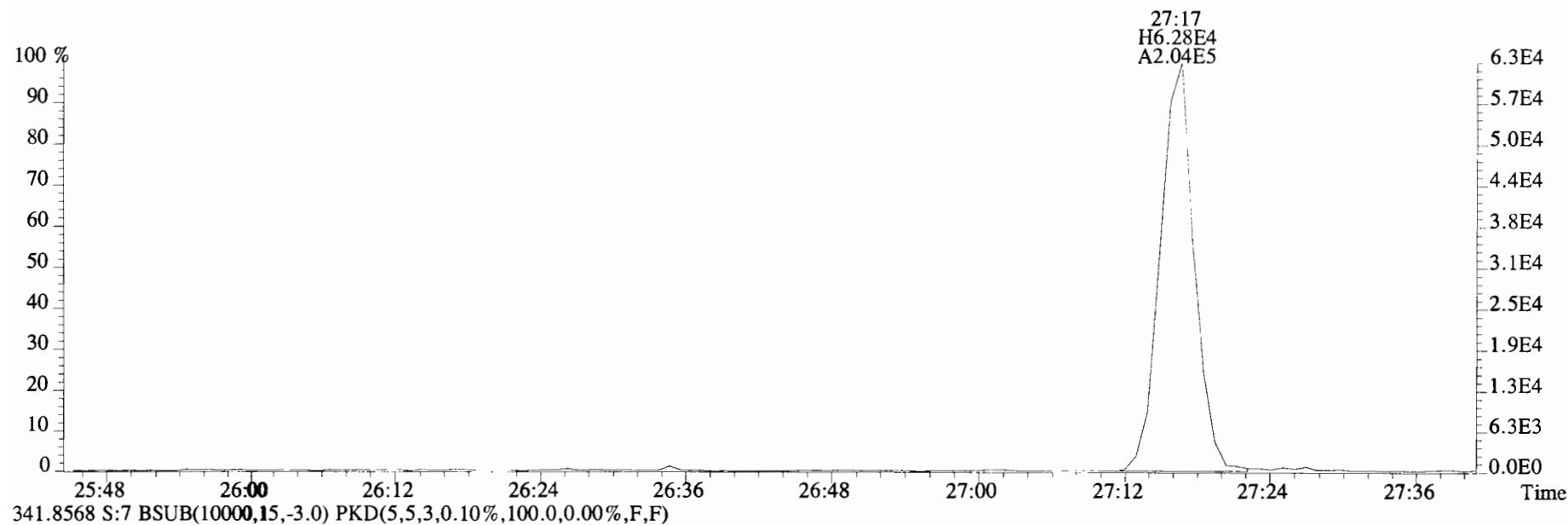
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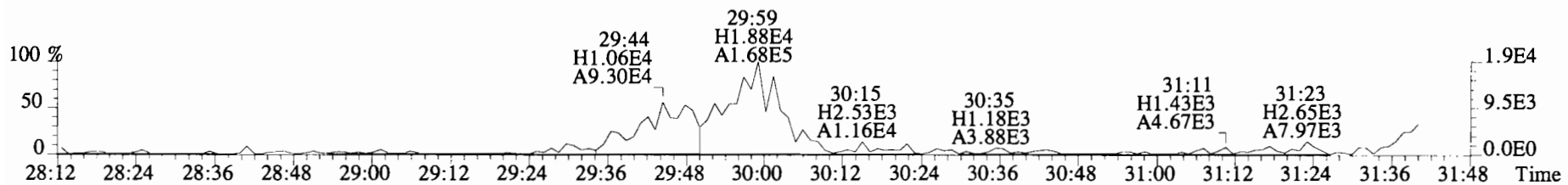
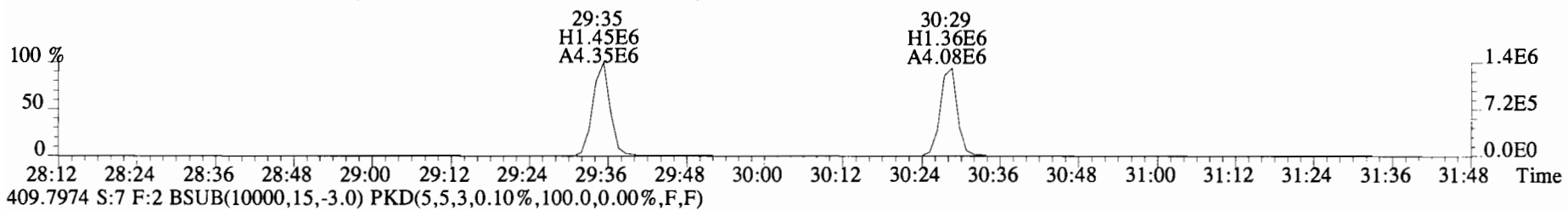
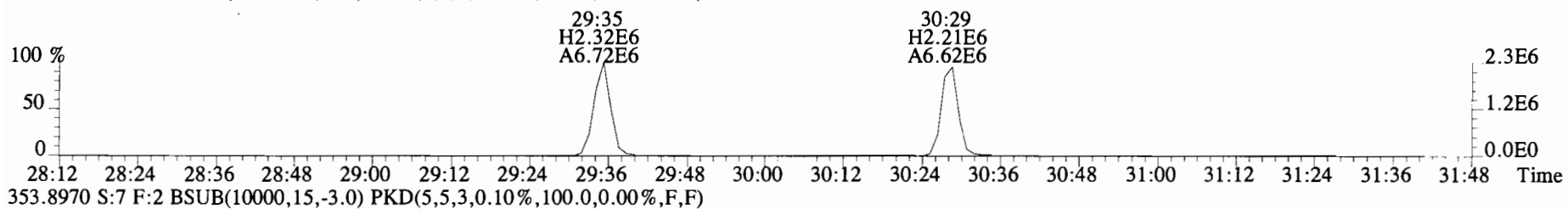
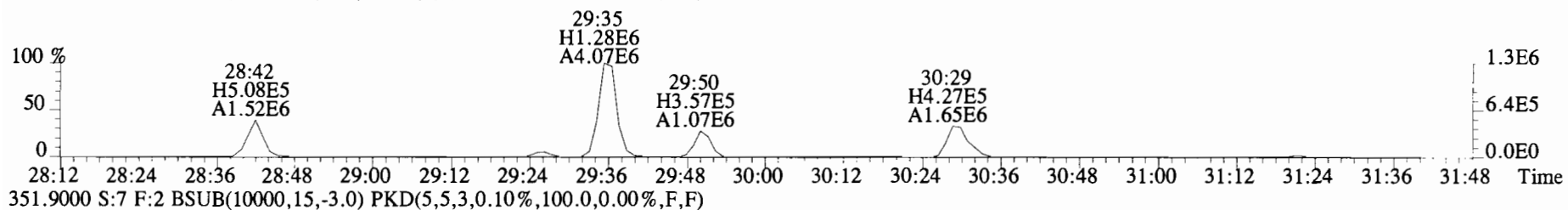
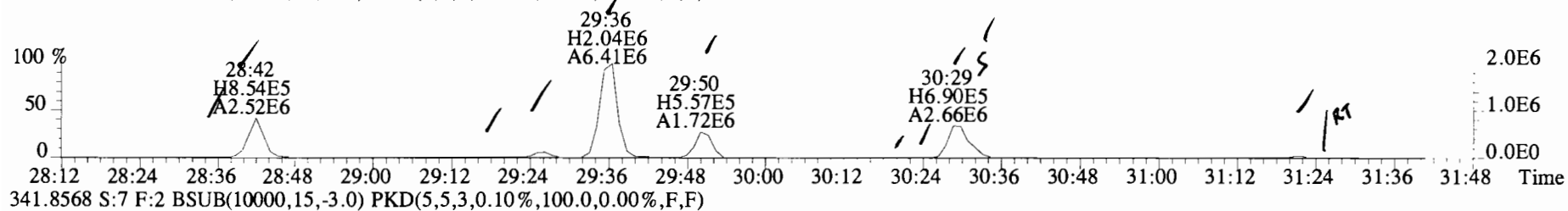
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 Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



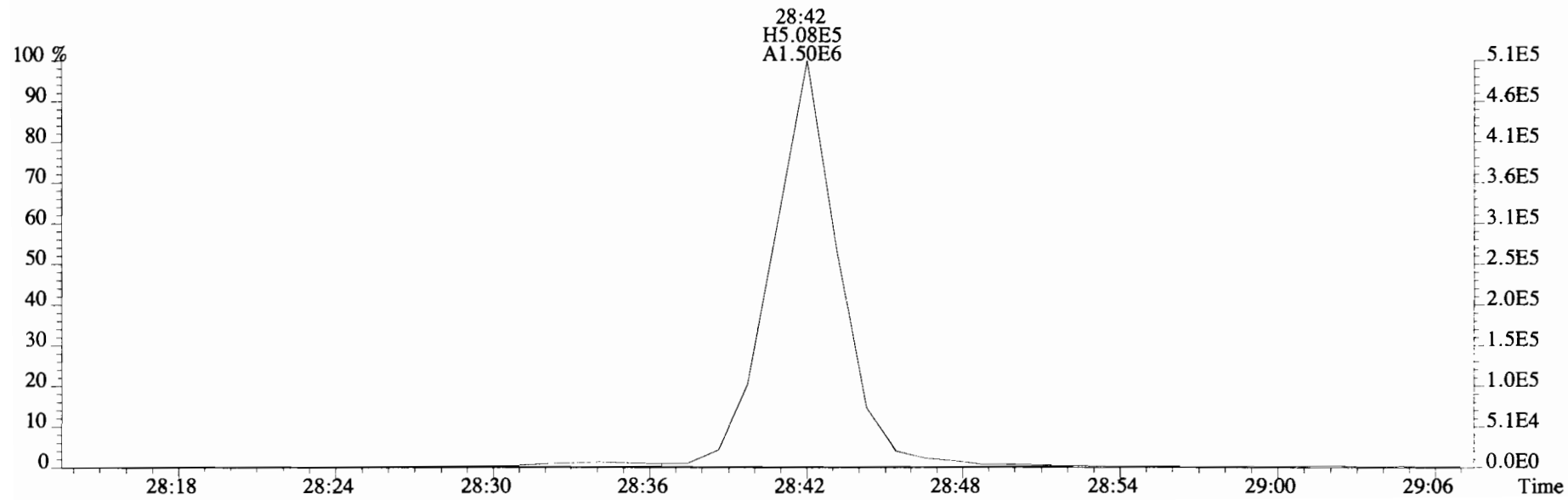
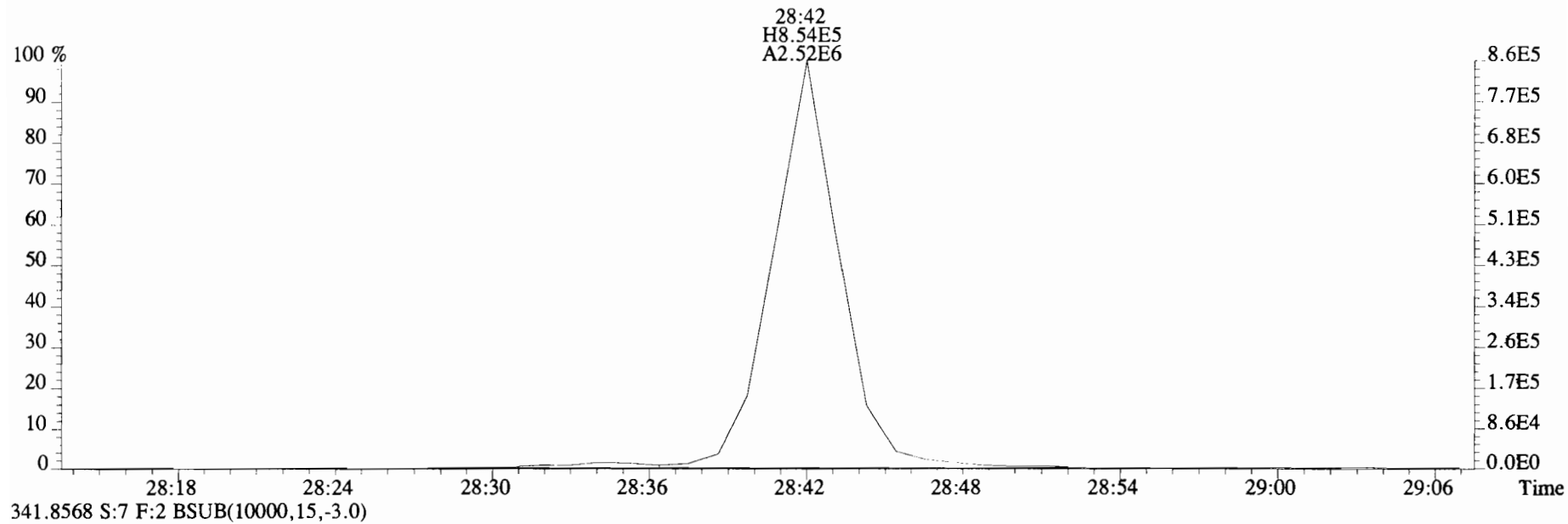
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



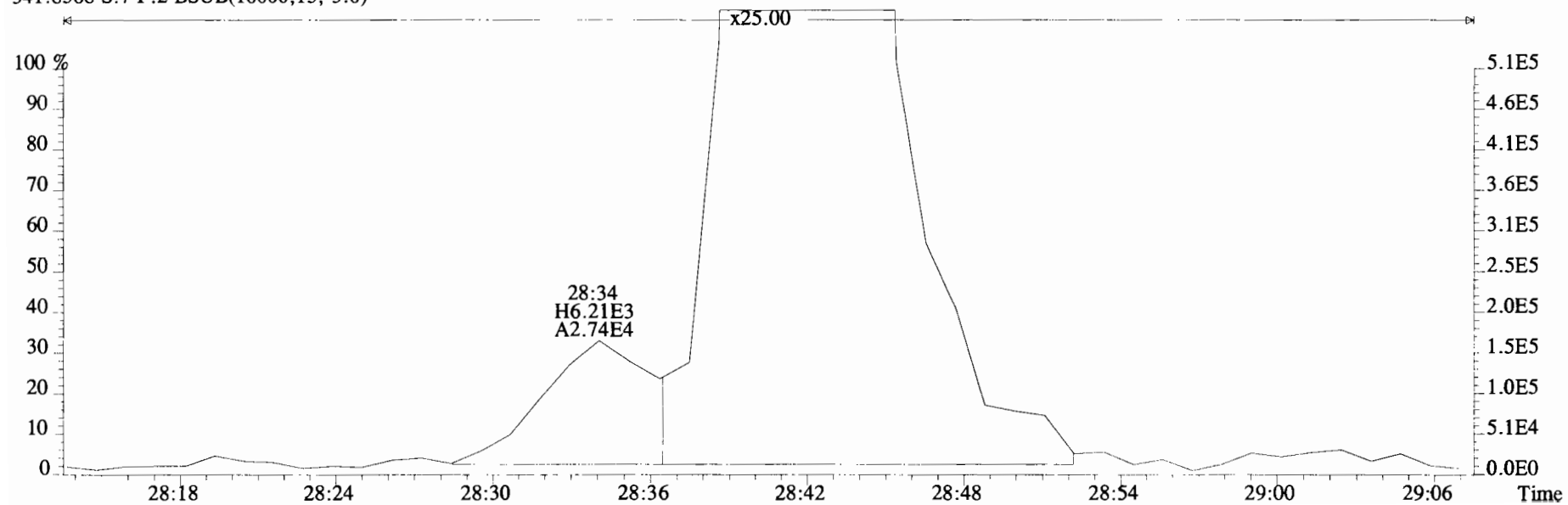
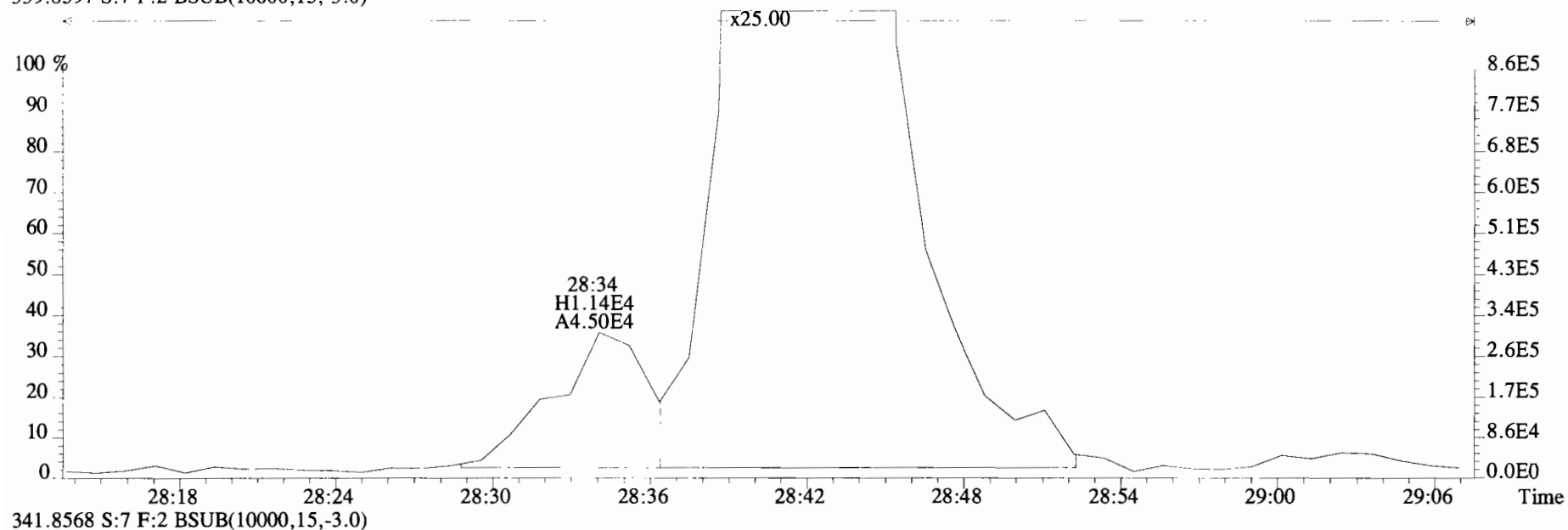
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



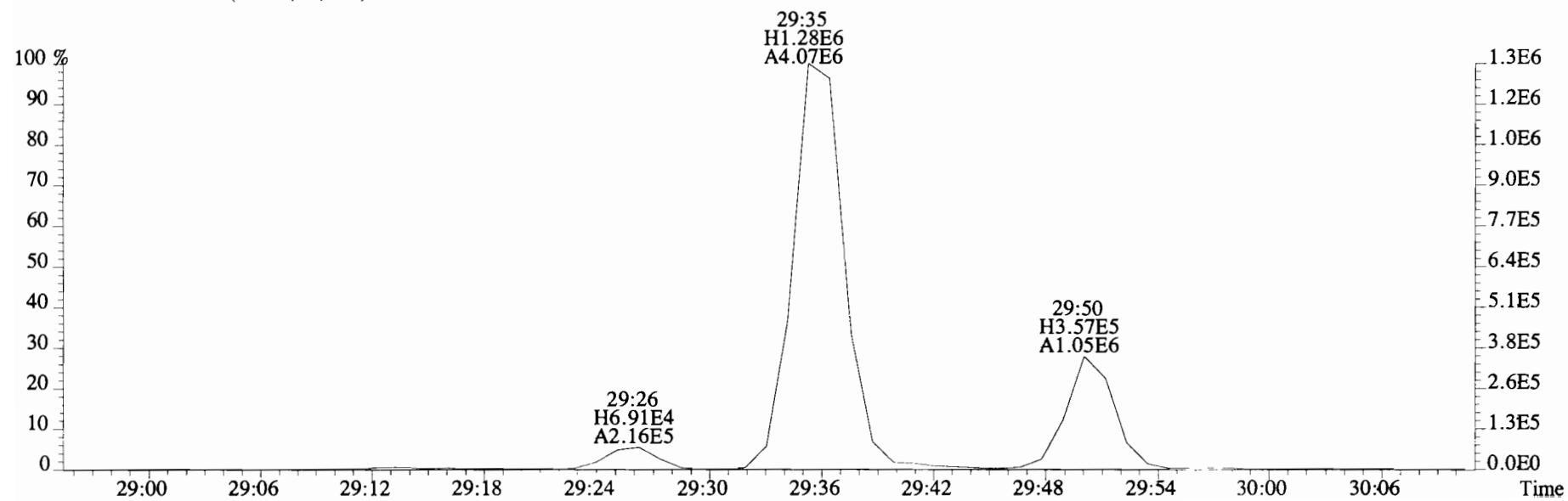
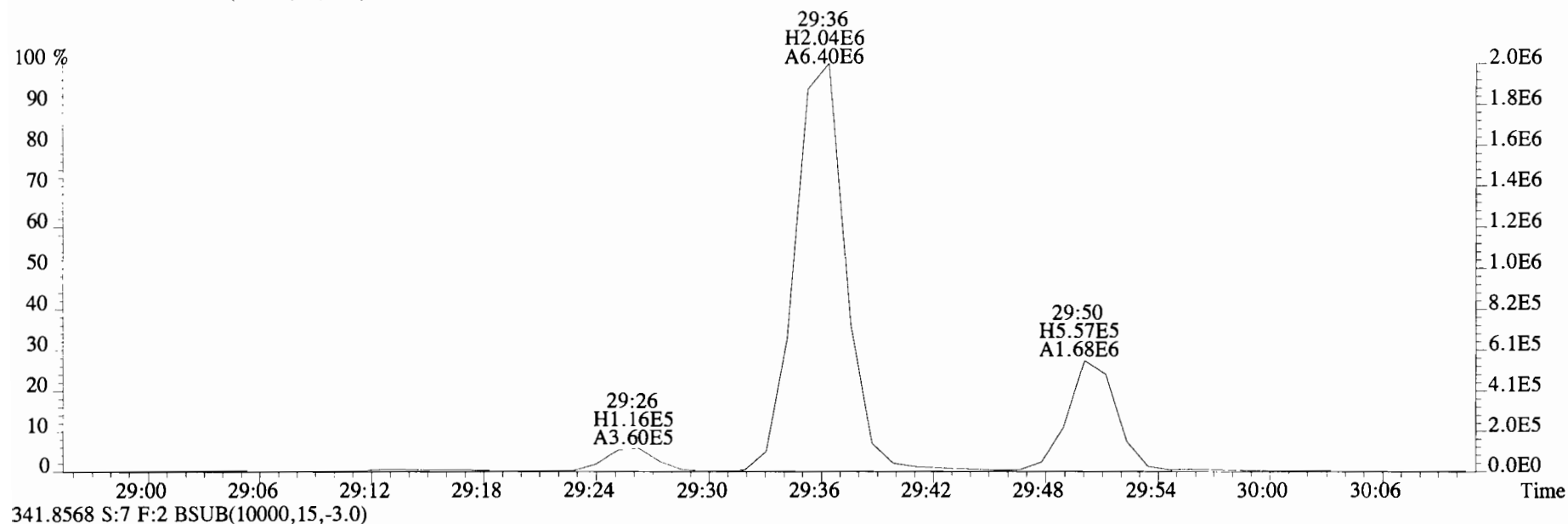
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



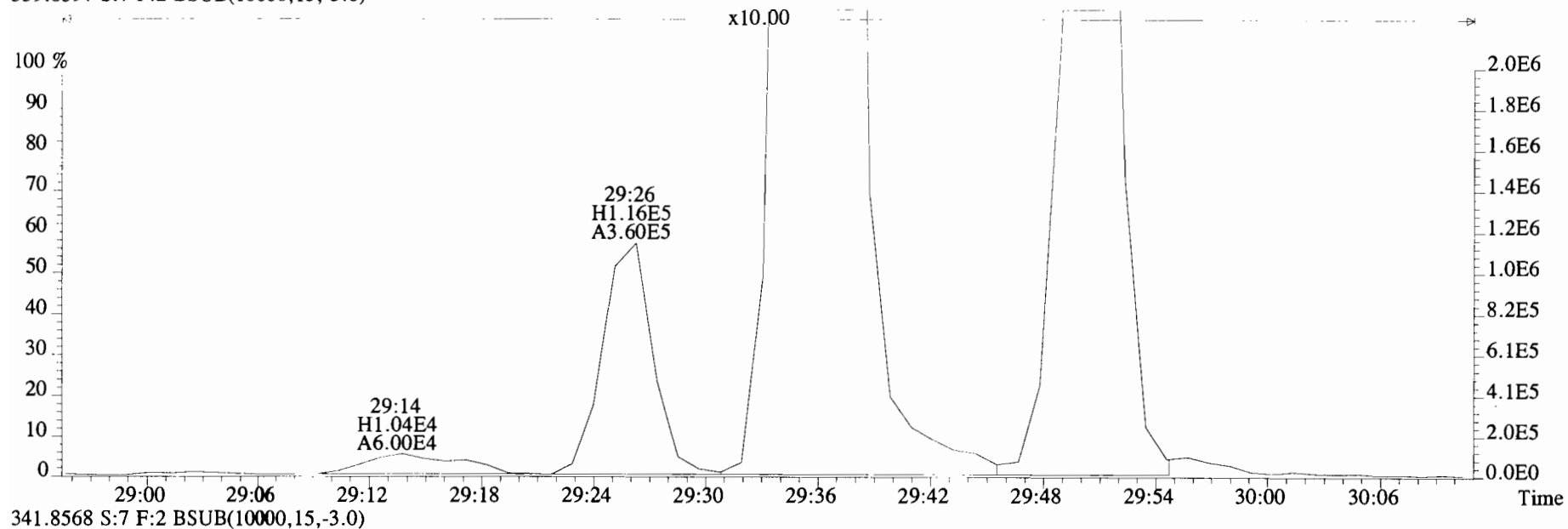
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(I0000,15,-3.0)



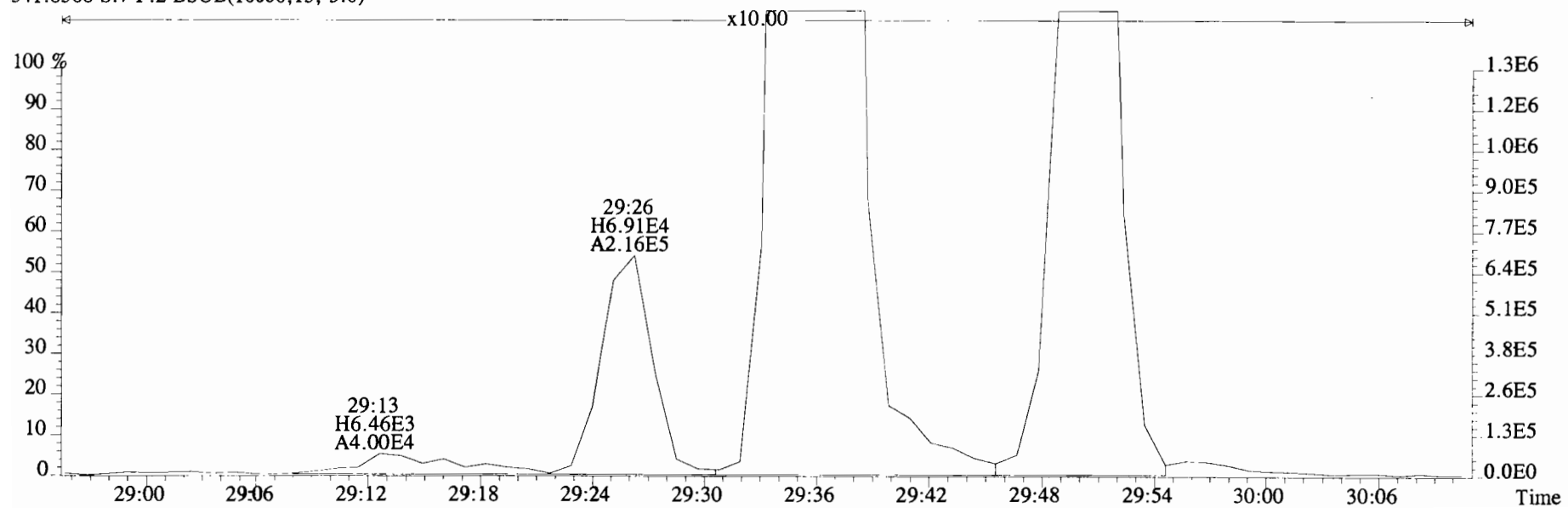
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



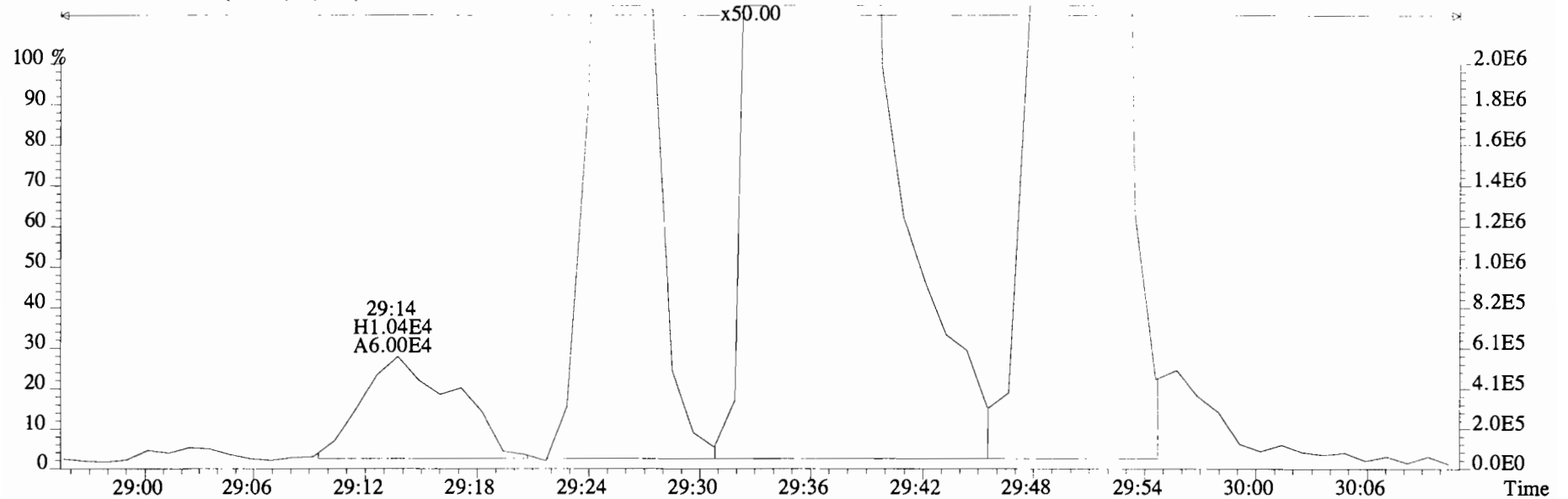
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



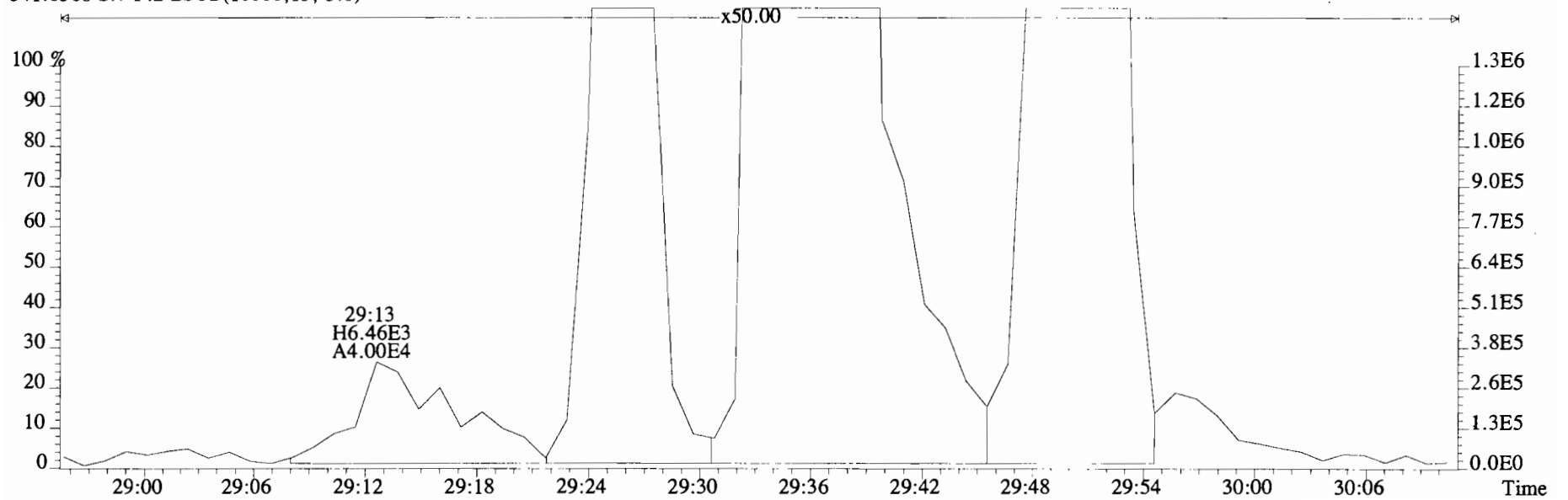
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



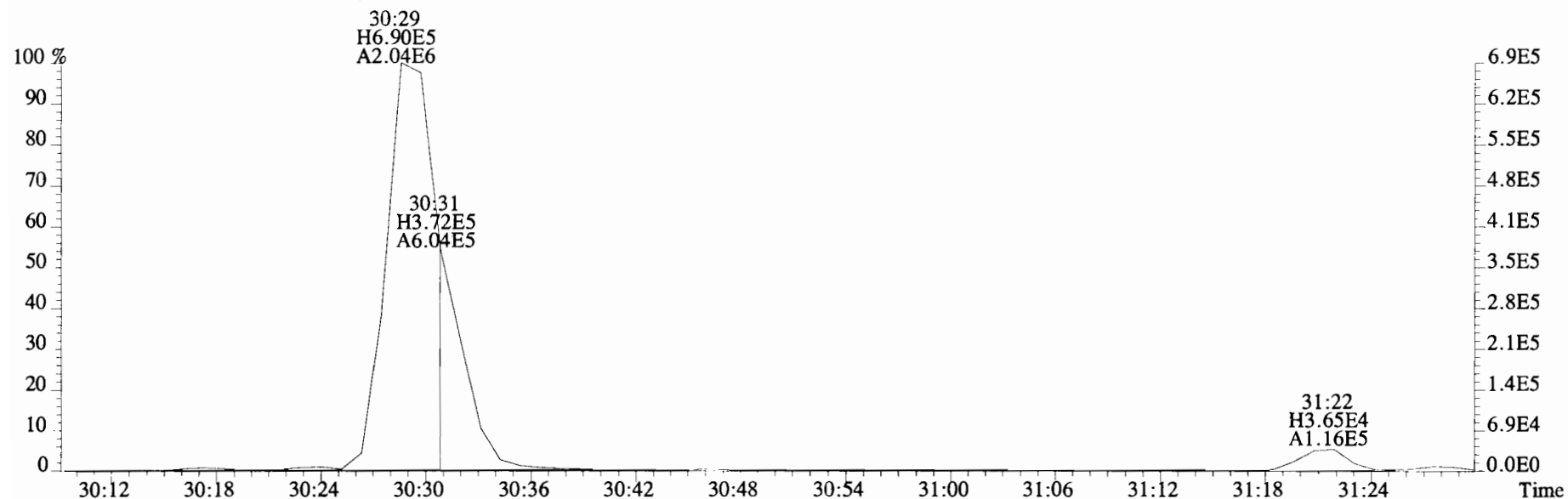
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



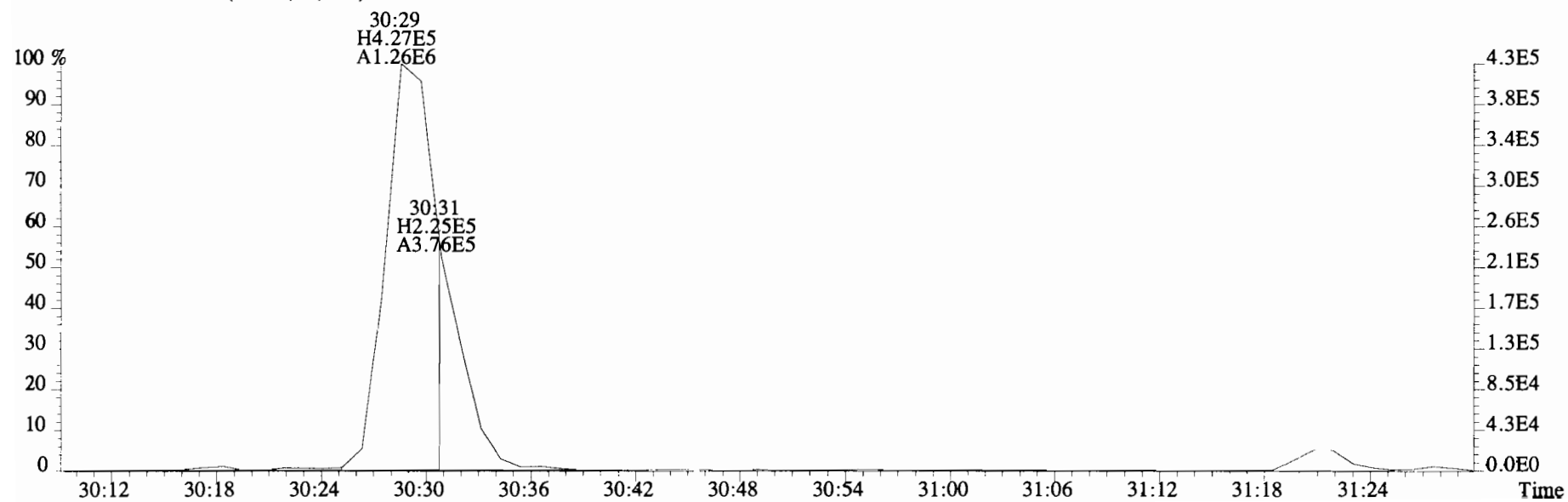
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



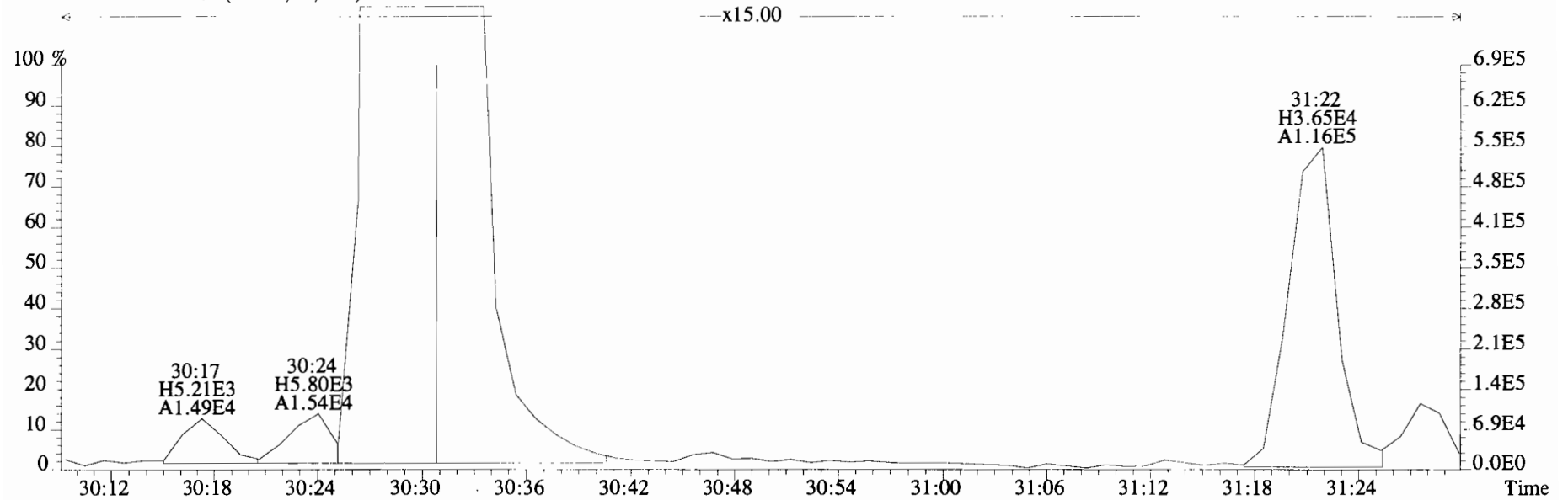
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



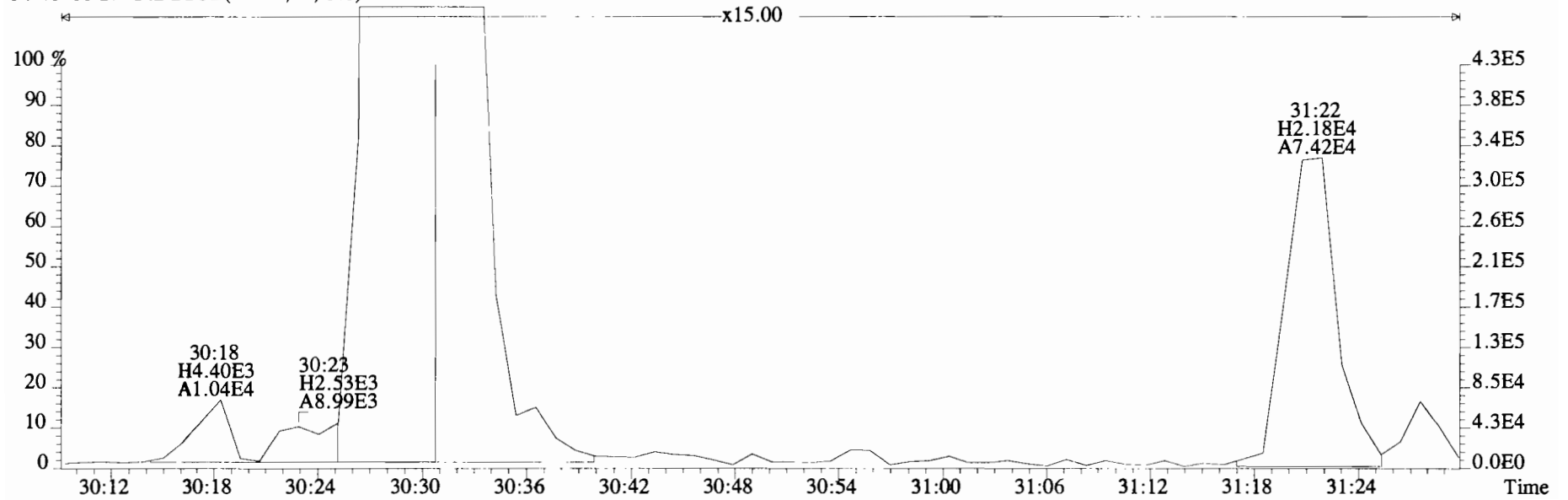
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



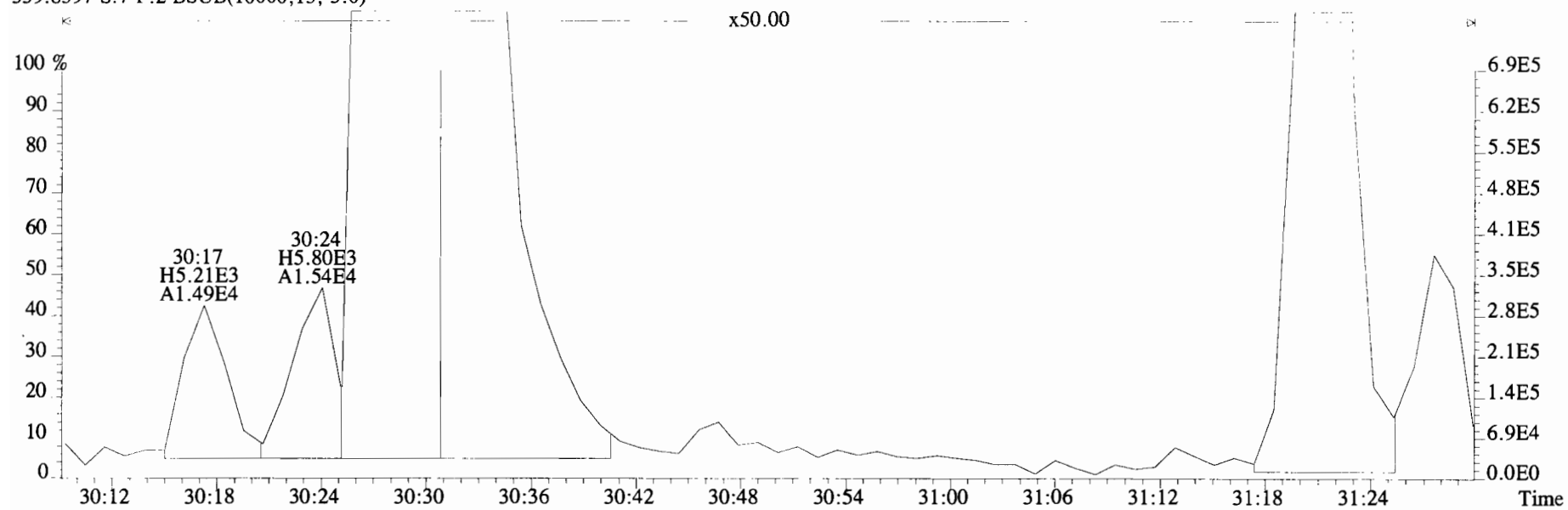
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 Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 339.8597 S:7 F:2 BSUB(10000,15,-3.0)



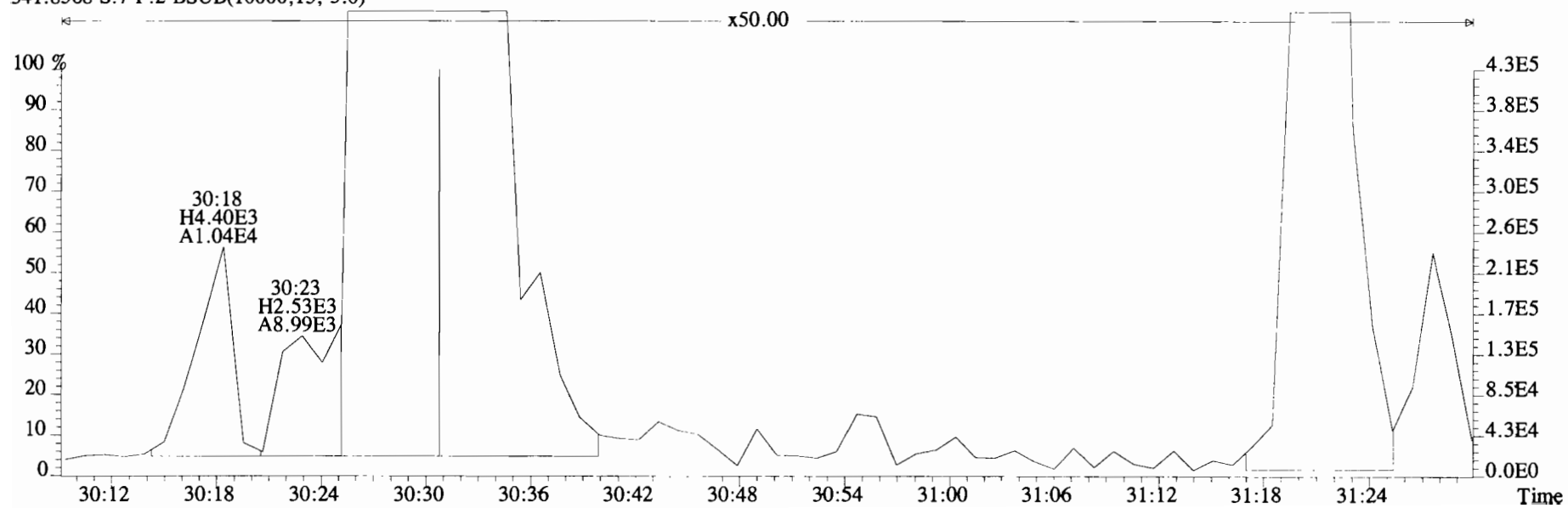
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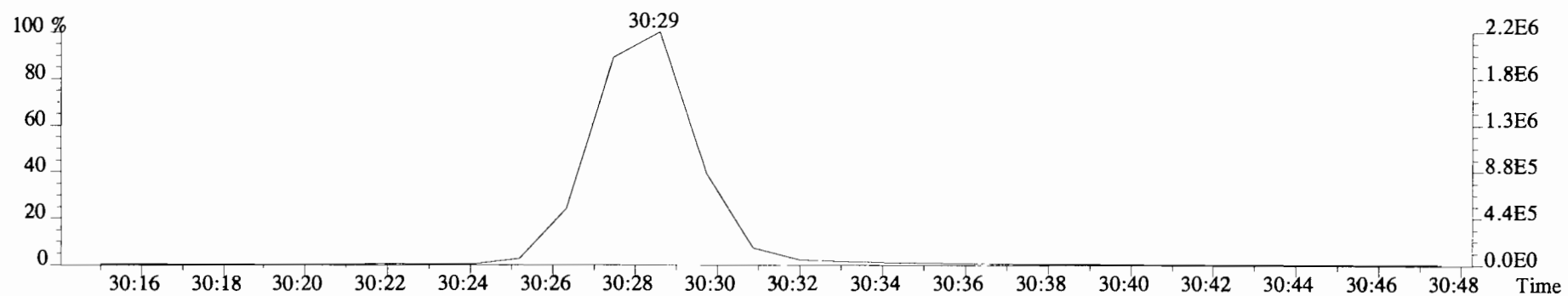
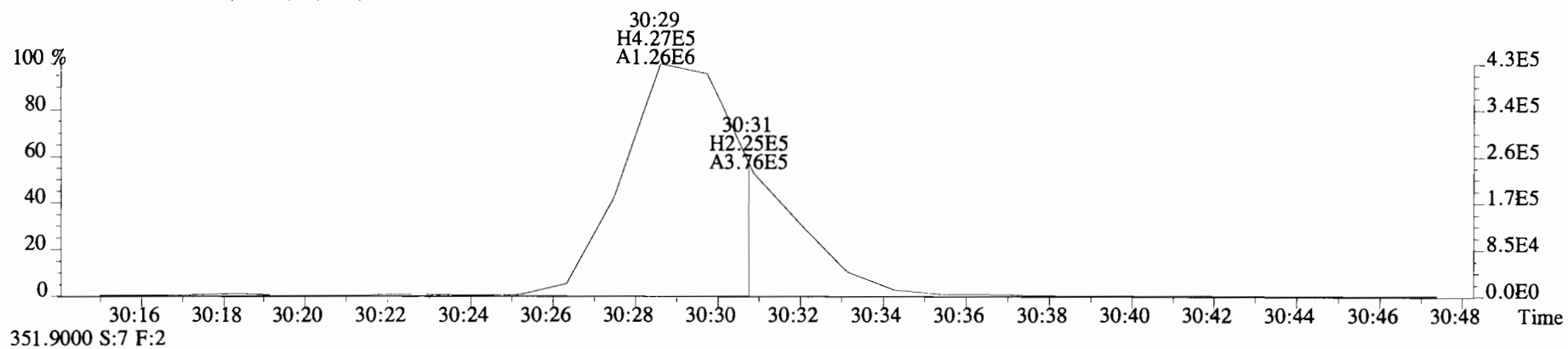
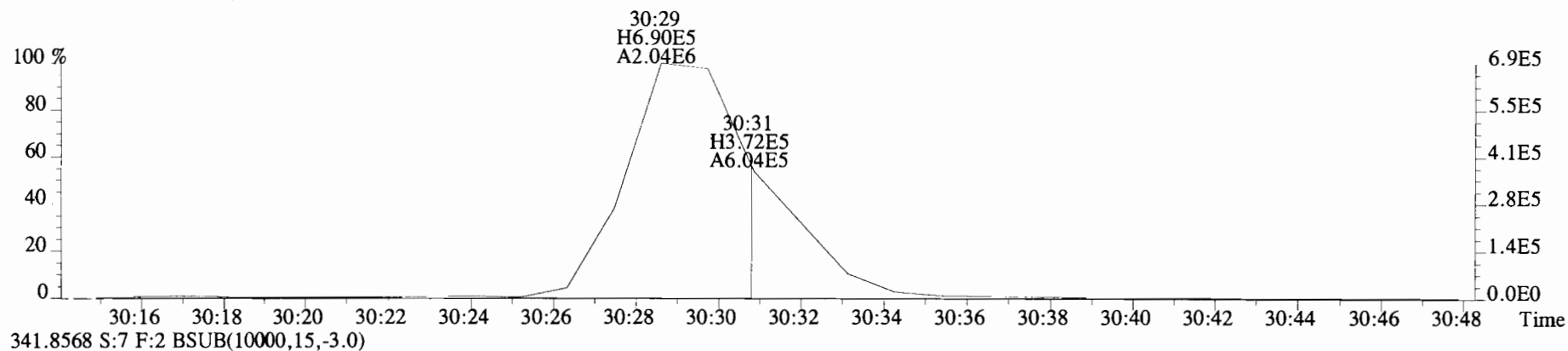
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Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



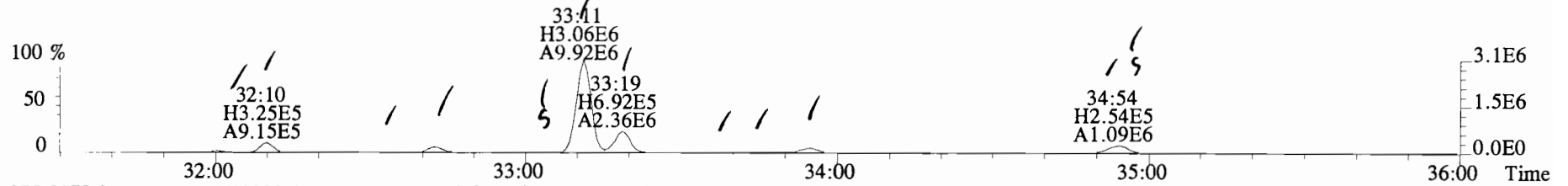
341.8568 S:7 F:2 BSUB(10000,15,-3.0)



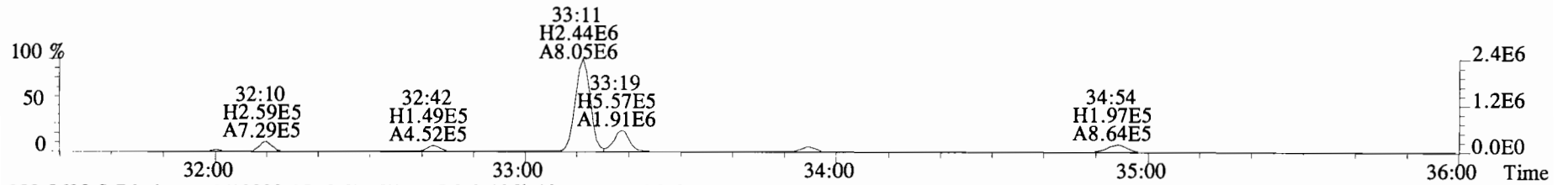
File:191031D2 #1-210 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0)



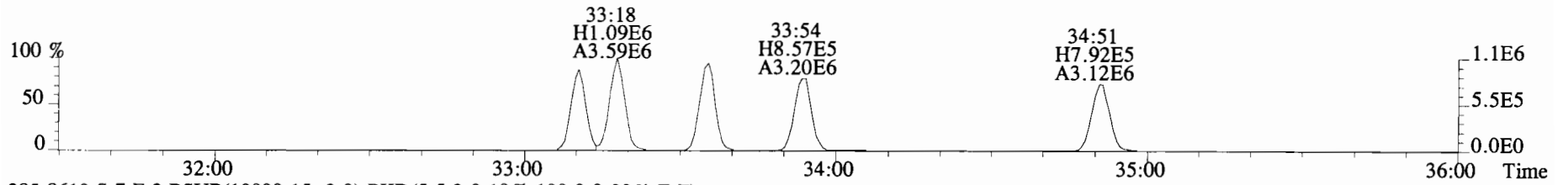
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



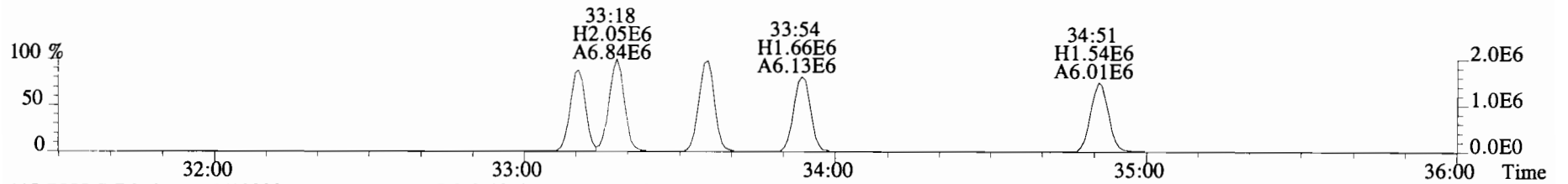
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



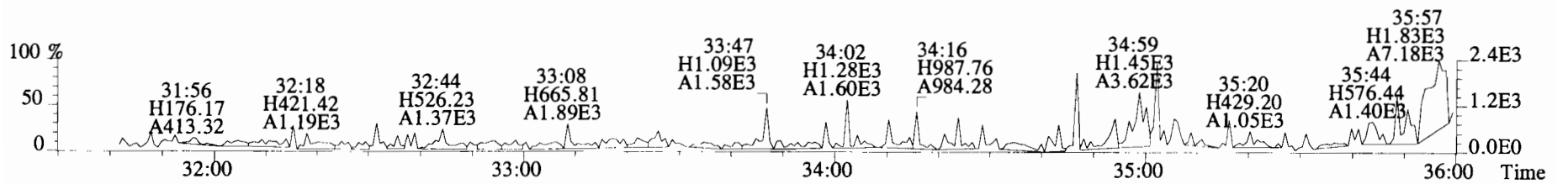
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



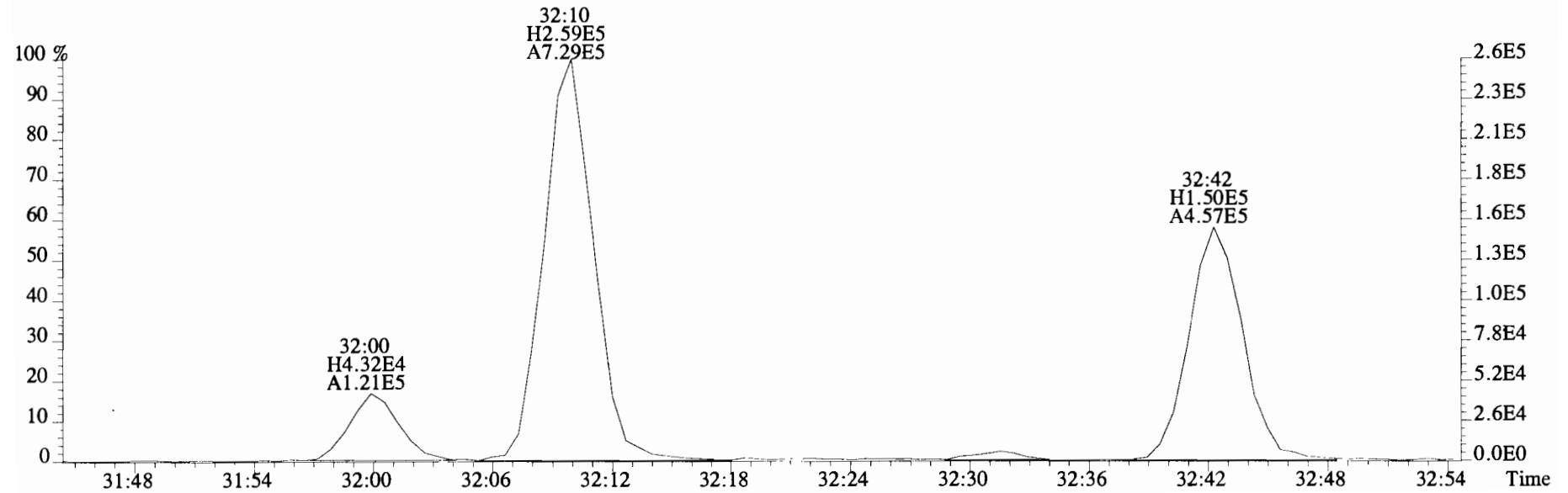
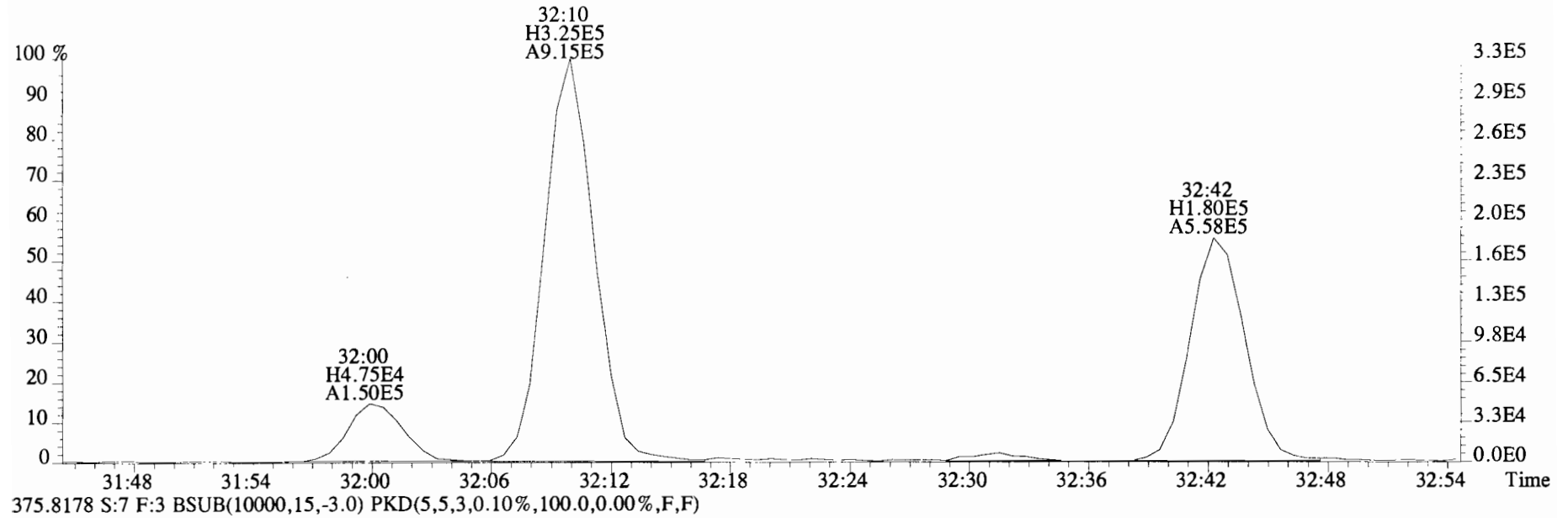
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



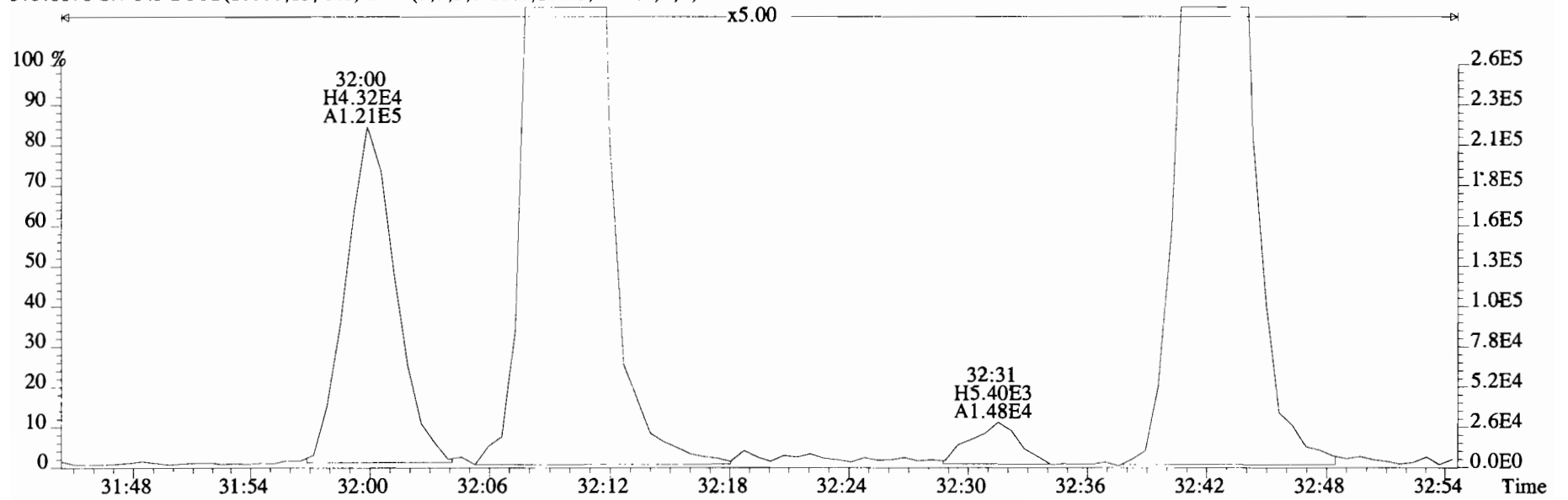
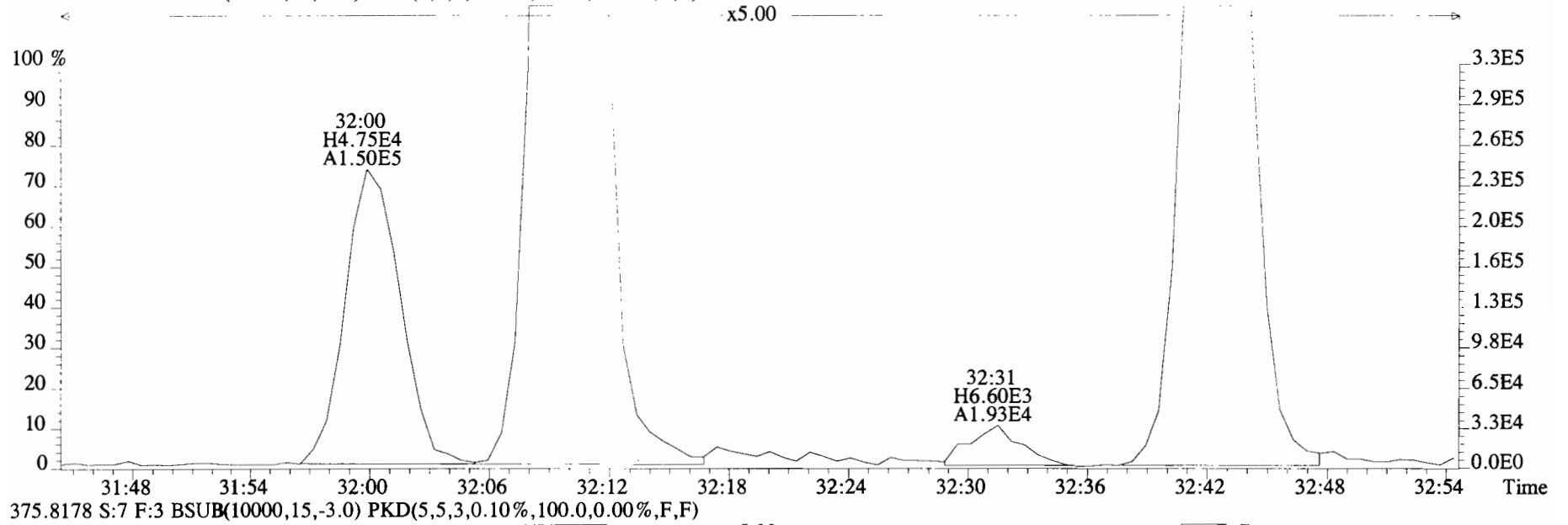
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



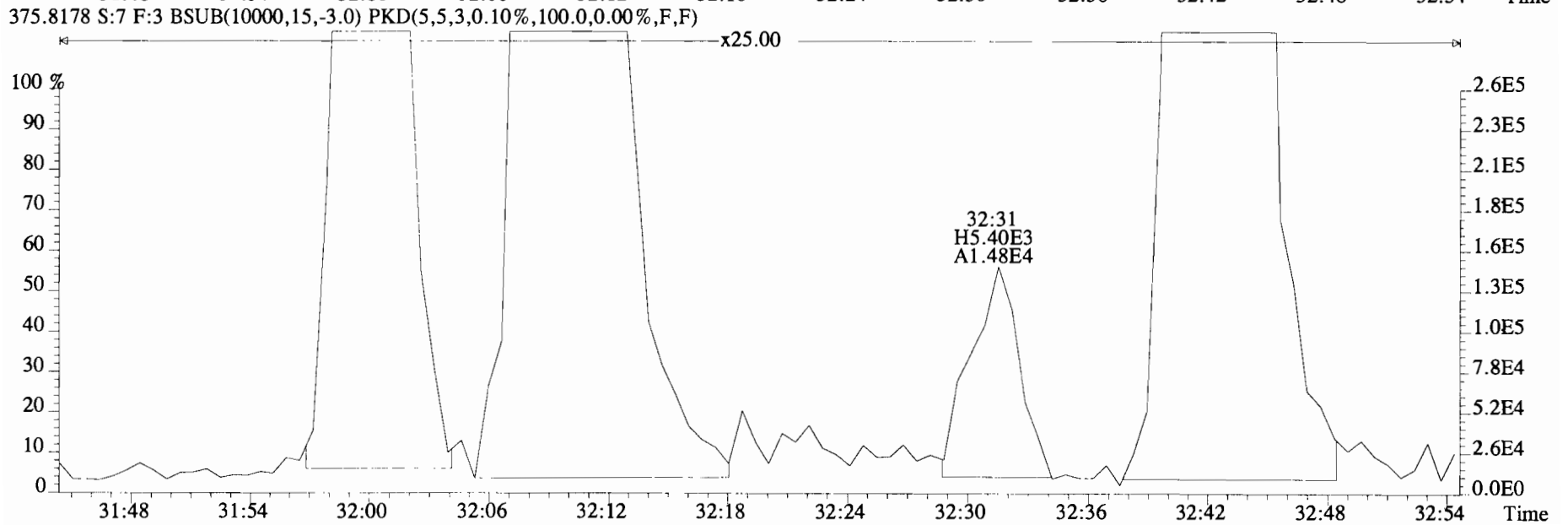
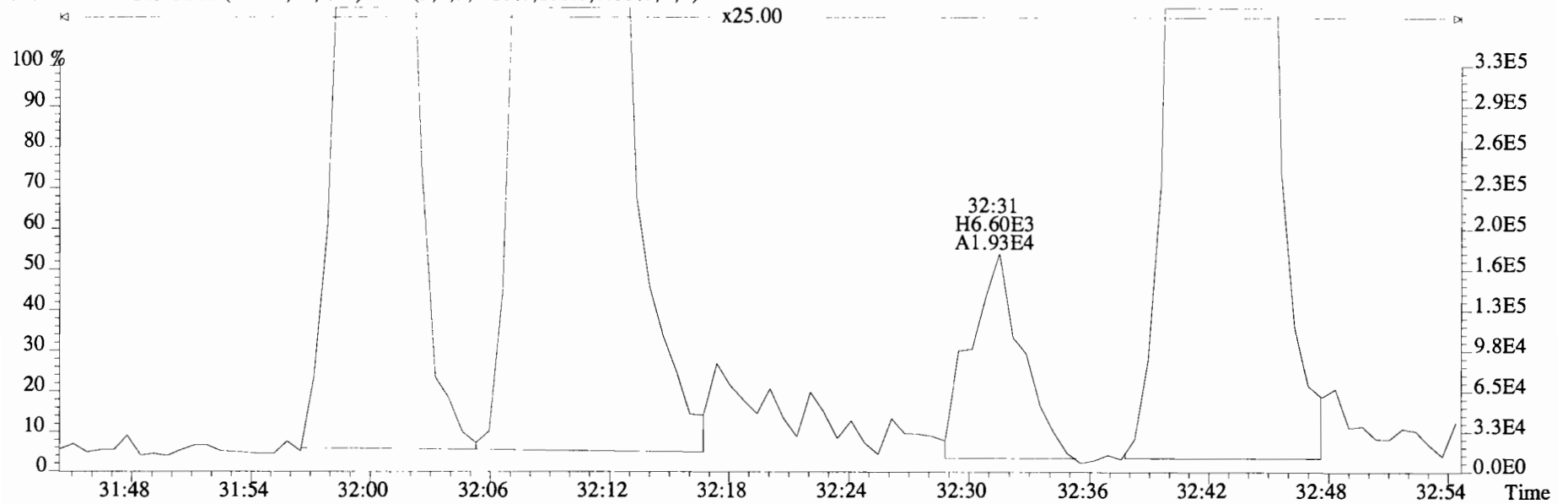
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



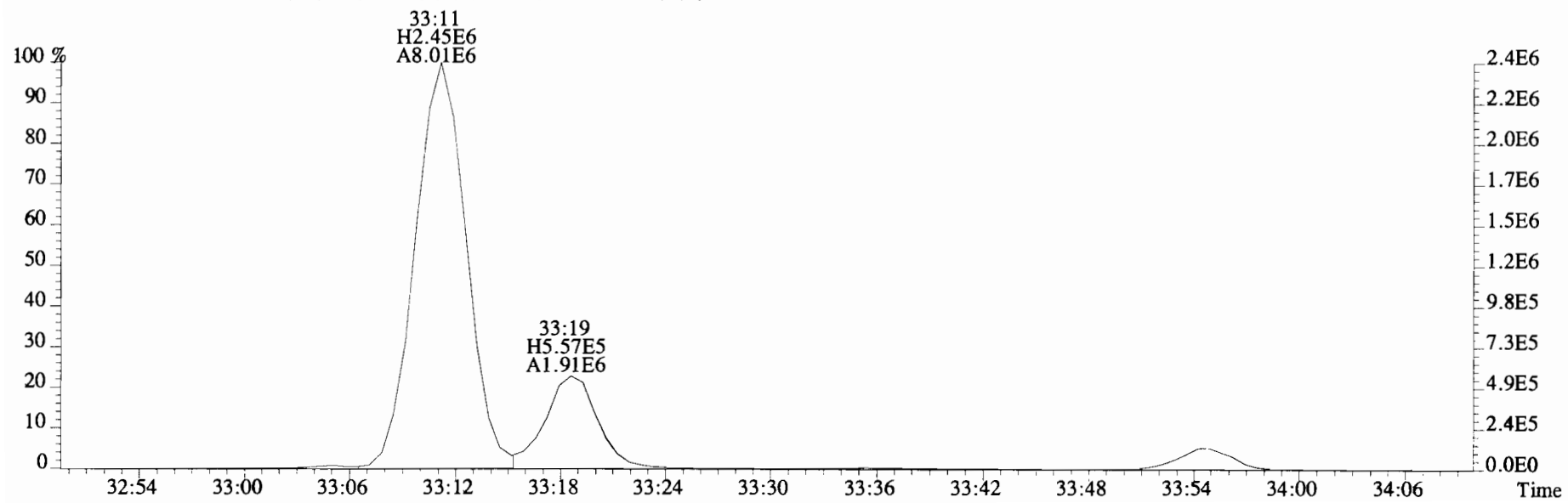
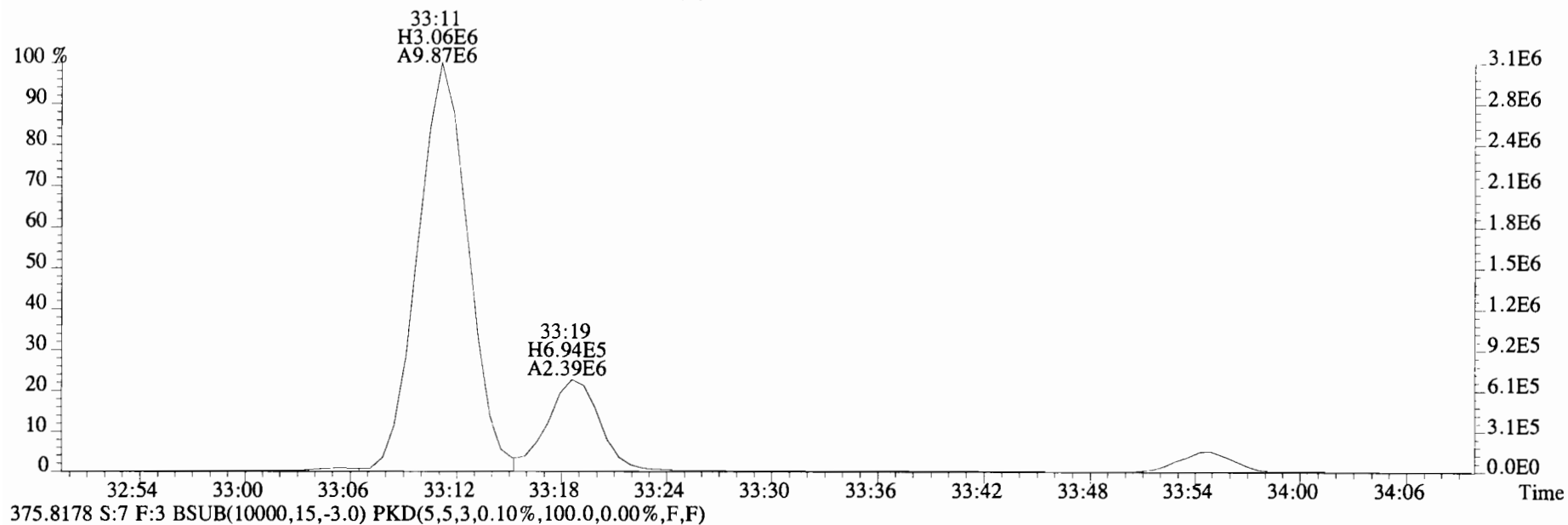
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



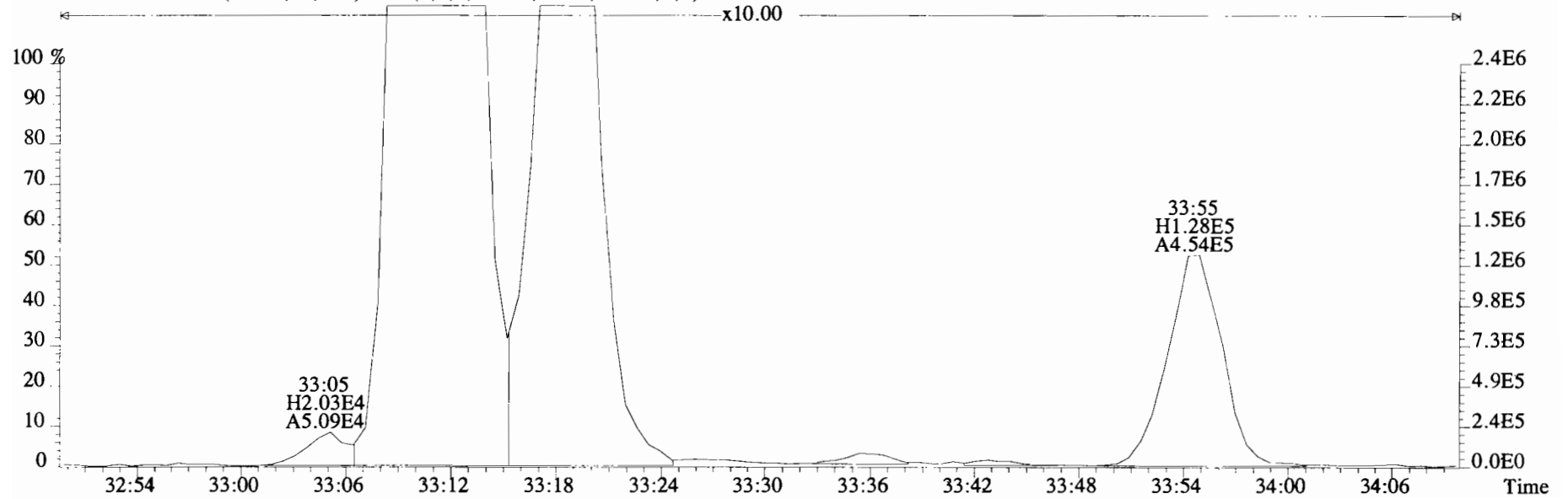
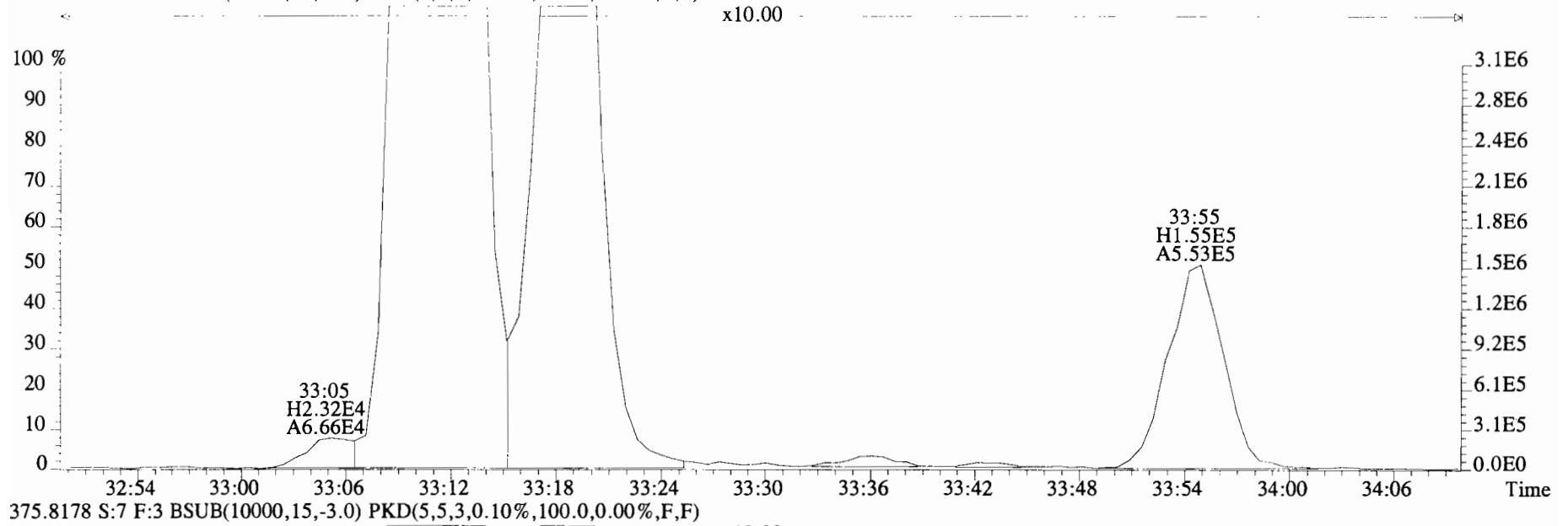
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



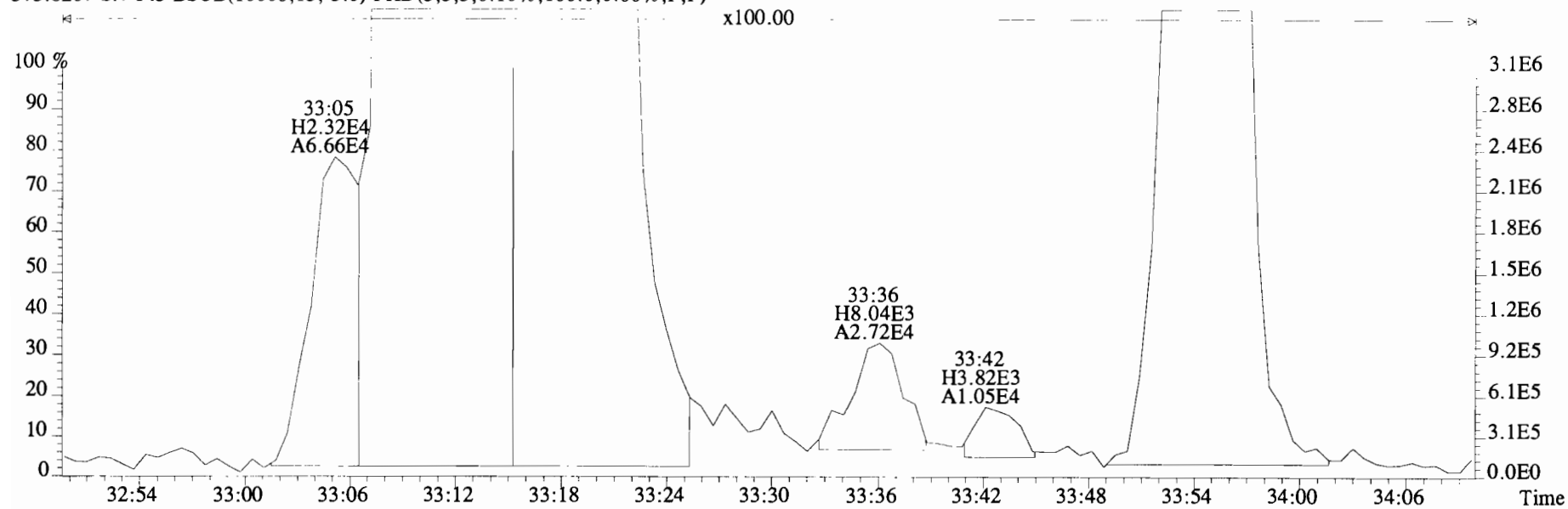
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



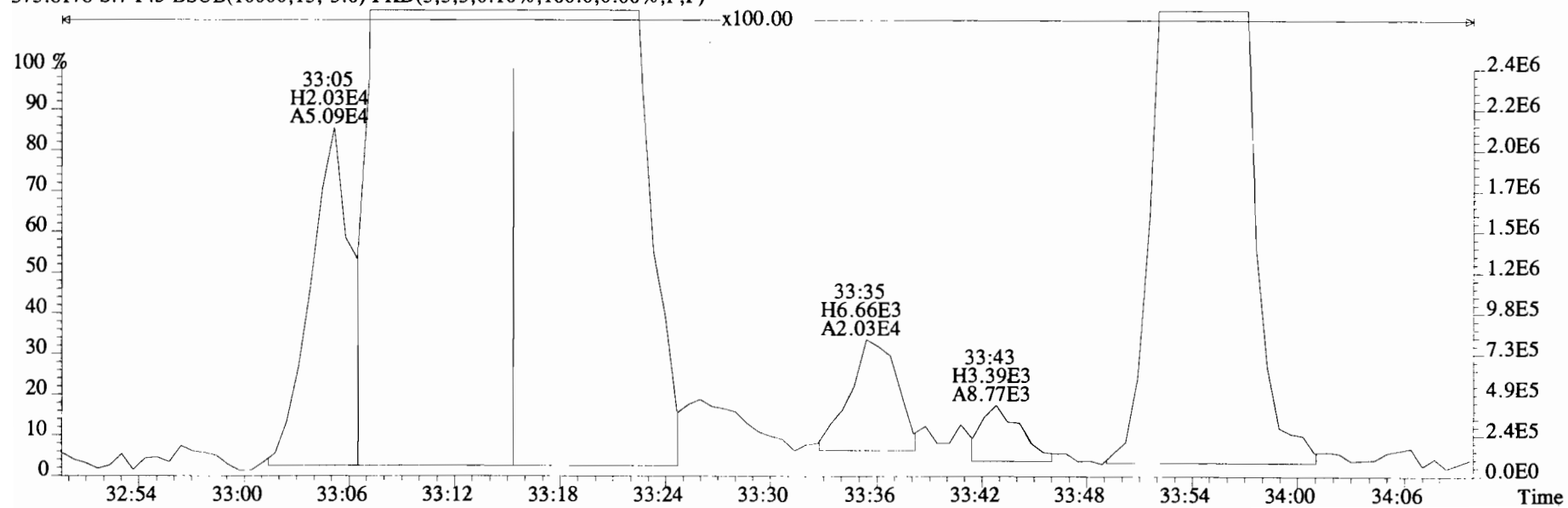
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



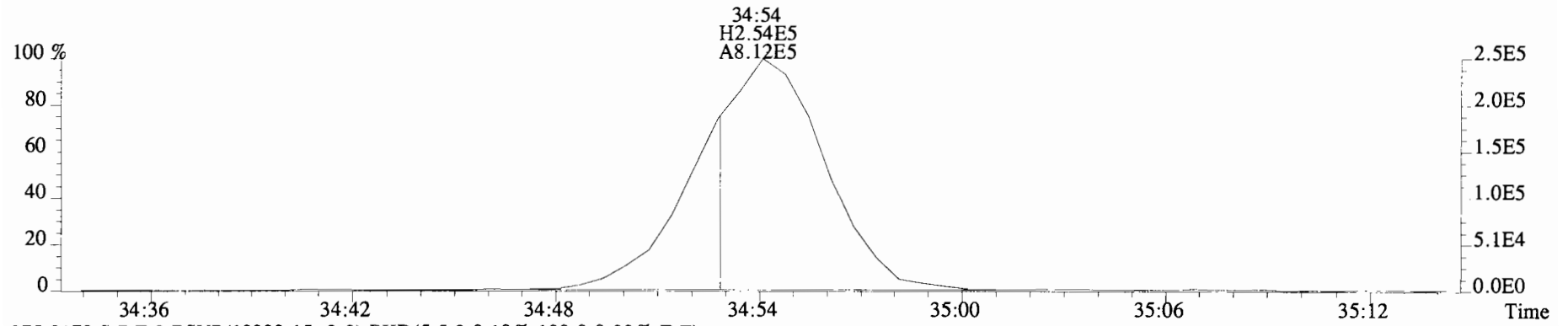
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



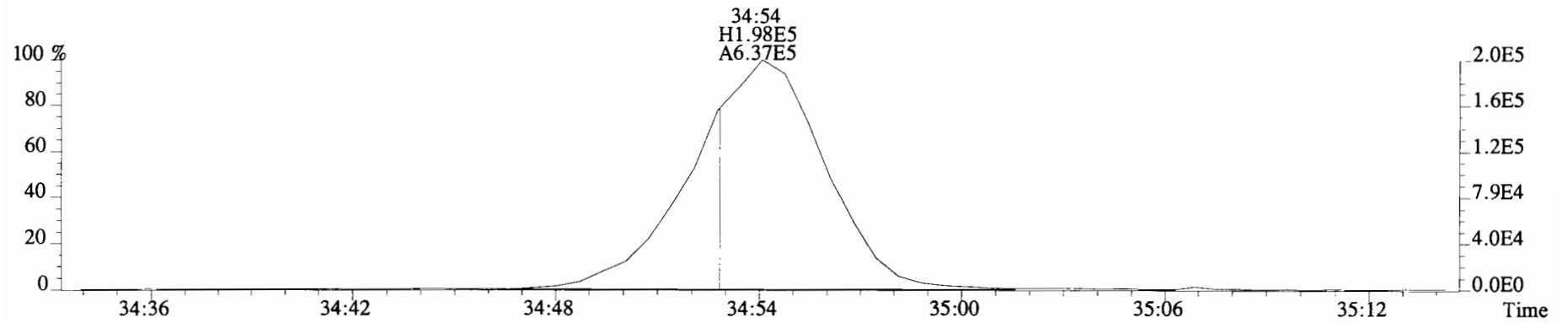
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



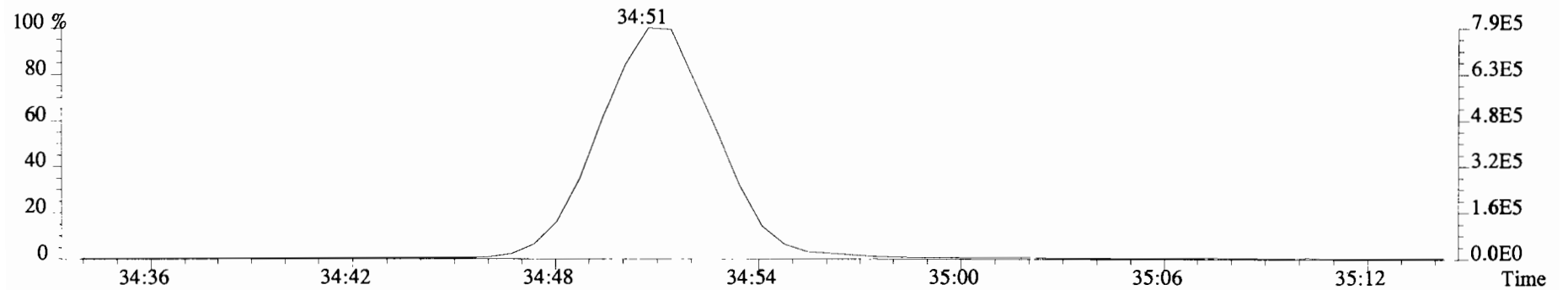
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



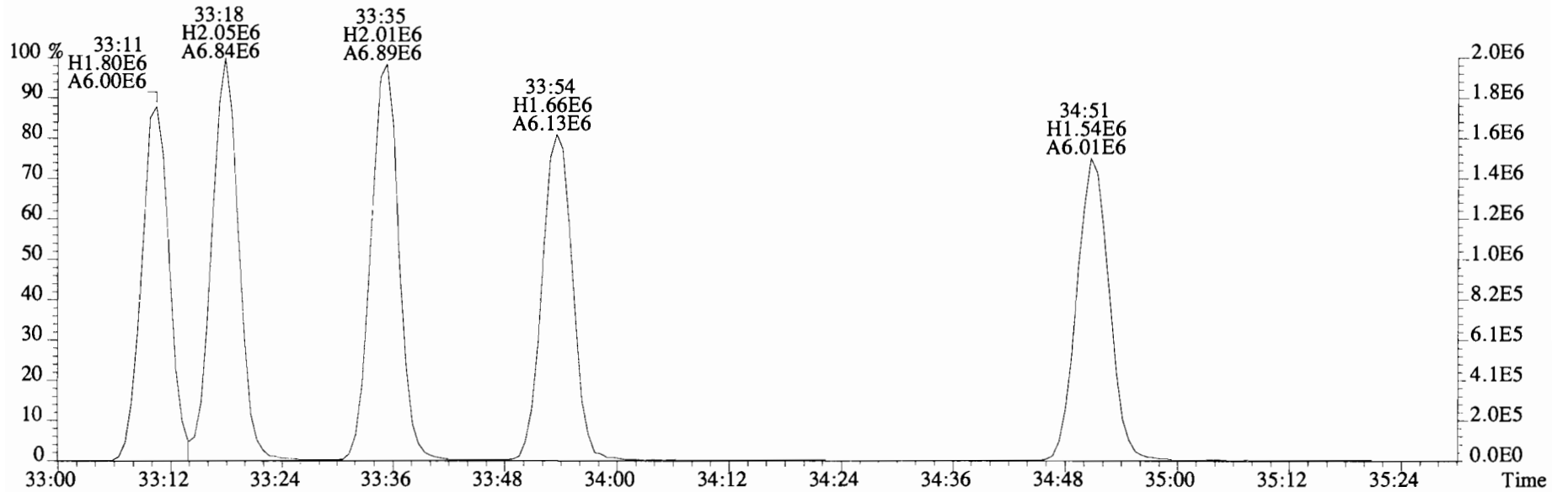
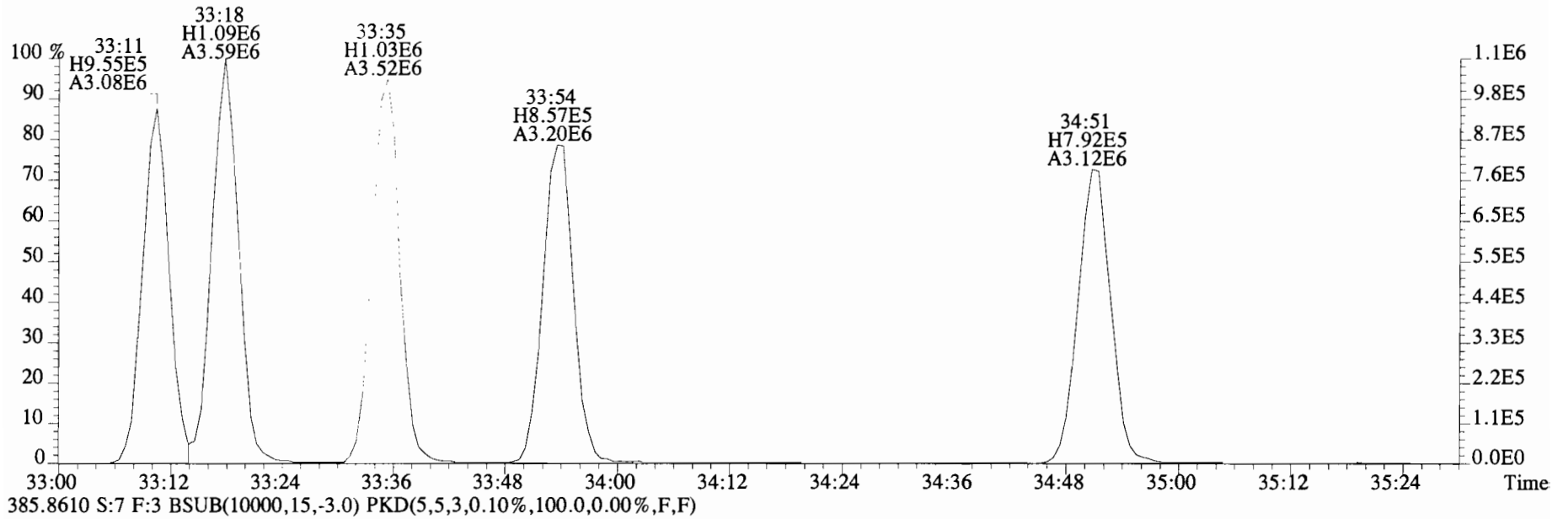
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



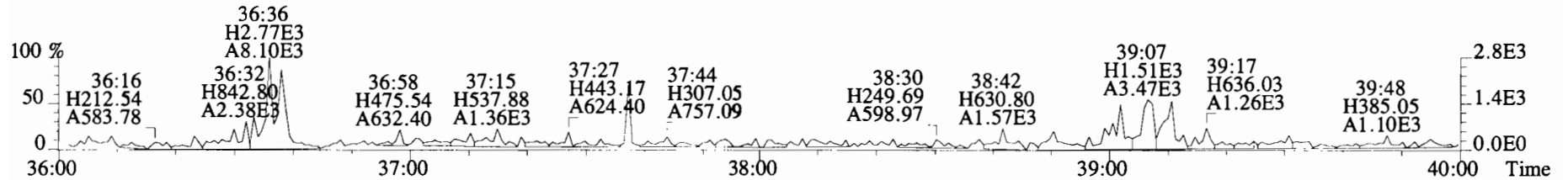
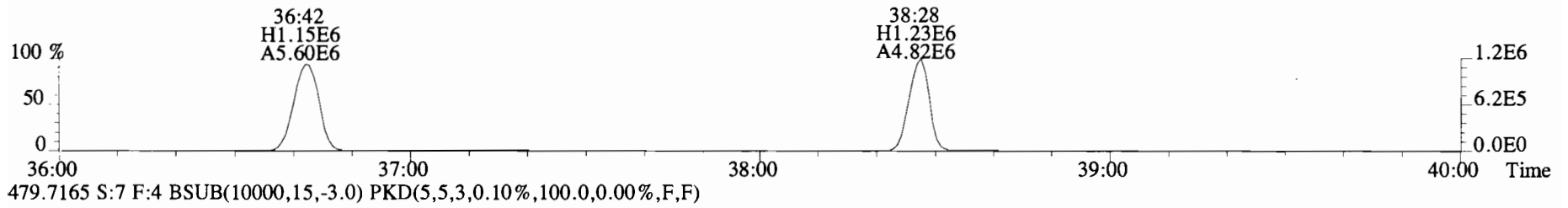
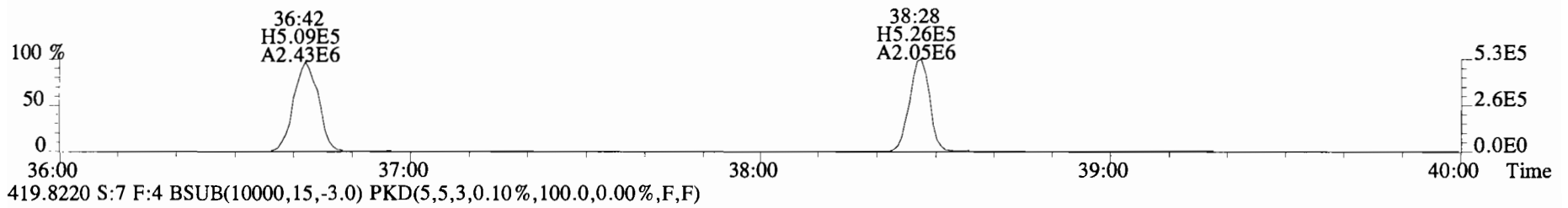
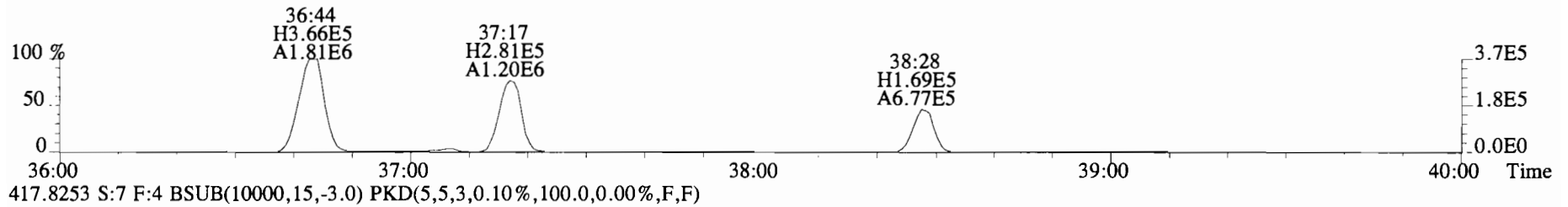
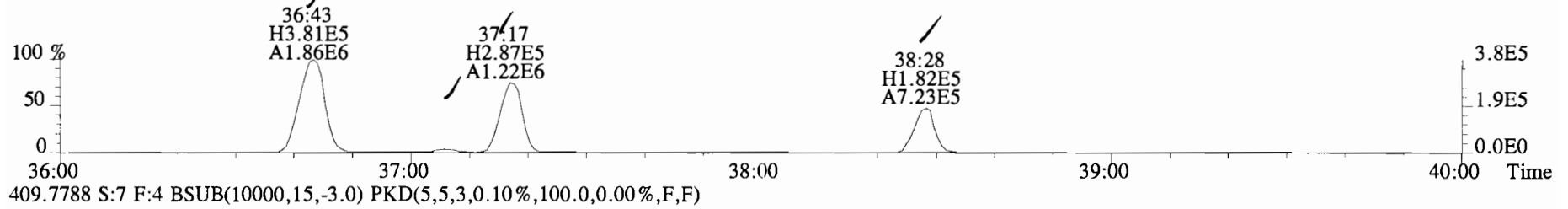
383.8639 S:7 F:3



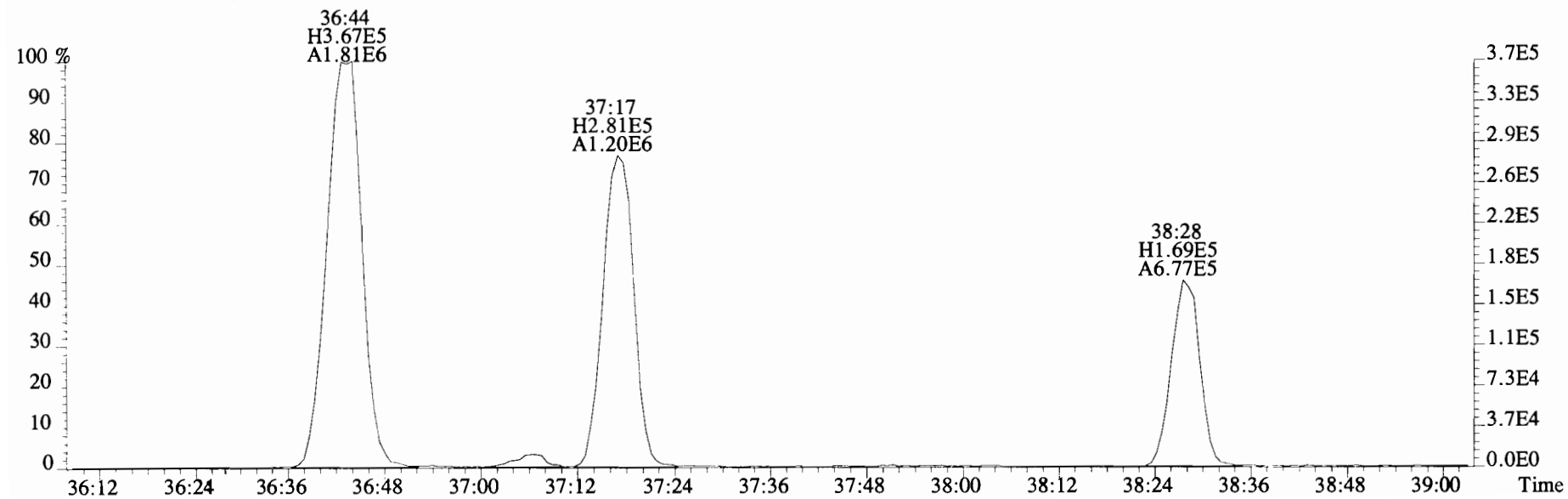
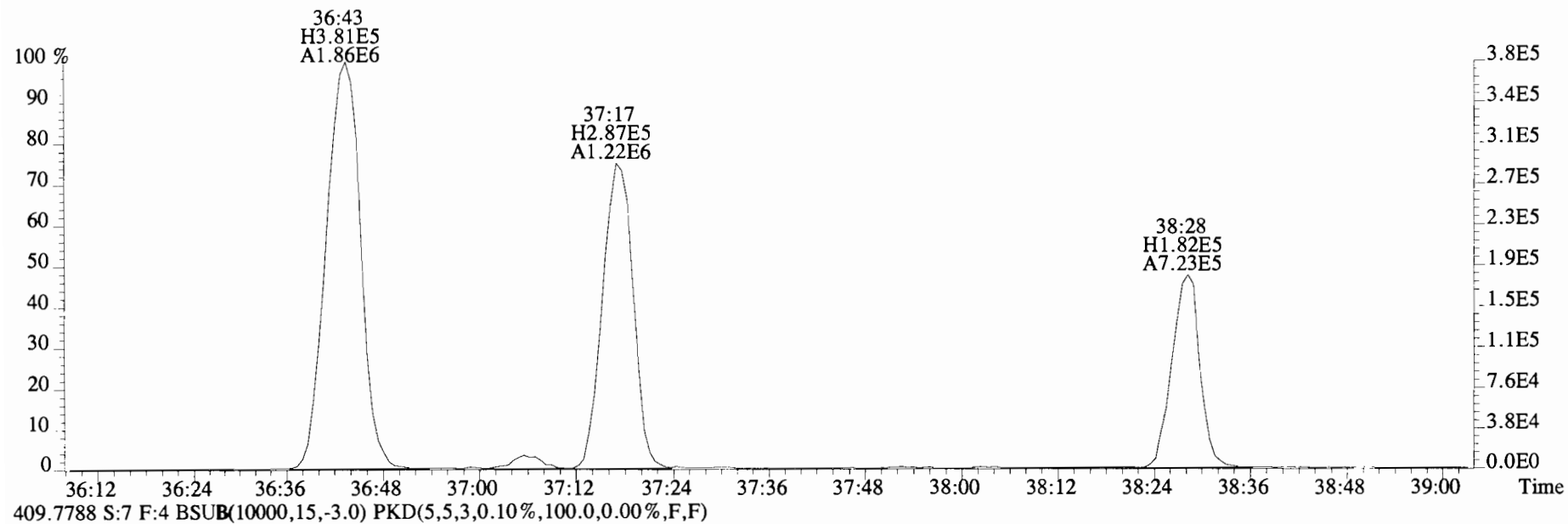
File:191031D2 #1-385 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



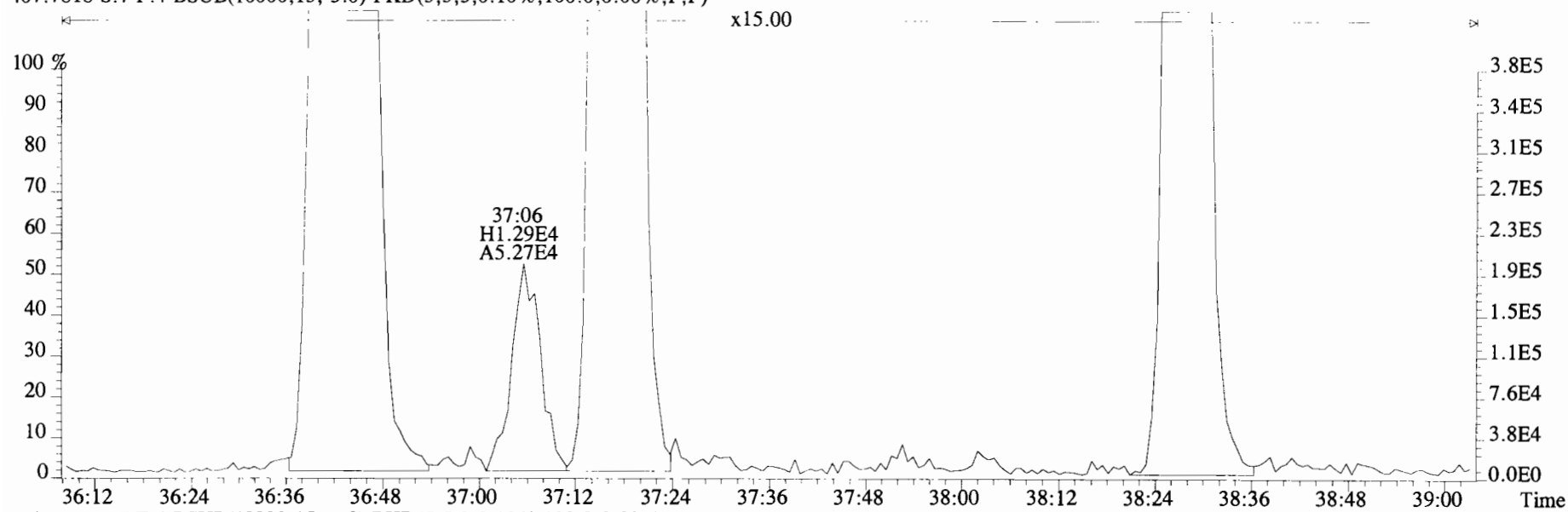
File:191031D2 #1-356 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
 407.7818 S:7 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



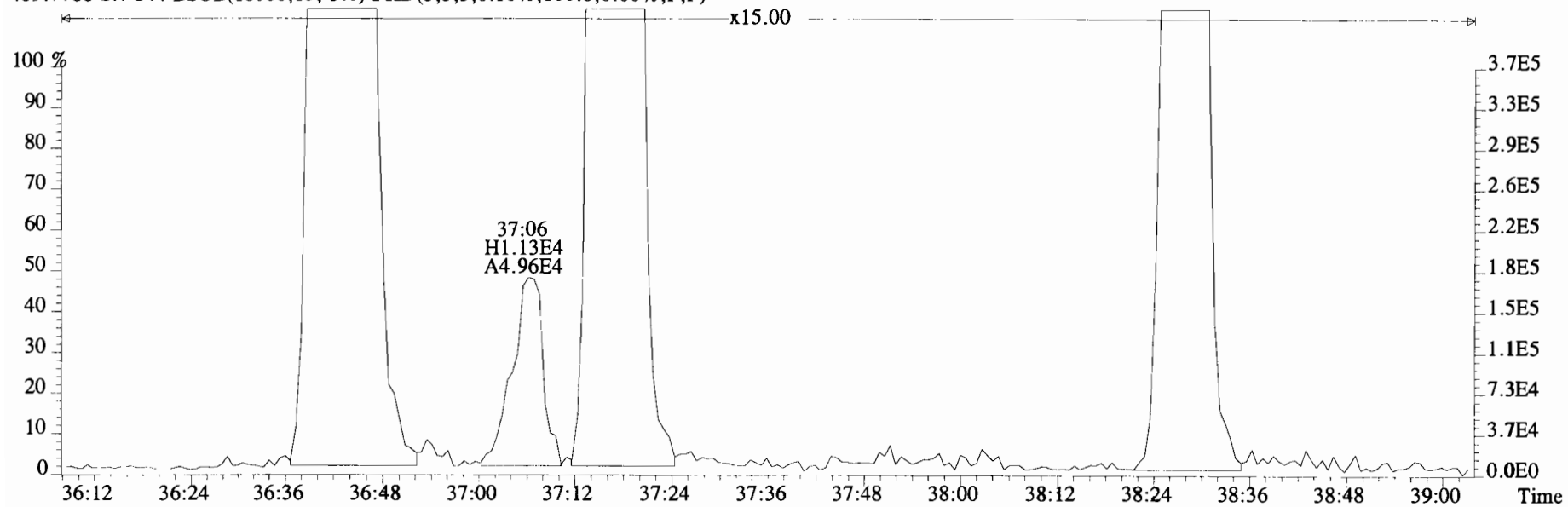
File:191031D2 #1-356 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



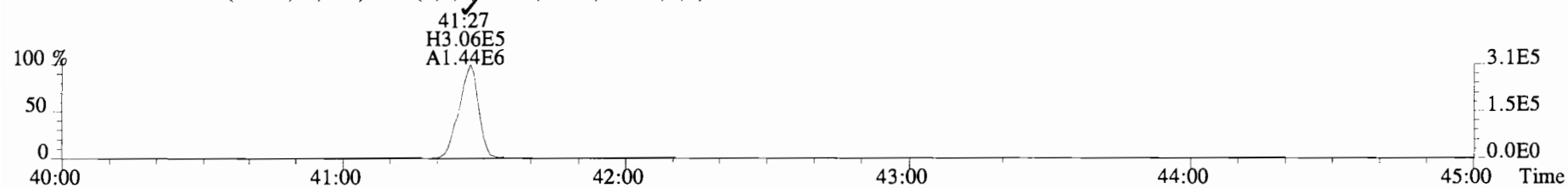
File:191031D2 #1-356 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



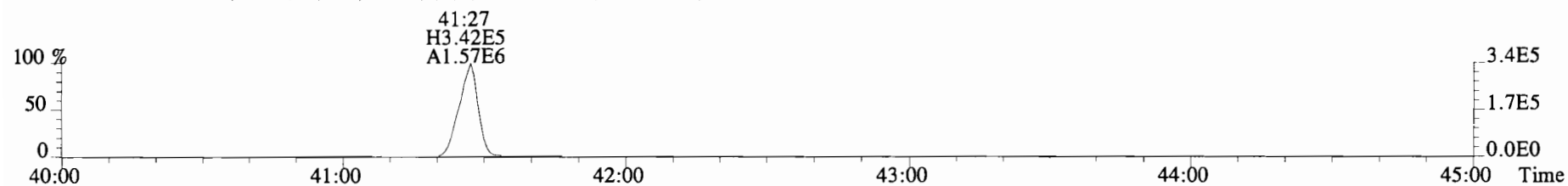
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



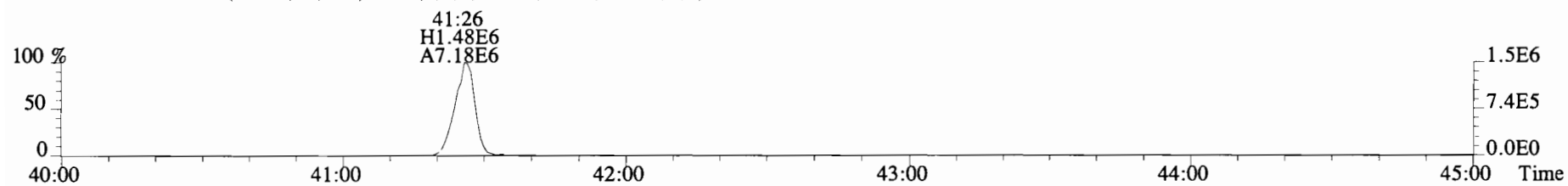
File:191031D2 #1-432 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



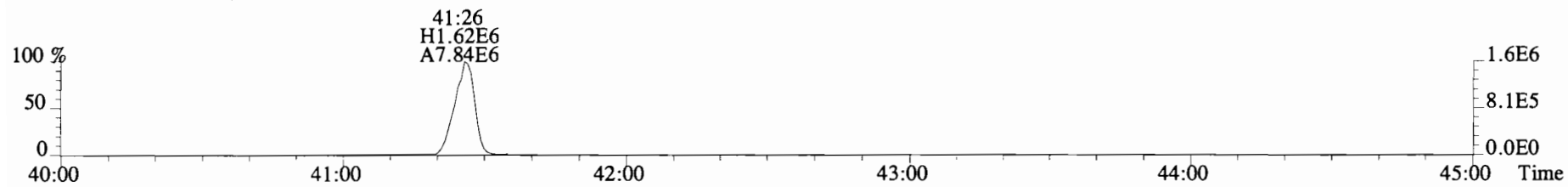
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



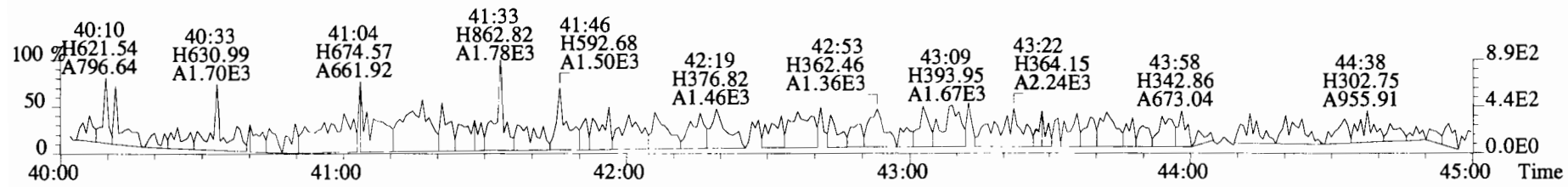
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



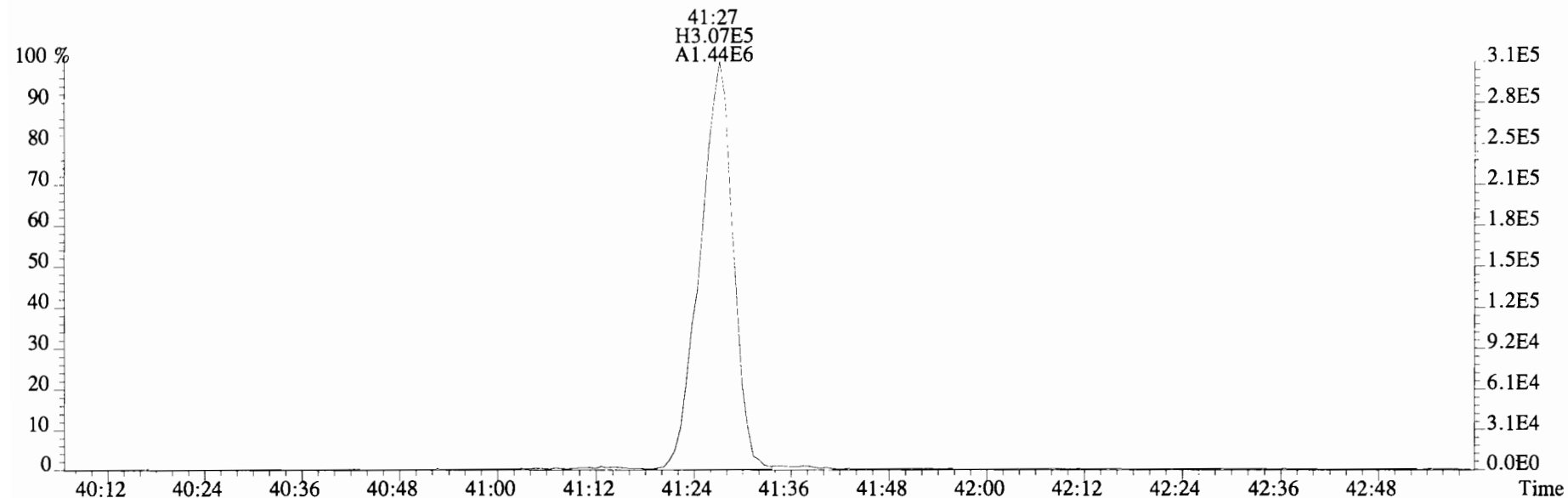
455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



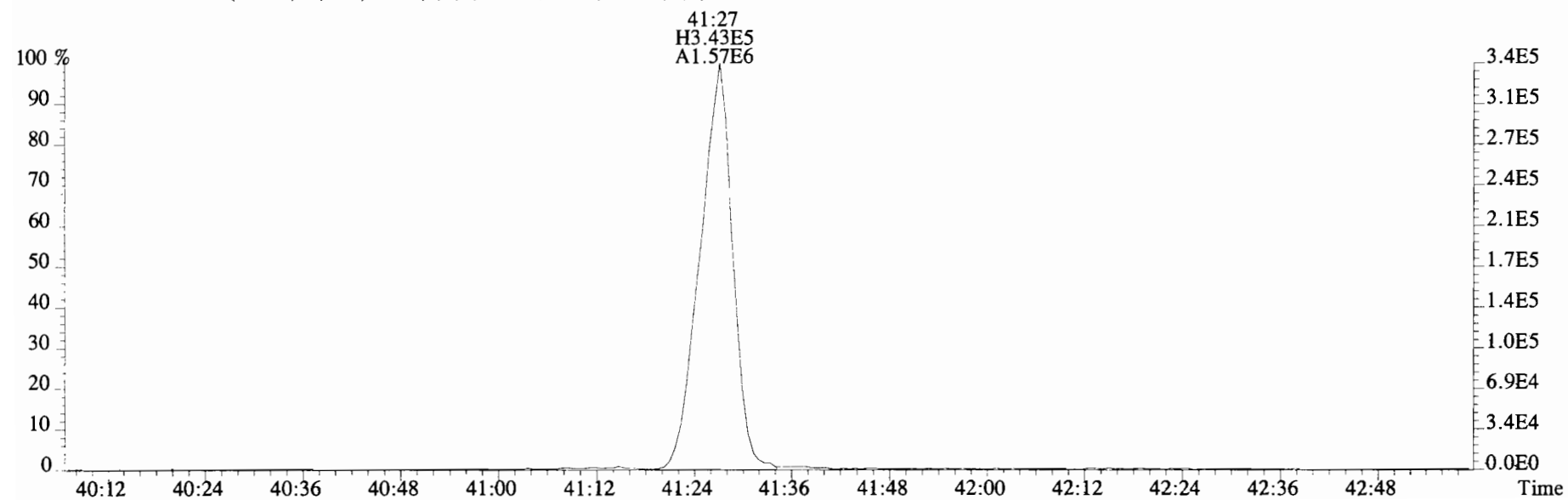
513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 04:29:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE1 PDI-082SC-B-04-06-191002 13.62 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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	2.67e+04	0.62	n	0.91	26:18	0.75712		* 2.5	*	Total Tetra-Dioxins	10.5	12.3	*	*	
1,2,3,7,8-PeCDD	3.77e+04	0.57	y	0.90	30:46	1.4422		* 2.5	*	Total Penta-Dioxins	9.89	14.6	*	*	
1,2,3,4,7,8-HxCDD	3.73e+04	1.27	y	1.10	34:05	1.4046		* 2.5	*	Total Hexa-Dioxins	77.6	77.6	*	*	
1,2,3,6,7,8-HxCDD	2.35e+05	1.16	y	0.94	34:12	9.0556		* 2.5	*	Total Hepta-Dioxins	662	662	*	*	
1,2,3,7,8,9-HxCDD	1.01e+05	1.16	y	0.96	34:30	3.9722		* 2.5	*	Total Tetra-Furans	274	285	*	*	
1,2,3,4,6,7,8-HpCDD	6.55e+06	1.01	y	0.98	37:55	273.66		* 2.5	*	Total Penta-Furans	332.23	332.23	*	*	
OCDD	6.83e+07	0.91	y	0.96	41:13	3974.1		* 2.5	*	Total Hexa-Furans	346	346	*	*	
2,3,7,8-TCDF	3.92e+06	0.80	y	0.95	25:32	84.170 (68.42)		* 2.5	*	Total Hepta-Furans	308	308	*	*	
1,2,3,7,8-PeCDF	4.72e+06	1.58	y	0.96	29:36	112.35		* 2.5	*						
2,3,4,7,8-PeCDF	1.55e+06	1.57	y	1.01	30:29	36.833		* 2.5	*						
1,2,3,4,7,8-HxCDF	6.10e+06	1.22	y	1.18	33:12	163.65		* 2.5	*						
1,2,3,6,7,8-HxCDF	1.73e+06	1.21	y	1.07	33:19	44.671		* 2.5	*						
2,3,4,6,7,8-HxCDF	4.88e+05	1.18	y	1.11	33:55	13.315		* 2.5	*						
1,2,3,7,8,9-HxCDF	2.87e+05	1.20	y	1.06	34:53	8.1220		* 2.5	*						
1,2,3,4,6,7,8-HpCDF	3.56e+06	1.00	y	1.13	36:43	110.48		* 2.5	*						
1,2,3,4,7,8,9-HpCDF	8.49e+05	1.05	y	1.28	38:28	27.802		* 2.5	*						
OCDF	5.21e+06	0.89	y	0.95	41:26	240.79		* 2.5	*						
IS	13C-2,3,7,8-TCDD	7.79e+06	0.77	y	1.10	26:17	173.13			Rec	86.5				
IS	13C-1,2,3,7,8-PeCDD	5.79e+06	0.65	y	0.88	30:46	159.93			Qual	79.9				
IS	13C-1,2,3,4,7,8-HxCDD	4.82e+06	1.26	y	0.64	34:04	156.92				78.4				
IS	13C-1,2,3,6,7,8-HxCDD	5.54e+06	1.23	y	0.86	34:11	135.21				67.6				
IS	13C-1,2,3,7,8,9-HxCDD	5.30e+06	1.21	y	0.81	34:29	137.24				68.6				
IS	13C-1,2,3,4,6,7,8-HpCDD	4.89e+06	1.04	y	0.65	37:55	156.19				78.1				
IS	13C-OCDD	7.17e+06	0.92	y	0.58	41:13	258.37				64.6				
IS	13C-2,3,7,8-TCDF	9.81e+06	0.81	y	1.03	25:31	161.55				80.8				
IS	13C-1,2,3,7,8-PeCDF	8.76e+06	1.61	y	0.85	29:36	174.75				87.4				
IS	13C-2,3,4,7,8-PeCDF	8.28e+06	1.55	y	0.85	30:29	166.52				83.2				
IS	13C-1,2,3,4,7,8-HxCDF	6.34e+06	0.52	y	0.83	33:11	159.21				79.6				
IS	13C-1,2,3,6,7,8-HxCDF	7.23e+06	0.52	y	1.03	33:19	145.94				73.0				
IS	13C-2,3,4,6,7,8-HxCDF	6.58e+06	0.50	y	0.95	33:54	144.22				72.1				
IS	13C-1,2,3,7,8,9-HxCDF	6.66e+06	0.52	y	0.83	34:52	168.12				84.0				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.72e+06	0.42	y	0.76	36:43	157.65				78.8				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.77e+06	0.43	y	0.58	38:27	171.59				85.8				
IS	13C-OCDF	9.13e+06	0.90	y	0.69	41:26	276.89				69.2				
C/up	37Cl-2,3,7,8-TCDD	3.28e+06		1.20	26:19	66.652					83.3				
RS/RT	13C-1,2,3,4-TCDD	8.21e+06	0.80	y	1.00	25:44	200.05			Integrations			Reviewed		
RS	13C-1,2,3,4-TCDF	1.17e+07	0.82	y	1.00	24:19	200.05			by			by		
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.58e+06	0.50	y	1.00	33:36	200.05			Analyst: <u>DB</u>			Analyst: <u>CT</u>		
										Date: <u>11/8/19</u>			Date: <u>12/04/19</u>		

Totals class: TCDD EMPC

Entry #: 19

Run: 13 File: 191031D2 S: 8 I: 1 F: 1
 Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 12.313 Unnamed Concentration: 11.556

RT	ml Resp	m2 Resp	RA		Resp Concentration	Name	
22:59	1.007e+05	1.243e+05	0.81	y	2.250e+05	6.3861	
23:19	1.704e+04	2.245e+04	0.76	y	3.949e+04	1.1207	
23:44	9.024e+03	9.406e+03	0.96	n	1.665e+04	0.47251	
24:27	6.245e+03	7.252e+03	0.86	y	1.350e+04	0.38304	
24:40	8.893e+03	1.031e+04	0.86	y	1.920e+04	0.54501	
24:49	1.146e+04	1.379e+04	0.83	y	2.525e+04	0.71647	
25:00	3.998e+03	4.163e+03	0.96	n	7.368e+03	0.20912	
25:14	4.640e+03	3.105e+03	1.49	n	5.496e+03	0.15599	
25:24	3.960e+03	4.606e+03	0.86	y	8.565e+03	0.24308	
25:41	4.616e+03	5.002e+03	0.92	n	8.853e+03	0.25126	
26:04	1.034e+04	1.340e+04	0.77	y	2.374e+04	0.67381	
26:18	1.161e+04	1.881e+04	0.62	n	2.668e+04	0.75712	2,3,7,8-TCDD
26:35	6.548e+03	7.519e+03	0.87	y	1.407e+04	0.39922	

Totals class: PeCDD EMPC

Entry #: 21

Run: 13 File: 191031D2 S: 8 I: 1 F: 2
Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 14.632 Unnamed Concentration: 13.190

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:44	4.398e+04	6.898e+04	0.64	y	1.130e+05	4.3250
29:10	1.009e+04	1.370e+04	0.74	n	2.233e+04	0.85496
29:38	3.982e+04	5.531e+04	0.72	y	9.513e+04	3.6425
29:47	1.627e+04	1.859e+04	0.88	n	3.030e+04	1.1602
29:52	1.117e+04	1.427e+04	0.78	n	2.326e+04	0.89061
30:05	2.401e+04	2.941e+04	0.82	n	4.793e+04	1.8352
30:22	4.509e+03	8.067e+03	0.56	y	1.258e+04	0.48150
30:46	1.367e+04	2.399e+04	0.57	y	3.767e+04	1.4422
						1,2,3,7,8-PeCDD

Totals class: HxCDD EMPC

Entry #: 23

Run: 13 File: 191031D2 S: 8 I: 1 F: 3
Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 77.621

Unnamed Concentration: 63.189

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:34	4.043e+05	3.394e+05	1.19	y	7.437e+05	28.735
33:07	5.643e+04	4.686e+04	1.20	y	1.033e+05	3.9909
33:23	3.968e+05	3.221e+05	1.23	y	7.189e+05	27.777
33:31	2.132e+04	1.807e+04	1.18	y	3.939e+04	1.5220
34:05	2.085e+04	1.645e+04	1.27	y	3.730e+04	1.4046
34:12	1.263e+05	1.090e+05	1.16	y	2.353e+05	9.0556
34:24	1.590e+04	1.422e+04	1.12	y	3.012e+04	1.1638
34:30	5.441e+04	4.676e+04	1.16	y	1.012e+05	3.9722
						1,2,3,4,7,8-HxCDD
						1,2,3,6,7,8-HxCDD
						1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 13 File: 191031D2 S: 8 I: 1 F: 4
Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 661.53 Unnamed Concentration: 387.870

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:06	4.662e+06	4.624e+06	1.01 y	9.286e+06	387.87	
37:55	3.295e+06	3.257e+06	1.01 y	6.552e+06	273.66	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 13 File: 191031D2 S: 8 I: 1 F: 1
 Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 285.38 Unnamed Concentration: 201.210

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:52	1.259e+04	1.316e+04	0.96	n	2.328e+04	0.49976
21:27	4.225e+04	4.846e+04	0.87	y	9.071e+04	1.9470
22:04	2.042e+05	2.345e+05	0.87	y	4.387e+05	9.4156
22:36	1.148e+05	1.370e+05	0.84	y	2.518e+05	5.4037
22:57	5.275e+05	6.600e+05	0.80	y	1.187e+06	25.488
23:21	2.230e+05	2.763e+05	0.81	y	4.993e+05	10.716
23:29	1.869e+04	2.220e+04	0.84	y	4.089e+04	0.87763
23:38	1.168e+05	1.471e+05	0.79	y	2.639e+05	5.6634
24:00	3.081e+04	3.575e+04	0.86	y	6.656e+04	1.4286
24:06	1.034e+04	1.523e+04	0.68	y	2.556e+04	0.54870
24:14	1.361e+05	1.623e+05	0.84	y	2.984e+05	6.4043
24:19	2.154e+05	2.618e+05	0.82	y	4.772e+05	10.243
24:45	1.862e+06	2.351e+06	0.79	y	4.213e+06	90.423
24:59	8.632e+04	9.816e+04	0.88	y	1.845e+05	3.9594
25:11	1.243e+04	1.574e+04	0.79	y	2.817e+04	0.60462
25:20	2.483e+04	2.991e+04	0.83	y	5.475e+04	1.1750
25:26	2.002e+05	2.472e+05	0.81	y	4.474e+05	9.6028
25:32	1.738e+06	2.184e+06	0.80	y	3.922e+06	84.170
25:51	8.342e+04	1.096e+05	0.76	y	1.931e+05	4.1438
26:04	3.014e+04	3.467e+04	0.87	y	6.480e+04	1.3909
26:47	1.715e+04	1.154e+04	1.49	n	2.042e+04	0.43838
27:01	6.758e+03	6.143e+03	1.10	n	1.087e+04	0.23339
27:17	2.800e+05	2.791e+05	1.00	n	4.941e+05	10.604

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 13 File: 191031D2 S: 8 I: 1 F: 1
Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 28.934 Unnamed Concentration: 28.934

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:17	7.349e+05	4.816e+05	1.53 y	1.216e+06	28.934

Totals class: PeCDF EMPC

Entry #: 31

Run: 13

File: 191031D2

S: 8 I: 1 F: 2

Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 303.30

Unnamed Concentration: 154.115

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
28:34	5.333e+04	3.302e+04	1.62 y	8.635e+04	2.0539	
28:42	1.652e+06	1.020e+06	1.62 y	2.672e+06	63.559	
29:15	1.879e+05	1.127e+05	1.67 y	3.006e+05	7.1499	
29:26	3.355e+05	1.988e+05	1.69 y	5.343e+05	12.708	
29:36	2.892e+06	1.832e+06	1.58 y	4.724e+06	112.35	1,2,3,7,8-PeCDF
29:51	1.053e+06	6.547e+05	1.61 y	1.708e+06	40.625	
30:23	1.885e+04	1.310e+04	1.44 y	3.195e+04	0.75995	
30:29	9.442e+05	6.022e+05	1.57 y	1.546e+06	36.833	2,3,4,7,8-PeCDF
30:32	6.265e+05	3.895e+05	1.61 y	1.016e+06	24.166	
31:22	7.759e+04	5.246e+04	1.48 y	1.301e+05	3.0933	

Totals class: HxCDF EMPC

Entry #: 33

Run: 13 File: 191031D2 S: 8 I: 1 F: 3
 Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

Total Concentration: 345.54 Unnamed Concentration: 115.777

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
32:02	3.978e+04	3.485e+04	1.14 y	7.463e+04	2.0187	
32:11	1.592e+05	1.276e+05	1.25 y	2.868e+05	7.7591	
32:15	8.619e+05	6.872e+05	1.25 y	1.549e+06	41.903	
32:32	1.707e+04	1.423e+04	1.20 y	3.129e+04	0.84642	
32:43	9.656e+05	7.933e+05	1.22 y	1.759e+06	47.579	
33:06	4.141e+04	3.655e+04	1.13 y	7.795e+04	2.1086	
33:12	3.355e+06	2.748e+06	1.22 y	6.103e+06	163.65	1,2,3,4,7,8-HxCDF
33:19	9.452e+05	7.800e+05	1.21 y	1.725e+06	44.671	1,2,3,6,7,8-HxCDF
33:36	2.269e+04	2.064e+04	1.10 y	4.334e+04	1.1723	
33:55	2.639e+05	2.239e+05	1.18 y	4.878e+05	13.315	2,3,4,6,7,8-HxCDF
34:53	1.563e+05	1.308e+05	1.20 y	2.872e+05	8.1220	1,2,3,7,8,9-HxCDF
34:55	2.549e+05	2.031e+05	1.26 y	4.581e+05	12.391	

Totals class: HpCDF EMPC

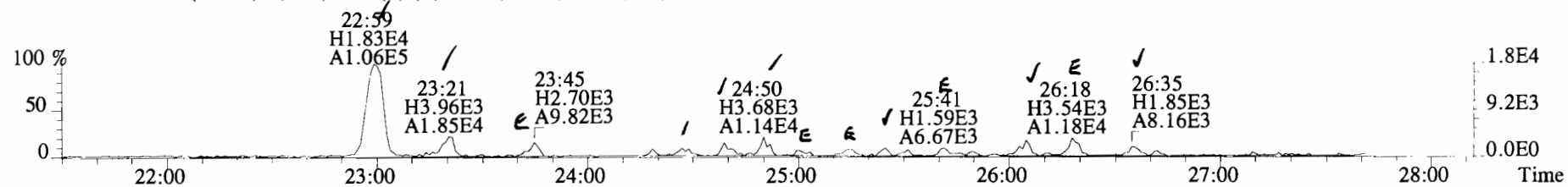
Entry #: 35

Run: 13 File: 191031D2 S: 8 I: 1 F: 4
Acquired: 1-NOV-19 05:17:42 Processed: 1-NOV-19 12:03:17

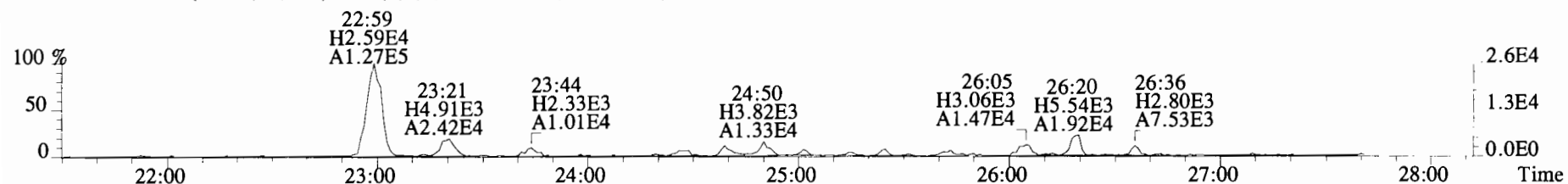
Total Concentration: 307.59 Unnamed Concentration: 169.311

RT	m1 Resp	m2 Resp	RA	Resp Concentration		Name
36:43	1.781e+06	1.780e+06	1.00 y	3.560e+06	110.48	1,2,3,4,6,7,8-HpCDF
37:06	3.799e+04	3.574e+04	1.06 y	7.373e+04	2.3552	
37:17	2.658e+06	2.568e+06	1.04 y	5.226e+06	166.96	
38:28	4.342e+05	4.150e+05	1.05 y	8.493e+05	27.802	1,2,3,4,7,8,9-HpCDF

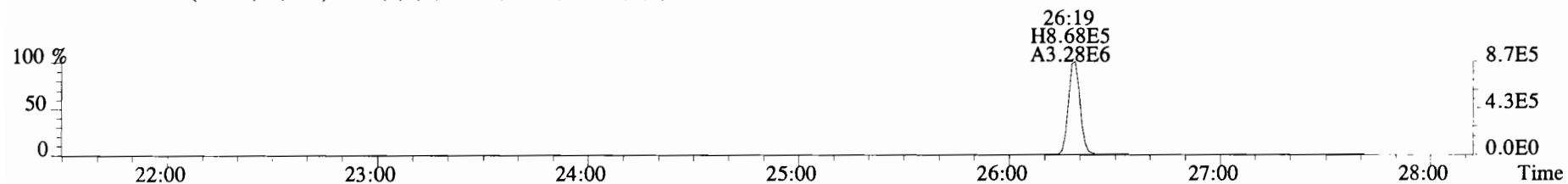
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 Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



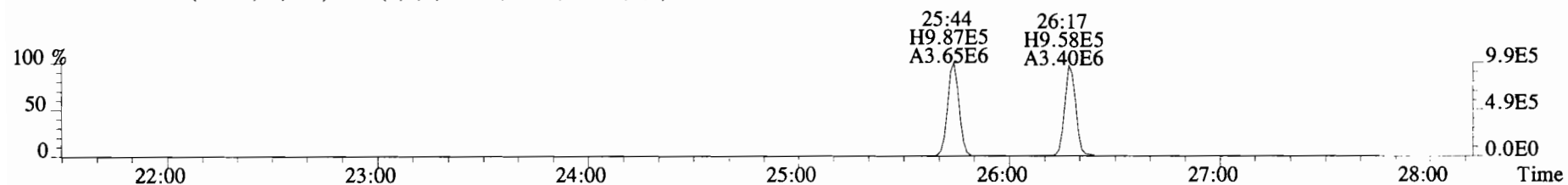
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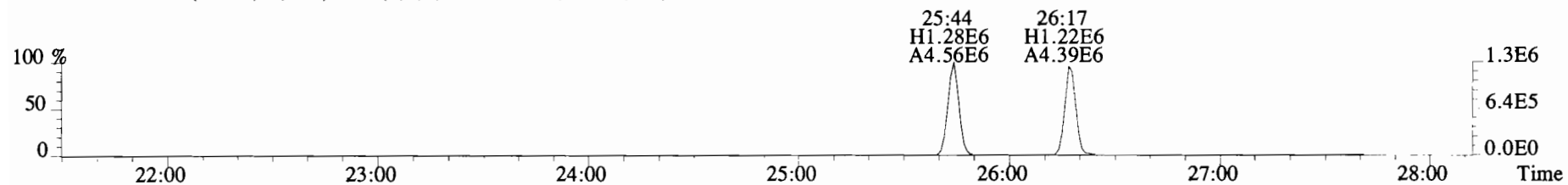
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



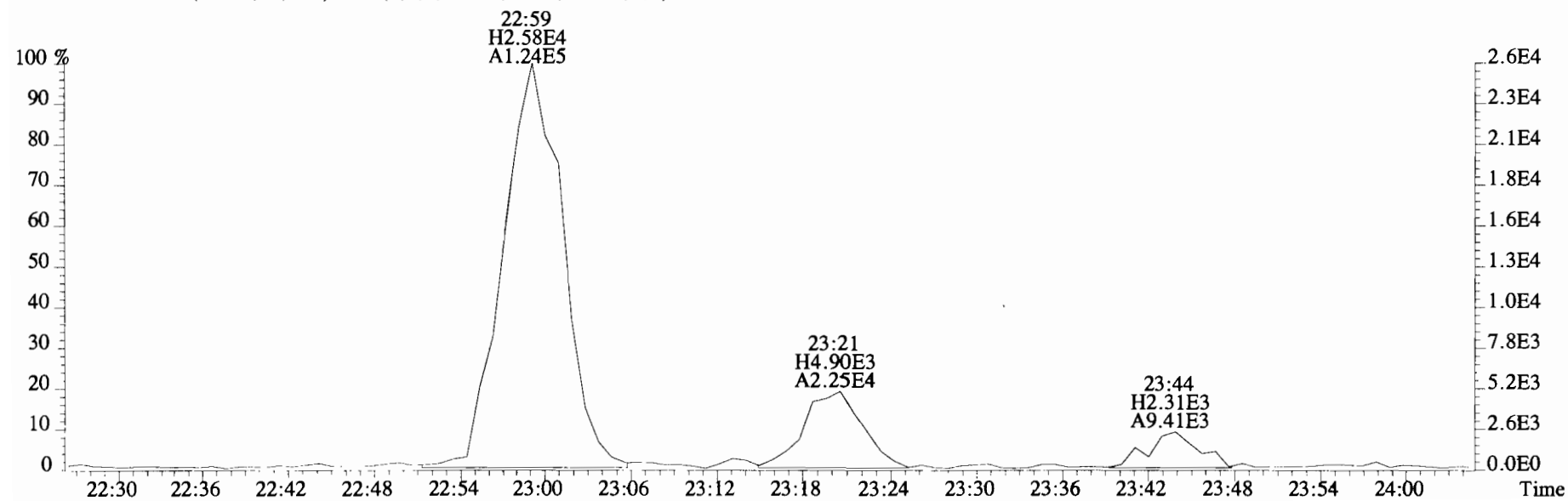
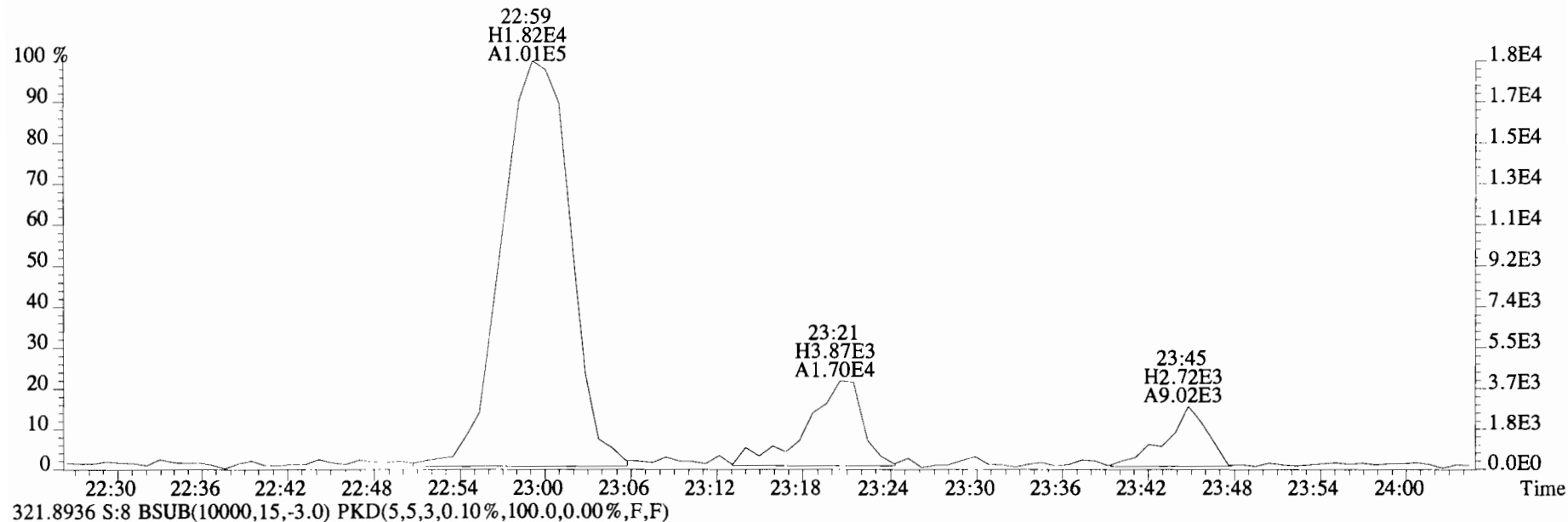
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



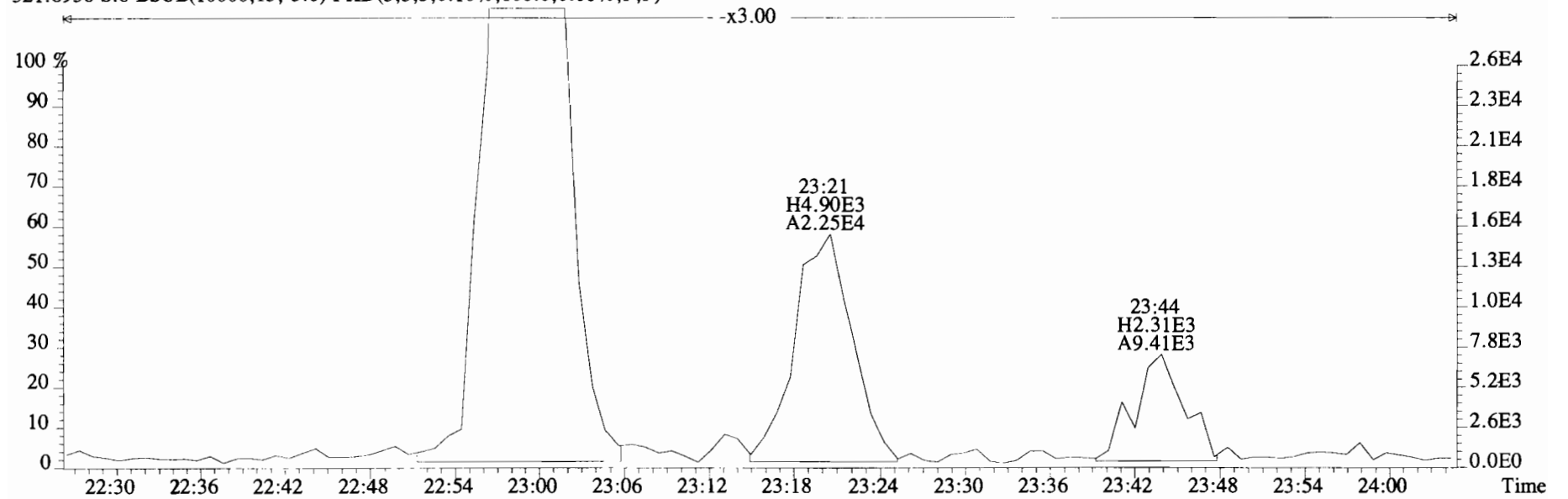
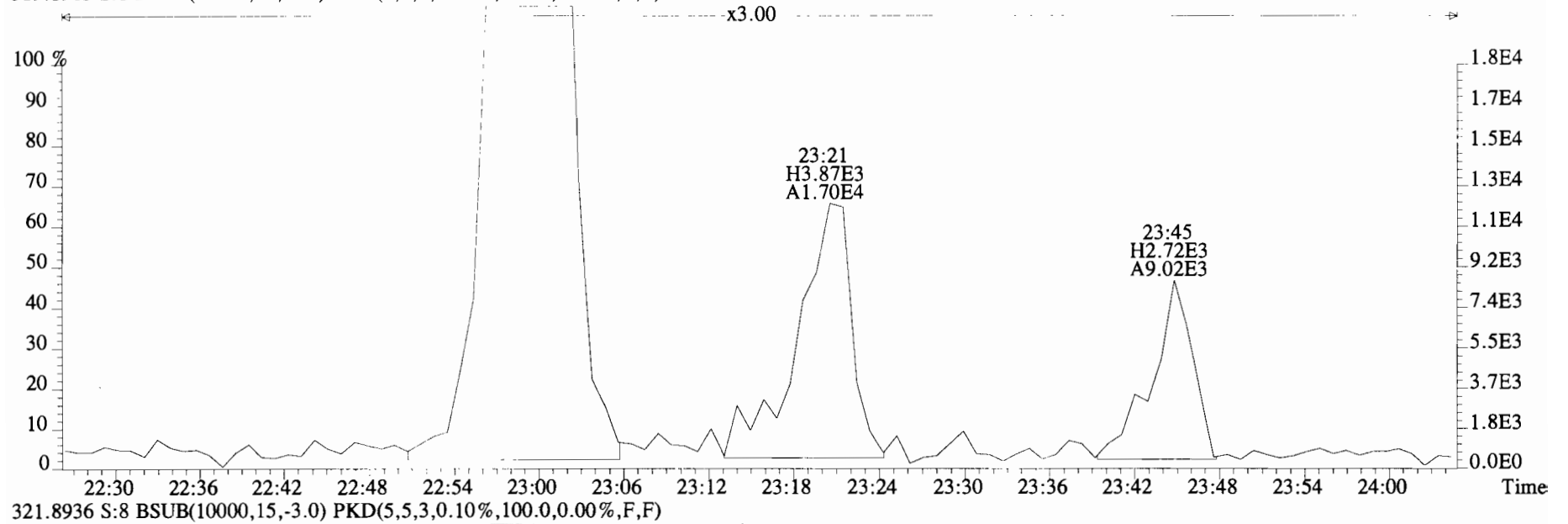
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



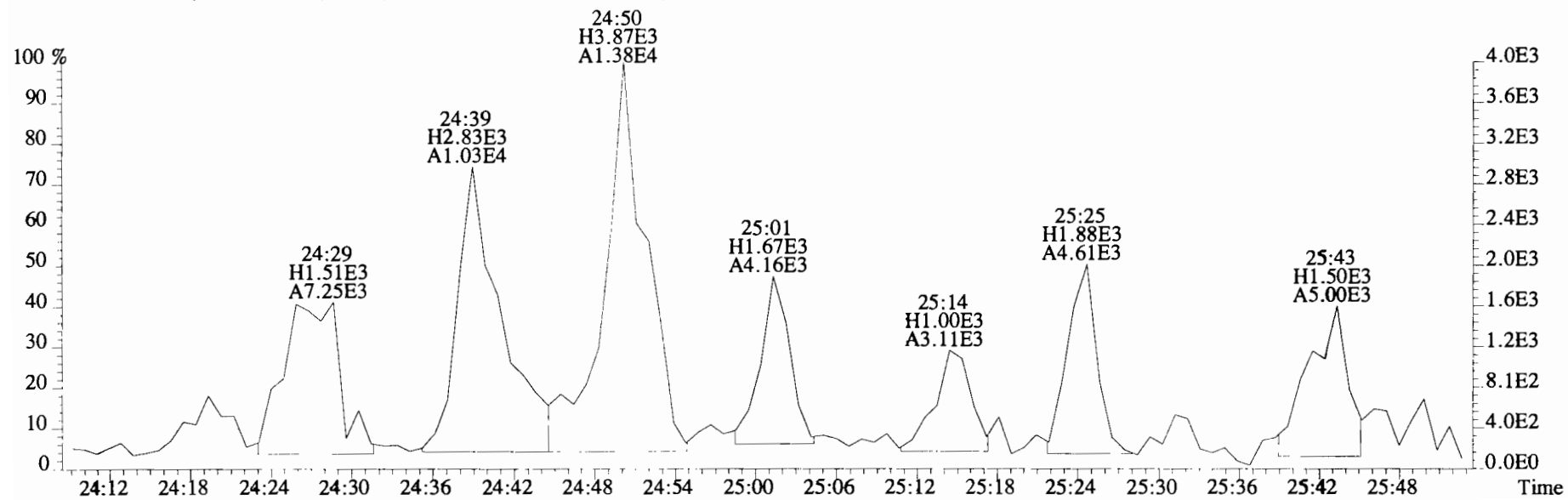
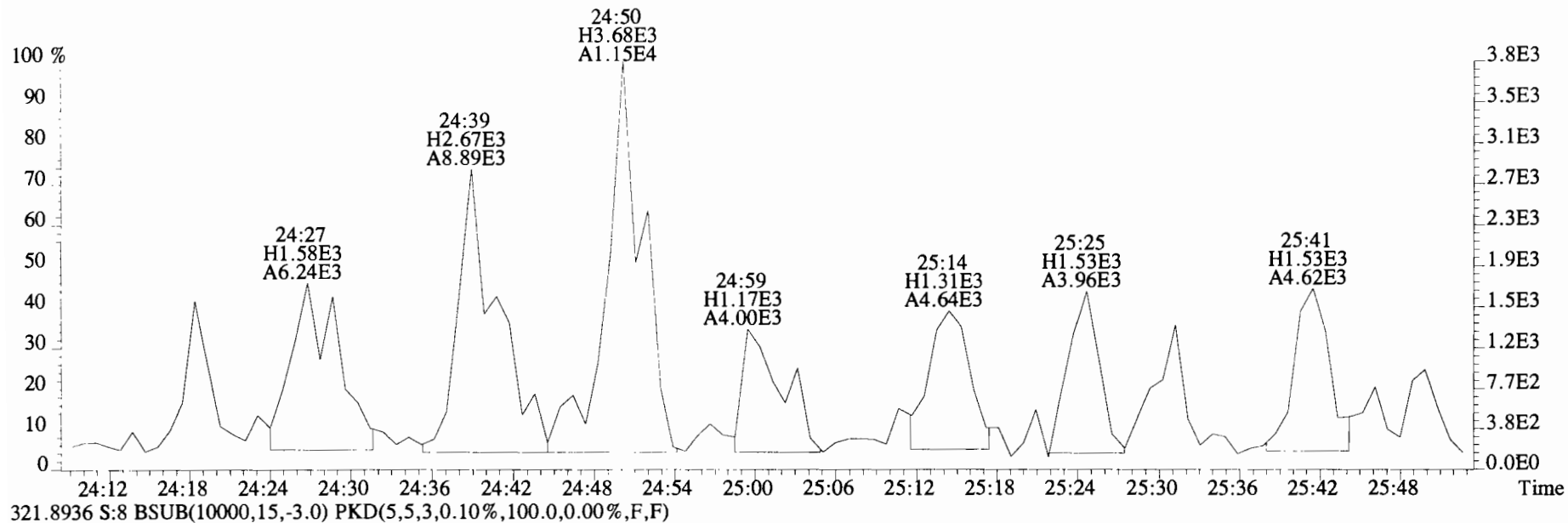
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



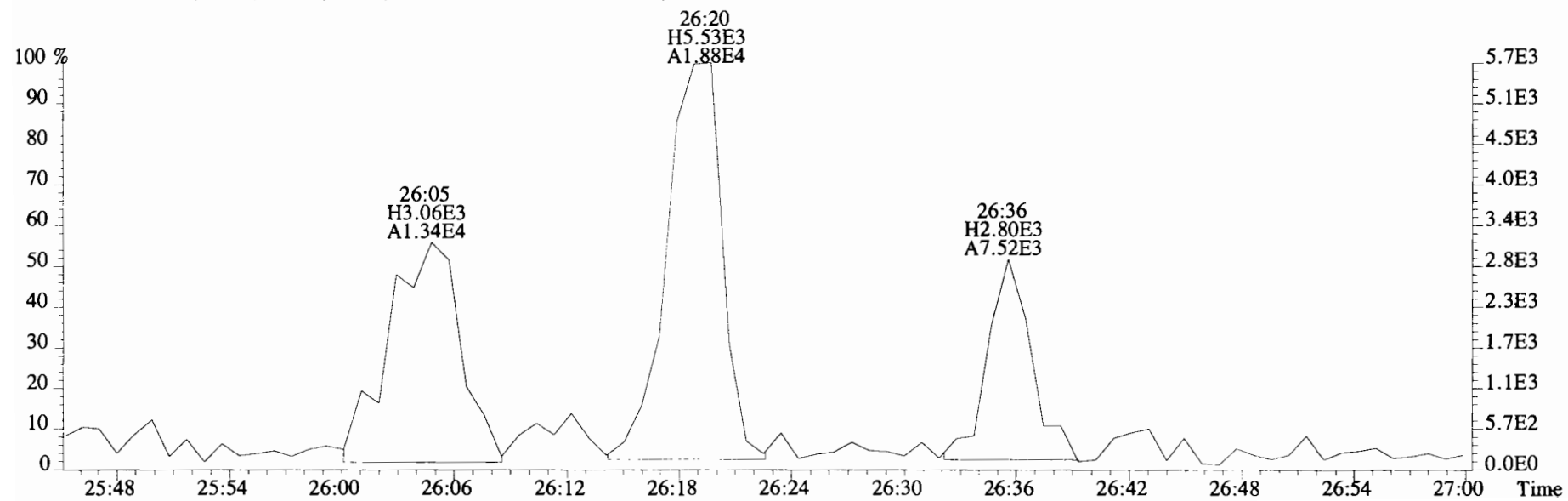
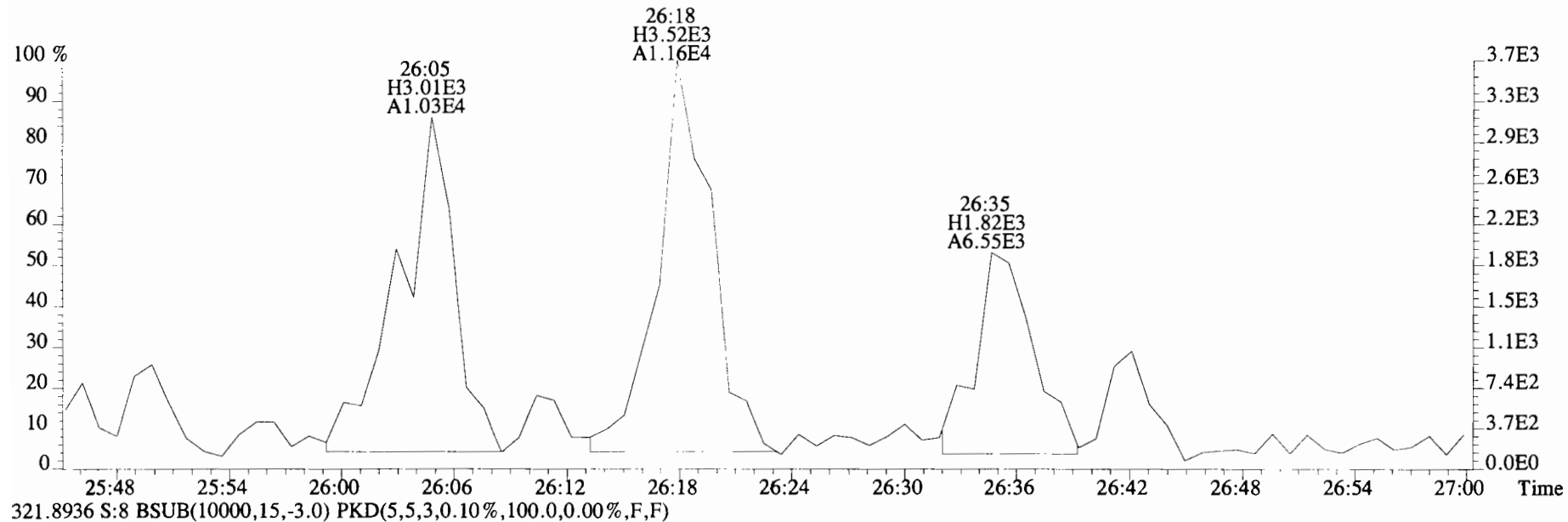
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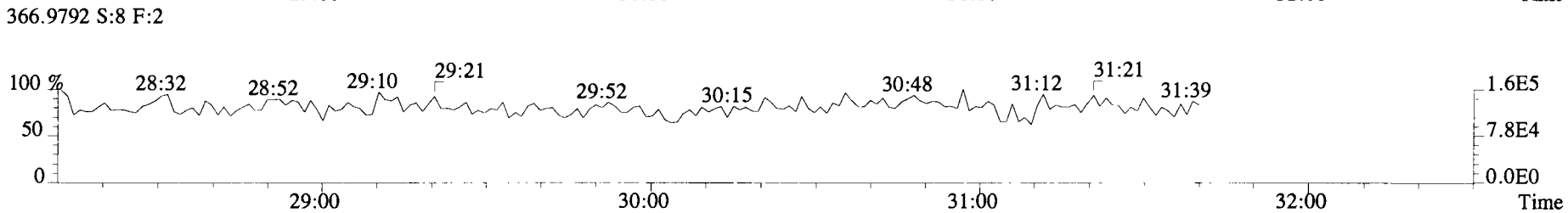
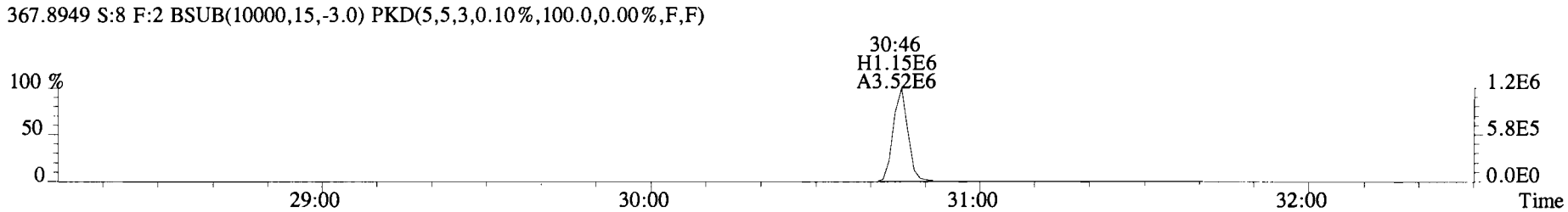
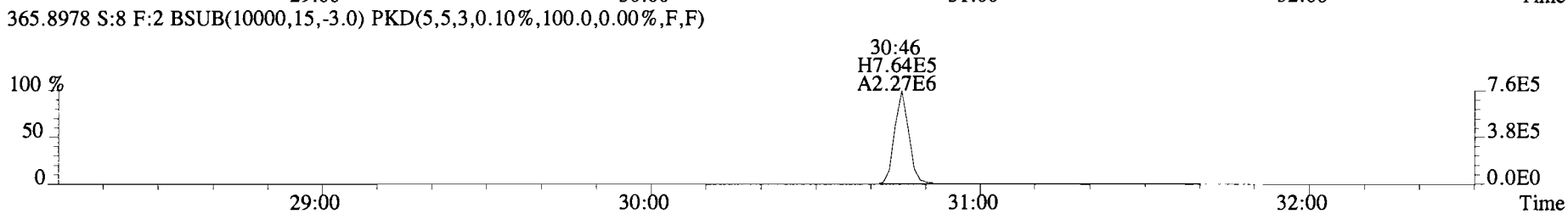
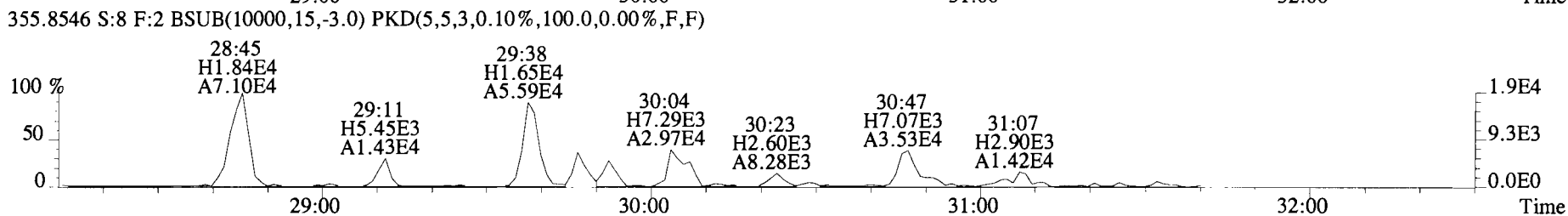
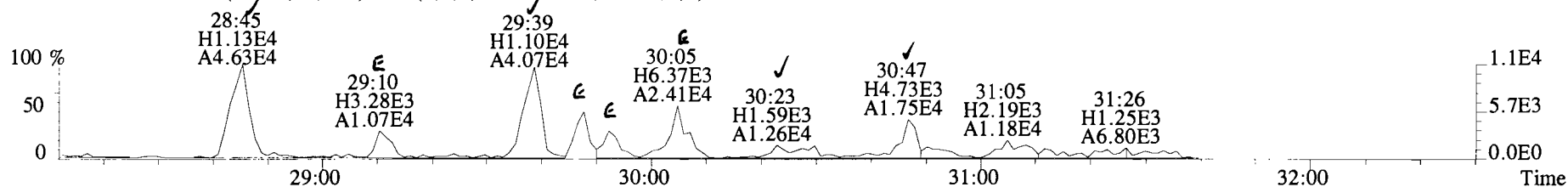
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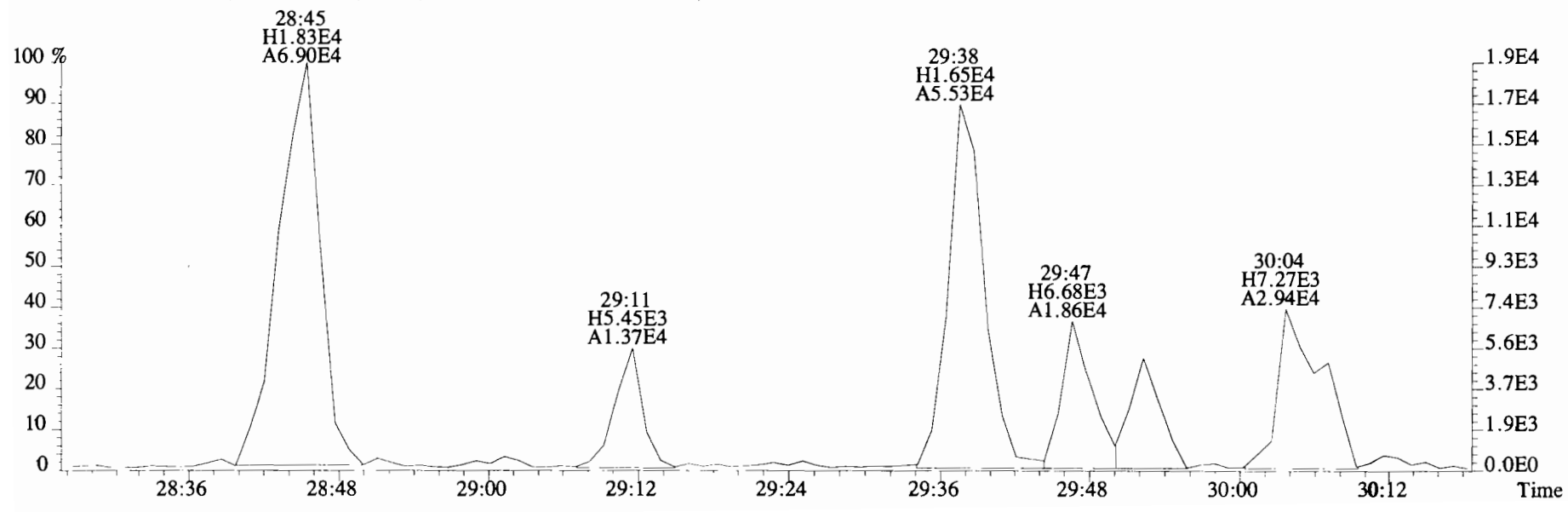
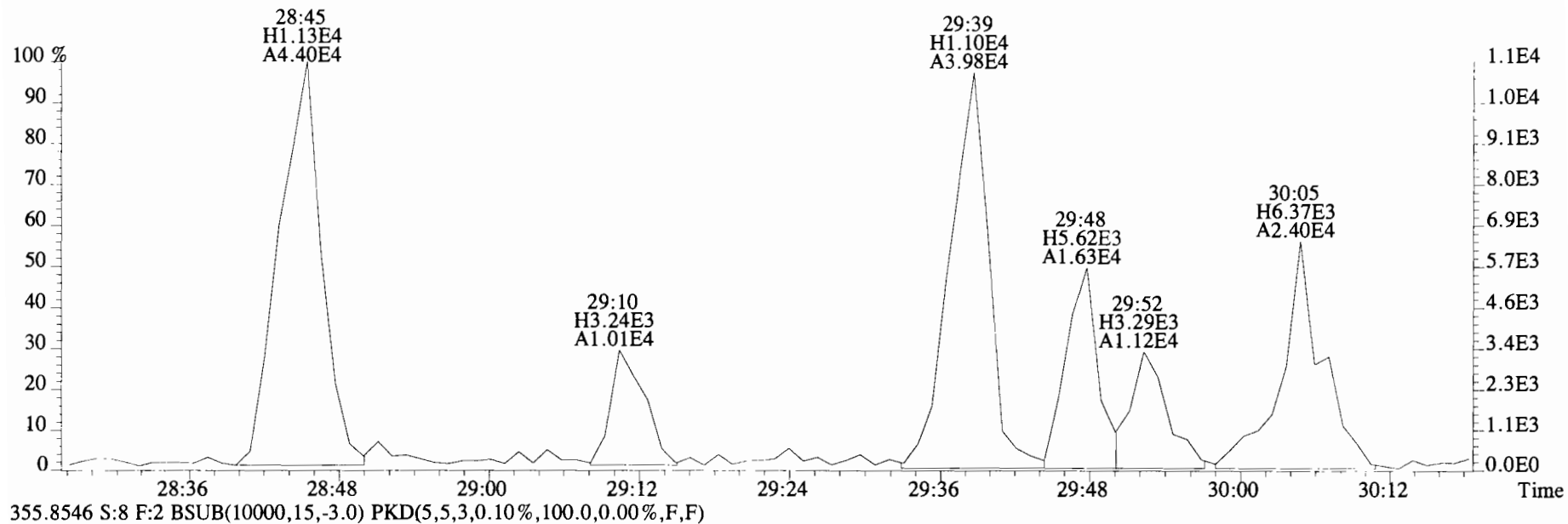
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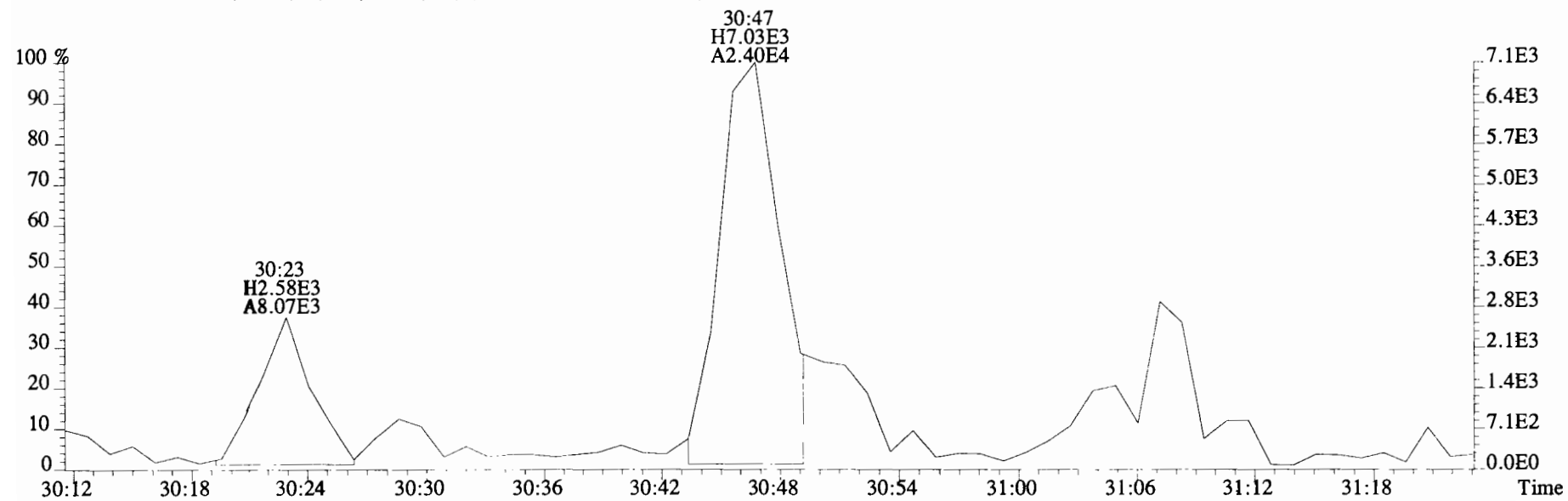
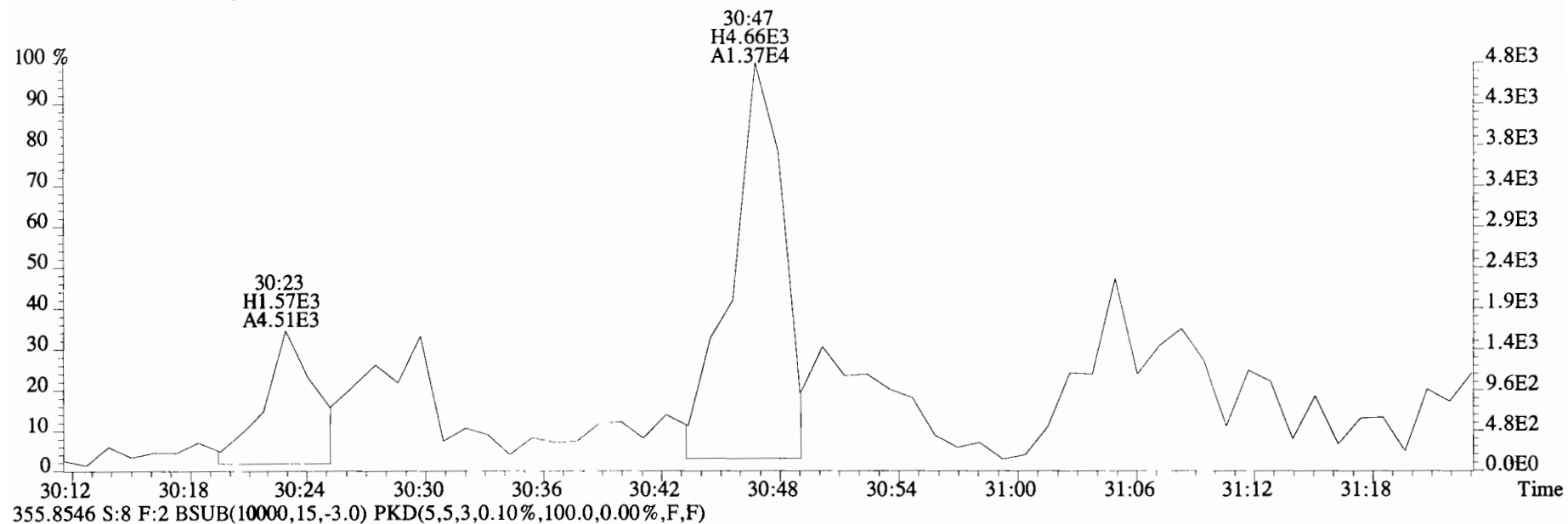
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Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
353.8576 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



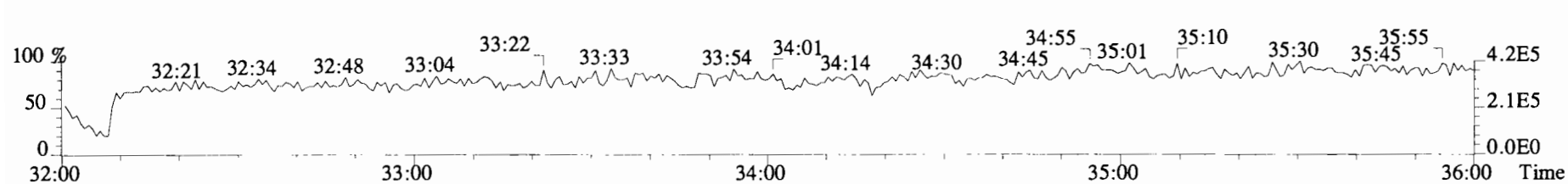
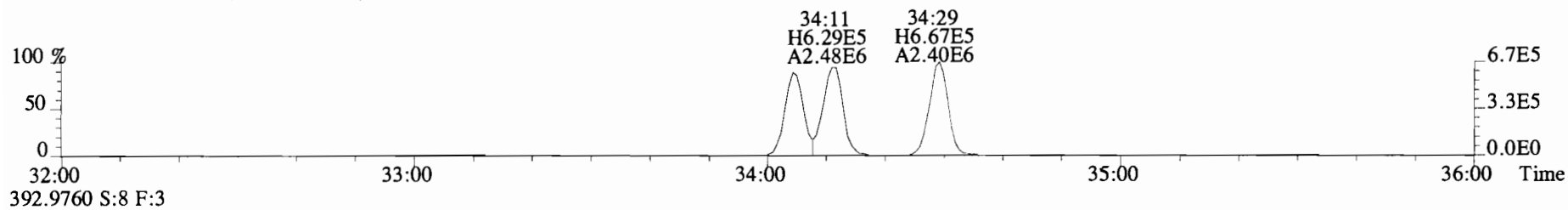
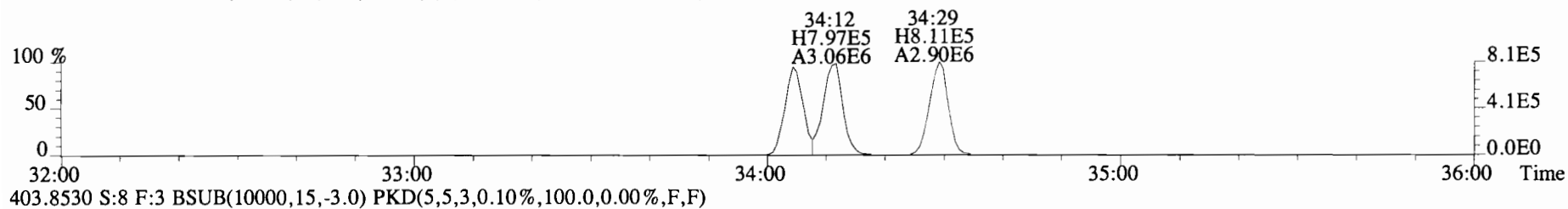
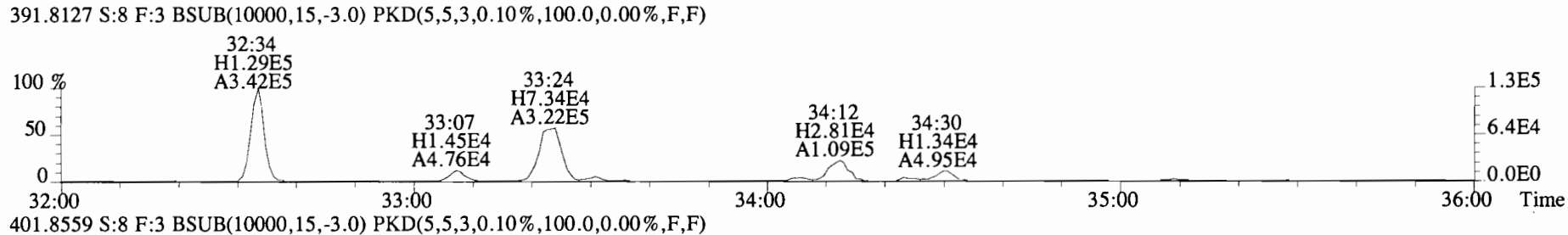
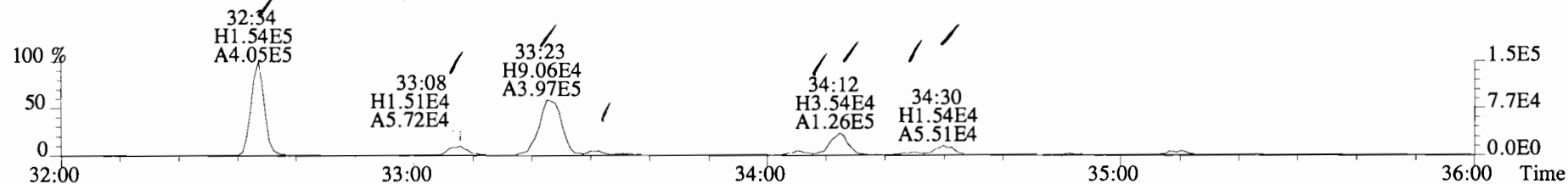
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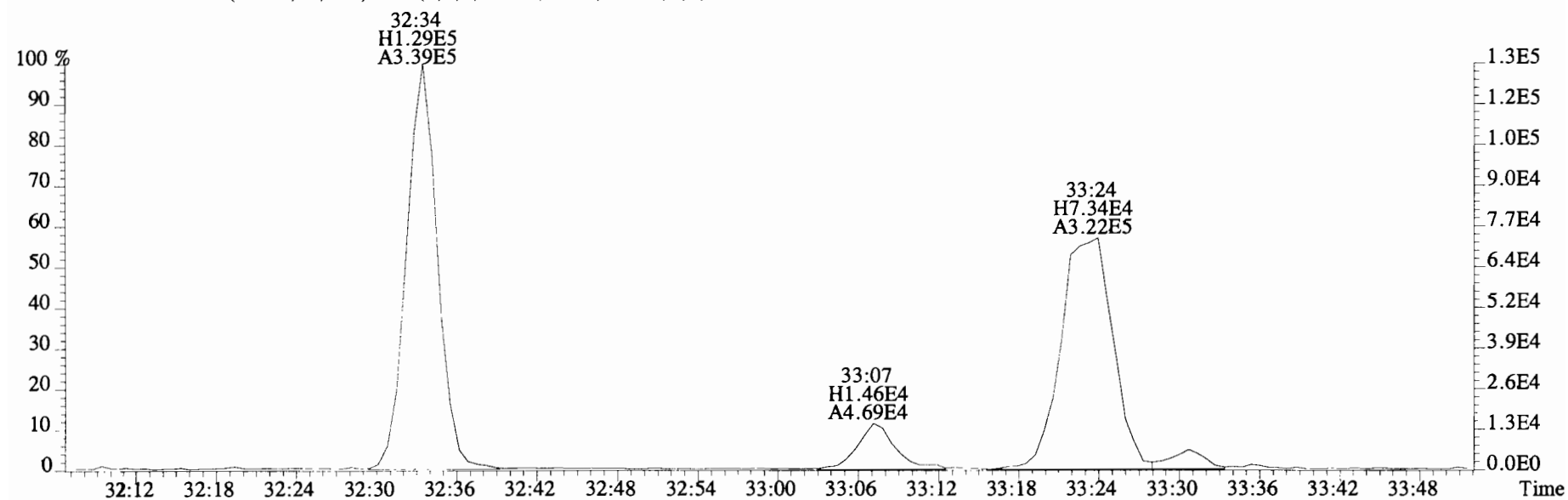
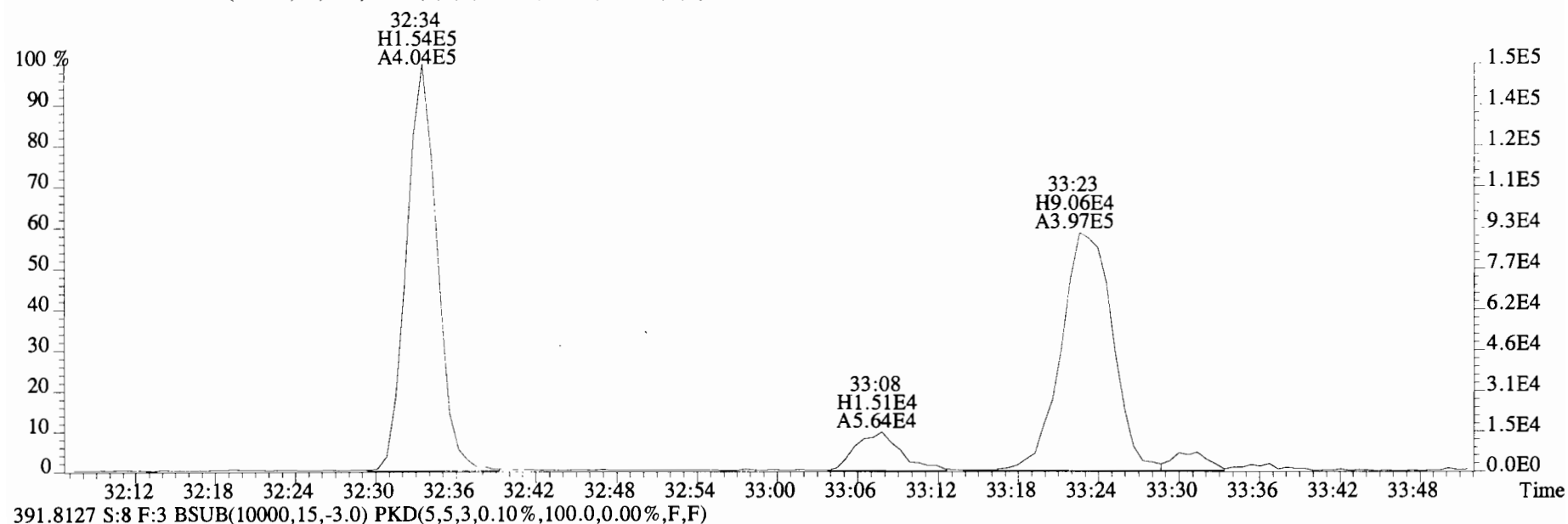
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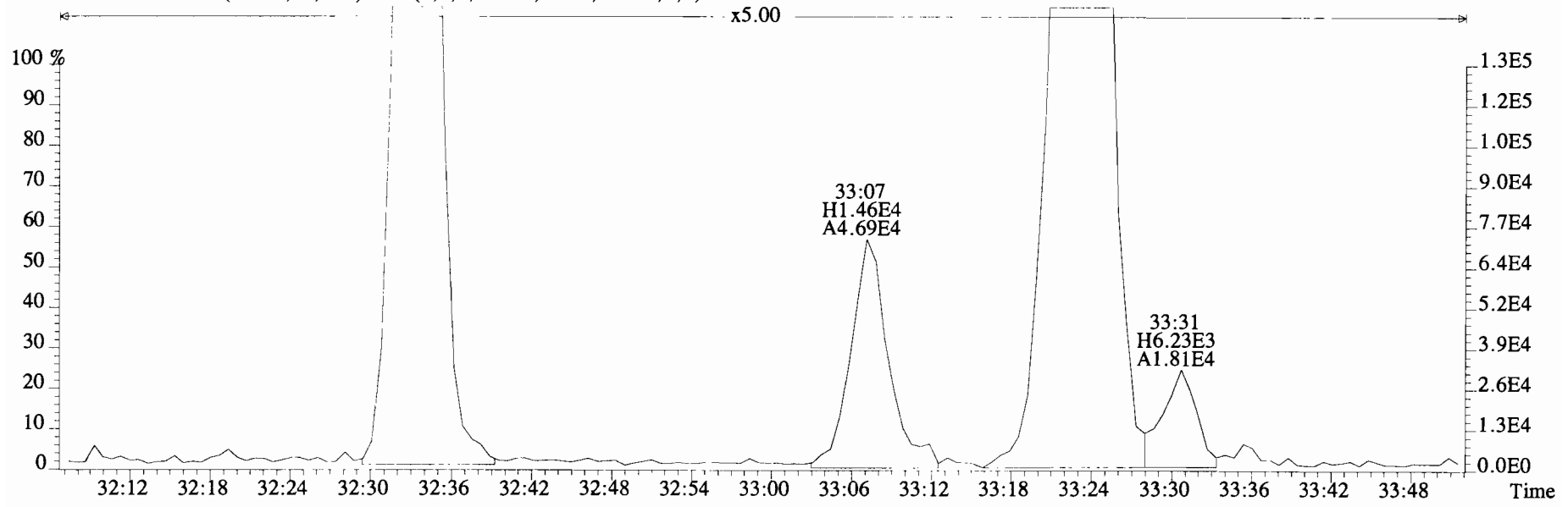
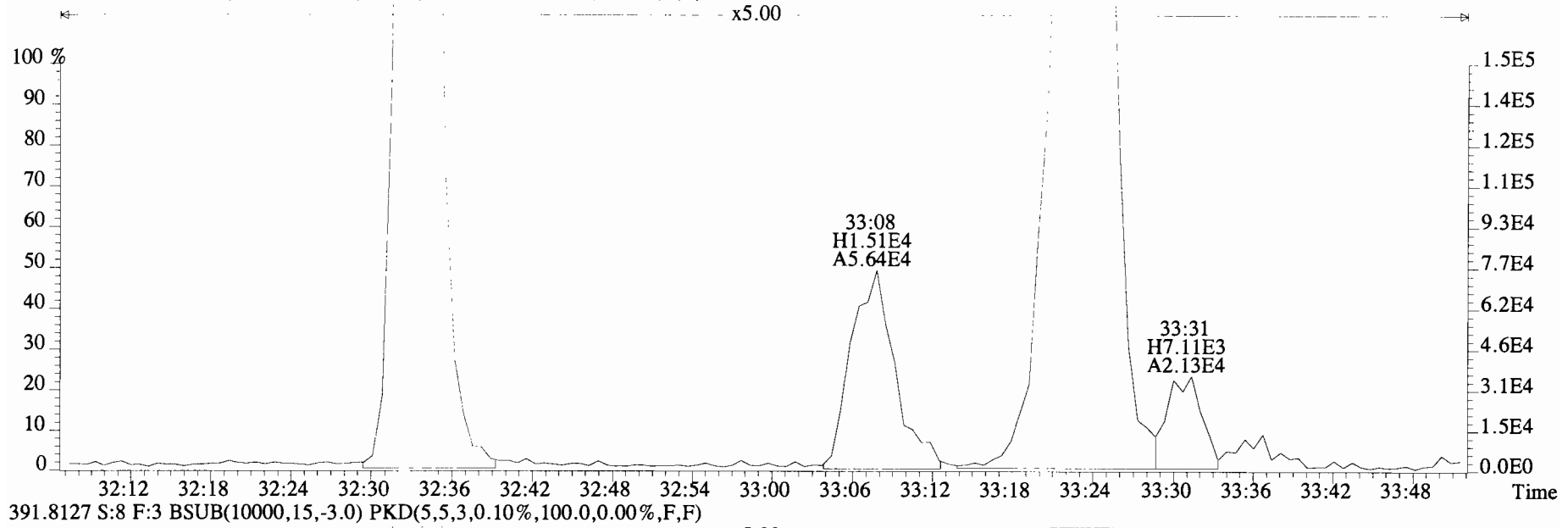
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 Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



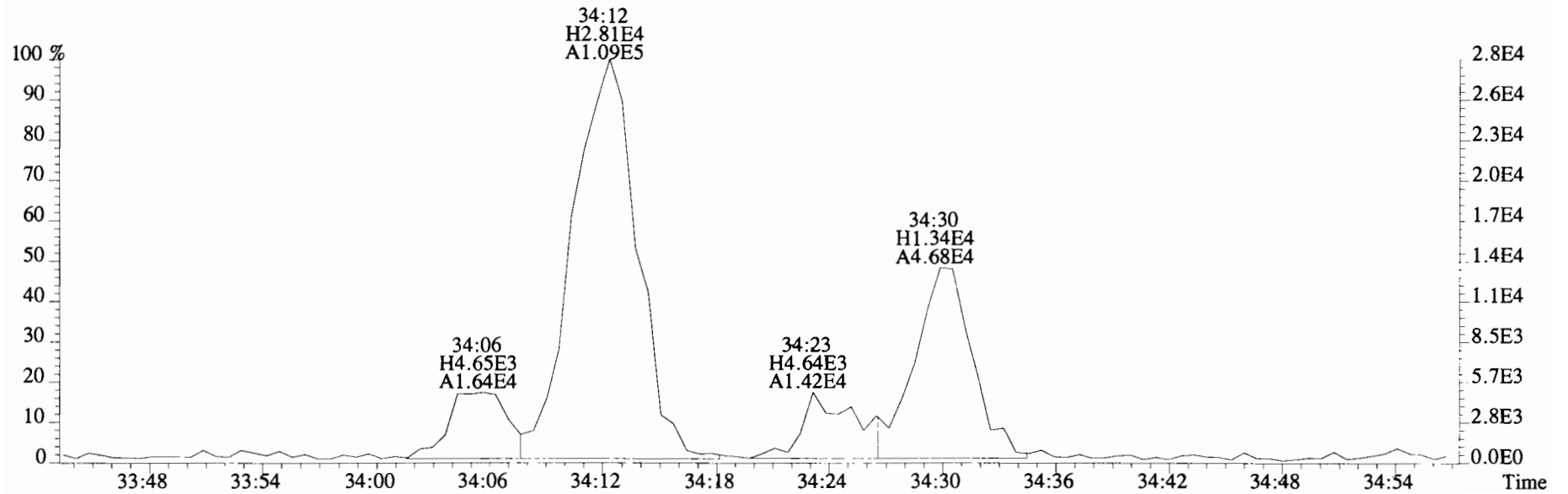
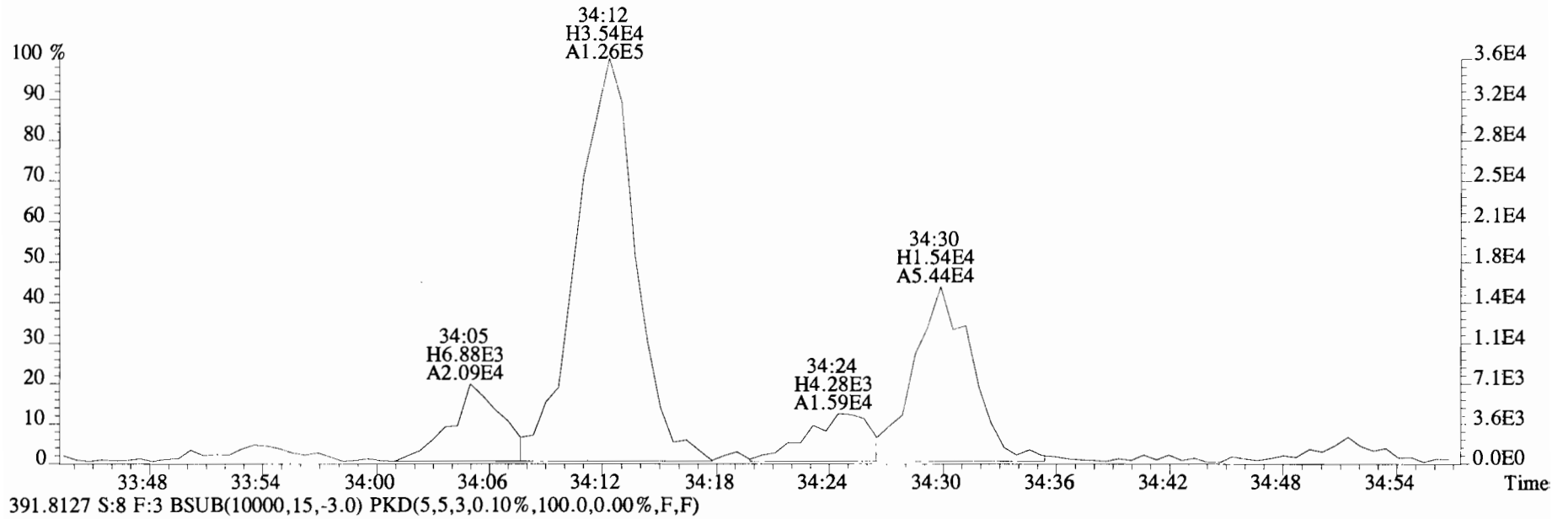
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



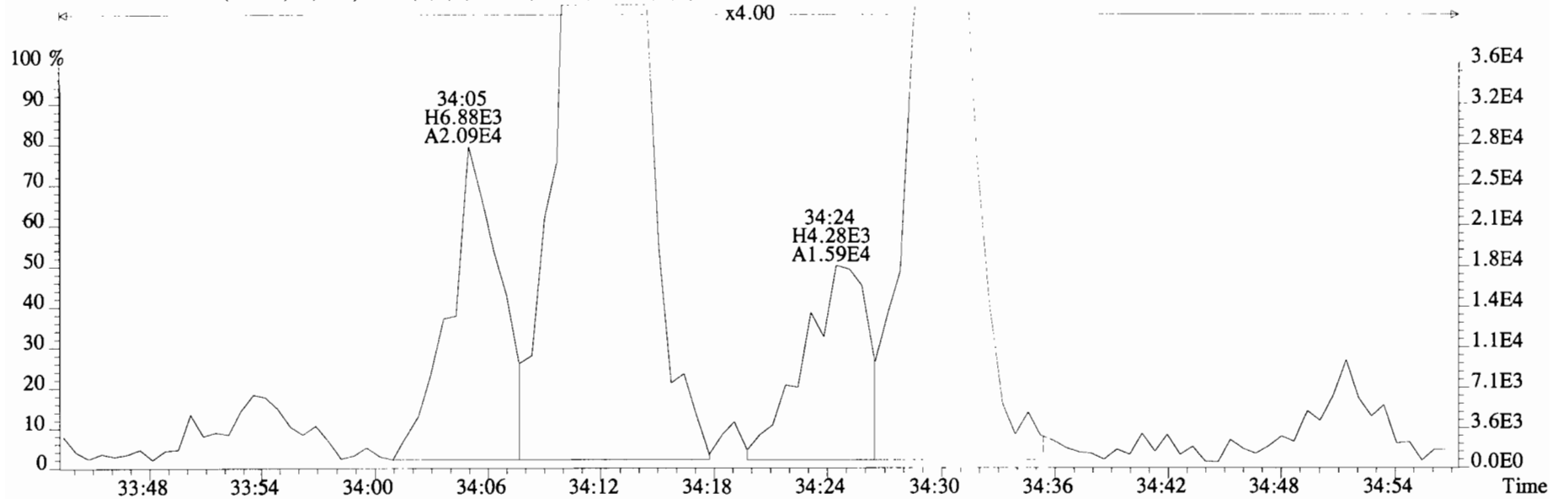
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



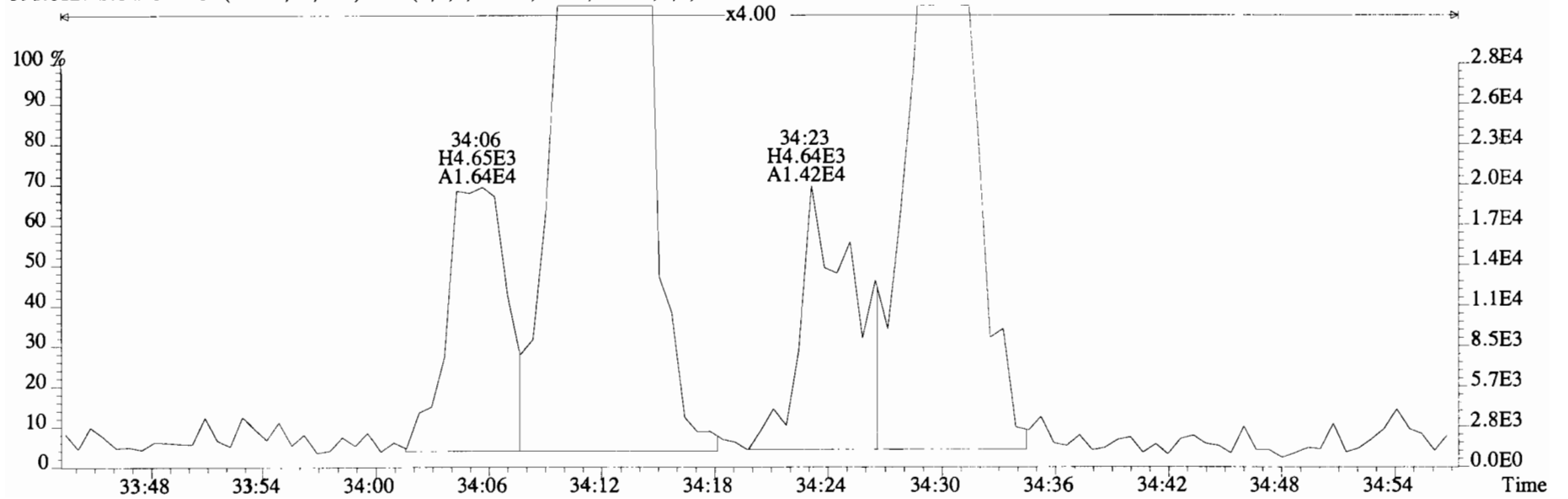
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



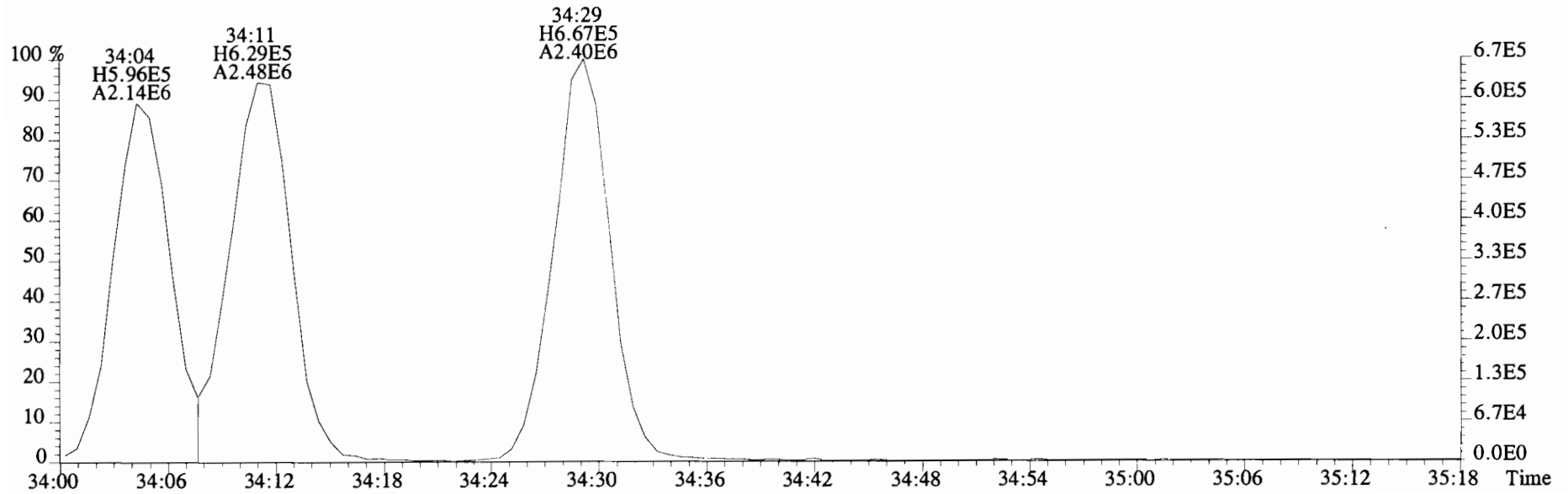
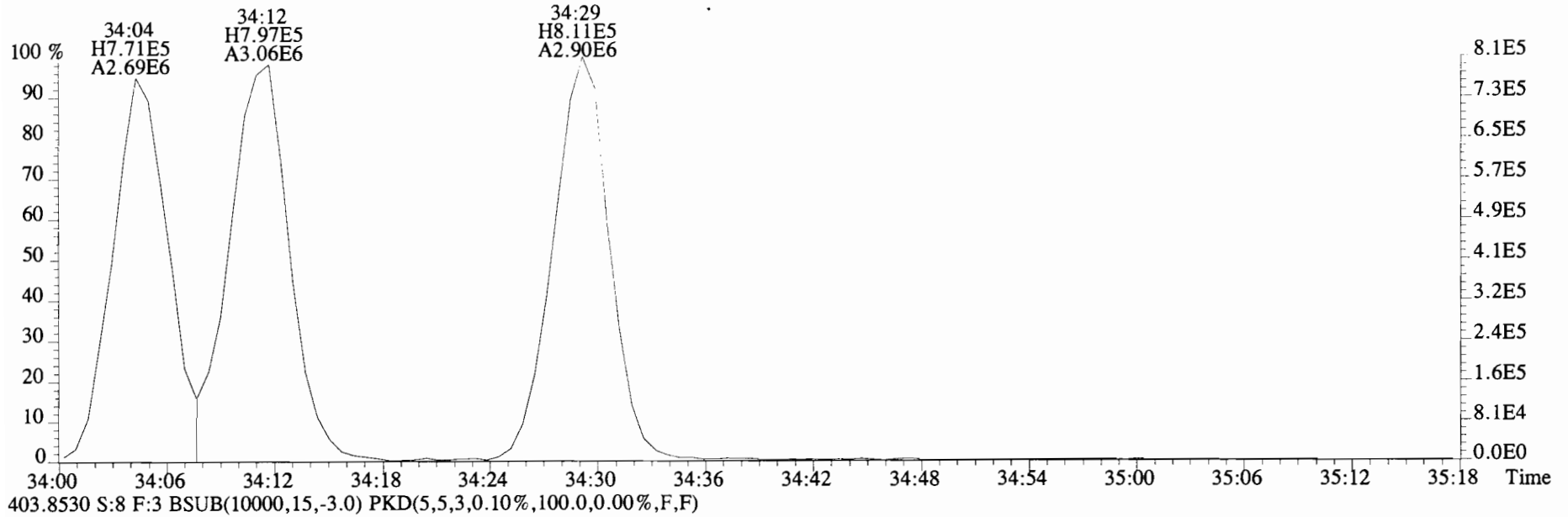
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



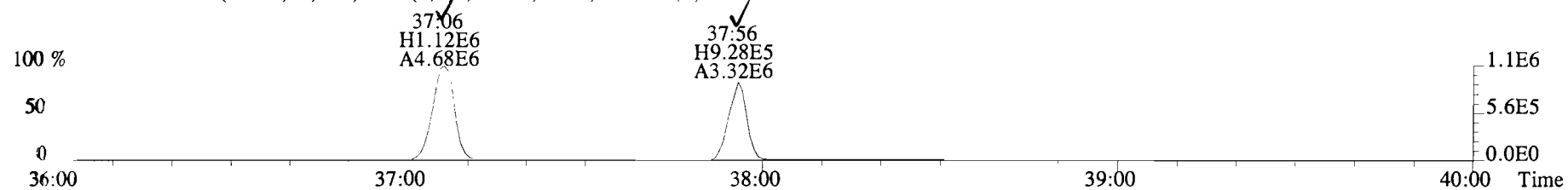
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



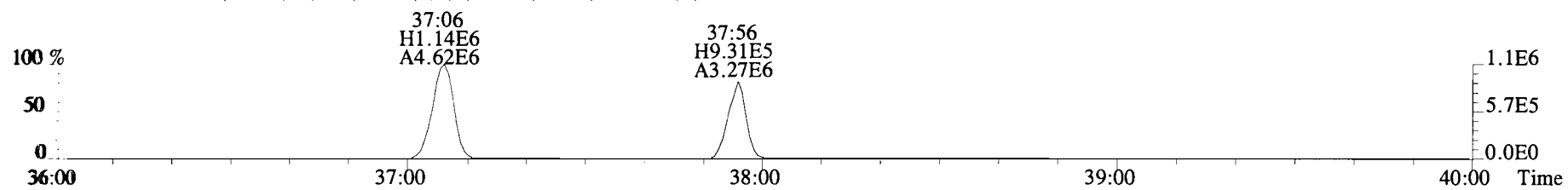
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
401.8559 S:8 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



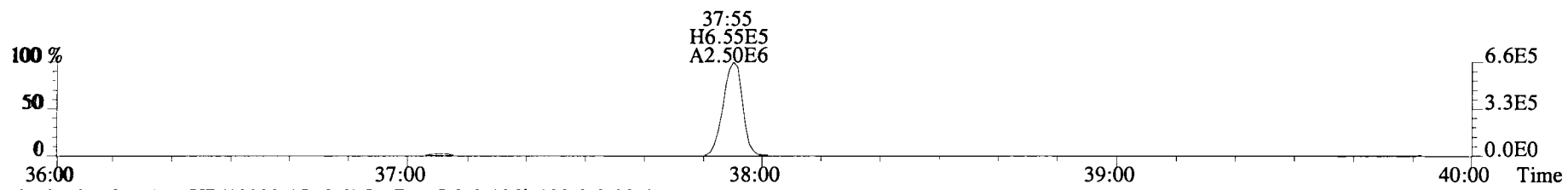
File: 1903565.D #1-355 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample #8 File Text: Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



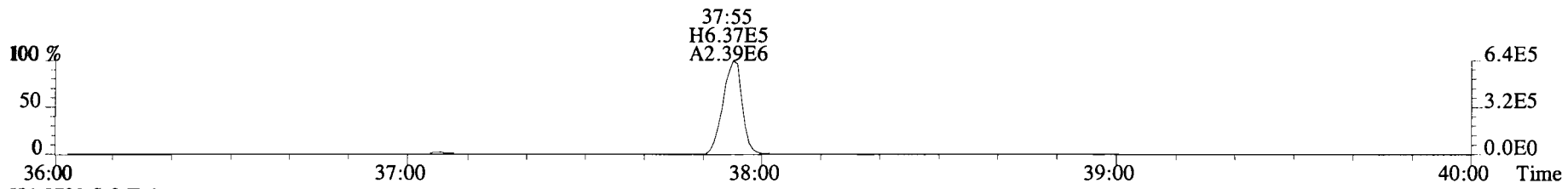
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



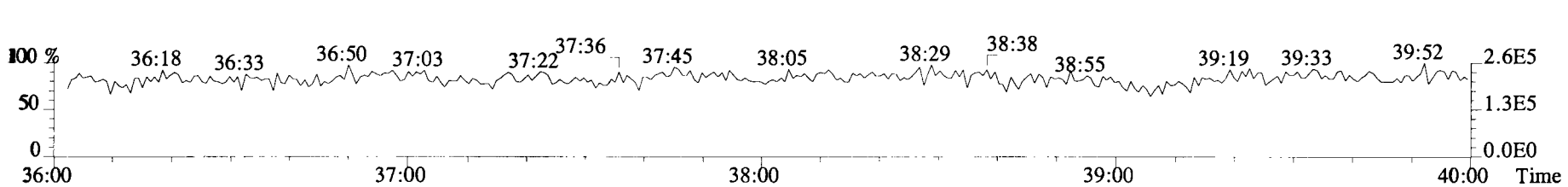
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



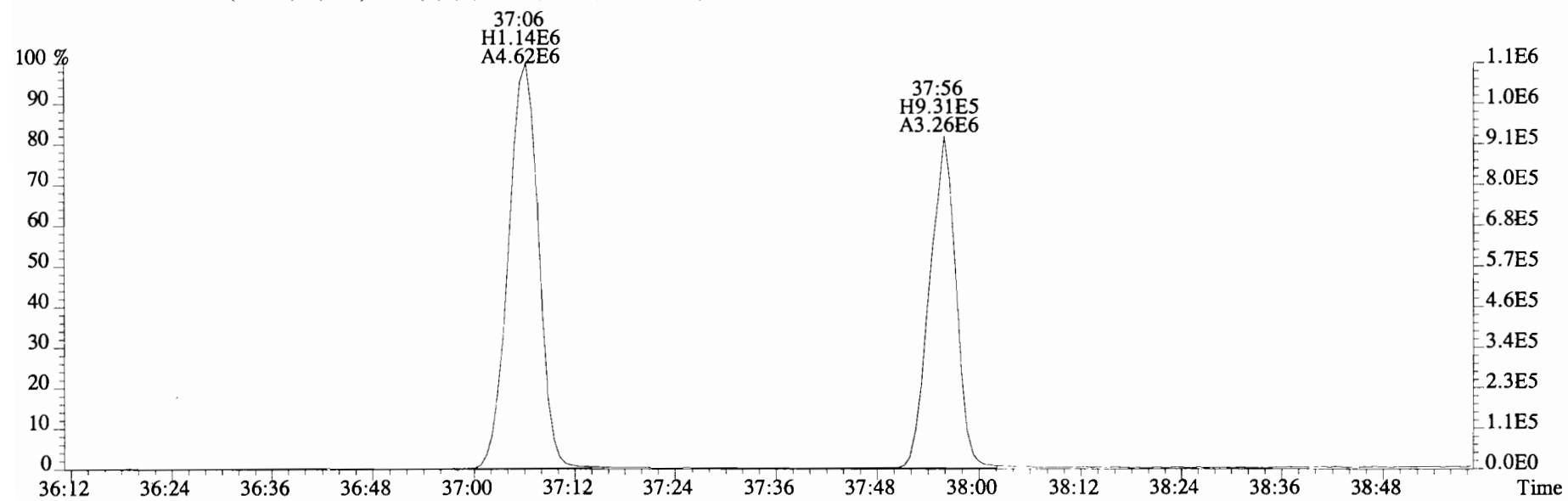
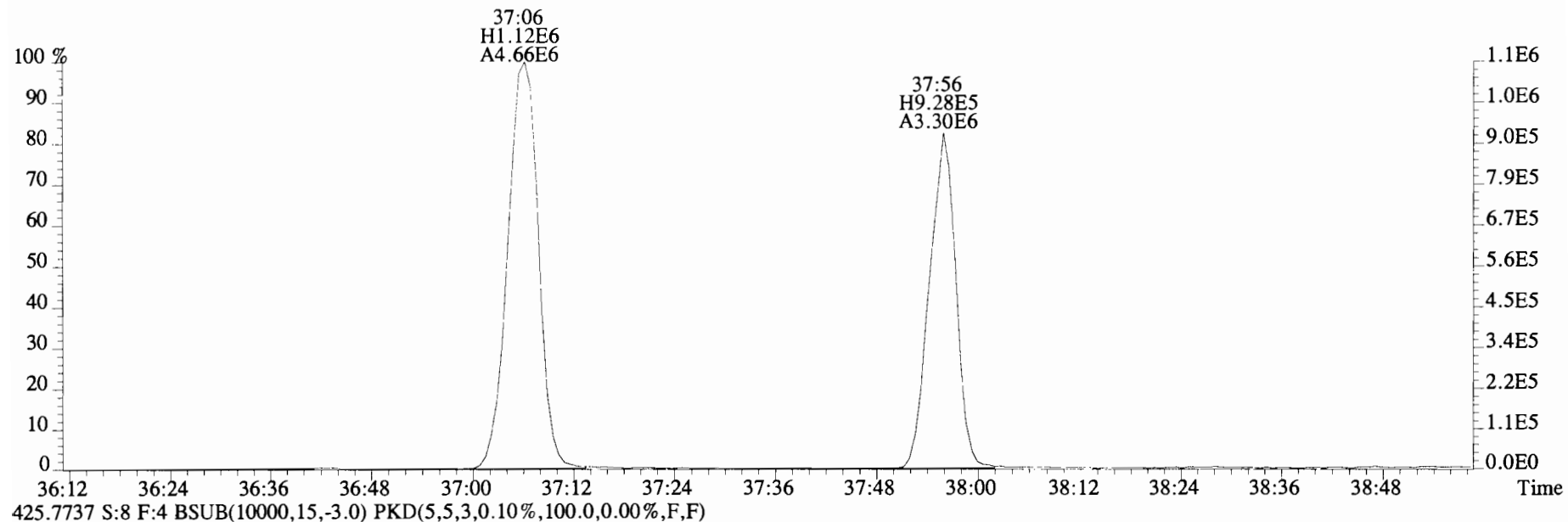
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



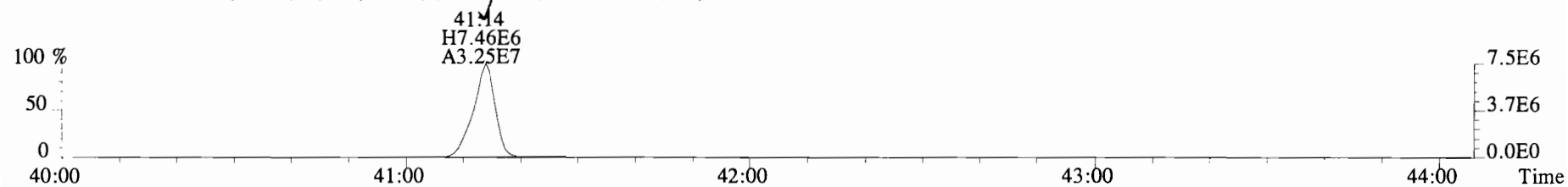
454.9728 S:8 F:4



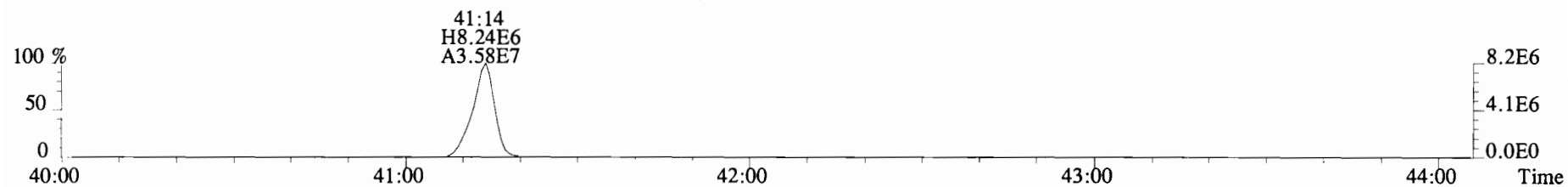
File:191031D2 #1-355 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



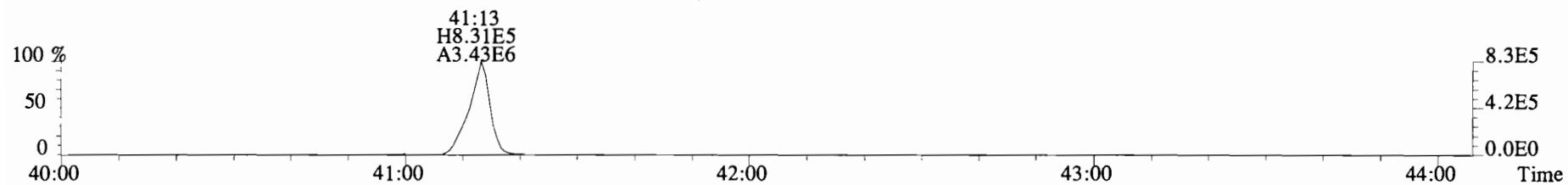
File:191031D2 #1-432 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



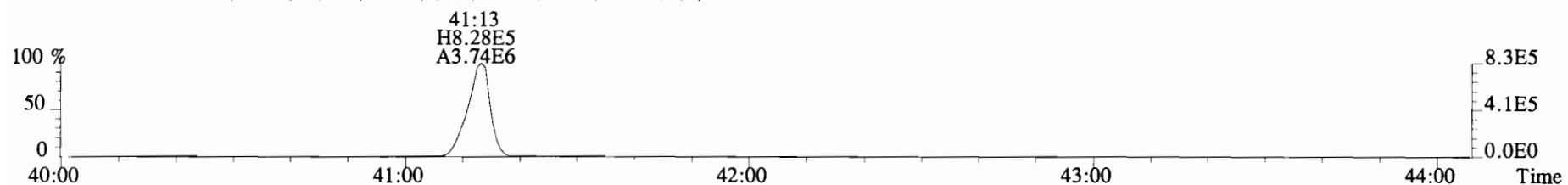
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



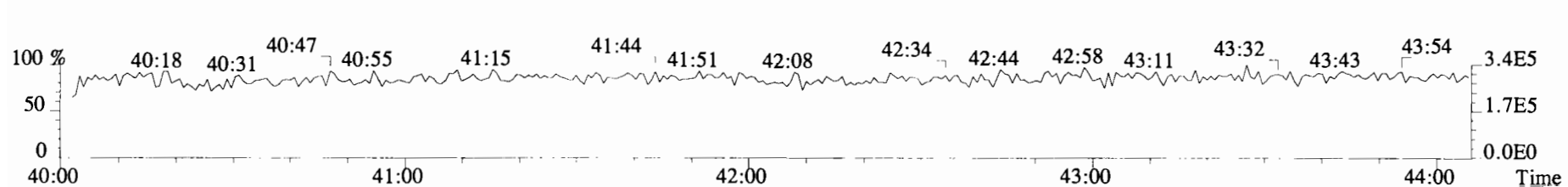
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



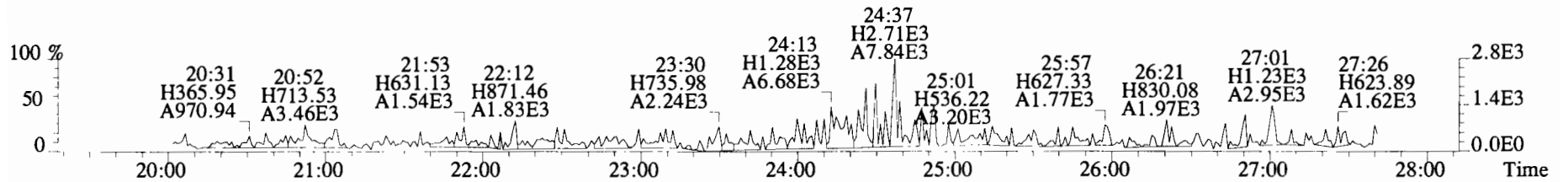
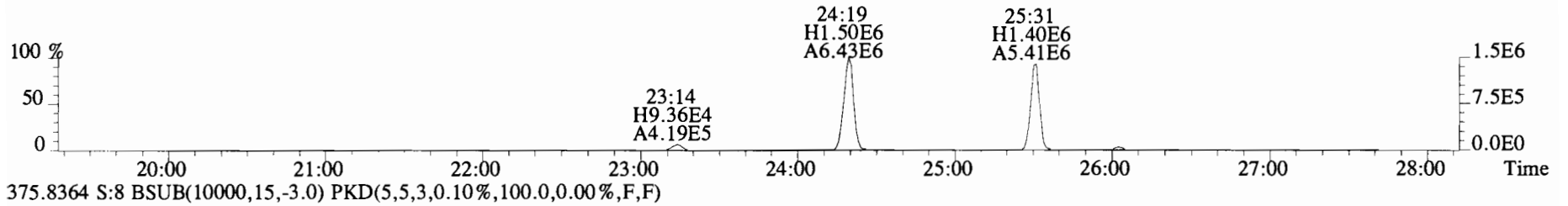
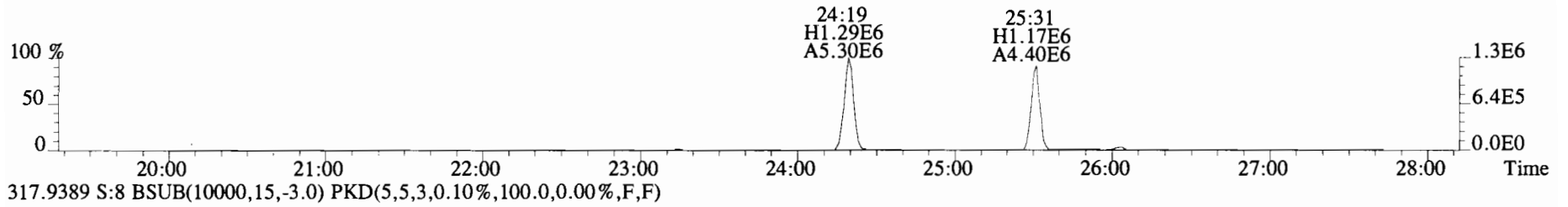
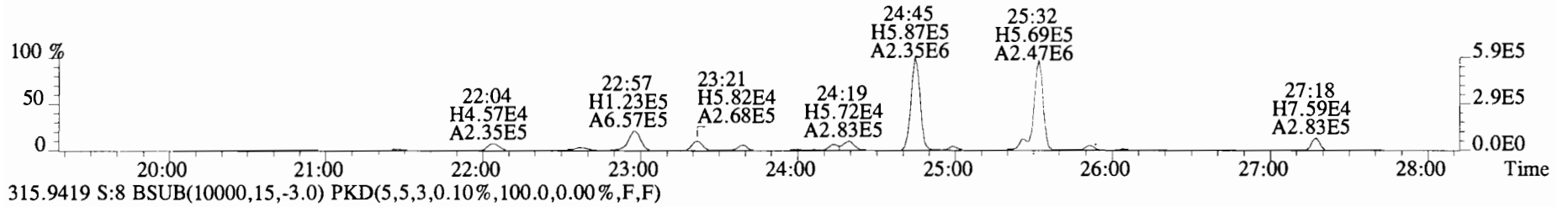
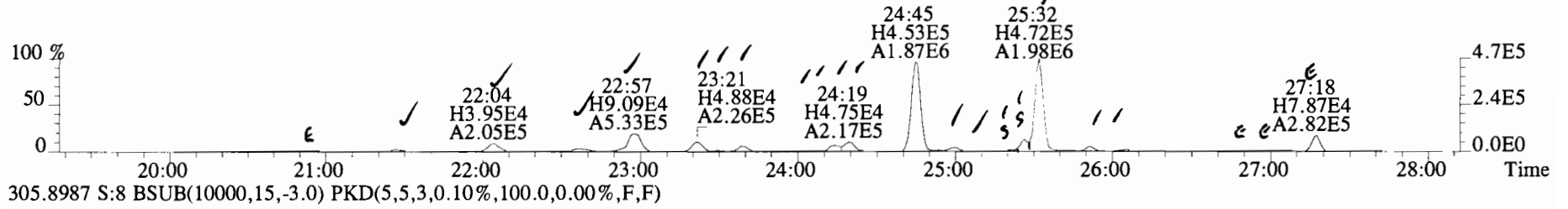
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



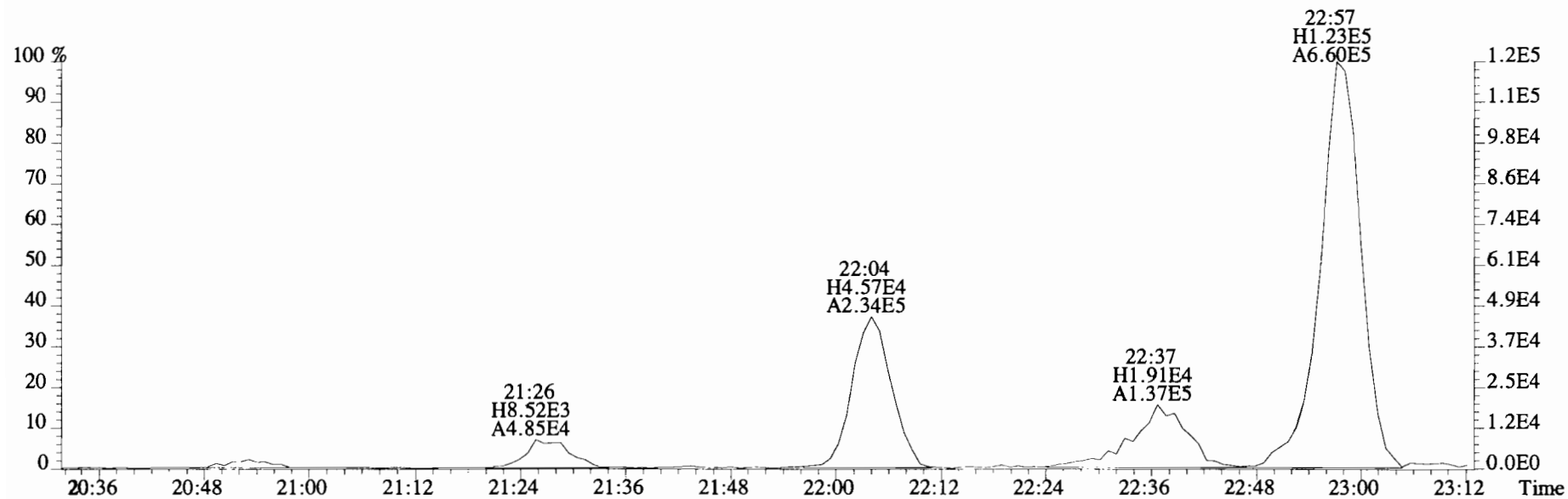
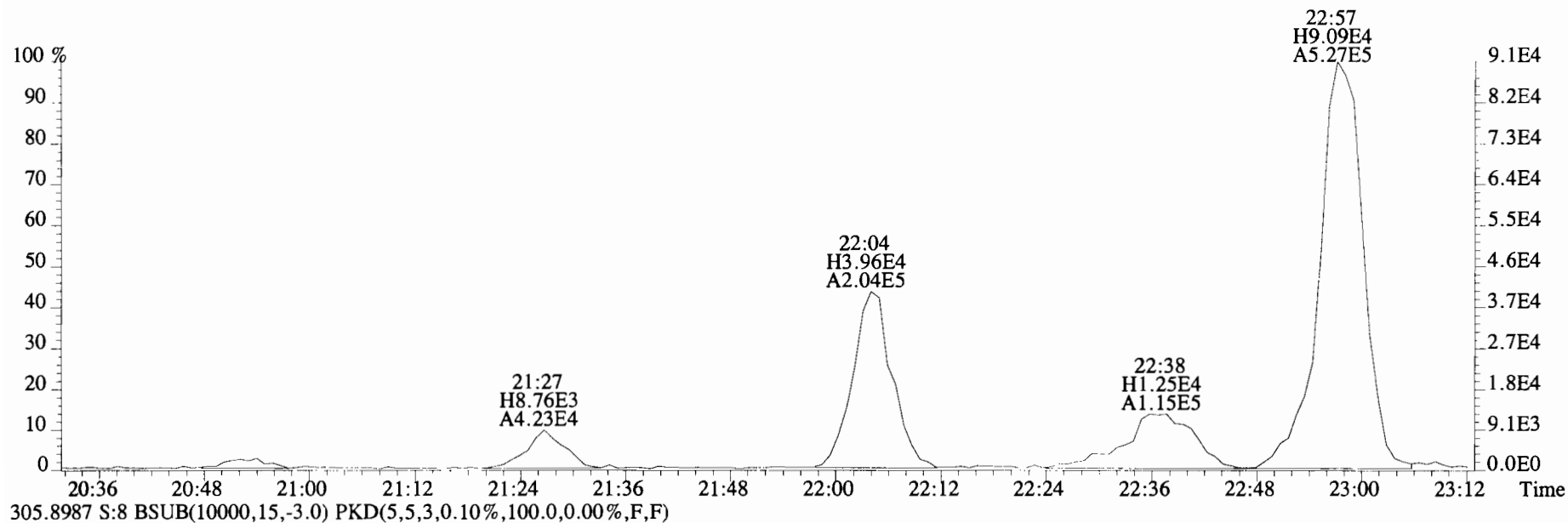
454.9728 S:8 F:5



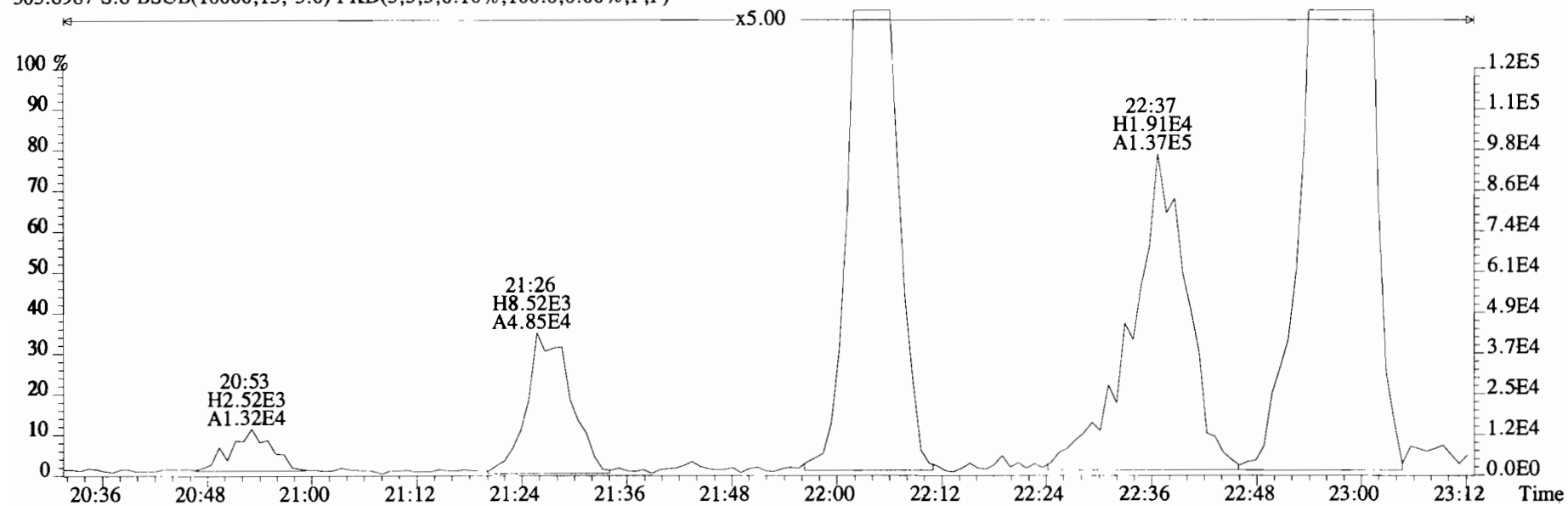
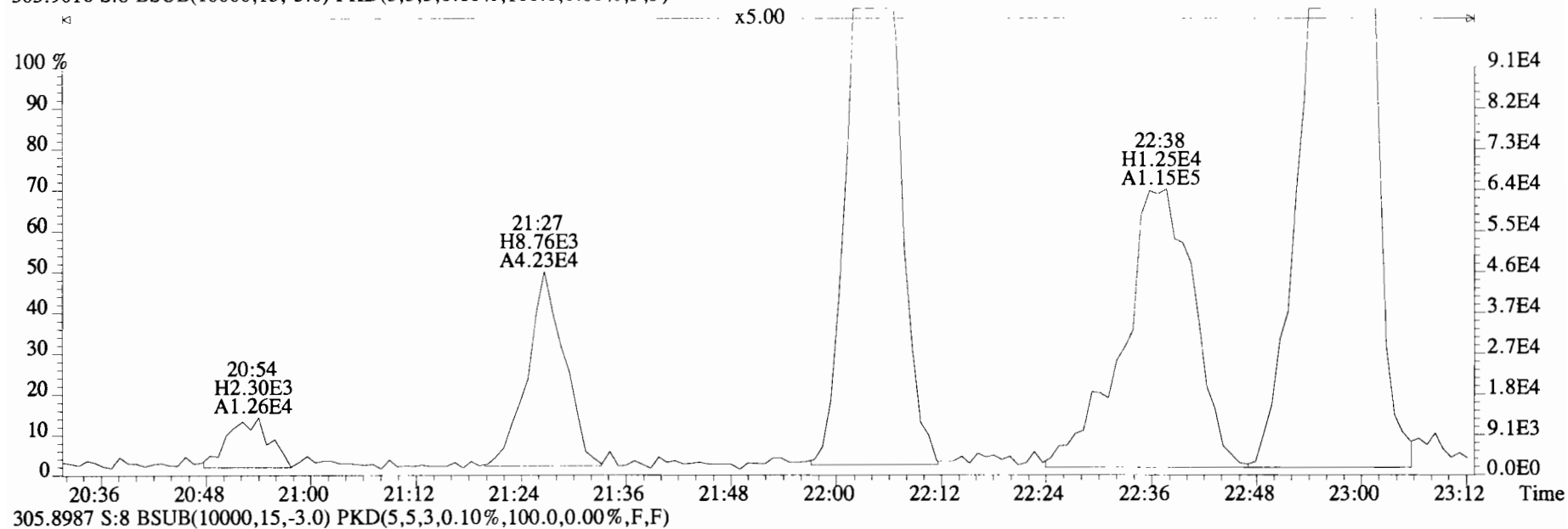
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



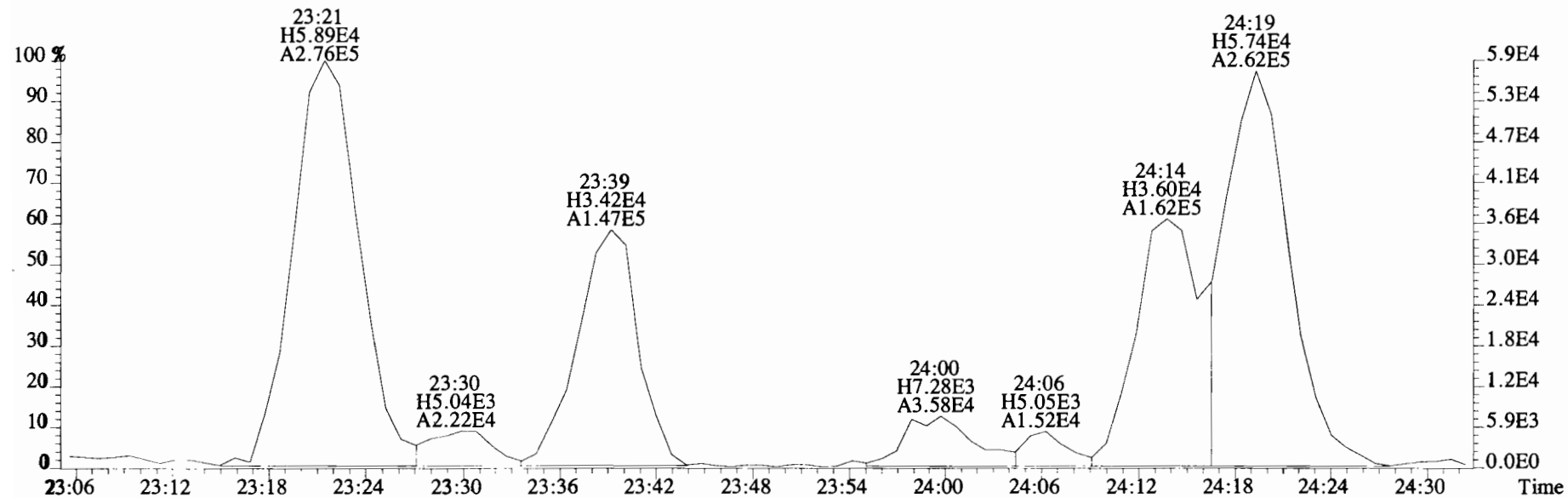
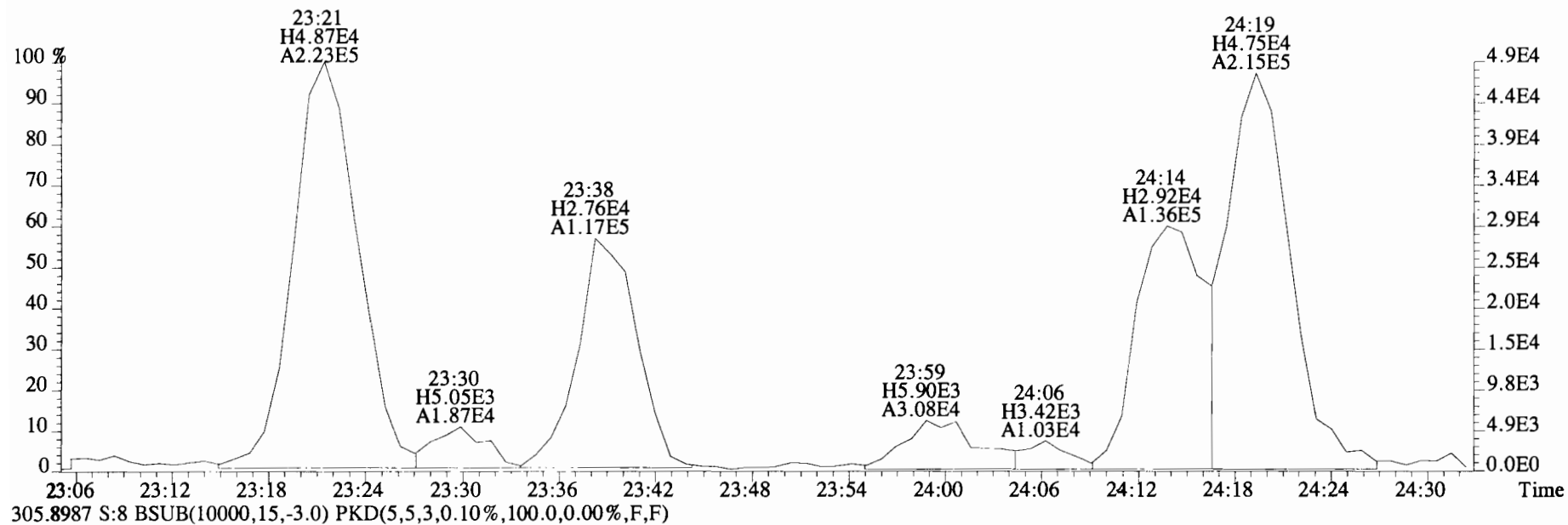
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



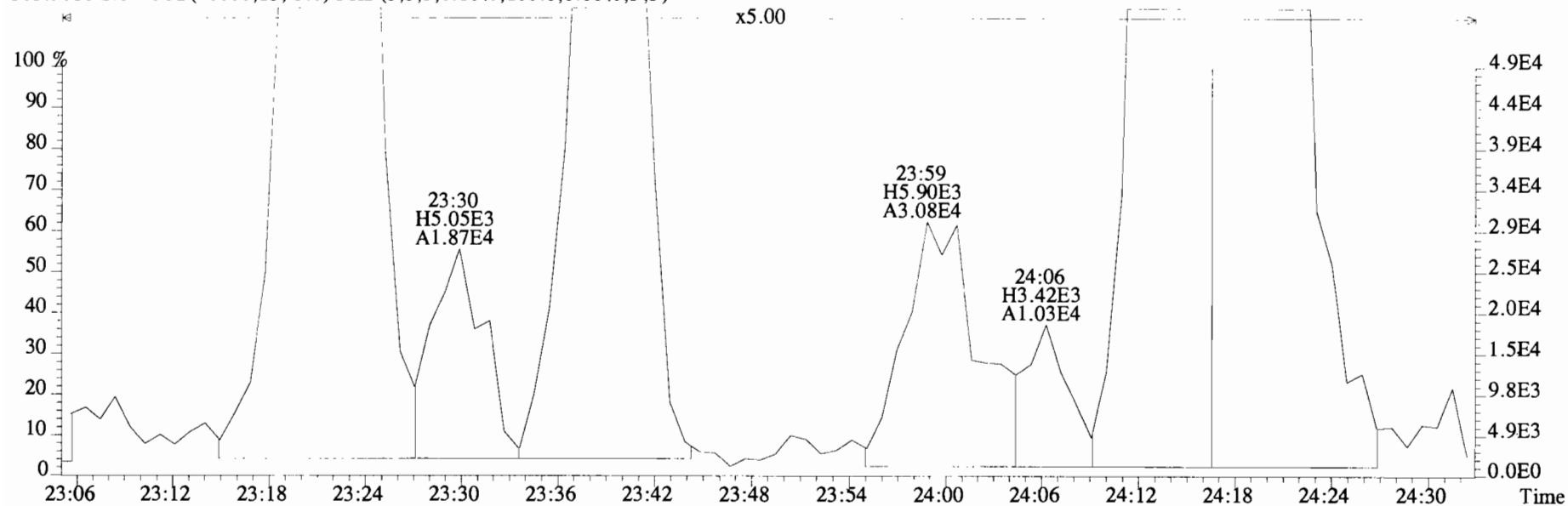
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



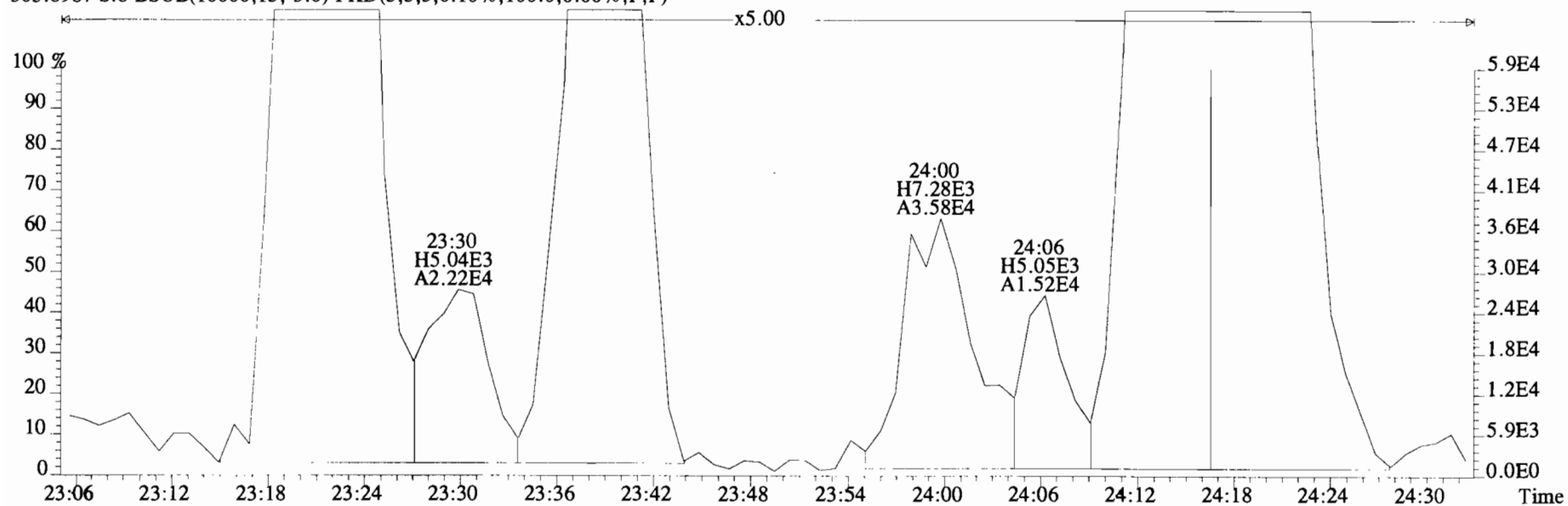
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



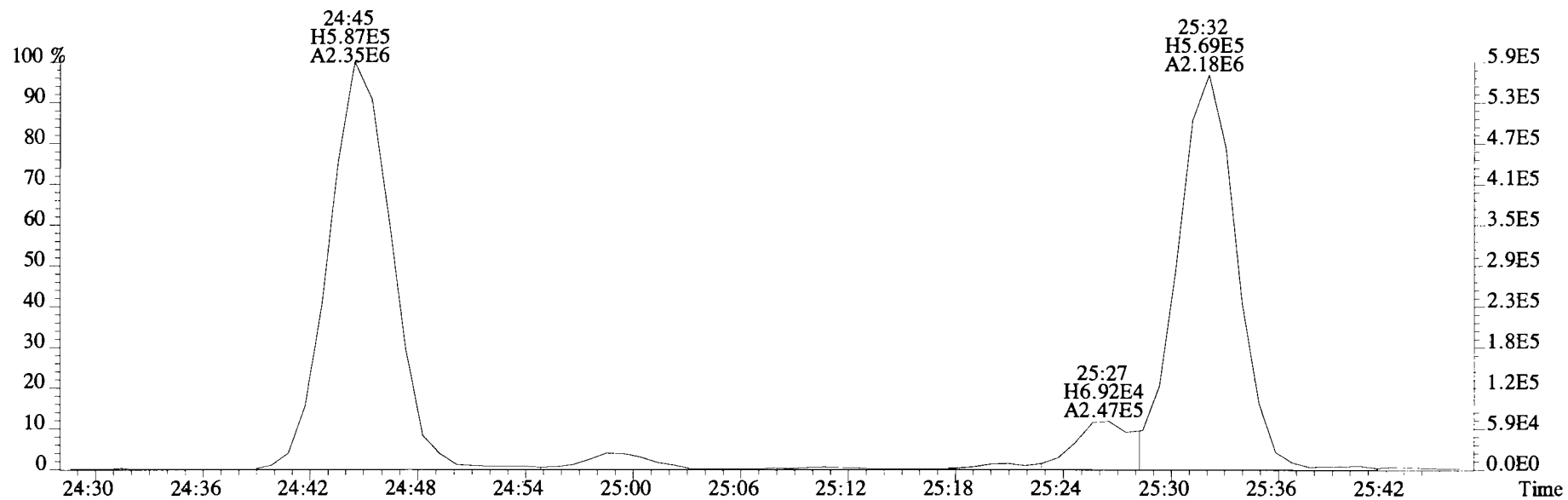
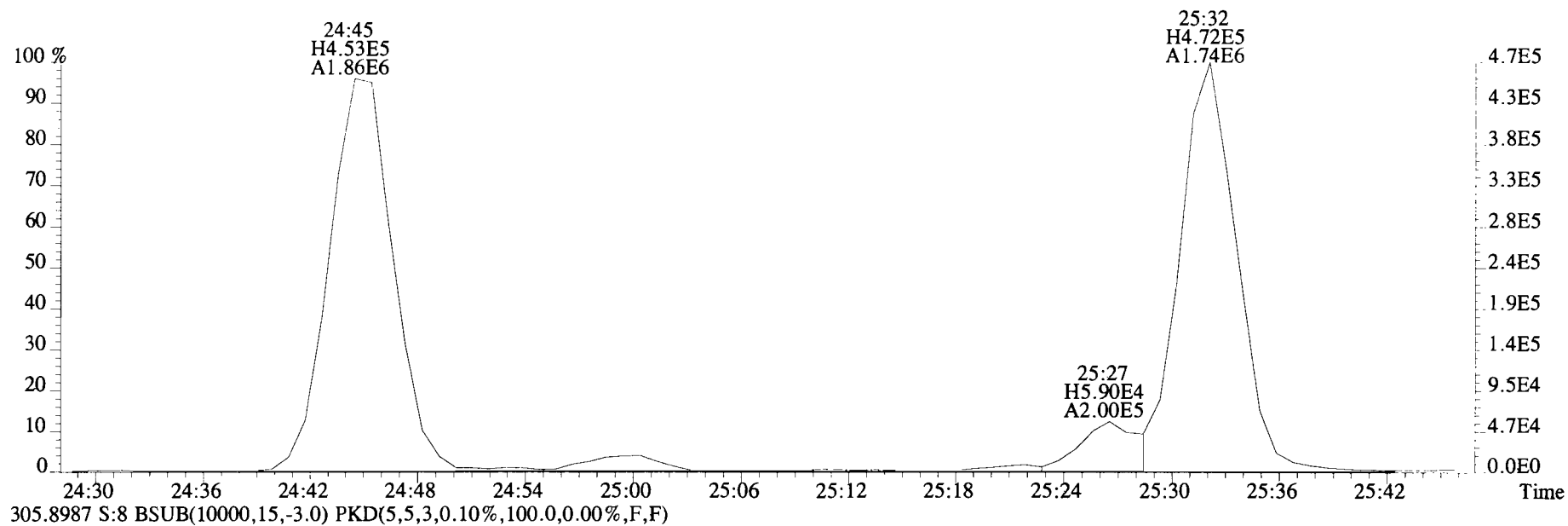
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



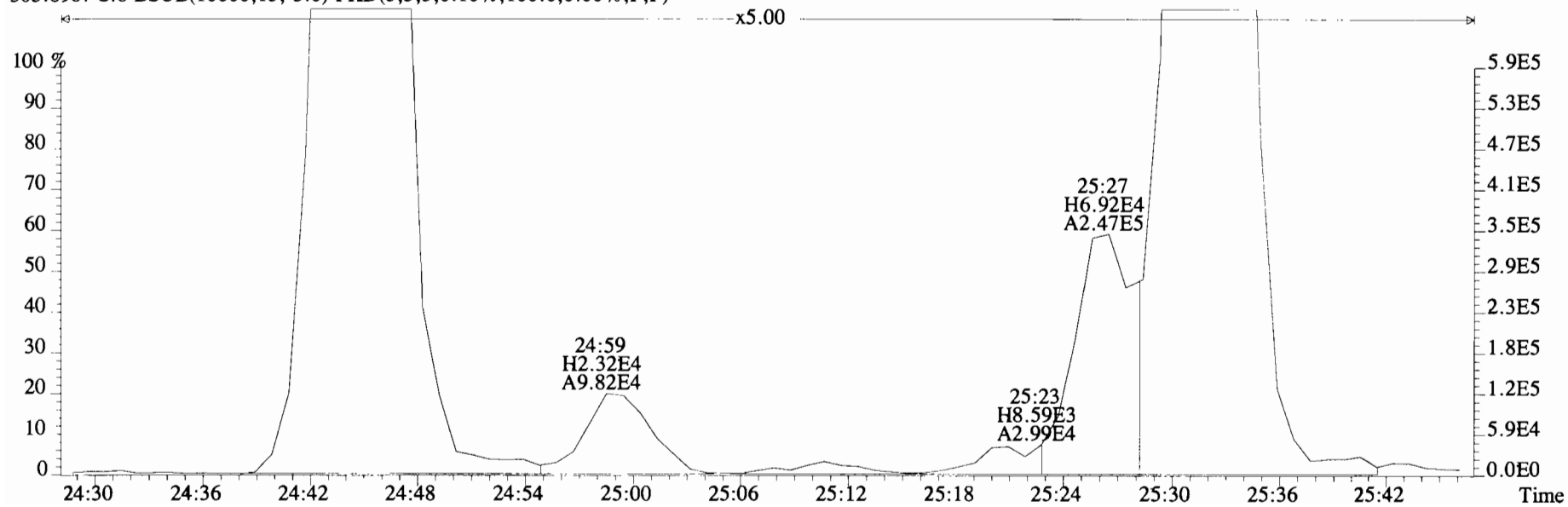
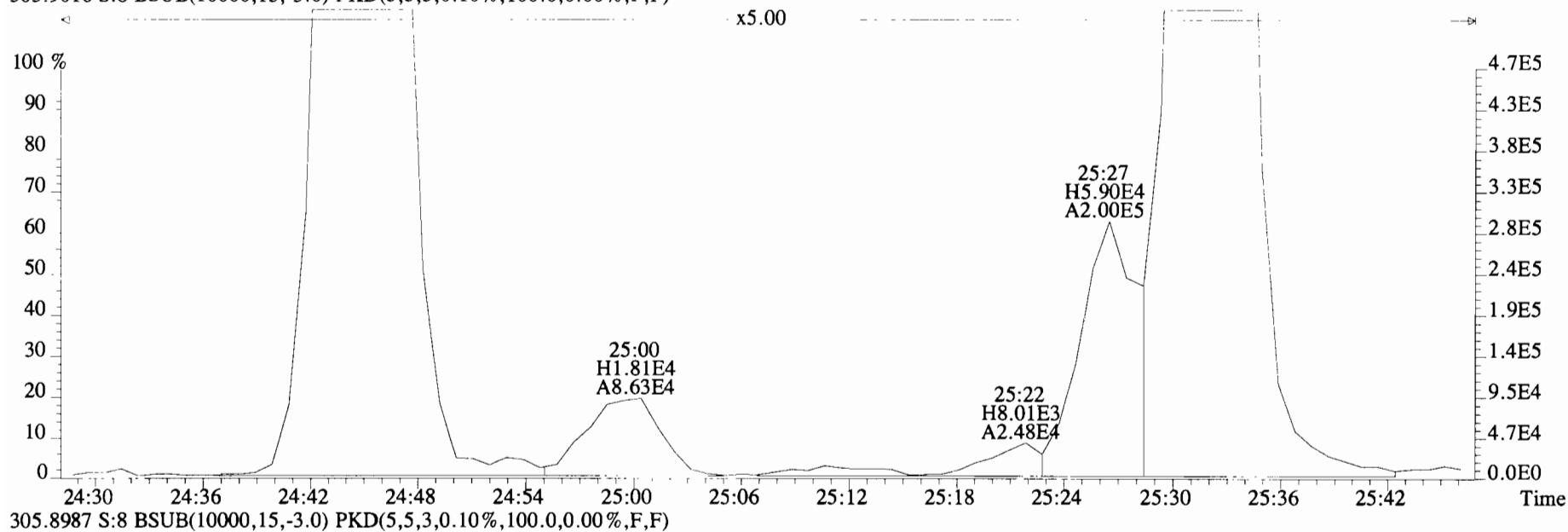
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



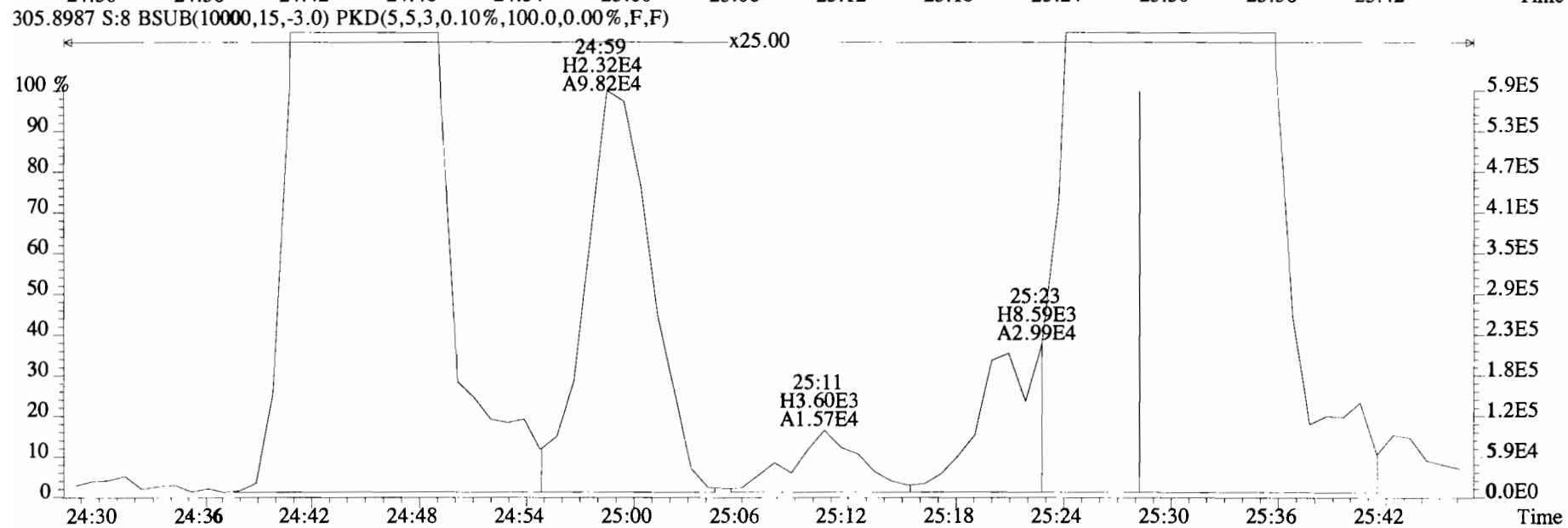
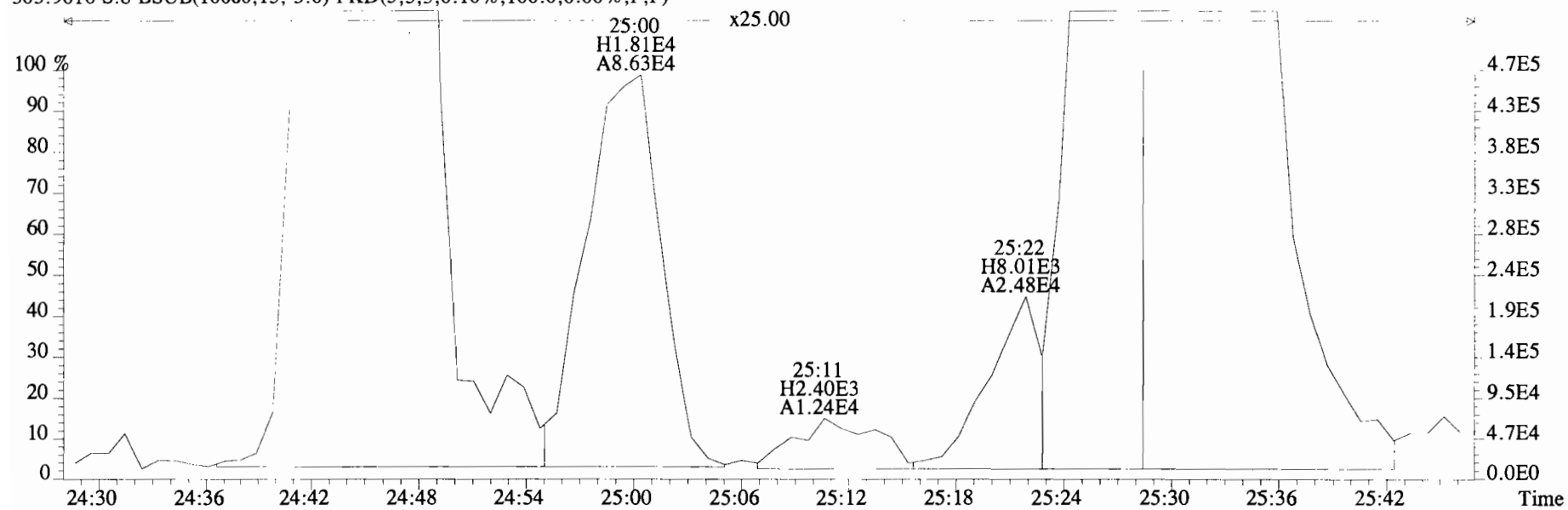
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



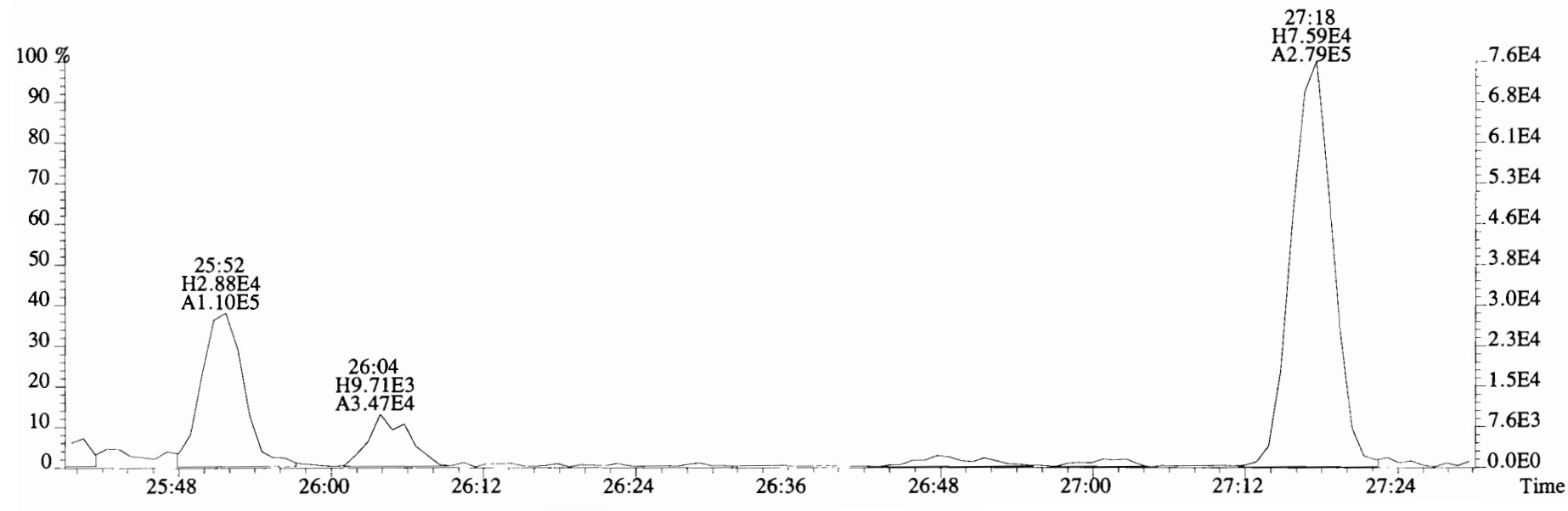
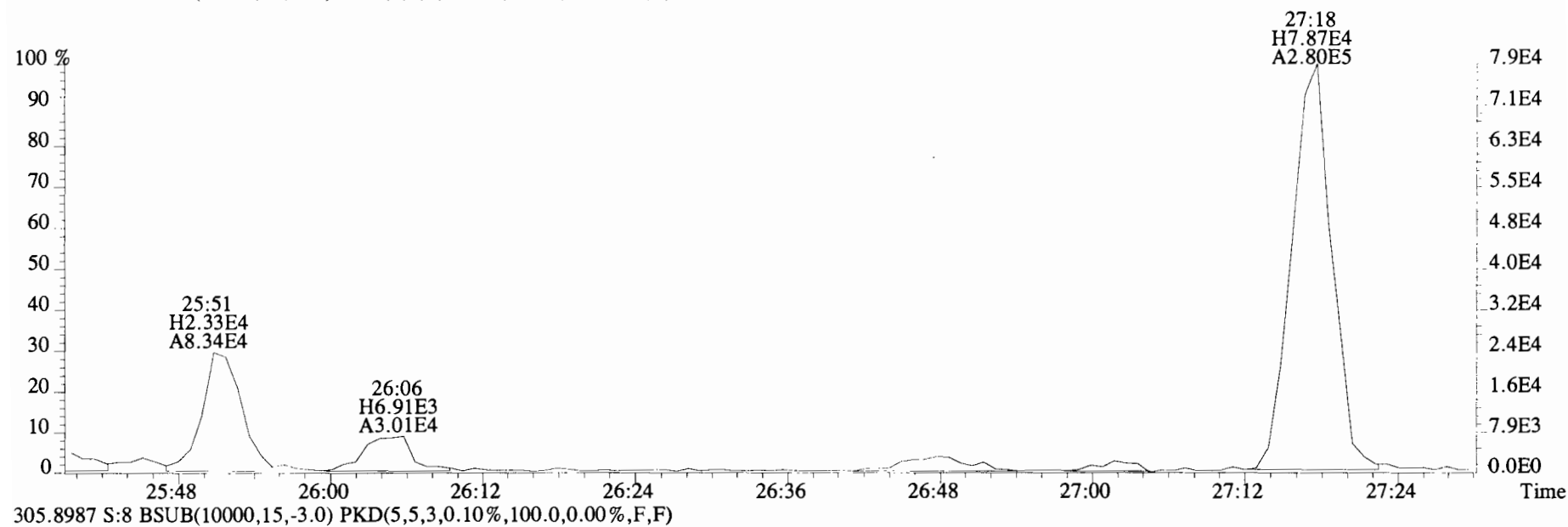
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



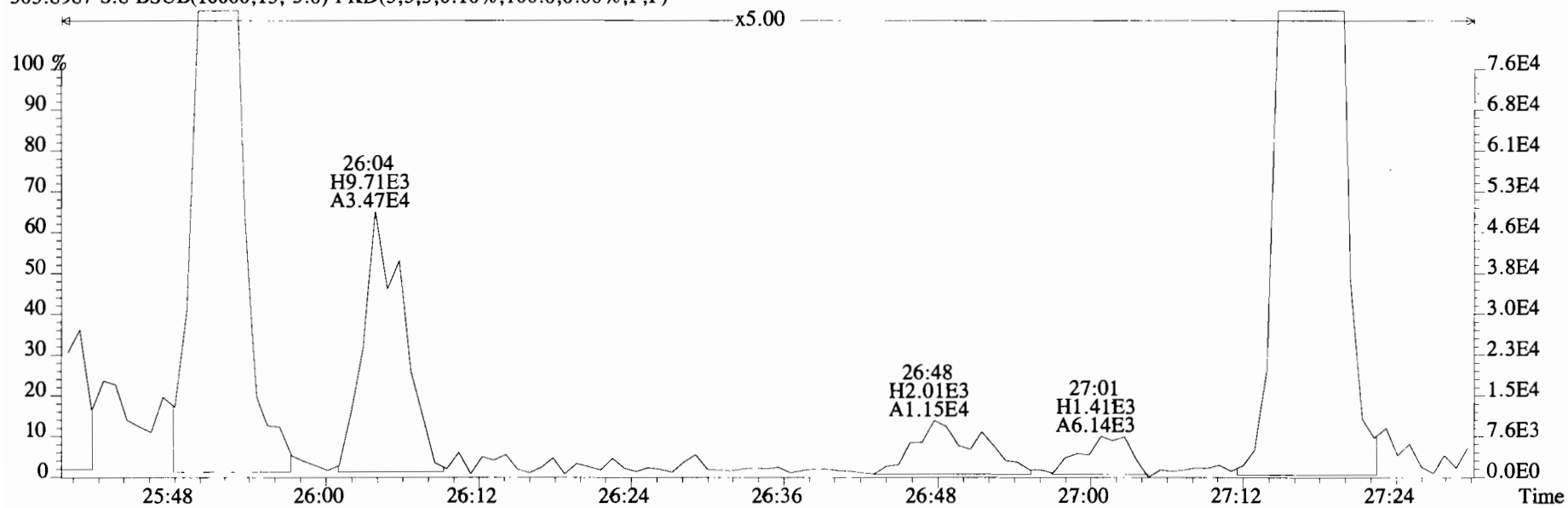
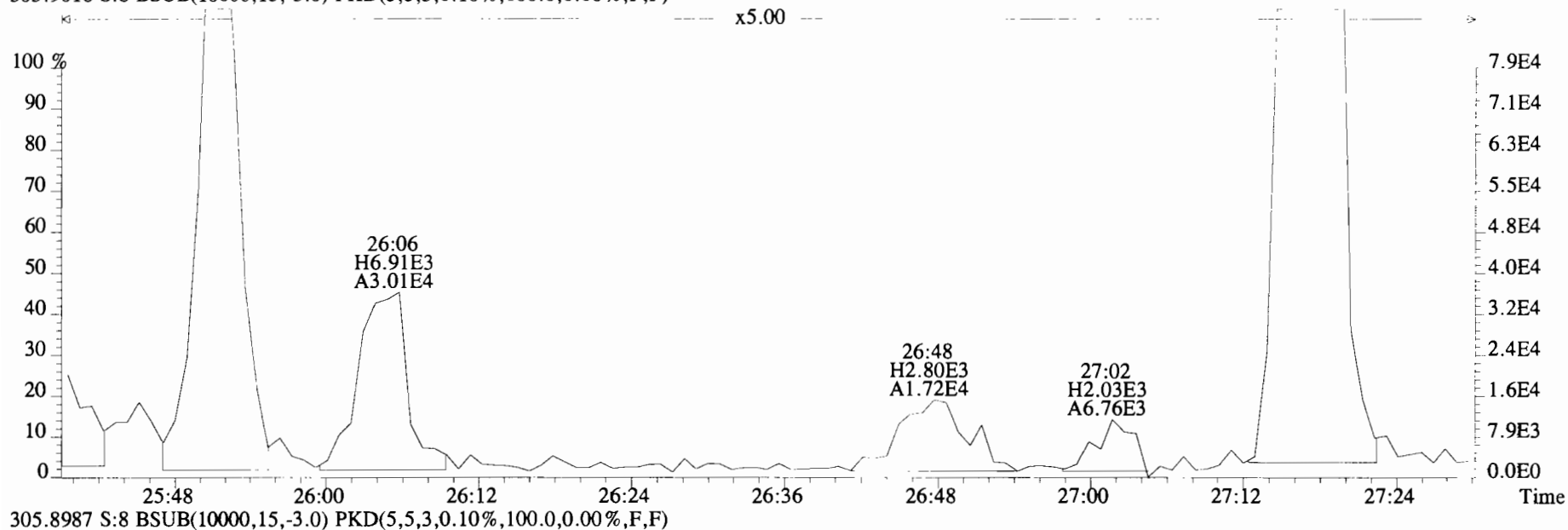
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



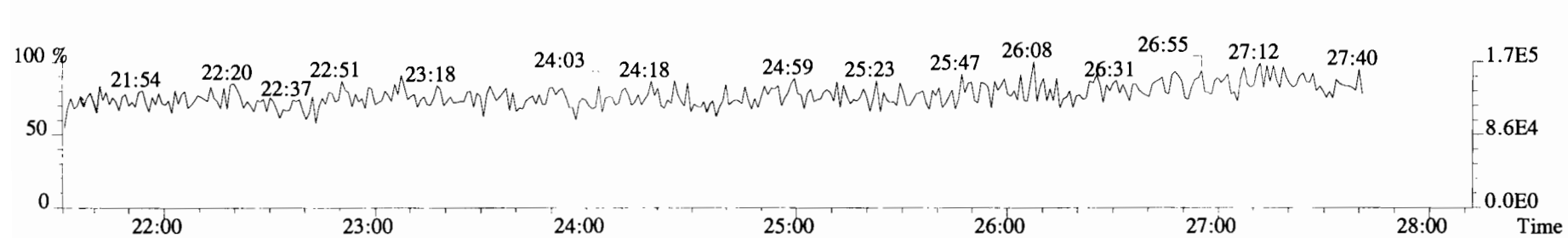
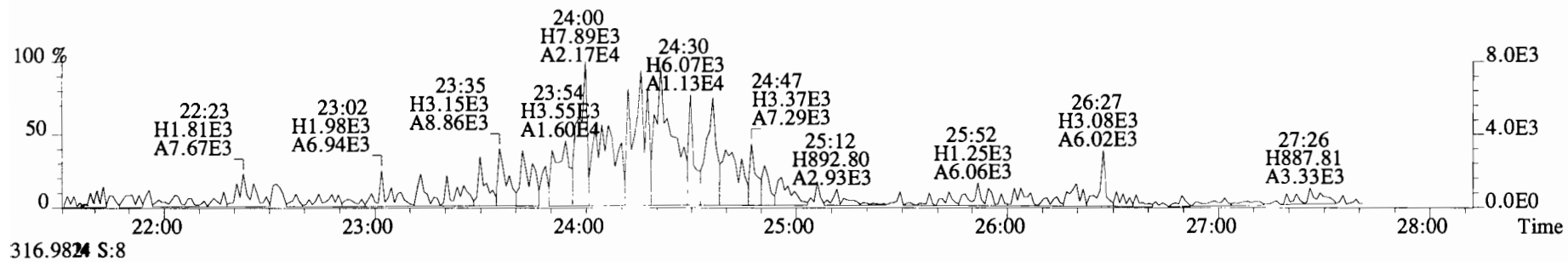
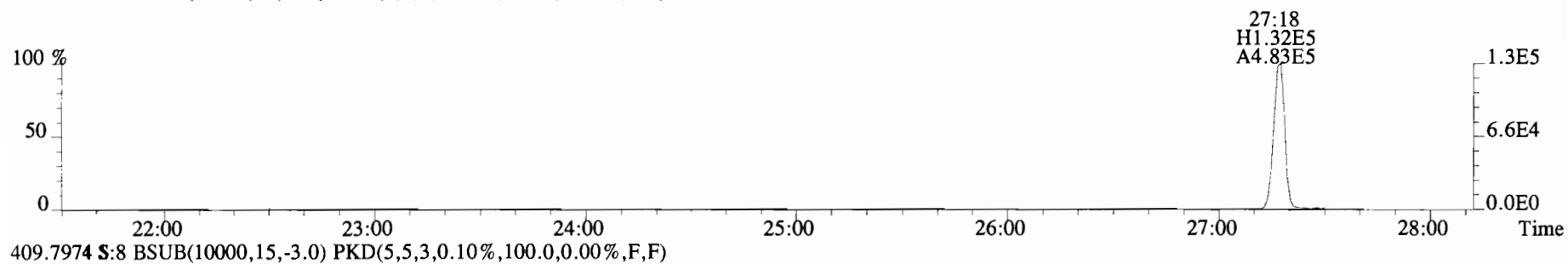
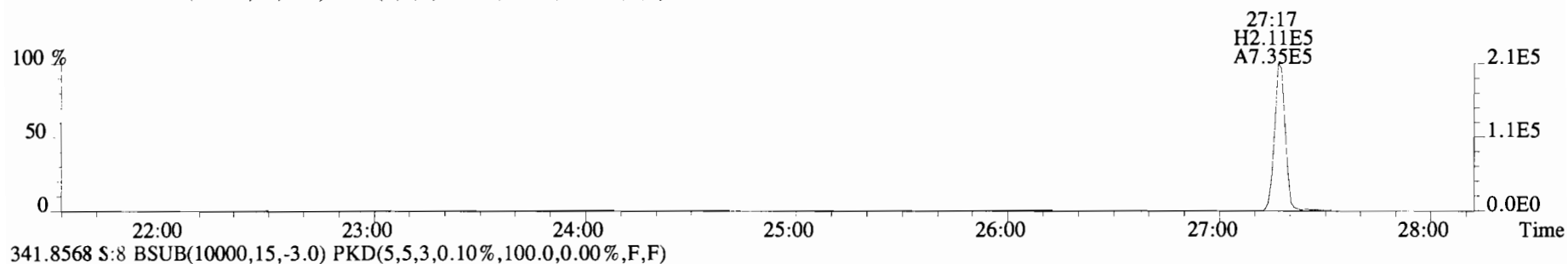
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



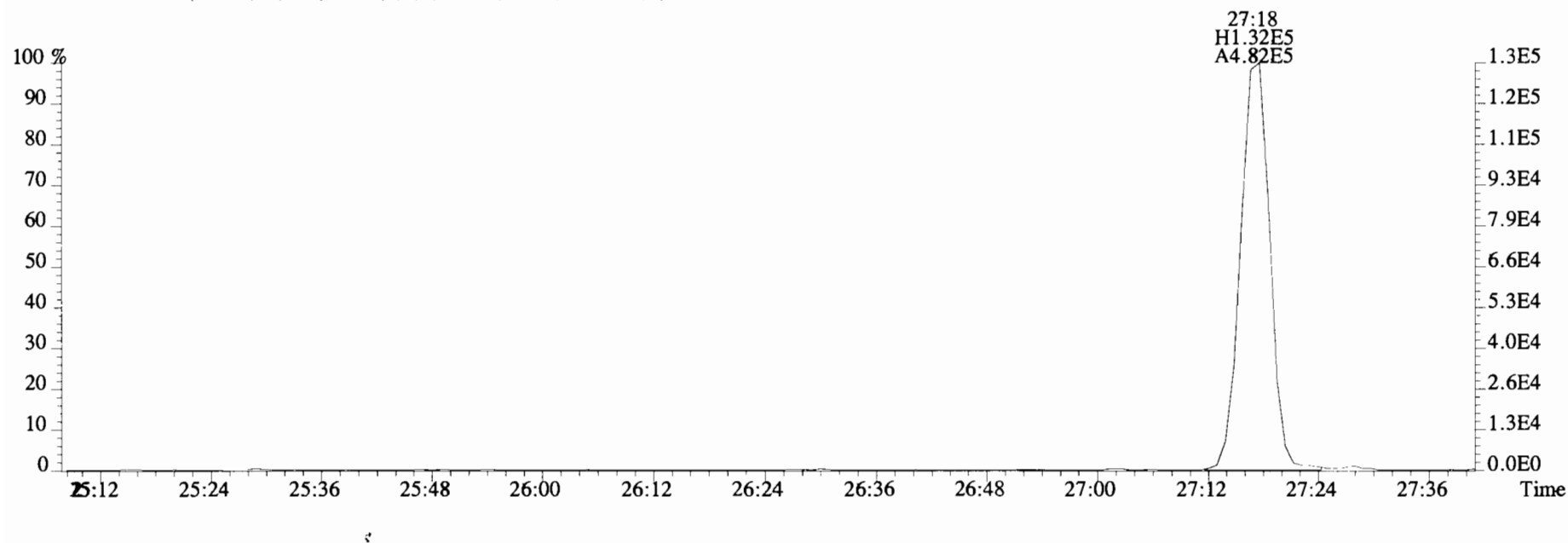
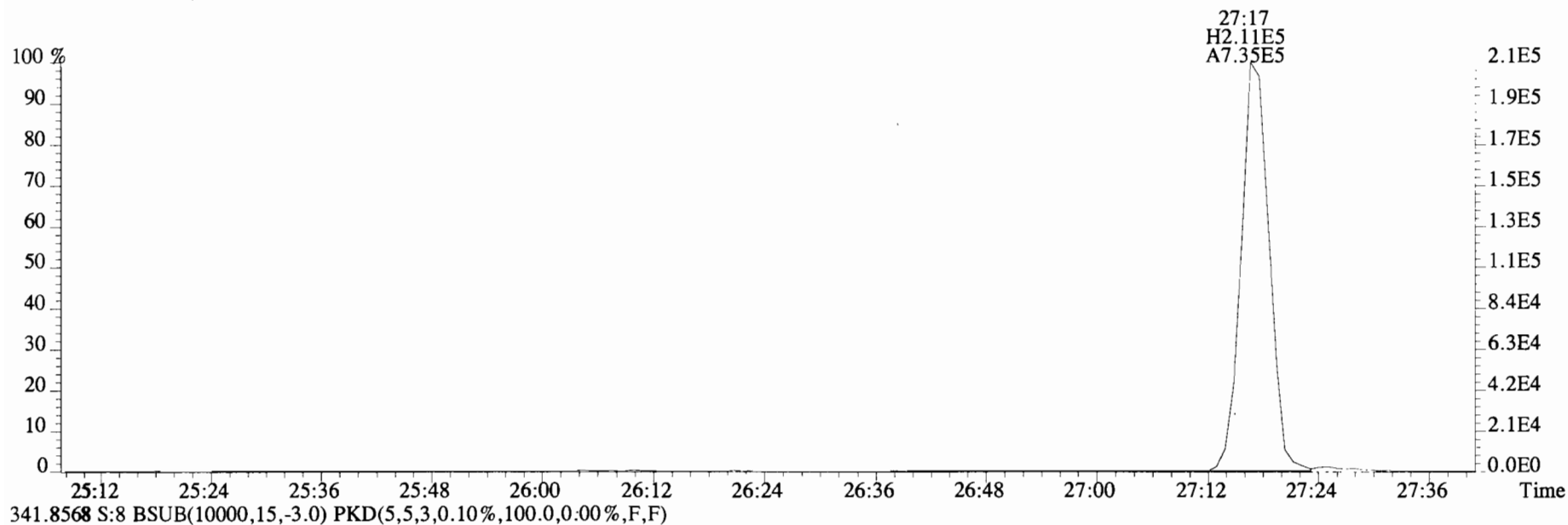
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



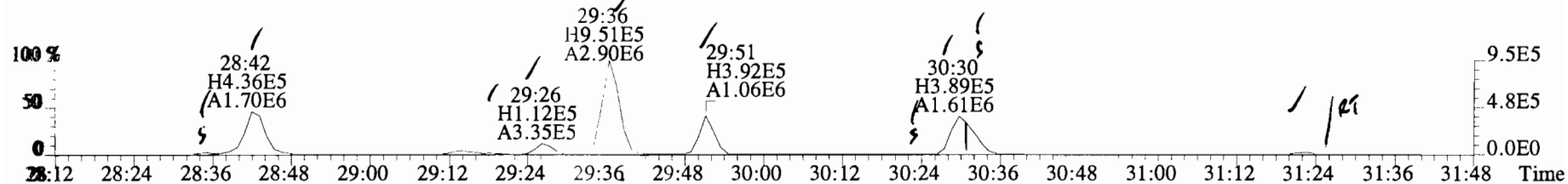
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



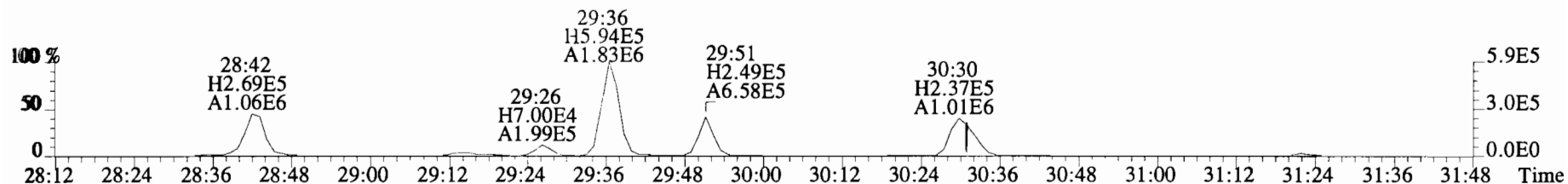
File:191031D2 #1-493 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



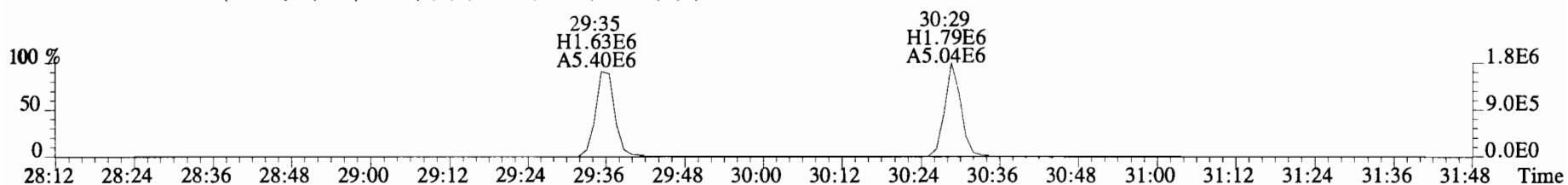
File: 191031D2 #1-210 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample #8 File Text: Viata Analytical Laboratory_VG7 Text: 1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp: OCDD_DB5
 339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



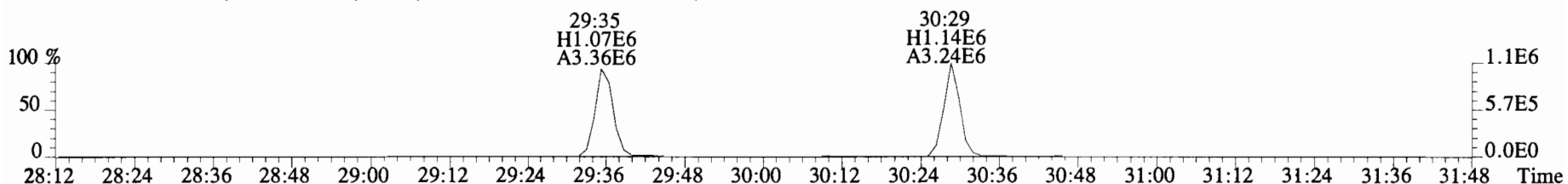
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



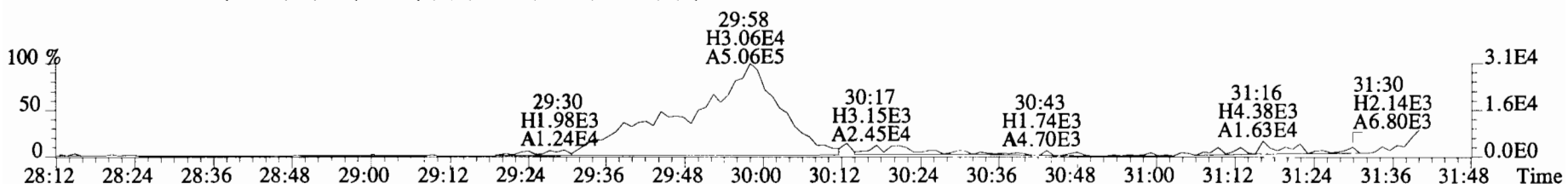
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



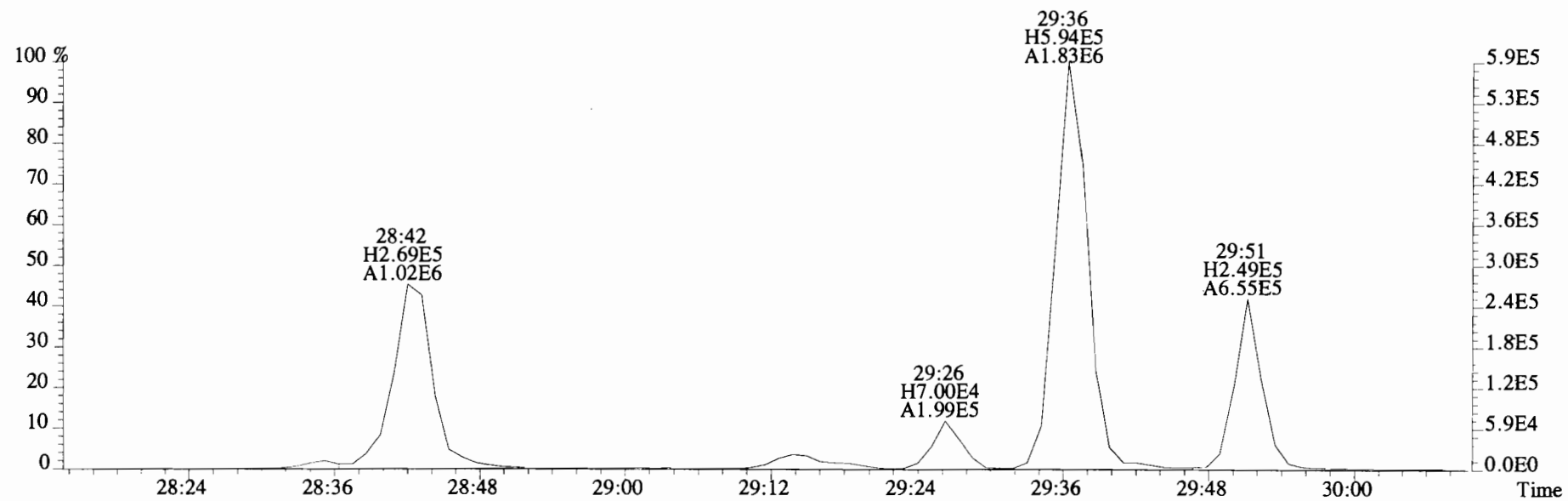
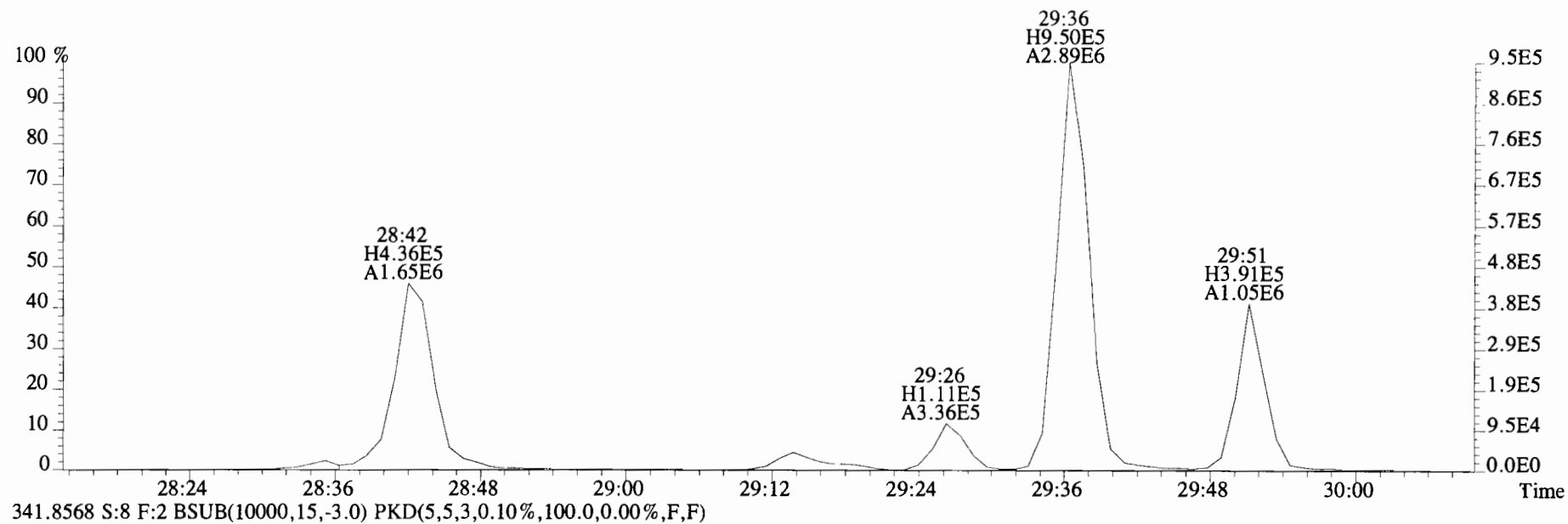
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



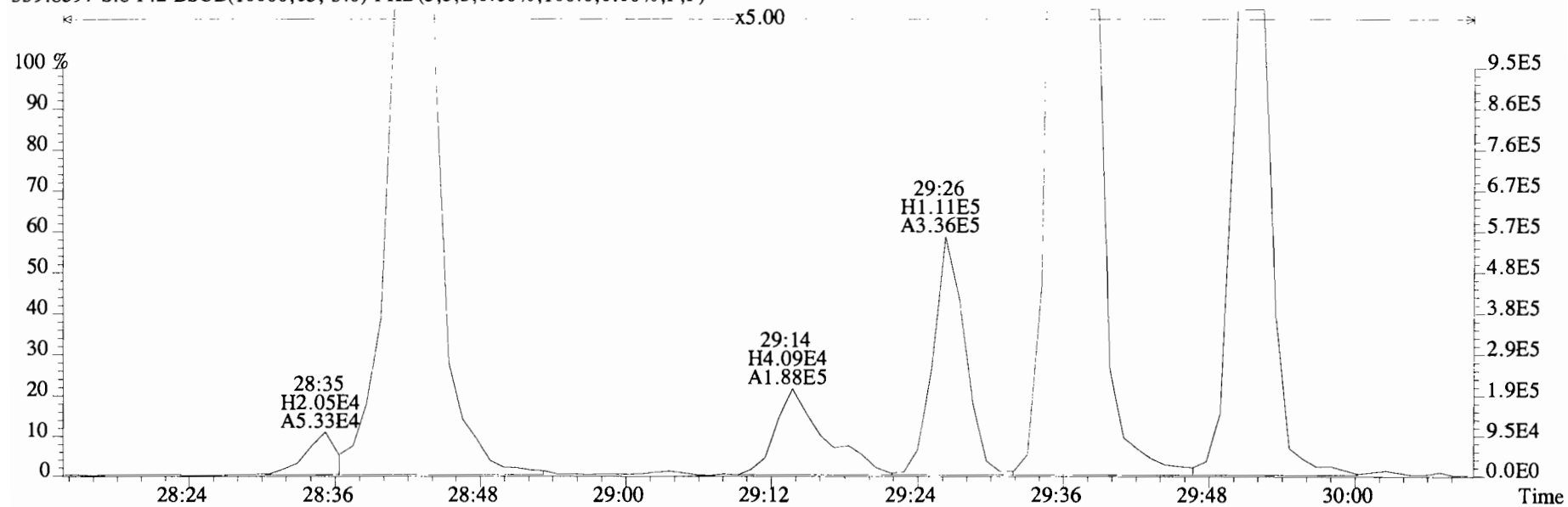
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



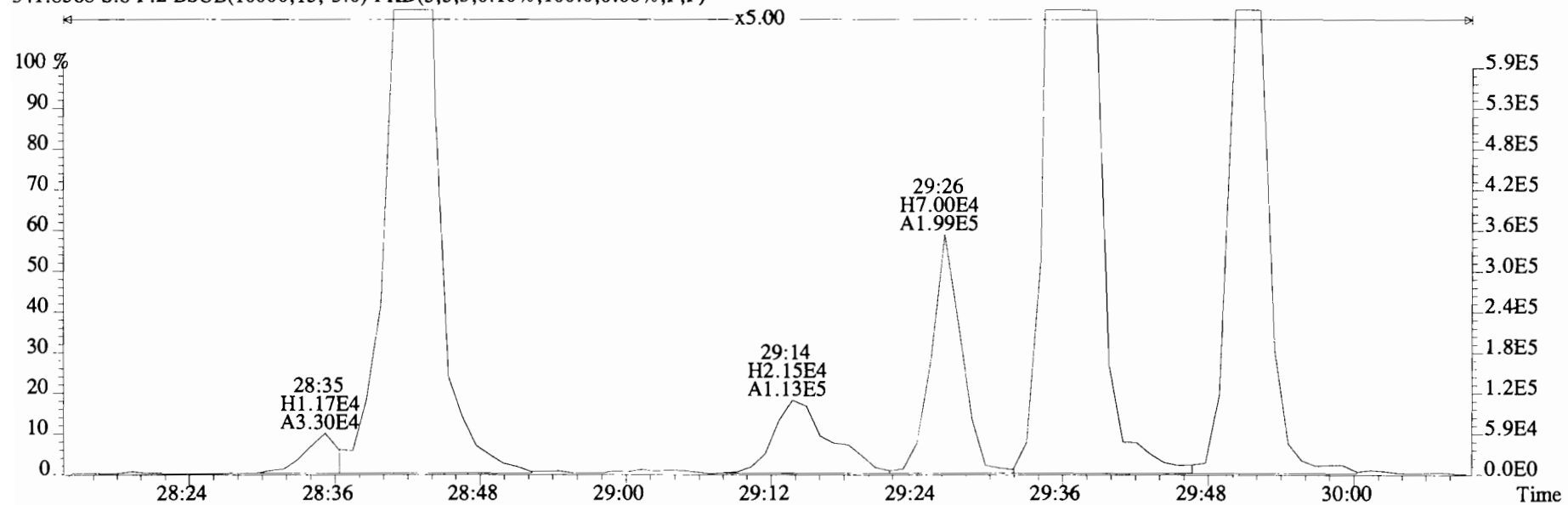
File:191031D2 #1-210 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



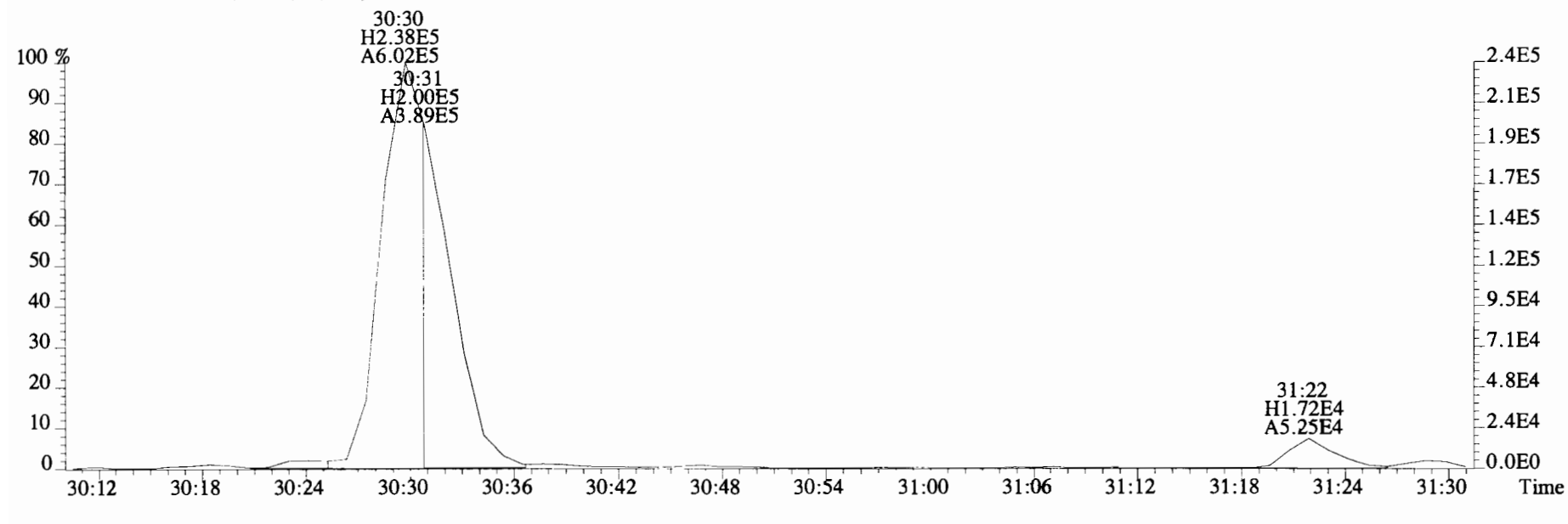
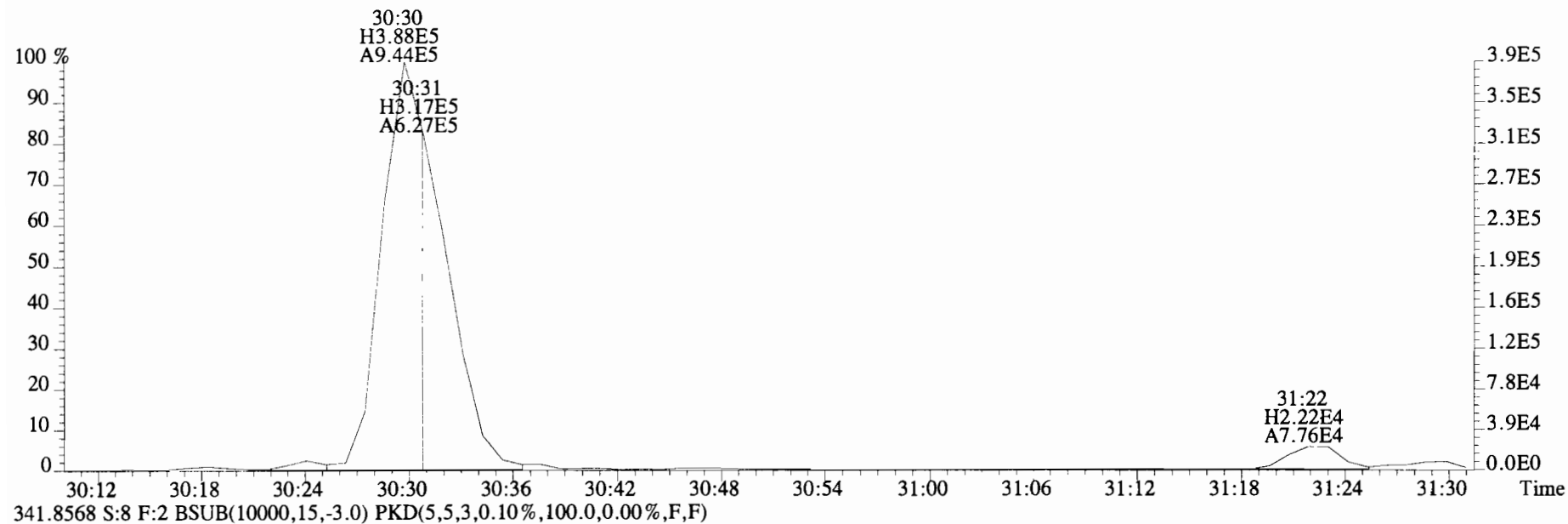
File:191031D2 #1-210 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



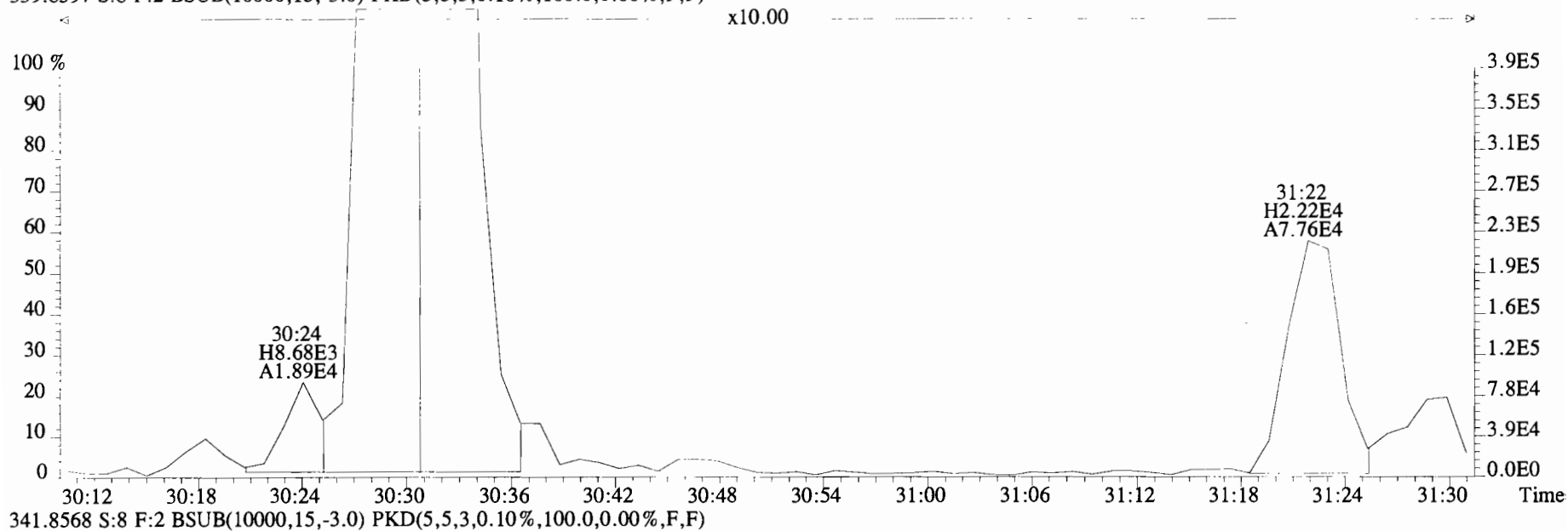
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



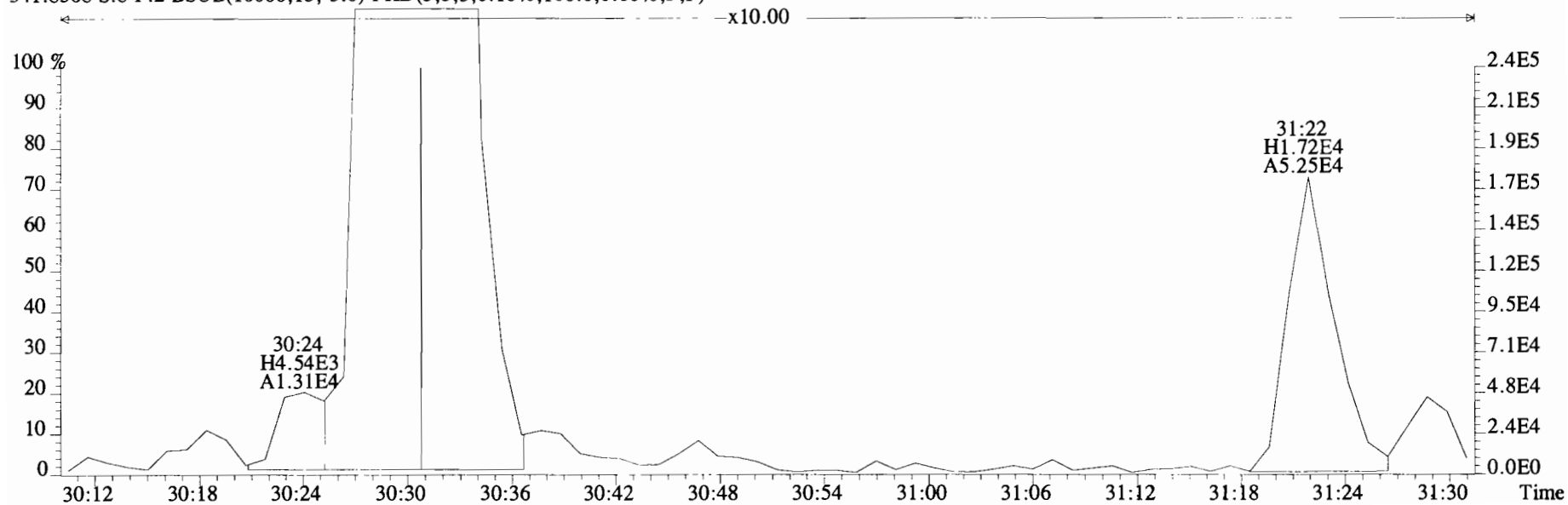
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Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



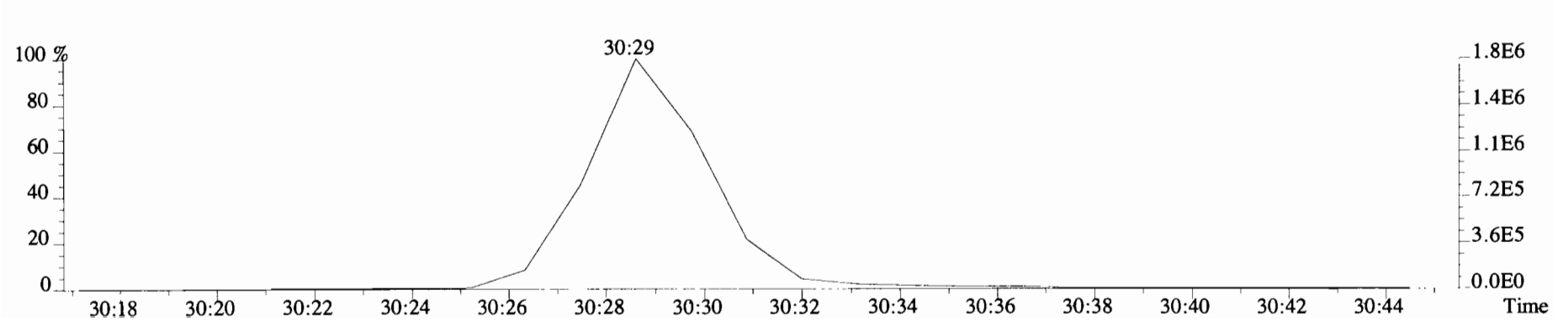
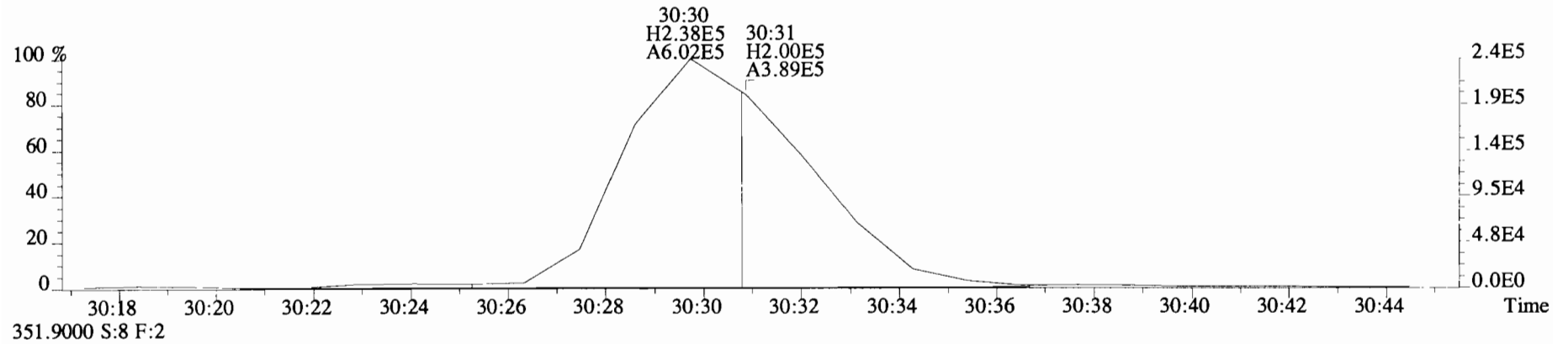
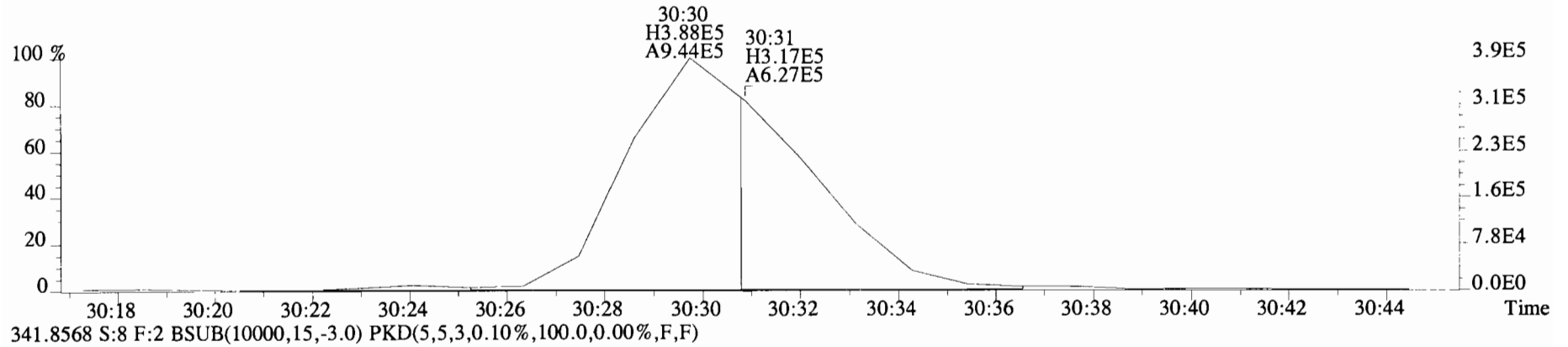
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



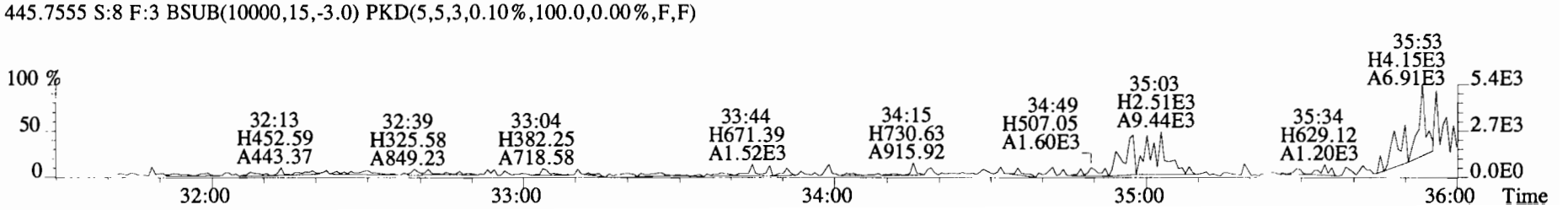
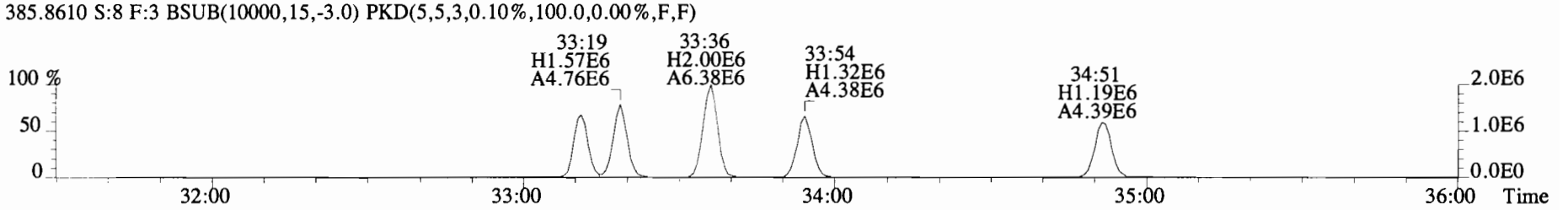
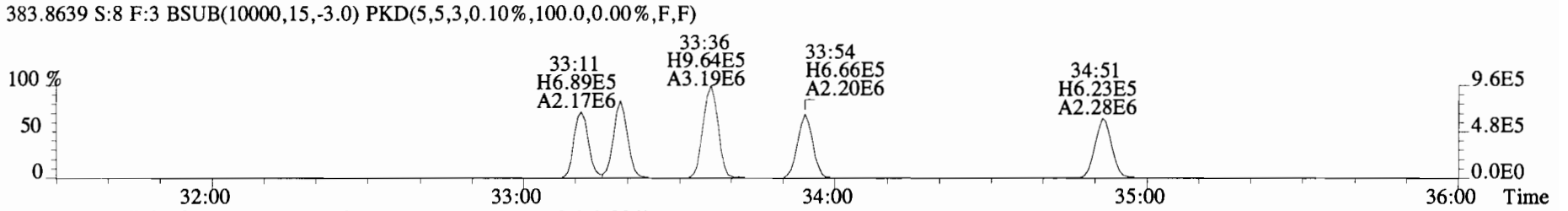
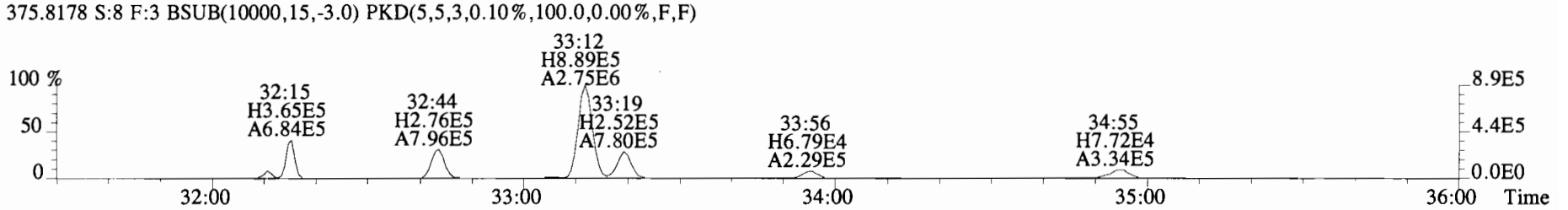
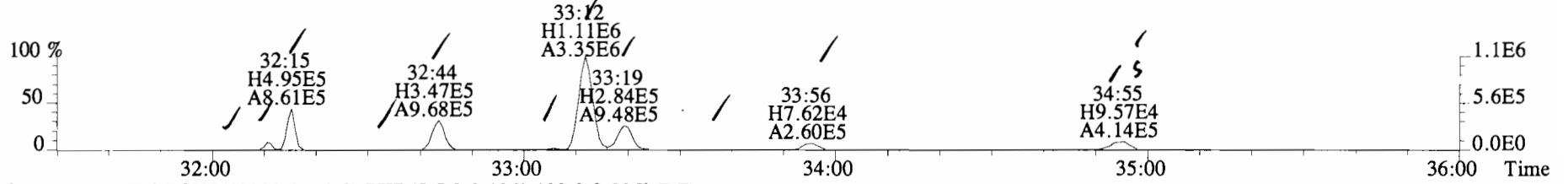
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



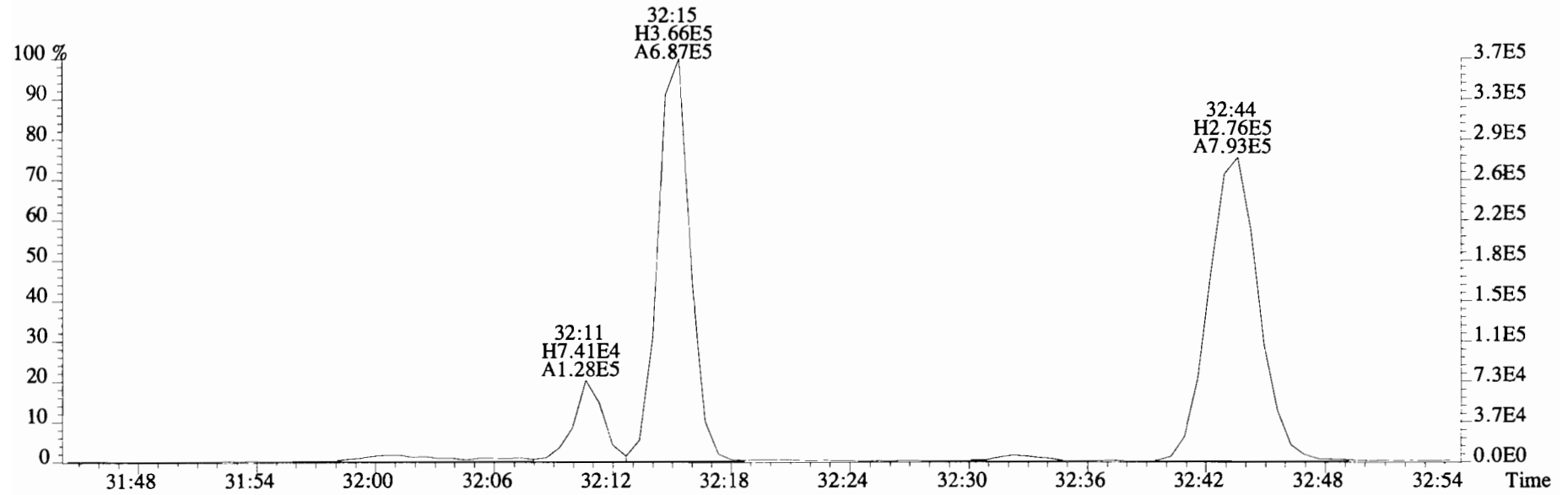
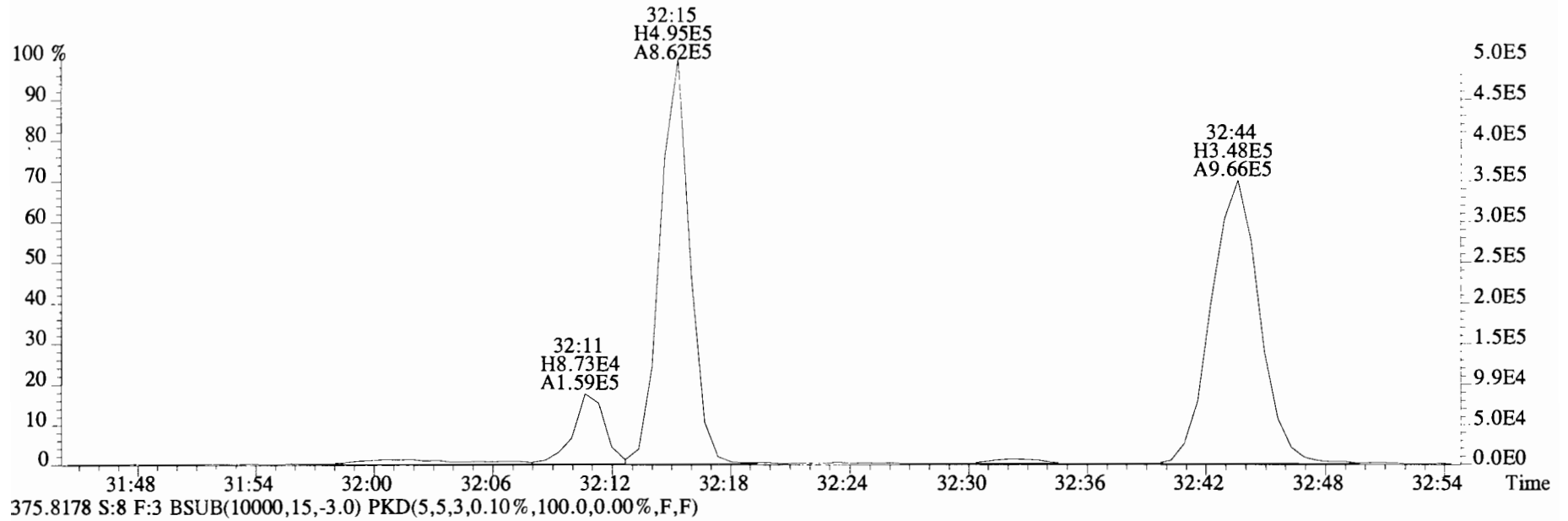
File:191031D2 #1-210 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



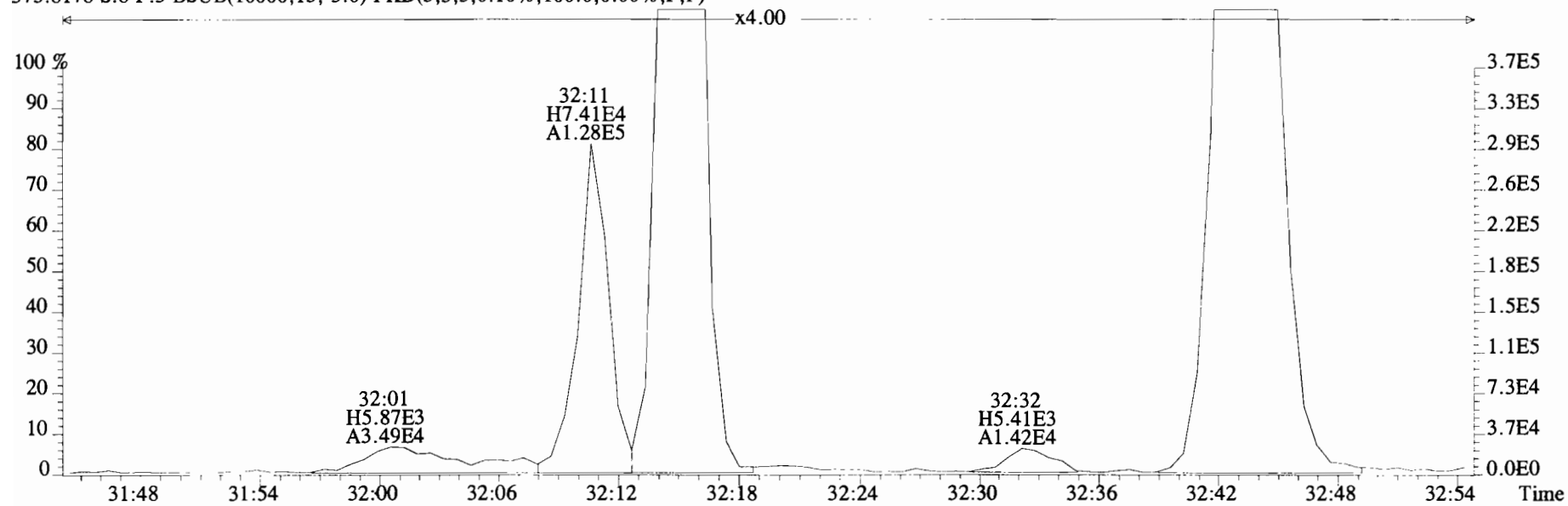
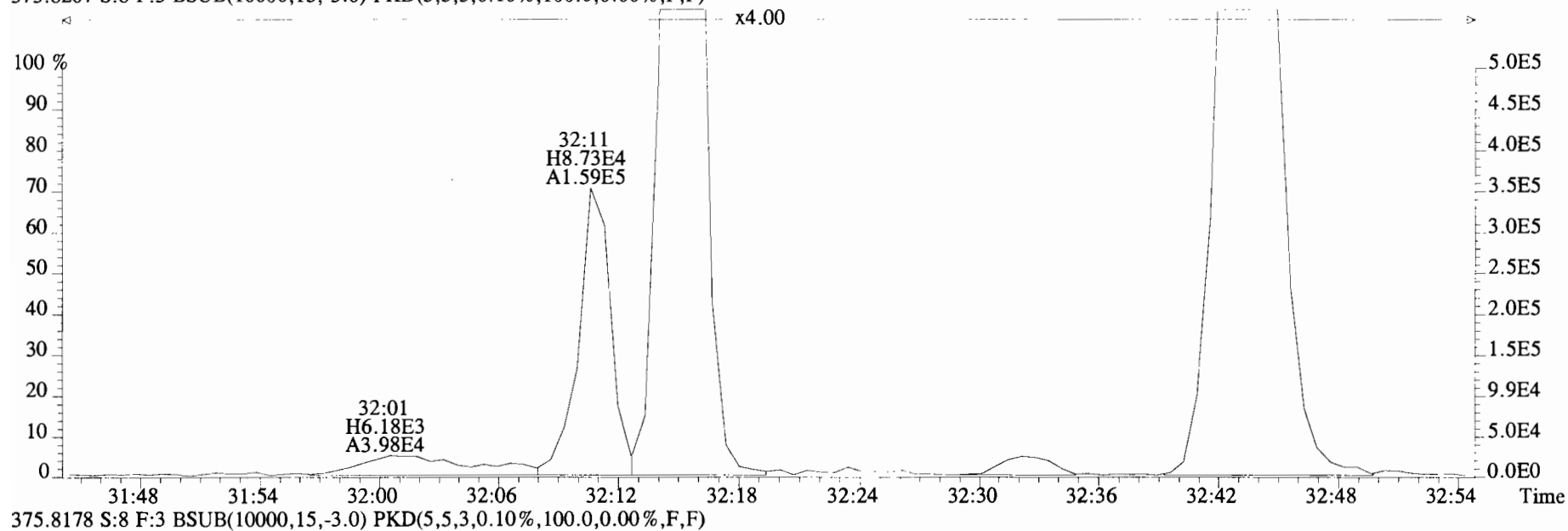
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



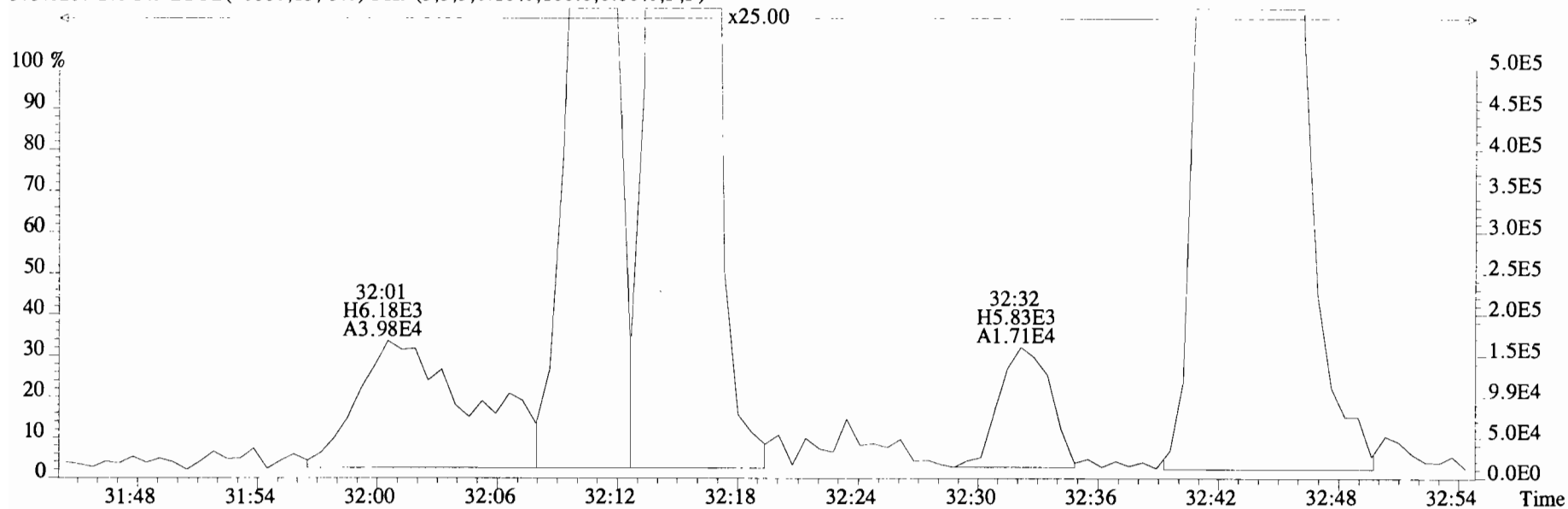
File:191031D2 #1-386 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



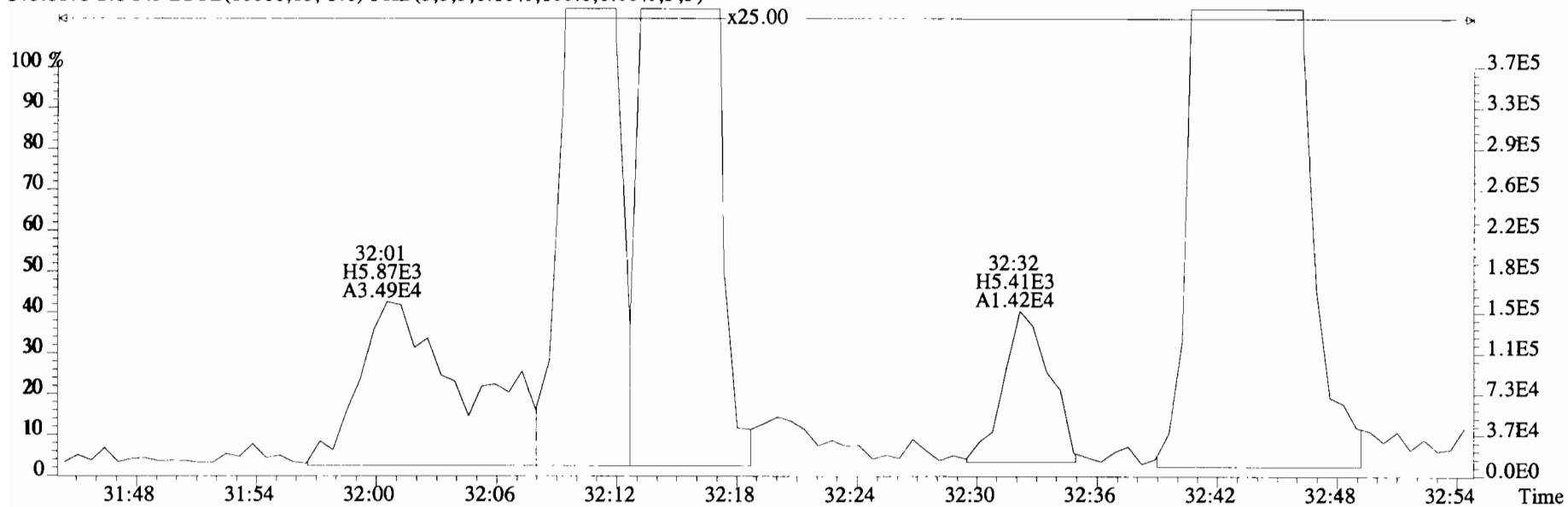
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



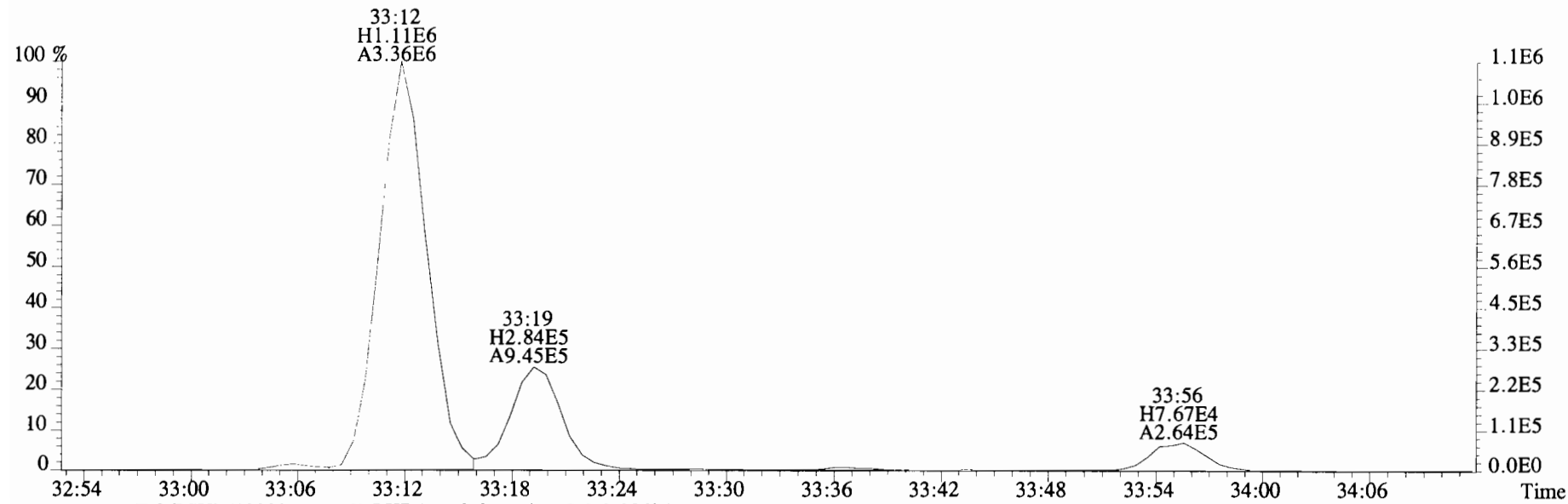
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



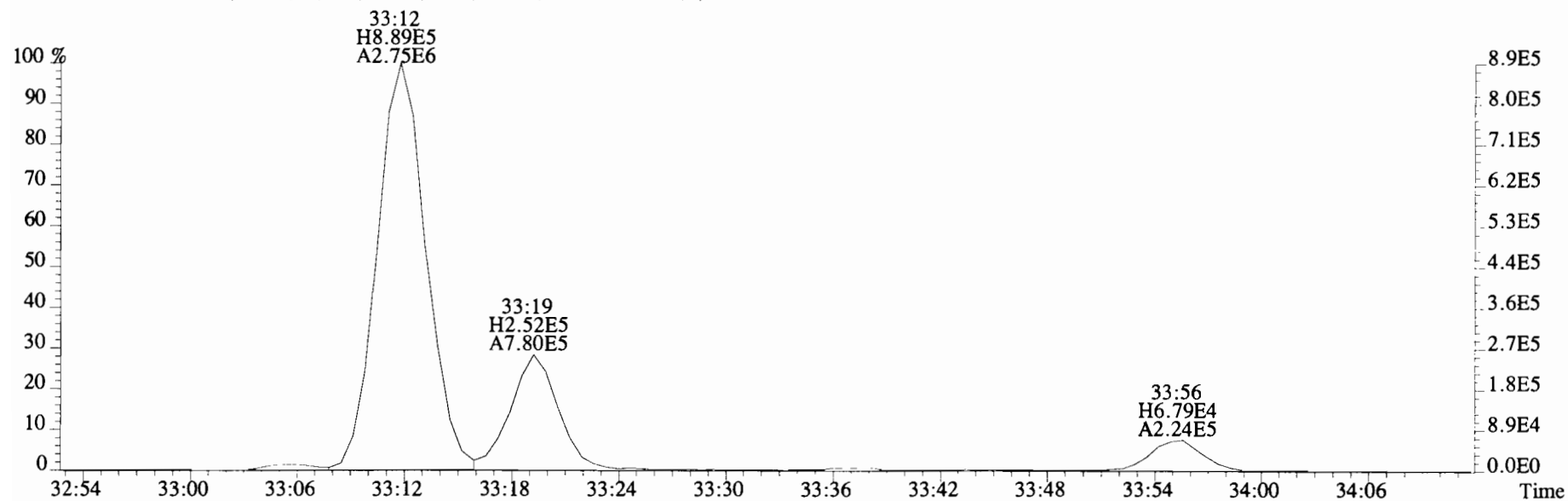
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



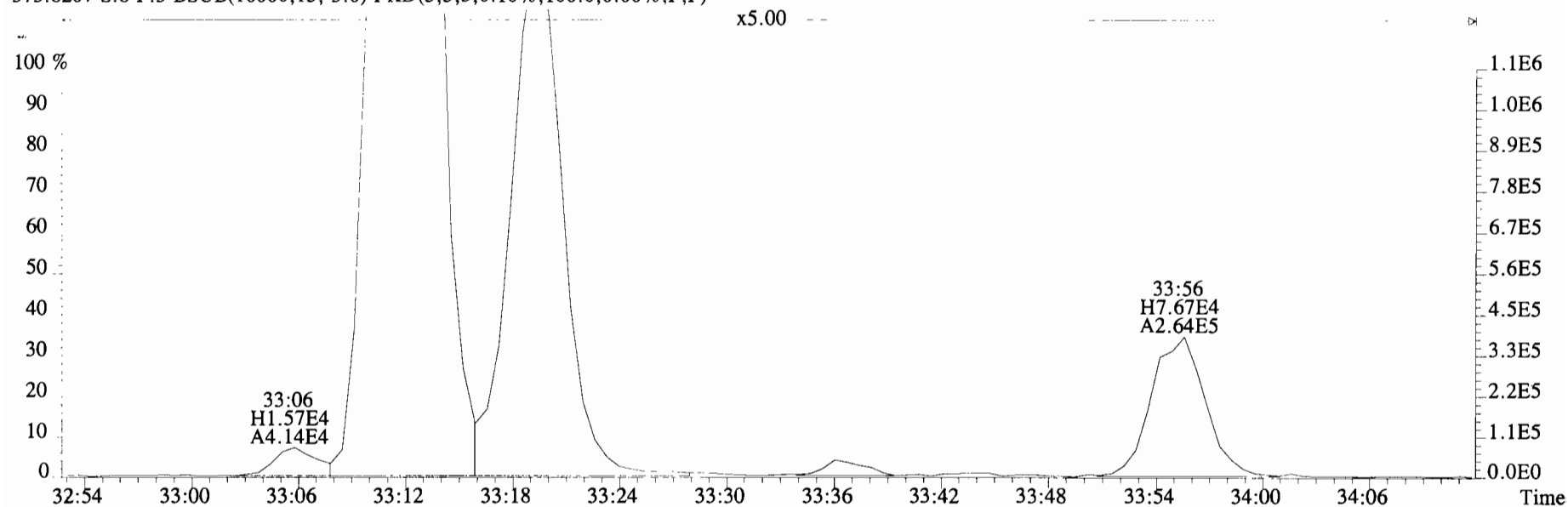
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



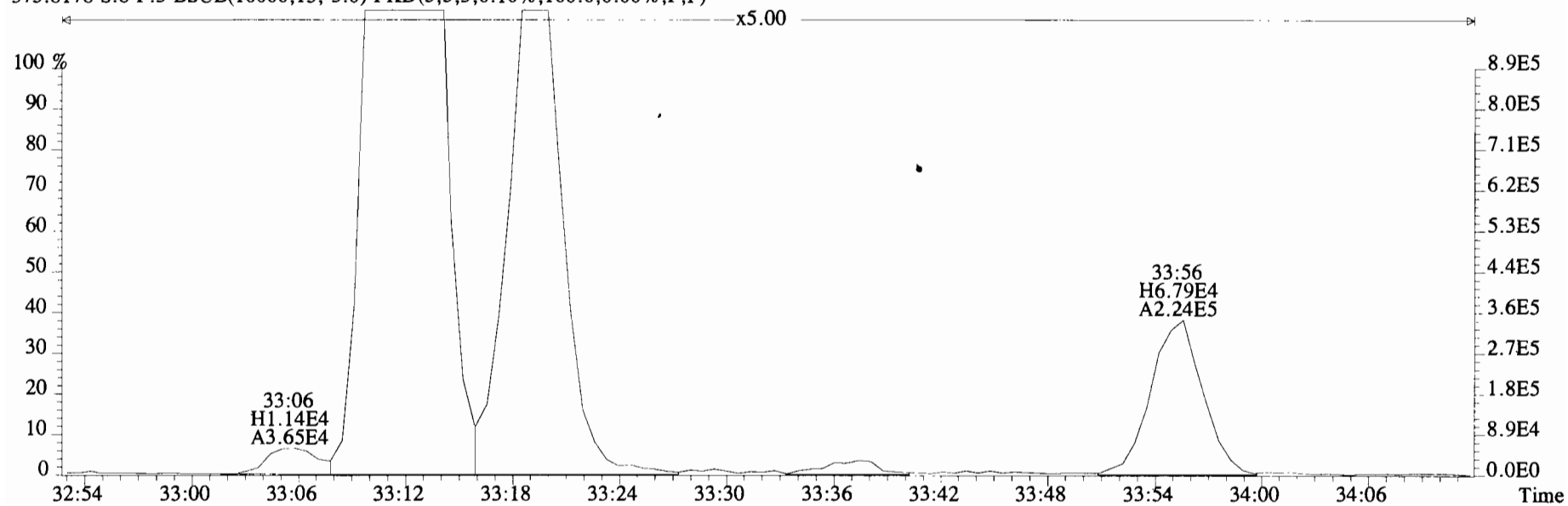
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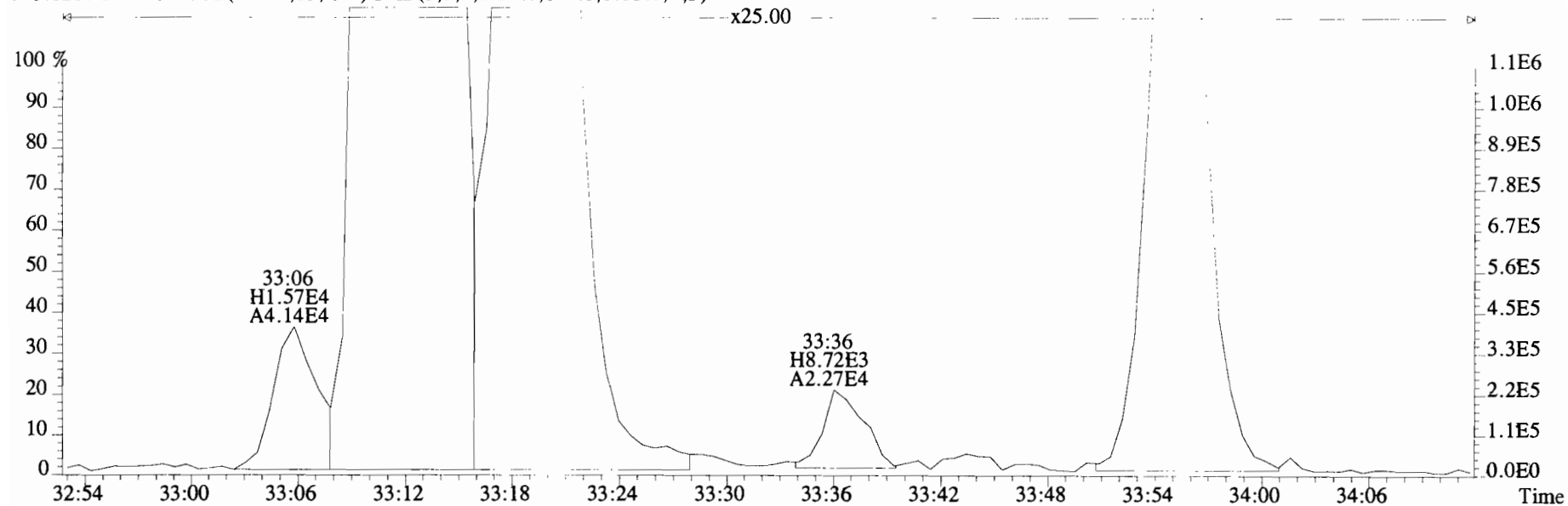
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



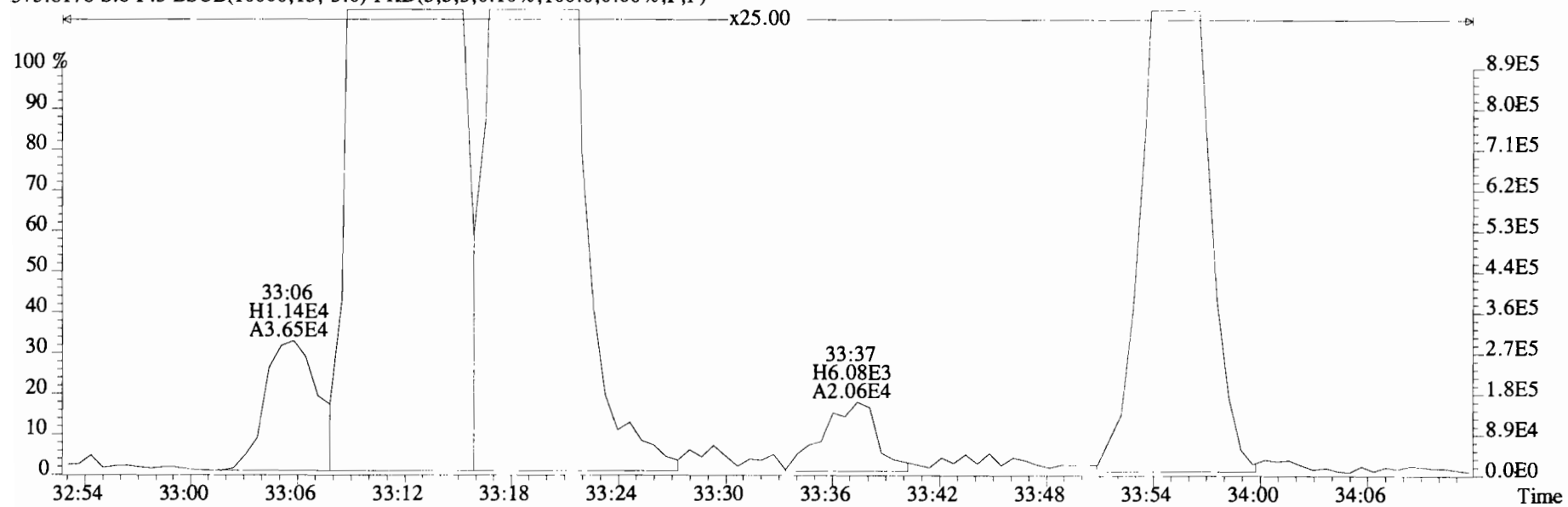
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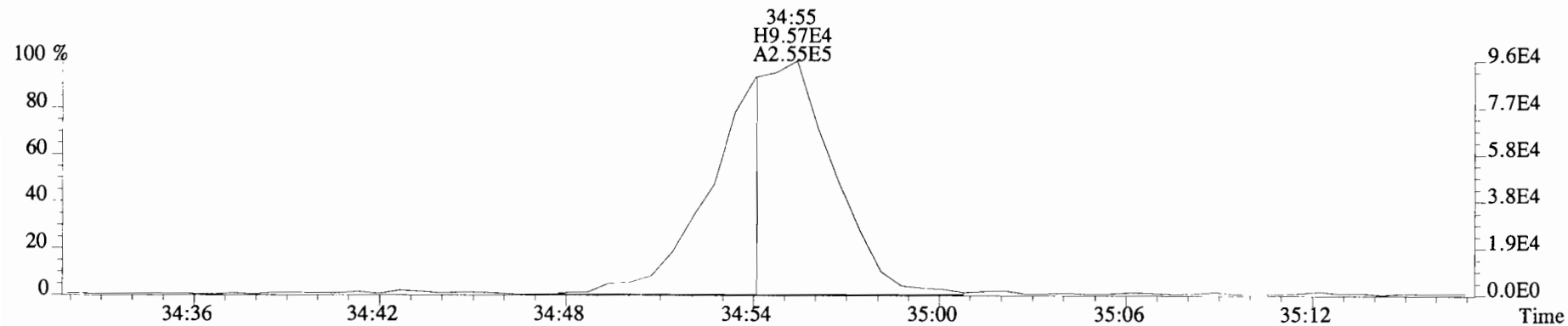
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Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



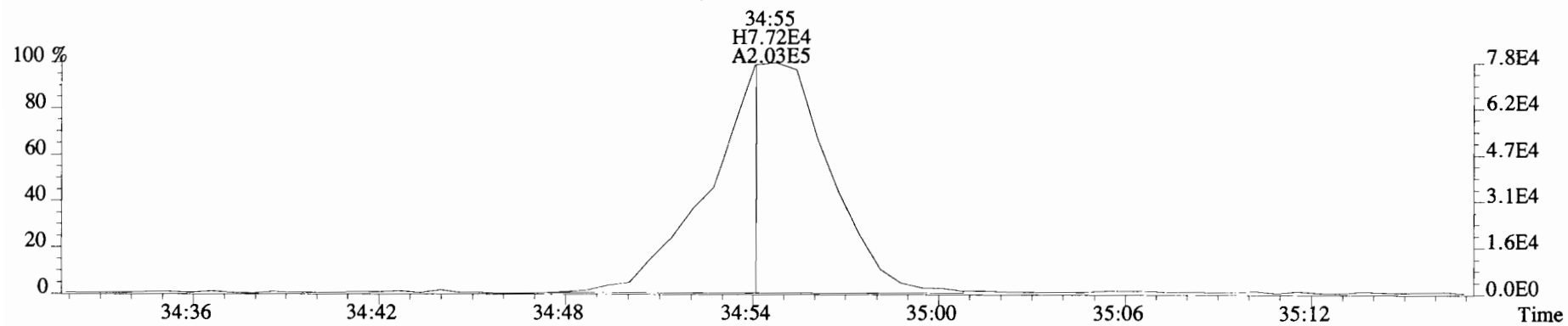
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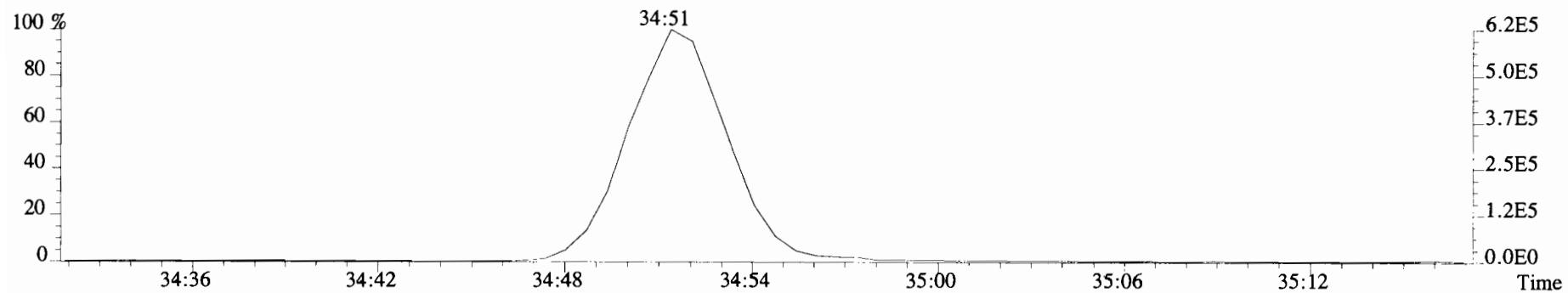
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Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



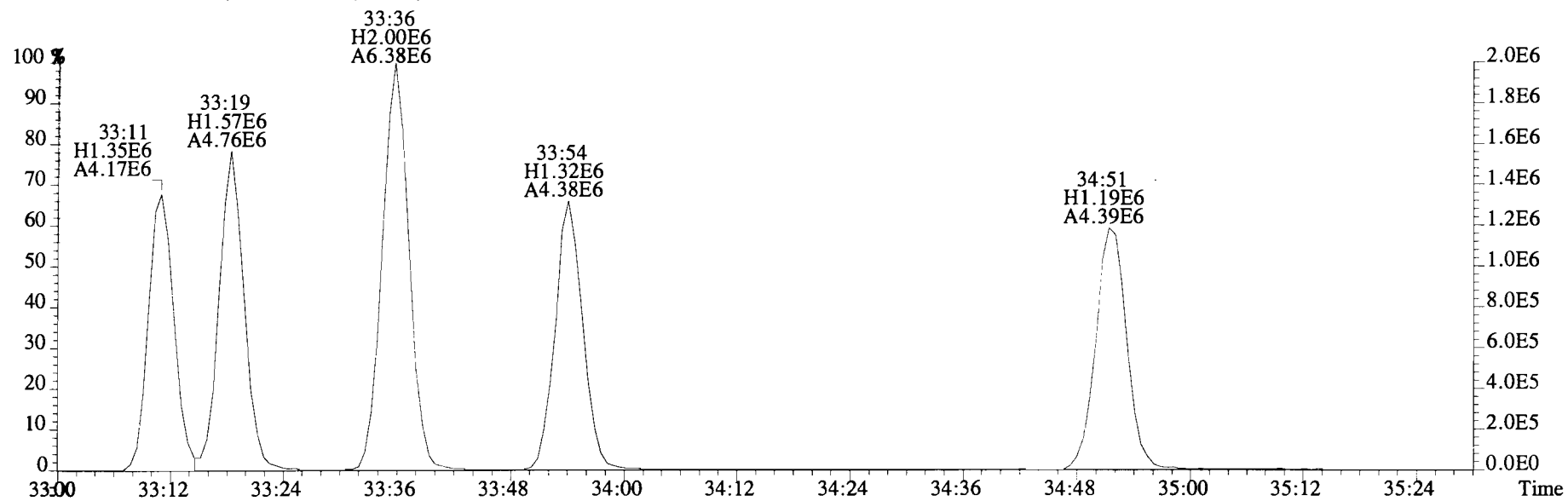
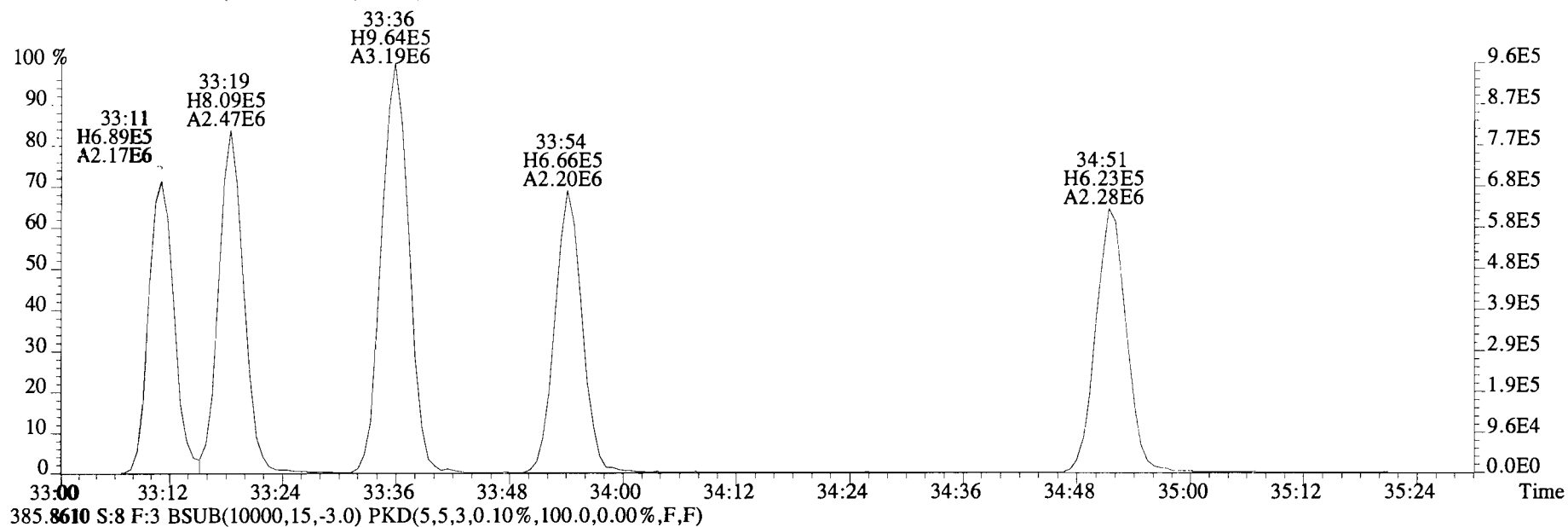
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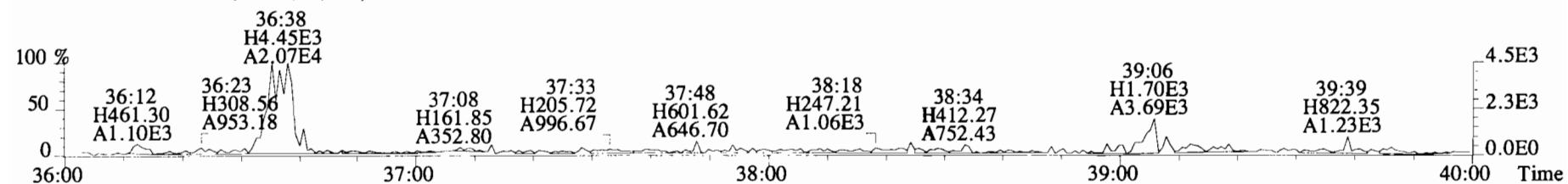
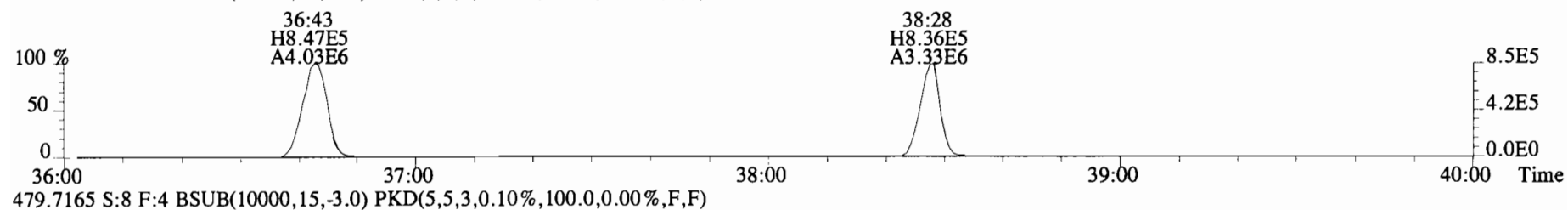
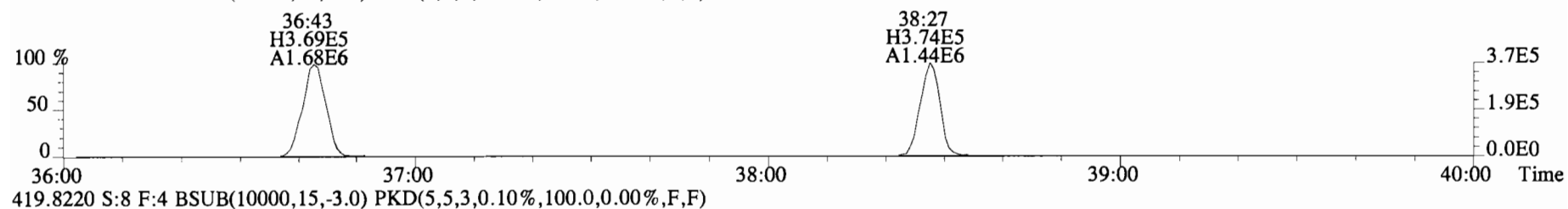
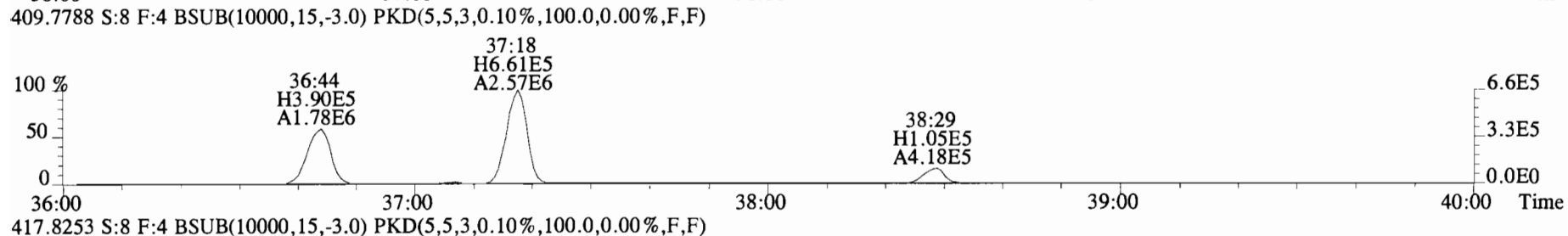
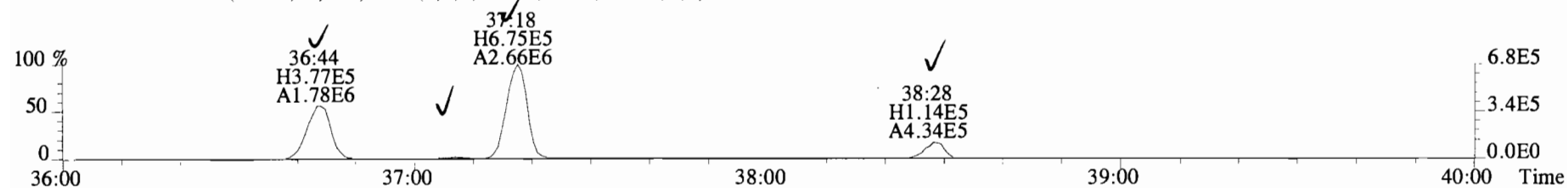
383.8639 S:8 F:3



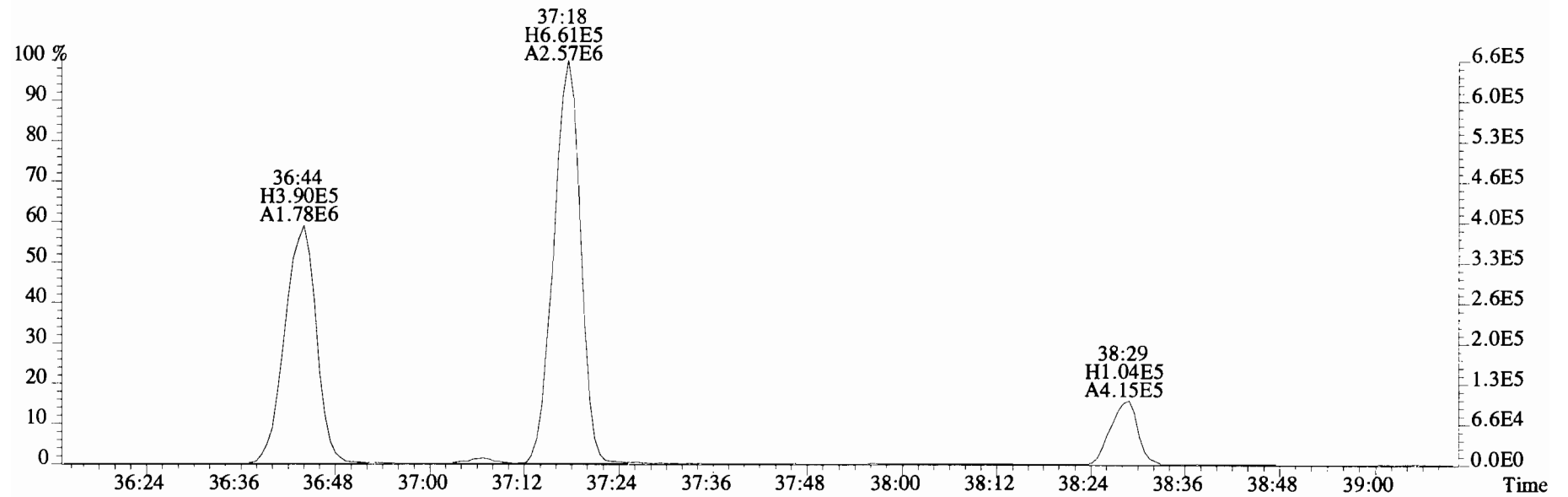
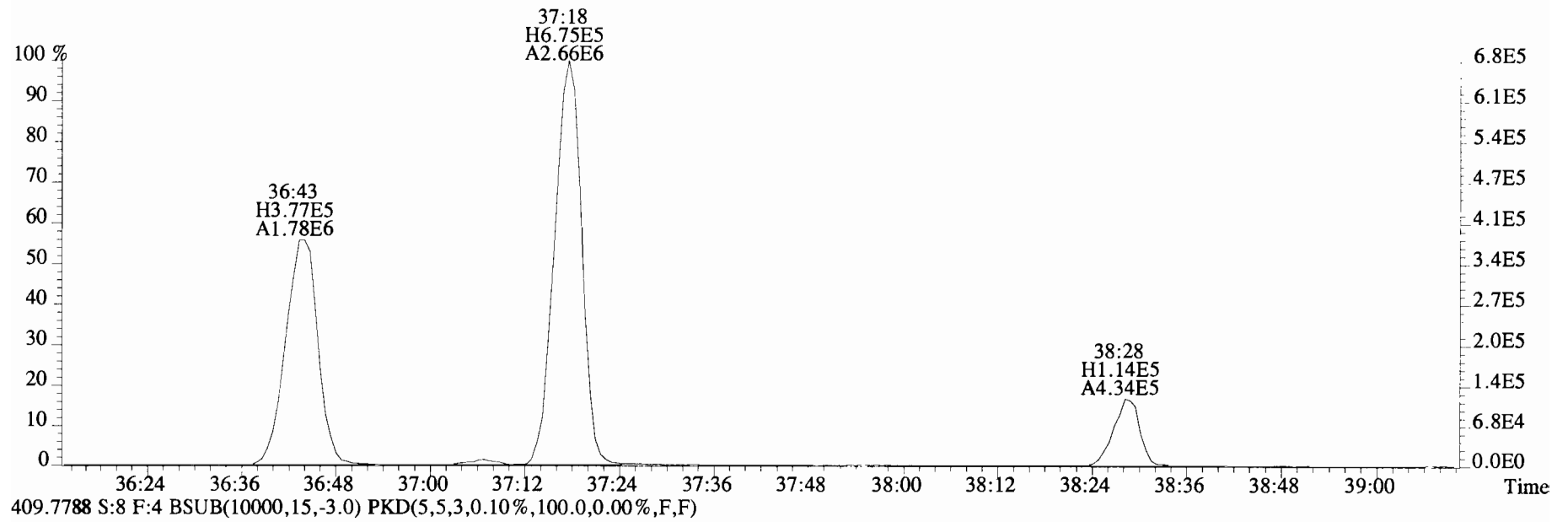
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Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



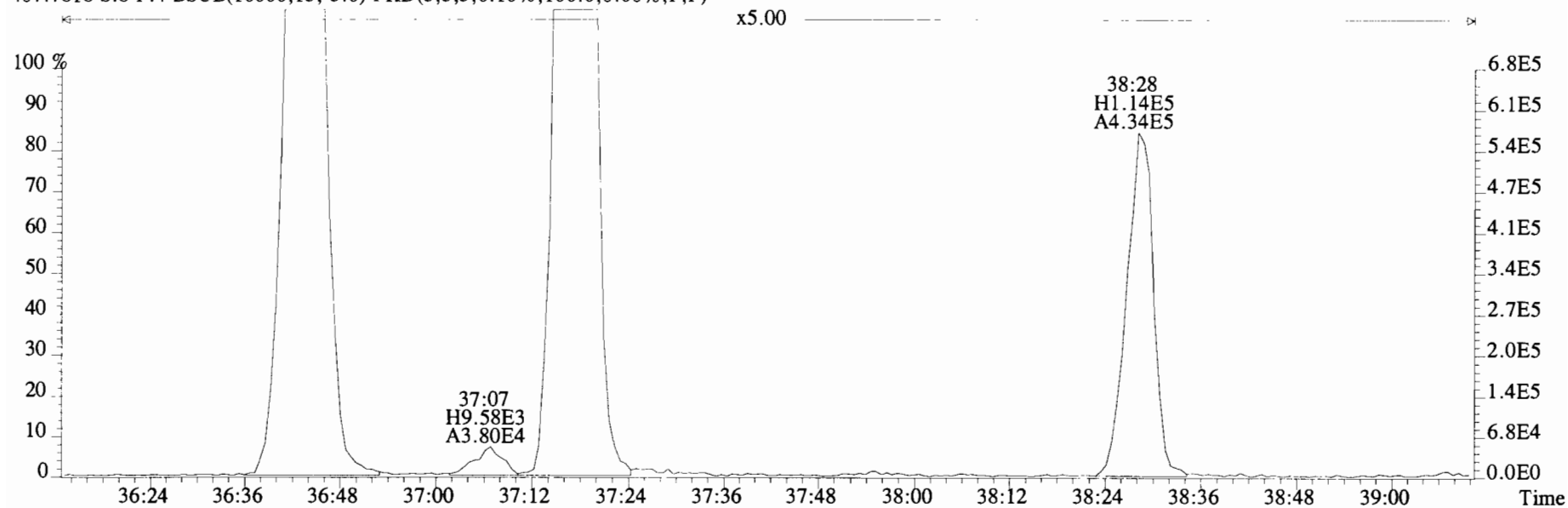
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 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
 407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



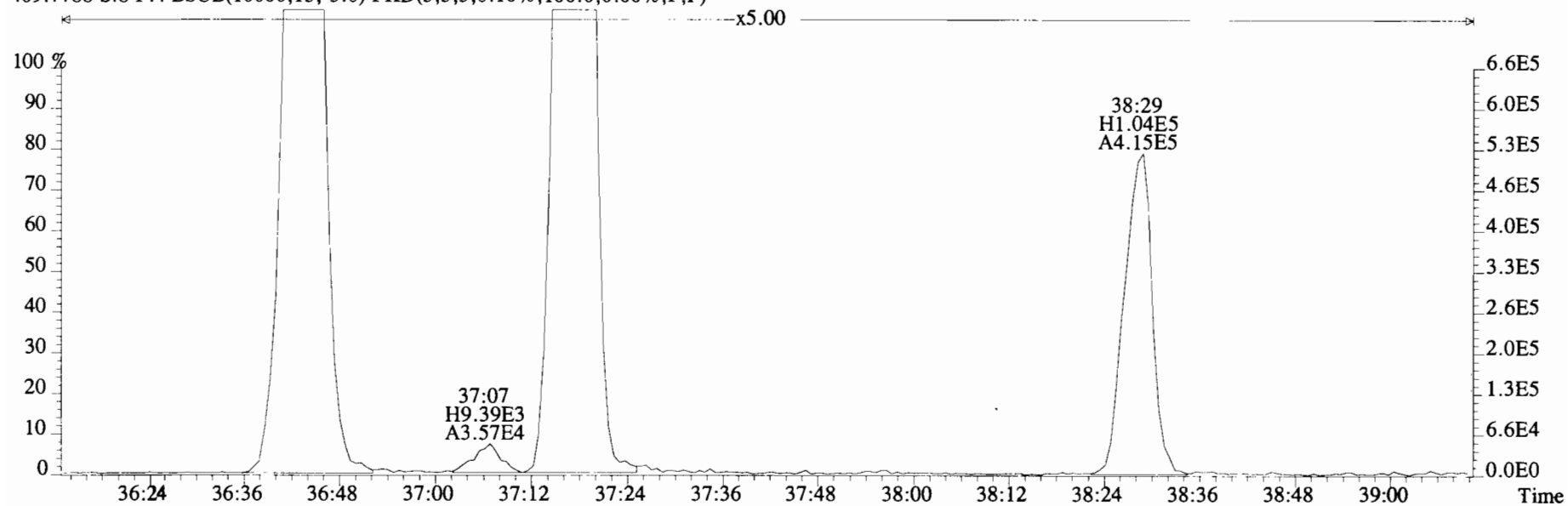
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Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



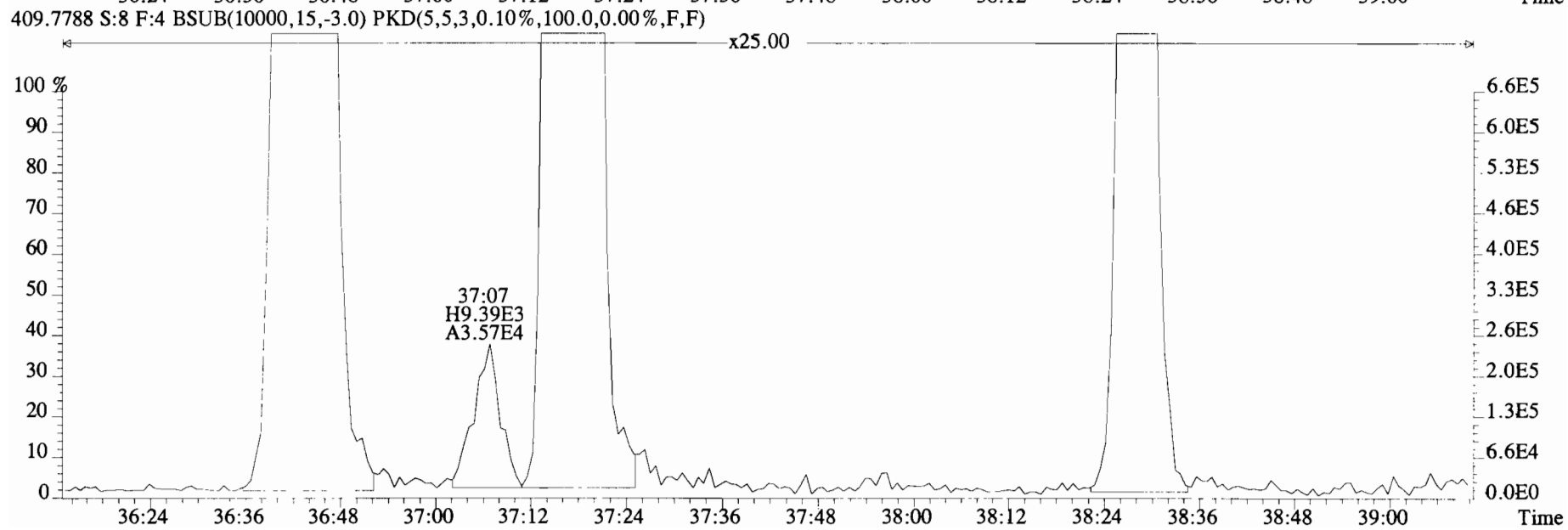
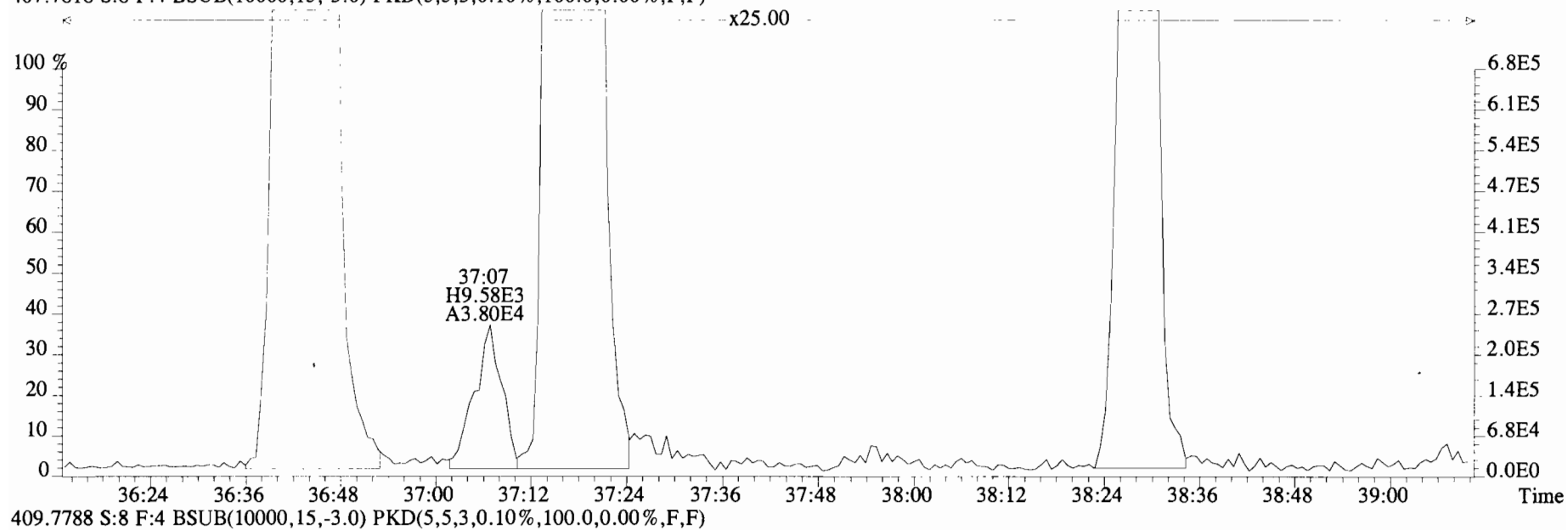
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407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



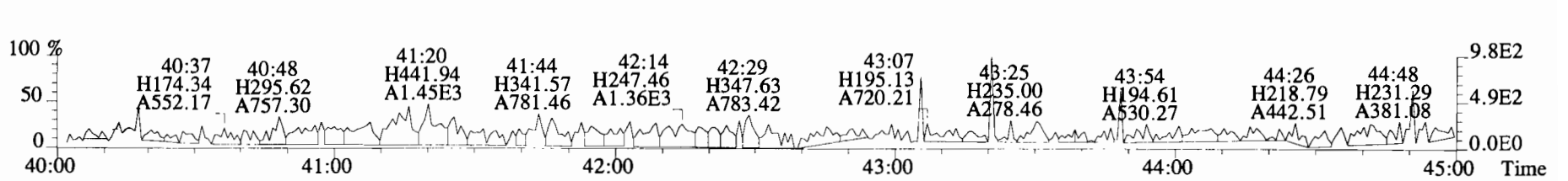
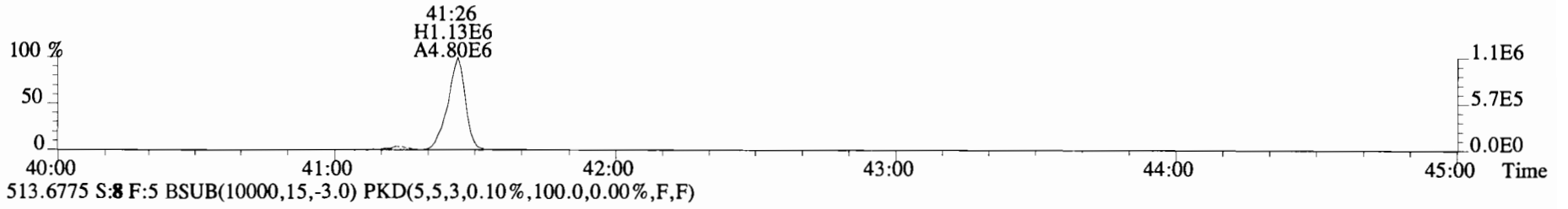
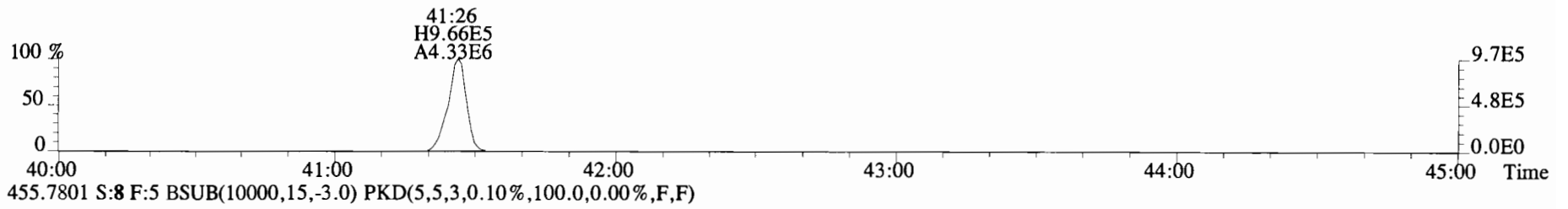
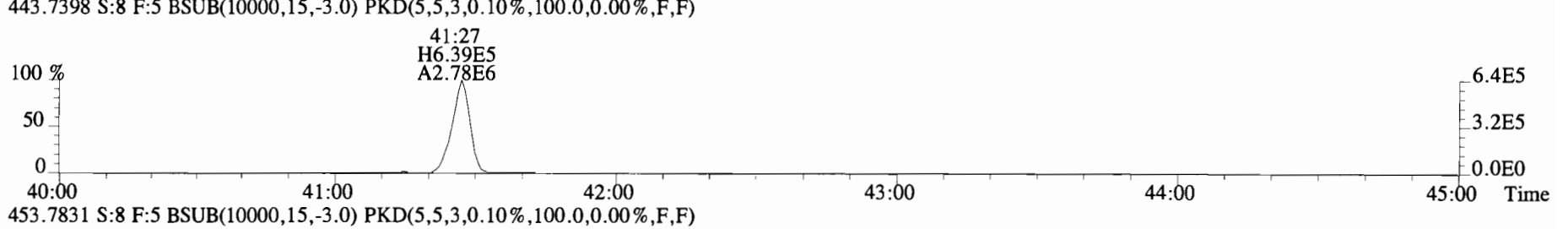
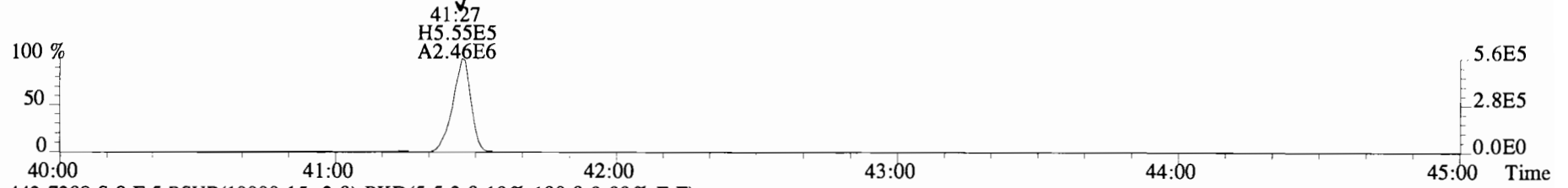
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



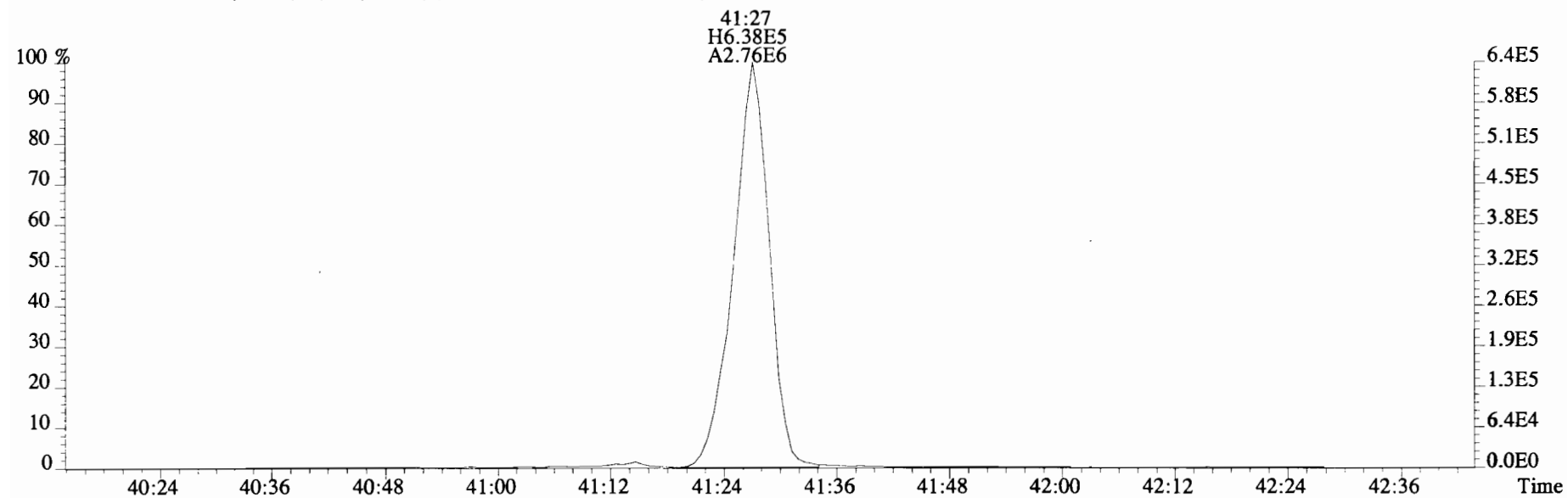
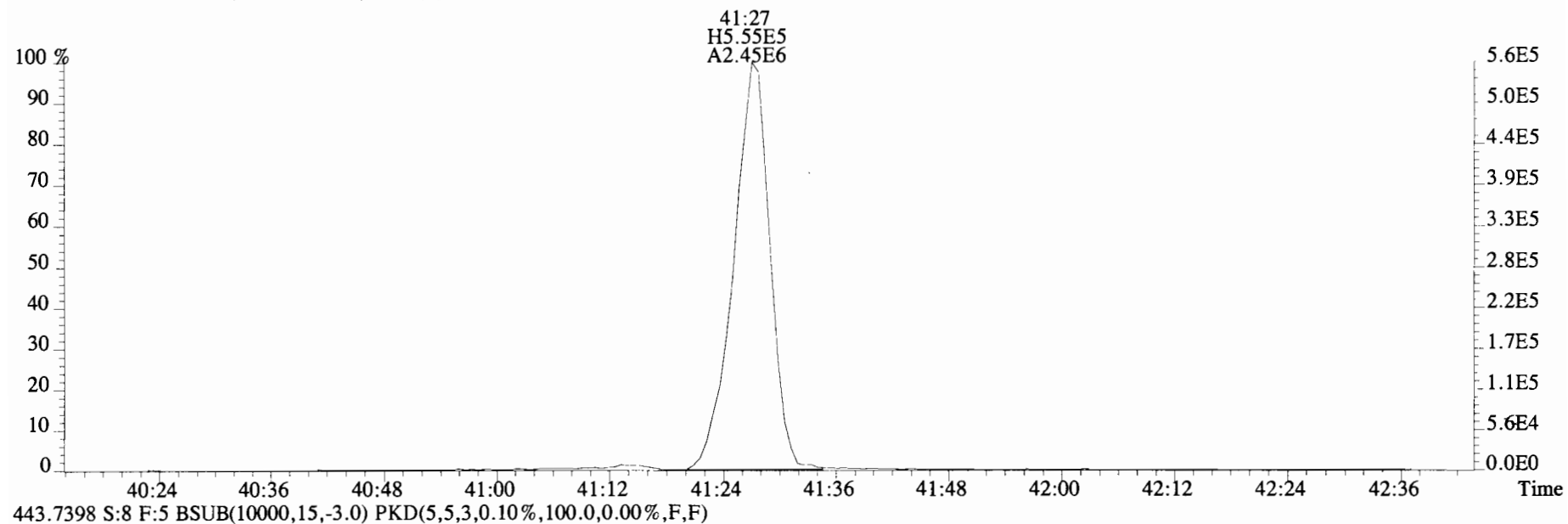
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Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 Exp:OCDD_DB5
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 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)



File:191031D2 #1-432 Acq: 1-NOV-2019 05:17:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE1 PDI-082SC-B-06-08-191002 16.99 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)



Client ID: Duplicate
Lab ID: B9J0288-DUP1

Filename: 191031D2 S:9 Acq:1-NOV-19 06:05:45
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol:10.003

ConCal: ST191031D2-1
EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	3.83e+04	0.67 y	0.91	26:17	1.0089	*	2.5	*	*	Total Tetra-Dioxins	13.4	15.0	*	*	*
1,2,3,7,8-PeCDD	4.94e+04	0.70 y	0.90	30:45	1.5976	*	2.5	*	*	Total Penta-Dioxins	9.66	18.7	*	*	*
1,2,3,4,7,8-HxCDD	6.02e+04	1.34 y	1.10	34:05	1.7202	*	2.5	*	*	Total Hexa-Dioxins	78.9	78.9	*	*	*
1,2,3,6,7,8-HxCDD	3.00e+05	1.22 y	0.94	34:11	9.3963	*	2.5	*	*	Total Hepta-Dioxins	553	553	*	*	*
1,2,3,7,8,9-HxCDD	1.34e+05	1.36 y	0.96	34:29	3.9948	*	2.5	*	*	Total Tetra-Furans	325	340	*	*	* P
1,2,3,4,6,7,8-HpCDD	6.86e+06	1.00 y	0.98	37:56	215.47	*	2.5	*	*	Total Penta-Furans	537.93	537.93	*	*	*
OCDD	7.74e+07	0.91 y	0.96	41:13	3009.2	*	2.5	*	*	Total Hexa-Furans	1200	1200	*	*	*
2,3,7,8-TCDF	4.68e+06	0.84 y	0.95	25:31	94.439 (86.70)	*	2.5	*	*	Total Hepta-Furans	759	759	*	*	*
1,2,3,7,8-PeCDF	1.02e+07	1.69 y	0.96	29:36	209.04	*	2.5	*	*						
2,3,4,7,8-PeCDF	3.19e+06	1.51 y	1.01	30:28	60.418	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	3.34e+07	1.24 y	1.18	33:11	715.50	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	9.27e+06	1.23 y	1.07	33:18	197.31	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	1.90e+06	1.22 y	1.11	33:55	39.905	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	6.56e+05	1.19 y	1.06	34:51	14.262	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	1.62e+07	1.02 y	1.13	36:43	367.65	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	5.15e+06	1.03 y	1.28	38:28	117.51	*	2.5	*	*						
OCDF	1.73e+07	0.90 y	0.95	41:27	508.89	*	2.5	*	*						
IS	13C-2,3,7,8-TCDD	8.38e+06	0.78 y	1.10	26:16	194.03				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	6.85e+06	0.62 y	0.88	30:45	197.13				97.0					
IS	13C-1,2,3,4,7,8-HxCDD	6.35e+06	1.28 y	0.64	34:04	192.69				98.6					
IS	13C-1,2,3,6,7,8-HxCDD	6.81e+06	1.23 y	0.86	34:11	155.05				96.4					
IS	13C-1,2,3,7,8,9-HxCDD	7.00e+06	1.24 y	0.81	34:28	168.95				77.5					
IS	13C-1,2,3,4,6,7,8-HpCDD	6.50e+06	1.05 y	0.65	37:55	193.39				84.5					
IS	13C-OCDD	1.07e+07	0.93 y	0.58	41:13	360.58				96.7					
IS	13C-2,3,7,8-TCDF	1.04e+07	0.79 y	1.03	25:30	168.36				90.2					
IS	13C-1,2,3,7,8-PeCDF	1.02e+07	1.52 y	0.85	29:35	198.53				84.2					
IS	13C-2,3,4,7,8-PeCDF	1.04e+07	1.61 y	0.85	30:28	205.06				99.3					
IS	13C-1,2,3,4,7,8-HxCDF	7.93e+06	0.51 y	0.83	33:11	185.78				103					
IS	13C-1,2,3,6,7,8-HxCDF	8.78e+06	0.52 y	1.03	33:18	165.35				92.9					
IS	13C-2,3,4,6,7,8-HxCDF	8.53e+06	0.50 y	0.95	33:54	174.26				82.7					
IS	13C-1,2,3,7,8,9-HxCDF	8.66e+06	0.51 y	0.83	34:51	203.69				87.2					
IS	13C-1,2,3,4,6,7,8-HpCDF	7.81e+06	0.41 y	0.76	36:42	200.70				102					
IS	13C-1,2,3,4,7,8,9-HpCDF	6.84e+06	0.43 y	0.58	38:27	229.22				100					
IS	13C-OCDF	1.44e+07	0.88 y	0.69	41:26	406.14				115					
C/Up	37C1-2,3,7,8-TCDD	3.36e+06		1.20	26:17	71.257				102					
RS/RT	13C-1,2,3,4-TCDD	7.88e+06	0.78 y	1.00	25:43	199.93				89.1					
RS	13C-1,2,3,4-TCDF	1.20e+07	0.81 y	1.00	24:18	199.93									
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.03e+07	0.51 y	1.00	33:36	199.93									

Integrations
Reviewed by: DB
Analyst: CT
Date: 11/11/19
Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 14 File: 191031D2 S: 9 I: 1 F: 1
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 15.046 Unnamed Concentration: 14.037

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
22:57	1.387e+05	1.806e+05	0.77 y	3.193e+05	8.4170
23:17	2.274e+04	3.029e+04	0.75 y	5.303e+04	1.3981
23:42	9.453e+03	1.148e+04	0.82 y	2.093e+04	0.55171
24:25	8.102e+03	9.931e+03	0.82 y	1.803e+04	0.47539
24:38	1.066e+04	1.423e+04	0.75 y	2.489e+04	0.65615
24:49	1.276e+04	1.302e+04	0.98 n	2.304e+04	0.60748
25:00	5.368e+03	4.638e+03	1.16 n	8.210e+03	0.21643
25:13	4.099e+03	4.464e+03	0.92 n	7.901e+03	0.20828
25:22	3.863e+03	8.405e+03	0.46 n	8.881e+03	0.23411
26:02	1.661e+04	1.900e+04	0.87 y	3.561e+04	0.93870
26:17	1.530e+04	2.297e+04	0.67 y	3.827e+04	1.0089
26:34	7.001e+03	7.146e+03	0.98 n	1.265e+04	0.33343

2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 14 File: 191031D2 S: 9 I: 1 F: 2
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 18.745 Unnamed Concentration: 17.147

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:44	6.973e+04	9.933e+04	0.70	y	1.691e+05	5.4666
29:10	1.419e+04	2.007e+04	0.71	y	3.426e+04	1.1077
29:37	6.281e+04	7.698e+04	0.82	n	1.255e+05	4.0575
29:46	1.580e+04	3.455e+04	0.46	n	4.089e+04	1.3221
29:52	1.196e+04	1.933e+04	0.62	y	3.129e+04	1.0119
30:03	3.754e+04	4.694e+04	0.80	n	7.651e+04	2.4741
30:22	5.834e+03	8.775e+03	0.66	y	1.461e+04	0.47240
30:45	2.031e+04	2.909e+04	0.70	y	4.941e+04	1.5976
30:51	8.310e+03	8.905e+03	0.93	n	1.452e+04	0.46937
31:02	6.376e+03	4.696e+03	1.36	n	7.654e+03	0.24751
31:06	1.028e+04	9.824e+03	1.05	n	1.601e+04	0.51778

1,2,3,7,8-PeCDD

Totals class: HxCDD EMPC

Entry #: 23

Run: 14 File: 191031D2 S: 9 I: 1 F: 3
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 78.882 Unnamed Concentration: 63.771

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:33	5.133e+05	4.189e+05	1.23 y	9.322e+05	27.957
33:07	7.915e+04	6.066e+04	1.30 y	1.398e+05	4.1932
33:22	5.234e+05	4.520e+05	1.16 y	9.754e+05	29.255
33:30	2.609e+04	2.072e+04	1.26 y	4.680e+04	1.4037
34:05	3.444e+04	2.577e+04	1.34 y	6.021e+04	1.7202 1,2,3,4,7,8-HxCDD
34:11	1.650e+05	1.355e+05	1.22 y	3.005e+05	9.3963 1,2,3,6,7,8-HxCDD
34:23	1.709e+04	1.499e+04	1.14 y	3.208e+04	0.96201
34:29	7.741e+04	5.703e+04	1.36 y	1.344e+05	3.9948 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 14 File: 191031D2 S: 9 I: 1 F: 4
Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 552.90 Unnamed Concentration: 337.424

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:05	5.448e+06	5.287e+06	1.03	y	1.074e+07	337.42
37:56	3.430e+06	3.425e+06	1.00	y	6.855e+06	215.47 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 14 File: 191031D2 S: 9 I: 1 F: 1
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 339.68 Unnamed Concentration: 245.238

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:50	1.040e+04	1.300e+04	0.80	y	2.340e+04	0.47170
21:24	2.621e+04	3.157e+04	0.83	y	5.778e+04	1.1647
22:01	2.689e+05	3.381e+05	0.80	y	6.070e+05	12.235
22:34	1.564e+05	1.842e+05	0.85	y	3.406e+05	6.8668
22:55	6.887e+05	8.652e+05	0.80	y	1.554e+06	31.325
23:19	2.941e+05	3.837e+05	0.77	y	6.778e+05	13.664
23:27	2.335e+04	3.183e+04	0.73	y	5.519e+04	1.1125
23:37	1.366e+05	1.784e+05	0.77	y	3.150e+05	6.3492
23:57	2.571e+04	3.904e+04	0.66	y	6.476e+04	1.3054
24:04	1.938e+04	1.963e+04	0.99	n	3.474e+04	0.70036
24:12	1.820e+05	2.100e+05	0.87	y	3.920e+05	7.9018
24:18	2.831e+05	3.676e+05	0.77	y	6.507e+05	13.117
24:43	2.401e+06	2.999e+06	0.80	y	5.400e+06	108.86
24:58	1.108e+05	1.376e+05	0.81	y	2.483e+05	5.0058
25:09	2.176e+04	2.179e+04	1.00	n	3.856e+04	0.77733
25:24	2.813e+05	3.608e+05	0.78	y	6.421e+05	12.944
25:31	2.132e+06	2.553e+06	0.84	y	4.685e+06	94.439
25:50	1.146e+05	1.548e+05	0.74	y	2.695e+05	5.4322
26:03	3.000e+04	3.680e+04	0.82	y	6.679e+04	1.3464
26:45	2.977e+04	1.522e+04	1.96	n	2.694e+04	0.54304
26:50	1.975e+04	1.928e+04	1.02	n	3.412e+04	0.68779
27:00	2.201e+04	2.567e+04	0.86	y	4.768e+04	0.96117
27:16	3.457e+05	3.494e+05	0.99	n	6.185e+05	12.467

2,3,7,8-TCDF

P
P
P

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 14 File: 191031D2 S: 9 I: 1 F: 1
Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 37.746 Unnamed Concentration: 37.746

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:16	1.181e+06	7.360e+05	1.60 y	1.917e+06	37.746

Totals class: PeCDF EMPC

Entry #: 31

Run: 14 File: 191031D2 S: 9 I: 1 F: 2
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 500.19 Unnamed Concentration: 230.731

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:33	9.573e+04	6.891e+04	1.39 y	1.646e+05	3.2414
28:41	3.253e+06	1.935e+06	1.68 y	5.188e+06	102.15
29:14	2.801e+05	1.818e+05	1.54 y	4.619e+05	9.0940
29:26	5.260e+05	3.022e+05	1.74 y	8.282e+05	16.306
29:36	6.411e+06	3.791e+06	1.69 y	1.020e+07	209.04
29:51	1.985e+06	1.201e+06	1.65 y	3.186e+06	62.729
30:28	1.919e+06	1.272e+06	1.51 y	3.191e+06	60.418
30:31	1.047e+06	6.385e+05	1.64 y	1.685e+06	33.177
31:21	1.230e+05	8.181e+04	1.50 y	2.048e+05	4.0315
					1,2,3,7,8-PeCDF
					2,3,4,7,8-PeCDF

Totals class: HxCDF EMPC

Entry #: 33

Run: 14 File: 191031D2 S: 9 I: 1 F: 3
 Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

Total Concentration: 1204.7 Unnamed Concentration: 237.716

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:00	1.942e+05	1.528e+05	1.27 y	3.470e+05	7.4172
32:05	1.669e+05	1.341e+05	1.24 y	3.010e+05	6.4345
32:12	2.443e+06	2.034e+06	1.20 y	4.477e+06	95.701
32:31	3.350e+04	2.381e+04	1.41 y	5.731e+04	1.2251
32:43	1.835e+06	1.509e+06	1.22 y	3.344e+06	71.483
33:05	1.111e+05	9.029e+04	1.23 y	2.013e+05	4.3040
33:11	1.849e+07	1.493e+07	1.24 y	3.342e+07	715.50 1,2,3,4,7,8-HxCDF
33:18	5.108e+06	4.159e+06	1.23 y	9.266e+06	197.31 1,2,3,6,7,8-HxCDF
33:36	5.257e+04	3.073e+04	1.71 n	6.882e+04	1.4712
33:55	1.043e+06	8.531e+05	1.22 y	1.896e+06	39.905 2,3,4,6,7,8-HxCDF
34:51	3.559e+05	2.997e+05	1.19 y	6.557e+05	14.262 1,2,3,7,8,9-HxCDF
34:55	1.306e+06	1.018e+06	1.28 y	2.324e+06	49.681

Totals class: HpCDF EMPC

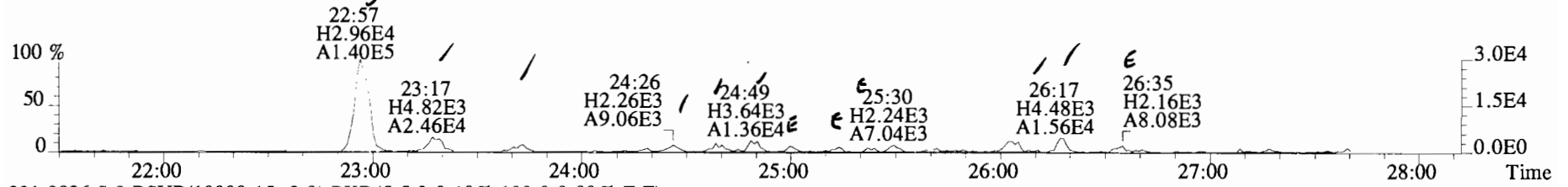
Entry #: 35

Run: 14 File: 191031D2 S: 9 I: 1 F: 4
Acquired: 1-NOV-19 06:05:45 Processed: 1-NOV-19 12:03:19

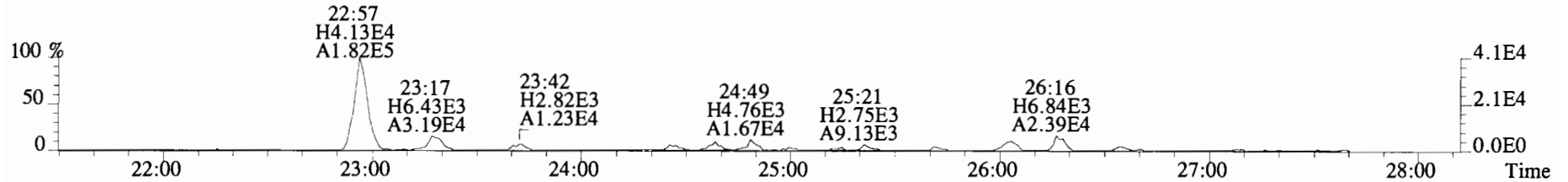
Total Concentration: 759.25 Unnamed Concentration: 274.090

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
36:43	8.170e+06	8.019e+06	1.02 y	1.619e+07	367.65	1,2,3,4,6,7,8-HpCDF
37:06	1.202e+05	1.184e+05	1.02 y	2.386e+05	5.4559	
37:17	5.911e+06	5.837e+06	1.01 y	1.175e+07	268.63	
38:28	2.606e+06	2.541e+06	1.03 y	5.147e+06	117.51	1,2,3,4,7,8,9-HpCDF

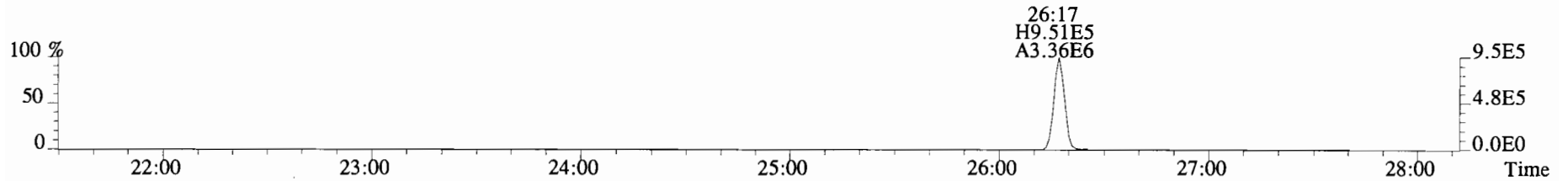
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



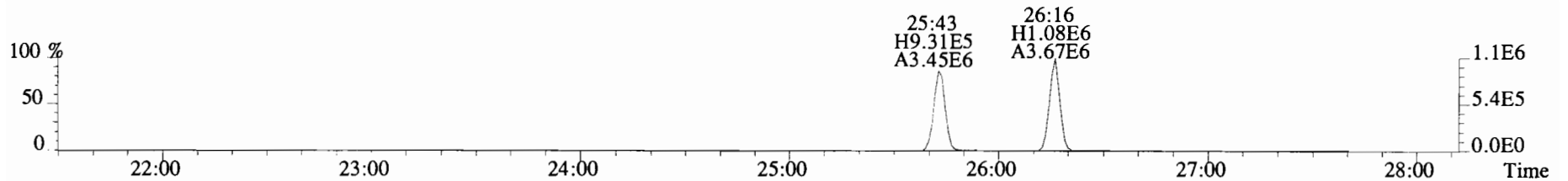
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



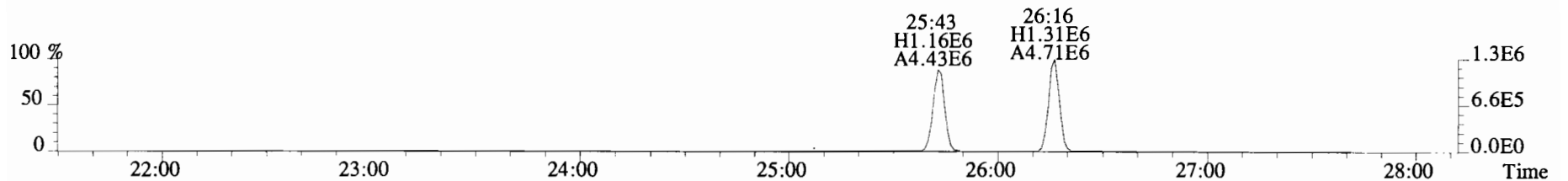
327.8847 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



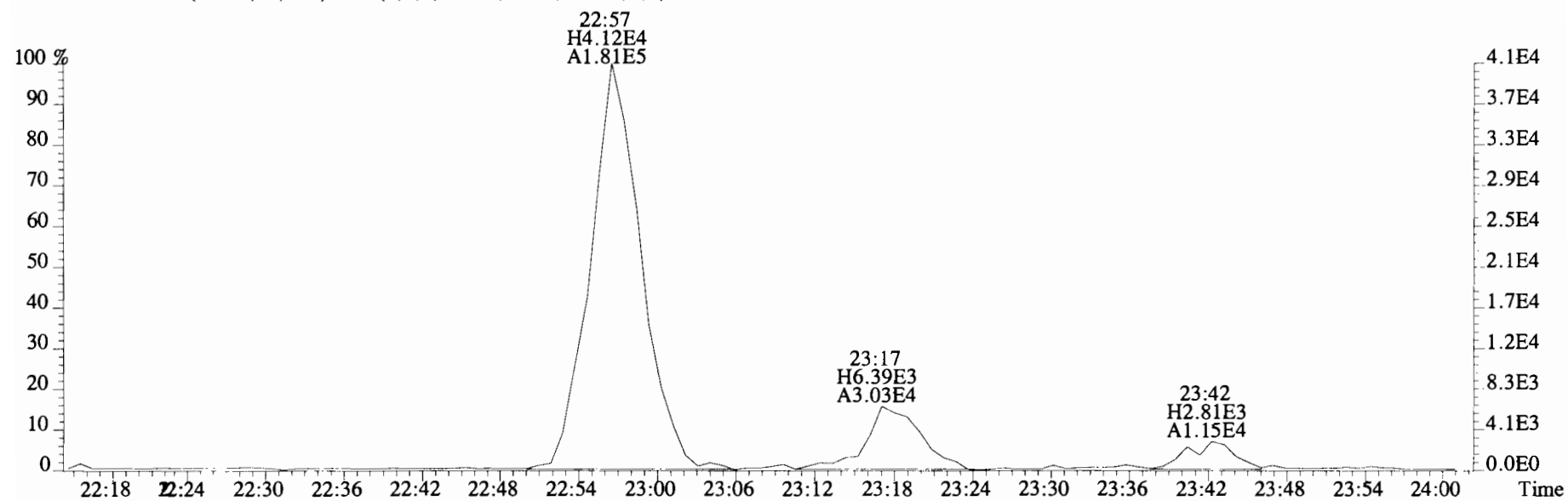
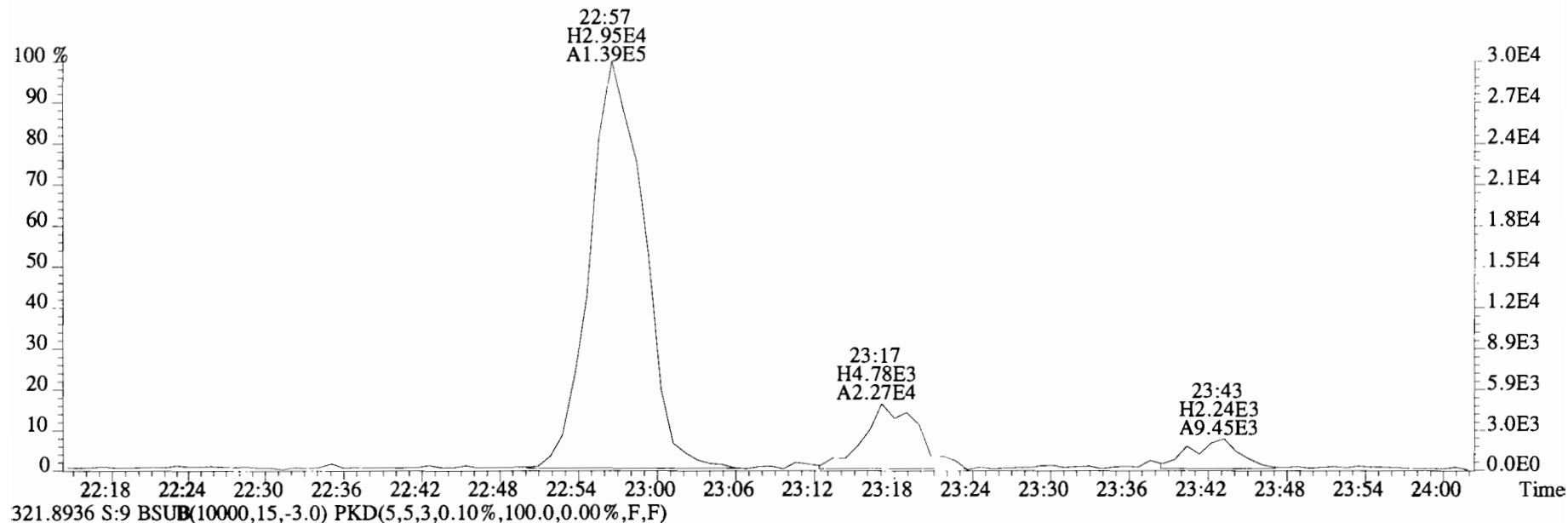
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



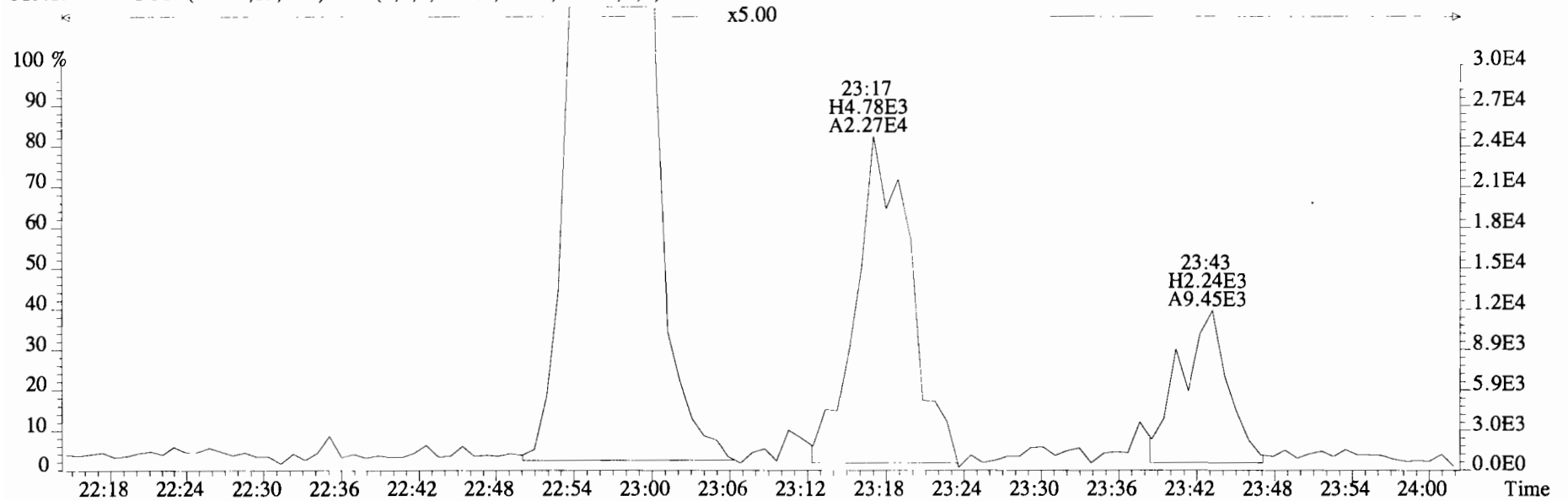
333.9339 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



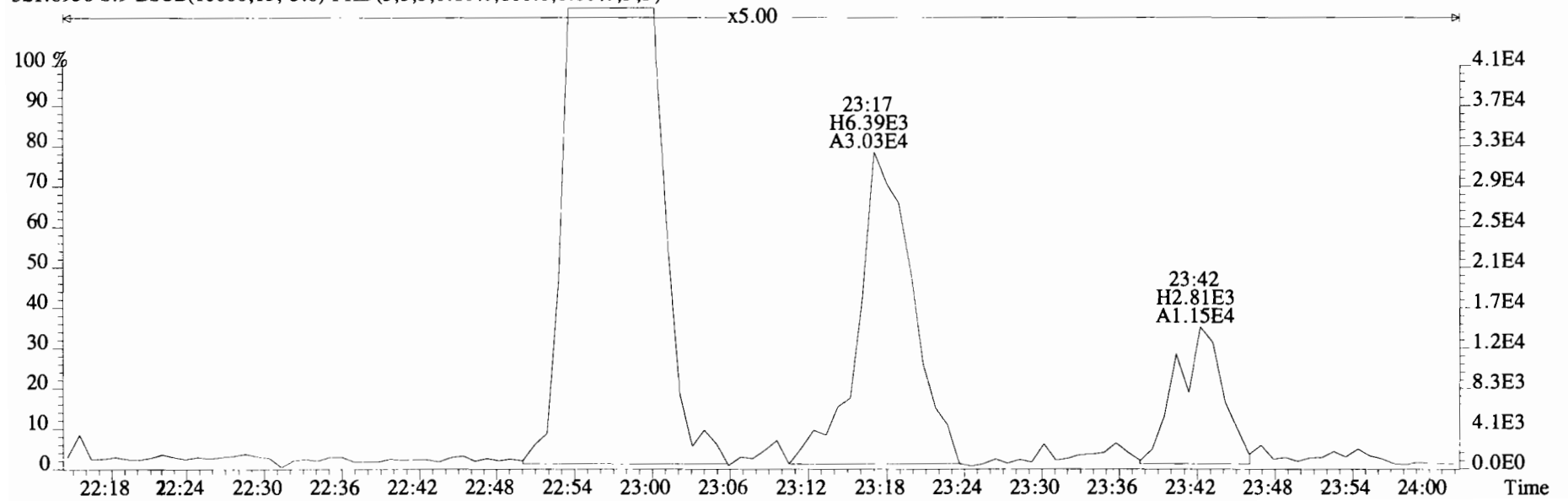
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Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B910288-DUP1 Duplicate 17 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



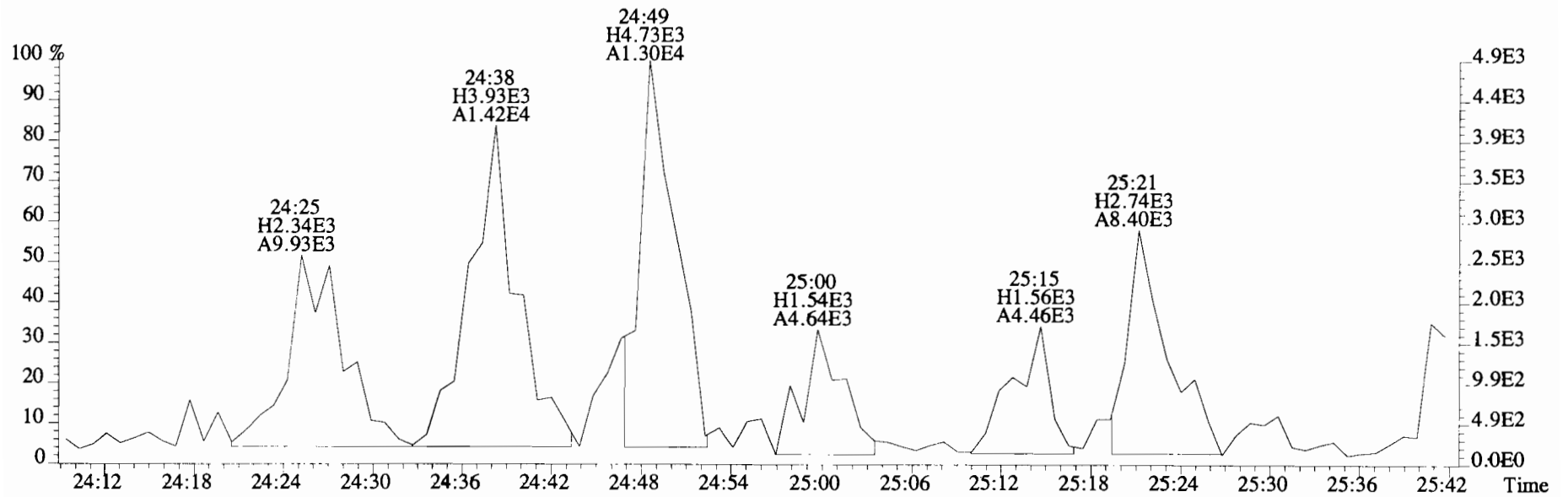
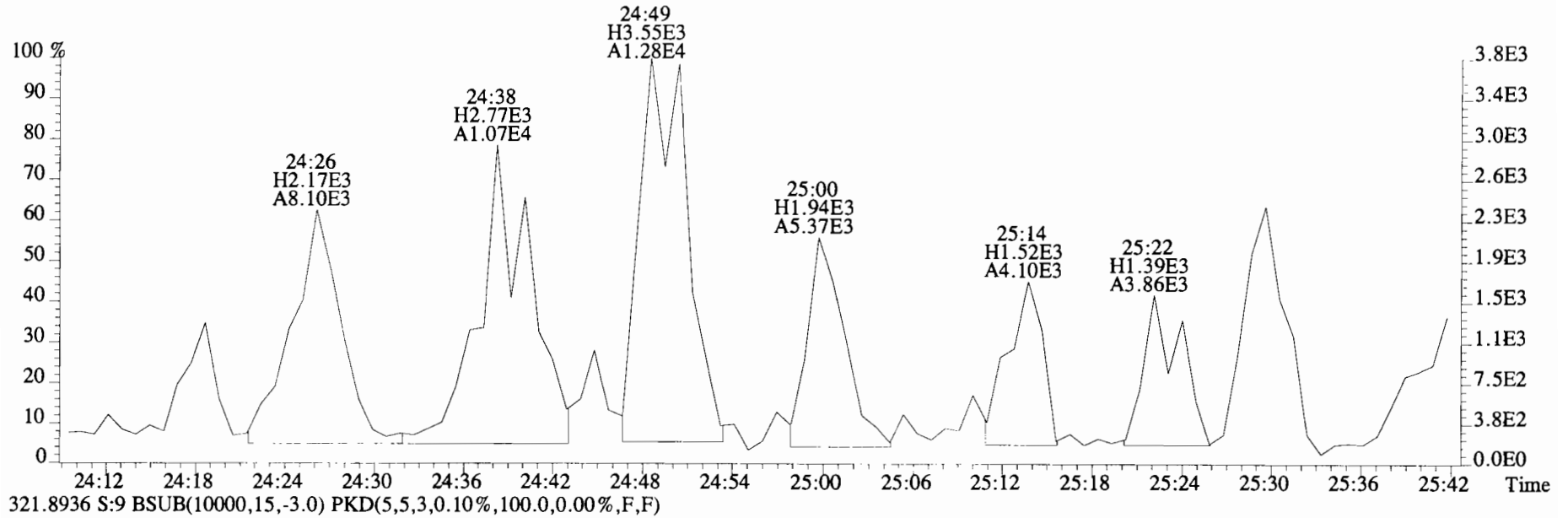
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Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



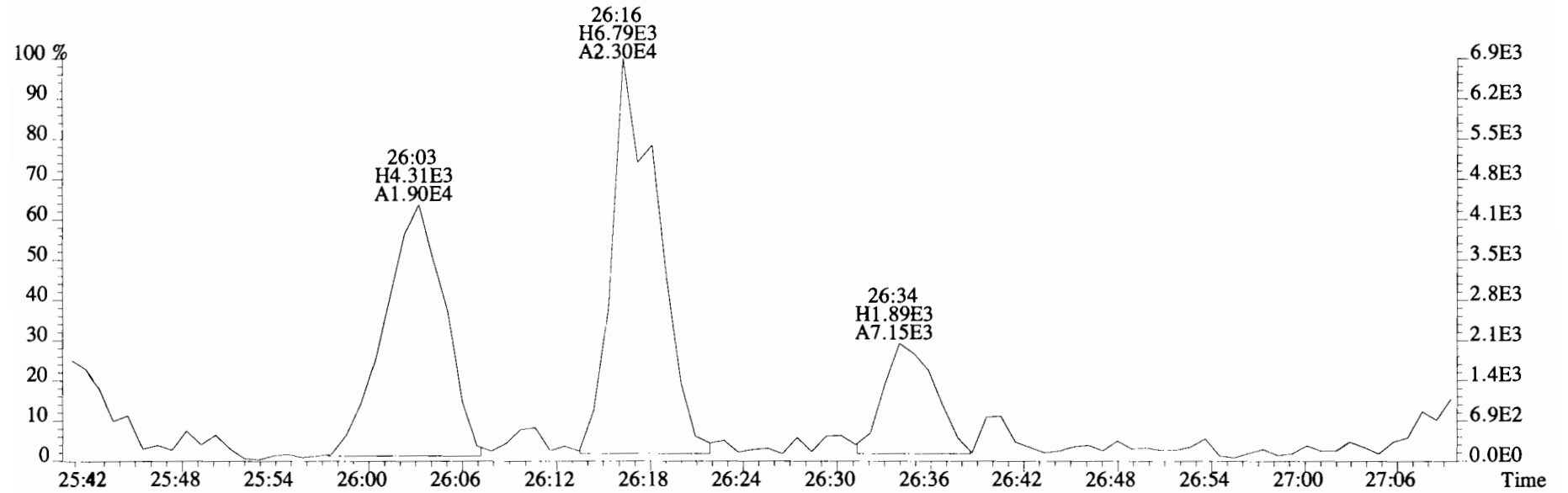
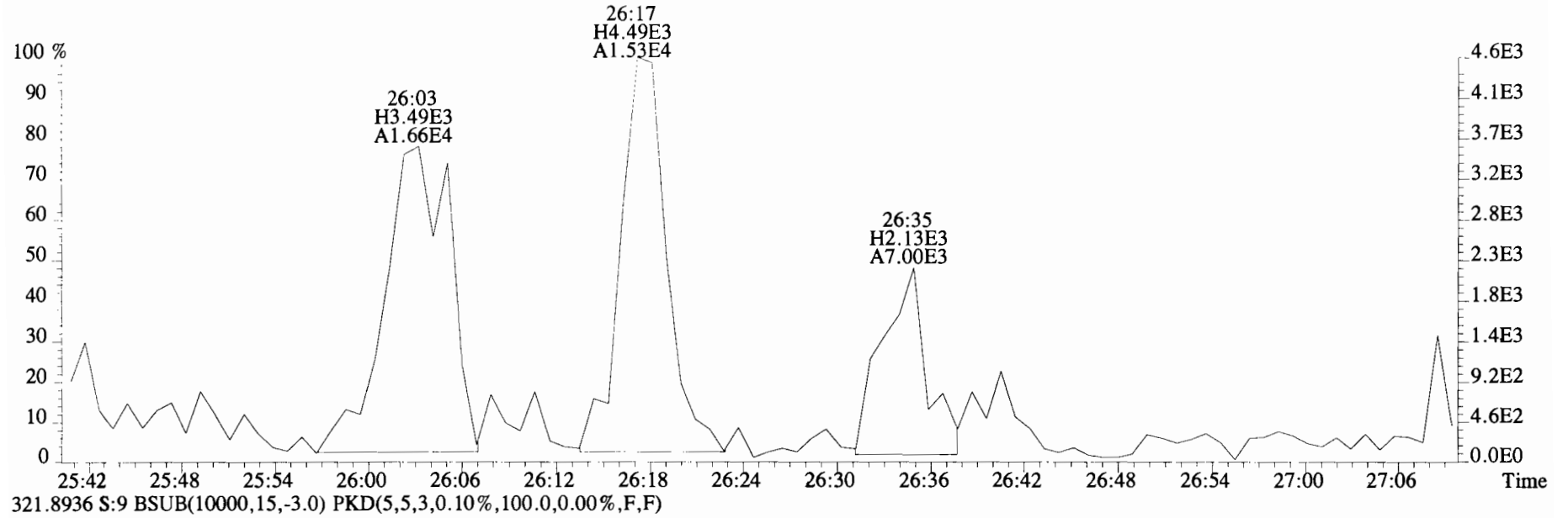
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



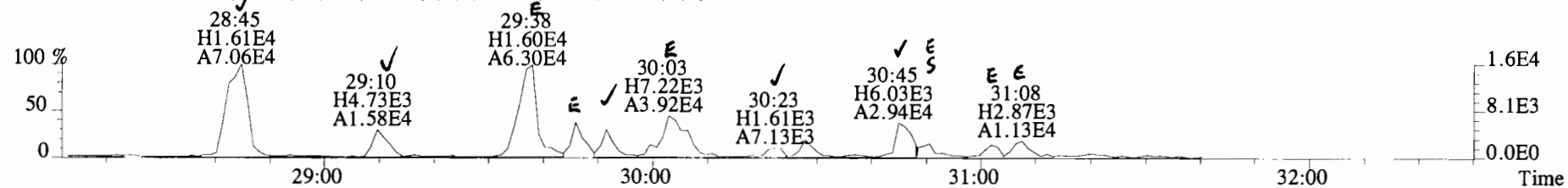
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 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



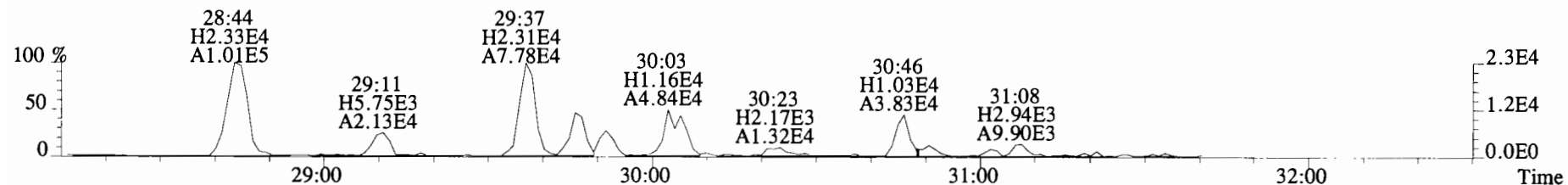
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



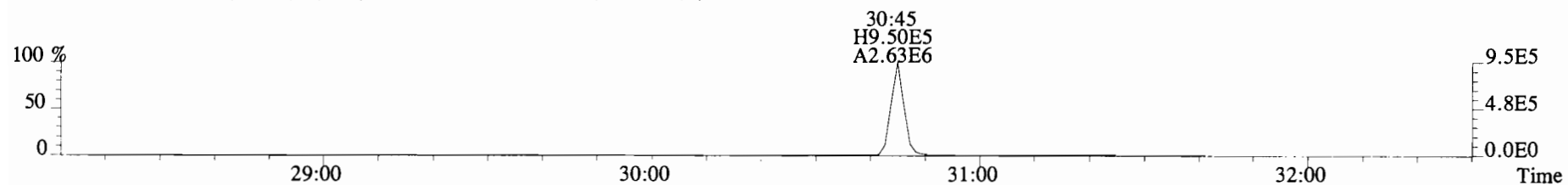
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



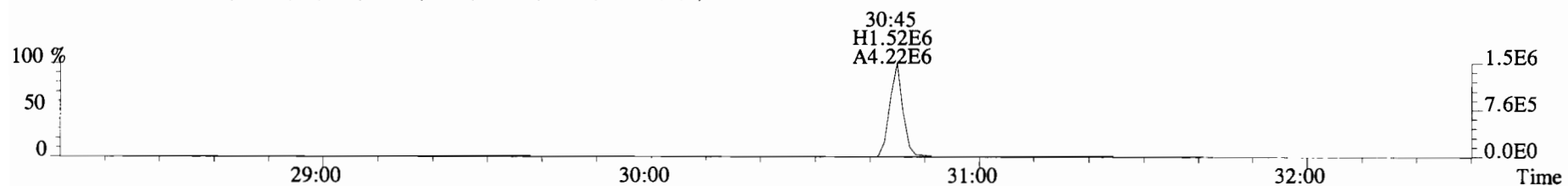
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



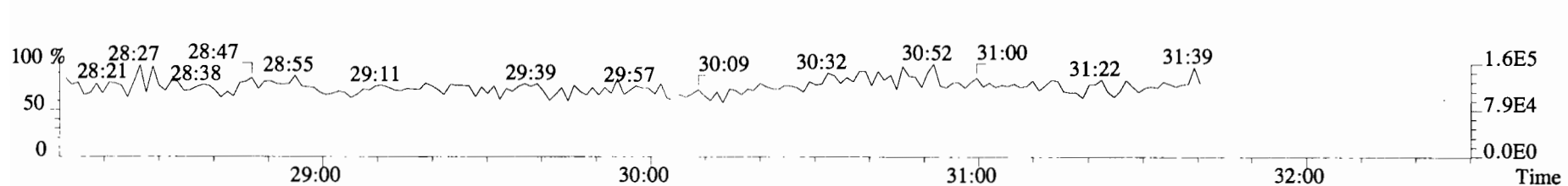
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



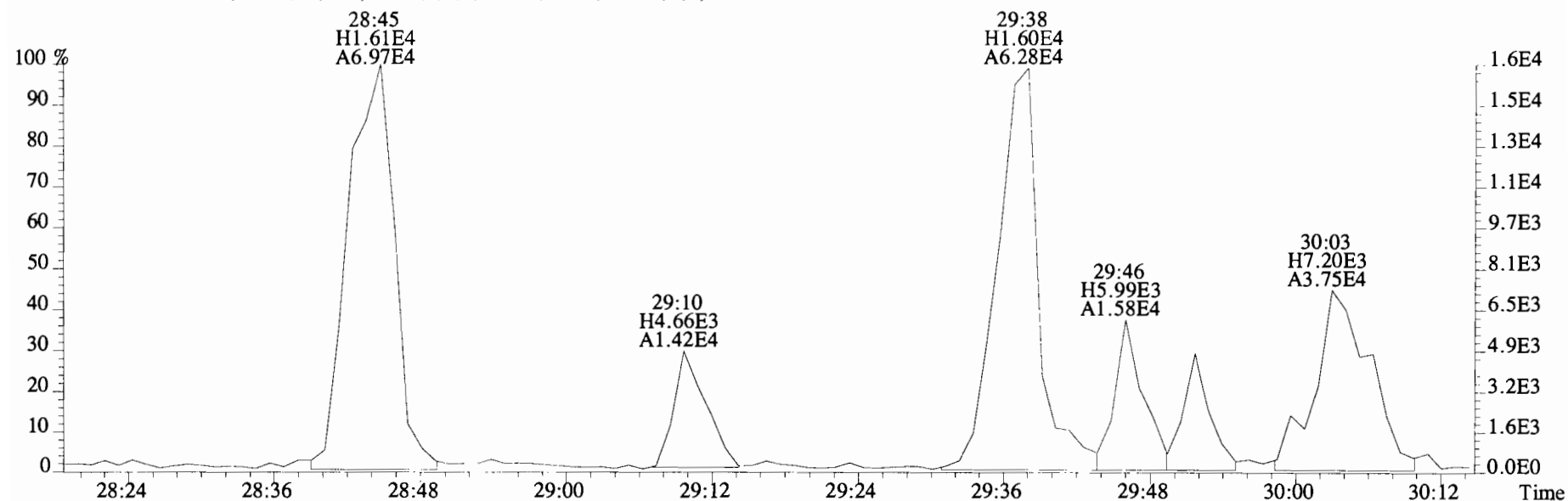
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



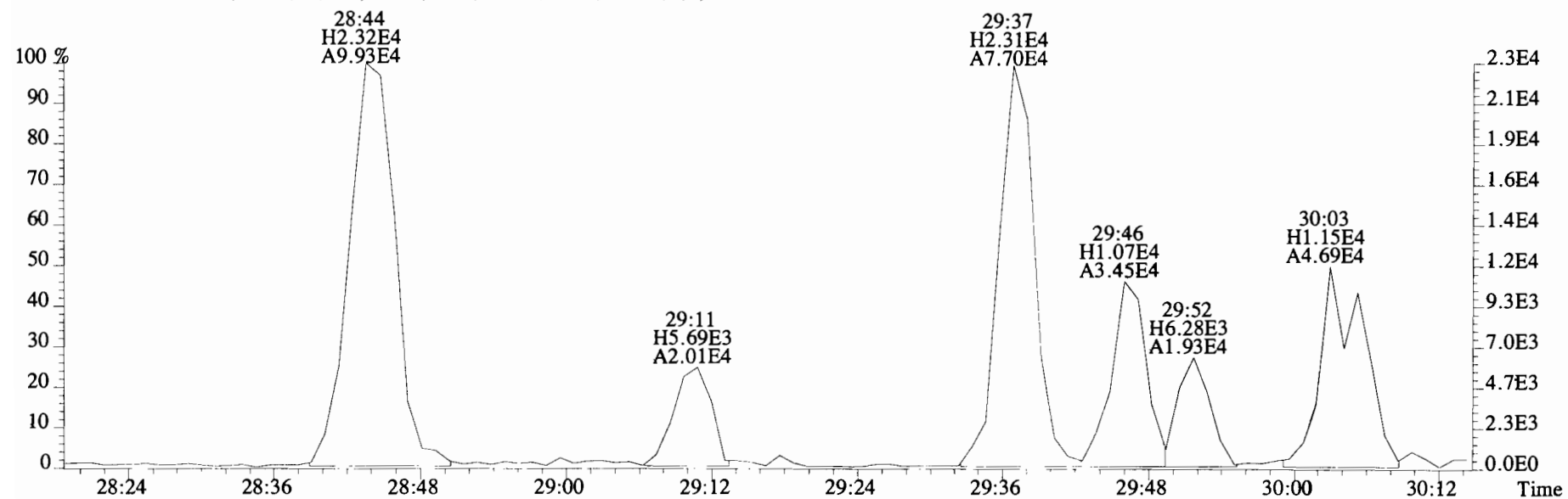
366.9792 S:9 F:2



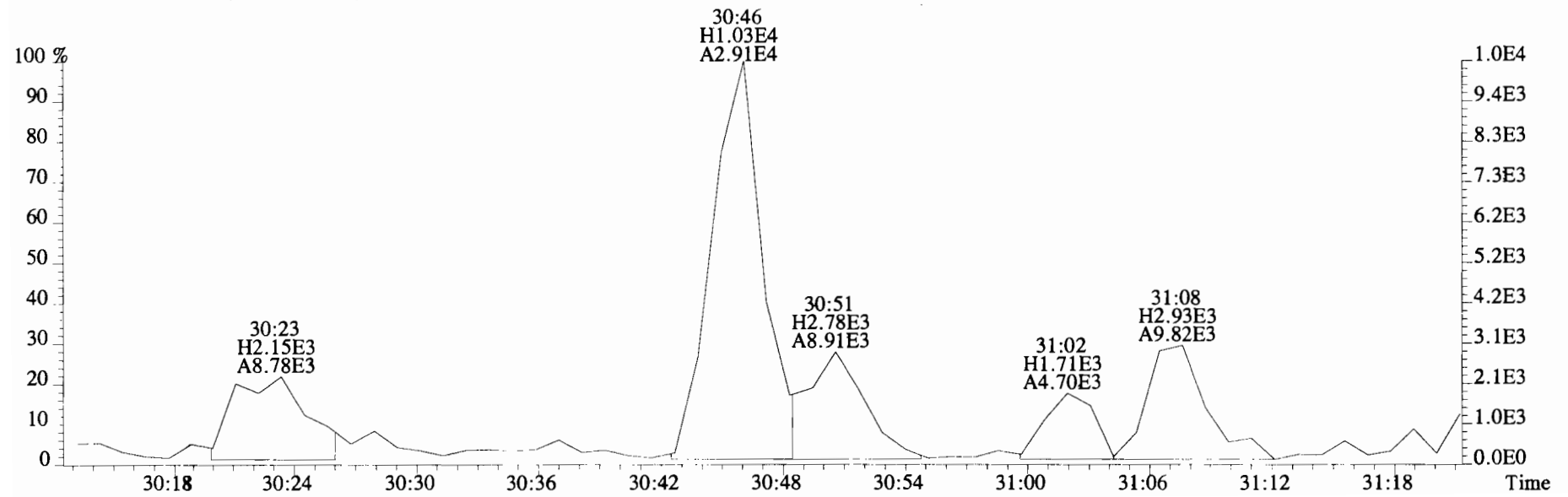
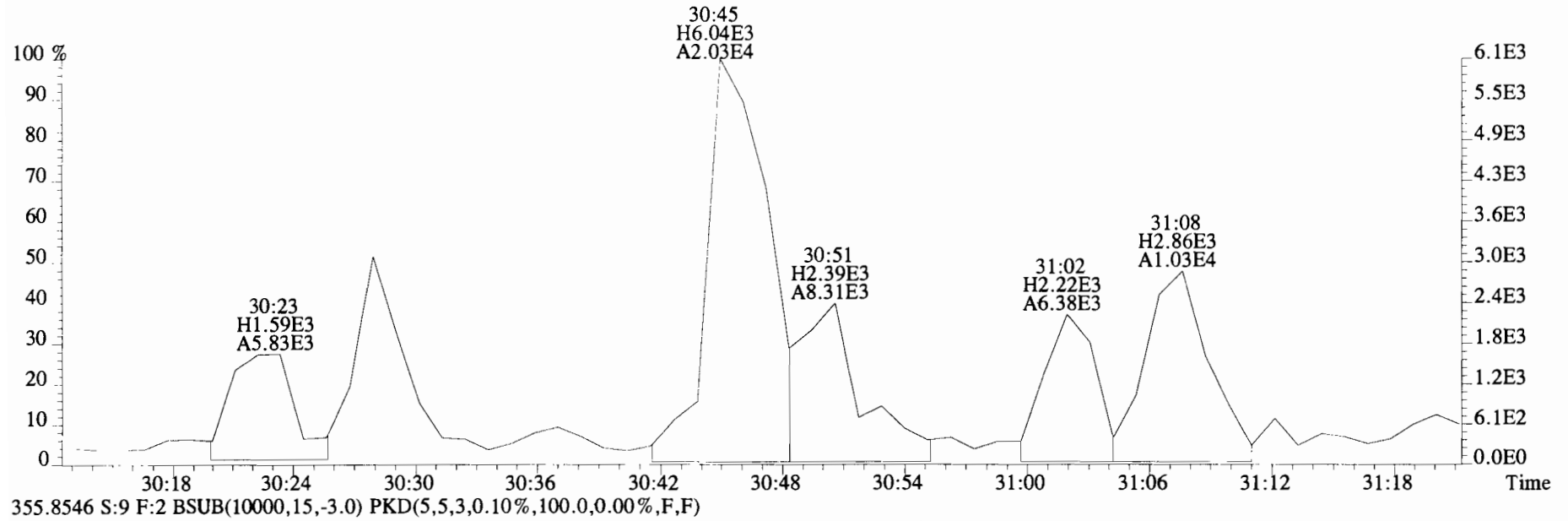
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



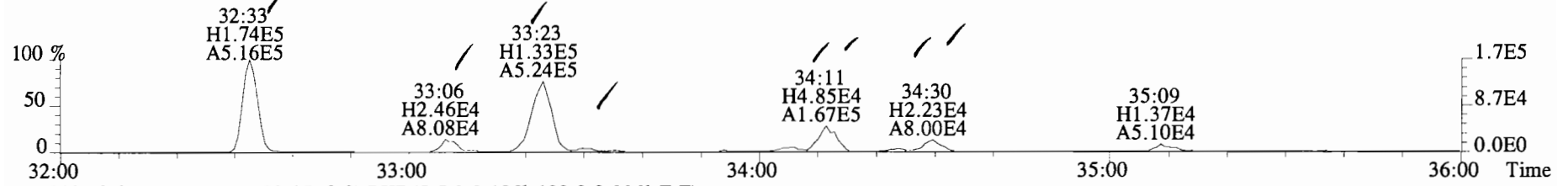
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



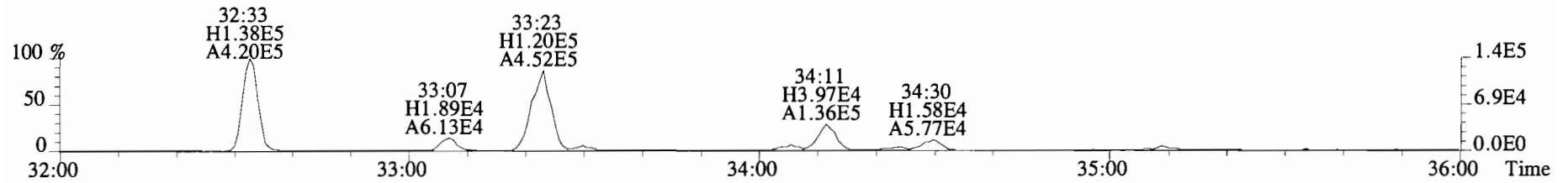
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



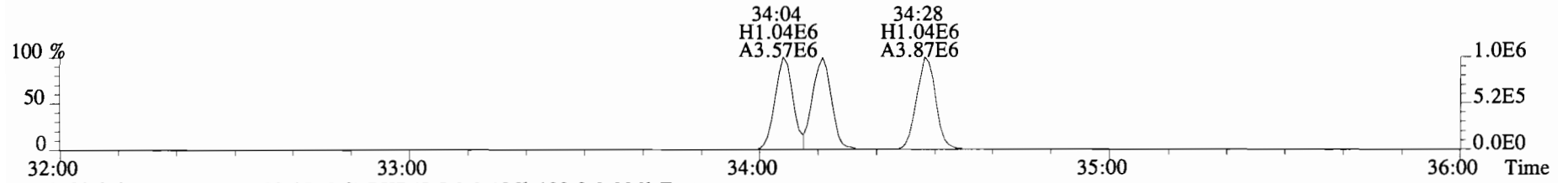
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



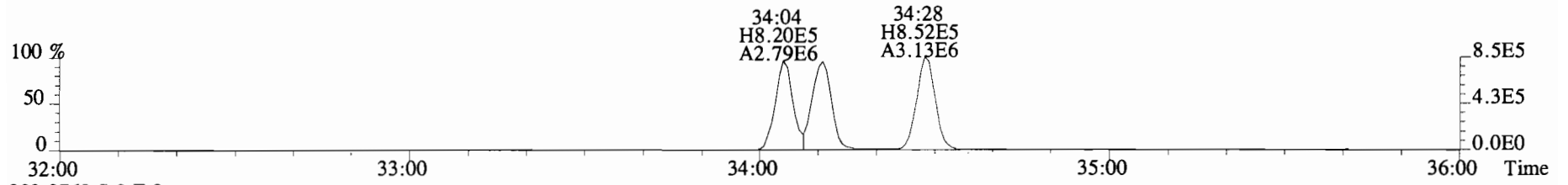
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



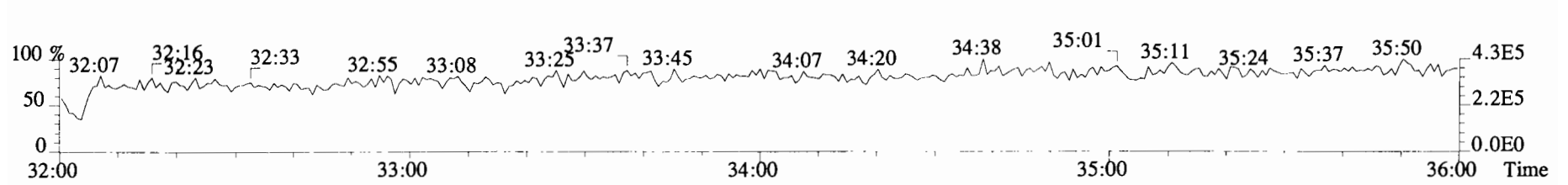
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



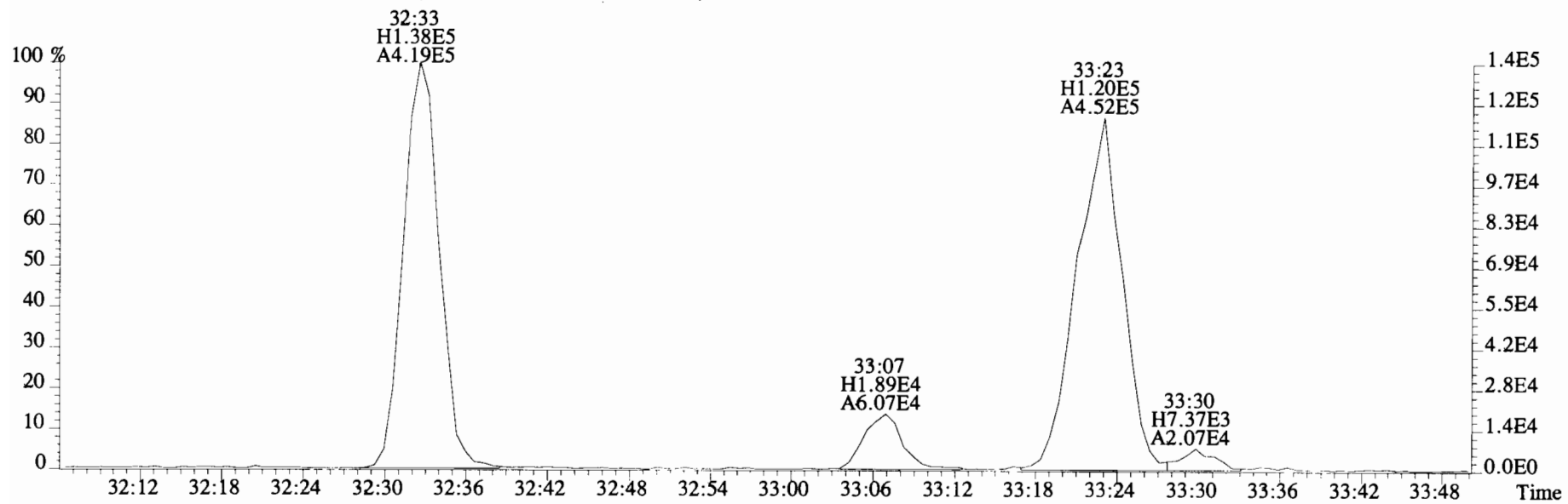
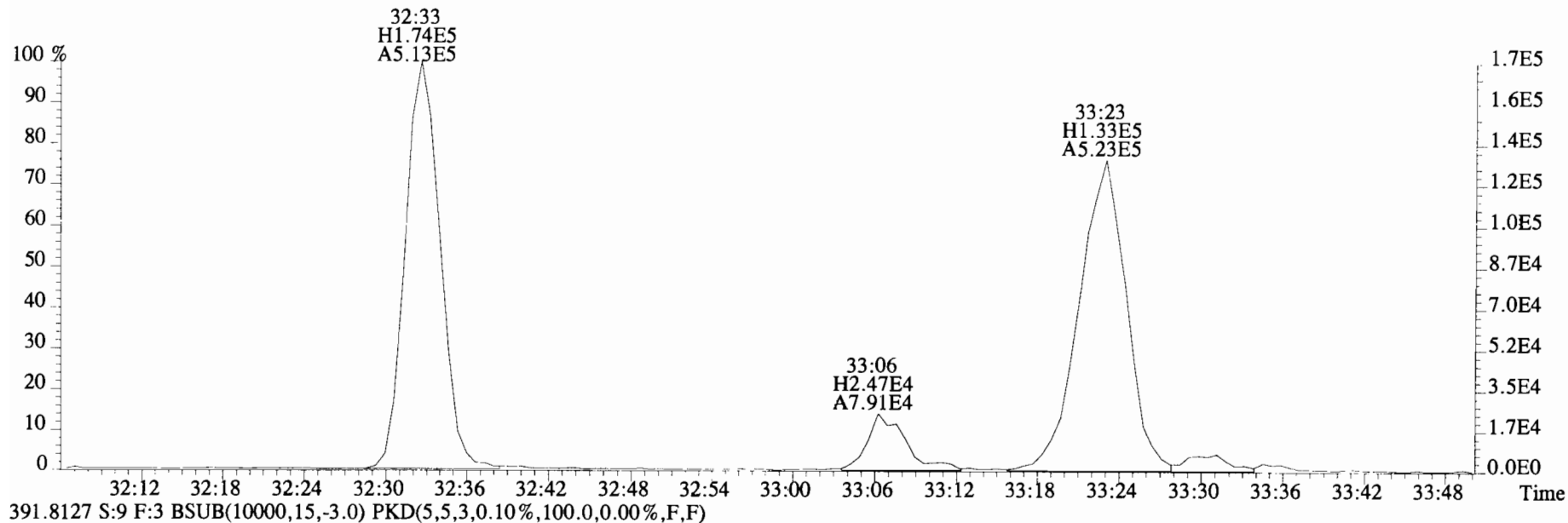
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



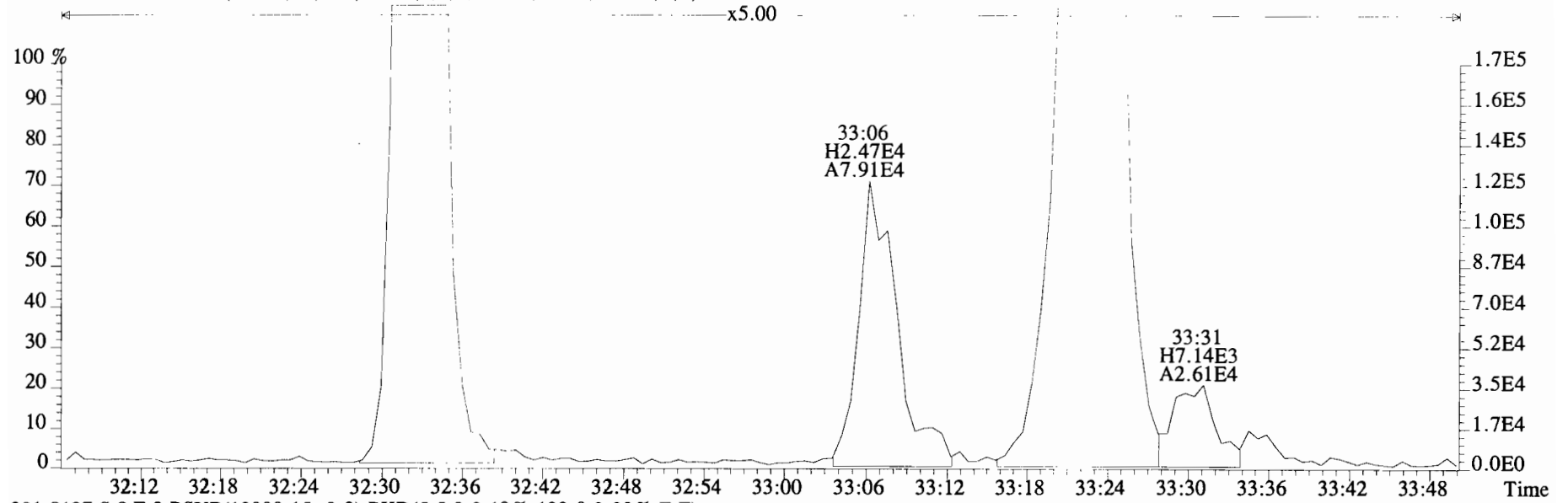
392.9760 S:9 F:3



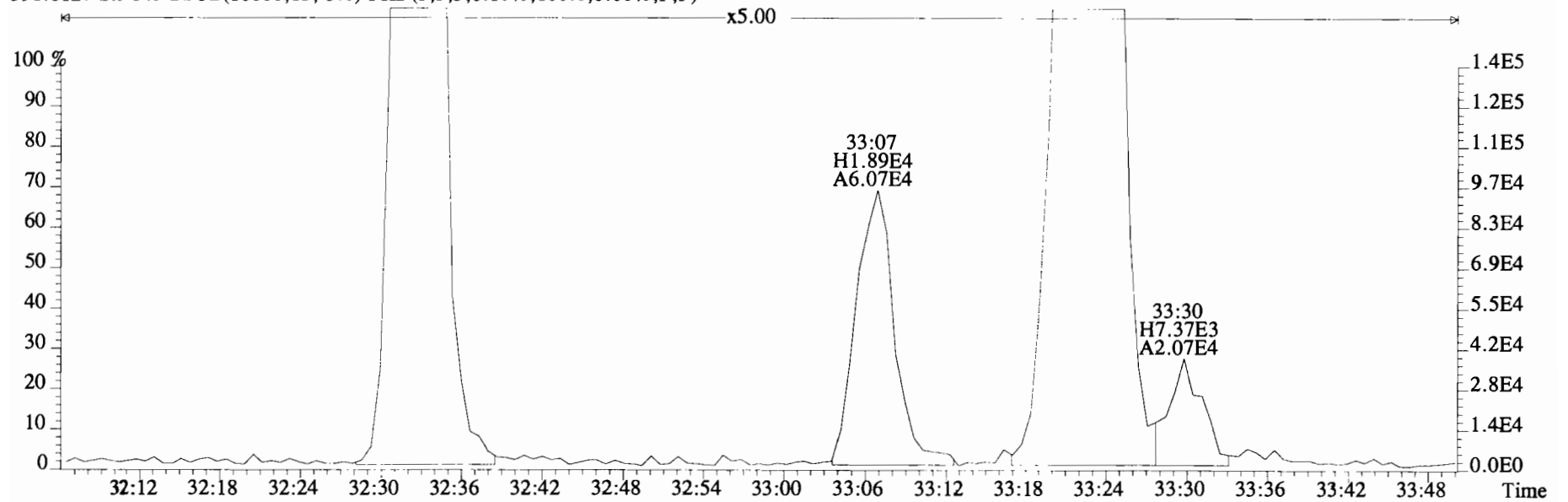
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



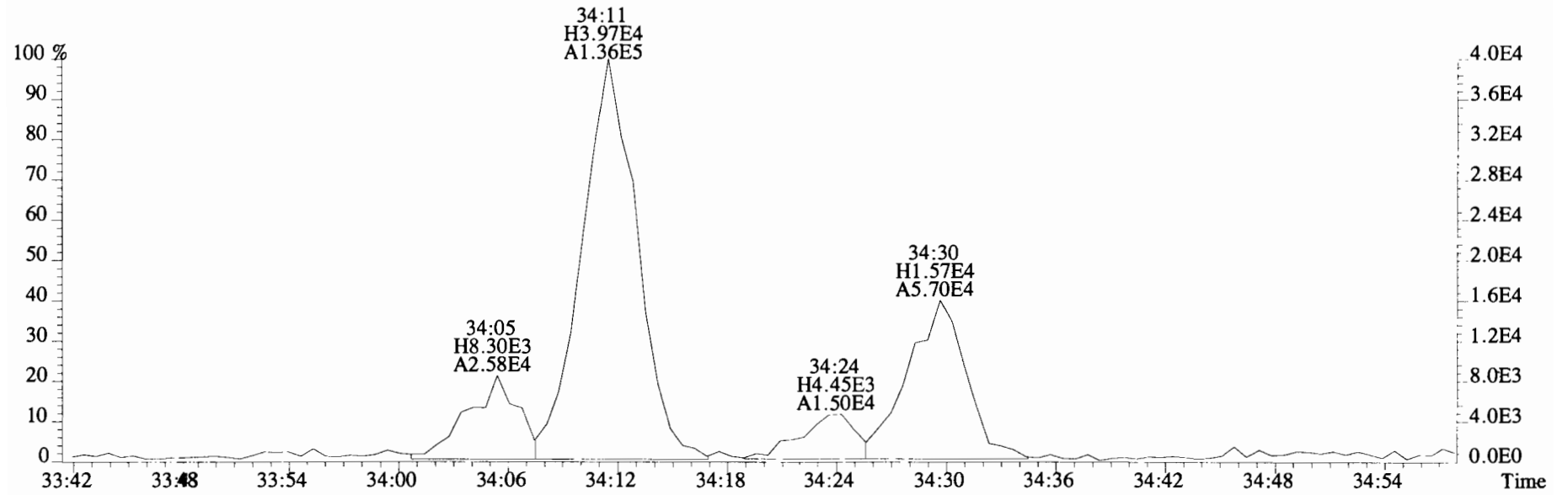
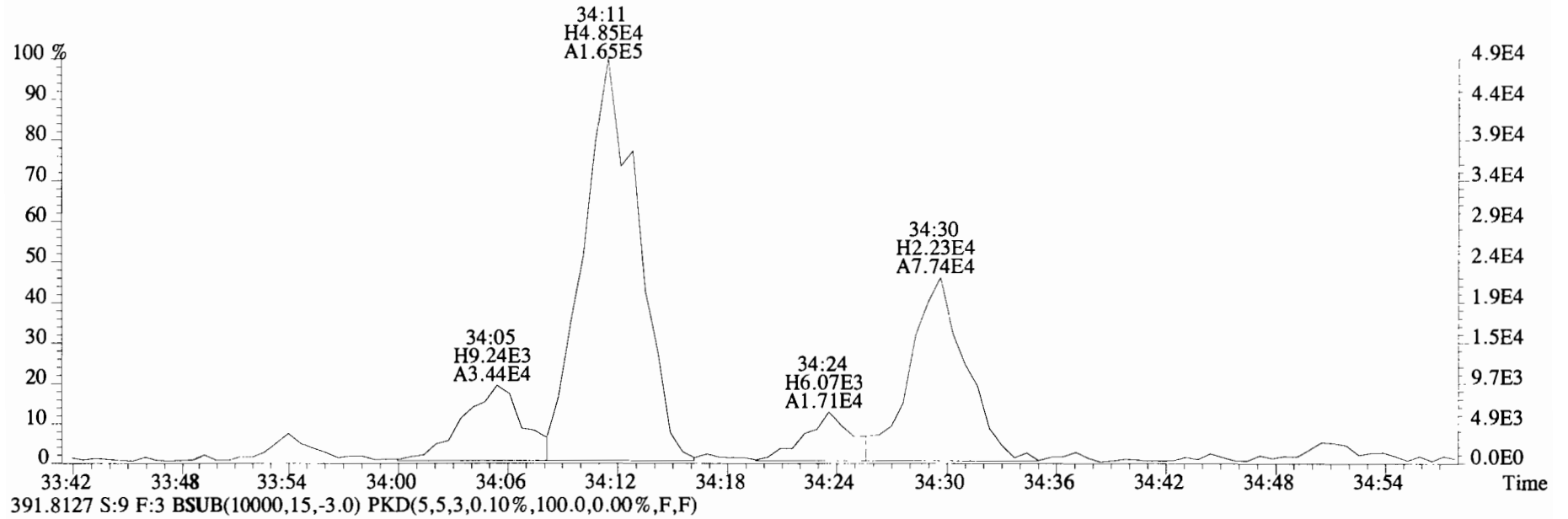
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



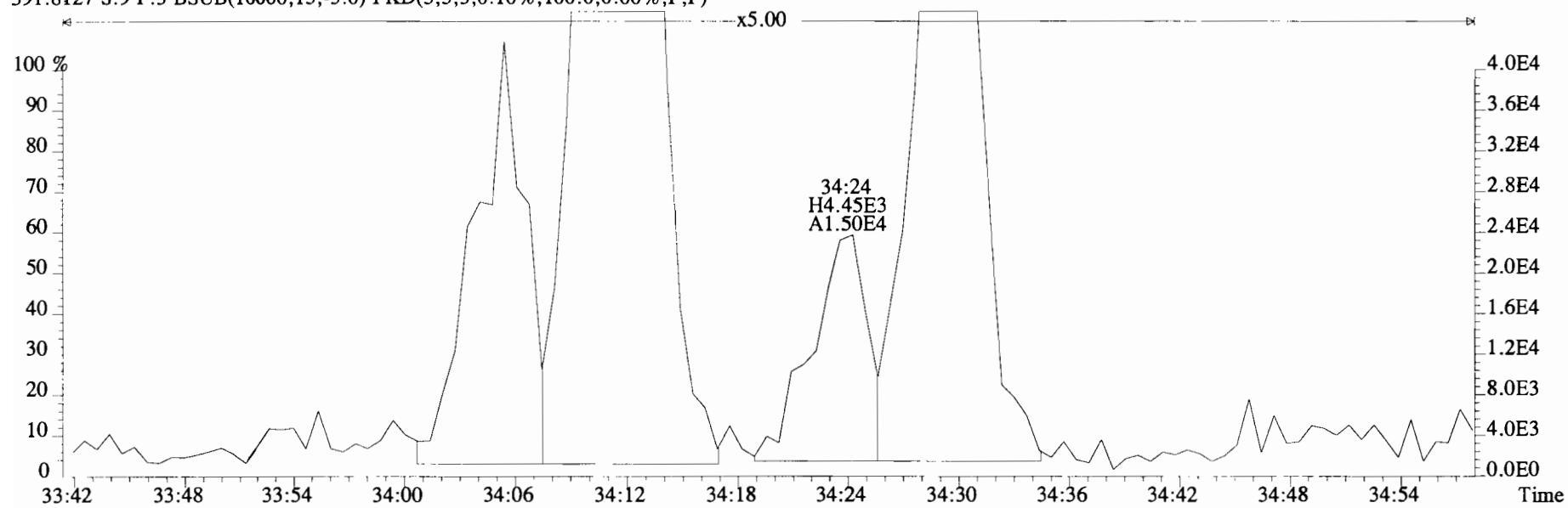
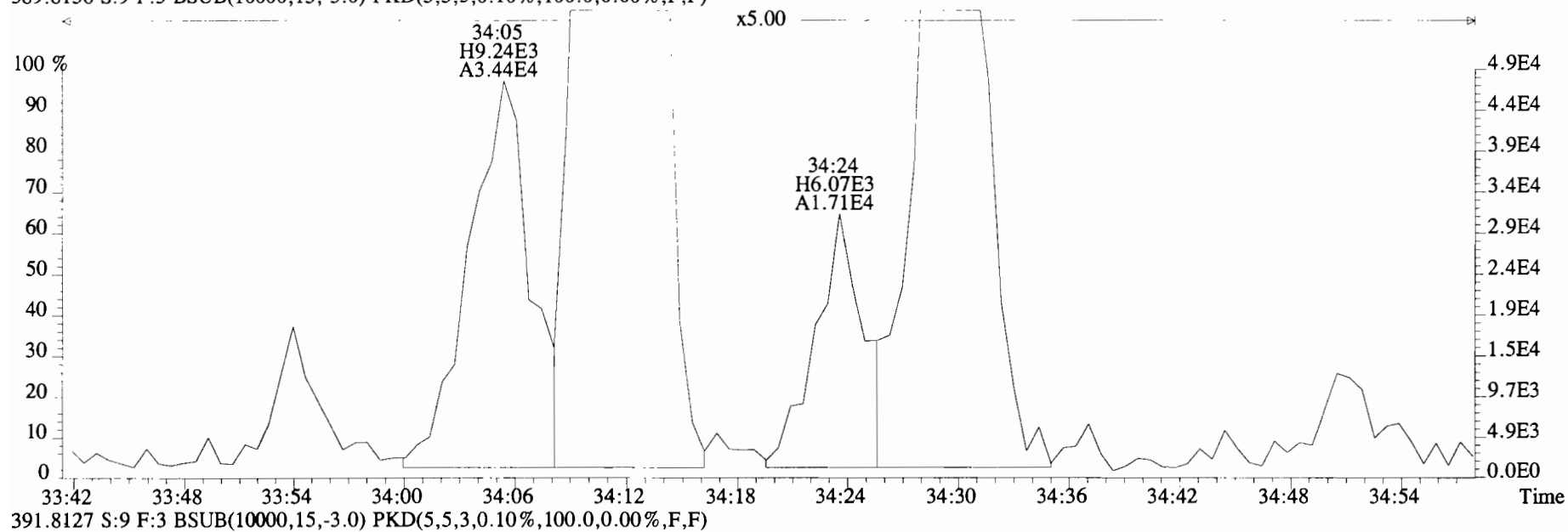
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



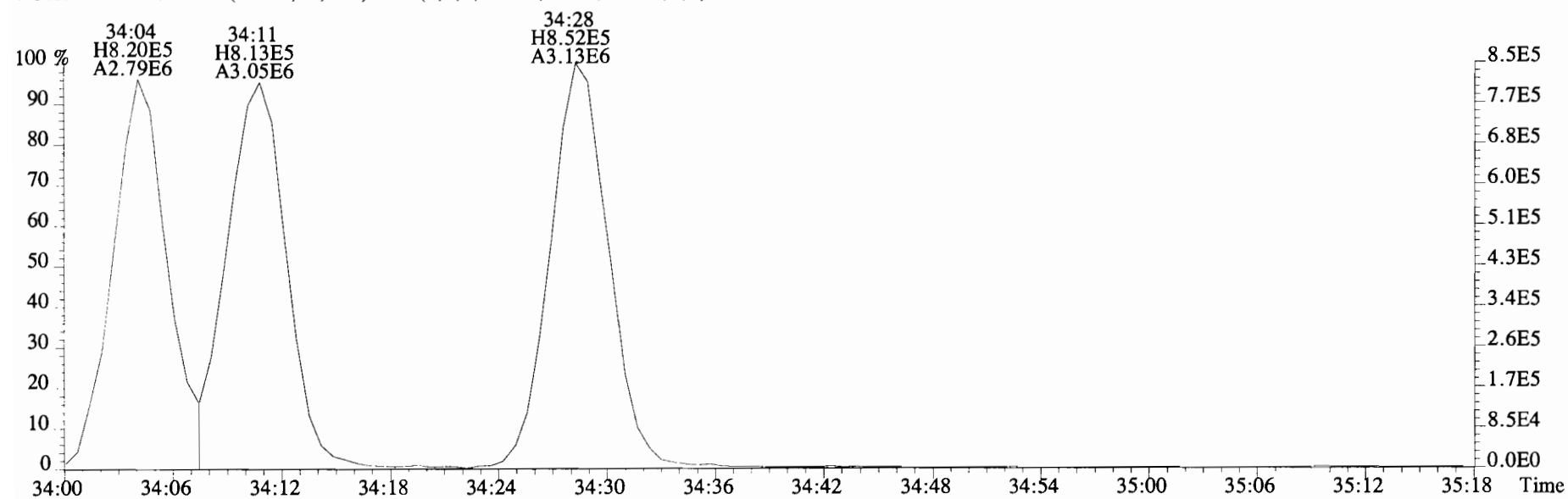
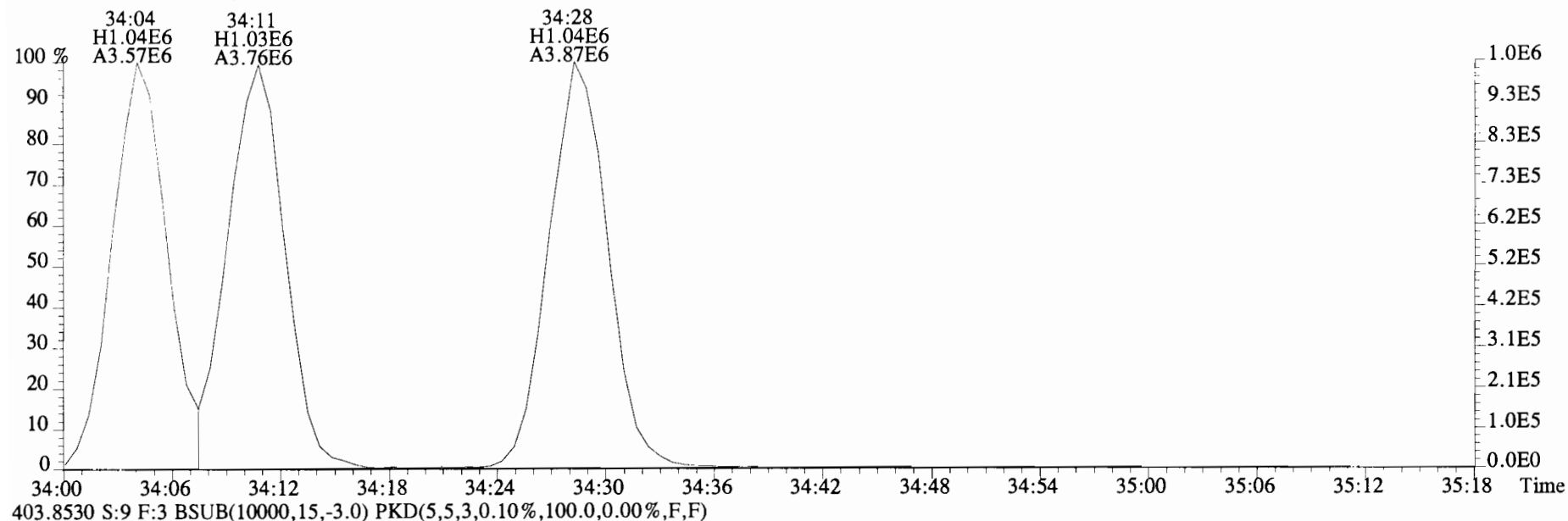
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



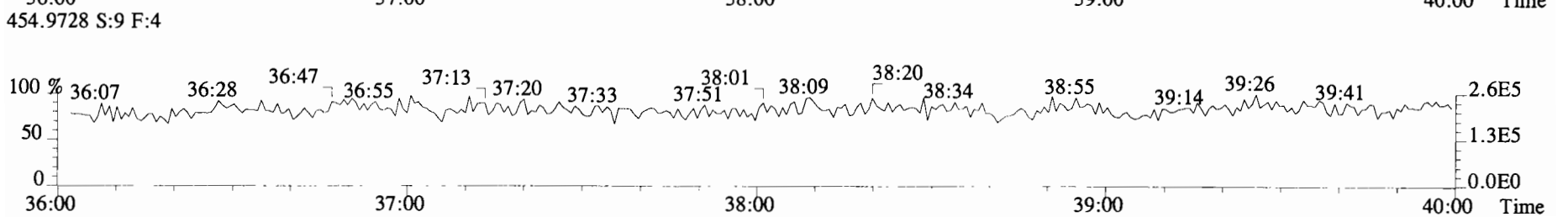
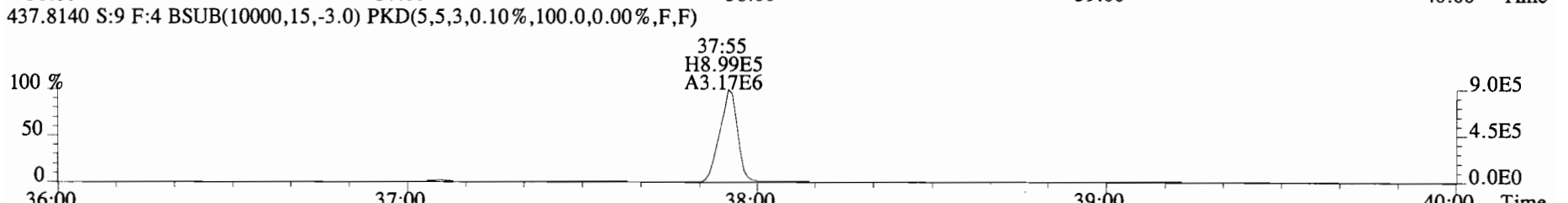
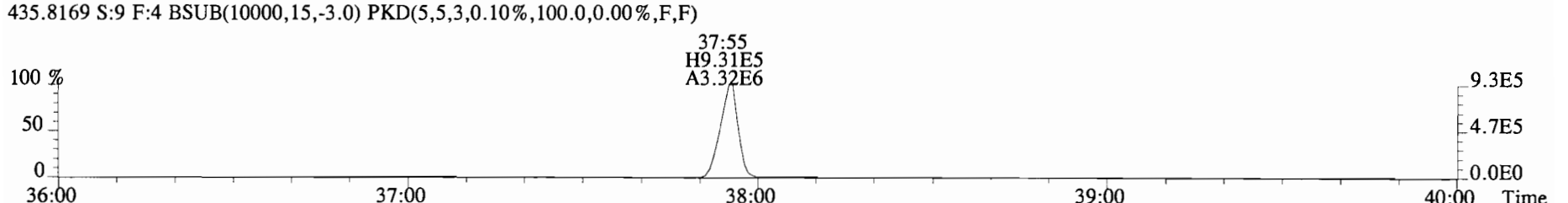
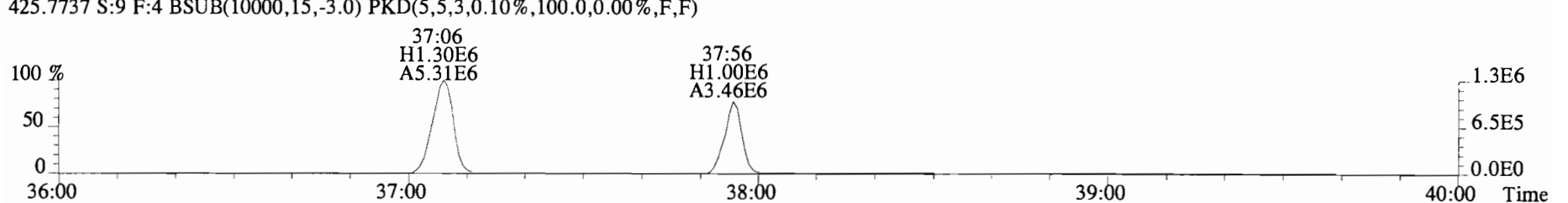
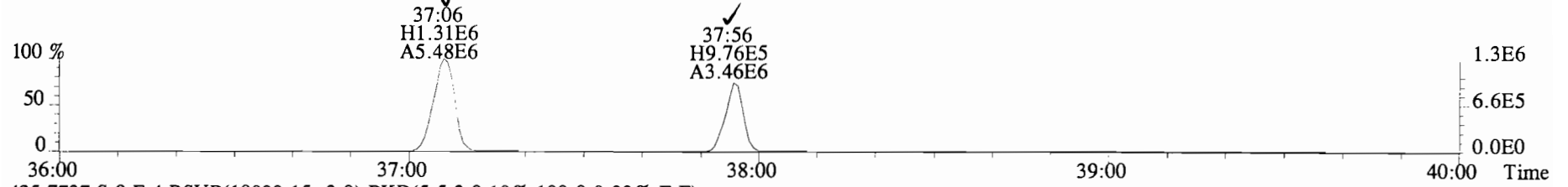
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



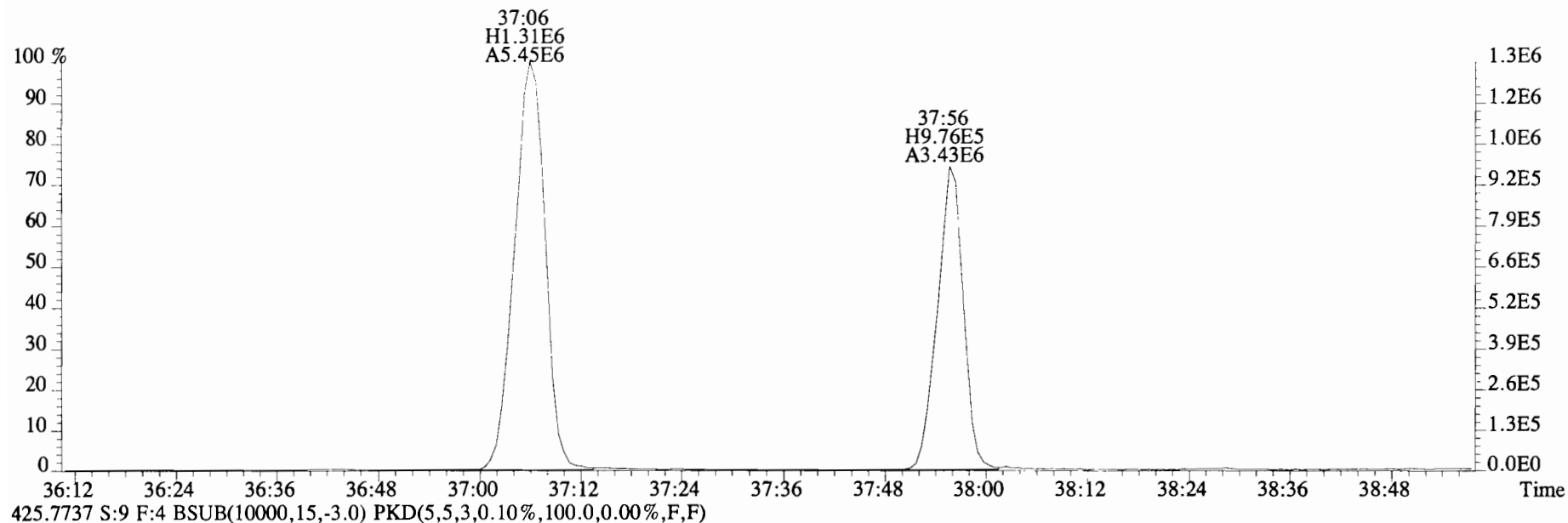
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



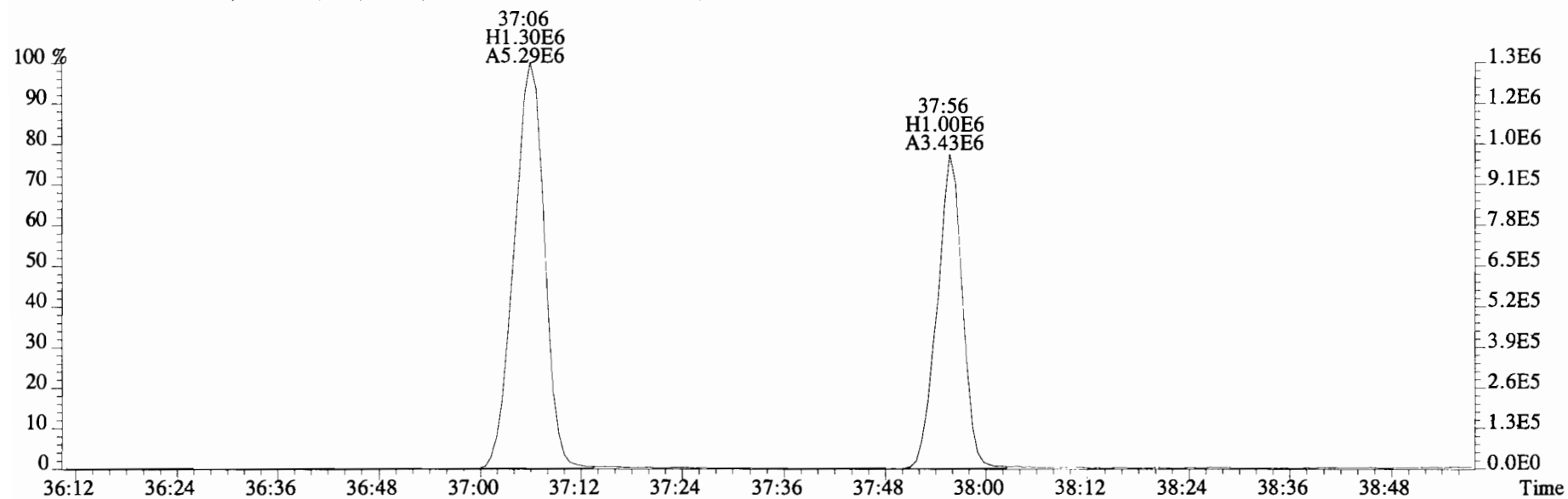
File:191031D2 #1-355 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



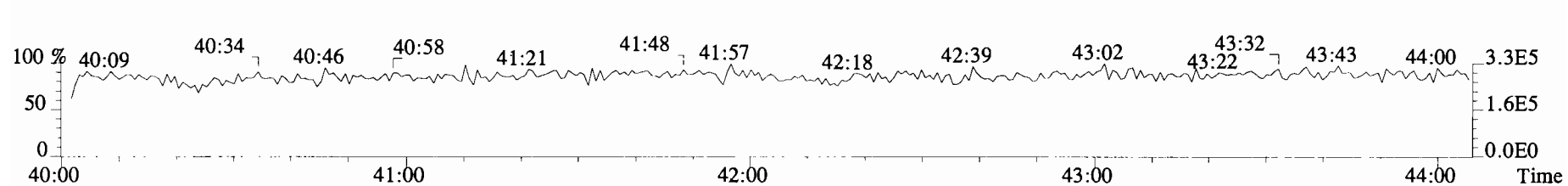
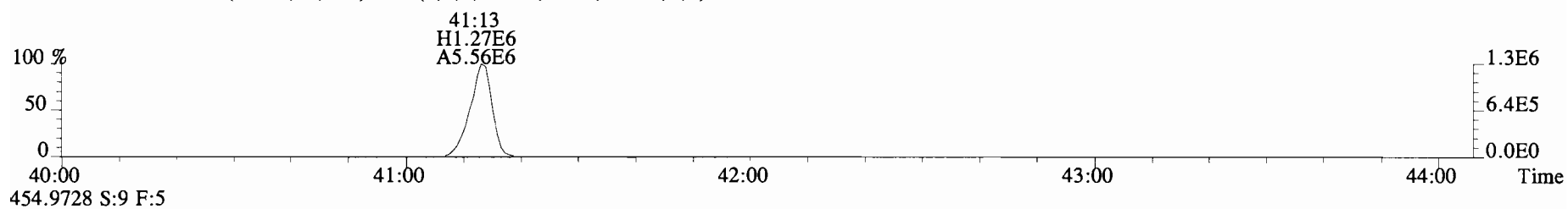
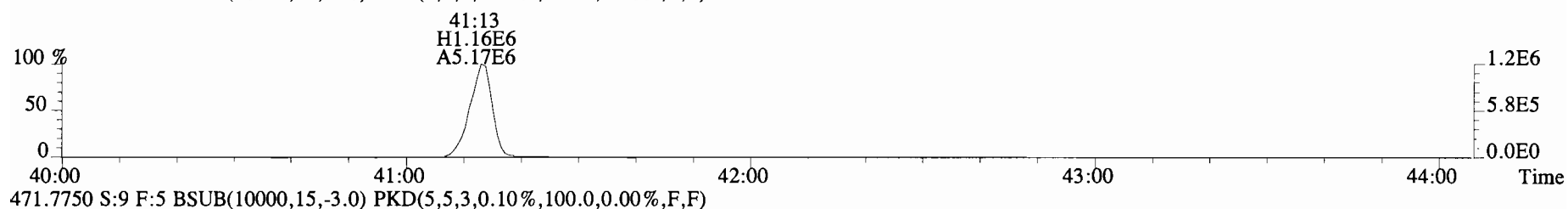
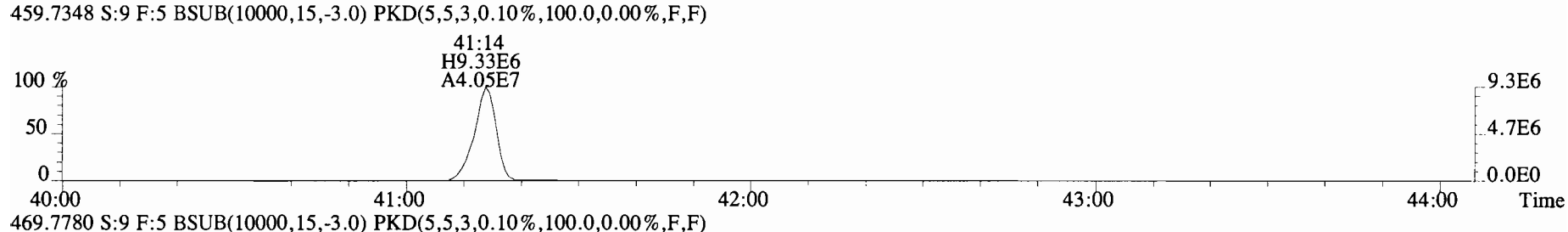
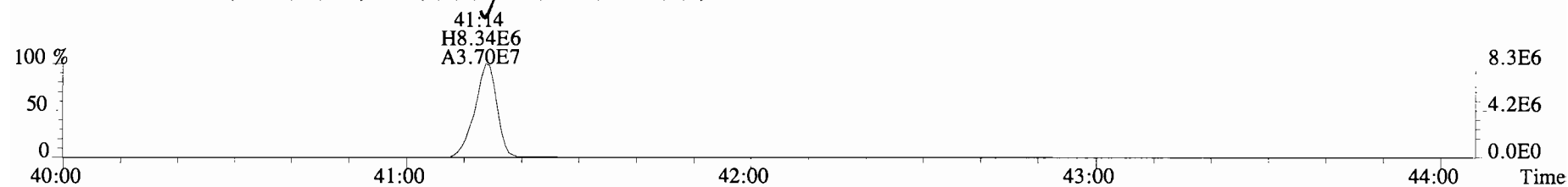
File:191031D2 #1-355 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



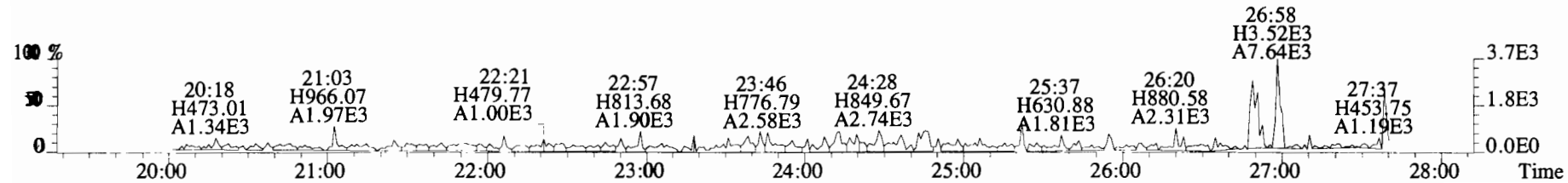
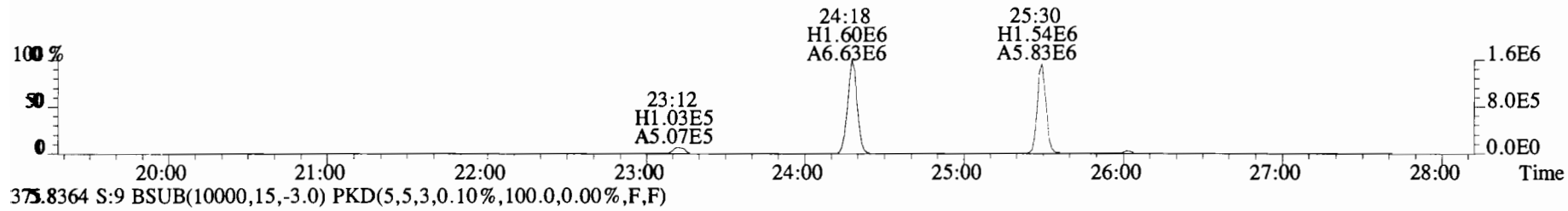
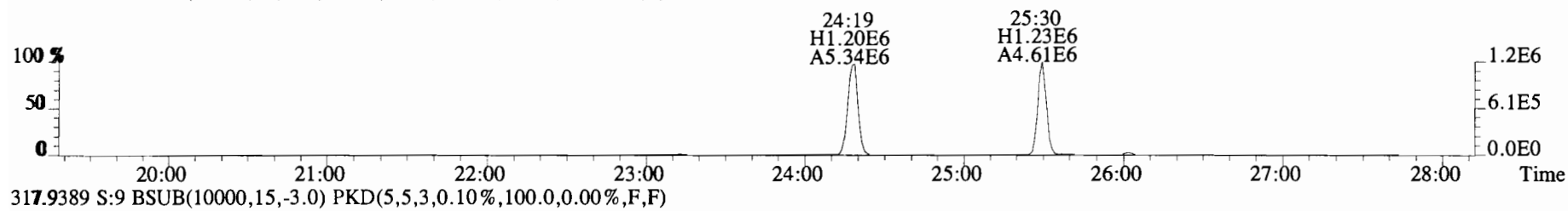
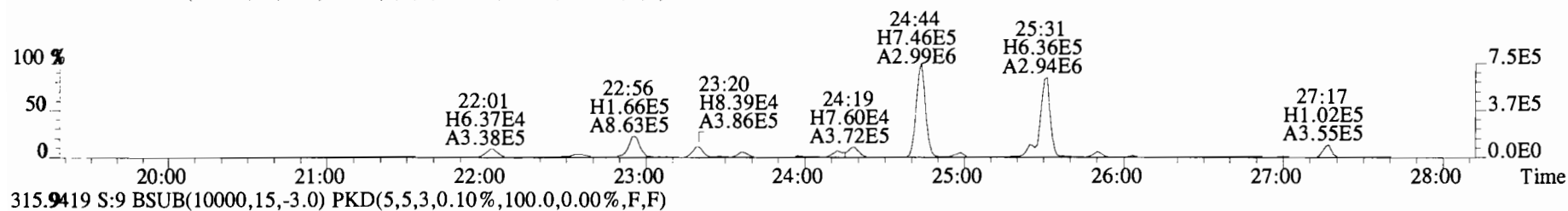
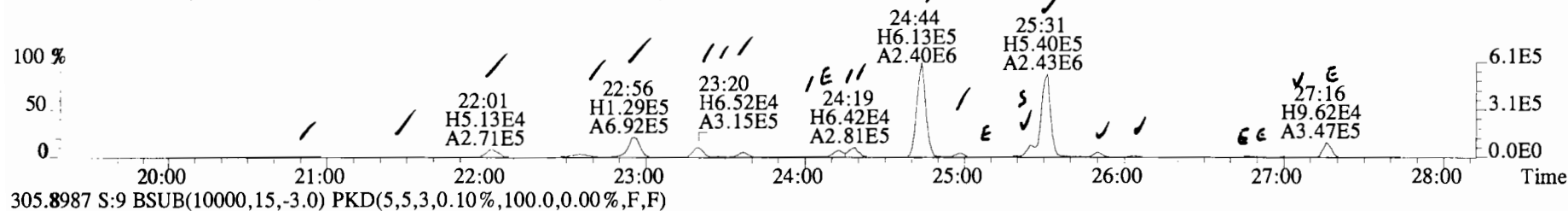
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



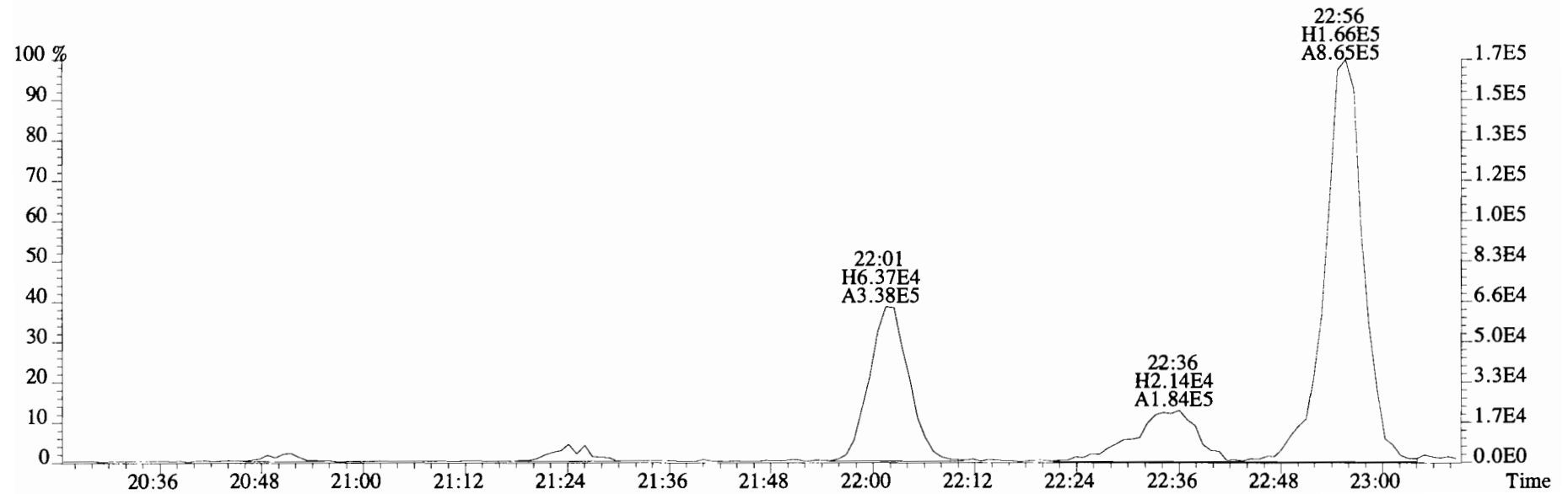
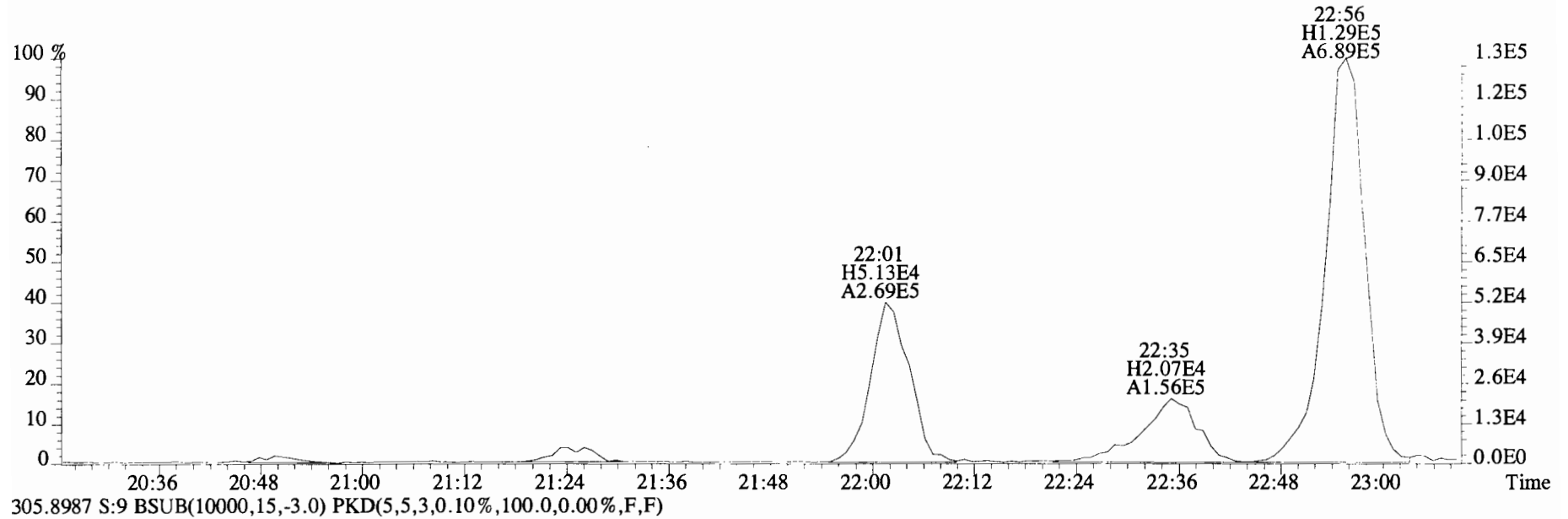
File:191031D2 #1-432 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B910288-DUP1 Duplicate 17 Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



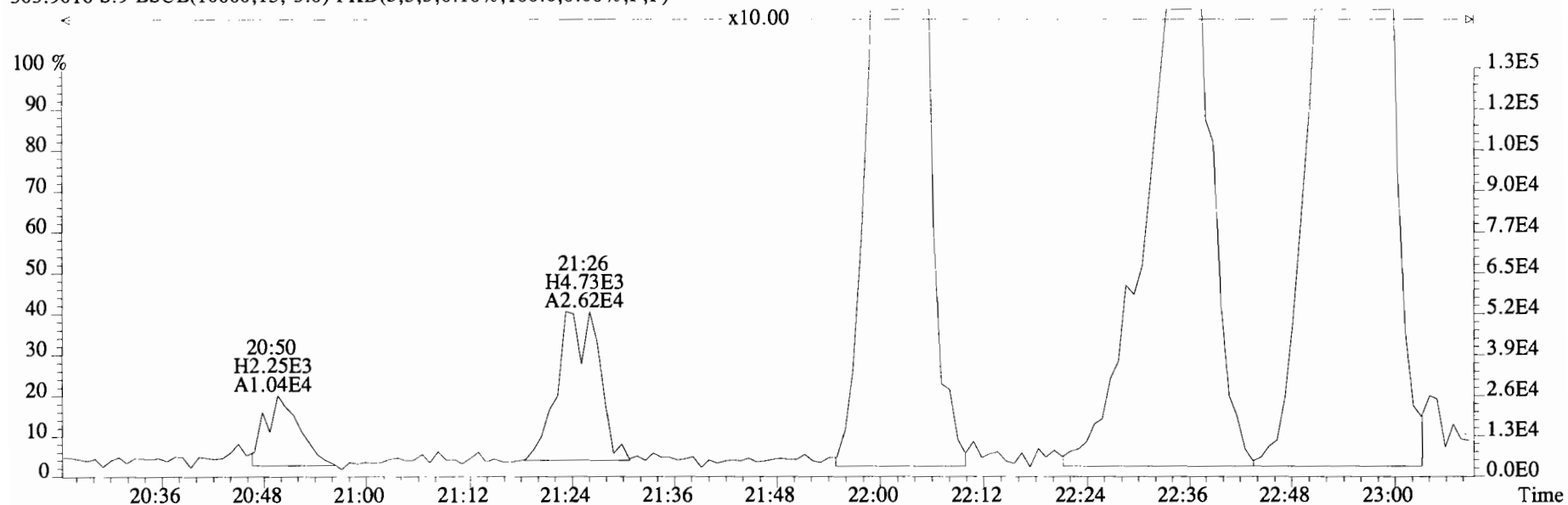
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



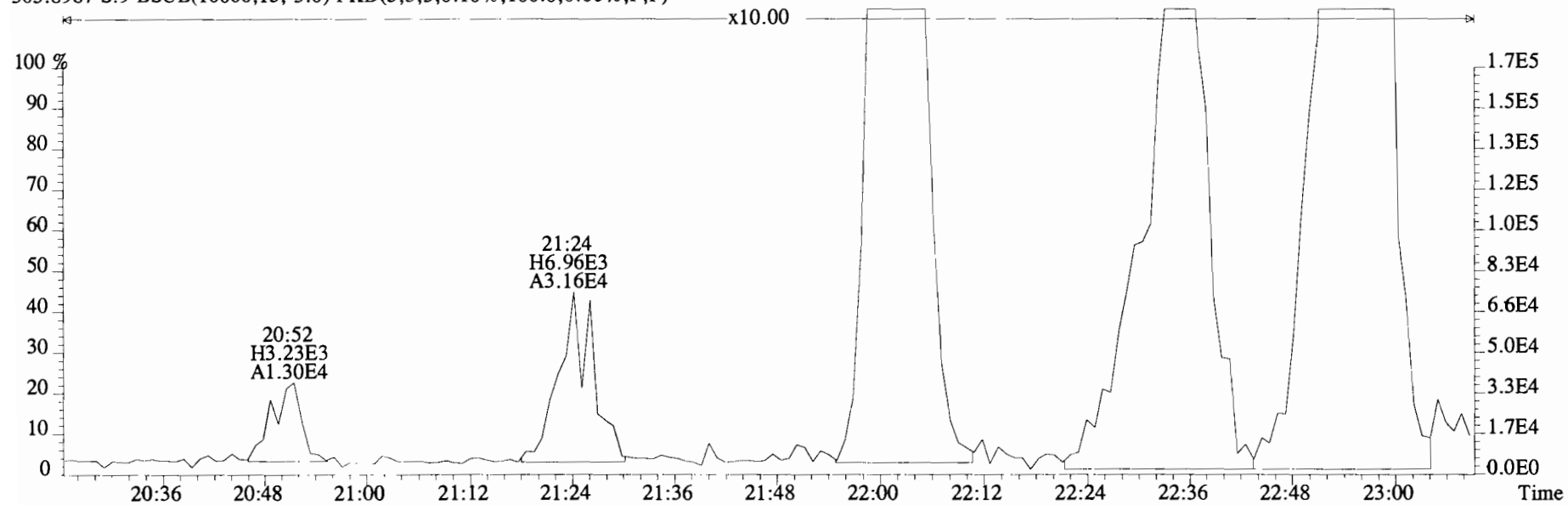
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



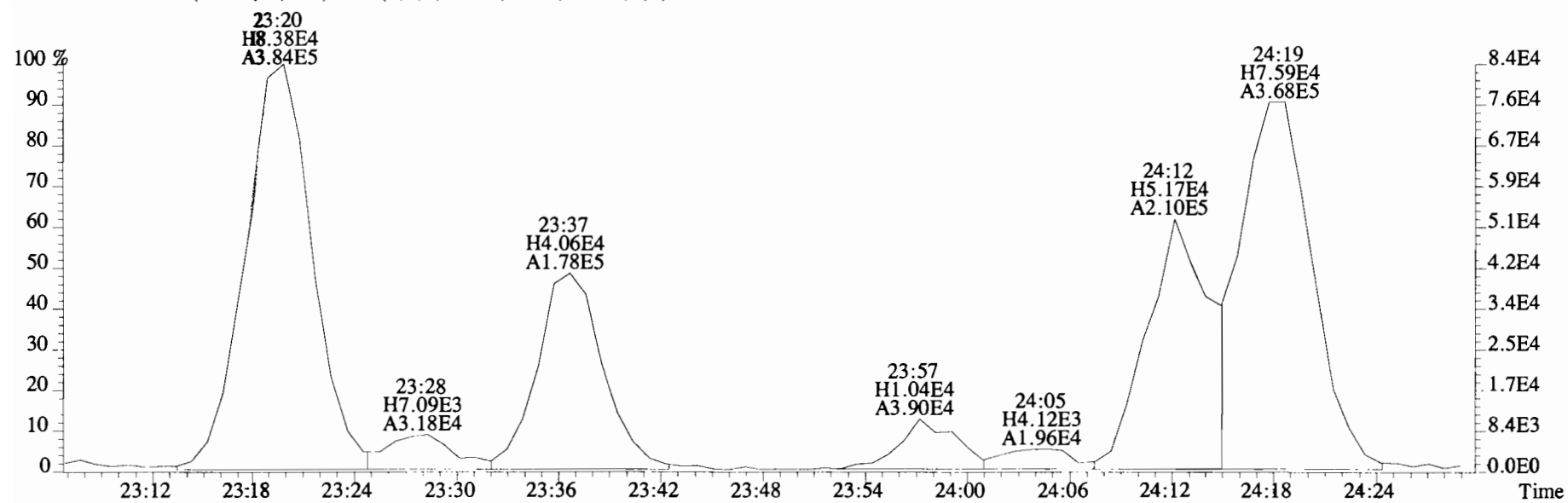
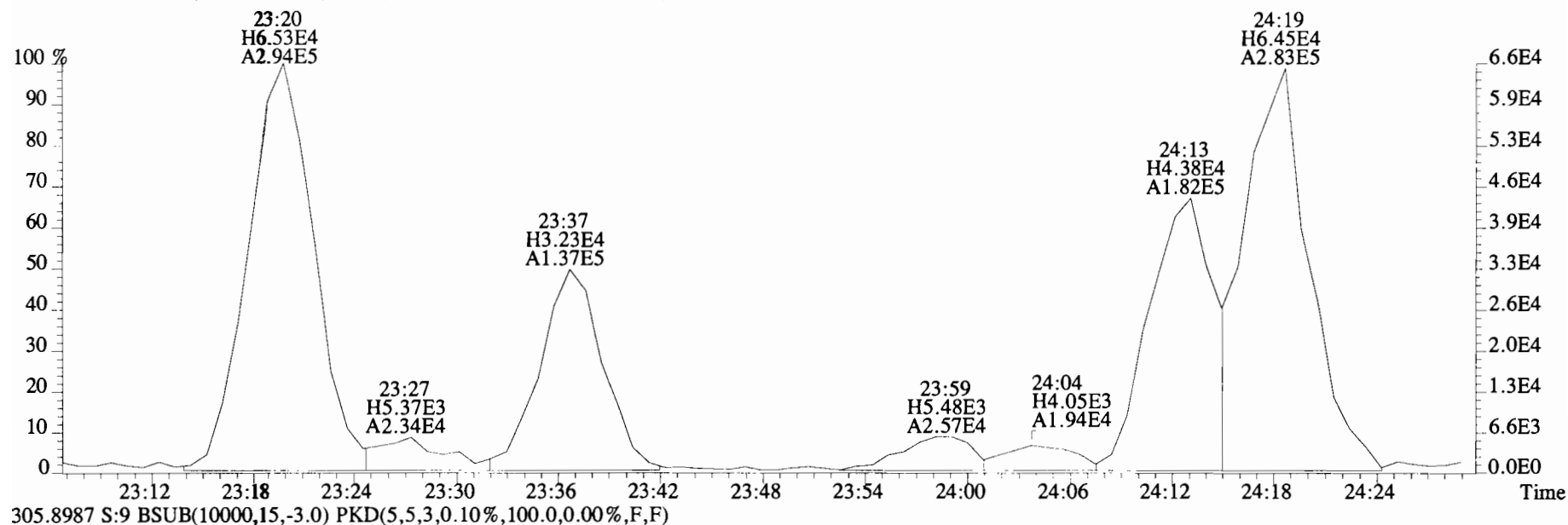
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



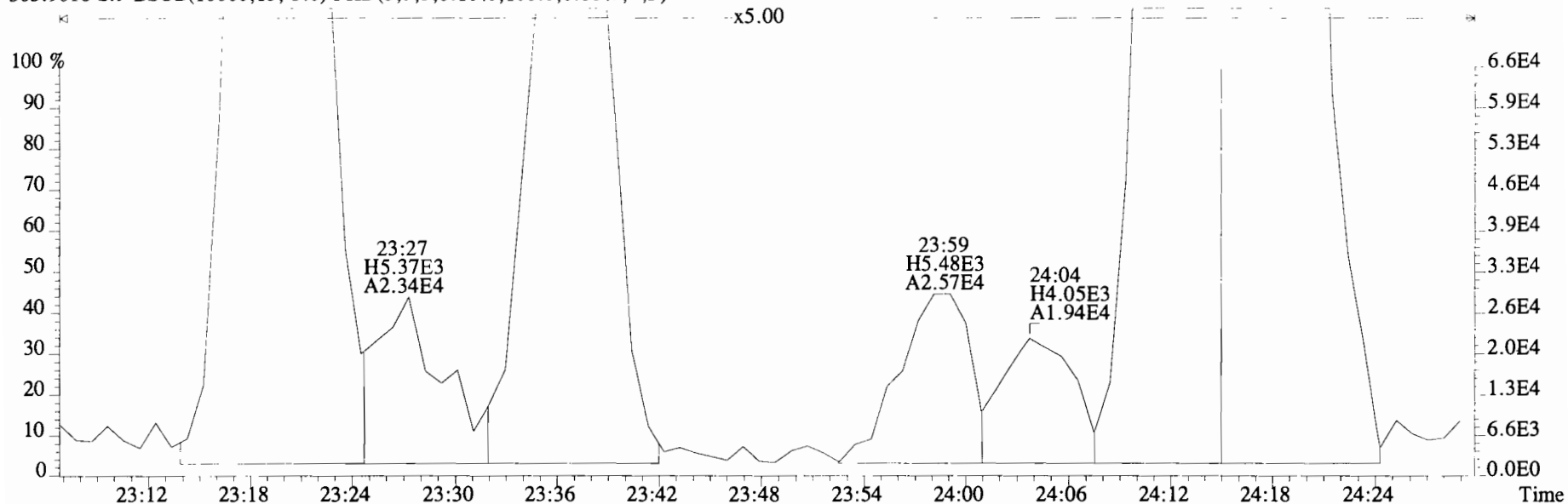
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



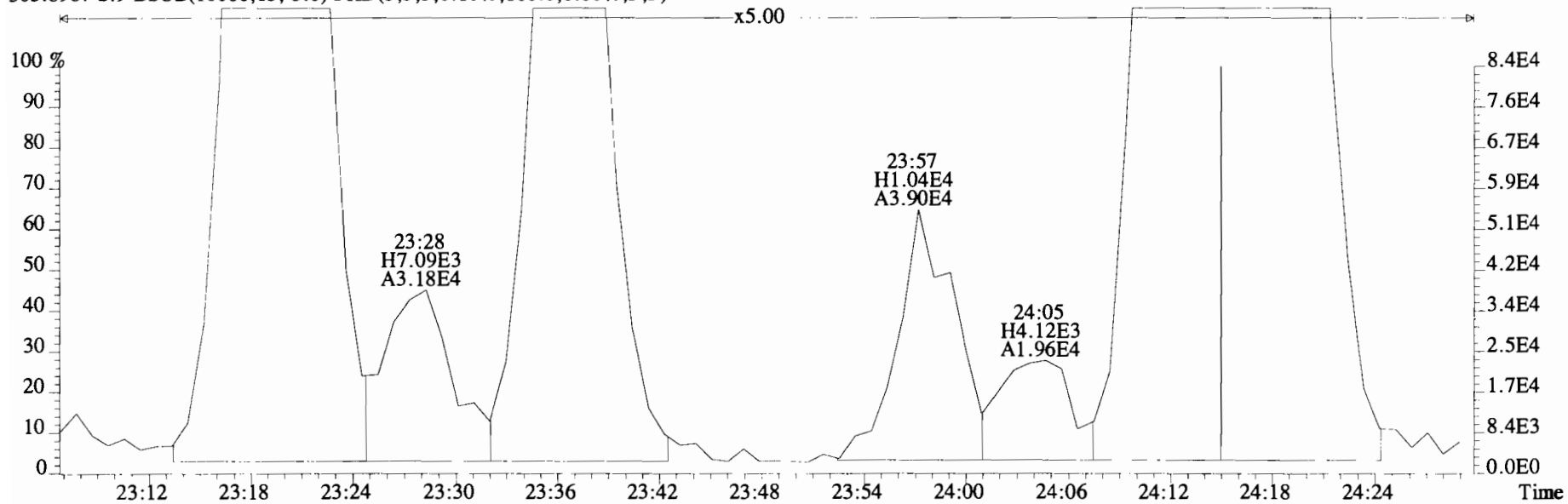
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



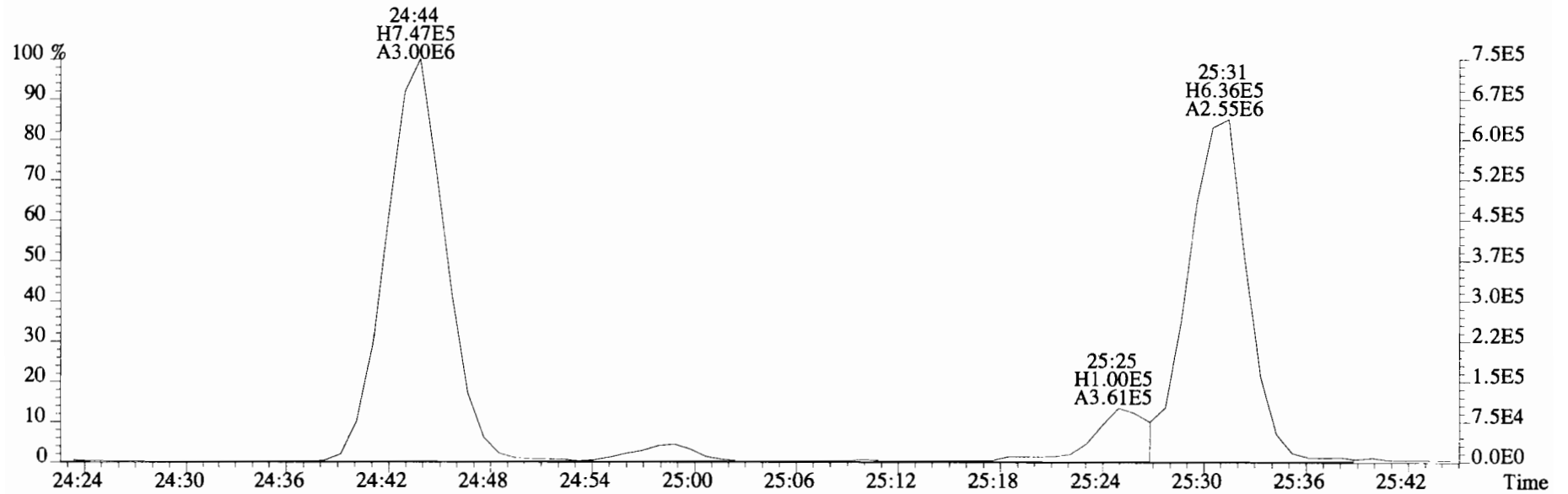
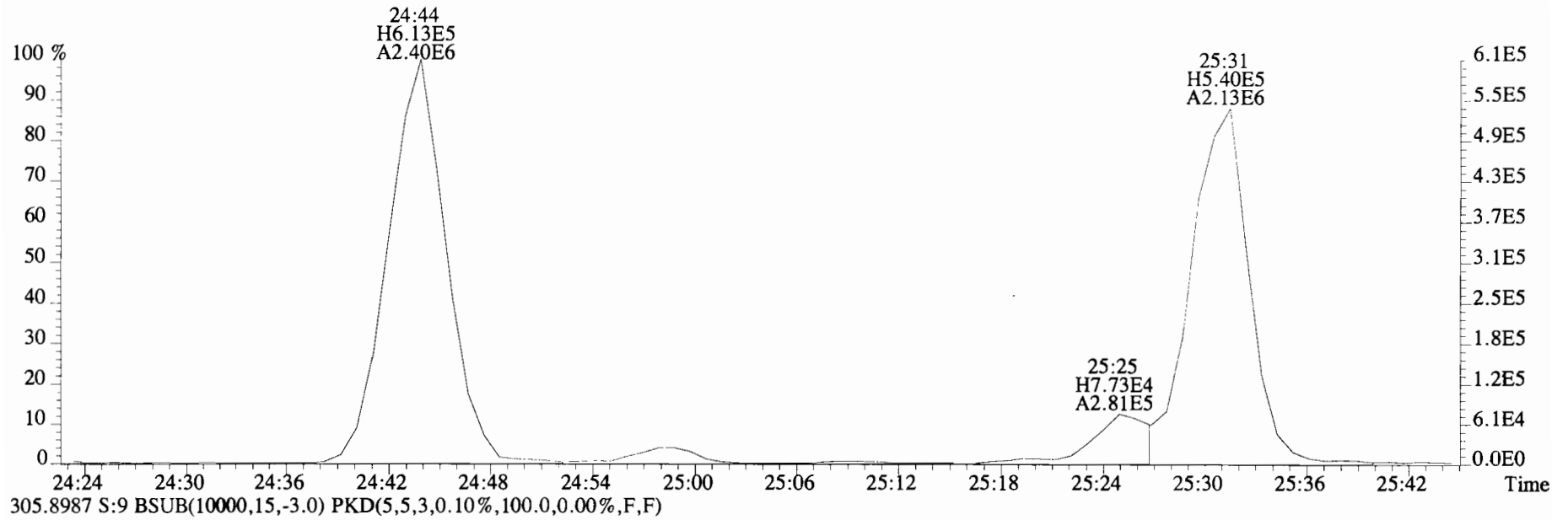
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



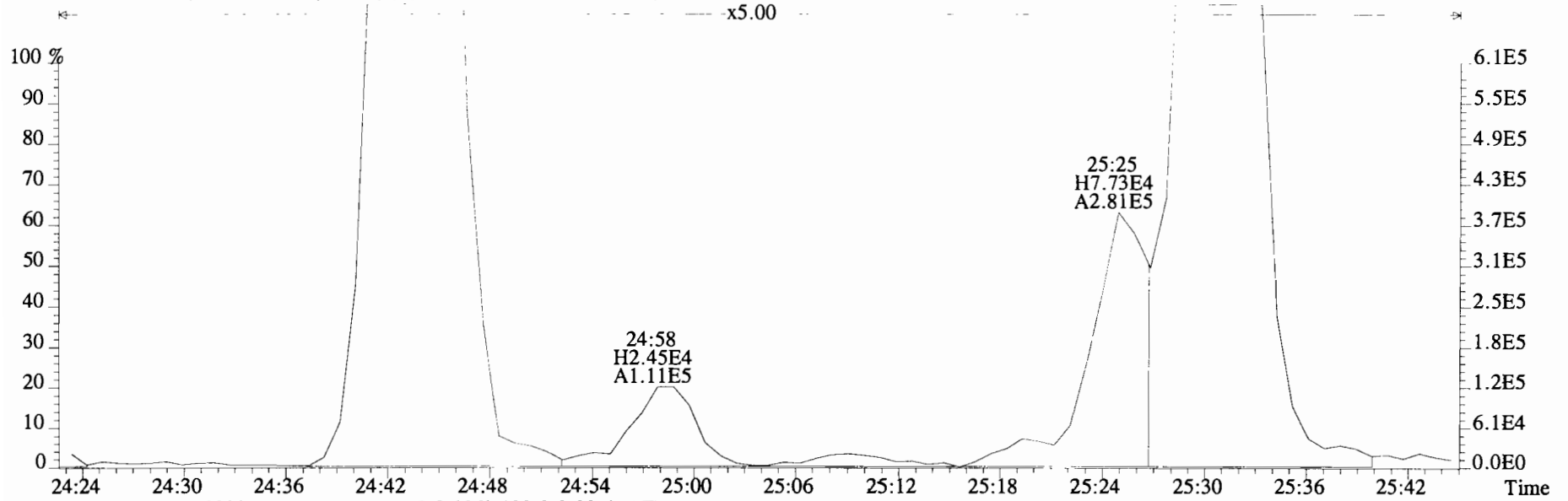
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



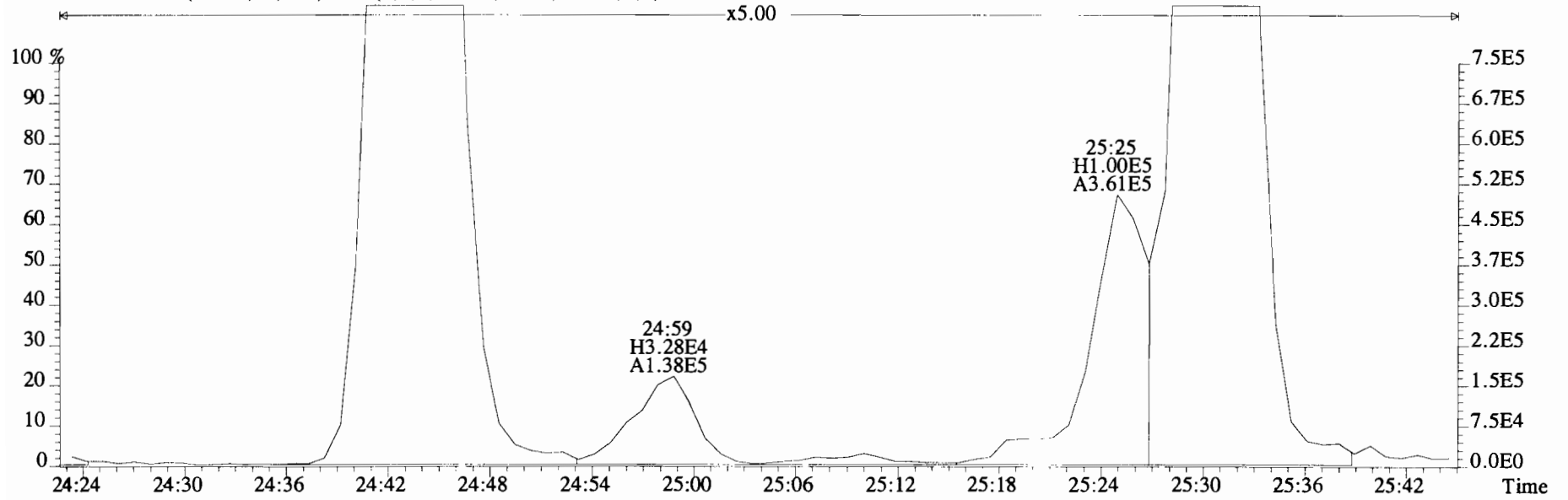
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



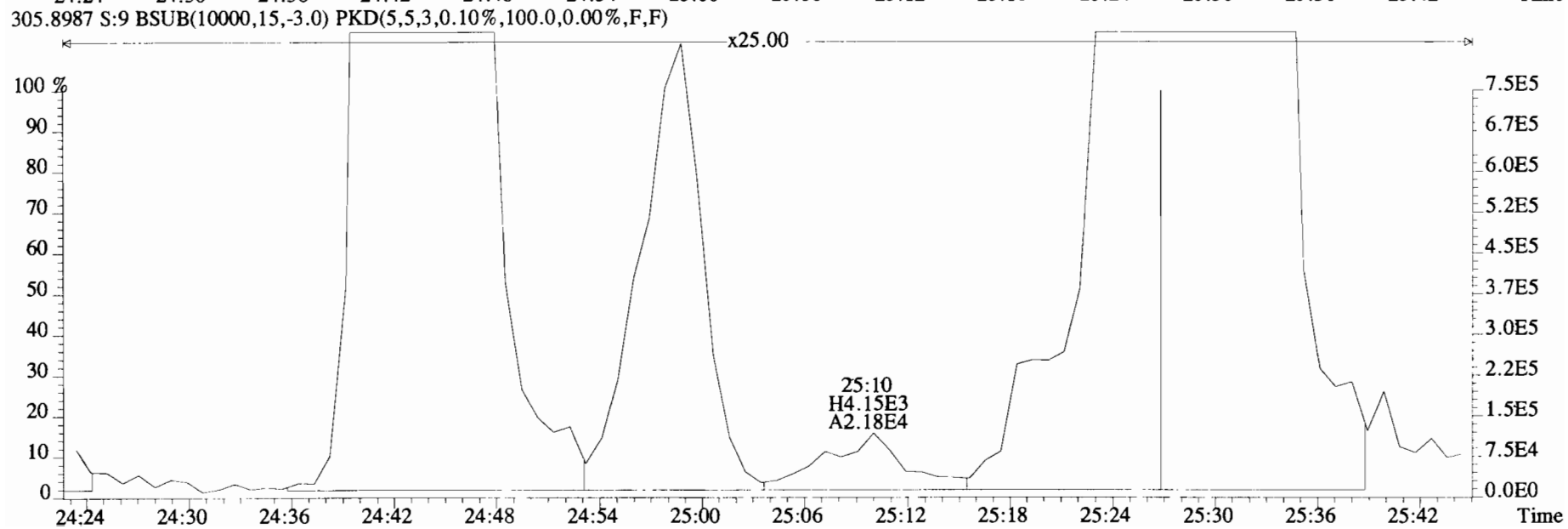
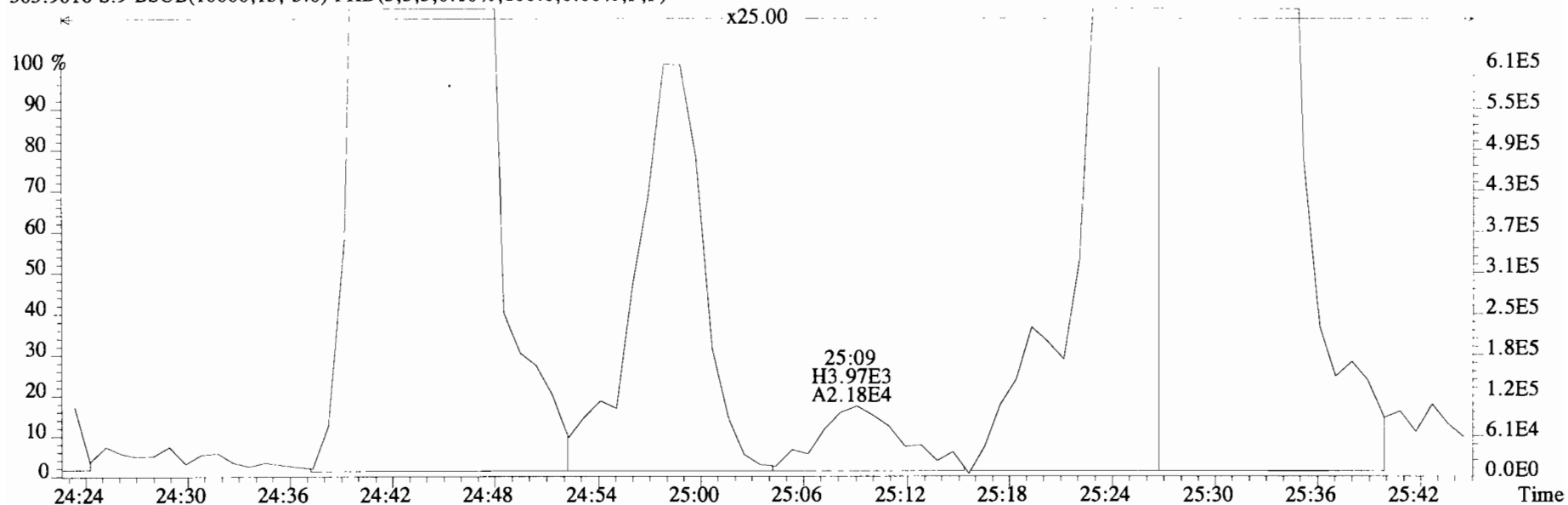
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



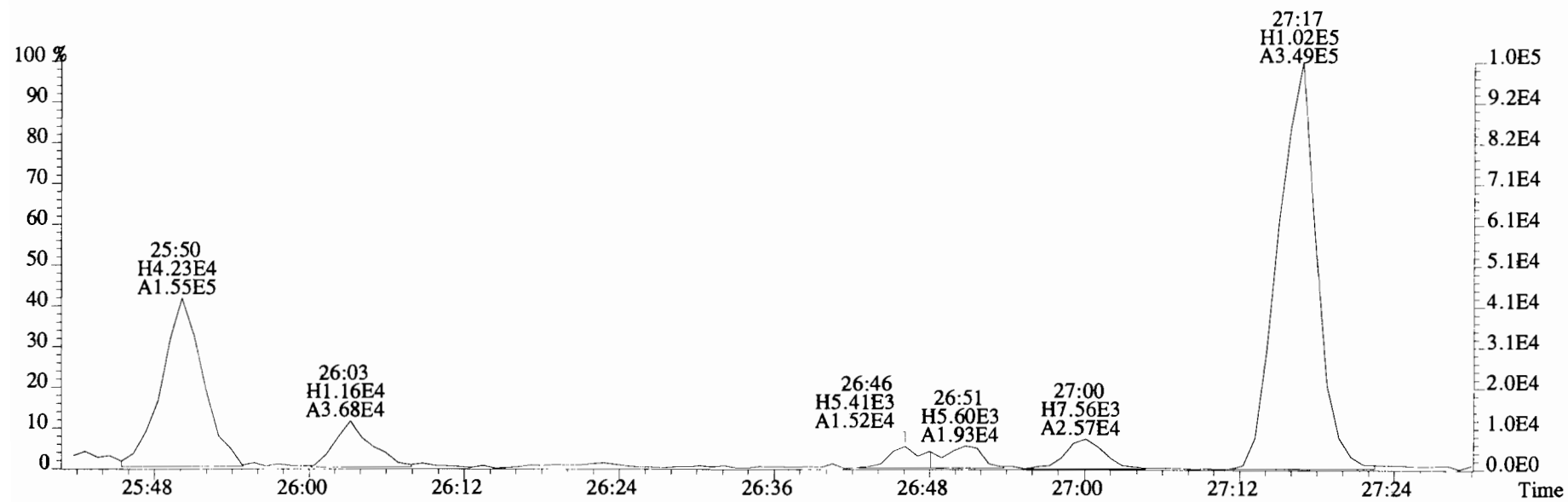
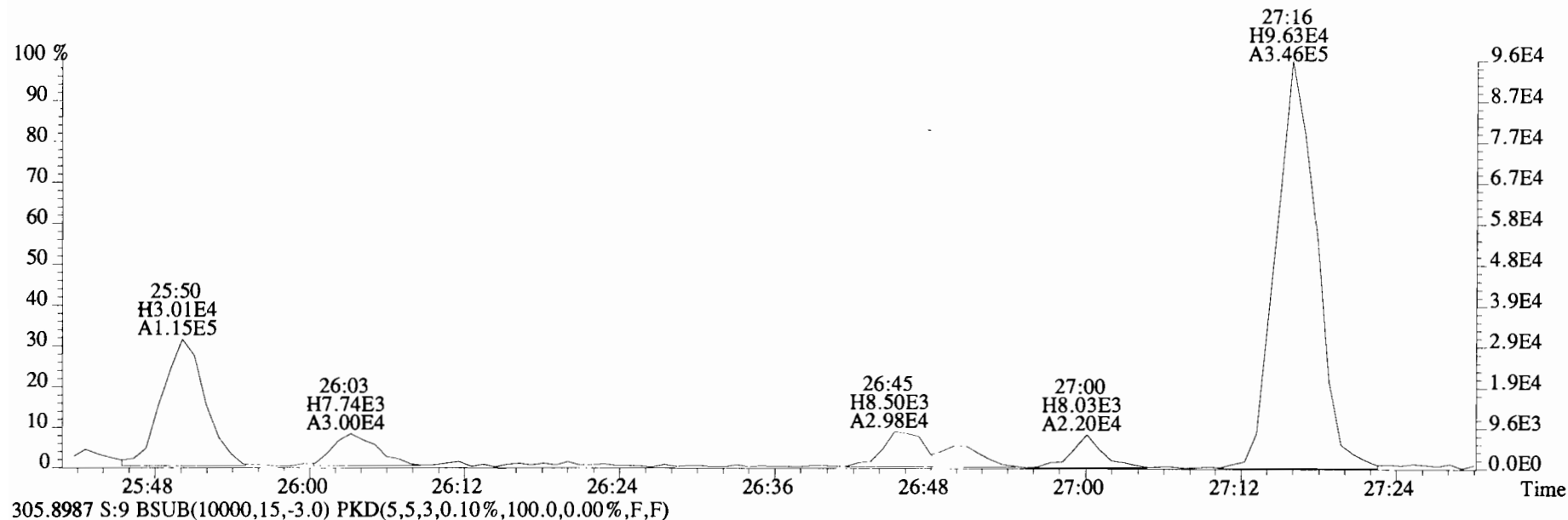
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



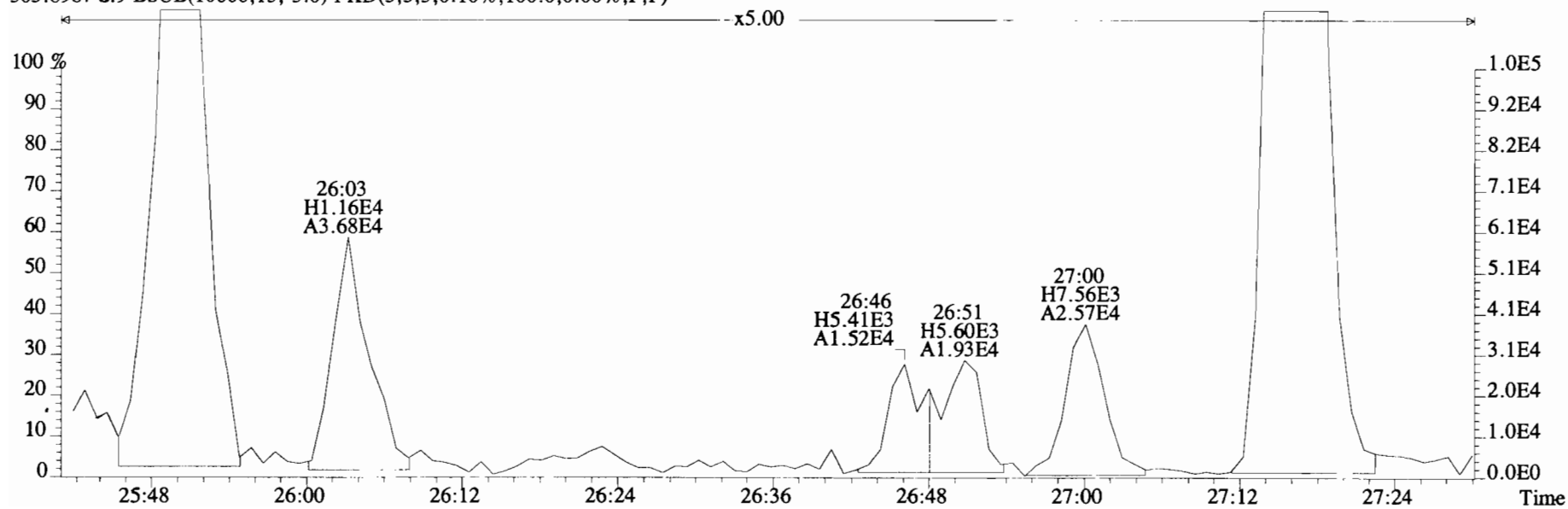
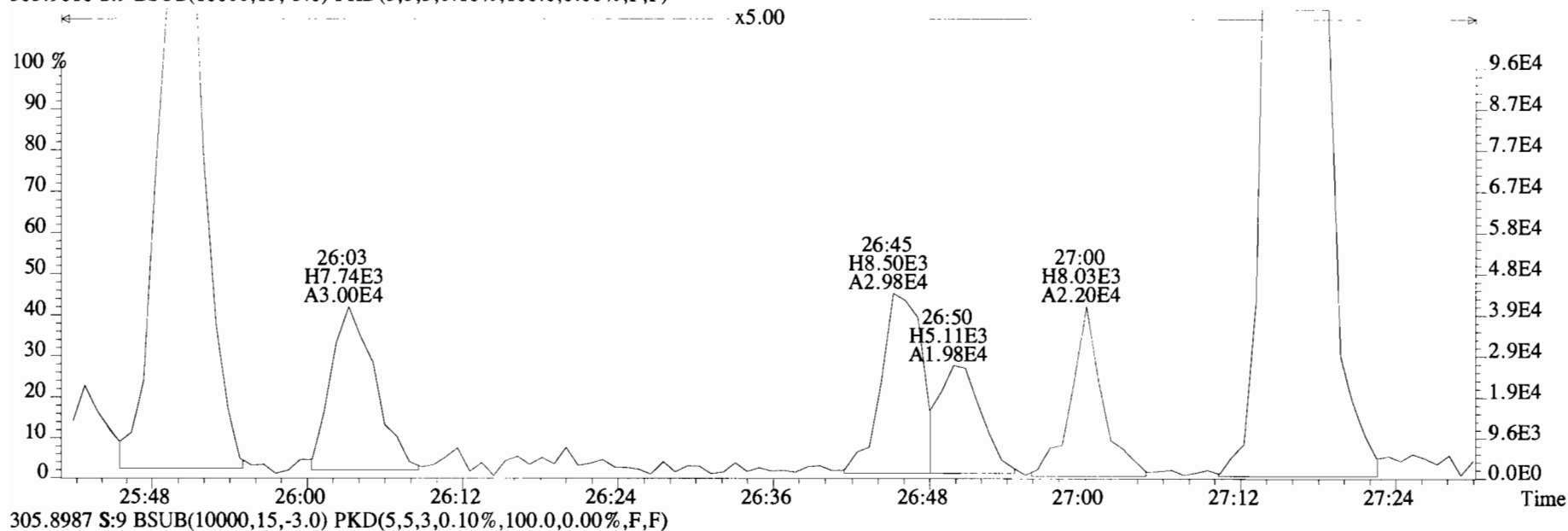
File: 191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text: Viata Analytical Laboratory VG7 Text: B9J0288-DUP1 Duplicate 17 Exp: OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



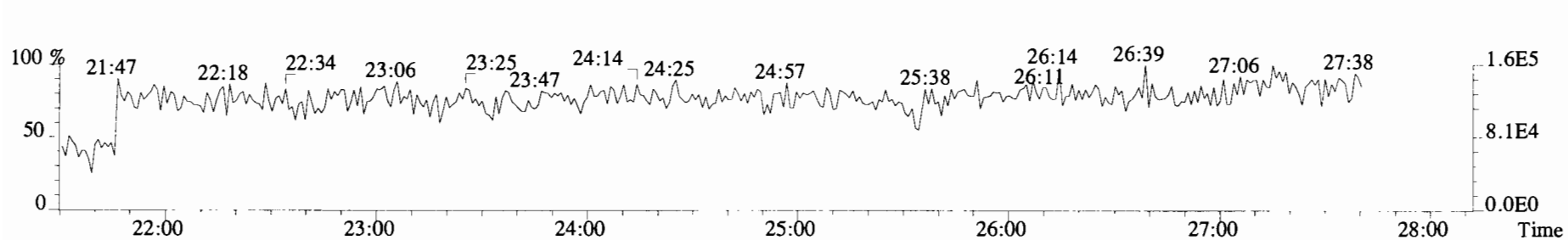
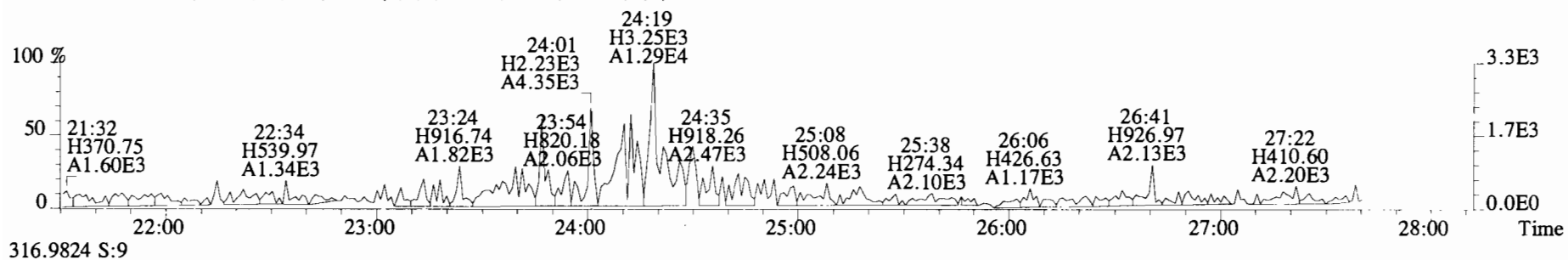
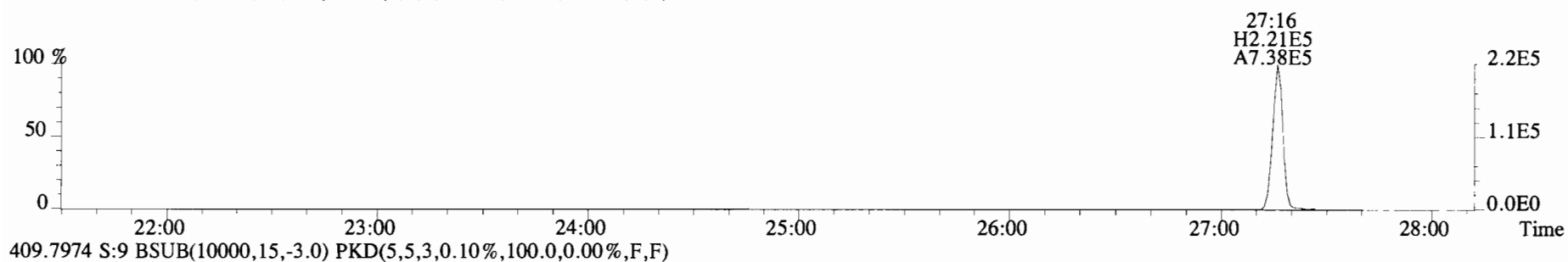
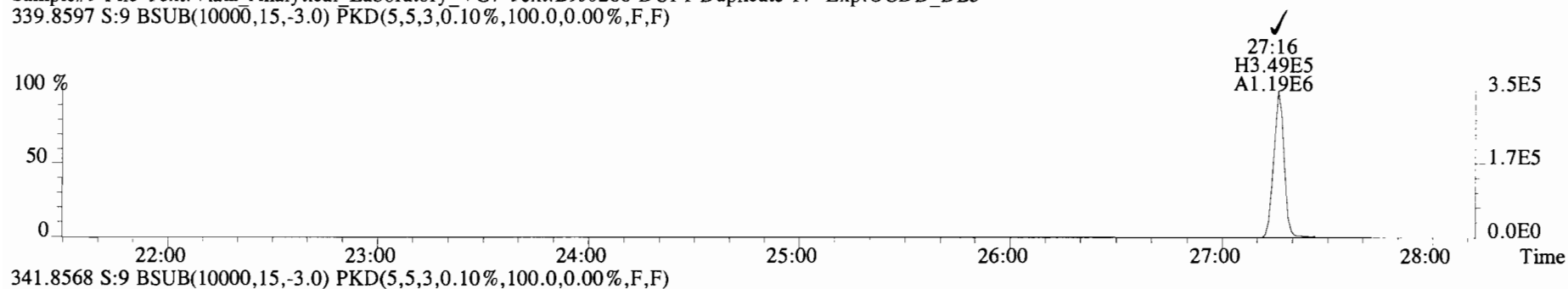
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



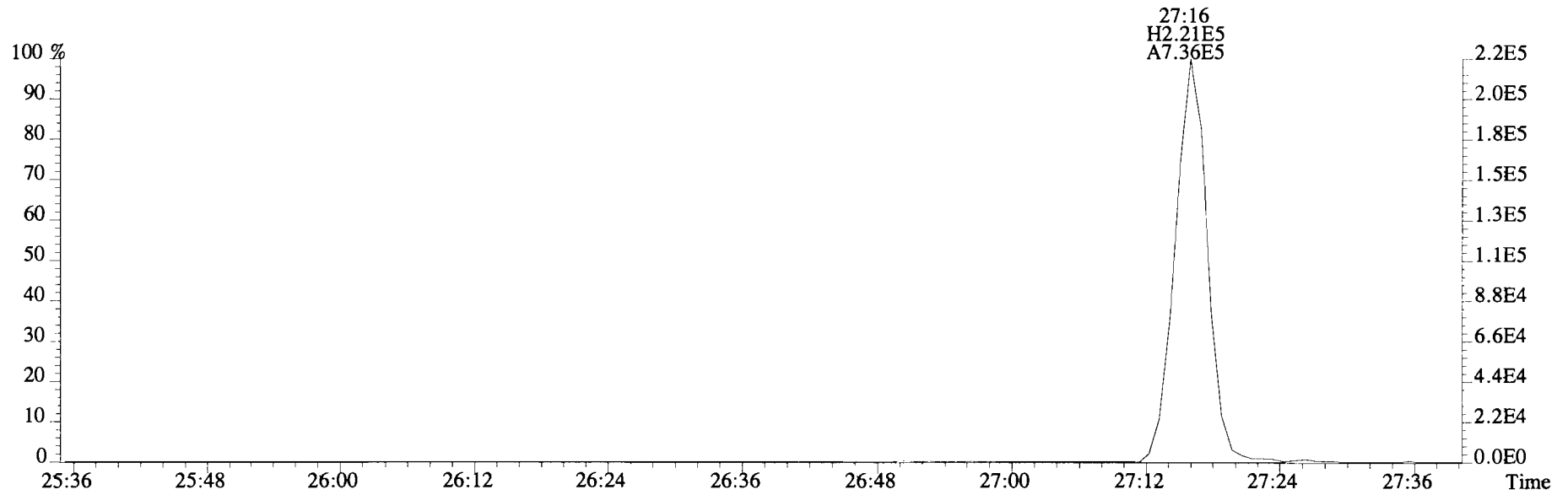
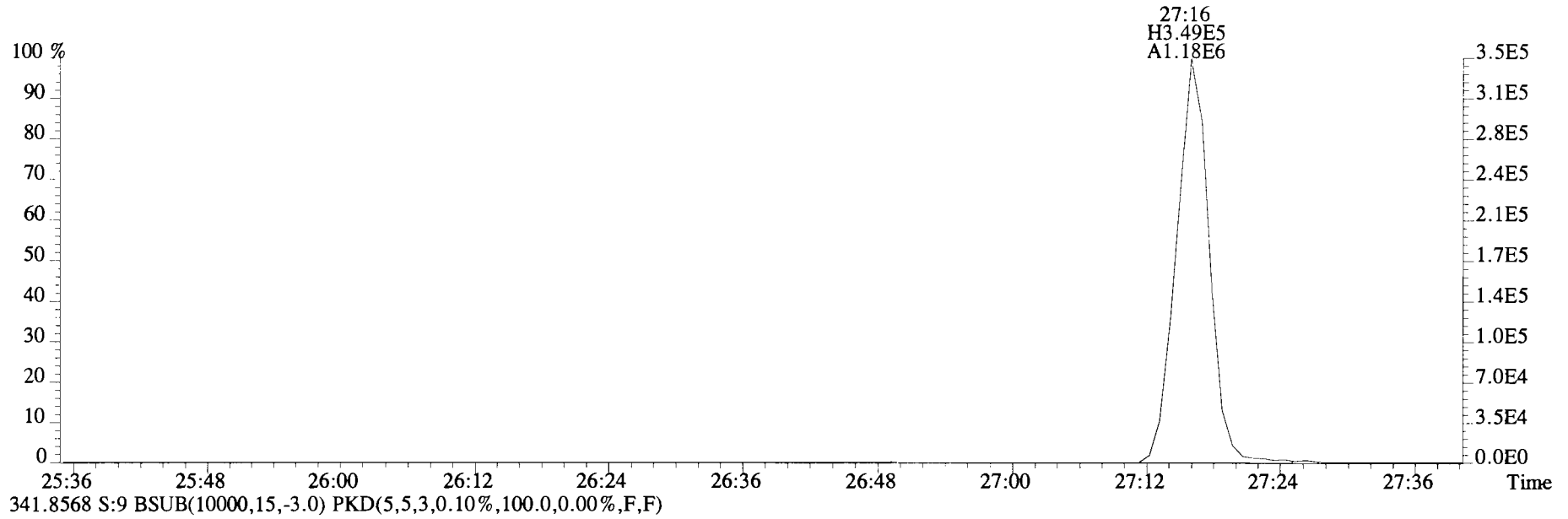
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



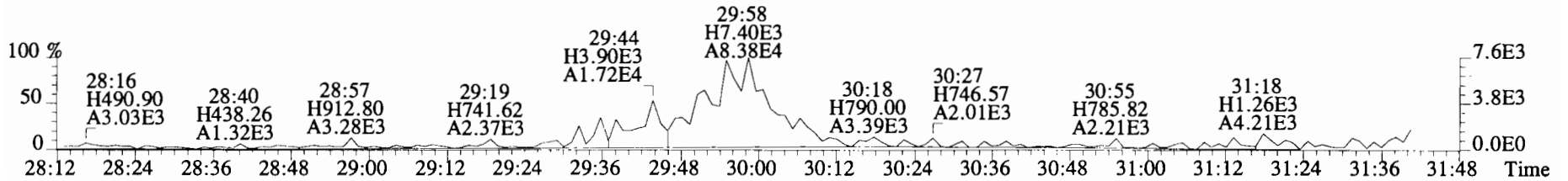
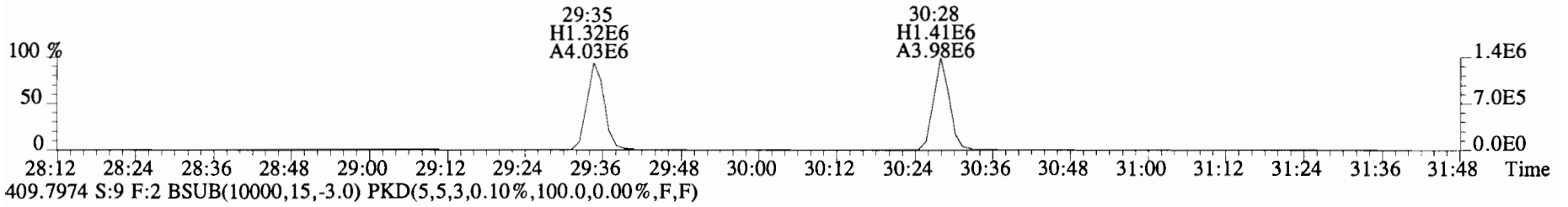
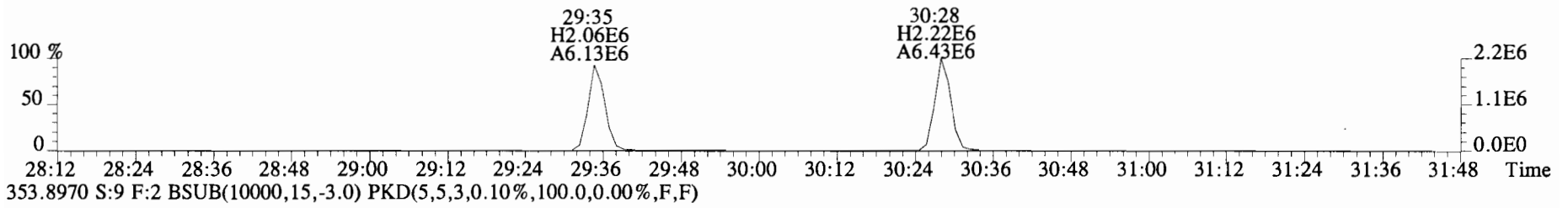
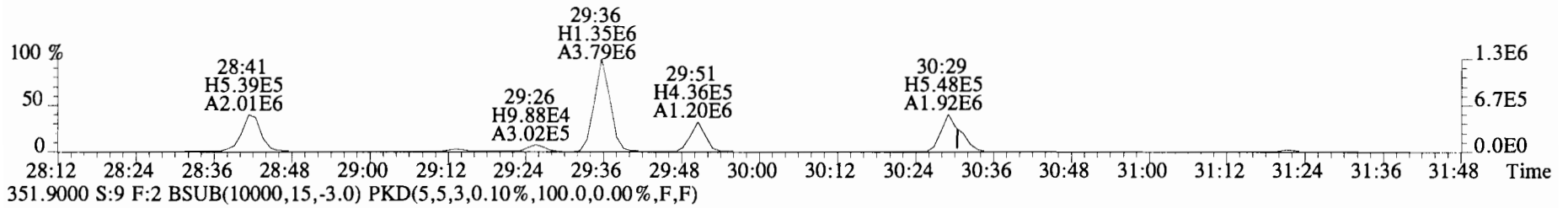
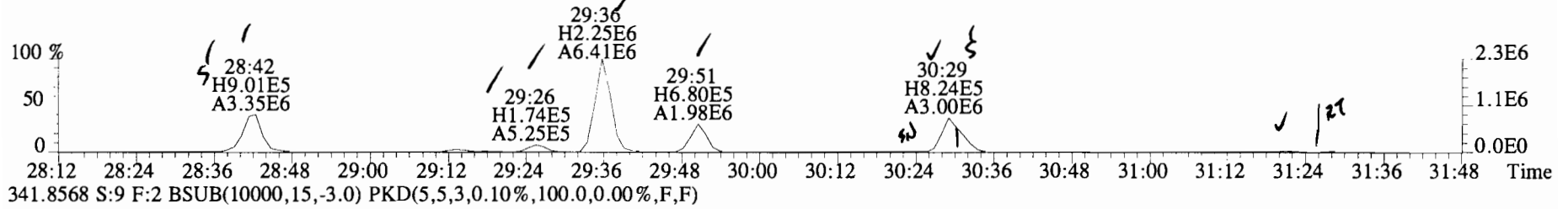
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



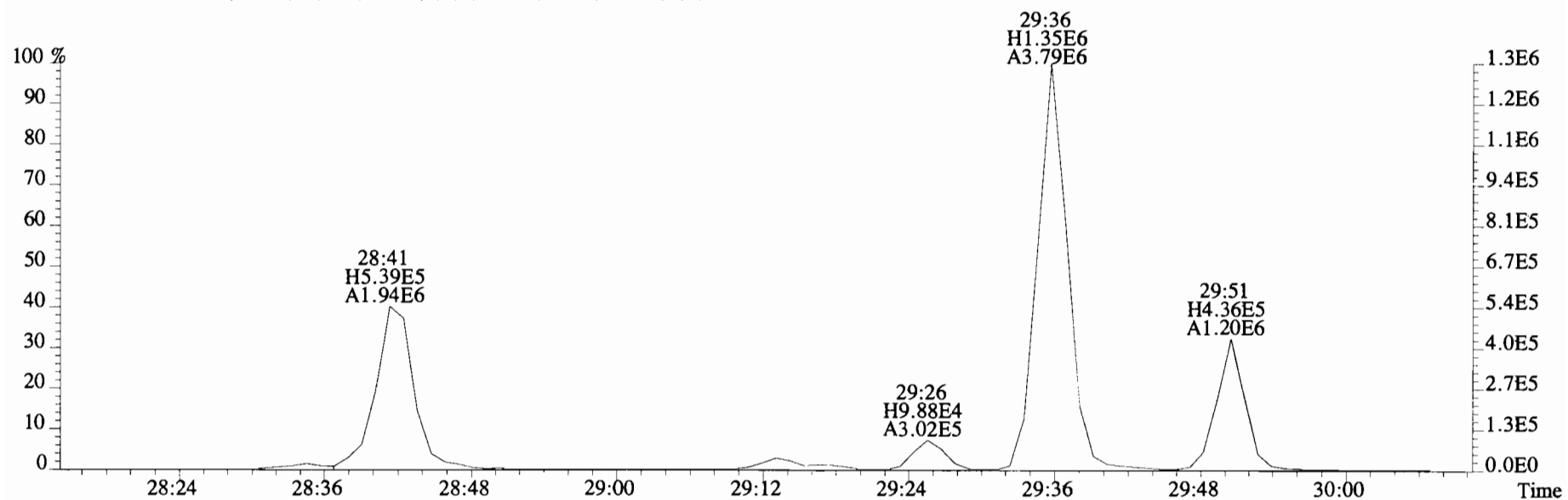
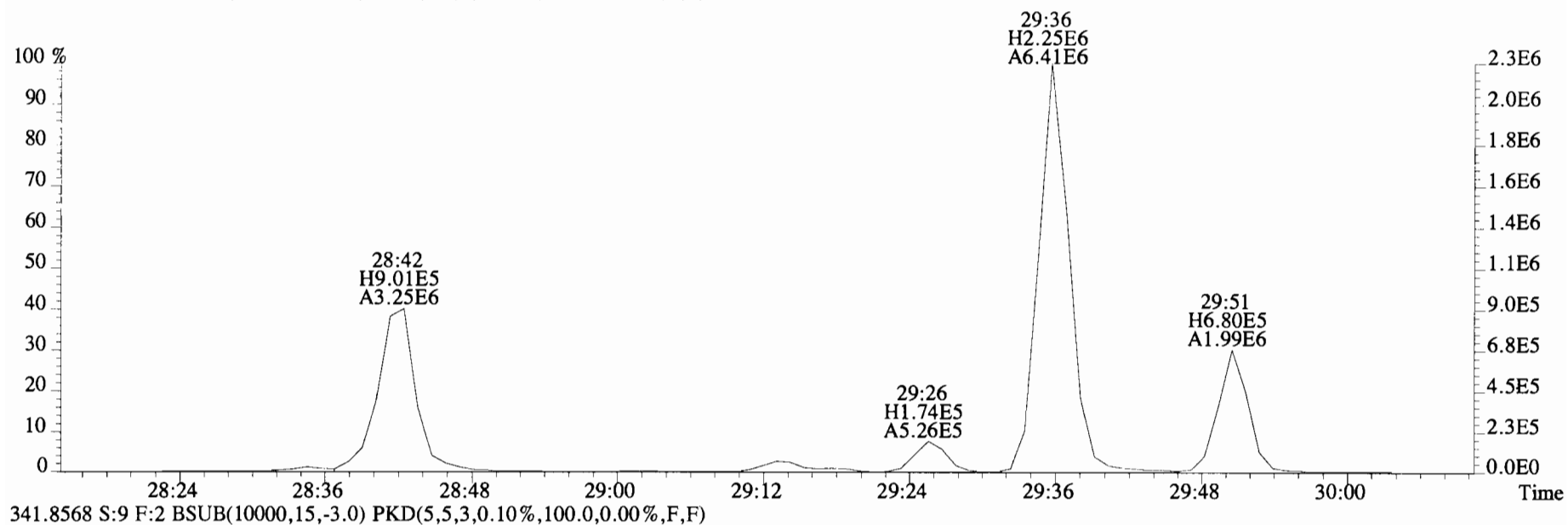
File:191031D2 #1-493 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



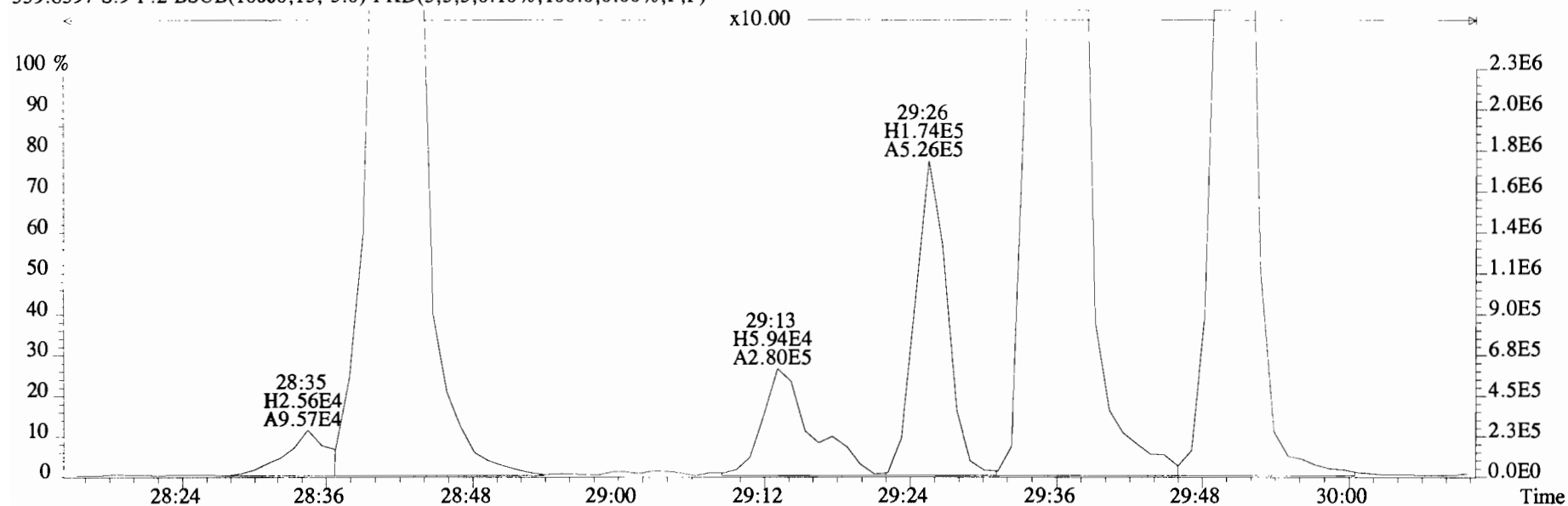
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



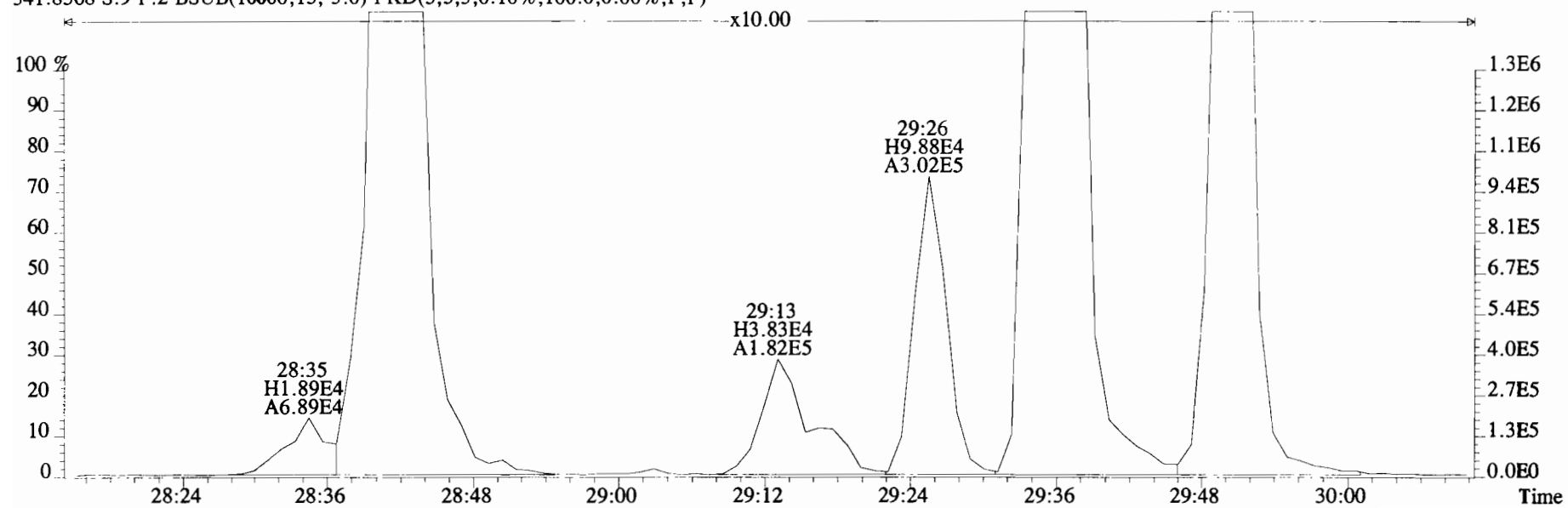
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



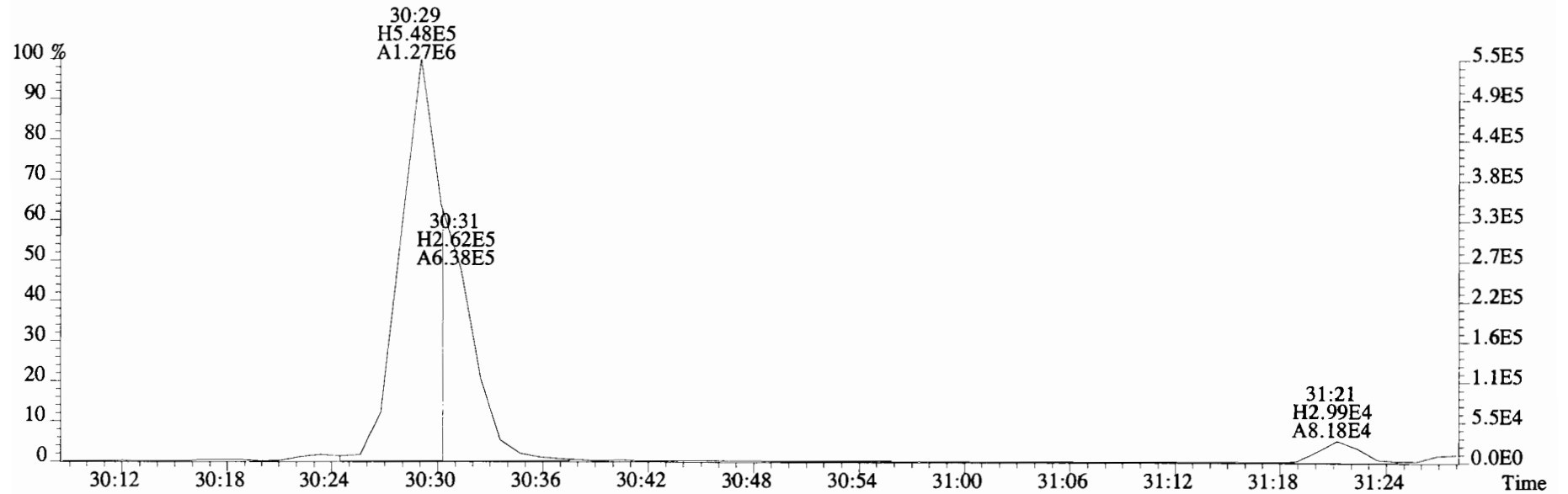
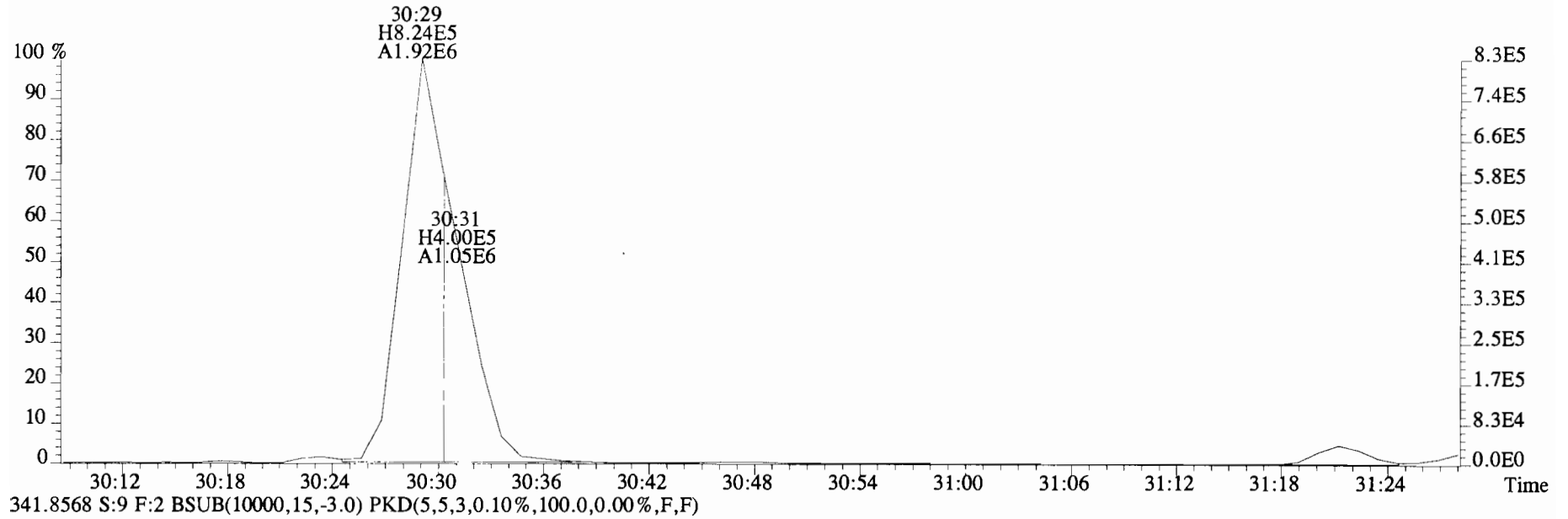
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



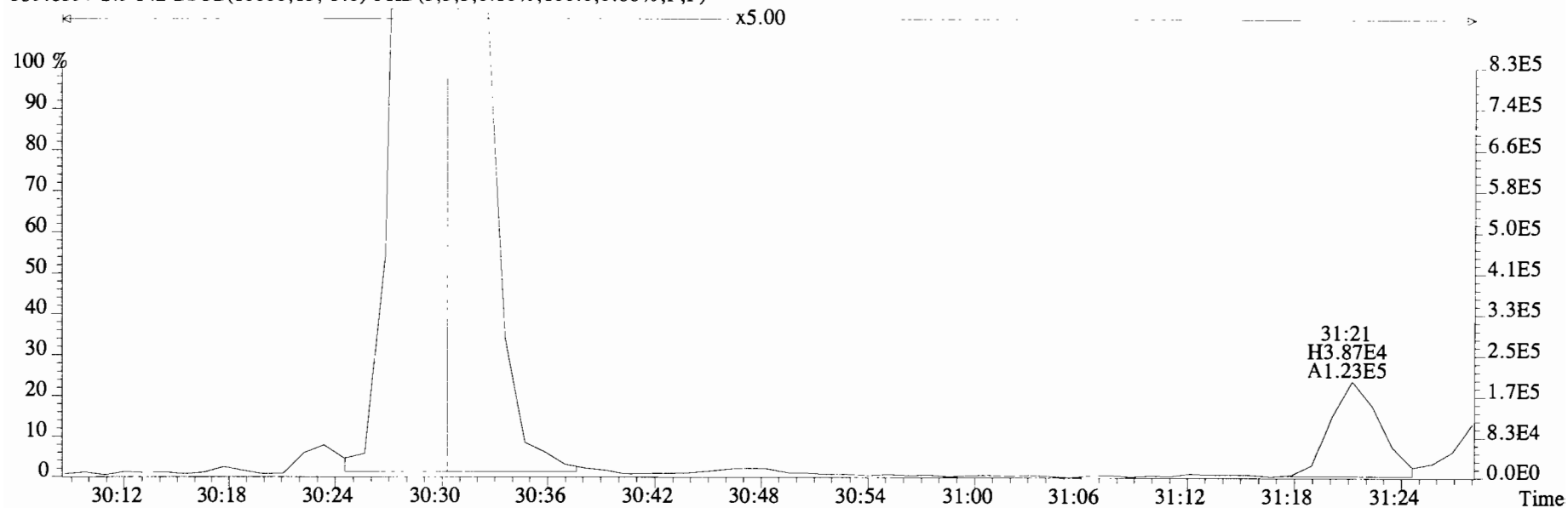
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



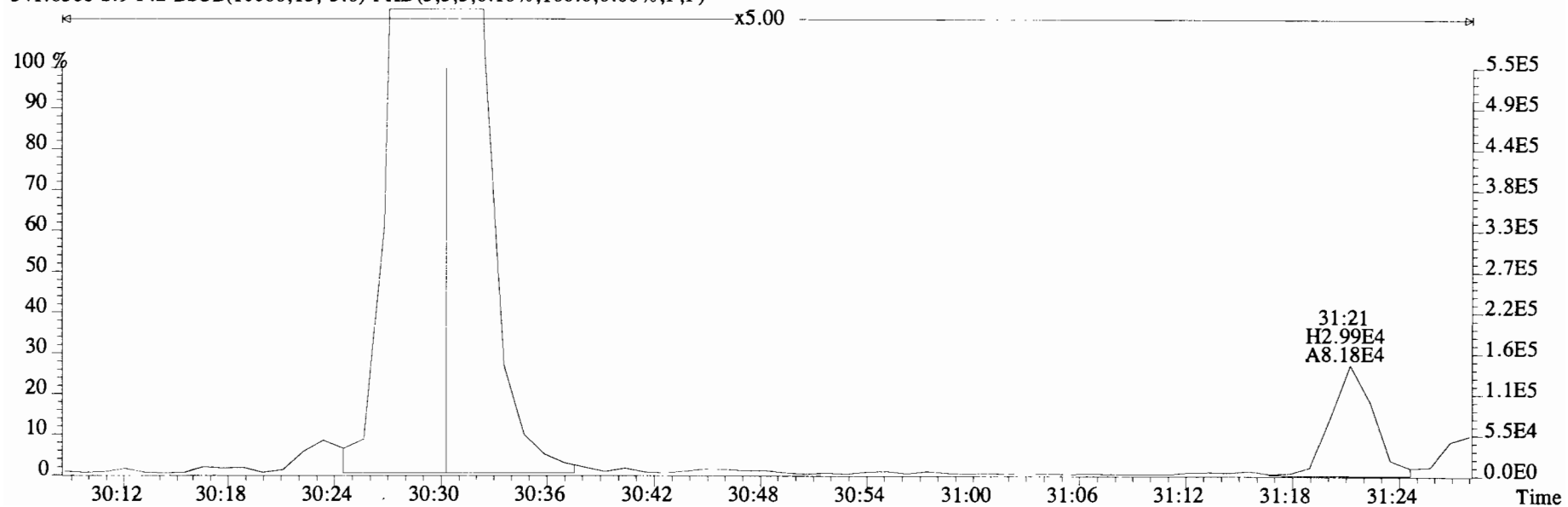
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



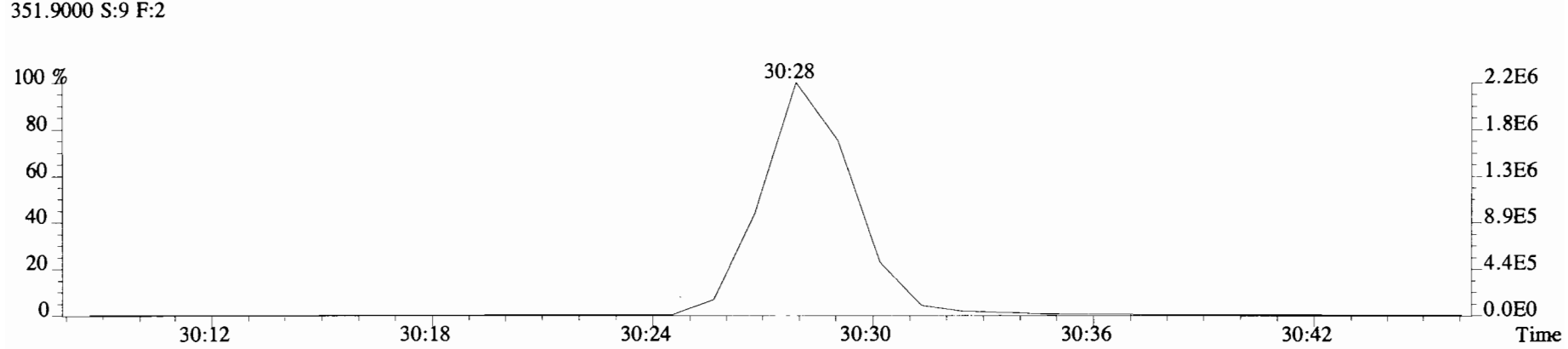
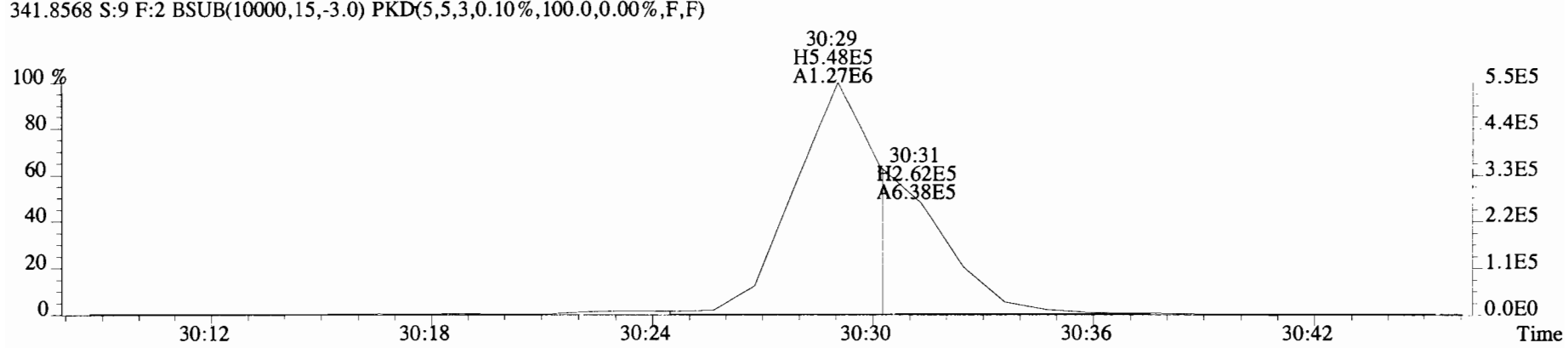
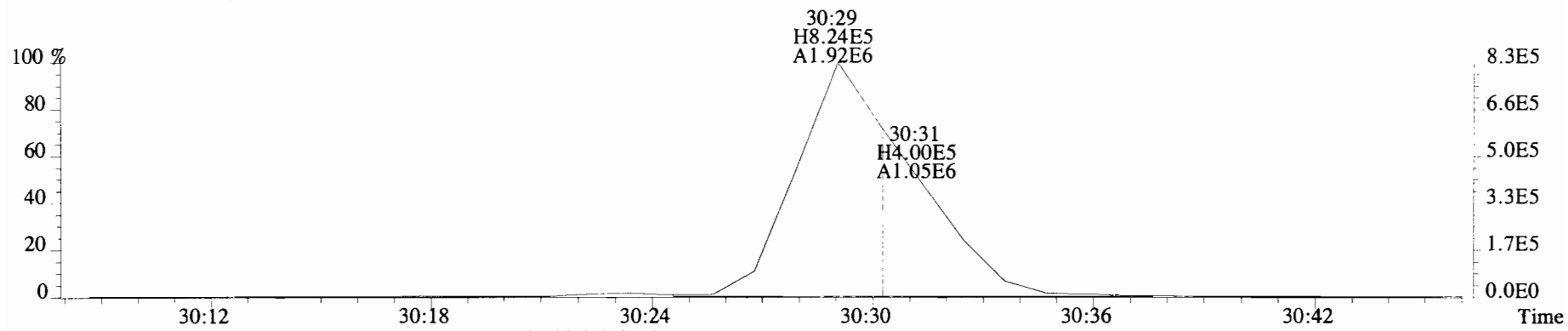
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



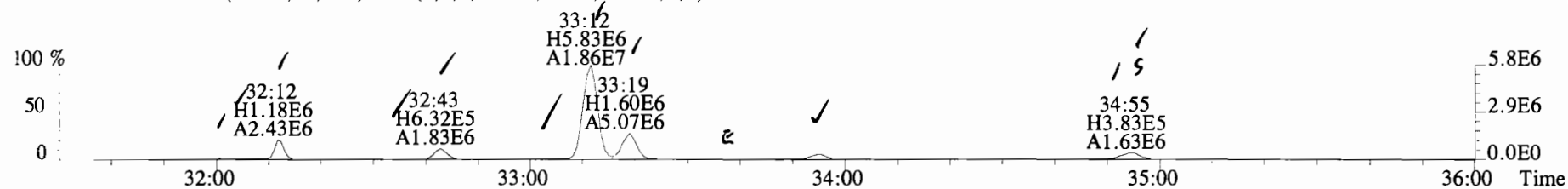
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



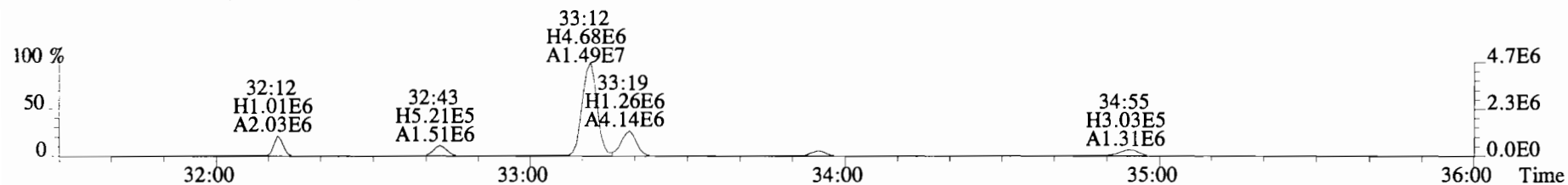
File:191031D2 #1-211 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



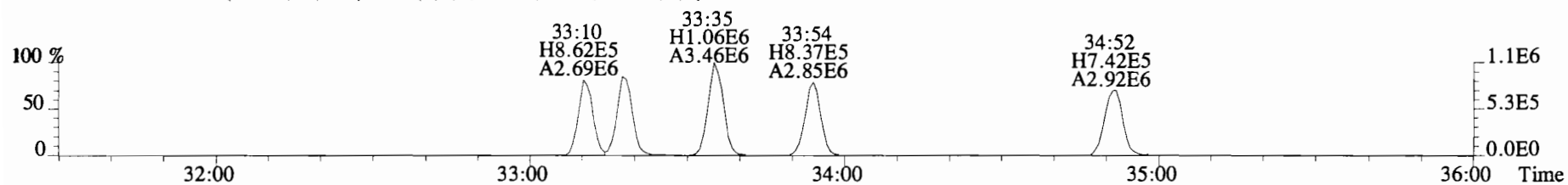
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



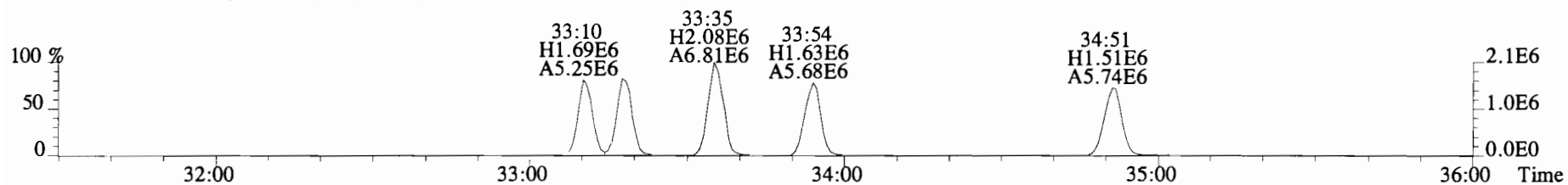
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



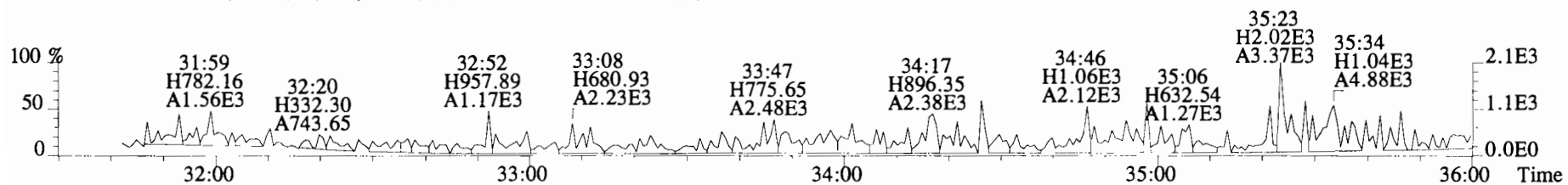
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



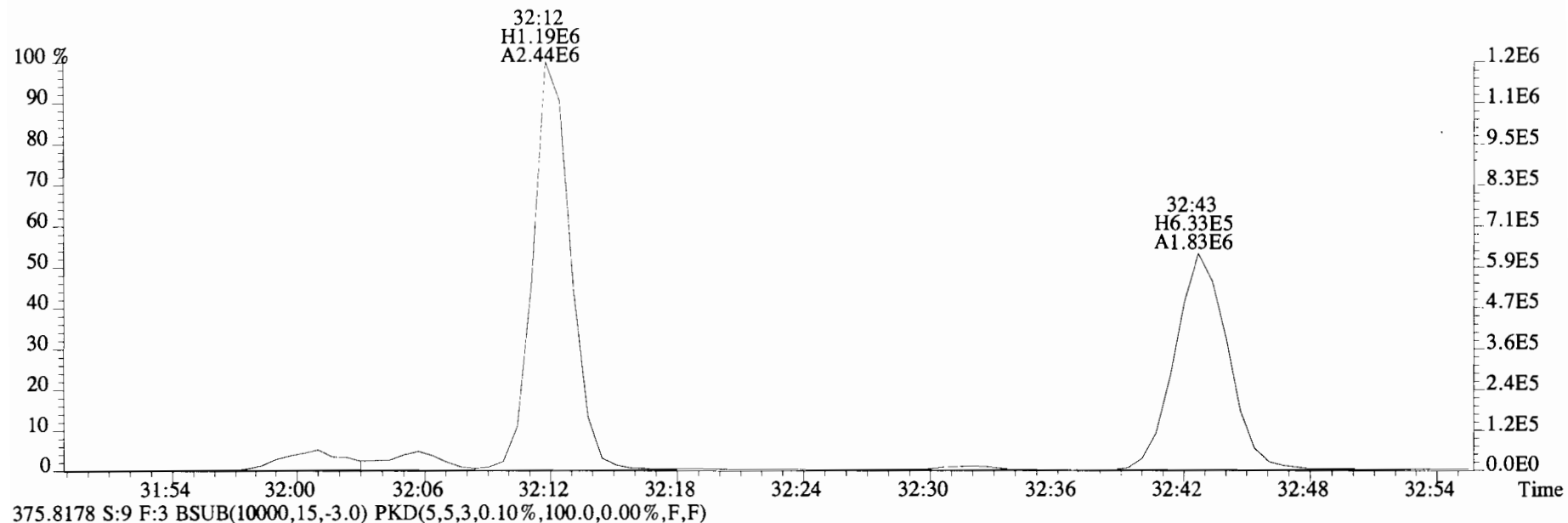
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



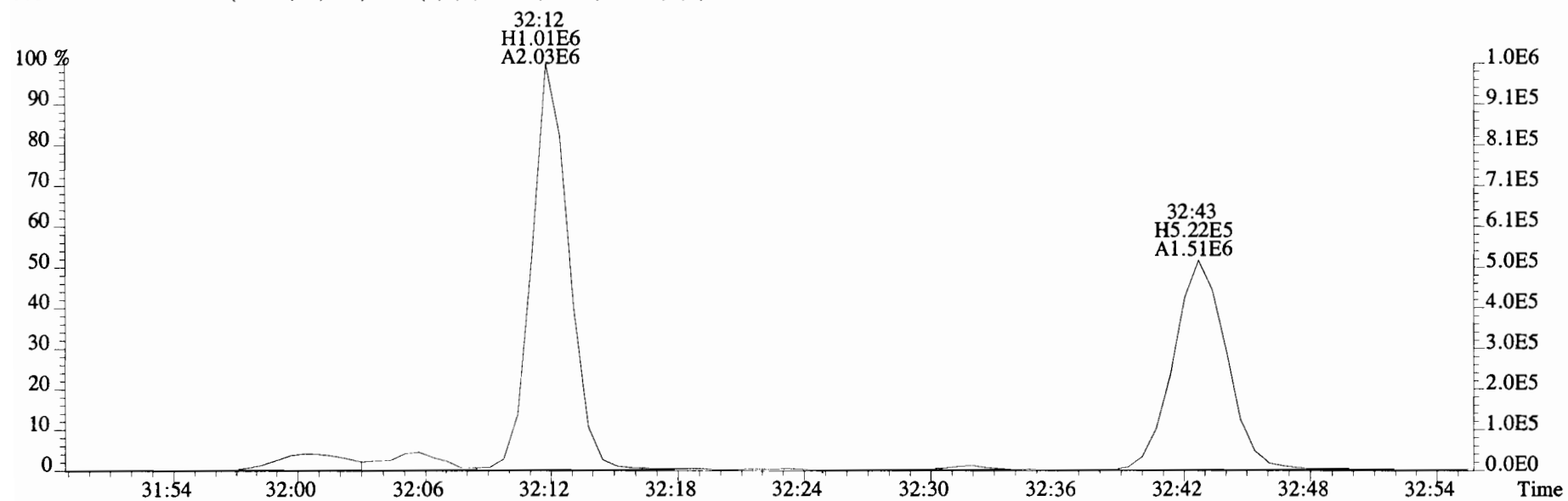
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



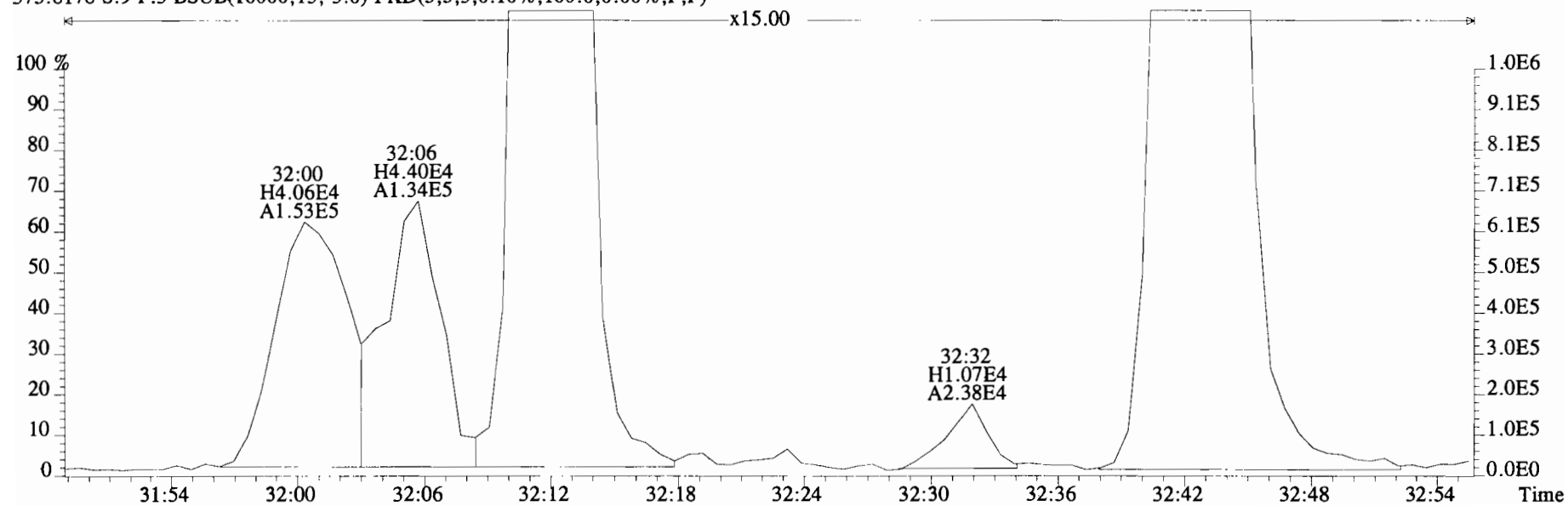
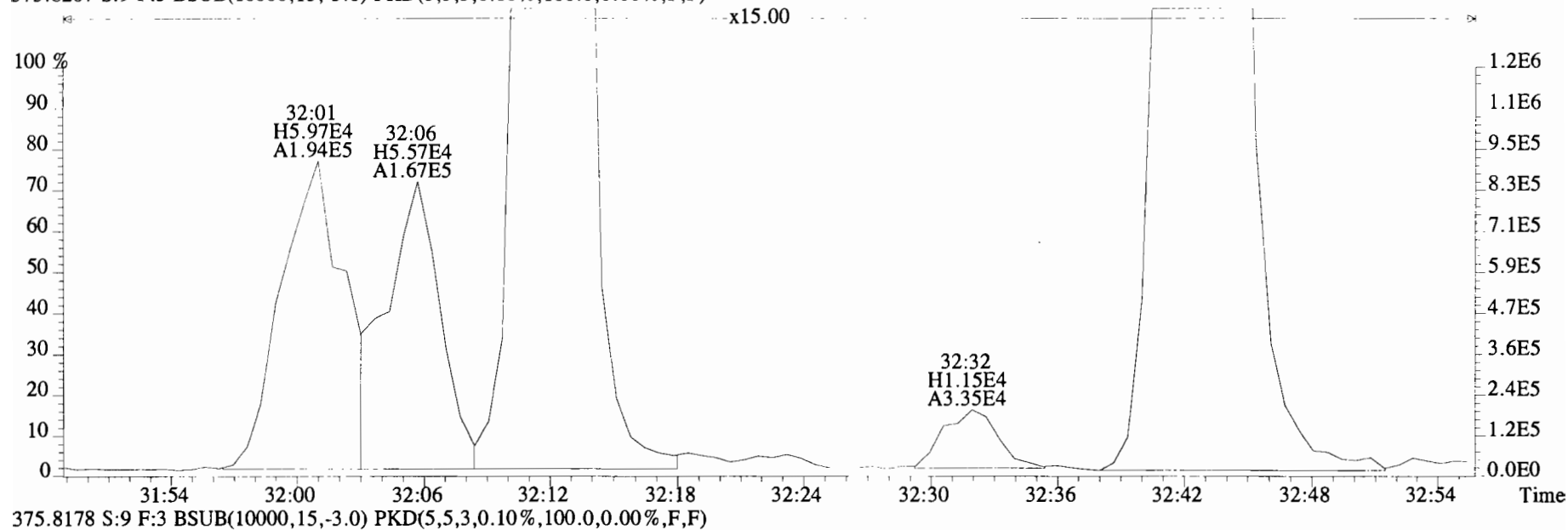
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



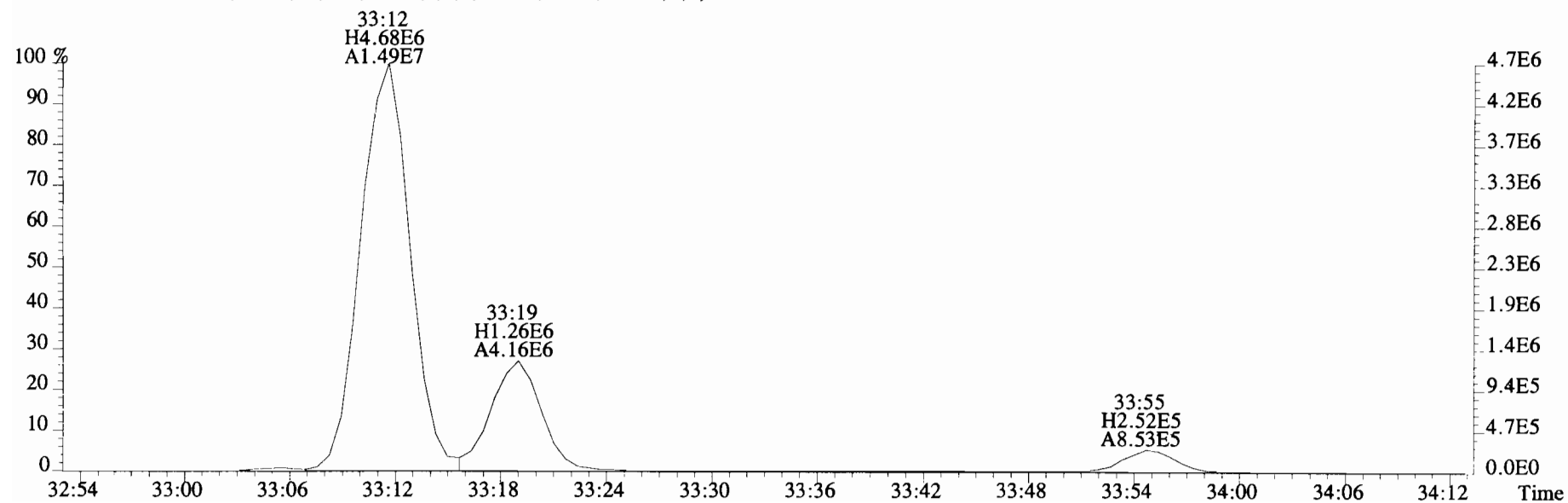
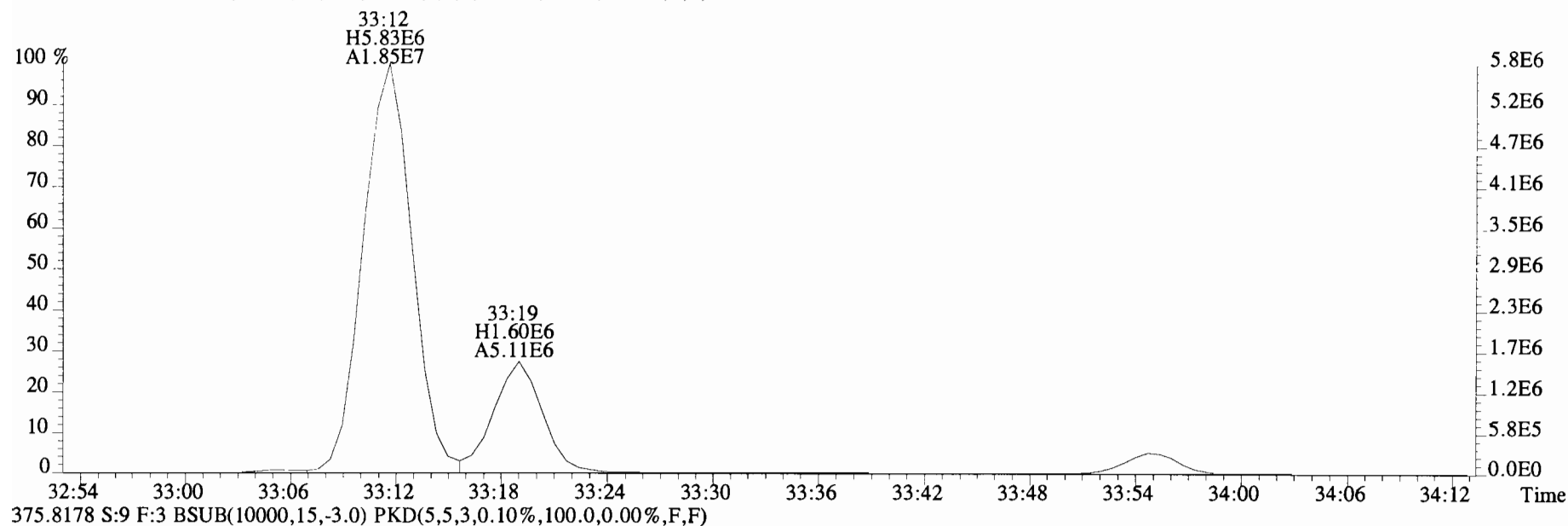
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



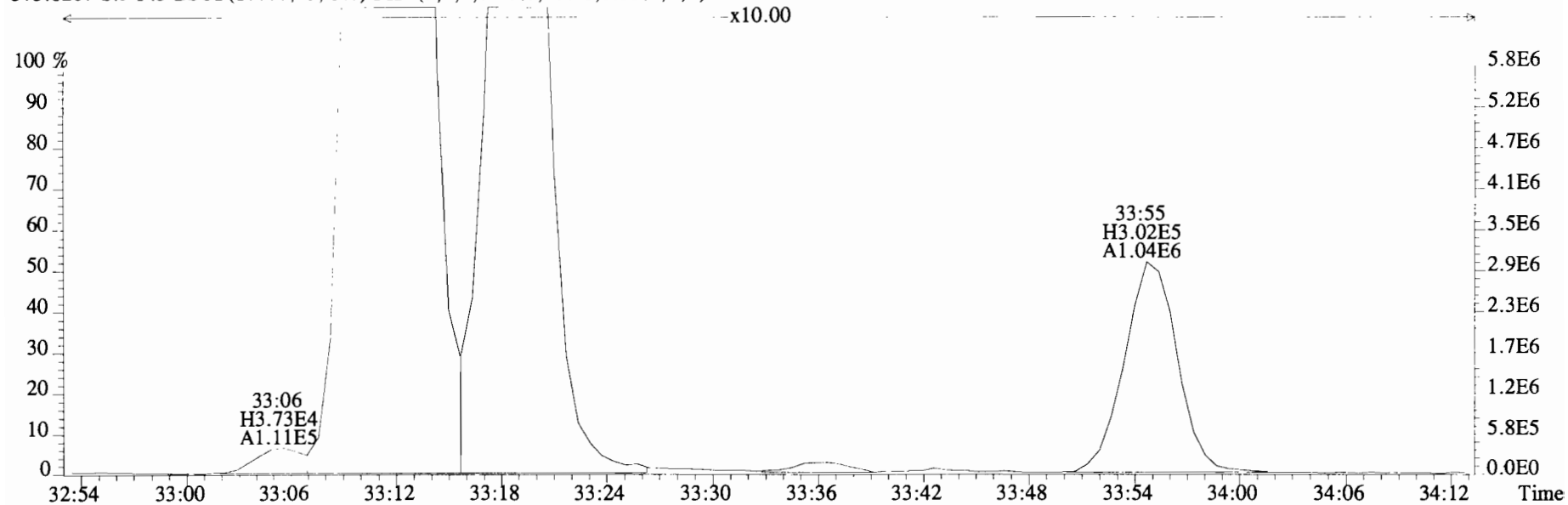
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



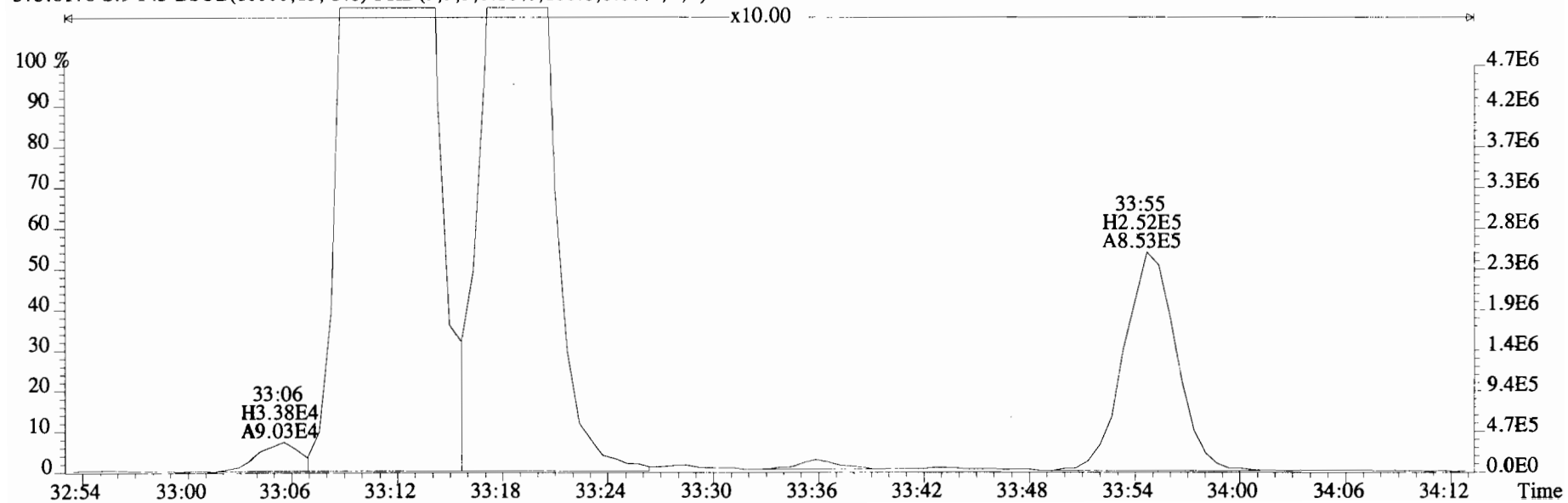
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



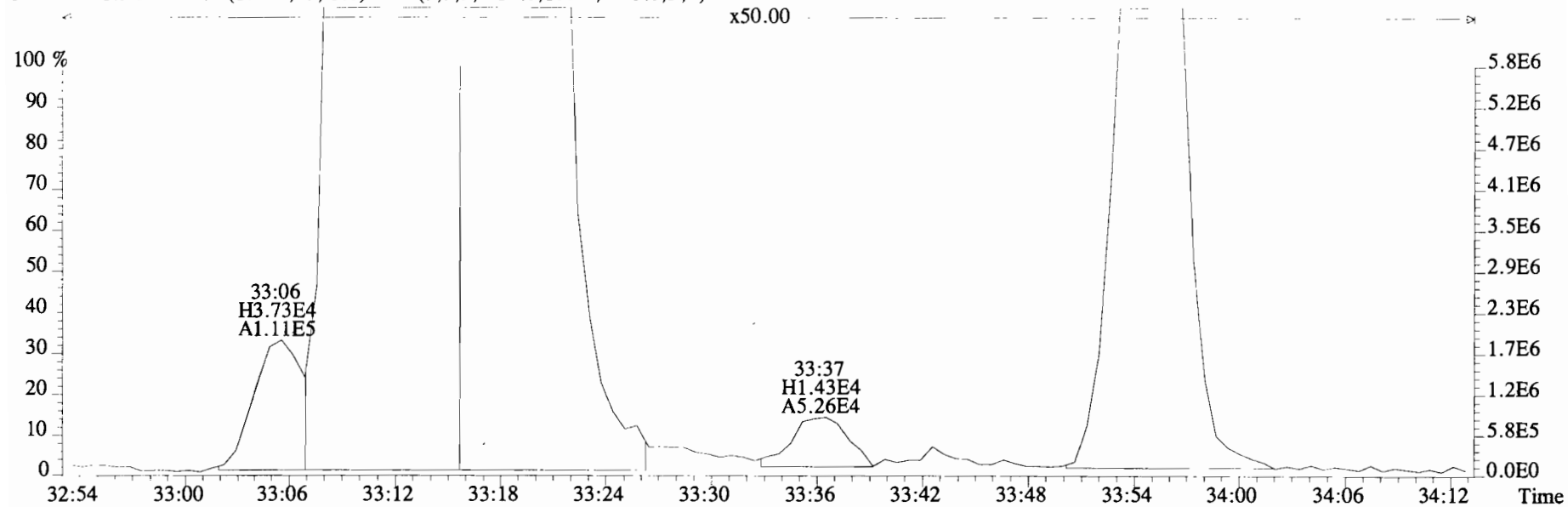
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



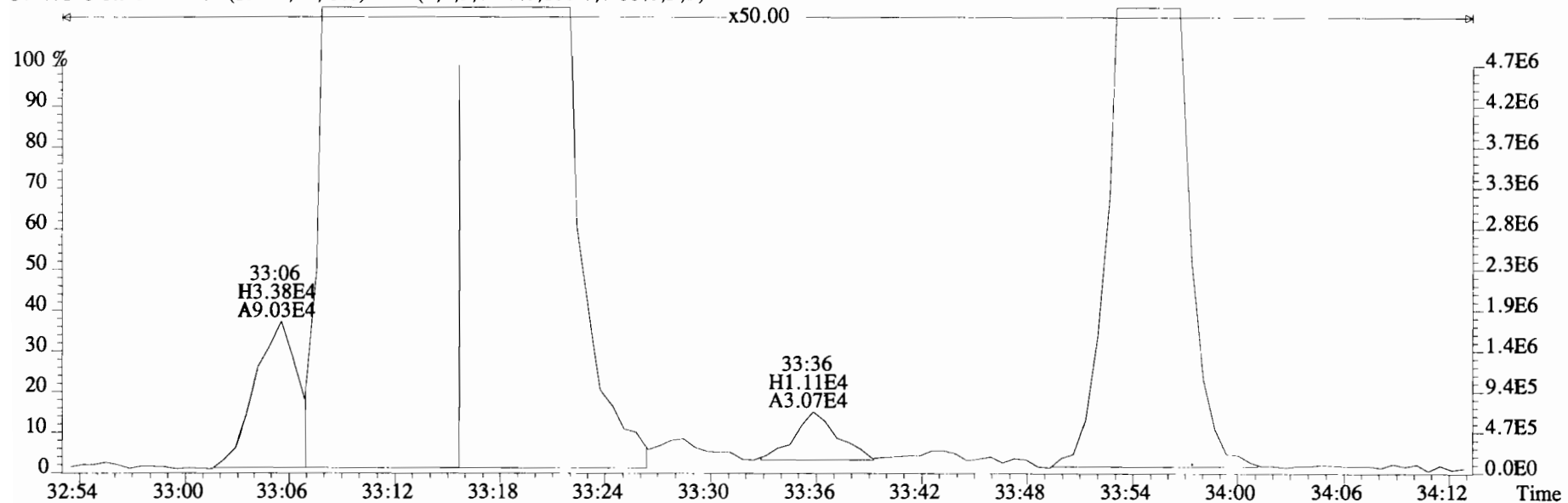
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



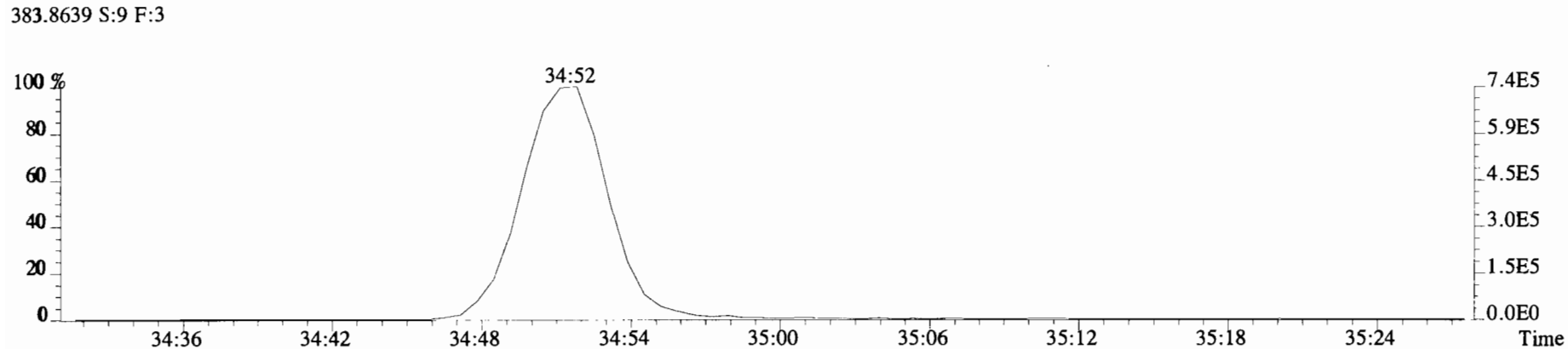
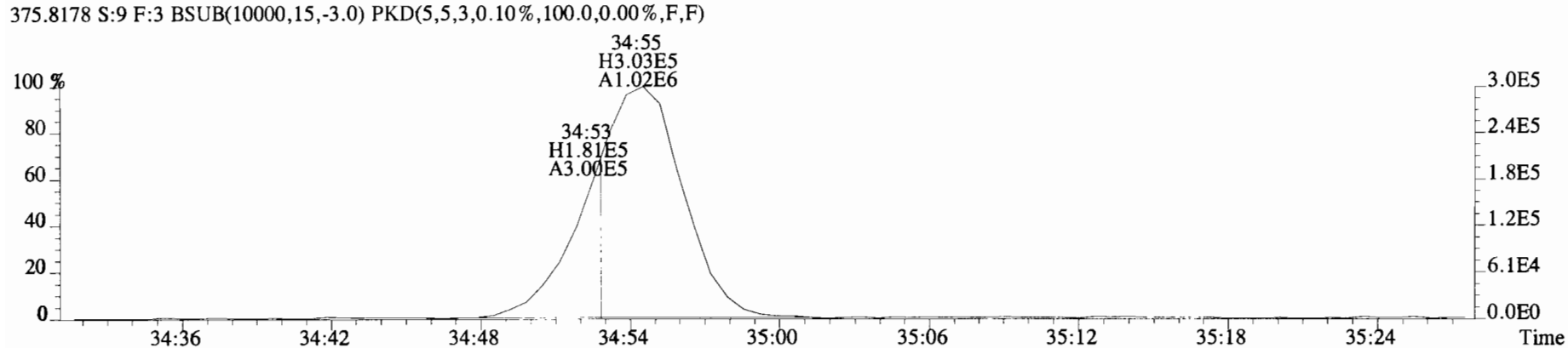
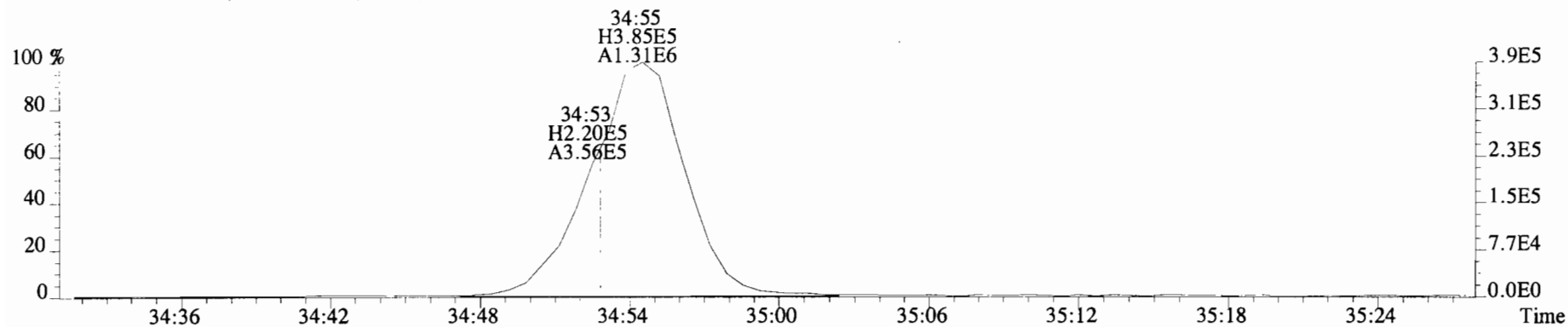
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



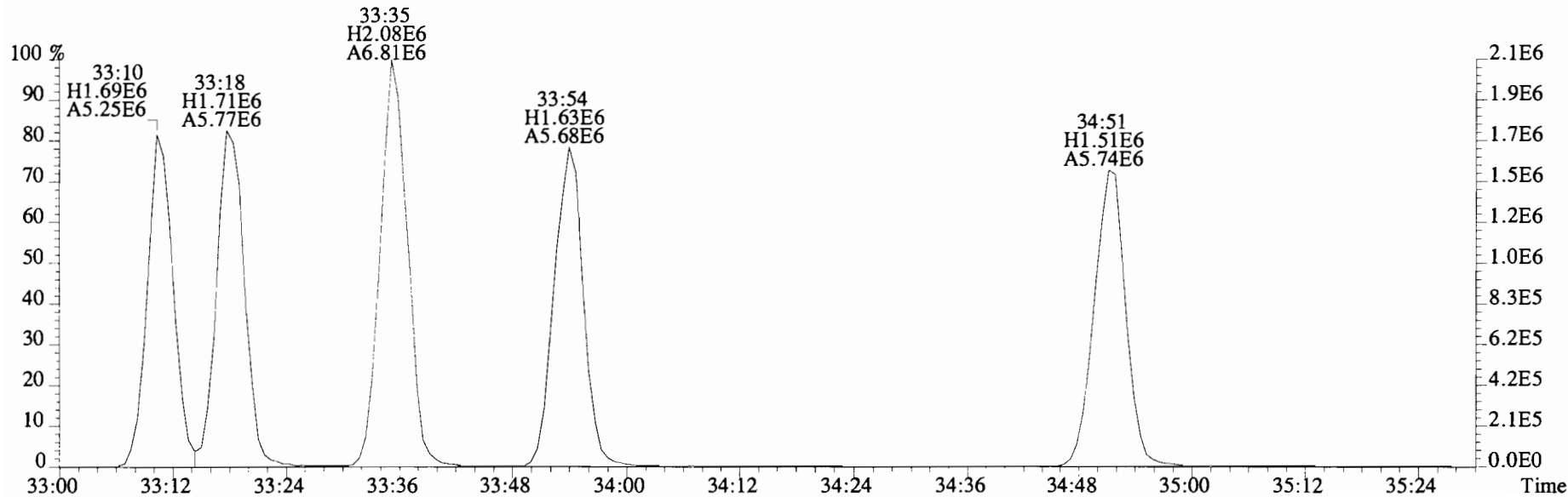
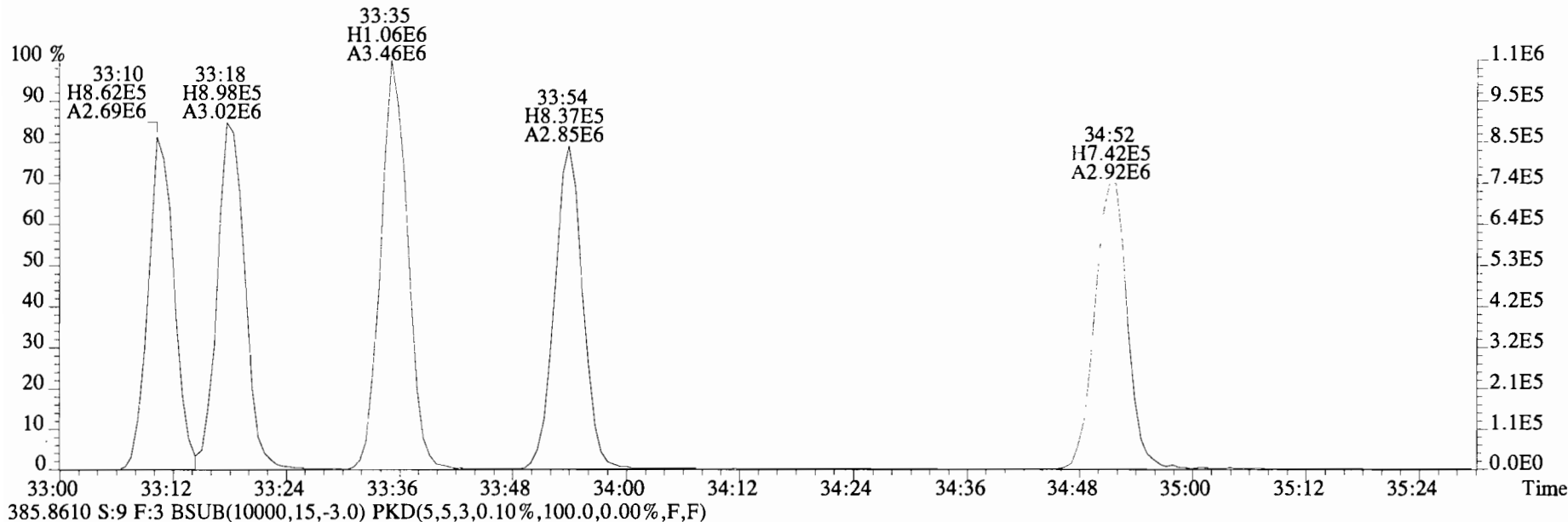
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



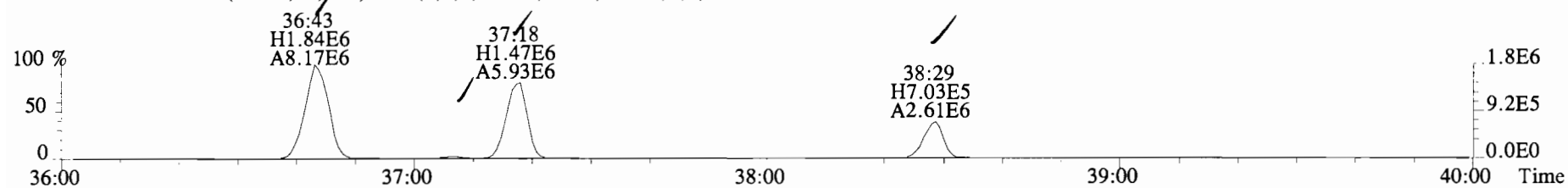
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



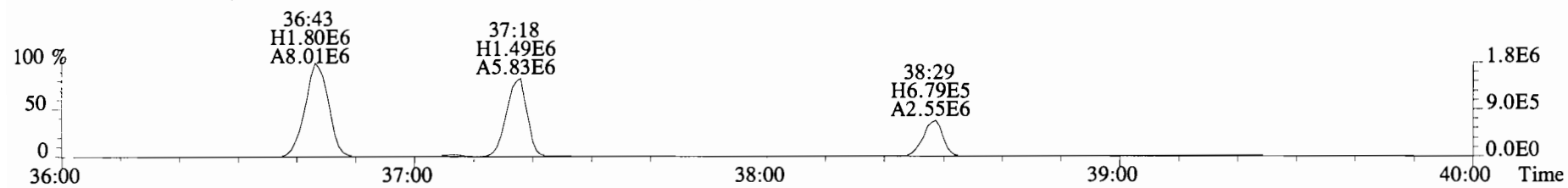
File:191031D2 #1-385 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



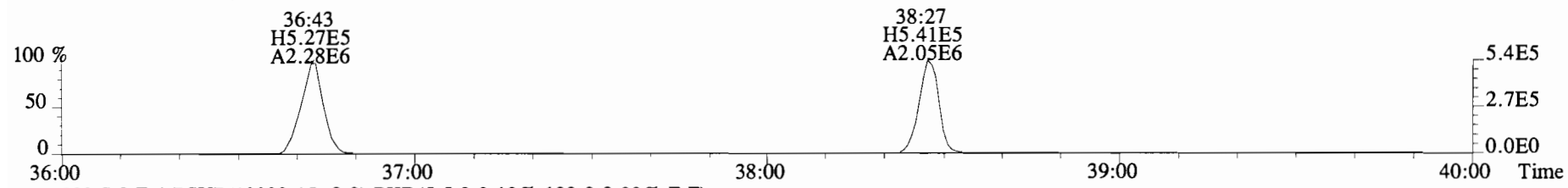
File:191031D2 #1-355 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



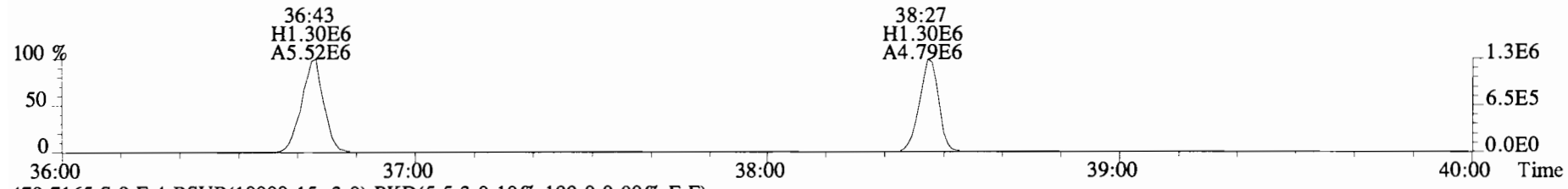
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



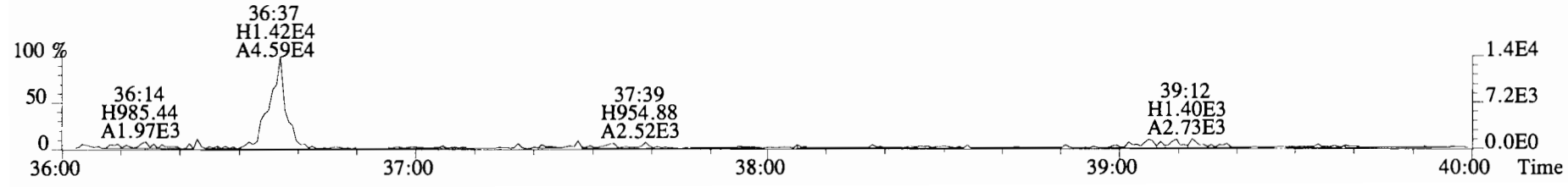
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



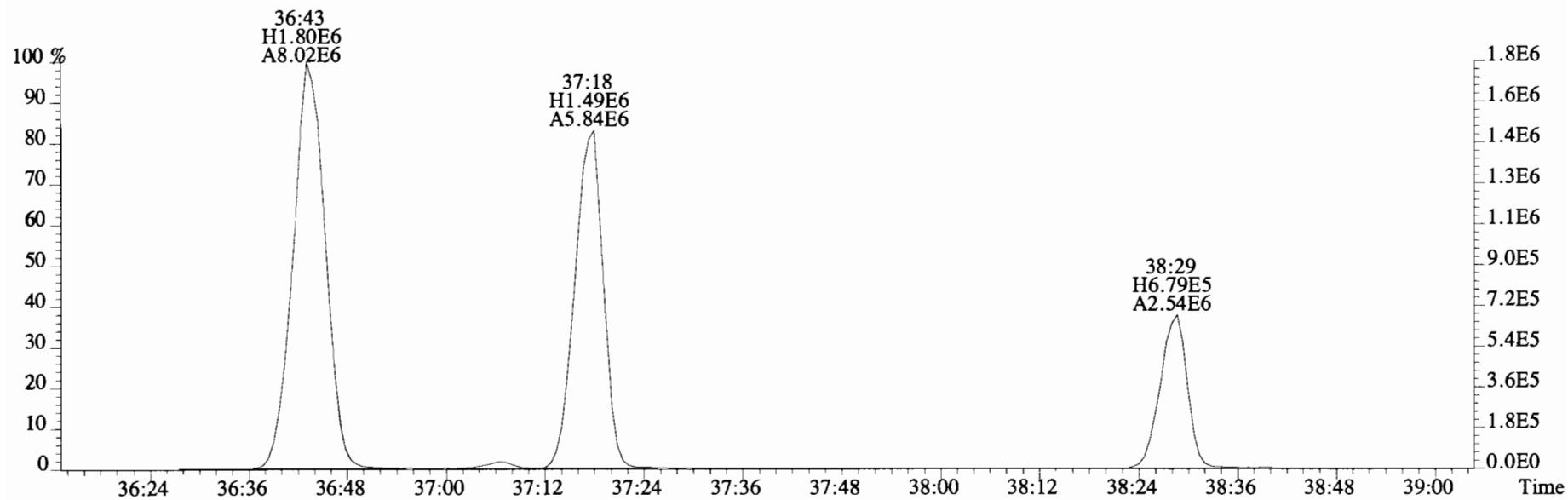
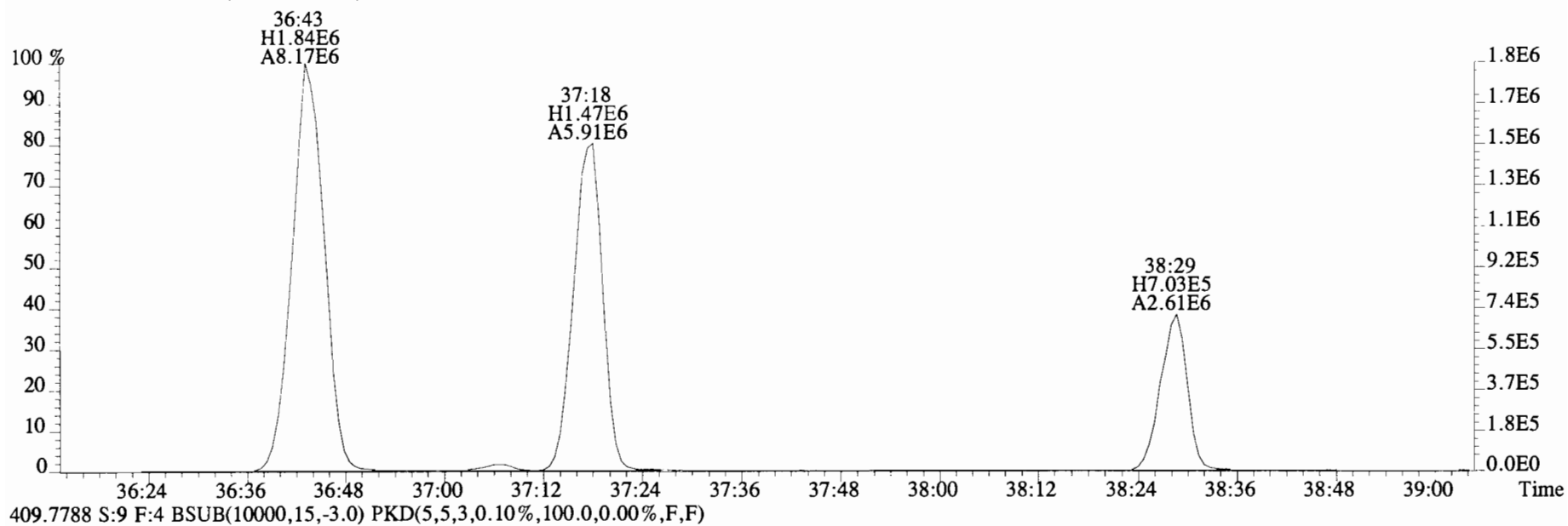
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



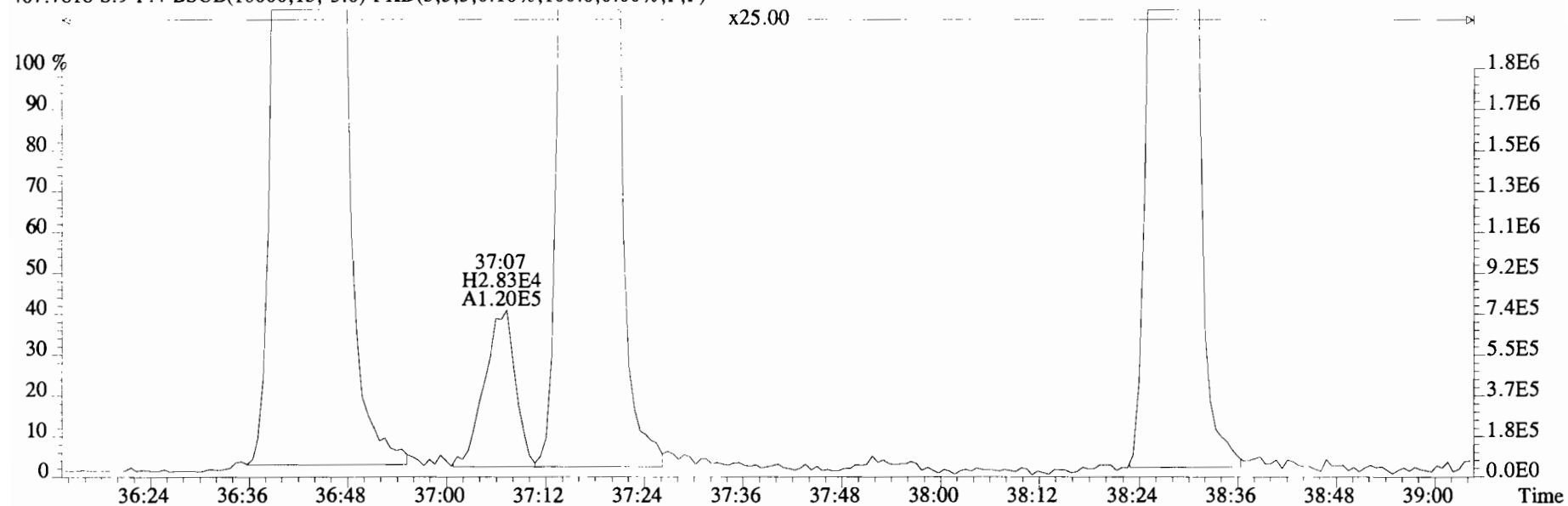
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



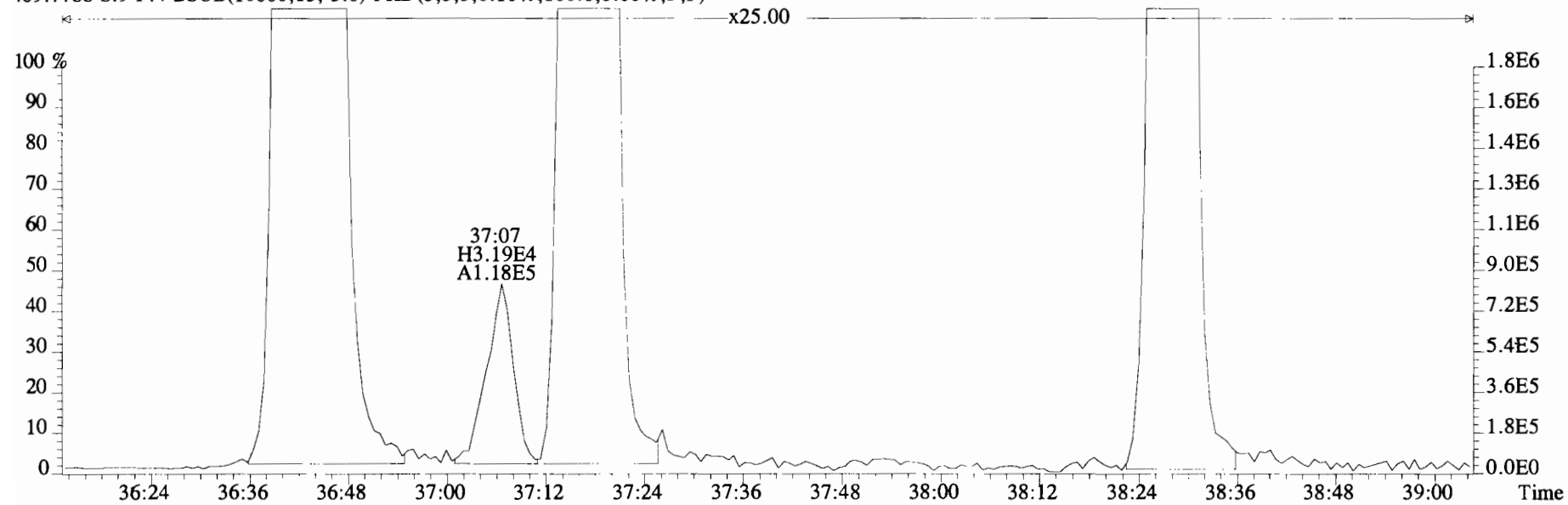
File:191031D2 #1-355 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



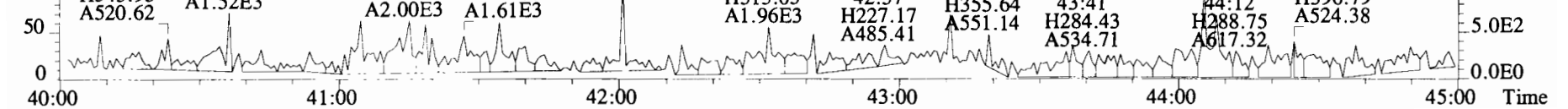
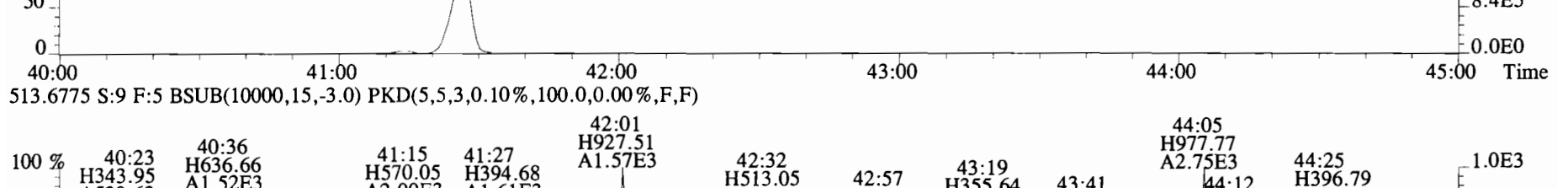
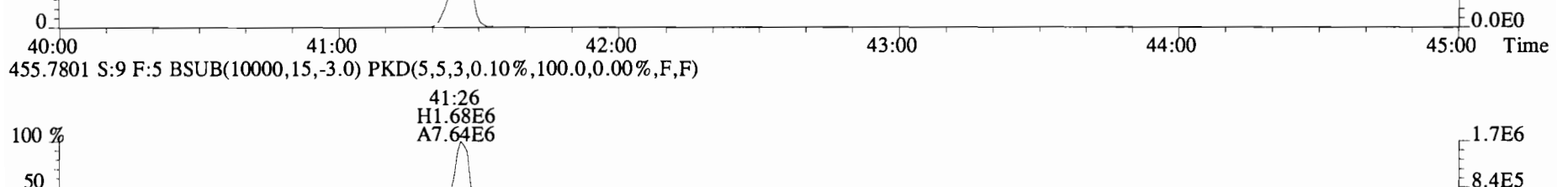
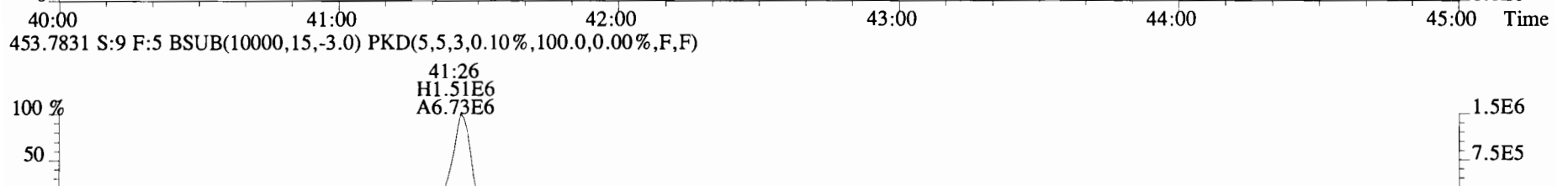
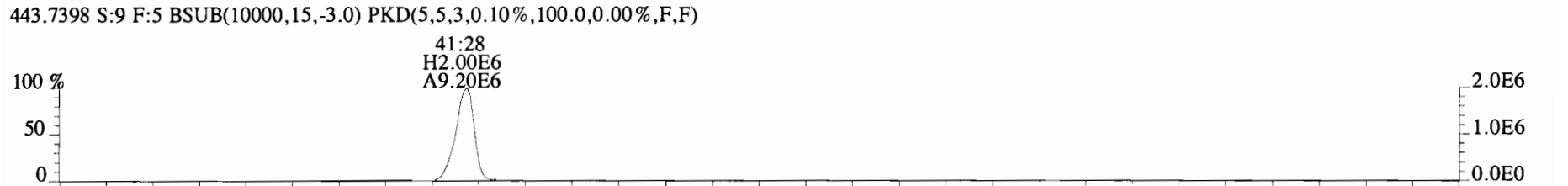
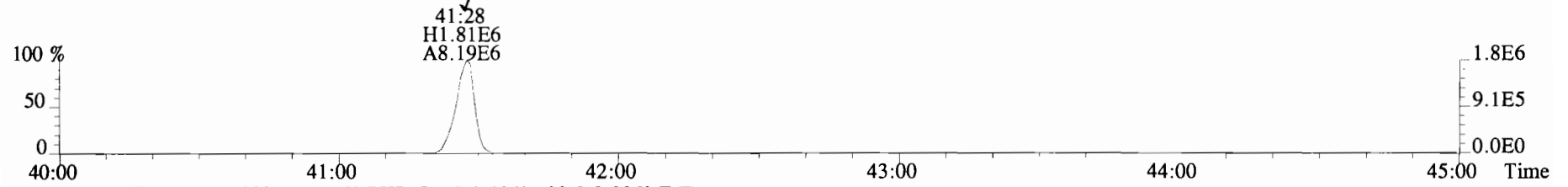
File:191031D2 #1-355 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



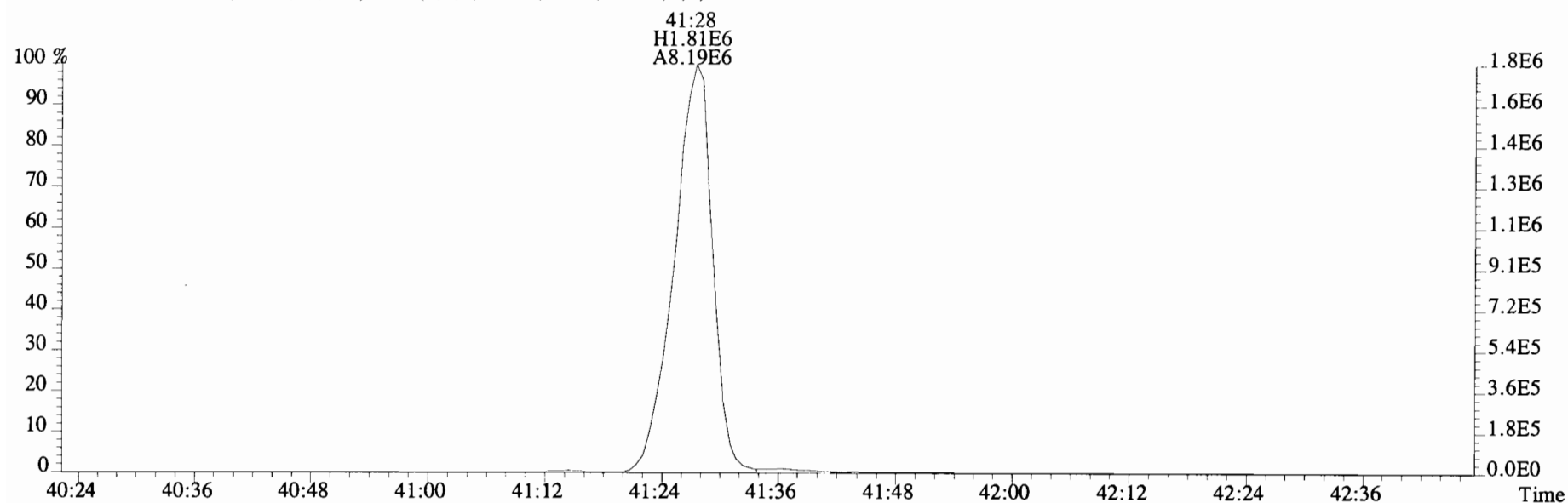
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



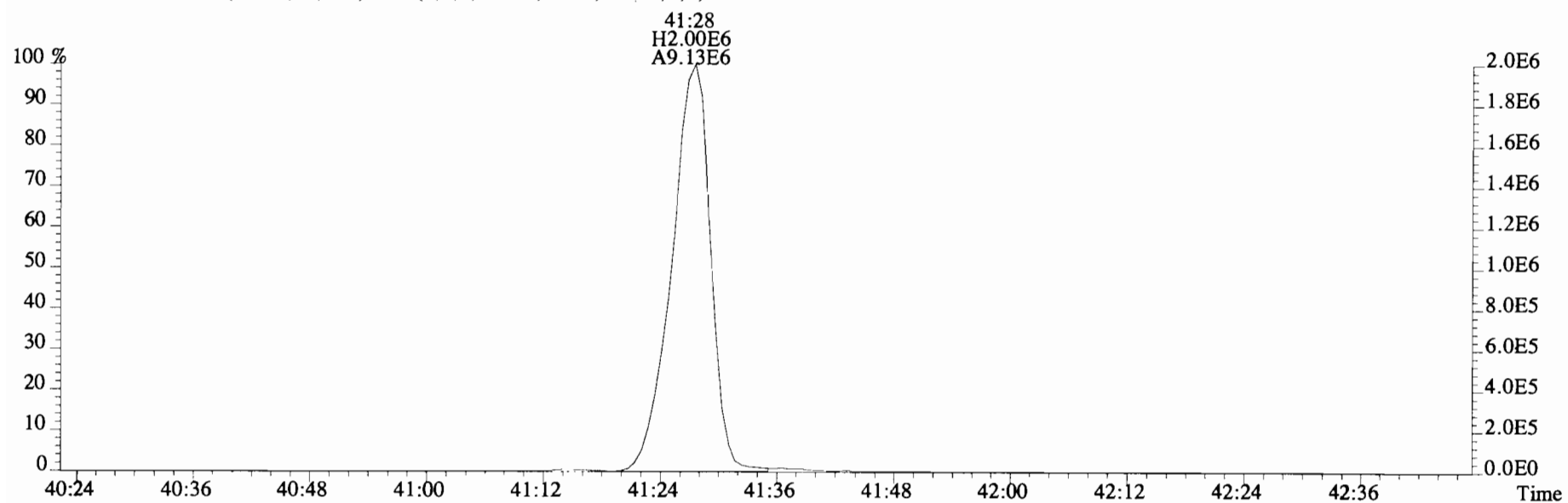
File:191031D2 #1-432 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata_Analytical_Laboratory_VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
 441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 06:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1 Duplicate 17 Exp:OCDD_DB5
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	1.27e+04	0.77 y	0.91	26:16	0.47247		* 2.5		*	Total Tetra-Dioxins	3.48	4.51		*	*
1,2,3,7,8-PeCDD	9.46e+03	1.20 n	0.90	30:46	0.54723		* 2.5		*	Total Penta-Dioxins	1.06	6.40		*	*
1,2,3,4,7,8-HxCDD	1.46e+04	1.48 n	1.10	34:04	0.58231		* 2.5		*	Total Hexa-Dioxins	26.9	28.7		*	*
1,2,3,6,7,8-HxCDD	8.75e+04	1.09 y	0.94	34:11	3.5520		* 2.5		*	Total Hepta-Dioxins	218	218		*	*
1,2,3,7,8,9-HxCDD	3.22e+04	1.59 n	0.96	34:29	1.2106		* 2.5		*	Total Tetra-Furans	125	130		*	*
1,2,3,4,6,7,8-HpCDD	2.52e+06	0.99 y	0.98	37:55	94.263		* 2.5		*	Total Penta-Furans	149.96	170.52		*	*
OCDD	3.35e+07	0.91 y	0.96	41:13	1519.6		* 2.5		*	Total Hexa-Furans	219	220		*	*
										Total Hepta-Furans	149	150		*	*
2,3,7,8-TCDF	1.69e+06	0.81 y	0.95	25:29	41.147	(35.23)	* 2.5		*						
1,2,3,7,8-PeCDF	1.85e+06	1.78 y	0.96	29:36	58.323		* 2.5		*						
2,3,4,7,8-PeCDF	6.88e+05	1.70 y	1.01	30:28	21.019		* 2.5		*						
1,2,3,4,7,8-HxCDF	4.45e+06	1.23 y	1.18	33:11	113.88		* 2.5		*						
1,2,3,6,7,8-HxCDF	1.13e+06	1.20 y	1.07	33:18	28.983		* 2.5		*						
2,3,4,6,7,8-HxCDF	3.40e+05	1.20 y	1.11	33:54	9.0462		* 2.5		*						
1,2,3,7,8,9-HxCDF	1.57e+05	1.15 y	1.06	34:52	4.7088		* 2.5		*						
1,2,3,4,6,7,8-HpCDF	2.11e+06	1.02 y	1.13	36:42	59.667		* 2.5		*						
1,2,3,4,7,8,9-HpCDF	6.28e+05	1.03 y	1.28	38:27	17.245		* 2.5		*						
OCDF	3.44e+06	0.91 y	0.95	41:26	117.76		* 2.5		*						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	5.91e+06	0.80 y	1.10	26:16	161.93					81.0					
IS 13C-1,2,3,7,8-PeCDD	3.83e+06	0.61 y	0.88	30:45	130.23					65.2					
IS 13C-1,2,3,4,7,8-HxCDD	4.54e+06	1.30 y	0.64	34:04	175.88					88.0					
IS 13C-1,2,3,6,7,8-HxCDD	5.25e+06	1.24 y	0.86	34:10	152.50					76.3					
IS 13C-1,2,3,7,8,9-HxCDD	5.53e+06	1.23 y	0.81	34:28	170.49					85.3					
IS 13C-1,2,3,4,6,7,8-HpCDD	5.45e+06	1.02 y	0.65	37:54	207.10					104					
IS 13C-OCDD	9.19e+06	0.91 y	0.58	41:12	394.26					98.6					
IS 13C-2,3,7,8-TCDF	8.62e+06	0.79 y	1.03	25:29	150.24					75.2					
IS 13C-1,2,3,7,8-PeCDF	6.61e+06	1.57 y	0.85	29:34	139.57					69.8					
IS 13C-2,3,4,7,8-PeCDF	6.45e+06	1.59 y	0.85	30:28	137.21					68.7					
IS 13C-1,2,3,4,7,8-HxCDF	6.64e+06	0.52 y	0.83	33:10	198.58					99.4					
IS 13C-1,2,3,6,7,8-HxCDF	7.26e+06	0.51 y	1.03	33:18	174.51					87.3					
IS 13C-2,3,4,6,7,8-HxCDF	6.74e+06	0.51 y	0.95	33:54	175.89					88.0					
IS 13C-1,2,3,7,8,9-HxCDF	6.26e+06	0.51 y	0.83	34:51	188.04					94.1					
IS 13C-1,2,3,4,6,7,8-HpCDF	6.27e+06	0.42 y	0.76	36:42	205.90					103					
IS 13C-1,2,3,4,7,8,9-HpCDF	5.69e+06	0.43 y	0.58	38:27	243.30					122					
IS 13C-OCDF	1.23e+07	0.91 y	0.69	41:25	444.50					111					
C/Up 37Cl-2,3,7,8-TCDD	2.53e+06		1.20	26:17	63.324					79.2					
RS/RT 13C-1,2,3,4-TCDD	6.66e+06	0.81 y	1.00	25:42	199.87										
RS 13C-1,2,3,4-TCDD	1.11e+07	0.80 y	1.00	24:17	199.87										
RS/RT 13C-1,2,3,4,6,9-HxCDF	8.04e+06	0.52 y	1.00	33:35	199.87										

Integrations
 by DB
 Analyst:
 Date: 11/12/19

Reviewed
 by CT
 Analyst:
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 15 File: 191031D2 S: 10 I: 1 F: 1
 Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 4.5100

Unnamed Concentration: 4.038

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:55	3.108e+04	4.071e+04	0.76	y	7.179e+04	2.6809
23:16	1.053e+04	1.133e+04	0.93	n	2.005e+04	0.74876
24:47	3.596e+03	5.163e+03	0.70	y	8.759e+03	0.32709
26:02	5.005e+03	4.248e+03	1.18	n	7.519e+03	0.28078
26:16	5.498e+03	7.153e+03	0.77	y	1.265e+04	0.47247 2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 15 File: 191031D2 S: 10 I: 1 F: 2
 Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 6.4016 Unnamed Concentration: 5.854

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:43	1.444e+04	1.954e+04	0.74	n	3.185e+04	1.8435
29:11	3.498e+03	5.352e+03	0.65	y	8.850e+03	0.51219
29:36	2.201e+04	1.763e+04	1.25	n	2.873e+04	1.6628
29:45	5.340e+03	5.512e+03	0.97	n	8.984e+03	0.51991
29:50	3.455e+03	6.043e+03	0.57	y	9.498e+03	0.54966
30:03	4.390e+03	5.122e+03	0.86	n	8.348e+03	0.48313
30:28	8.067e+03	3.002e+03	2.69	n	4.894e+03	0.28322
30:46	6.978e+03	5.801e+03	1.20	n	9.456e+03	0.54723
						1,2,3,7,8-PeCDD

Totals class: H: 10 EMPC

Entry #: 23

Run: 1 File: 191031D2 S: 10 I: 1 F: 3
Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 28.723 Unnamed Concentration: 23.378

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:32	1.459e+05	1.151e+05	1.27	y	2.610e+05	10.299
33:07	2.172e+04	1.983e+04	1.10	y	4.155e+04	1.6396
33:22	1.506e+05	1.208e+05	1.25	y	2.715e+05	10.712
33:30	5.631e+03	4.332e+03	1.30	y	9.963e+03	0.39315
34:04	9.658e+03	6.507e+03	1.48	n	1.457e+04	0.58231 1,2,3,4,7,8-HxCDD
34:11	4.574e+04	4.179e+04	1.09	y	8.753e+04	3.5520 1,2,3,6,7,8-HxCDD
34:23	4.430e+03	4.024e+03	1.10	y	8.454e+03	0.33358
34:29	2.289e+04	1.438e+04	1.59	n	3.221e+04	1.2106 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 15 File: 191031D2 S: 10 I: 1 F: 4
Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 218.21 Unnamed Concentration: 123.950

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:05	1.681e+06	1.627e+06	1.03 y	3.309e+06	123.95
37:55	1.252e+06	1.264e+06	0.99 y	2.516e+06	94.263

Totals class: TCDF EMPC

Entry #: 27

Run: 15 File: 191031D2 S: 10 I: 1 F: 1
 Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 130.07 Unnamed Concentration: 88.921

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
21:23	1.289e+04	1.676e+04	0.77	y	2.965e+04	0.72333	
22:00	5.751e+04	7.817e+04	0.74	y	1.357e+05	3.3097	
22:33	6.010e+04	6.888e+04	0.87	y	1.290e+05	3.1461	
22:54	2.227e+05	2.828e+05	0.79	y	5.055e+05	12.329	
23:18	8.777e+04	1.090e+05	0.81	y	1.968e+05	4.8004	
23:36	4.571e+04	5.399e+04	0.85	y	9.970e+04	2.4319	
23:56	1.164e+04	1.501e+04	0.78	y	2.665e+04	0.65002	
24:11	3.940e+04	4.805e+04	0.82	y	8.745e+04	2.1331	
24:18	8.485e+04	1.087e+05	0.78	y	1.935e+05	4.7210	
24:43	7.591e+05	9.504e+05	0.80	y	1.710e+06	41.698	
24:57	3.339e+04	3.950e+04	0.85	y	7.289e+04	1.7779	
25:23	7.258e+04	1.030e+05	0.70	y	1.756e+05	4.2828	
25:29	7.562e+05	9.307e+05	0.81	y	1.687e+06	41.147	2,3,7,8-TCDF
25:49	3.152e+04	3.897e+04	0.81	y	7.049e+04	1.7195	
26:03	9.586e+03	1.133e+04	0.85	y	2.091e+04	0.51010	
26:45	6.215e+03	3.725e+03	1.67	n	6.593e+03	0.16082	
27:16	1.203e+05	1.049e+05	1.15	n	1.856e+05	4.5268	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 15 File: 191031D2 S: 10 I: 1 F: 1
Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 11.946 Unnamed Concentration: 11.946

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:15	2.336e+05	1.518e+05	1.54 y	3.854e+05	11.946

Totals class: PeCDF EMPC

Entry #: 31

Run: 15 File: 191031D2 S: 10 I: 1 F: 2
 Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 158.57

Unnamed Concentration: 79.231

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
28:33	2.551e+04	1.748e+04	1.46 y	4.299e+04	1.3327	
28:41	6.782e+05	3.969e+05	1.71 y	1.075e+06	33.326	
29:14	6.428e+04	3.665e+04	1.75 y	1.009e+05	3.1286	
29:25	1.500e+05	9.001e+04	1.67 y	2.400e+05	7.4396	
29:36	1.186e+06	6.667e+05	1.78 y	1.853e+06	58.323	1,2,3,7,8-PeCDF
29:50	4.726e+05	2.601e+05	1.82 n	6.633e+05	20.561	
30:23	1.285e+04	7.260e+03	1.77 y	2.011e+04	0.62327	
30:28	4.334e+05	2.546e+05	1.70 y	6.880e+05	21.019	2,3,4,7,8-PeCDF
30:31	2.299e+05	1.293e+05	1.78 y	3.592e+05	11.134	
31:21	3.389e+04	2.048e+04	1.65 y	5.436e+04	1.6851	

Totals class: HxCDF EMPC

Entry #: 33

Run: 15 File: 191031D2 S: 10 I: 1 F: 3
Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 219.91

Unnamed Concentration: 63.294

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:00	1.308e+05	1.002e+05	1.31	y	2.311e+05	6.2227
32:10	4.779e+05	3.890e+05	1.23	y	8.669e+05	23.346
32:30	1.143e+04	6.733e+03	1.70	n	1.508e+04	0.40612
32:42	4.562e+05	3.666e+05	1.24	y	8.228e+05	22.159
33:04	3.031e+04	2.633e+04	1.15	y	5.663e+04	1.5251
33:11	2.459e+06	1.995e+06	1.23	y	4.454e+06	113.88 1,2,3,4,7,8-HxCDF
33:18	6.149e+05	5.105e+05	1.20	y	1.125e+06	28.983 1,2,3,6,7,8-HxCDF
33:35	1.272e+04	1.286e+04	0.99	n	2.297e+04	0.61865
33:54	1.853e+05	1.546e+05	1.20	y	3.399e+05	9.0462 2,3,4,6,7,8-HxCDF
34:52	8.361e+04	7.296e+04	1.15	y	1.566e+05	4.7088 1,2,3,7,8,9-HxCDF
34:54	1.881e+05	1.467e+05	1.28	y	3.348e+05	9.0162

Totals class: HpCDF EMPC

Entry #: 35

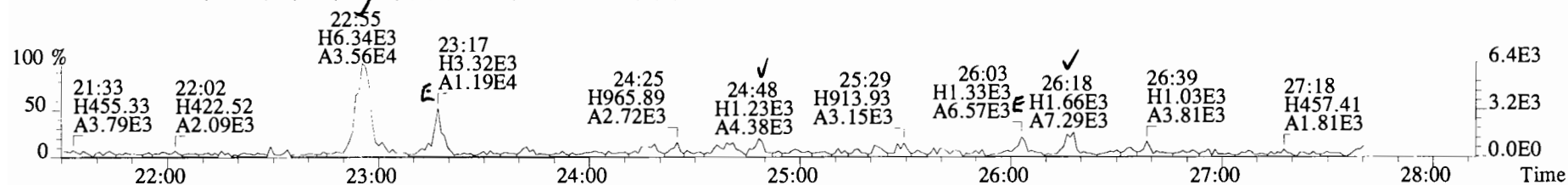
Run: 15 File: 191031D2 S: 10 I: 1 F: 4
 Acquired: 1-NOV-19 06:53:31 Processed: 1-NOV-19 12:03:19

Total Concentration: 150.12

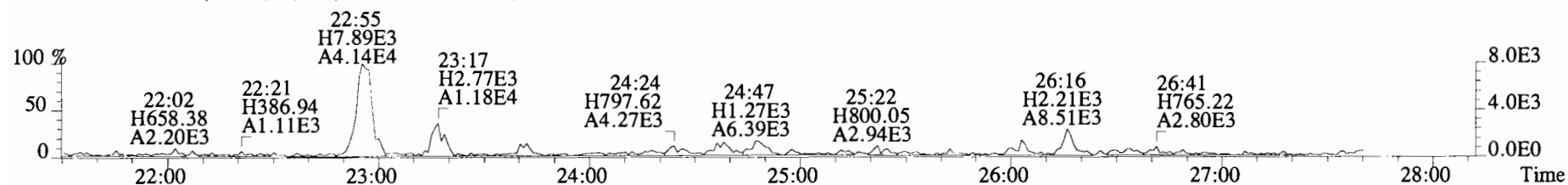
Unnamed Concentration: 73.211

RT	m1 Resp	m2 Resp	RA		Resp Concentration		Name
36:42	1.068e+06	1.043e+06	1.02	y	2.112e+06	59.667	1,2,3,4,6,7,8-HpCDF
37:05	2.425e+04	1.948e+04	1.25	n	3.973e+04	1.1124	
37:17	1.314e+06	1.261e+06	1.04	y	2.575e+06	72.098	
38:27	3.183e+05	3.098e+05	1.03	y	6.281e+05	17.245	1,2,3,4,7,8,9-HpCDF

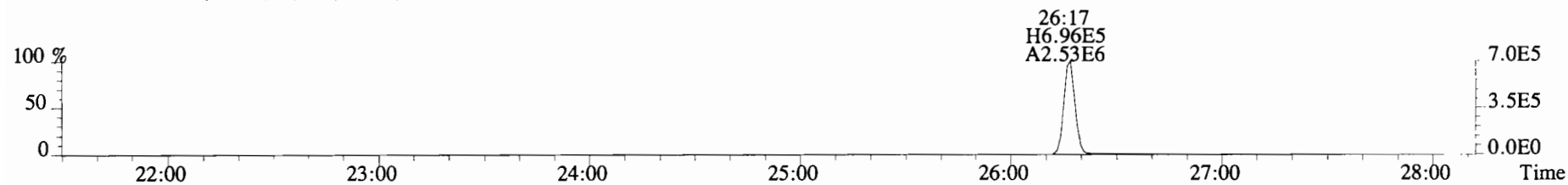
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



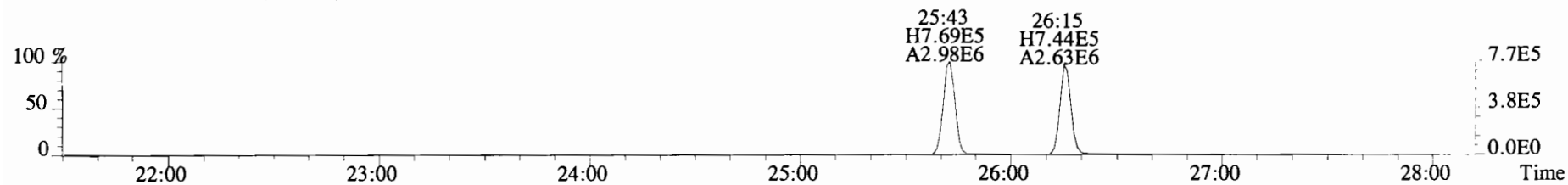
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



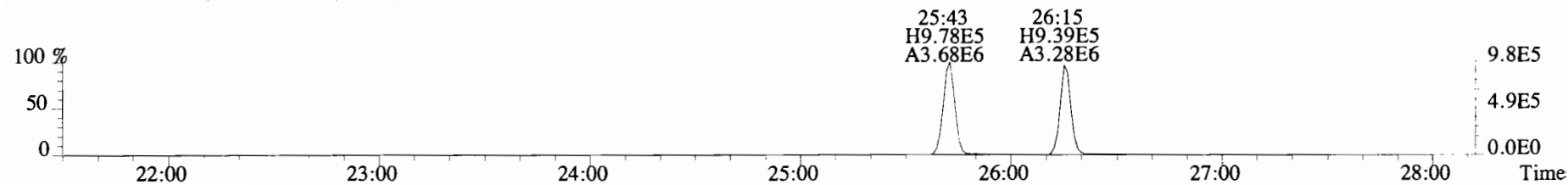
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



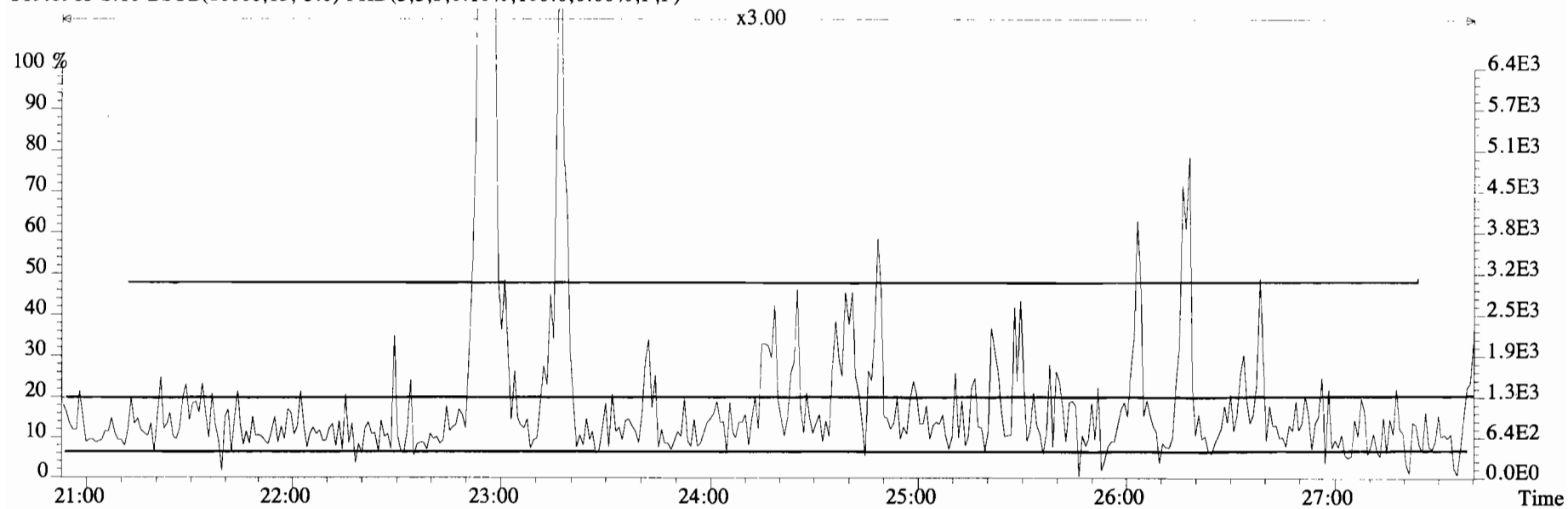
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



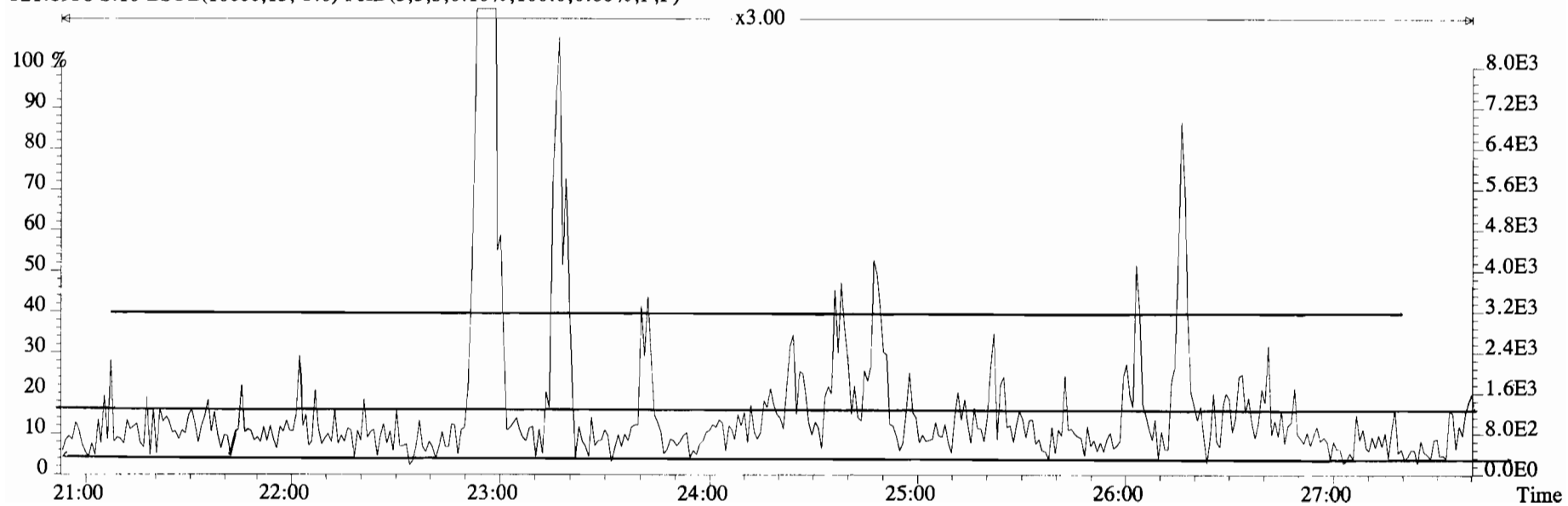
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



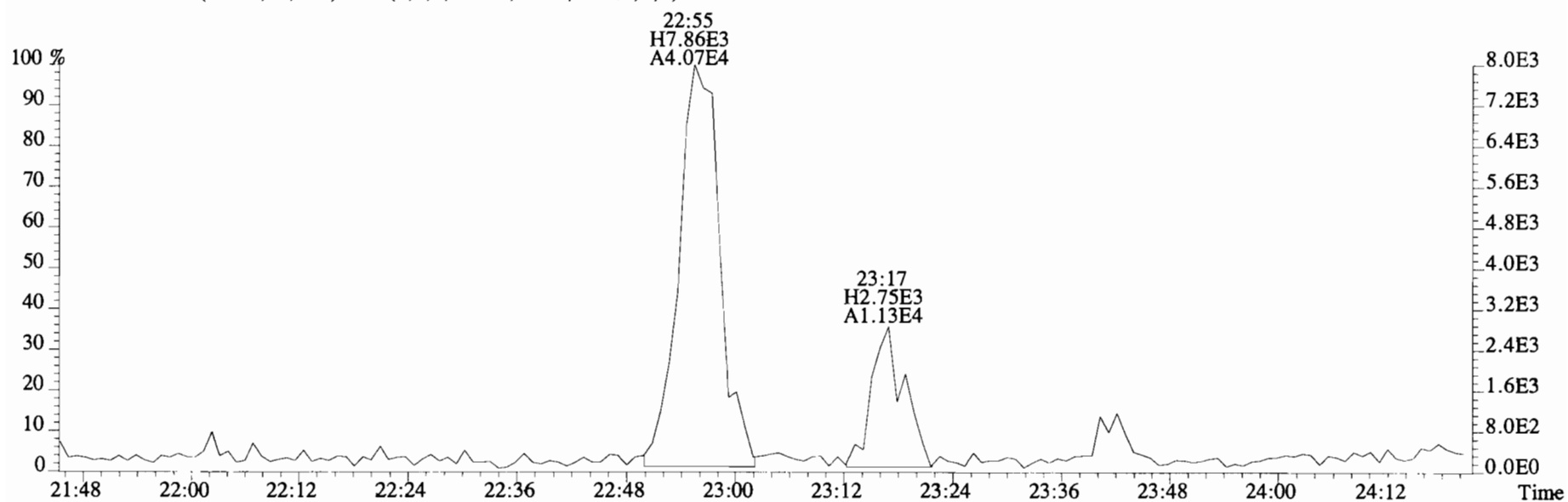
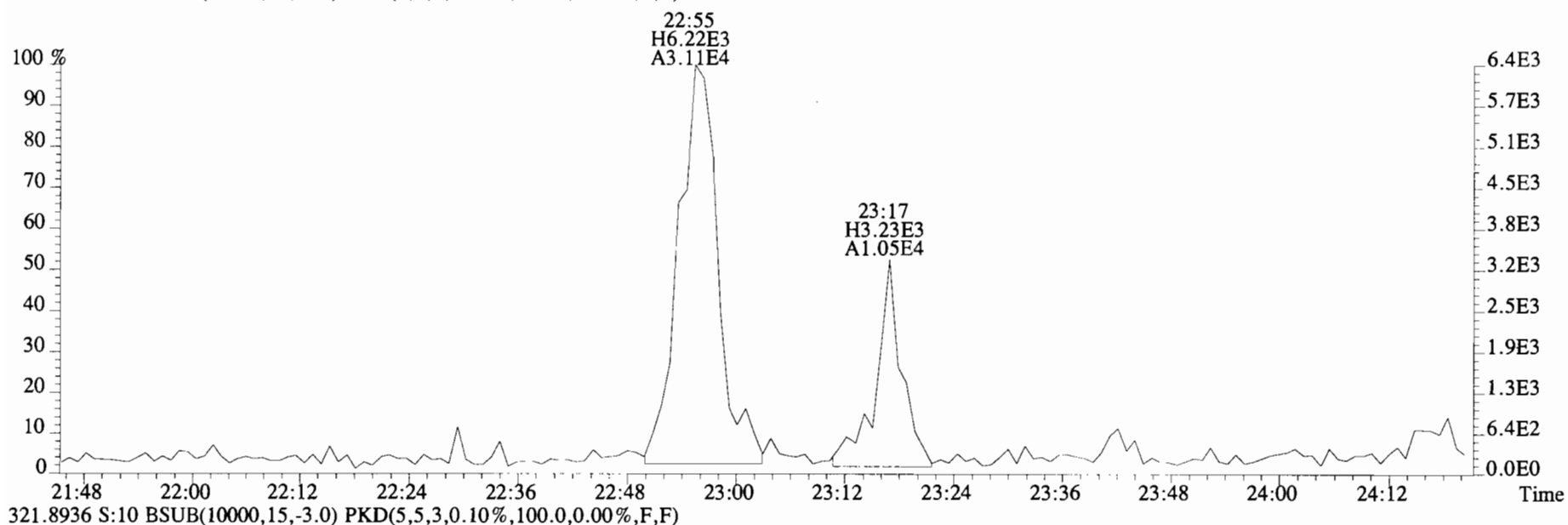
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



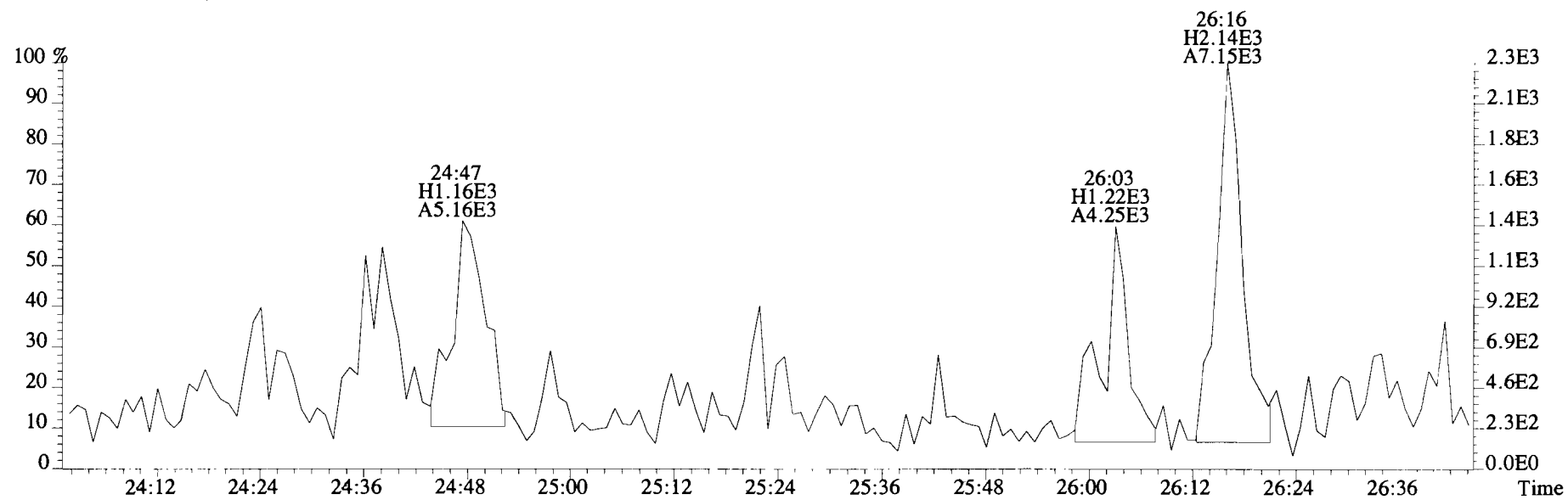
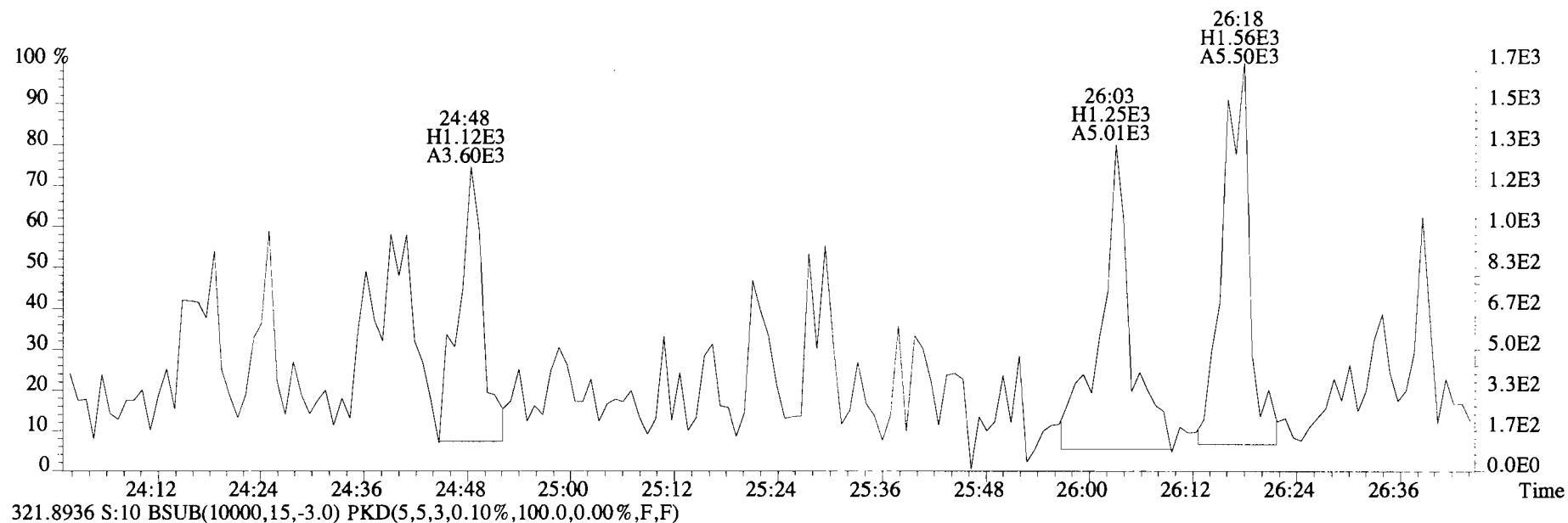
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



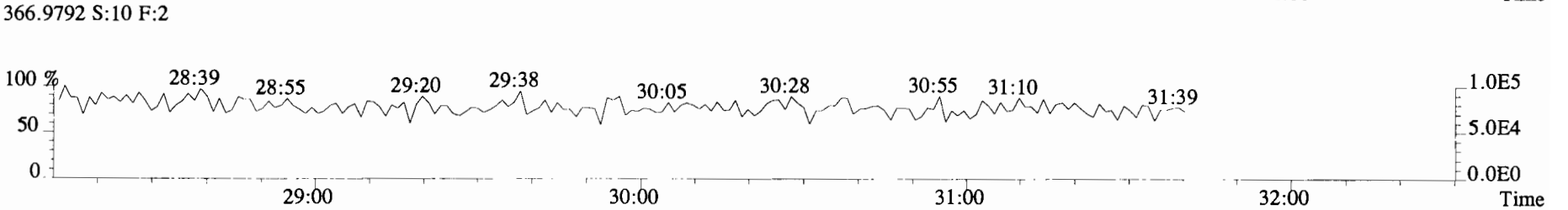
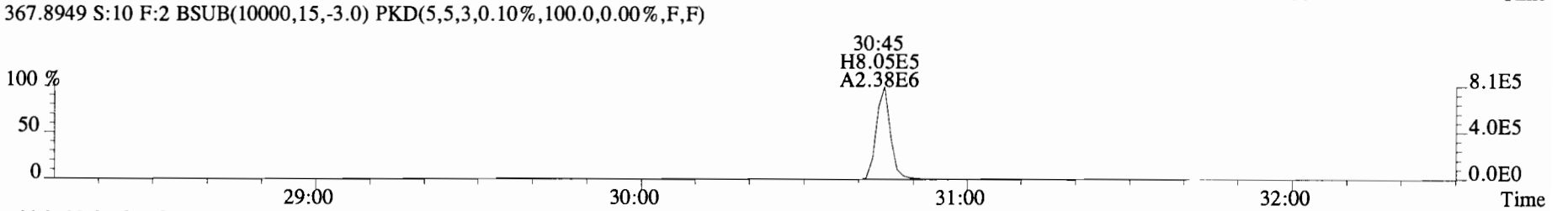
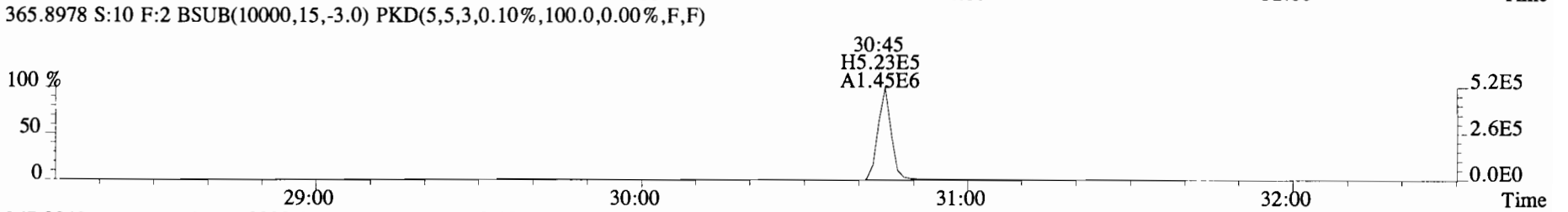
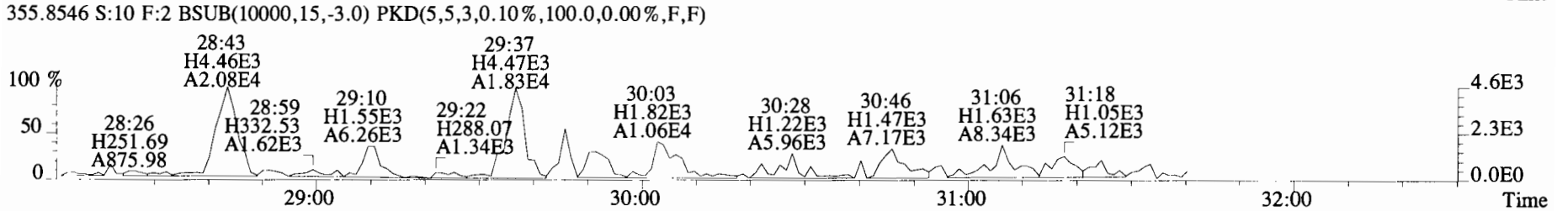
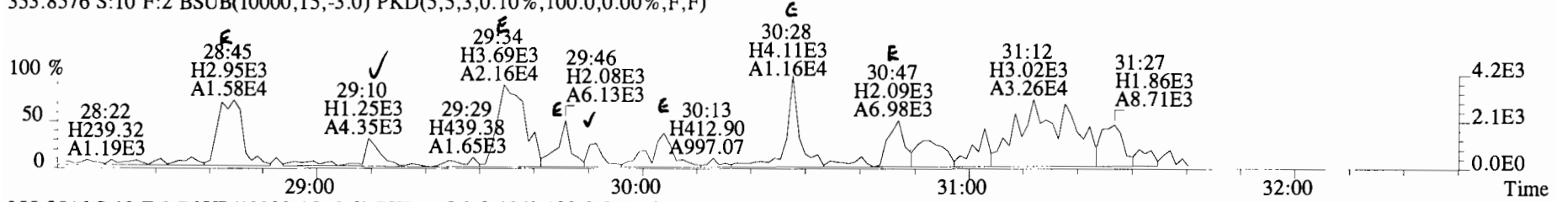
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



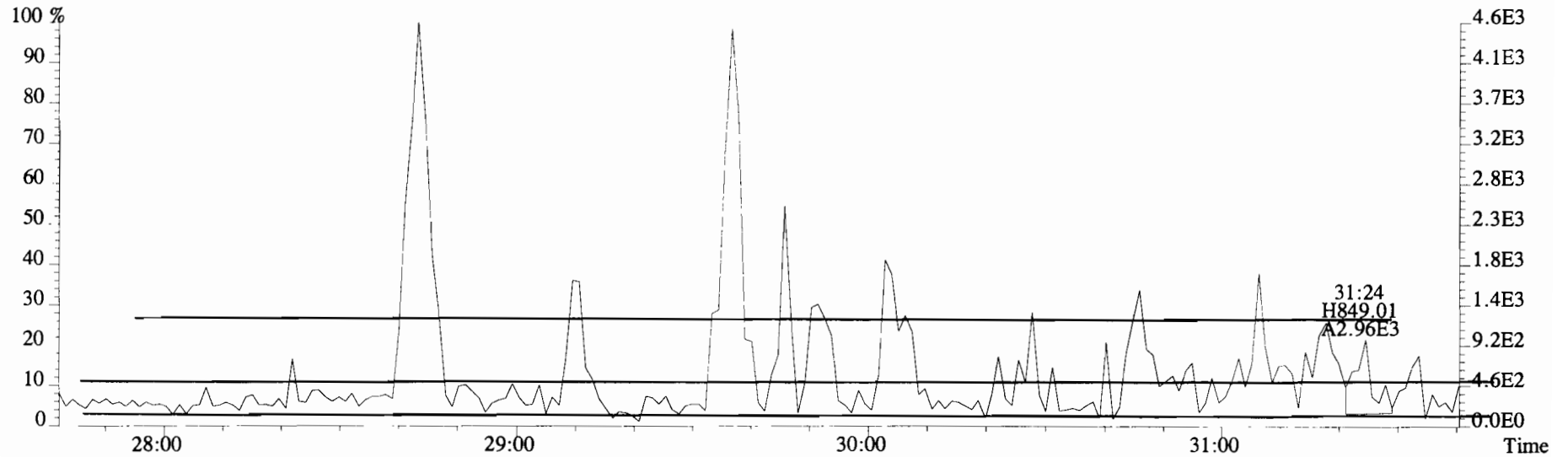
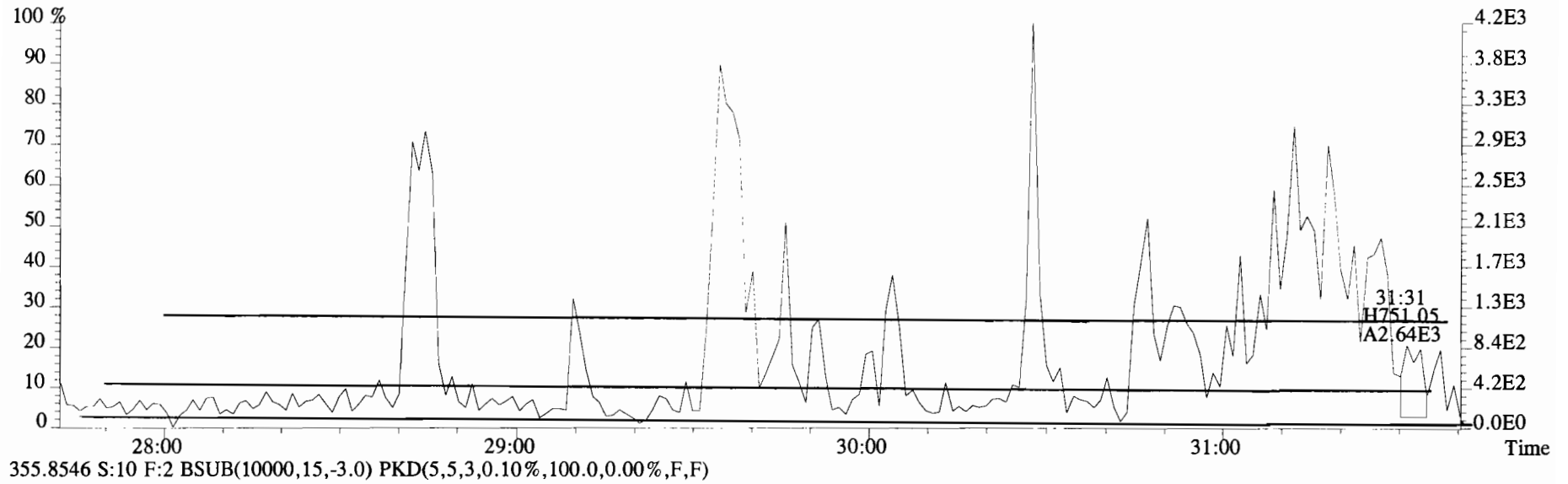
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



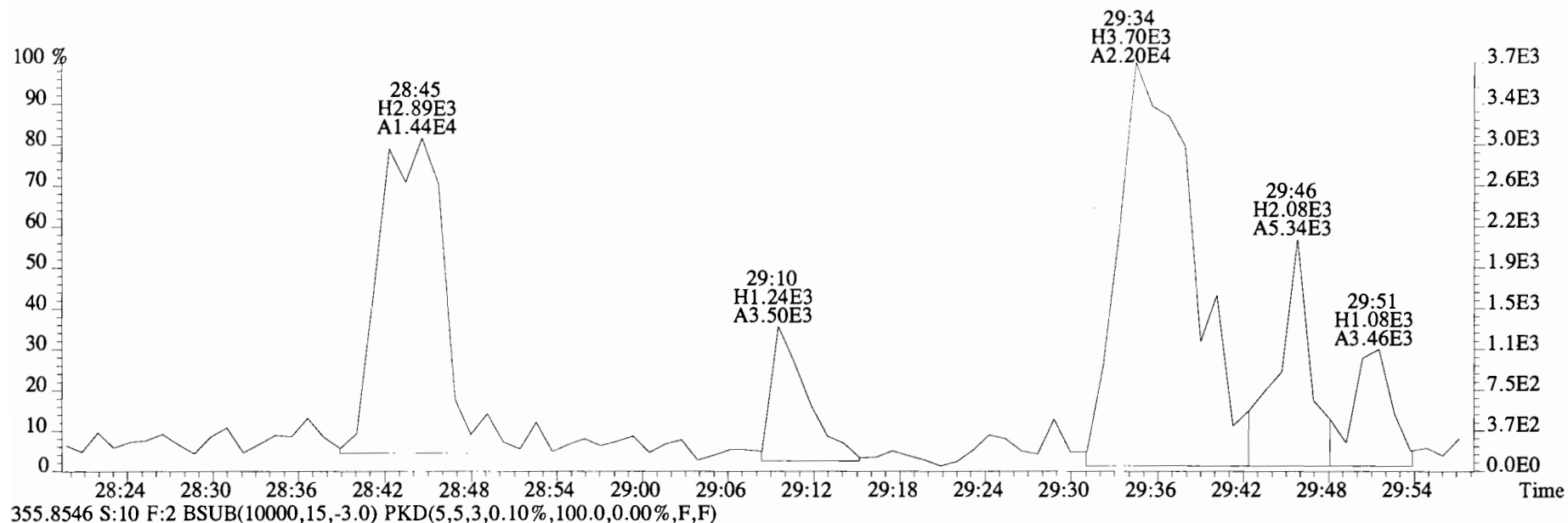
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



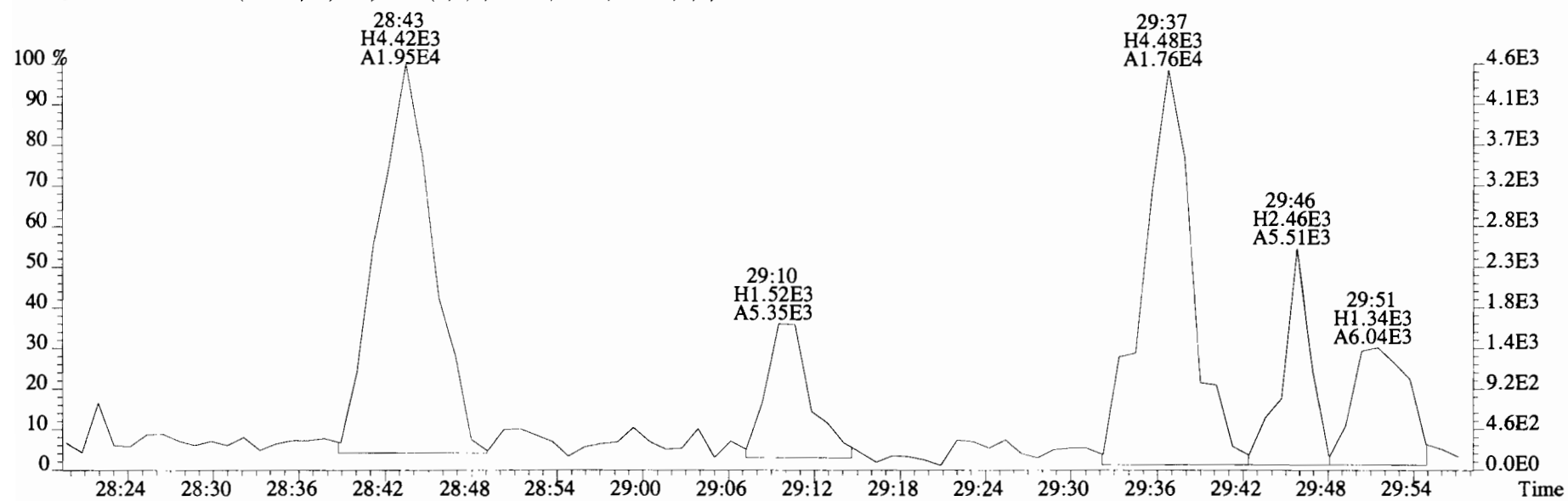
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



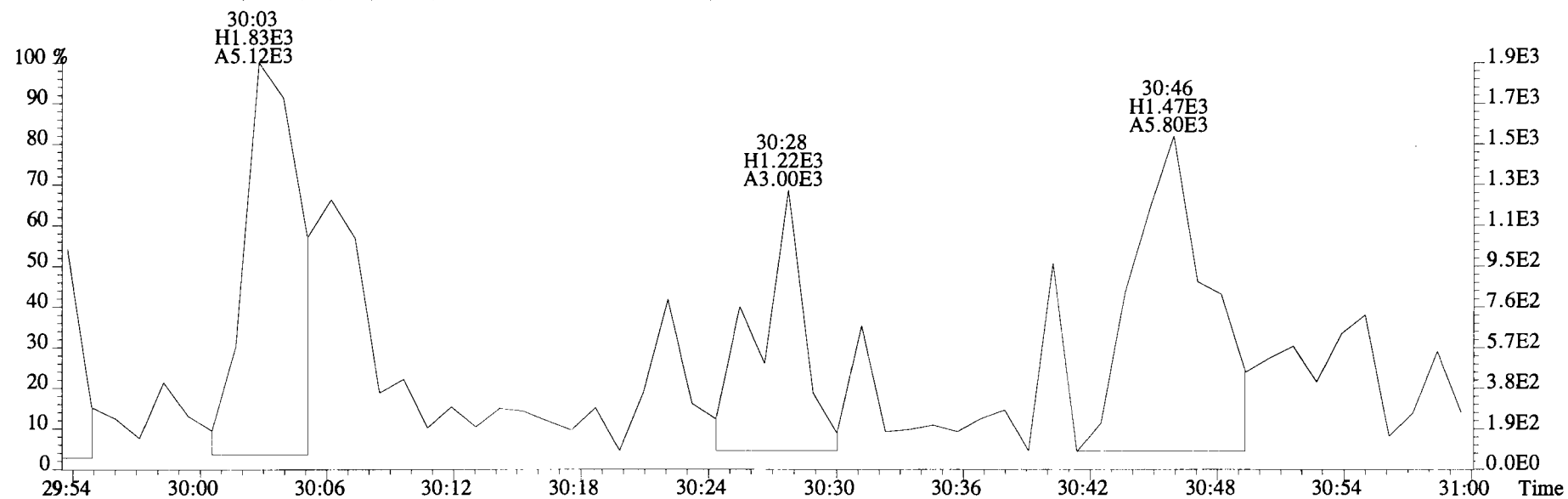
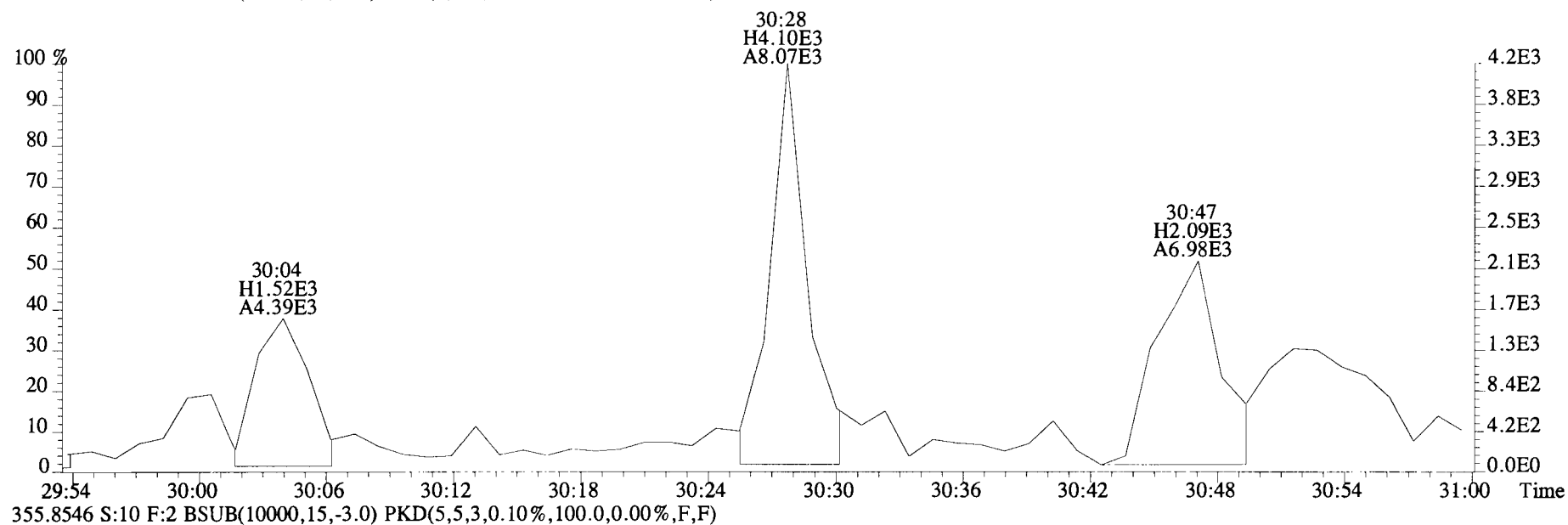
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



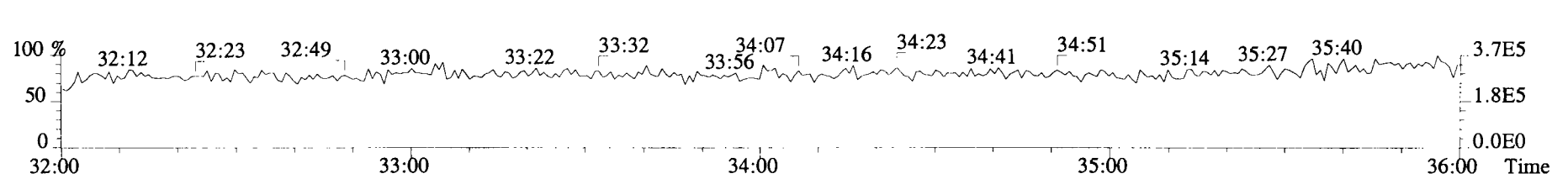
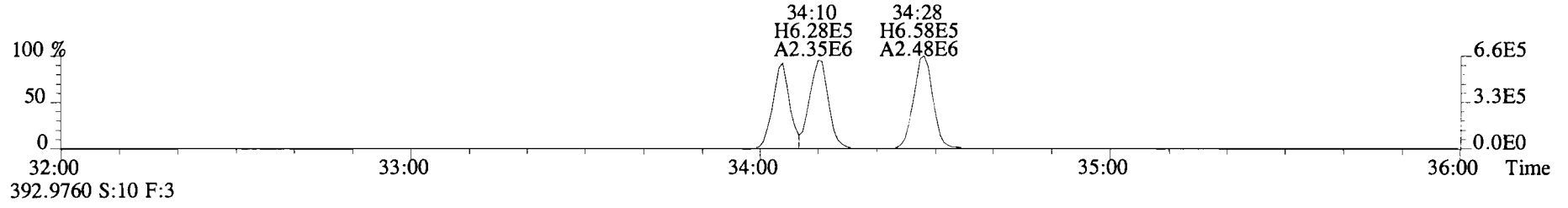
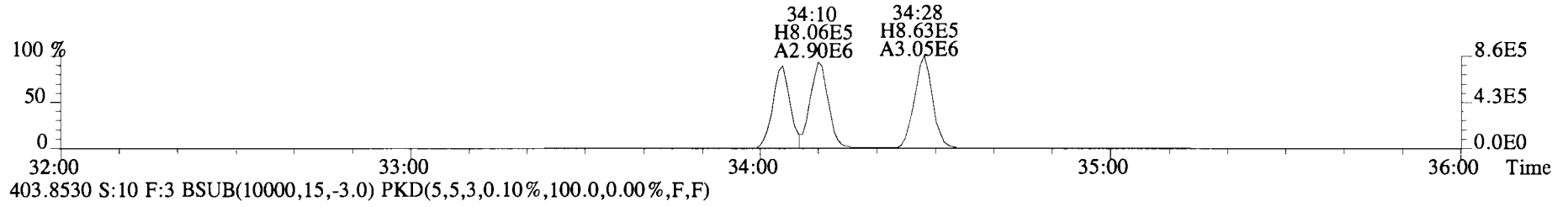
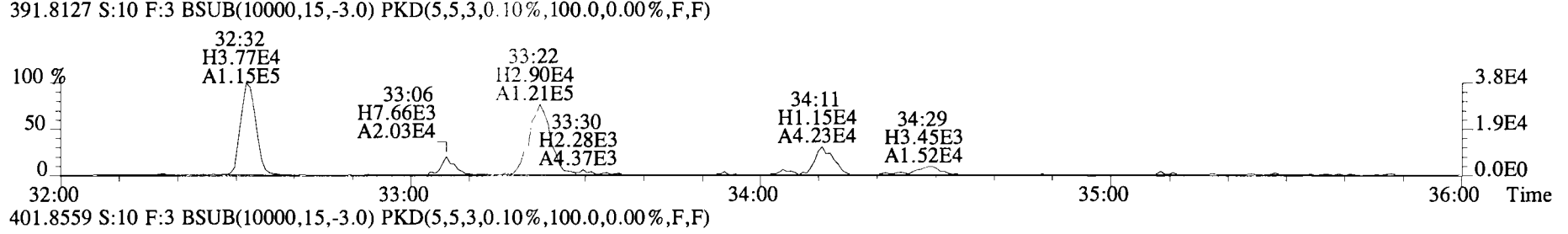
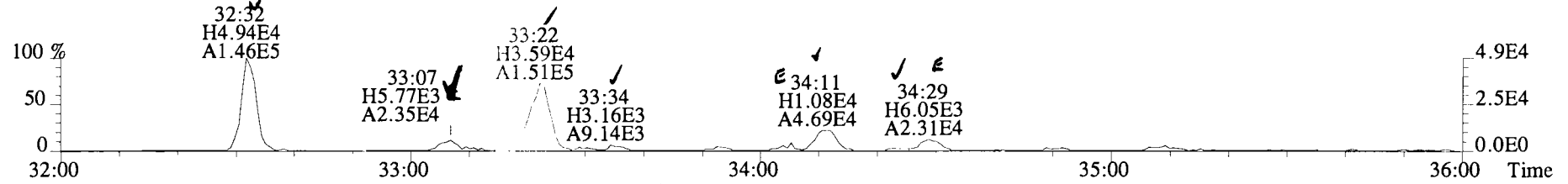
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



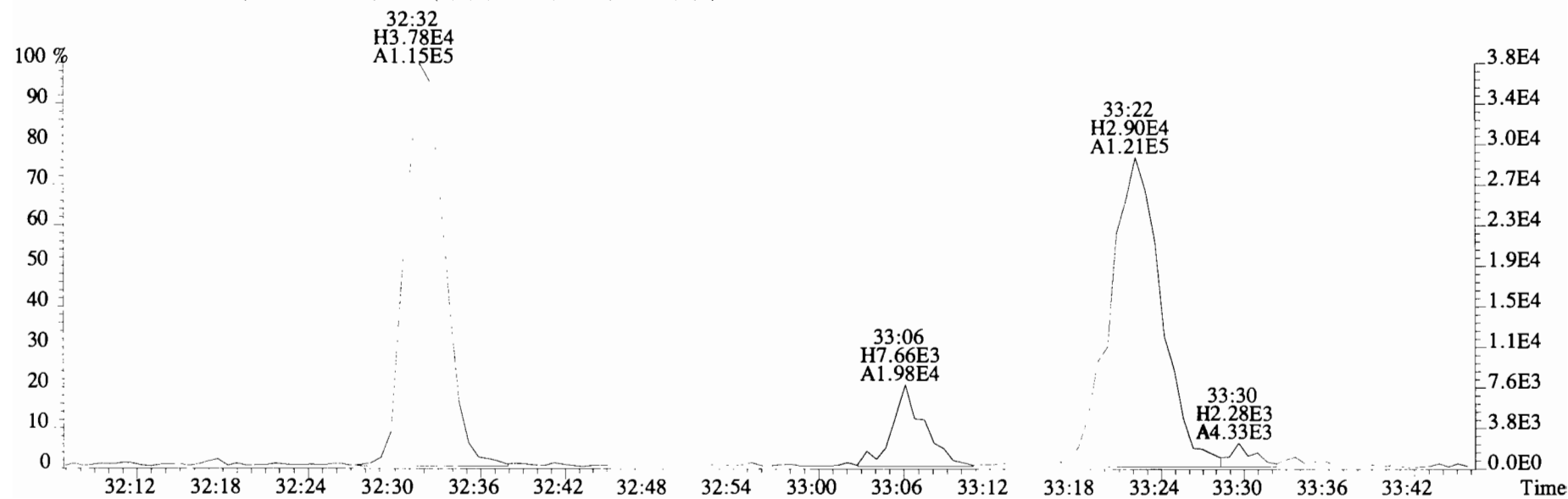
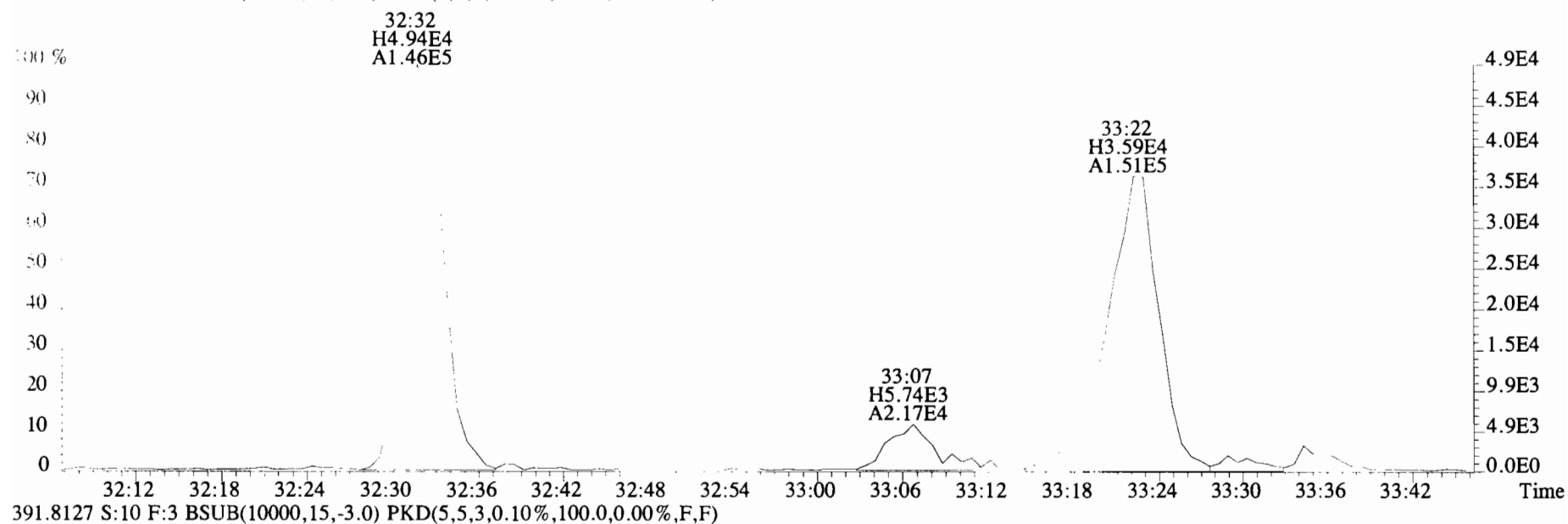
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



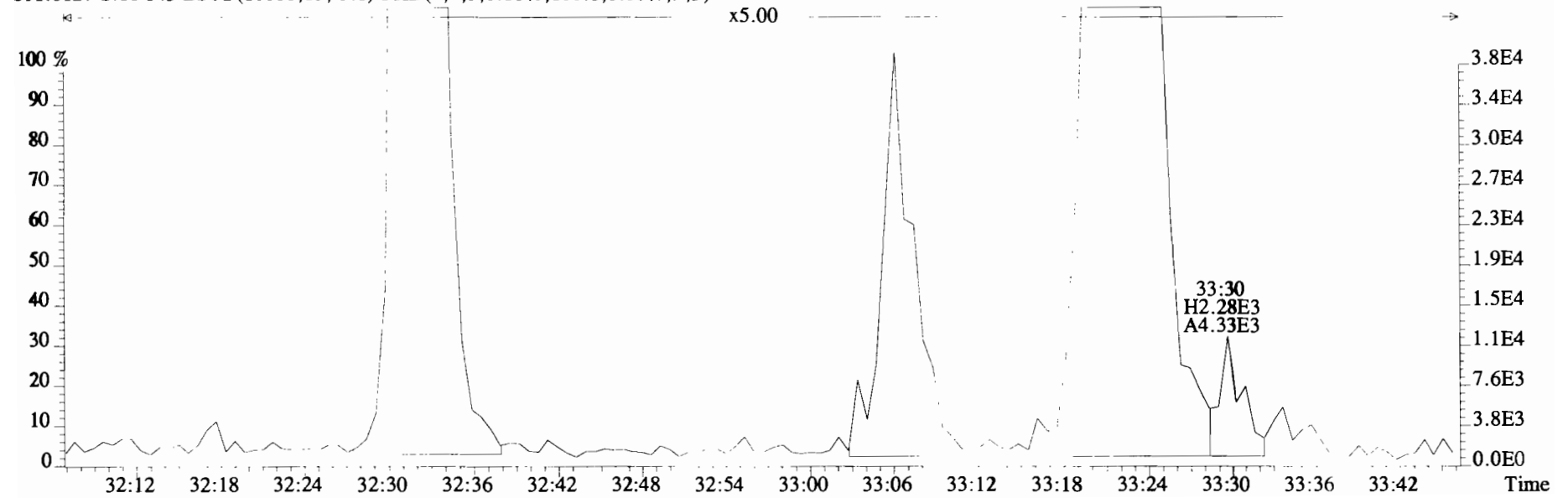
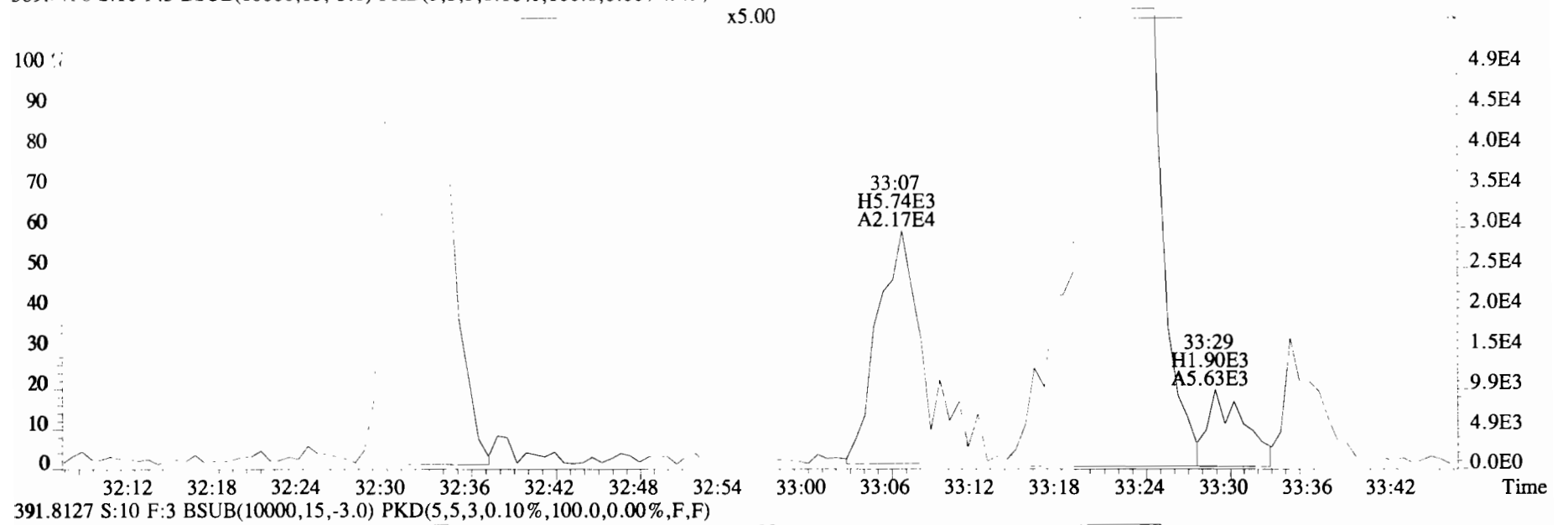
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI + Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



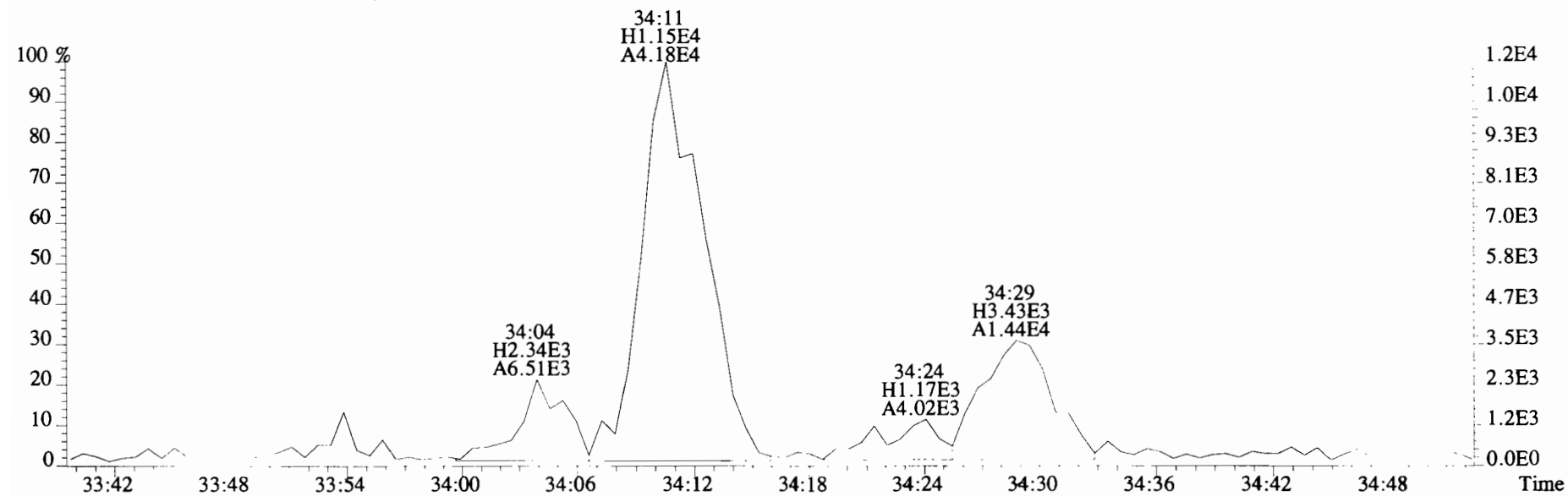
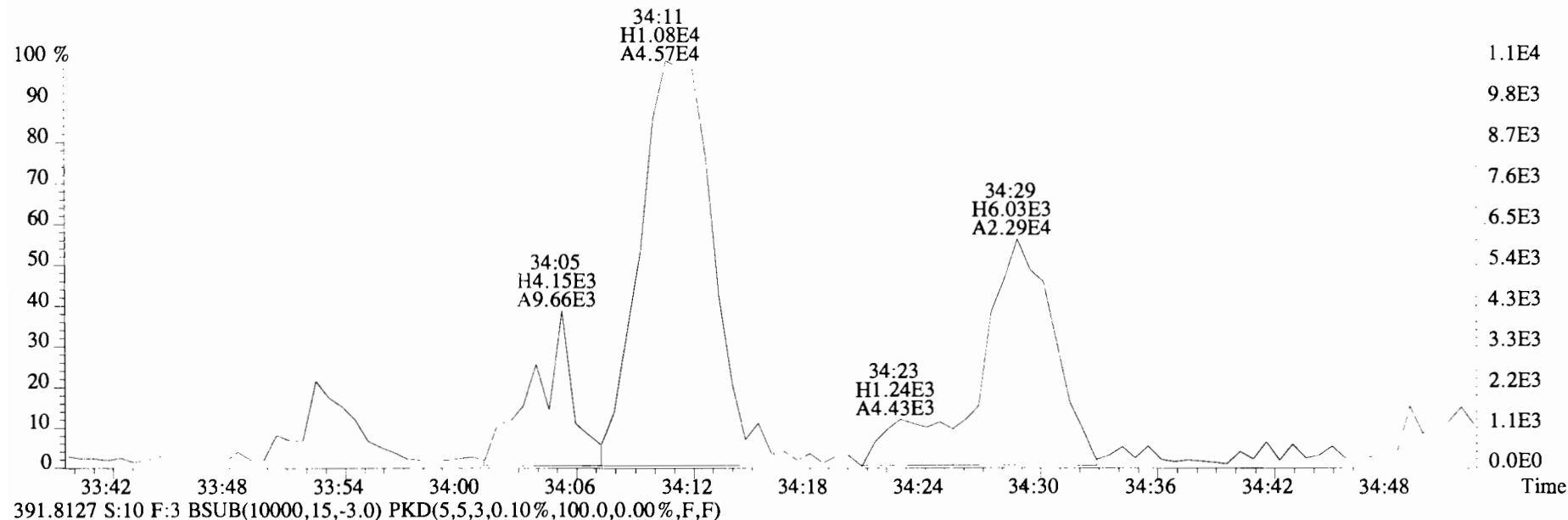
File: 191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage: SIR Autospec-UltimaE
 Sample#10 File Text: Viata Analytical Laboratory VG7 Text: 1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp: OCDD_DB5
 391.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



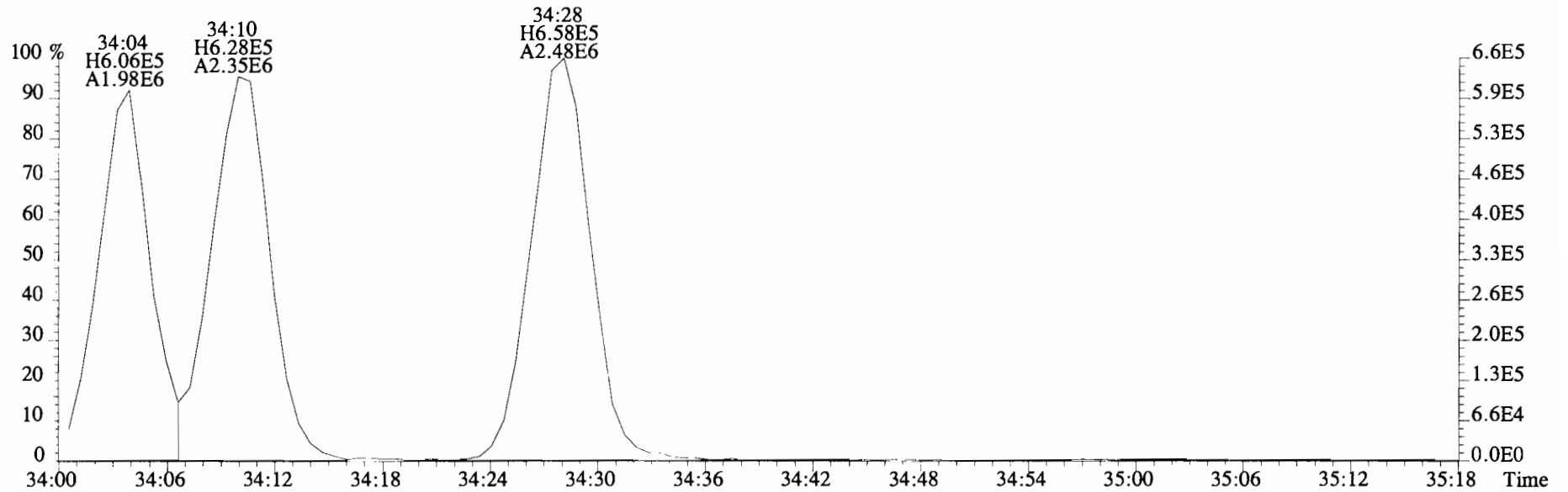
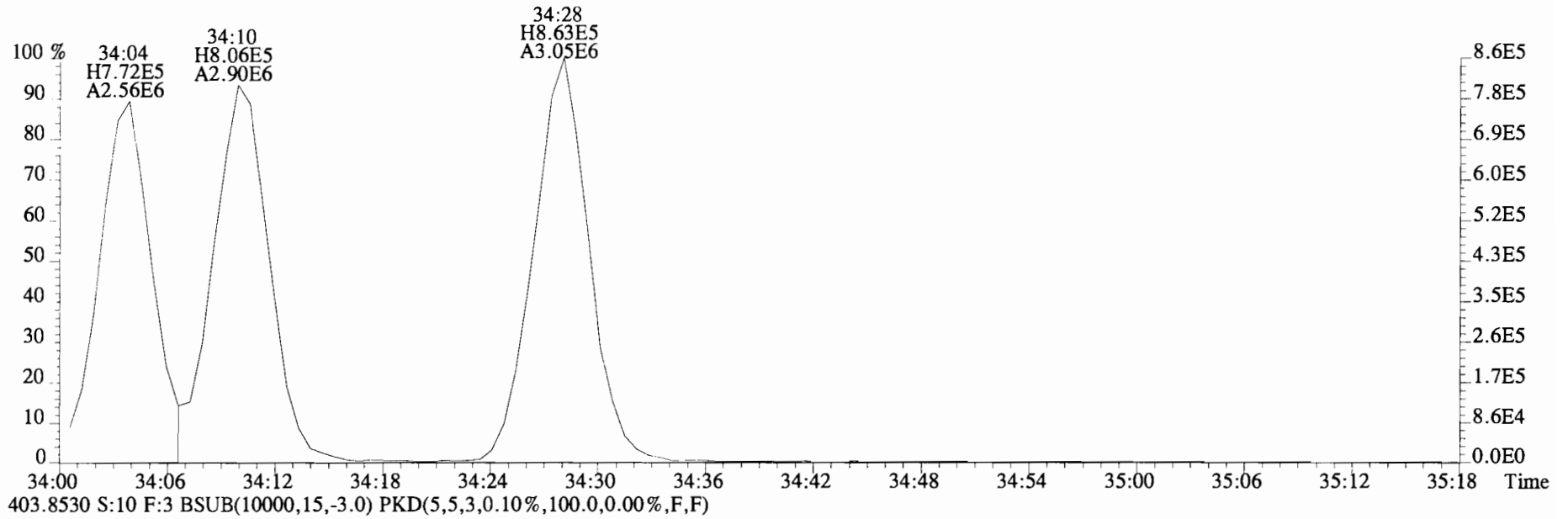
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



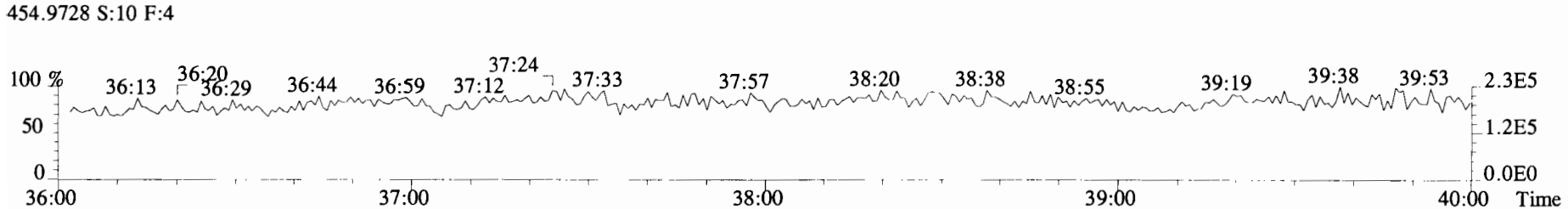
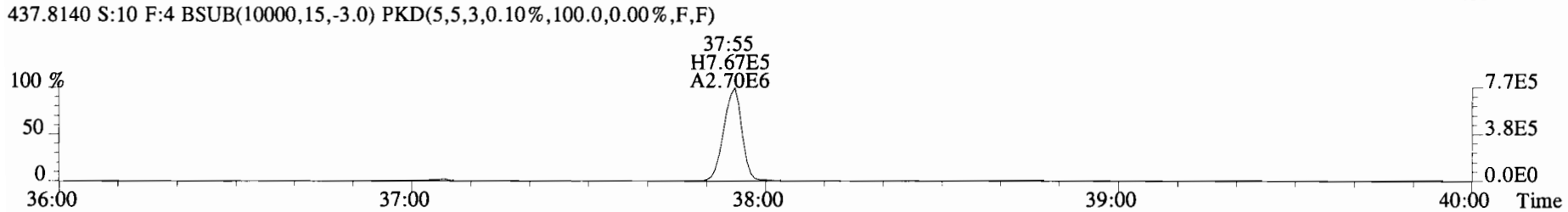
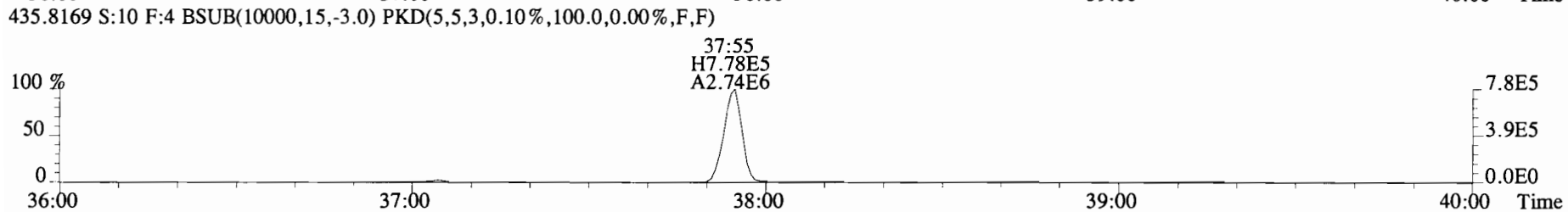
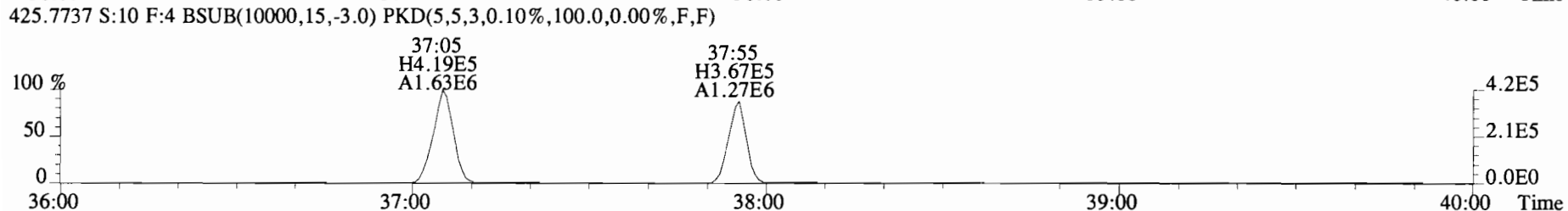
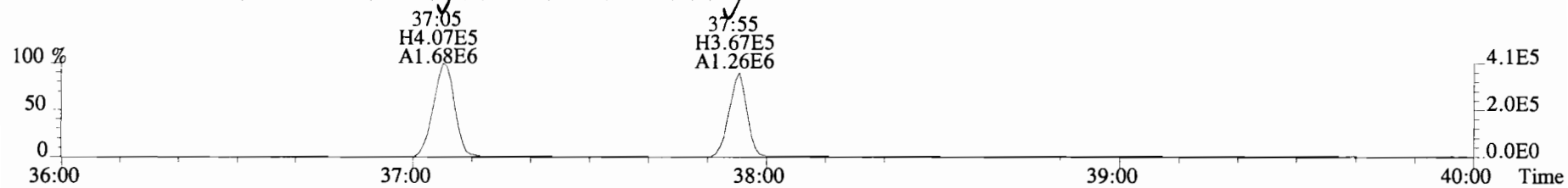
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 C:\E1- Voltage SIR Autospec-UltimaI
 Sample#10 File Text:Viata Analytical Laboratory_V07 Text:1903565-08RE1 PDI-1082SC B-04-06-191002 20.41 Exp:OCDD_DB5
 389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



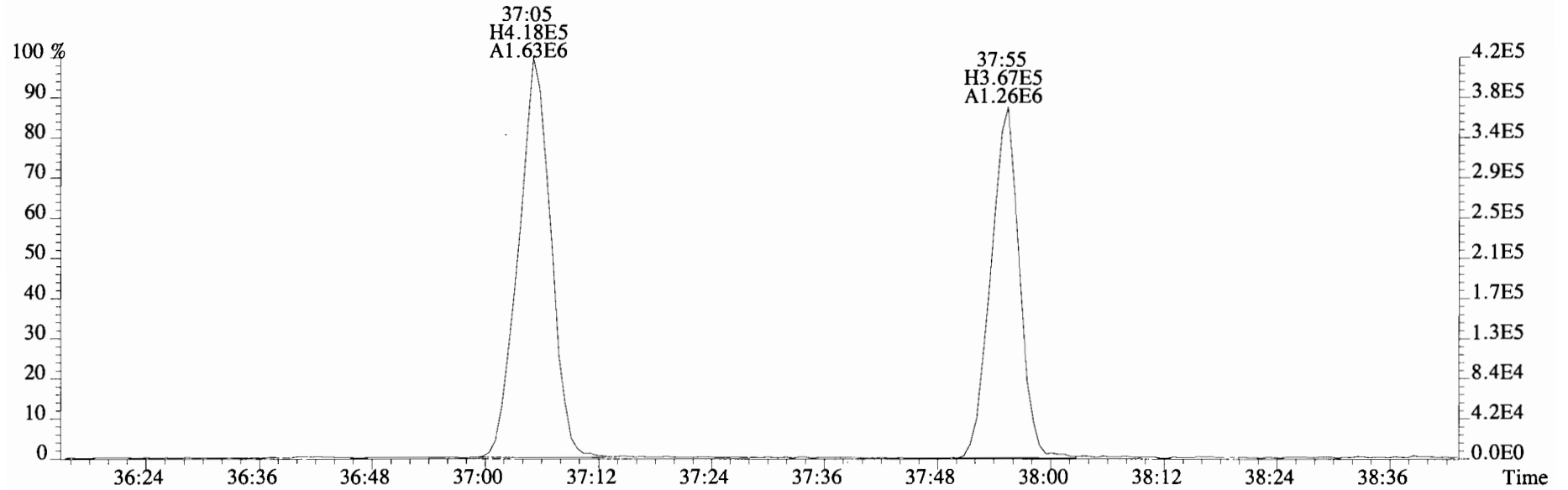
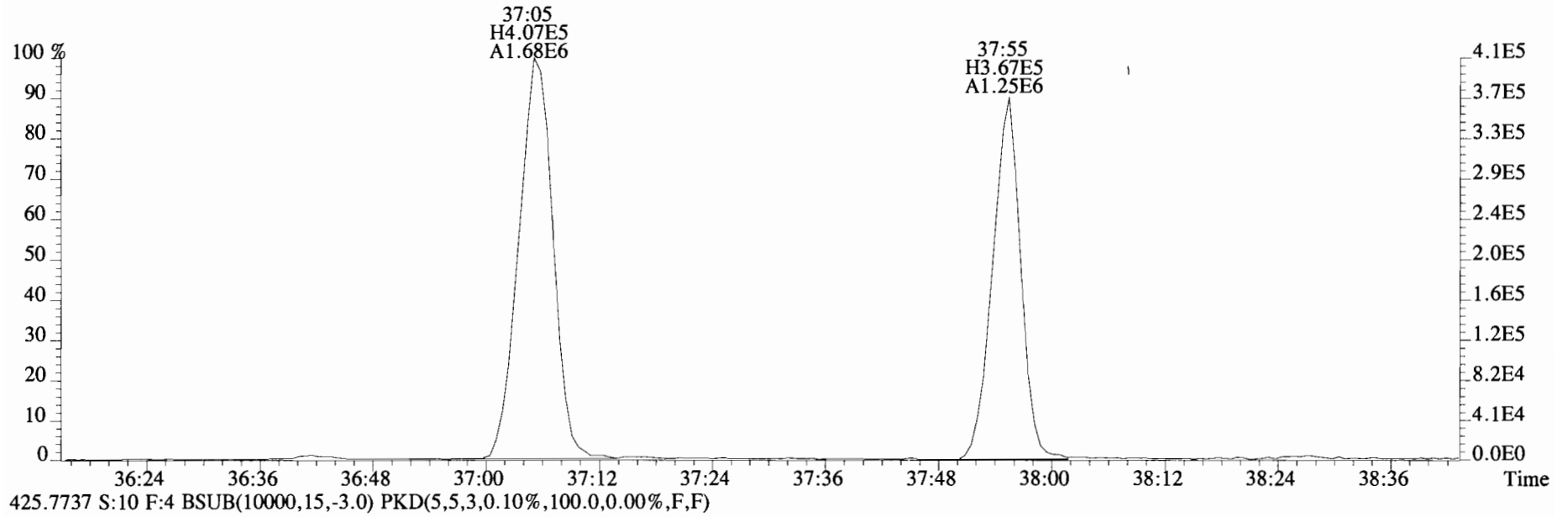
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



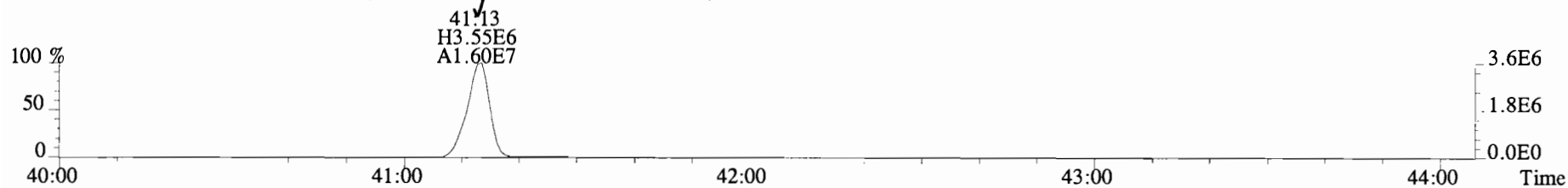
File:191031D2 #1-356 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



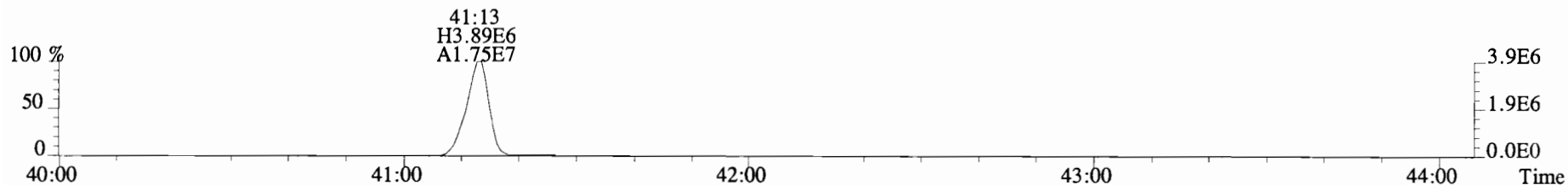
File:191031D2 #1-356 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



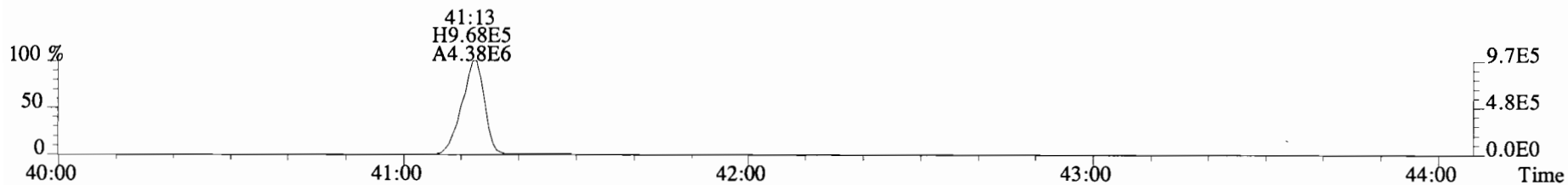
File:191031D2 #1-432 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



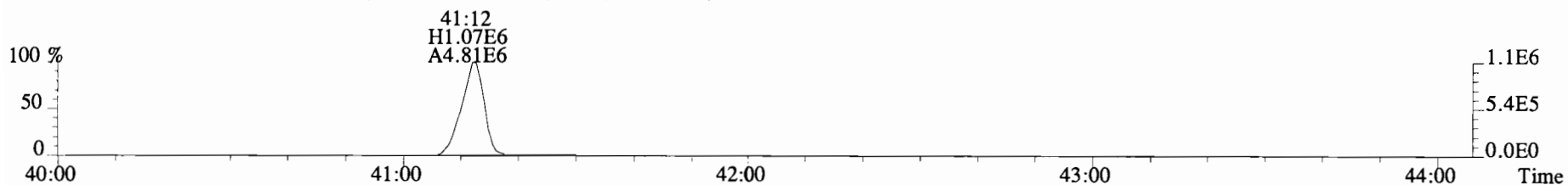
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



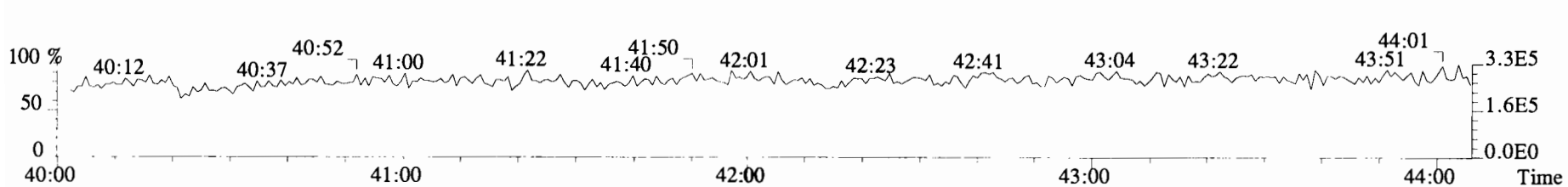
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



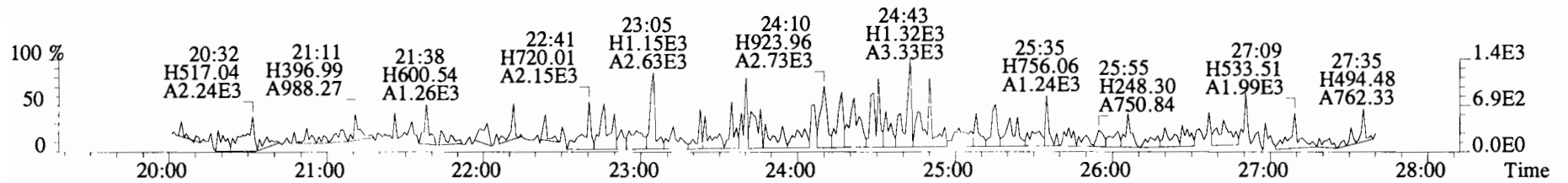
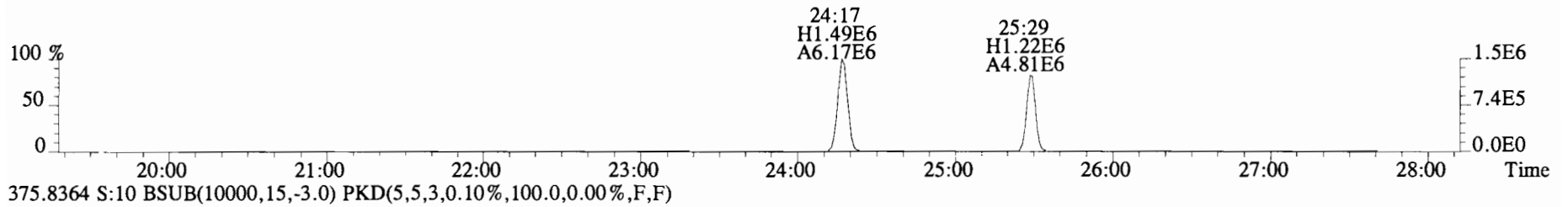
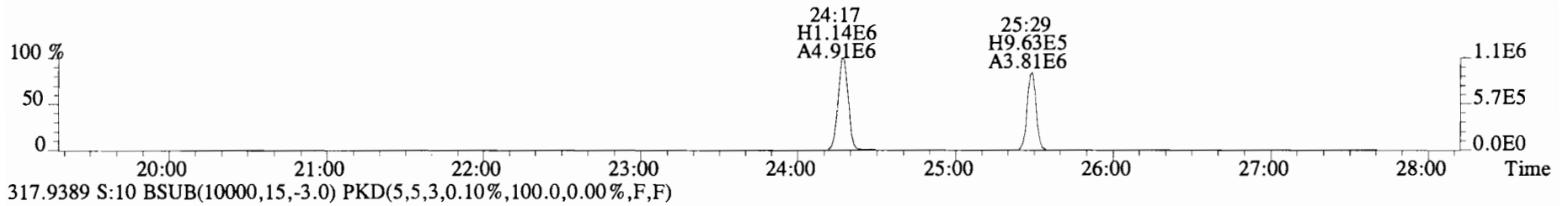
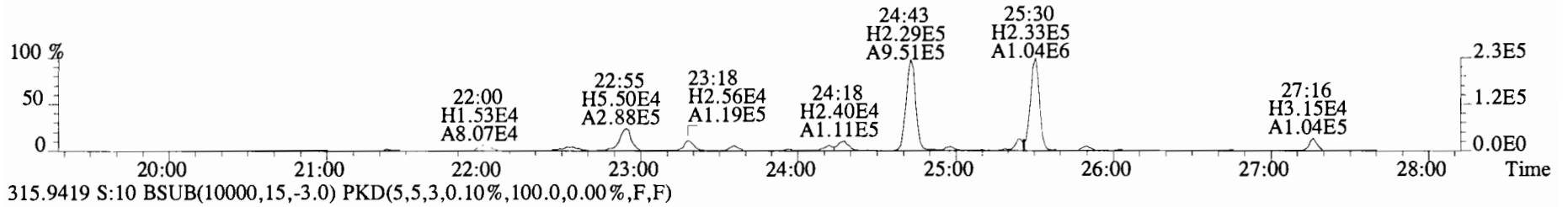
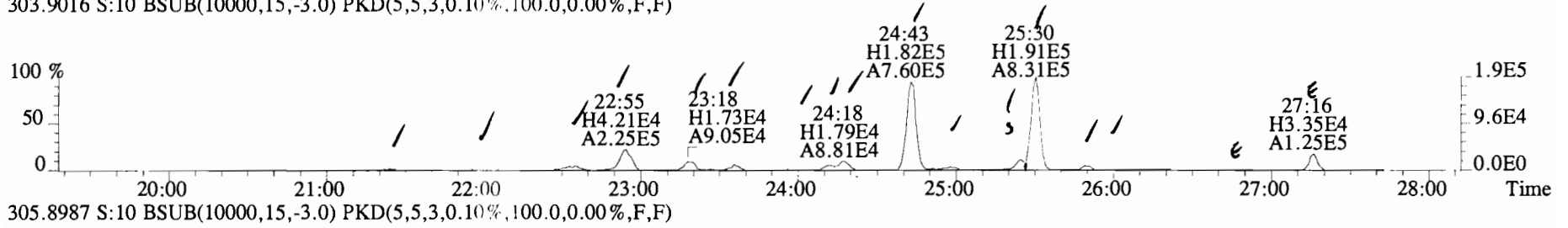
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



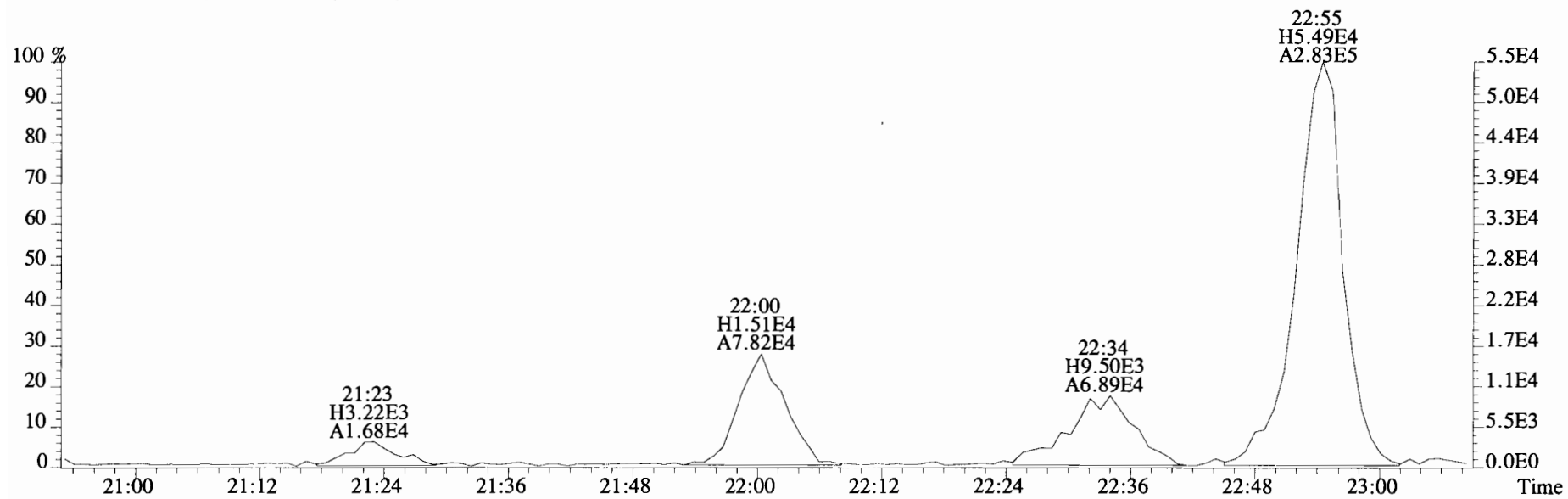
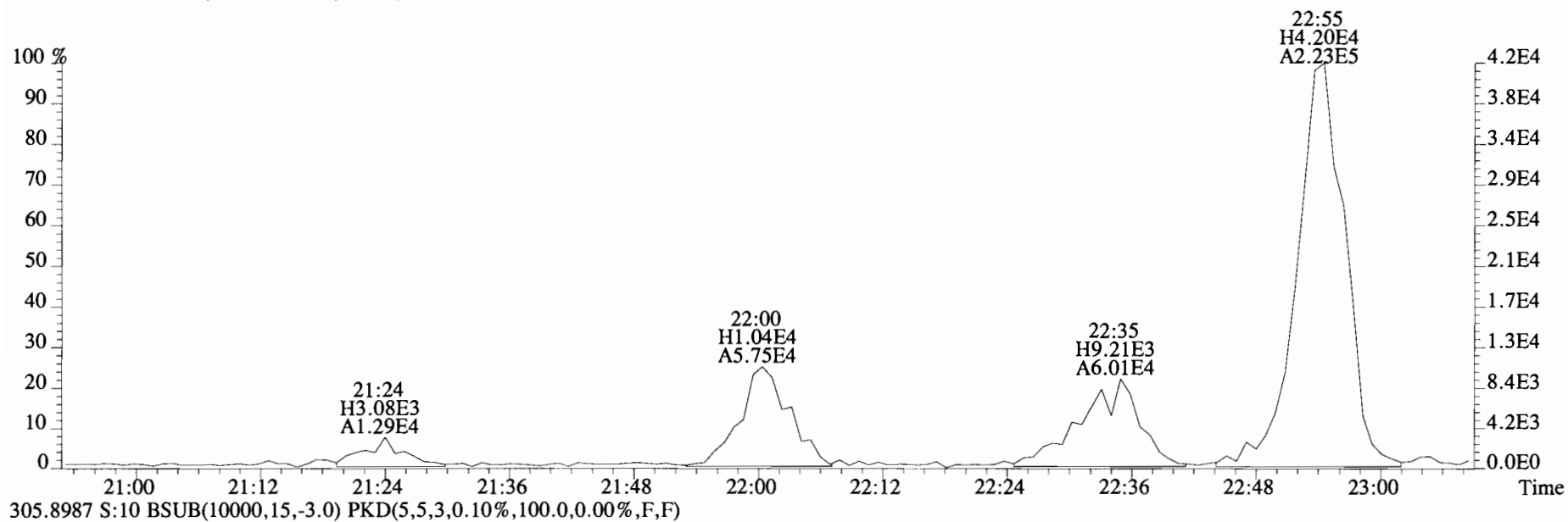
454.9728 S:10 F:5



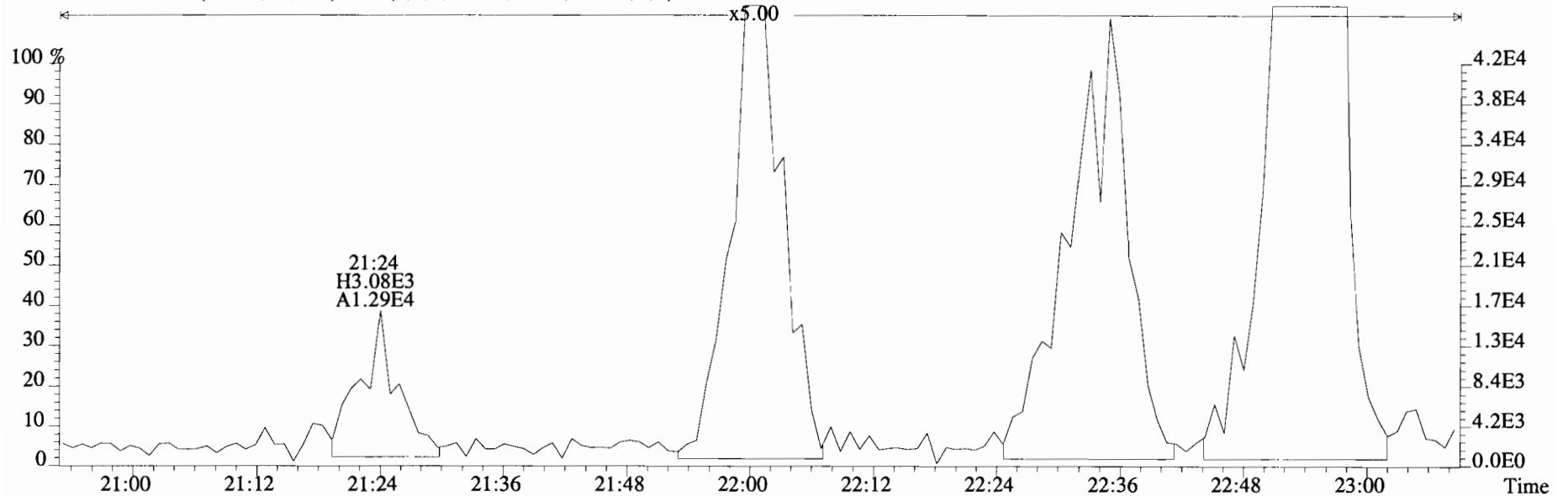
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



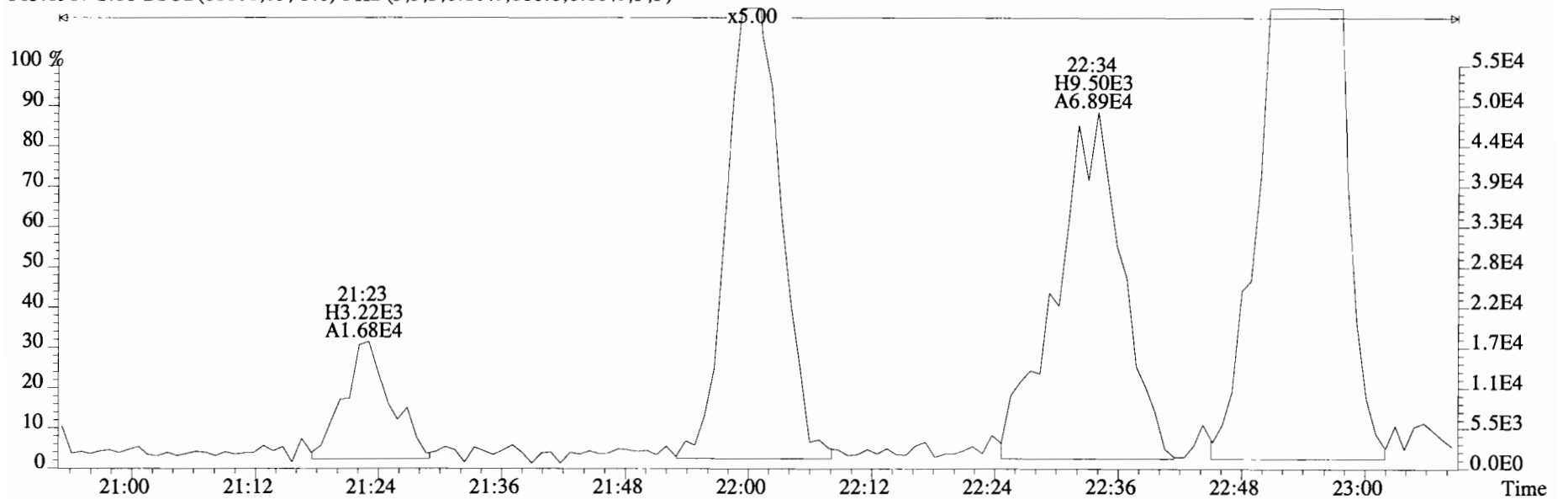
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



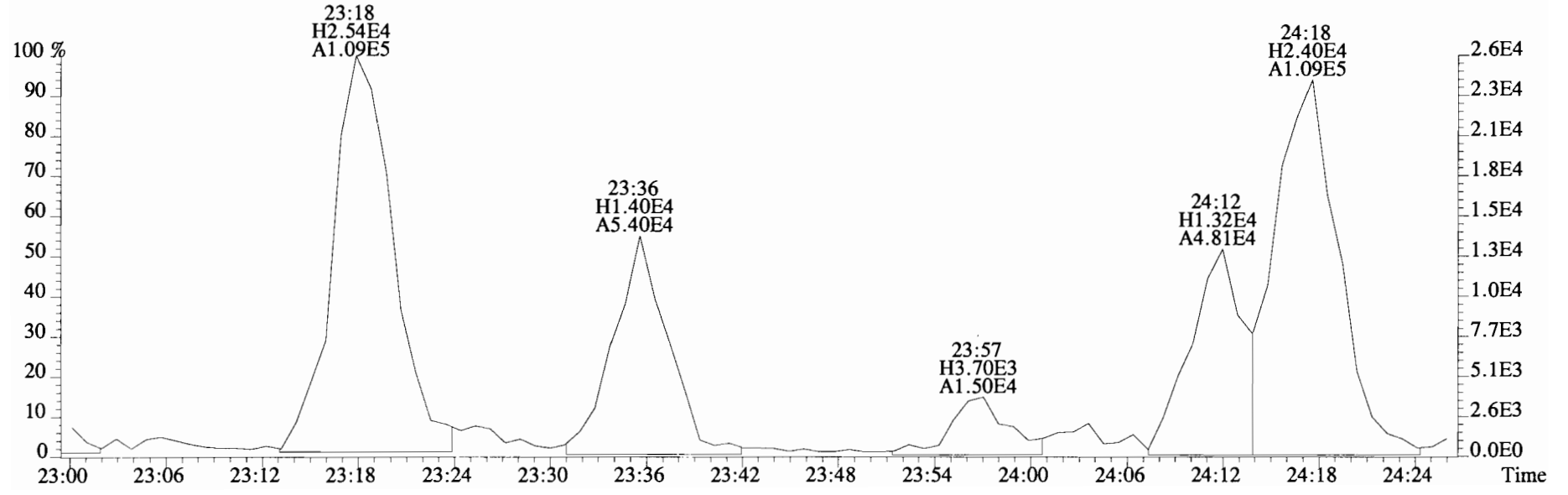
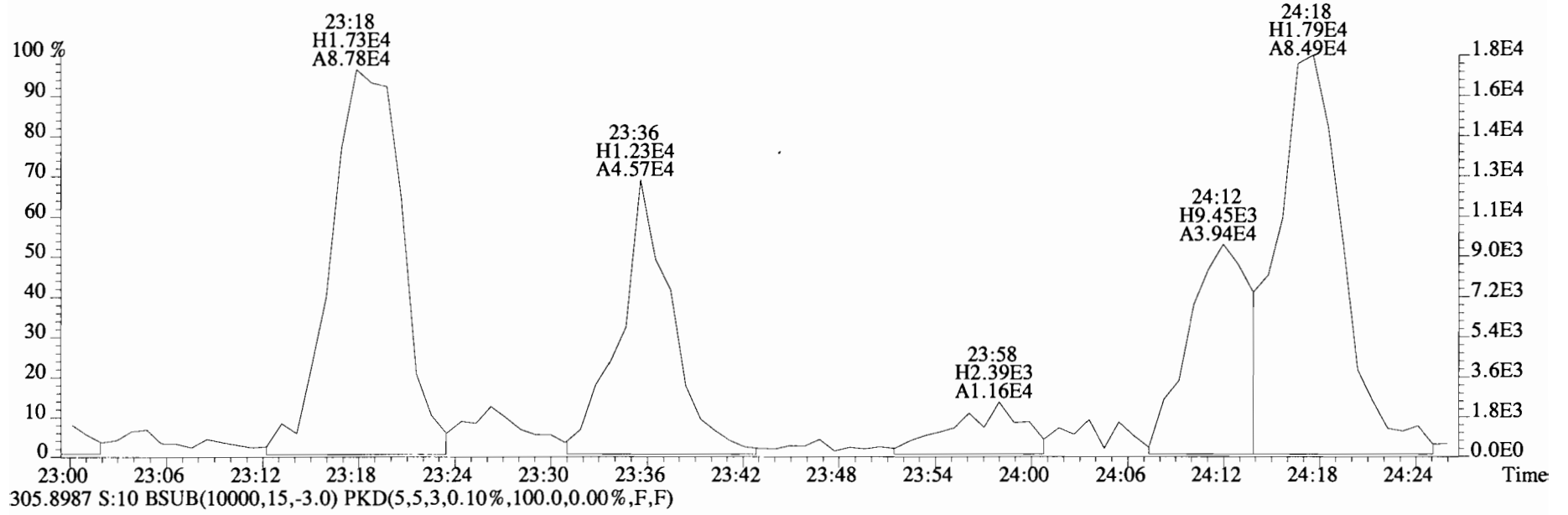
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Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



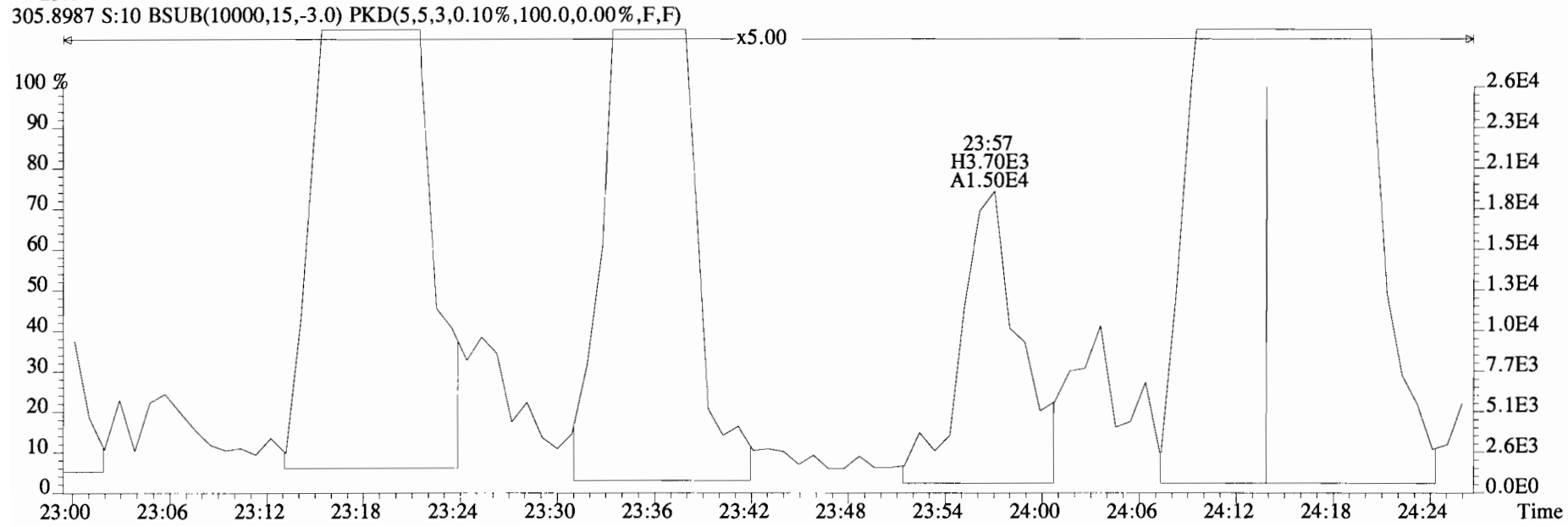
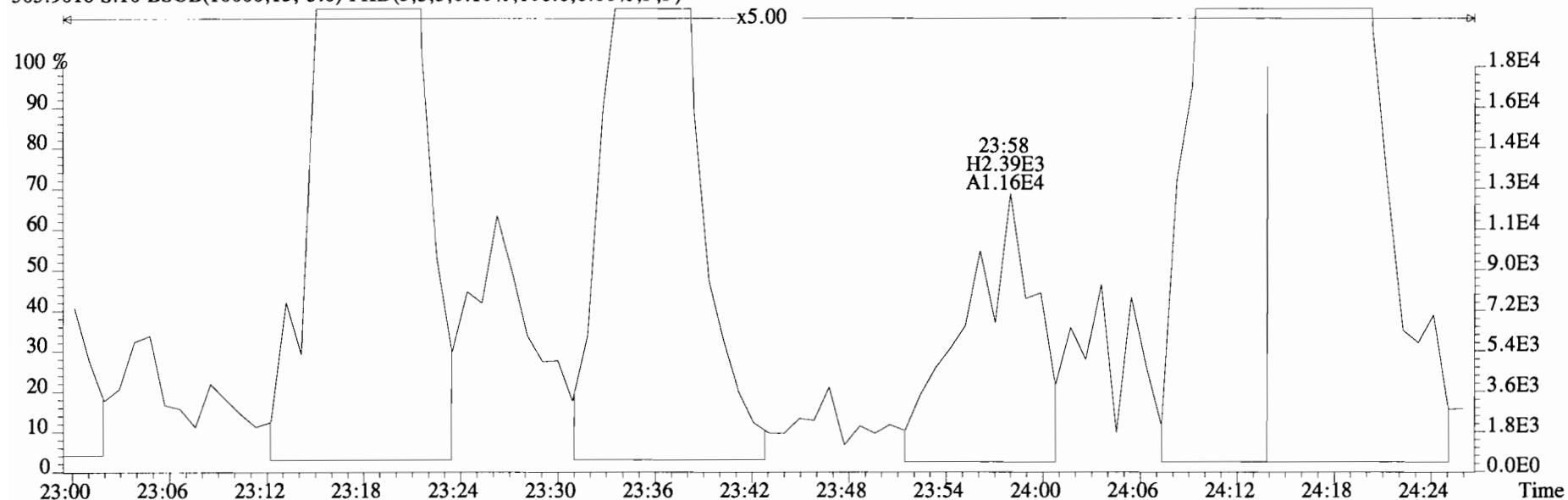
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



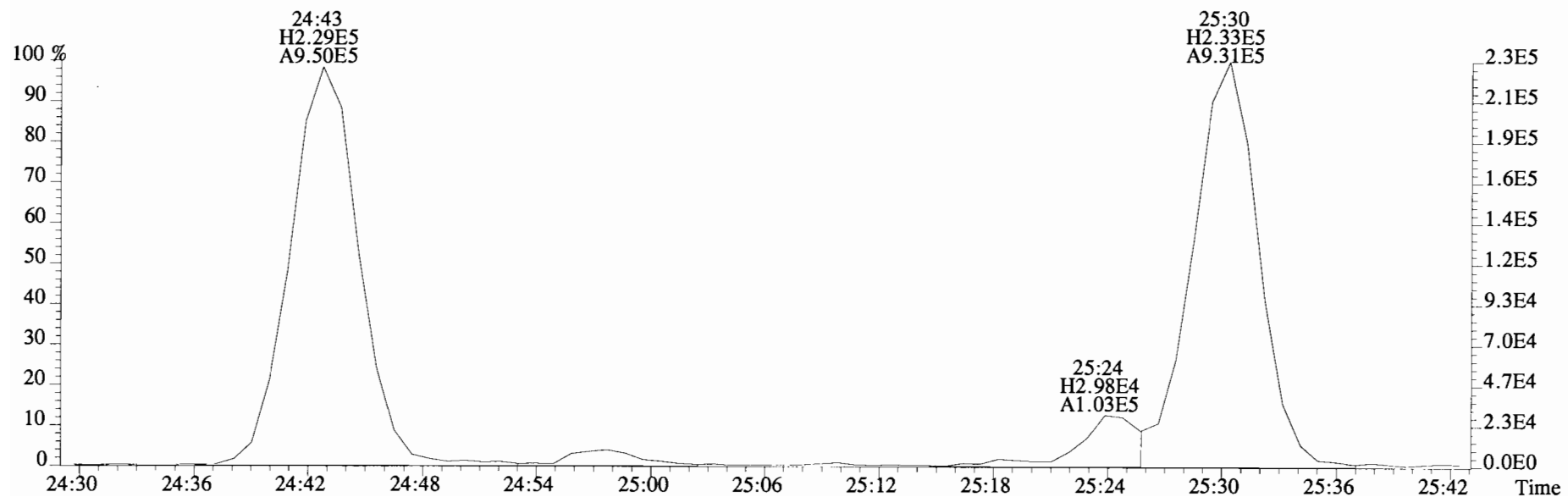
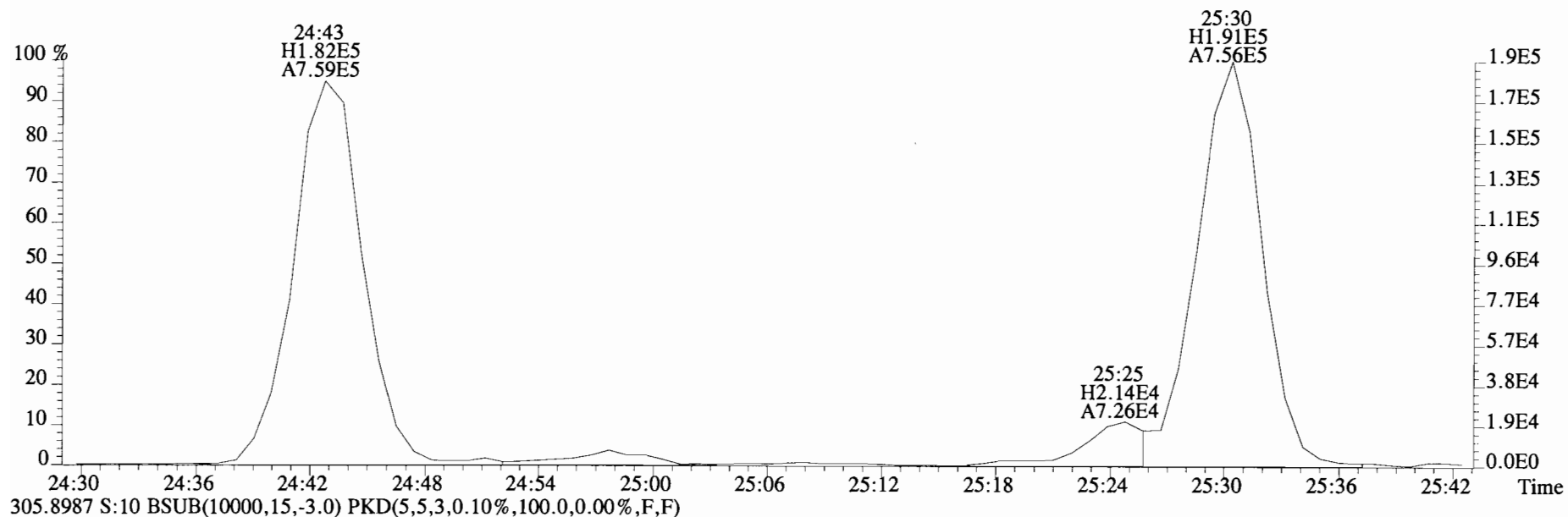
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



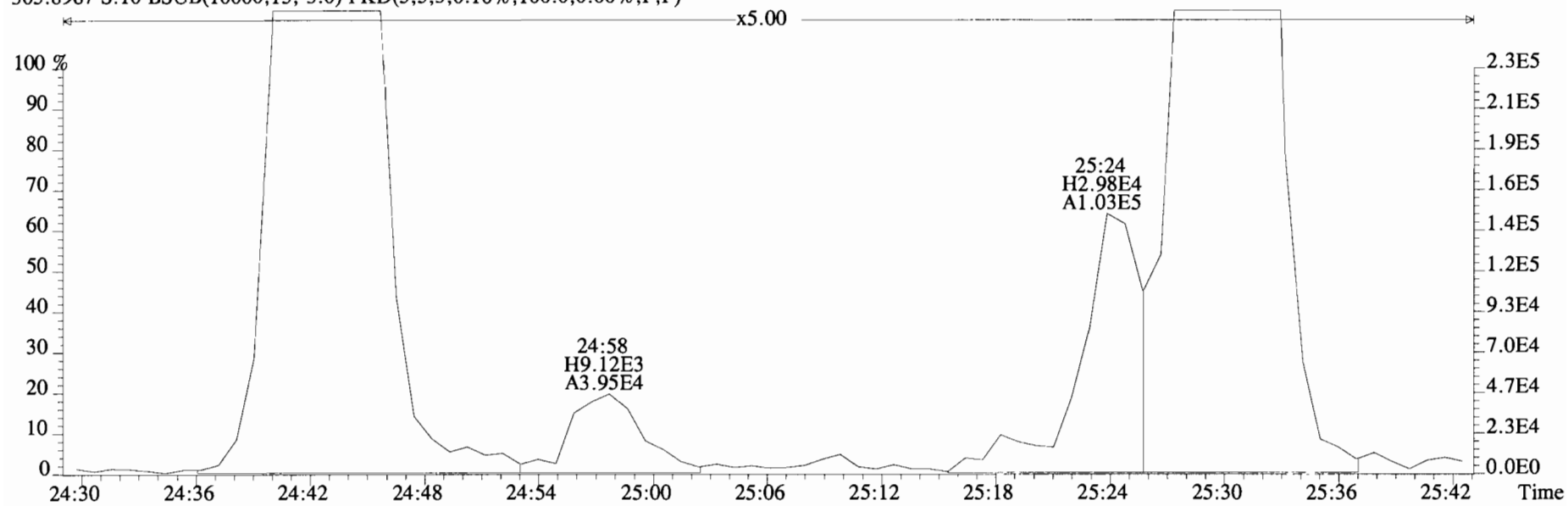
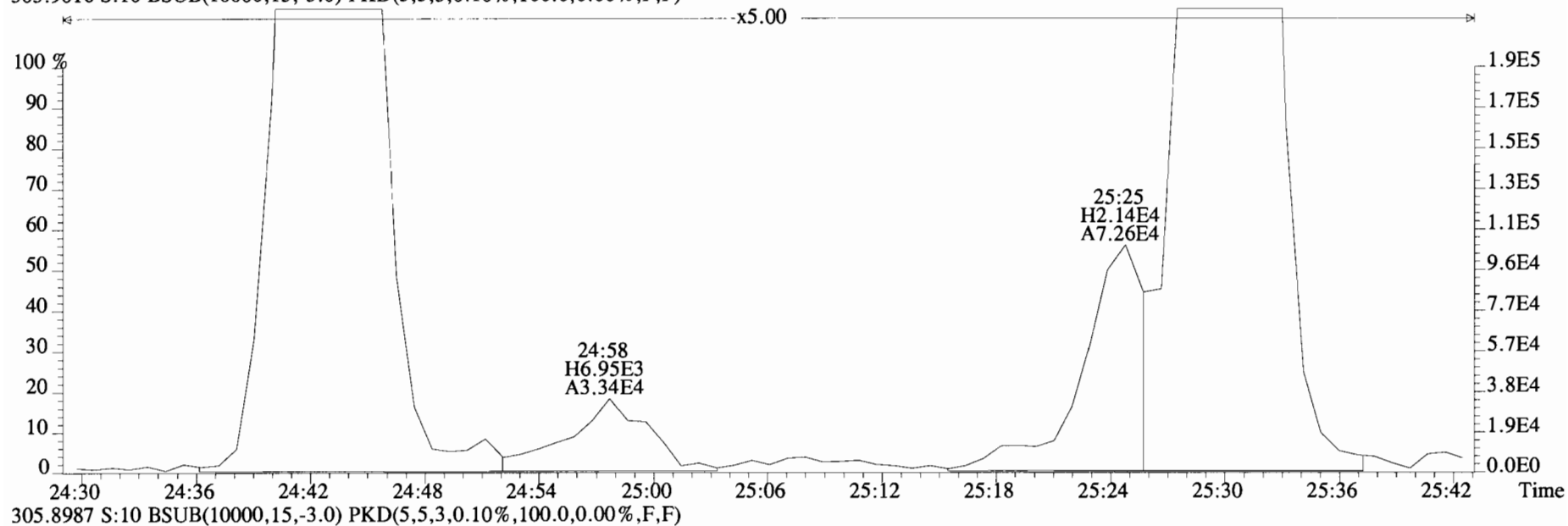
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Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



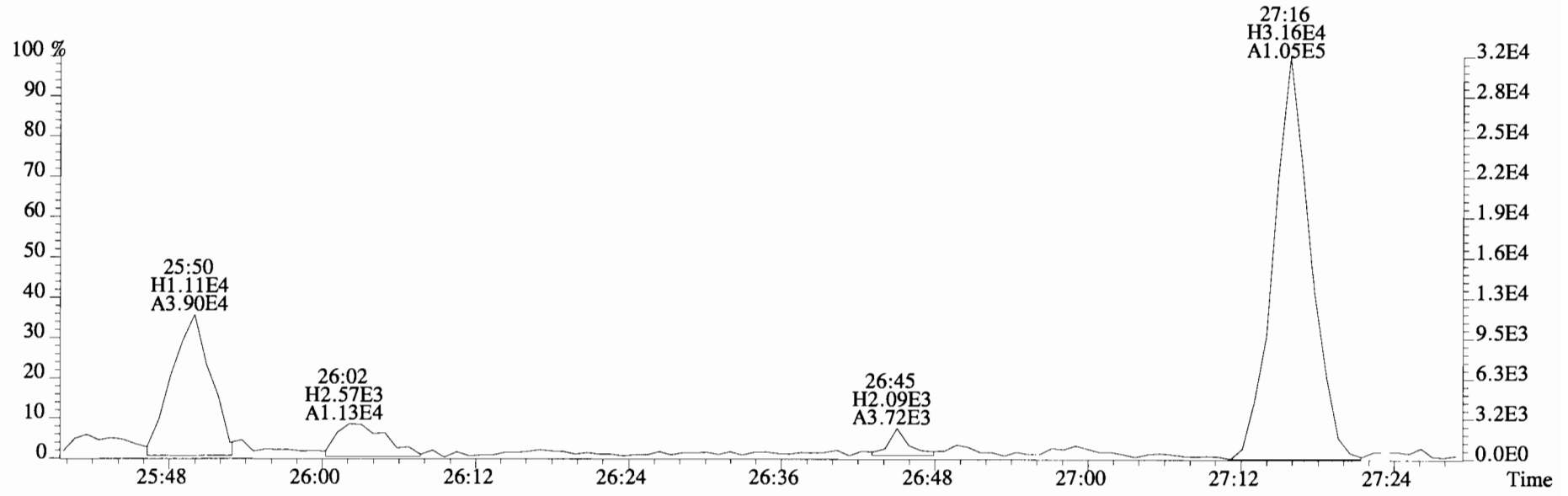
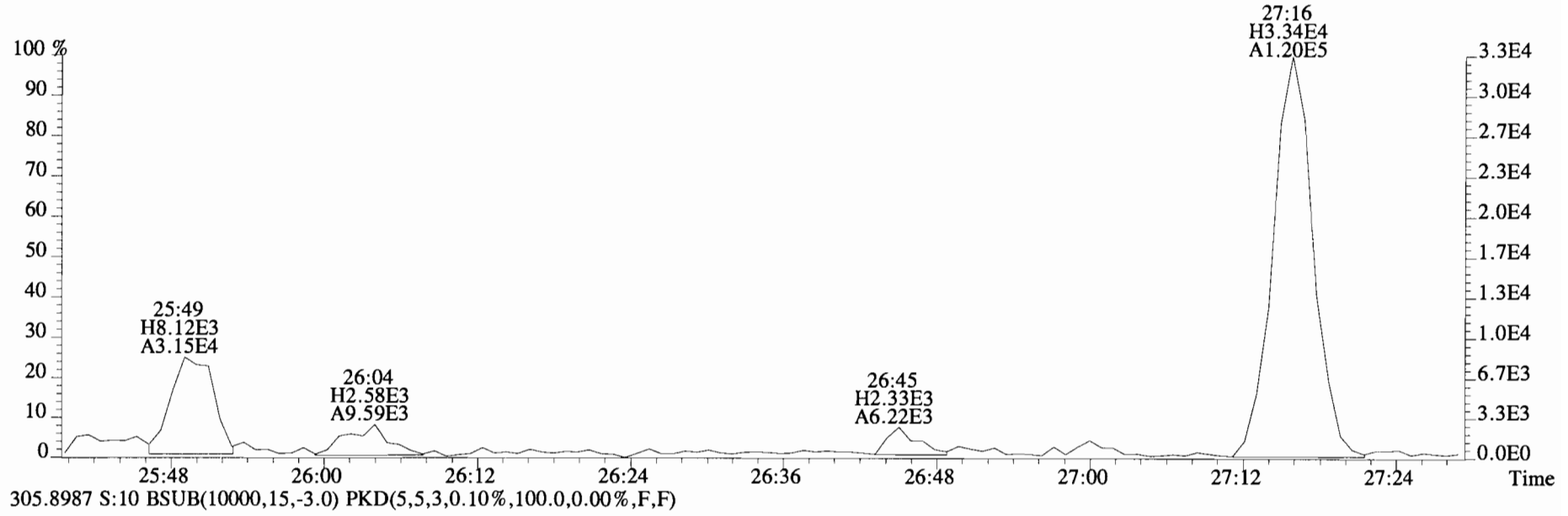
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Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



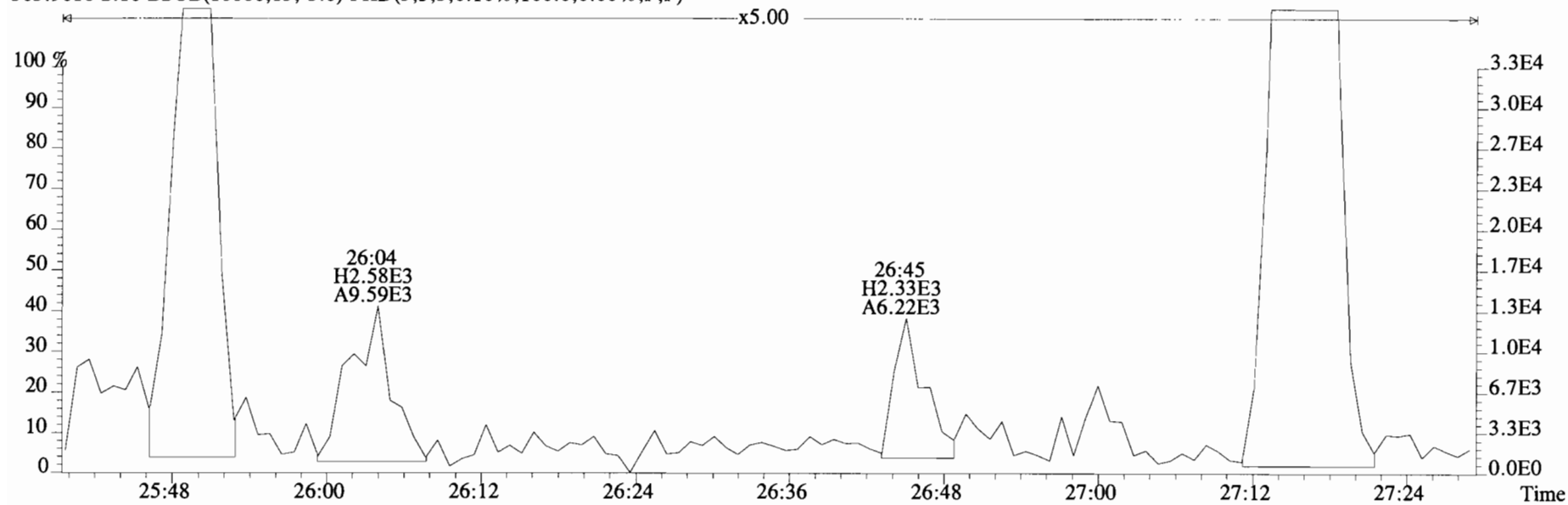
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Sample#10 File Text: Viata Analytical Laboratory VG7 Text: 1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp: OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



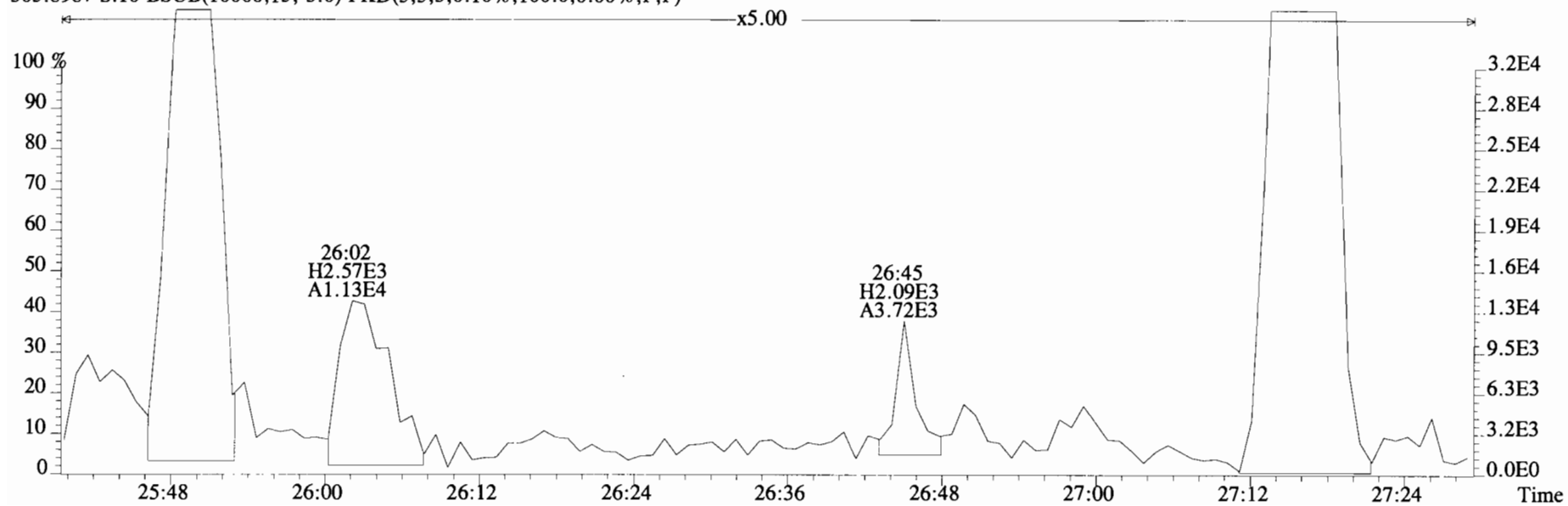
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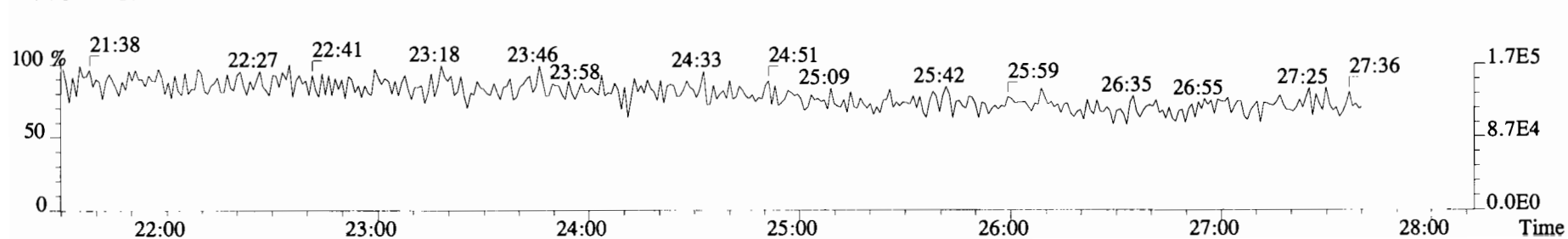
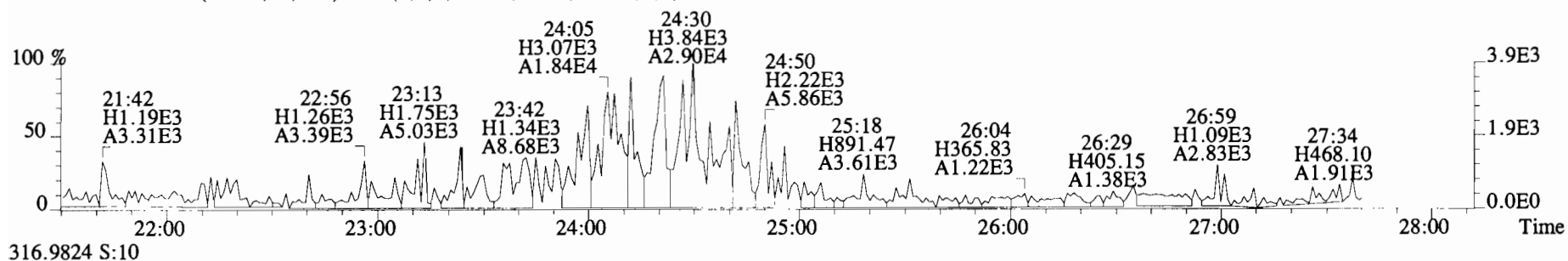
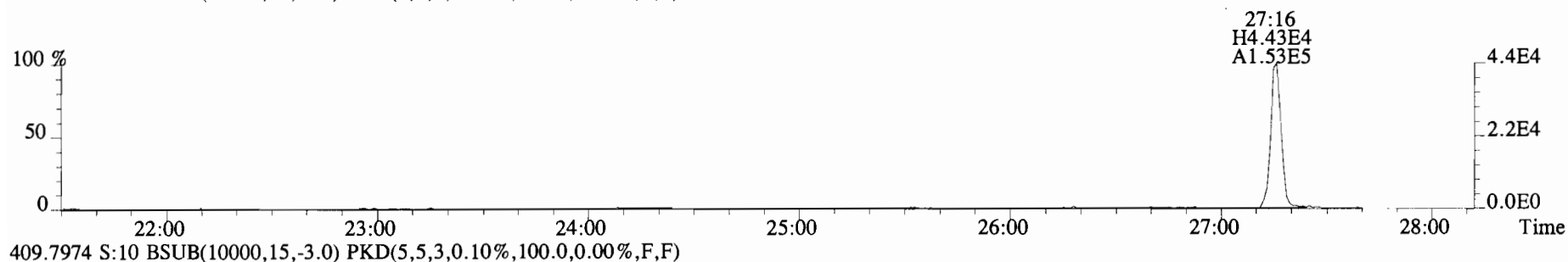
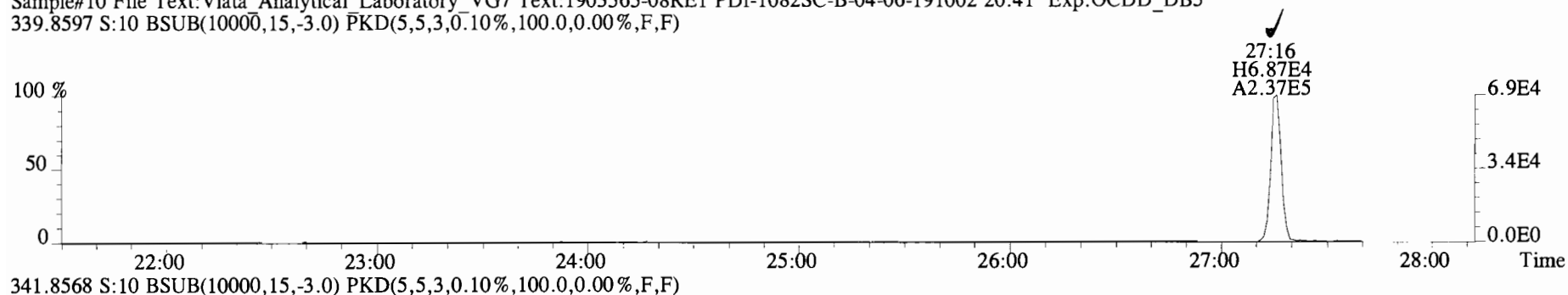
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



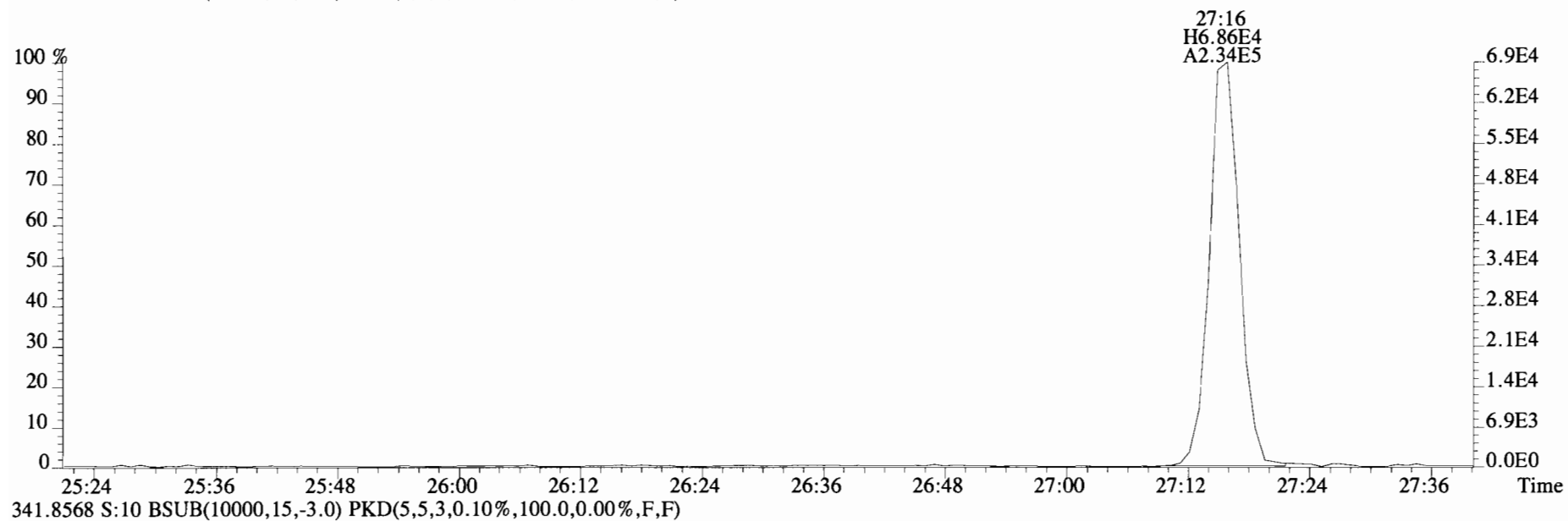
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



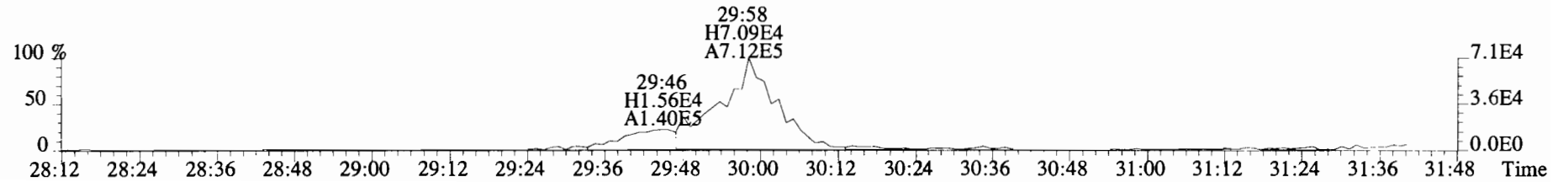
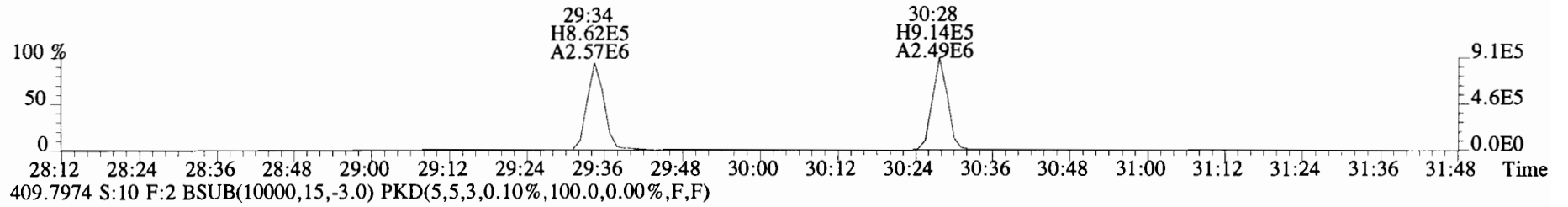
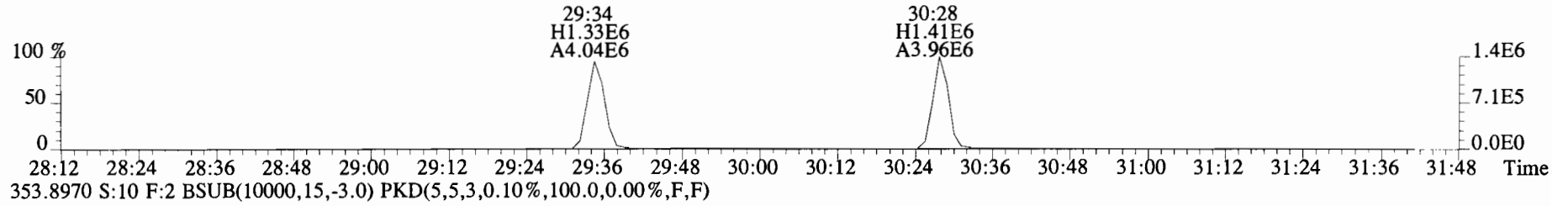
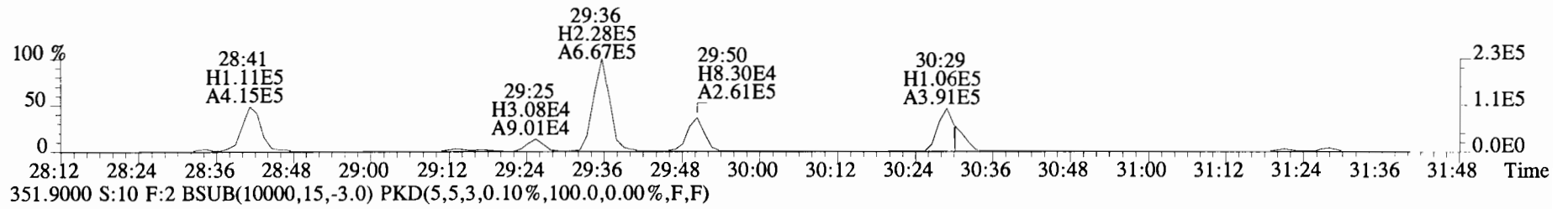
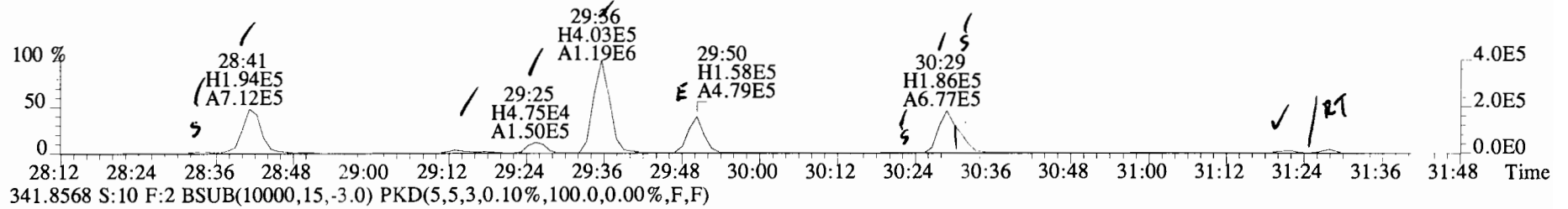
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



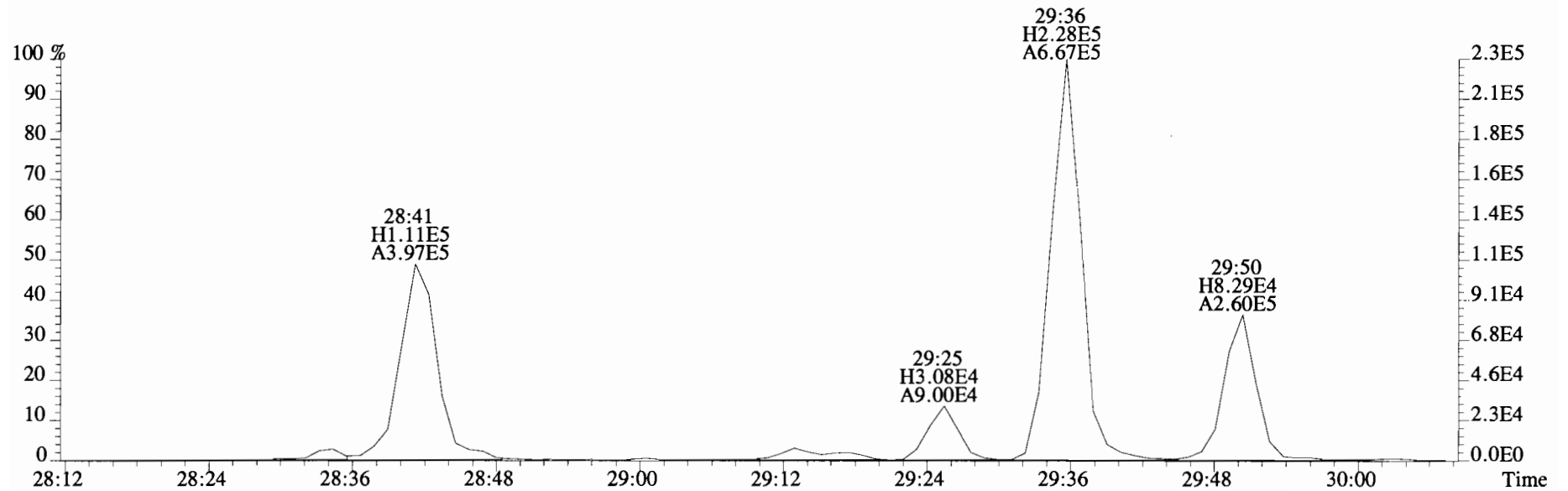
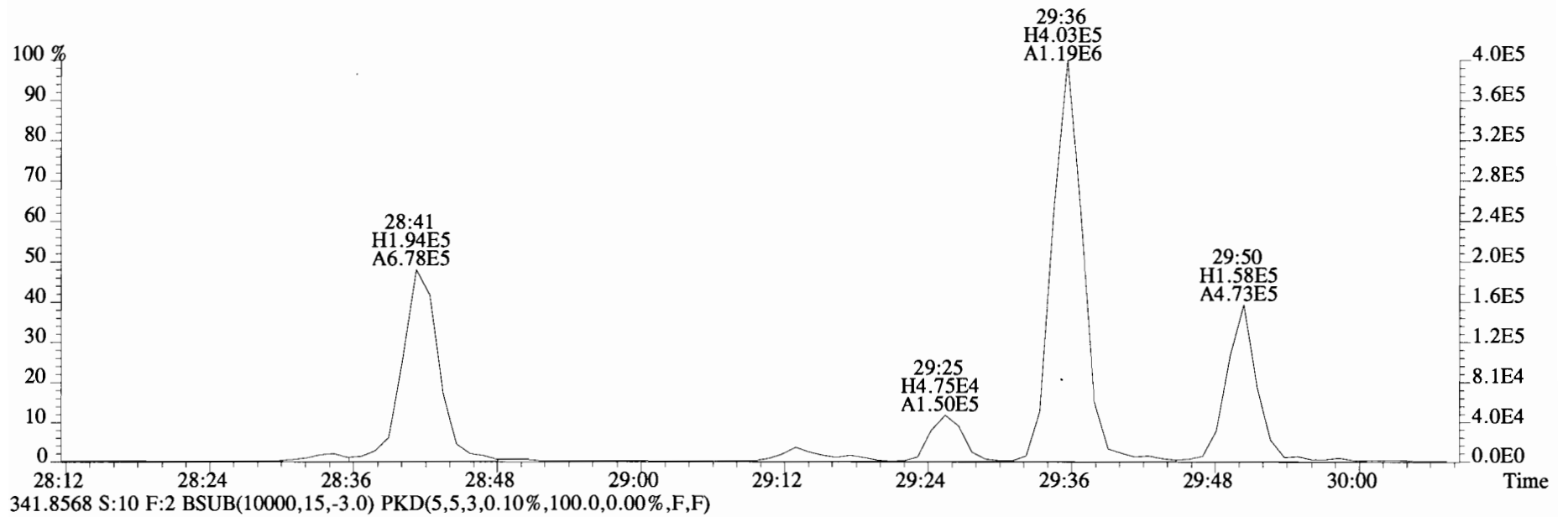
File:191031D2 #1-493 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



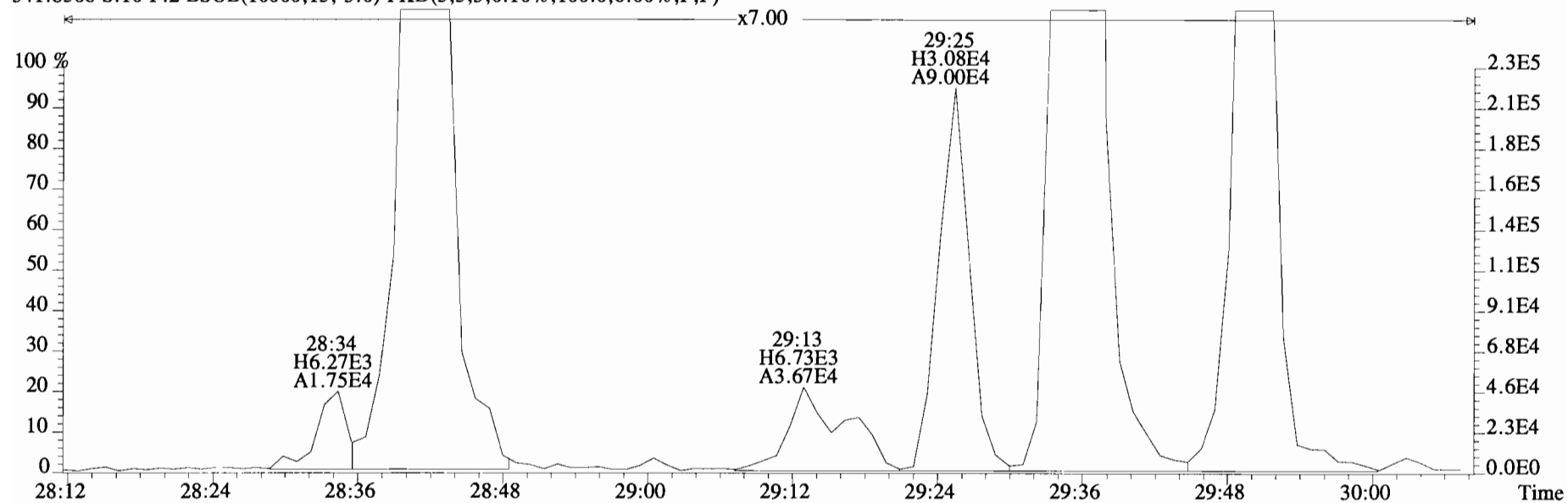
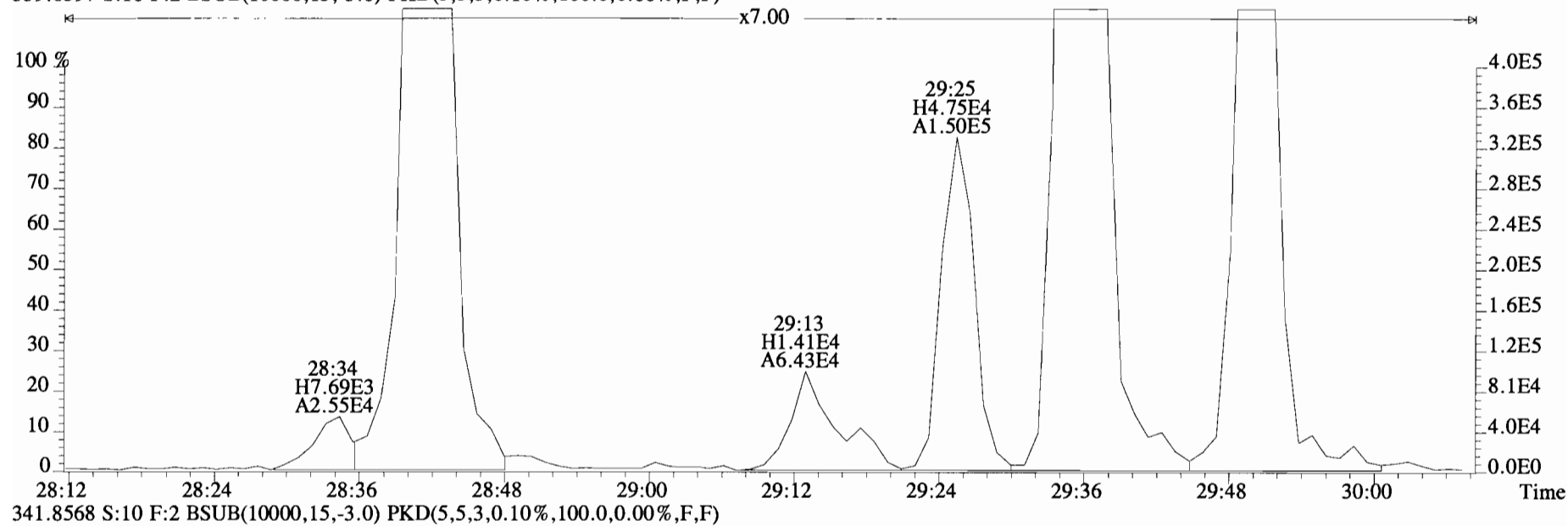
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



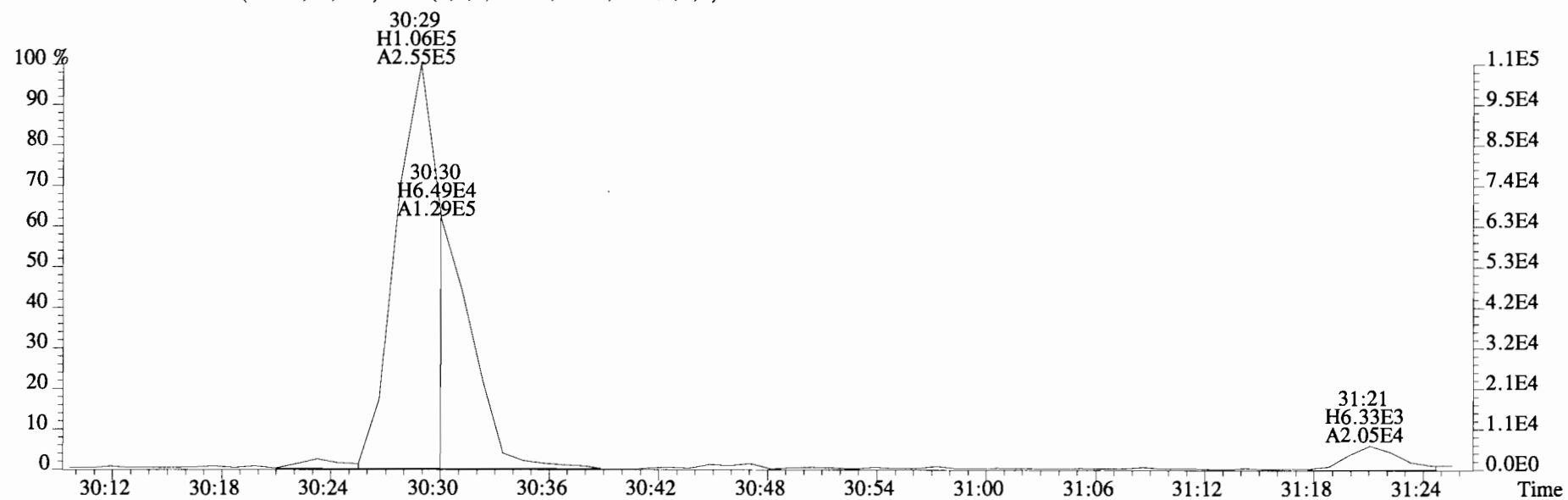
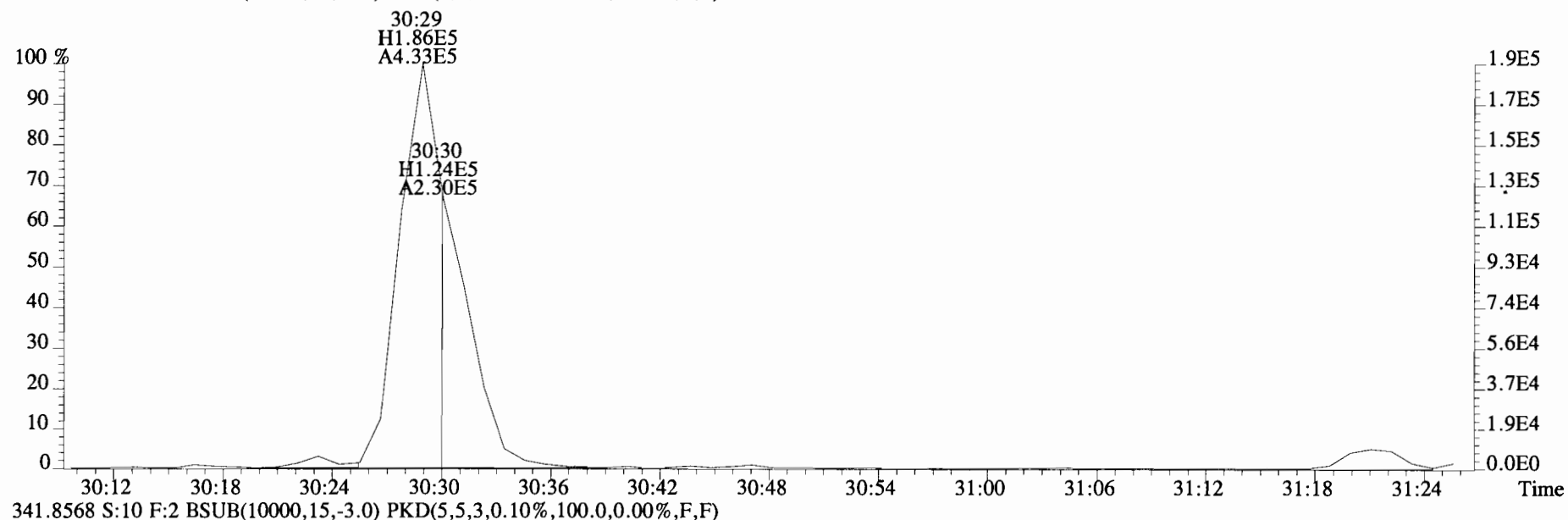
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



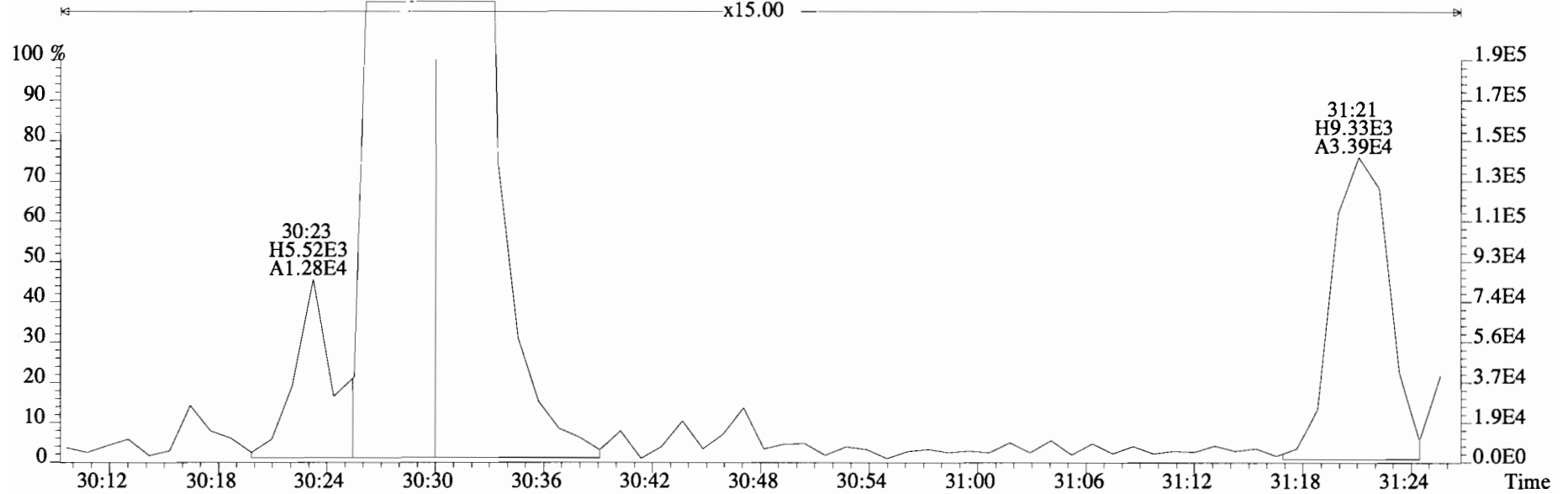
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



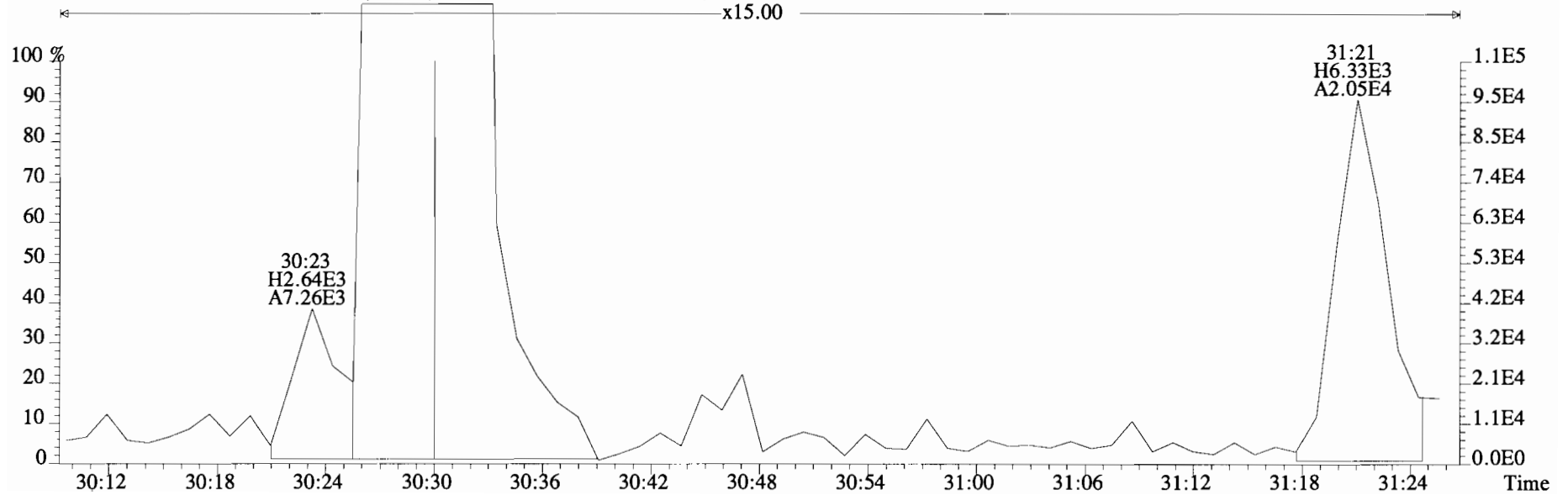
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



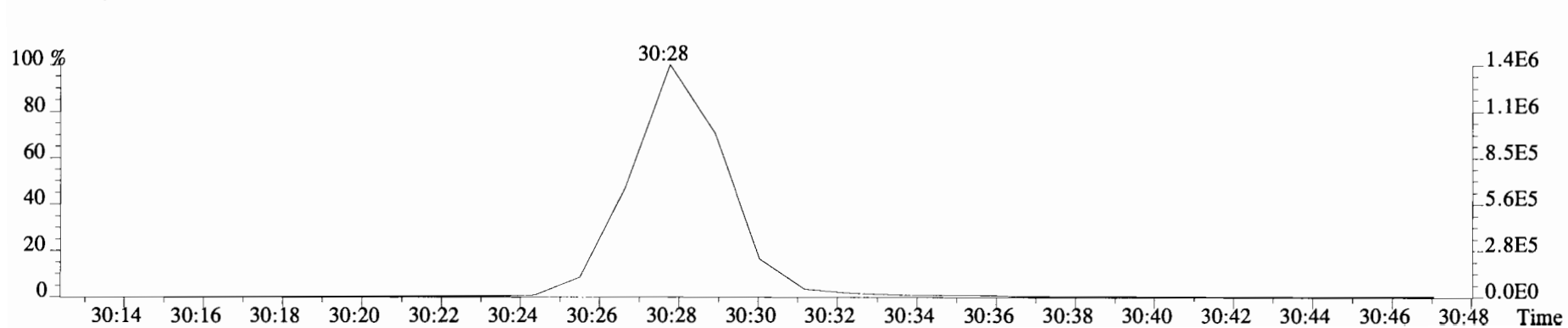
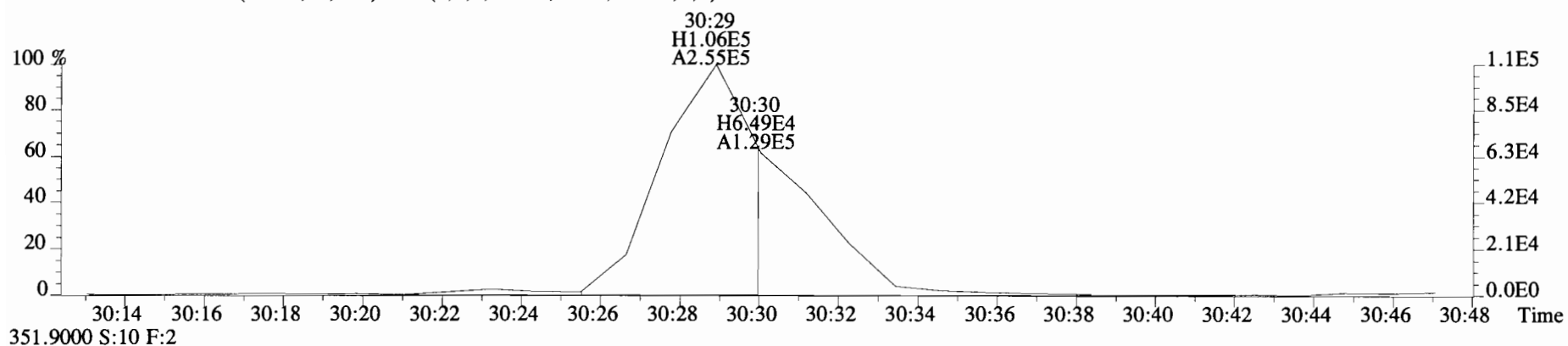
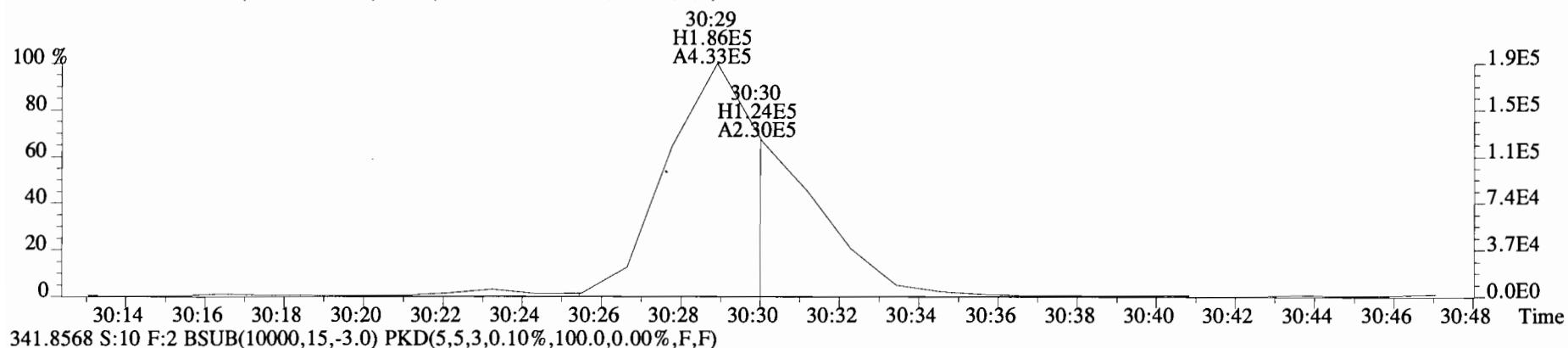
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



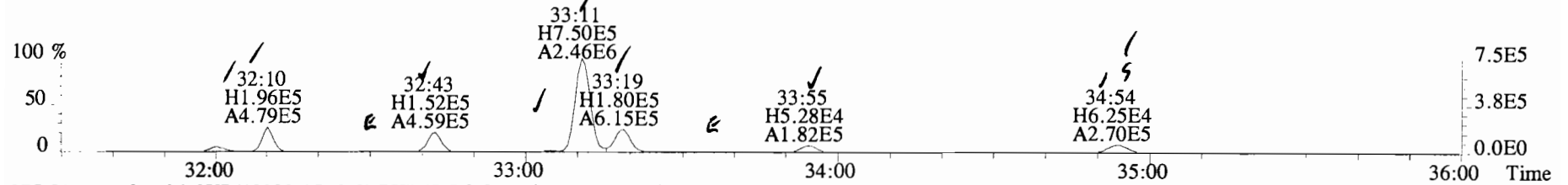
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



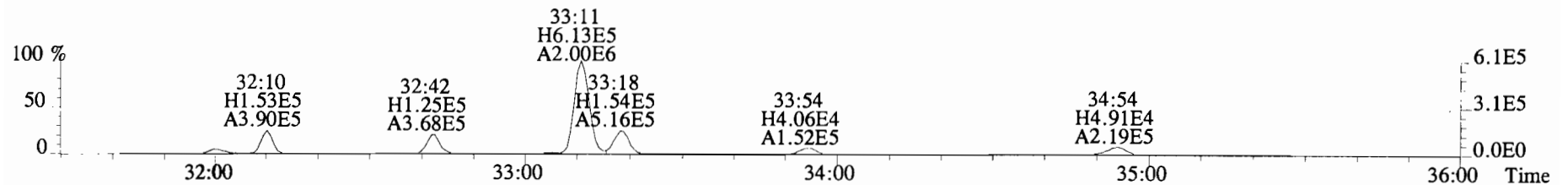
File:191031D2 #1-211 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



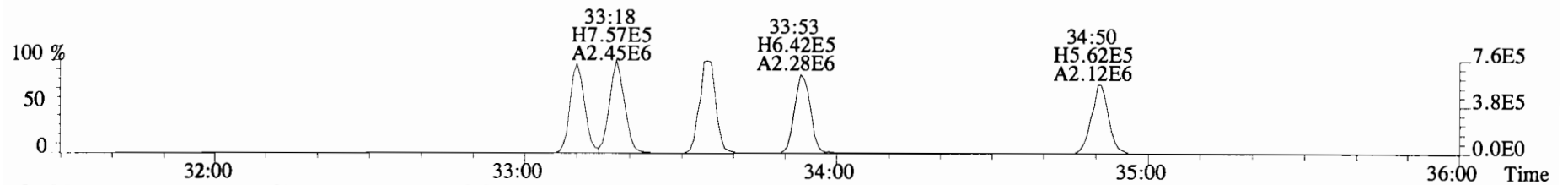
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



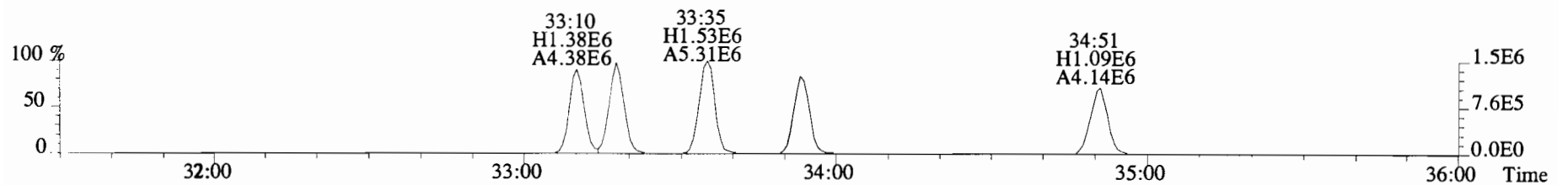
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



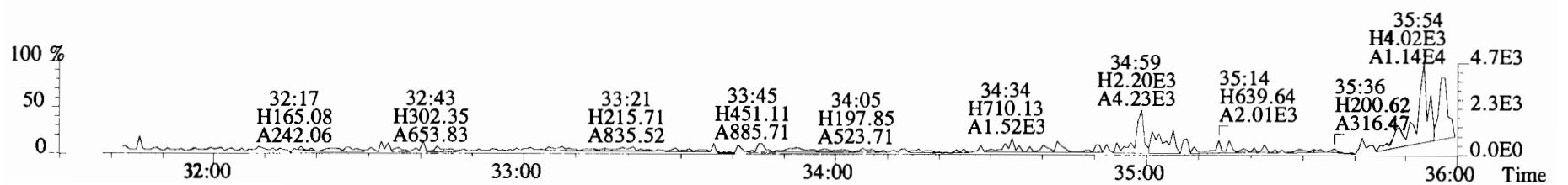
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



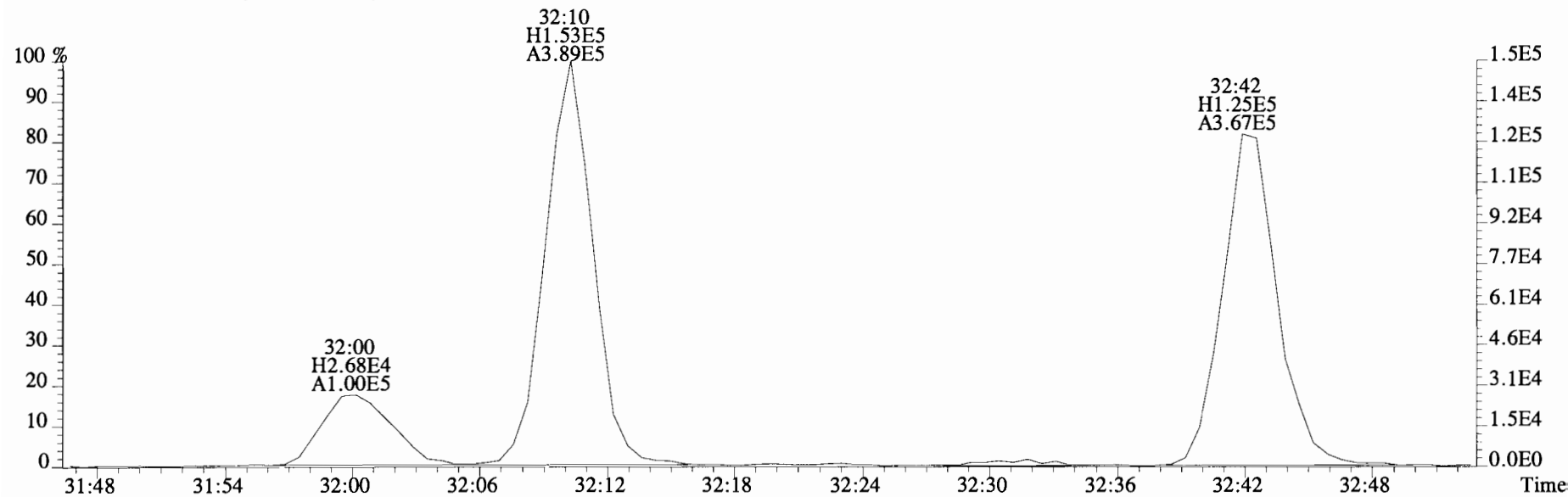
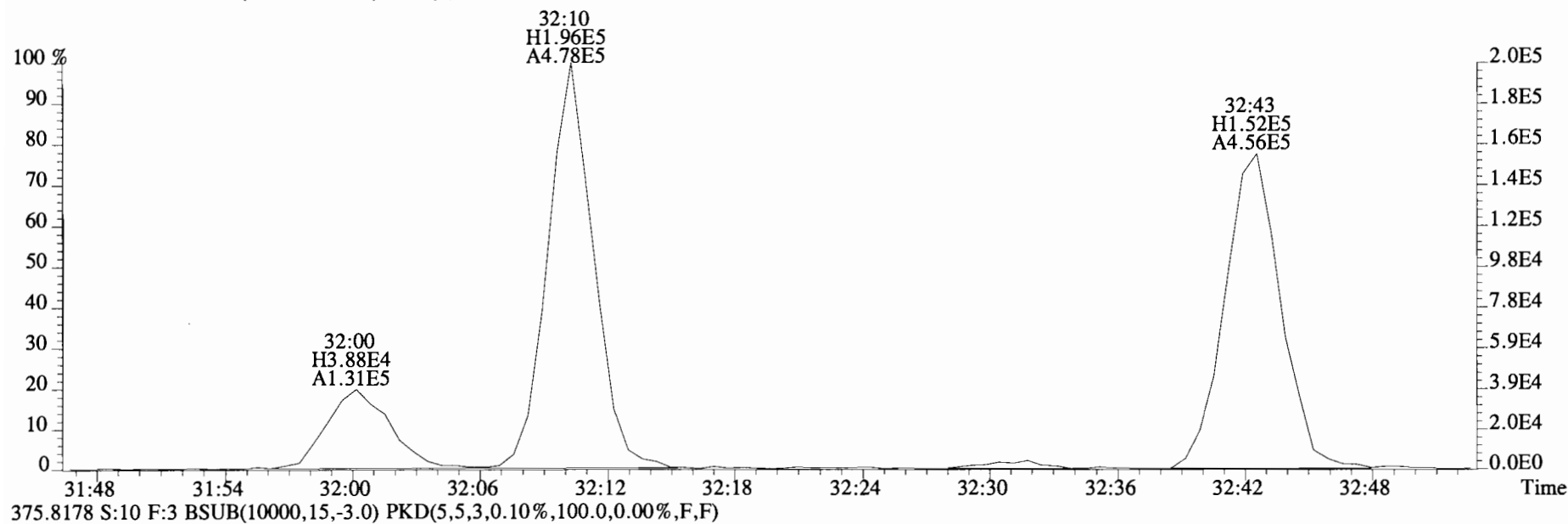
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



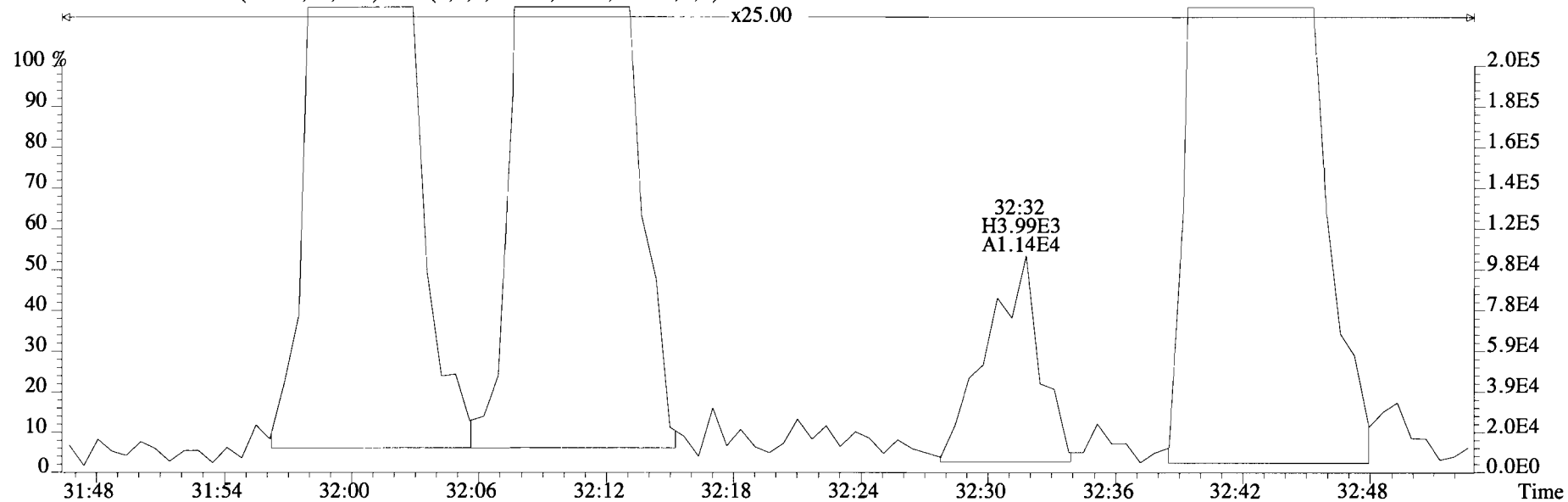
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



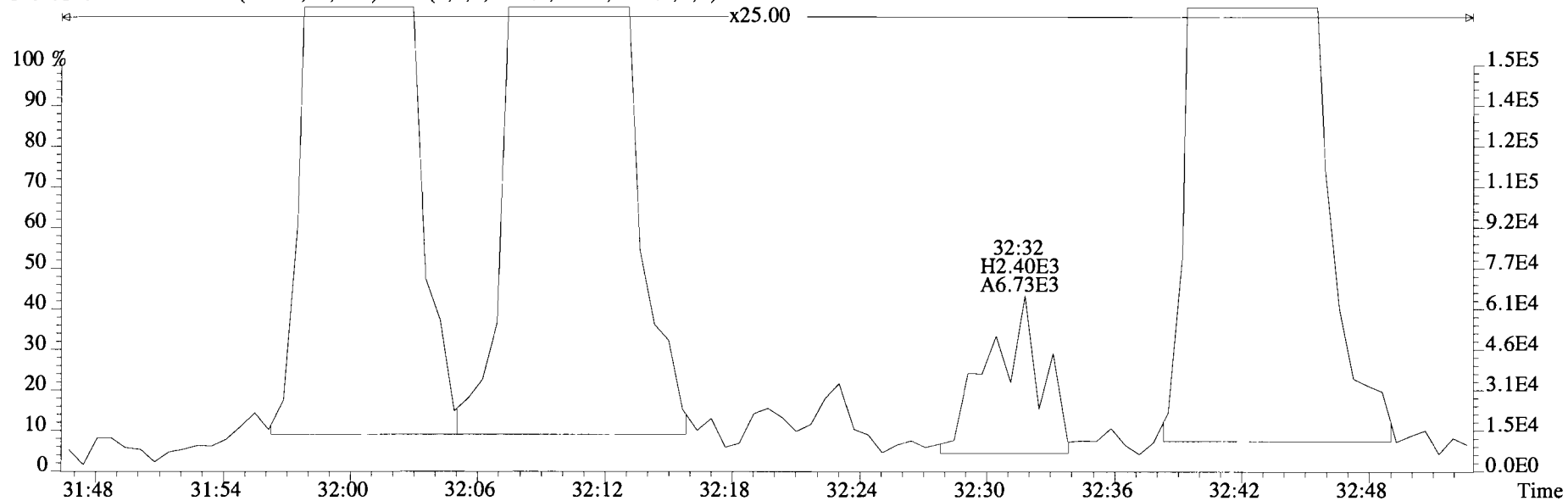
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



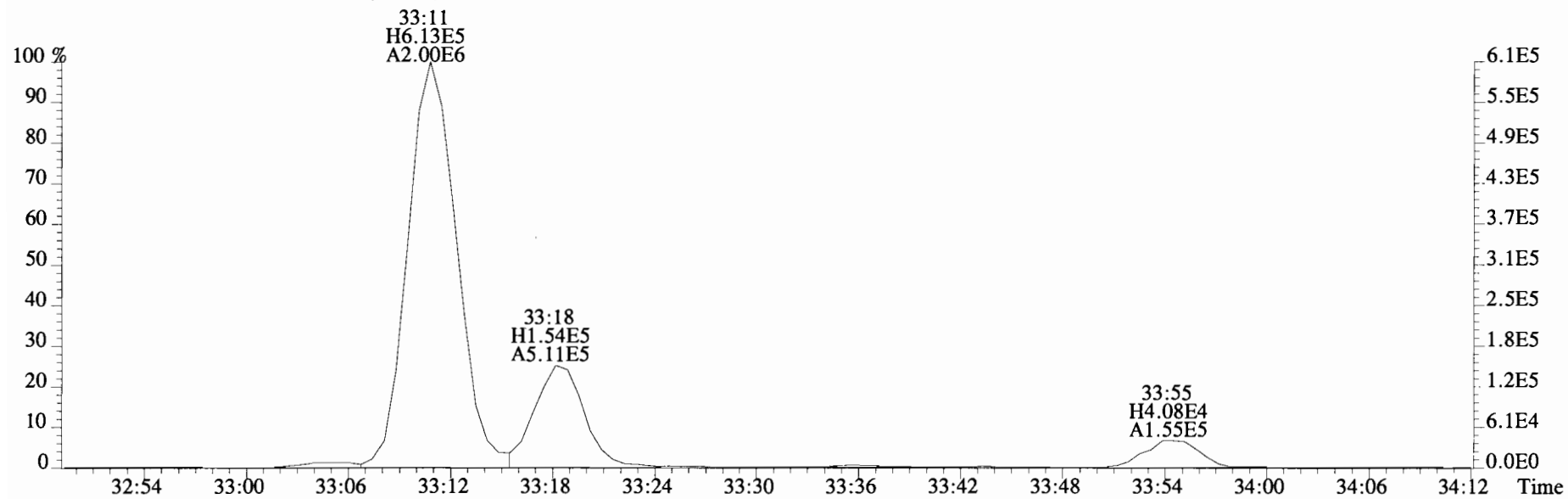
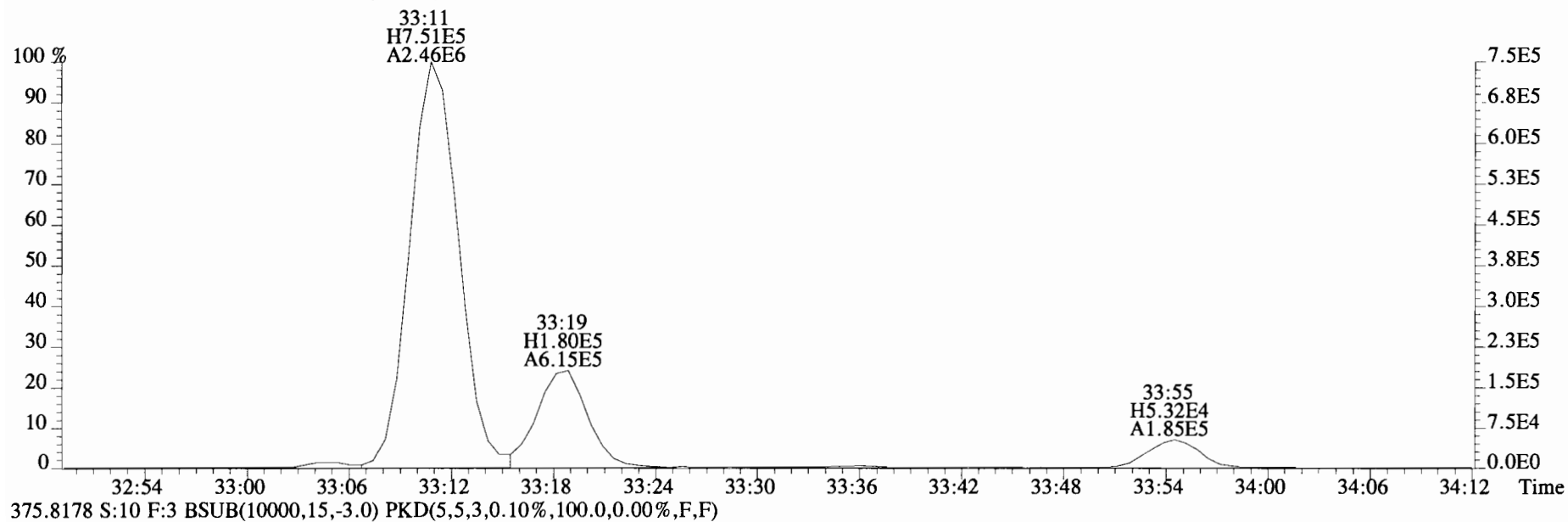
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



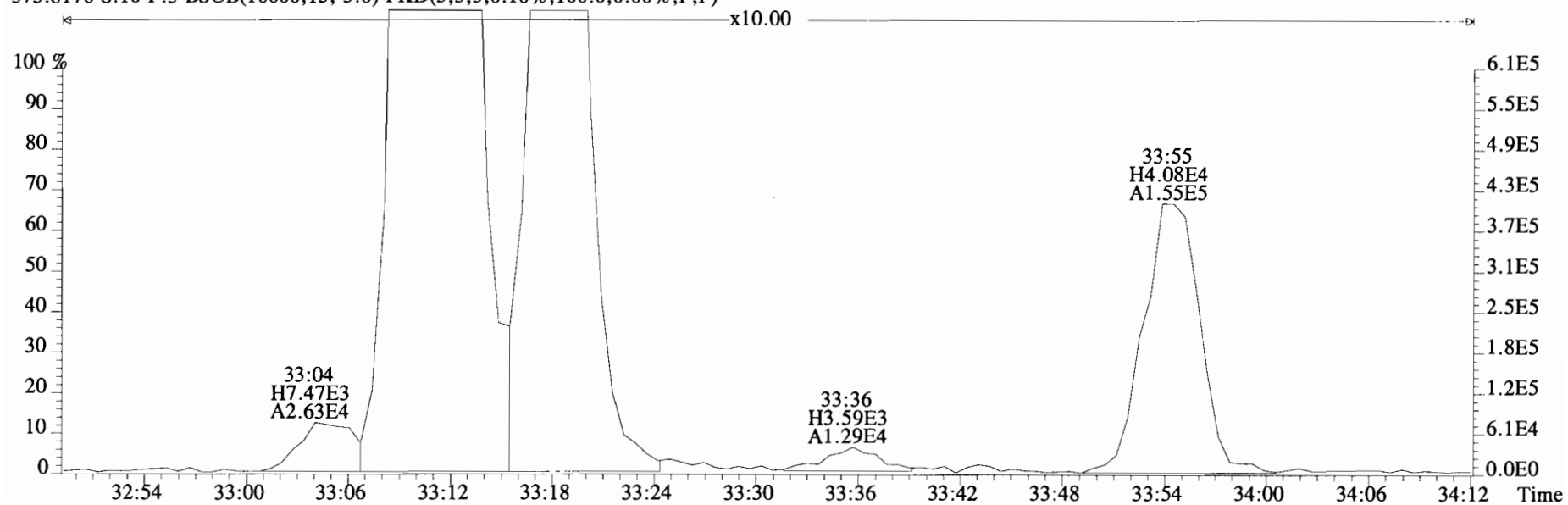
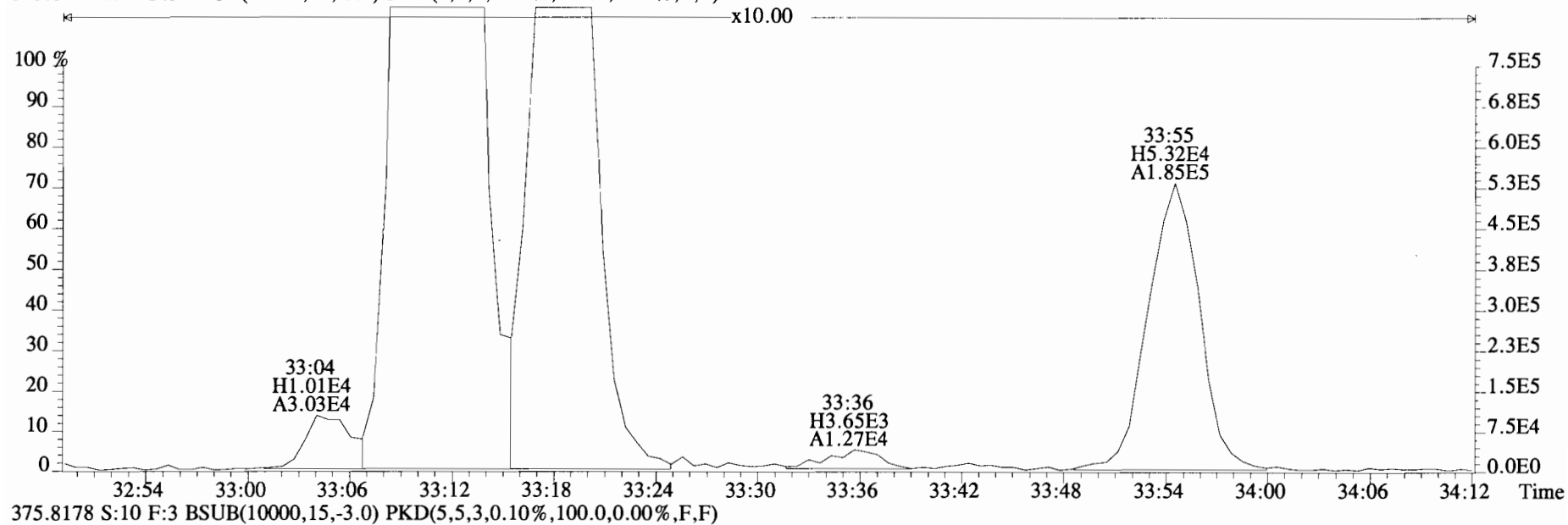
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



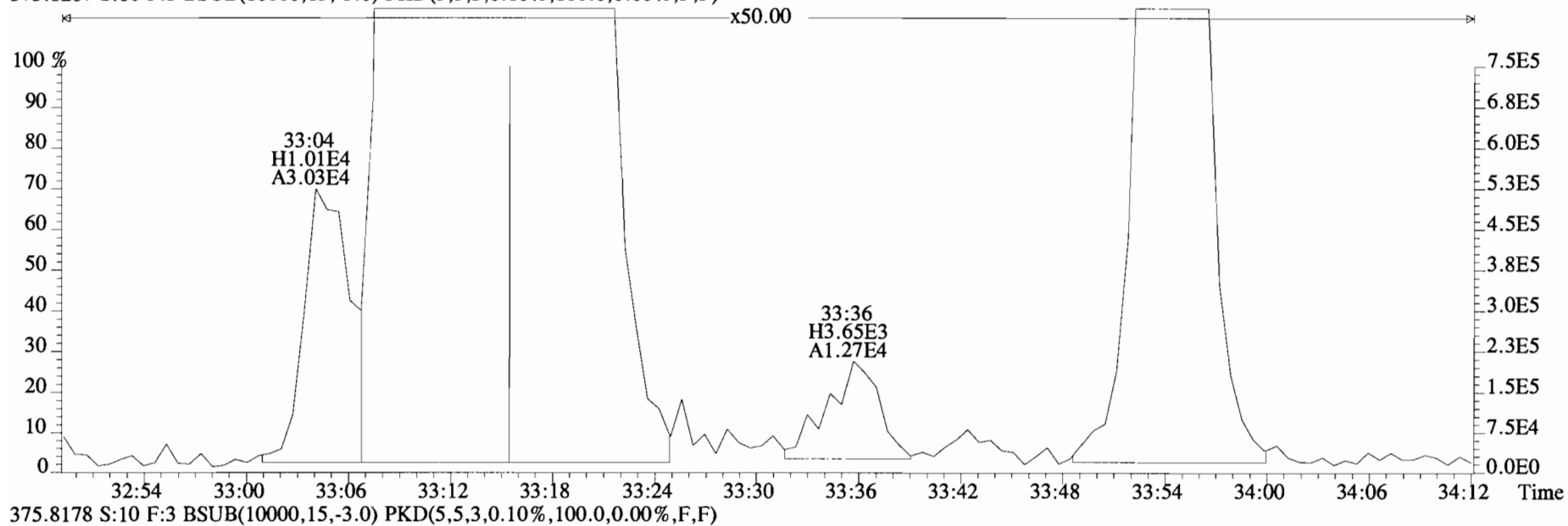
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



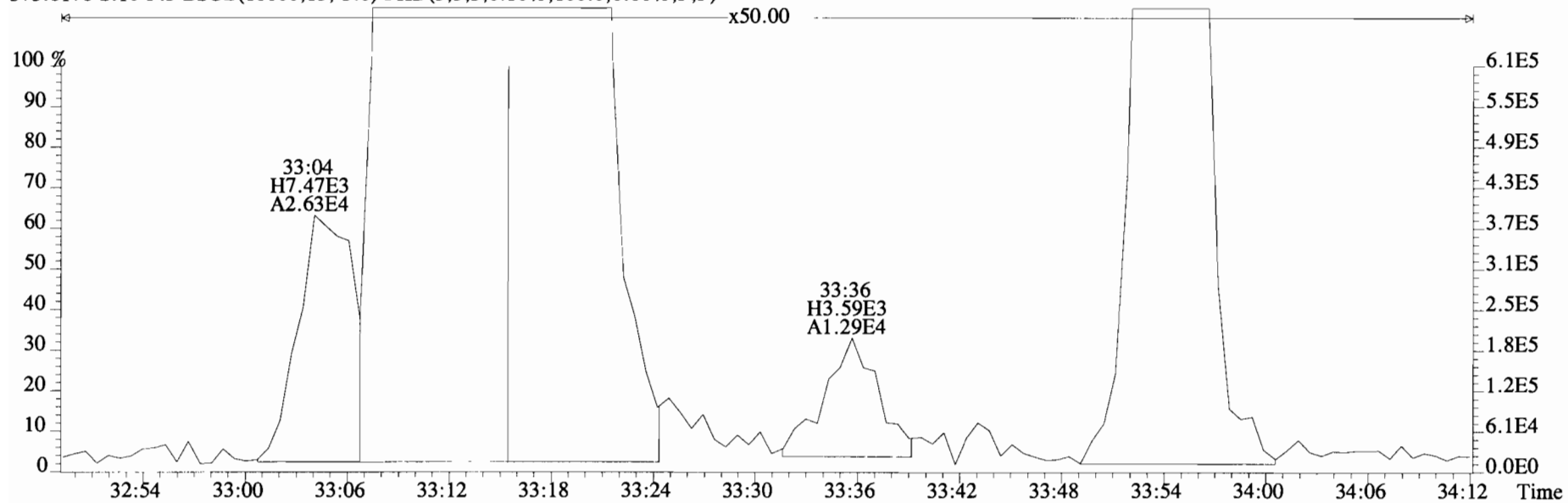
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



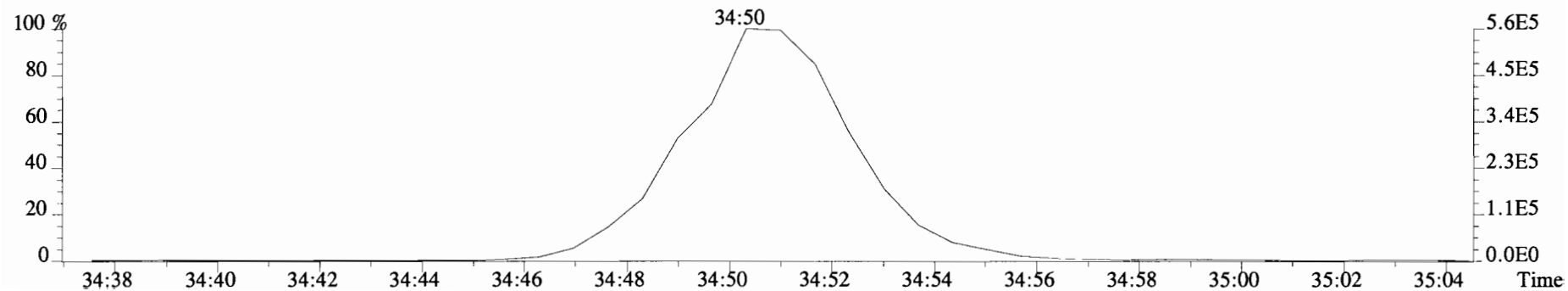
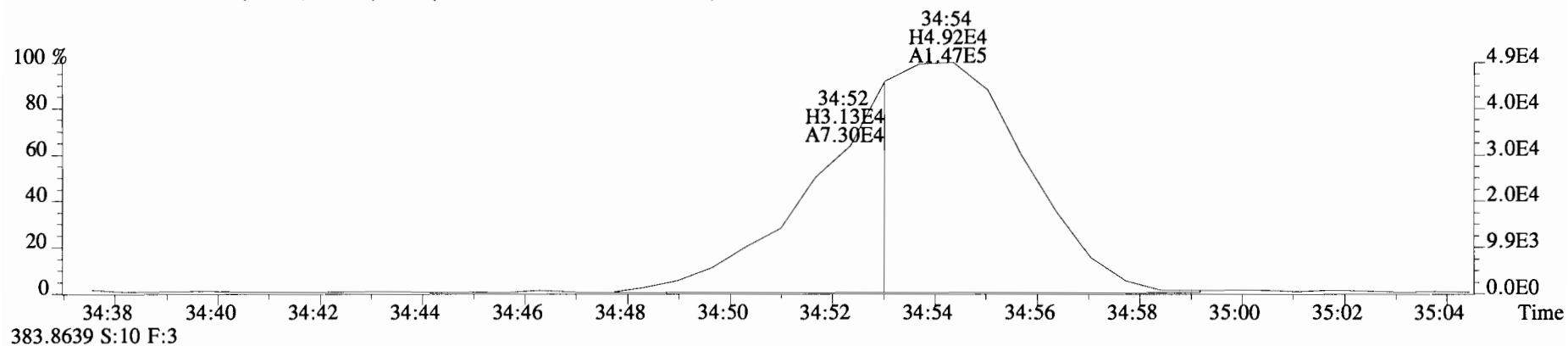
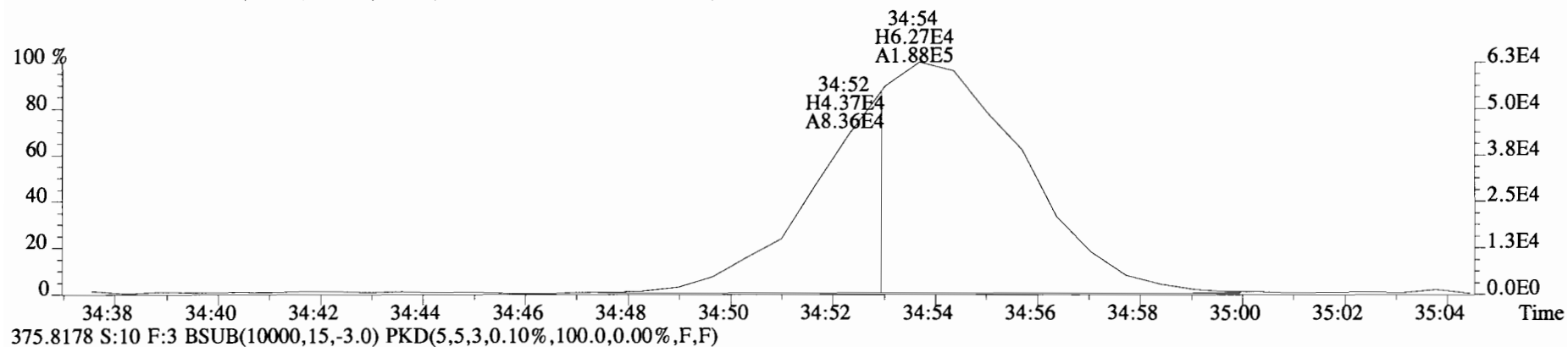
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



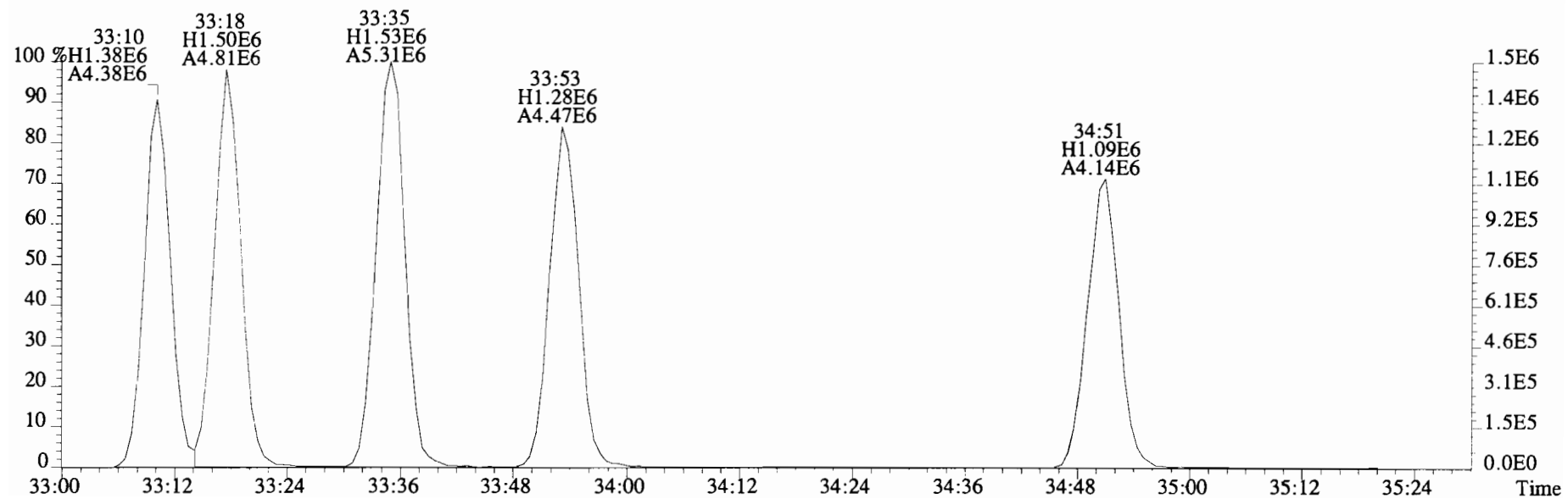
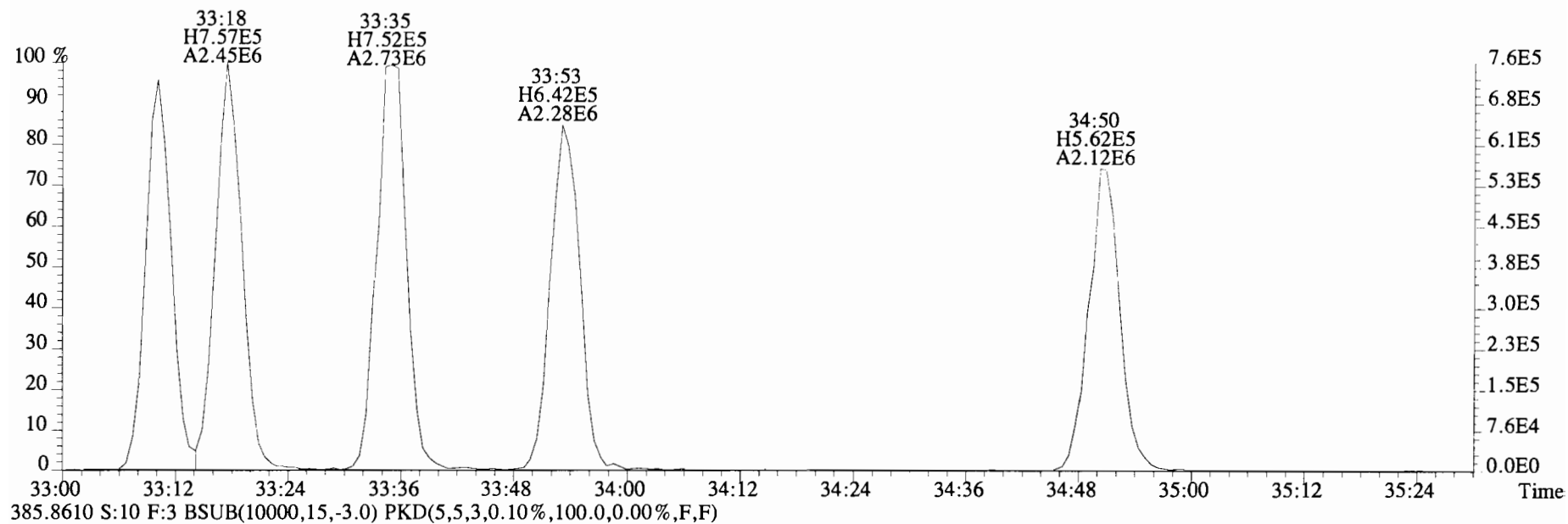
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



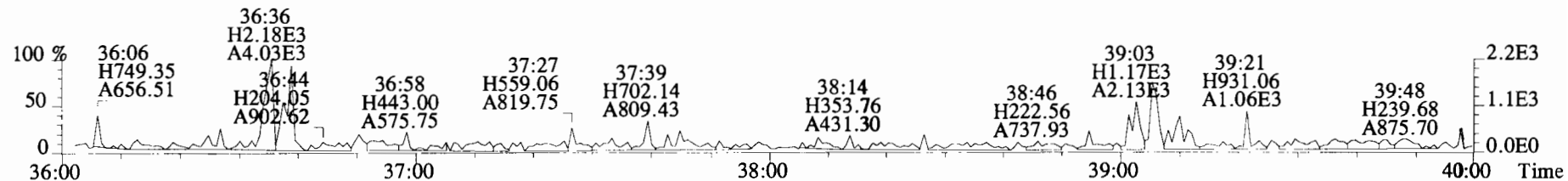
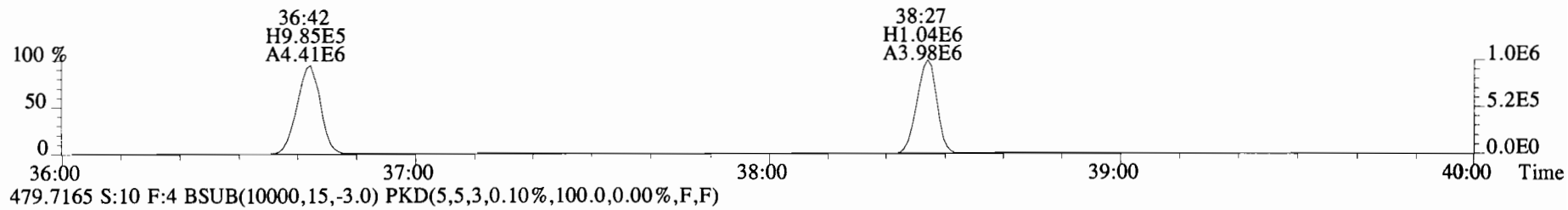
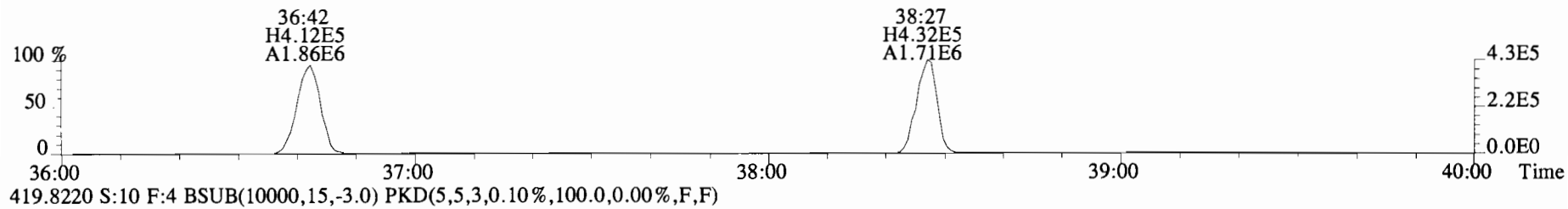
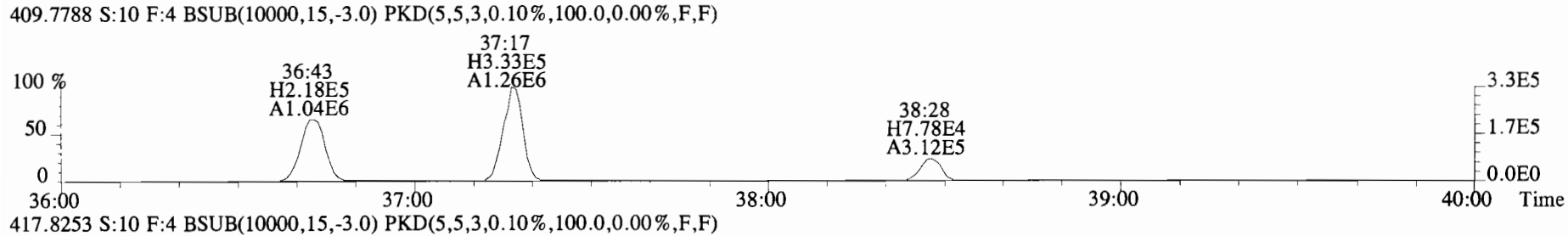
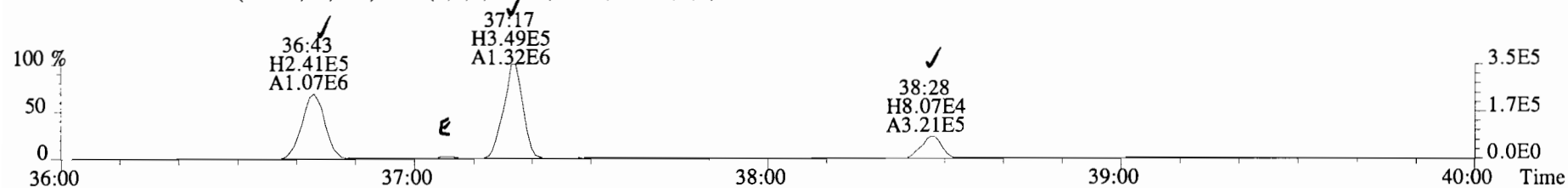
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



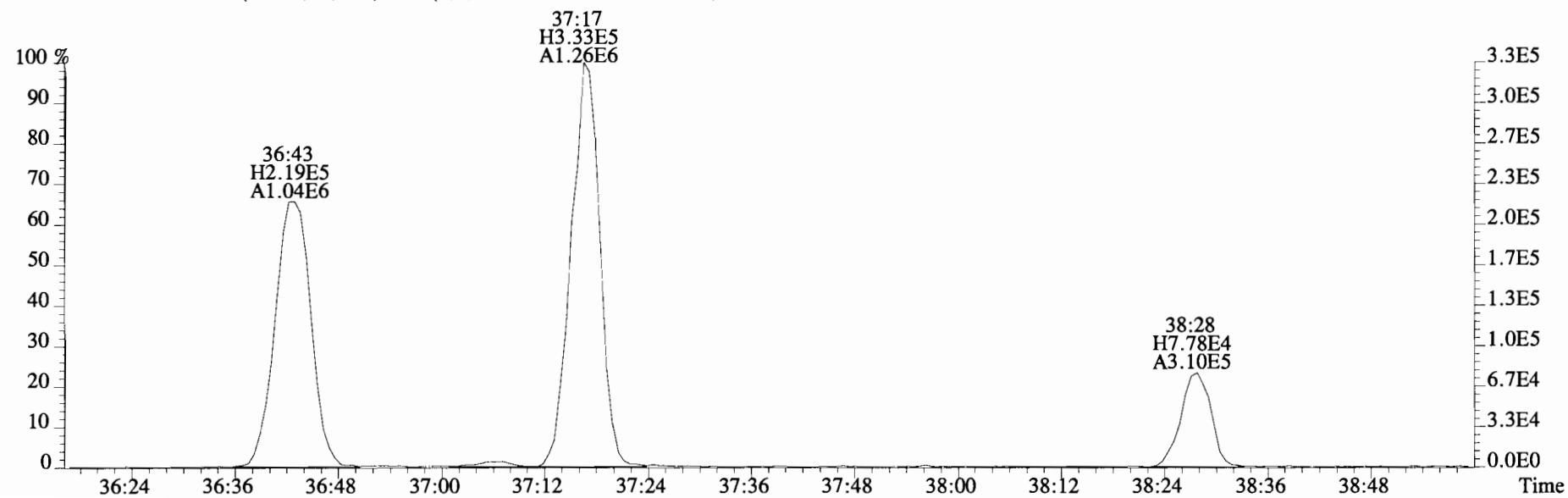
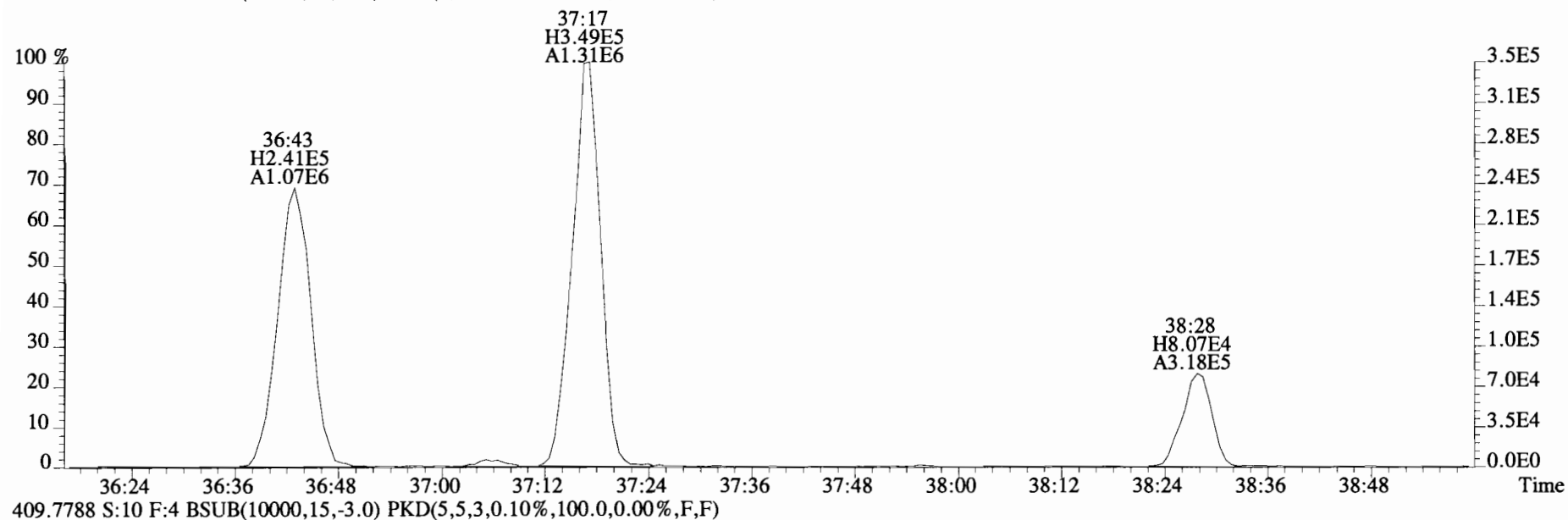
File:191031D2 #1-385 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



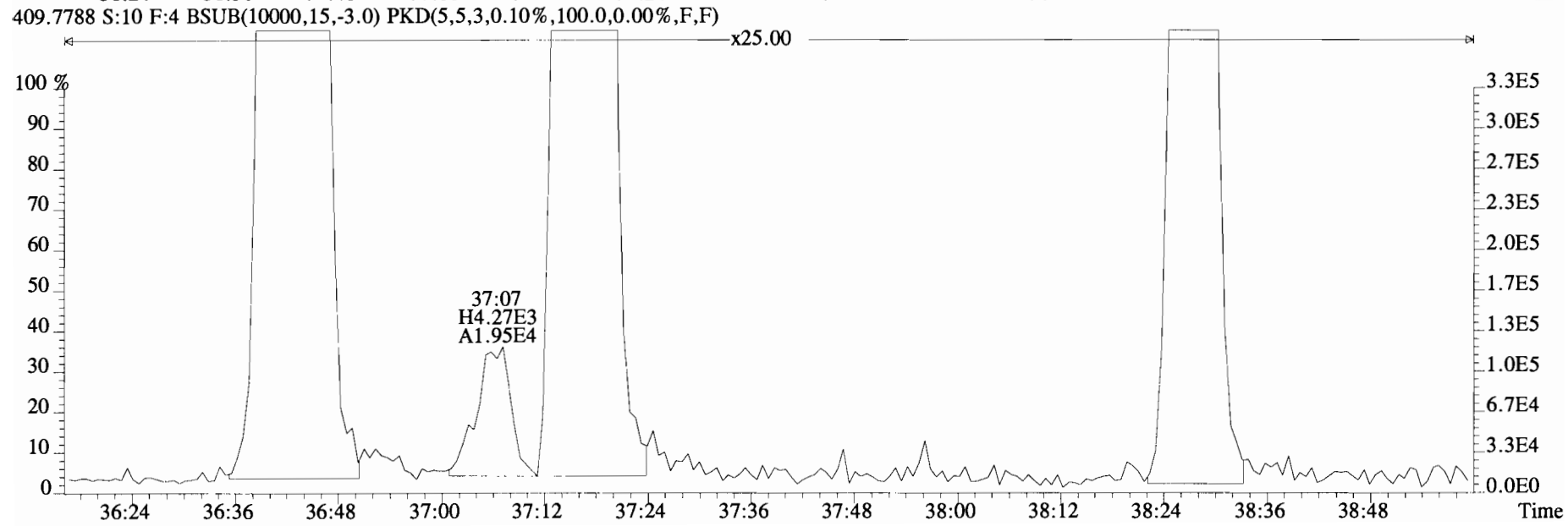
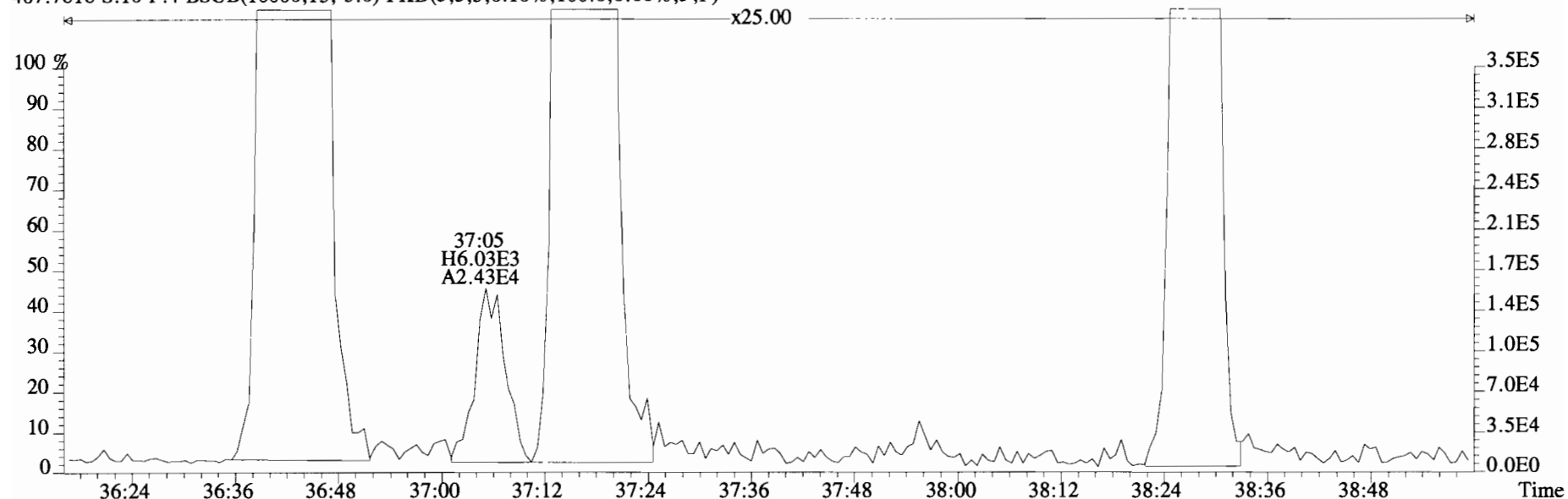
File:191031D2 #1-356 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



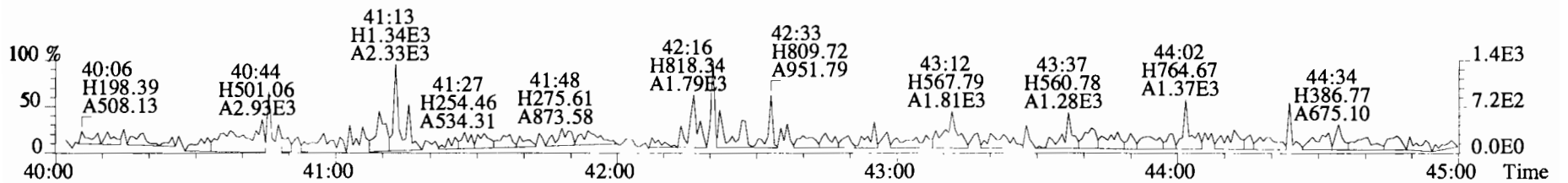
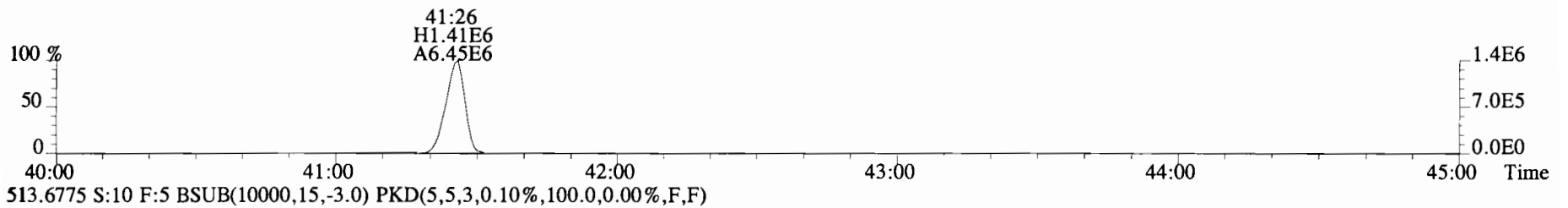
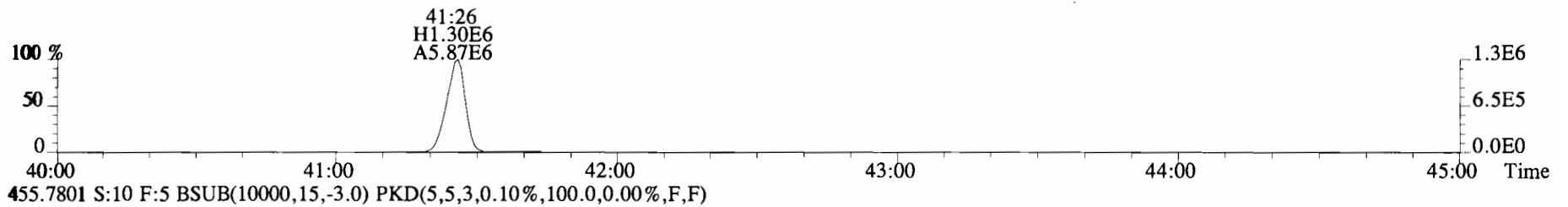
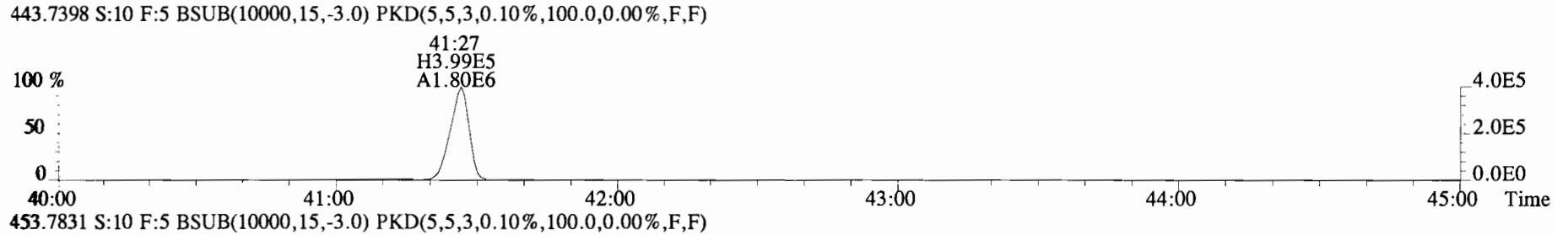
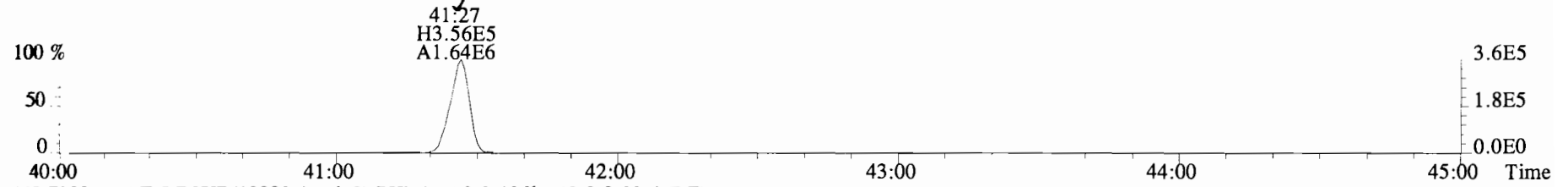
File:191031D2 #1-356 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File: 191031D2 #1-356 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text: Viata Analytical Laboratory VG7 Text: 1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp: OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 06:53:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-08RE1 PDI-1082SC-B-04-06-191002 20.41 Exp:OCDD_DB5
 441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotF	*		96.6	2.5	0.0837	Total Tetra-Dioxins	*	*		96.6	0.0837
1,2,3,7,8-PeCDD	*	* n	0.90	NotF	*		155	2.5	0.134	Total Penta-Dioxins	*	*		155	0.134
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF	*		162	2.5	0.213	Total Hexa-Dioxins	*	0.883		*	*
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF	*		162	2.5	0.242	Total Hepta-Dioxins	*	*		158	0.228
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF	*		162	2.5	0.222	Total Tetra-Furans	*	*		162	0.0899
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotF	*		158	2.5	0.228	Total Penta-Furans	0.0000	0.0000		219	0.136
OCDD	1.87e+04	0.88 y	0.96	41:14	1.6820		*	2.5	*	Total Hexa-Furans	*	*		113	0.0710
										Total Hepta-Furans	*	*		127	0.121
2,3,7,8-TCDF	*	* n	0.95	NotF	*		162	2.5	0.0899						
1,2,3,7,8-PeCDF	*	* n	0.96	NotF	*		219	2.5	0.140						
2,3,4,7,8-PeCDF	*	* n	1.01	NotF	*		219	2.5	0.133						
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF	*		113	2.5	0.0558						
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF	*		113	2.5	0.0652						
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF	*		113	2.5	0.0705						
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF	*		113	2.5	0.0992						
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF	*		127	2.5	0.130						
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF	*		127	2.5	0.111						
OCDF	*	* n	0.95	NotF	*		162	2.5	0.245						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	4.03e+06	0.80 y	1.10	26:16	122.02					61.1					
IS 13C-1,2,3,7,8-PeCDD	3.36e+06	0.62 y	0.88	30:46	126.42					63.3					
IS 13C-1,2,3,4,7,8-HxCDD	2.61e+06	1.25 y	0.64	34:04	120.33					60.3					
IS 13C-1,2,3,6,7,8-HxCDD	2.82e+06	1.24 y	0.86	34:11	97.588					48.9					
IS 13C-1,2,3,7,8,9-HxCDD	3.11e+06	1.24 y	0.81	34:29	114.10					57.2					
IS 13C-1,2,3,4,6,7,8-HpCDD	2.47e+06	1.01 y	0.65	37:55	111.81					56.0					
IS 13C-OCDD	4.62e+06	0.89 y	0.58	41:13	235.98					59.1					
IS 13C-2,3,7,8-TCDF	6.09e+06	0.81 y	1.03	25:30	120.70					60.5					
IS 13C-1,2,3,7,8-PeCDF	6.09e+06	1.57 y	0.85	29:35	146.33					73.3					
IS 13C-2,3,4,7,8-PeCDF	5.72e+06	1.60 y	0.85	30:29	138.57					69.4					
IS 13C-1,2,3,4,7,8-HxCDF	4.17e+06	0.52 y	0.83	33:11	148.56					74.4					
IS 13C-1,2,3,6,7,8-HxCDF	4.35e+06	0.54 y	1.03	33:18	124.51					62.4					
IS 13C-2,3,4,6,7,8-HxCDF	3.72e+06	0.52 y	0.95	33:54	115.38					57.8					
IS 13C-1,2,3,7,8,9-HxCDF	3.35e+06	0.54 y	0.83	34:52	119.81					60.0					
IS 13C-1,2,3,4,6,7,8-HpCDF	2.81e+06	0.42 y	0.76	36:43	109.72					55.0					
IS 13C-1,2,3,4,7,8,9-HpCDF	2.40e+06	0.45 y	0.58	38:28	122.38					61.3					
IS 13C-OCDF	5.79e+06	0.90 y	0.69	41:26	248.71					62.3					
C/Up 37Cl-2,3,7,8-TCDD	2.66e+06		1.20	26:18	73.635					92.2					
											Integrations				
											by				
RS/RT 13C-1,2,3,4-TCDD	6.02e+06	0.81 y	1.00	25:43	199.58						Analyst: <u>DB</u>				Reviewed
RS 13C-1,2,3,4-TCDF	9.72e+06	0.81 y	1.00	24:18	199.58										by
RS/RT 13C-1,2,3,4,6,9-HxCDF	6.74e+06	0.51 y	1.00	33:35	199.58										Analyst: <u>CT</u>
											Date: <u>11/20/19</u>				Date: <u>12/04/19</u>

Totals class: HxCDD EMPC

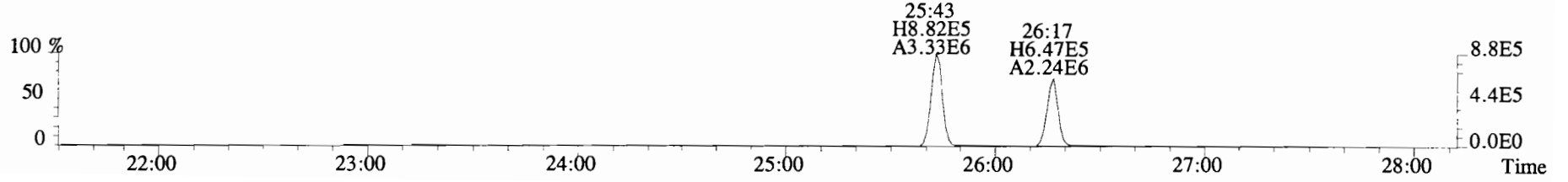
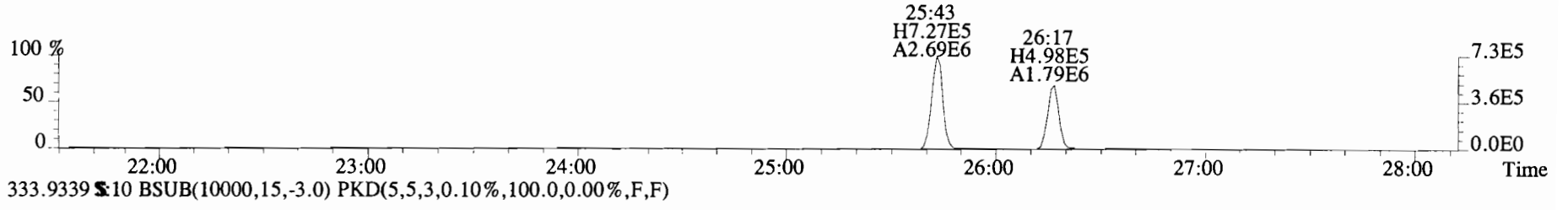
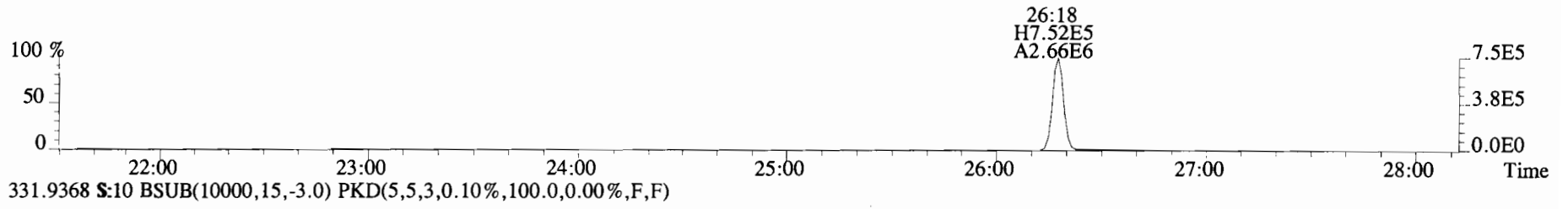
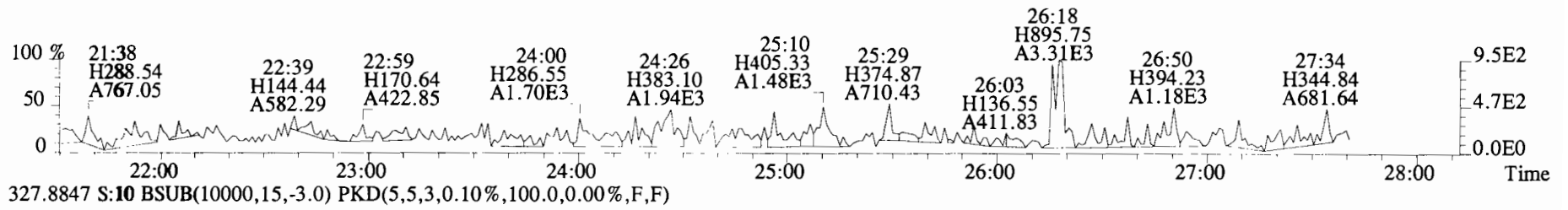
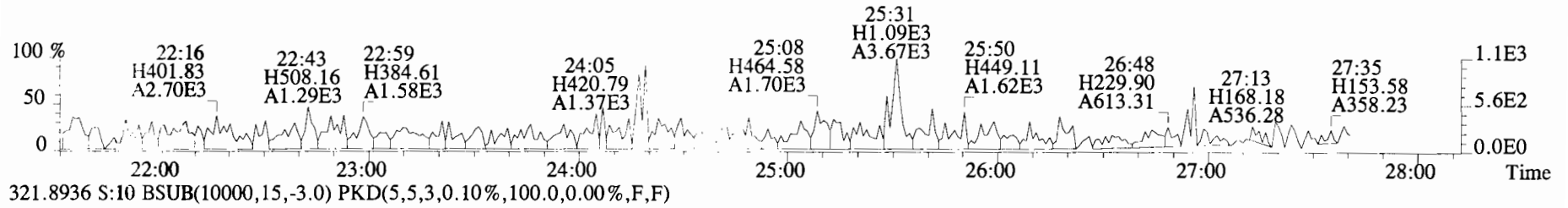
Entry #: 23

Run: 14 File: 191101D1 S: 10 I: 1 F: 3
Acquired: 1-NOV-19 21:09:47 Processed: 4-NOV-19 10:36:48

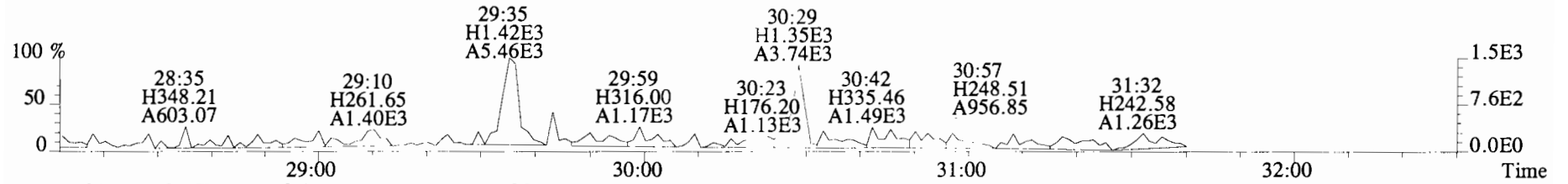
Total Concentration: 0.88295 Unnamed Concentration: 0.883

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
33:11	3.946e+03	2.086e+03	1.89	n	4.672e+03	0.33024
33:35	5.220e+03	2.039e+03	2.56	n	4.567e+03	0.32281
33:54	3.449e+03	1.452e+03	2.38	n	3.252e+03	0.22990

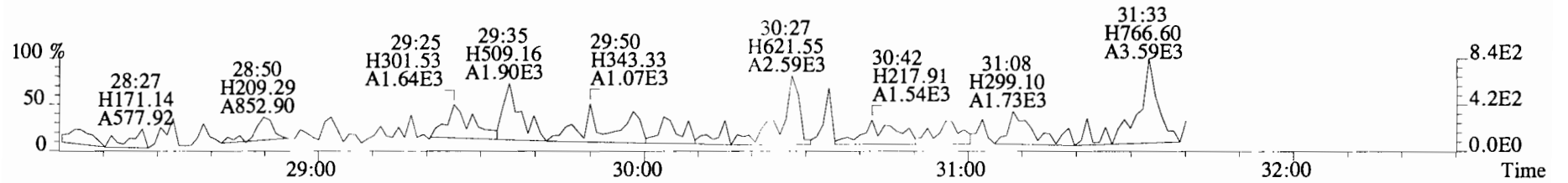
File:191101D1 #1-493 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



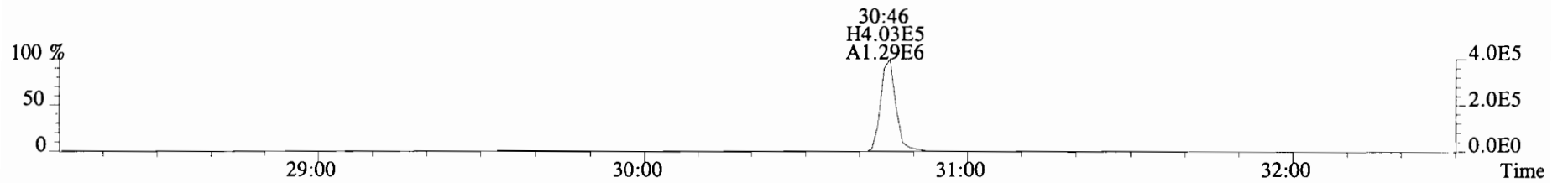
File:191101D1 #1-210 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



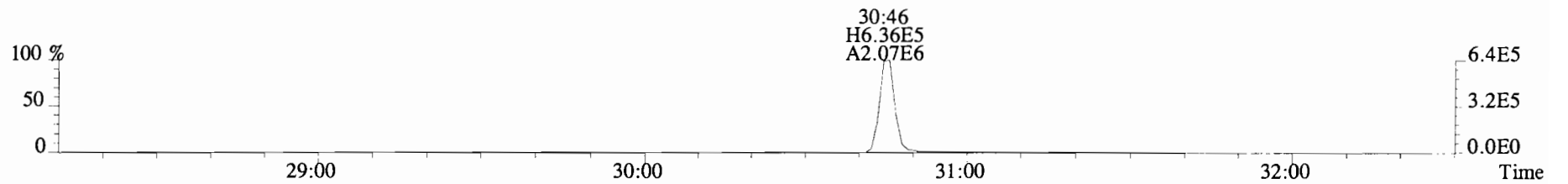
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



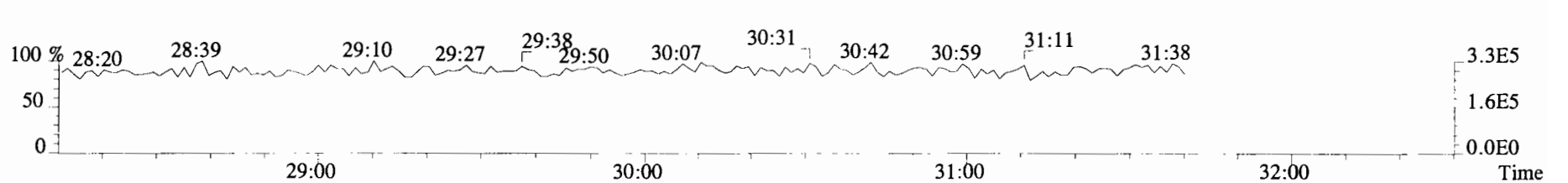
365.8978 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



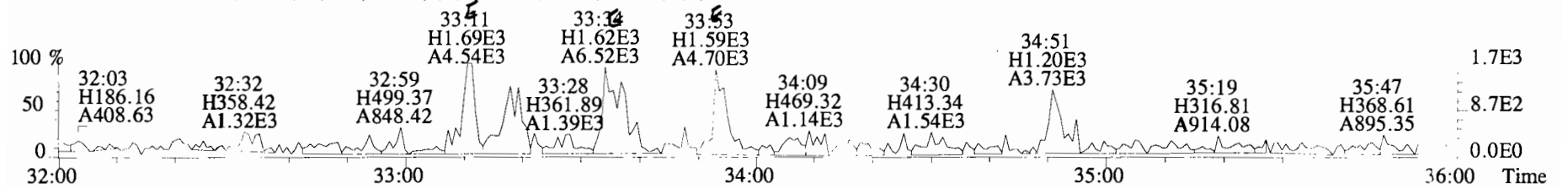
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



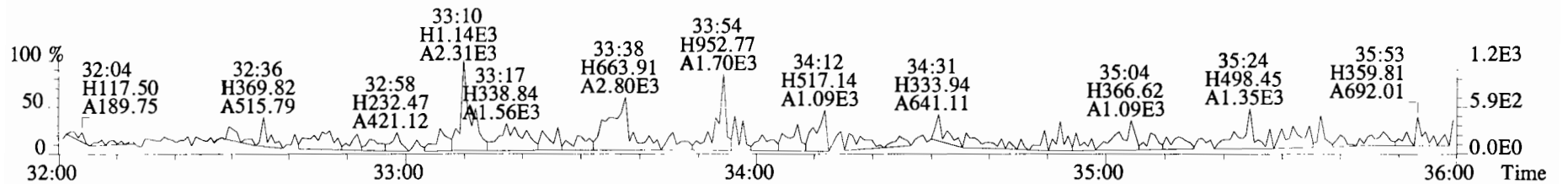
366.9792 S:10 F:2



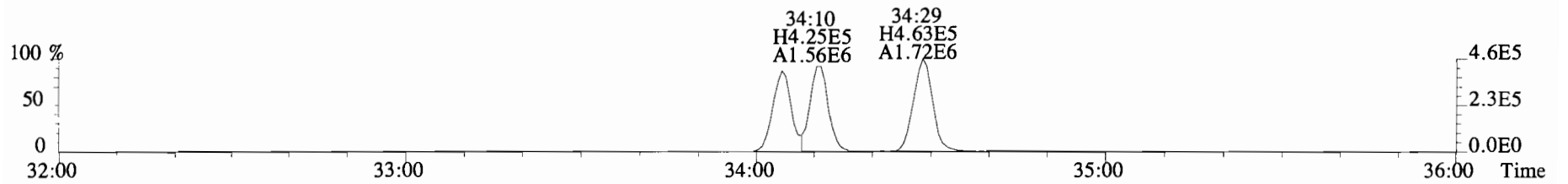
File:191101D1 #1-385 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



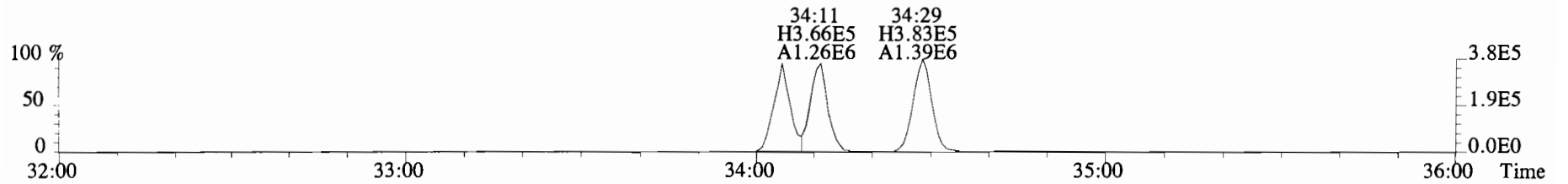
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



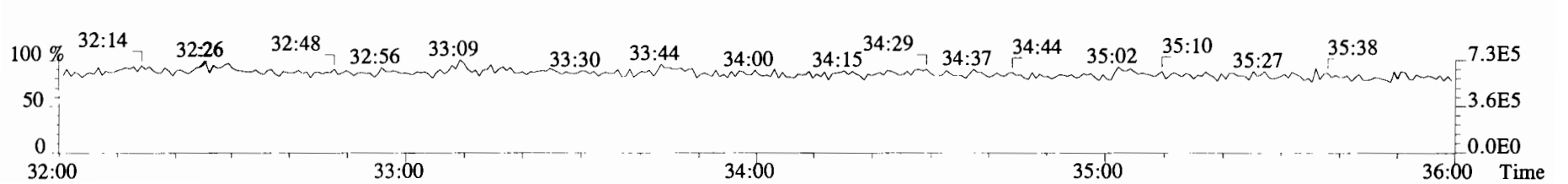
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



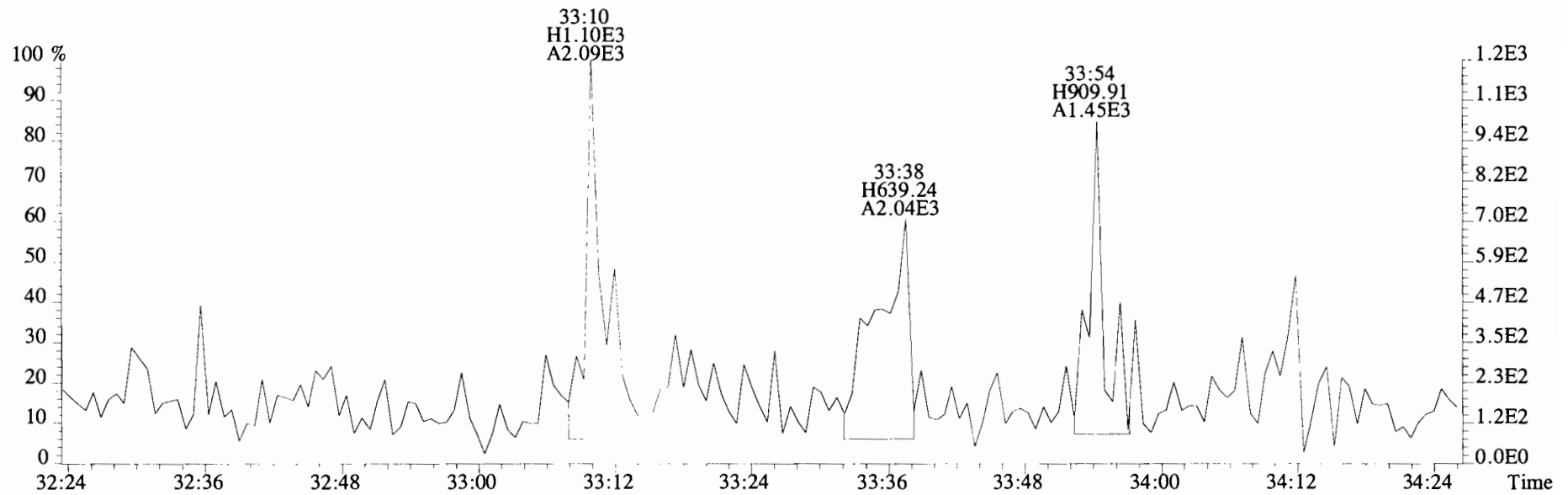
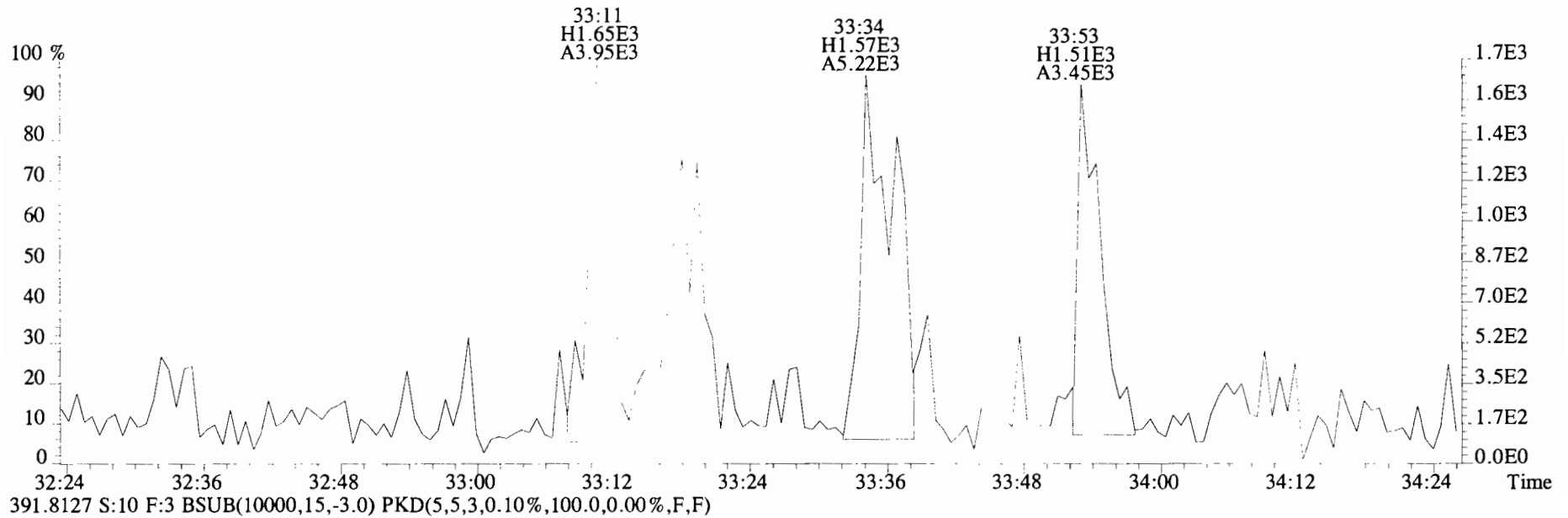
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



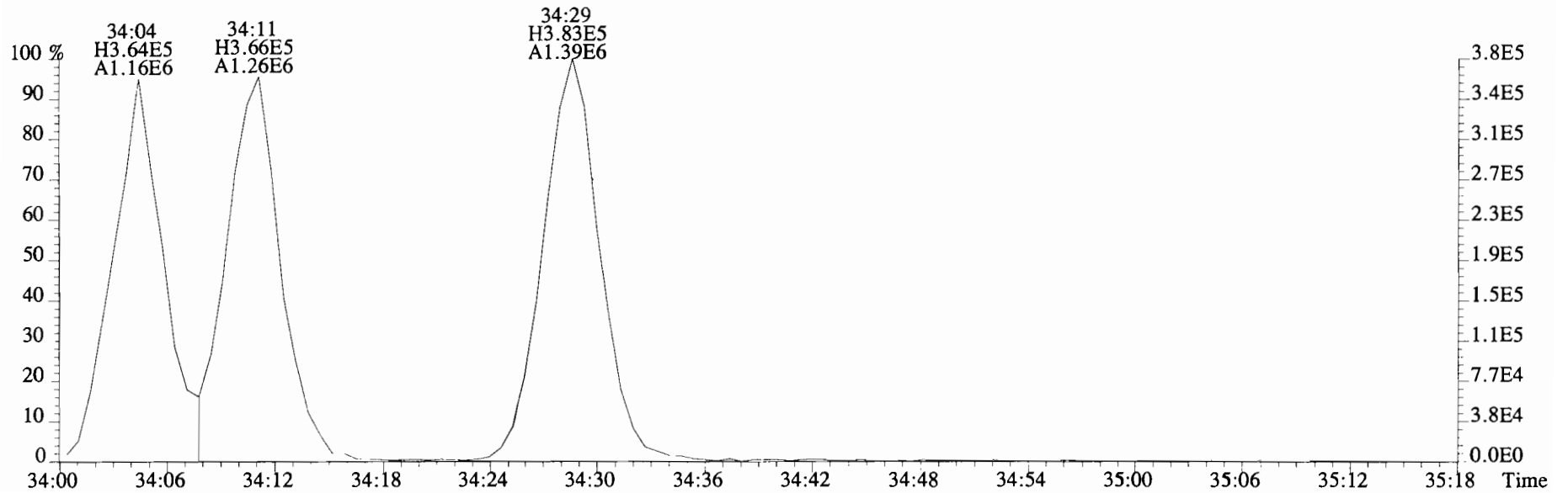
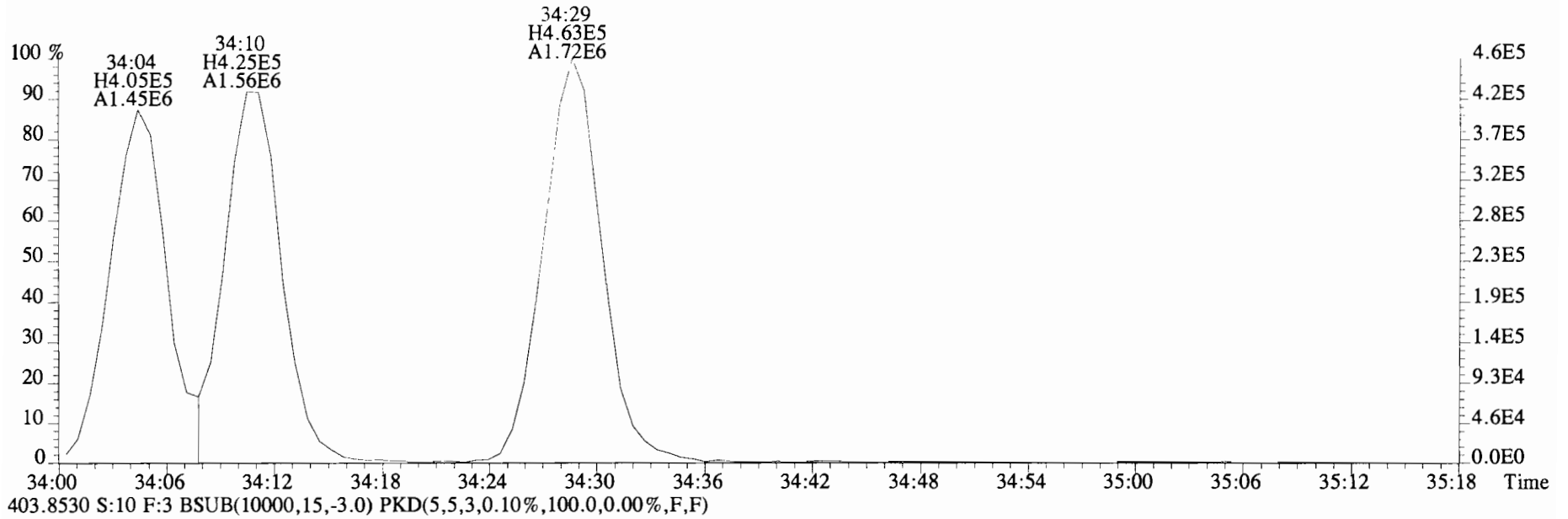
392.9760 S:10 F:3



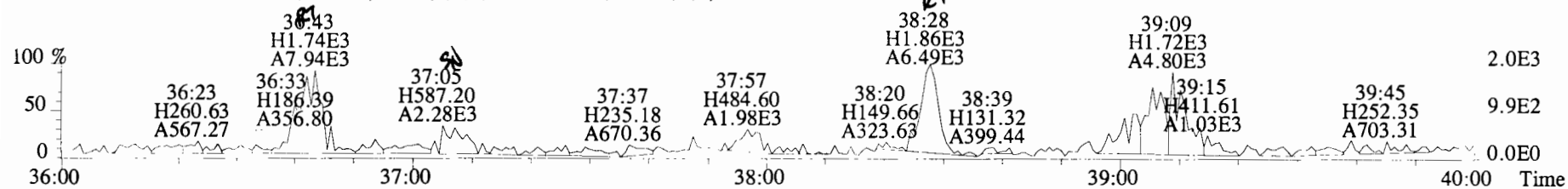
File:191101D1 #1-385 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



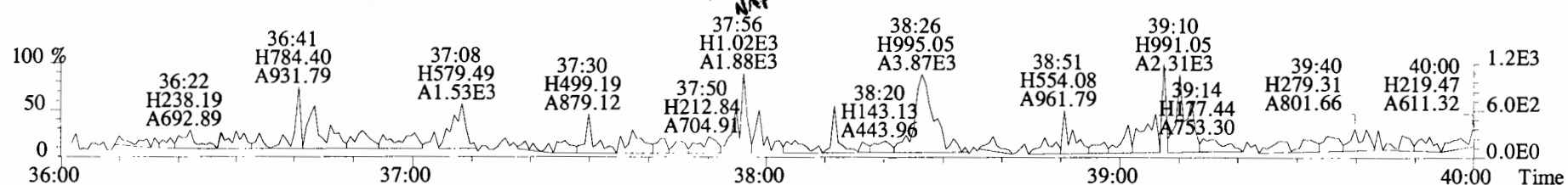
File:191101D1 #1-385 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



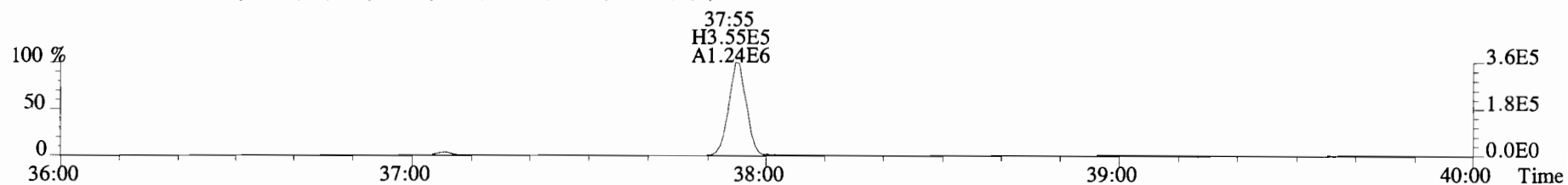
File:191101D1 #1-356 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



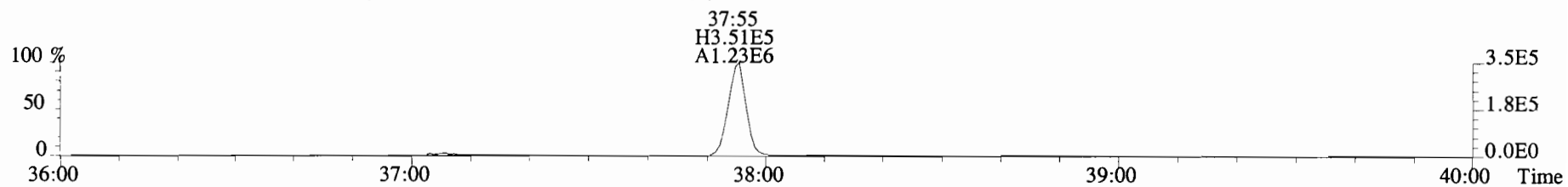
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



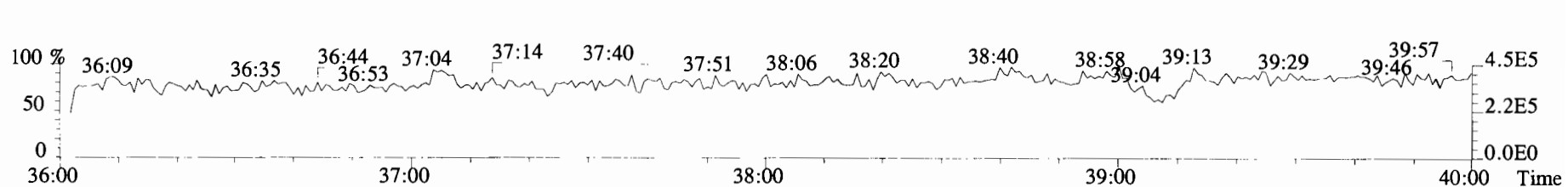
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



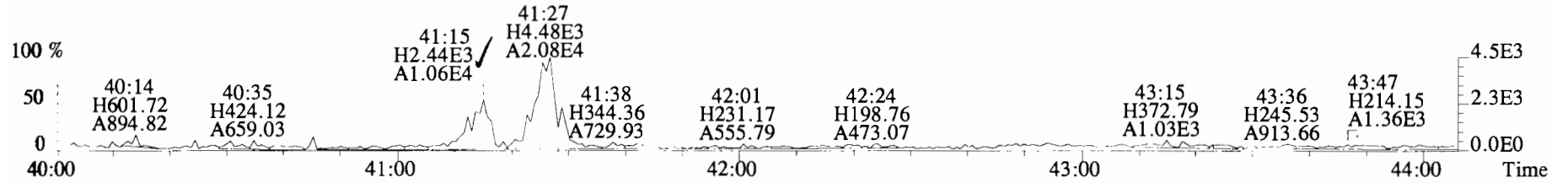
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



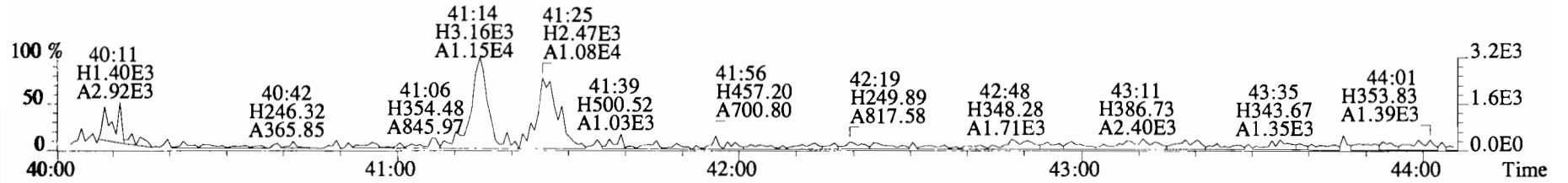
454.9728 S:10 F:4



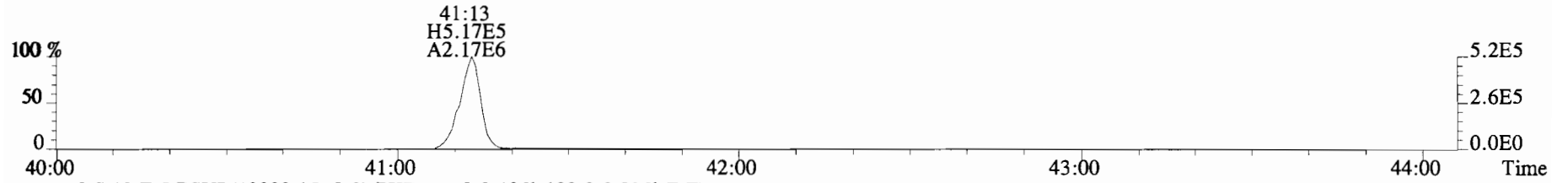
File:191101D1 #1-431 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
457.7377 S:10 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



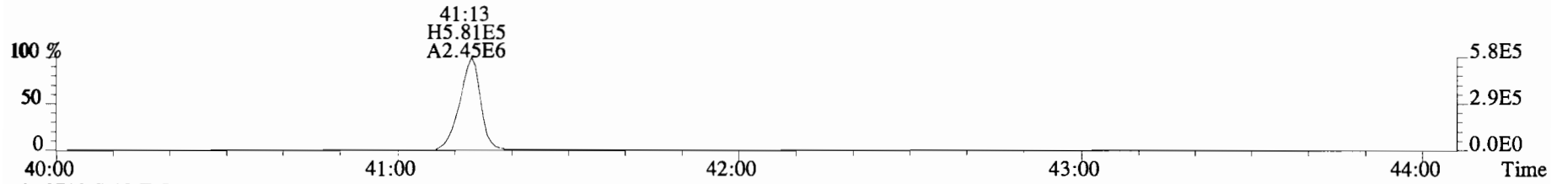
459.7348 S:10 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



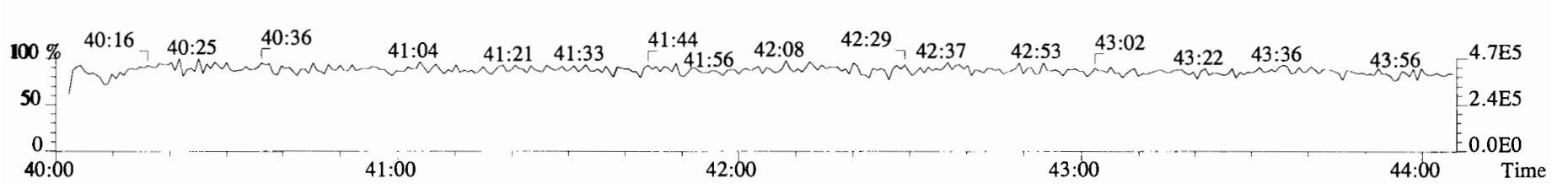
469.7780 S:10 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



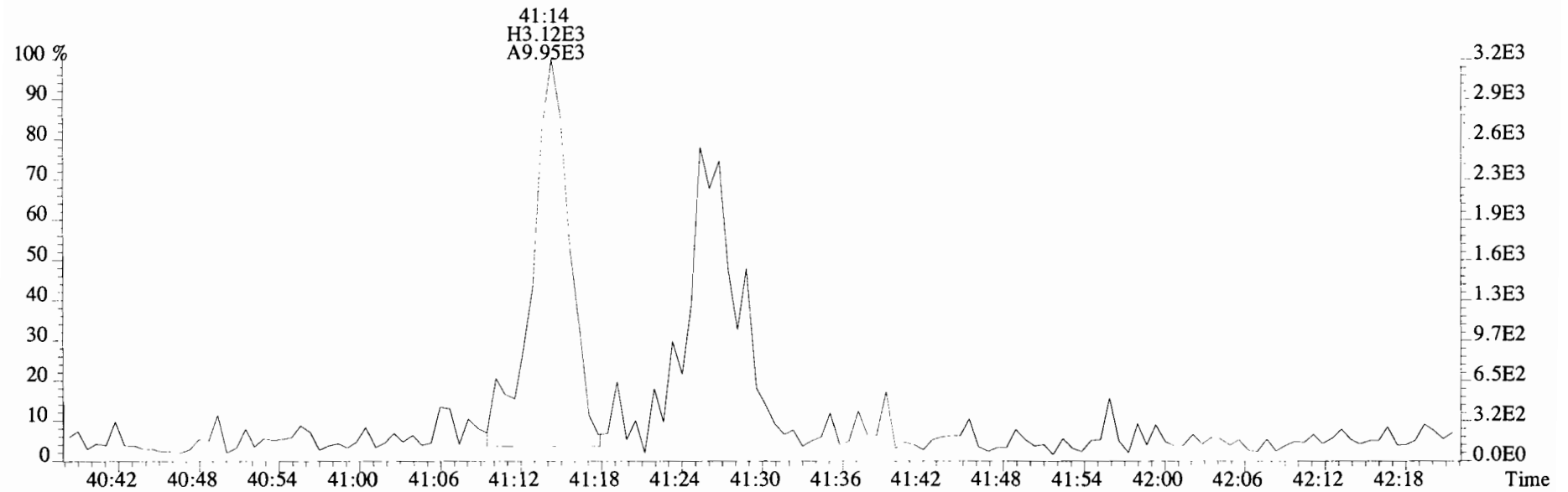
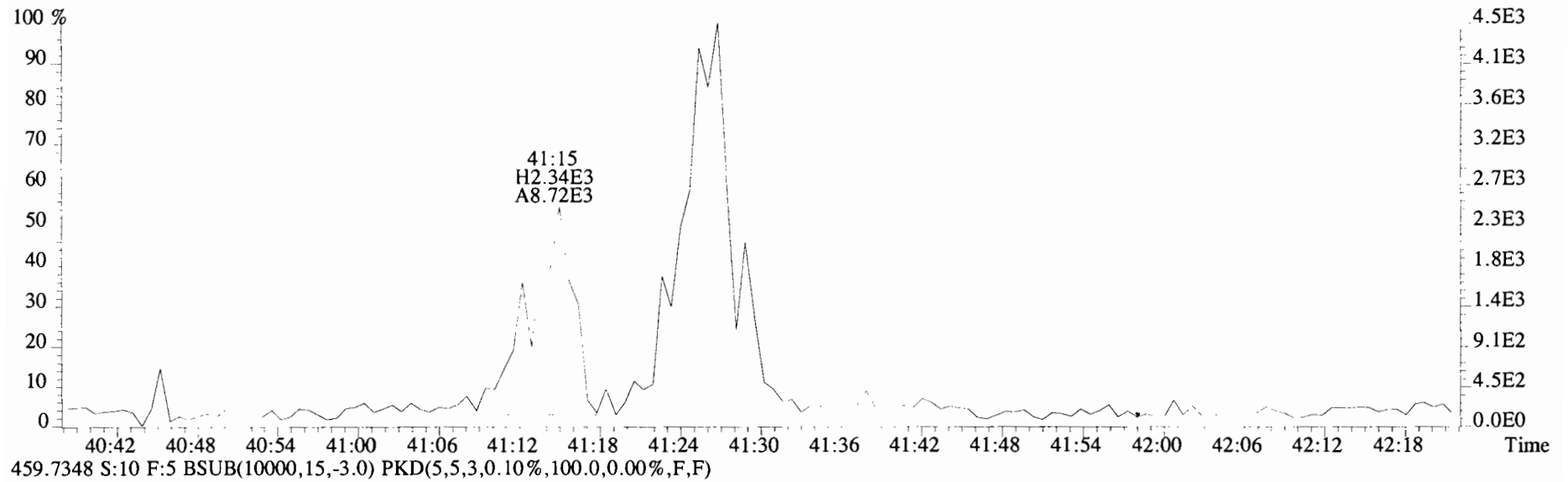
471.7750 S:10 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



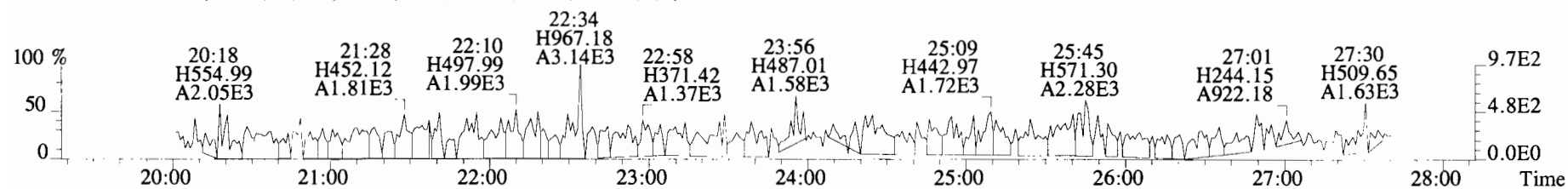
454.9728 S:10 F:5



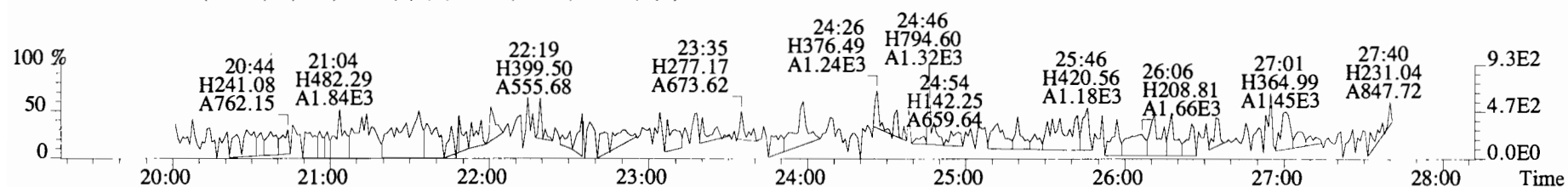
File:191101D1 #1-431 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



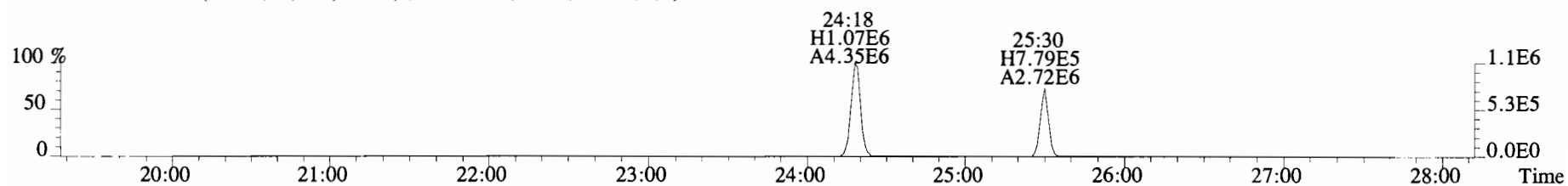
File:191101D1 #1-493 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



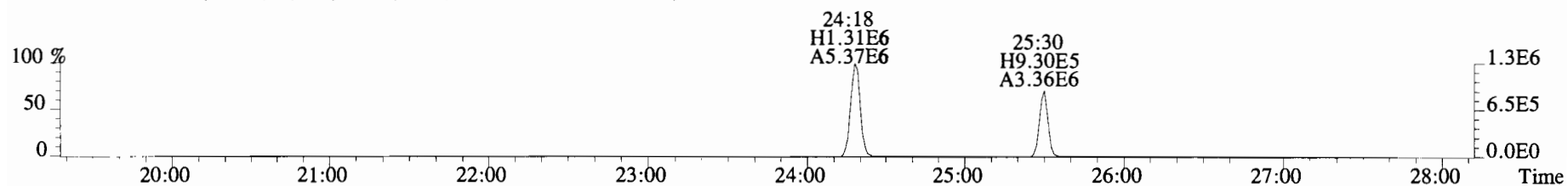
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



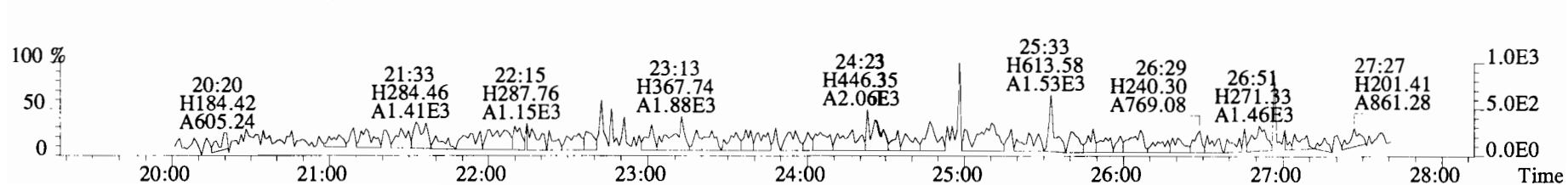
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



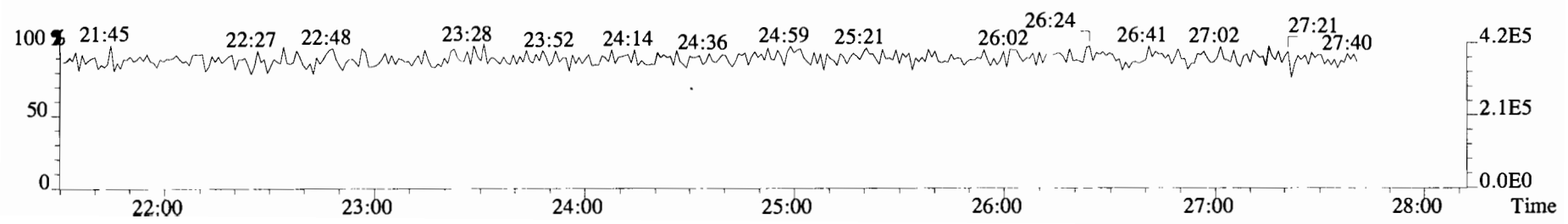
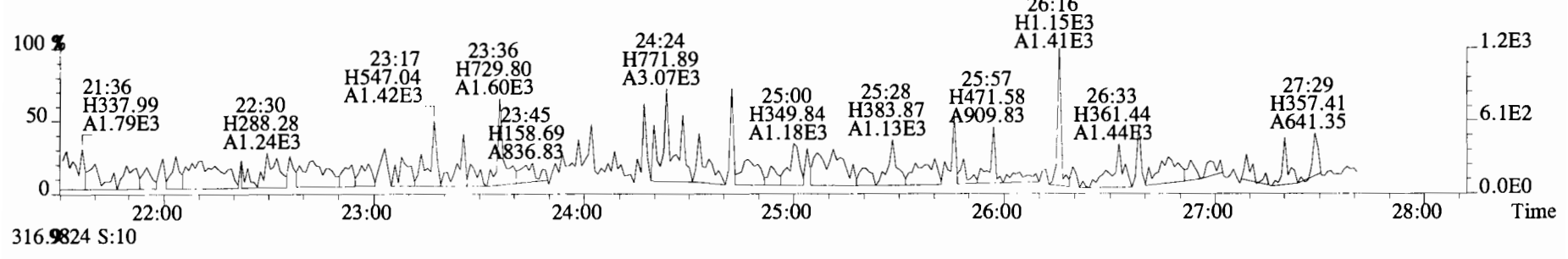
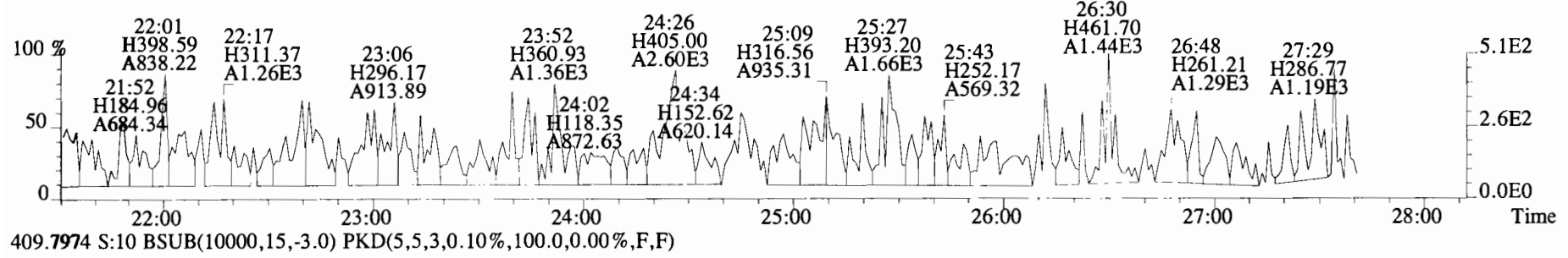
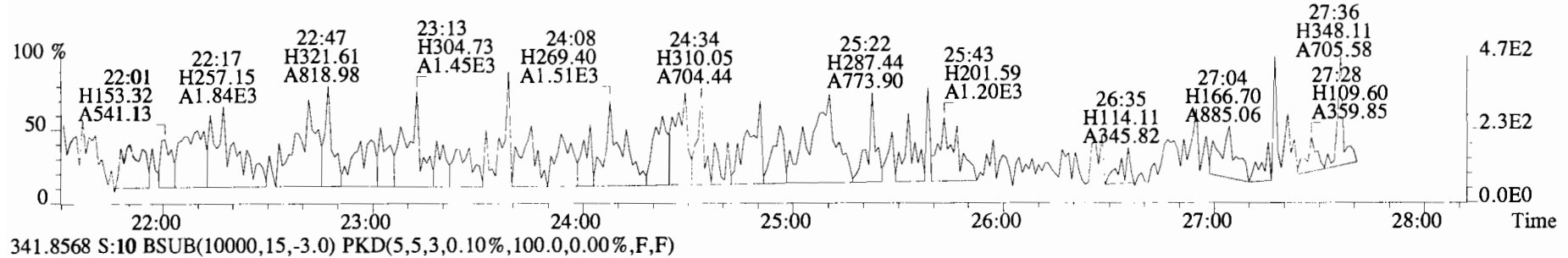
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



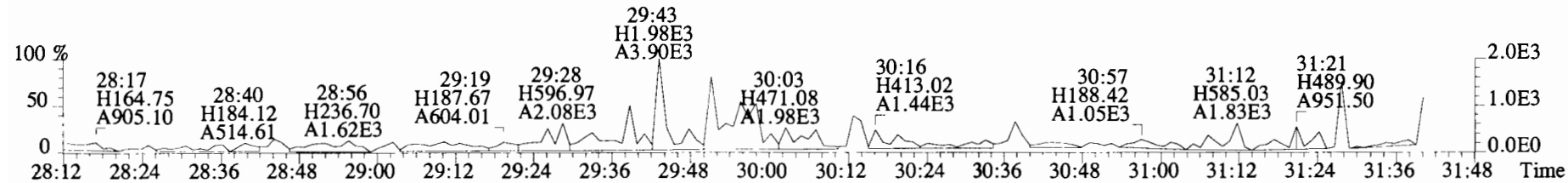
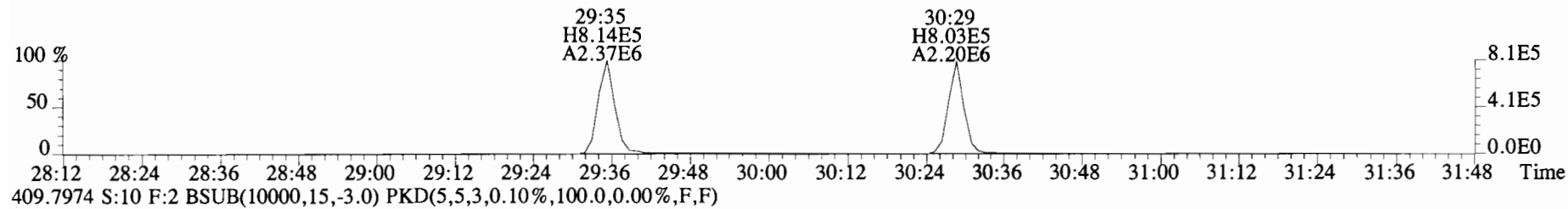
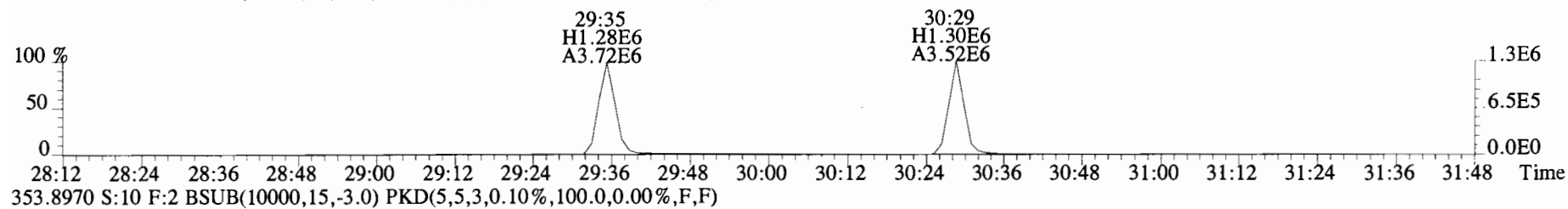
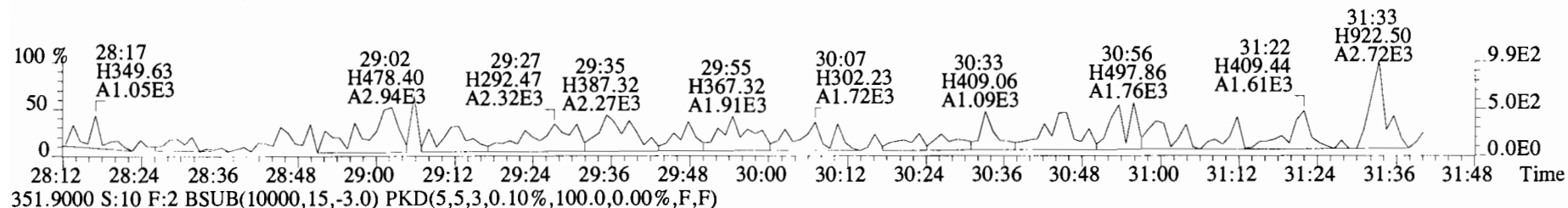
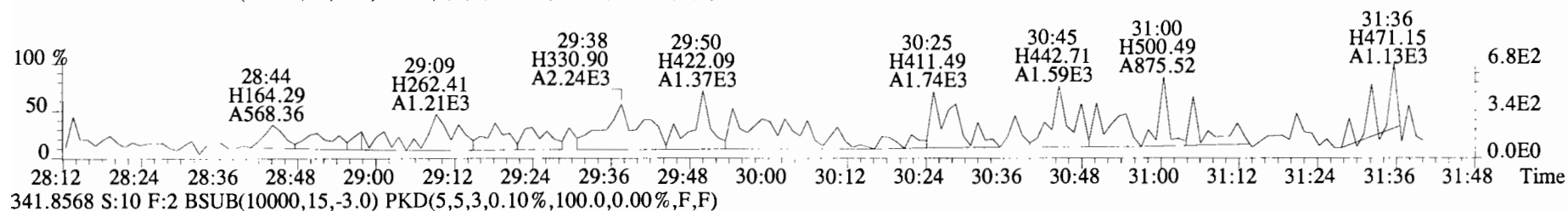
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



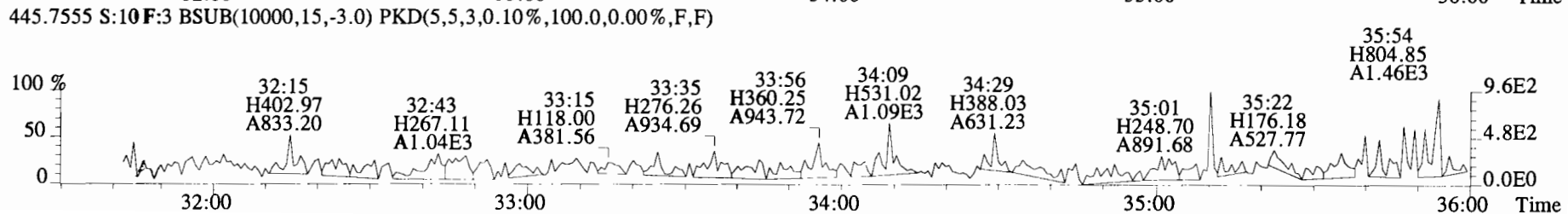
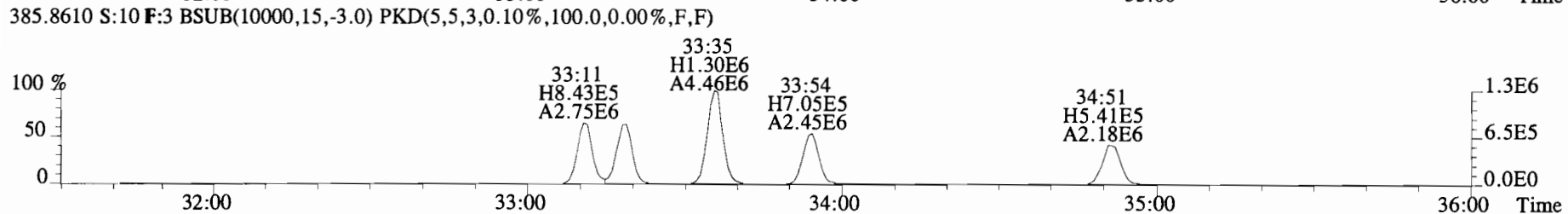
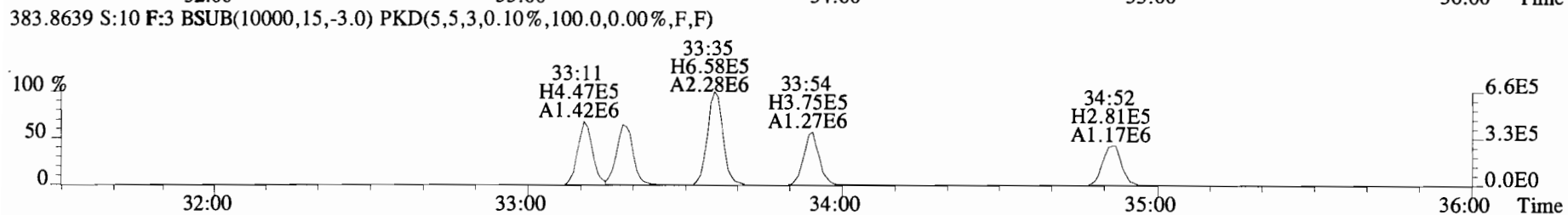
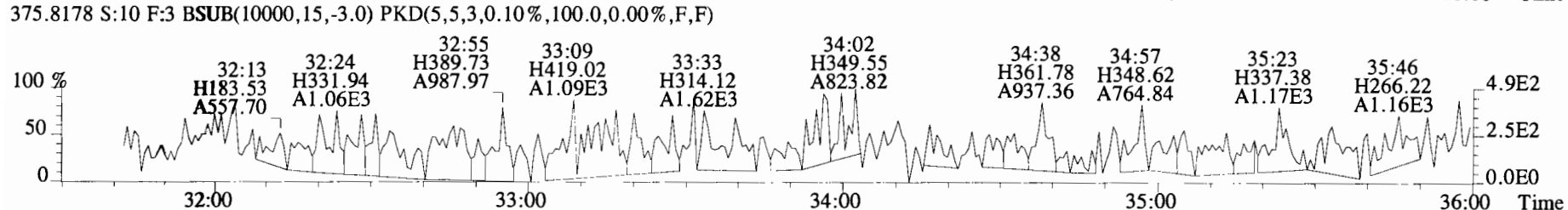
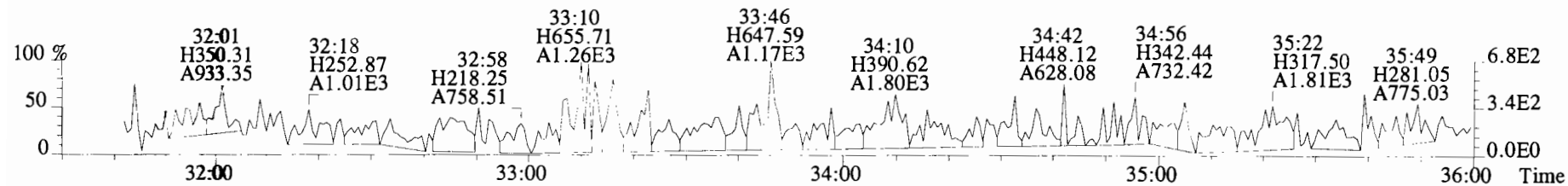
File:191101D1 #1-493 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



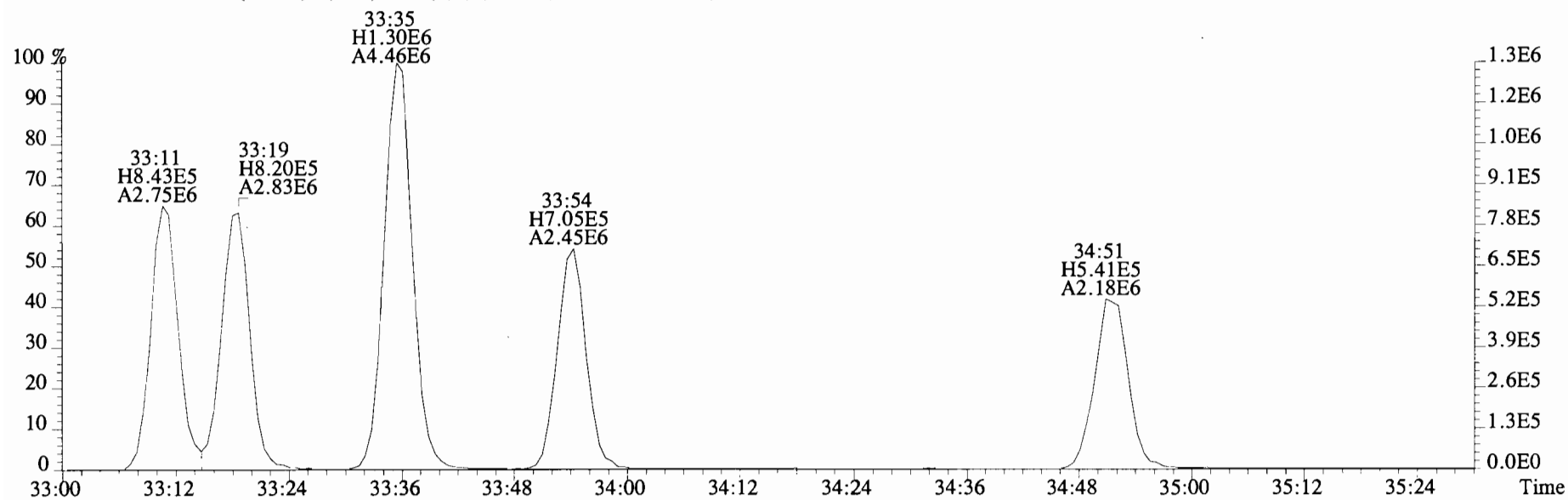
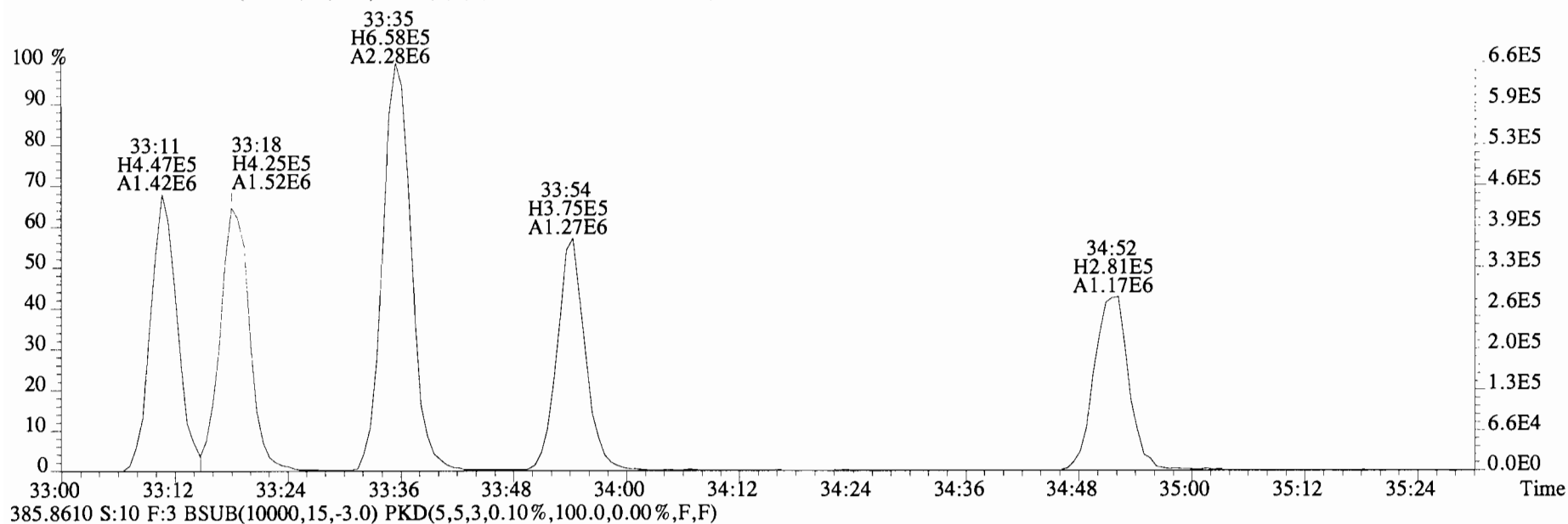
File:191101D1 #1-210 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



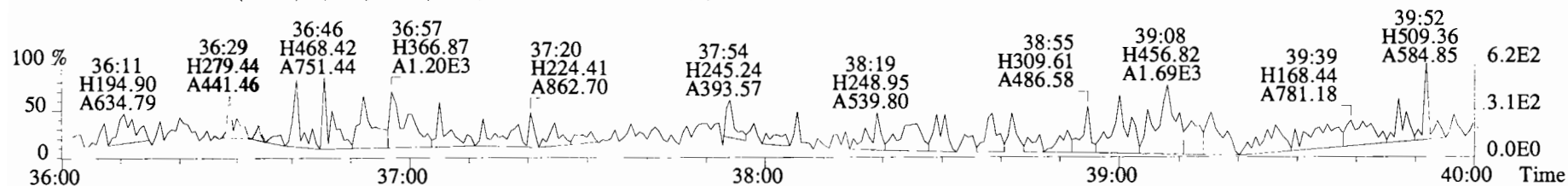
File:191101D1 #1-385 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



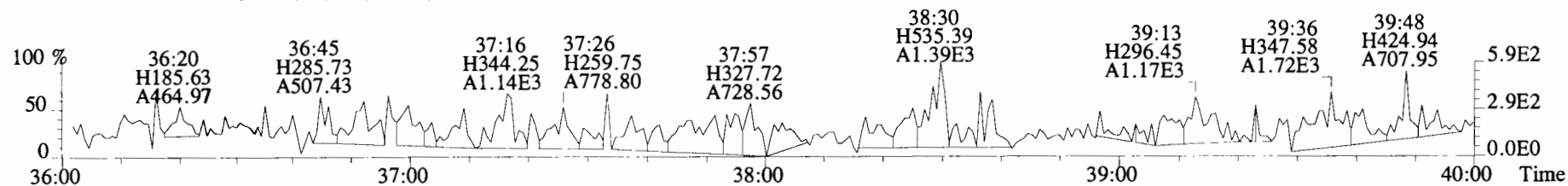
File:191101D1 #1-385 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



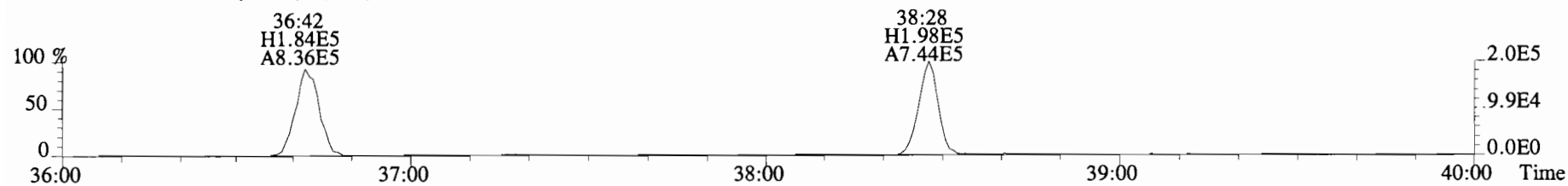
File:191101D1 #1-356 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
 407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



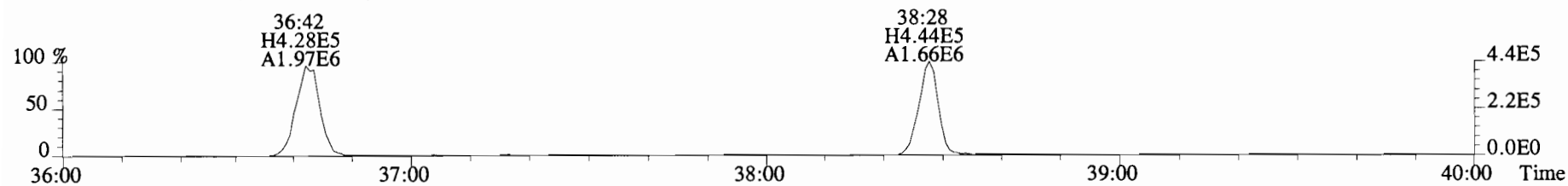
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



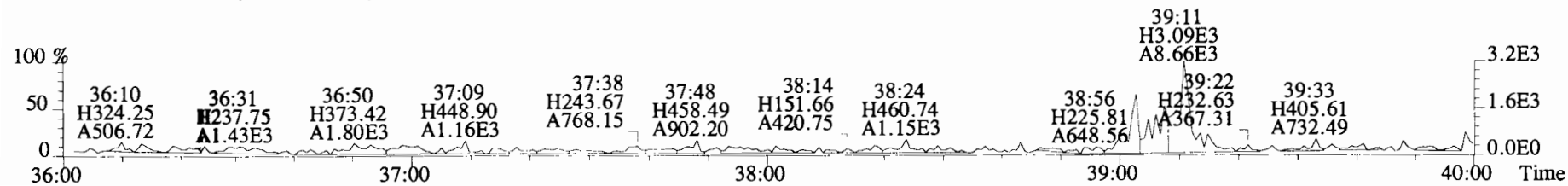
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



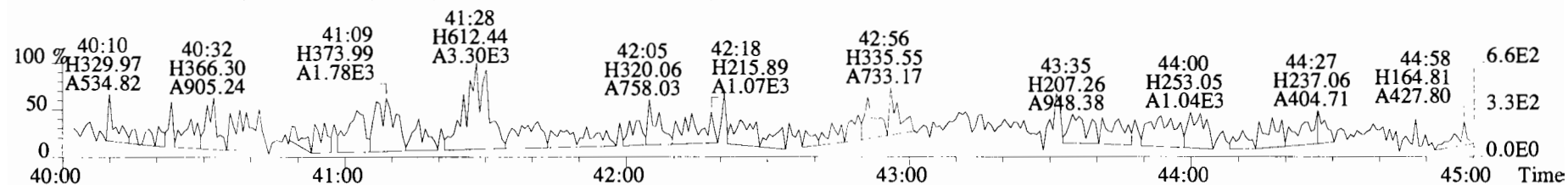
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



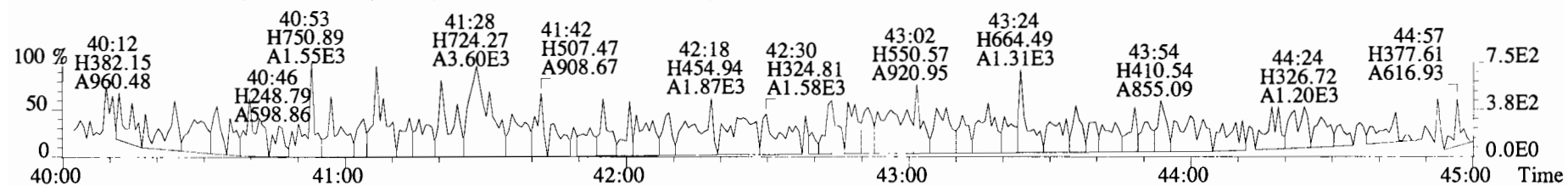
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



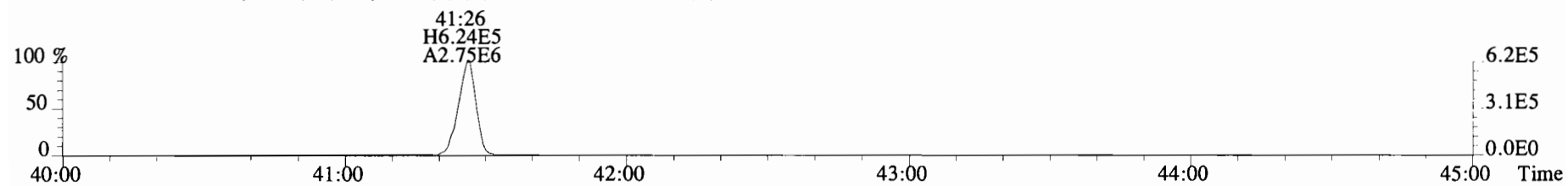
File:191101D1 #1-431 Acq: 1-NOV-2019 21:09:47 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-09RE1 PDI-084SC-A-15-16-191002 15.08 Exp:OCDD_DB5
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



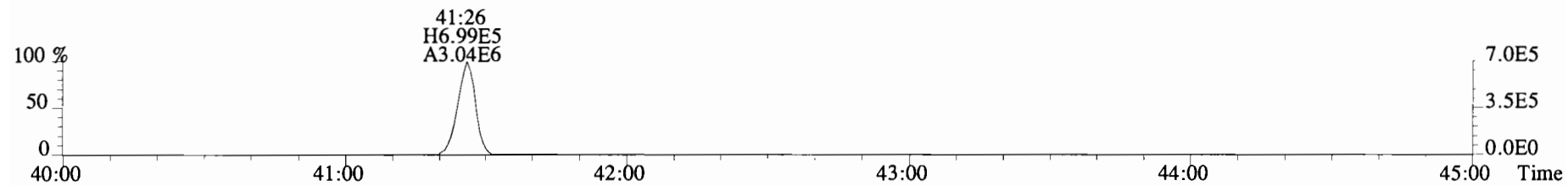
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



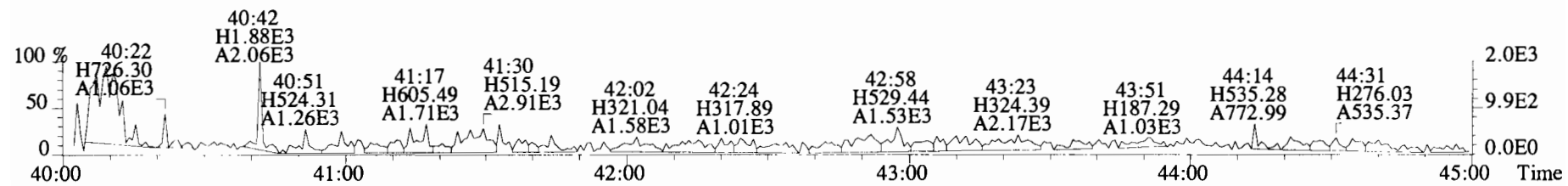
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	Not Fη	*		115	2.5	0.0619	Total Tetra-Dioxins	0.477	0.477	*	*	
1,2,3,7,8-PeCDD	*	* n	0.90	Not Fη	*		262	2.5	0.136	Total Penta-Dioxins	*	*		262	0.136
1,2,3,4,7,8-HxCDD	*	* n	1.10	Not Fη	*		281	2.5	0.221	Total Hexa-Dioxins	1.45	1.45	*	*	
1,2,3,6,7,8-HxCDD	*	* n	0.94	Not Fη	*		281	2.5	0.234	Total Hepta-Dioxins	3.85	3.85	*	*	
1,2,3,7,8,9-HxCDD	*	* n	0.96	Not Fη	*		281	2.5	0.230	Total Tetra-Furans	0.207	0.207	*	*	
1,2,3,4,6,7,8-HpCDD	3.15e+04	0.98 y	0.98	37:55	1.3493		*	2.5	*	Total Penta-Furans	0.0000	0.0000		193	0.0866
OCDD	2.56e+05	0.87 y	0.96	41:13	13.547		*	2.5	*	Total Hexa-Furans	*	*		253	0.0818
										Total Hepta-Furans	*	*		276	0.130
2,3,7,8-TCDF	*	* n	0.95	Not Fη	*		207	2.5	0.0675						
1,2,3,7,8-PeCDF	*	* n	0.96	Not Fη	*		193	2.5	0.0882						
2,3,4,7,8-PeCDF	*	* n	1.01	Not Fη	*		193	2.5	0.0851						
1,2,3,4,7,8-HxCDF	*	* n	1.18	Not Fη	*		253	2.5	0.0683						
1,2,3,6,7,8-HxCDF	*	* n	1.07	Not Fη	*		253	2.5	0.0747						
2,3,4,6,7,8-HxCDF	*	* n	1.11	Not Fη	*		253	2.5	0.0818						
1,2,3,7,8,9-HxCDF	*	* n	1.06	Not Fη	*		253	2.5	0.107						
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	Not Fη	*		276	2.5	0.141						
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	Not Fη	*		276	2.5	0.118						
OCDF	*	* n	0.95	Not Fη	*		147	2.5	0.123						
IS	13C-2,3,7,8-TCDD	6.71e+06	0.78 y	1.10	26:16	204.10				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	5.12e+06	0.64 y	0.88	30:45	193.57				102					
IS	13C-1,2,3,4,7,8-HxCDD	4.75e+06	1.29 y	0.64	34:04	183.13				97.1					
IS	13C-1,2,3,6,7,8-HxCDD	5.31e+06	1.23 y	0.86	34:11	153.74				91.8					
IS	13C-1,2,3,7,8,9-HxCDD	5.52e+06	1.24 y	0.81	34:29	169.42				77.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	4.75e+06	1.07 y	0.65	37:55	179.96				84.9					
IS	13C-OCDD	7.87e+06	0.93 y	0.58	41:13	336.34				90.2					
IS	13C-2,3,7,8-TCDF	1.09e+07	0.79 y	1.03	25:30	198.70				84.3					
IS	13C-1,2,3,7,8-PeCDF	9.48e+06	1.62 y	0.85	29:35	208.47				99.6					
IS	13C-2,3,4,7,8-PeCDF	8.97e+06	1.62 y	0.85	30:29	198.85				105					
IS	13C-1,2,3,4,7,8-HxCDF	7.75e+06	0.51 y	0.83	33:11	230.78				99.7					
IS	13C-1,2,3,6,7,8-HxCDF	8.38e+06	0.54 y	1.03	33:18	200.59				116					
IS	13C-2,3,4,6,7,8-HxCDF	7.53e+06	0.53 y	0.95	33:54	195.65				101					
IS	13C-1,2,3,7,8,9-HxCDF	6.79e+06	0.51 y	0.83	34:51	203.20				98.1					
IS	13C-1,2,3,4,6,7,8-HpCDF	6.05e+06	0.44 y	0.76	36:43	197.78				102					
IS	13C-1,2,3,4,7,8,9-HpCDF	5.08e+06	0.44 y	0.58	38:28	216.45				99.2					
IS	13C-OCDF	1.09e+07	0.93 y	0.69	41:26	391.77				109					
C/Up	37C1-2,3,7,8-TCDD	2.85e+06		1.20	26:18	79.181				98.2					
RS/RT	13C-1,2,3,4-TCDD	5.99e+06	0.81 y	1.00	25:43	199.44				99.3					
RS	13C-1,2,3,4-TCDF	1.06e+07	0.83 y	1.00	24:18	199.44									
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.05e+06	0.54 y	1.00	33:36	199.44									

Integrations
 by DB
 Analyst: DB
 Date: 12/5/19
 Reviewed
 by CT
 Analyst: CT
 Date: 12/05/19

Totals class: TCDD EMPC

Entry #: 19

Run: 17 File: 191031D2 S: 12 I: 1 F: 1
Acquired: 1-NOV-19 08:29:07 Processed: 1-NOV-19 12:03:21

Total Concentration: 0.47665 Unnamed Concentration: 0.477

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
24:26	5.801e+03	8.719e+03	0.67 y	1.452e+04	0.47665

Totals class: HxCDD EMPC

Entry #: 23

Run: 17

File: 191031D2

S: 12 I: 1 F: 3

Acquired: 1-NOV-19 08:29:07

Processed: 1-NOV-19 12:03:21

Total Concentration: 1.4506

Unnamed Concentration: 1.451

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:32	1.346e+04	1.220e+04	1.10 y	2.566e+04	0.99374
33:22	6.885e+03	4.910e+03	1.40 y	1.179e+04	0.45686

Totals class: HpCDD EMPC

Entry #: 25

Run: 17 File: 191031D2 S: 12 I: 1 F: 4
Acquired: 1-NOV-19 08:29:07 Processed: 1-NOV-19 12:03:21

Total Concentration: 3.8478 Unnamed Concentration: 2.499

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:06	3.022e+04	2.808e+04	1.08	y	5.830e+04	2.4986
37:55	1.561e+04	1.587e+04	0.98	y	3.148e+04	1.3493

Totals class: TCDF EMPC

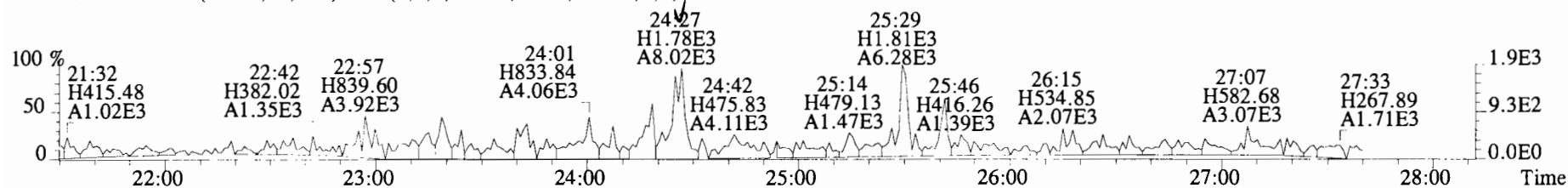
Entry #: 27

Run: 17 File: 191031D2 S: 12 I: 1 F: 1
Acquired: 1-NOV-19 08:29:07 Processed: 1-NOV-19 12:03:21

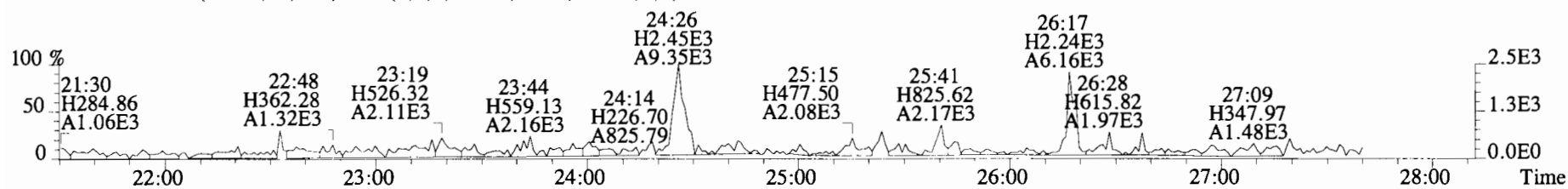
Total Concentration: 0.20740 Unnamed Concentration: 0.207

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
22:01	4.835e+03	5.982e+03	0.81 y	1.082e+04	0.20740

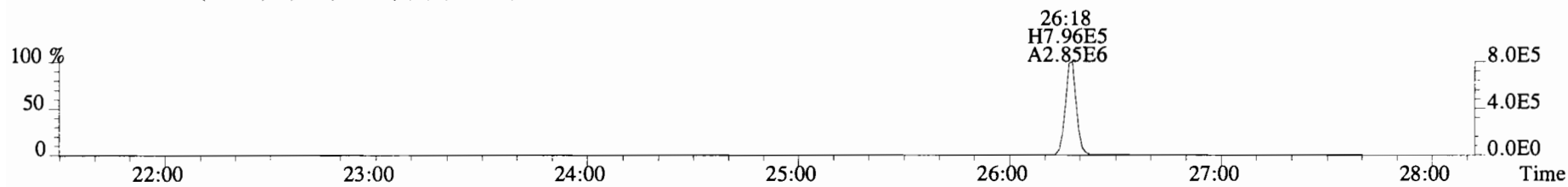
File:191031D2 #1-492 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 319.8965 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



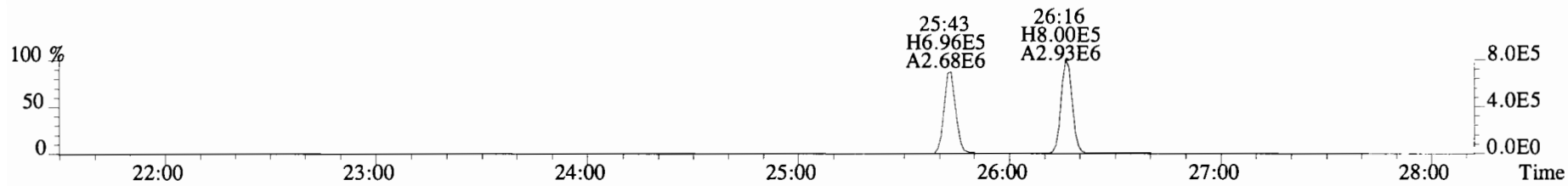
321.8936 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



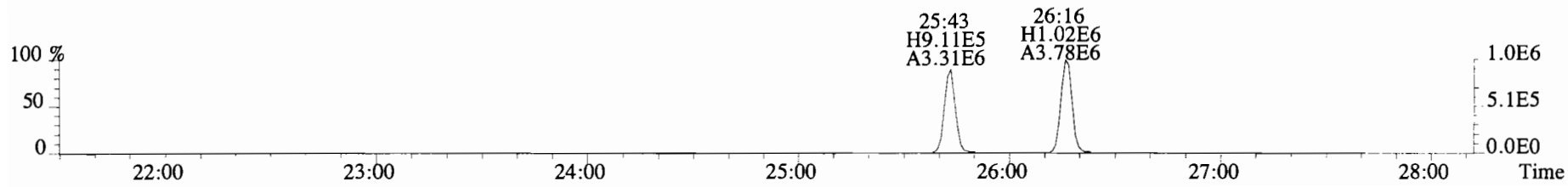
327.8847 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



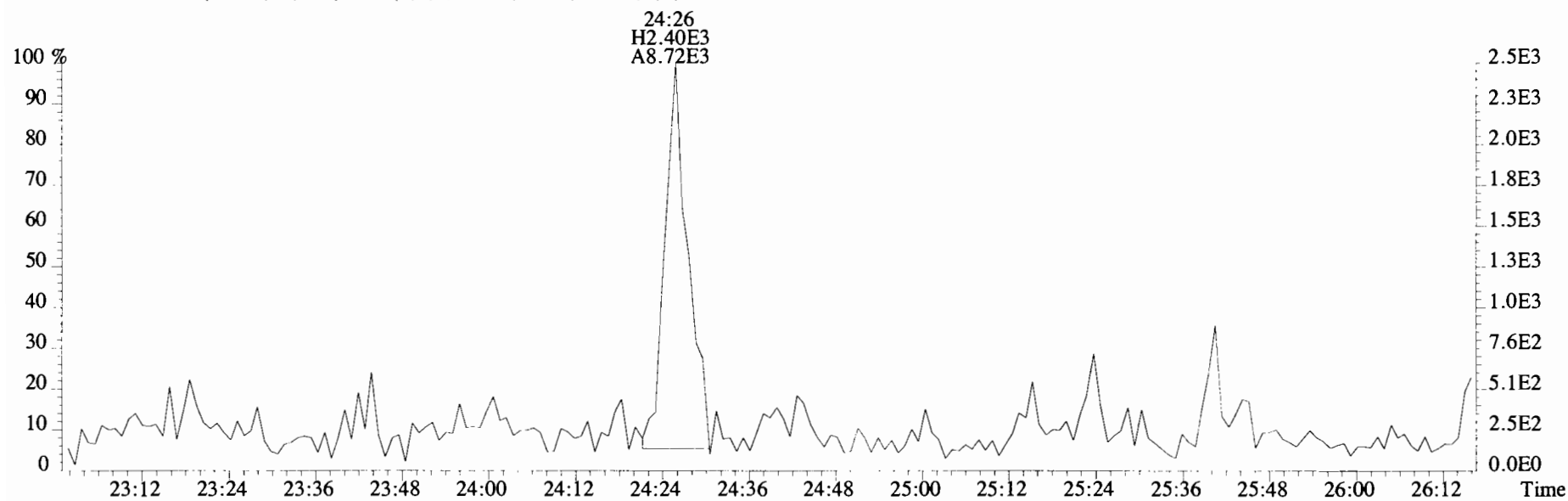
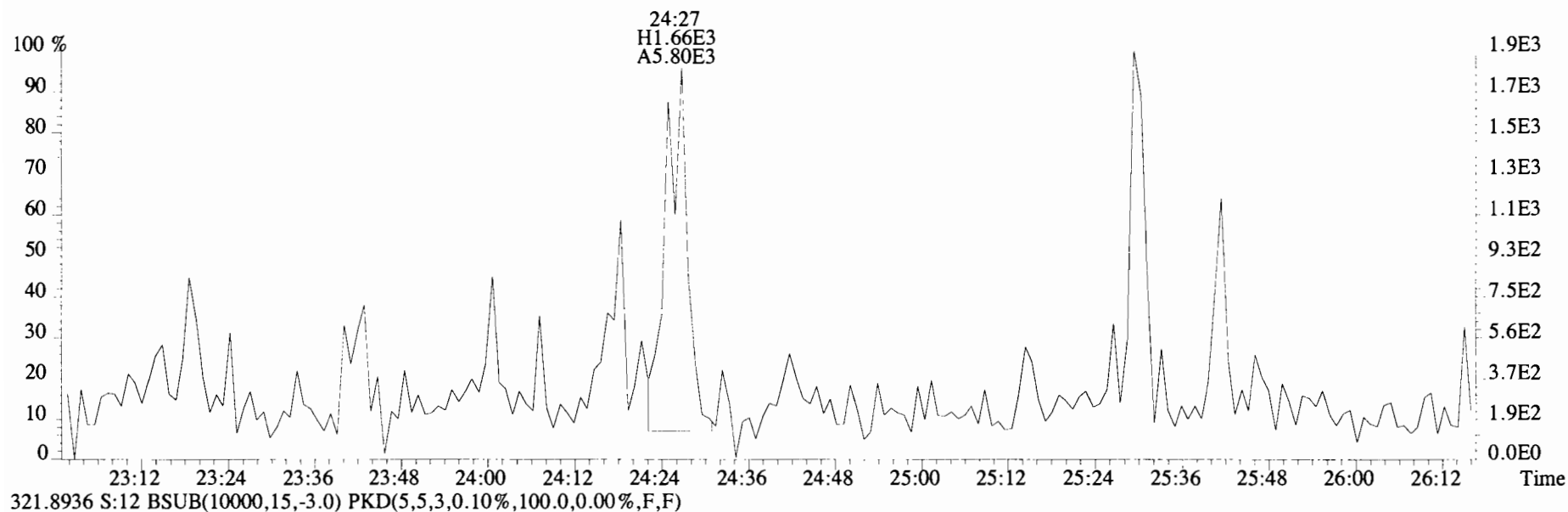
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



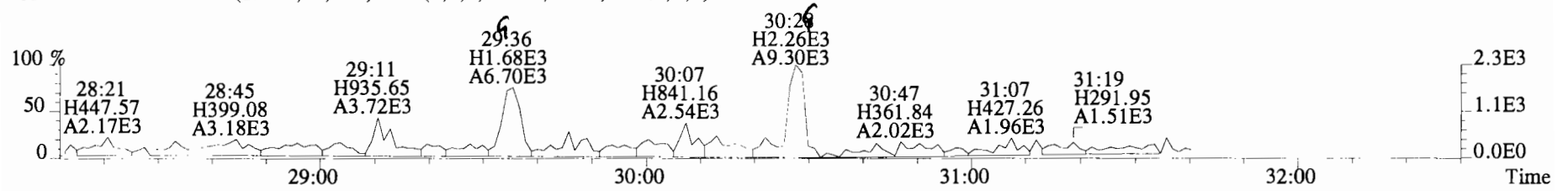
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



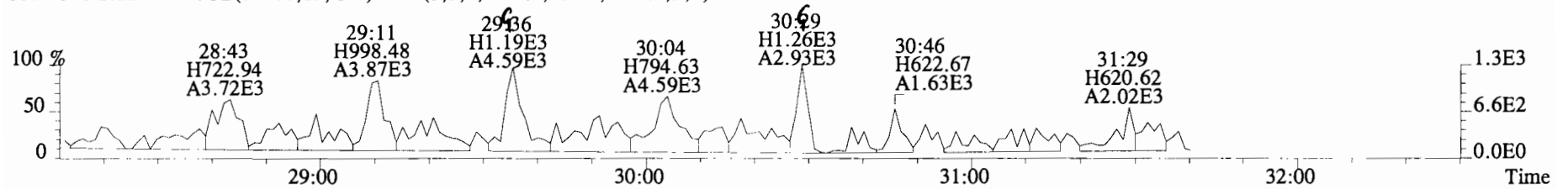
File:191031D2 #1-492 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
319.8965 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



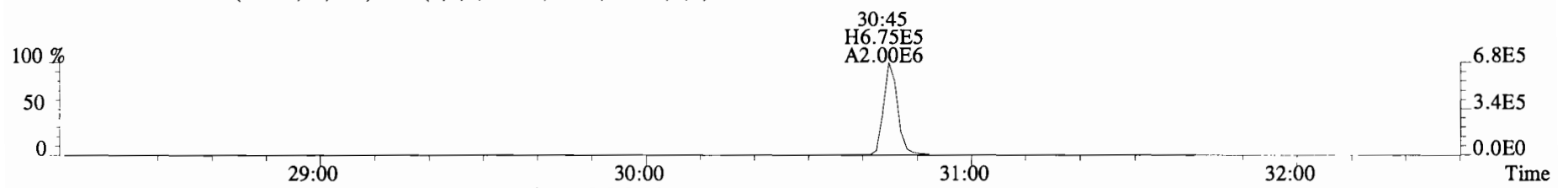
File:191031D2 #1-211 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
353.8576 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



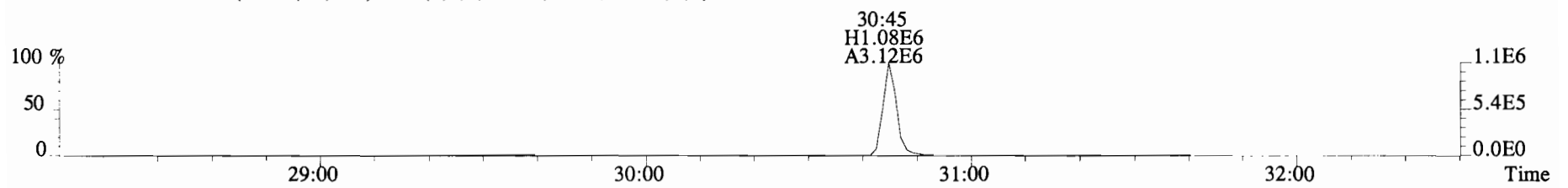
355.8546 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



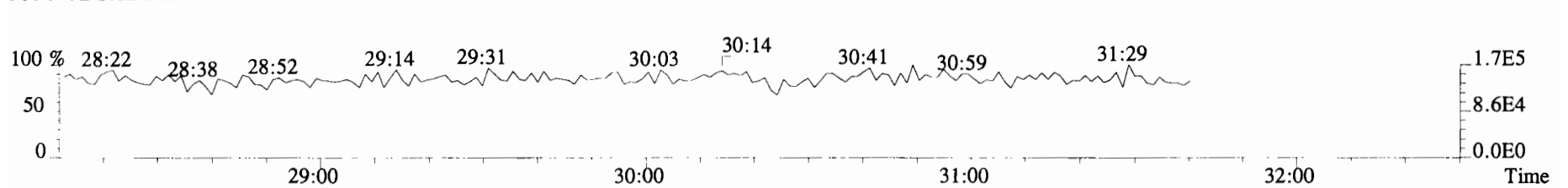
365.8978 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



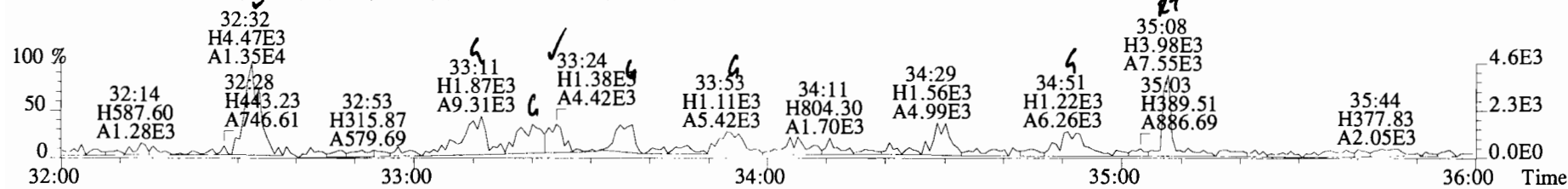
367.8949 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



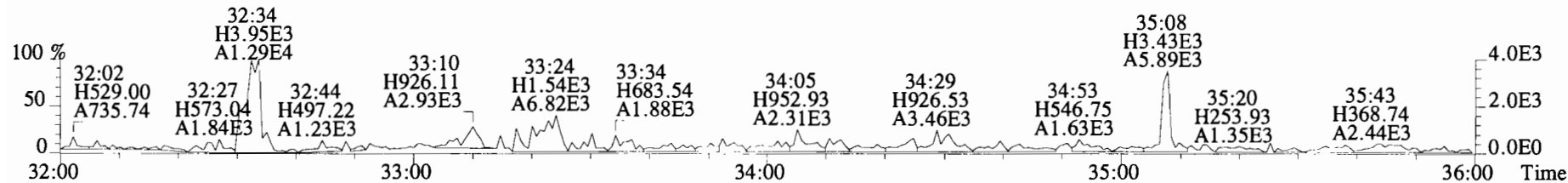
366.9792 S:12 F:2



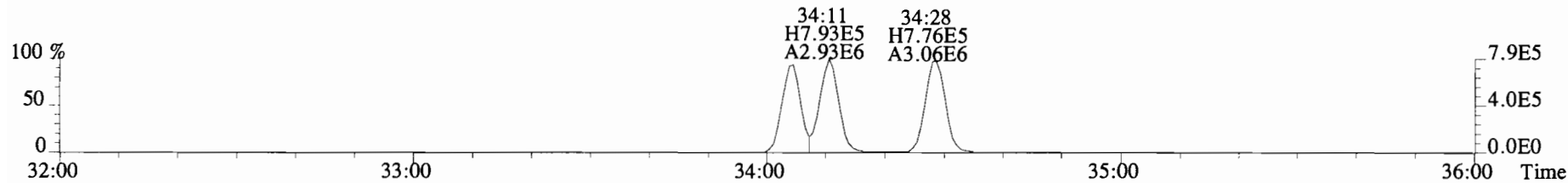
File:191031D2 #1-385 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 389.8156 S:12 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



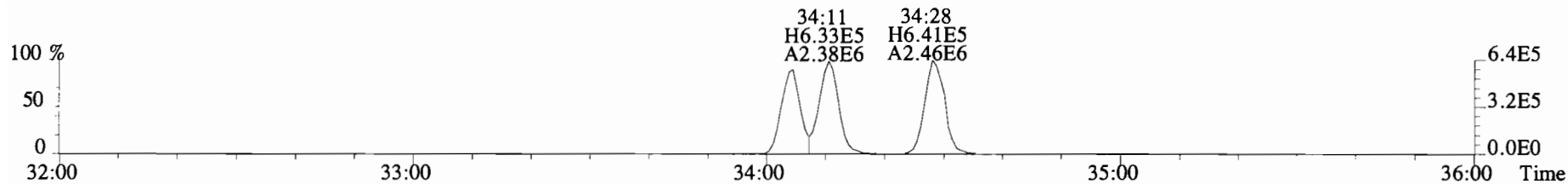
391.8127 S:12 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



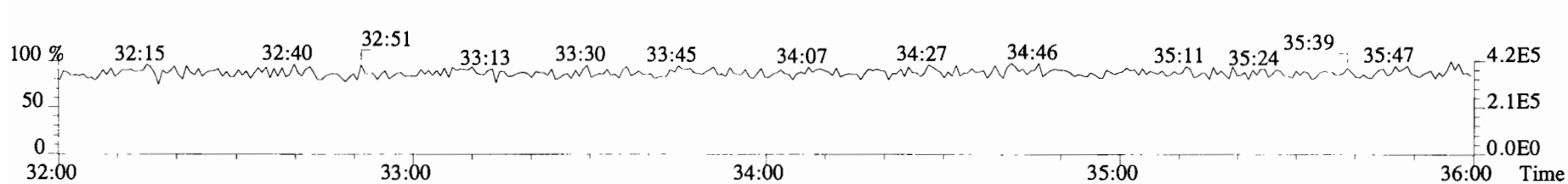
401.8559 S:12 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



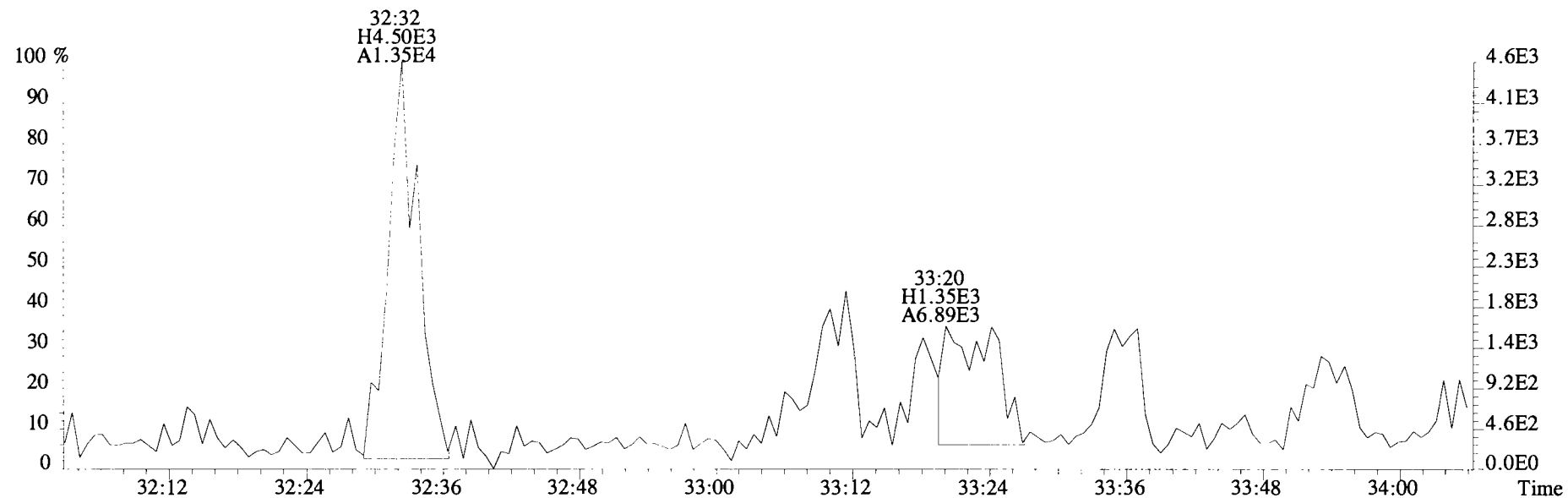
403.8530 S:12 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



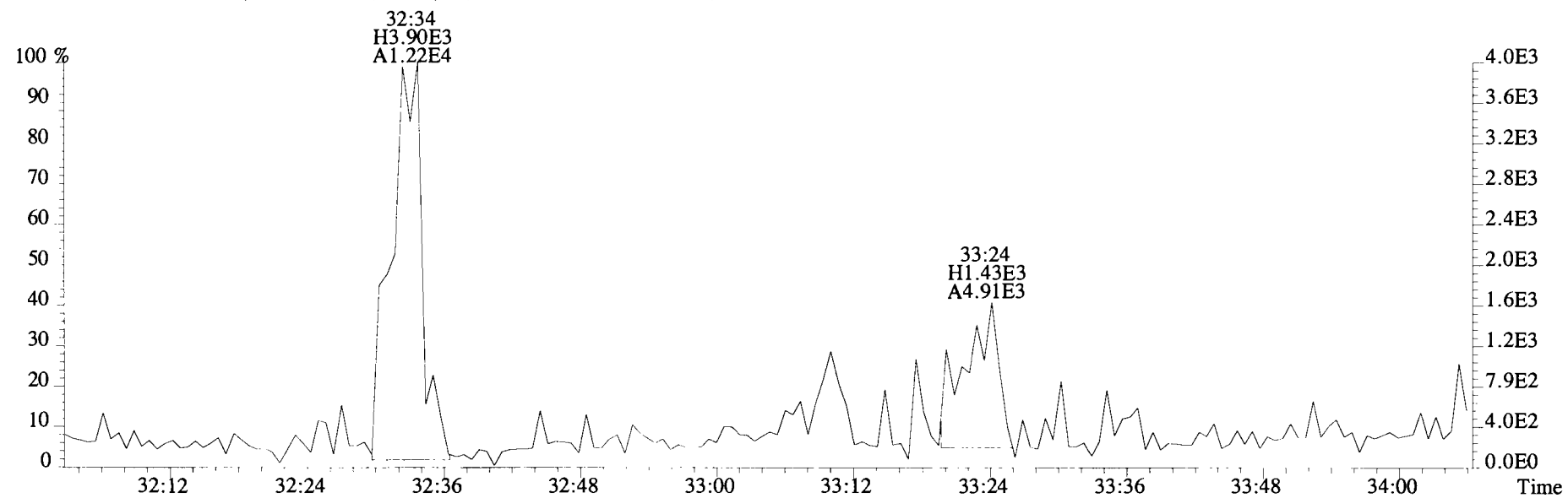
392.9760 S:12 F:3



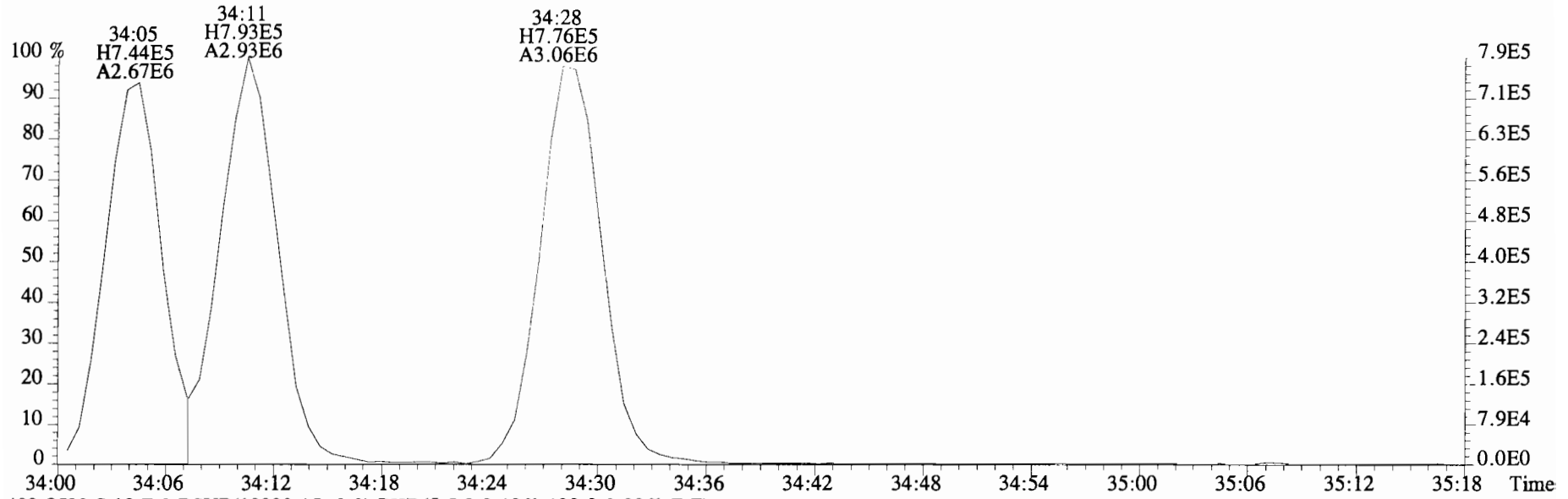
File:191031D2 #1-385 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



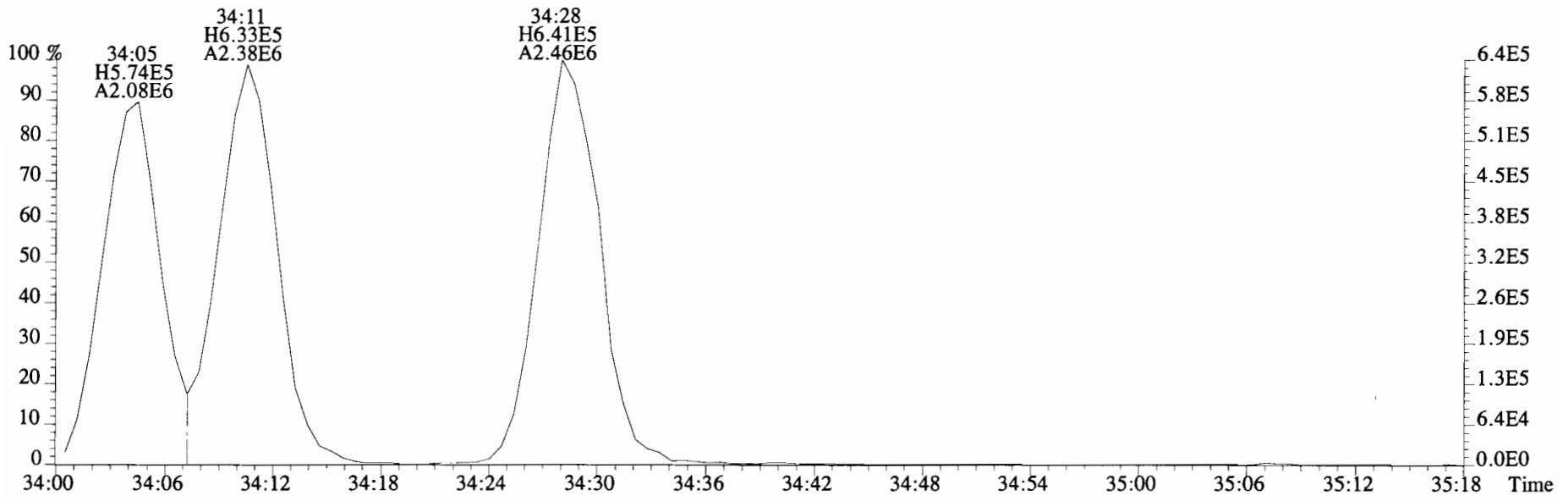
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



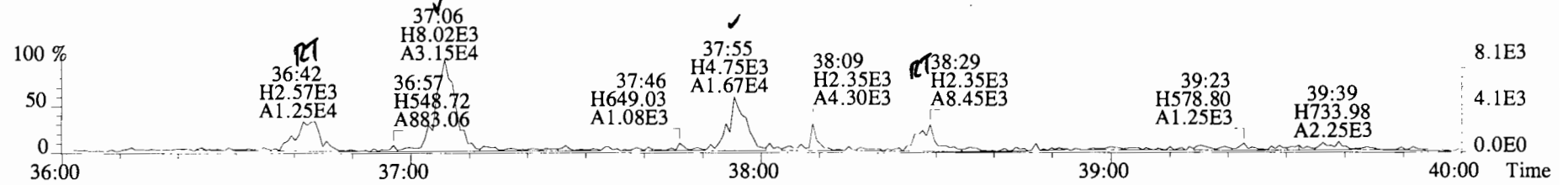
File: 191031D2 #1-385 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text: Viata Analytical Laboratory_VG7 Text: 1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp: OCDD_DB5
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



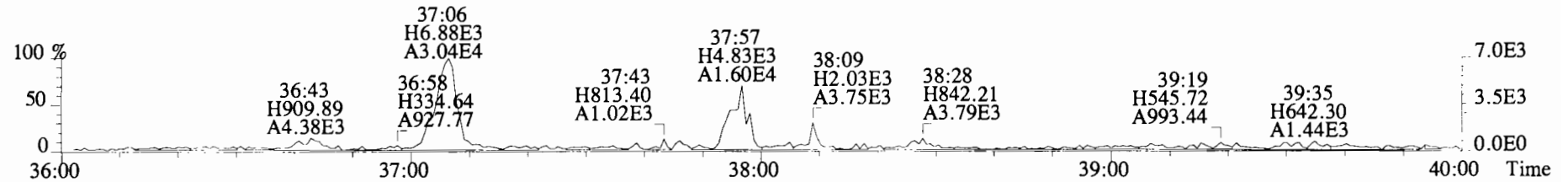
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



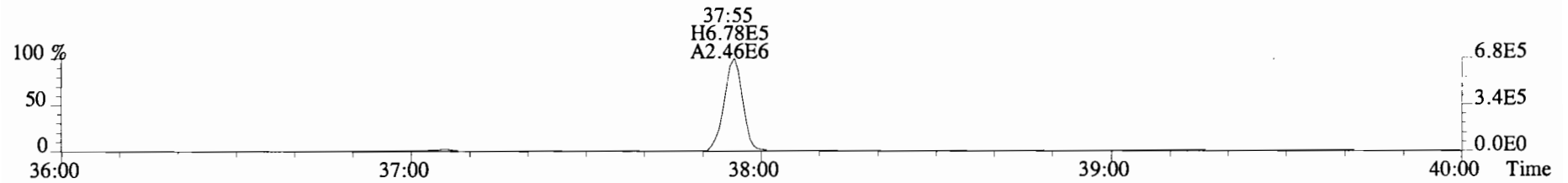
File:191031D2 #1-356 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 423.7767 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



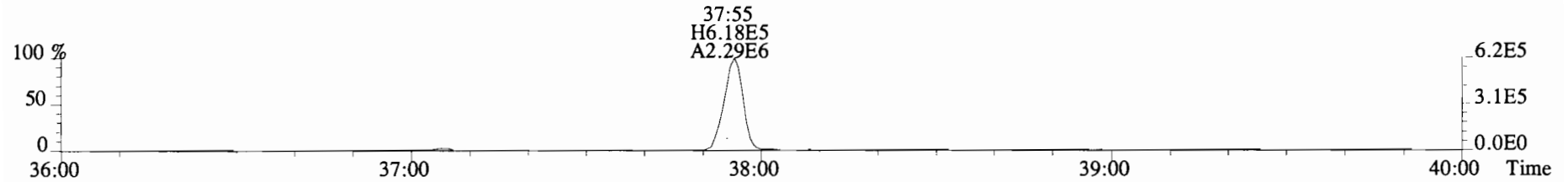
425.7737 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



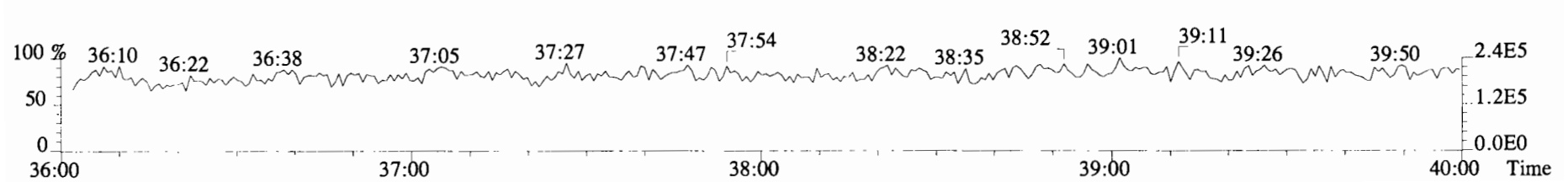
435.8169 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



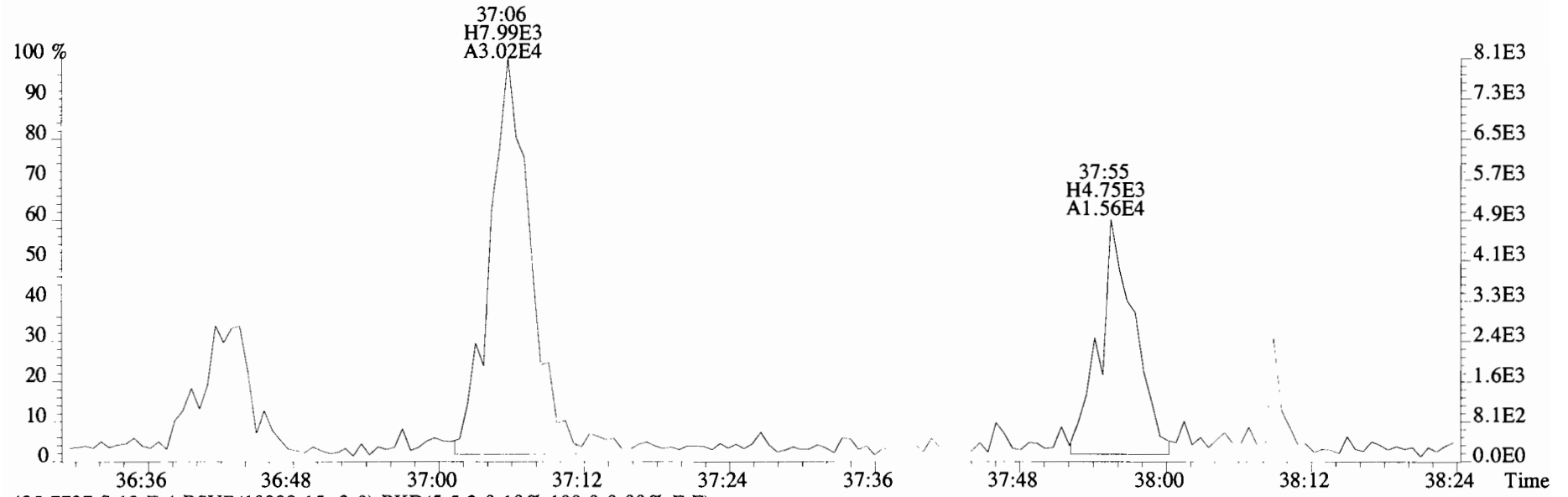
437.8140 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



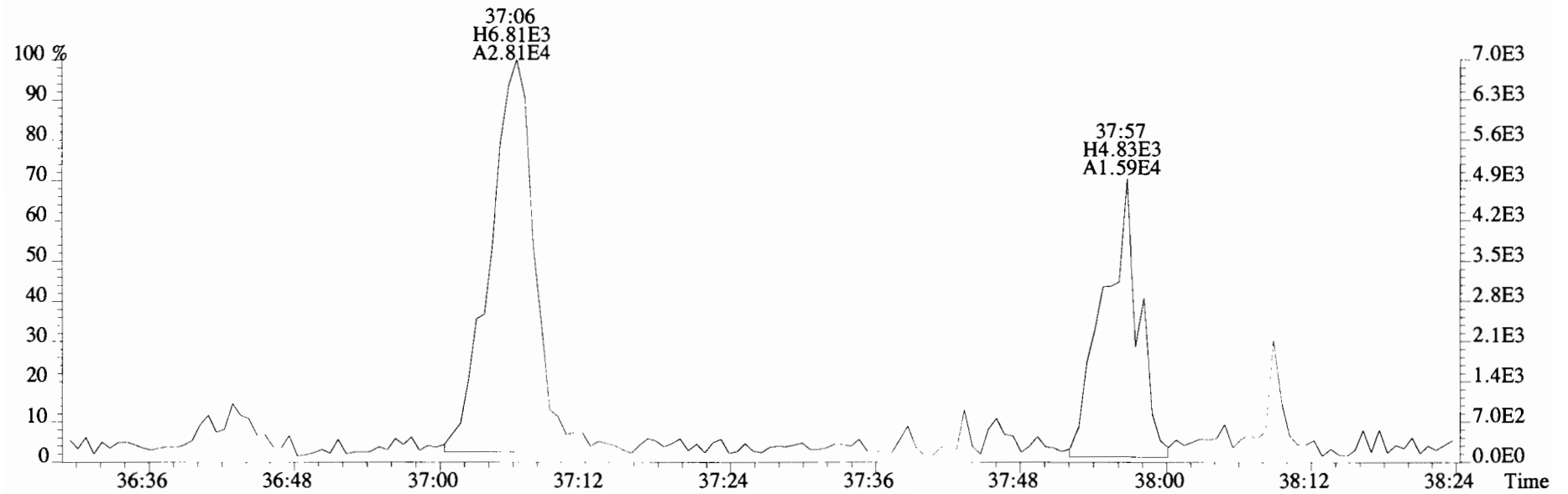
454.9728 S:12 F:4



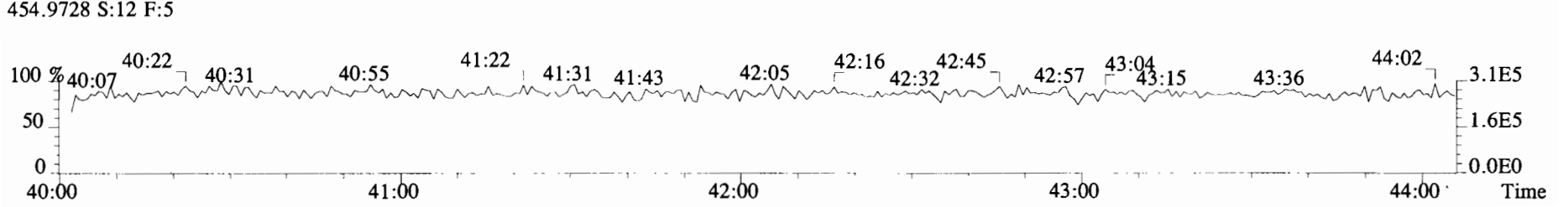
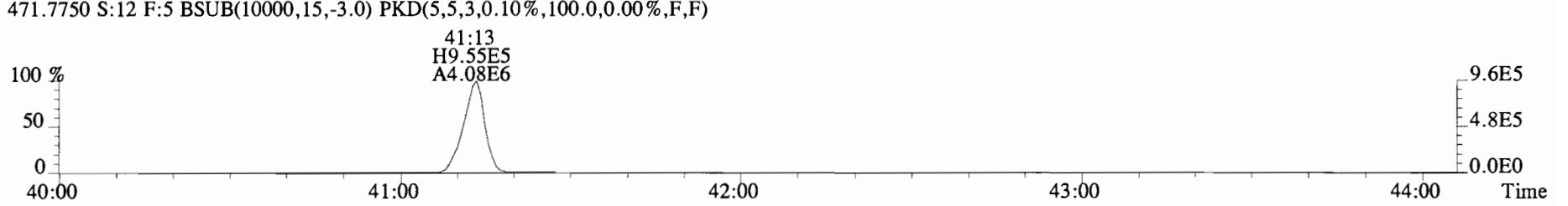
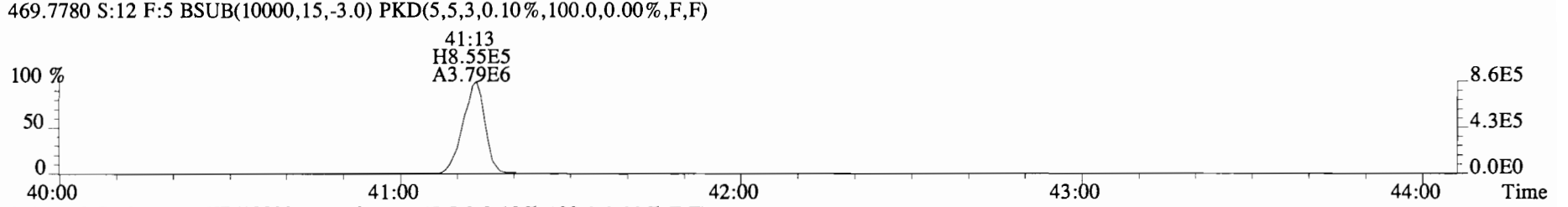
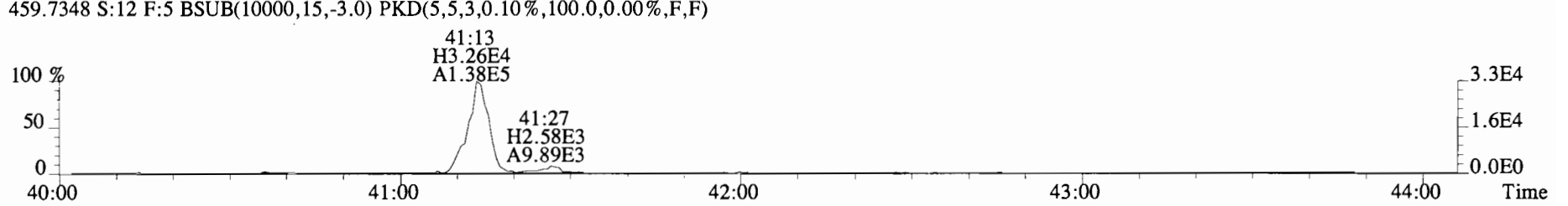
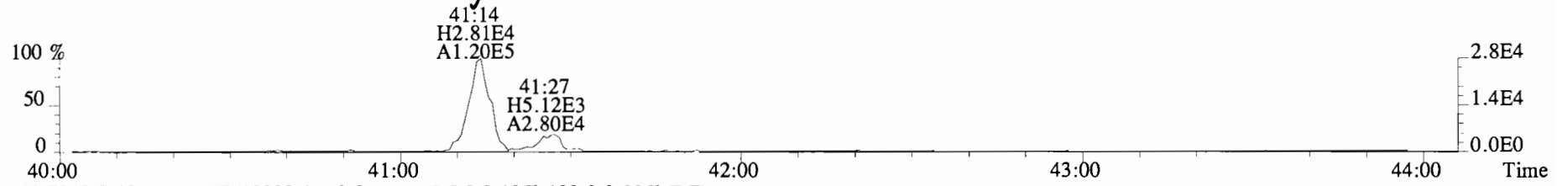
File:191031D2 #1-356 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
423.7767 S:12 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



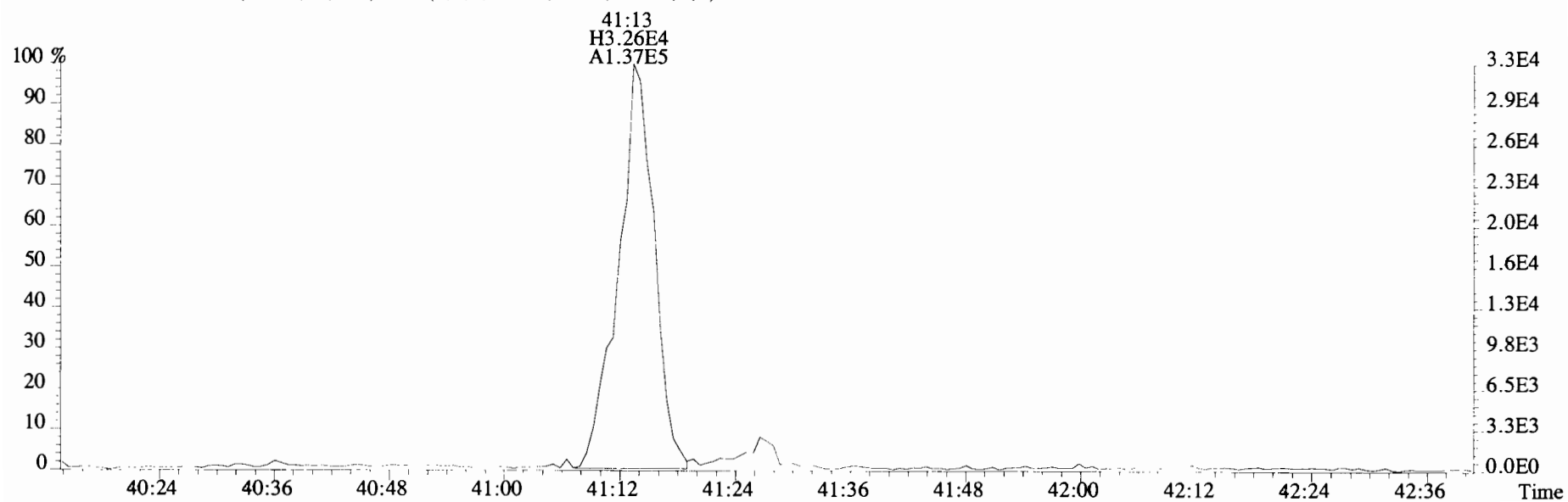
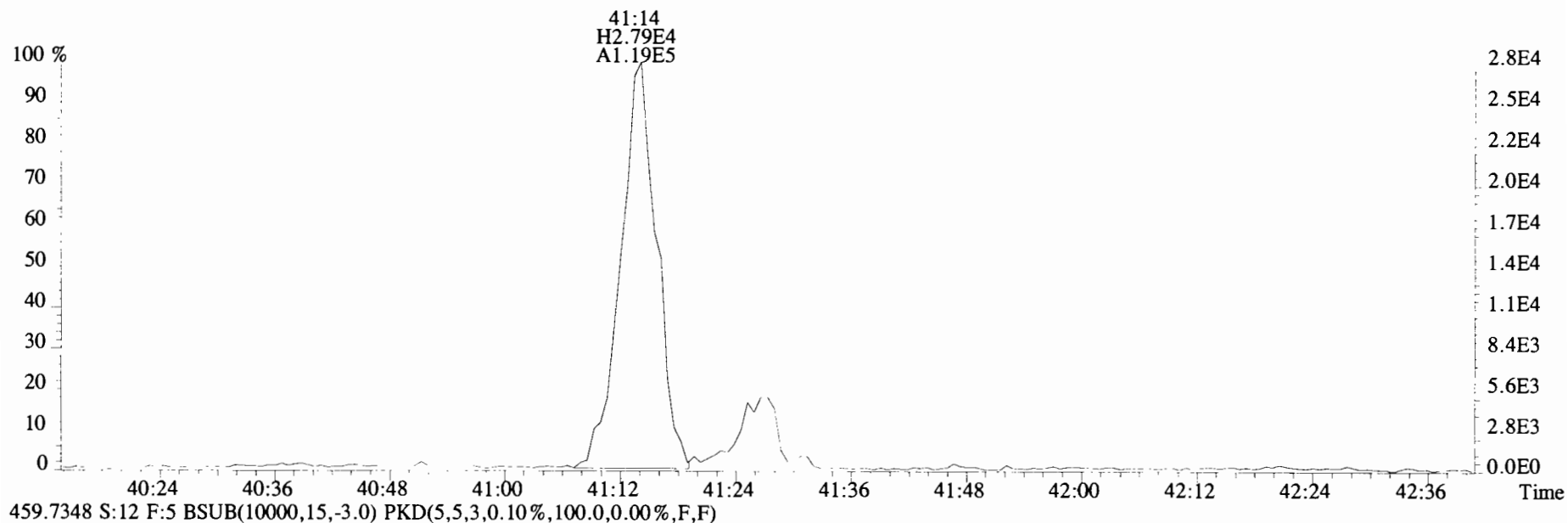
425.7737 S:12 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



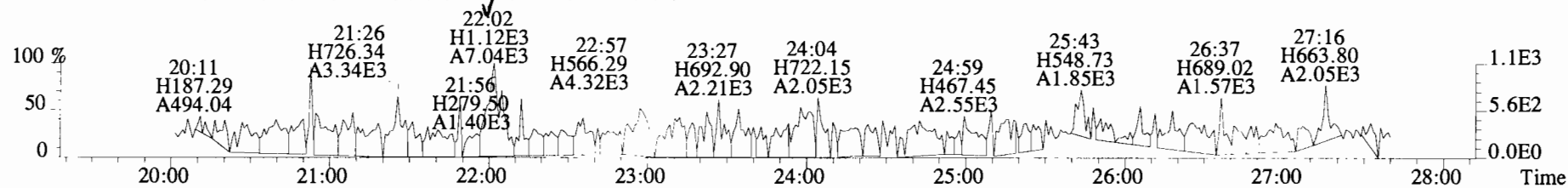
File: 191031D2 #1-432 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text: Viata_Analytical_Laboratory_VG7 Text: 1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp: OCDD_DB5
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



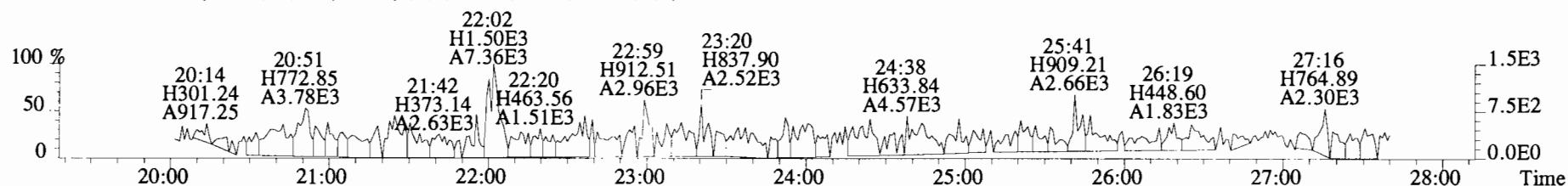
File:191031D2 #1-432 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



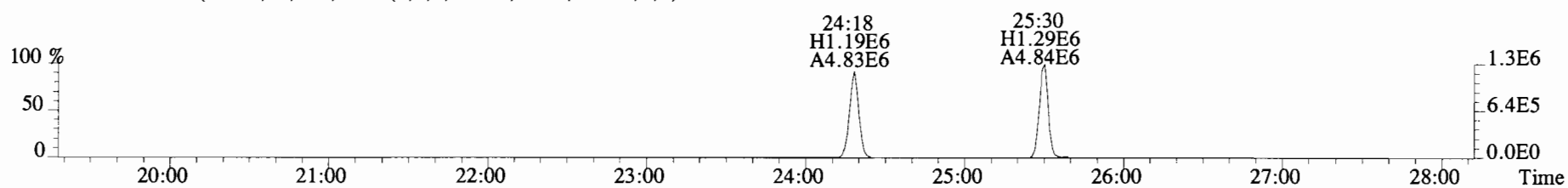
File:191031D2 #1-492 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



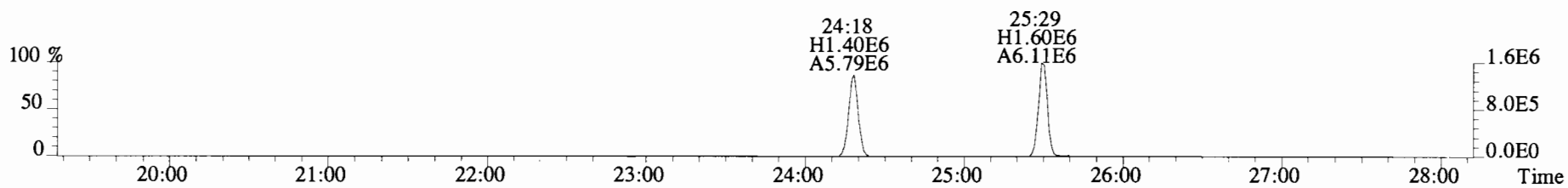
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



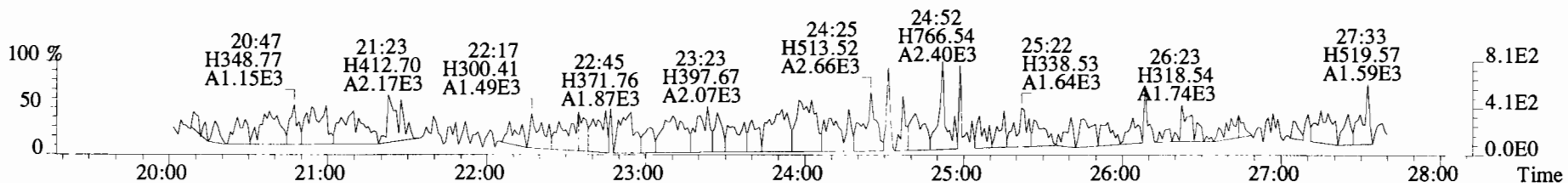
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



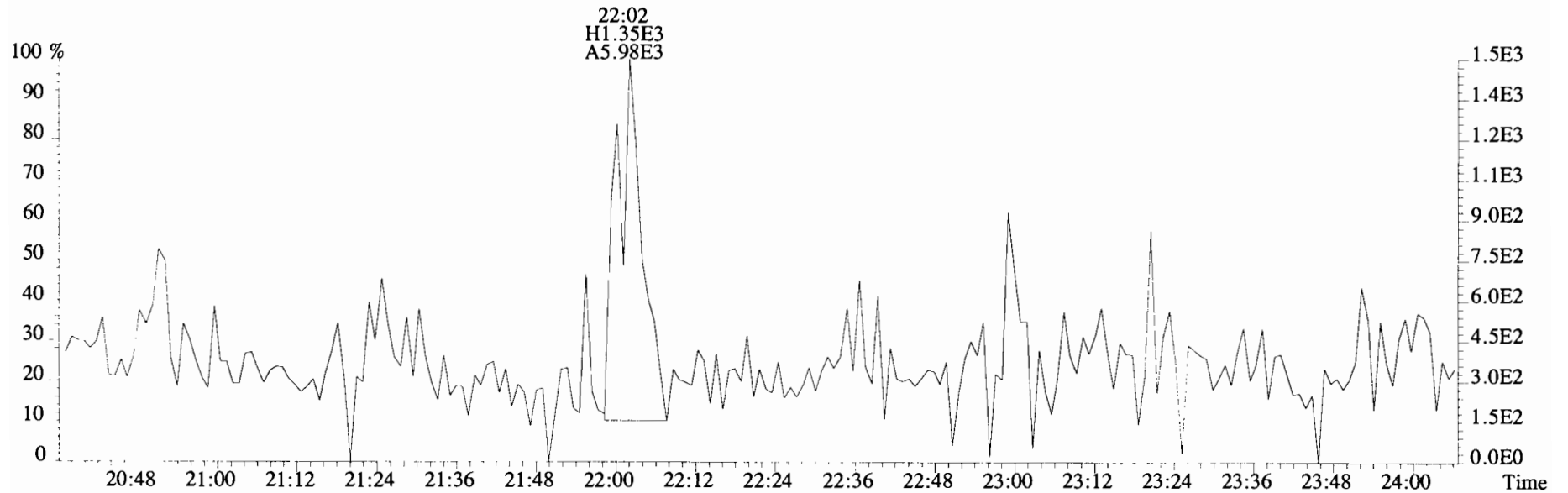
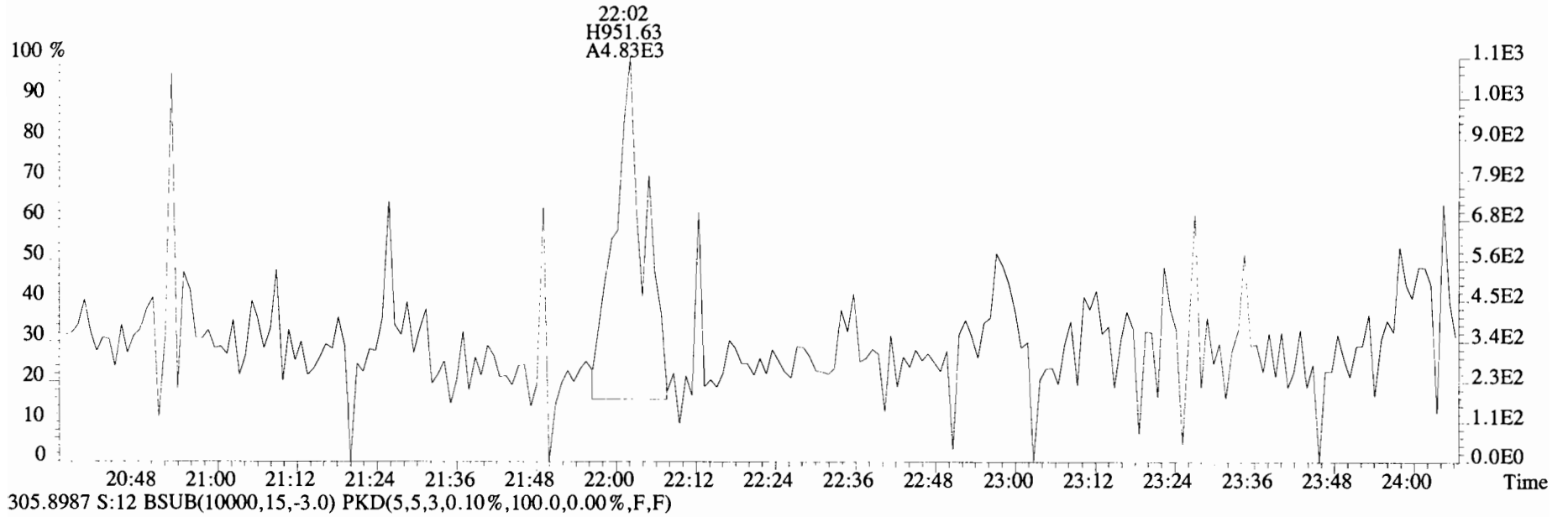
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



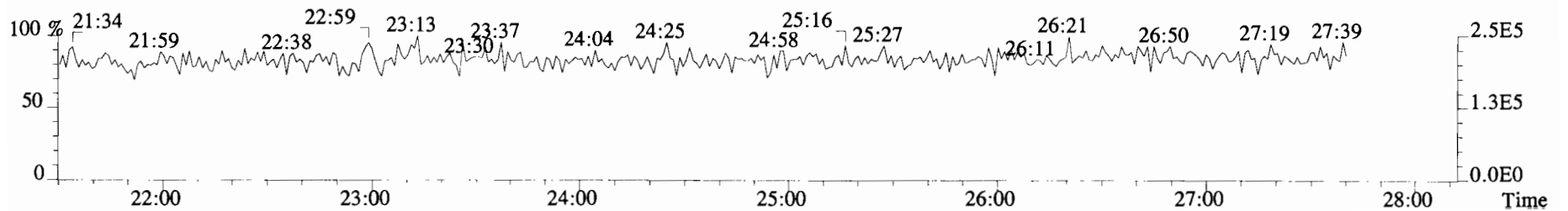
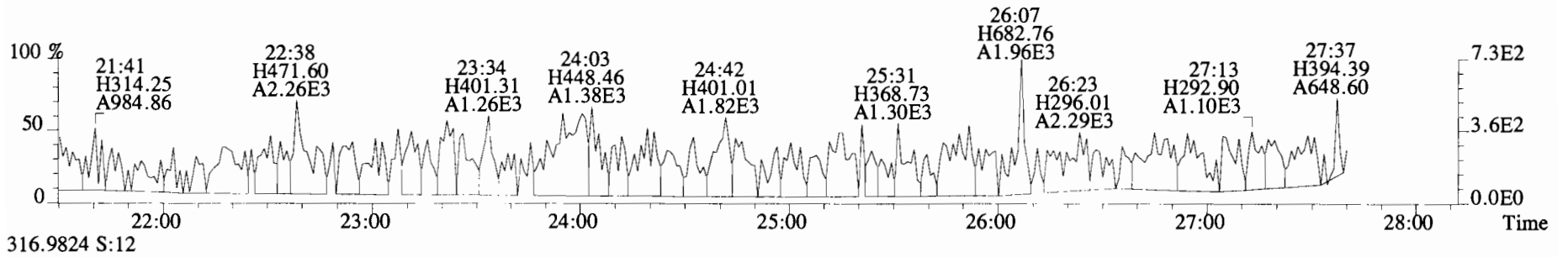
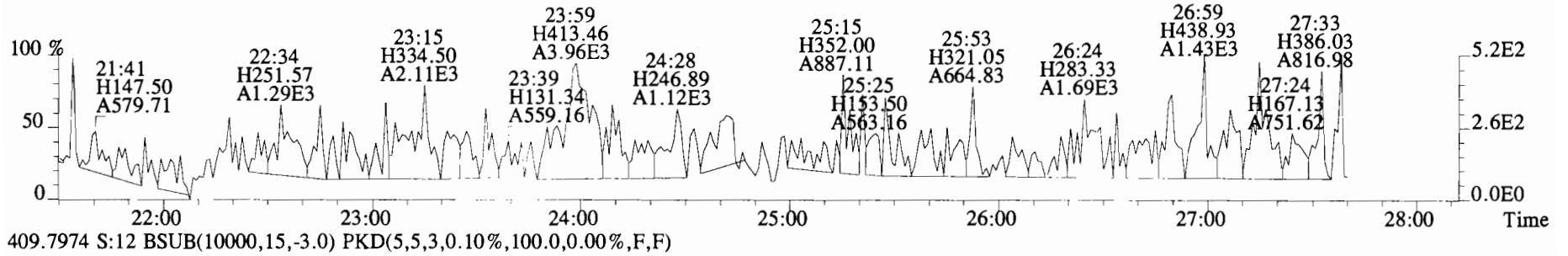
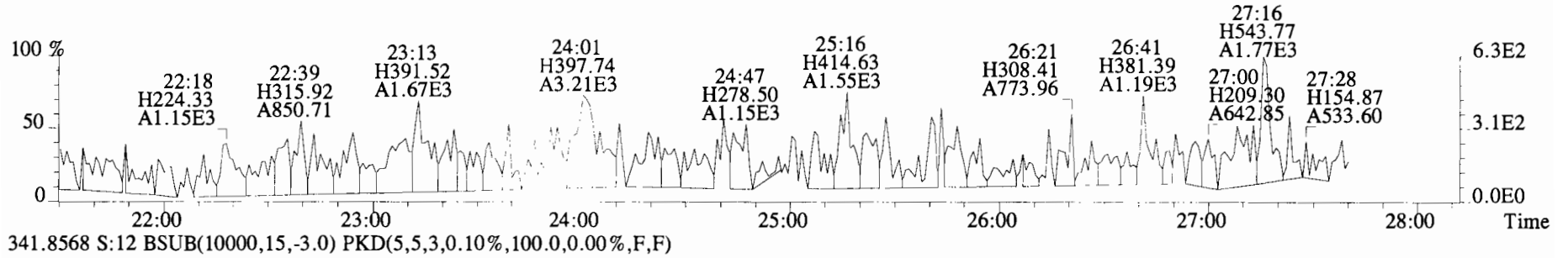
375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



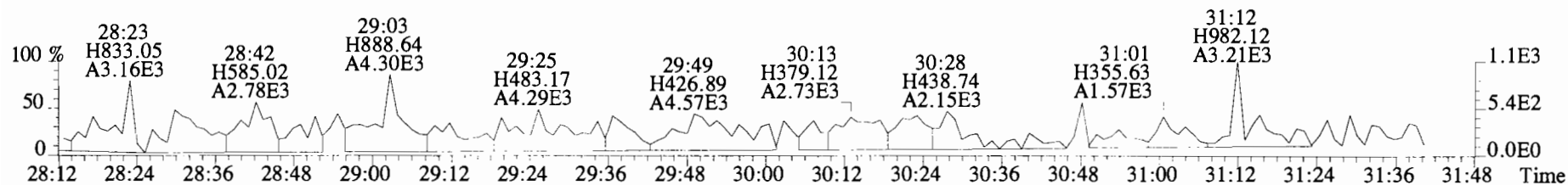
File:191031D2 #1-492 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



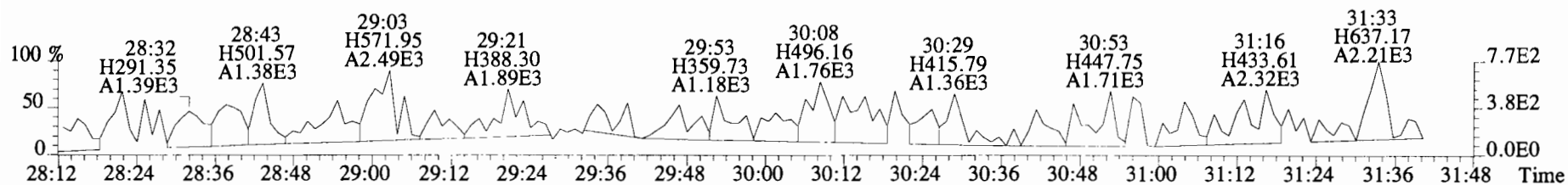
File:191031D2 #1-492 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 339.8597 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



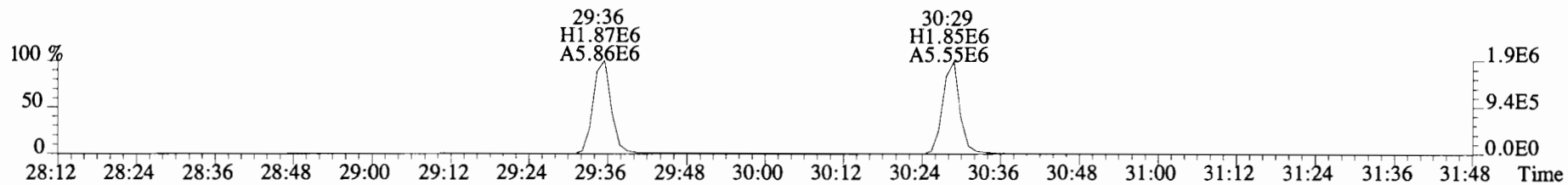
File:191031D2 #1-211 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



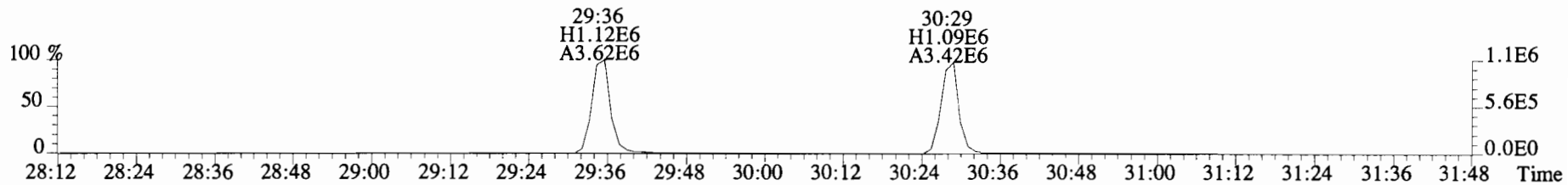
341.8568 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



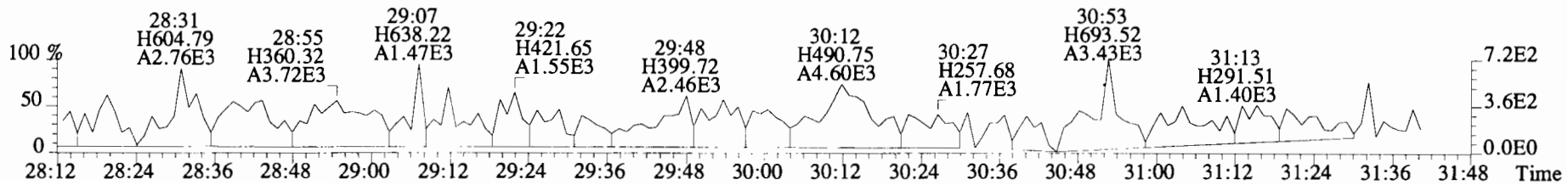
351.9000 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



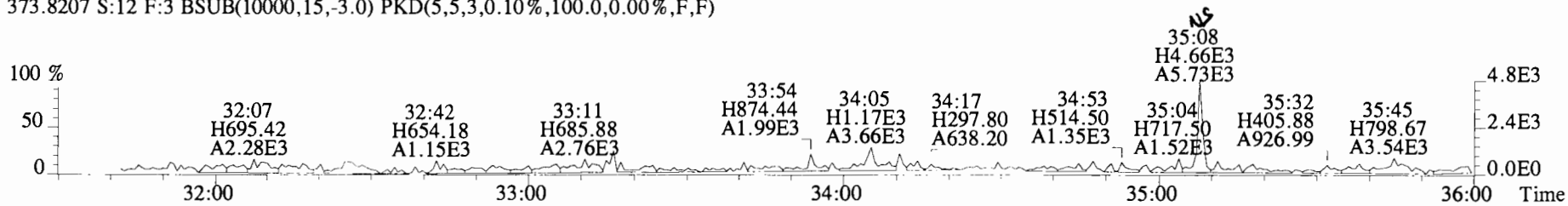
353.8970 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



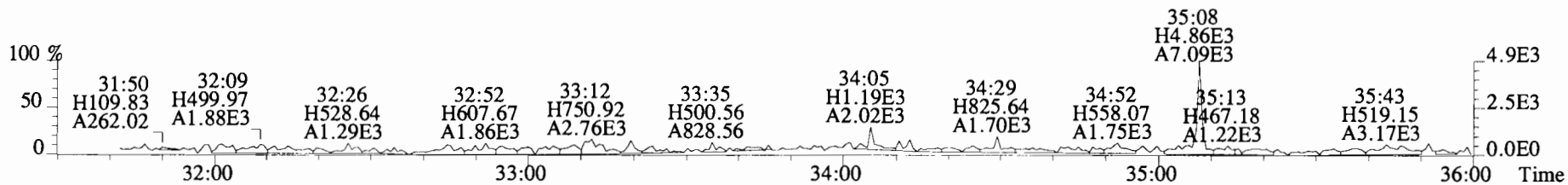
409.7974 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



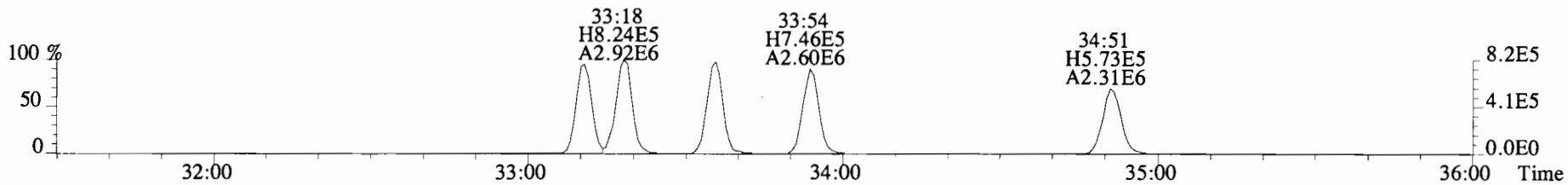
File:191031D2 #1-385 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



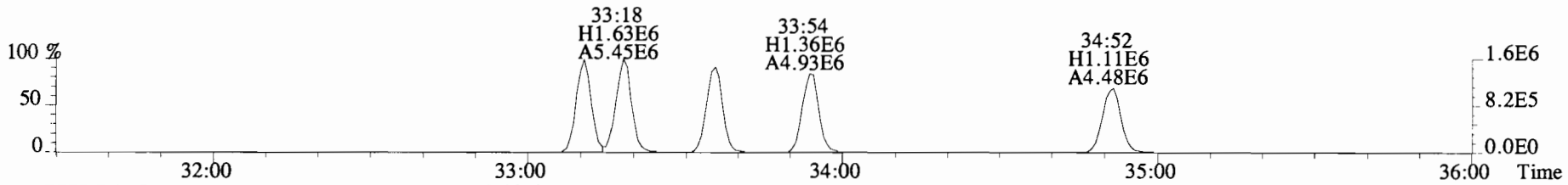
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



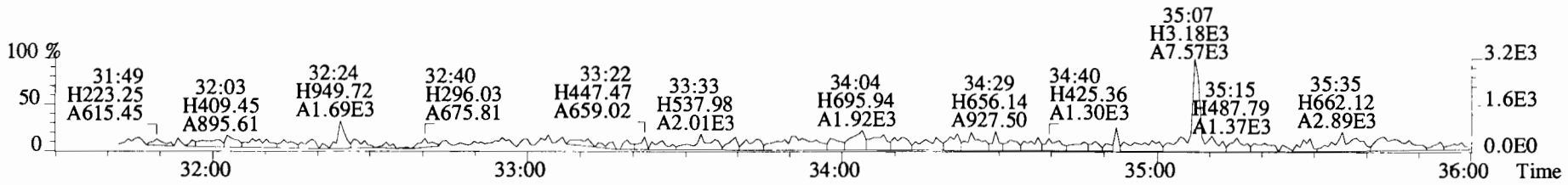
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



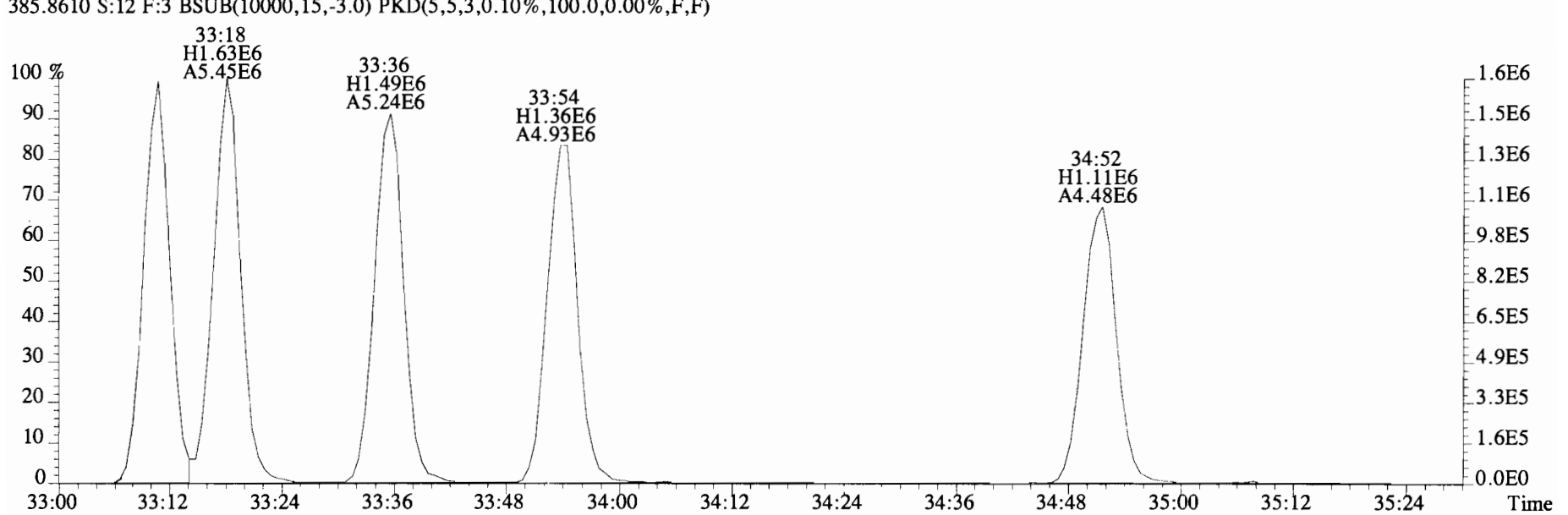
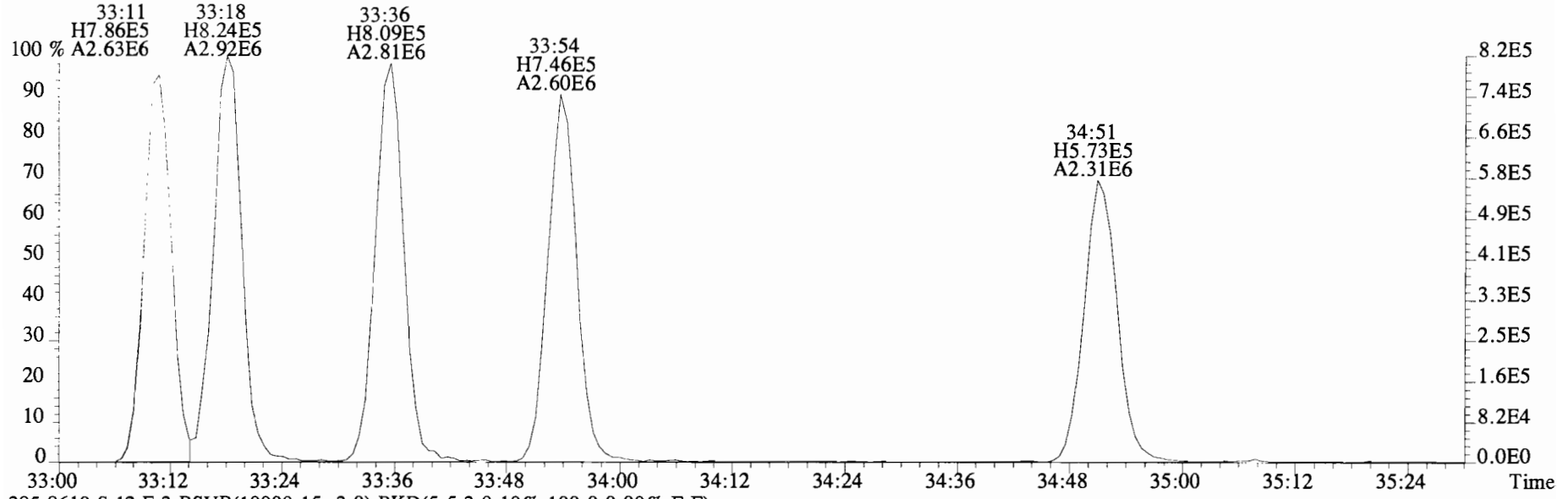
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



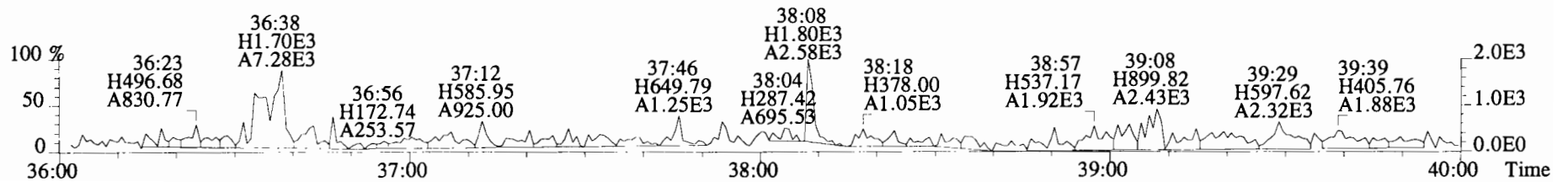
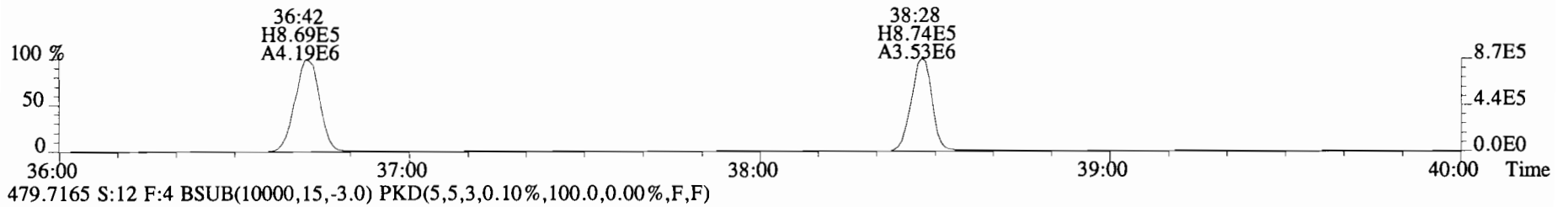
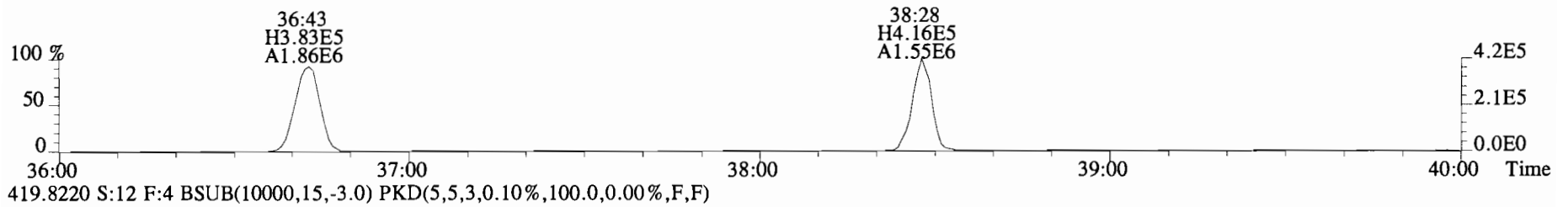
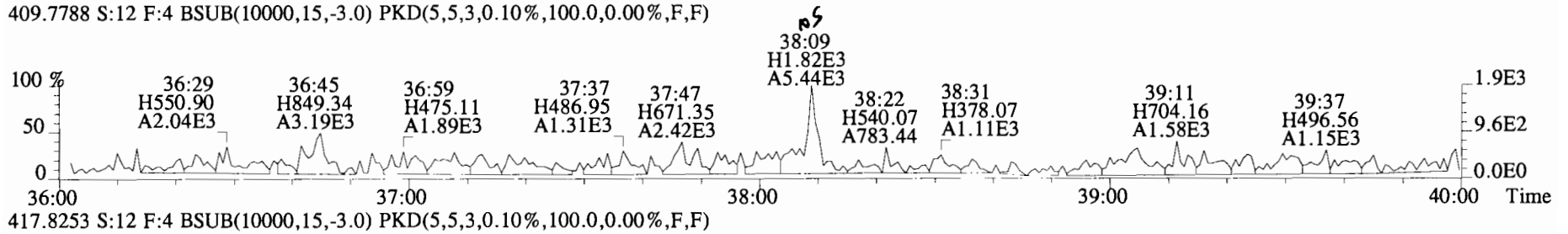
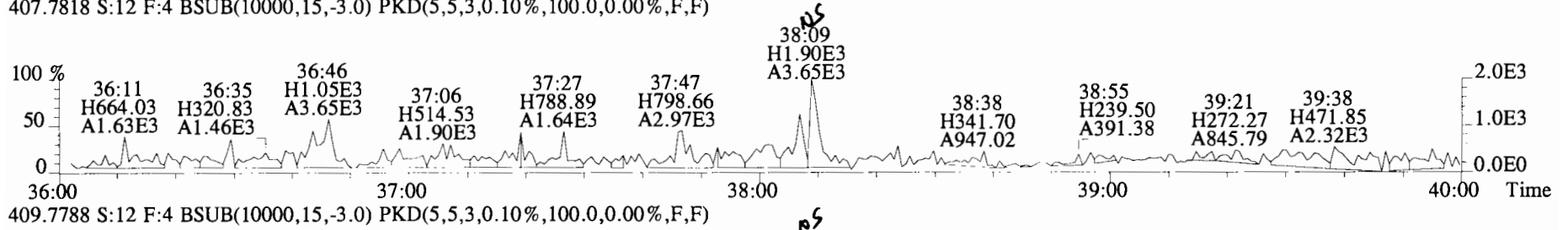
445.7555 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



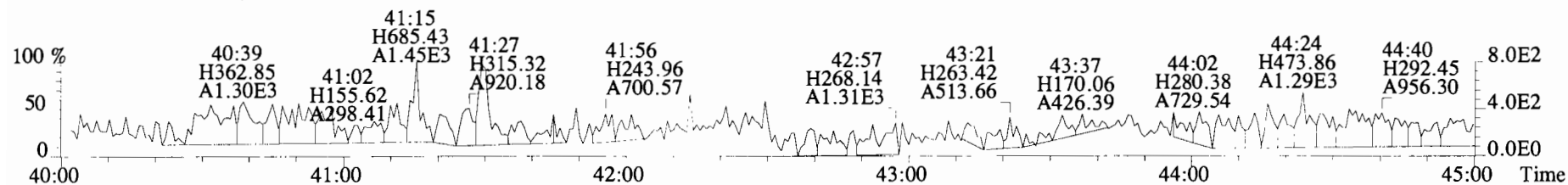
File:191031D2 #1-385 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



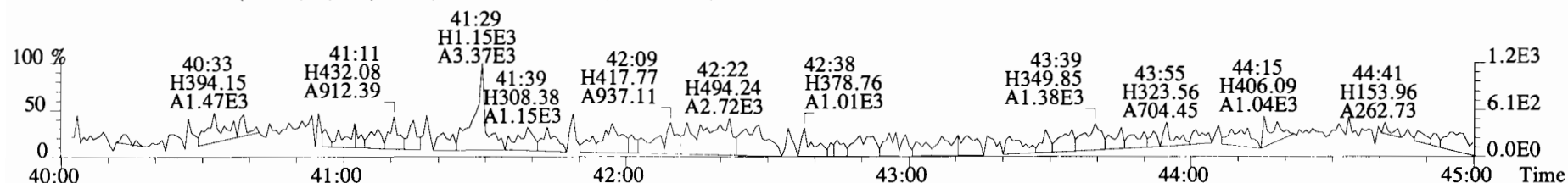
File:191031D2 #1-356 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 407.7818 S:12 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



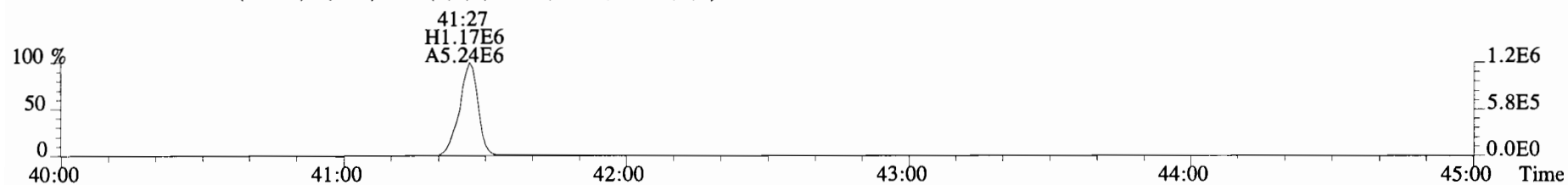
File:191031D2 #1-432 Acq: 1-NOV-2019 08:29:07 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-10RE1 PDI-084SC-A-16-17-191002 15.89 Exp:OCDD_DB5
 441.7428 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



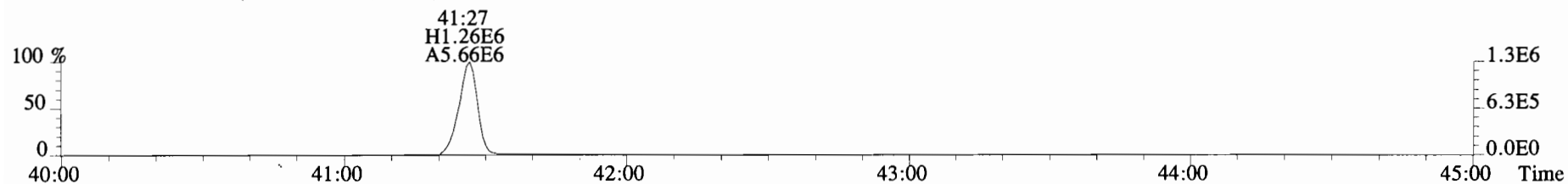
443.7398 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



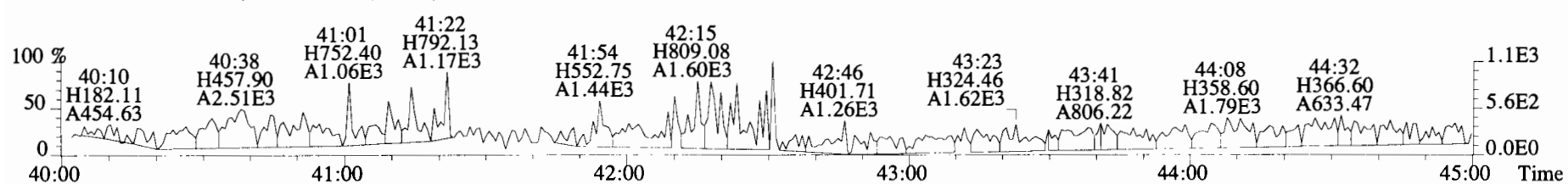
453.7831 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	1.48e+04	0.55 n	0.91	26:16	0.43465			* 2.5	*	Total Tetra-Dioxins	2.58	3.33		*	*
1,2,3,7,8-PeCDD	2.81e+04	0.56 y	0.90	30:45	1.0605			* 2.5	*	Total Penta-Dioxins	4.24	7.95		*	*
1,2,3,4,7,8-HxCDD	2.40e+04	1.55 n	1.10	34:04	0.83669			* 2.5	*	Total Hexa-Dioxins	38.0	40.3		*	*
1,2,3,6,7,8-HxCDD	1.48e+05	1.19 y	0.94	34:10	5.3792			* 2.5	*	Total Hepta-Dioxins	194	194		*	*
1,2,3,7,8,9-HxCDD	7.56e+04	1.36 y	0.96	34:28	2.5222			* 2.5	*	Total Tetra-Furans	41.3	42.9		*	*
1,2,3,4,6,7,8-HpCDD	2.34e+06	1.04 y	0.98	37:54	88.927			* 2.5	*	Total Penta-Furans	51.397	53.672		*	*
OCDD	1.84e+07	0.91 y	0.96	41:11	810.94			* 2.5	*	Total Hexa-Furans	66.2	66.5		*	*
										Total Hepta-Furans	52.5	53.0		*	*
2,3,7,8-TCDF	7.42e+05	0.78 y	0.95	25:31	12.587 (10.95)			* 2.5	*						
1,2,3,7,8-PeCDF	9.16e+05	1.61 y	0.96	29:35	18.202			* 2.5	*						
2,3,4,7,8-PeCDF	3.77e+05	1.53 y	1.01	30:28	7.6988			* 2.5	*						
1,2,3,4,7,8-HxCDF	1.52e+06	1.23 y	1.18	33:10	30.650			* 2.5	*						
1,2,3,6,7,8-HxCDF	3.64e+05	1.34 y	1.07	33:17	7.4476			* 2.5	*						
2,3,4,6,7,8-HxCDF	1.20e+05	1.20 y	1.11	33:53	2.5916			* 2.5	*						
1,2,3,7,8,9-HxCDF	5.97e+04	1.19 y	1.06	34:50	1.4796			* 2.5	*						
1,2,3,4,6,7,8-HpCDF	8.08e+05	1.01 y	1.13	36:41	20.878			* 2.5	*						
1,2,3,4,7,8,9-HpCDF	2.02e+05	1.09 y	1.28	38:26	5.4270			* 2.5	*						
OCDF	1.41e+06	0.92 y	0.95	41:24	47.100			* 2.5	*						
IS	13C-2,3,7,8-TCDD	7.53e+06	0.82 y	1.10	26:16	240.37				Rec					
IS	13C-1,2,3,7,8-PeCDD	5.86e+06	0.64 y	0.88	30:44	232.56				120					
IS	13C-1,2,3,4,7,8-HxCDD	5.21e+06	1.29 y	0.64	34:03	208.66				116					
IS	13C-1,2,3,6,7,8-HxCDD	5.86e+06	1.28 y	0.86	34:09	176.35				104					
IS	13C-1,2,3,7,8,9-HxCDD	6.24e+06	1.24 y	0.81	34:27	198.93				88.2					
IS	13C-1,2,3,4,6,7,8-HpCDD	5.37e+06	1.04 y	0.65	37:53	211.28				99.5					
IS	13C-OCDD	9.47e+06	0.93 y	0.58	41:10	420.12				106					
IS	13C-2,3,7,8-TCDF	1.24e+07	0.78 y	1.03	25:30	234.97				105					
IS	13C-1,2,3,7,8-PeCDF	1.05e+07	1.58 y	0.85	29:35	240.34				117					
IS	13C-2,3,4,7,8-PeCDF	9.65e+06	1.58 y	0.85	30:28	223.12				120					
IS	13C-1,2,3,4,7,8-HxCDF	8.41e+06	0.51 y	0.83	33:09	260.23				112					
IS	13C-1,2,3,6,7,8-HxCDF	9.13e+06	0.51 y	1.03	33:17	227.21				130					
IS	13C-2,3,4,6,7,8-HxCDF	8.34e+06	0.53 y	0.95	33:53	225.16				114					
IS	13C-1,2,3,7,8,9-HxCDF	7.60e+06	0.52 y	0.83	34:50	236.15				113					
IS	13C-1,2,3,4,6,7,8-HpCDF	6.87e+06	0.43 y	0.76	36:40	233.26				118					
IS	13C-1,2,3,4,7,8,9-HpCDF	5.83e+06	0.43 y	0.58	38:26	257.90				117					
IS	13C-OCDF	1.26e+07	0.90 y	0.69	41:24	471.31				129					
C/Up	37Cl-2,3,7,8-TCDD	3.15e+06		1.20	26:17	92.127				118					
RS/RT	13C-1,2,3,4-TCDD	5.72e+06	0.83 y	1.00	25:43	200.01				115					
RS	13C-1,2,3,4-TCDF	1.02e+07	0.79 y	1.00	24:18	200.01									
RS/RT	13C-1,2,3,4,6,9-HxCDF	7.77e+06	0.53 y	1.00	33:34	200.01									

Integrations
 by JB
 Analyst: JB
 Date: 11/19/19
 Reviewed
 by CT
 Analyst: CT
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 18 File: 191031D2 S: 13 I: 1 F: 1
Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 3.3278 Unnamed Concentration: 2.893

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:56	1.448e+04	1.820e+04	0.80	y	3.268e+04	0.95915
23:17	6.749e+03	7.879e+03	0.86	y	1.463e+04	0.42934
24:38	4.506e+03	5.441e+03	0.83	y	9.947e+03	0.29196
24:49	6.486e+03	6.036e+03	1.07	n	1.068e+04	0.31356
26:03	1.202e+04	1.433e+04	0.84	y	2.635e+04	0.77341
26:16	6.442e+03	1.167e+04	0.55	n	1.481e+04	0.43465
26:34	1.990e+03	2.296e+03	0.87	y	4.285e+03	0.12577

Totals class: PeCDD EMPC

Entry #: 21

Run: 18 File: 191031D2 S: 13 I: 1 F: 2
 Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 7.9514 Unnamed Concentration: 6.891

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:44	2.134e+04	3.811e+04	0.56	y	5.945e+04	2.2478
29:10	5.213e+03	8.176e+03	0.64	y	1.339e+04	0.50623
29:35	2.295e+04	2.050e+04	1.12	n	3.342e+04	1.2634
29:45	9.741e+03	1.271e+04	0.77	n	2.071e+04	0.78314
29:51	4.190e+03	7.119e+03	0.59	y	1.131e+04	0.42756
30:02	1.473e+04	1.488e+04	0.99	n	2.425e+04	0.91679
30:27	5.080e+03	3.436e+03	1.48	n	5.601e+03	0.21174
30:45	1.007e+04	1.799e+04	0.56	y	2.805e+04	1.0605
30:51	4.182e+03	4.685e+03	0.89	n	7.636e+03	0.28870
31:07	3.910e+03	3.984e+03	0.98	n	6.494e+03	0.24551

1,2,3,7,8-PeCDD

Totals class: HxCDD EMPC

Entry #: 23

Run: 18 File: 191031D2 S: 13 I: 1 F: 3
Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 40.307

Unnamed Concentration: 31.569

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
32:32	1.649e+05	1.325e+05	1.24	y	2.974e+05	10.395	
33:06	2.880e+04	1.842e+04	1.56	n	4.127e+04	1.4427	
33:21	2.941e+05	2.349e+05	1.25	y	5.291e+05	18.494	
33:29	1.045e+04	8.564e+03	1.22	y	1.902e+04	0.66478	
34:04	1.655e+04	1.071e+04	1.55	n	2.399e+04	0.83669	1,2,3,4,7,8-HxCDD
34:10	8.034e+04	6.767e+04	1.19	y	1.480e+05	5.3792	1,2,3,6,7,8-HxCDD
34:22	8.903e+03	7.457e+03	1.19	y	1.636e+04	0.57192	
34:28	4.355e+04	3.205e+04	1.36	y	7.560e+04	2.5222	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 18 File: 191031D2 S: 13 I: 1 F: 4
Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 193.95 Unnamed Concentration: 105.025

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:03	1.421e+06	1.341e+06	1.06 y	2.762e+06	105.02
37:54	1.194e+06	1.144e+06	1.04 y	2.338e+06	88.927 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 18 File: 191031D2 S: 13 I: 1 F: 1
 Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 42.880 Unnamed Concentration: 30.293

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
20:50	9.243e+03	1.675e+04	0.55	n	2.125e+04	0.36032	
21:23	1.508e+04	1.751e+04	0.86	y	3.259e+04	0.55264	
22:02	6.031e+04	8.215e+04	0.73	y	1.425e+05	2.4160	
22:32	4.848e+04	5.819e+04	0.83	y	1.067e+05	1.8088	
22:55	1.044e+05	1.361e+05	0.77	y	2.405e+05	4.0781	
23:19	3.507e+04	4.810e+04	0.73	y	8.317e+04	1.4104	
23:27	1.225e+04	1.480e+04	0.83	y	2.705e+04	0.45870	
23:36	2.490e+04	3.422e+04	0.73	y	5.912e+04	1.0025	
23:56	7.529e+03	8.593e+03	0.88	y	1.612e+04	0.27341	
24:04	7.779e+03	9.021e+03	0.86	y	1.680e+04	0.28490	
24:11	2.164e+04	2.855e+04	0.76	y	5.019e+04	0.85113	
24:18	5.028e+04	6.411e+04	0.78	y	1.144e+05	1.9399	
24:43	2.770e+05	3.234e+05	0.86	y	6.004e+05	10.182	
24:57	1.645e+04	1.935e+04	0.85	y	3.580e+04	0.60703	
25:24	4.591e+04	5.725e+04	0.80	y	1.032e+05	1.7495	
25:31	3.244e+05	4.178e+05	0.78	y	7.422e+05	12.587	2,3,7,8-TCDF
25:50	2.270e+04	3.064e+04	0.74	y	5.335e+04	0.90468	
26:03	6.102e+03	7.592e+03	0.80	y	1.369e+04	0.23222	
27:15	4.399e+04	3.933e+04	1.12	n	6.961e+04	1.1805	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 18 File: 191031D2 S: 13 I: 1 F: 1
Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 4.4988 Unnamed Concentration: 4.499

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:15	1.382e+05	8.530e+04	1.62 y	2.235e+05	4.4988

Totals class: PeCDF EMPC

Entry #: 31

Run: 18 File: 191031D2 S: 13 I: 1 F: 2
 Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 49.174 Unnamed Concentration: 23.273

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:33	2.801e+04	1.736e+04	1.61	y	4.537e+04	0.91304
28:40	3.407e+05	2.169e+05	1.57	y	5.576e+05	11.221
29:13	5.360e+04	3.748e+04	1.43	y	9.108e+04	1.8329
29:25	5.350e+04	3.291e+04	1.63	y	8.641e+04	1.7391
29:35	5.653e+05	3.507e+05	1.61	y	9.159e+05	18.202
29:50	1.551e+05	9.116e+04	1.70	y	2.462e+05	4.9553
30:23	9.534e+03	7.151e+03	1.33	y	1.669e+04	0.33580
30:28	2.279e+05	1.490e+05	1.53	y	3.769e+05	7.6988
30:32	6.251e+04	3.467e+04	1.80	n	8.841e+04	1.7793
31:20	1.739e+04	9.670e+03	1.80	n	2.466e+04	0.49625

Totals class: HxCDF EMPC

Entry #: 33

Run: 18 File: 191031D2 S: 13 I: 1 F: 3
 Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 66.537

Unnamed Concentration: 24.369

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
31:59	7.610e+04	6.008e+04	1.27	y	1.362e+05	2.9491
32:09	2.346e+05	1.846e+05	1.27	y	4.192e+05	9.0787
32:30	9.592e+03	6.275e+03	1.53	n	1.406e+04	0.30437
32:42	2.509e+05	1.961e+05	1.28	y	4.471e+05	9.6814
33:04	1.204e+04	9.060e+03	1.33	y	2.110e+04	0.45696
33:10	8.367e+05	6.802e+05	1.23	y	1.517e+06	30.650 1,2,3,4,7,8-HxCDF
33:17	2.082e+05	1.553e+05	1.34	y	3.636e+05	7.4476 1,2,3,6,7,8-HxCDF
33:53	6.568e+04	5.468e+04	1.20	y	1.204e+05	2.5916 2,3,4,6,7,8-HxCDF
34:50	3.240e+04	2.726e+04	1.19	y	5.966e+04	1.4796 1,2,3,7,8,9-HxCDF
34:53	4.926e+04	3.840e+04	1.28	y	8.765e+04	1.8982

Totals class: HpCDF EMPC

Entry #: 35

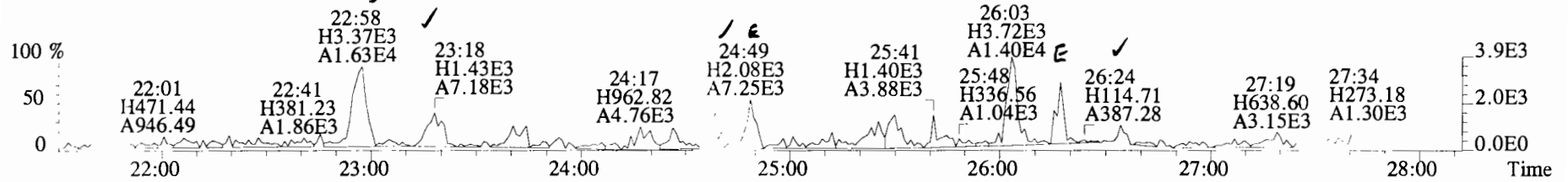
Run: 18 File: 191031D2 S: 13 I: 1 F: 4
Acquired: 1-NOV-19 09:16:52 Processed: 1-NOV-19 12:03:22

Total Concentration: 52.963

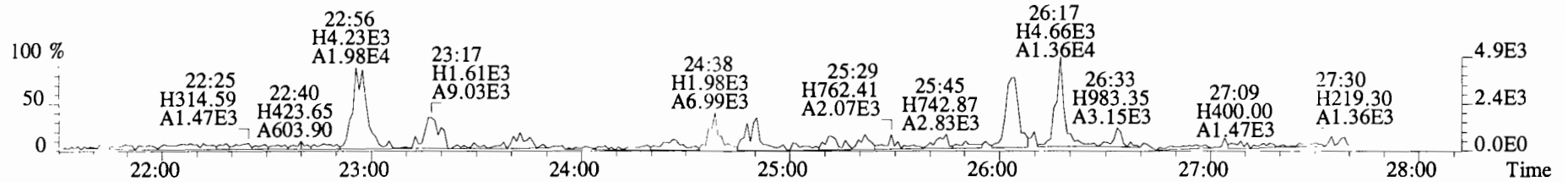
Unnamed Concentration: 26.658

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
36:41	4.063e+05	4.019e+05	1.01	y	8.082e+05	20.878	1,2,3,4,6,7,8-HpCDF
37:05	9.425e+03	1.116e+04	0.84	n	1.849e+04	0.48813	
37:16	5.137e+05	4.775e+05	1.08	y	9.912e+05	26.170	
38:26	1.056e+05	9.669e+04	1.09	y	2.023e+05	5.4270	1,2,3,4,7,8,9-HpCDF

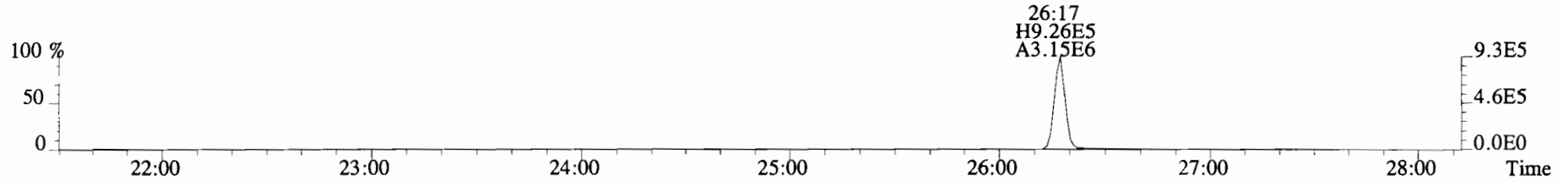
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



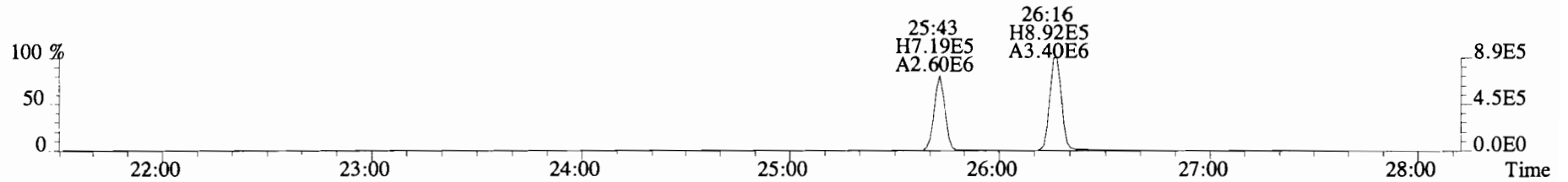
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



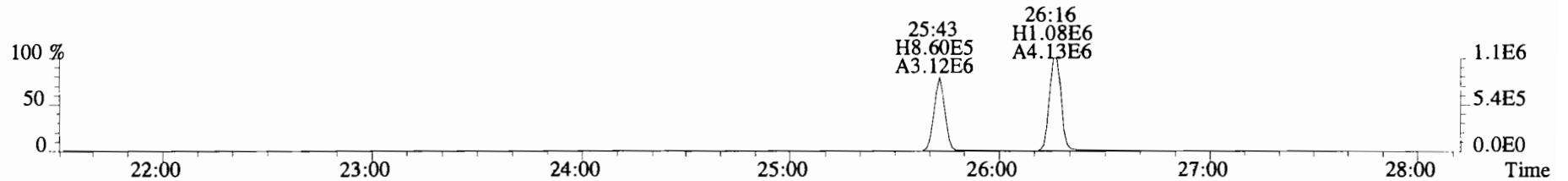
327.8847 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



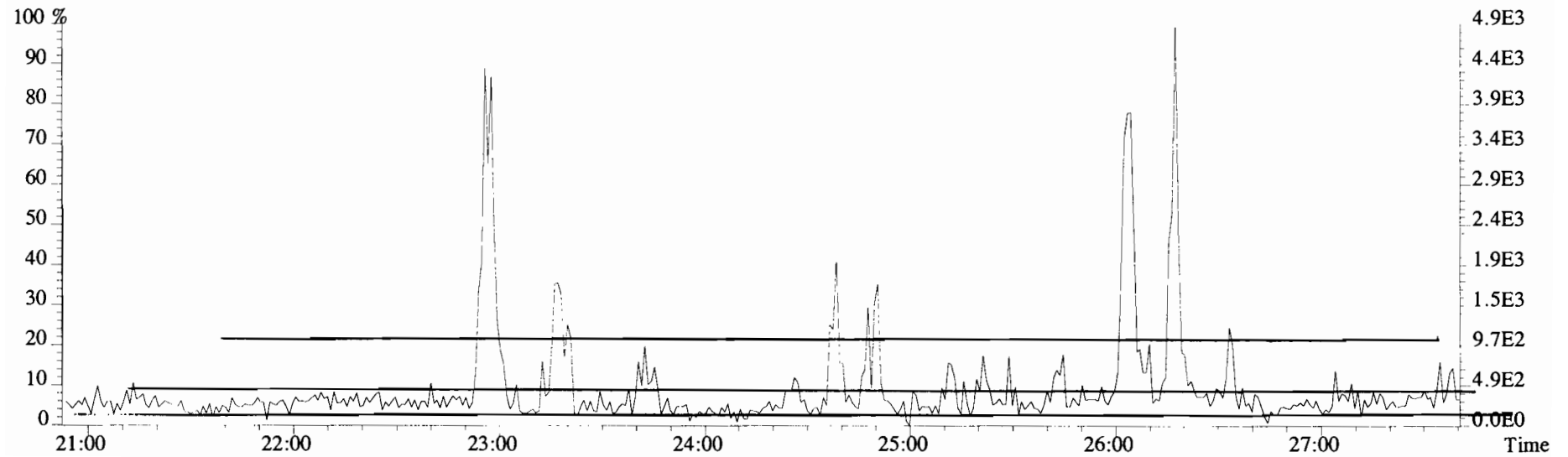
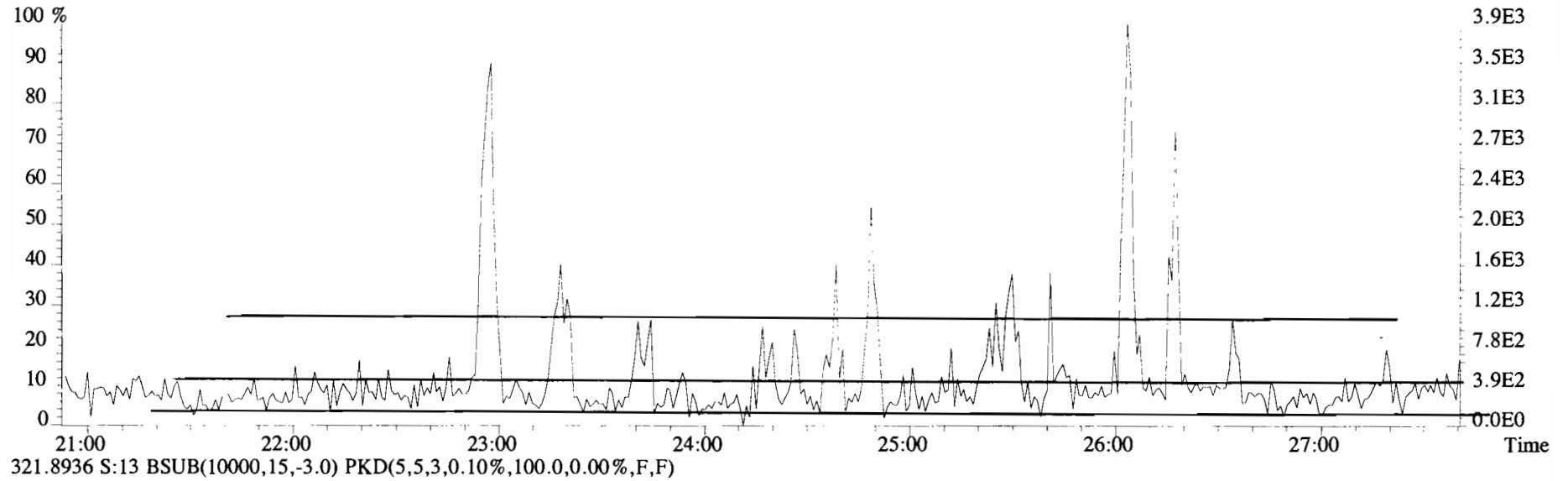
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



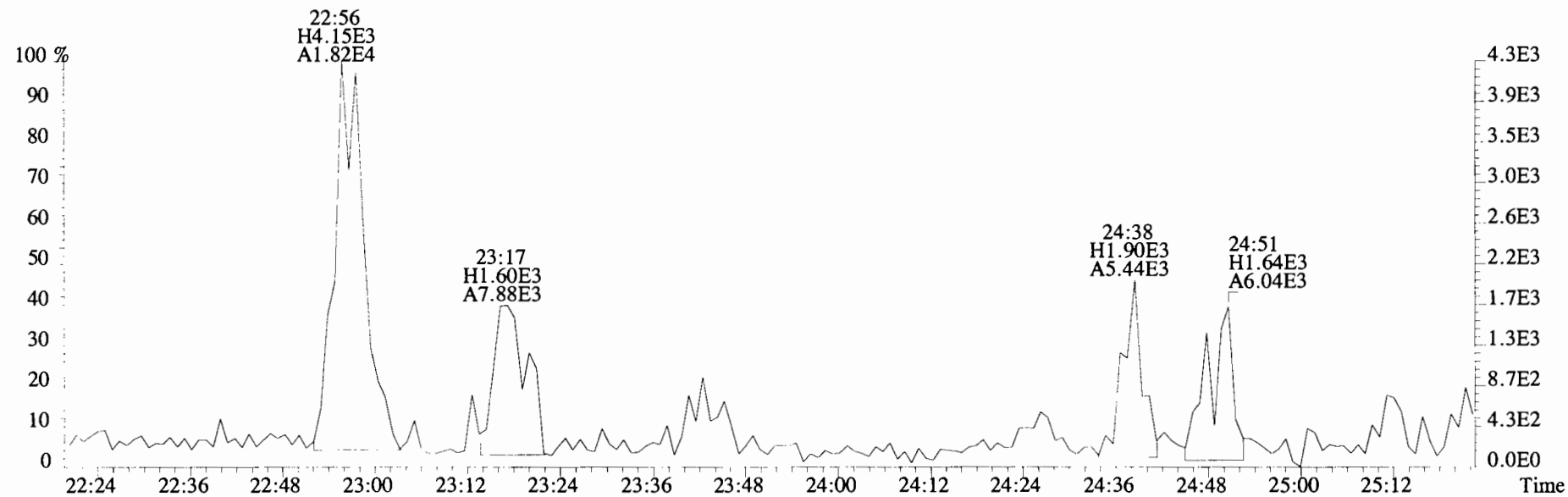
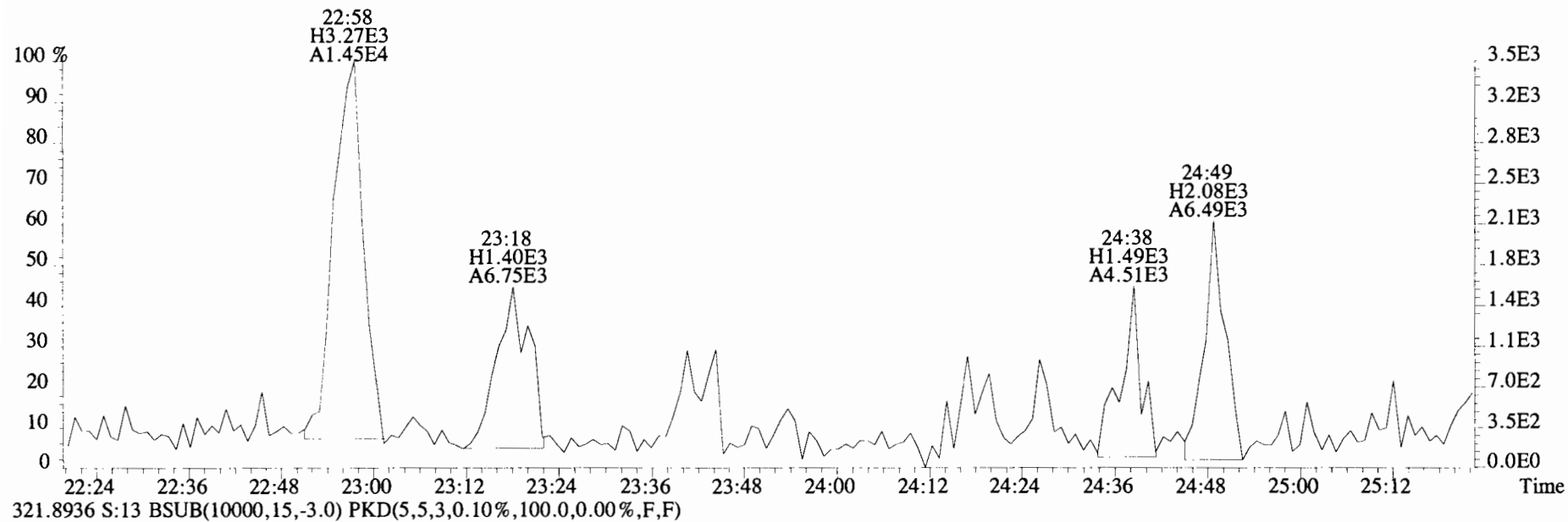
333.9339 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



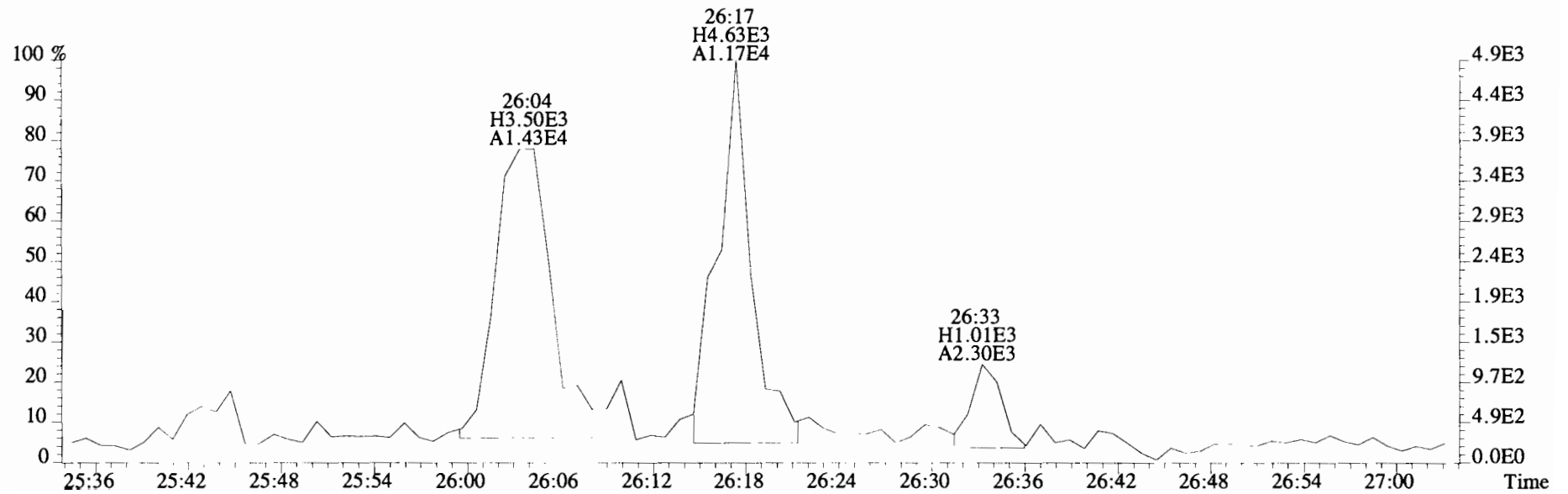
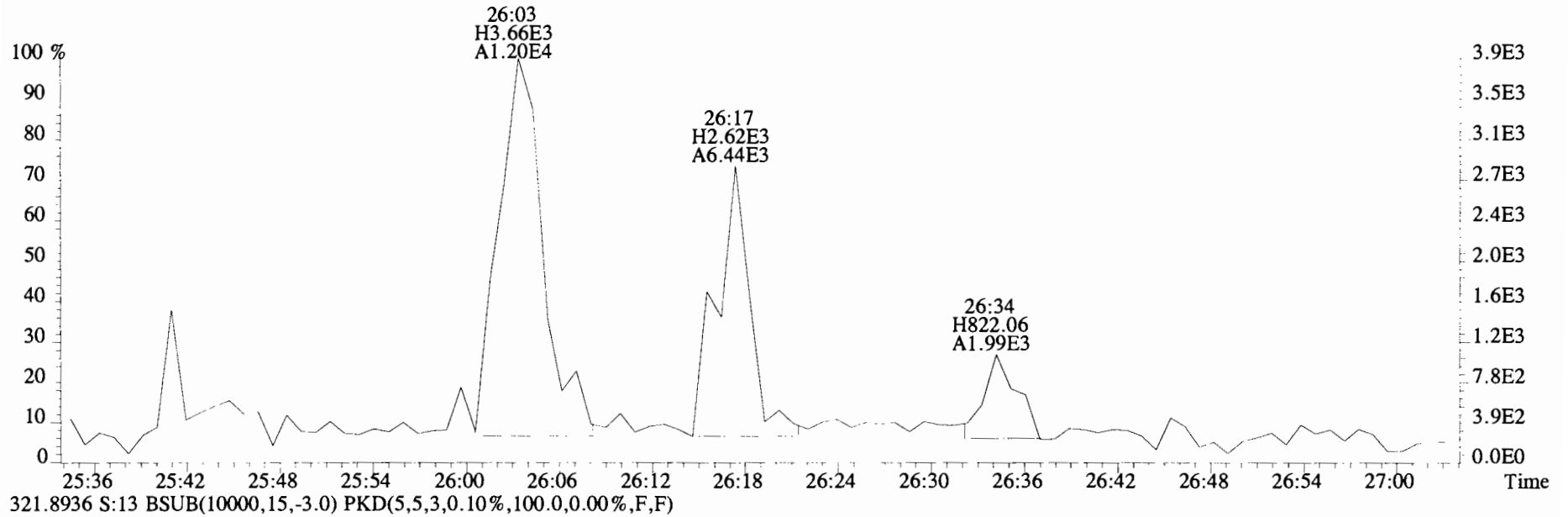
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



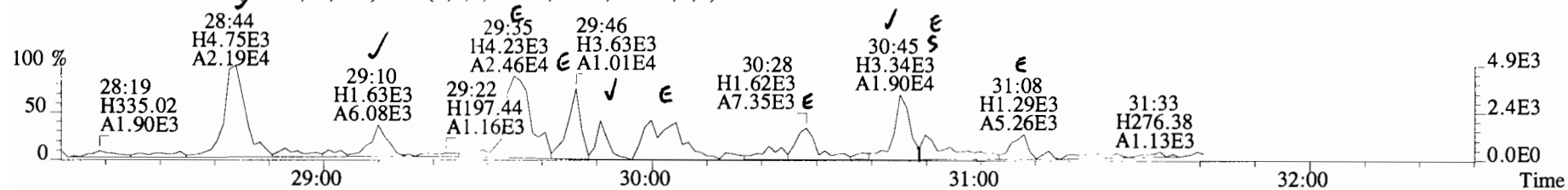
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Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



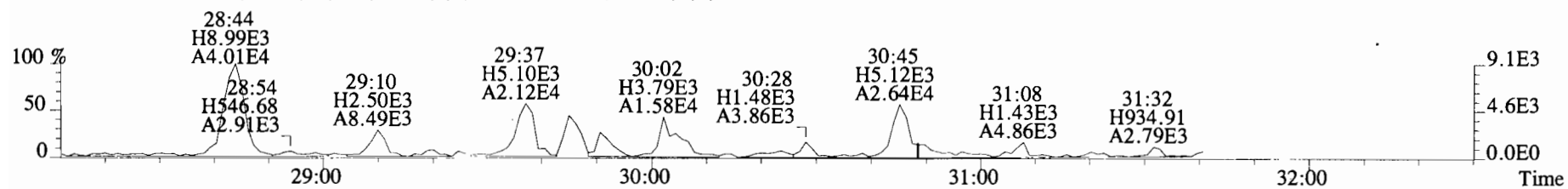
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Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



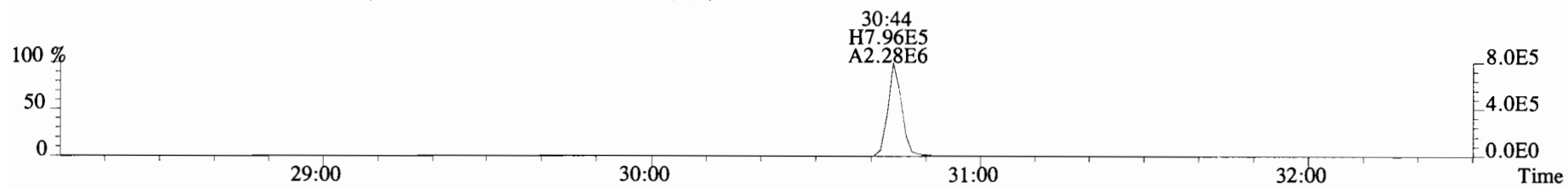
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



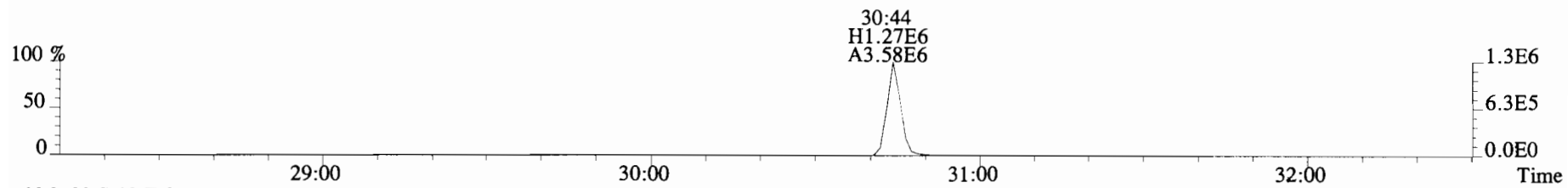
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



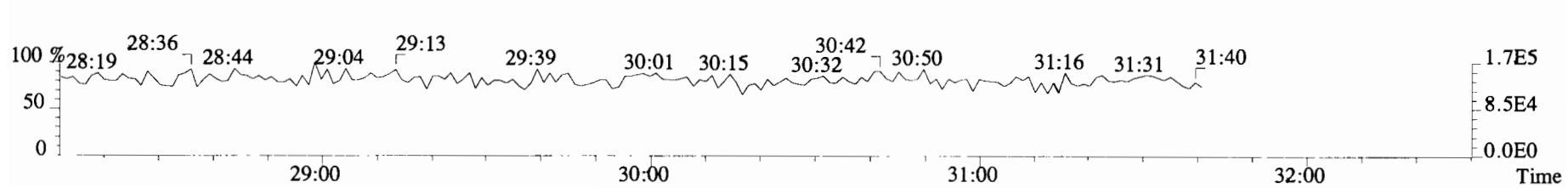
365.8978 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



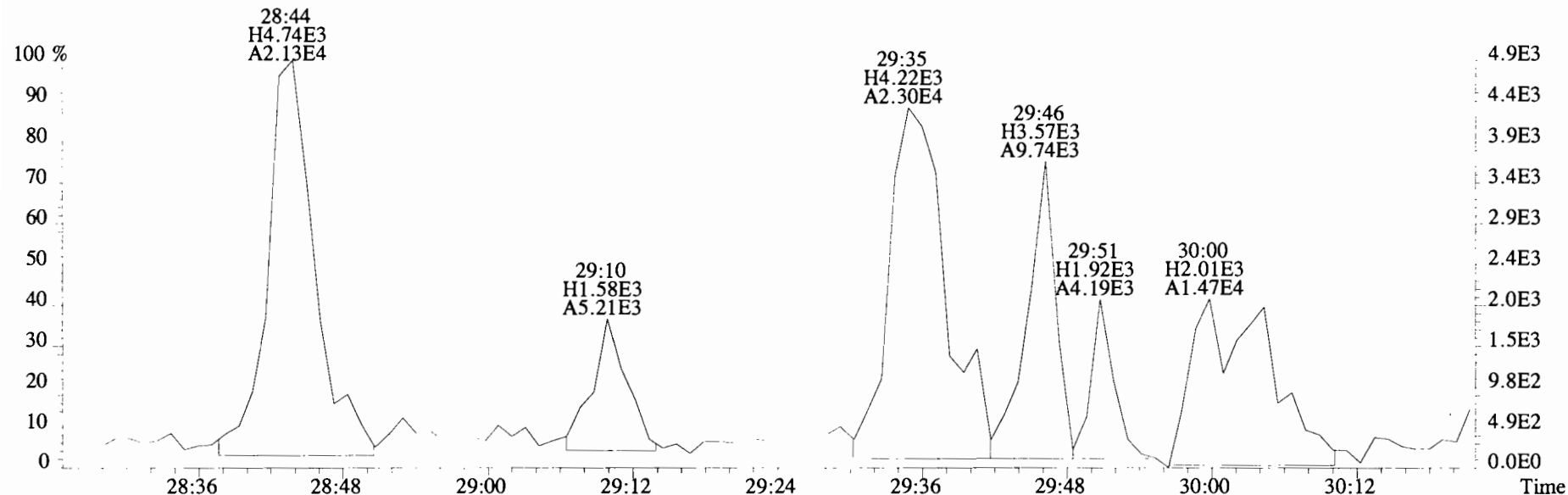
367.8949 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



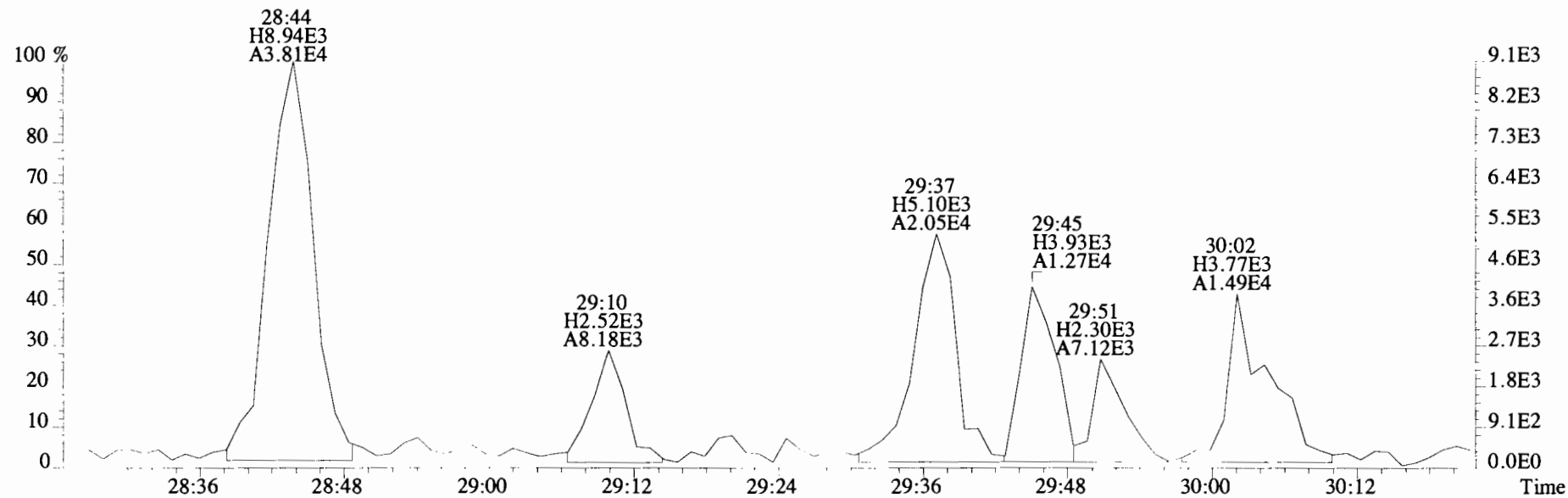
366.9792 S:13 F:2



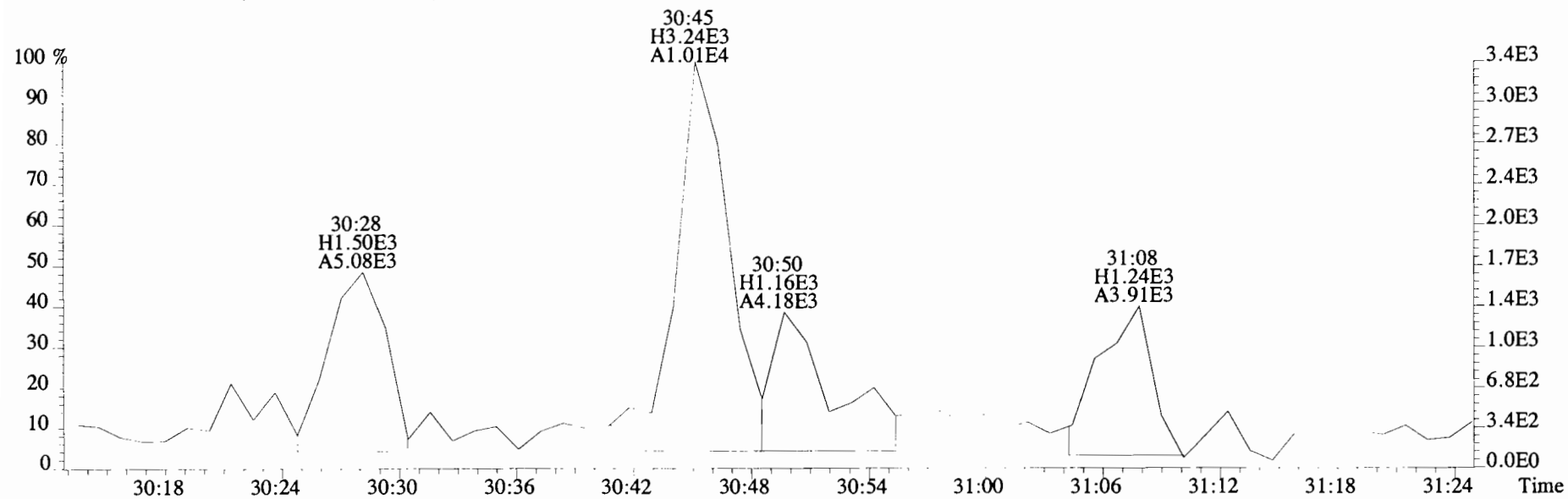
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



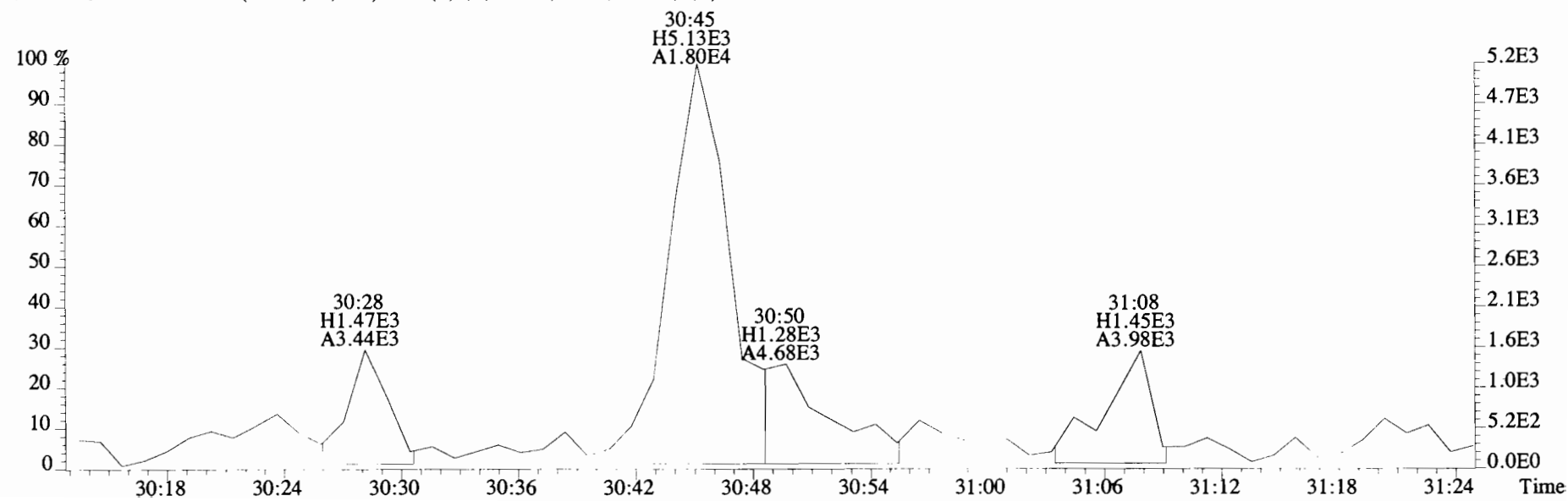
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



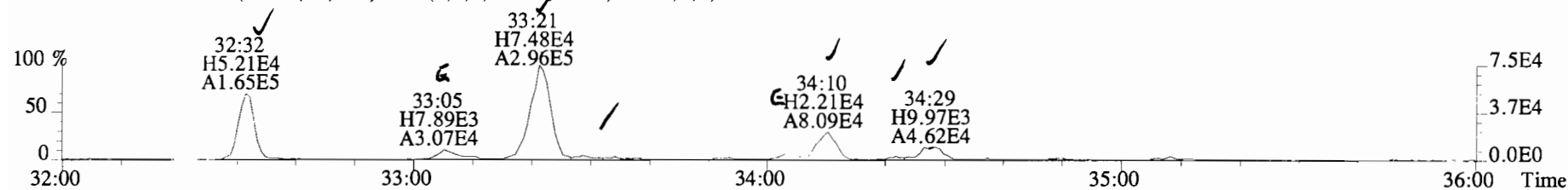
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



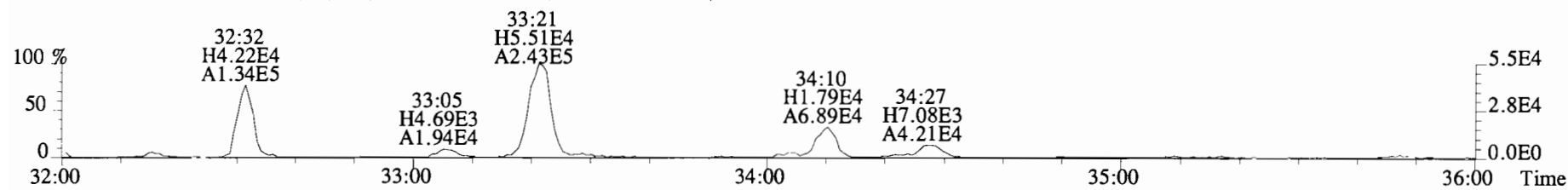
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



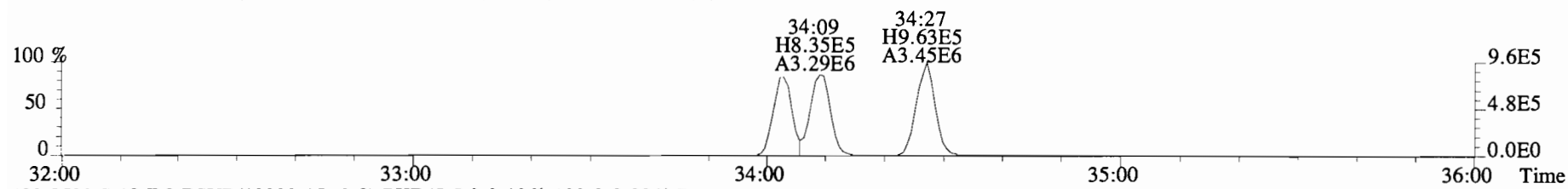
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



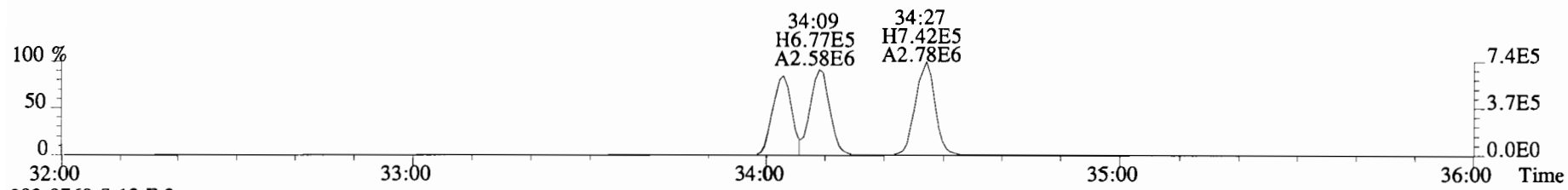
391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



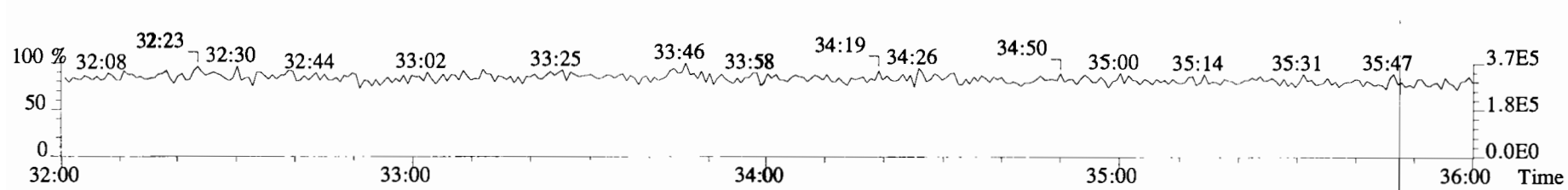
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



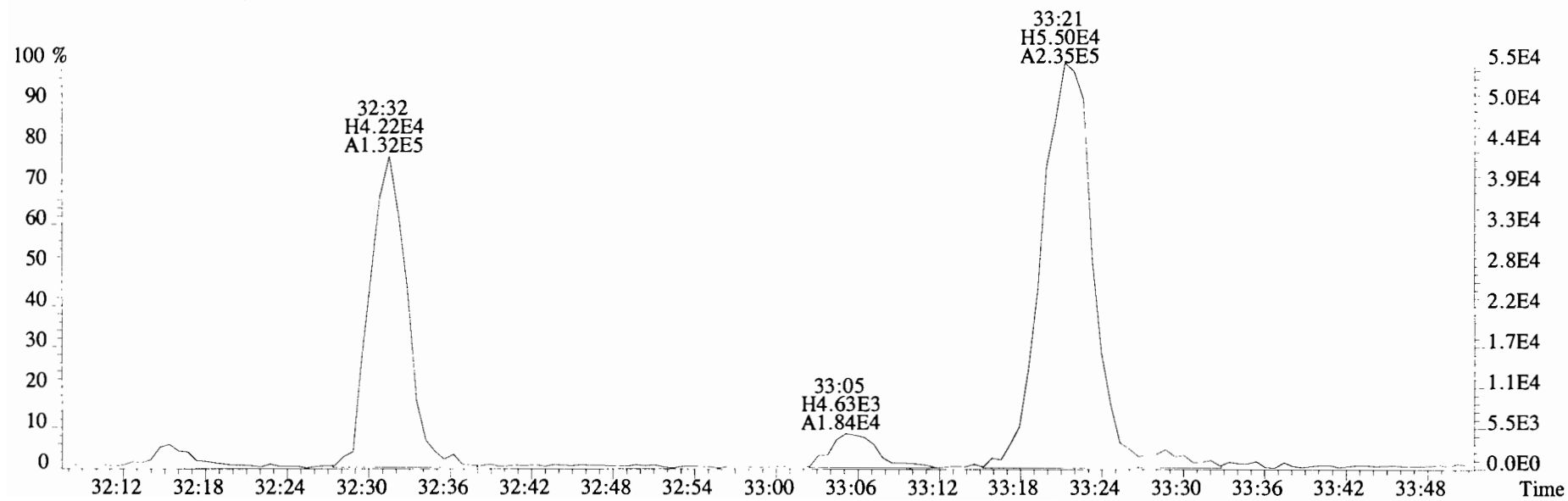
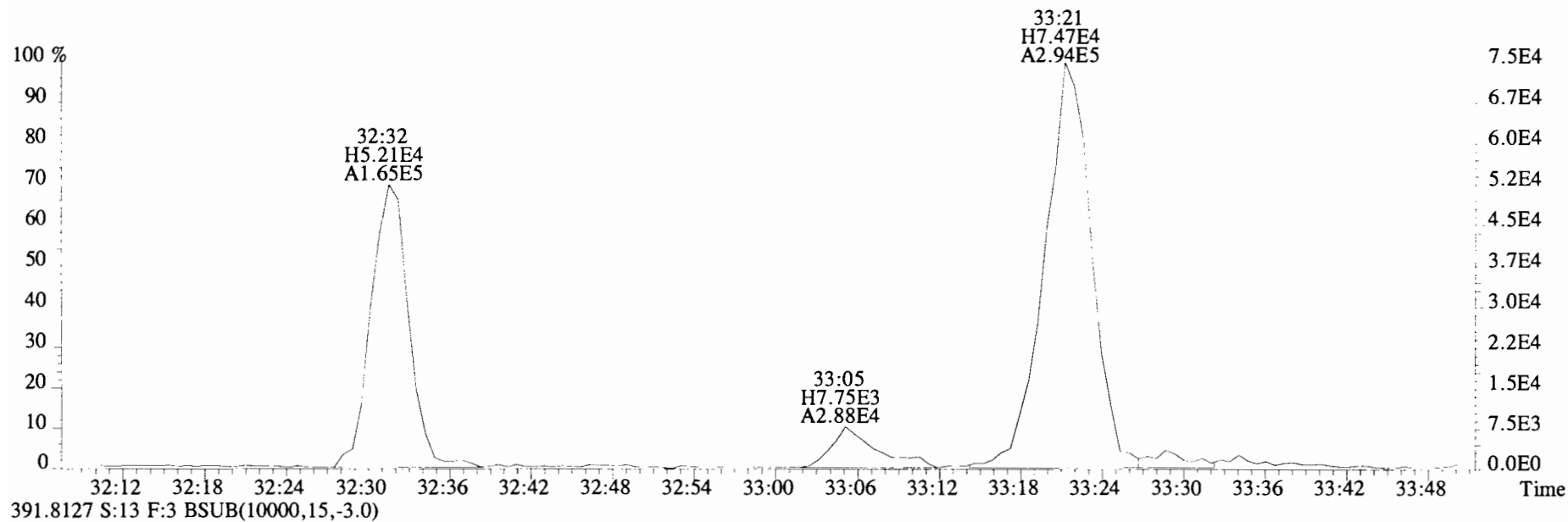
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



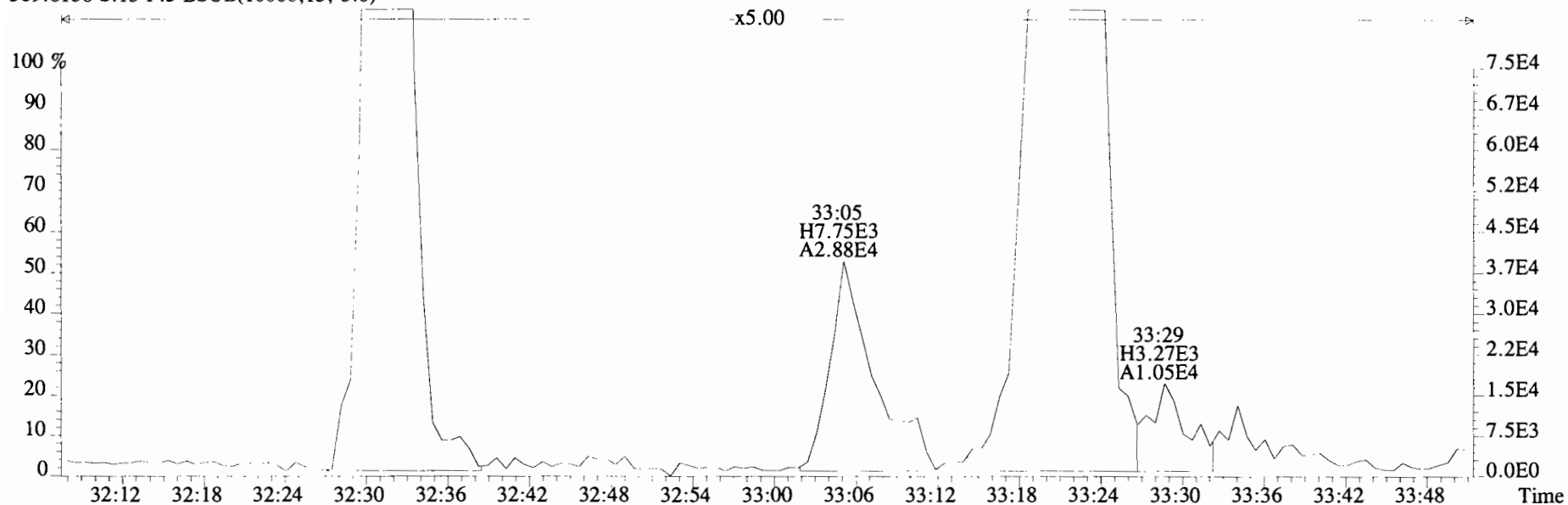
392.9760 S:13 F:3



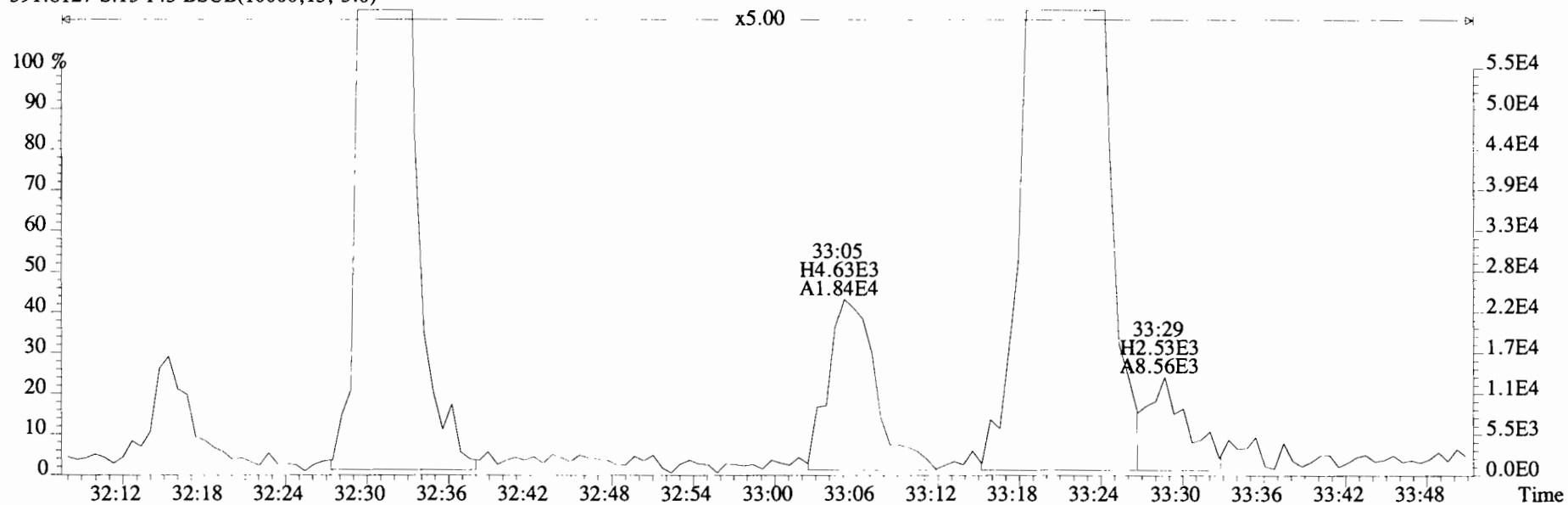
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0)



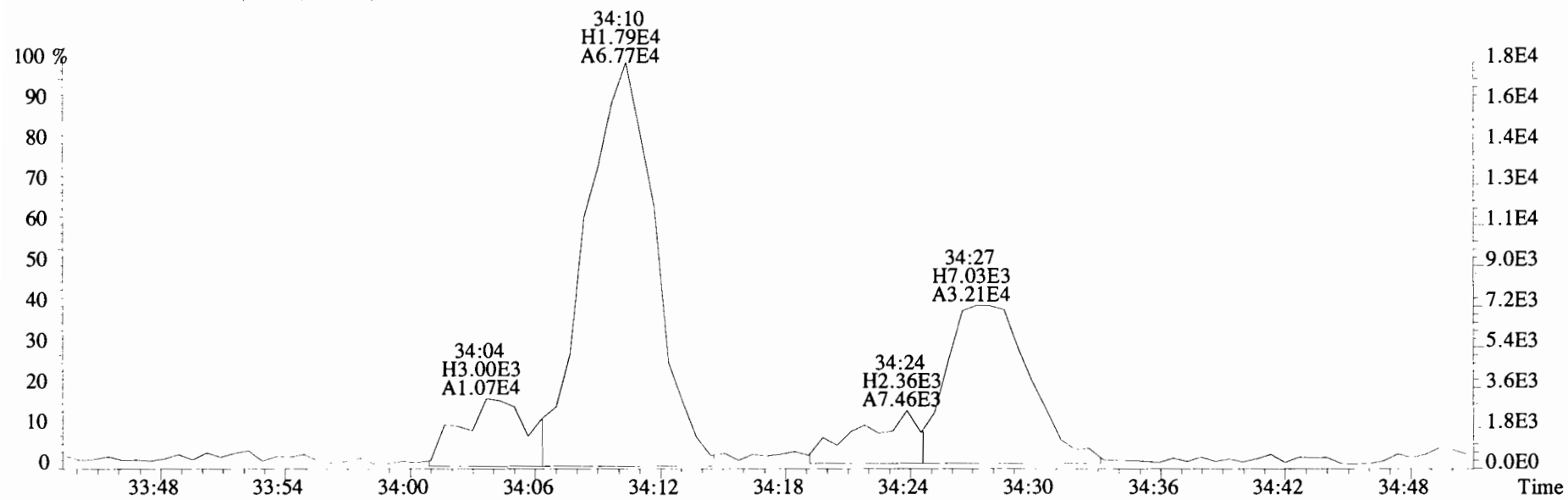
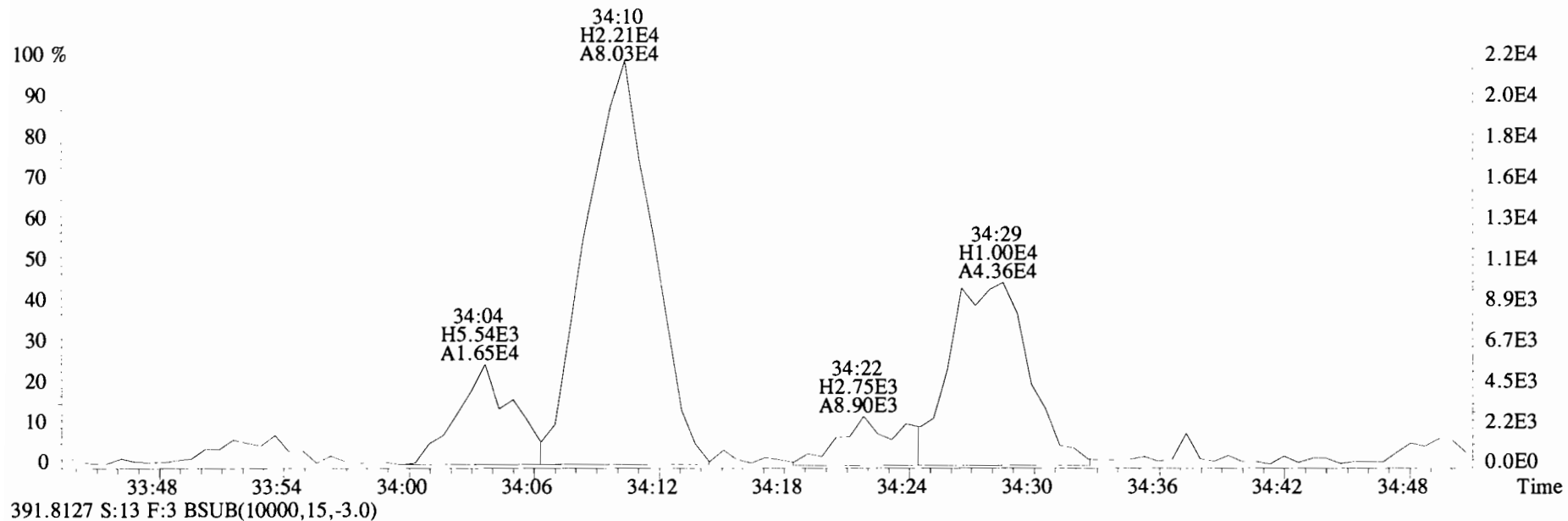
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0)



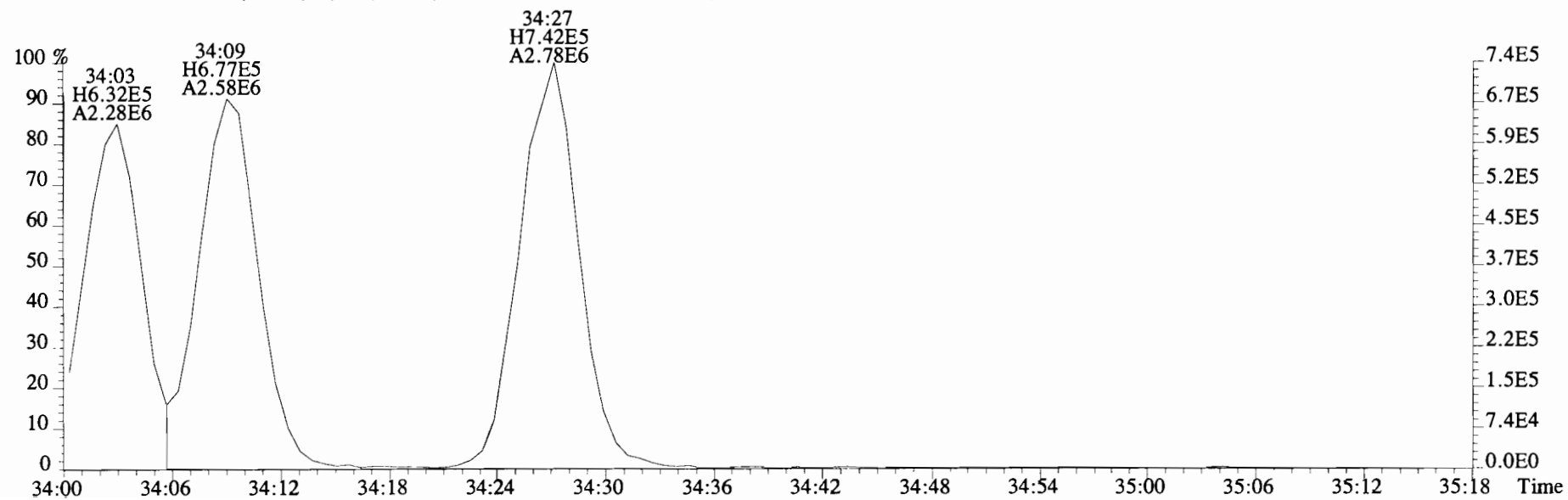
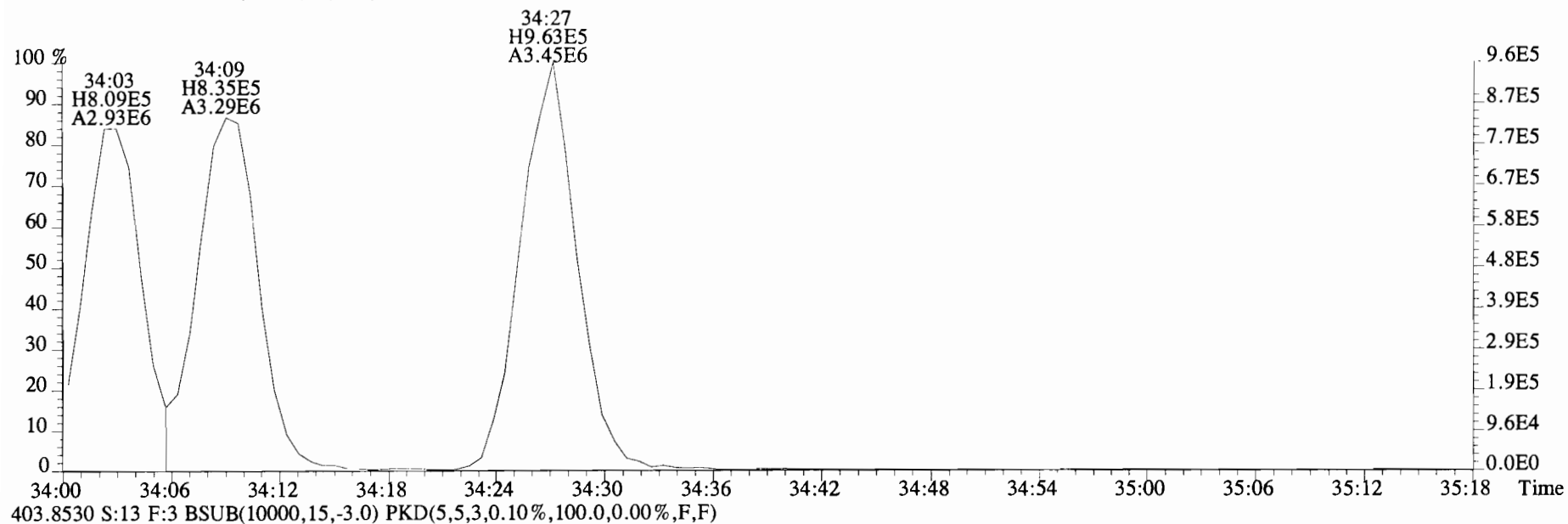
391.8127 S:13 F:3 BSUB(10000,15,-3.0)



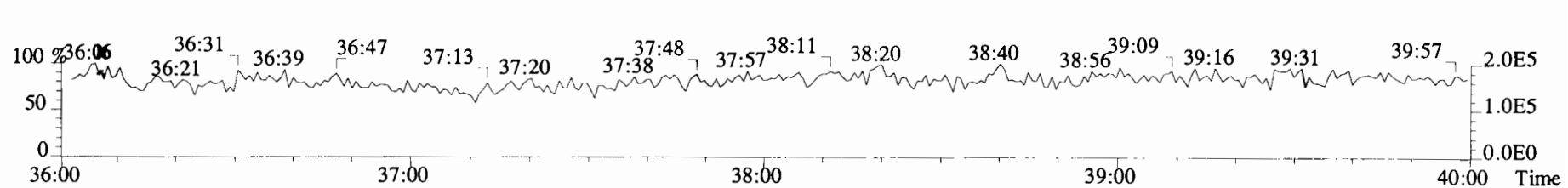
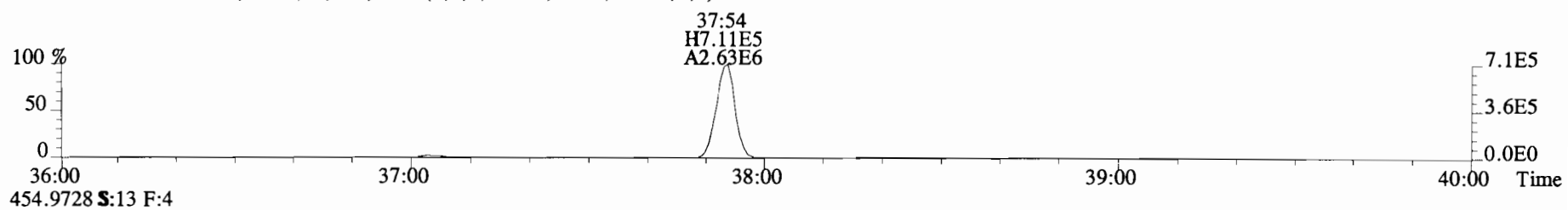
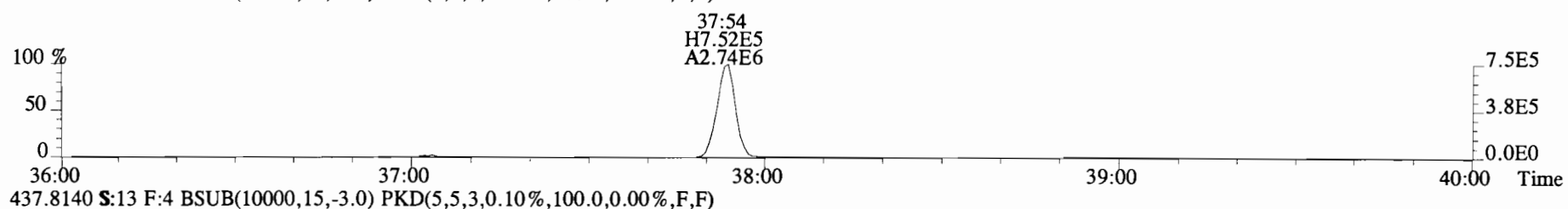
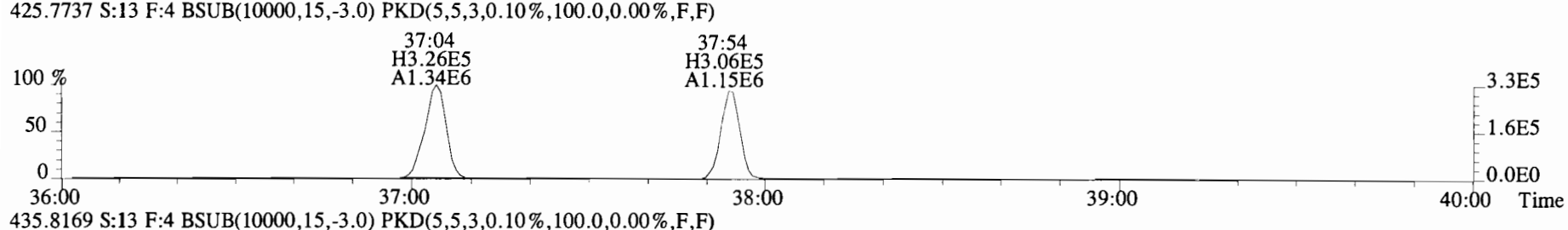
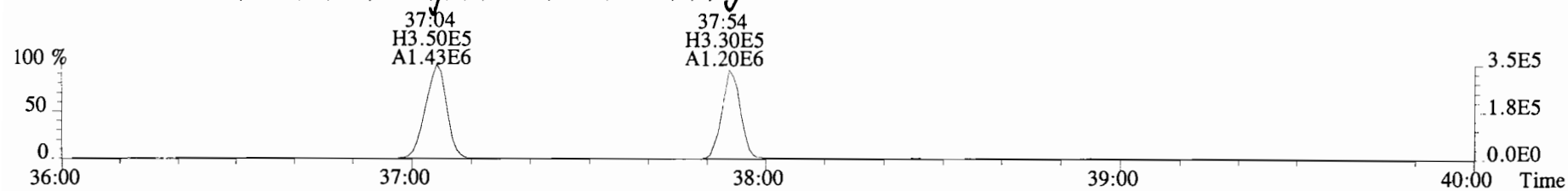
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0)



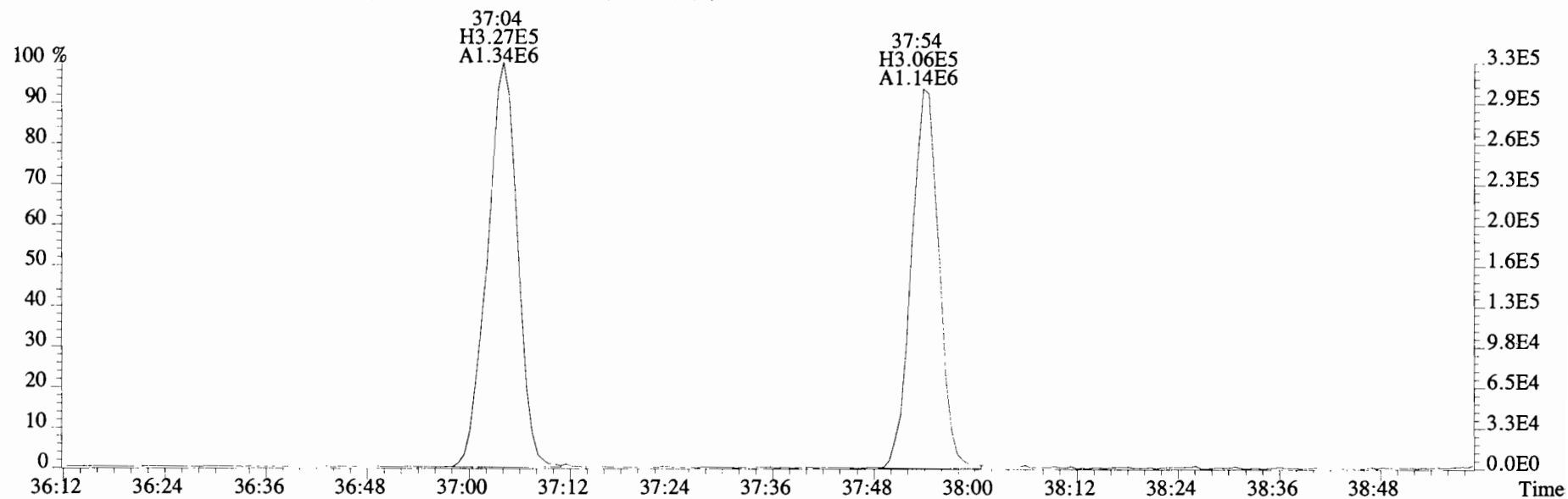
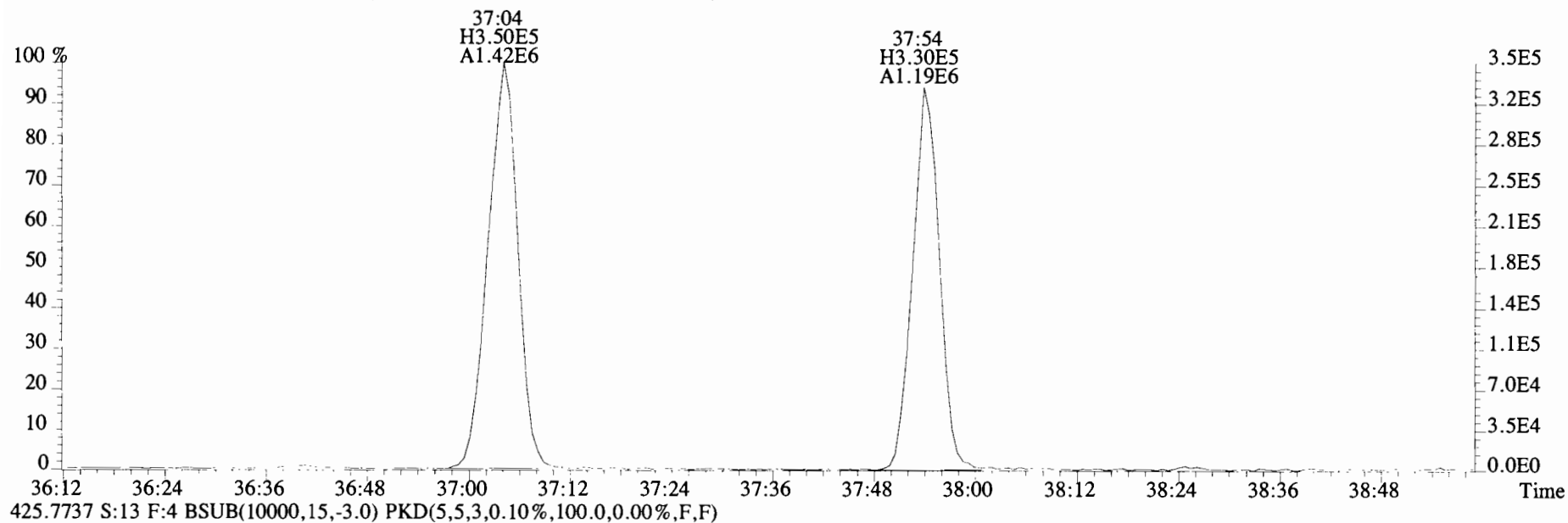
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



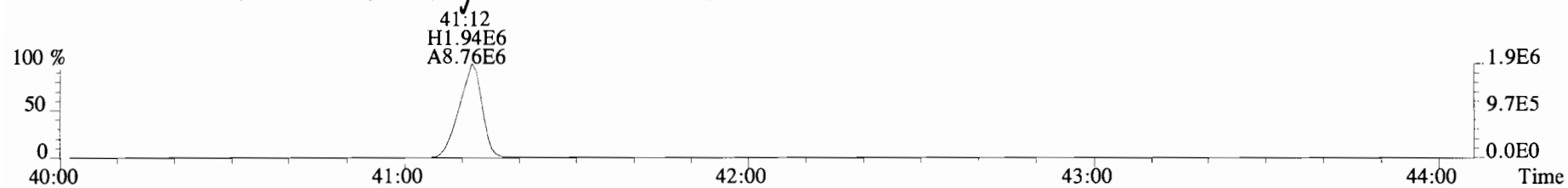
File:191031D2 #1-356 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



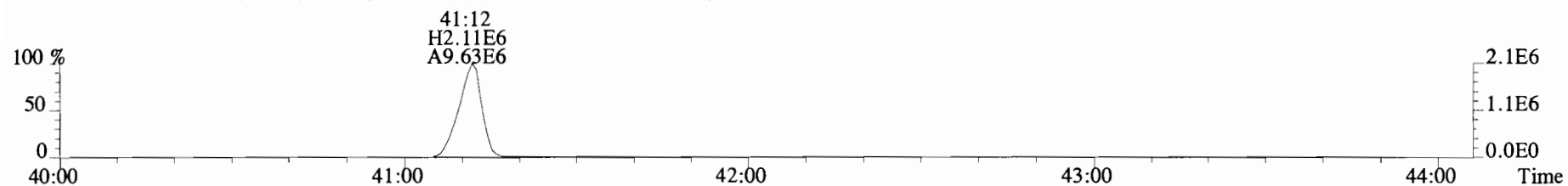
File:191031D2 #1-356 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



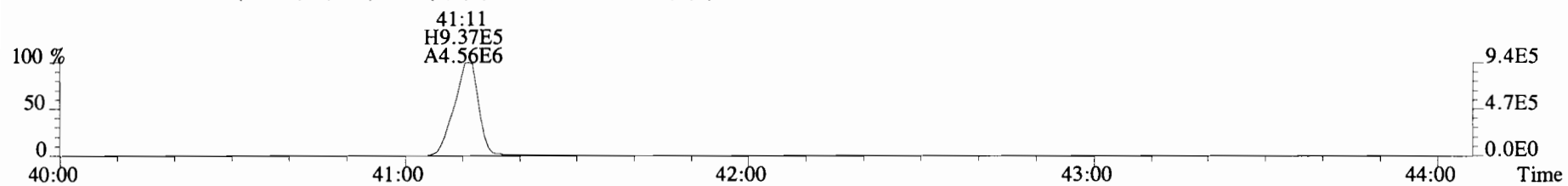
File:191031D2 #1-432 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



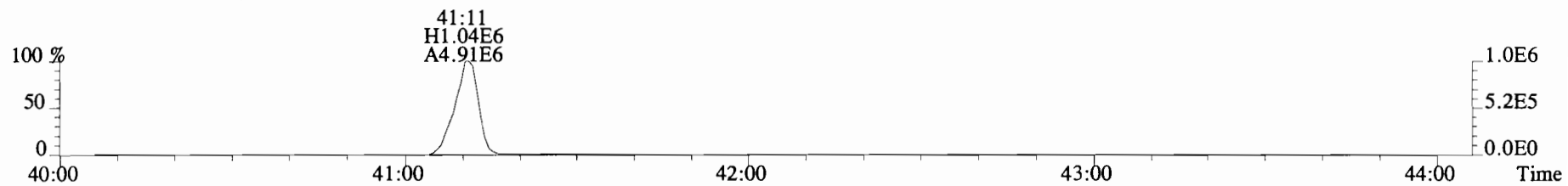
459.7348 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



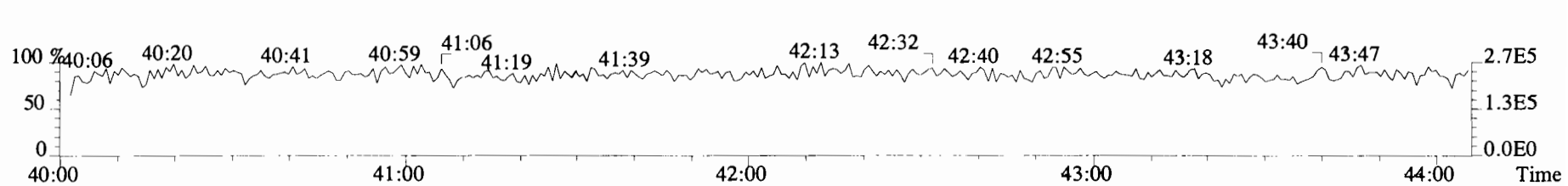
469.7780 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



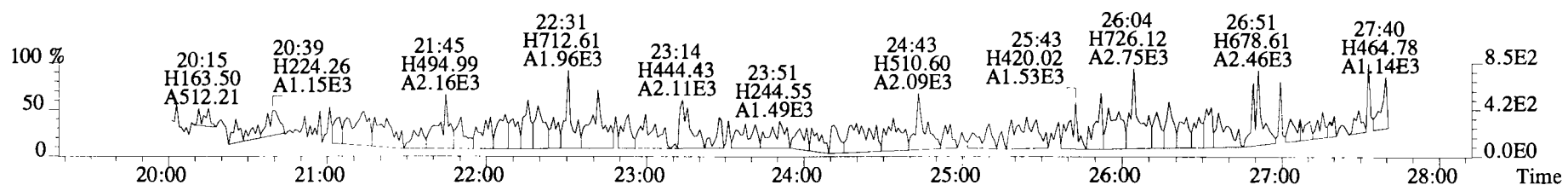
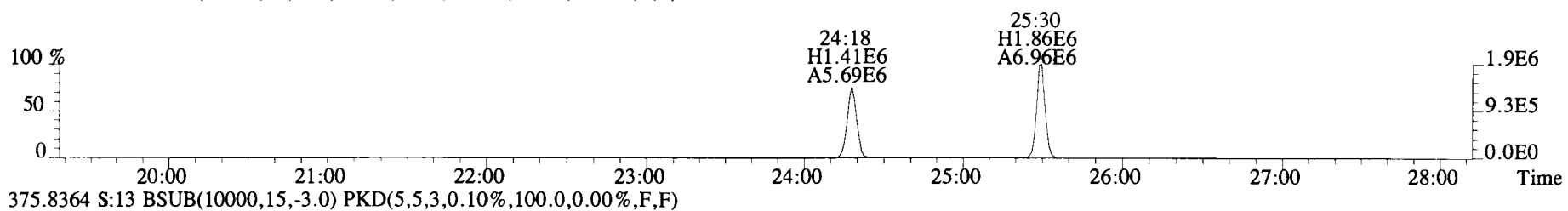
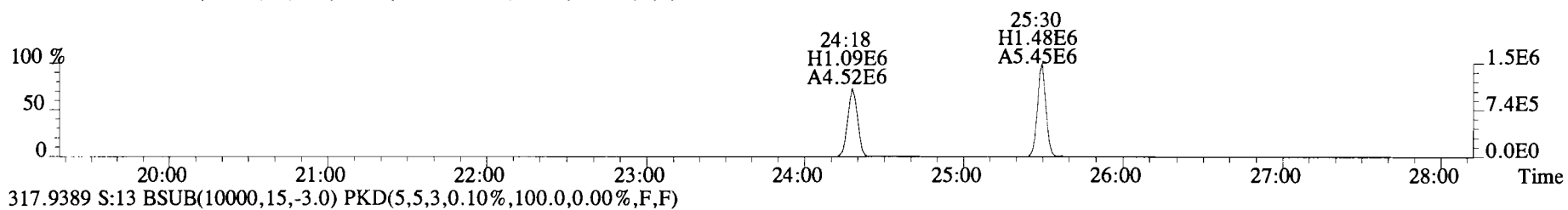
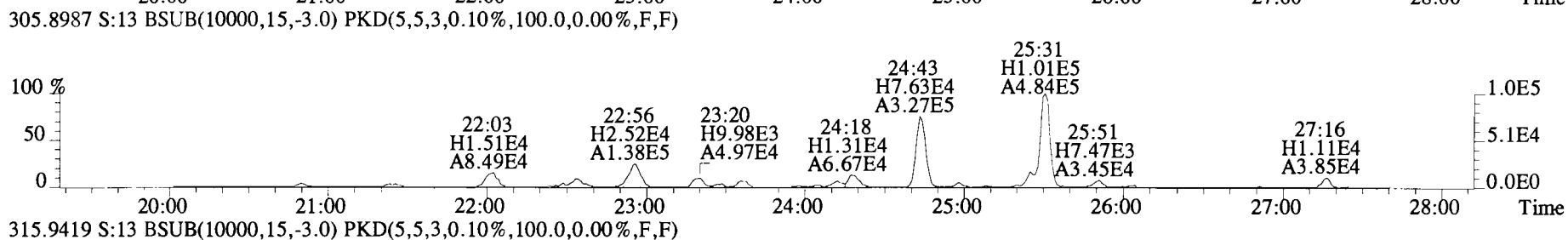
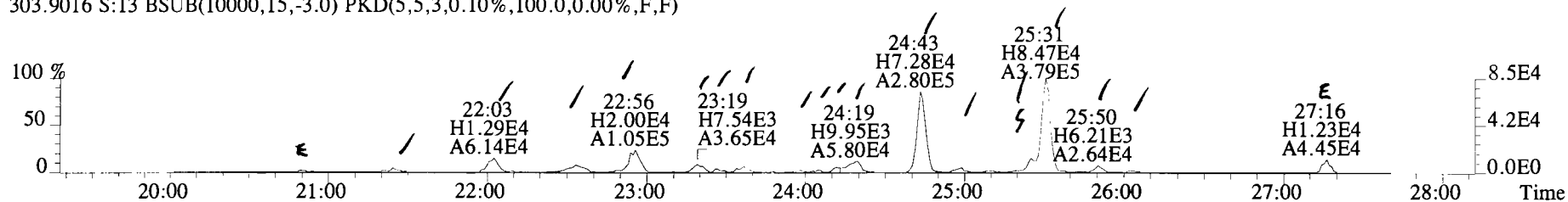
471.7750 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



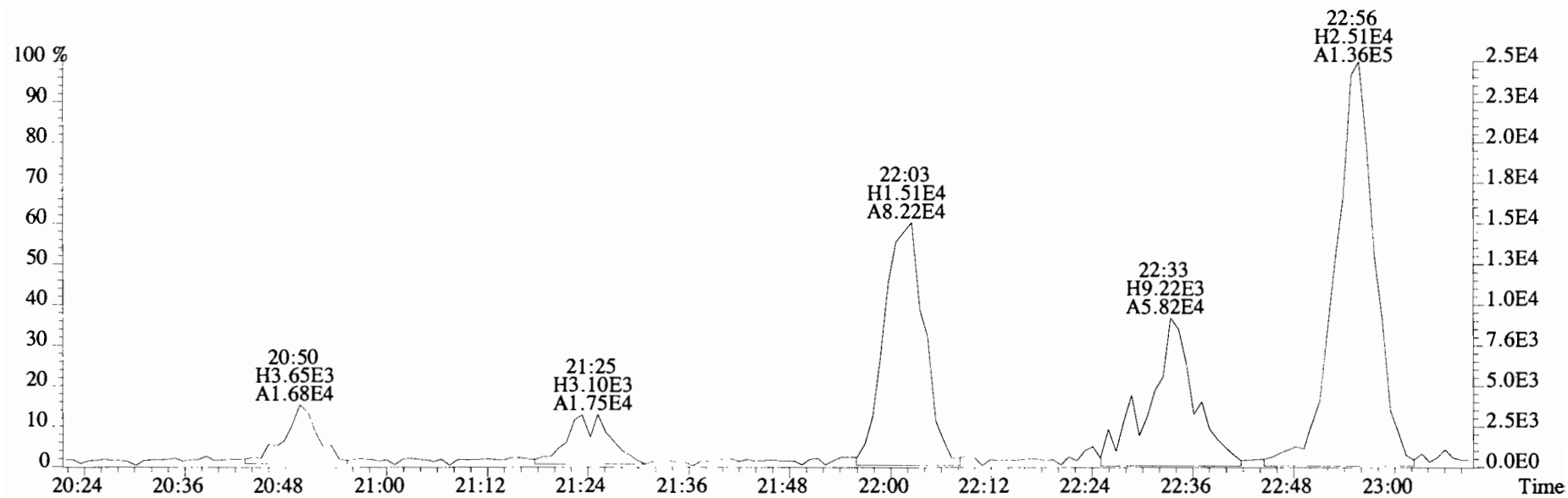
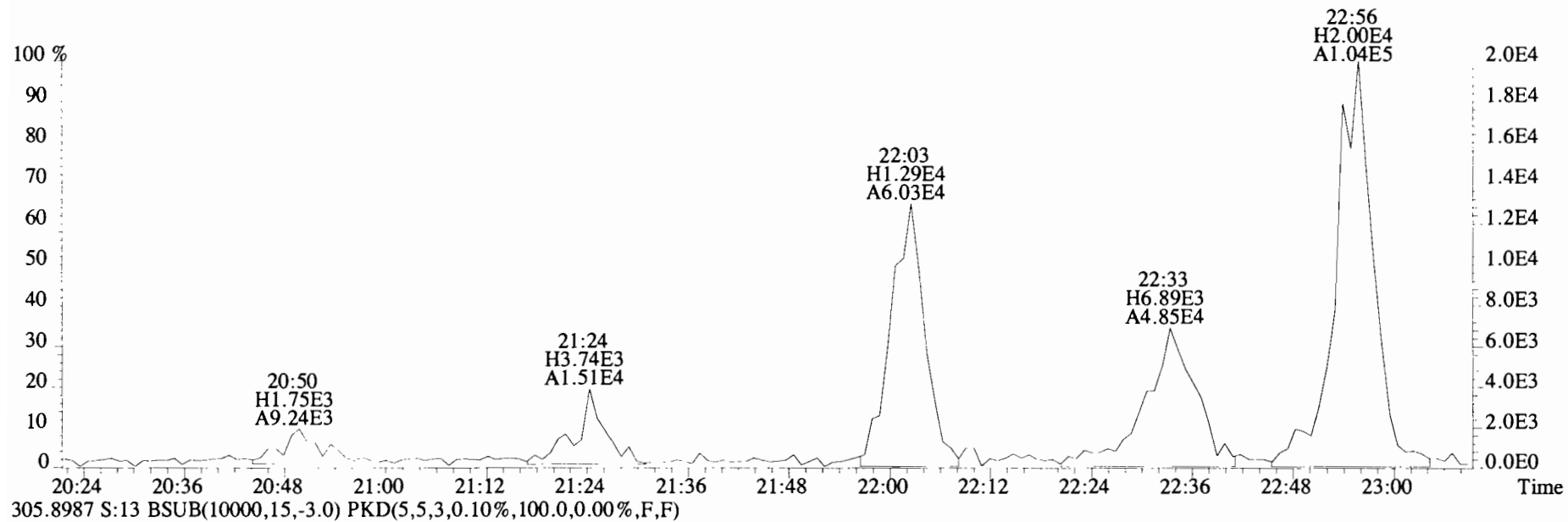
454.9728 S:13 F:5



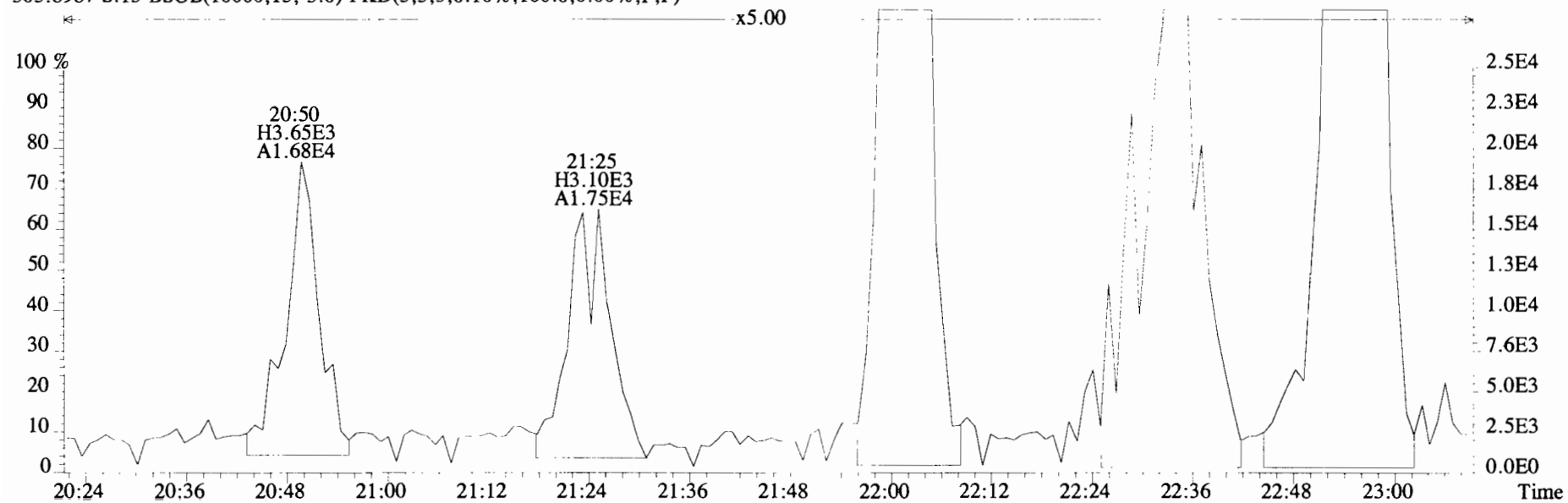
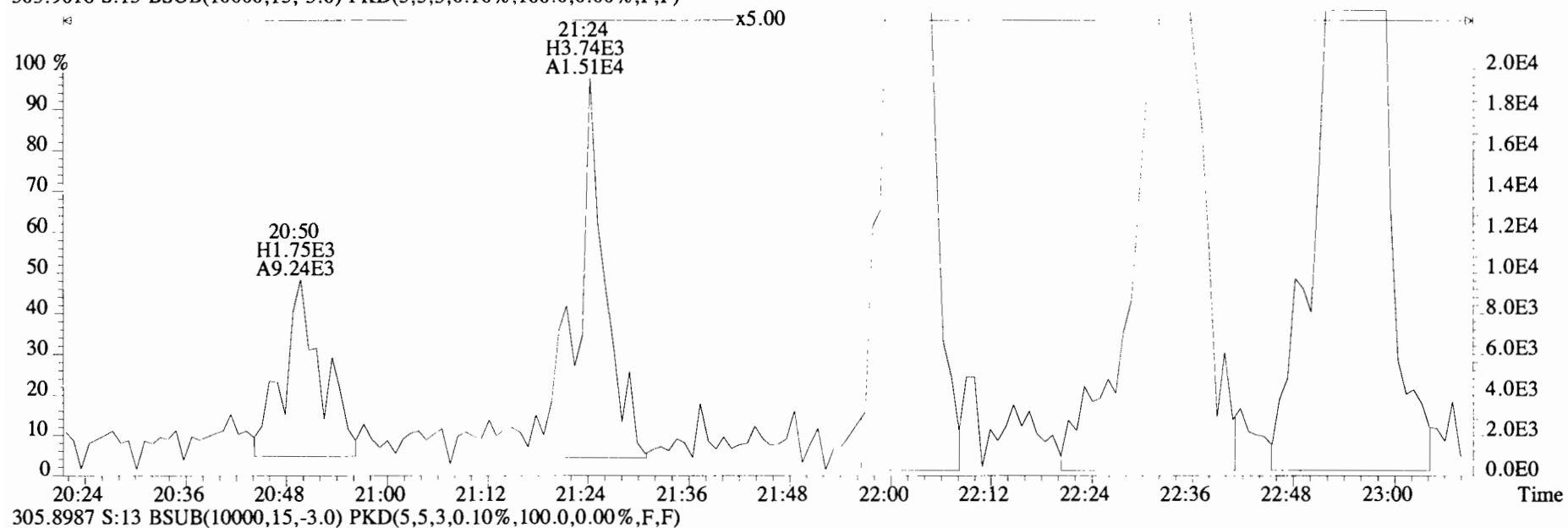
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



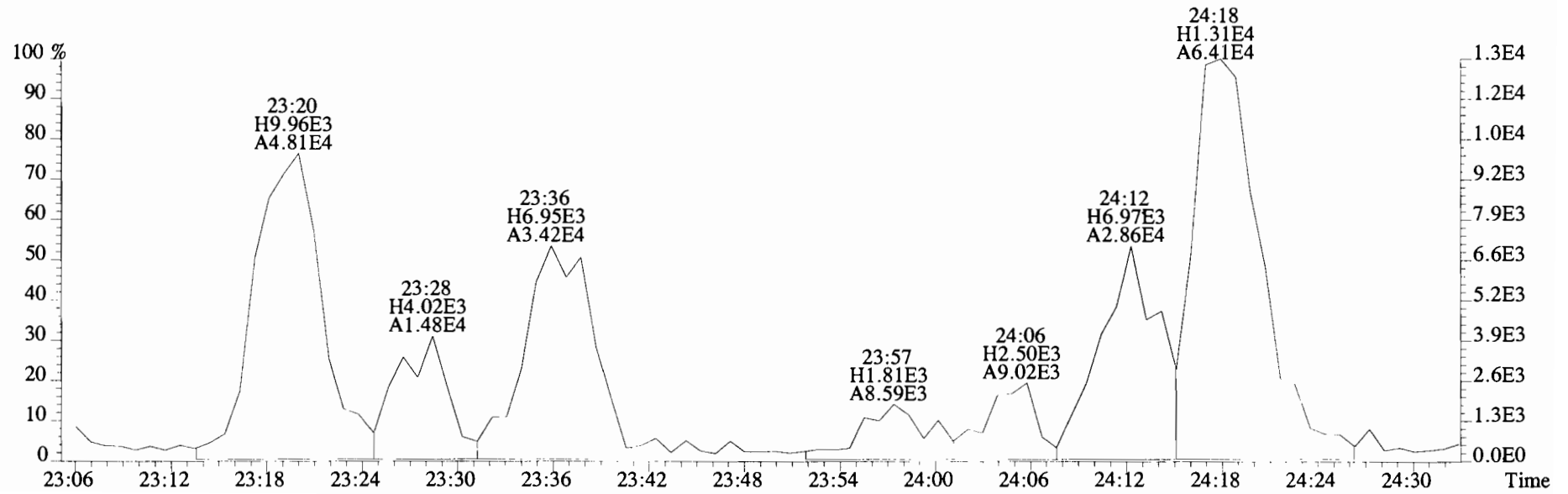
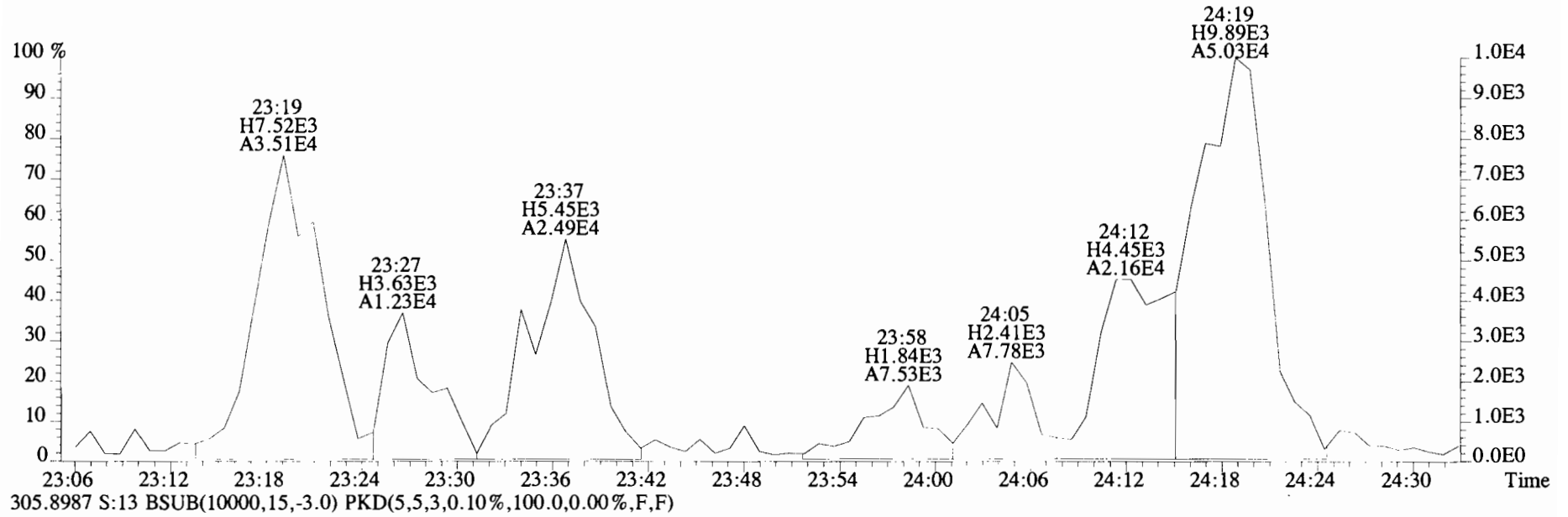
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



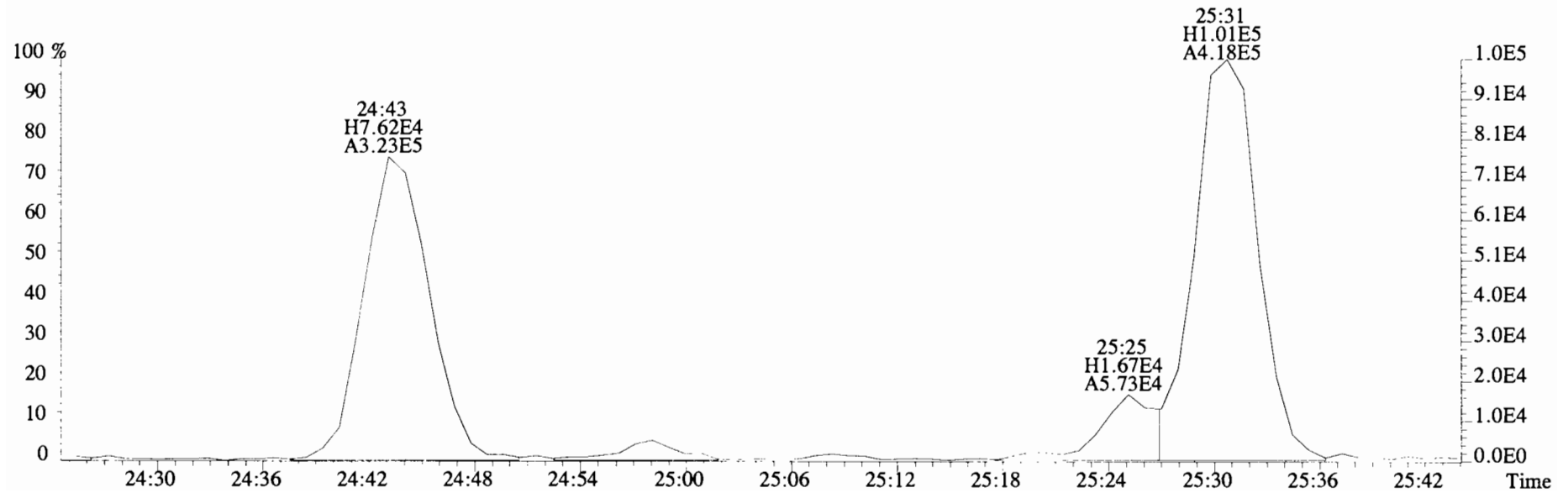
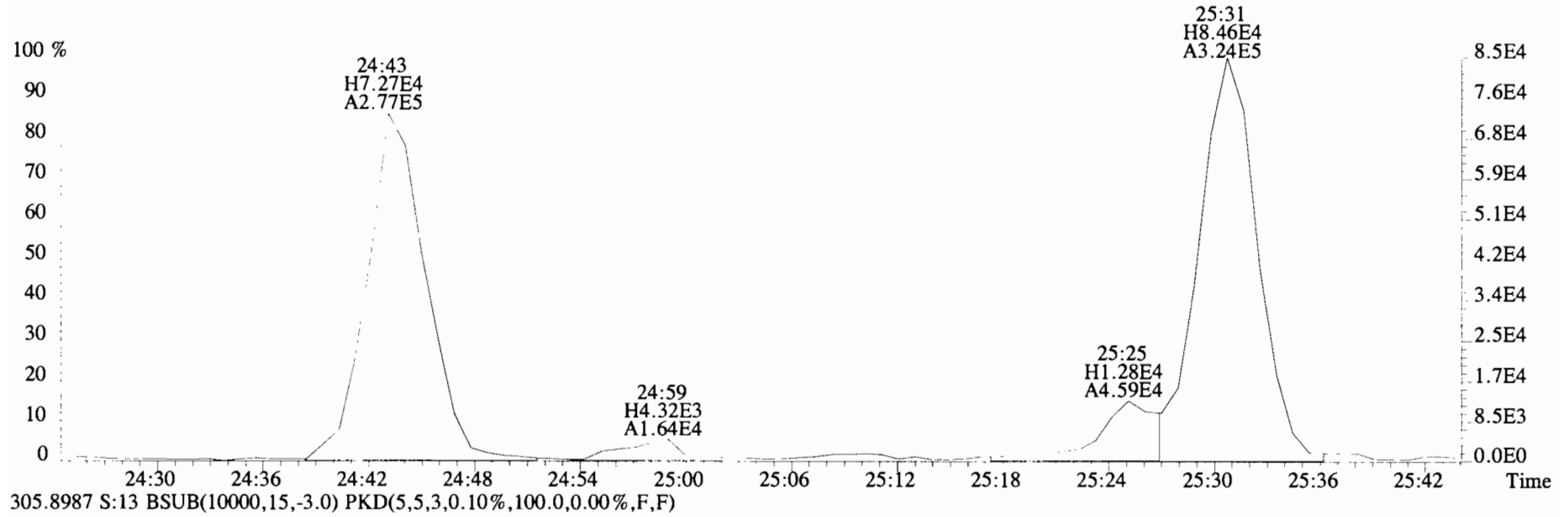
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



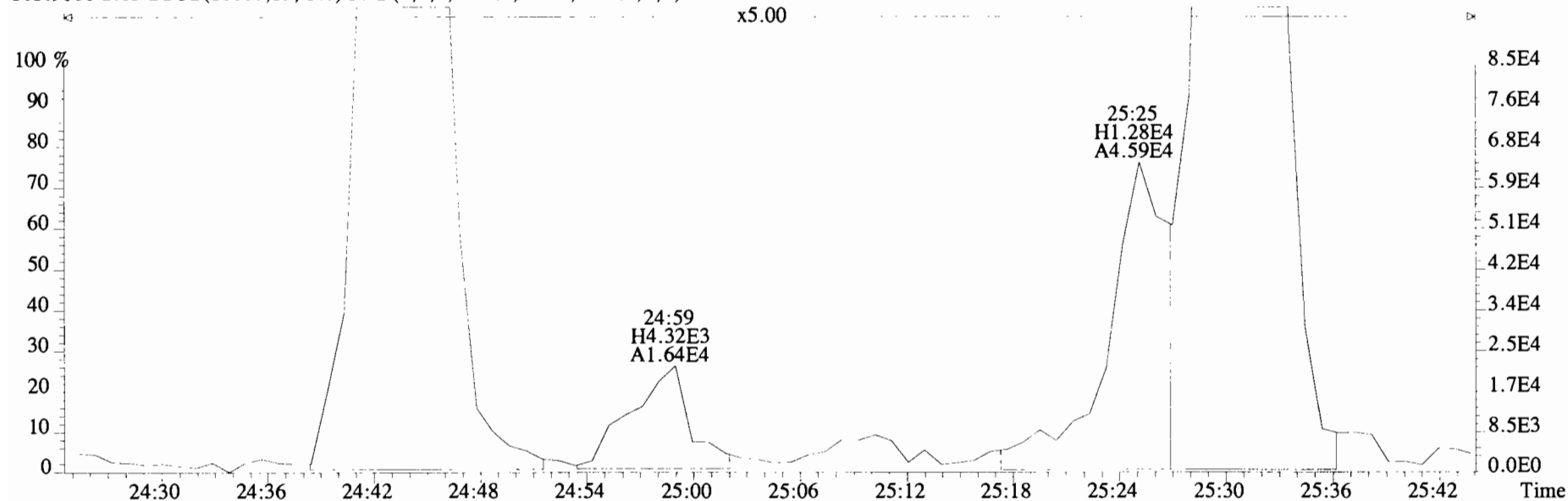
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



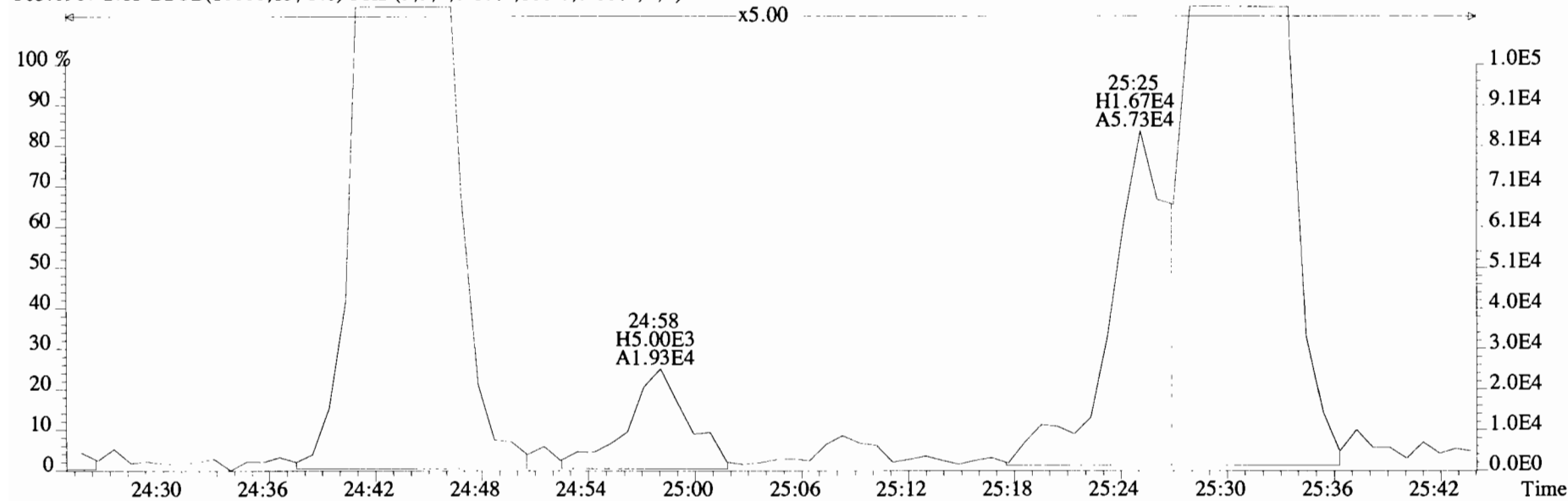
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



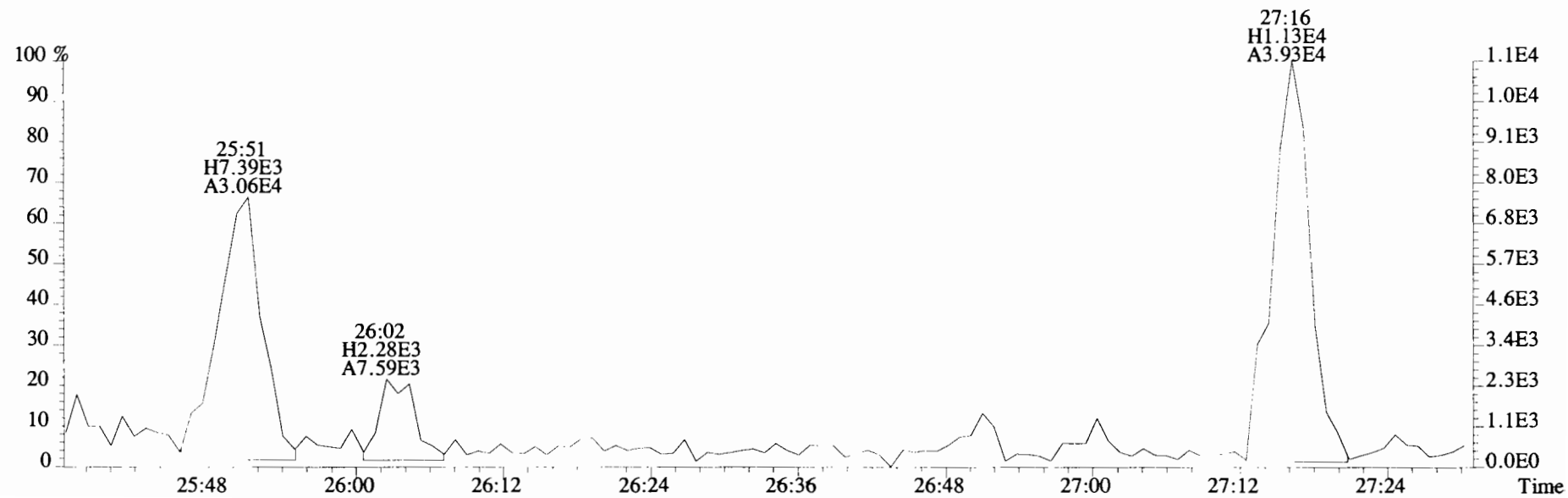
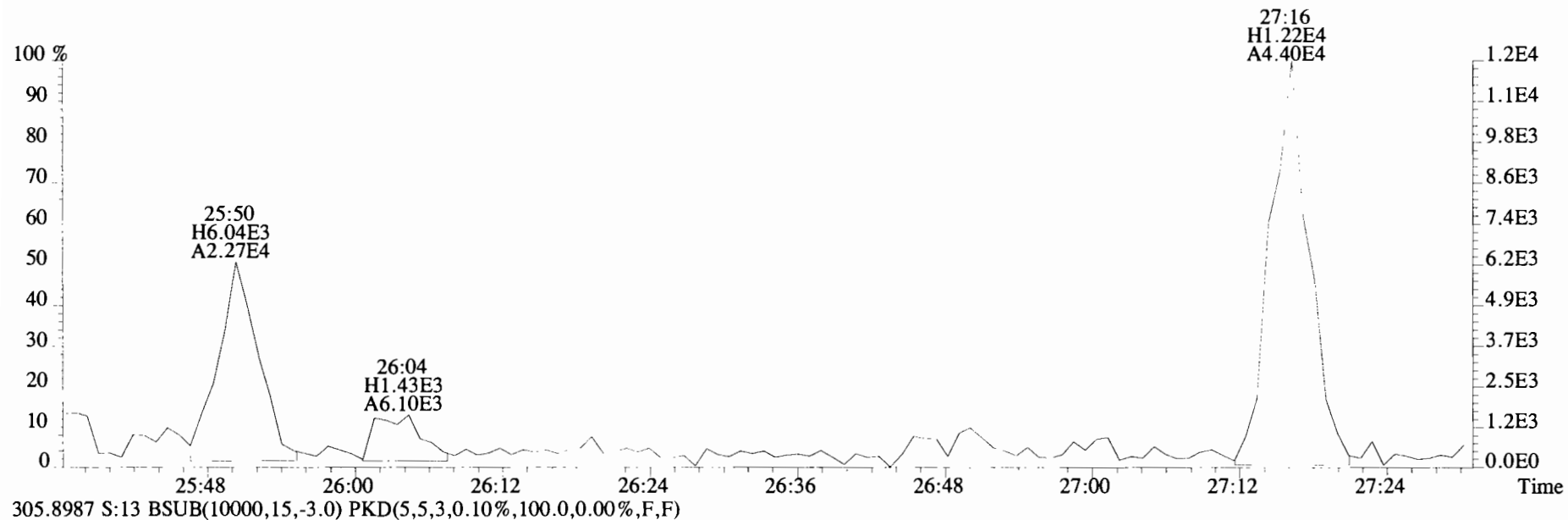
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



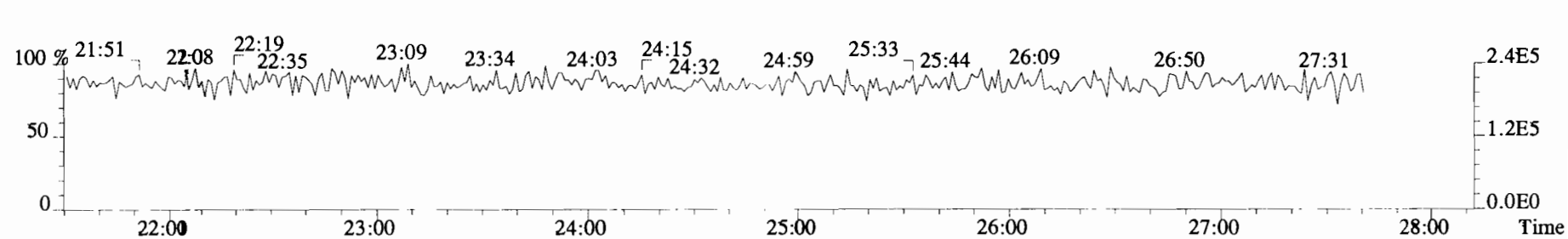
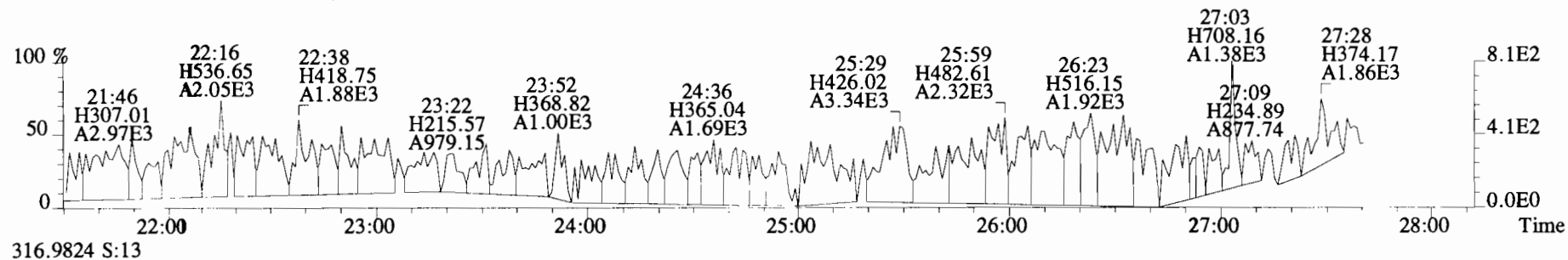
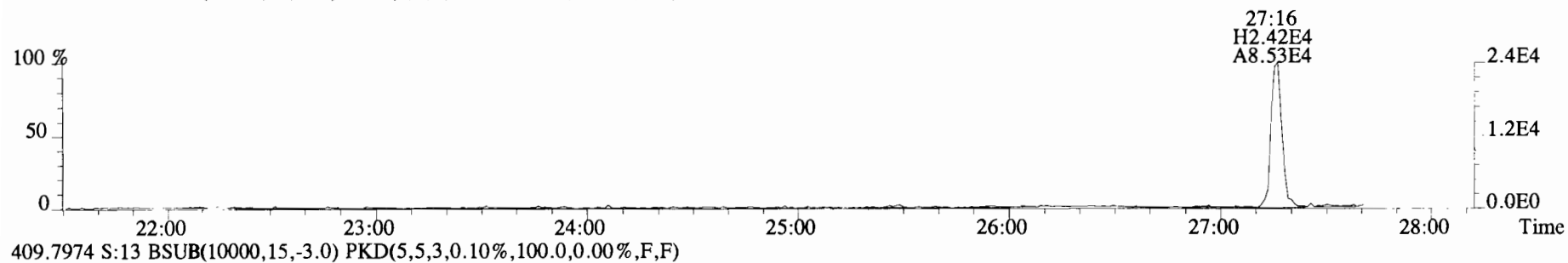
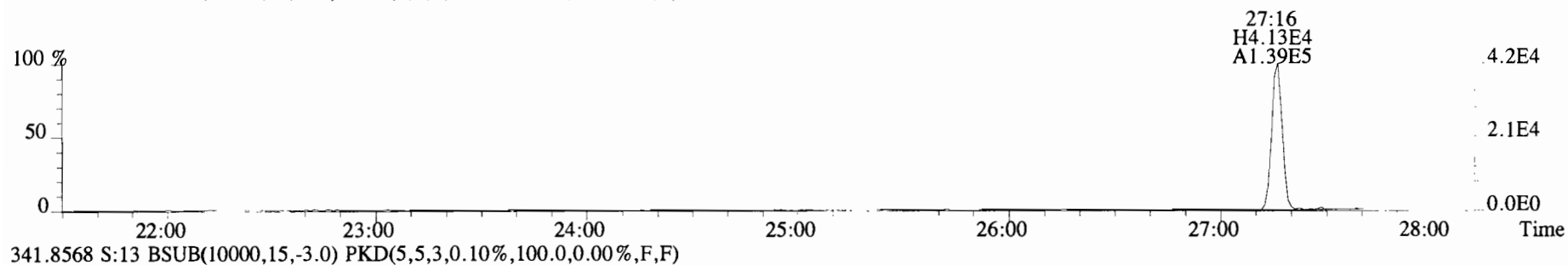
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



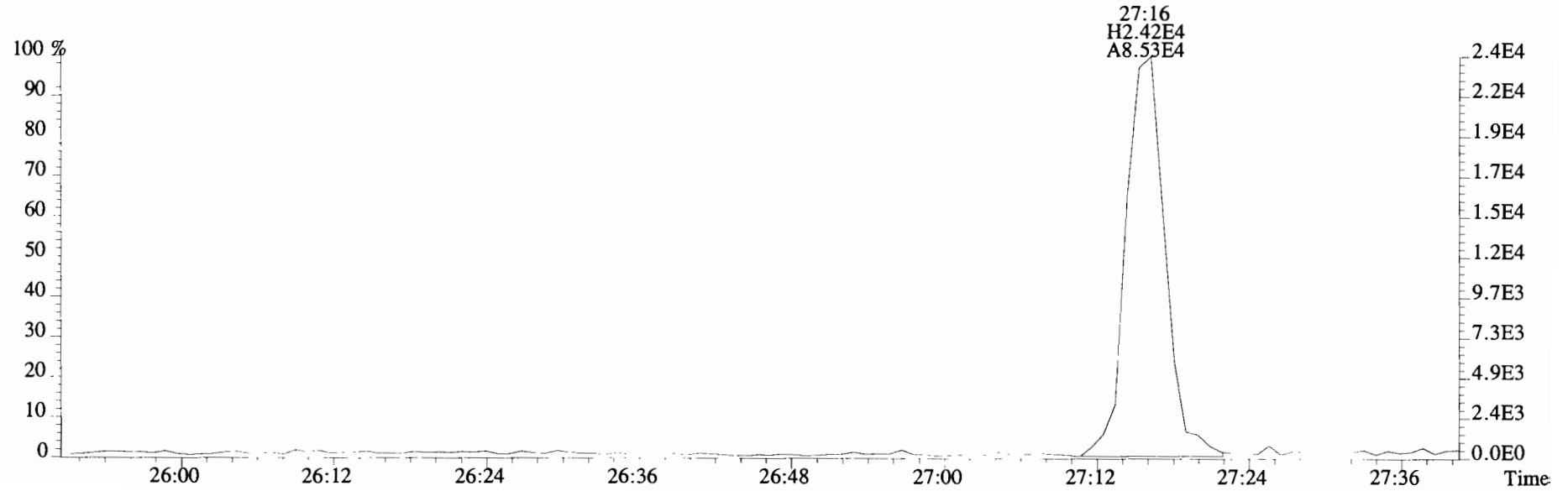
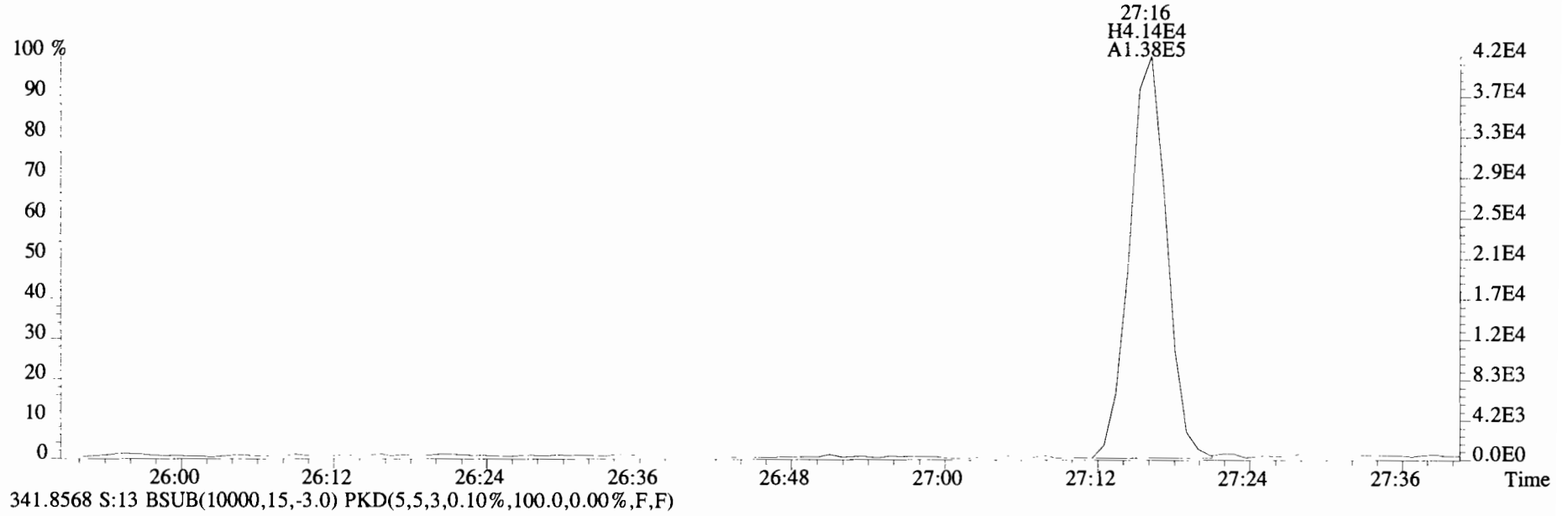
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



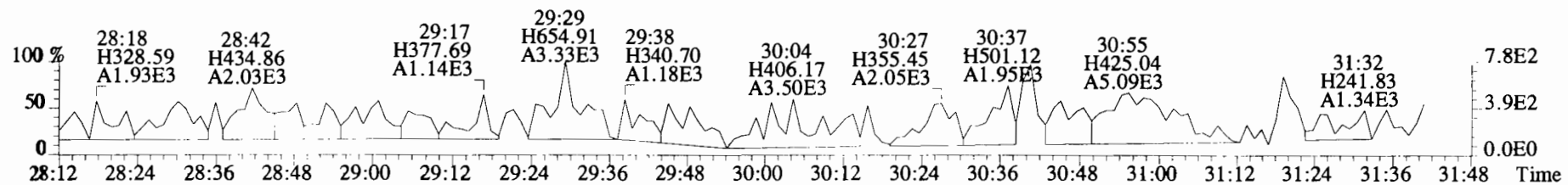
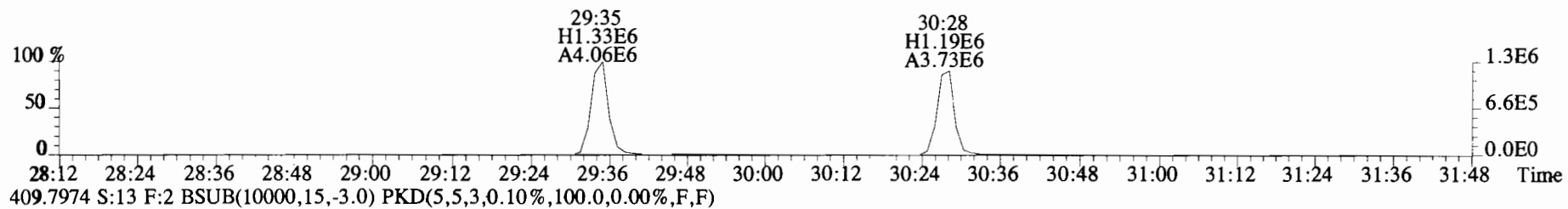
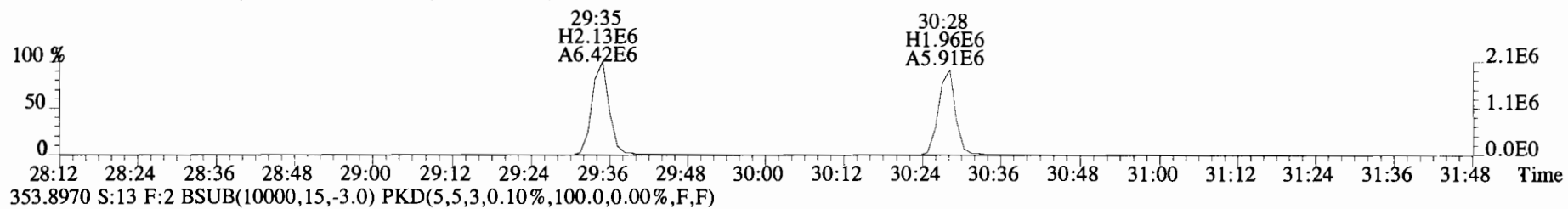
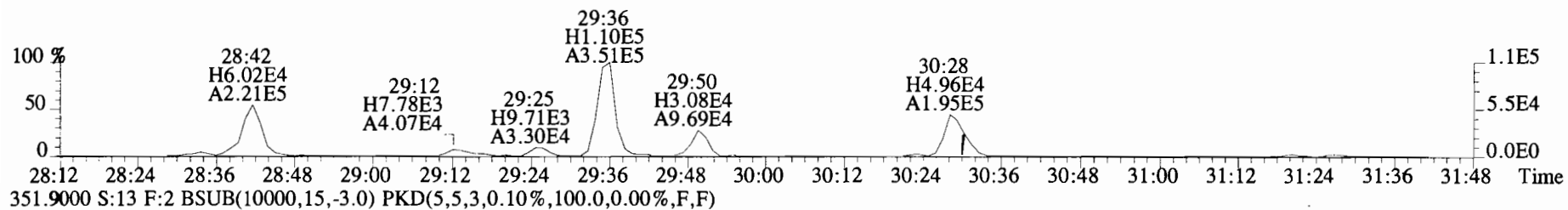
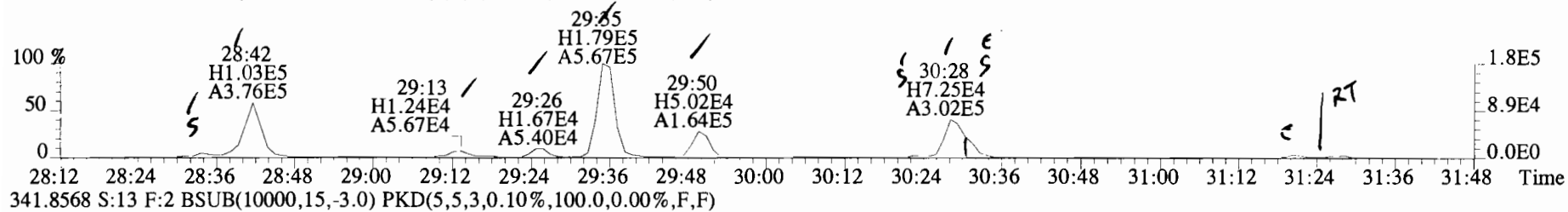
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



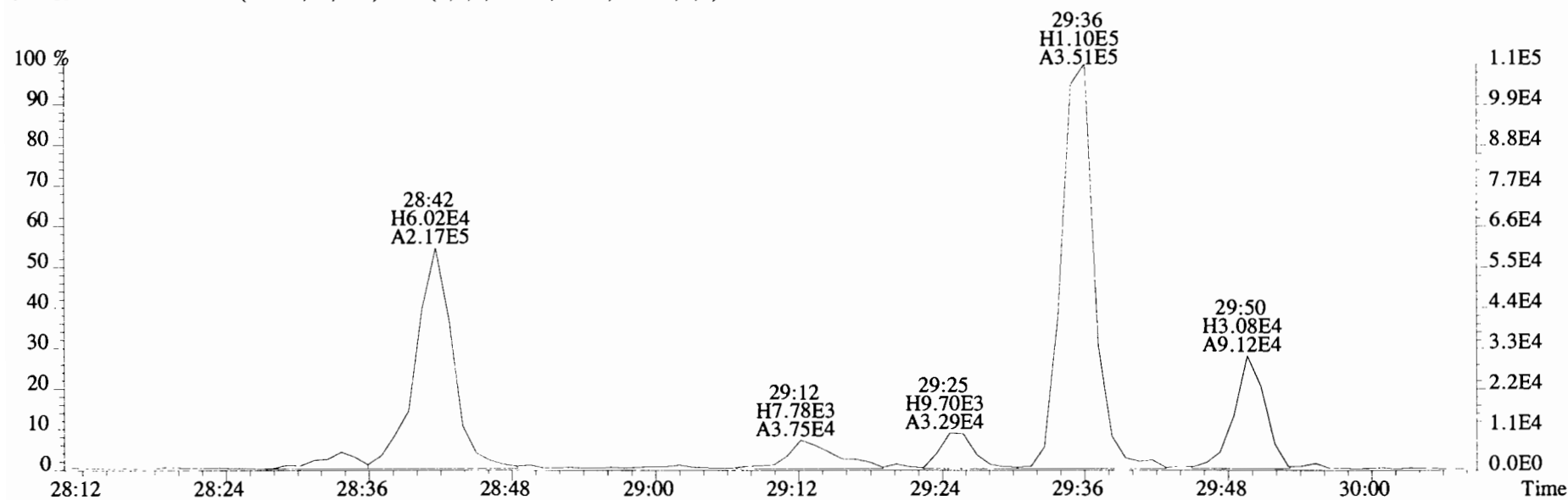
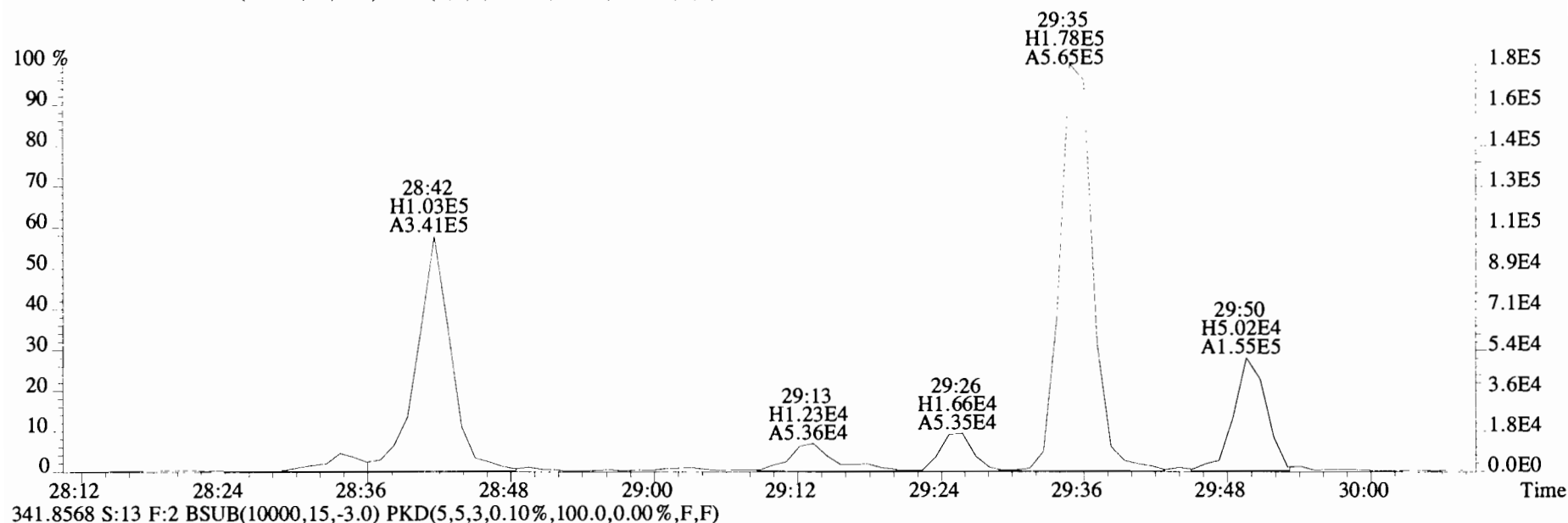
File:191031D2 #1-493 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



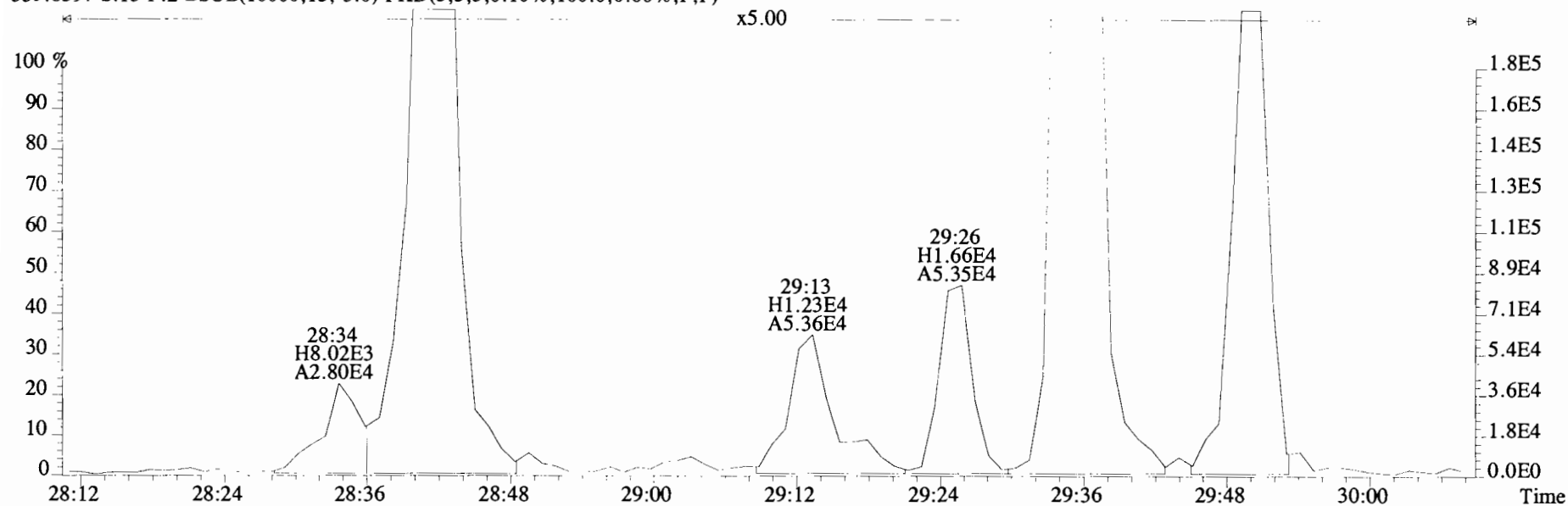
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



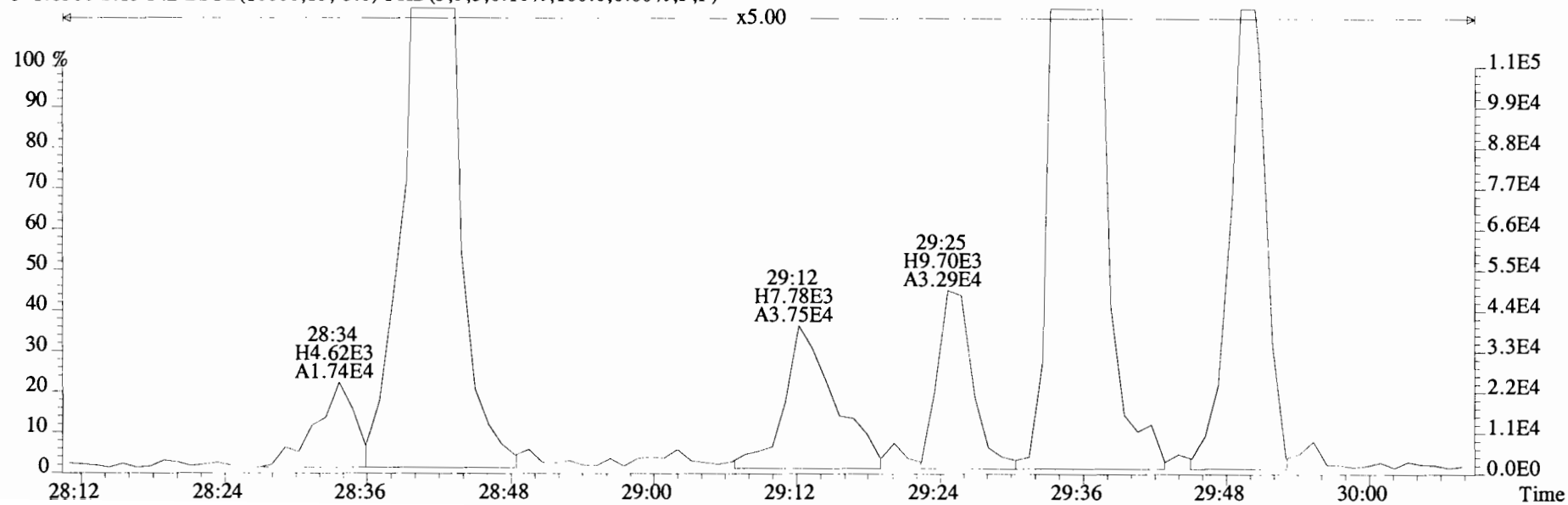
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



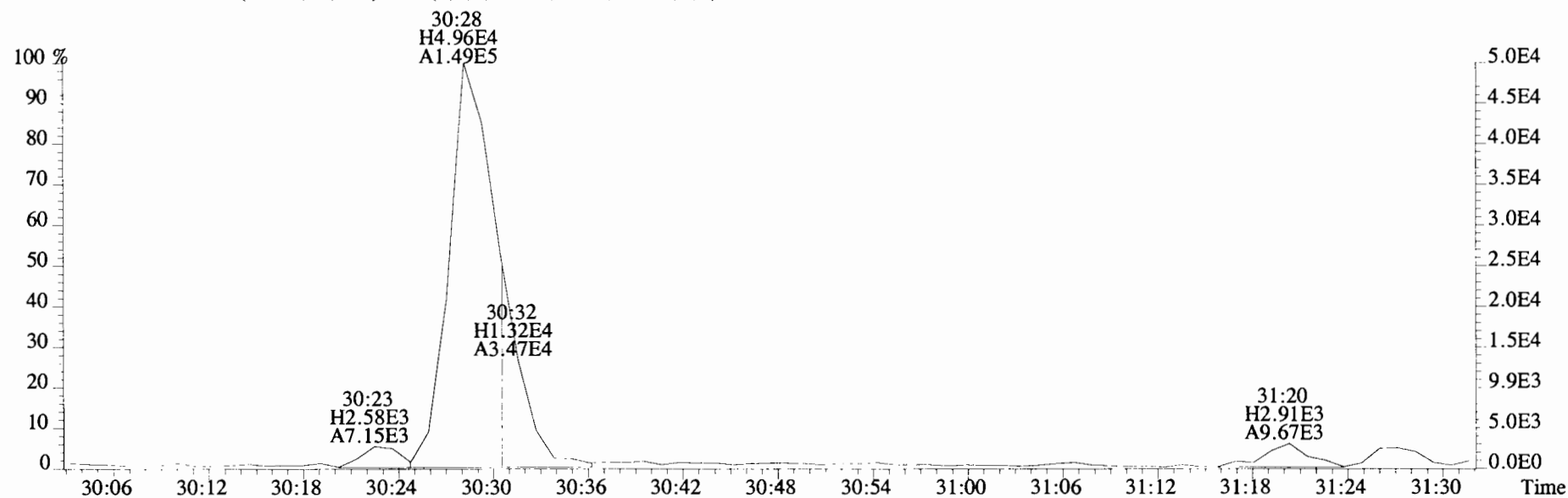
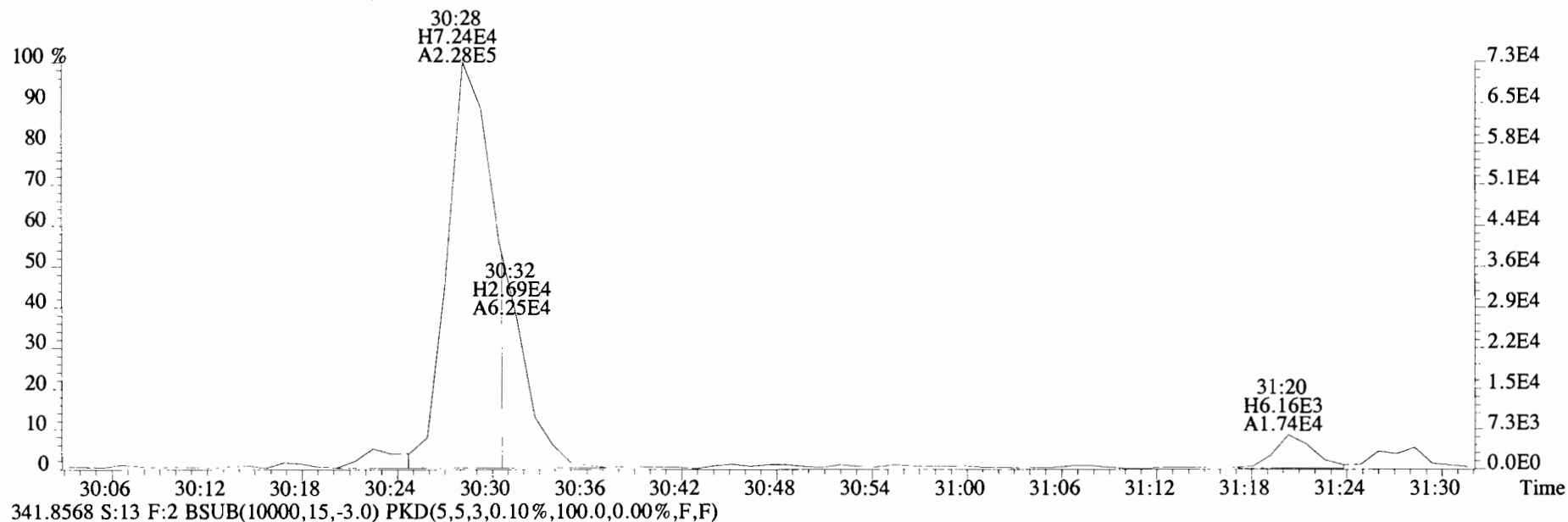
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



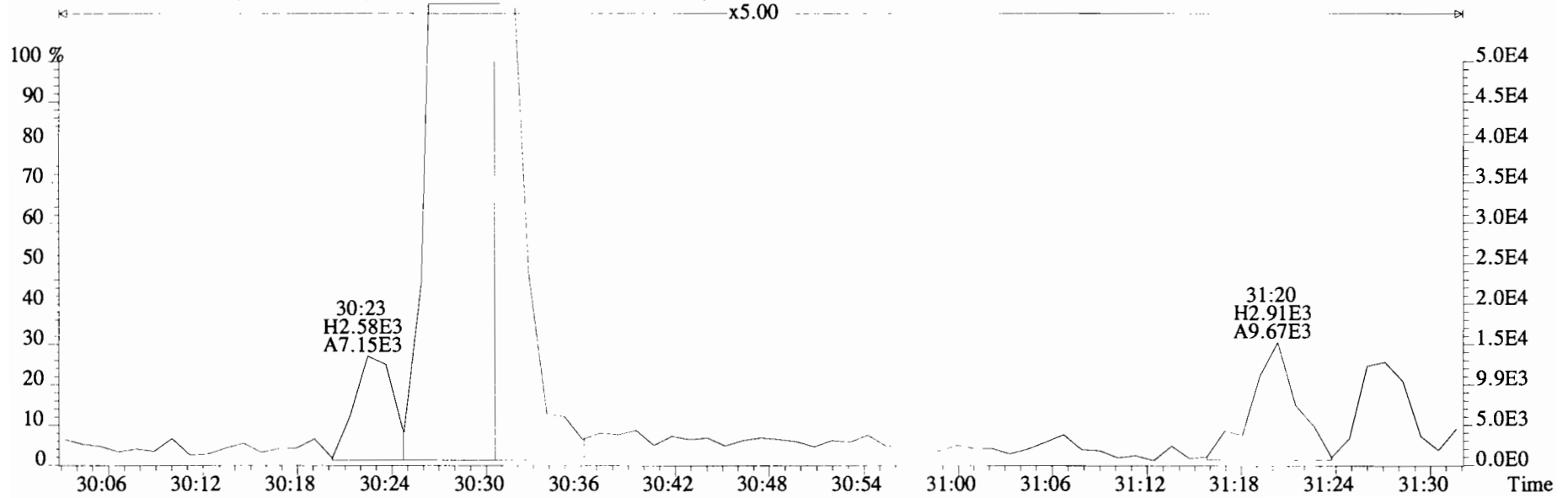
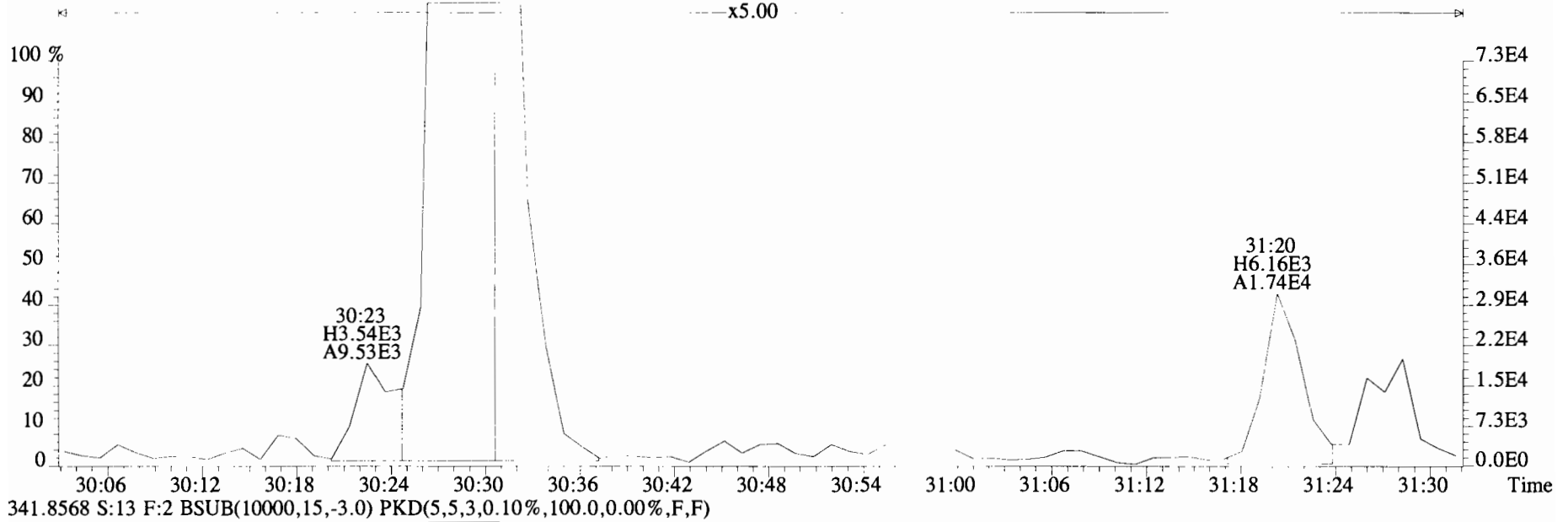
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



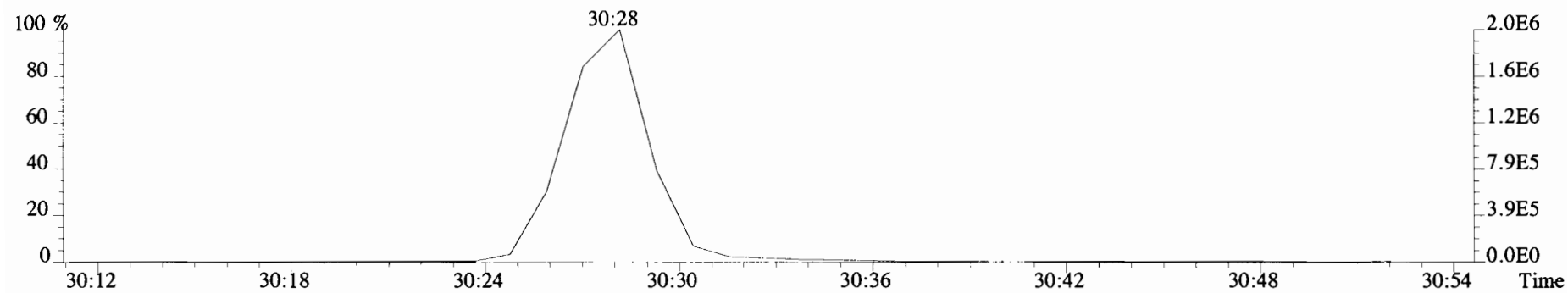
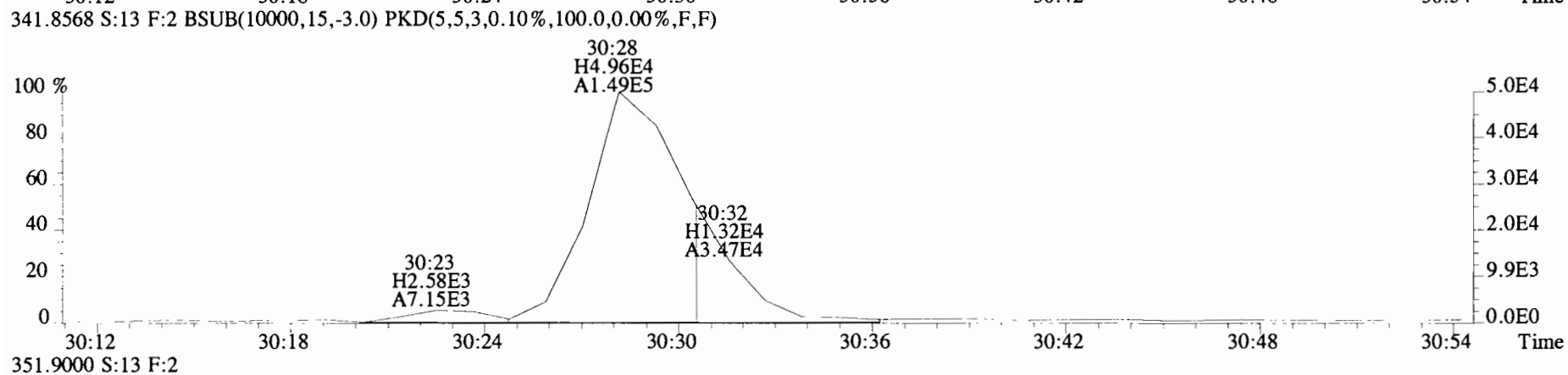
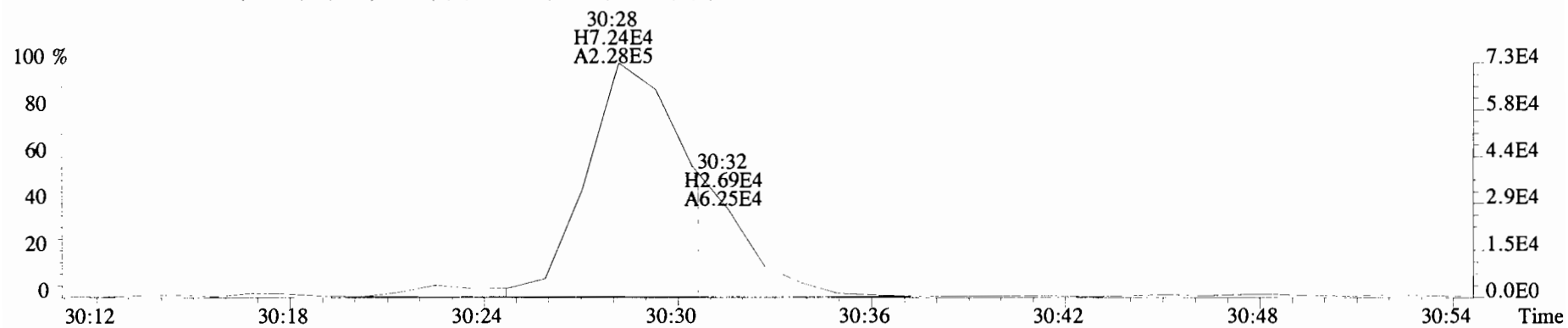
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



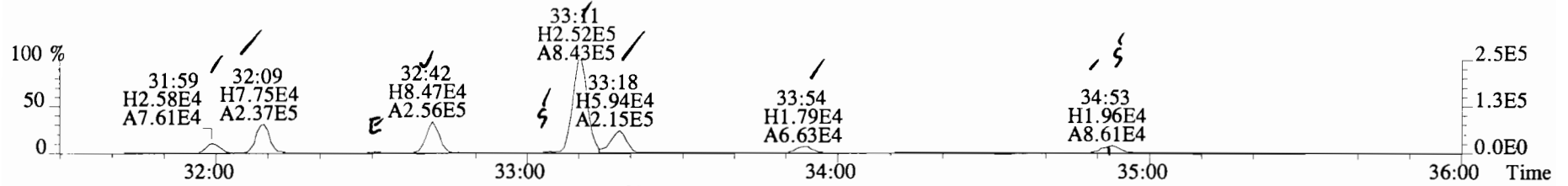
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



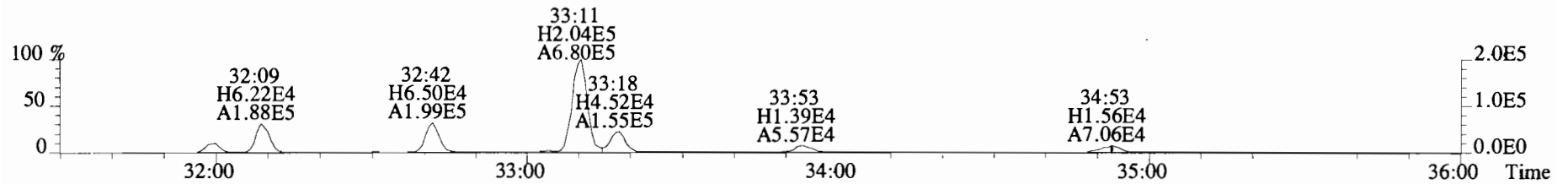
File:191031D2 #1-211 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



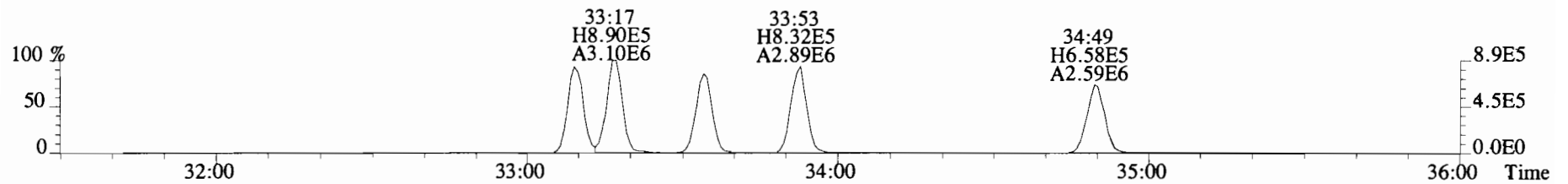
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



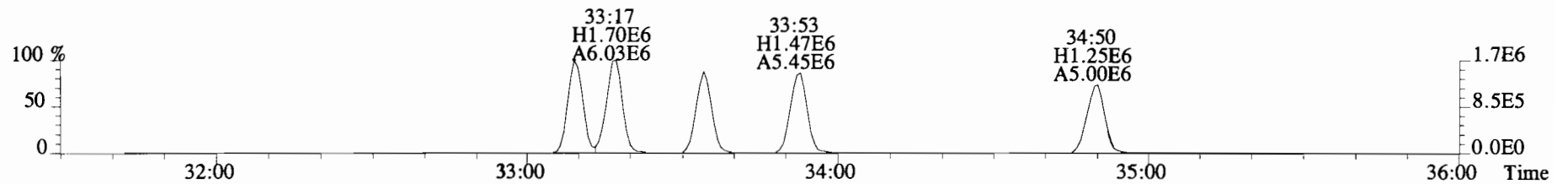
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



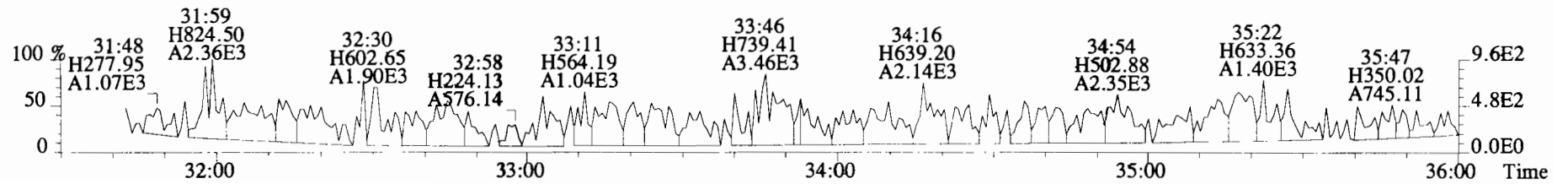
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



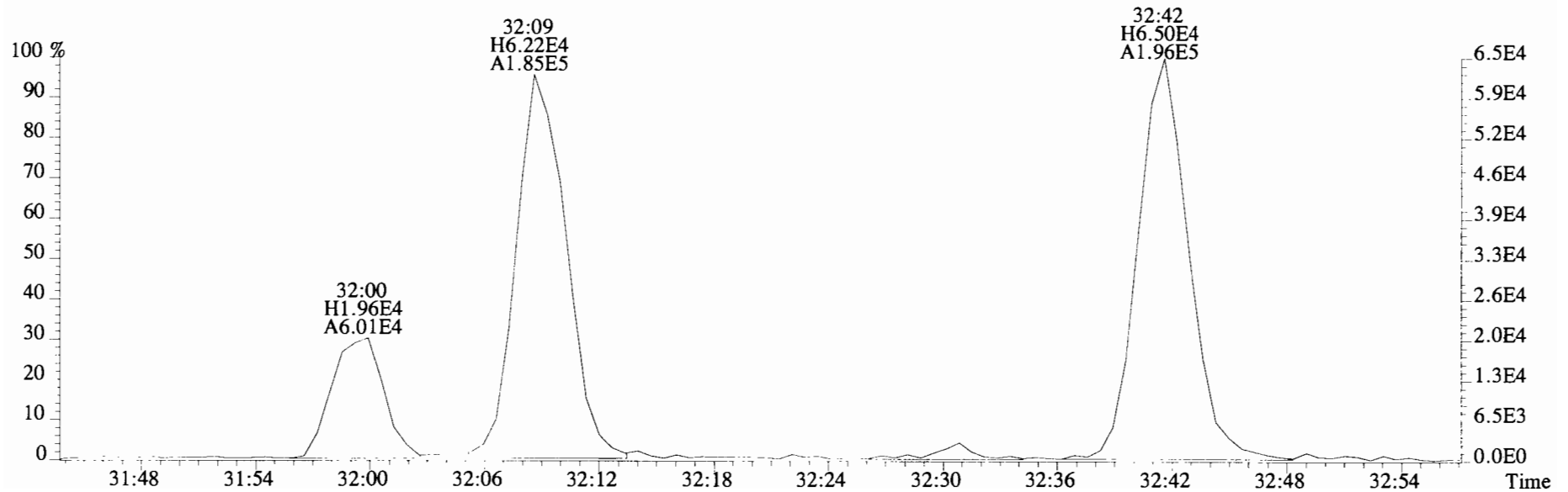
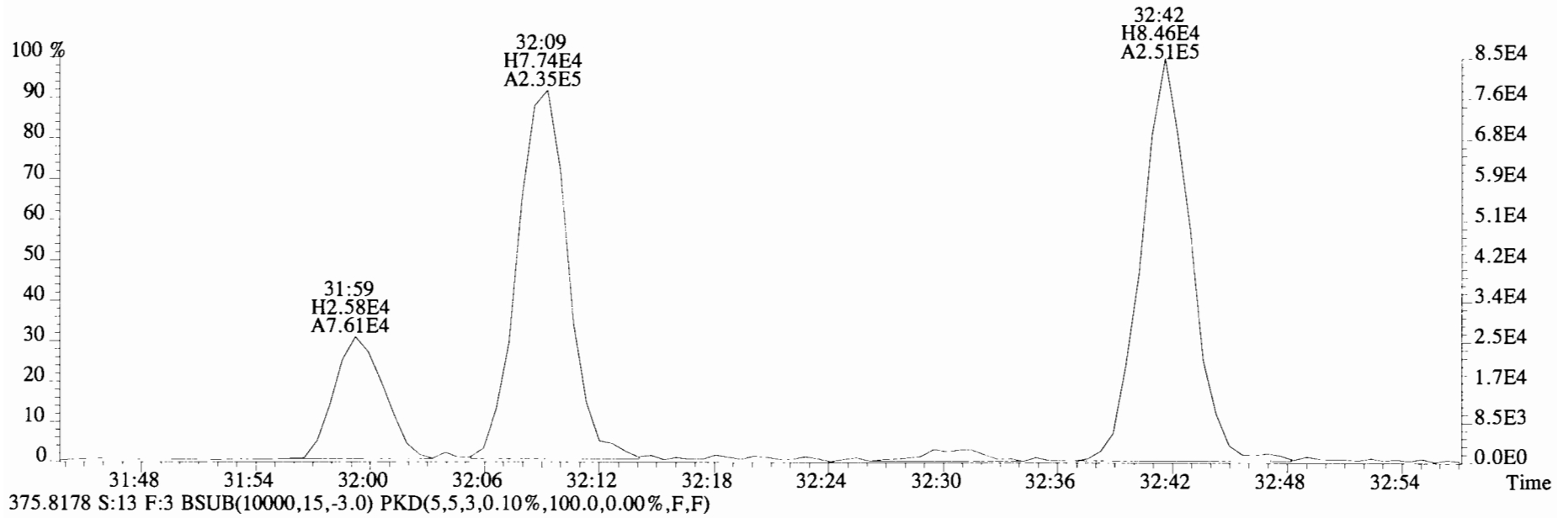
385.8610 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



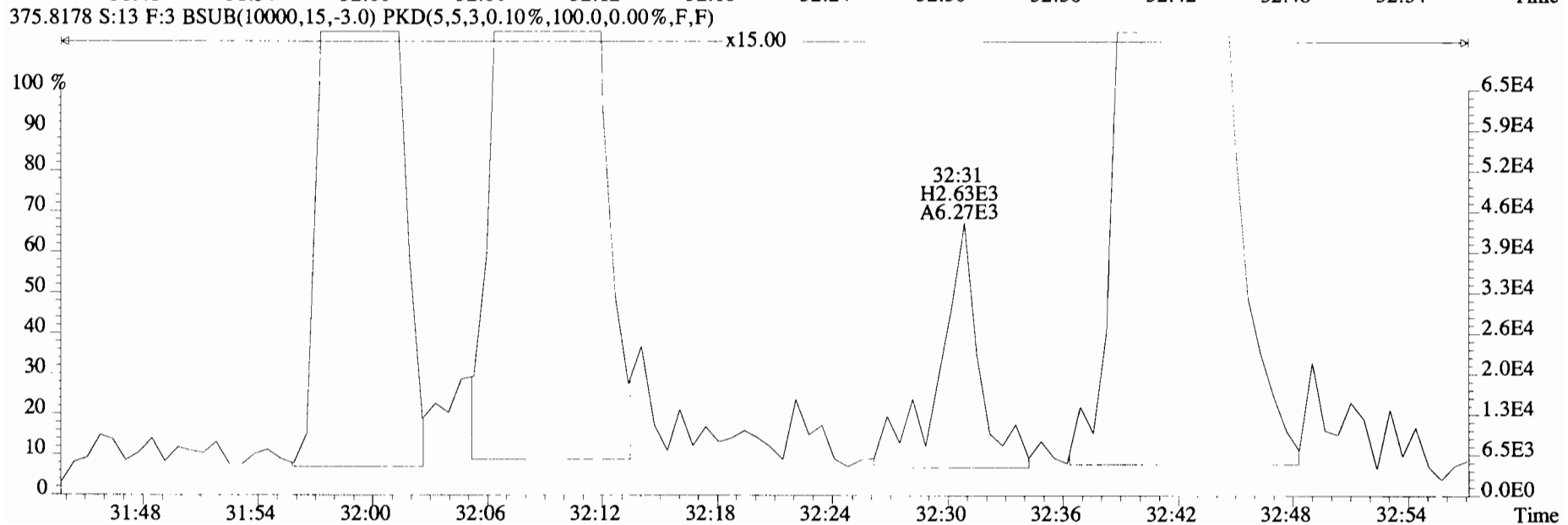
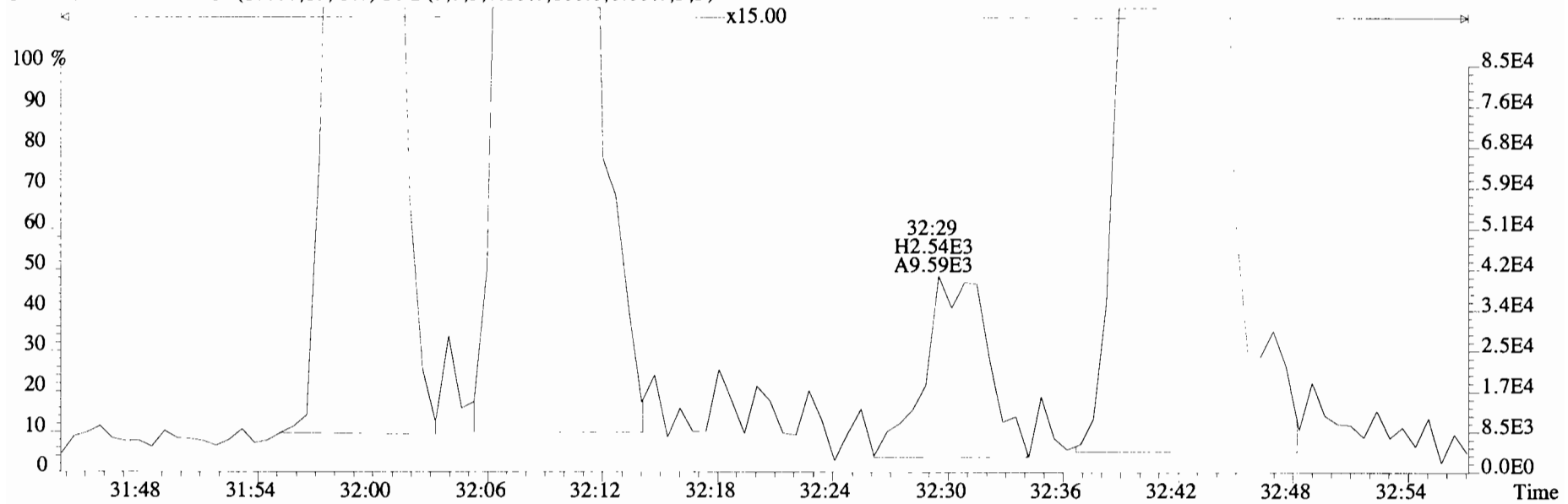
445.7555 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



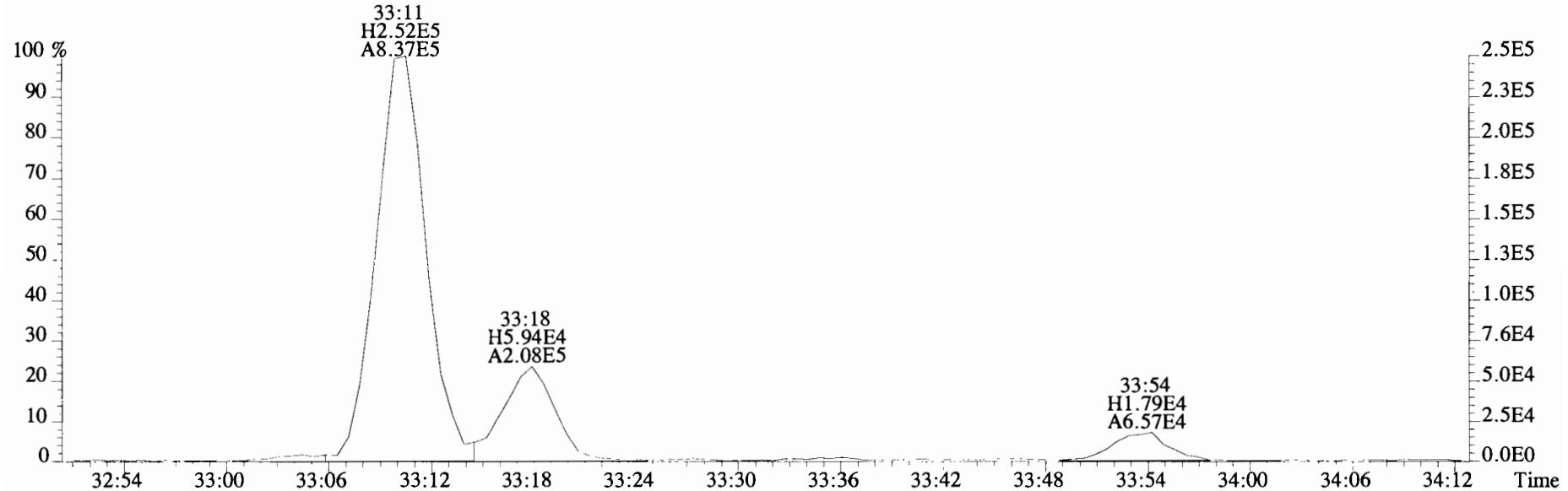
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



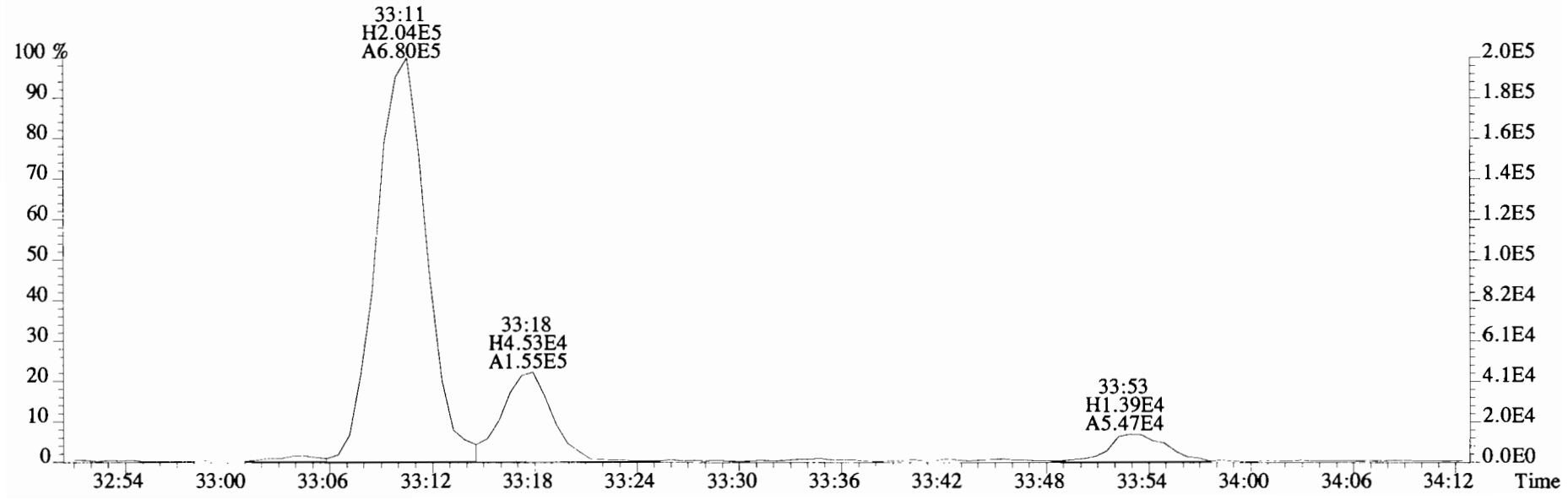
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



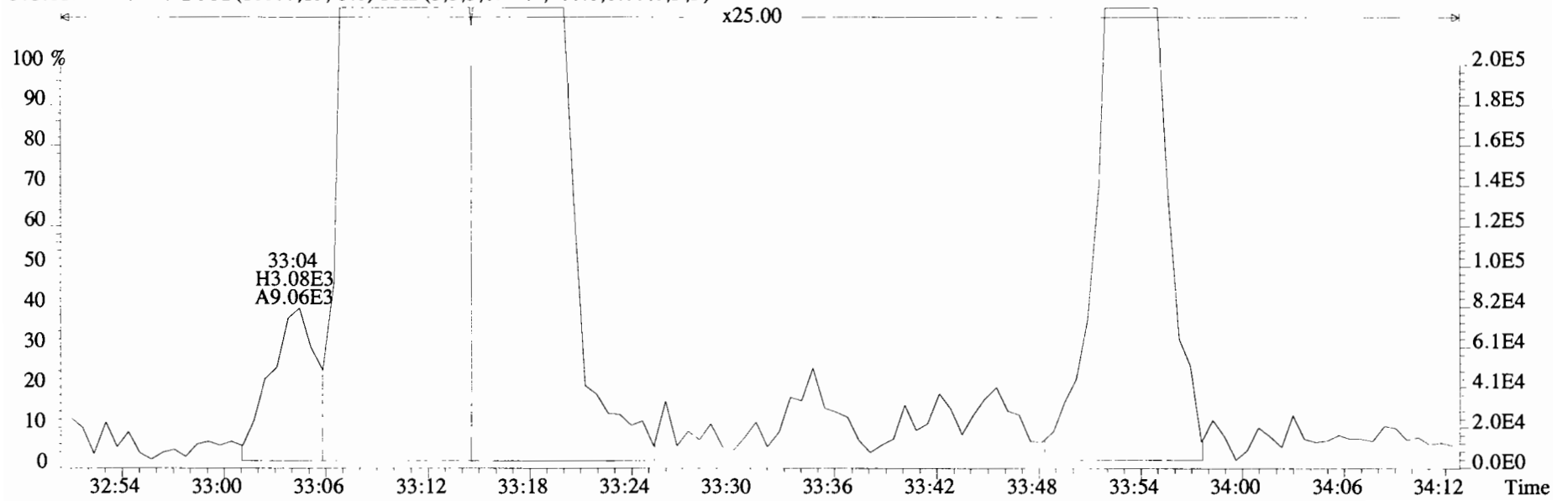
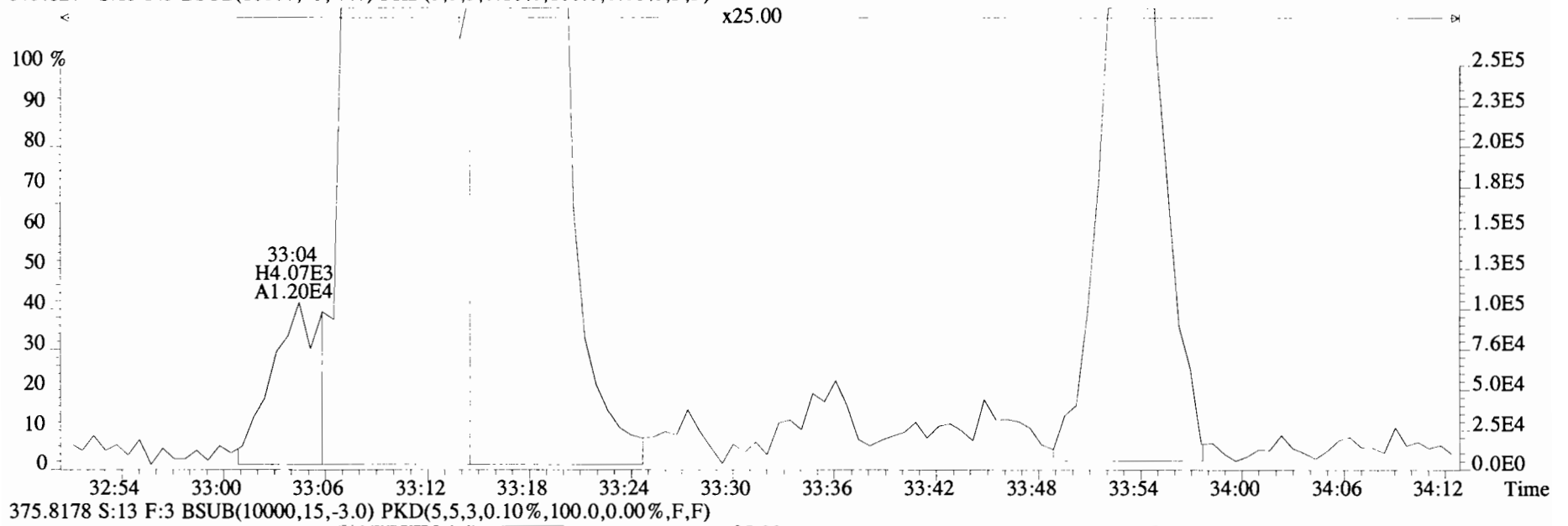
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



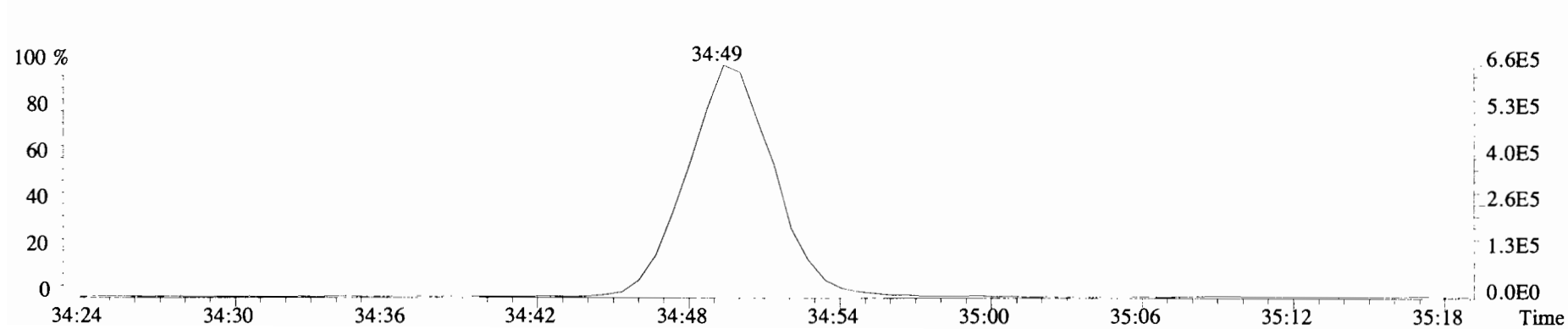
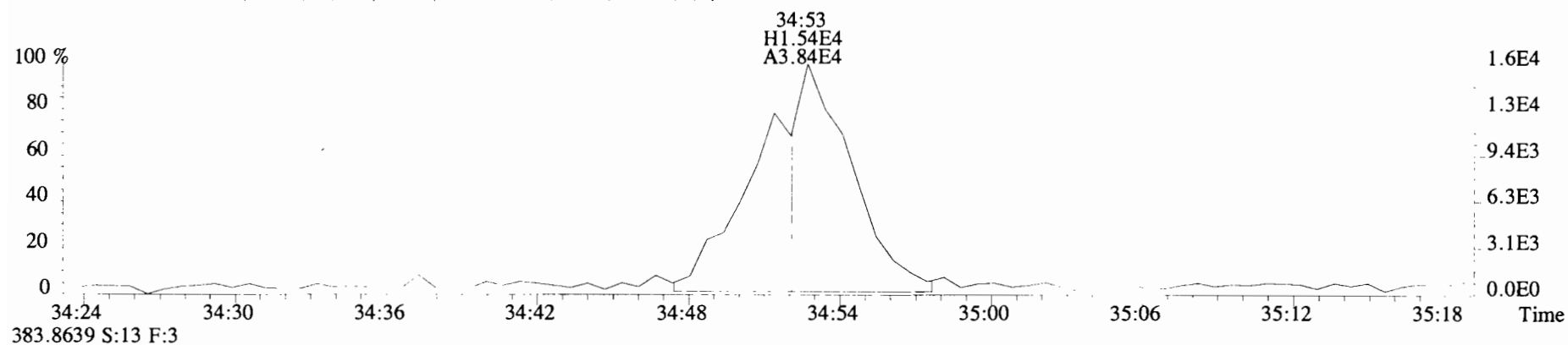
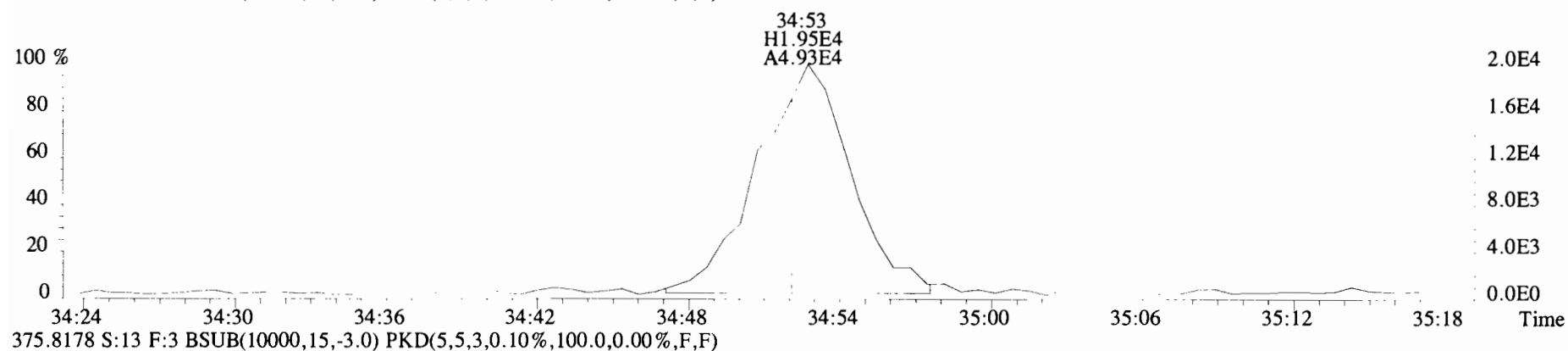
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



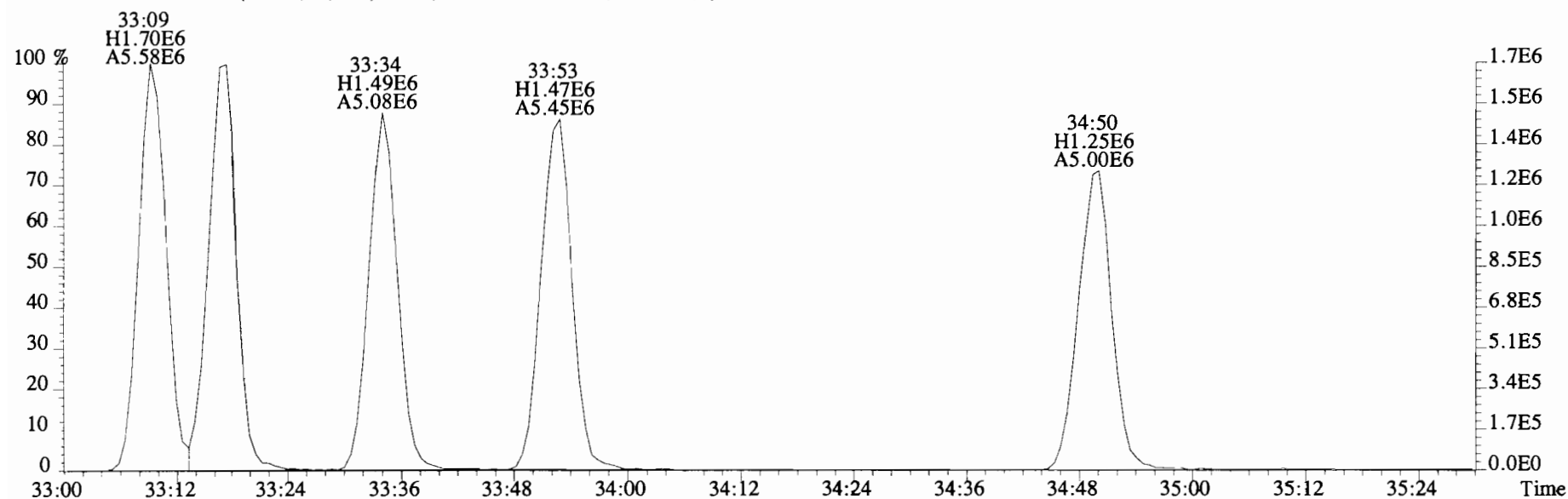
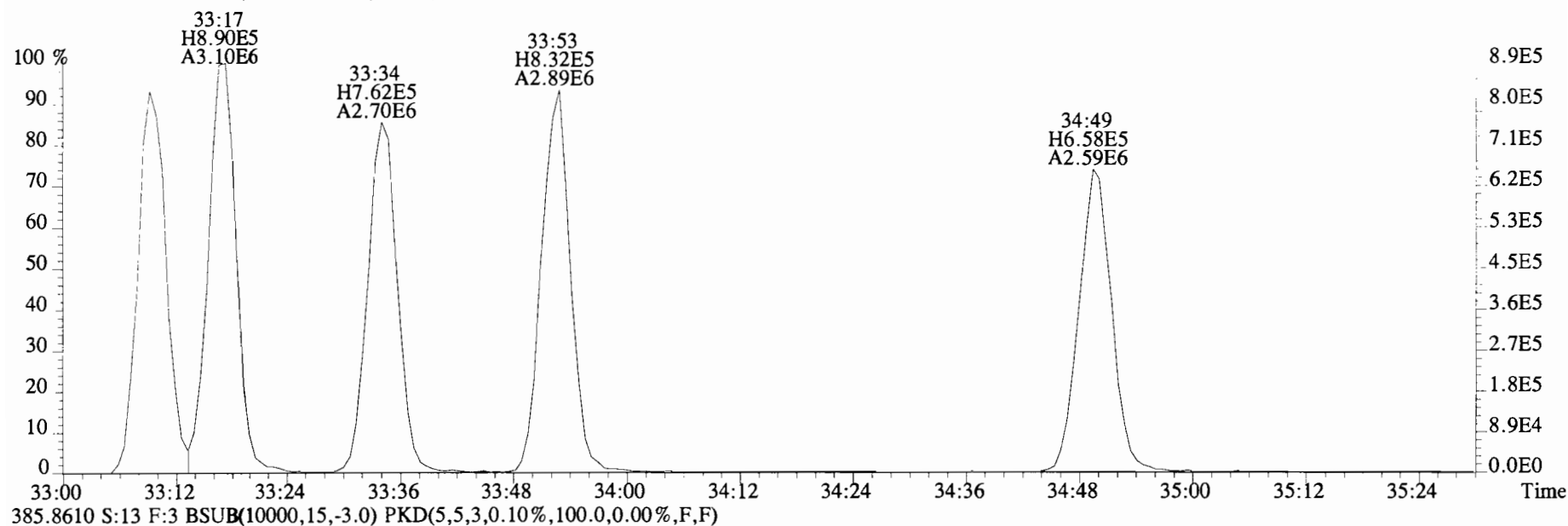
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Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



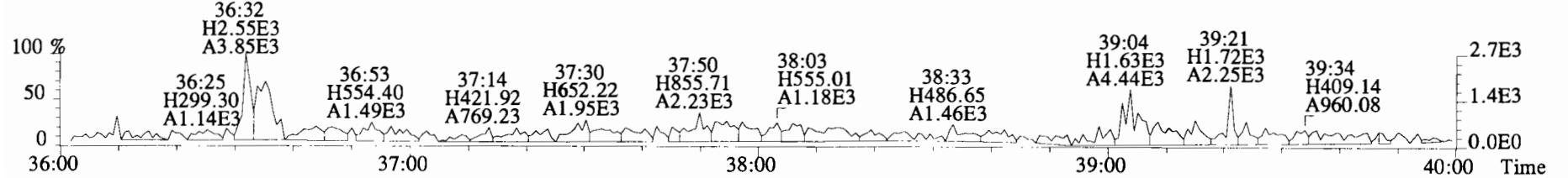
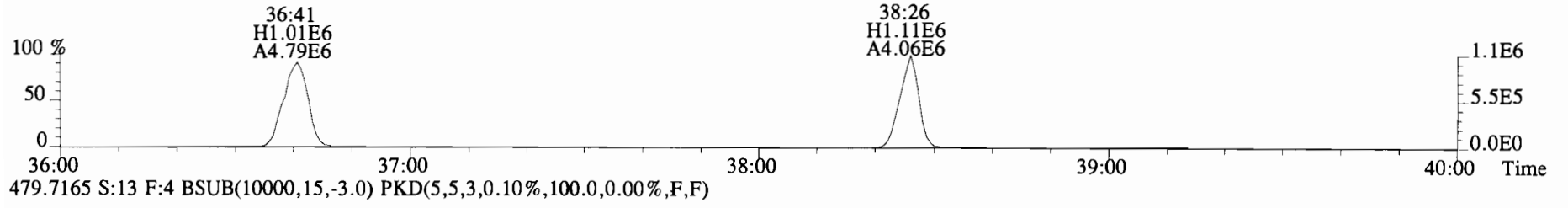
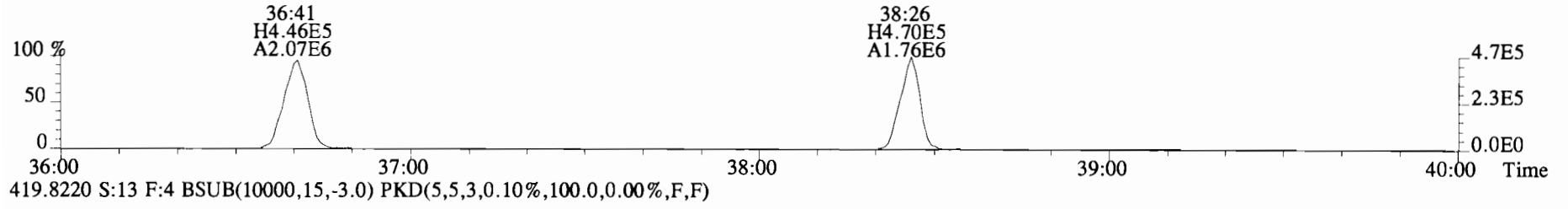
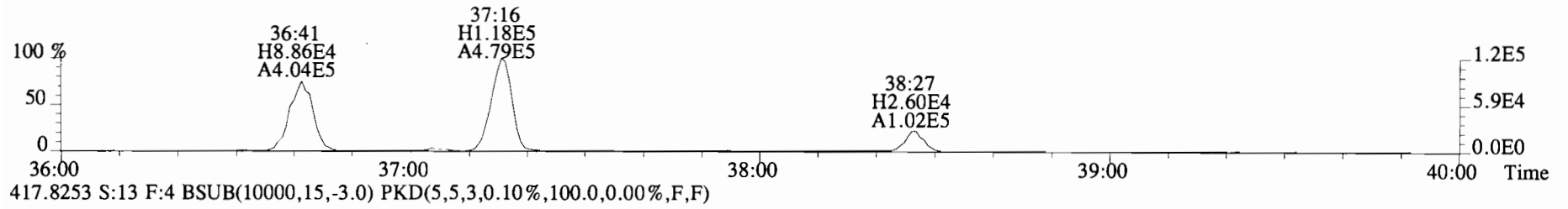
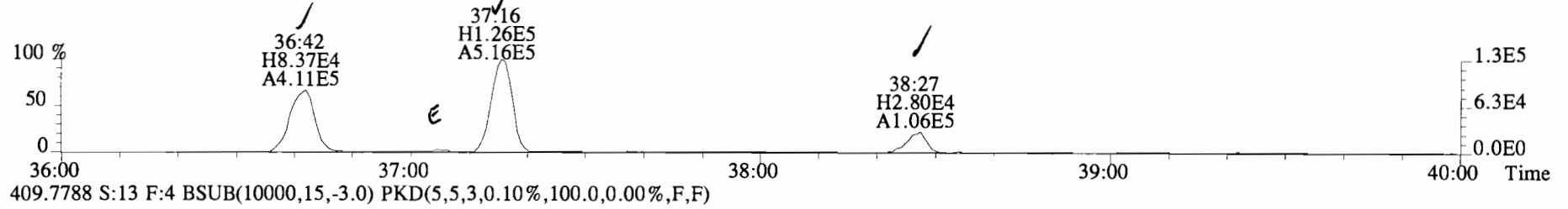
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



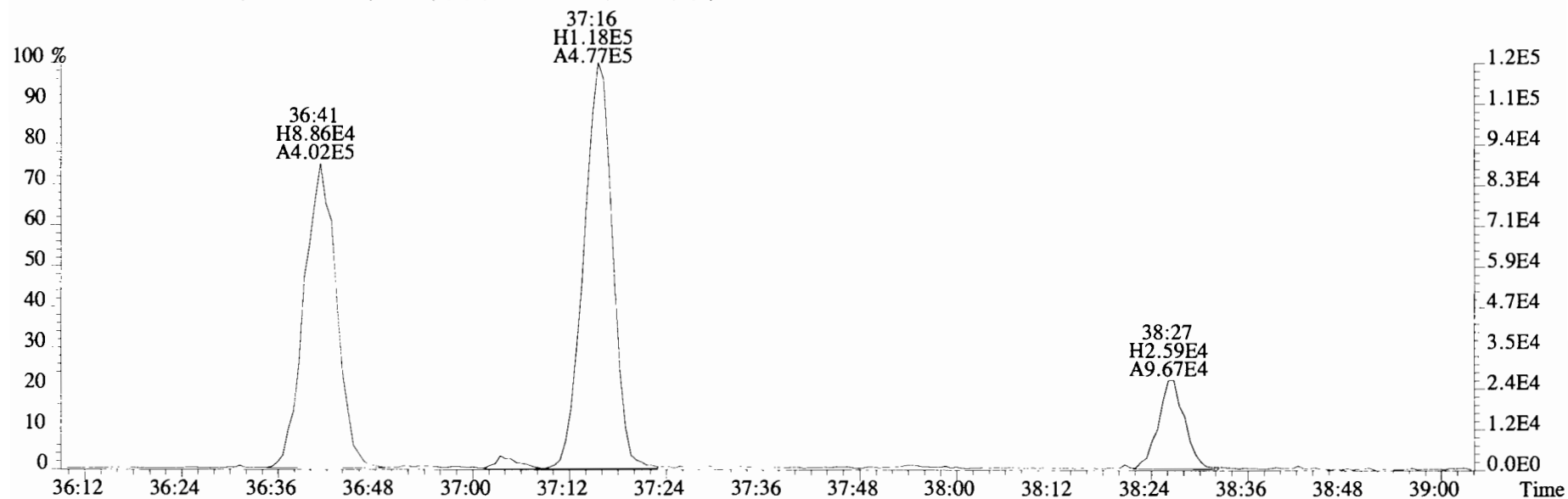
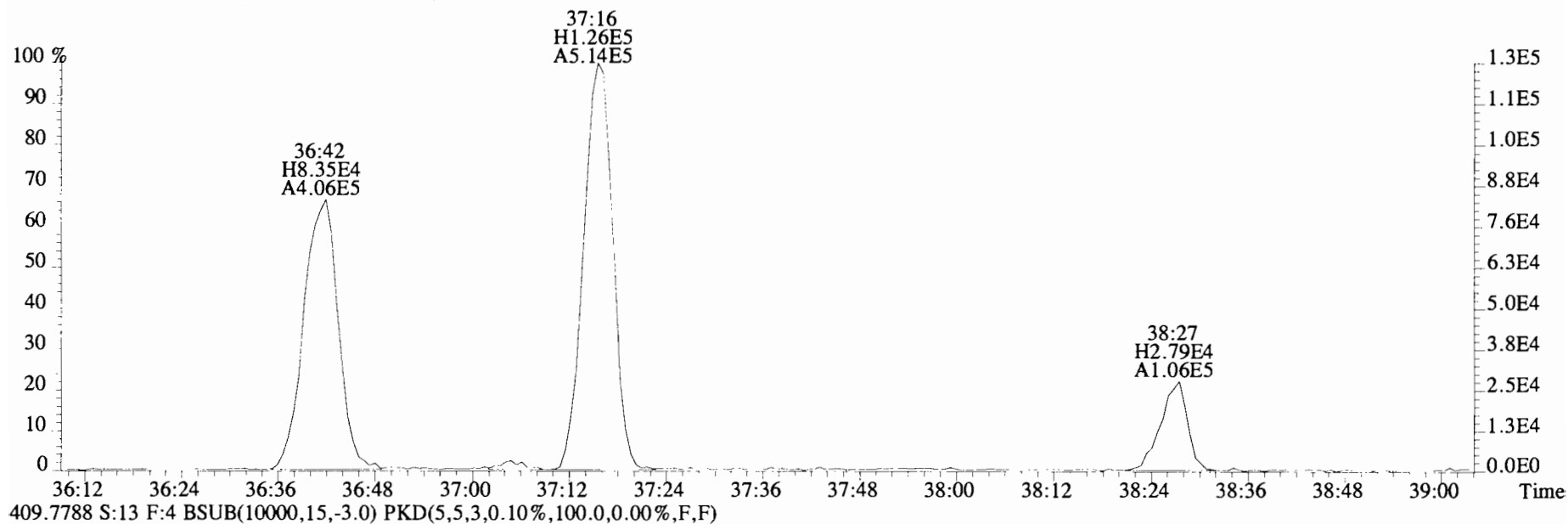
File:191031D2 #1-384 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



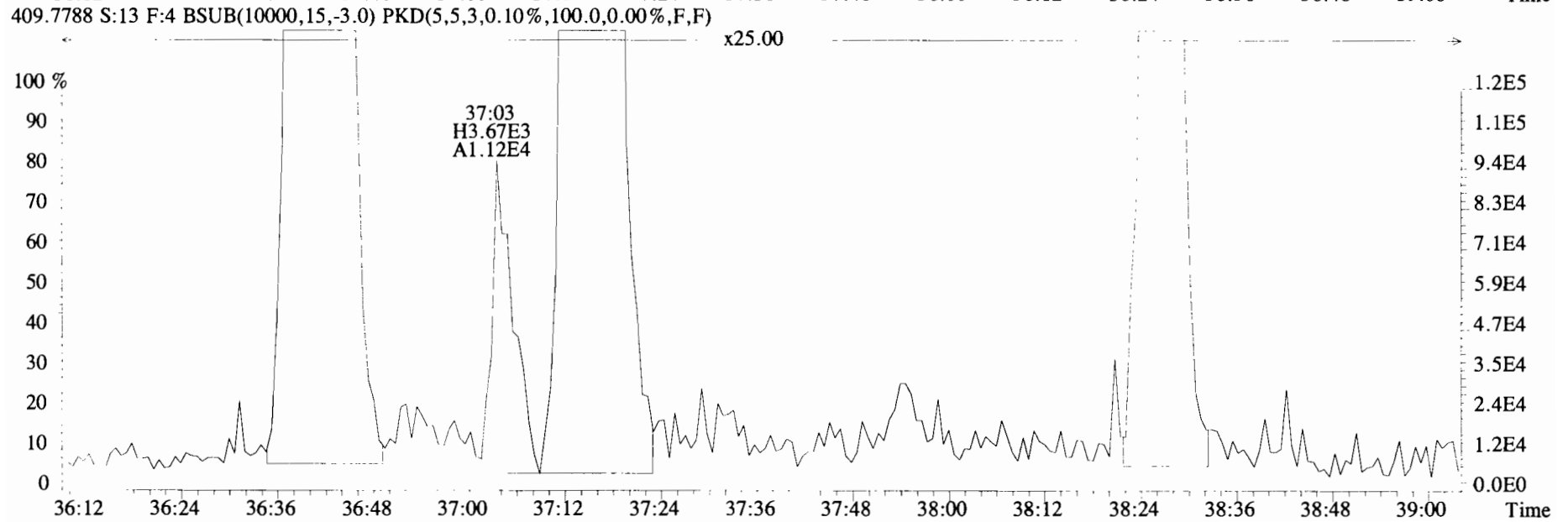
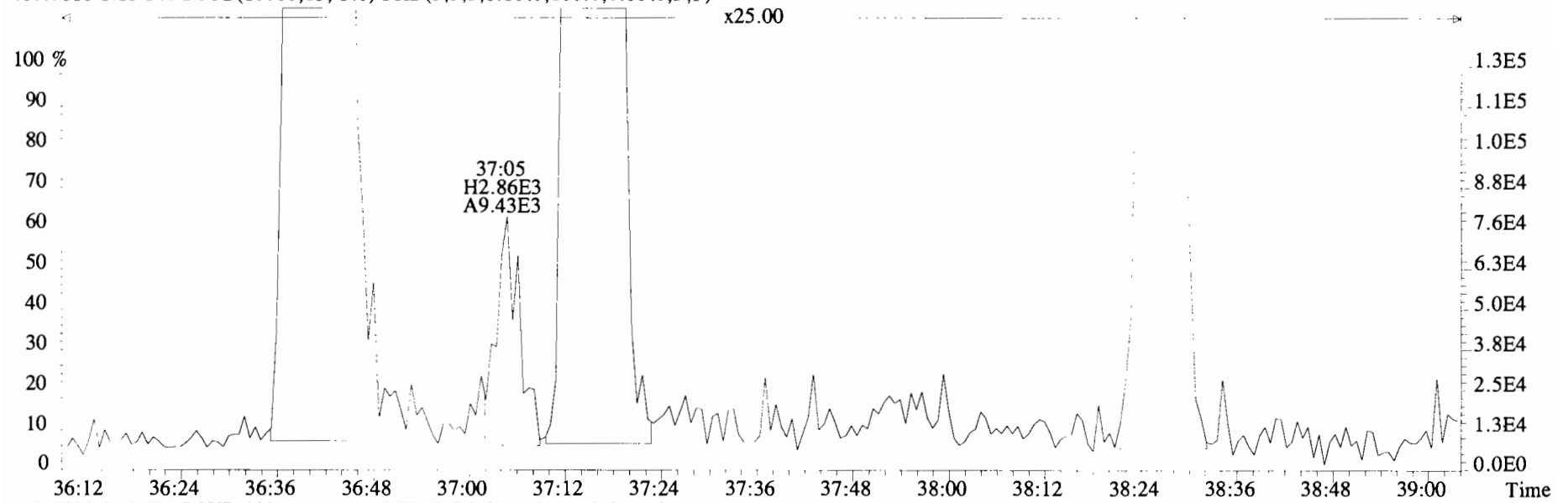
File:191031D2 #1-356 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



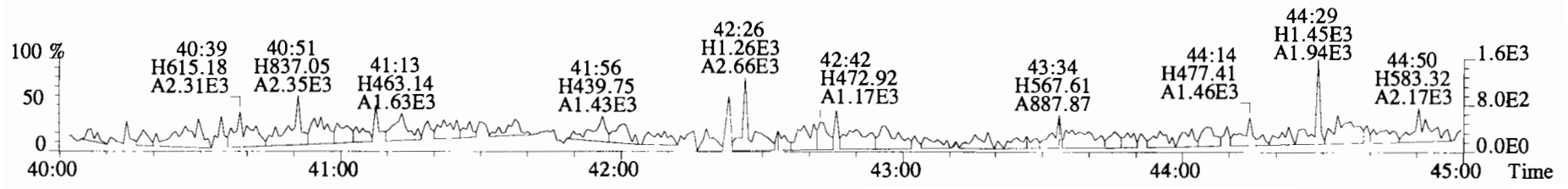
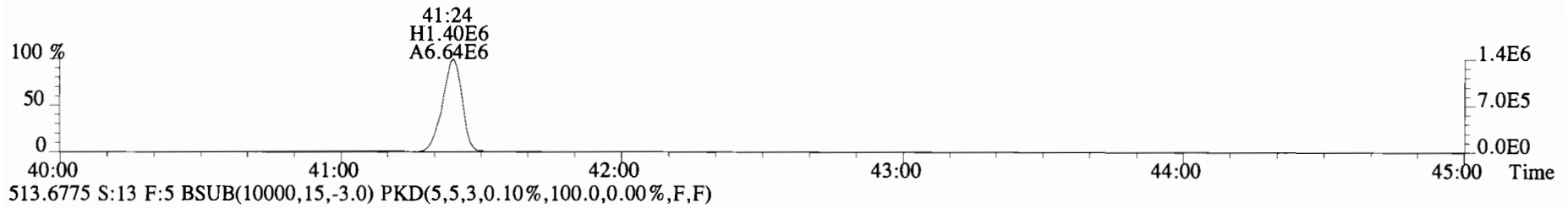
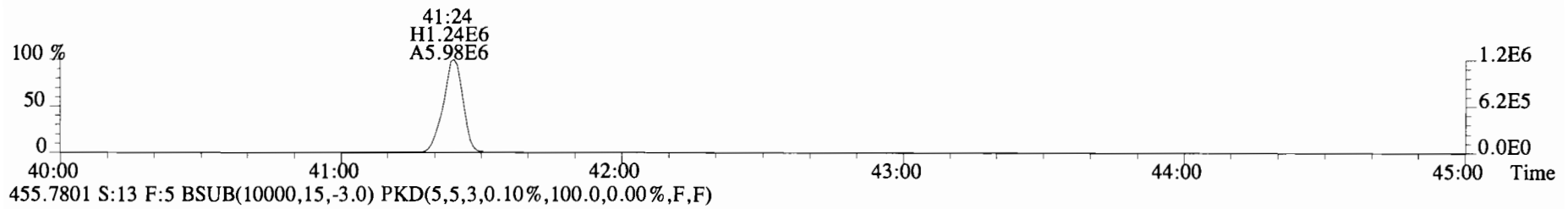
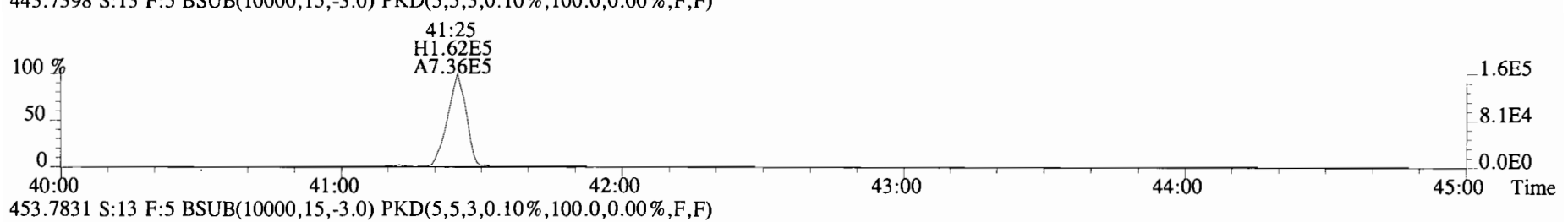
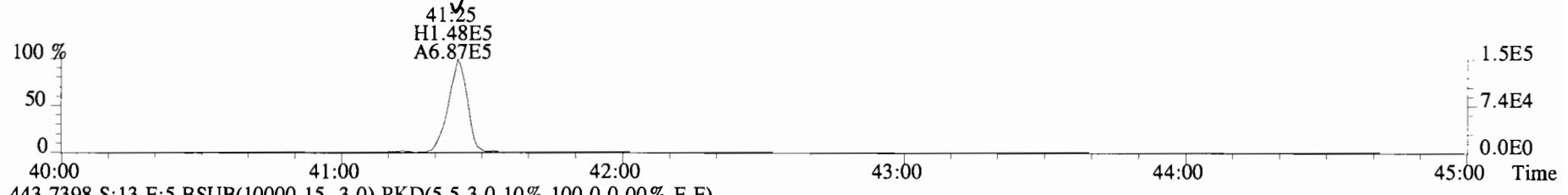
File:191031D2 #1-356 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



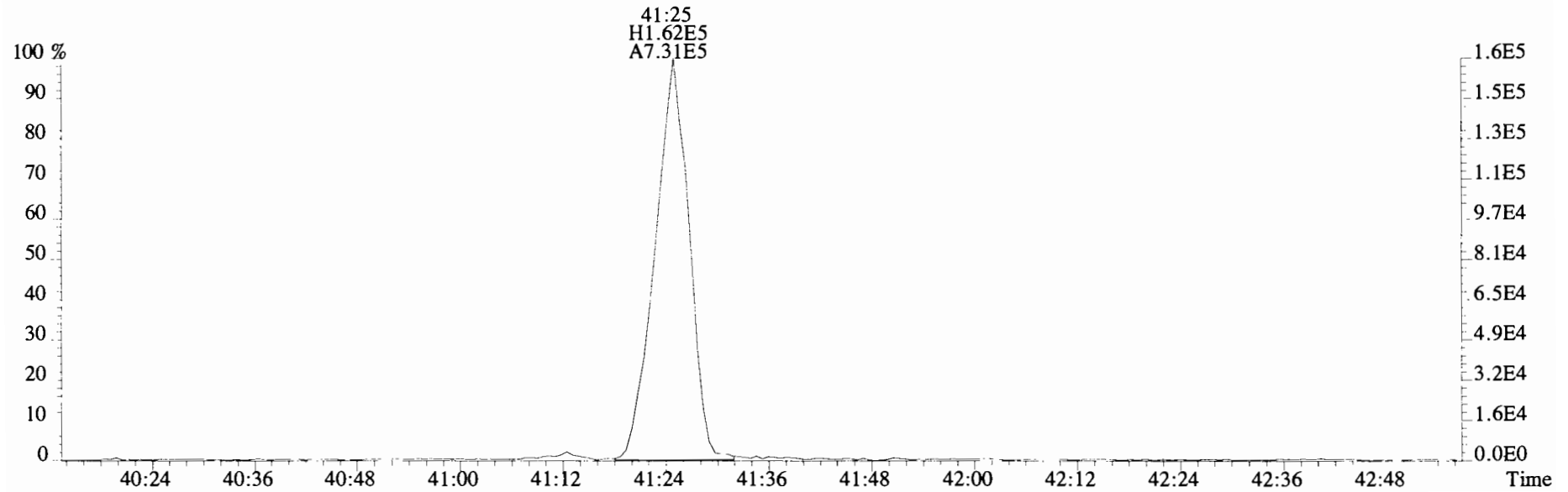
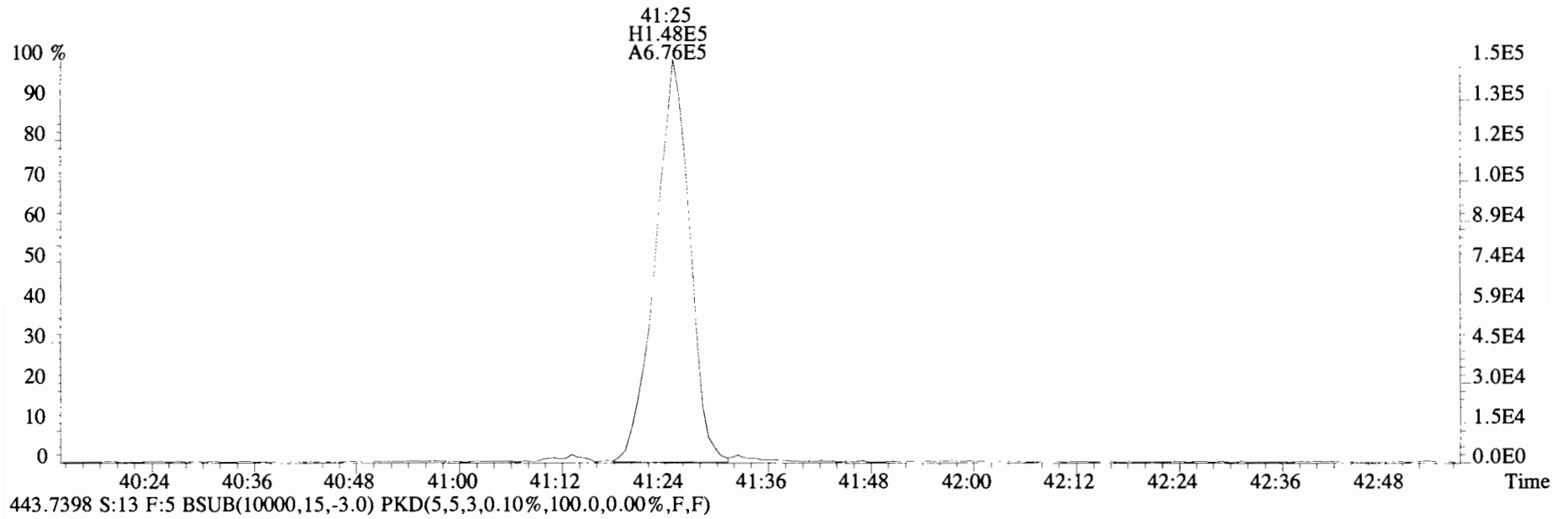
File:191031D2 #1-356 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
 441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 09:16:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE1 PDI-084SC-B-00-02-191002 20.39 Exp:OCDD_DB5
441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-084SC-B-02-04-1910η Filename: 191031D2 S:14 Acq:1-NOV-19 10:04:37
 Lab ID: 1903565-12RE1 GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 9.998 ✓

ConCal: ST191031D2-1
 EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	8.91e+04	0.78 y	0.91	26:16	2.8043			* 2.5	*	Total Tetra-Dioxins	22.5	24.7	*	*	
1,2,3,7,8-PeCDD	1.05e+05	0.59 y	0.90	30:45	4.3203			* 2.5	*	Total Penta-Dioxins	34.1	38.5	*	*	
1,2,3,4,7,8-HxCDD	1.11e+05	1.20 y	1.10	34:04	3.8124			* 2.5	*	Total Hexa-Dioxins	176	176	*	*	
1,2,3,6,7,8-HxCDD	6.23e+05	1.20 y	0.94	34:10	22.560			* 2.5	*	Total Hepta-Dioxins	1100	1100	*	*	
1,2,3,7,8,9-HxCDD	2.74e+05	1.22 y	0.96	34:29	9.4035			* 2.5	*	Total Tetra-Furans	989	1020	*	*	P
1,2,3,4,6,7,8-HpCDD	1.25e+07	1.04 y	0.98	37:55	464.23			* 2.5	*	Total Penta-Furans	1296.8	1296.8	*	*	P
OCDD	1.44e+08	0.91 y	0.96	41:13	5780.9			* 2.5	*	Total Hexa-Furans	1490	1490	*	*	
										Total Hepta-Furans	963	963	*	*	
2,3,7,8-TCDF	1.98e+07	0.78 y	0.95	25:30	344.04	(3006)		* 2.5	*						
1,2,3,7,8-PeCDF	2.48e+07	1.59 y	0.96	29:35	490.89			* 2.5	*						
2,3,4,7,8-PeCDF	1.00e+07	1.58 y	1.01	30:28	206.29			* 2.5	*						
1,2,3,4,7,8-HxCDF	4.21e+07	1.24 y	1.18	33:10	833.87			* 2.5	*						
1,2,3,6,7,8-HxCDF	1.06e+07	1.24 y	1.07	33:18	214.77			* 2.5	*						
2,3,4,6,7,8-HxCDF	2.55e+06	1.25 y	1.11	33:54	56.437			* 2.5	*						
1,2,3,7,8,9-HxCDF	1.33e+06	1.16 y	1.06	34:51	32.832			* 2.5	*						
1,2,3,4,6,7,8-HpCDF	1.52e+07	1.04 y	1.13	36:43	401.69			* 2.5	*						
1,2,3,4,7,8,9-HpCDF	5.74e+06	1.04 y	1.28	38:27	152.81			* 2.5	*						
OCDF	2.53e+07	0.90 y	0.95	41:26	788.42			* 2.5	*						
IS	13C-2,3,7,8-TCDD	7.02e+06	0.78 y	1.10	26:15	215.76				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	5.39e+06	0.65 y	0.88	30:45	206.01				108					
IS	13C-1,2,3,4,7,8-HxCDD	5.31e+06	1.32 y	0.64	34:04	205.72				103					
IS	13C-1,2,3,6,7,8-HxCDD	5.88e+06	1.27 y	0.86	34:10	171.06				85.5					
IS	13C-1,2,3,7,8,9-HxCDD	6.06e+06	1.26 y	0.81	34:28	186.74				93.4					
IS	13C-1,2,3,4,6,7,8-HpCDD	5.49e+06	1.06 y	0.65	37:54	208.93				104					
IS	13C-OCDD	1.04e+07	0.91 y	0.58	41:12	446.70				112					
IS	13C-2,3,7,8-TCDF	1.21e+07	0.81 y	1.03	25:29	233.84				117					
IS	13C-1,2,3,7,8-PeCDF	1.05e+07	1.60 y	0.85	29:35	246.57				123					
IS	13C-2,3,4,7,8-PeCDF	9.59e+06	1.62 y	0.85	30:28	226.64				113					
IS	13C-1,2,3,4,7,8-HxCDF	8.58e+06	0.52 y	0.83	33:10	256.57				128					
IS	13C-1,2,3,6,7,8-HxCDF	9.26e+06	0.51 y	1.03	33:18	222.67				111					
IS	13C-2,3,4,6,7,8-HxCDF	8.12e+06	0.53 y	0.95	33:53	211.78				106					
IS	13C-1,2,3,7,8,9-HxCDF	7.61e+06	0.51 y	0.83	34:51	228.68				114					
IS	13C-1,2,3,4,6,7,8-HpCDF	6.71e+06	0.45 y	0.76	36:42	220.33				110					
IS	13C-1,2,3,4,7,8,9-HpCDF	5.87e+06	0.43 y	0.58	38:27	251.13				126					
IS	13C-OCDF	1.36e+07	0.90 y	0.69	41:26	489.49				122					
C/Up	37C1-2,3,7,8-TCDD	3.02e+06		1.20	26:16	84.938				106					
RS/RT	13C-1,2,3,4-TCDD	5.94e+06	0.76 y	1.00	25:42	200.04									
RS	13C-1,2,3,4-TCDF	9.99e+06	0.83 y	1.00	24:17	200.04									
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.04e+06	0.53 y	1.00	33:35	200.04									

Integrations
 by DB
 Analyst: DB
 Date: 11/19/19
 Reviewed
 by CT
 Analyst: CT
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 19 File: 191031D2 S: 14 I: 1 F: 1
Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 24.722 Unnamed Concentration: 21.918

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:56	1.357e+05	1.609e+05	0.84	y	2.966e+05	9.3367
23:16	3.800e+04	4.776e+04	0.80	y	8.576e+04	2.7000
23:41	1.466e+04	1.657e+04	0.88	y	3.122e+04	0.98301
24:24	9.861e+03	1.073e+04	0.92	n	1.899e+04	0.59786
24:37	2.029e+04	1.994e+04	1.02	n	3.530e+04	1.1113
24:48	2.323e+04	2.743e+04	0.85	y	5.065e+04	1.5946
24:59	7.744e+03	8.356e+03	0.93	n	1.479e+04	0.46560
25:12	7.297e+03	1.051e+04	0.69	y	1.781e+04	0.56062
25:21	8.550e+03	9.673e+03	0.88	y	1.822e+04	0.57369
25:41	8.006e+03	9.655e+03	0.83	y	1.766e+04	0.55602
26:02	4.053e+04	5.050e+04	0.80	y	9.103e+04	2.8658
26:16	3.895e+04	5.013e+04	0.78	y	8.908e+04	2.8043
26:33	8.505e+03	9.678e+03	0.88	y	1.818e+04	0.57243

2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 19 File: 191031D2 S: 14 I: 1 F: 2
 Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 38.463

Unnamed Concentration: 34.143

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:43	1.044e+05	1.705e+05	0.61 y	2.749e+05	11.297
29:10	2.071e+04	2.913e+04	0.71 y	4.984e+04	2.0480
29:36	6.471e+04	1.011e+05	0.64 y	1.658e+05	6.8120
29:45	3.399e+04	6.127e+04	0.55 y	9.526e+04	3.9144
29:51	2.427e+04	3.513e+04	0.69 y	5.940e+04	2.4409
30:03	4.887e+04	6.489e+04	0.75 n	1.058e+05	4.3460
30:21	1.023e+04	1.517e+04	0.67 y	2.540e+04	1.0437
30:45	3.904e+04	6.610e+04	0.59 y	1.051e+05	4.3203
30:50	9.623e+03	1.343e+04	0.72 y	2.305e+04	0.94717
31:07	1.287e+04	1.861e+04	0.69 y	3.147e+04	1.2933

Totals class: HxCDD EMPC

Entry #: 23

Run: 19 File: 191031D2 S: 14 I: 1 F: 3
Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 176.24 Unnamed Concentration: 140.463

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:31	9.443e+05	7.653e+05	1.23	y	1.710e+06	59.973
33:06	1.261e+05	1.001e+05	1.26	y	2.262e+05	7.9352
33:22	1.089e+06	8.609e+05	1.26	y	1.950e+06	68.390
33:29	3.393e+04	2.597e+04	1.31	y	5.990e+04	2.1013
34:04	6.073e+04	5.073e+04	1.20	y	1.115e+05	3.8124
34:10	3.390e+05	2.837e+05	1.20	y	6.227e+05	22.560
34:22	3.127e+04	2.755e+04	1.14	y	5.881e+04	2.0632
34:29	1.504e+05	1.232e+05	1.22	y	2.737e+05	9.4035

Totals class: HpCDD EMPC

Entry #: 25

Run: 19 File: 191031D2 S: 14 I: 1 F: 4

Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 1102.2

Unnamed Concentration: 637.973

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:05	8.705e+06	8.451e+06	1.03 y	1.716e+07	637.97	
37:55	6.355e+06	6.128e+06	1.04 y	1.248e+07	464.23	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 19 File: 191031D2 S: 14 I: 1 F: 1
 Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 1020.2 Unnamed Concentration: 676.177

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:49	4.502e+04	5.917e+04	0.76	y	1.042e+05	1.8146
21:22	1.121e+05	1.378e+05	0.81	y	2.500e+05	4.3536
22:01	8.703e+05	1.099e+06	0.79	y	1.970e+06	34.305
22:32	4.751e+05	6.203e+05	0.77	y	1.095e+06	19.077
22:54	2.207e+06	2.802e+06	0.79	y	5.009e+06	87.244
23:18	7.212e+05	9.406e+05	0.77	y	1.662e+06	28.944
23:27	8.986e+04	1.078e+05	0.83	y	1.977e+05	3.4434
23:35	3.705e+05	4.728e+05	0.78	y	8.433e+05	14.687
23:56	1.092e+05	1.351e+05	0.81	y	2.443e+05	4.2546
24:03	4.706e+04	6.227e+04	0.76	y	1.093e+05	1.9041
24:10	3.534e+05	4.411e+05	0.80	y	7.945e+05	13.837
24:17	1.271e+06	1.567e+06	0.81	y	2.839e+06	49.441
24:42	7.708e+06	9.562e+06	0.81	y	1.727e+07	300.79
24:57	3.387e+05	3.918e+05	0.86	y	7.304e+05	12.722
25:08	6.127e+04	7.142e+04	0.86	y	1.327e+05	2.3110
25:23	1.049e+06	1.332e+06	0.79	y	2.381e+06	41.461
25:30	8.657e+06	1.110e+07	0.78	y	1.975e+07	344.04
25:49	4.426e+05	5.195e+05	0.85	y	9.621e+05	16.756
26:02	7.810e+04	1.050e+05	0.74	y	1.831e+05	3.1892
26:44	4.621e+04	2.954e+04	1.56	n	5.229e+04	0.91078
26:49	6.394e+04	7.346e+04	0.87	y	1.374e+05	2.3930 P
26:59	6.704e+04	7.719e+04	0.87	y	1.442e+05	2.5121 P
27:15	9.748e+05	9.675e+05	1.01	n	1.713e+06	29.826

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 19 File: 191031D2 S: 14 I: 1 F: 1
Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 42.483 Unnamed Concentration: 42.483

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:15	1.308e+06	8.010e+05	1.63 y	2.109e+06	42.483

Totals class: PeCDF EMPC

Entry #: 31

Run: 19 File: 191031D2 S: 14 I: 1 F: 2
 Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 1254.3 Unnamed Concentration: 557.115

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:32	2.808e+05	1.827e+05	1.54	y	4.635e+05	9.3378
28:40	7.269e+06	4.446e+06	1.64	y	1.172e+07	236.01
29:13	7.500e+05	4.690e+05	1.60	y	1.219e+06	24.559
29:25	1.592e+06	1.000e+06	1.59	y	2.593e+06	52.232
29:35	1.524e+07	9.558e+06	1.59	y	2.479e+07	490.89
29:50	4.910e+06	3.002e+06	1.64	y	7.911e+06	159.38
30:22	1.279e+05	8.643e+04	1.48	y	2.143e+05	4.3171
30:28	6.147e+06	3.888e+06	1.58	y	1.004e+07	206.29
30:32	1.775e+06	1.091e+06	1.63	y	2.866e+06	57.734
31:20	4.067e+05	2.652e+05	1.53	y	6.718e+05	13.535

Totals class: HxCDF EMPC

Entry #: 33

Run: 19 File: 191031D2 S: 14 I: 1 F: 3
 Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 1491.6 Unnamed Concentration: 353.695

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:00	8.550e+05	7.001e+05	1.22 y	1.555e+06	33.601
32:09	3.277e+06	2.645e+06	1.24 y	5.921e+06	127.94
32:31	7.663e+04	6.130e+04	1.25 y	1.379e+05	2.9803
32:42	2.997e+06	2.396e+06	1.25 y	5.393e+06	116.53
33:04	1.857e+05	1.596e+05	1.16 y	3.453e+05	7.4610
33:10	2.333e+07	1.875e+07	1.24 y	4.208e+07	833.87
33:18	5.875e+06	4.752e+06	1.24 y	1.063e+07	214.77
33:35	1.216e+05	9.527e+04	1.28 y	2.169e+05	4.6865
33:54	1.418e+06	1.132e+06	1.25 y	2.550e+06	56.437
34:51	7.109e+05	6.149e+05	1.16 y	1.326e+06	32.832
34:54	1.557e+06	1.242e+06	1.25 y	2.800e+06	60.493

Totals class: HpCDF EMPC

Entry #: 35

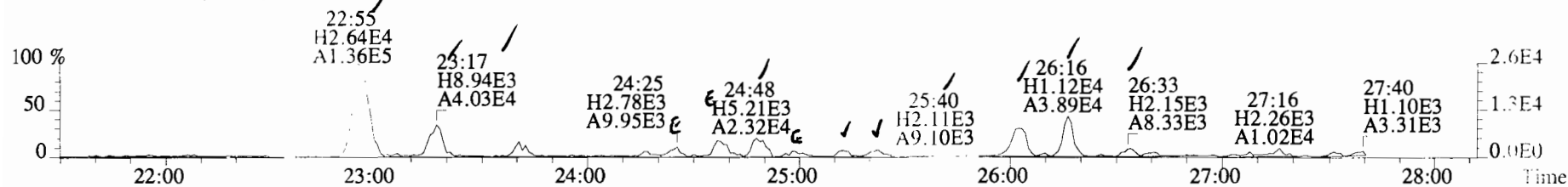
Run: 19 File: 191031D2 S: 14 I: 1 F: 4
 Acquired: 1-NOV-19 10:04:37 Processed: 1-NOV-19 12:03:24

Total Concentration: 962.91

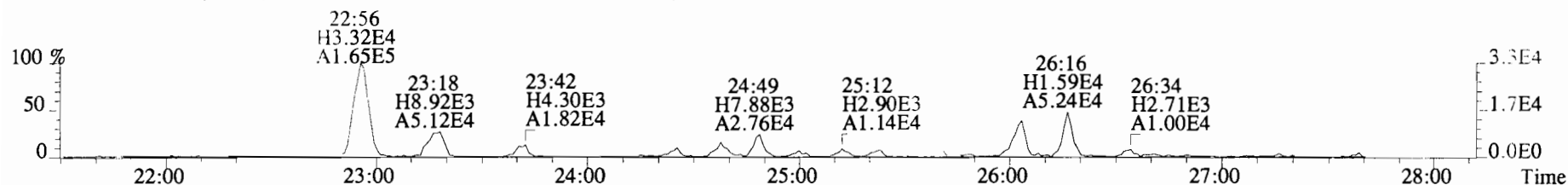
Unnamed Concentration: 408.414

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
36:43	7.745e+06	7.446e+06	1.04	y	1.519e+07	401.69	1,2,3,4,6,7,8-HpCDF
37:05	2.070e+05	1.920e+05	1.08	y	3.990e+05	10.633	
37:17	7.587e+06	7.340e+06	1.03	y	1.493e+07	397.78	
38:27	2.929e+06	2.808e+06	1.04	y	5.737e+06	152.81	1,2,3,4,7,8,9-HpCDF

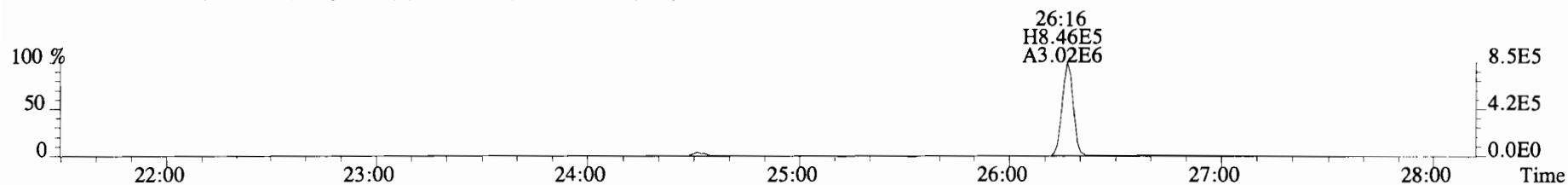
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



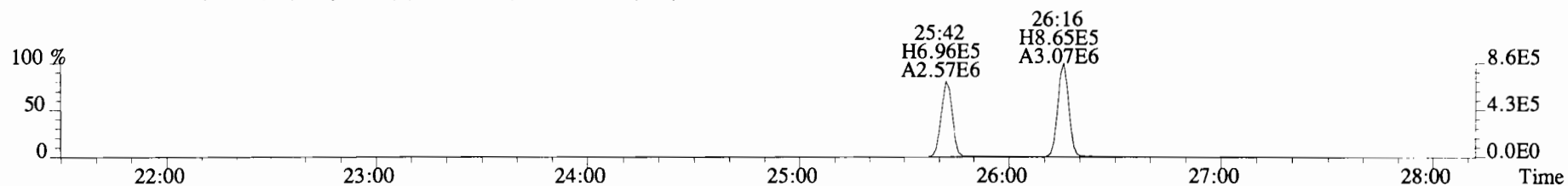
321.8936 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



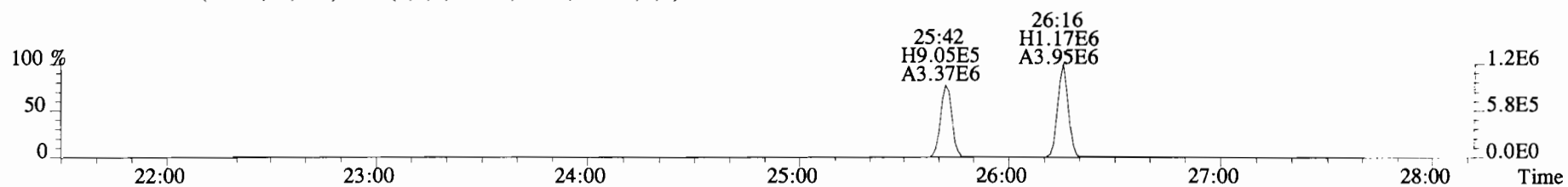
327.8847 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



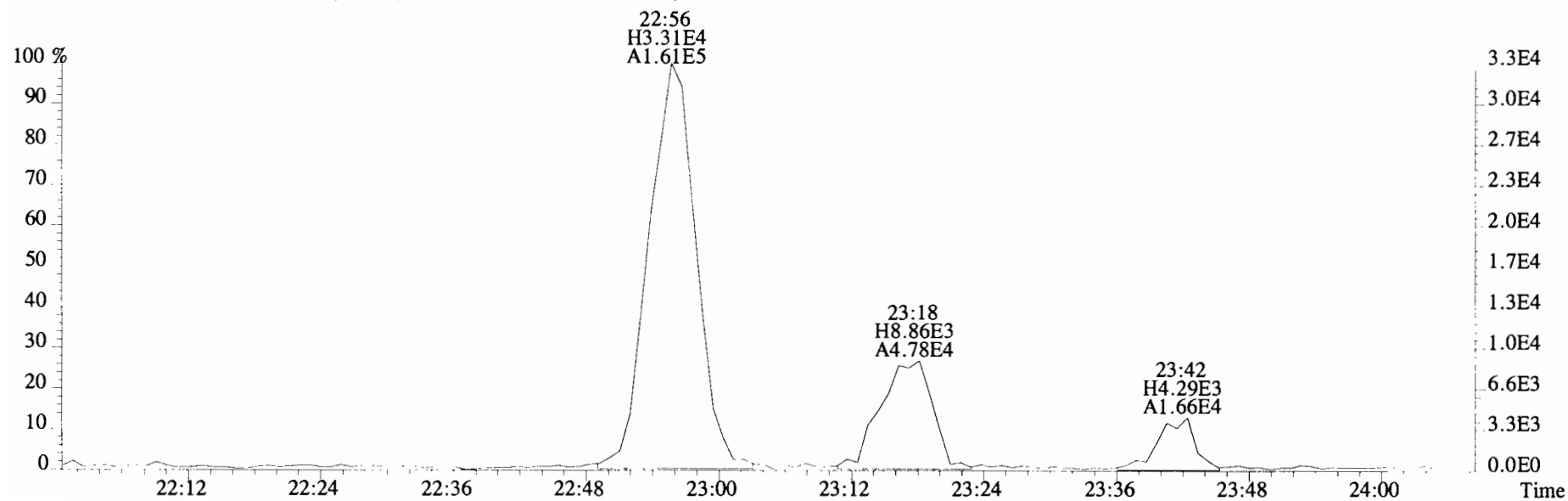
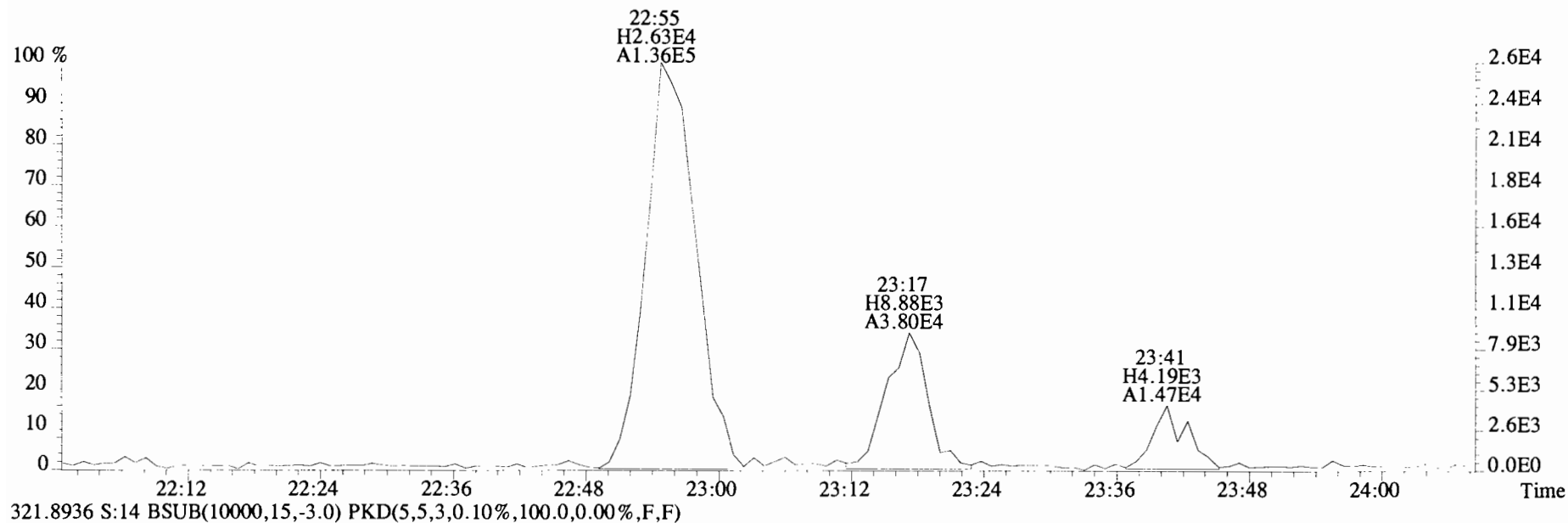
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



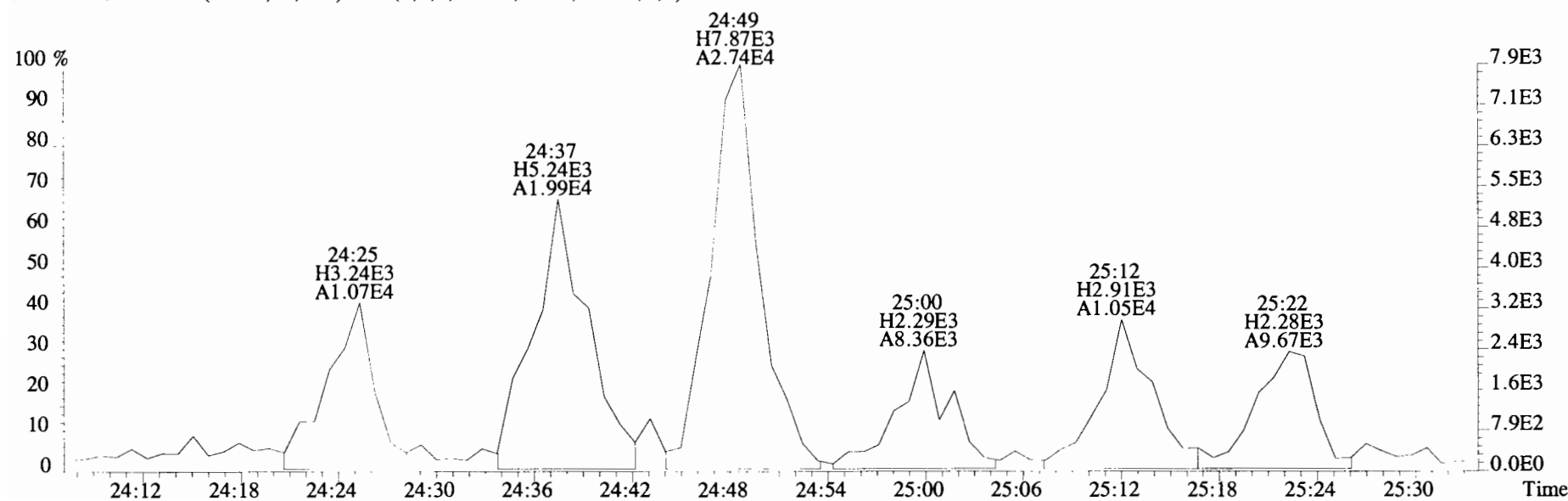
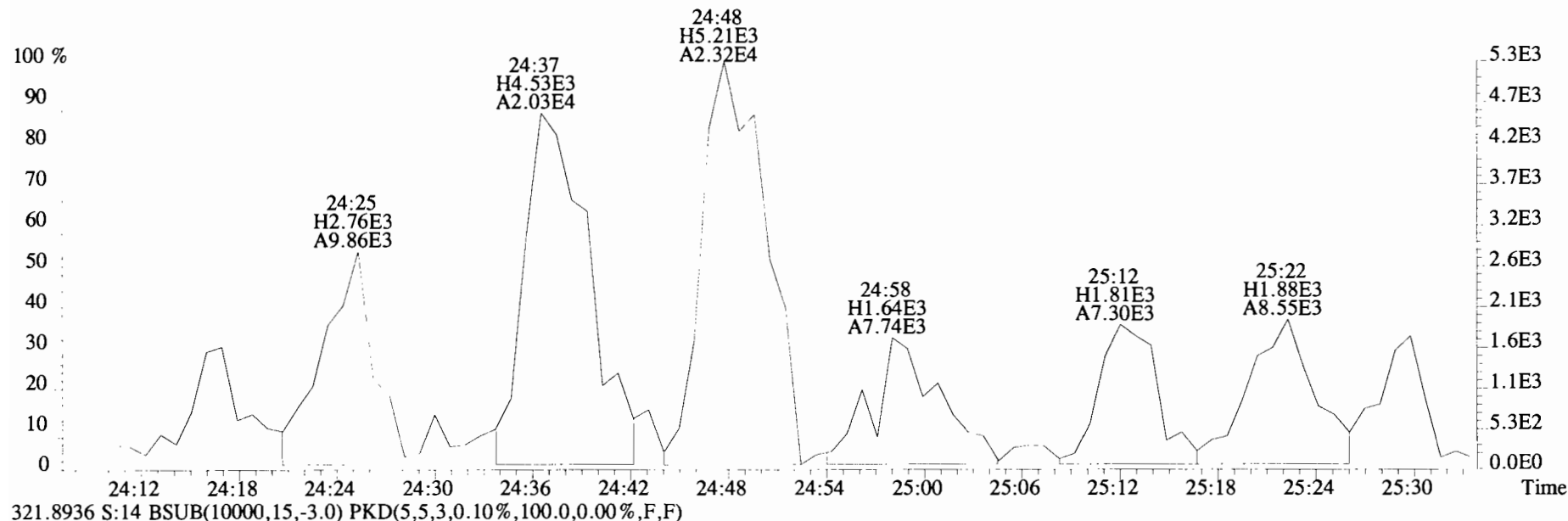
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



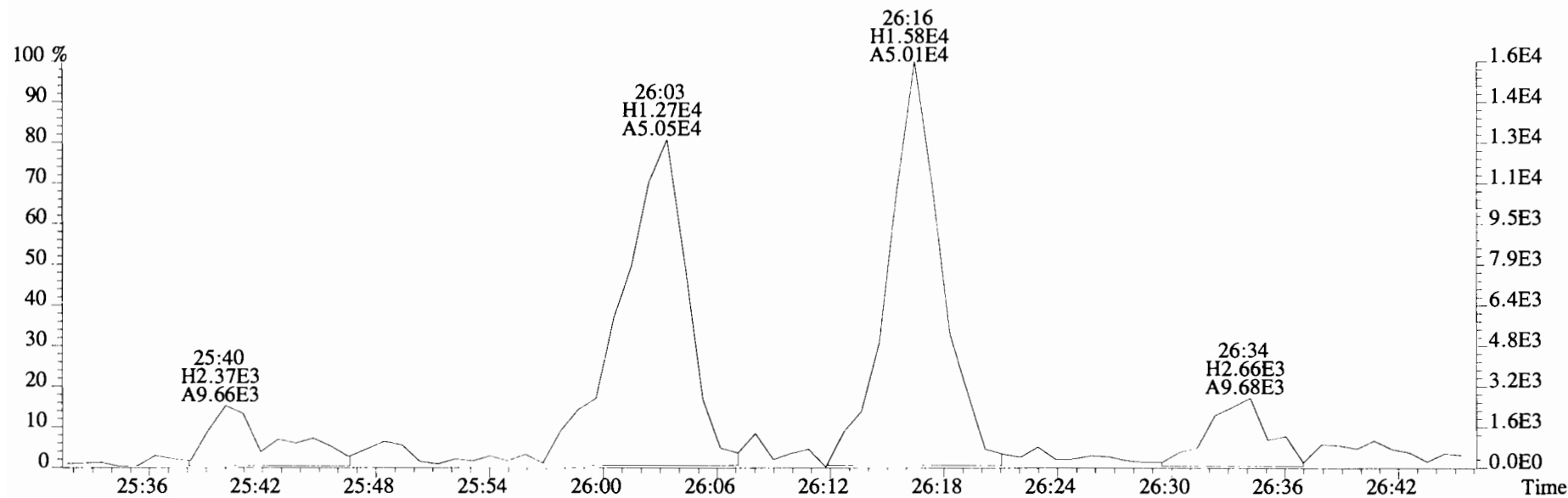
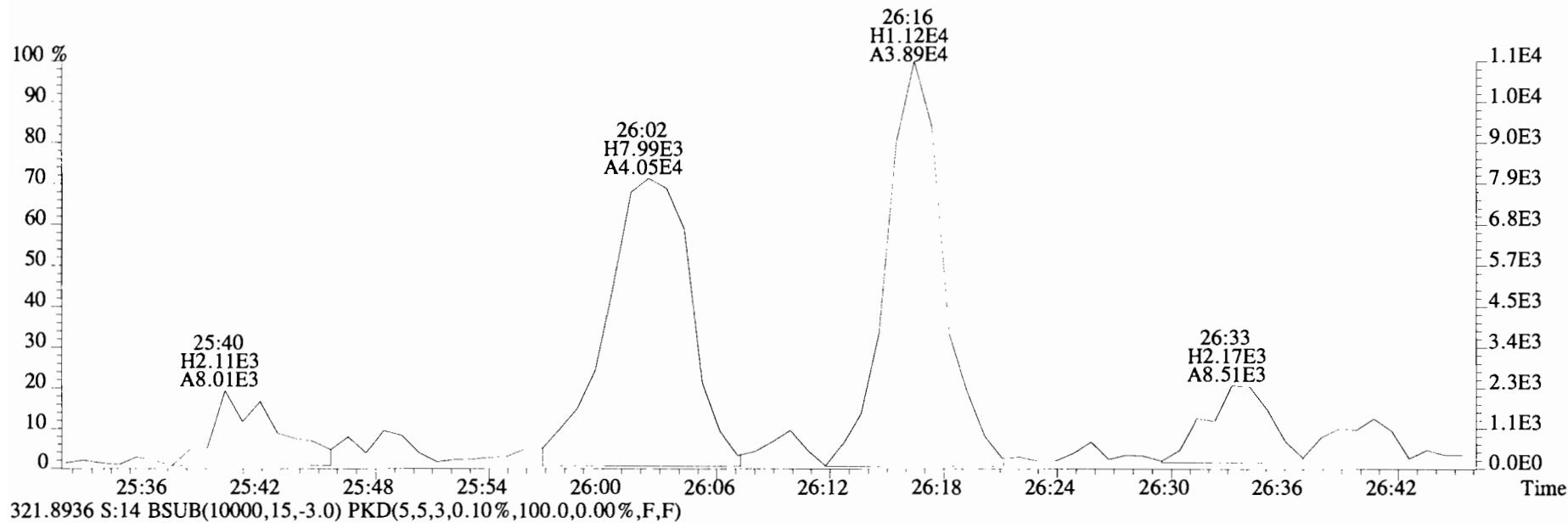
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



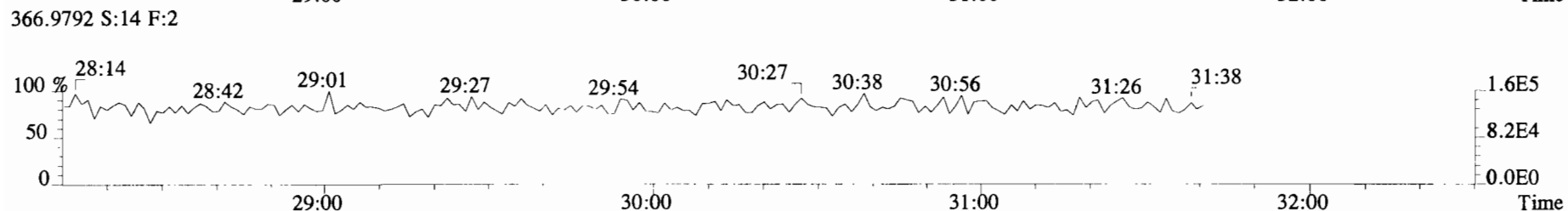
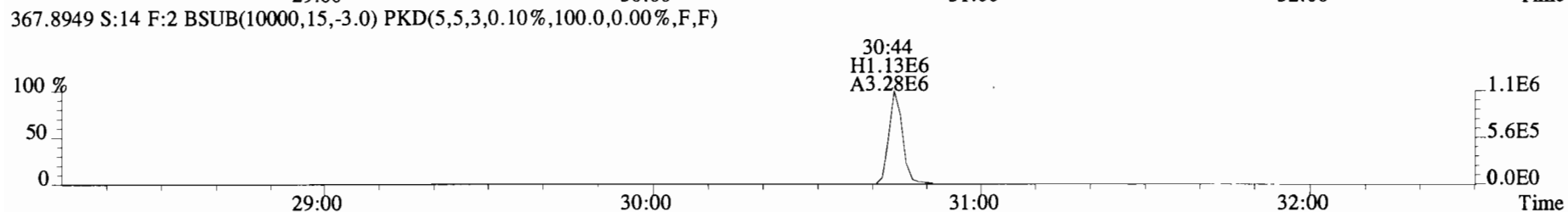
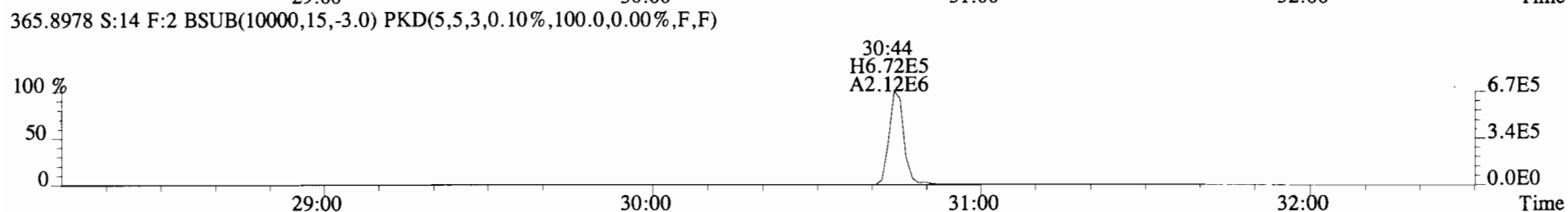
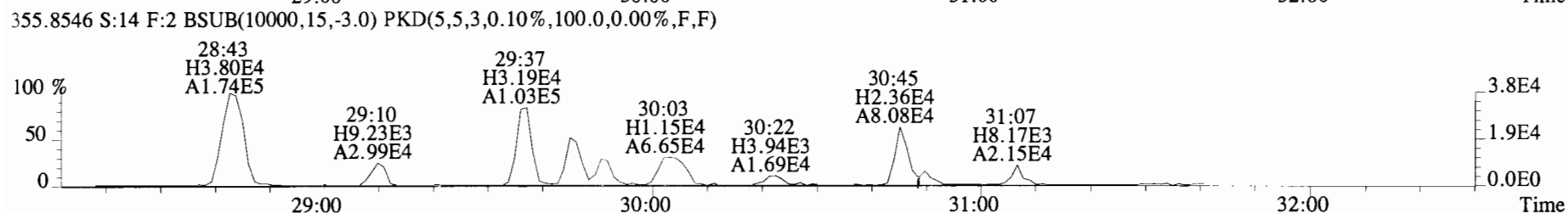
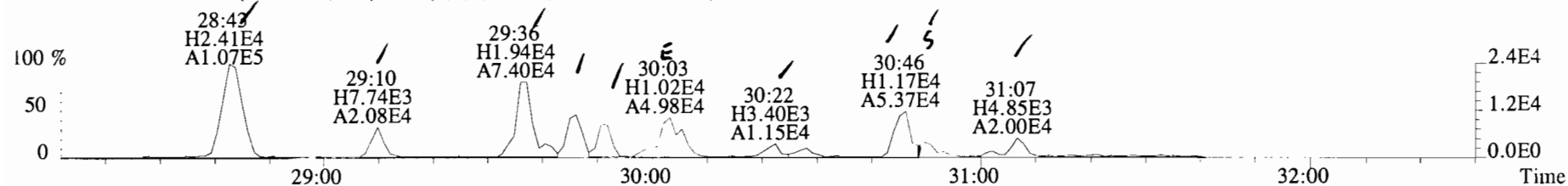
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



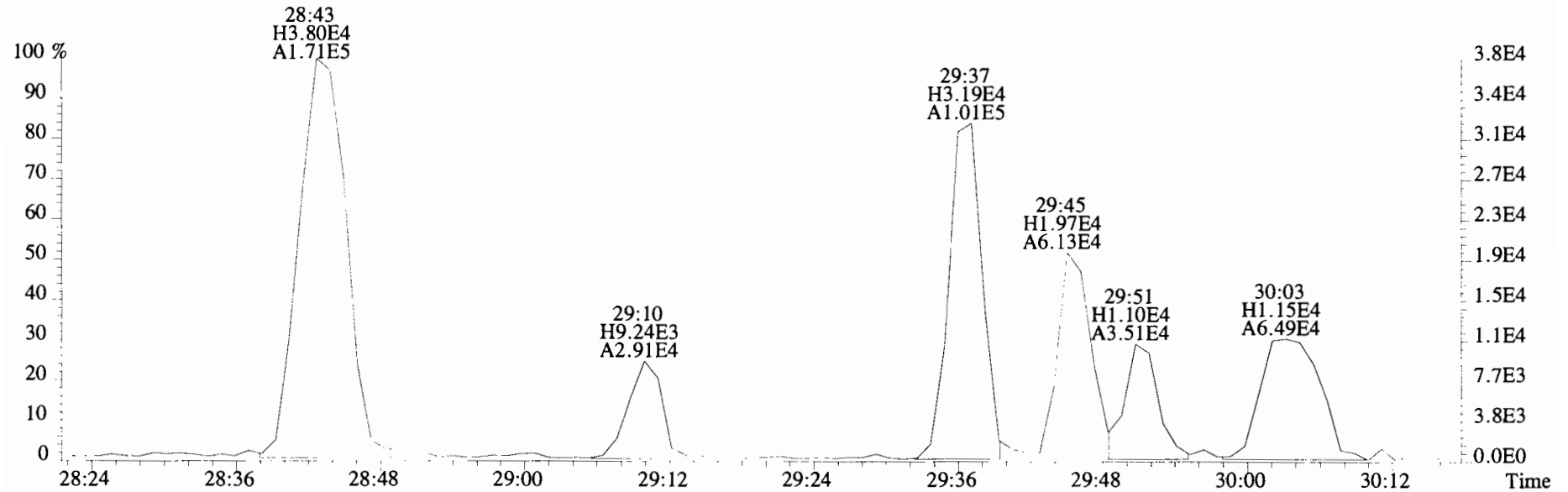
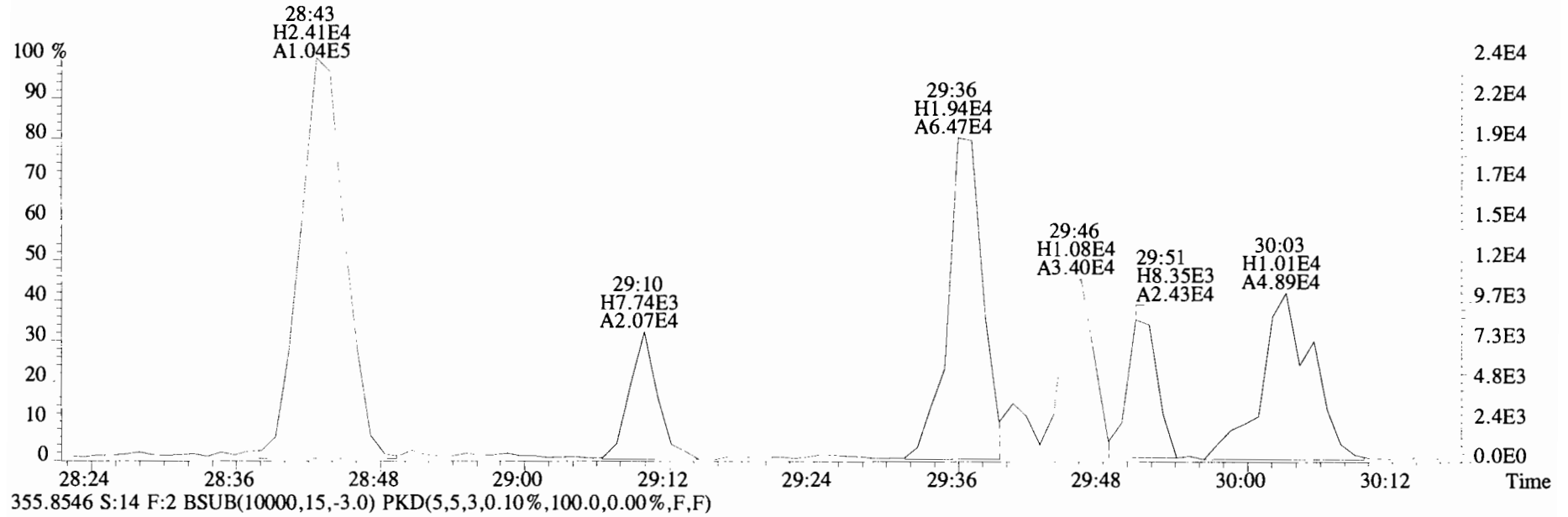
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Sample#14 File Text: Viata Analytical Laboratory_VG7 Text: 1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp: OCDD_DB5
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



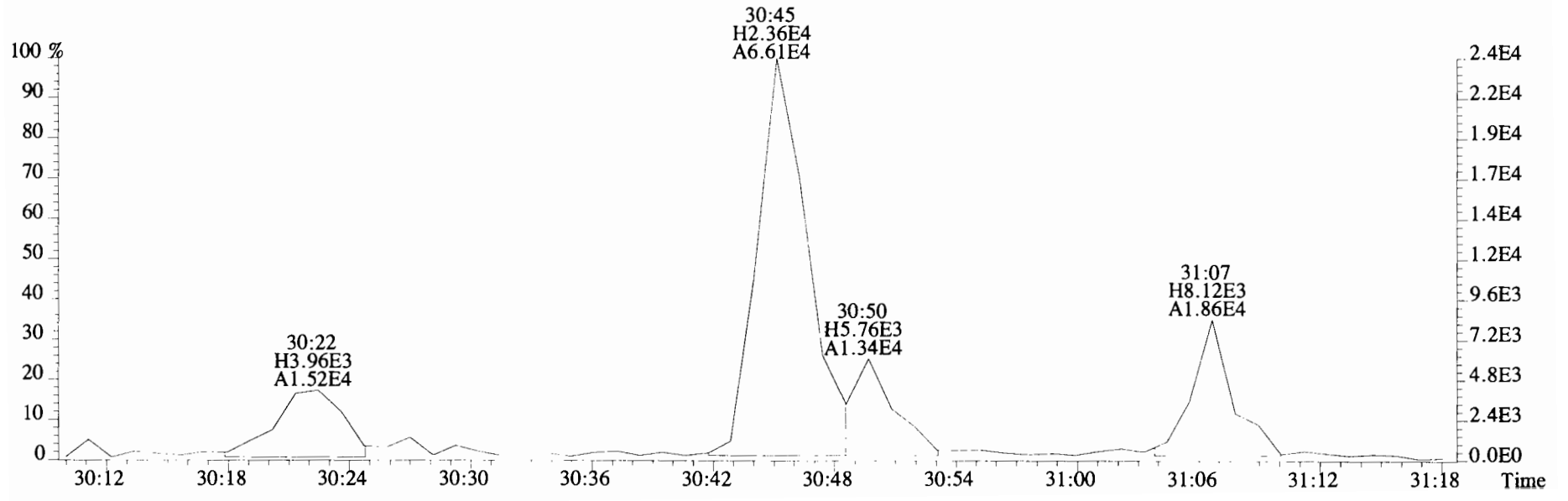
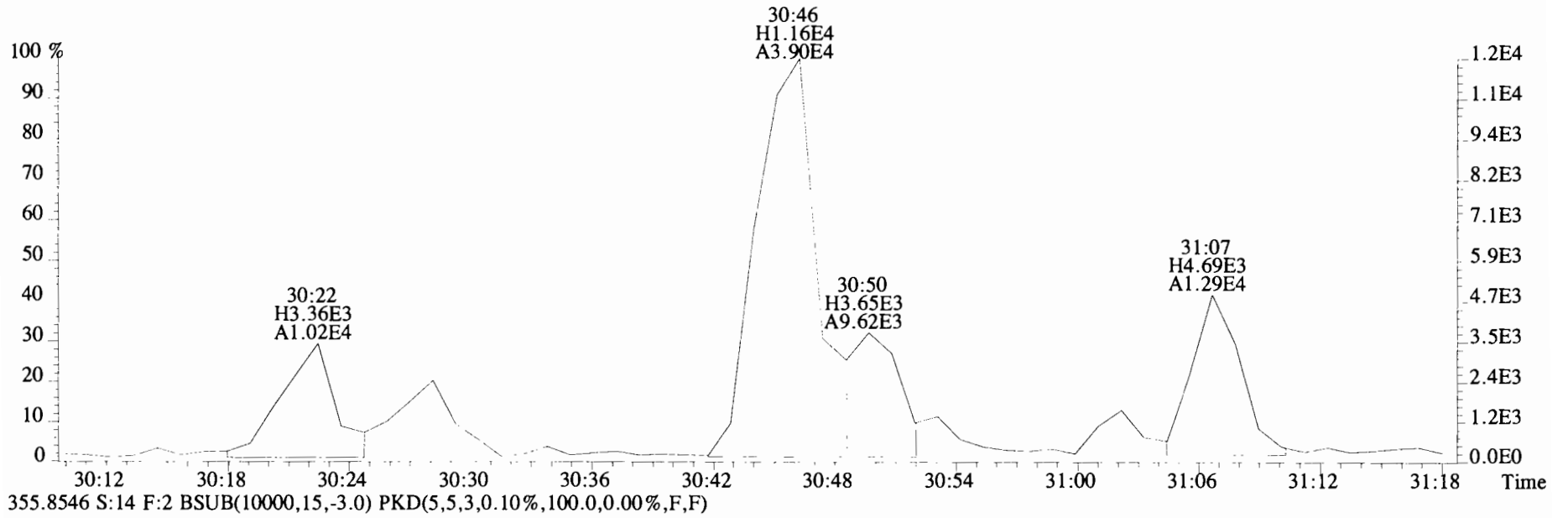
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



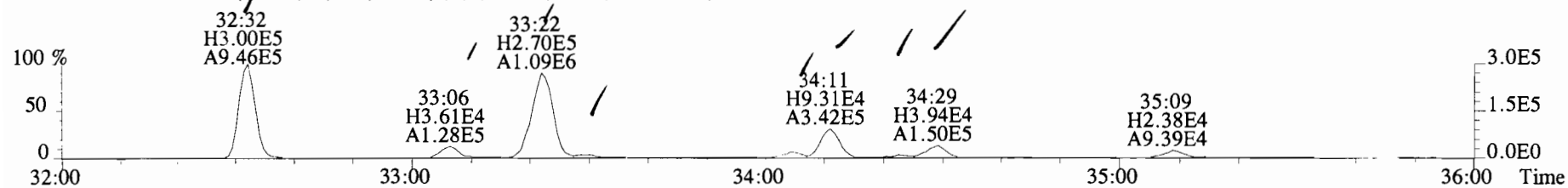
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



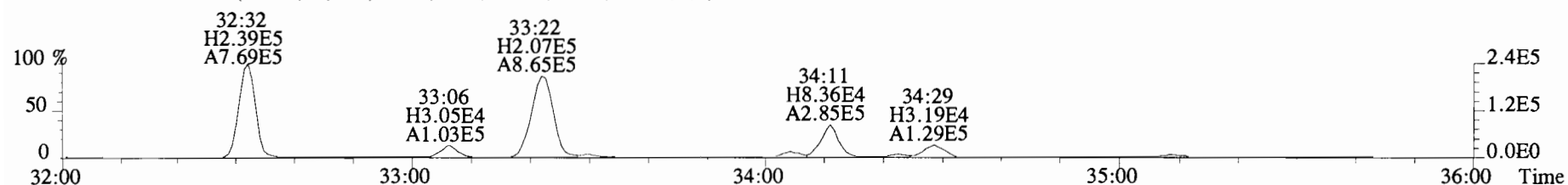
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



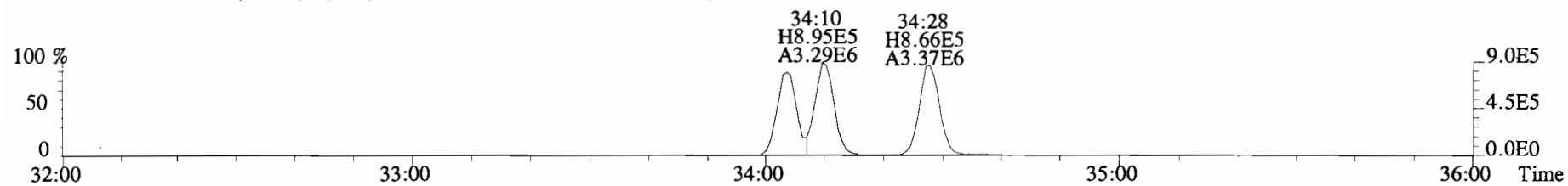
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



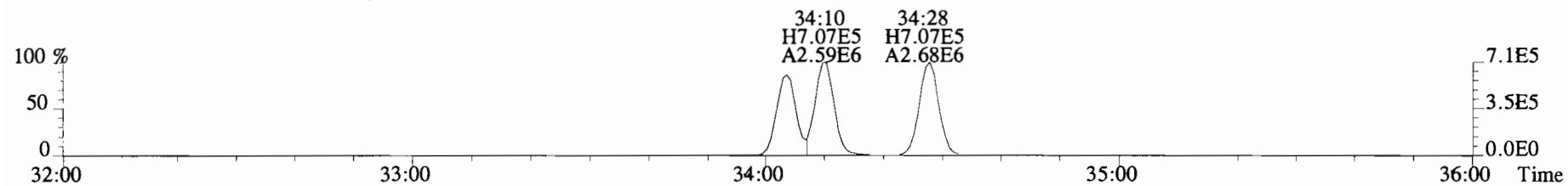
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



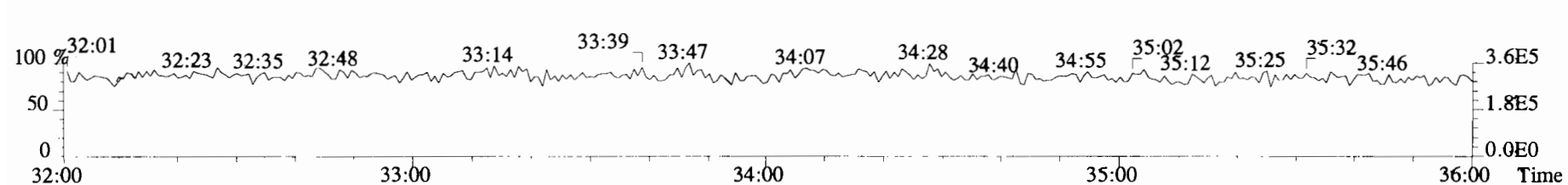
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



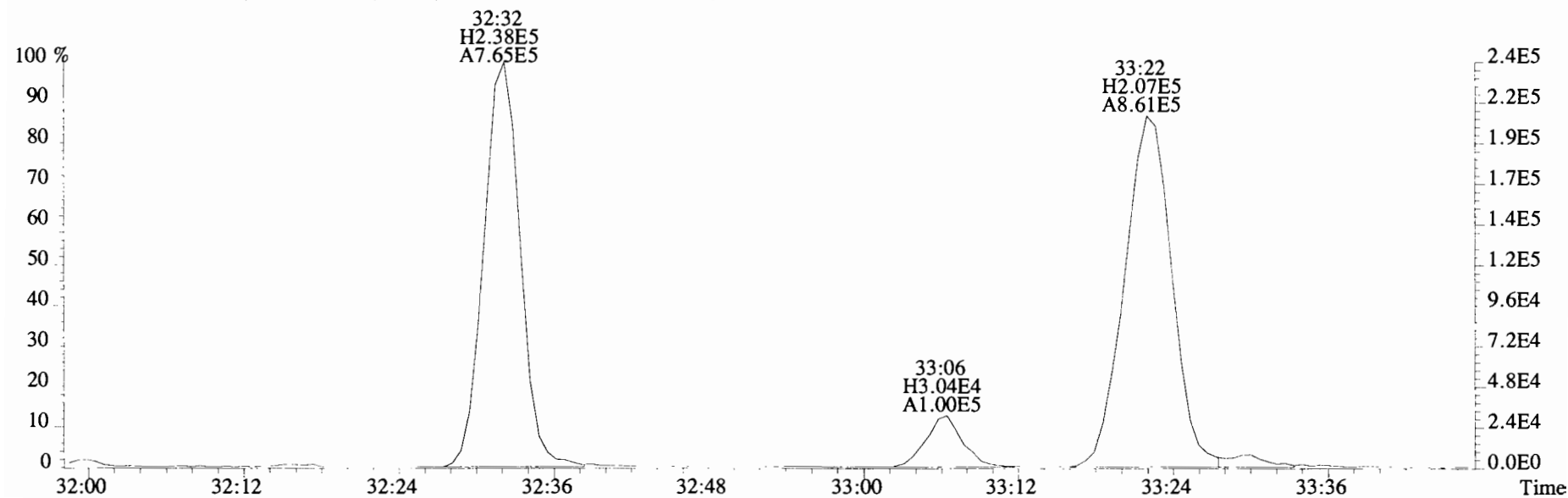
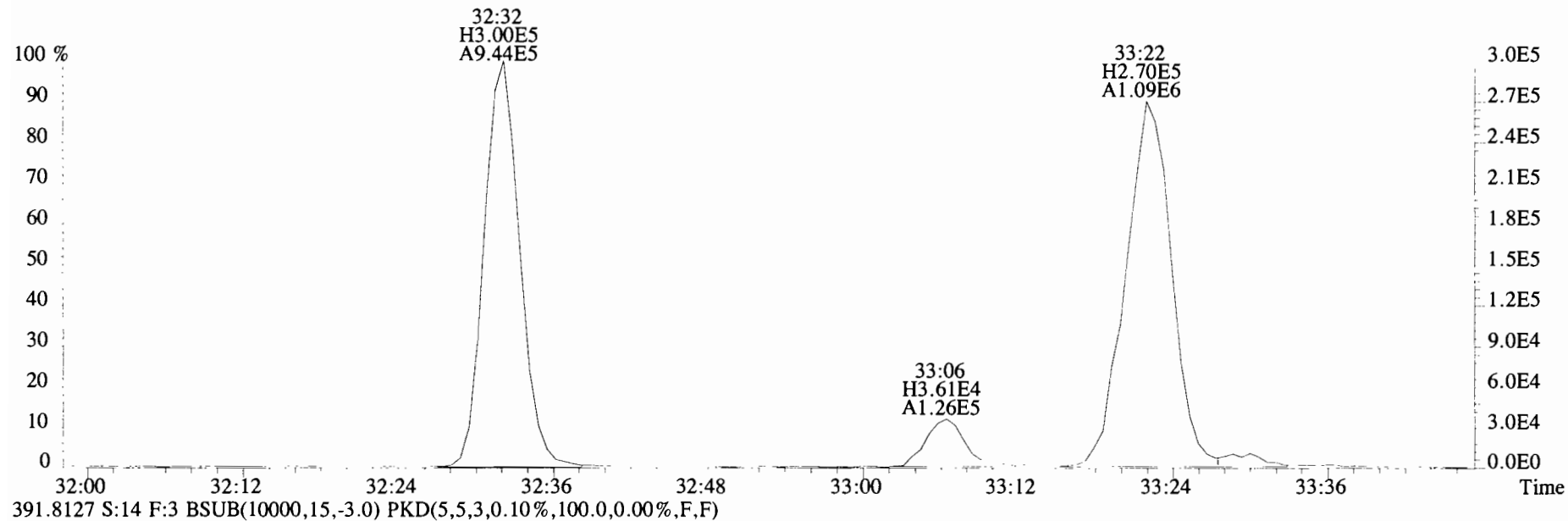
403.8530 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



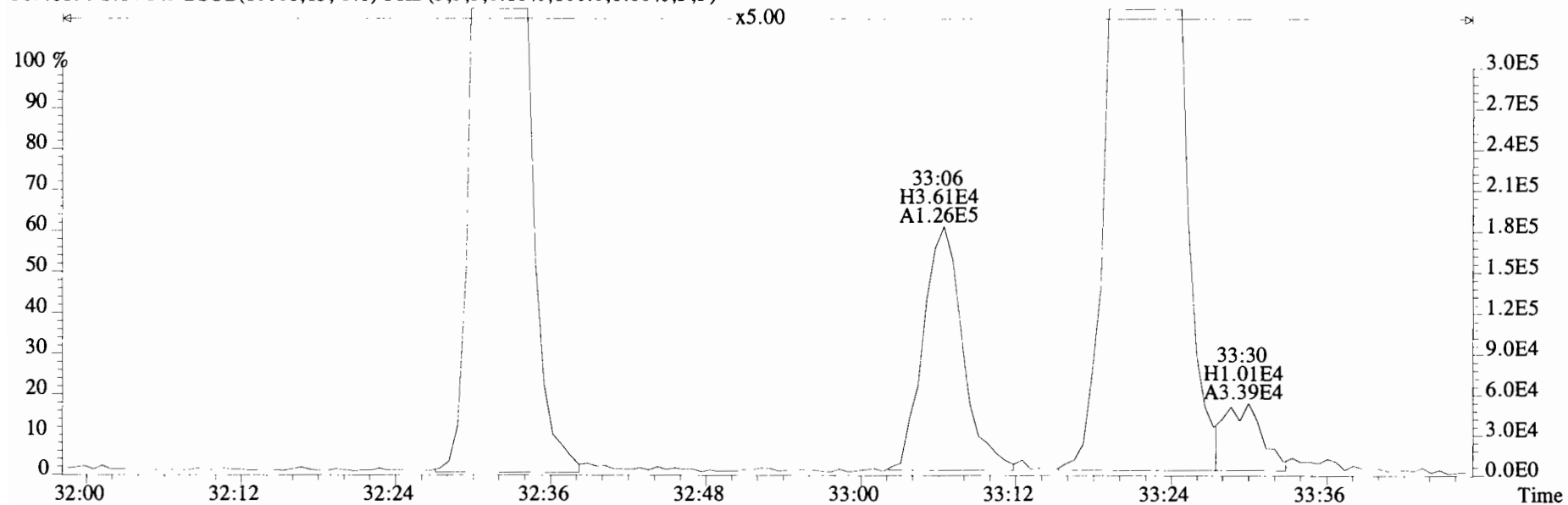
392.9760 S:14 F:3



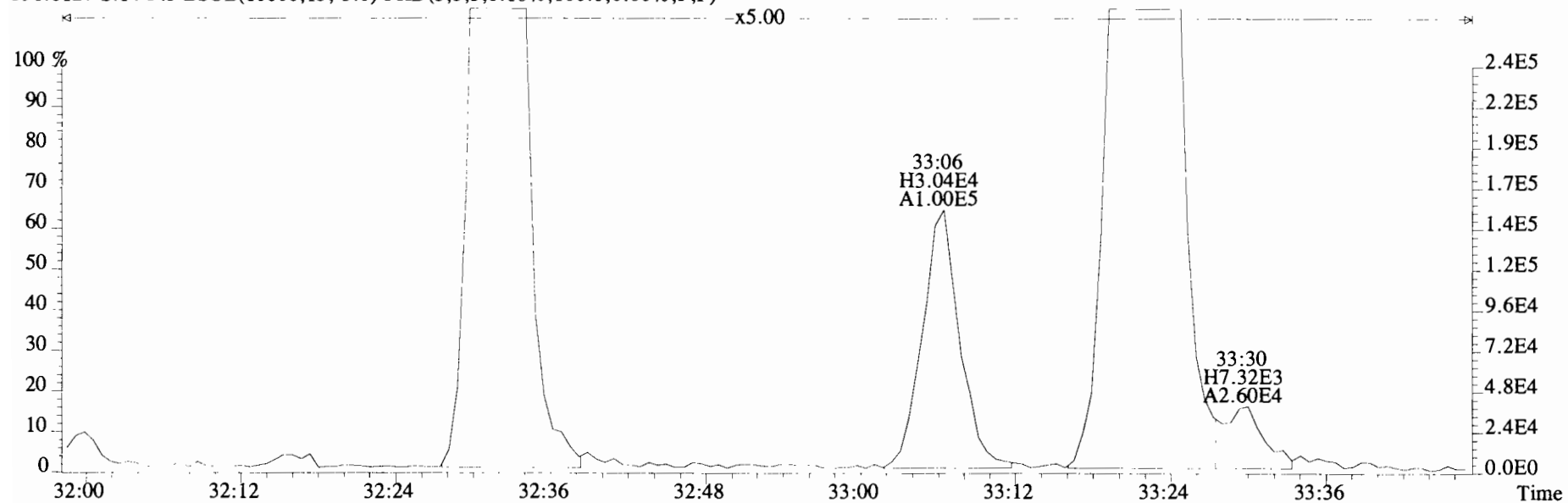
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Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



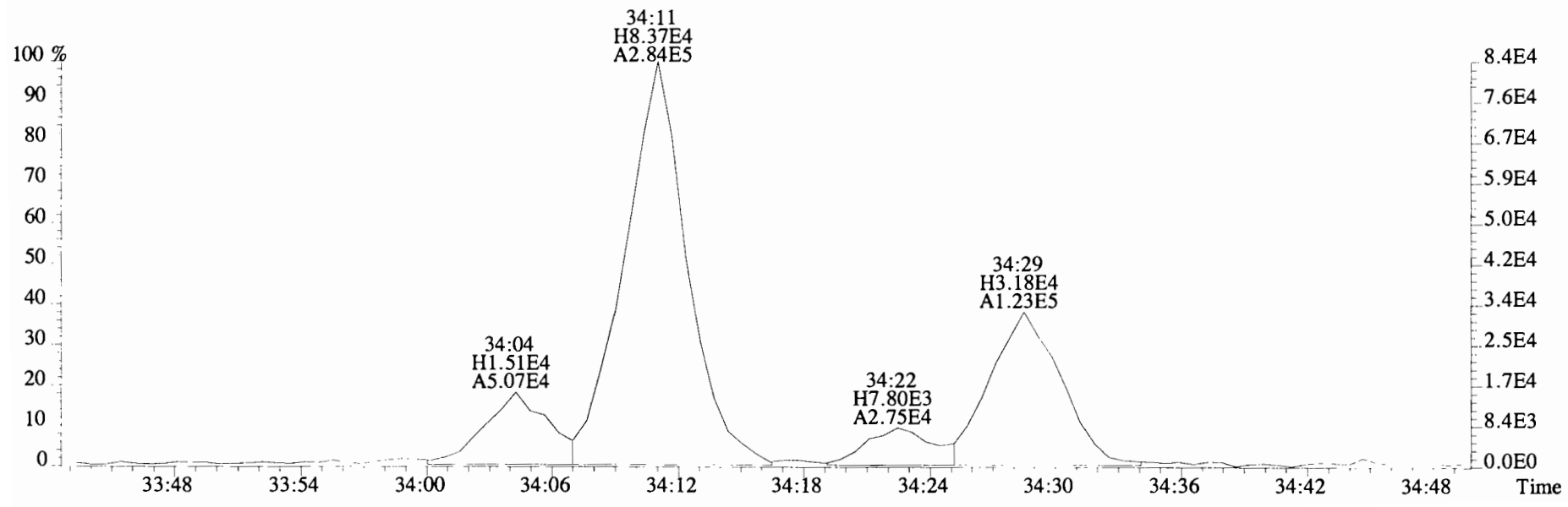
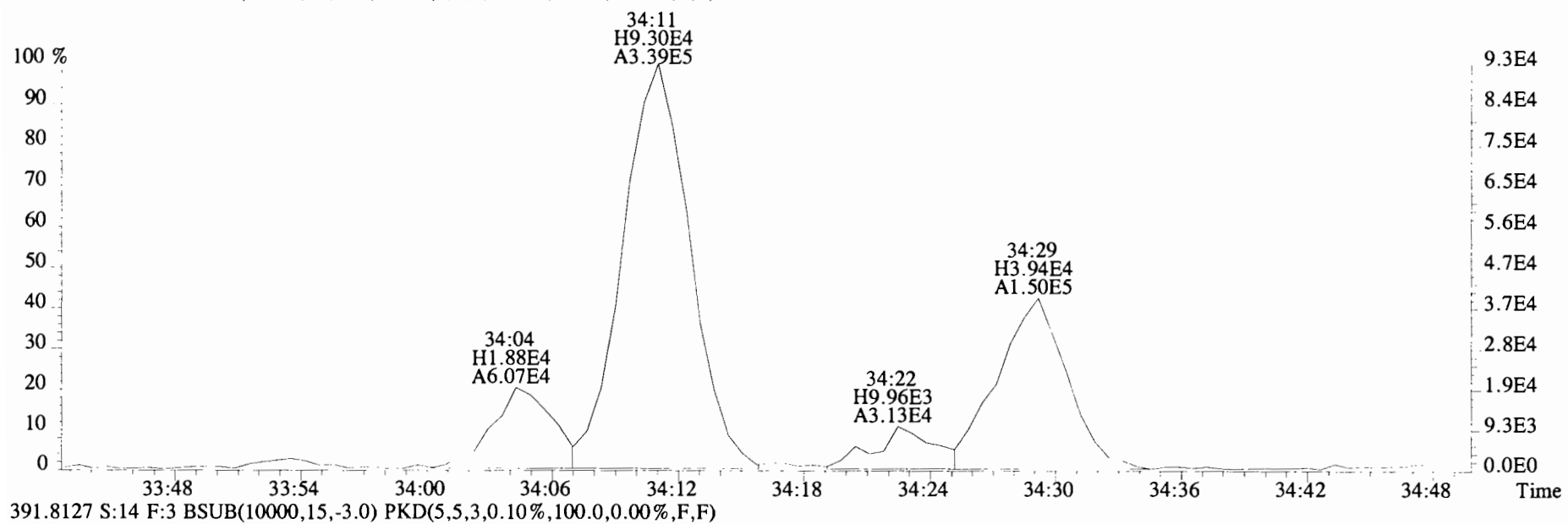
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
389.8156 S:14 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



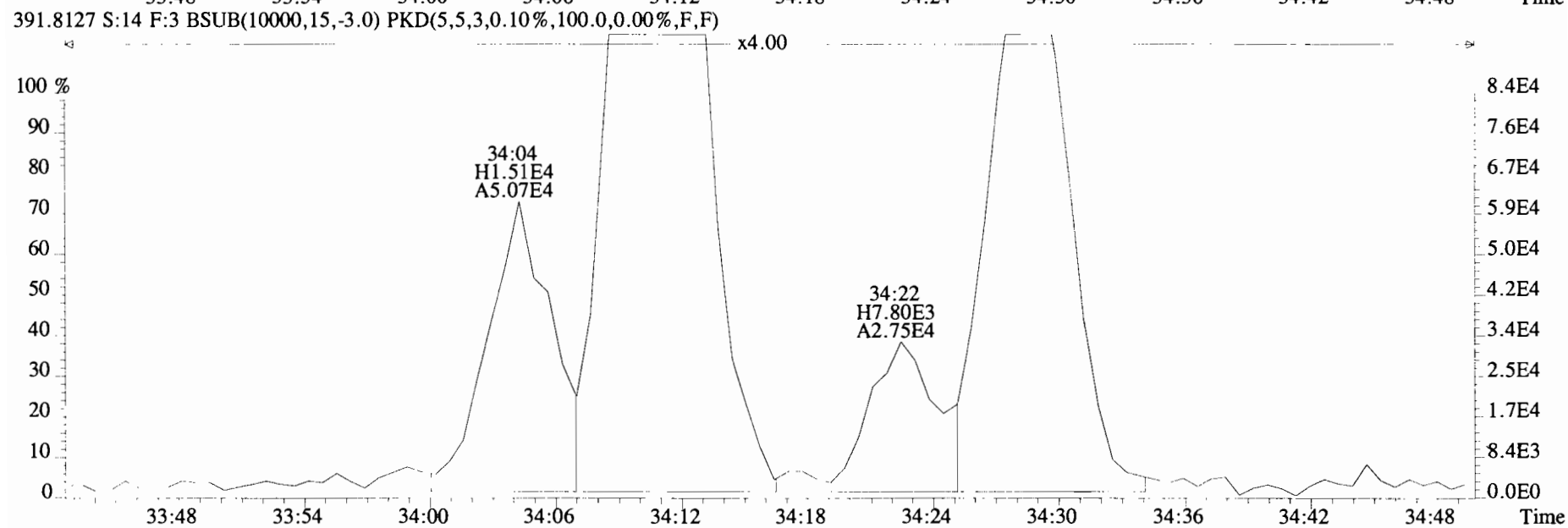
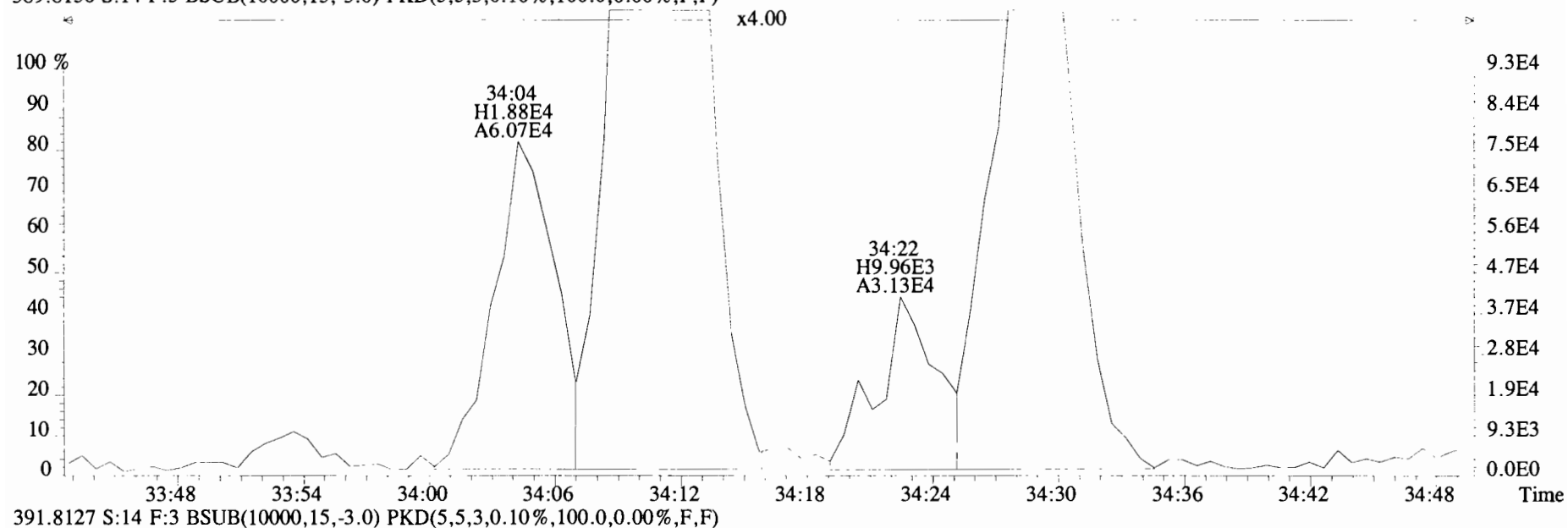
391.8127 S:14 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



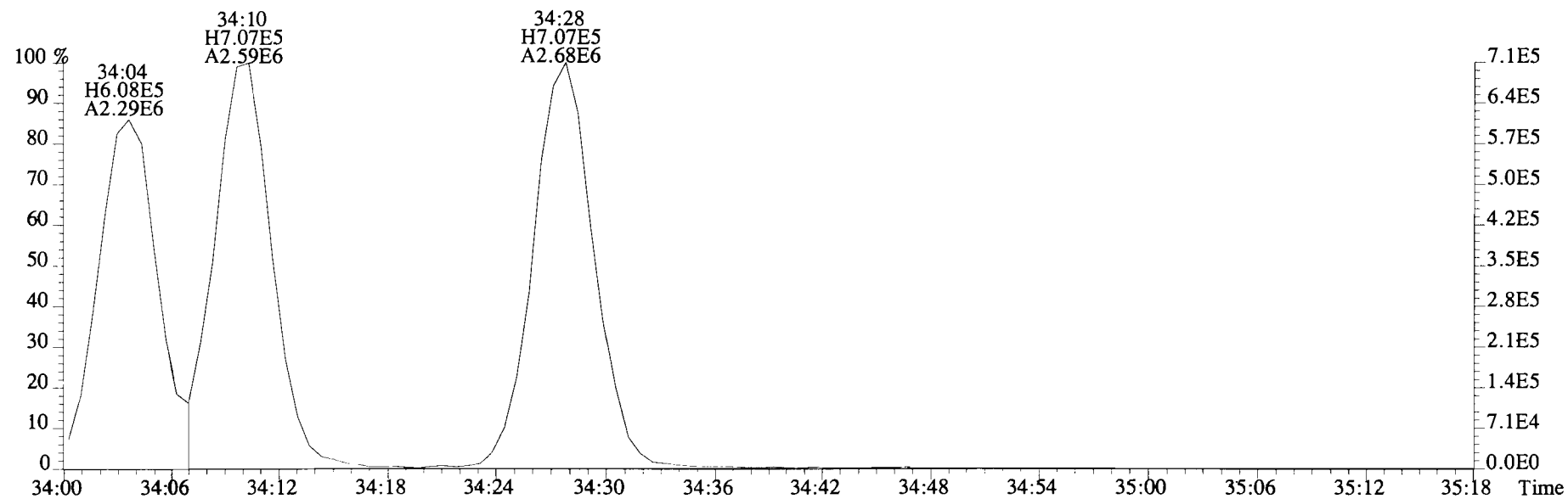
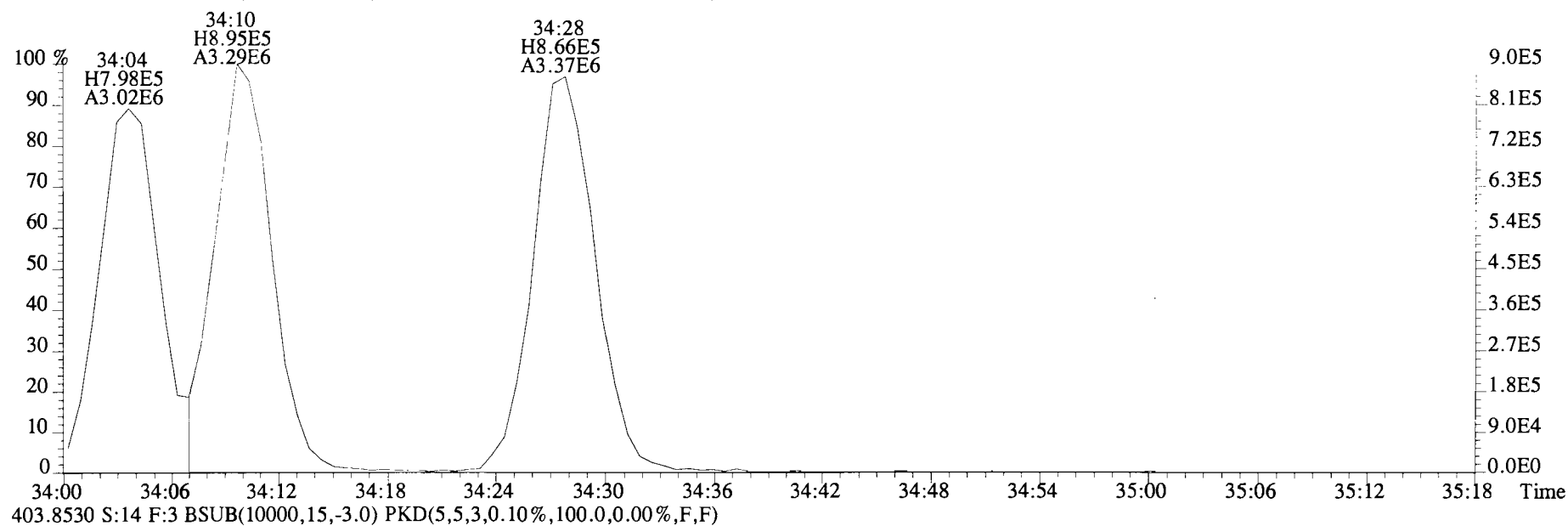
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



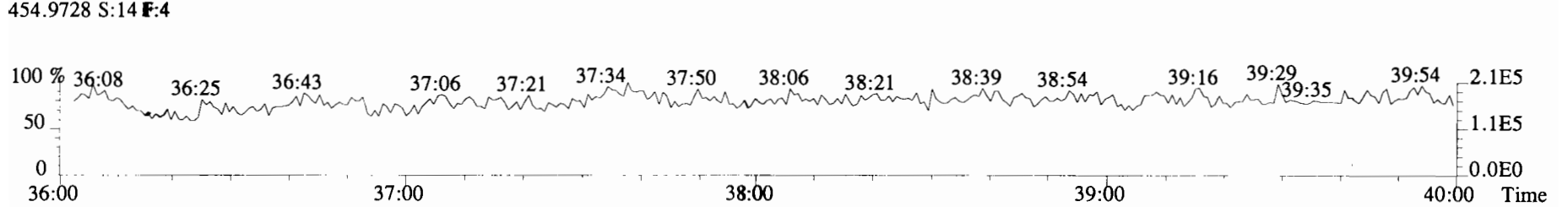
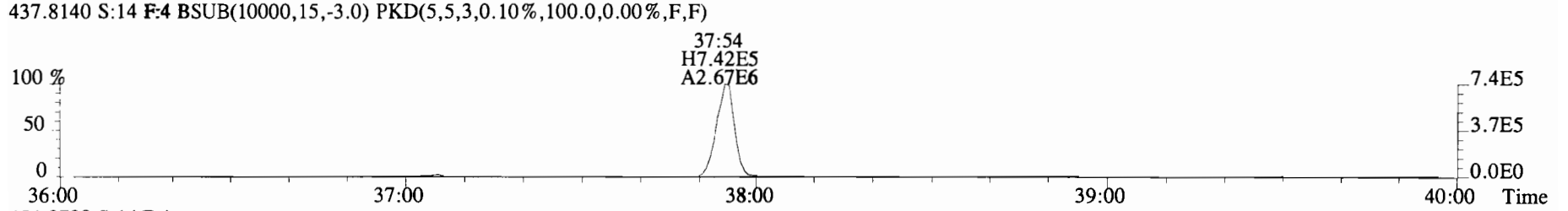
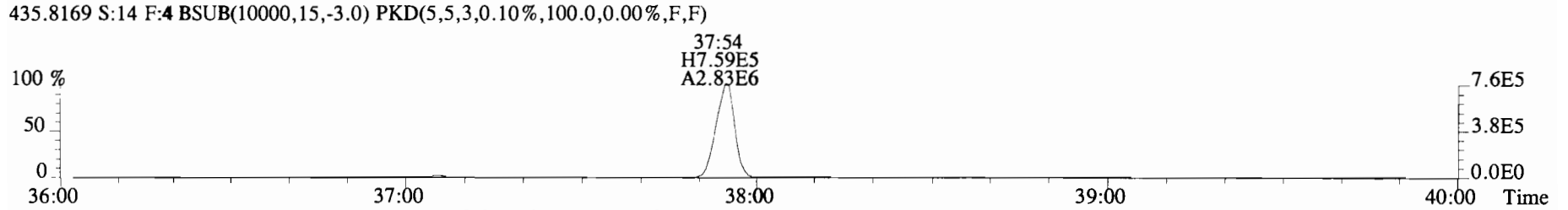
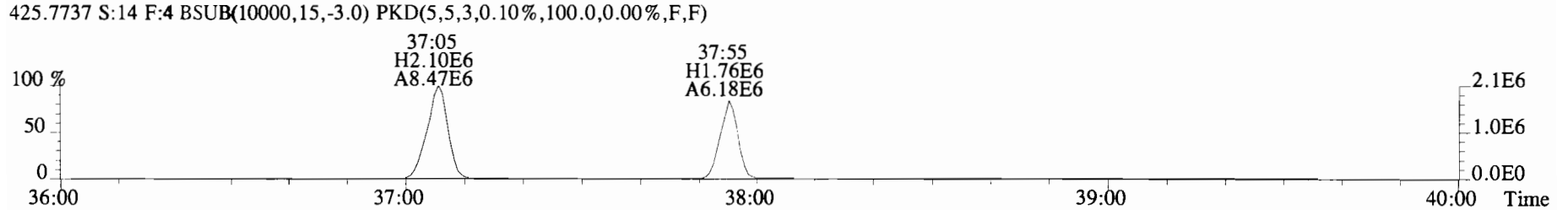
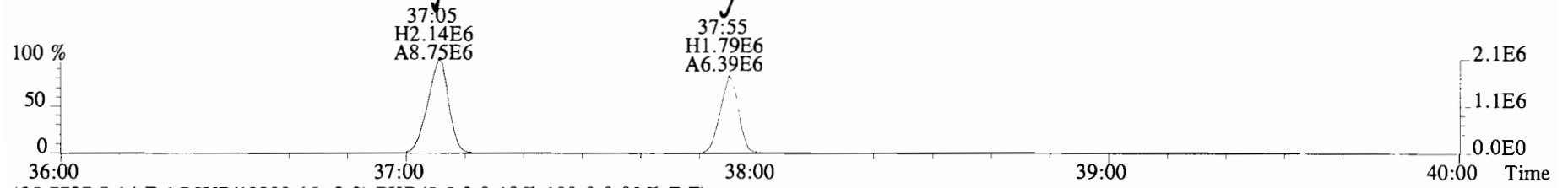
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
389.8156 S:14 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



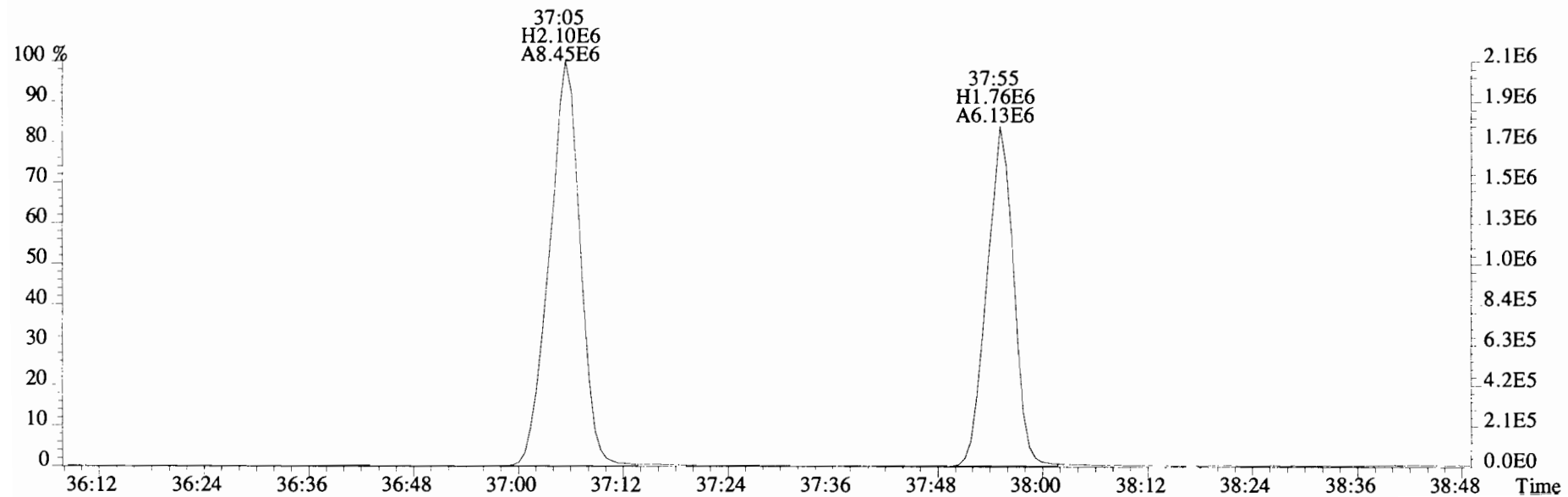
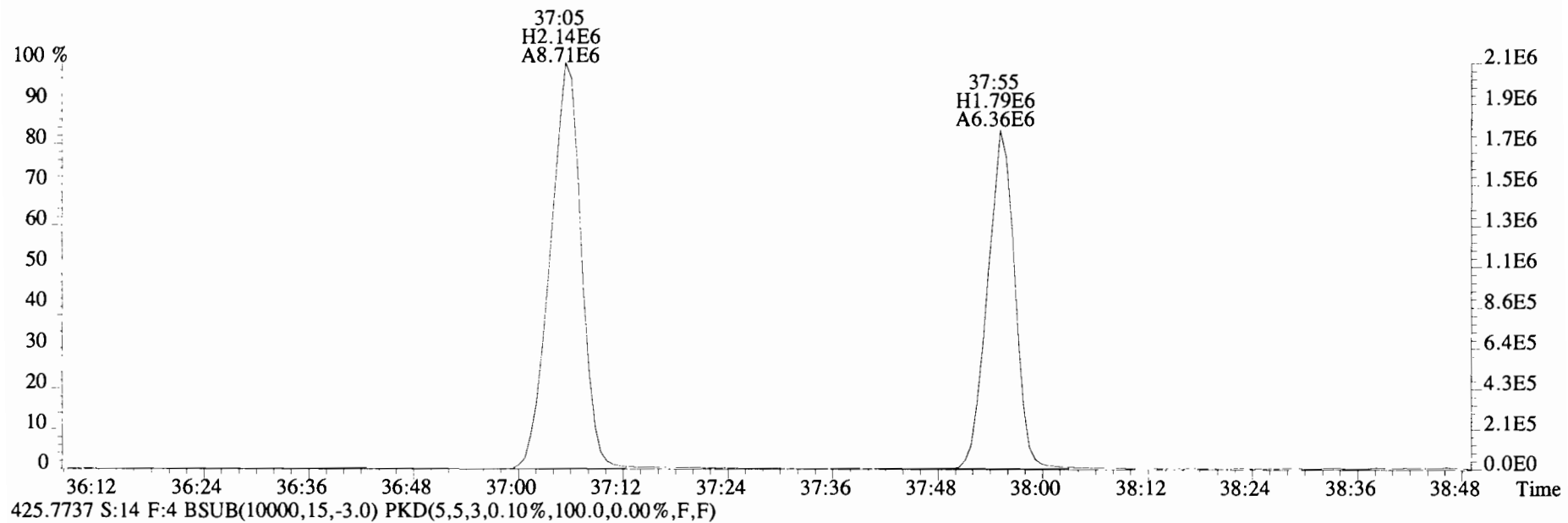
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PD1-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



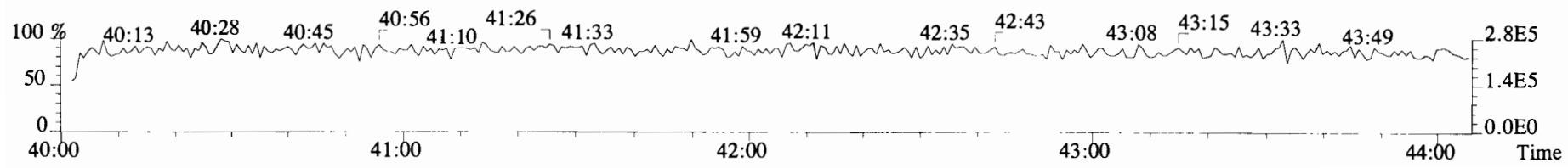
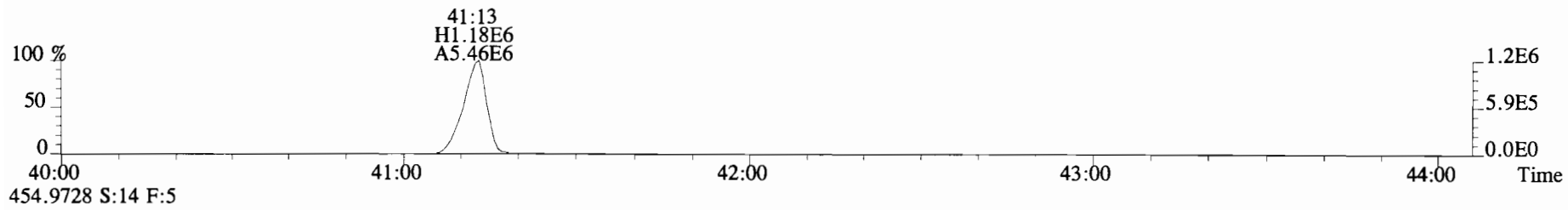
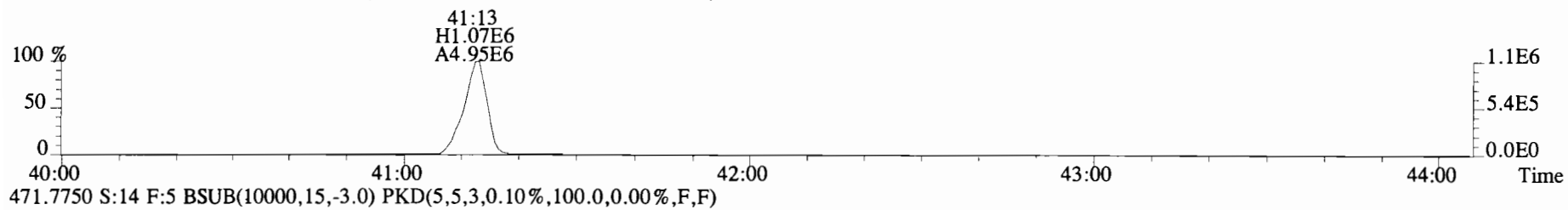
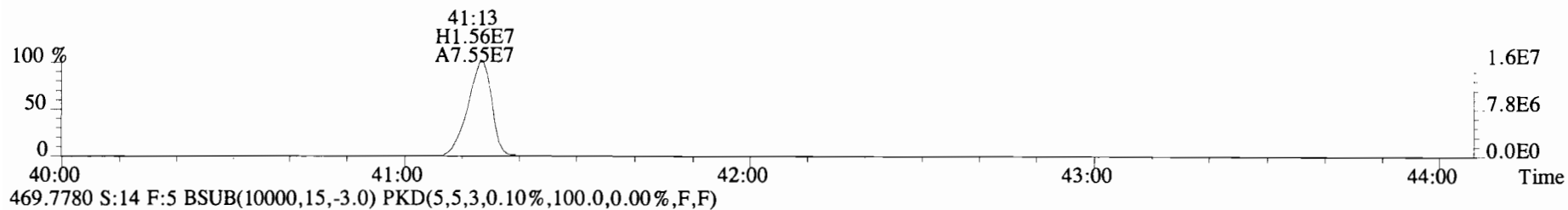
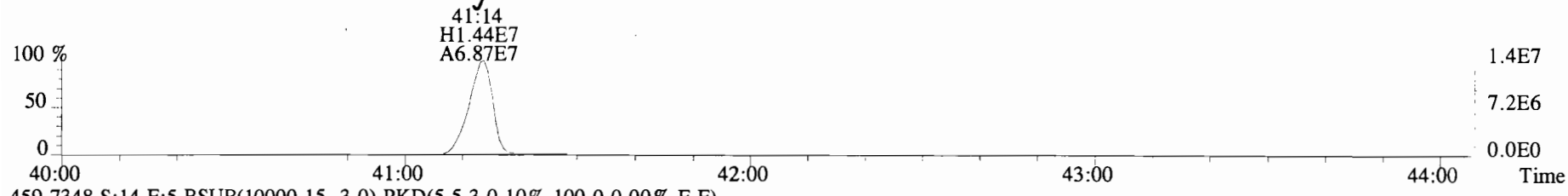
File:191031D2 #1-555 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



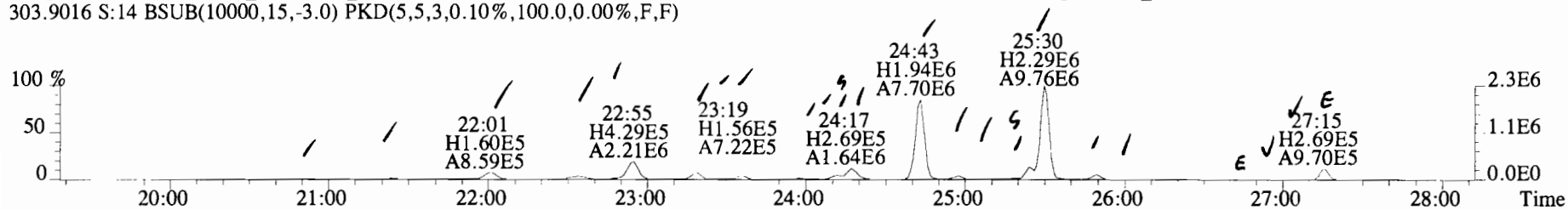
File:191031D2 #1-355 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
423.7767 S:14 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



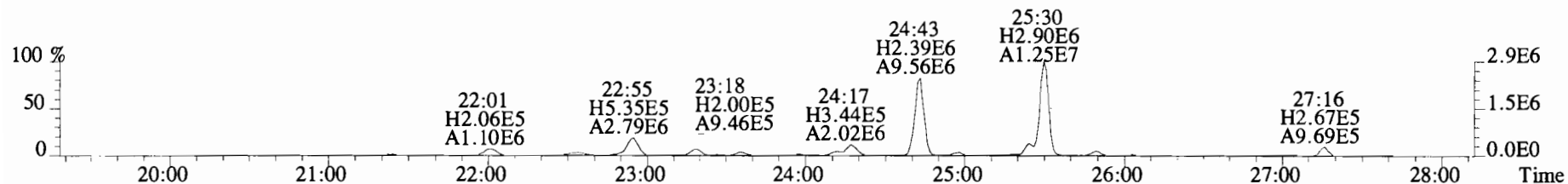
File:191031D2 #1-432 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



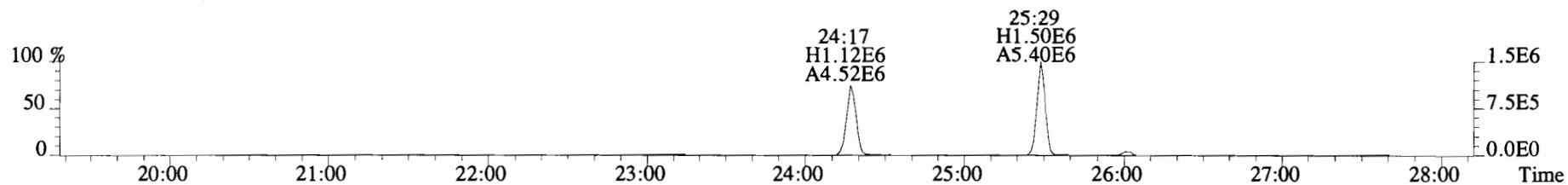
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



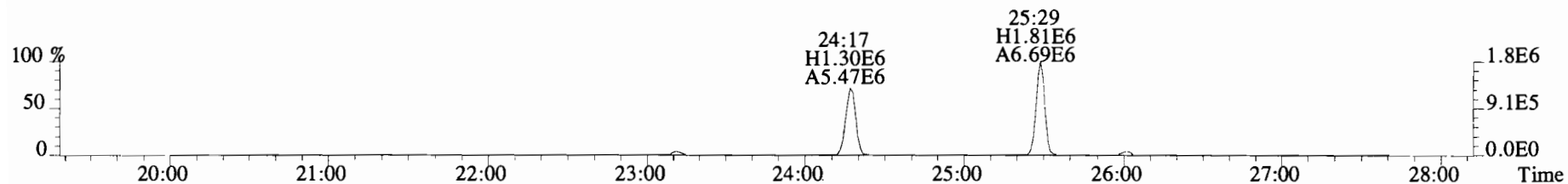
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



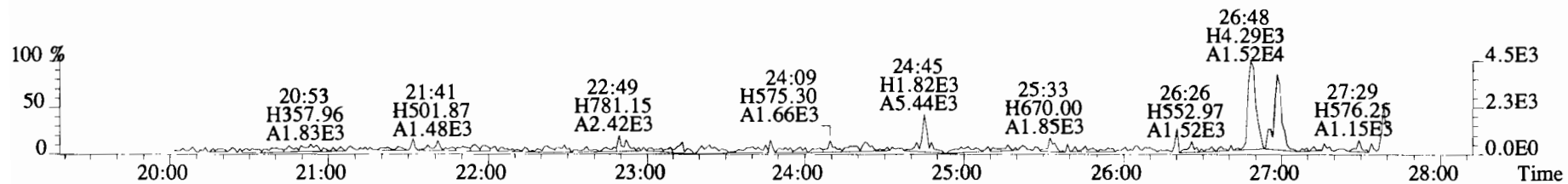
315.9419 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



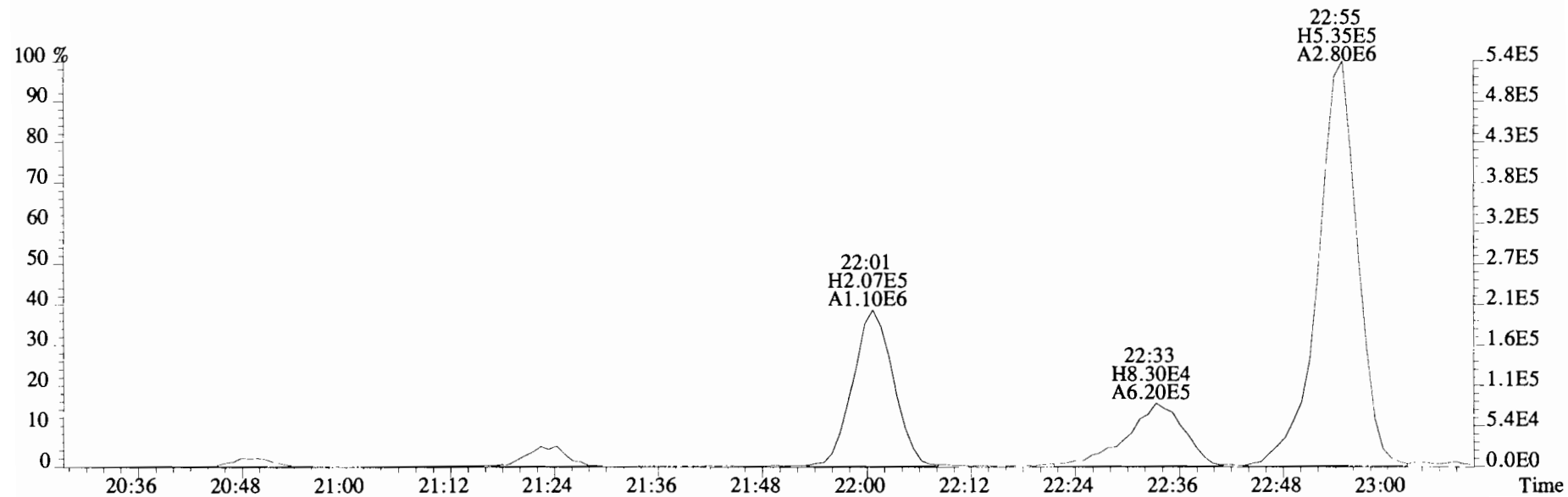
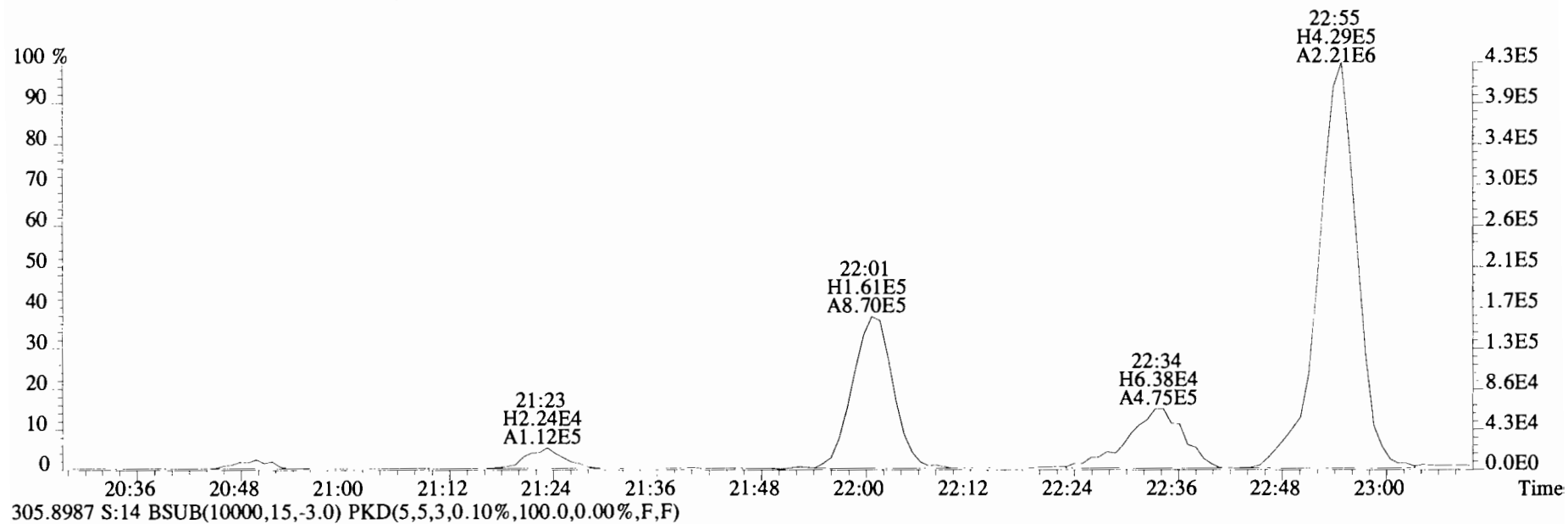
317.9389 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



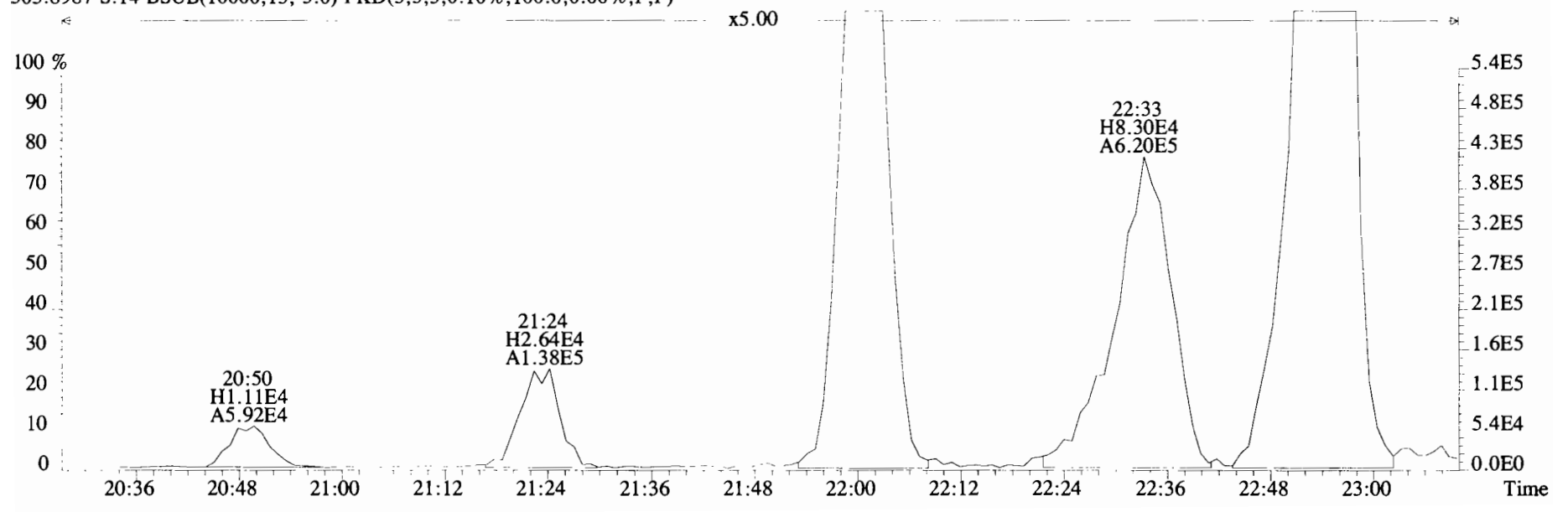
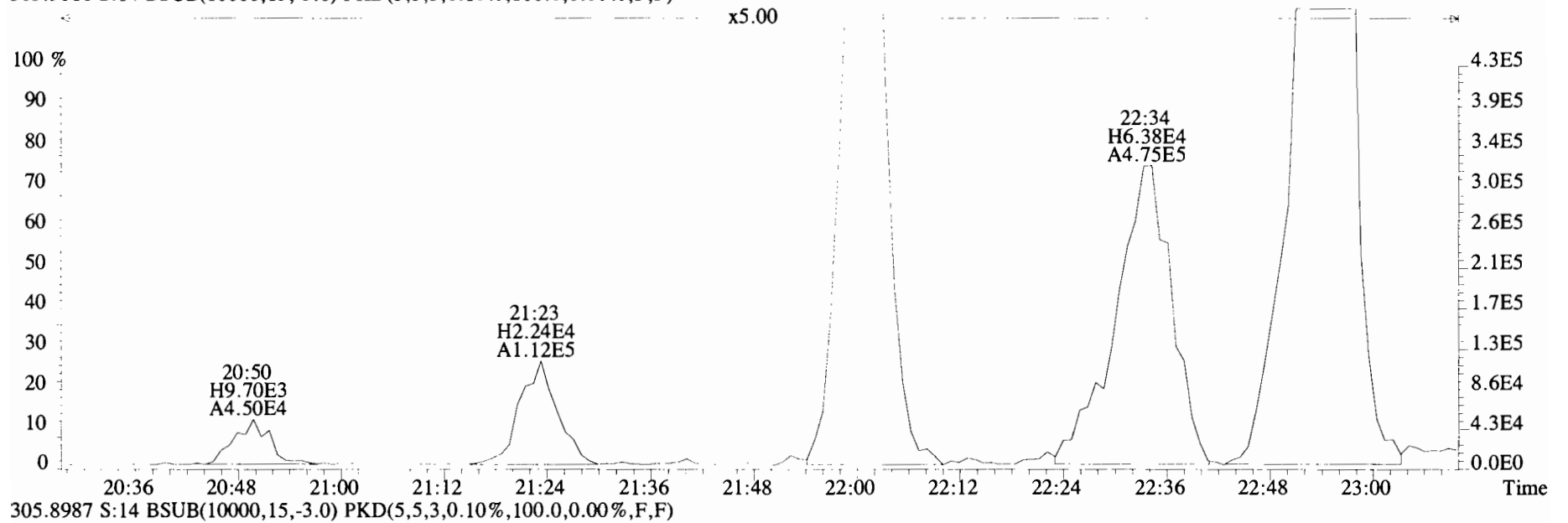
375.8364 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



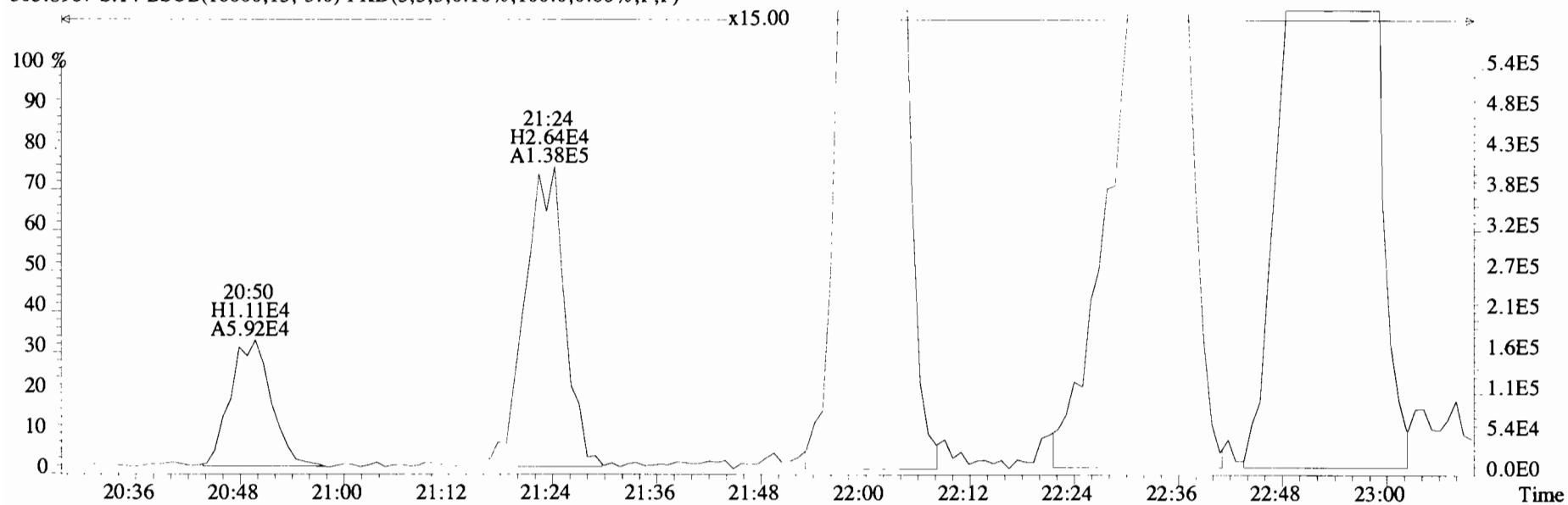
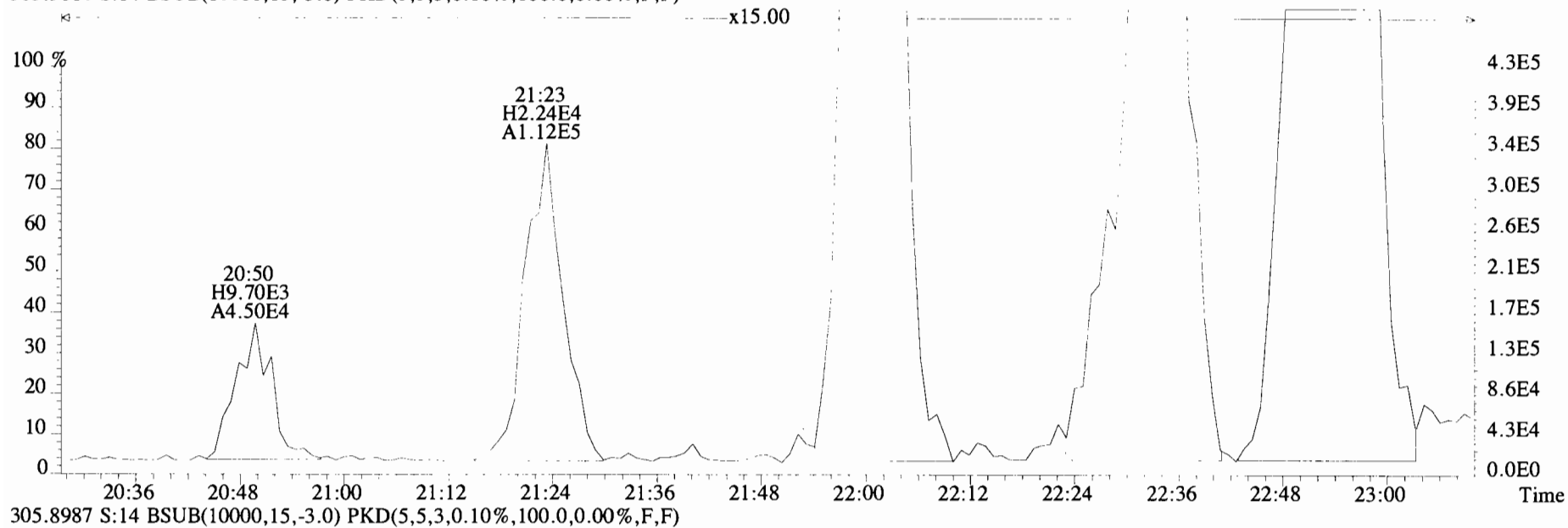
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PD1-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



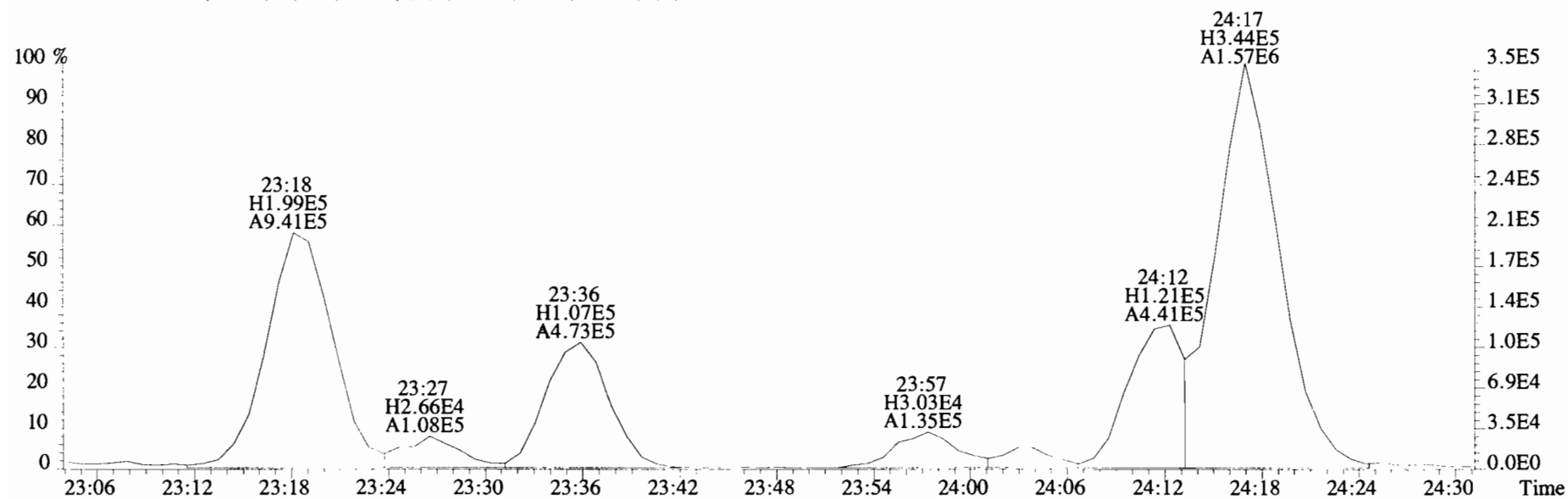
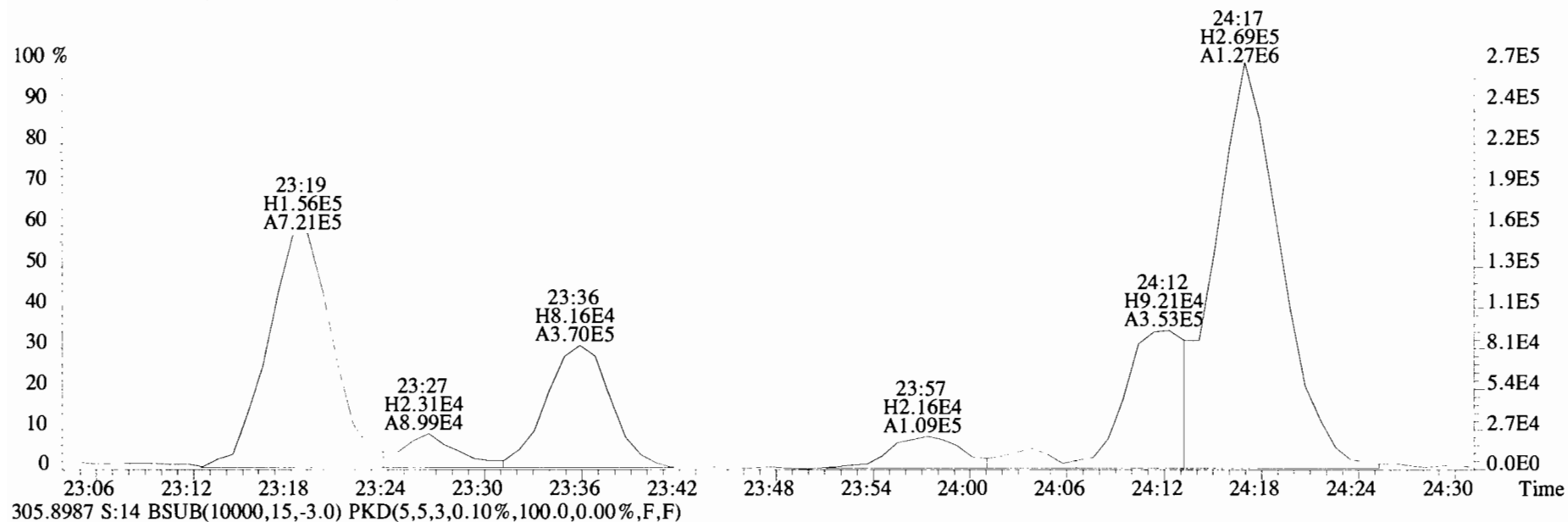
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Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



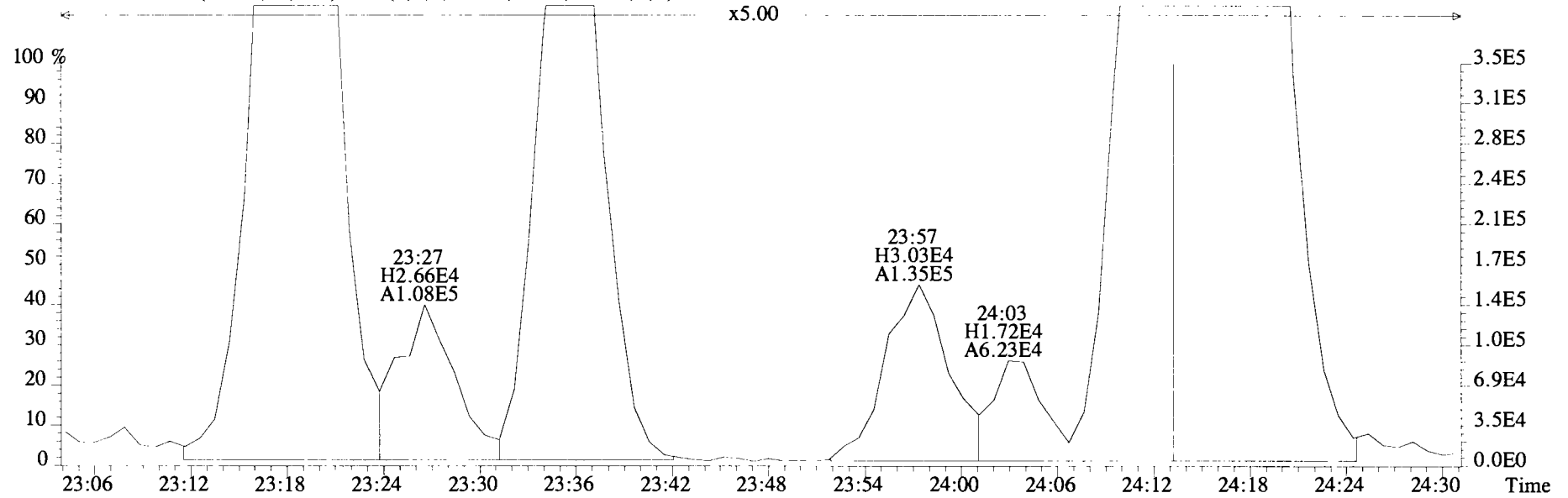
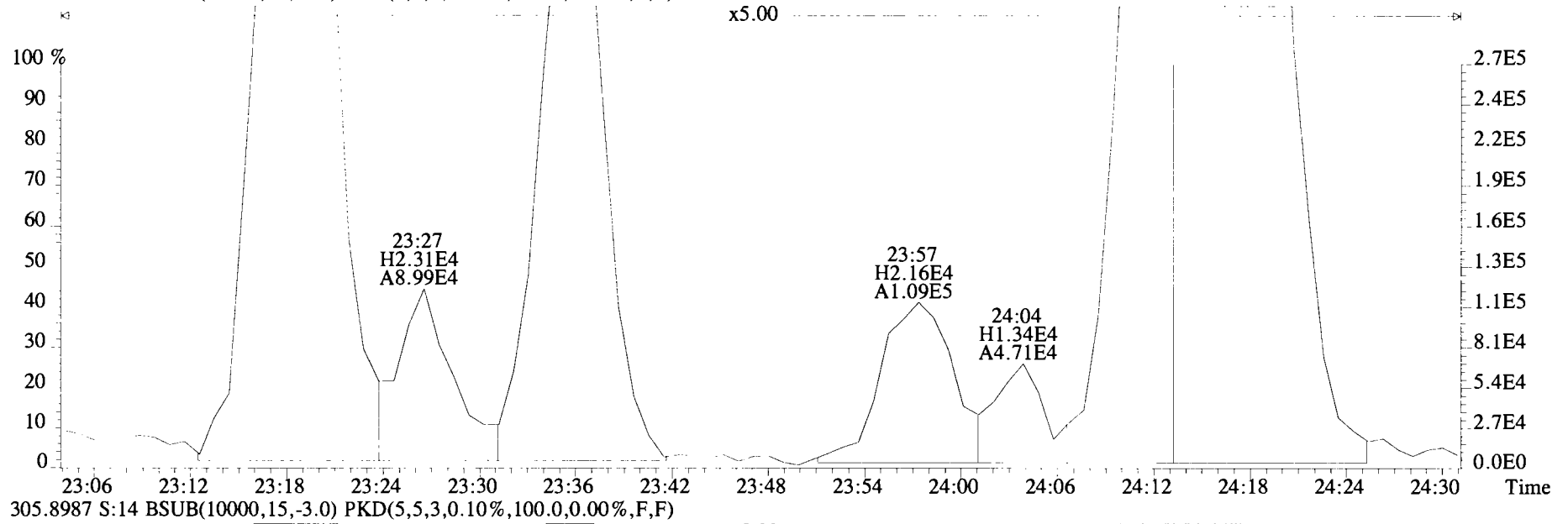
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Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



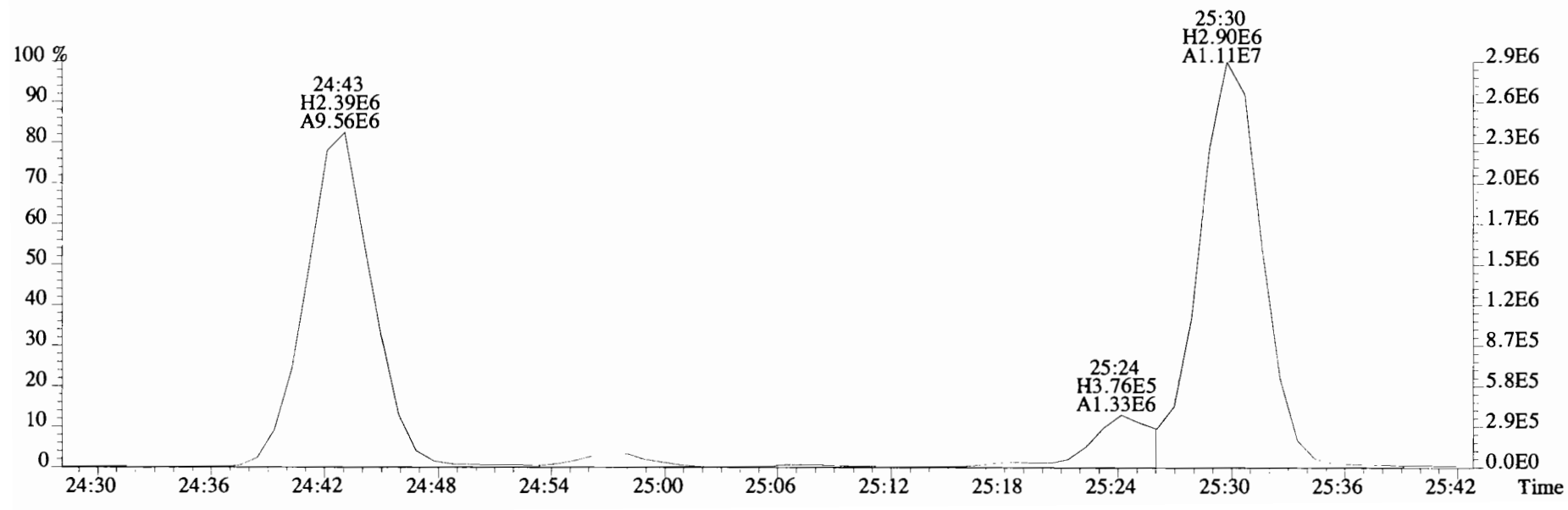
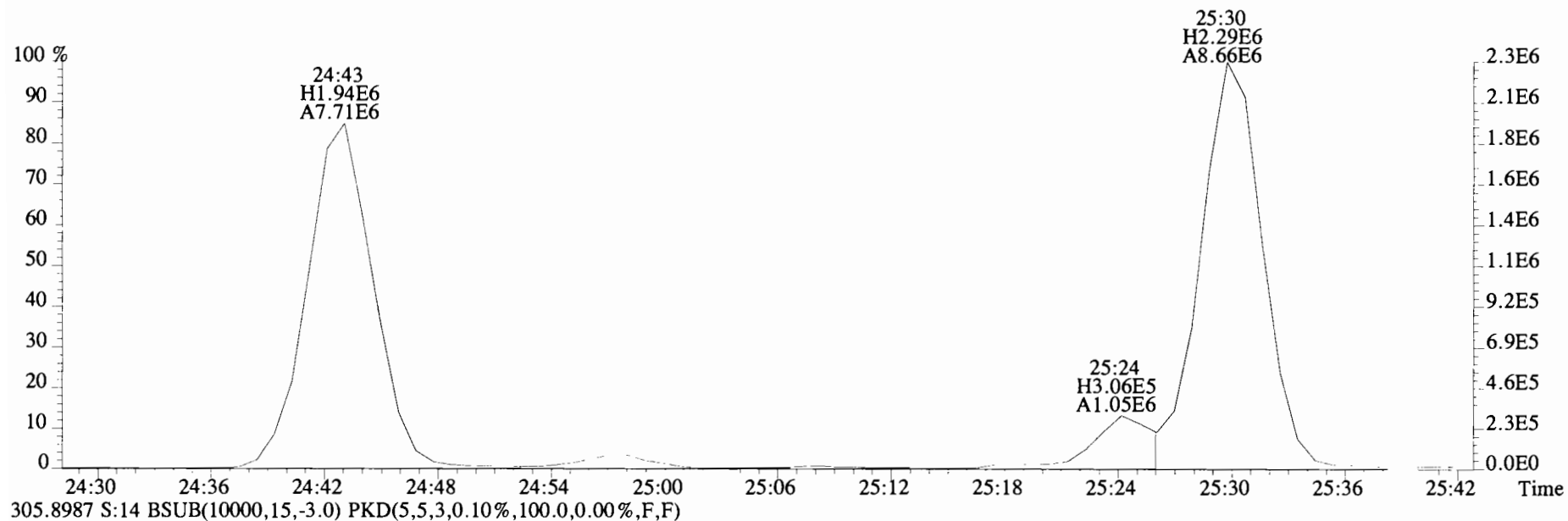
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 Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
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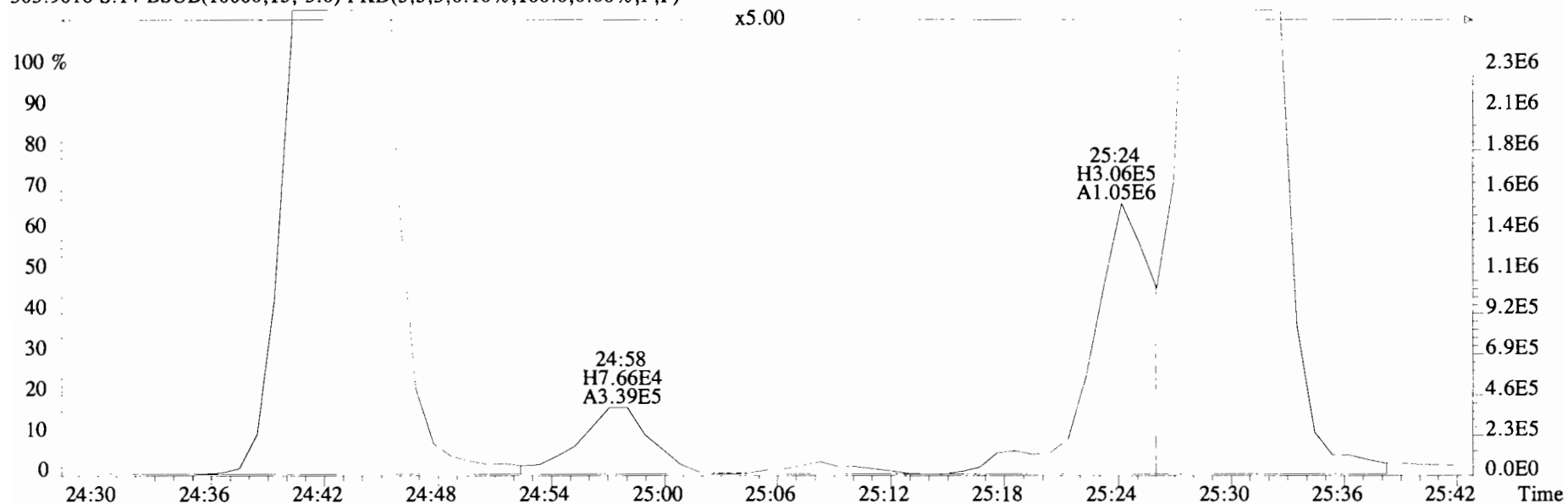
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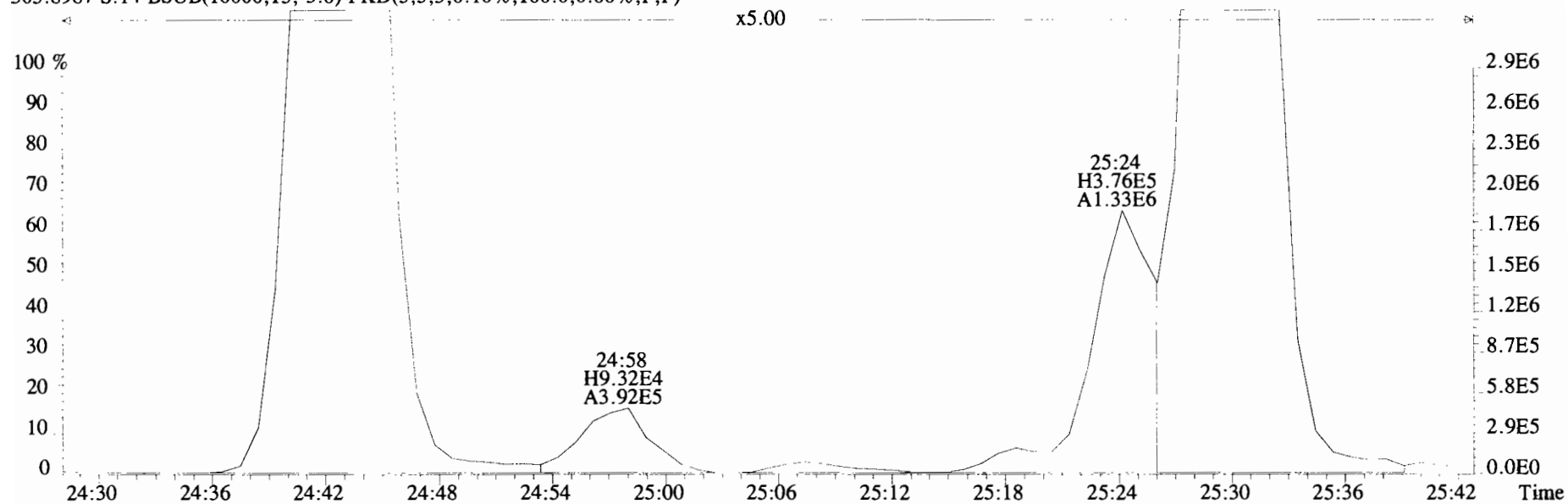
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



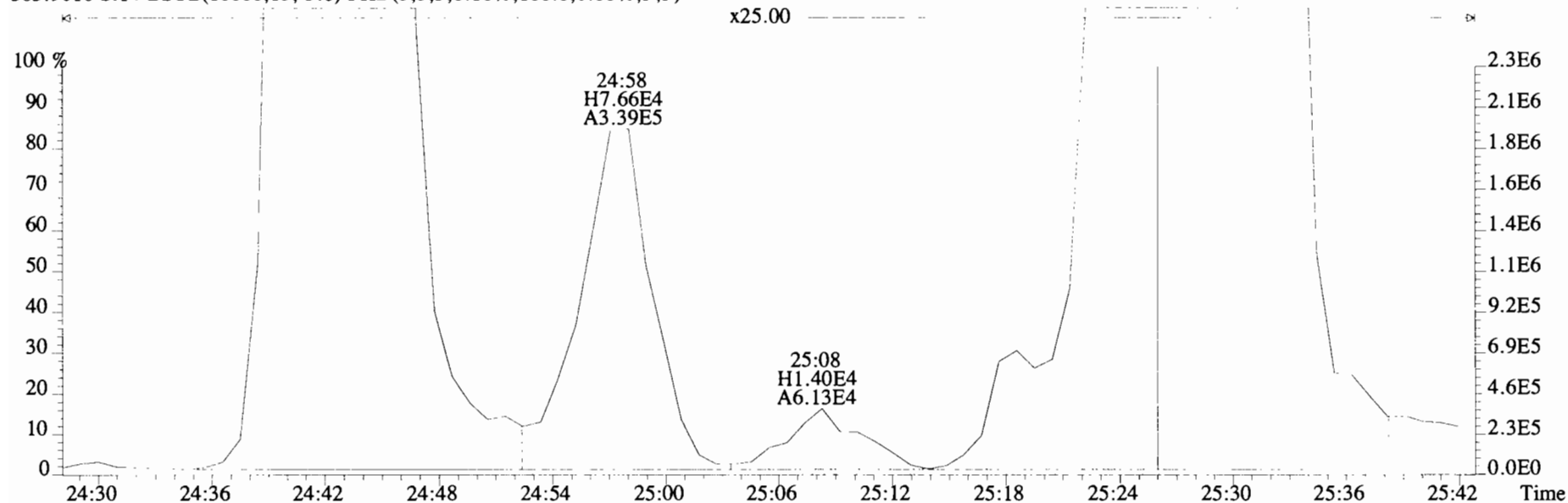
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Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



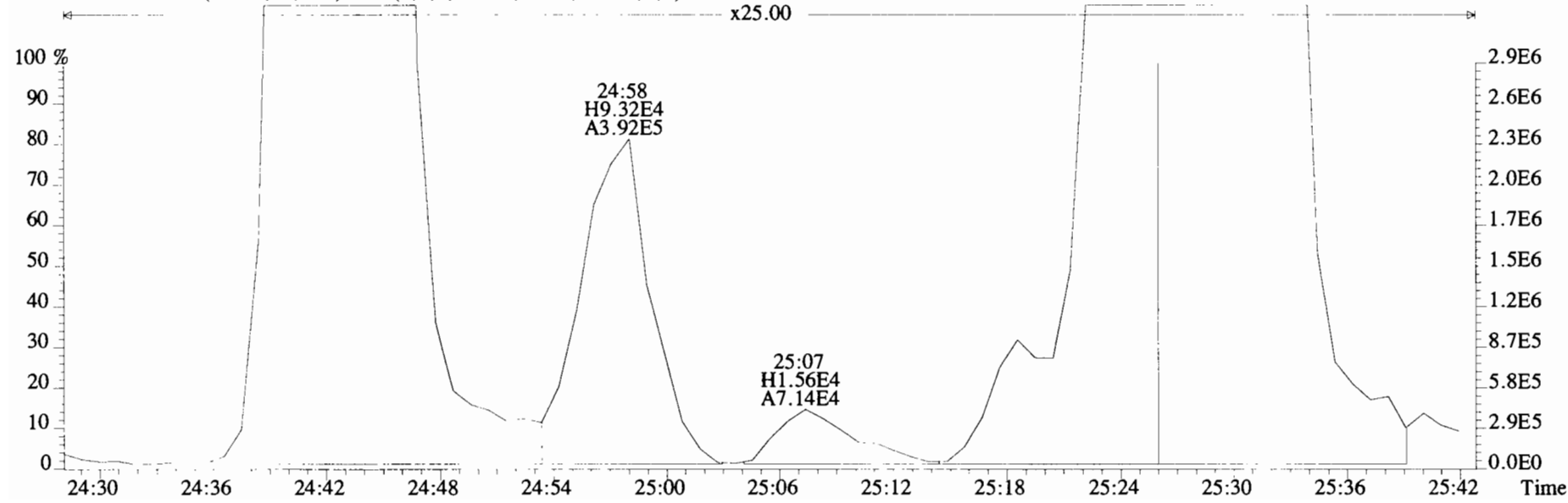
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



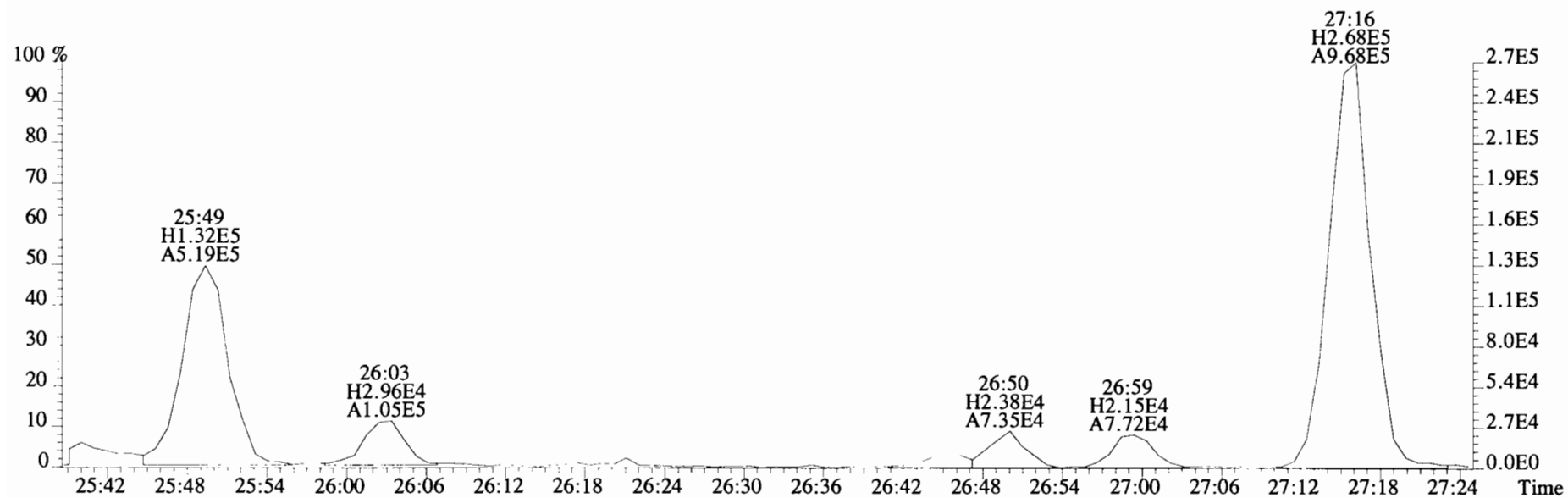
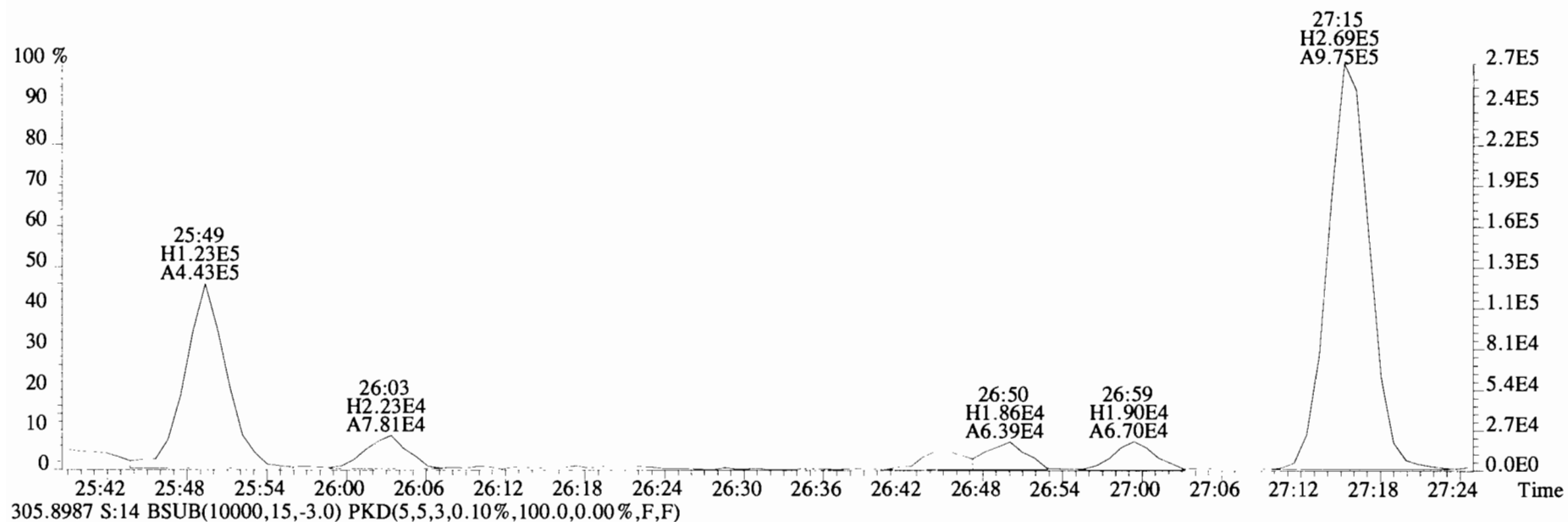
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Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



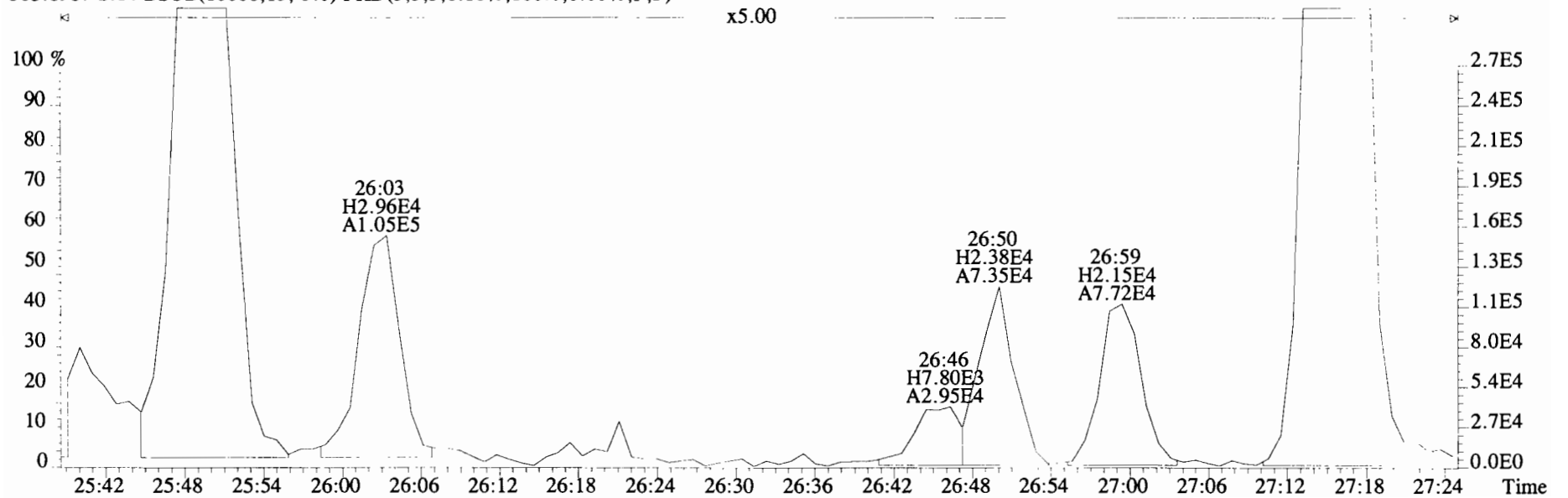
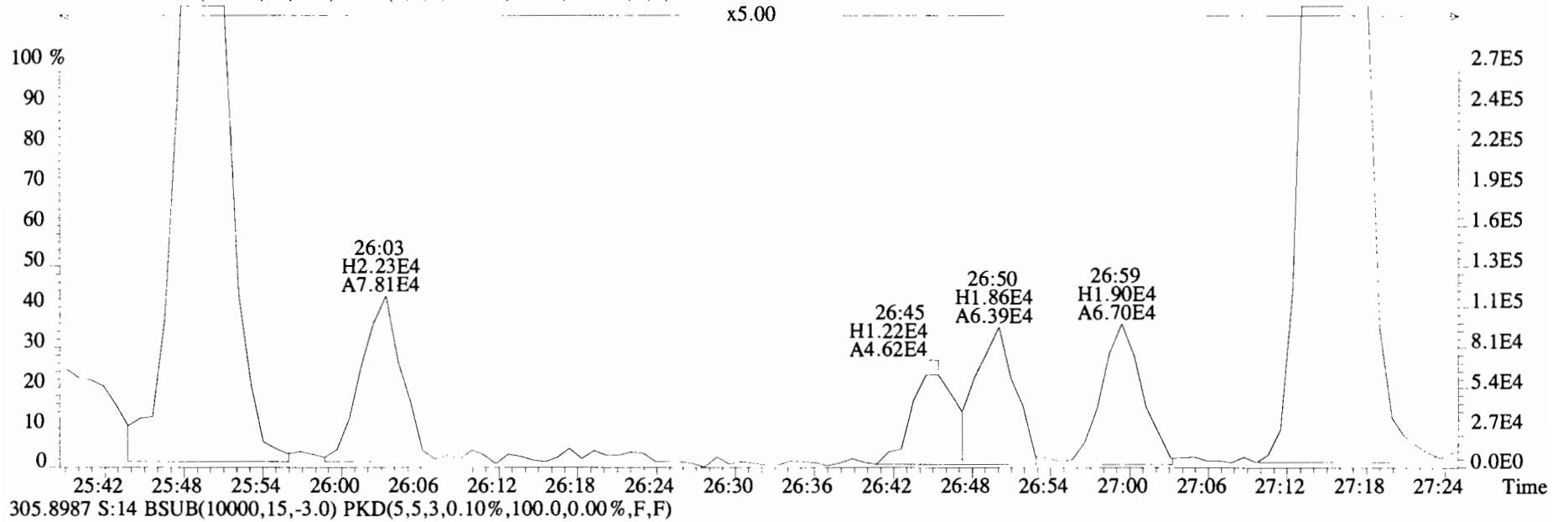
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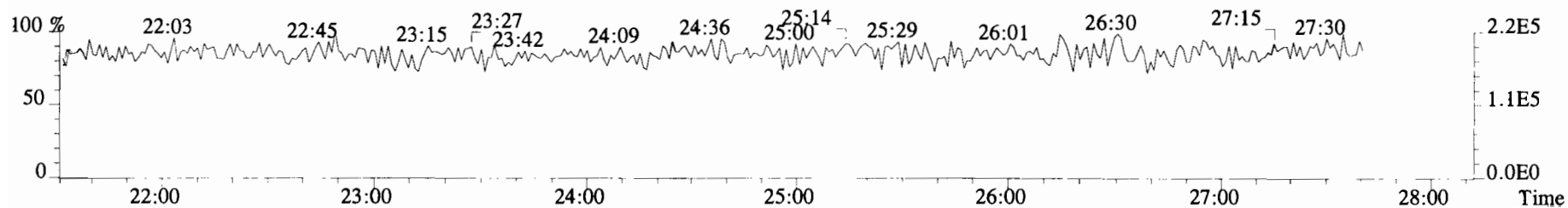
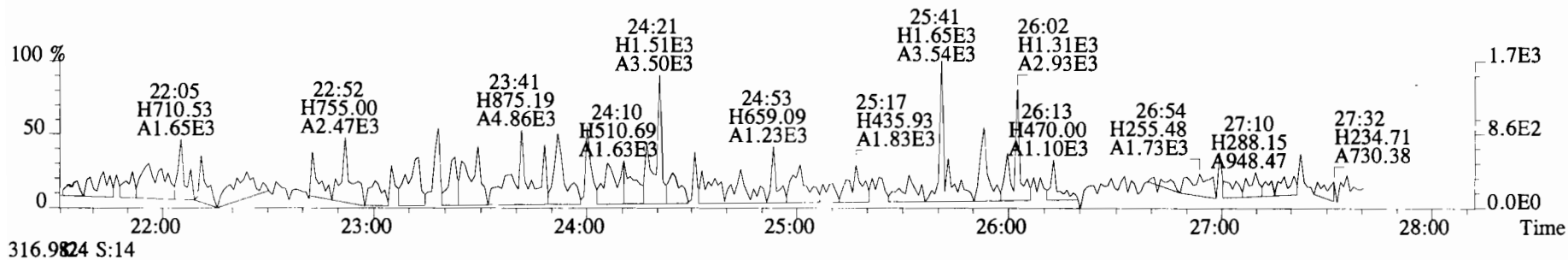
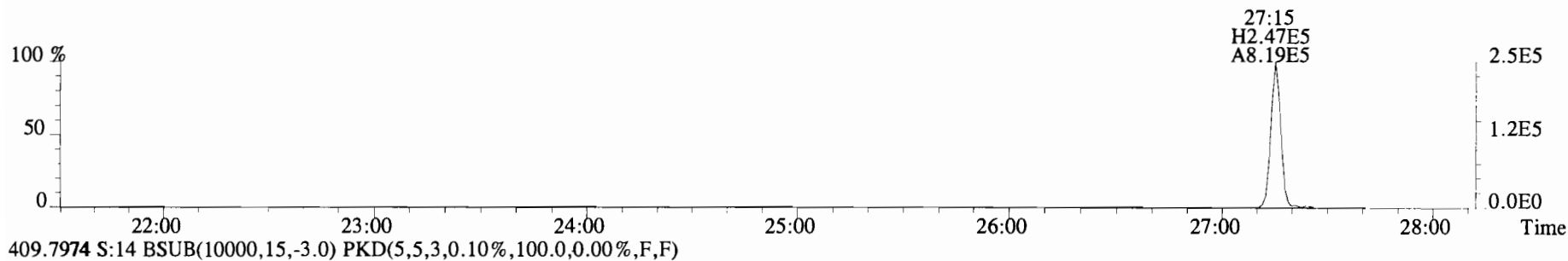
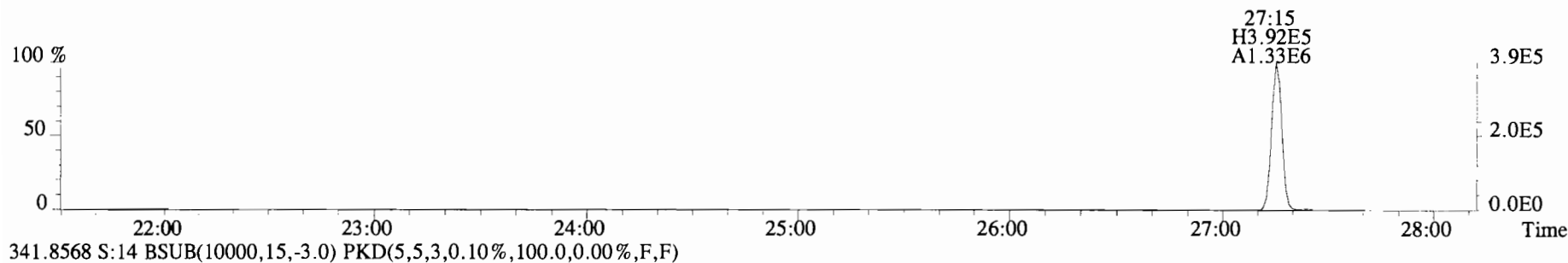
File:191031D2 #1-493 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
303.9016 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



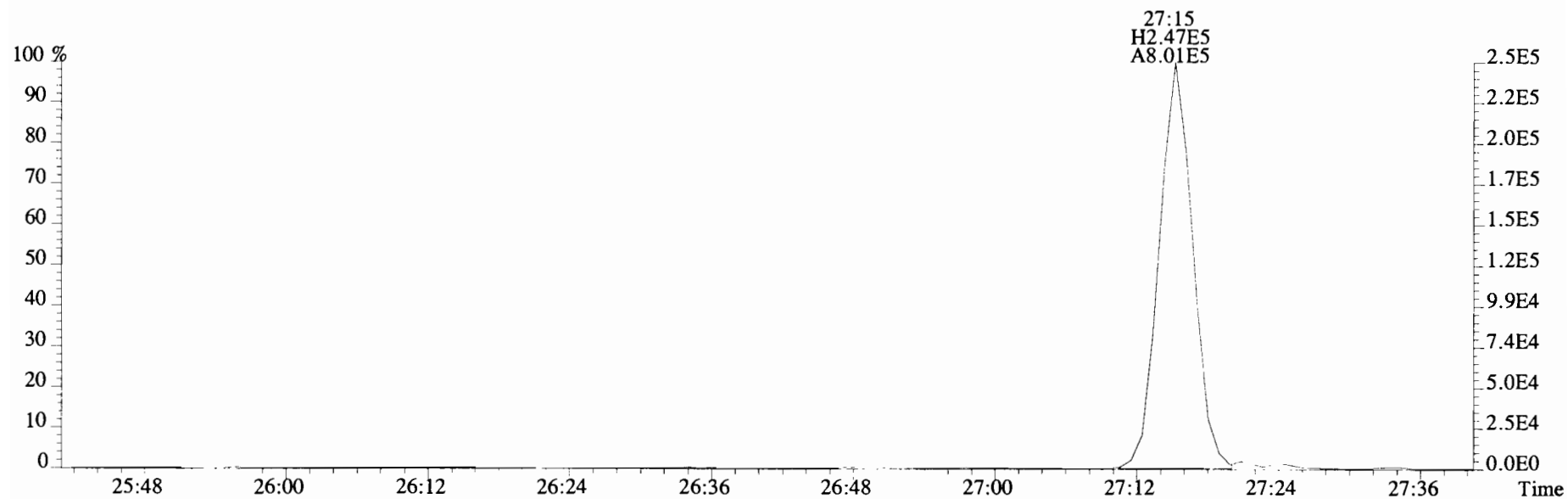
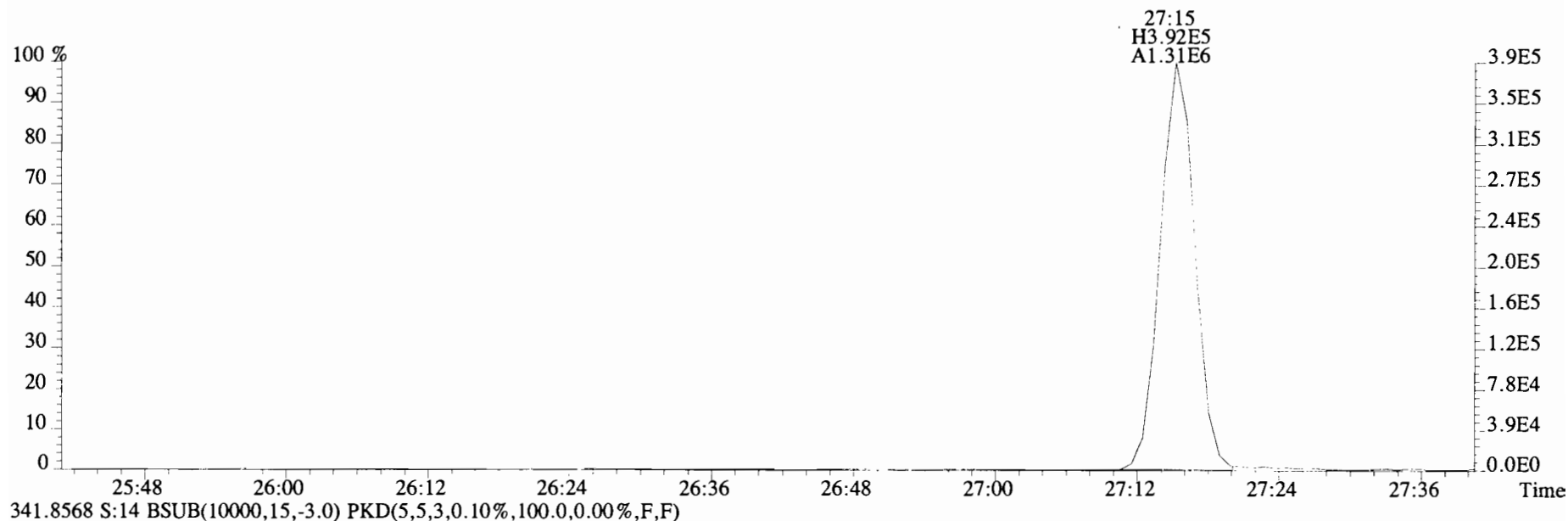
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 Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
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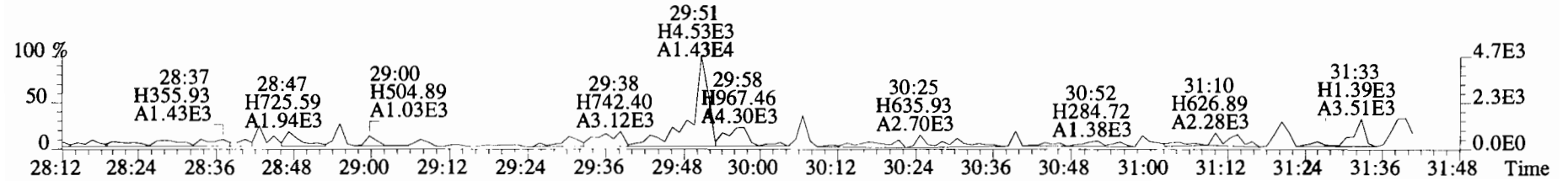
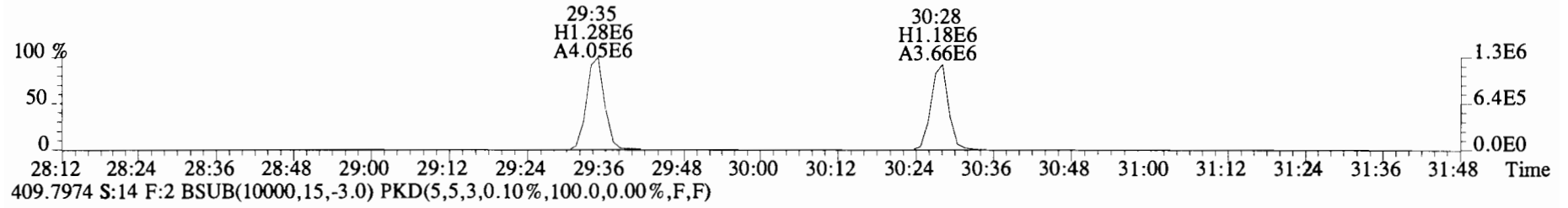
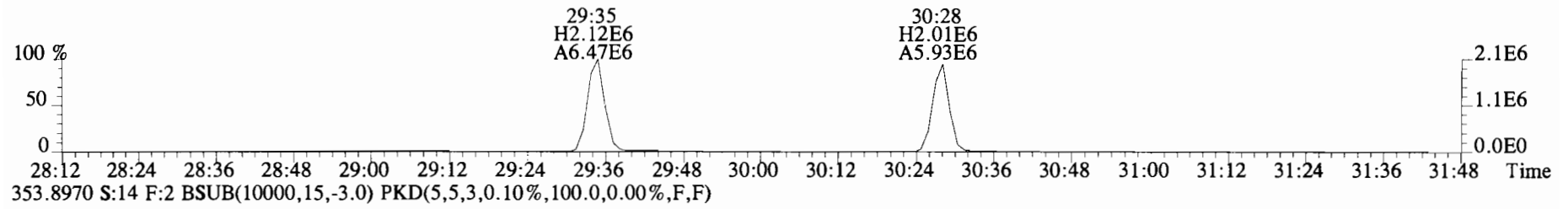
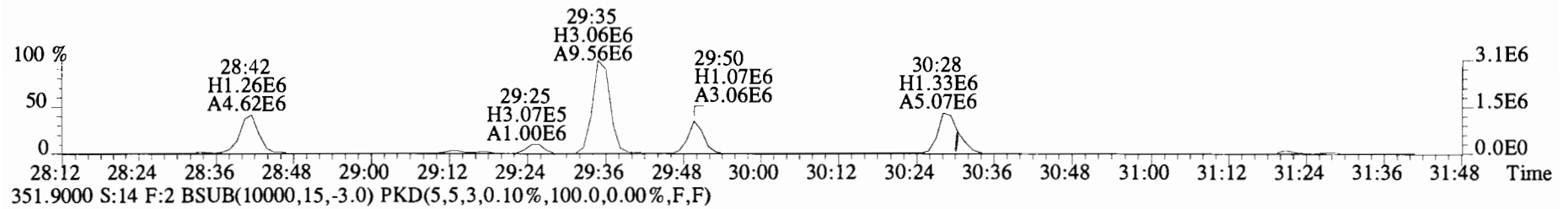
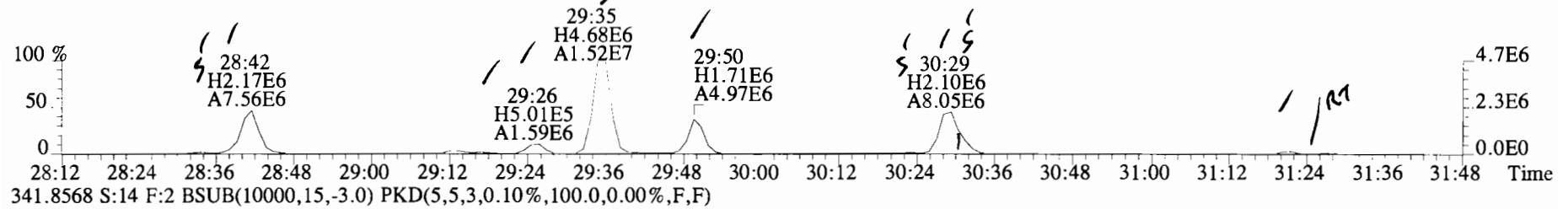
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 Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



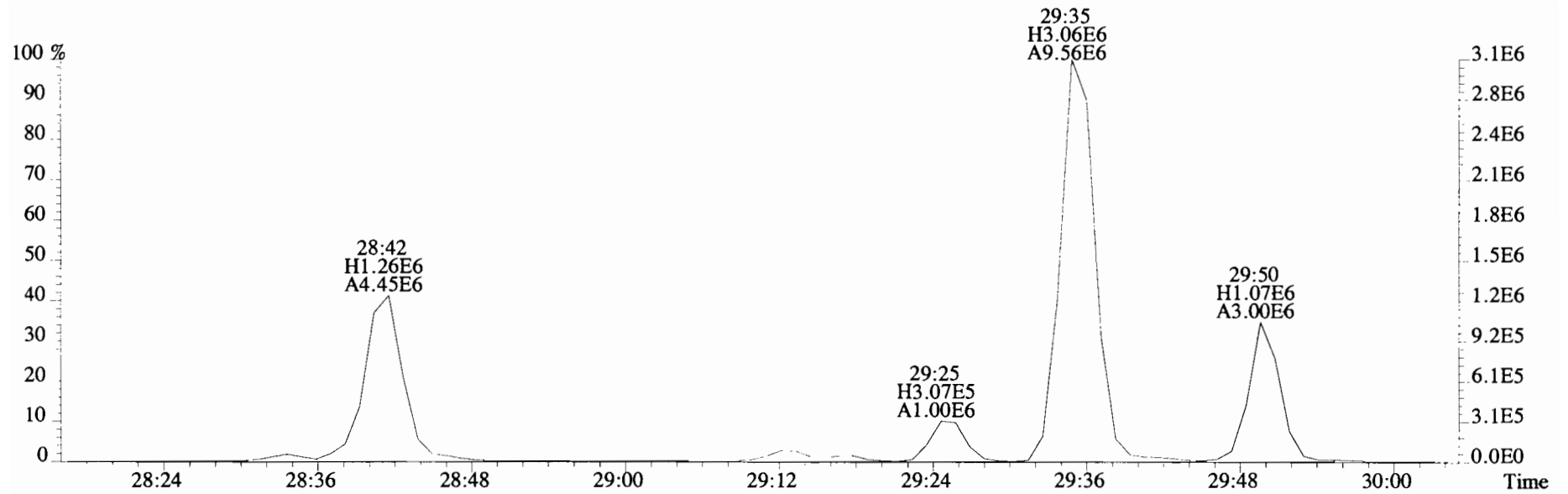
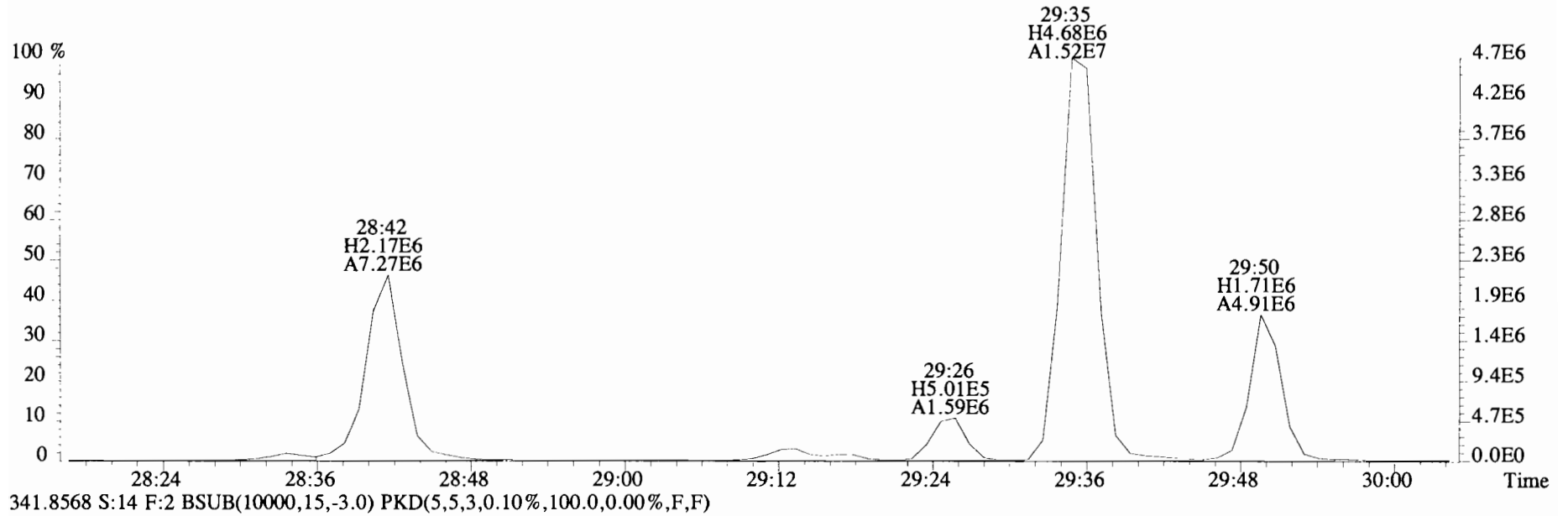
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Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



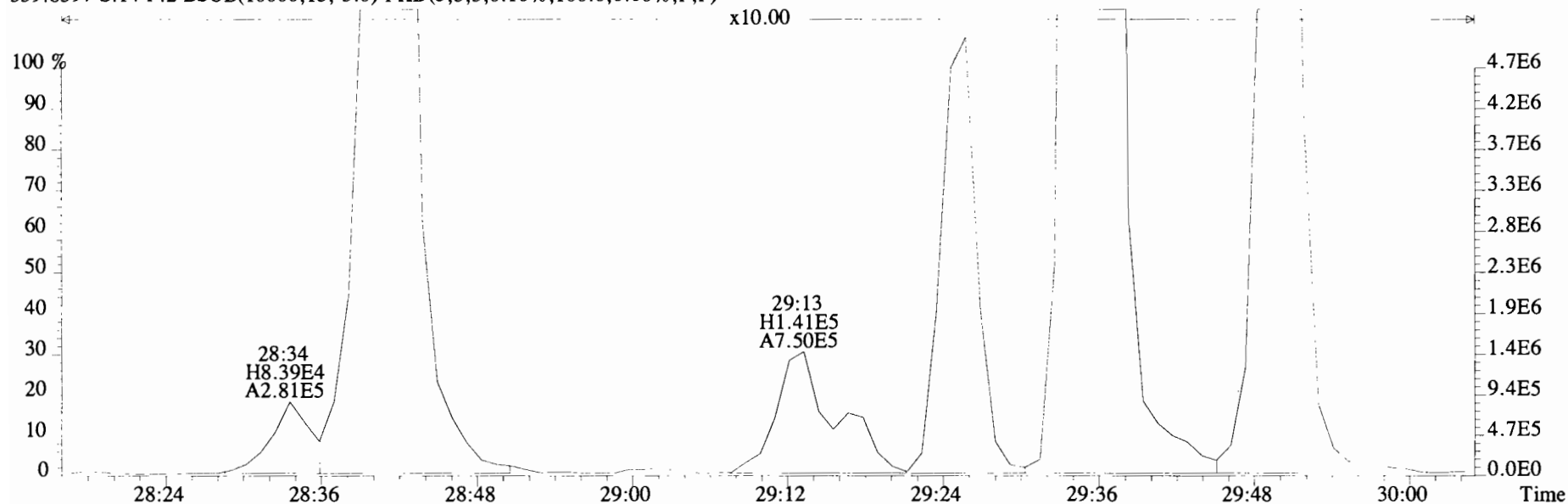
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



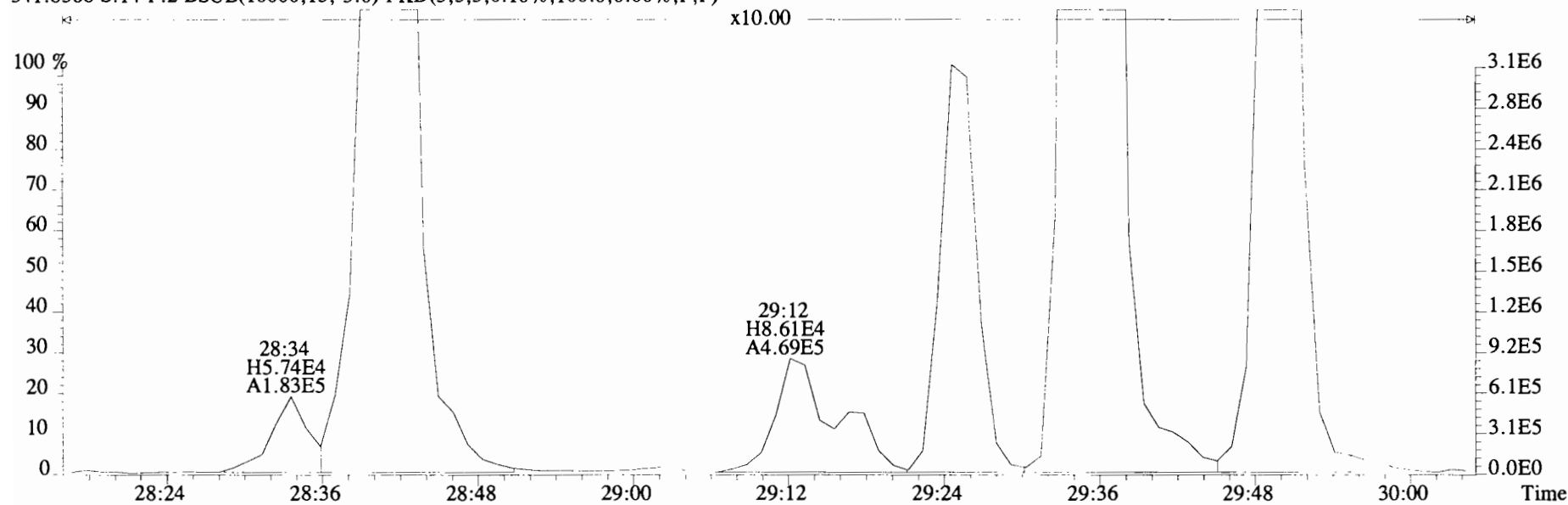
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



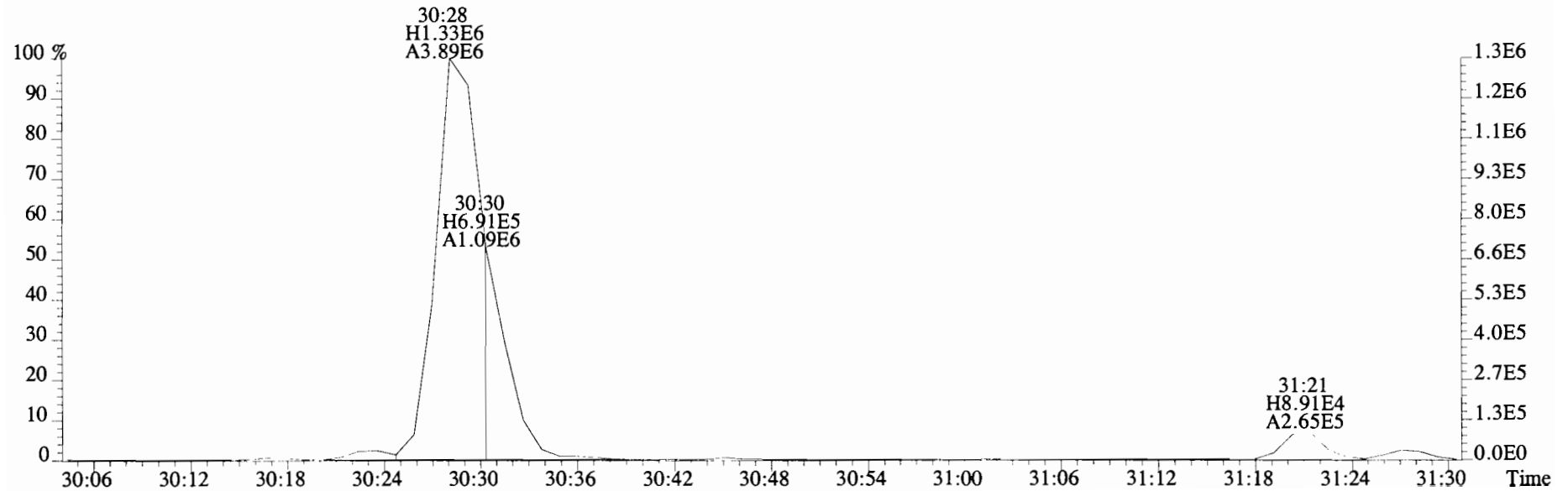
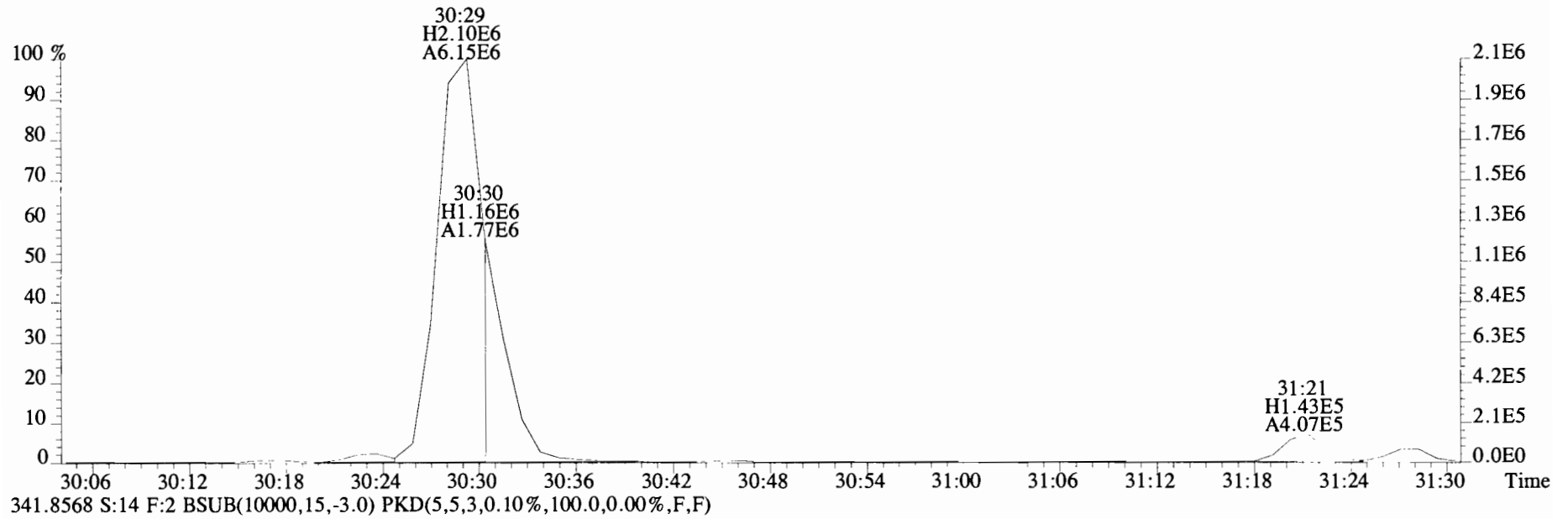
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



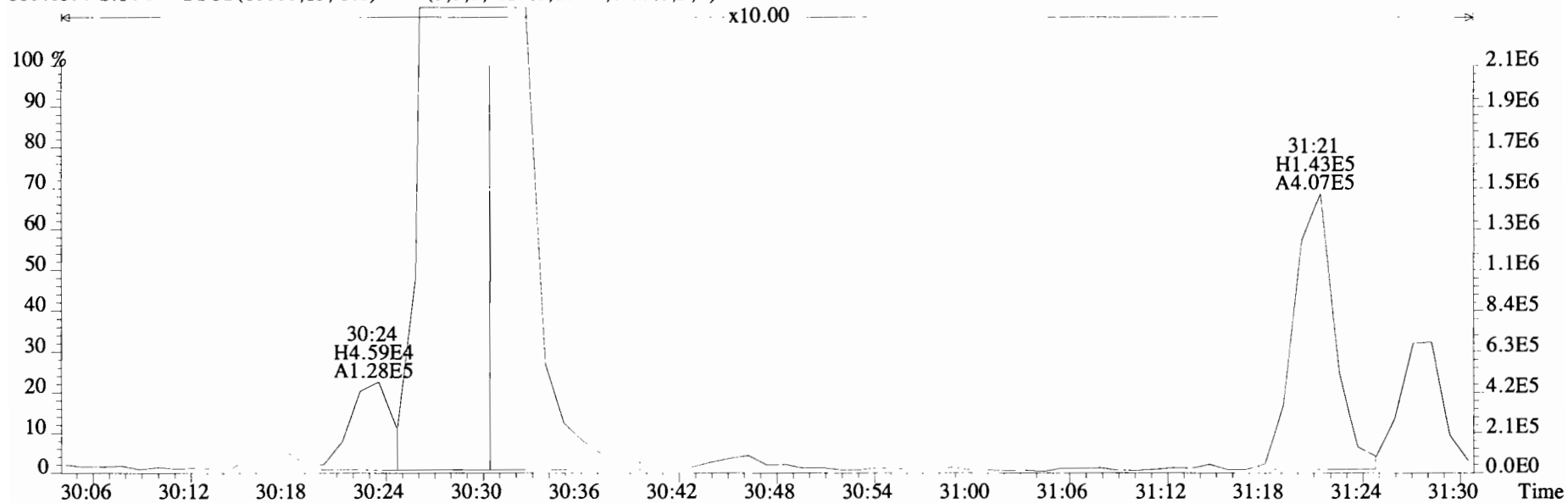
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



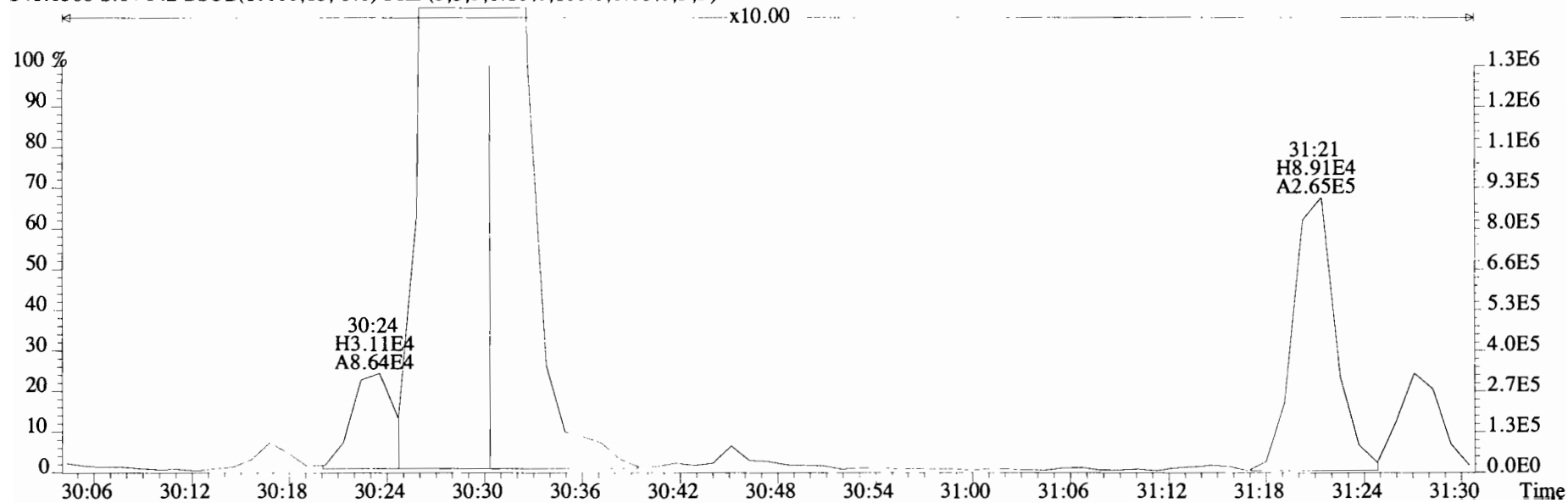
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



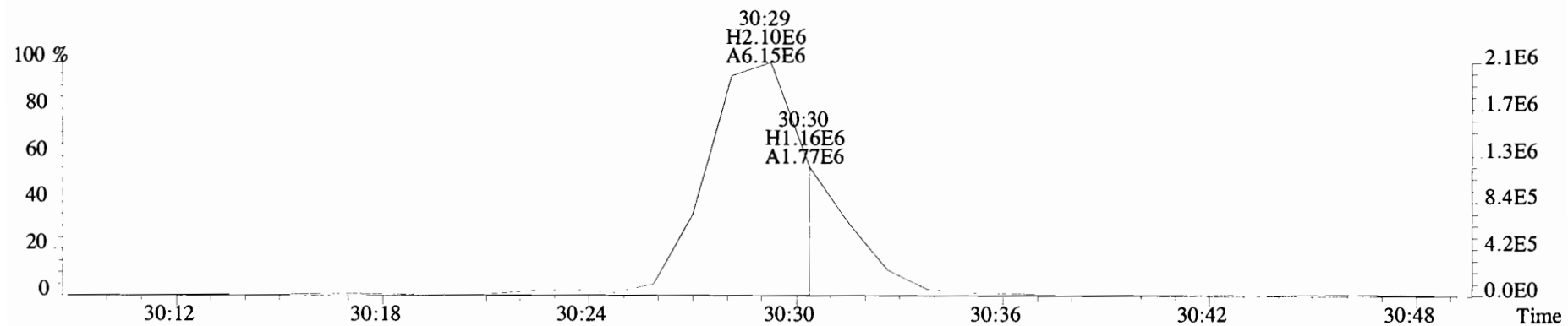
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



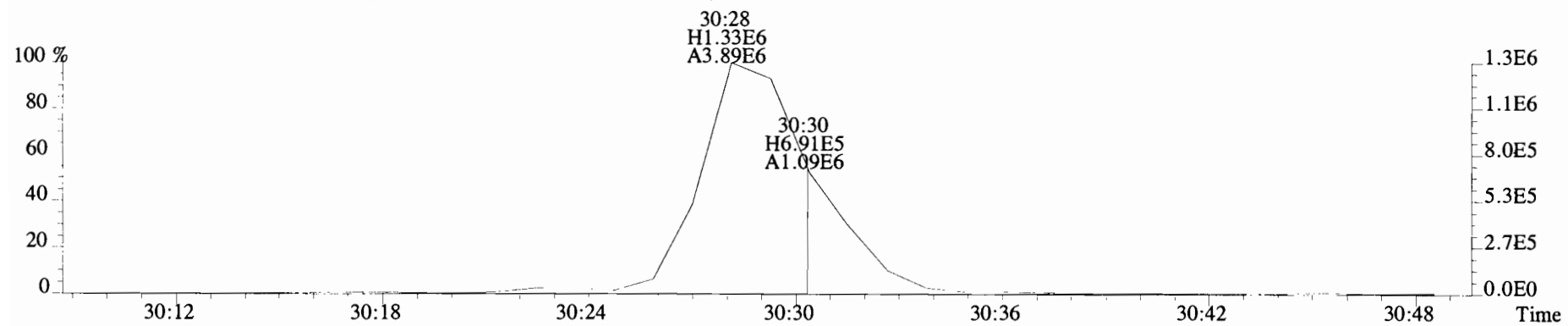
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



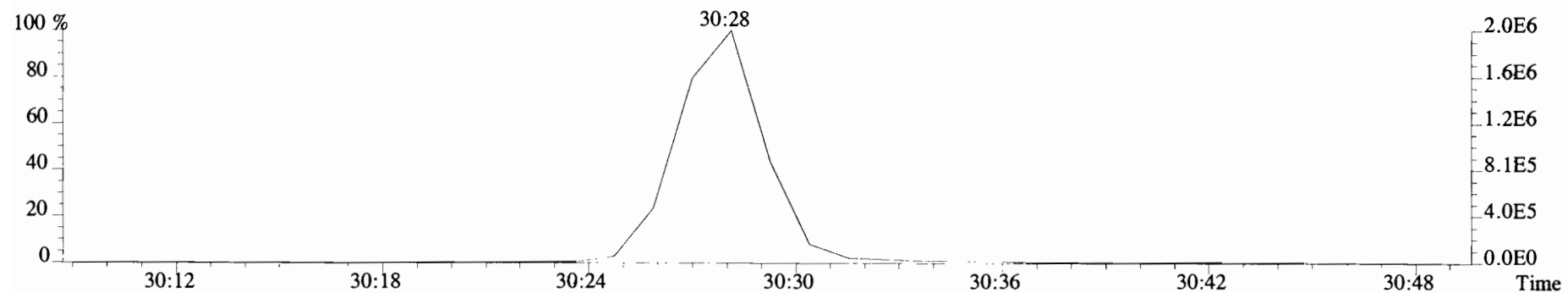
File:191031D2 #1-211 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



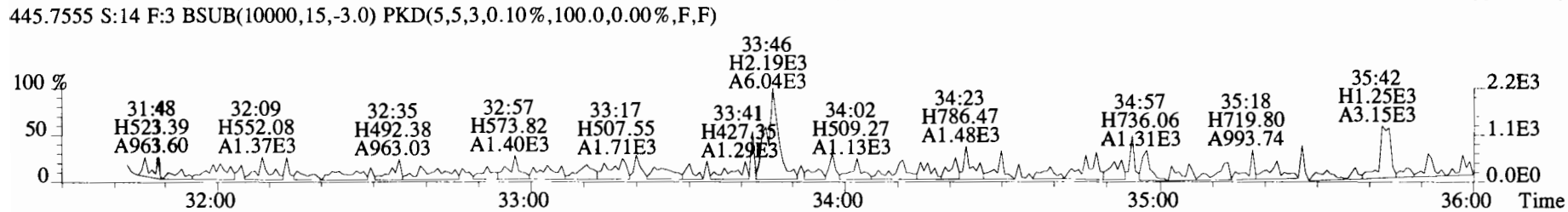
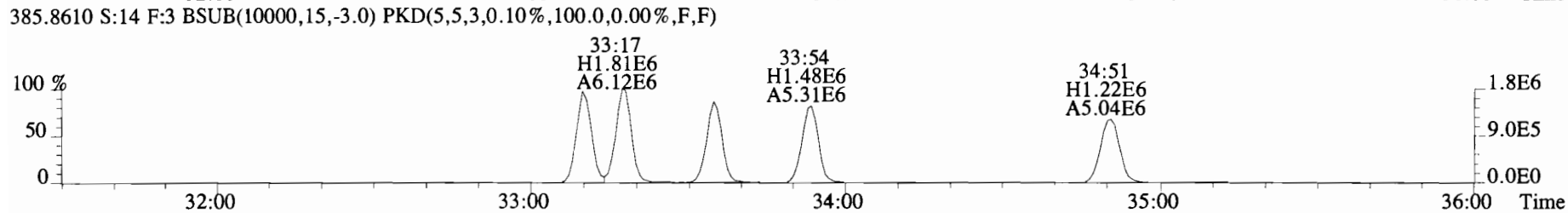
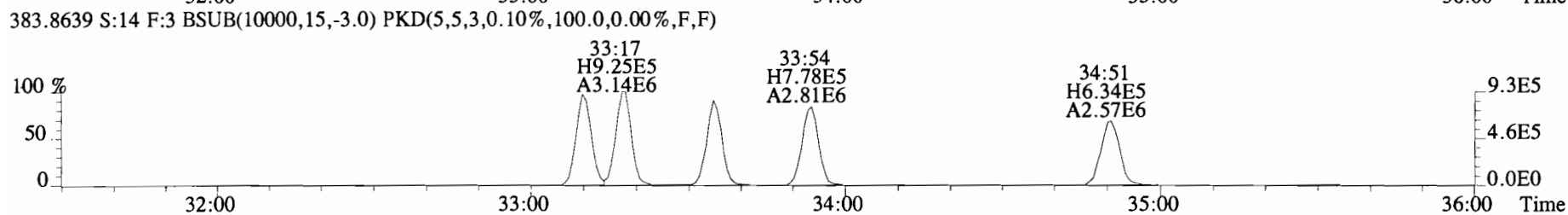
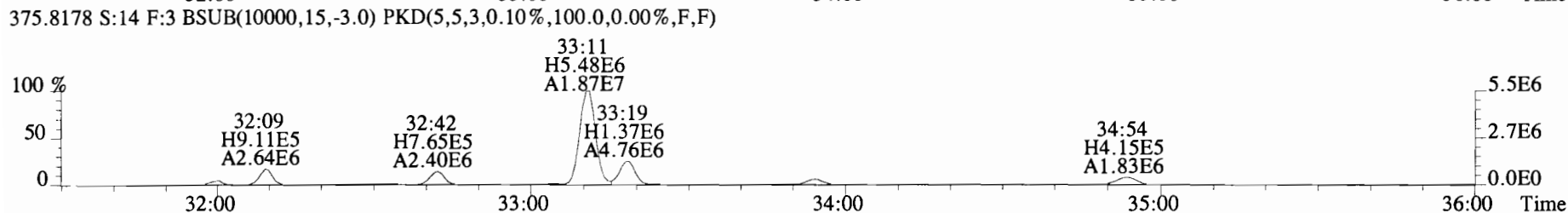
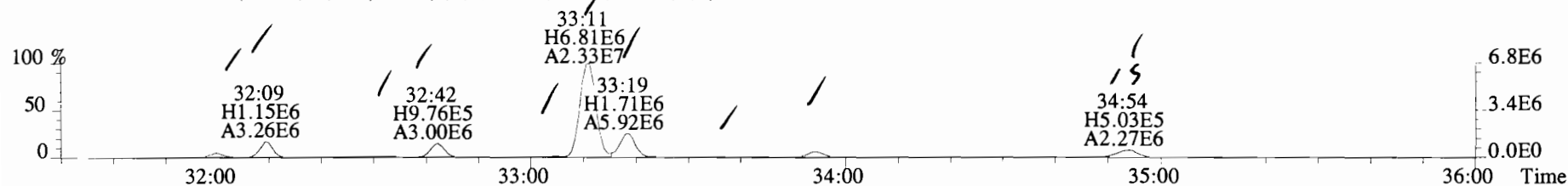
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



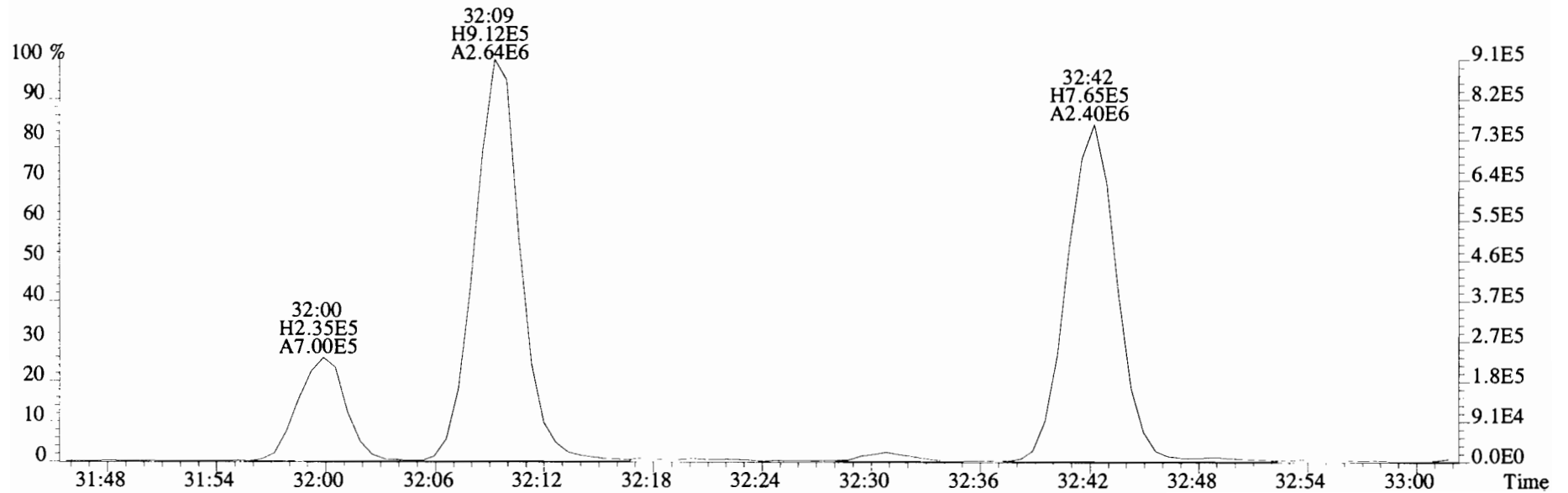
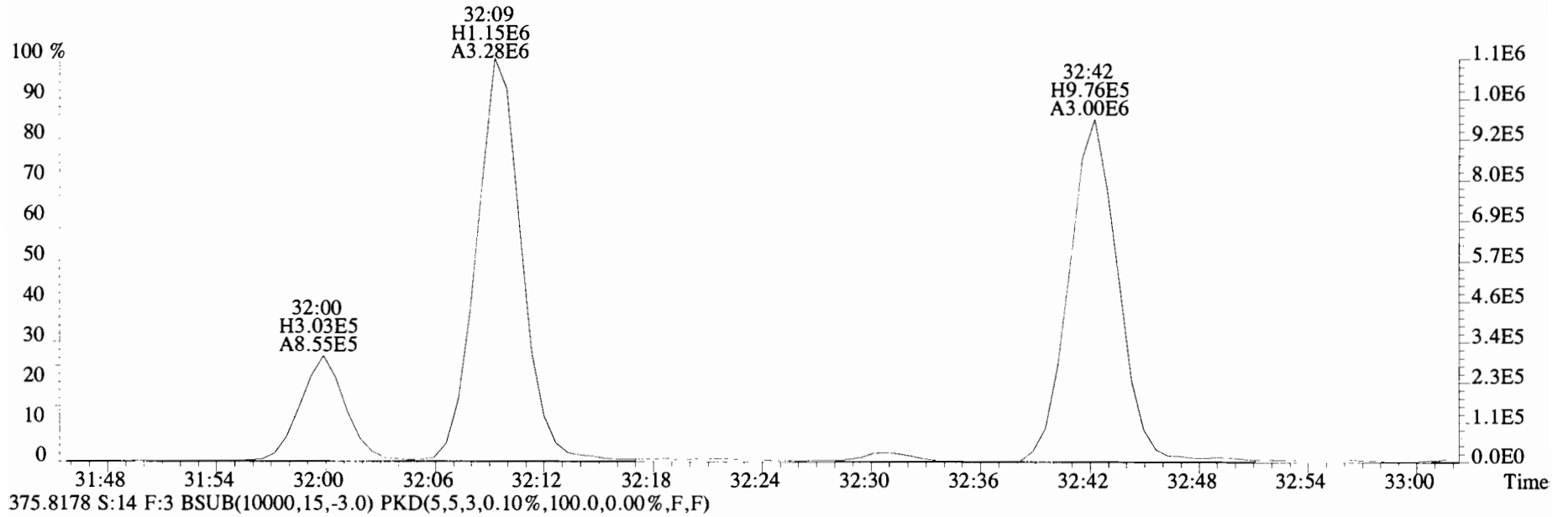
351.9000 S:14 F:2



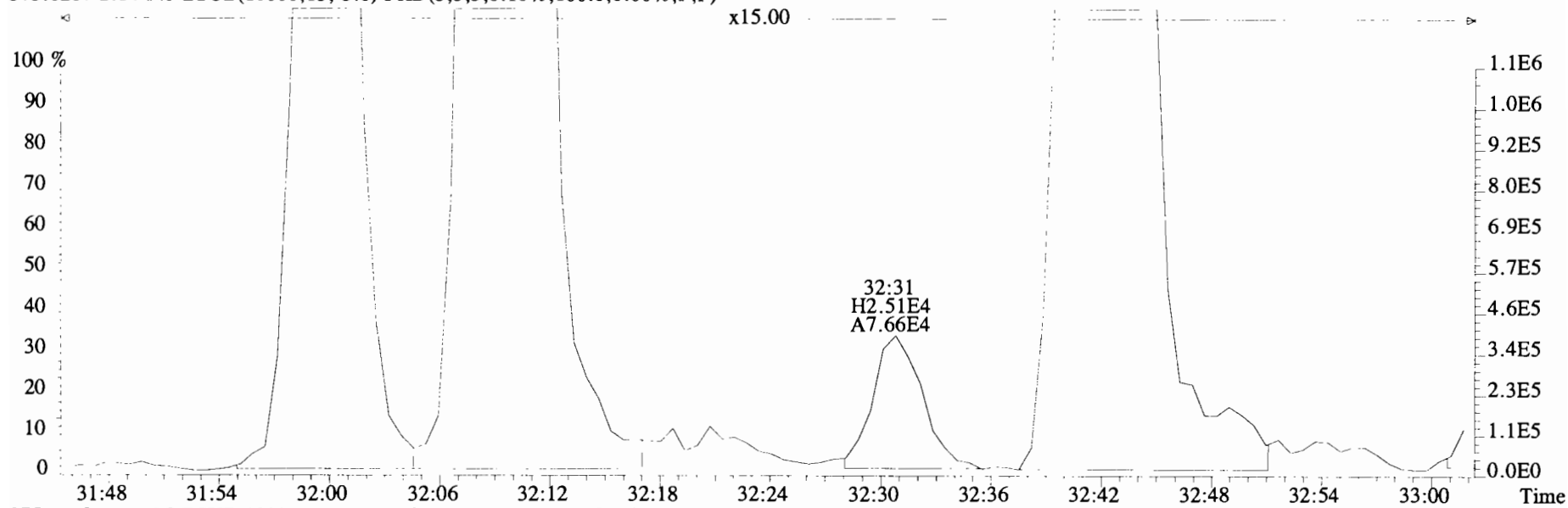
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



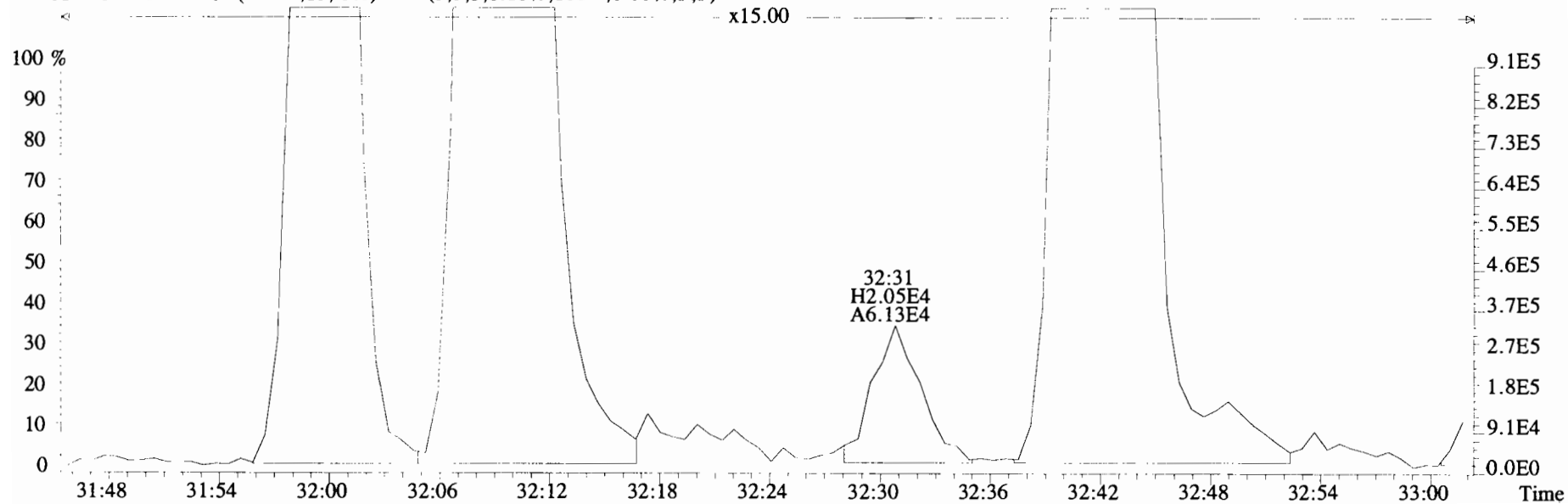
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



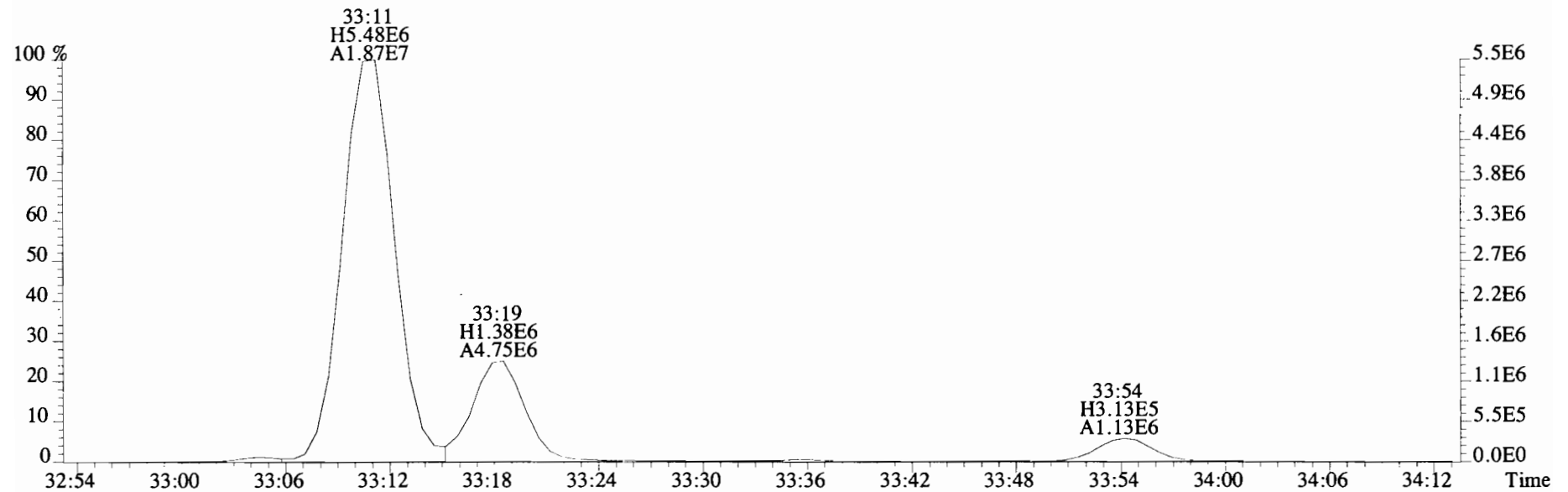
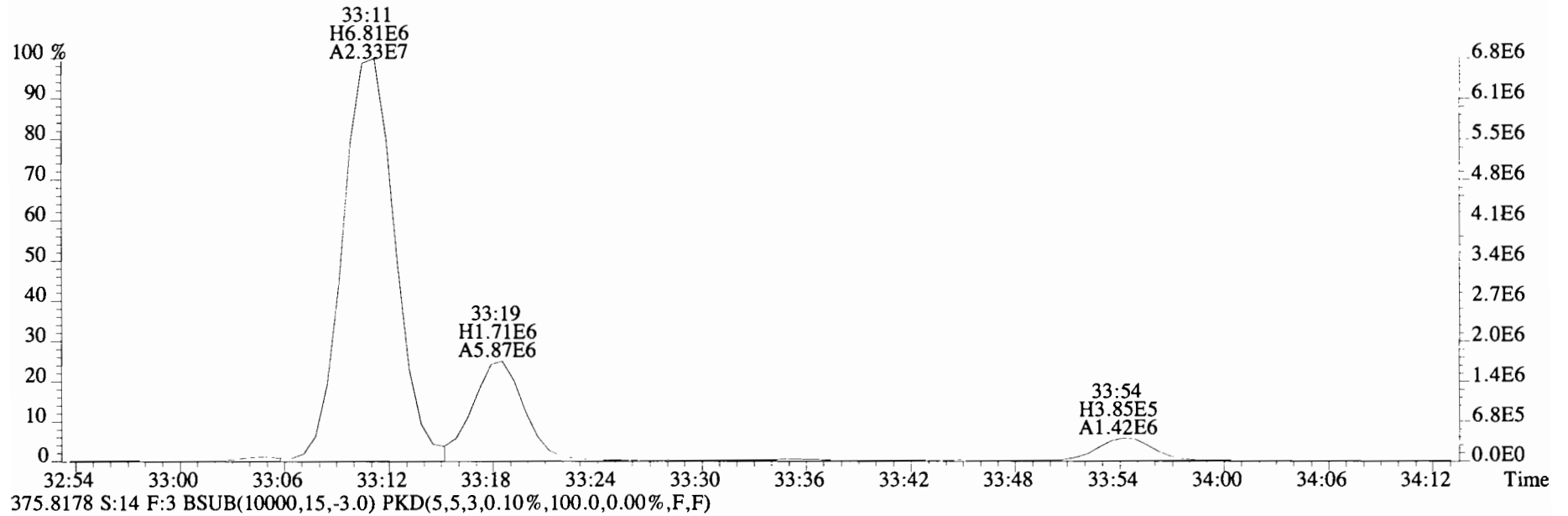
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



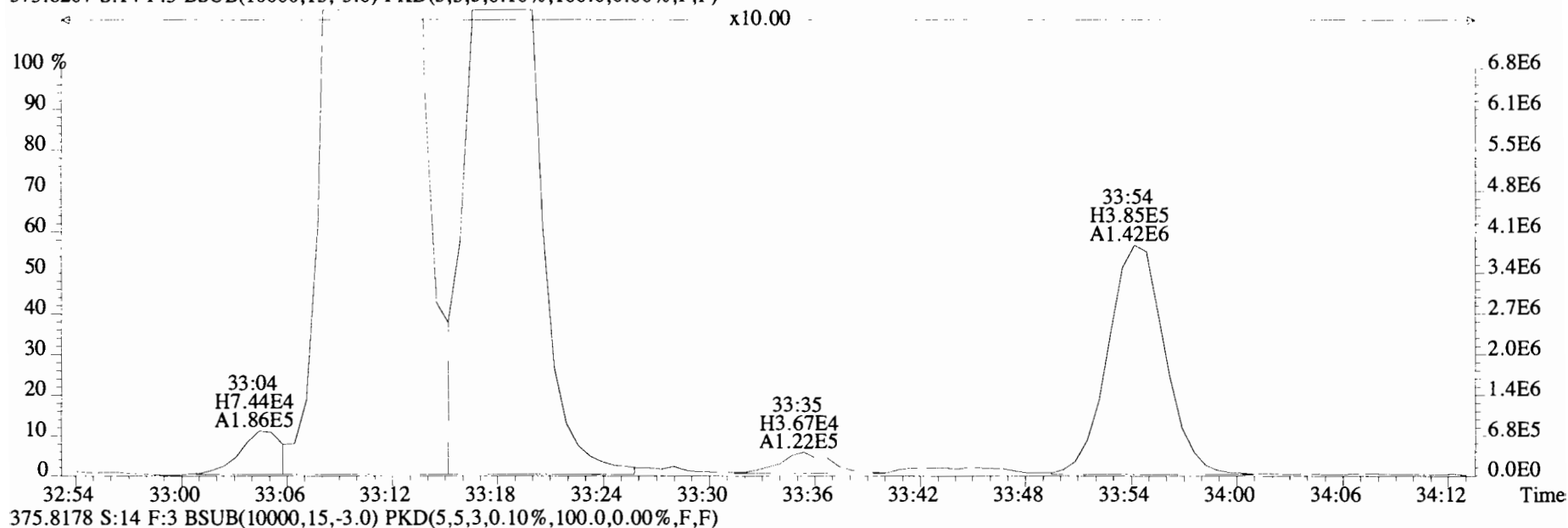
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



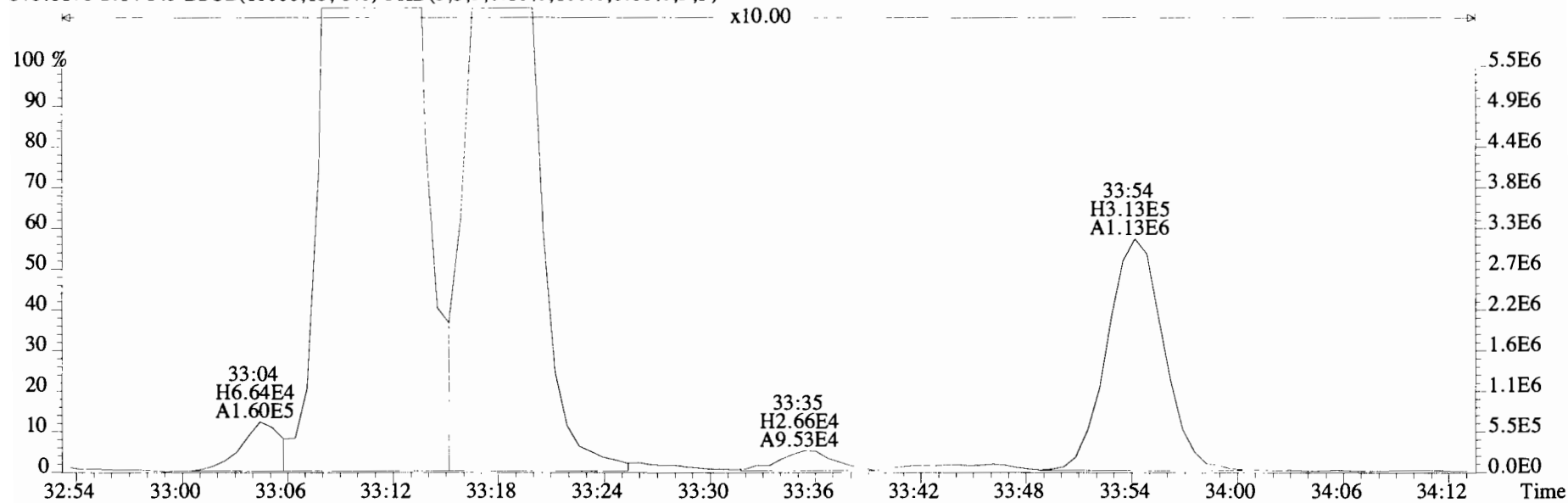
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



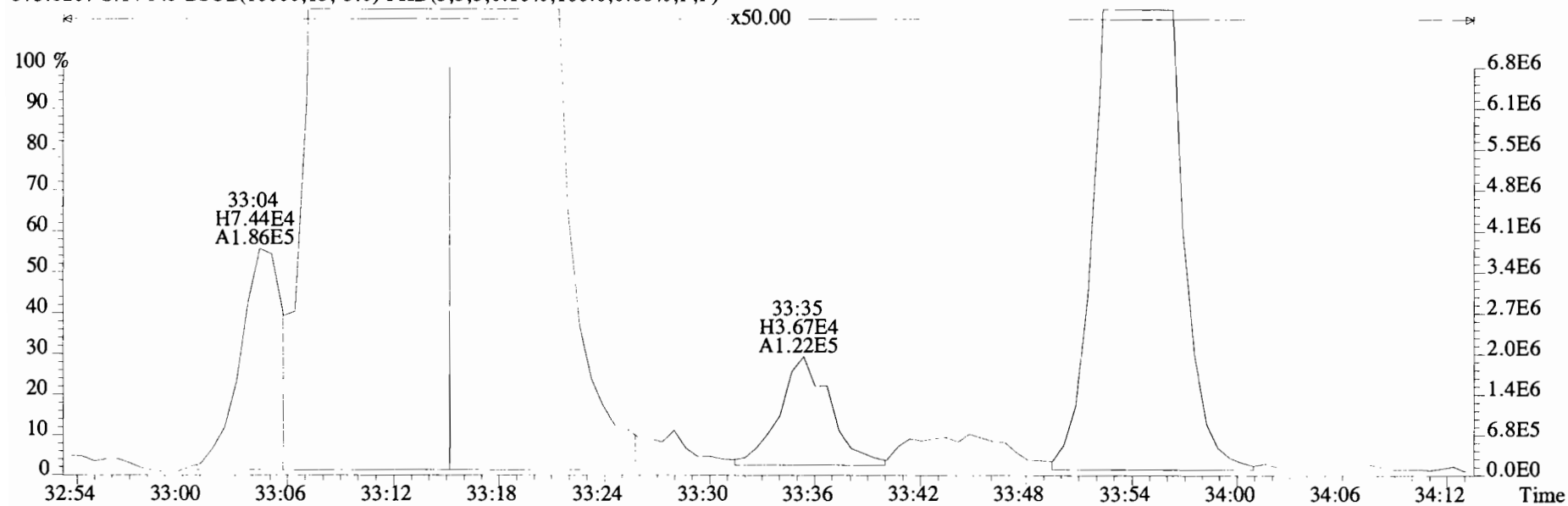
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



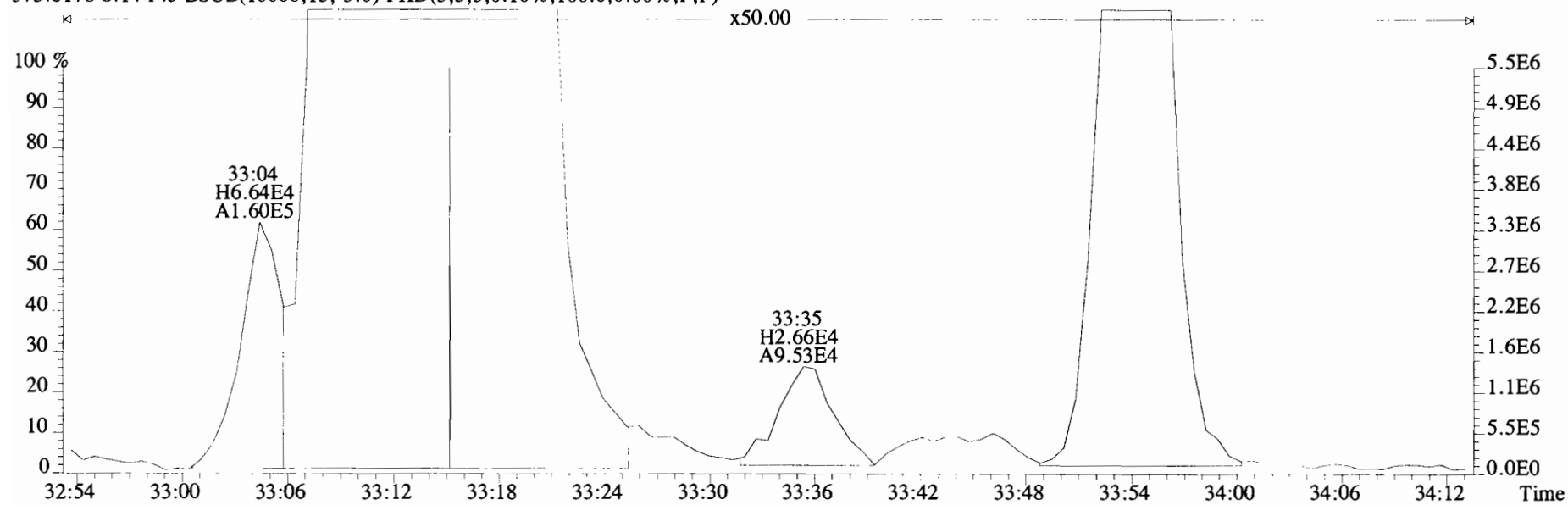
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



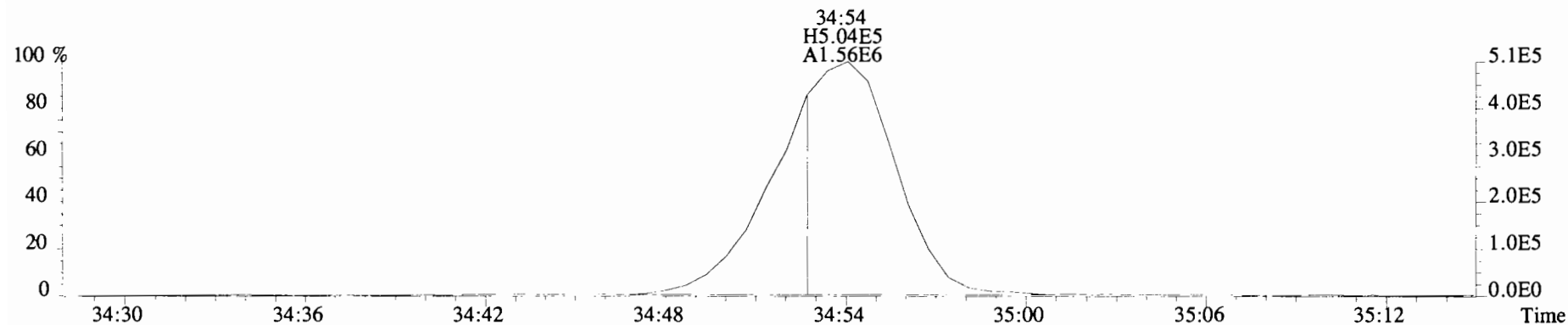
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



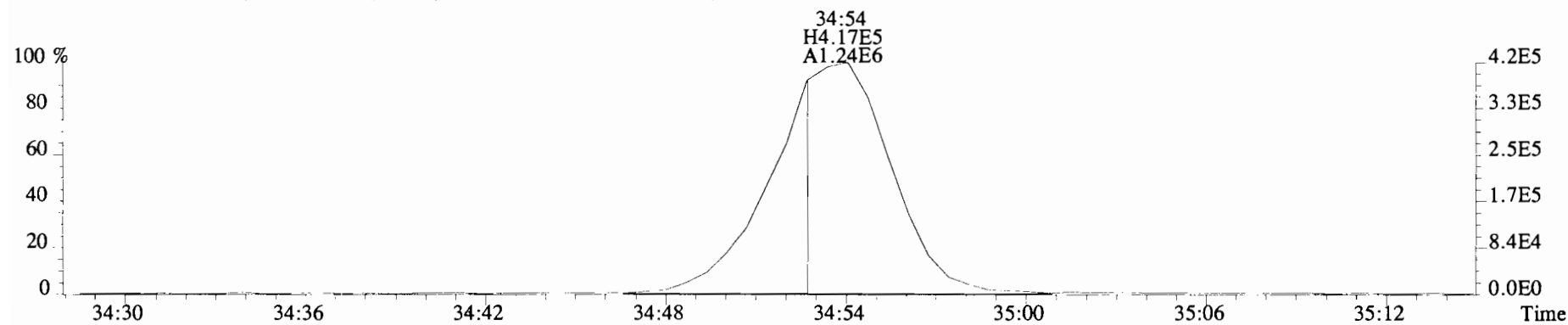
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



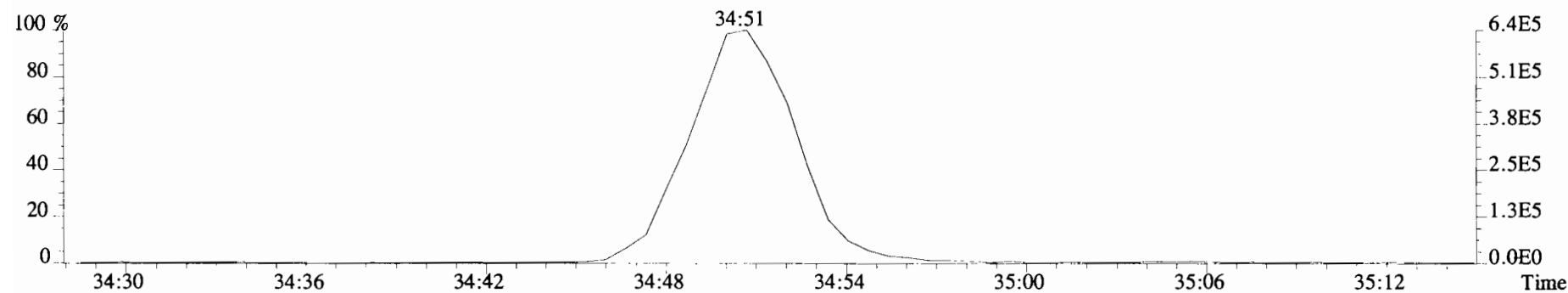
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



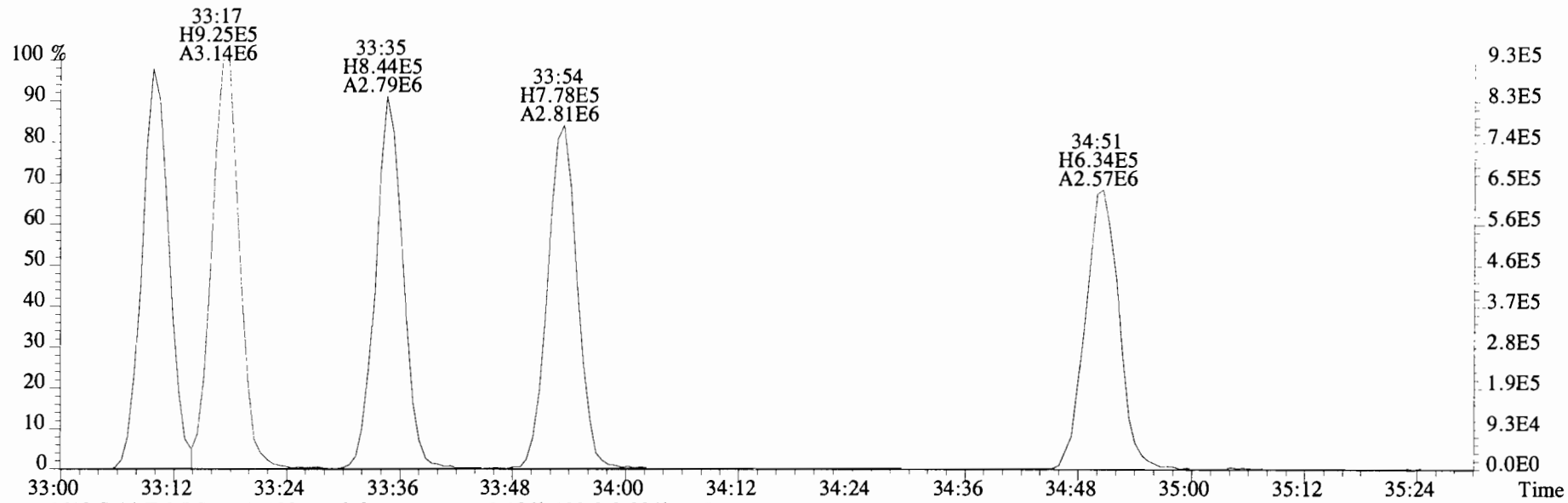
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



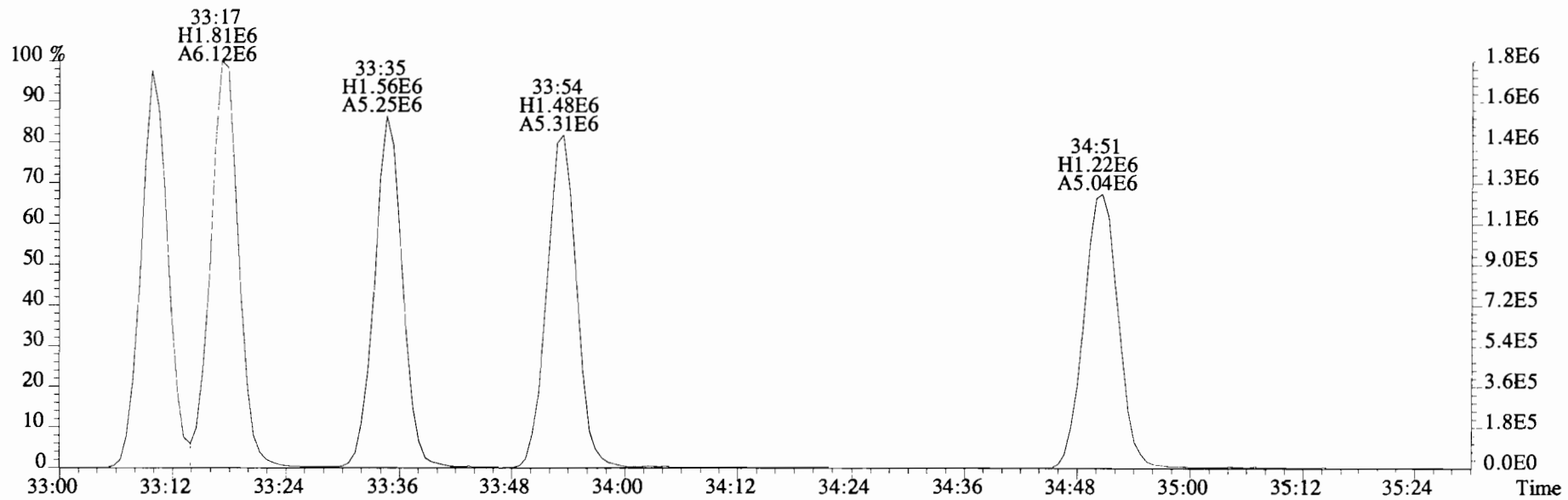
383.8639 S:14 F:3



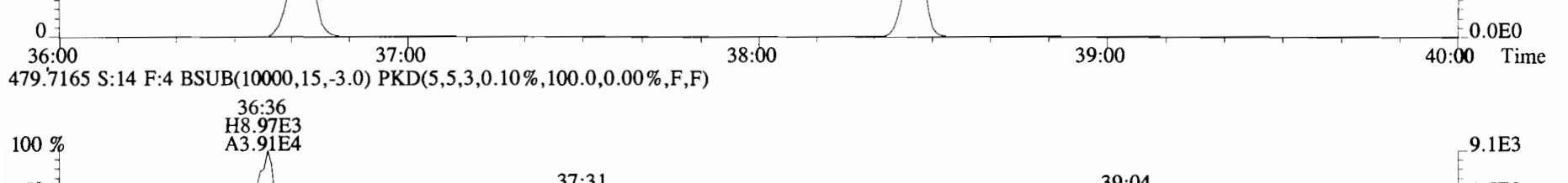
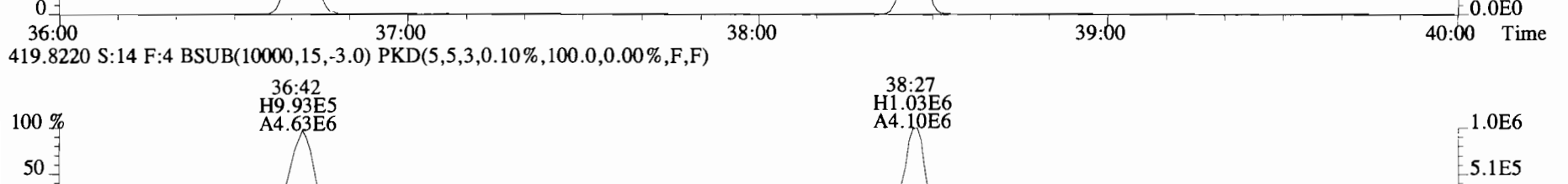
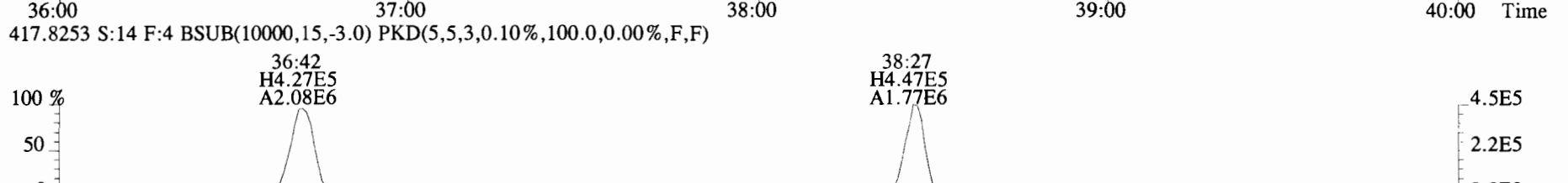
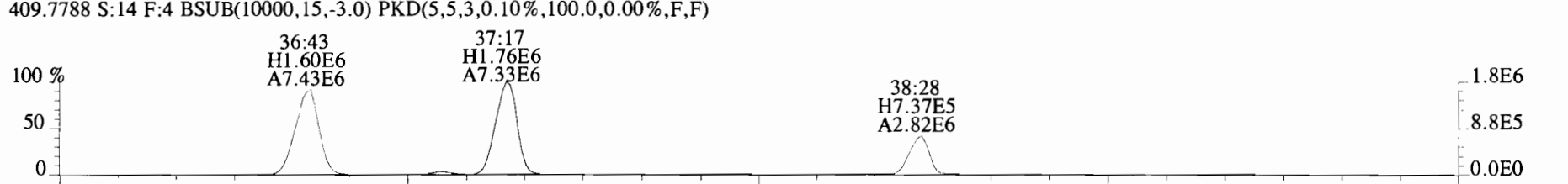
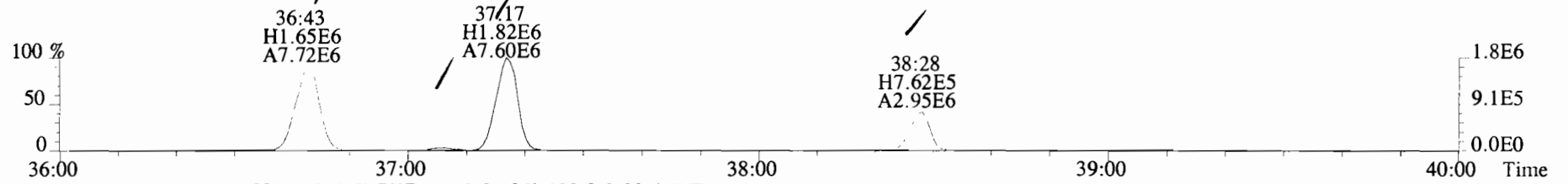
File:191031D2 #1-385 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PD1-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



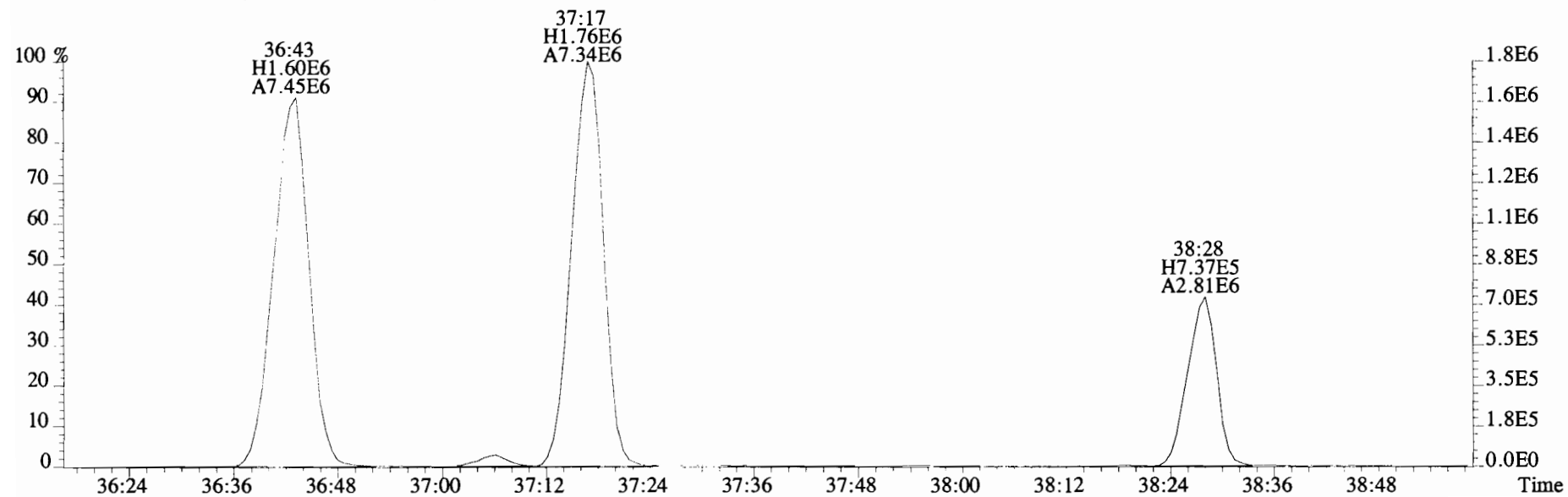
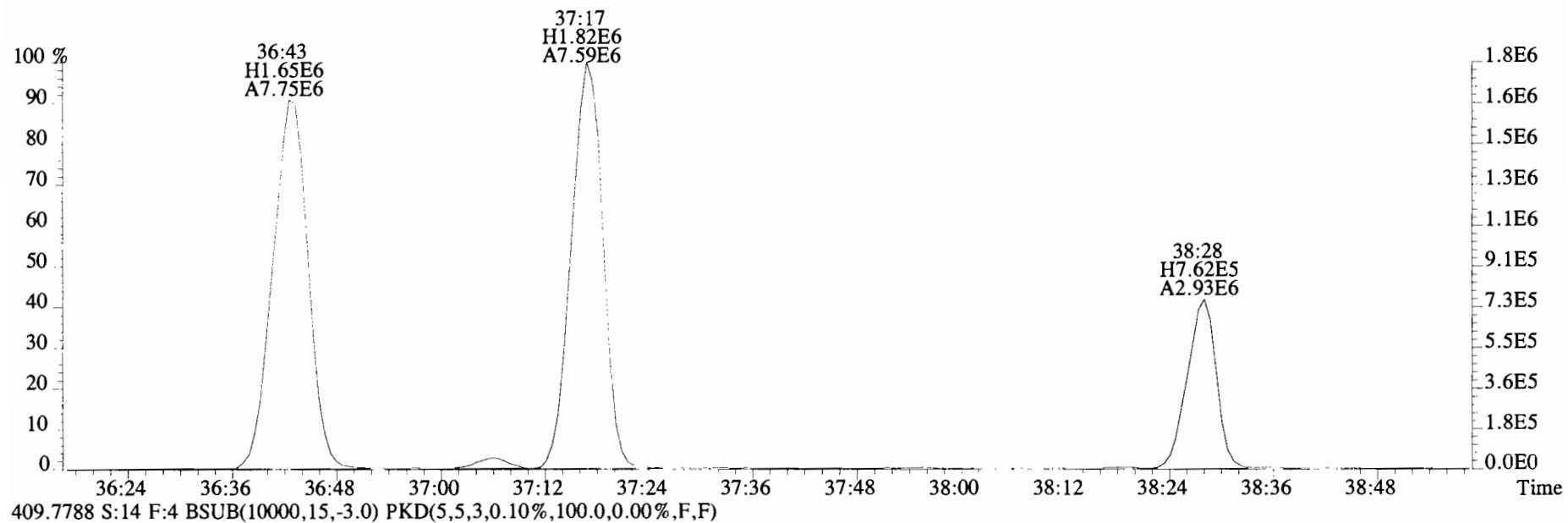
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



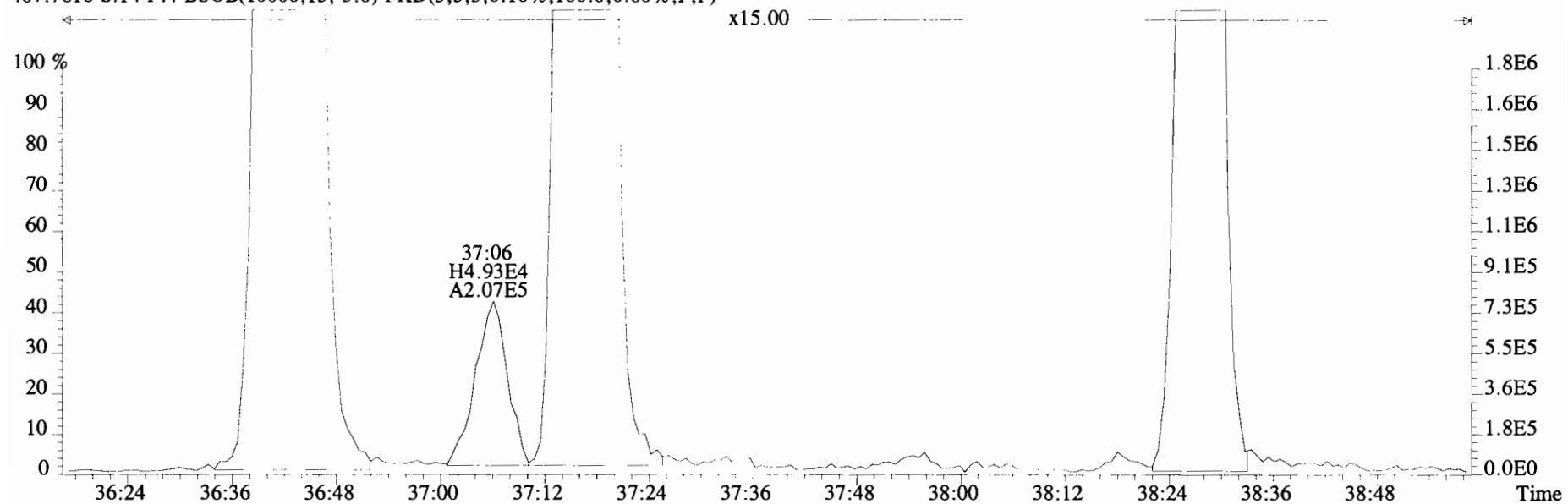
File:191031D2 #1-355 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



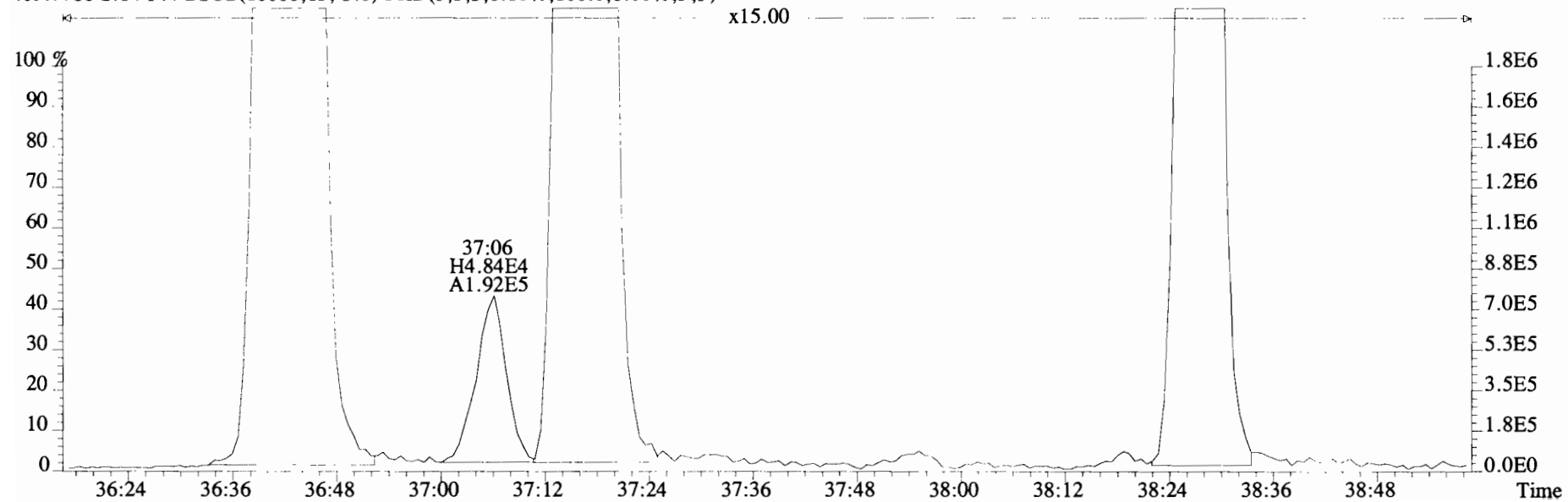
File:191031D2 #1-355 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
407.7818 S:14 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



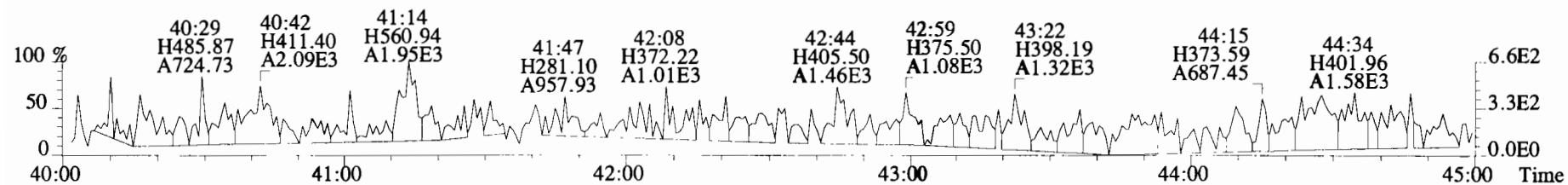
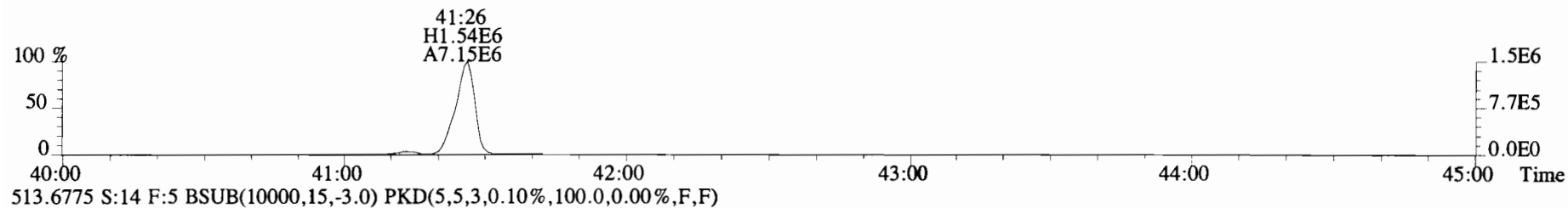
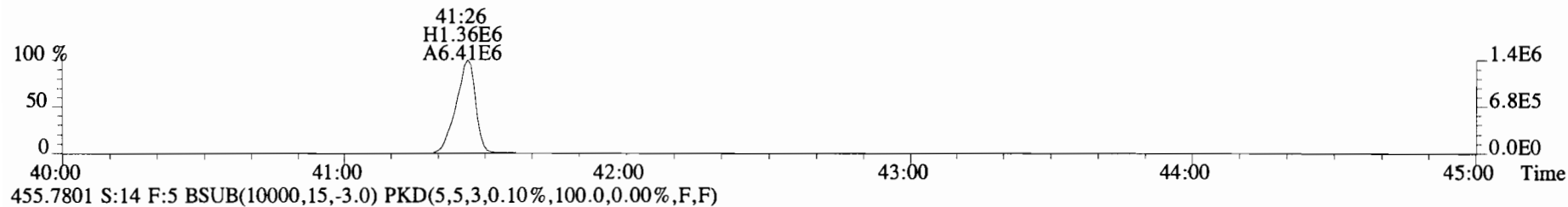
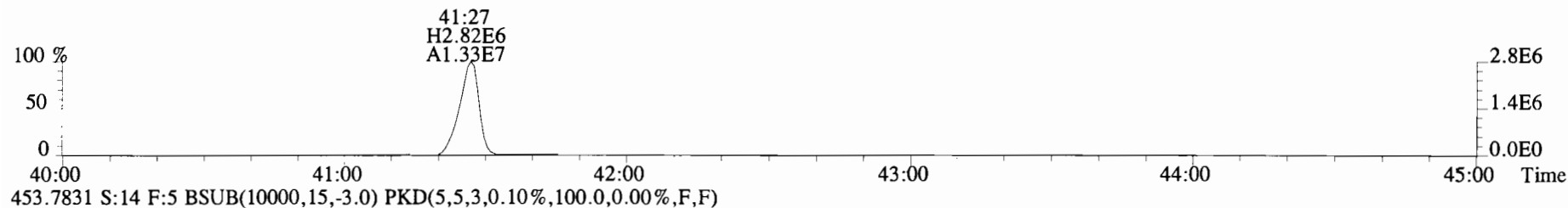
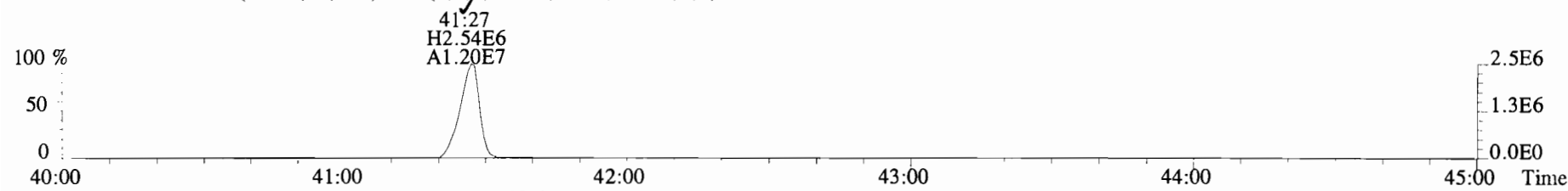
File:191031D2 #1-355 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 10:04:37 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE1 PDI-084SC-B-02-04-191002 19.52 Exp:OCDD_DB5
 441.7428 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	1.26e+04	0.63	n	0.91	26:16	0.39890		* 2.5	*	Total Tetra-Dioxins	0.480	3.16	*	*	
1,2,3,7,8-PeCDD	1.51e+04	0.64	y	0.90	30:44	0.58904		* 2.5	*	Total Penta-Dioxins	2.64	5.60	*	*	
1,2,3,4,7,8-HxCDD	1.61e+04	1.96	n	1.10	34:03	0.57447		* 2.5	*	Total Hexa-Dioxins	28.3	29.2	*	*	
1,2,3,6,7,8-HxCDD	9.84e+04	1.24	y	0.94	34:10	3.6554		* 2.5	*	Total Hepta-Dioxins	255	255	*	*	
1,2,3,7,8,9-HxCDD	4.06e+04	1.14	y	0.96	34:28	1.3920		* 2.5	*	Total Tetra-Furans	80.6	83.7	*	*	
1,2,3,4,6,7,8-HpCDD	2.54e+06	1.03	y	0.98	37:55	102.62		* 2.5	*	Total Penta-Furans	169.21	169.21	*	*	
OCDD	3.37e+07	0.92	y	0.96	41:12	1485.0		* 2.5	*	Total Hexa-Furans	215	215	*	*	
2,3,7,8-TCDF	1.55e+06	0.77	y	0.95	25:30	27.865	(24,03)	* 2.5	*	Total Hepta-Furans	188	188	*	*	
1,2,3,7,8-PeCDF	3.10e+06	1.53	y	0.96	29:35	63.550		* 2.5	*						
2,3,4,7,8-PeCDF	1.27e+06	1.52	y	1.01	30:28	25.834		* 2.5	*						
1,2,3,4,7,8-HxCDF	5.36e+06	1.23	y	1.18	33:10	106.10		* 2.5	*						
1,2,3,6,7,8-HxCDF	1.42e+06	1.27	y	1.07	33:18	29.511		* 2.5	*						
2,3,4,6,7,8-HxCDF	4.14e+05	1.22	y	1.11	33:54	9.1727		* 2.5	*						
1,2,3,7,8,9-HxCDF	2.49e+05	1.25	y	1.06	34:51	6.2970		* 2.5	*						
1,2,3,4,6,7,8-HpCDF	2.45e+06	1.04	y	1.13	36:42	67.992		* 2.5	*						
1,2,3,4,7,8,9-HpCDF	7.76e+05	1.06	y	1.28	38:27	21.419		* 2.5	*						
OCDF	5.11e+06	0.89	y	0.95	41:25	168.69		* 2.5	*						
IS 13C-2,3,7,8-TCDD	6.98e+06	0.79	y	1.10	26:15	200.10				Rec			Qual		
IS 13C-1,2,3,7,8-PeCDD	5.68e+06	0.64	y	0.88	30:44	202.31				100					
IS 13C-1,2,3,4,7,8-HxCDD	5.07e+06	1.36	y	0.64	34:03	176.24				101					
IS 13C-1,2,3,6,7,8-HxCDD	5.72e+06	1.21	y	0.86	34:10	149.16				88.3					
IS 13C-1,2,3,7,8,9-HxCDD	6.05e+06	1.29	y	0.81	34:28	167.19				74.8					
IS 13C-1,2,3,4,6,7,8-HpCDD	5.04e+06	1.05	y	0.65	37:54	171.99				83.8					
IS 13C-OCDD	9.45e+06	0.92	y	0.58	41:11	363.73				86.2					
IS 13C-2,3,7,8-TCDF	1.17e+07	0.77	y	1.03	25:29	190.37				91.2					
IS 13C-1,2,3,7,8-PeCDF	1.01e+07	1.64	y	0.85	29:34	200.24				95.4					
IS 13C-2,3,4,7,8-PeCDF	9.69e+06	1.64	y	0.85	30:28	192.82				100					
IS 13C-1,2,3,4,7,8-HxCDF	8.56e+06	0.52	y	0.83	33:10	229.52				96.7					
IS 13C-1,2,3,6,7,8-HxCDF	8.97e+06	0.52	y	1.03	33:17	193.40				115					
IS 13C-2,3,4,6,7,8-HxCDF	8.08e+06	0.52	y	0.95	33:53	189.14				96.9					
IS 13C-1,2,3,7,8,9-HxCDF	7.44e+06	0.51	y	0.83	34:51	200.41				94.8					
IS 13C-1,2,3,4,6,7,8-HpCDF	6.39e+06	0.44	y	0.76	36:42	188.01				100					
IS 13C-1,2,3,4,7,8,9-HpCDF	5.65e+06	0.43	y	0.58	38:27	216.73				94.2					
IS 13C-OCDF	1.28e+07	0.90	y	0.69	41:25	413.32				109					
C/Up 37Cl-2,3,7,8-TCDD	3.05e+06			1.20	26:16	79.927				104					
RS/RT 13C-1,2,3,4-TCDD	6.35e+06	0.81	y	1.00	25:42	199.50				100					
RS 13C-1,2,3,4-TCDF	1.18e+07	0.82	y	1.00	24:17	199.50									
RS/RT 13C-1,2,3,4,6,9-HxCDF	8.94e+06	0.52	y	1.00	33:35	199.50									

Integrations
 by DB
 Analyst: DB
 Date: 11/20/19
 Reviewed
 by CT
 Analyst: CT
 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 20 File: 191031D2 S: 15 I: 1 F: 1
Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 3.1555 Unnamed Concentration: 2.757

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:55	3.622e+04	3.800e+04	0.95	n	6.726e+04	2.1233
23:16	6.310e+03	8.890e+03	0.71	y	1.520e+04	0.47987
24:49	3.227e+03	2.746e+03	1.18	n	4.861e+03	0.15345
26:16	5.497e+03	8.791e+03	0.63	n	1.264e+04	0.39890 2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 20 File: 191031D2 S: 15 I: 1 F: 2
 Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 5.6039

Unnamed Concentration: 5.015

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:43	1.475e+04	2.745e+04	0.54	y	4.220e+04	1.6422
29:09	5.443e+03	6.321e+03	0.86	n	1.030e+04	0.40095
29:36	1.671e+04	2.151e+04	0.78	n	3.505e+04	1.3642
29:45	7.363e+03	9.584e+03	0.77	n	1.562e+04	0.60795
29:51	3.659e+03	6.728e+03	0.54	y	1.039e+04	0.40425
30:03	5.911e+03	1.194e+04	0.49	n	1.529e+04	0.59522
30:44	5.894e+03	9.242e+03	0.64	y	1.514e+04	0.58904
						1,2,3,7,8-PeCDD

Totals class: HxCDD EMPC

Entry #: 23

Run: 20 File: 191031D2 S: 15 I: 1 F: 3
Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 29.224

Unnamed Concentration: 23.602

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
32:32	1.624e+05	1.291e+05	1.26	y	2.915e+05	10.445	
33:06	2.807e+04	2.012e+04	1.40	y	4.819e+04	1.7267	
33:22	1.655e+05	1.306e+05	1.27	y	2.960e+05	10.608	
33:29	7.894e+03	6.257e+03	1.26	y	1.415e+04	0.50704	
34:03	1.411e+04	7.183e+03	1.96	n	1.609e+04	0.57447	1,2,3,4,7,8-HxCDD
34:10	5.438e+04	4.401e+04	1.24	y	9.840e+04	3.6554	1,2,3,6,7,8-HxCDD
34:23	6.942e+03	3.942e+03	1.76	n	8.830e+03	0.31639	
34:28	2.162e+04	1.894e+04	1.14	y	4.056e+04	1.3920	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 20 File: 191031D2 S: 15 I: 1 F: 4
Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 254.90 Unnamed Concentration: 152.281

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:05	1.927e+06	1.843e+06	1.05 y	3.770e+06	152.28
37:55	1.289e+06	1.251e+06	1.03 y	2.540e+06	102.62 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 20 File: 191031D2 S: 15 I: 1 F: 1
 Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 83.703 Unnamed Concentration: 55.838

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:48	7.139e+03	1.061e+04	0.67	y	1.775e+04	0.31883
21:22	1.451e+04	1.438e+04	1.01	n	2.544e+04	0.45707
22:00	5.634e+04	7.671e+04	0.73	y	1.331e+05	2.3901
22:31	4.630e+04	5.666e+04	0.82	y	1.030e+05	1.8495
22:53	1.966e+05	2.318e+05	0.85	y	4.284e+05	7.6959
23:18	7.714e+04	9.054e+04	0.85	y	1.677e+05	3.0120
23:25	6.159e+03	9.153e+03	0.67	y	1.531e+04	0.27504
23:35	3.135e+04	3.637e+04	0.86	y	6.772e+04	1.2164
23:56	8.038e+03	9.174e+03	0.88	y	1.721e+04	0.30919
24:03	4.950e+03	5.976e+03	0.83	y	1.093e+04	0.19627
24:10	4.724e+04	5.709e+04	0.83	y	1.043e+05	1.8741
24:17	6.360e+04	7.675e+04	0.83	y	1.404e+05	2.5212
24:42	6.372e+05	8.095e+05	0.79	y	1.447e+06	25.987
24:57	2.770e+04	3.974e+04	0.70	y	6.744e+04	1.2115
25:23	6.168e+04	7.669e+04	0.80	y	1.384e+05	2.4856
25:30	6.764e+05	8.748e+05	0.77	y	1.551e+06	27.865
25:49	2.820e+04	3.780e+04	0.75	y	6.600e+04	1.1856
26:02	5.553e+03	6.711e+03	0.83	y	1.226e+04	0.22031
27:15	8.995e+04	8.279e+04	1.09	n	1.465e+05	2.6322

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 20 File: 191031D2 S: 15 I: 1 F: 1
Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 8.6224 Unnamed Concentration: 8.622

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:15	2.535e+05	1.698e+05	1.49 y	4.234e+05	8.6224

Totals class: PeCDF EMPC

Entry #: 31

Run: 20 File: 191031D2 S: 15 I: 1 F: 2
 Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 160.59 Unnamed Concentration: 71.208

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:32	3.460e+04	1.999e+04	1.73 y	5.459e+04	1.1118
28:40	9.237e+05	6.222e+05	1.48 y	1.546e+06	31.485
29:13	8.482e+04	5.362e+04	1.58 y	1.384e+05	2.8196
29:25	1.557e+05	9.493e+04	1.64 y	2.506e+05	5.1037
29:35	1.880e+06	1.225e+06	1.53 y	3.105e+06	63.550
29:49	6.199e+05	4.006e+05	1.55 y	1.021e+06	20.786
30:22	1.304e+04	8.406e+03	1.55 y	2.144e+04	0.43669
30:28	7.690e+05	5.045e+05	1.52 y	1.273e+06	25.834
30:31	2.391e+05	1.438e+05	1.66 y	3.828e+05	7.7974
31:20	4.782e+04	3.408e+04	1.40 y	8.190e+04	1.6680

Totals class: HxCDF EMPC

Entry #: 33

Run: 20 File: 191031D2 S: 15 I: 1 F: 3
 Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 215.49 Unnamed Concentration: 64.412

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
31:59	1.622e+05	1.156e+05	1.40 y	2.778e+05	6.0793	
32:09	5.669e+05	4.463e+05	1.27 y	1.013e+06	22.174	
32:31	1.473e+04	1.142e+04	1.29 y	2.615e+04	0.57219	
32:42	6.559e+05	5.118e+05	1.28 y	1.168e+06	25.553	
33:04	4.119e+04	3.222e+04	1.28 y	7.340e+04	1.6063	
33:10	2.954e+06	2.402e+06	1.23 y	5.357e+06	106.10	1,2,3,4,7,8-HxCDF
33:18	7.925e+05	6.258e+05	1.27 y	1.418e+06	29.511	1,2,3,6,7,8-HxCDF
33:35	2.476e+04	2.164e+04	1.14 y	4.640e+04	1.0153	
33:54	2.274e+05	1.865e+05	1.22 y	4.139e+05	9.1727	2,3,4,6,7,8-HxCDF
34:51	1.383e+05	1.109e+05	1.25 y	2.492e+05	6.2970	1,2,3,7,8,9-HxCDF
34:55	1.941e+05	1.446e+05	1.34 y	3.388e+05	7.4131	

Totals class: HpCDF EMPC

Entry #: 35

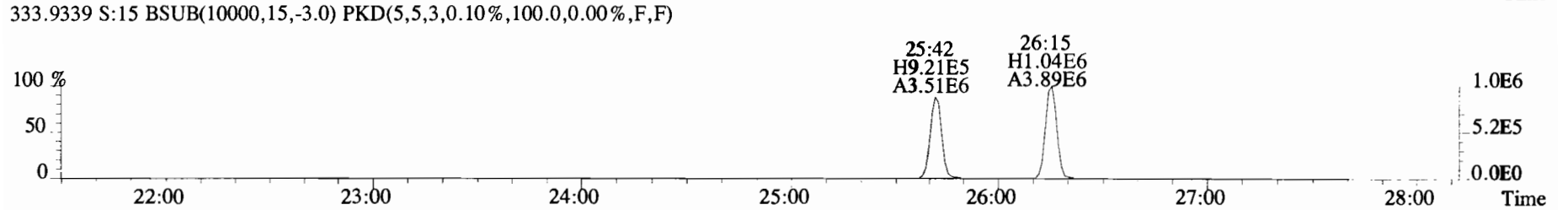
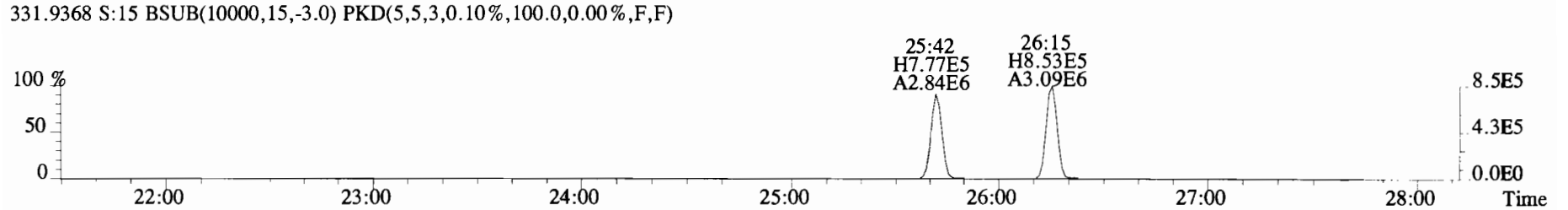
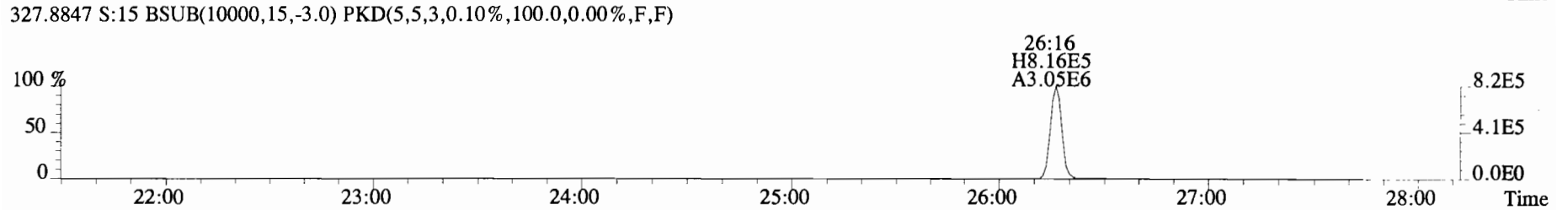
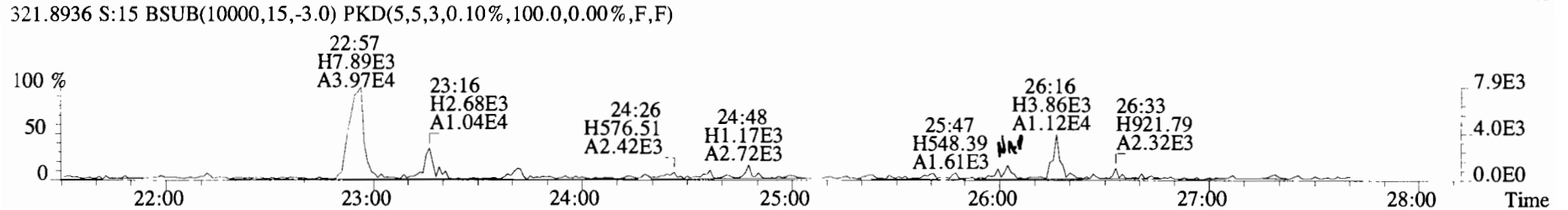
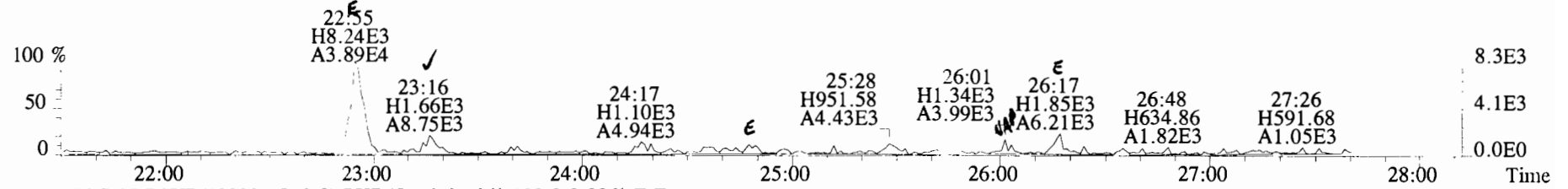
Run: 20 File: 191031D2 S: 15 I: 1 F: 4
Acquired: 1-NOV-19 10:52:33 Processed: 1-NOV-19 12:03:25

Total Concentration: 188.09

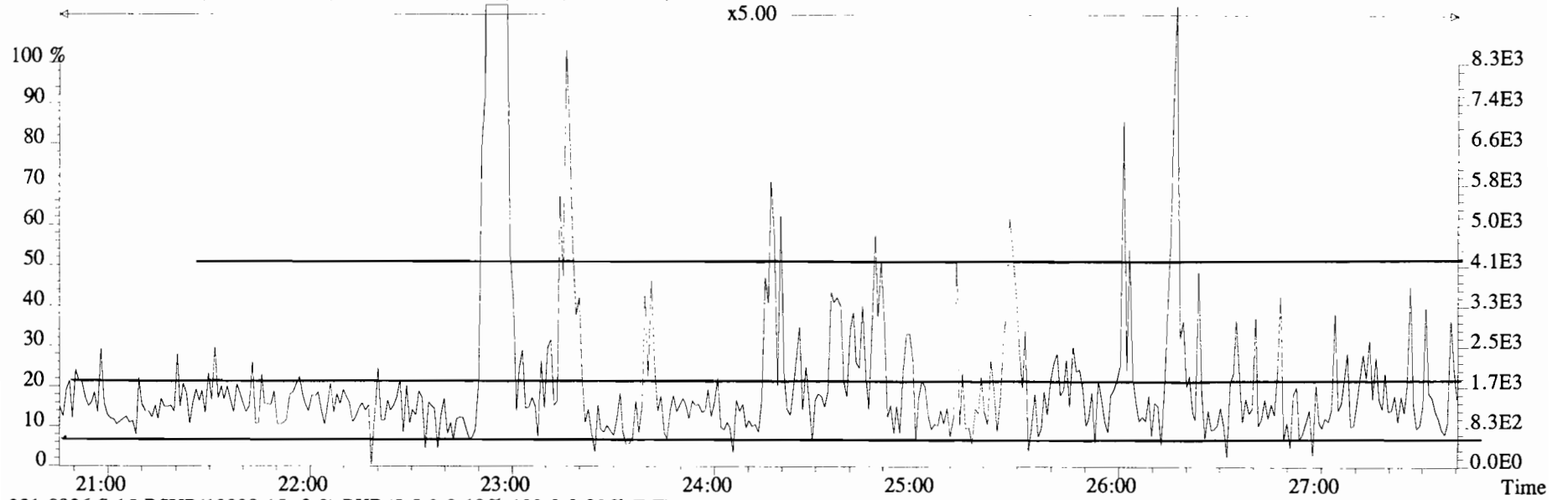
Unnamed Concentration: 98.678

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
36:42	1.251e+06	1.203e+06	1.04 y	2.454e+06	67.992	1,2,3,4,6,7,8-HpCDF
37:05	3.100e+04	3.226e+04	0.96 y	6.327e+04	1.7574	
37:16	1.762e+06	1.727e+06	1.02 y	3.489e+06	96.920	
38:27	3.987e+05	3.774e+05	1.06 y	7.761e+05	21.419	1,2,3,4,7,8,9-HpCDF

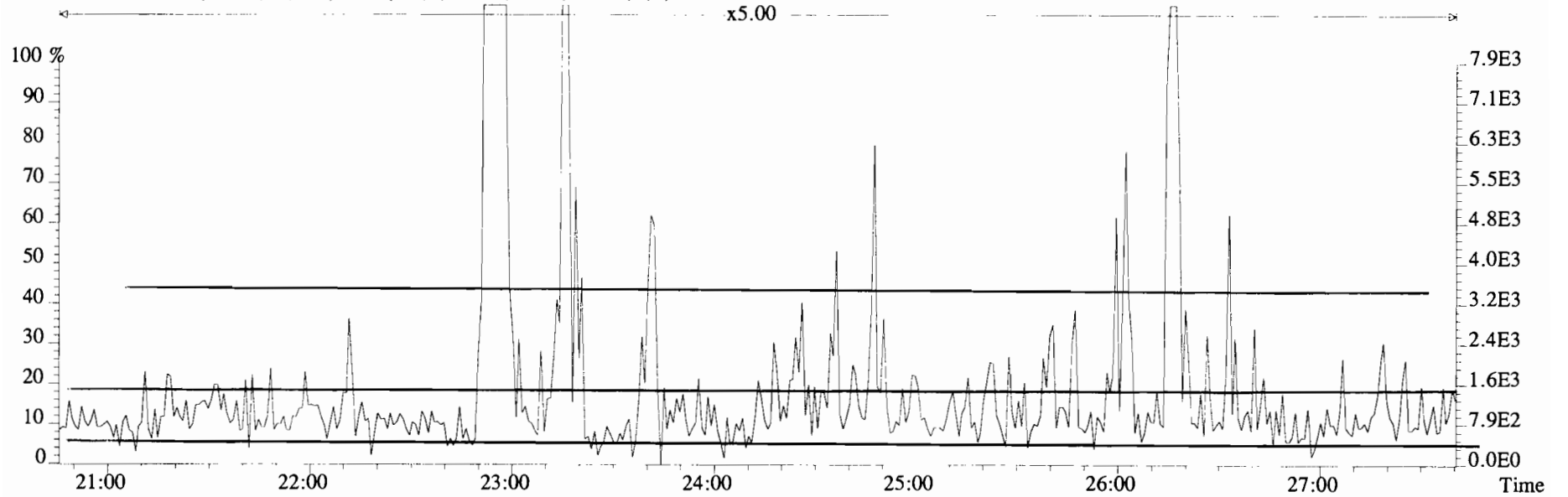
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



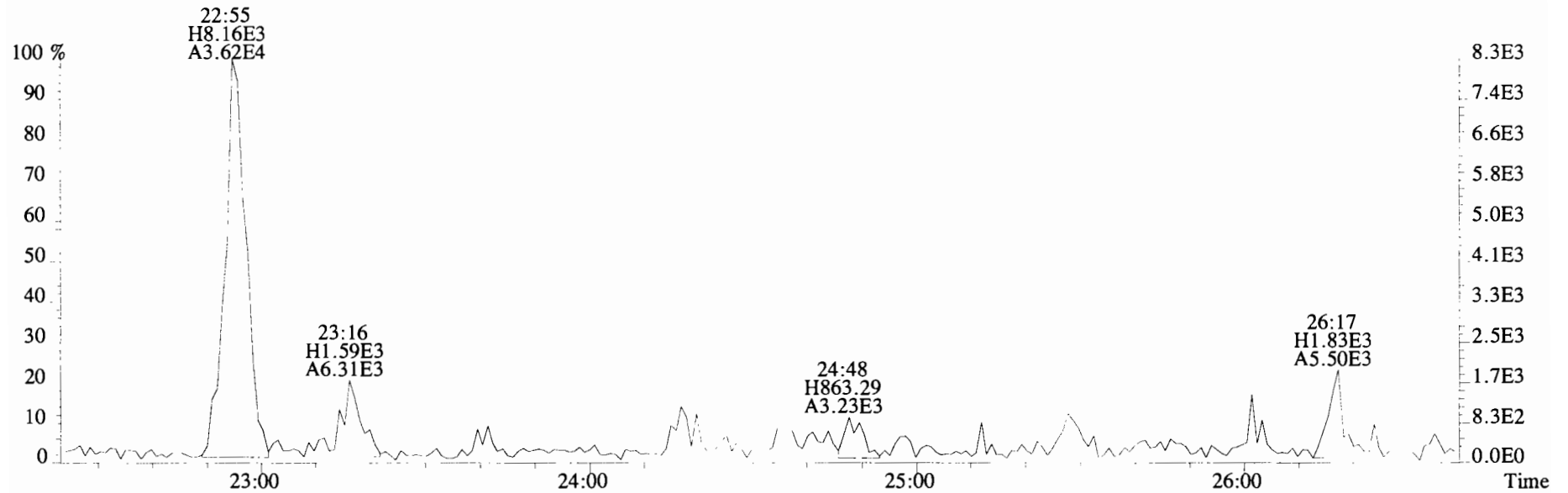
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



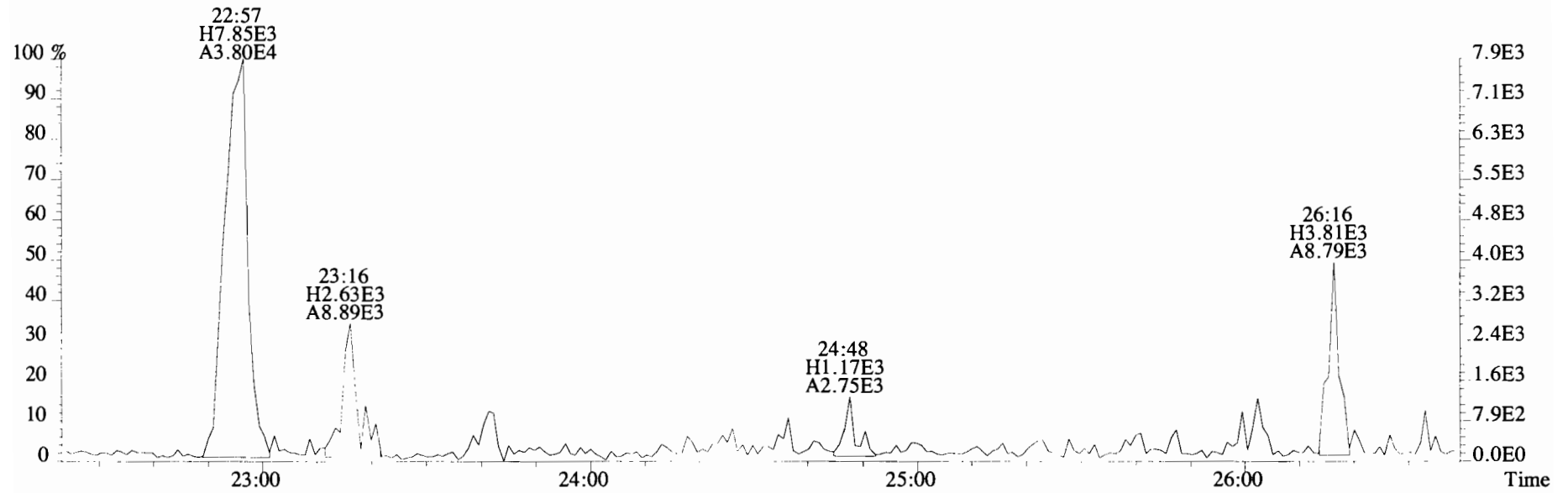
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



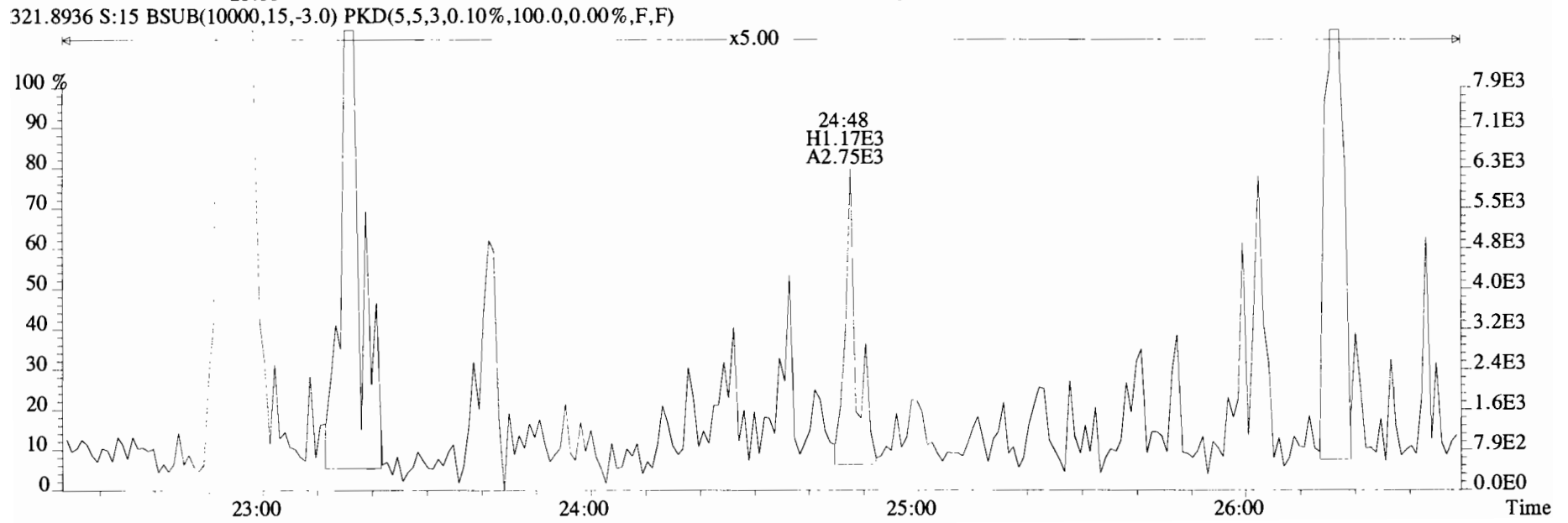
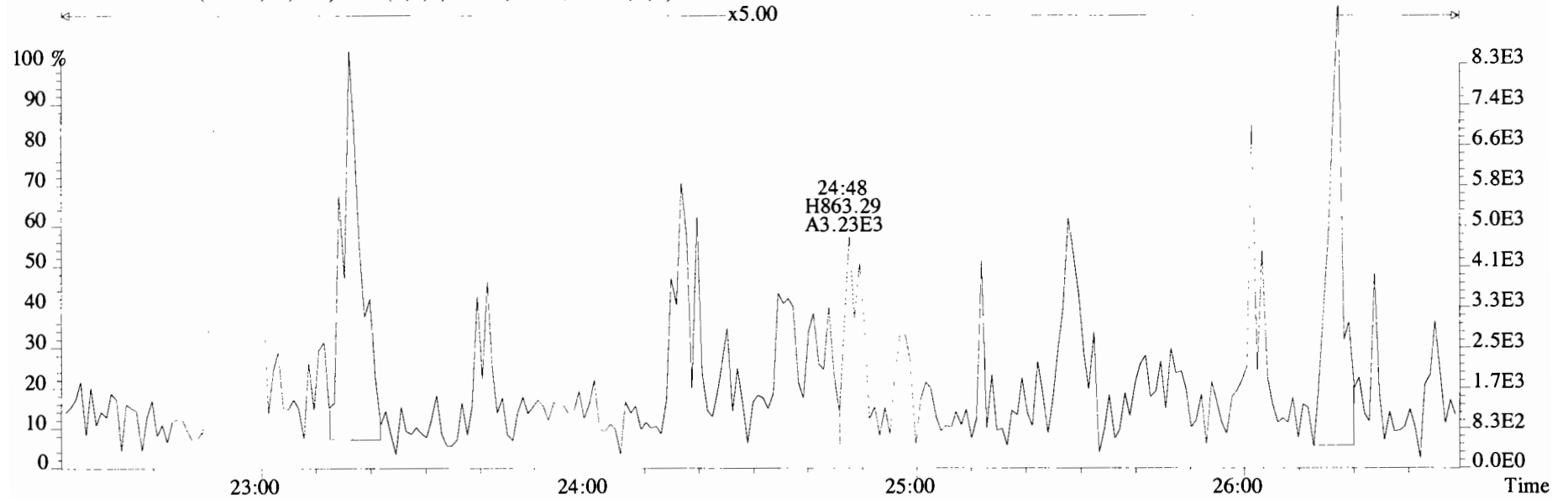
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Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



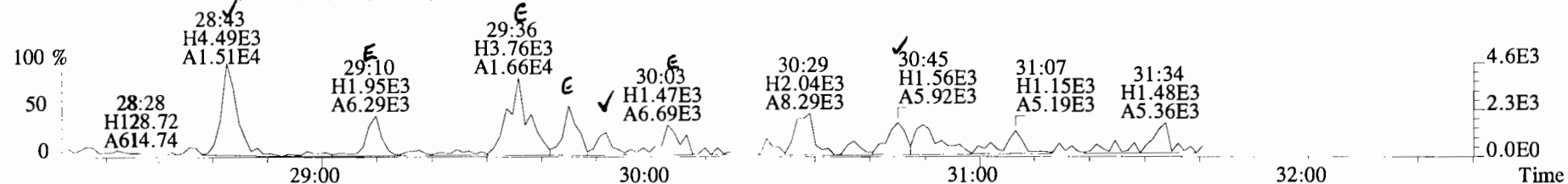
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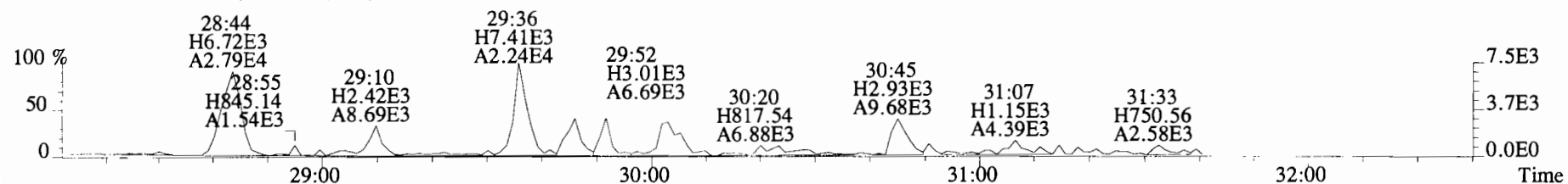
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Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



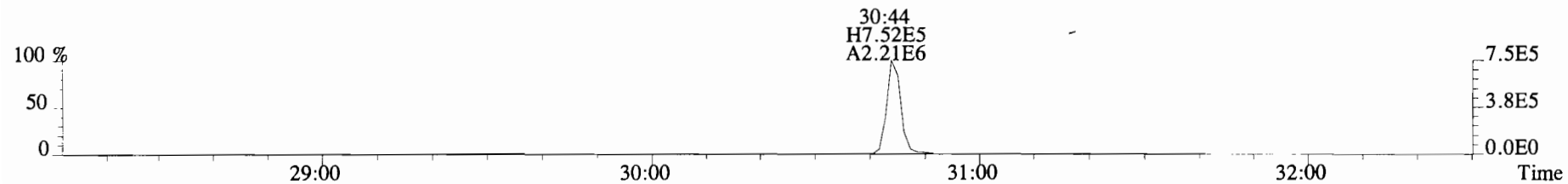
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



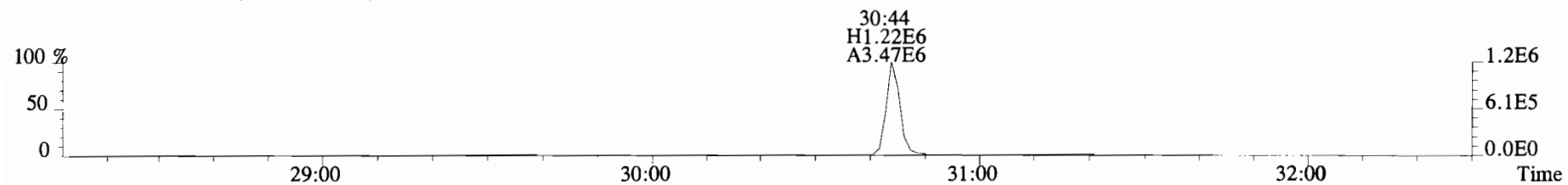
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



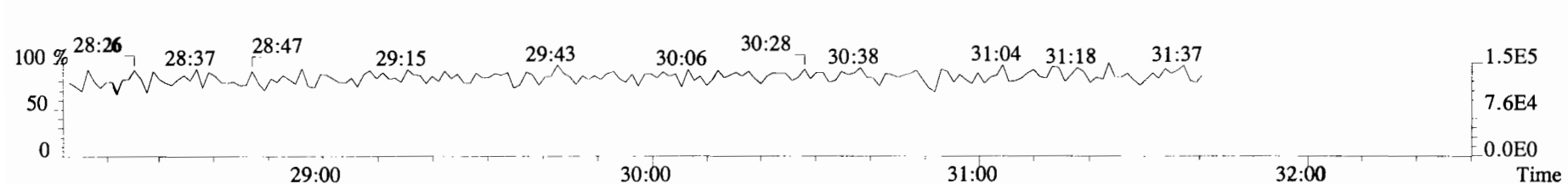
365.8978 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



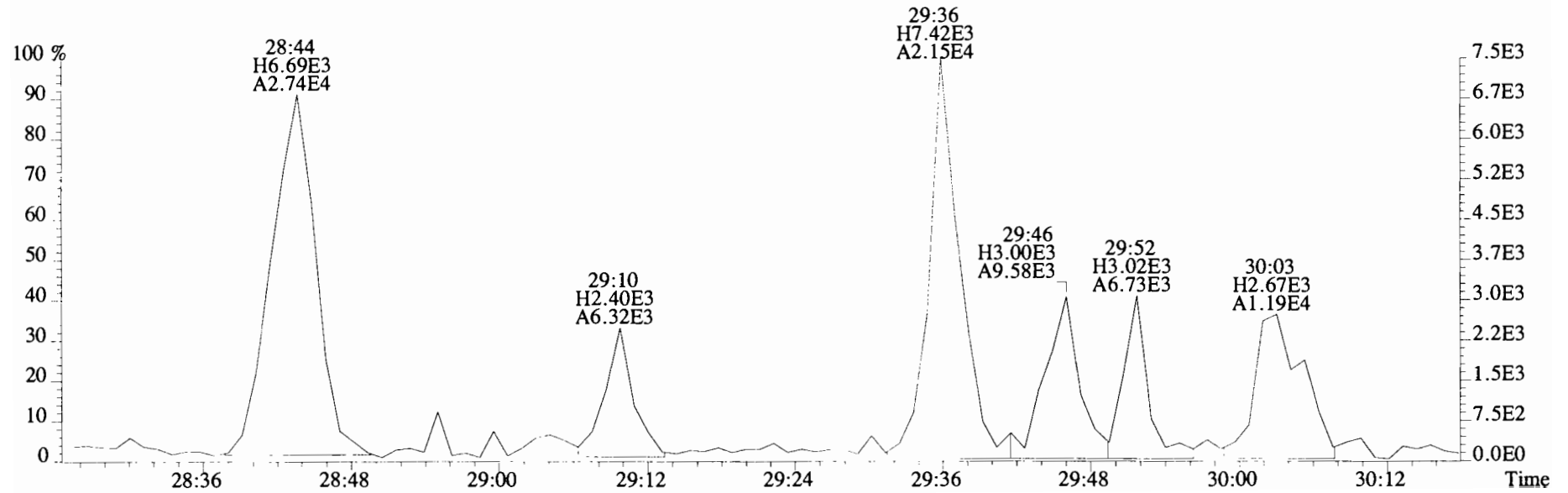
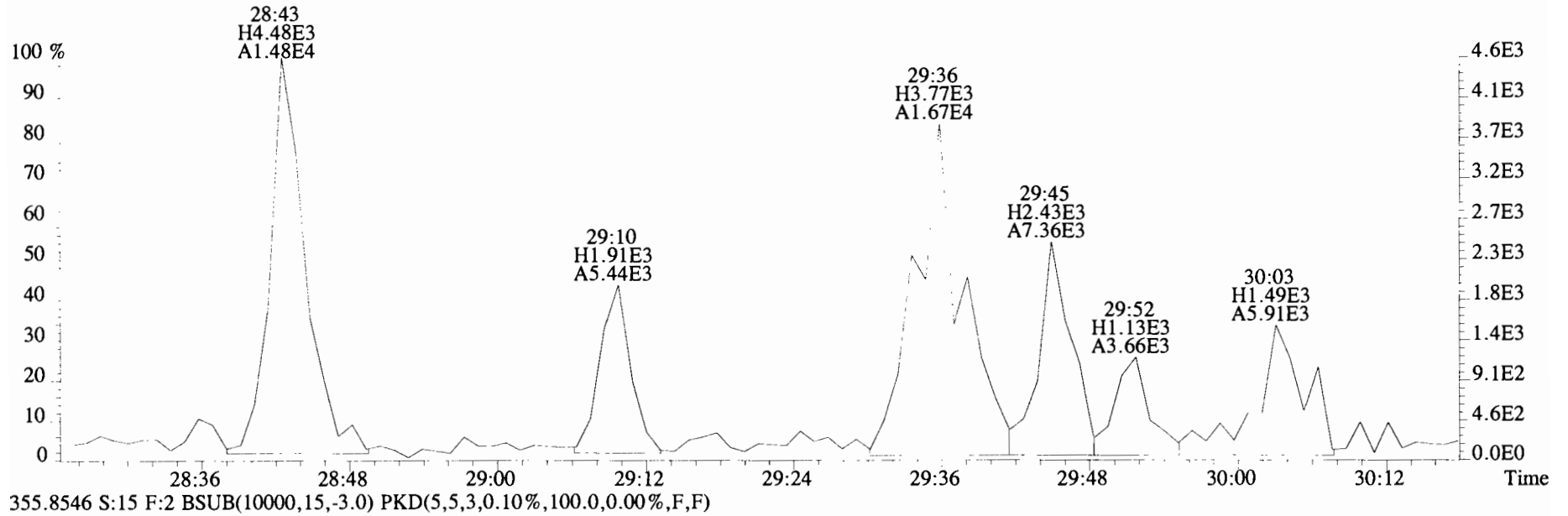
367.8949 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



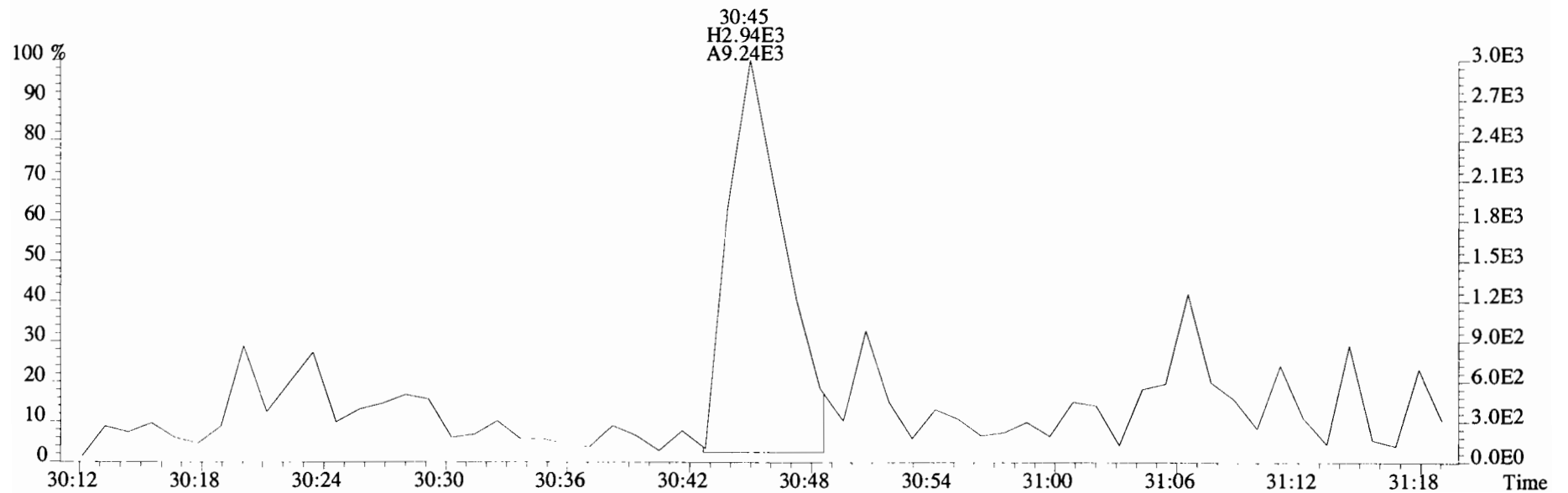
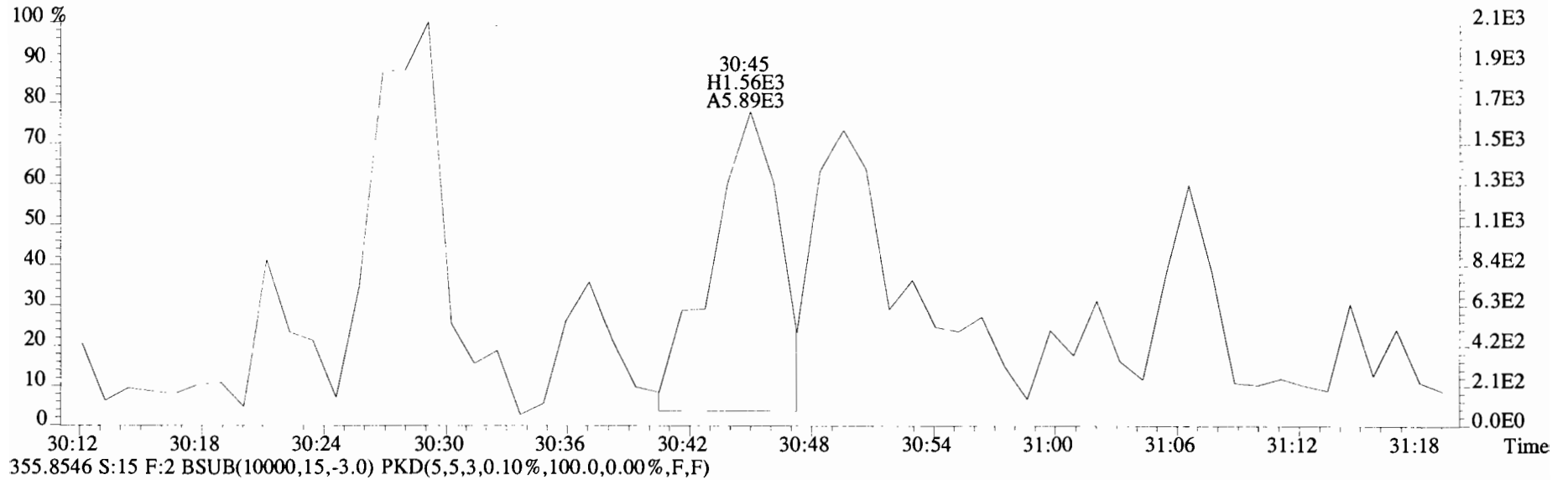
366.9792 S:15 F:2



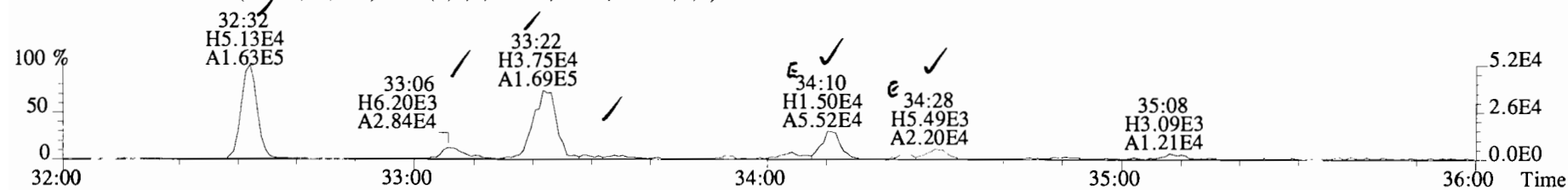
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



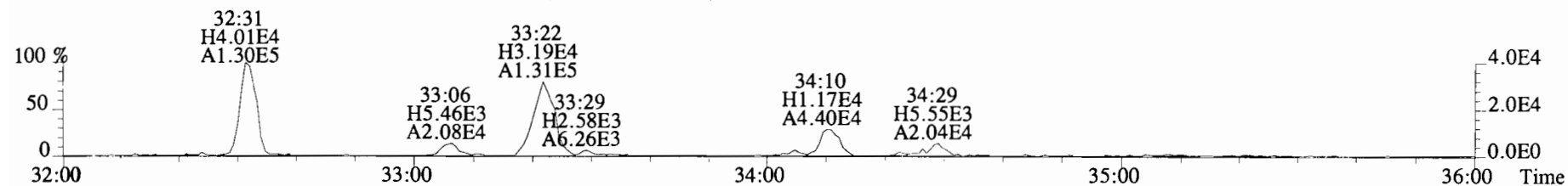
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



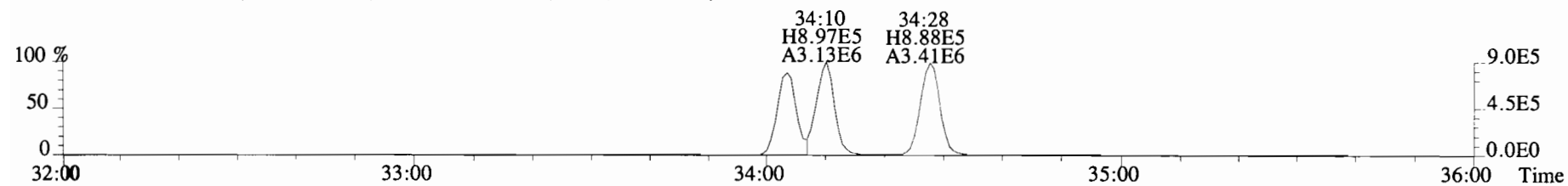
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



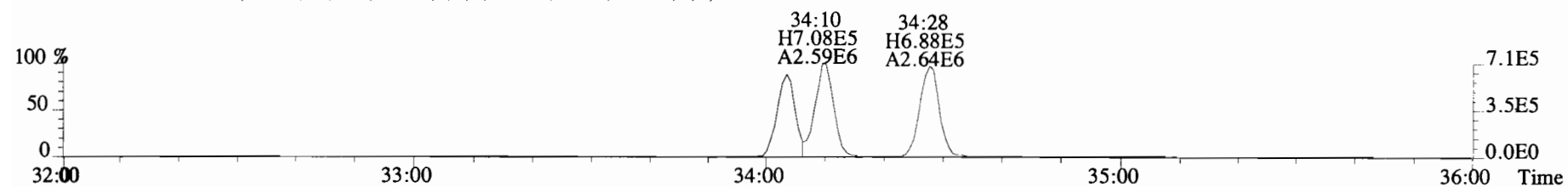
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



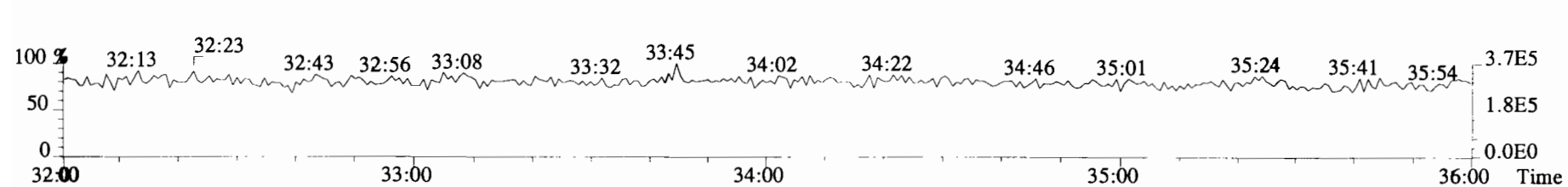
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



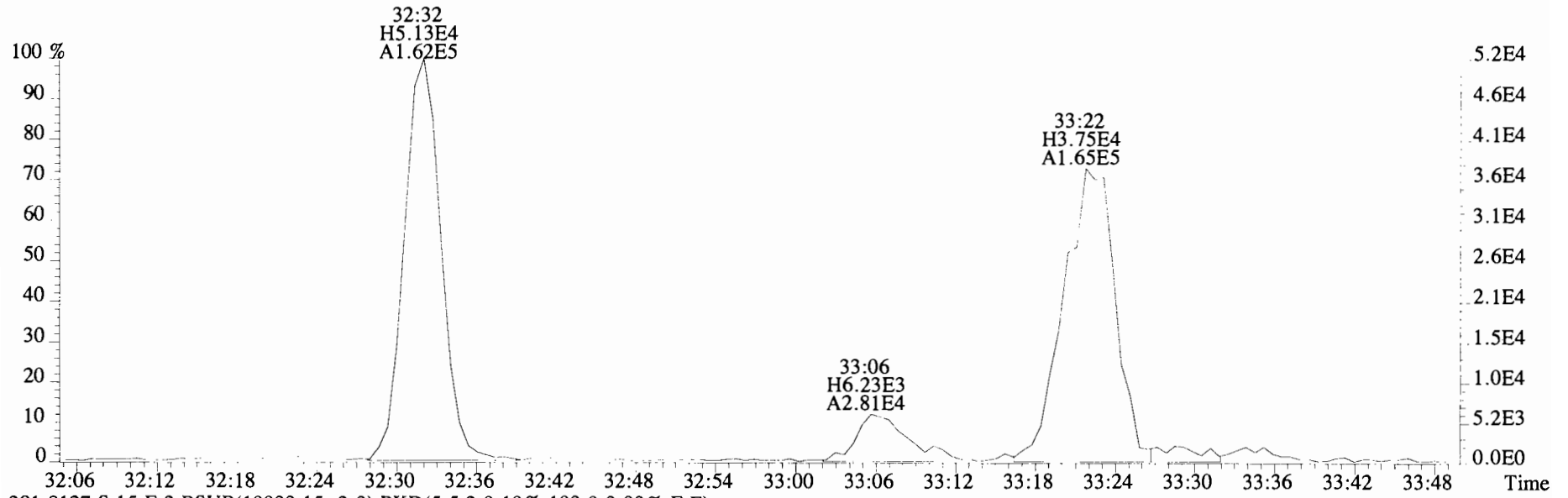
403.8530 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



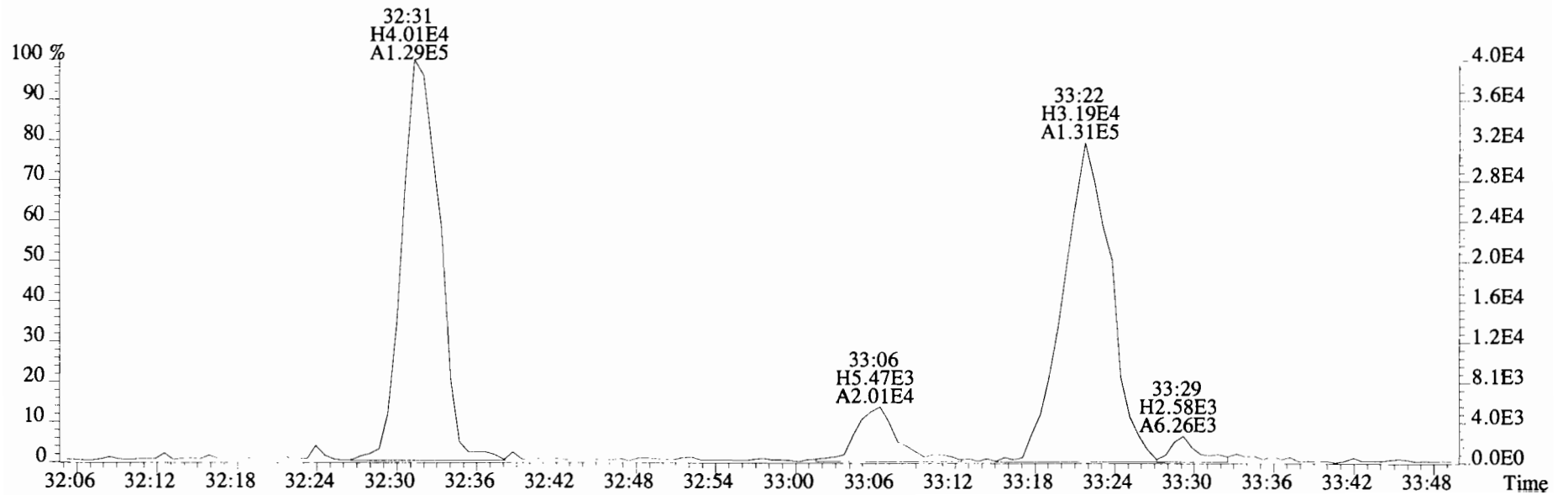
392.9760 S:15 F:3



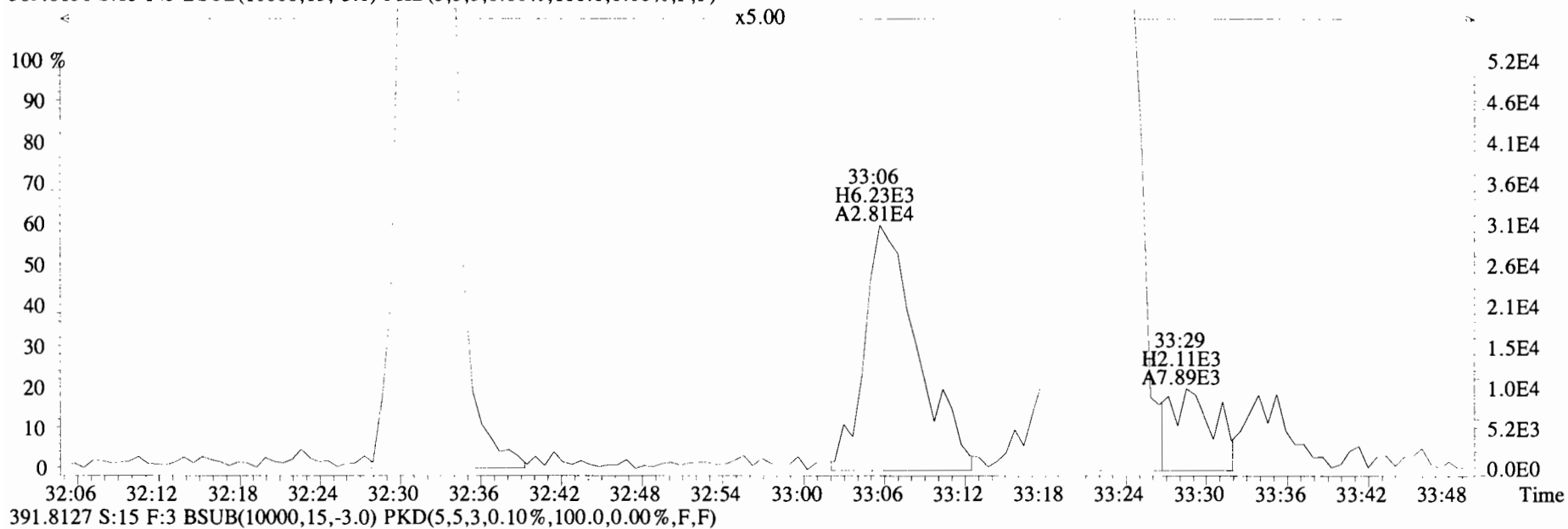
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



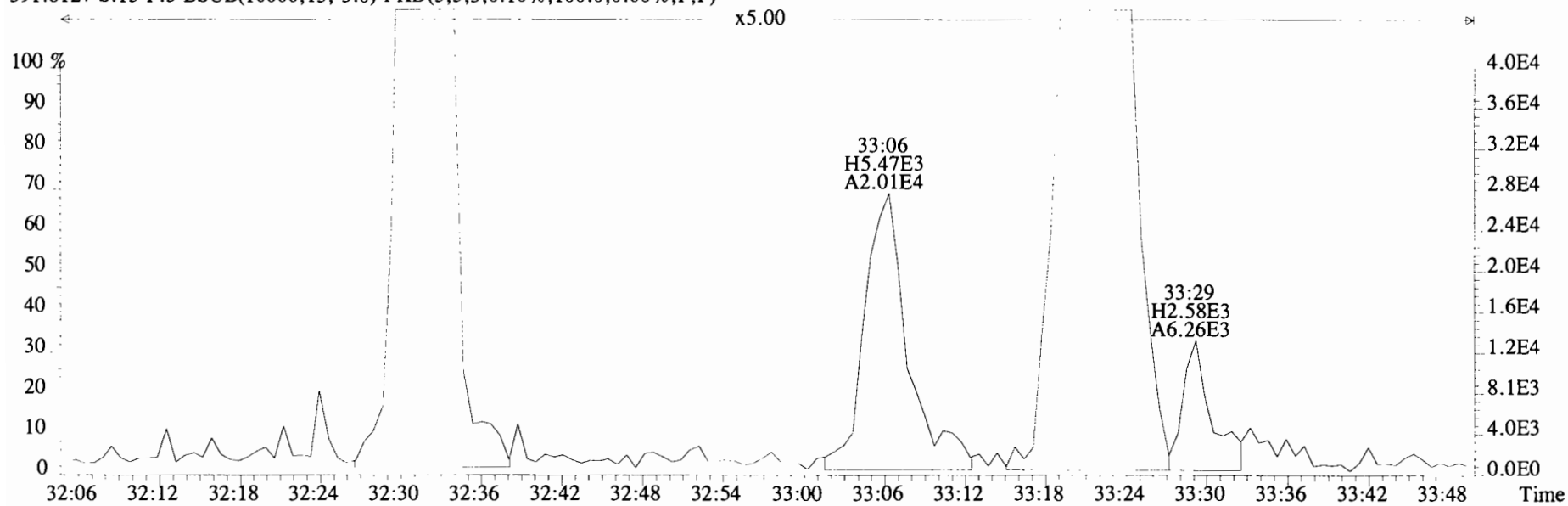
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



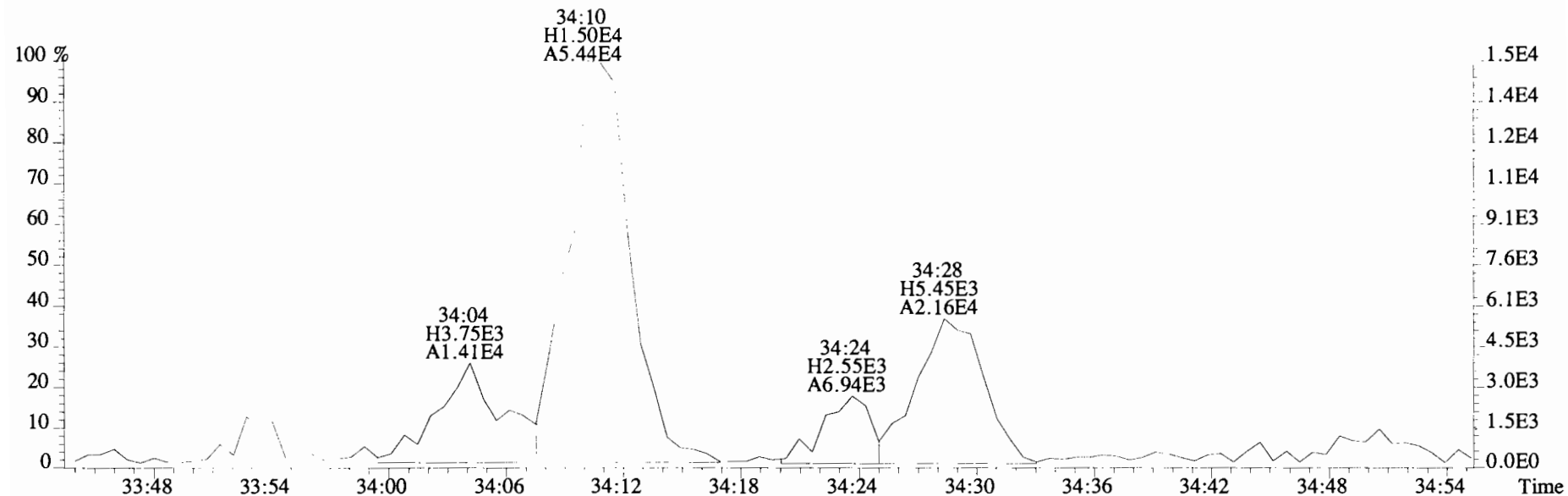
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PD1-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



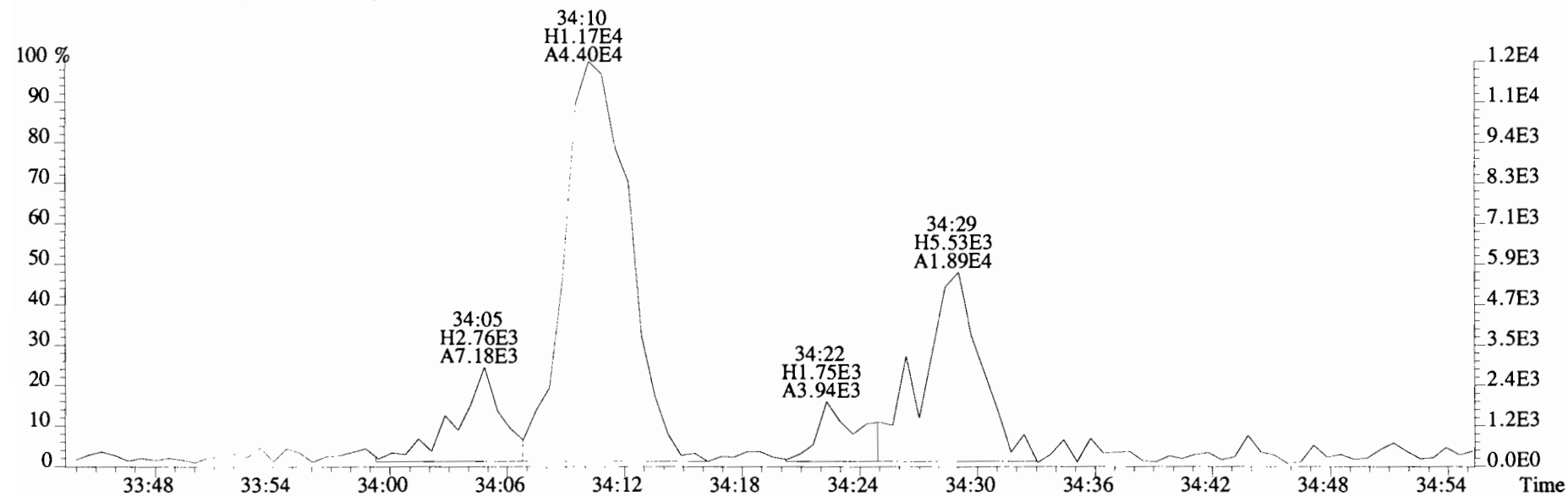
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



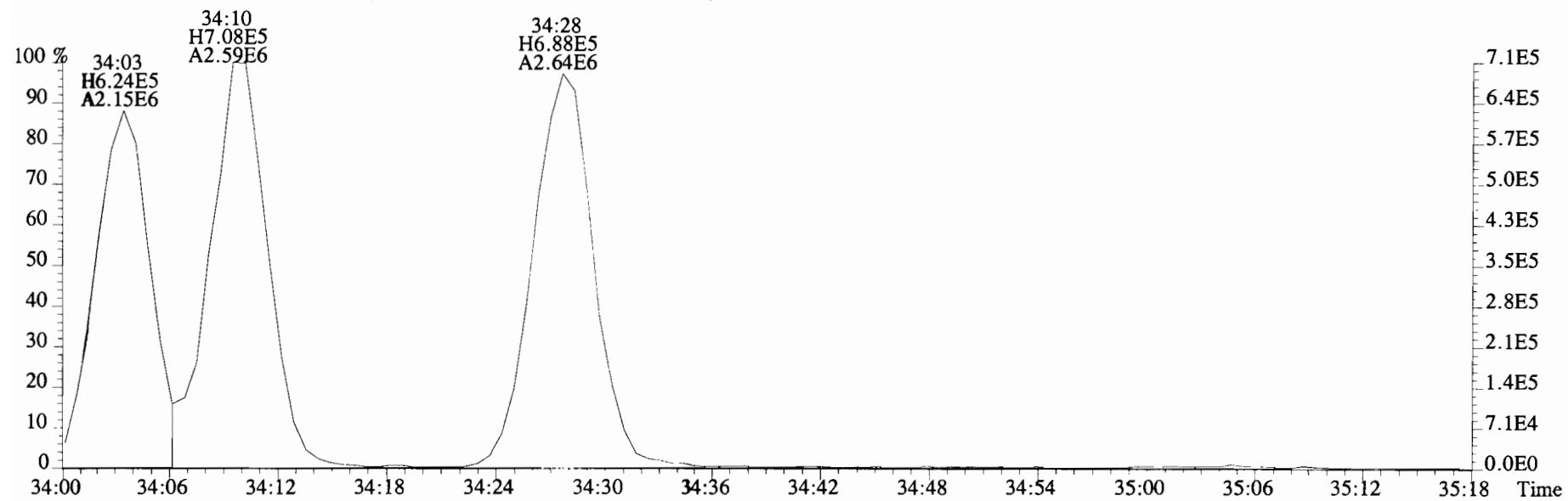
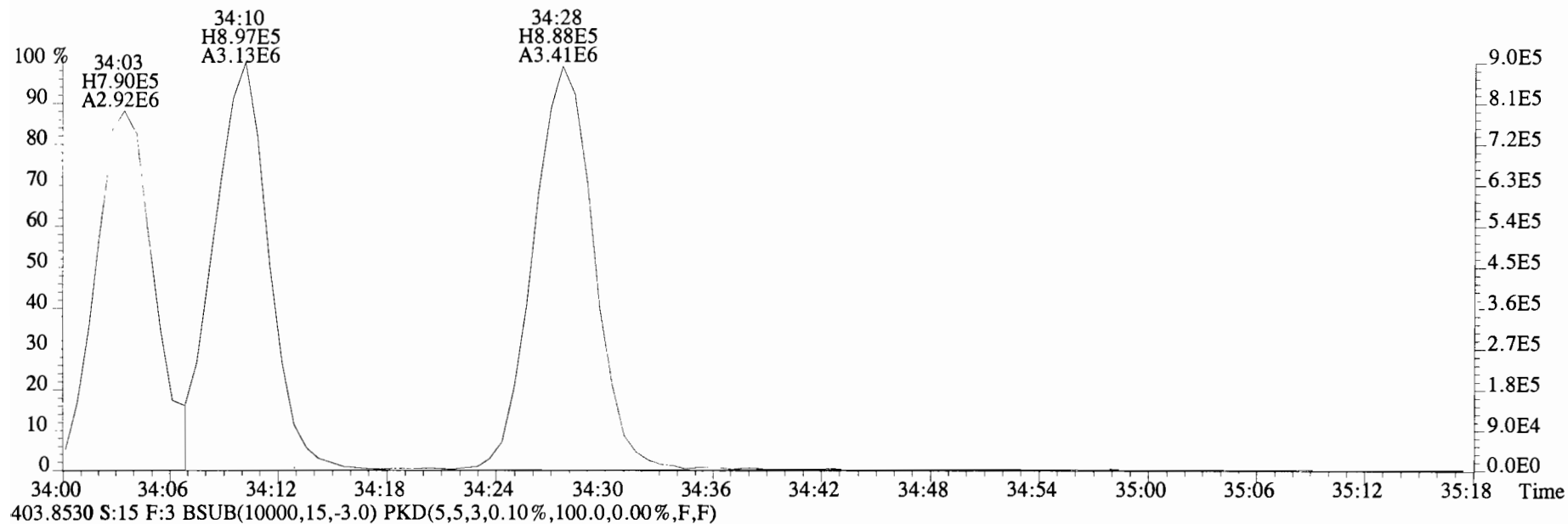
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 389.8156 S:15 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



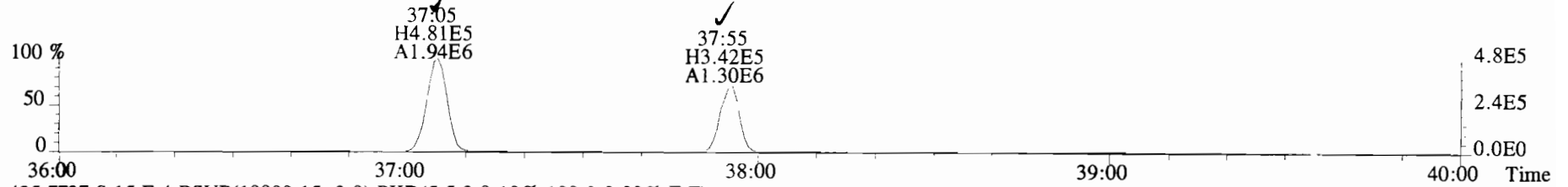
391.8127 S:15 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



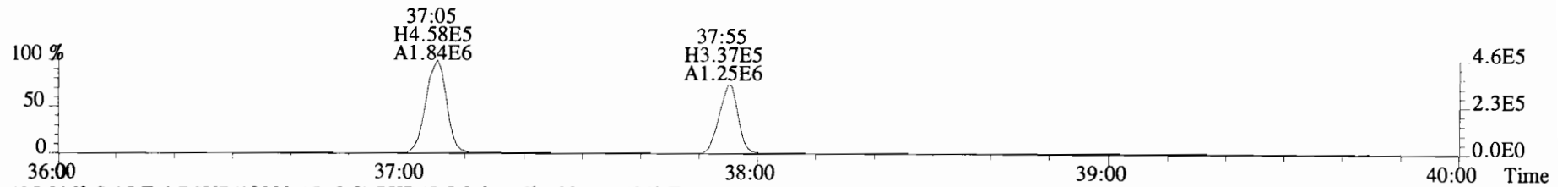
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



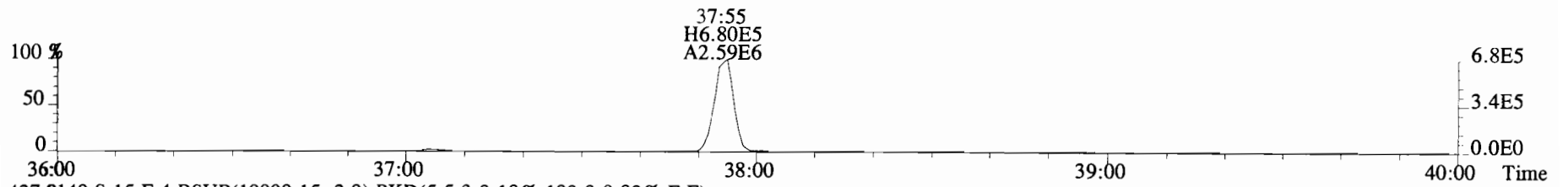
File:191031D2 #1-356 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



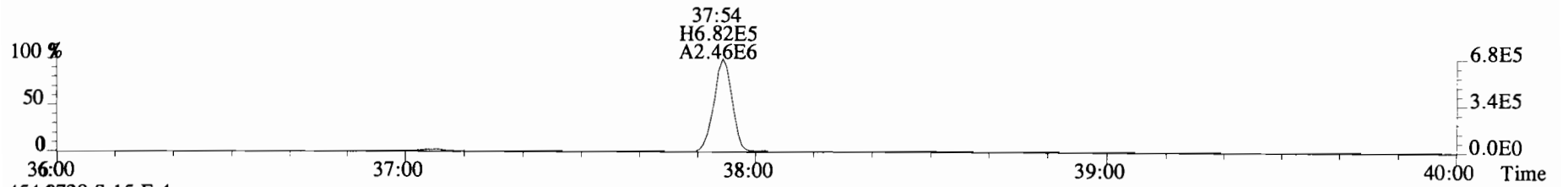
425.7737 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



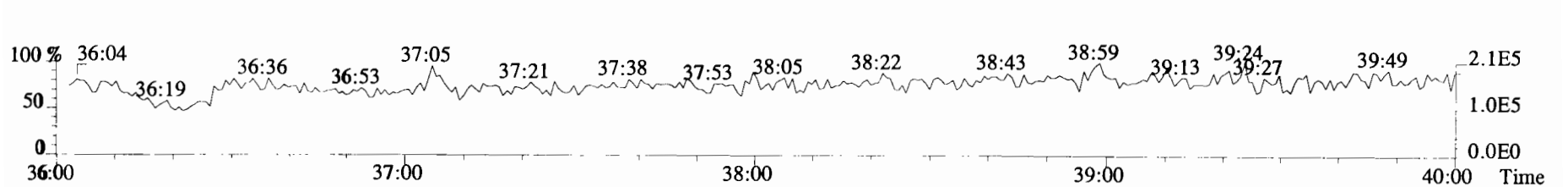
435.8169 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



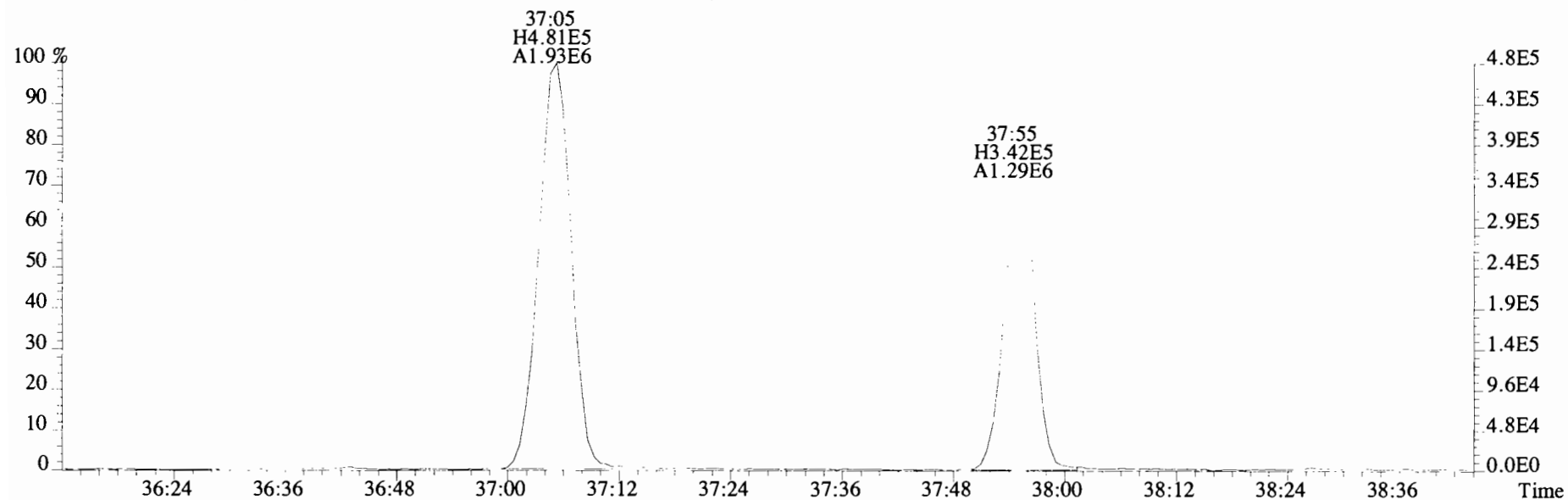
437.8140 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



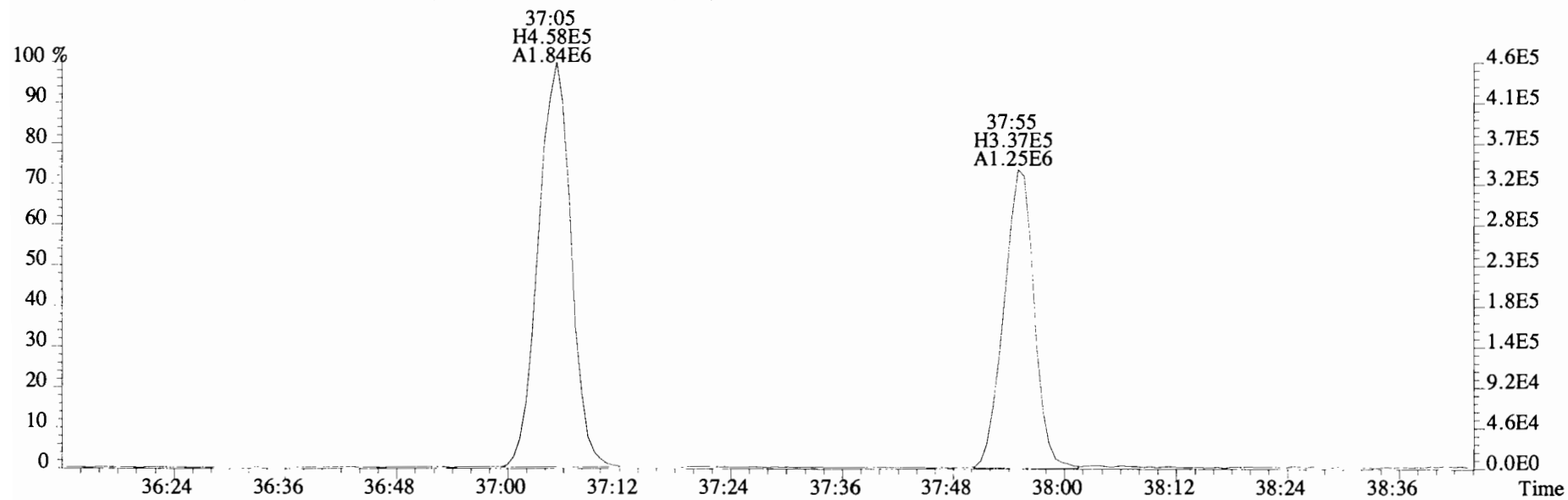
454.9728 S:15 F:4



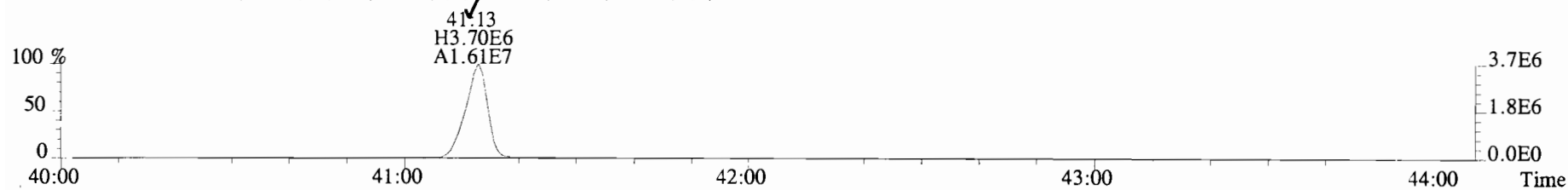
File:191031D2 #1-356 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



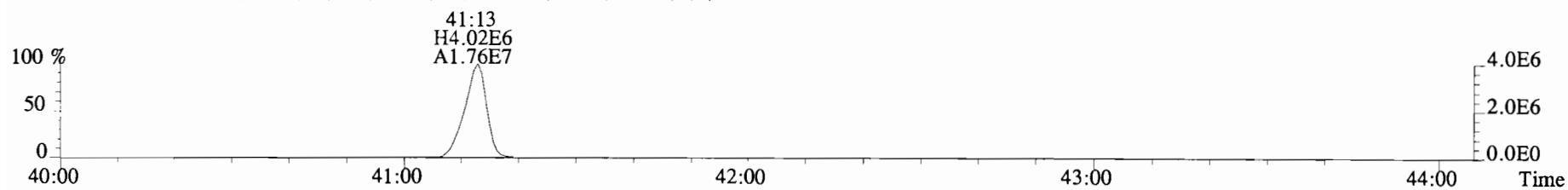
425.7737 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



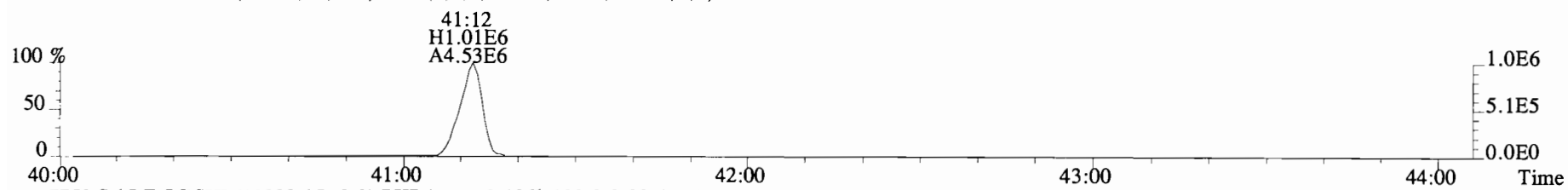
File:191031D2 #1-432 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



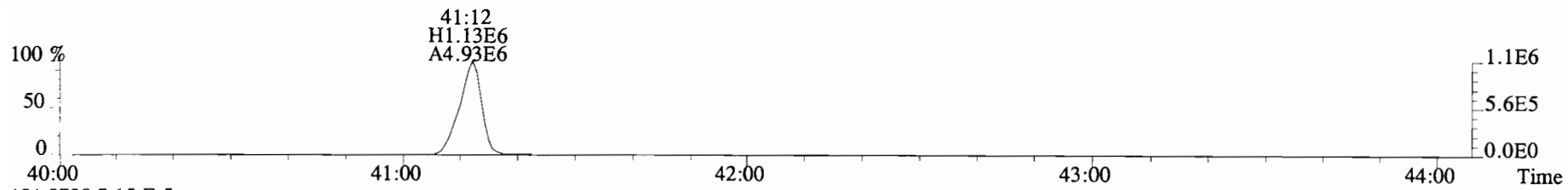
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



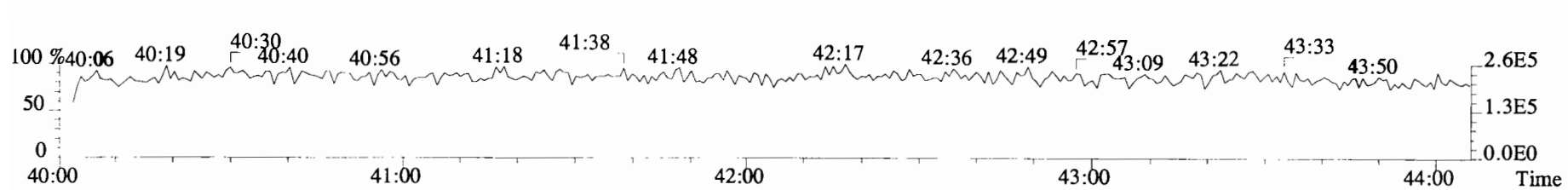
469.7780 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



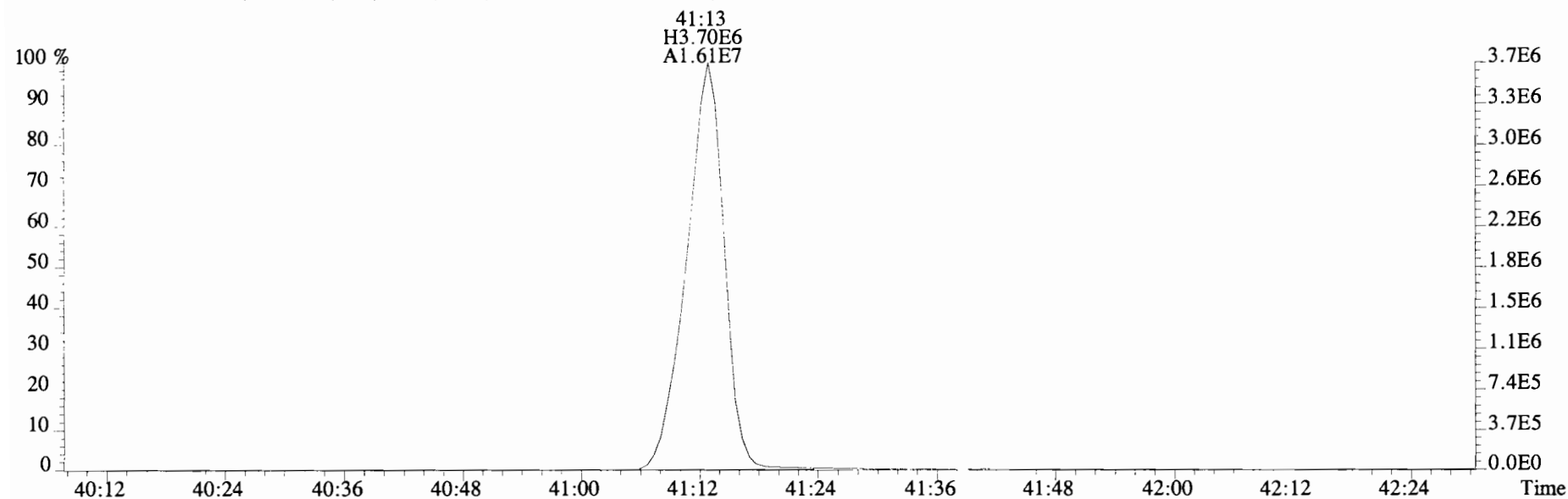
471.7750 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



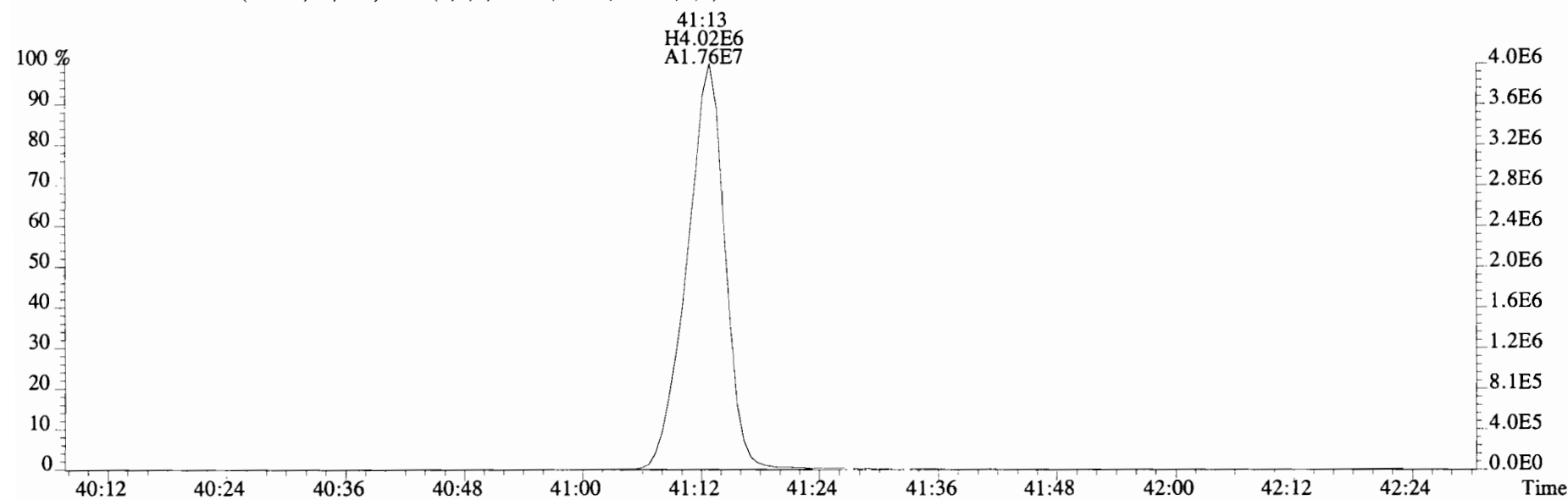
454.9728 S:15 F:5



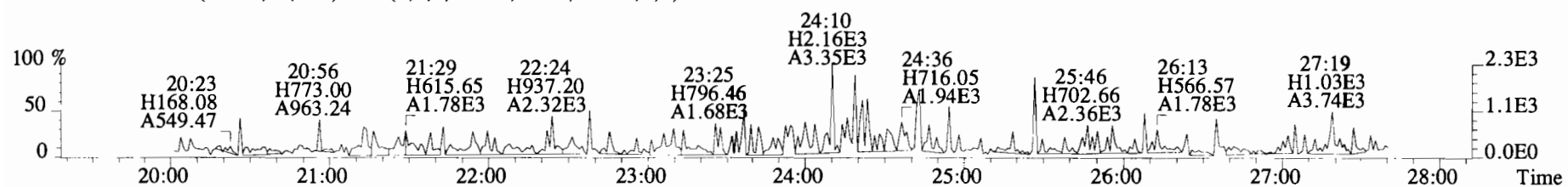
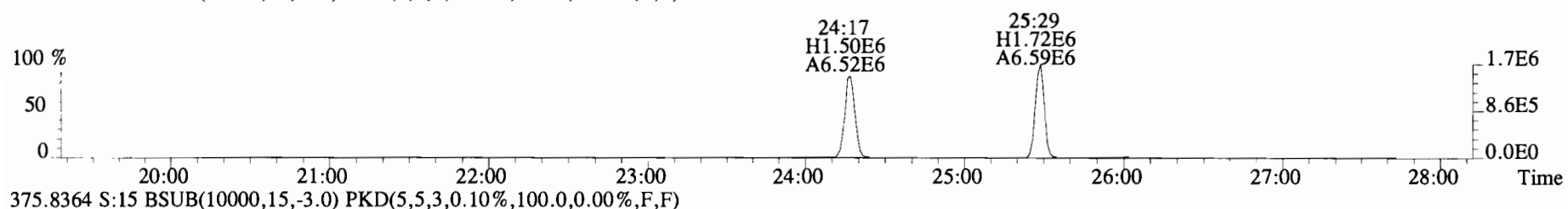
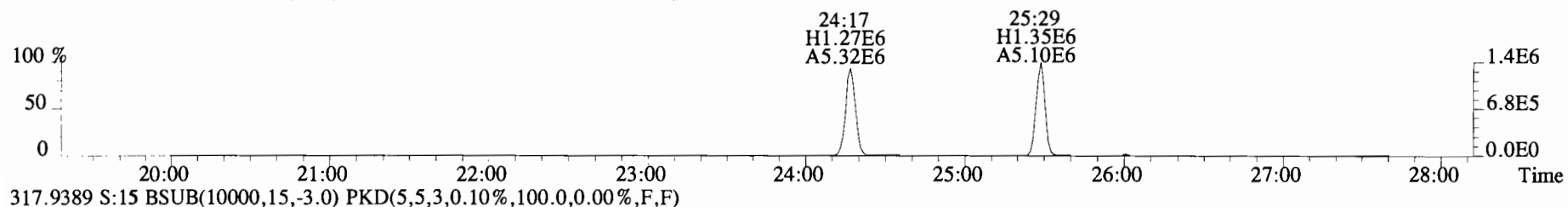
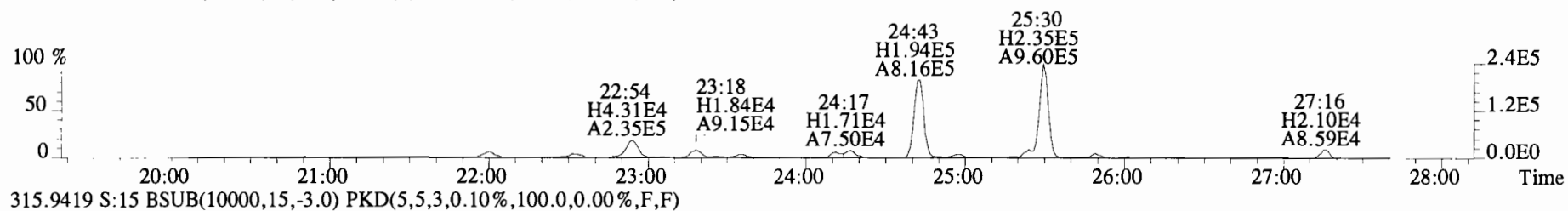
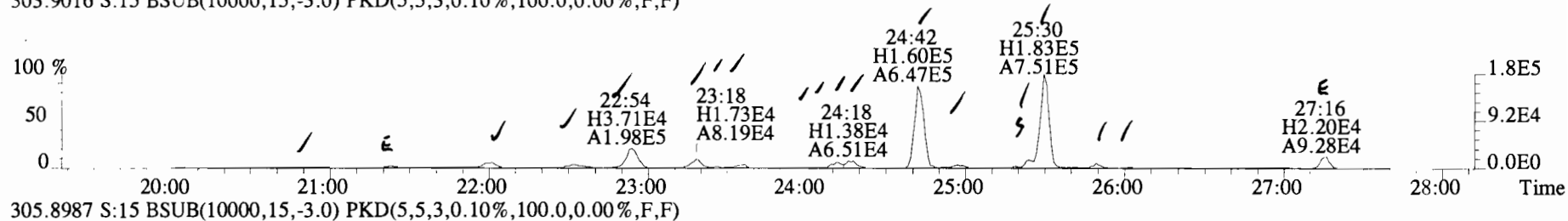
File:191031D2 #1-432 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



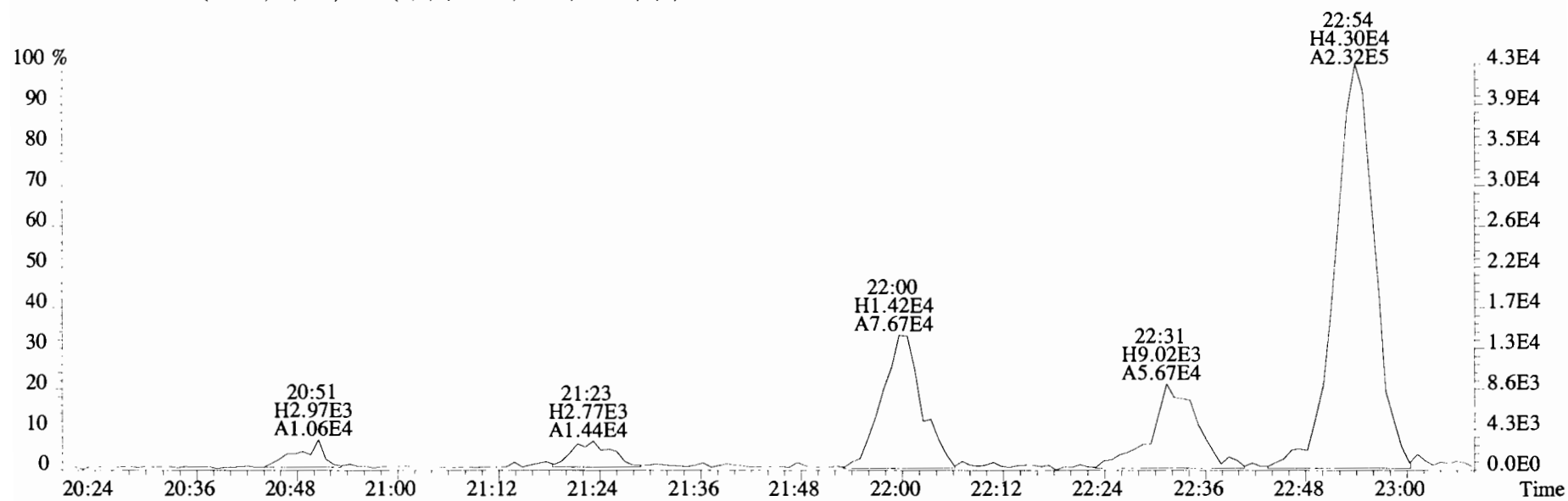
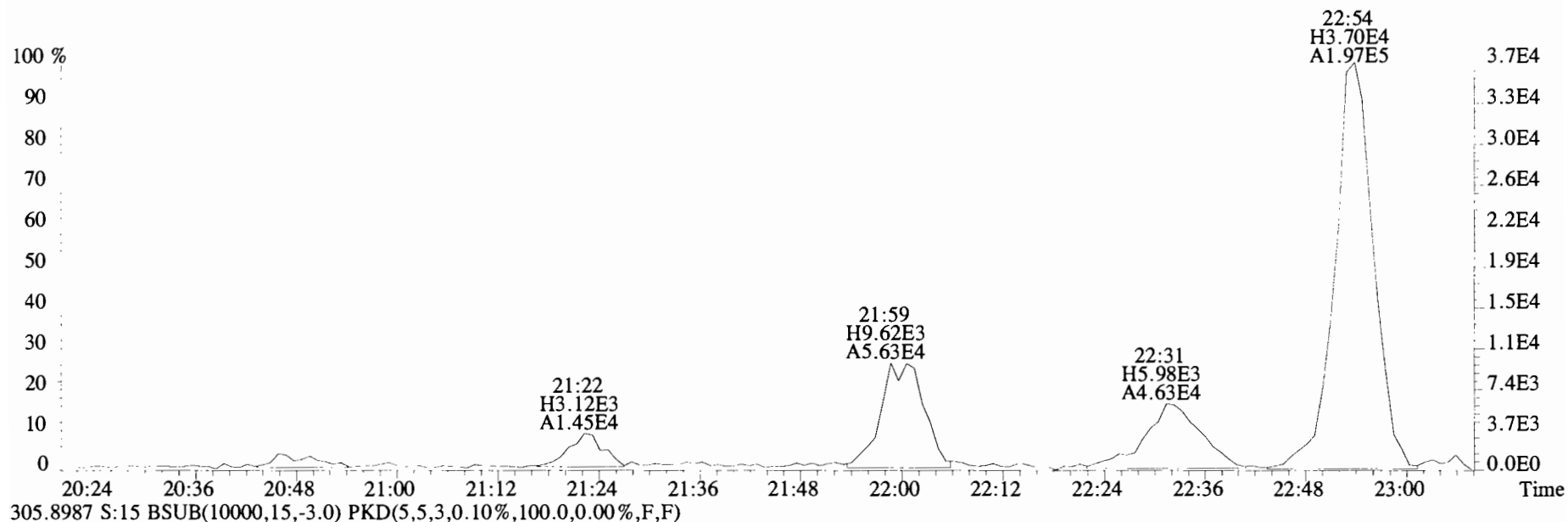
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



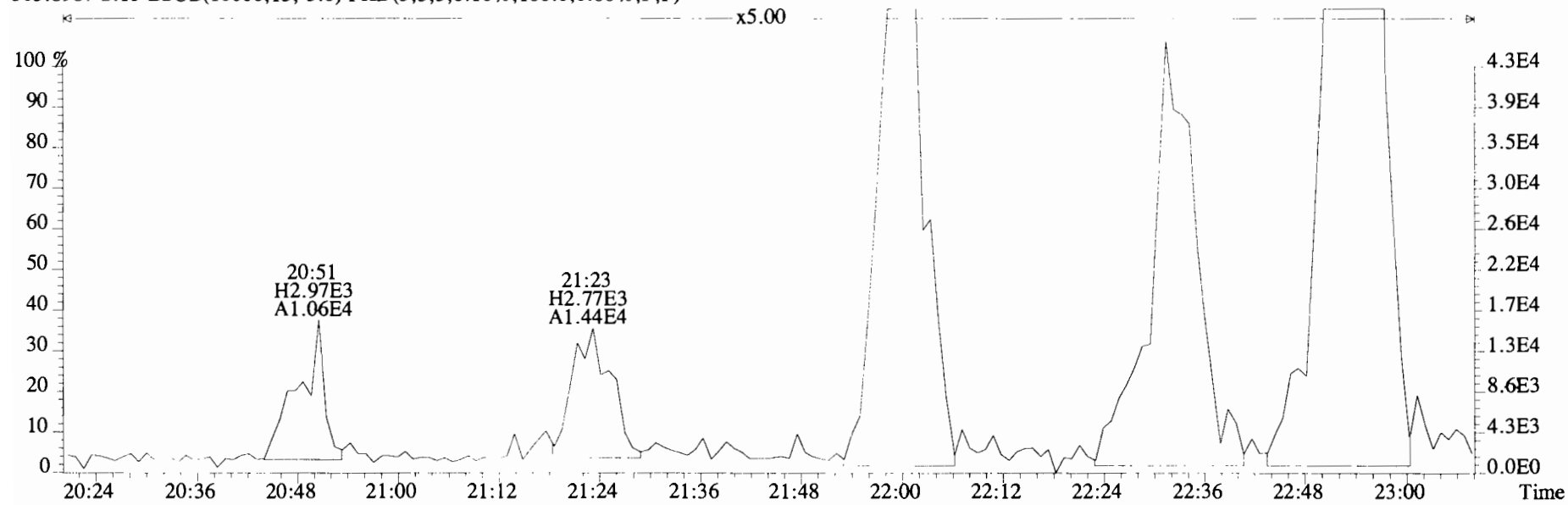
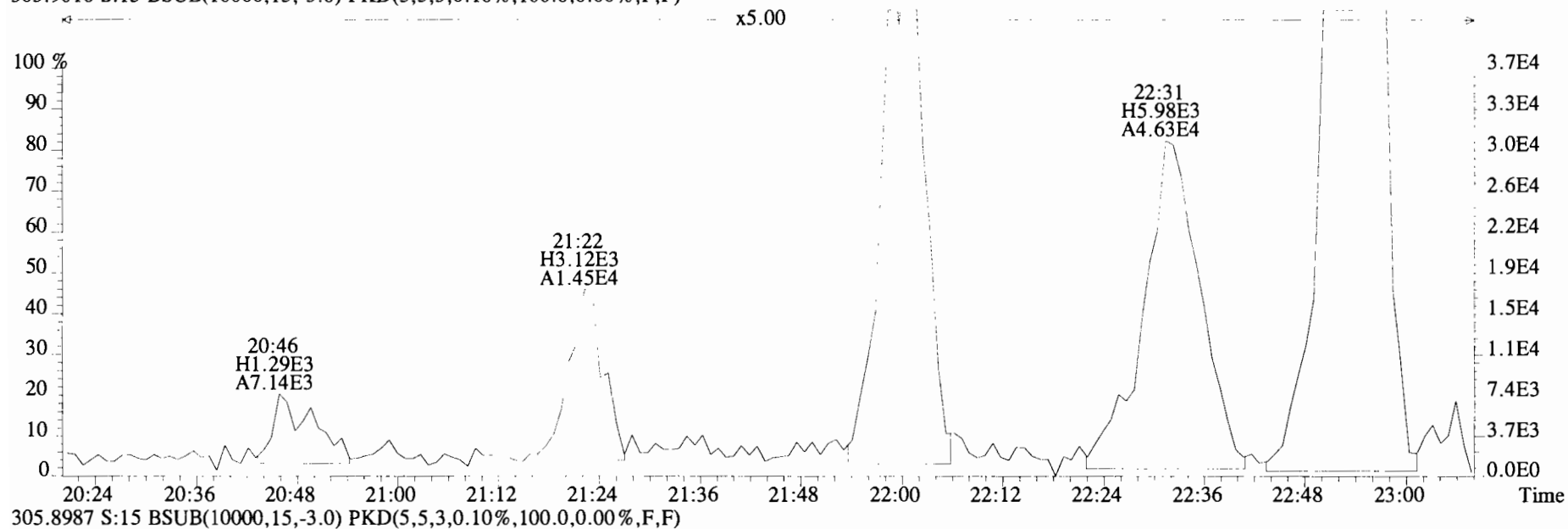
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



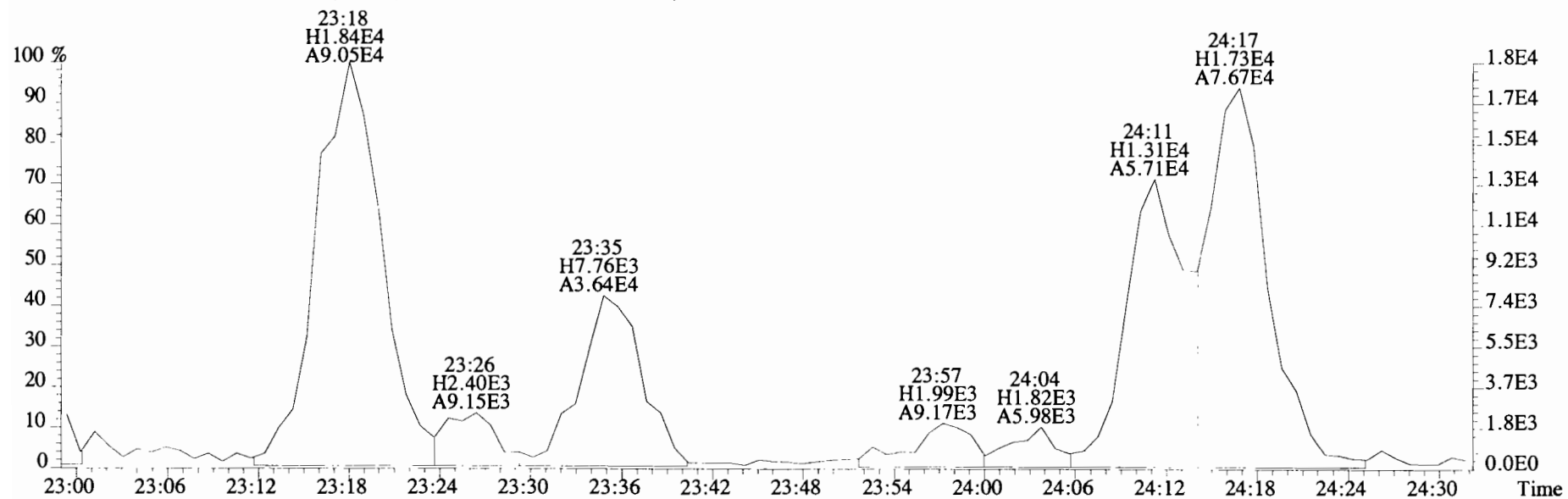
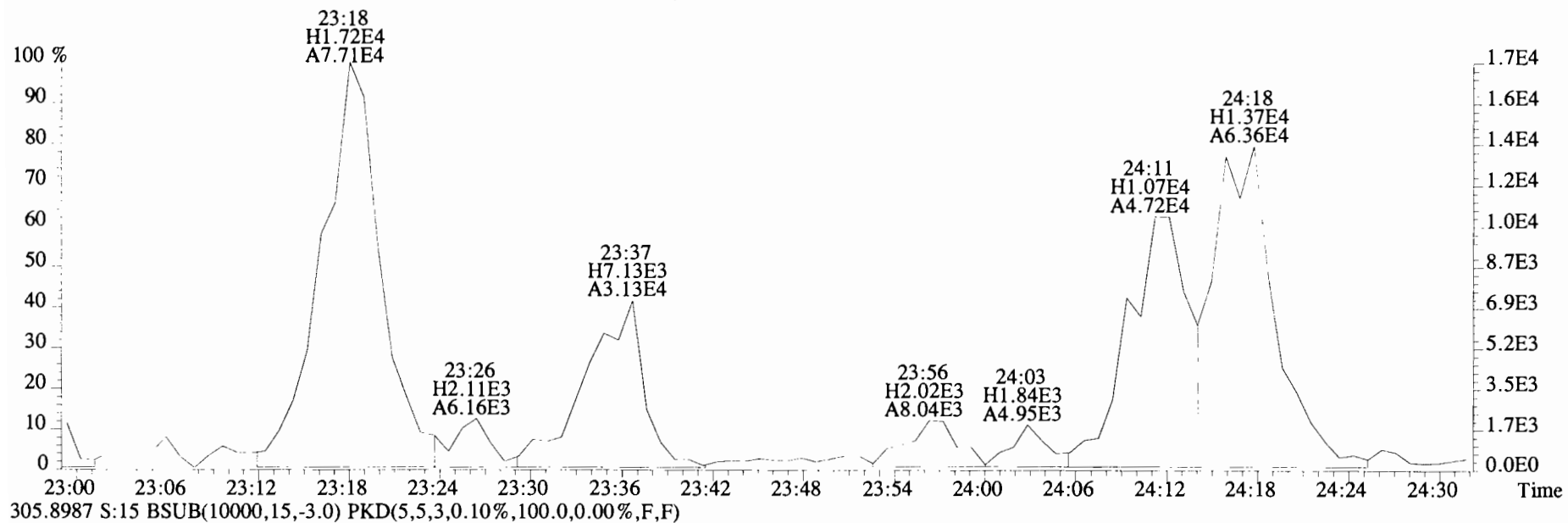
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



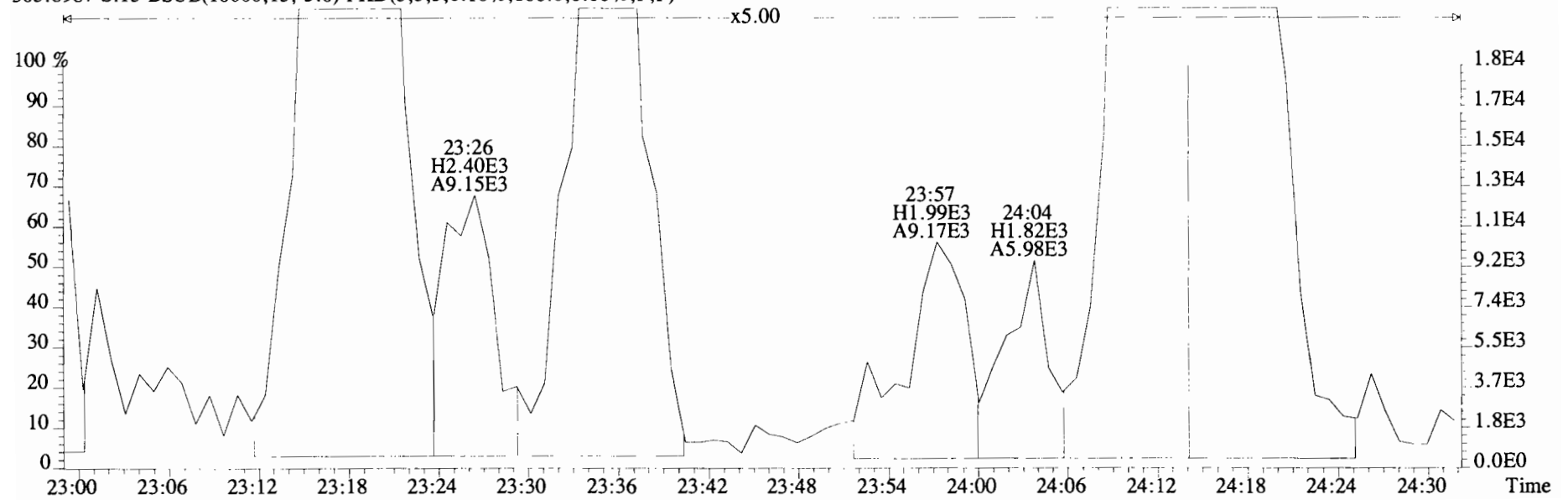
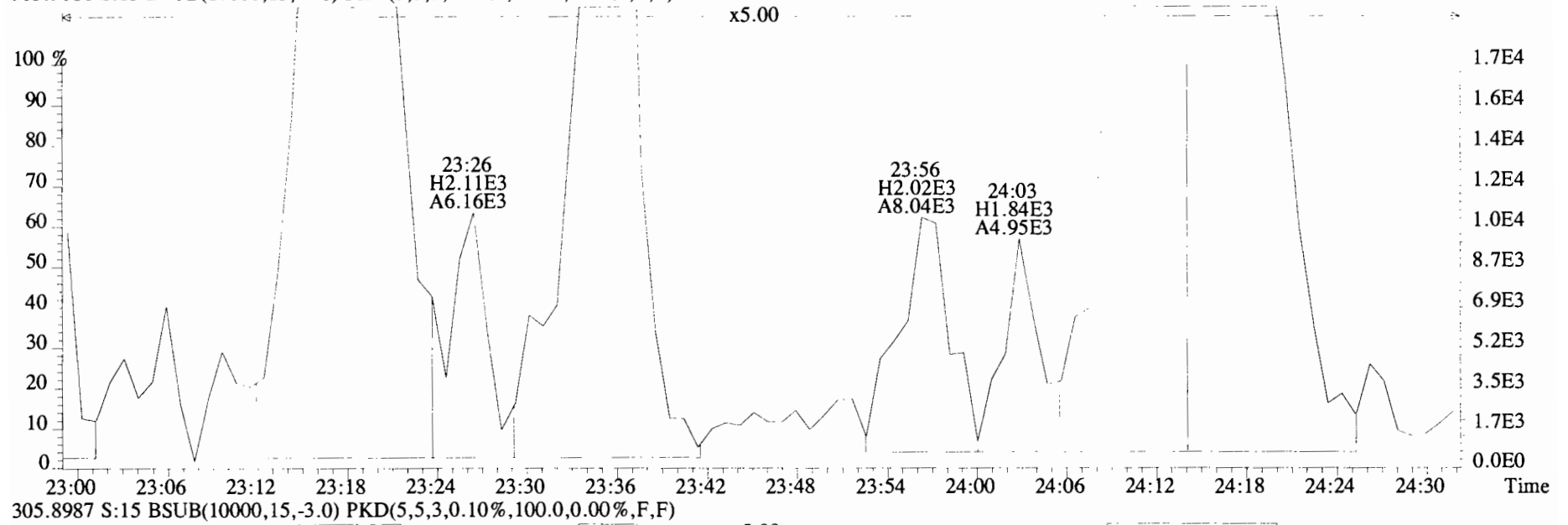
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



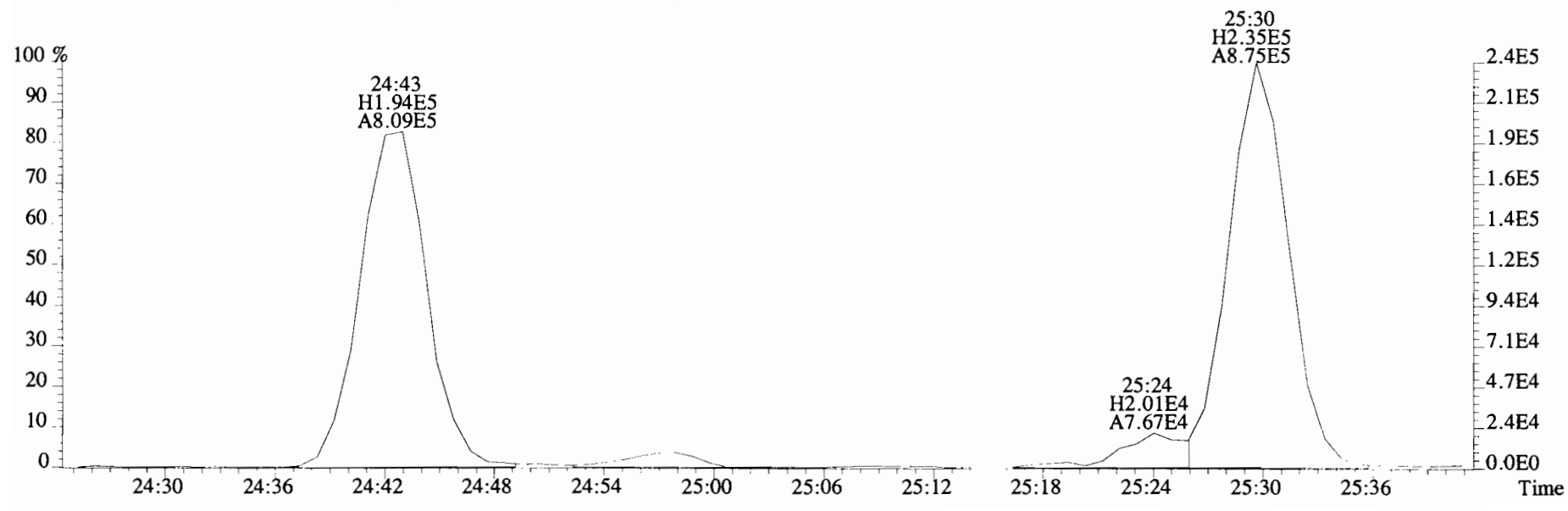
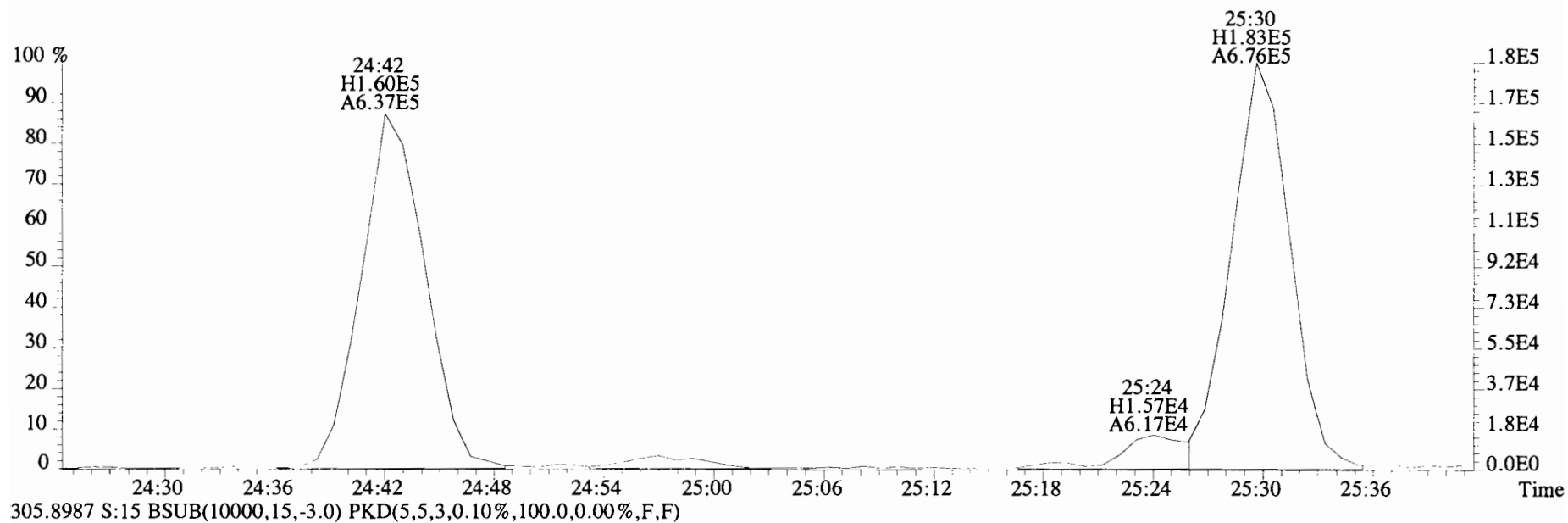
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



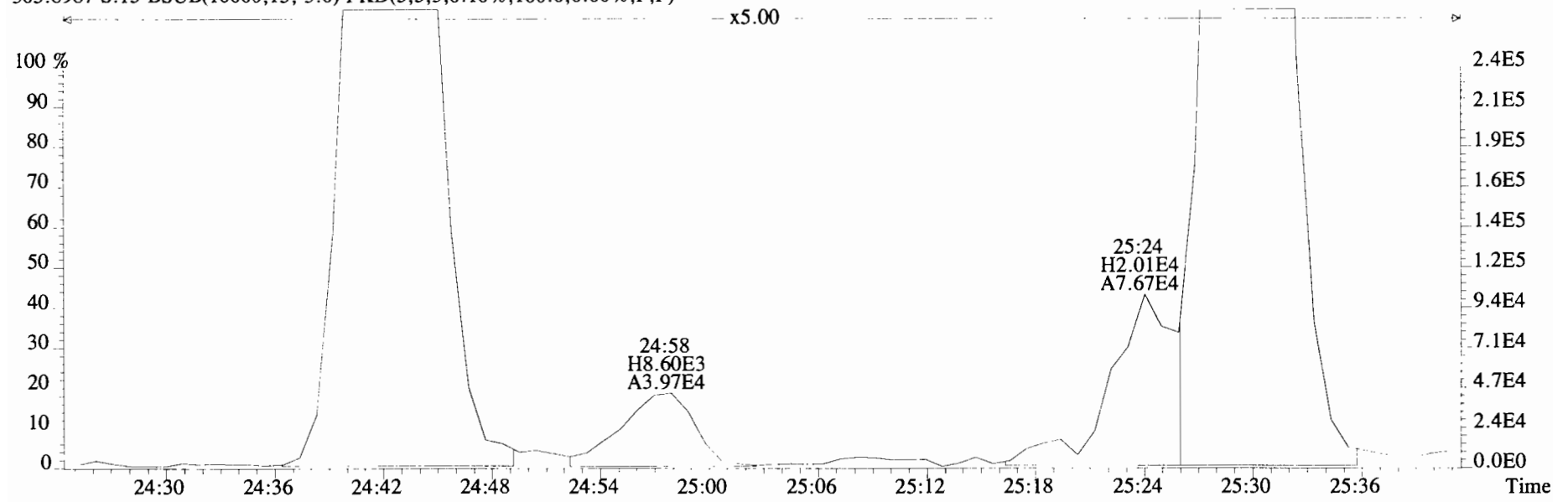
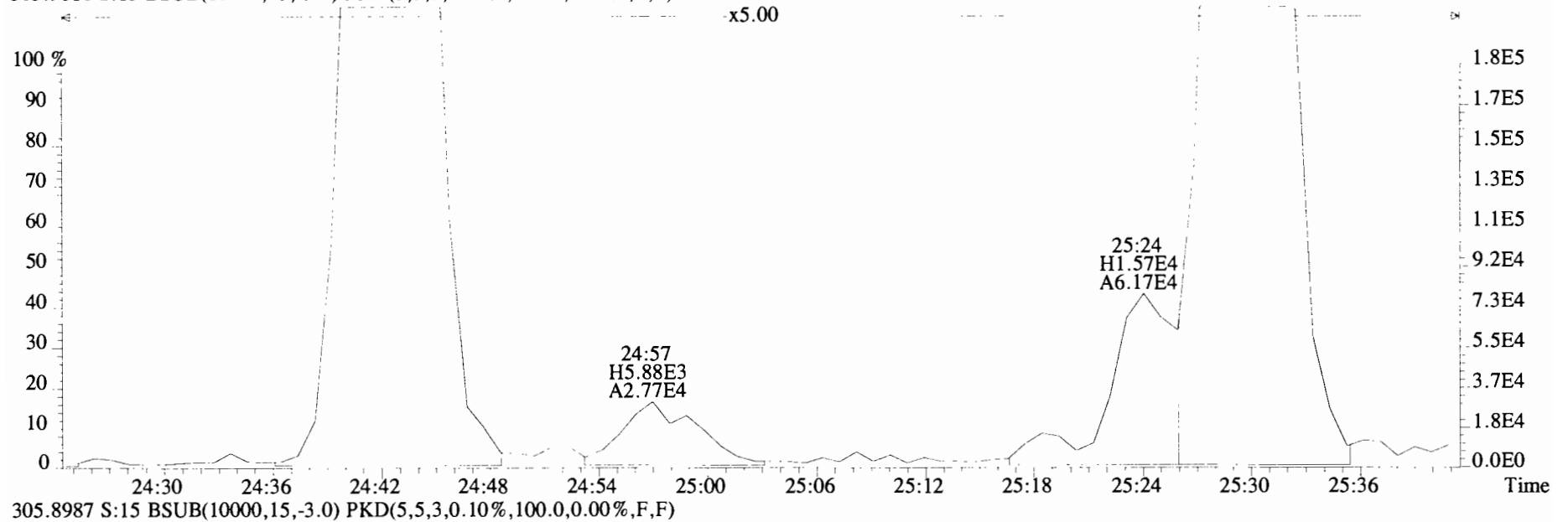
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



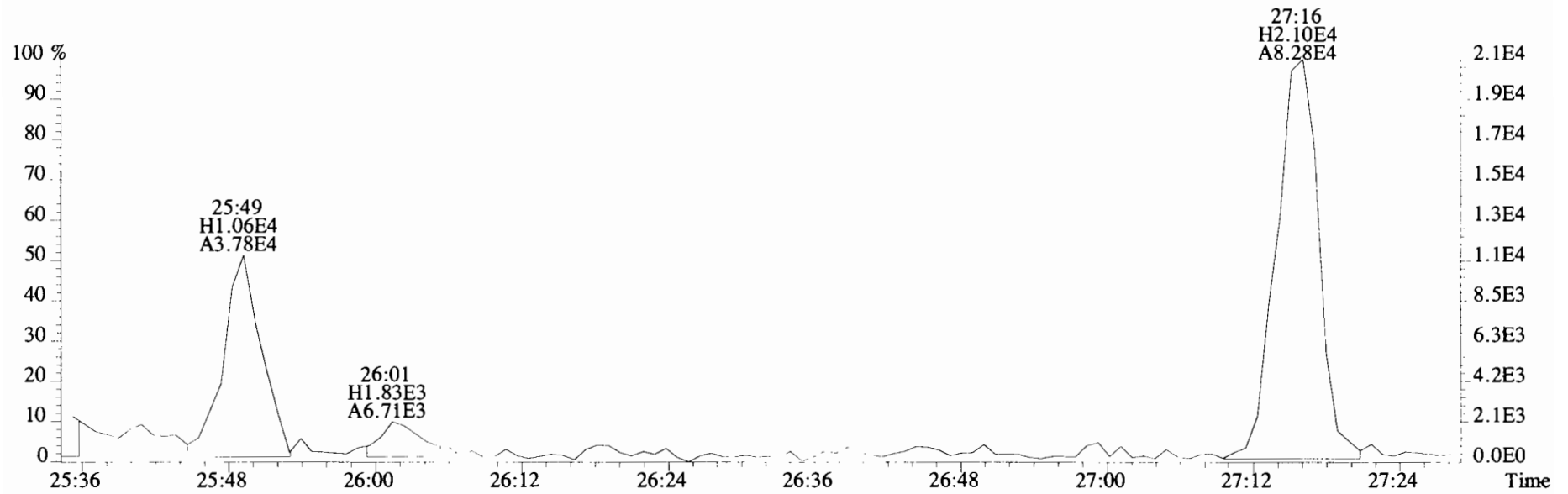
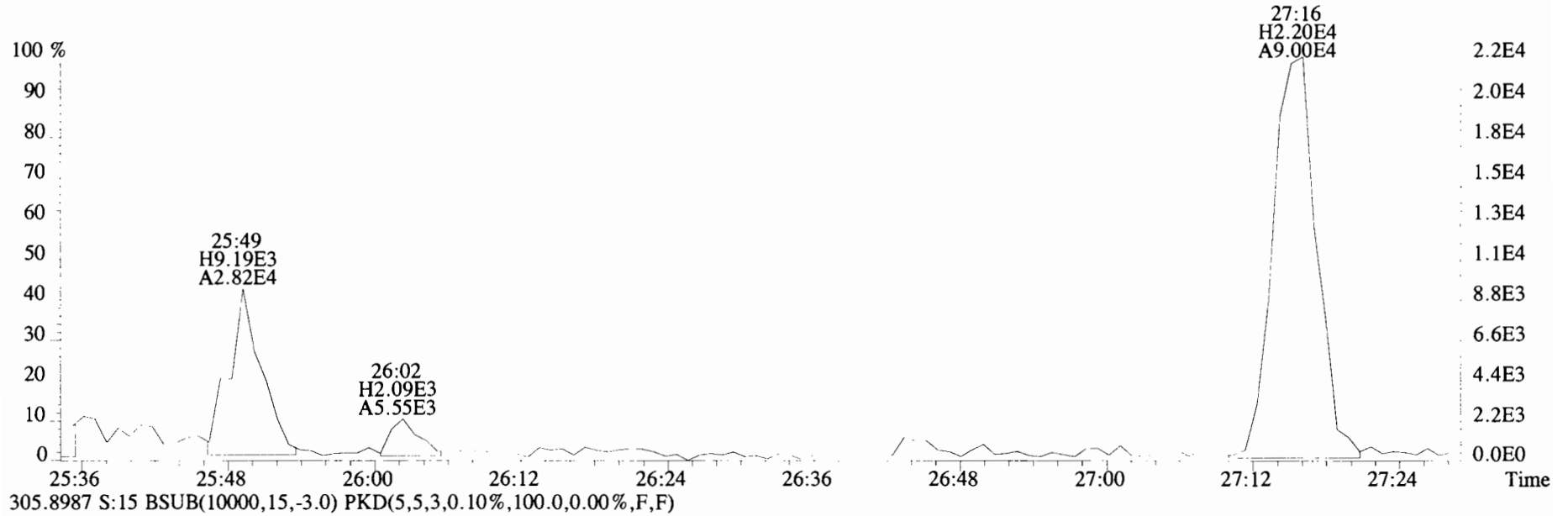
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



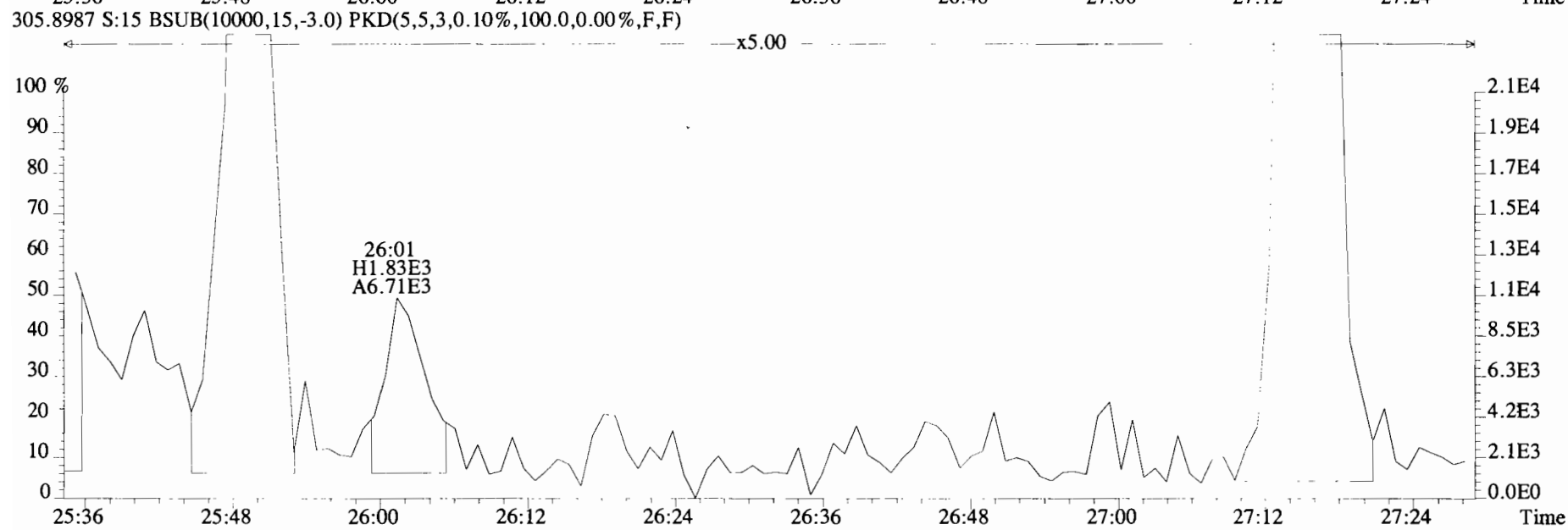
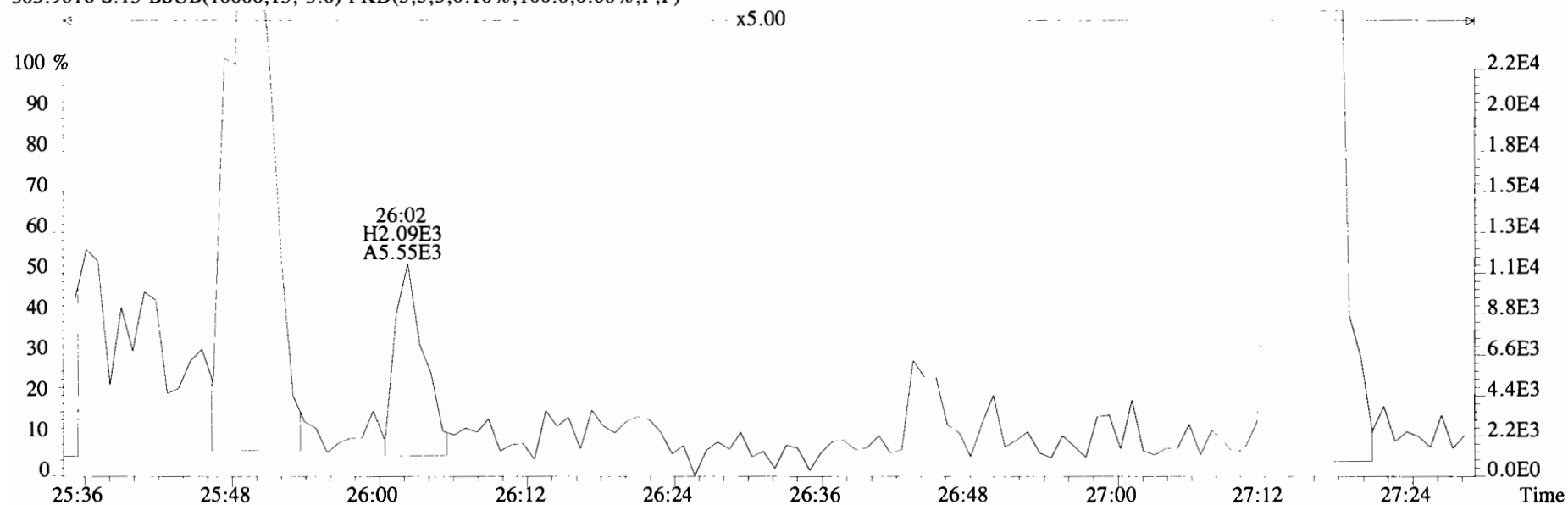
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



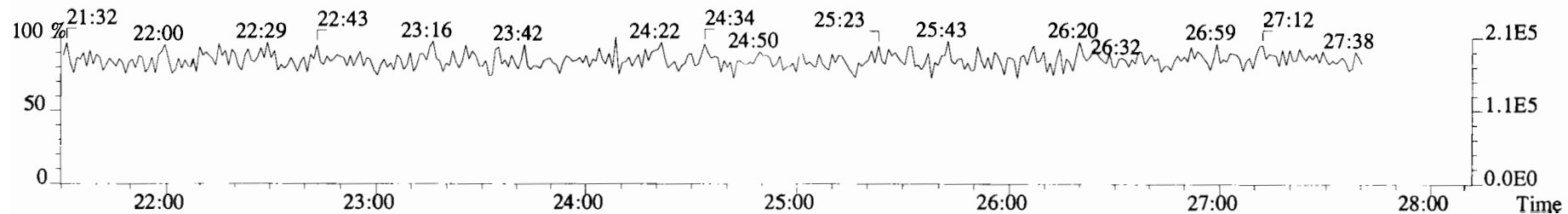
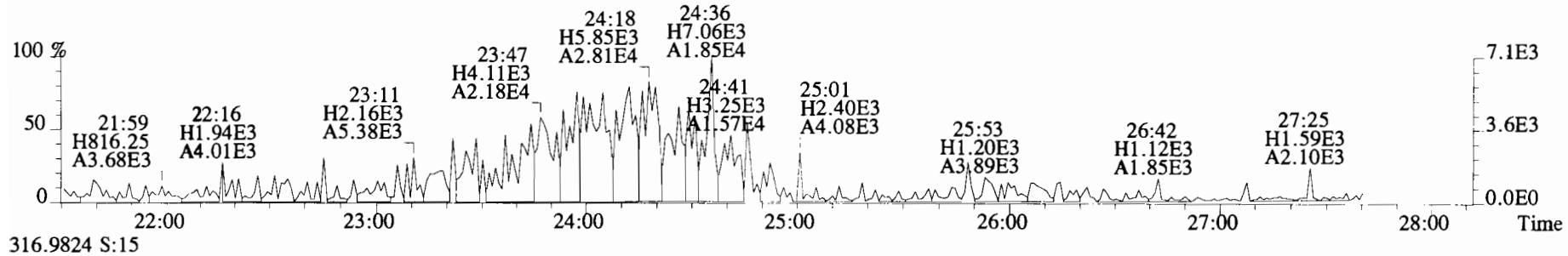
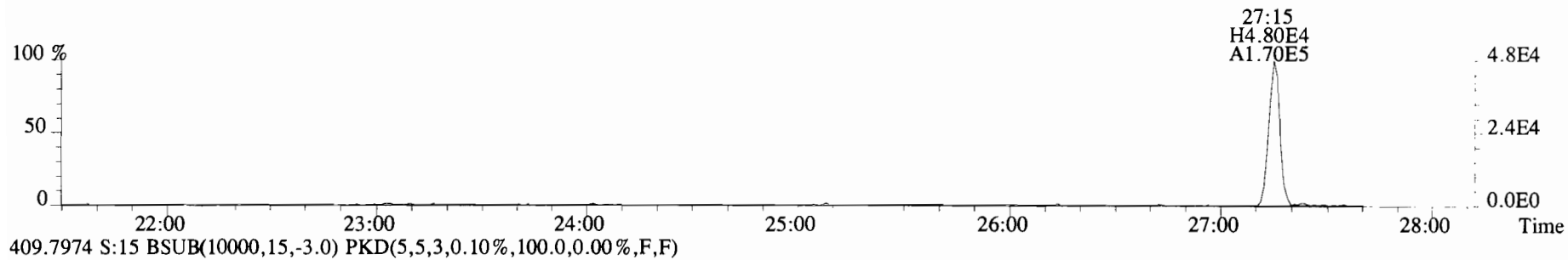
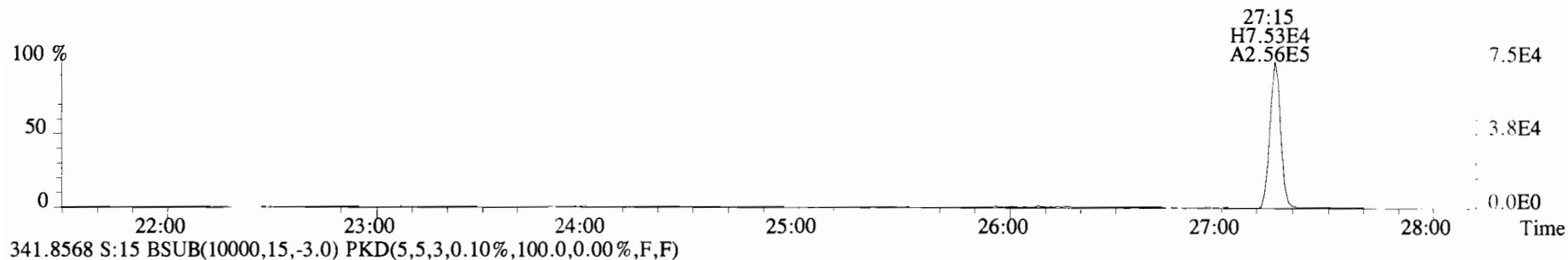
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



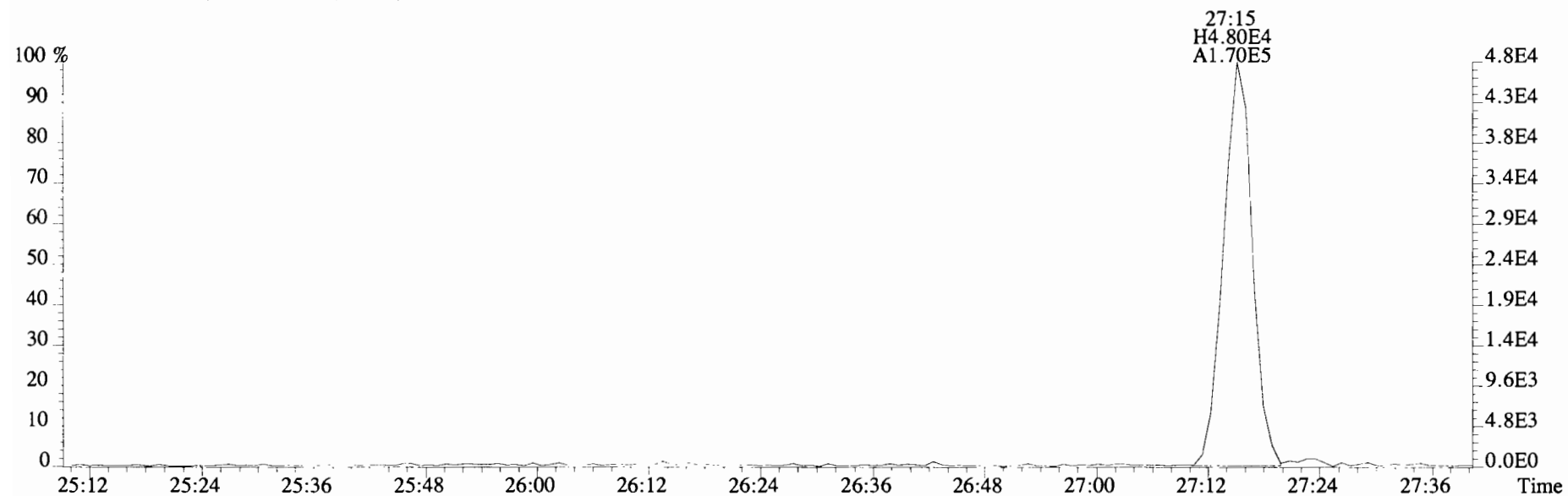
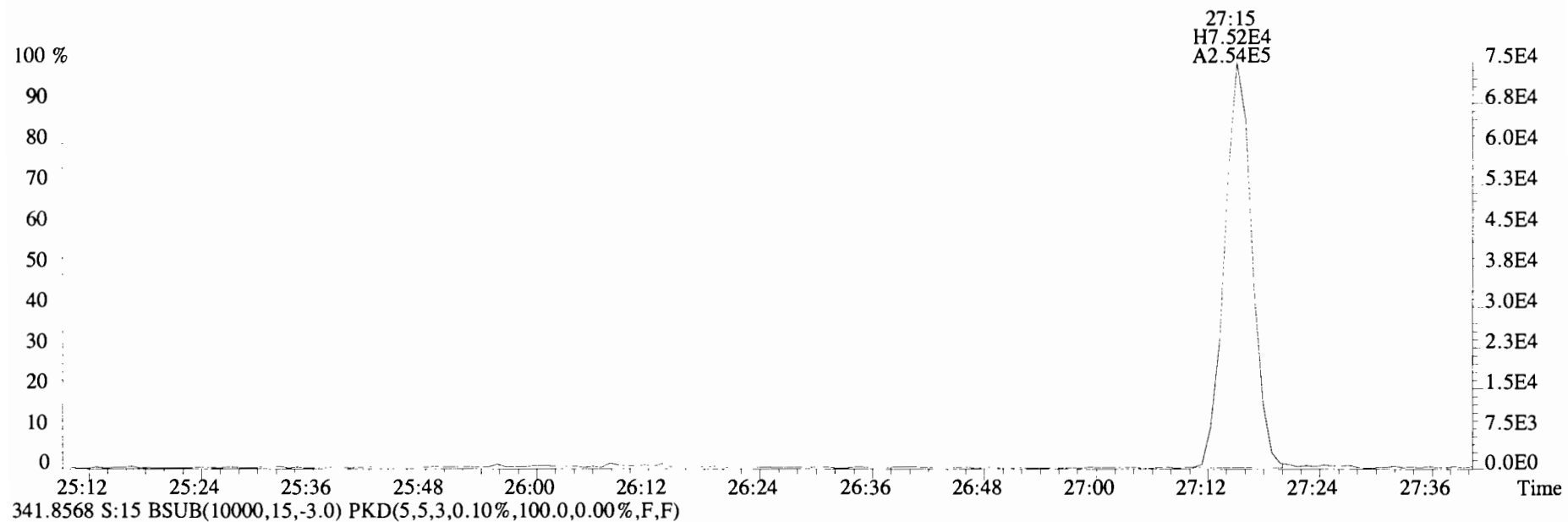
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



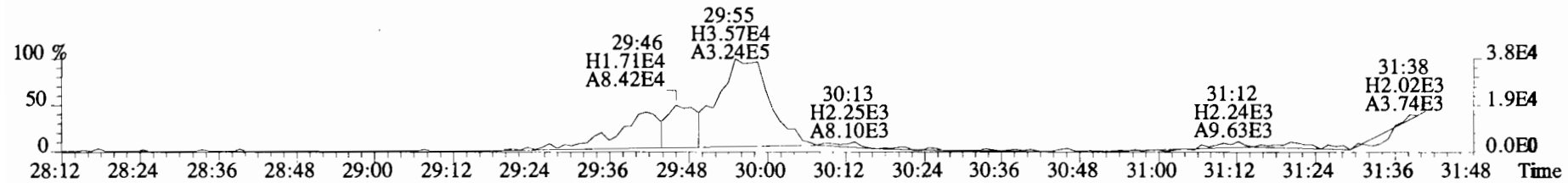
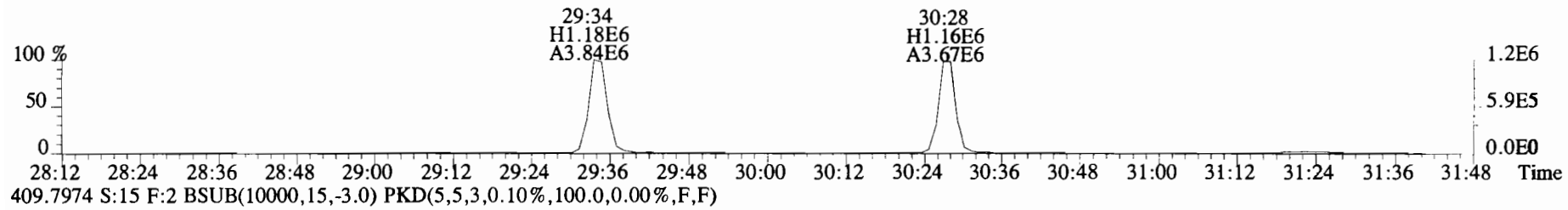
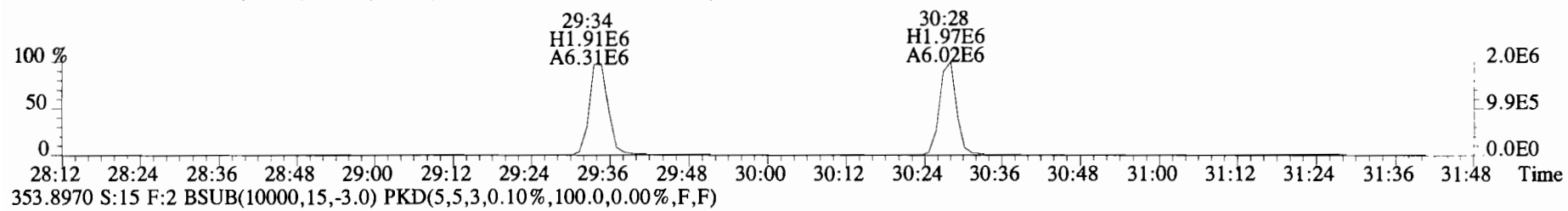
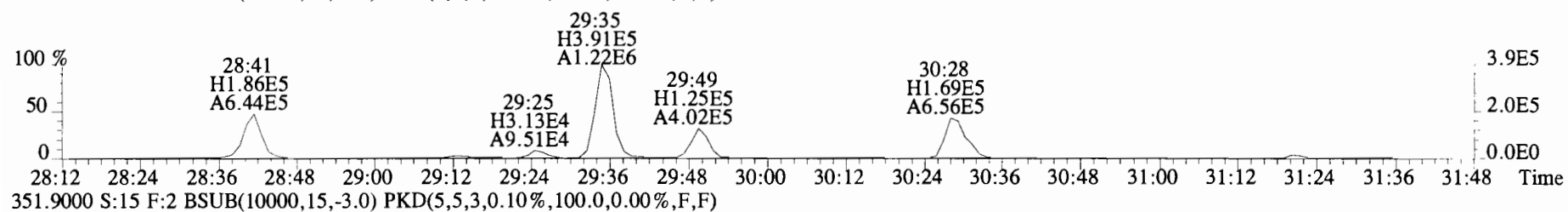
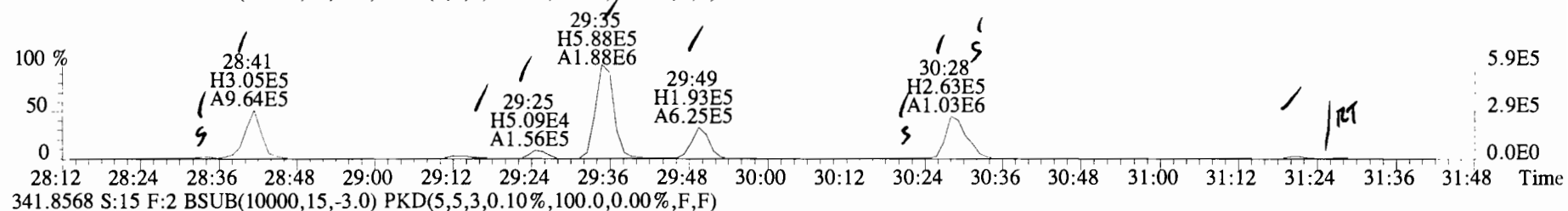
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



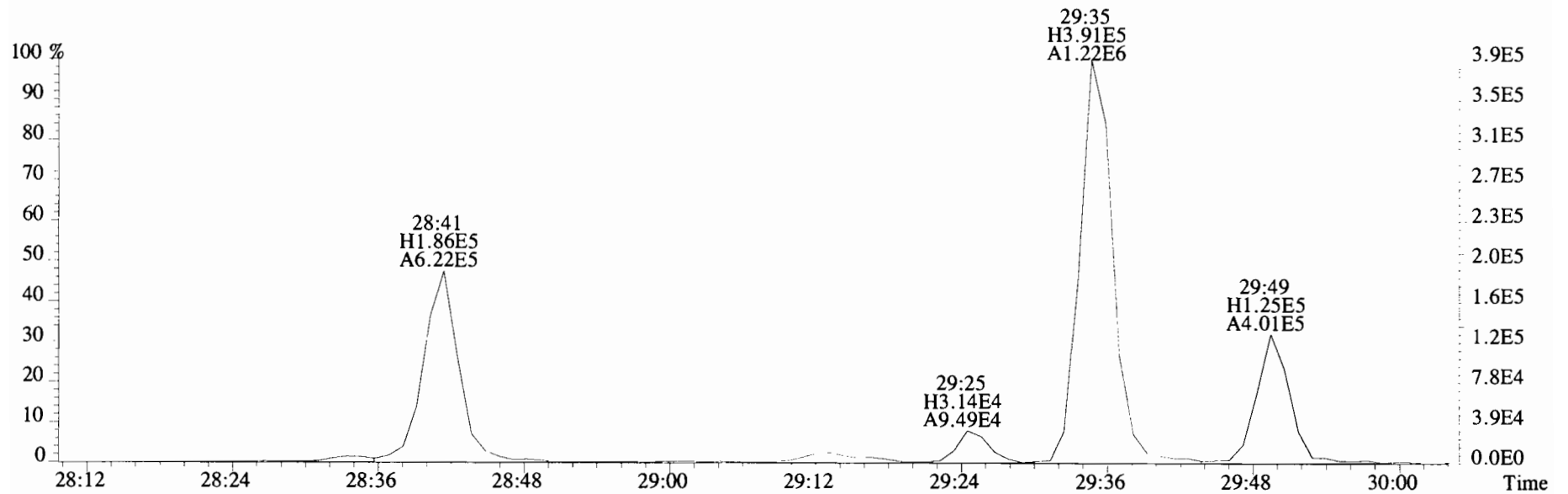
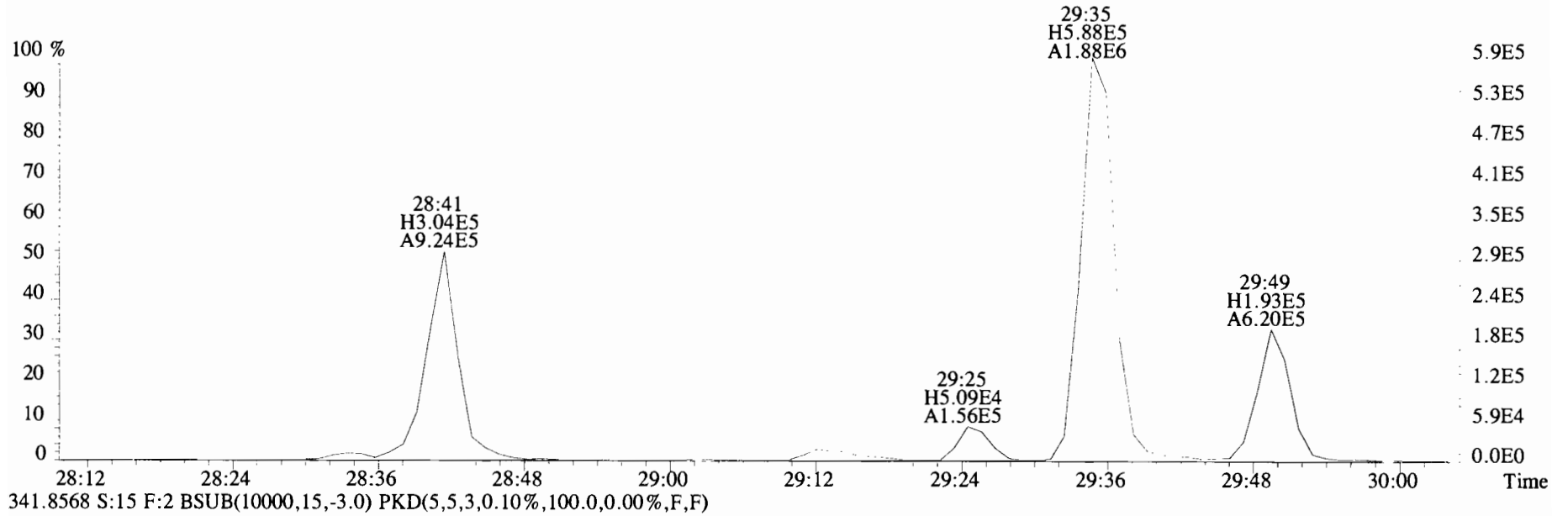
File:191031D2 #1-493 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



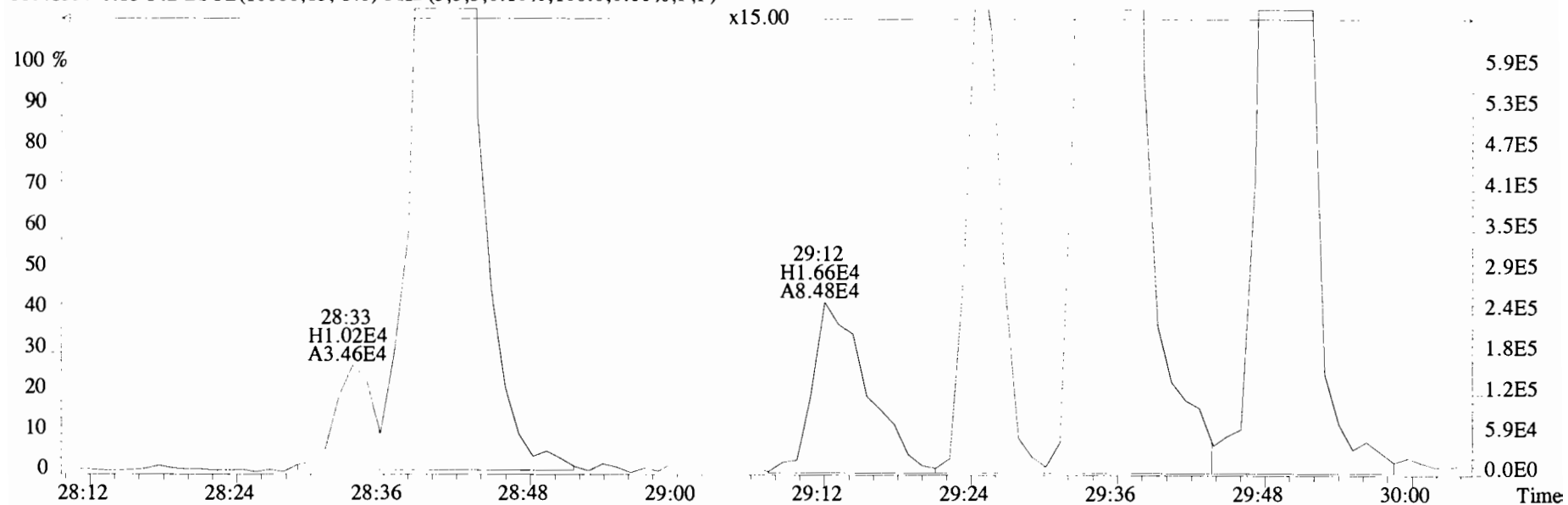
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



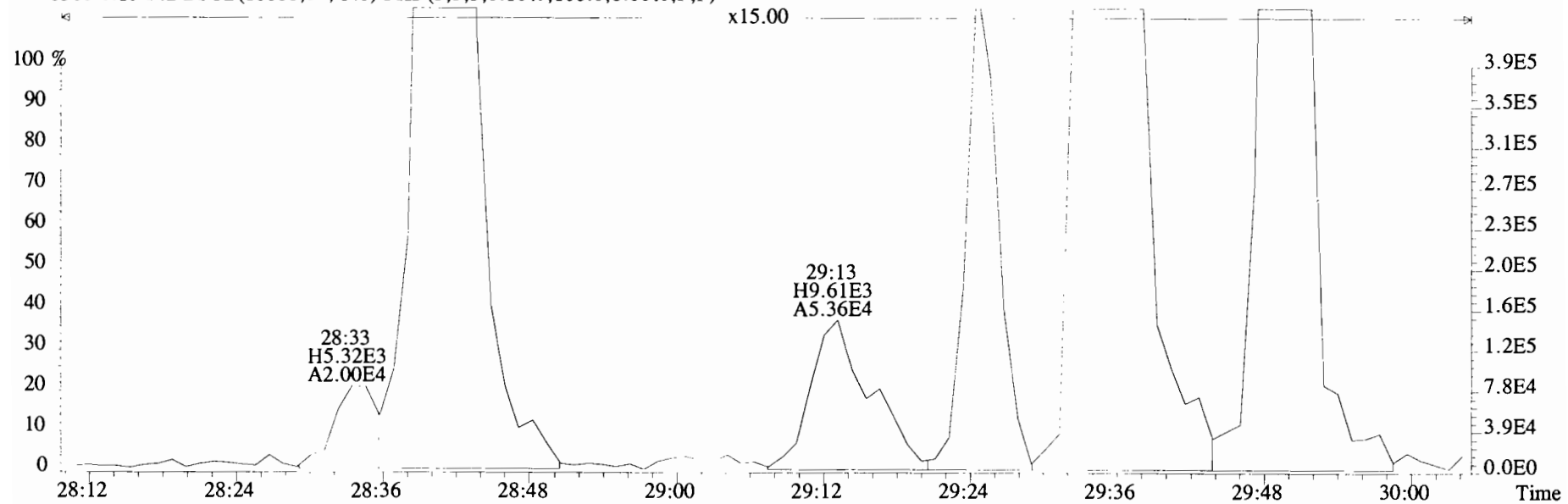
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



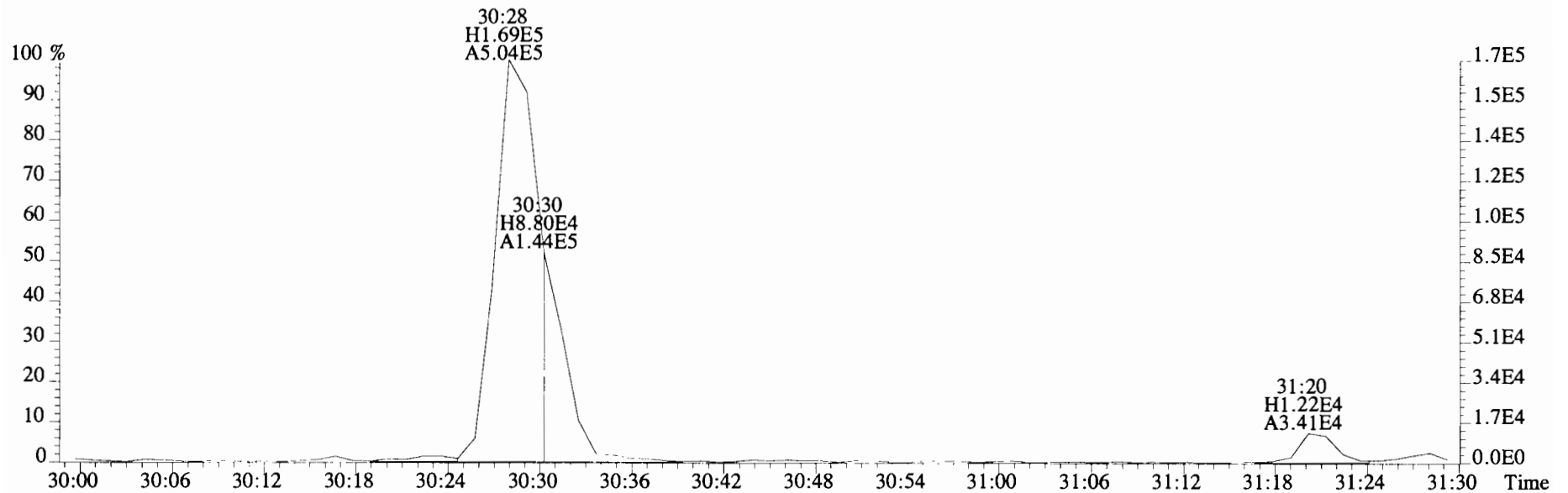
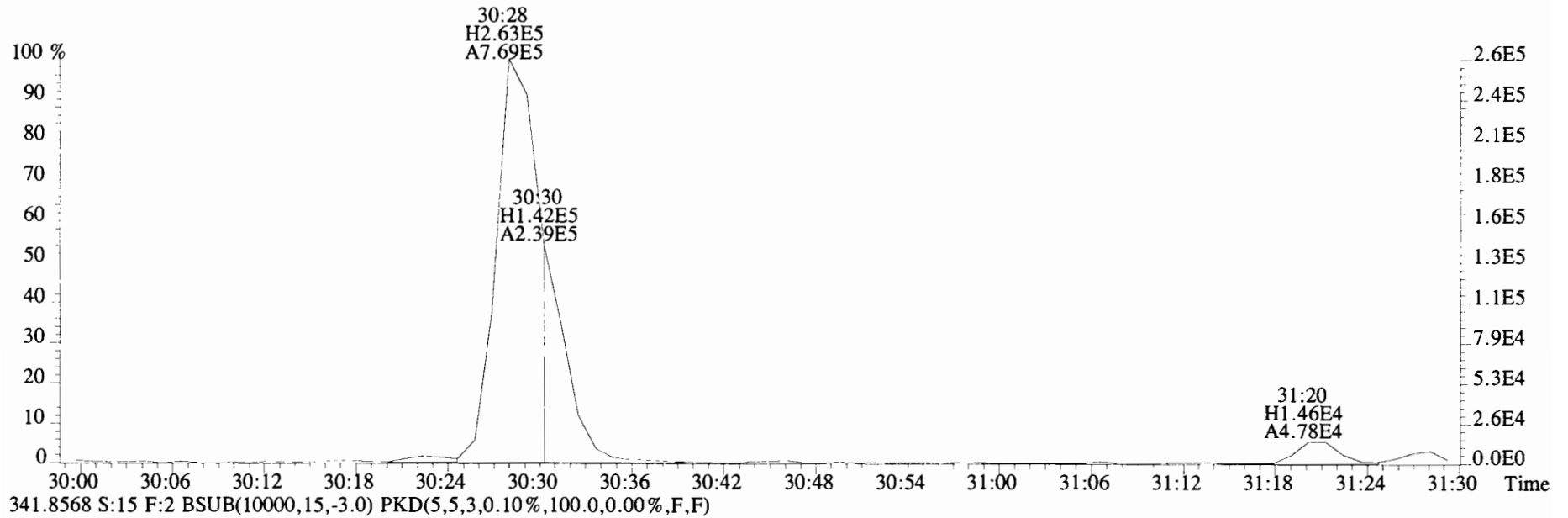
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
339.8597 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



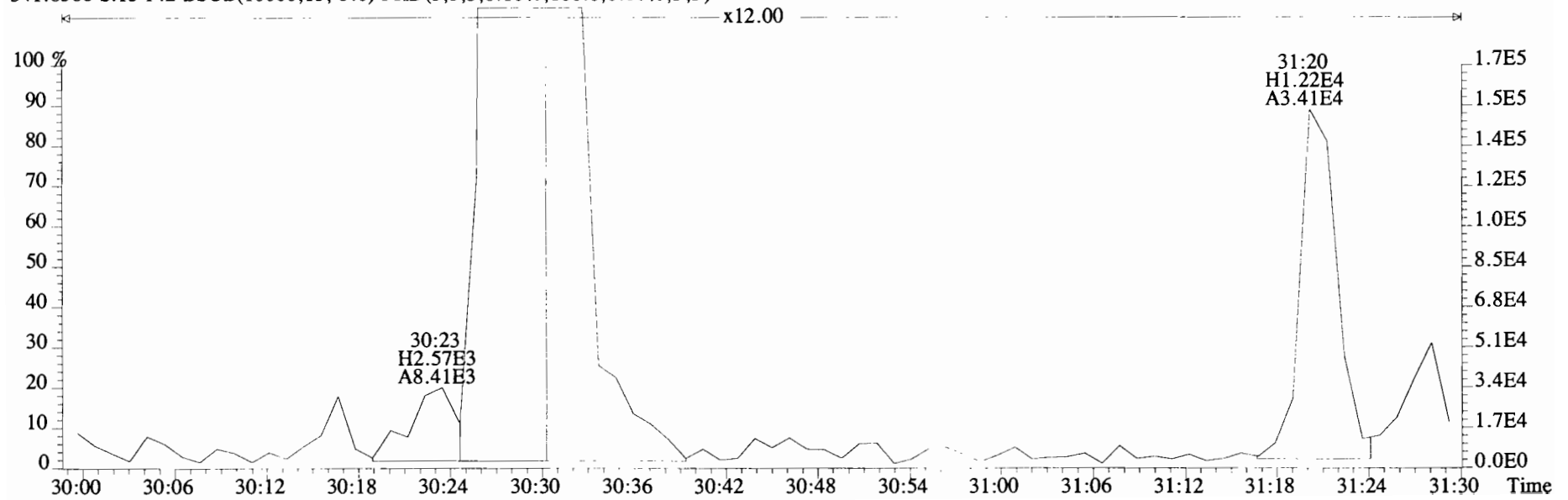
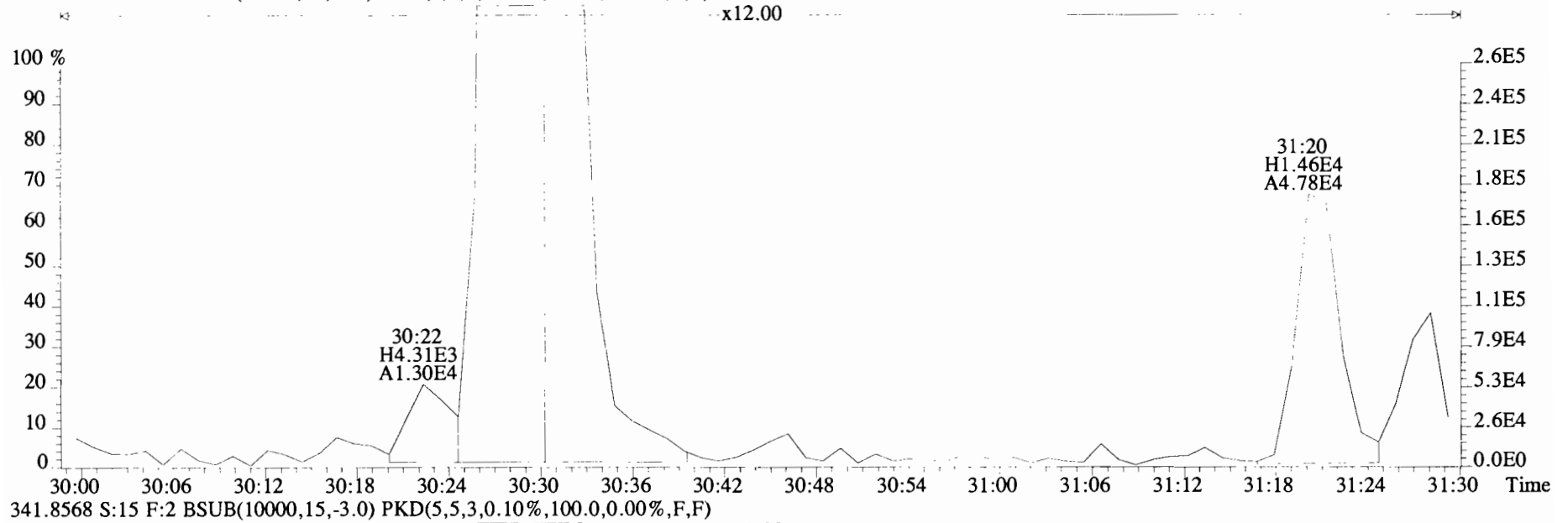
341.8568 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



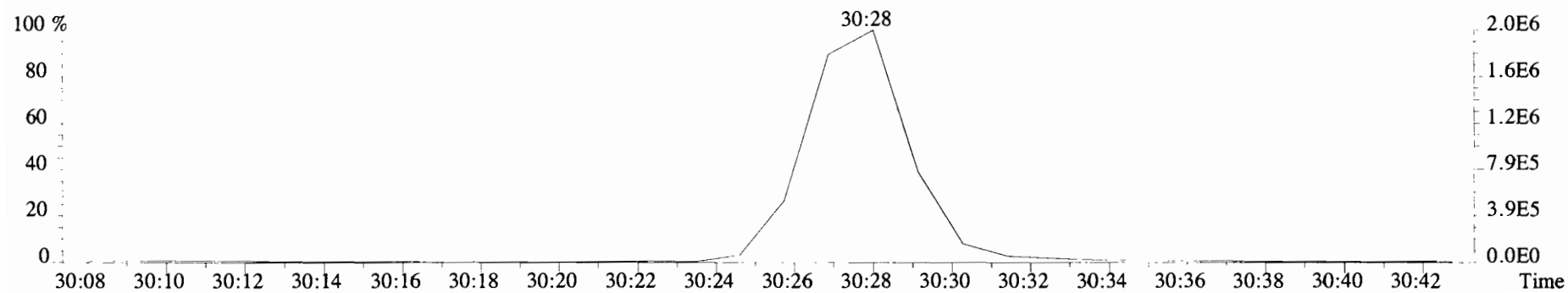
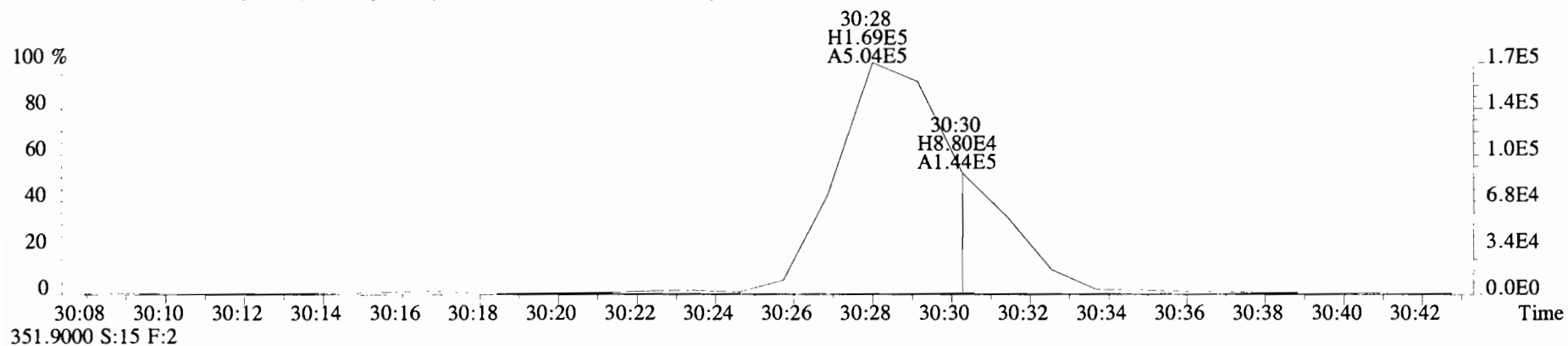
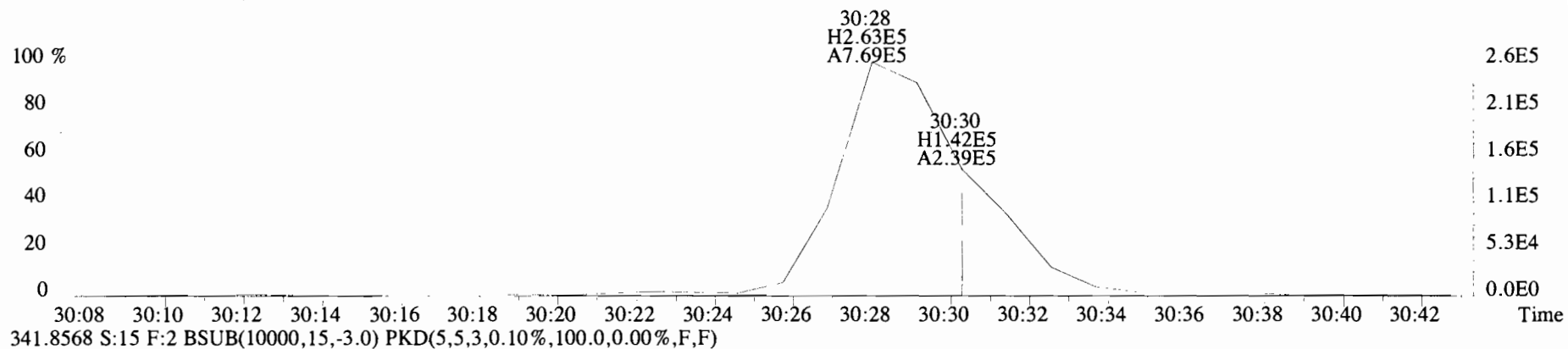
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



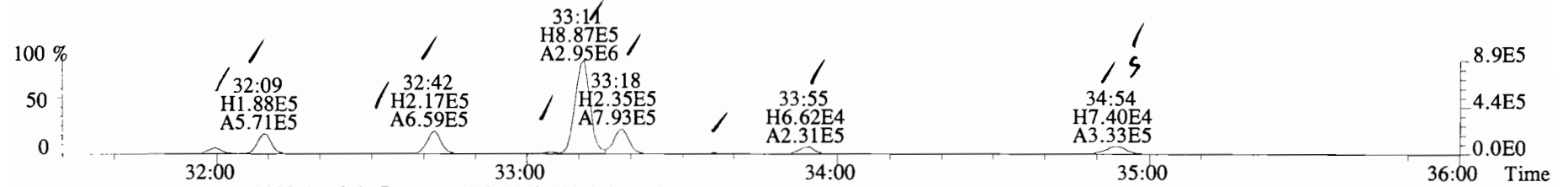
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



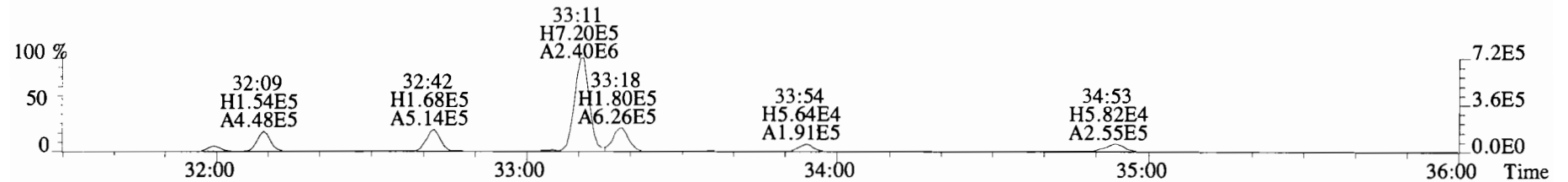
File:191031D2 #1-211 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



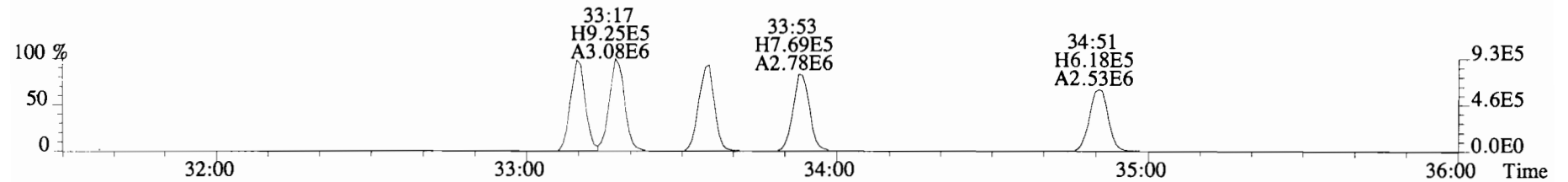
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



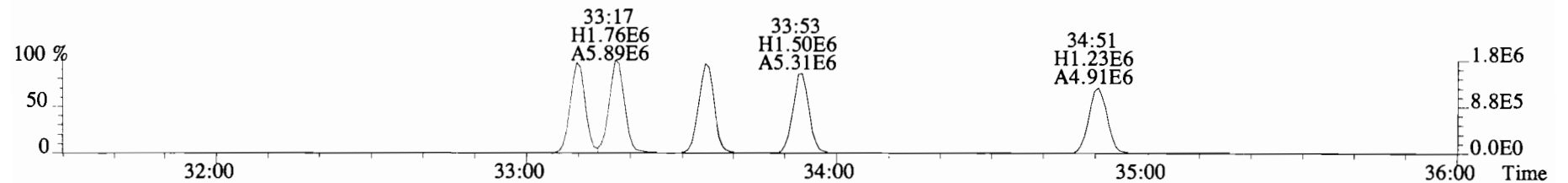
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



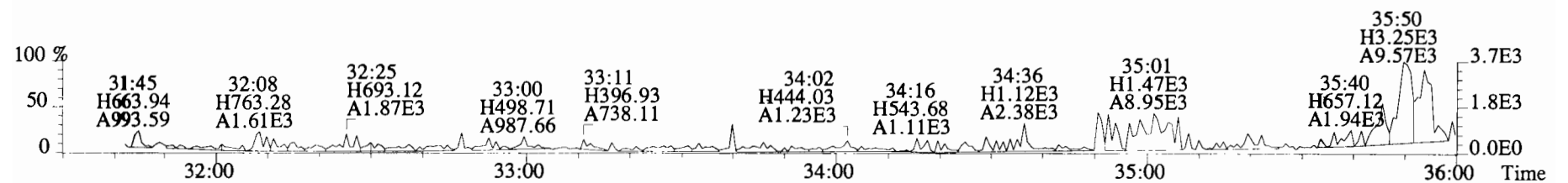
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



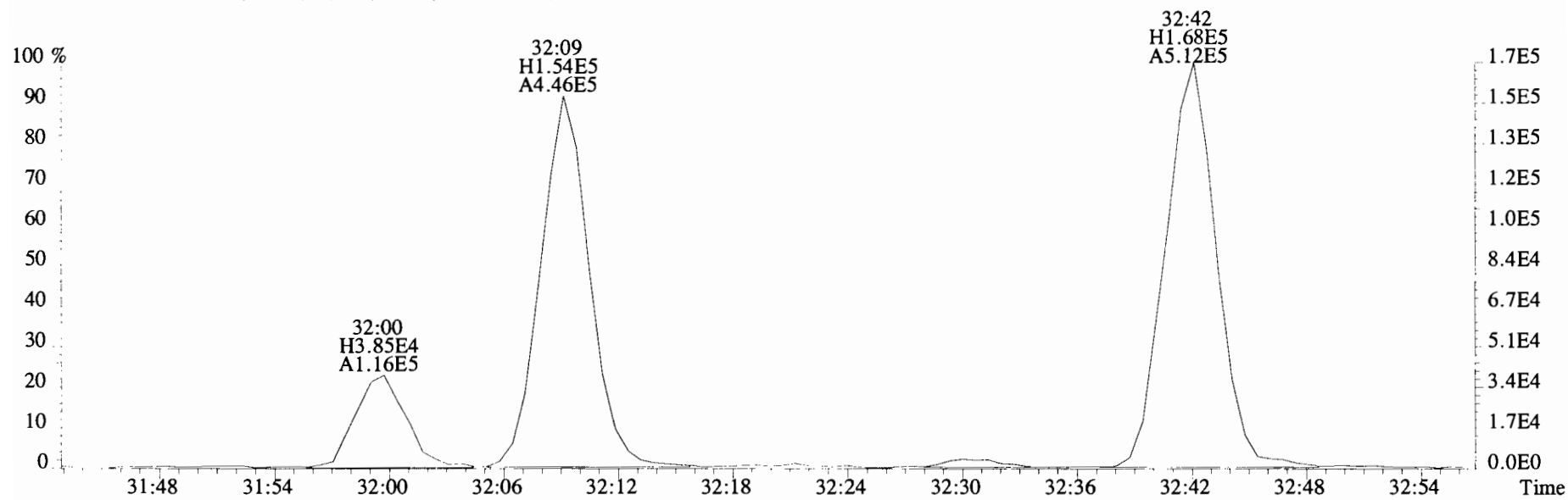
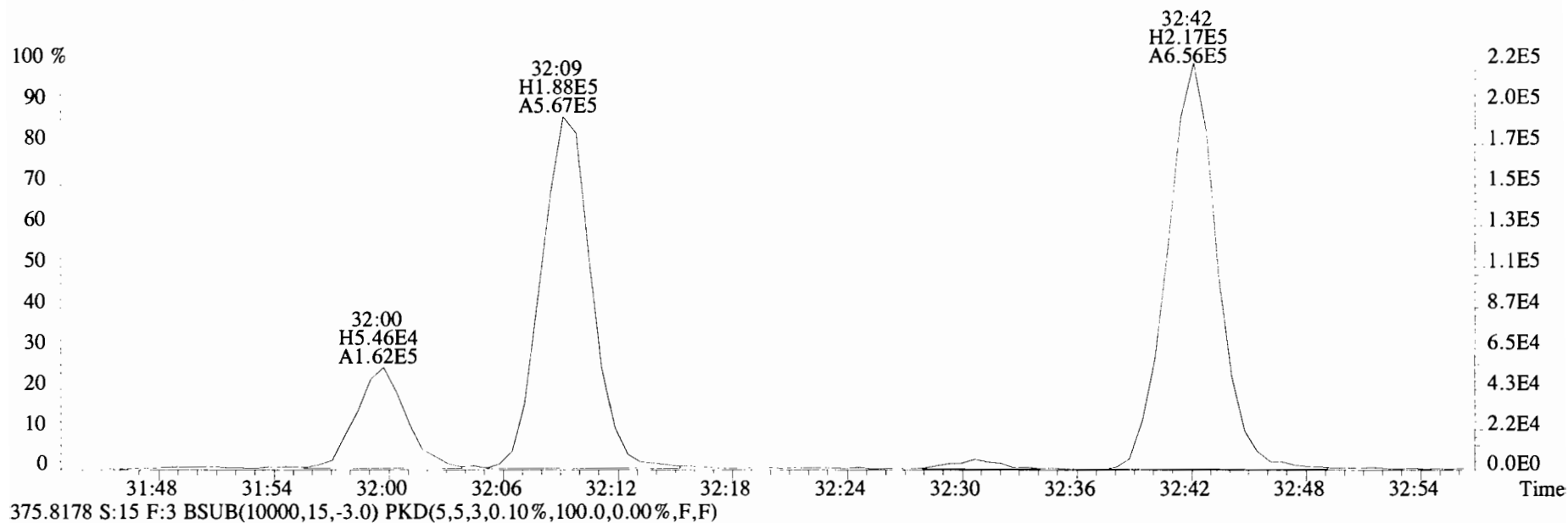
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



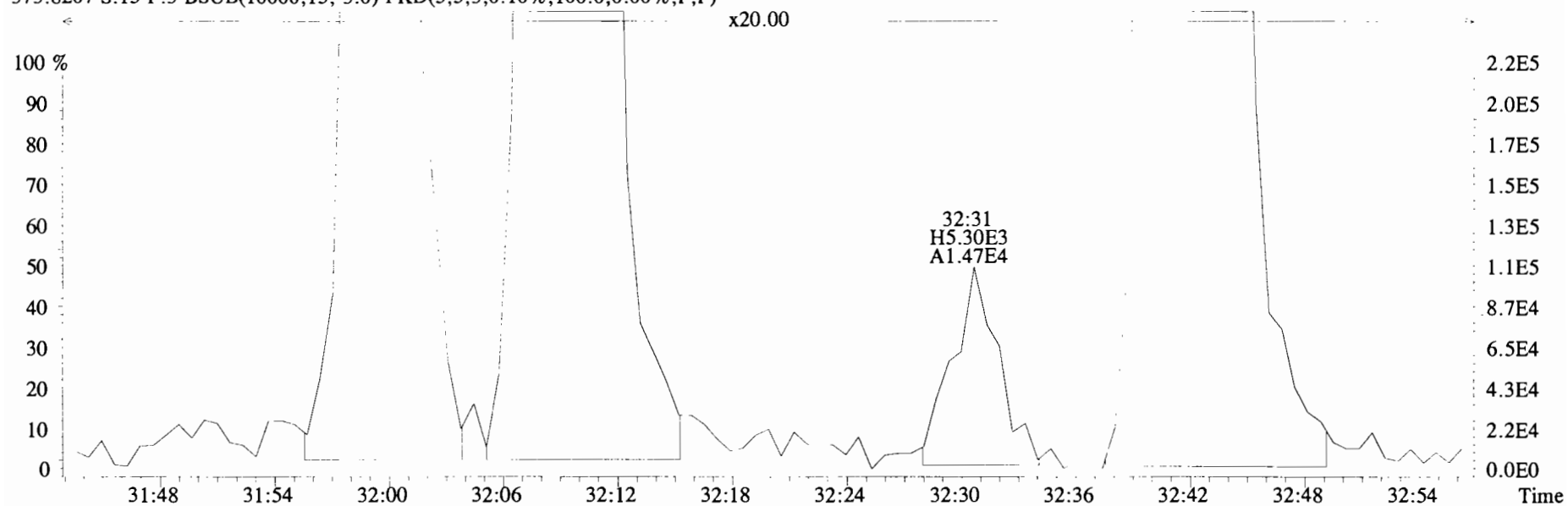
445.7555 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



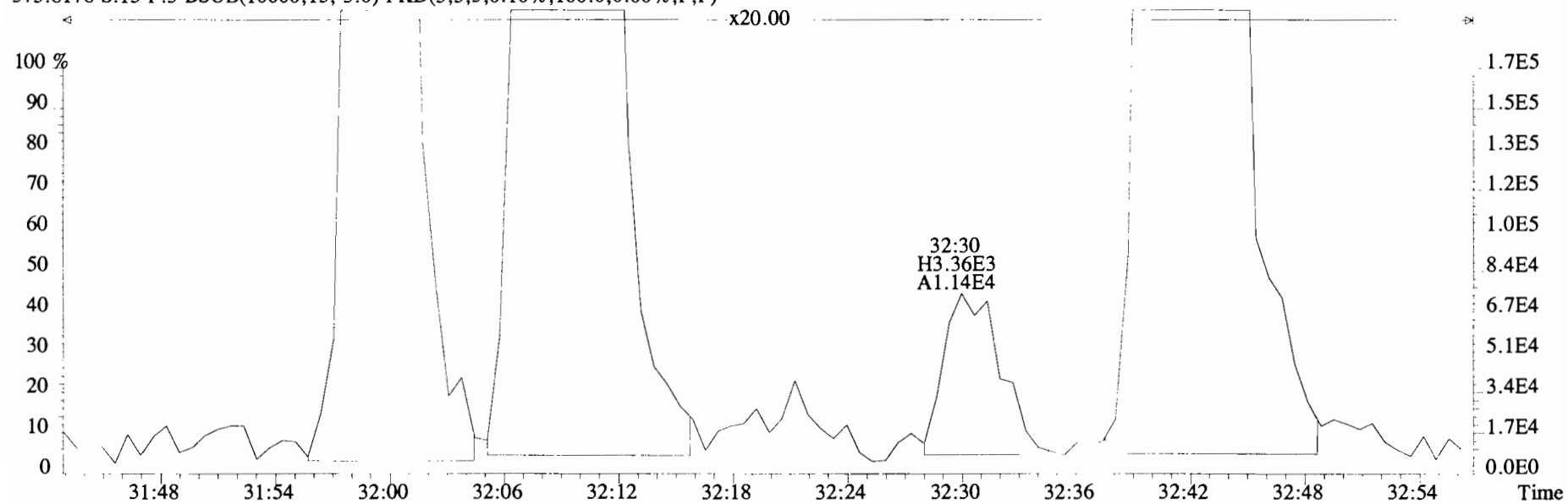
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



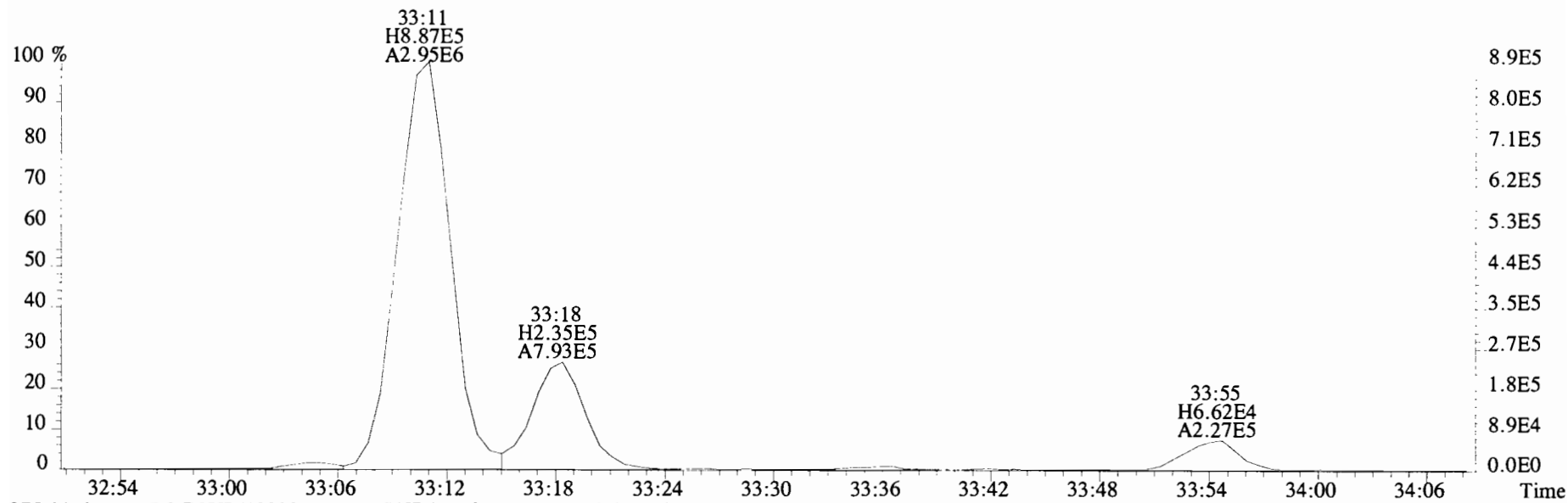
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



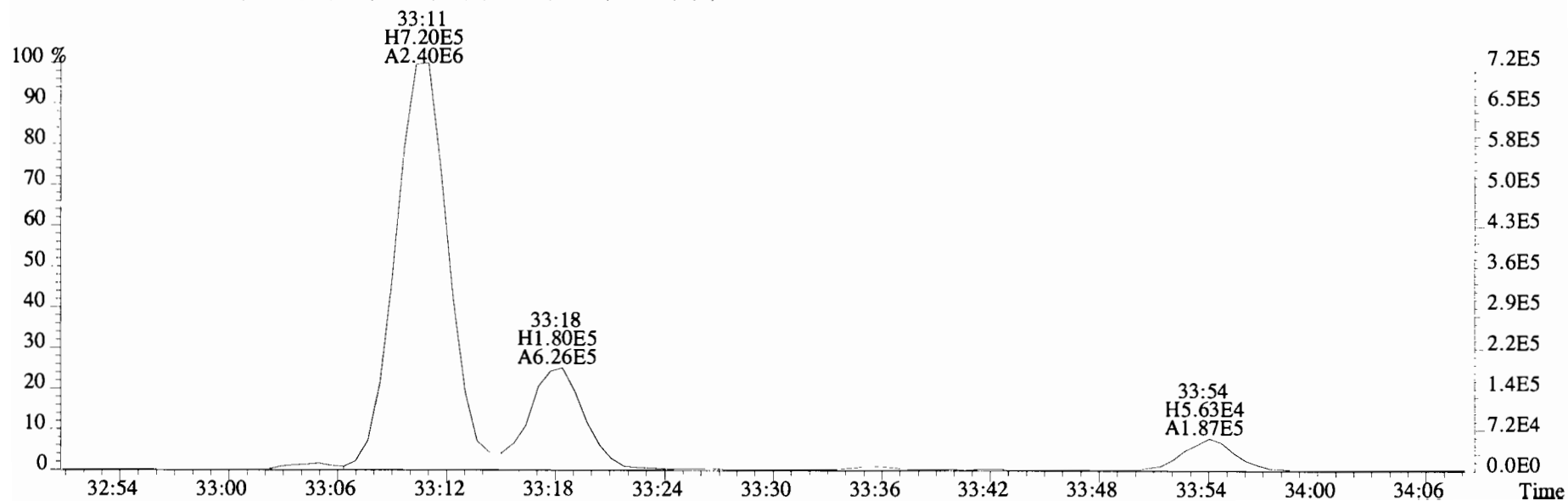
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



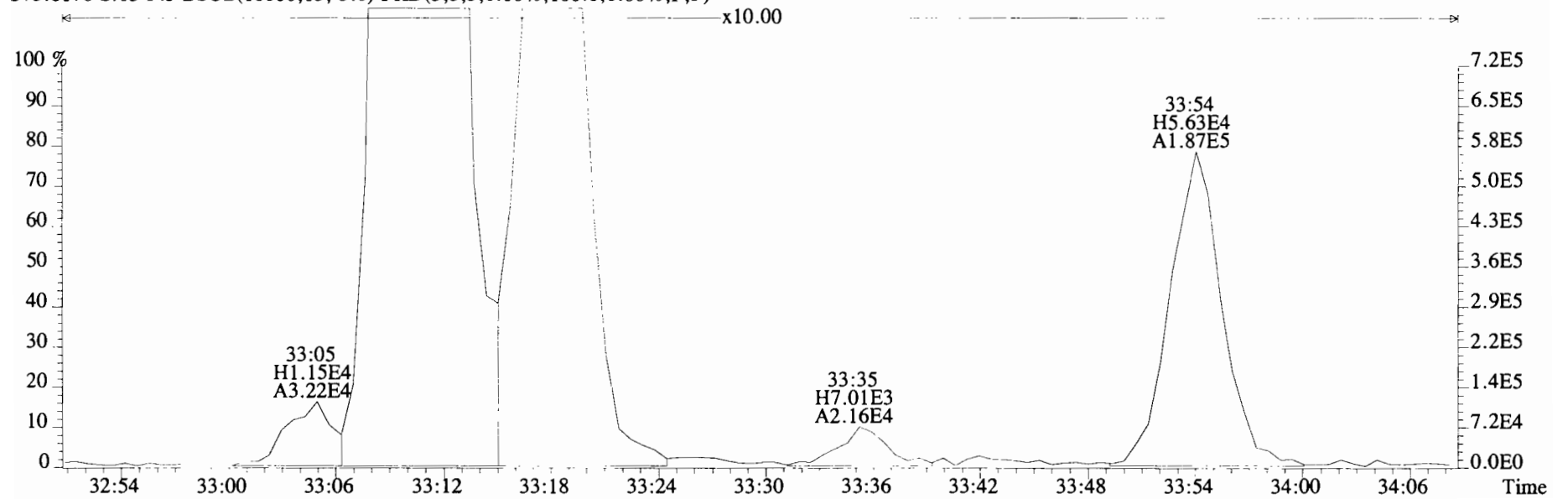
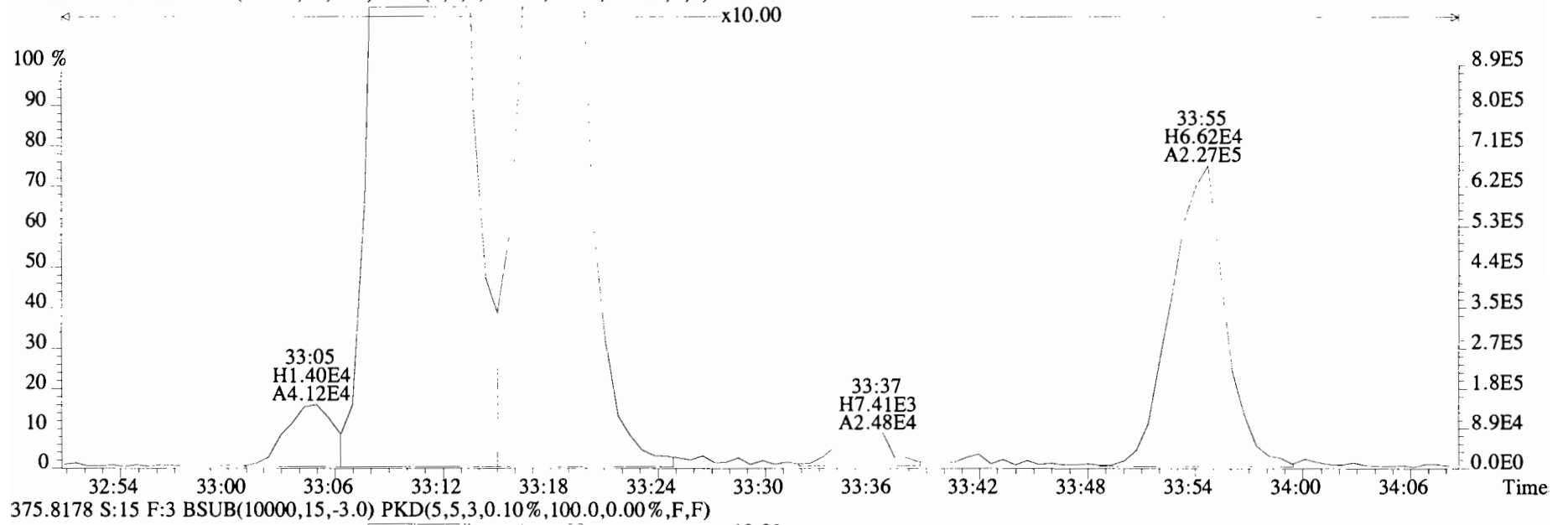
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



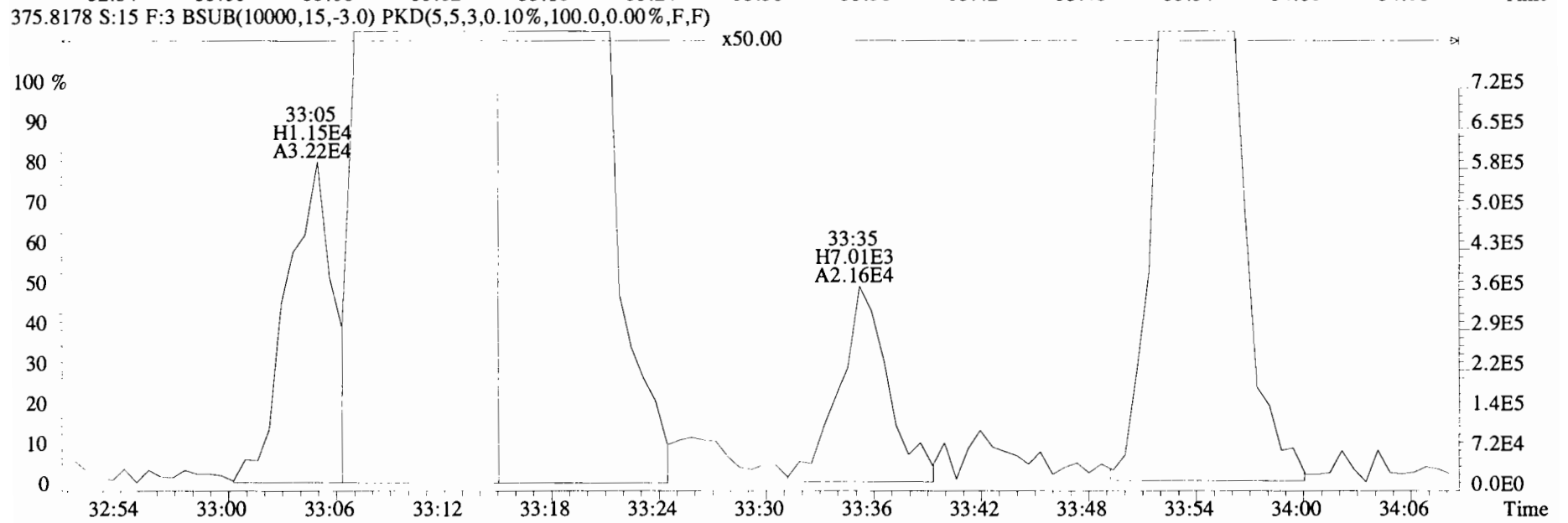
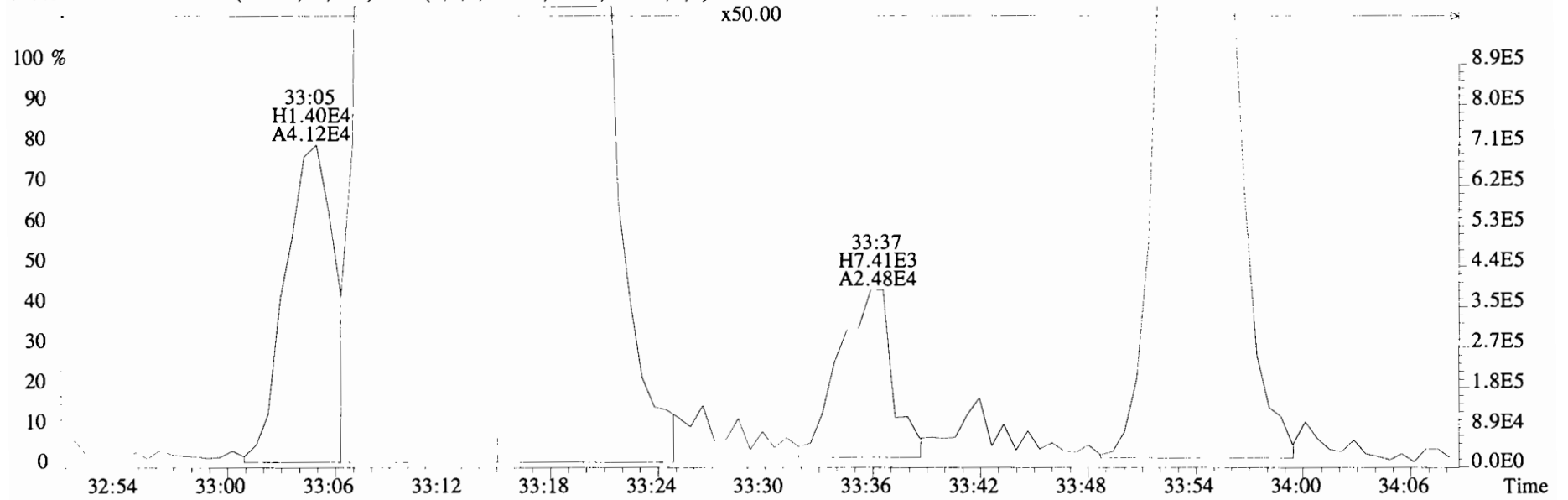
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



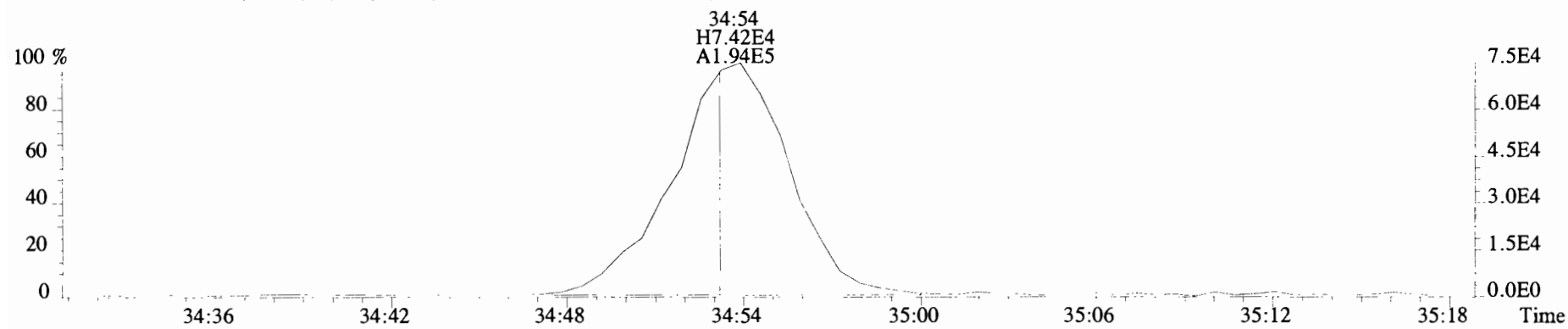
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Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



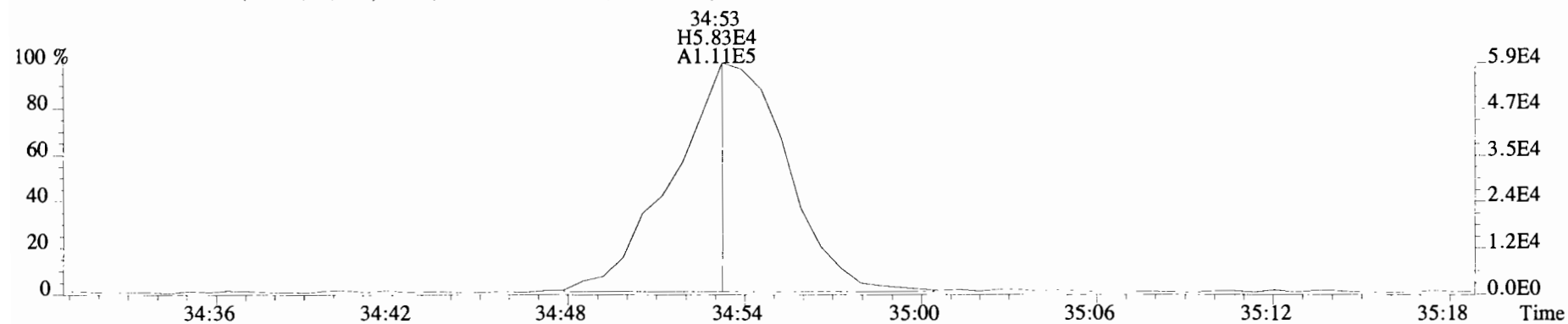
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



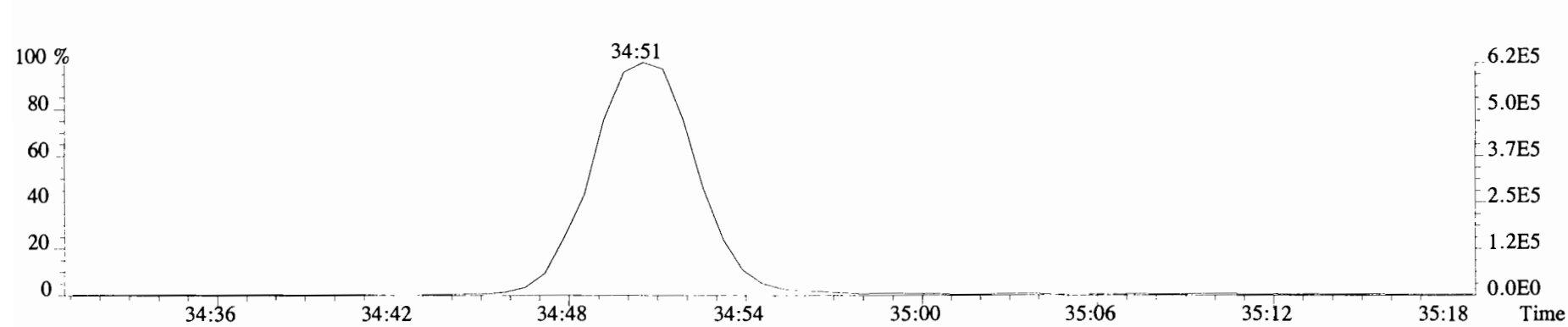
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Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



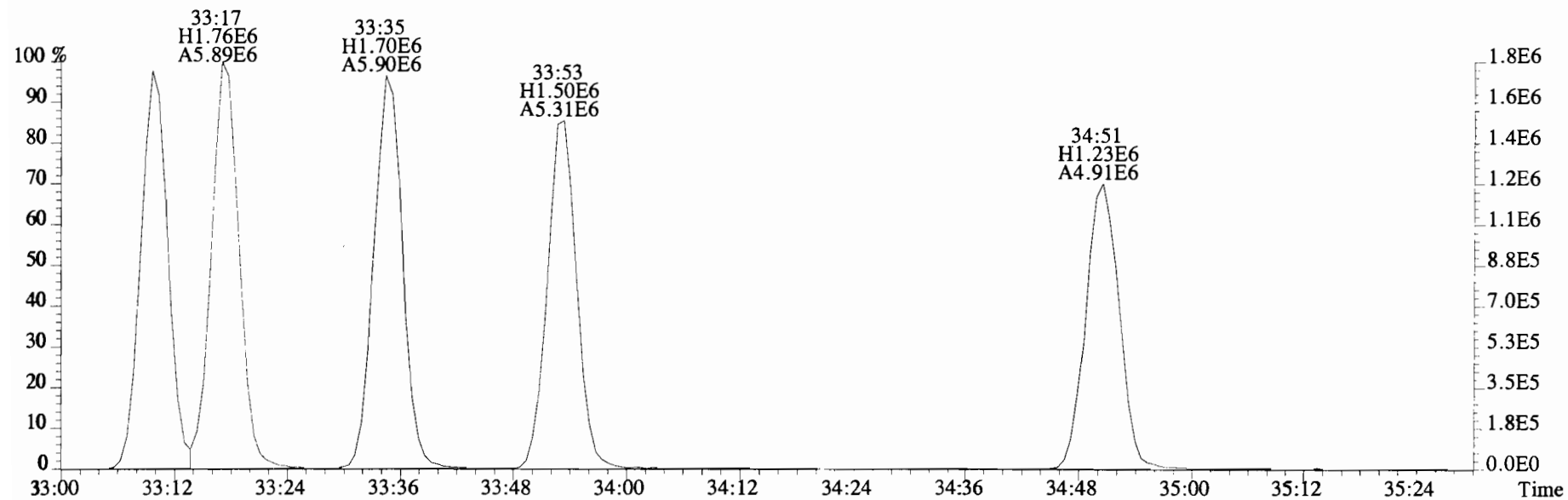
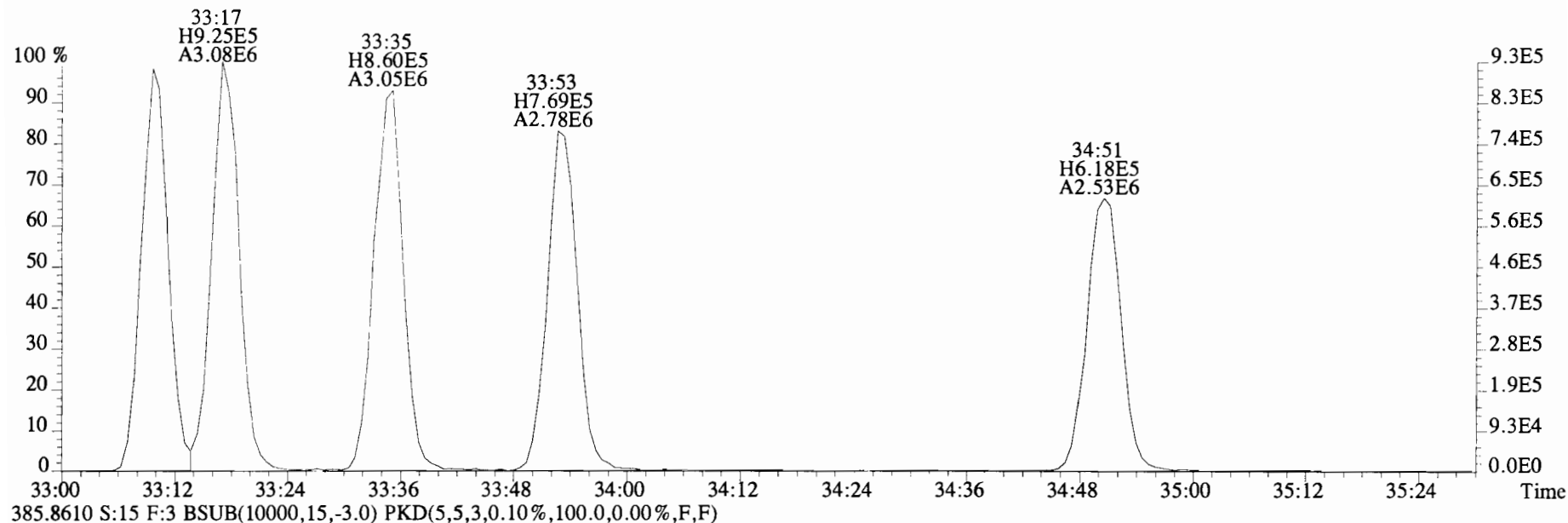
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



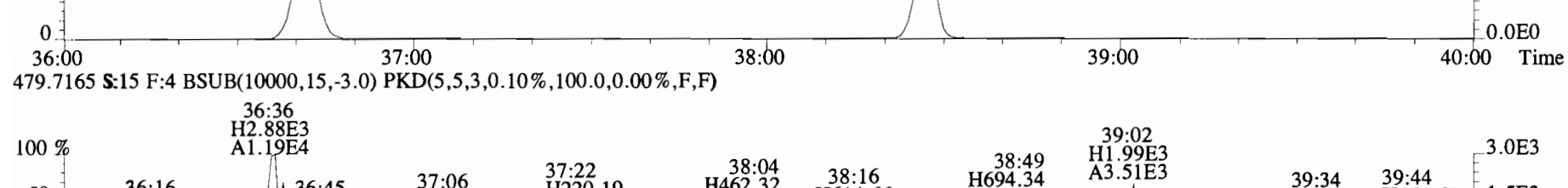
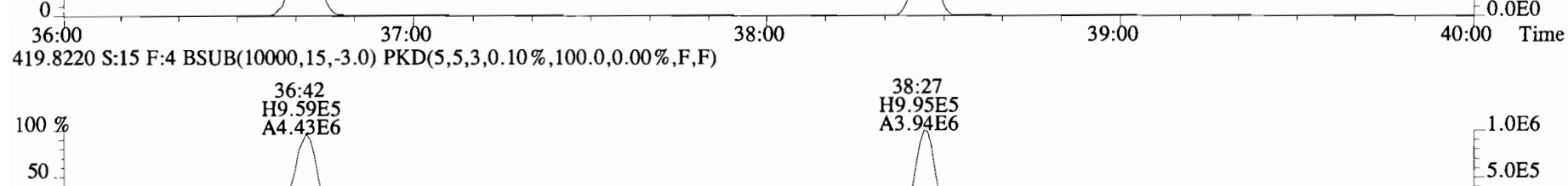
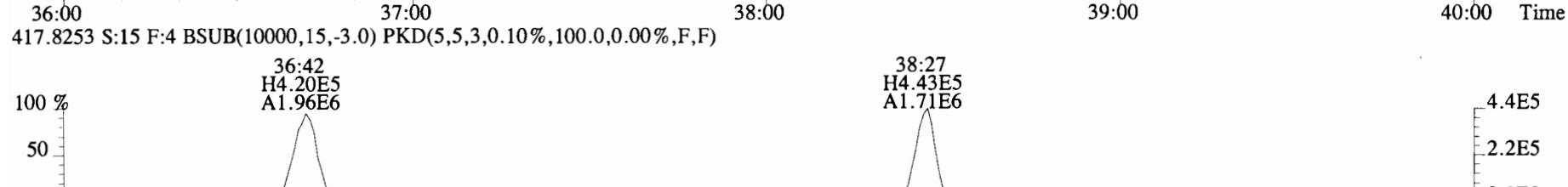
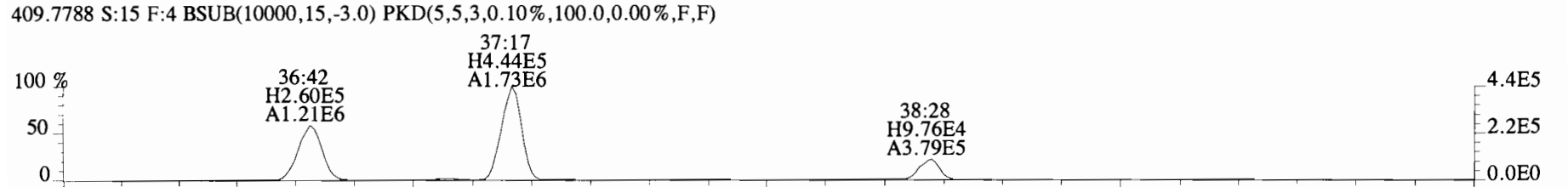
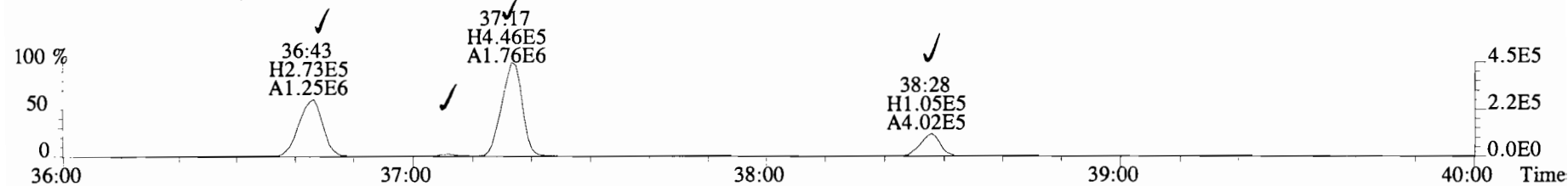
383.8639 S:15 F:3



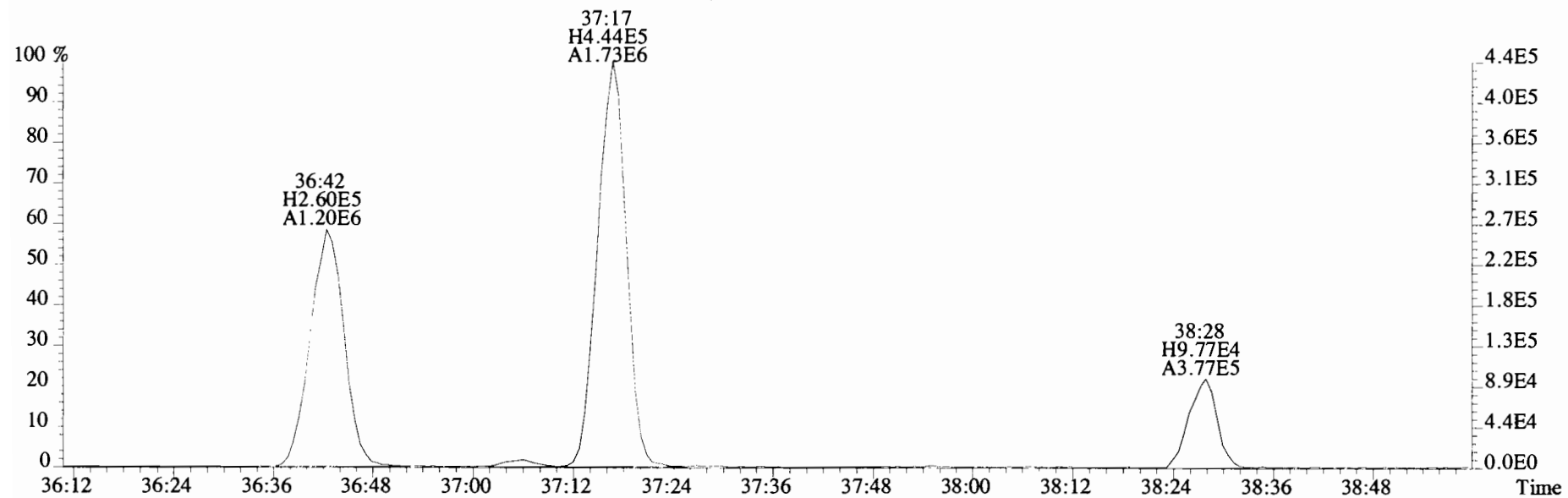
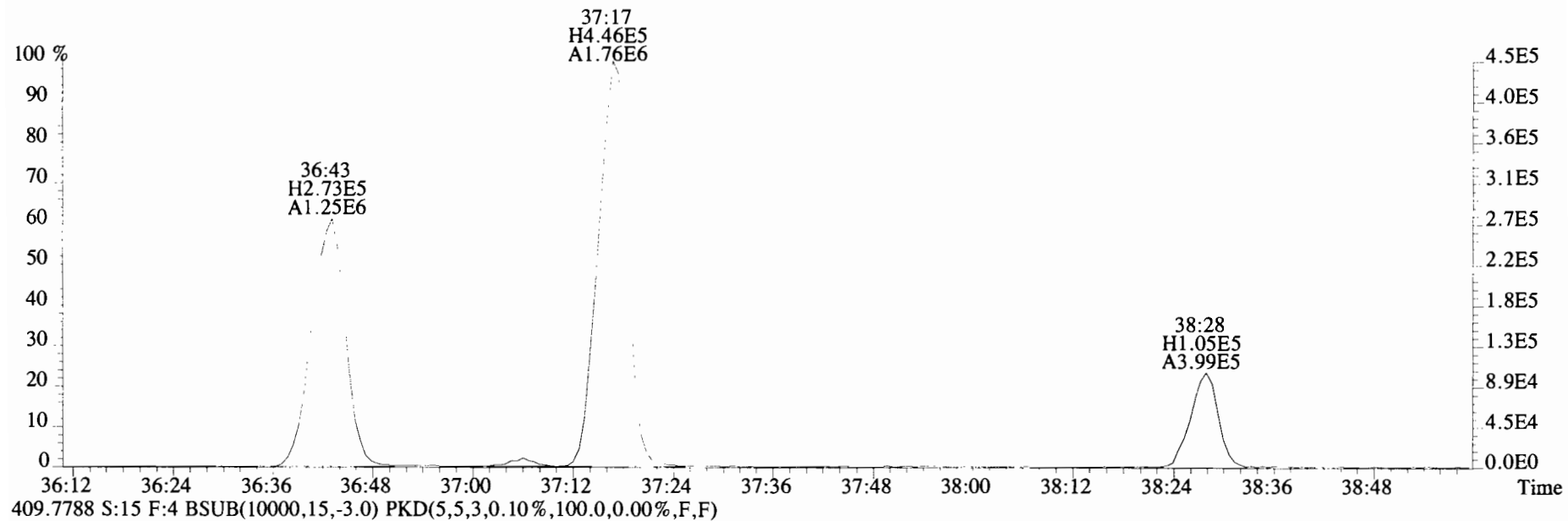
File:191031D2 #1-385 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



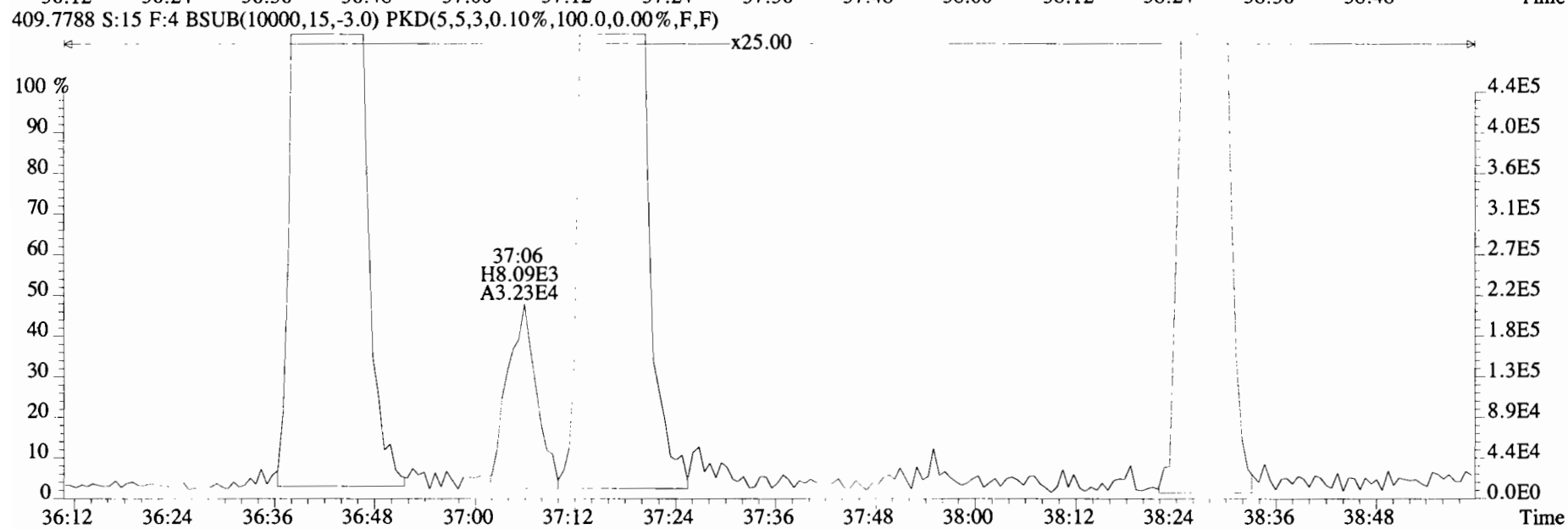
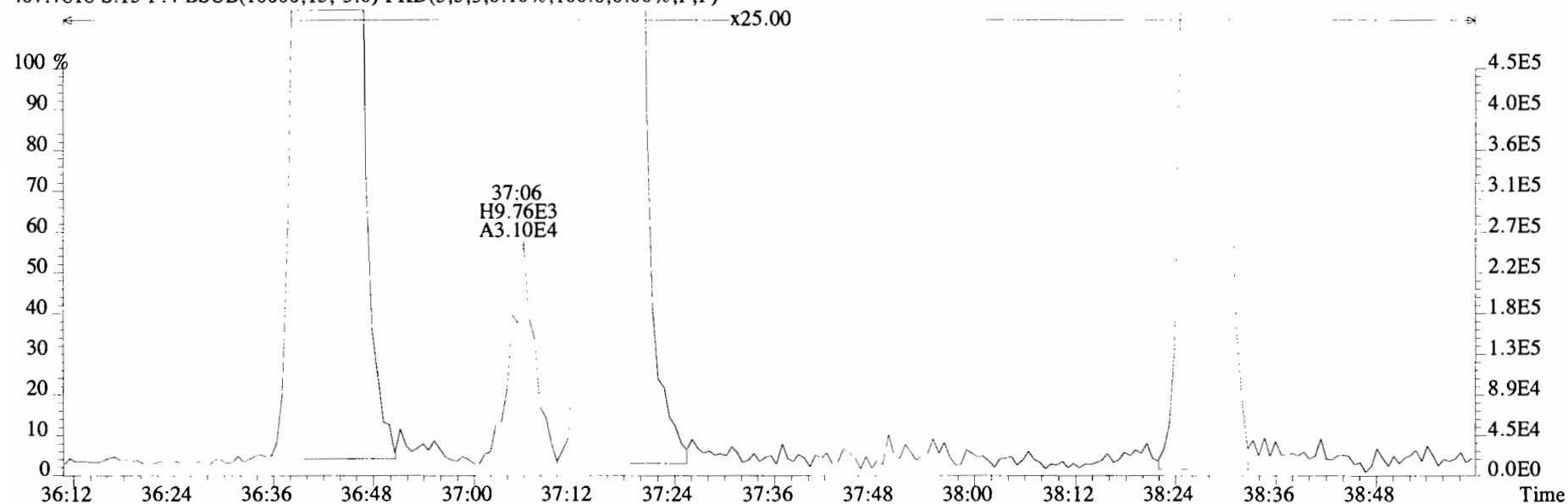
File:191031D2 #1-356 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
 407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



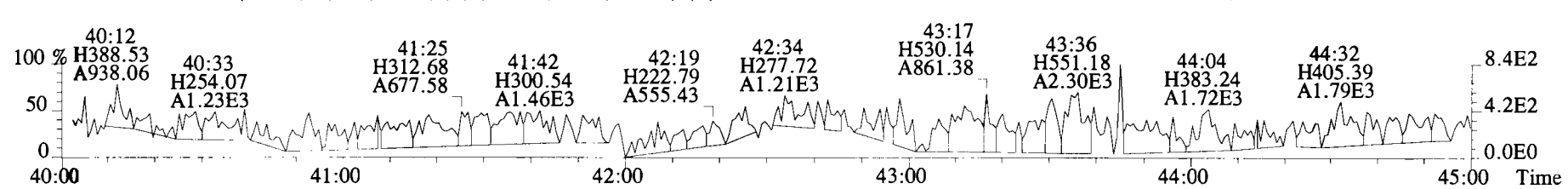
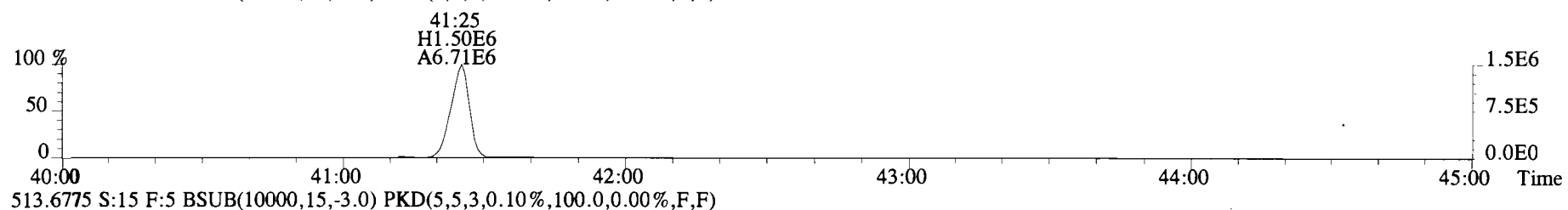
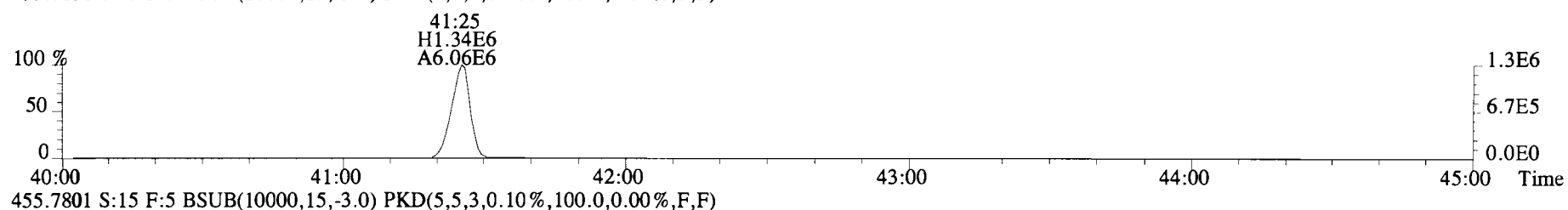
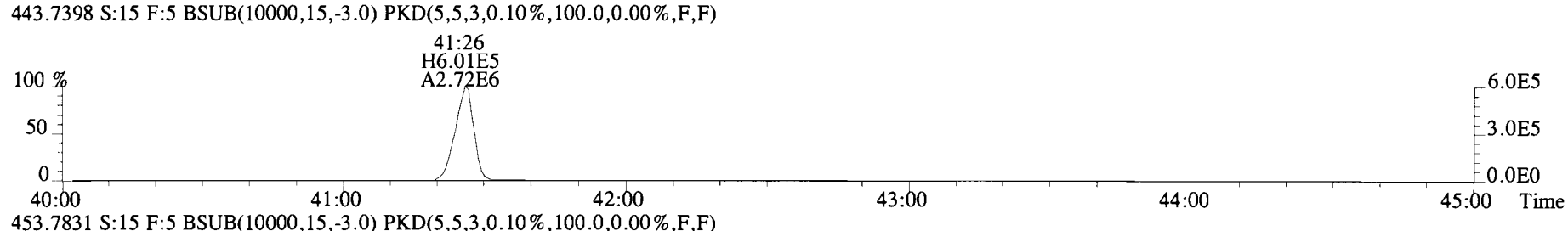
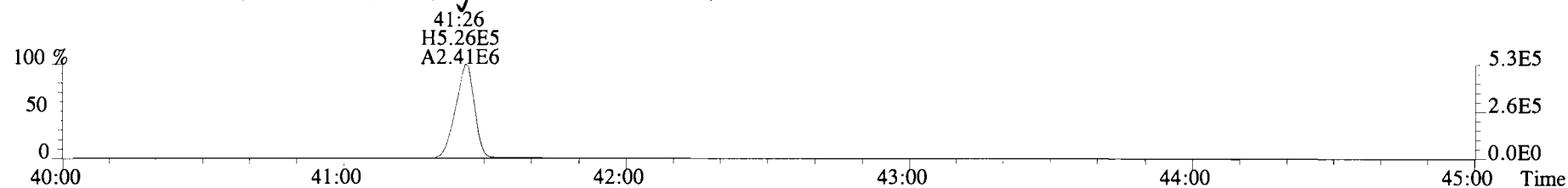
File:191031D2 #1-356 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



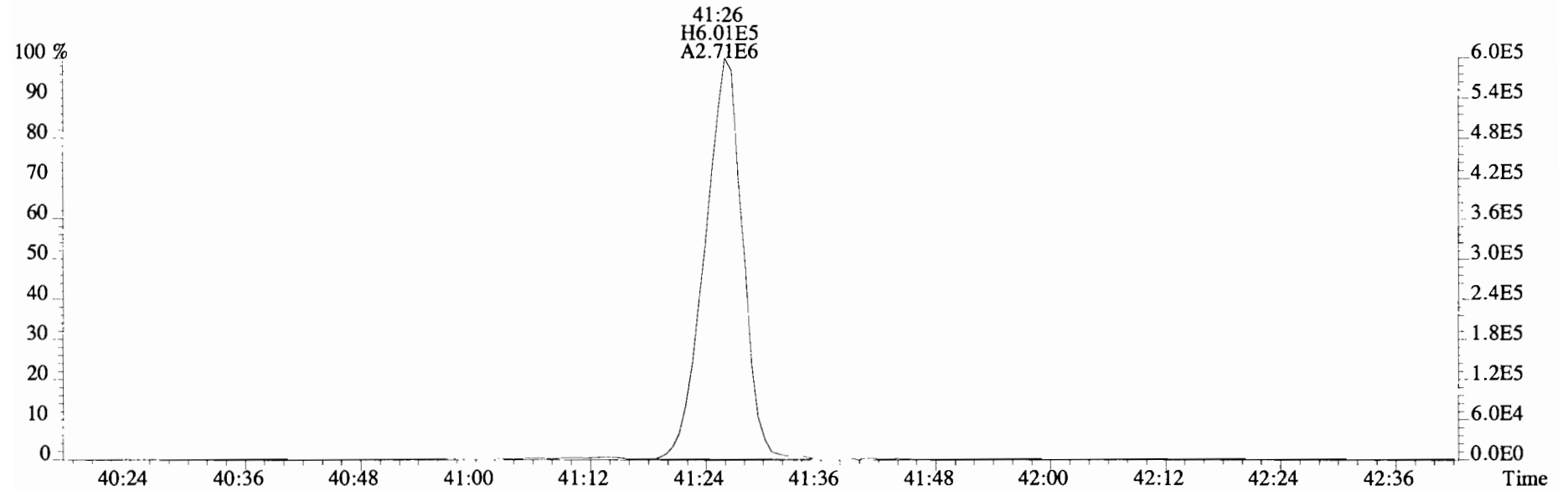
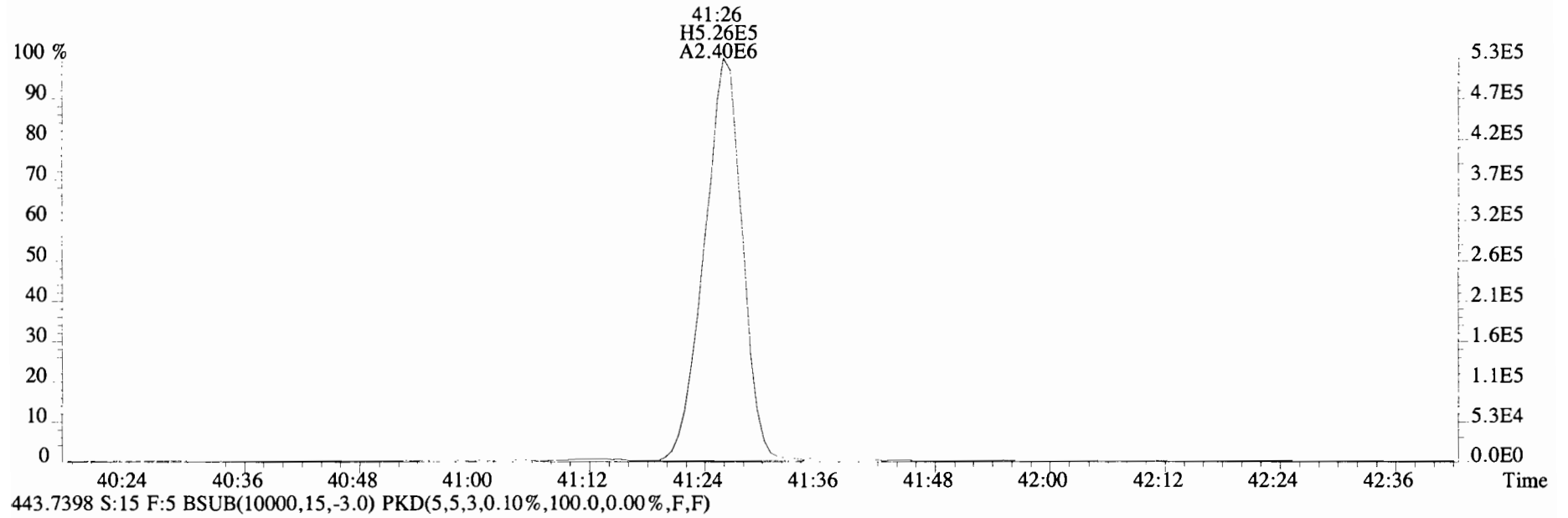
File:191031D2 #1-356 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191031D2 #1-432 Acq: 1-NOV-2019 10:52:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE1 PDI-084SC-B-04-06-191002 17.62 Exp:OCDD_DB5
441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotF7	*		105	2.5	0.0644	Total Tetra-Dioxins	1.21	1.21	*	*	
1,2,3,7,8-PeCDD	*	* n	0.90	NotF7	*		219	2.5	0.132	Total Penta-Dioxins	1.30	2.06	*	*	
1,2,3,4,7,8-HxCDD	4.96e+03	1.18 y	1.10	34:05	0.25829		*	2.5	*	Total Hexa-Dioxins	11.1	11.1	*	*	
1,2,3,6,7,8-HxCDD	2.59e+04	1.32 y	0.94	34:11	1.4074		*	2.5	*	Total Hepta-Dioxins	96.4	96.4	*	*	
1,2,3,7,8,9-HxCDD	1.07e+04	1.33 y	0.96	34:29	0.51297		*	2.5	*	Total Tetra-Furans	37.1	39.9	*	*	
1,2,3,4,6,7,8-HpCDD	6.78e+05	1.07 y	0.98	37:55	41.336		*	2.5	*	Total Penta-Furans	52.888	53.817	*	*	
OCDD	7.94e+06	0.88 y	0.96	41:13	566.27		*	2.5	*	Total Hexa-Furans	50.6	52.6	*	*	
2,3,7,8-TCDF	4.87e+05	0.76 y	0.95	25:30	12.663	(11.24)	*	2.5	*	Total Hepta-Furans	44.7	44.7	*	*	
1,2,3,7,8-PeCDF	6.81e+05	1.56 y	0.96	29:36	18.372		*	2.5	*						
2,3,4,7,8-PeCDF	3.30e+05	1.50 y	1.01	30:29	9.0597		*	2.5	*						
1,2,3,4,7,8-HxCDF	7.40e+05	1.24 y	1.18	33:11	24.652		*	2.5	*						
1,2,3,6,7,8-HxCDF	2.03e+05	1.28 y	1.07	33:19	6.7851		*	2.5	*						
2,3,4,6,7,8-HxCDF	6.89e+04	1.40 y	1.11	33:54	2.4439		*	2.5	*						
1,2,3,7,8,9-HxCDF	3.07e+04	1.25 y	1.06	34:51	1.2671		*	2.5	*						
1,2,3,4,6,7,8-HpCDF	3.52e+05	0.97 y	1.13	36:43	15.879		*	2.5	*						
1,2,3,4,7,8,9-HpCDF	9.83e+04	0.96 y	1.28	38:28	4.6112		*	2.5	*						
OCDF	6.82e+05	0.87 y	0.95	41:26	38.201		*	2.5	*						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	5.52e+06	0.78 y	1.10	26:16	163.58					81.8					
IS 13C-1,2,3,7,8-PeCDD	4.39e+06	0.64 y	0.88	30:45	161.51					80.8					
IS 13C-1,2,3,4,7,8-HxCDD	3.48e+06	1.33 y	0.64	34:04	156.67					78.4					
IS 13C-1,2,3,6,7,8-HxCDD	3.92e+06	1.28 y	0.86	34:10	132.42					66.2					
IS 13C-1,2,3,7,8,9-HxCDD	4.35e+06	1.26 y	0.81	34:28	155.67					77.9					
IS 13C-1,2,3,4,6,7,8-HpCDD	3.35e+06	1.06 y	0.65	37:55	147.81					74.0					
IS 13C-OCDD	5.85e+06	0.92 y	0.58	41:13	291.31					72.9					
IS 13C-2,3,7,8-TCDF	8.10e+06	0.80 y	1.03	25:29	162.01					81.1					
IS 13C-1,2,3,7,8-PeCDF	7.72e+06	1.56 y	0.85	29:35	187.05					93.6					
IS 13C-2,3,4,7,8-PeCDF	7.17e+06	1.65 y	0.85	30:28	175.39					87.7					
IS 13C-1,2,3,4,7,8-HxCDF	5.10e+06	0.52 y	0.83	33:11	177.12					88.6					
IS 13C-1,2,3,6,7,8-HxCDF	5.59e+06	0.51 y	1.03	33:18	156.01					78.1					
IS 13C-2,3,4,6,7,8-HxCDF	5.06e+06	0.52 y	0.95	33:54	153.28					76.7					
IS 13C-1,2,3,7,8,9-HxCDF	4.57e+06	0.51 y	0.83	34:51	159.38					79.7					
IS 13C-1,2,3,4,6,7,8-HpCDF	3.93e+06	0.46 y	0.76	36:42	149.78					74.9					
IS 13C-1,2,3,4,7,8,9-HpCDF	3.33e+06	0.44 y	0.58	38:27	165.33					82.7					
IS 13C-OCDF	7.53e+06	0.88 y	0.69	41:26	315.75					79.0					
C/Up 37C1-2,3,7,8-TCDD	2.81e+06		1.20	26:17	76.011					95.1					
RS/RT 13C-1,2,3,4-TCDD	6.16e+06	0.75 y	1.00	25:43	199.87										
RS 13C-1,2,3,4-TCDF	9.65e+06	0.83 y	1.00	24:18	199.87										
RS/RT 13C-1,2,3,4,6,9-HxCDF	6.92e+06	0.51 y	1.00	33:35	199.87										

Integrations Reviewed
 by Analyst: JB by Analyst: CT
 Date: 11/20/19 Date: 12/04/19

Totals class: TCDD EMPC

Entry #: 19

Run: 15 File: 191101D1 S: 11 I: 1 F: 1
Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 1.2127

Unnamed Concentration: 1.213

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
22:56	1.330e+04	1.703e+04	0.78 y	3.033e+04	1.2127

Totals class: PeCDD EMPC

Entry #: 21

Run: 15 File: 191101D1 S: 11 I: 1 F: 2
Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 2.0605

Unnamed Concentration: 2.060

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:43	5.323e+03	7.502e+03	0.71 y	1.282e+04	0.64725	
29:35	7.166e+03	9.278e+03	0.77 n	1.512e+04	0.76327	
29:46	2.589e+03	4.548e+03	0.57 y	7.137e+03	0.36022	
30:04	2.056e+03	3.685e+03	0.56 y	5.741e+03	0.28975	

Totals class: HxCDD EMPC

Entry #: 23

Run: 15 File: 191101D1 S: 11 I: 1 F: 3
 Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 11.115 Unnamed Concentration: 8.937

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Resp Concentration	Name
32:32	4.142e+04	3.291e+04	1.26 y	7.433e+04	3.8231	
33:07	5.835e+03	4.883e+03	1.19 y	1.072e+04	0.55125	
33:22	5.087e+04	3.784e+04	1.34 y	8.871e+04	4.5626	
34:05	2.688e+03	2.270e+03	1.18 y	4.958e+03	0.25829	1,2,3,4,7,8-HxCDD
34:11	1.477e+04	1.116e+04	1.32 y	2.593e+04	1.4074	1,2,3,6,7,8-HxCDD
34:29	6.126e+03	4.603e+03	1.33 y	1.073e+04	0.51297	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 15 File: 191101D1 S: 11 I: 1 F: 4
Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 96.410

Unnamed Concentration: 55.074

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:06	4.496e+05	4.538e+05	0.99	y	9.033e+05	55.074
37:55	3.499e+05	3.281e+05	1.07	y	6.780e+05	41.336 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 15 File: 191101D1 S: 11 I: 1 F: 1
 Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 39.883 Unnamed Concentration: 27.220

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
21:24	6.026e+03	4.644e+03	1.30	n	8.219e+03	0.21353
22:02	3.727e+04	4.479e+04	0.83	y	8.205e+04	2.1317
22:33	2.065e+04	2.101e+04	0.98	n	3.719e+04	0.96620
22:54	6.707e+04	8.037e+04	0.83	y	1.474e+05	3.8306
23:19	2.931e+04	3.336e+04	0.88	y	6.267e+04	1.6282
23:36	1.215e+04	1.373e+04	0.88	y	2.588e+04	0.67234
24:12	1.425e+04	1.796e+04	0.79	y	3.220e+04	0.83667
24:18	2.527e+04	2.908e+04	0.87	y	5.435e+04	1.4120
24:44	1.943e+05	2.480e+05	0.78	y	4.422e+05	11.490
24:58	1.132e+04	1.454e+04	0.78	y	2.586e+04	0.67174
25:25	2.102e+04	2.554e+04	0.82	y	4.656e+04	1.2095
25:30	2.108e+05	2.766e+05	0.76	y	4.874e+05	12.663
25:50	1.057e+04	1.208e+04	0.88	y	2.265e+04	0.58847
27:16	4.058e+04	3.413e+04	1.19	n	6.041e+04	1.5695

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 15 File: 191101D1 S: 11 I: 1 F: 1
Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 3.7373 Unnamed Concentration: 3.737

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:16	8.233e+04	5.514e+04	1.49 y	1.375e+05	3.7373

Totals class: PeCDF EMPC

Entry #: 31

Run: 15 File: 191101D1 S: 11 I: 1 F: 2
 Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 50.079

Unnamed Concentration: 22.648

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
28:41	2.479e+05	1.540e+05	1.61 y	4.020e+05	10.927	
29:14	2.660e+04	1.339e+04	1.99 n	3.415e+04	0.92842	
29:26	4.403e+04	2.675e+04	1.65 y	7.078e+04	1.9242	
29:36	4.148e+05	2.664e+05	1.56 y	6.811e+05	18.372	1,2,3,7,8-PeCDF
29:50	1.467e+05	9.531e+04	1.54 y	2.421e+05	6.5804	
30:22	3.555e+03	2.355e+03	1.51 y	5.910e+03	0.16066	
30:29	1.980e+05	1.320e+05	1.50 y	3.300e+05	9.0597	2,3,4,7,8-PeCDF
30:32	3.588e+04	2.201e+04	1.63 y	5.789e+04	1.5737	
31:22	1.176e+04	8.606e+03	1.37 y	2.037e+04	0.55378	

Totals class: HxCDF EMPC

Entry #: 33

Run: 15 File: 191101D1 S: 11 I: 1 F: 3
 Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 52.555

Unnamed Concentration: 17.406

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
32:00	2.596e+04	2.691e+04	0.96	n	4.689e+04	1.6721	
32:09	9.831e+04	8.075e+04	1.22	y	1.791e+05	6.3857	
32:42	1.050e+05	8.922e+04	1.18	y	1.942e+05	6.9266	
33:05	5.031e+03	5.007e+03	1.00	n	9.089e+03	0.32412	
33:11	4.104e+05	3.300e+05	1.24	y	7.405e+05	24.652	1,2,3,4,7,8-HxCDF
33:19	1.140e+05	8.879e+04	1.28	y	2.028e+05	6.7851	1,2,3,6,7,8-HxCDF
33:54	4.024e+04	2.866e+04	1.40	y	6.890e+04	2.4439	2,3,4,6,7,8-HxCDF
34:51	1.705e+04	1.369e+04	1.25	y	3.075e+04	1.2671	1,2,3,7,8,9-HxCDF
34:55	3.211e+04	2.671e+04	1.20	y	5.882e+04	2.0977	

Totals class: HpCDF EMPC

Entry #: 35

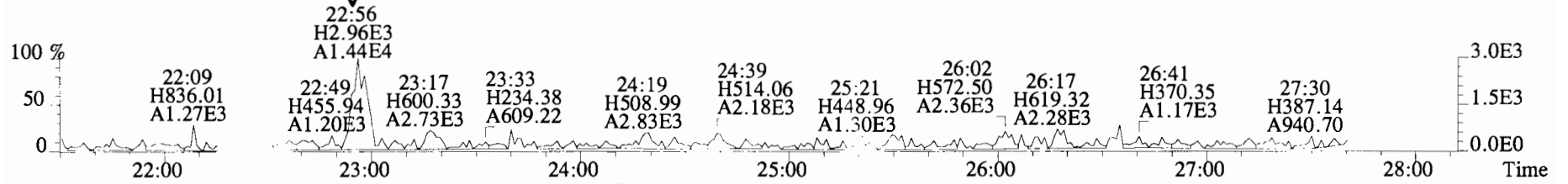
Run: 15 File: 191101D1 S: 11 I: 1 F: 4
Acquired: 1-NOV-19 21:57:30 Processed: 4-NOV-19 10:36:49

Total Concentration: 44.736

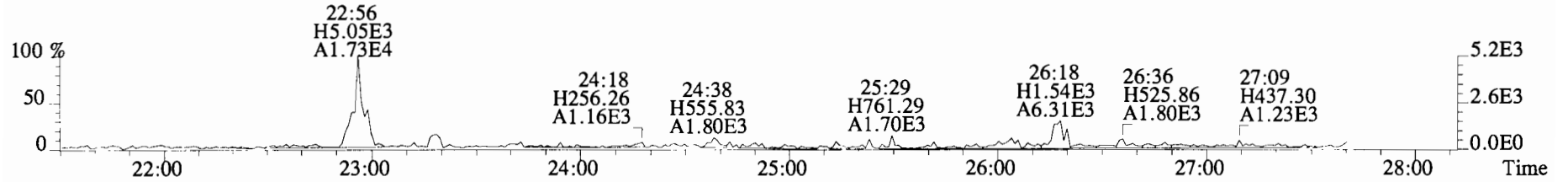
Unnamed Concentration: 24.246

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
36:43	1.730e+05	1.790e+05	0.97 y	3.520e+05	15.879	1,2,3,4,6,7,8-HpCDF
37:06	5.067e+03	4.880e+03	1.04 y	9.947e+03	0.45903	
37:17	2.580e+05	2.575e+05	1.00 y	5.154e+05	23.787	
38:28	4.818e+04	5.008e+04	0.96 y	9.826e+04	4.6112	1,2,3,4,7,8,9-HpCDF

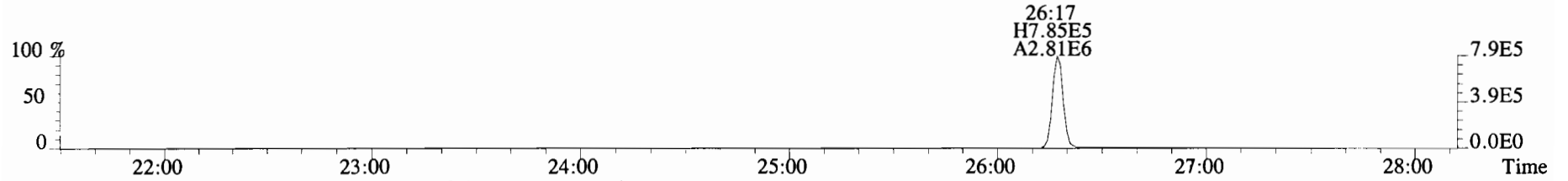
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



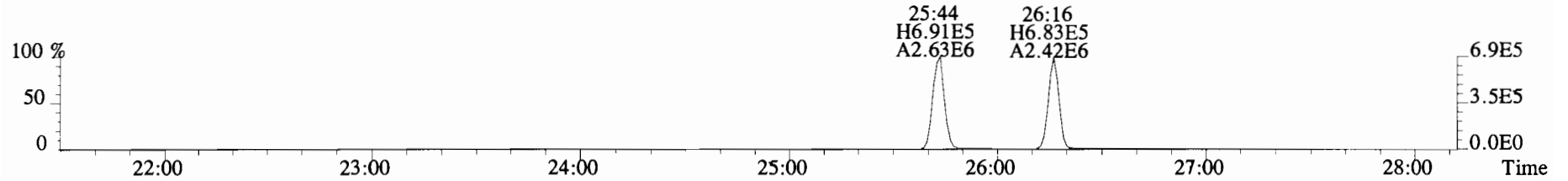
321.8936 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



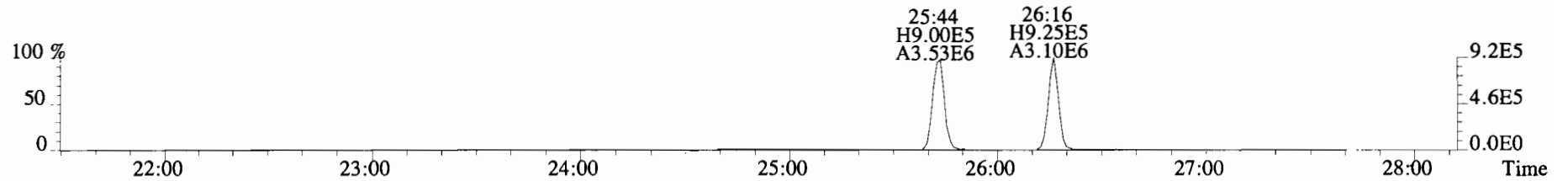
327.8847 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



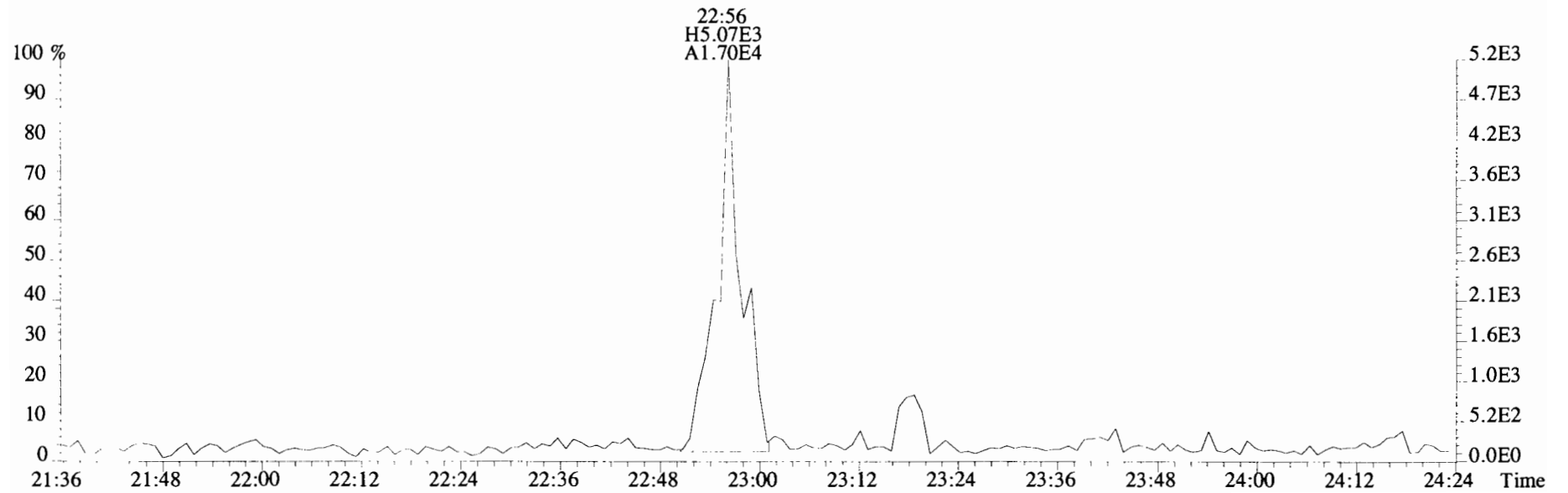
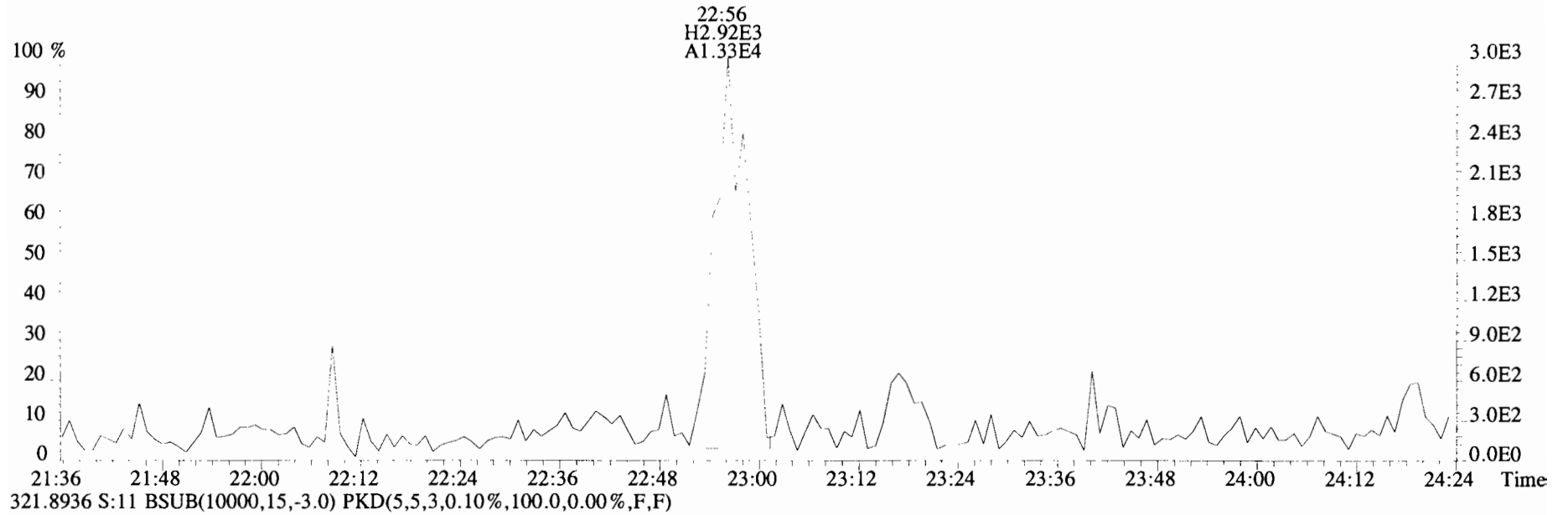
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



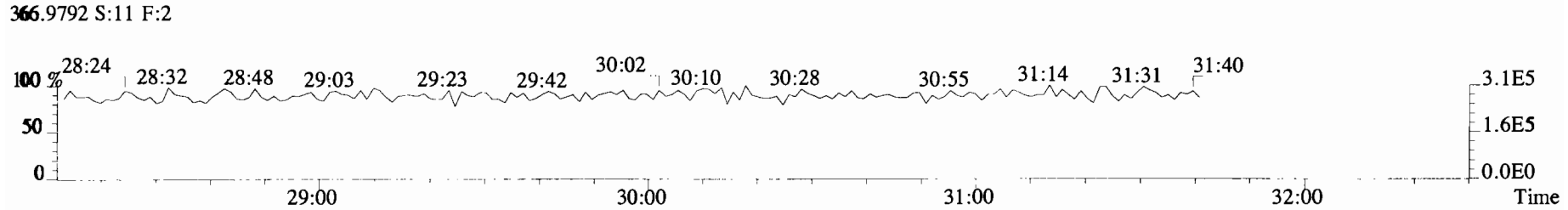
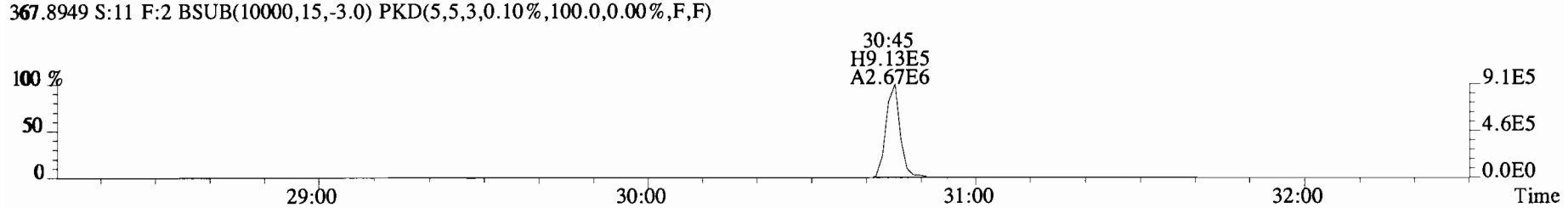
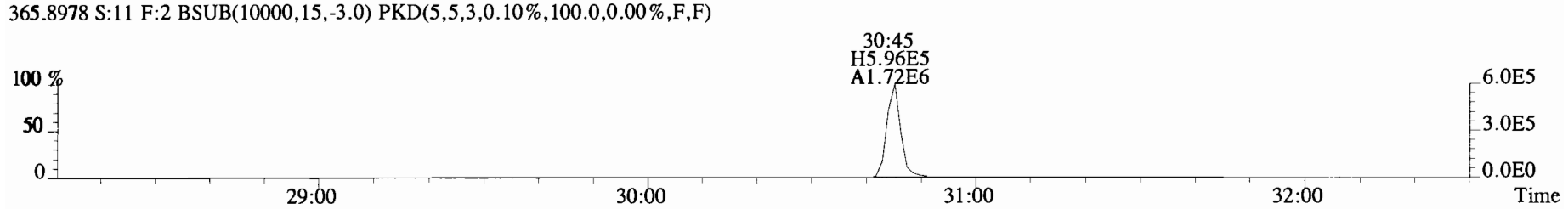
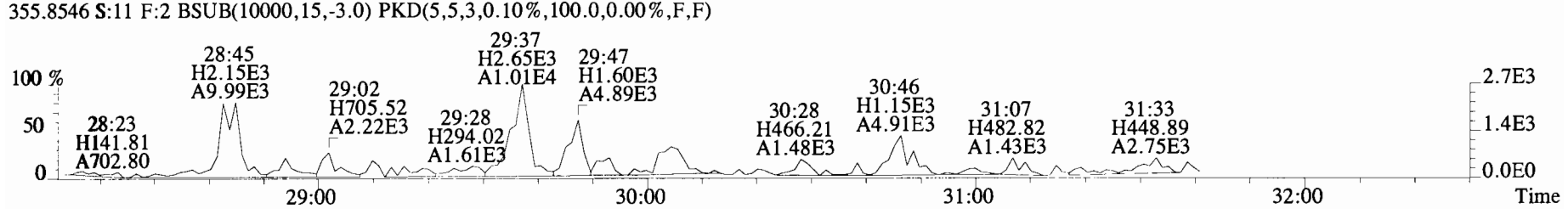
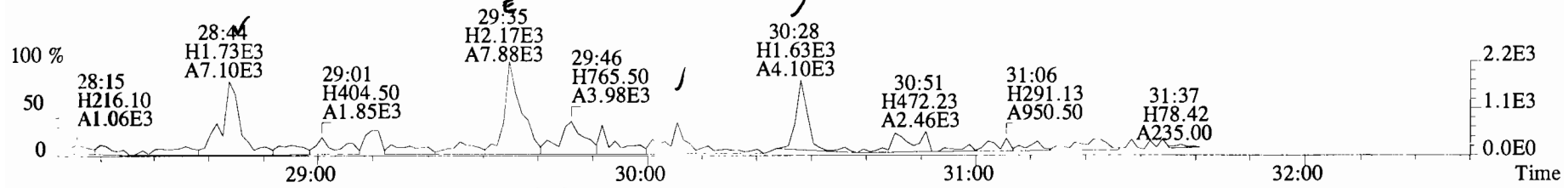
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



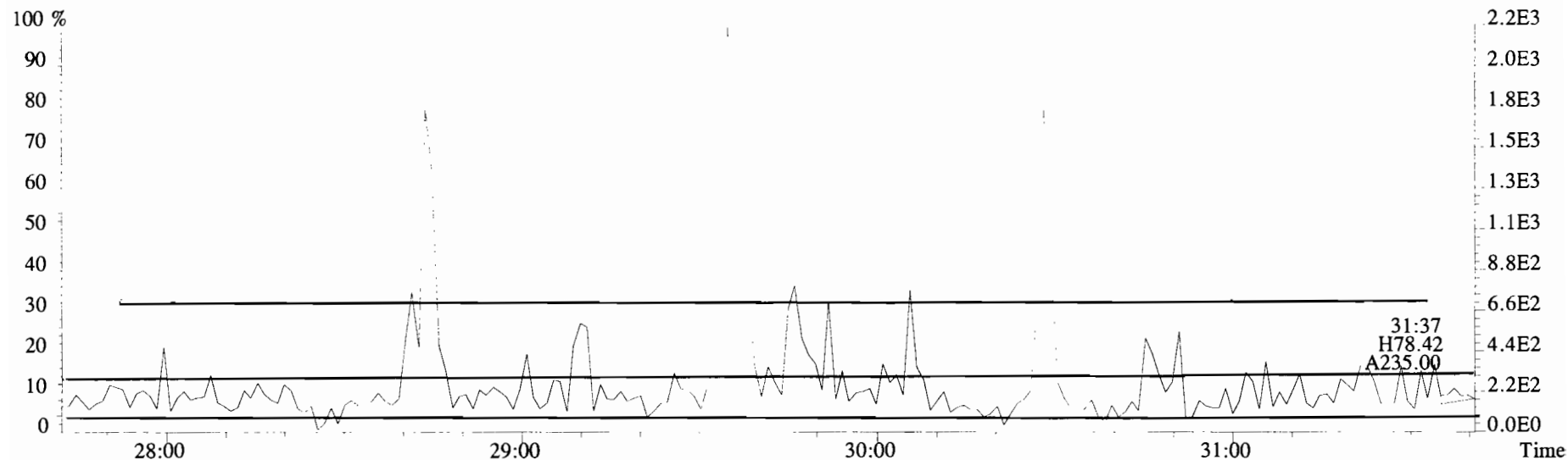
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



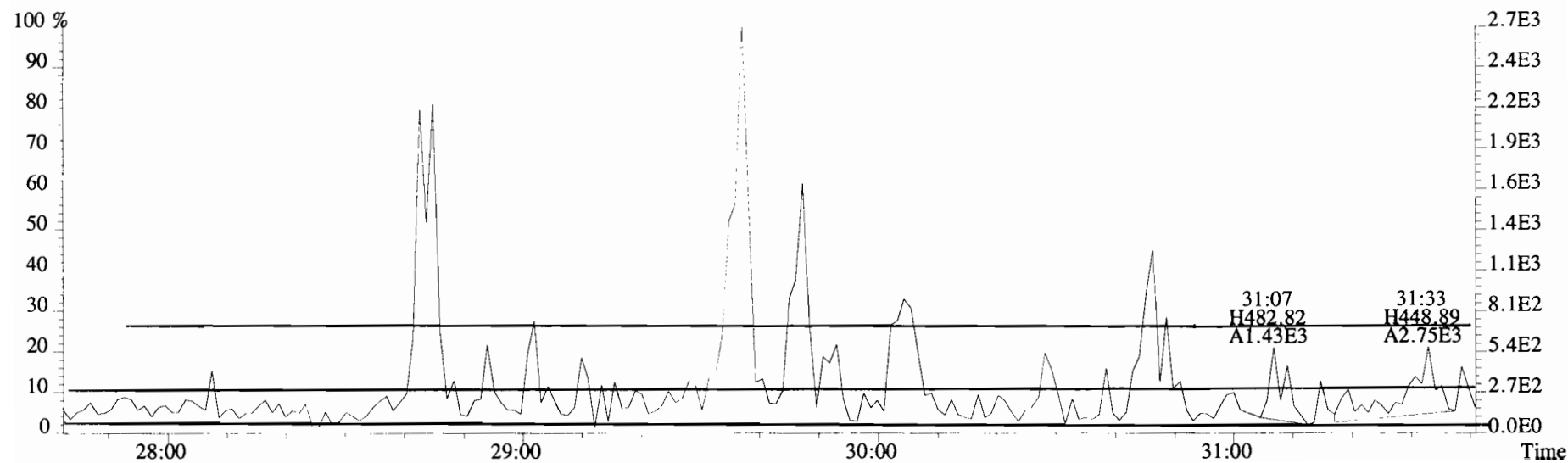
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 353.8576 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



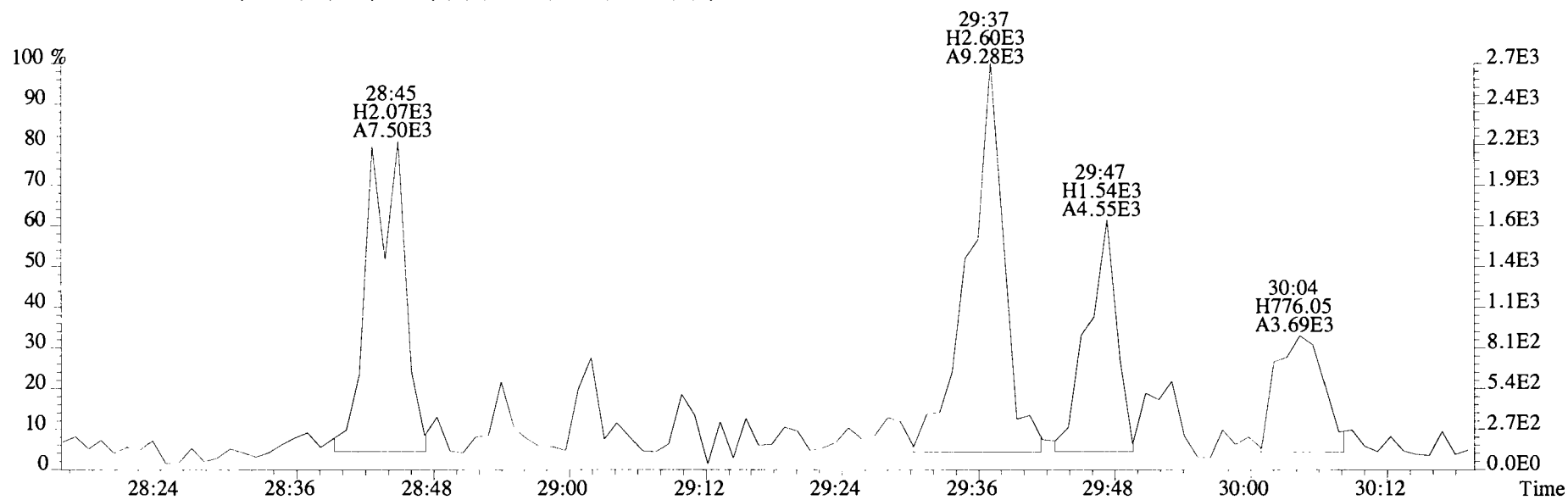
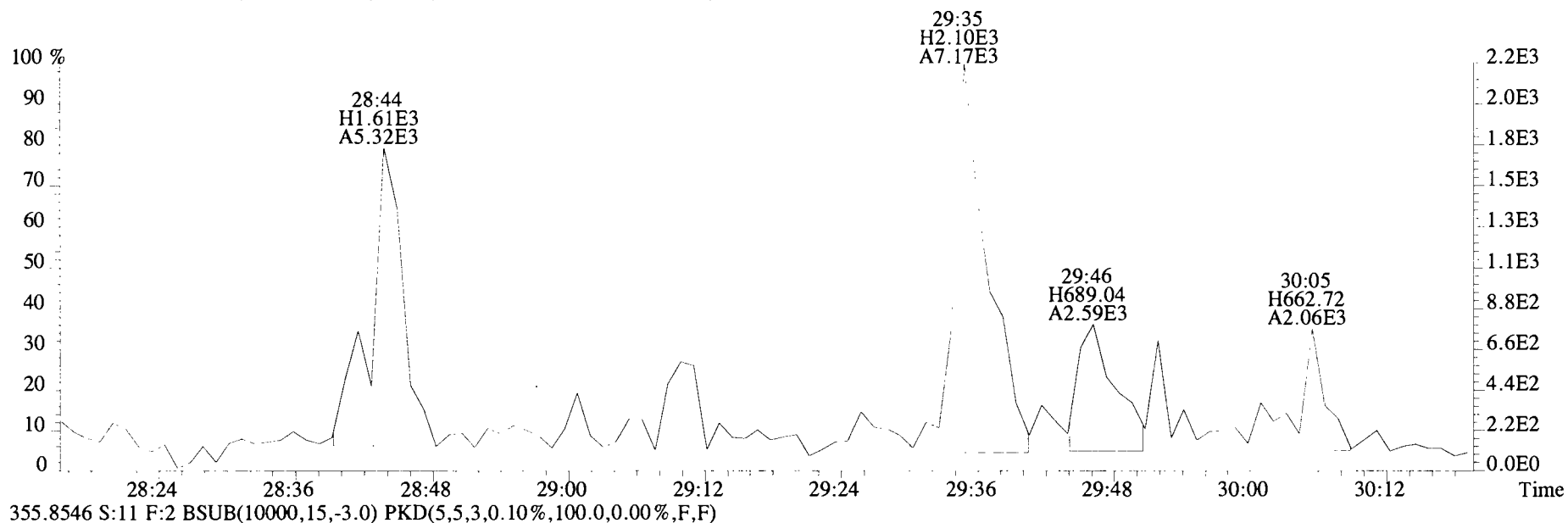
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
353.8576 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



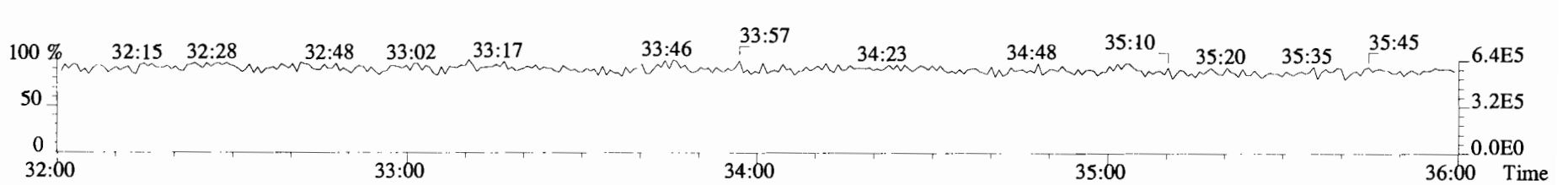
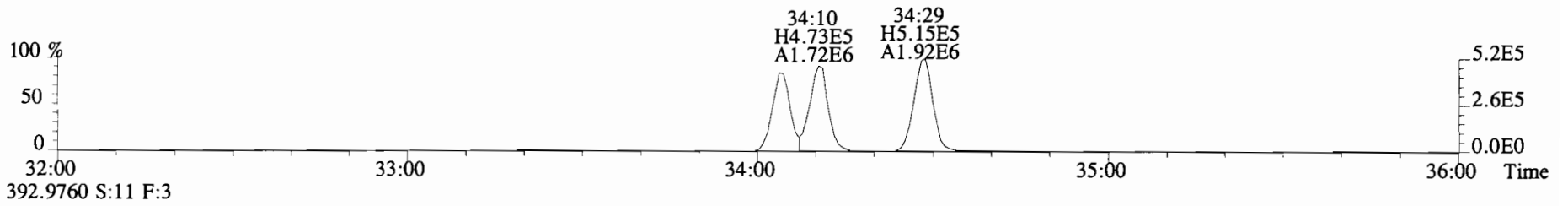
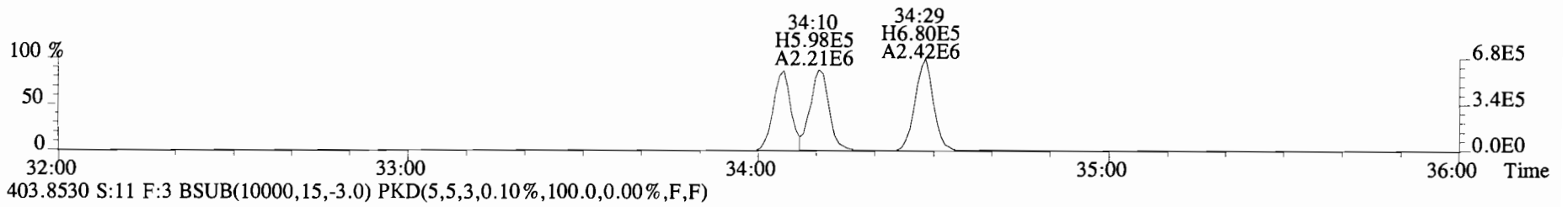
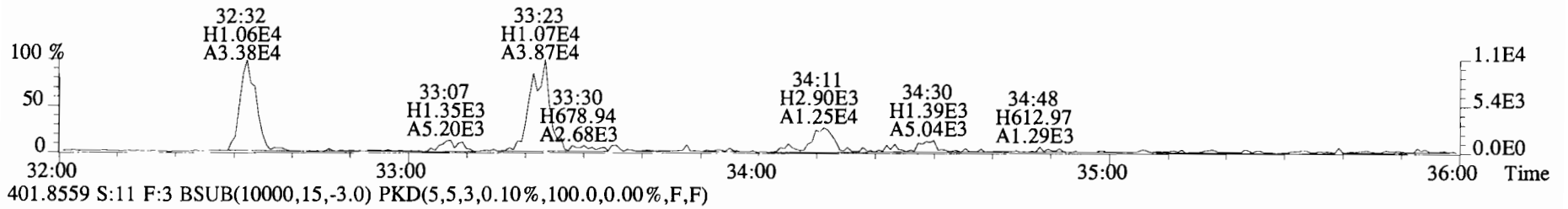
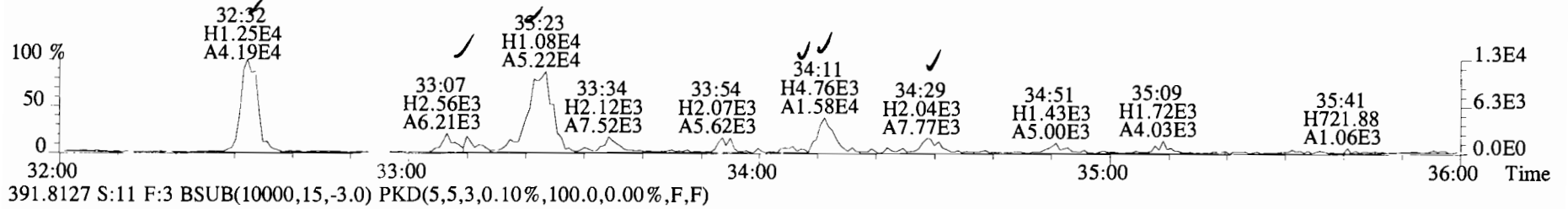
355.8546 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



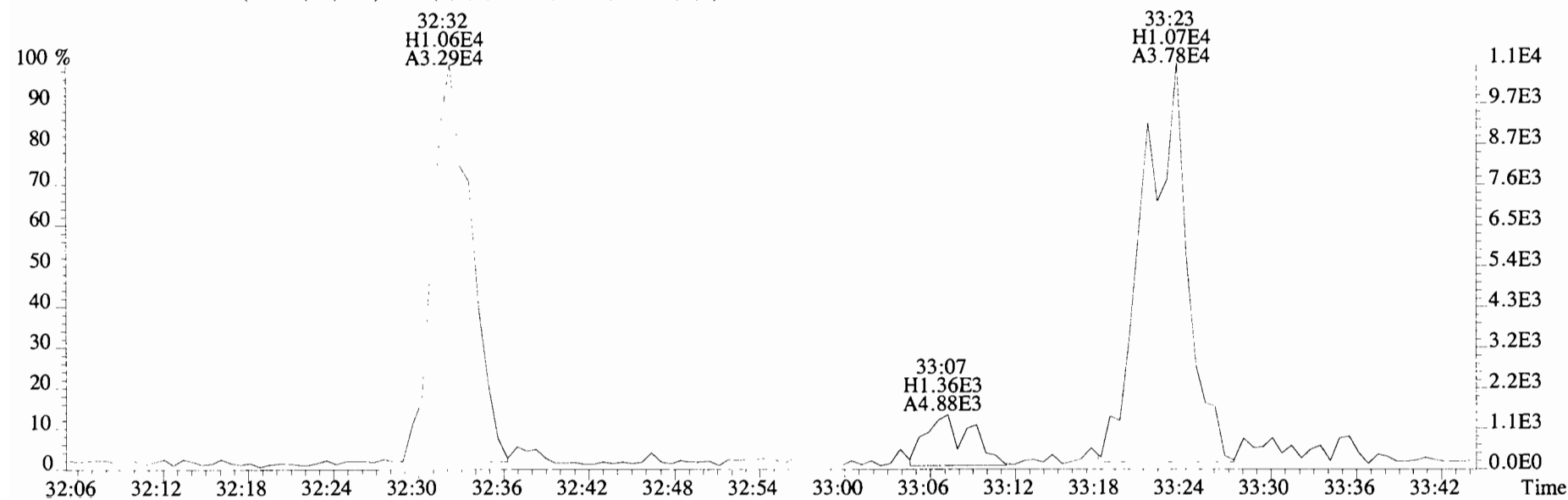
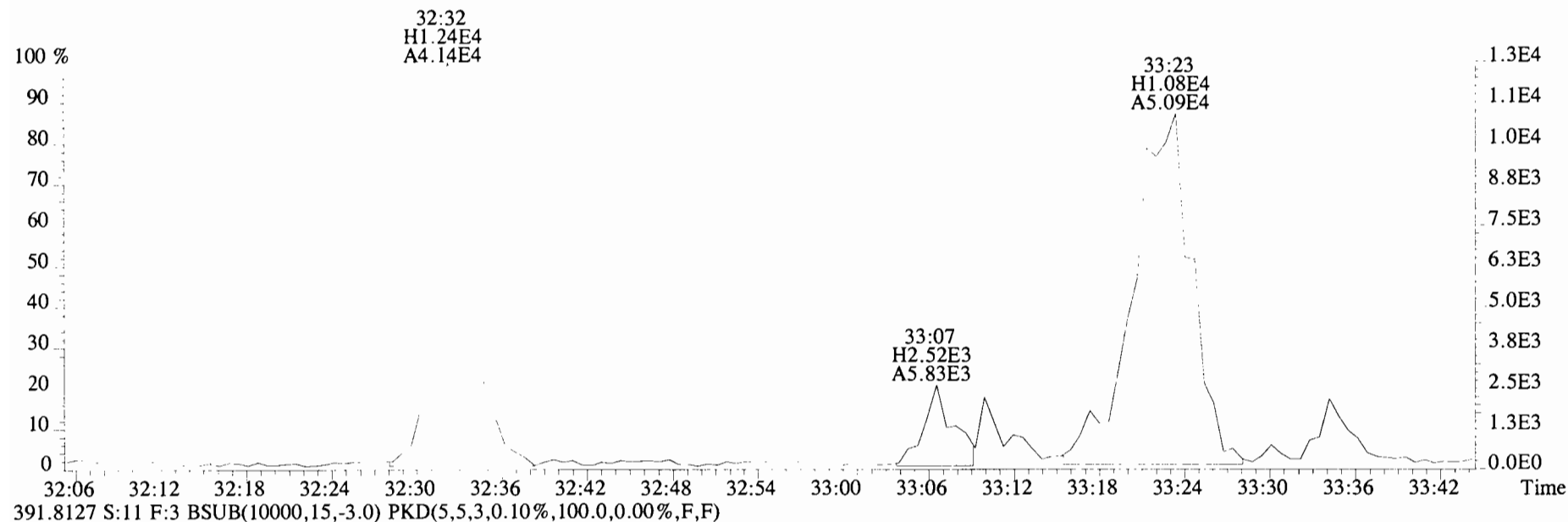
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
353.8576 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



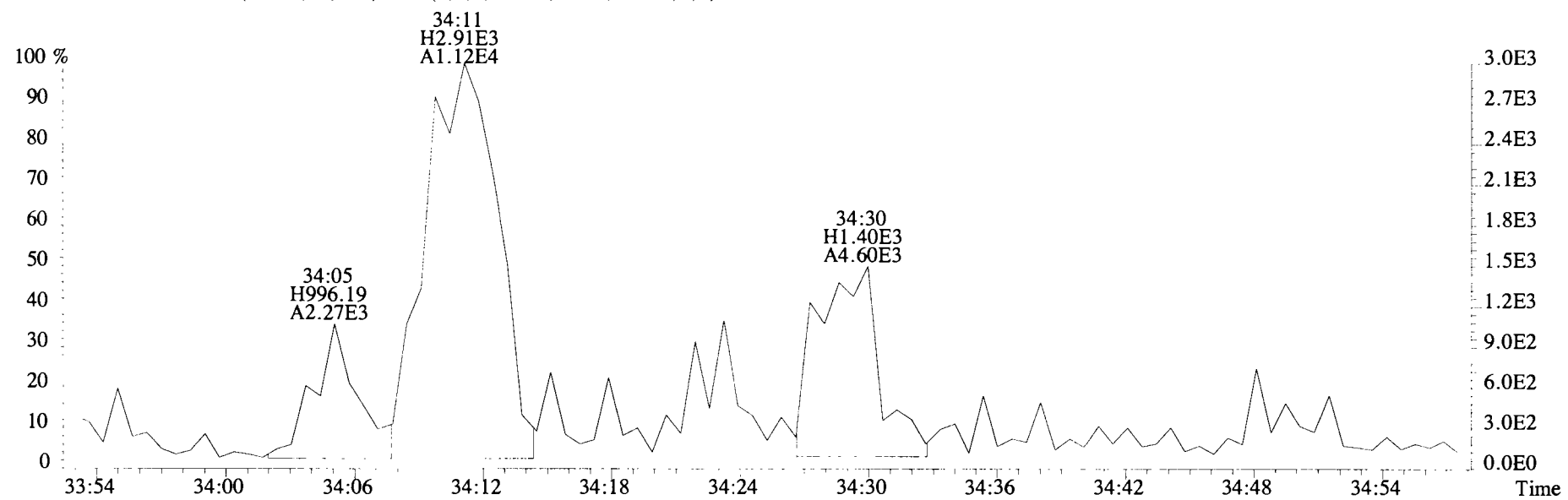
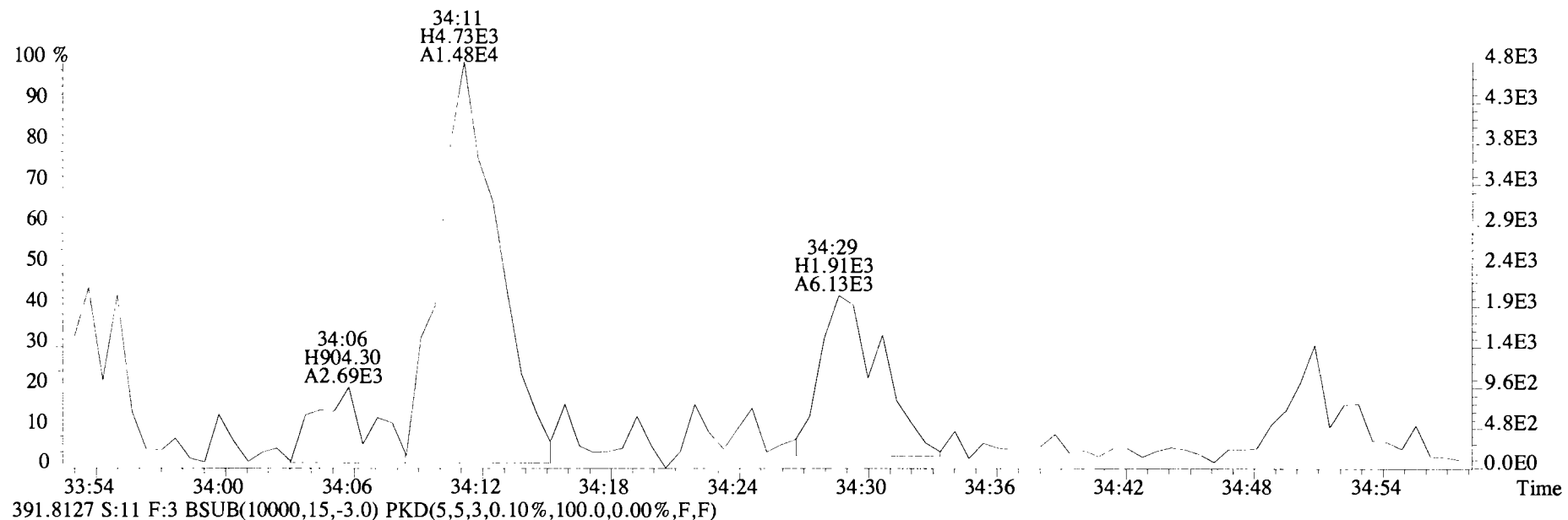
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



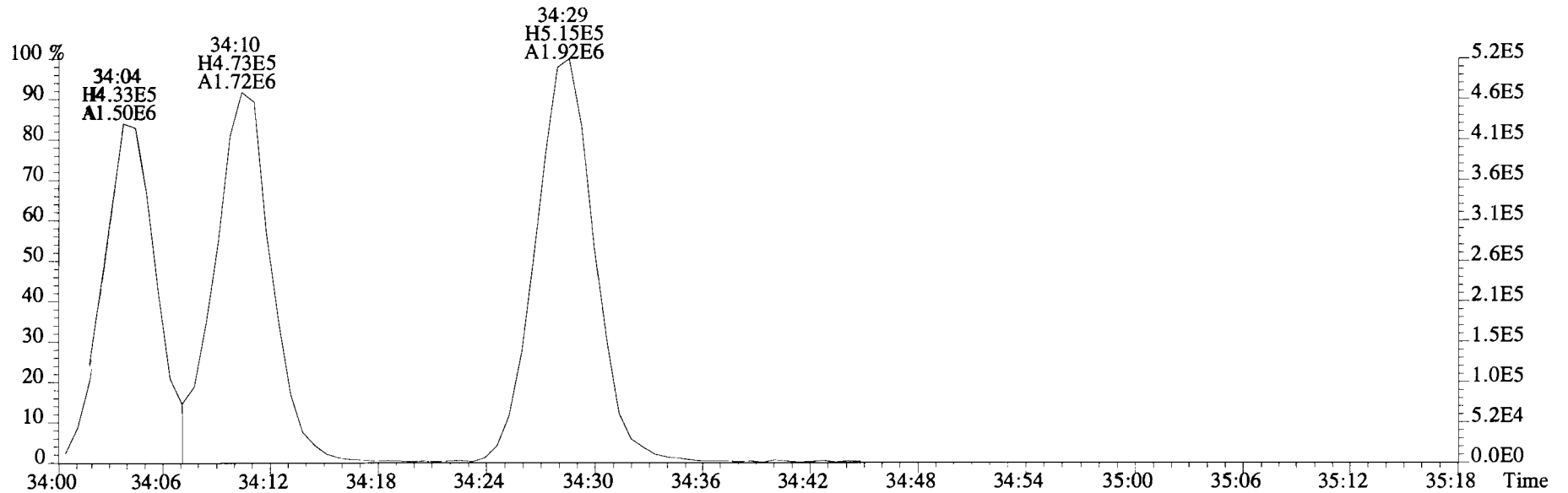
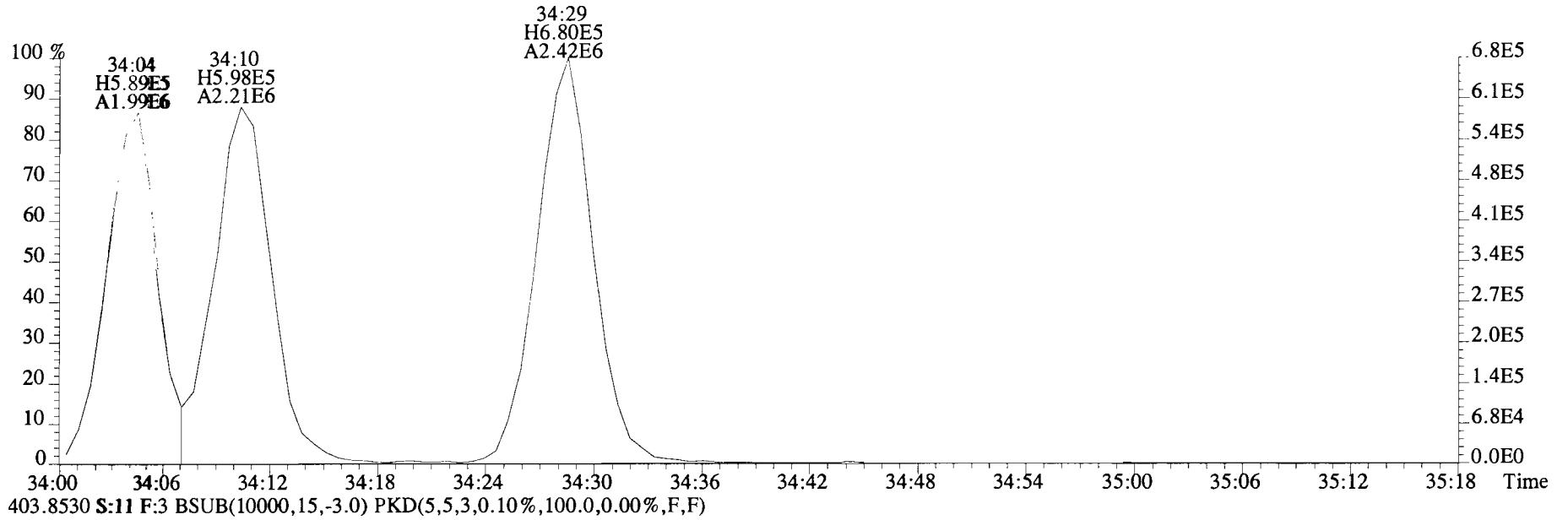
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



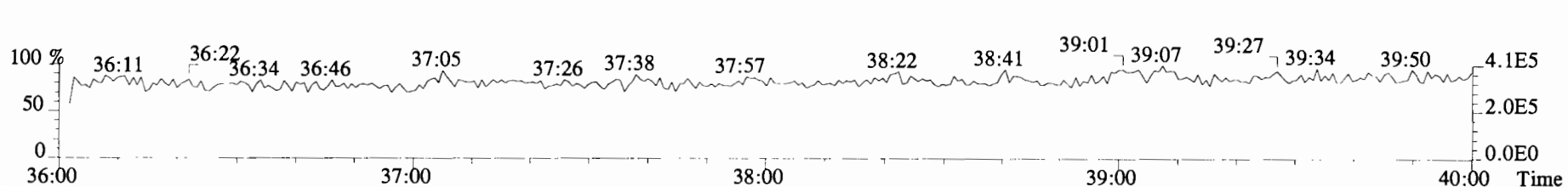
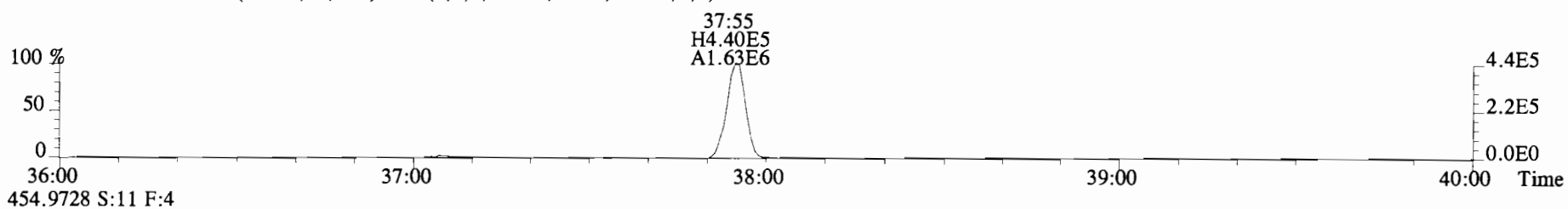
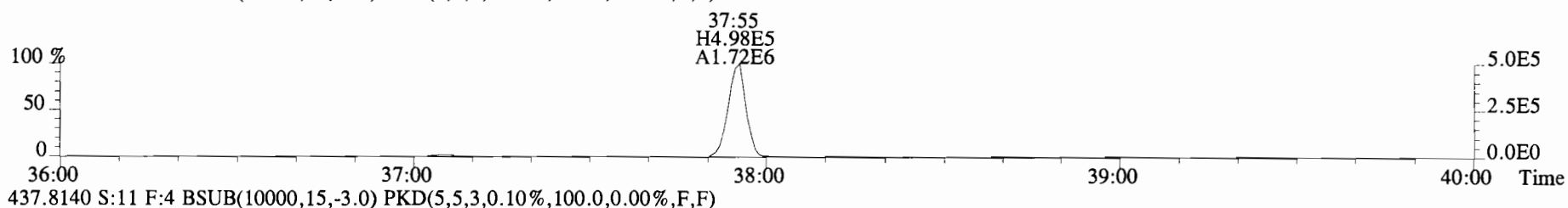
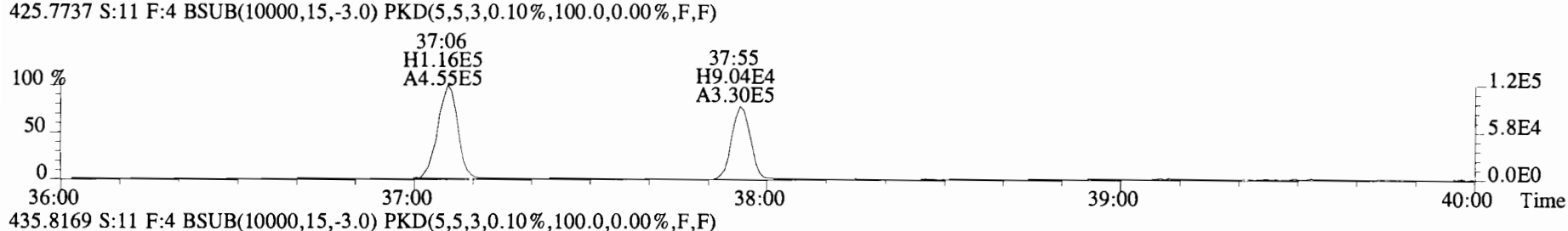
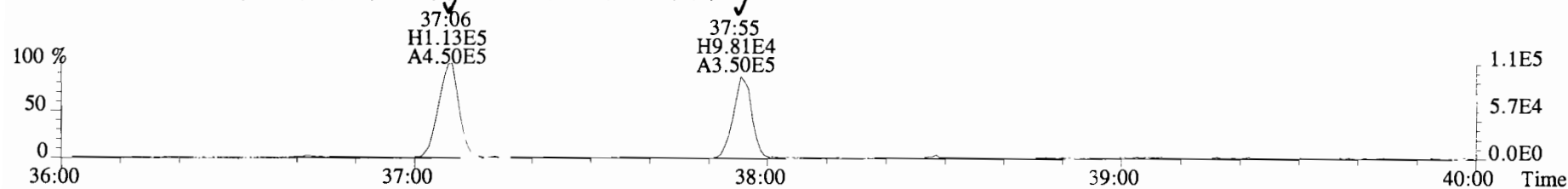
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Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



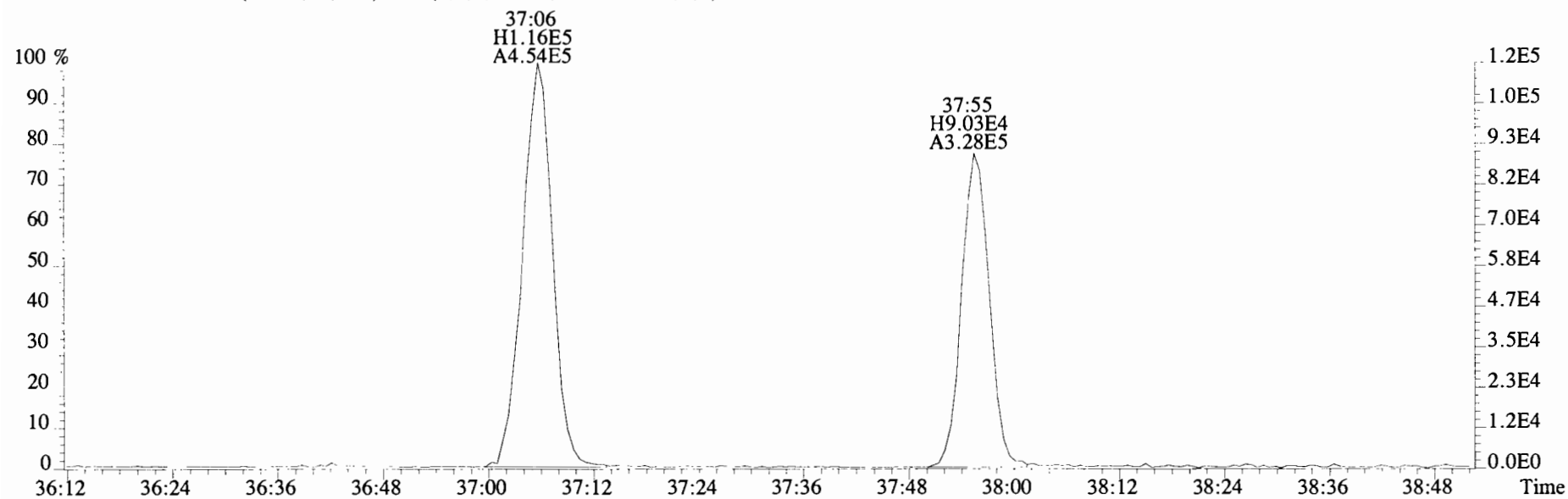
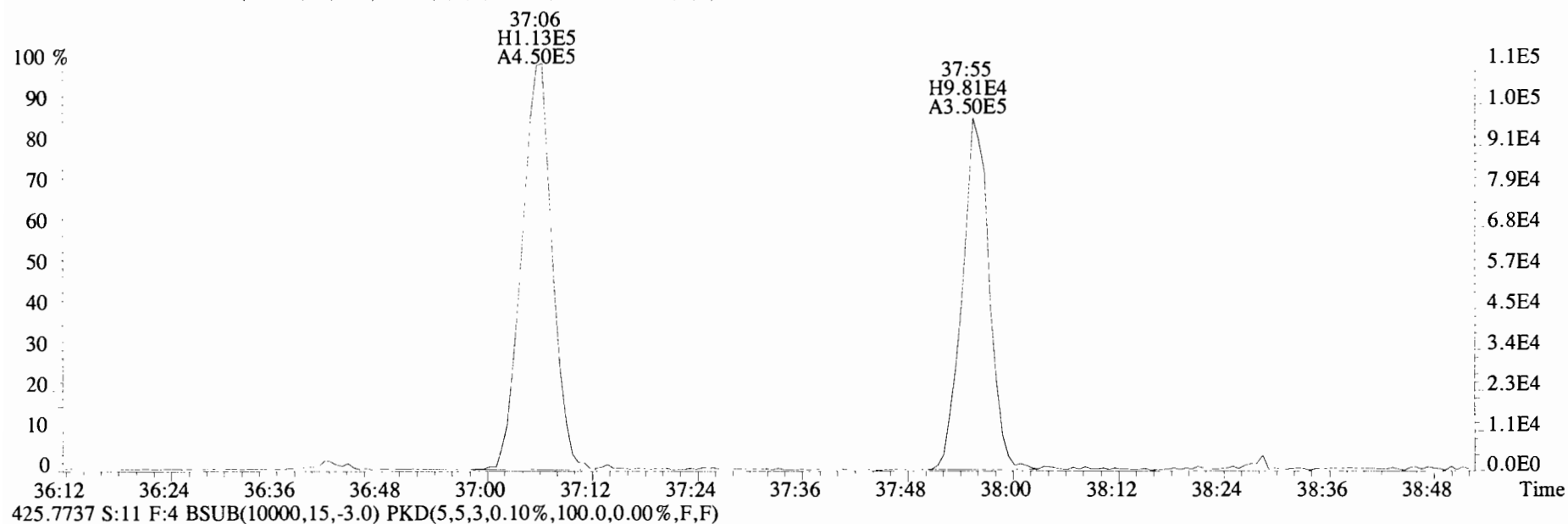
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Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PD1-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



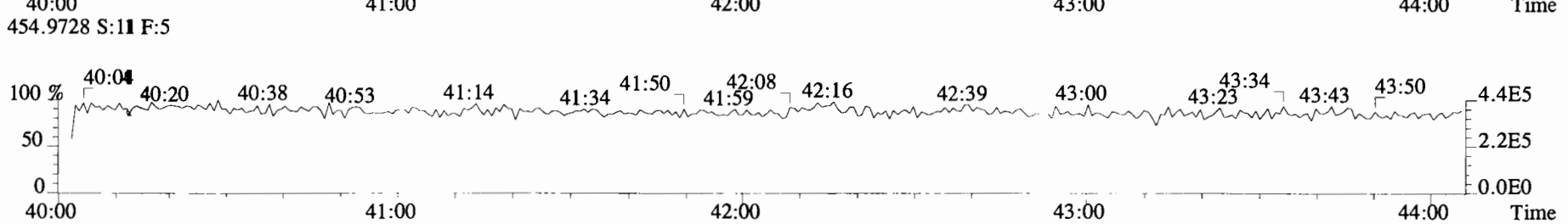
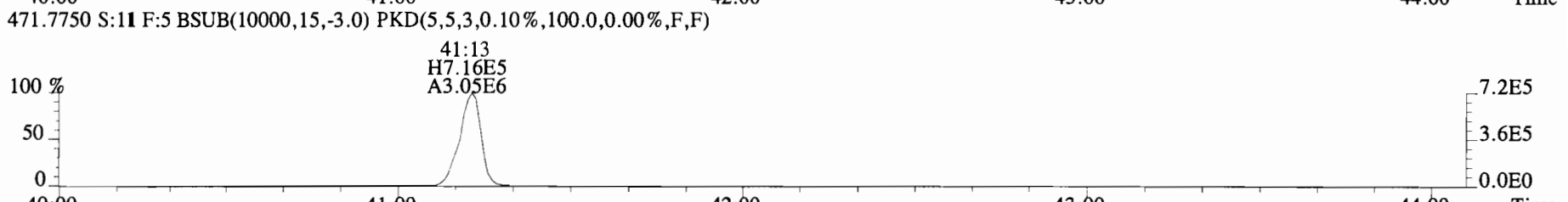
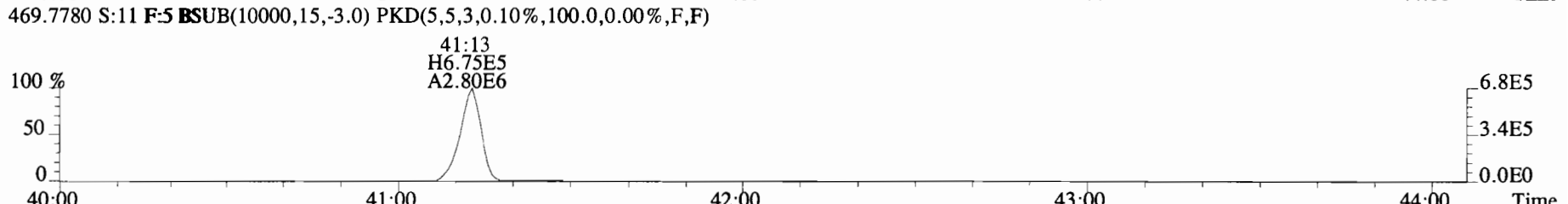
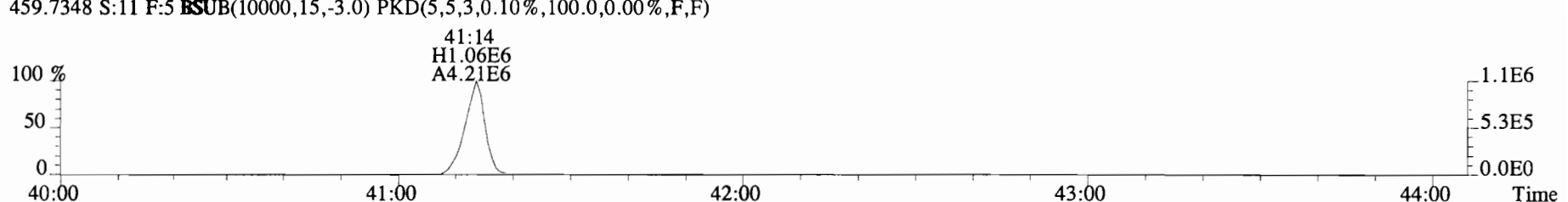
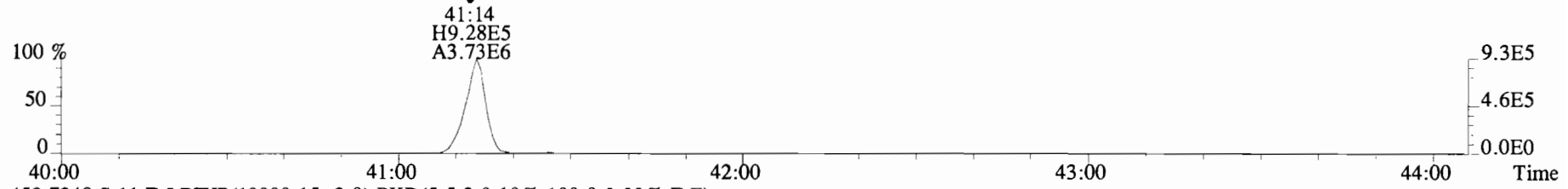
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



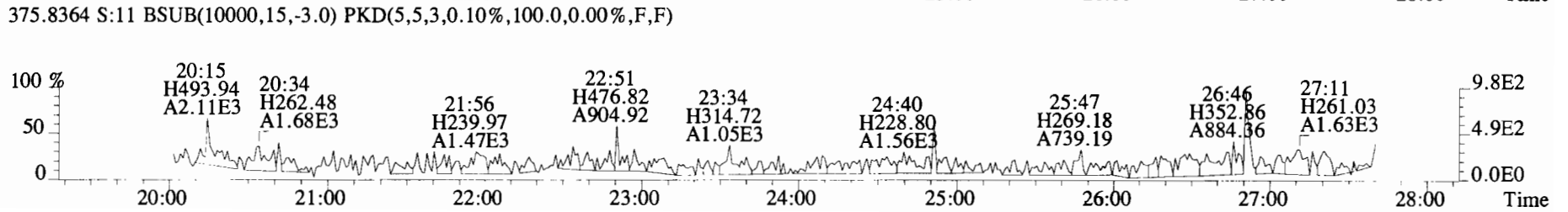
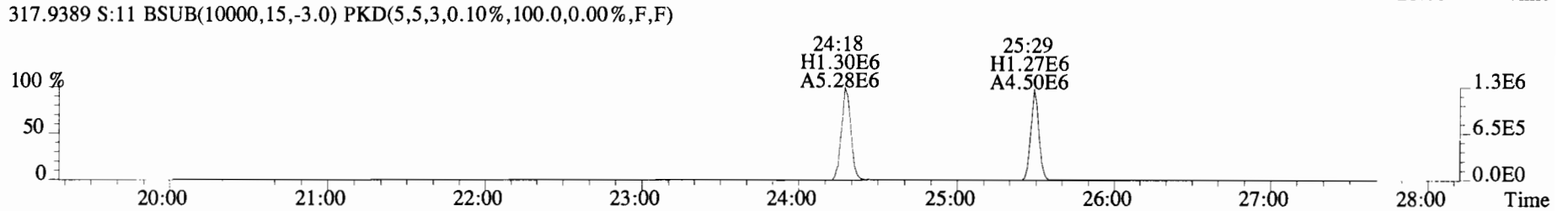
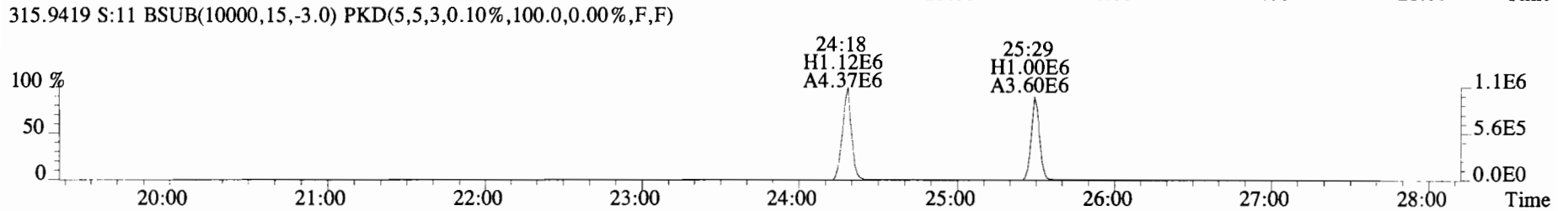
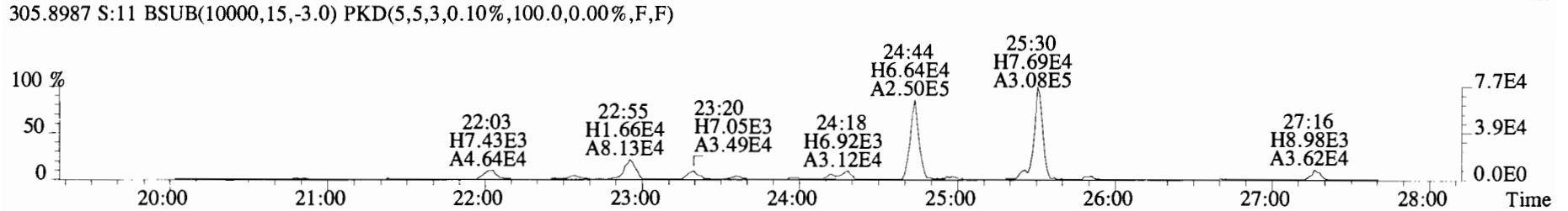
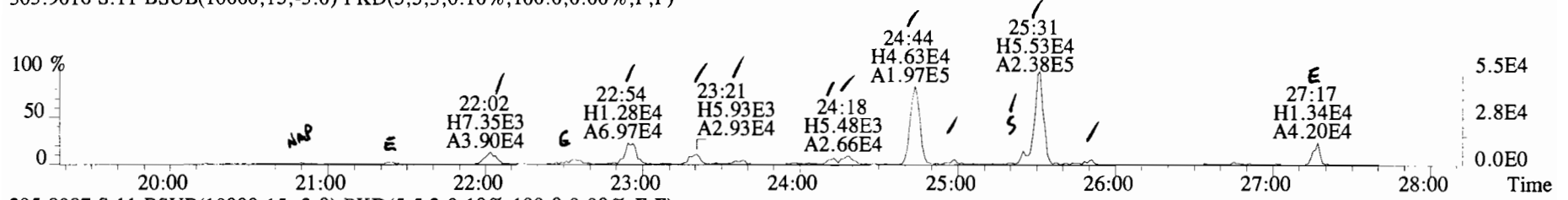
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



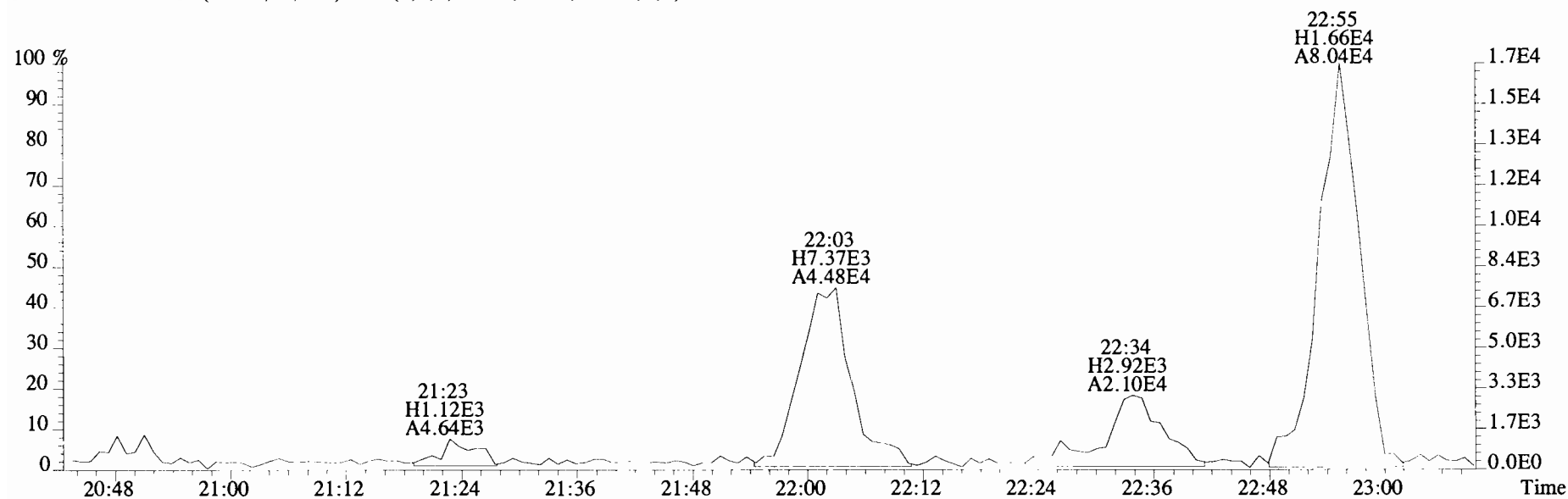
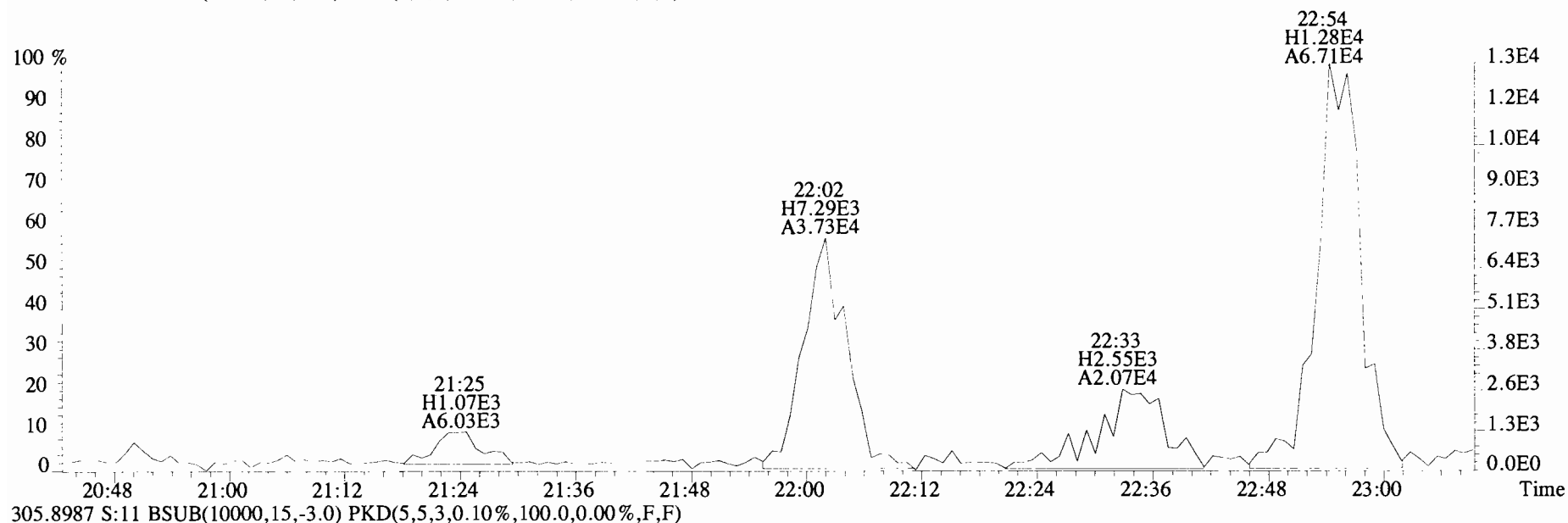
File:191101D1 #1-431 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
457.7377 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



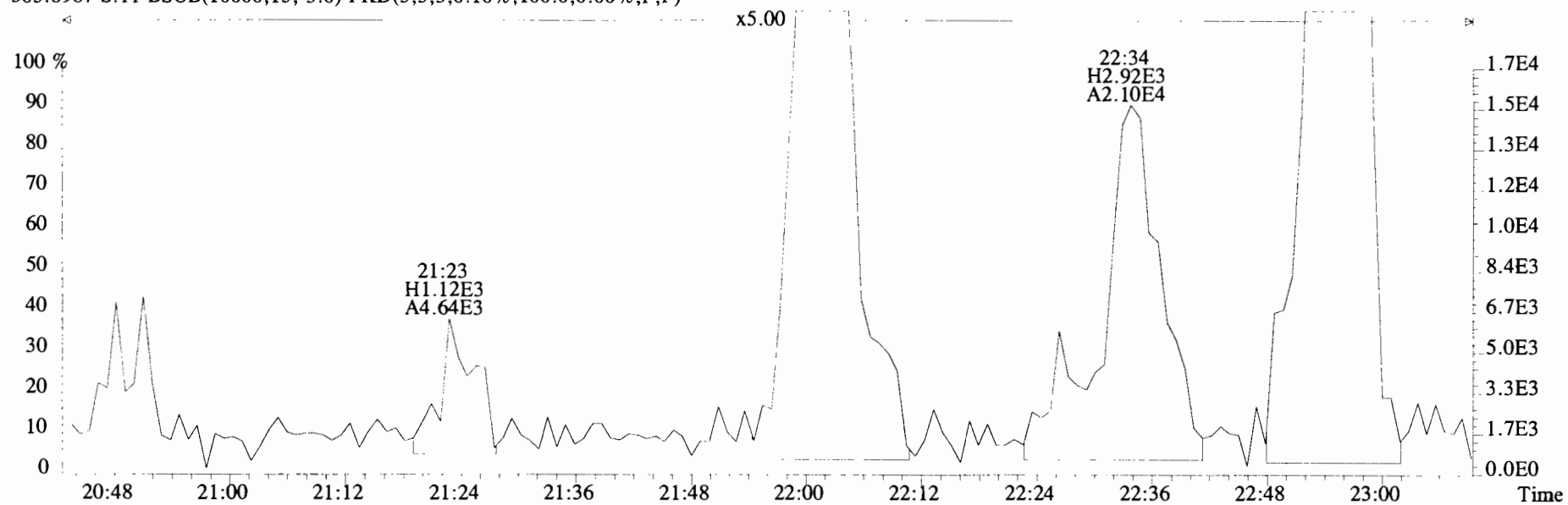
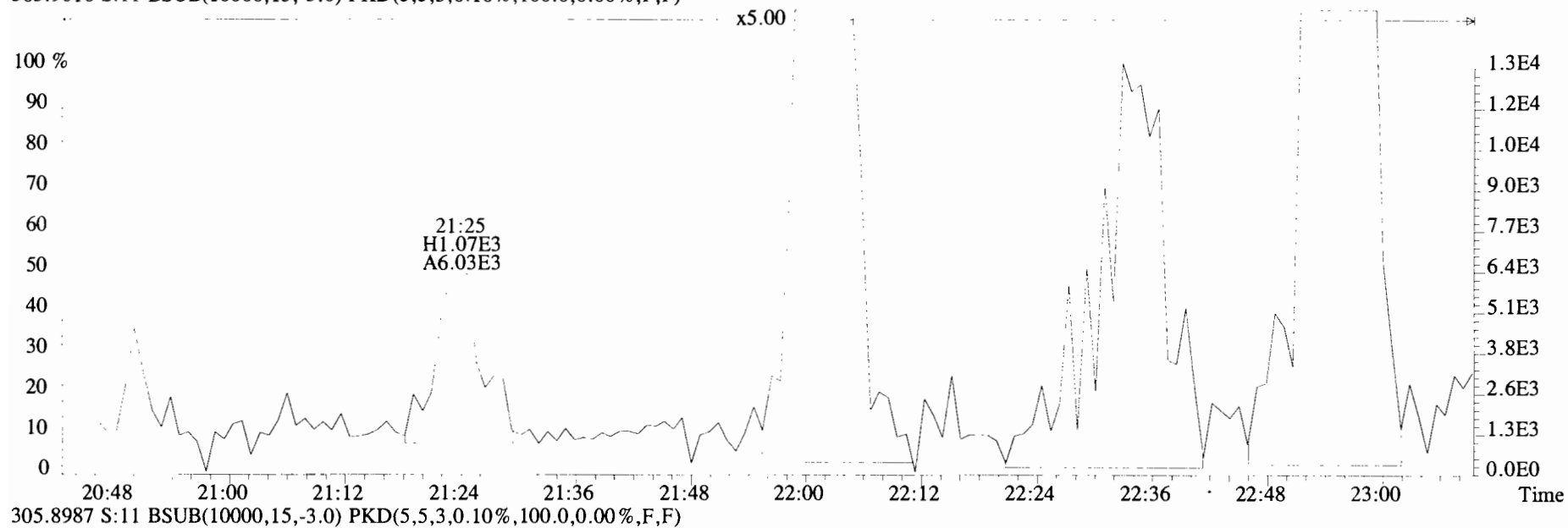
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



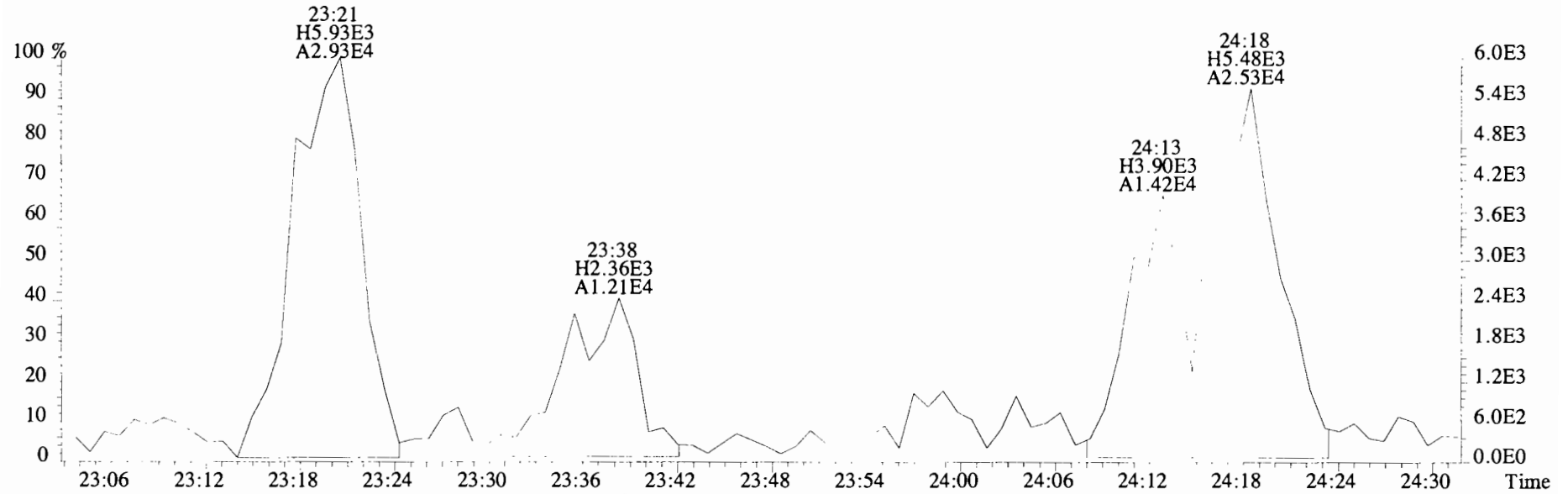
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Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



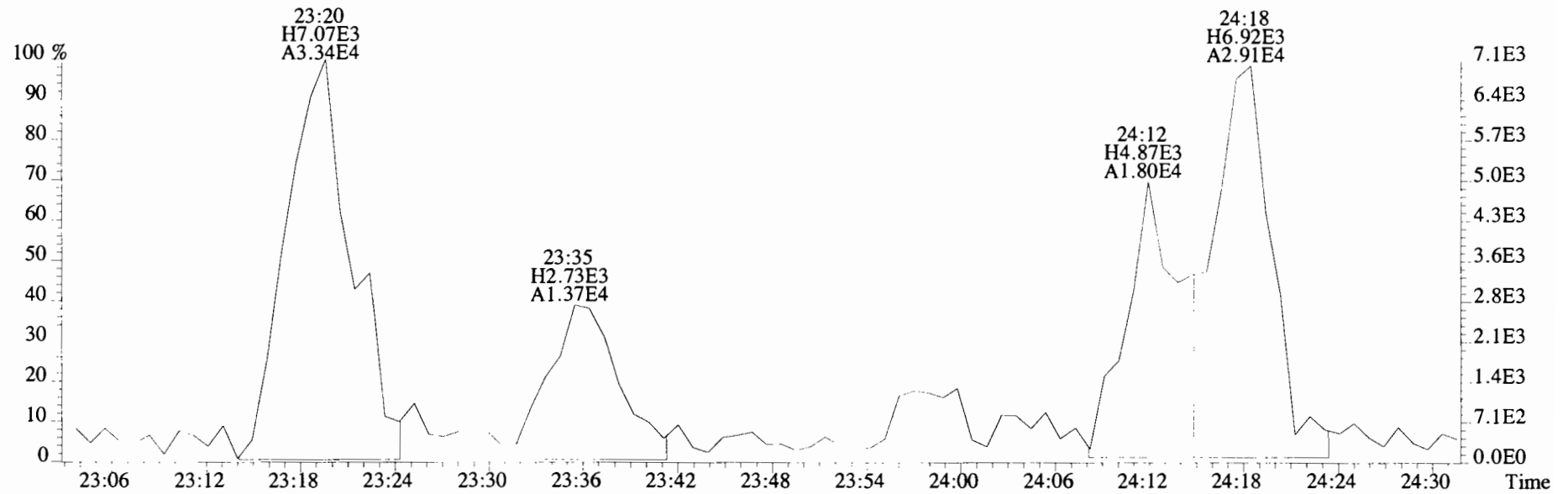
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



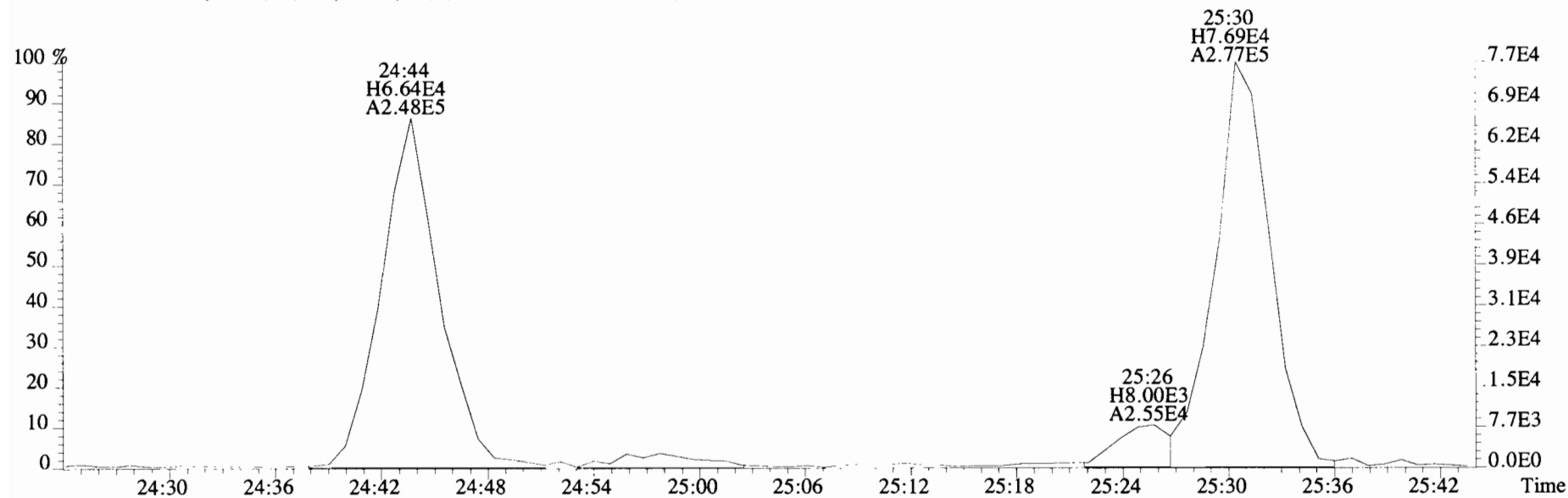
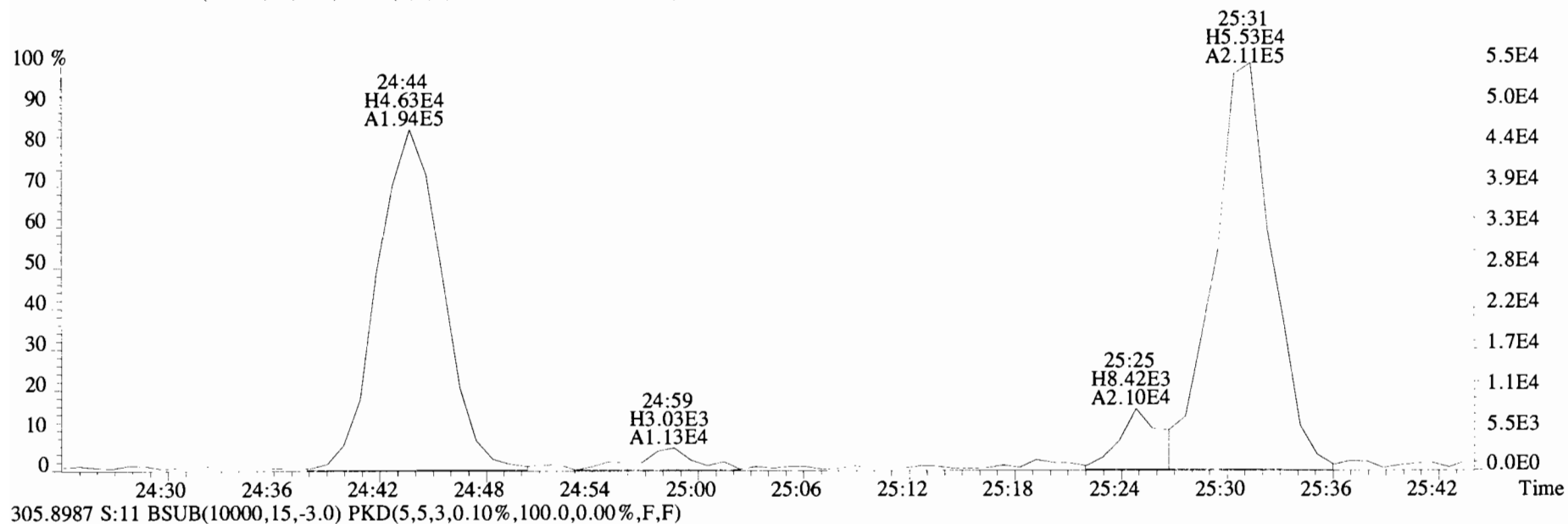
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



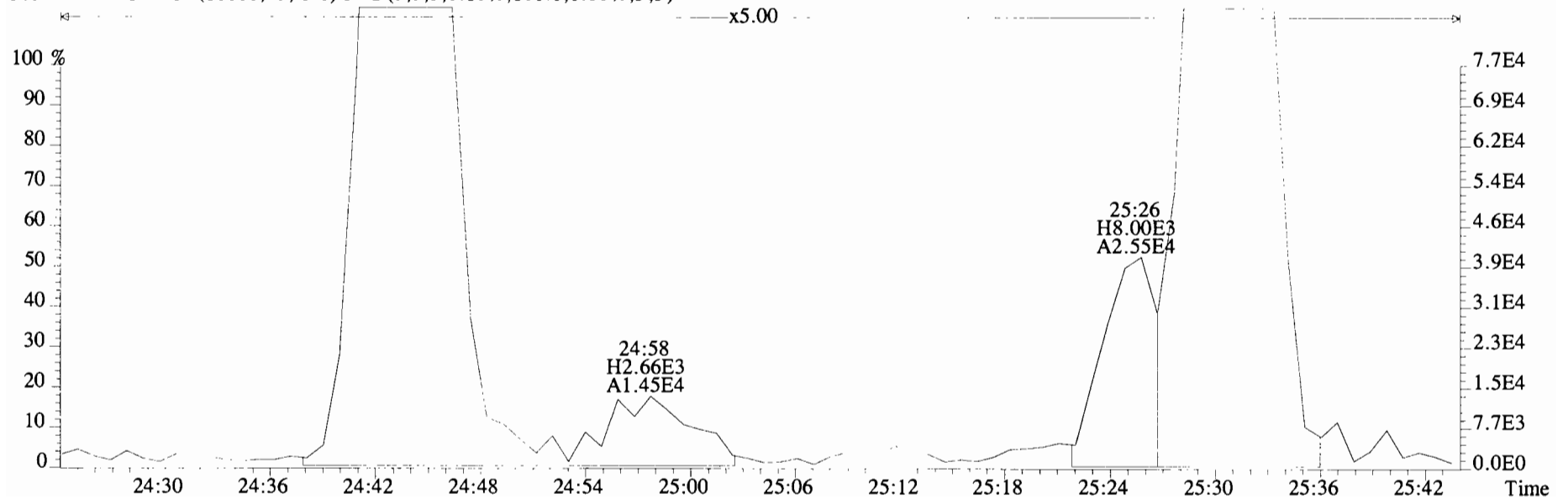
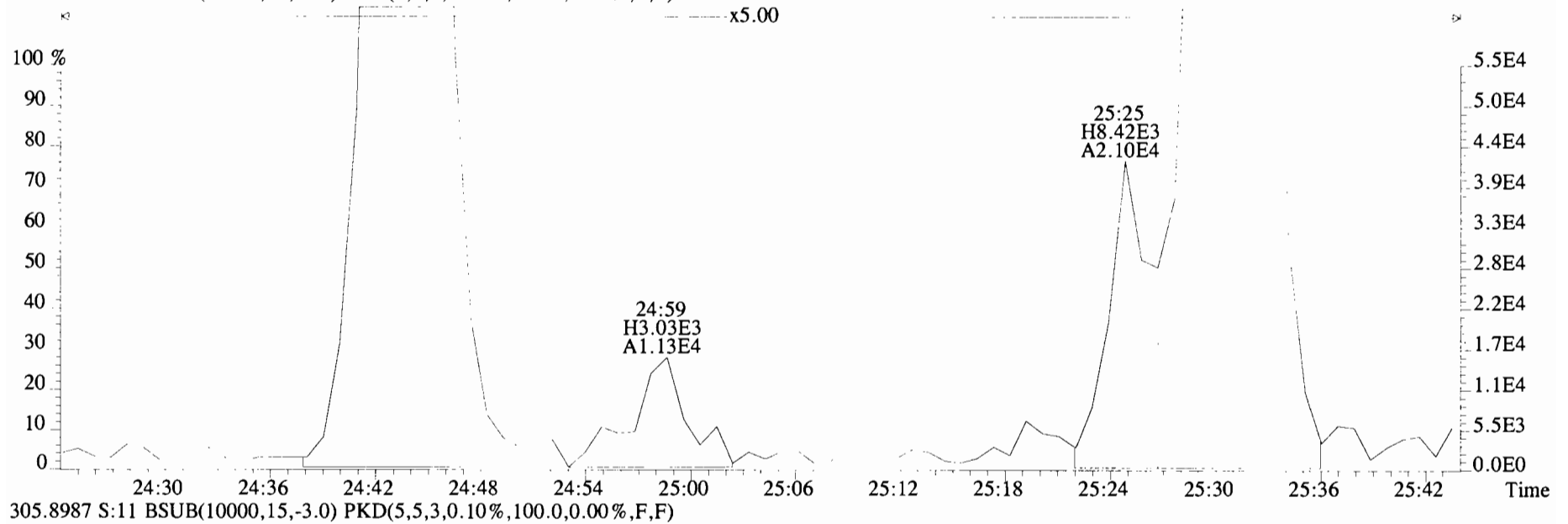
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



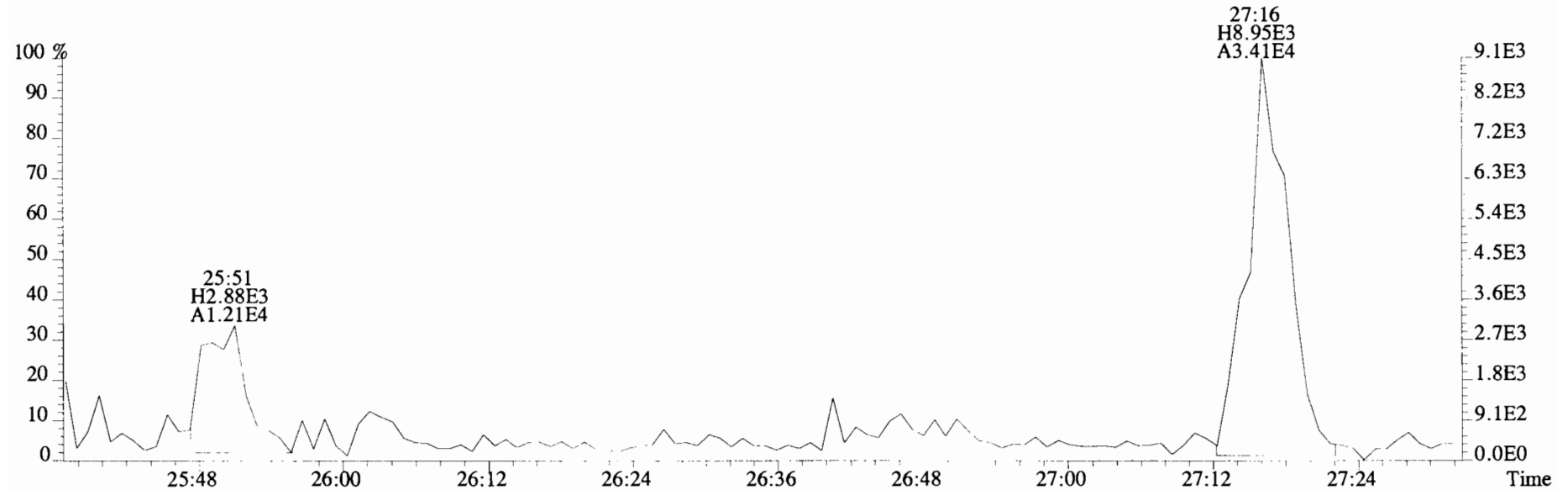
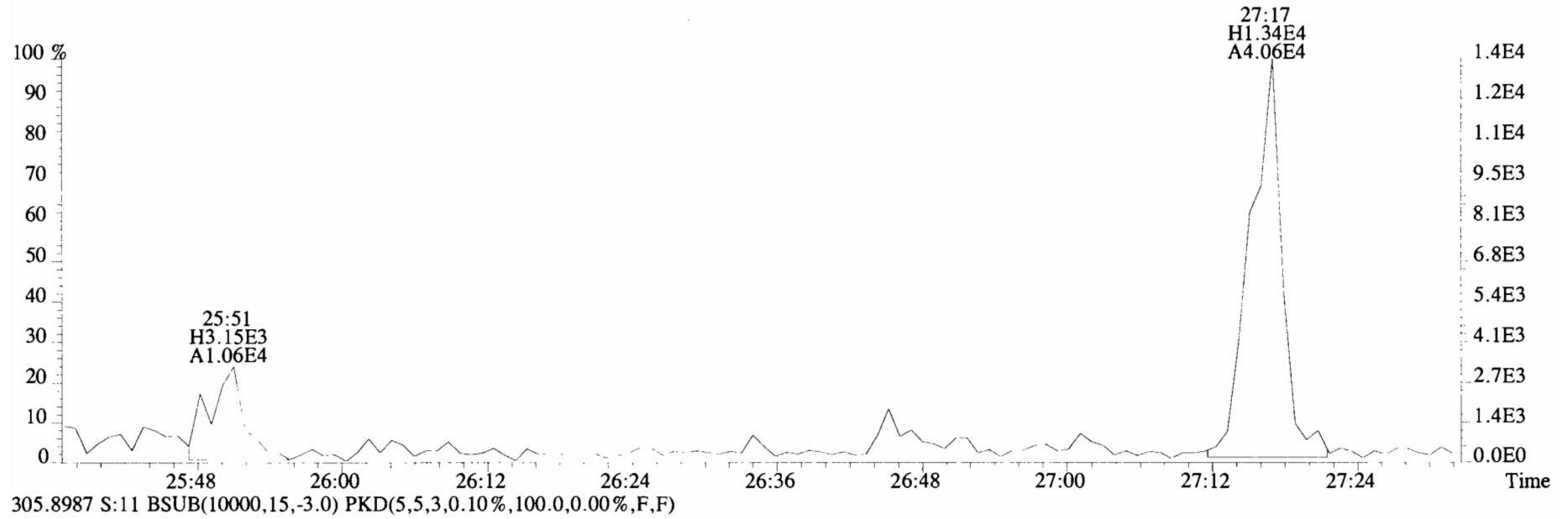
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



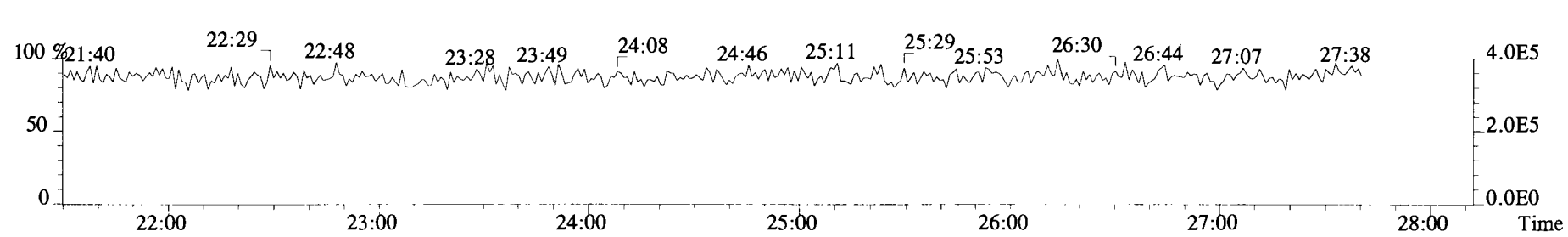
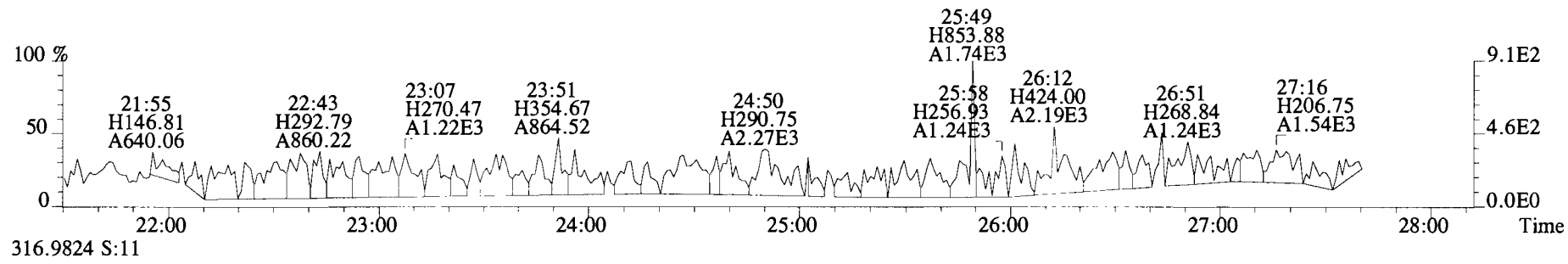
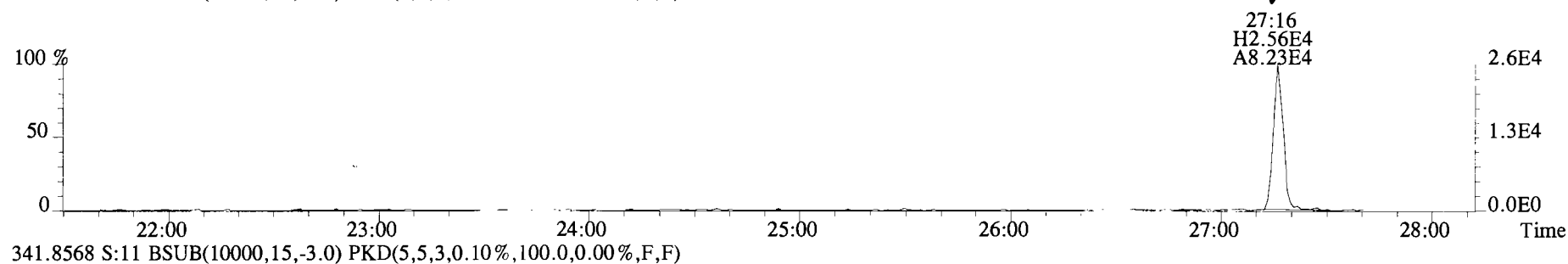
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



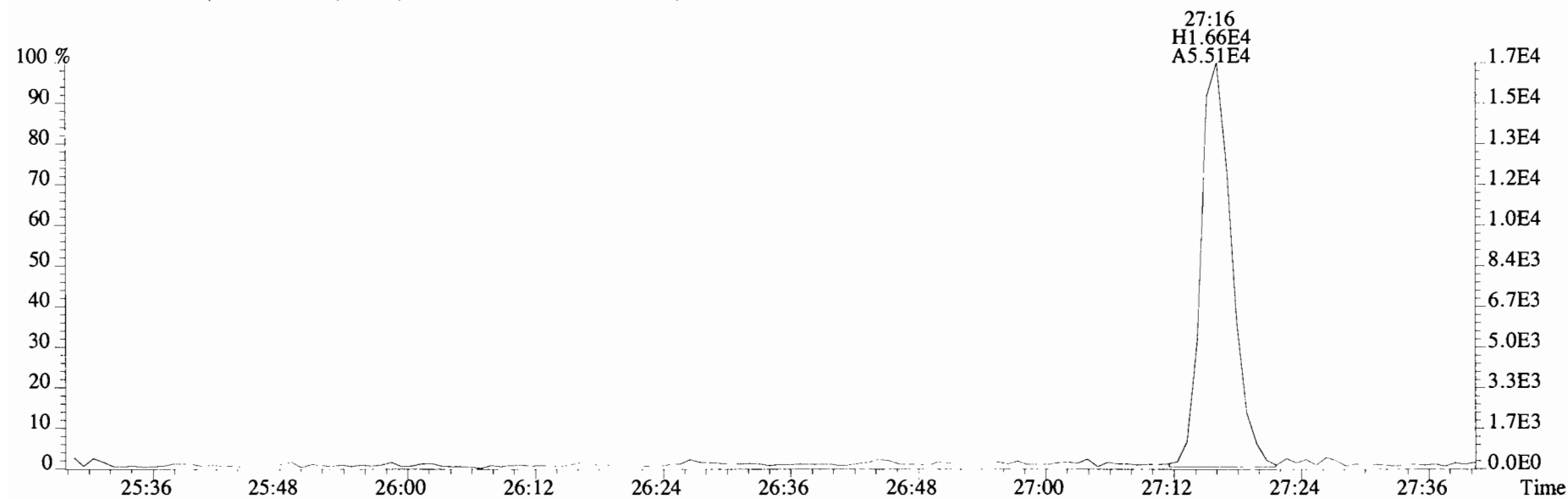
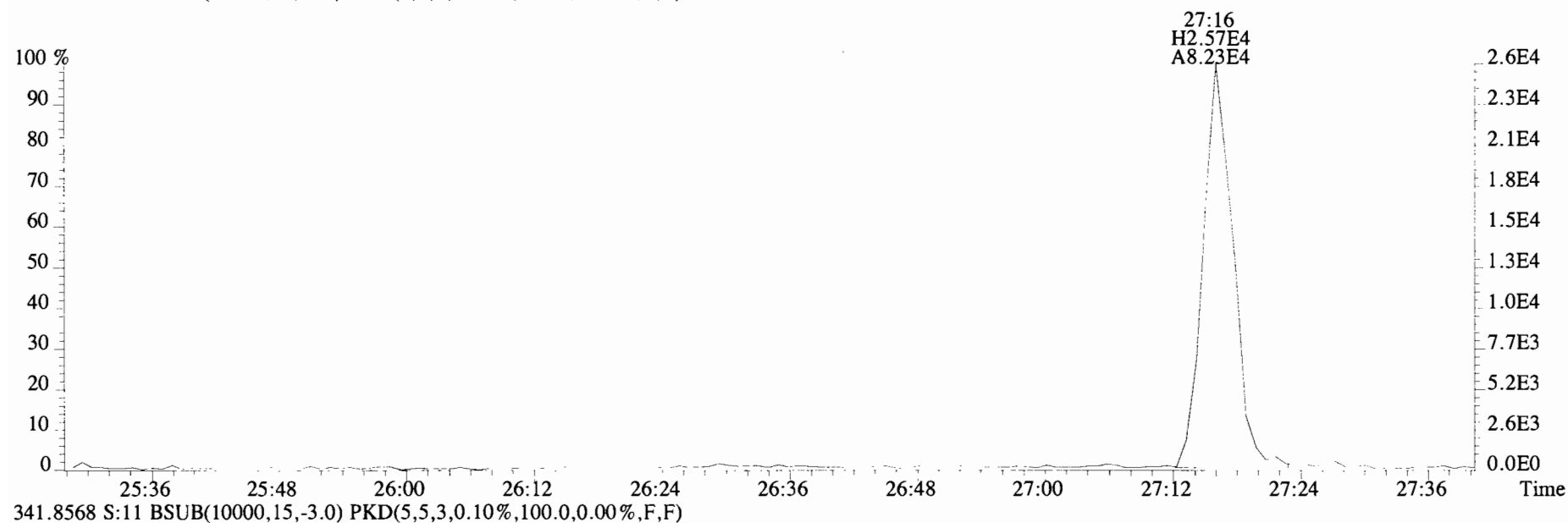
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Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



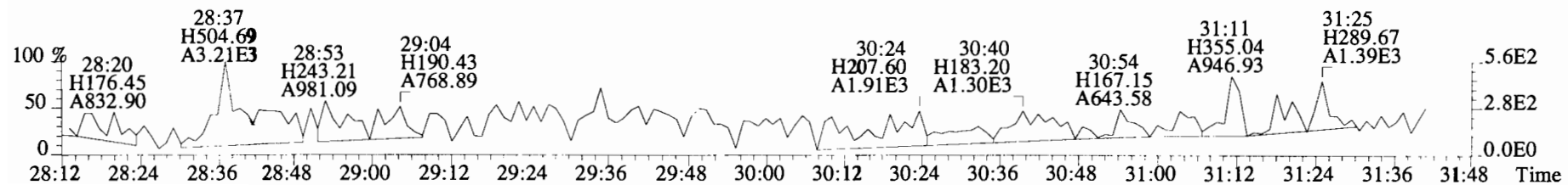
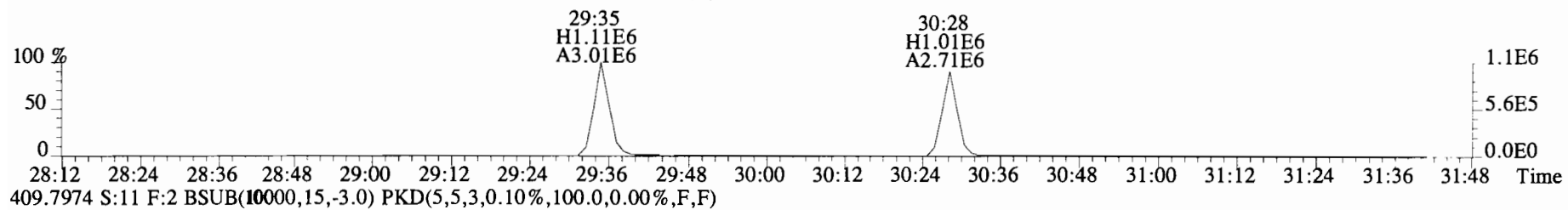
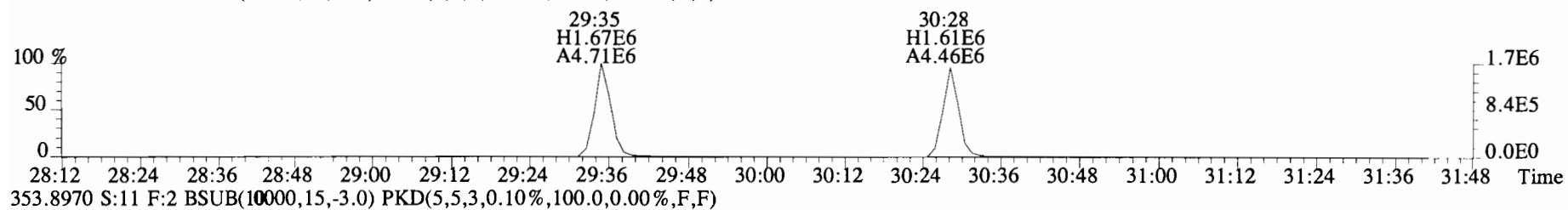
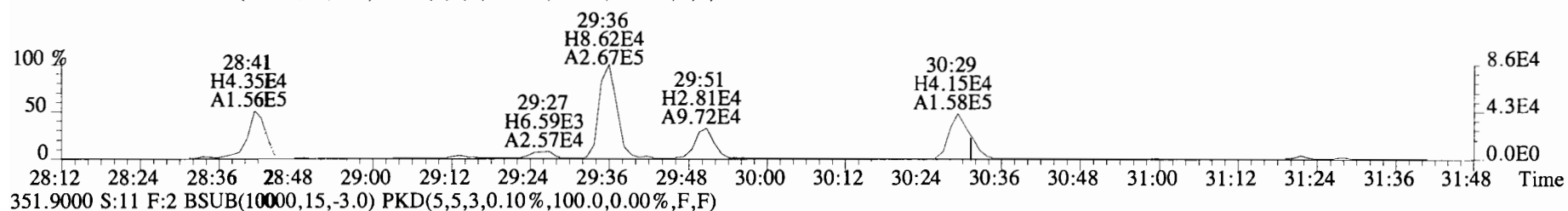
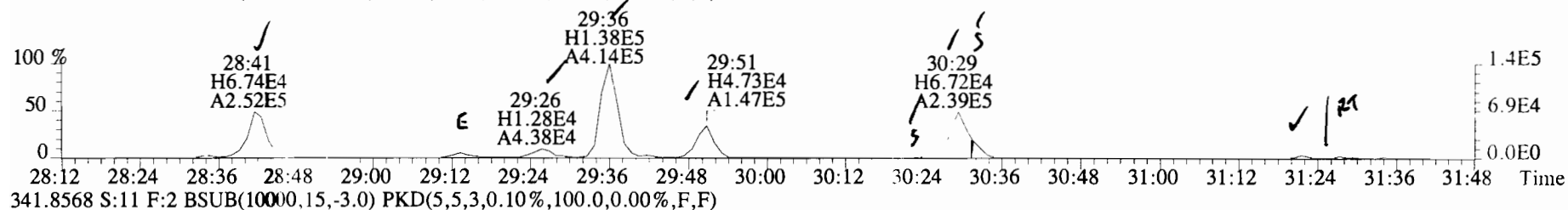
File:191101D1 #1-492 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



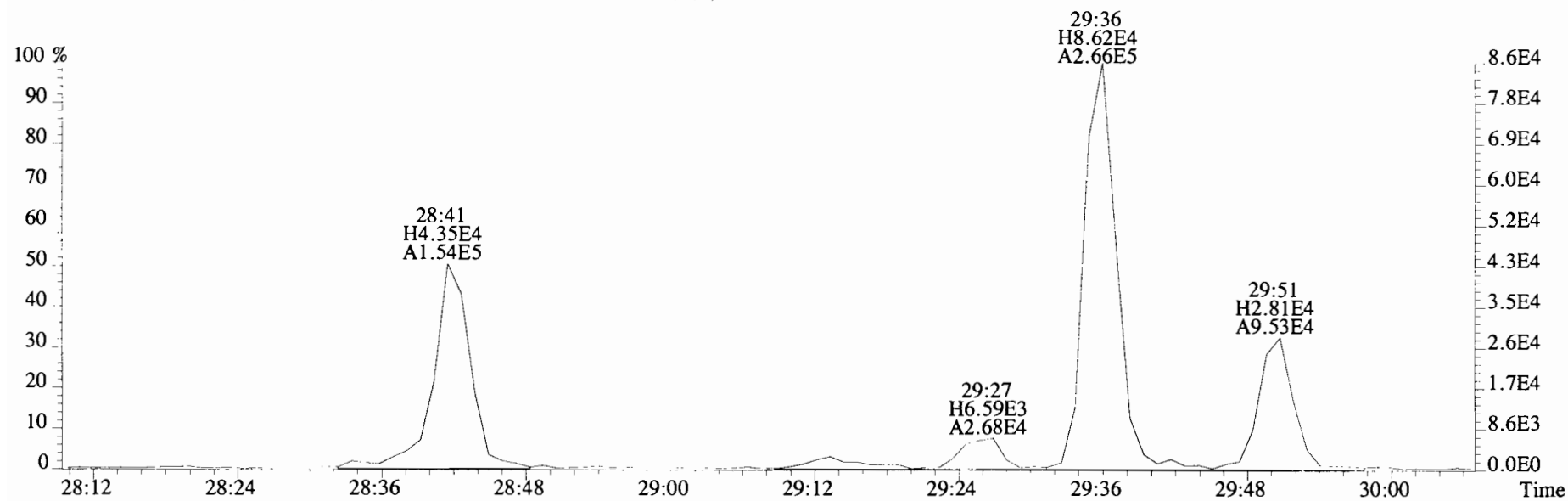
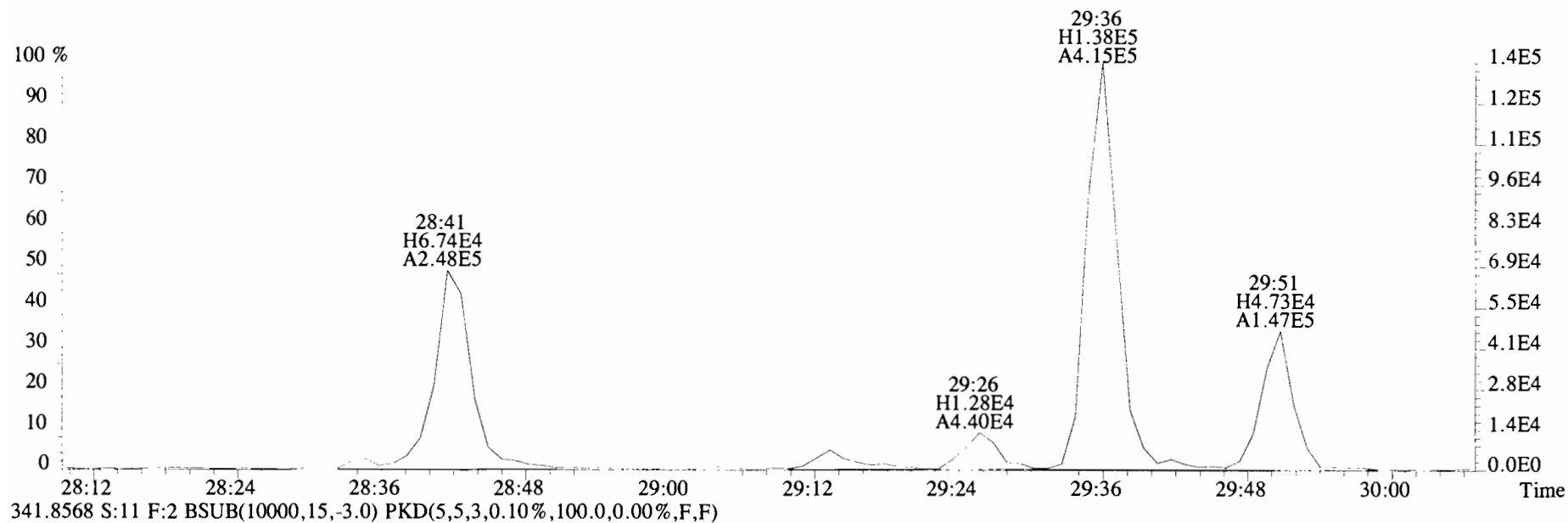
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Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



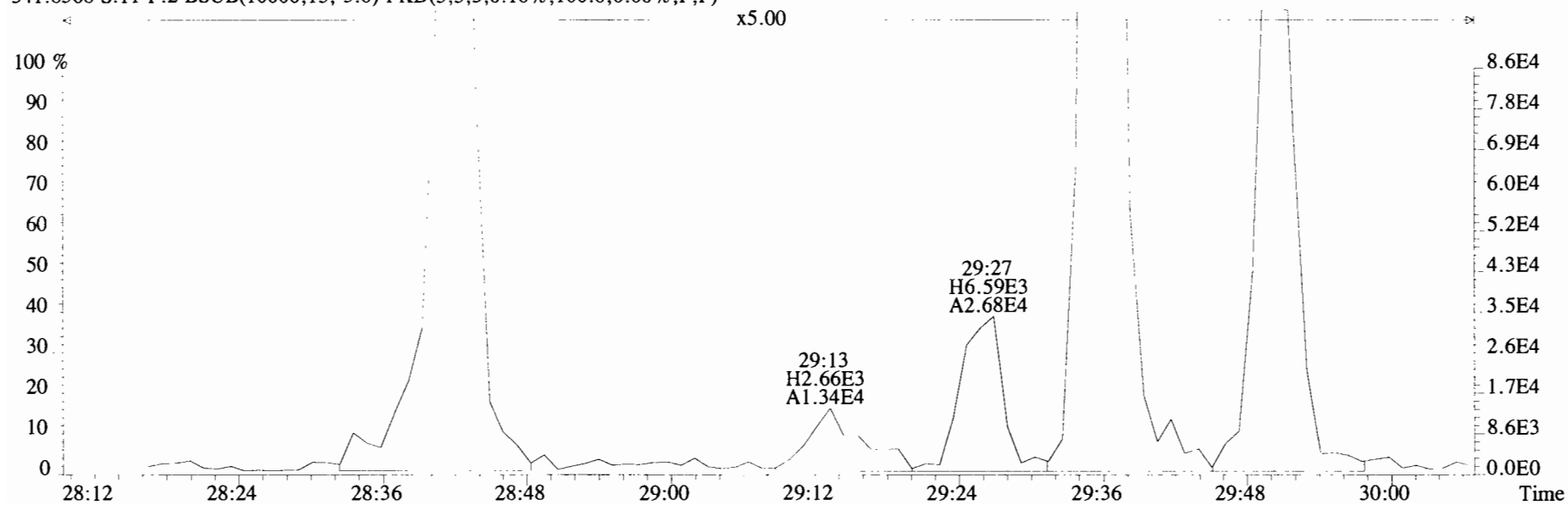
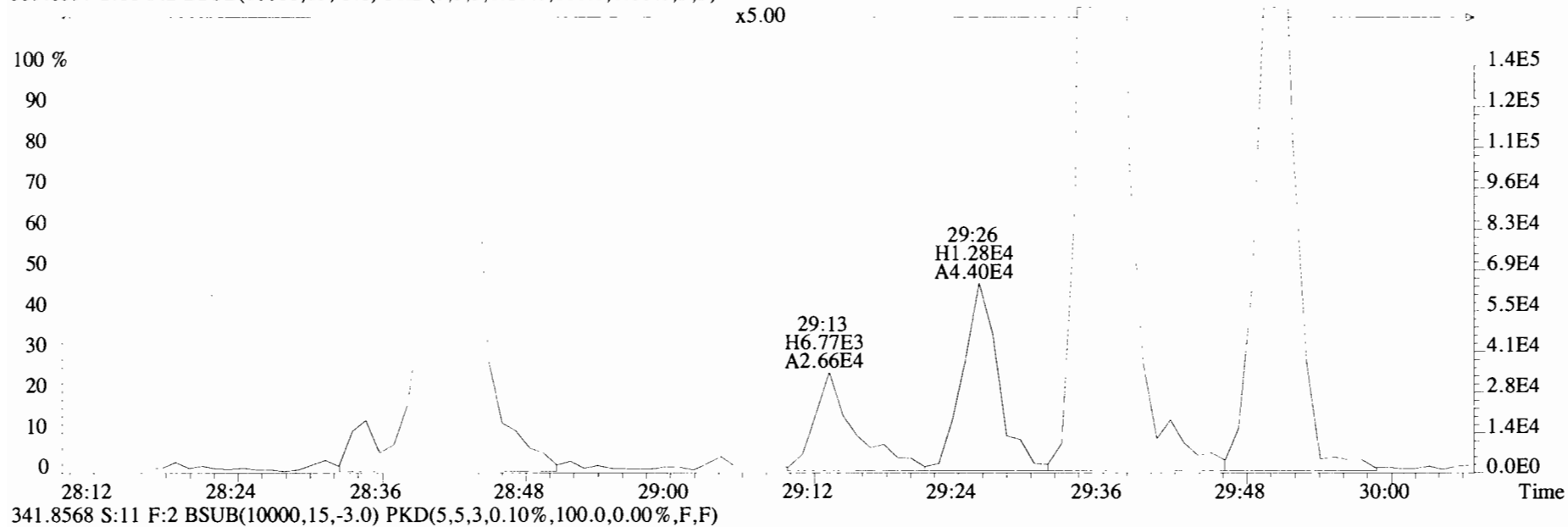
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



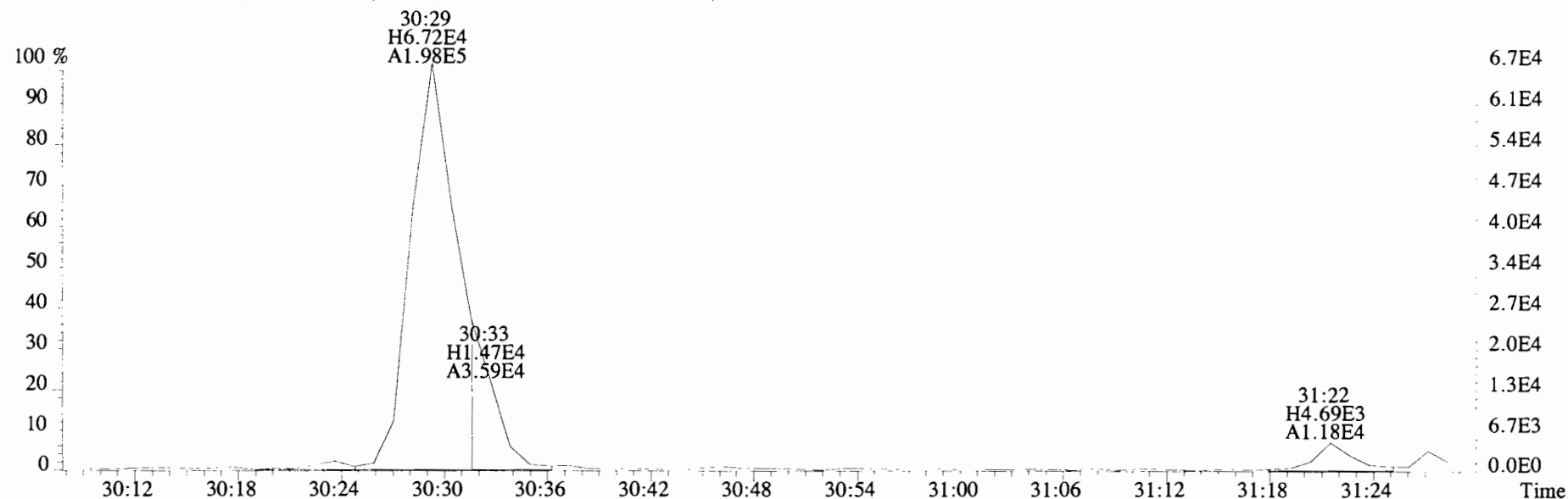
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



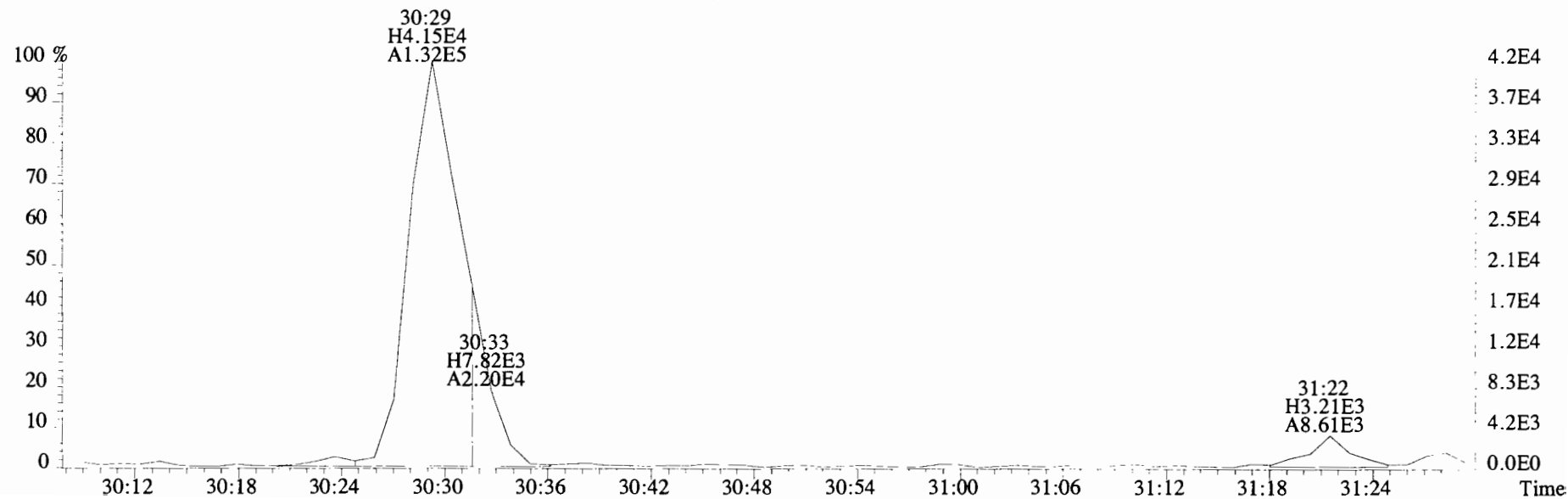
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



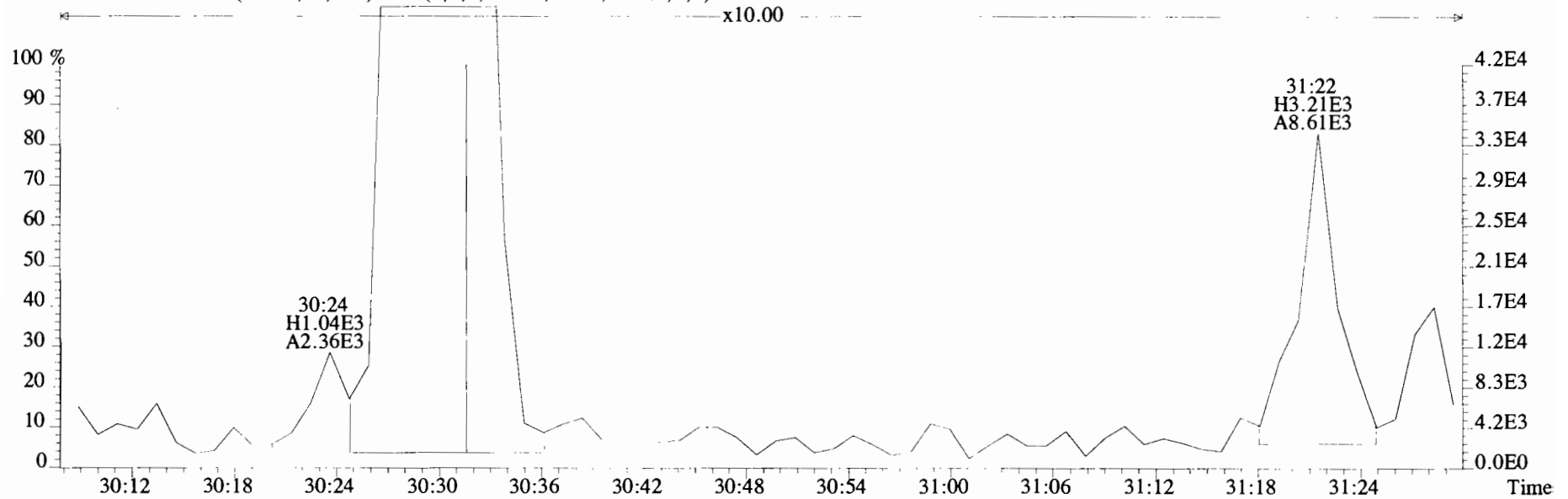
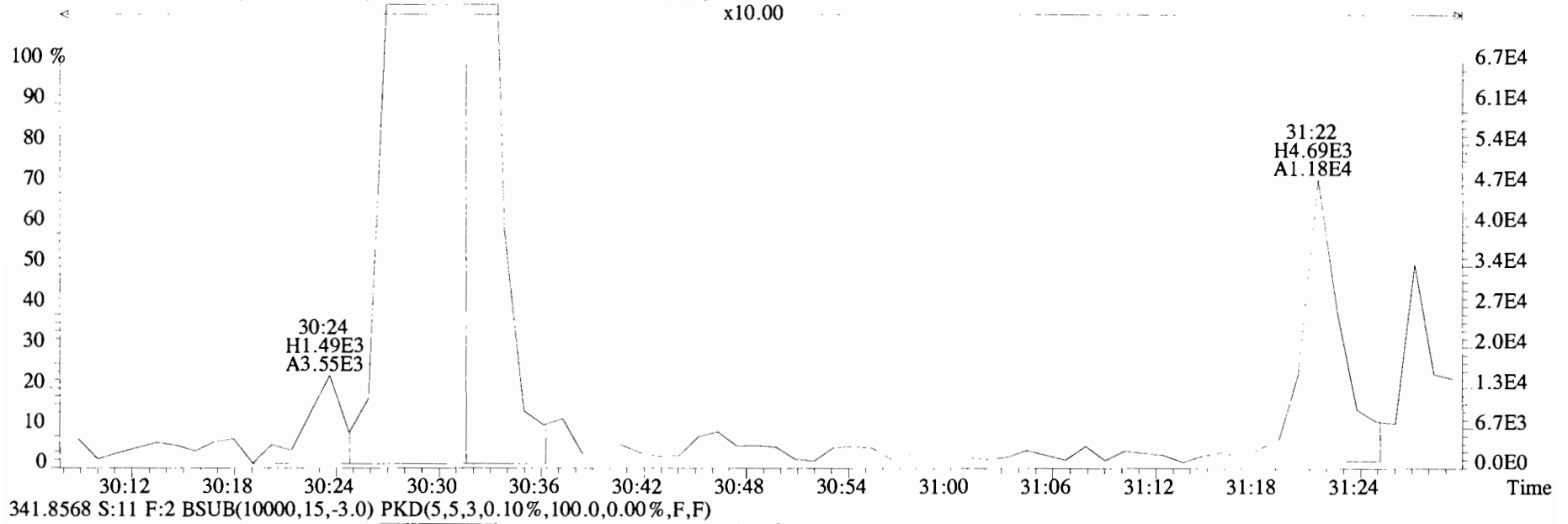
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



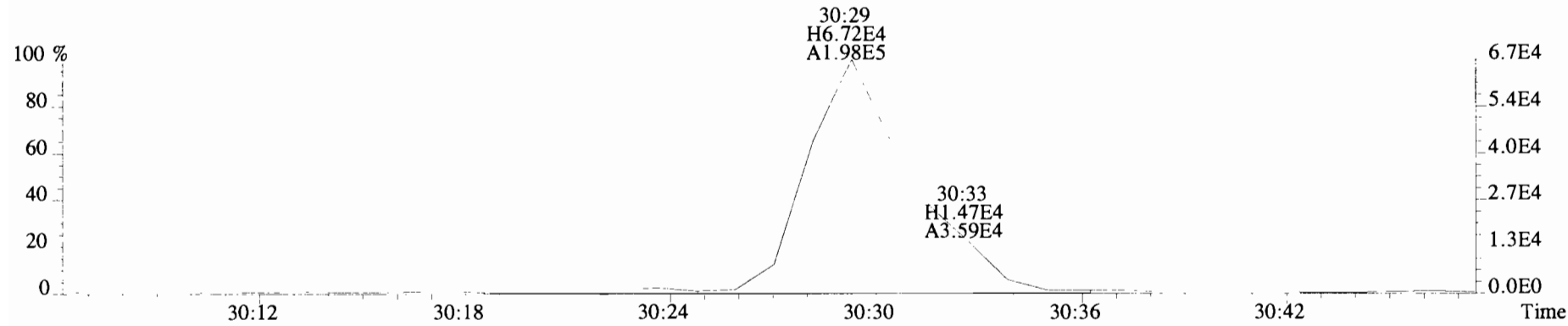
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



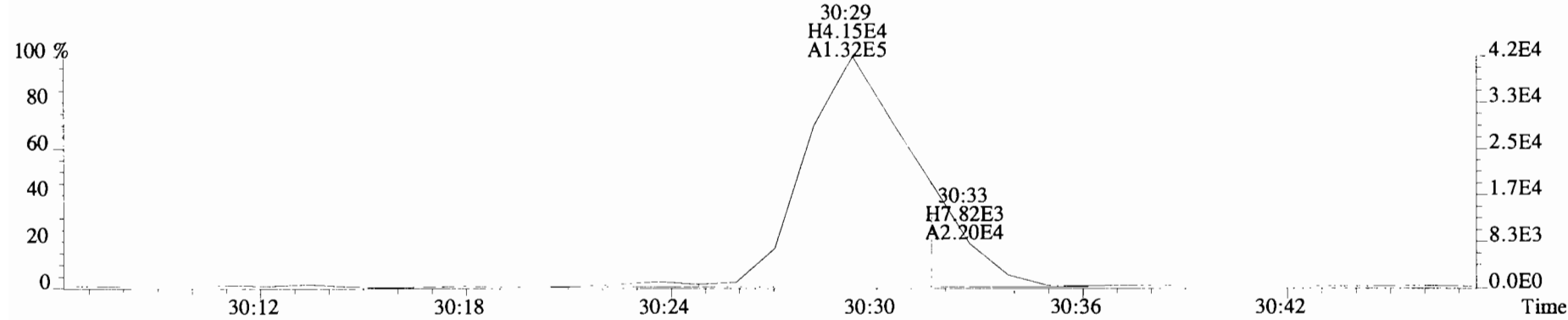
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



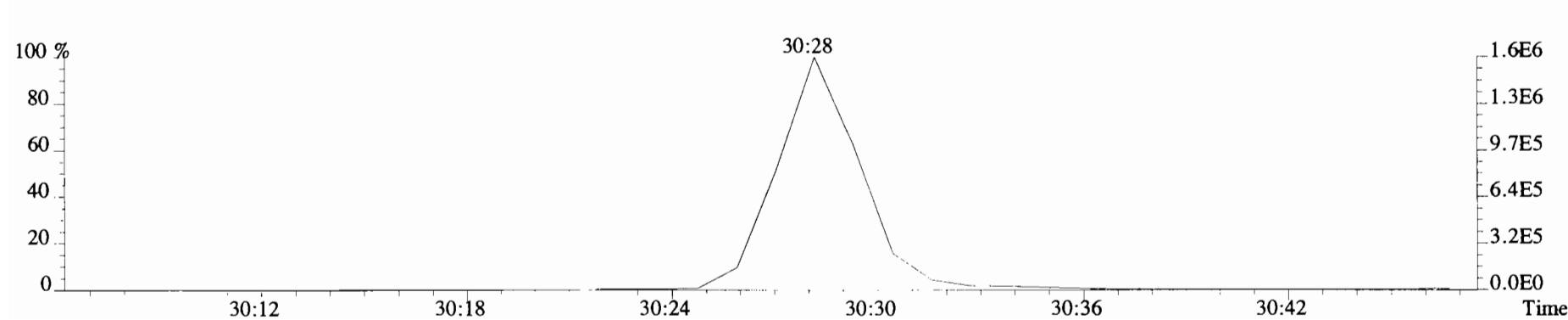
File:191101D1 #1-211 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



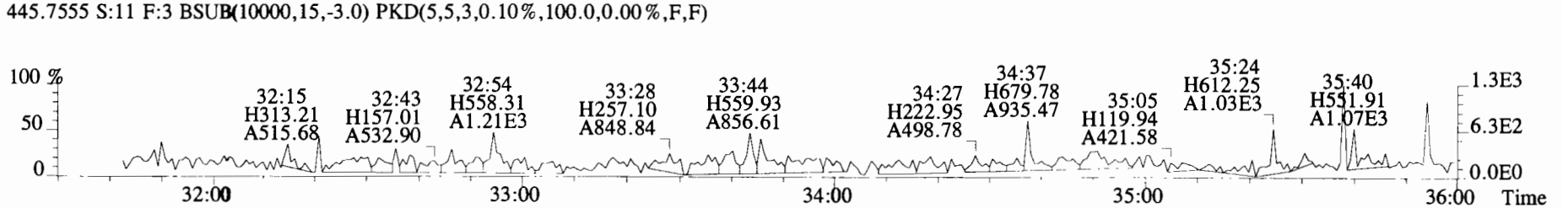
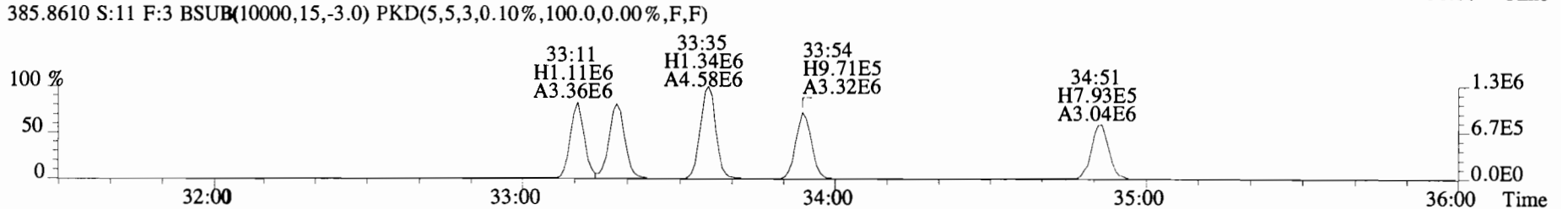
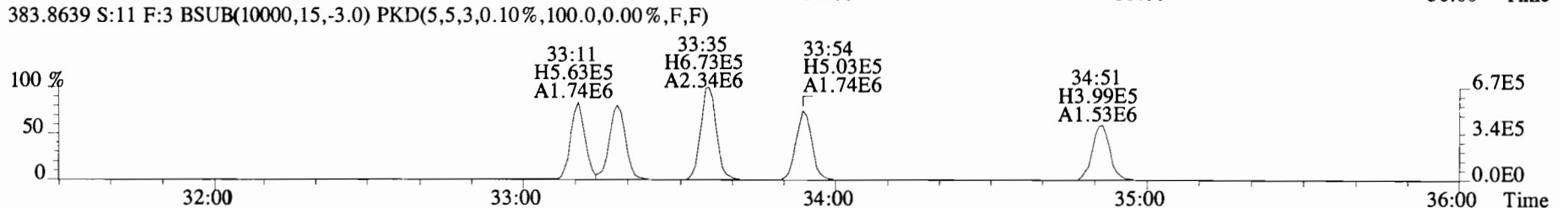
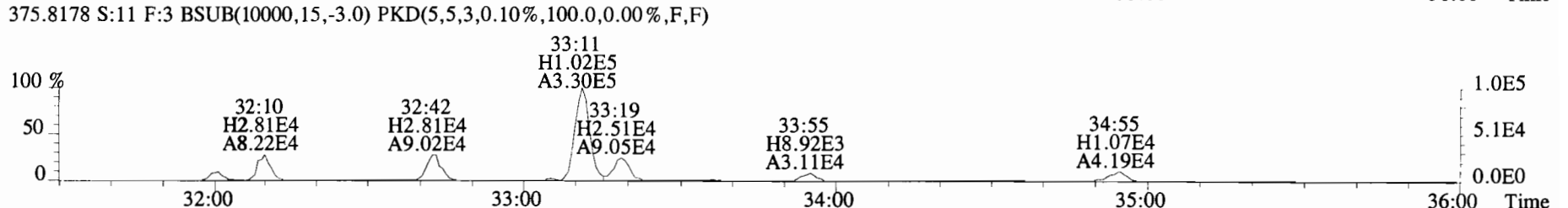
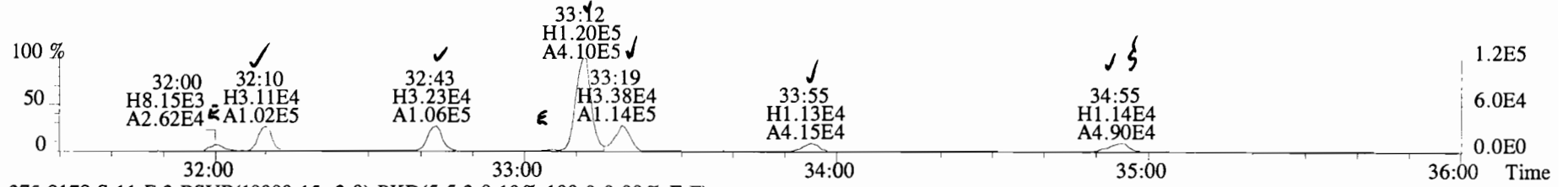
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



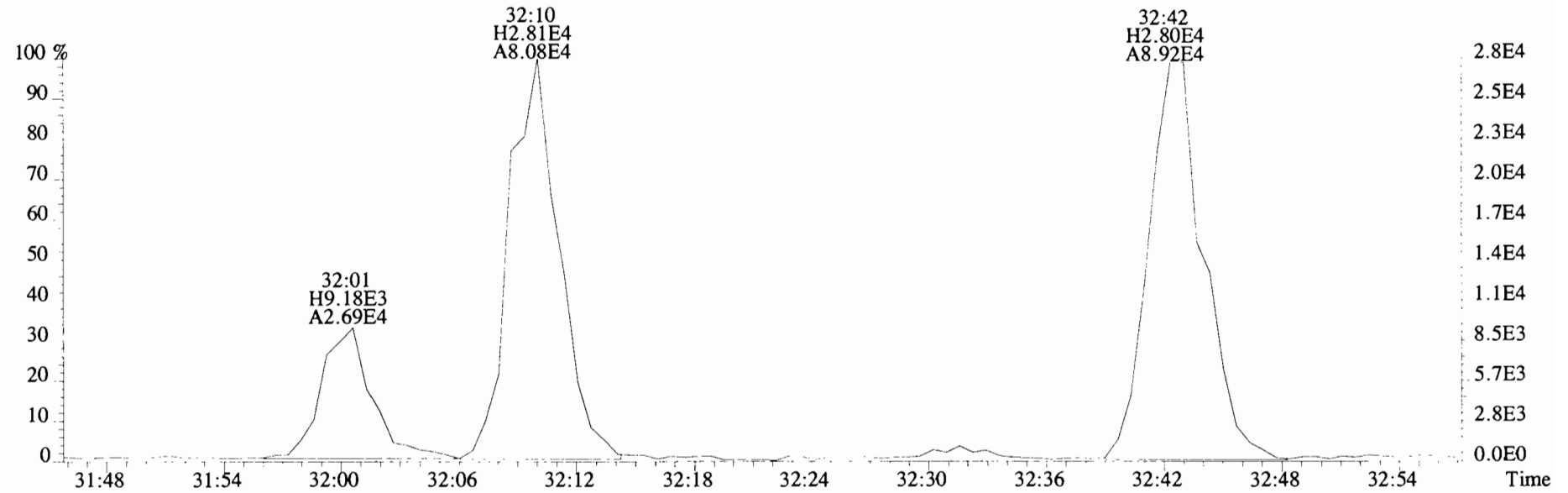
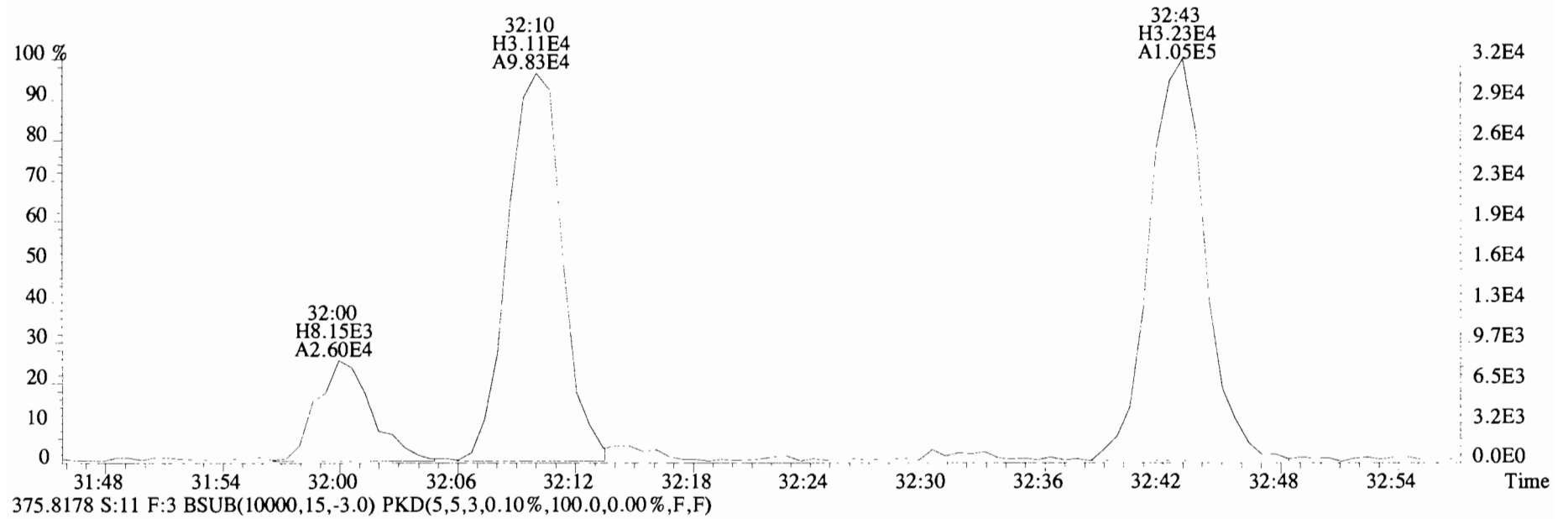
351.9000 S:11 F:2



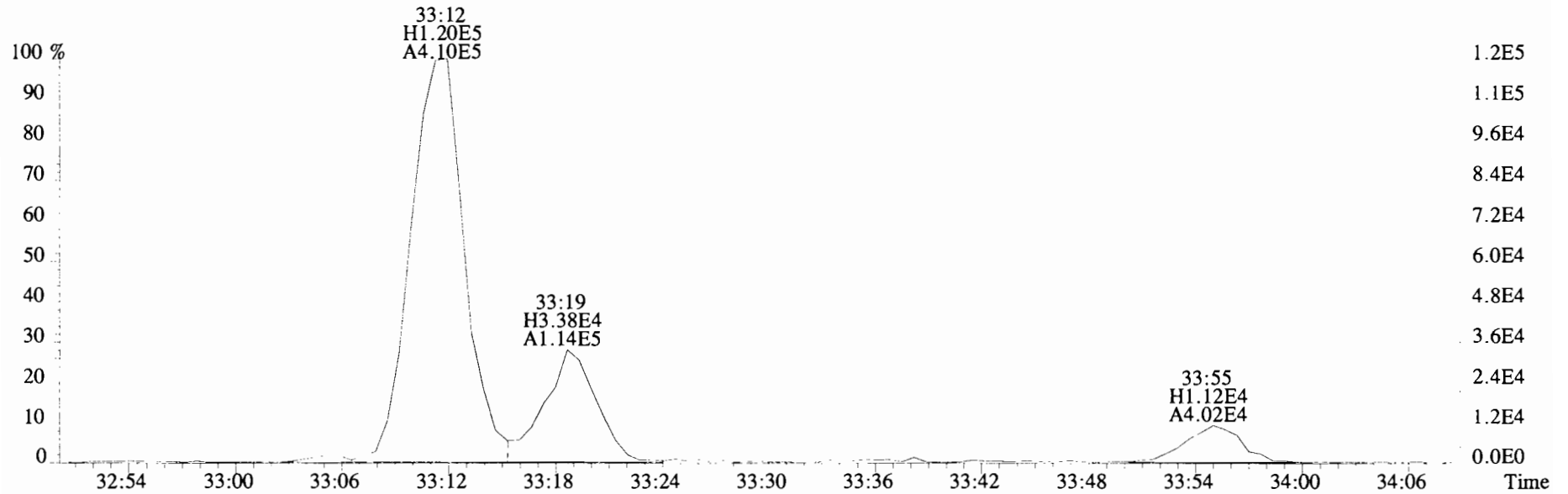
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



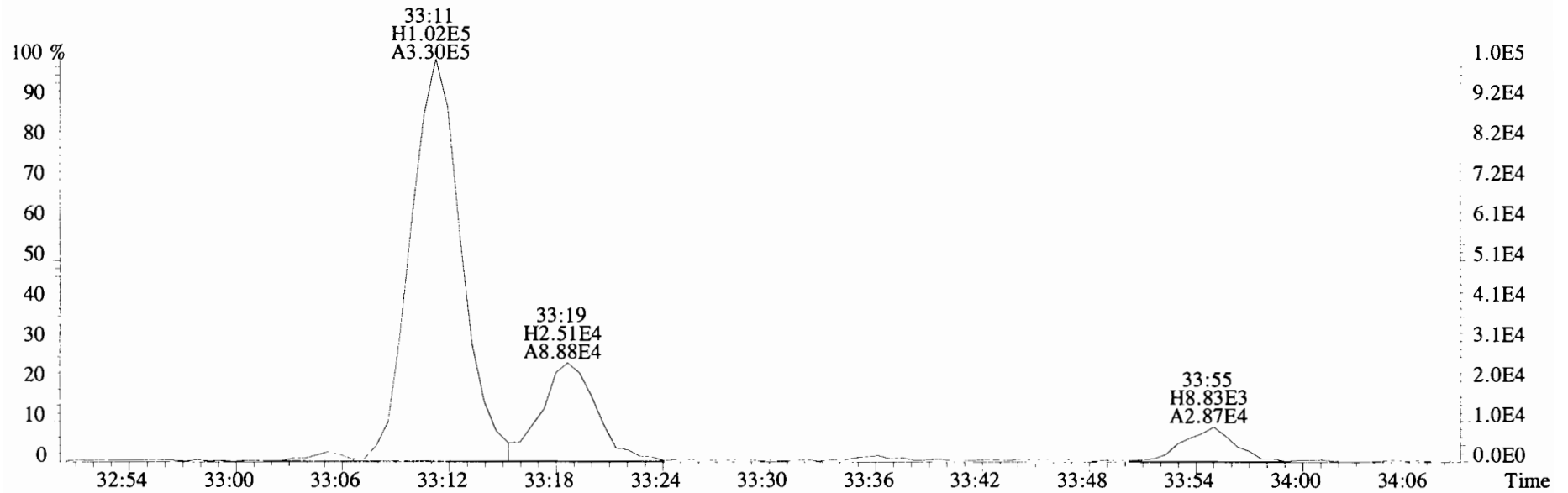
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



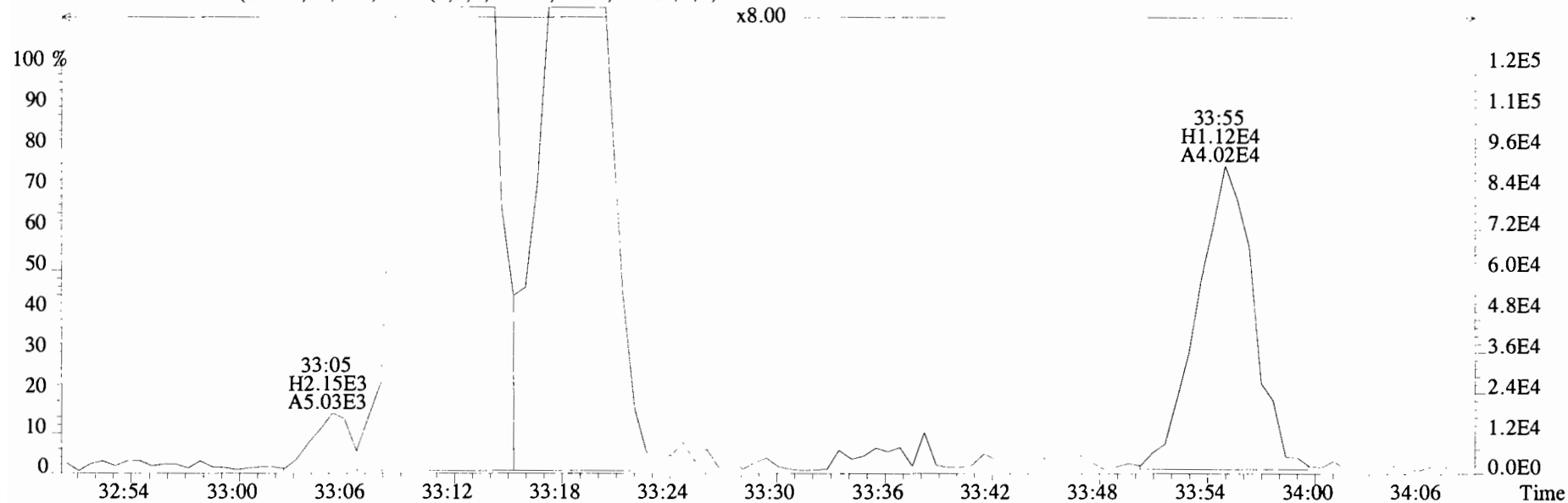
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



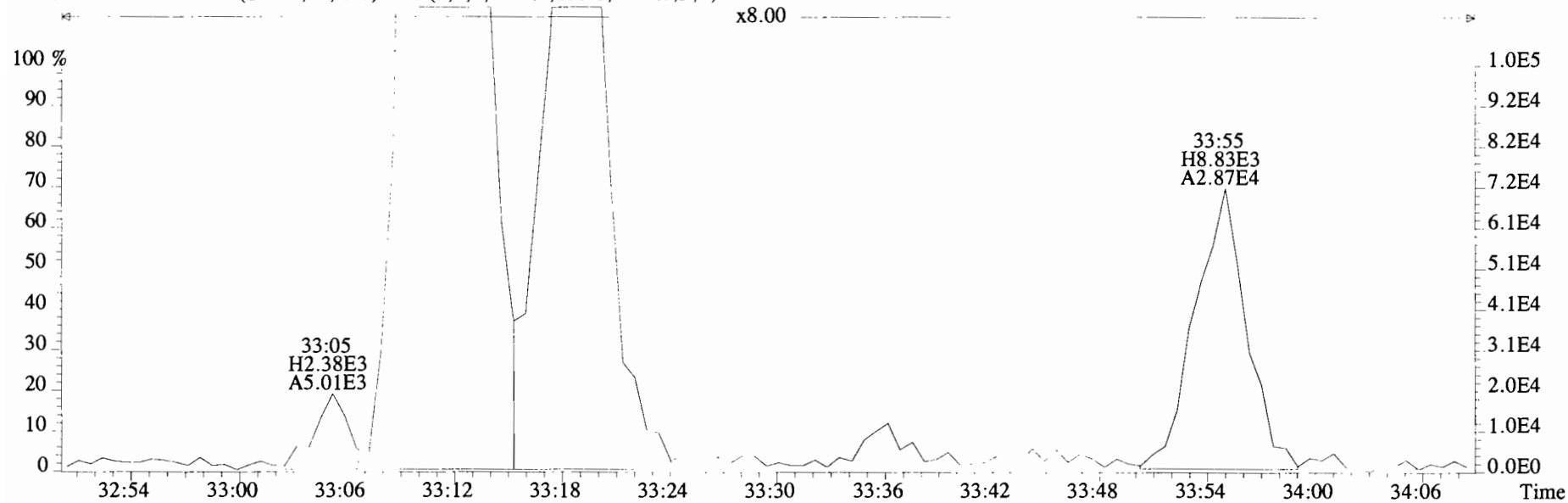
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



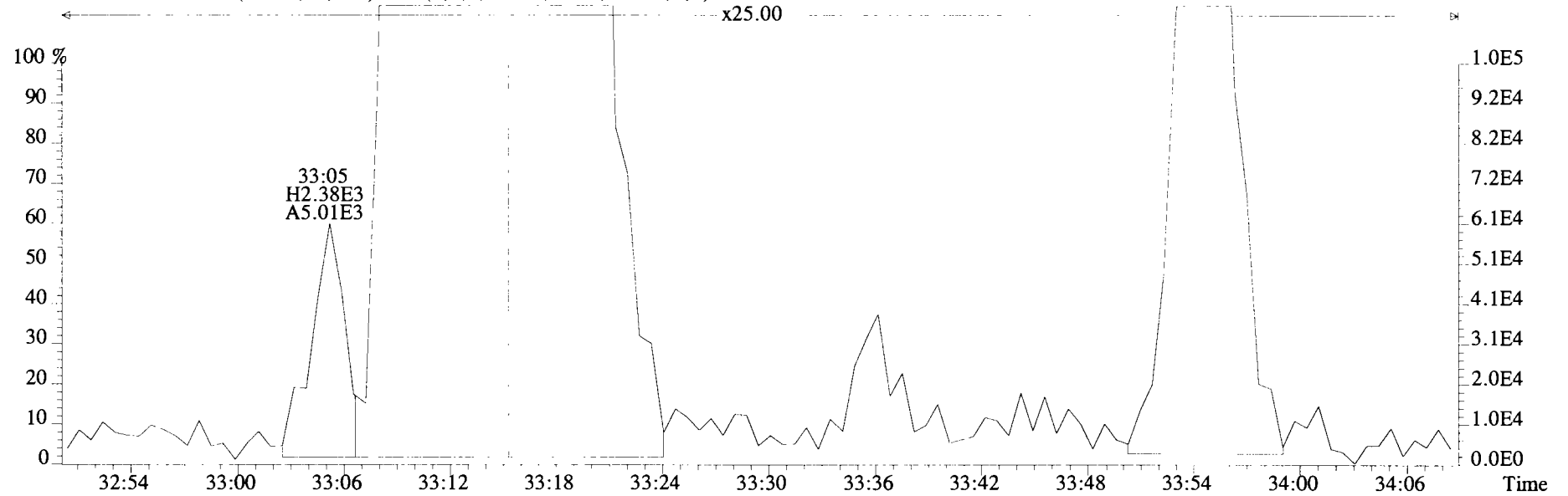
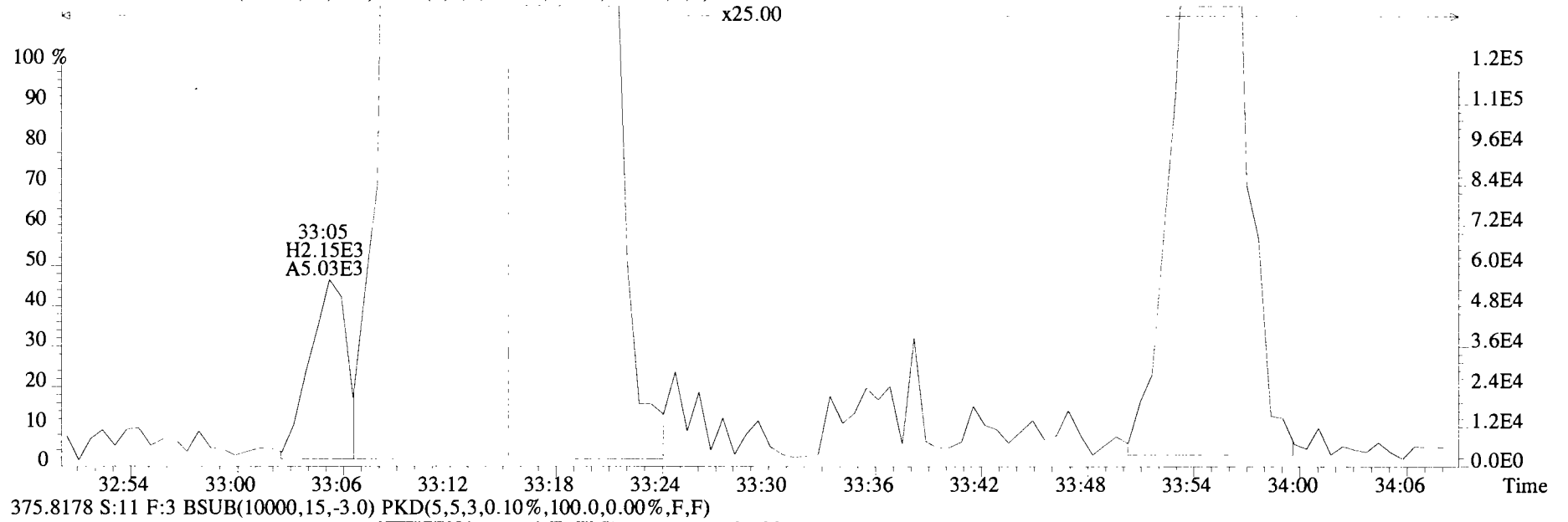
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



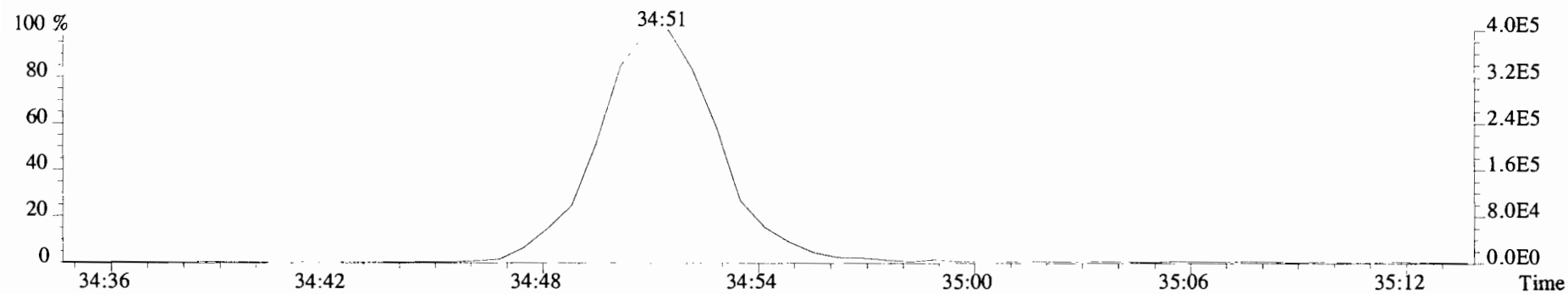
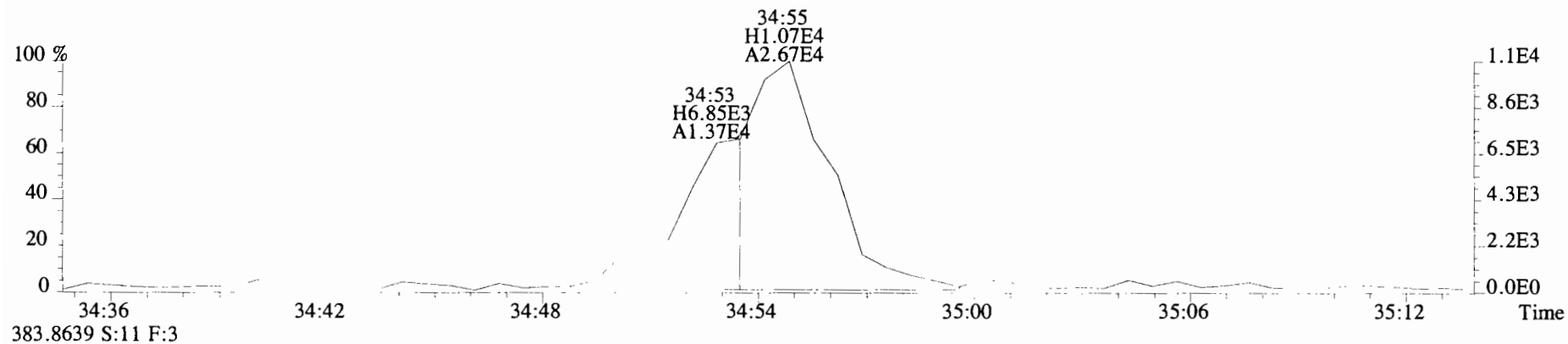
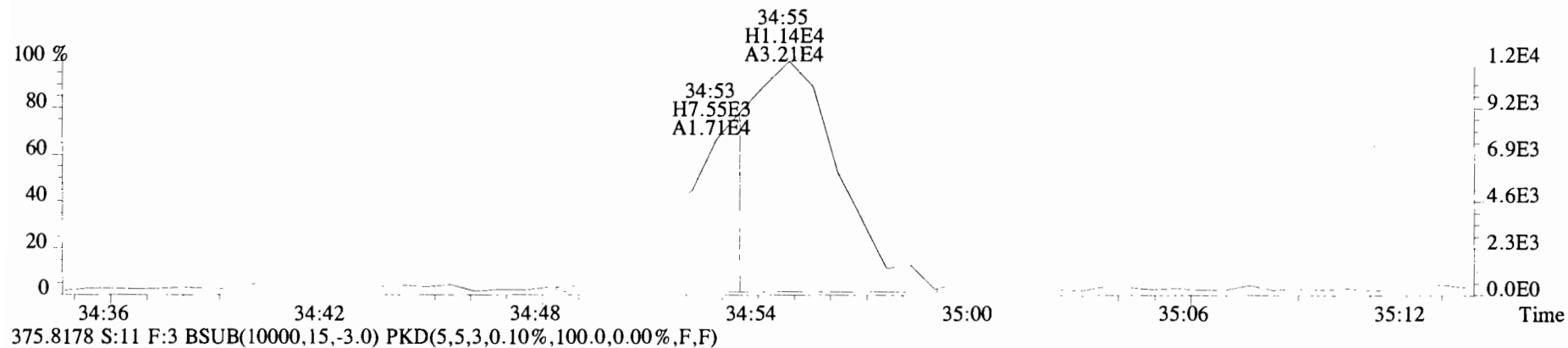
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



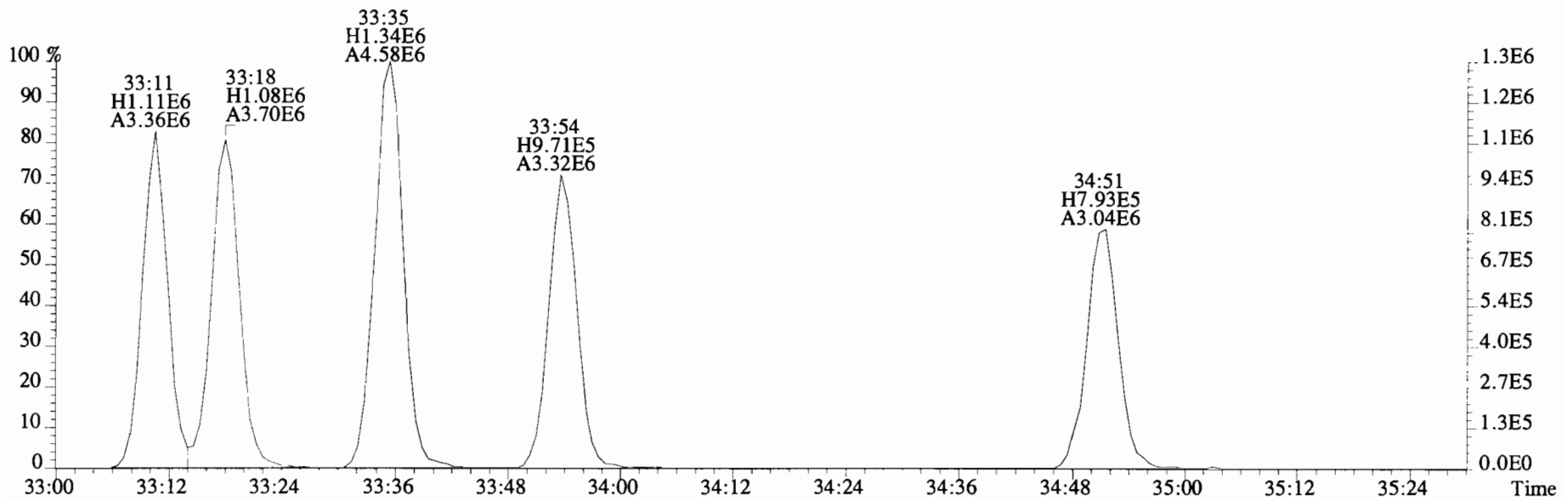
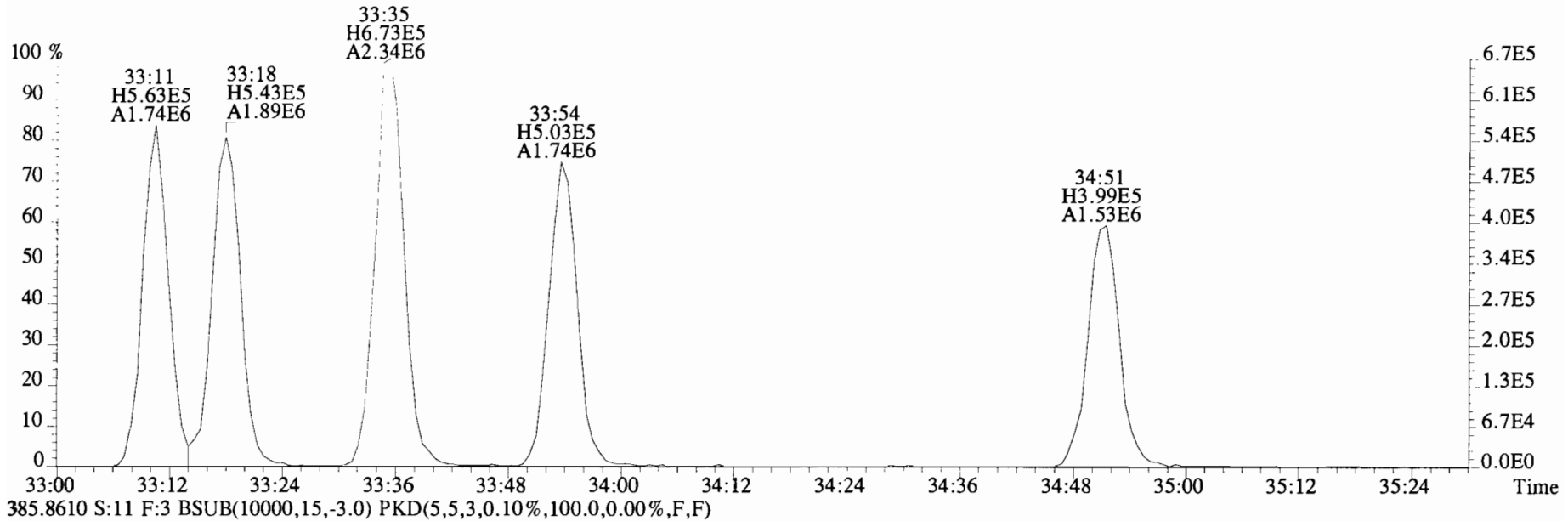
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



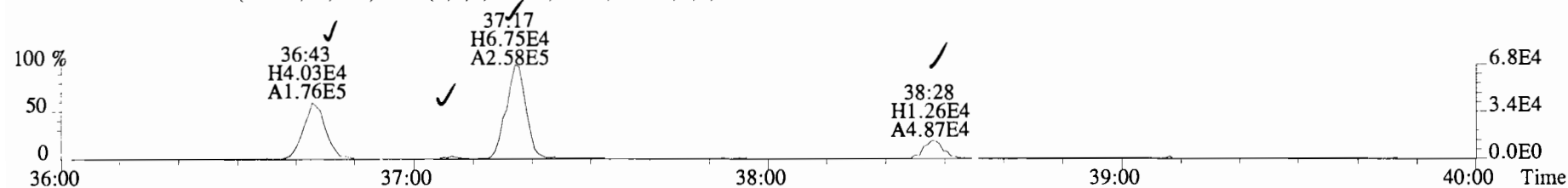
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



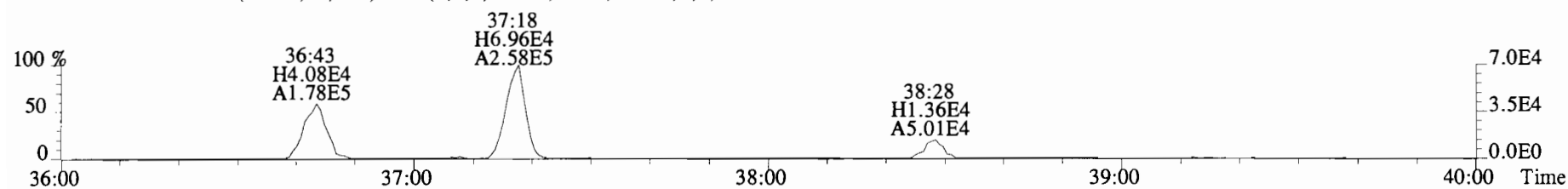
File:191101D1 #1-384 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



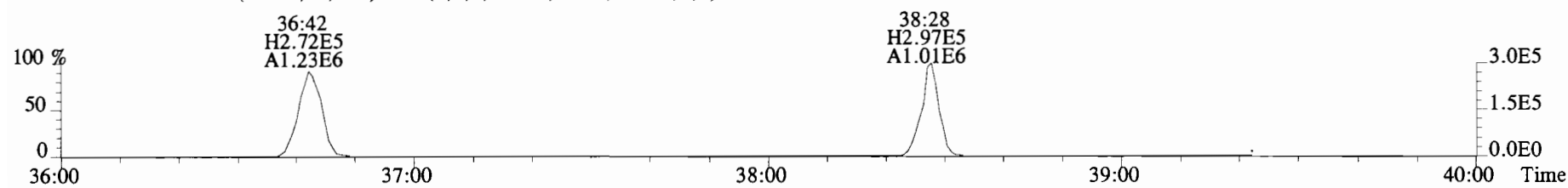
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
 407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



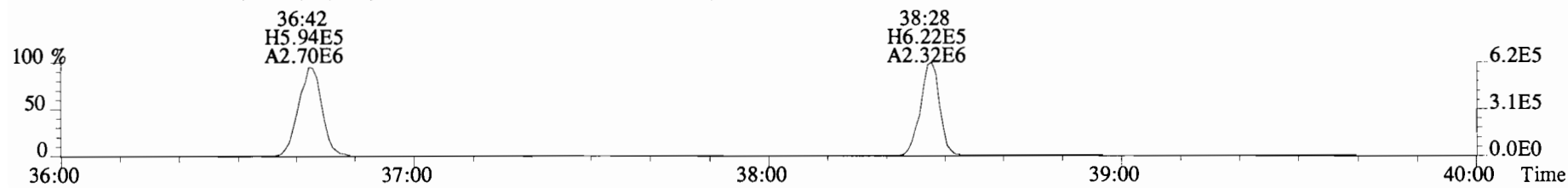
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



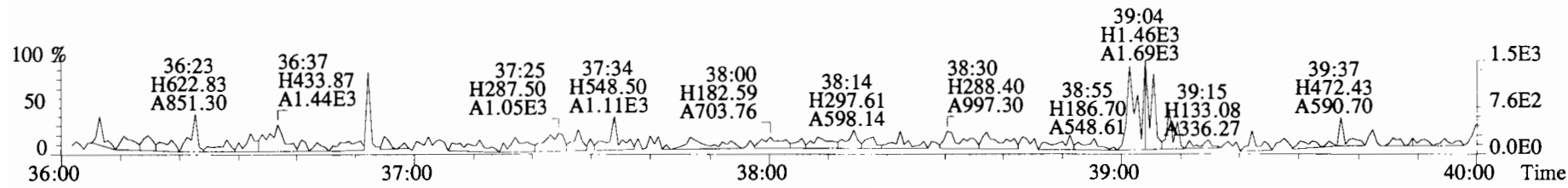
417.8253 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



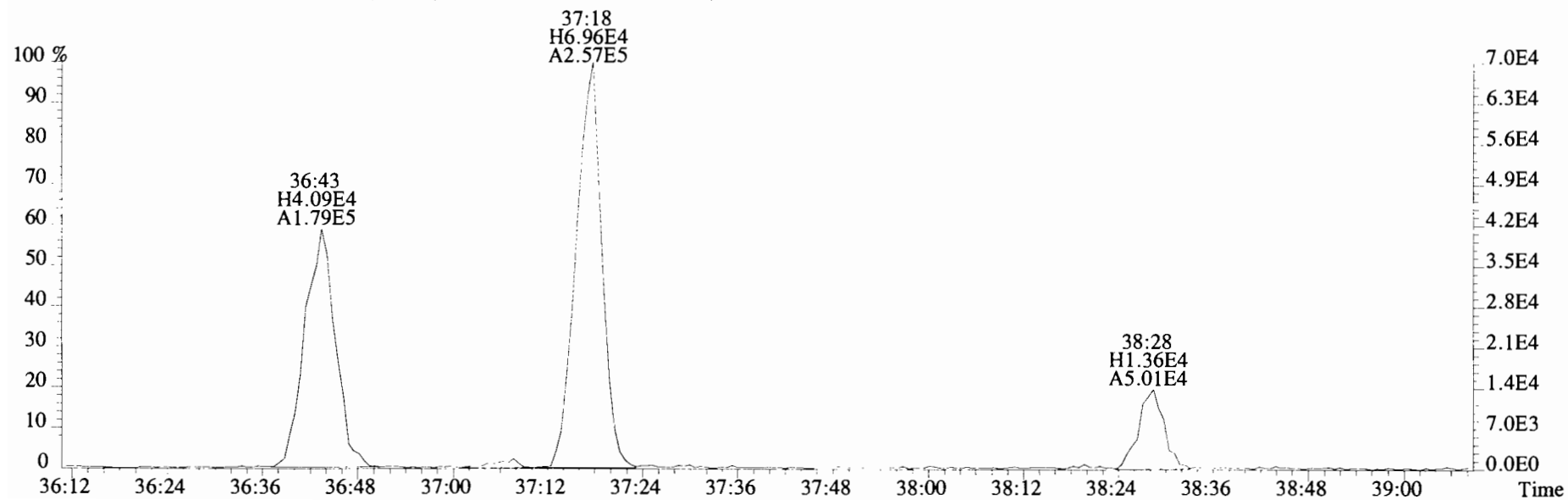
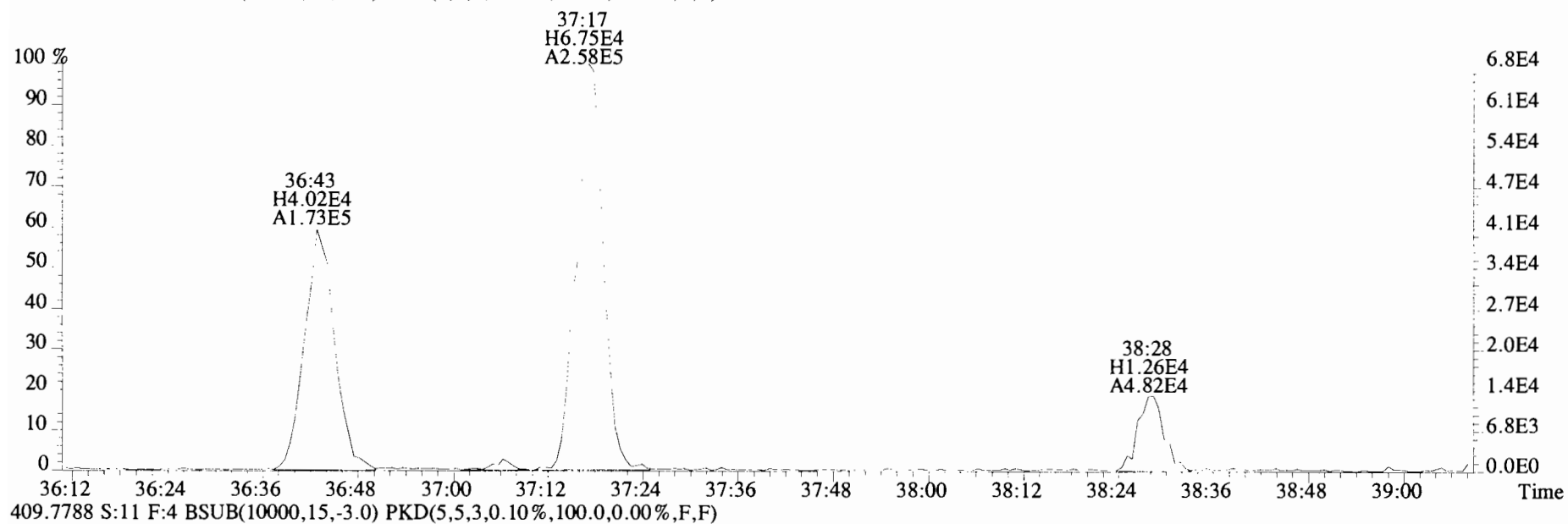
419.8220 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



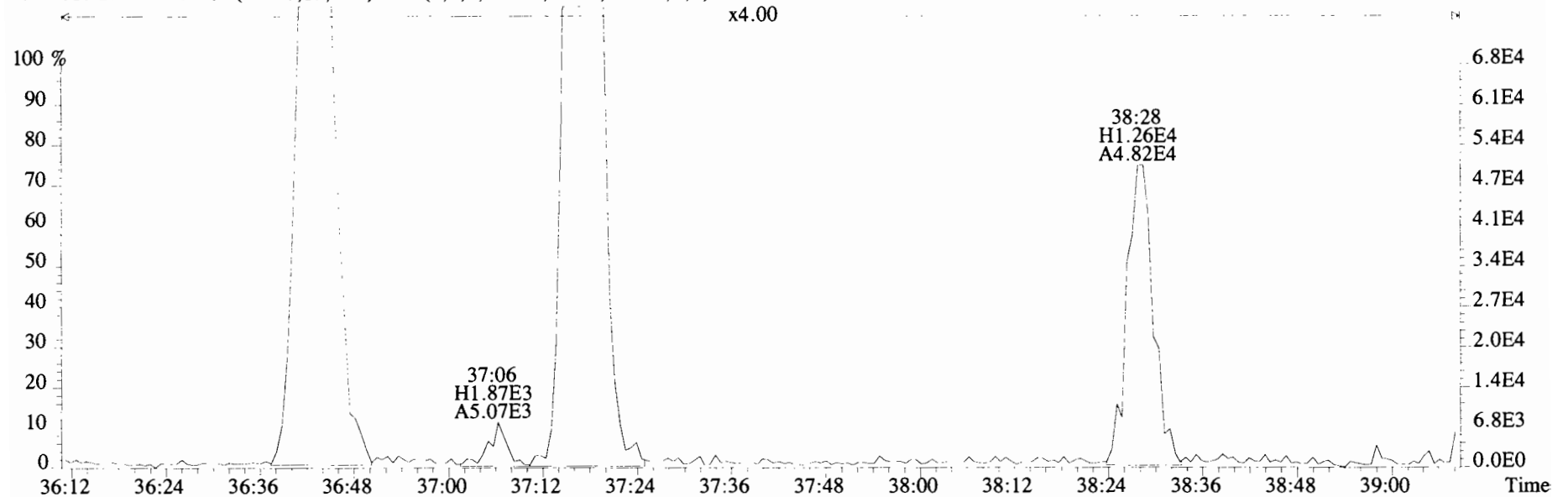
479.7165 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



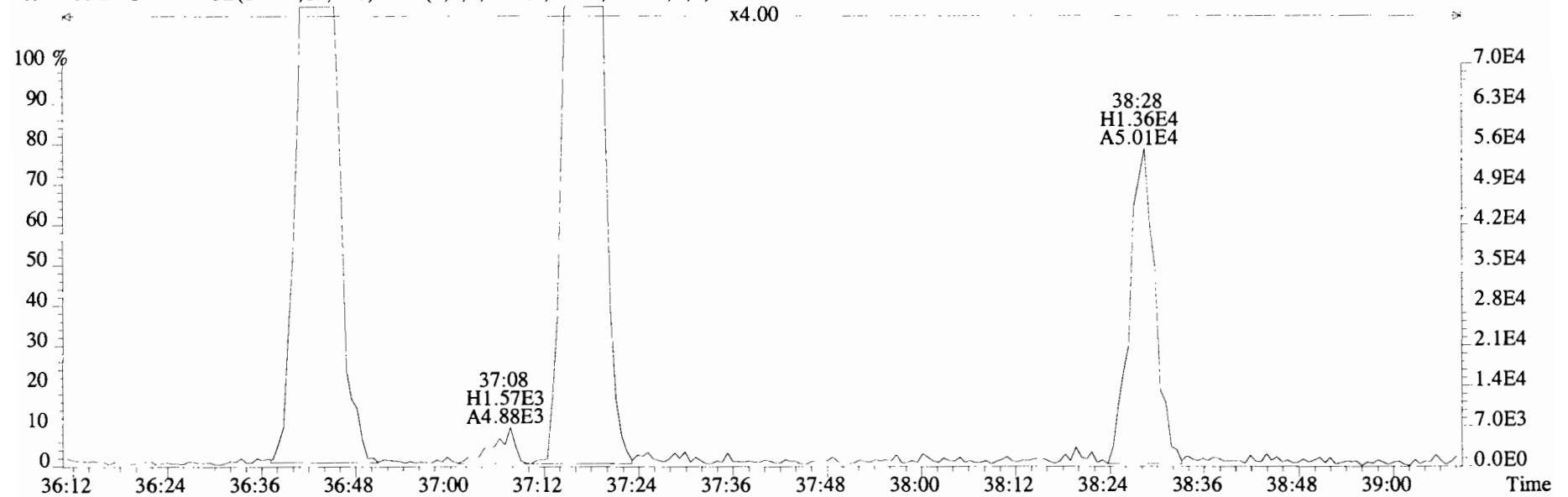
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



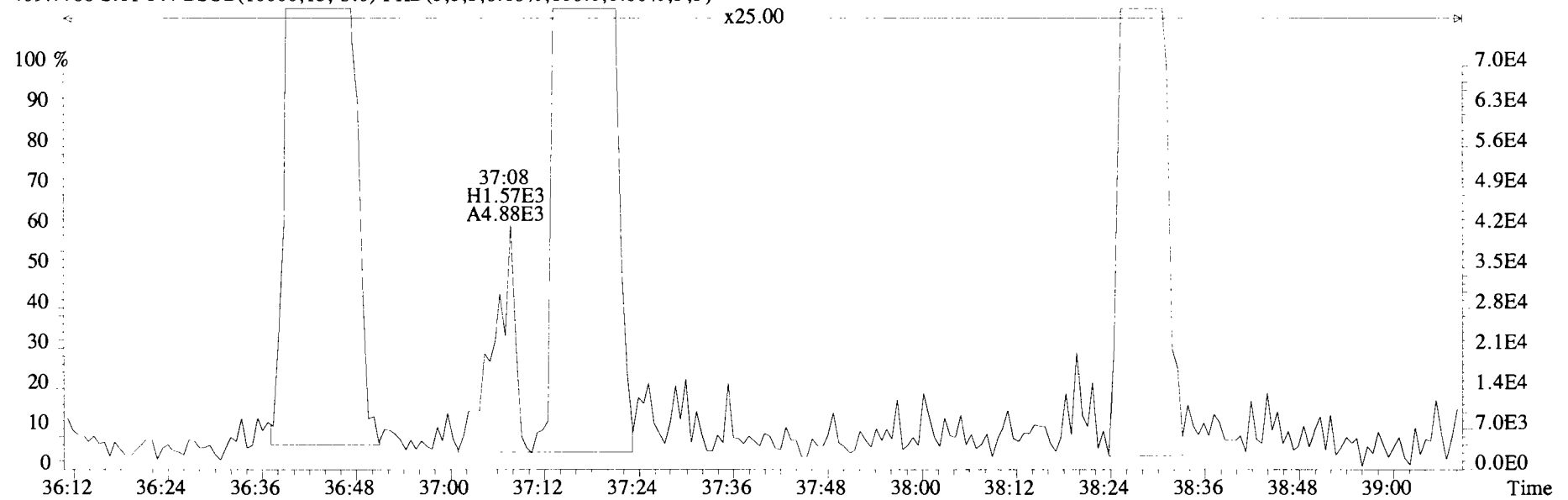
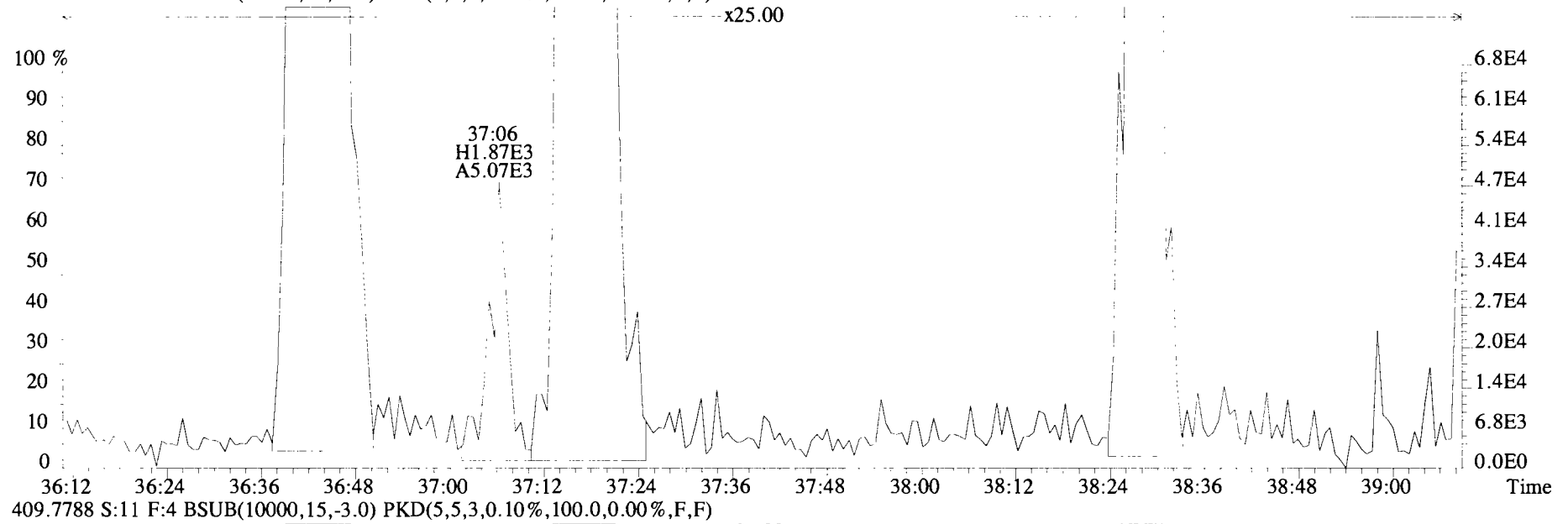
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



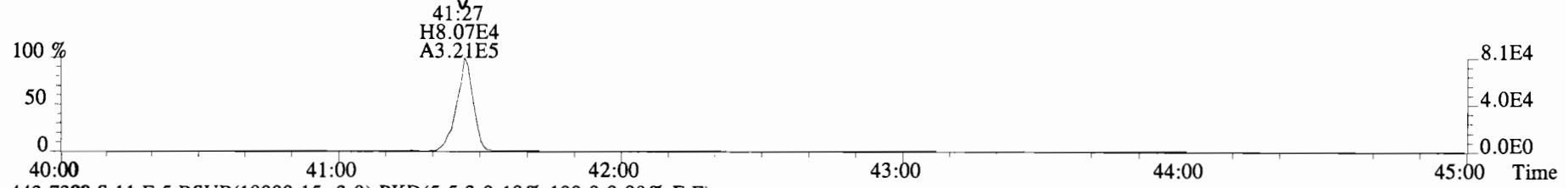
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



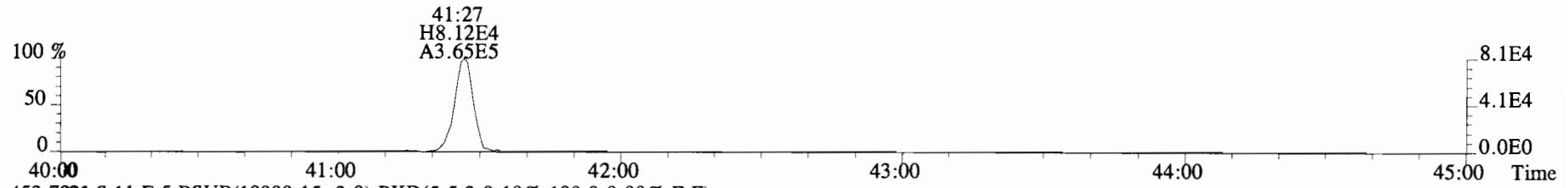
File:191101D1 #1-356 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



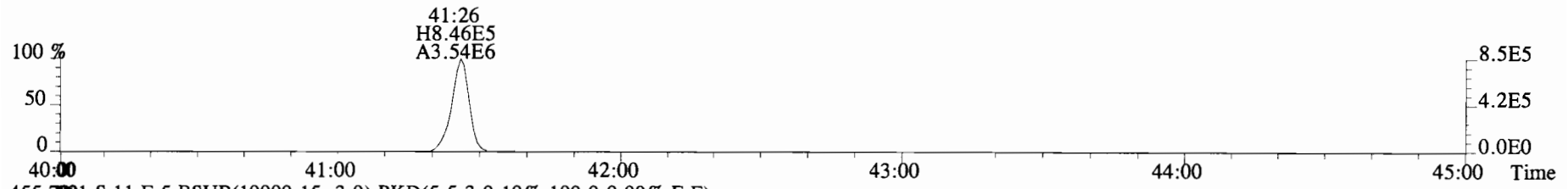
File:191101D1 #1-431 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



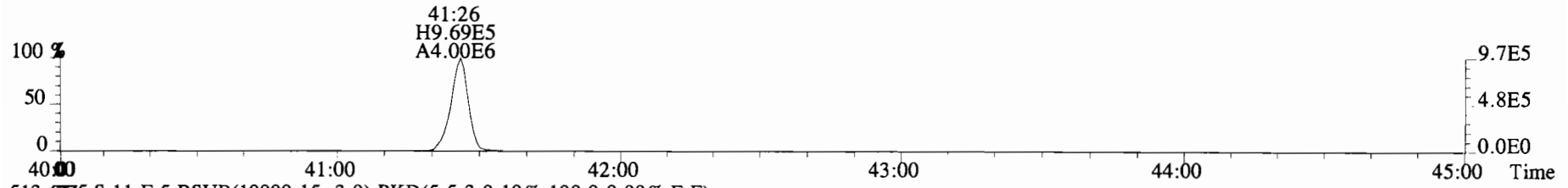
443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



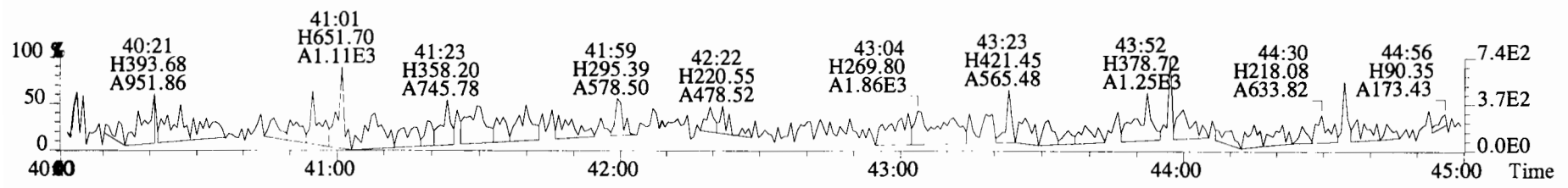
453.7831 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



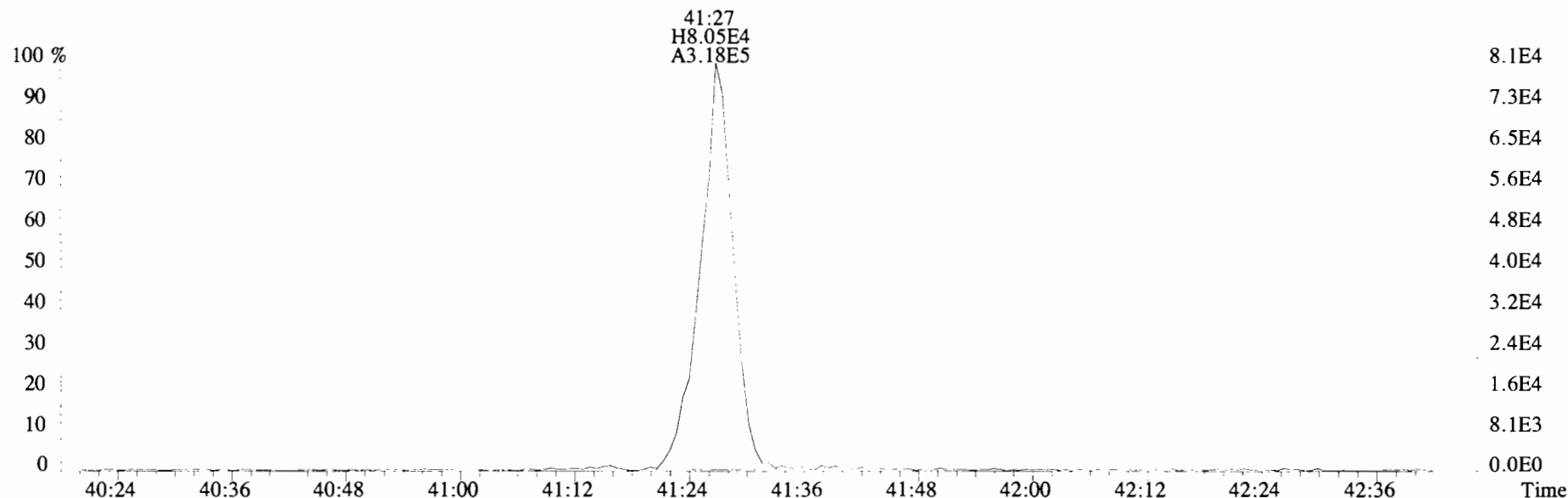
455.7801 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



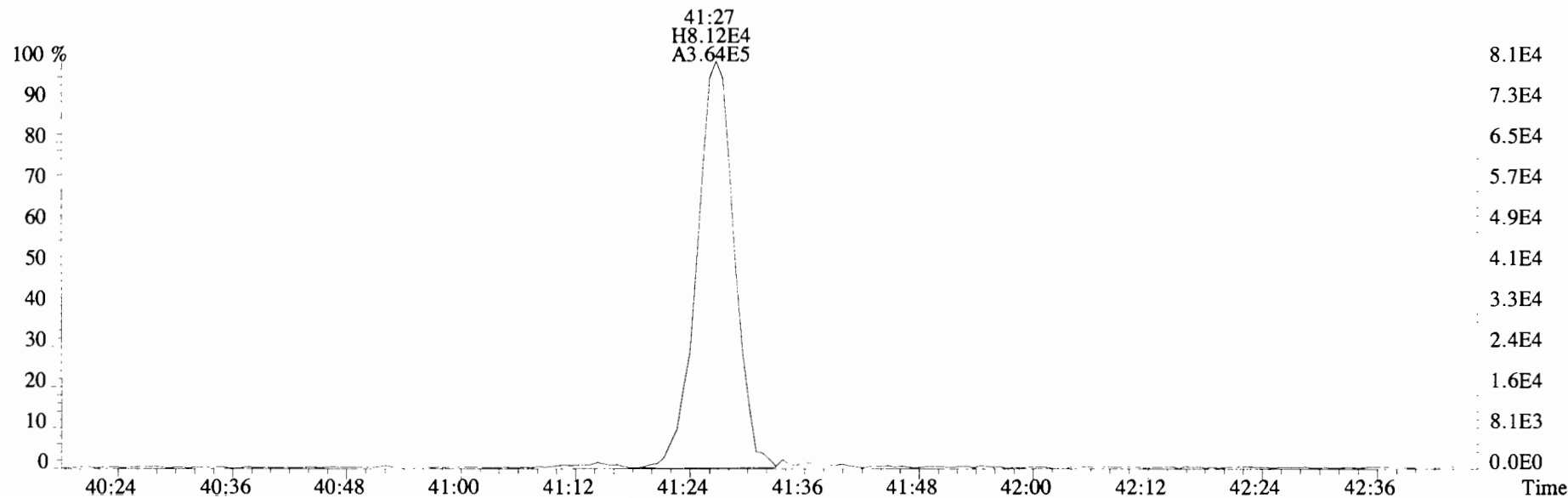
513.6775 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191101D1 #1-431 Acq: 1-NOV-2019 21:57:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-14RE1 PDI-084SC-B-06-08-191002 16.58 Exp:OCDD_DB5
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-095SC-B-00-02-19107 Filename: 191120D1 S:13 Acq:20-NOV-19 23:34:02
 Lab ID: 1903565-15RE2 GC Column ID: ZB-SMS ICal: 1613VG7-10-9-19 wt/vol:10.009 ✓

ConCal: ST191120D1-1
 EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	9.47e+04	0.80 y	0.91	26:11	2.2134		* 2.5		*	Total Tetra-Dioxins	24.6	26.7	*	*	
1,2,3,7,8-PeCDD	6.90e+04	0.56 y	0.90	30:41	1.9923		* 2.5		*	Total Penta-Dioxins	18.8	28.0	*	*	
1,2,3,4,7,8-HxCDD	7.56e+04	1.25 y	1.10	33:59	2.3044		* 2.5		*	Total Hexa-Dioxins	139	139	*	*	
1,2,3,6,7,8-HxCDD	4.64e+05	1.20 y	0.94	34:06	14.926		* 2.5		*	Total Hepta-Dioxins	870	870	*	*	
1,2,3,7,8,9-HxCDD	2.08e+05	1.26 y	0.96	34:23	6.6072		* 2.5		*	Total Tetra-Furans	164	172	*	*	* P
1,2,3,4,6,7,8-HpCDD	9.29e+06	1.01 y	0.98	37:50	341.03		* 2.5		*	Total Penta-Furans	273.04	273.04	*	*	* P
OCDD	1.31e+08	0.89 y	0.96	41:07	5663.3		* 2.5		*	Total Hexa-Furans	473	473	*	*	* P
2,3,7,8-TCDF	3.00e+06	0.76 y	0.95	25:24	45.857	OK	* 2.5		*	Total Hepta-Furans	491	491	*	*	
1,2,3,7,8-PeCDF	3.94e+06	1.60 y	0.96	29:31	71.422		* 2.5		*						
2,3,4,7,8-PeCDF	1.29e+06	1.51 y	1.01	30:23	22.569		* 2.5		*						
1,2,3,4,7,8-HxCDF	9.94e+06	1.18 y	1.18	33:06	208.80		* 2.5		*						
1,2,3,6,7,8-HxCDF	3.01e+06	1.20 y	1.07	33:14	63.870		* 2.5		*						
2,3,4,6,7,8-HxCDF	8.14e+05	1.18 y	1.11	33:49	17.890		* 2.5		*						
1,2,3,7,8,9-HxCDF	3.12e+05	1.21 y	1.06	34:46	8.0703		* 2.5		*						
1,2,3,4,6,7,8-HpCDF	7.22e+06	0.96 y	1.13	36:37	214.96		* 2.5		*						
1,2,3,4,7,8,9-HpCDF	1.57e+06	0.96 y	1.28	38:23	45.724		* 2.5		*						
OCDF	1.14e+07	0.89 y	0.95	41:20	402.88		* 2.5		*						
IS	13C-2,3,7,8-TCDD	9.45e+06	0.78 y	1.10	26:11	201.76				Rec	101				
IS	13C-1,2,3,7,8-PeCDD	7.67e+06	0.62 y	0.88	30:40	203.51				Qual	102				
IS	13C-1,2,3,4,7,8-HxCDD	5.95e+06	1.30 y	0.64	33:59	202.39					101				
IS	13C-1,2,3,6,7,8-HxCDD	6.62e+06	1.29 y	0.86	34:05	169.01					84.6				
IS	13C-1,2,3,7,8,9-HxCDD	6.54e+06	1.23 y	0.81	34:23	176.95					88.6				
IS	13C-1,2,3,4,6,7,8-HpCDD	5.56e+06	1.05 y	0.65	37:50	185.52					92.8				
IS	13C-OCDD	9.68e+06	0.88 y	0.58	41:06	364.53					91.2				
IS	13C-2,3,7,8-TCDF	1.38e+07	0.78 y	1.03	25:24	195.95					98.1				
IS	13C-1,2,3,7,8-PeCDF	1.15e+07	1.56 y	0.85	29:31	197.63					98.9				
IS	13C-2,3,4,7,8-PeCDF	1.13e+07	1.56 y	0.85	30:24	195.63					97.9				
IS	13C-1,2,3,4,7,8-HxCDF	8.08e+06	0.52 y	0.83	33:05	212.20					106				
IS	13C-1,2,3,6,7,8-HxCDF	8.81e+06	0.50 y	1.03	33:13	186.04					93.1				
IS	13C-2,3,4,6,7,8-HxCDF	8.17e+06	0.52 y	0.95	33:49	187.01					93.6				
IS	13C-1,2,3,7,8,9-HxCDF	7.27e+06	0.51 y	0.83	34:46	191.82					96.0				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.95e+06	0.40 y	0.76	36:36	171.48					85.8				
IS	13C-1,2,3,4,7,8,9-HpCDF	5.37e+06	0.42 y	0.58	38:22	201.86					101				
IS	13C-OCDF	1.20e+07	0.90 y	0.69	41:20	379.96					95.1				
C/Up	37Cl-2,3,7,8-TCDD	3.90e+06		1.20	26:12	76.146					95.3				
RS/RT	13C-1,2,3,4-TCDD	8.54e+06	0.84 y	1.00	25:37	199.82									
RS	13C-1,2,3,4-TCDF	1.36e+07	0.79 y	1.00	24:12	199.82									
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.15e+06	0.51 y	1.00	33:30	199.82									

Integrations
 by DB
 Analyst: DB
 Reviewed
 by CT
 Analyst: CT
 Date: 12/2/19
 Date: 12/03/19

Totals class: TCDD EMPC

Entry #: 19

Run: 14 File: 191120D1 S: 13 I: 1 F: 1
 Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 26.747

Unnamed Concentration: 24.534

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
22:49	2.922e+05	3.638e+05	0.80	y	6.560e+05	15.330	
23:11	3.529e+04	5.130e+04	0.69	y	8.659e+04	2.0236	
23:36	2.069e+04	2.514e+04	0.82	y	4.582e+04	1.0709	
24:19	7.973e+03	1.013e+04	0.79	y	1.810e+04	0.42300	
24:32	1.928e+04	1.903e+04	1.01	n	3.369e+04	0.78723	
24:42	2.164e+04	2.591e+04	0.84	y	4.755e+04	1.1112	
24:54	6.220e+03	7.727e+03	0.80	y	1.395e+04	0.32594	
25:07	1.263e+04	1.179e+04	1.07	n	2.086e+04	0.48750	
25:17	8.109e+03	1.102e+04	0.74	y	1.913e+04	0.44695	
25:24	4.025e+03	2.449e+03	1.64	n	4.334e+03	0.10129	
25:36	8.228e+03	8.989e+03	0.92	n	1.591e+04	0.37182	
25:57	3.351e+04	3.909e+04	0.86	y	7.261e+04	1.6968	
26:11	4.204e+04	5.267e+04	0.80	y	9.471e+04	2.2134	2,3,7,8-TCDD
26:29	9.060e+03	8.637e+03	1.05	n	1.529e+04	0.35725	

Totals class: PeCDD EMPC

Entry #: 21

Run: 14 File: 191120D1 S: 13 I: 1 F: 2
 Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 28.038

Unnamed Concentration: 26.046

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:39	1.089e+05	1.802e+05	0.60	y	2.891e+05	8.3472
29:05	2.926e+04	3.827e+04	0.76	n	6.238e+04	1.8013
29:32	9.506e+04	1.293e+05	0.74	n	2.108e+05	6.0859
29:41	2.994e+04	4.865e+04	0.62	y	7.859e+04	2.2691
29:47	2.333e+04	3.793e+04	0.61	y	6.126e+04	1.7689
29:59	4.862e+04	7.711e+04	0.63	y	1.257e+05	3.6303
30:17	7.468e+03	8.912e+03	0.84	n	1.453e+04	0.41944
30:41	2.483e+04	4.417e+04	0.56	y	6.900e+04	1.9923
30:46	1.134e+04	1.598e+04	0.71	y	2.732e+04	0.78894
30:57	7.733e+03	4.229e+03	1.83	n	6.893e+03	0.19903
31:03	1.276e+04	1.562e+04	0.82	n	2.547e+04	0.73530

Totals class: HxCDD EMPC

Entry #: 23

Run: 14 File: 191120D1 S: 13 I: 1 F: 3
Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 139.17 Unnamed Concentration: 115.334

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
32:28	9.217e+05	7.443e+05	1.24	y	1.666e+06	52.686	
33:01	1.291e+05	9.844e+04	1.31	y	2.276e+05	7.1970	
33:18	9.047e+05	7.207e+05	1.26	y	1.625e+06	51.401	
33:24	3.983e+04	3.086e+04	1.29	y	7.069e+04	2.2356	
33:59	4.198e+04	3.362e+04	1.25	y	7.560e+04	2.3044	1,2,3,4,7,8-HxCDD
34:06	2.536e+05	2.108e+05	1.20	y	4.643e+05	14.926	1,2,3,6,7,8-HxCDD
34:18	3.087e+04	2.649e+04	1.17	y	5.736e+04	1.8140	
34:23	1.160e+05	9.181e+04	1.26	y	2.078e+05	6.6072	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 14 File: 191120D1 S: 13 I: 1 F: 4

Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 870.24

Unnamed Concentration: 529.212

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:00	7.194e+06	7.220e+06	1.00 y	1.441e+07	529.21
37:50	4.675e+06	4.613e+06	1.01 y	9.288e+06	341.03 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 14 File: 191120D1 S: 13 I: 1 F: 1
 Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 172.07 Unnamed Concentration: 126.213

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
20:42	3.331e+04	4.470e+04	0.75	y	7.801e+04	1.1909	
21:16	7.294e+04	9.851e+04	0.74	y	1.715e+05	2.6174	
21:53	3.490e+05	4.651e+05	0.75	y	8.141e+05	12.428	
22:26	1.281e+05	1.789e+05	0.72	y	3.070e+05	4.6873	
22:47	5.023e+05	6.465e+05	0.78	y	1.149e+06	17.538	
23:13	3.010e+05	3.928e+05	0.77	y	6.938e+05	10.592	
23:21	2.051e+04	2.556e+04	0.80	y	4.606e+04	0.70321	
23:30	6.942e+04	8.776e+04	0.79	y	1.572e+05	2.3996	
23:51	1.808e+04	2.081e+04	0.87	y	3.889e+04	0.59376	
23:58	2.308e+04	2.648e+04	0.87	y	4.957e+04	0.75672	
24:05	1.770e+05	2.399e+05	0.74	y	4.169e+05	6.3638	
24:12	1.802e+05	2.443e+05	0.74	y	4.245e+05	6.4800	
24:37	1.221e+06	1.639e+06	0.74	y	2.860e+06	43.658	
24:52	6.528e+04	7.798e+04	0.84	y	1.433e+05	2.1869	
25:18	1.177e+05	1.748e+05	0.67	y	2.925e+05	4.4656	
25:24	1.296e+06	1.708e+06	0.76	y	3.004e+06	45.857	2,3,7,8-TCDF
25:44	8.168e+04	8.838e+04	0.92	n	1.564e+05	2.3880	
25:57	1.542e+04	2.150e+04	0.72	y	3.692e+04	0.56364	
26:43	1.719e+04	2.302e+04	0.75	y	4.021e+04	0.61384	
26:54	1.490e+04	1.778e+04	0.84	y	3.268e+04	0.49887	P
27:11	2.085e+05	2.030e+05	1.03	n	3.594e+05	5.4862	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 14 File: 191120D1 S: 13 I: 1 F: 1
Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 52.493 Unnamed Concentration: 52.493

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:11	1.812e+06	1.136e+06	1.60 y	2.948e+06	52.493

Totals class: PeCDF EMPC

Entry #: 31

Run: 14 File: 191120D1 S: 13 I: 1 F: 2
 Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 220.55 Unnamed Concentration: 126.554

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:28	7.586e+04	4.892e+04	1.55	y	1.248e+05	2.2222
28:36	1.964e+06	1.228e+06	1.60	y	3.192e+06	56.841
29:09	4.380e+05	2.745e+05	1.60	y	7.126e+05	12.690
29:21	2.383e+05	1.515e+05	1.57	y	3.897e+05	6.9405
29:31	2.425e+06	1.512e+06	1.60	y	3.937e+06	71.422
29:46	8.341e+05	5.158e+05	1.62	y	1.350e+06	24.039
30:19	3.088e+04	2.174e+04	1.42	y	5.263e+04	0.93725
30:23	7.754e+05	5.149e+05	1.51	y	1.290e+06	22.569
30:27	7.290e+05	4.357e+05	1.67	y	1.165e+06	20.742
31:17	7.254e+04	4.775e+04	1.52	y	1.203e+05	2.1421

Totals class: HxCDF EMPC

Entry #: 33

Run: 14 File: 191120D1 S: 13 I: 1 F: 3
 Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

Total Concentration: 472.76

Unnamed Concentration: 174.125

RT	m1 Resp	m2 Resp	RA		Resp Concentration		Name
31:55	4.187e+05	3.556e+05	1.18	y	7.743e+05	17.347	
32:05	1.640e+06	1.349e+06	1.22	y	2.989e+06	66.966	
32:26	4.229e+04	3.031e+04	1.39	y	7.260e+04	1.6265	
32:38	1.817e+06	1.528e+06	1.19	y	3.346e+06	74.959	
32:59	4.132e+04	3.824e+04	1.08	y	7.956e+04	1.7825	
33:06	5.388e+06	4.553e+06	1.18	y	9.941e+06	208.80	1,2,3,4,7,8-HxCDF
33:14	1.642e+06	1.369e+06	1.20	y	3.012e+06	63.870	1,2,3,6,7,8-HxCDF
33:31	4.602e+04	4.231e+04	1.09	y	8.834e+04	1.9790	
33:49	4.415e+05	3.726e+05	1.18	y	8.141e+05	17.890	2,3,4,6,7,8-HxCDF
34:46	1.708e+05	1.410e+05	1.21	y	3.118e+05	8.0703	1,2,3,7,8,9-HxCDF
34:50	2.386e+05	1.839e+05	1.30	y	4.225e+05	9.4650	

Totals class: HpCDF EMPC

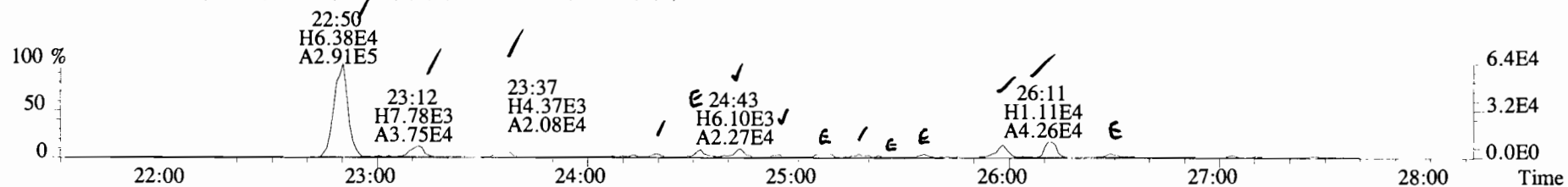
Entry #: 35

Run: 14 File: 191120D1 S: 13 I: 1 F: 4
Acquired: 20-NOV-19 23:34:02 Processed: 26-NOV-19 12:22:47

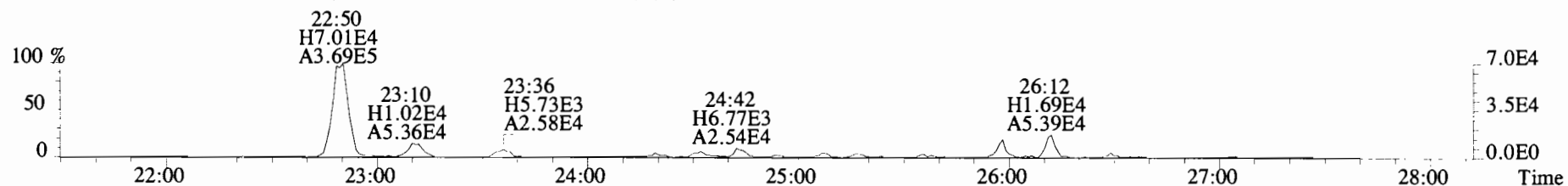
Total Concentration: 490.51 Unnamed Concentration: 229.827

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
36:37	3.533e+06	3.684e+06	0.96	y	7.217e+06	214.96	1,2,3,4,6,7,8-HpCDF
37:00	5.652e+04	6.384e+04	0.89	y	1.204e+05	3.5587	
37:11	3.760e+06	3.893e+06	0.97	y	7.653e+06	226.27	
38:23	7.725e+05	8.014e+05	0.96	y	1.574e+06	45.724	1,2,3,4,7,8,9-HpCDF

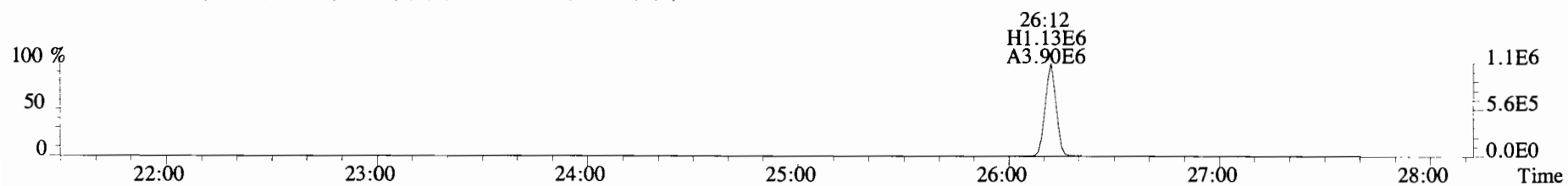
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



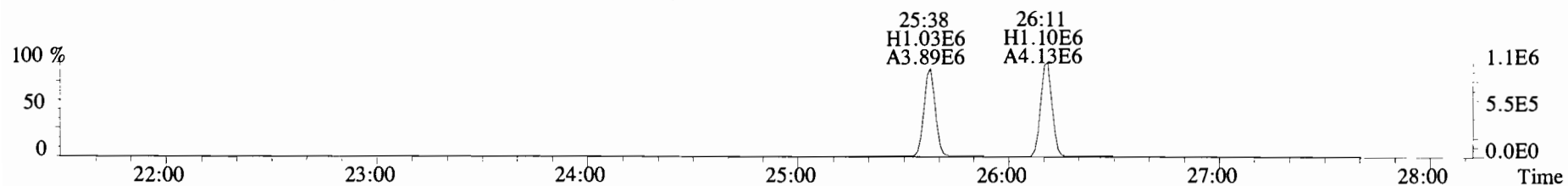
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



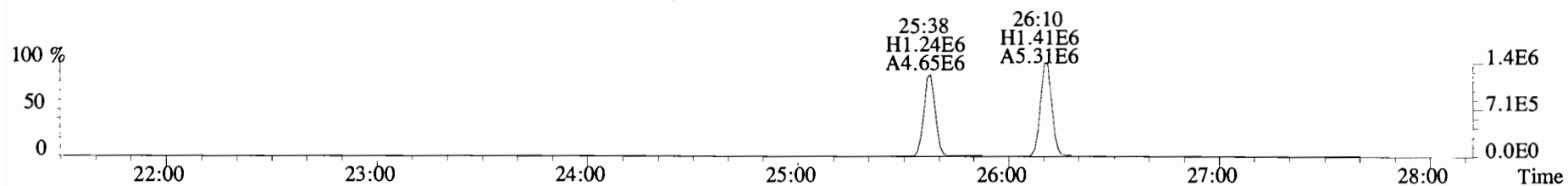
327.8847 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



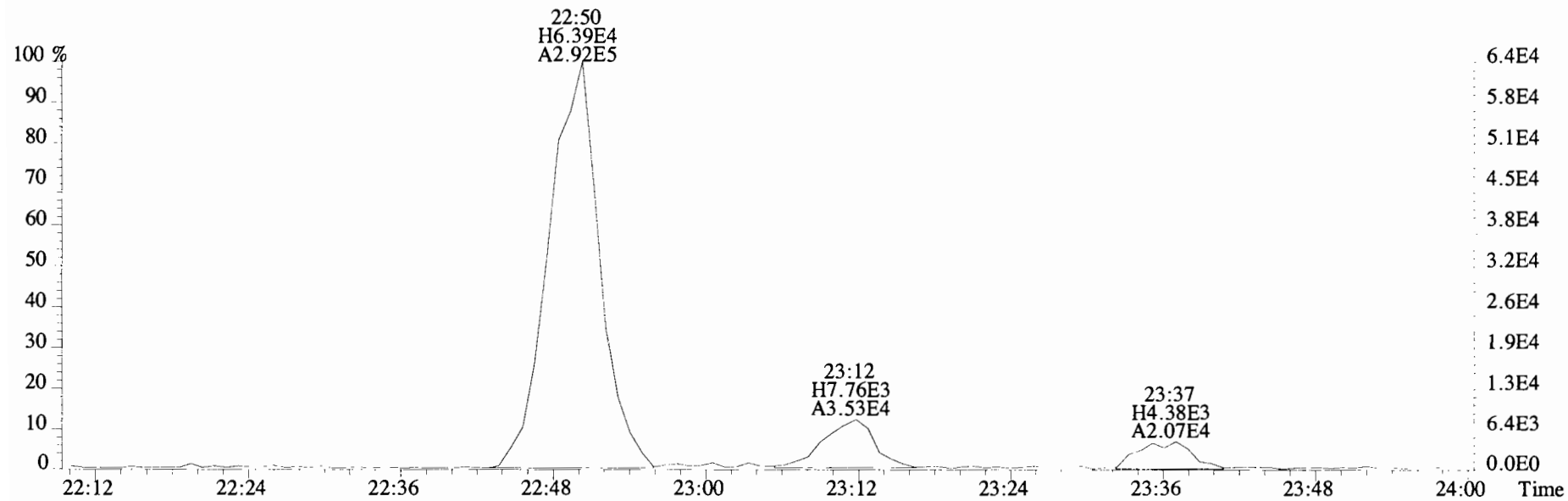
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



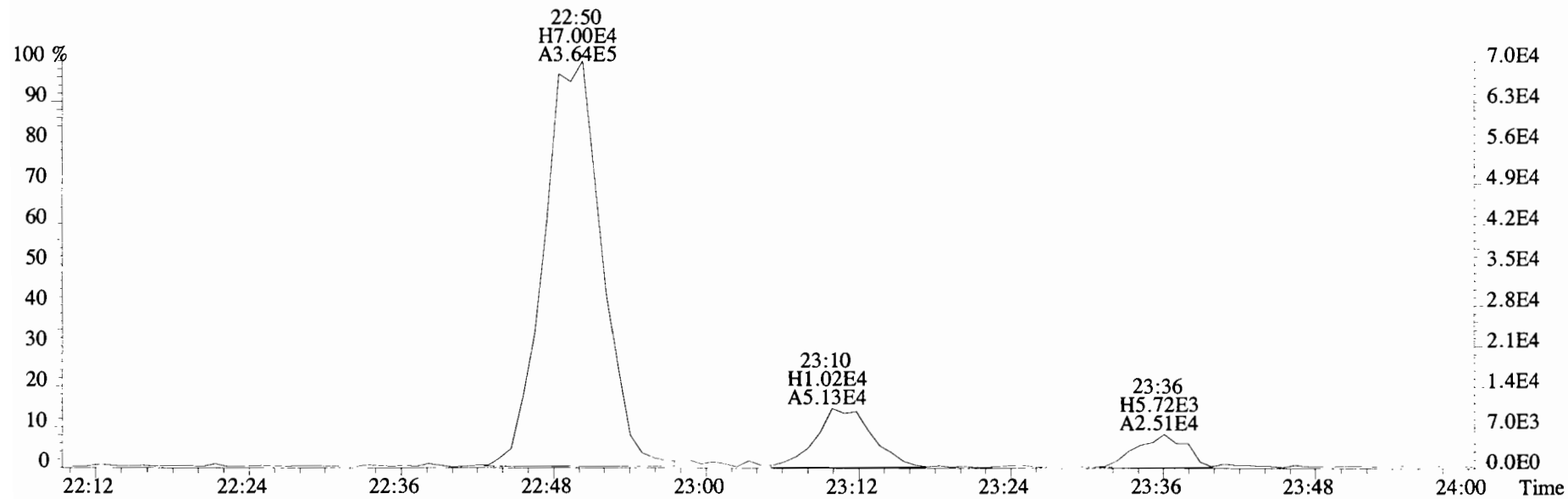
333.9339 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



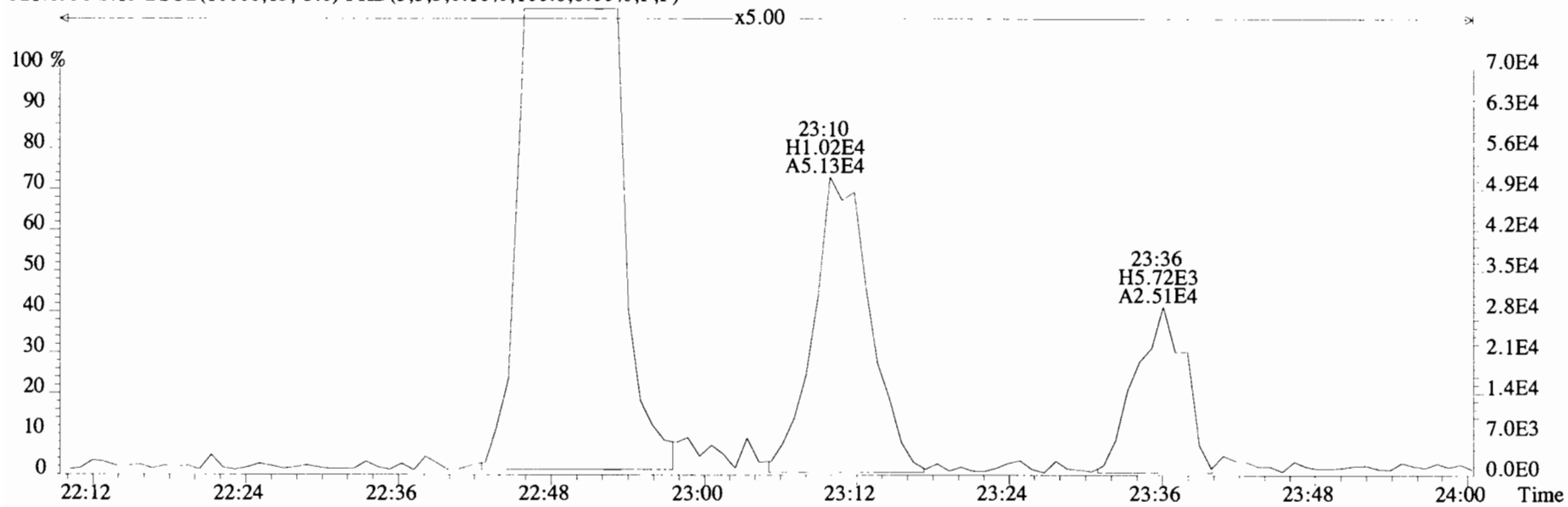
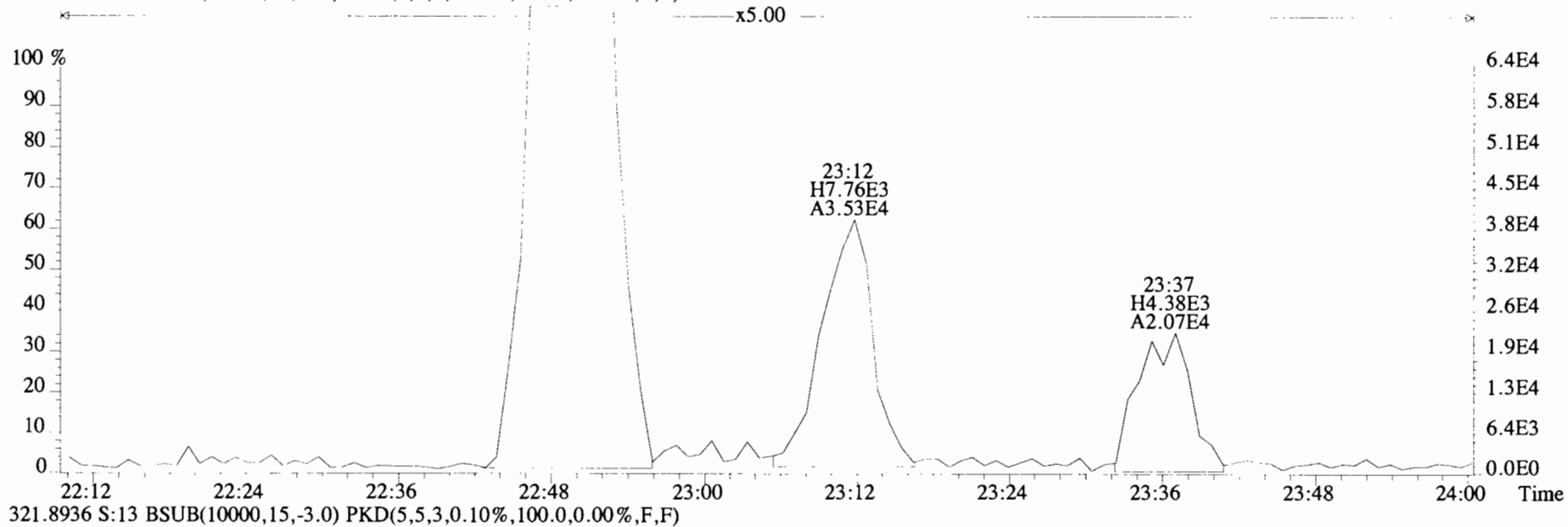
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Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SS-B-00-02-191002 19.65 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



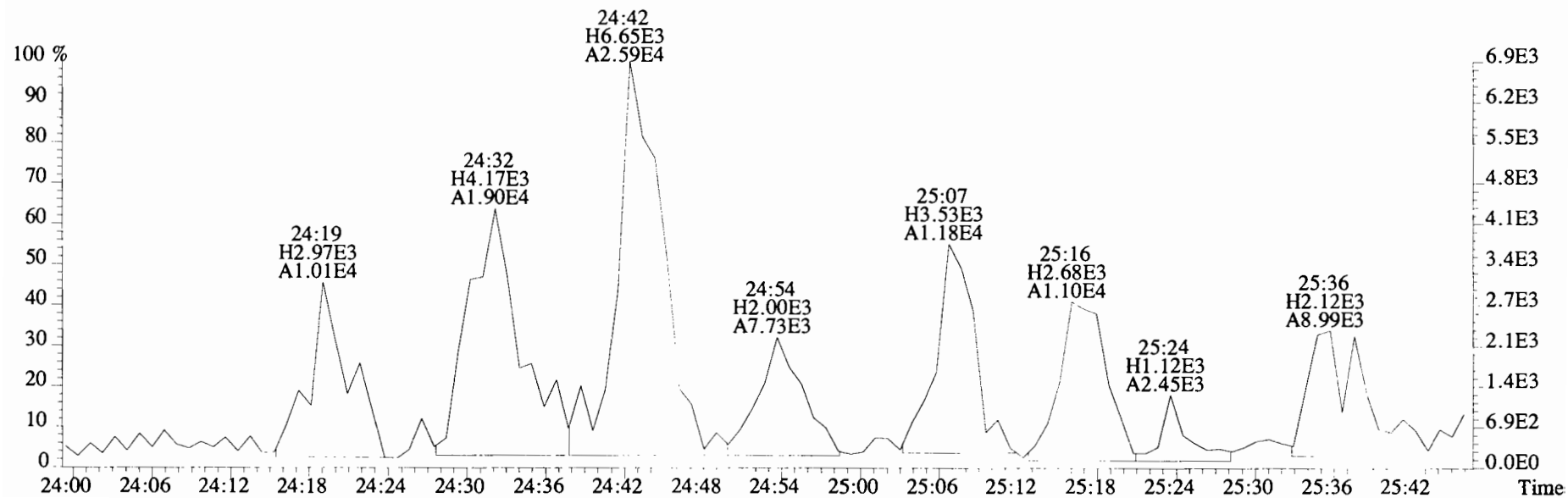
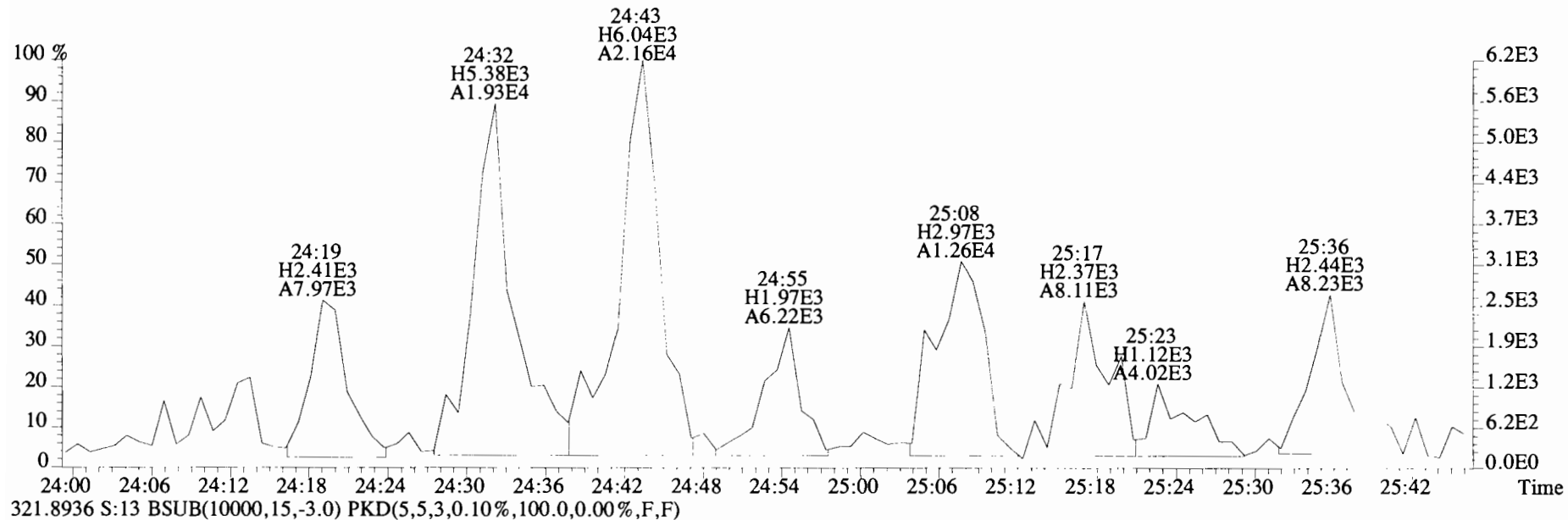
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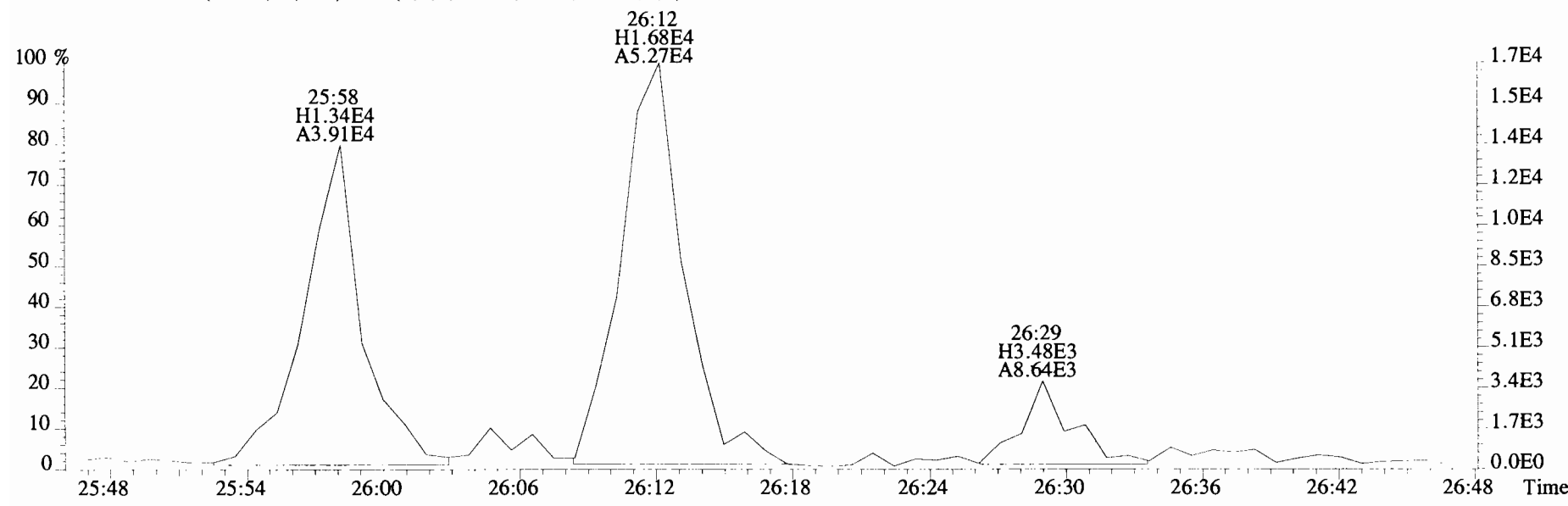
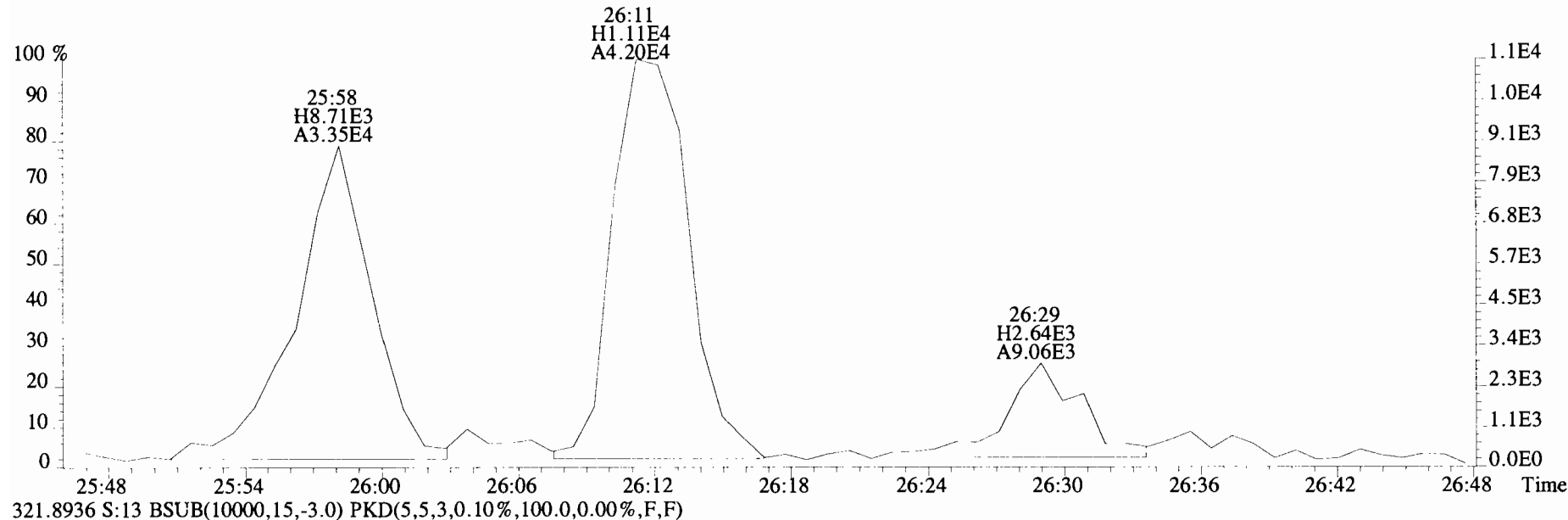
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Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



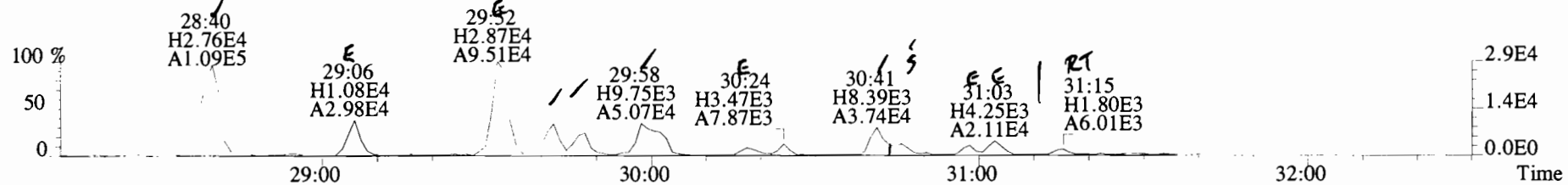
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 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



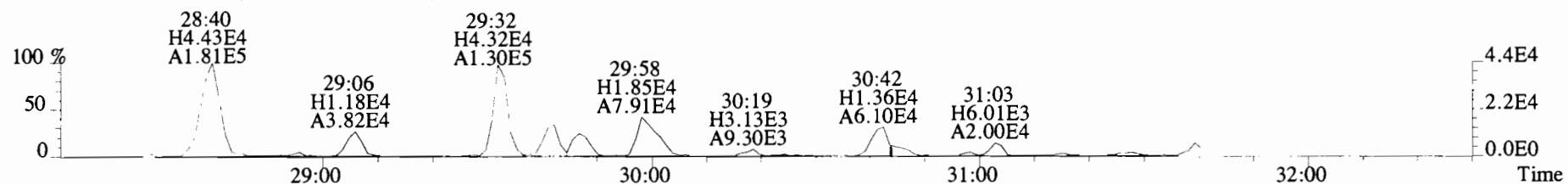
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Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



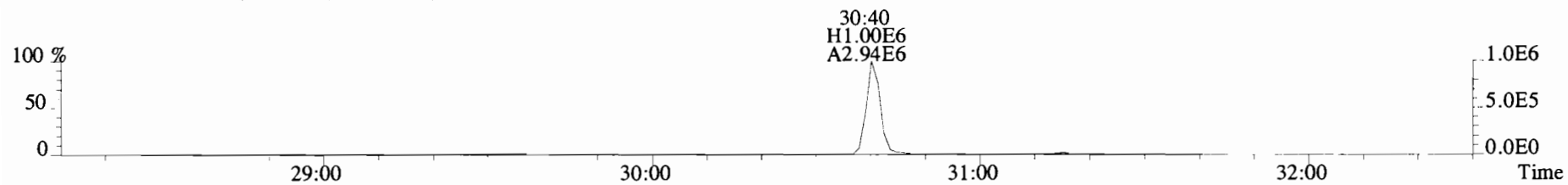
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



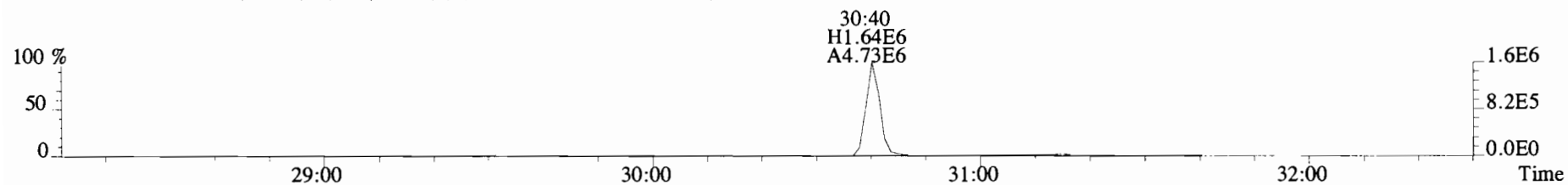
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



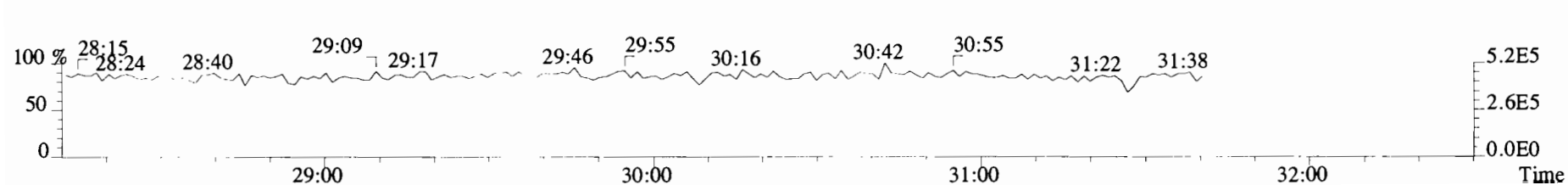
365.8978 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



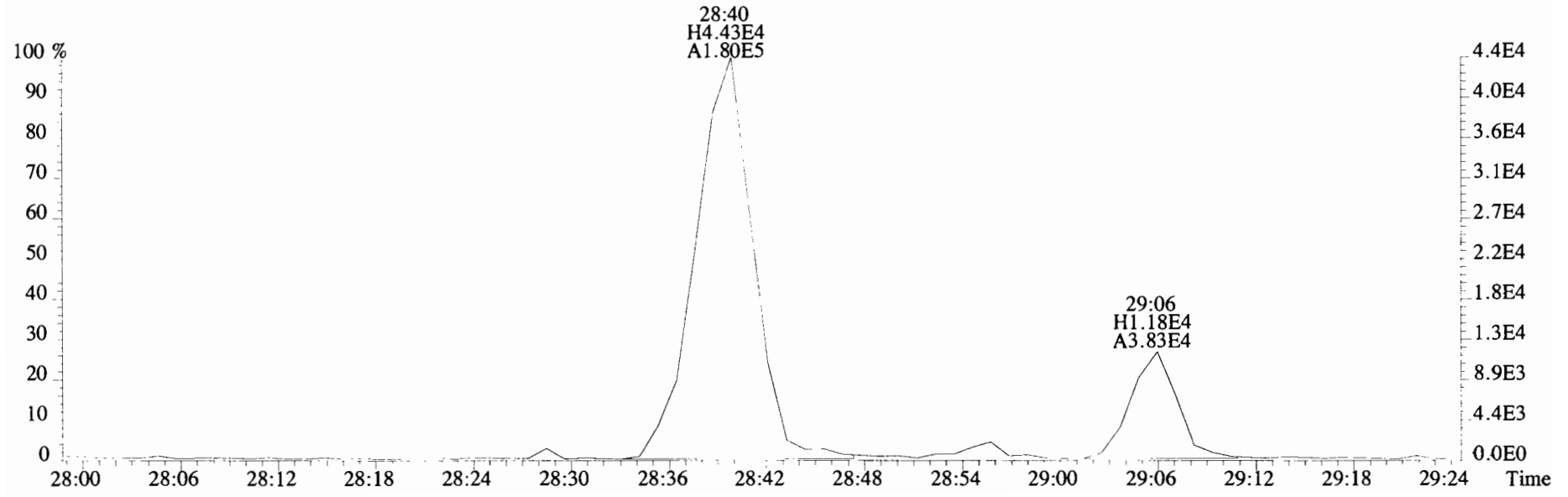
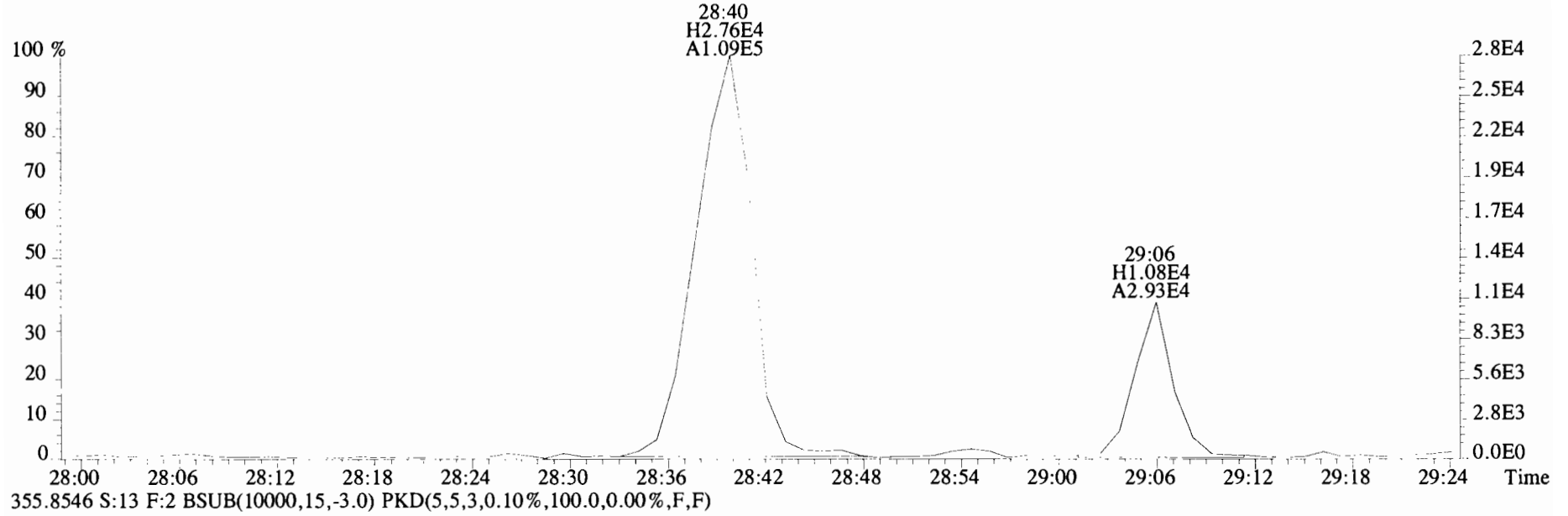
367.8949 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



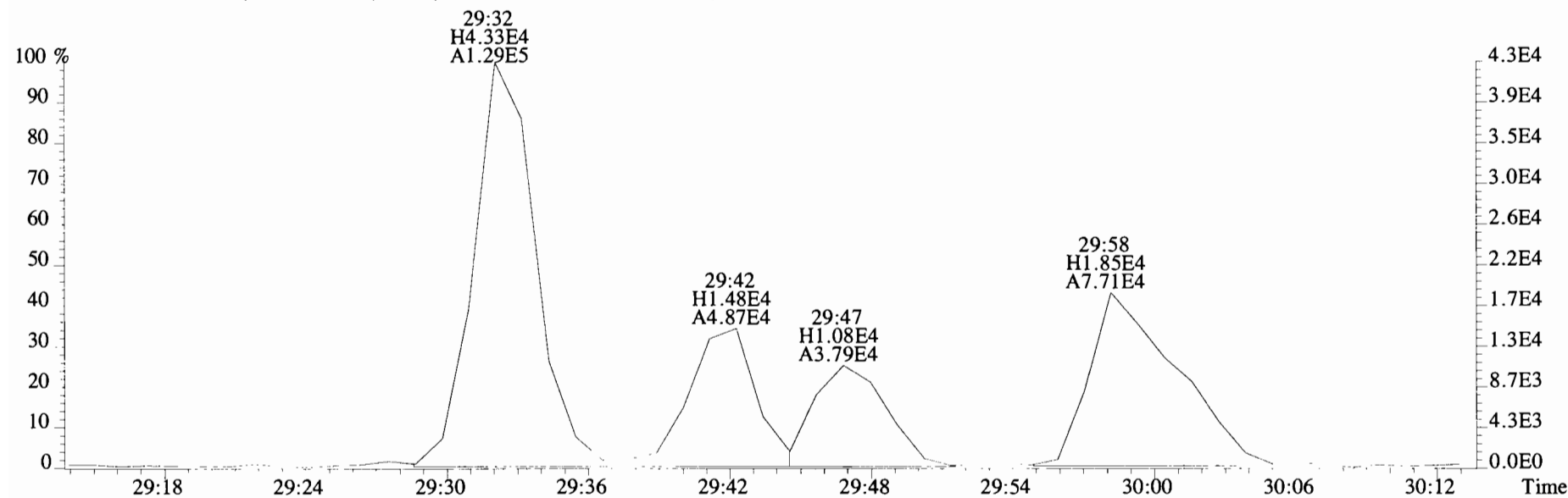
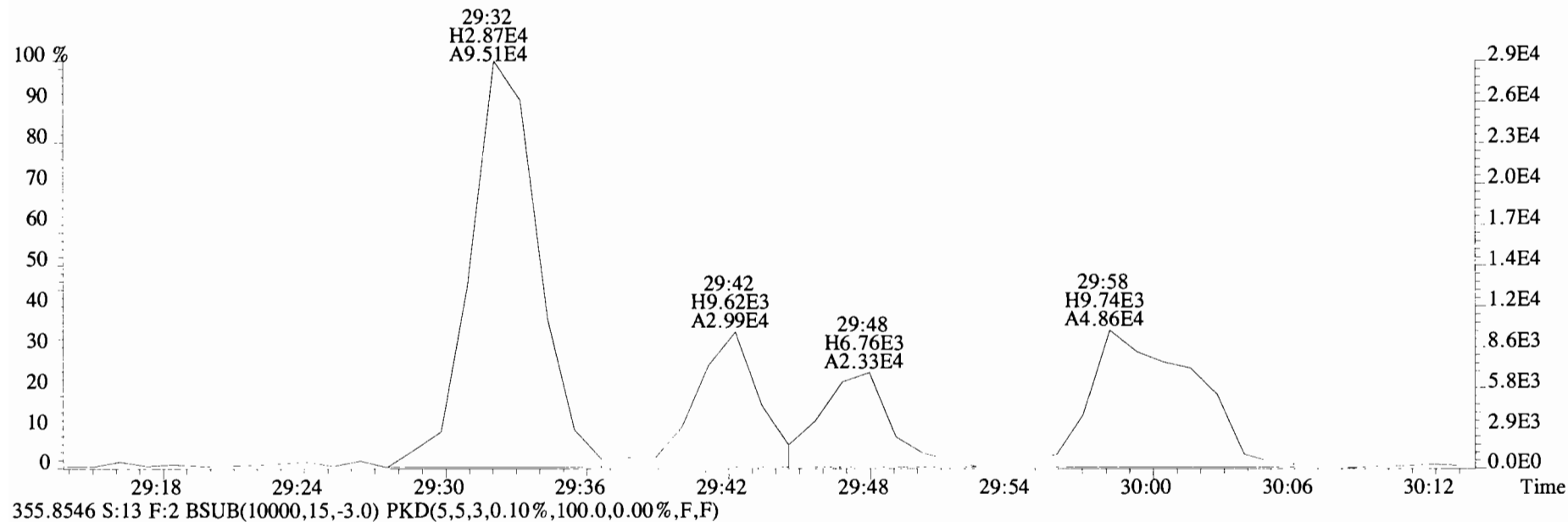
366.9792 S:13 F:2



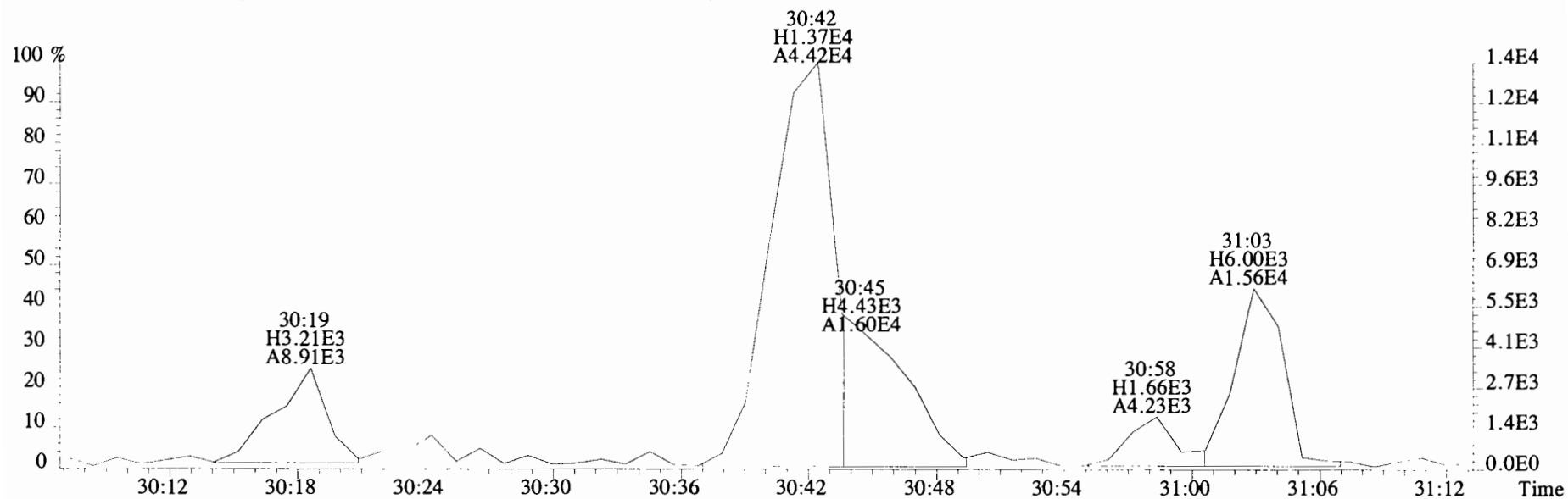
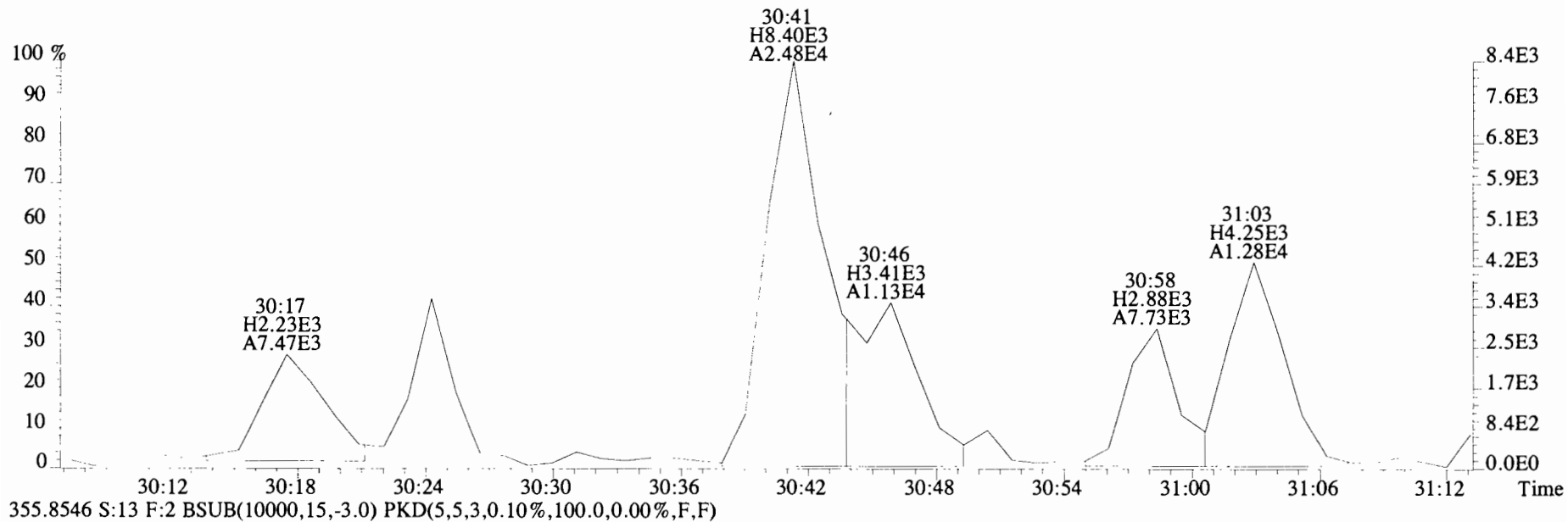
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



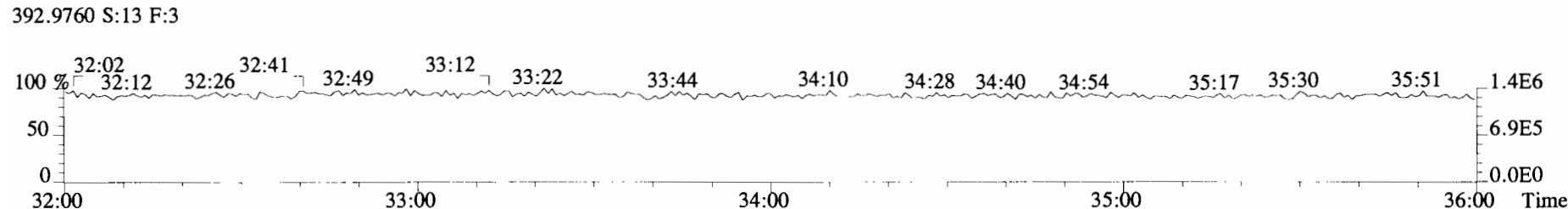
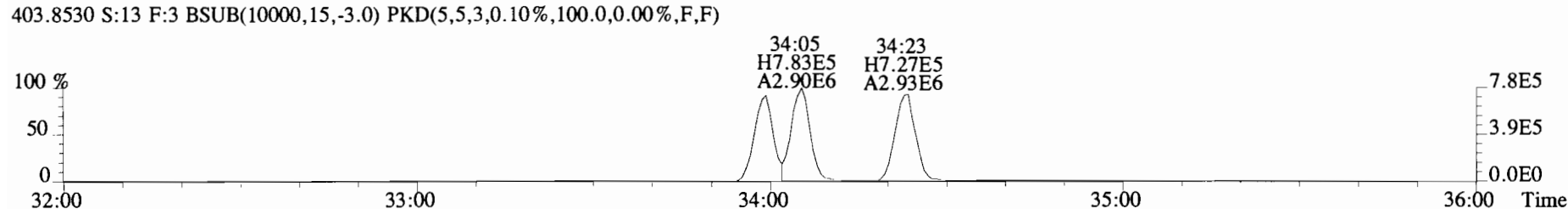
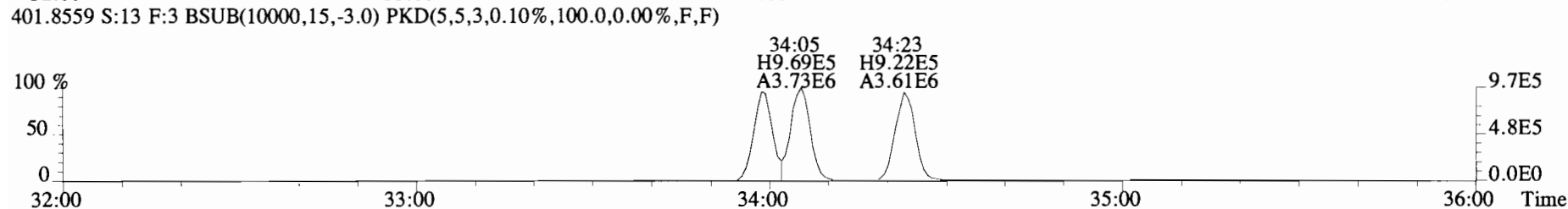
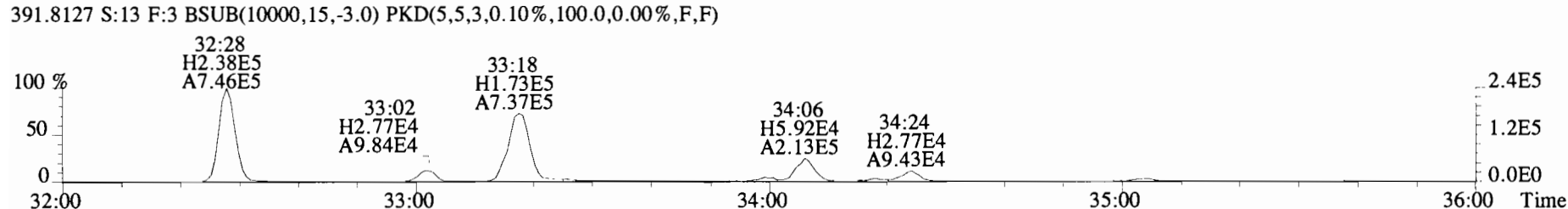
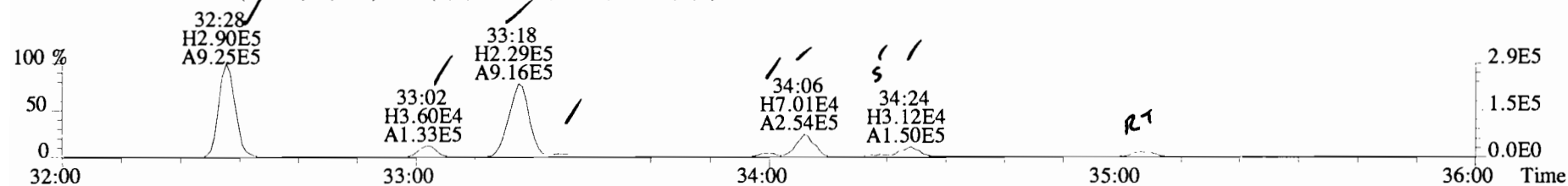
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 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



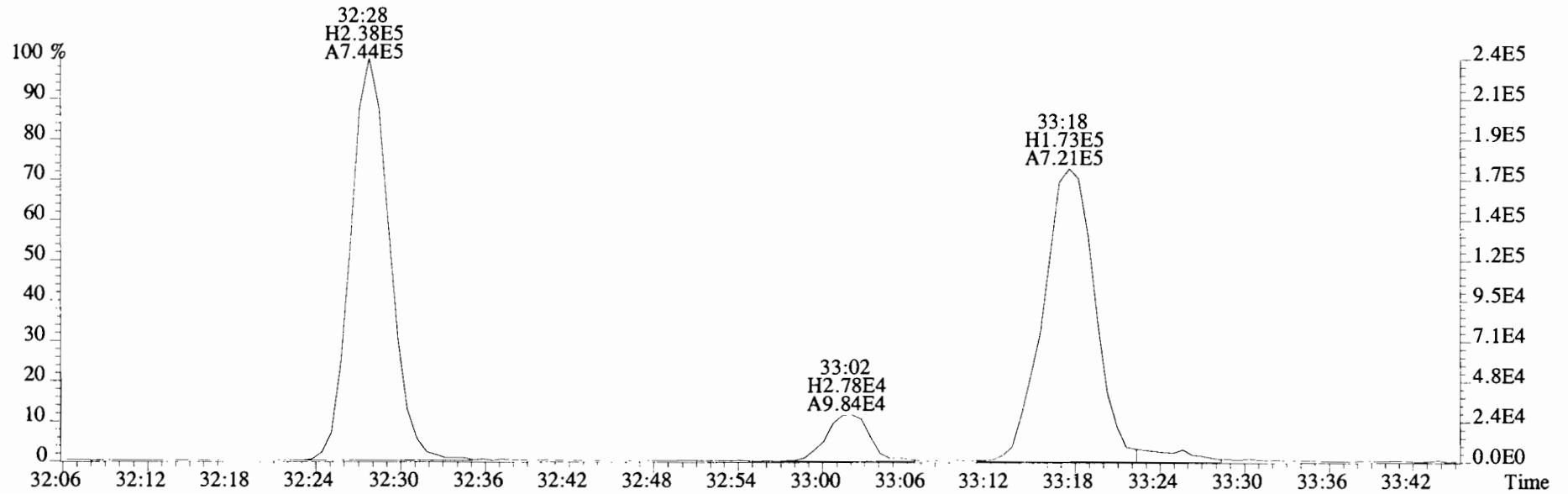
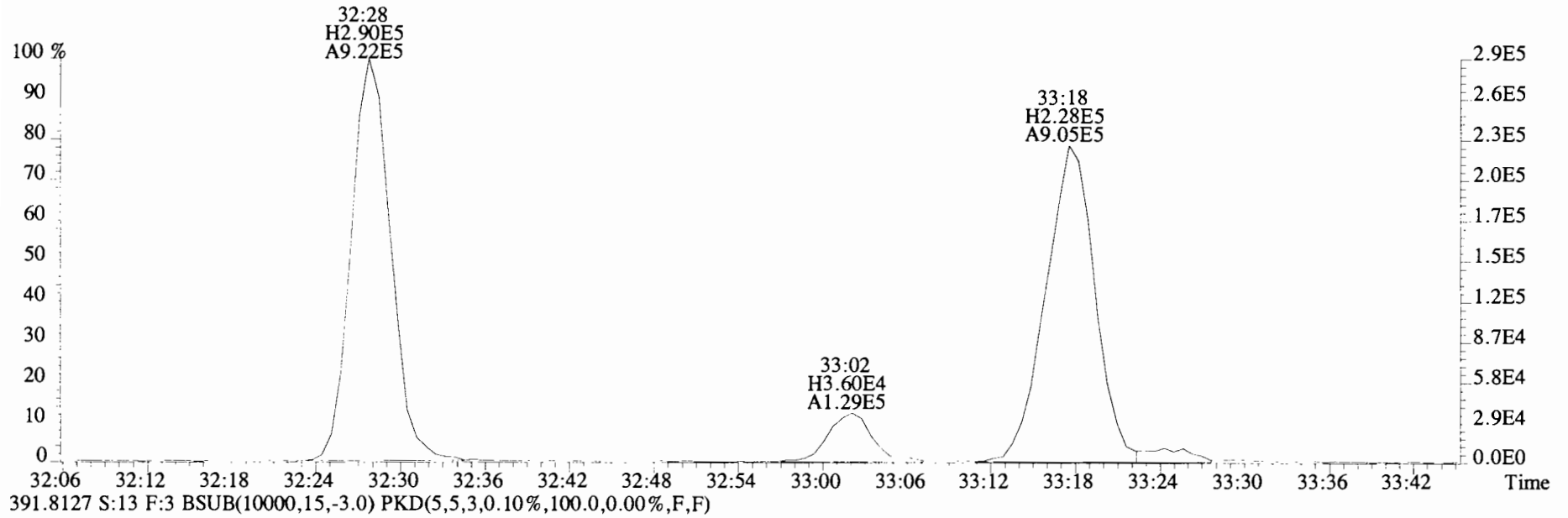
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 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



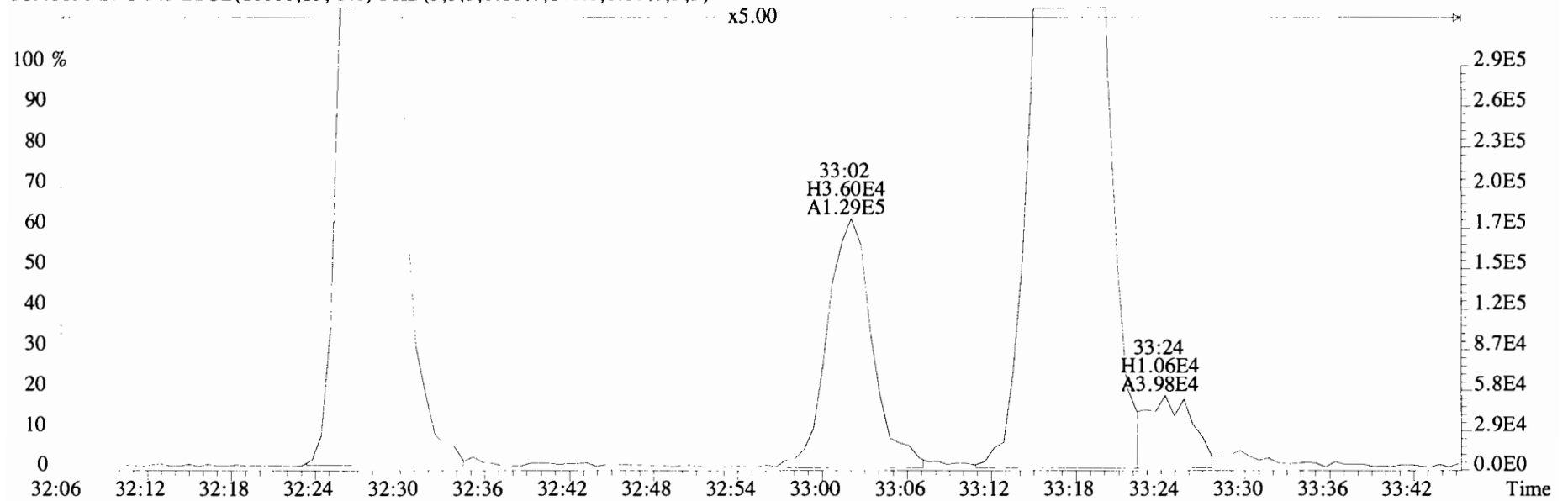
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



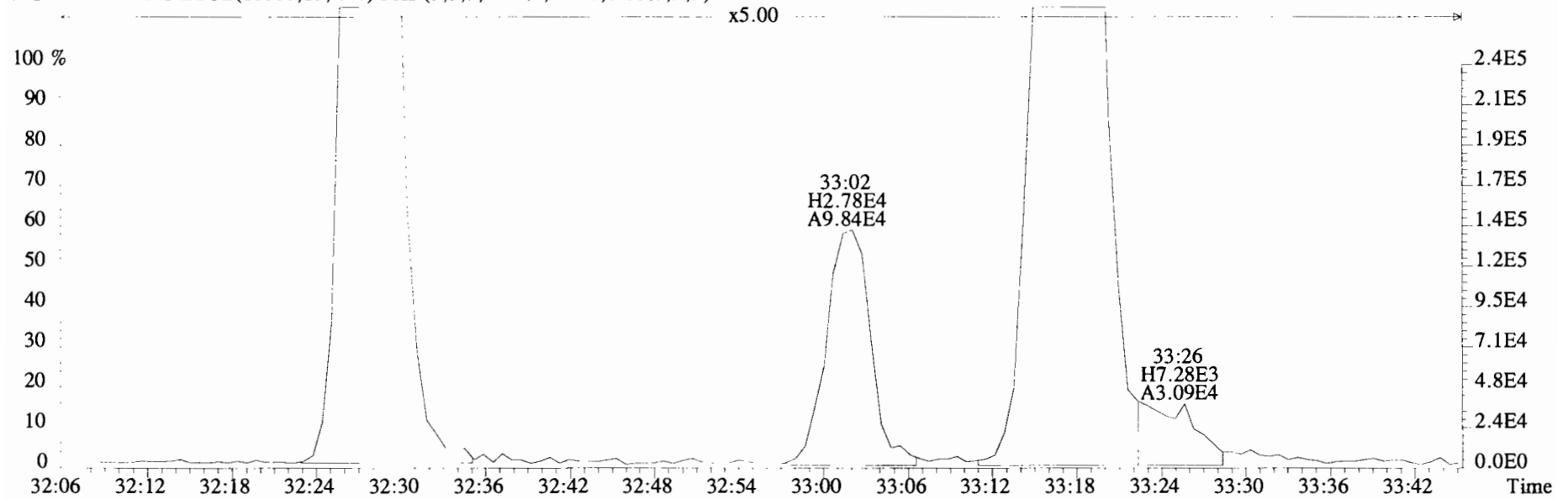
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



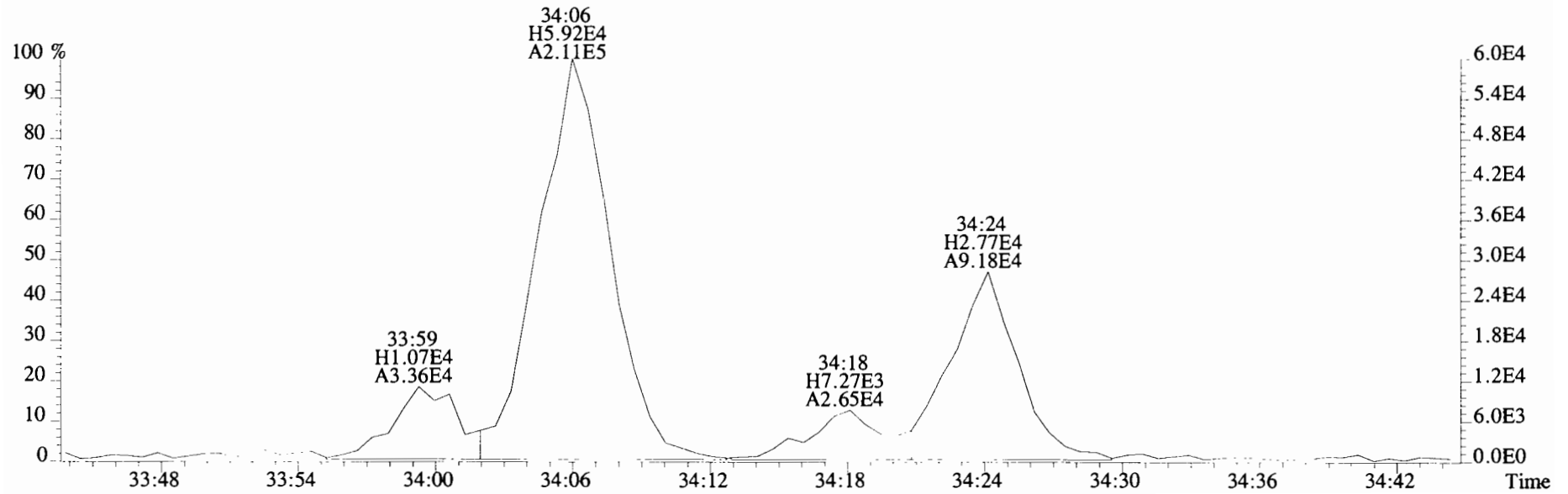
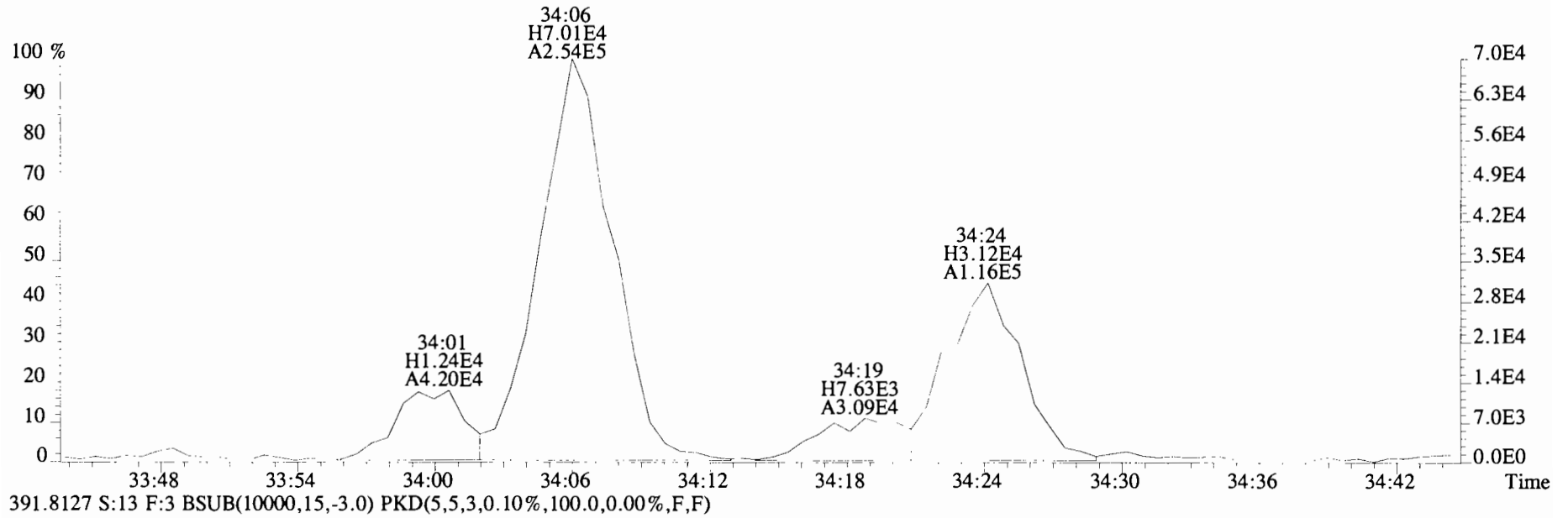
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Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



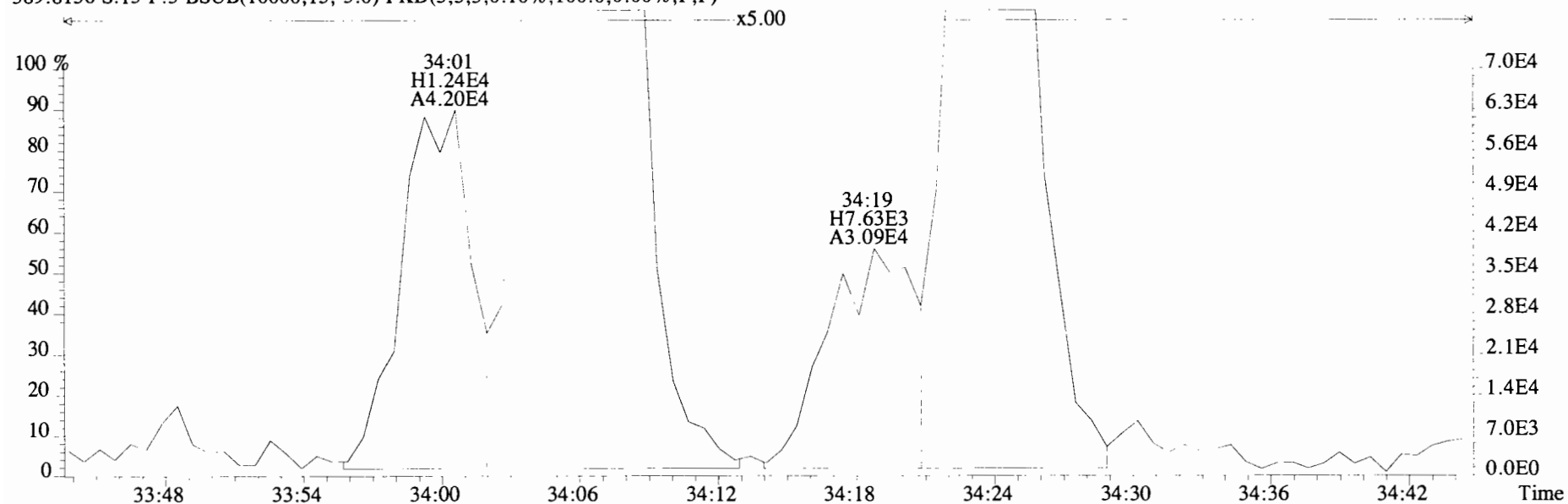
391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



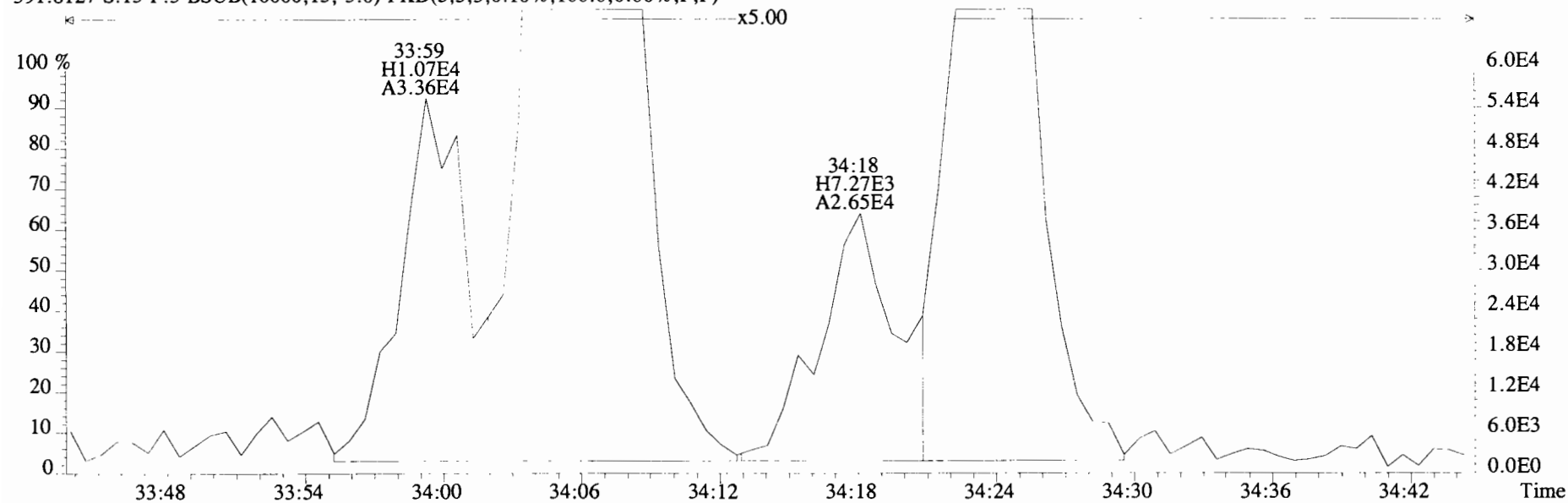
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



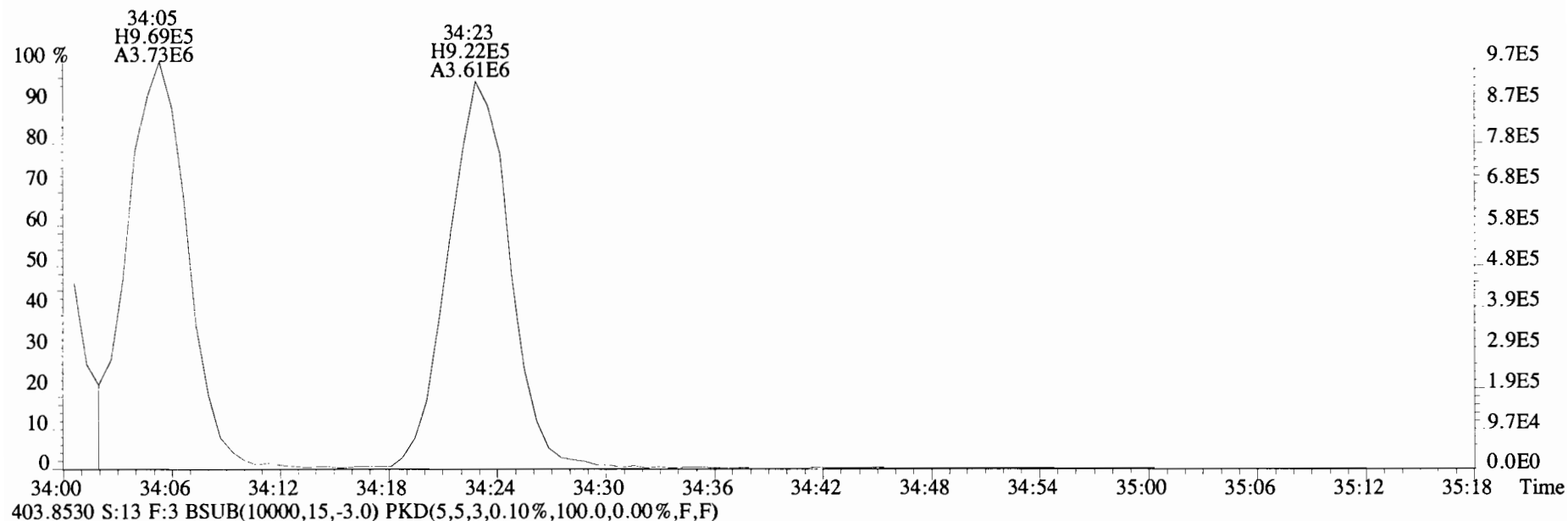
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Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
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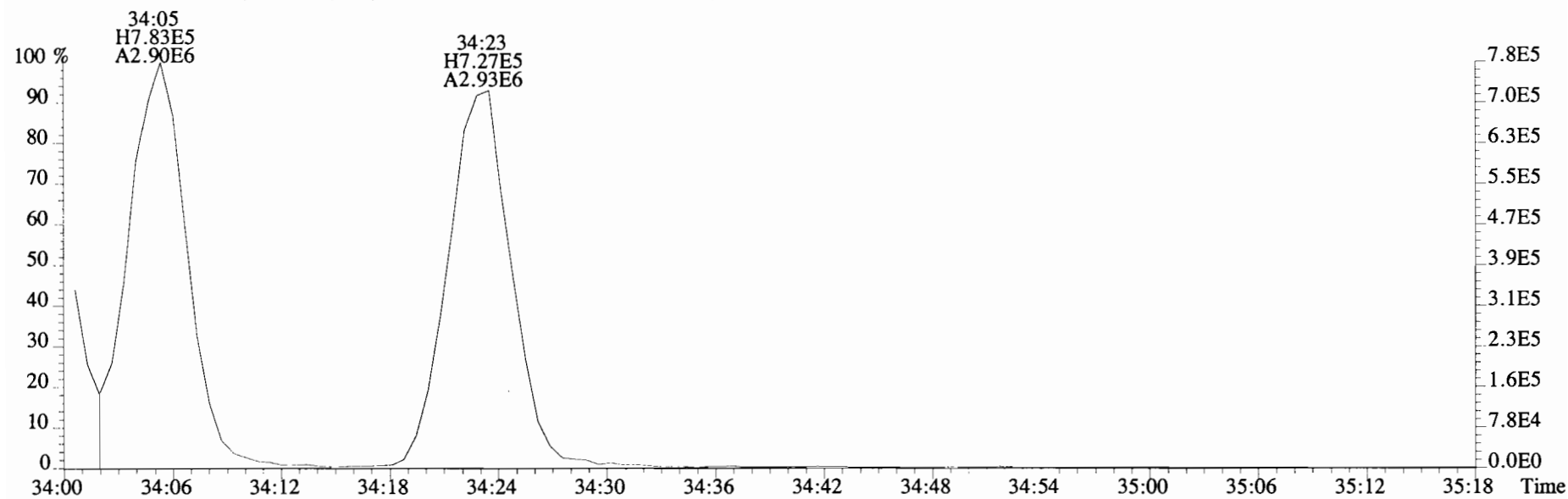
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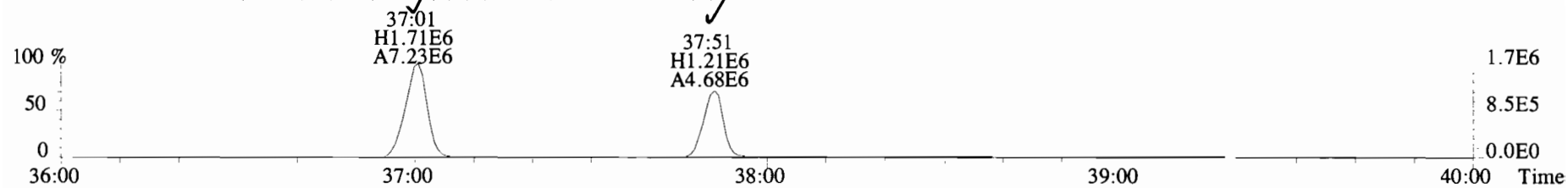
File: 191120D1 #1-385 Acq: 20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text: Viata Analytical Laboratory_VG7 Text: 1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp: OCDD_DB5
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



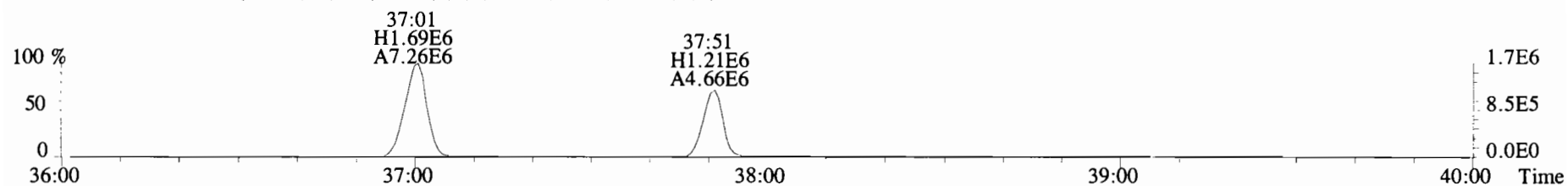
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



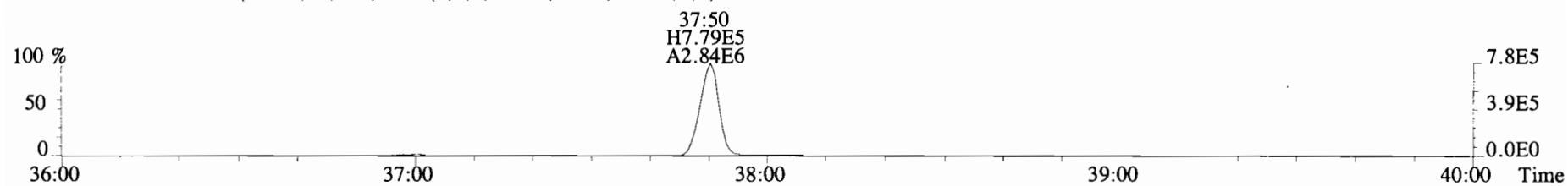
File:191120D1 #1-355 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



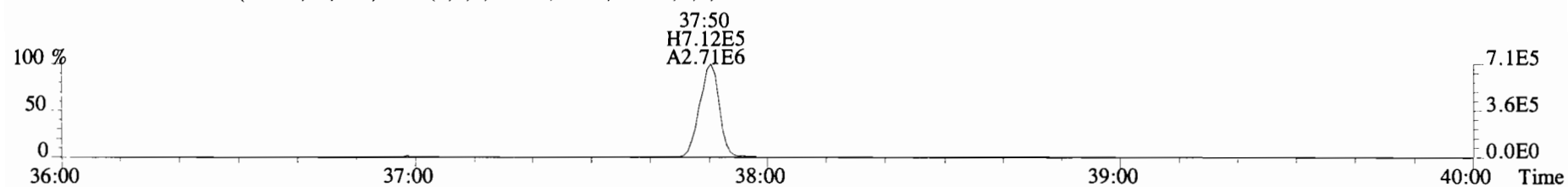
425.7737 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



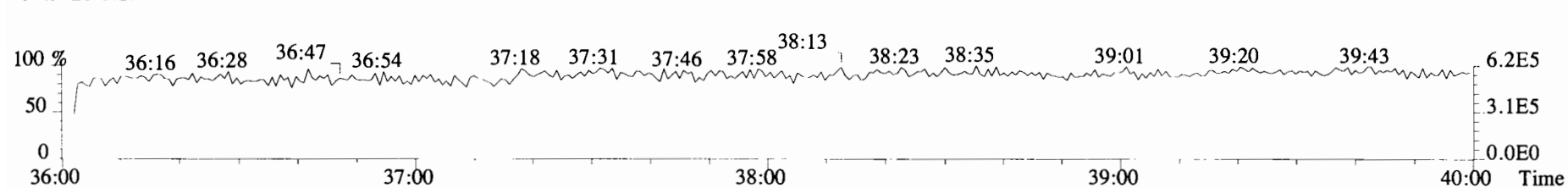
435.8169 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



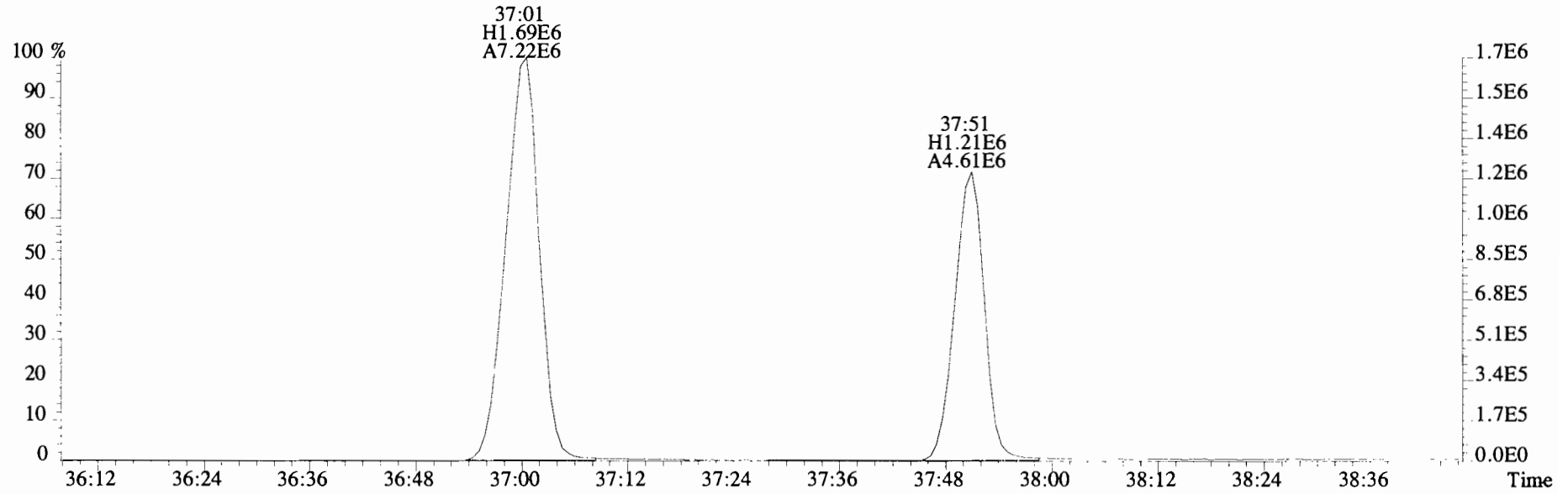
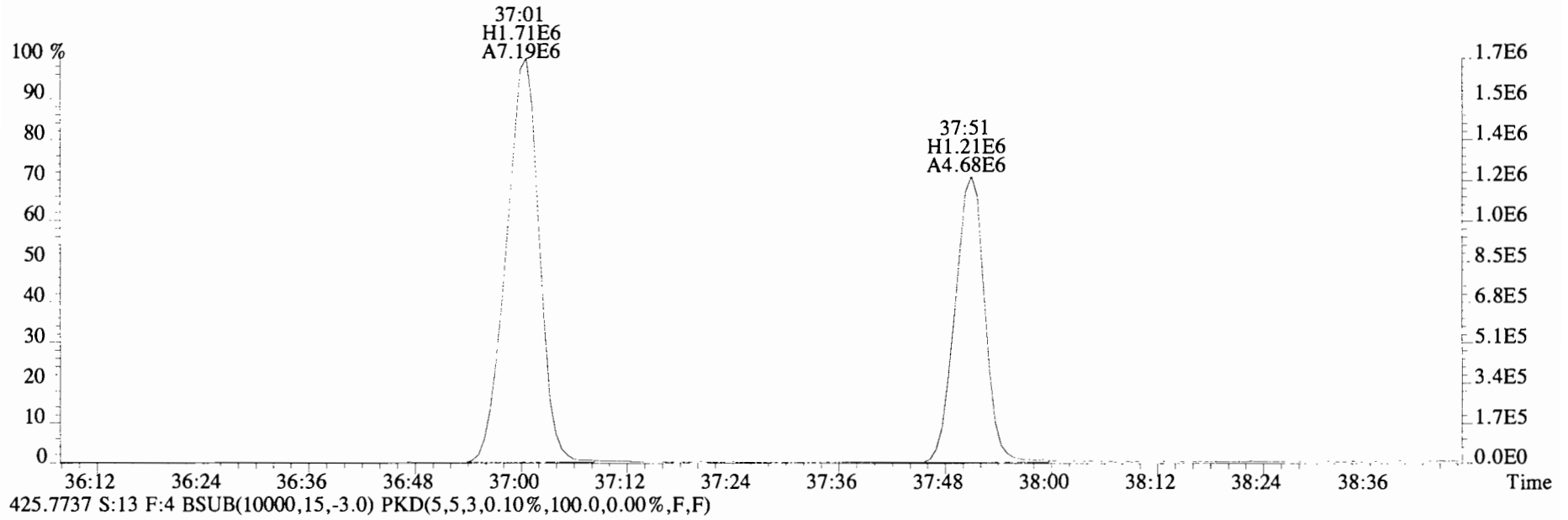
437.8140 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



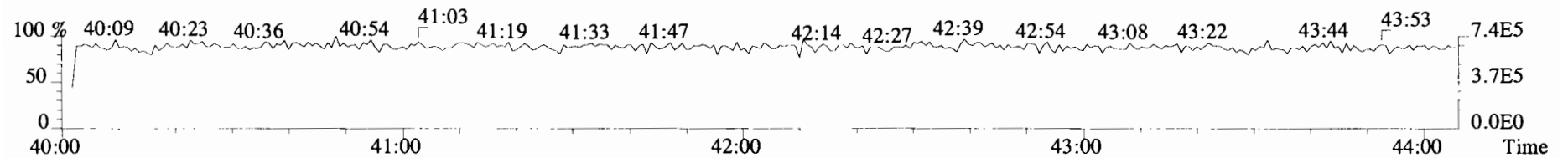
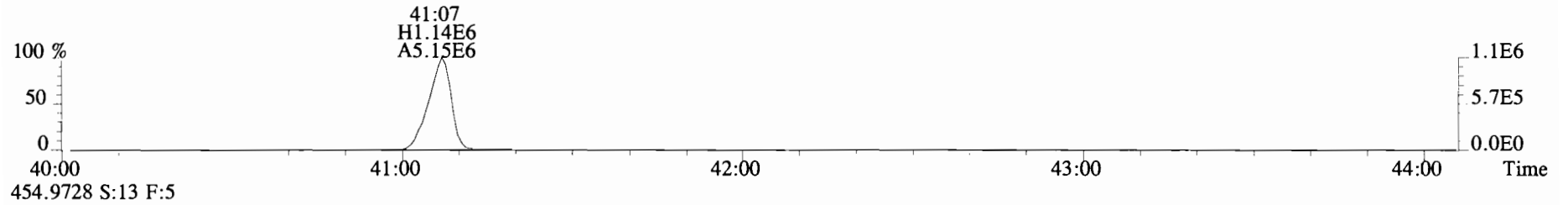
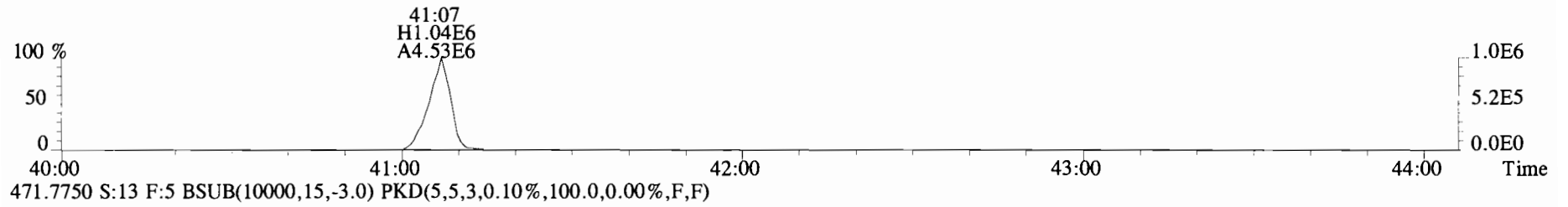
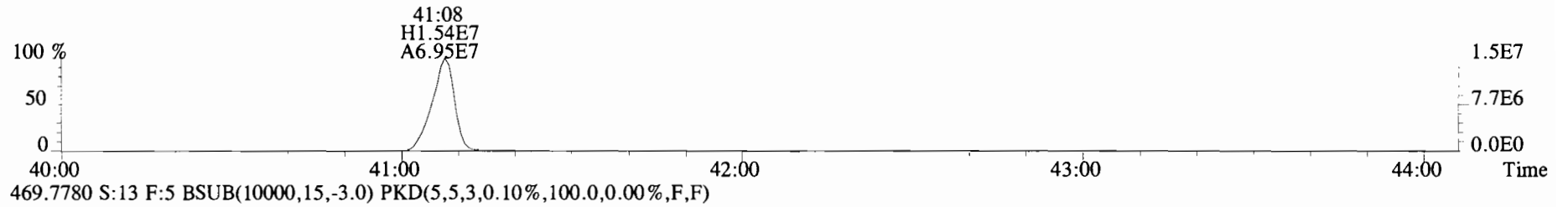
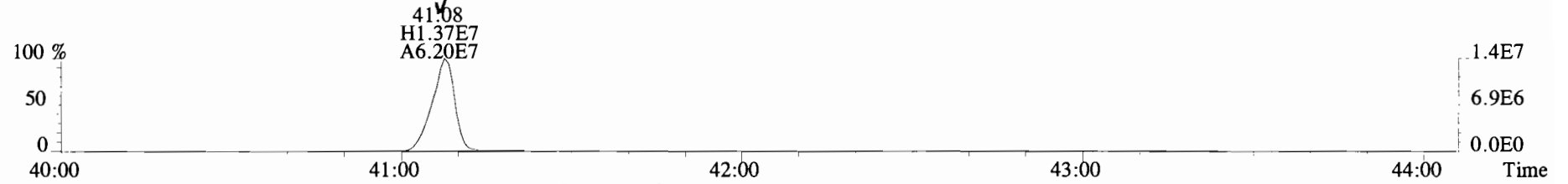
454.9728 S:13 F:4



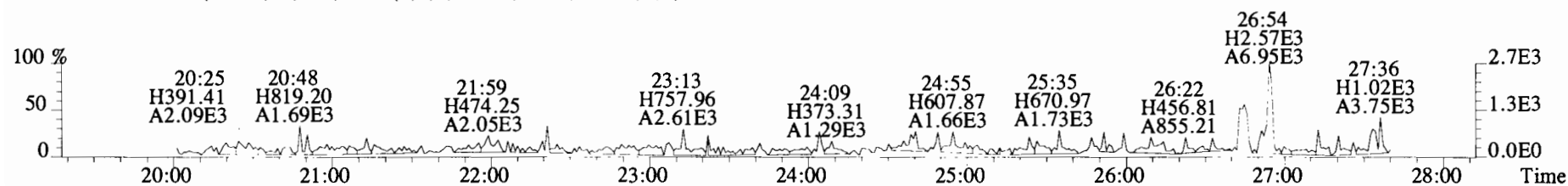
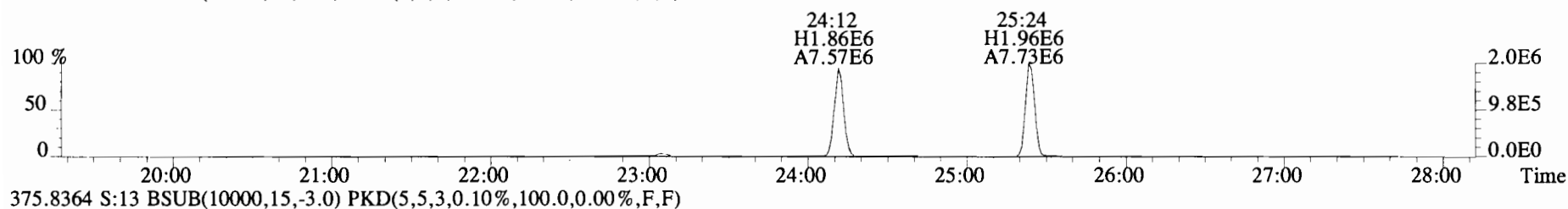
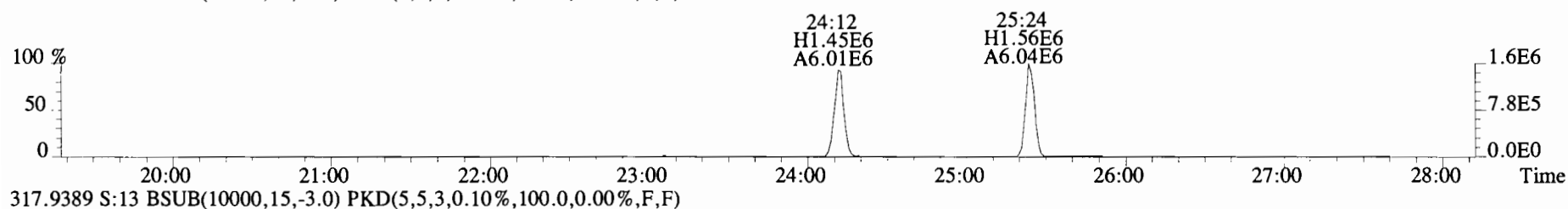
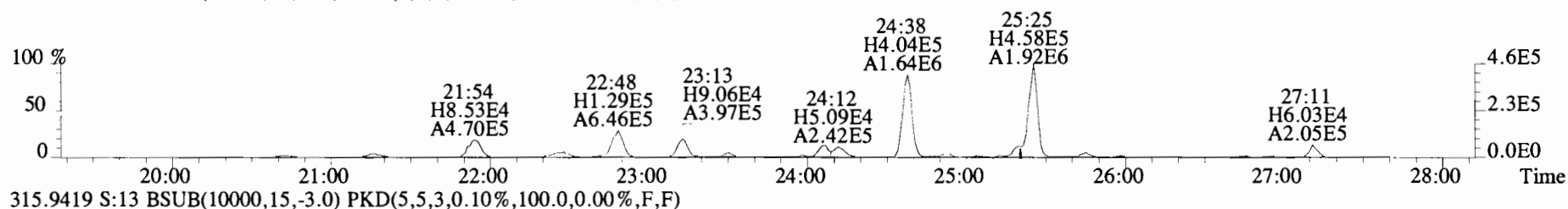
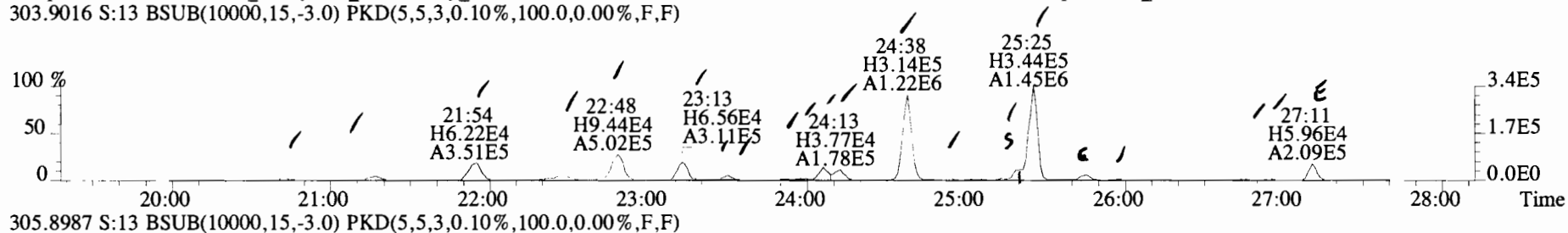
File:191120D1 #1-355 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



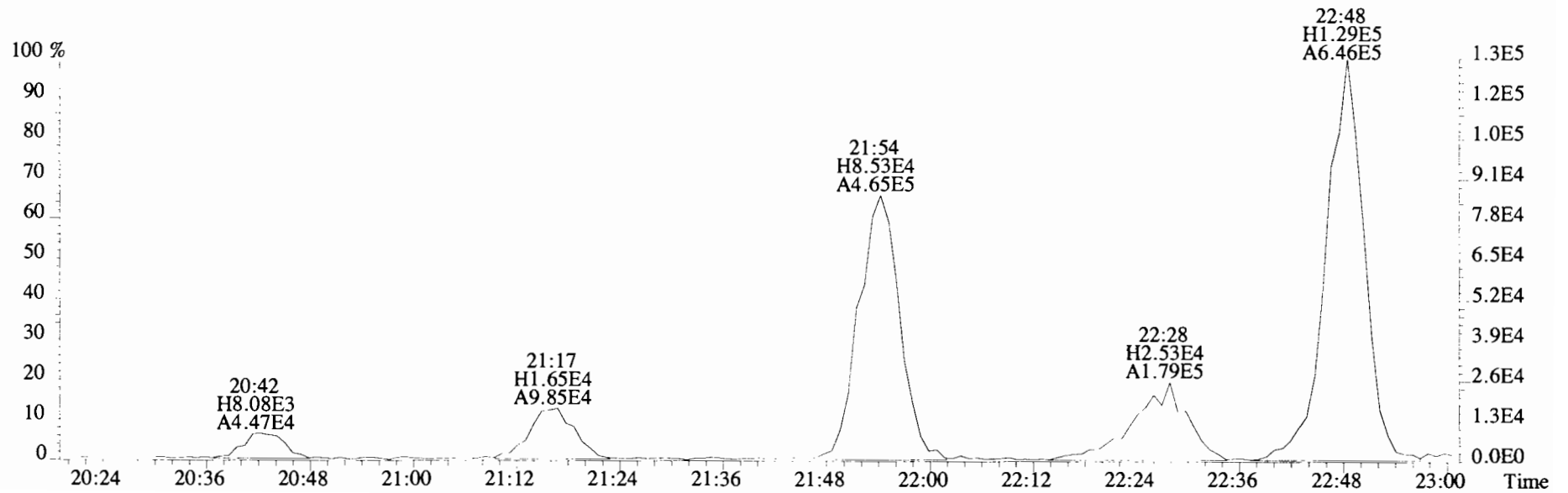
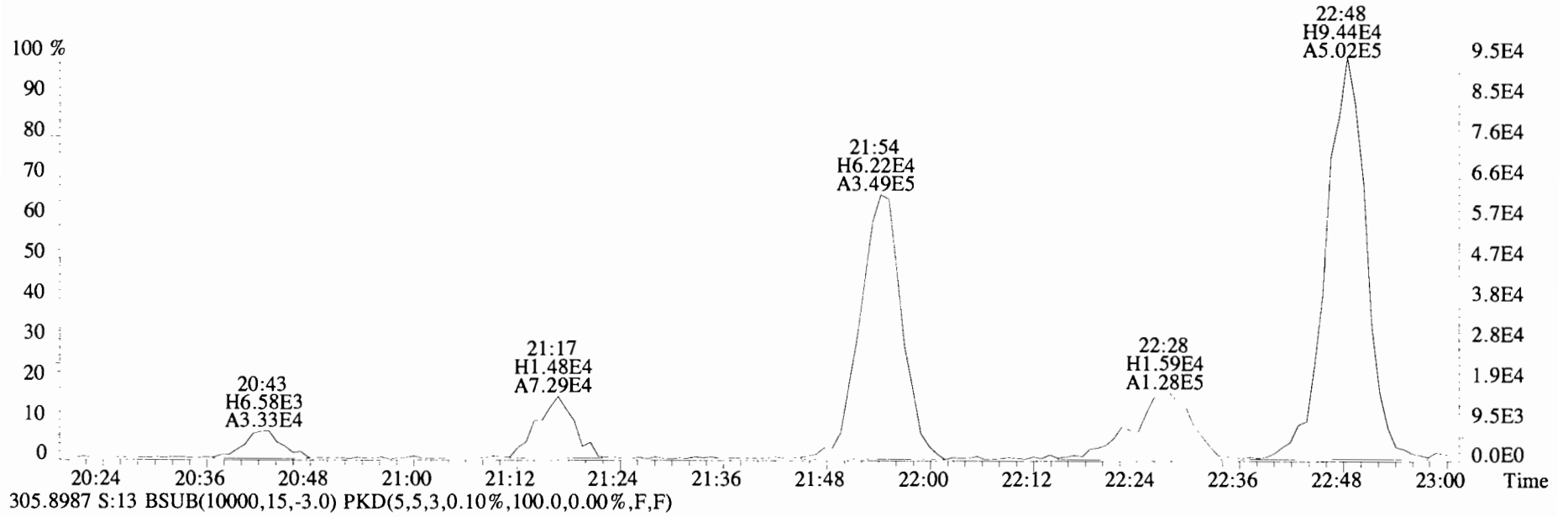
File:191120D1 #1-432 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



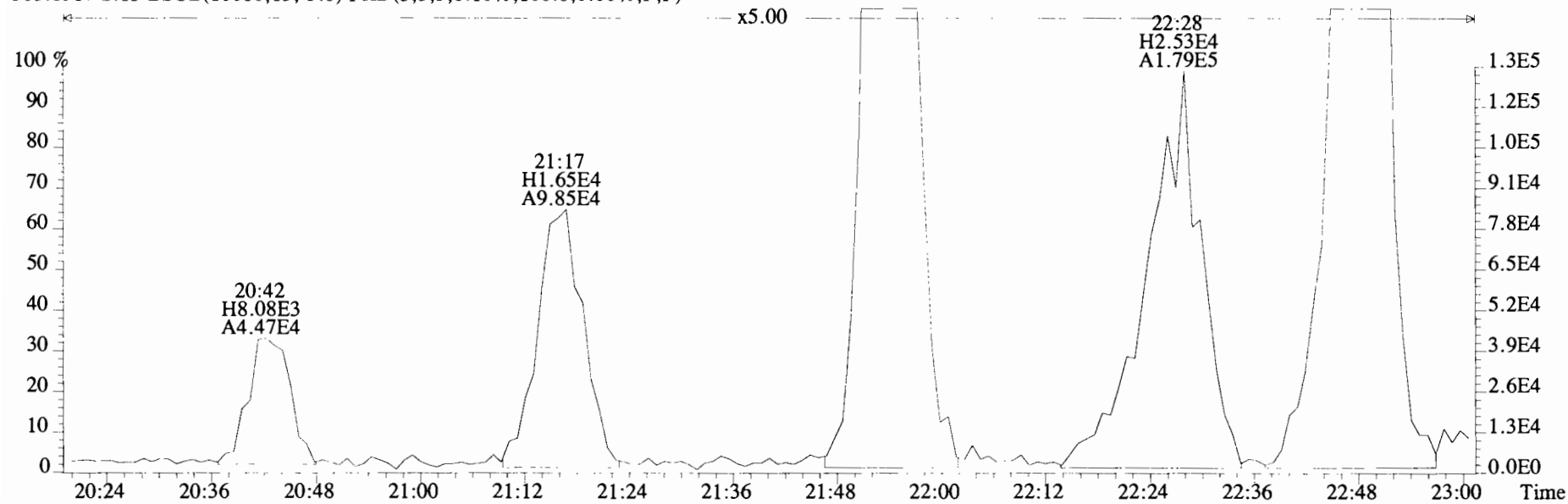
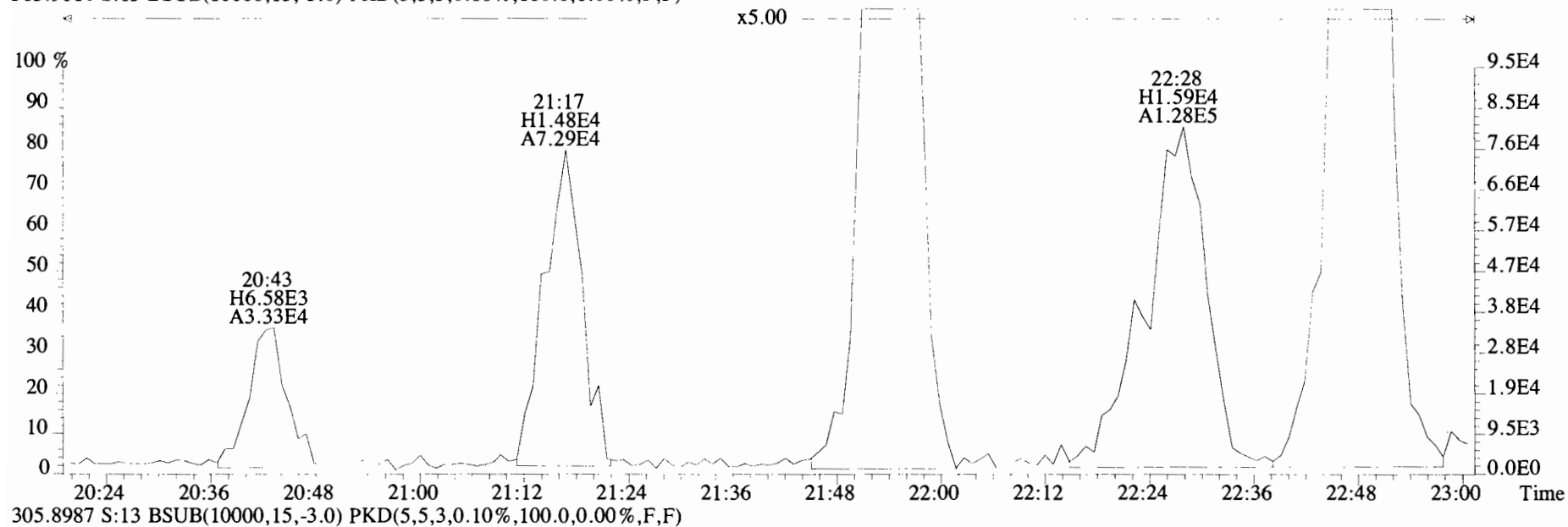
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



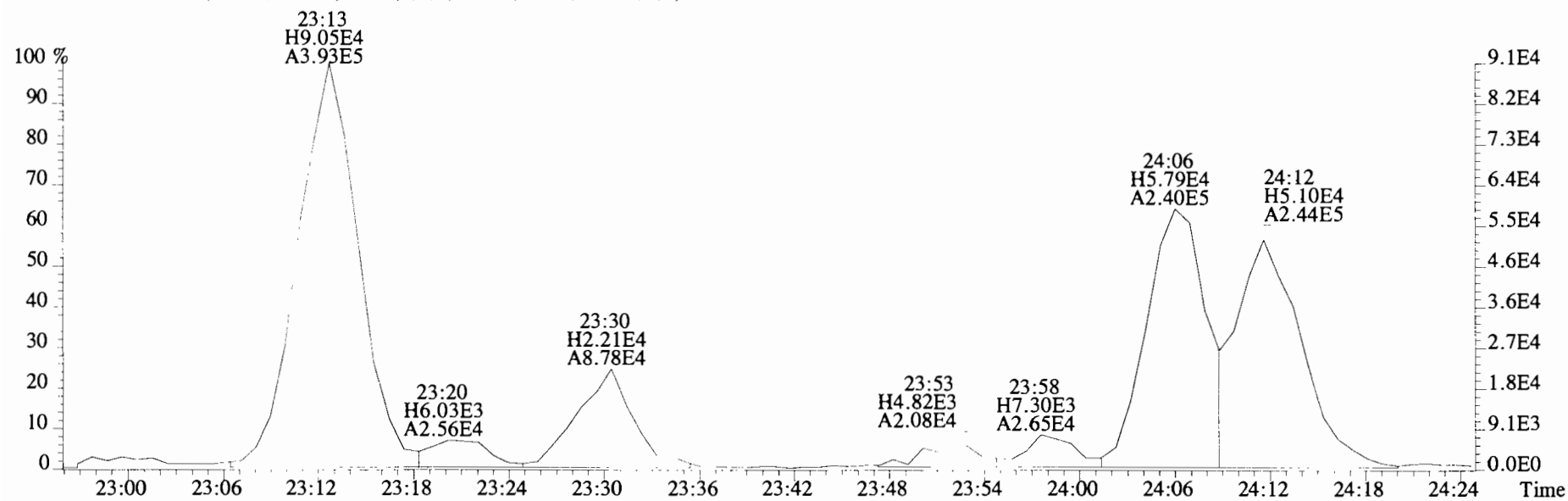
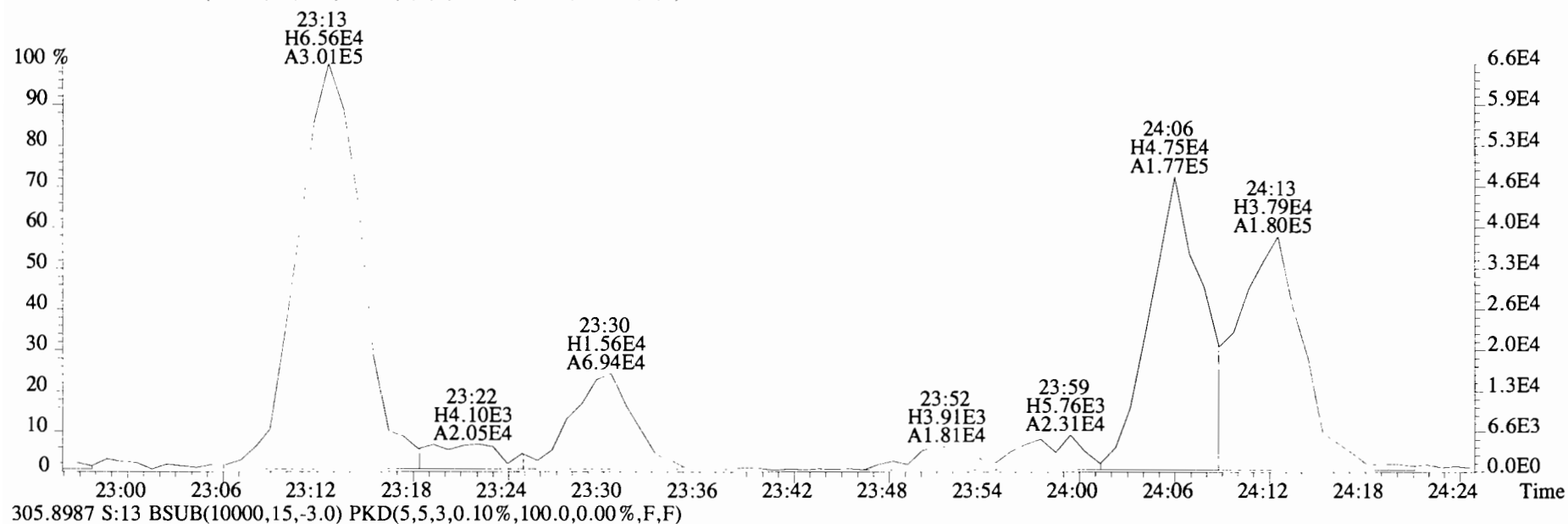
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



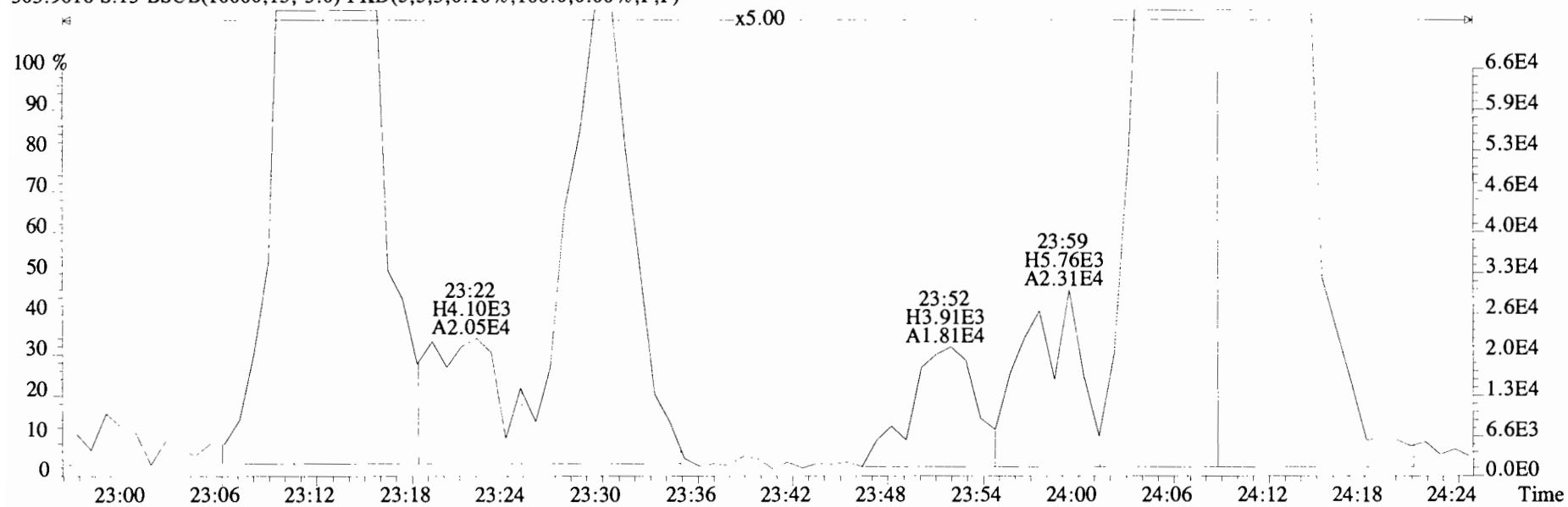
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



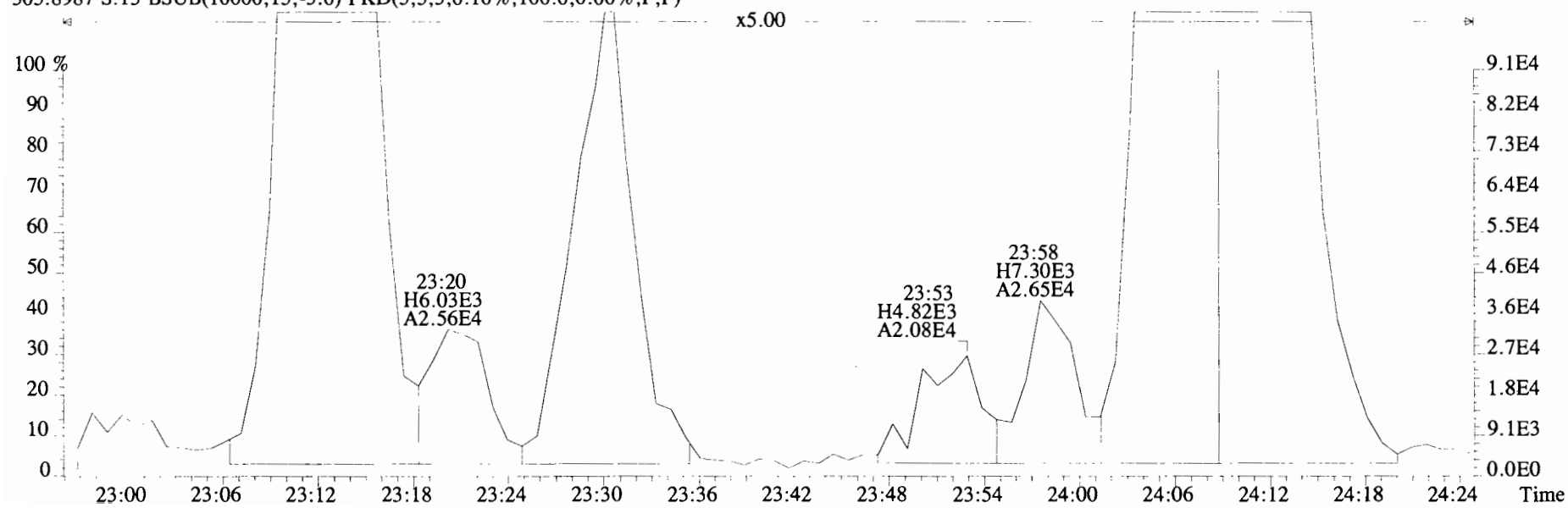
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



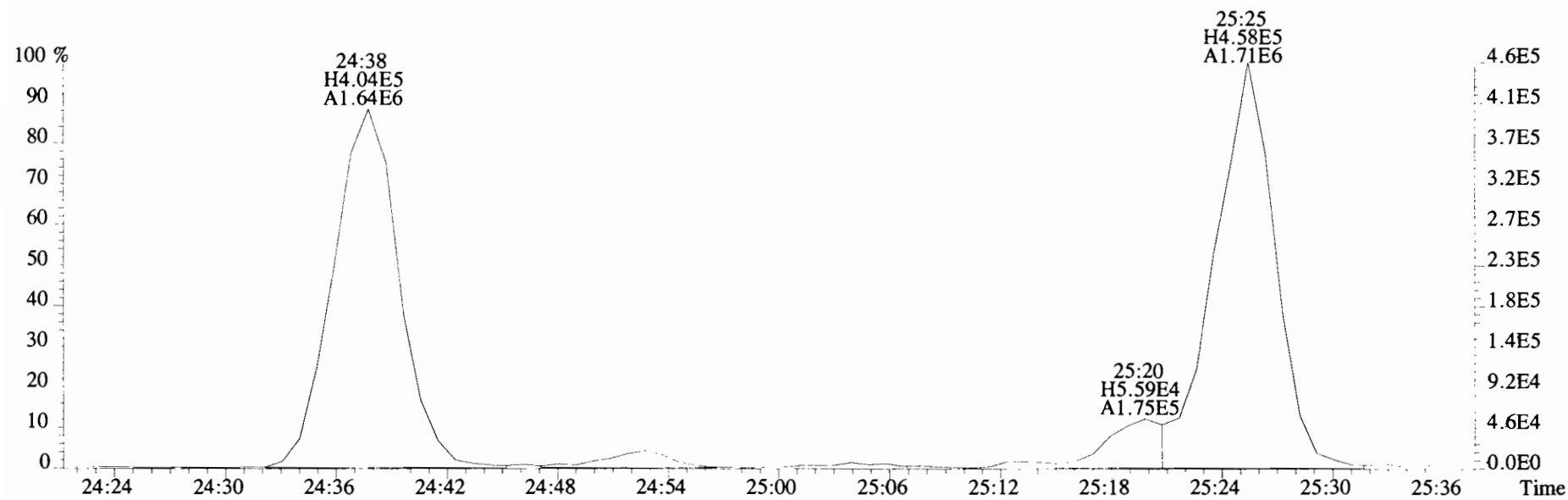
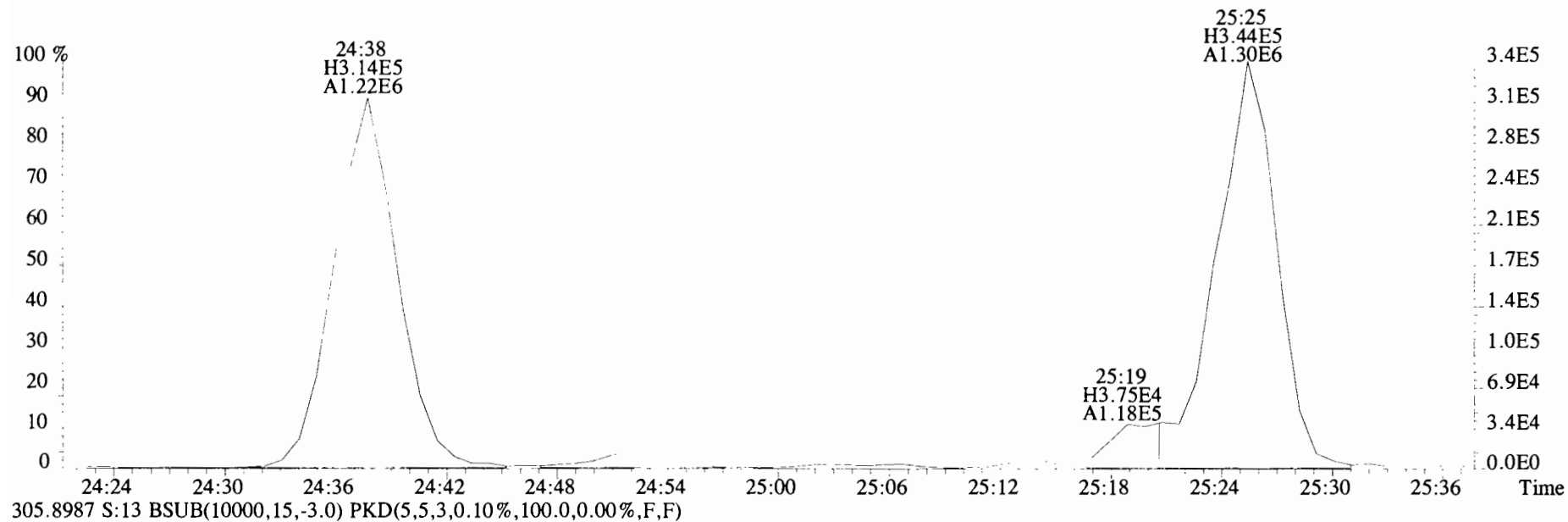
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



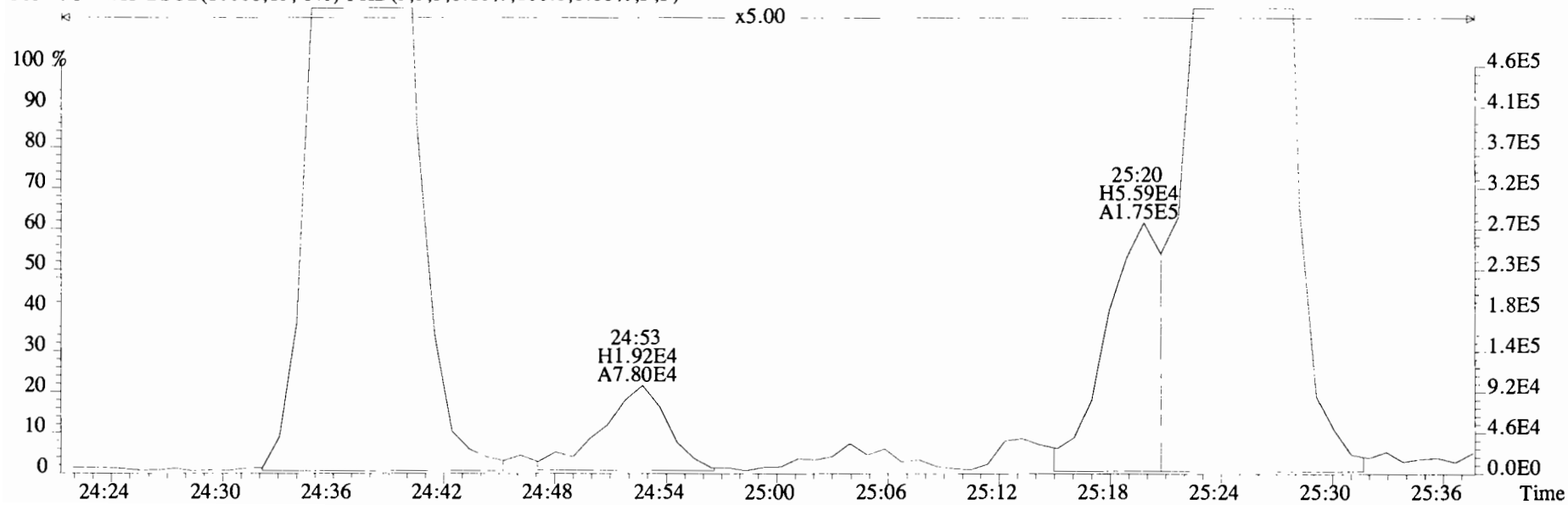
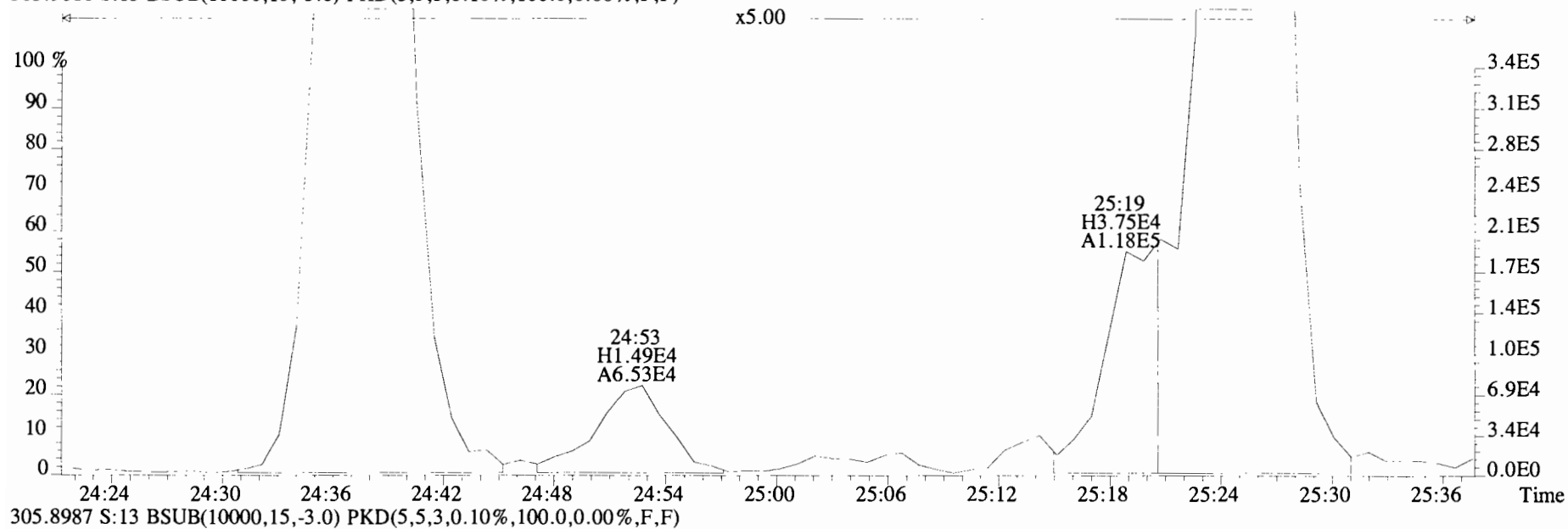
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



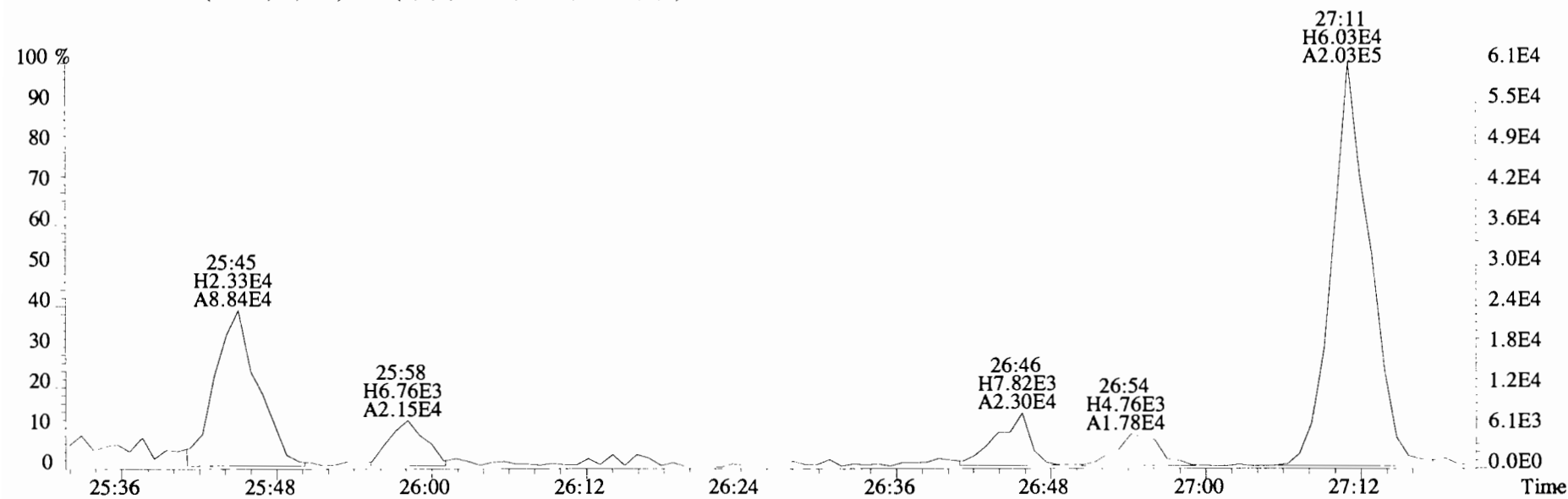
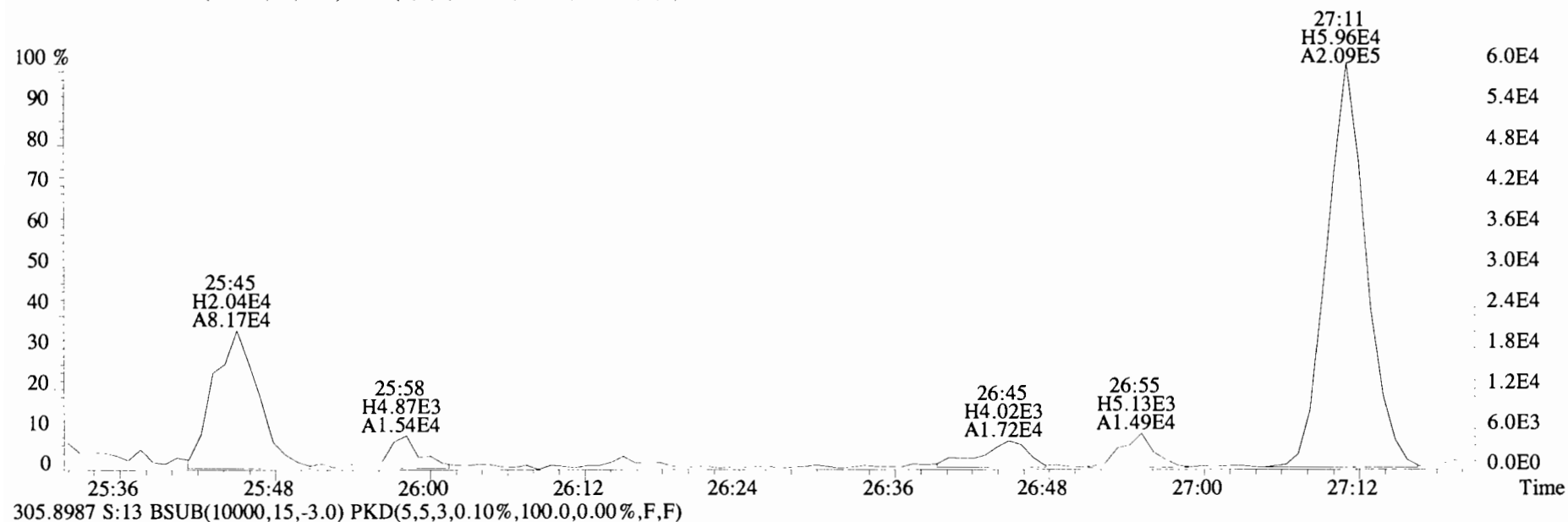
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



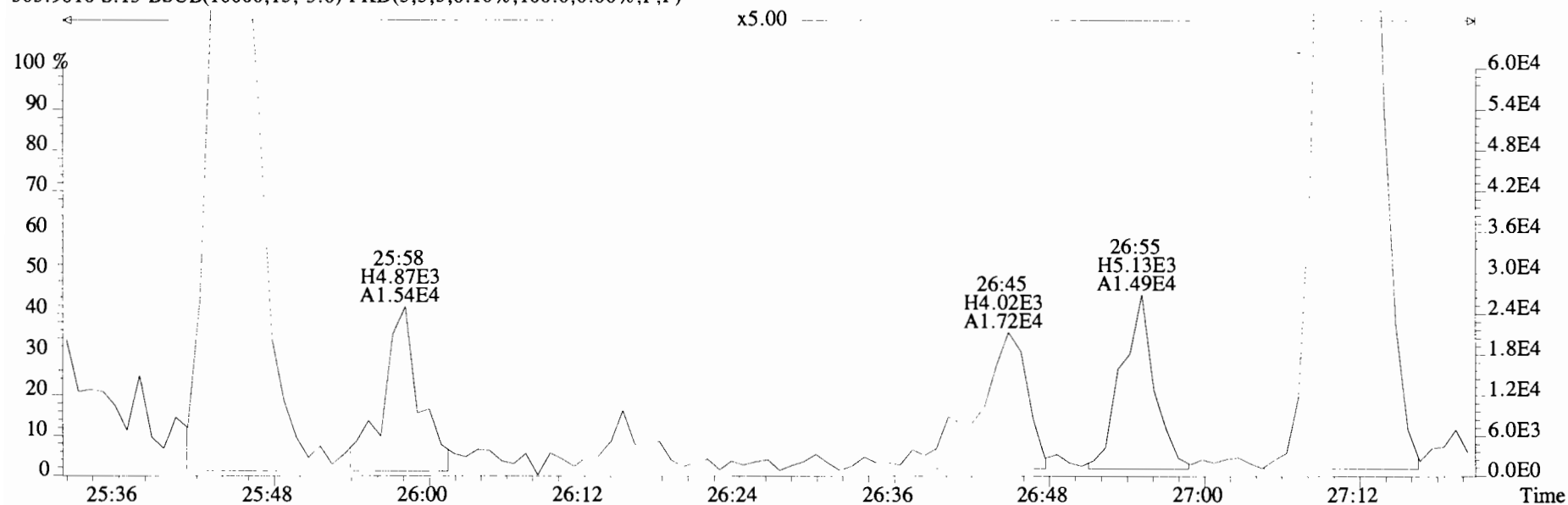
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



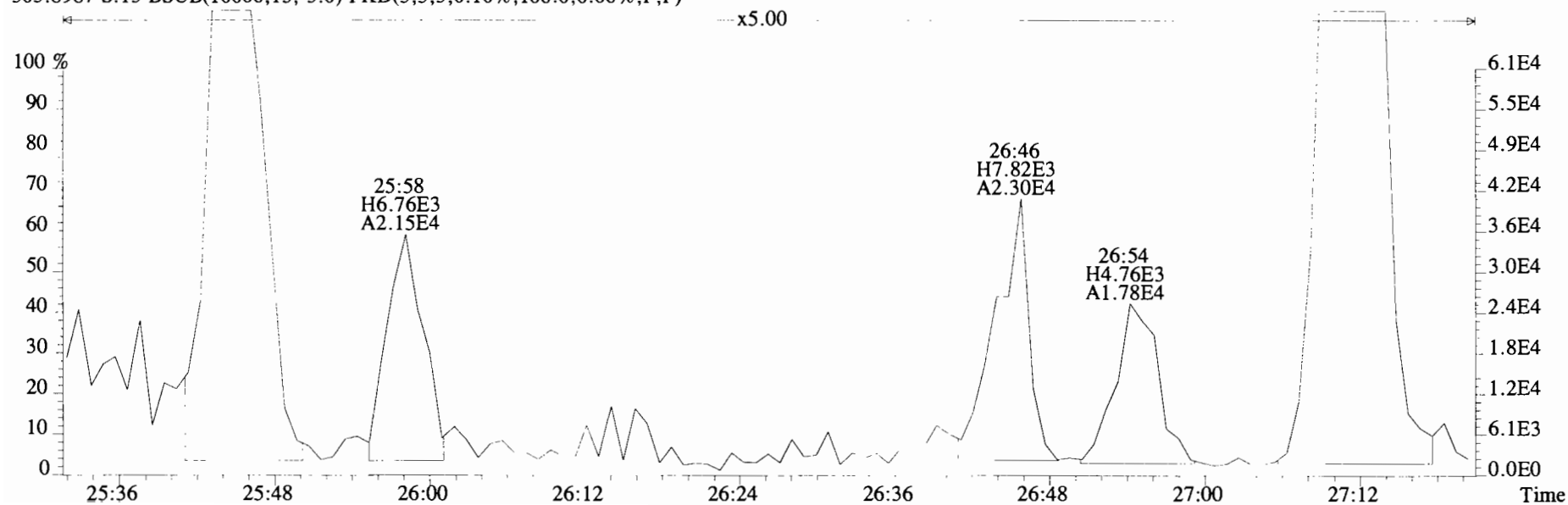
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



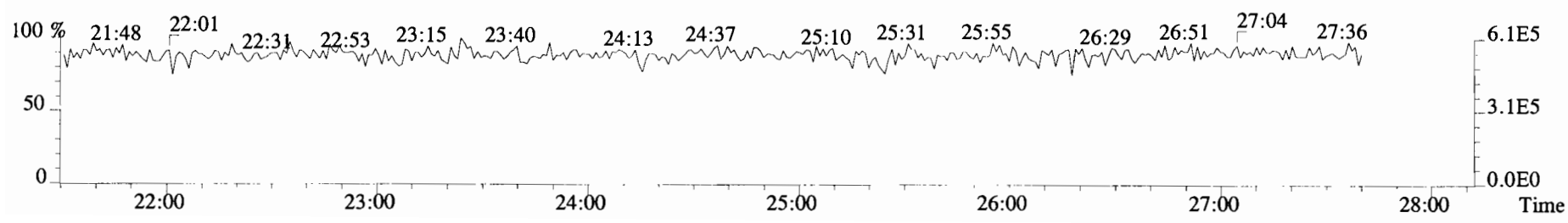
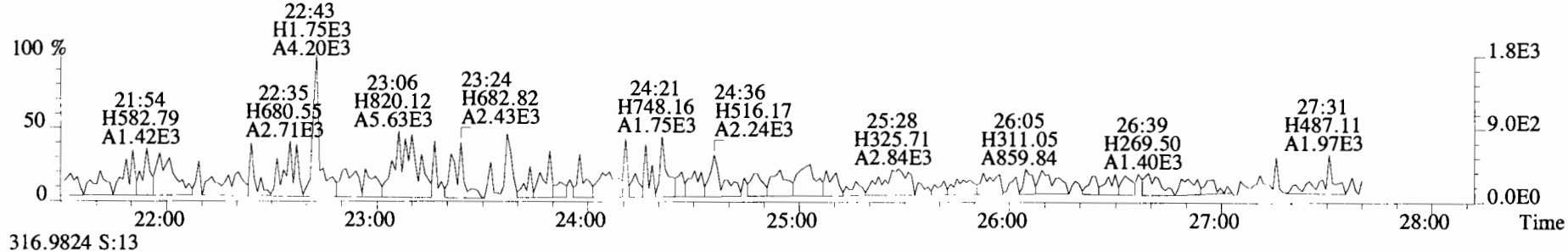
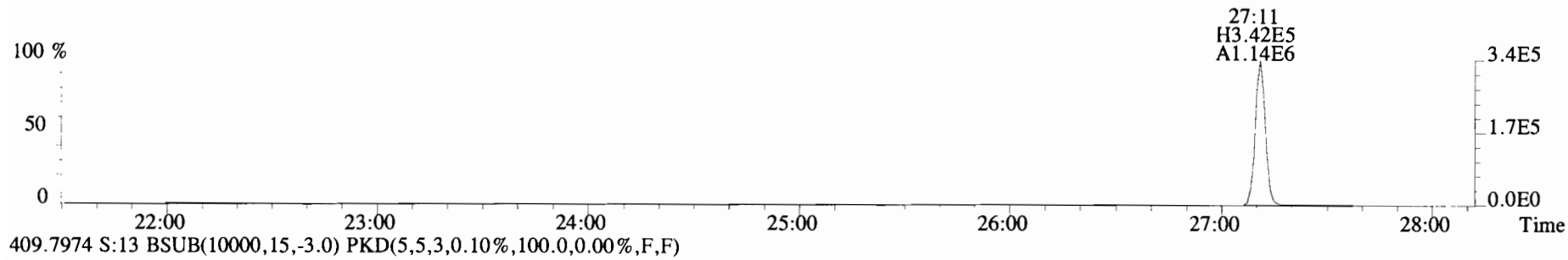
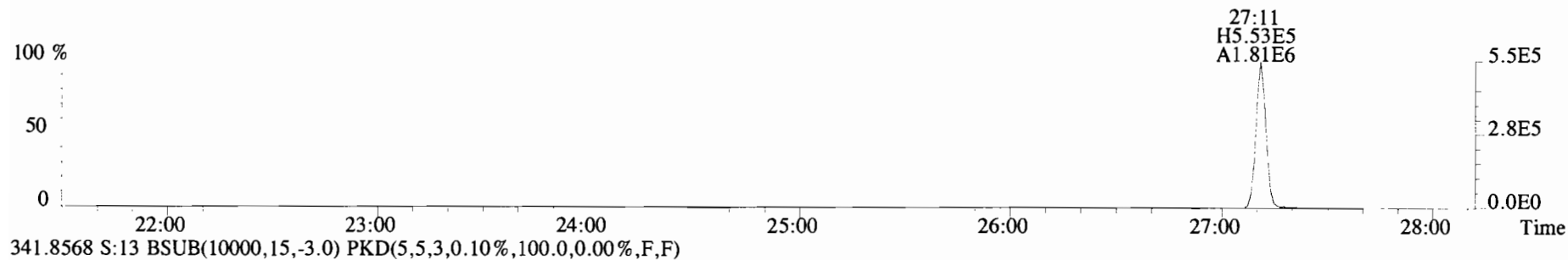
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



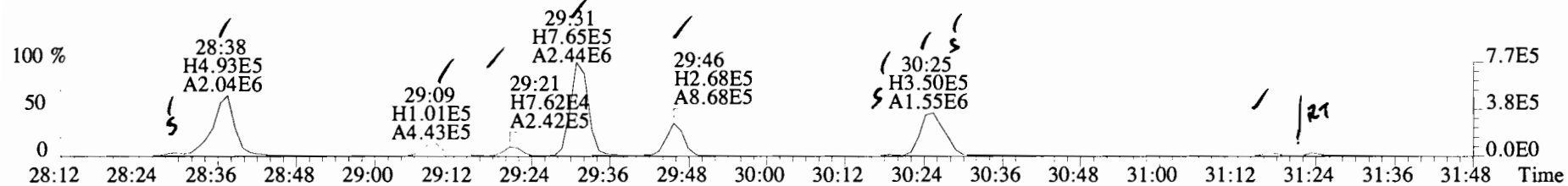
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



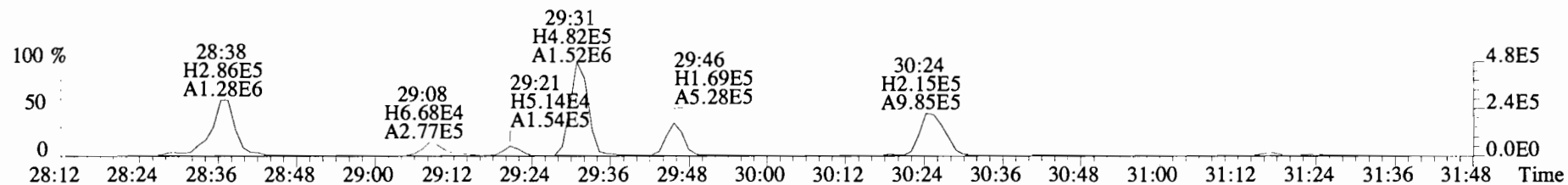
File:191120D1 #1-492 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



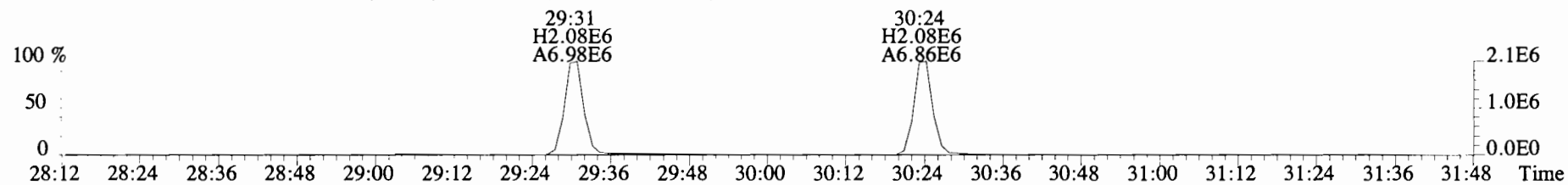
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



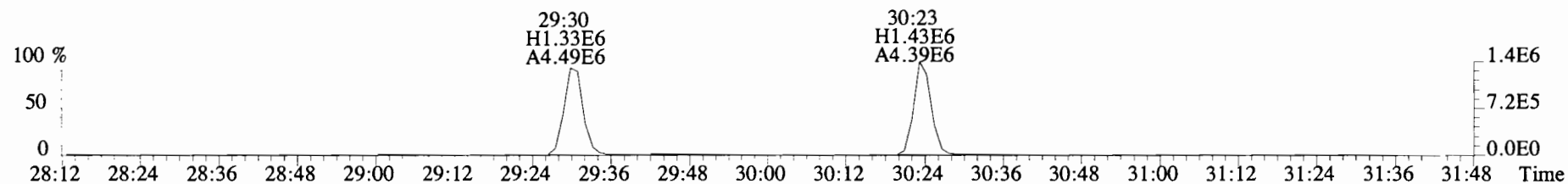
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



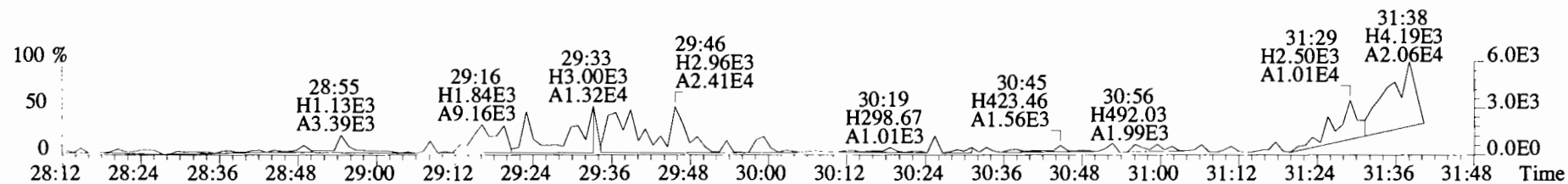
351.9000 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



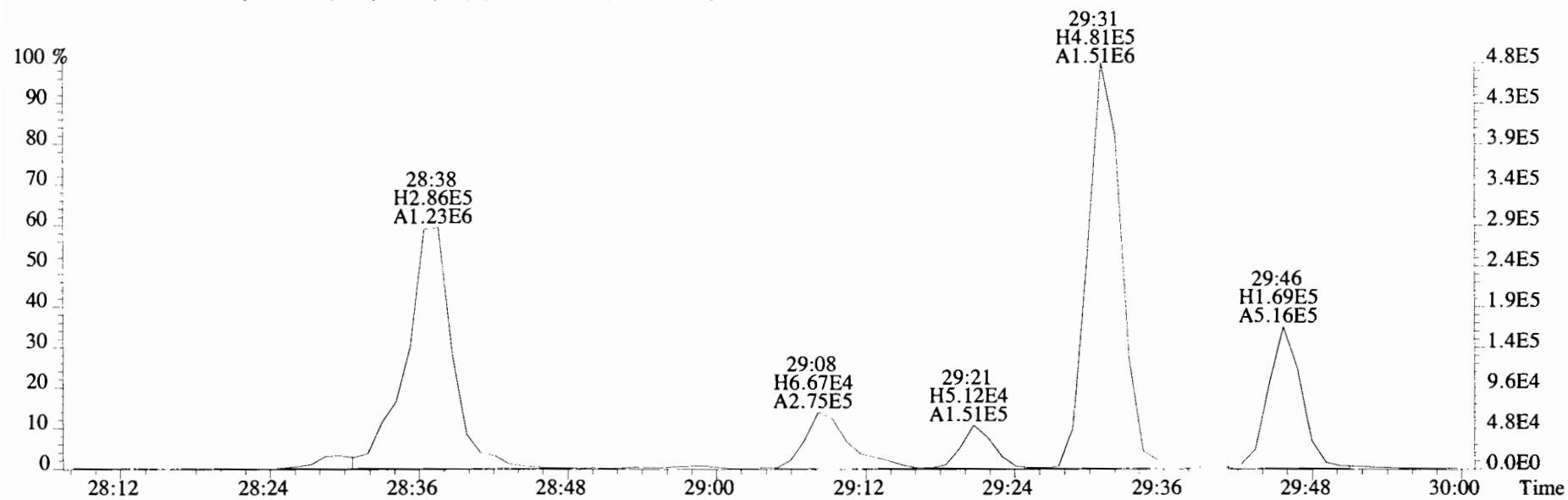
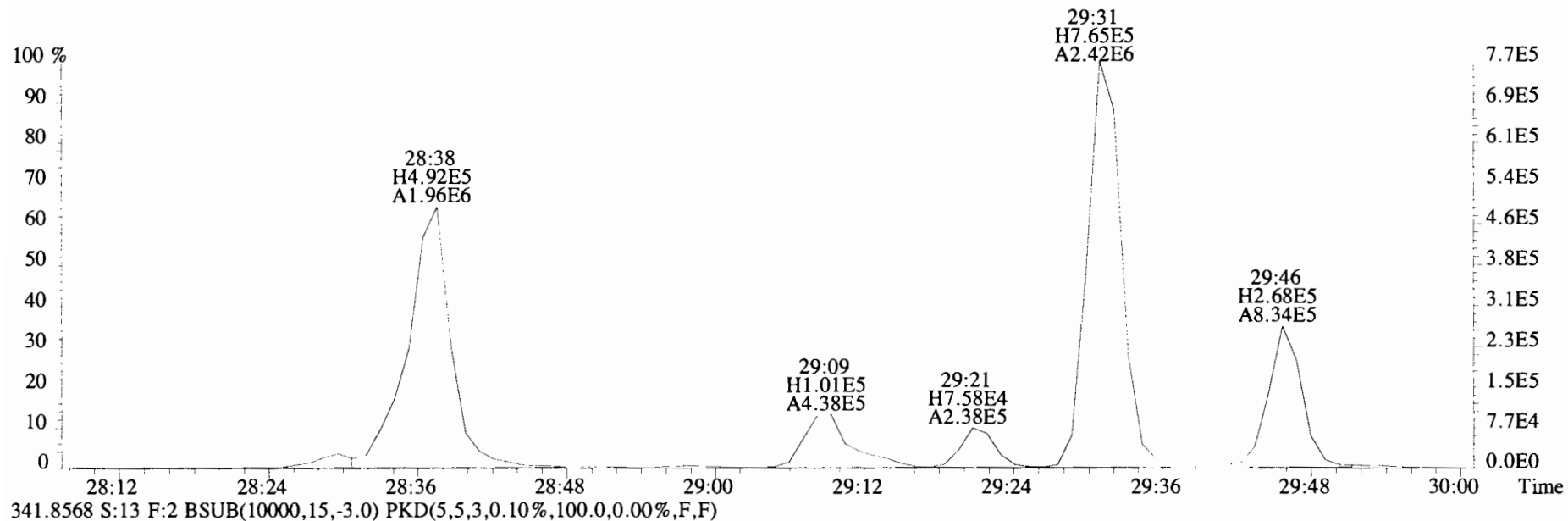
353.8970 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



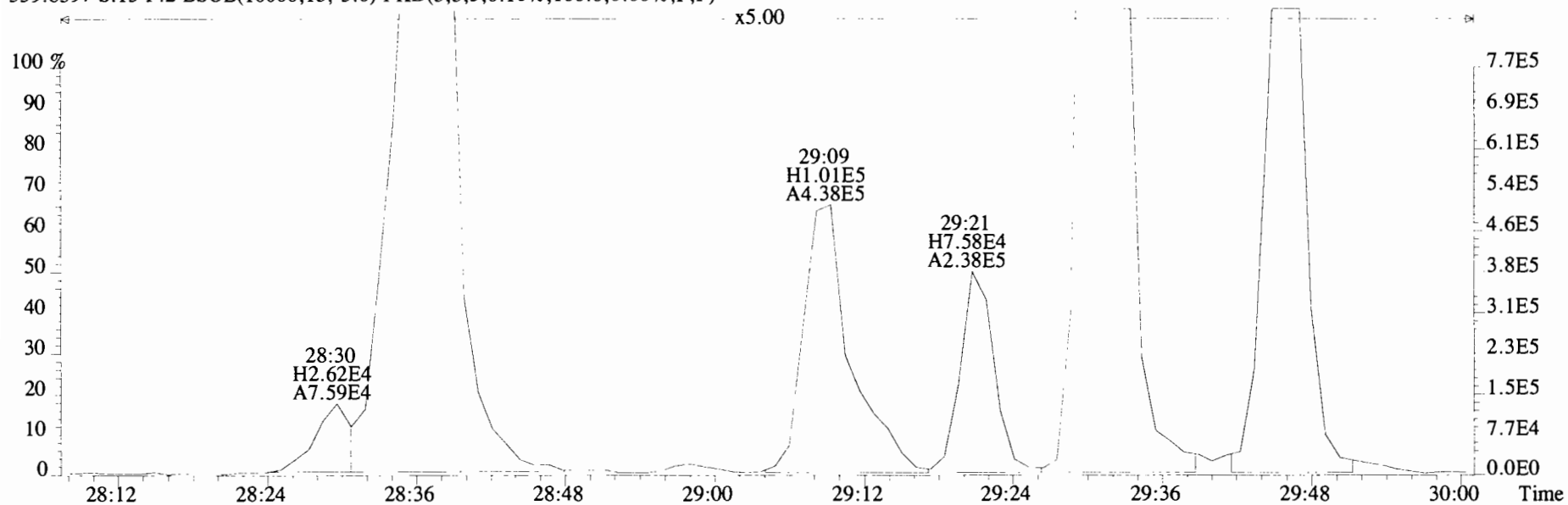
409.7974 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



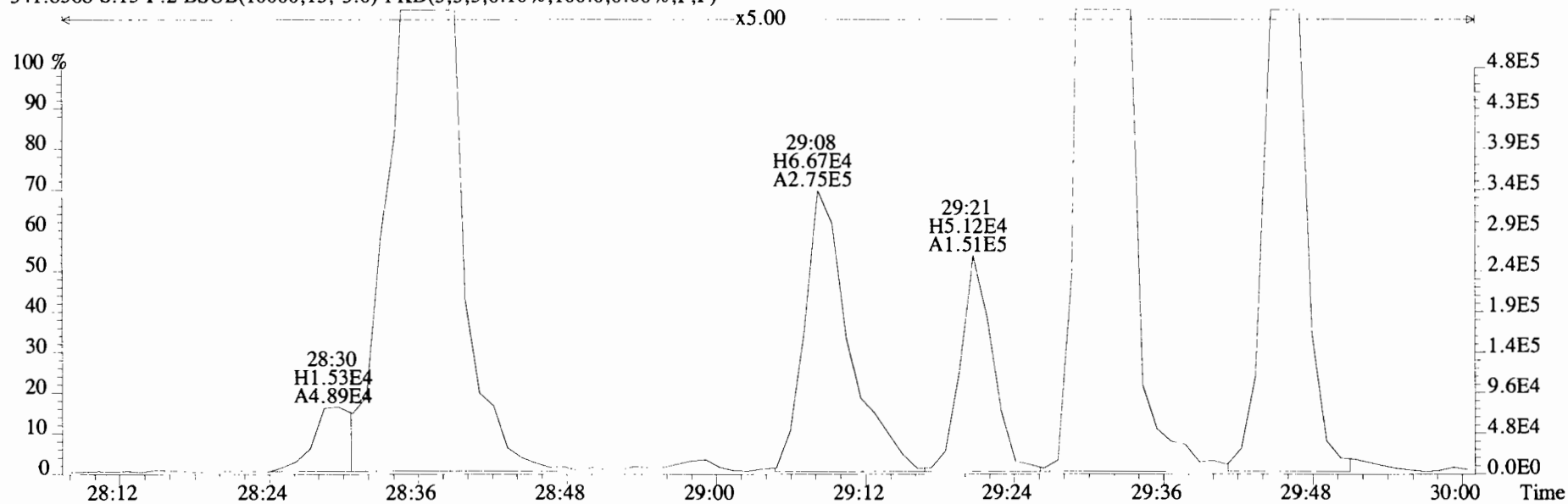
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



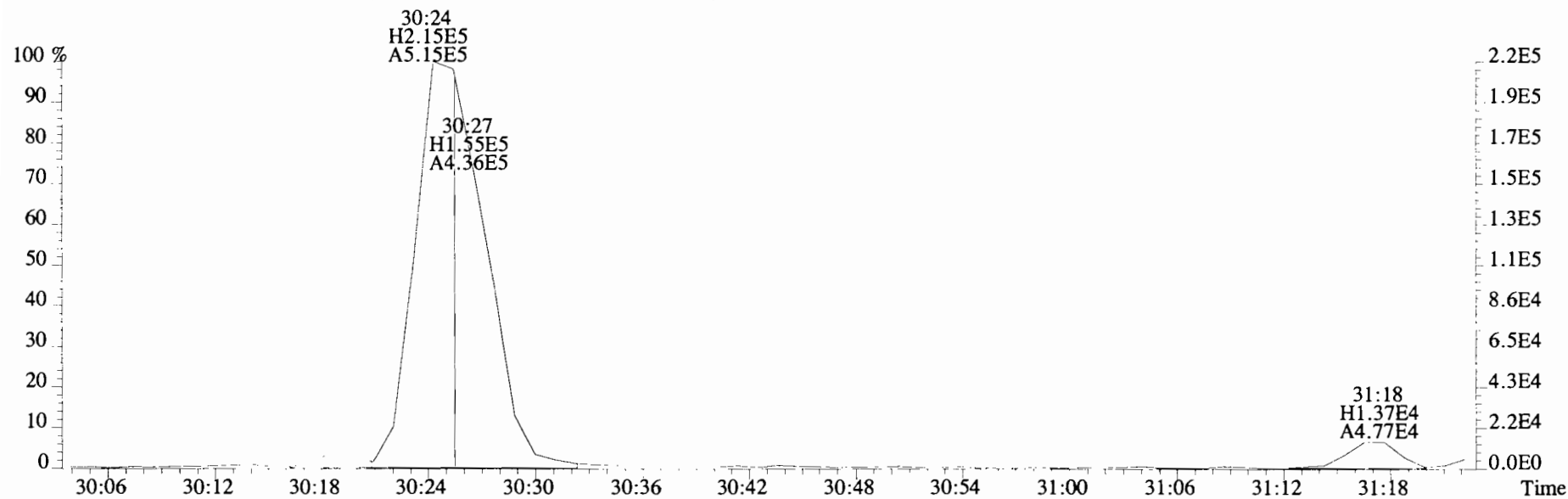
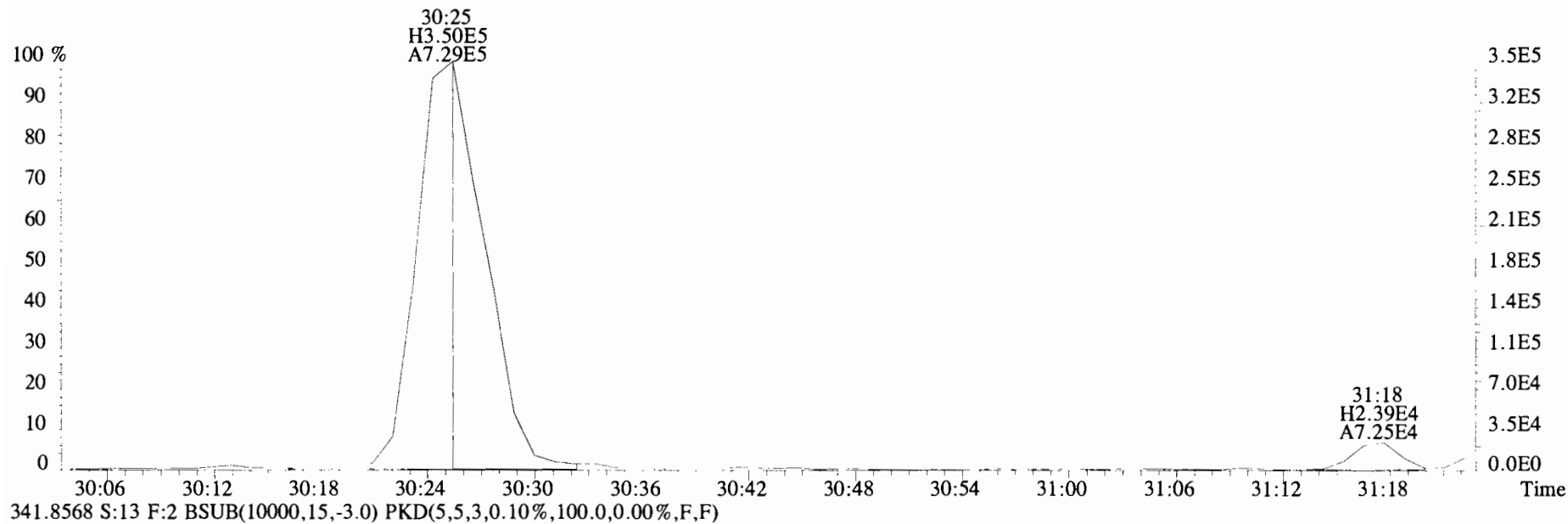
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



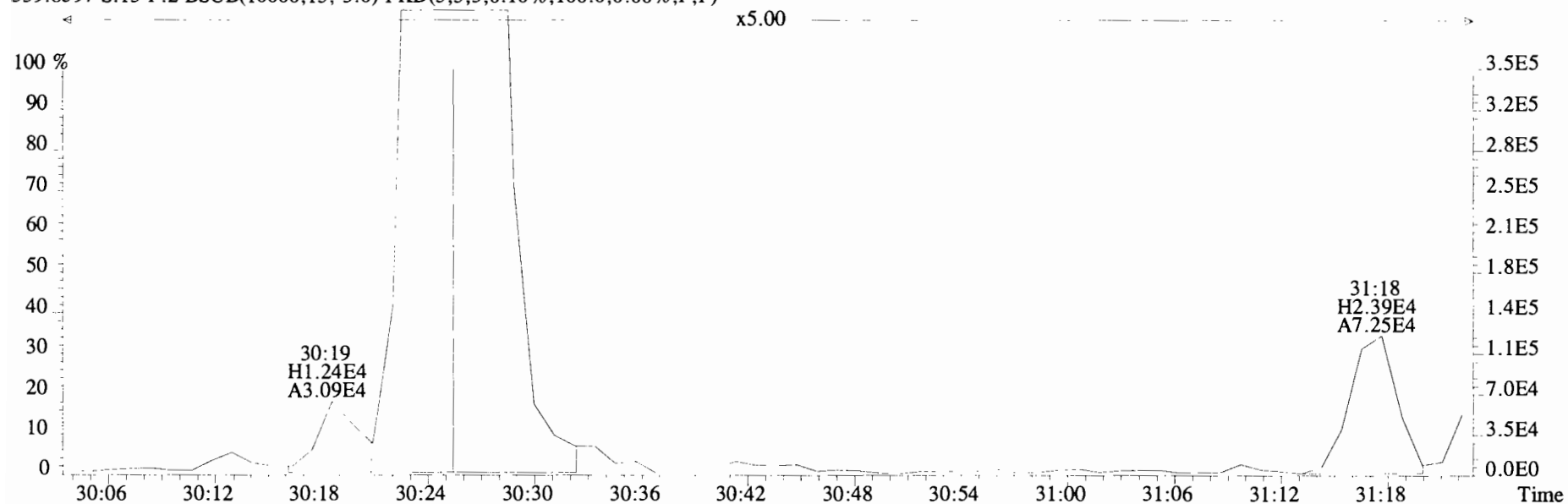
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



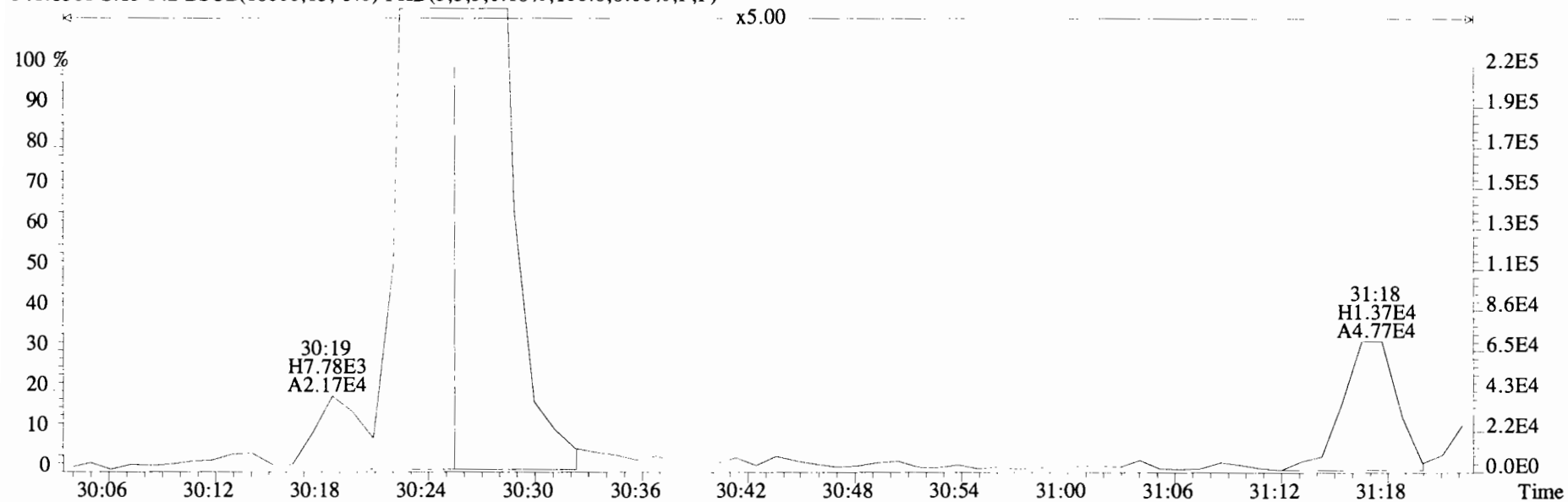
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



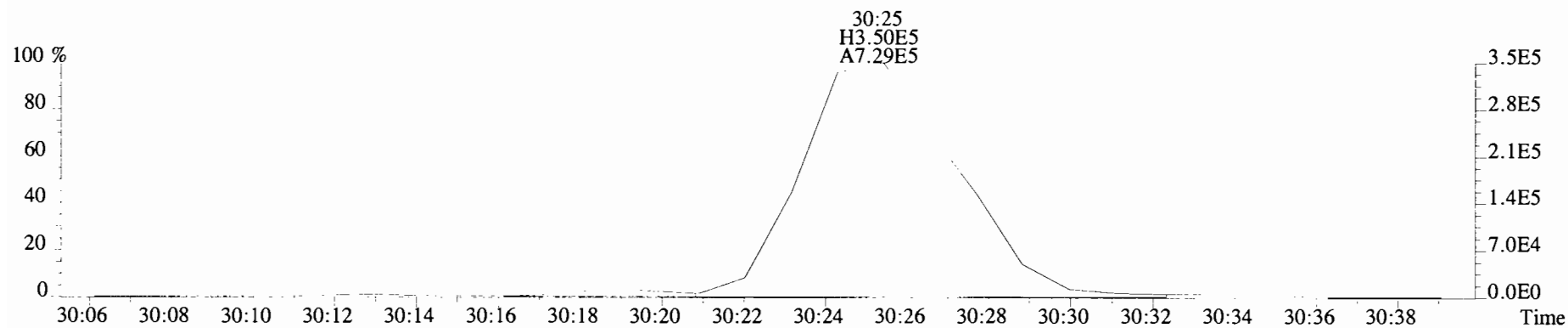
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



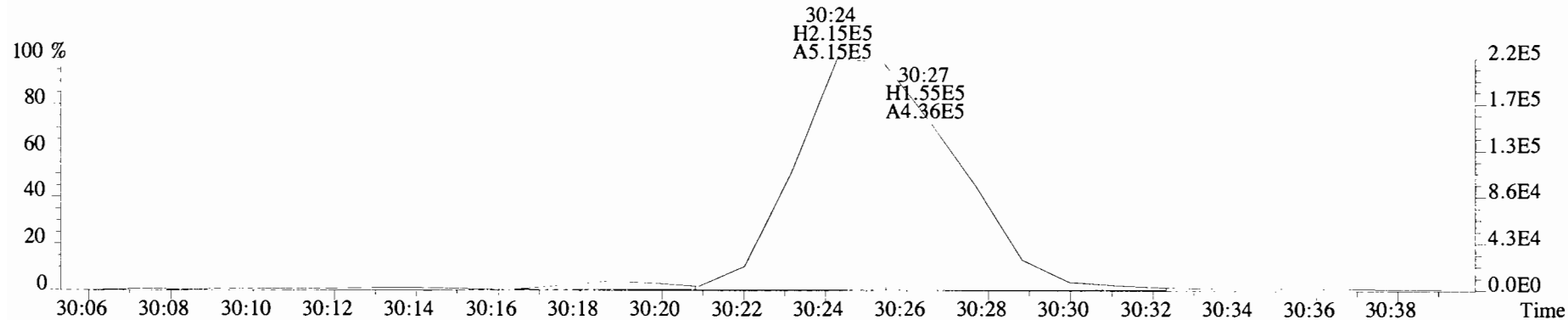
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



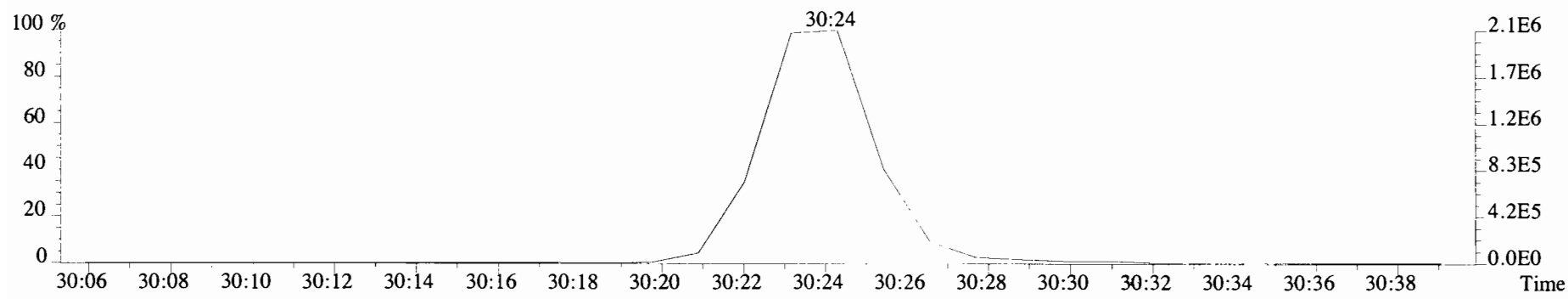
File:191120D1 #1-210 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



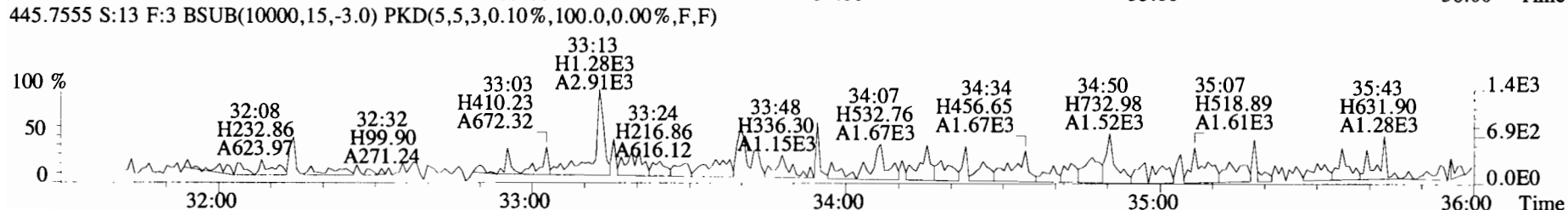
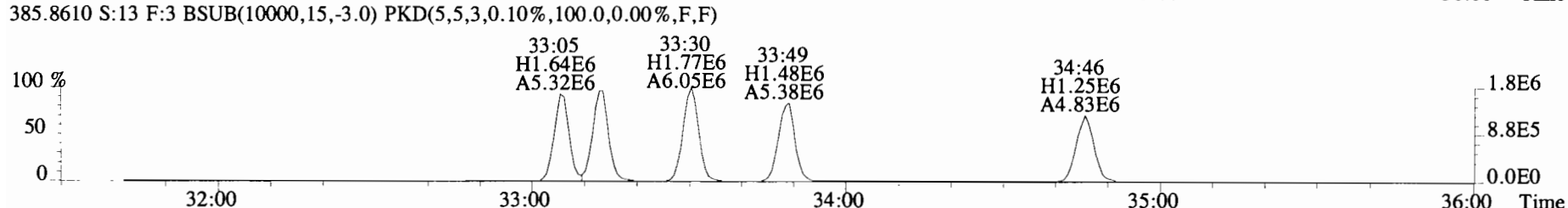
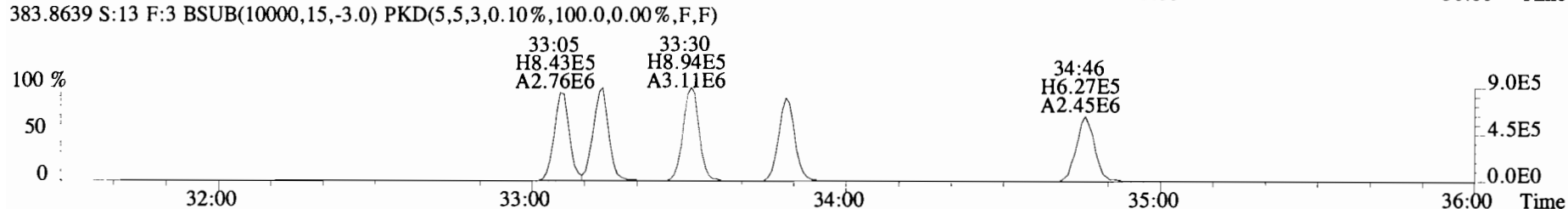
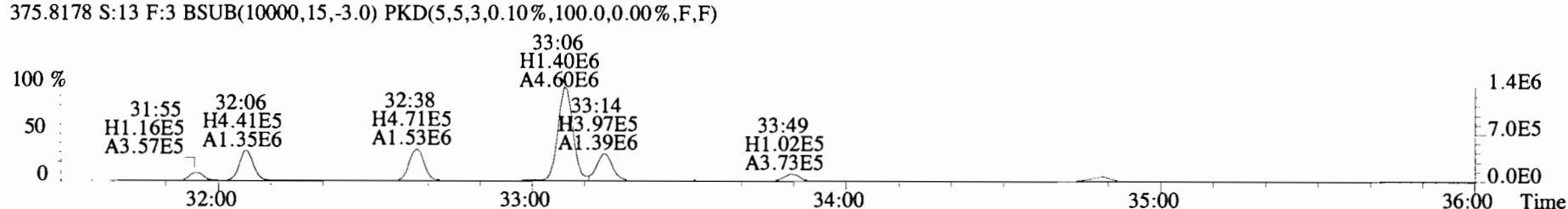
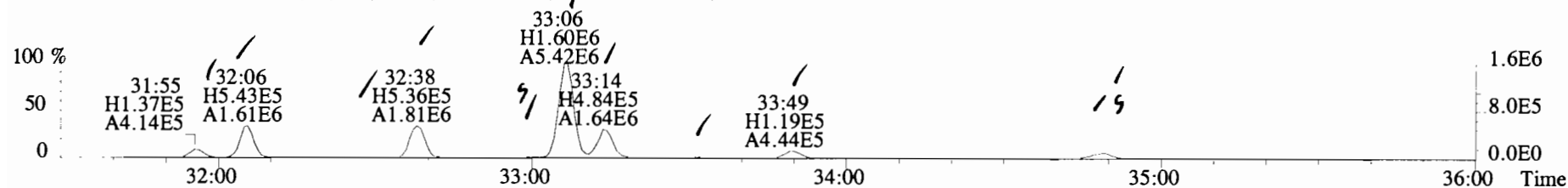
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



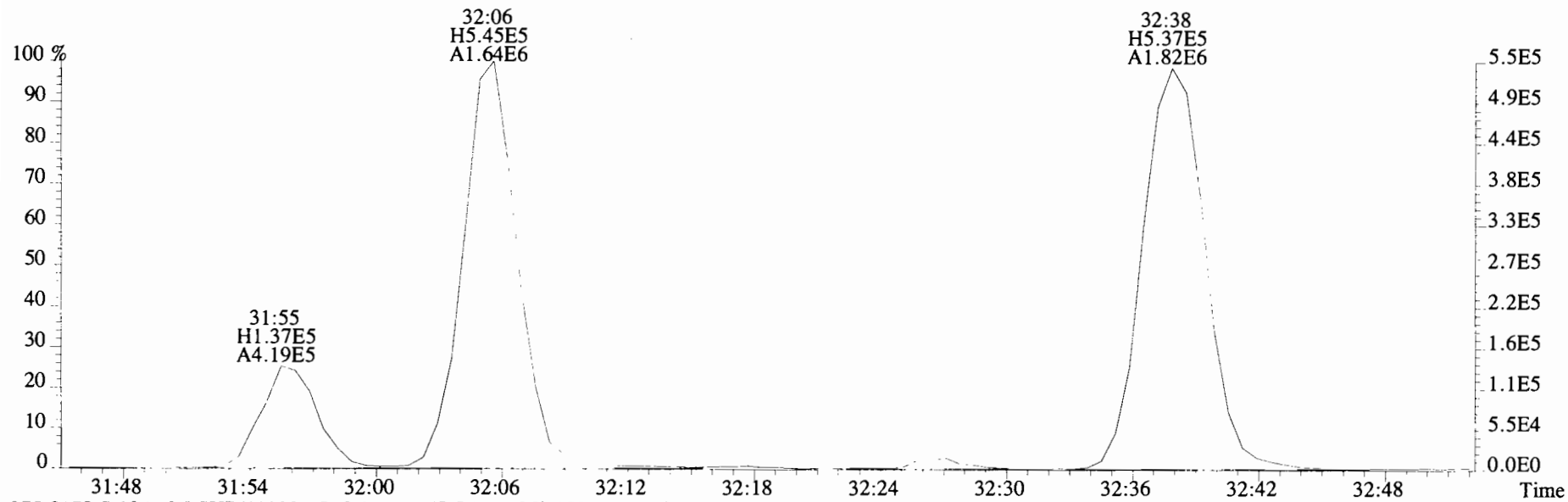
351.9000 S:13 F:2



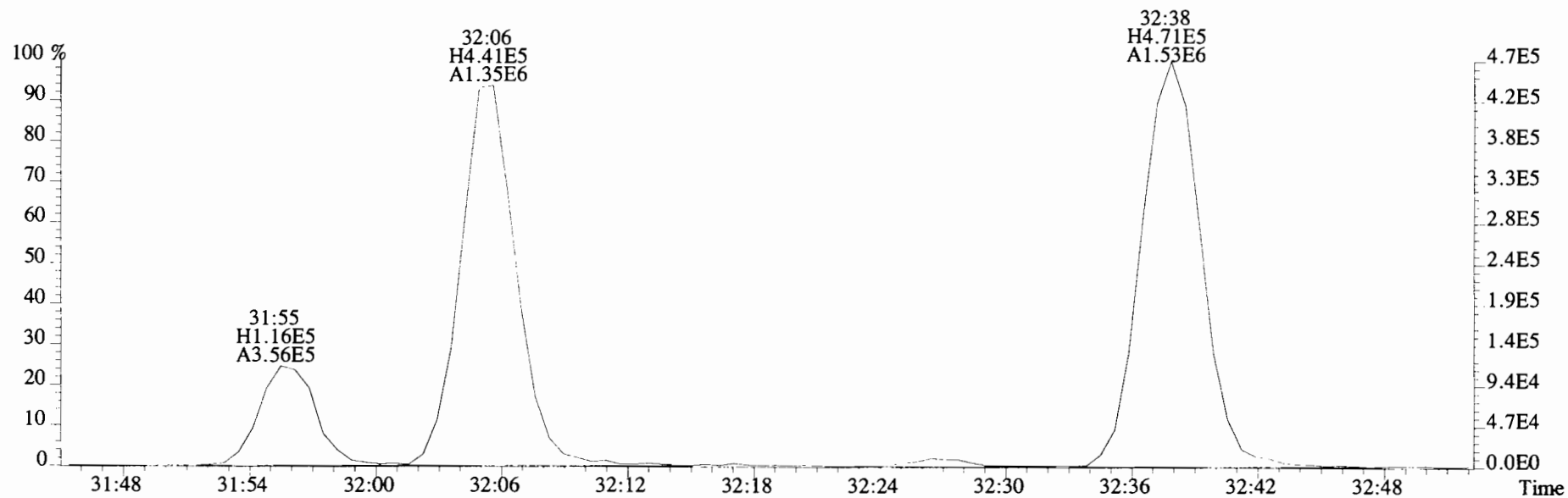
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



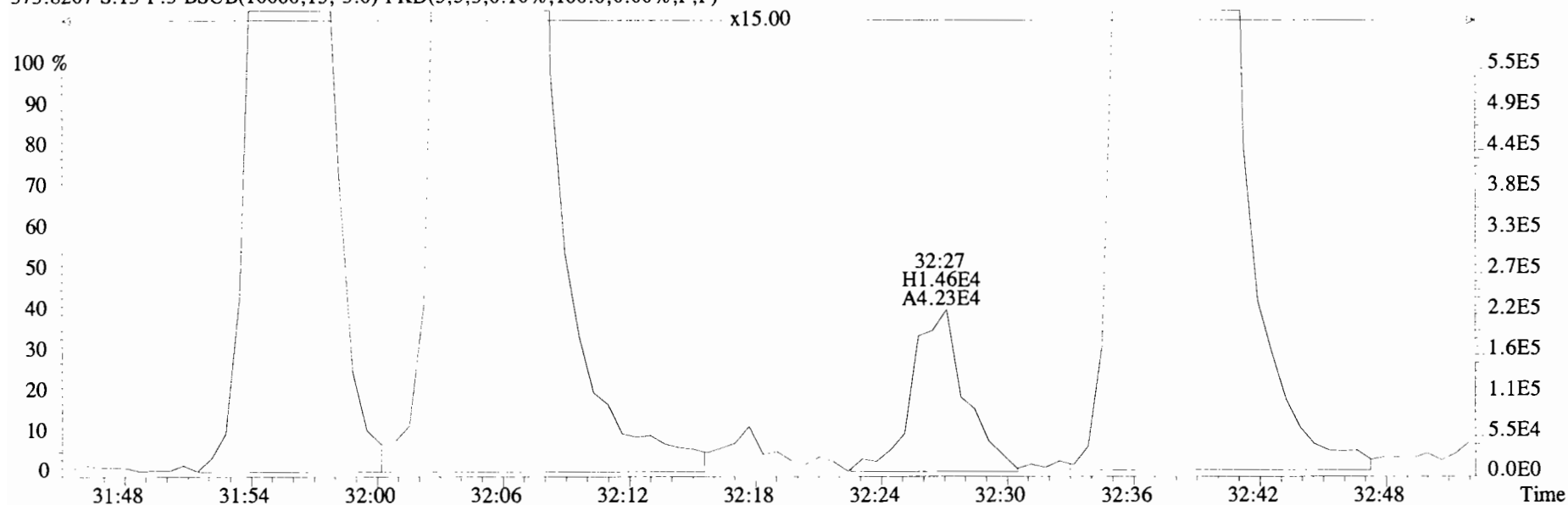
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



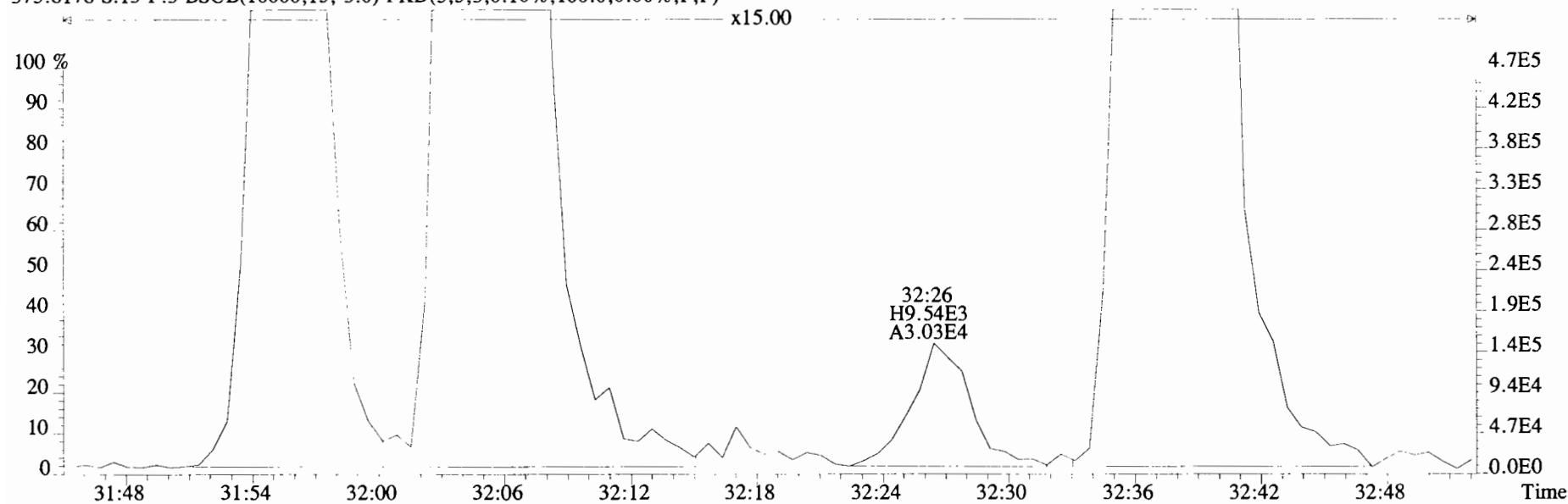
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



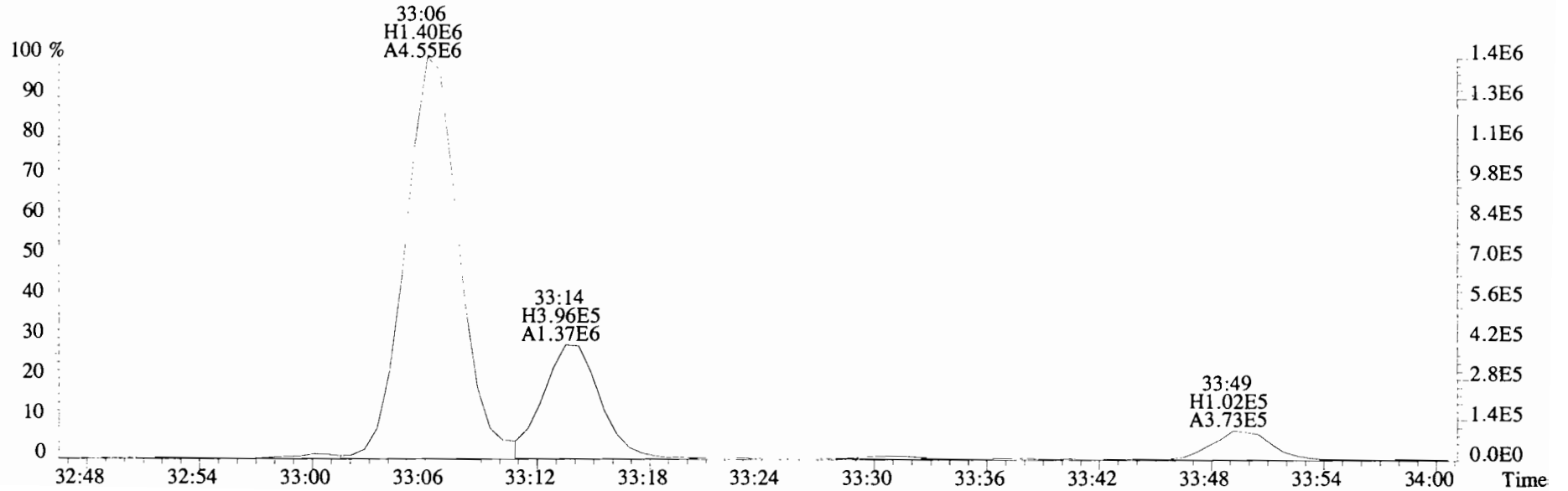
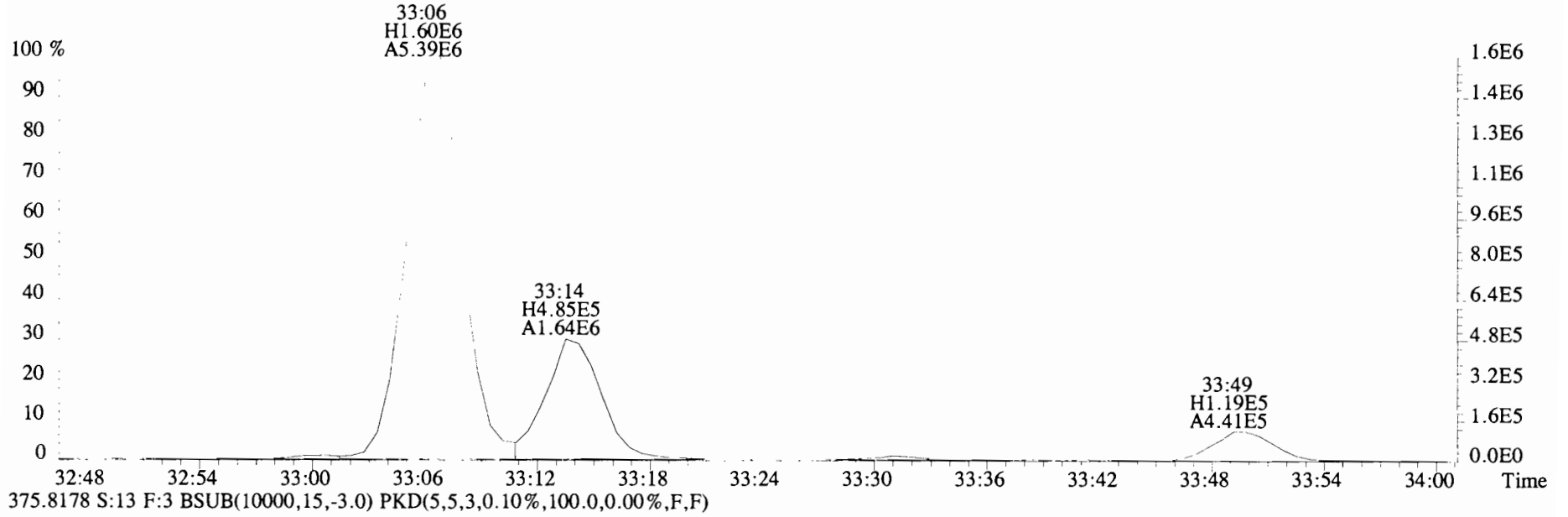
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



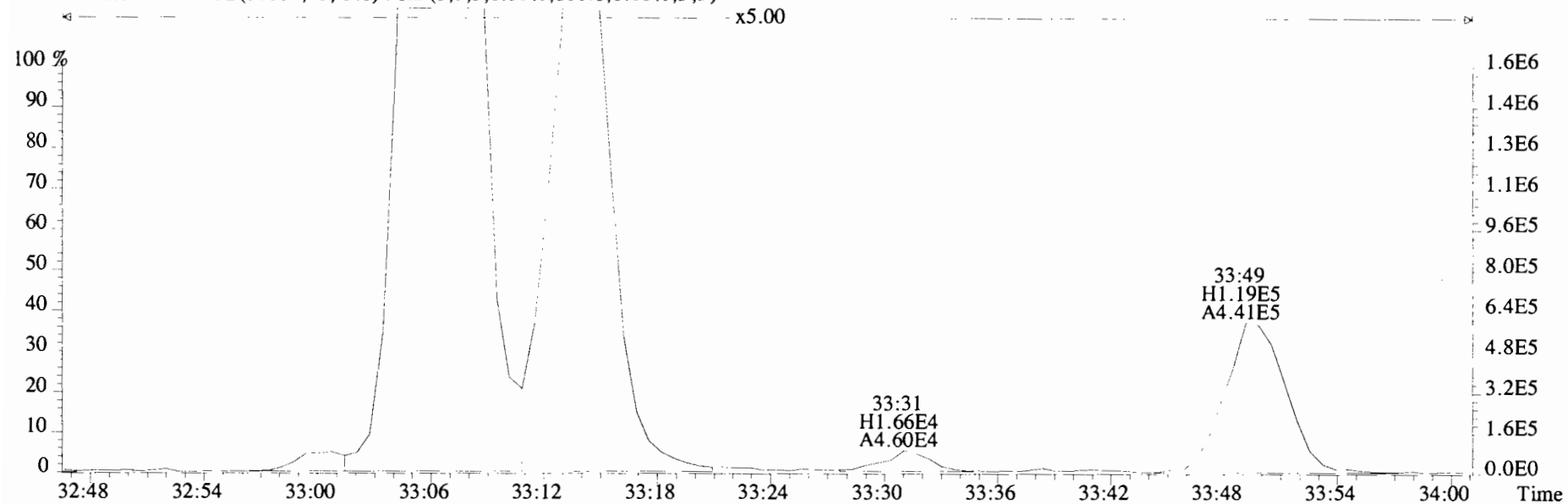
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



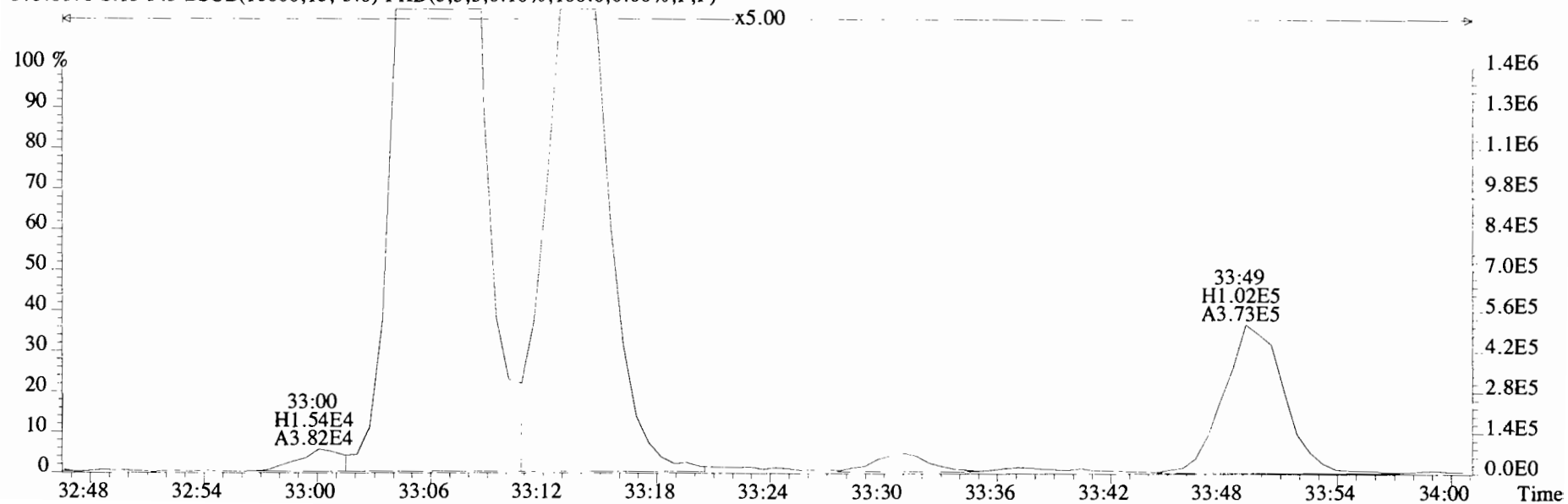
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



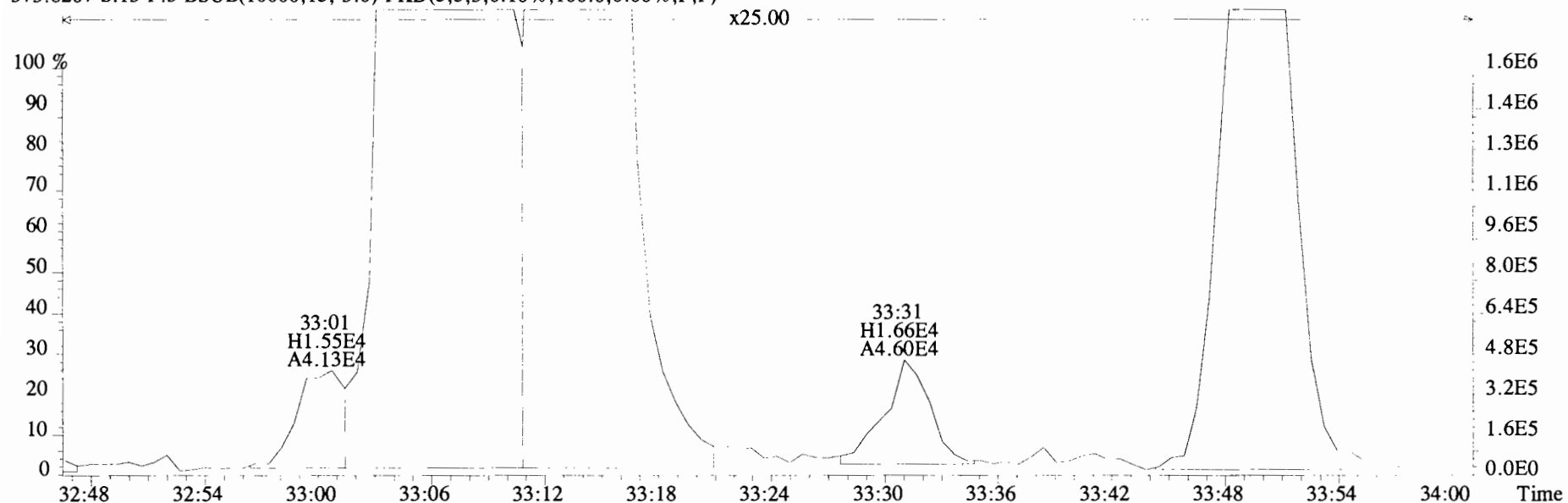
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



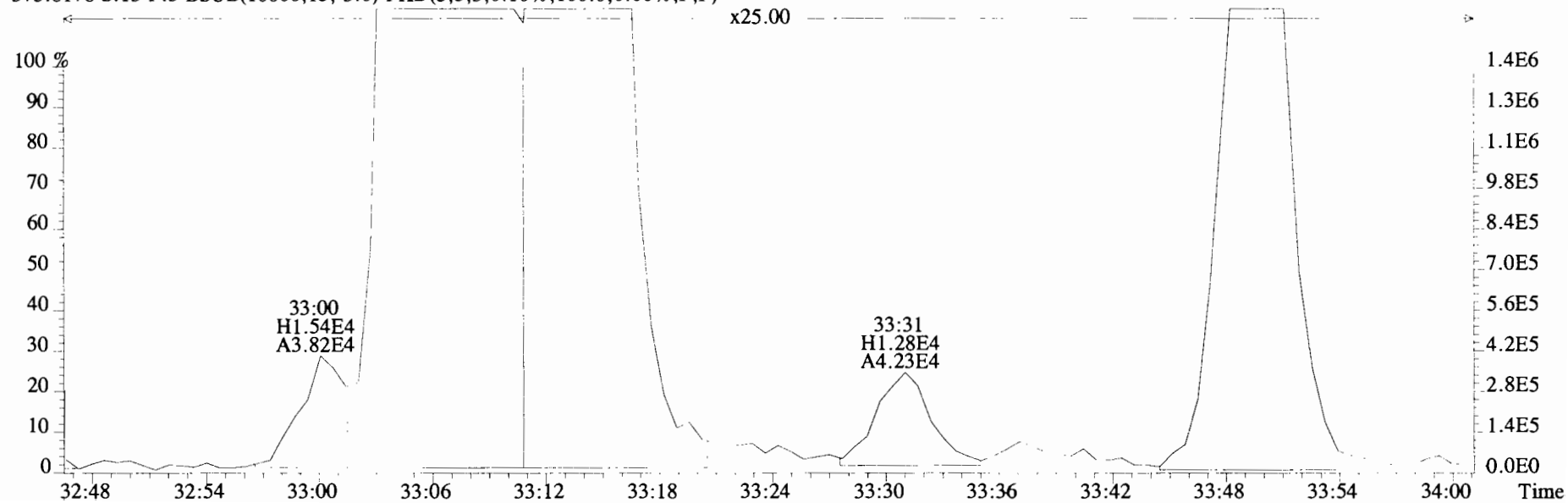
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



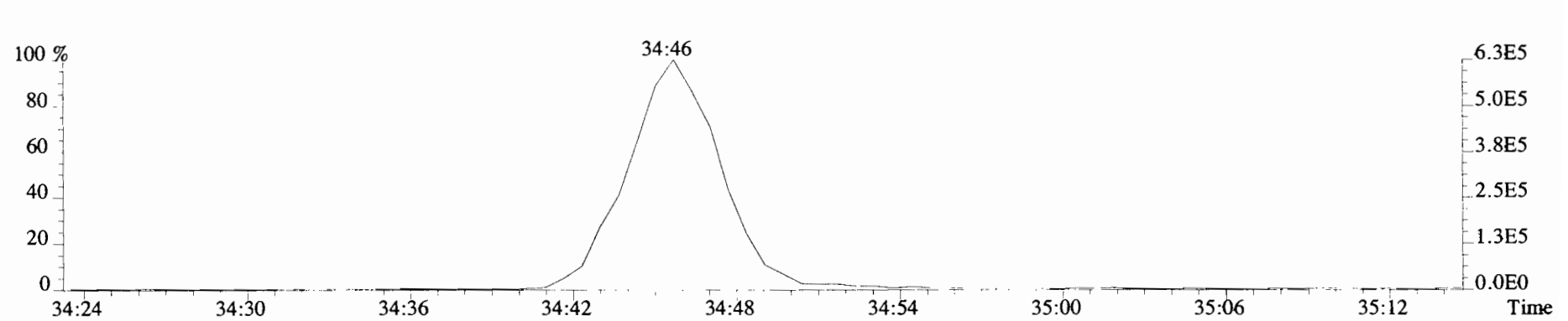
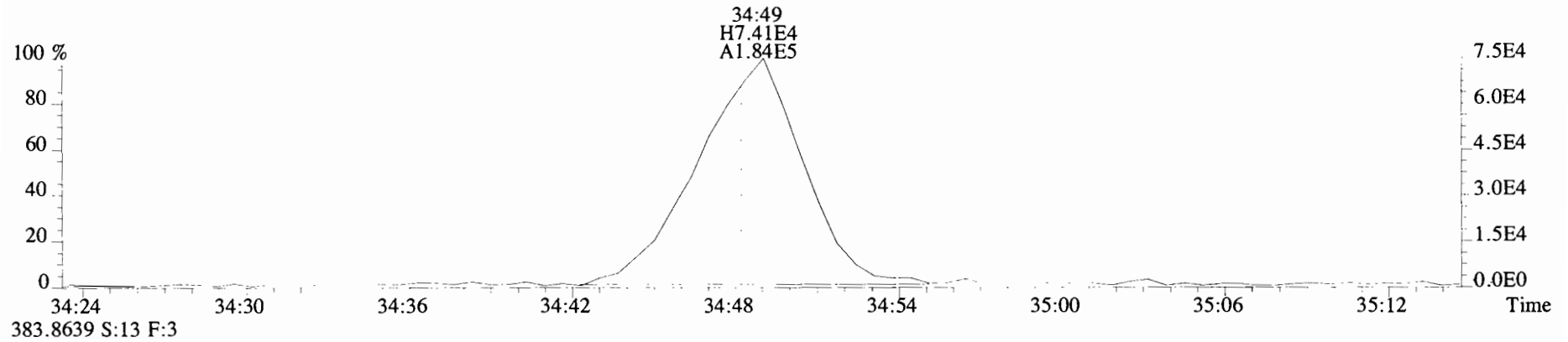
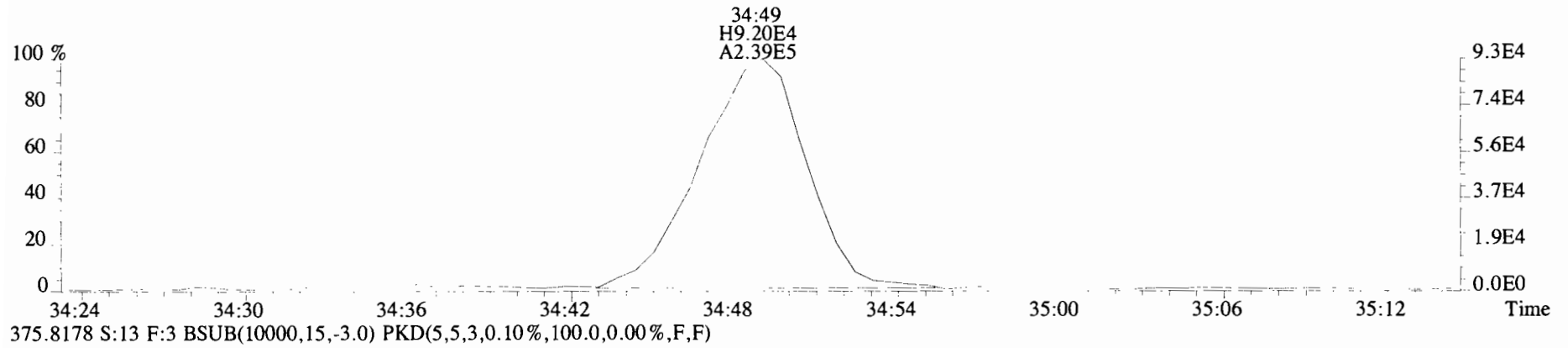
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



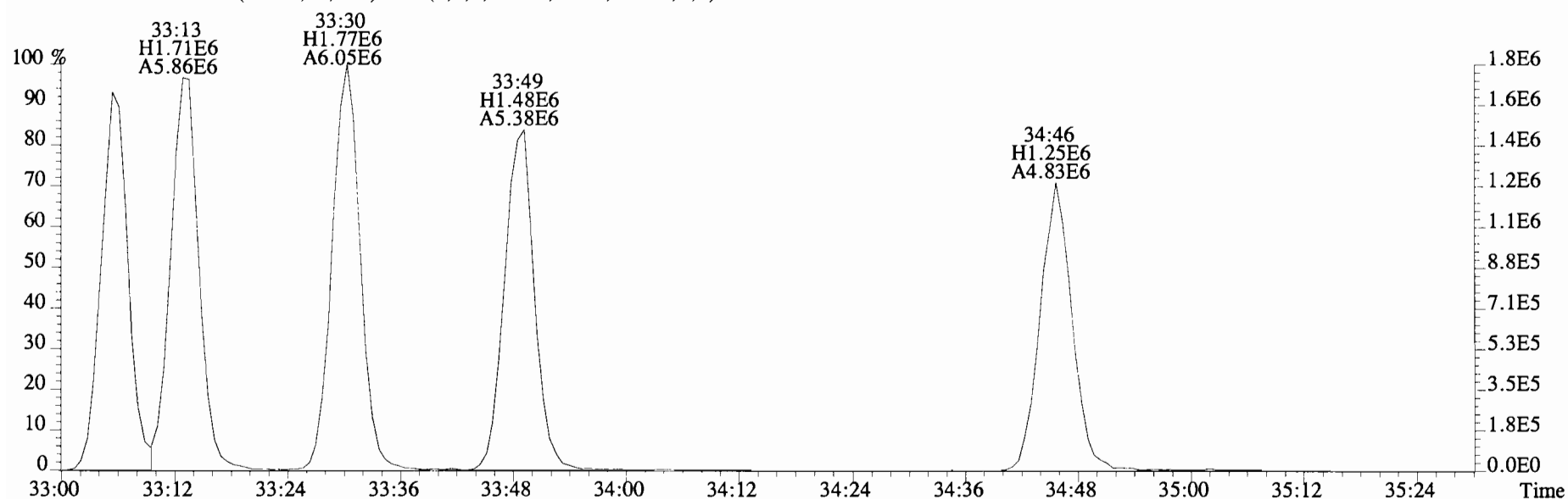
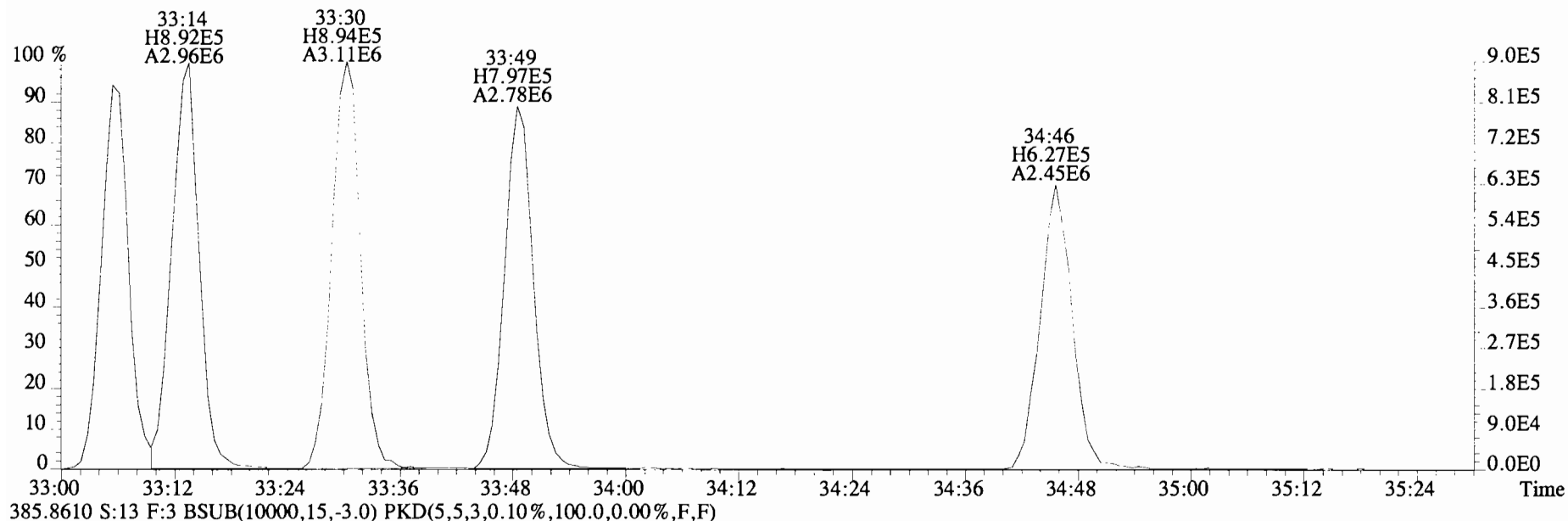
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



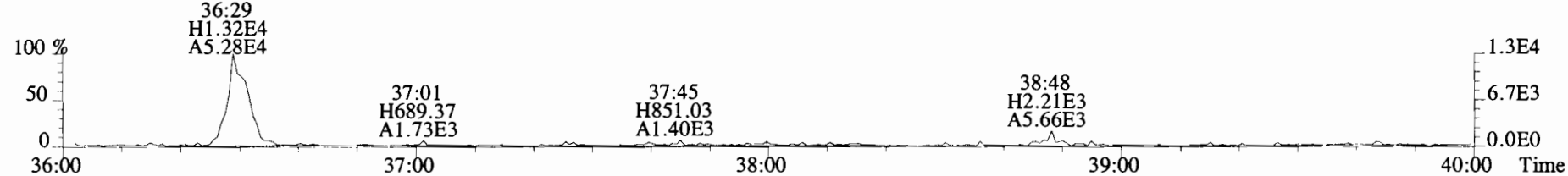
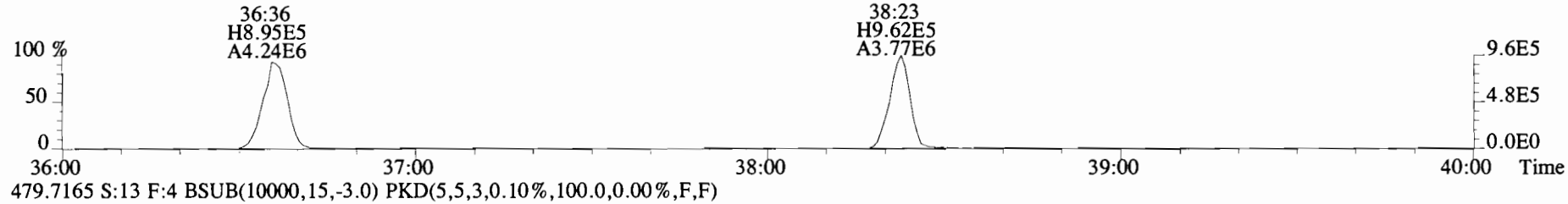
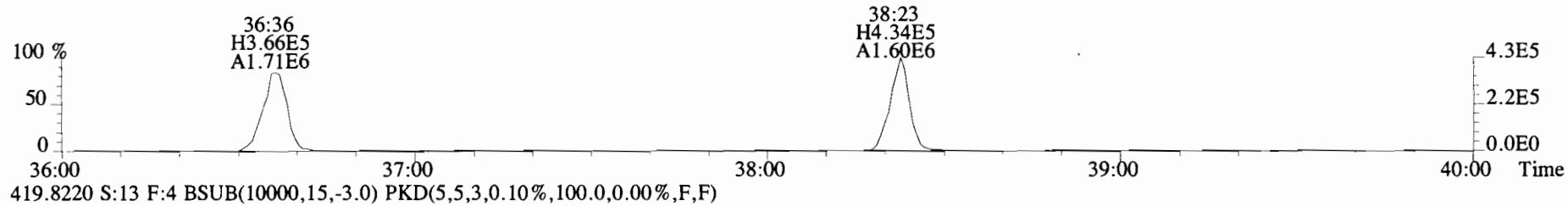
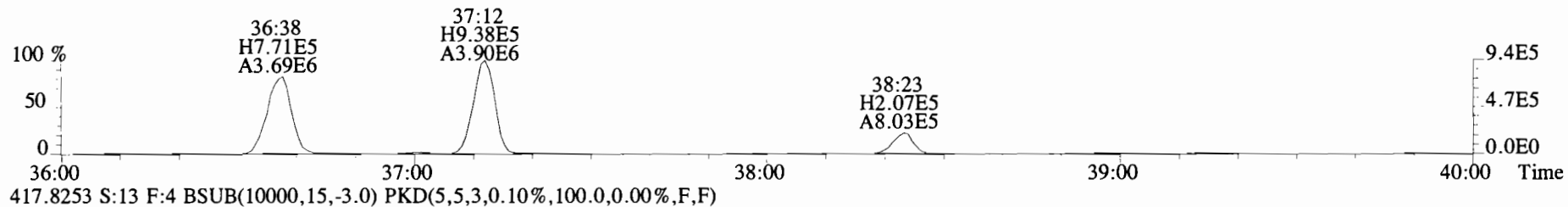
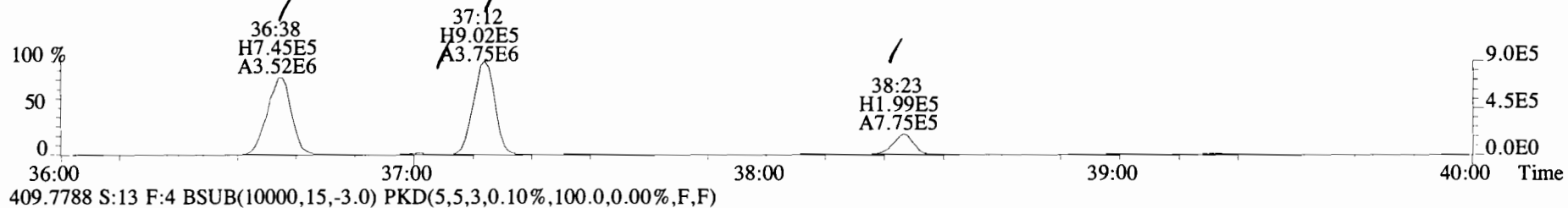
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



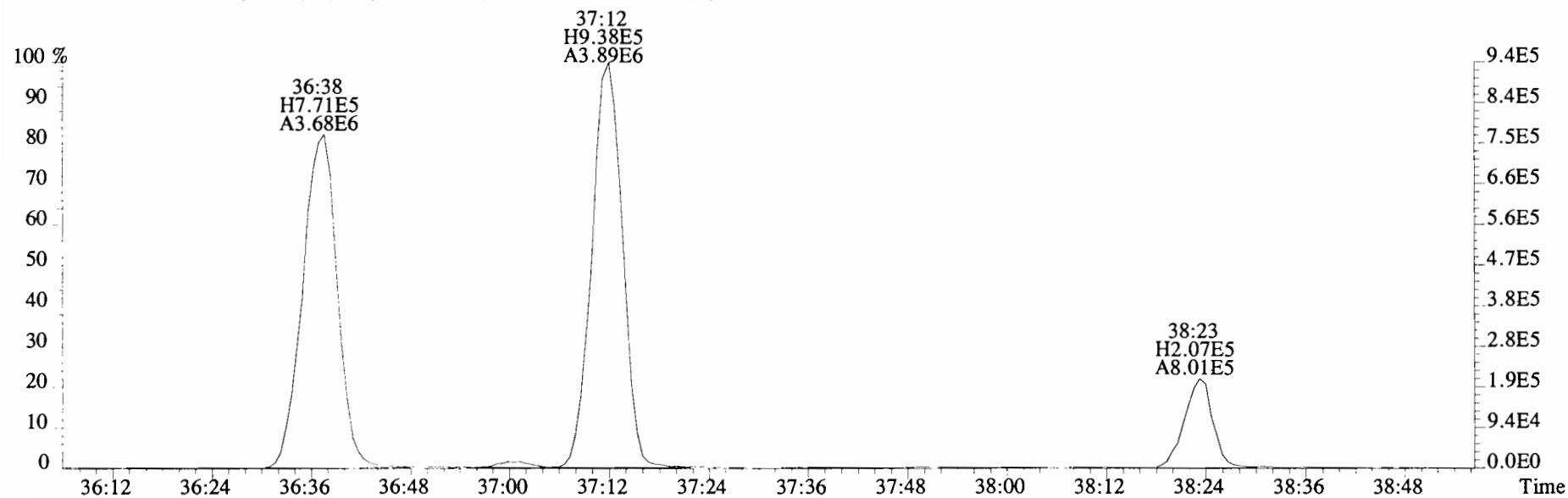
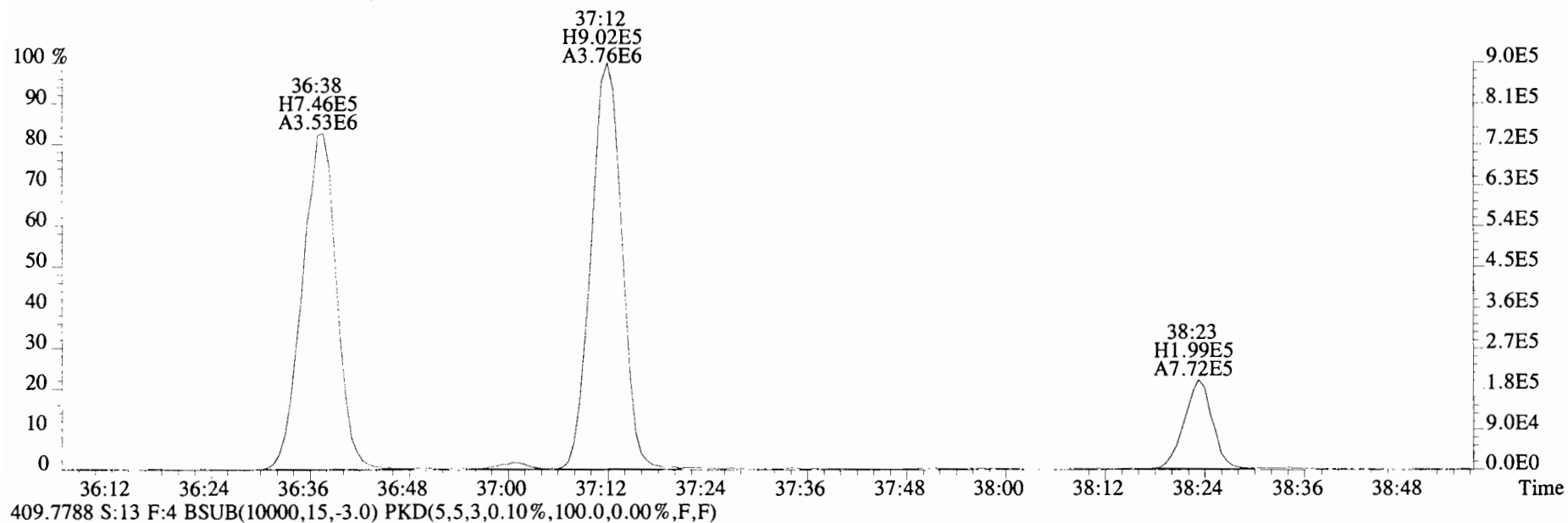
File:191120D1 #1-385 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



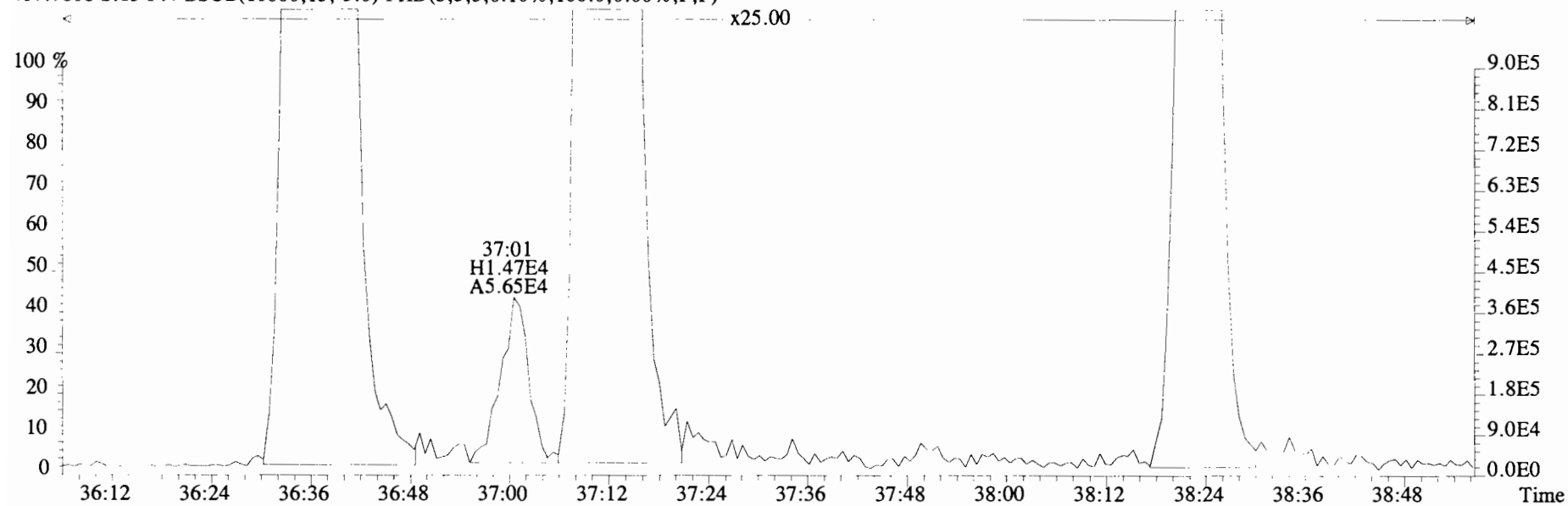
File:191120D1 #1-355 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



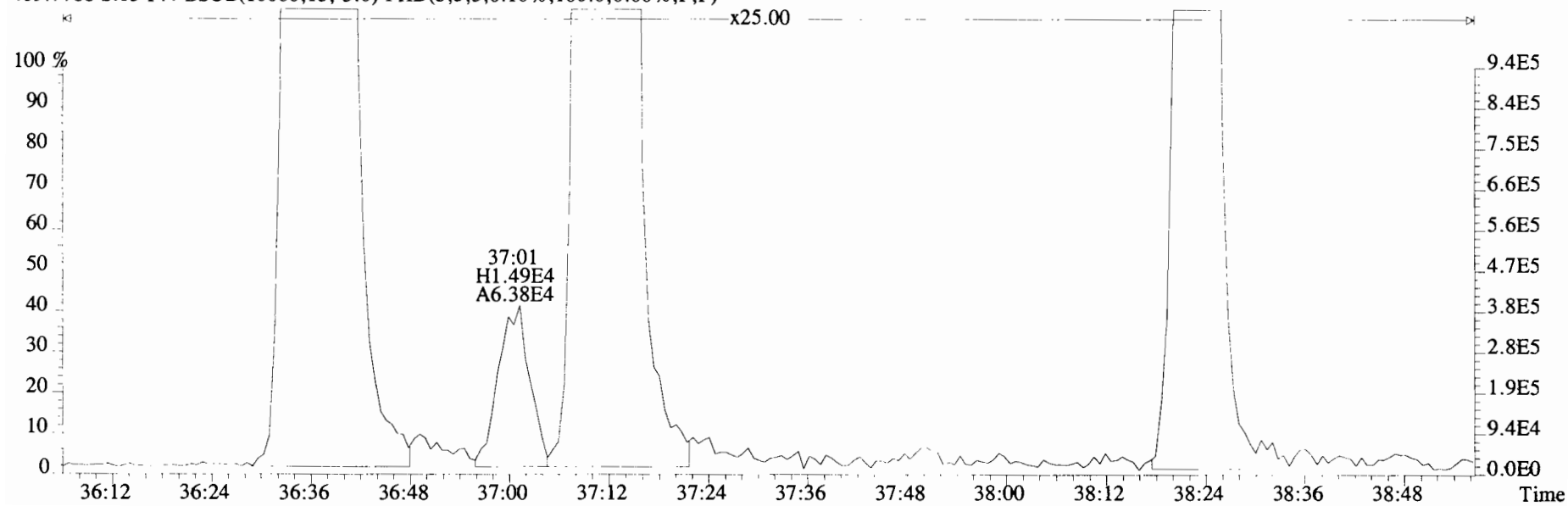
File:191120D1 #1-355 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



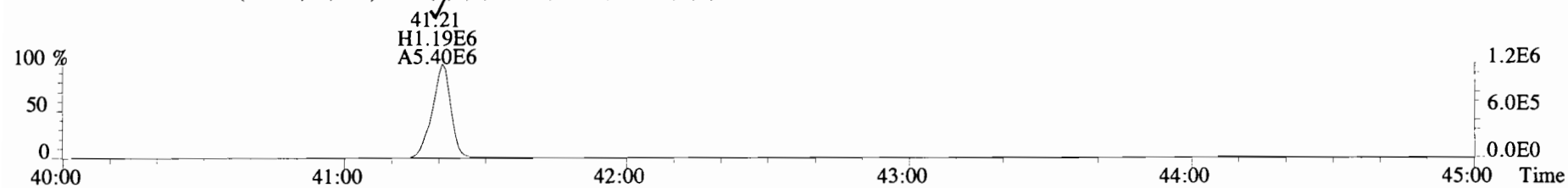
File:191120D1 #1-355 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(I0000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



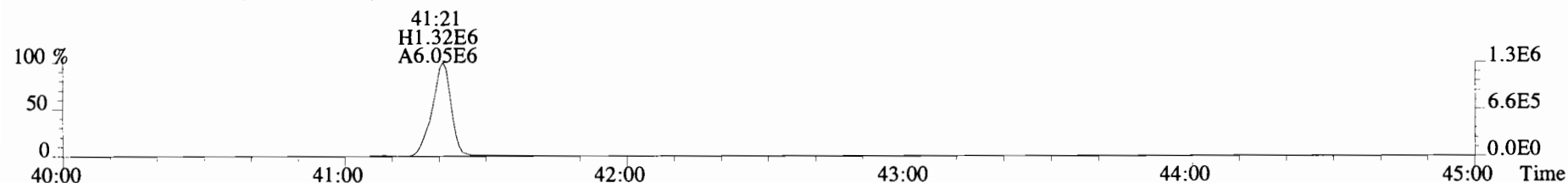
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



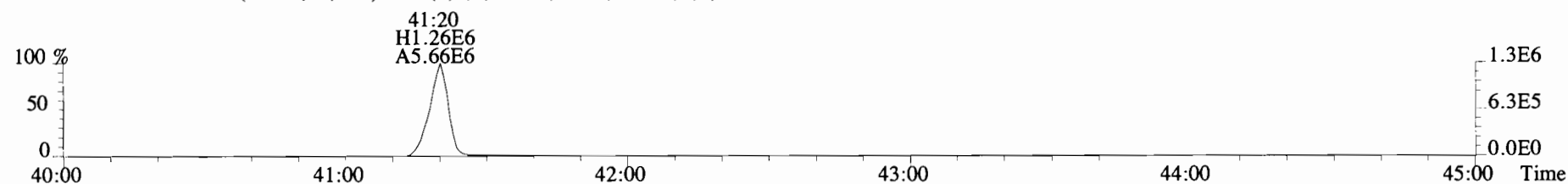
File:191120D1 #1-432 Acq:20-NOV-2019 23:34:02 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-15RE2 PDI-095SC-B-00-02-191002 19.65 Exp:OCDD_DB5
 441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



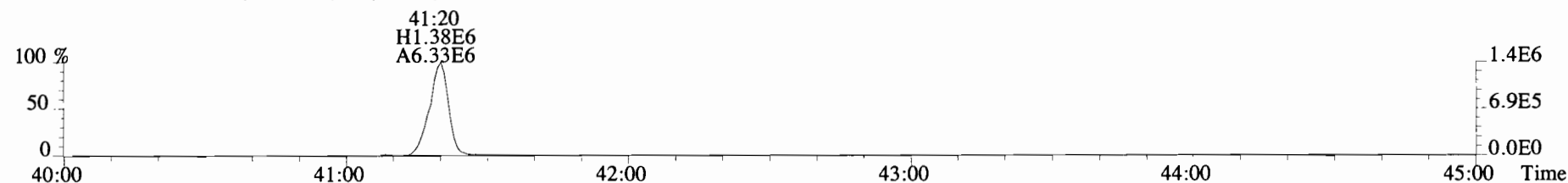
443.7398 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



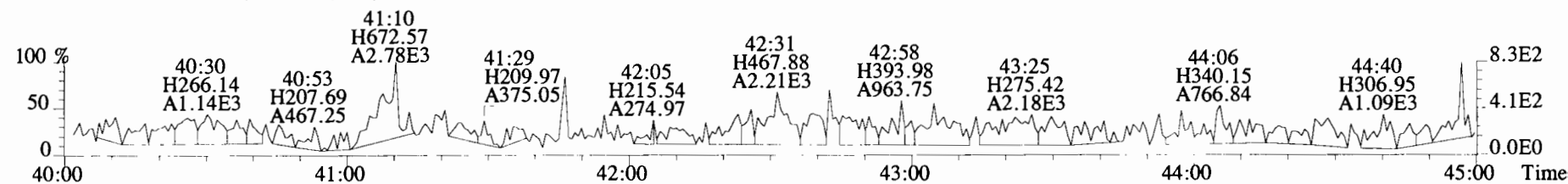
453.7831 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-095SC-B-02-04-19107
 Lab ID: 1903565-16RE1
 GC Column ID: ZB-5MS
 S:4
 Acq:6-NOV-19 14:05:25
 ICal: 1613VG7-10-9-19
 wt/vol:10.015

ConCal: ST191106D1-1
 EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotFη	*		238	2.5	0.288	Total Tetra-Dioxins	*	*		238	0.288
1,2,3,7,8-PeCDD	*	* n	0.90	NotFη	*		182	2.5	0.188	Total Penta-Dioxins	*	0.727		*	*
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotFη	*		210	2.5	0.380	Total Hexa-Dioxins	1.97	3.70		*	*
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotFη	*		210	2.5	0.389	Total Hepta-Dioxins	38.2	38.2		*	*
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotFη	*		210	2.5	0.352	Total Tetra-Furans	11.2	13.0		*	*
1,2,3,4,6,7,8-HpCDD	1.67e+05	1.01 y	0.98	37:55	16.274		*	2.5	*	Total Penta-Furans	12.955	15.424		*	*
OCDD	1.15e+06	0.87 y	0.96	41:13	132.51		*	2.5	*	Total Hexa-Furans	9.56	12.3		*	*P
										Total Hepta-Furans	4.86	9.76		*	*
2,3,7,8-TCDF	9.59e+04	0.70 y	0.95	25:30	4.9315	OK	*	2.5	*						
1,2,3,7,8-PeCDF	8.95e+04	1.65 y	0.96	29:35	4.9023		*	2.5	*						
2,3,4,7,8-PeCDF	4.71e+04	1.39 y	1.01	30:28	2.5923		*	2.5	*						
1,2,3,4,7,8-HxCDF	1.02e+05	1.30 y	1.18	33:10	6.2424		*	2.5	*						
1,2,3,6,7,8-HxCDF	2.69e+04	1.21 y	1.07	33:18	1.6252		*	2.5	*						
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotFη	*		285	2.5	0.247						
1,2,3,7,8,9-HxCDF	7.34e+03	1.12 y	1.06	34:51	0.54498		*	2.5	*						
1,2,3,4,6,7,8-HpCDF	4.63e+04	1.19 y	1.13	36:42	3.8021		*	2.5	*						
1,2,3,4,7,8,9-HpCDF	1.24e+04	0.98 y	1.28	38:27	1.0550		*	2.5	*						
OCDF	8.28e+04	0.85 y	0.95	41:26	8.1910		*	2.5	*						
IS	13C-2,3,7,8-TCDD	2.91e+06	0.79 y	1.10	26:15	97.796				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	2.51e+06	0.66 y	0.88	30:44	105.21				49.0					
IS	13C-1,2,3,4,7,8-HxCDD	2.11e+06	1.37 y	0.64	34:03	114.73				52.7					
IS	13C-1,2,3,6,7,8-HxCDD	2.39e+06	1.28 y	0.86	34:10	97.809				57.5					
IS	13C-1,2,3,7,8,9-HxCDD	2.49e+06	1.26 y	0.81	34:28	108.18				49.0					
IS	13C-1,2,3,4,6,7,8-HpCDD	2.10e+06	1.06 y	0.65	37:55	112.20				54.2					
IS	13C-OCDD	3.61e+06	0.88 y	0.58	41:12	218.06				56.2					
IS	13C-2,3,7,8-TCDF	4.09e+06	0.78 y	1.03	25:29	82.747				54.6					
IS	13C-1,2,3,7,8-PeCDF	3.80e+06	1.58 y	0.85	29:34	93.067				41.4					
IS	13C-2,3,4,7,8-PeCDF	3.57e+06	1.59 y	0.85	30:28	88.347				46.6					
IS	13C-1,2,3,4,7,8-HxCDF	2.76e+06	0.51 y	0.83	33:10	116.25				44.2					
IS	13C-1,2,3,6,7,8-HxCDF	3.10e+06	0.49 y	1.03	33:17	104.75				58.2					
IS	13C-2,3,4,6,7,8-HxCDF	2.80e+06	0.52 y	0.95	33:53	102.78				52.5					
IS	13C-1,2,3,7,8,9-HxCDF	2.53e+06	0.49 y	0.83	34:51	107.10				51.5					
IS	13C-1,2,3,4,6,7,8-HpCDF	2.16e+06	0.45 y	0.76	36:42	99.670				53.6					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.83e+06	0.44 y	0.58	38:27	110.25				49.9					
IS	13C-OCDF	4.26e+06	0.87 y	0.69	41:26	216.37				55.2					
C/Up	37Cl-2,3,7,8-TCDD	2.18e+06		1.20	26:16	67.004				83.9					
RS/RT	13C-1,2,3,4-TCDD	5.42e+06	0.85 y	1.00	25:42	199.70					Integrations	Reviewed			
RS	13C-1,2,3,4-TCDF	9.53e+06	0.81 y	1.00	24:17	199.70					by	by			
RS/RT	13C-1,2,3,4,6,9-HxCDF	5.71e+06	0.52 y	1.00	33:35	199.70					Analyst: <u>DB</u>	Analyst: <u>CT</u>			
											Date: <u>11/20/19</u>	Date: <u>12/04/19</u>			

Totals class: PeCDD EMPC

Entry #: 21

Run: 9 File: 191106D1 S: 4 I: 1 F: 2
Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 0.72728 Unnamed Concentration: 0.727

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
29:34	5.798e+03	3.137e+03	1.85 n	5.113e+03	0.44974
30:27	4.898e+03	1.936e+03	2.53 n	3.155e+03	0.27754

Totals class: HxCDD EMPC

Entry #: 23

Run: 9 File: 191106D1 S: 4 I: 1 F: 3
Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 3.6972 Unnamed Concentration: 3.697

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:31	1.242e+04	1.034e+04	1.20	y	2.276e+04	1.9664
33:21	1.377e+04	8.943e+03	1.54	n	2.003e+04	1.7308

Totals class: HpCDD EMPC

Entry #: 25

Run: 9 File: 191106D1 S: 4 I: 1 F: 4
Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 38.191

Unnamed Concentration: 21.917

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:05	1.137e+05	1.118e+05	1.02 y		2.254e+05	21.917
37:55	8.419e+04	8.320e+04	1.01 y		1.674e+05	16.274 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 9 File: 191106D1 S: 4 I: 1 F: 1
 Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 13.003

Unnamed Concentration: 8.071

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:53	1.248e+04	1.076e+04	1.16	n	1.905e+04	0.97928
24:16	5.781e+03	7.504e+03	0.77	y	1.329e+04	0.68302
24:42	3.882e+04	5.665e+04	0.69	y	9.547e+04	4.9083
25:24	6.300e+03	7.293e+03	0.86	y	1.359e+04	0.69887
25:30	3.955e+04	5.638e+04	0.70	y	9.592e+04	4.9315
27:14	8.446e+03	8.811e+03	0.96	n	1.560e+04	0.80177

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 9 File: 191106D1 S: 4 I: 1 F: 1
Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 1.4035 Unnamed Concentration: 1.404

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:14	1.547e+04	1.009e+04	1.53 y	2.557e+04	1.4035

Totals class: PeCDF EMPC

Entry #: 31

Run: 9 File: 191106D1 S: 4 I: 1 F: 2
 Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 14.020

Unnamed Concentration: 6.525

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Resp Concentration	Name
28:40	3.061e+04	2.071e+04	1.48 y	5.132e+04	2.8170	
29:25	8.241e+03	5.531e+03	1.49 y	1.377e+04	0.75602	
29:35	5.569e+04	3.378e+04	1.65 y	8.947e+04	4.9023	1,2,3,7,8-PeCDF
29:50	2.077e+04	1.795e+04	1.16 n	3.416e+04	1.8754	
30:28	2.733e+04	1.973e+04	1.39 y	4.706e+04	2.5923	2,3,4,7,8-PeCDF
30:30	8.699e+03	4.237e+03	2.05 n	1.080e+04	0.59311	
31:19	5.482e+03	3.333e+03	1.64 y	8.815e+03	0.48389	

Totals class: HxCDF EMPC

Entry #: 33

Run: 9 File: 191106D1 S: 4 I: 1 F: 3
 Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

Total Concentration: 12.318

Unnamed Concentration: 3.905

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
31:59	4.302e+03	3.752e+03	1.15	y	8.054e+03	0.52082
32:09	1.075e+04	1.094e+04	0.98	n	1.941e+04	1.2554
32:42	1.509e+04	1.035e+04	1.46	n	2.318e+04	1.4992 P
33:10	5.745e+04	4.422e+04	1.30	y	1.017e+05	6.2424 1,2,3,4,7,8-HxCDF
33:18	1.476e+04	1.219e+04	1.21	y	2.695e+04	1.6252 1,2,3,6,7,8-HxCDF
34:51	3.883e+03	3.458e+03	1.12	y	7.341e+03	0.54498 1,2,3,7,8,9-HxCDF
34:54	5.050e+03	4.684e+03	1.08	y	9.734e+03	0.62946

Totals class: HpCDF EMPC

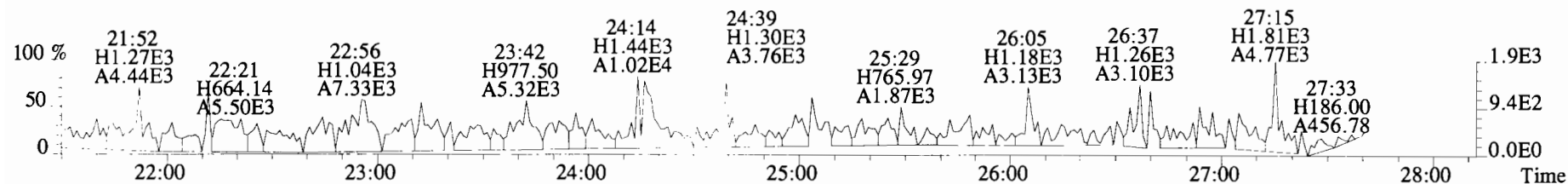
Entry #: 35

Run: 9 File: 191106D1 S: 4 I: 1 F: 4
 Acquired: 6-NOV-19 14:05:25 Processed: 6-NOV-19 16:31:48

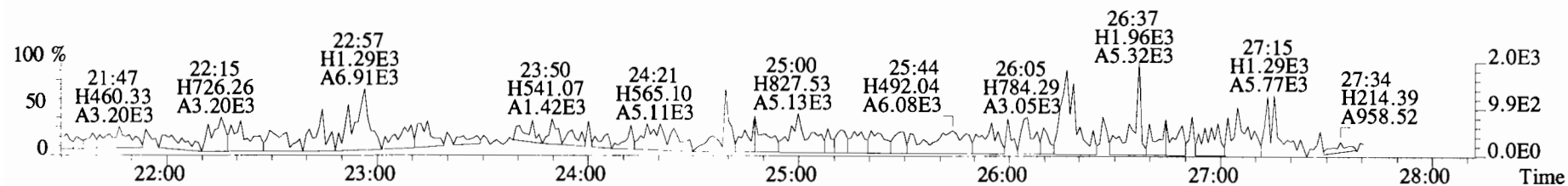
Total Concentration: 9.7563 Unnamed Concentration: 4.899

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Concentration	Name
36:42	2.513e+04	2.120e+04	1.19 y	4.633e+04	3.8021	1,2,3,4,6,7,8-HpCDF
37:16	3.590e+04	2.864e+04	1.25 n	5.842e+04	4.8992	
38:27	6.141e+03	6.244e+03	0.98 y	1.238e+04	1.0550	1,2,3,4,7,8,9-HpCDF

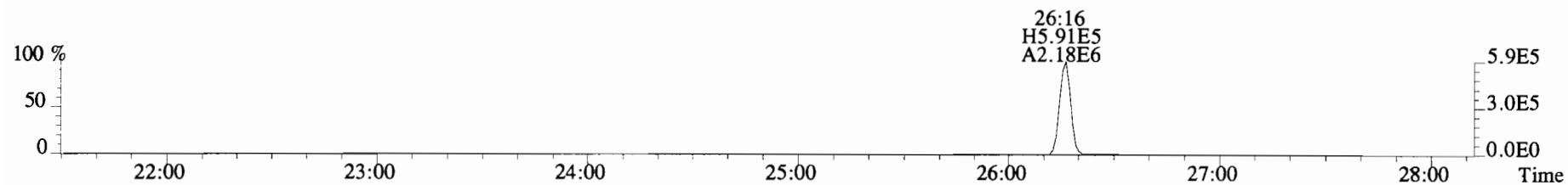
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



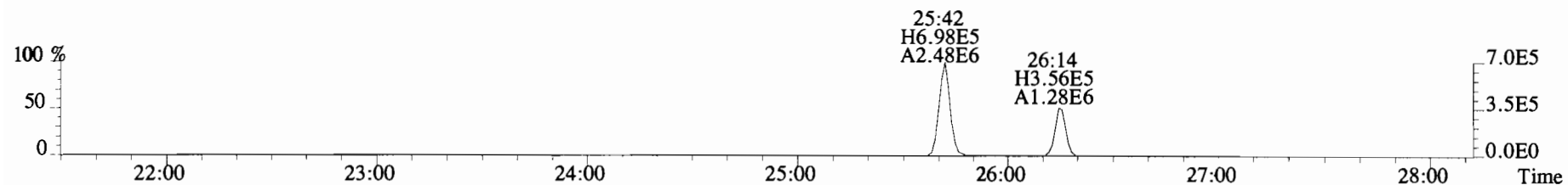
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



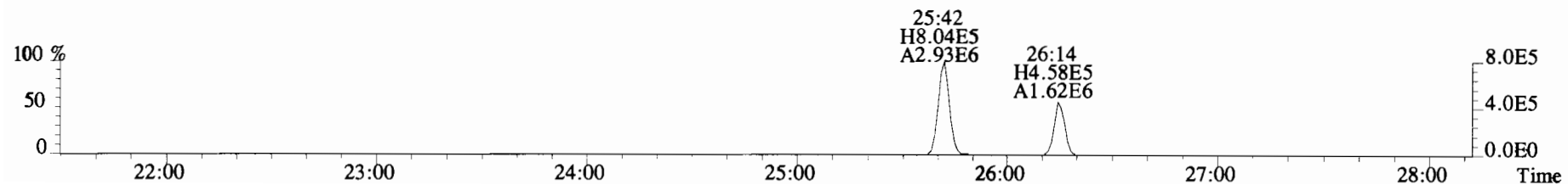
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



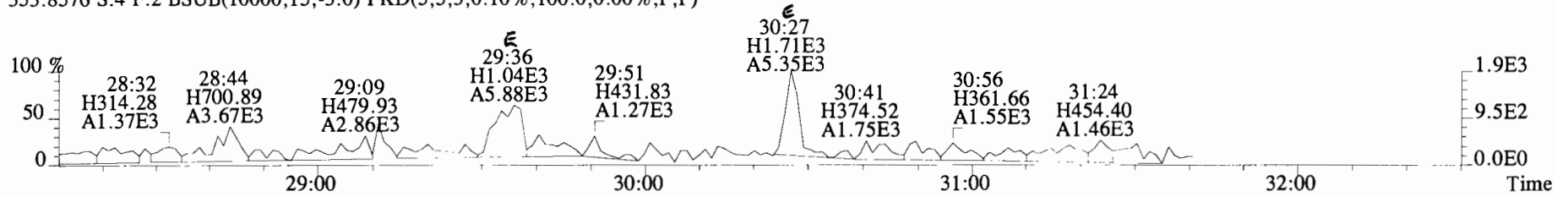
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



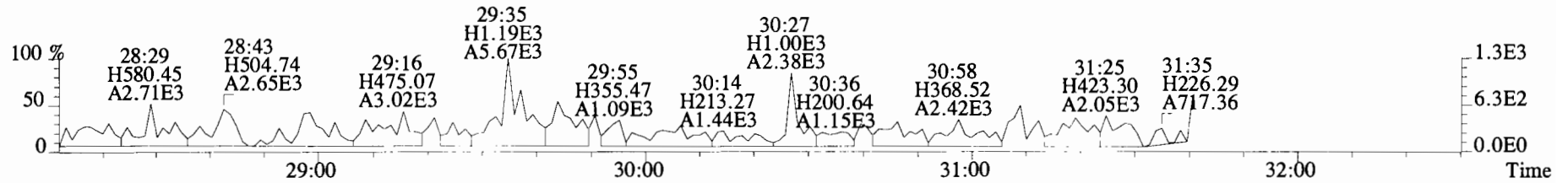
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



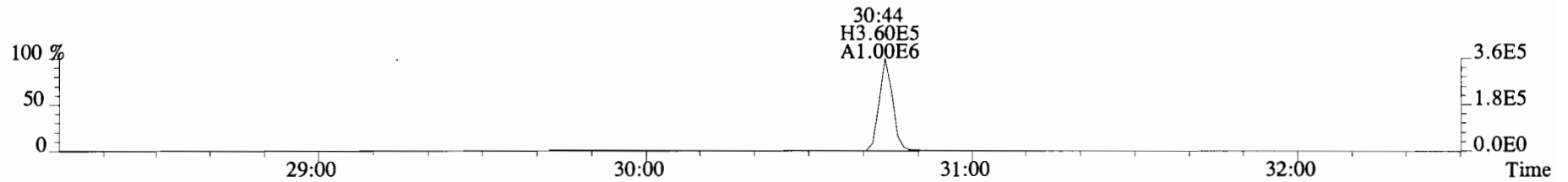
File:191106D1 #1-211 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



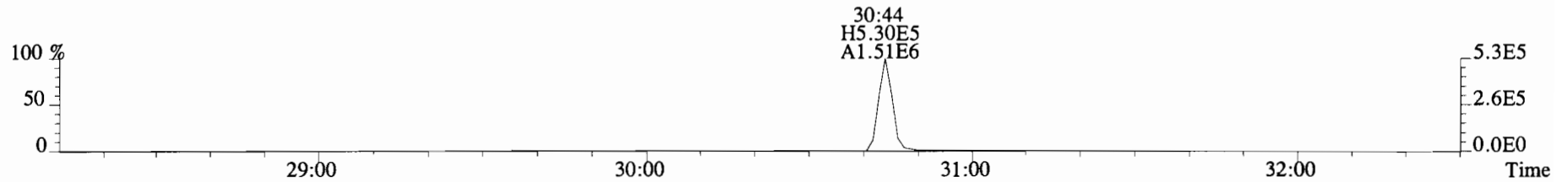
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



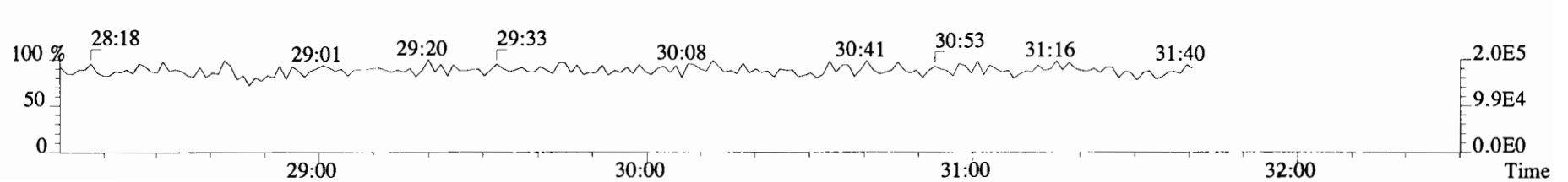
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



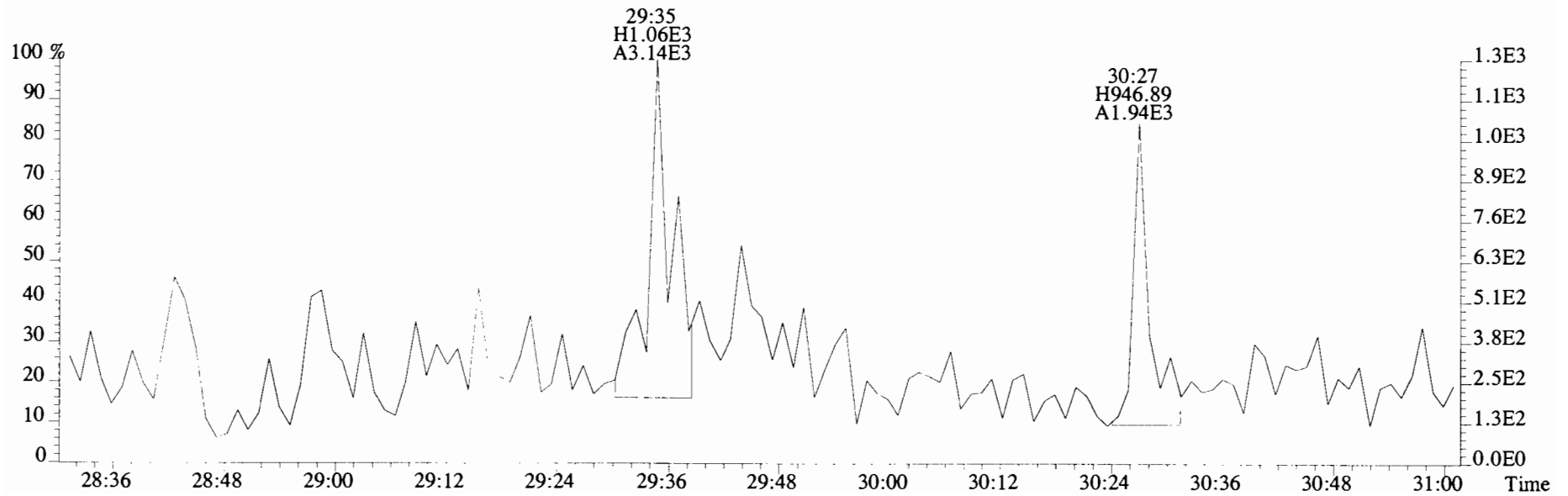
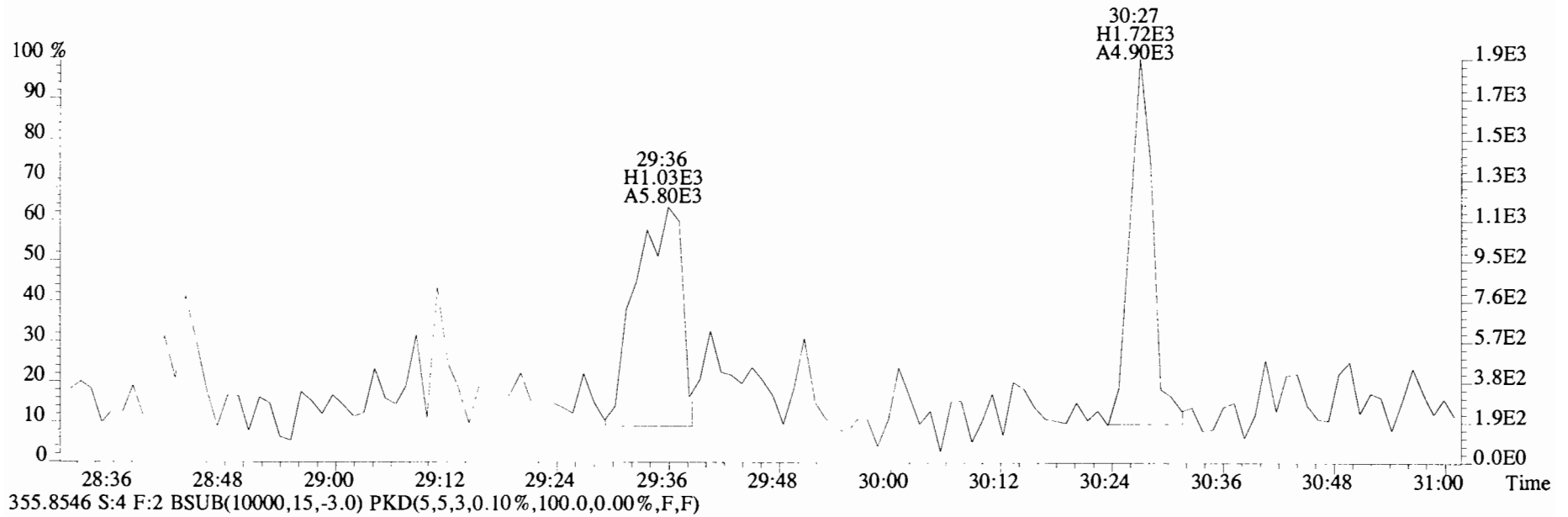
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



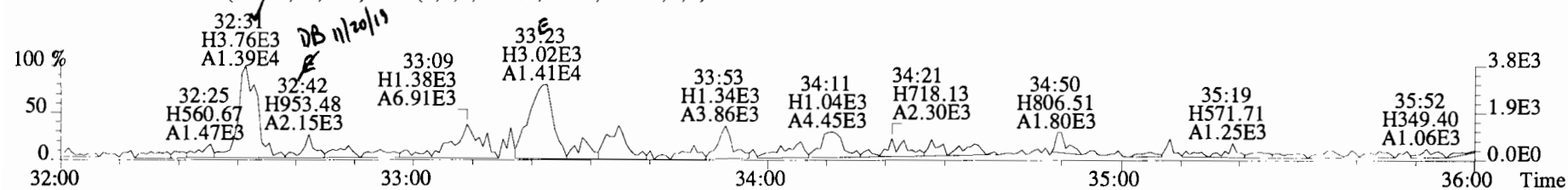
366.9792 S:4 F:2



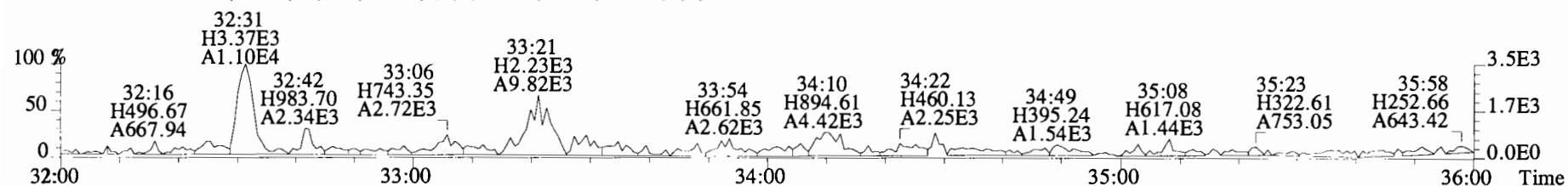
File:191106D1 #1-211 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



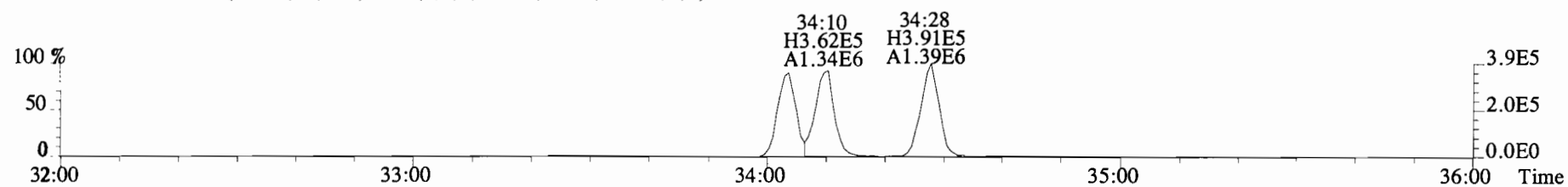
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



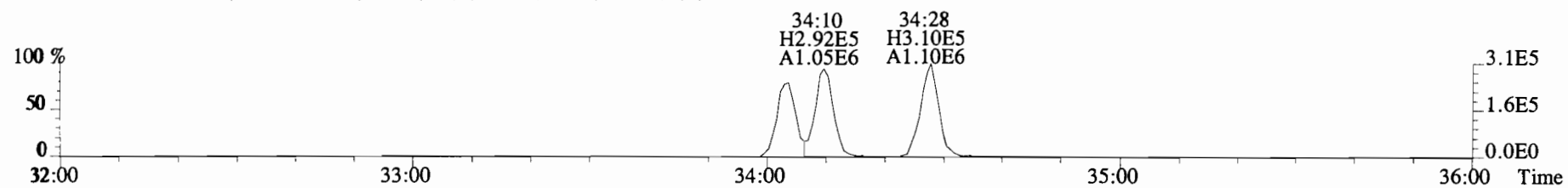
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



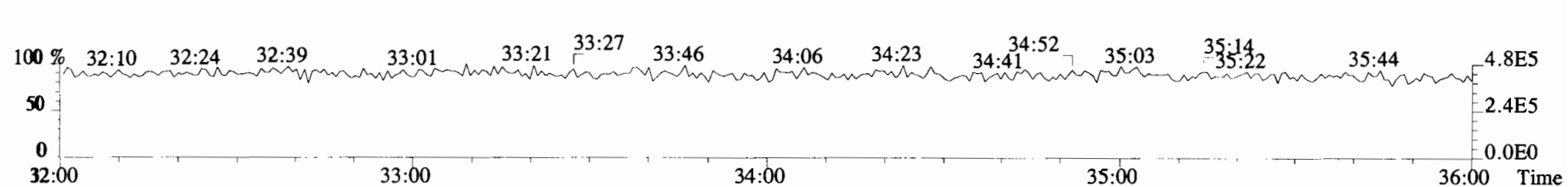
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



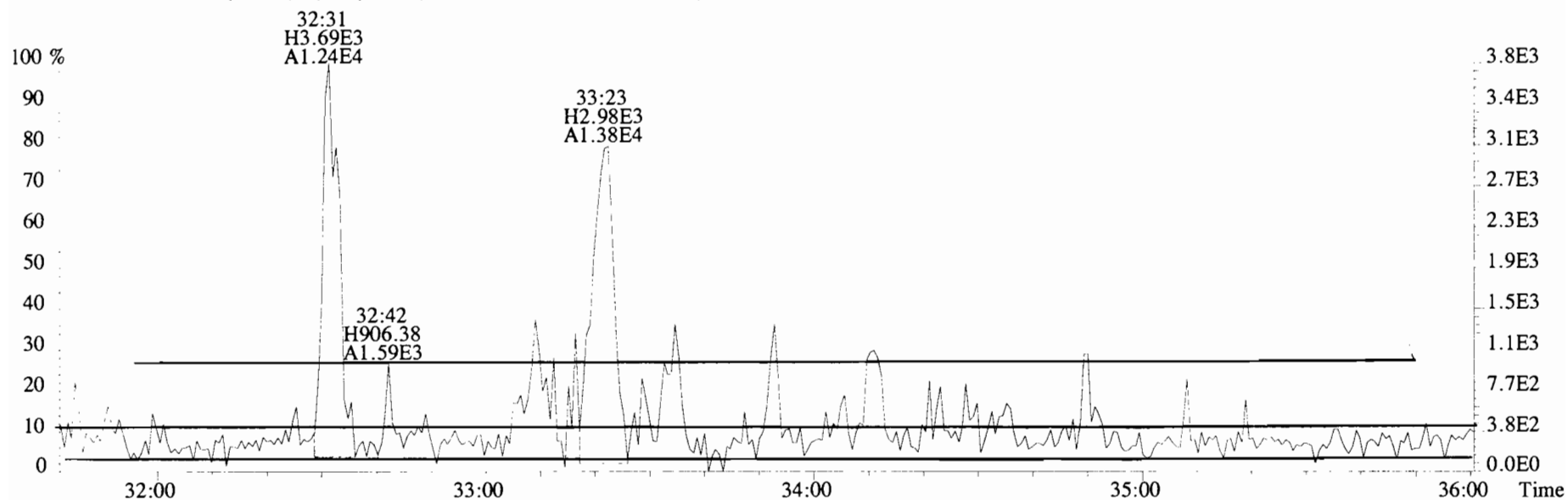
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



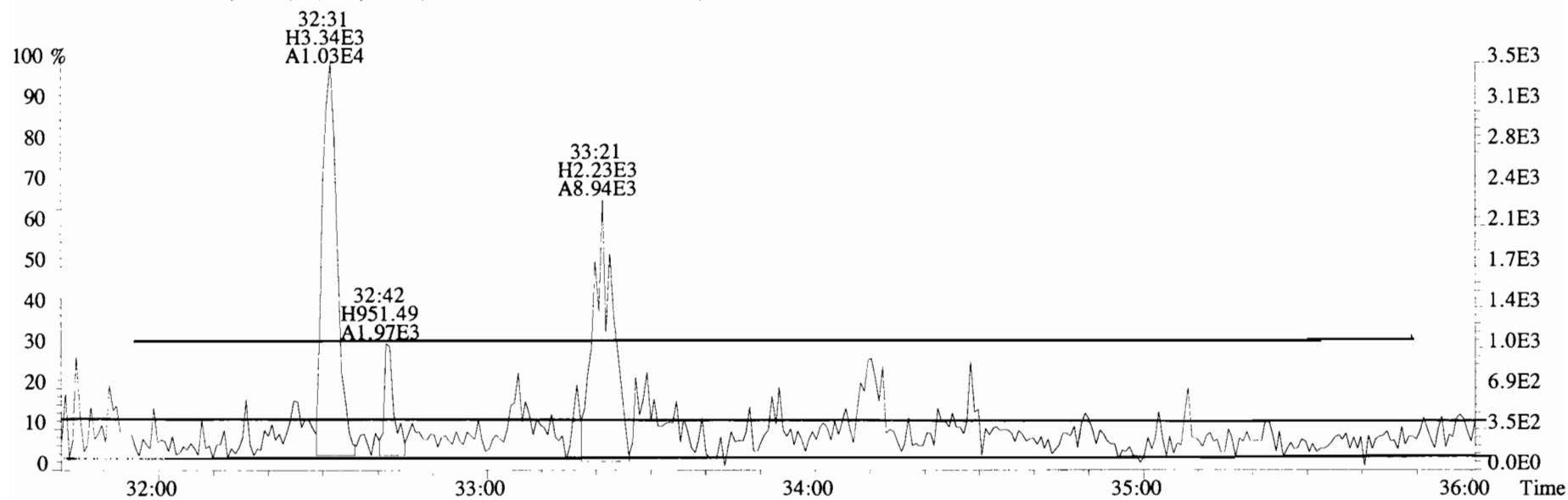
392.9760 S:4 F:3



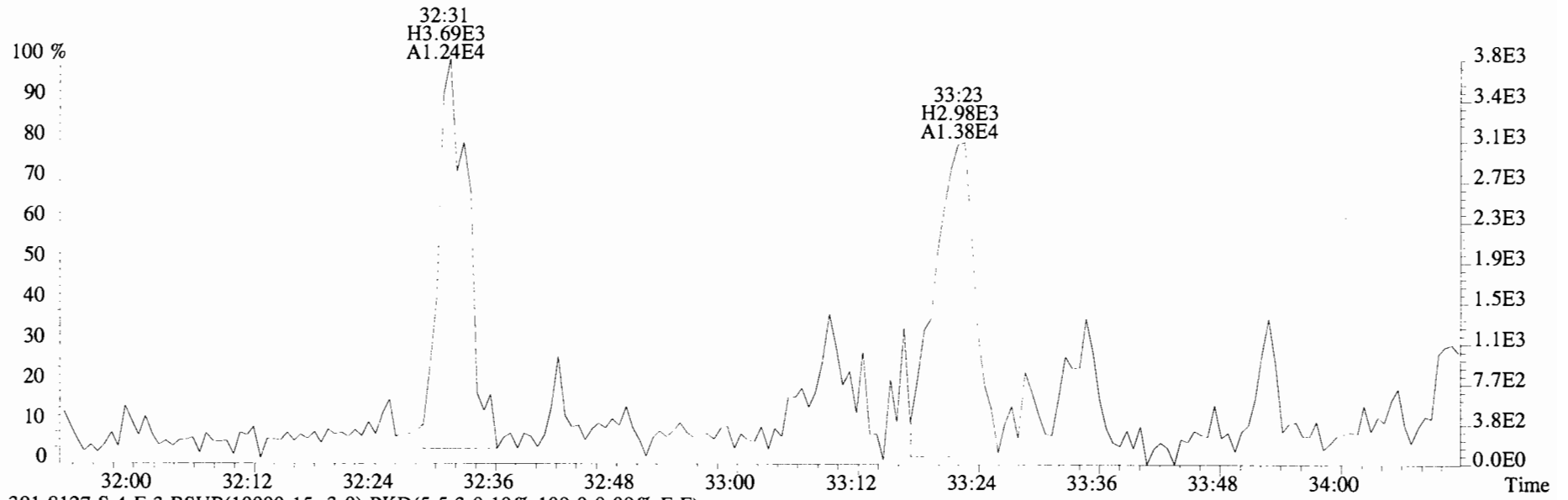
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



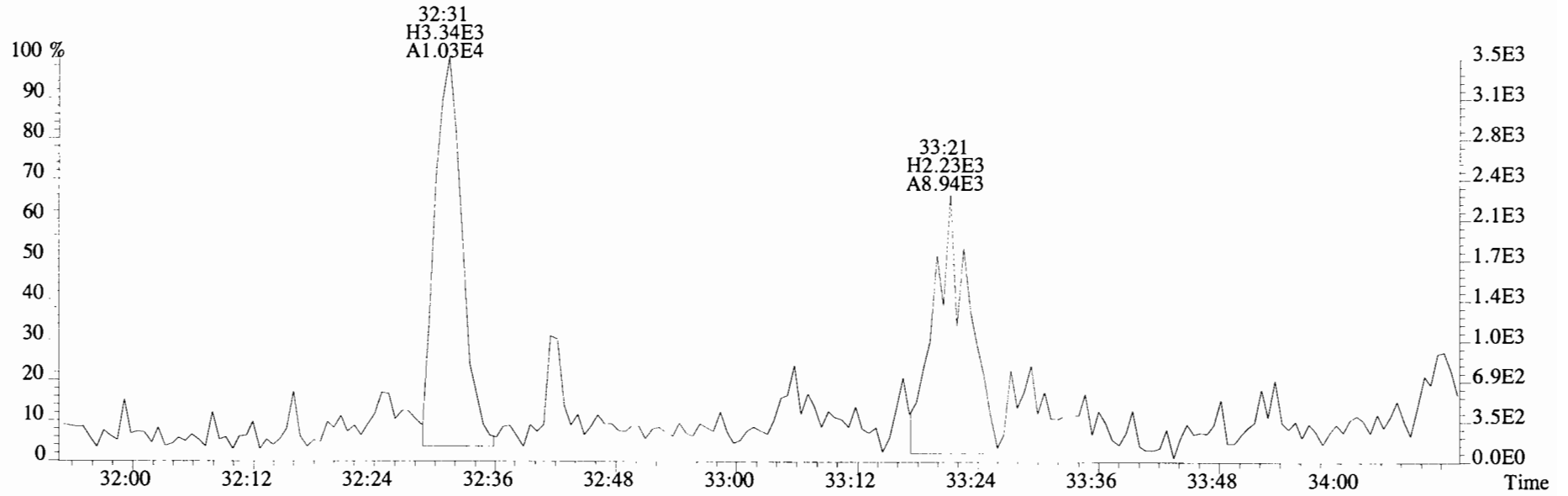
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



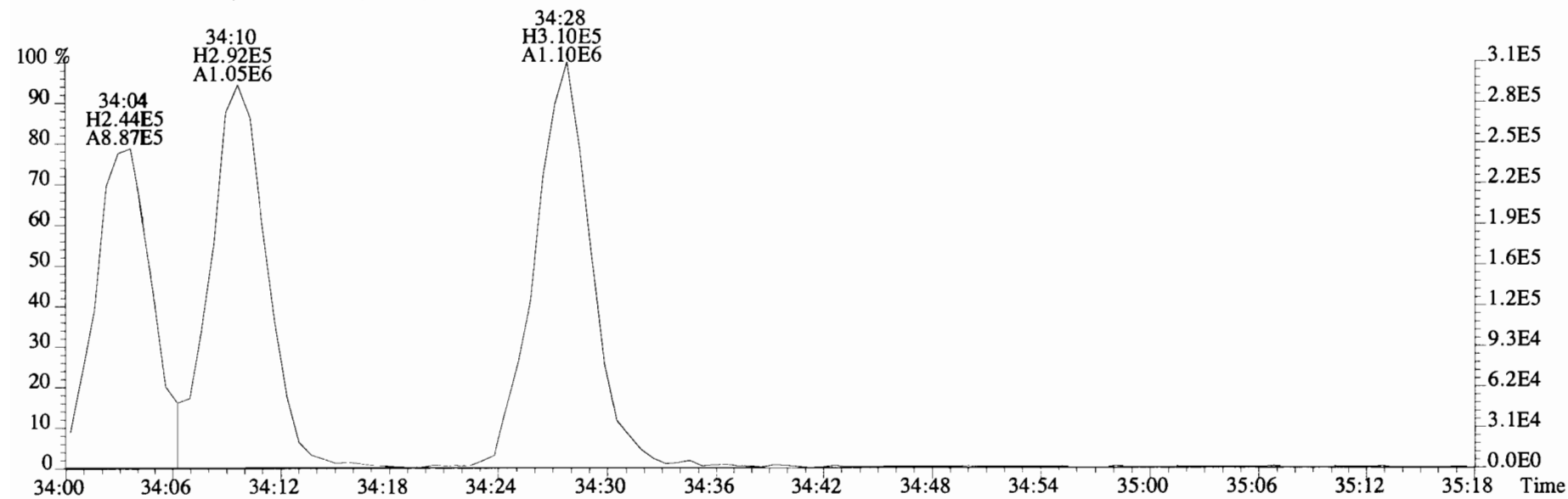
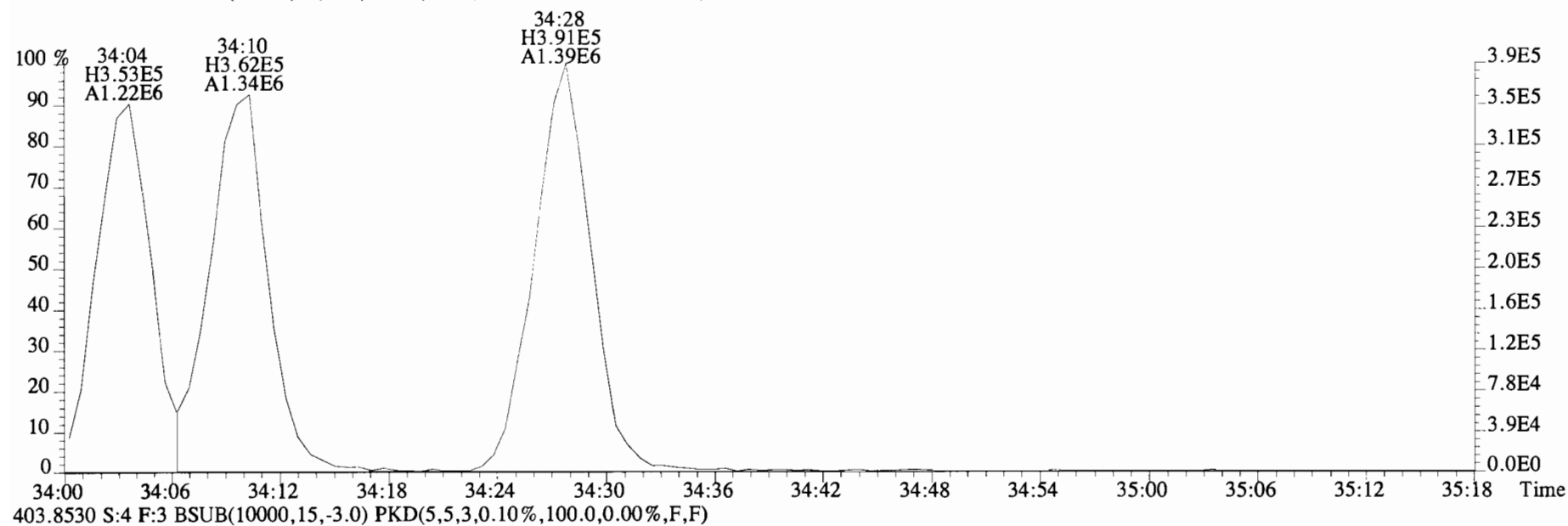
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



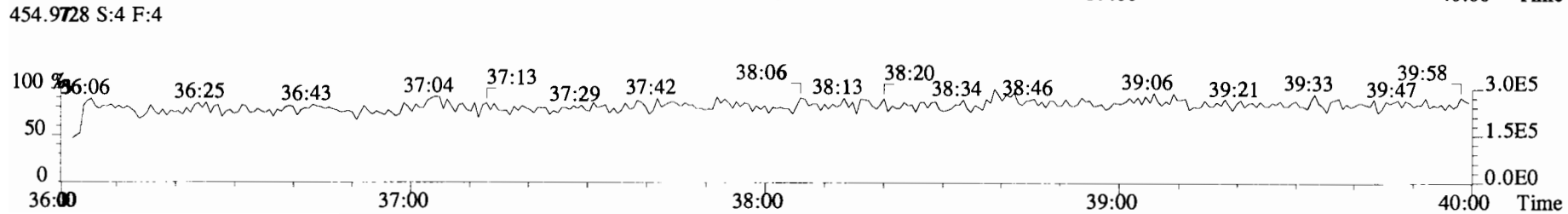
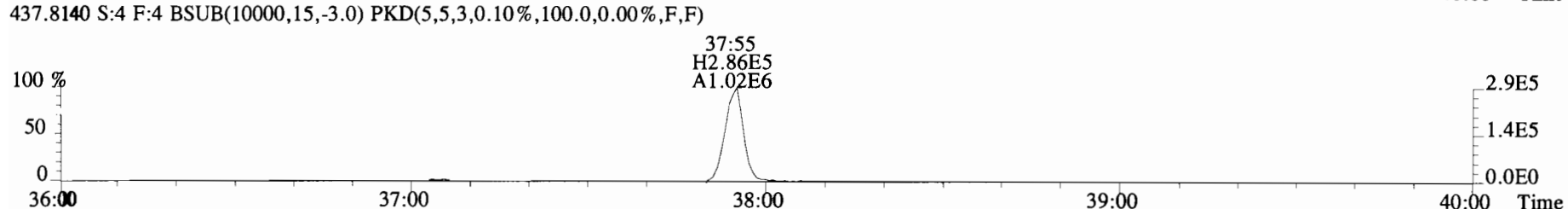
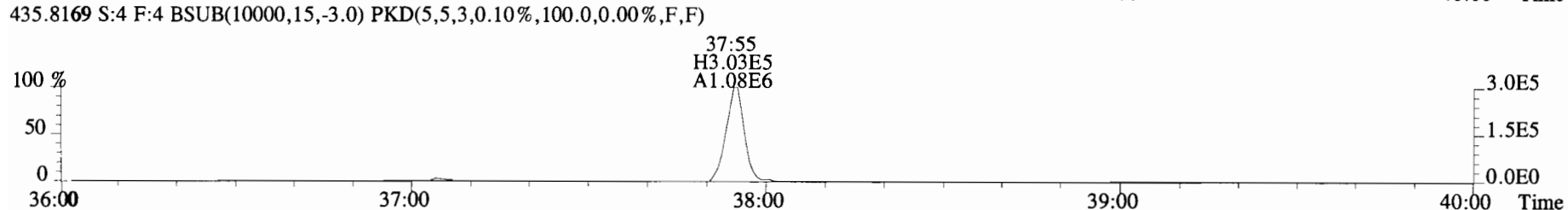
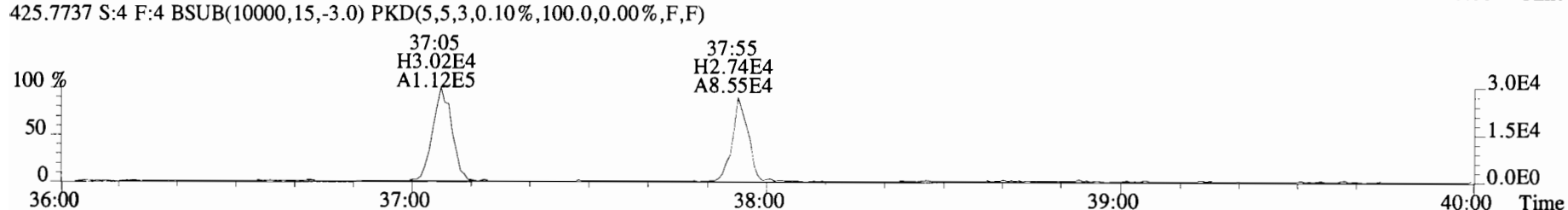
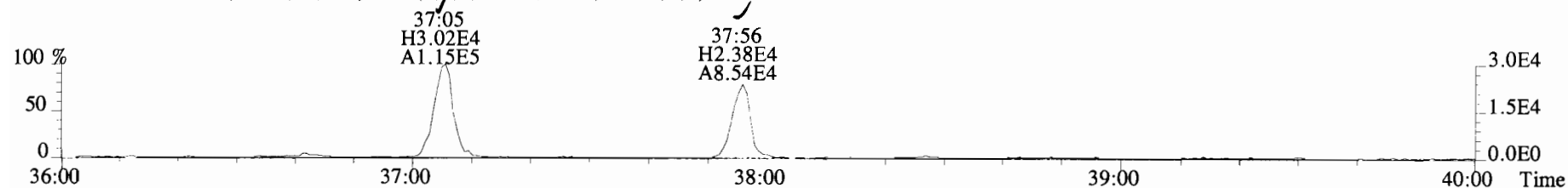
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



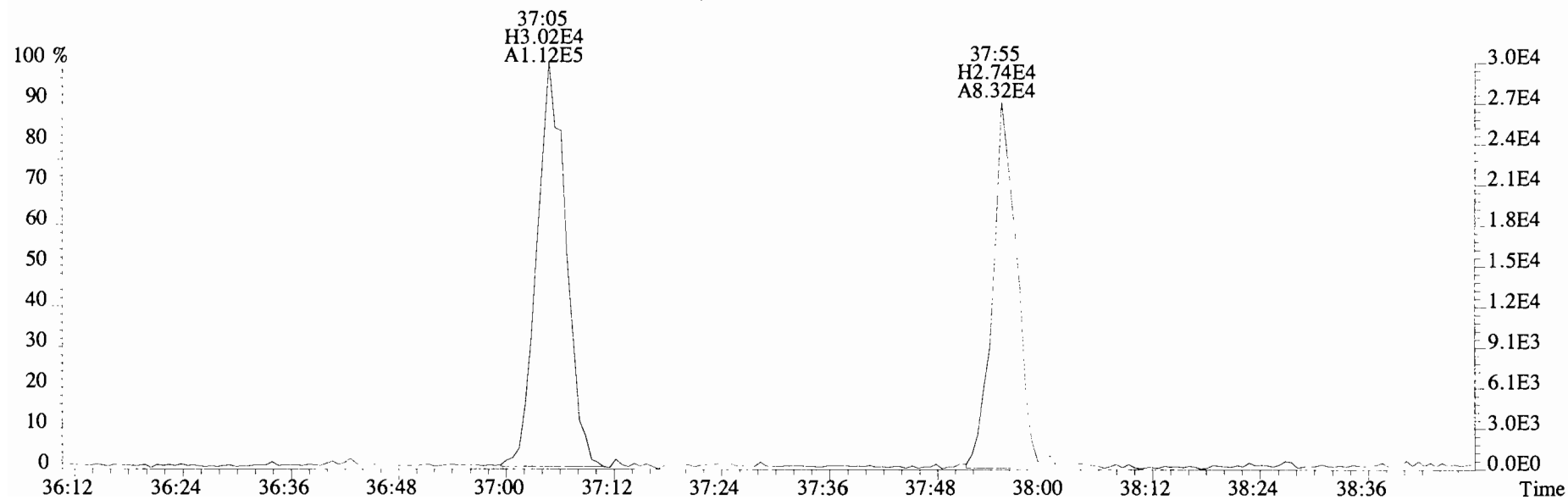
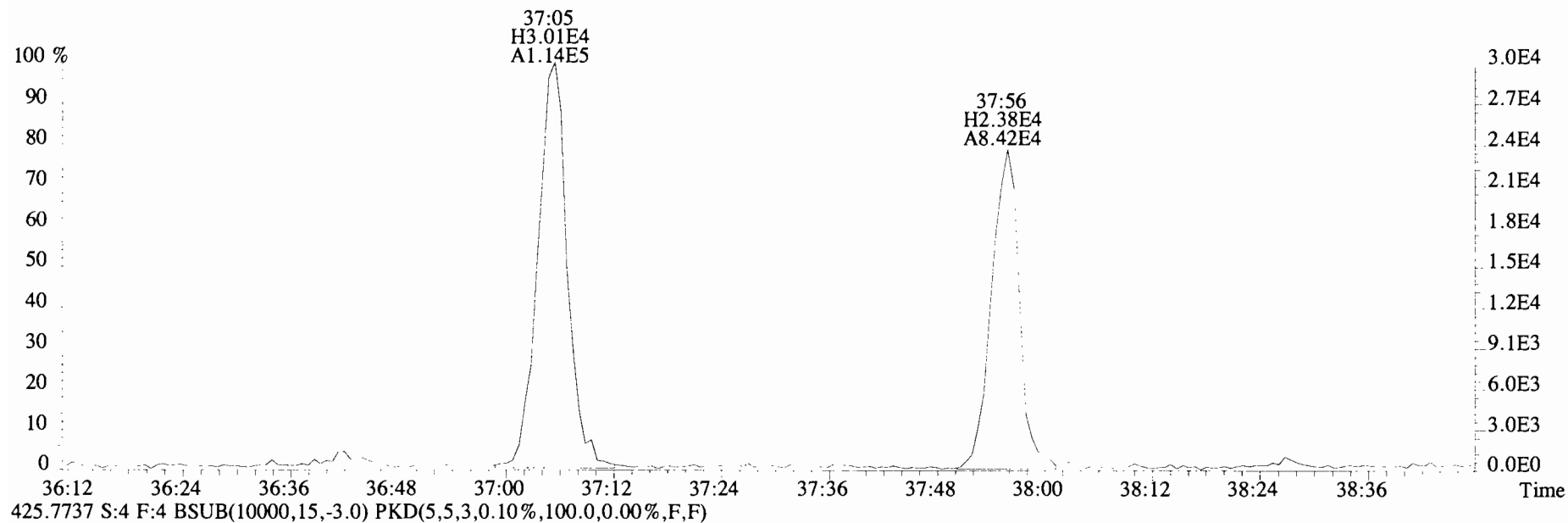
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
401.8559 S:4 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



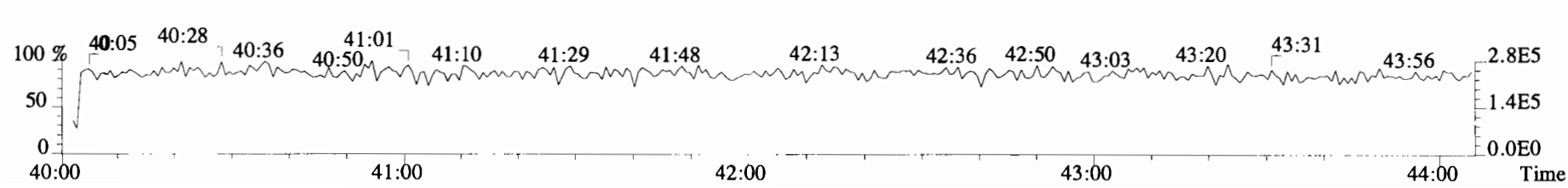
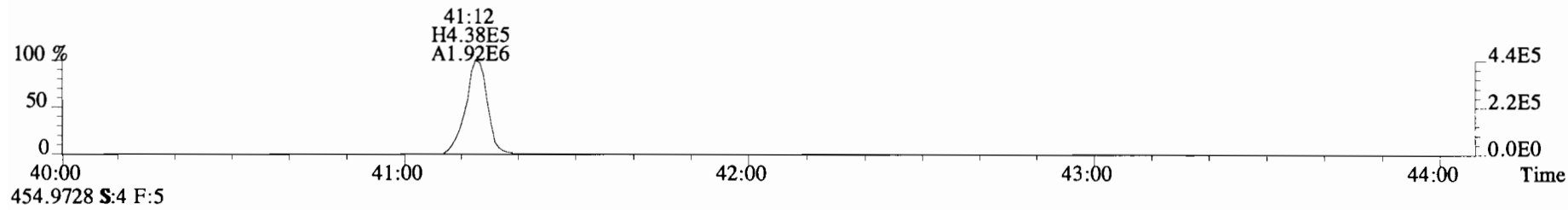
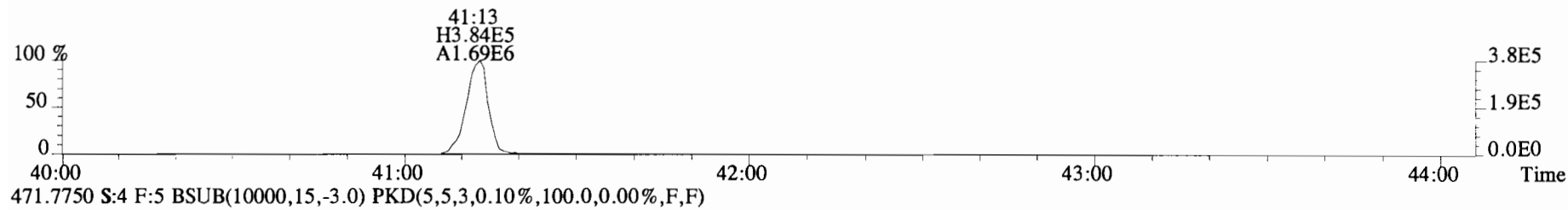
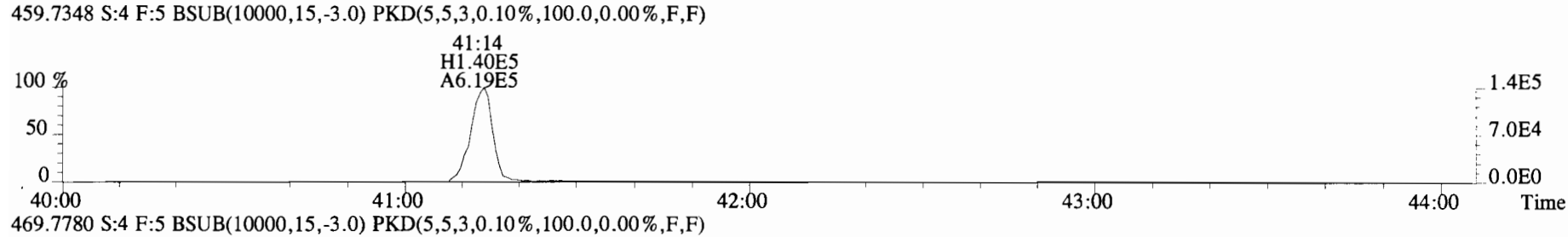
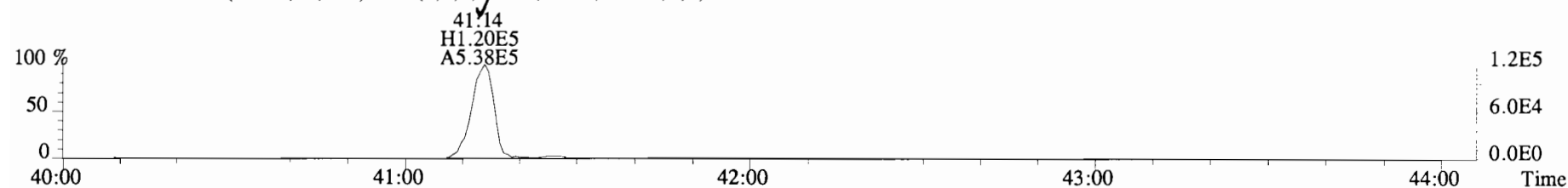
File:191106D1 #1-355 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



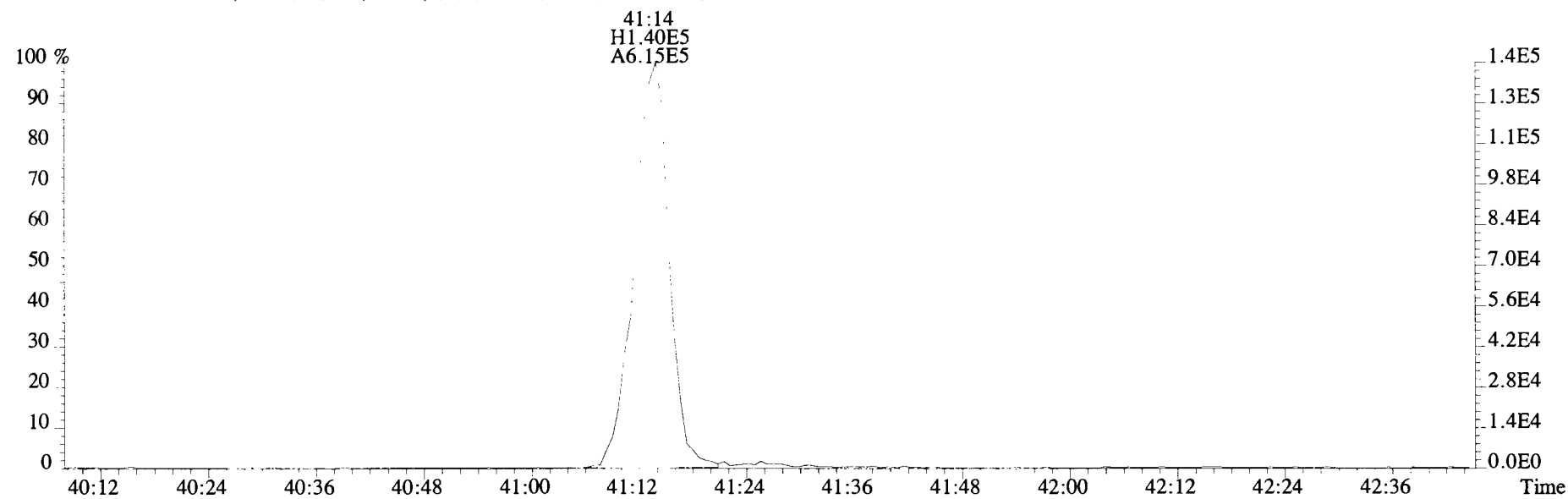
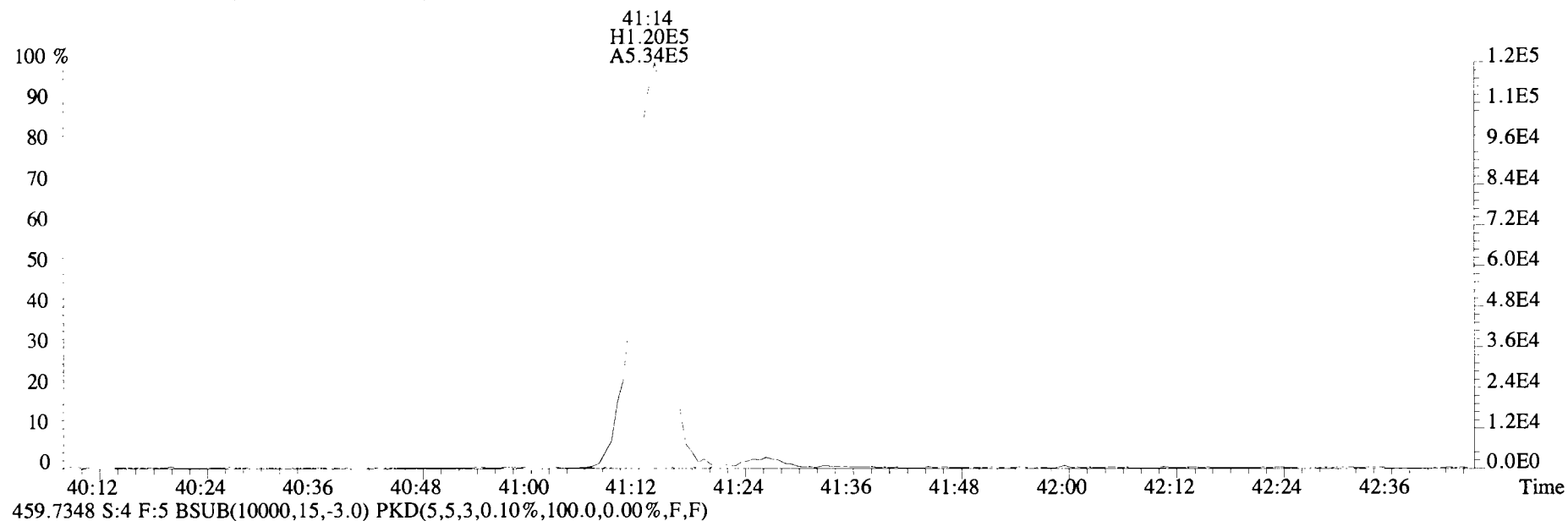
File:191106D1 #1-355 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



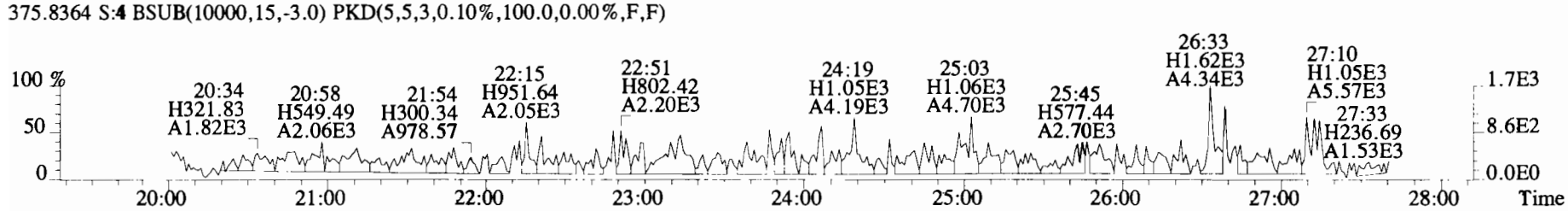
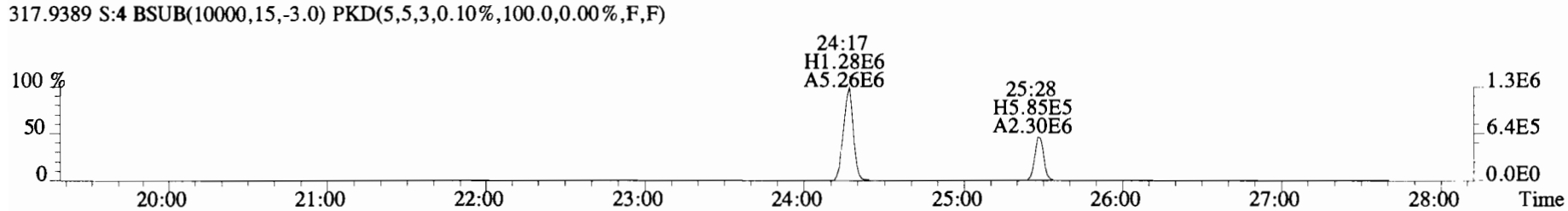
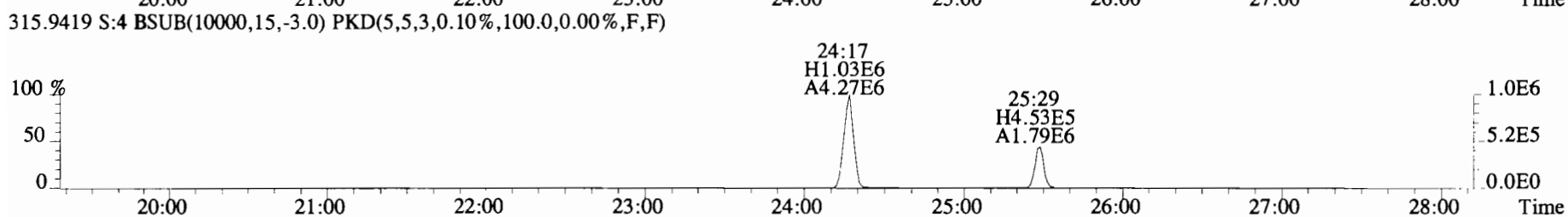
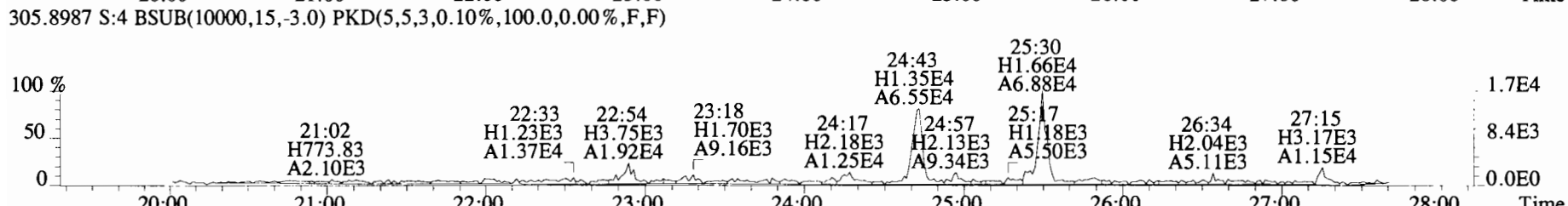
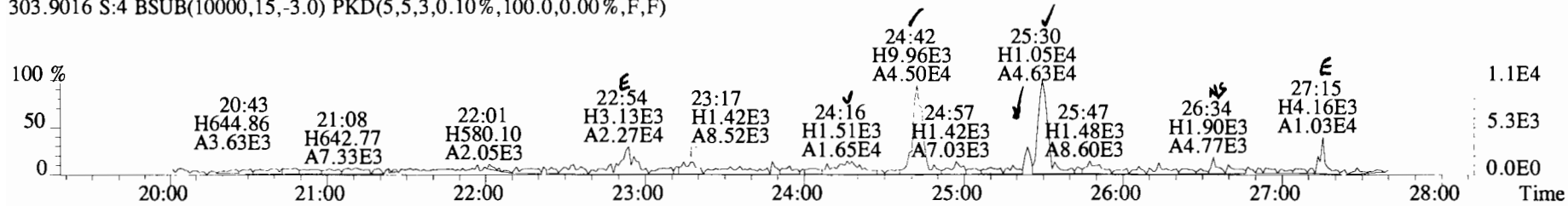
File:191106D1 #1-432 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F)



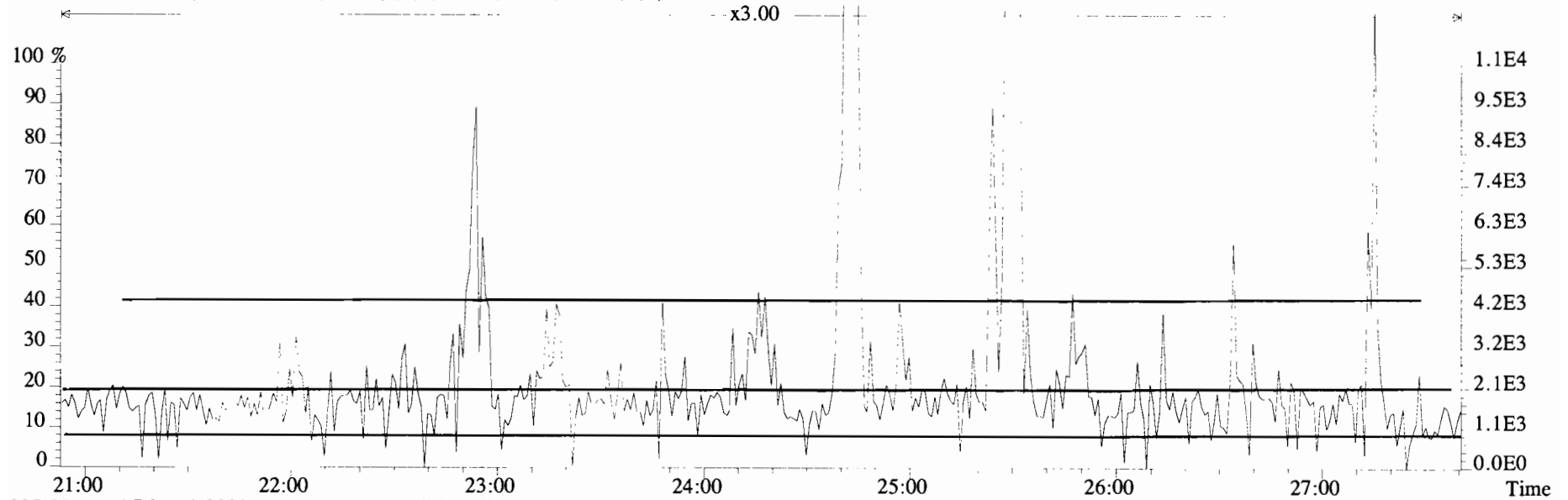
File:191106D1 #1-432 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



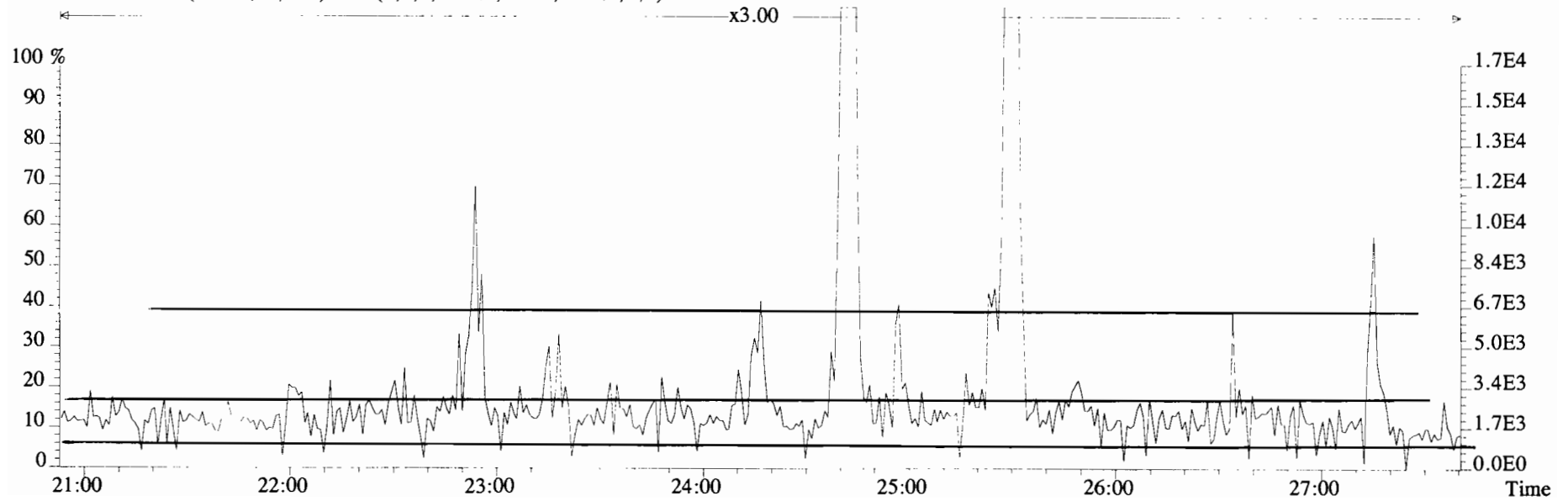
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



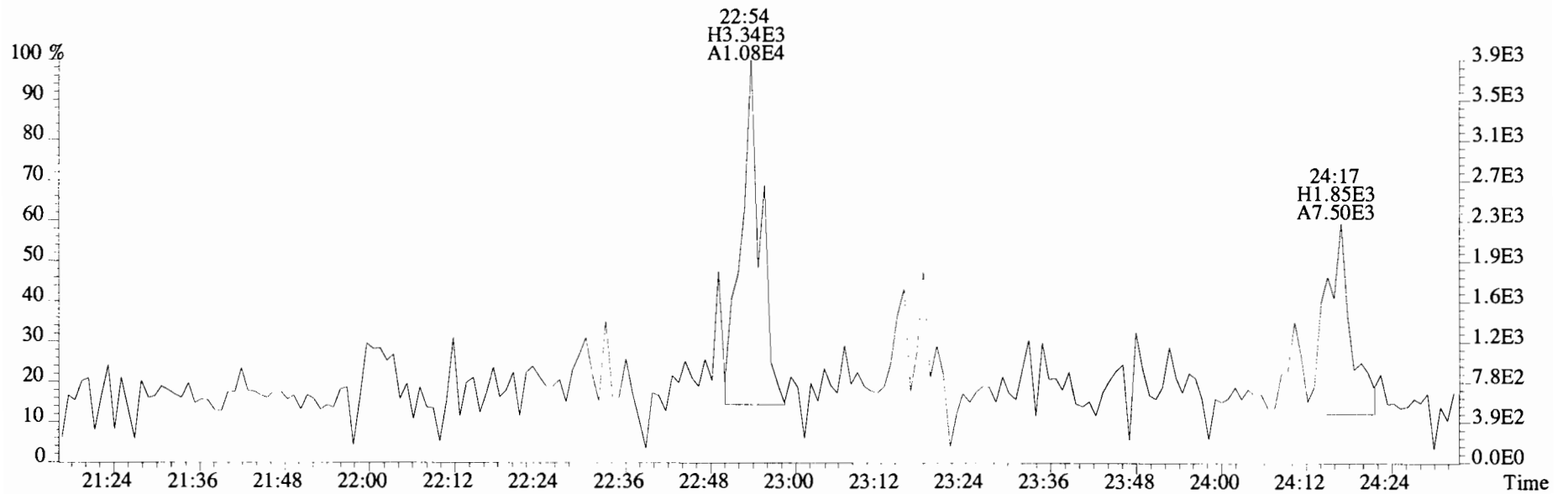
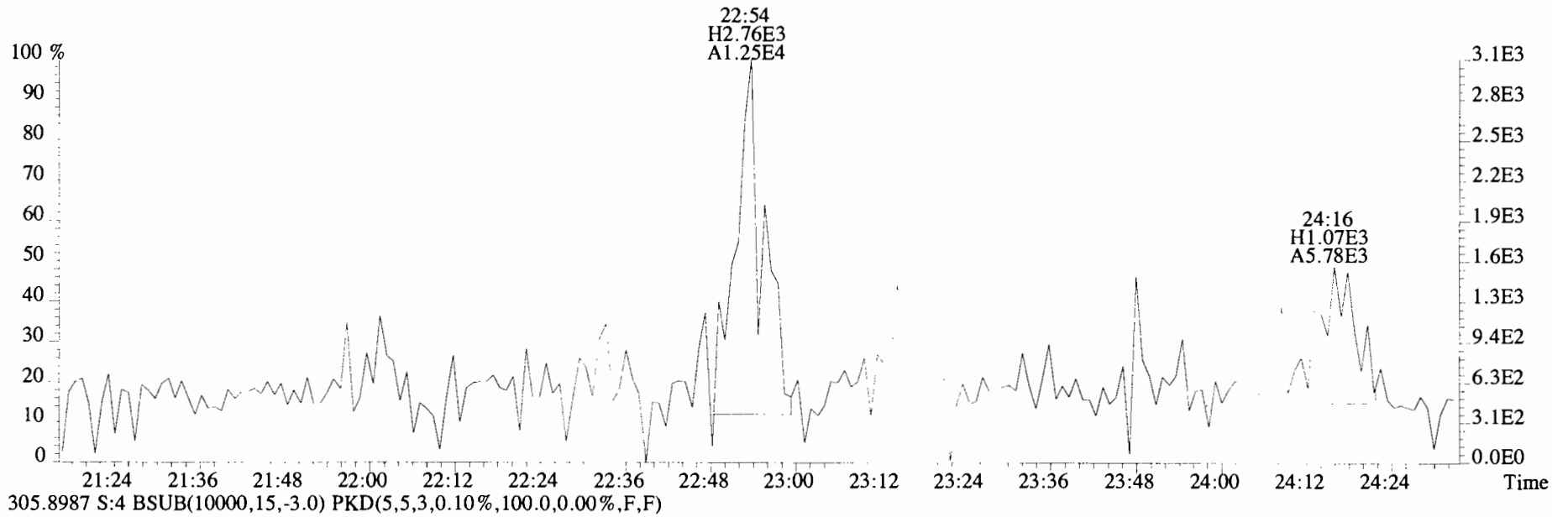
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
303.9016 S:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



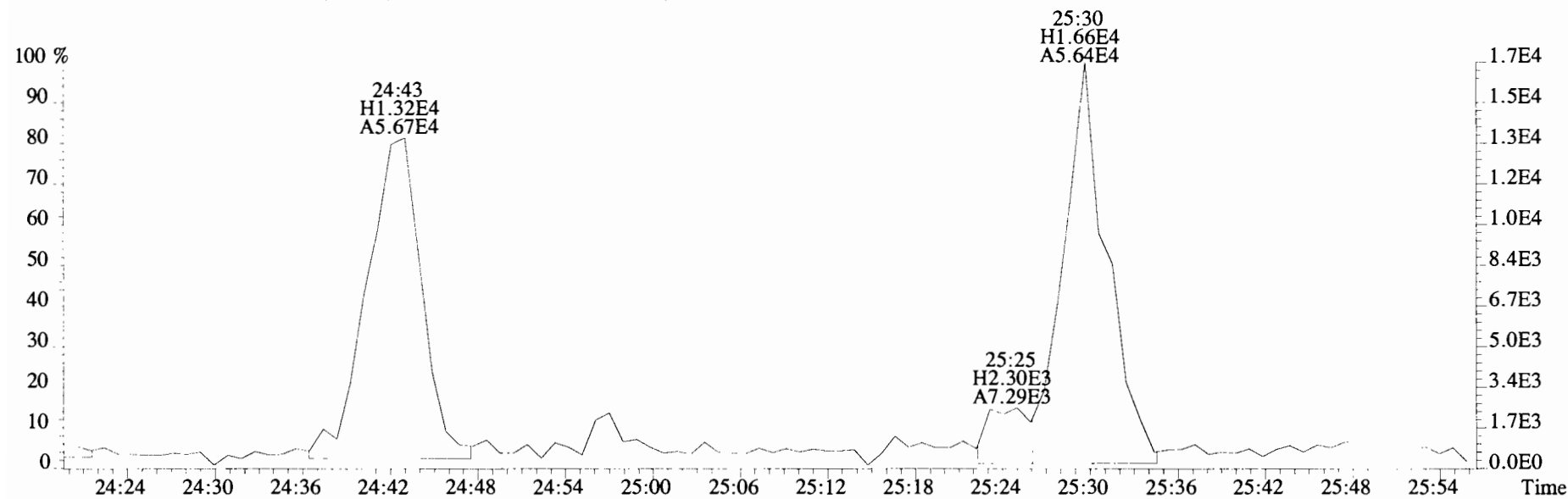
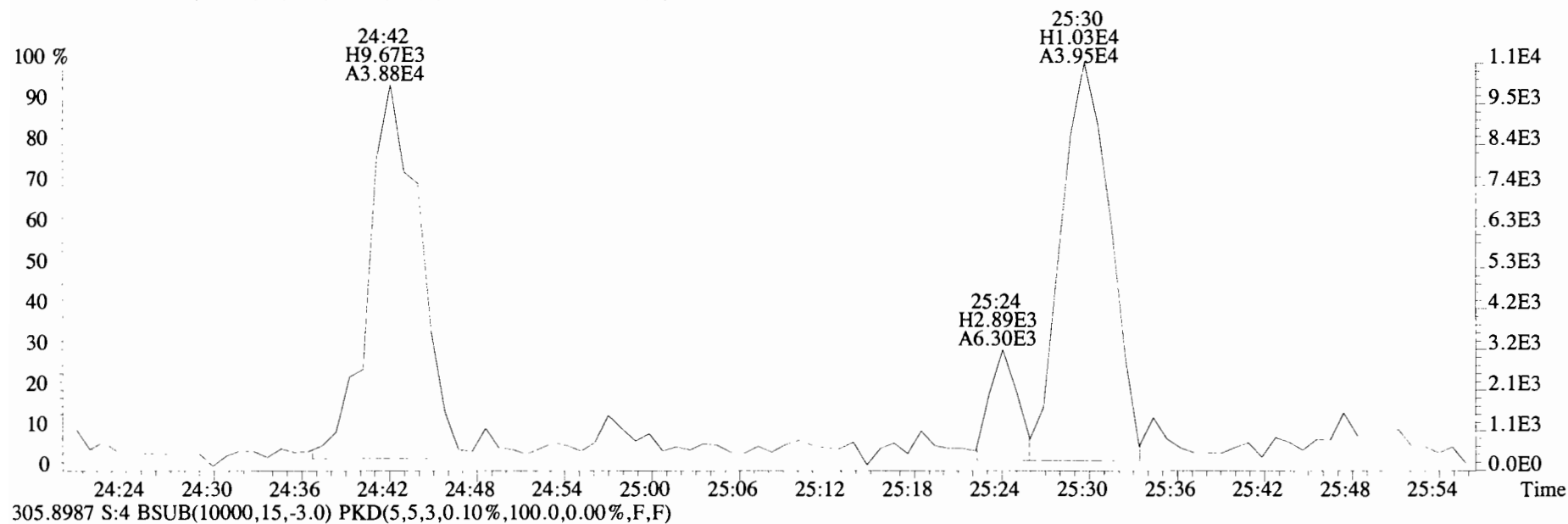
305.8987 S:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



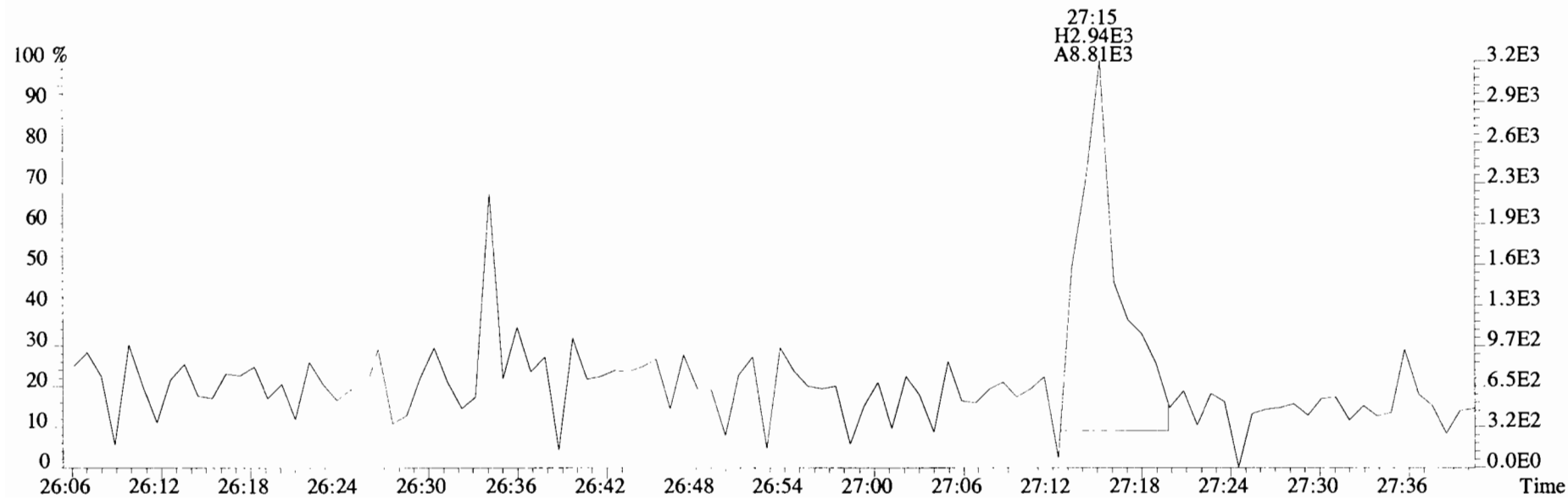
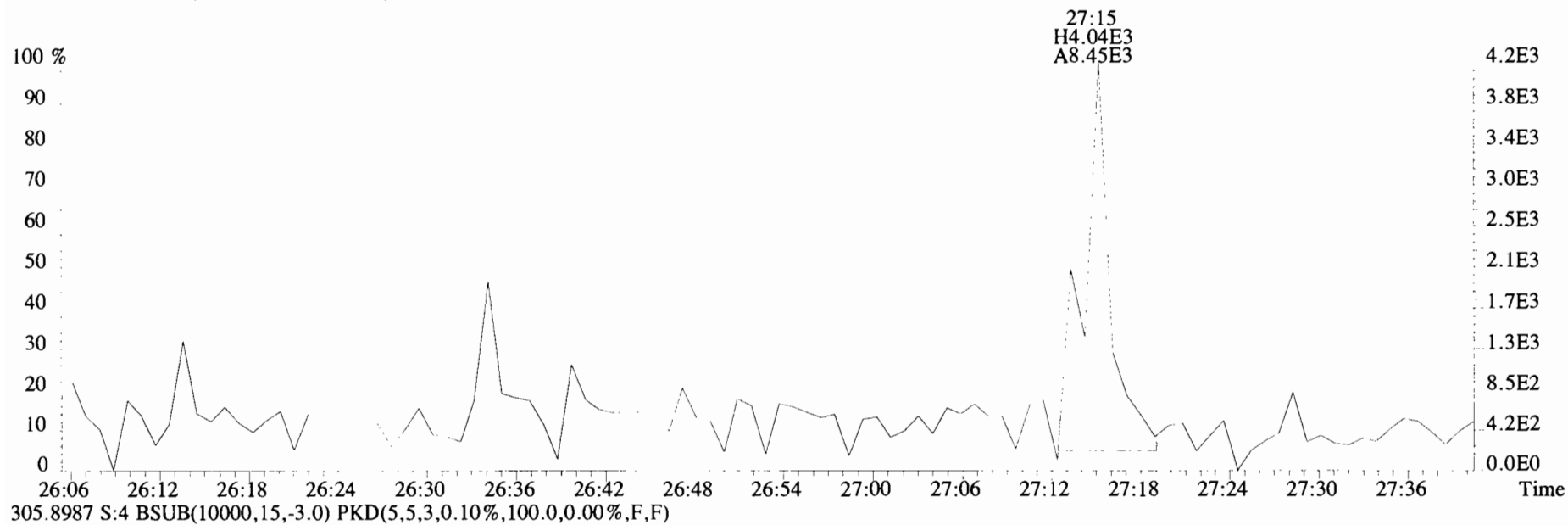
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



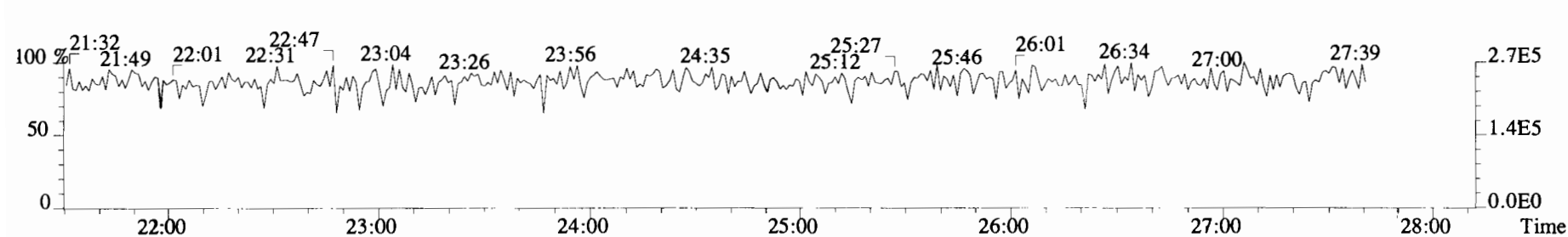
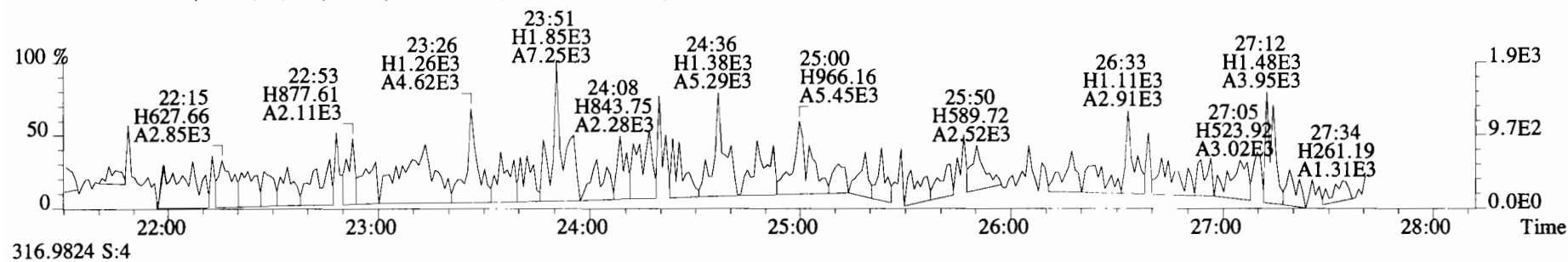
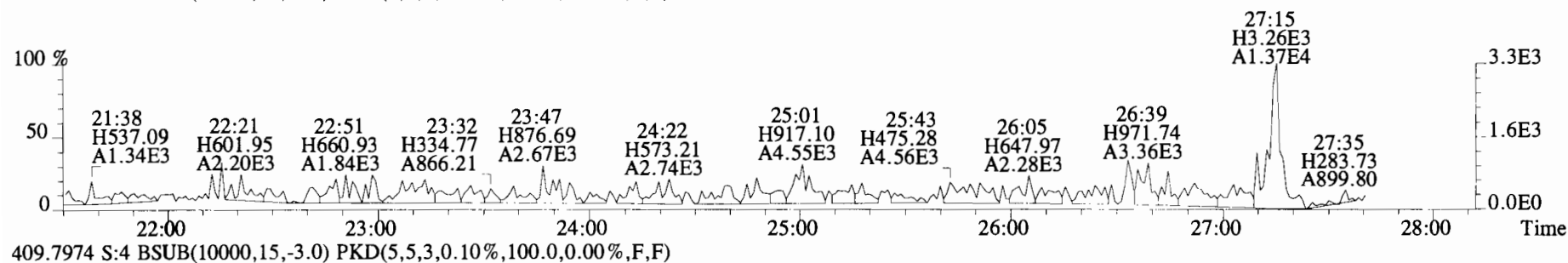
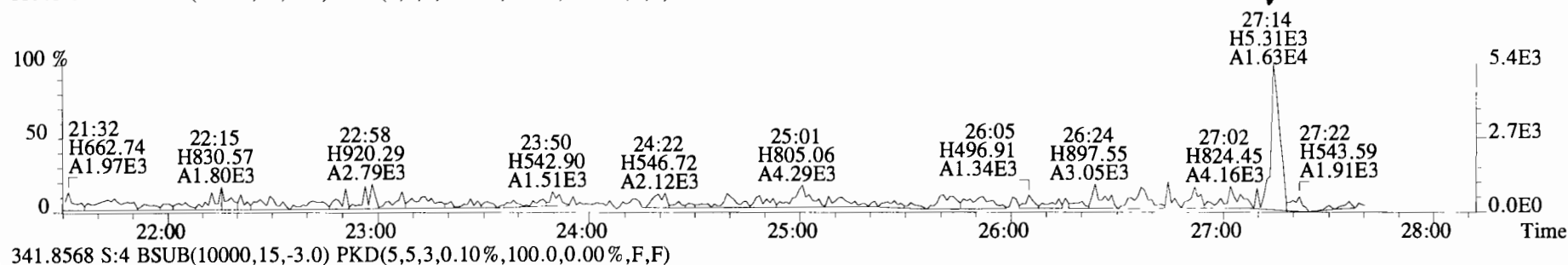
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



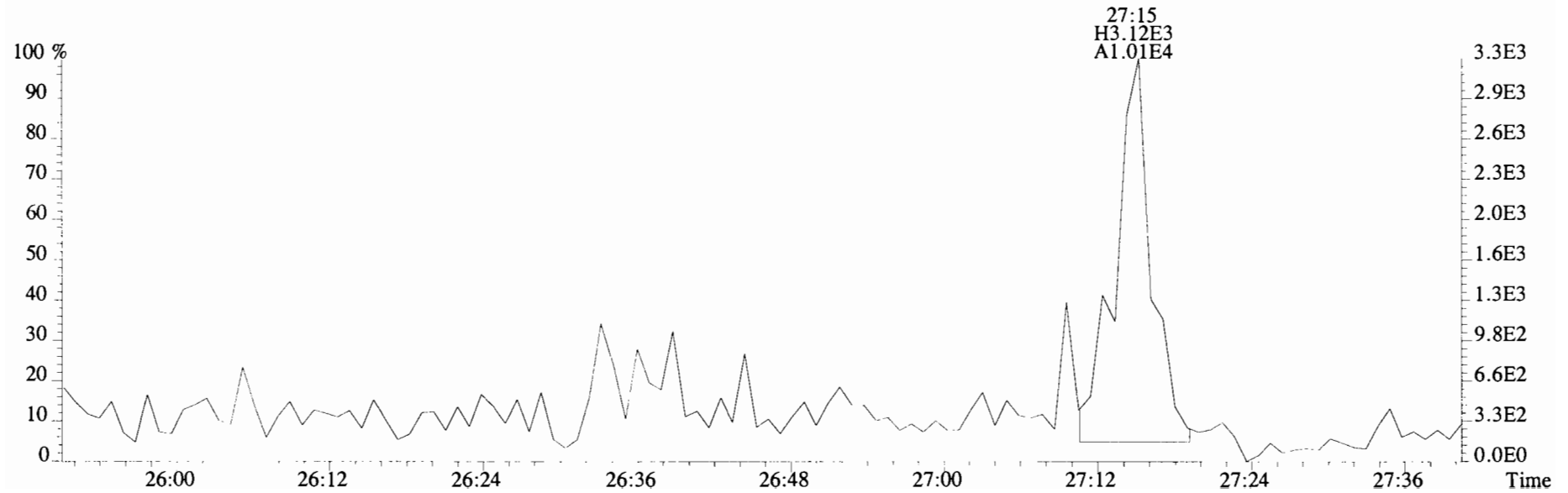
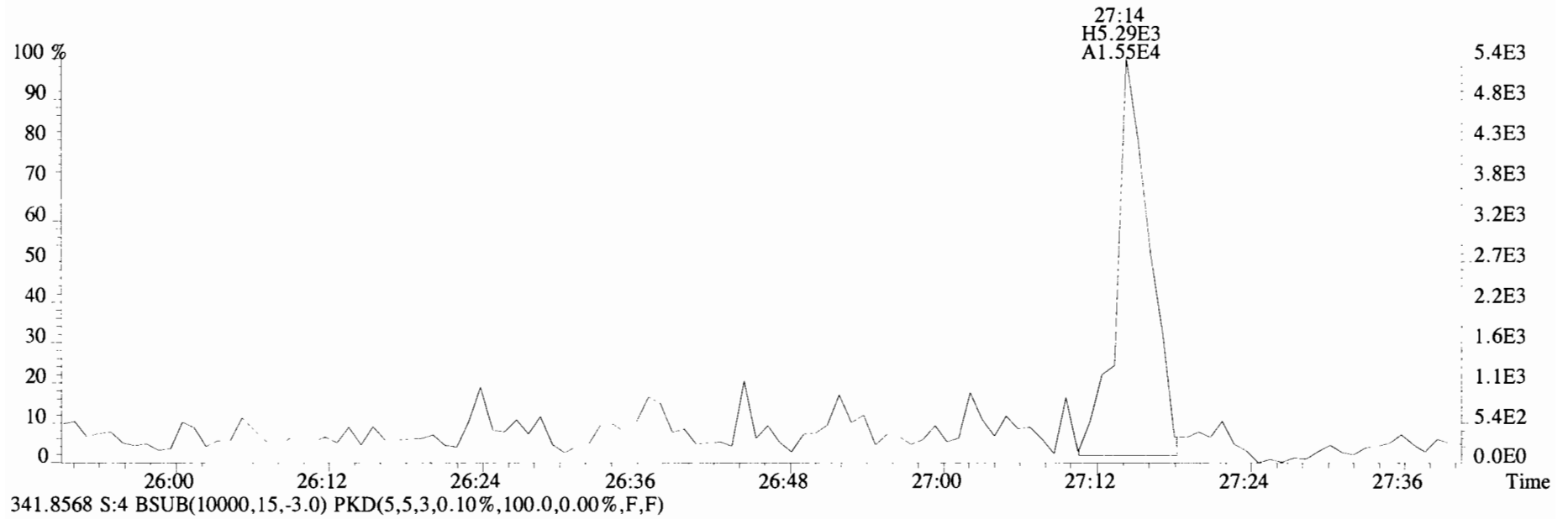
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



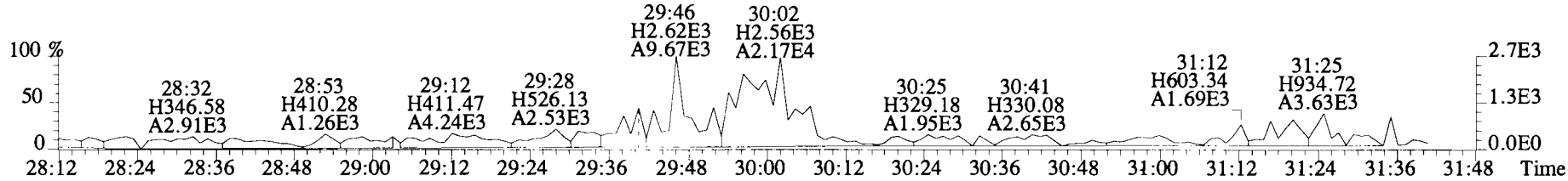
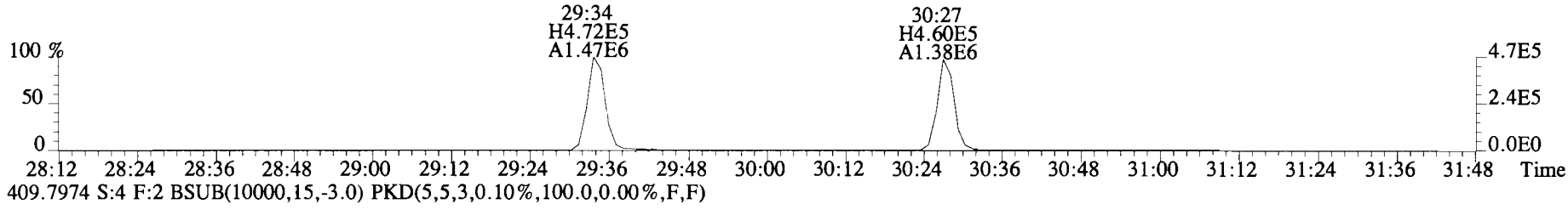
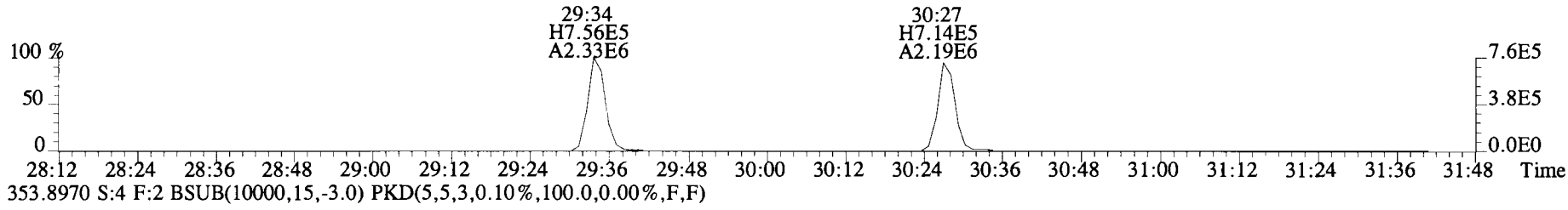
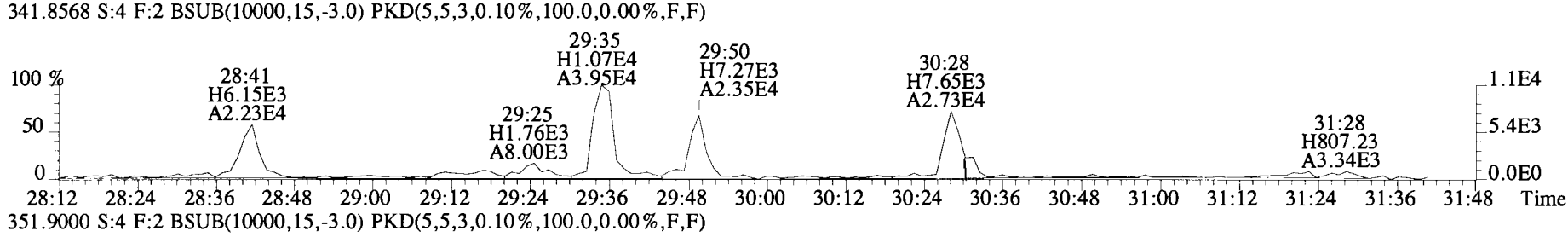
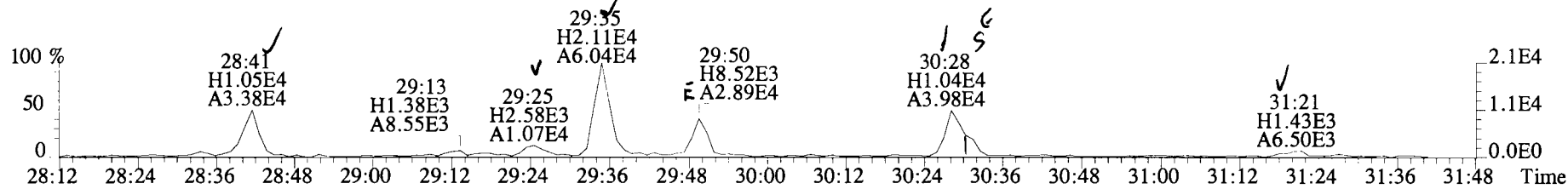
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



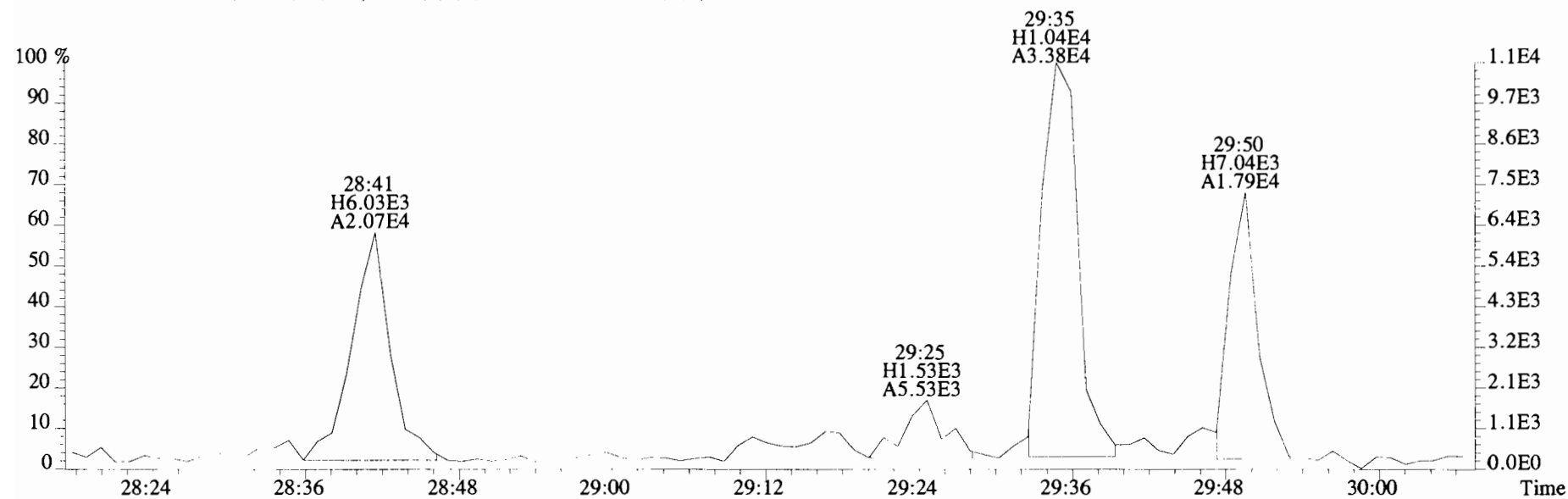
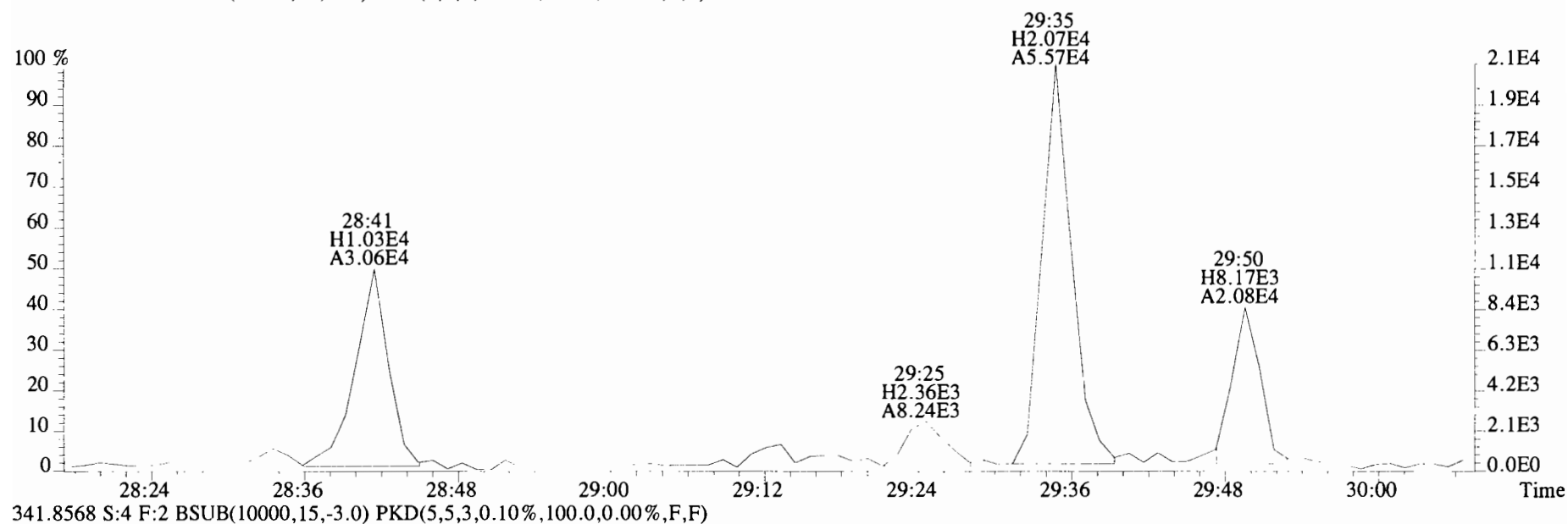
File:191106D1 #1-493 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



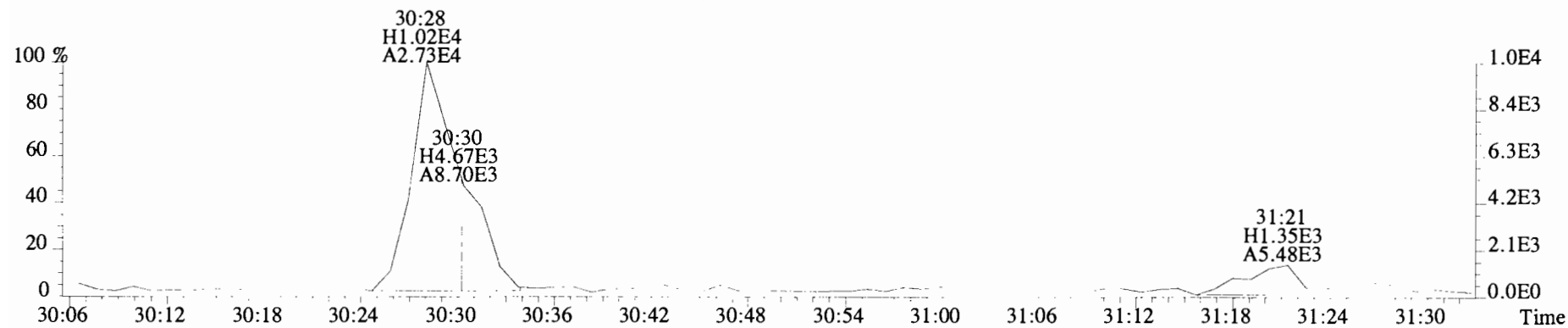
File:191106D1 #1-211 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 339.8597 S:4 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



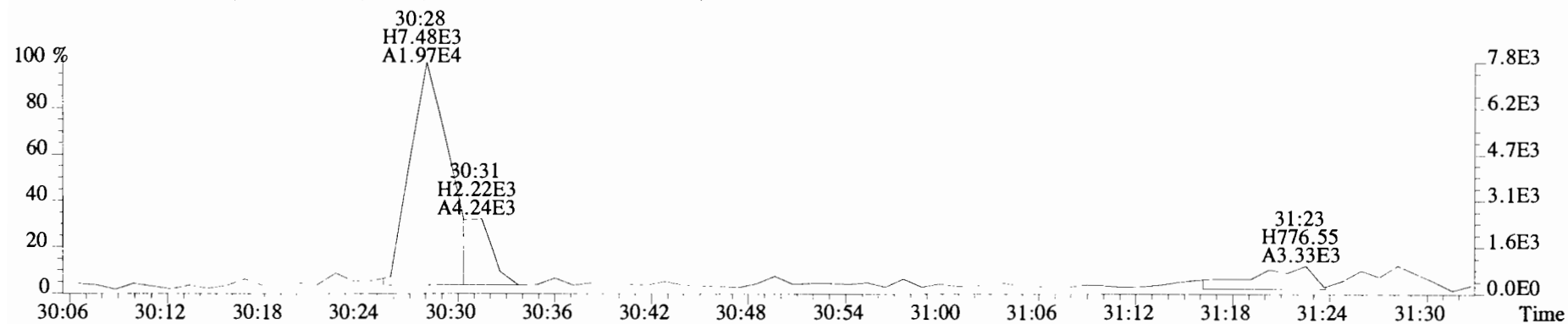
File:191106D1 #1-211 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



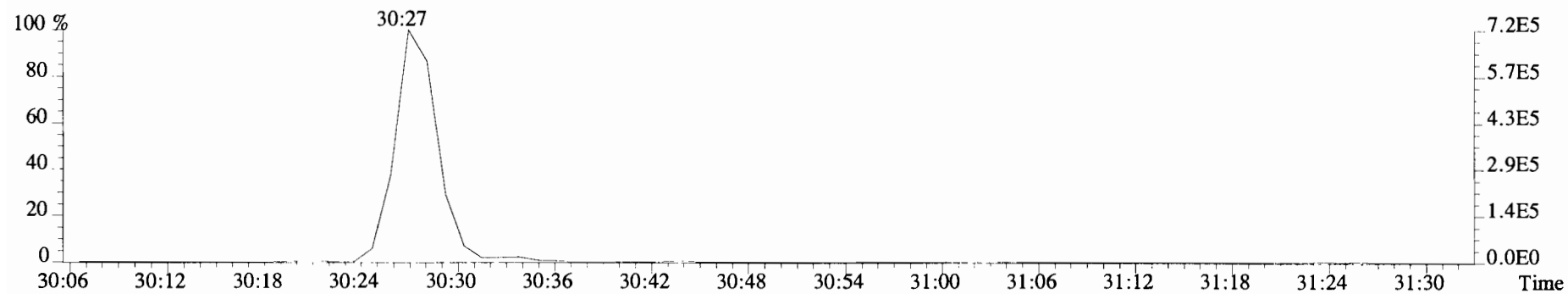
File:191106D1 #1-211 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



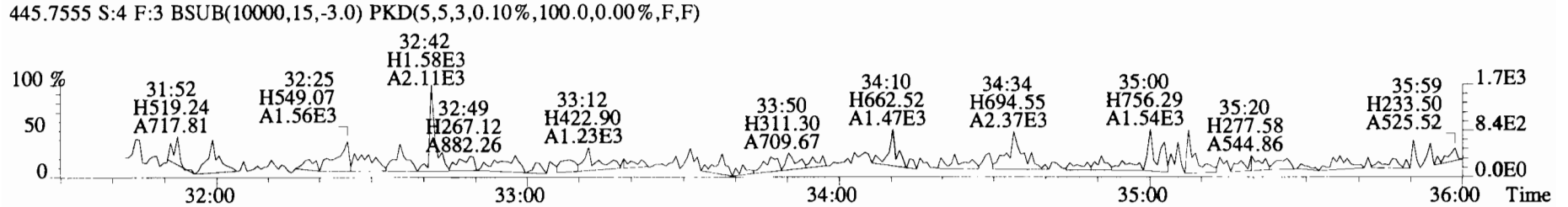
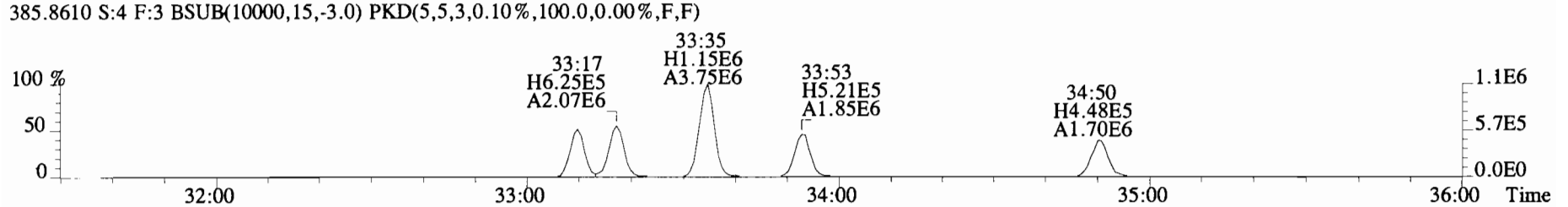
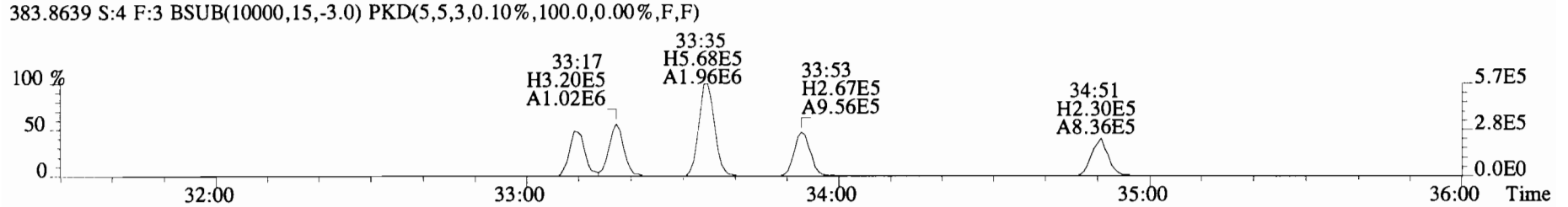
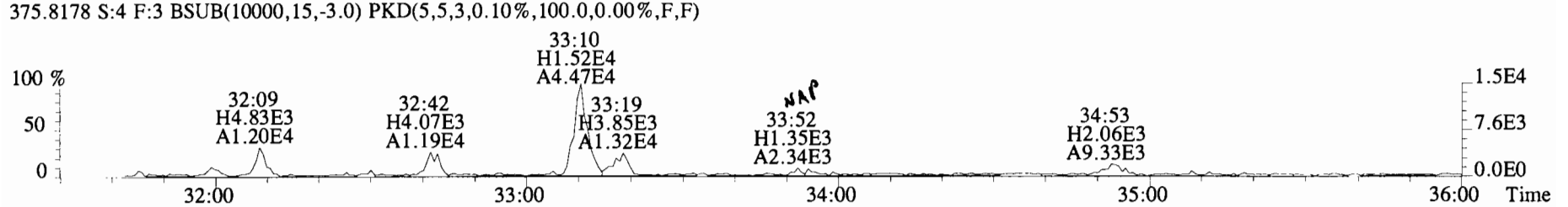
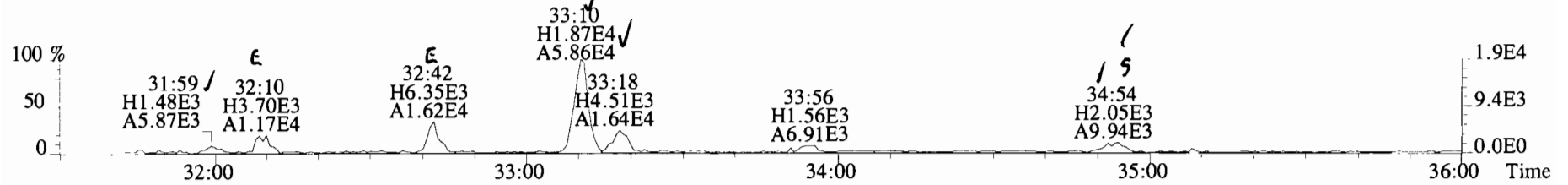
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



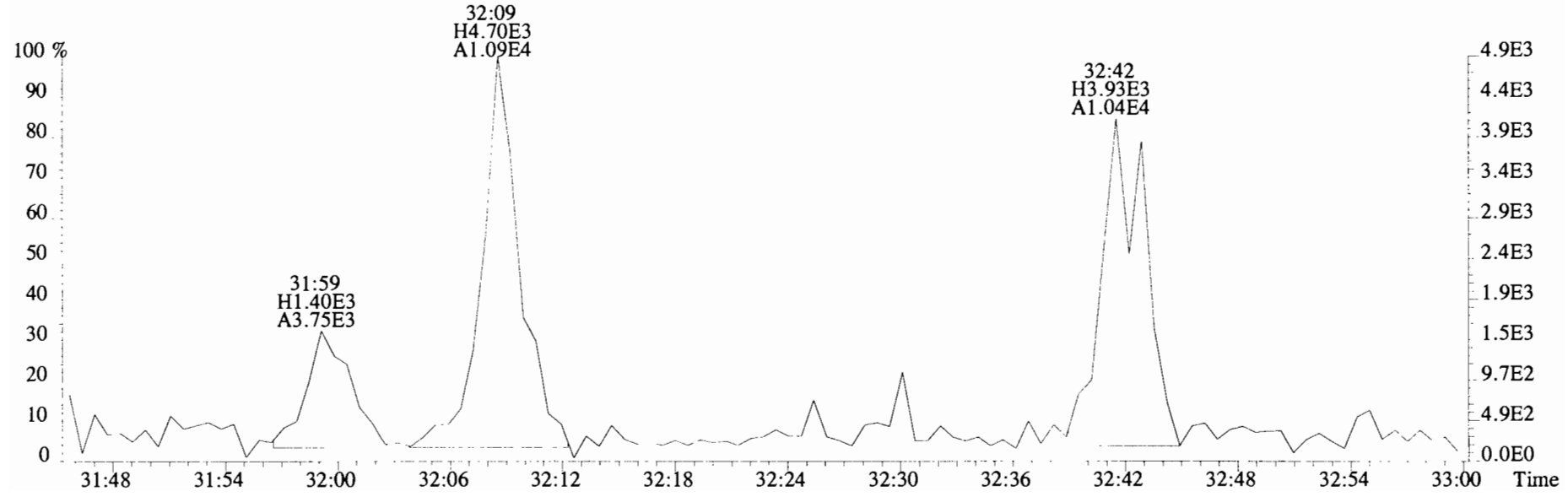
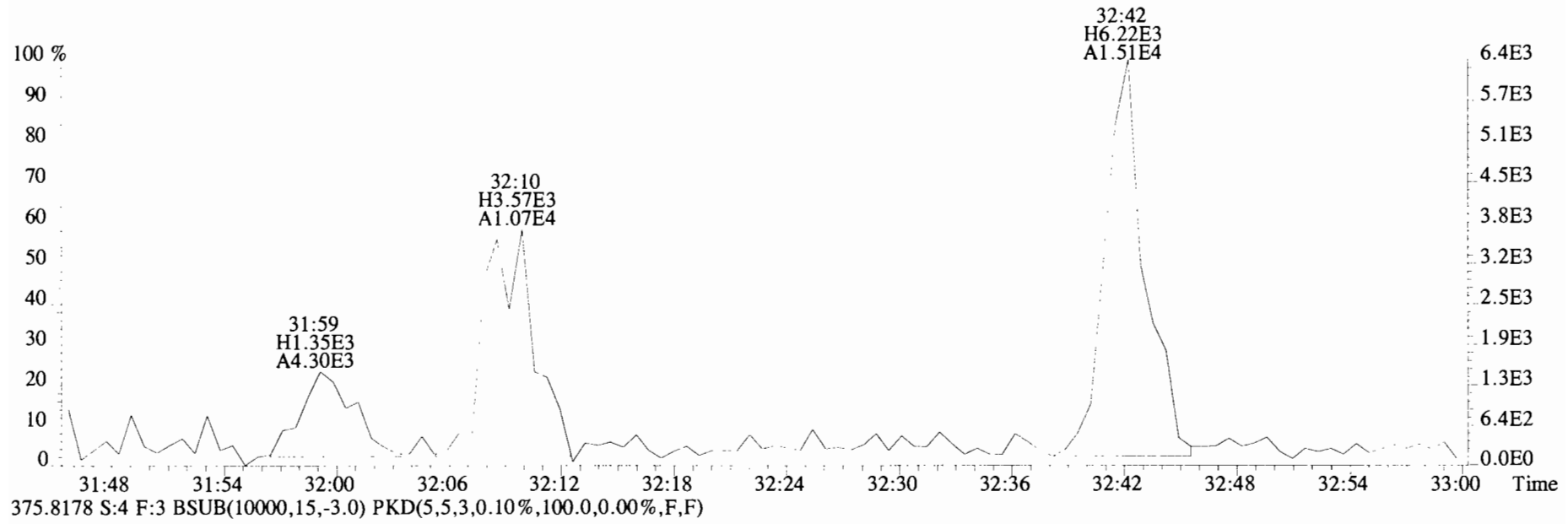
351.9000 S:4 F:2



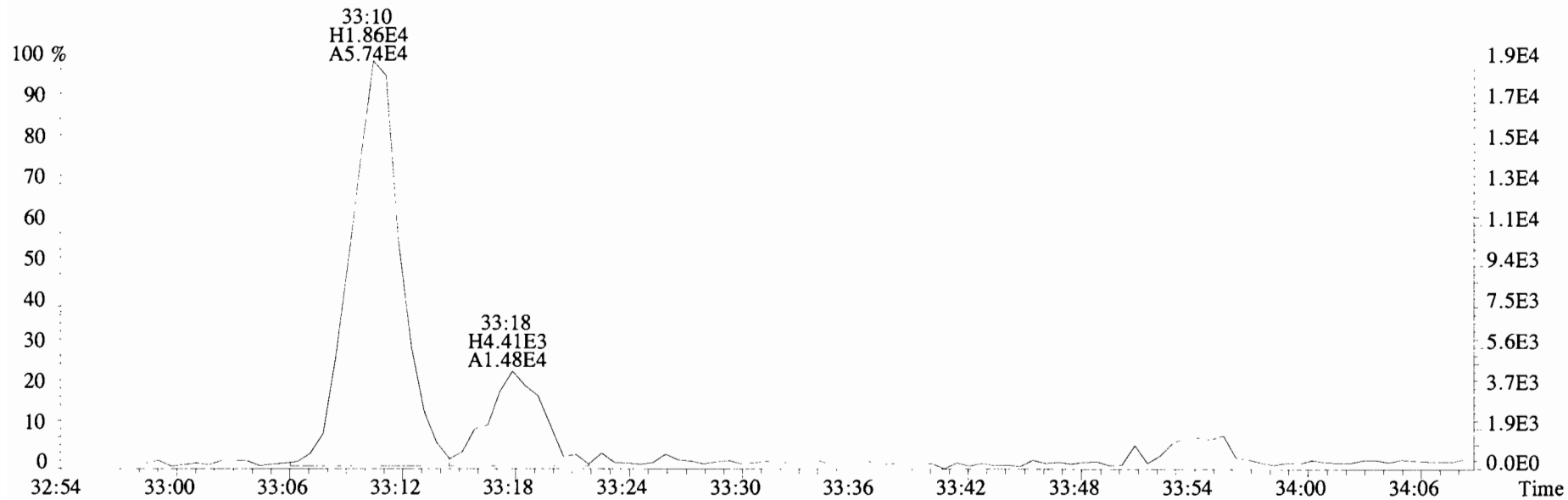
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



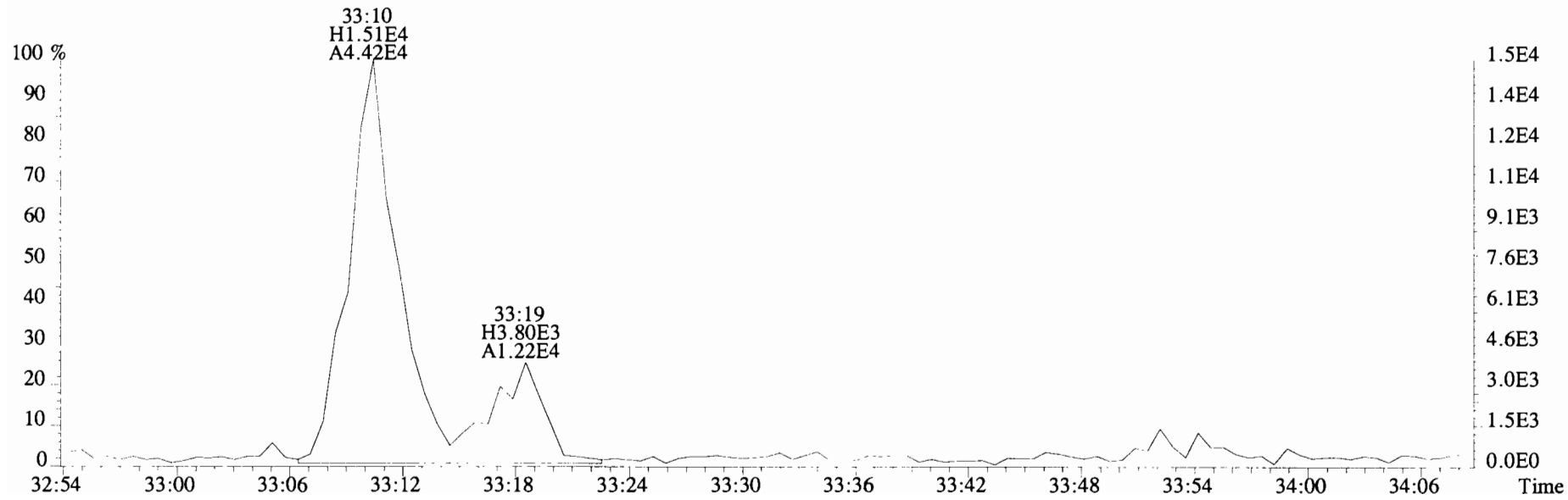
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



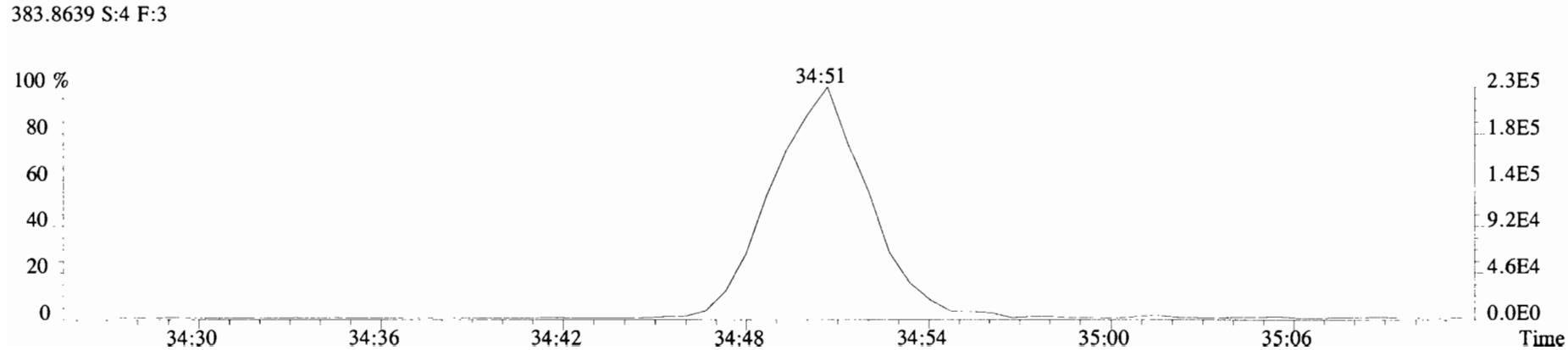
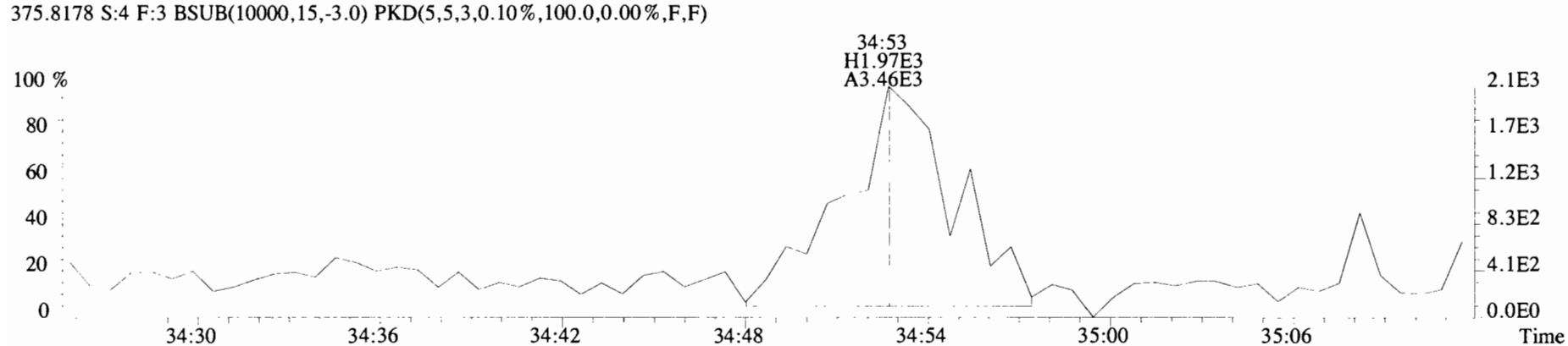
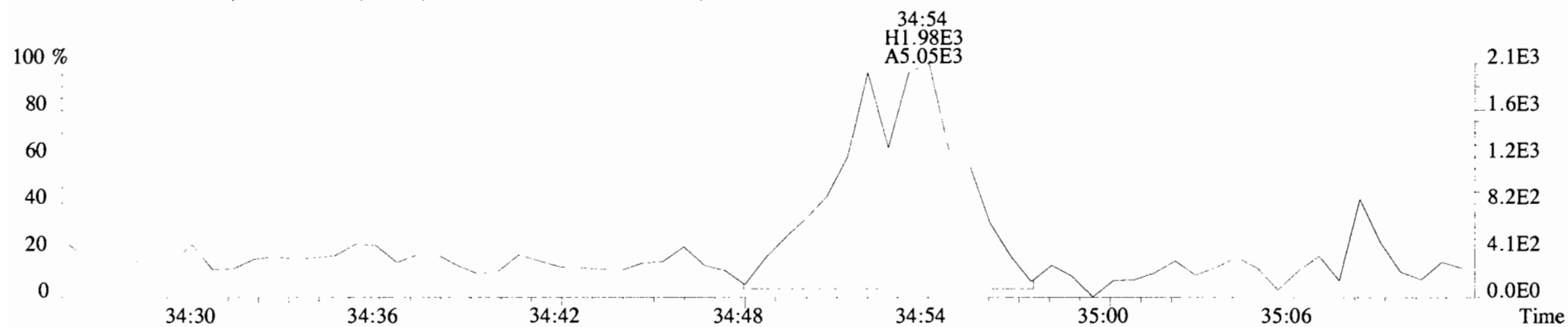
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



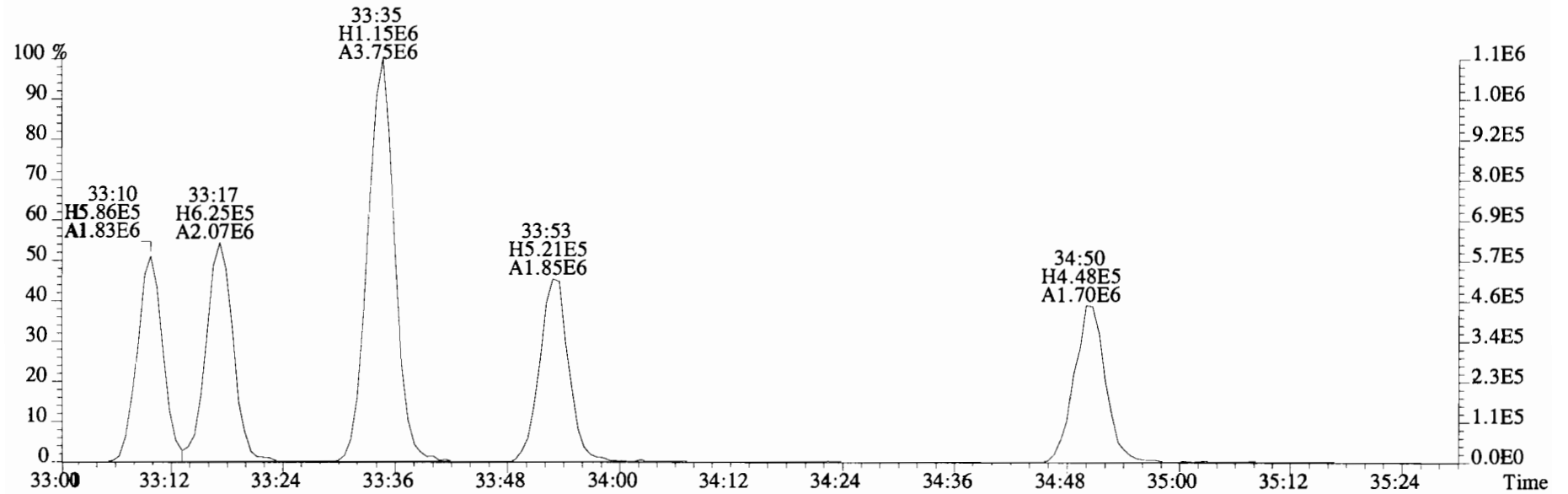
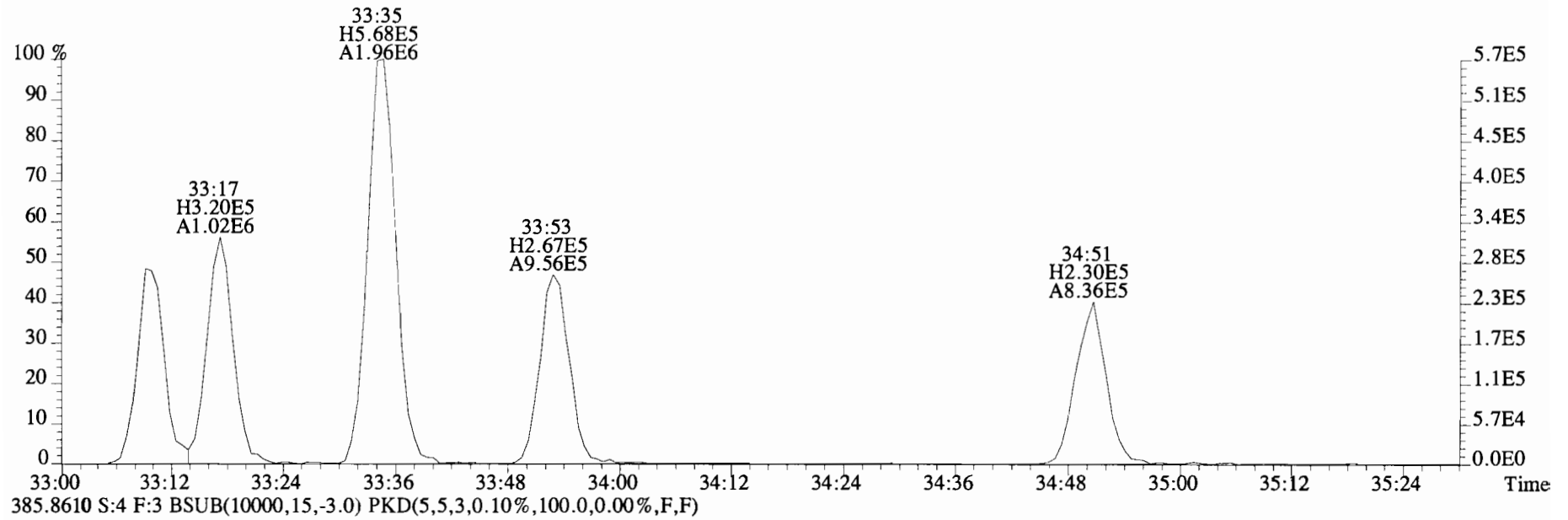
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



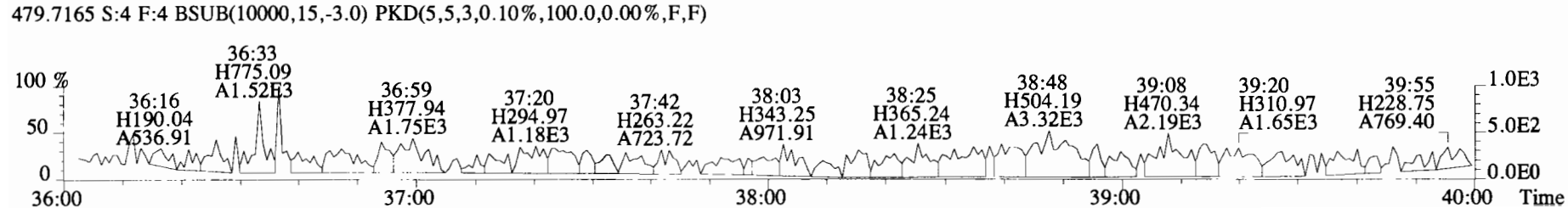
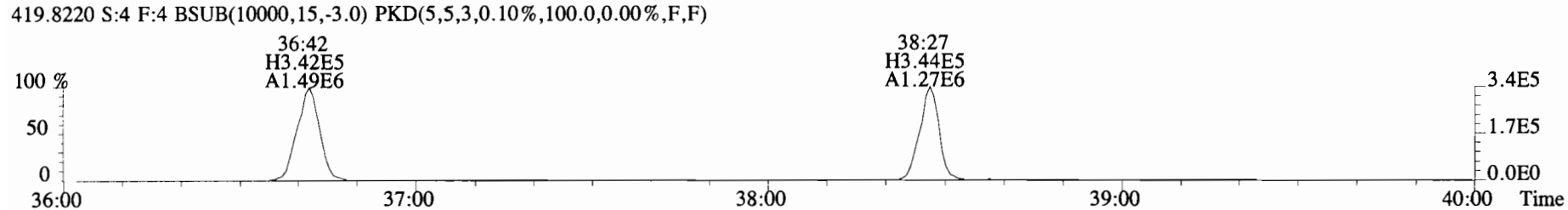
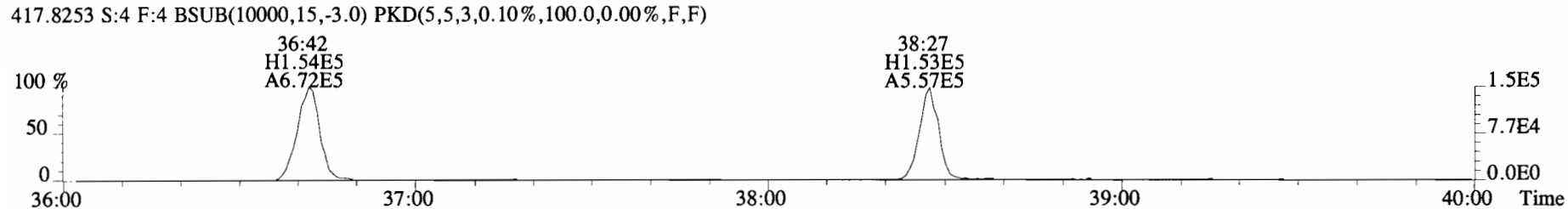
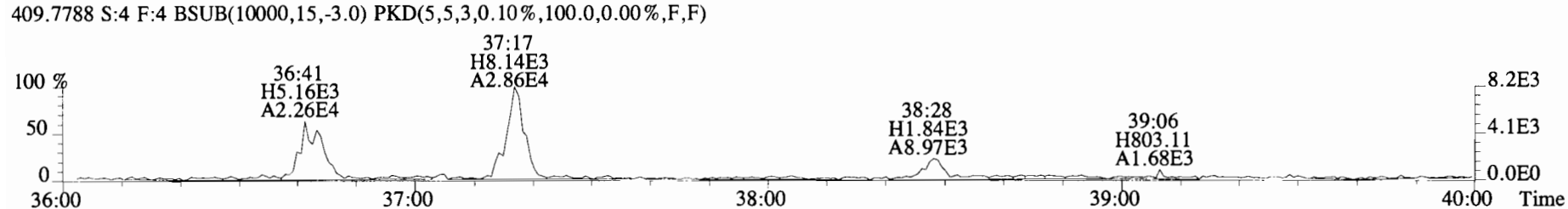
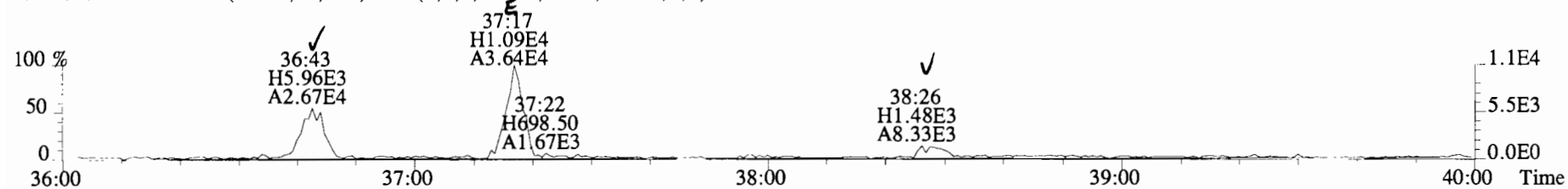
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



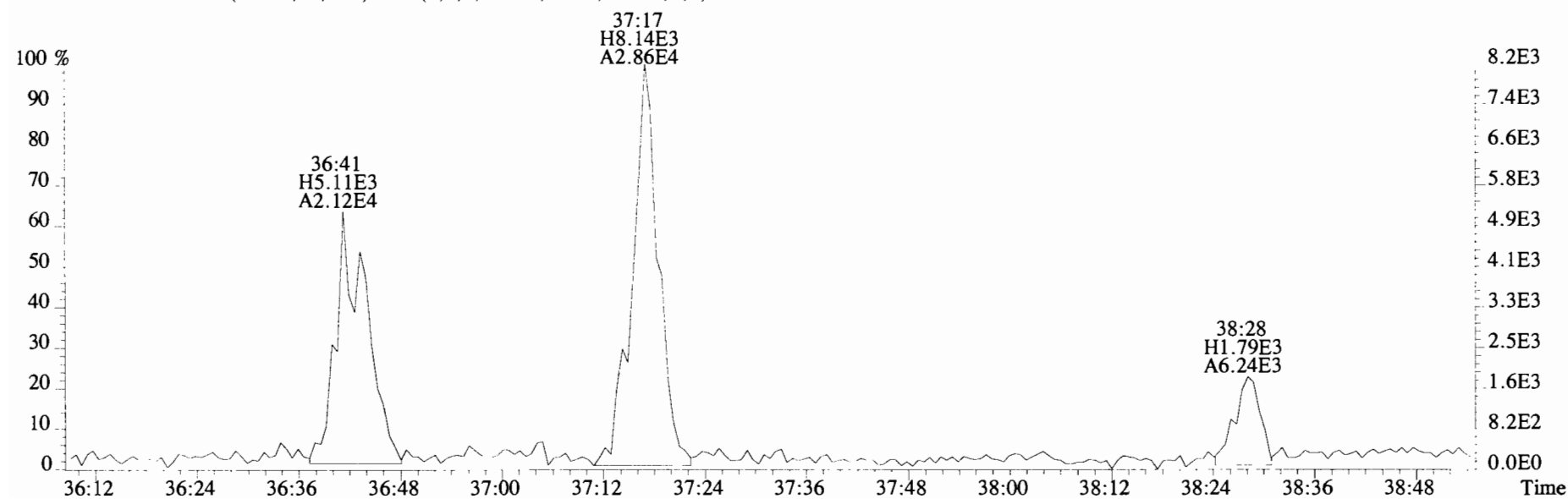
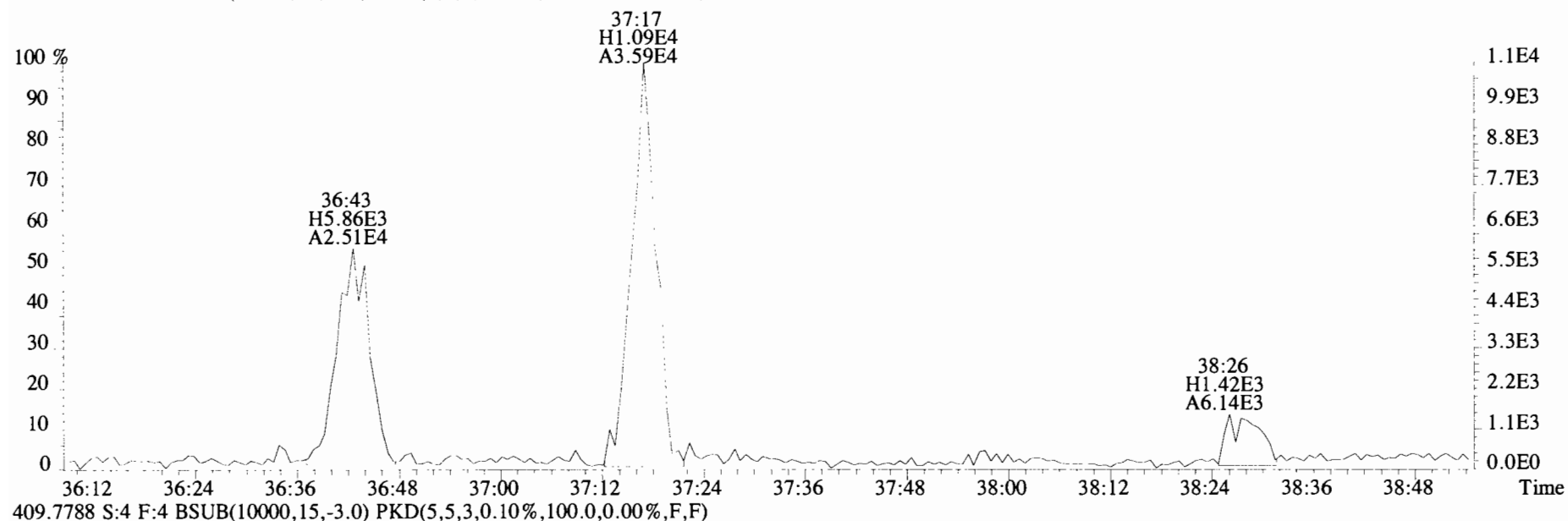
File:191106D1 #1-385 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



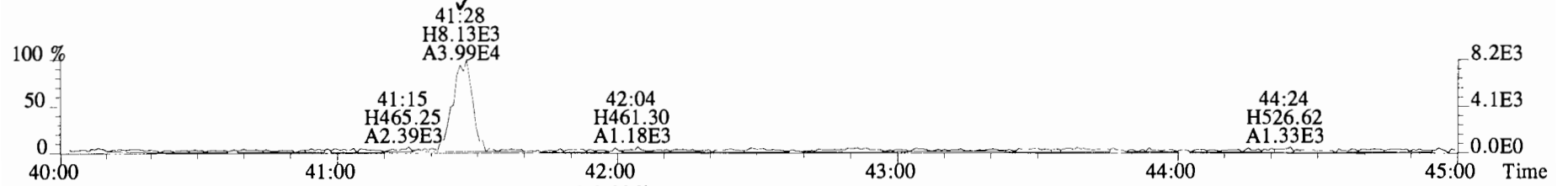
File:191106D1 #1-355 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



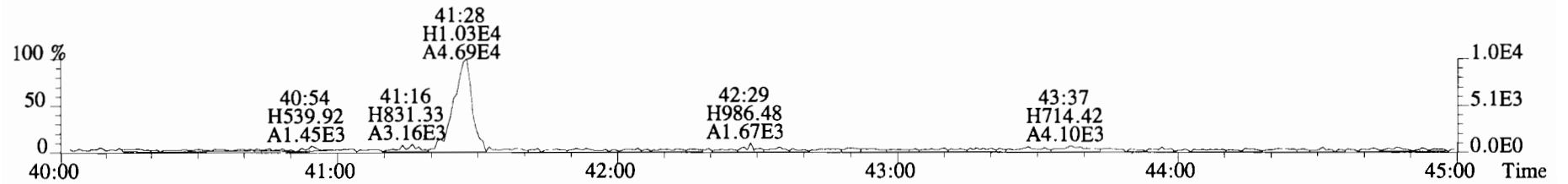
File:191106D1 #1-355 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



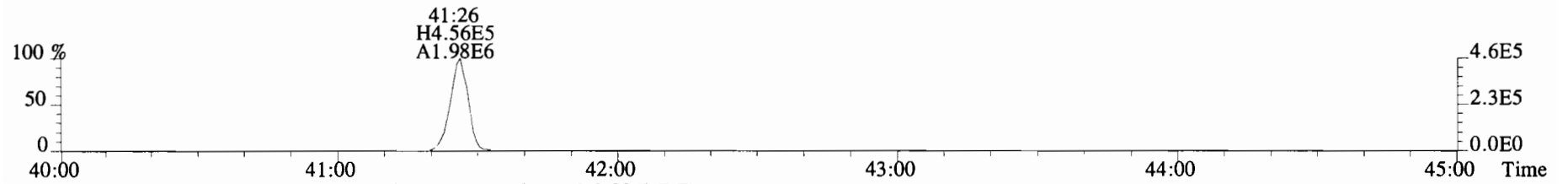
File:191106D1 #1-432 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 Exp:OCDD_DB5
 441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



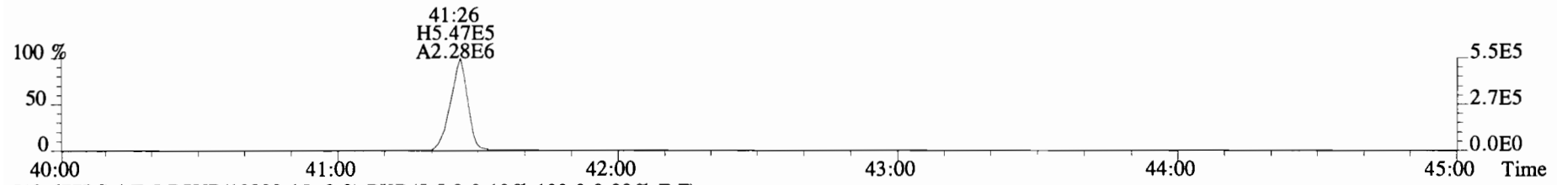
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



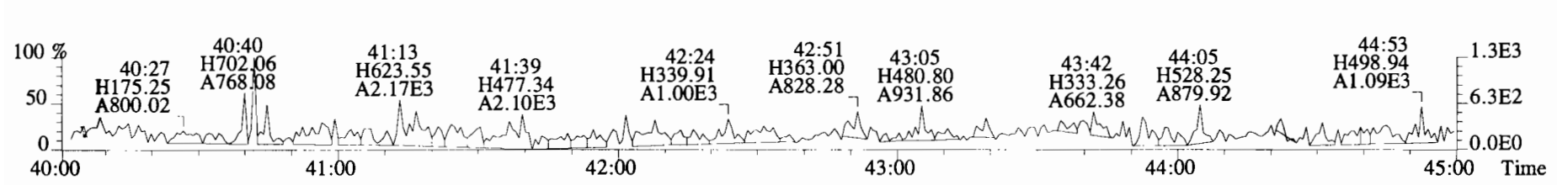
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



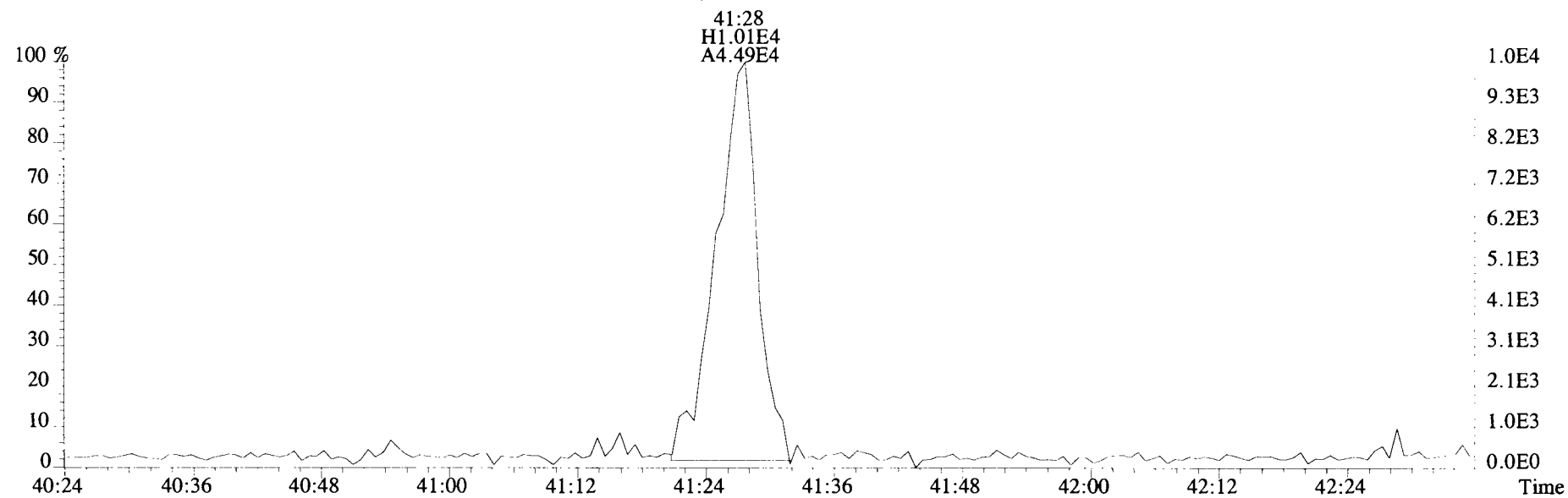
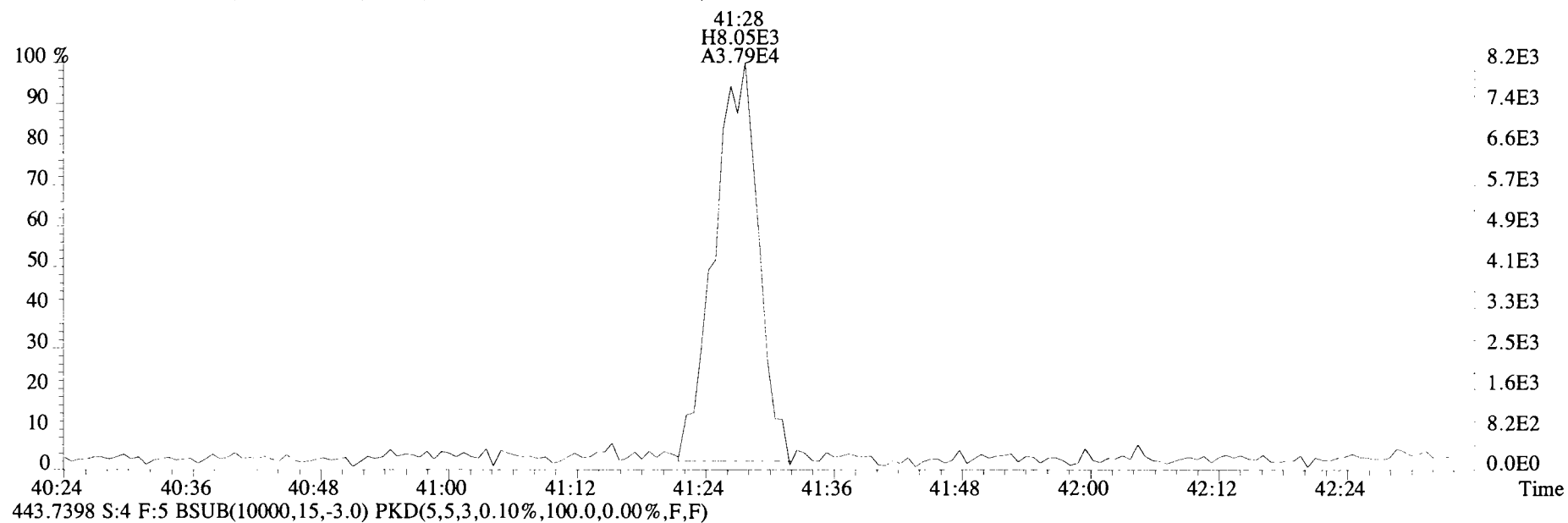
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191106D1 #1-432 Acq: 6-NOV-2019 14:05:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE1 PDI-095SC-B-02-04-191022 10.0158 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)



Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	4.83e+04	0.93 n	0.91	26:11	1.0624			* 2.5	*	Total Tetra-Dioxins	17.4	23.2		*	*
1,2,3,7,8-PeCDD	5.75e+04	0.77 n	0.90	30:42	1.6265			* 2.5	*	Total Penta-Dioxins	29.1	32.8		*	*
1,2,3,4,7,8-HxCDD	5.77e+04	1.36 y	1.10	34:00	1.7119			* 2.5	*	Total Hexa-Dioxins	144	144		*	*
1,2,3,6,7,8-HxCDD	4.21e+05	1.19 y	0.94	34:07	13.254			* 2.5	*	Total Hepta-Dioxins	1490	1490		*	*
1,2,3,7,8,9-HxCDD	1.43e+05	1.28 y	0.96	34:25	4.4448			* 2.5	*	Total Tetra-Furans	182	187		*	*P
1,2,3,4,6,7,8-HpCDD	1.92e+07	1.01 y	0.98	37:51	689.27			* 2.5	*	Total Penta-Furans	315.52	315.52		*	*P
OCDD	1.50e+08	0.89 y	0.96	41:07	7001.4	E +		* 2.5	*	Total Hexa-Furans	285	287		*	*P
2,3,7,8-TCDF	2.62e+06	0.77 y	0.95	25:26	38.999	(37.03)		* 2.5	*	Total Hepta-Furans	388	388		*	*
1,2,3,7,8-PeCDF	2.70e+06	1.70 y	0.96	29:31	48.997			* 2.5	*						
2,3,4,7,8-PeCDF	9.62e+05	1.60 y	1.01	30:24	16.591			* 2.5	*						
1,2,3,4,7,8-HxCDF	3.34e+06	1.20 y	1.18	33:07	70.111			* 2.5	*						
1,2,3,6,7,8-HxCDF	1.12e+06	1.22 y	1.07	33:15	23.079			* 2.5	*						
2,3,4,6,7,8-HxCDF	6.12e+05	1.22 y	1.11	33:50	13.535			* 2.5	*						
1,2,3,7,8,9-HxCDF	2.37e+05	1.13 y	1.06	34:47	5.9949			* 2.5	*	* SEE dilution					
1,2,3,4,6,7,8-HpCDF	4.98e+06	1.00 y	1.13	36:37	148.13			* 2.5	*						
1,2,3,4,7,8,9-HpCDF	5.75e+05	0.97 y	1.28	38:24	16.612			* 2.5	*						
OCDF	8.84e+06	0.89 y	0.95	41:21	334.24			* 2.5	*						
IS	13C-2,3,7,8-TCDD	9.97e+06	0.78 y	1.10	26:11	186.74				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	7.78e+06	0.62 y	0.88	30:41	181.09				94.0					
IS	13C-1,2,3,4,7,8-HxCDD	6.08e+06	1.36 y	0.64	33:60	190.68				91.1					
IS	13C-1,2,3,6,7,8-HxCDD	6.73e+06	1.22 y	0.86	34:06	158.19				95.9					
IS	13C-1,2,3,7,8,9-HxCDD	6.64e+06	1.29 y	0.81	34:24	165.60				79.6					
IS	13C-1,2,3,4,6,7,8-HpCDD	5.66e+06	1.03 y	0.65	37:51	174.32				83.3					
IS	13C-OCDD	8.91e+06	0.90 y	0.58	41:07	309.28				87.7					
IS	13C-2,3,7,8-TCDF	1.41e+07	0.80 y	1.03	25:25	184.62				77.8	*				
IS	13C-1,2,3,7,8-PeCDF	1.14e+07	1.58 y	0.85	29:31	181.70				92.9					
IS	13C-2,3,4,7,8-PeCDF	1.13e+07	1.61 y	0.85	30:24	182.06				91.4					
IS	13C-1,2,3,4,7,8-HxCDF	8.05e+06	0.50 y	0.83	33:06	194.70				91.6					
IS	13C-1,2,3,6,7,8-HxCDF	9.06e+06	0.54 y	1.03	33:14	176.24				98.0					
IS	13C-2,3,4,6,7,8-HxCDF	8.07e+06	0.52 y	0.95	33:49	170.29				88.7					
IS	13C-1,2,3,7,8,9-HxCDF	7.41e+06	0.52 y	0.83	34:47	180.11				85.7					
IS	13C-1,2,3,4,6,7,8-HpCDF	5.93e+06	0.41 y	0.76	36:37	157.42				90.6					
IS	13C-1,2,3,4,7,8,9-HpCDF	5.38e+06	0.41 y	0.58	38:23	186.20				79.2					
IS	13C-OCDF	1.11e+07	0.88 y	0.69	41:20	324.17				93.7					
C/Up	37Cl-2,3,7,8-TCDD	4.45e+06		1.20	26:12	76.270				81.6					
RS/RT	13C-1,2,3,4-TCDD	9.69e+06	0.80 y	1.00	25:38	198.74				95.9					
RS	13C-1,2,3,4-TCDF	1.46e+07	0.78 y	1.00	24:12	198.74					Integrations			Reviewed	
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.88e+06	0.52 y	1.00	33:31	198.74					by			by	
											Analyst: <u>DB</u>			Analyst: <u>CT</u>	
											Date: <u>11/27/19</u>			Date: <u>12/03/19</u>	

Totals class: TCDD EMPC

Entry #: 19

Run: 13 File: 191120D1 S: 12 I: 1 F: 1
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 23.171 Unnamed Concentration: 22.108

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
22:50	2.393e+05	2.854e+05	0.84	y	5.247e+05	11.554
23:11	4.436e+04	4.700e+04	0.94	n	8.319e+04	1.8317
23:36	1.597e+04	1.642e+04	0.97	n	2.906e+04	0.63989
24:20	1.091e+04	1.166e+04	0.94	n	2.064e+04	0.45433
24:32	3.204e+04	4.371e+04	0.73	y	7.575e+04	1.6678
24:44	3.211e+04	3.561e+04	0.90	n	6.303e+04	1.3879
24:54	9.141e+03	1.262e+04	0.72	y	2.176e+04	0.47901
25:07	9.046e+03	9.626e+03	0.94	n	1.704e+04	0.37515
25:17	1.042e+04	1.507e+04	0.69	y	2.549e+04	0.56117
25:37	1.057e+04	1.477e+04	0.72	y	2.534e+04	0.55785
25:57	3.817e+04	4.619e+04	0.83	y	8.436e+04	1.8574
26:11	2.522e+04	2.726e+04	0.93	n	4.825e+04	1.0624
26:29	1.290e+04	1.457e+04	0.89	y	2.746e+04	0.60466
27:04	2.832e+03	3.426e+03	0.83	y	6.258e+03	0.13778

2,3,7,8-TCDD

Totals class: PeCDD EMPC

Entry #: 21

Run: 13 File: 191120D1 S: 12 I: 1 F: 2
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 32.792

Unnamed Concentration: 31.166

RT	m1 Resp	m2 Resp	RA		Resp Concentration		Name
28:39	1.528e+05	2.338e+05	0.65	y	3.866e+05	10.939	
29:06	1.784e+04	2.527e+04	0.71	y	4.311e+04	1.2198	
29:32	1.343e+05	1.950e+05	0.69	y	3.293e+05	9.3176	
29:42	3.204e+04	4.956e+04	0.65	y	8.160e+04	2.3089	
29:47	2.866e+04	3.864e+04	0.74	n	6.299e+04	1.7823	
30:00	3.925e+04	7.083e+04	0.55	y	1.101e+05	3.1148	
30:18	8.634e+03	1.580e+04	0.55	y	2.443e+04	0.69134	
30:42	2.732e+04	3.526e+04	0.77	n	5.748e+04	1.6265	1,2,3,7,8-PeCDD
30:46	1.110e+04	1.610e+04	0.69	y	2.720e+04	0.76975	
30:58	6.887e+03	6.059e+03	1.14	n	9.877e+03	0.27948	
31:03	1.008e+04	1.619e+04	0.62	y	2.626e+04	0.74317	

Totals class: HxCDD EMPC

Entry #: 23

Run: 13 File: 191120D1 S: 12 I: 1 F: 3
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 143.77 Unnamed Concentration: 124.355

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:28	9.912e+05	8.022e+05	1.24	y	1.793e+06	55.441
33:02	1.497e+05	1.183e+05	1.27	y	2.679e+05	8.2825
33:18	1.023e+06	8.144e+05	1.26	y	1.837e+06	56.786
33:25	3.461e+04	2.949e+04	1.17	y	6.410e+04	1.9816
34:00	3.325e+04	2.447e+04	1.36	y	5.771e+04	1.7119 1,2,3,4,7,8-HxCDD
34:07	2.289e+05	1.921e+05	1.19	y	4.210e+05	13.254 1,2,3,6,7,8-HxCDD
34:18	3.498e+04	2.535e+04	1.38	y	6.032e+04	1.8648
34:25	7.999e+04	6.273e+04	1.28	y	1.427e+05	4.4448 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 13 File: 191120D1 S: 12 I: 1 F: 4
Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 1494.2 Unnamed Concentration: 804.926

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:00	1.127e+07	1.120e+07	1.01 y	2.247e+07	804.93
37:51	9.663e+06	9.578e+06	1.01 y	1.924e+07	689.27 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 13 File: 191120D1 S: 12 I: 1 F: 1
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 187.37 Unnamed Concentration: 148.367

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:42	6.029e+04	7.775e+04	0.78	y	1.380e+05	2.0535
21:17	1.161e+05	1.574e+05	0.74	y	2.735e+05	4.0688
21:54	7.702e+05	1.001e+06	0.77	y	1.772e+06	26.355
22:26	1.256e+05	1.661e+05	0.76	y	2.917e+05	4.3394
22:49	5.156e+05	6.721e+05	0.77	y	1.188e+06	17.666
23:13	5.477e+05	6.958e+05	0.79	y	1.244e+06	18.498
23:21	1.957e+04	2.328e+04	0.84	y	4.286e+04	0.63749
23:30	6.142e+04	8.388e+04	0.73	y	1.453e+05	2.1613
23:51	1.515e+04	1.626e+04	0.93	n	2.877e+04	0.42802
23:58	3.577e+04	4.770e+04	0.75	y	8.347e+04	1.2417
24:06	4.385e+05	5.683e+05	0.77	y	1.007e+06	14.978
24:13	1.271e+05	1.601e+05	0.79	y	2.871e+05	4.2712
24:38	9.914e+05	1.272e+06	0.78	y	2.264e+06	33.672
24:52	4.375e+04	6.631e+04	0.66	y	1.101e+05	1.6372
25:04	2.303e+04	2.839e+04	0.81	y	5.142e+04	0.76490
25:13	2.282e+04	3.037e+04	0.75	y	5.319e+04	0.79118
25:19	1.426e+05	1.628e+05	0.88	y	3.055e+05	4.5439
25:26	1.137e+06	1.485e+06	0.77	y	2.622e+06	38.999
25:45	6.935e+04	8.091e+04	0.86	y	1.503e+05	2.2352
25:58	1.363e+04	1.817e+04	0.75	y	3.181e+04	0.47315
26:44	4.562e+04	5.254e+04	0.87	y	9.816e+04	1.4601 P
26:54	4.465e+04	5.285e+04	0.84	y	9.751e+04	1.4505 P
27:11	1.813e+05	1.763e+05	1.03	n	3.120e+05	4.6409

2,3,7,8-TCDF

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 13 File: 191120D1 S: 12 I: 1 F: 1
Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 107.18 Unnamed Concentration: 107.182

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:12	3.679e+06	2.385e+06	1.54 y	6.064e+06	107.18

Totals class: PeCDF EMPC

Entry #: 31

Run: 13 File: 191120D1 S: 12 I: 1 F: 2
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 208.34 Unnamed Concentration: 142.753

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:37	2.346e+06	1.453e+06	1.61 y	3.799e+06	67.149
29:09	6.434e+05	4.086e+05	1.57 y	1.052e+06	18.594
29:21	1.962e+05	1.257e+05	1.56 y	3.219e+05	5.6896
29:31	1.701e+06	1.003e+06	1.70 y	2.705e+06	48.997 1,2,3,7,8-PeCDF
29:46	7.063e+05	4.650e+05	1.52 y	1.171e+06	20.704 P
30:19	3.177e+04	2.109e+04	1.51 y	5.286e+04	0.93434
30:24	5.923e+05	3.693e+05	1.60 y	9.615e+05	16.591 2,3,4,7,8-PeCDF
30:27	9.684e+05	6.033e+05	1.61 y	1.572e+06	27.780
31:17	6.737e+04	4.026e+04	1.67 y	1.076e+05	1.9025

Totals class: HxCDF EMPC

Entry #: 33

Run: 13 File: 191120D1 S: 12 I: 1 F: 3
 Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 287.23 Unnamed Concentration: 174.508

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
31:57	5.946e+05	4.898e+05	1.21	y	1.084e+06	23.981
32:06	1.535e+06	1.267e+06	1.21	y	2.801e+06	61.948
32:27	2.530e+04	2.475e+04	1.02	n	4.570e+04	1.0107
32:38	1.974e+06	1.656e+06	1.19	y	3.630e+06	80.266
33:00	3.157e+04	3.054e+04	1.03	n	5.703e+04	1.2611
33:07	1.821e+06	1.520e+06	1.20	y	3.341e+06	70.111
33:15	6.172e+05	5.073e+05	1.22	y	1.125e+06	23.079
33:31	2.734e+04	2.142e+04	1.28	y	4.876e+04	1.0784
33:50	3.363e+05	2.754e+05	1.22	y	6.118e+05	13.535
34:47	1.258e+05	1.114e+05	1.13	y	2.372e+05	5.9949
34:51	1.257e+05	9.873e+04	1.27	y	2.244e+05	4.9633

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

Totals class: HpCDF EMPC

Entry #: 35

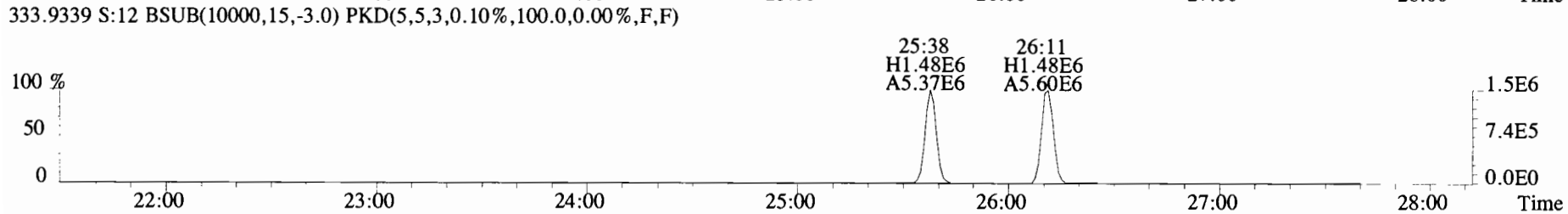
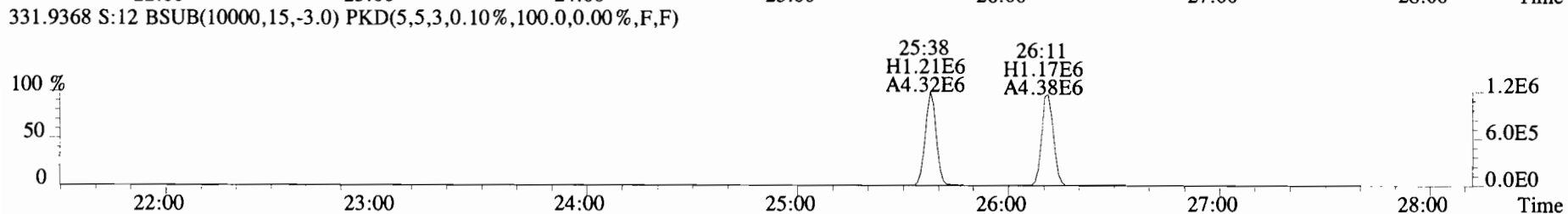
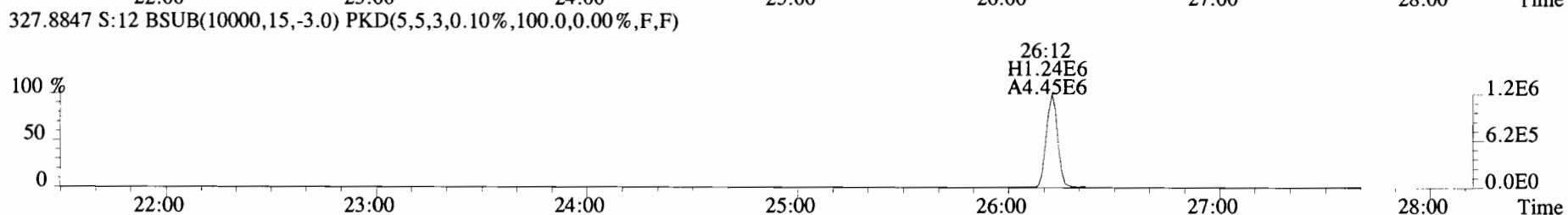
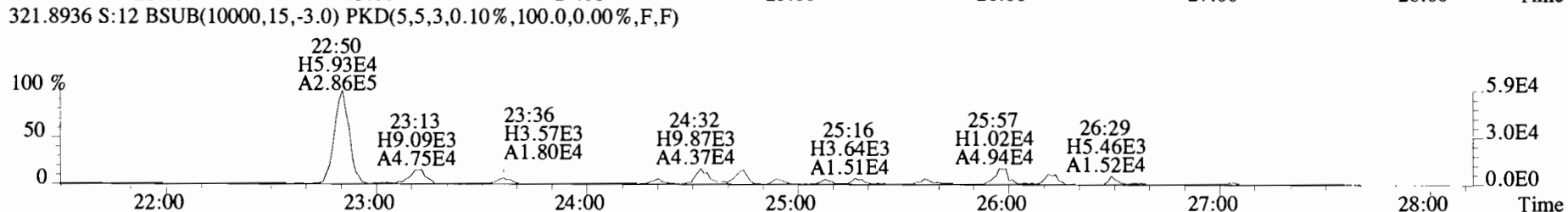
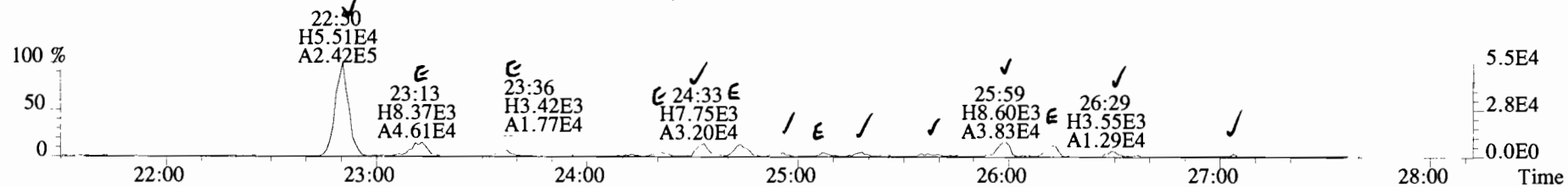
Run: 13 File: 191120D1 S: 12 I: 1 F: 4
Acquired: 20-NOV-19 22:46:18 Processed: 26-NOV-19 12:22:46

Total Concentration: 388.00

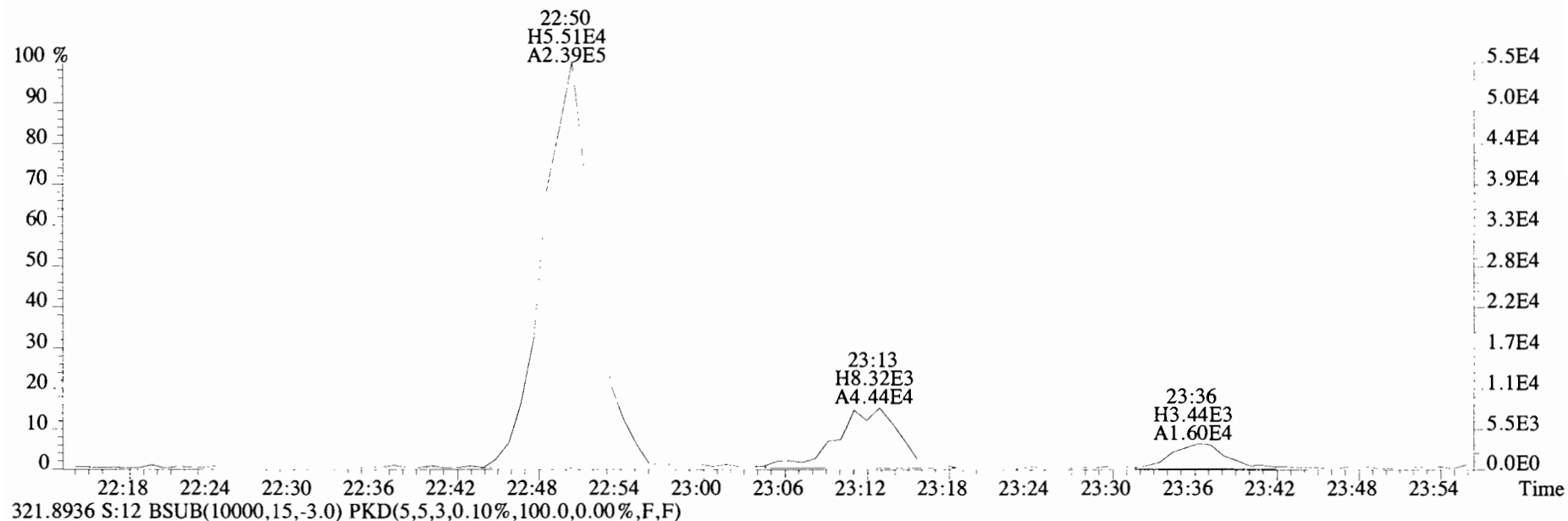
Unnamed Concentration: 223.261

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
36:37	2.485e+06	2.495e+06	1.00 y	4.980e+06	148.13	1,2,3,4,6,7,8-HpCDF
37:01	3.373e+04	3.200e+04	1.05 y	6.573e+04	1.9363	
37:12	3.698e+06	3.815e+06	0.97 y	7.513e+06	221.32	
38:24	2.839e+05	2.914e+05	0.97 y	5.753e+05	16.612	1,2,3,4,7,8,9-HpCDF

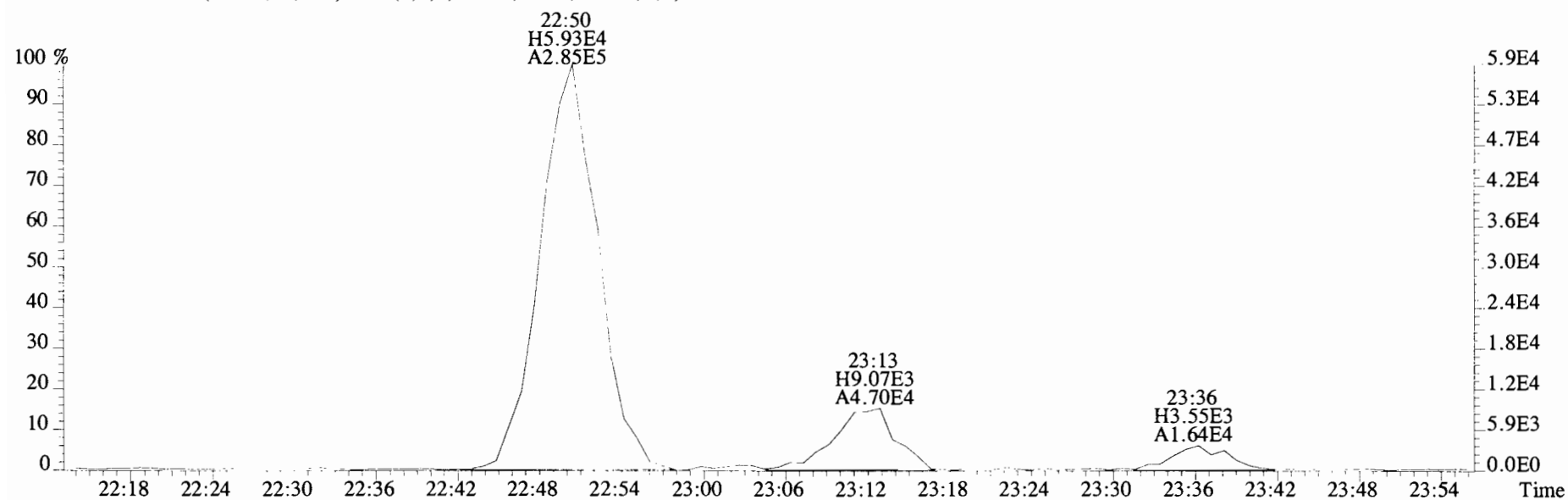
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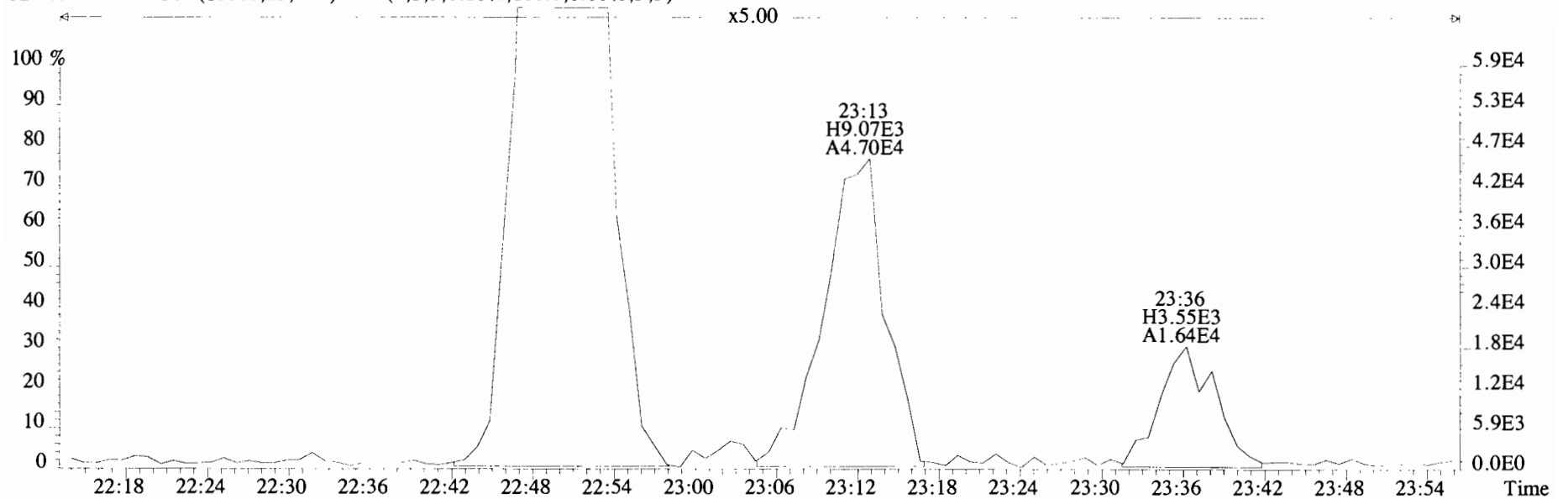
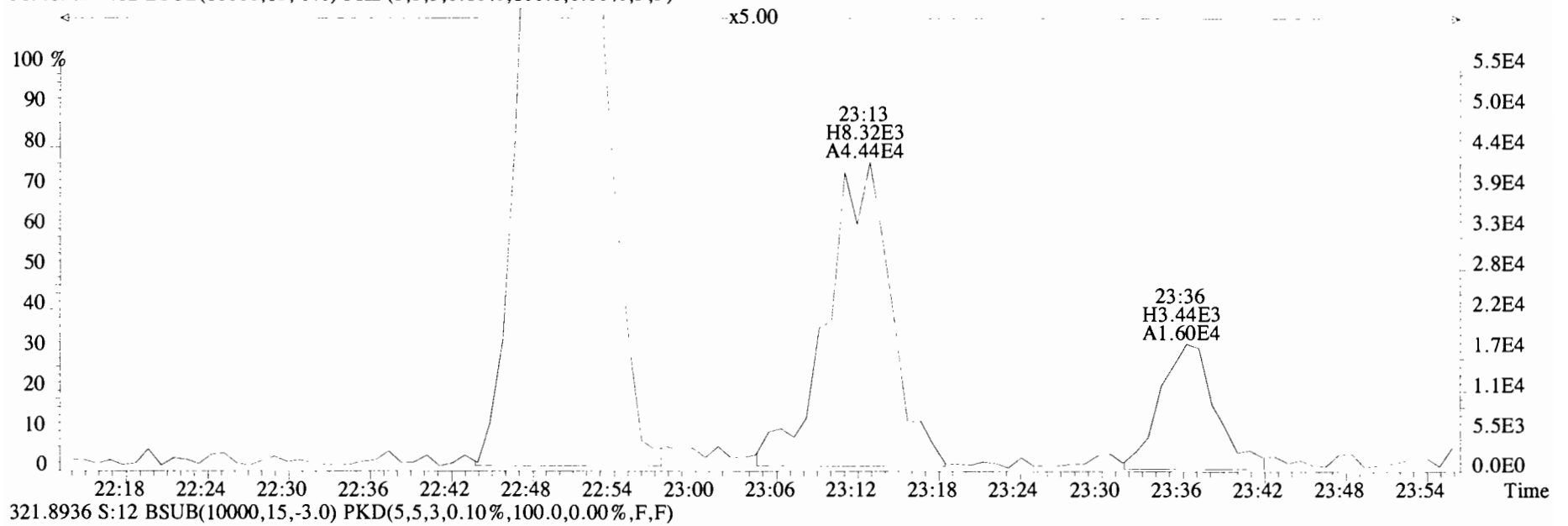
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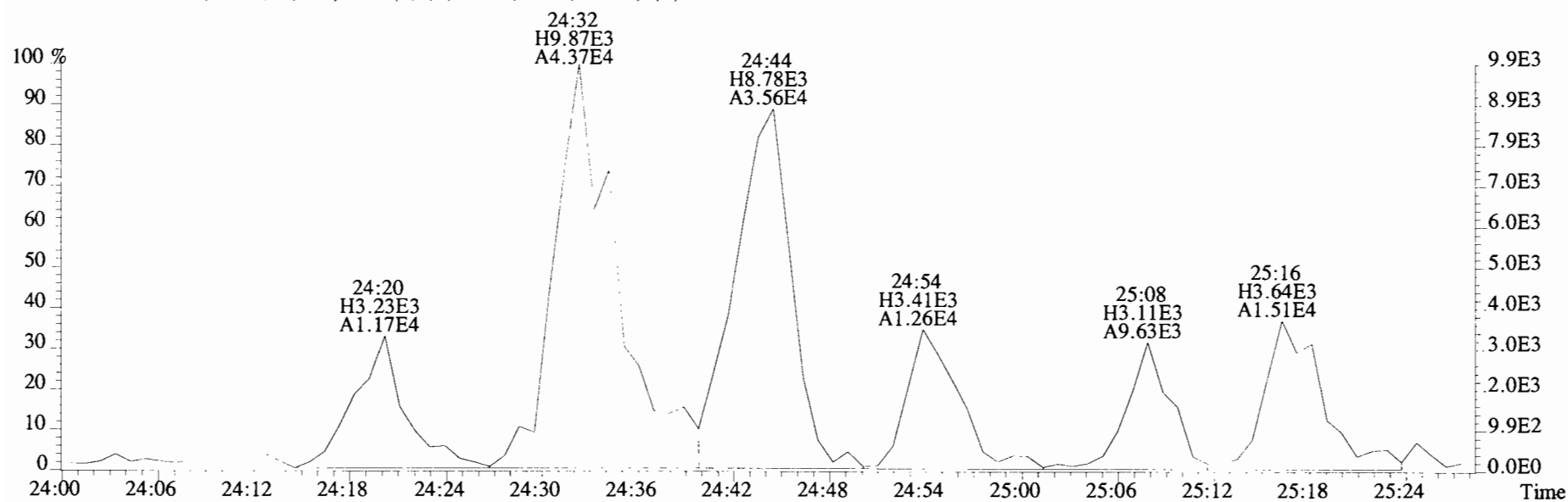
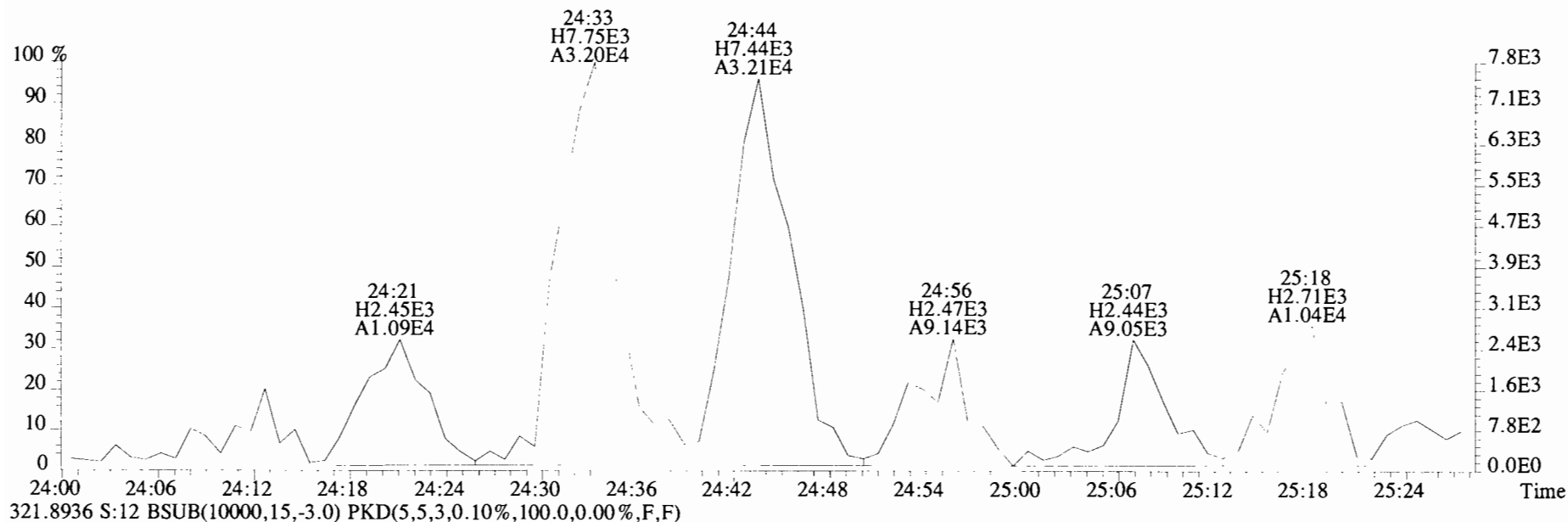
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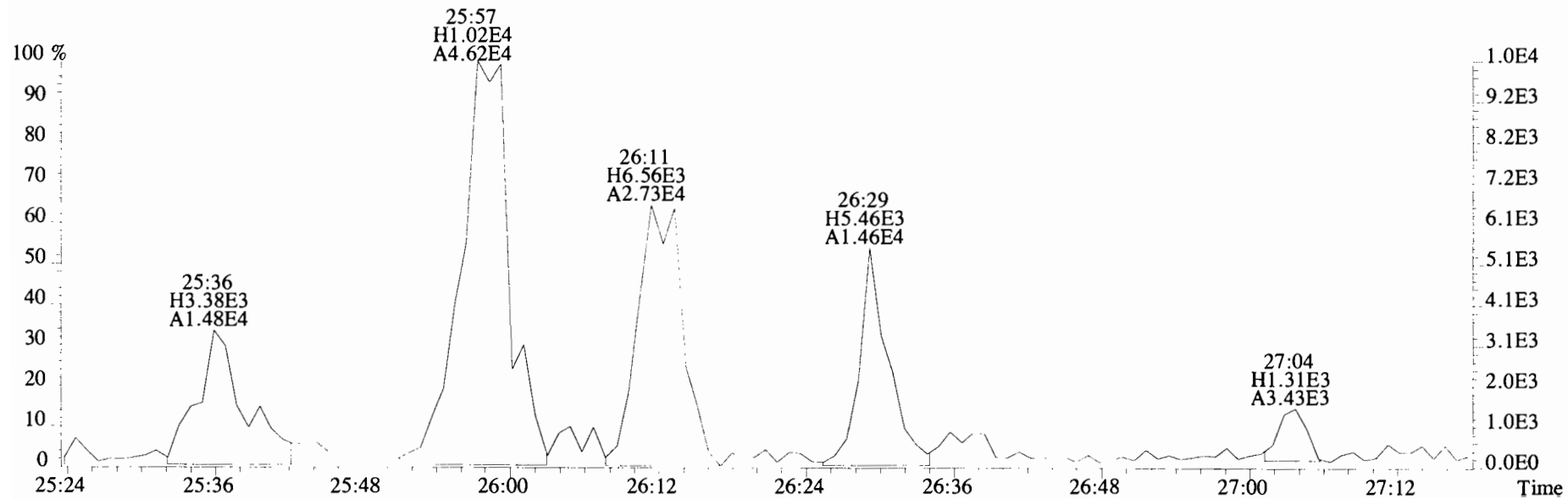
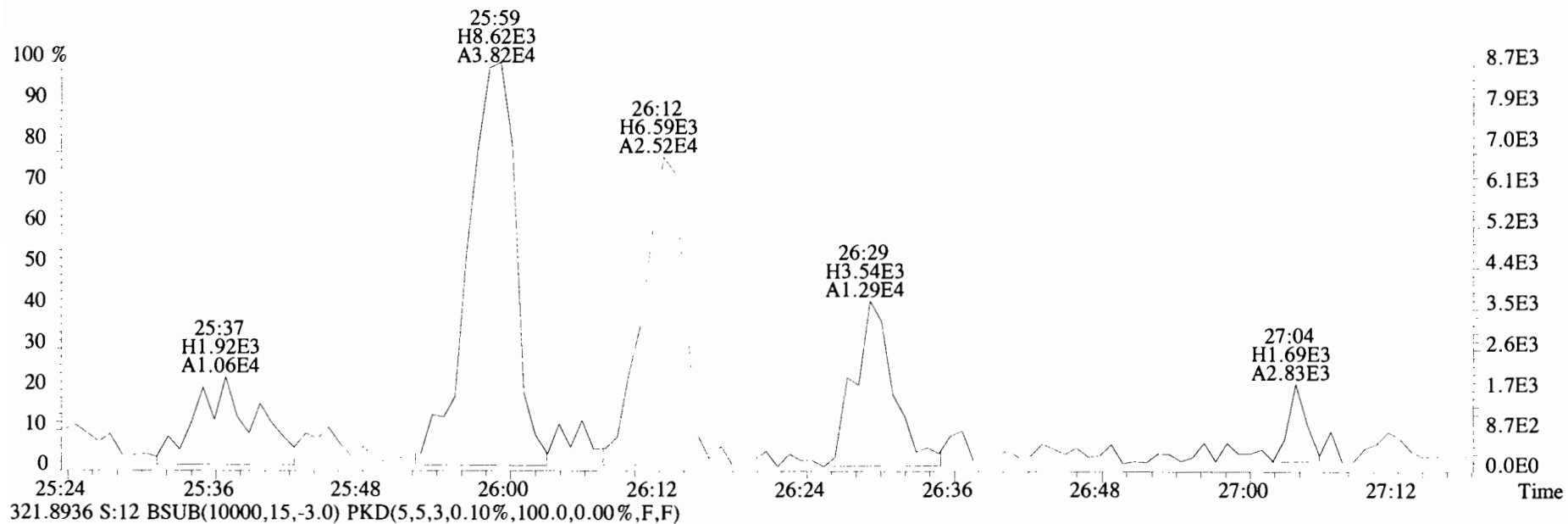
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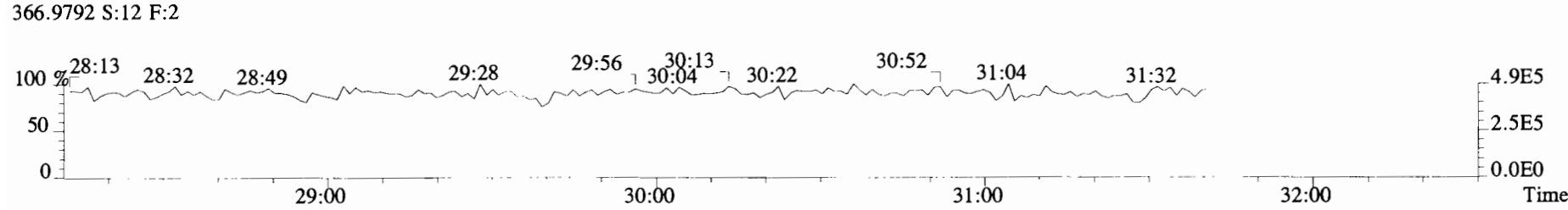
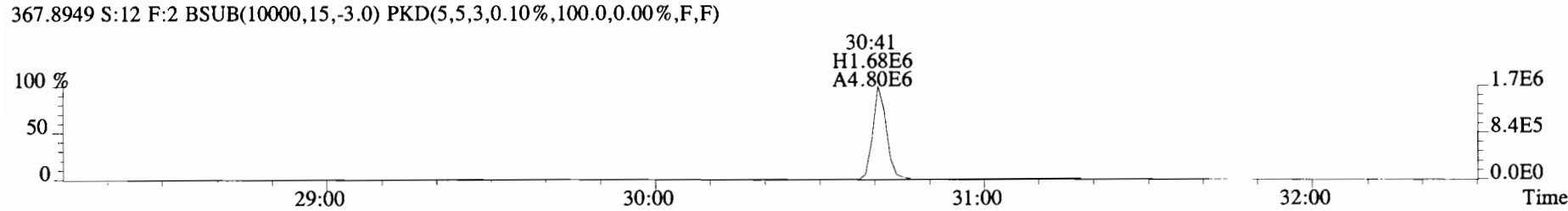
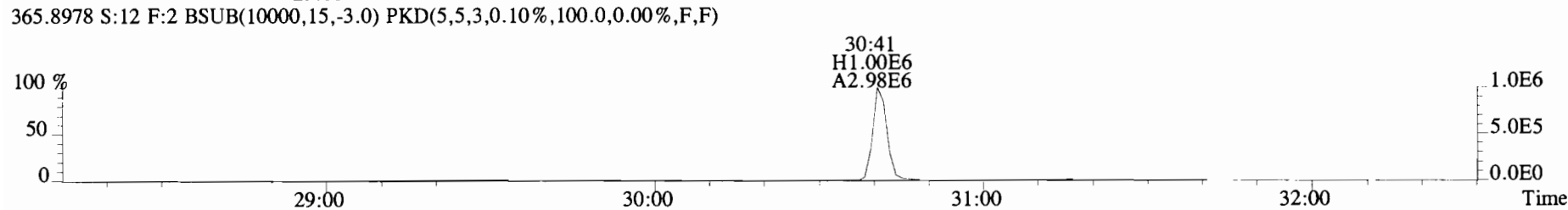
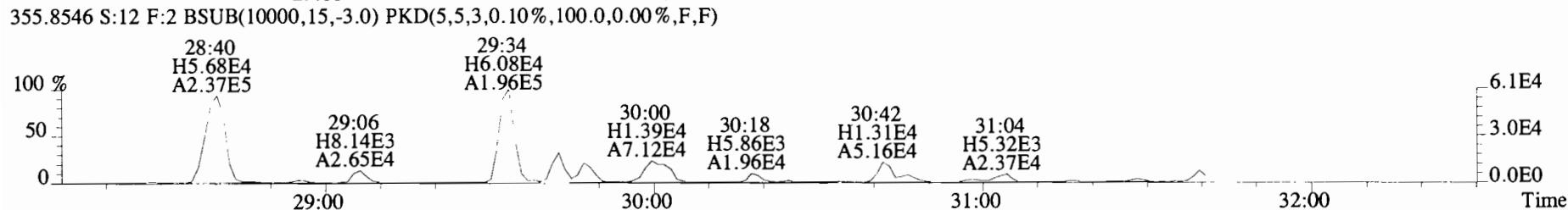
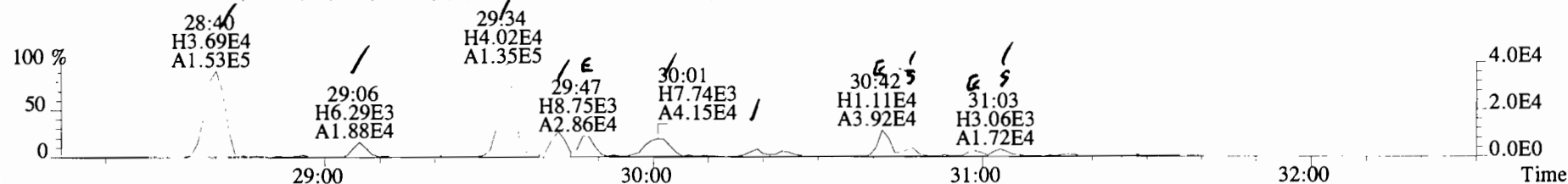
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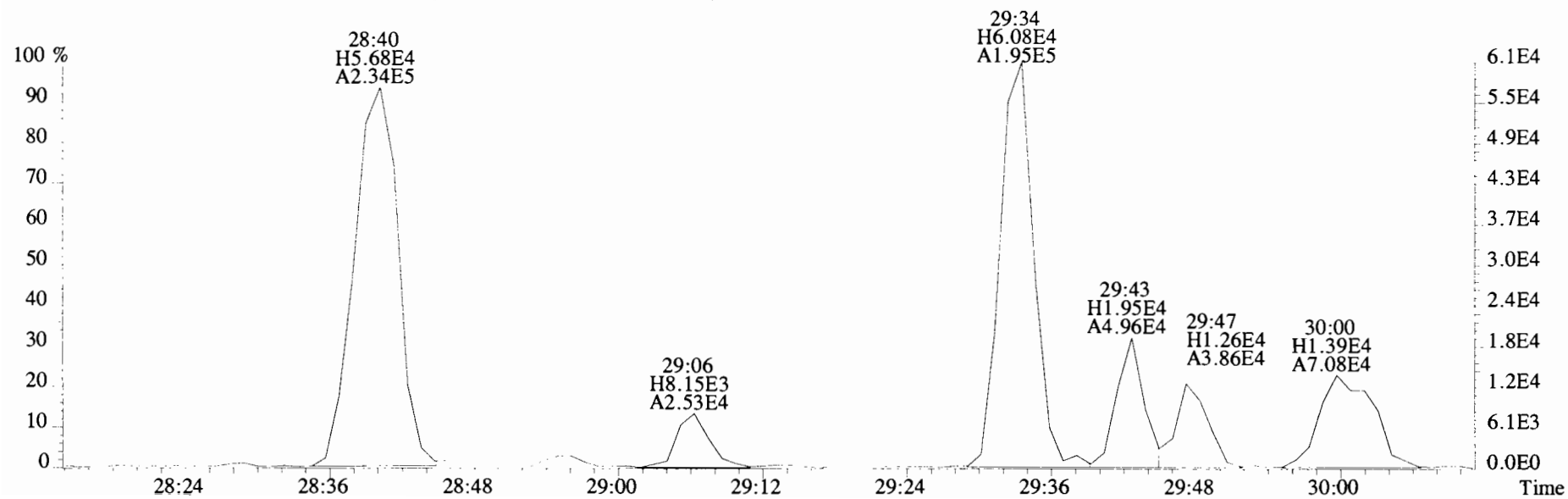
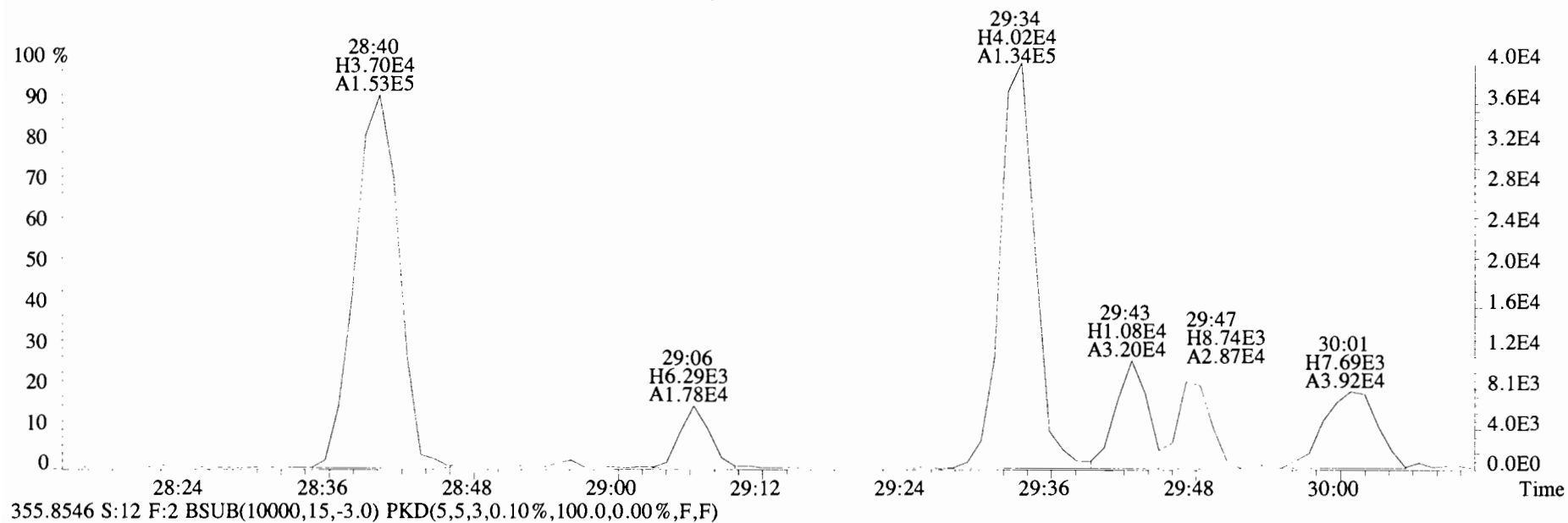
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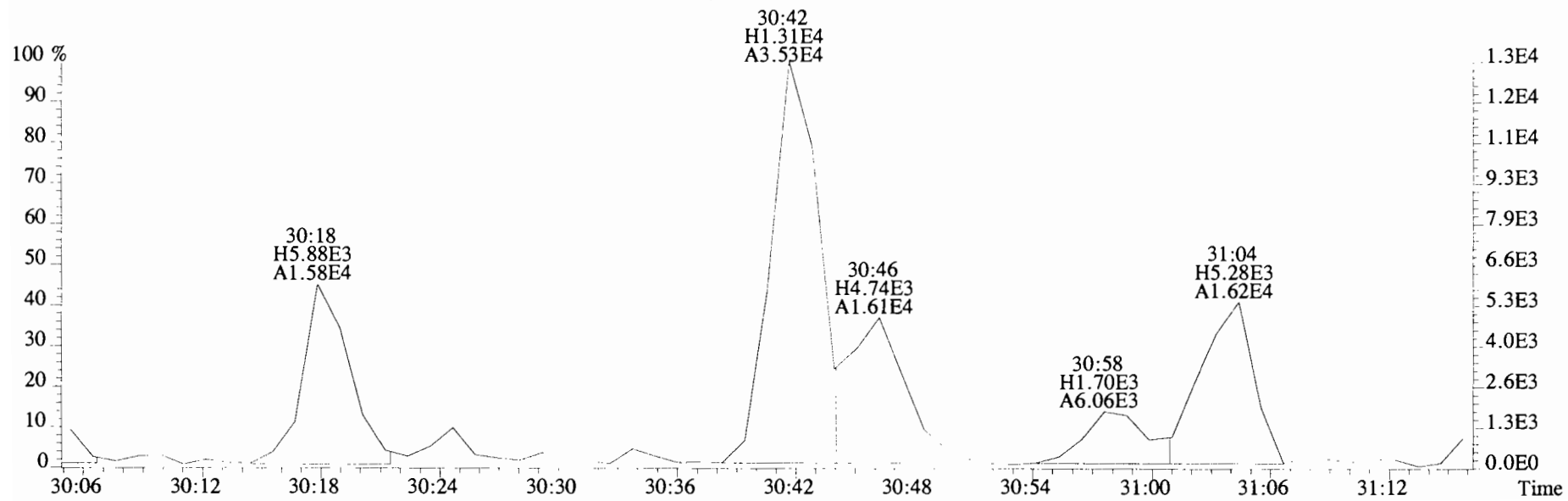
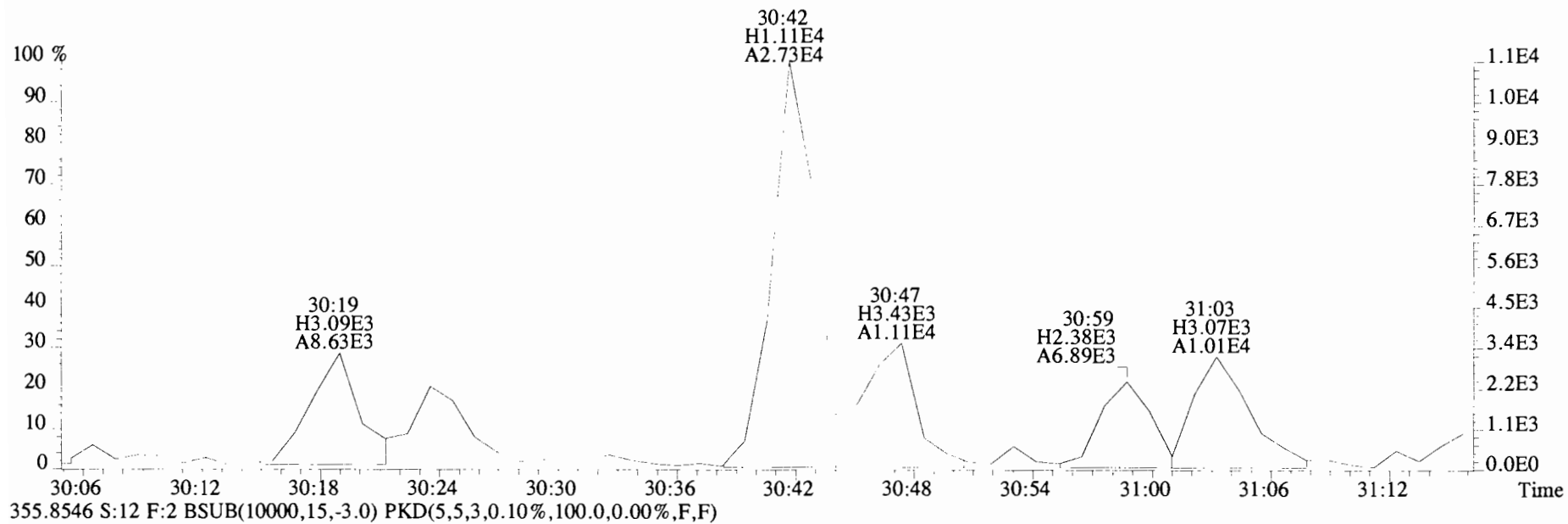
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Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
353.8576 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



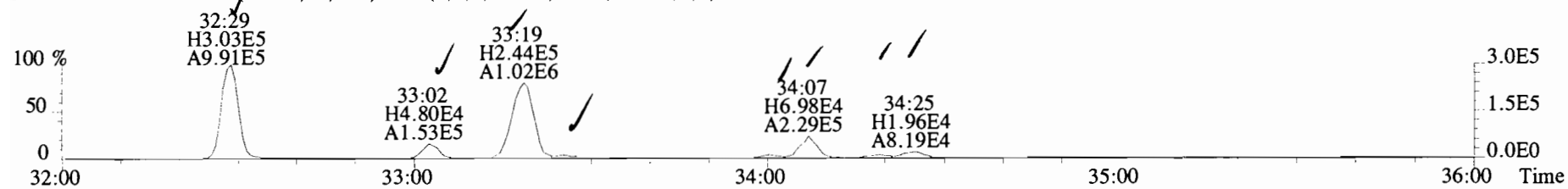
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 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 353.8576 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



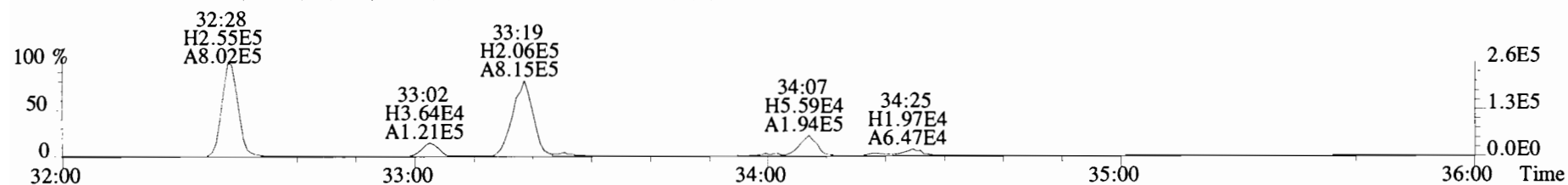
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 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 353.8576 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



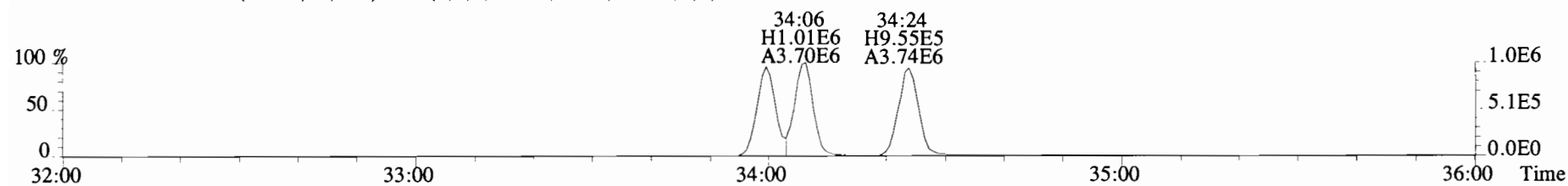
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 389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



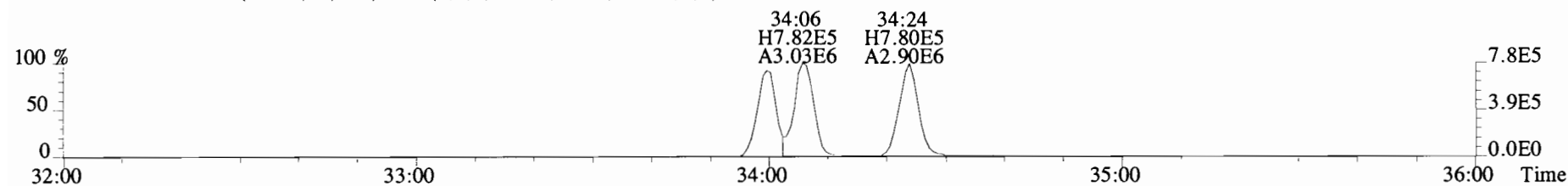
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



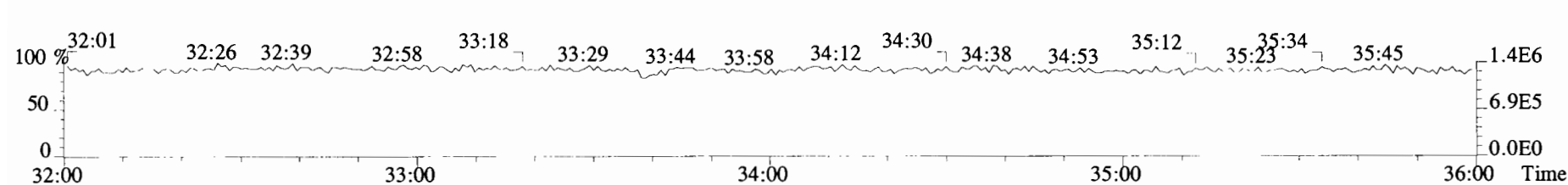
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



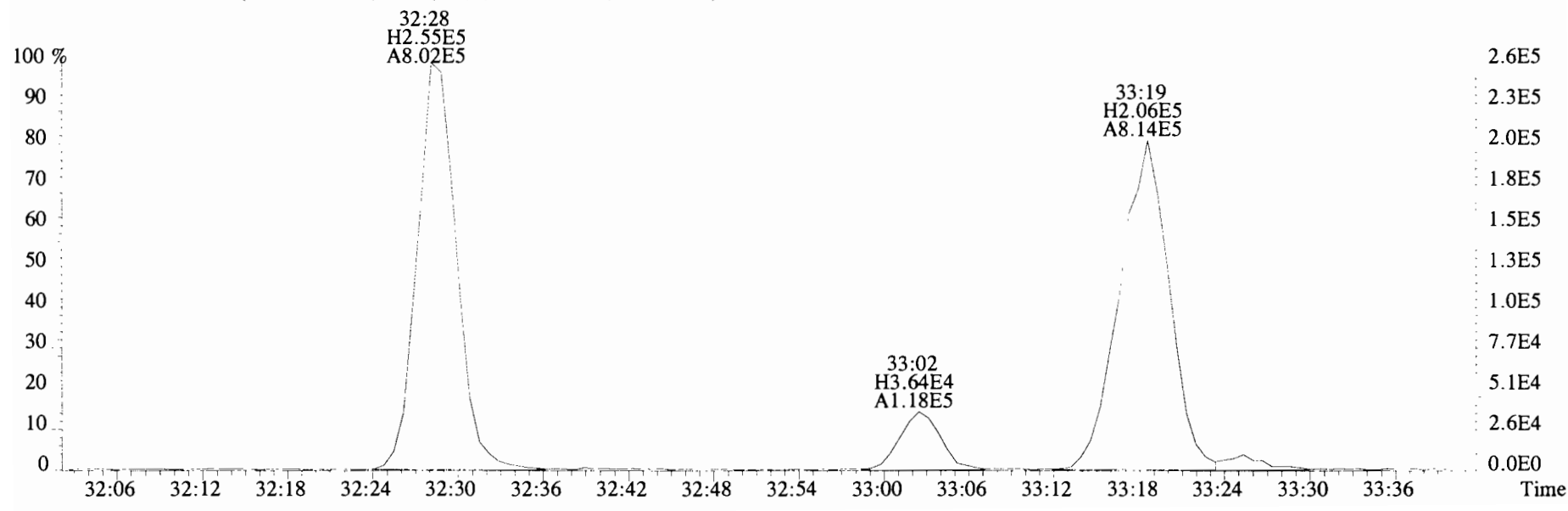
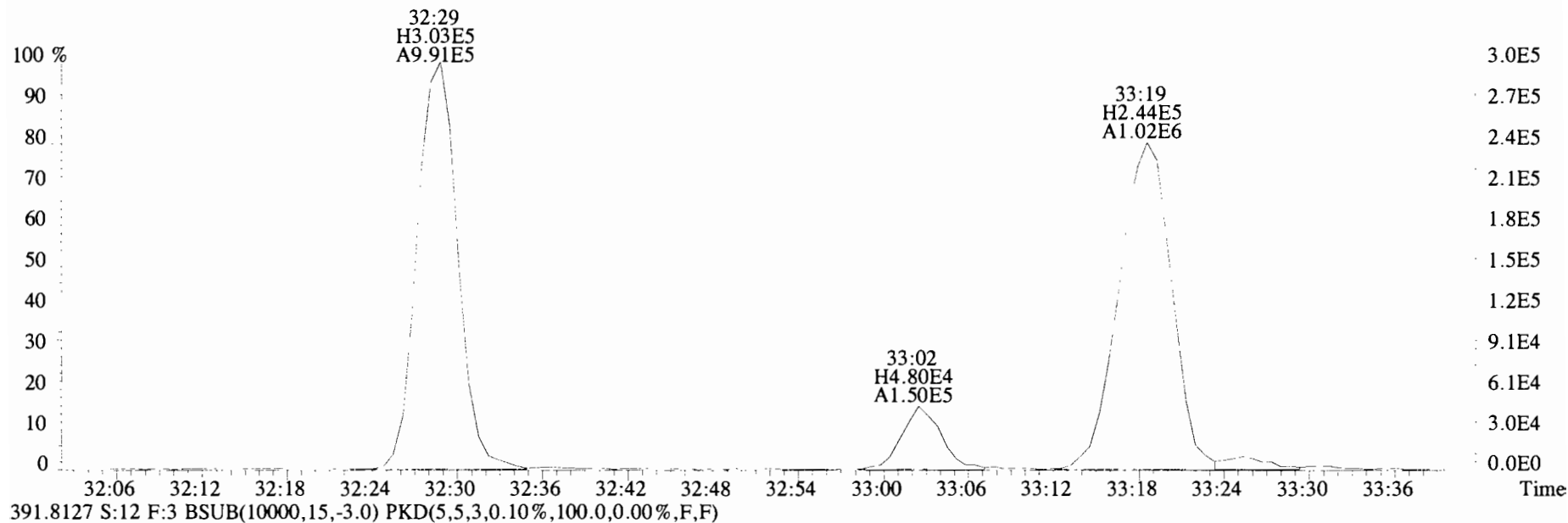
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



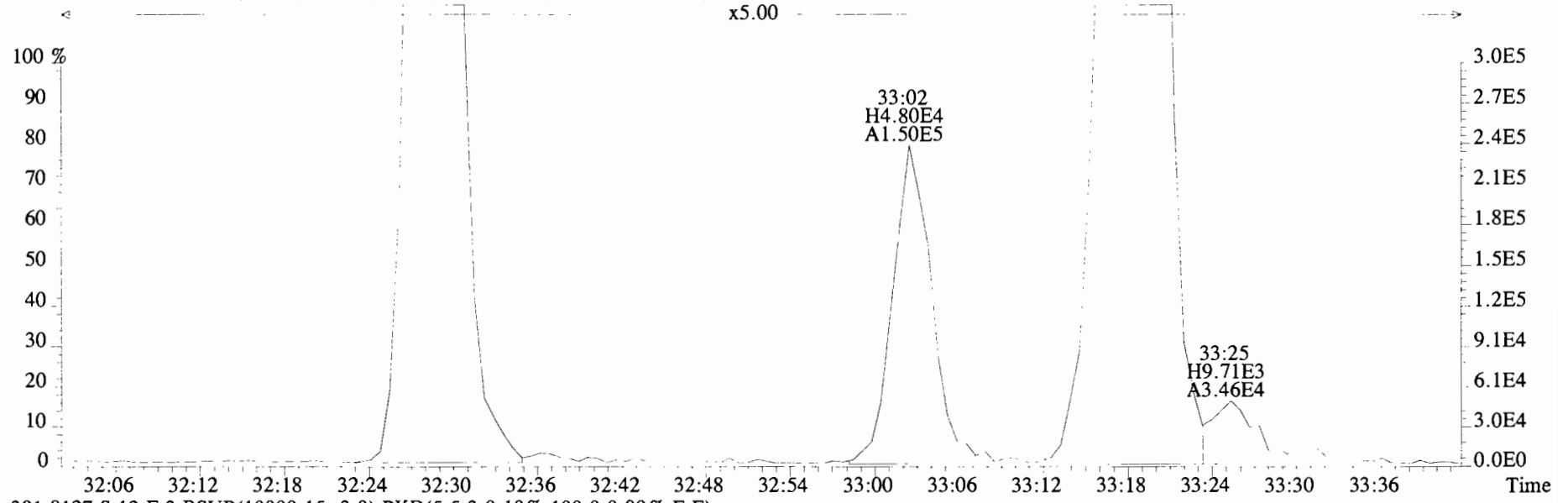
392.9760 S:12 F:3



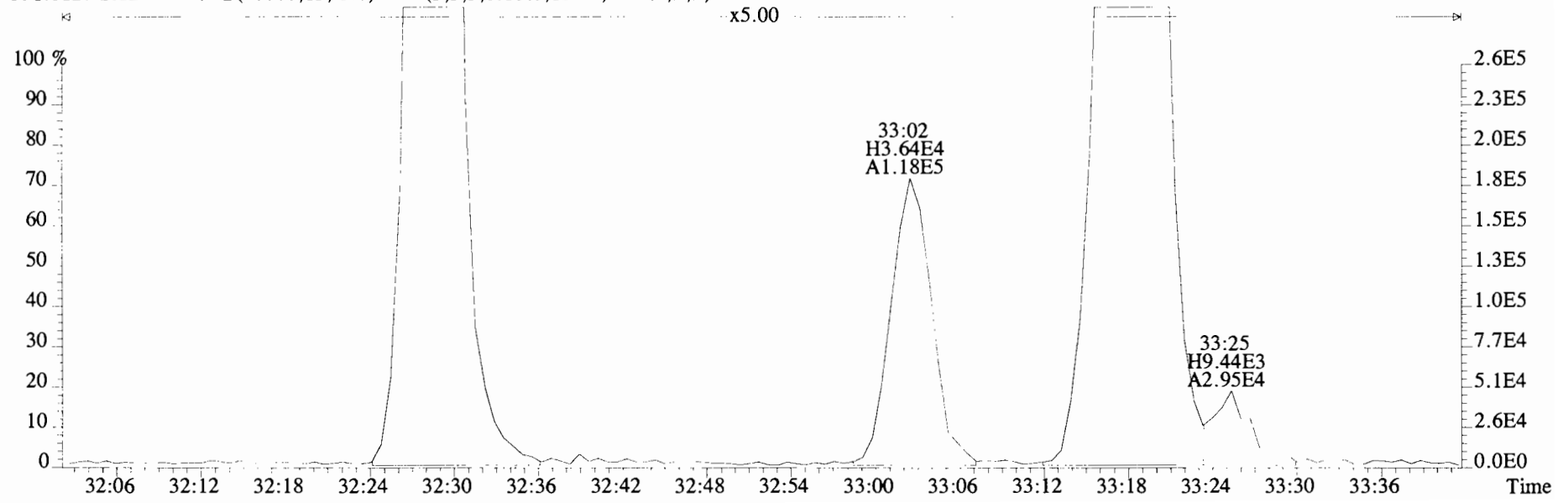
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



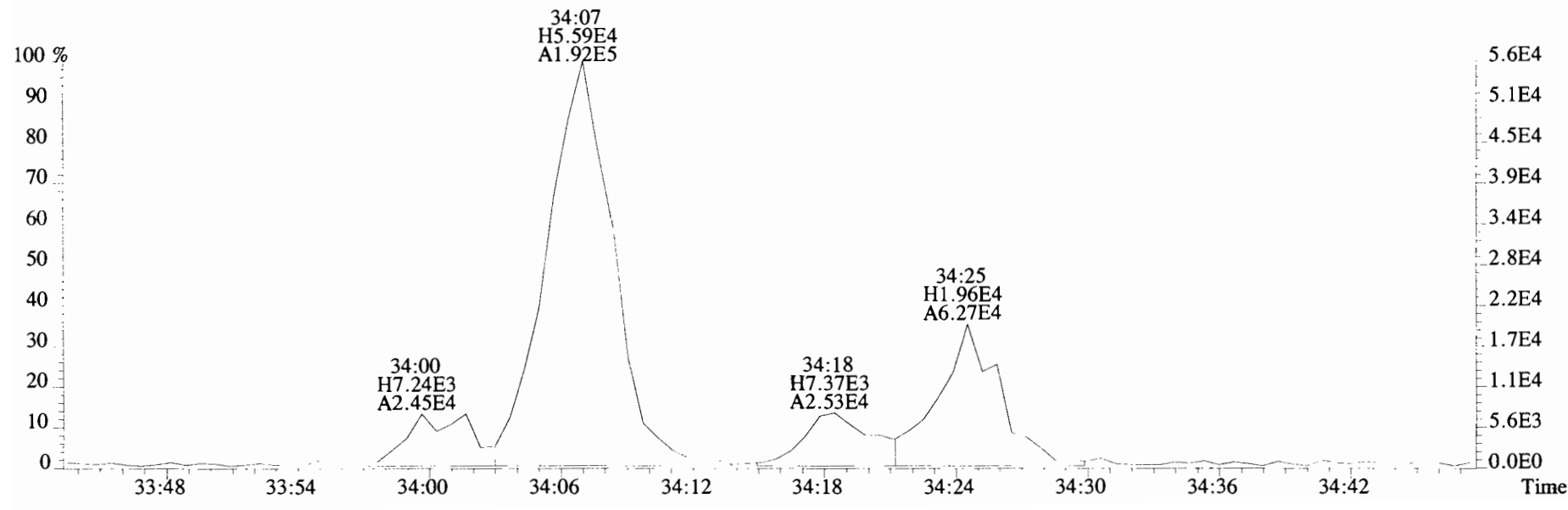
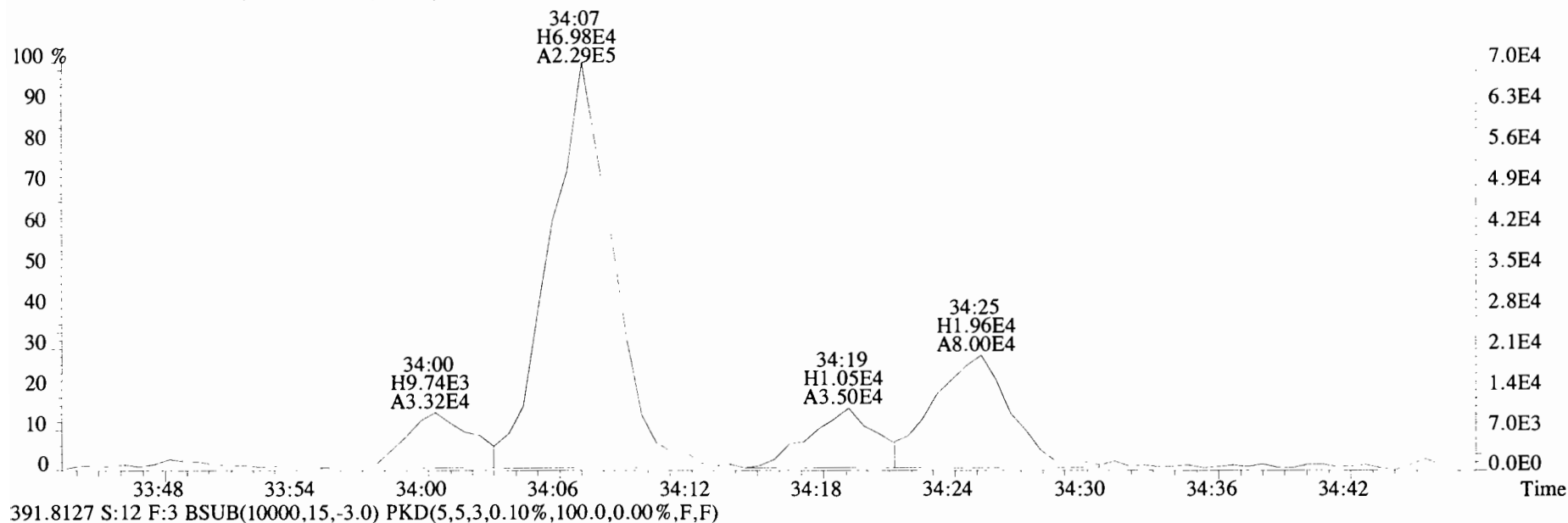
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



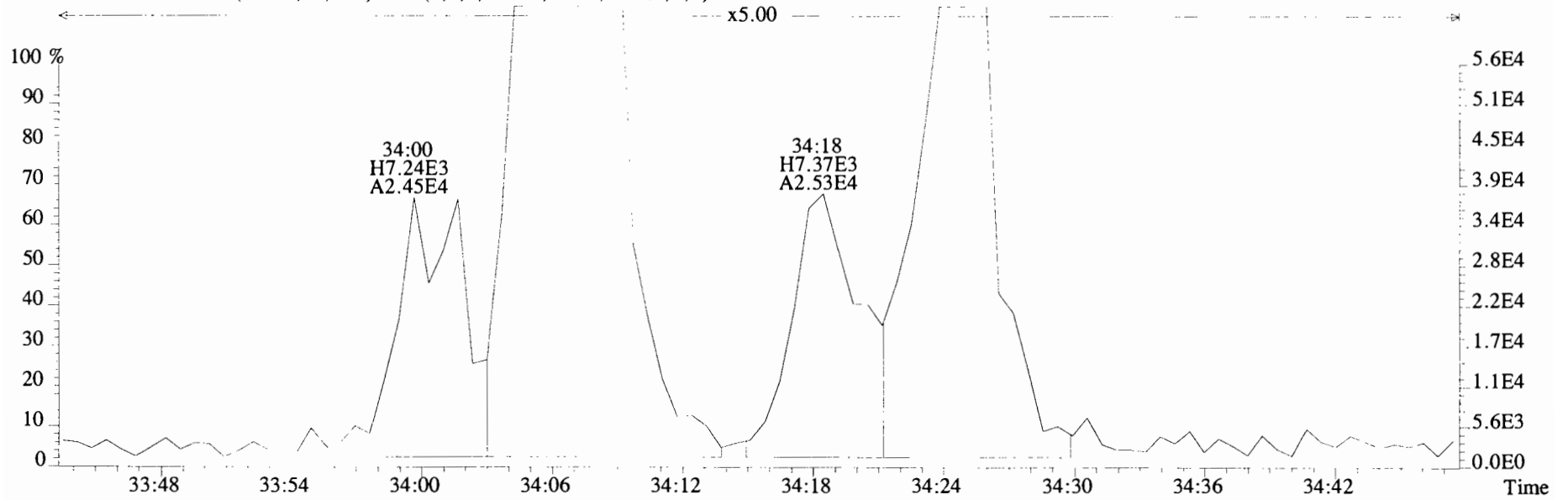
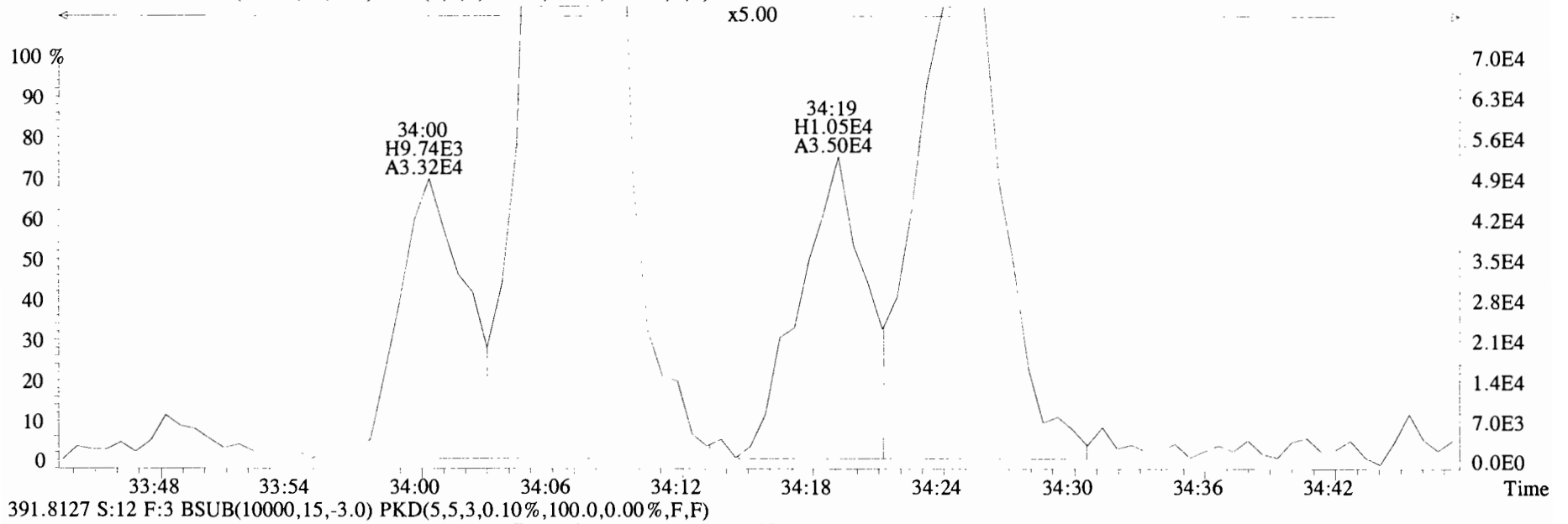
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



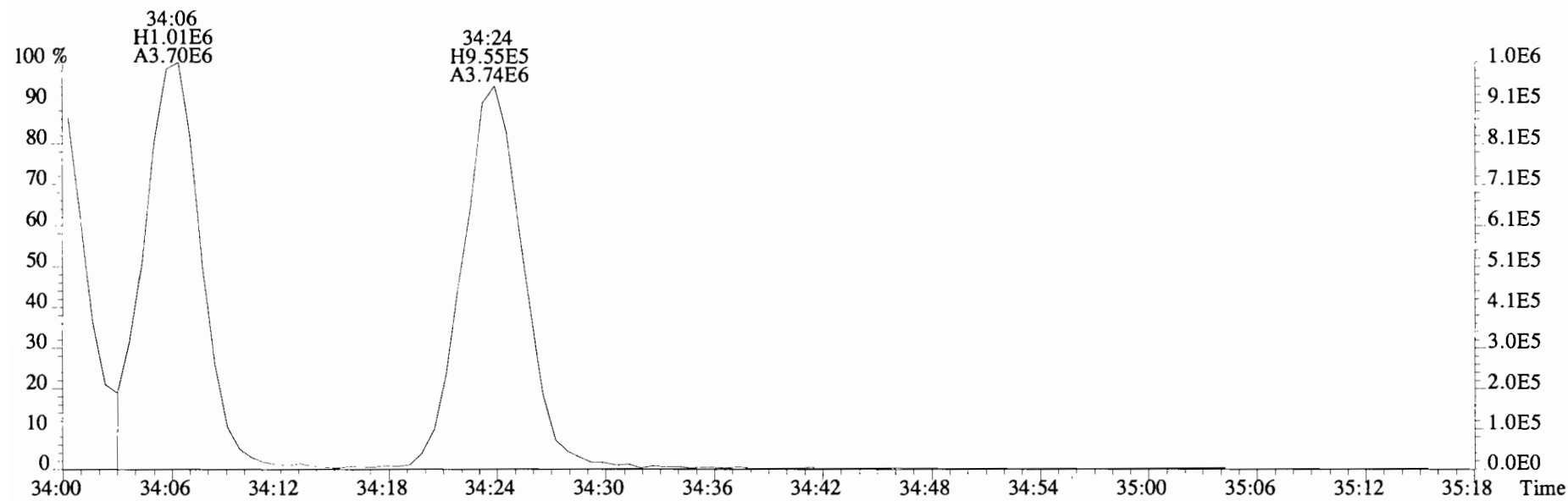
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



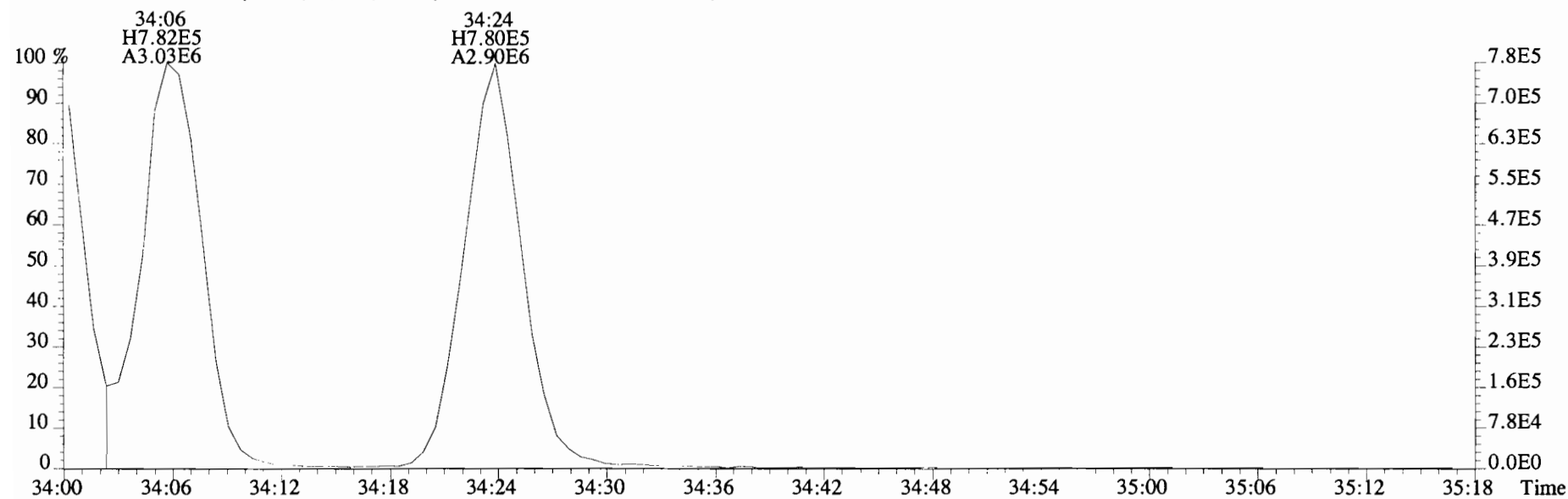
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



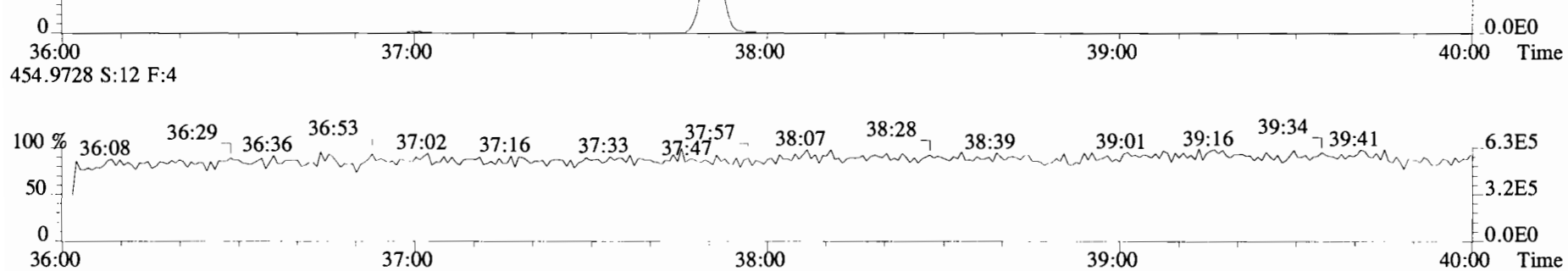
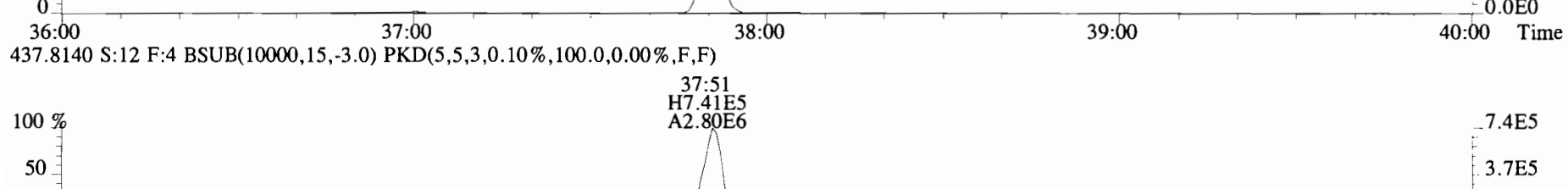
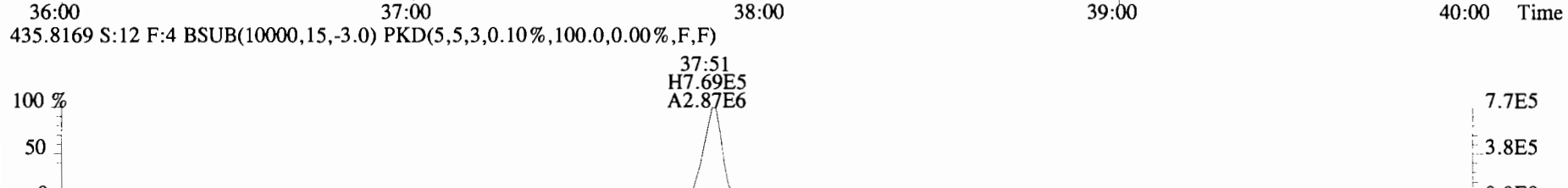
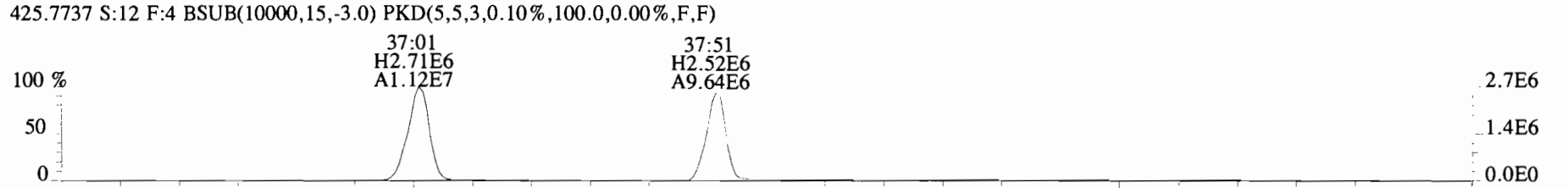
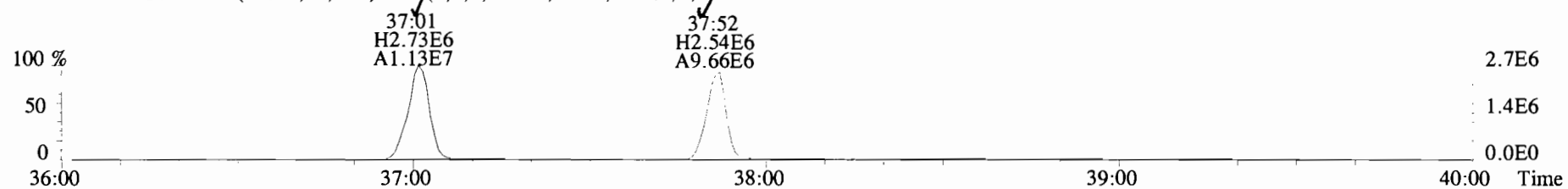
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



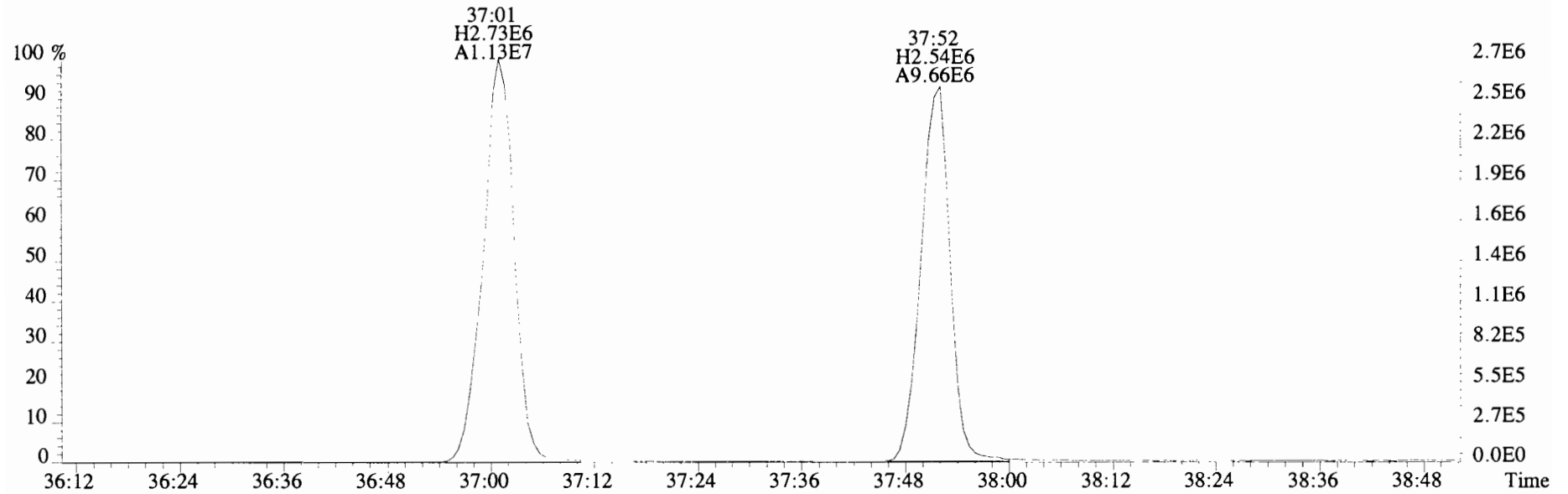
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



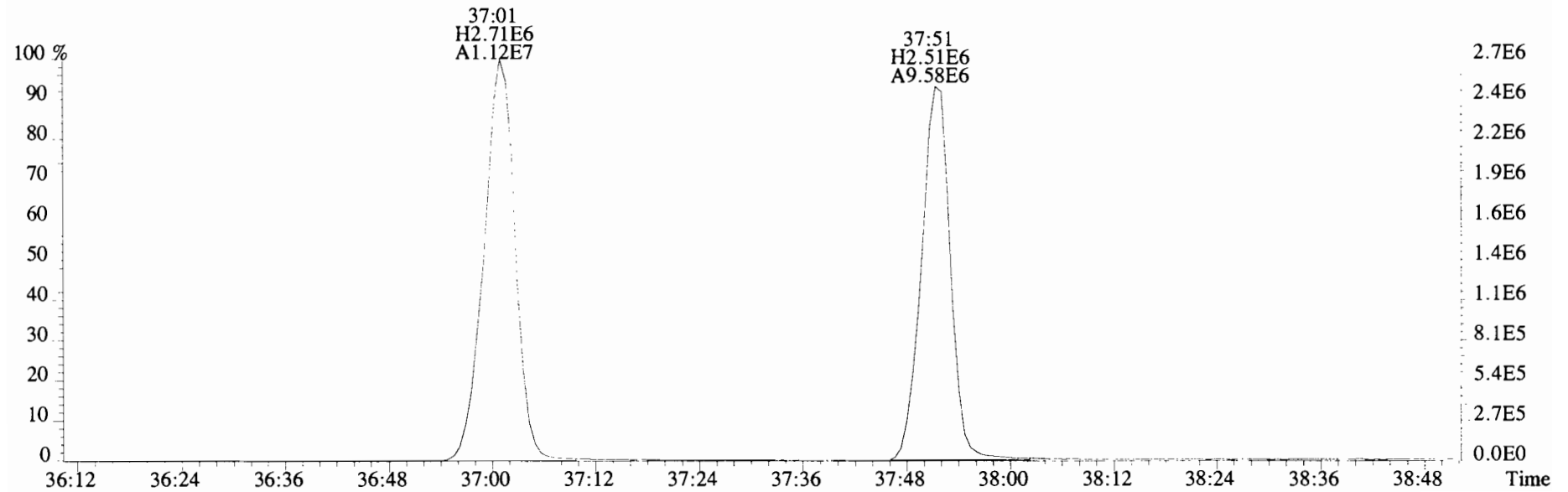
File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
423.7767 S:12 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



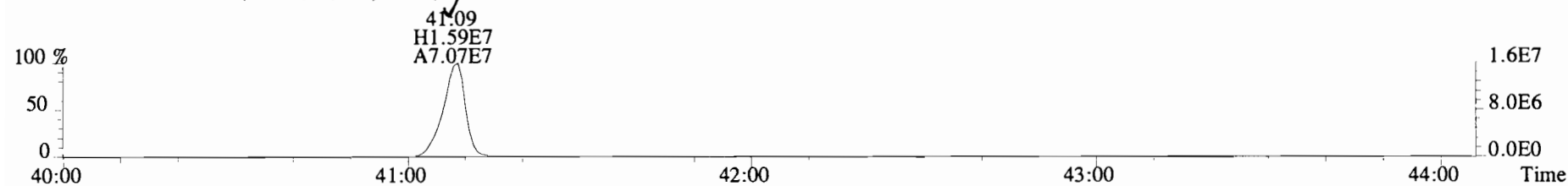
File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
423.7767 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



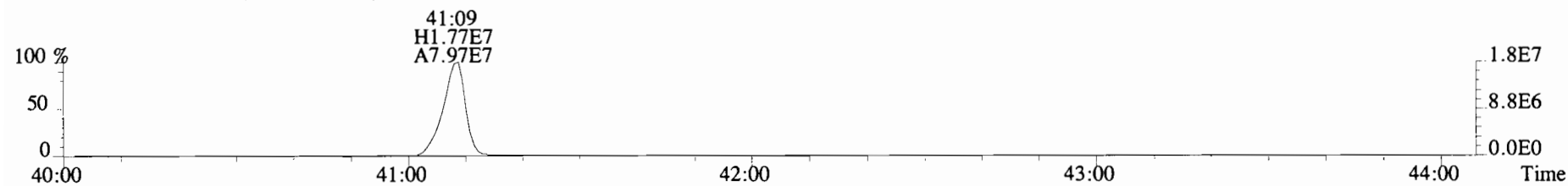
425.7737 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



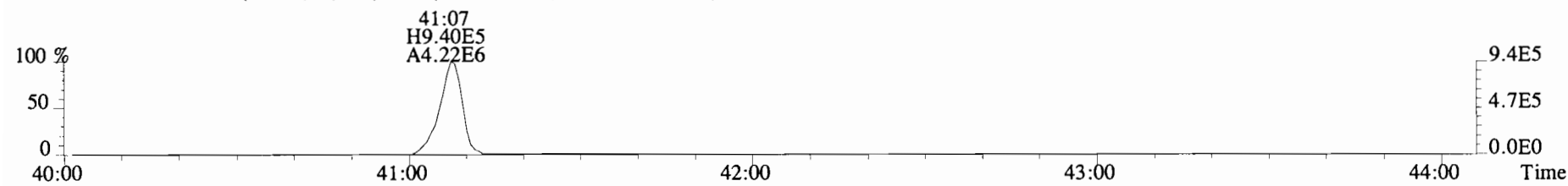
File:191120D1 #1-431 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



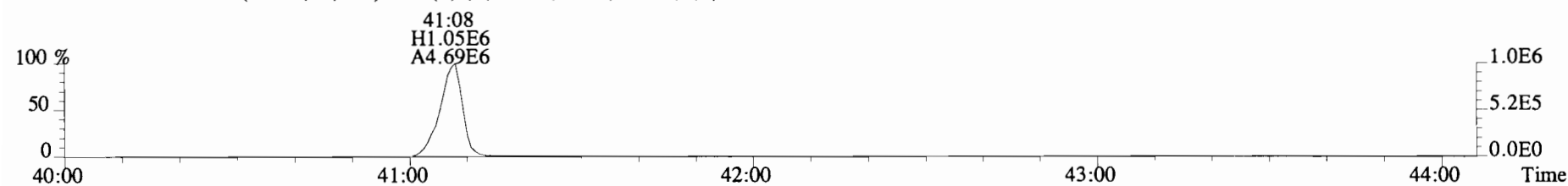
459.7348 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



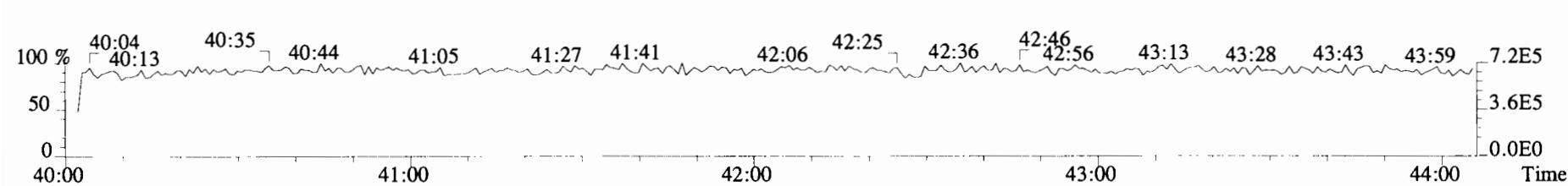
469.7780 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



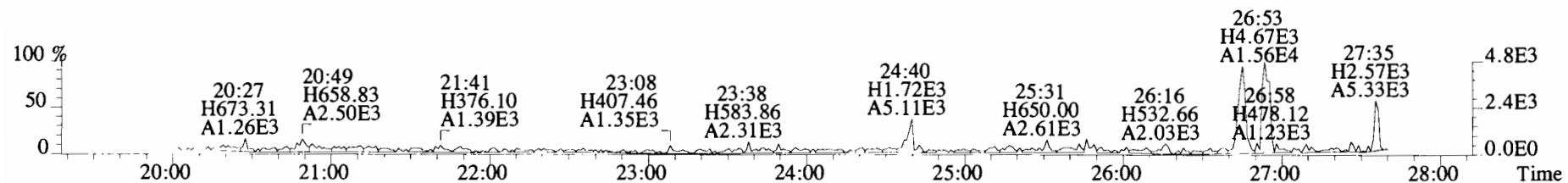
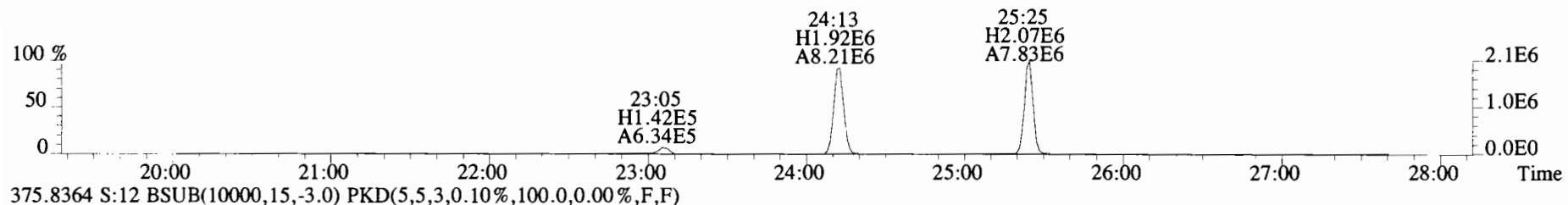
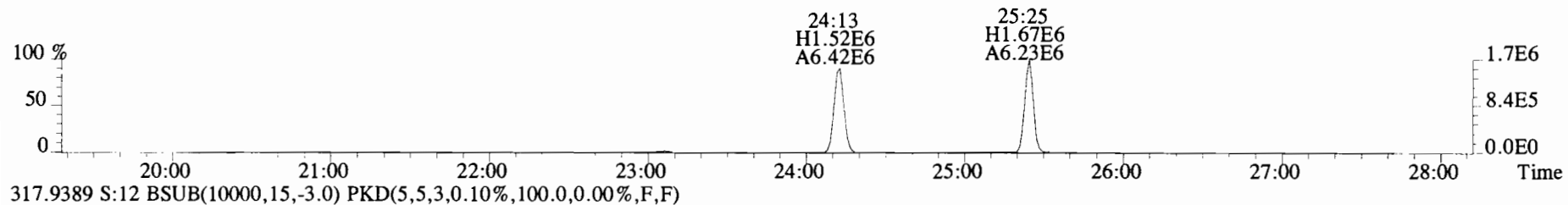
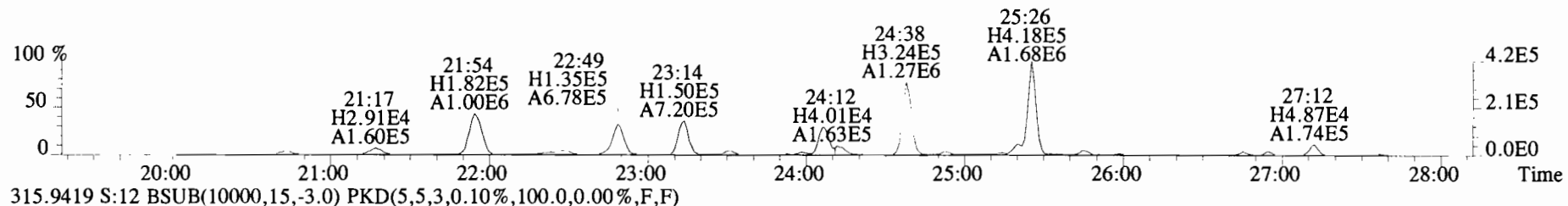
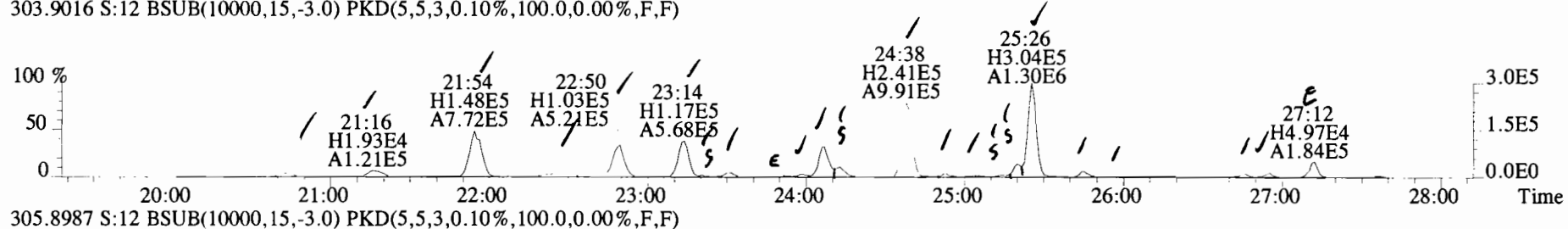
471.7750 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



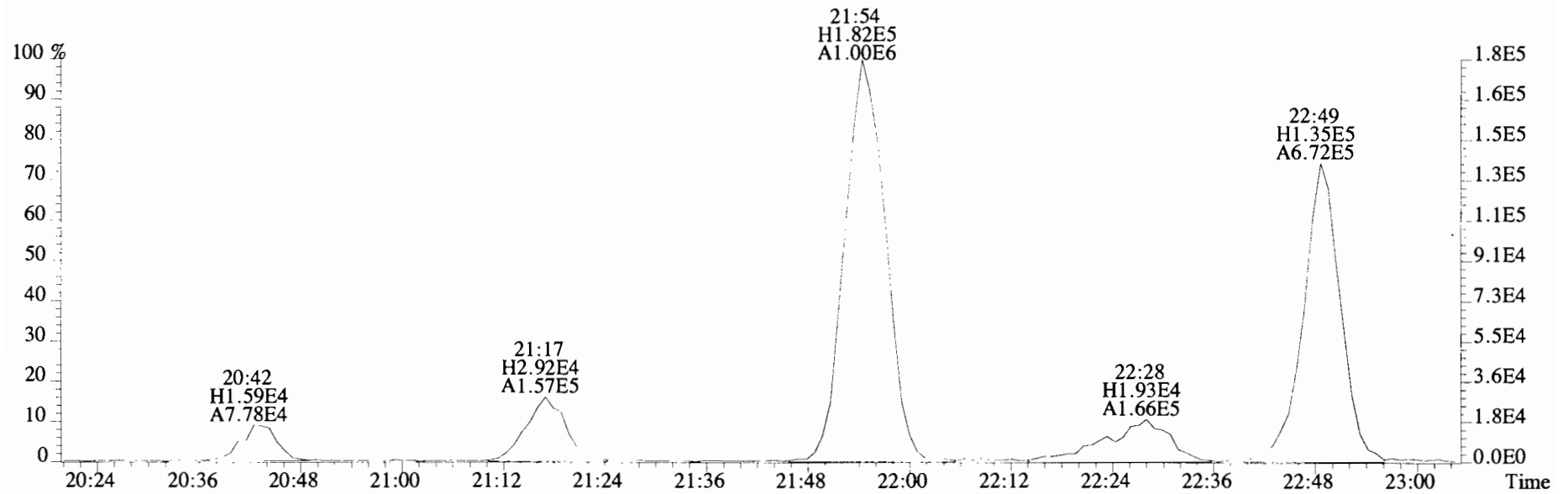
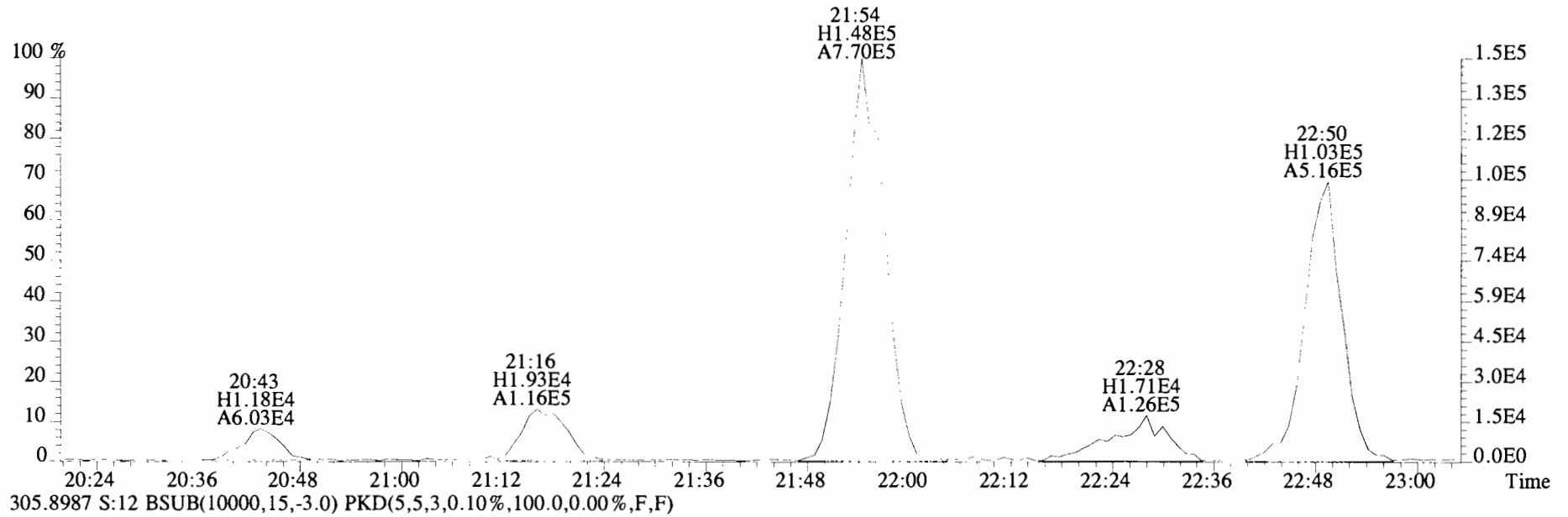
454.9728 S:12 F:5



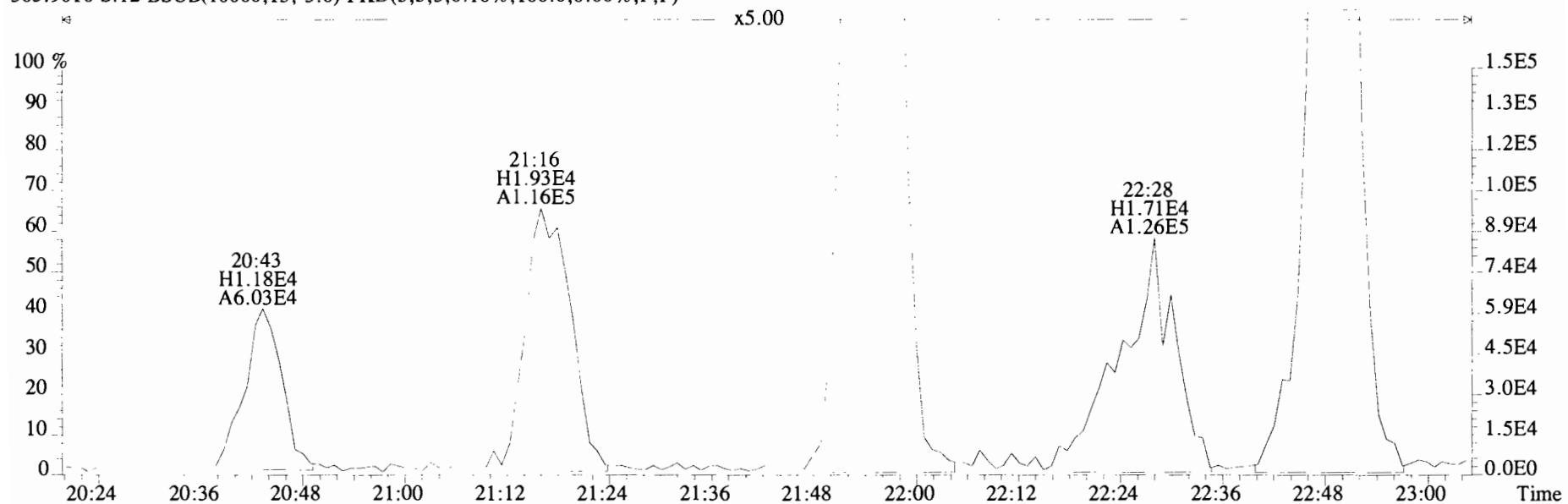
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



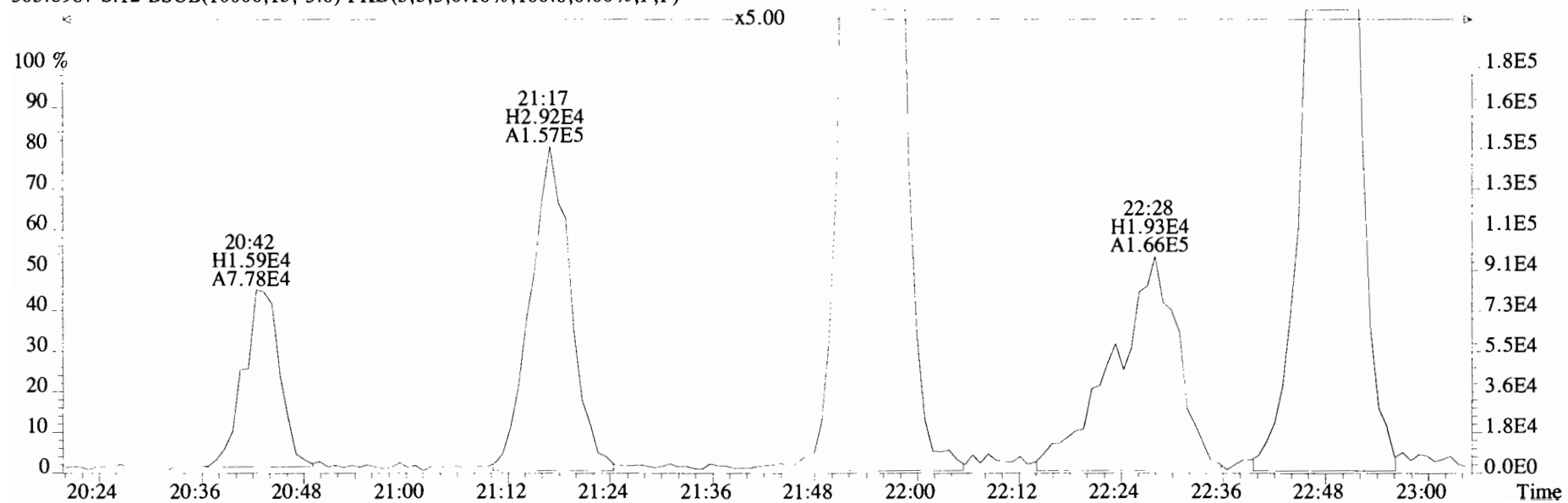
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



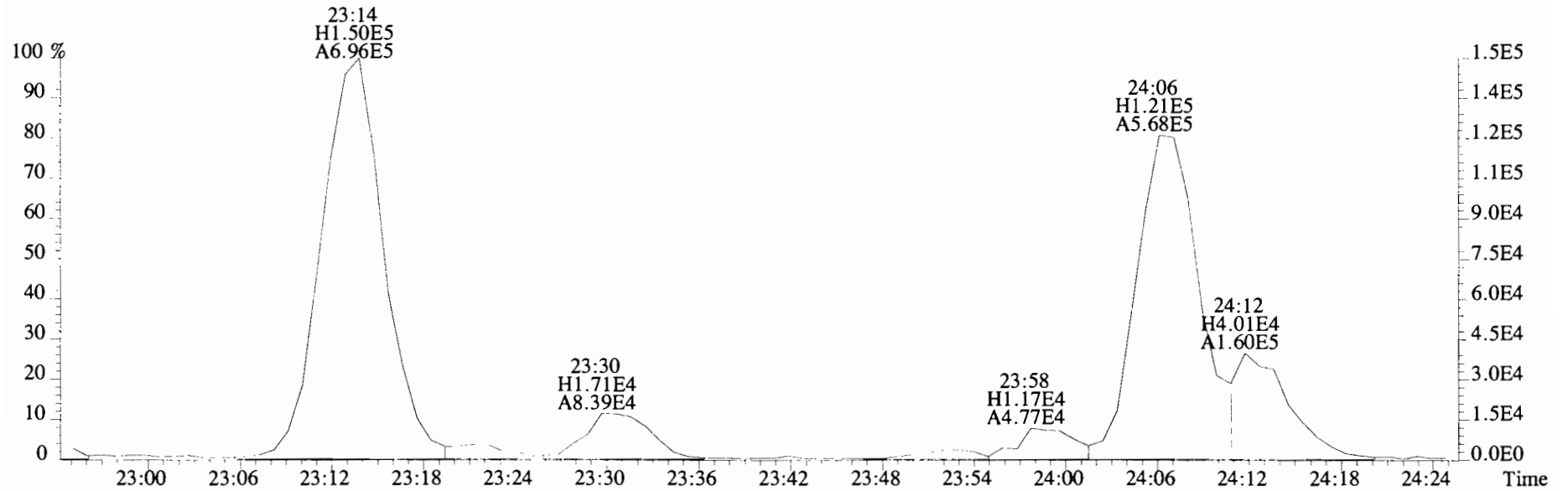
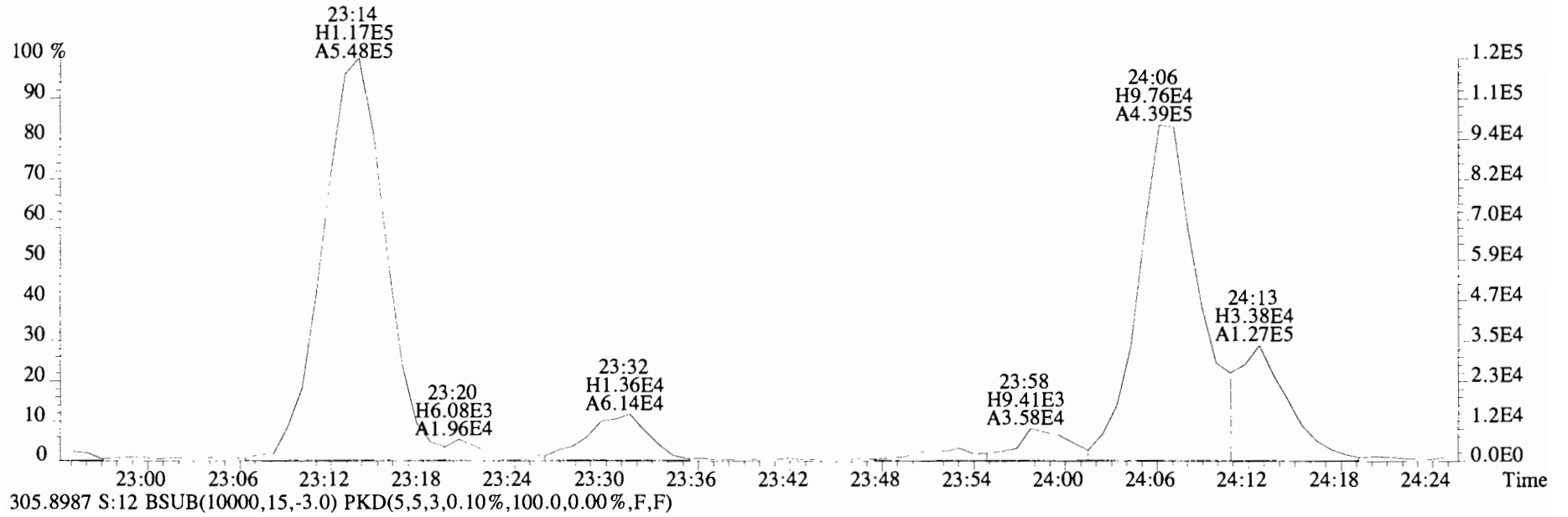
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



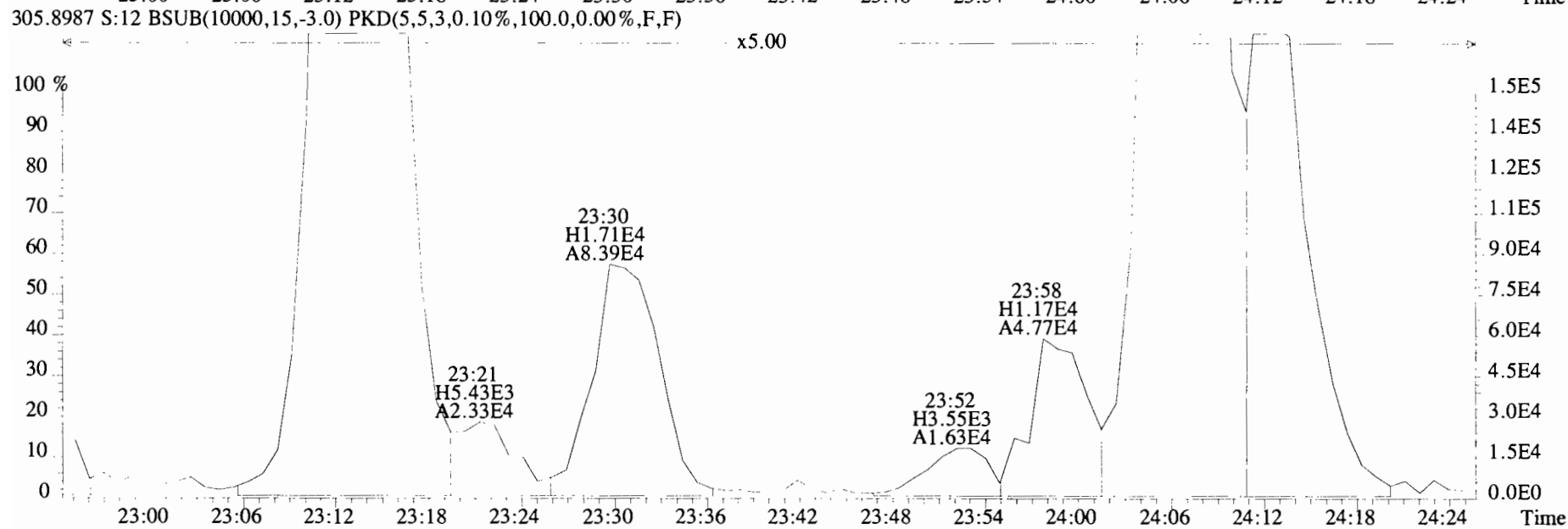
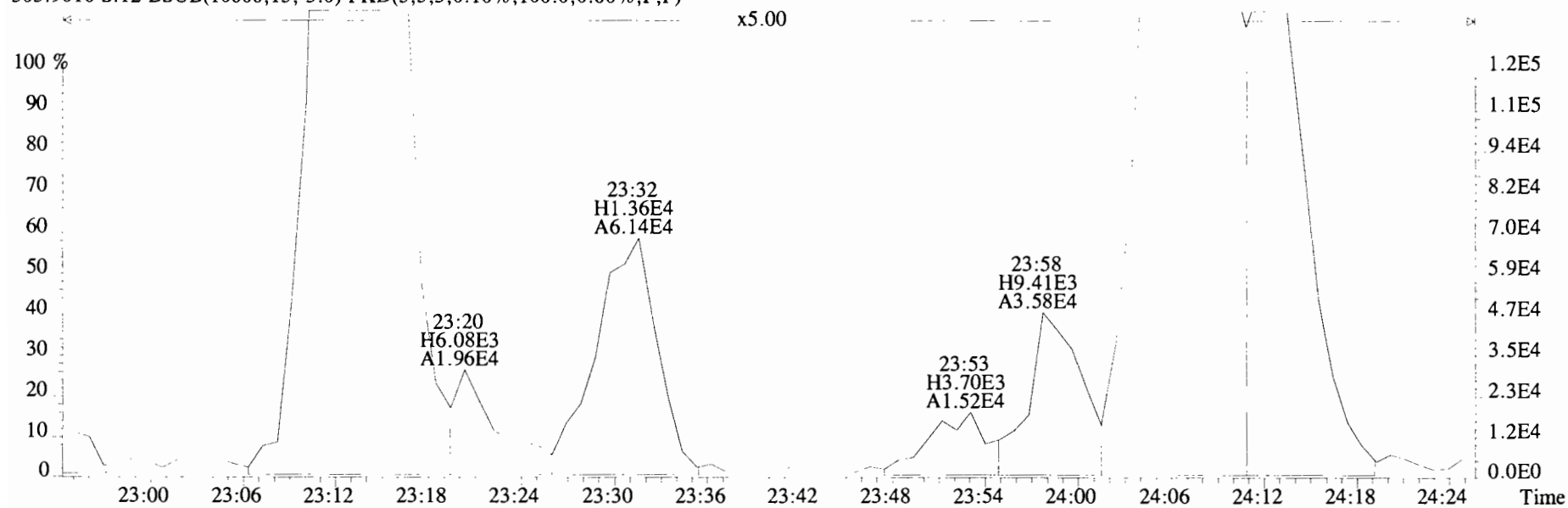
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



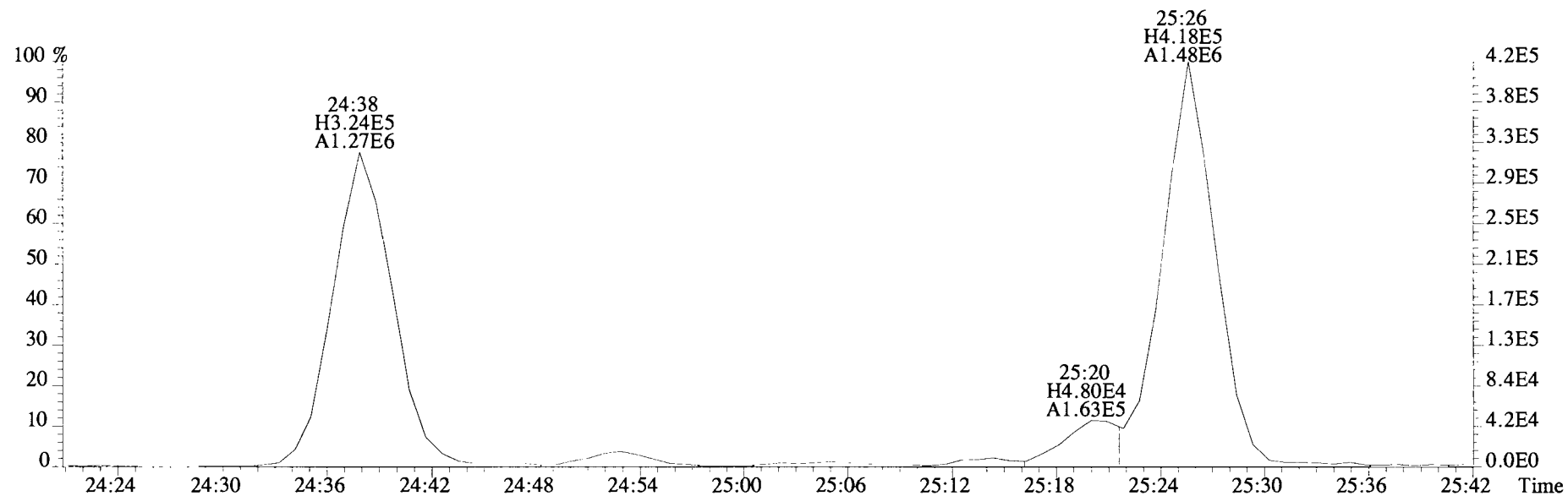
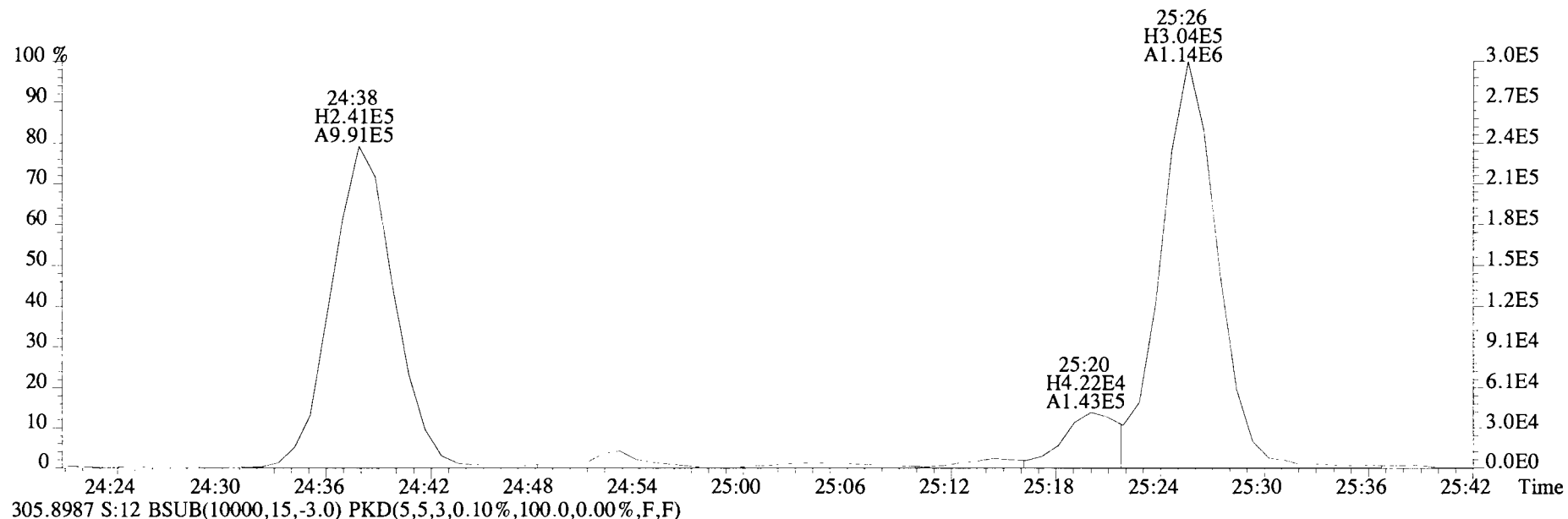
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



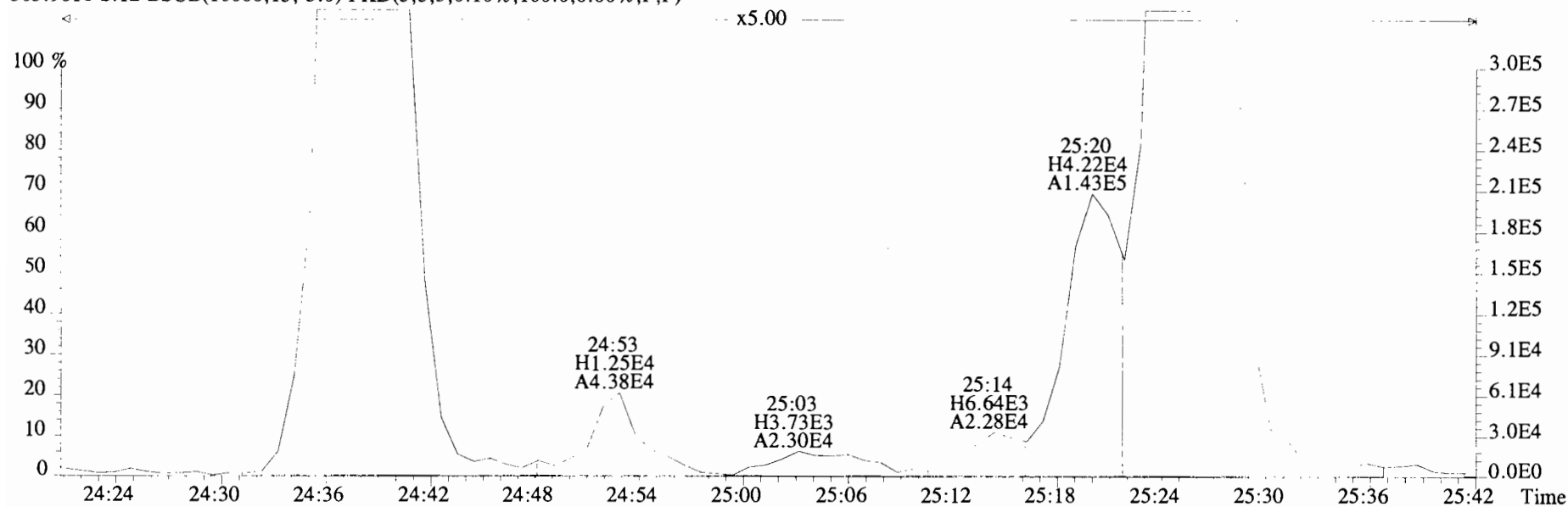
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 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



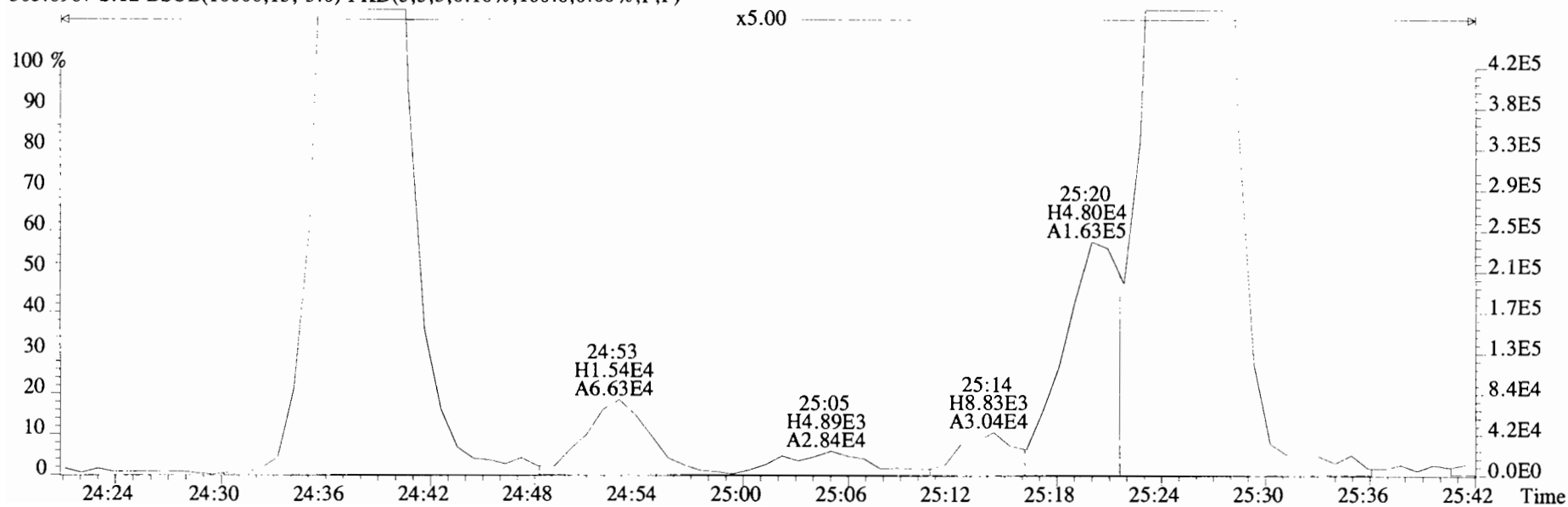
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



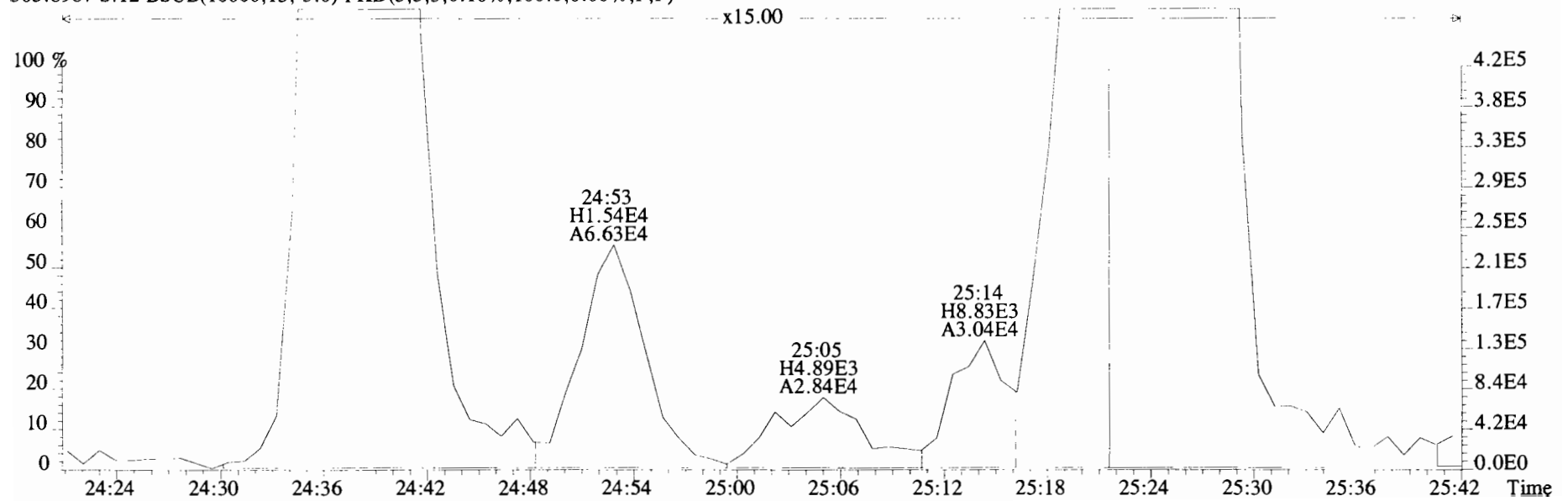
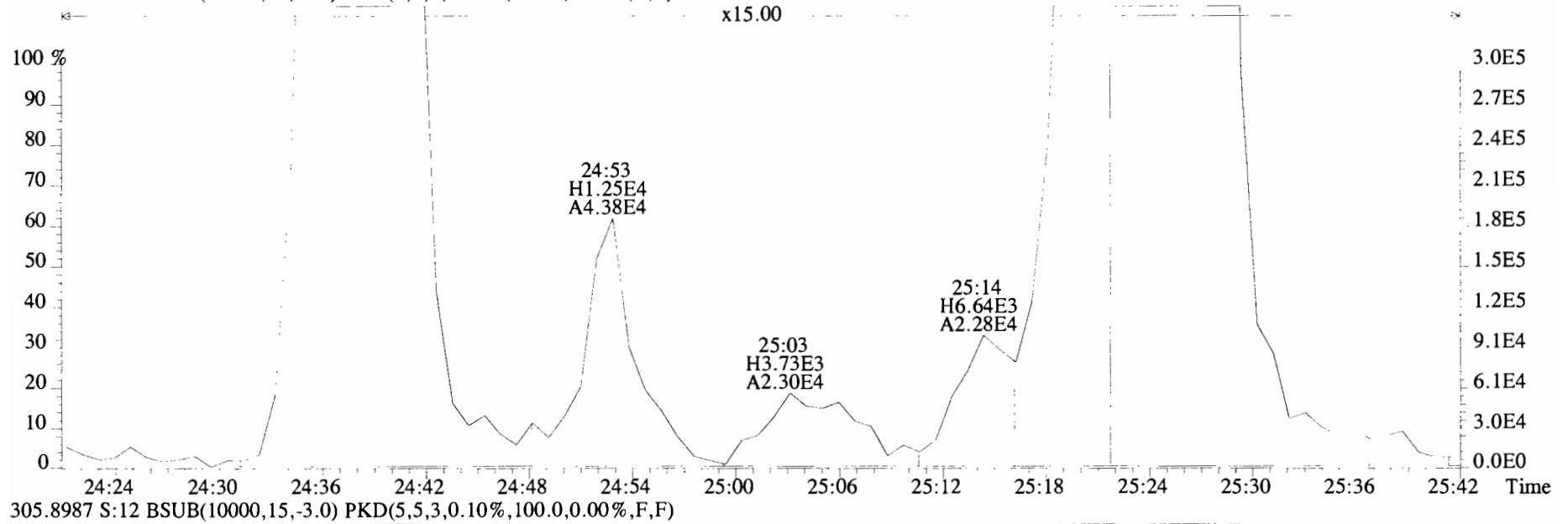
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



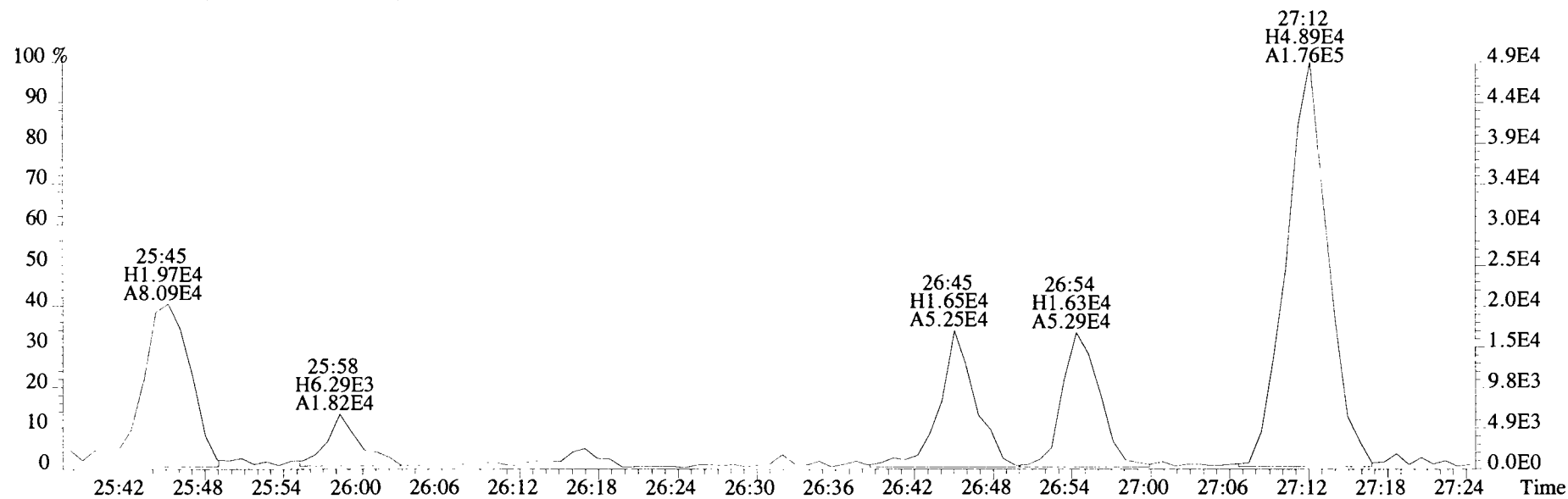
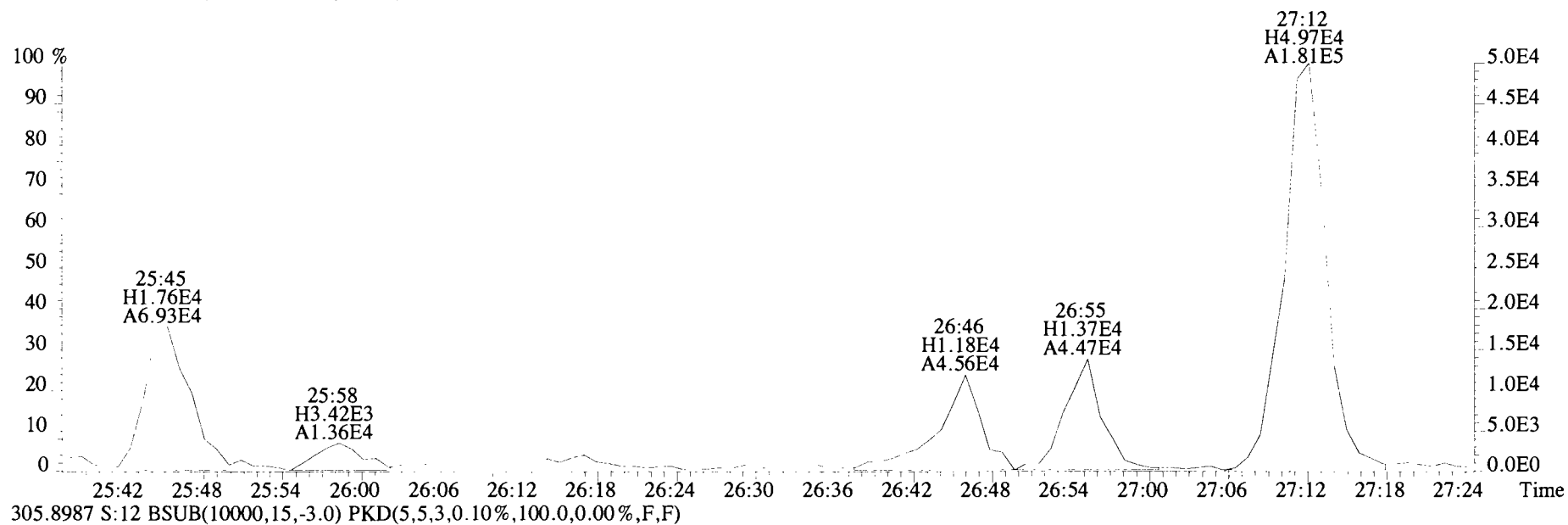
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



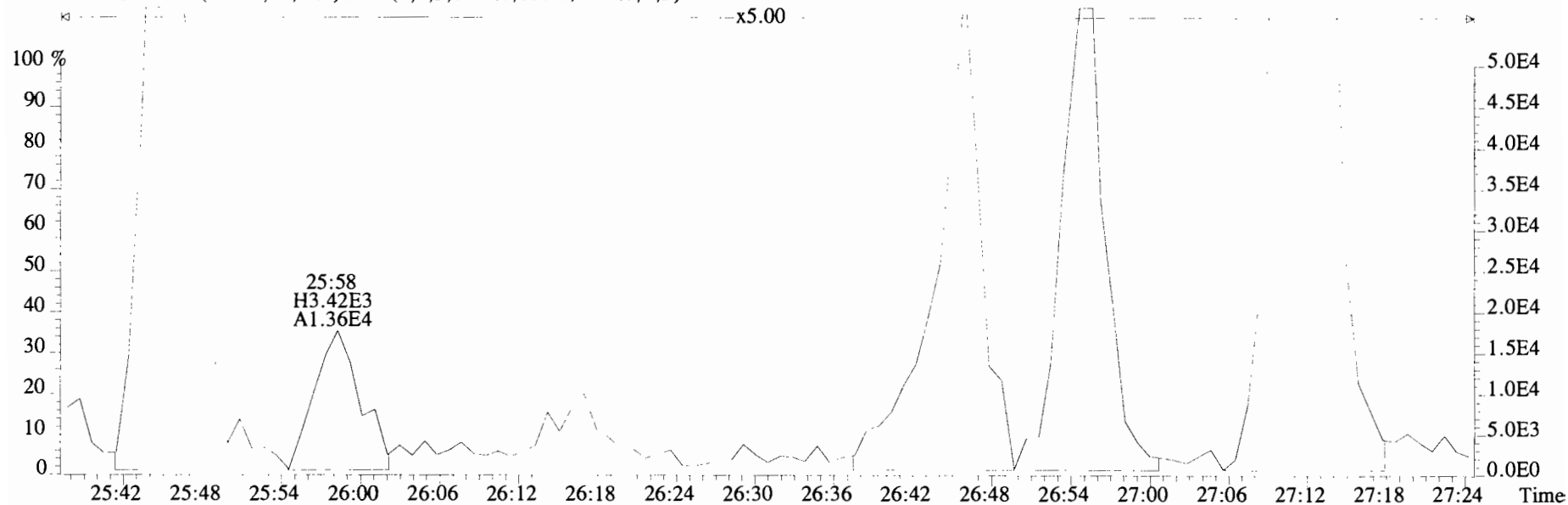
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



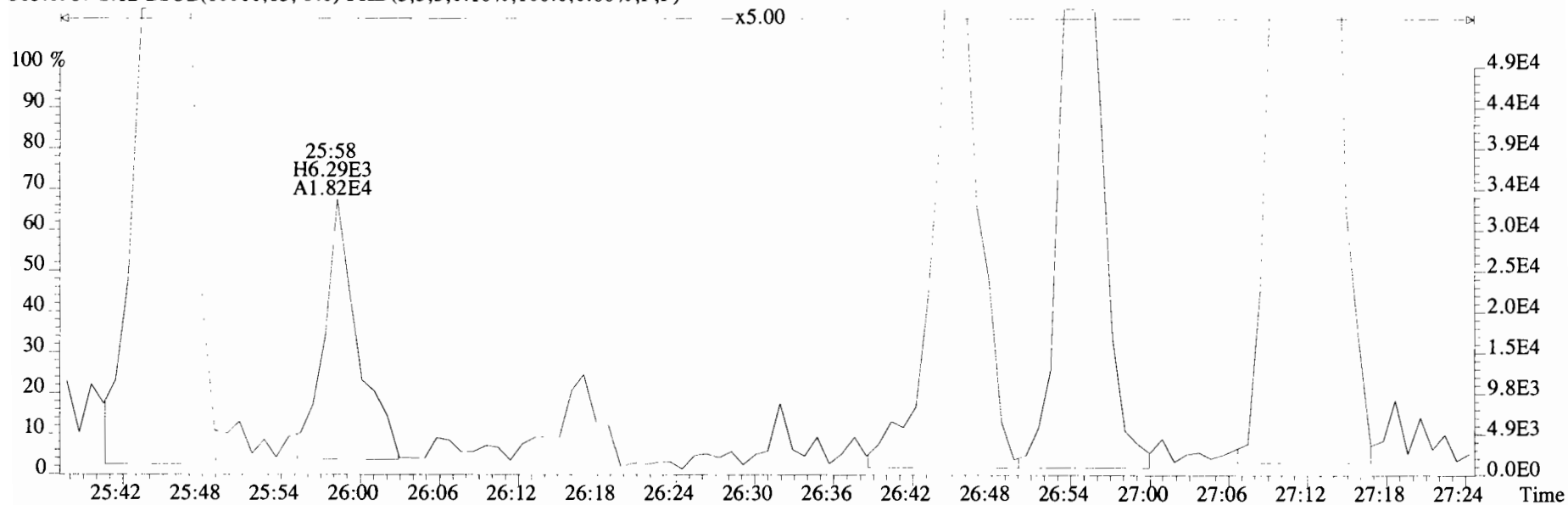
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
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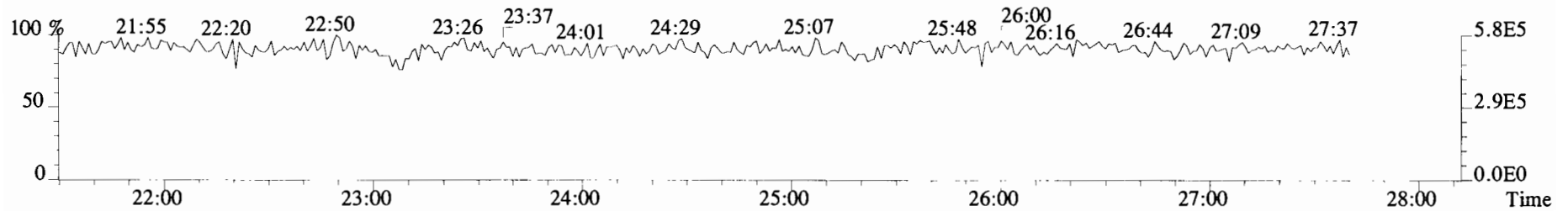
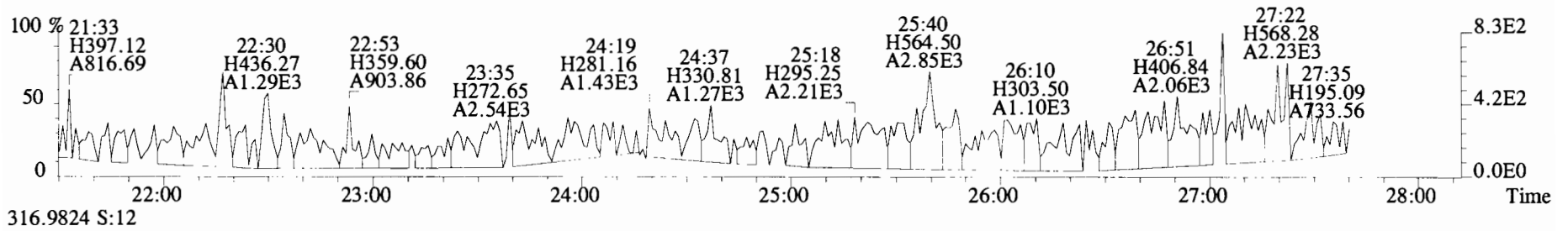
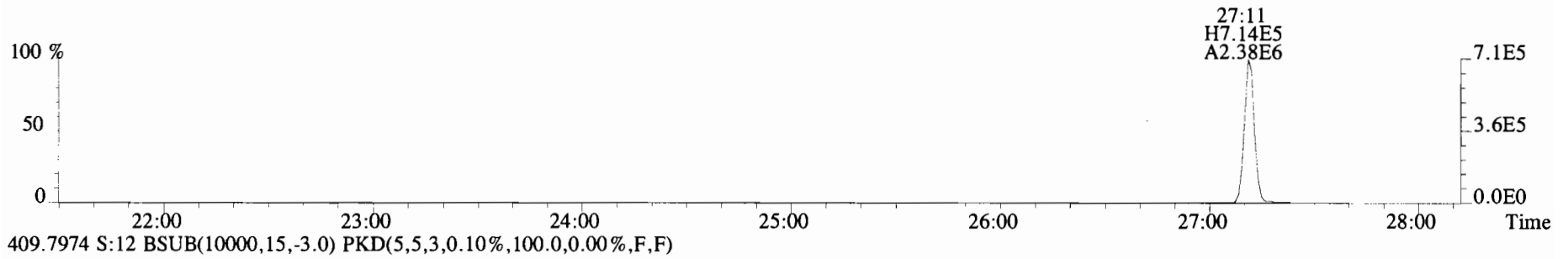
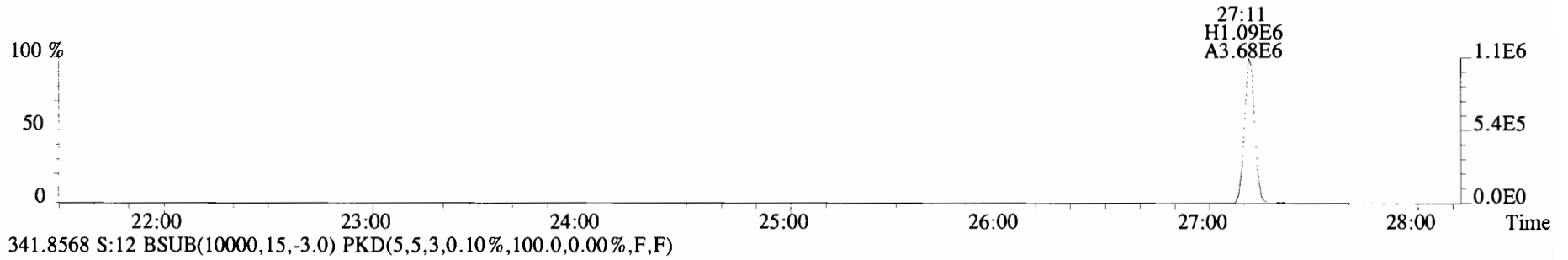
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



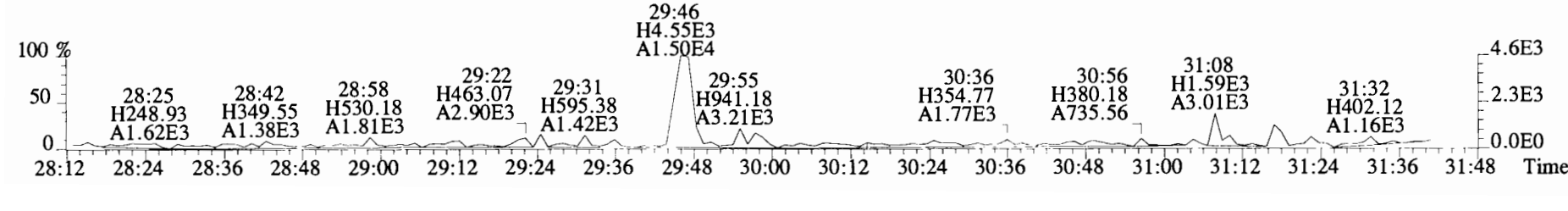
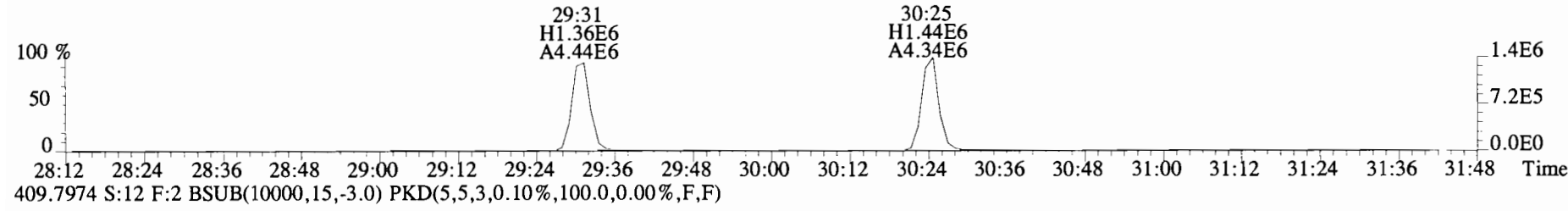
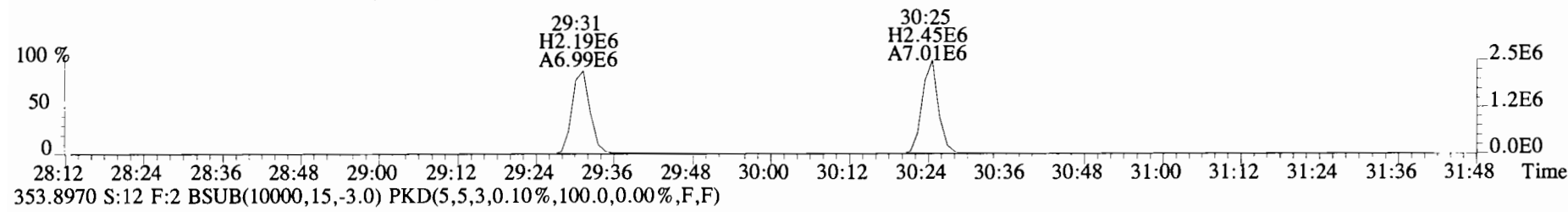
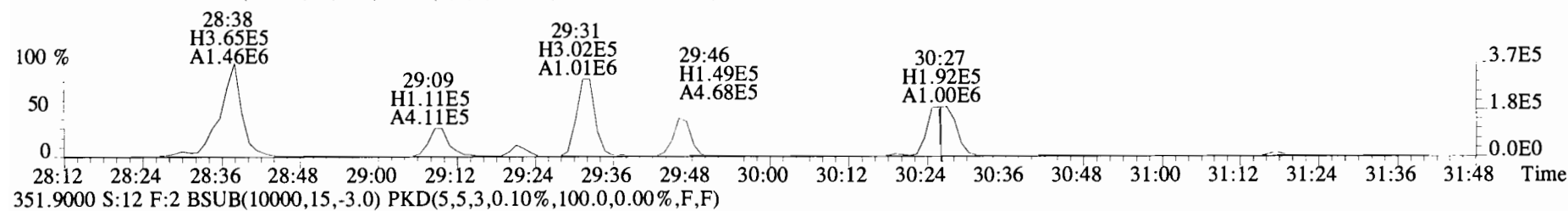
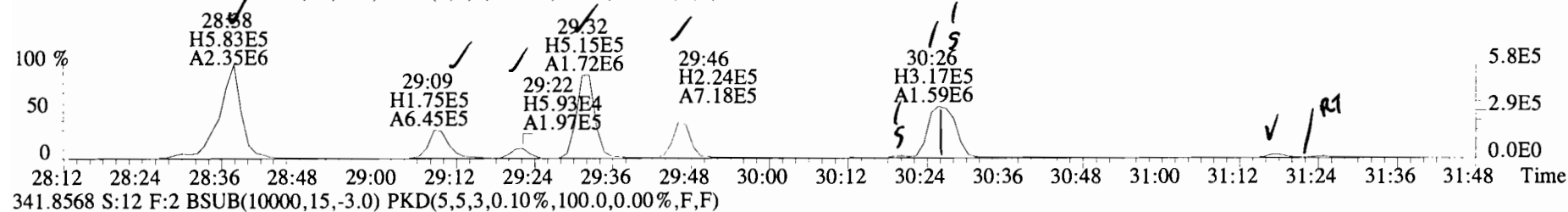
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



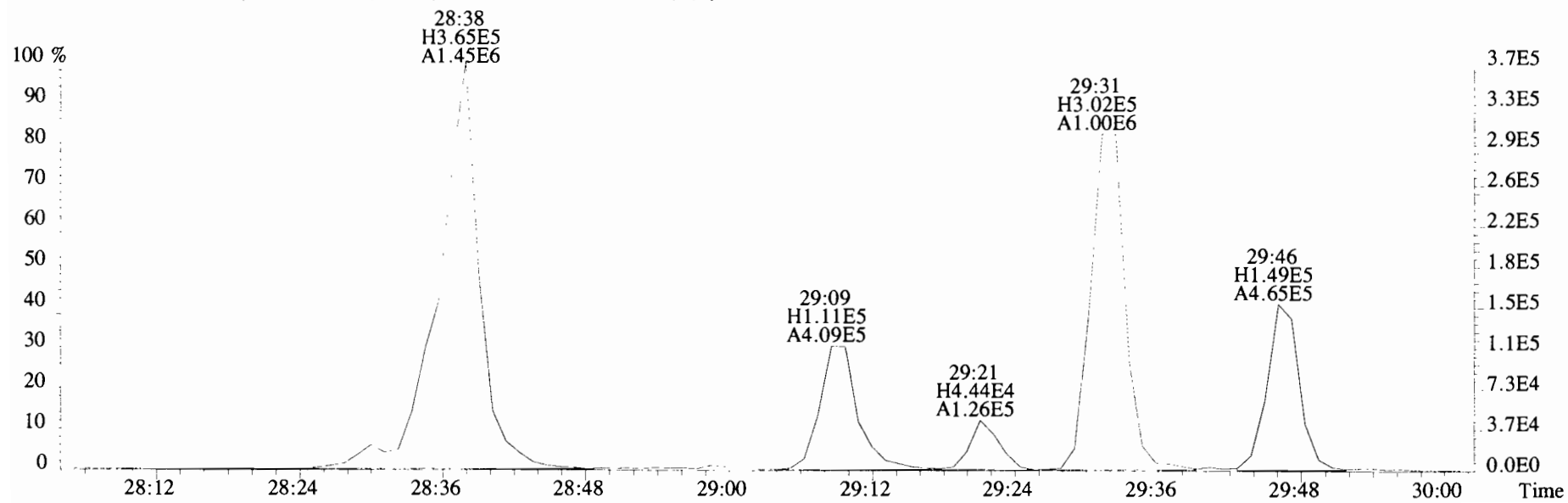
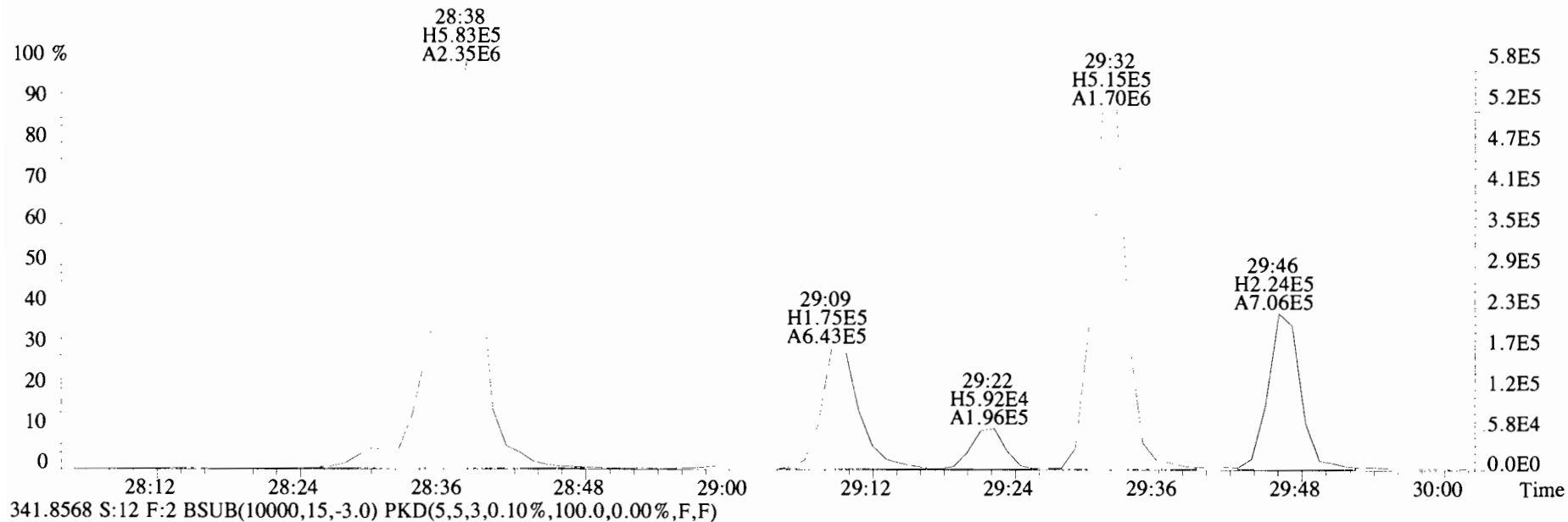
File:191120D1 #1-492 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 339.8597 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



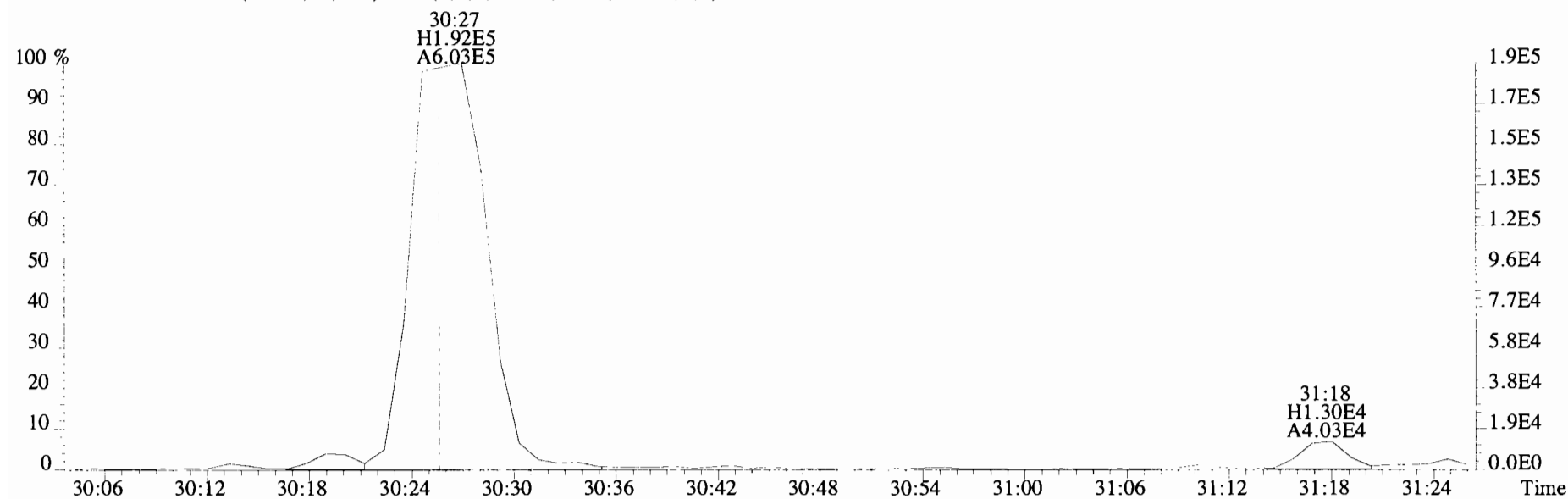
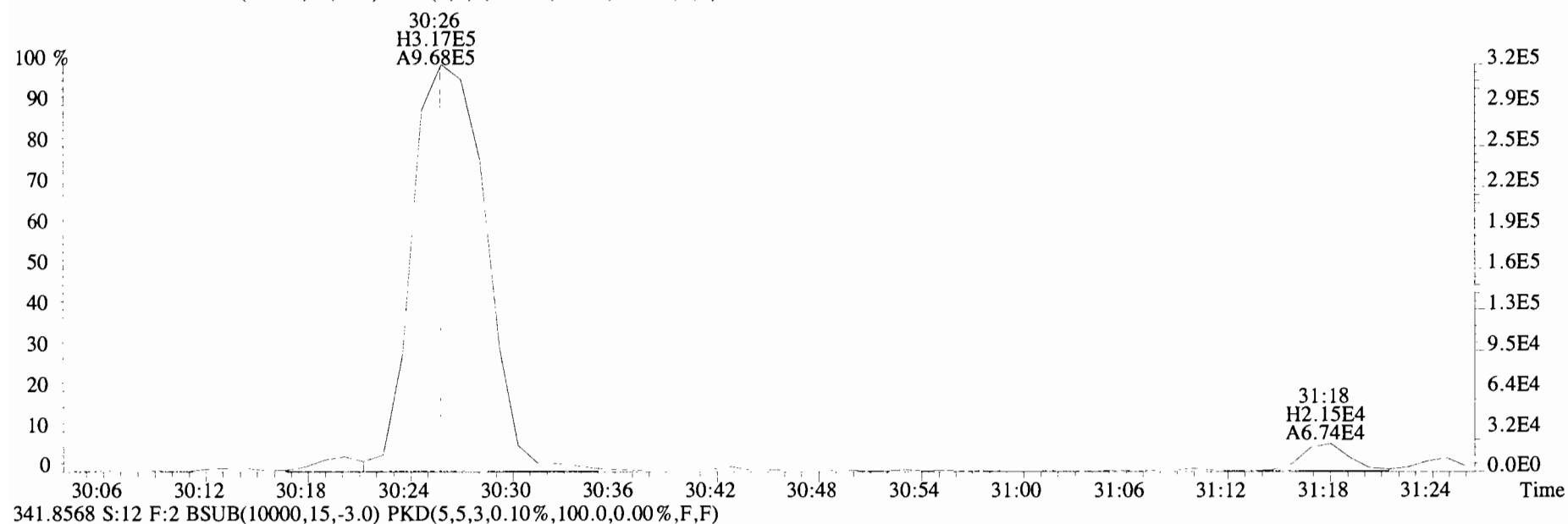
File:191120D1 #1-211 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



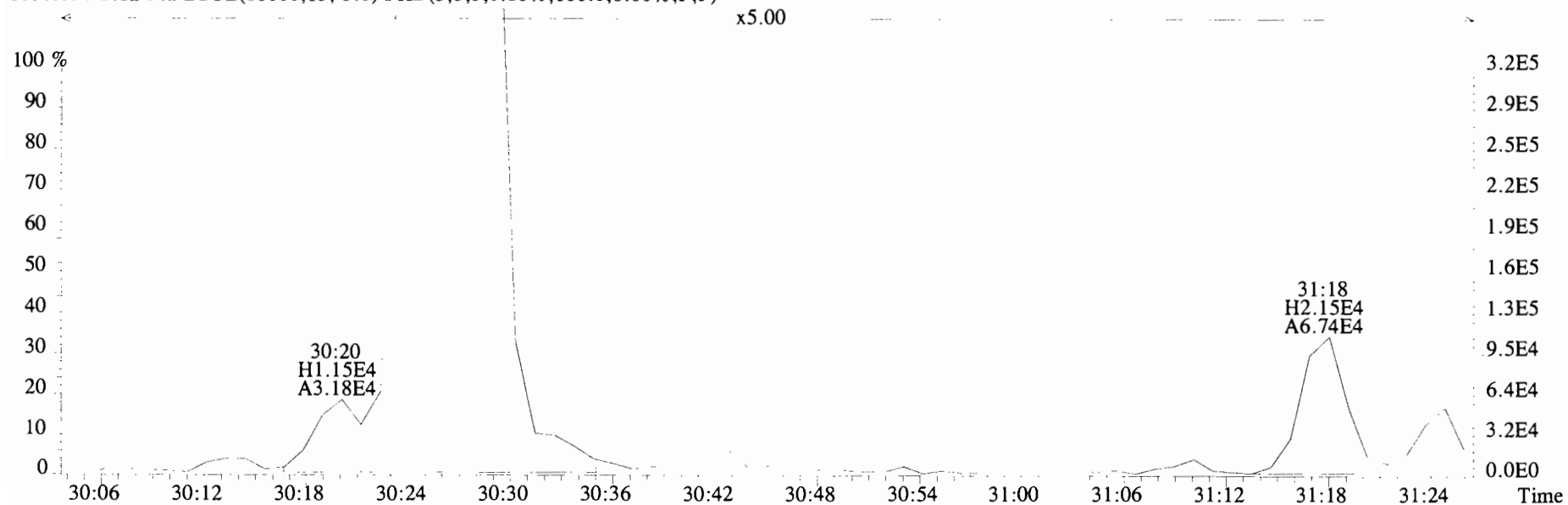
File:191120D1 #1-211 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



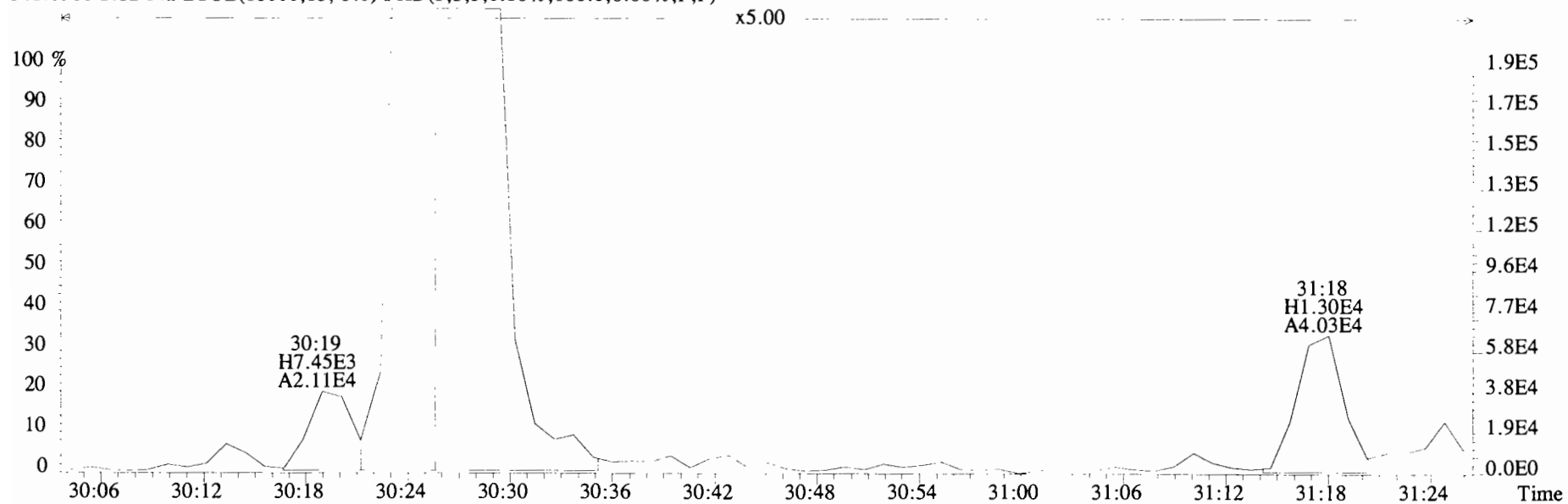
File:191120D1 #1-211 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



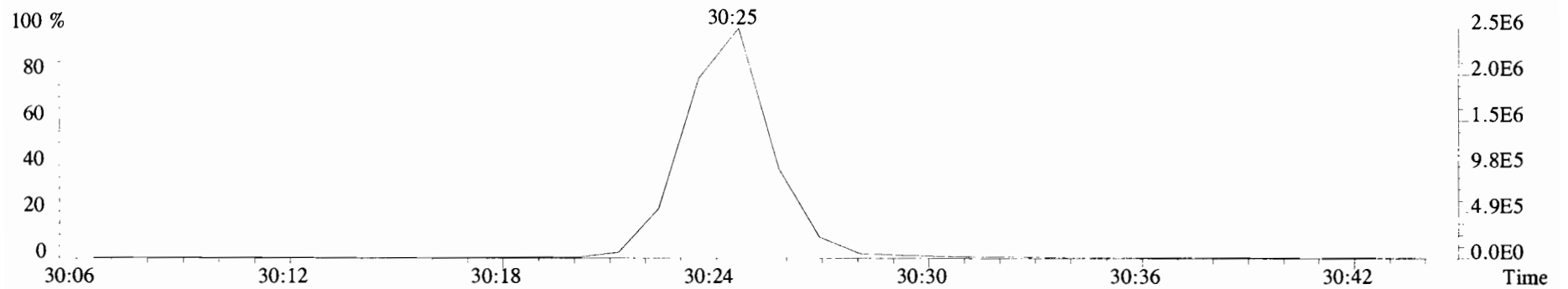
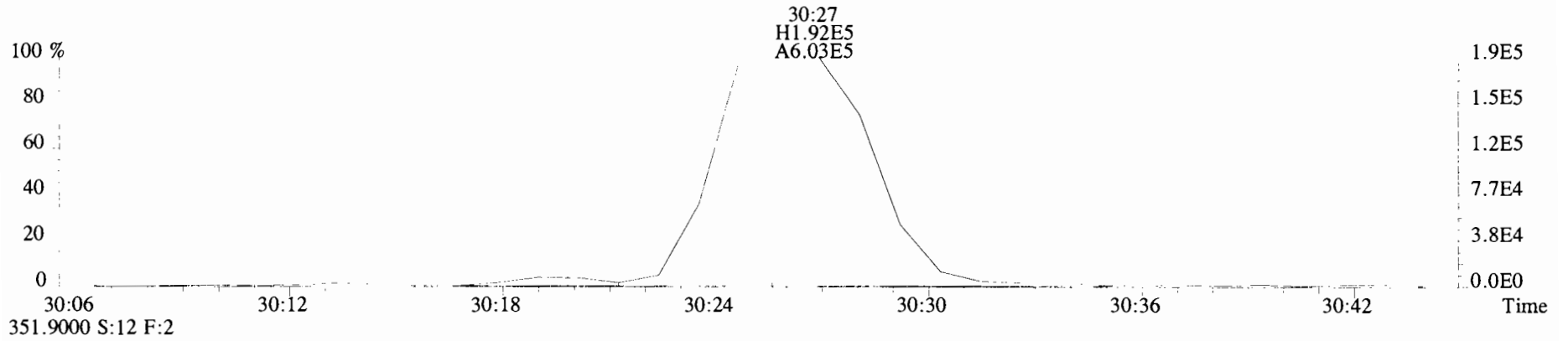
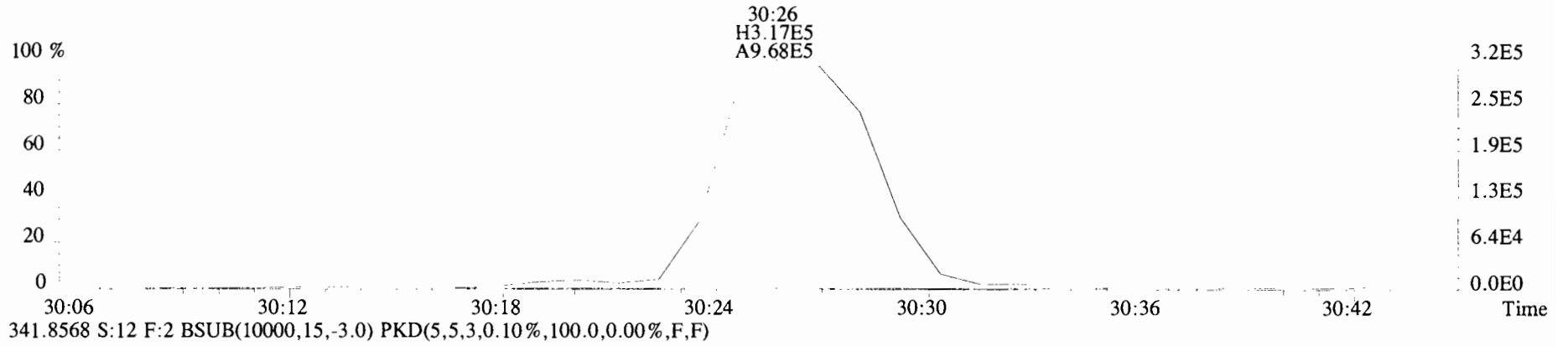
File:191120D1 #1-211 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



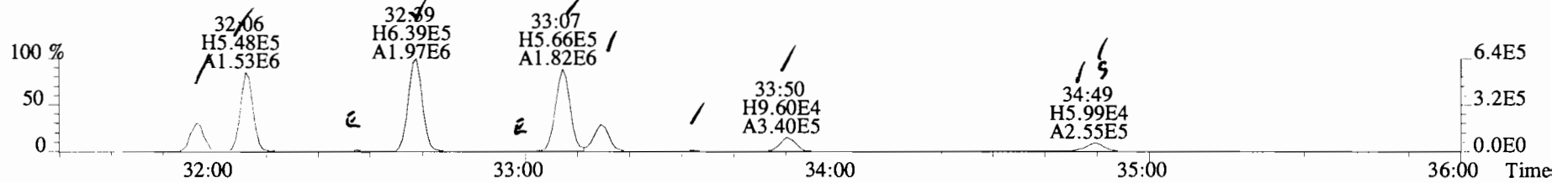
341.8568 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



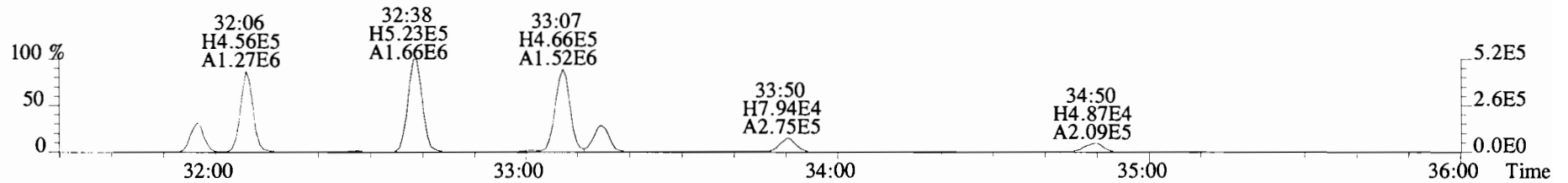
File:191120D1 #1-211 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



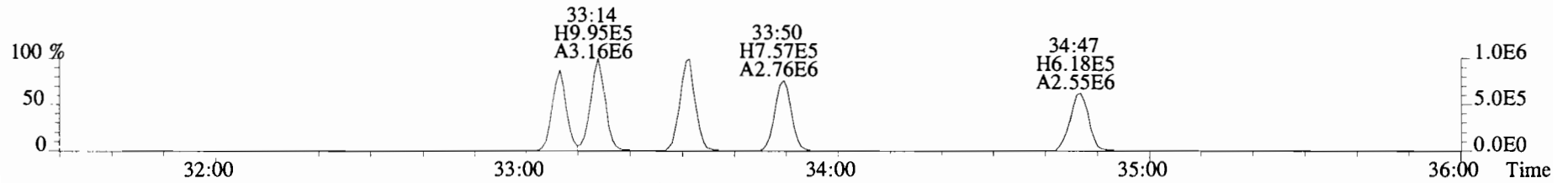
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



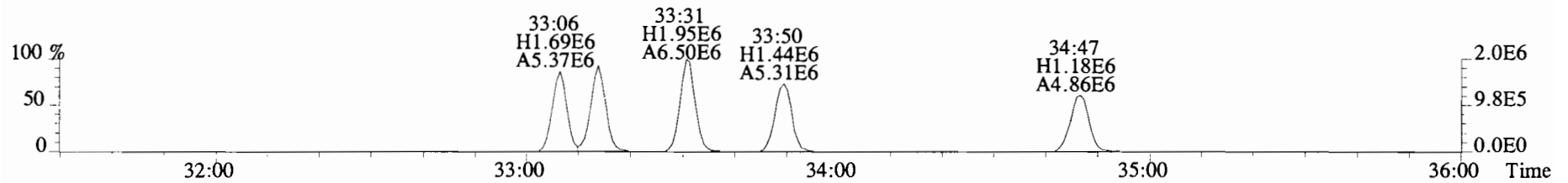
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



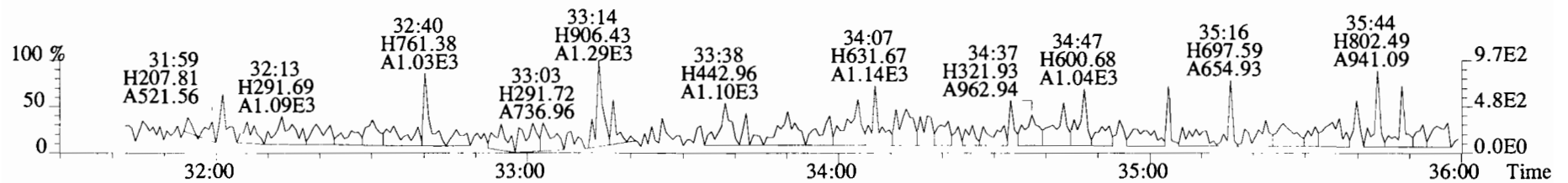
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



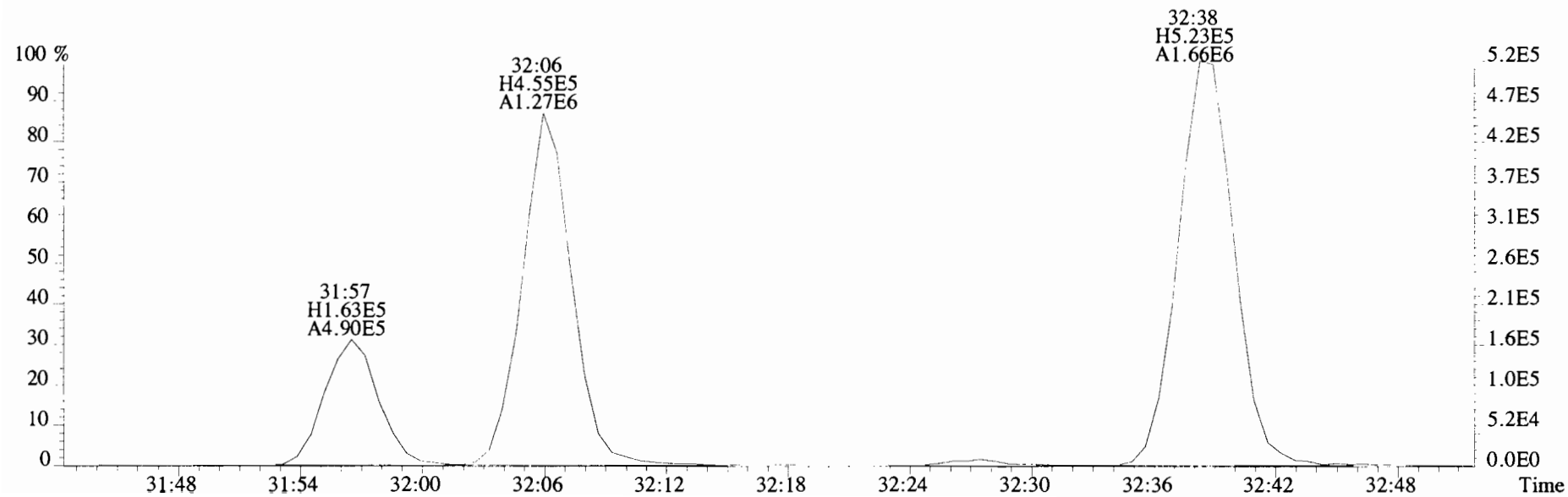
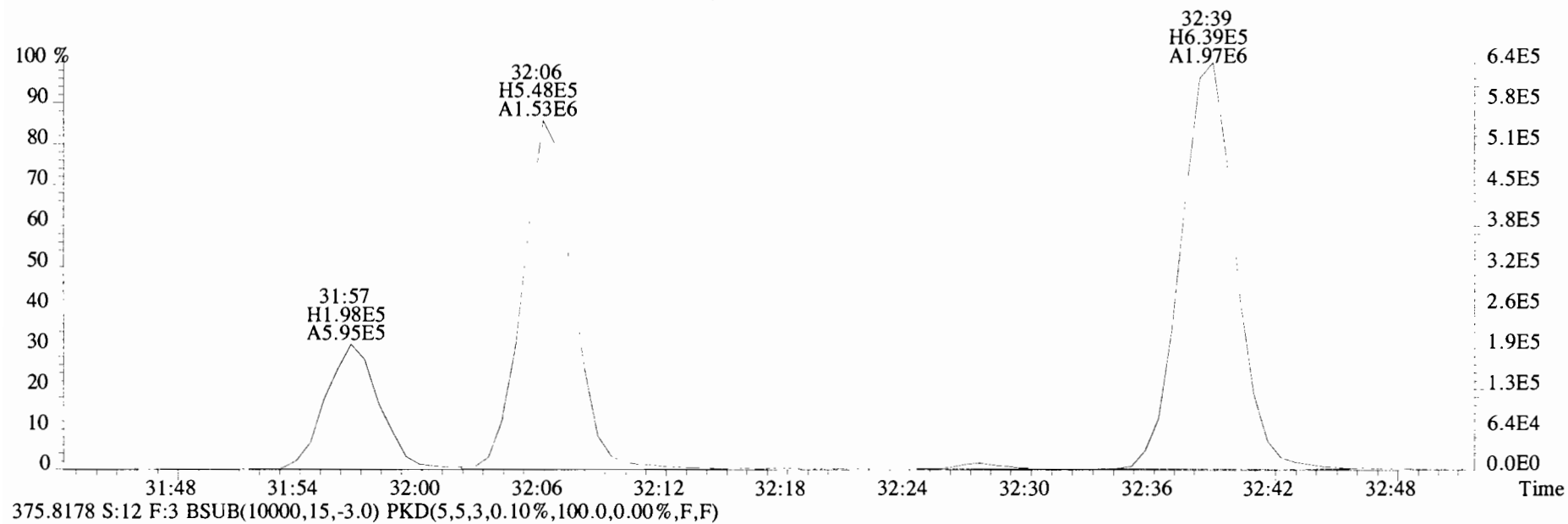
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



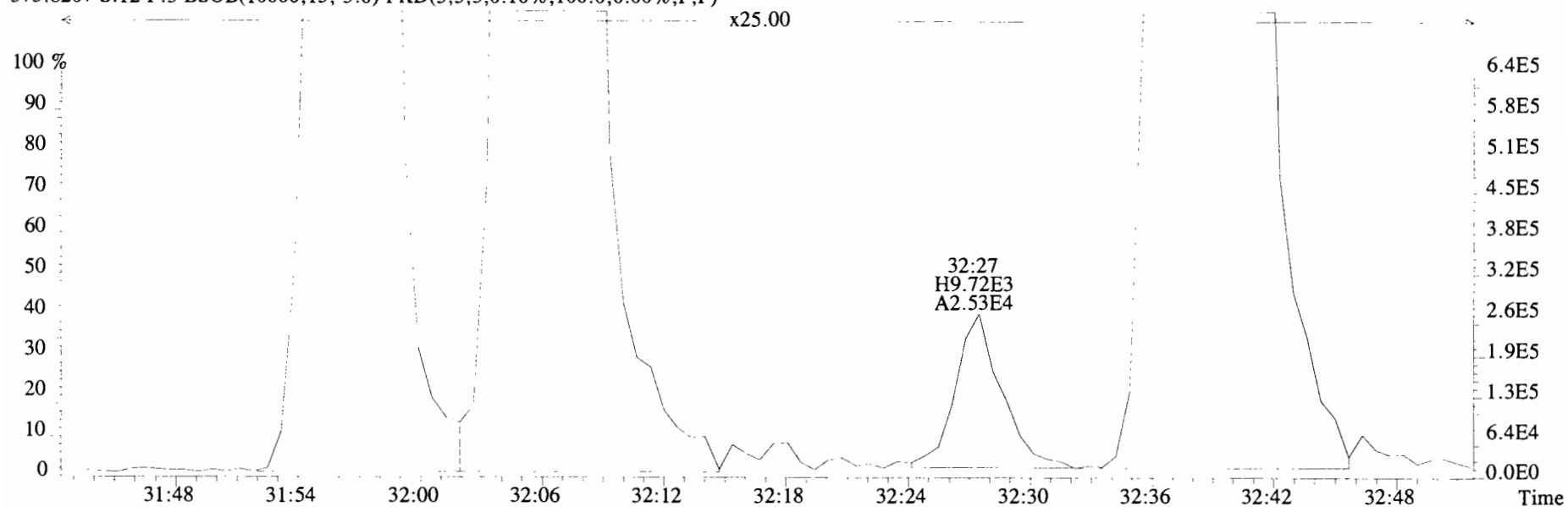
445.7555 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



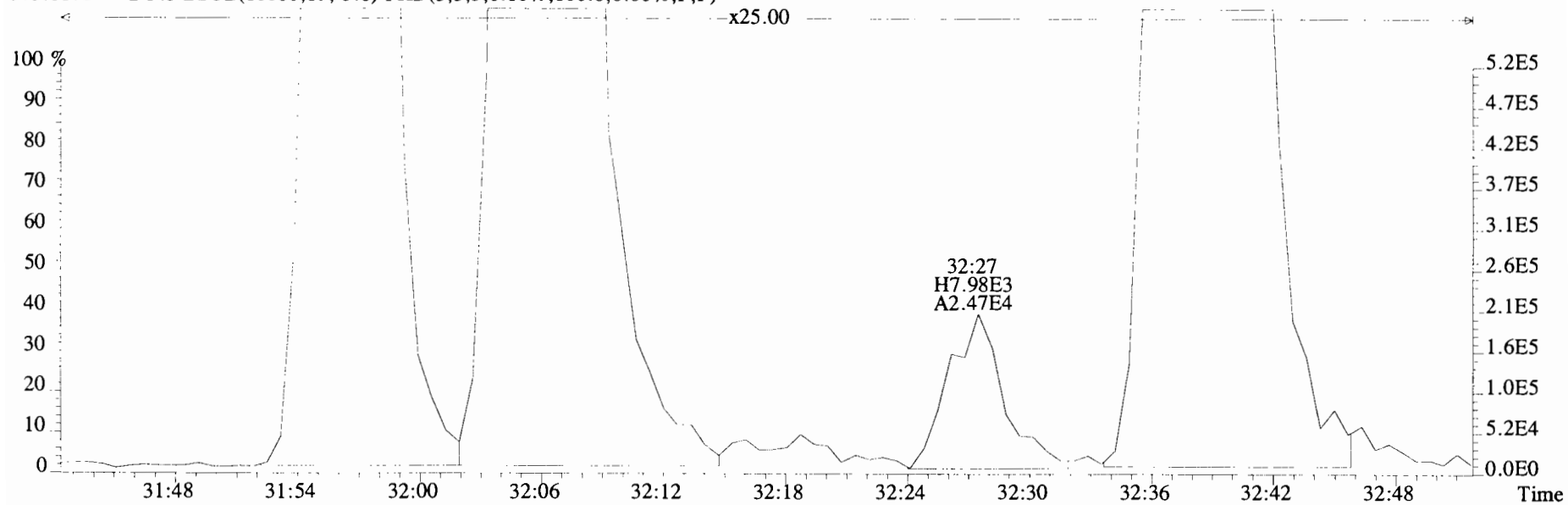
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



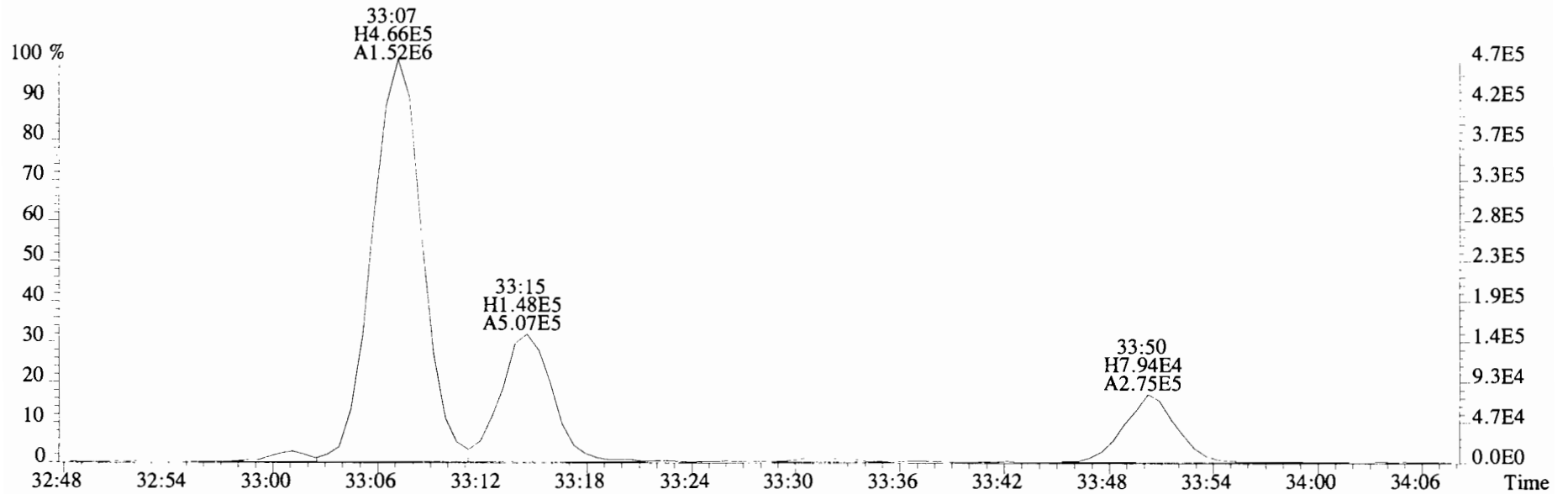
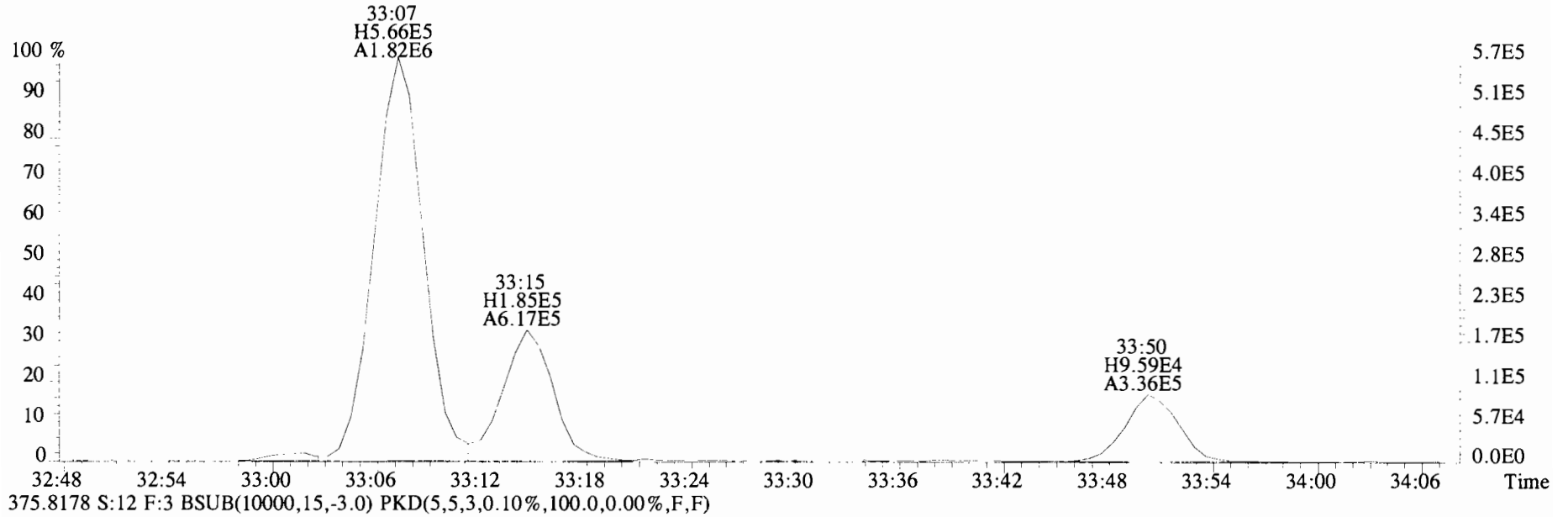
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



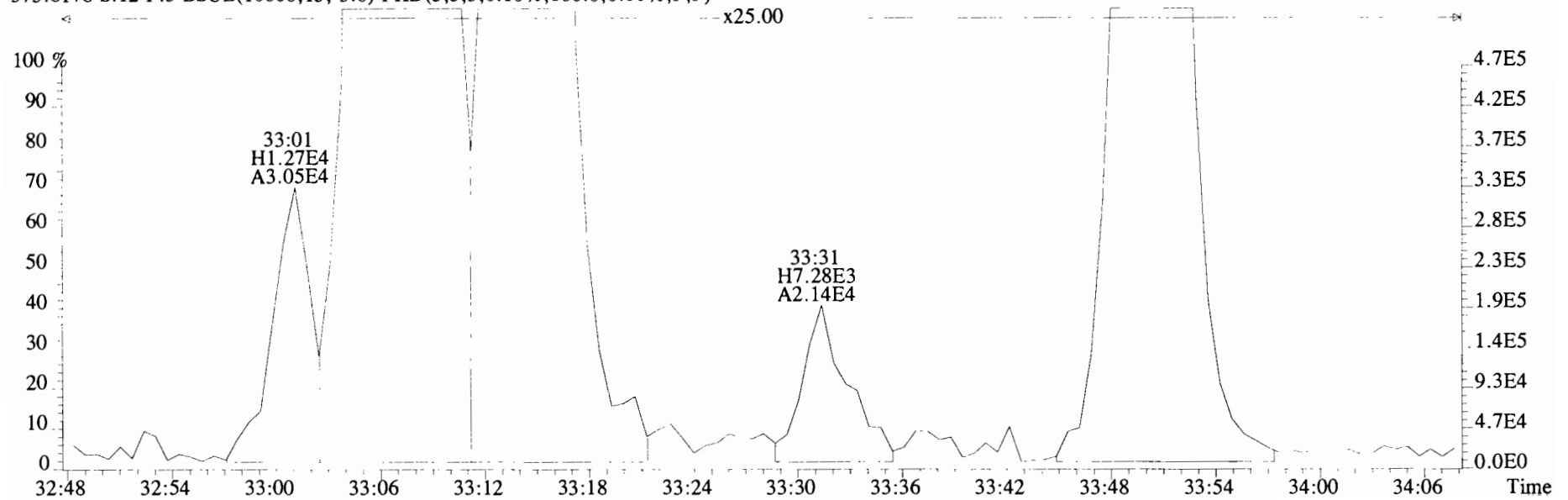
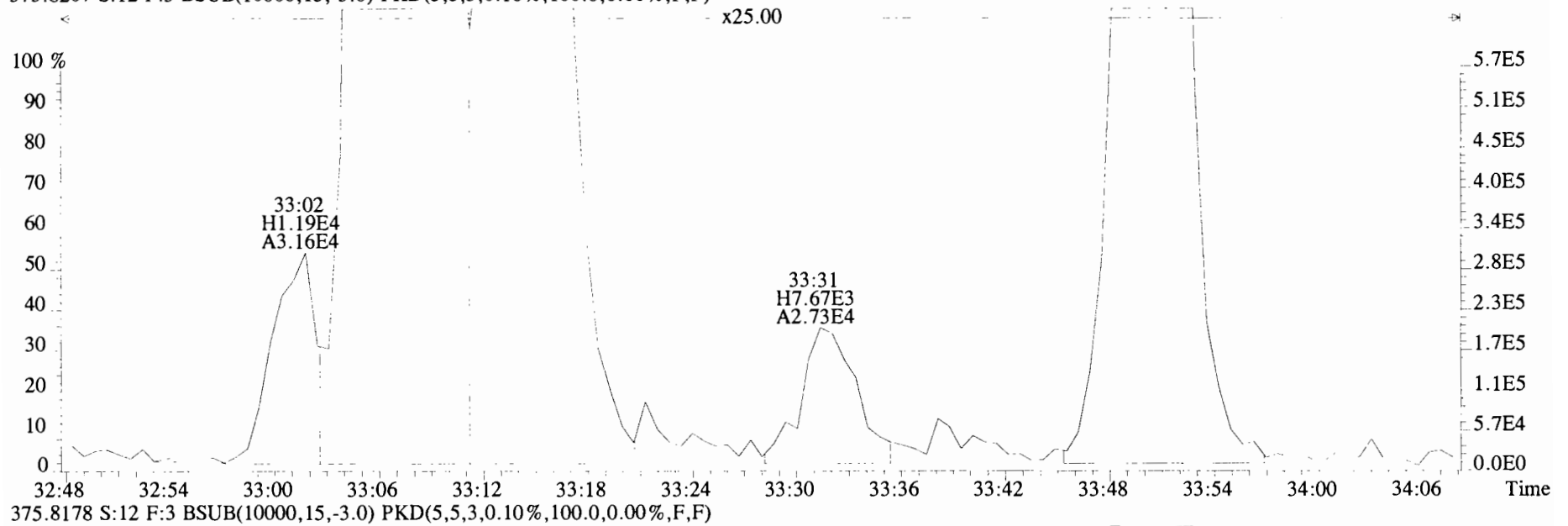
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



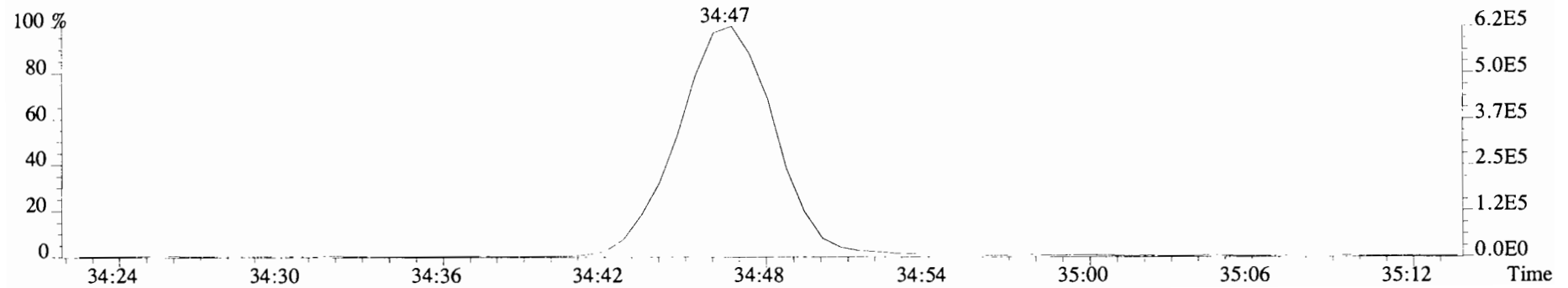
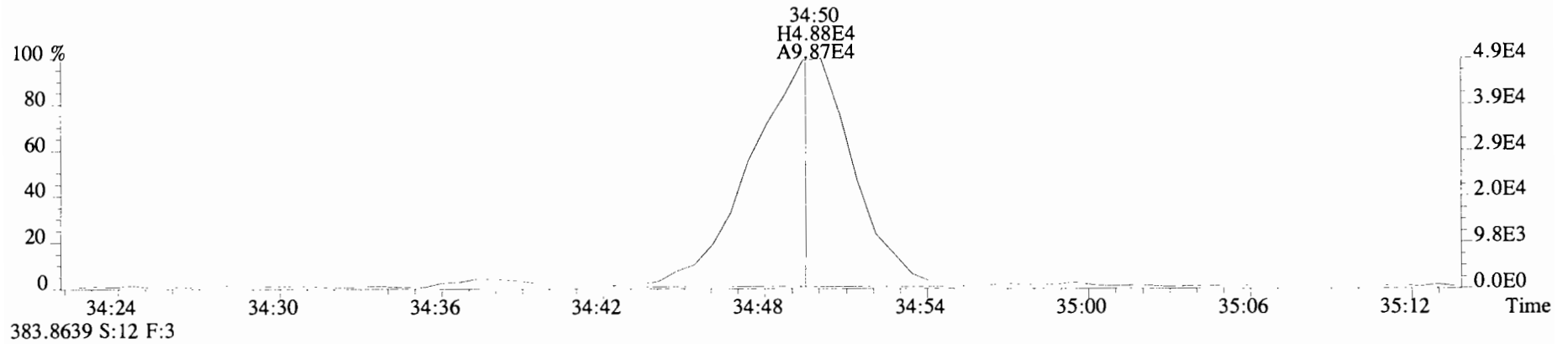
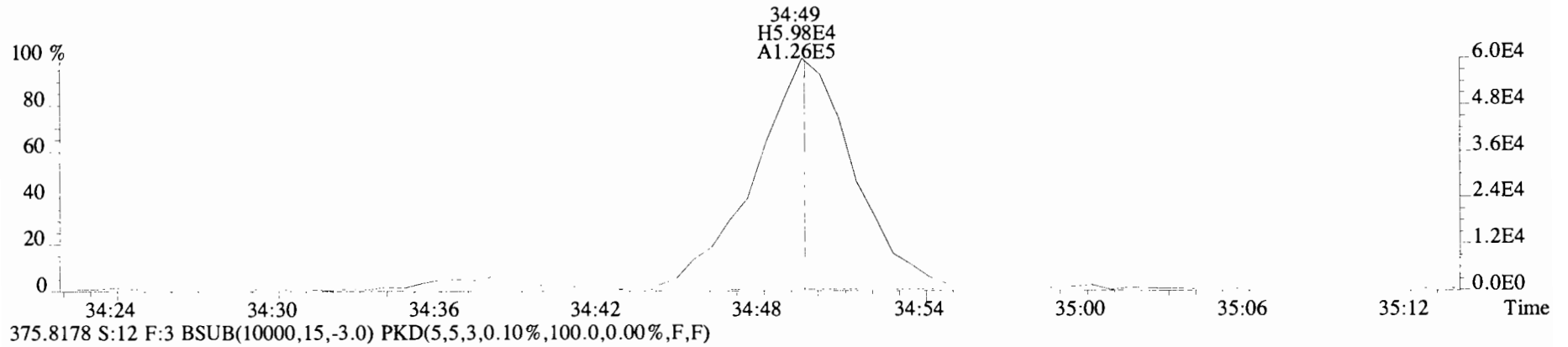
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



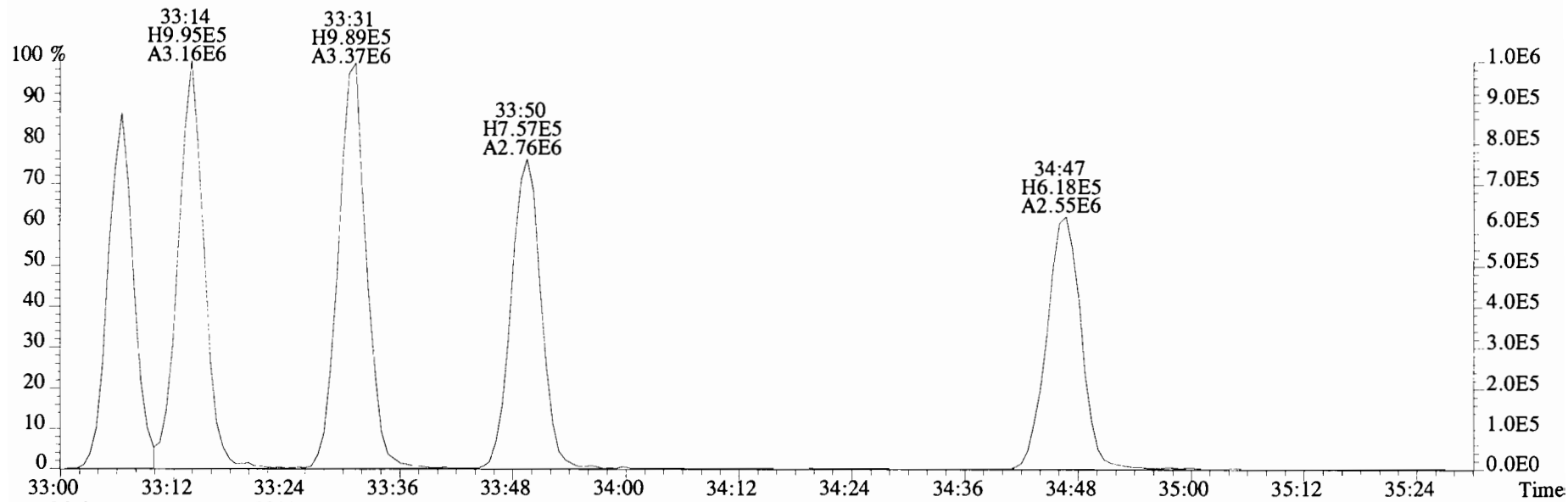
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Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



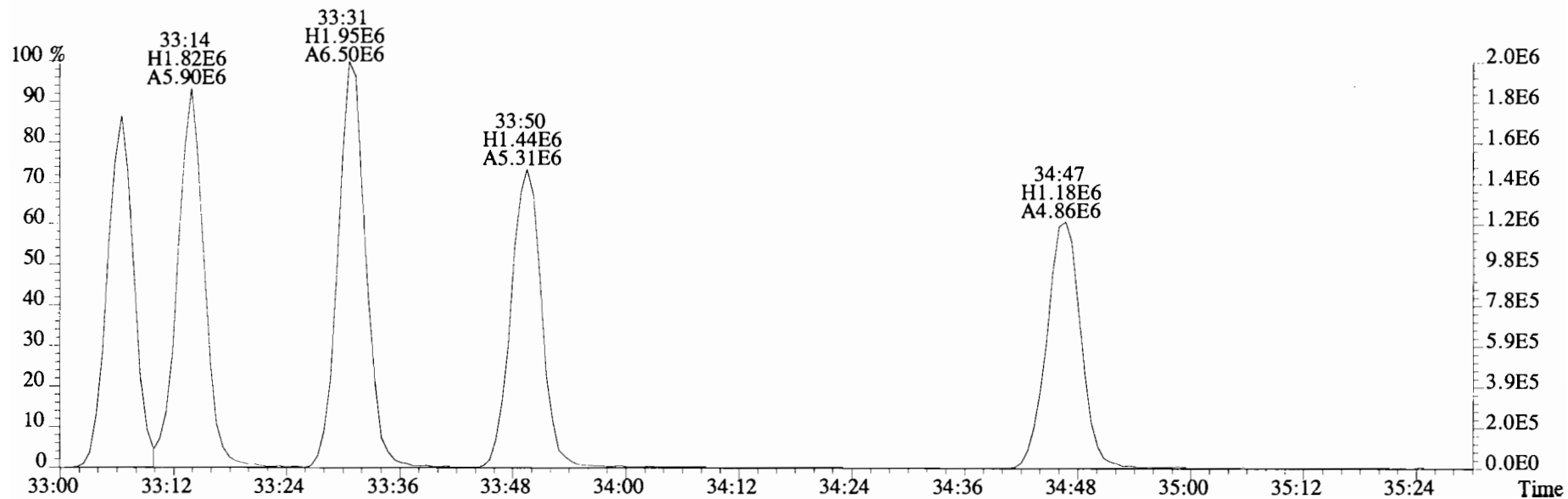
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Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



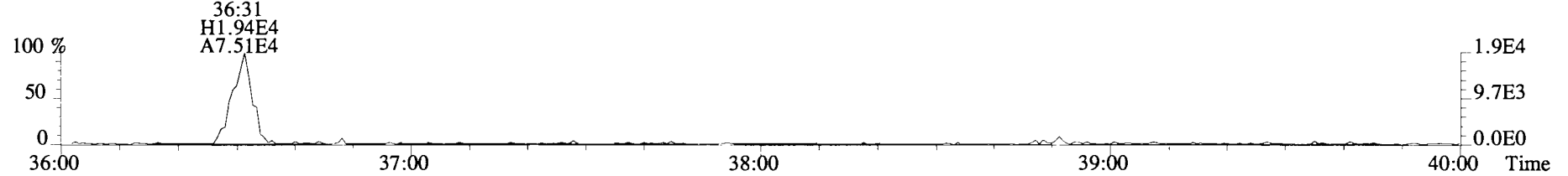
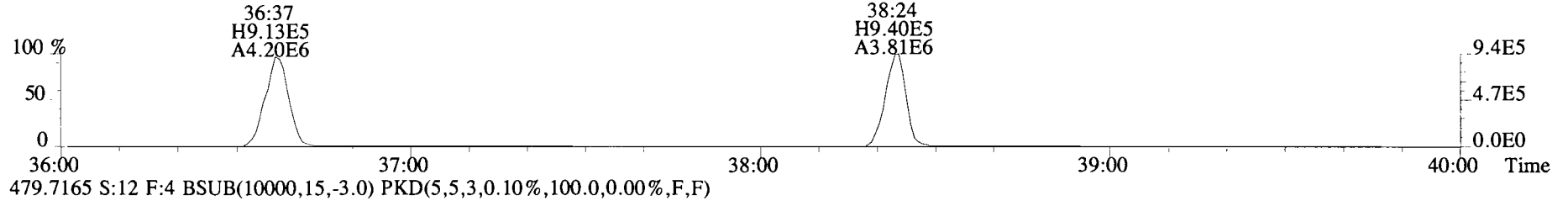
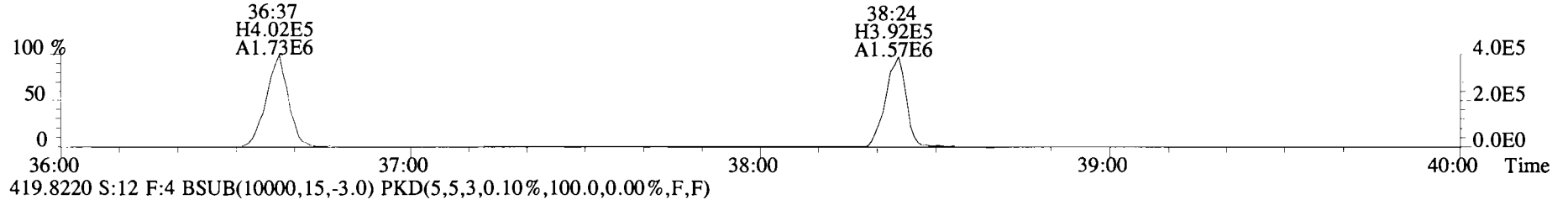
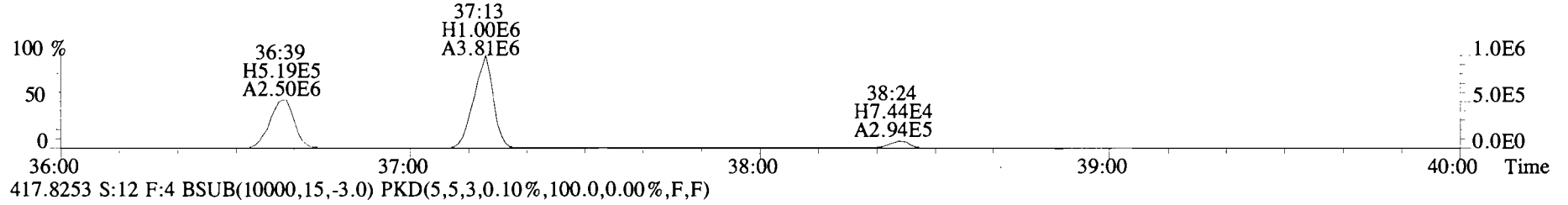
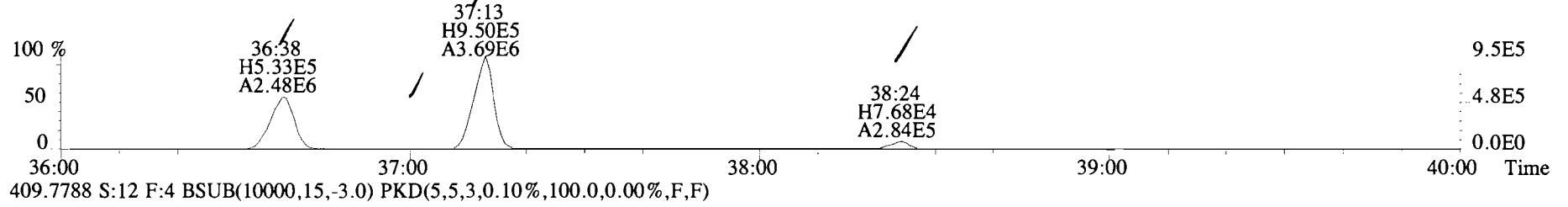
File:191120D1 #1-384 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



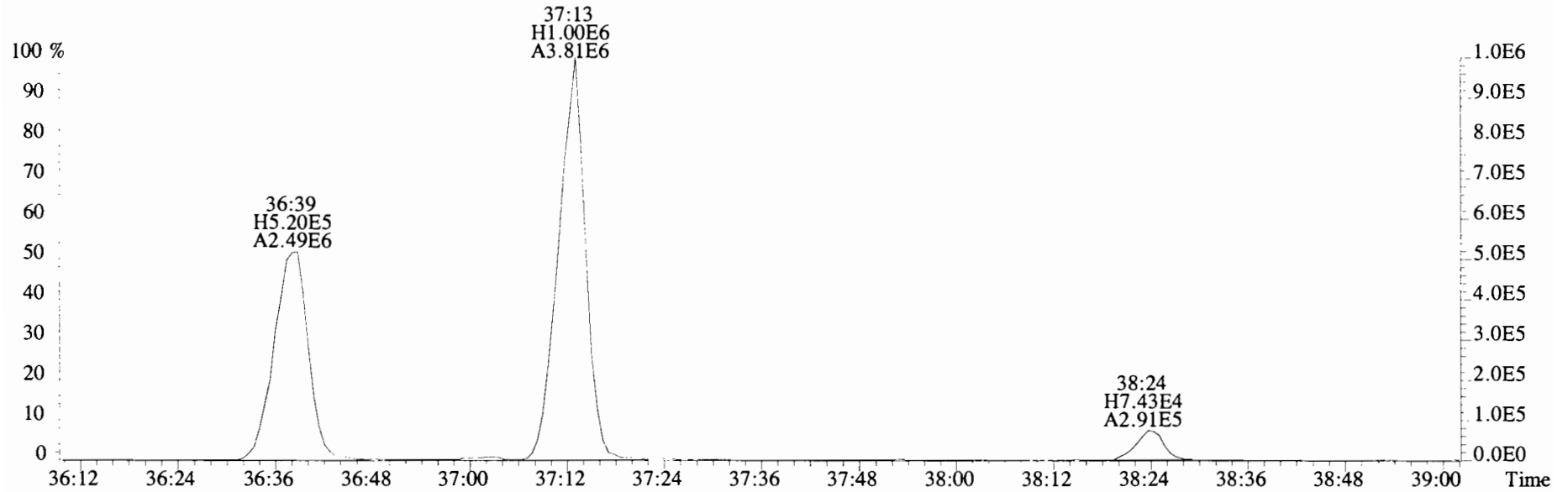
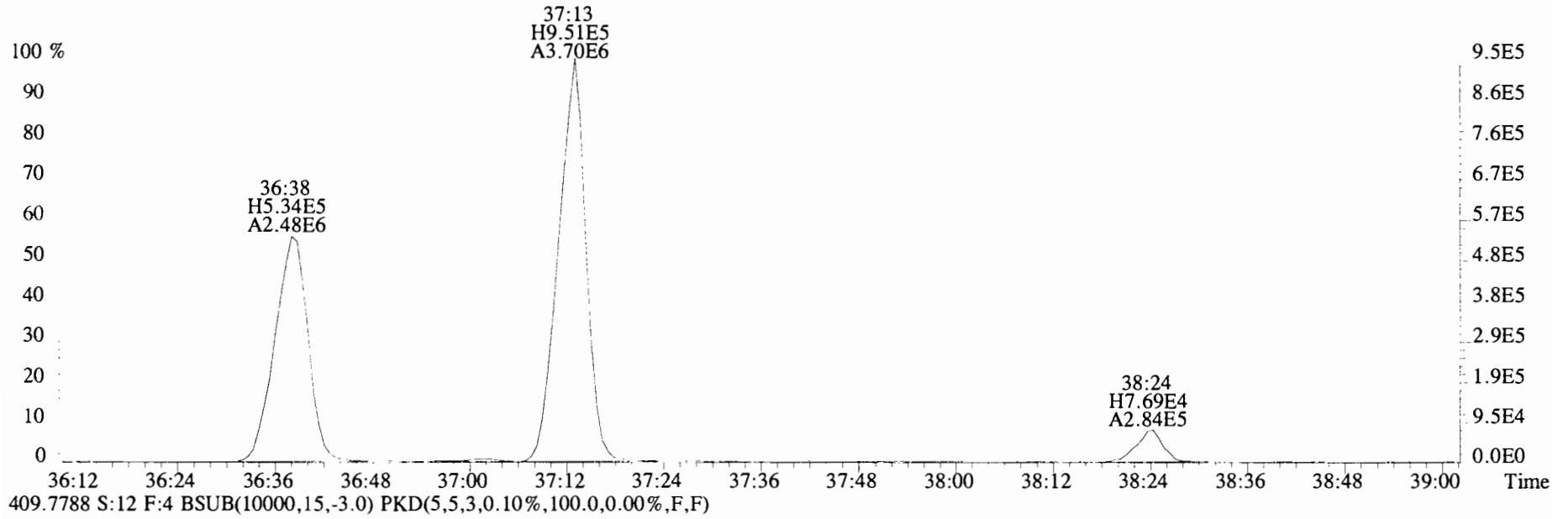
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



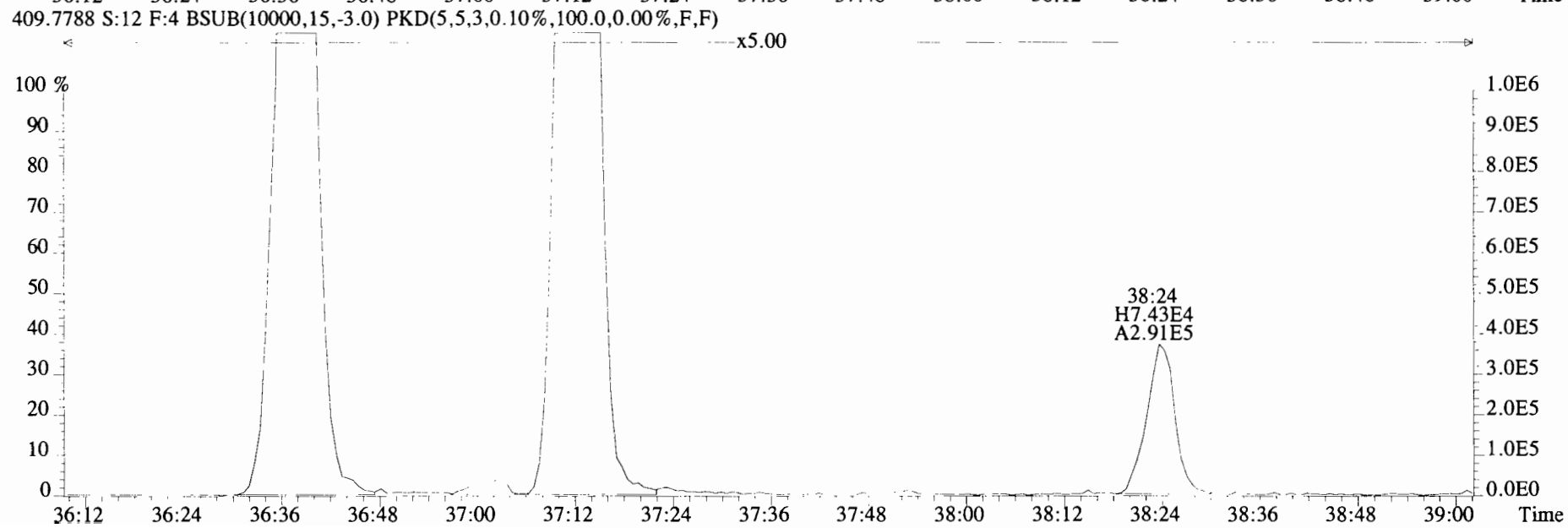
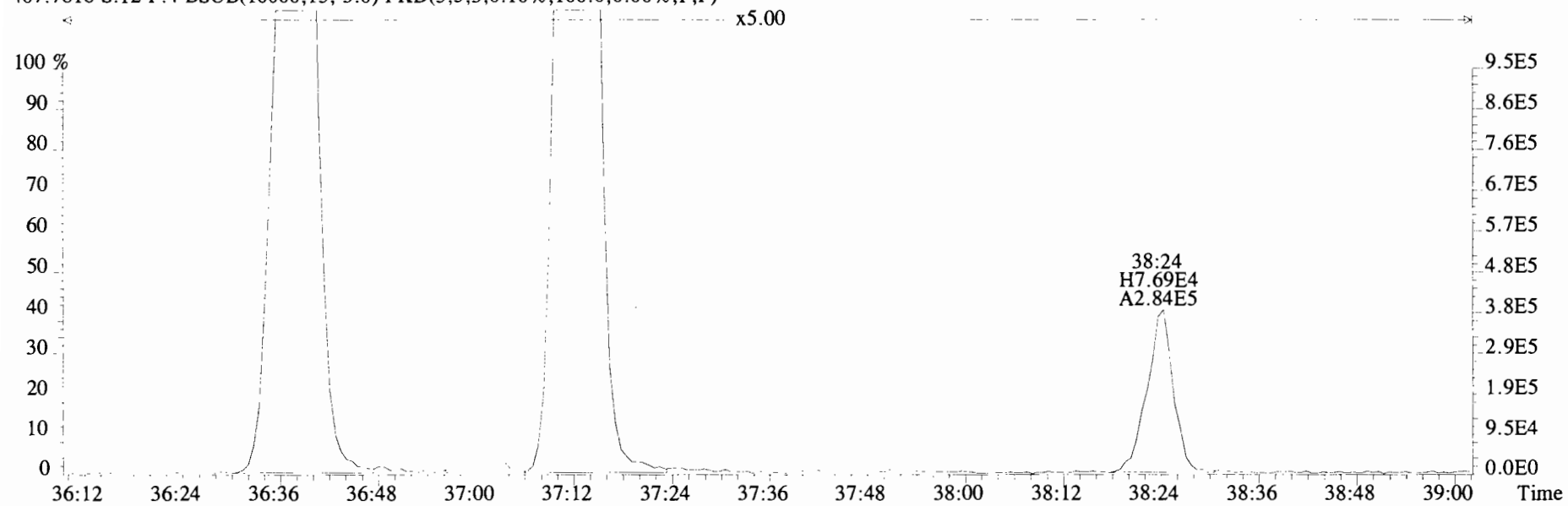
File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



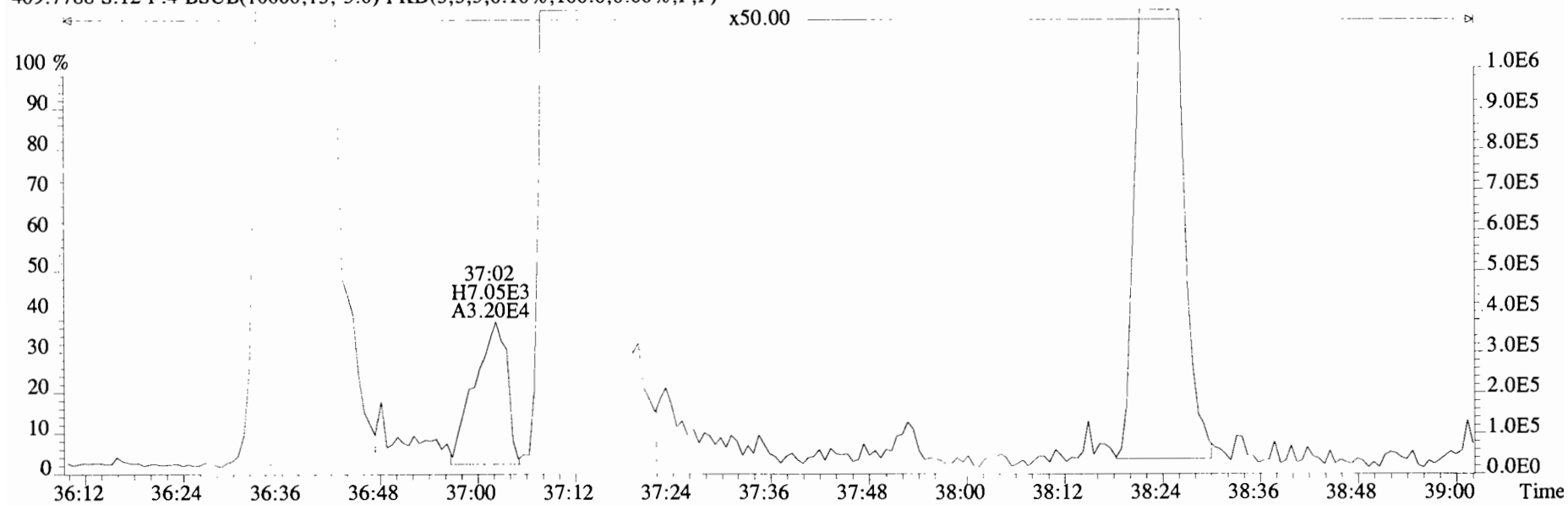
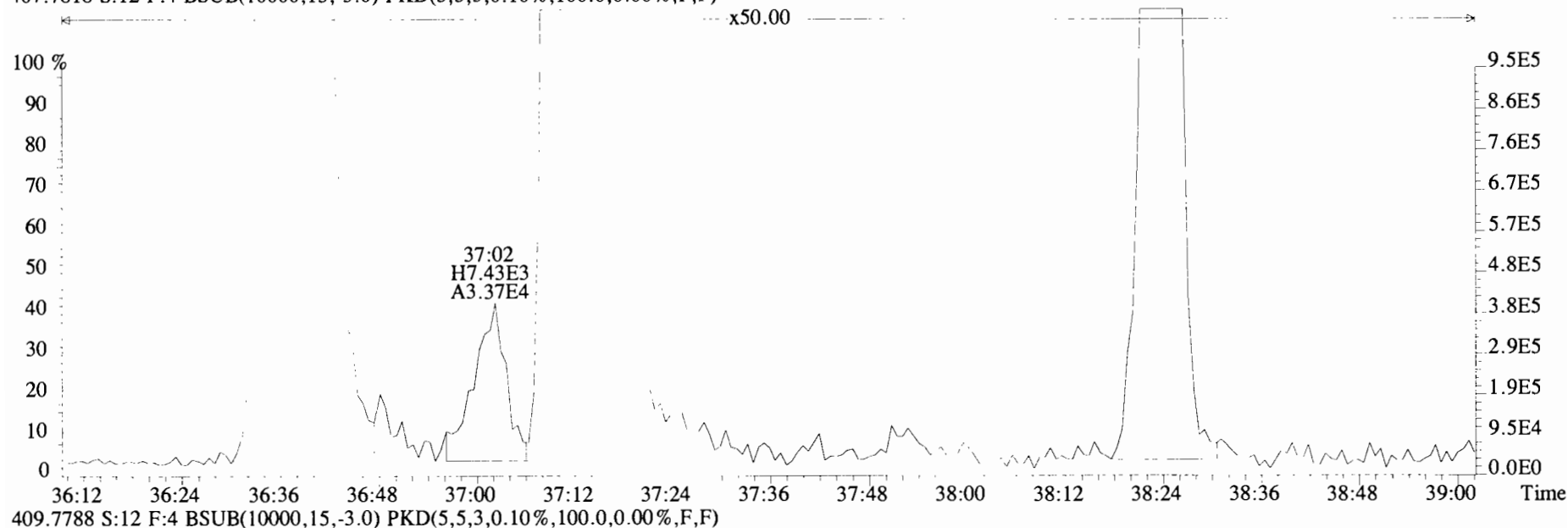
File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



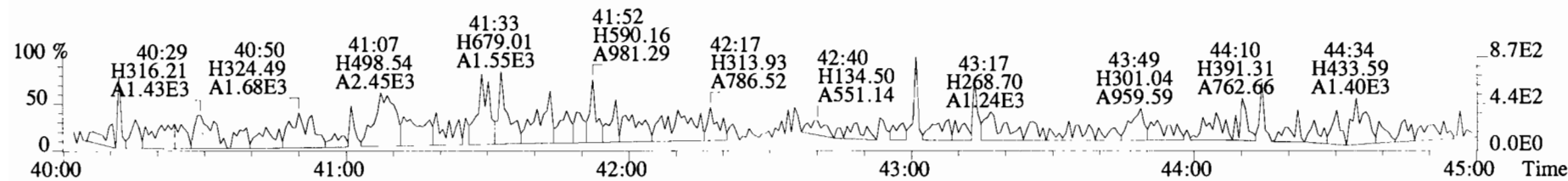
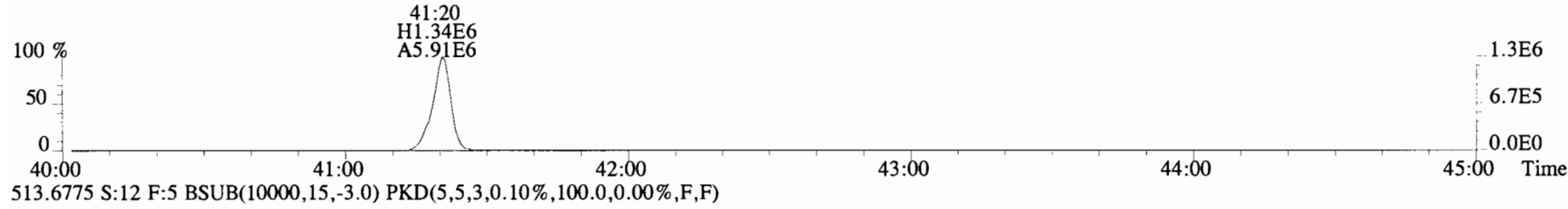
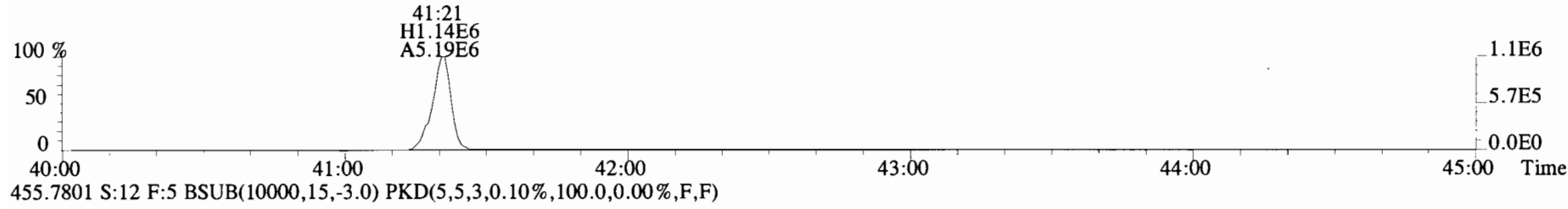
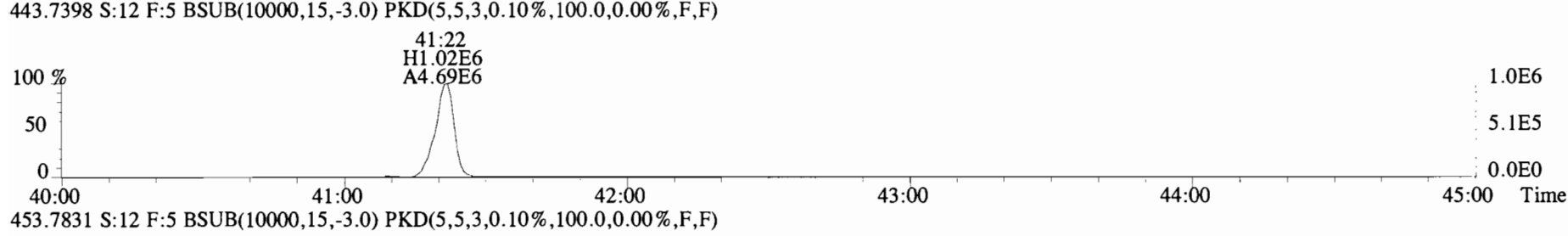
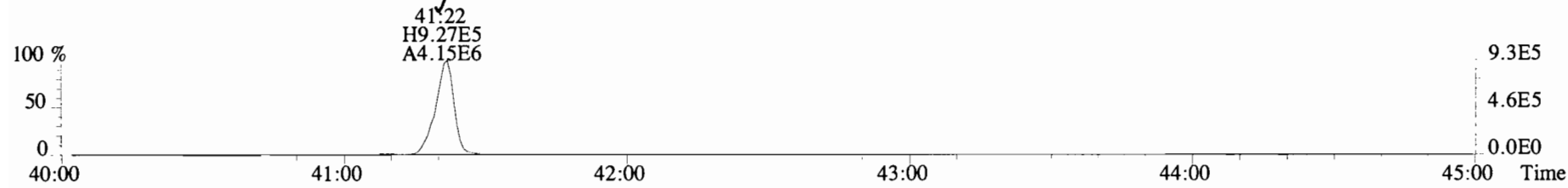
File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191120D1 #1-356 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

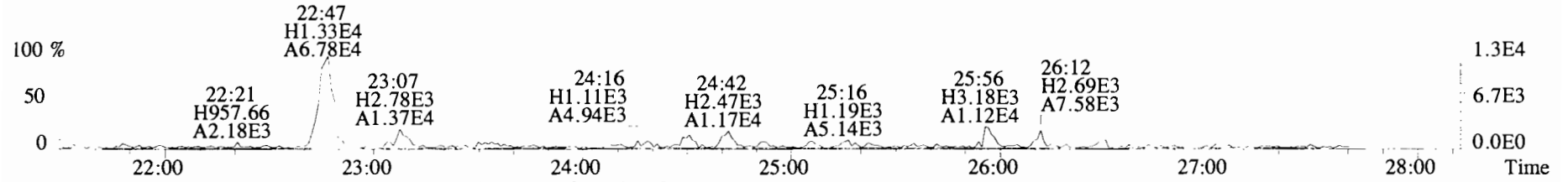


File:191120D1 #1-431 Acq:20-NOV-2019 22:46:18 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#12 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2 PDI-095SC-B-04-06-191002 17.42 Exp:OCDD_DB5
 441.7428 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

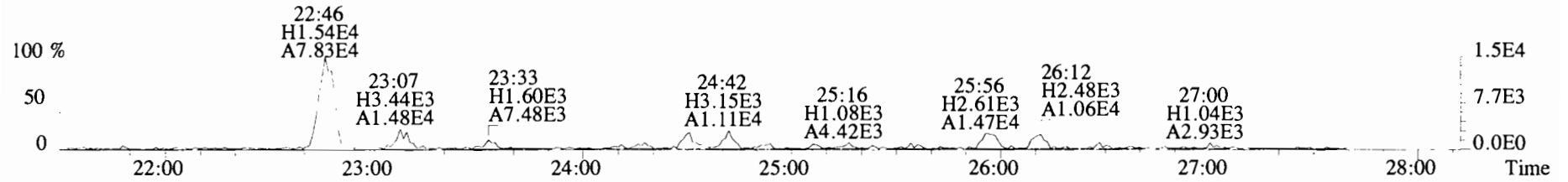


Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotF7	*	*	2.5	*	*	Total Tetra-Dioxins	*	*	*	*	*
1,2,3,7,8-PeCDD	*	* n	0.90	NotF7	*	*	2.5	*	*	Total Penta-Dioxins	*	*	*	*	*
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotF7	*	*	2.5	*	*	Total Hexa-Dioxins	*	*	*	*	*
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotF7	*	*	2.5	*	*	Total Hepta-Dioxins	*	*	*	*	*
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotF7	*	*	2.5	*	*	Total Tetra-Furans	*	*	*	*	*
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotF7	*	*	2.5	*	*	Total Penta-Furans	0.0000	0.0000	*	*	*
OCDD	4.55e+07	0.90 y	0.96	41:07	7283.7	*	2.5	*	*	Total Hexa-Furans	*	*	*	*	*
										Total Hepta-Furans	*	*	*	*	*
2,3,7,8-TCDF	*	* n	0.95	NotF7	*	*	2.5	*	*						
1,2,3,7,8-PeCDF	*	* n	0.96	NotF7	*	*	2.5	*	*						
2,3,4,7,8-PeCDF	*	* n	1.01	NotF7	*	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotF7	*	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotF7	*	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotF7	*	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotF7	*	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotF7	*	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotF7	*	*	2.5	*	*						
OCDF	*	* n	0.95	NotF7	*	*	2.5	*	*						
IS	13C-2,3,7,8-TCDD	2.47e+06	0.77 y	1.10	26:10	186.28				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	1.67e+06	0.64 y	0.88	30:41	156.32				93.7					
IS	13C-1,2,3,4,7,8-HxCDD	1.44e+06	1.26 y	0.64	33:60	183.42				78.7					
IS	13C-1,2,3,6,7,8-HxCDD	1.61e+06	1.23 y	0.86	34:06	153.97				92.3					
IS	13C-1,2,3,7,8,9-HxCDD	1.63e+06	1.26 y	0.81	34:24	165.24				77.5					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.47e+06	1.04 y	0.65	37:51	183.25				83.1					
IS	13C-OCDD	2.59e+06	0.90 y	0.58	41:07	365.06				92.2					
IS	13C-2,3,7,8-TCDF	3.69e+06	0.77 y	1.03	25:23	180.78				91.8					
IS	13C-1,2,3,7,8-PeCDF	2.92e+06	1.62 y	0.85	29:31	173.02				91.0					
IS	13C-2,3,4,7,8-PeCDF	2.63e+06	1.57 y	0.85	30:25	157.23				87.1					
IS	13C-1,2,3,4,7,8-HxCDF	1.96e+06	0.53 y	0.83	33:06	192.70				79.1					
IS	13C-1,2,3,6,7,8-HxCDF	2.23e+06	0.52 y	1.03	33:14	175.70				97.0					
IS	13C-2,3,4,6,7,8-HxCDF	2.01e+06	0.55 y	0.95	33:50	172.44				88.4					
IS	13C-1,2,3,7,8,9-HxCDF	1.87e+06	0.53 y	0.83	34:47	184.57				86.8					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.60e+06	0.43 y	0.76	36:37	172.09				92.9					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.43e+06	0.43 y	0.58	38:23	200.49				86.6					
IS	13C-OCDF	3.36e+06	0.86 y	0.69	41:20	398.55				101					
C/Up	37C1-2,3,7,8-TCDD	1.04e+06		1.20	26:11	71.867				100					
RS/RT	13C-1,2,3,4-TCDD	2.40e+06	0.81 y	1.00	25:36	198.75				90.4					
RS	13C-1,2,3,4-TCDF	3.92e+06	0.81 y	1.00	24:09	198.75					Integrations	Reviewed			
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.43e+06	0.52 y	1.00	33:31	198.75					by <u>DB</u>	by <u>CT</u>			
											Analyst: <u>DB</u>	Analyst: <u>CT</u>			
											Date: <u>12/2/19</u>	Date: <u>12/03/19</u>			

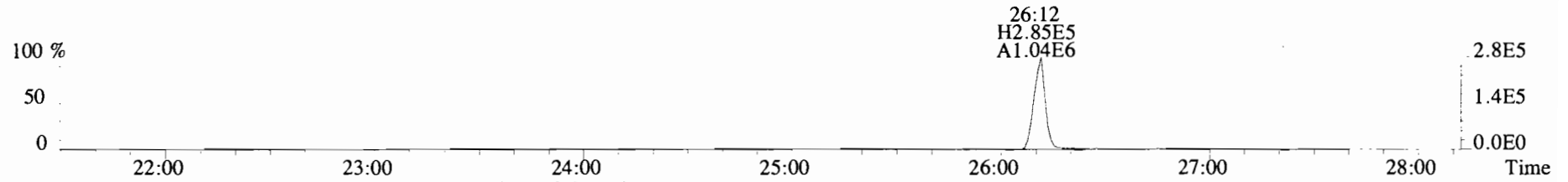
File:191127D1 #1-492 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



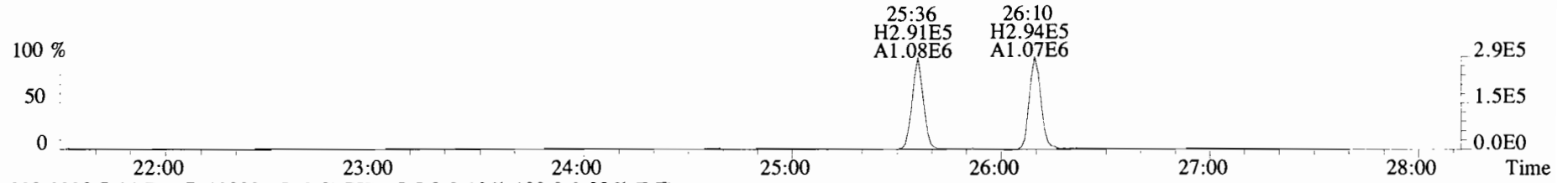
321.8936 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



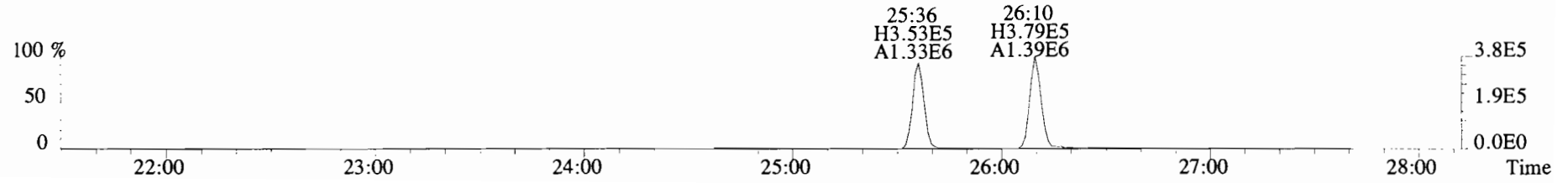
327.8847 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



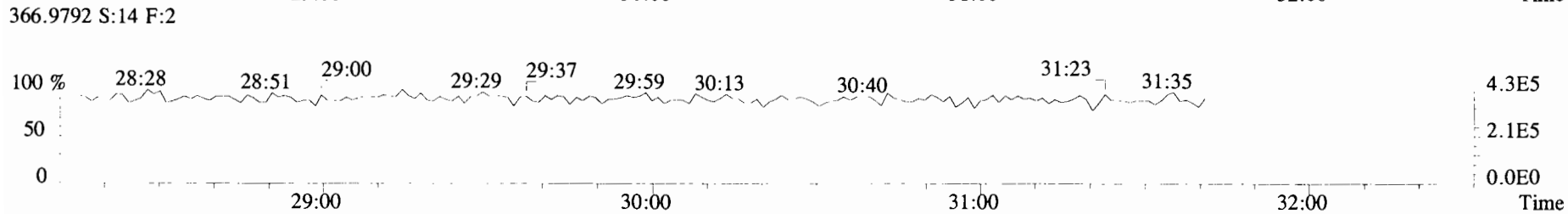
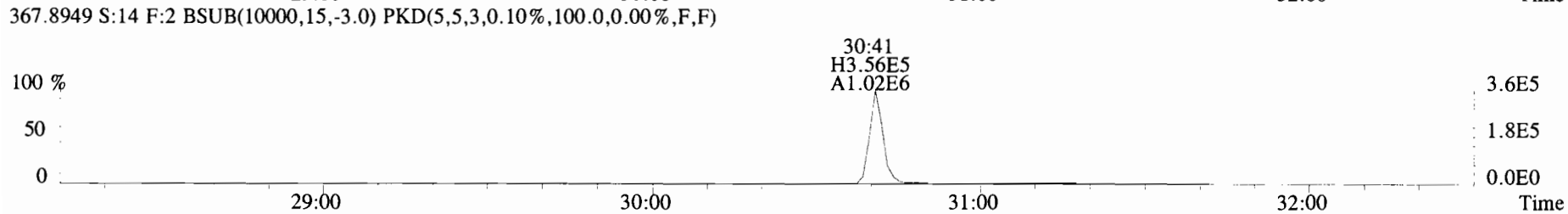
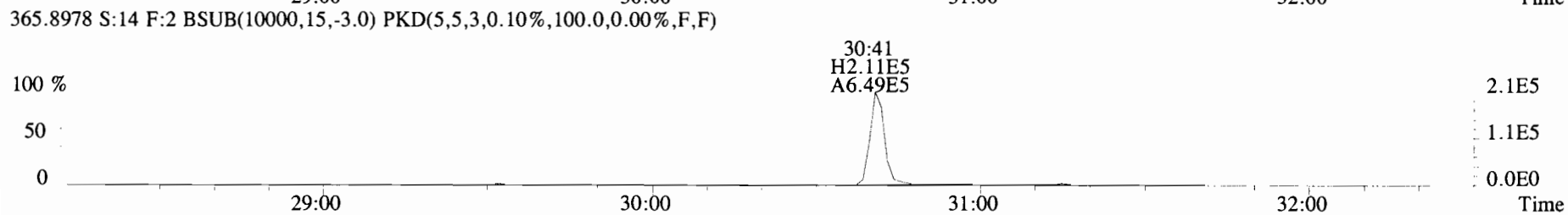
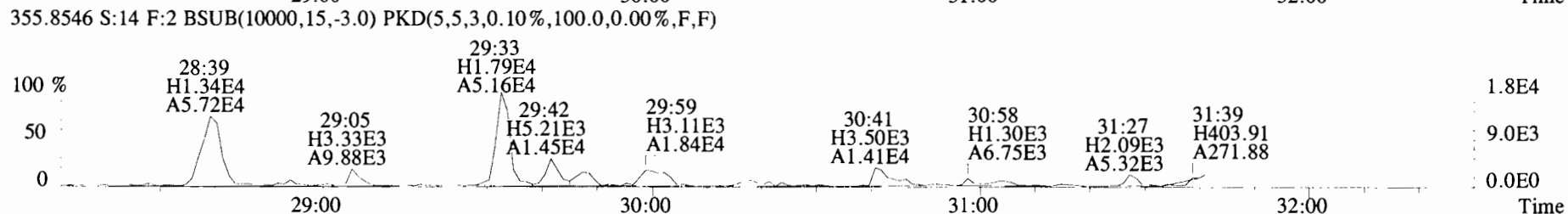
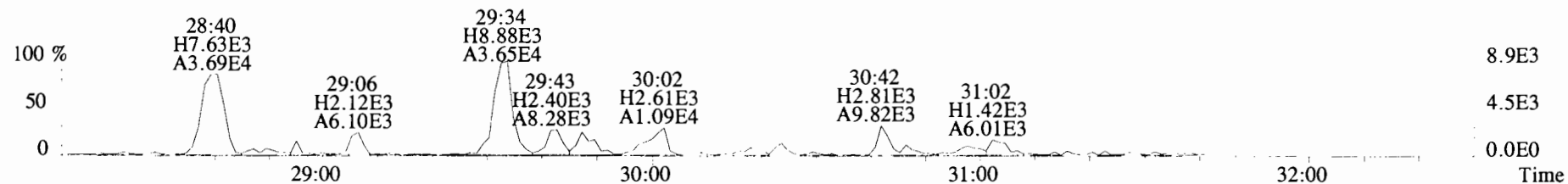
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



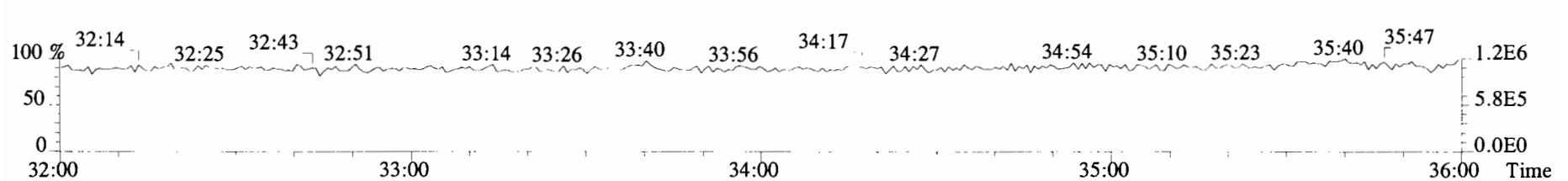
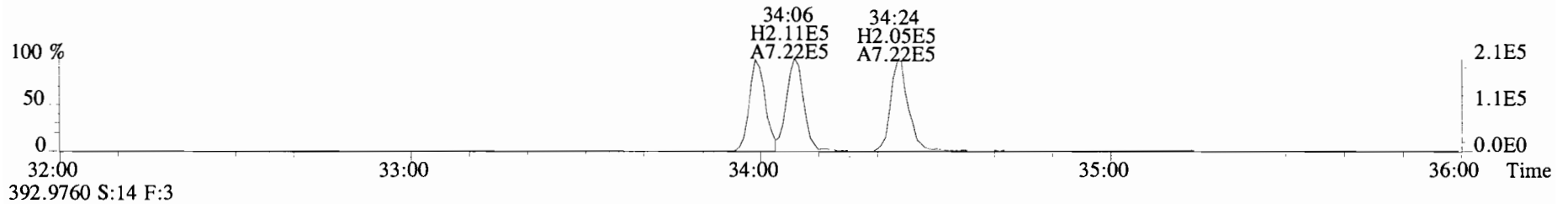
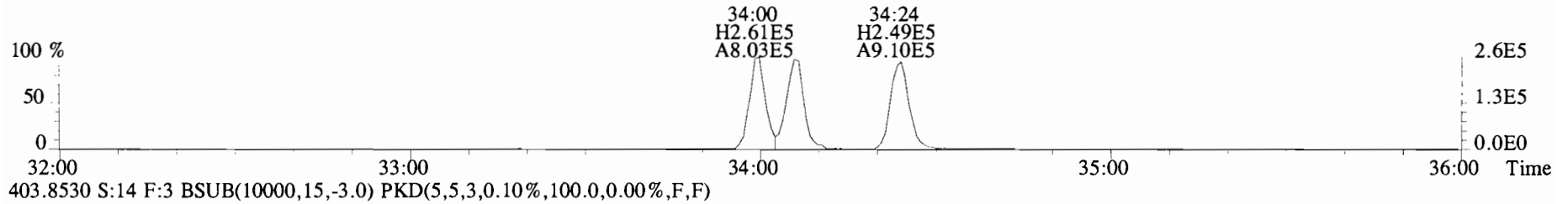
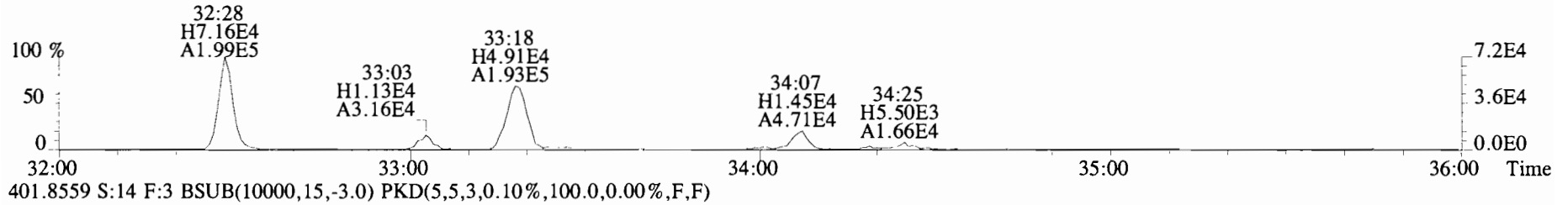
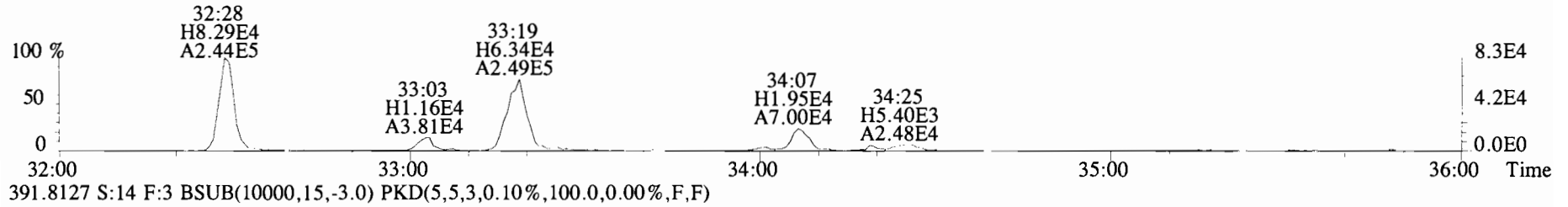
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



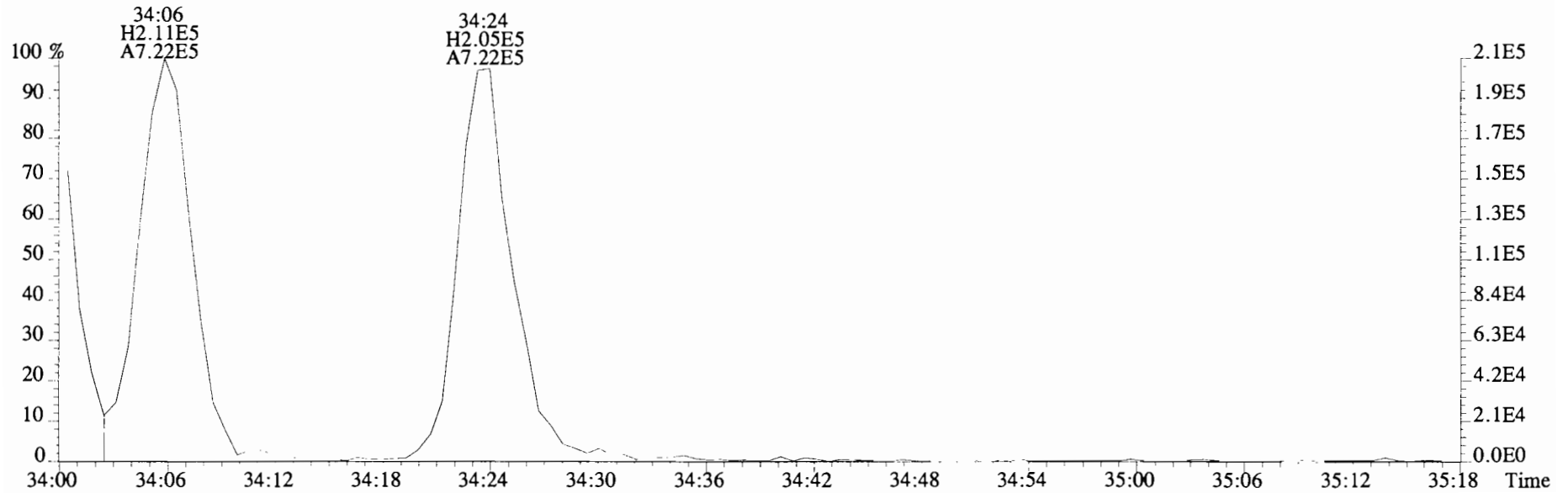
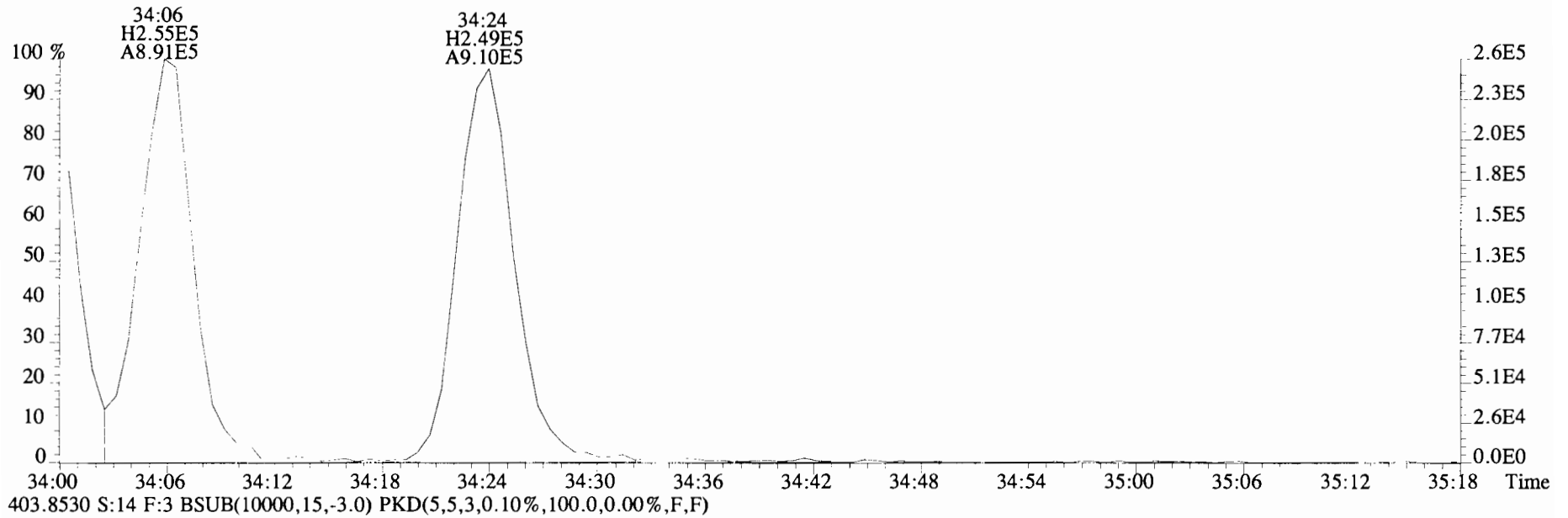
File:191127D1 #1-211 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



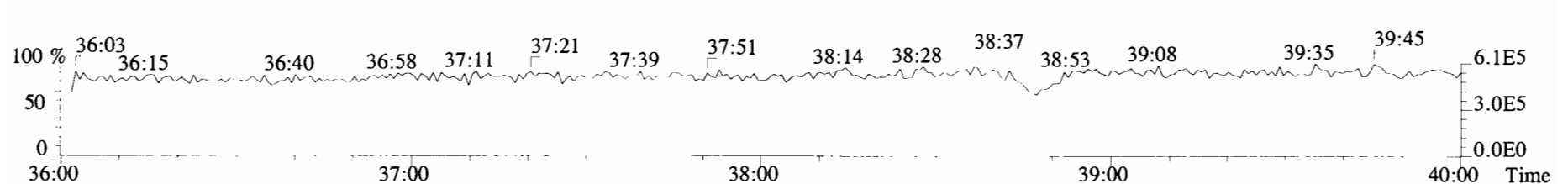
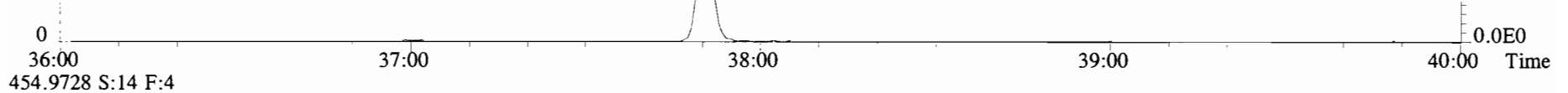
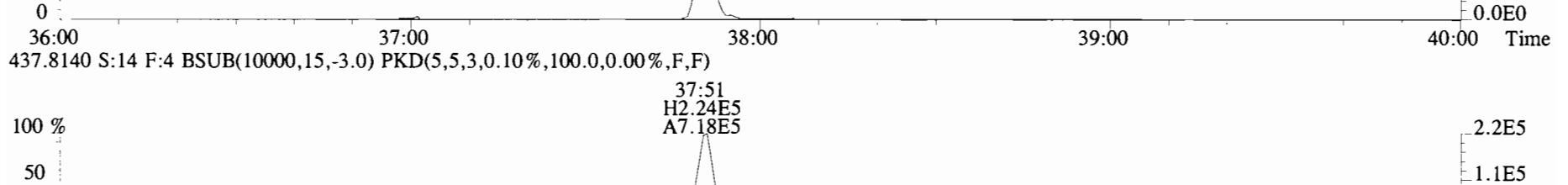
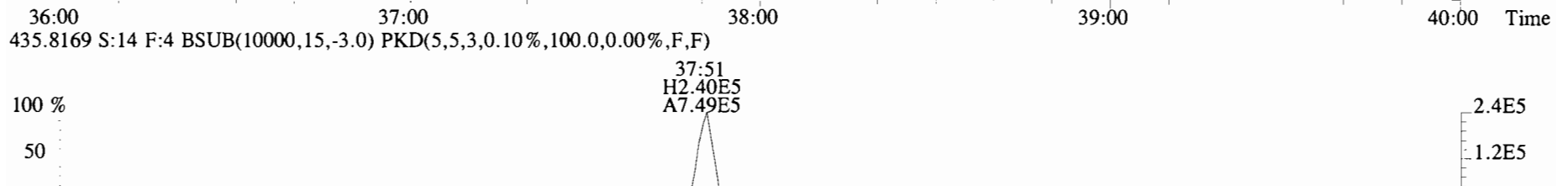
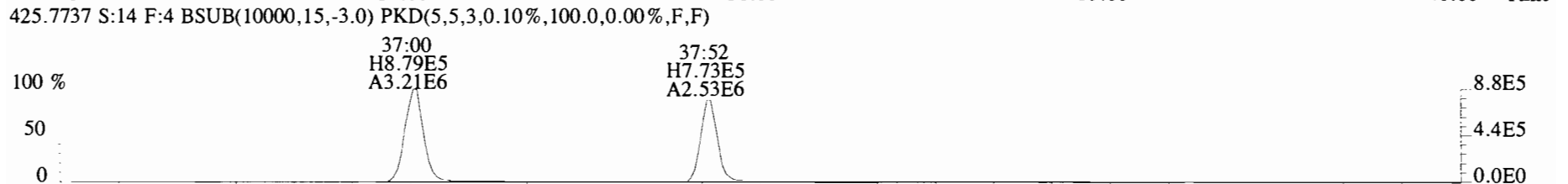
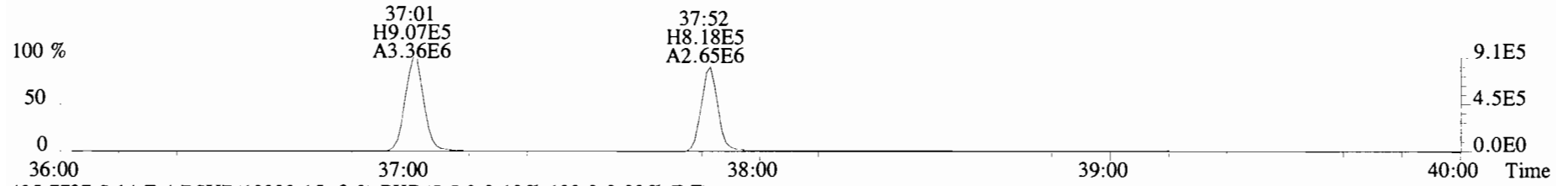
File:191127D1 #1-384 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



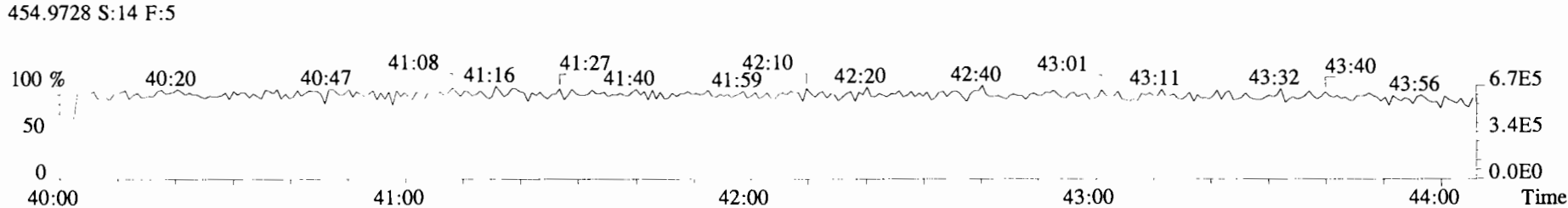
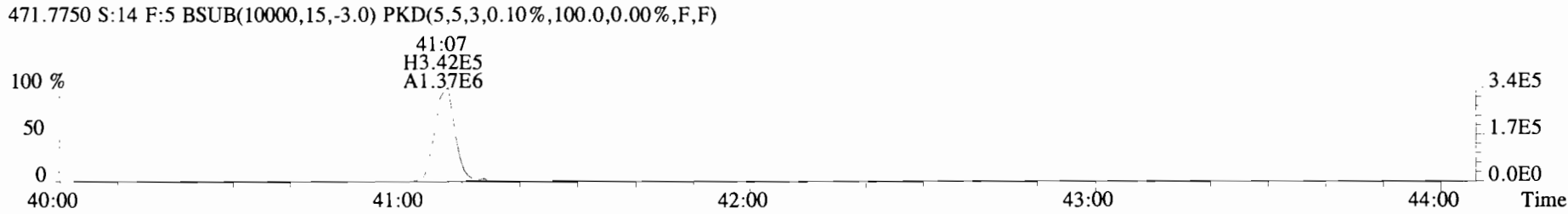
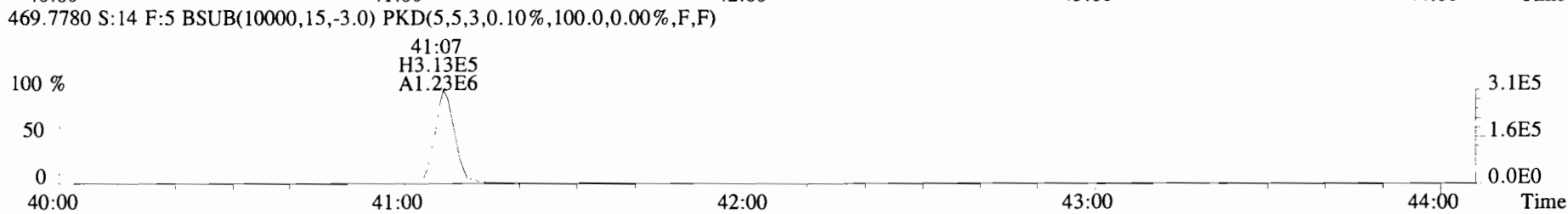
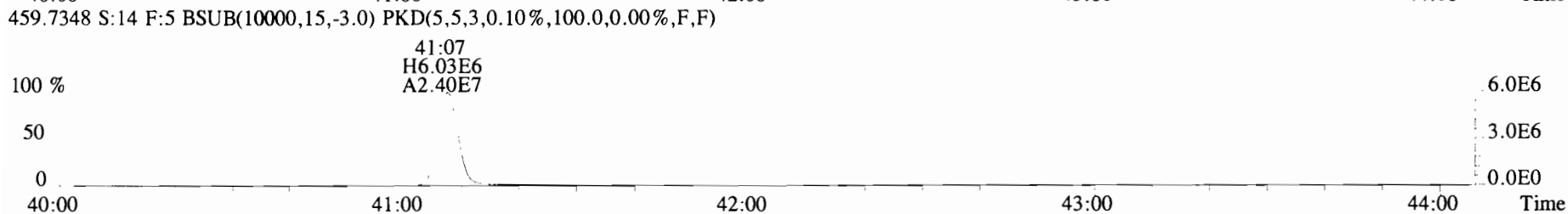
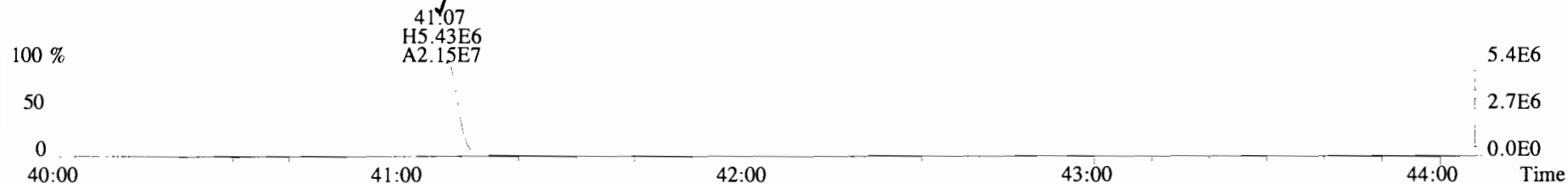
File:191127D1 #1-384 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE2@5X PDI-0955C-B-04-06-191002 1:5 10.0635 Exp:OCDF
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



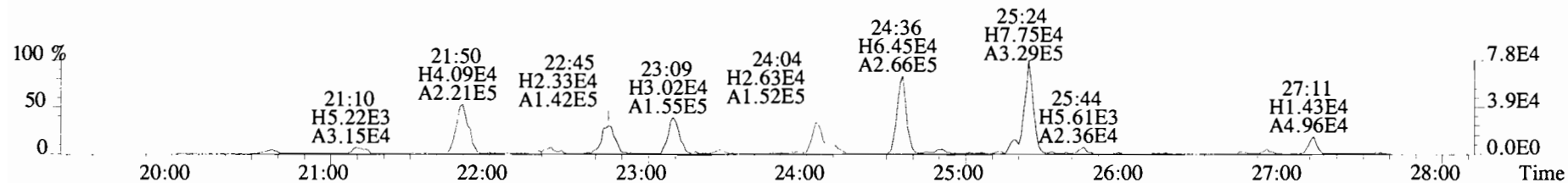
File:191127D1 #1-356 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



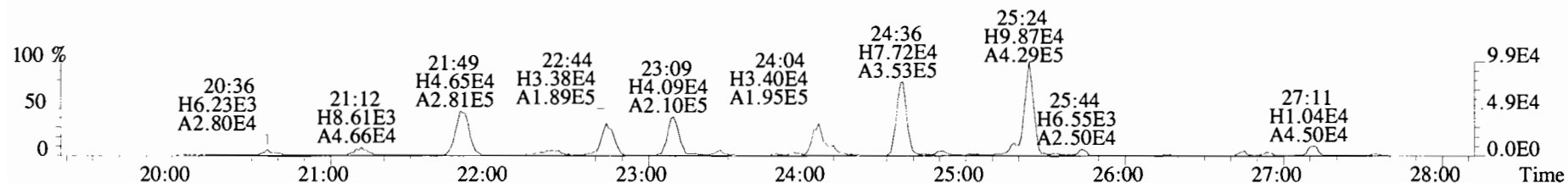
File:191127D1 #1-431 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



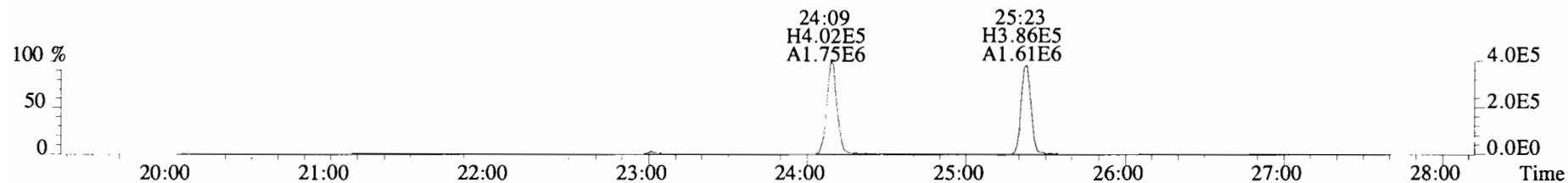
File:191127D1 #1-492 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDf
 303.9016 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



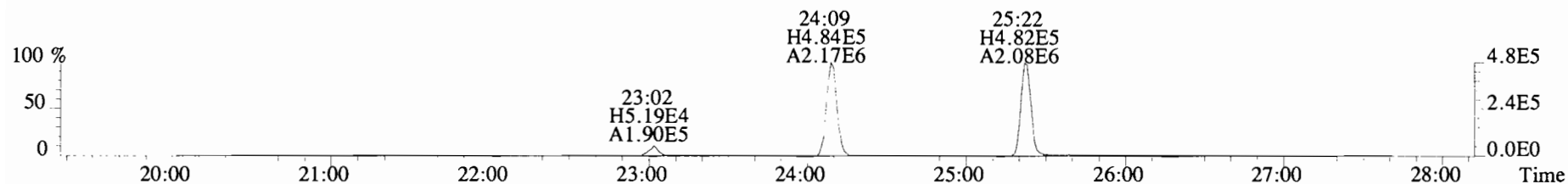
305.8987 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



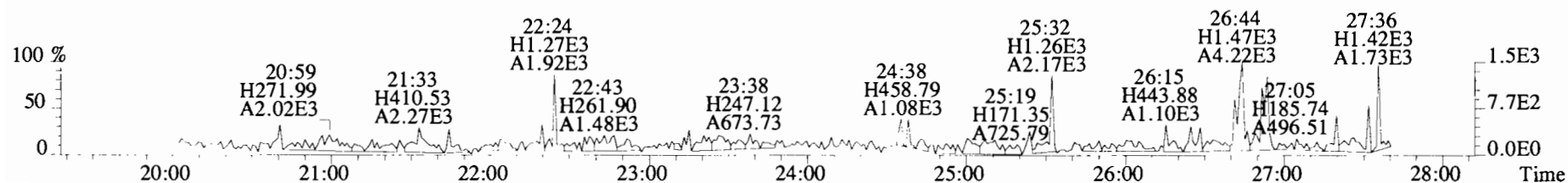
315.9419 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



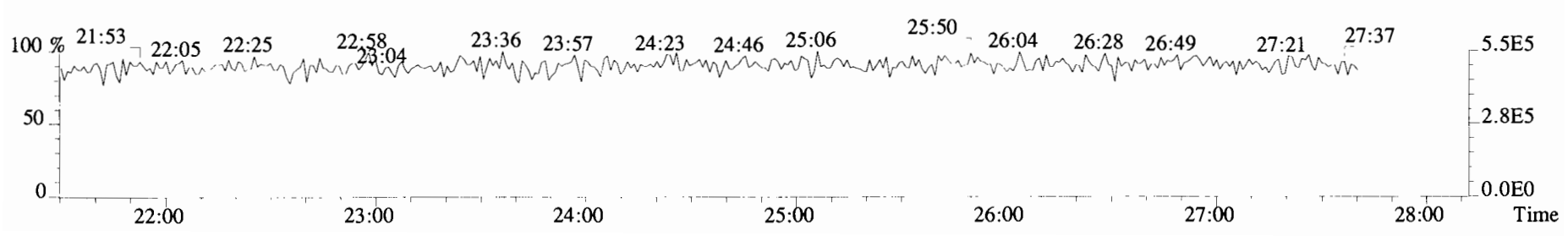
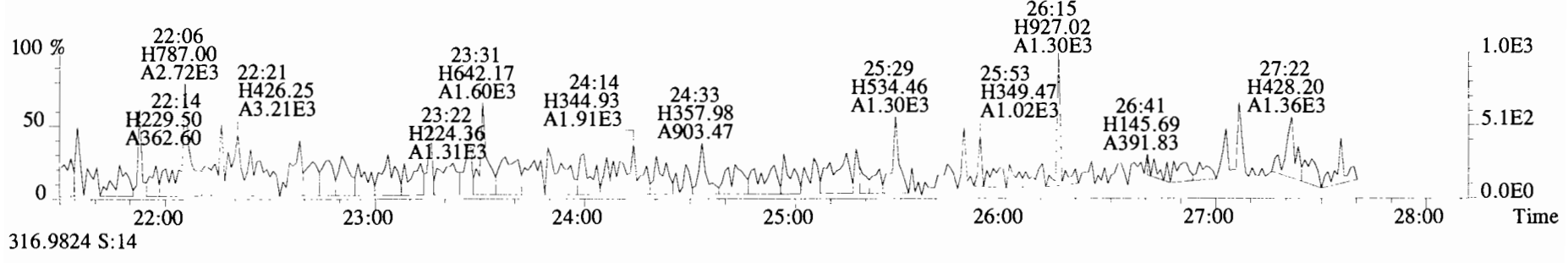
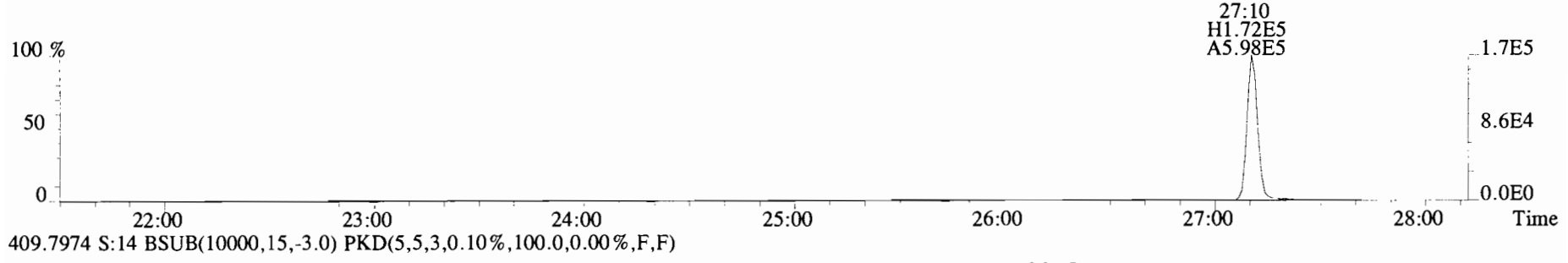
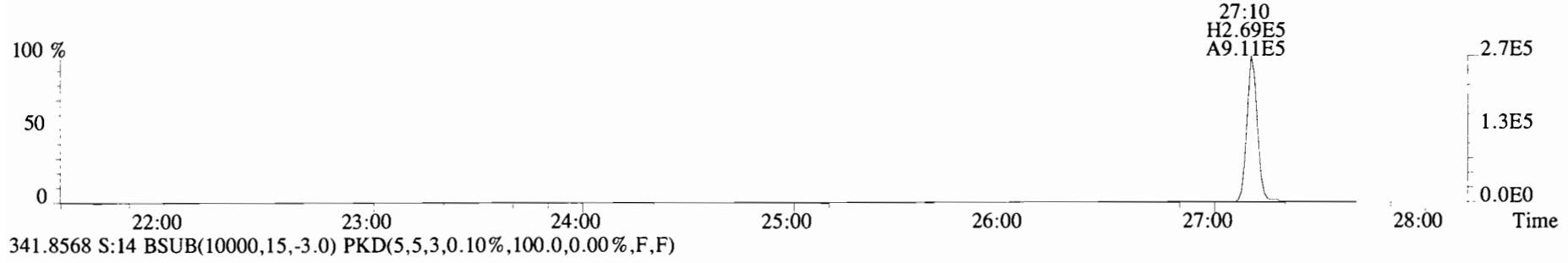
317.9389 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



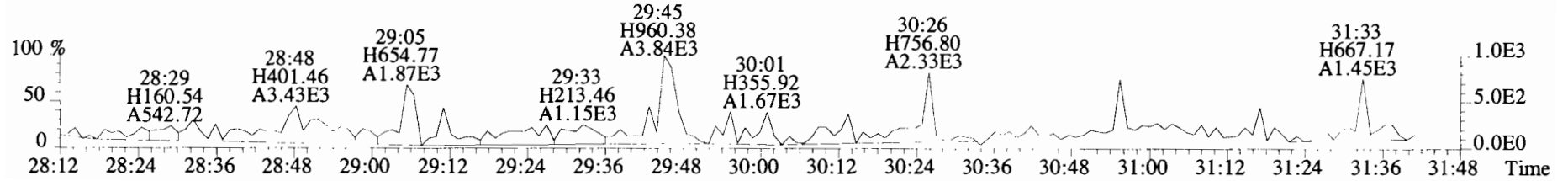
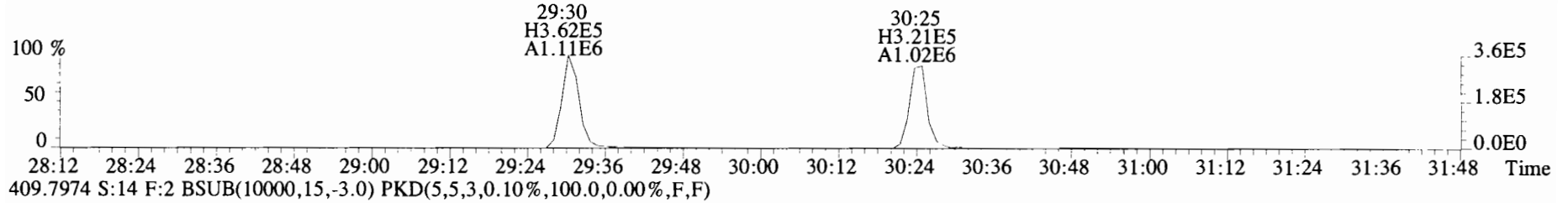
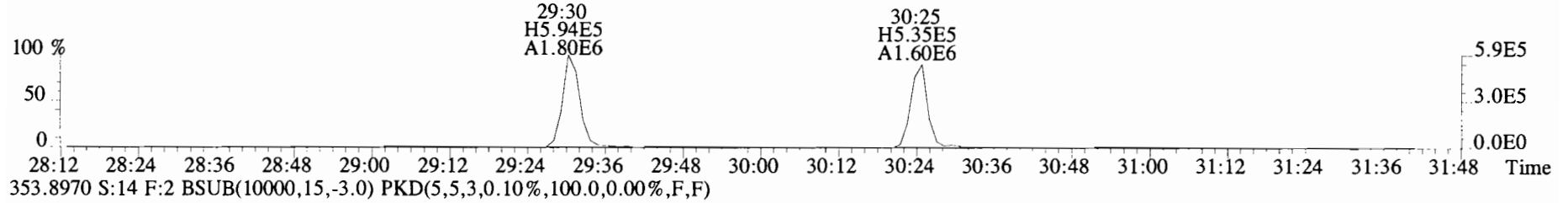
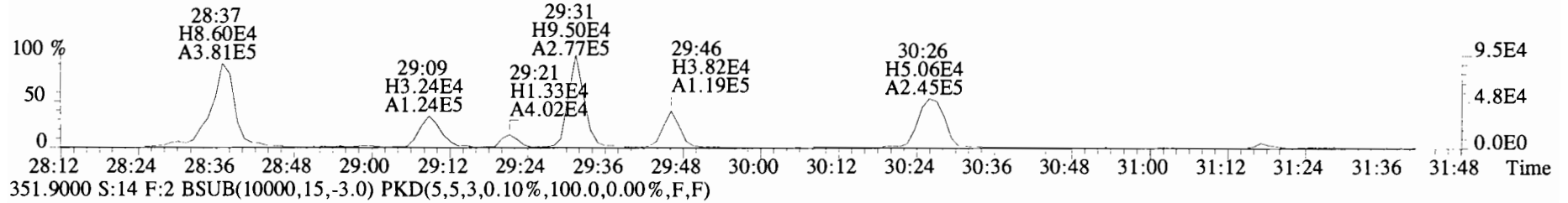
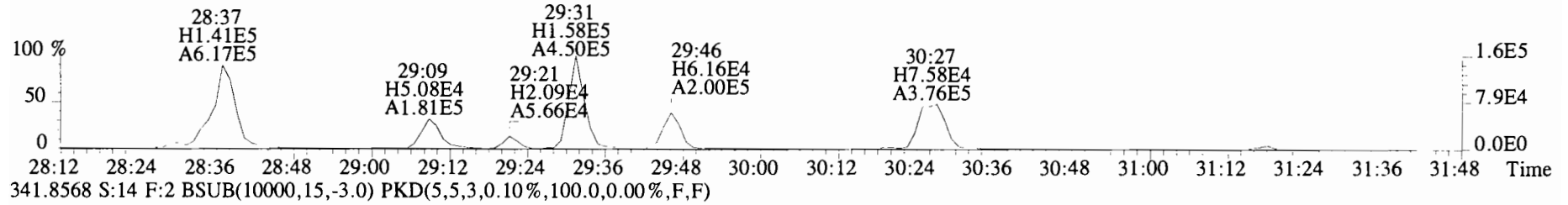
375.8364 S:14 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



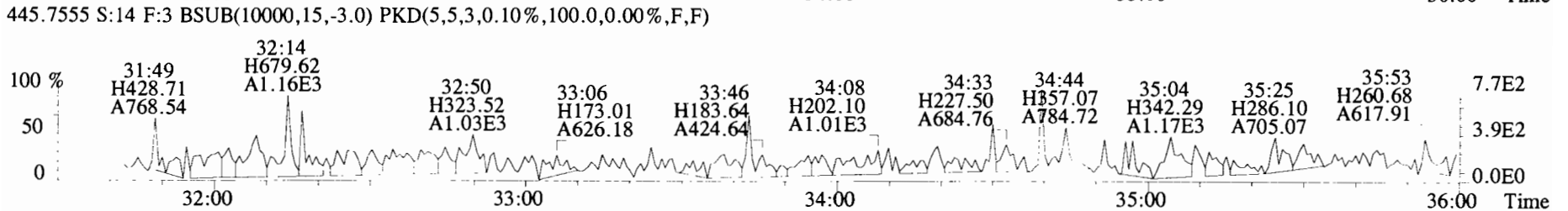
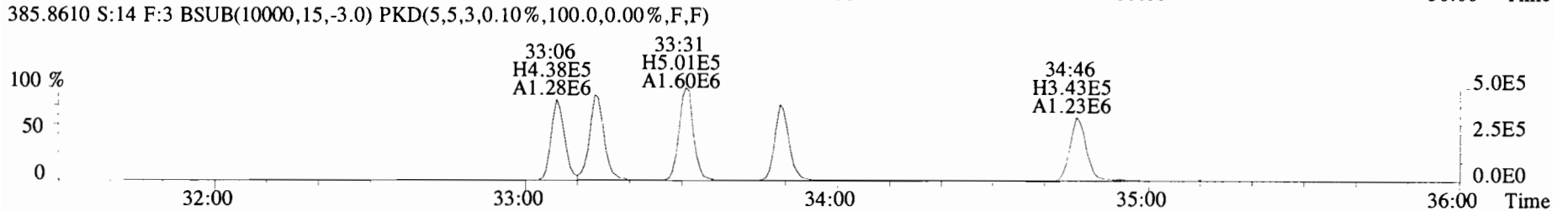
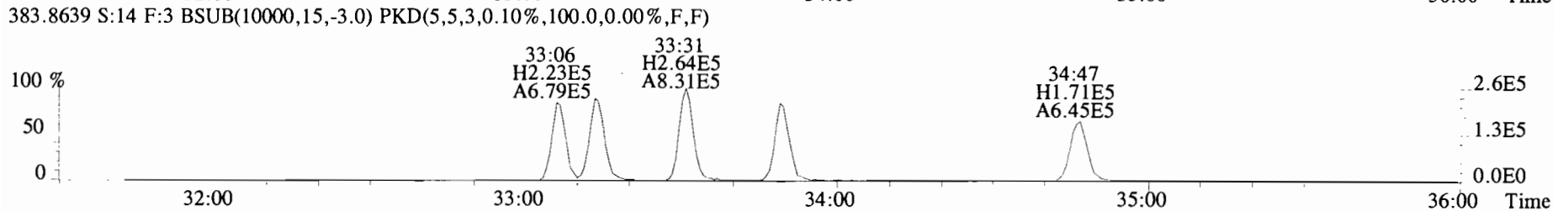
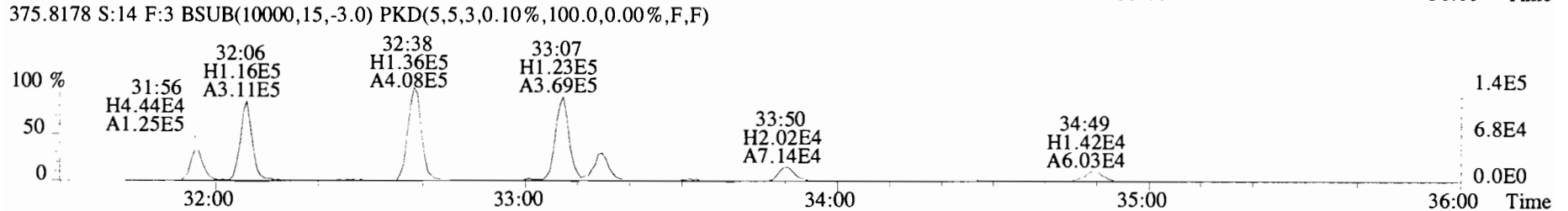
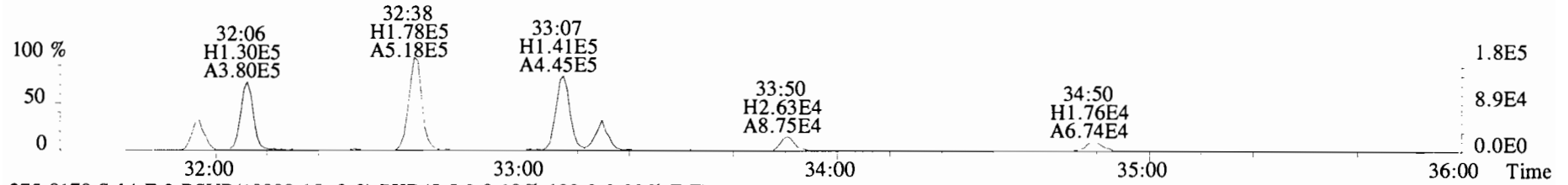
File:191127D1 #1-492 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



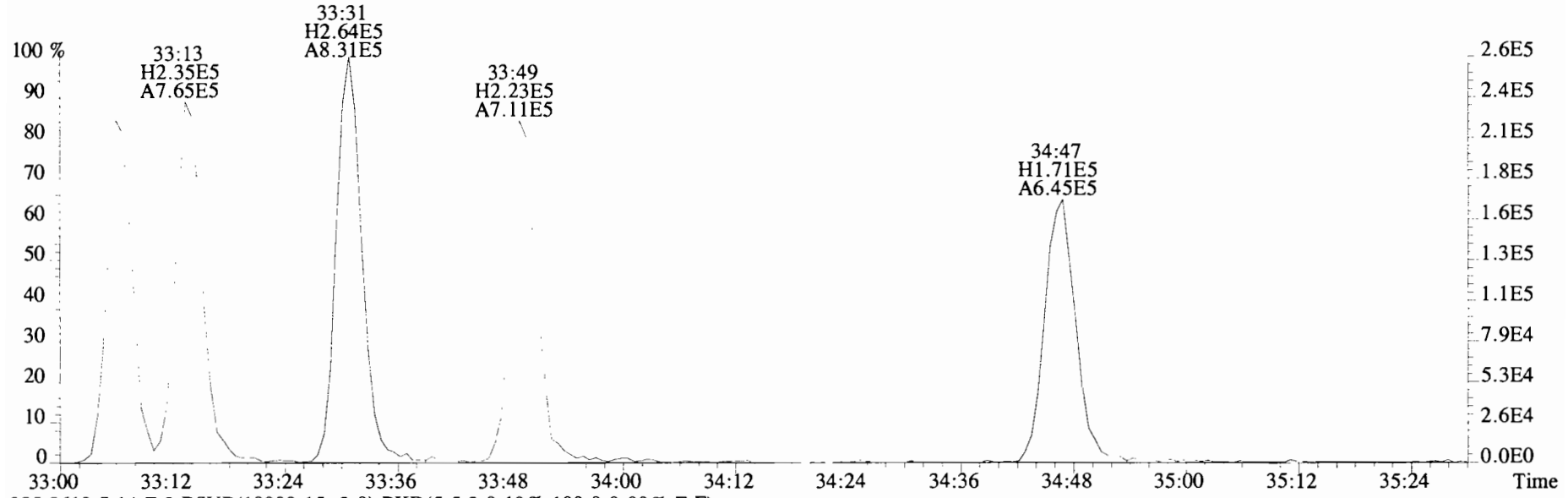
File:191127D1 #1-211 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



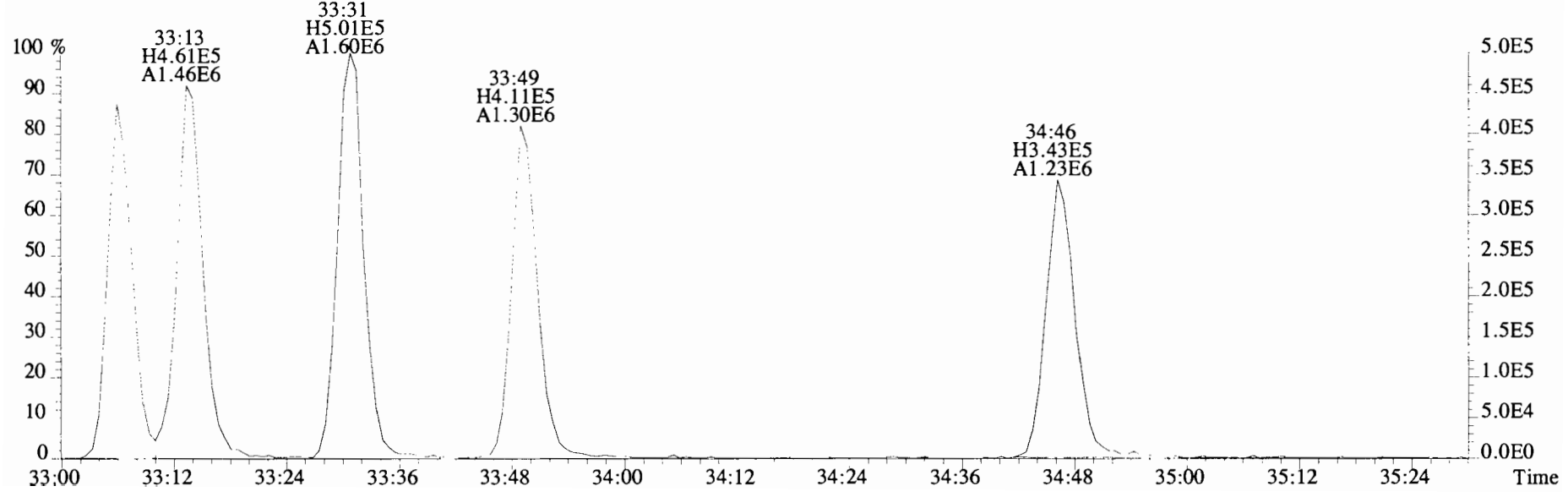
File:191127D1 #1-384 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



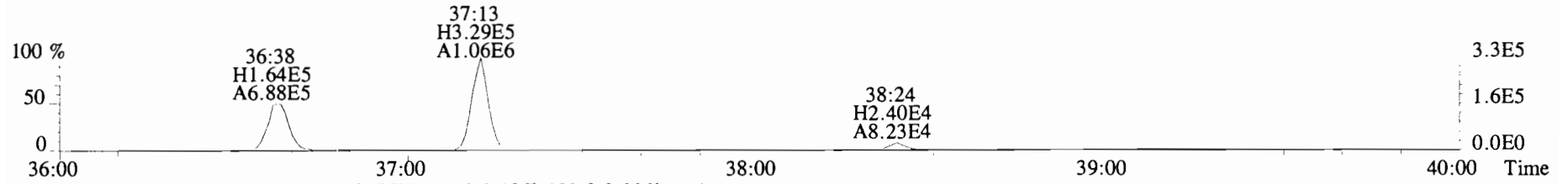
File:191127D1 #1-384 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCD£
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



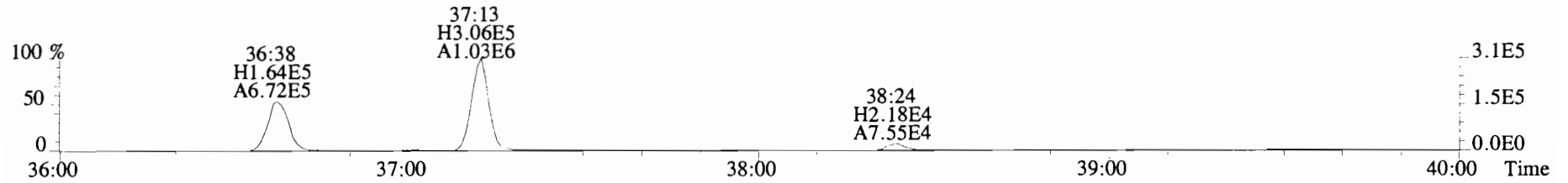
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



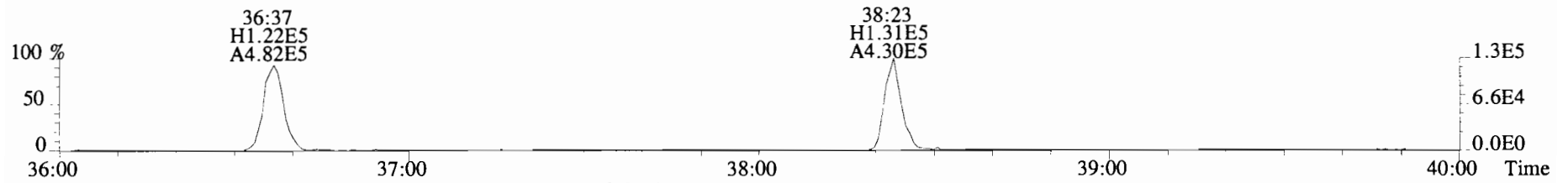
File:191127D1 #1-356 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDF
 407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



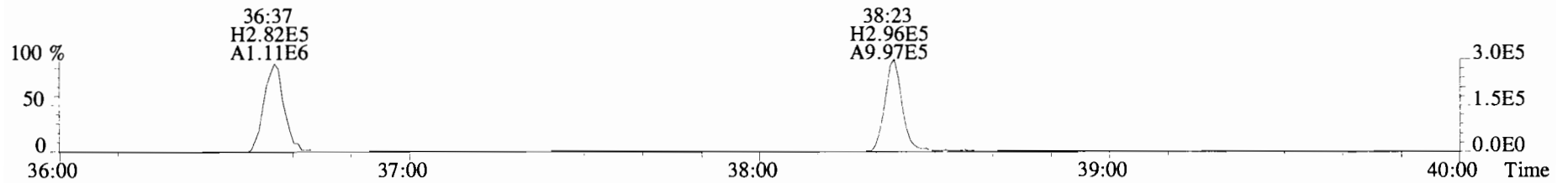
409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



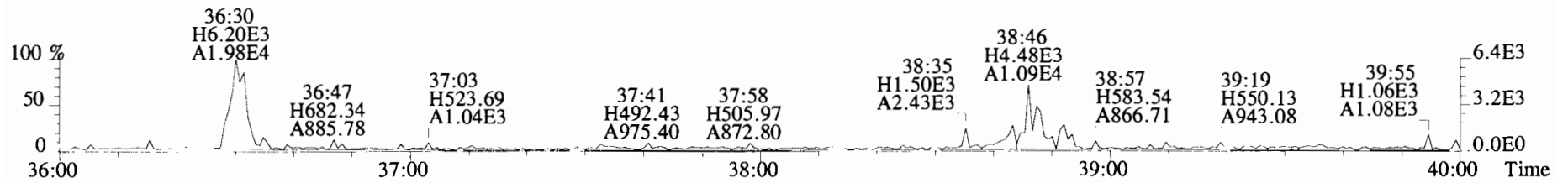
417.8253 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



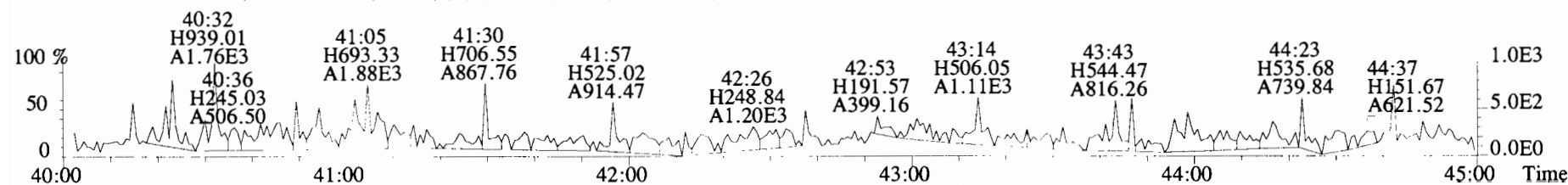
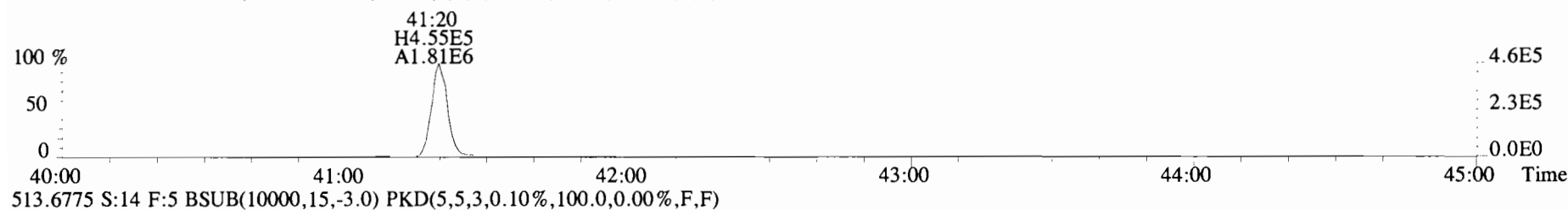
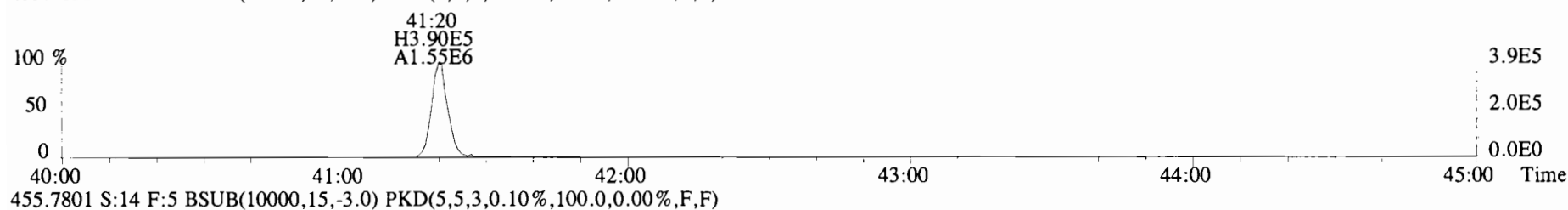
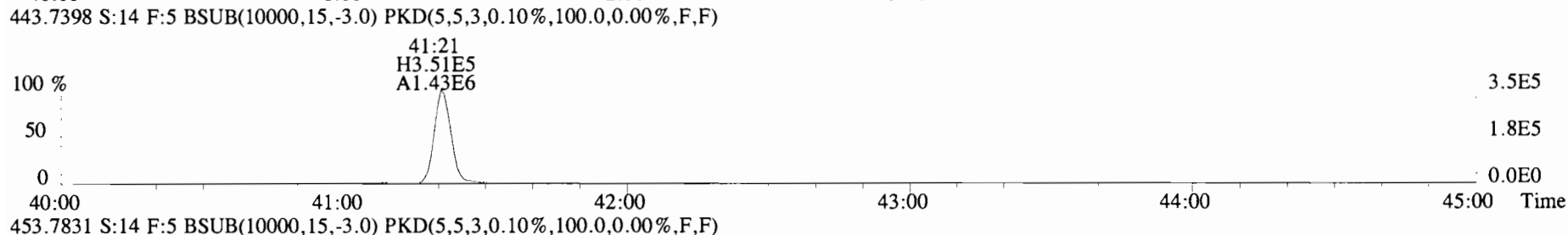
419.8220 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191127D1 #1-431 Acq:28-NOV-2019 02:15:30 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-17RE2@5X PDI-095SC-B-04-06-191002 1:5 10.0635 Exp:OCDf
 441.7428 S:14 F:5 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-095SC-B-06-08-191071 Filename: 191120D1 S:11 Acq:20-NOV-19 21:58:32
 Lab ID: 1903565-18RE2 GC Column ID: ZB-SMS ICal: 1613VG7-10-9-19 wt/vol:10.027 ✓

ConCal: ST191120D1-1
 EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	2.65e+04	0.78 y	0.91	26:11	0.65236		* 2.5		*	Total Tetra-Dioxins	10.7	12.8	*	*	
1,2,3,7,8-PeCDD	7.53e+04	0.55 y	0.90	30:42	2.3251		* 2.5		*	Total Penta-Dioxins	38.5	39.6	*	*	
1,2,3,4,7,8-HxCDD	4.55e+04	1.03 n	1.10	34:00	1.4951		* 2.5		*	Total Hexa-Dioxins	181	183	*	*	
1,2,3,6,7,8-HxCDD	5.55e+05	1.20 y	0.94	34:06	19.178		* 2.5		*	Total Hepta-Dioxins	1070	1070	*	*	
1,2,3,7,8,9-HxCDD	1.69e+05	1.41 y	0.96	34:24	5.8254		* 2.5		*	Total Tetra-Furans	104	105	*	*	*P
1,2,3,4,6,7,8-HpCDD	1.15e+07	1.01 y	0.98	37:51	458.59		* 2.5		*	Total Penta-Furans	236.34	237.49	*	*	*P
OCDD	1.19e+08	0.90 y	0.96	41:07	6153.9	E *	* 2.5		*	Total Hexa-Furans	444	444	*	*	*P
2,3,7,8-TCDF	1.01e+05	0.75 y	0.95	25:26	1.7142	OK	* 2.5		*	Total Hepta-Furans	1050	1060	*	*	*
1,2,3,7,8-PeCDF	1.13e+05	1.52 y	0.96	29:31	2.1608		* 2.5		*						
2,3,4,7,8-PeCDF	2.47e+05	1.70 y	1.01	30:24	4.5254		* 2.5		*						
1,2,3,4,7,8-HxCDF	4.99e+05	1.18 y	1.18	33:07	11.405		* 2.5		*						
1,2,3,6,7,8-HxCDF	1.13e+06	1.22 y	1.07	33:14	25.642		* 2.5		*						
2,3,4,6,7,8-HxCDF	7.22e+05	1.23 y	1.11	33:50	17.376		* 2.5		*						
1,2,3,7,8,9-HxCDF	5.99e+04	1.08 y	1.06	34:47	1.6745		* 2.5		*	* see dilution					
1,2,3,4,6,7,8-HpCDF	1.75e+07	0.99 y	1.13	36:37	563.28		* 2.5		*						
1,2,3,4,7,8,9-HpCDF	2.08e+05	0.88 n	1.28	38:23	6.7448		* 2.5		*						
OCDF	9.12e+06	0.88 y	0.95	41:21	390.90		* 2.5		*						
IS	13C-2,3,7,8-TCDD	8.94e+06	0.78 y	1.10	26:11	189.96				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	7.16e+06	0.62 y	0.88	30:41	189.10				95.2					
IS	13C-1,2,3,4,7,8-HxCDD	5.51e+06	1.30 y	0.64	33:59	192.00				94.8					
IS	13C-1,2,3,6,7,8-HxCDD	6.15e+06	1.27 y	0.86	34:06	160.62				96.3					
IS	13C-1,2,3,7,8,9-HxCDD	6.02e+06	1.26 y	0.81	34:24	166.73				80.5					
IS	13C-1,2,3,4,6,7,8-HpCDD	5.12e+06	1.06 y	0.65	37:51	174.92				83.6					
IS	13C-OCDD	8.04e+06	0.89 y	0.58	41:07	310.03				87.7					
IS	13C-2,3,7,8-TCDF	1.23e+07	0.78 y	1.03	25:25	177.76				77.7	*				
IS	13C-1,2,3,7,8-PeCDF	1.09e+07	1.61 y	0.85	29:31	190.38				89.1					
IS	13C-2,3,4,7,8-PeCDF	1.07e+07	1.60 y	0.85	30:24	189.09				95.5					
IS	13C-1,2,3,4,7,8-HxCDF	7.42e+06	0.53 y	0.83	33:06	199.50				94.8					
IS	13C-1,2,3,6,7,8-HxCDF	8.21e+06	0.52 y	1.03	33:14	177.49				100					
IS	13C-2,3,4,6,7,8-HxCDF	7.44e+06	0.52 y	0.95	33:49	174.47				89.0					
IS	13C-1,2,3,7,8,9-HxCDF	6.72e+06	0.51 y	0.83	34:47	181.43				87.5					
IS	13C-1,2,3,4,6,7,8-HpCDF	5.49e+06	0.43 y	0.76	36:37	162.04				91.0					
IS	13C-1,2,3,4,7,8,9-HpCDF	4.81e+06	0.42 y	0.58	38:23	185.07				81.2					
IS	13C-OCDF	9.83e+06	0.88 y	0.69	41:20	318.79				92.8					
C/Up	37C1-2,3,7,8-TCDD	3.87e+06		1.20	26:12	75.305				79.9					
RS/RT	13C-1,2,3,4-TCDD	8.57e+06	0.78 y	1.00	25:38	199.45									
RS	13C-1,2,3,4-TCDF	1.34e+07	0.79 y	1.00	24:12	199.45									
RS/RT	13C-1,2,3,4,6,9-HxCDF	8.92e+06	0.51 y	1.00	33:31	199.45									

Integrations
 by DB
 Analyst: DB
 Reviewed
 by CT
 Analyst: CT
 Date: 11/26/19
 Date: 12/03/19

Totals class: TCDD EMPC

Entry #: 19

Run: 12 File: 191120D1 S: 11 I: 1 F: 1
 Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 12.836

Unnamed Concentration: 12.183

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name	
22:50	5.507e+04	7.279e+04	0.76	y	1.279e+05	3.1525	
23:11	1.980e+04	2.976e+04	0.67	y	4.956e+04	1.2220	
23:36	1.526e+04	1.968e+04	0.78	y	3.494e+04	0.86150	
24:19	6.840e+03	1.097e+04	0.62	n	1.572e+04	0.38767	
24:32	2.679e+04	3.303e+04	0.81	y	5.982e+04	1.4749	
24:43	3.225e+04	3.880e+04	0.83	y	7.105e+04	1.7519	
24:55	6.870e+03	1.111e+04	0.62	n	1.579e+04	0.38935	
25:08	1.094e+04	9.223e+03	1.19	n	1.633e+04	0.40251	
25:17	1.466e+04	1.525e+04	0.96	n	2.700e+04	0.66559	
25:36	8.022e+03	7.510e+03	1.07	n	1.329e+04	0.32774	
25:57	1.504e+04	1.714e+04	0.88	y	3.218e+04	0.79336	
26:11	1.158e+04	1.488e+04	0.78	y	2.646e+04	0.65236	2,3,7,8-TCDD
26:29	9.900e+03	1.397e+04	0.71	y	2.387e+04	0.58853	
27:03	2.763e+03	3.952e+03	0.70	y	6.716e+03	0.16558	

Totals class: PeCDD EMPC

Entry #: 21

Run: 12 File: 191120D1 S: 11 I: 1 F: 2
 Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 39.566

Unnamed Concentration: 37.241

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:39	1.844e+05	2.862e+05	0.64	y	4.705e+05	14.523
29:05	1.997e+04	3.404e+04	0.59	y	5.401e+04	1.6670
29:33	1.019e+05	1.469e+05	0.69	y	2.487e+05	7.6776
29:42	4.082e+04	6.229e+04	0.66	y	1.031e+05	3.1824
29:47	3.512e+04	5.585e+04	0.63	y	9.097e+04	2.8080
30:00	6.075e+04	8.662e+04	0.70	y	1.474e+05	4.5485
30:18	9.607e+03	1.523e+04	0.63	y	2.484e+04	0.76664
30:42	2.682e+04	4.851e+04	0.55	y	7.533e+04	2.3251
30:46	1.189e+04	2.056e+04	0.58	y	3.245e+04	1.0017
31:03	1.569e+04	2.119e+04	0.74	n	3.453e+04	1.0659

Totals class: HxCDD EMPC

Entry #: 23

Run: 12 File: 191120D1 S: 11 I: 1 F: 3

Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 182.72

Unnamed Concentration: 156.219

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
32:28	1.146e+06	9.097e+05	1.26	y	2.056e+06	70.151
33:02	1.435e+05	1.146e+05	1.25	y	2.580e+05	8.8063
33:18	1.196e+06	9.749e+05	1.23	y	2.171e+06	74.092
33:25	3.149e+04	2.357e+04	1.34	y	5.506e+04	1.8792
34:00	2.520e+04	2.454e+04	1.03	n	4.553e+04	1.4951 1,2,3,4,7,8-HxCDD
34:06	3.029e+05	2.519e+05	1.20	y	5.548e+05	19.178 1,2,3,6,7,8-HxCDD
34:19	1.958e+04	1.822e+04	1.07	y	3.780e+04	1.2902
34:24	9.877e+04	7.016e+04	1.41	y	1.689e+05	5.8254 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 12 File: 191120D1 S: 11 I: 1 F: 4
Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 1071.3 Unnamed Concentration: 612.681

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
37:00	7.775e+06	7.621e+06	1.02	y	1.540e+07	612.68
37:51	5.802e+06	5.722e+06	1.01	y	1.152e+07	458.59 1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 12 File: 191120D1 S: 11 I: 1 F: 1
 Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 104.98 Unnamed Concentration: 103.268

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
20:42	4.437e+04	5.018e+04	0.88	y	9.455e+04	1.6086
21:16	1.133e+05	1.480e+05	0.77	y	2.614e+05	4.4467
21:54	7.289e+05	9.433e+05	0.77	y	1.672e+06	28.448
22:21	4.314e+04	5.359e+04	0.80	y	9.673e+04	1.6457
22:28	6.180e+04	7.073e+04	0.87	y	1.325e+05	2.2547
22:49	2.935e+05	3.677e+05	0.80	y	6.613e+05	11.250
23:13	4.310e+05	5.468e+05	0.79	y	9.778e+05	16.634
23:21	1.650e+04	1.465e+04	1.13	n	2.593e+04	0.44111
23:31	3.066e+04	3.691e+04	0.83	y	6.757e+04	1.1495
23:58	3.738e+04	4.500e+04	0.83	y	8.238e+04	1.4014
24:06	3.269e+05	4.285e+05	0.76	y	7.553e+05	12.850
24:14	3.363e+04	4.775e+04	0.70	y	8.138e+04	1.3845
24:39	1.176e+05	1.484e+05	0.79	y	2.660e+05	4.5257 P
24:53	2.071e+04	2.475e+04	0.84	y	4.547e+04	0.77352
25:04	1.941e+04	2.926e+04	0.66	y	4.866e+04	0.82791
25:14	2.160e+04	2.865e+04	0.75	y	5.024e+04	0.85478
25:20	3.284e+04	4.189e+04	0.78	y	7.473e+04	1.2714
25:26	4.333e+04	5.743e+04	0.75	y	1.008e+05	1.7142 2,3,7,8-TCDF
25:37	3.695e+03	6.022e+03	0.61	n	8.494e+03	0.14451
25:45	2.705e+04	3.518e+04	0.77	y	6.223e+04	1.0587
25:59	8.222e+03	1.165e+04	0.71	y	1.988e+04	0.33815
26:16	1.753e+04	1.999e+04	0.88	y	3.752e+04	0.63826
26:45	8.920e+04	1.092e+05	0.82	y	1.984e+05	3.3748 P
26:54	9.119e+04	1.235e+05	0.74	y	2.147e+05	3.6523 P
27:12	5.831e+04	7.653e+04	0.76	y	1.348e+05	2.2940

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 12 File: 191120D1 S: 11 I: 1 F: 1
Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 134.57 Unnamed Concentration: 134.573

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:11	4.397e+06	2.816e+06	1.56 y	7.213e+06	134.57

Totals class: PeCDF EMPC

Entry #: 31

Run: 12 File: 191120D1 S: 11 I: 1 F: 2
 Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 102.92

Unnamed Concentration: 96.235

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
28:29	1.044e+05	6.386e+04	1.63	y	1.682e+05	3.1387
28:37	1.574e+06	9.552e+05	1.65	y	2.529e+06	47.186
28:58	2.204e+04	1.484e+04	1.49	y	3.688e+04	0.68803
29:09	6.071e+05	3.885e+05	1.56	y	9.957e+05	18.576
29:21	3.760e+04	3.010e+04	1.25	n	6.186e+04	1.1542
29:31	6.848e+04	4.501e+04	1.52	y	1.135e+05	2.1608
29:46	2.876e+05	1.794e+05	1.60	y	4.670e+05	8.7136
30:19	2.945e+04	1.858e+04	1.58	y	4.803e+04	0.89605
30:24	1.557e+05	9.169e+04	1.70	y	2.474e+05	4.5254
30:27	4.889e+05	2.973e+05	1.64	y	7.862e+05	14.668
31:09	1.362e+04	8.759e+03	1.56	y	2.238e+04	0.41759
31:17	2.649e+04	1.618e+04	1.64	y	4.267e+04	0.79610

1,2,3,7,8-PeCDF
 P
 2,3,4,7,8-PeCDF

Totals class: HxCDF EMPC

Entry #: 33

Run: 12 File: 191120D1 S: 11 I: 1 F: 3
 Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

Total Concentration: 444.22 Unnamed Concentration: 388.118

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name	
31:56	1.261e+06	1.057e+06	1.19 y	2.317e+06	56.244	
32:05	3.047e+06	2.545e+06	1.20 y	5.592e+06	135.71	
32:27	4.938e+04	4.091e+04	1.21 y	9.029e+04	2.1913	
32:38	4.255e+06	3.579e+06	1.19 y	7.834e+06	190.13	
33:01	2.256e+04	1.853e+04	1.22 y	4.108e+04	0.99701	
33:07	2.708e+05	2.287e+05	1.18 y	4.995e+05	11.405	1,2,3,4,7,8-HxCDF
33:14	6.195e+05	5.093e+05	1.22 y	1.129e+06	25.642	1,2,3,6,7,8-HxCDF ^f
33:31	1.757e+04	1.400e+04	1.26 y	3.157e+04	0.76623	
33:50	3.983e+05	3.235e+05	1.23 y	7.218e+05	17.376	2,3,4,6,7,8-HxCDF
34:47	3.103e+04	2.884e+04	1.08 y	5.987e+04	1.6745	1,2,3,7,8,9-HxCDF
34:50	4.544e+04	4.033e+04	1.13 y	8.577e+04	2.0815	

Totals class: HpCDF EMPC

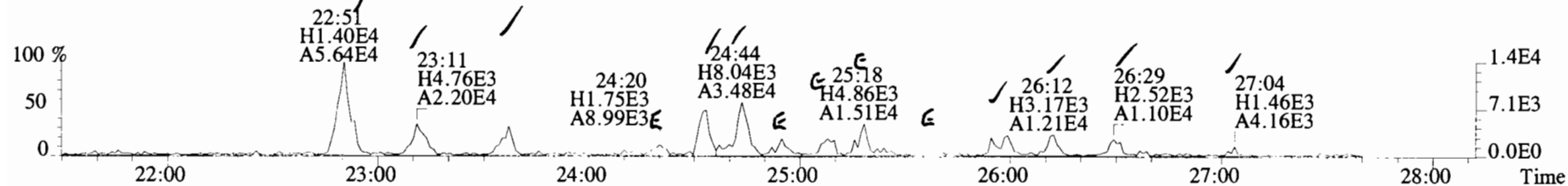
Entry #: 35

Run: 12 File: 191120D1 S: 11 I: 1 F: 4
Acquired: 20-NOV-19 21:58:32 Processed: 26-NOV-19 12:22:45

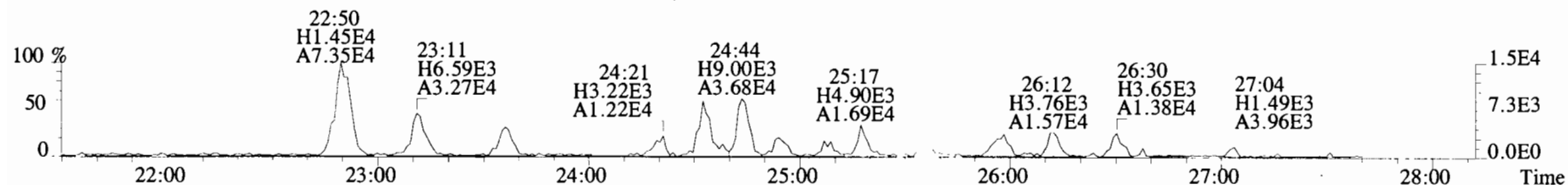
Total Concentration: 1055.9 Unnamed Concentration: 485.884

RT	m1 Resp	m2 Resp	RA		Resp Concentration	Name
36:37	8.705e+06	8.781e+06	0.99 y	1.749e-07	563.28	1,2,3,4,6,7,8-HpCDF
37:12	7.484e+06	7.496e+06	1.00 y	1.498e-07	485.88	
38:23	1.062e+05	1.207e+05	0.88 n	2.083e-05	6.7448	1,2,3,4,7,8,9-HpCDF

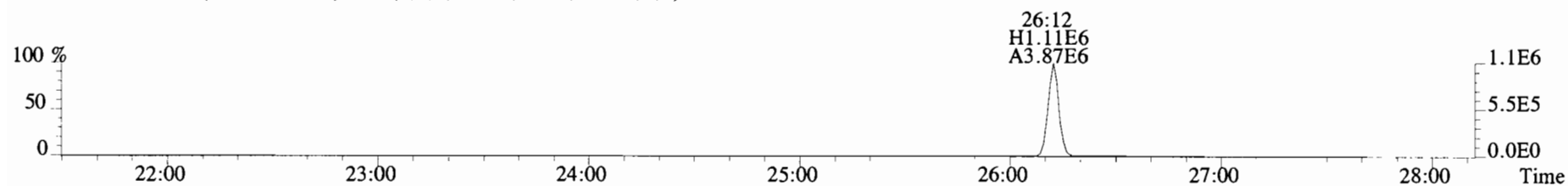
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Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



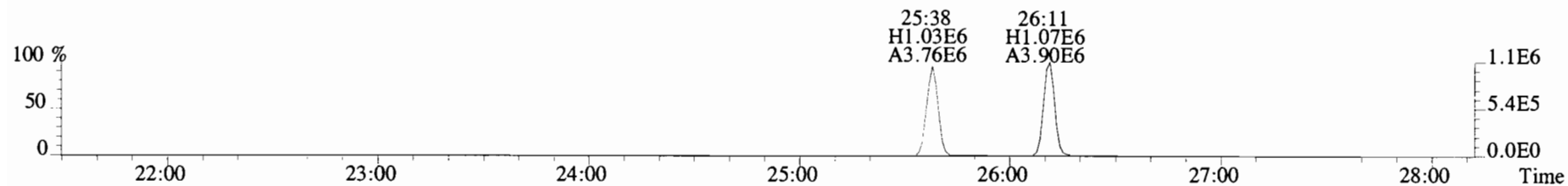
321.8936 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



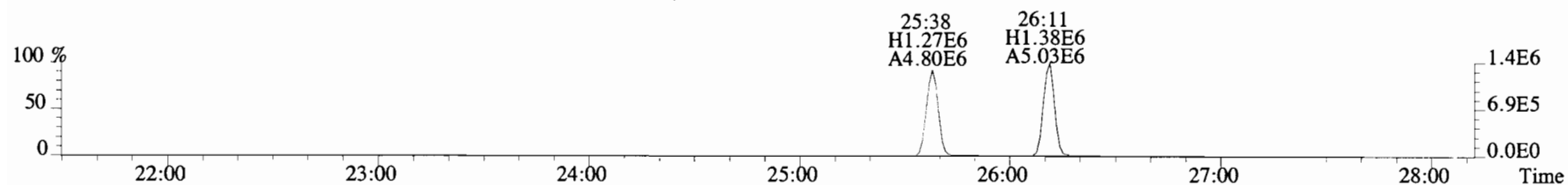
327.8847 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



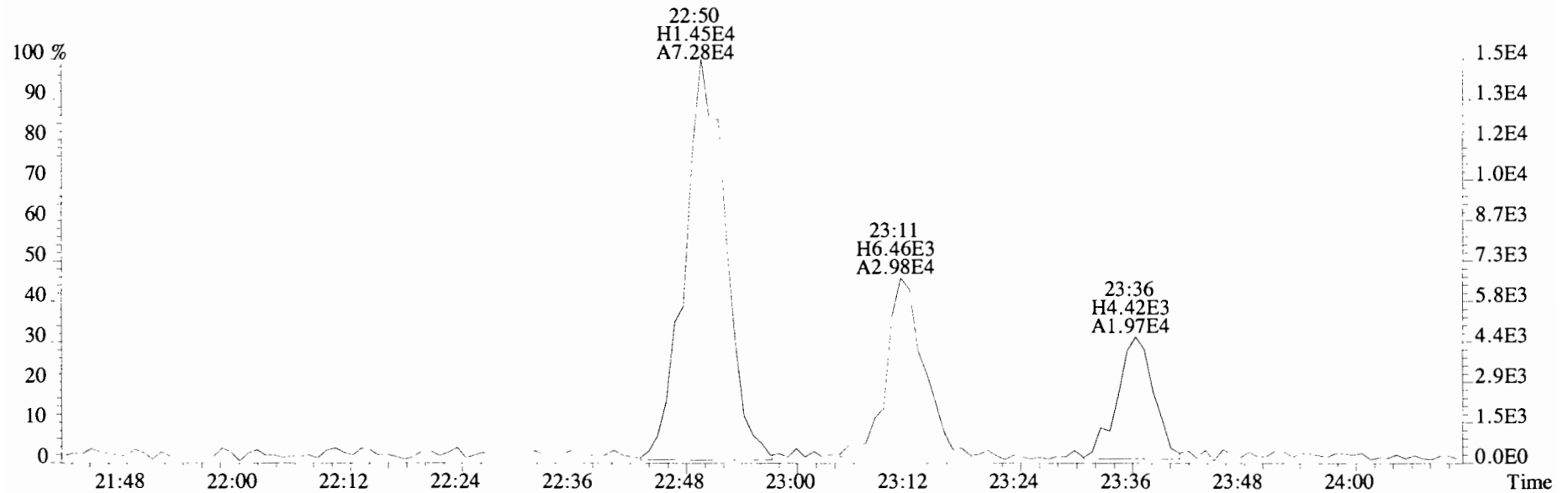
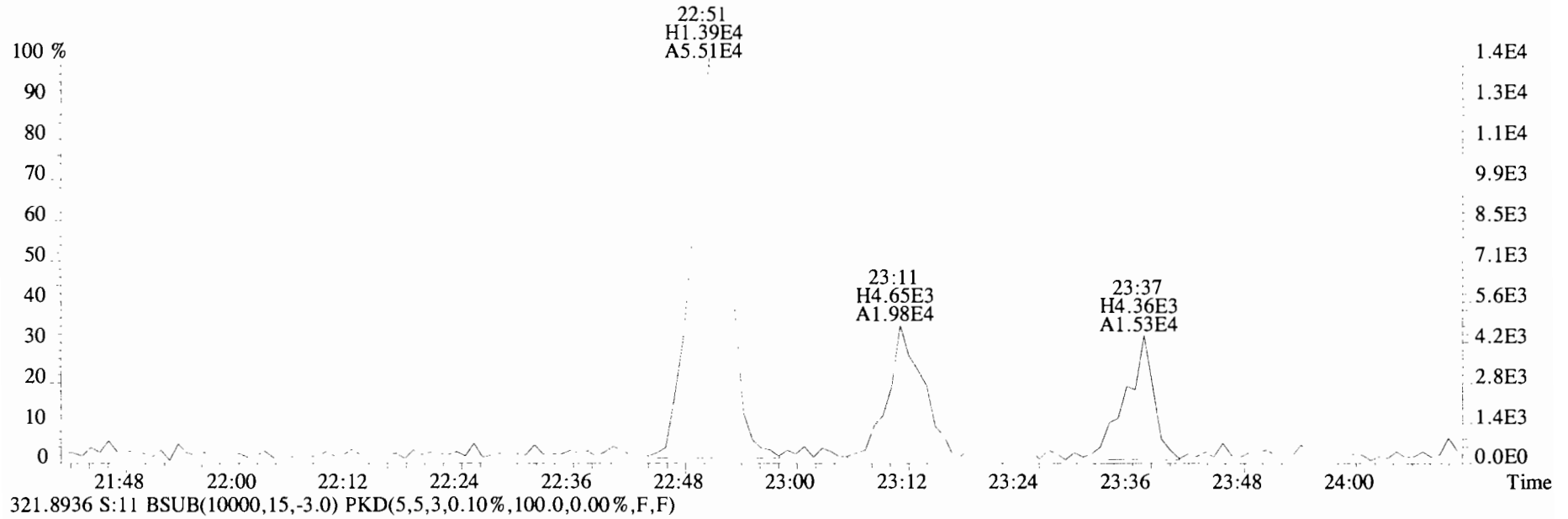
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



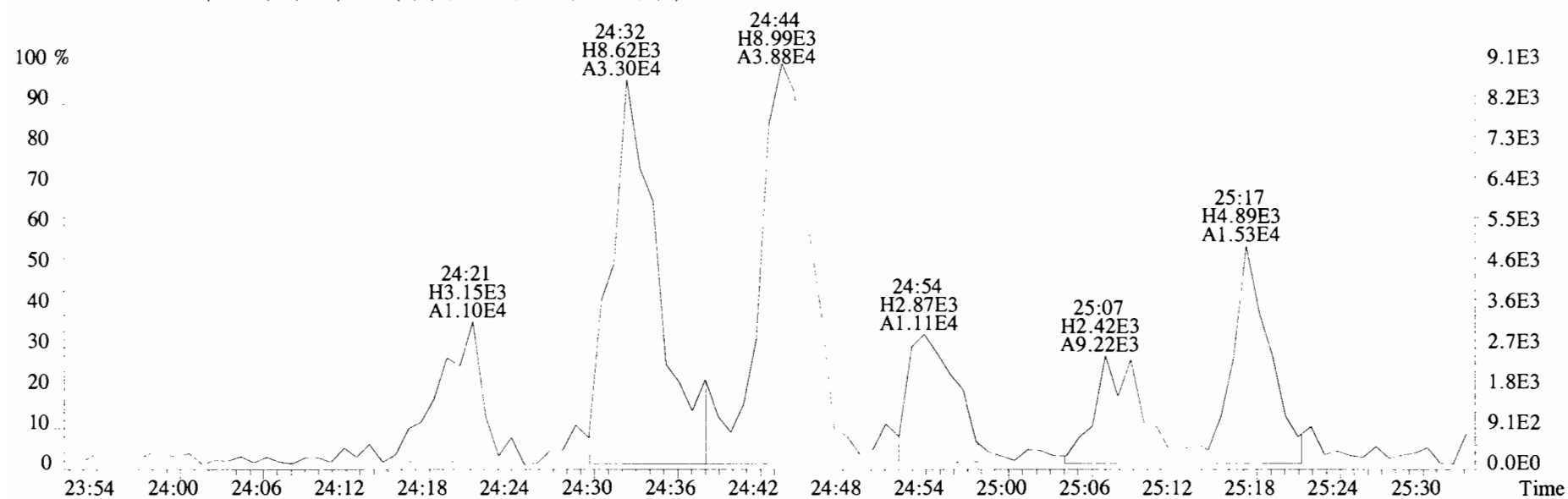
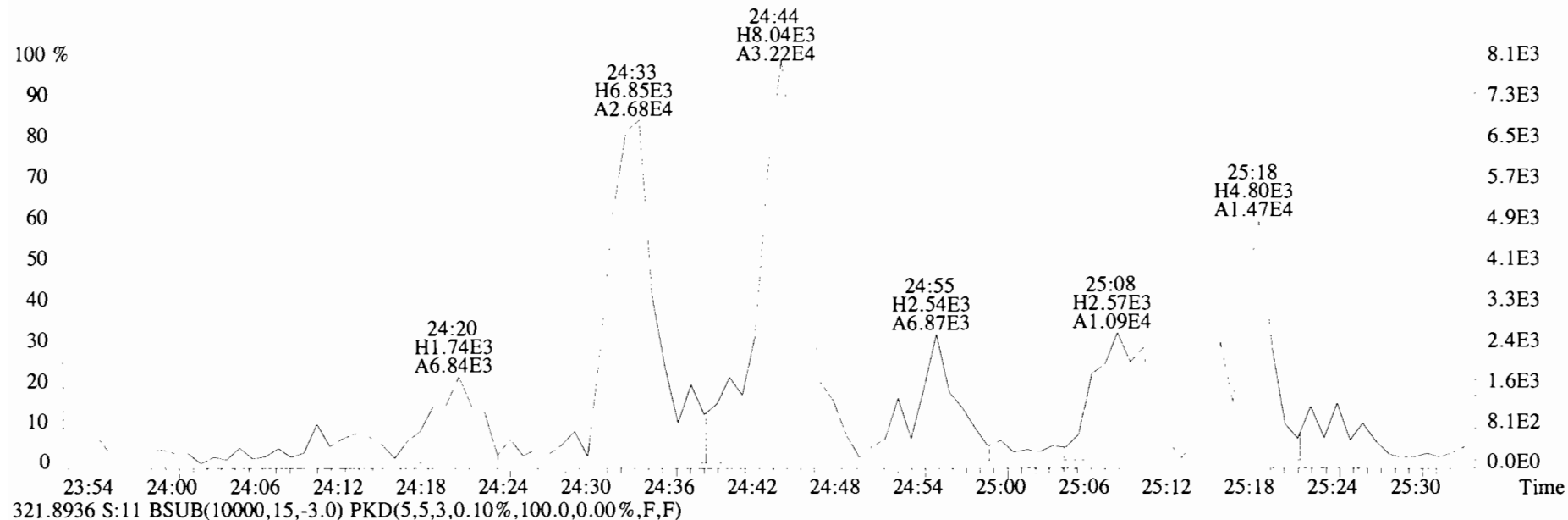
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



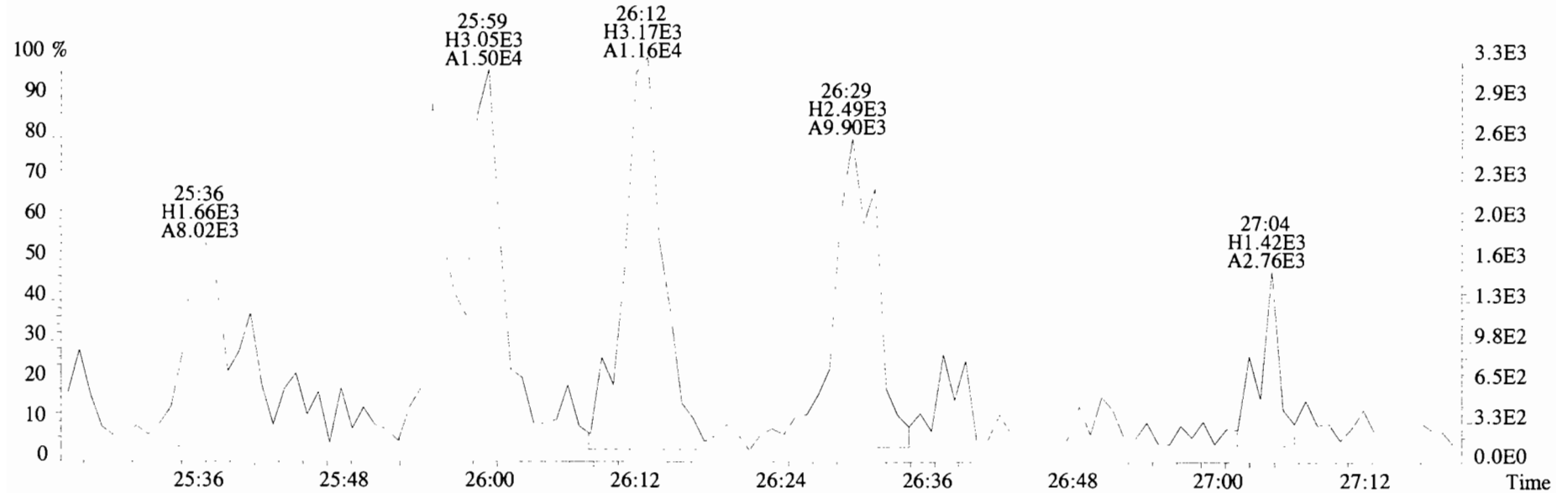
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Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



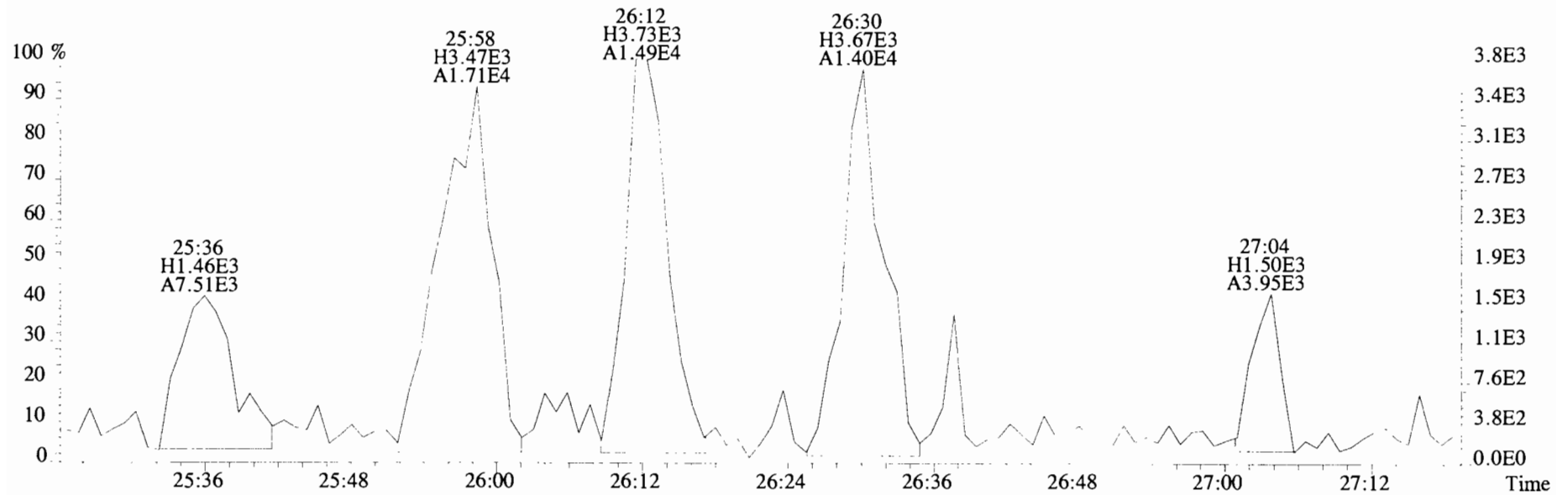
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



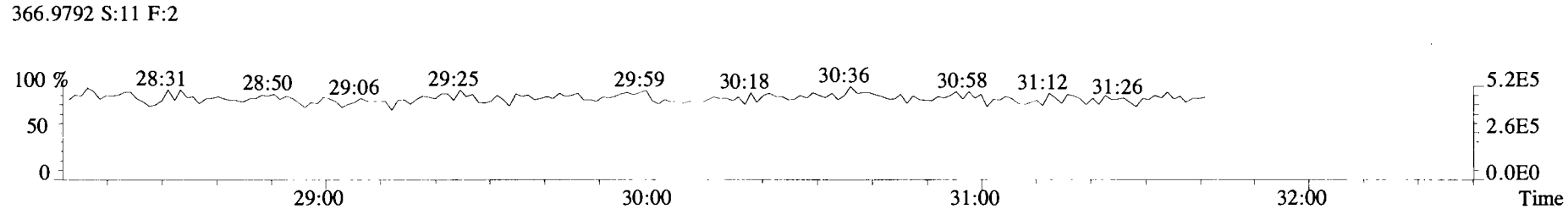
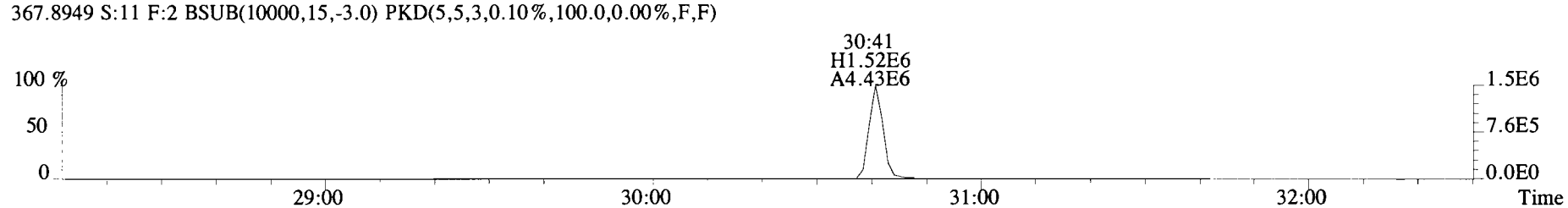
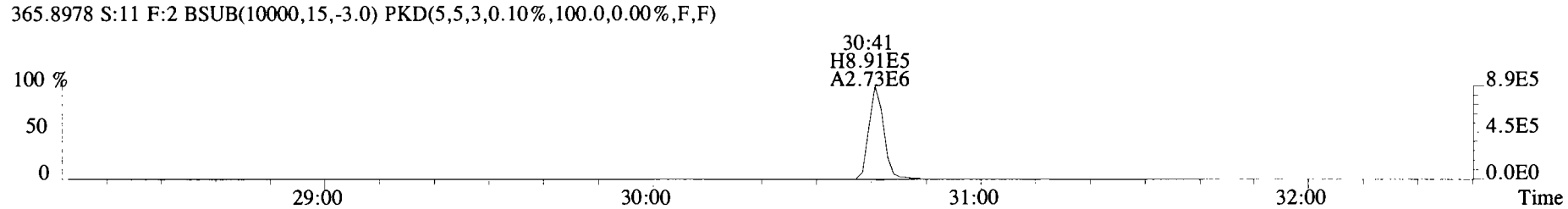
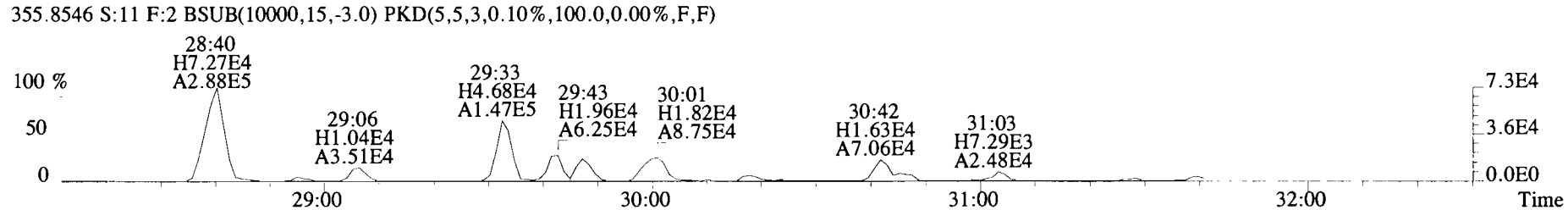
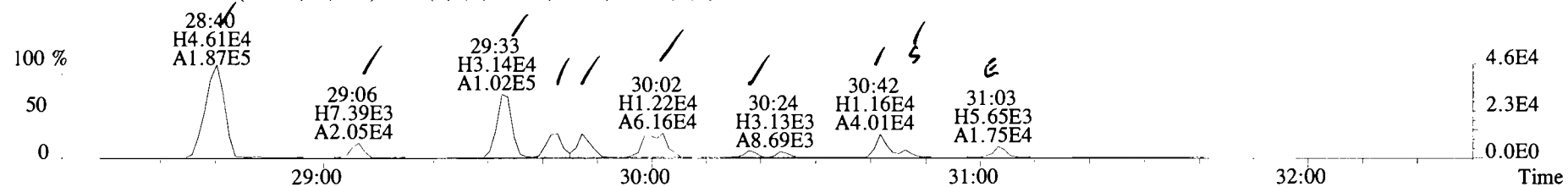
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



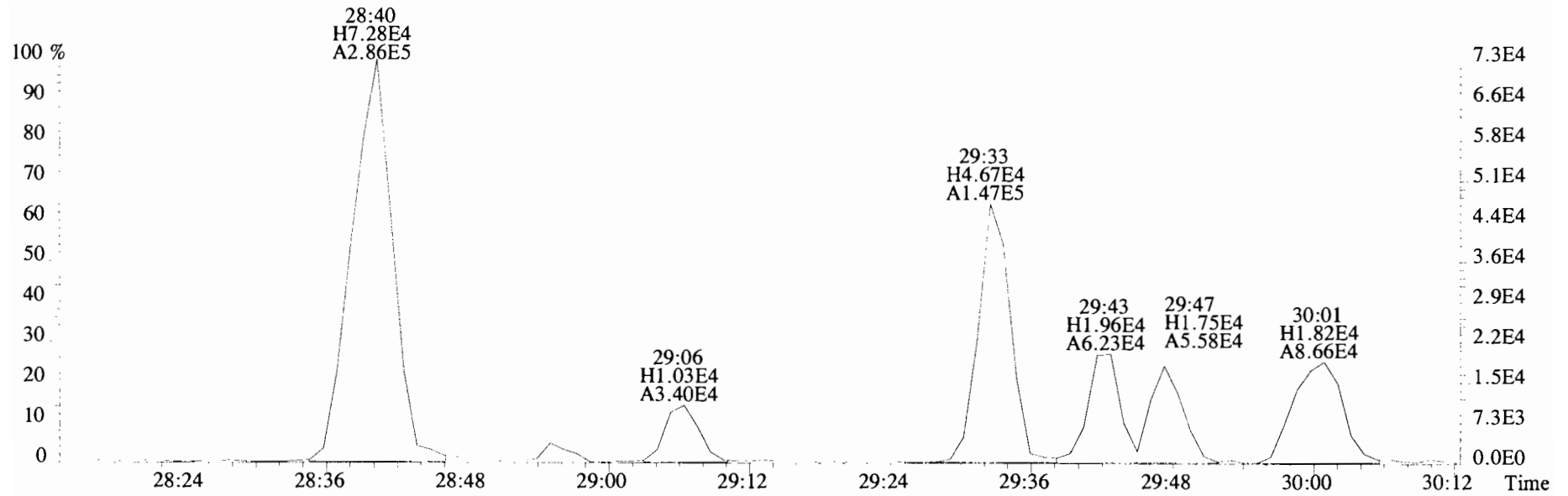
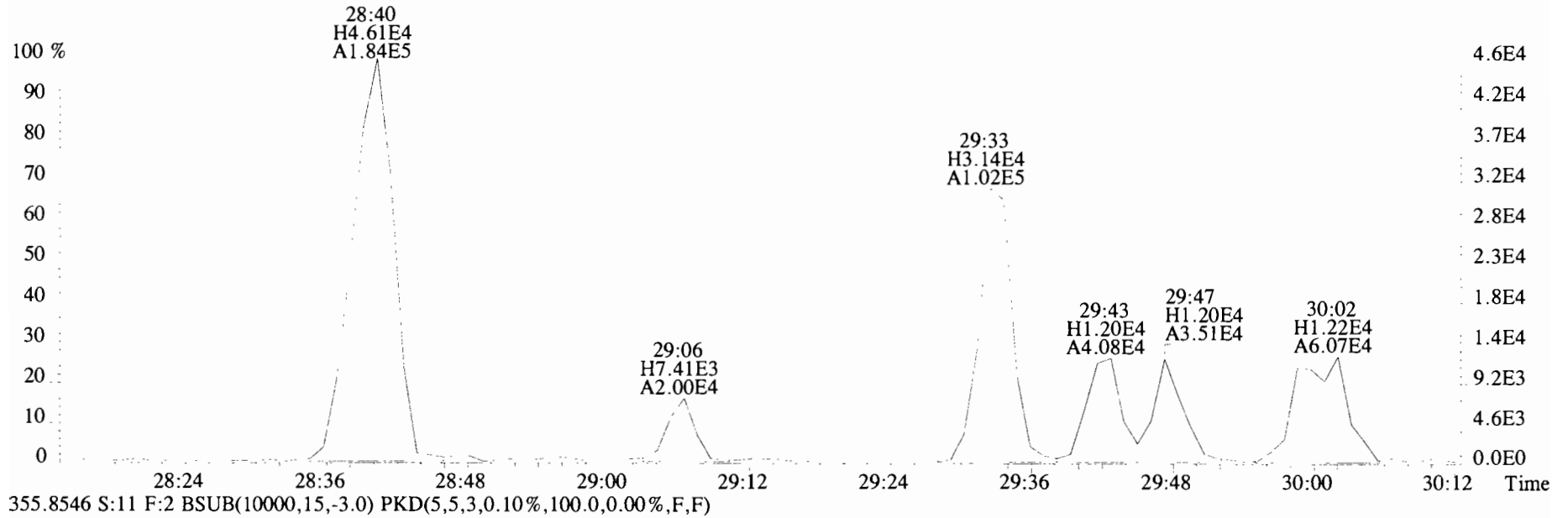
321.8936 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



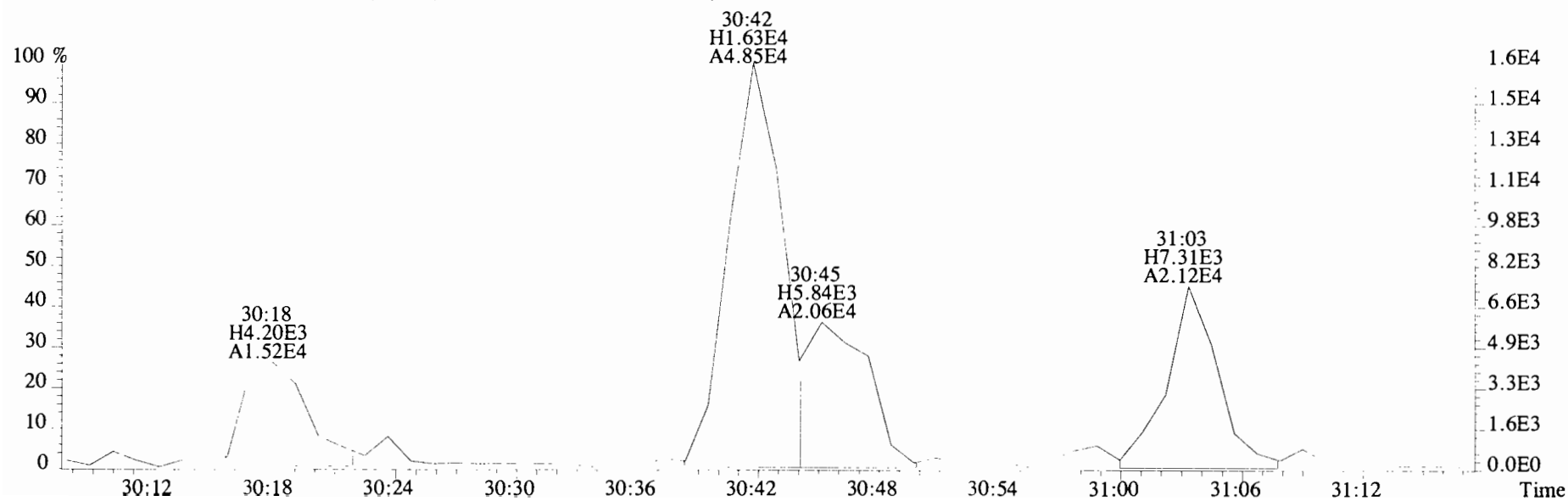
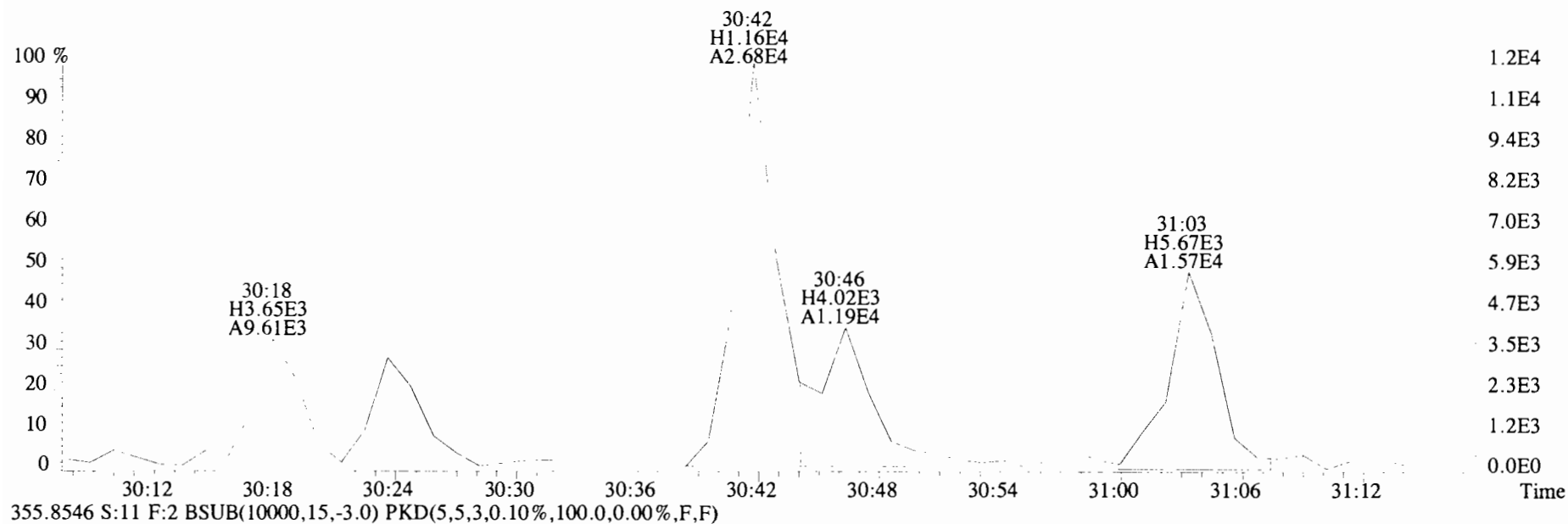
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 353.8576 S:11 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



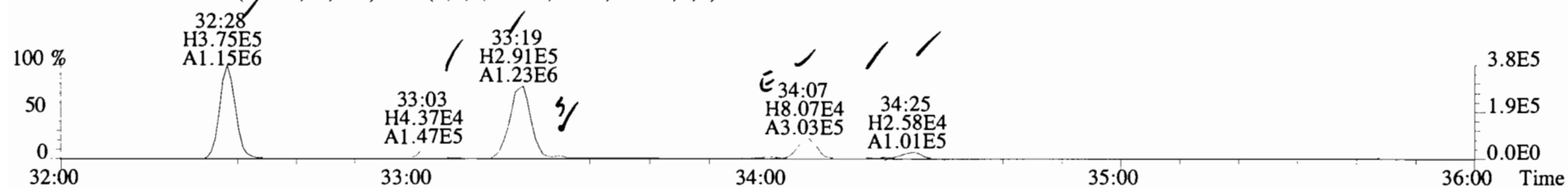
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 353.8576 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



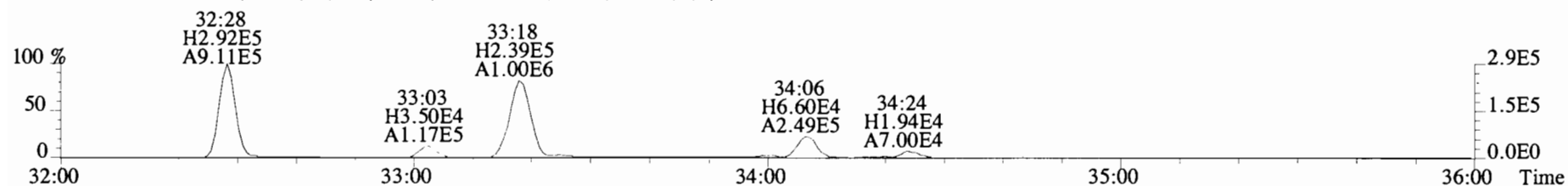
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 353.8576 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



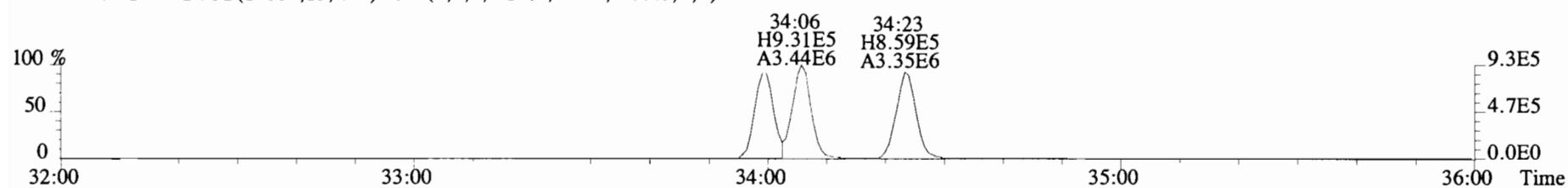
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



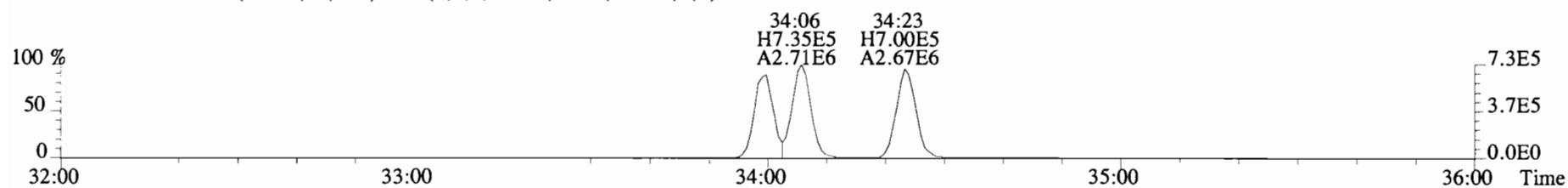
391.8127 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



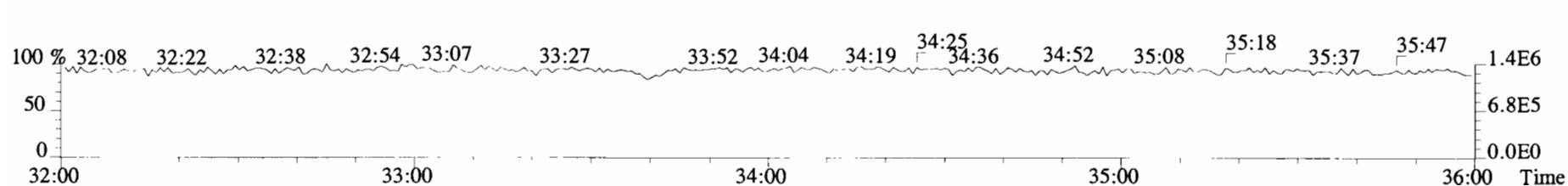
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



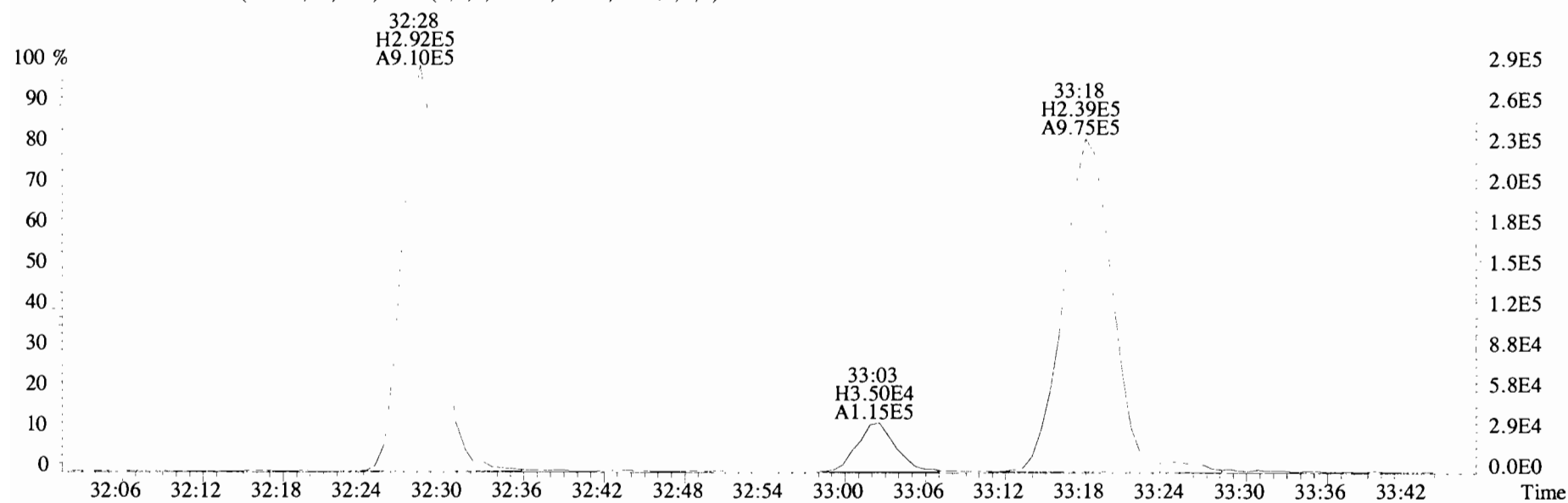
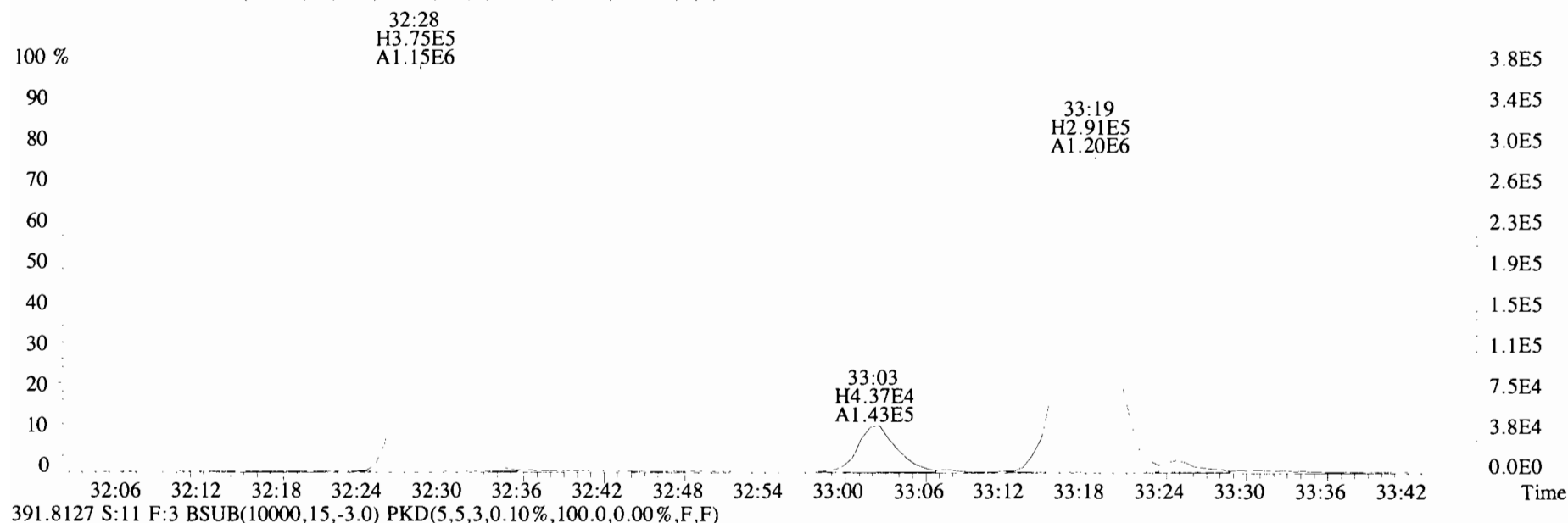
403.8530 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



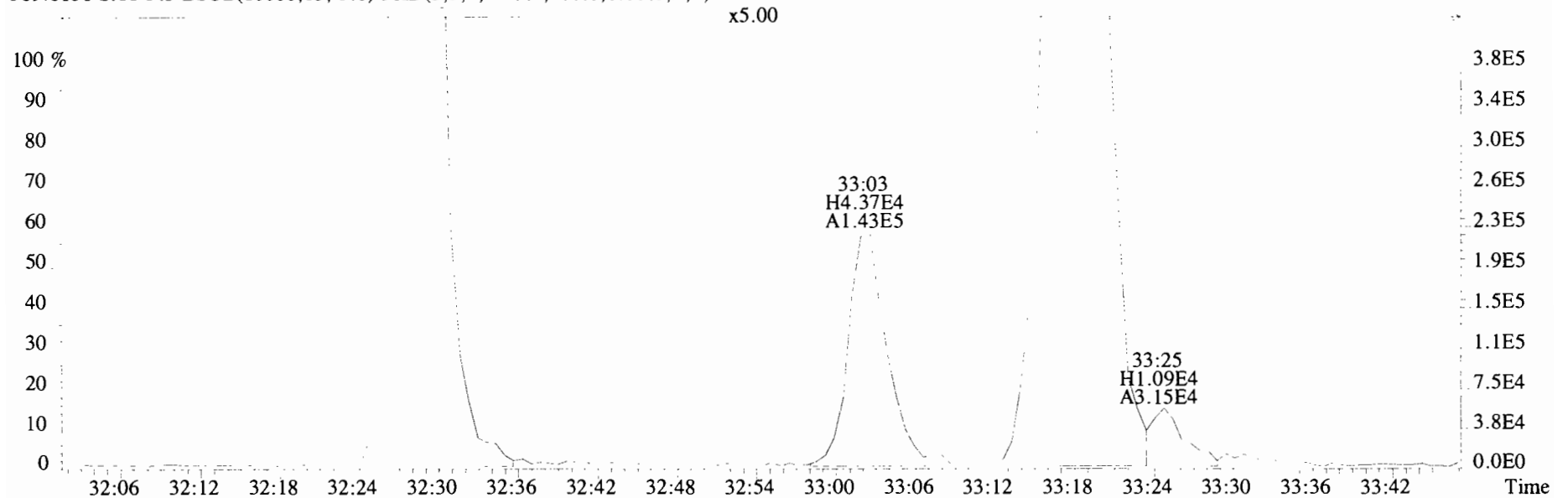
392.9760 S:11 F:3



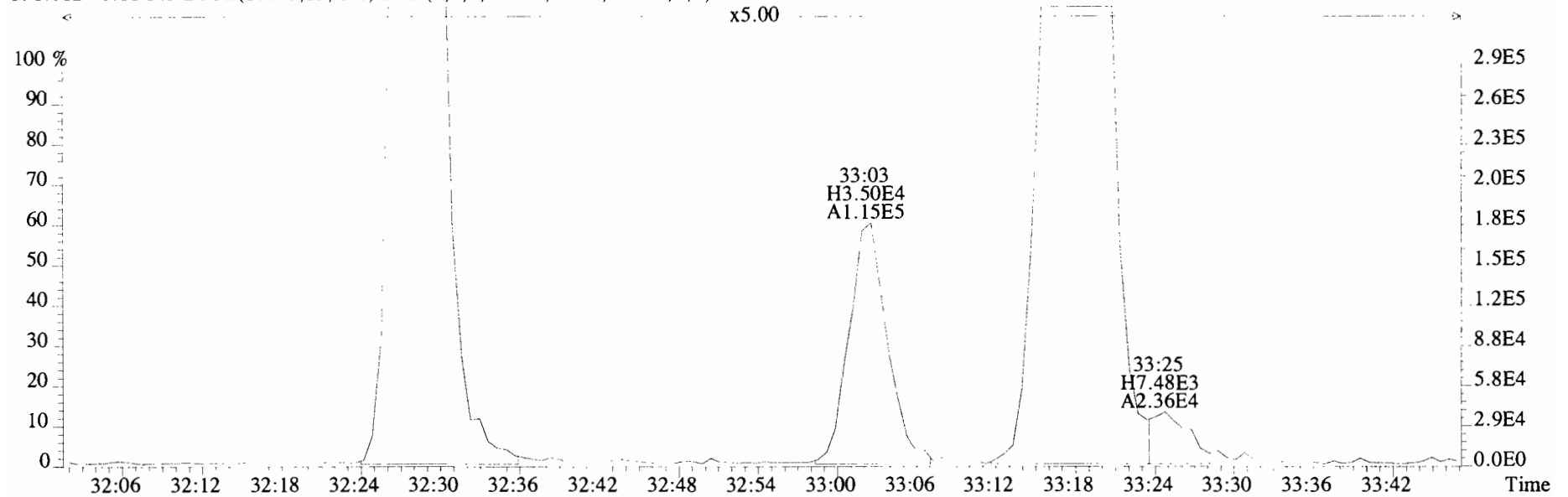
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



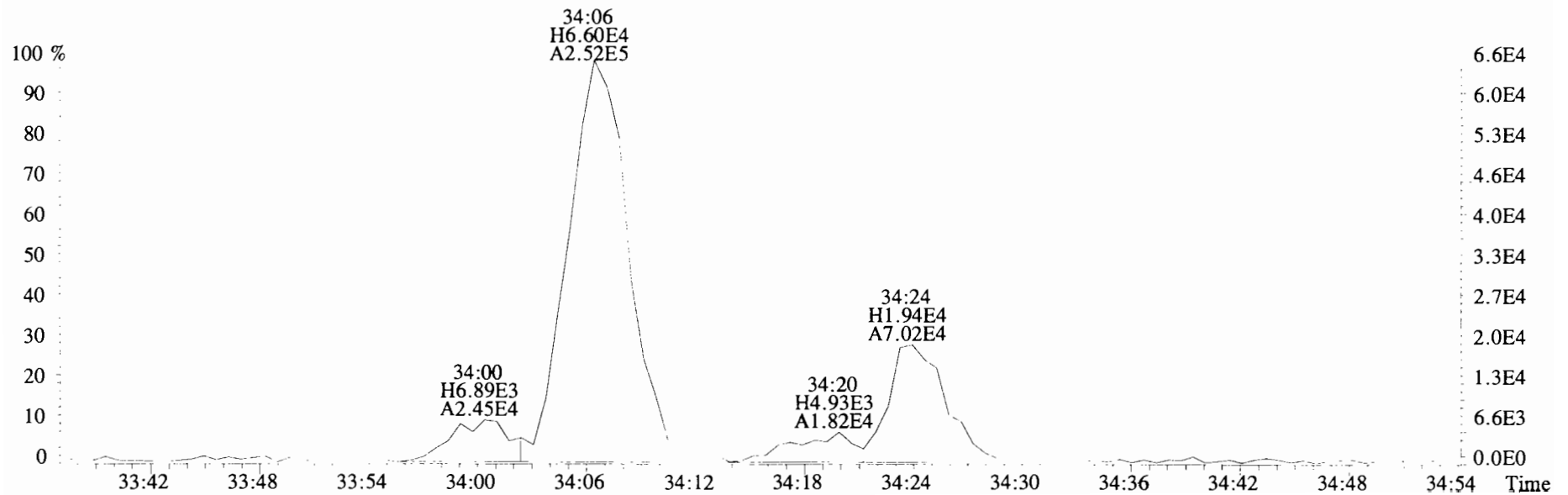
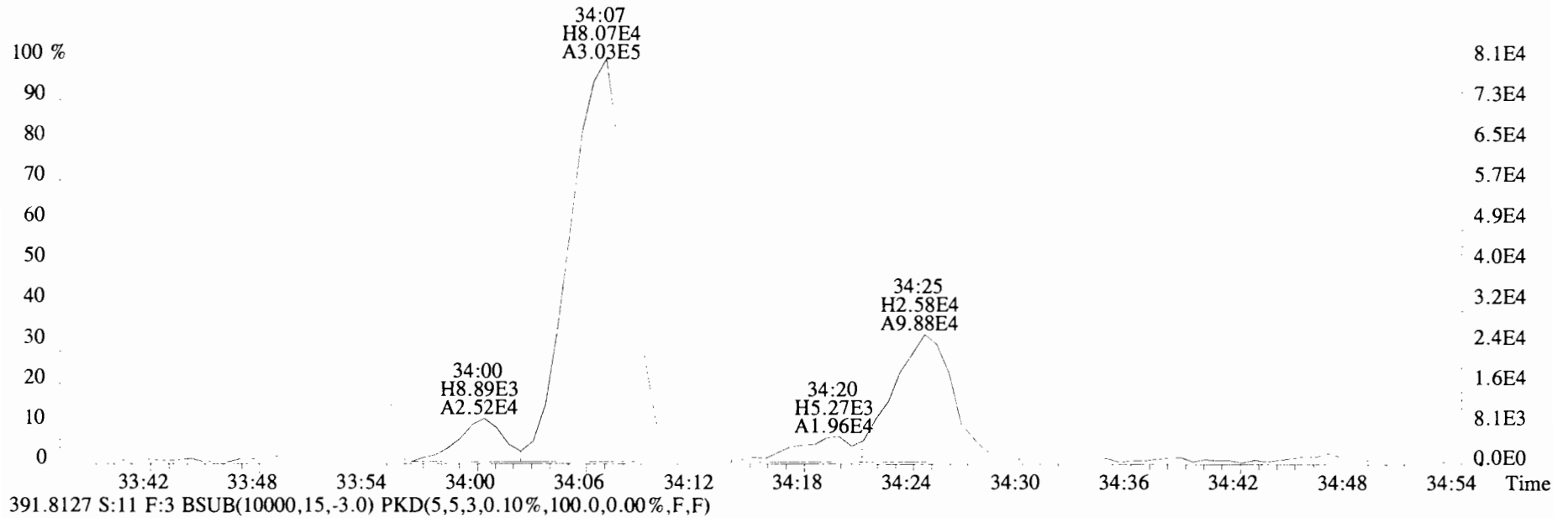
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



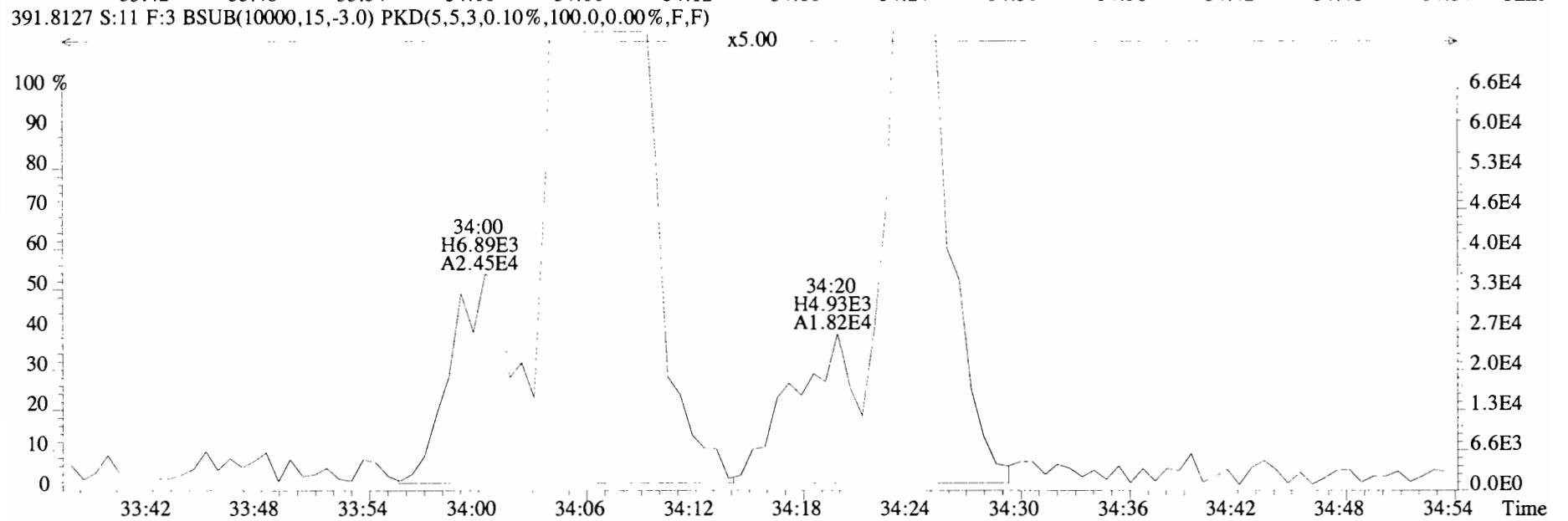
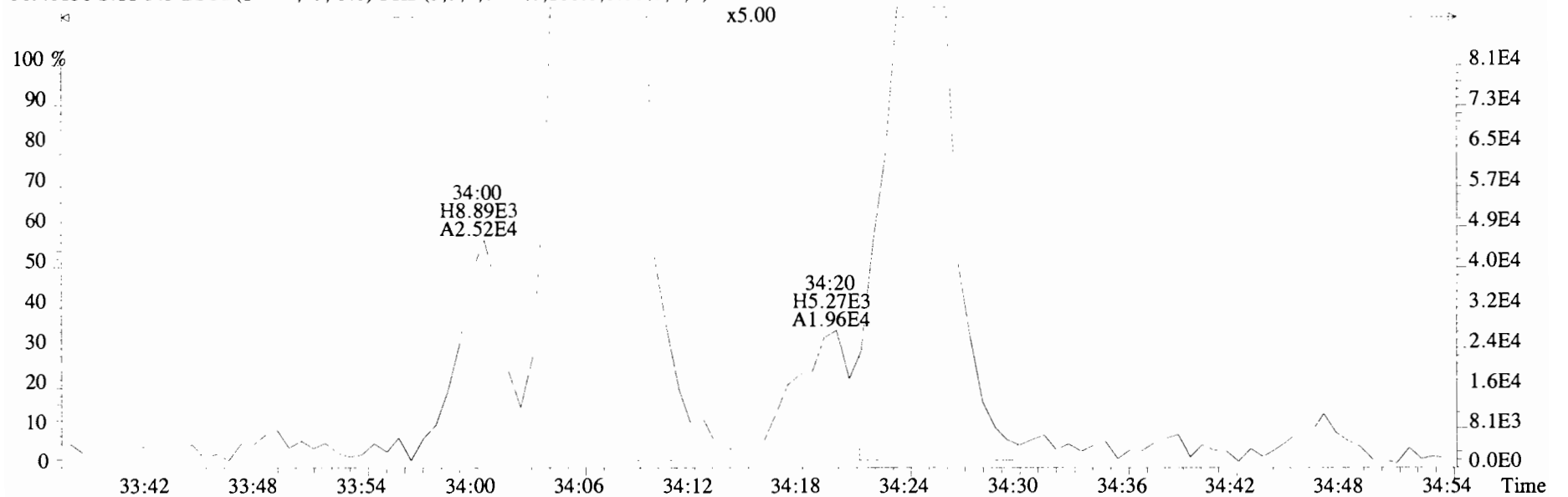
391.8127 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



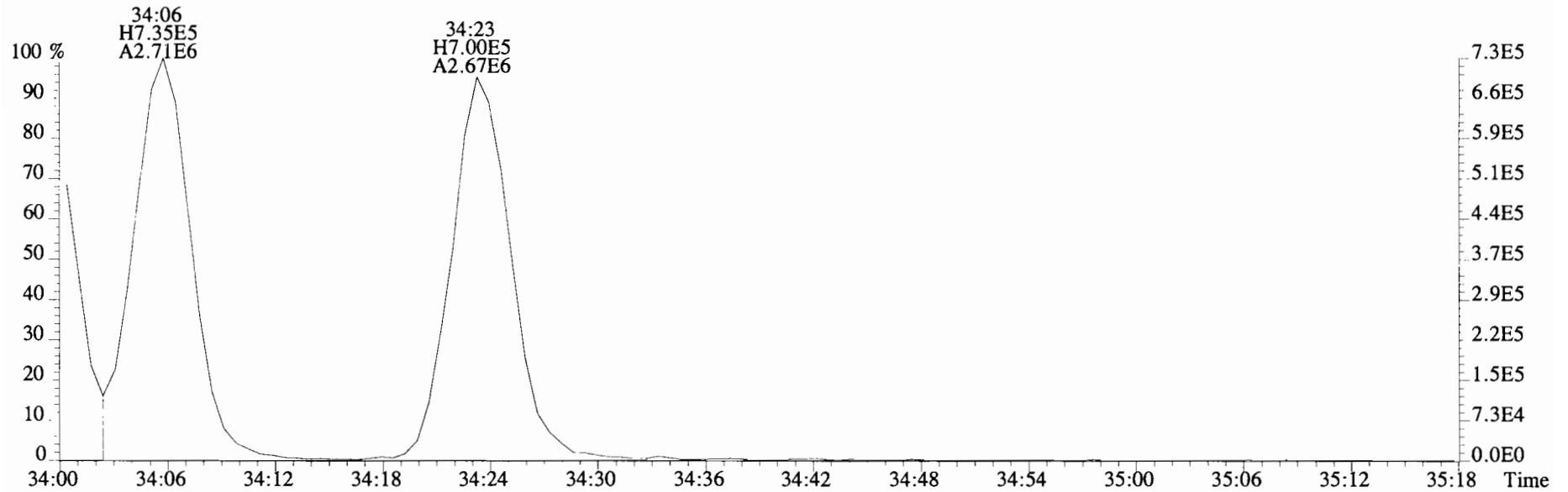
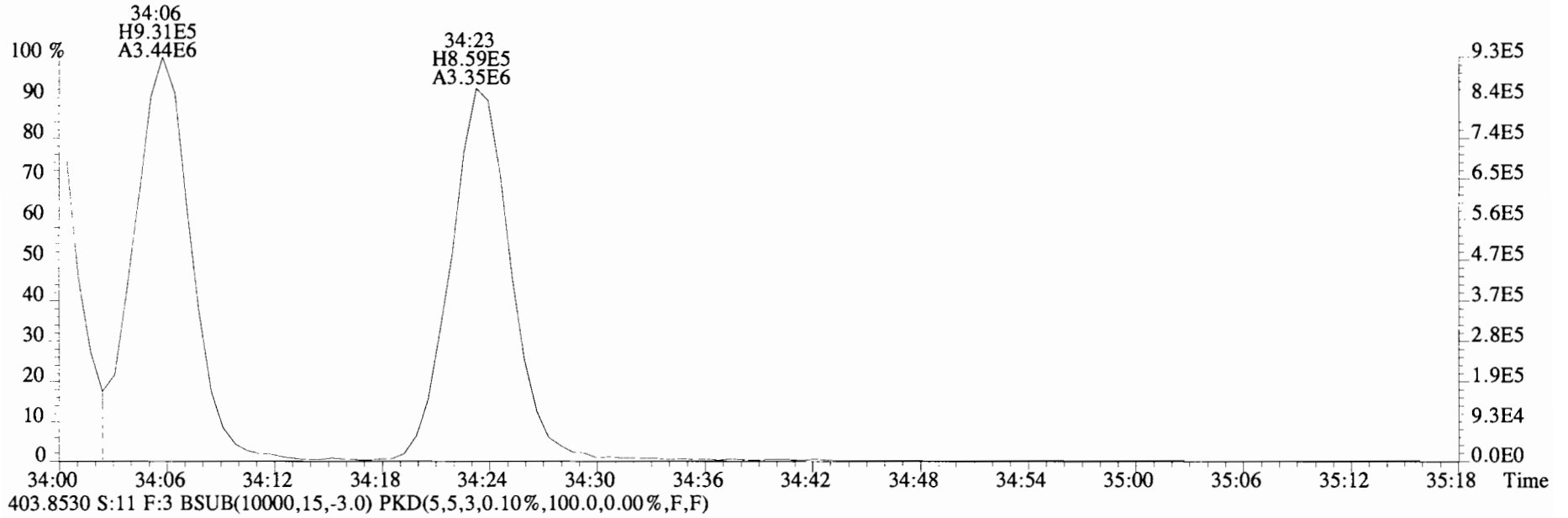
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 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



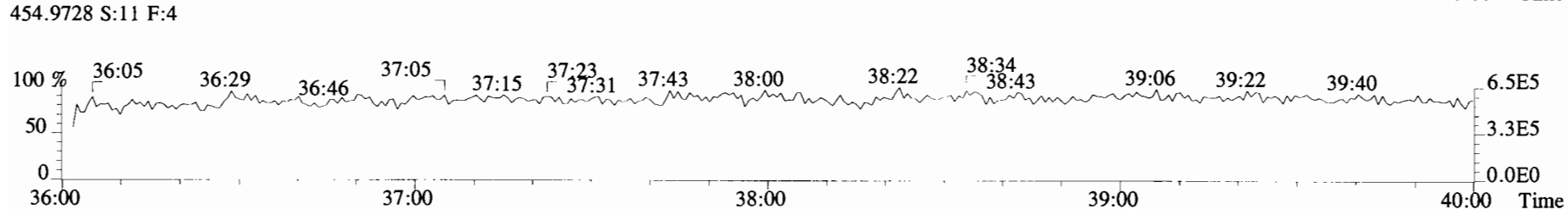
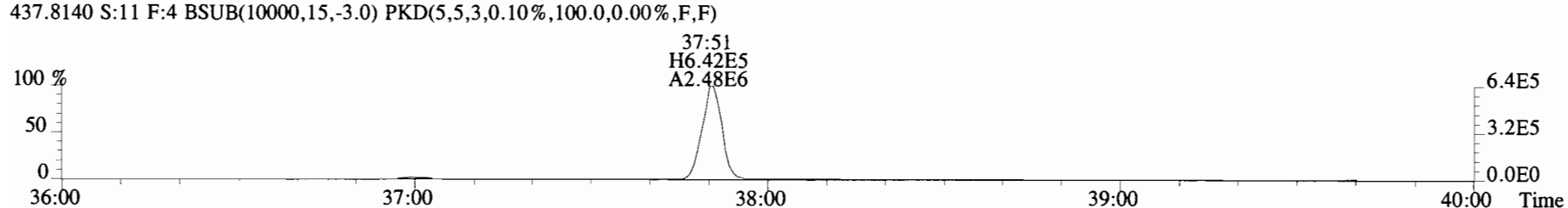
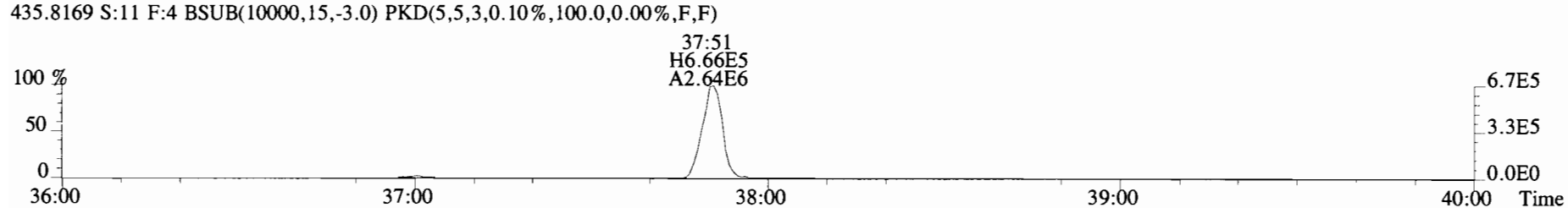
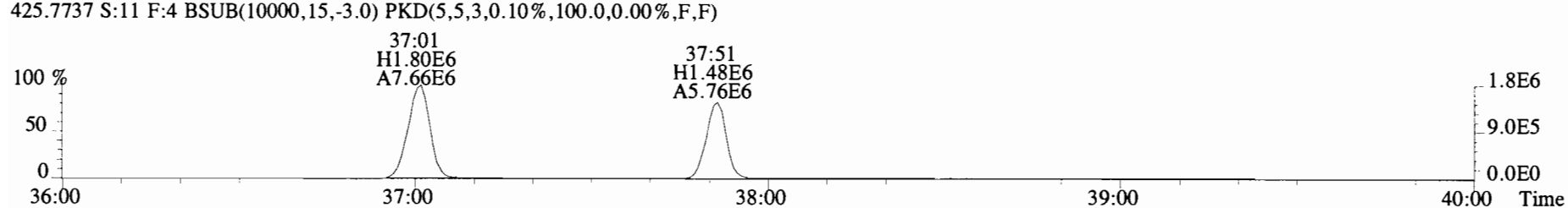
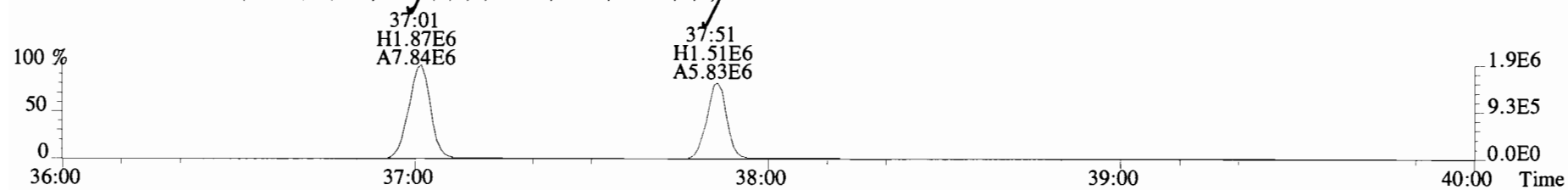
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



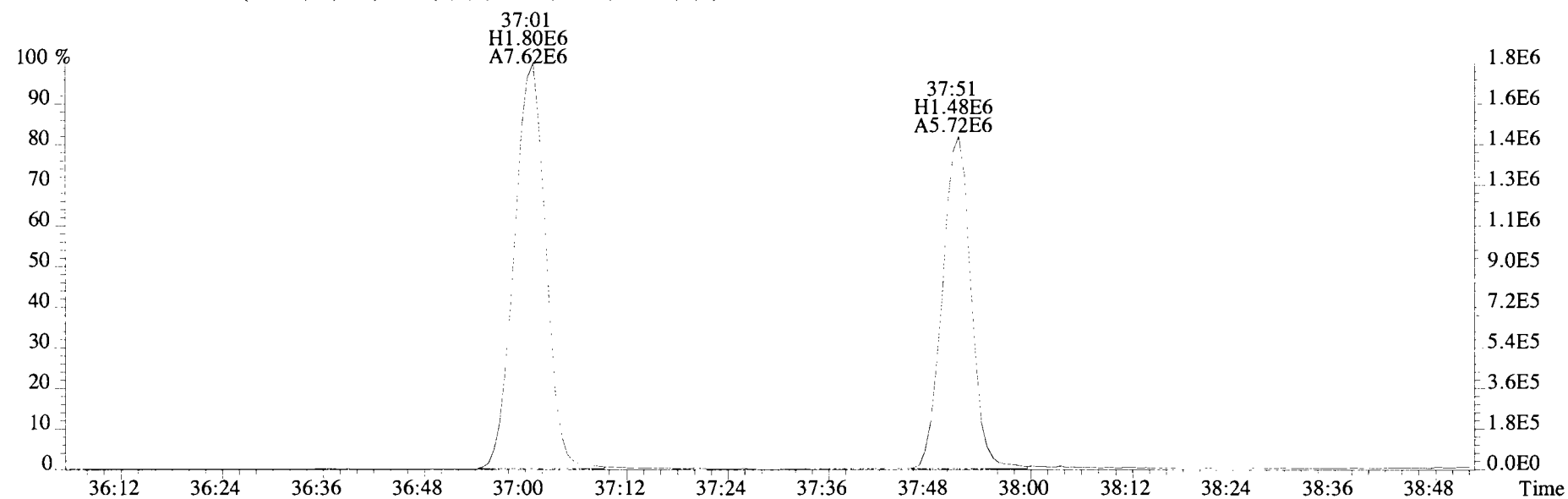
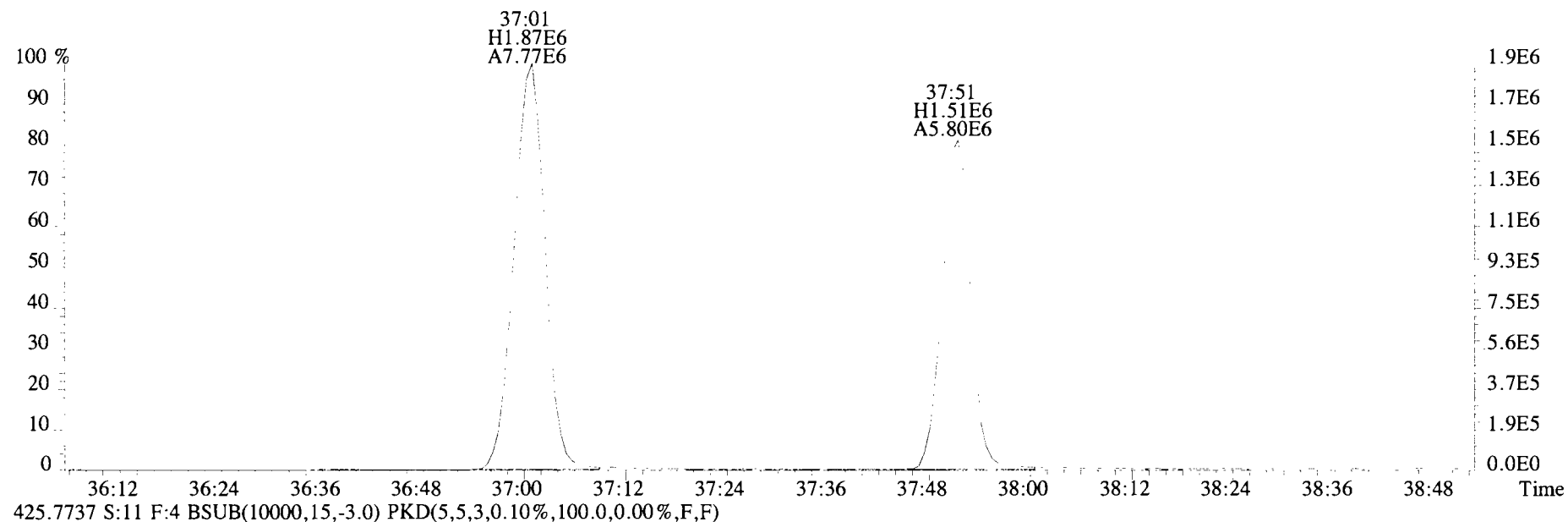
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



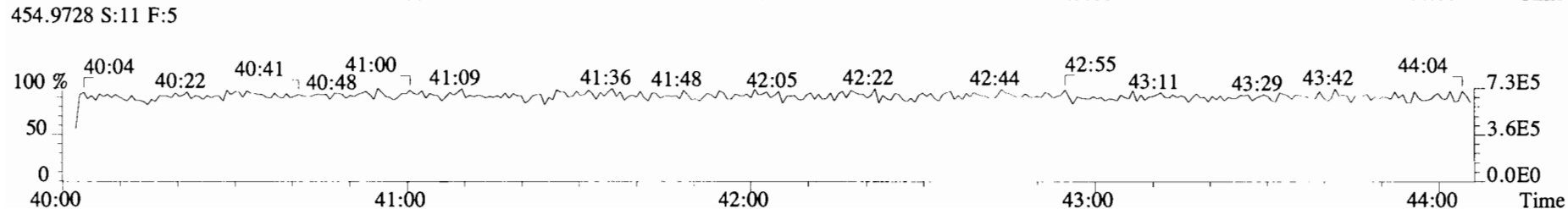
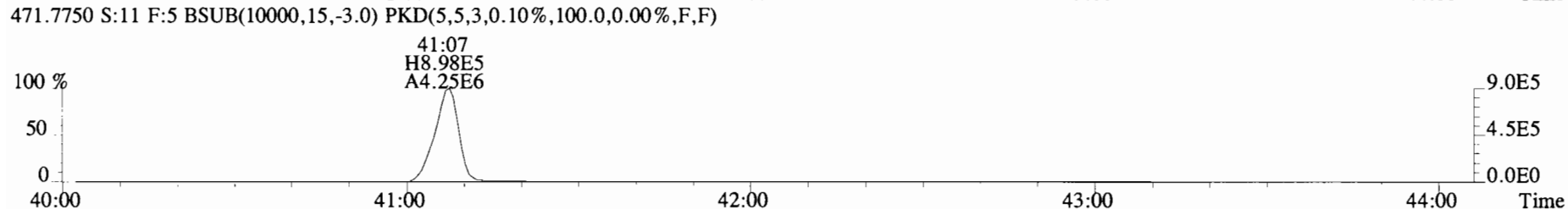
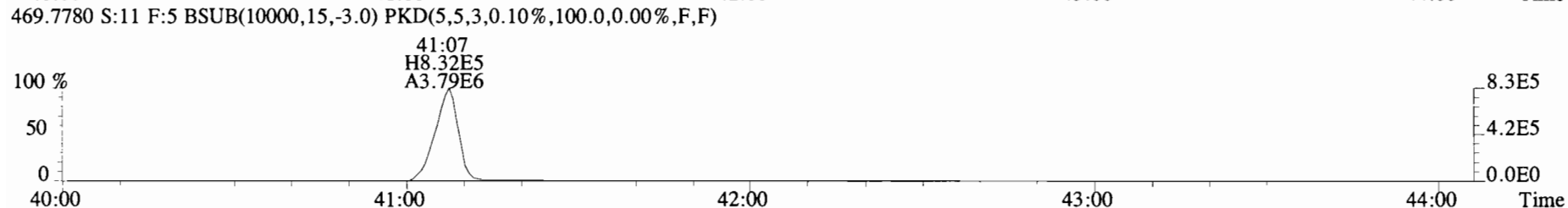
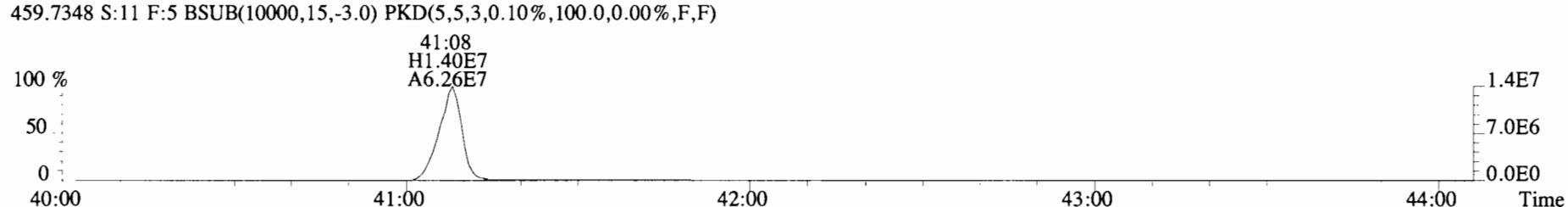
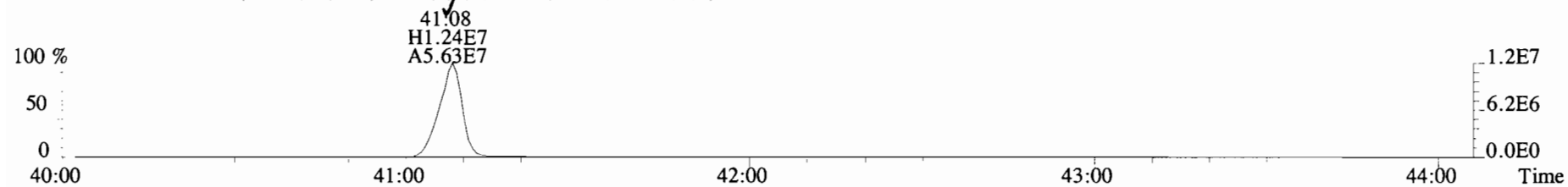
File:191120D1 #1-356 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



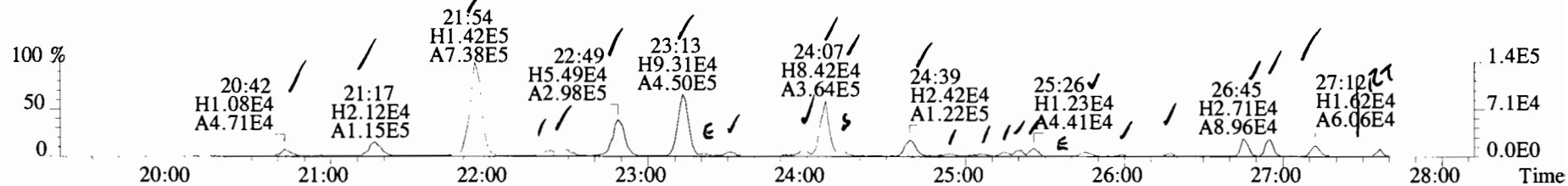
File:191120D1 #1-356 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



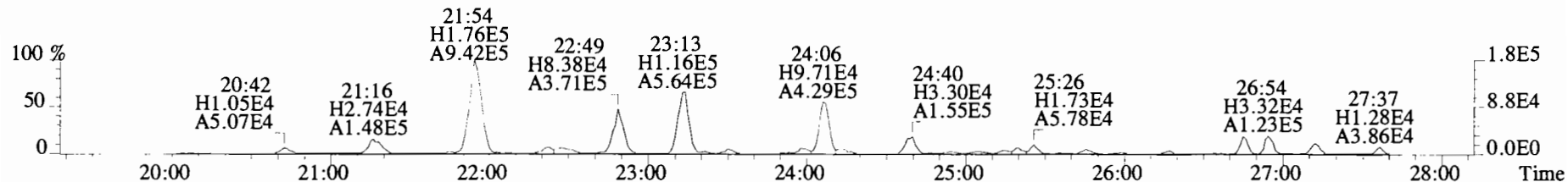
File:191120D1 #1-431 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
457.7377 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



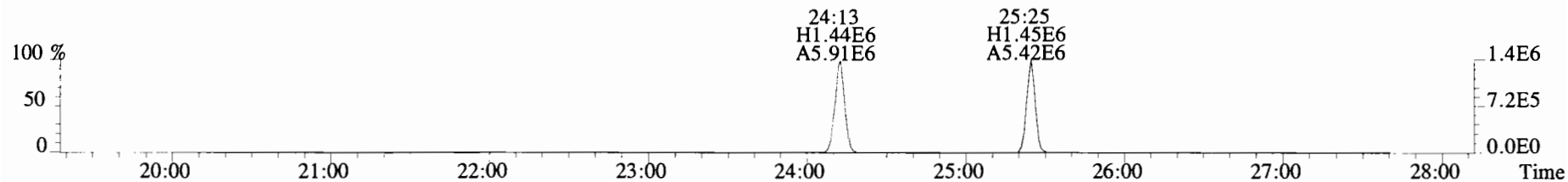
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



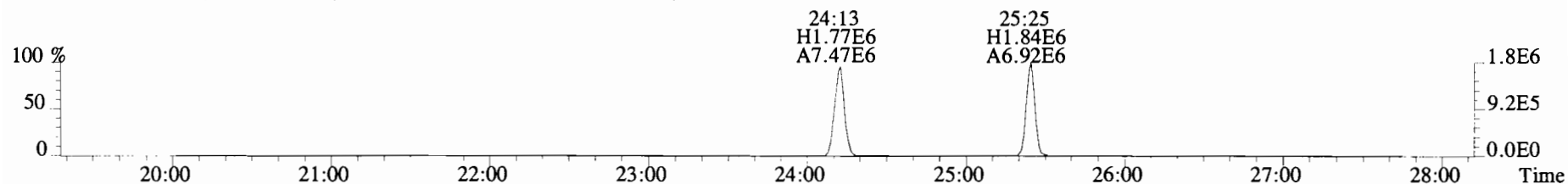
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



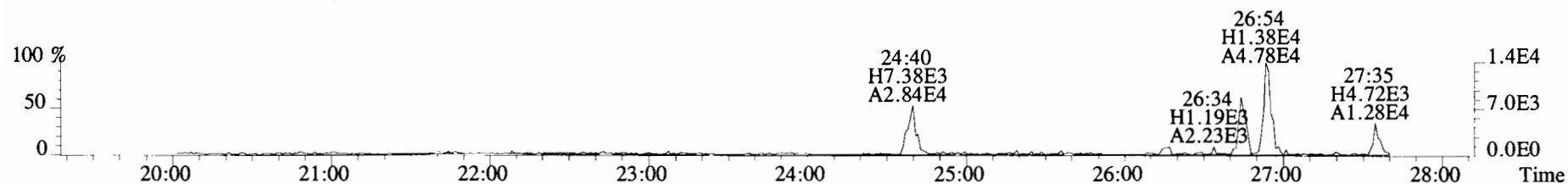
315.9419 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



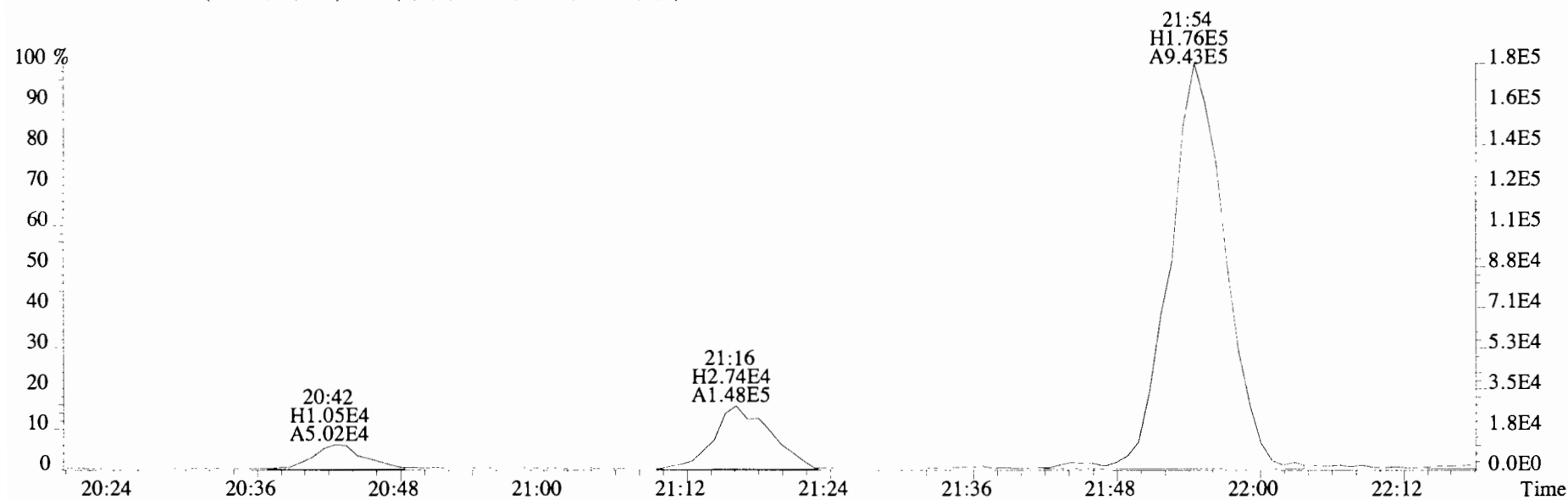
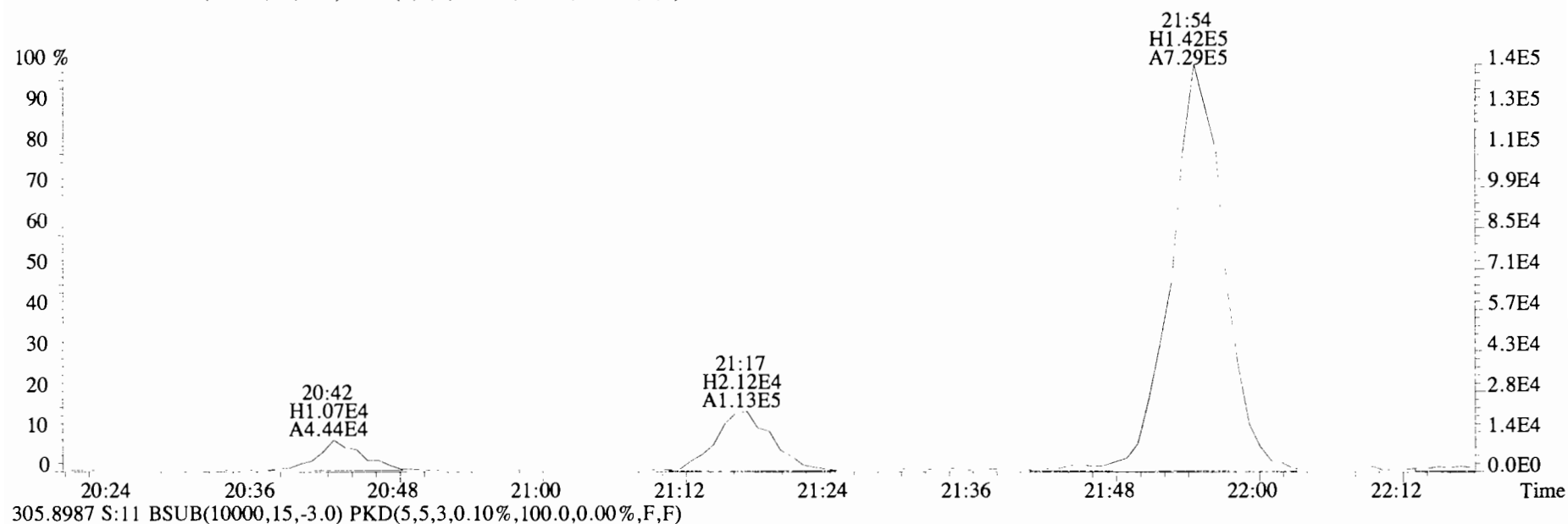
317.9389 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



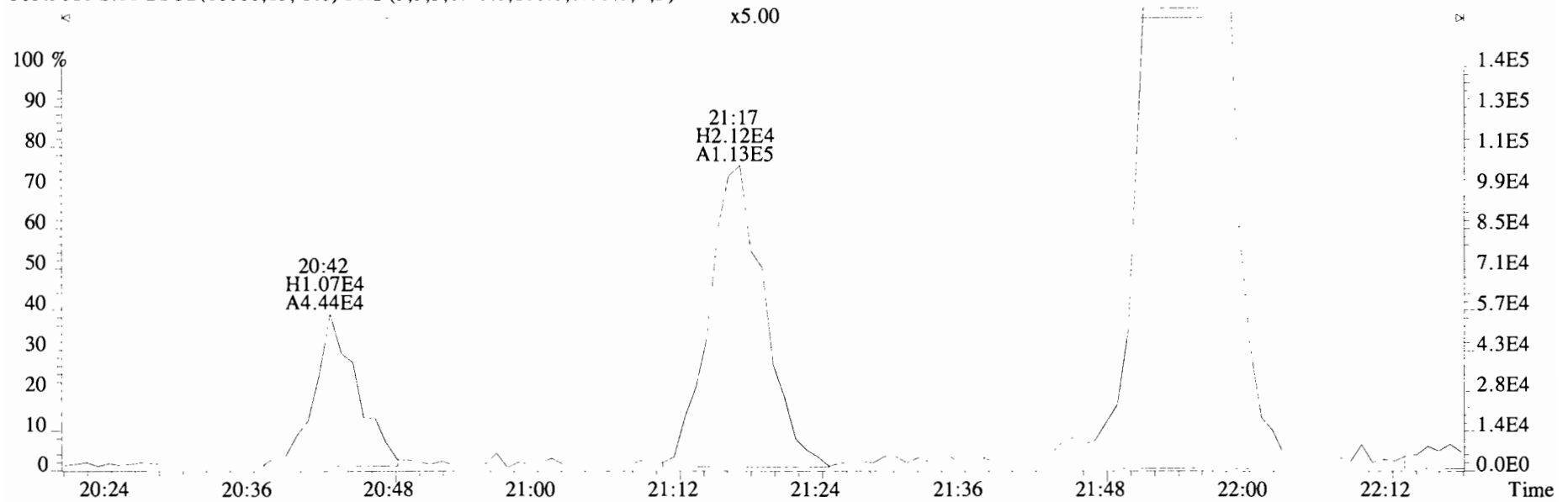
375.8364 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



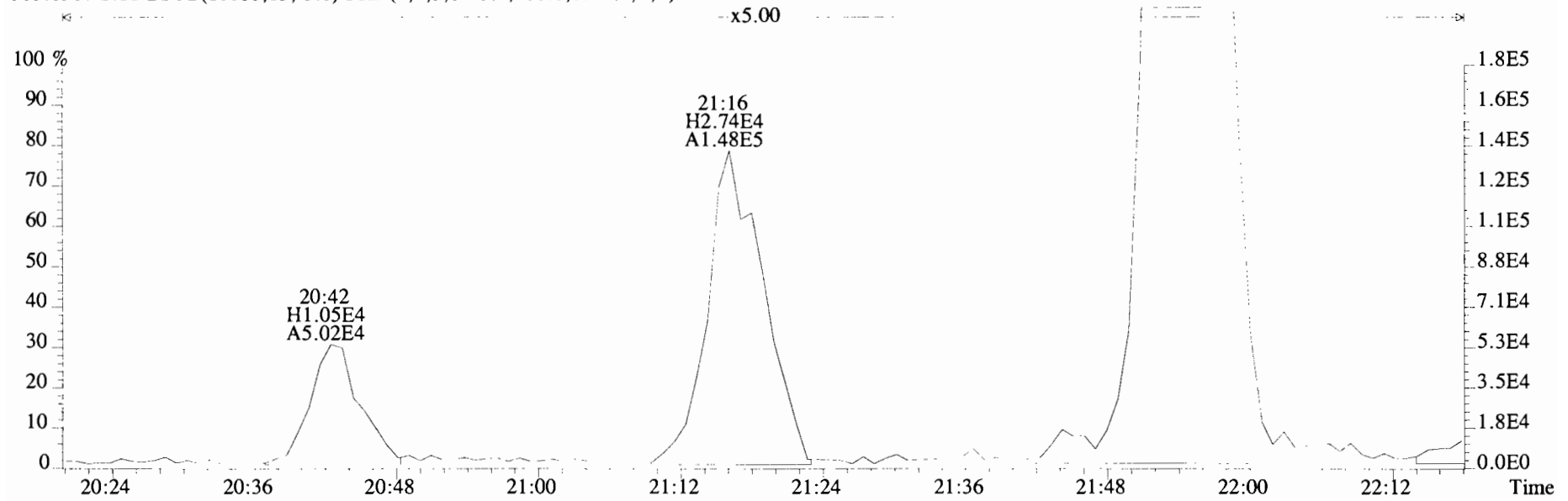
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



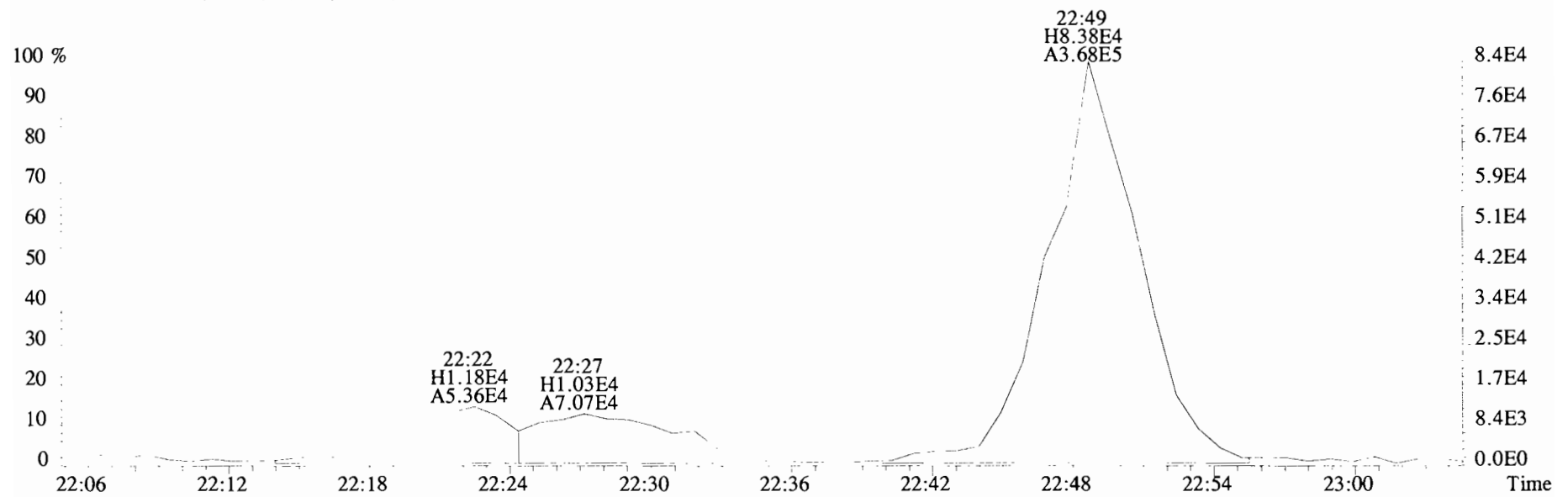
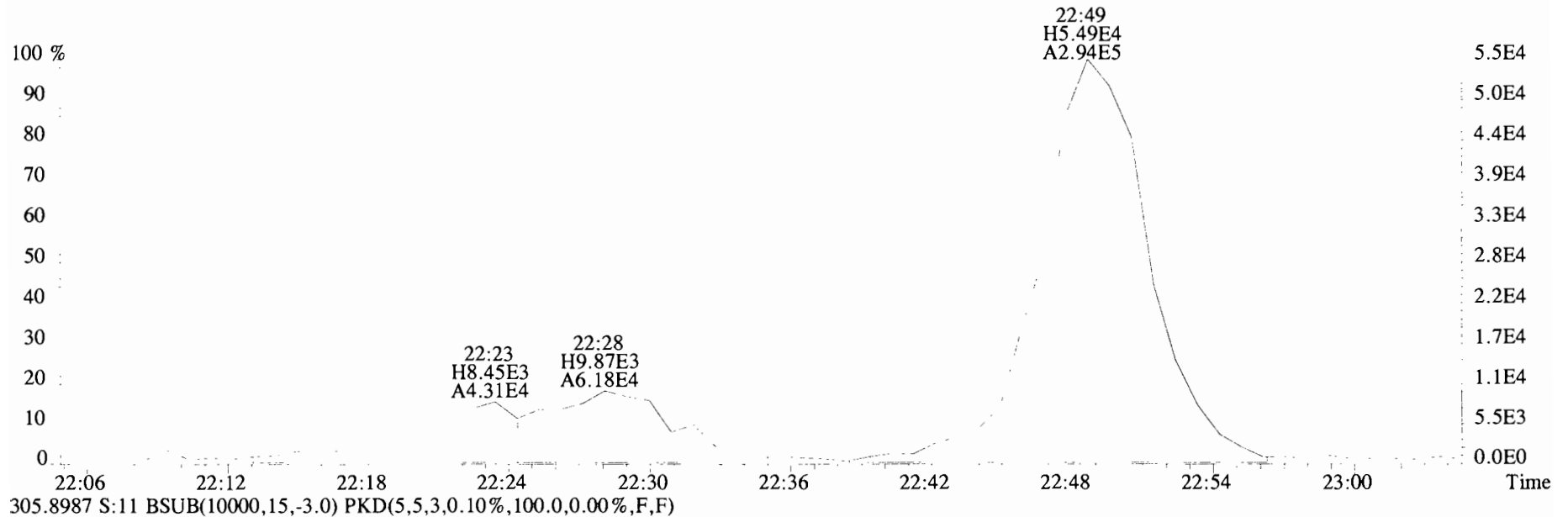
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



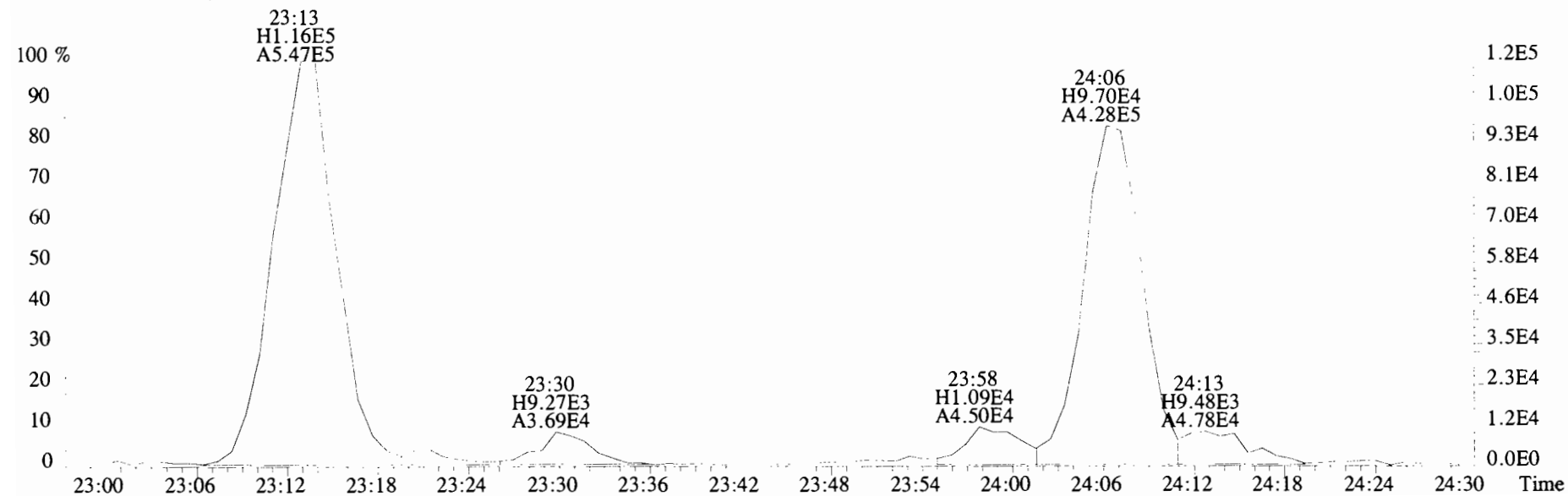
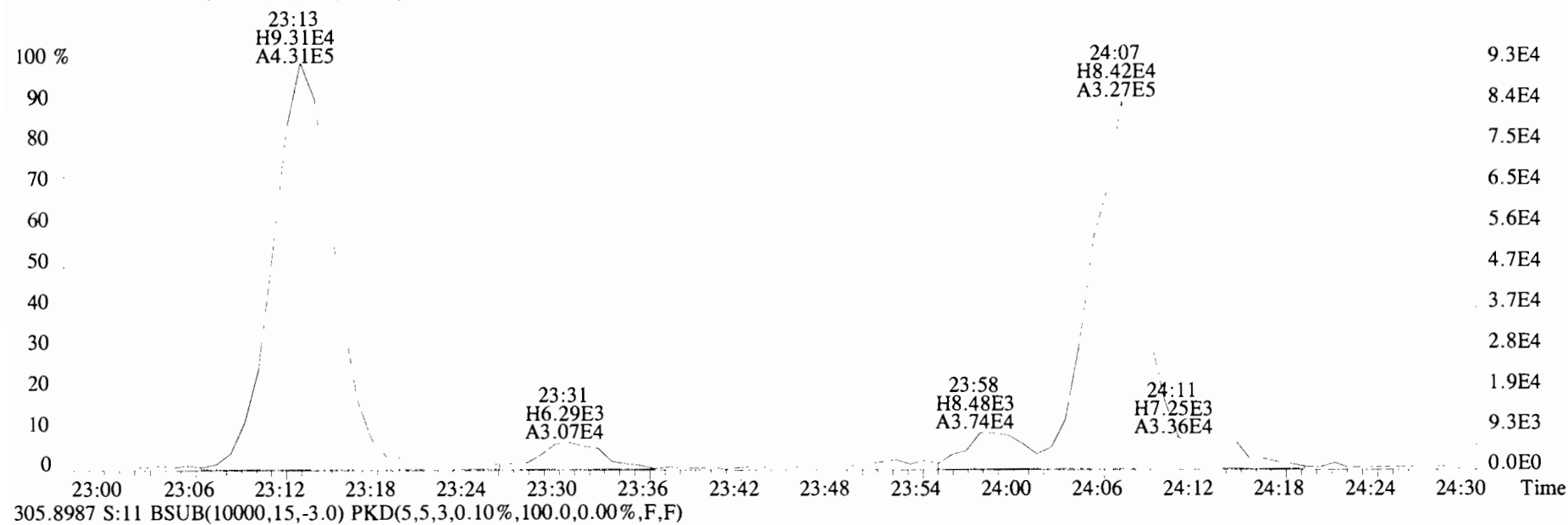
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



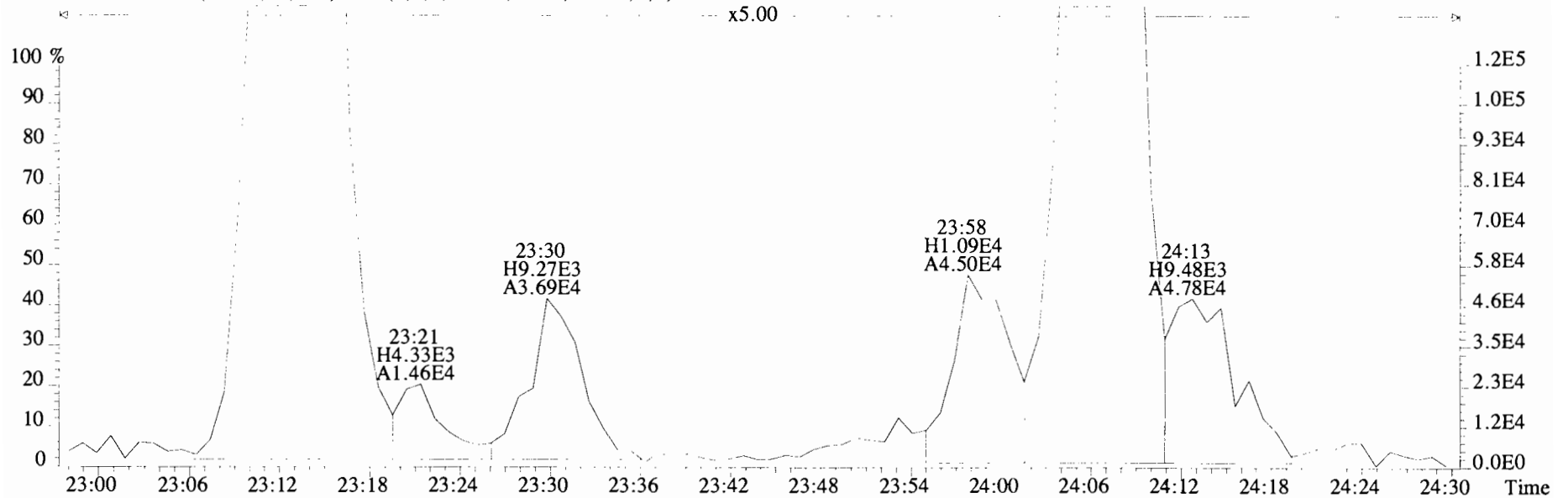
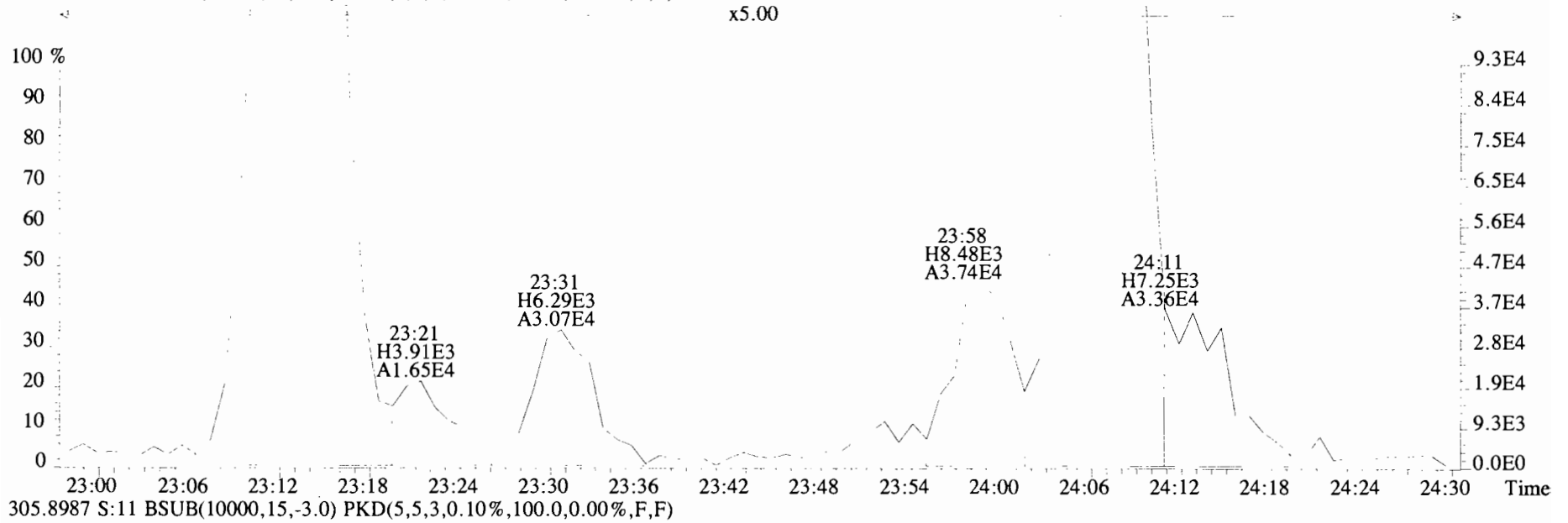
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 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



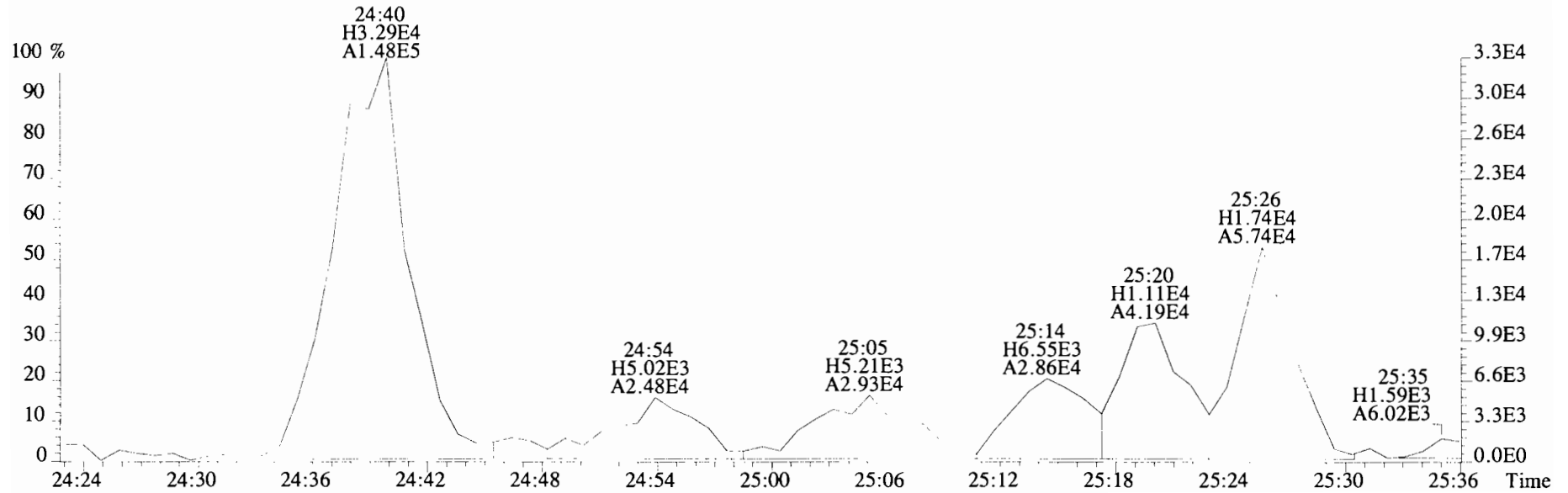
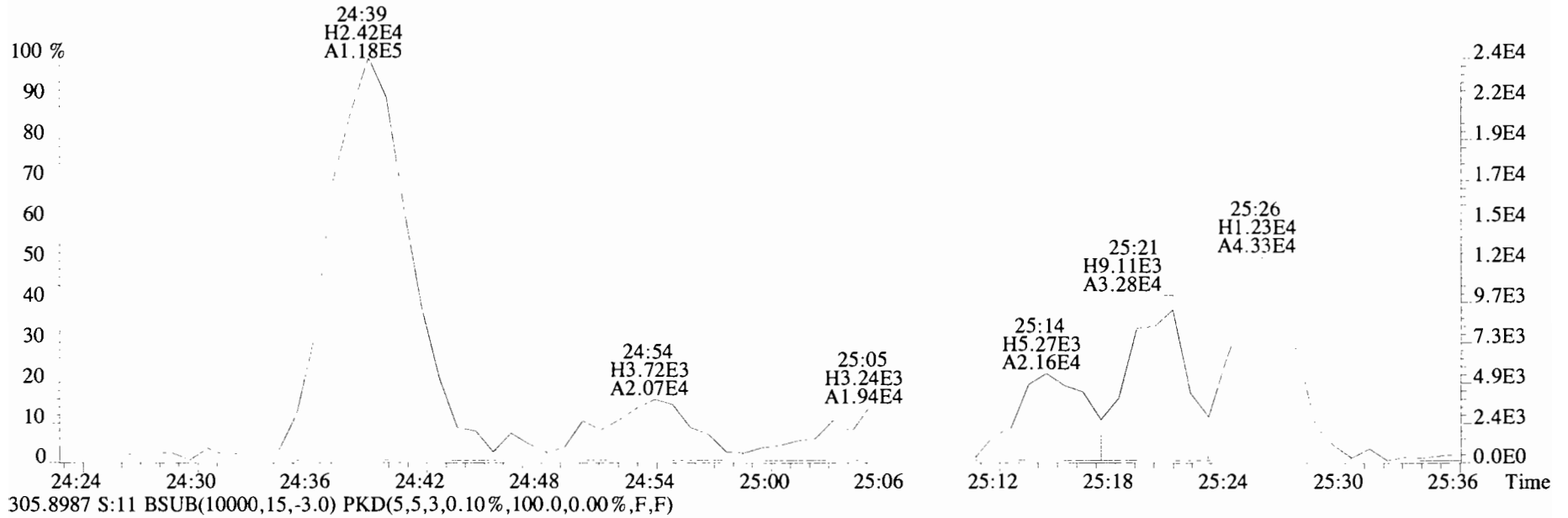
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 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



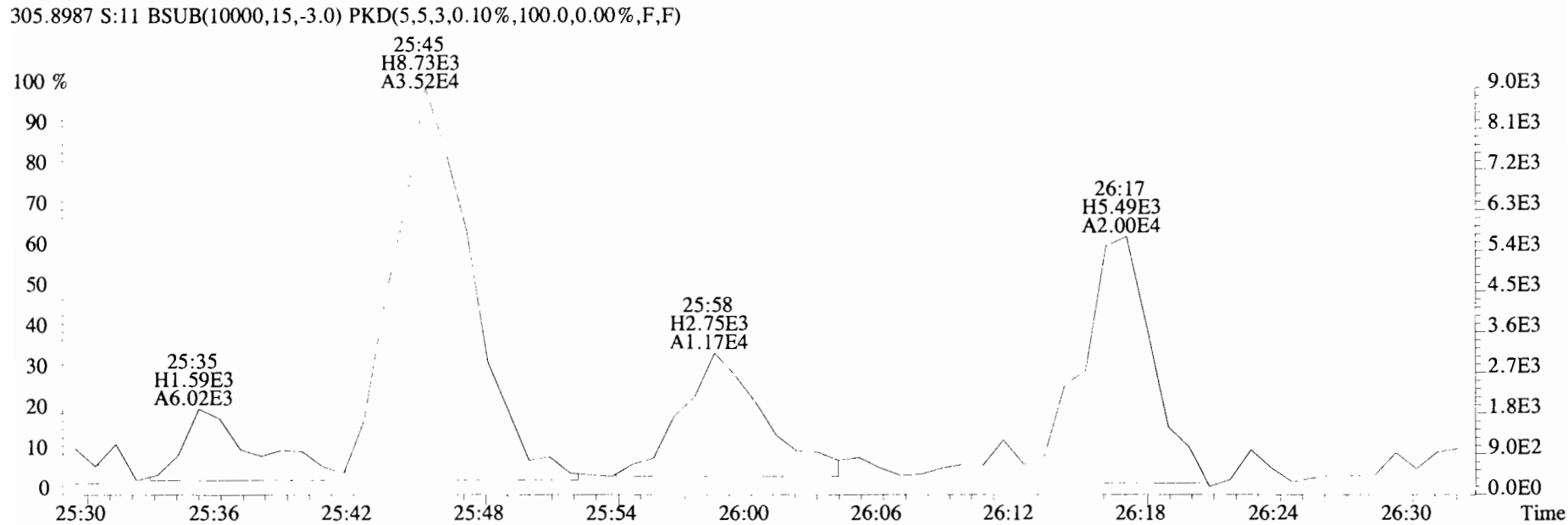
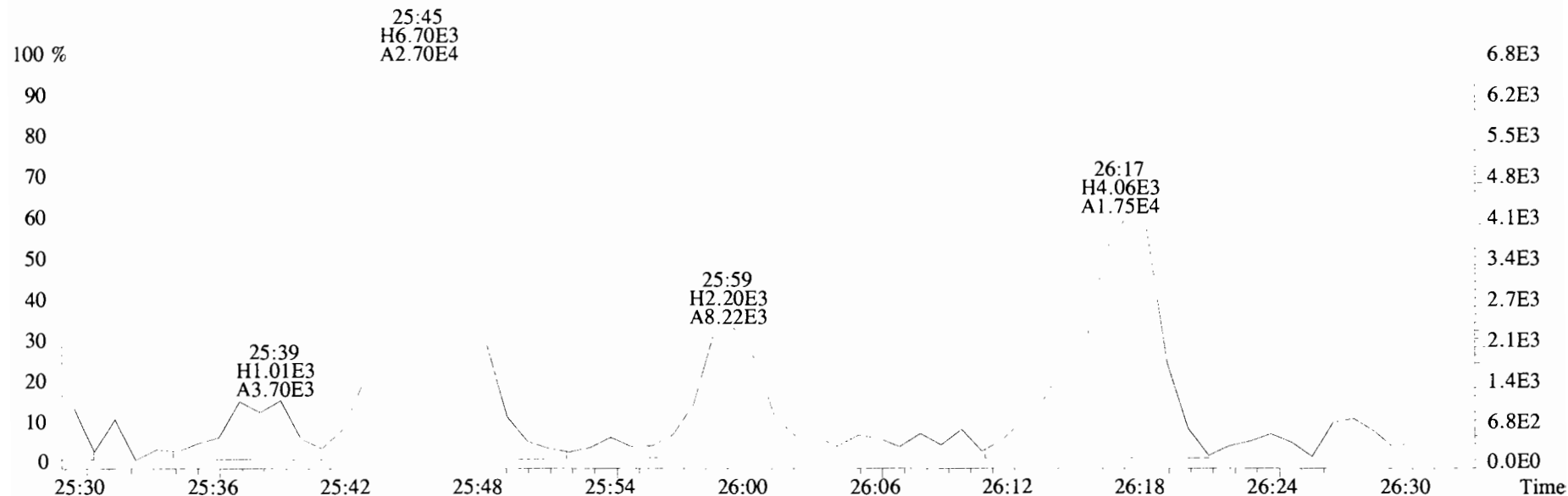
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



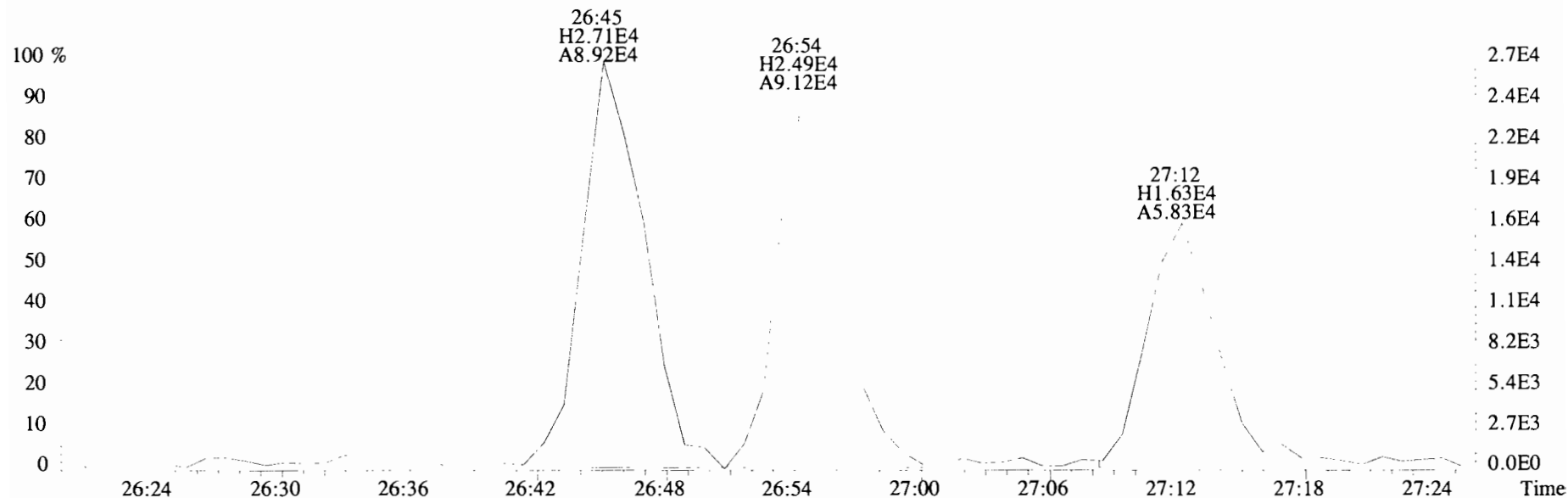
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 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



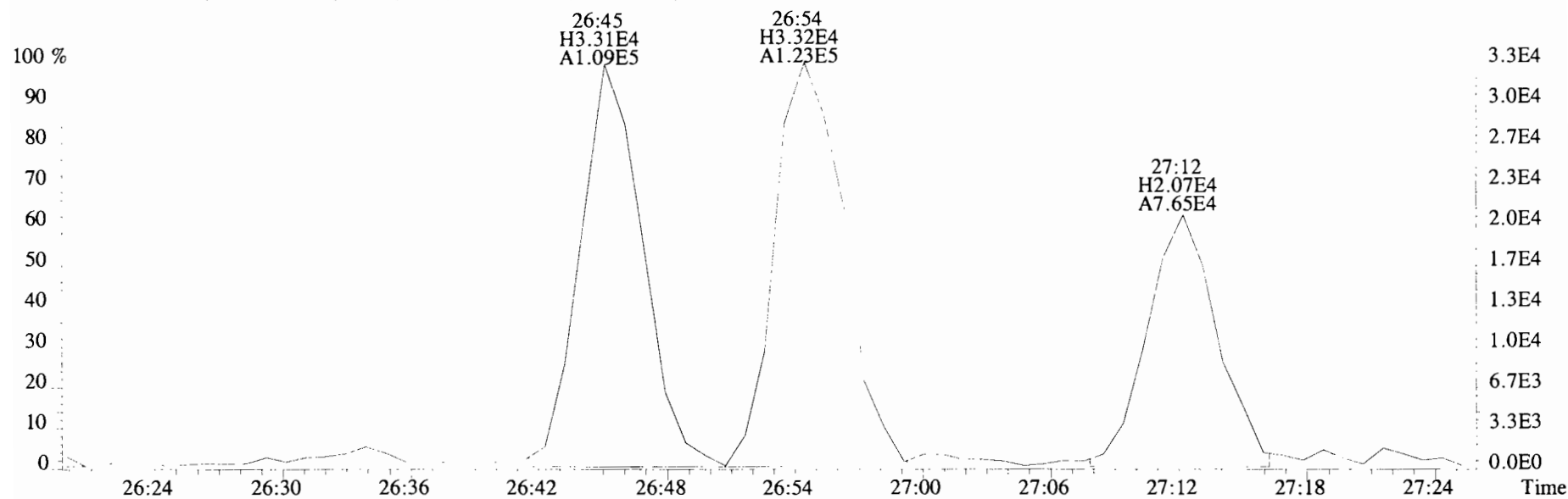
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 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



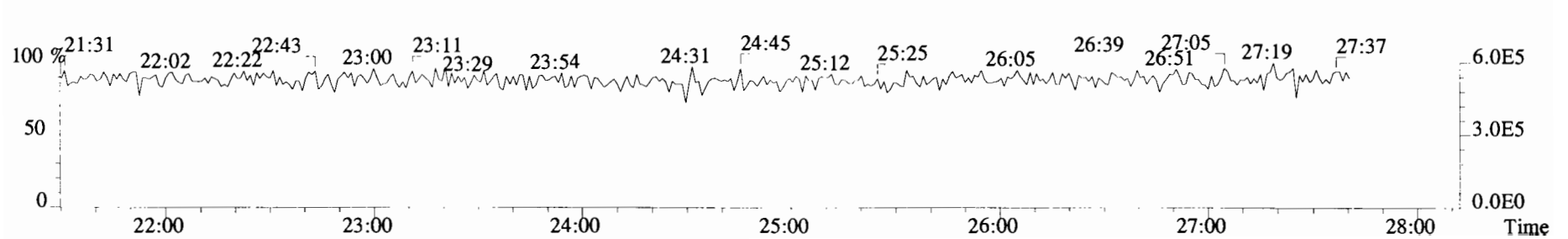
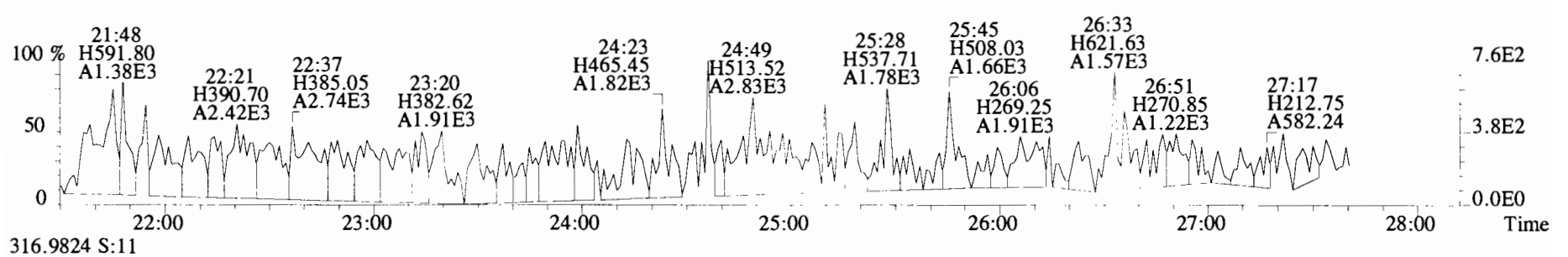
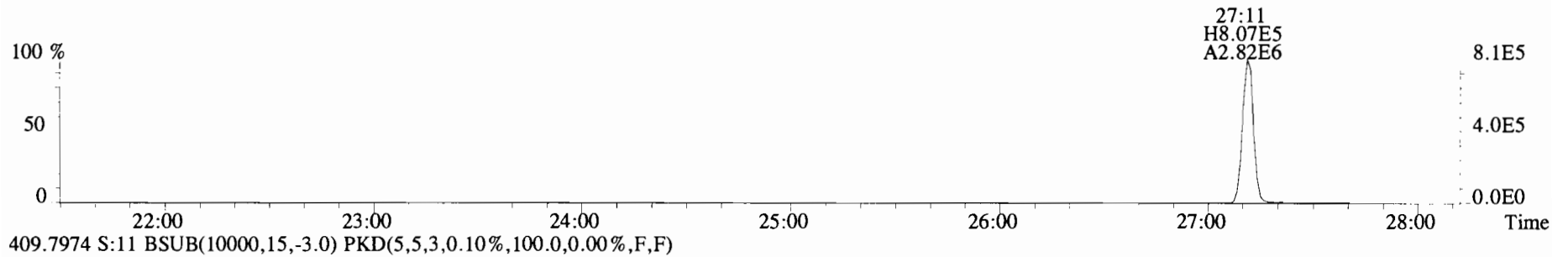
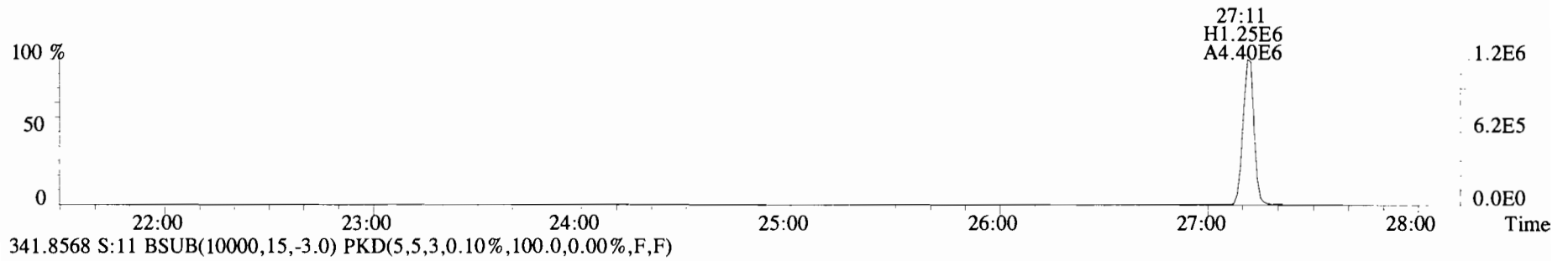
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



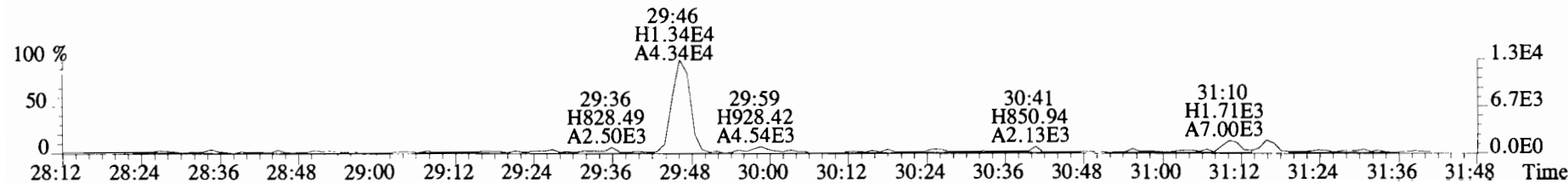
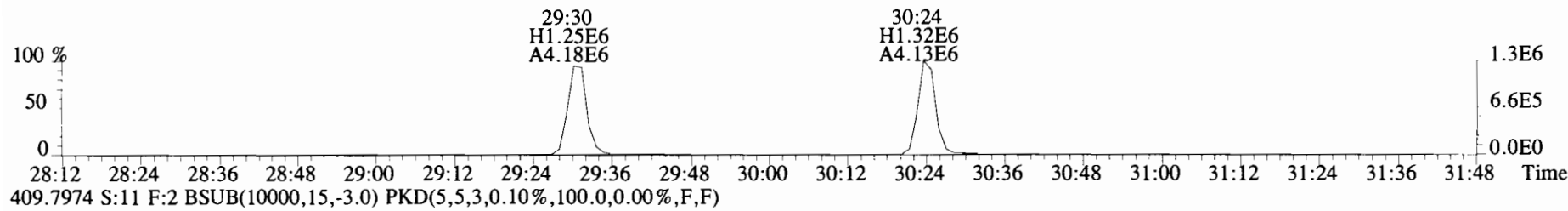
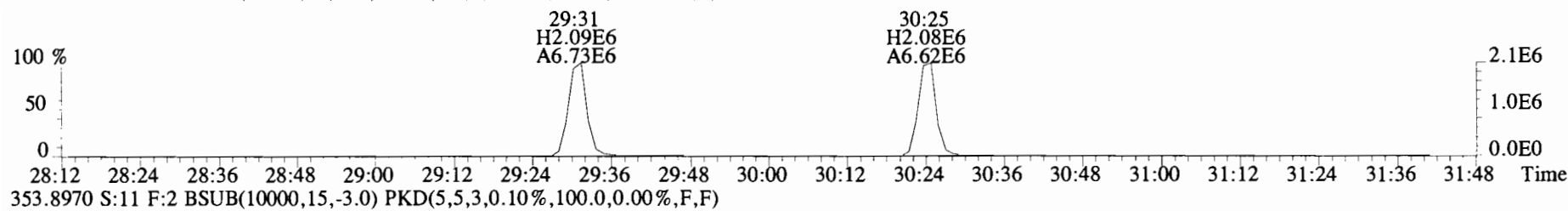
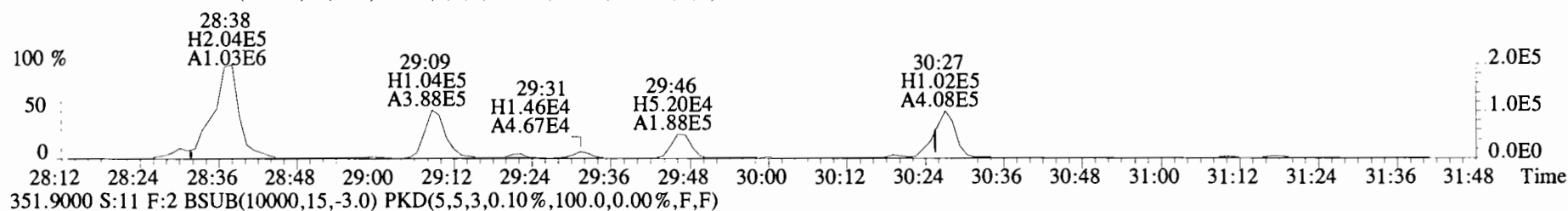
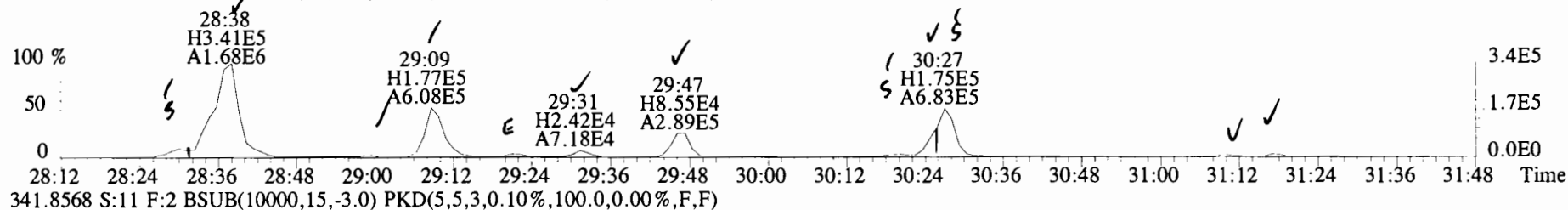
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



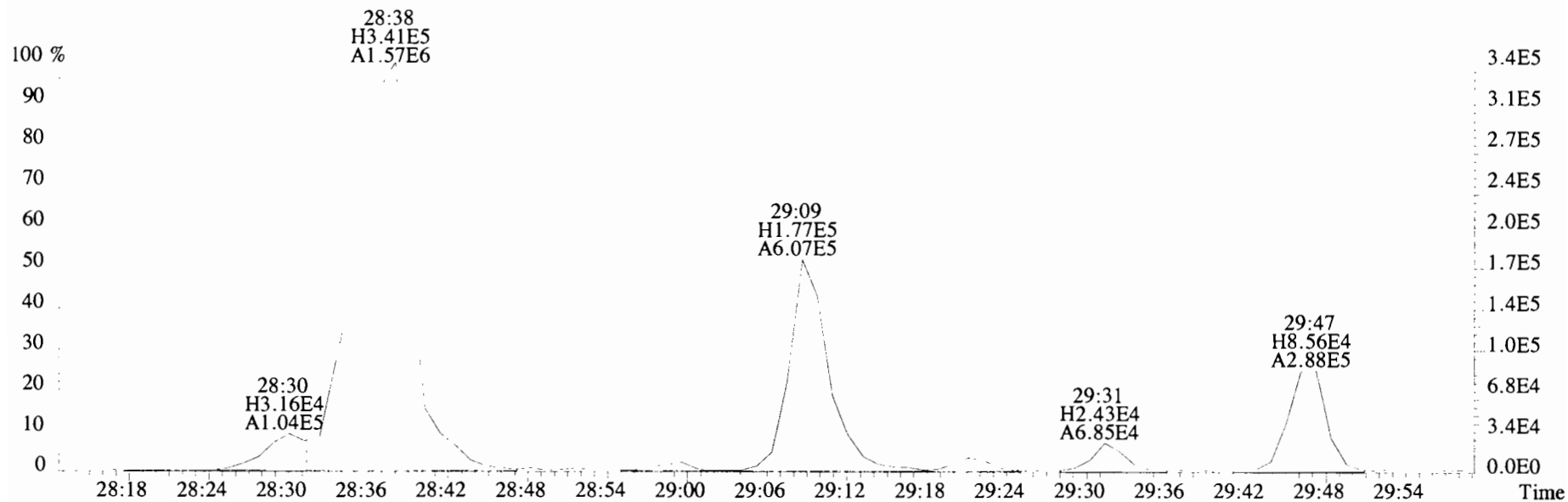
File:191120D1 #1-492 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



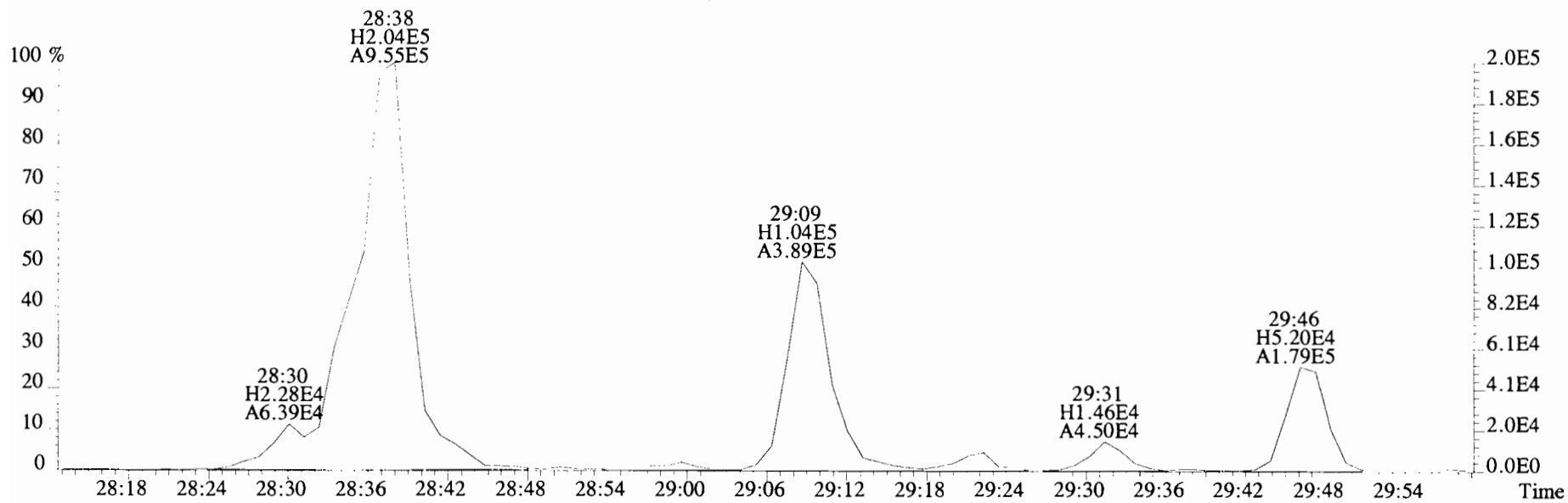
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



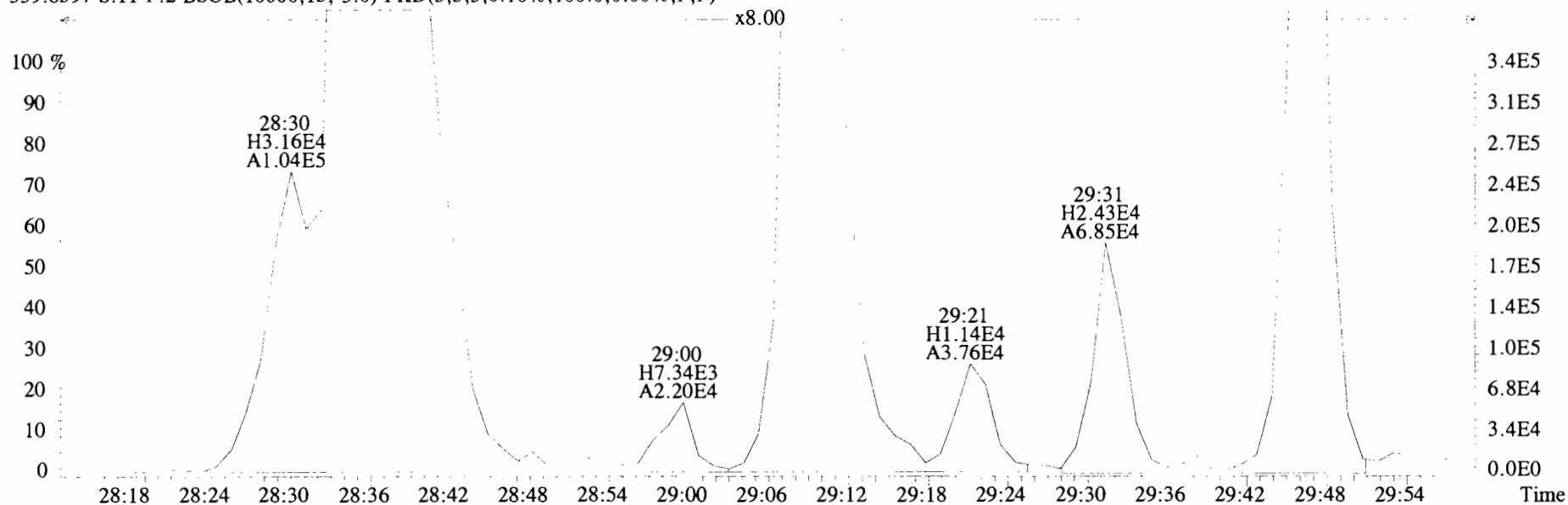
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



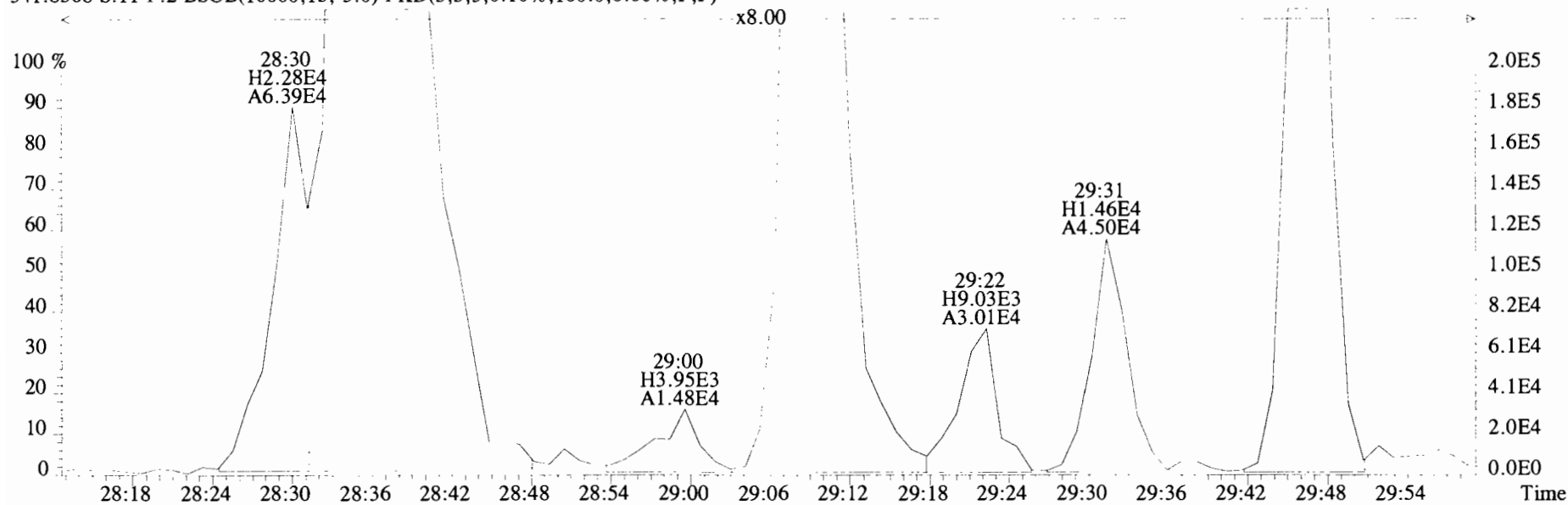
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



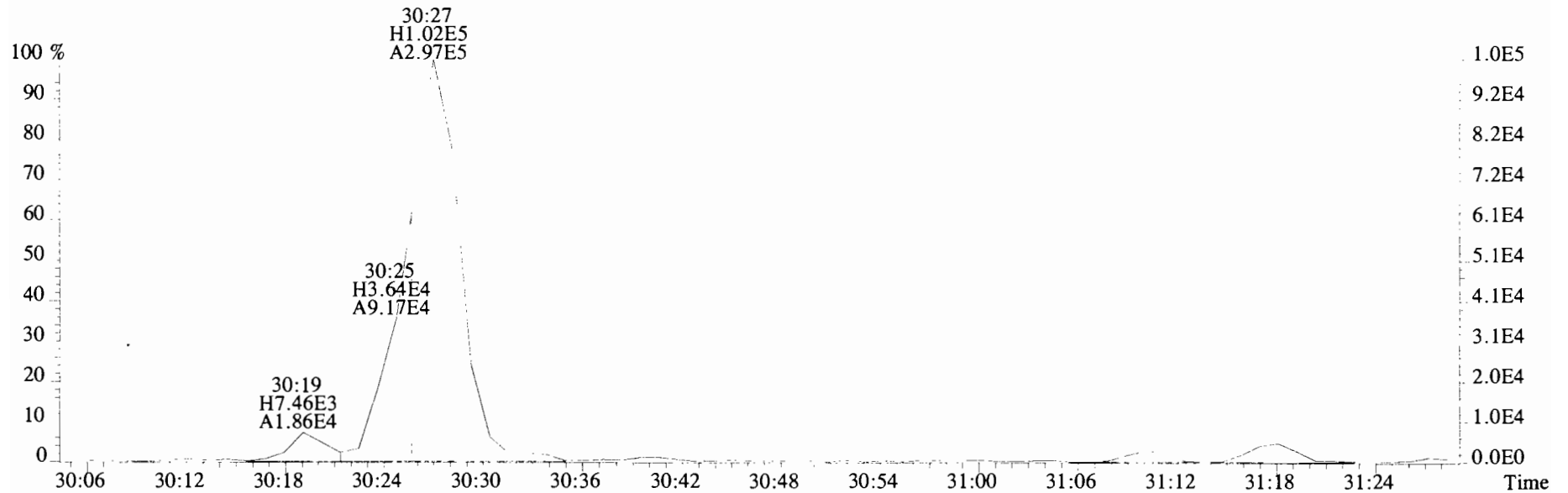
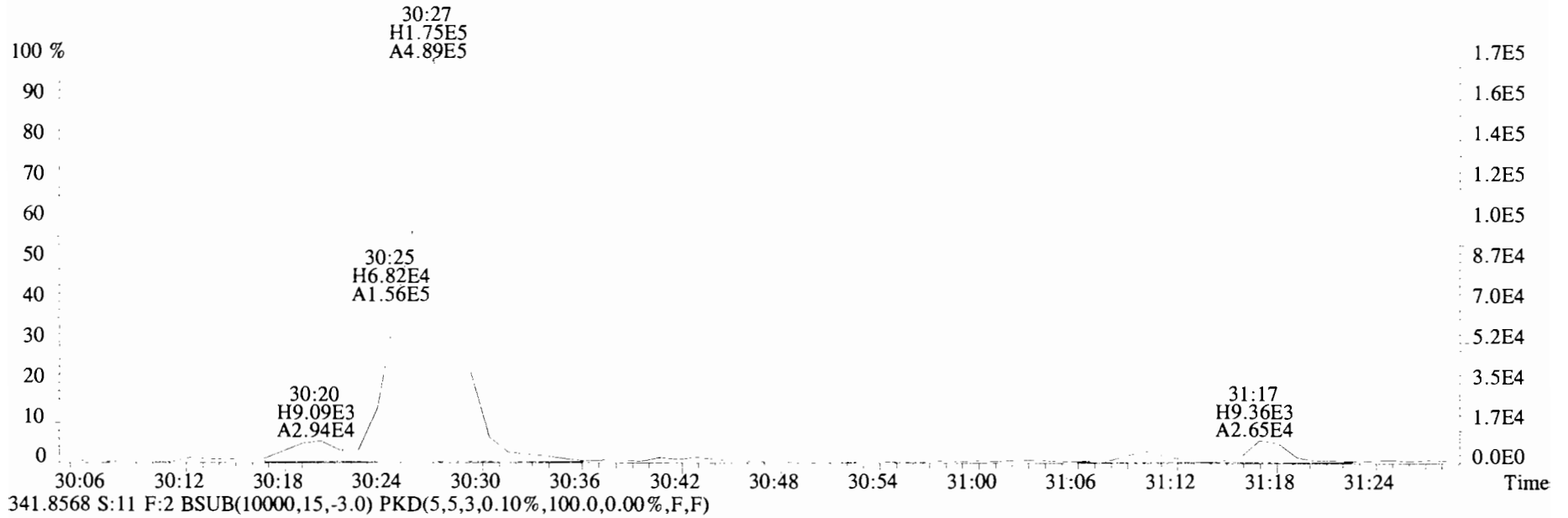
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



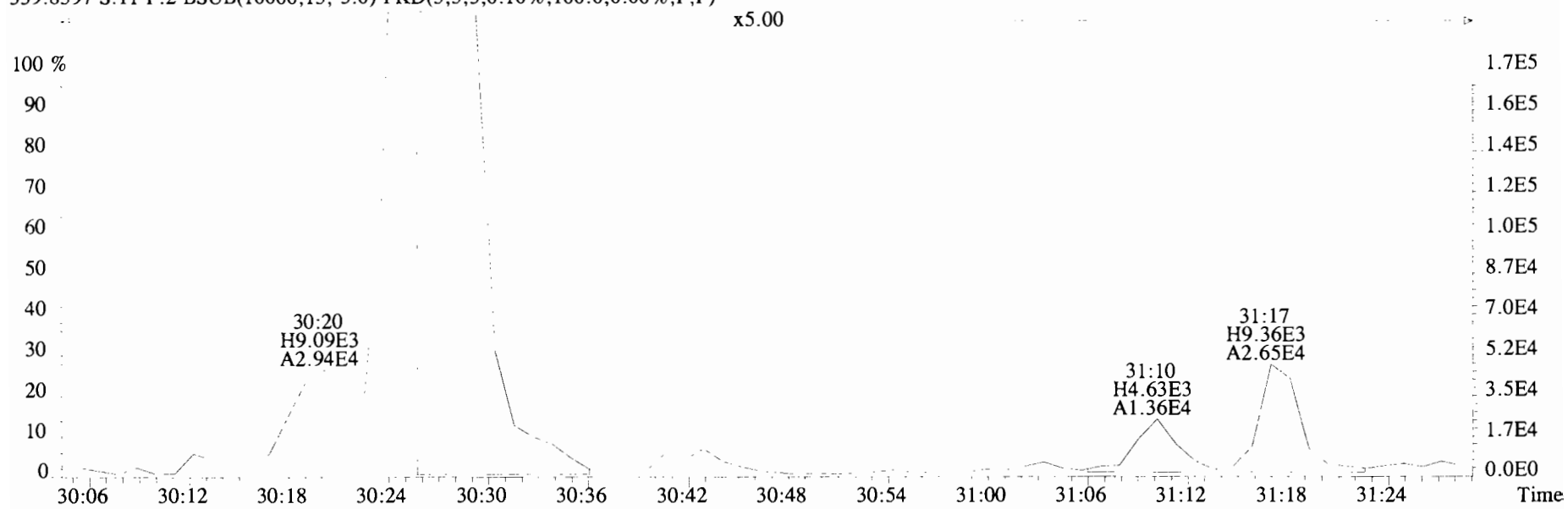
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



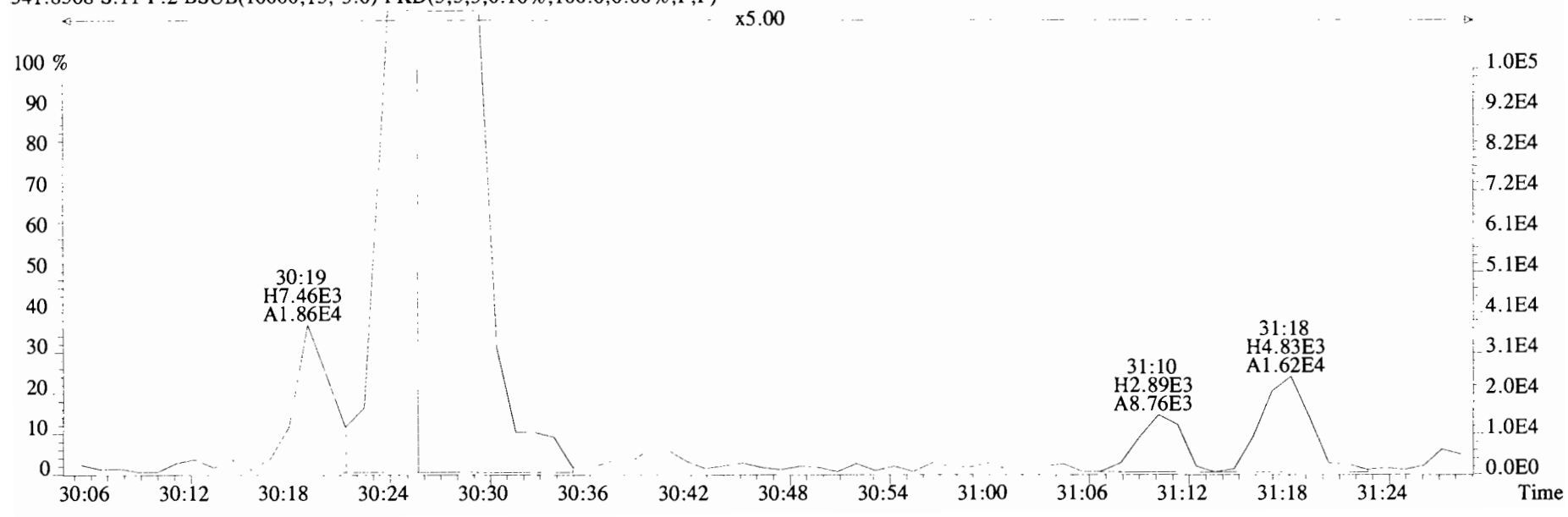
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



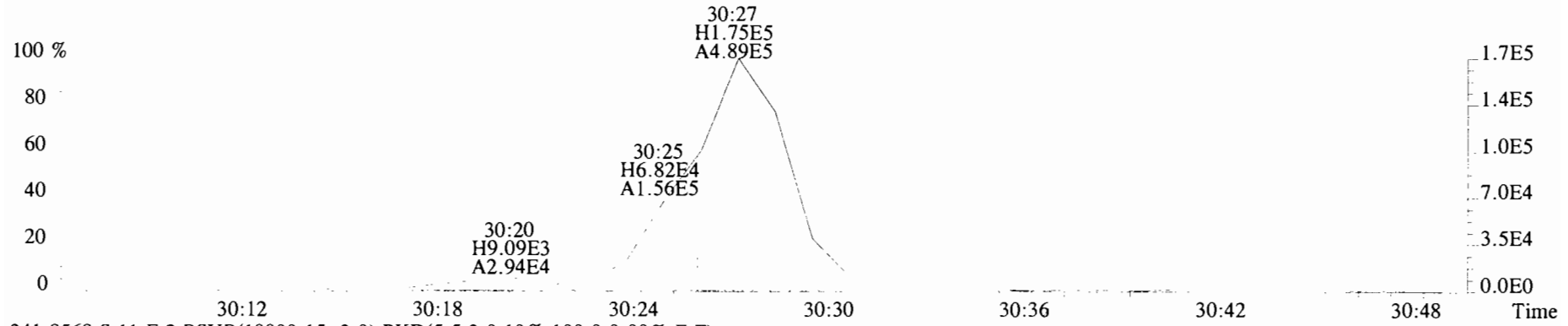
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



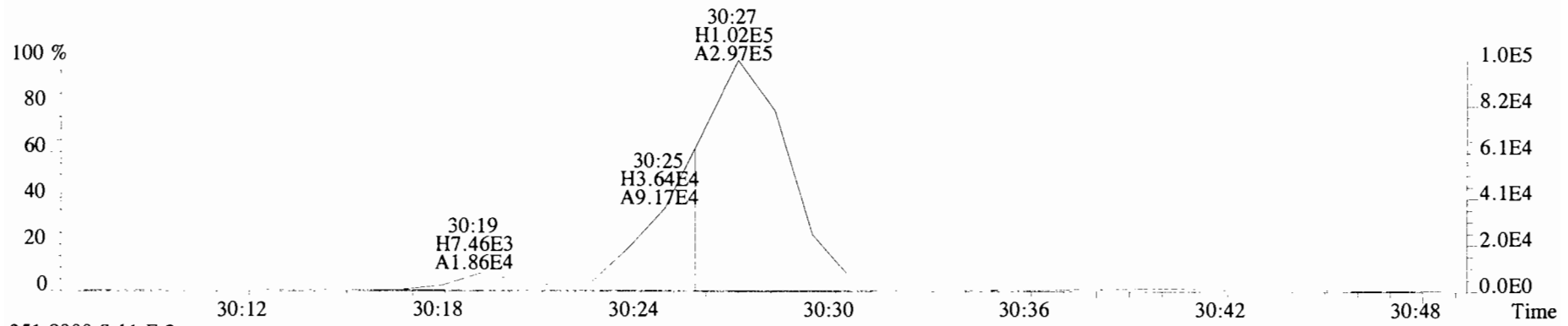
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



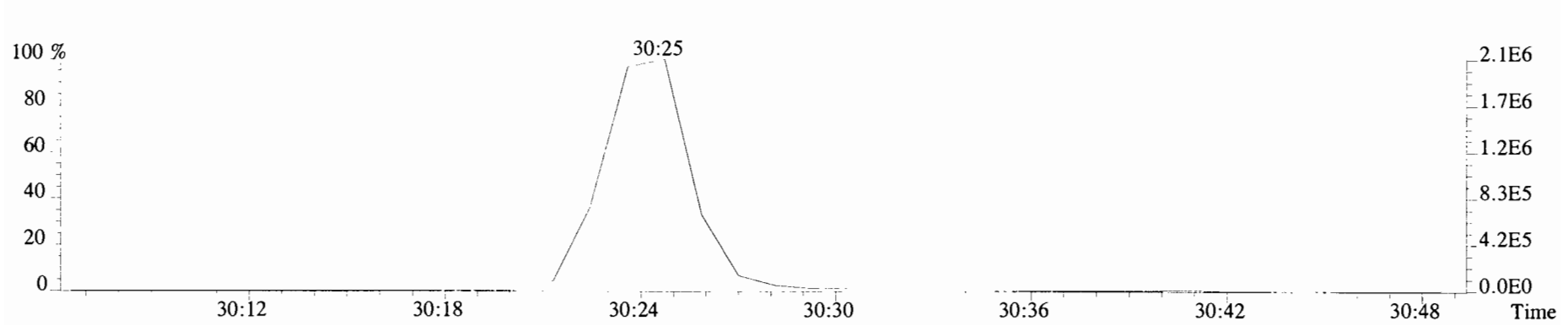
File:191120D1 #1-211 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



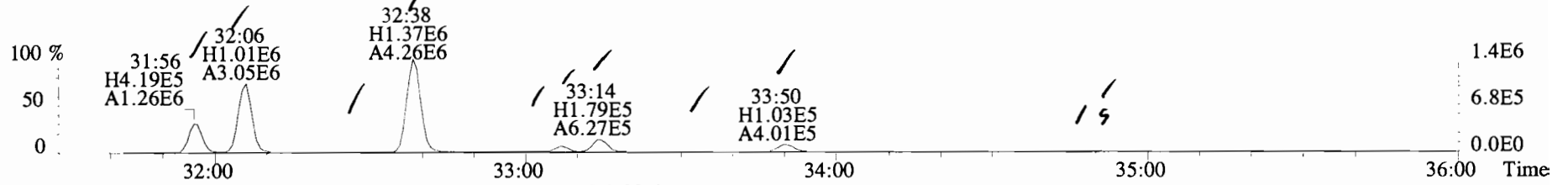
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



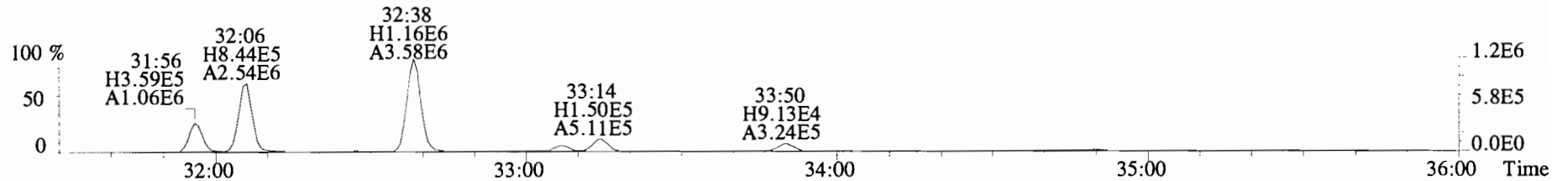
351.9000 S:11 F:2



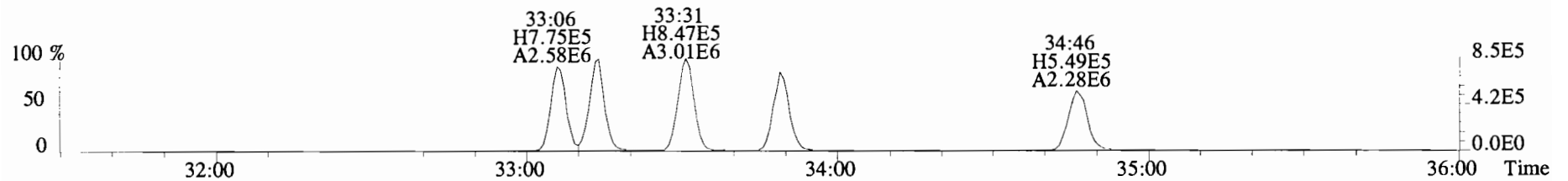
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



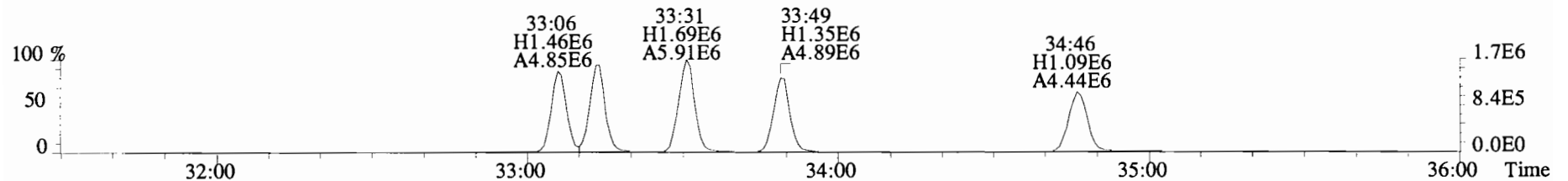
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



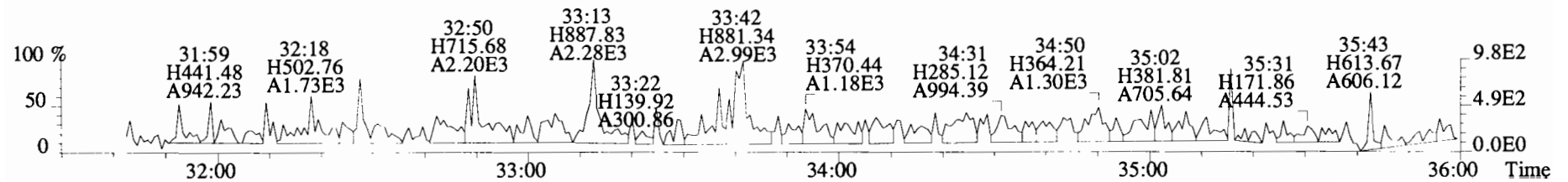
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



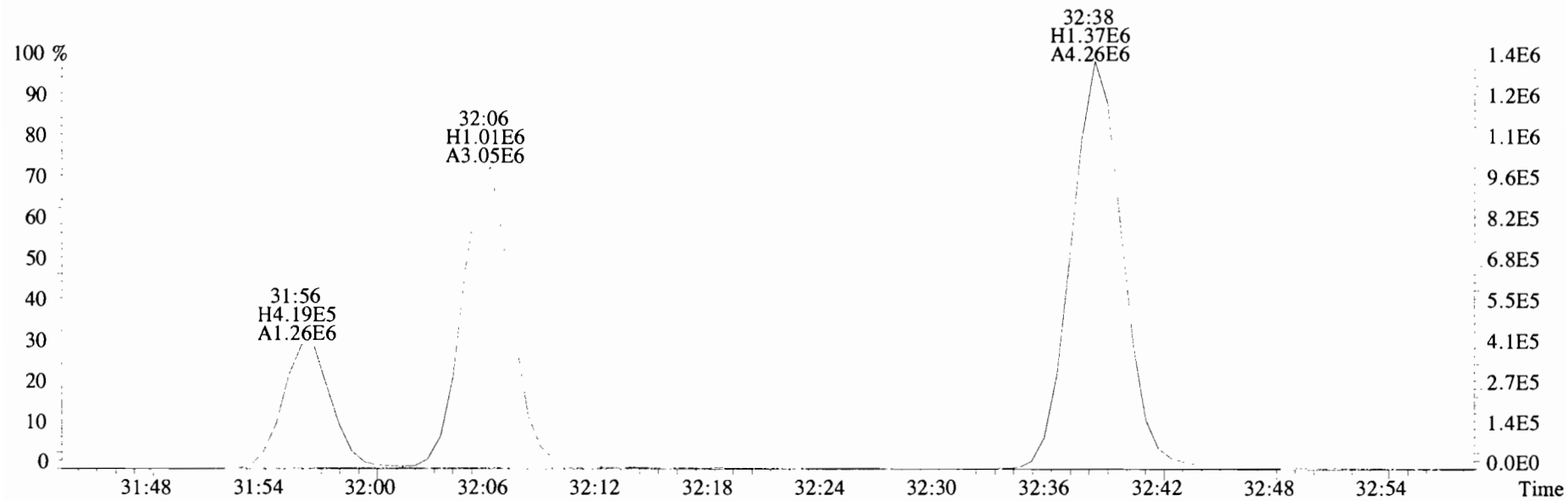
385.8610 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



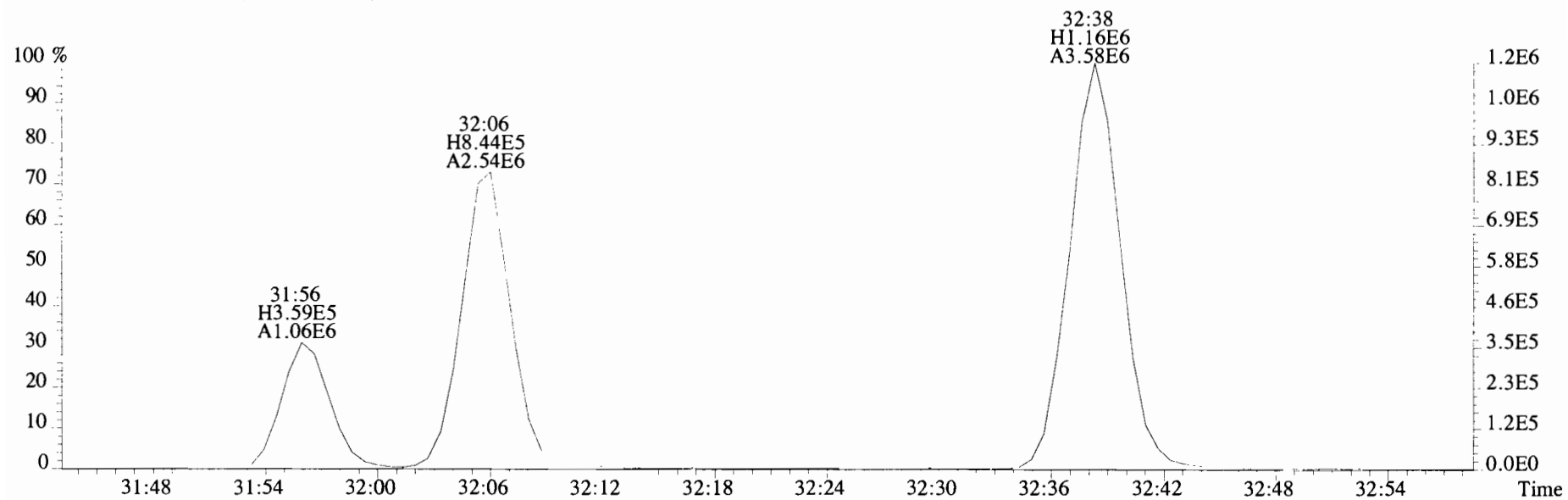
445.7555 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



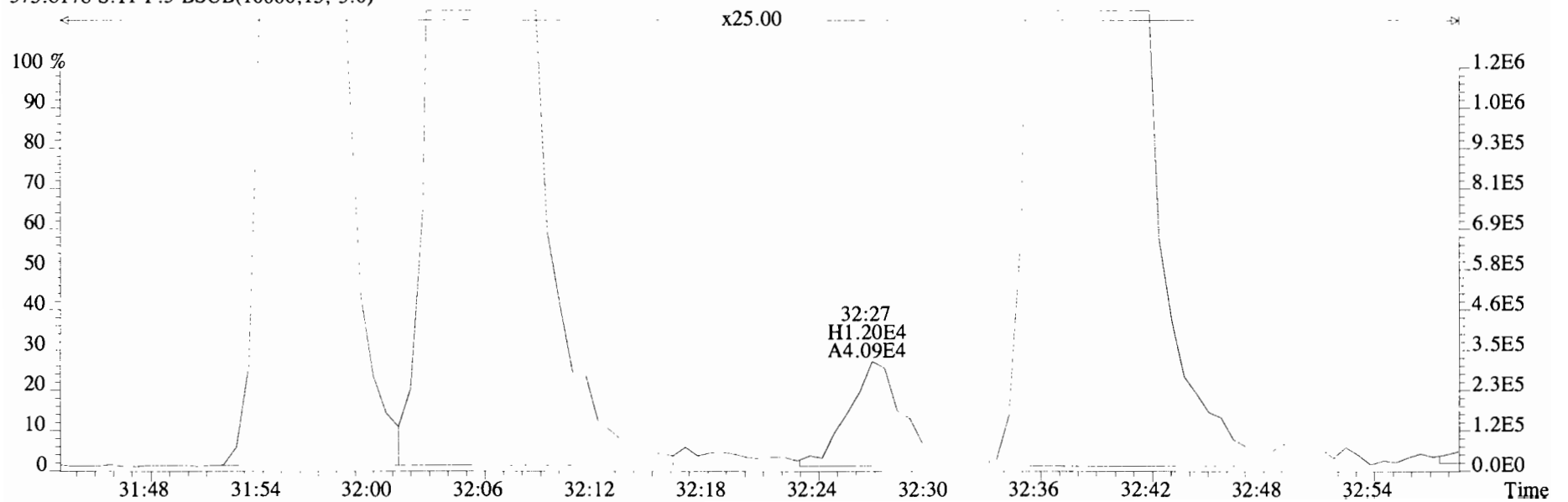
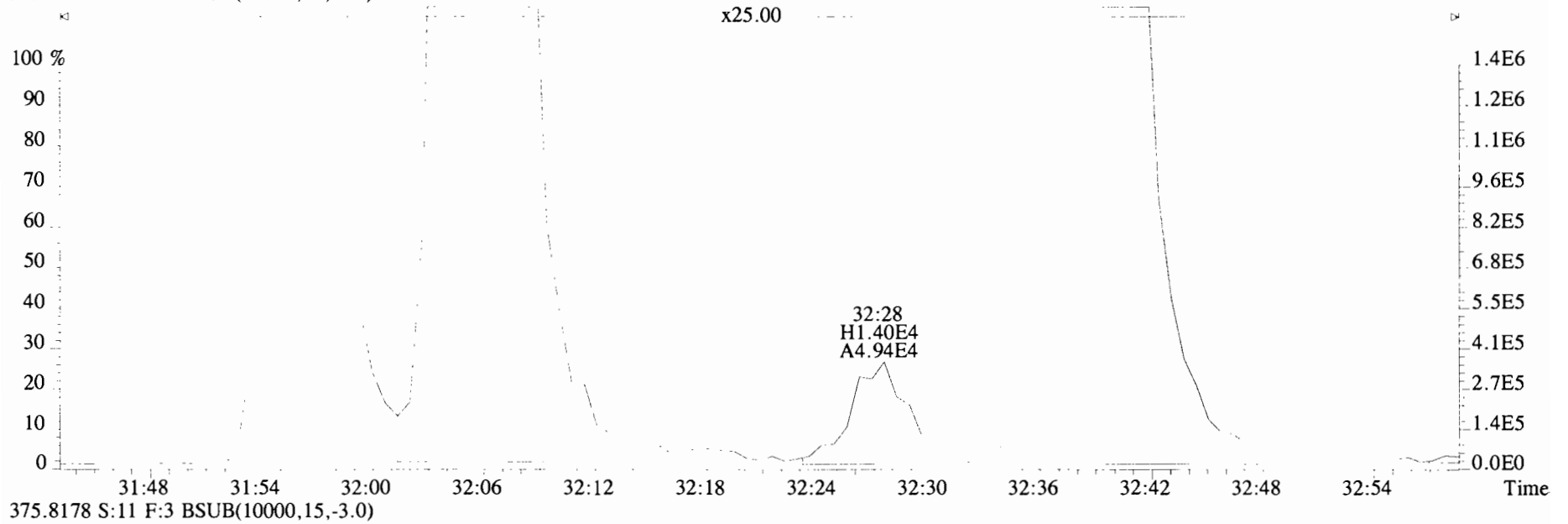
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0)



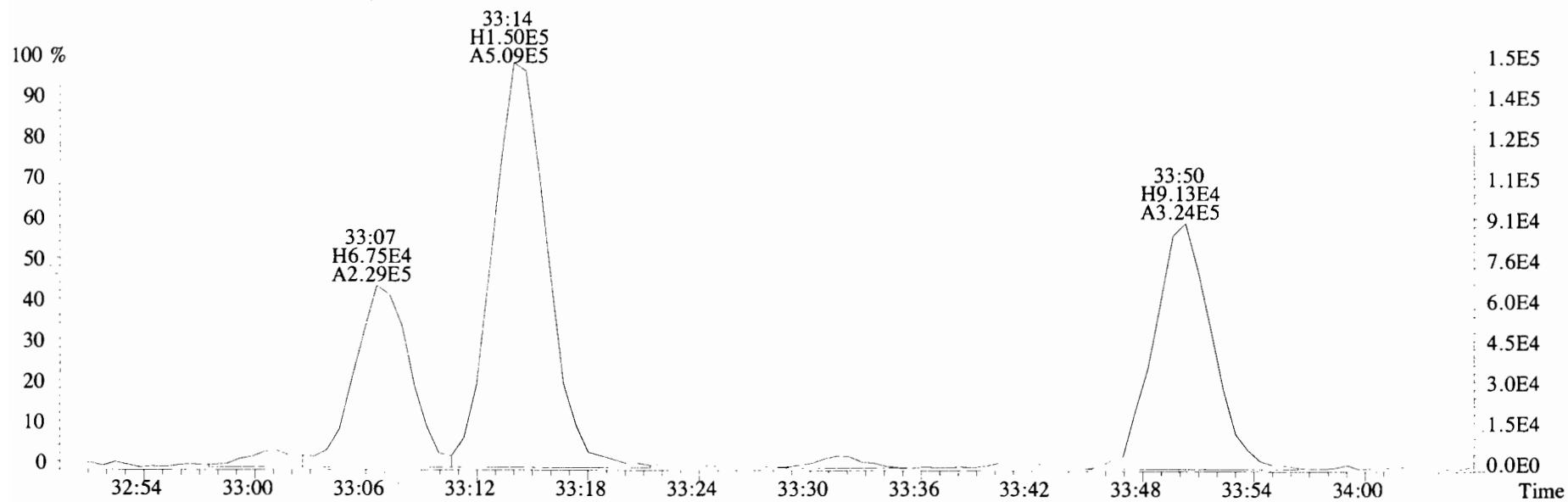
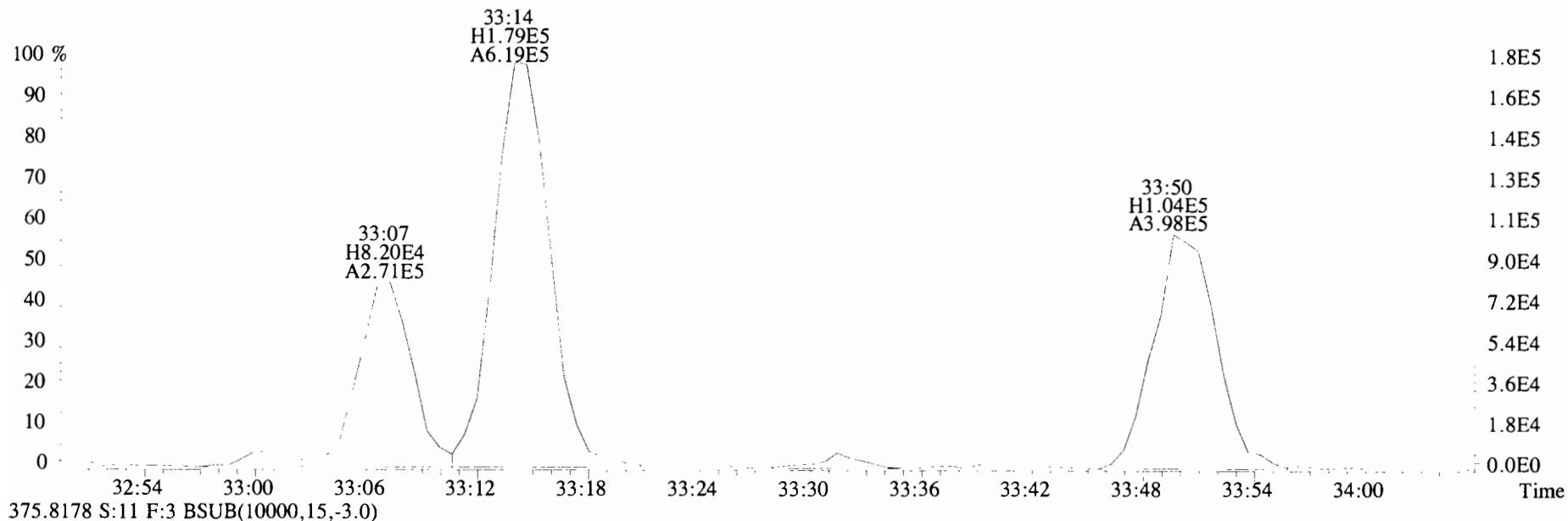
375.8178 S:11 F:3 BSUB(10000,15,-3.0)



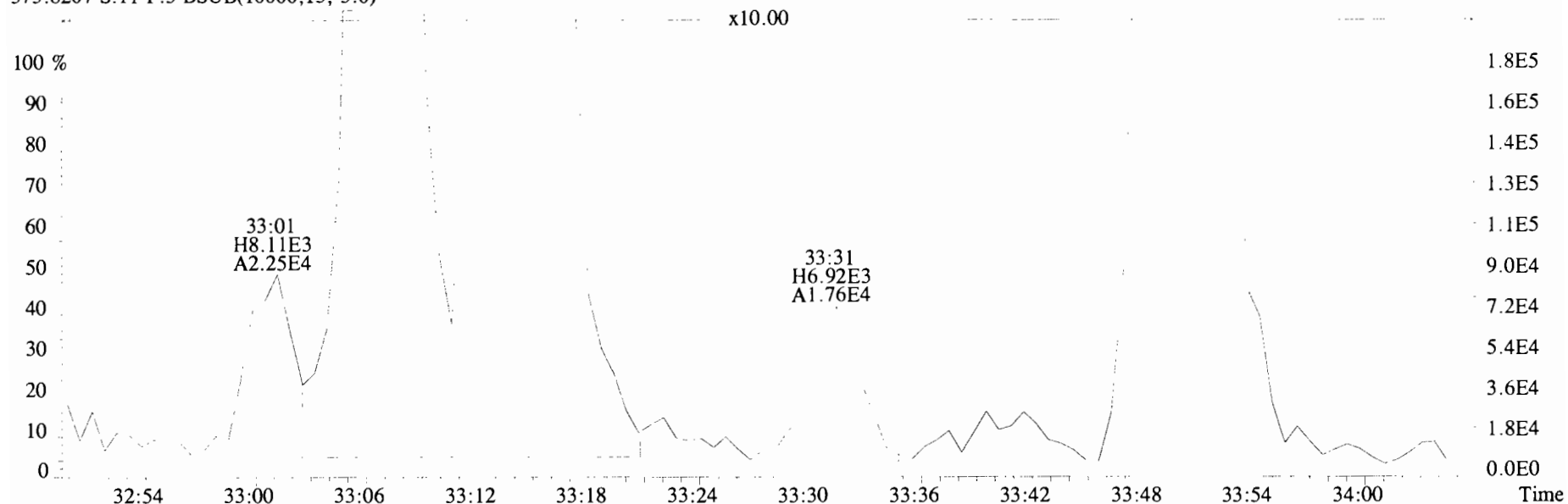
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0)



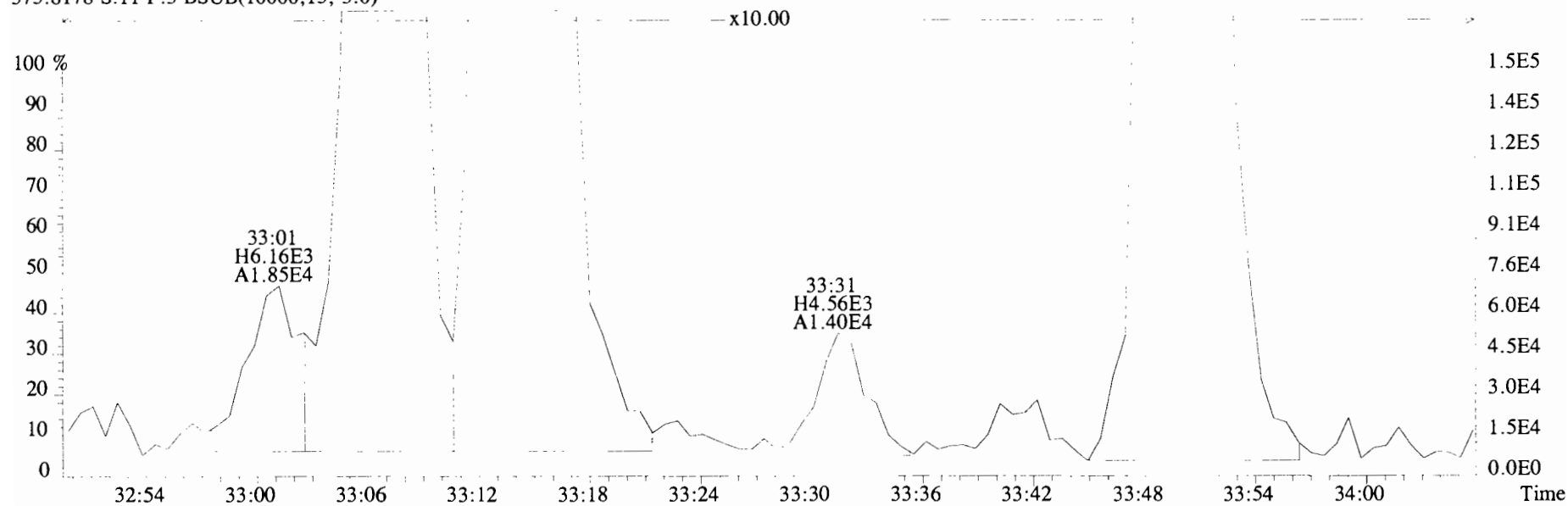
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0)



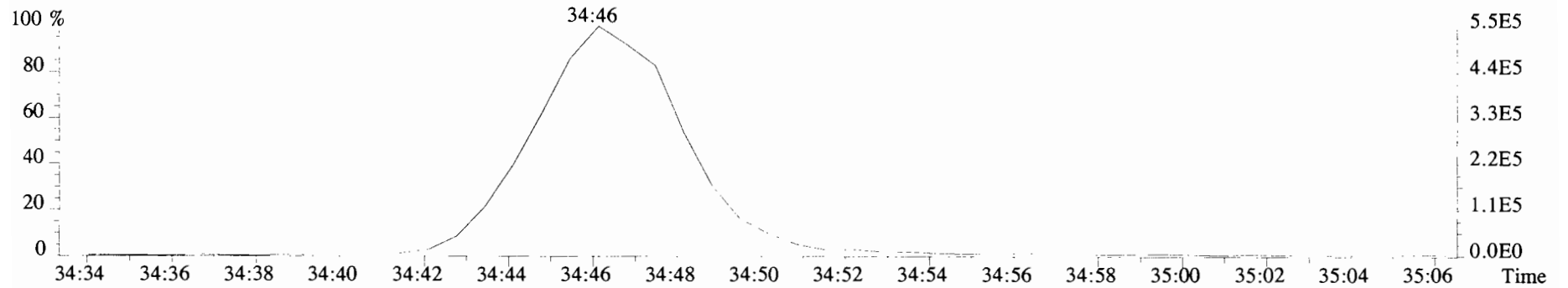
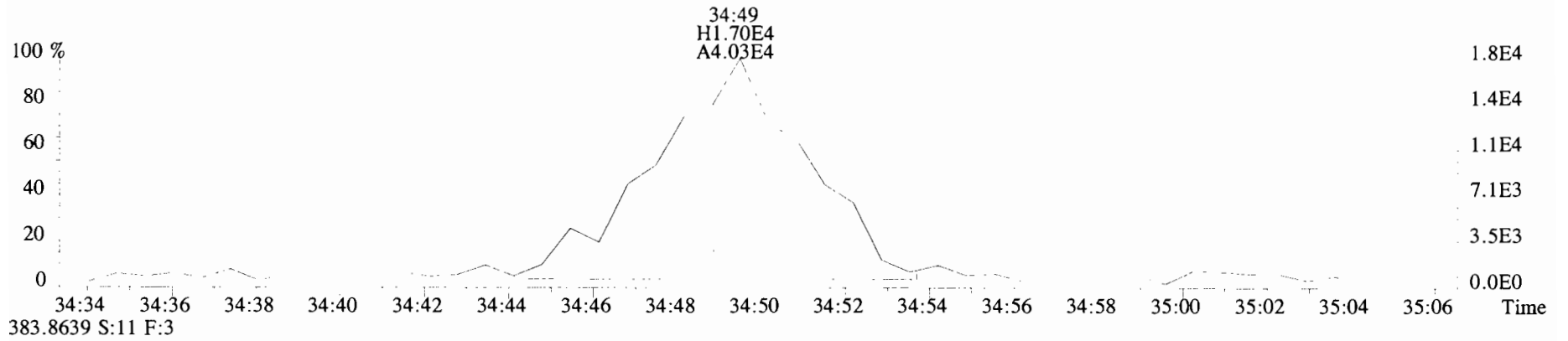
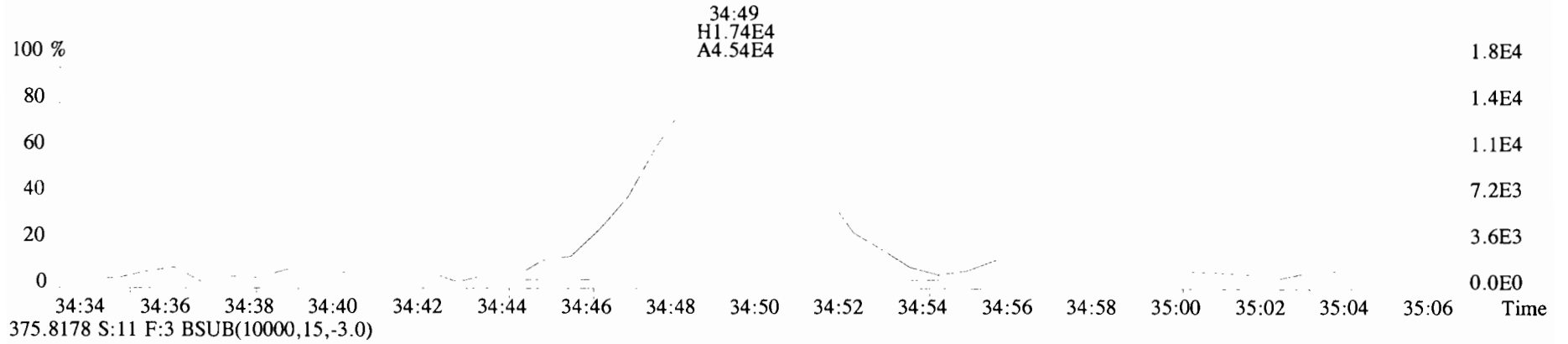
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0)



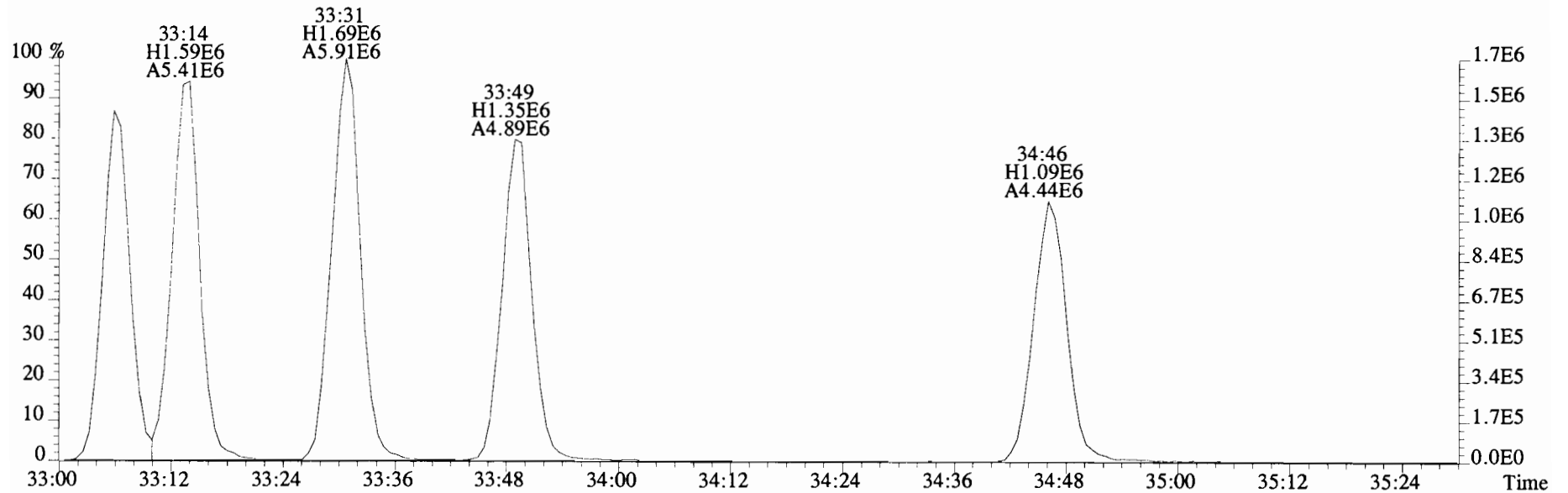
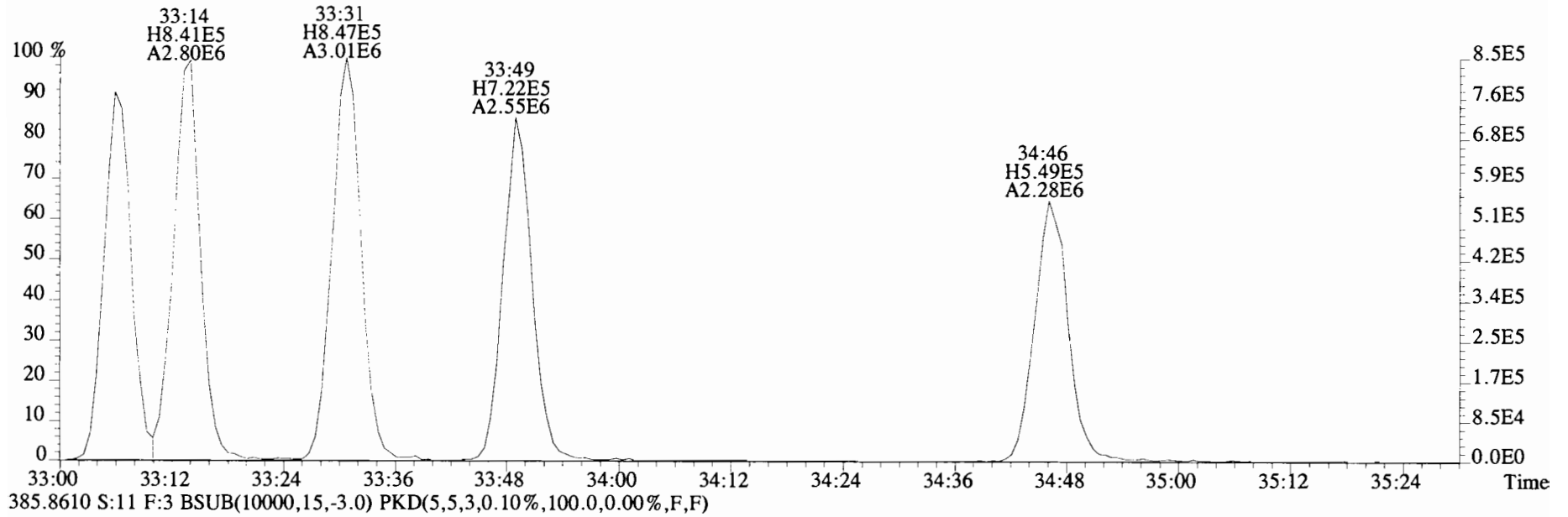
375.8178 S:11 F:3 BSUB(10000,15,-3.0)



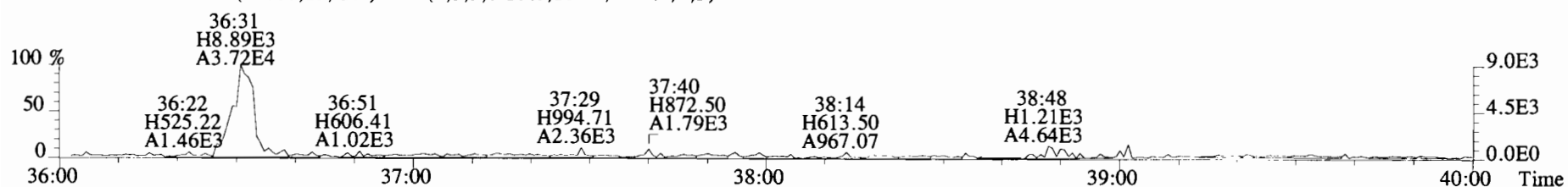
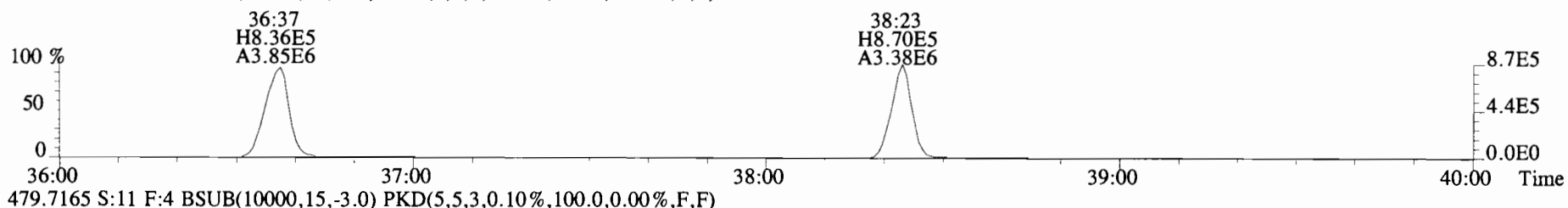
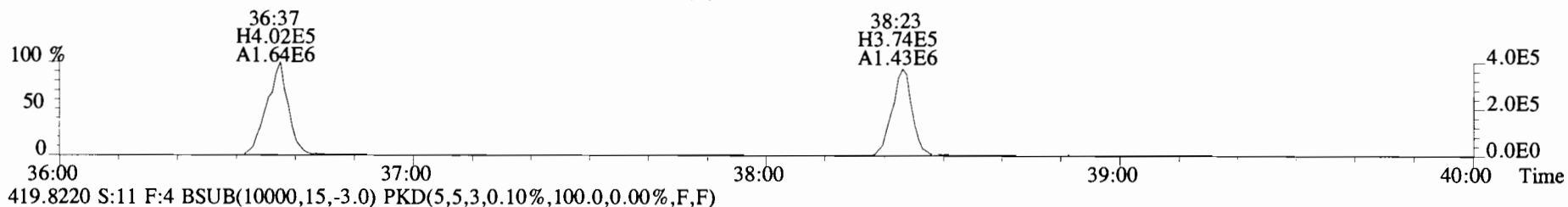
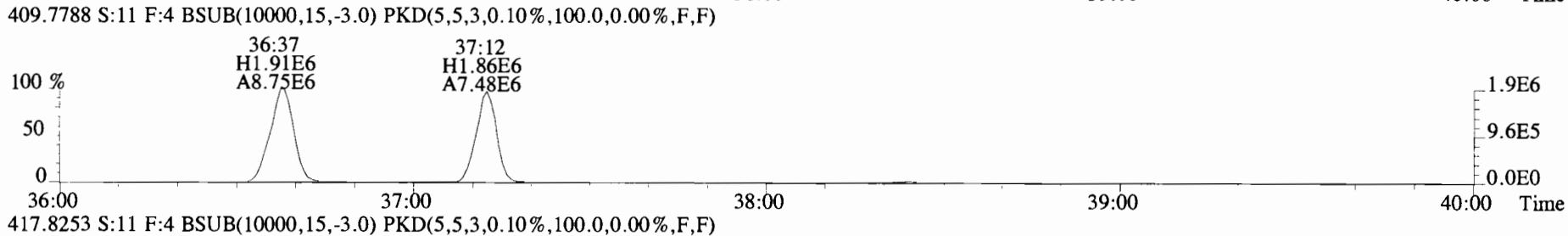
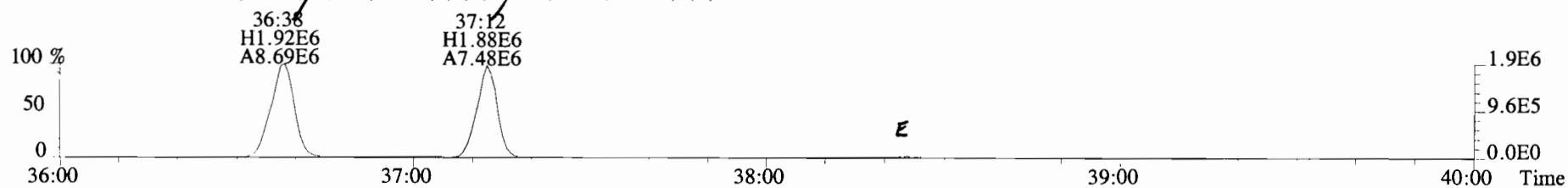
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
373.8207 S:11 F:3 BSUB(10000,15,-3.0)



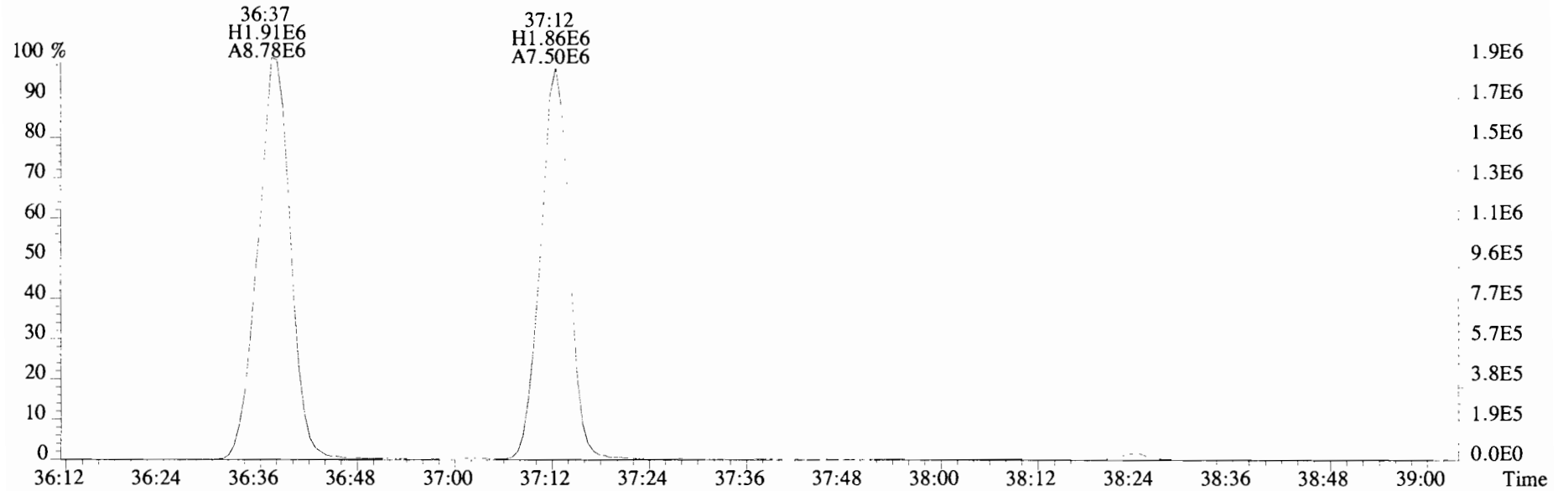
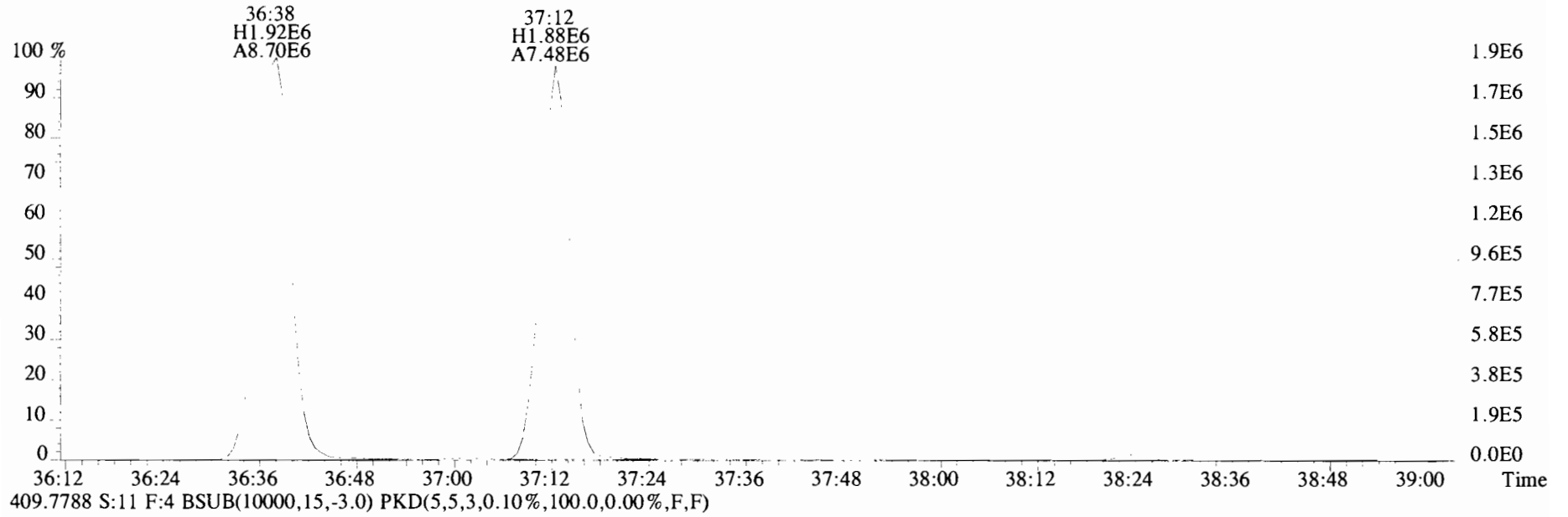
File:191120D1 #1-384 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



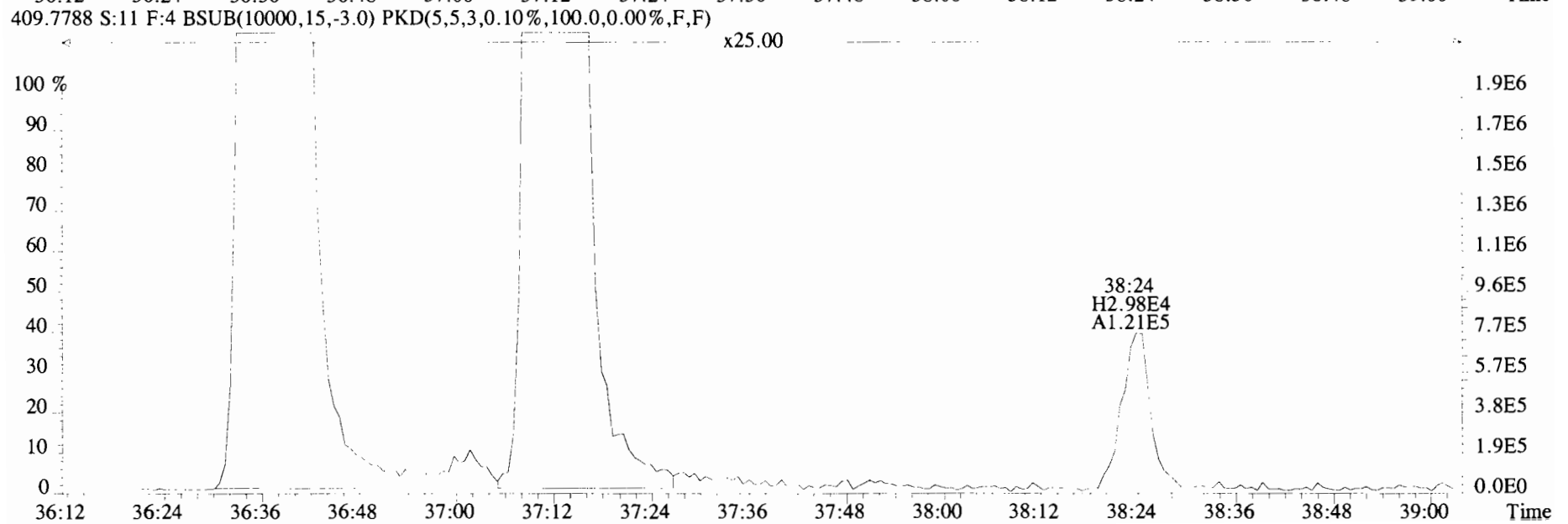
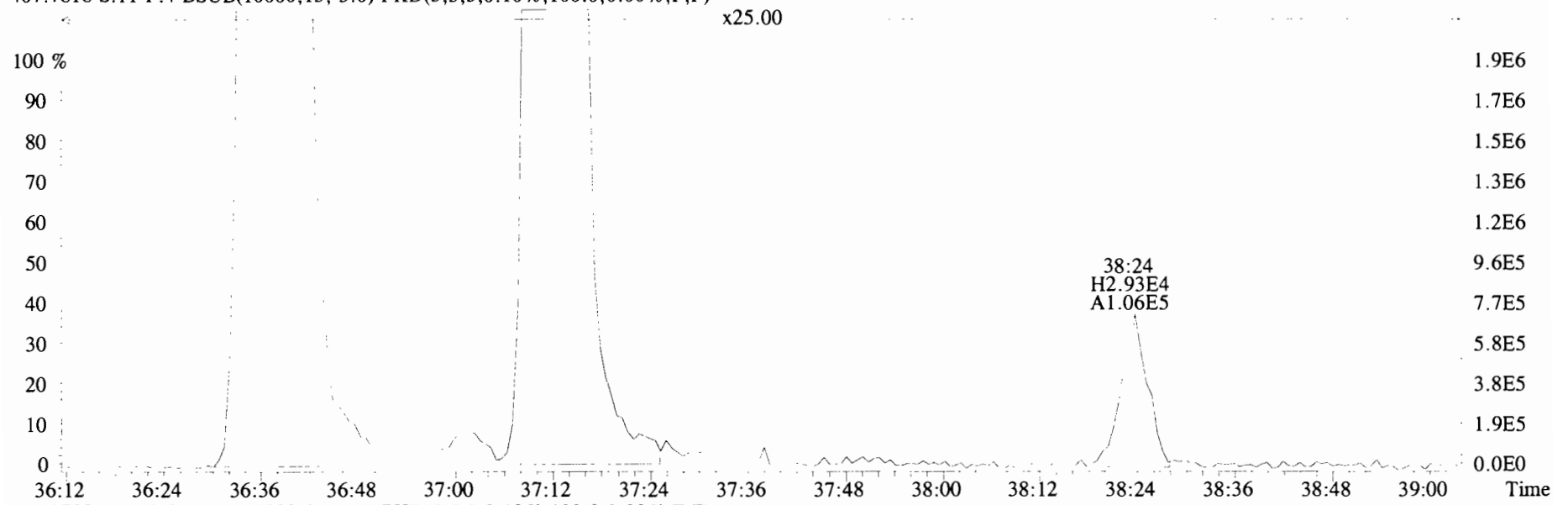
File:191120D1 #1-356 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



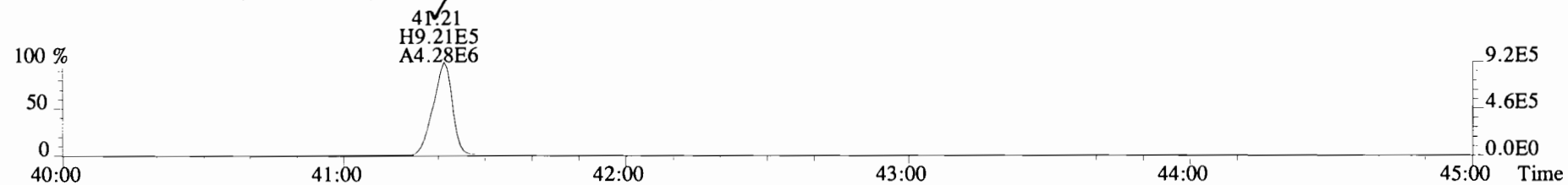
File:191120D1 #1-356 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



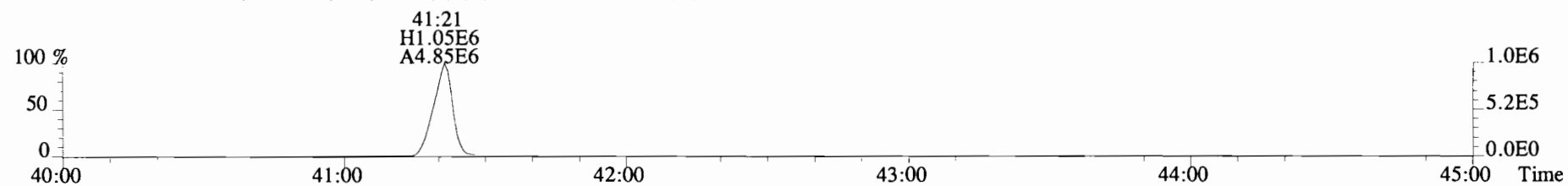
File:191120D1 #1-356 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



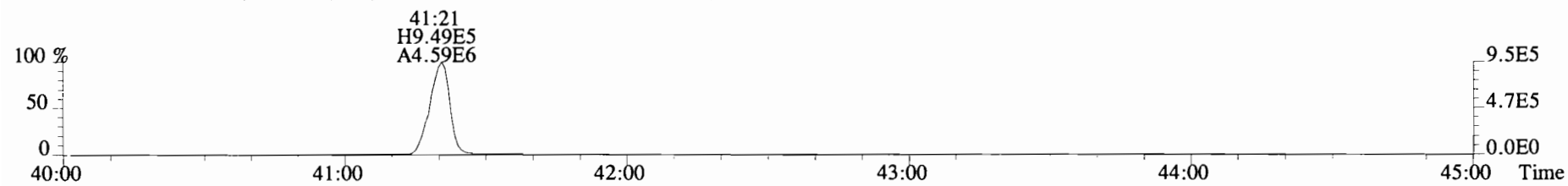
File:191120D1 #1-431 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#11 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
 441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



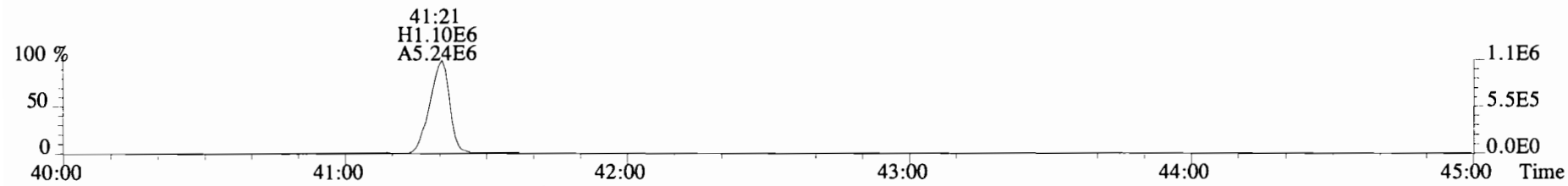
443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



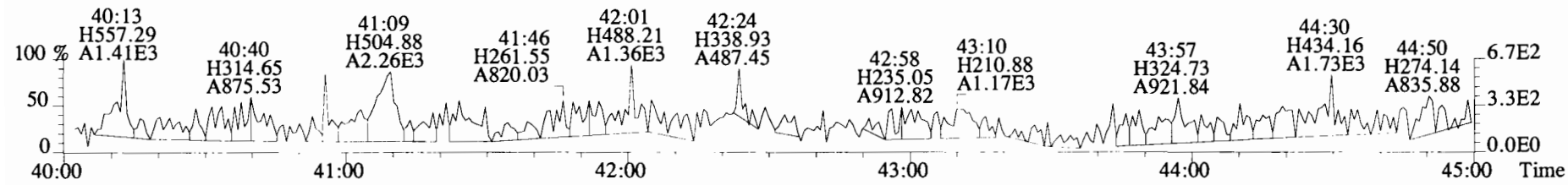
453.7831 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



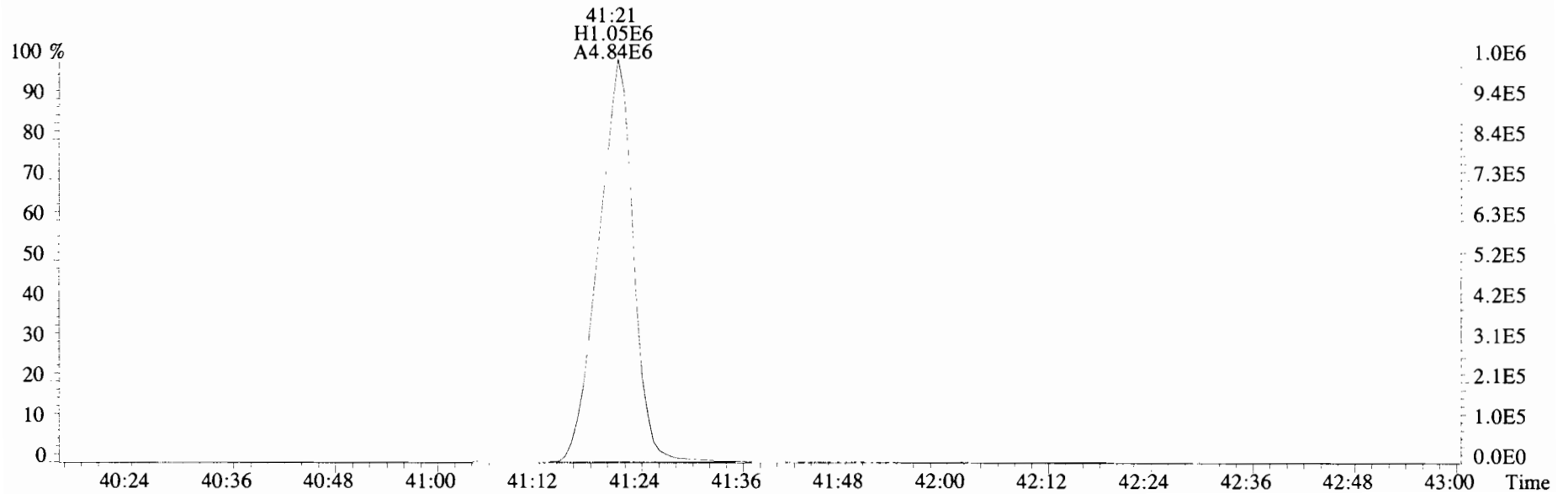
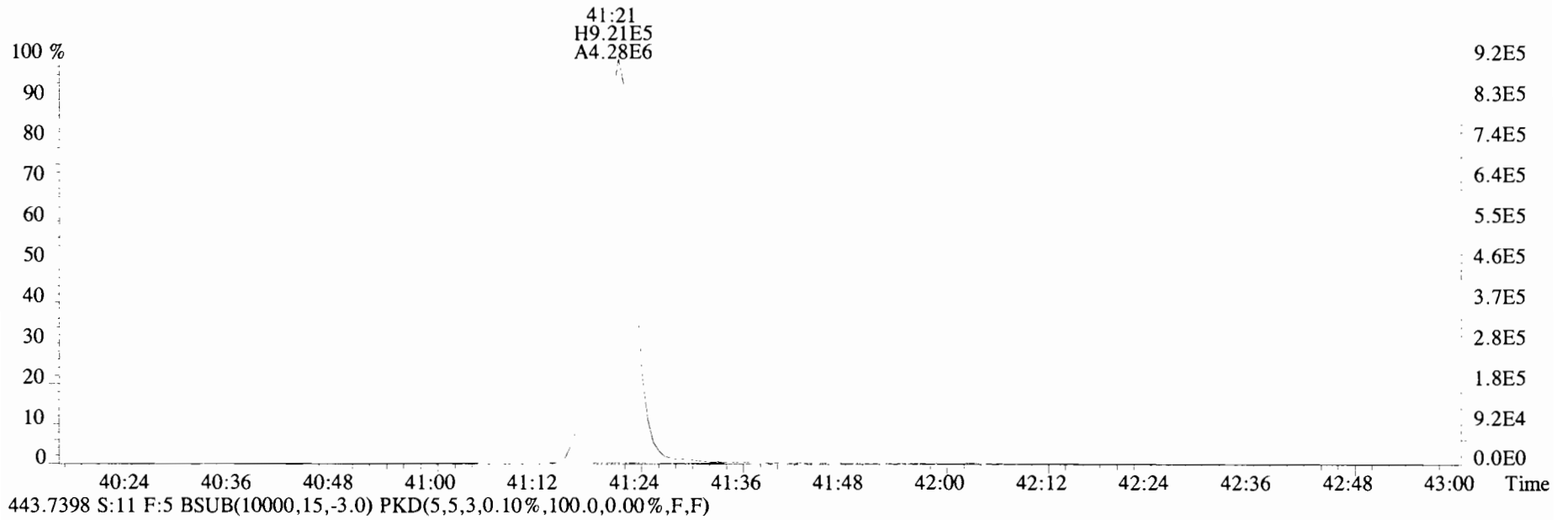
455.7801 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

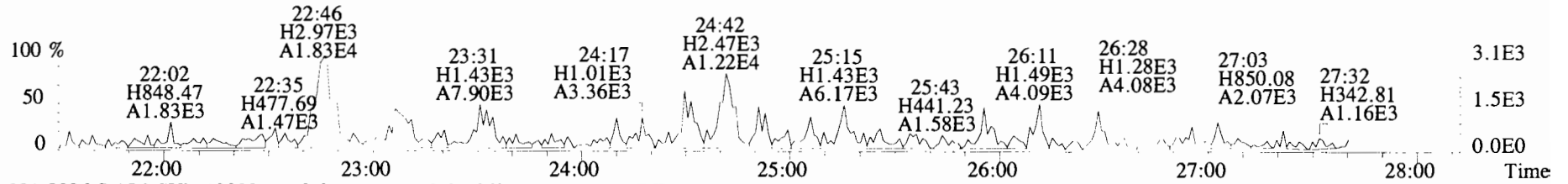


File:191120D1 #1-431 Acq:20-NOV-2019 21:58:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2 PDI-095SC-B-06-08-191002 17.95 Exp:OCDD_DB5
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

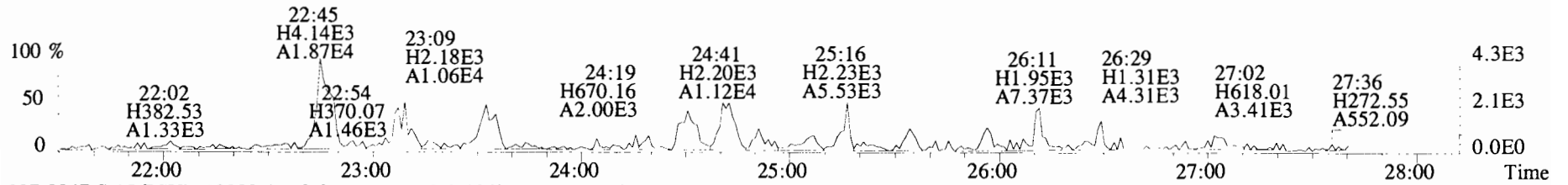


Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	*	* n	0.91	NotFη	*	*	2.5	*	*	Total Tetra-Dioxins	*	*	*	*	*
1,2,3,7,8-PeCDD	*	* n	0.90	NotFη	*	*	2.5	*	*	Total Penta-Dioxins	*	*	*	*	*
1,2,3,4,7,8-HxCDD	*	* n	1.10	NotFη	*	*	2.5	*	*	Total Hexa-Dioxins	*	*	*	*	*
1,2,3,6,7,8-HxCDD	*	* n	0.94	NotFη	*	*	2.5	*	*	Total Hepta-Dioxins	*	*	*	*	*
1,2,3,7,8,9-HxCDD	*	* n	0.96	NotFη	*	*	2.5	*	*	Total Tetra-Furans	*	*	*	*	*
1,2,3,4,6,7,8-HpCDD	*	* n	0.98	NotFη	*	*	2.5	*	*	Total Penta-Furans	0.0000	0.0000	*	*	*
OCDD	3.34e+07	0.89 y	0.96	41:08	6245.3	*	2.5	*	*	Total Hexa-Furans	*	*	*	*	*
										Total Hepta-Furans	*	*	*	*	*
2,3,7,8-TCDF	*	* n	0.95	NotFη	*	*	2.5	*	*						
1,2,3,7,8-PeCDF	*	* n	0.96	NotFη	*	*	2.5	*	*						
2,3,4,7,8-PeCDF	*	* n	1.01	NotFη	*	*	2.5	*	*						
1,2,3,4,7,8-HxCDF	*	* n	1.18	NotFη	*	*	2.5	*	*						
1,2,3,6,7,8-HxCDF	*	* n	1.07	NotFη	*	*	2.5	*	*						
2,3,4,6,7,8-HxCDF	*	* n	1.11	NotFη	*	*	2.5	*	*						
1,2,3,7,8,9-HxCDF	*	* n	1.06	NotFη	*	*	2.5	*	*						
1,2,3,4,6,7,8-HpCDF	*	* n	1.13	NotFη	*	*	2.5	*	*						
1,2,3,4,7,8,9-HpCDF	*	* n	1.28	NotFη	*	*	2.5	*	*						
OCDF	*	* n	0.95	NotFη	*	*	2.5	*	*						
										Rec	Qual				
IS	13C-2,3,7,8-TCDD	2.20e+06	0.79 y	1.10	26:10	189.05				94.8					
IS	13C-1,2,3,7,8-PeCDD	1.64e+06	0.64 y	0.88	30:41	175.40				87.9					
IS	13C-1,2,3,4,7,8-HxCDD	1.33e+06	1.42 y	0.64	33:60	180.55				90.5					
IS	13C-1,2,3,6,7,8-HxCDD	1.53e+06	1.26 y	0.86	34:06	155.21				77.8					
IS	13C-1,2,3,7,8,9-HxCDD	1.54e+06	1.30 y	0.81	34:24	166.35				83.4					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.35e+06	1.03 y	0.65	37:51	179.08				89.8					
IS	13C-OCDD	2.23e+06	0.89 y	0.58	41:07	334.25				83.8					
IS	13C-2,3,7,8-TCDF	3.28e+06	0.79 y	1.03	25:23	177.72				89.1					
IS	13C-1,2,3,7,8-PeCDF	2.65e+06	1.63 y	0.85	29:31	173.54				87.0					
IS	13C-2,3,4,7,8-PeCDF	2.47e+06	1.63 y	0.85	30:25	162.98				81.7					
IS	13C-1,2,3,4,7,8-HxCDF	1.81e+06	0.53 y	0.83	33:07	189.50				95.0					
IS	13C-1,2,3,6,7,8-HxCDF	2.14e+06	0.53 y	1.03	33:14	180.06				90.3					
IS	13C-2,3,4,6,7,8-HxCDF	1.92e+06	0.52 y	0.95	33:50	175.18				87.8					
IS	13C-1,2,3,7,8,9-HxCDF	1.76e+06	0.52 y	0.83	34:47	185.06				92.8					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.53e+06	0.44 y	0.76	36:37	175.49				88.0					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.29e+06	0.43 y	0.58	38:24	192.99				96.8					
IS	13C-OCDF	2.82e+06	0.88 y	0.69	41:21	356.35				89.3					
C/Up	37C1-2,3,7,8-TCDD	9.23e+05		1.20	26:11	72.521				90.9					
											Integrations	Reviewed			
											by	by			
RS/RT	13C-1,2,3,4-TCDD	2.12e+06	0.79 y	1.00	25:36	199.46				Analyst: <u>DB</u>		Analyst: <u>CT</u>			
RS	13C-1,2,3,4-TCDF	3.56e+06	0.81 y	1.00	24:10	199.46									
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.29e+06	0.51 y	1.00	33:31	199.46									
										Date: <u>12/2/19</u>		Date: <u>12/03/19</u>			

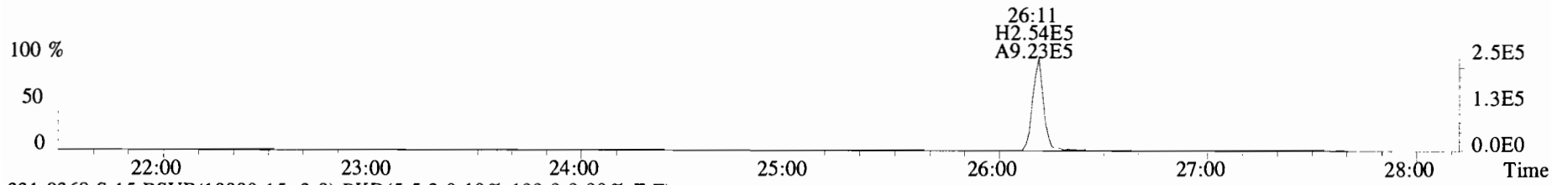
File:191127D1 #1-492 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SSC-B-06-08-191002 1:5 10.0274 Exp:OCDF
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



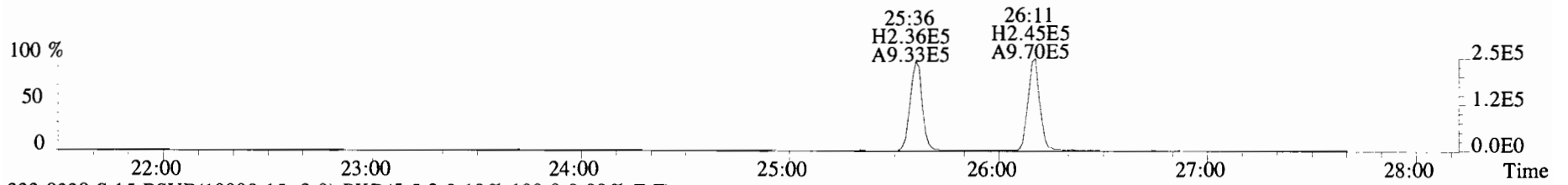
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



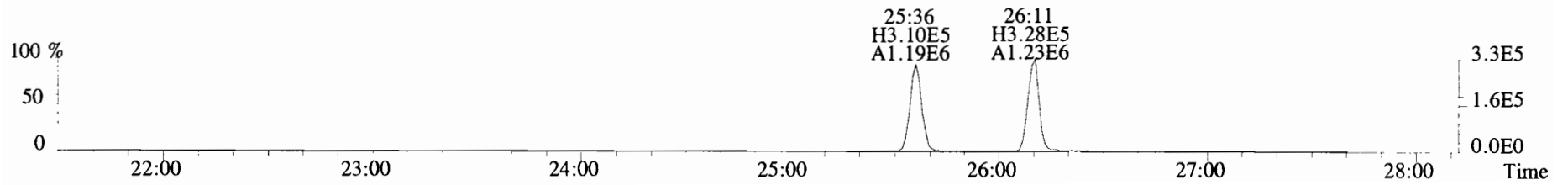
327.8847 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



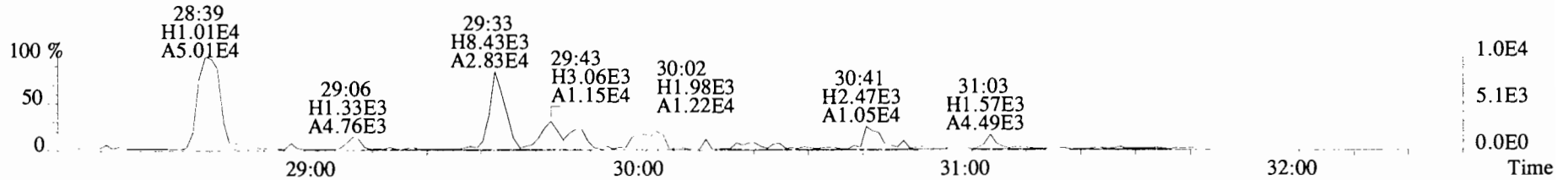
331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



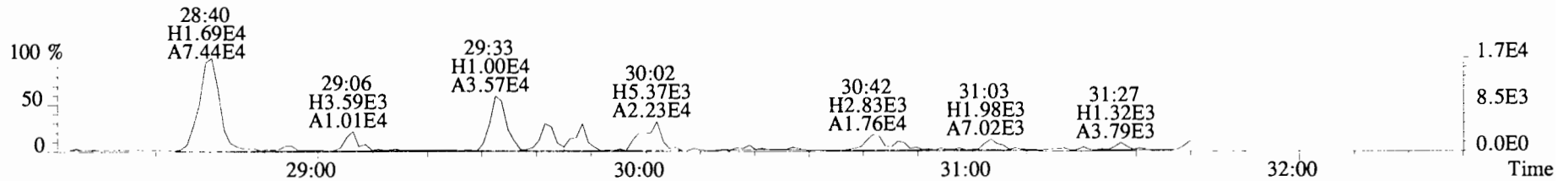
333.9339 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



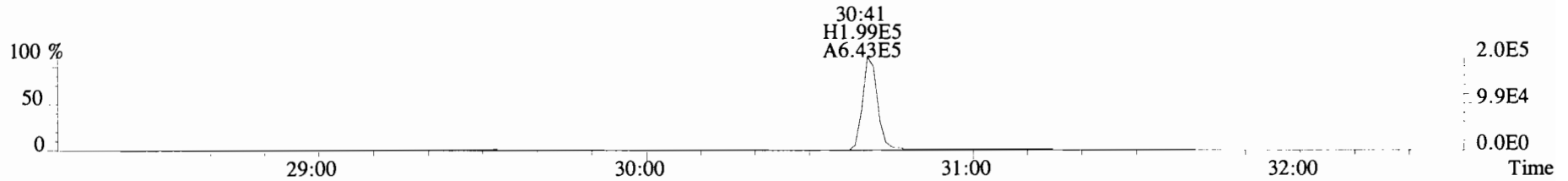
File:191127D1 #1-211 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCD£
 353.8576 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



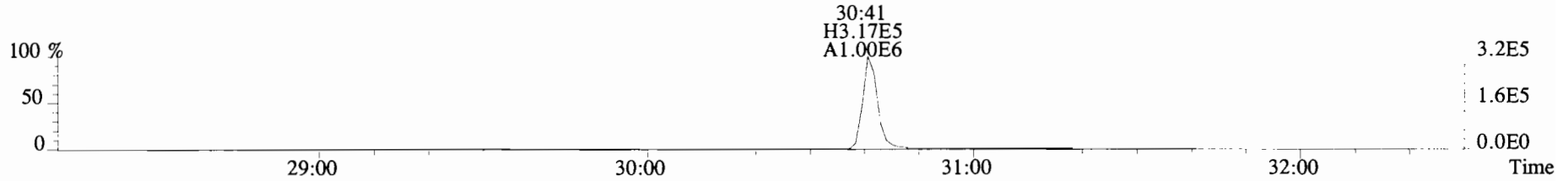
355.8546 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



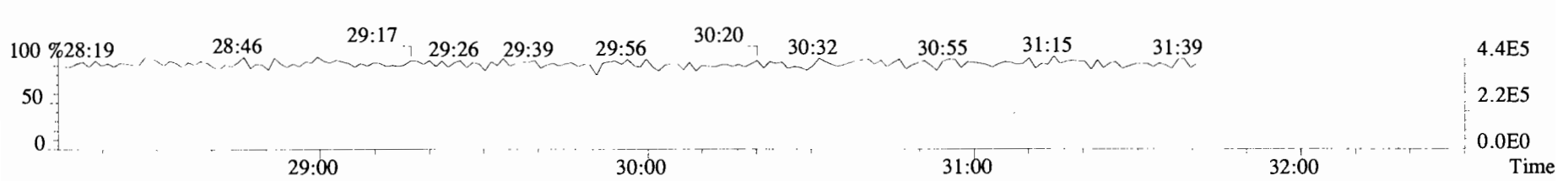
365.8978 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



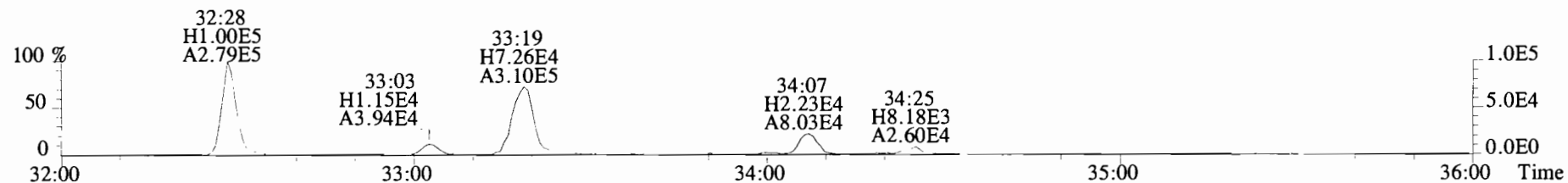
367.8949 S:15 F:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



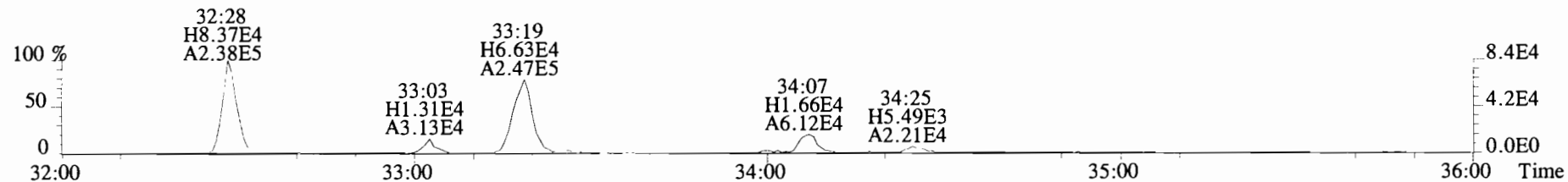
366.9792 S:15 F:2



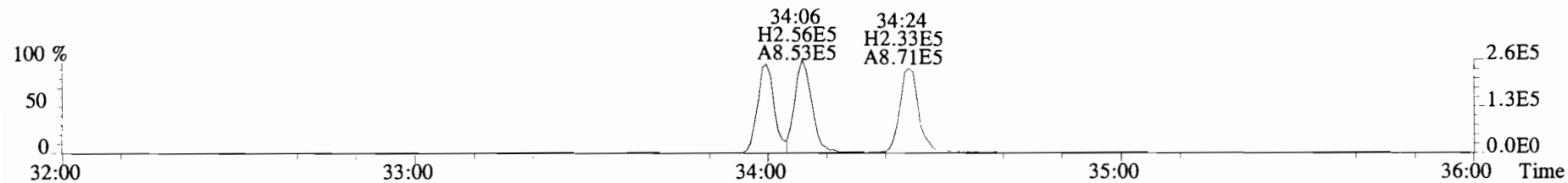
File:191127D1 #1-384 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



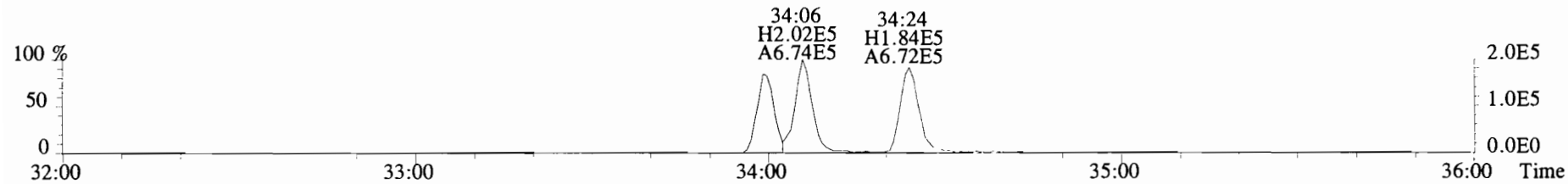
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



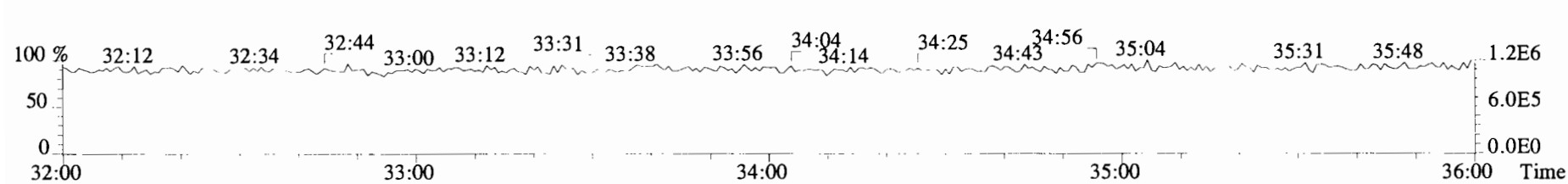
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



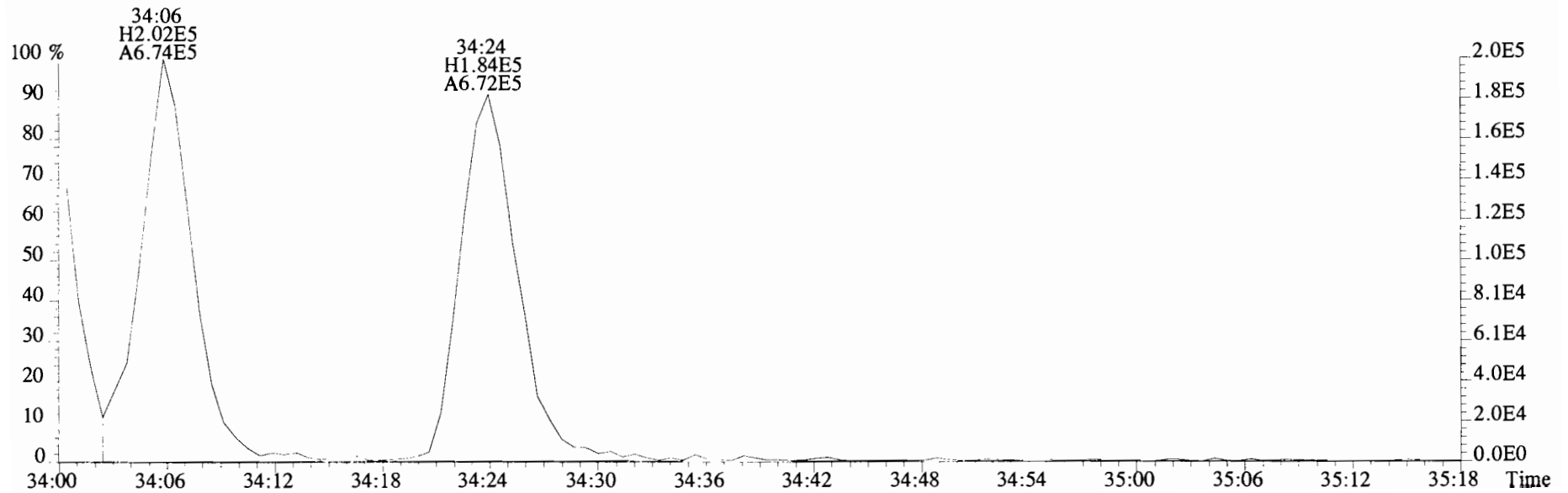
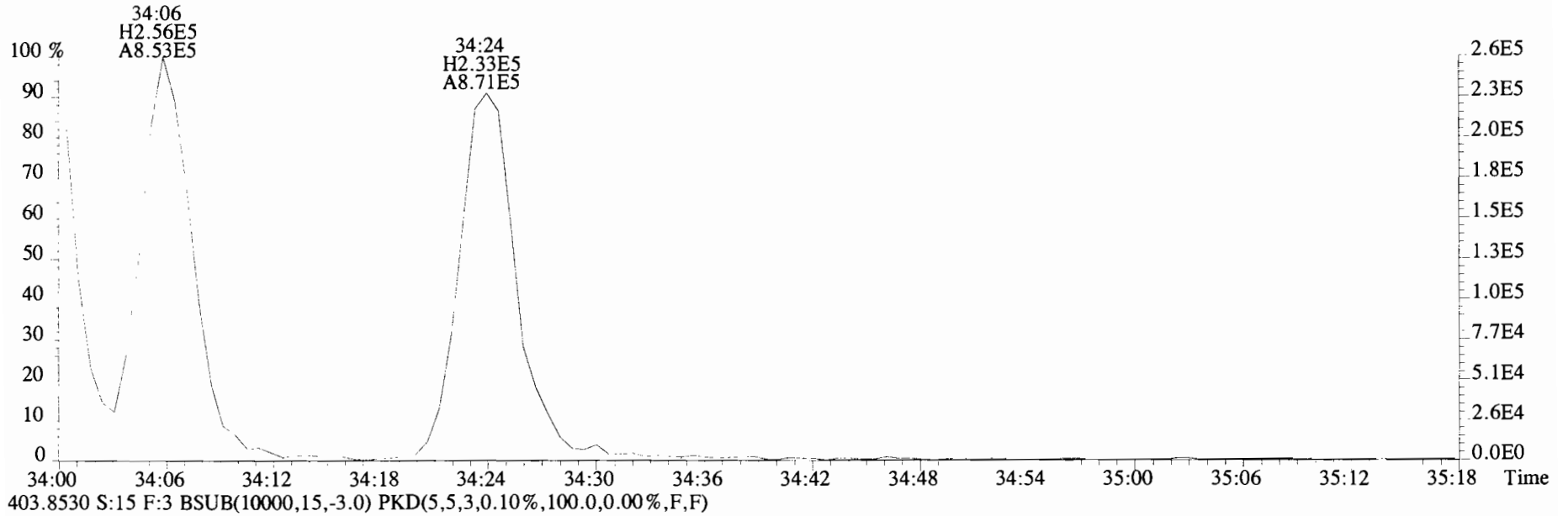
403.8530 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



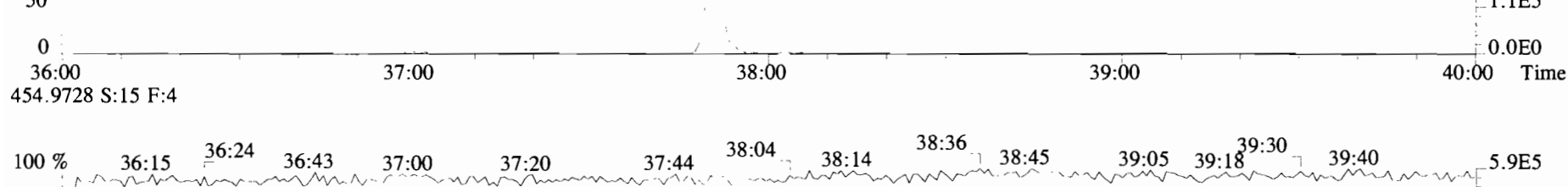
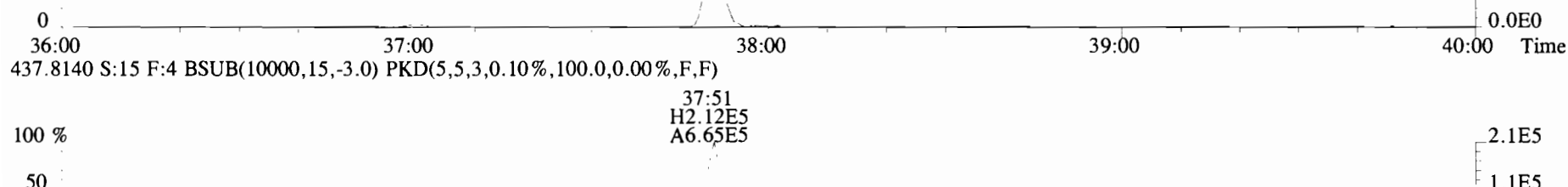
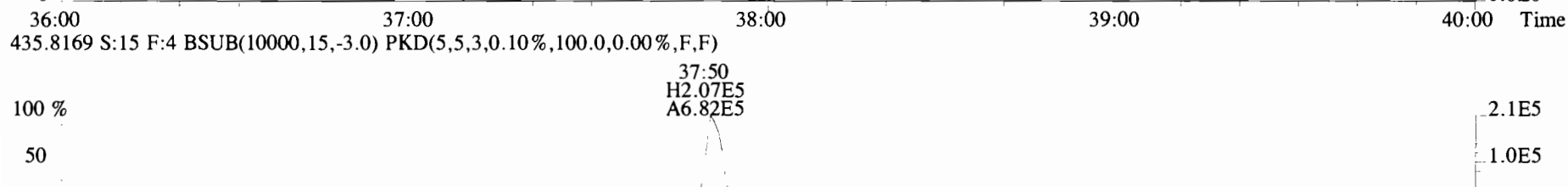
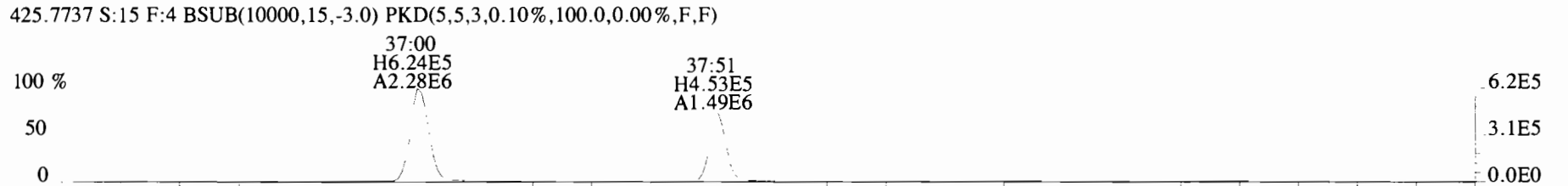
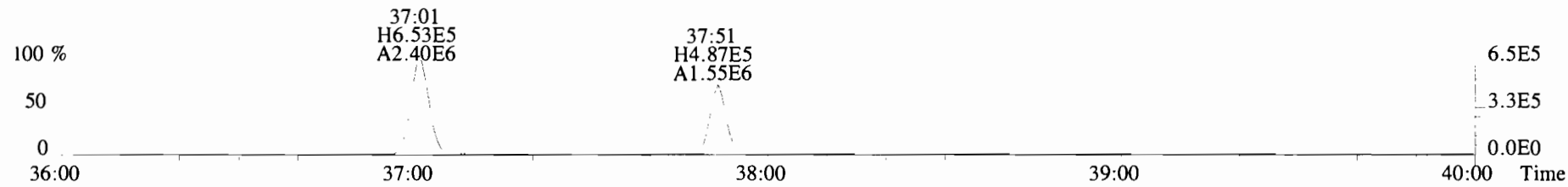
392.9760 S:15 F:3



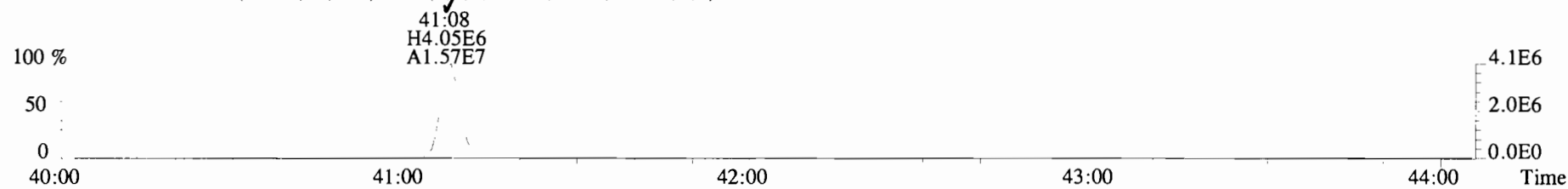
File:191127D1 #1-384 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDf
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



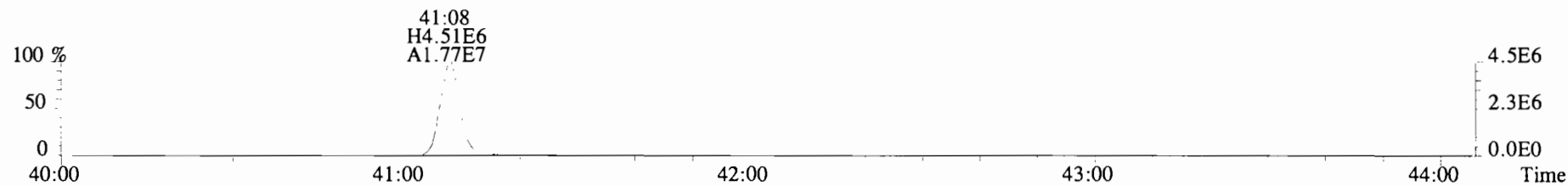
File:191127D1 #1-356 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDf
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



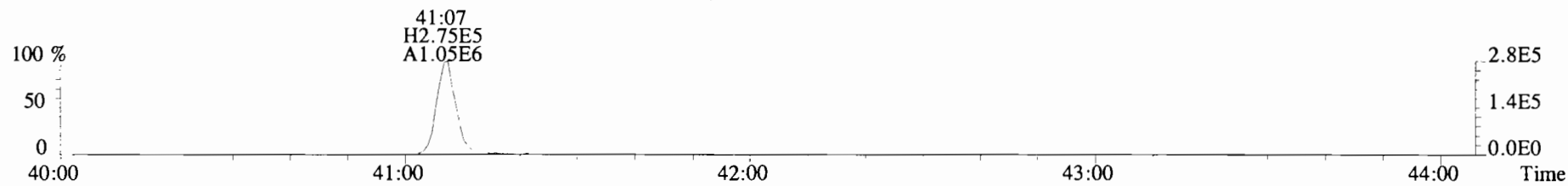
File:191127D1 #1-431 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SSC-B-06-08-191002 1:5 10.0274 Exp:OCDF
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



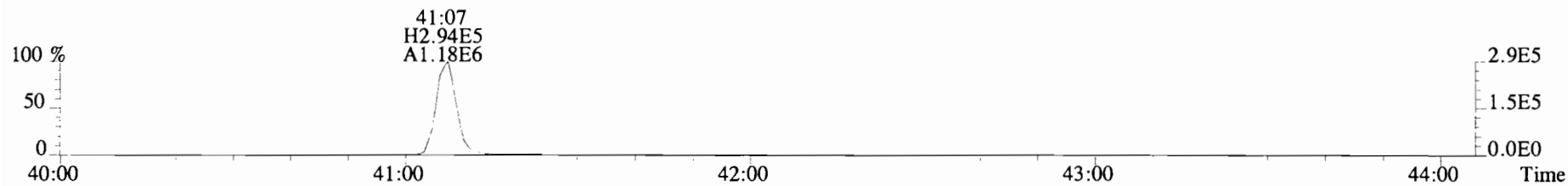
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



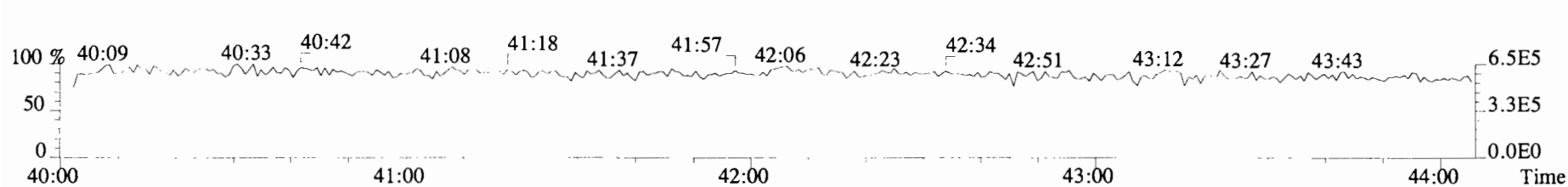
469.7780 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



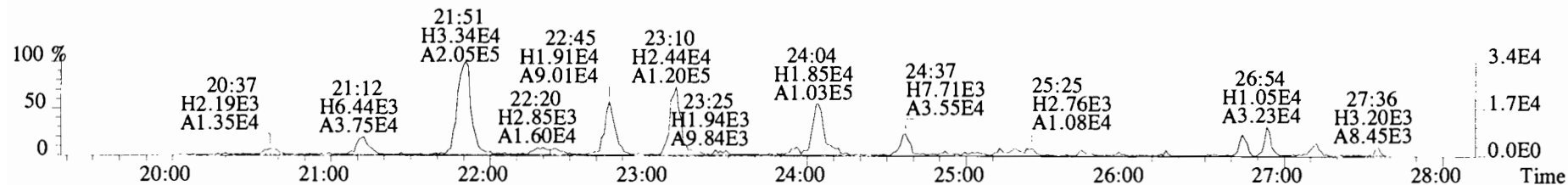
471.7750 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



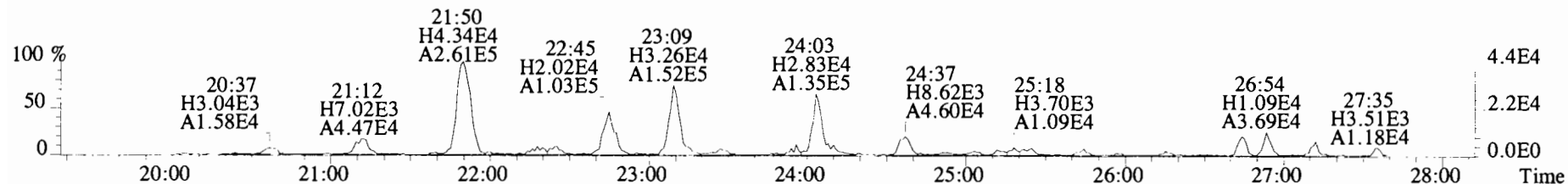
454.9728 S:15 F:5



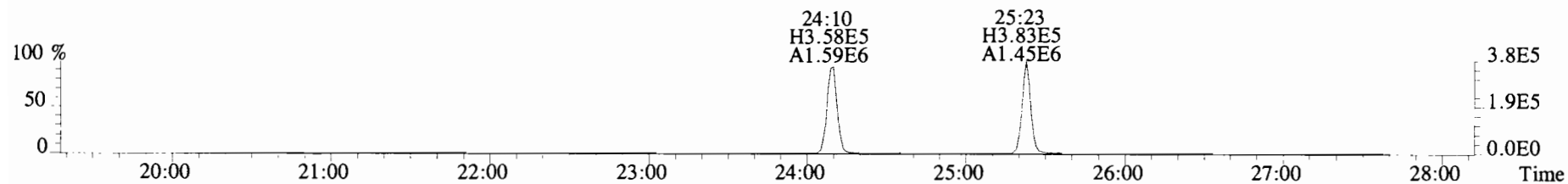
File:191127D1 #1-492 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



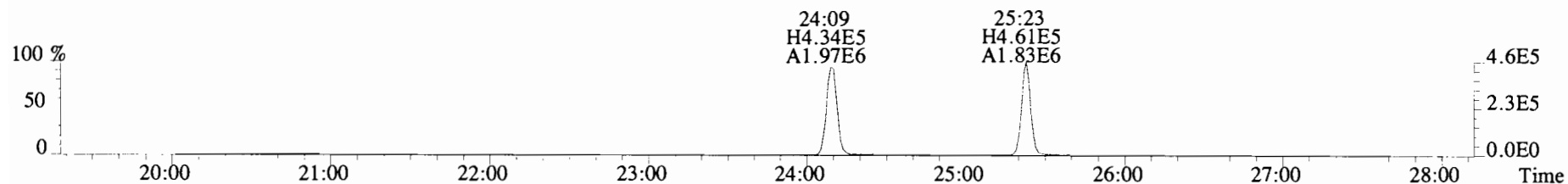
305.8987 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



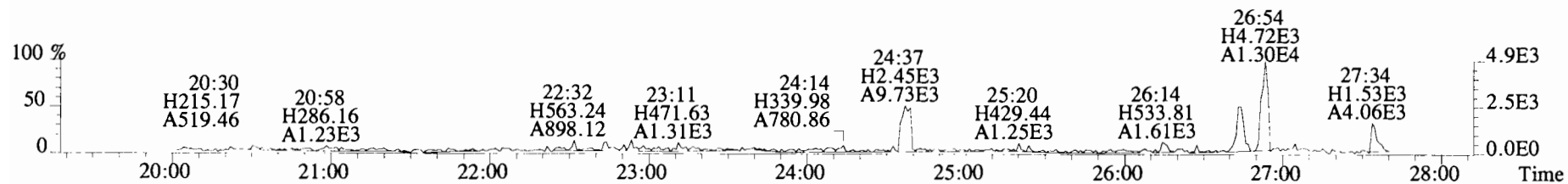
315.9419 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



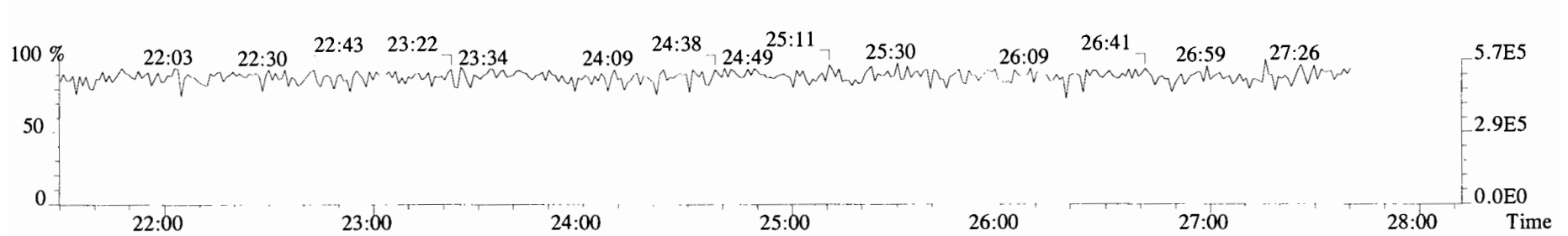
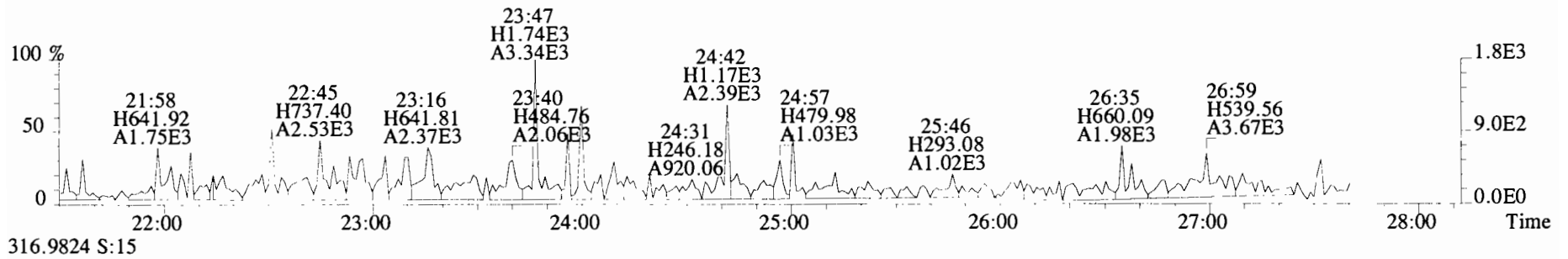
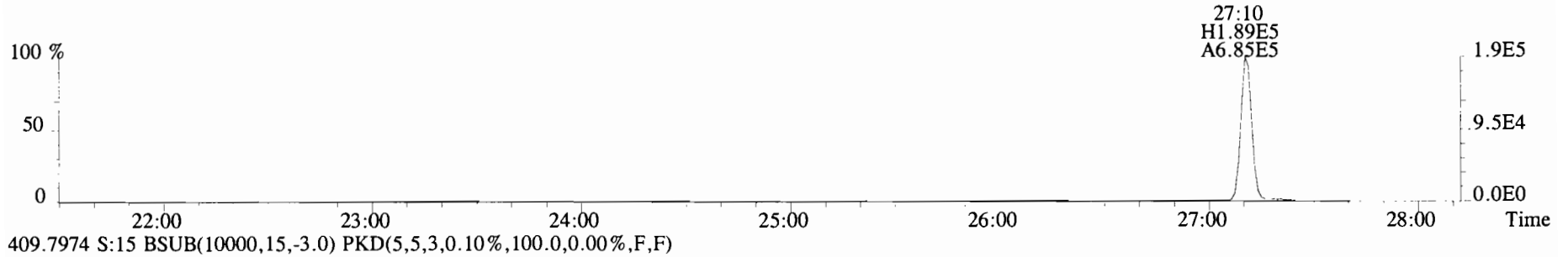
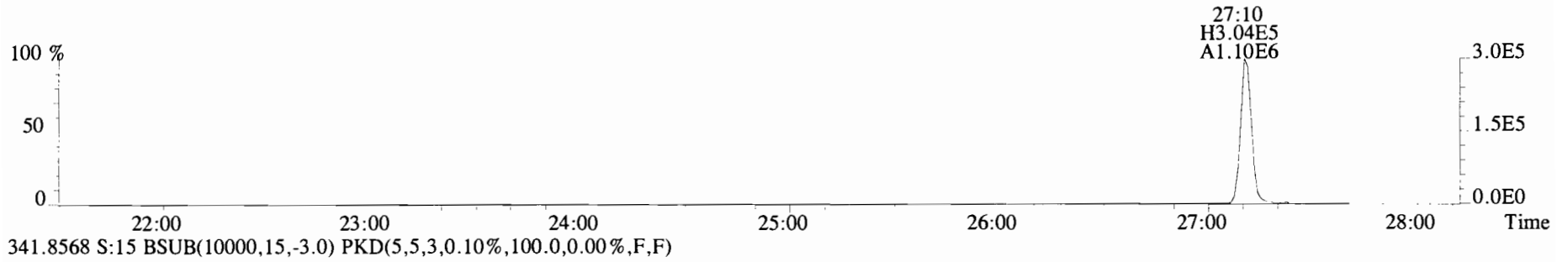
317.9389 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



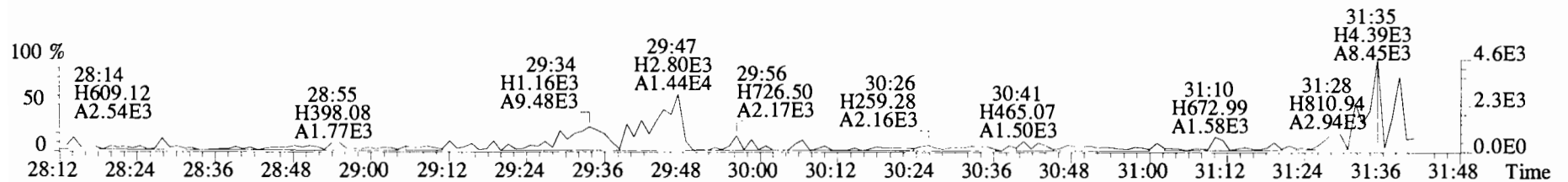
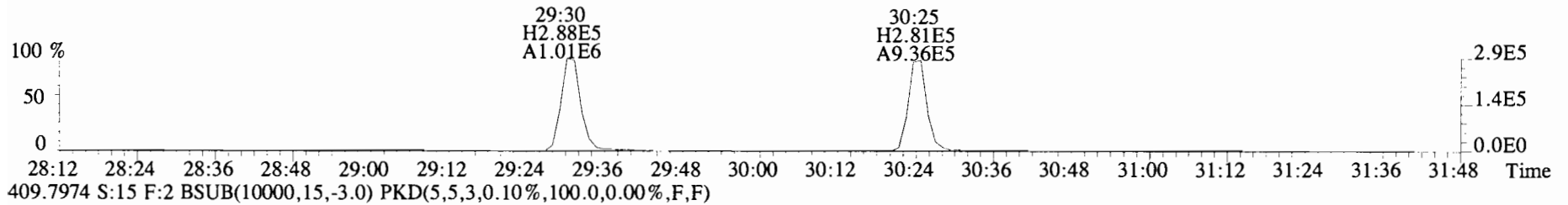
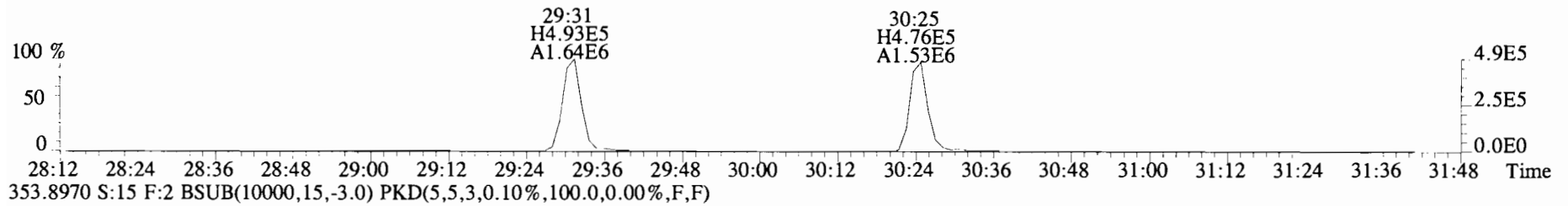
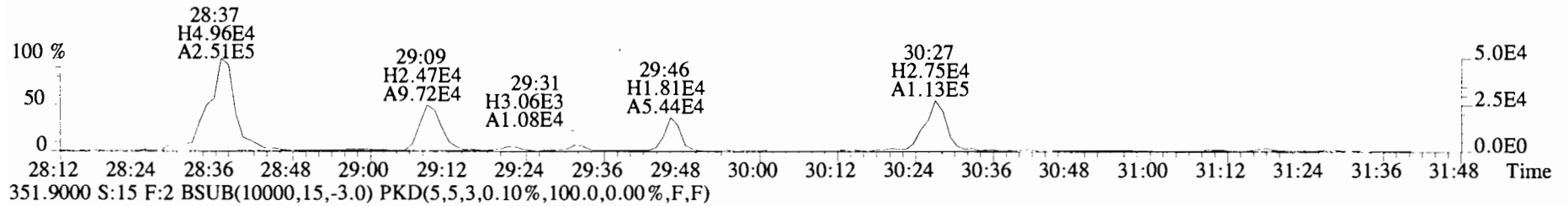
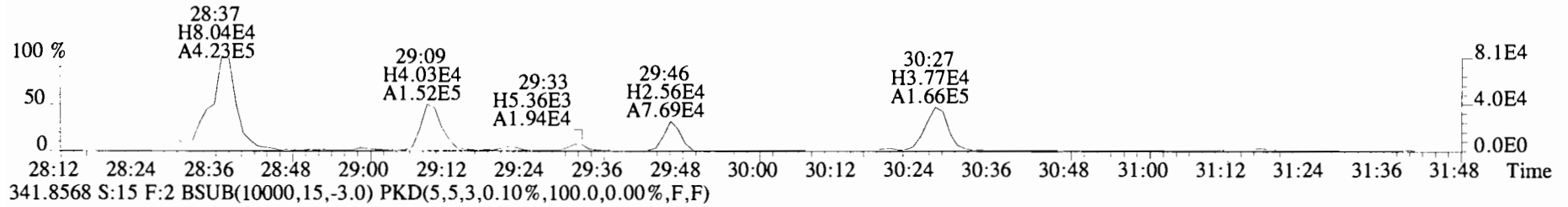
375.8364 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



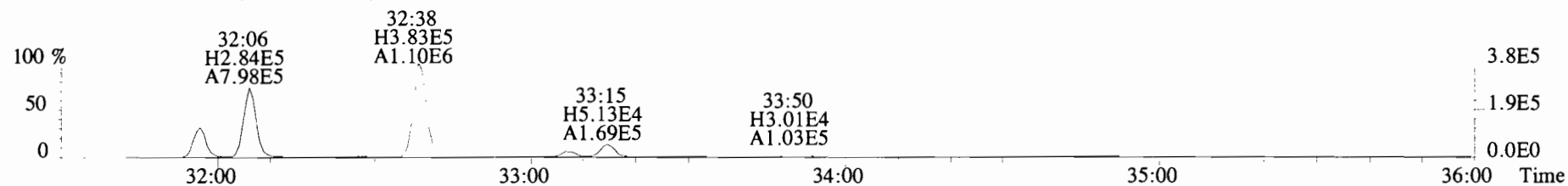
File:191127D1 #1-492 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



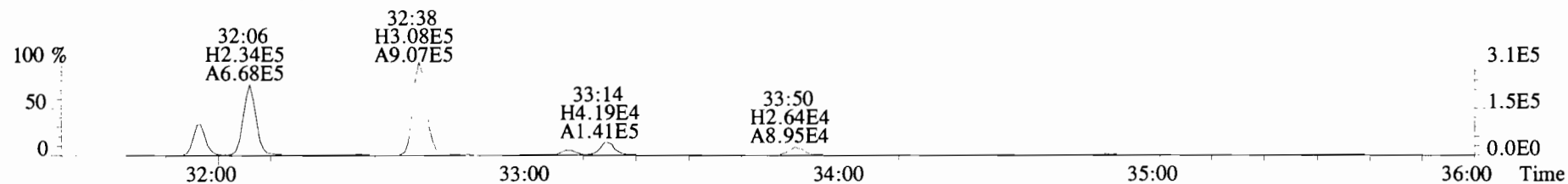
File:191127D1 #1-211 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



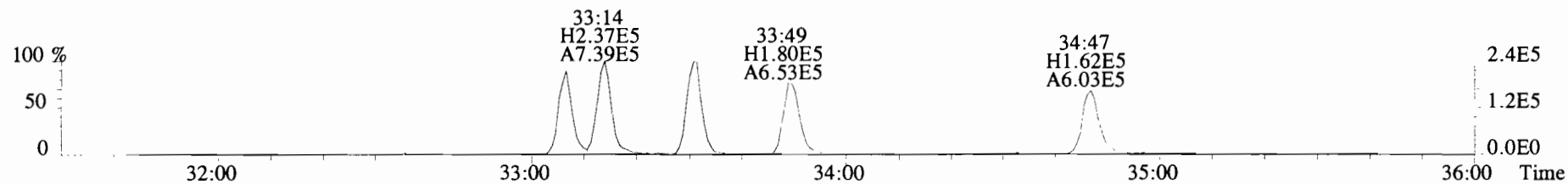
File:191127D1 #1-384 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



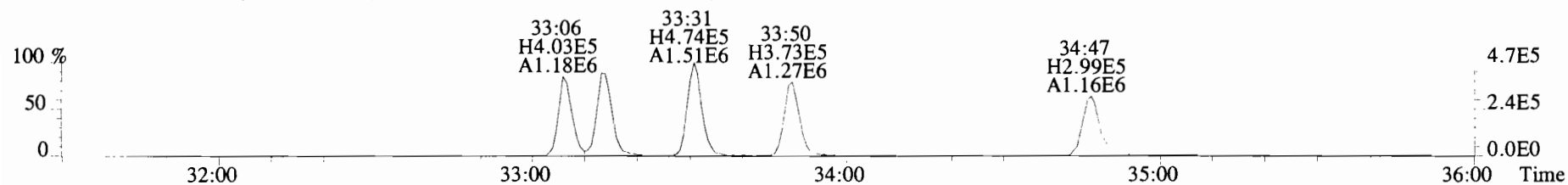
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



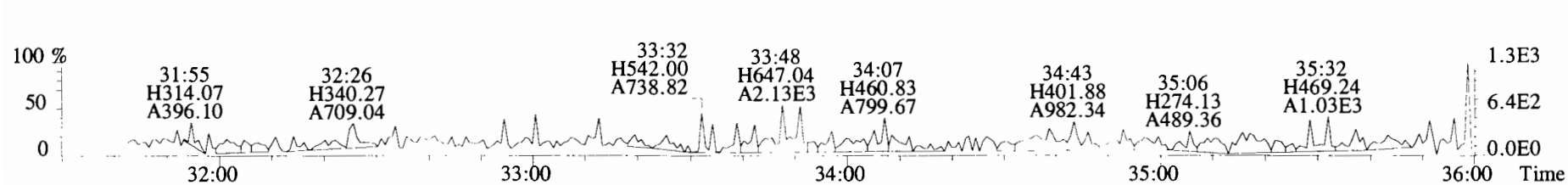
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



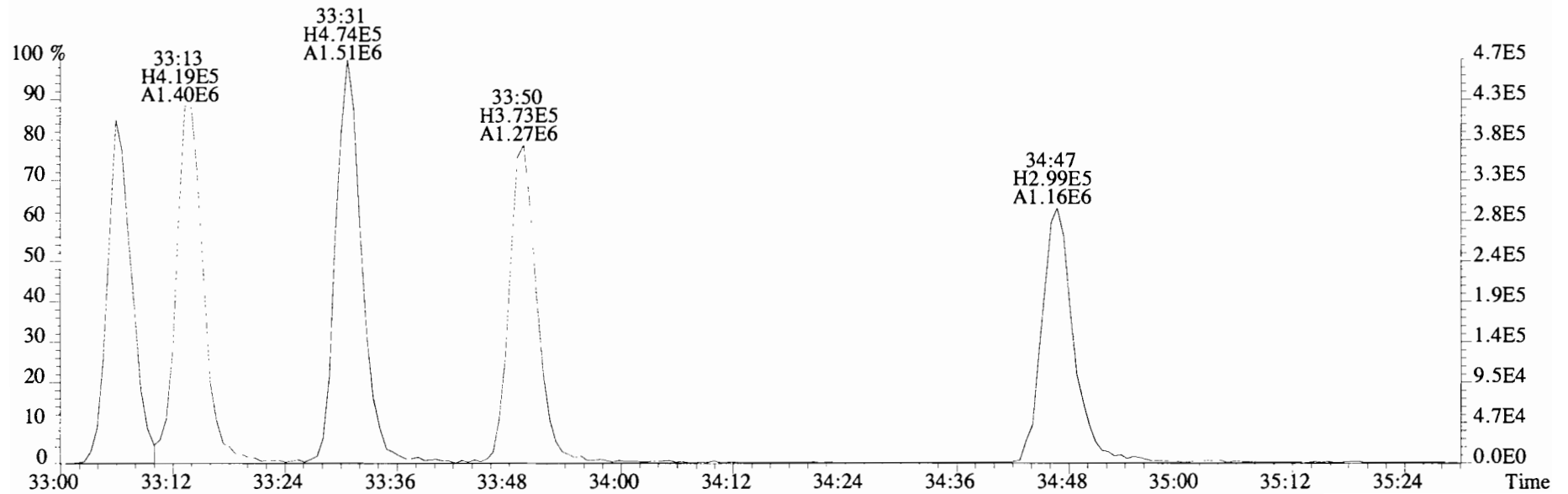
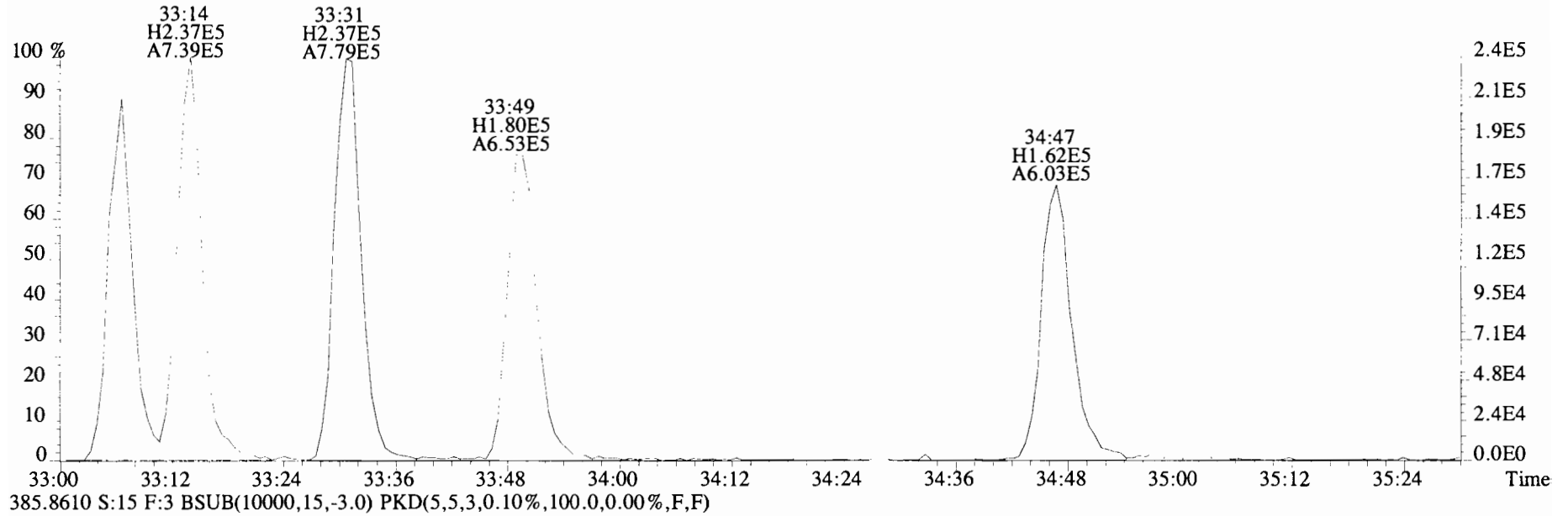
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



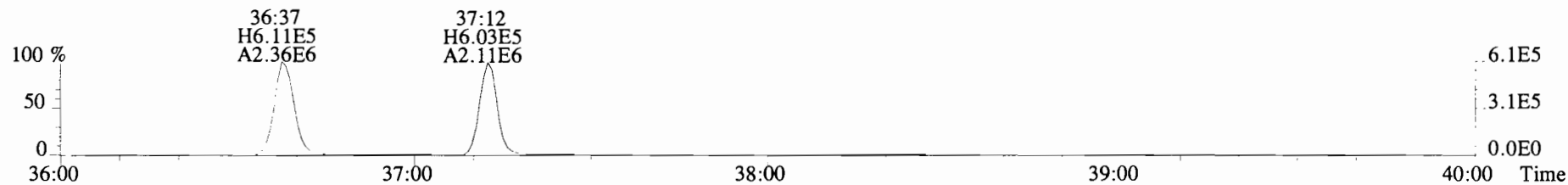
445.7555 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



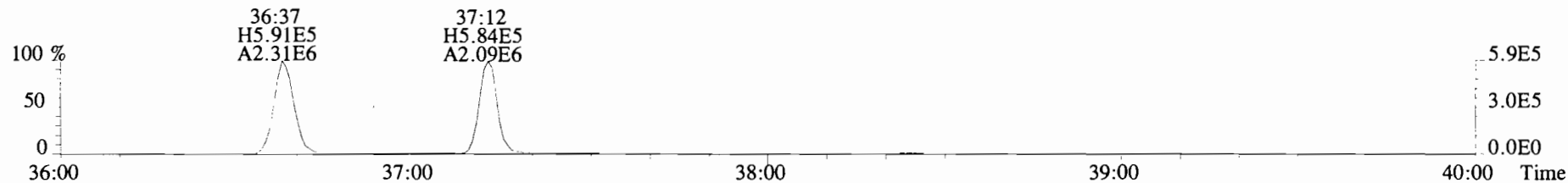
File:191127D1 #1-384 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCD£
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



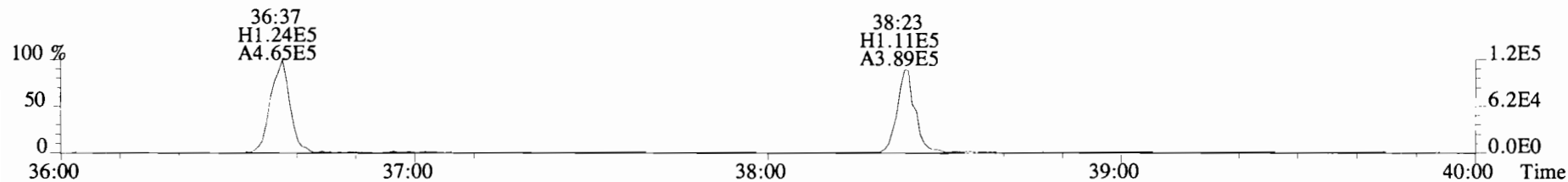
File:191127D1 #1-356 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 407.7818 S:15 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



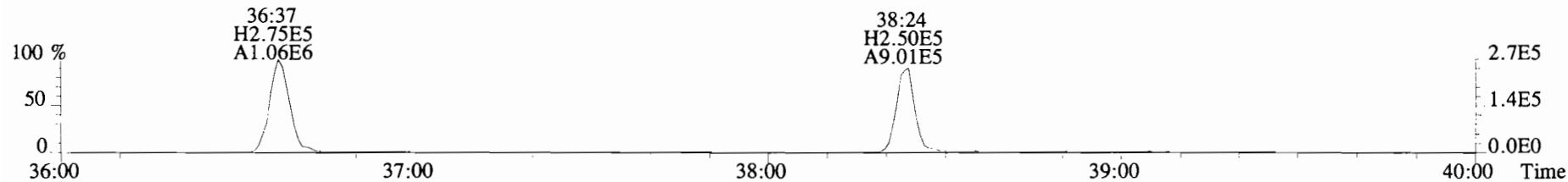
409.7788 S:15 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



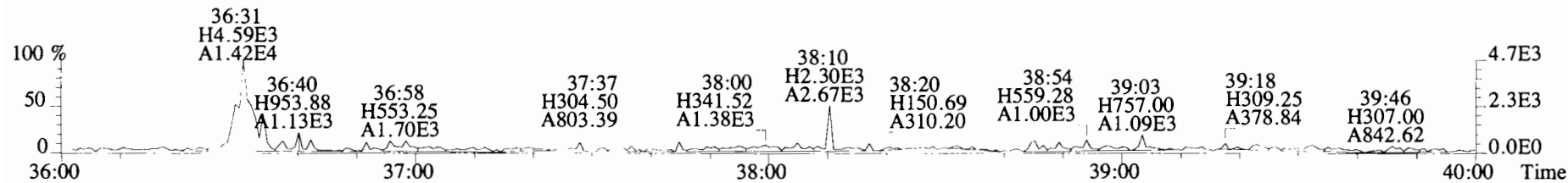
417.8253 S:15 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



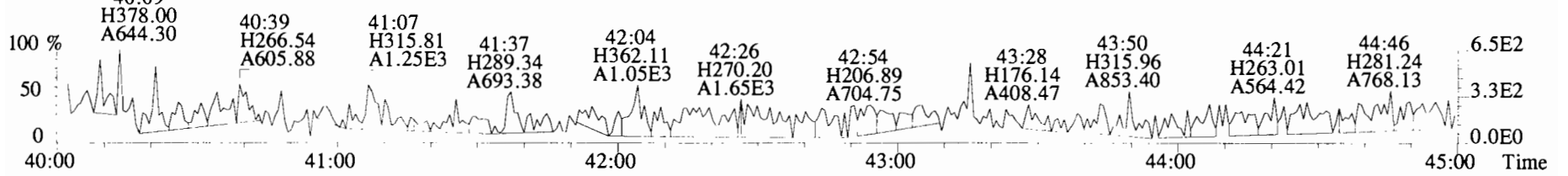
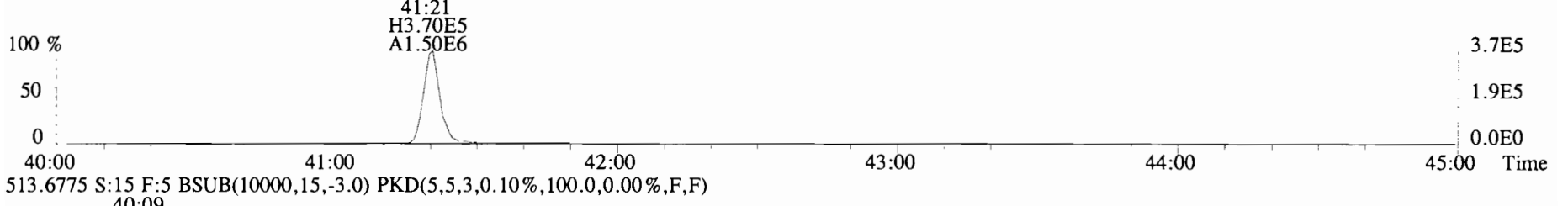
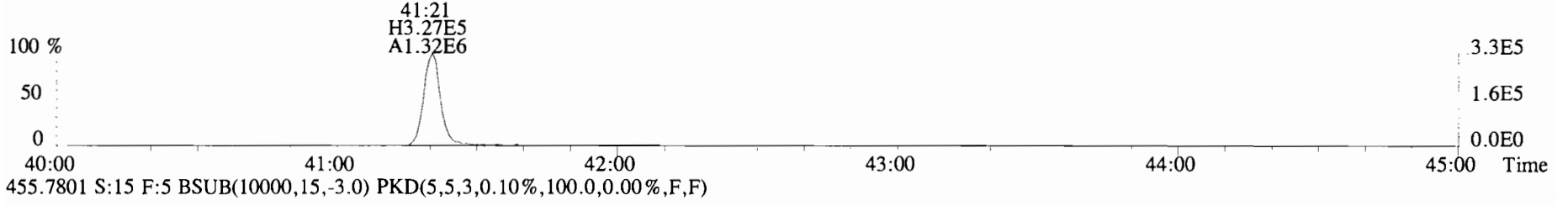
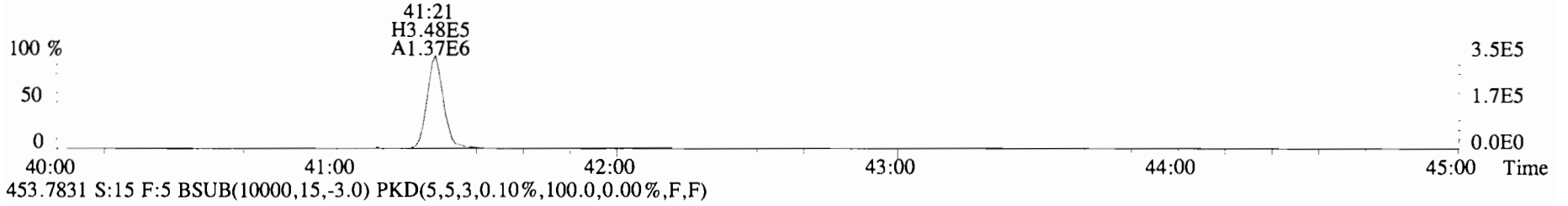
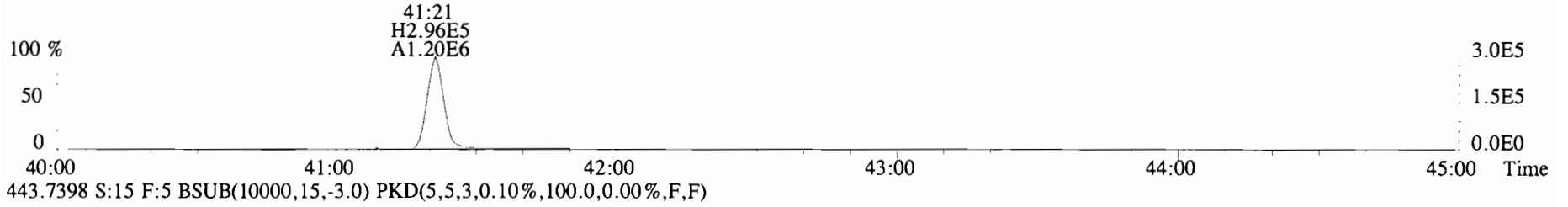
419.8220 S:15 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



File:191127D1 #1-431 Acq:28-NOV-2019 03:03:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Viata_Analytical_Laboratory_VG7 Text:1903565-18RE2@5X PDI-095SC-B-06-08-191002 1:5 10.0274 Exp:OCDF
 441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



CONFIRMATION

Client ID: PDI-082SC-B-00-02-191077
Lab ID: 1903565-04RE2

Filename: 191105D1 S:8 Acq: 5-NOV-19 15:24:31
GC Column ID: DB-225 ICal: 1613TCDFVG7-8-19 wt/vol:10.015

ConCal: ST191105D1-1
EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.33e+07	0.80 y	15:36	1.00	199.7	-
13C-2,3,7,8-TCDF	1.45e+07	0.79 y	17:48	1.02	212.7	106.5
2,3,7,8-TCDF	2.24e+06	0.76 y	17:49	0.95	32.53	

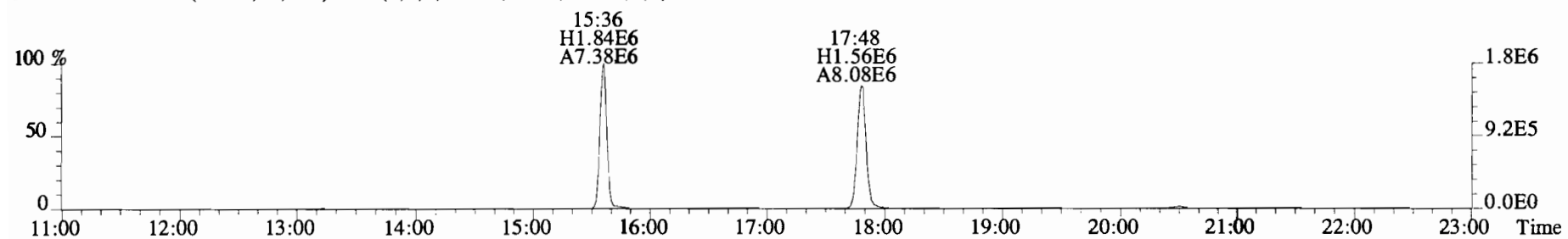
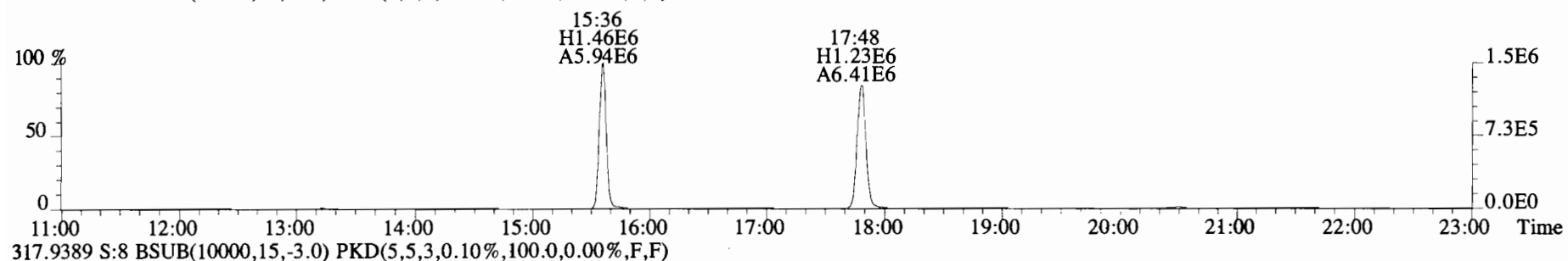
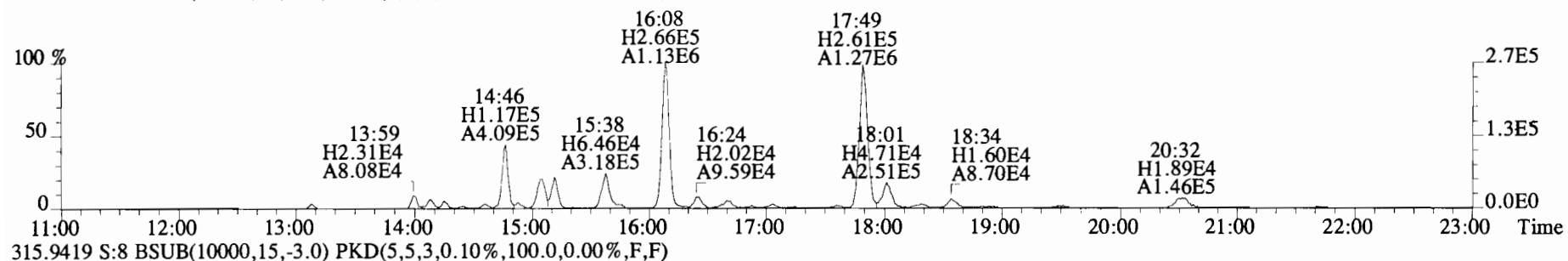
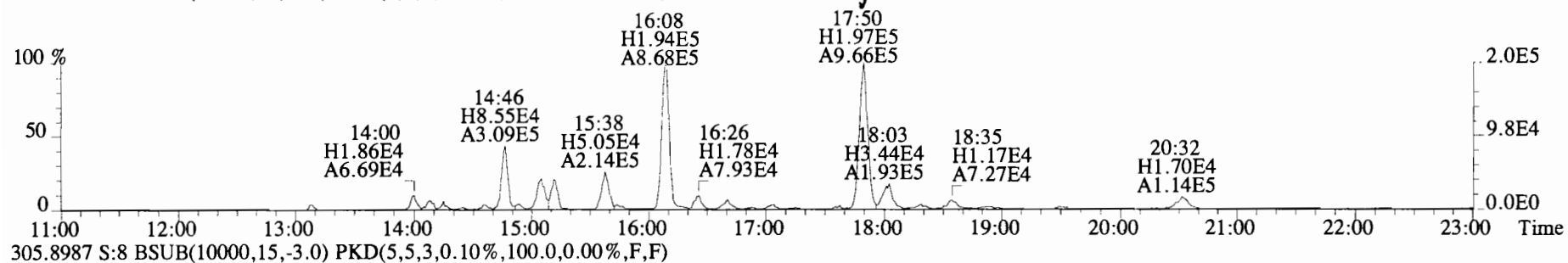
Integrations
by
Analyst: DB

Date: 11/5/19

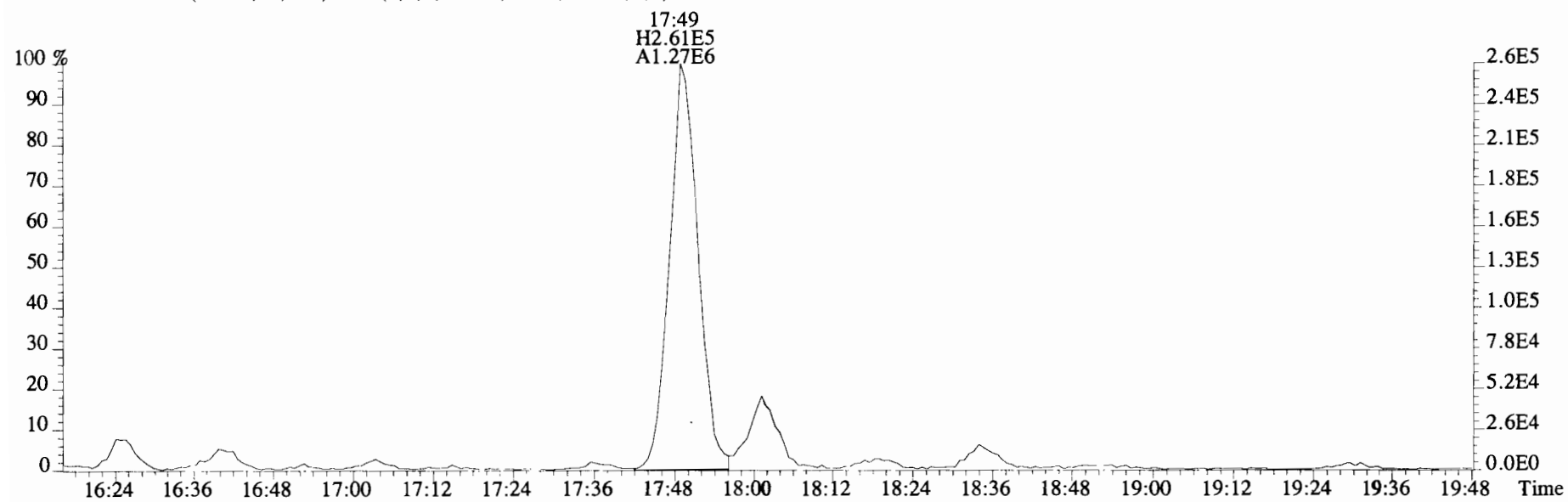
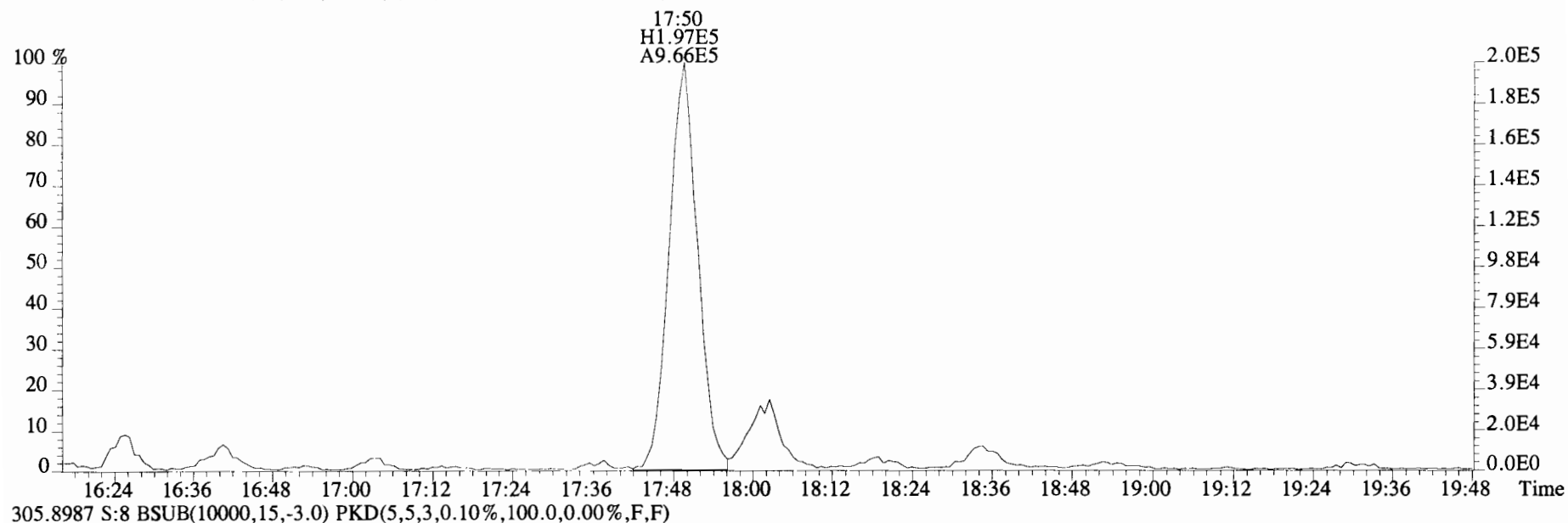
Reviewed
by
Analyst: CT

Date: 12/23/19

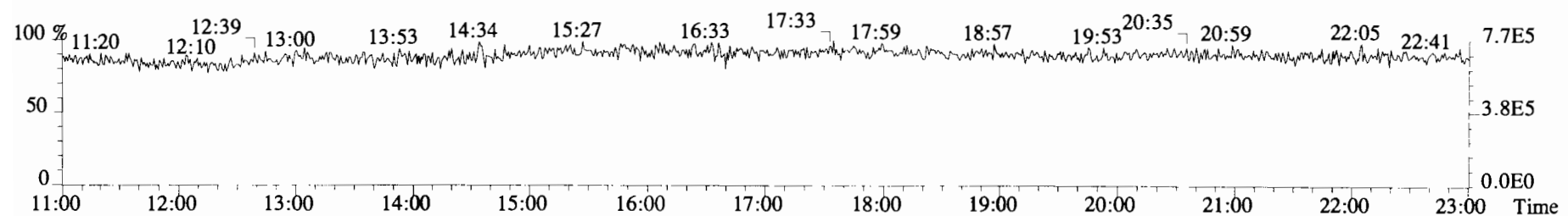
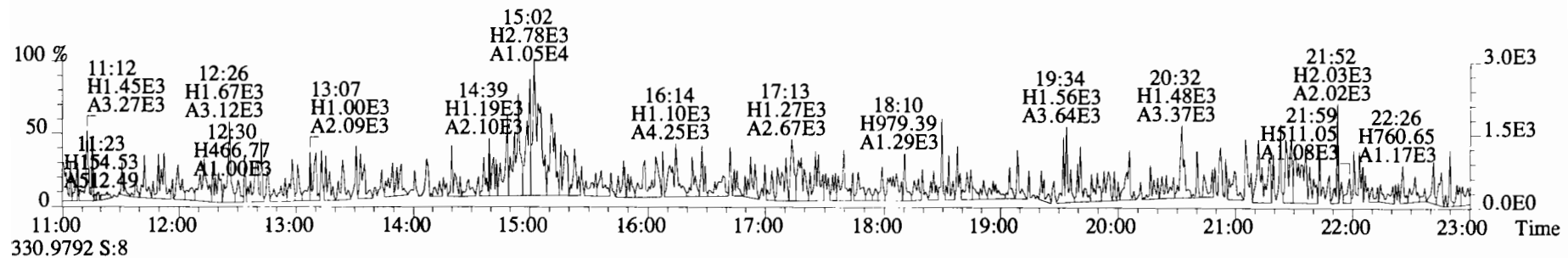
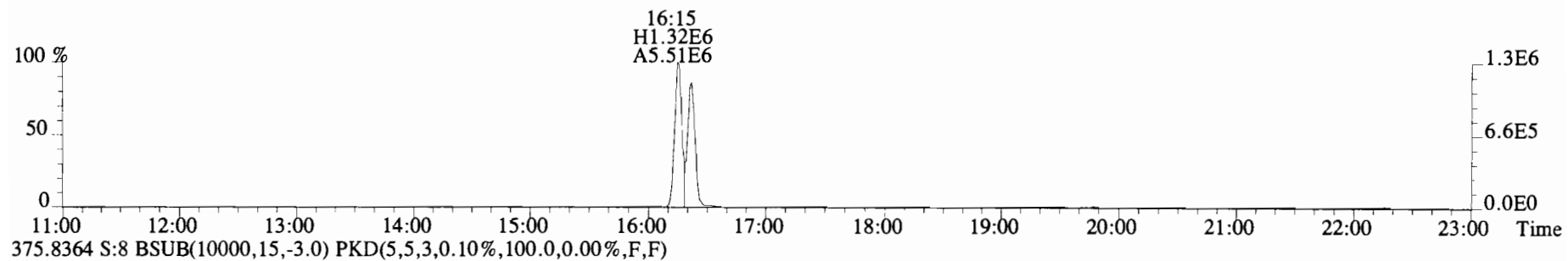
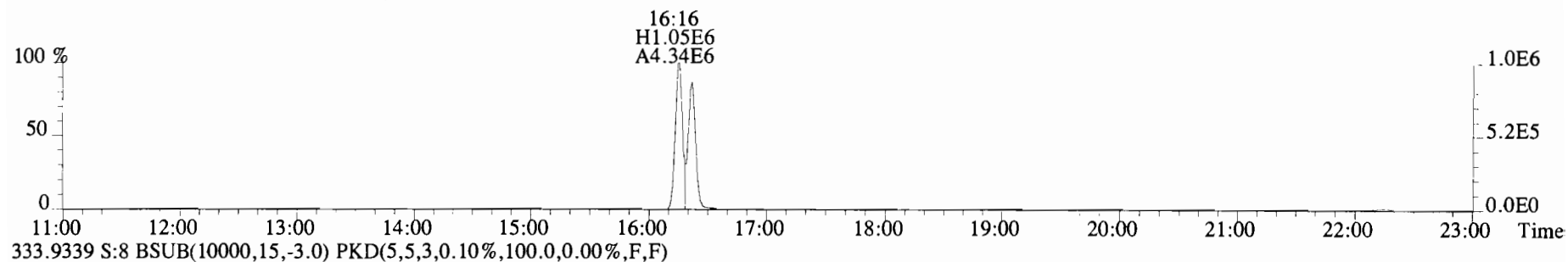
File:191105D1 #1-1682 Acq: 5-NOV-2019 15:24:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE2 PDI-082SC-B-00-02-191002 20.05 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1682 Acq: 5-NOV-2019 15:24:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-04RE2 PDI-082SC-B-00-02-191002 20.05 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1682 Acq: 5-NOV-2019 15:24:31 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-04RE2 PDI-082SC-B-00-02-191002 20.05 Exp:TCDF_DB225
 331.9368 S:8 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.34e+07	0.81 y	15:37	1.00	199.4	-
13C-2,3,7,8-TCDF	1.27e+07	0.79 y	17:49	1.02	185.5	93.1
2,3,7,8-TCDF	6.96e+06	0.78 y	17:51	0.95	115.2	

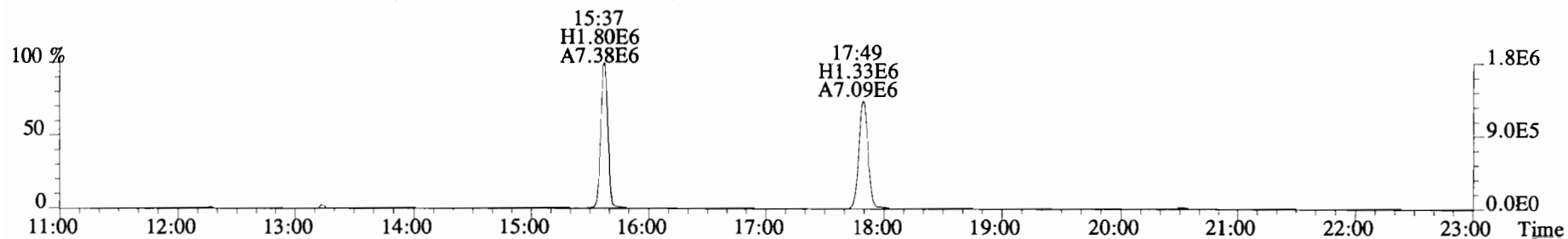
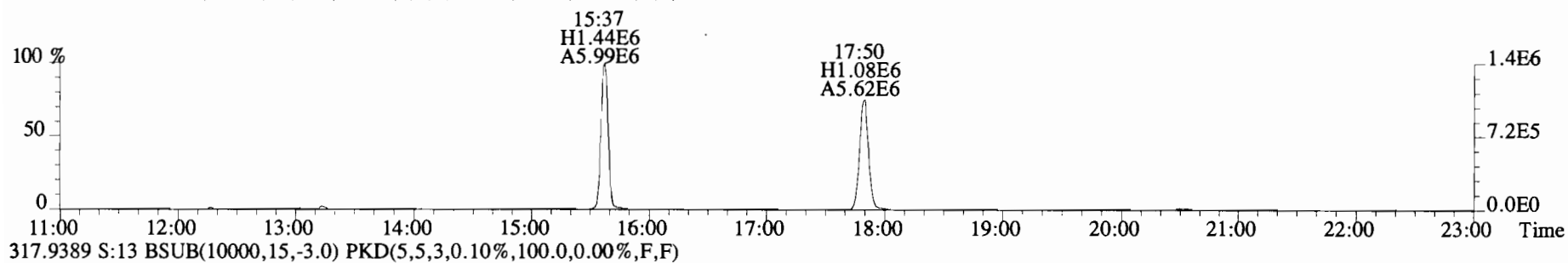
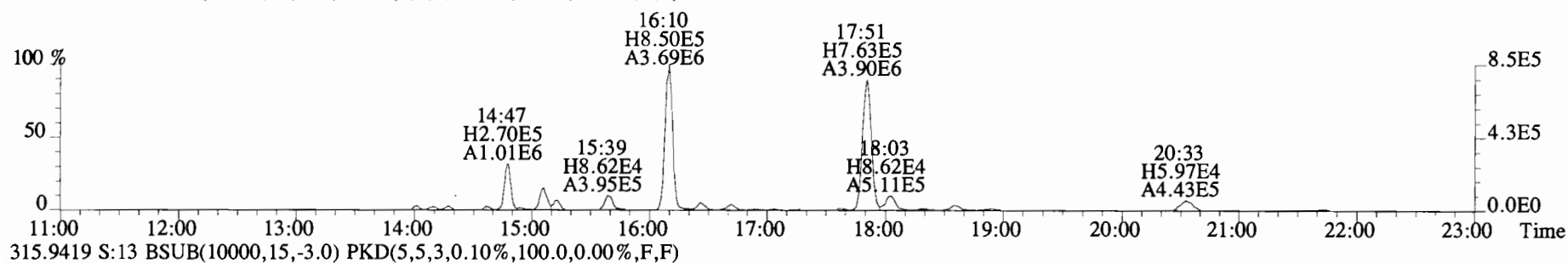
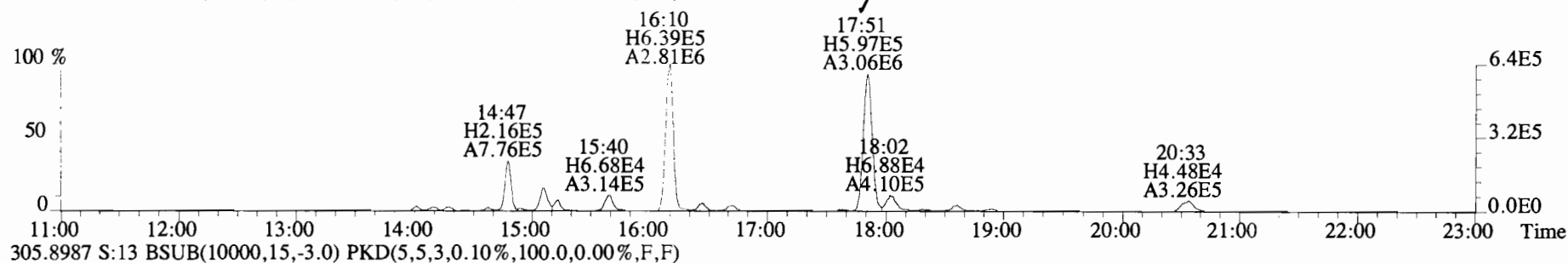
Integrations
by
Analyst: DB

Date: 11/6/19

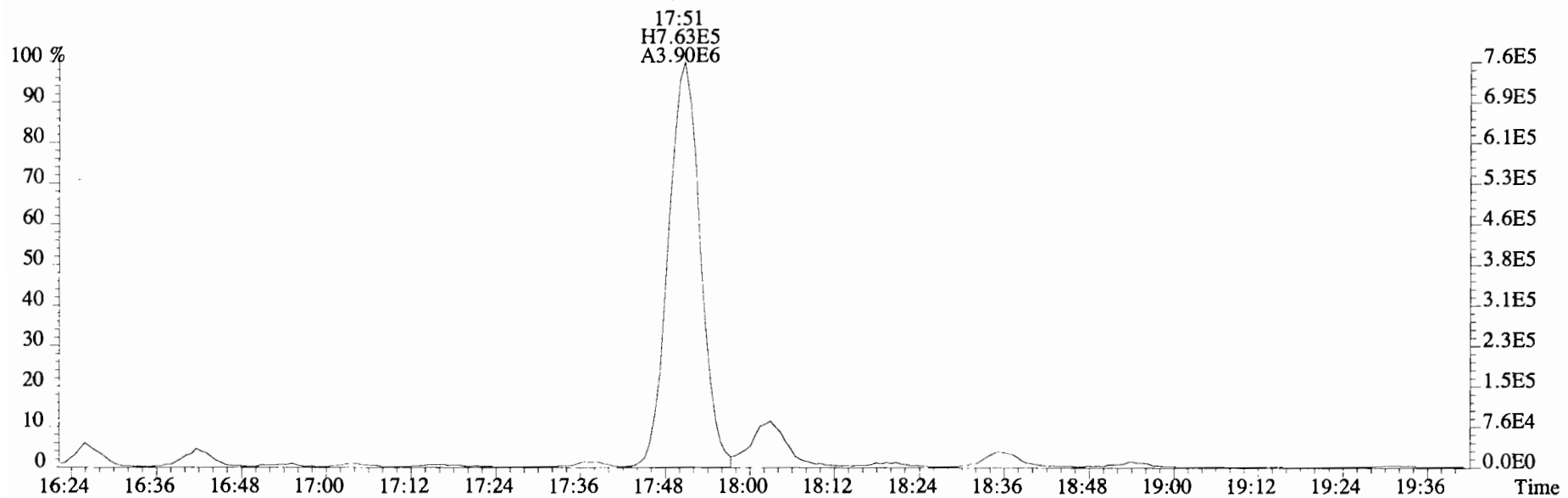
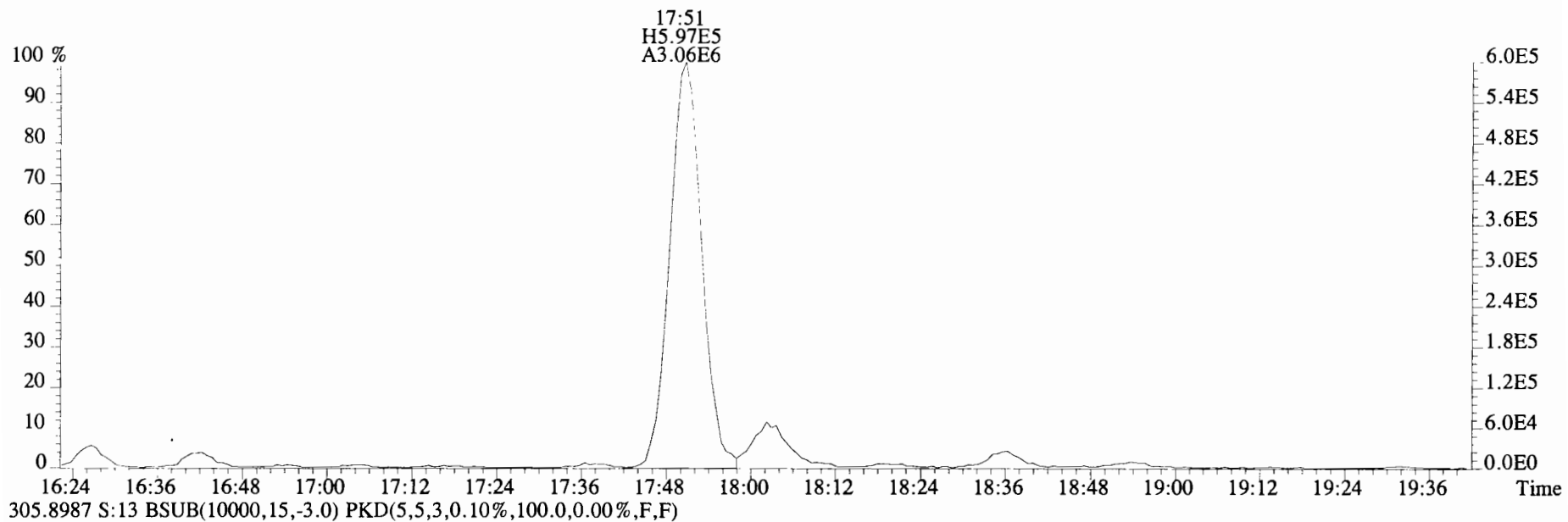
Reviewed
by
Analyst: C7

Date: 12/04/19

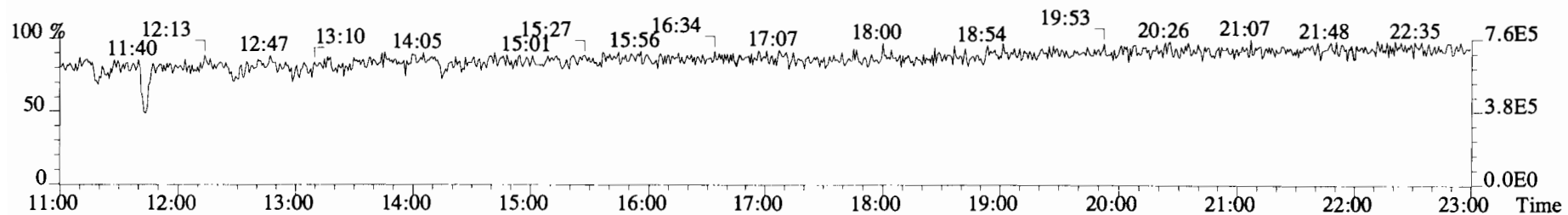
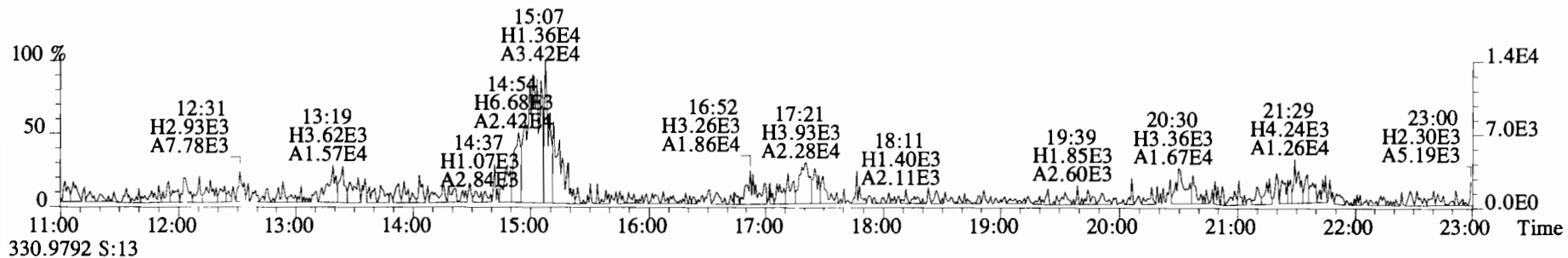
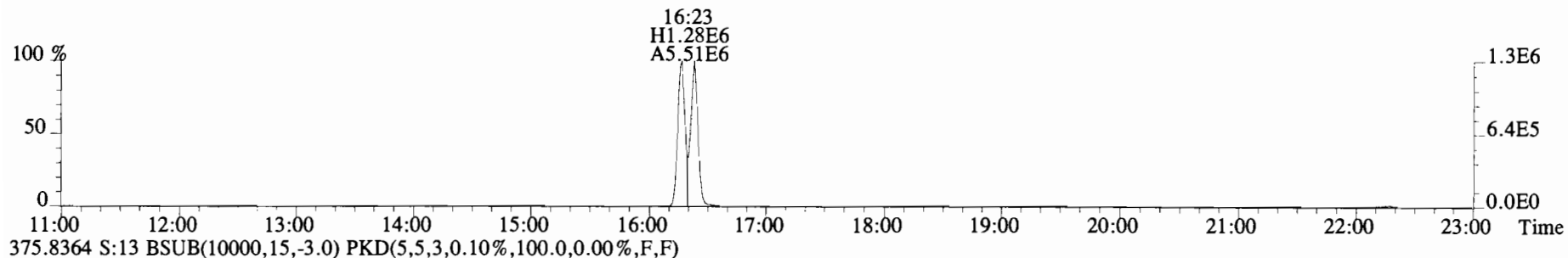
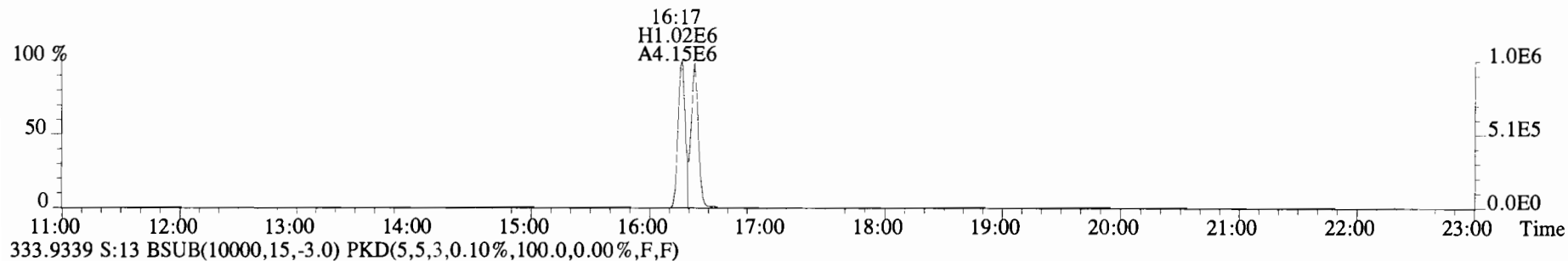
File:191105D1 #1-1683 Acq: 5-NOV-2019 18:03:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory VG7 Text:1903565-05RE2 PDI-082SC-B-02-04-191002 17.21 Exp:TCDF_DB225
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 18:03:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE2 PDI-082SC-B-02-04-191002 17.21 Exp:TCDF_DB225
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 18:03:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Viata Analytical Laboratory_VG7 Text:1903565-05RE2 PDI-082SC-B-02-04-191002 17.21 Exp:TCDF_DB225
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.21e+07	0.81 y	15:37	1.00	199.5	-
13C-2,3,7,8-TCDF	1.33e+07	0.81 y	17:50	1.02	214.1	107.3
2,3,7,8-TCDF	2.42e+06	0.76 y	17:50	0.95	38.32	

Integrations

by
Analyst: DB

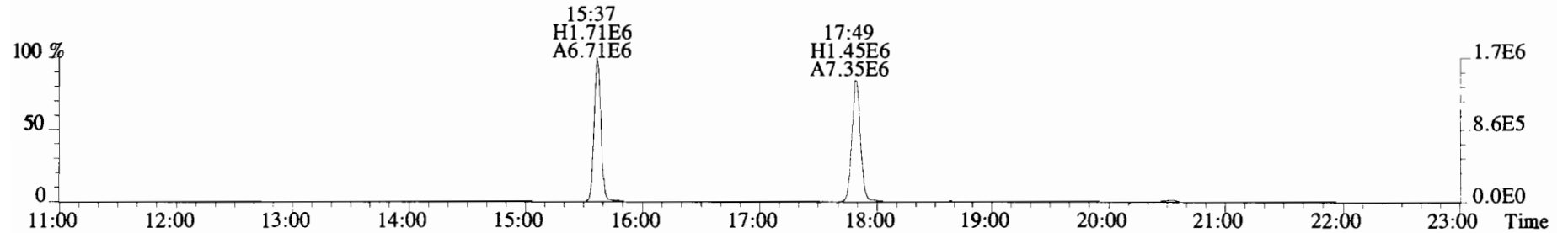
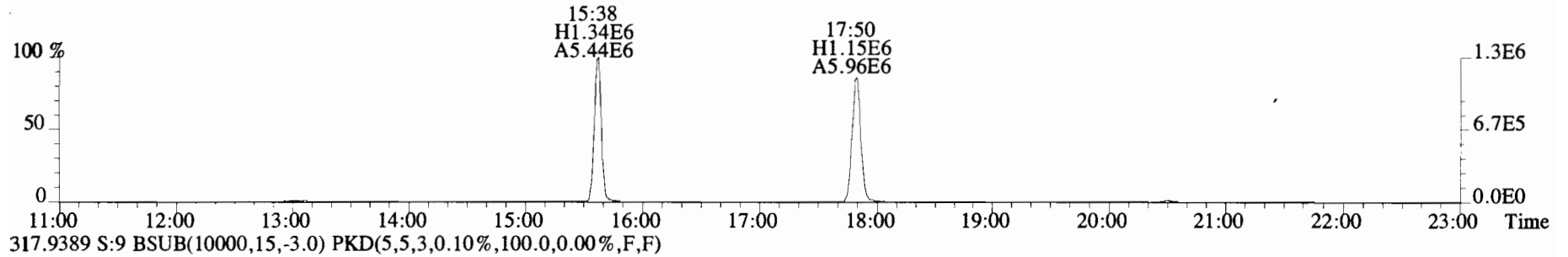
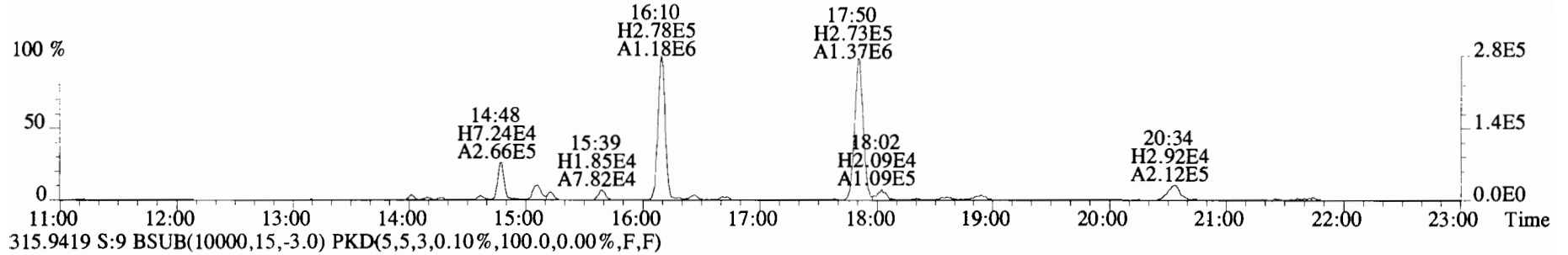
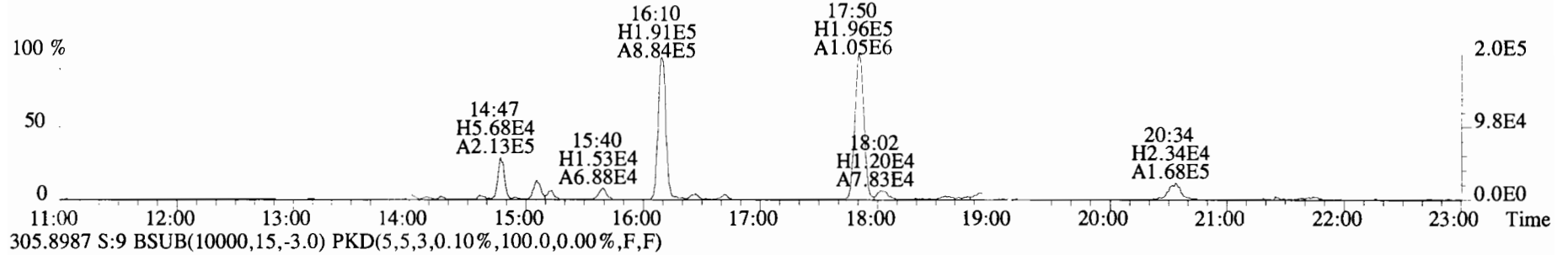
Date: 11/5/19

Reviewed

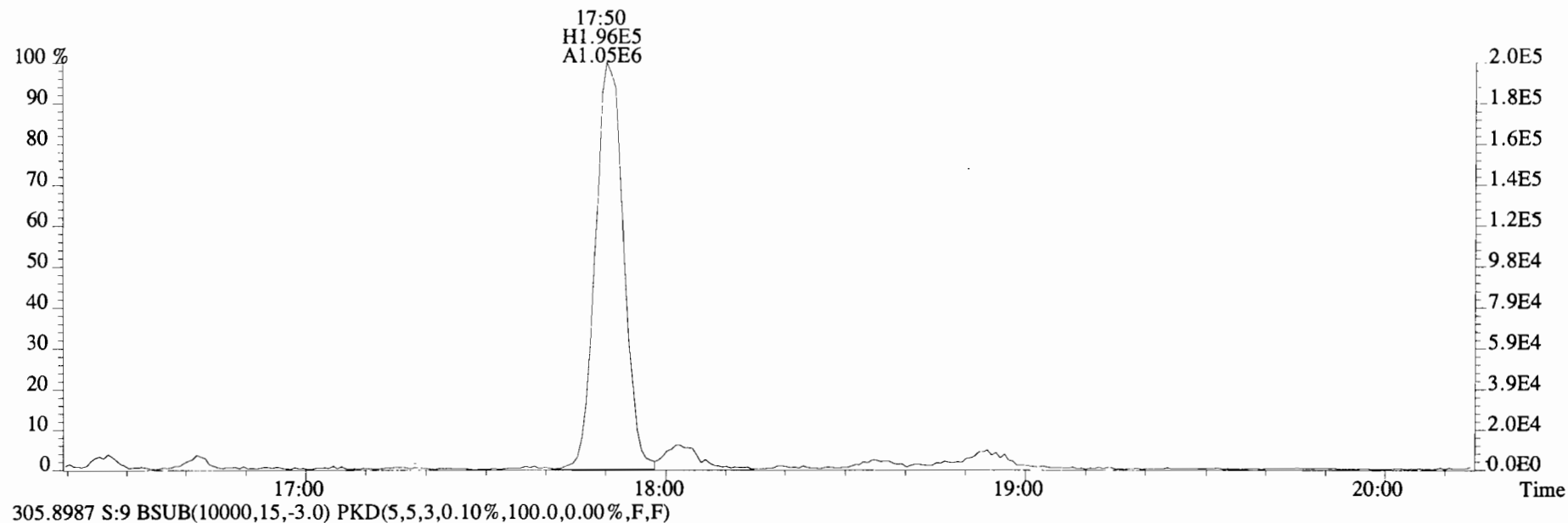
by
Analyst: CT

Date: 12/04/19

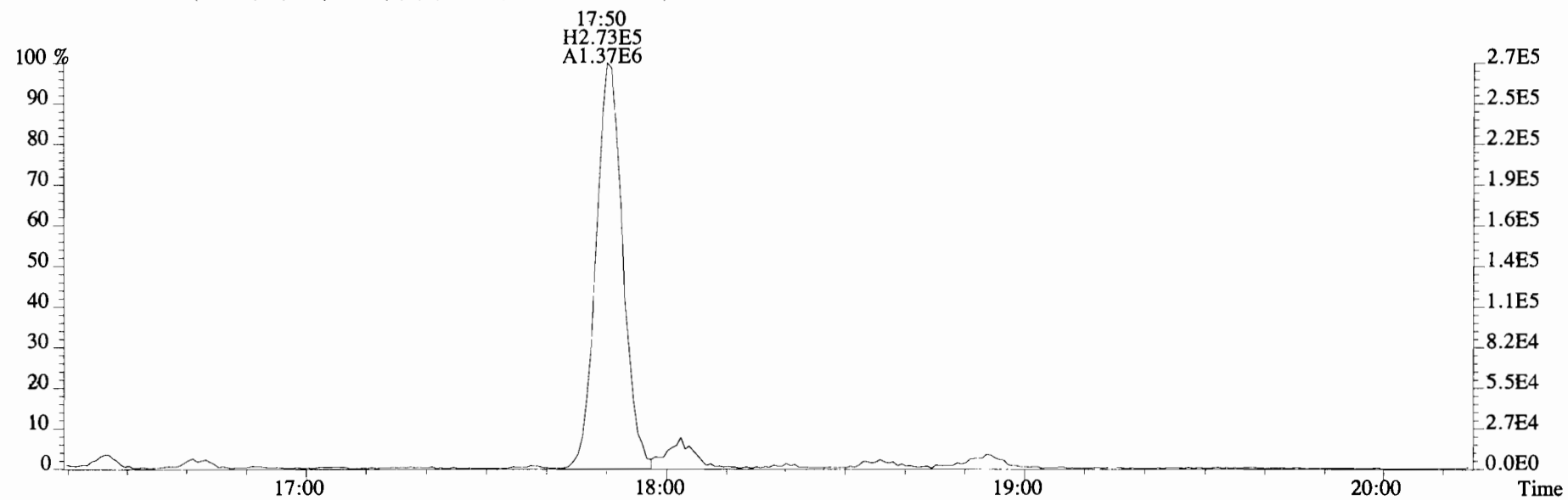
File:191105D1 #1-1683 Acq: 5-NOV-2019 15:56:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:1903565-06RE2 PDI-082SC-B-04-06-191002 13.62 Exp:TCDF_DB225
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



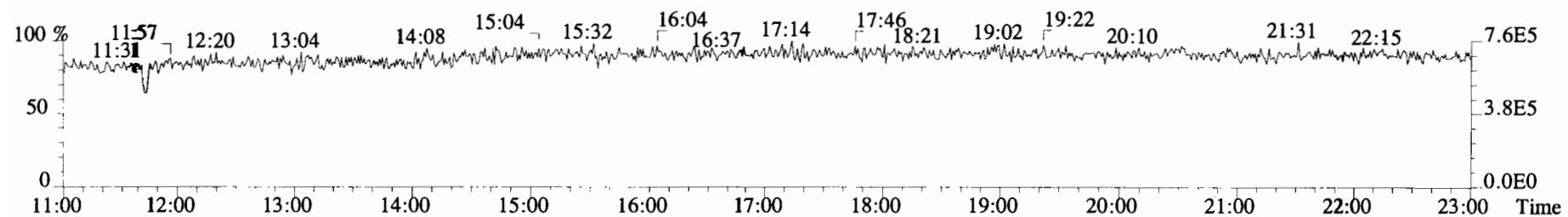
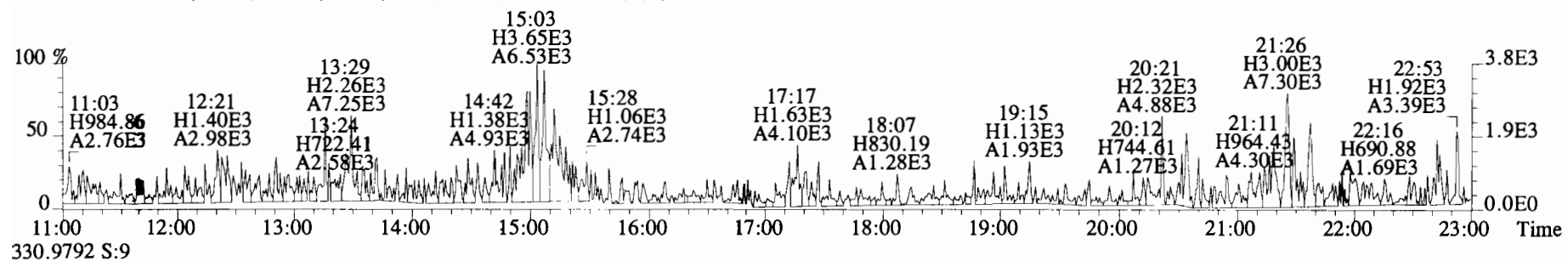
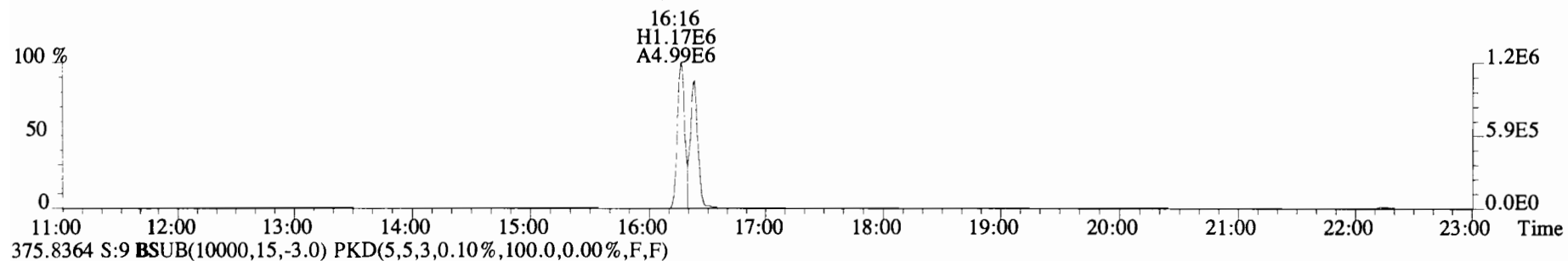
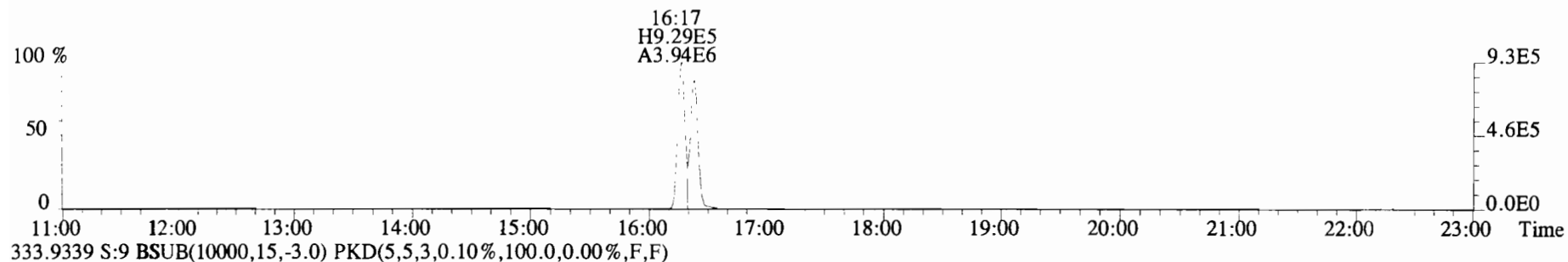
File:191105D1 #1-1683 Acq: 5-NOV-2019 15:56:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE2 PDI-082SC-B-04-06-191002 13.62 Exp:TCDF_DB225
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 15:56:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:1903565-06RE2 PDI-082SC-B-04-06-191002 13.62 Exp:TCDF_DB225
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-082SC-B-06-08-19107
Lab ID: 1903565-07RE2

Filename: 191105D1 S:11 Acq: 5-NOV-19 16:59:54
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 9.997

ConCal: ST191105D1-1
EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.28e+07	0.80 y	15:38	1.00	200.1	-
13C-2,3,7,8-TCDF	1.09e+07	0.78 y	17:50	1.02	167.4	83.7
2,3,7,8-TCDF	3.57e+06	0.76 y	17:51	0.95	68.92	

Integrations

by
Analyst: DB

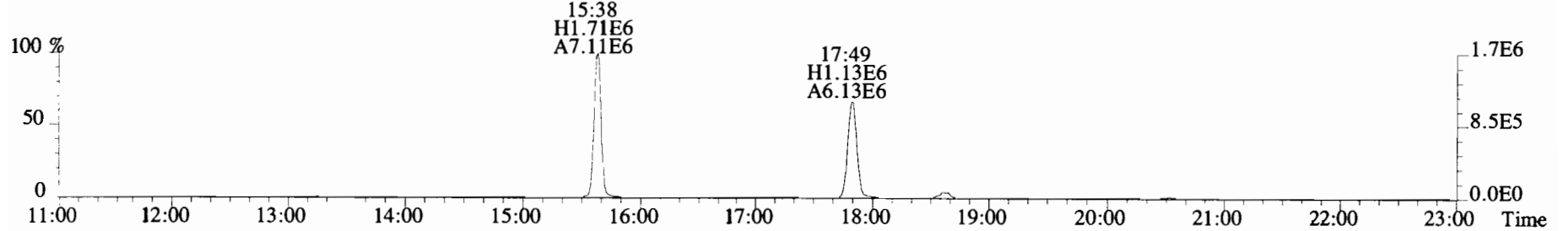
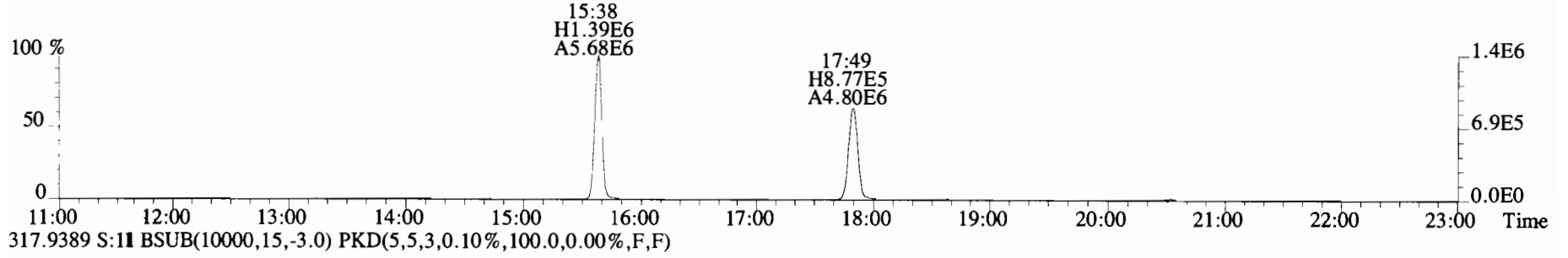
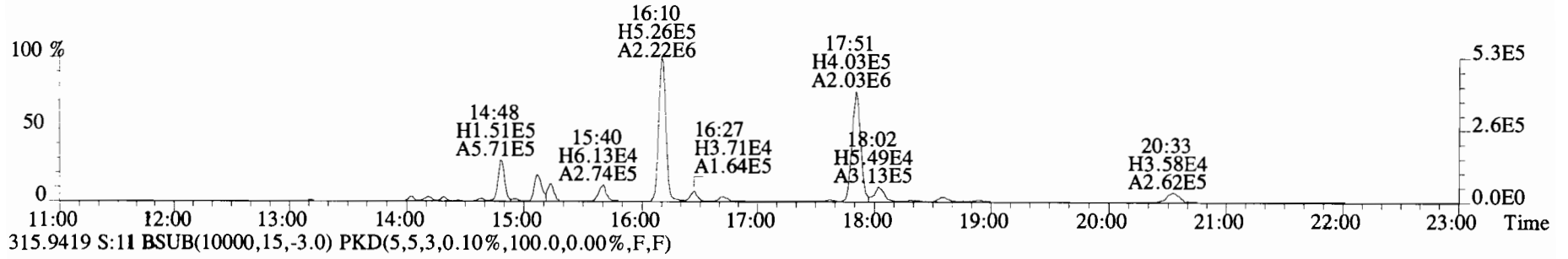
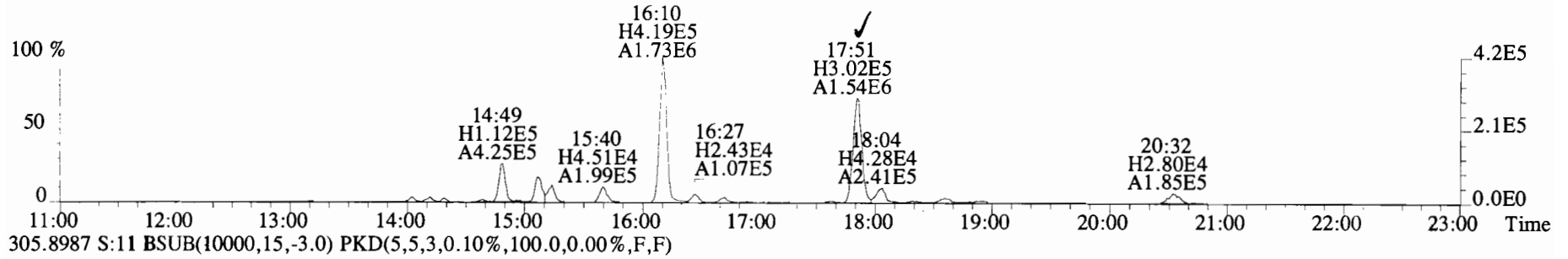
Date: 11/5/19

Reviewed

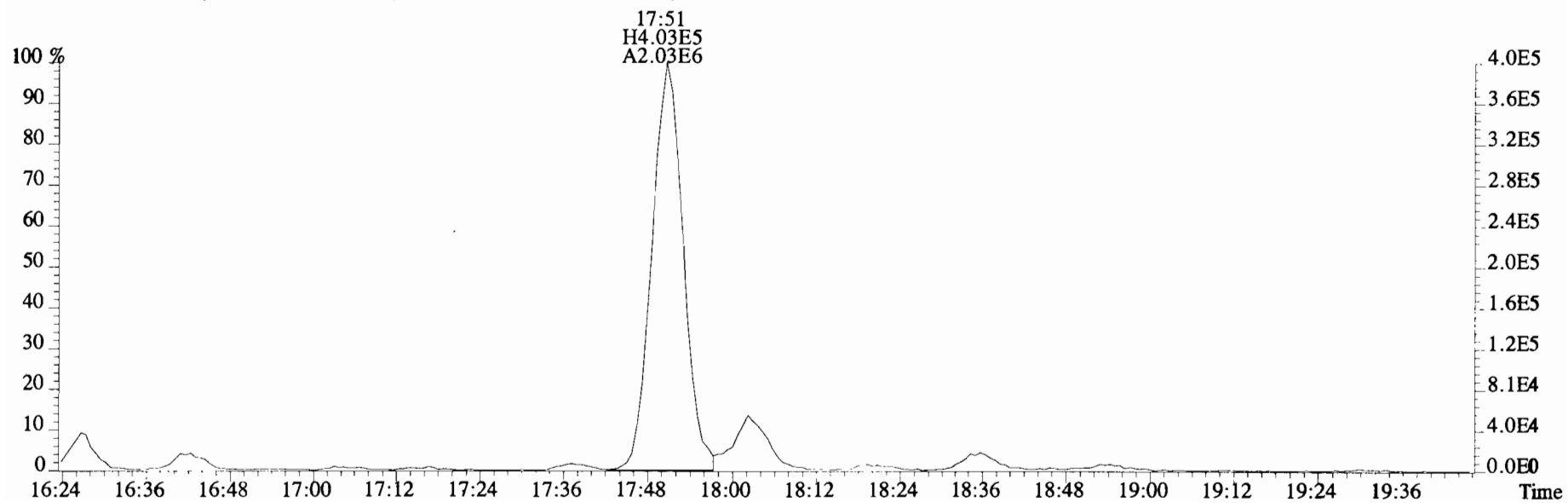
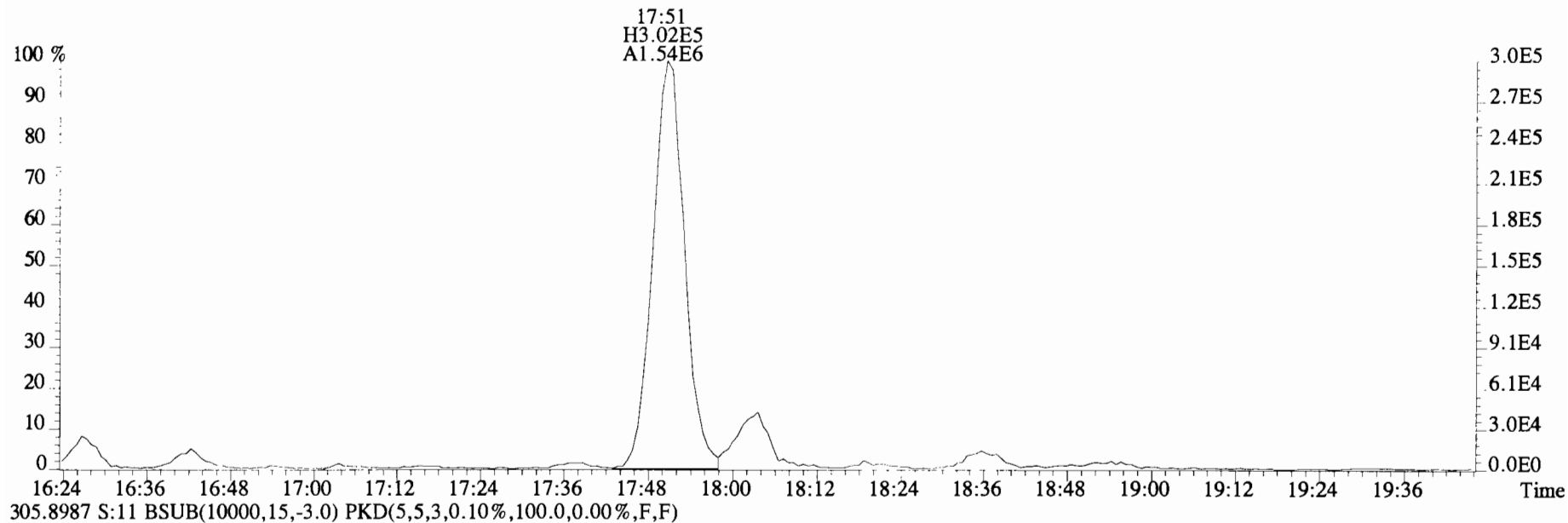
by
Analyst: CT

Date: 12/04/19

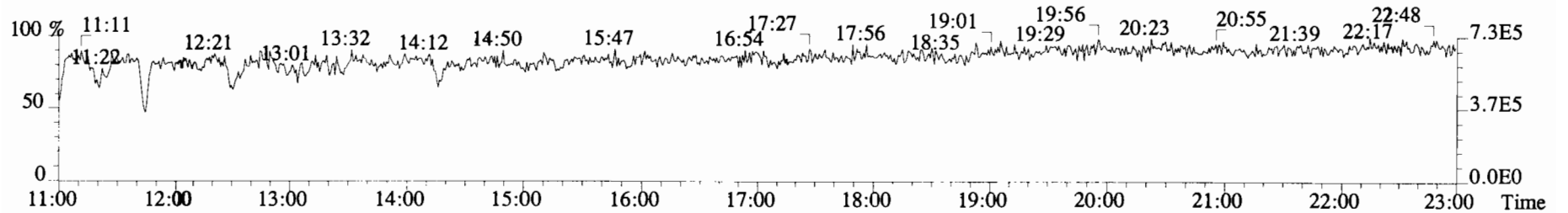
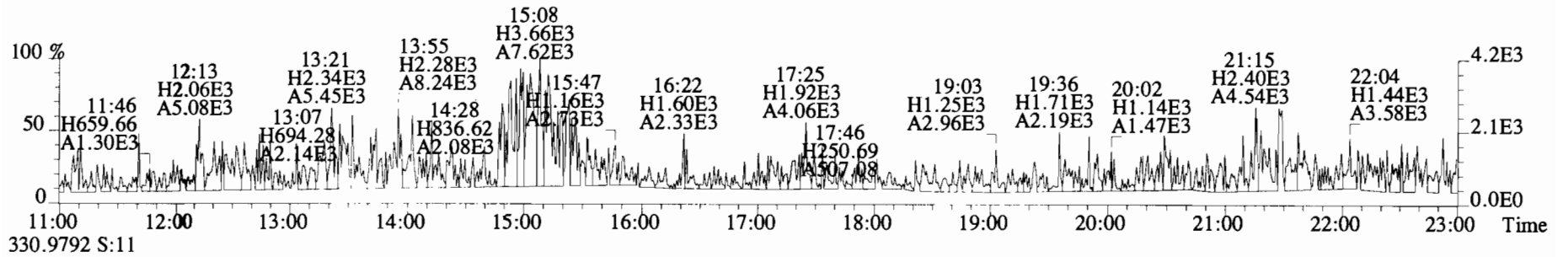
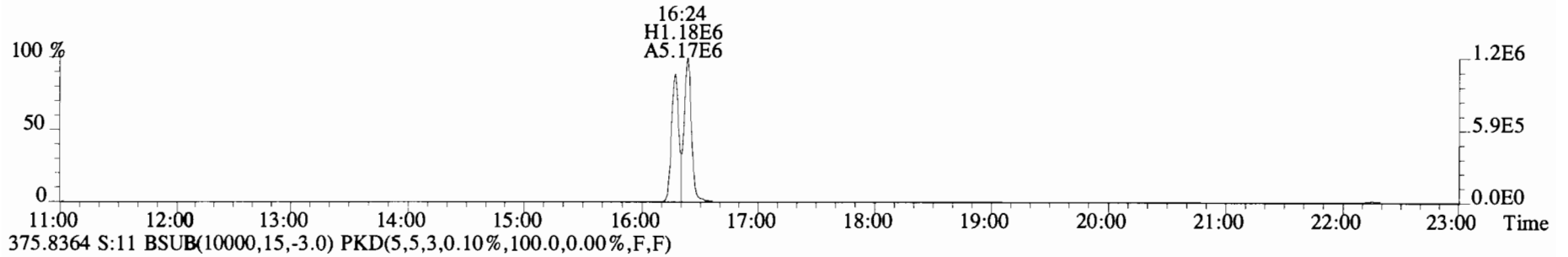
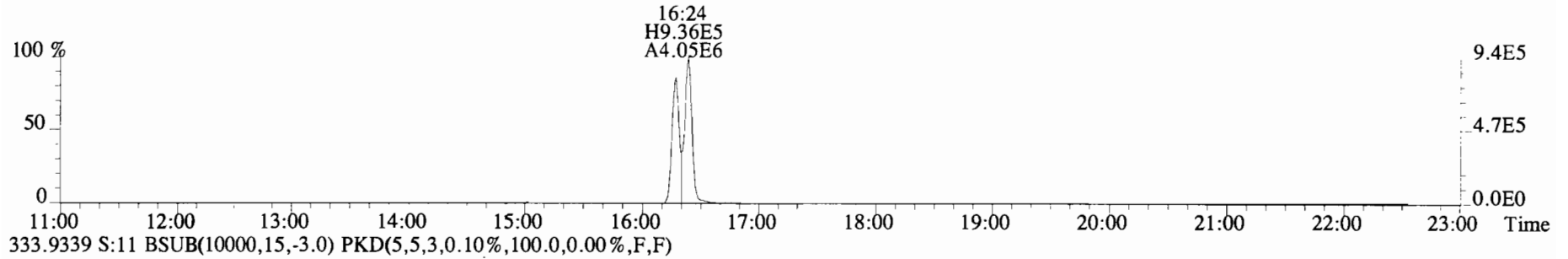
File:191105D1 #1-1683 Acq: 5-NOV-2019 16:59:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE2 PDI-082SC-B-06-08-191002 16.99 Exp:TCDF_DB225
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1608 Acq: 5-NOV-2019 16:59:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory_VG7 Text:1903565-07RE2 PDI-082SC-B-06-08-191002 16.99 Exp:TCDF_DB225
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 16:59:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Viata Analytical Laboratory VG7 Text:1903565-07RE2 PDI-082SC-B-06-08-191002 16.99 Exp:TCDF_DB225
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: Duplicate
Lab ID: B9J0288-DUP1RE1

Filename: 191105D1 S:12 Acq: 5-NOV-19 17:31:44
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol:10.003

ConCal: ST191105D1-1
EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.39e+07	0.79 y	15:36	1.00	199.9	-
13C-2,3,7,8-TCDF	1.29e+07	0.80 y	17:49	1.02	181.0	90.5
2,3,7,8-TCDF	5.29e+06	0.76 y	17:49	0.95	86.70	

Integrations

by
Analyst: DB

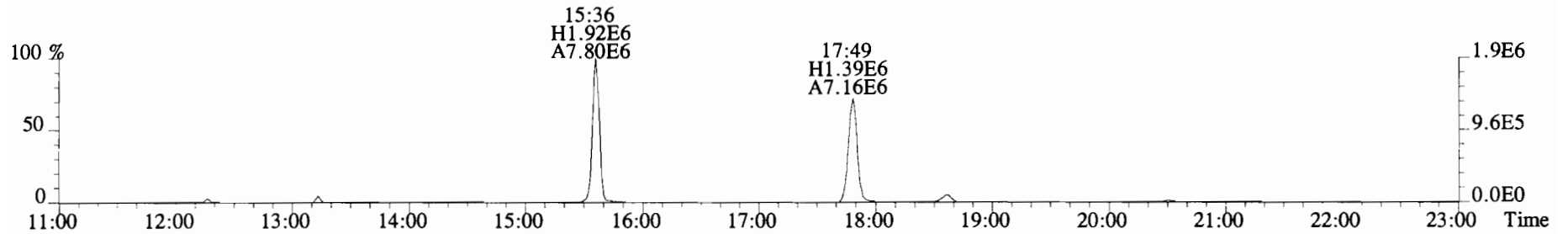
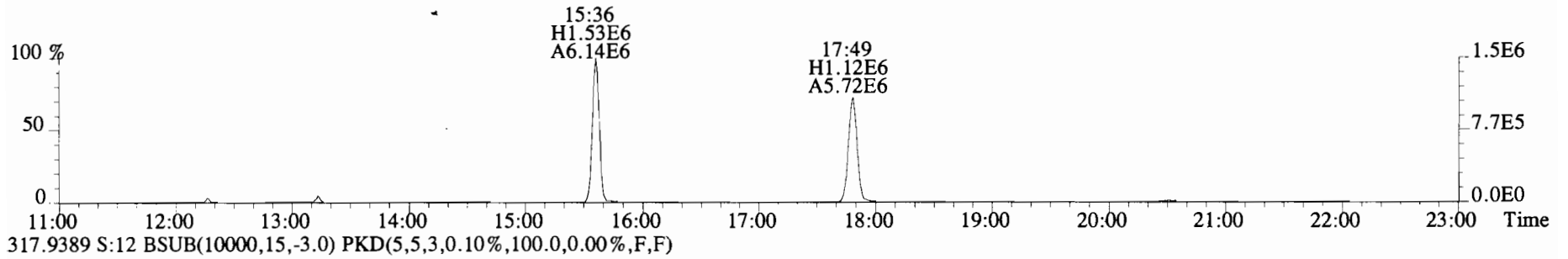
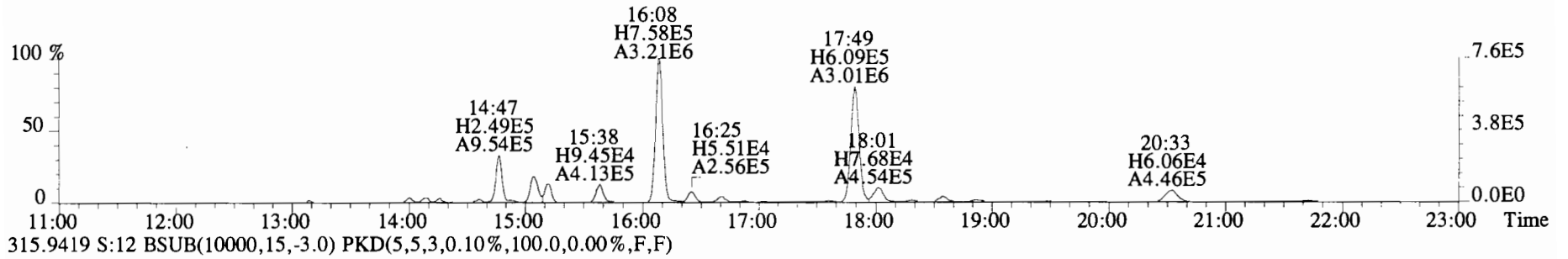
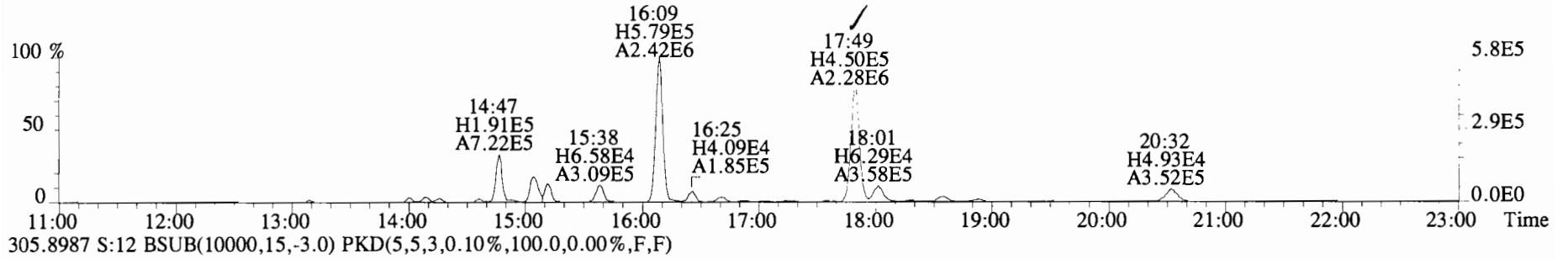
Date: 11/6/19

Reviewed

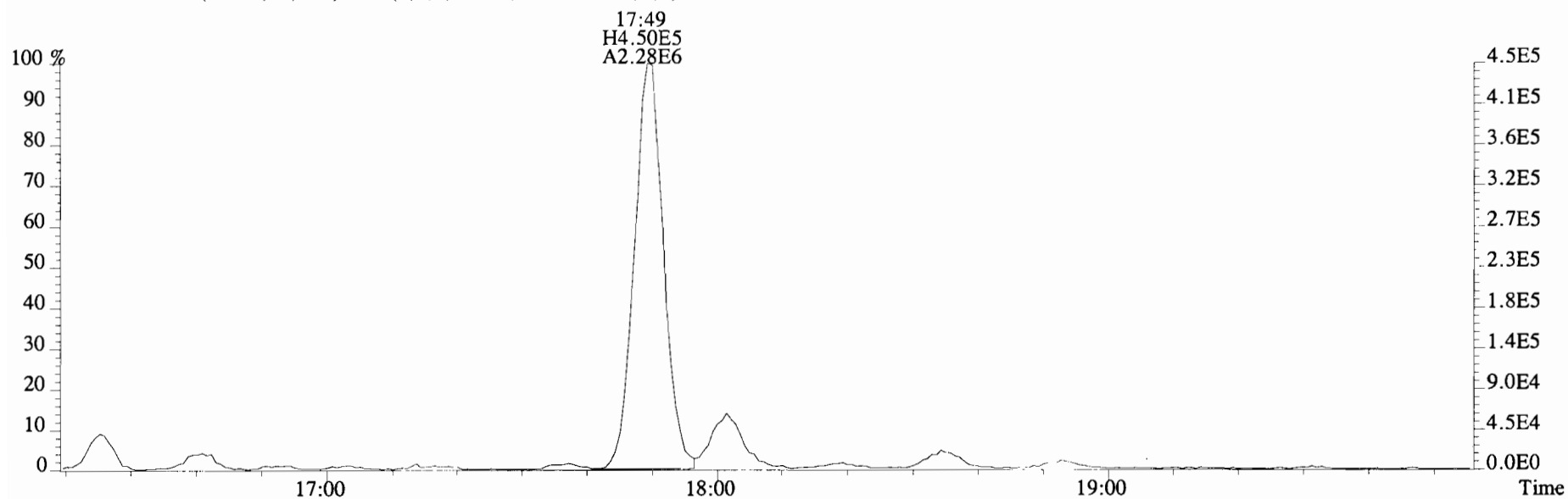
by
Analyst: CT

Date: 12/04/19

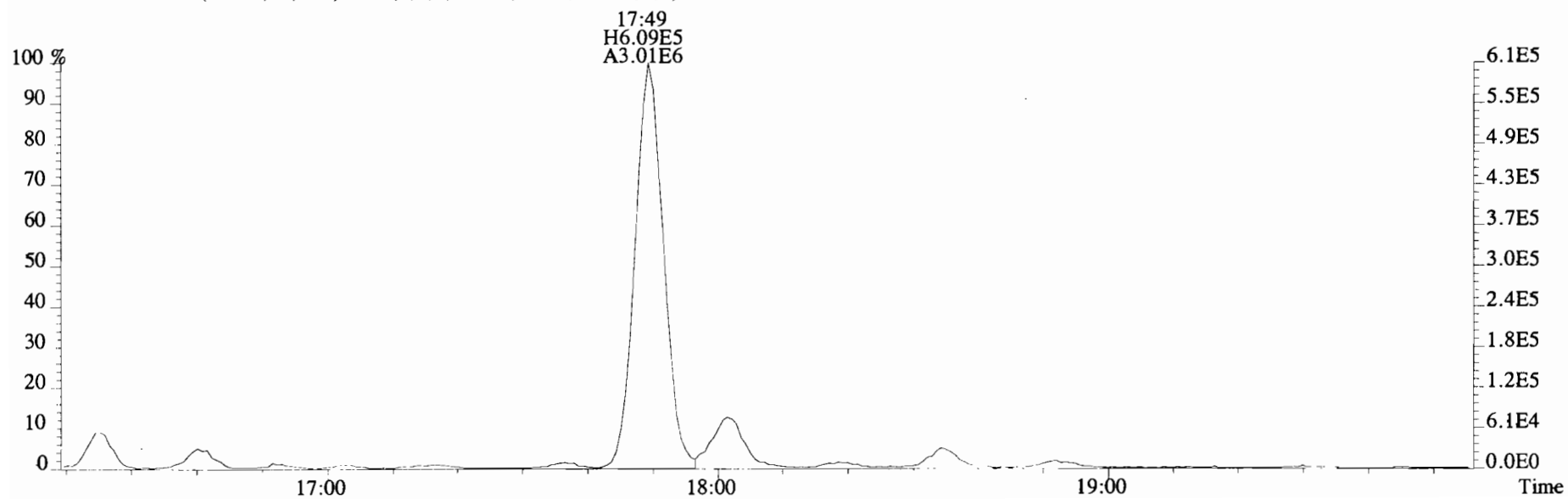
File:191105D1 #1-1683 Acq: 5-NOV-2019 17:31:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1RE1 Duplicate 10.00333 Exp:TCDF_DB225
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



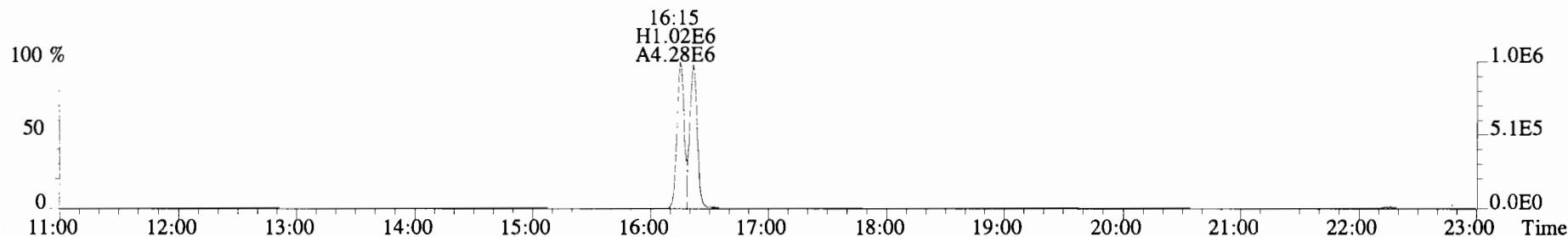
File:191105D1 #1-1683 Acq: 5-NOV-2019 17:31:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory VG7 Text:B9J0288-DUP1RE1 Duplicate 10.00333 Exp:TCDF_DB225
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



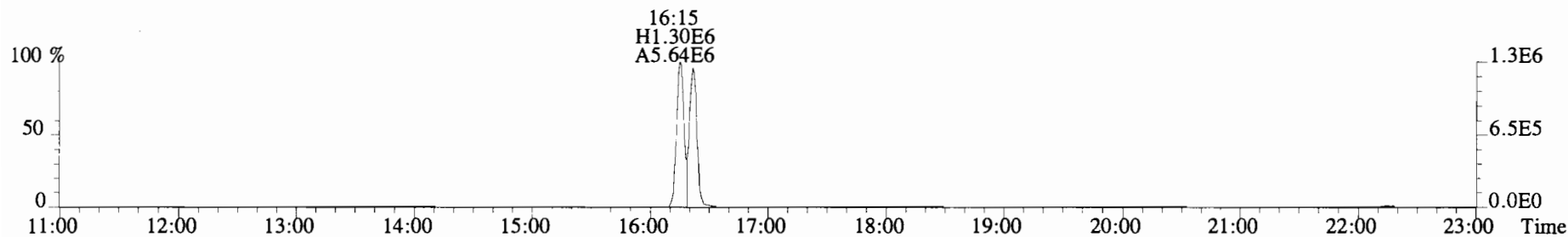
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



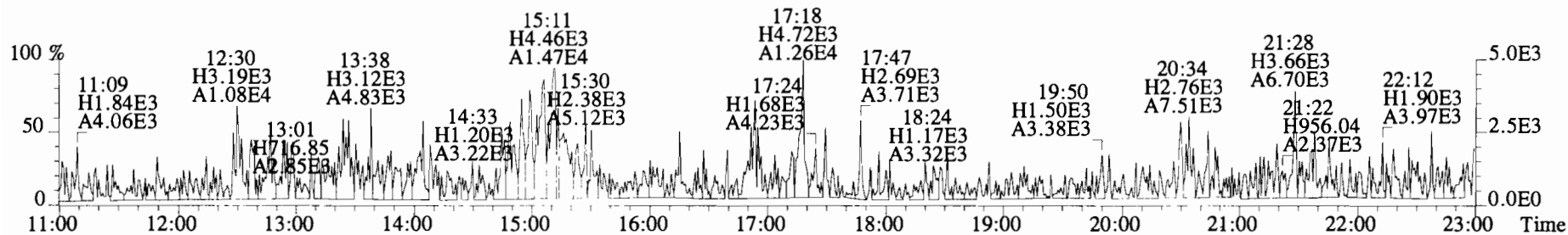
File:191105D1 #1-1683 Acq: 5-NOV-2019 17:31:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Viata Analytical Laboratory_VG7 Text:B9J0288-DUP1RE1 Duplicate 10.00333 Exp:TCDF_DB225
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



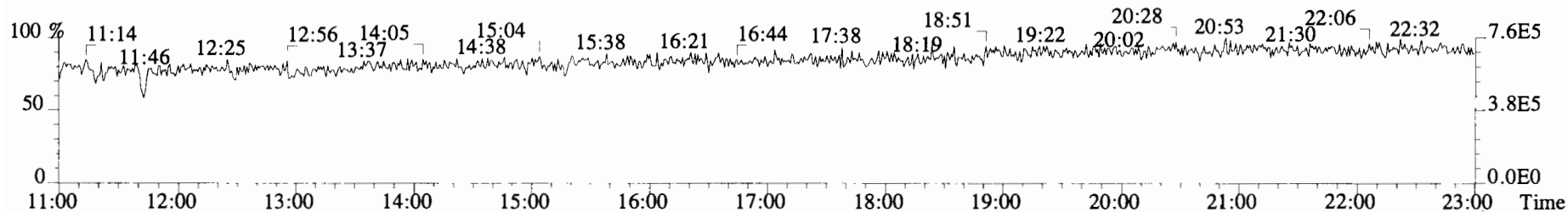
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



330.9792 S:12



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.12e+07	0.82 y	15:37	1.00	199.9	-
13C-2,3,7,8-TCDF	9.46e+06	0.80 y	17:50	1.02	165.9	83.0
2,3,7,8-TCDF	1.58e+06	0.76 y	17:51	0.95	35.23	

Integrations

by DB
Analyst: DB

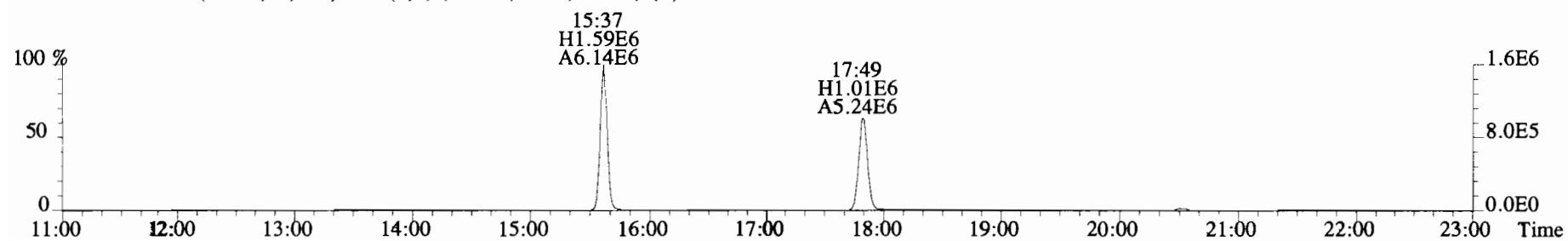
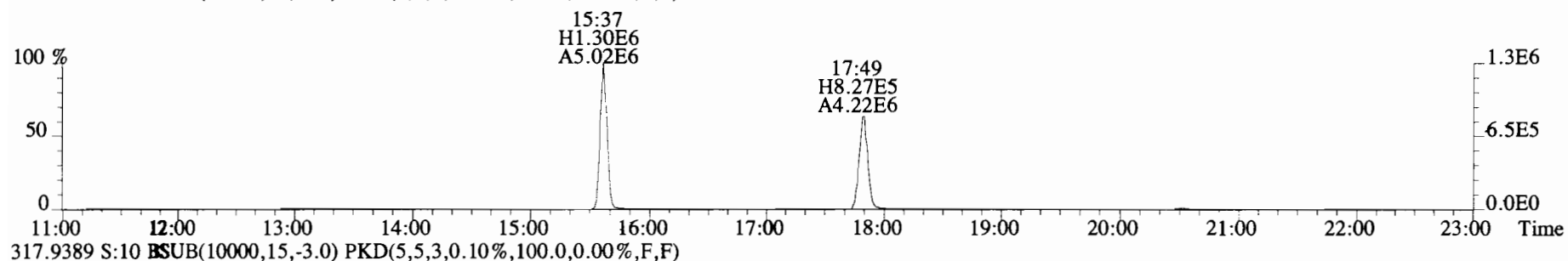
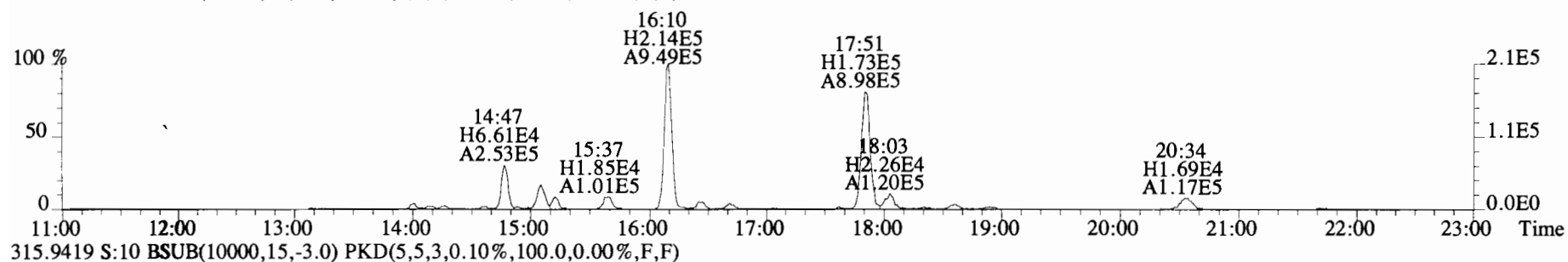
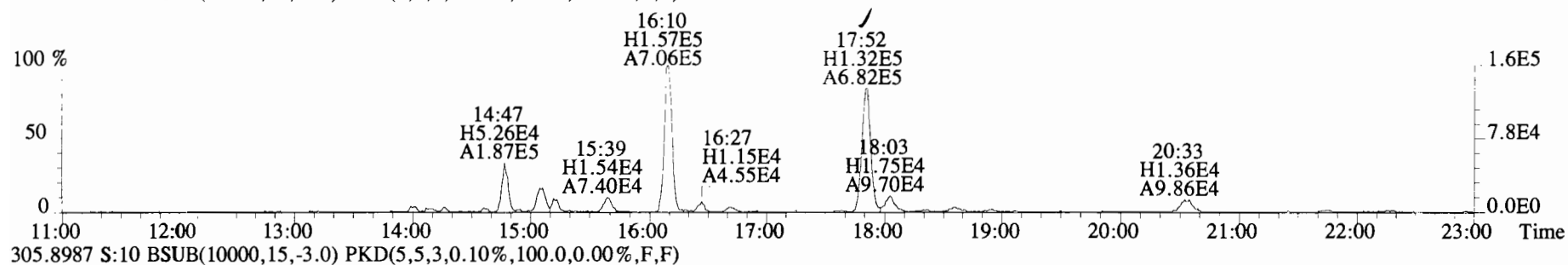
Date: 11/5/19

Reviewed

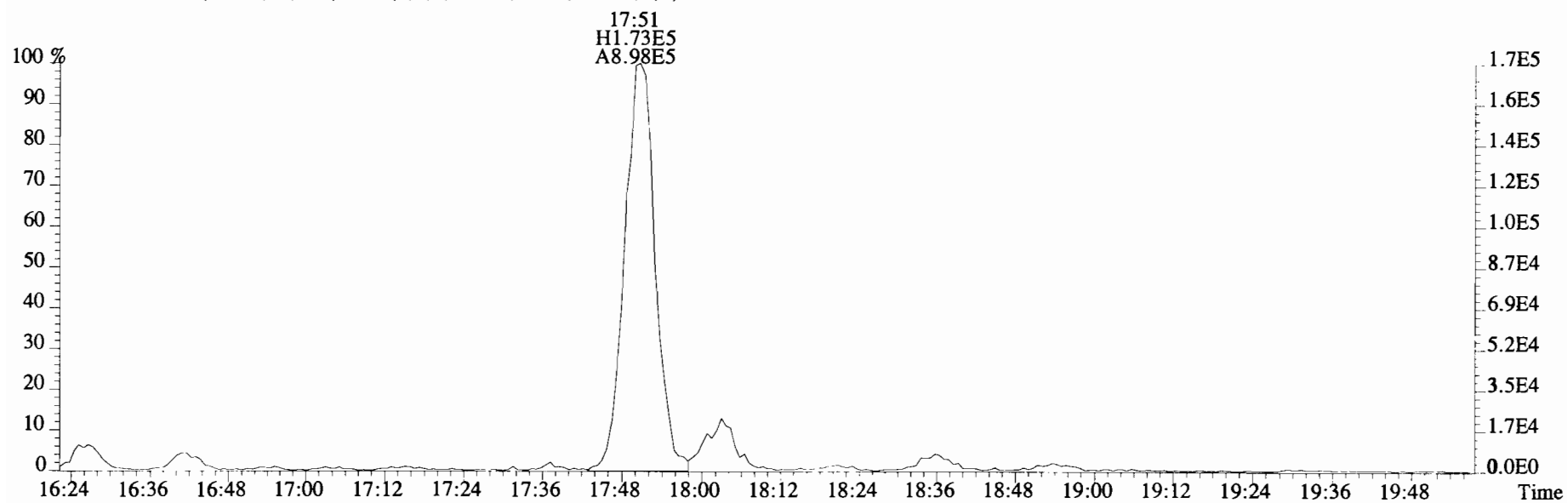
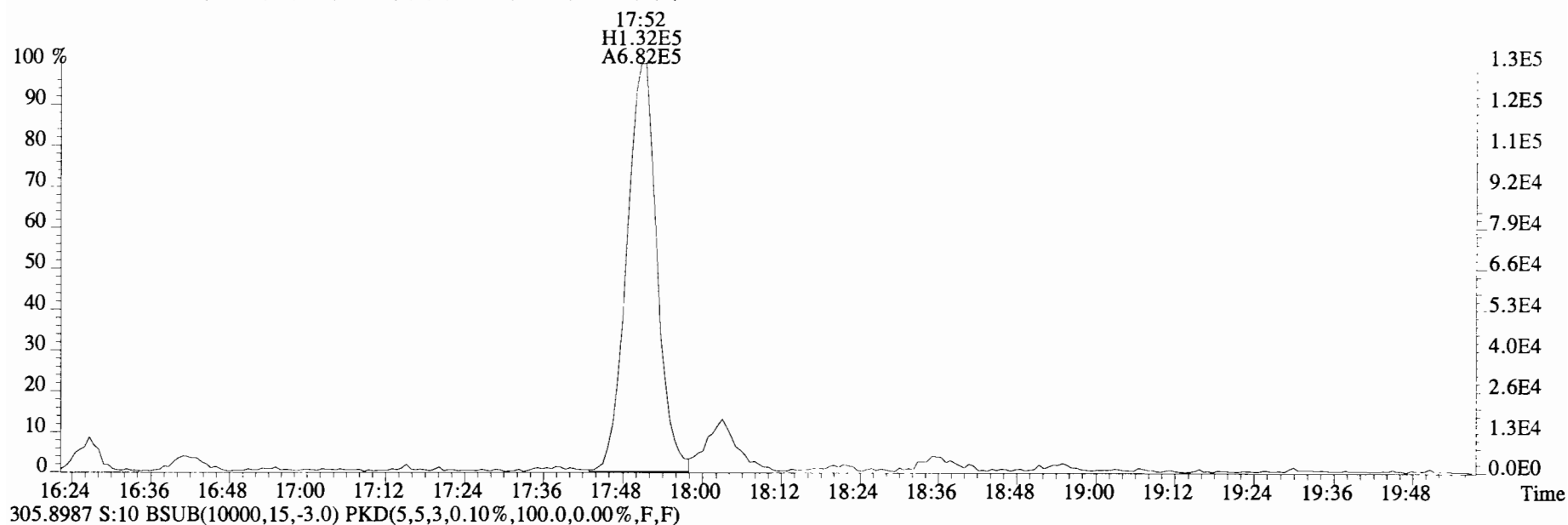
by CT
Analyst: CT

Date: 12/04/19

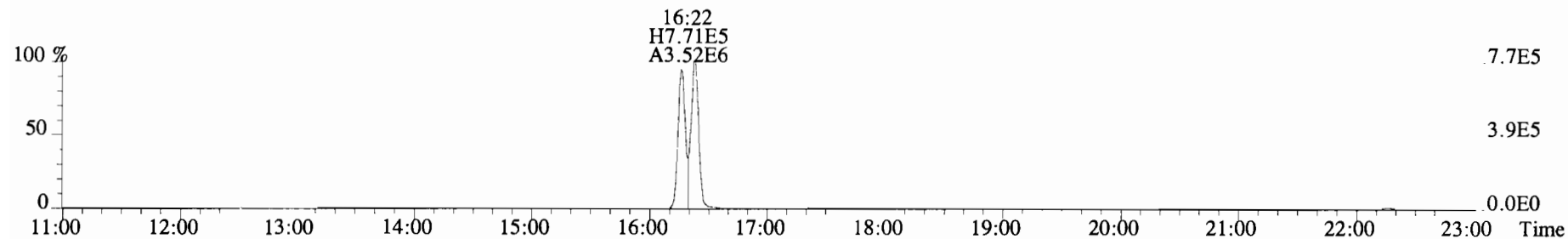
File:191105D1 #1-1683 Acq: 5-NOV-2019 16:28:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE2 PDI-1082SC-B-04-06-191002 20.41 Exp:TCDF_DB225
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



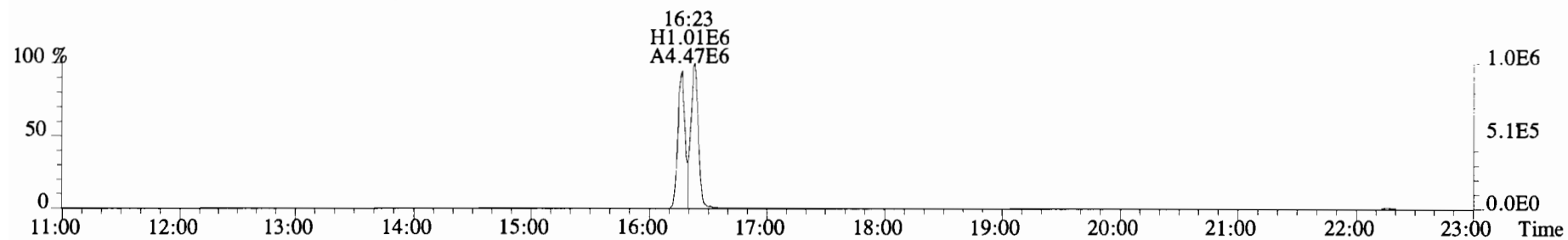
File:191105D1 #1-1683 Acq: 5-NOV-2019 16:28:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE2 PDI-1082SC-B-04-06-191002 20.41 Exp:TCDF_DB225
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



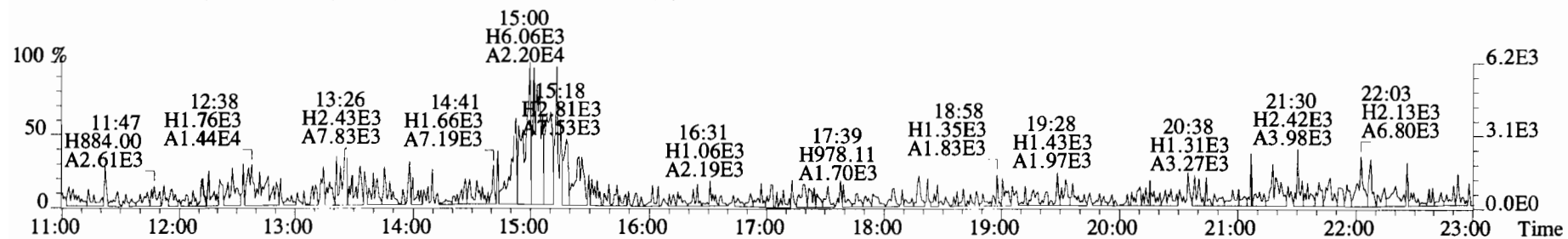
File:191105D1 #1-1683 Acq: 5-NOV-2019 16:28:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Viata Analytical Laboratory_VG7 Text:1903565-08RE2 PDI-1082SC-B-04-06-191002 20.41 Exp:TCDF_DB225
 331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



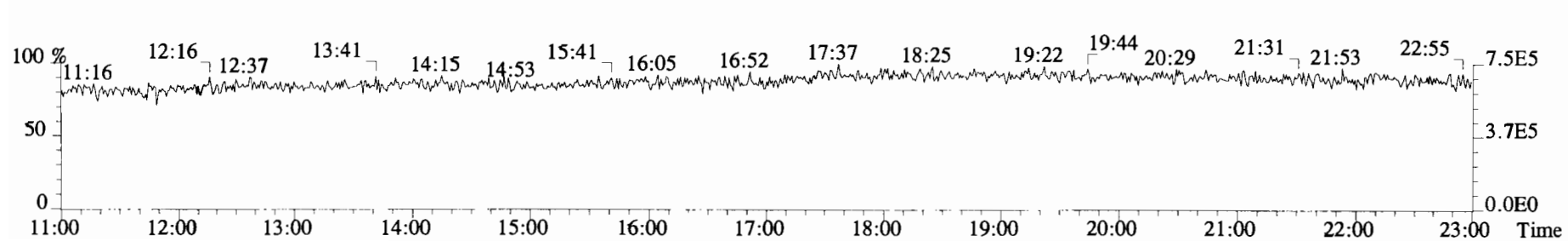
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	9.64e+06	0.81 y	15:37	1.00	200.0	-
13C-2,3,7,8-TCDF	1.13e+07	0.80 y	17:49	1.02	230.2	115.1
2,3,7,8-TCDF	5.82e+05	0.74 y	17:50	0.95	10.85	

Integrations

by
Analyst: DB

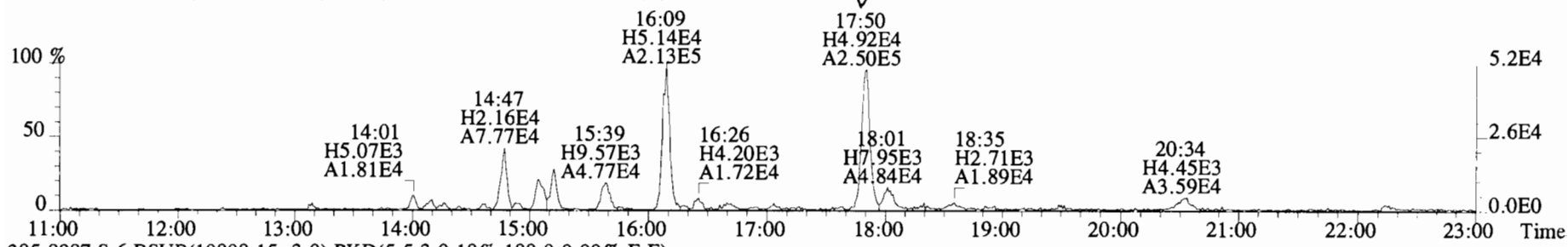
Date: 11/5/19

Reviewed

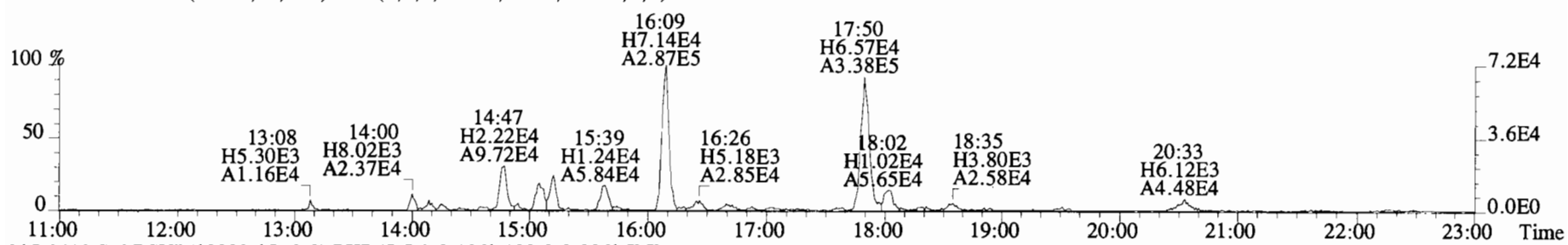
by
Analyst: CT

Date: 12/6/19

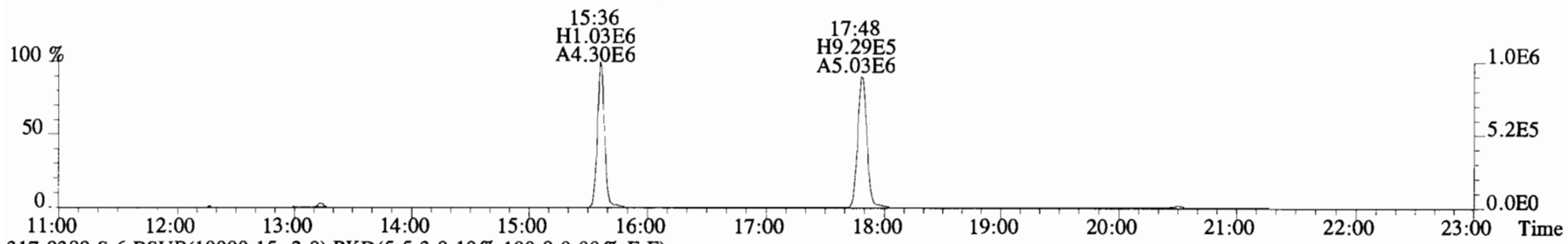
File:191105D1 #1-1682 Acq: 5-NOV-2019 14:21:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-11RE2 PDI-084SC-B-00-02-191002 20.39 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



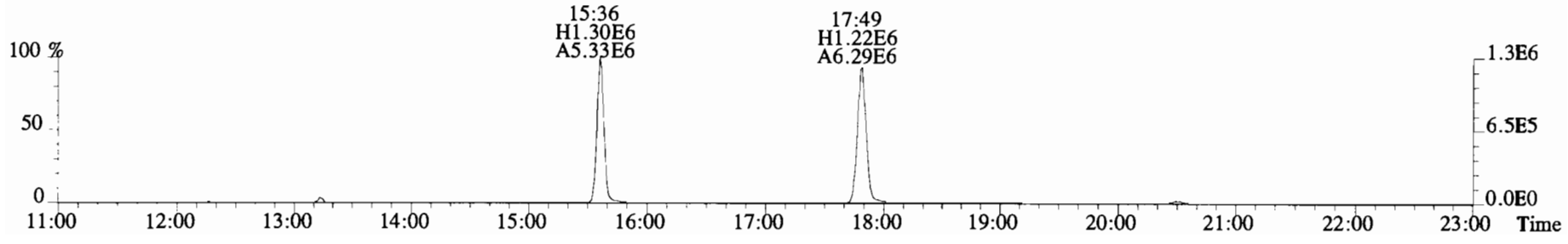
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



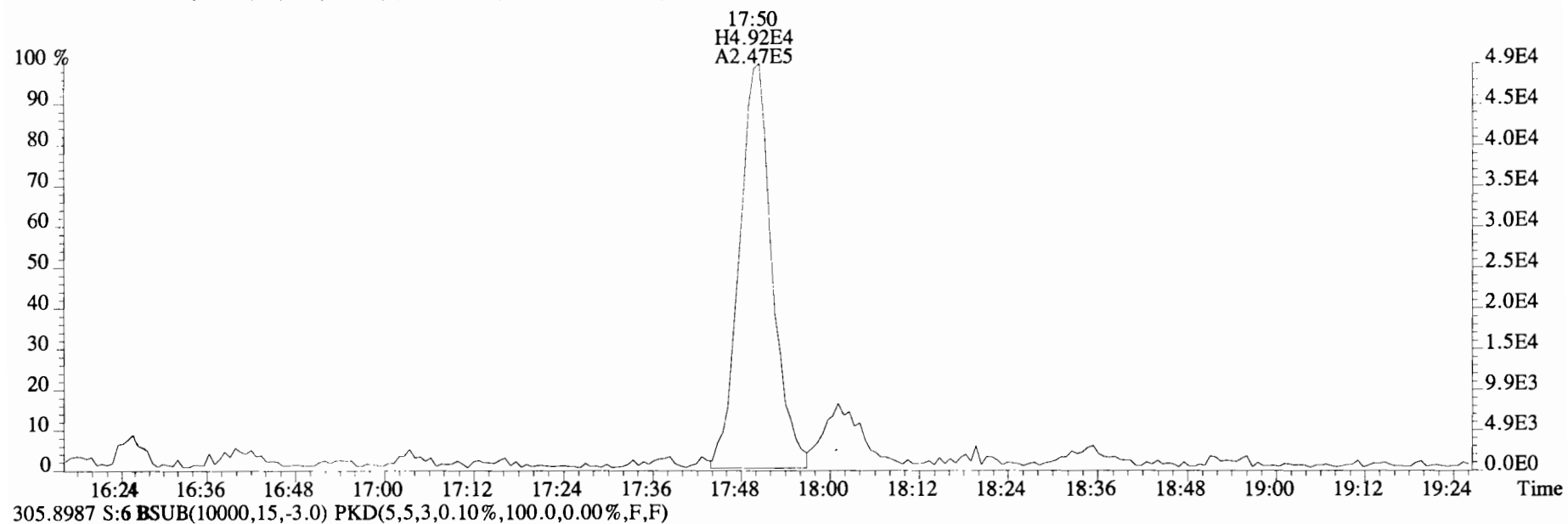
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



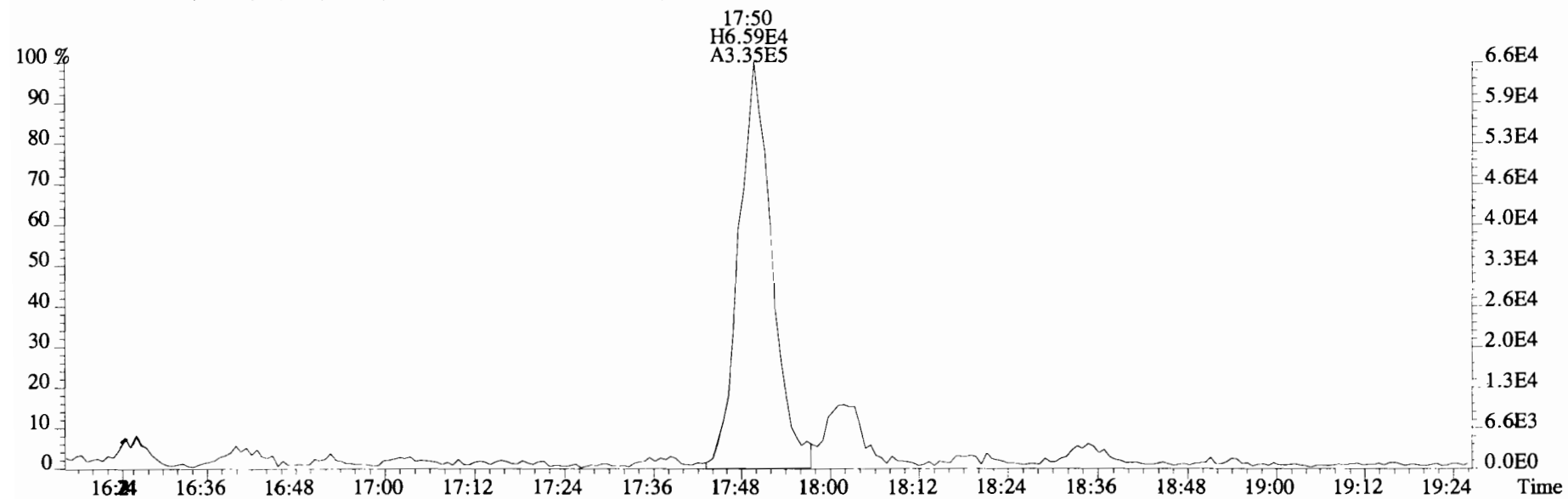
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



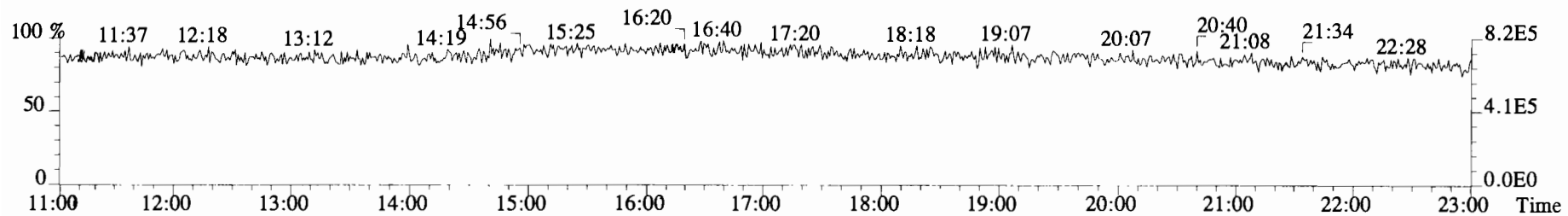
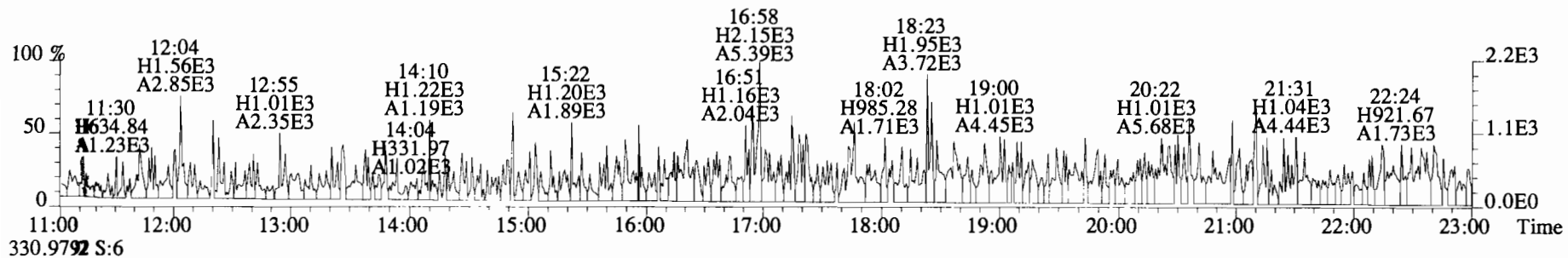
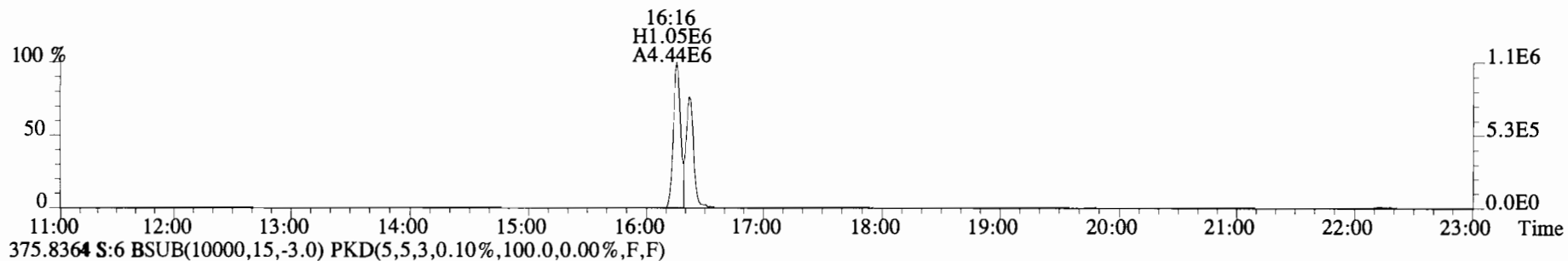
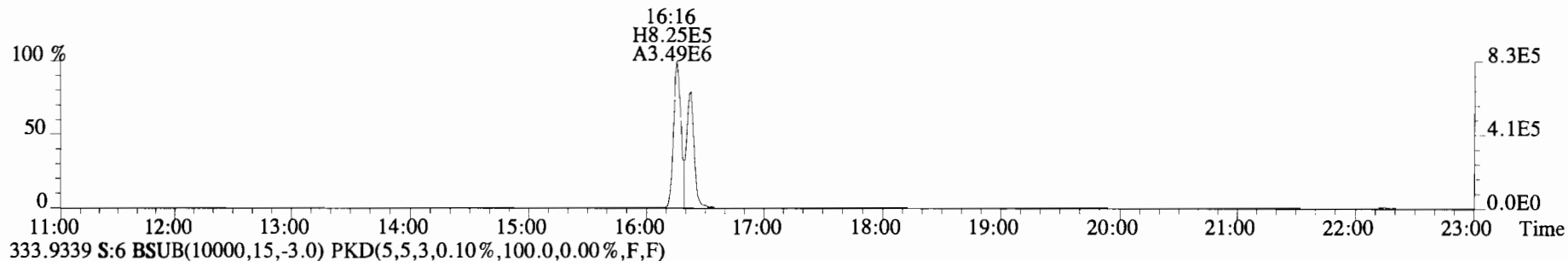
File:191105D1 #1-1682 Acq: 5-NOV-2019 14:21:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE2 PDI-084SC-B-00-02-191002 20.39 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1682 Acq: 5-NOV-2019 14:21:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-11RE2 PDI-084SC-B-00-02-191002 20.39 Exp:TCDF_DB225
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-084SC-B-02-04-191077 Filename: 191105D1 S:14 Acq: 5-NOV-19 18:35:23 ✓ ConCal: ST191105D1-1
Lab ID: 1903565-12RE2 GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 9.998 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.11e+07	0.80 y	15:37	1.00	200.0	-
13C-2,3,7,8-TCDF	1.21e+07	0.81 y	17:49	1.02	213.2	106.6
2,3,7,8-TCDF	1.73e+07	0.76 y	17:51	0.95	300.6	

Integrations

by
Analyst: DB

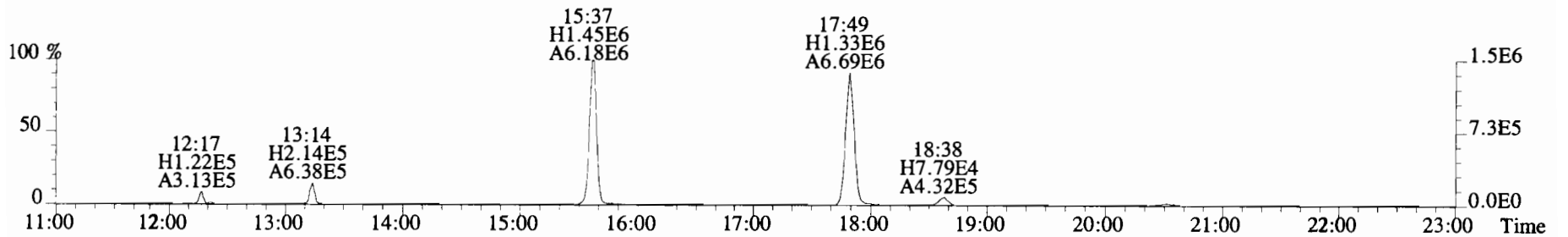
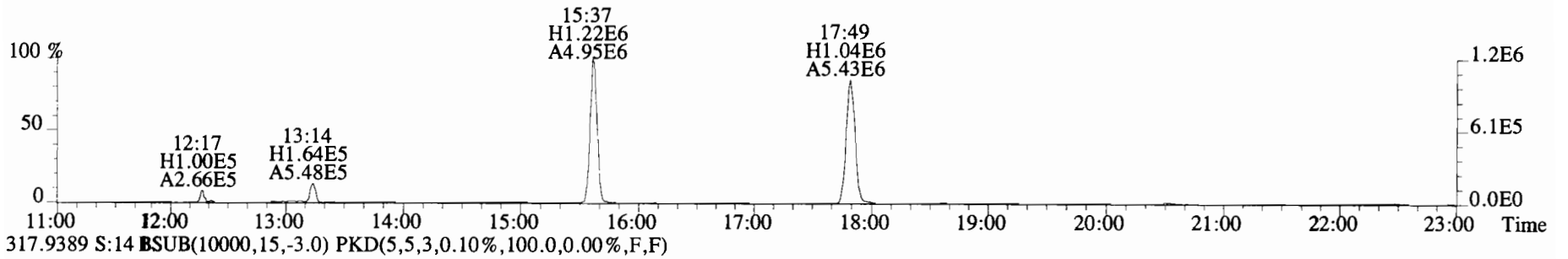
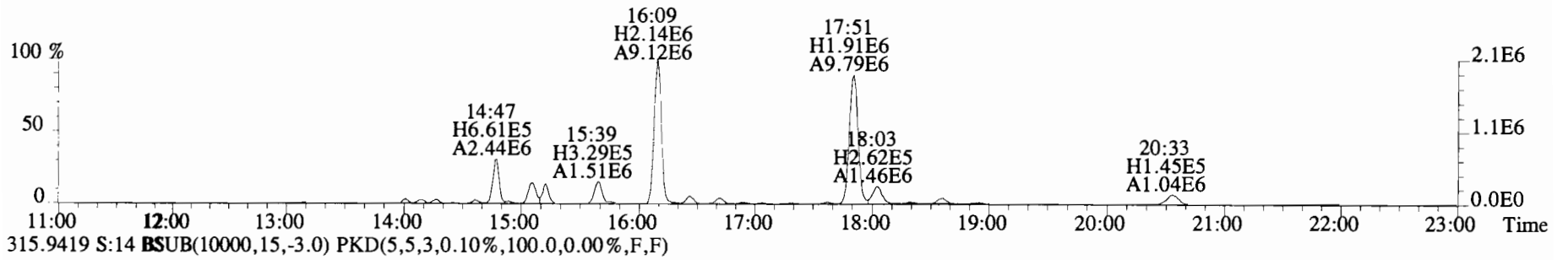
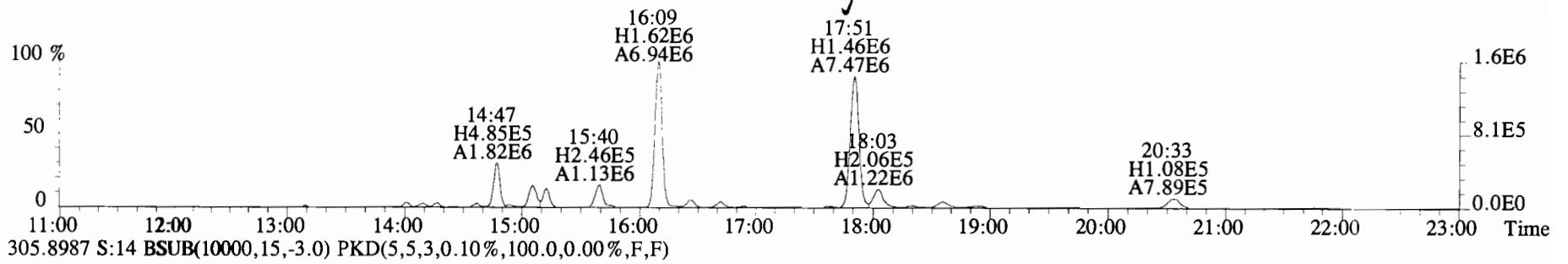
Date: 11/6/19

Reviewed

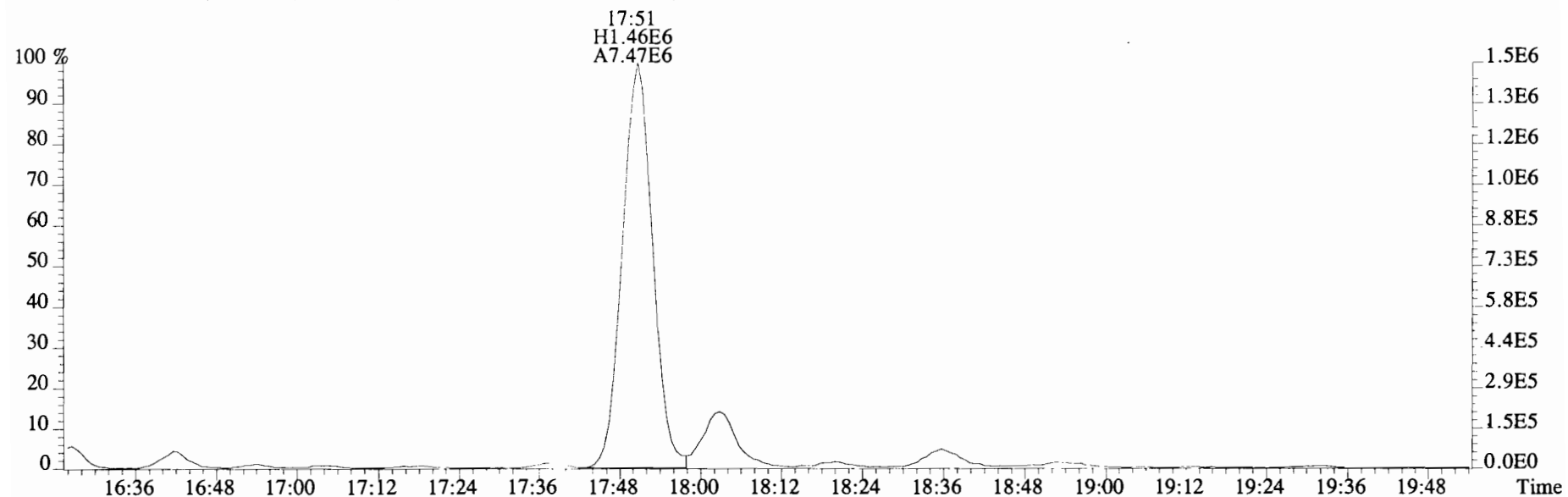
by
Analyst: CT

Date: 12/04/19

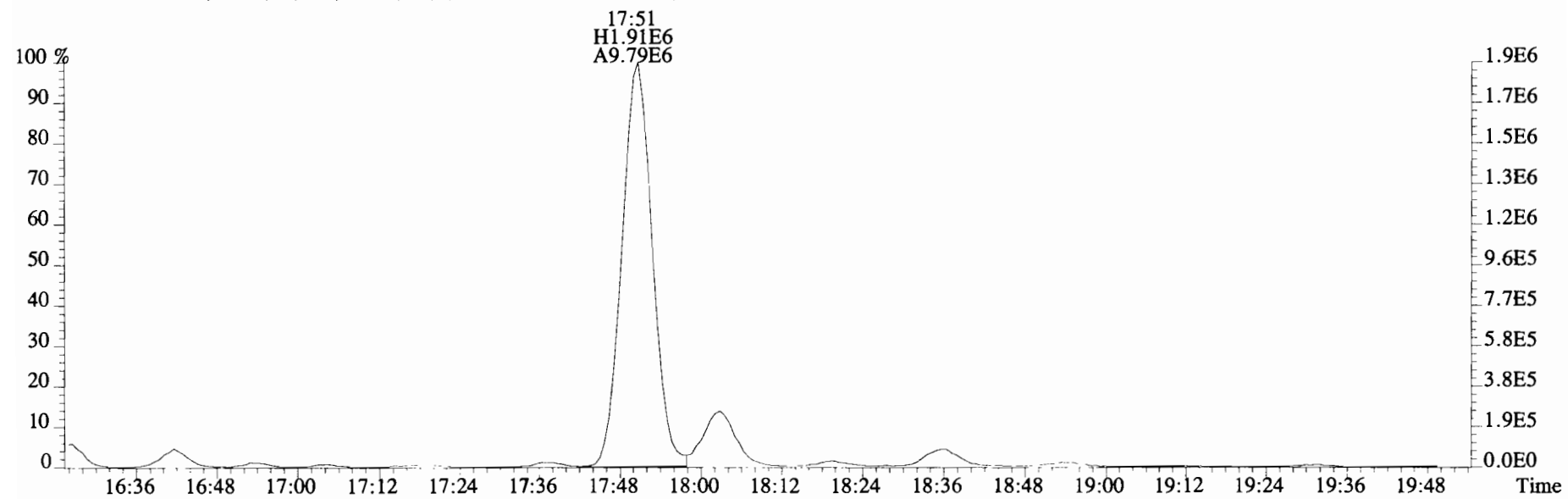
File:191105D1 #1-1683 Acq: 5-NOV-2019 18:35:23 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE2 PDI-084SC-B-02-04-191002 19.52 Exp:TCDF_DB225
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



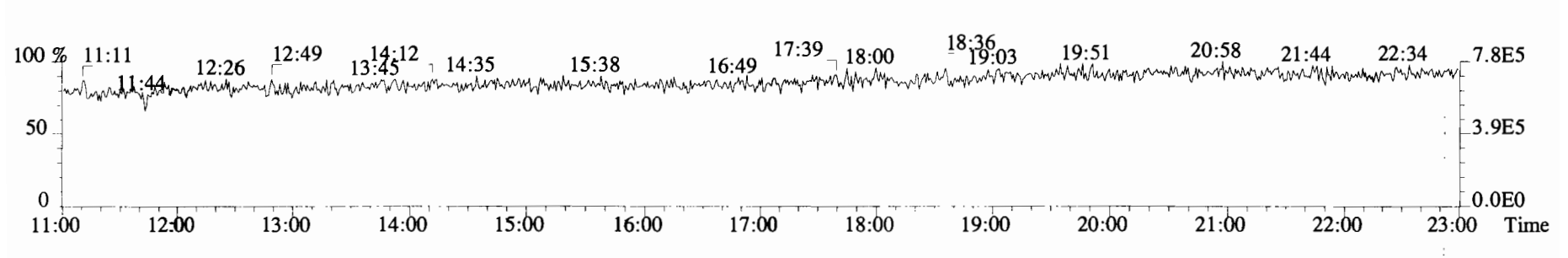
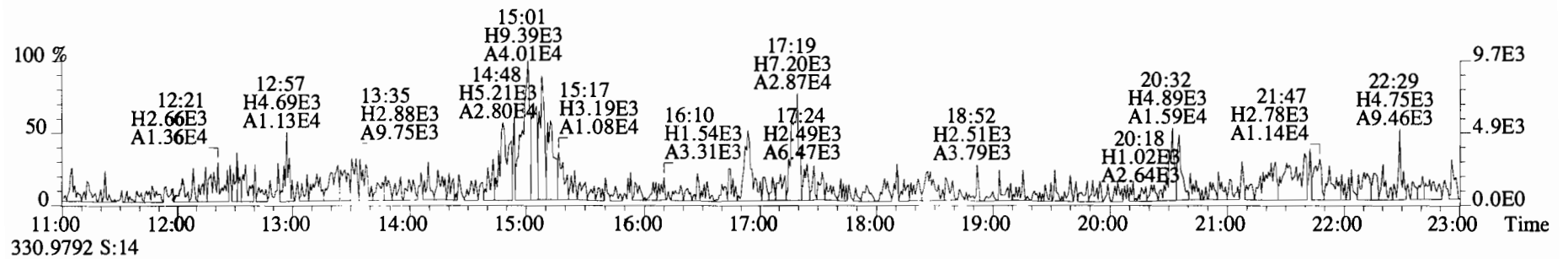
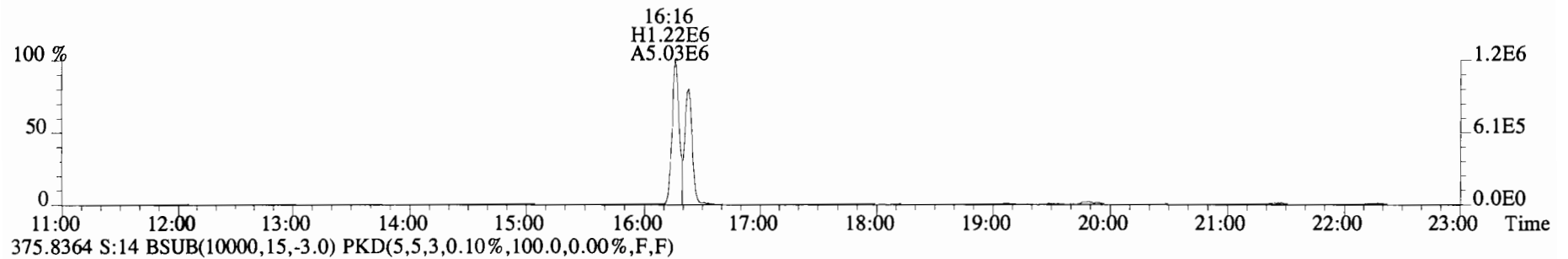
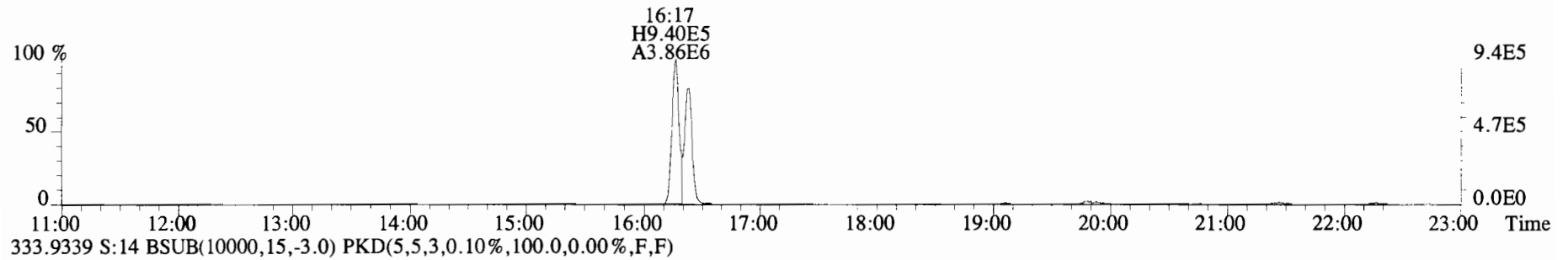
File:191105D1 #1-1683 Acq: 5-NOV-2019 18:35:23 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory_VG7 Text:1903565-12RE2 PDI-084SC-B-02-04-191002 19.52 Exp:TCDF_DB225
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 18:35:23 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Viata Analytical Laboratory VG7 Text:1903565-12RE2 PDI-084SC-B-02-04-191002 19.52 Exp:TCDF_DB225
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.26e+07	0.80 y	15:36	1.00	199.5	-
13C-2,3,7,8-TCDF	1.20e+07	0.81 y	17:48	1.02	187.1	93.8
2,3,7,8-TCDF	1.37e+06	0.76 y	17:49	0.95	24.03	

Integrations

by
Analyst: DB

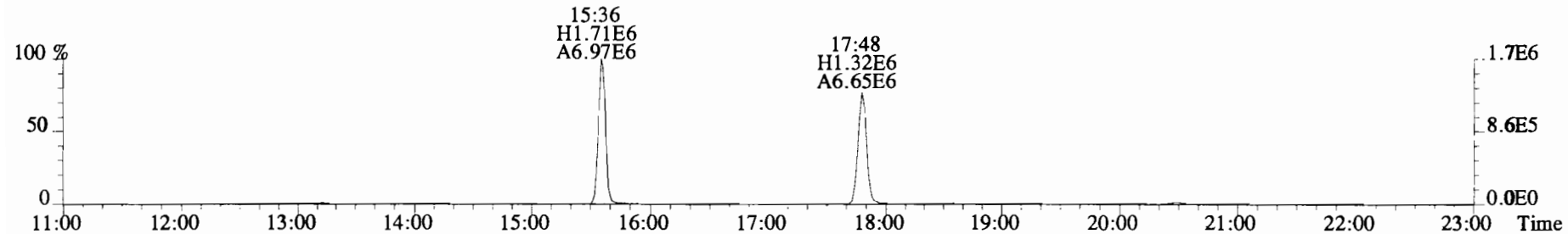
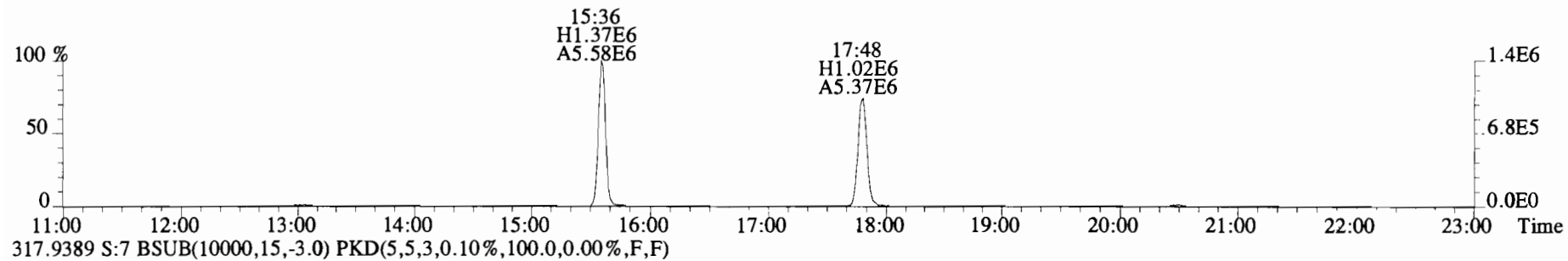
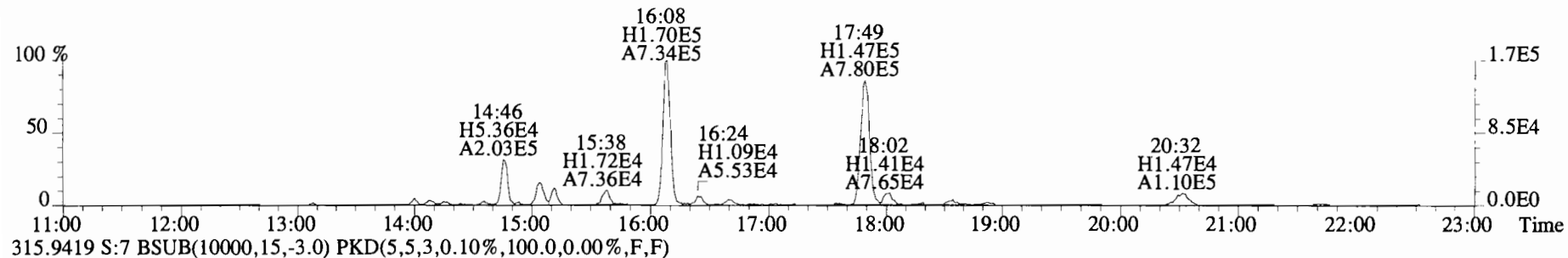
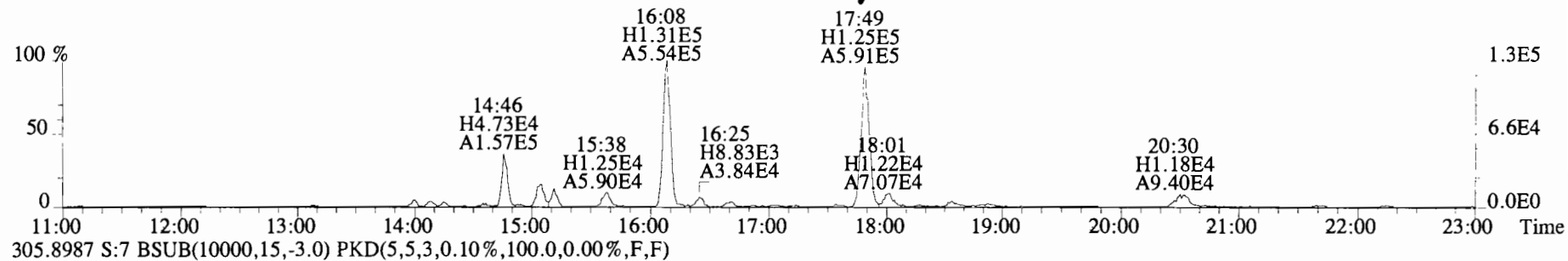
Date: 11/5/19

Reviewed

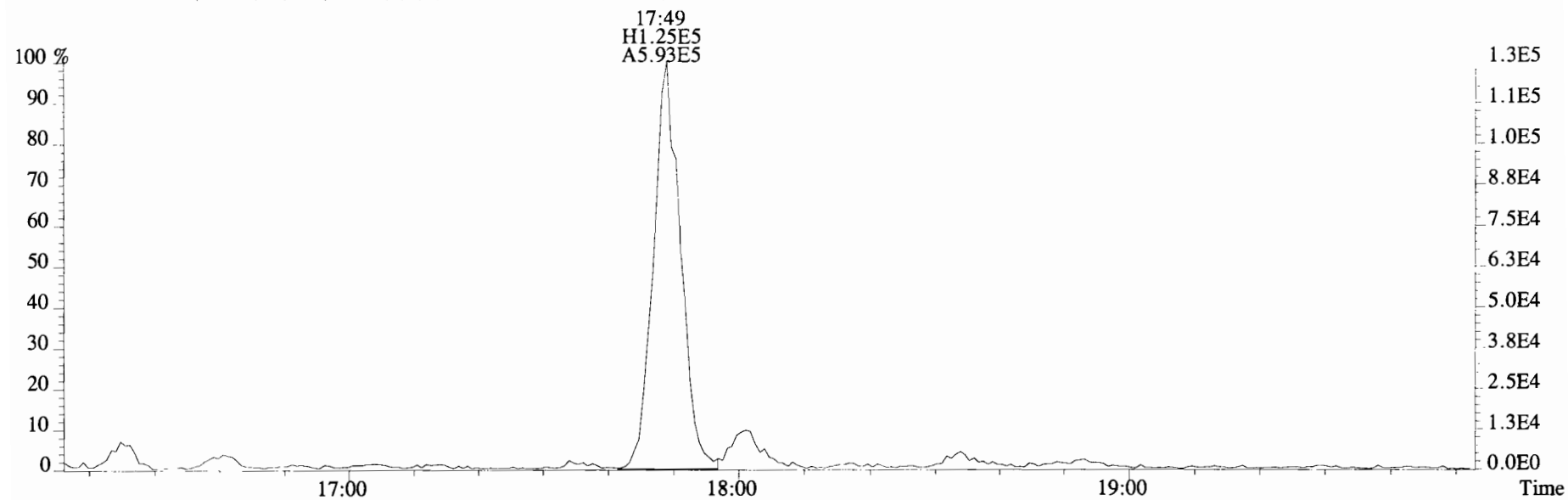
by
Analyst: CT

Date: 12/04/19

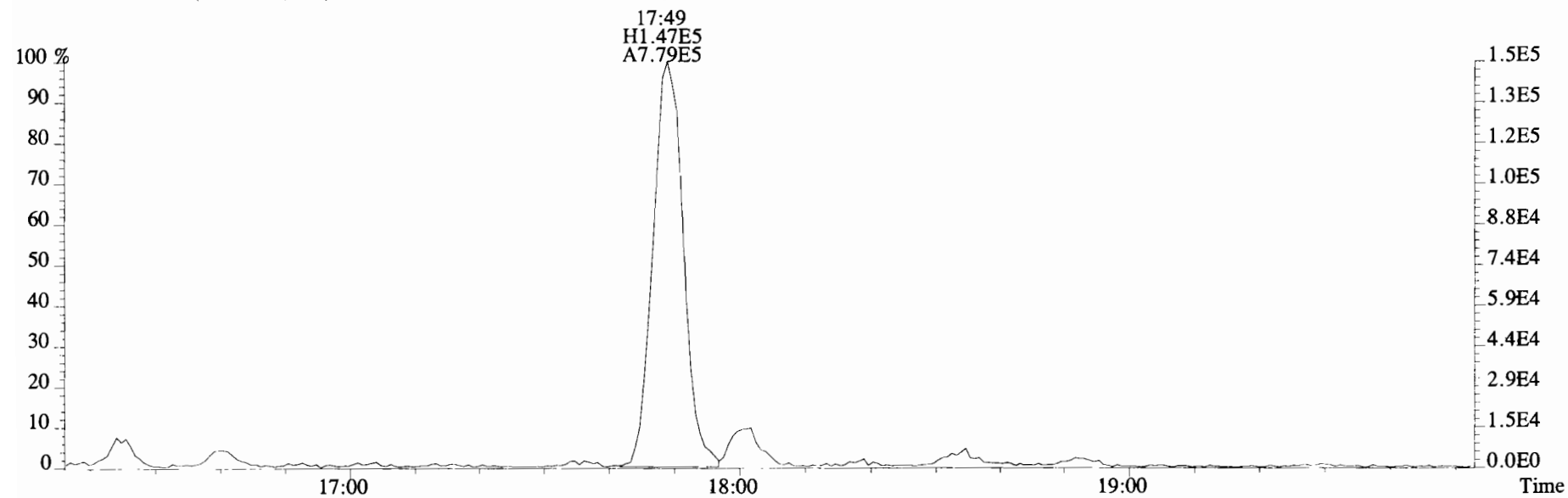
File:191105D1 #1-1682 Acq: 5-NOV-2019 14:52:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE2 PDI-084SC-B-04-06-191002 17.62 Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



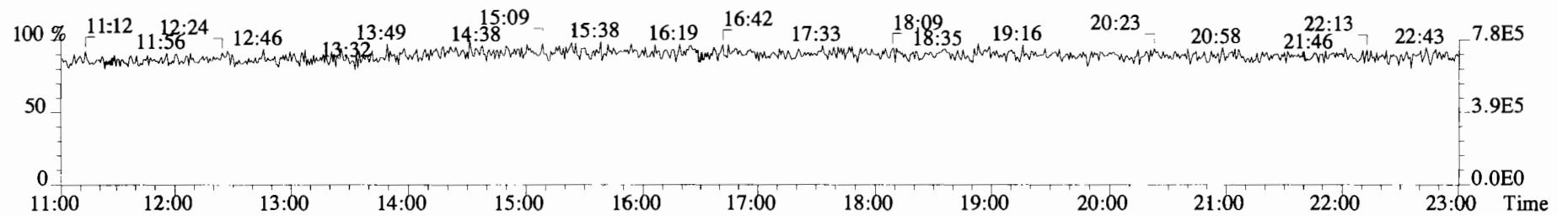
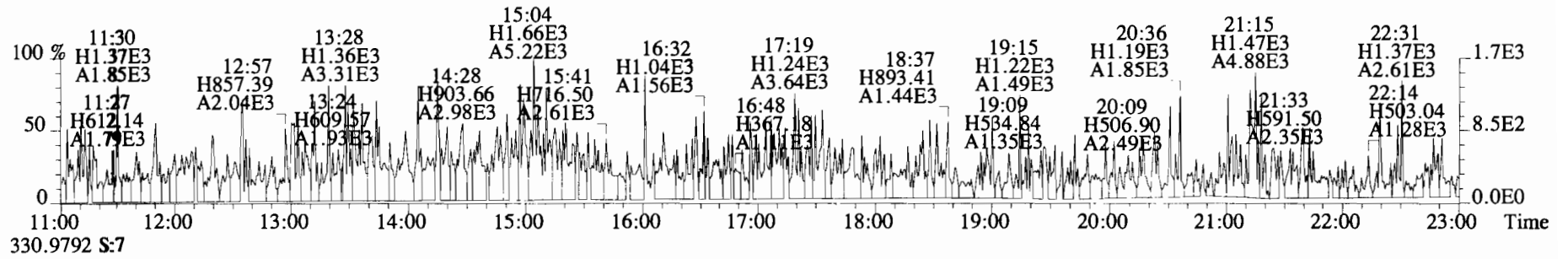
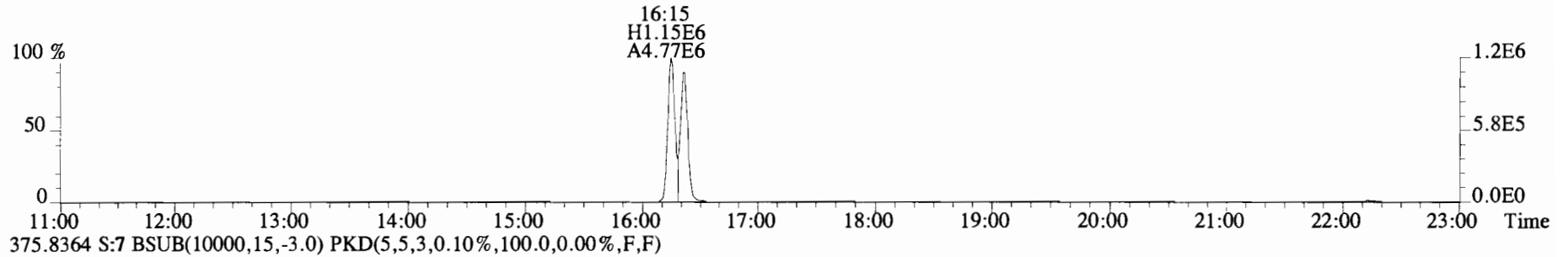
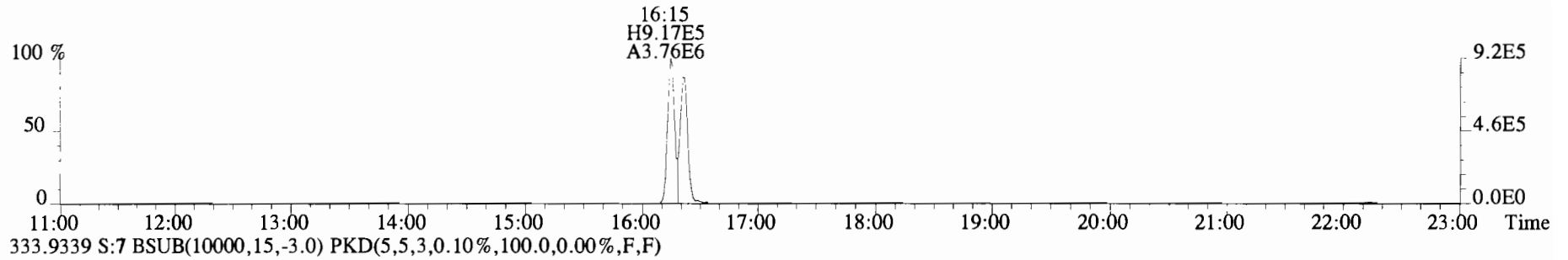
File:191105D1 #1-1682 Acq: 5-NOV-2019 14:52:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Viata Analytical Laboratory_VG7 Text:1903565-13RE2 PDI-084SC-B-04-06-191002 17.62 Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1682 Acq: 5-NOV-2019 14:52:46 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Viata Analytical Laboratory VG7 Text:1903565-13RE2 PDI-084SC-B-04-06-191002 17.62 Exp:TCDF_DB225
 331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.09e+07	0.81 y	15:36	1.00	199.9	-
13C-2,3,7,8-TCDF	8.79e+06	0.79 y	17:42	1.02	158.3	79.2
2,3,7,8-TCDF	4.93e+05	0.73 y	17:43	0.95	11.84	

Integrations

by
Analyst: DB

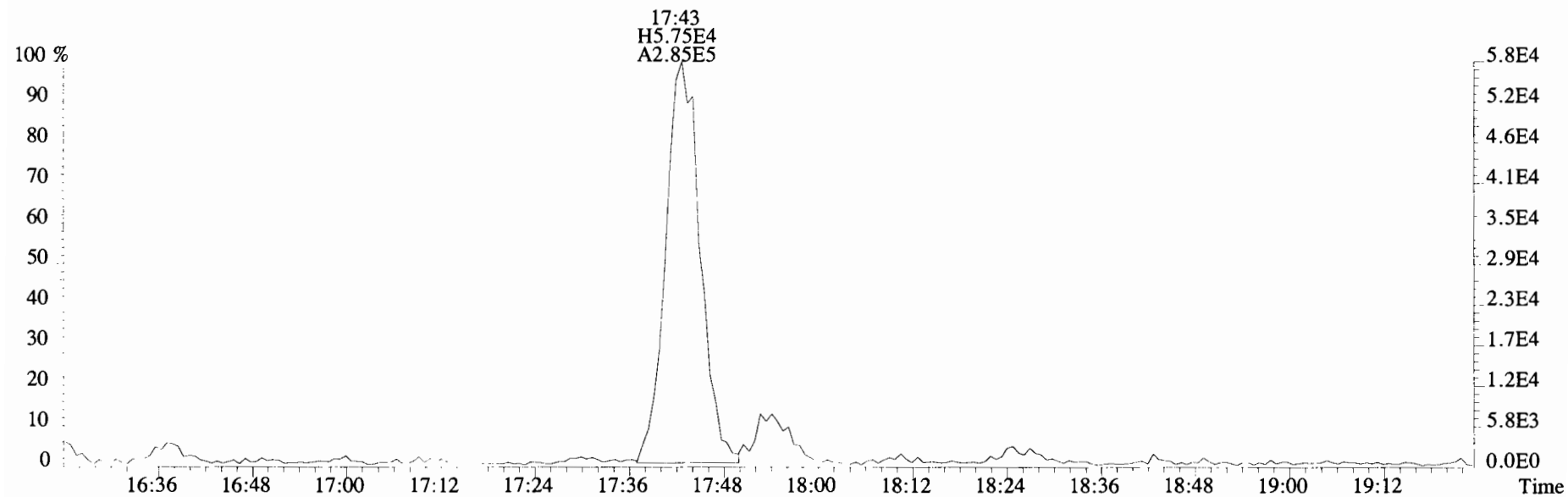
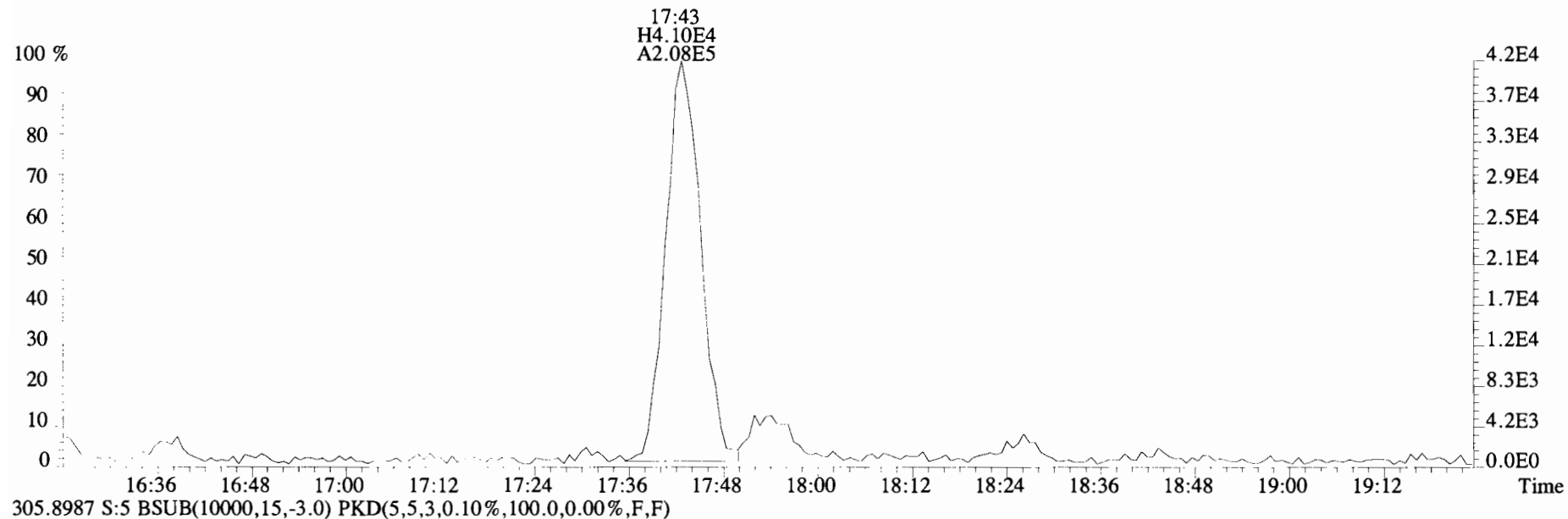
Date: 12/2/19

Reviewed

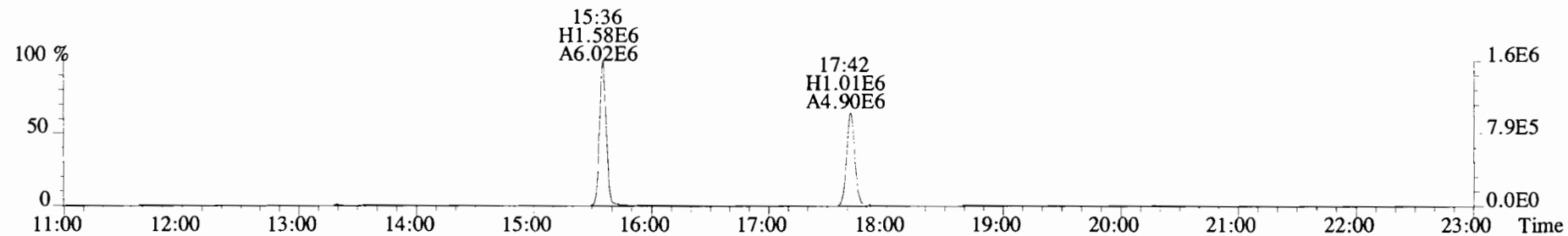
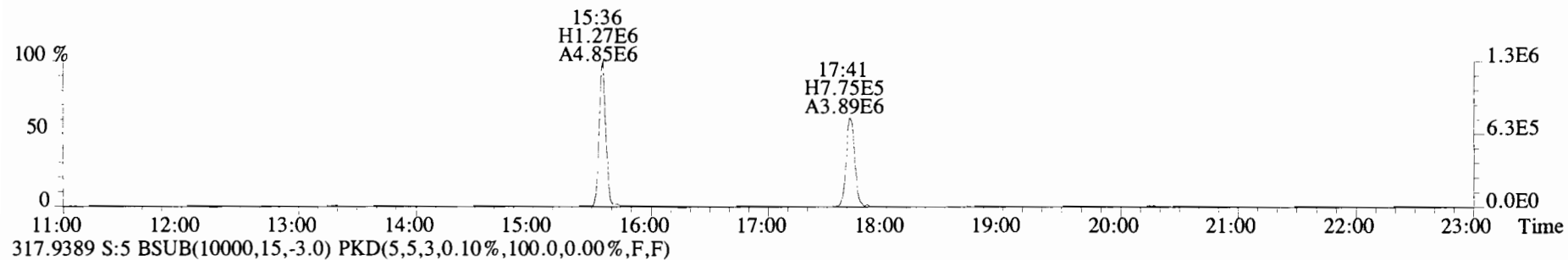
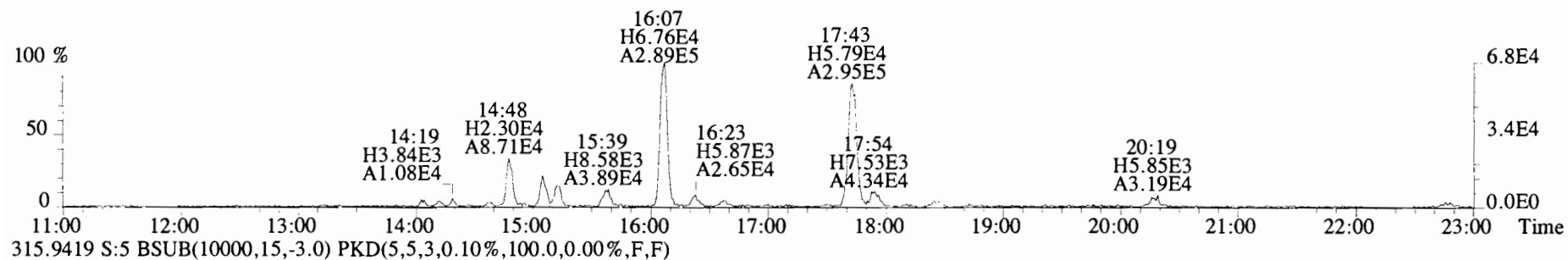
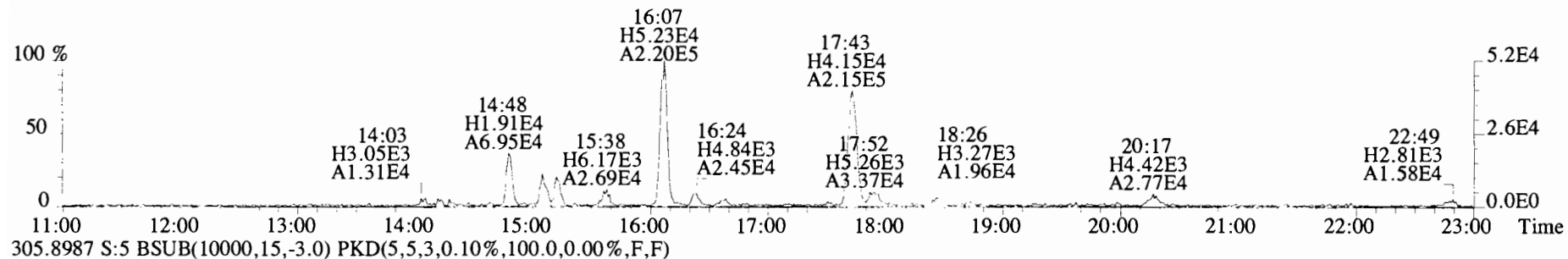
by
Analyst: CT

Date: 12/04/19

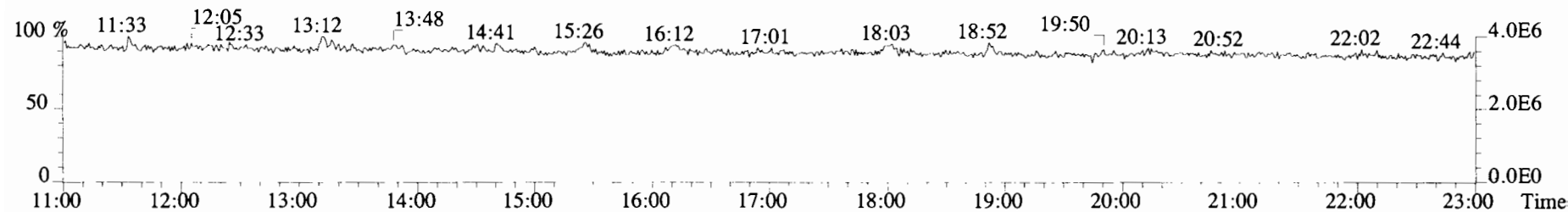
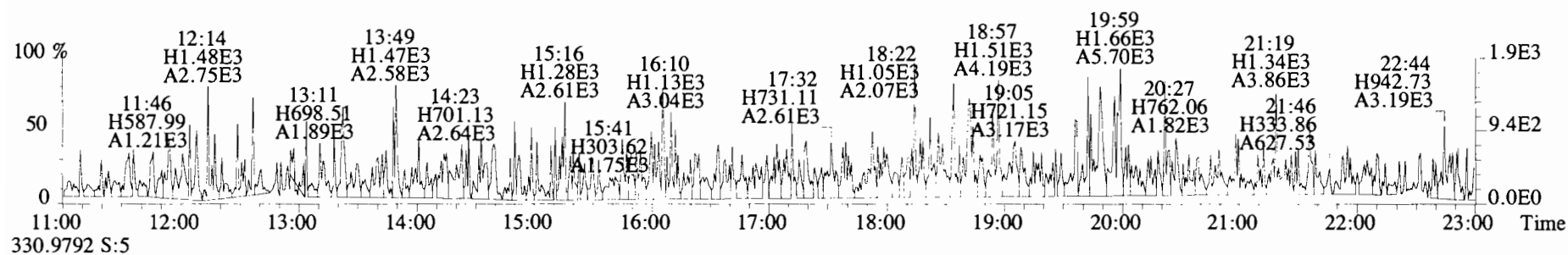
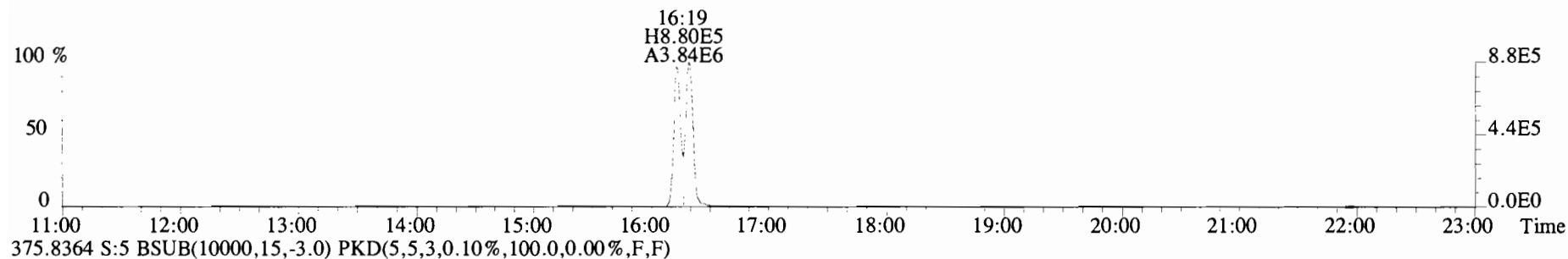
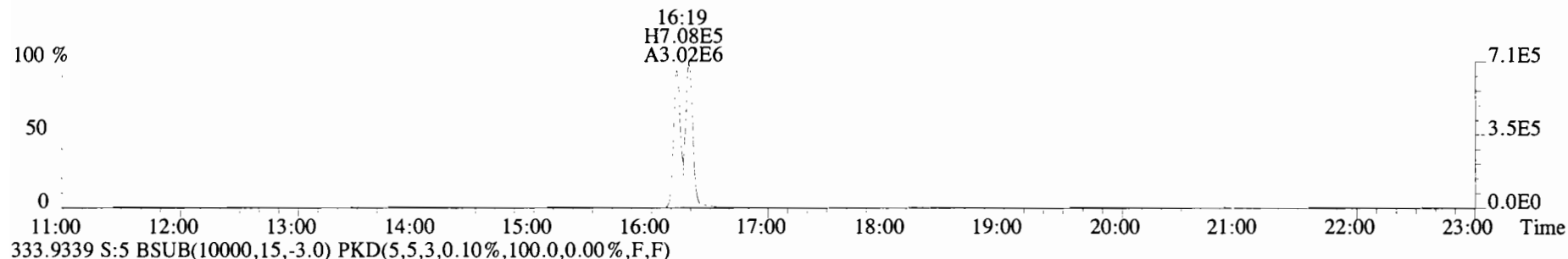
File:191202D1 #1-1682 Acq: 2-DEC-2019 13:11:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE2 PDI-084SC-B-06-08-191002 16.58 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191202D1 #1-1682 Acq: 2-DEC-2019 13:11:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE2 PDI-084SC-B-06-08-191002 16.58 Exp:TCDF_DB225
 303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191202D1 #1-1682 Acq: 2-DEC-2019 13:11:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Viata Analytical Laboratory_VG7 Text:1903565-14RE2 PDI-084SC-B-06-08-191002 16.58 Exp:TCDF_DB225
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	2.70e+07	0.80 y	15:41	1.00	199.8	-
13C-2,3,7,8-TCDF	2.67e+07	0.79 y	17:48	1.02	193.6	96.9
2,3,7,8-TCDF	5.91e+06	0.78 y	17:49	0.95	46.68	

Integrations

by
Analyst: DB

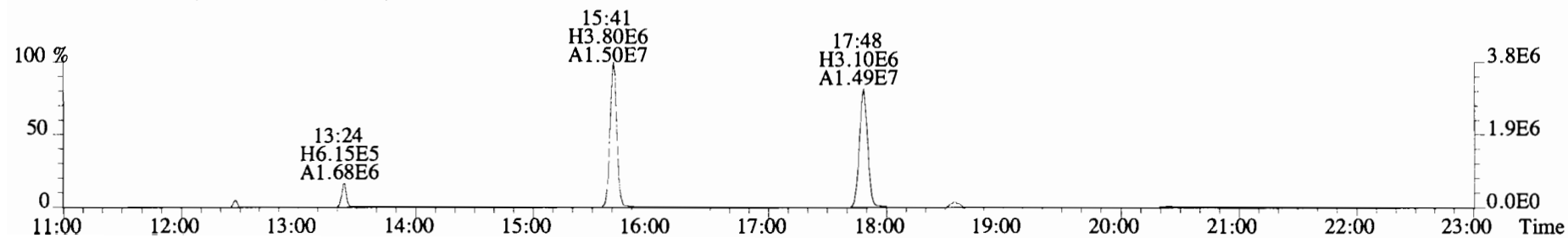
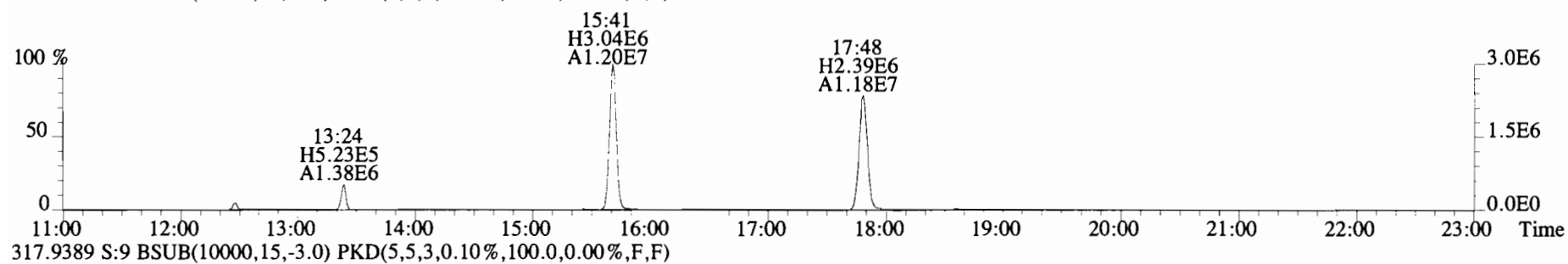
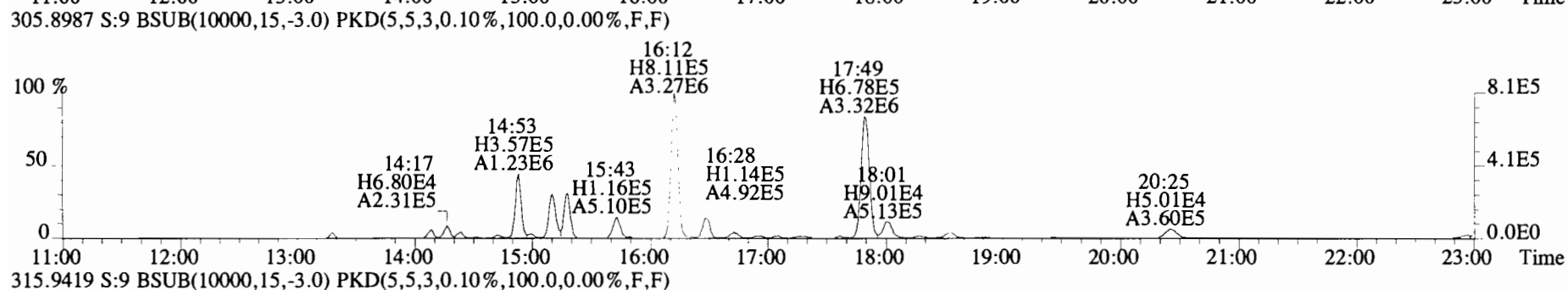
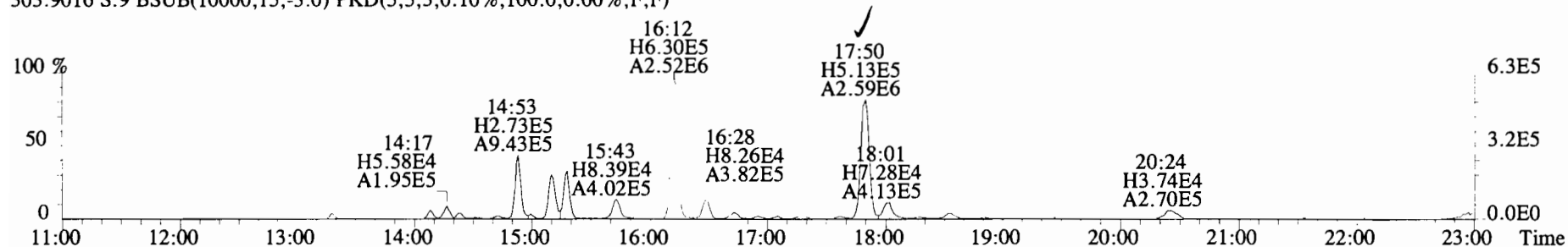
Date: 11/19/19

Reviewed

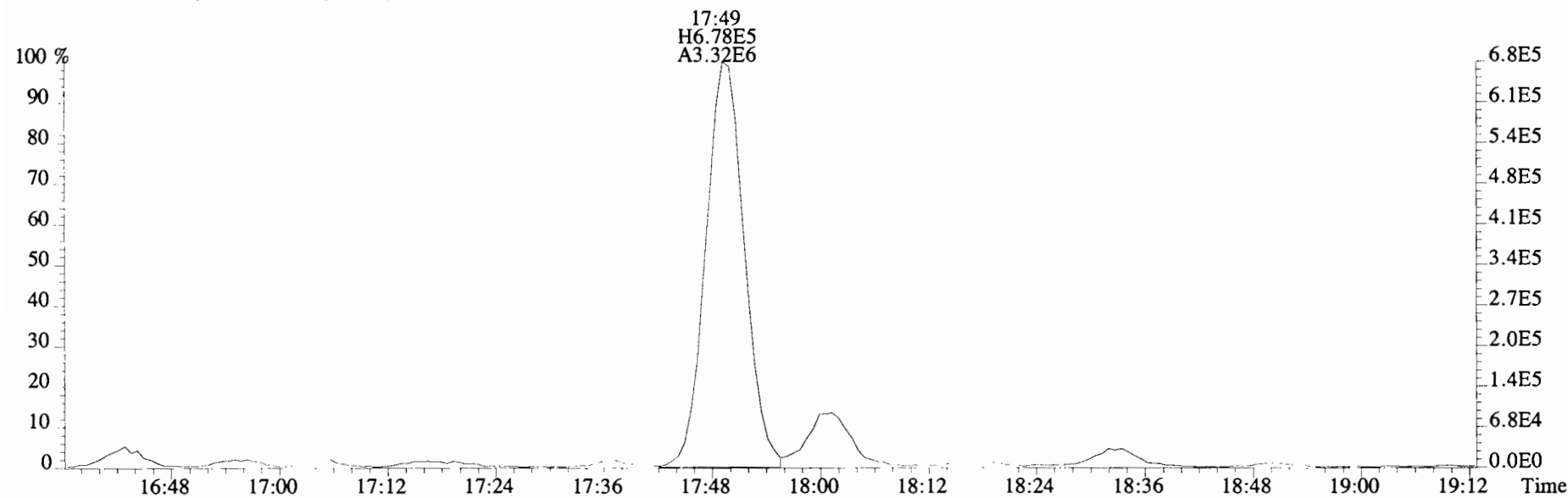
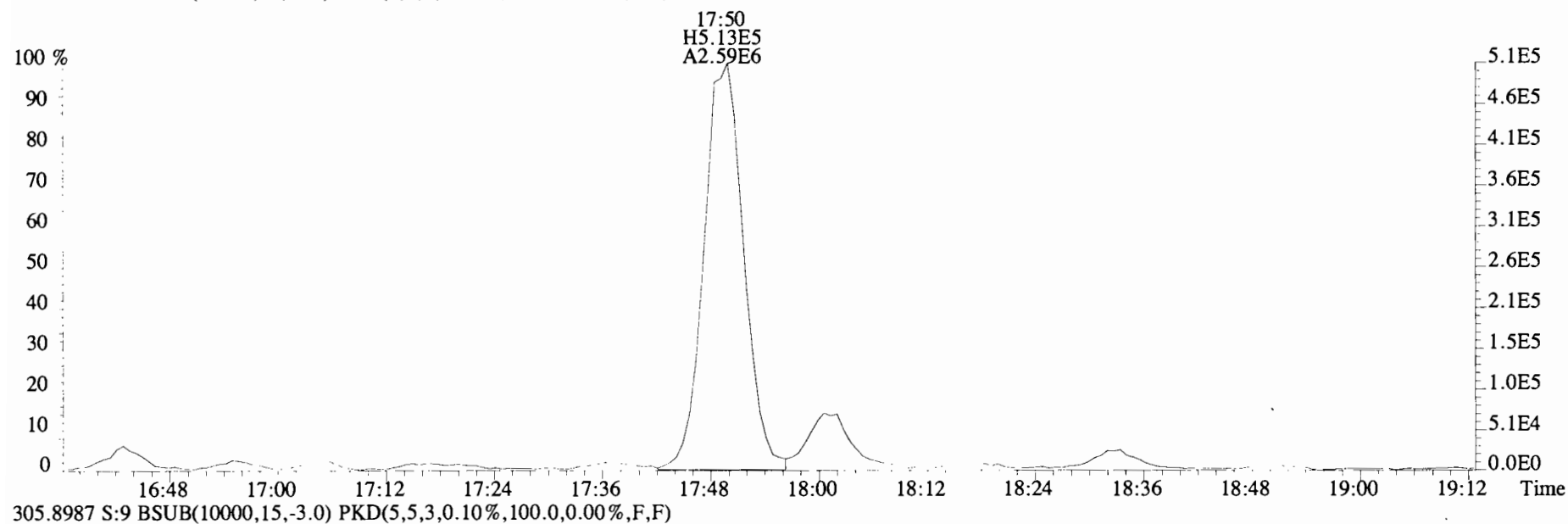
by
Analyst: CT

Date: 12/03/19

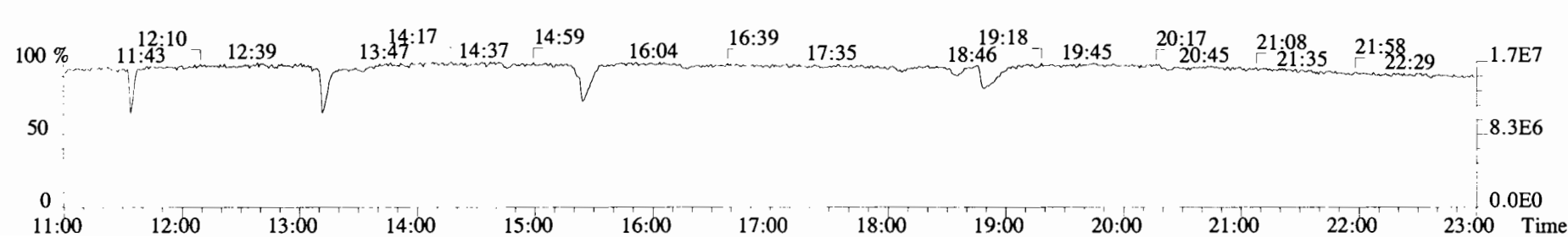
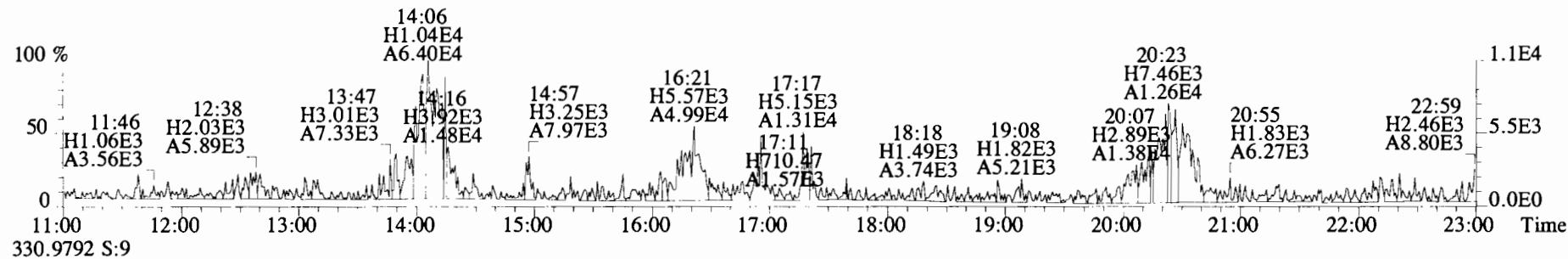
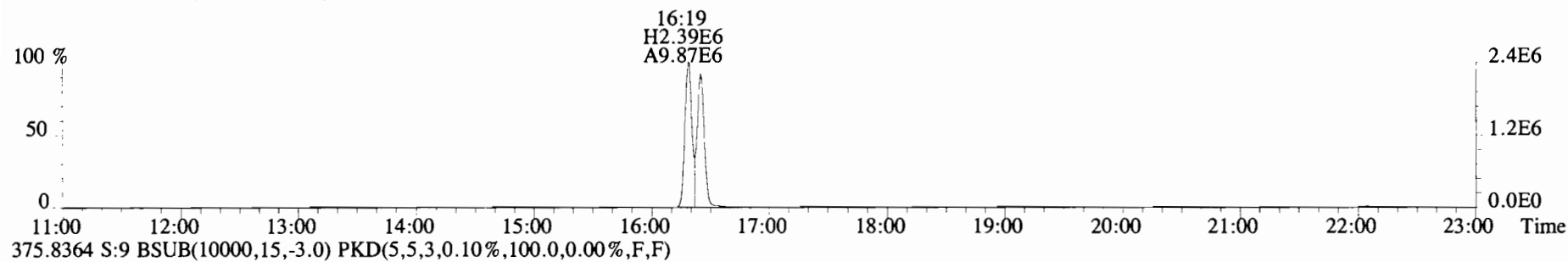
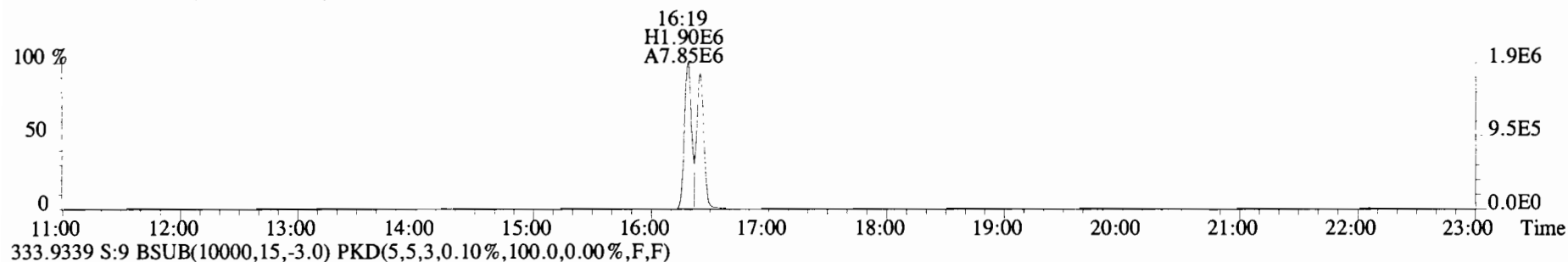
File:191118D1 #1-1682 Acq:18-NOV-2019 17:56:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory_VG7 Text:1903565-15RE3 PDI-095SC-B-00-02-191002 19.65 Exp:TCDF_DB225
303.9016 S:9 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 17:56:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE3 PDI-095SC-B-00-02-191002 19.65 Exp:TCDF_DB225
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 17:56:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Viata Analytical Laboratory VG7 Text:1903565-15RE3 PDI-095SC-B-00-02-191002 19.65 Exp:TCDF_DB225
 331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.01e+07	0.81 y	15:36	1.00	199.7	-
13C-2,3,7,8-TCDF	4.27e+06	0.81 y	17:48	1.02	82.41	41.3
2,3,7,8-TCDF	1.16e+05	0.78 y	17:49	0.95	5.732	

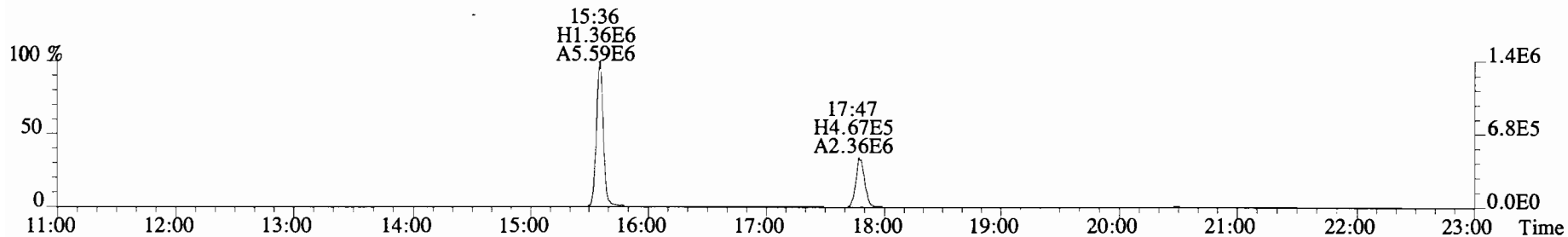
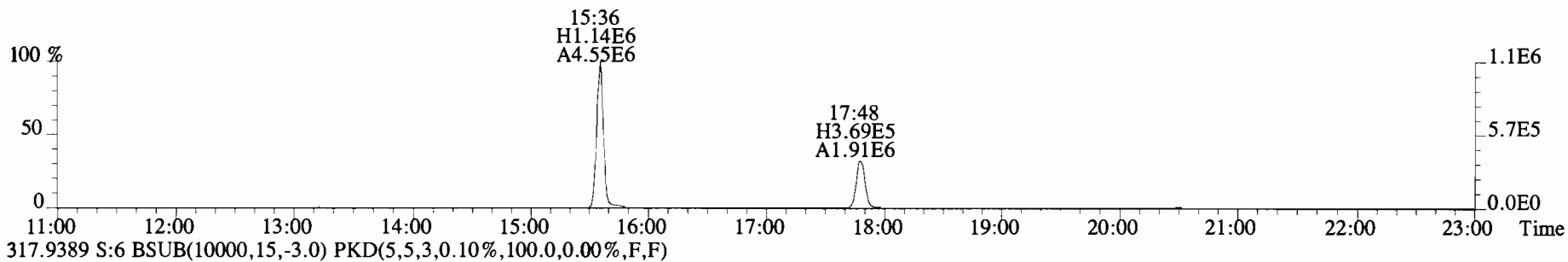
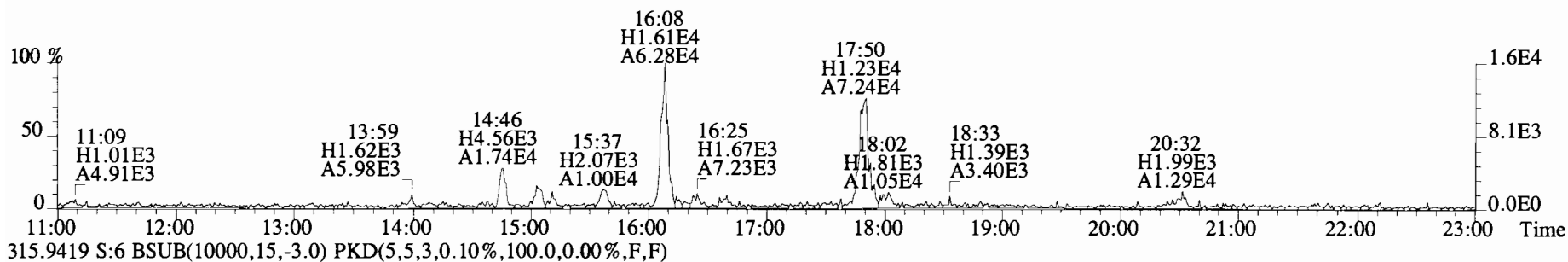
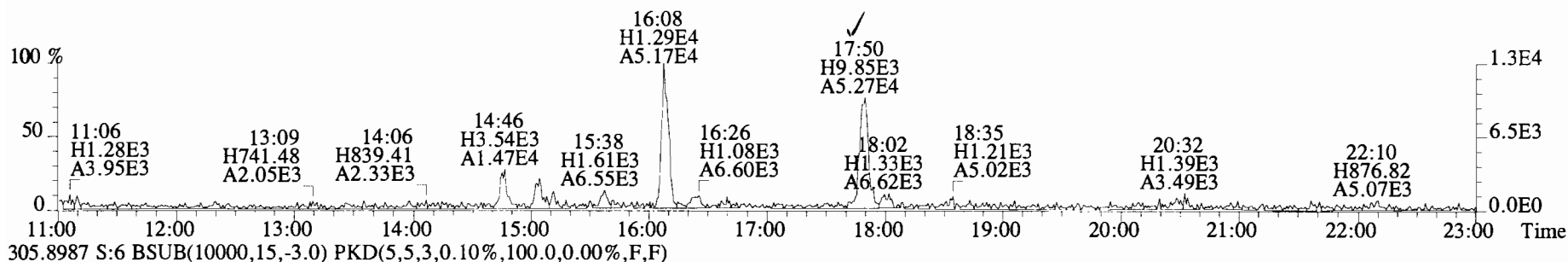
Integrations
by
Analyst: DB

Date: 11/7/19

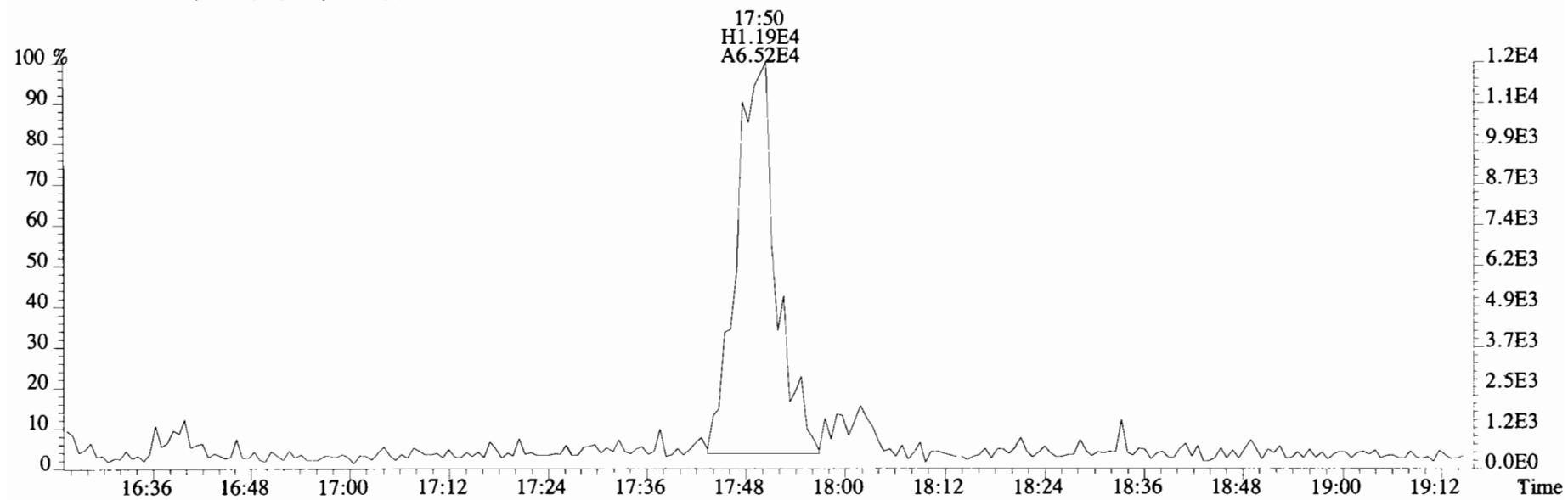
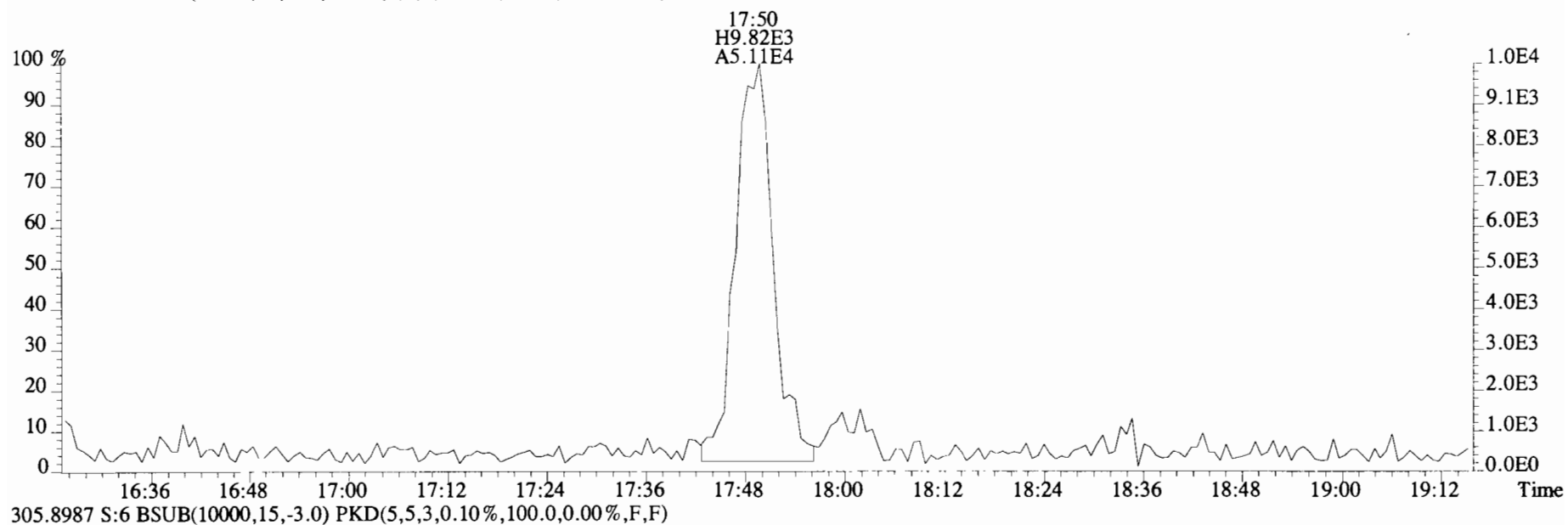
Reviewed
by
Analyst: CT

Date: 12/04/19

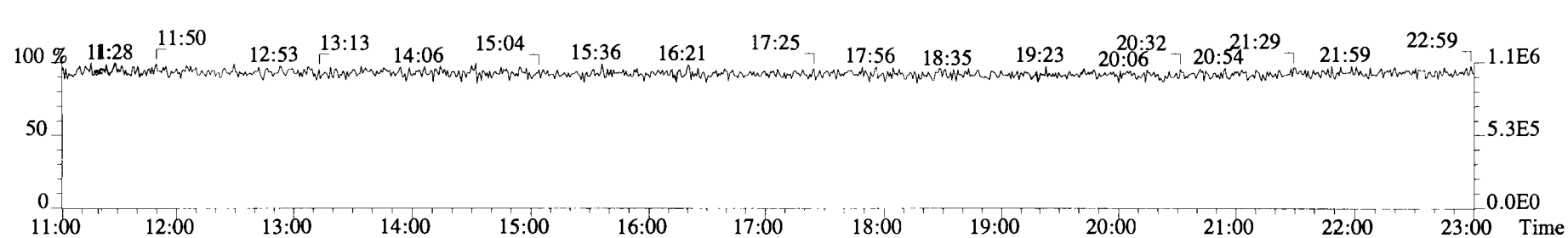
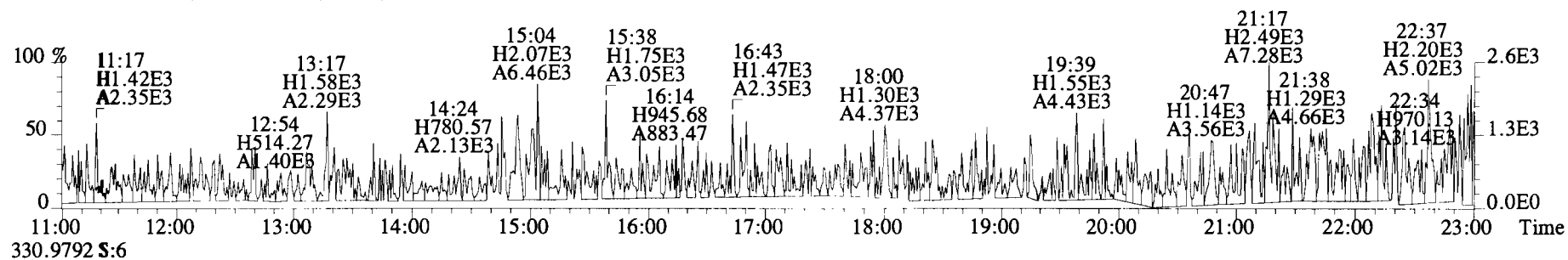
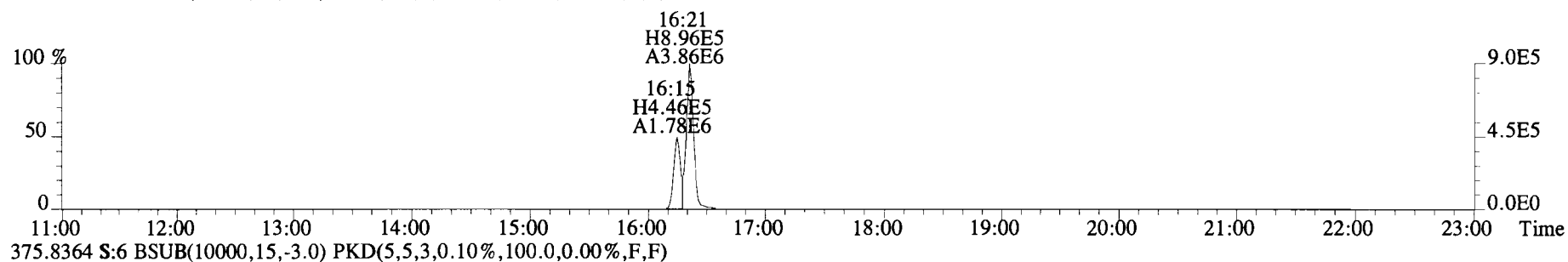
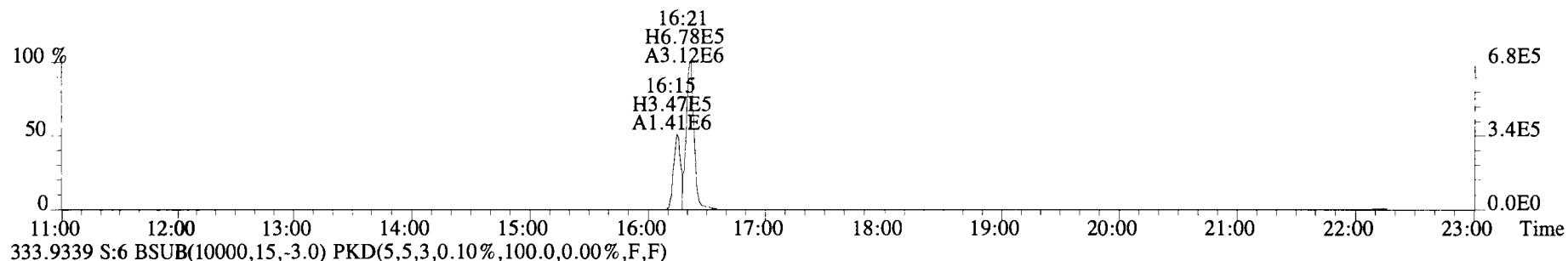
File:191107D1 #1-1682 Acq: 7-NOV-2019 13:29:50 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE2 PDI-095SC-B-02-04-191002 18.66 Exp:TCDF_DB225
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191107D1 #1-1682 Acq: 7-NOV-2019 13:29:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE2 PDI-095SC-B-02-04-191002 18.66 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191107D1 #1-1682 Acq: 7-NOV-2019 13:29:50 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-16RE2 PDI-095SC-B-02-04-191002 18.66 Exp:TCDF_DB225
 331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	2.83e+07	0.79 y	15:40	1.00	198.7	-
13C-2,3,7,8-TCDF	2.65e+07	0.80 y	17:47	1.02	182.4	91.8
2,3,7,8-TCDF	4.78e+06	0.78 y	17:48	0.95	37.83	

Integrations

by DB
Analyst: DB

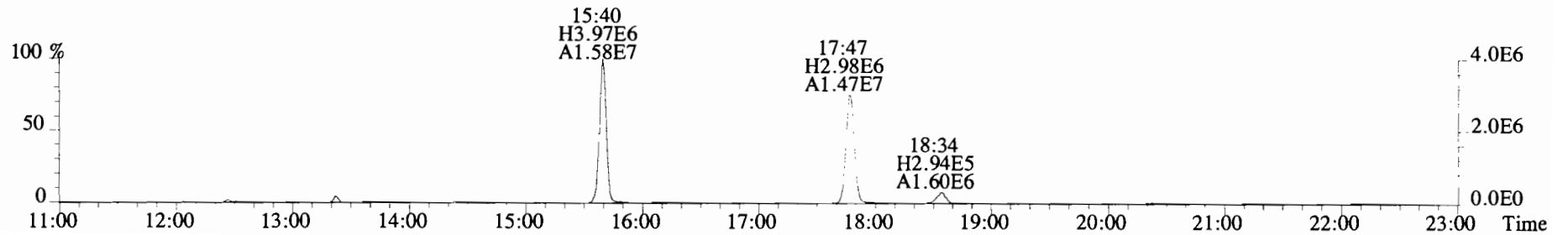
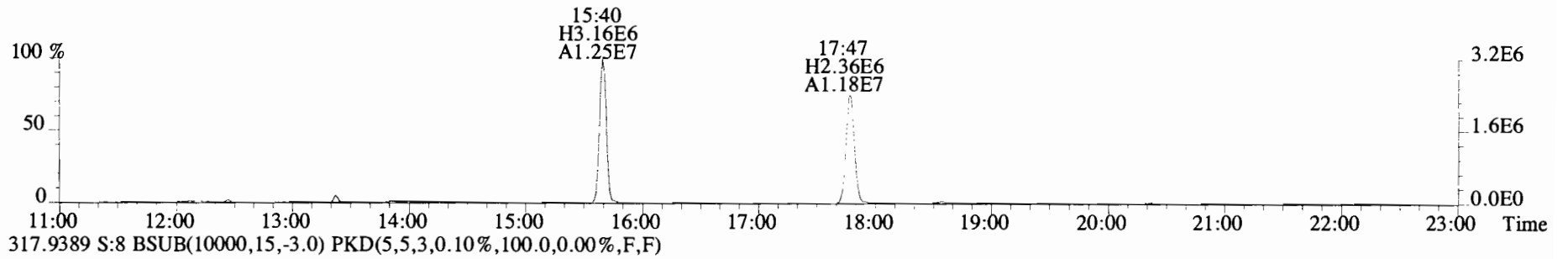
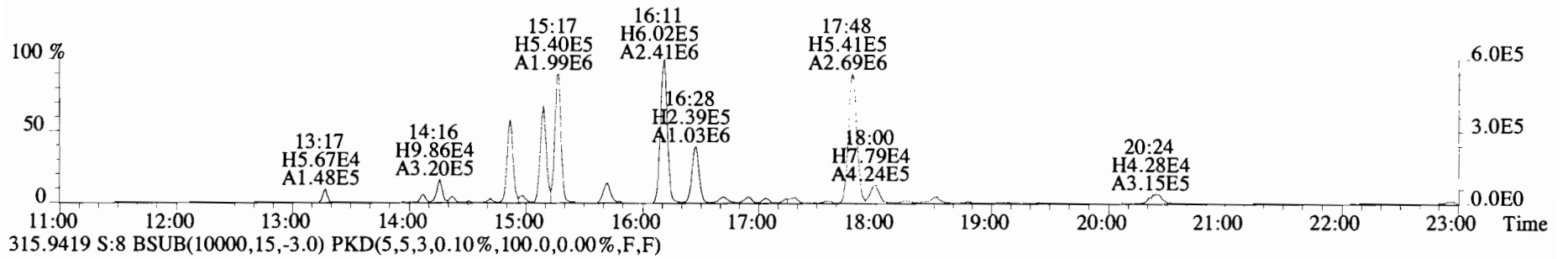
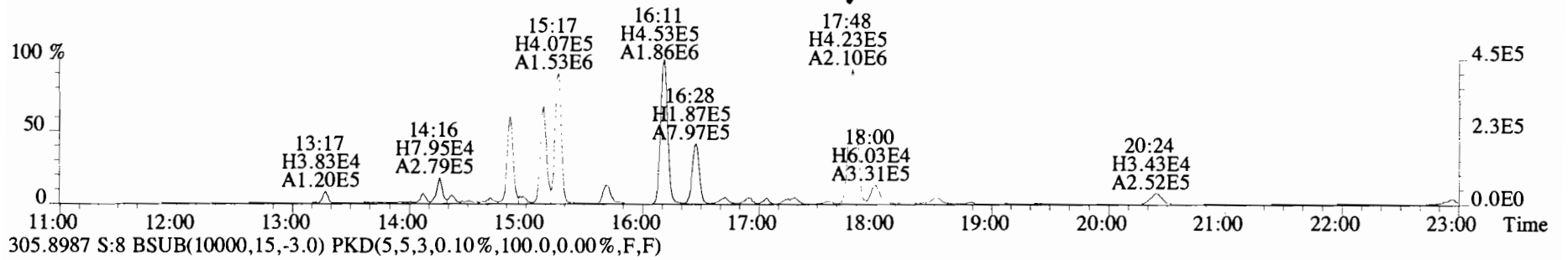
Date: 11/19/19

Reviewed

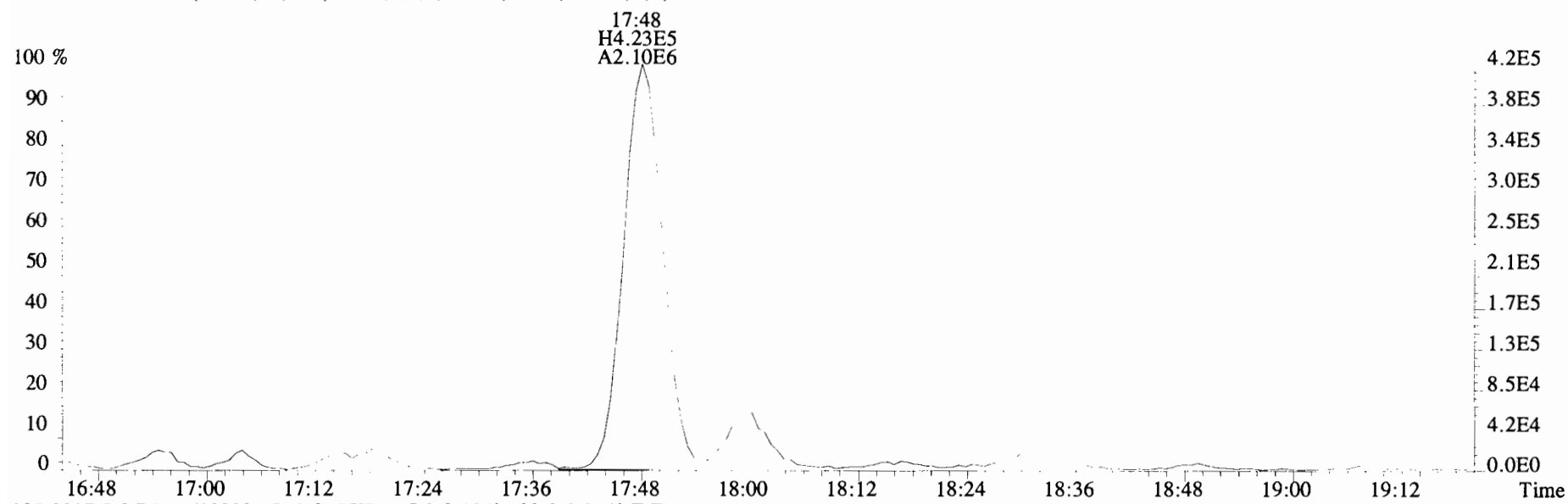
by CT
Analyst: CT

Date: 12/23/19

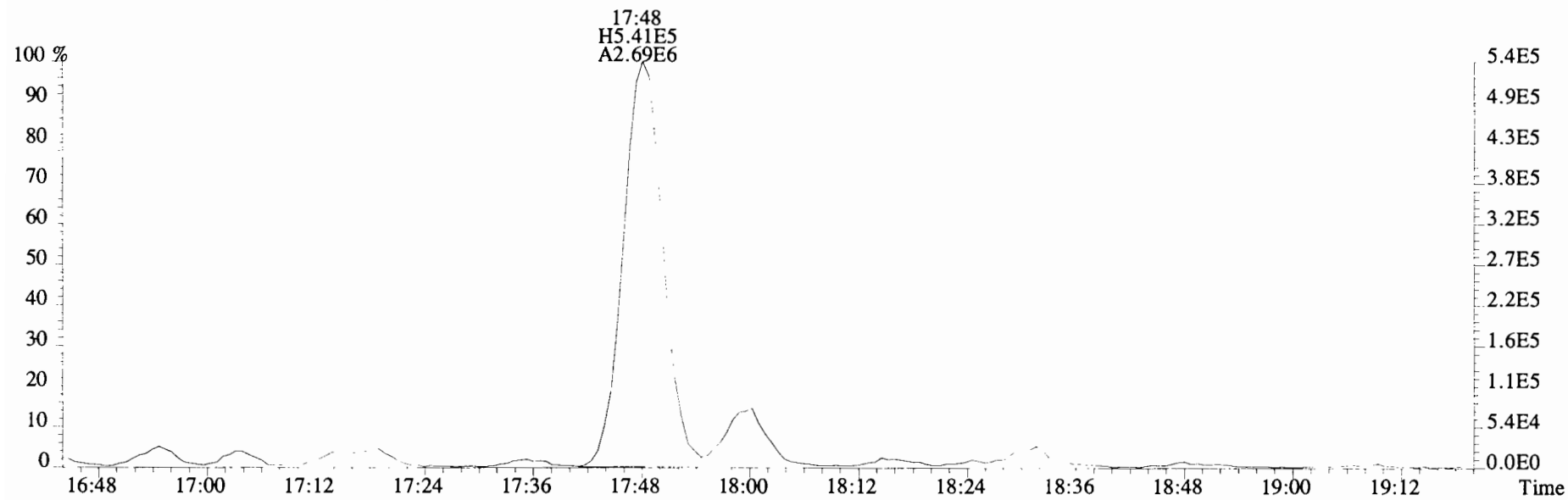
File:191118D1 #1-1682 Acq:18-NOV-2019 17:24:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory_VG7 Text:1903565-17RE3 PDI-095SC-B-04-06-191002 17.42 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



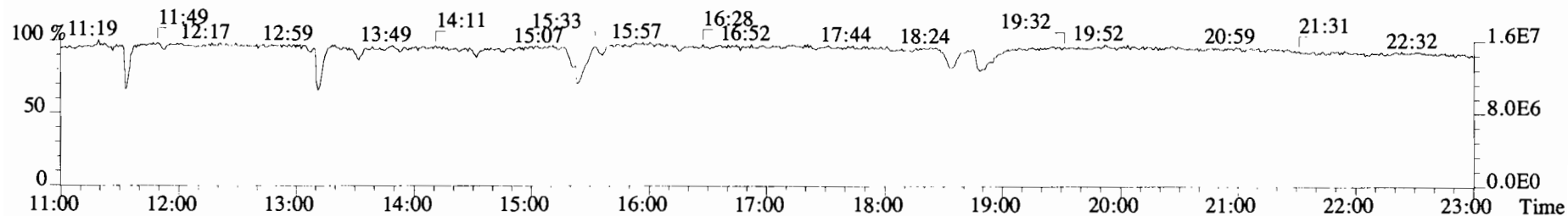
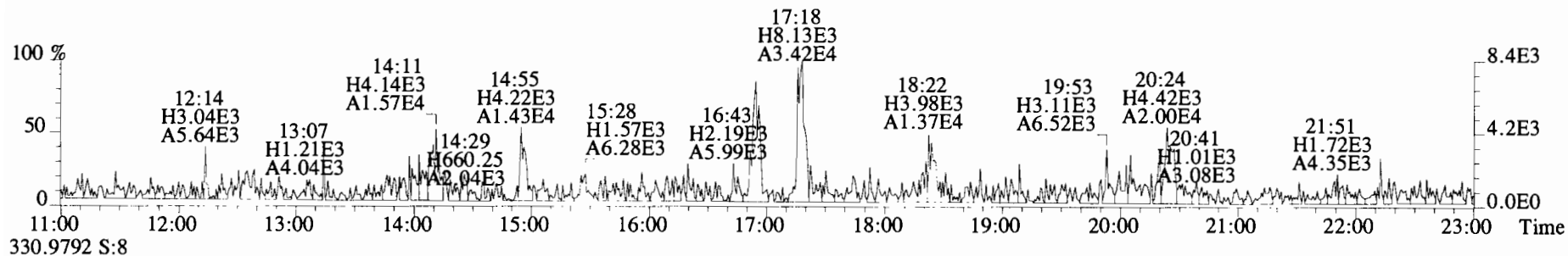
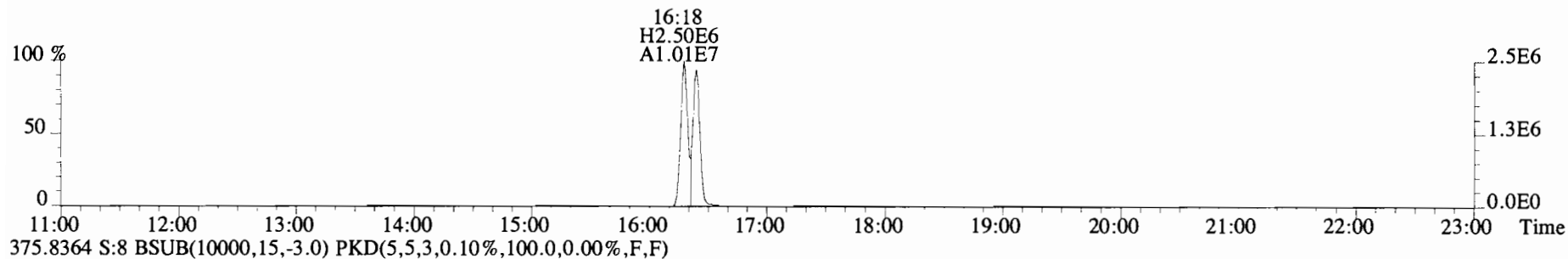
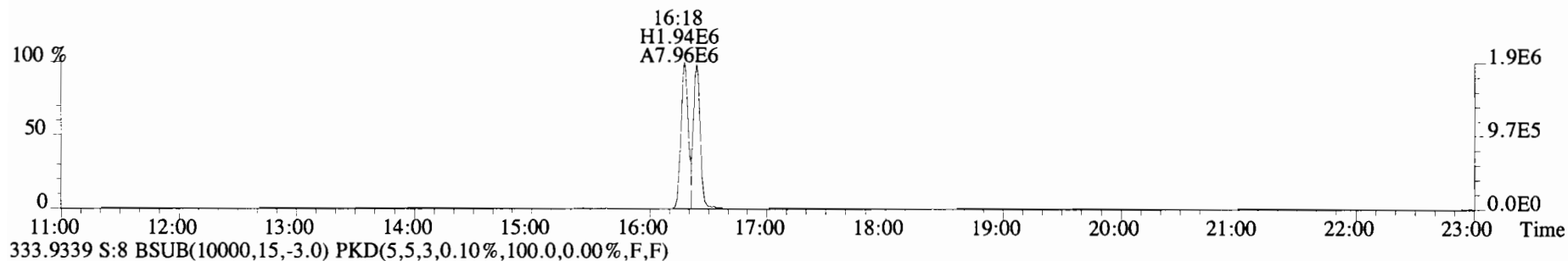
File:191118D1 #1-1682 Acq:18-NOV-2019 17:24:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE3 PDI-095SC-B-04-06-191002 17.42 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 17:24:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Viata Analytical Laboratory VG7 Text:1903565-17RE3 PDI-095SC-B-04-06-191002 17.42 Exp:TCDF_DB225
331.9368 S:8 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: PDI-095SC-B-06-08-1910
Lab ID: 1903565-18RE3

Filename: 191118D1 S:6 Acq:18-NOV-19 16:20:00
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol:10.027

✓ ConCal: ST191118D1-1
EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	2.73e+07	0.80 y	15:38	1.00	199.5	-
13C-2,3,7,8-TCDF	2.53e+07	0.79 y	17:46	1.02	180.7	90.6
2,3,7,8-TCDF	2.10e+05	0.85 y	17:46	0.95	1.746	

Integrations

by
Analyst: DB

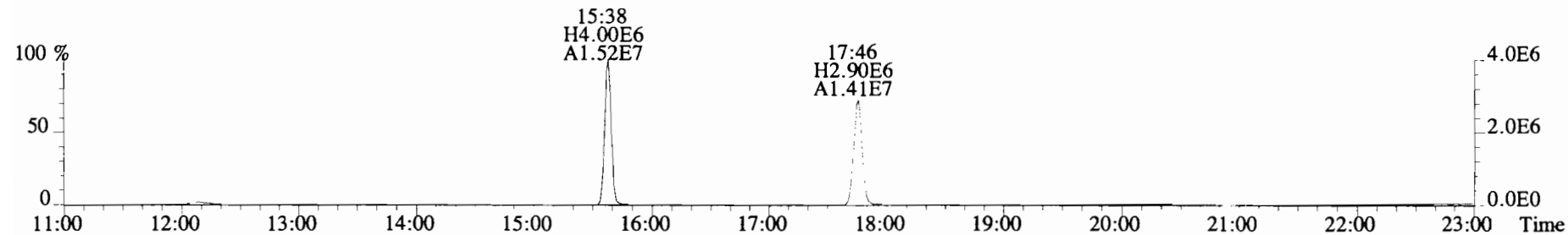
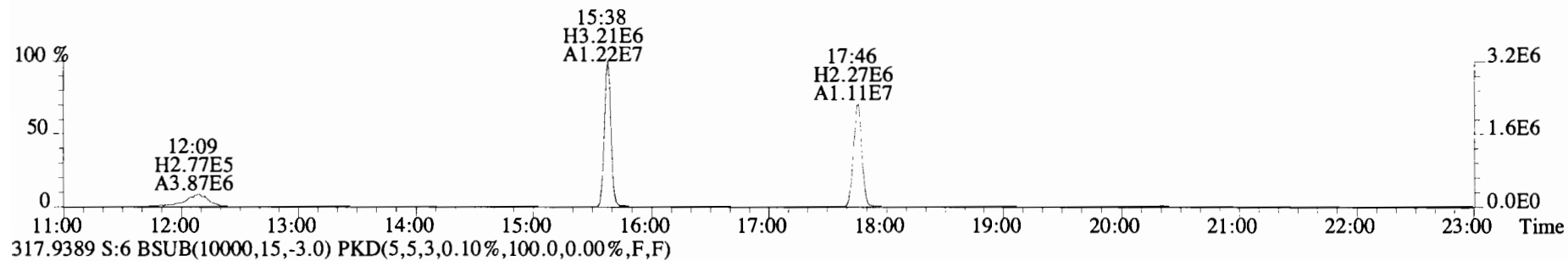
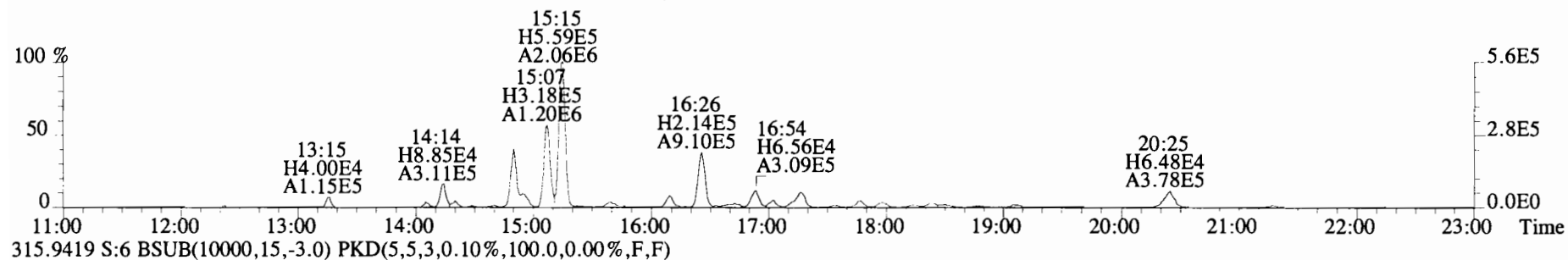
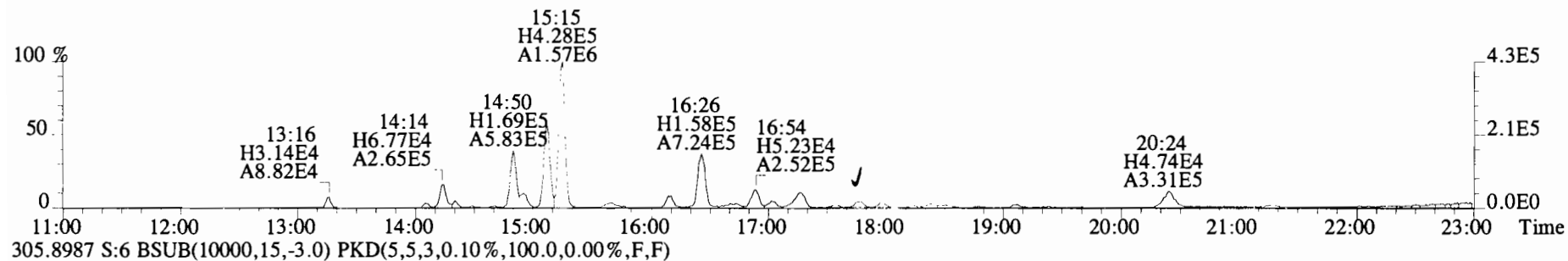
Date: 11/18/19

Reviewed

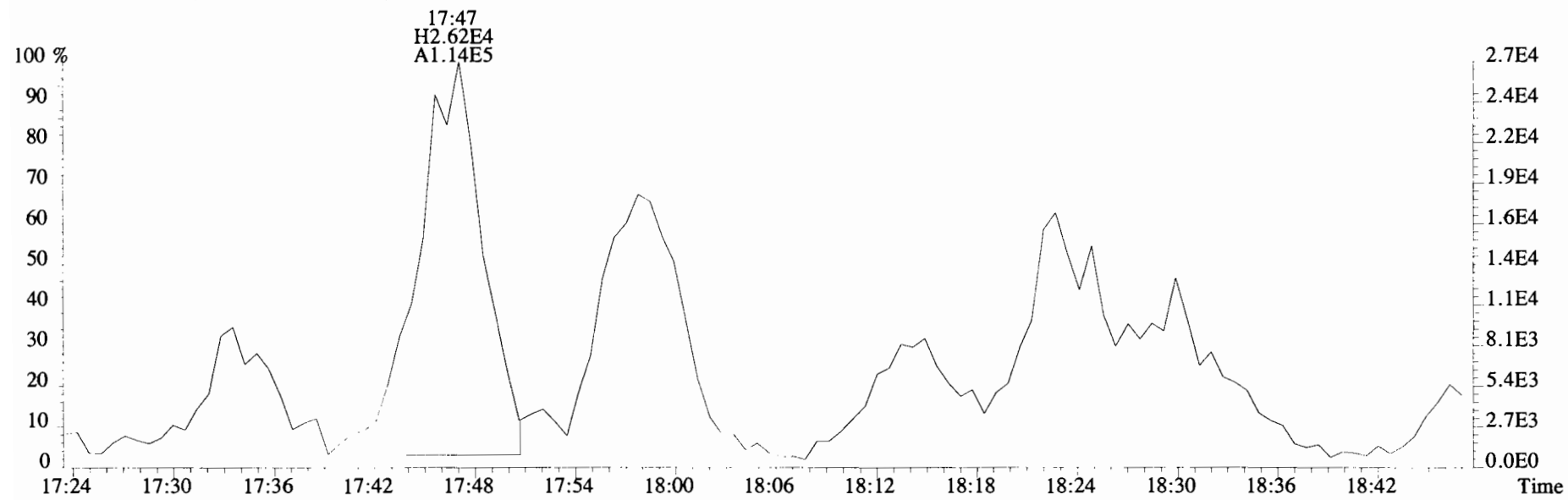
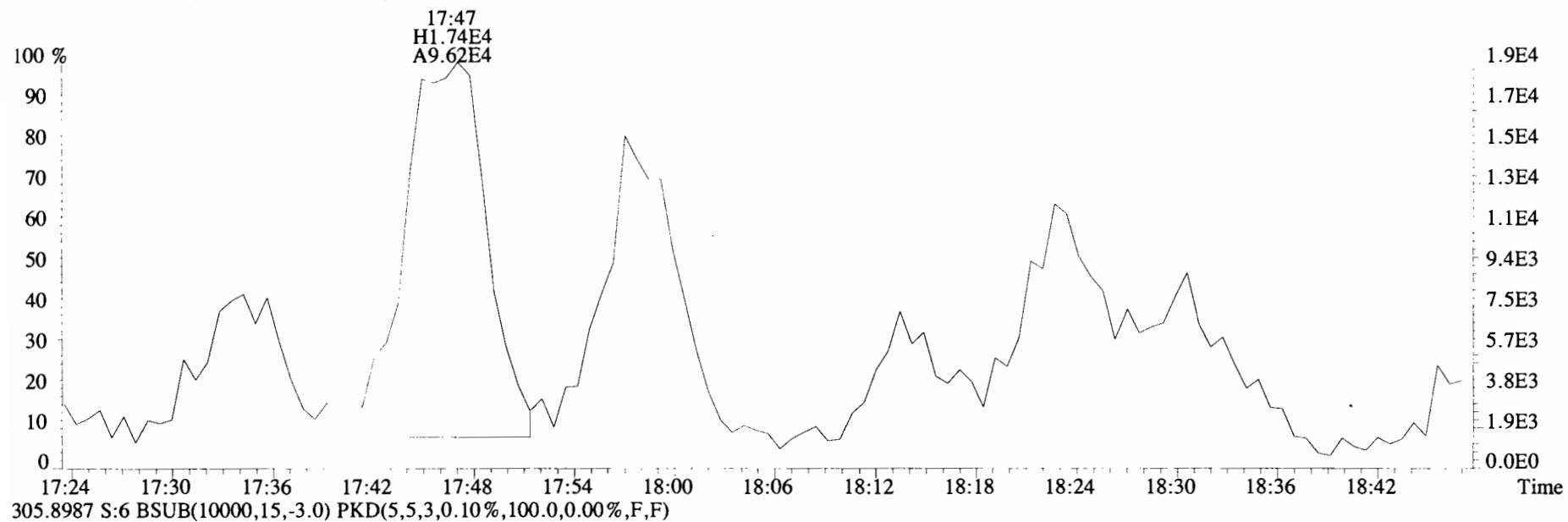
by
Analyst: CT

Date: 12/03/19

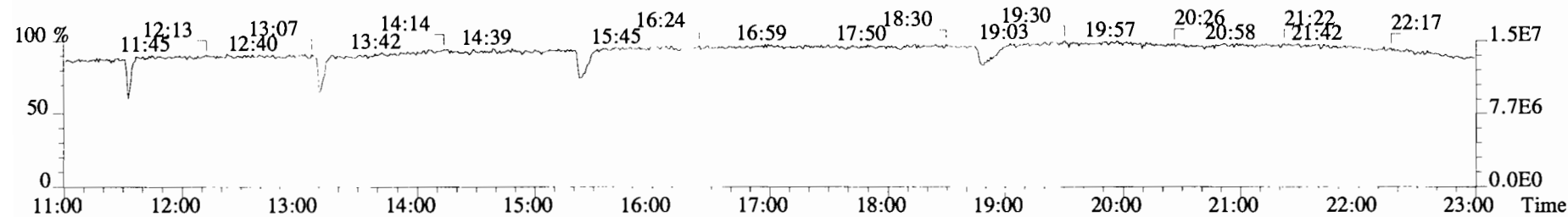
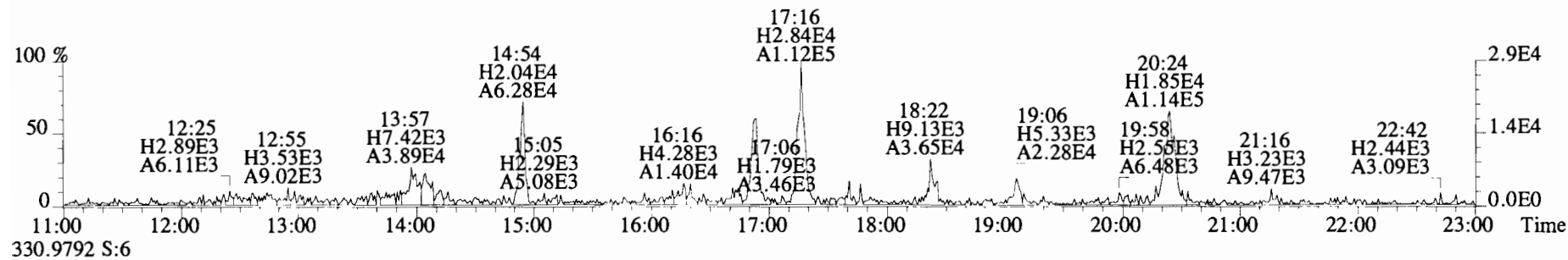
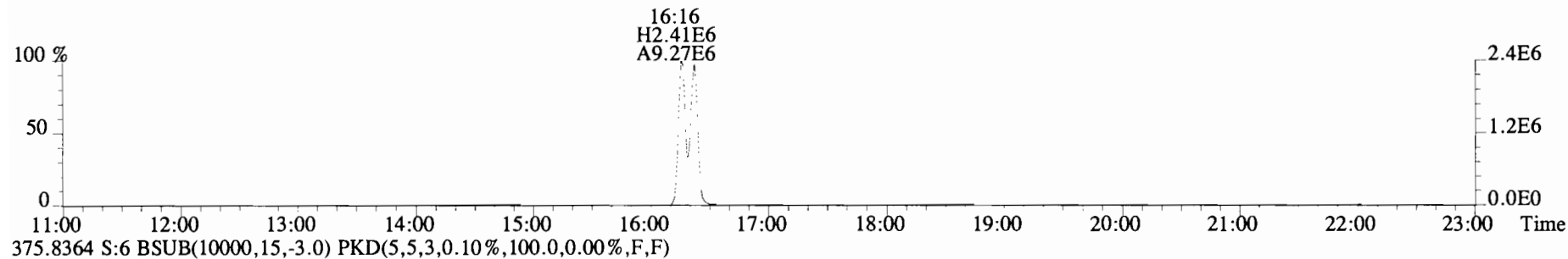
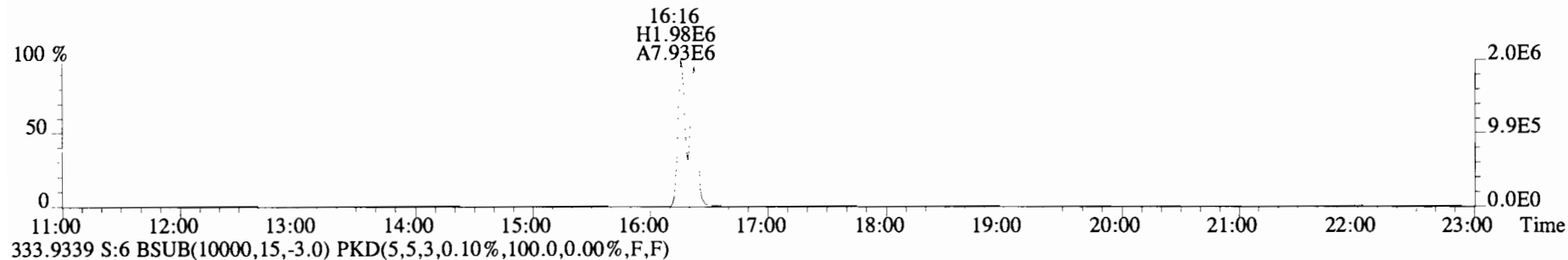
File:191118D1 #1-1682 Acq:18-NOV-2019 16:20:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE3 PDI-095SC-B-06-08-191002 17.95 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 16:20:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Viata Analytical Laboratory_VG7 Text:1903565-18RE3 PDI-095SC-B-06-08-191002 17.95 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 16:20:00 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Viata Analytical Laboratory VG7 Text:1903565-18RE3 PDI-095SC-B-06-08-191002 17.95 Exp:TCDF_DB225
 331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



CONTINUING CALIBRATION

HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191031D1-1

Reviewed By: CT 11/01/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<input type="checkbox"/>
<u>Run Log:</u>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
- Bottle position verified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Mass resolution \geq

5k 6-8K 8K 10K
 1614 1699 429 1613/1668/8280

Intergrated peaks display correctly?

GC Break <20%

8280 CS1 End Standard:

- **Ratios within limits, S/N <2.5:1, CS1 within 12 hours**

Comments:

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191031D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
2,3,7,8-TCDD	M/M+2	0.84	0.65-0.89	y	11.7	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	55.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	52.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	53.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	53.8	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	y	50.7	43.0 - 58.0
OCDD	M+2/M+4	0.93	0.76-1.02	y	106	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.81	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	1.64	1.32-1.78	y	51.9	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.64	1.32-1.78	y	52.9	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	52.6	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	53.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05-1.43	y	52.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	y	49.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	47.2	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	105	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: 10/31/19

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: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

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	0.74	0.65-0.89	y	98.0	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	98.6	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	103	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	89.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	94.2	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	116	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	243	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	107	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	108	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	105	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	109	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	96.3	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	103	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	108	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.41	0.37-0.51	y	114	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.42	0.37-0.51	y	127	77.0 - 129.0
13C-OCDF	M+2/M+4	0.93	0.76-1.02	y	262	96.0 - 415.0
CLEANUP STANDARD (3) 37Cl-2,3,7,8-TCDD					9.76	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: 10/31/19

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: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

ZB-5MS IS Data Filename: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

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)	22:54	1,3,6,8-TCDF (F)	20:46
1,2,8,9-TCDD (L)	27:06	1,2,8,9-TCDF (L)	27:15
1,2,4,7,9-PeCDD (F)	28:42	1,3,4,6,8-PeCDF (F)	27:13
1,2,3,8,9-PeCDD (L)	31:06	1,2,3,8,9-PeCDF (L)	31:19
1,2,4,6,7,9-HxCDD (F)	32:31	1,2,3,4,6,8-HxCDF (F)	31:59
1,2,3,7,8,9-HxCDD (L)	34:28	1,2,3,7,8,9-HxCDF (L)	34:51
1,2,3,4,6,7,9-HpCDD (F)	37:04	1,2,3,4,6,7,8-HpCDF (F)	36:42
1,2,3,4,6,7,8-HpCDD (L)	37:55	1,2,3,4,7,8,9-HpCDF (L)	38:27

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirements, %Valley Height Between Compared
Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DBDate: 10/31/19

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: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	RRT
	REFERENCE		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	1.001	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	1.197	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.151	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.186	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: 10/31/19

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-SMS

VER Data Filename: 191031D1 S#1 Analysis Date: 31-OCT-19 Time: 10:43:28

NATIVE ANALYTES	RETENTION TIME		RRT	QC LIMITS (1)
	REFERENCE			
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF		1.001	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		1.000	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		1.001	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	0.992	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	1.018	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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: 10/31/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191031D1-1

Filename: 191031D1 S:1 Acq:31-OCT-19 10:43:28
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

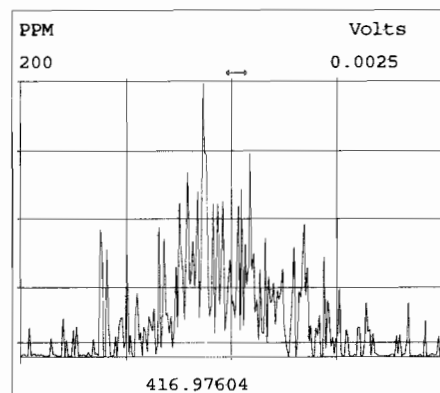
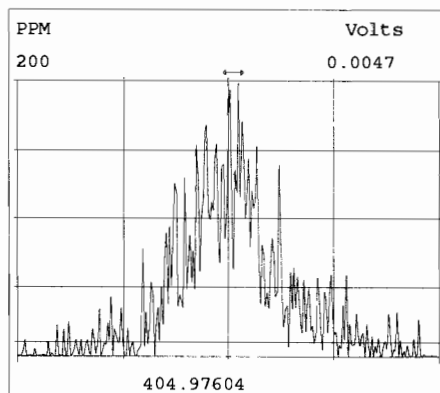
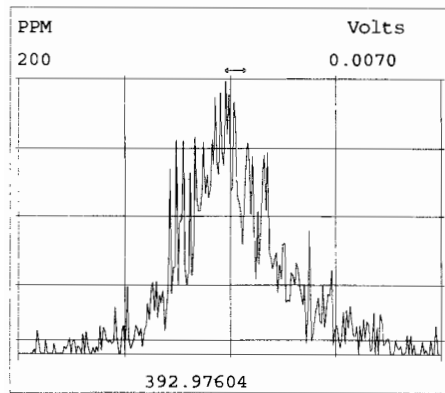
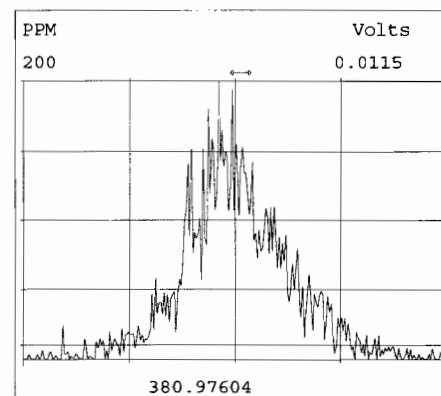
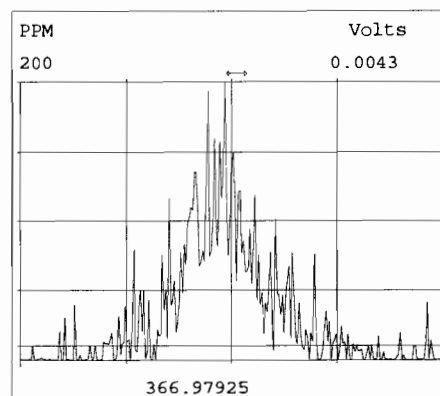
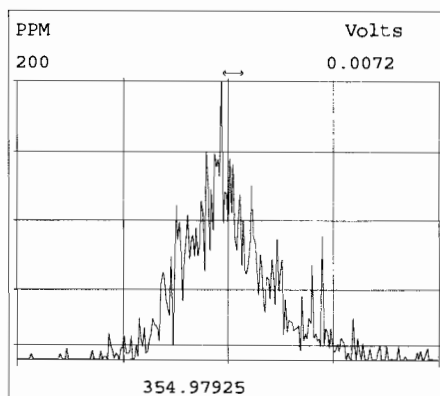
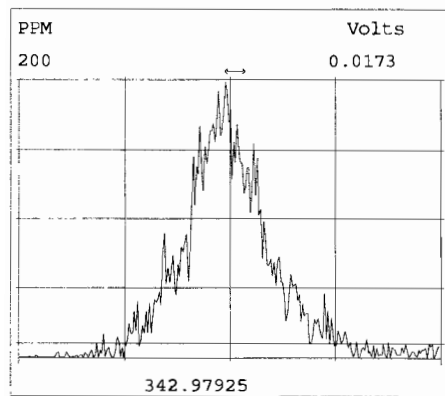
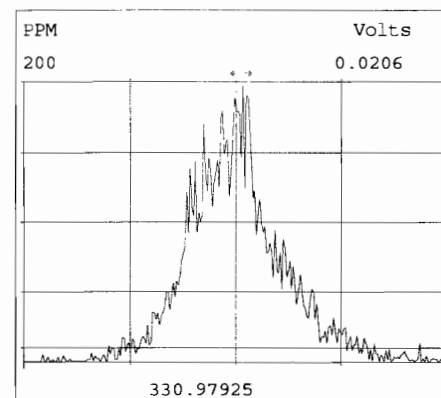
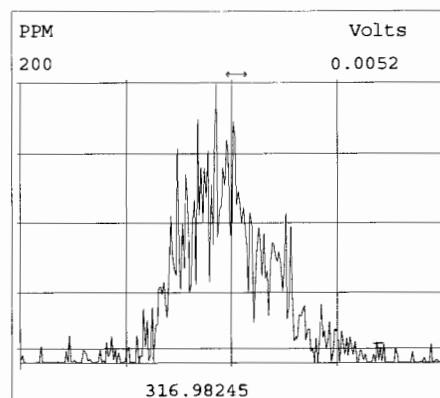
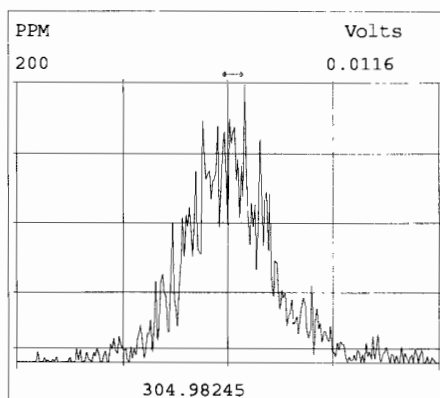
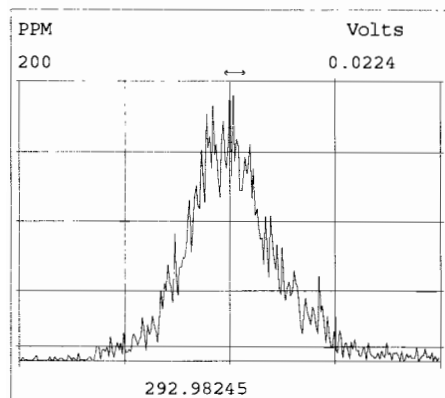
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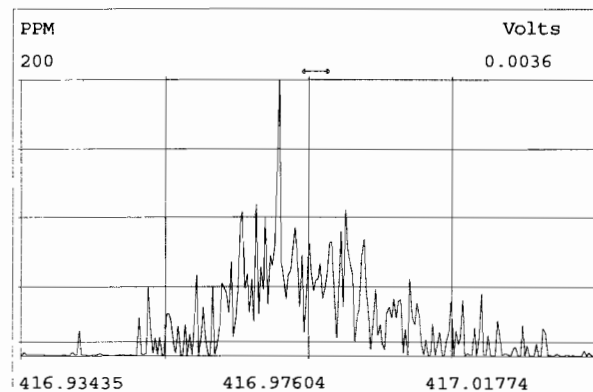
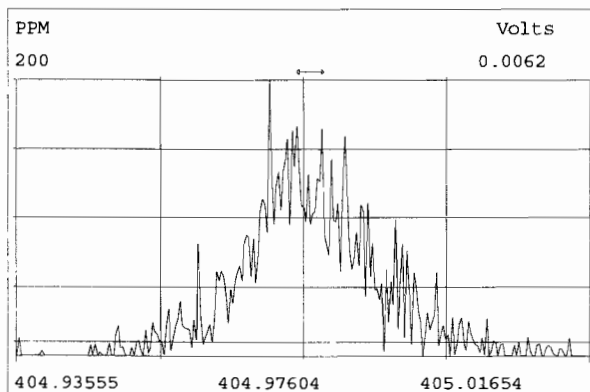
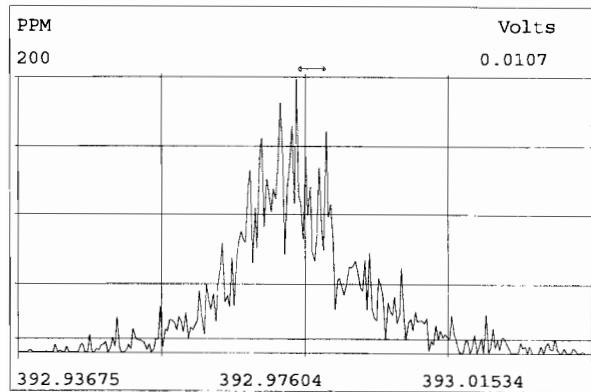
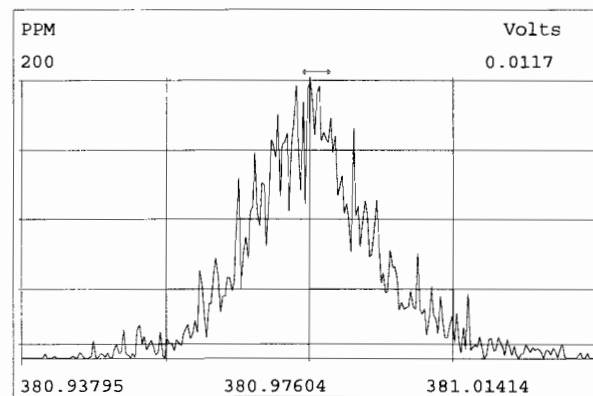
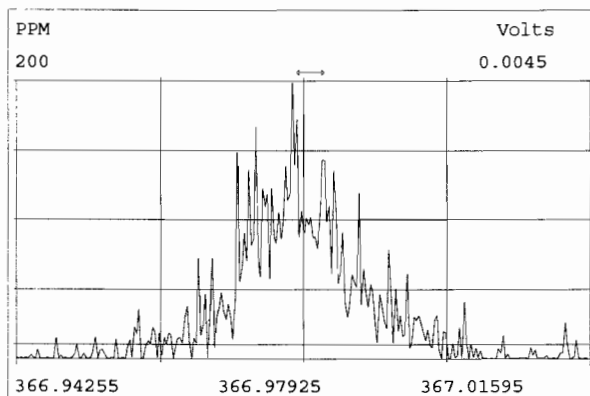
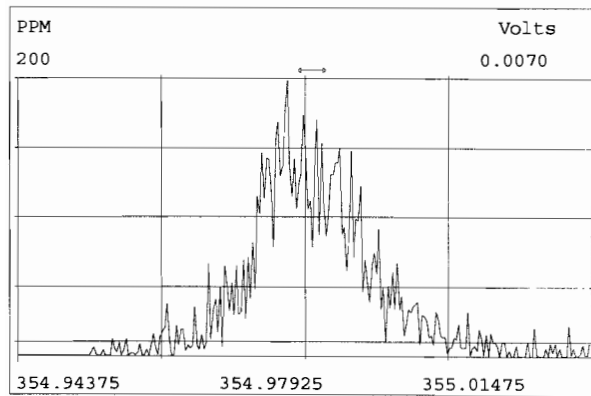
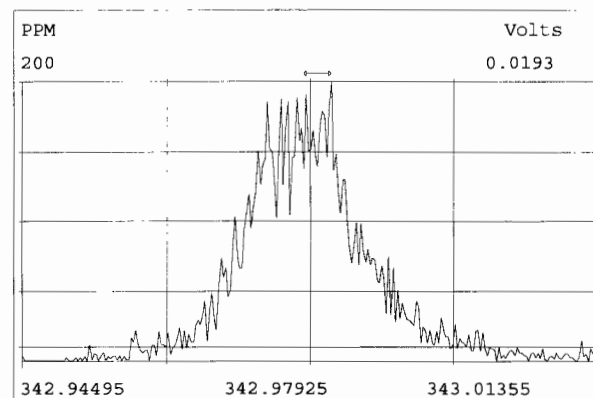
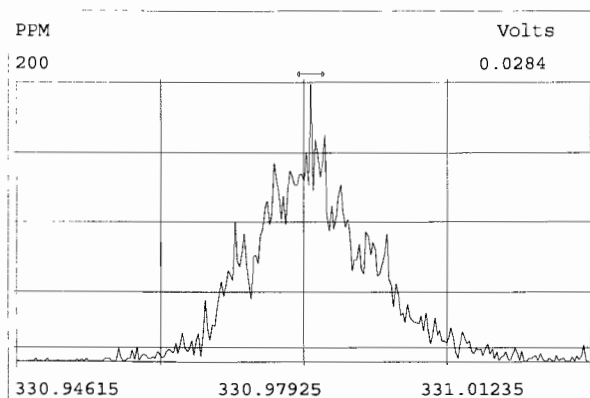
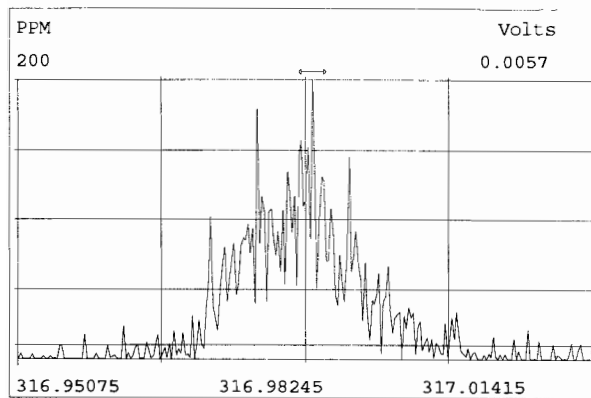
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	6.33e+05	0.84 y	0.91	26:15	11.717			* 2.5	*	Total Tetra-Dioxins	82.6	84.9	*	*	
1,2,3,7,8-PeCDD	2.41e+06	0.64 y	0.90	30:44	55.218			* 2.5	*	Total Penta-Dioxins	212	213	*	*	
1,2,3,4,7,8-HxCDD	2.57e+06	1.22 y	1.10	34:04	52.388			* 2.5	*	Total Hexa-Dioxins	234	236	*	*	
1,2,3,6,7,8-HxCDD	2.59e+06	1.21 y	0.94	34:10	53.333			* 2.5	*	Total Hepta-Dioxins	116	118	*	*	
1,2,3,7,8,9-HxCDD	2.65e+06	1.22 y	0.96	34:28	53.806			* 2.5	*	Total Tetra-Furans	37.2	39.0	*	*	
1,2,3,4,6,7,8-HpCDD	2.53e+06	1.01 y	0.98	37:55	50.652			* 2.5	*	Total Penta-Furans	216.99	217.25	*	*	
OCDD	4.82e+06	0.93 y	0.96	41:12	105.86			* 2.5	*	Total Hexa-Furans	276	276	*	*	
										Total Hepta-Furans	96.7	98.2	*	*	
2,3,7,8-TCDF	9.35e+05	0.81 y	0.95	25:28	10.303			* 2.5	*						
1,2,3,7,8-PeCDF	3.96e+06	1.64 y	0.96	29:34	51.862			* 2.5	*						
2,3,4,7,8-PeCDF	4.10e+06	1.64 y	1.01	30:27	52.942			* 2.5	*						
1,2,3,4,7,8-HxCDF	3.63e+06	1.24 y	1.18	33:10	50.695			* 2.5	*						
1,2,3,6,7,8-HxCDF	3.77e+06	1.20 y	1.07	33:17	52.581			* 2.5	*						
2,3,4,6,7,8-HxCDF	3.91e+06	1.22 y	1.11	33:53	52.958			* 2.5	*						
1,2,3,7,8,9-HxCDF	3.34e+06	1.20 y	1.06	34:51	52.353			* 2.5	*						
1,2,3,4,6,7,8-HpCDF	3.22e+06	1.02 y	1.13	36:42	49.072			* 2.5	*						
1,2,3,4,7,8,9-HpCDF	3.00e+06	1.02 y	1.28	38:27	47.158			* 2.5	*						
OCDF	6.01e+06	0.92 y	0.95	41:26	104.51			* 2.5	*						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	5.97e+06	0.74 y	1.10	26:14	98.015					98.0					
IS 13C-1,2,3,7,8-PeCDD	4.83e+06	0.62 y	0.88	30:43	98.596					98.6					
IS 13C-1,2,3,4,7,8-HxCDD	4.46e+06	1.27 y	0.64	34:03	103.23					103					
IS 13C-1,2,3,6,7,8-HxCDD	5.17e+06	1.24 y	0.86	34:09	89.828					89.8					
IS 13C-1,2,3,7,8,9-HxCDD	5.11e+06	1.24 y	0.81	34:27	94.170					94.2					
IS 13C-1,2,3,4,6,7,8-HpCDD	5.11e+06	1.02 y	0.65	37:54	116.01					116					
IS 13C-OCDD	9.50e+06	0.89 y	0.58	41:12	243.33					122					
IS 13C-2,3,7,8-TCDF	9.55e+06	0.78 y	1.03	25:27	107.24					107					
IS 13C-1,2,3,7,8-PeCDF	7.96e+06	1.57 y	0.85	29:33	108.26					108					
IS 13C-2,3,4,7,8-PeCDF	7.64e+06	1.66 y	0.85	30:26	104.78					105					
IS 13C-1,2,3,4,7,8-HxCDF	6.08e+06	0.50 y	0.83	33:09	108.57					109					
IS 13C-1,2,3,6,7,8-HxCDF	6.71e+06	0.50 y	1.03	33:17	96.285					96.3					
IS 13C-2,3,4,6,7,8-HxCDF	6.64e+06	0.50 y	0.95	33:52	103.37					103					
IS 13C-1,2,3,7,8,9-HxCDF	6.01e+06	0.51 y	0.83	34:50	107.88					108					
IS 13C-1,2,3,4,6,7,8-HpCDF	5.83e+06	0.41 y	0.76	36:41	114.23					114					
IS 13C-1,2,3,4,7,8,9-HpCDF	4.98e+06	0.42 y	0.58	38:26	127.13					127					
IS 13C-OCDF	1.21e+07	0.93 y	0.69	41:25	261.59					131					
C/Up 37Cl-2,3,7,8-TCDD	6.50e+05		1.20	26:15	9.7563					97.6					
RS/RT 13C-1,2,3,4-TCDD	5.56e+06	0.76 y	1.00	25:40	100.00										
RS 13C-1,2,3,4-TCDF	8.61e+06	0.83 y	1.00	24:15	100.00										
RS/RT 13C-1,2,3,4,6,9-HxCDF	6.73e+06	0.51 y	1.00	33:34	100.00										

Integrations
by DB
Analyst: DB
Reviewed
by CT
Analyst: CT
Date: 10/31/19
Date: 10/31/19

Vista Analytical Laboratory - Injection Log Run file: 191031D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

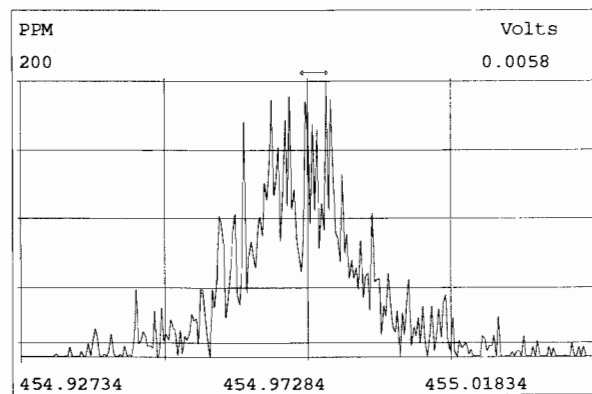
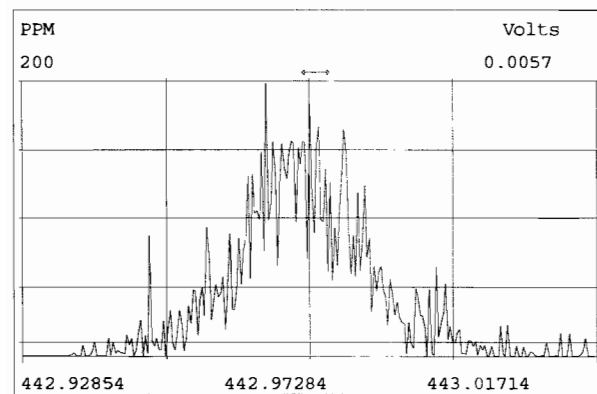
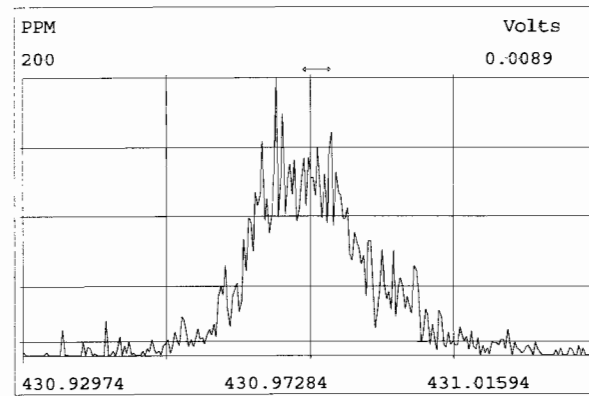
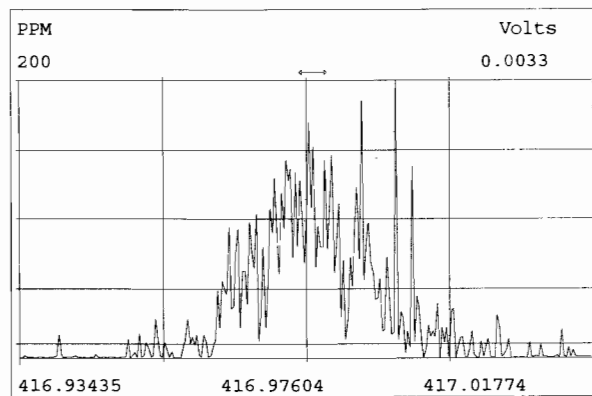
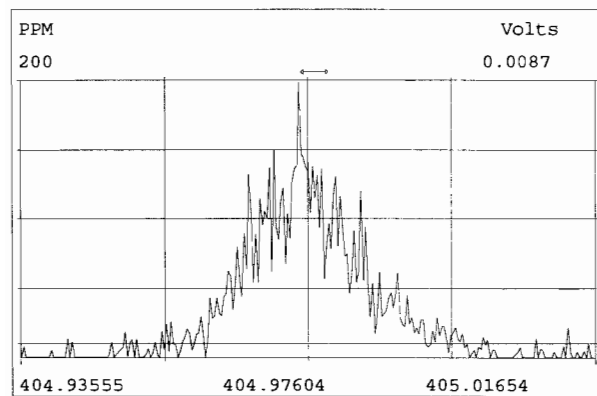
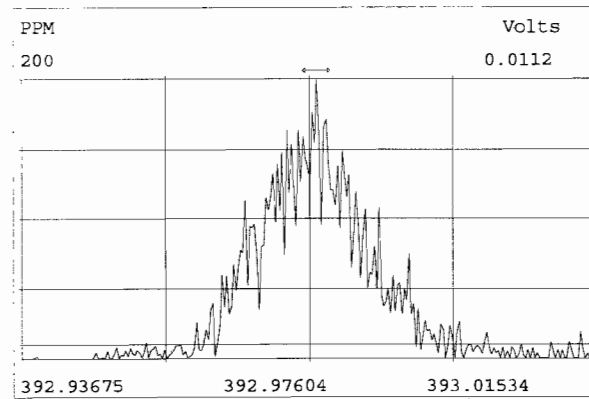
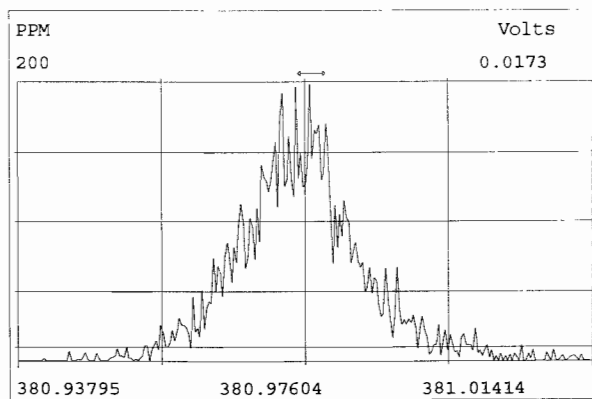
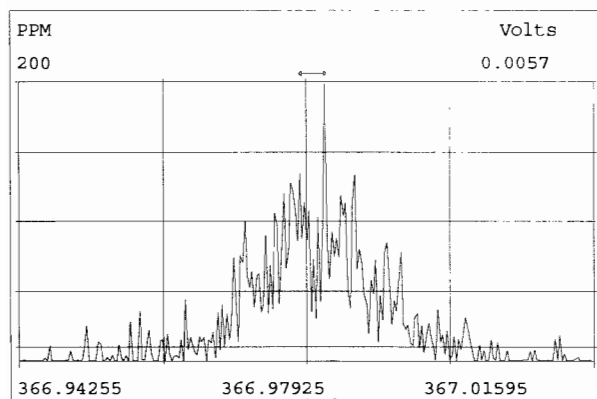
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191031D1	1	ST191031D1-1	DB	31-OCT-19	10:43:28	ST191031D1-1	NA
191031D1	2	ST191031D1-2	DB	31-OCT-19	11:31:22	ST191031D1-2	ST191031D1-3
191031D1	3	B9J0218-BS1	DB	31-OCT-19	12:19:19	ST191031D1-2	ST191031D1-3
191031D1	4	B9J0169-BS1	DB	31-OCT-19	13:07:04	ST191031D1-2	ST191031D1-3
191031D1	5	B9J0288-BS1	DB	31-OCT-19	13:55:05	ST191031D1-1	NA
191031D1	6	SOLVENT BLANK	DB	31-OCT-19	14:43:01	NA	NA
191031D1	7	B9J0218-BLK1	DB	31-OCT-19	15:30:54	ST191031D1-2	ST191031D1-3
191031D1	8	B9J0169-BLK1	DB	31-OCT-19	16:18:49	ST191031D1-2	ST191031D1-3
191031D1	9	B9J0288-BLK1	DB	31-OCT-19	17:06:44	ST191031D1-1	NA
191031D1	10	B9J0170-BS7	DB	31-OCT-19	17:54:37	ST191031D1-2	ST191031D1-3
191031D1	11	1903578-01	DB	31-OCT-19	18:42:21	ST191031D1-2	ST191031D1-3
191031D1	12	1903578-02	DB	31-OCT-19	19:30:06	ST191031D1-2	ST191031D1-3
191031D1	13	1903385-03	DB	31-OCT-19	20:17:49	ST191031D1-2	ST191031D1-3
191031D1	14	1903260-01RE2@10X	DB	31-OCT-19	21:05:33	ST191031D1-2	ST191031D1-3
191031D1	15	SOLVENT BLANK	DB	31-OCT-19	21:53:18	NA	NA
191031D1	16	ST191031D1-3	DB	31-OCT-19	22:41:03	ST191031D1-2	ST191031D1-3





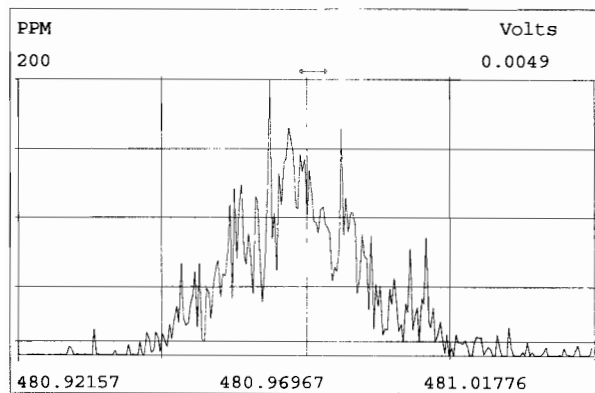
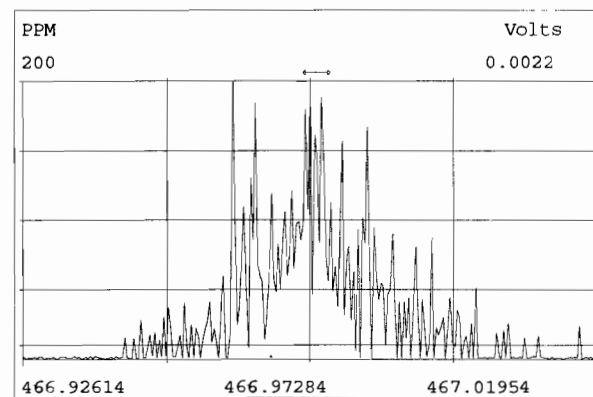
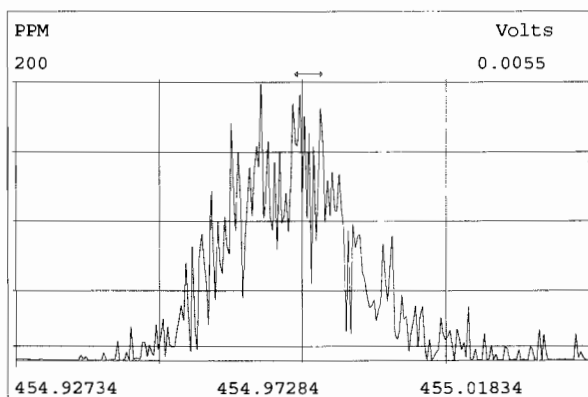
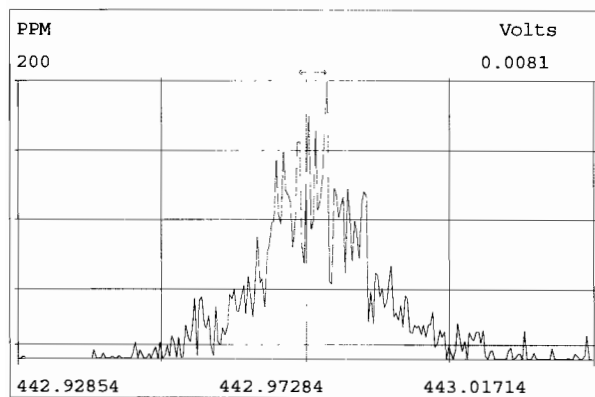
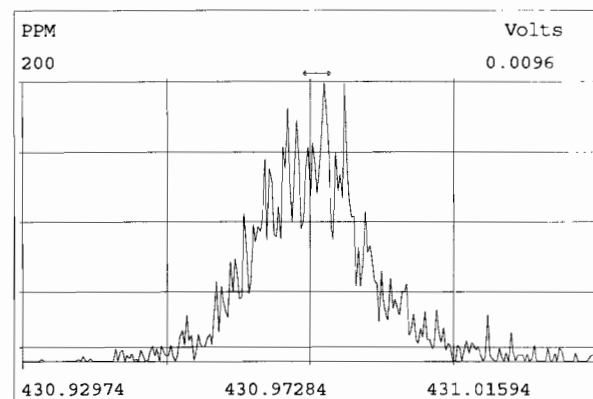
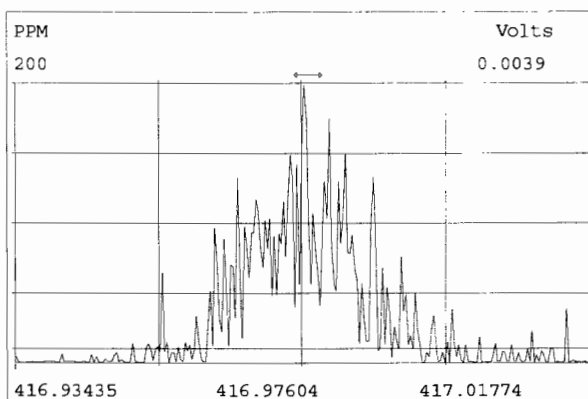
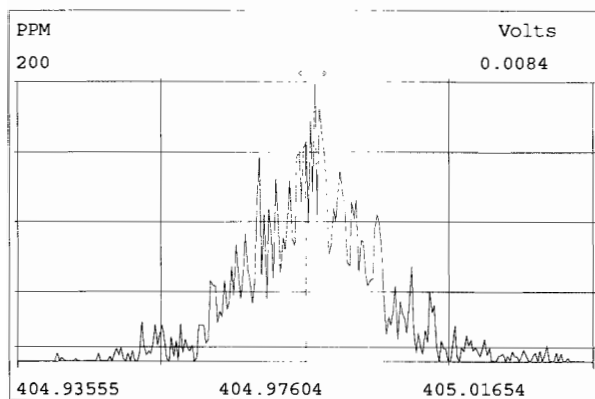
Peak Locate Examination:31-OCT-2019:10:40 File:191031D1

Experiment:OCDD_DB5 Function:3 Reference:PFK



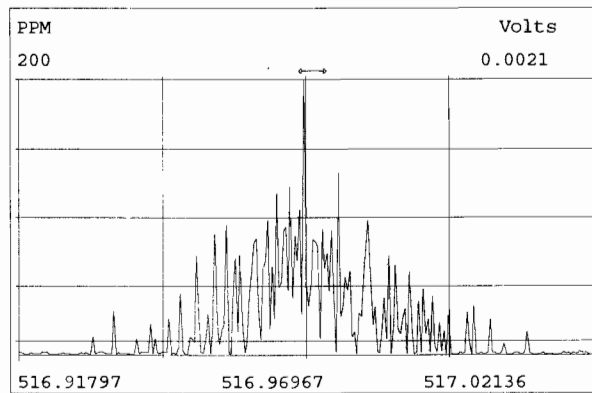
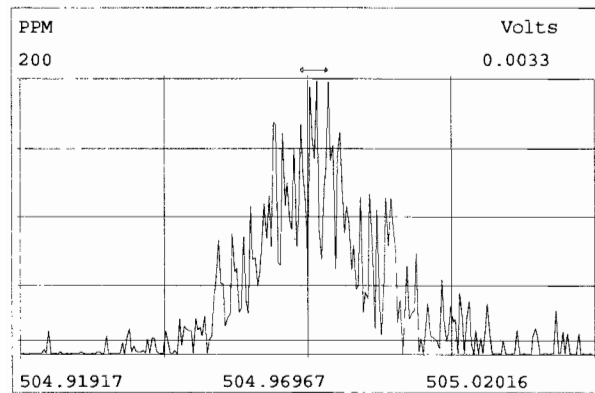
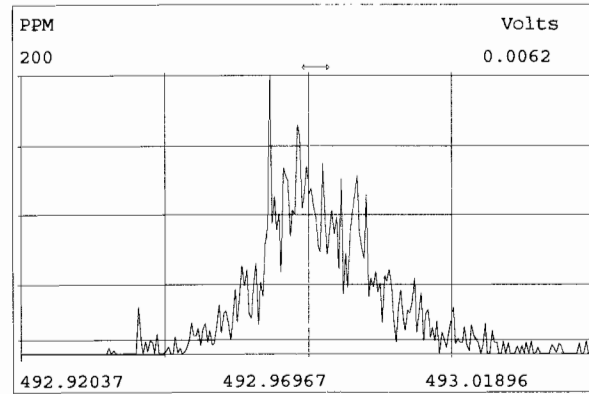
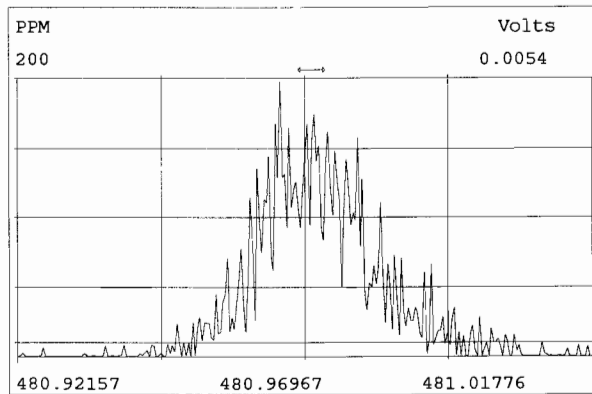
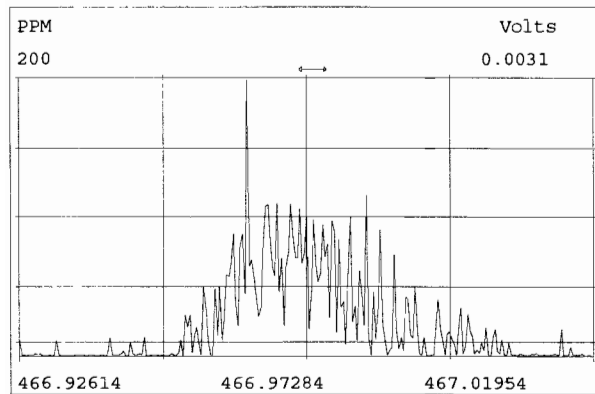
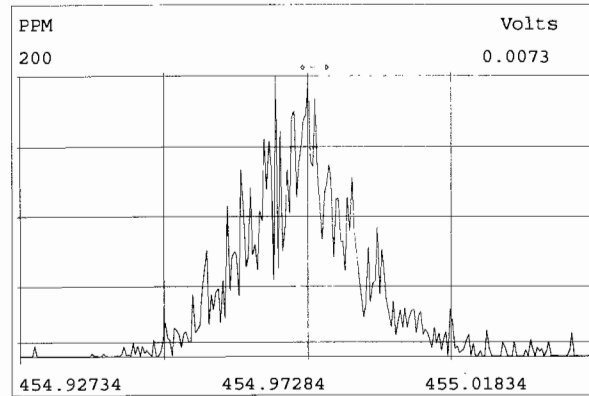
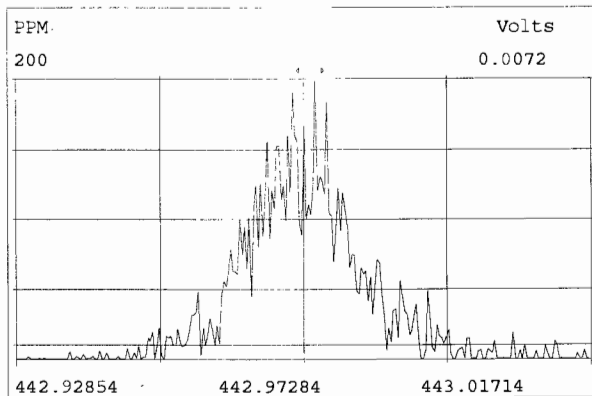
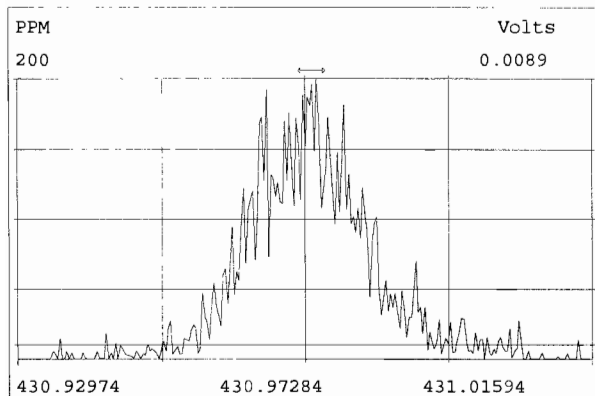
Peak Locate Examination:31-OCT-2019:10:41 File:191031D1

Experiment:OCDD_DB5 Function:4 Reference:PFK

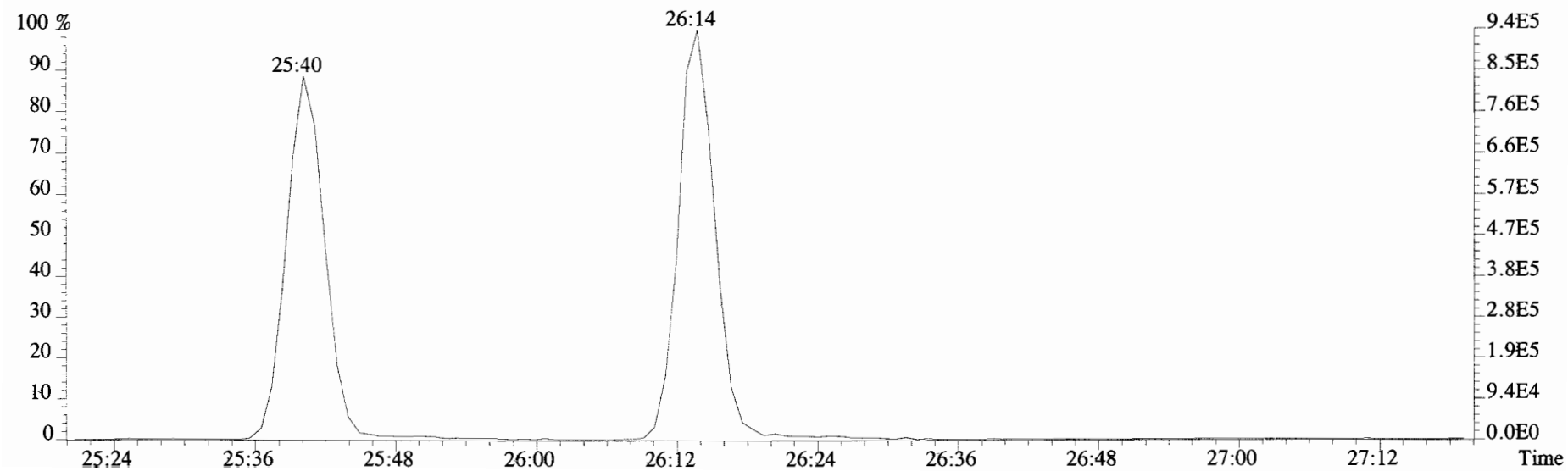
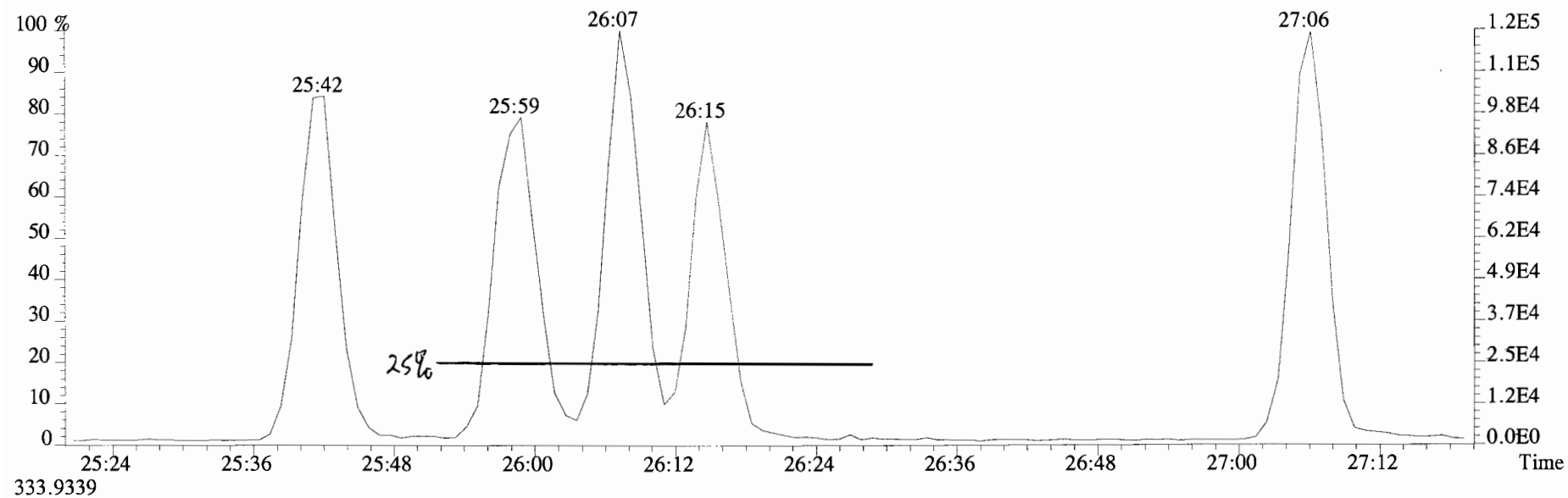


Peak Locate Examination:31-OCT-2019:10:41 File:191031D1

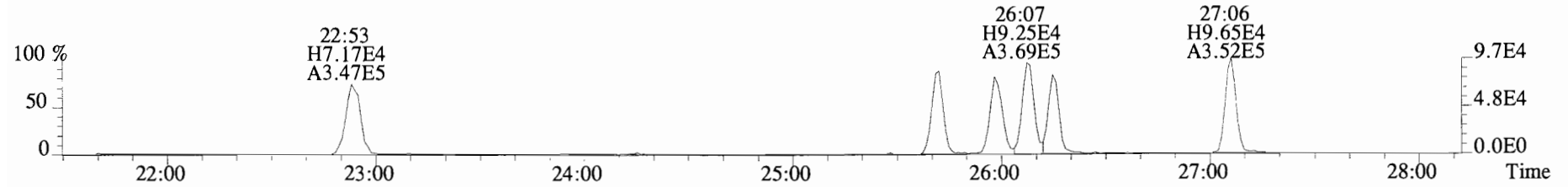
Experiment:OCDD_DB5 Function:5 Reference:PFK



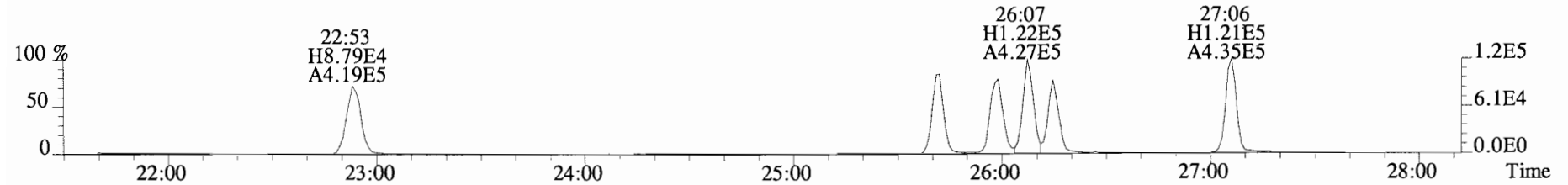
File:191031D1 #1-493 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



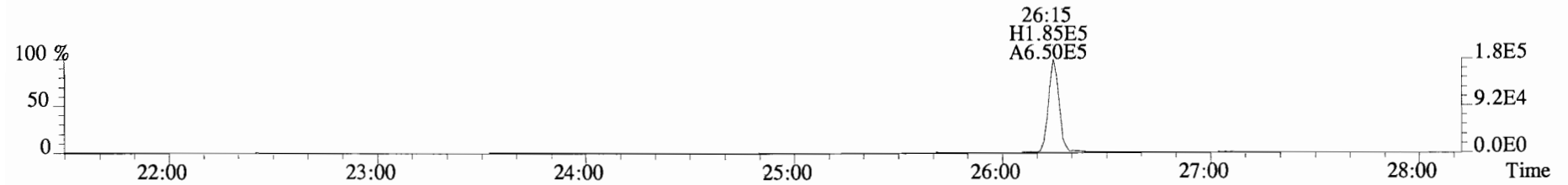
File:191031D1 #1-493 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



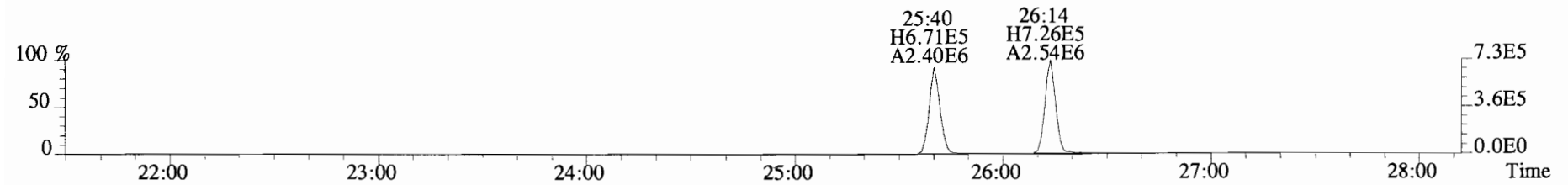
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



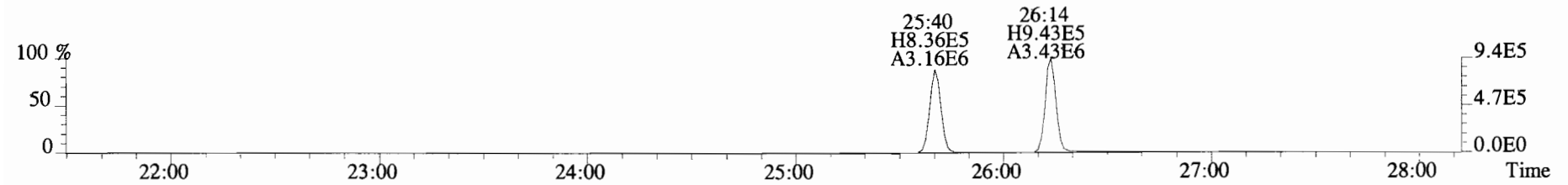
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



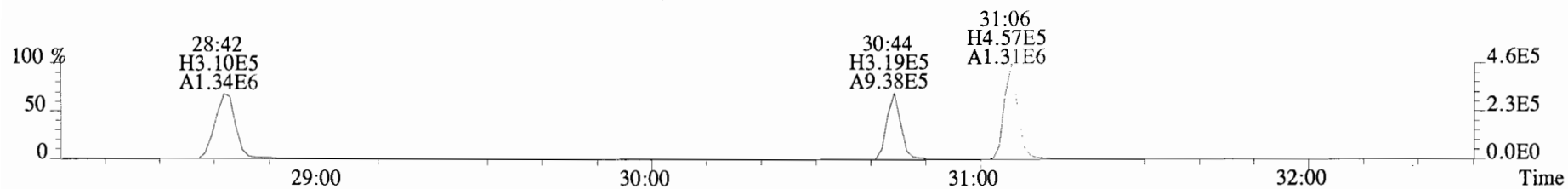
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



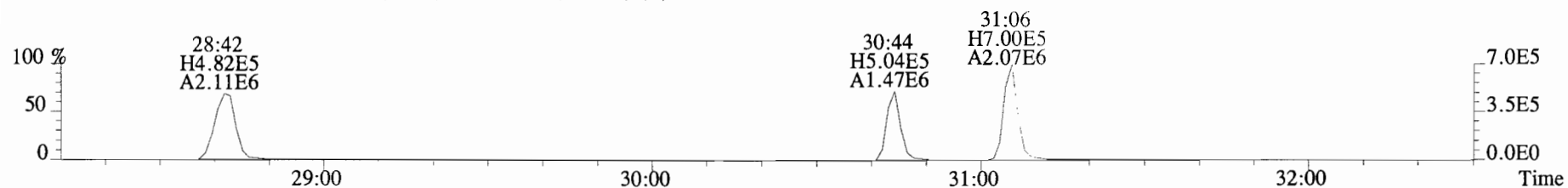
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



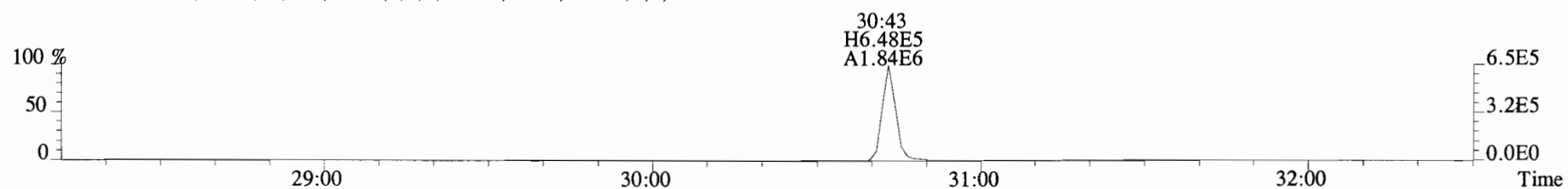
File:191031D1 #1-211 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



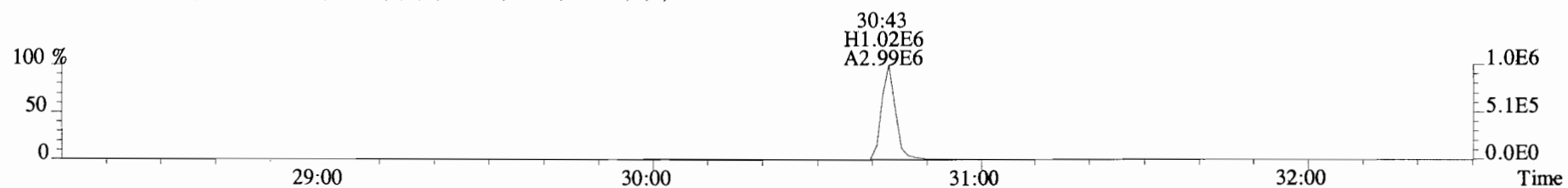
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



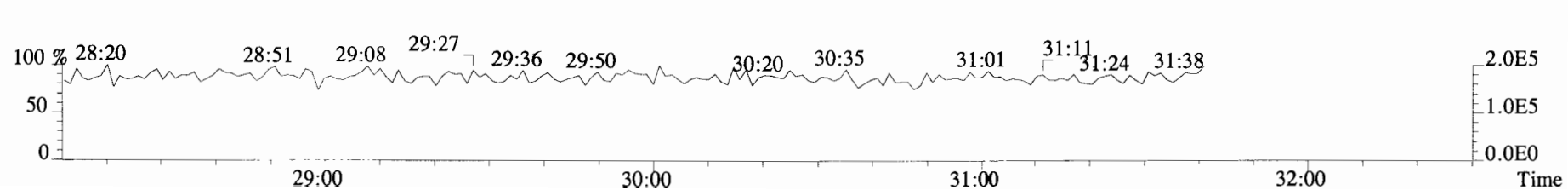
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



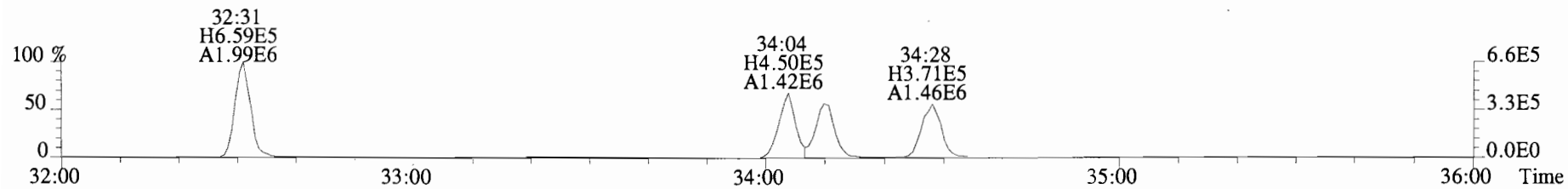
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



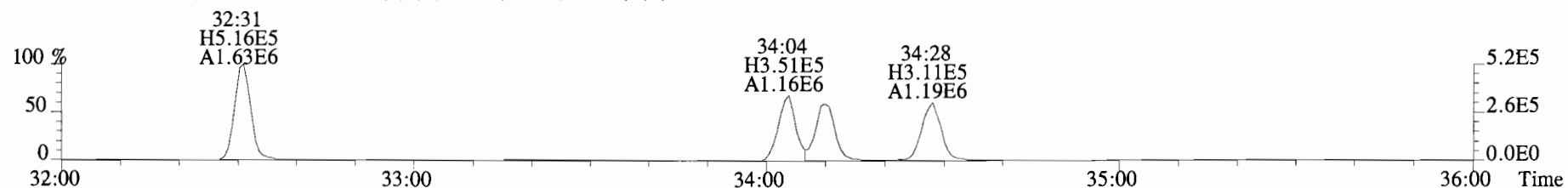
366.9792 F:2



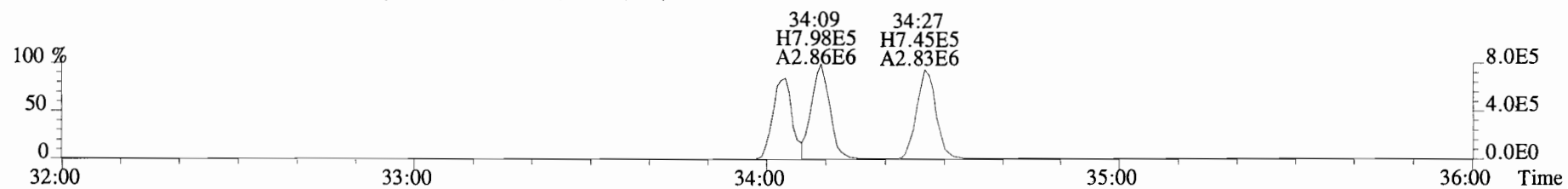
File:191031D1 #1-384 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



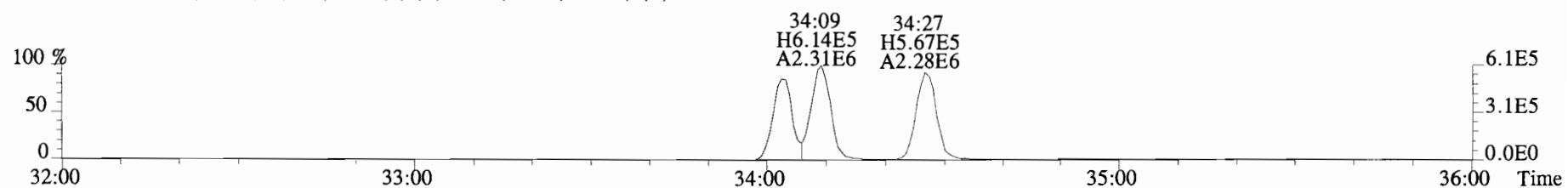
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



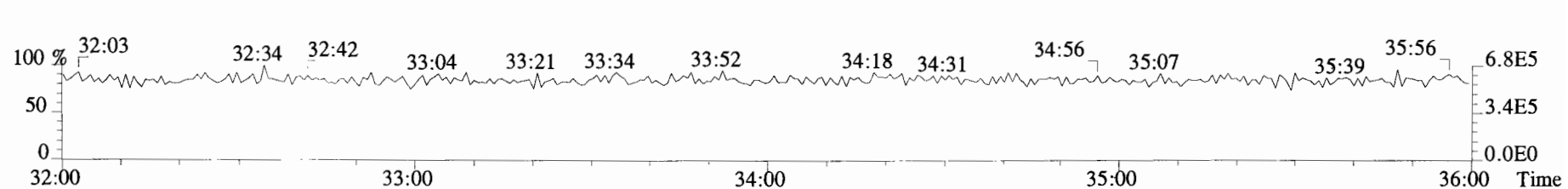
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



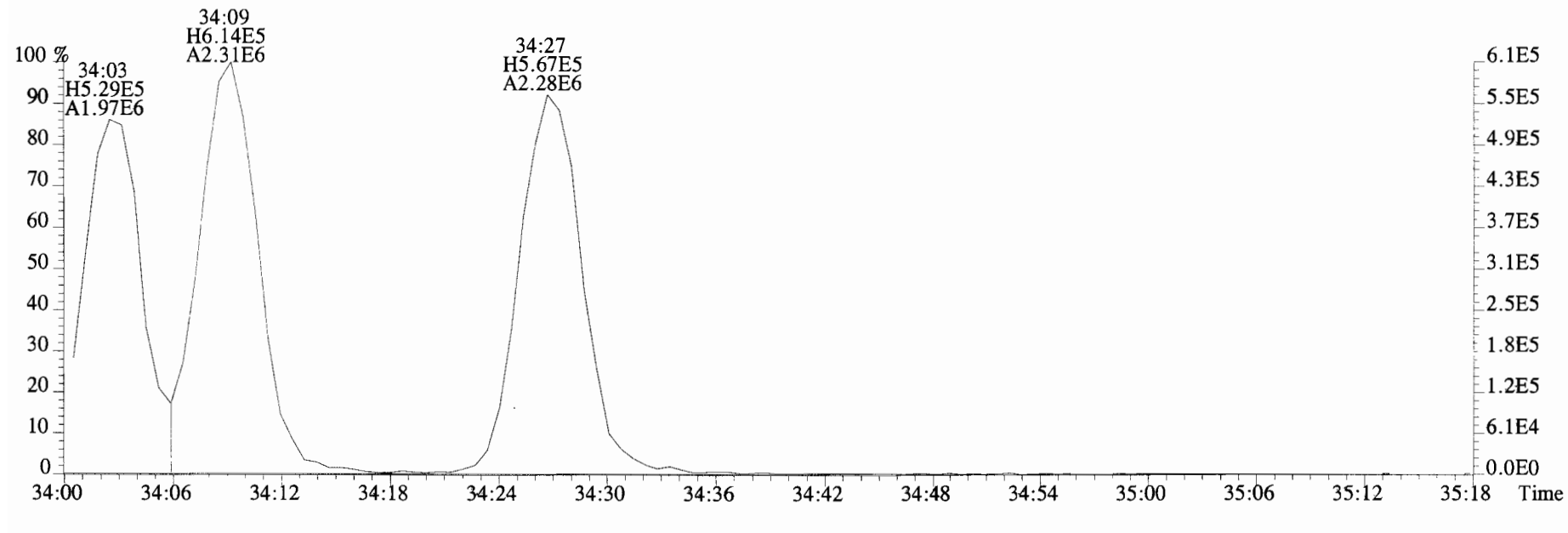
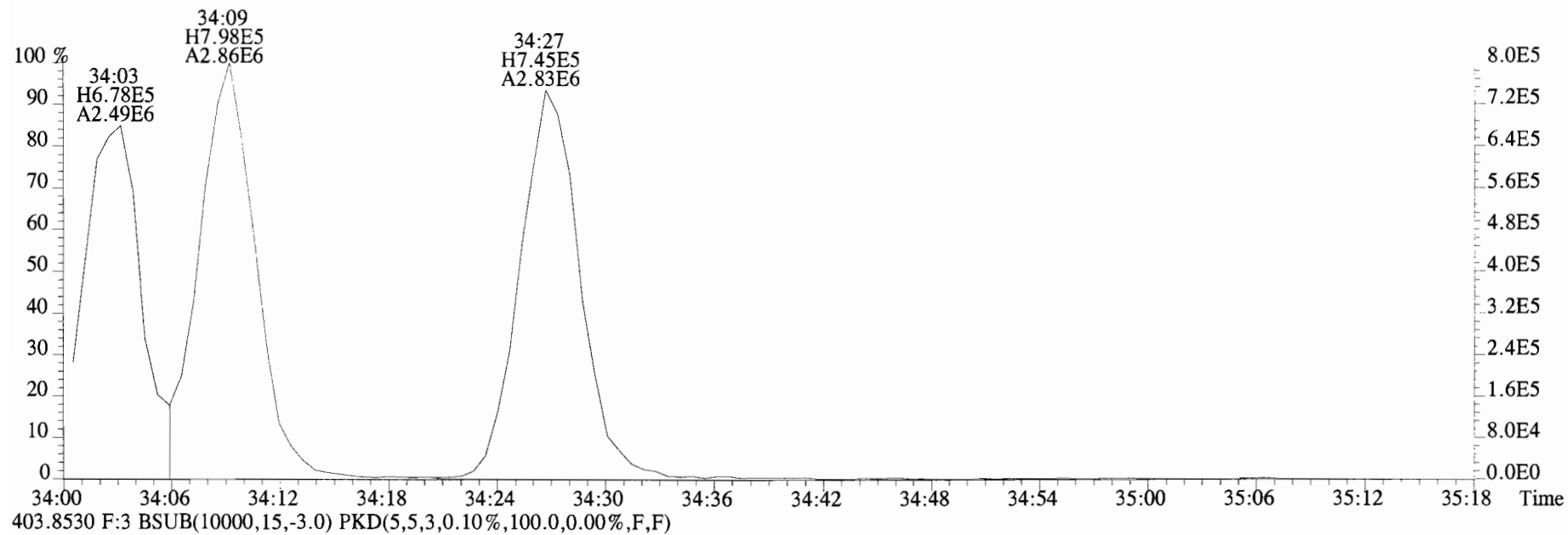
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



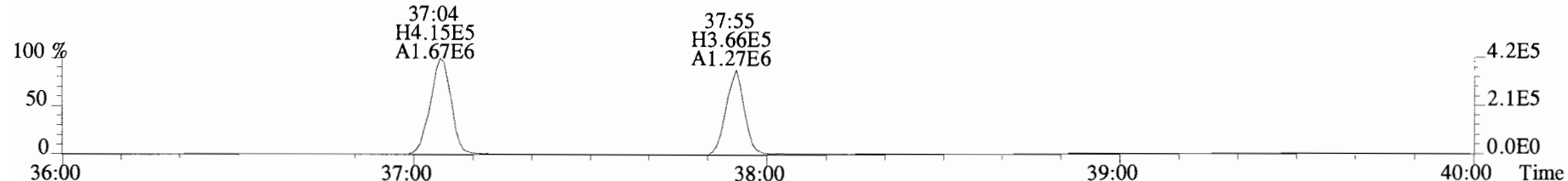
392.9760 F:3



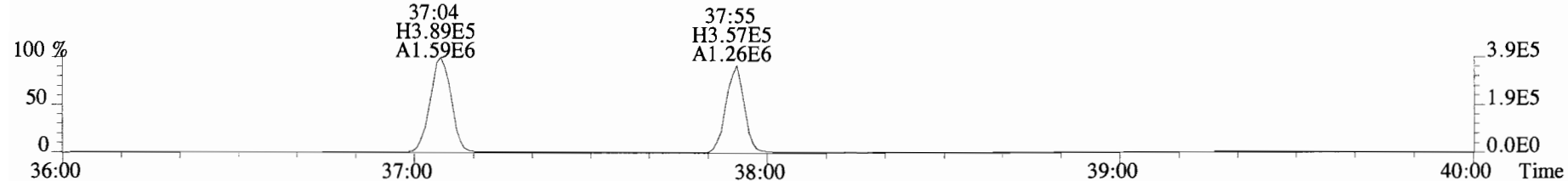
File:191031D1 #1-384 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



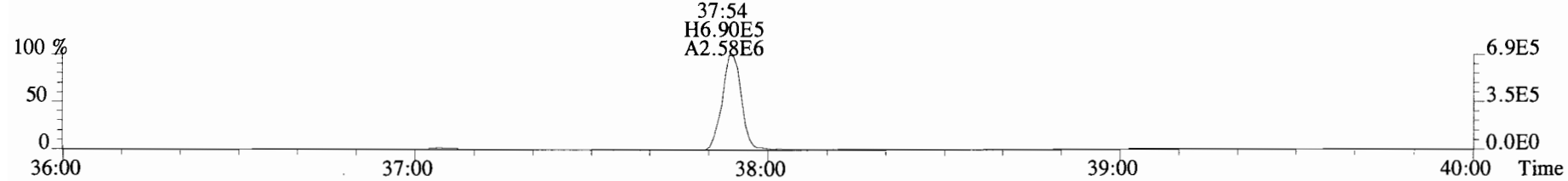
File:191031D1 #1-355 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



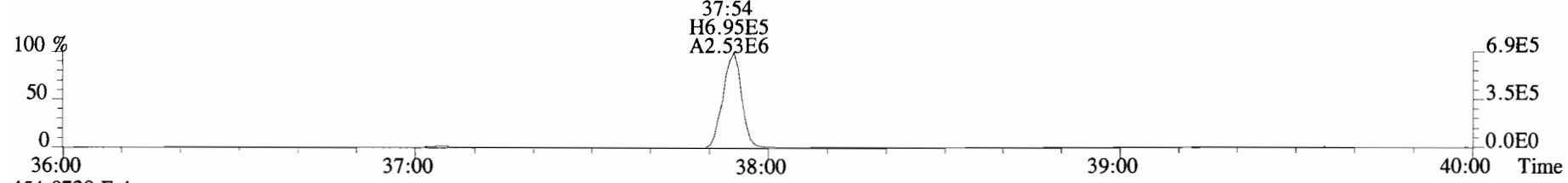
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



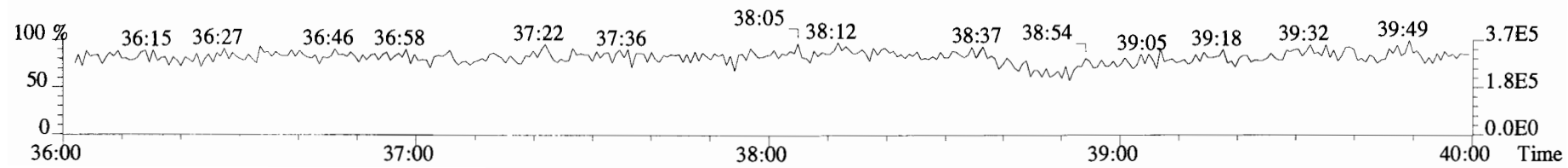
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



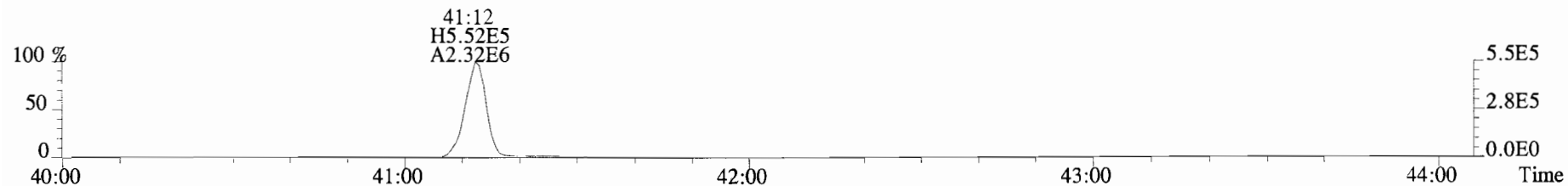
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



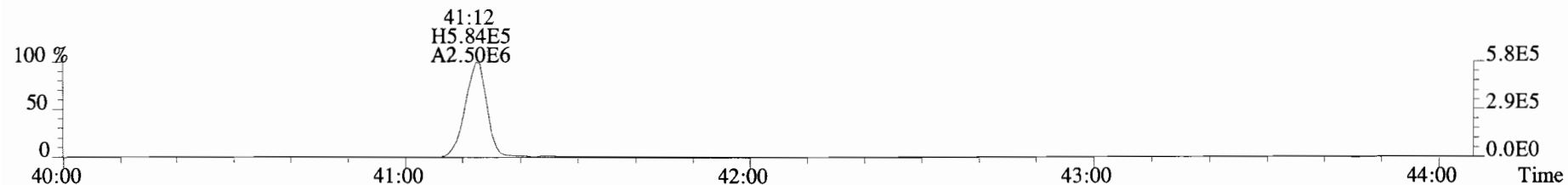
454.9728 F:4



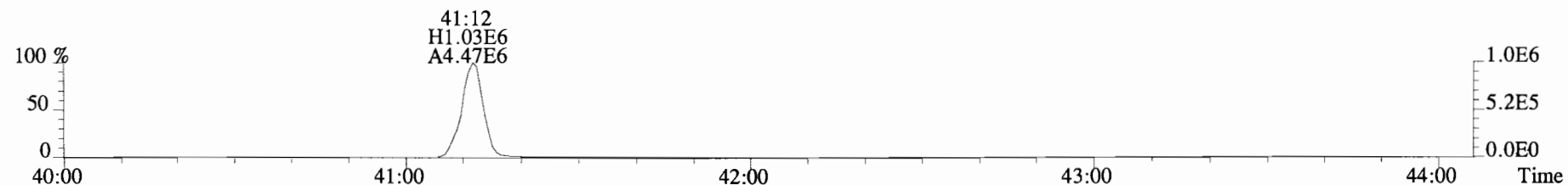
File:191031D1 #1-432 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



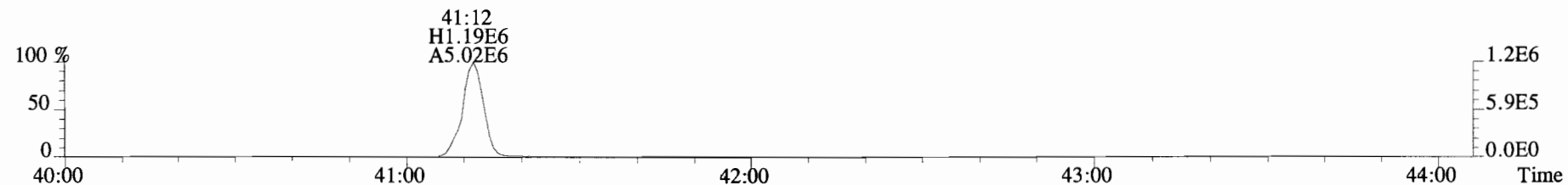
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



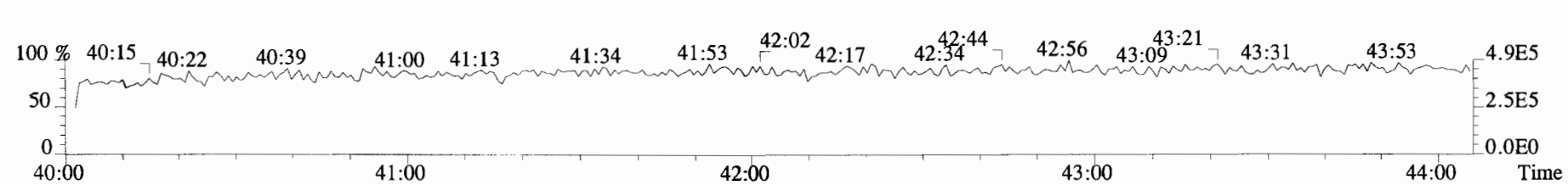
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



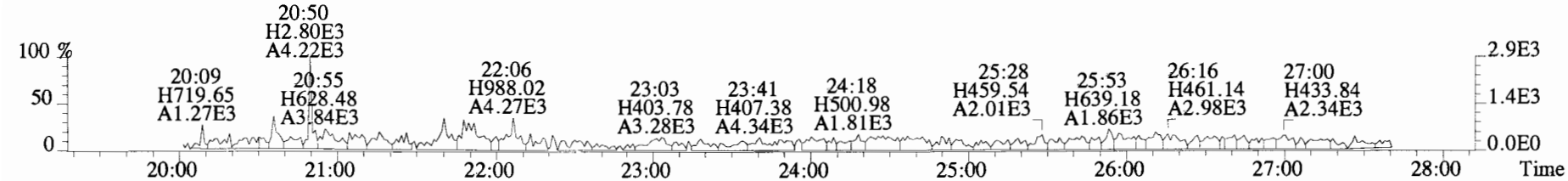
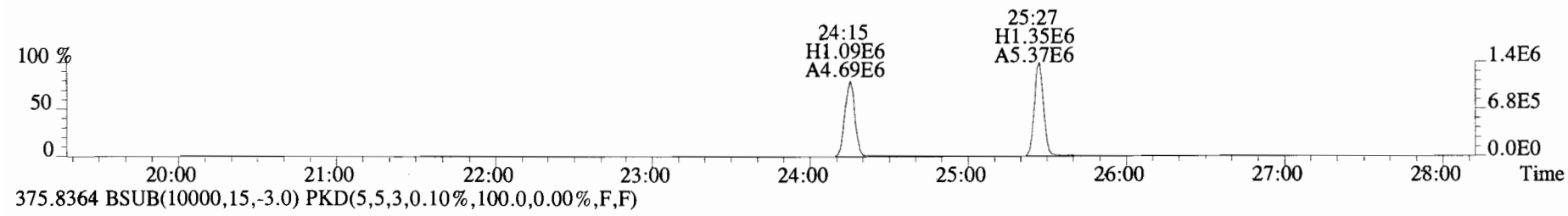
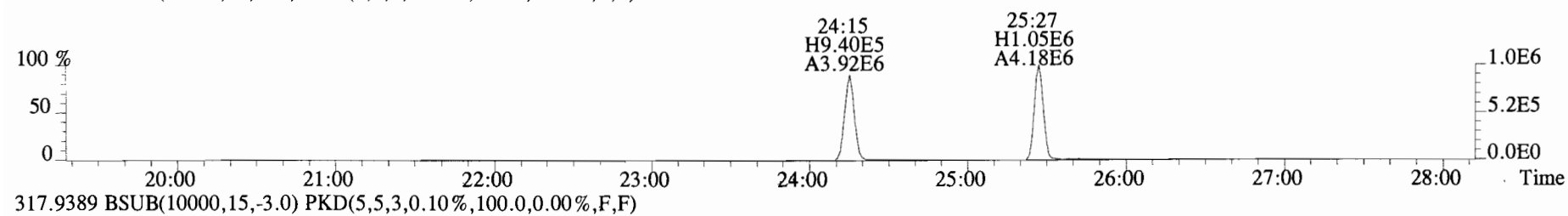
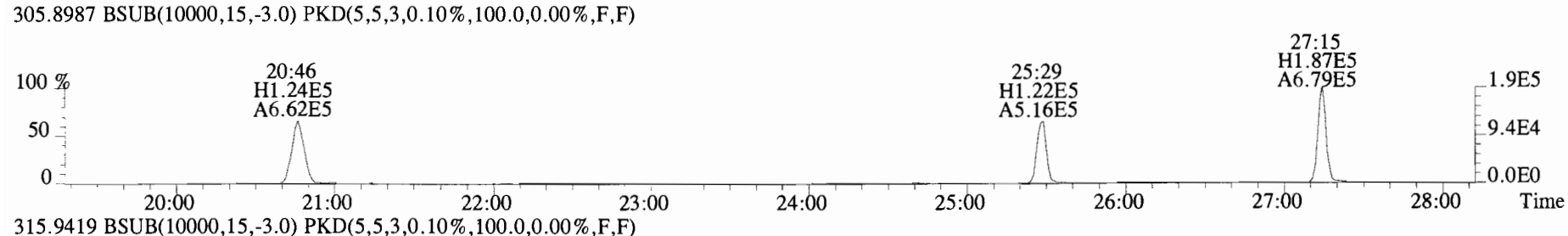
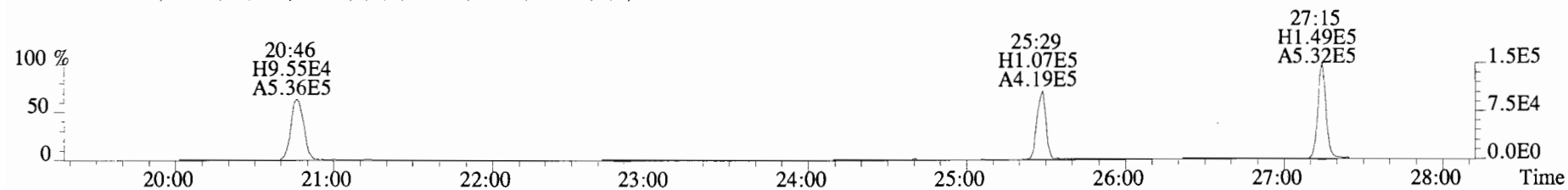
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



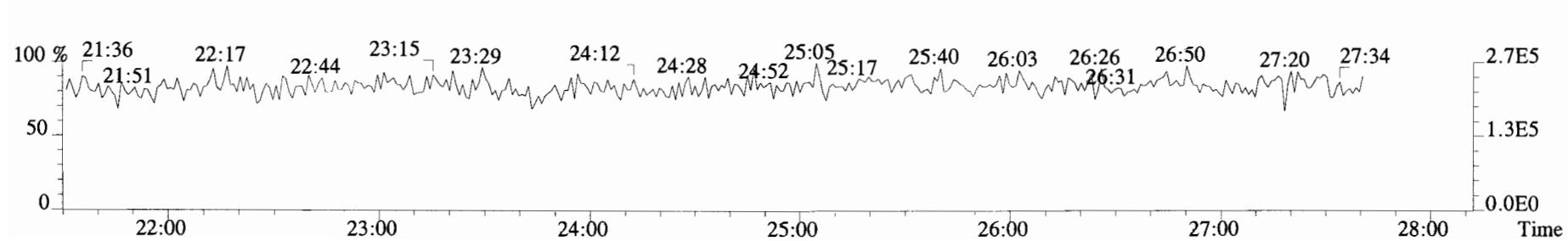
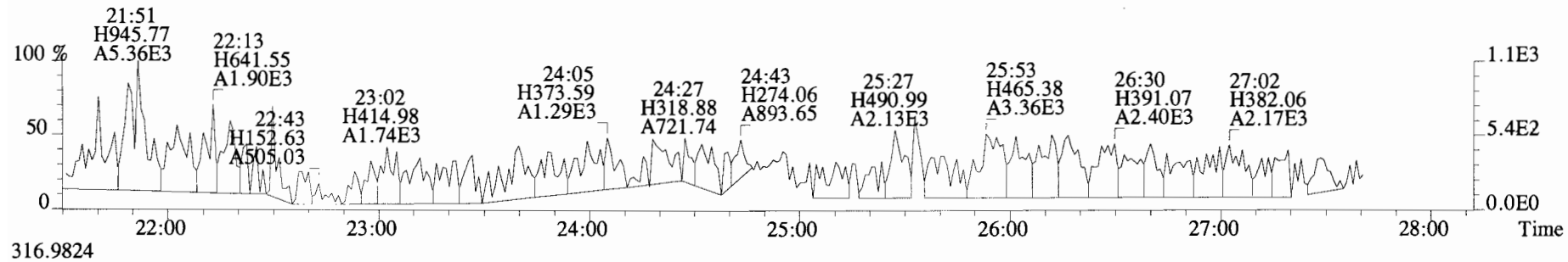
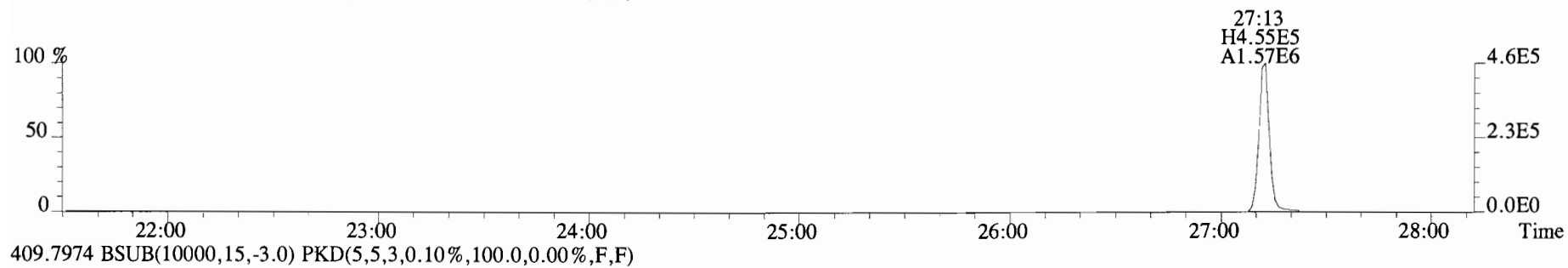
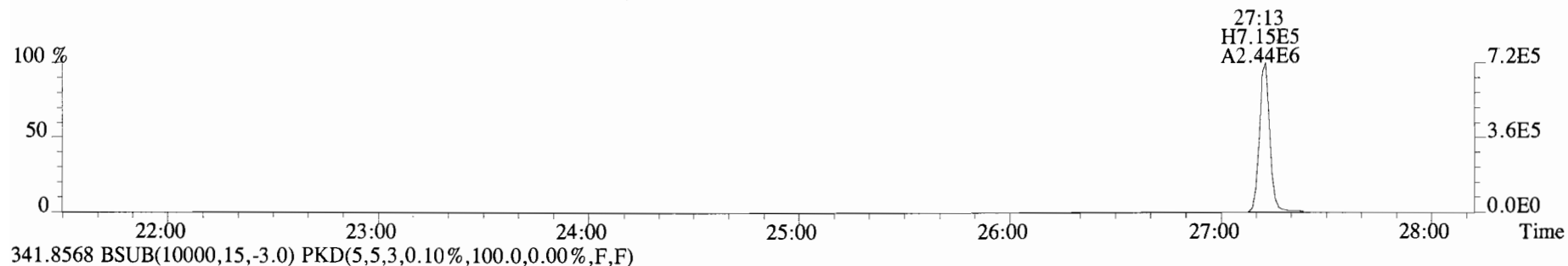
454.9728 F:5



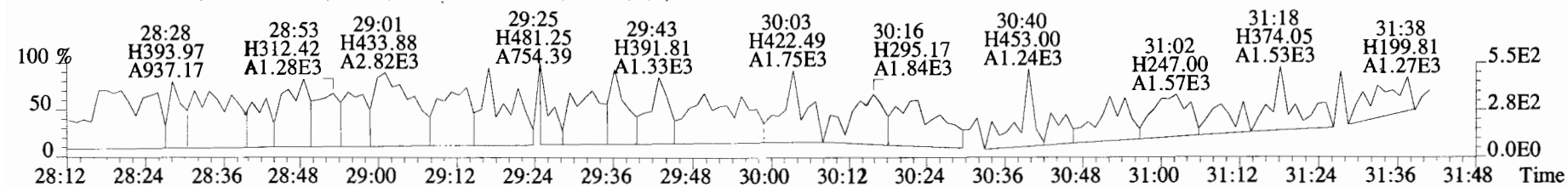
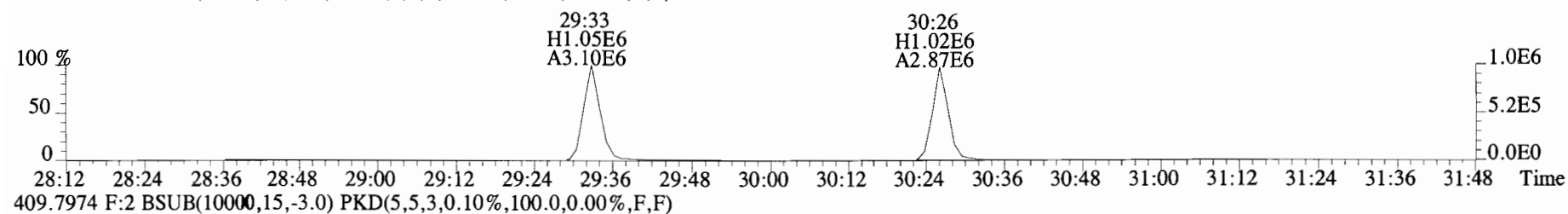
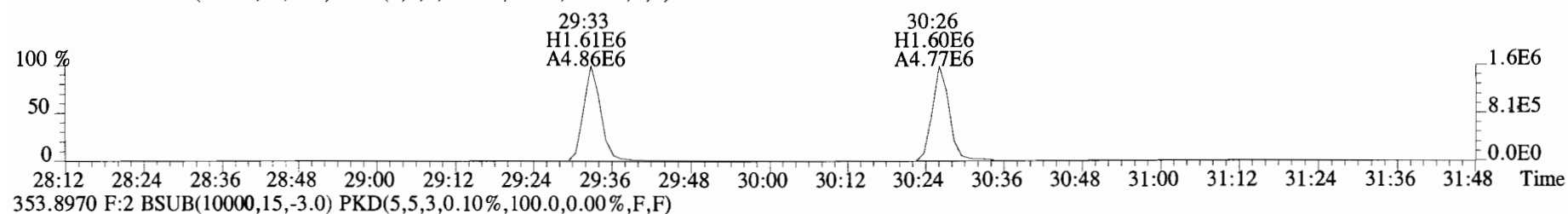
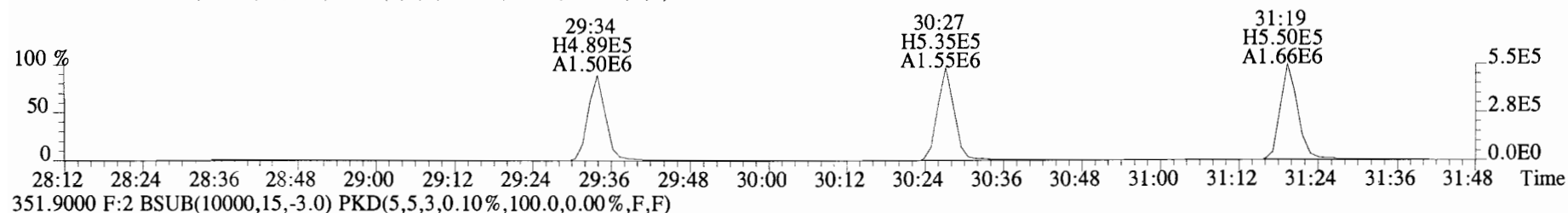
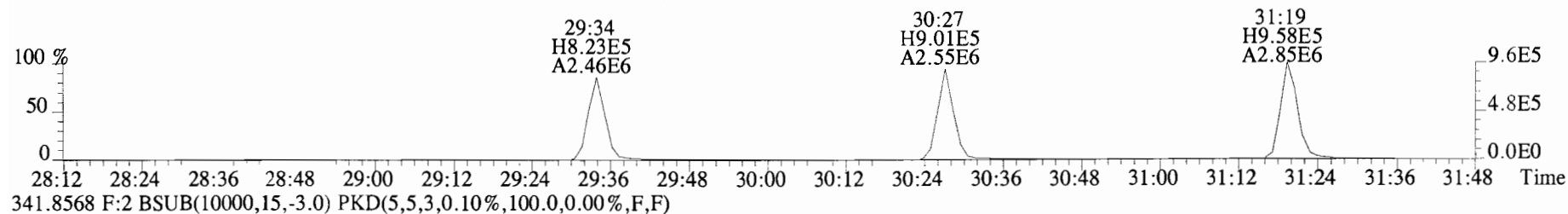
File:191031D1 #1-493 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



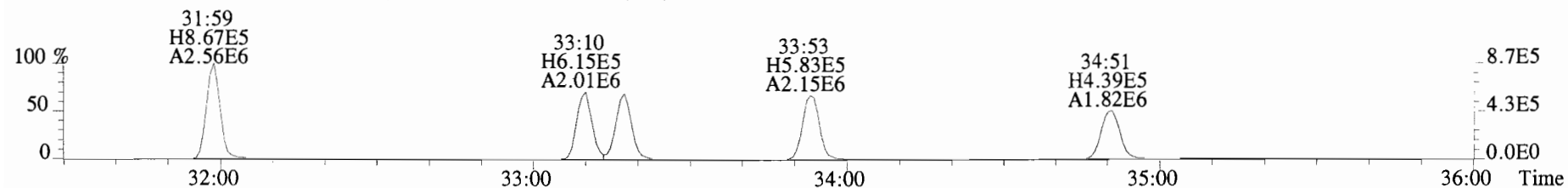
File:191031D1 #1-493 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



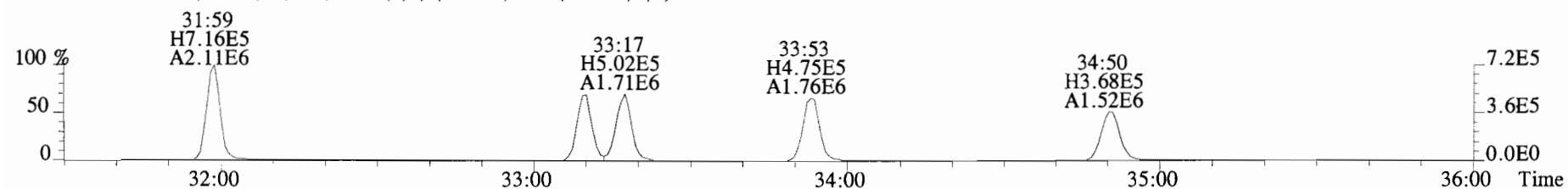
File:191031D1 #1-211 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



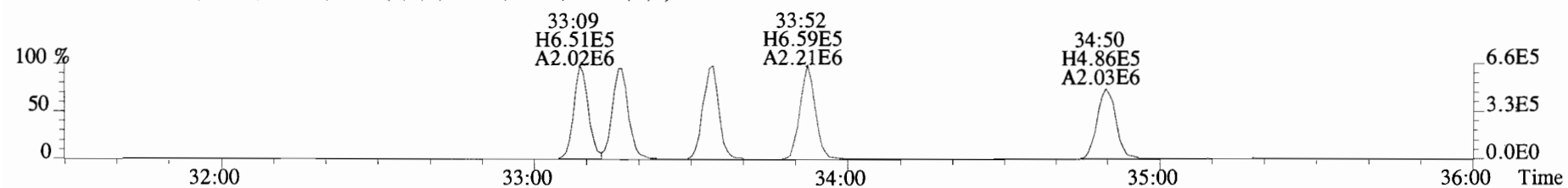
File:191031D1 #1-384 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



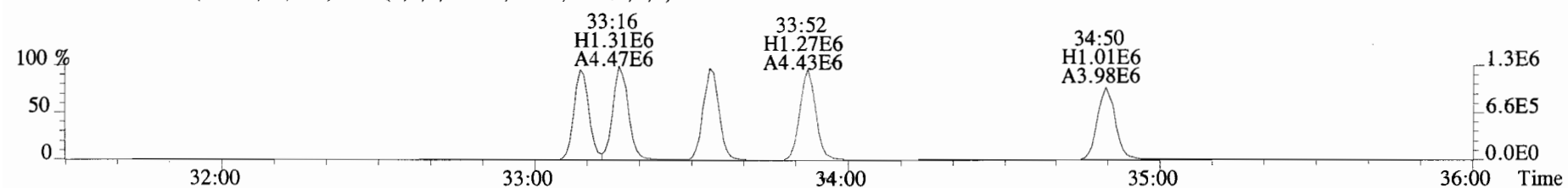
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



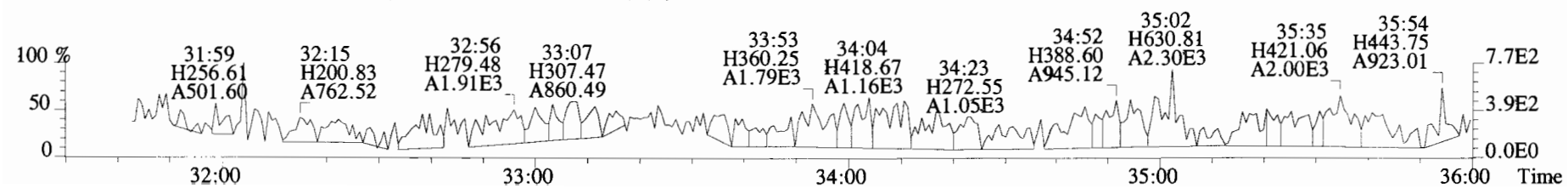
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



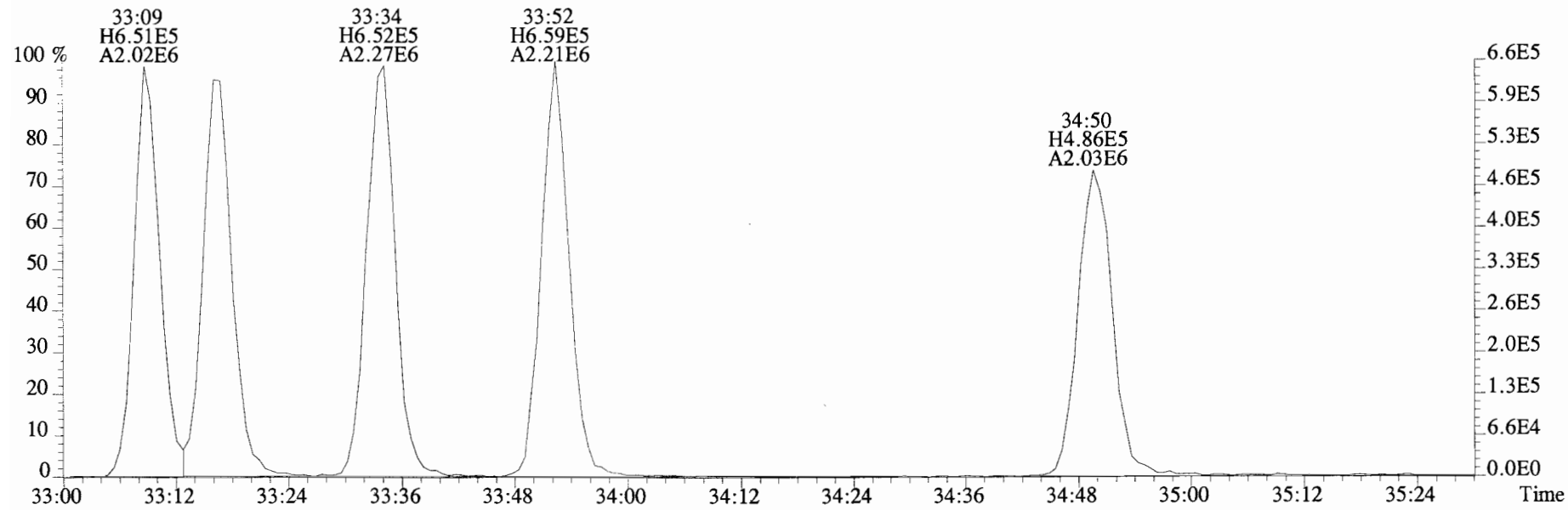
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



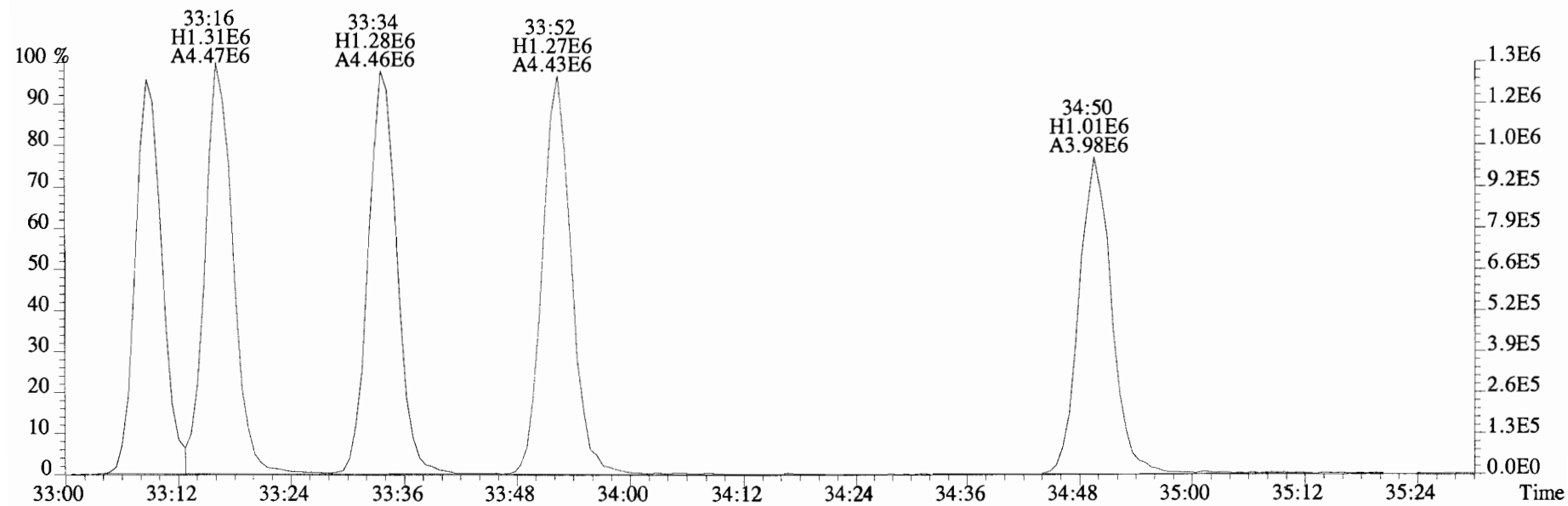
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



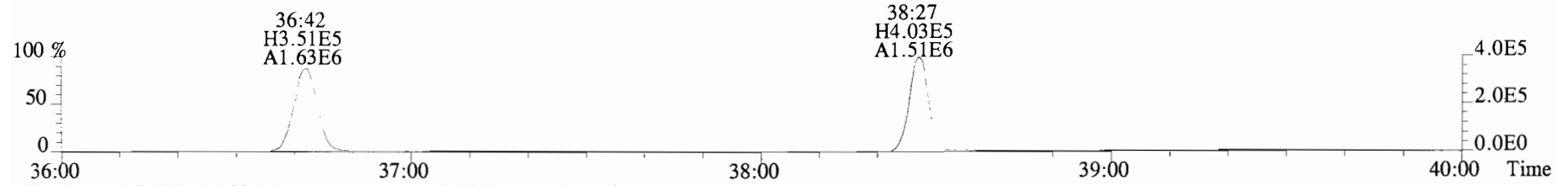
File:191031D1 #1-384 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



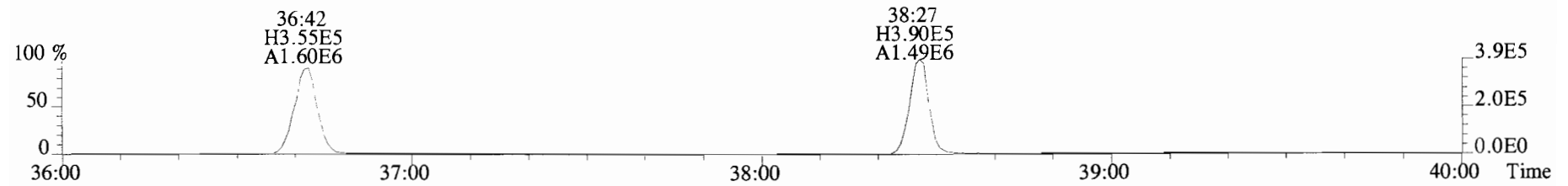
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



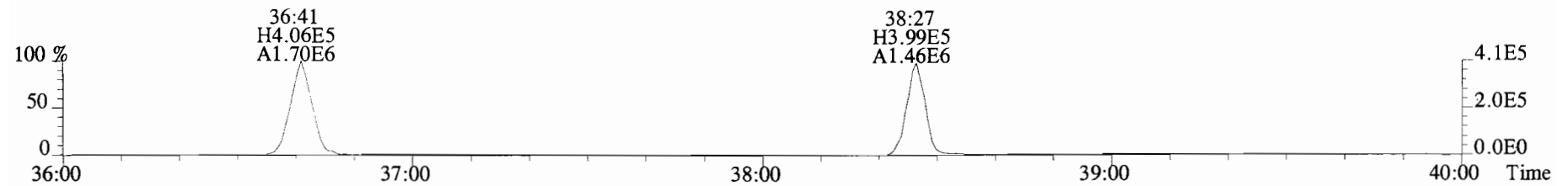
File:191031D1 #1-355 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata_Analytical Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



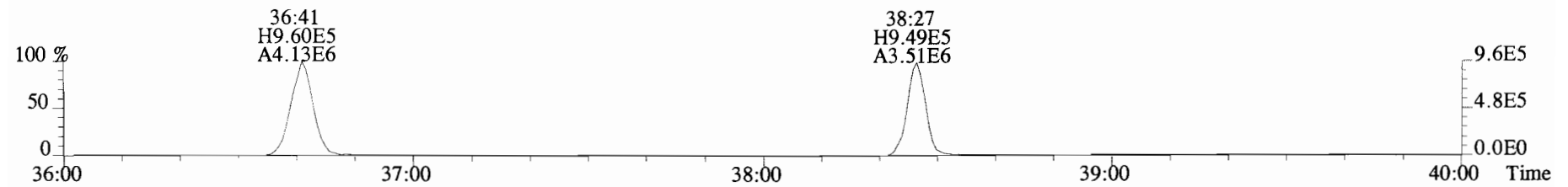
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



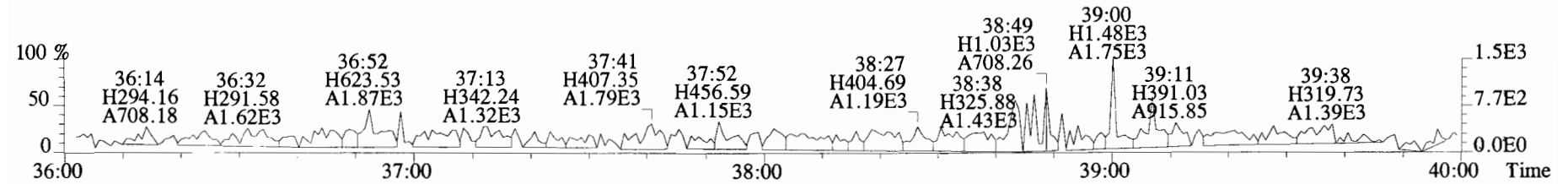
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



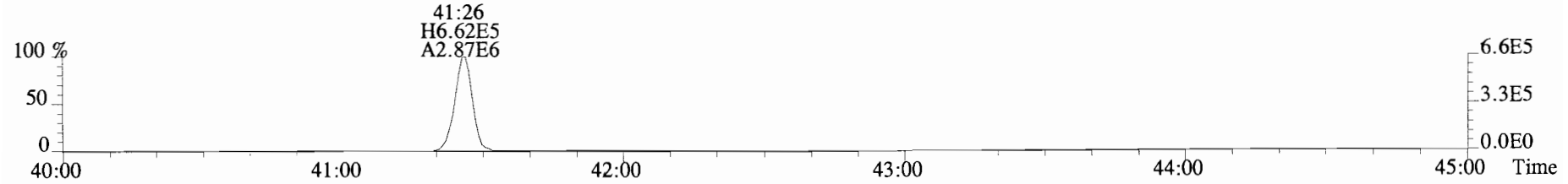
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



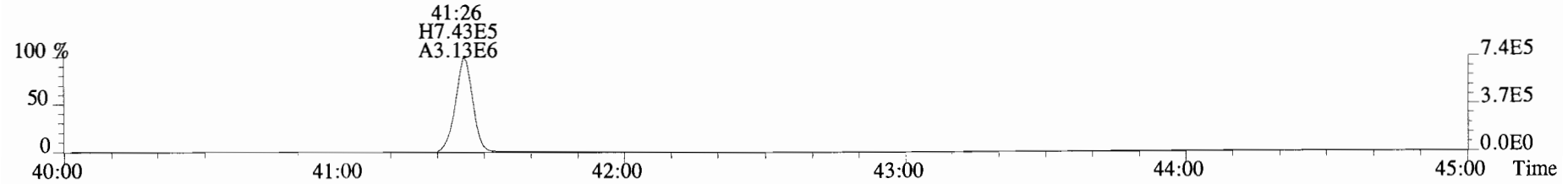
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



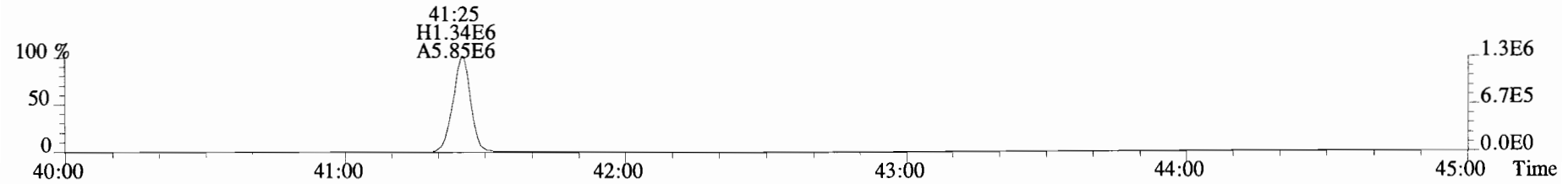
File:191031D1 #1-432 Acq:31-OCT-2019 10:43:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



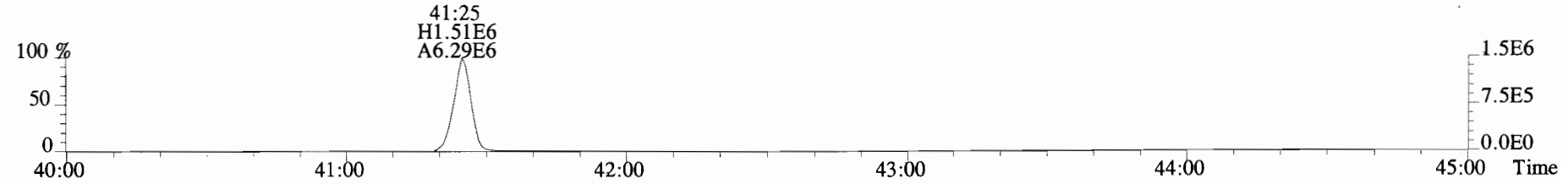
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



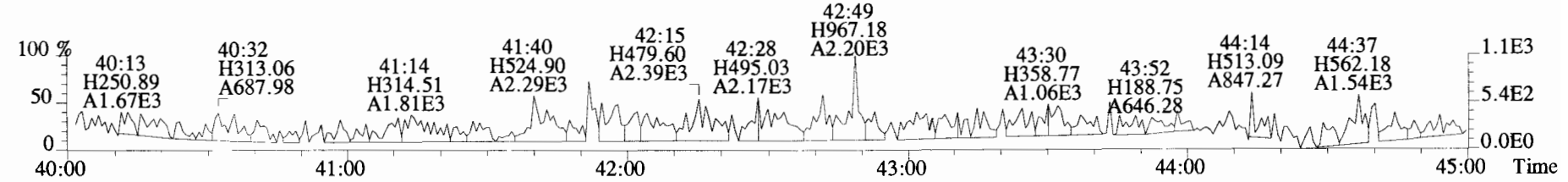
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

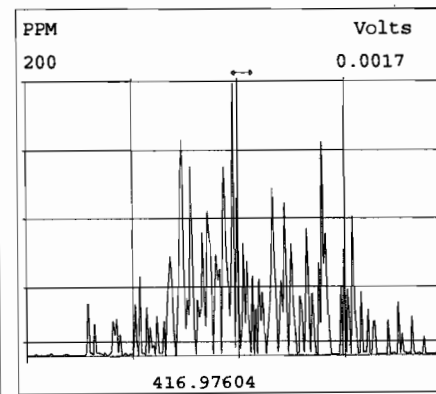
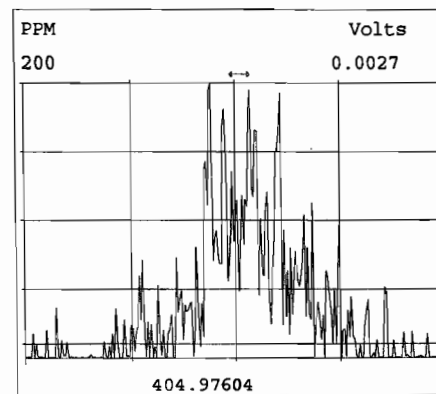
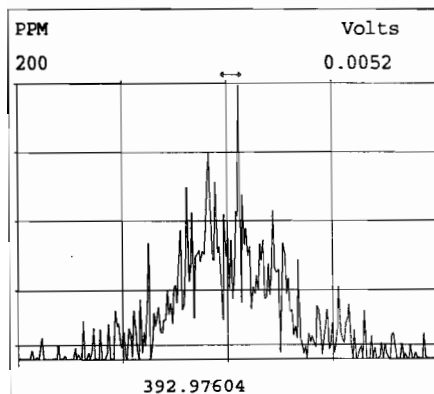
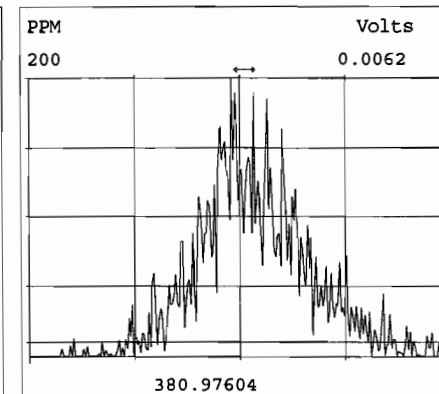
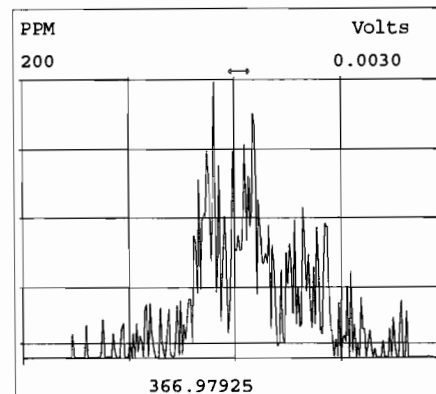
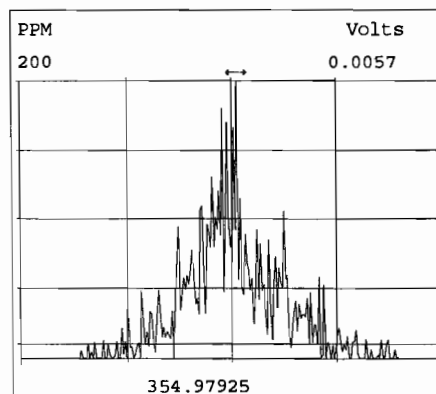
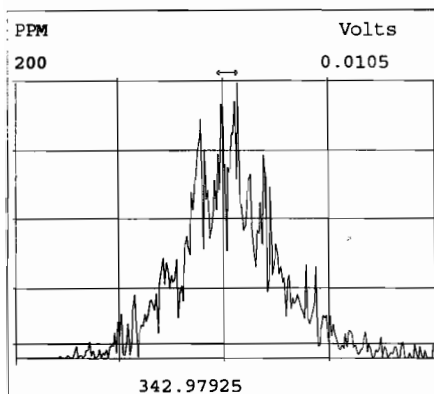
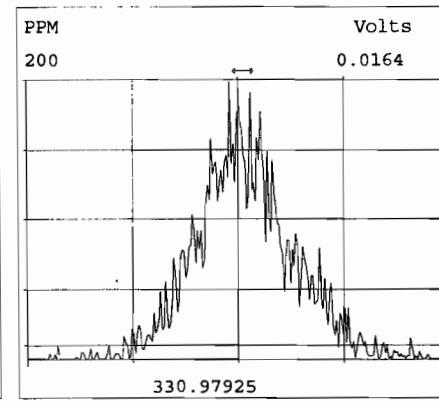
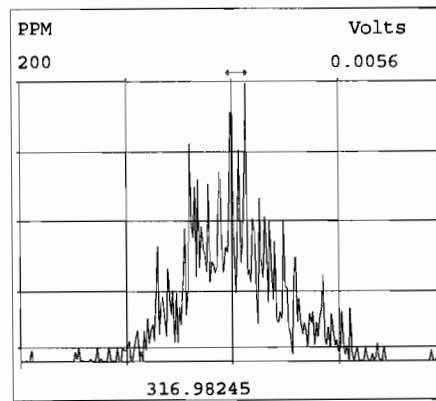
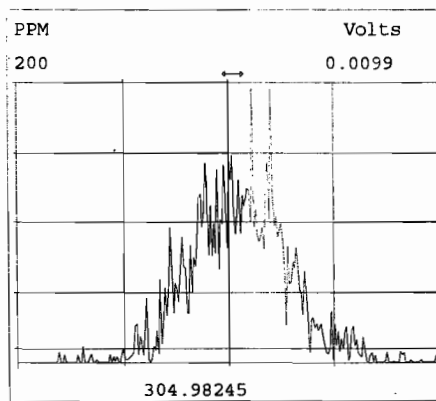
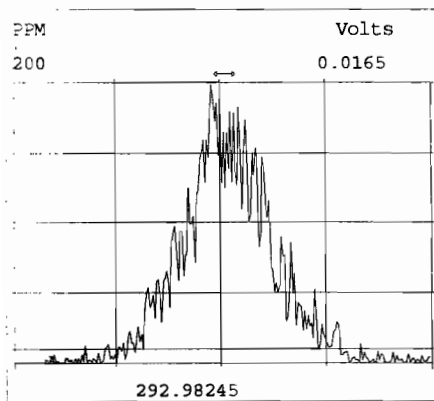


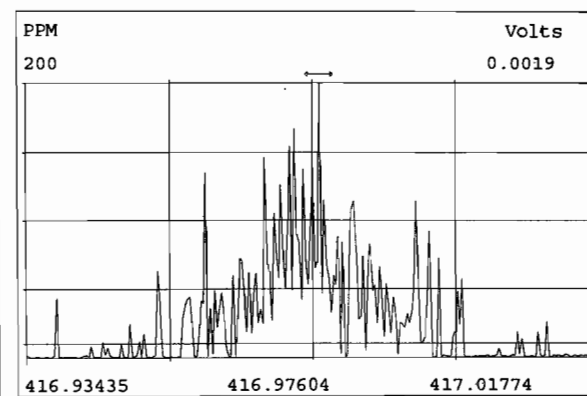
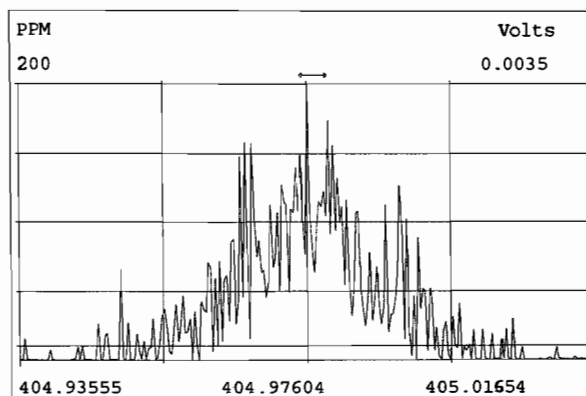
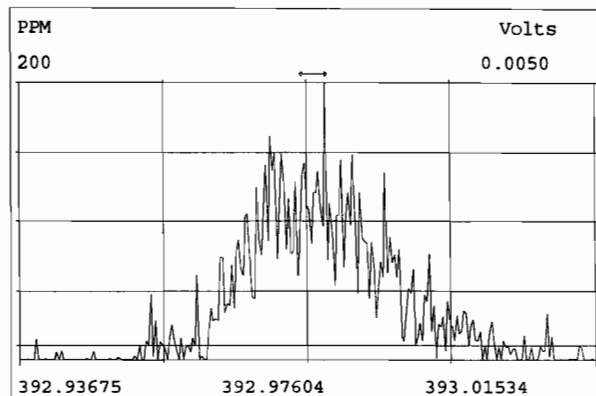
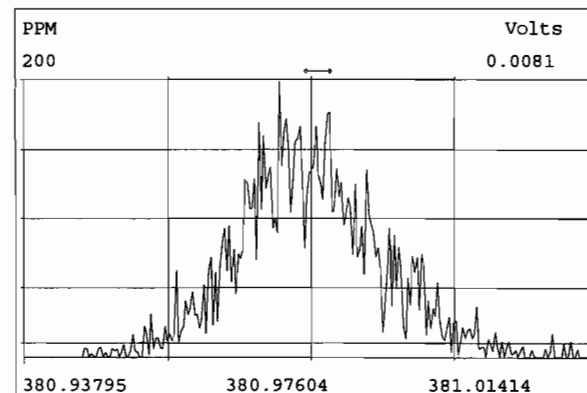
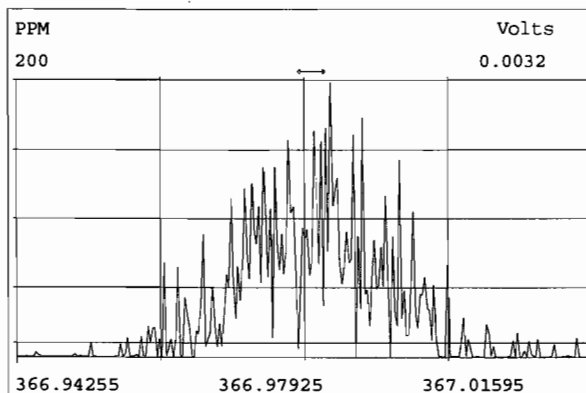
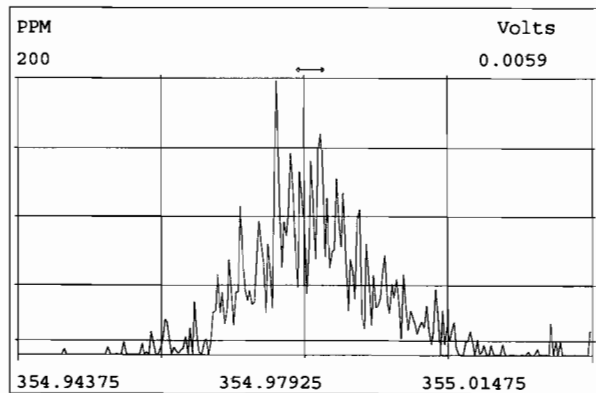
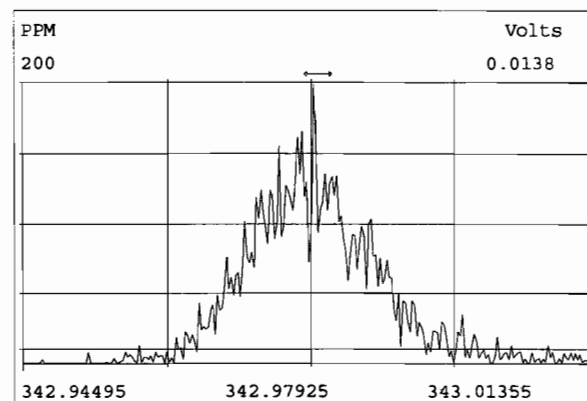
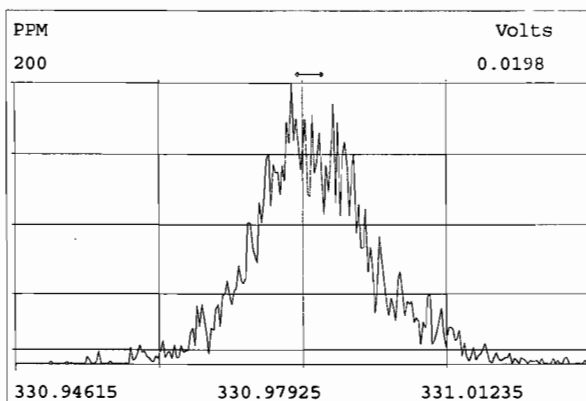
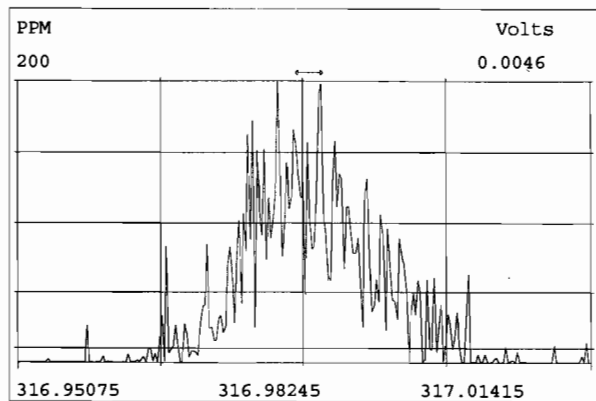
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

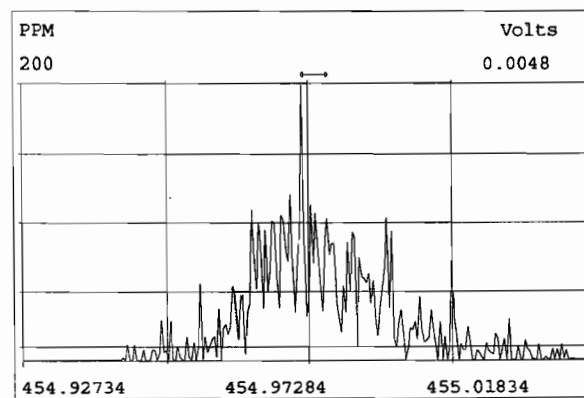
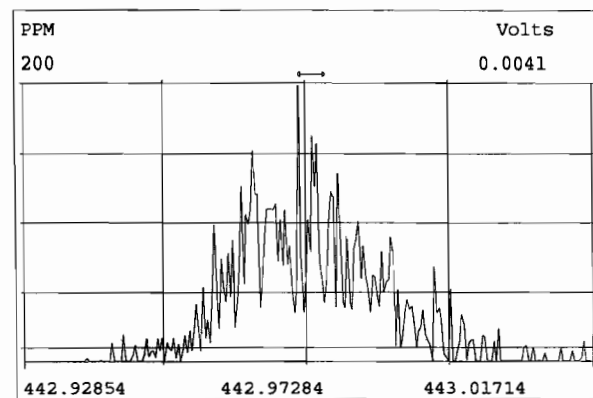
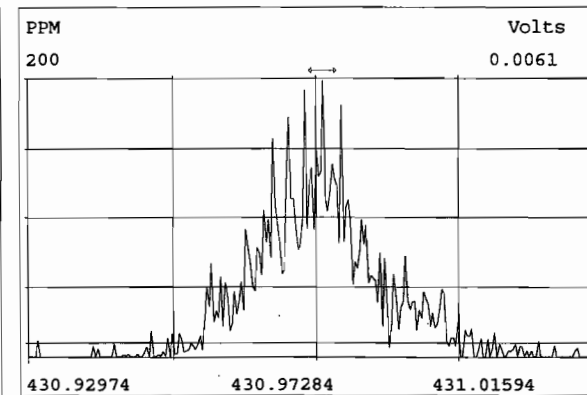
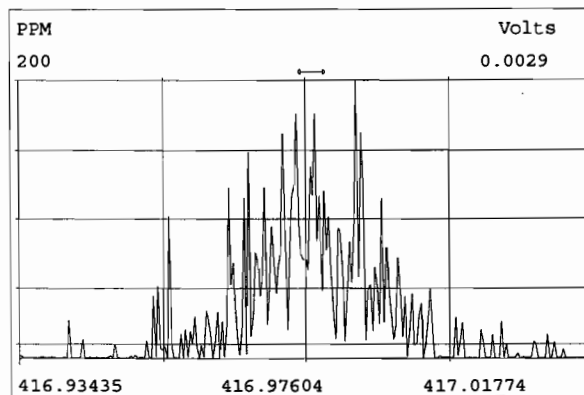
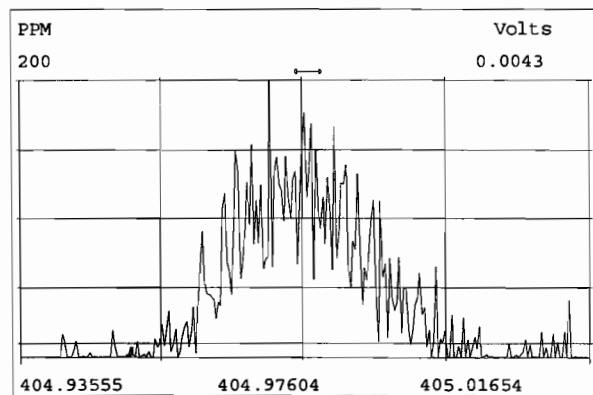
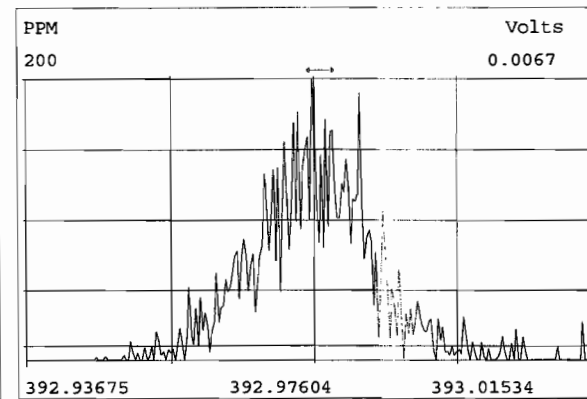
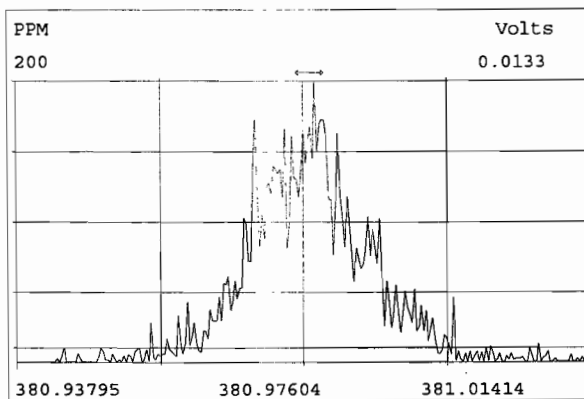
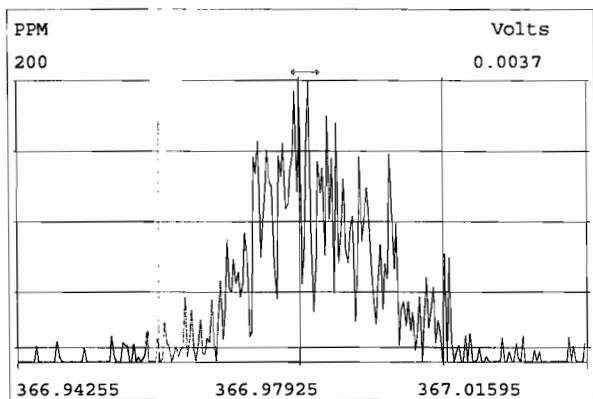


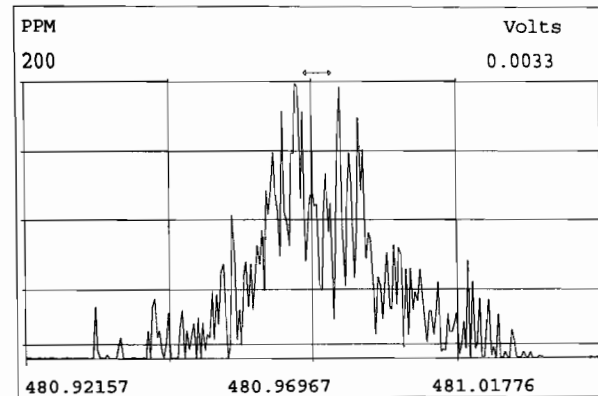
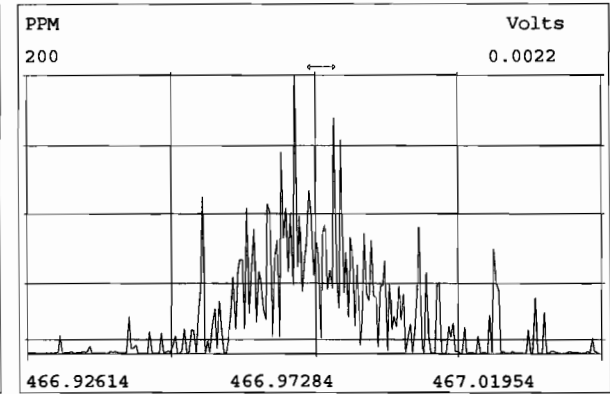
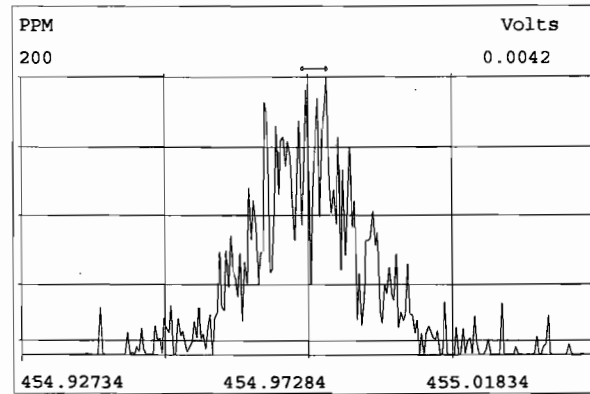
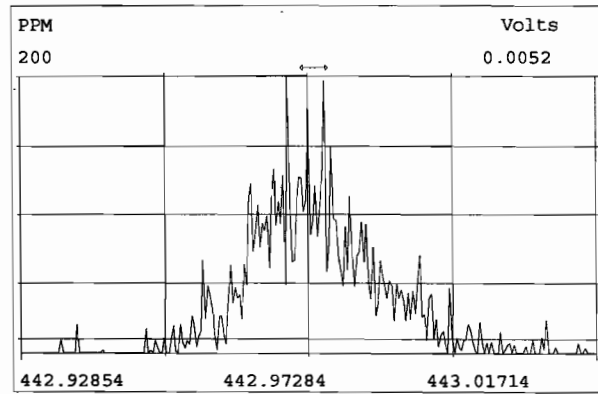
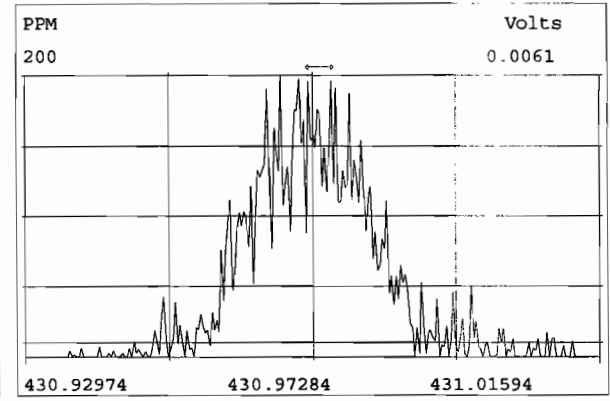
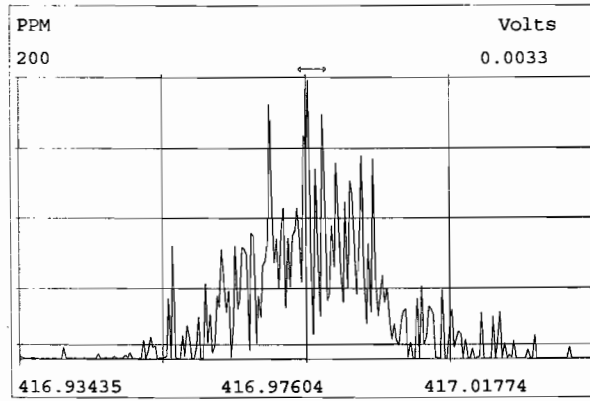
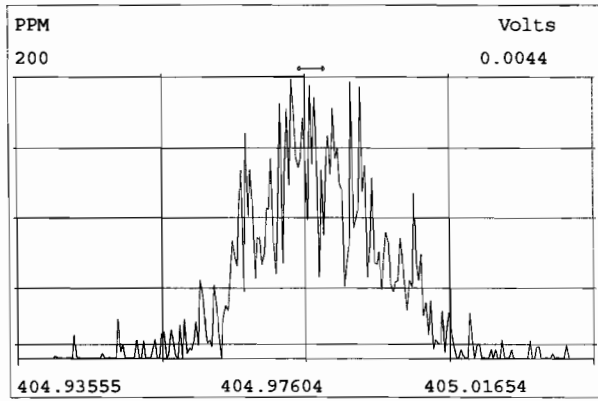
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

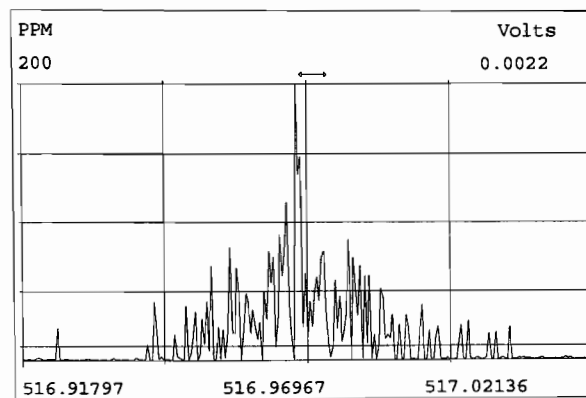
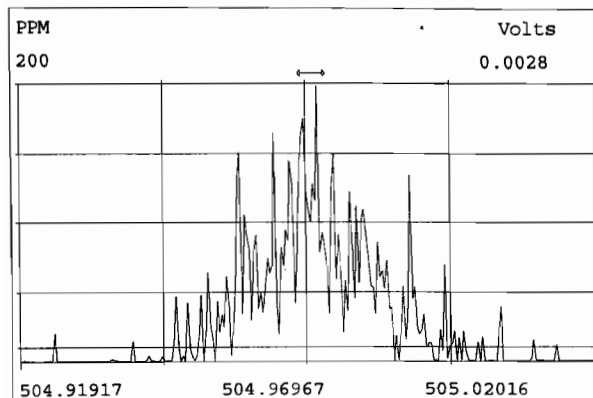
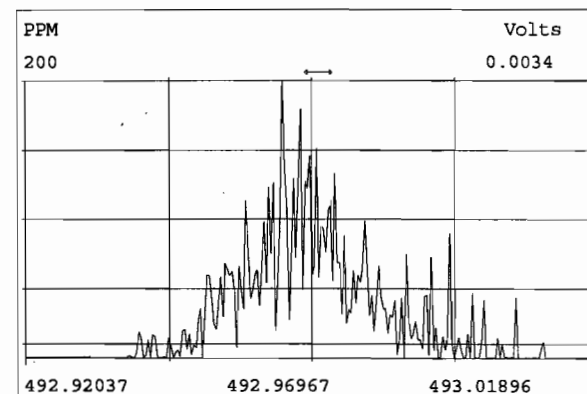
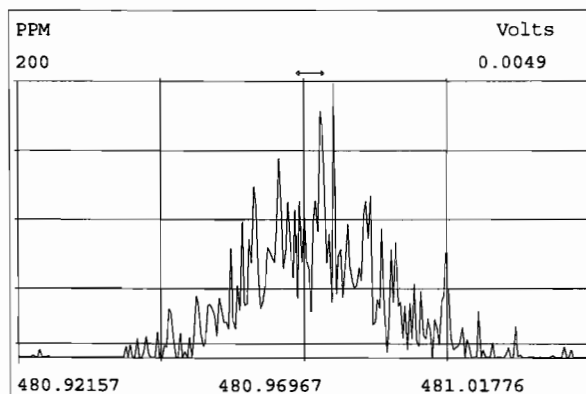
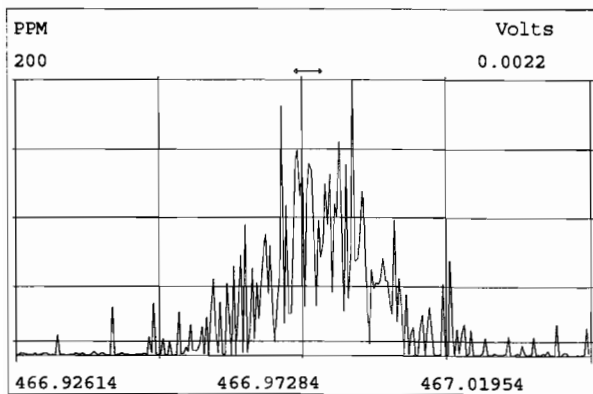
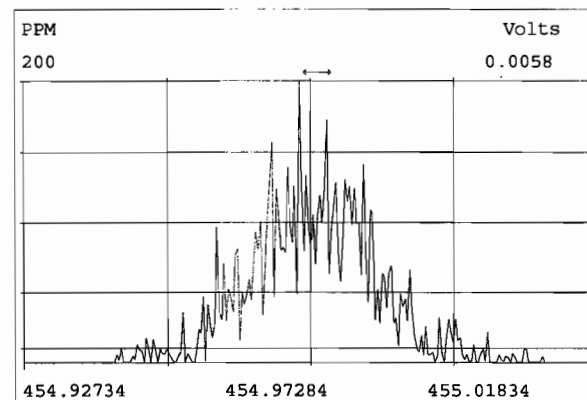
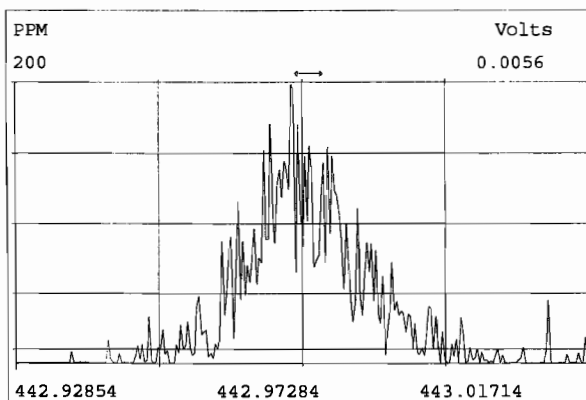
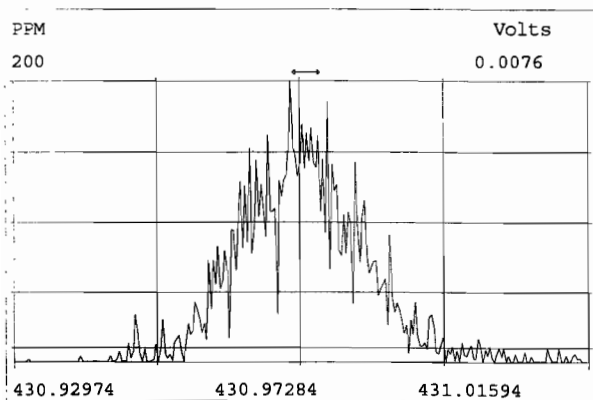












HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191031D2-1

Reviewed By: CT 11/01/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<input type="checkbox"/>
<u>Run Log:</u>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> V
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
- Bottle position verified?	<u>DB</u>	<input type="checkbox"/>

Mass resolution \geq

5k 6-8K 8K 10K
 1614 1699 429 1613/1668/8280

Intergrated peaks display correctly?

GC Break <20%

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours

Comments:

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191031D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC.	CONC.
	FORMING	ABUND.	LIMITS		FOUND	RANGE (3)
	RATIO (1)	RATIO	(2)			(ng/mL)
2,3,7,8-TCDD	M/M+2	0.81	0.65-0.89	y	10.8	7.8 - 12.9
						8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	53.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	52.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	52.6	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	53.5	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	106	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.83	0.65-0.89	y	10.4	8.4 - 12.0
						8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	51.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	49.8	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.0	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	53.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	54.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05-1.43	y	52.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	50.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	50.6	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	106	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: 11/1/19

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: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

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	0.76	0.65-0.89	y	102	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	106	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	y	104	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	87.4	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05-1.43	y	94.0	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	106	72.0 - 138.0
13C-OCDD	M/M+2	0.90	0.76-1.02	y	220	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	105	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	113	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	y	111	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	107	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	95.5	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	103	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	111	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.42	0.37-0.51	y	115	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	124	77.0 - 129.0
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	241	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.59	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: 11/1/19

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: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

ZB-5MS IS Data Filename: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

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)	22:56	1,3,6,8-TCDF (F)	20:49
1,2,8,9-TCDD (L)	27:08	1,2,8,9-TCDF (L)	27:16
1,2,4,7,9-PeCDD (F)	28:43	1,3,4,6,8-PeCDF (F)	27:14
1,2,3,8,9-PeCDD (L)	31:07	1,2,3,8,9-PeCDF (L)	31:21
1,2,4,6,7,9-HxCDD (F)	32:32	1,2,3,4,6,8-HxCDF (F)	31:60
1,2,3,7,8,9-HxCDD (L)	34:29	1,2,3,7,8,9-HxCDF (L)	34:51
1,2,3,4,6,7,9-HpCDD (F)	37:05	1,2,3,4,6,7,8-HpCDF (F)	36:43
1,2,3,4,6,7,8-HpCDD (L)	37:55	1,2,3,4,7,8,9-HpCDF (L)	38:28

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<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: 11/1/19

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: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME		RRT	RRT
	REFERENCE	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	1.196	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.151	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.185	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: 11/1/19

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: 191031D2 S#1 Analysis Date: 31-OCT-19 Time: 23:43:12

NATIVE ANALYTES	RETENTION TIME		RRT	QC LIMITS (1)
	REFERENCE			
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		1.000	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	1.018	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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: 11/1/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191031D2-1

Filename: 191031D2 S:1 Acq:31-OCT-19 23:43:12
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191031D2-1
EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	7.57e+05	0.81 y	0.91	26:17	10.813			* 2.5	*
1,2,3,7,8-PeCDD	3.11e+06	0.64 y	0.90	30:45	53.320			* 2.5	*
1,2,3,4,7,8-HxCDD	3.48e+06	1.24 y	1.10	34:04	50.123			* 2.5	*
1,2,3,6,7,8-HxCDD	3.46e+06	1.24 y	0.94	34:11	52.549			* 2.5	*
1,2,3,7,8,9-HxCDD	3.60e+06	1.22 y	0.96	34:29	52.642			* 2.5	*
1,2,3,4,6,7,8-HpCDD	3.43e+06	1.04 y	0.98	37:55	53.483			* 2.5	*
OCDD	6.08e+06	0.90 y	0.96	41:13	105.67			* 2.5	*
2,3,7,8-TCDF	1.11e+06	0.83 y	0.95	25:30	10.440			* 2.5	*
1,2,3,7,8-PeCDF	4.92e+06	1.59 y	0.96	29:35	51.627			* 2.5	*
2,3,4,7,8-PeCDF	4.87e+06	1.63 y	1.01	30:28	49.752			* 2.5	*
1,2,3,4,7,8-HxCDF	5.12e+06	1.24 y	1.18	33:11	52.029			* 2.5	*
1,2,3,6,7,8-HxCDF	5.31e+06	1.24 y	1.07	33:18	53.516			* 2.5	*
2,3,4,6,7,8-HxCDF	5.53e+06	1.24 y	1.11	33:54	54.074			* 2.5	*
1,2,3,7,8,9-HxCDF	4.78e+06	1.22 y	1.06	34:51	52.436			* 2.5	*
1,2,3,4,6,7,8-HpCDF	4.68e+06	1.01 y	1.13	36:43	50.846			* 2.5	*
1,2,3,4,7,8,9-HpCDF	4.40e+06	1.02 y	1.28	38:28	50.637			* 2.5	*
OCDF	7.81e+06	0.91 y	0.95	41:27	105.58			* 2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	76.0	76.8	*		*
Total Penta-Dioxins	201	201	*		*
Total Hexa-Dioxins	227	228	*		*
Total Hepta-Dioxins	123	124	*		*
Total Tetra-Furans	40.1	40.6	*		*
Total Penta-Furans	218.13	219.55	*		*
Total Hexa-Furans	276	276	*		*
Total Hepta-Furans	102	102	*		*

IS	13C-2,3,7,8-TCDD	7.73e+06	0.76 y	1.10	26:15	102.30			
IS	13C-1,2,3,7,8-PeCDD	6.45e+06	0.63 y	0.88	30:44	106.10			
IS	13C-1,2,3,4,7,8-HxCDD	6.30e+06	1.33 y	0.64	34:04	104.39			
IS	13C-1,2,3,6,7,8-HxCDD	7.02e+06	1.26 y	0.86	34:10	87.406			
IS	13C-1,2,3,7,8,9-HxCDD	7.12e+06	1.28 y	0.81	34:28	93.997			
IS	13C-1,2,3,4,6,7,8-HpCDD	6.54e+06	1.04 y	0.65	37:55	106.49			
IS	13C-OCDD	1.20e+07	0.90 y	0.58	41:12	220.31			
IS	13C-2,3,7,8-TCDF	1.12e+07	0.77 y	1.03	25:29	104.72			
IS	13C-1,2,3,7,8-PeCDF	9.91e+06	1.63 y	0.85	29:34	112.71			
IS	13C-2,3,4,7,8-PeCDF	9.65e+06	1.52 y	0.85	30:28	110.65			
IS	13C-1,2,3,4,7,8-HxCDF	8.36e+06	0.51 y	0.83	33:10	106.96			
IS	13C-1,2,3,6,7,8-HxCDF	9.28e+06	0.52 y	1.03	33:17	95.491			
IS	13C-2,3,4,6,7,8-HxCDF	9.19e+06	0.53 y	0.95	33:53	102.63			
IS	13C-1,2,3,7,8,9-HxCDF	8.59e+06	0.52 y	0.83	34:51	110.52			
IS	13C-1,2,3,4,6,7,8-HpCDF	8.16e+06	0.42 y	0.76	36:42	114.71			
IS	13C-1,2,3,4,7,8,9-HpCDF	6.79e+06	0.44 y	0.58	38:27	124.29			
IS	13C-OCDF	1.56e+07	0.92 y	0.69	41:26	241.28			

Rec Qual

102
106
104
87.4
94.0
106
110
105
113
111
107
95.5
103
111
115
124
121

C/Up	37C1-2,3,7,8-TCDD	7.92e+05		1.20	26:17	9.5903			
RS/RT	13C-1,2,3,4-TCDD	6.90e+06	0.81 y	1.00	25:42	100.00			
RS	13C-1,2,3,4-TCDF	1.03e+07	0.82 y	1.00	24:17	100.00			
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.39e+06	0.53 y	1.00	33:35	100.00			

Integrations
by
Analyst: DB

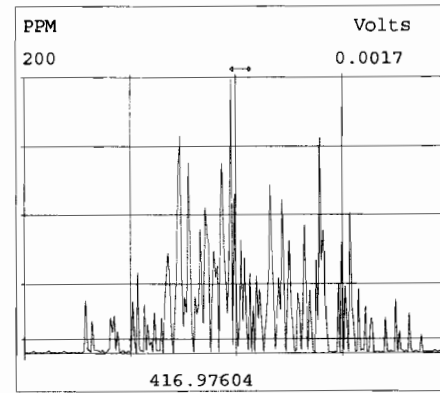
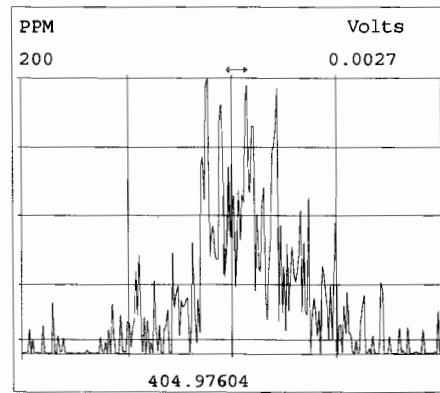
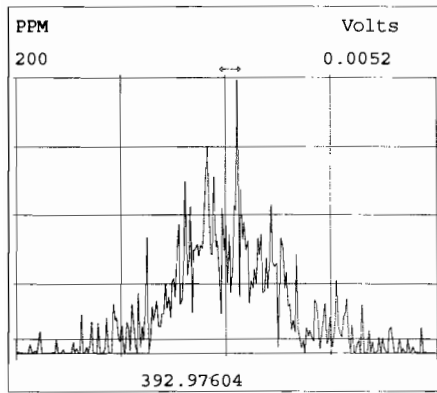
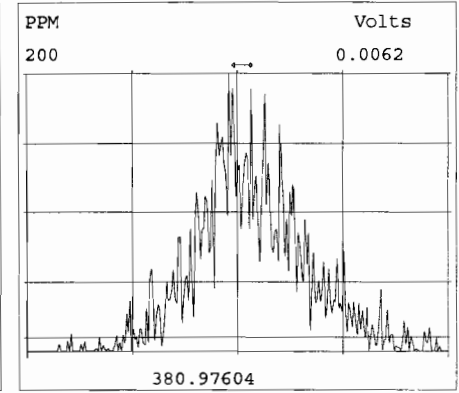
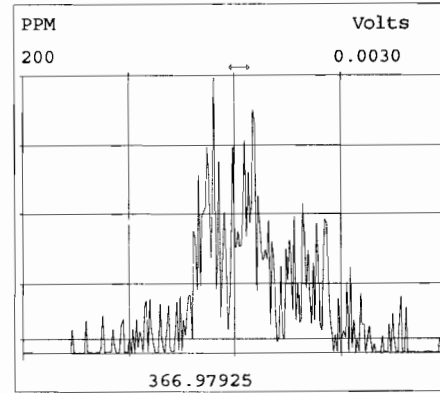
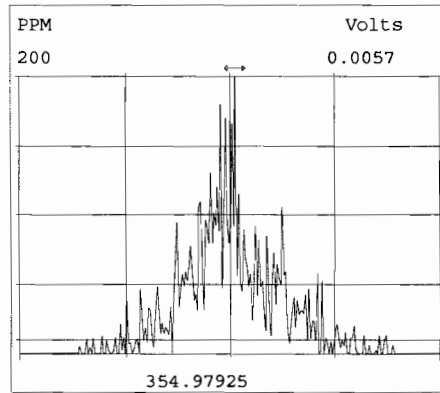
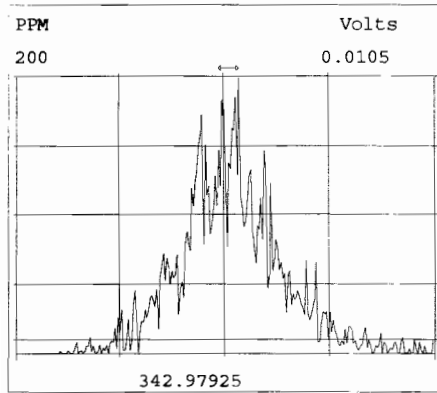
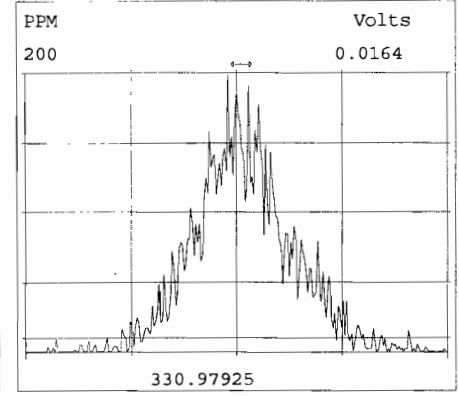
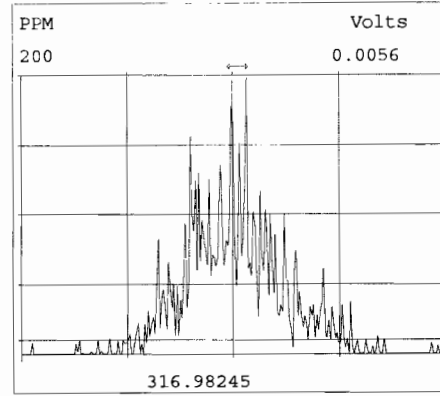
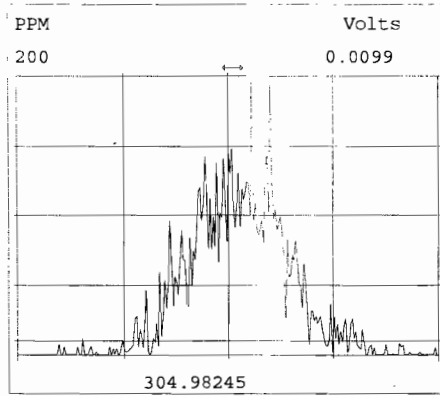
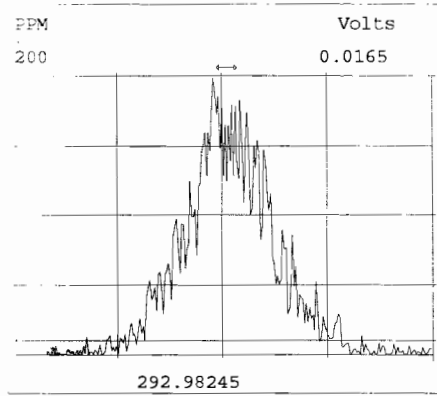
Reviewed
by
Analyst: CT

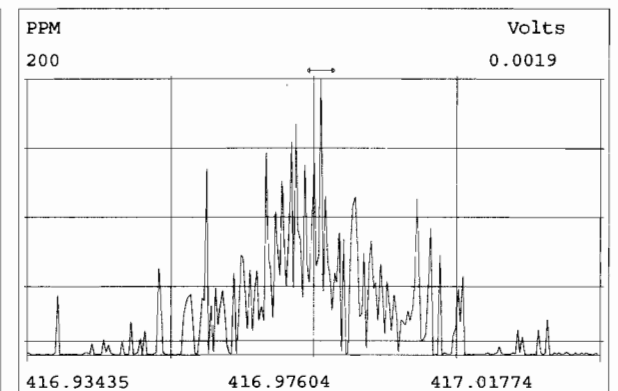
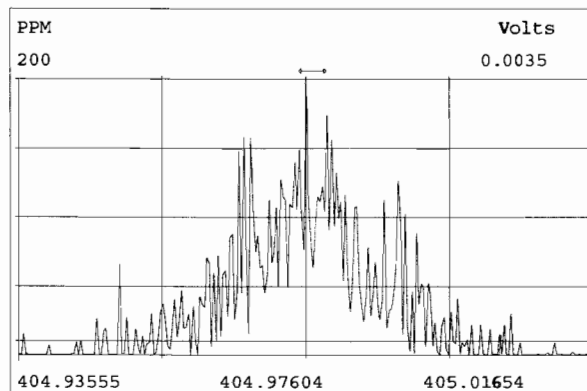
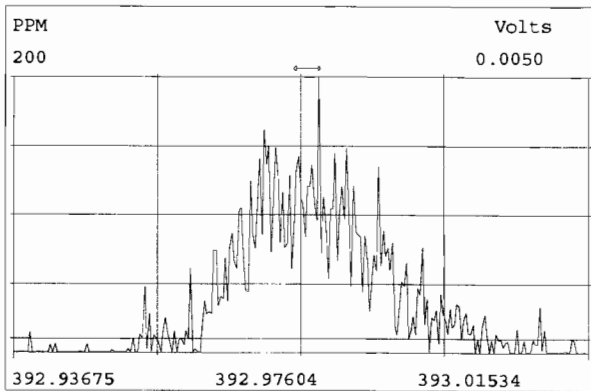
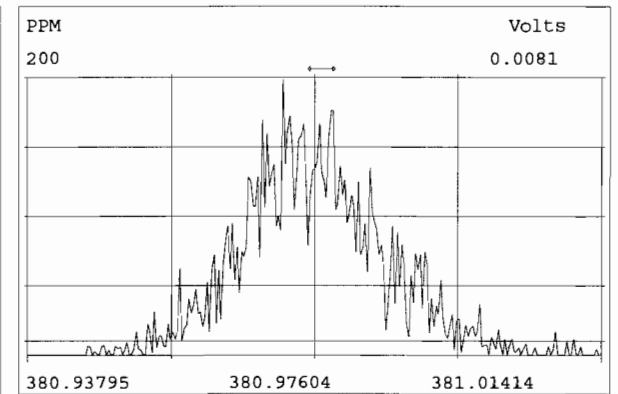
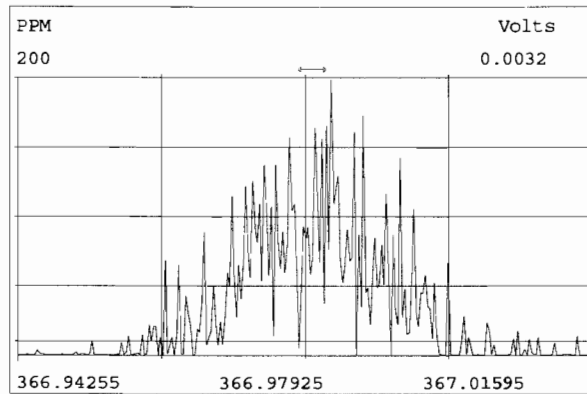
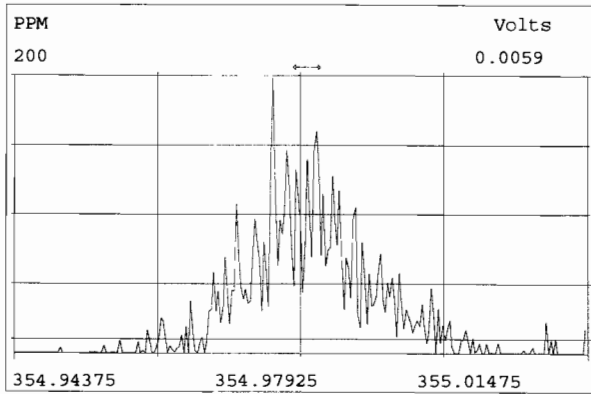
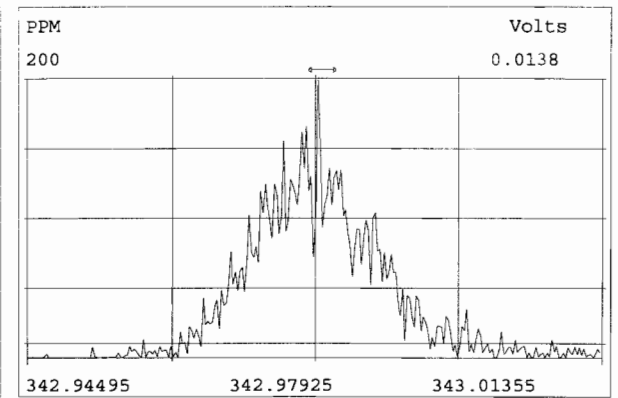
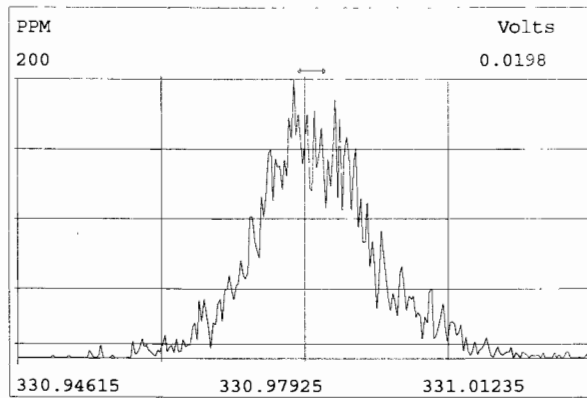
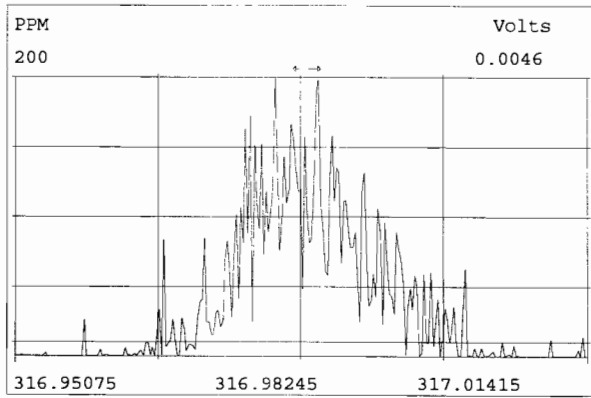
Date: 11/1/19

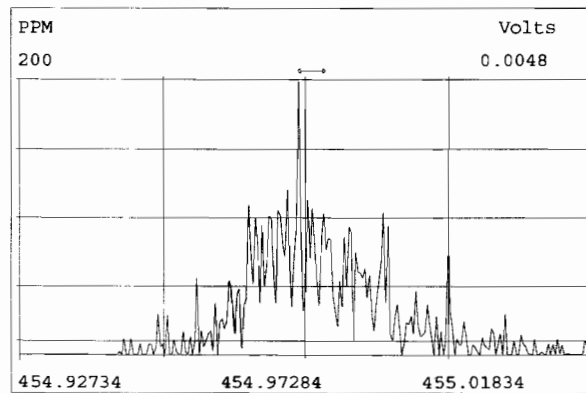
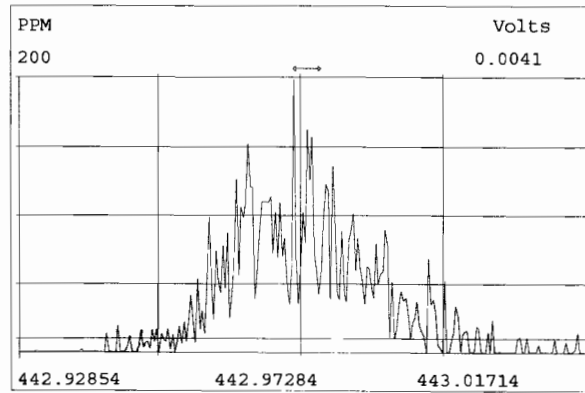
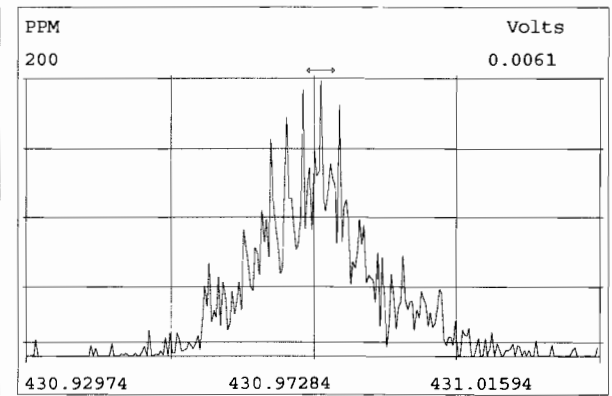
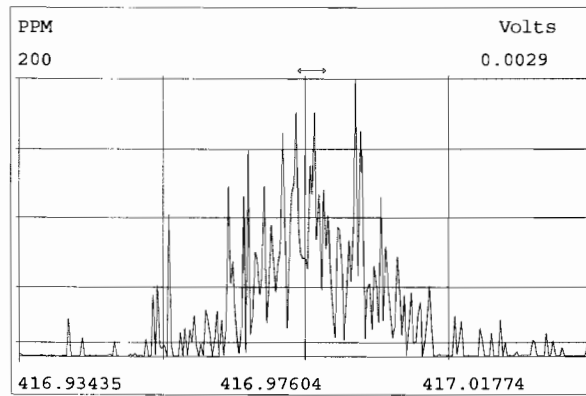
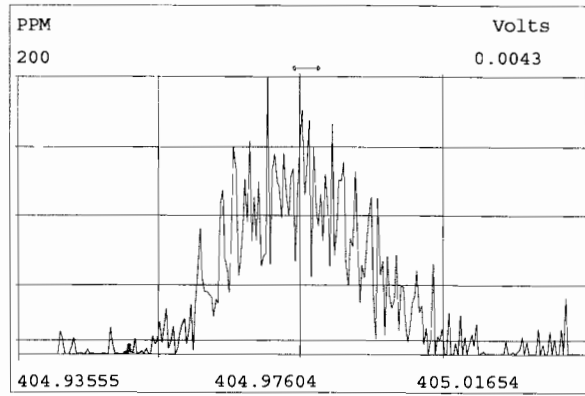
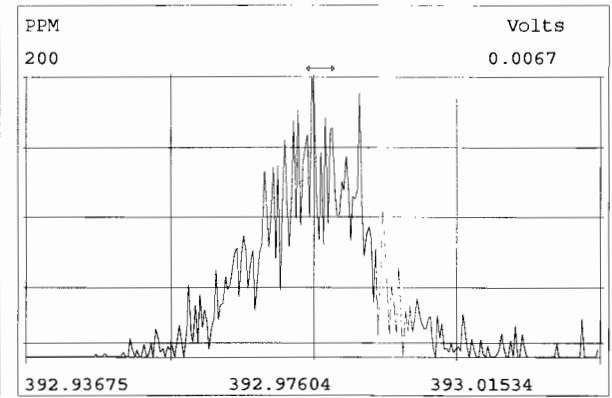
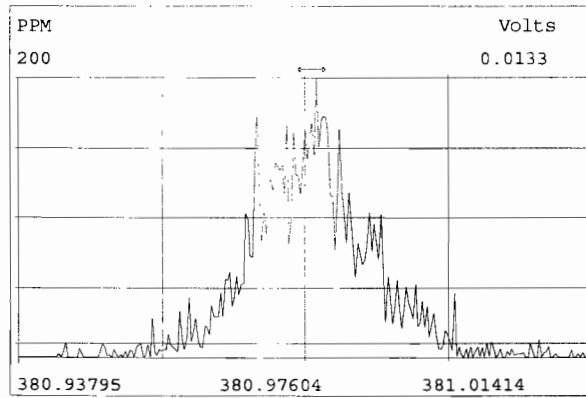
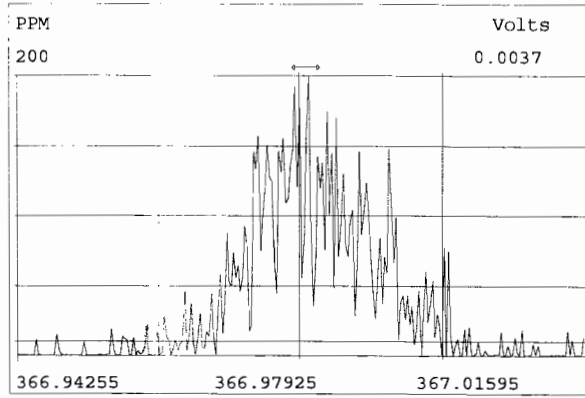
Date: 11/01/19

Vista Analytical Laboratory - Injection Log Run file: 191031D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191031D2	1	ST191031D2-1	DB	31-OCT-19	23:43:12	ST191031D2-1	NA
191031D2	2	SOLVENT BLANK	DB	1-NOV-19	00:30:52	ST191031D2-1	NA
191031D2	3	1903565-02RE1	DB	1-NOV-19	01:18:40	ST191031D2-1	NA
191031D2	4	1903565-03RE1	DB	1-NOV-19	02:06:31	ST191031D2-1	NA
191031D2	5	1903565-04RE1	DB	1-NOV-19	02:54:17	ST191031D2-1	NA
191031D2	6	1903565-05RE1	DB	1-NOV-19	03:42:09	ST191031D2-1	NA
191031D2	7	1903565-06RE1	DB	1-NOV-19	04:29:56	ST191031D2-1	NA
191031D2	8	1903565-07RE1	DB	1-NOV-19	05:17:42	ST191031D2-1	NA
191031D2	9	B9J0288-DUP1	DB	1-NOV-19	06:05:45	ST191031D2-1	NA
191031D2	10	1903565-08RE1	DB	1-NOV-19	06:53:31	ST191031D2-1	NA
191031D2	11	1903565-09RE1@20X	DB	1-NOV-19	07:41:16	ST191031D2-1	NA
191031D2	12	1903565-10RE1	DB	1-NOV-19	08:29:07	ST191031D2-1	NA
191031D2	13	1903565-11RE1	DB	1-NOV-19	09:16:52	ST191031D2-1	NA
191031D2	14	1903565-12RE1	DB	1-NOV-19	10:04:37	ST191031D2-1	NA
191031D2	15	1903565-13RE1	DB	1-NOV-19	10:52:33	ST191031D2-1	NA

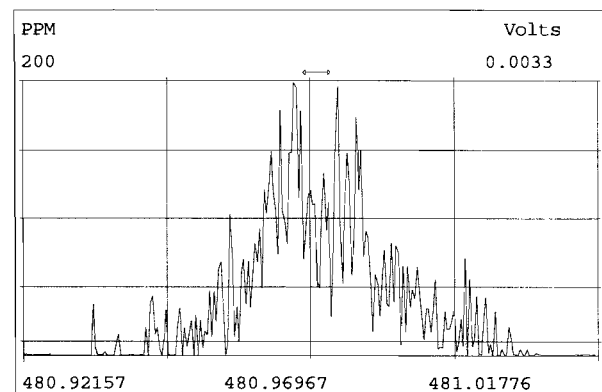
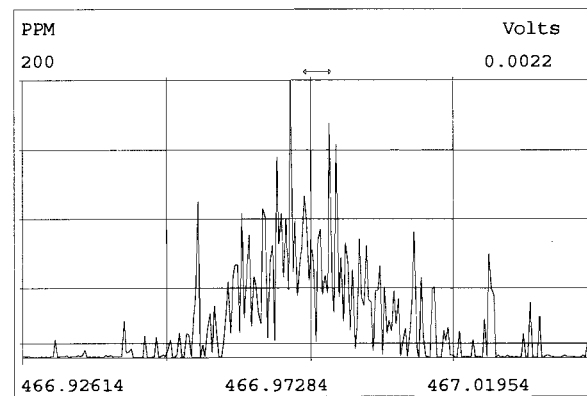
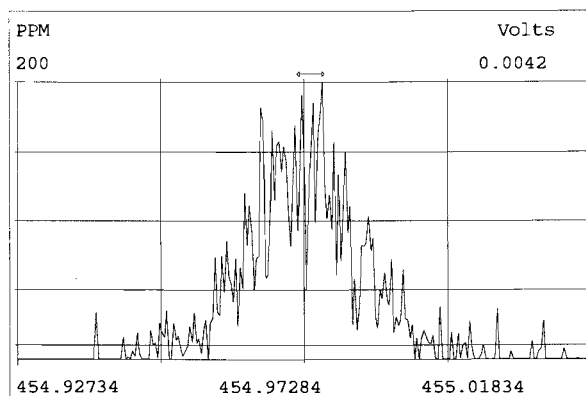
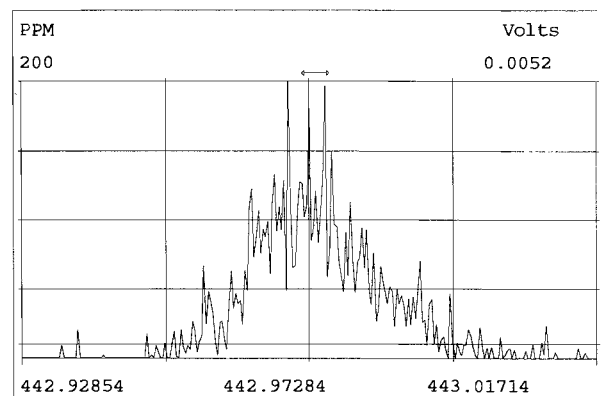
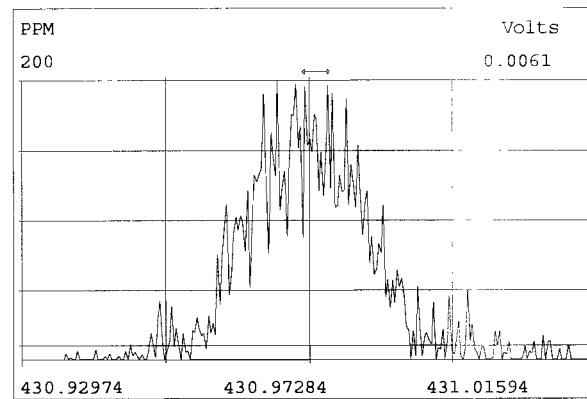
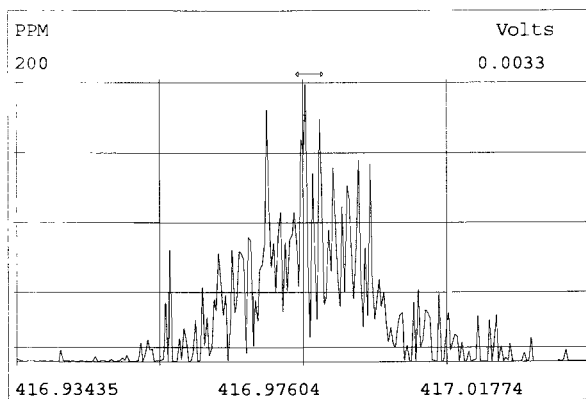
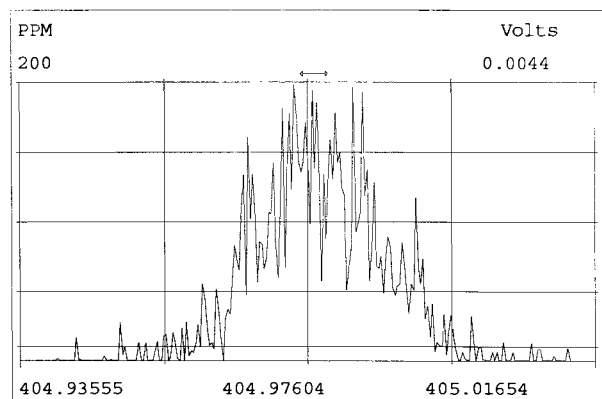


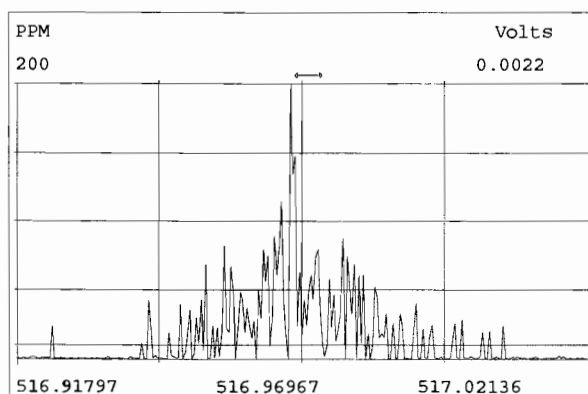
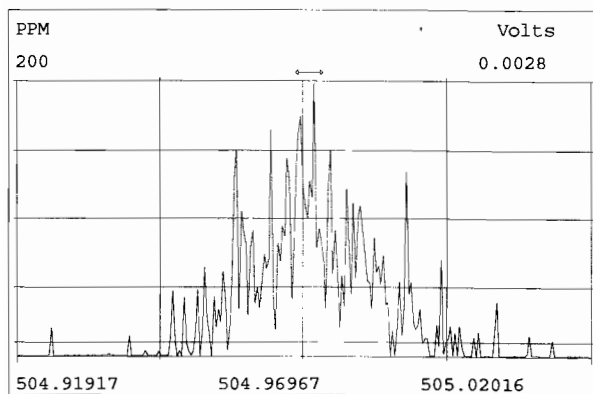
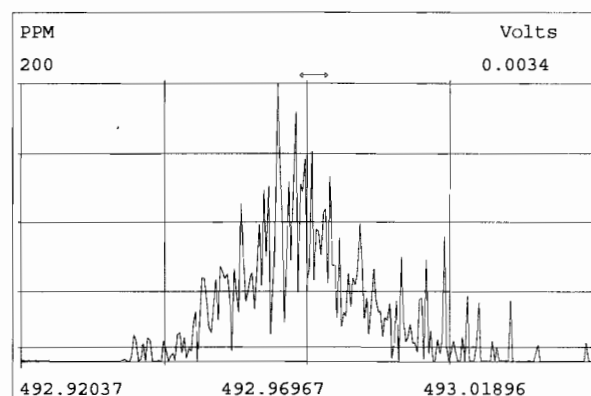
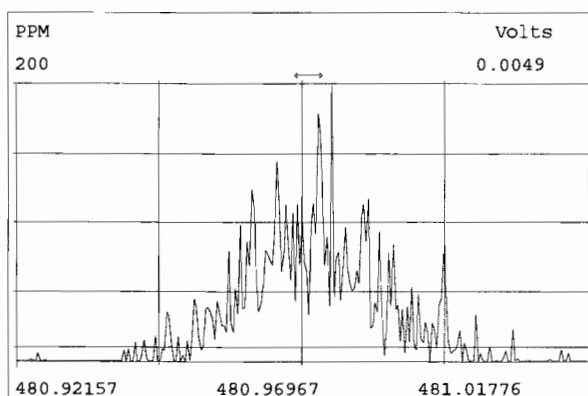
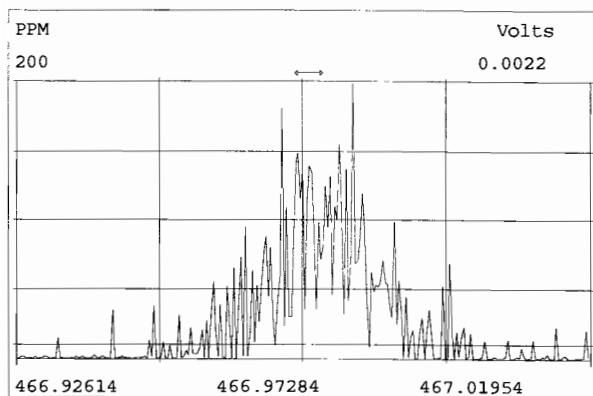
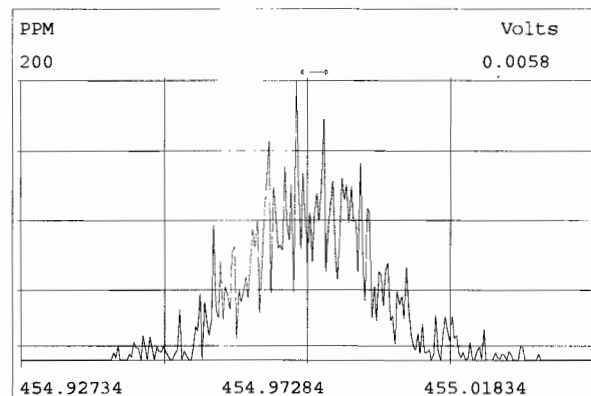
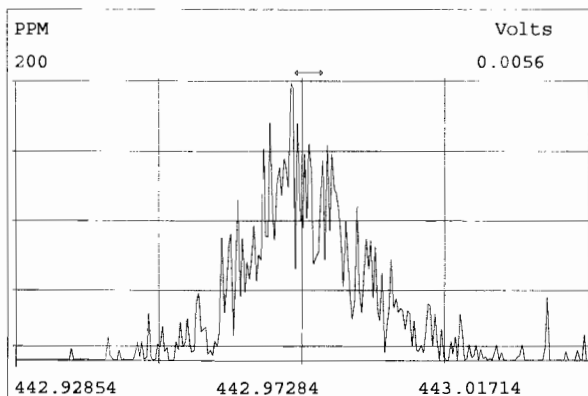
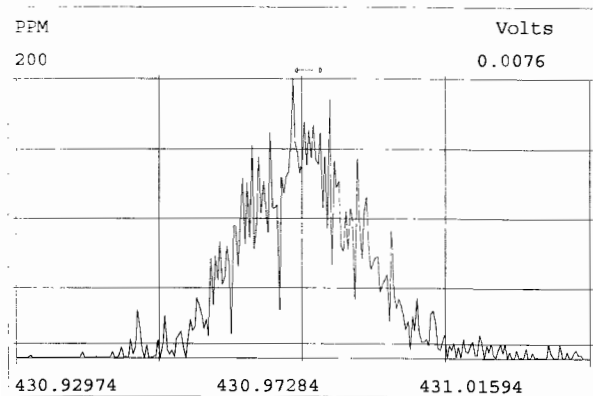




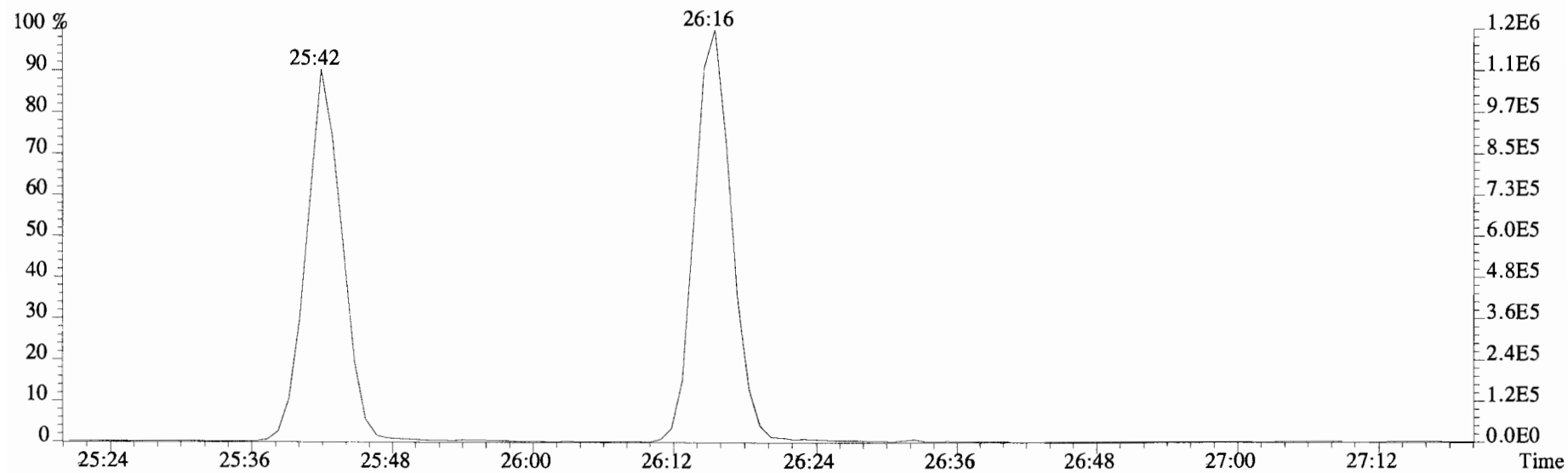
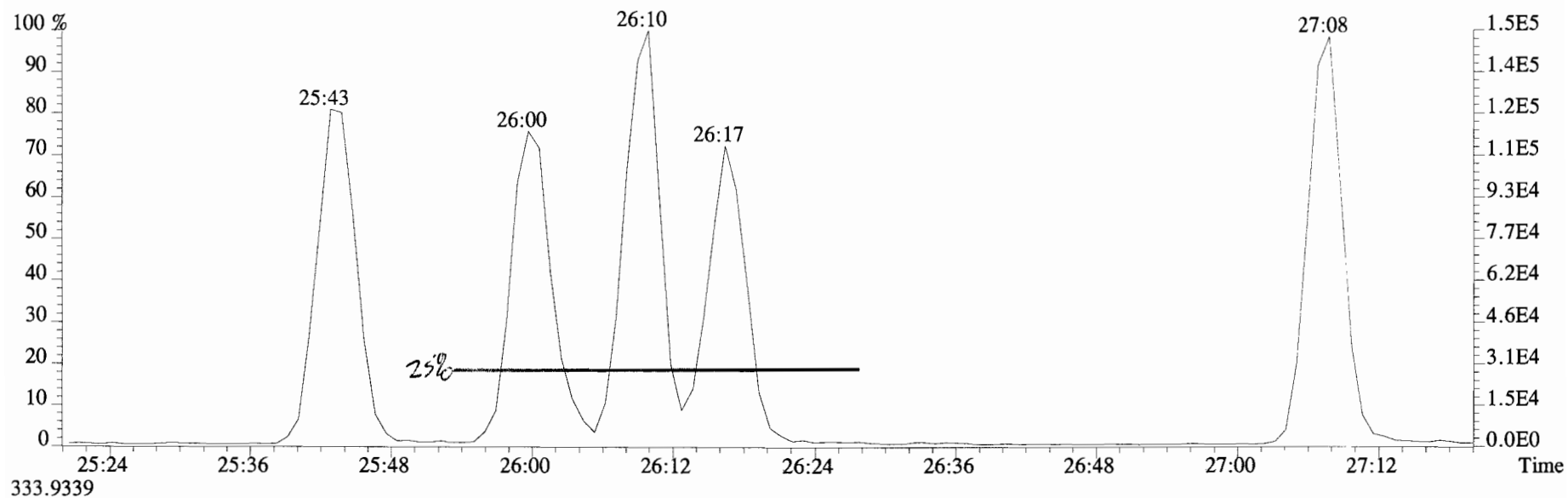
Peak Locate Examination:31-OCT-2019:23:41 File:RES_CHECK

Experiment:OCDD_DB5 Function:4 Reference:PFK

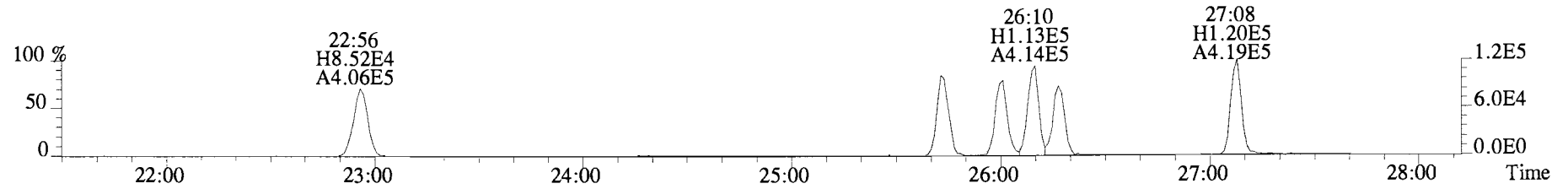




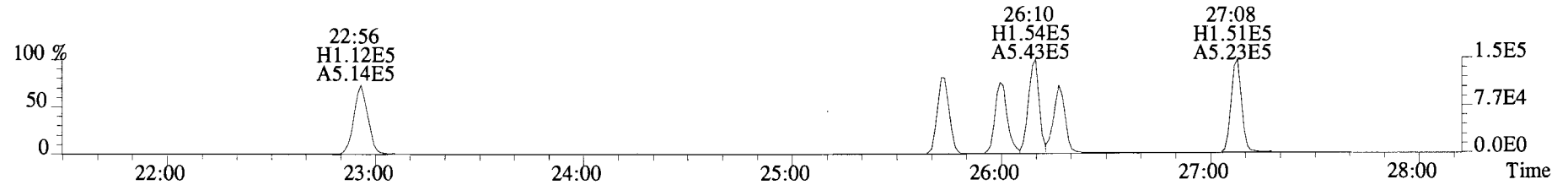
File:191031D2 #1-493 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



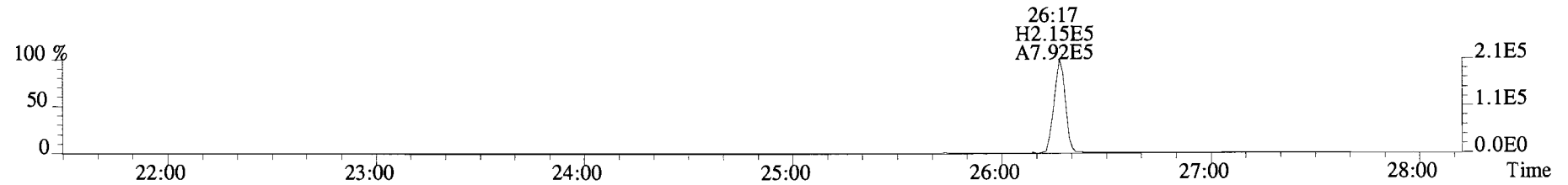
File:191031D2 #1-493 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



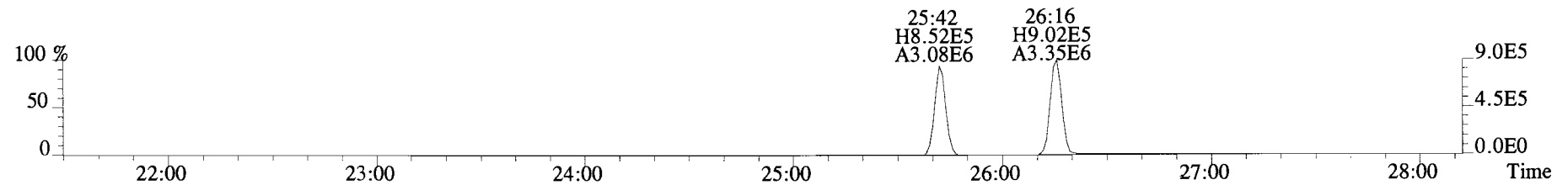
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



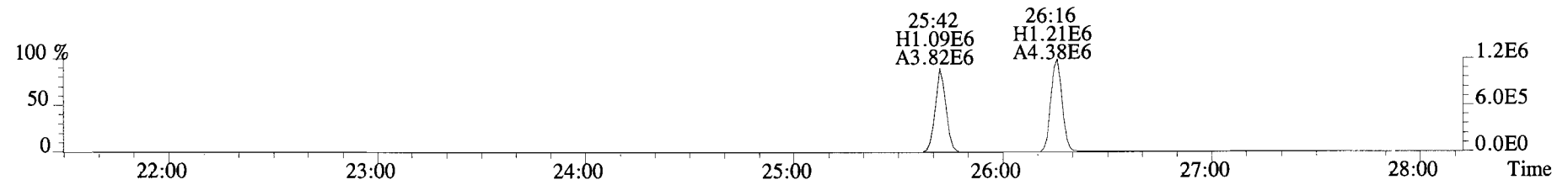
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



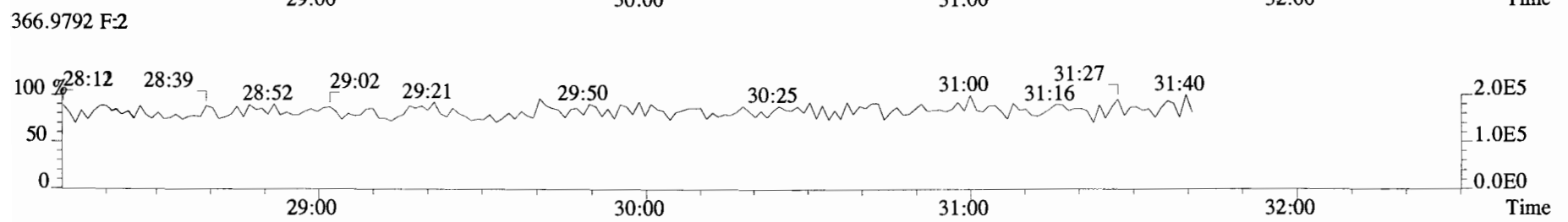
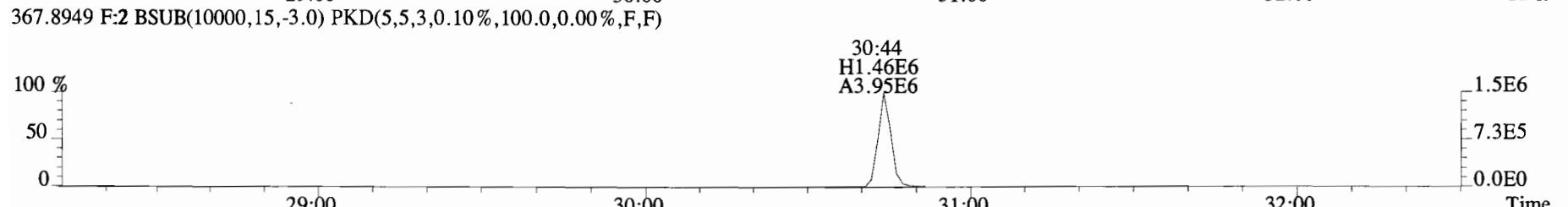
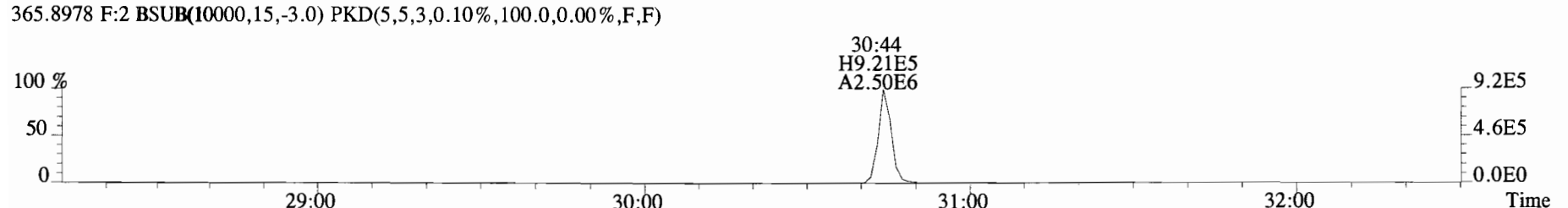
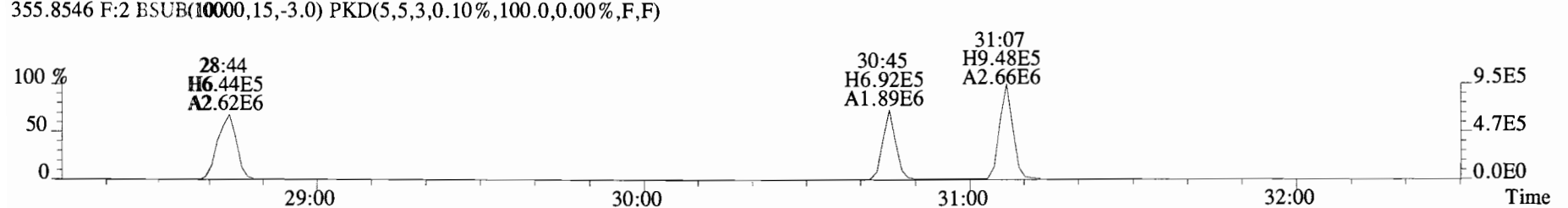
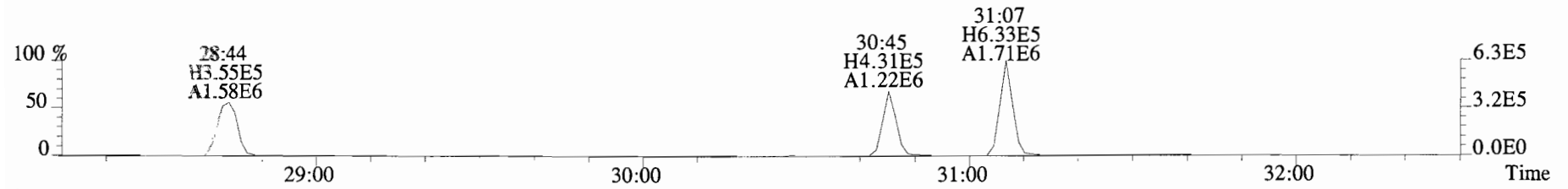
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



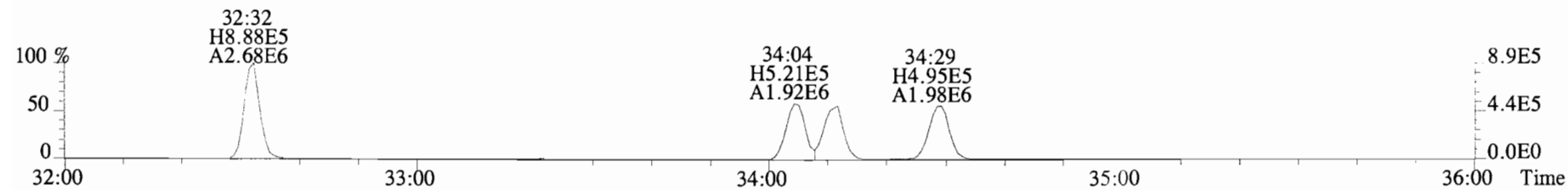
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



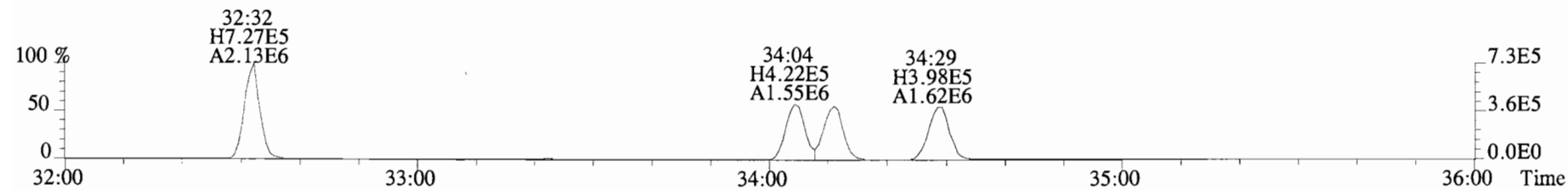
File:191031D2 #1-211 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
 353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



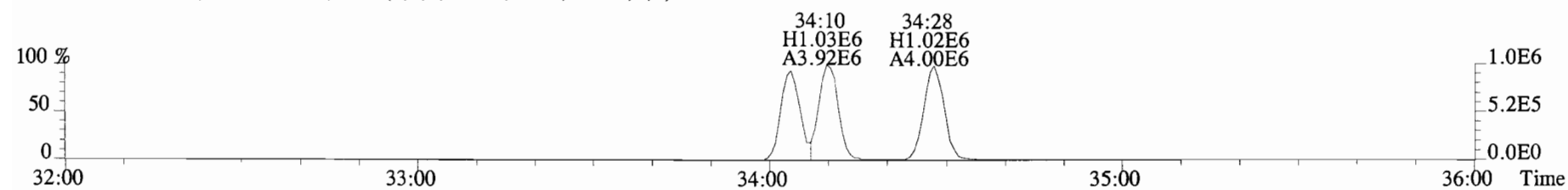
File:191031D2 #1-384 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



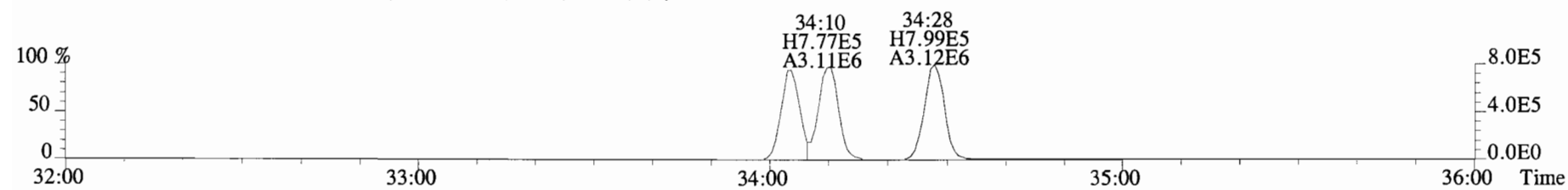
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



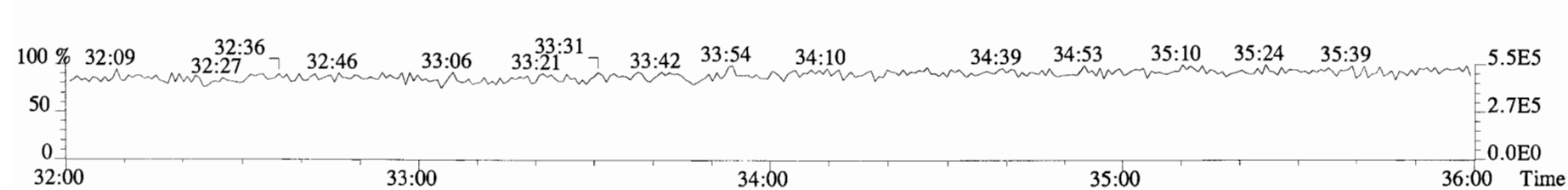
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



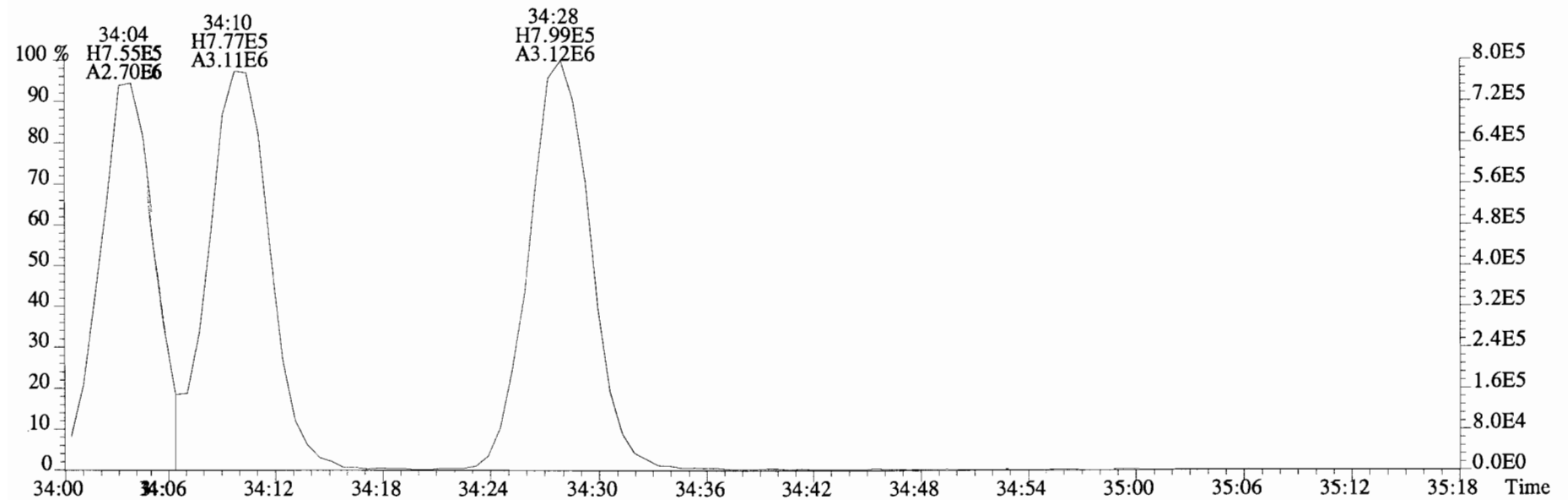
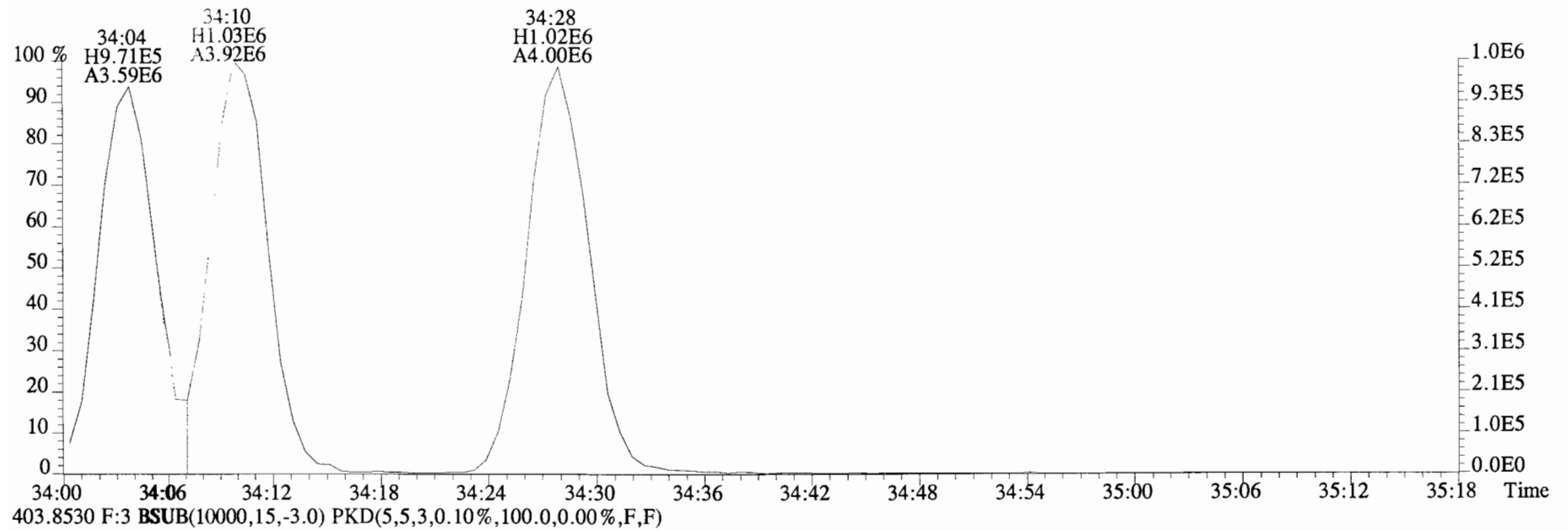
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



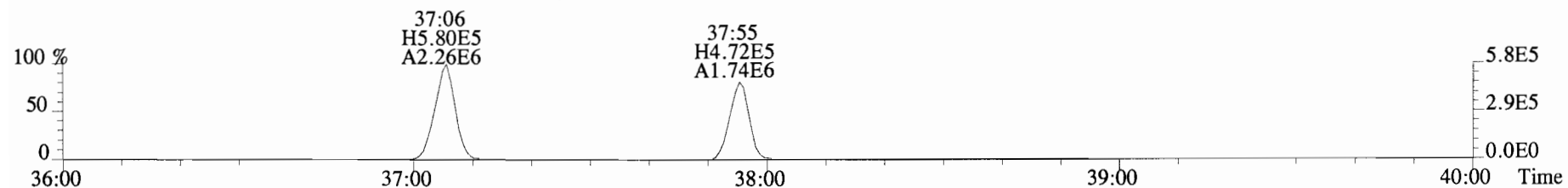
392.9760 F:3



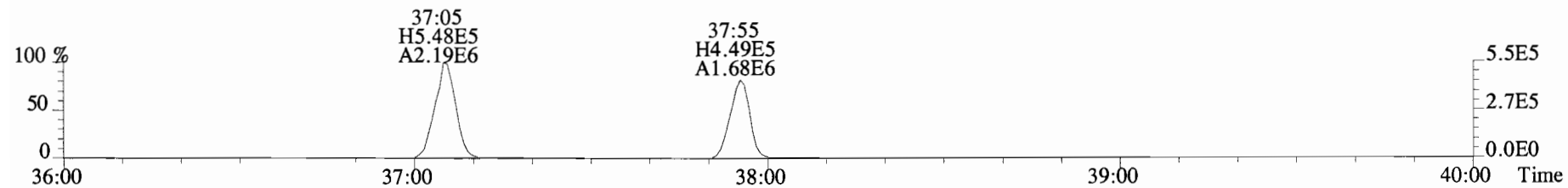
File:191031D2 #1-384 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



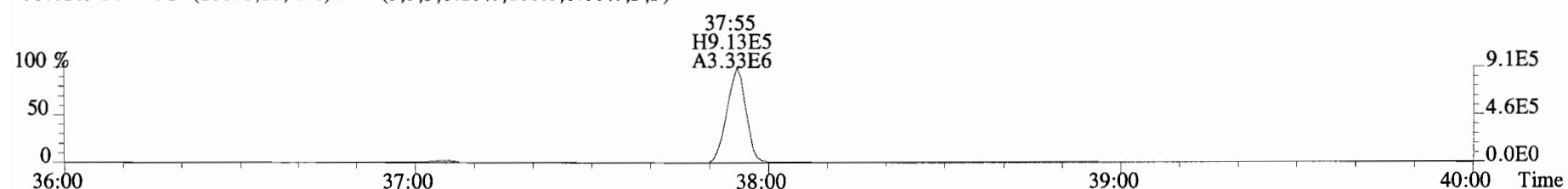
File:191031D2 #1-356 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



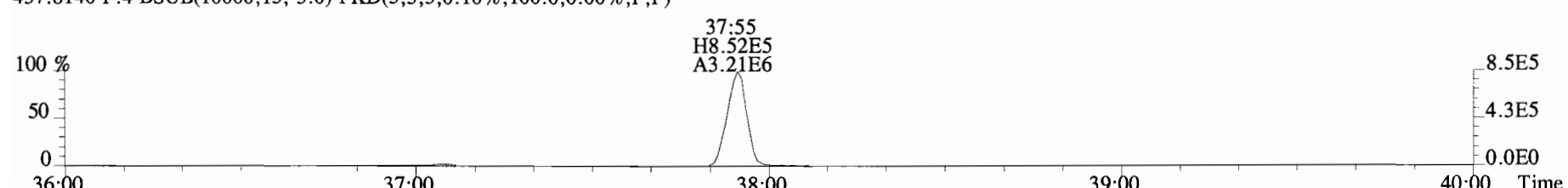
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



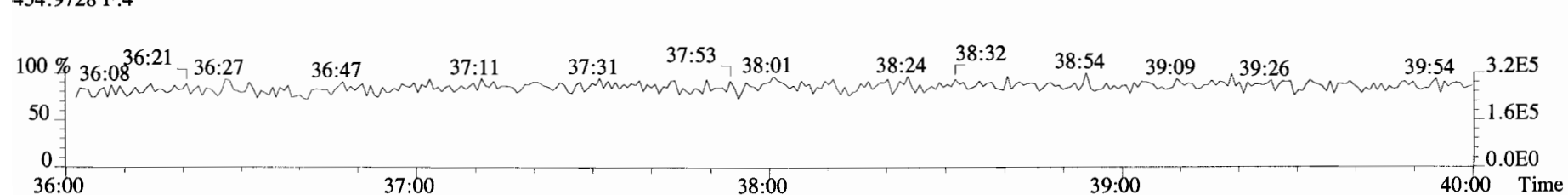
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



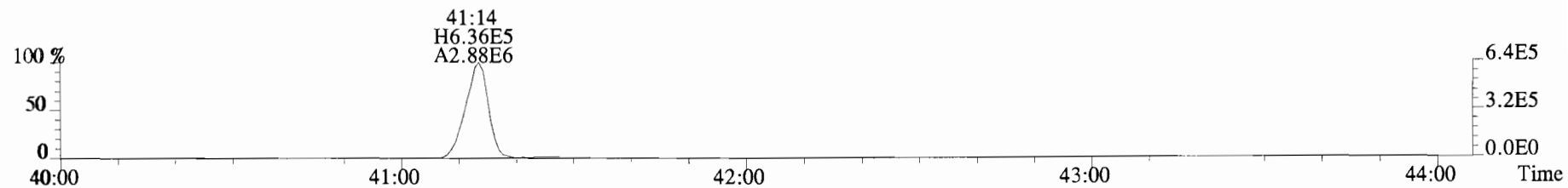
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



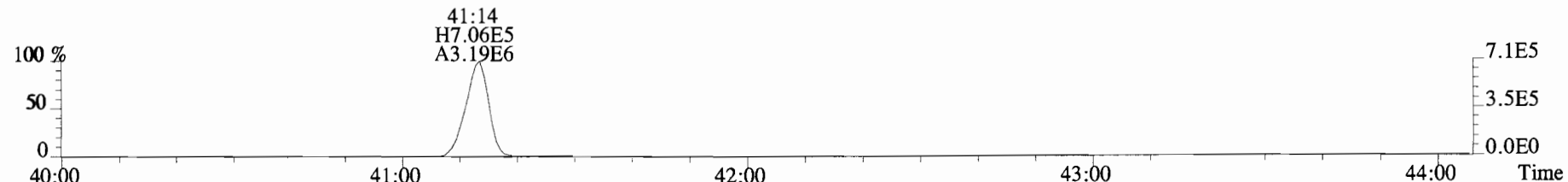
454.9728 F:4



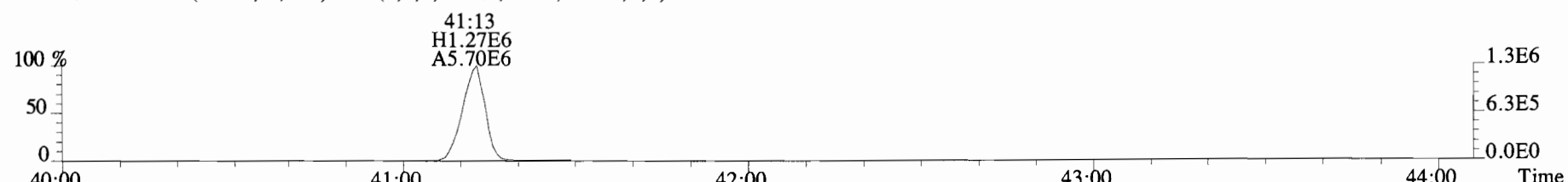
File:191031D2 #1-431 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



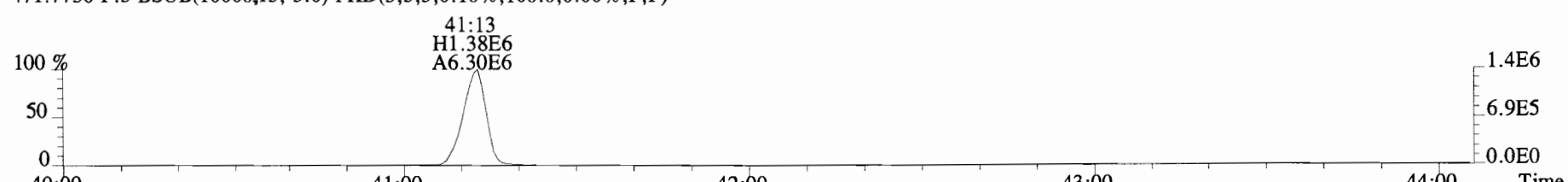
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



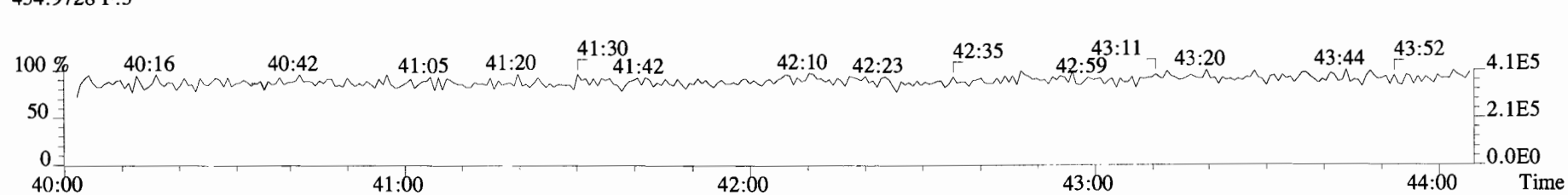
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



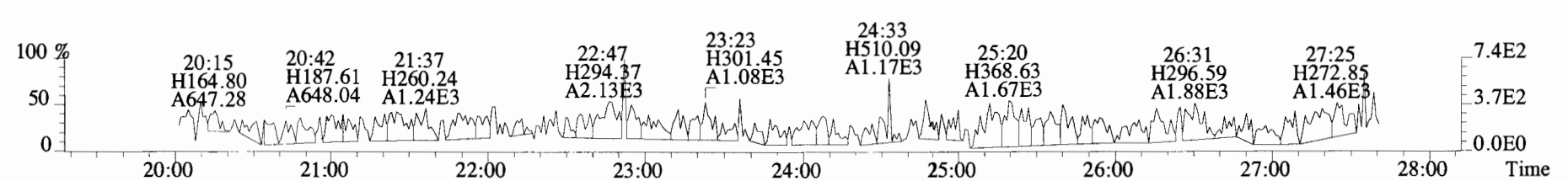
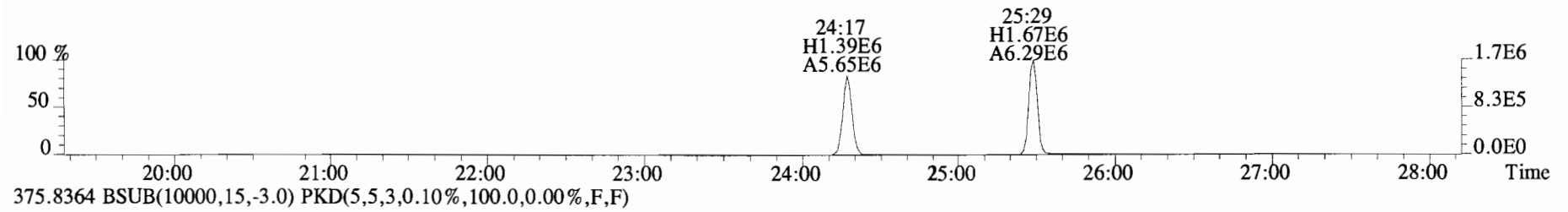
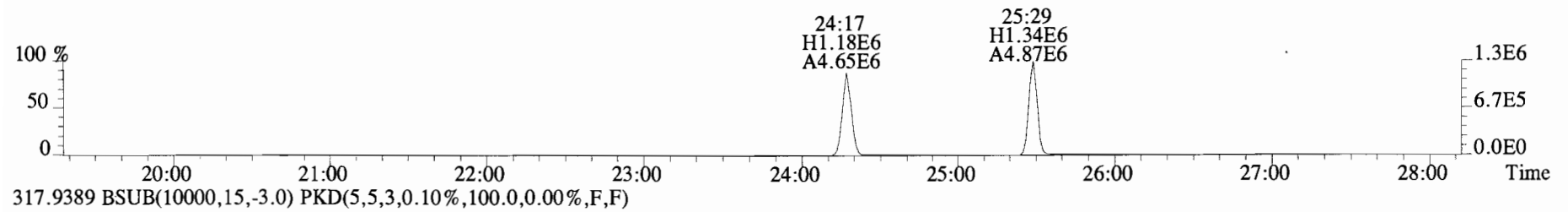
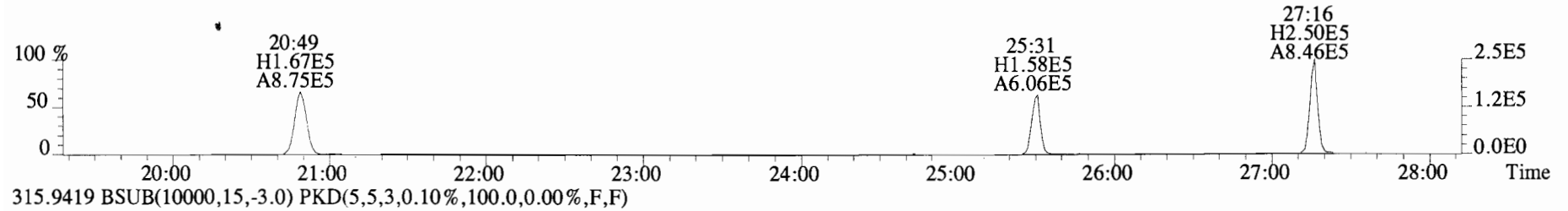
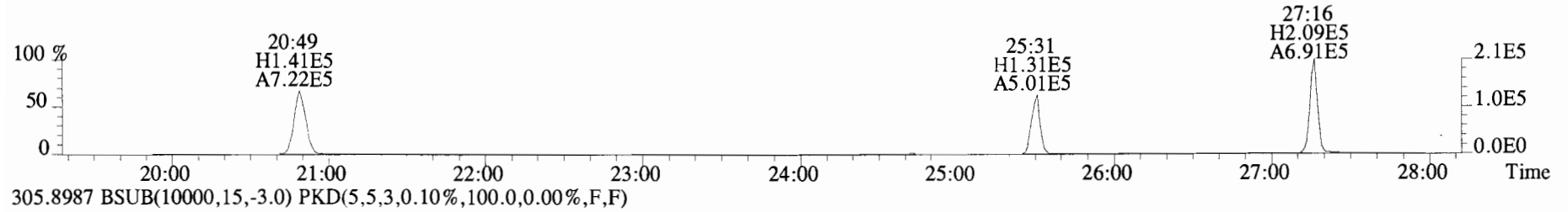
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



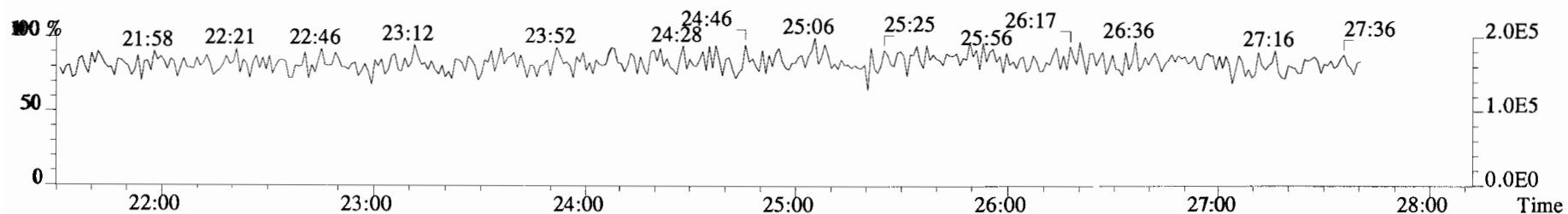
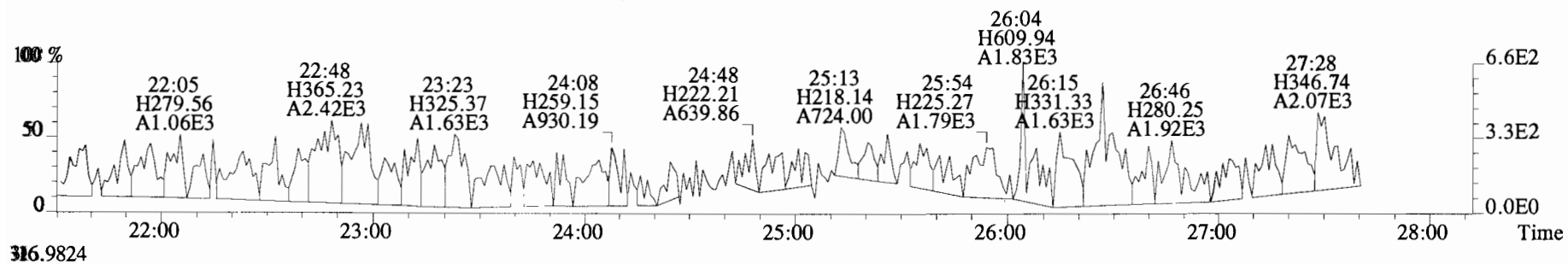
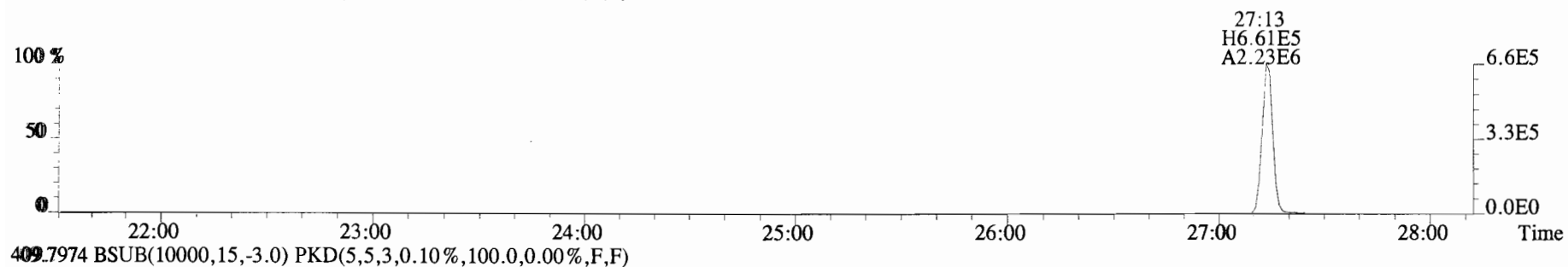
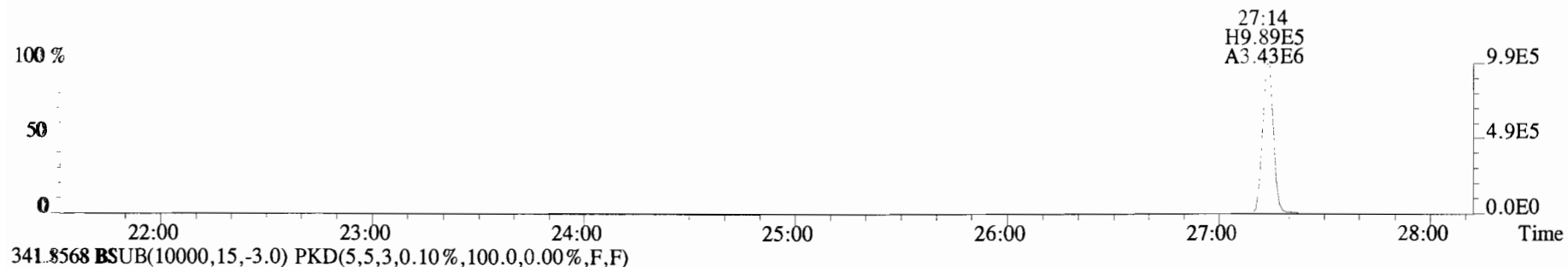
454.9728 F:5



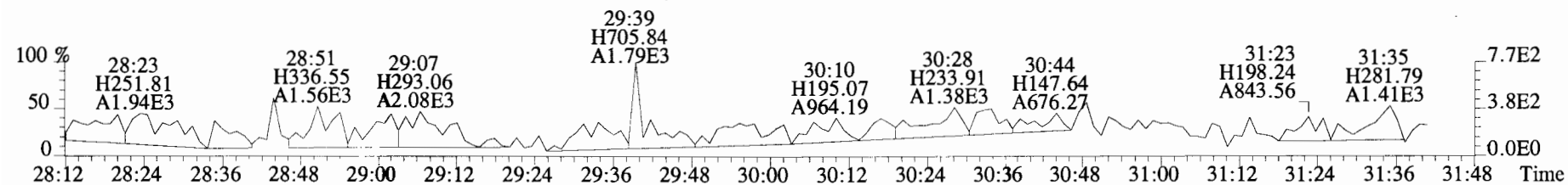
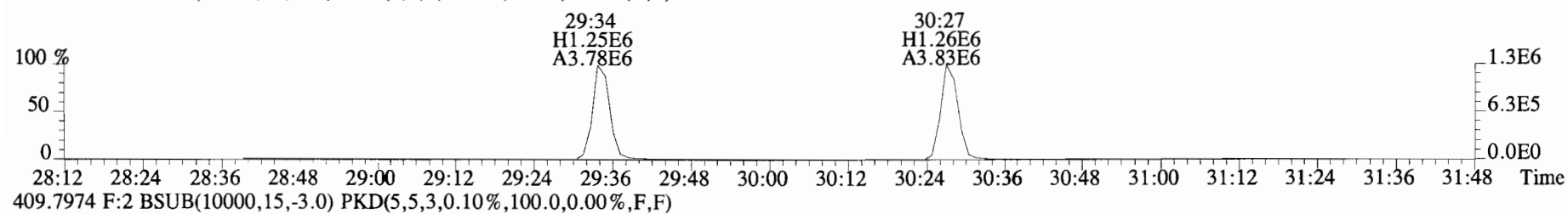
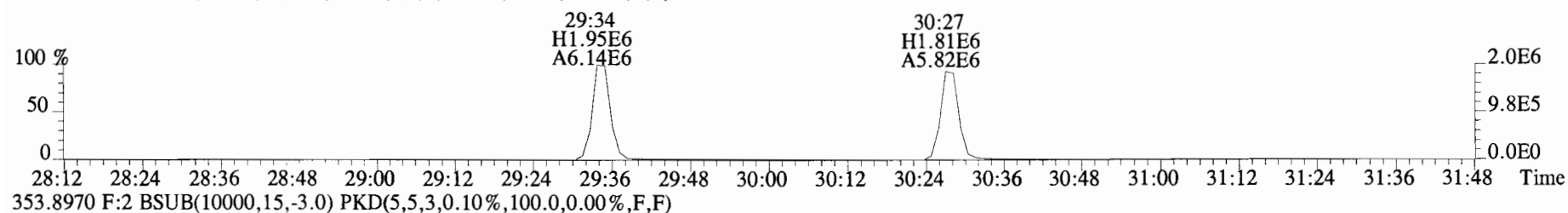
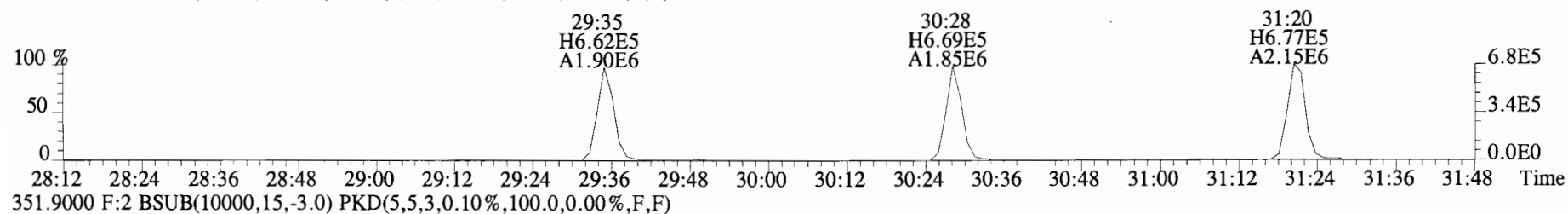
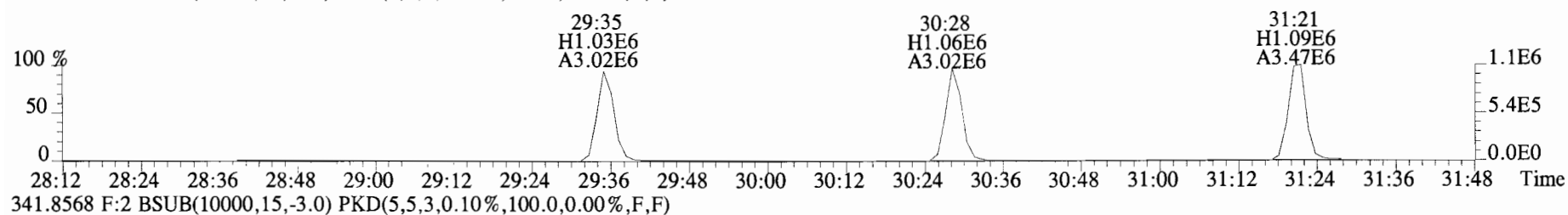
File:191031D2 #1-493 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5.5,3,0.10%,100.0,0.00%,F,F)



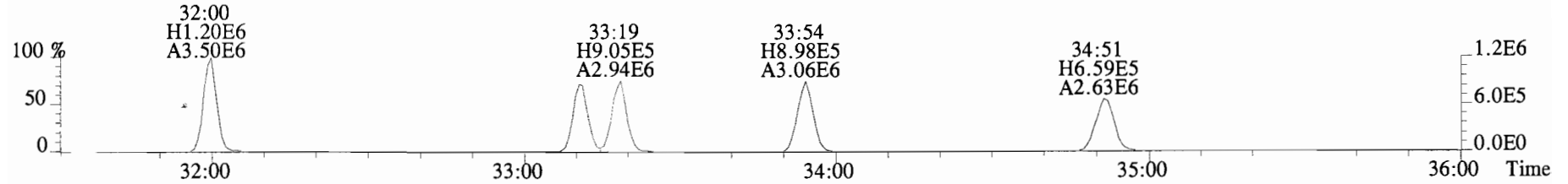
File:191031D2 #1-493 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



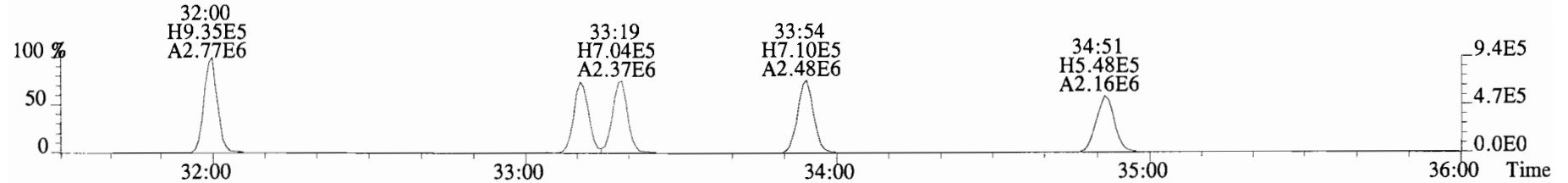
File:191031D2 #1-211 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



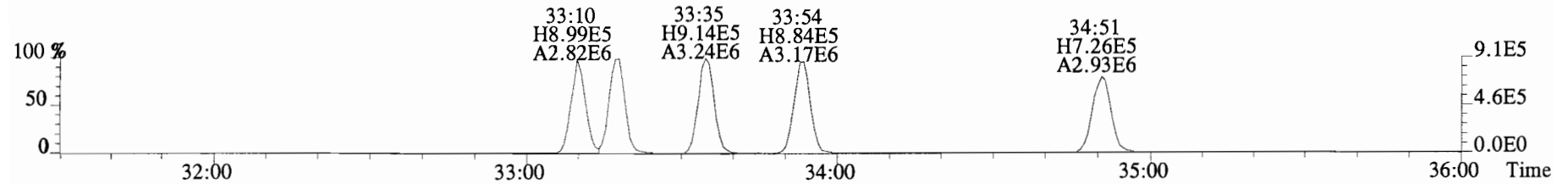
File:191031D2 #1-384 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



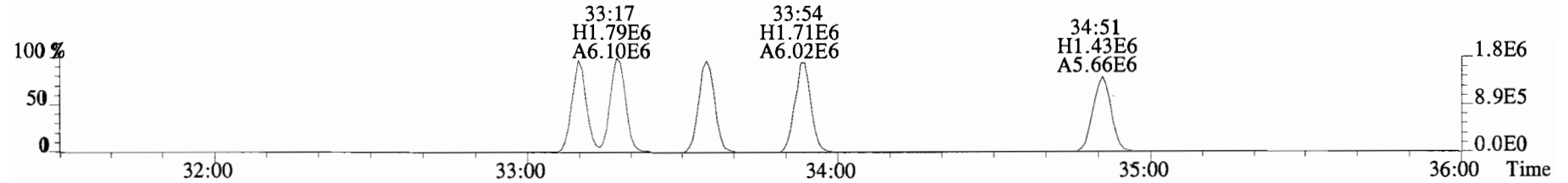
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



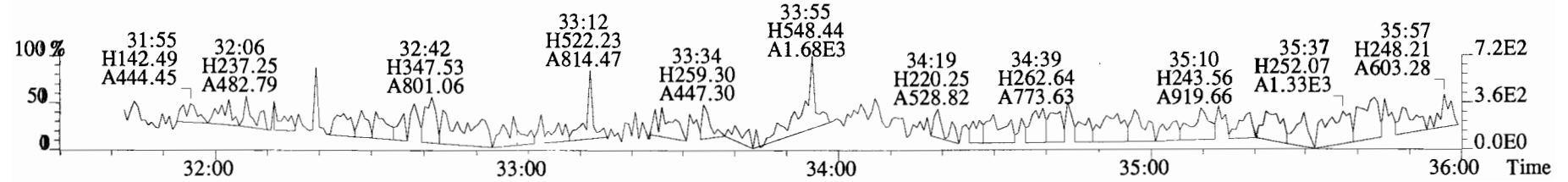
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



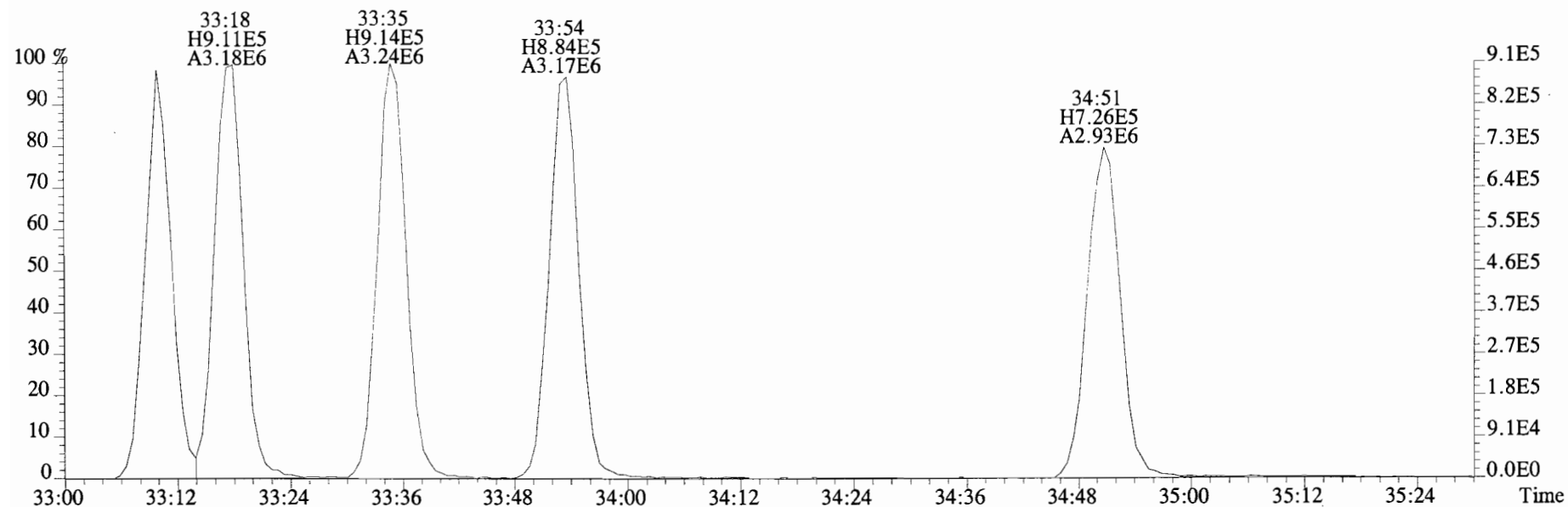
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



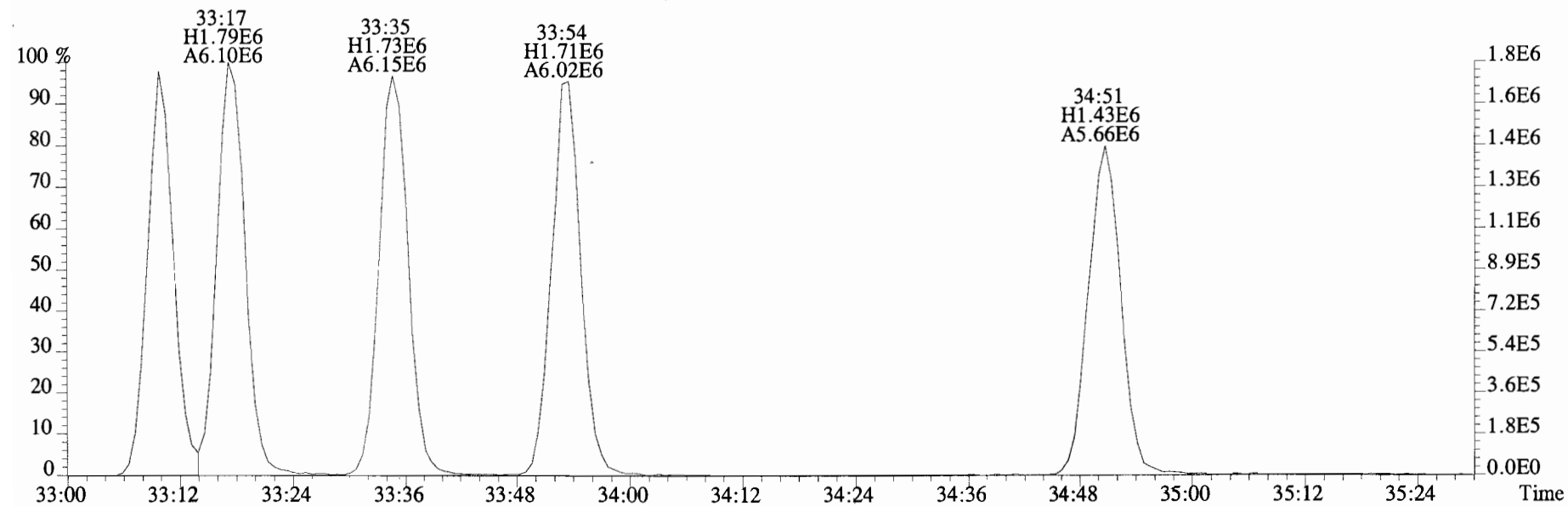
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



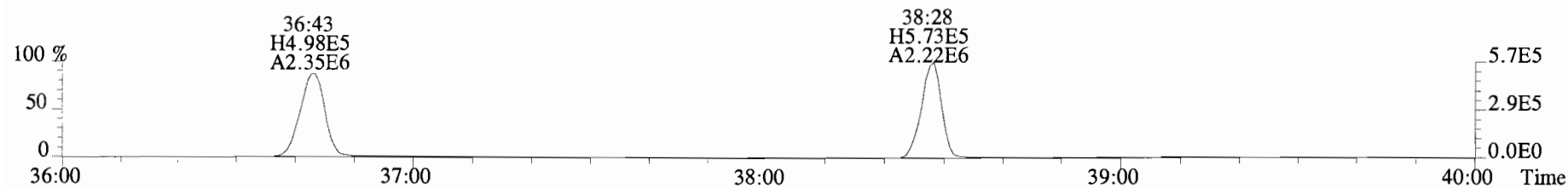
File:191031D2 #1-384 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



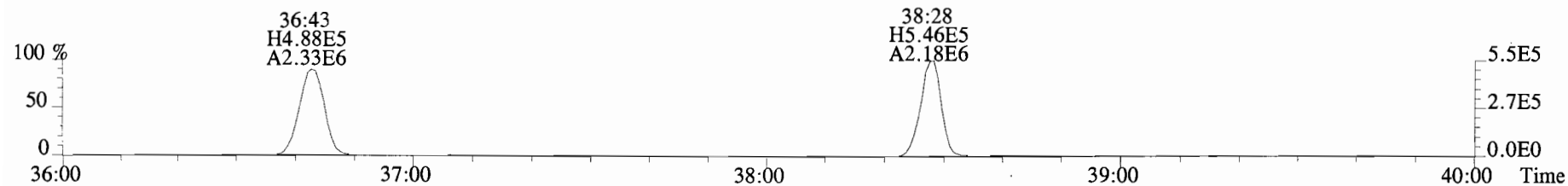
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



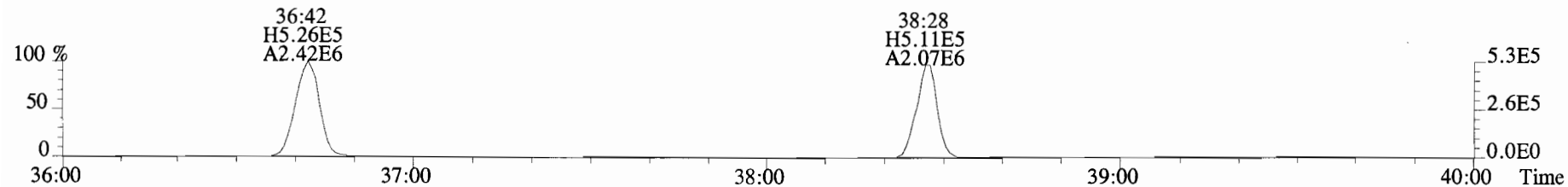
File:191031D2 #1-356 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



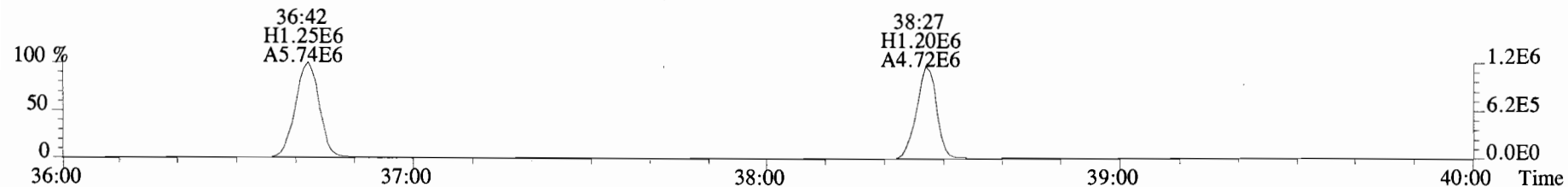
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



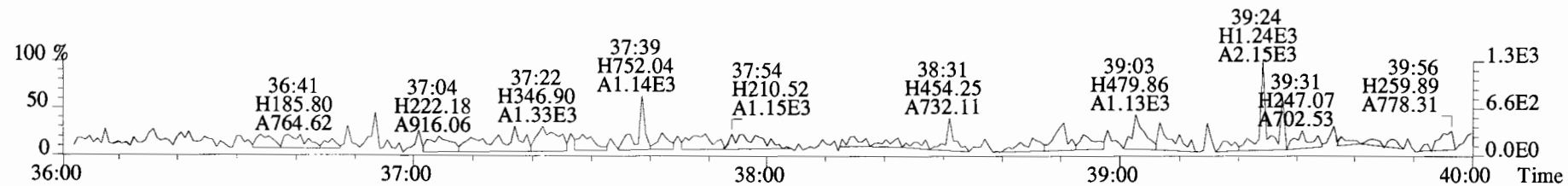
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



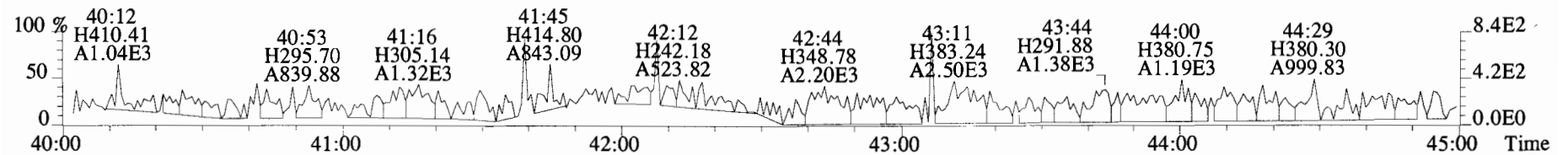
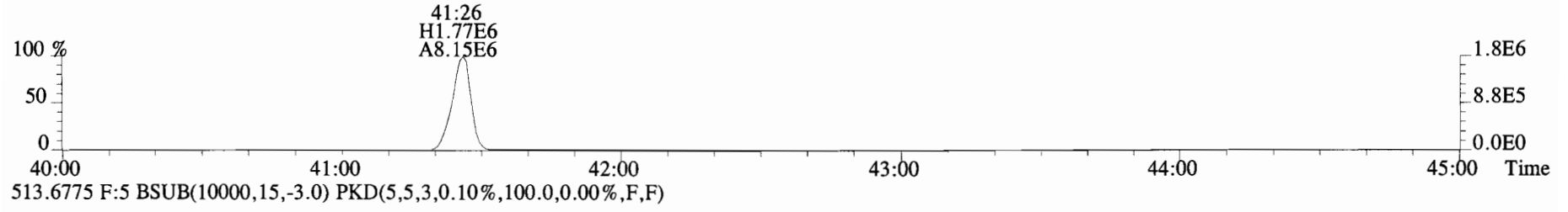
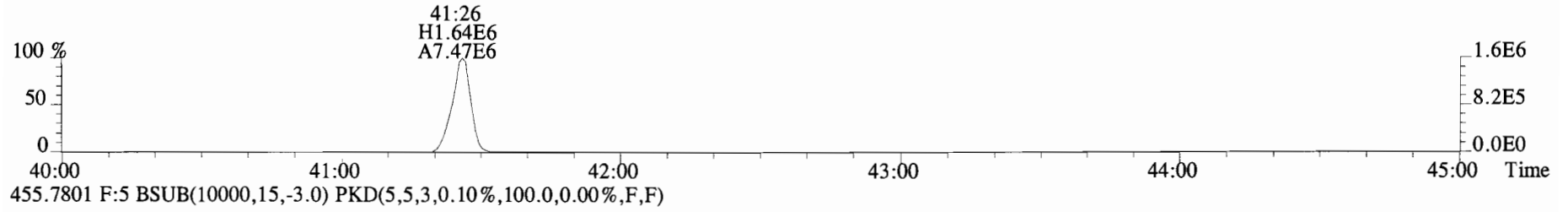
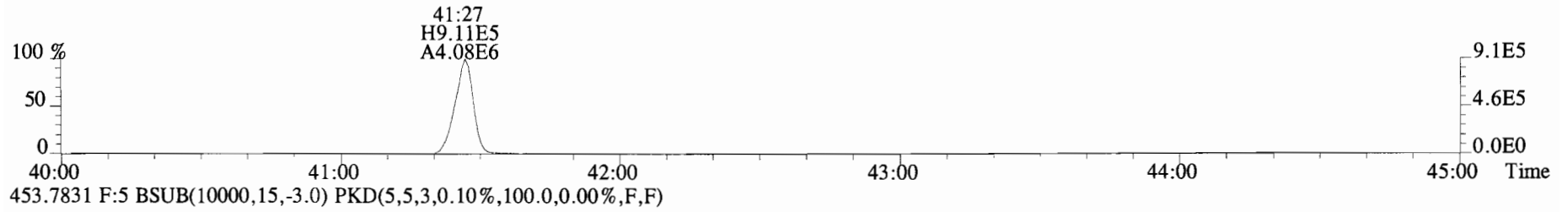
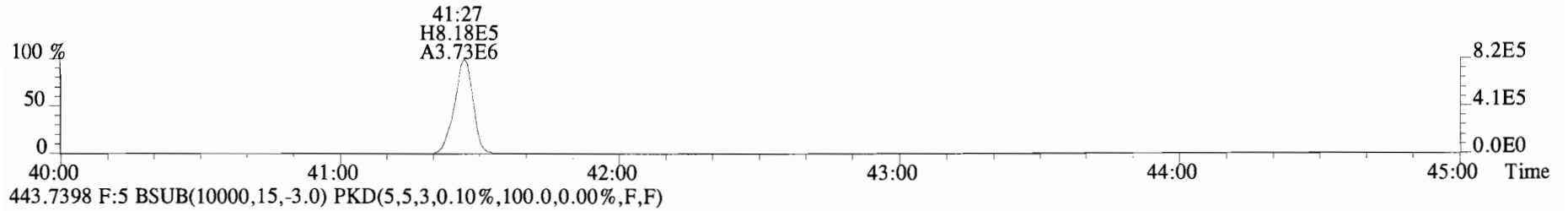
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

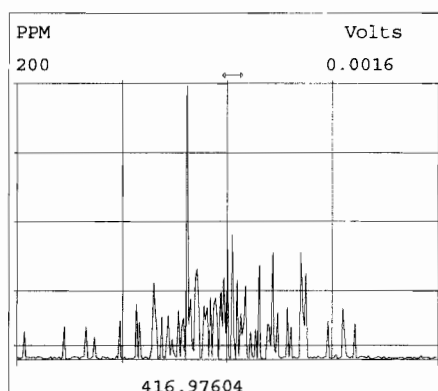
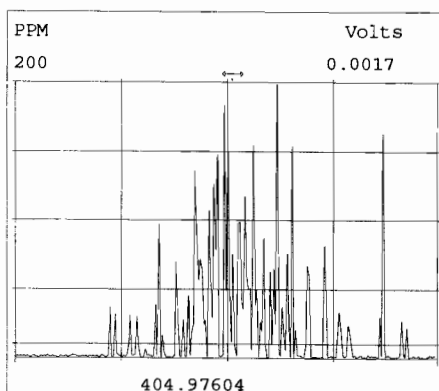
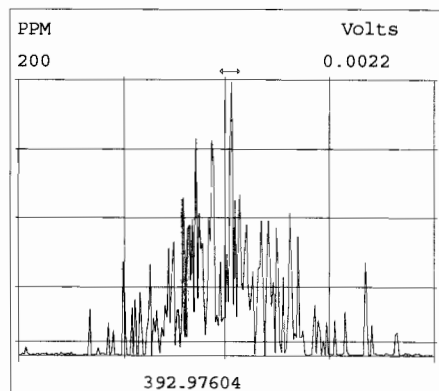
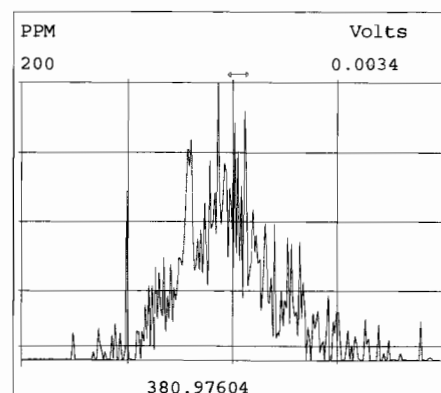
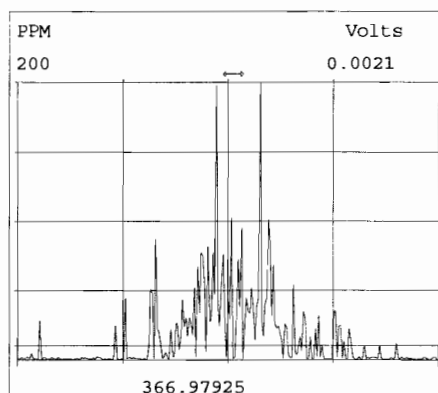
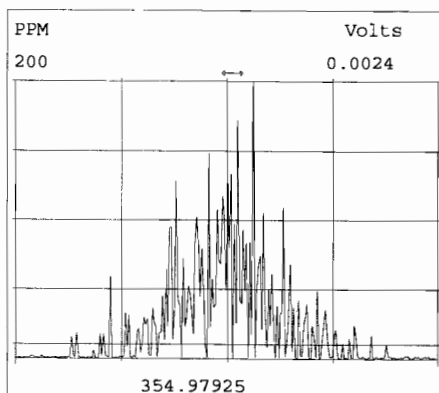
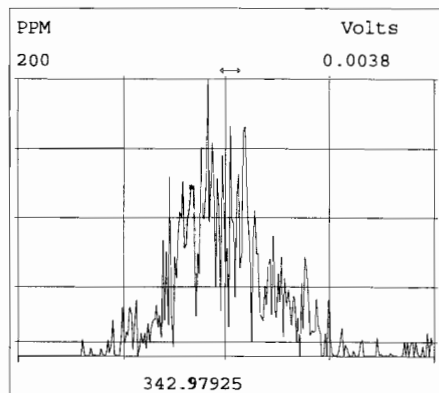
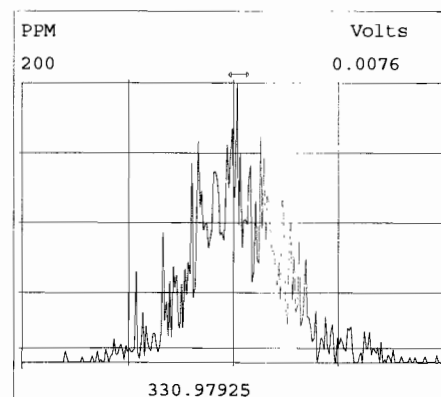
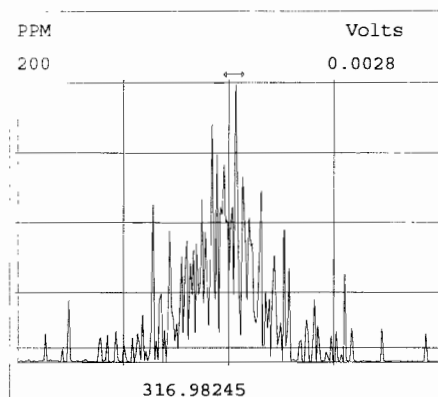
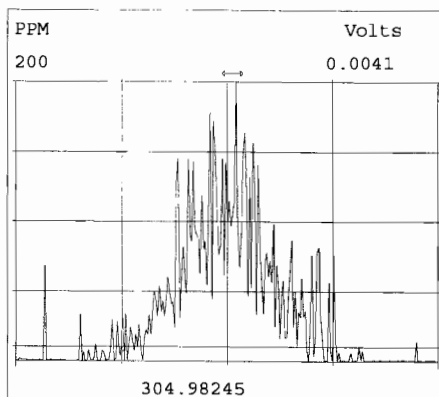
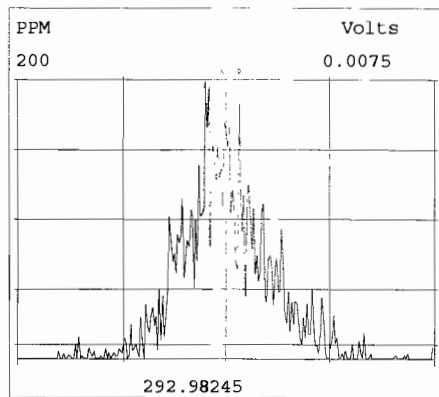


File:191031D2 #1-431 Acq:31-OCT-2019 23:43:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191031D2-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



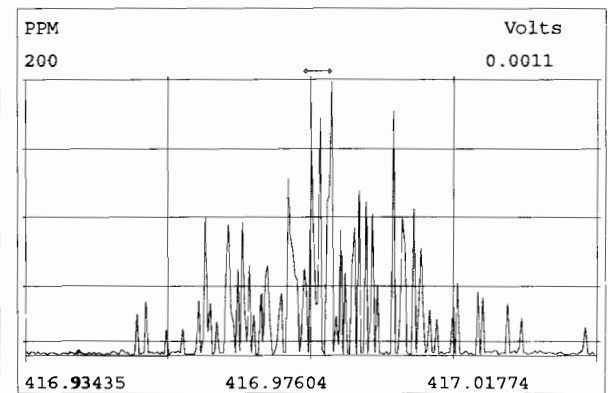
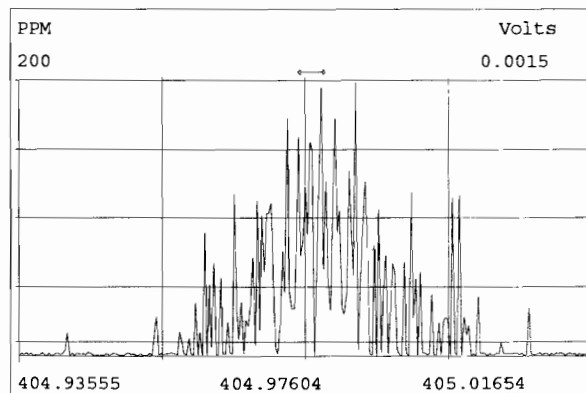
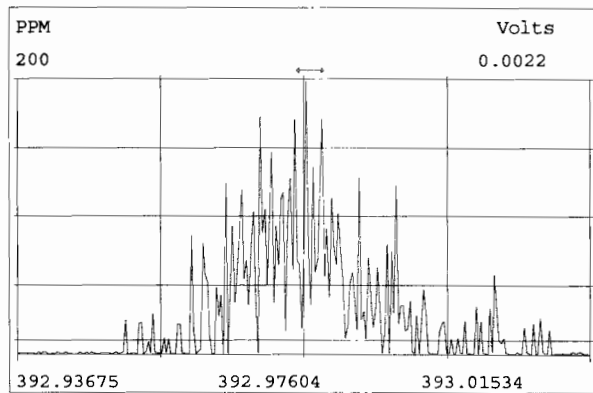
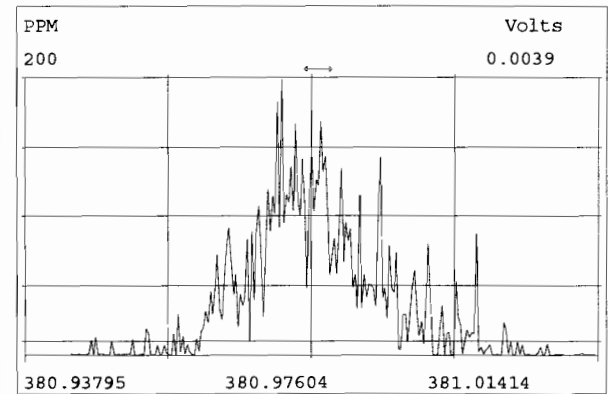
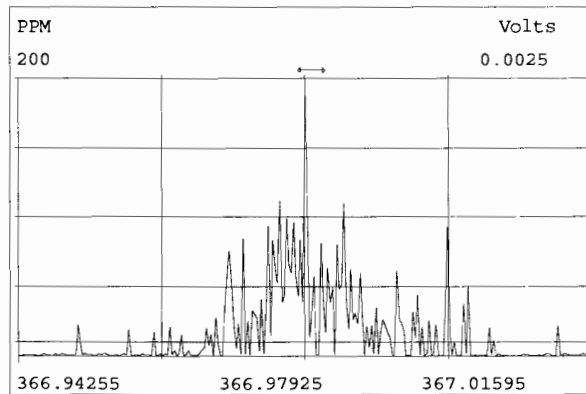
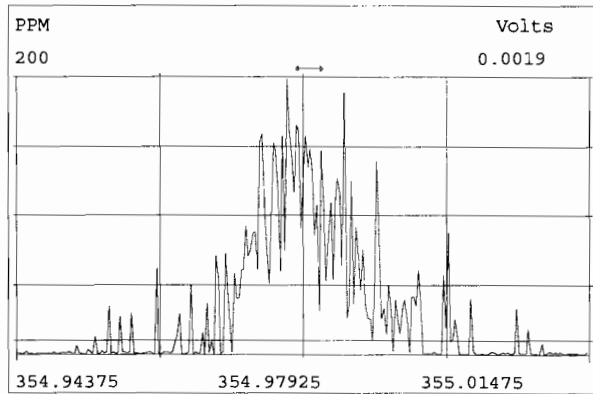
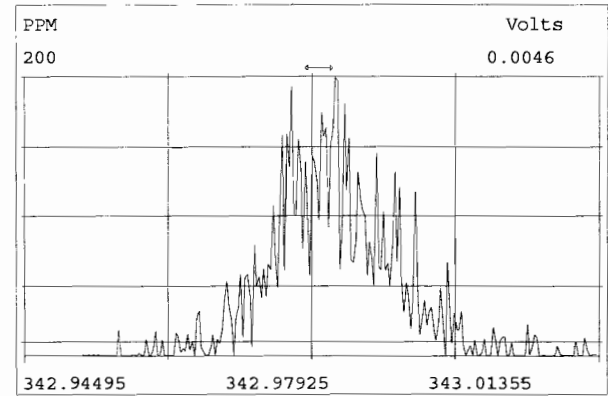
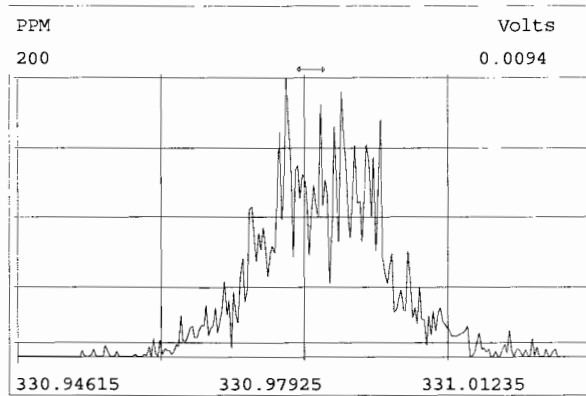
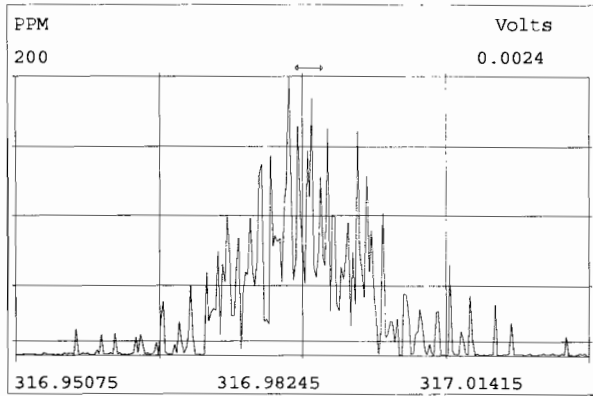
Peak Locate Examination: 1-NOV-2019:11:50 File:RES_CHECK

Experiment:OCDD_DB5 Function:1 Reference:PFK



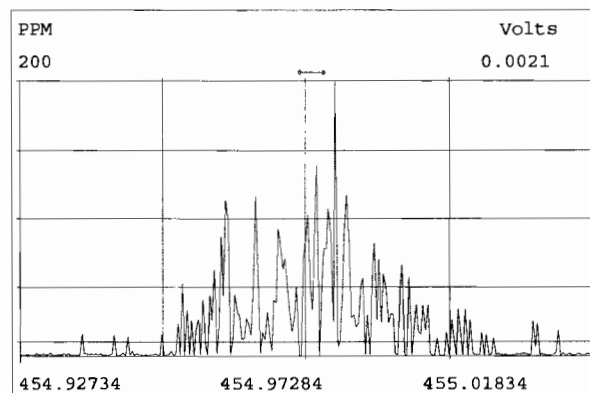
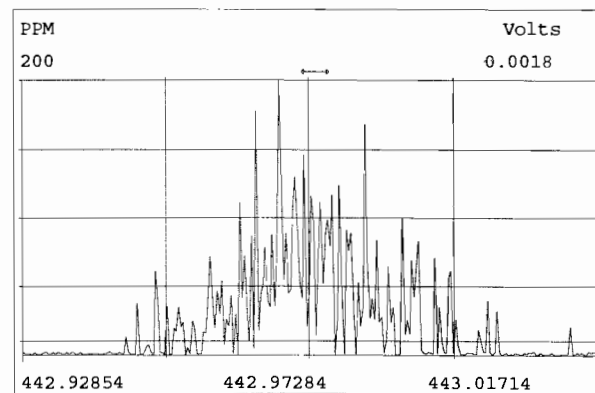
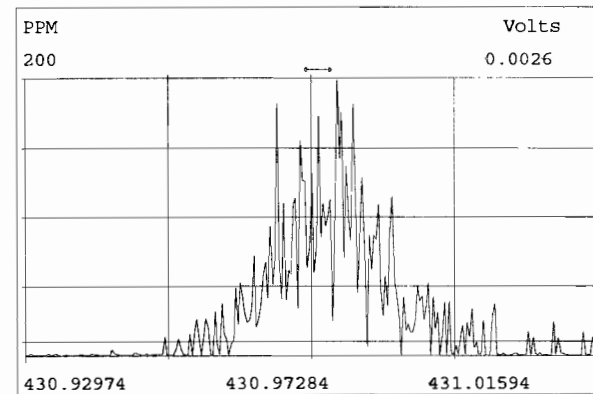
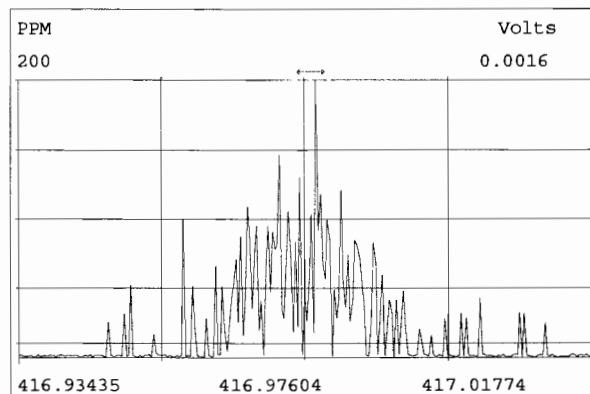
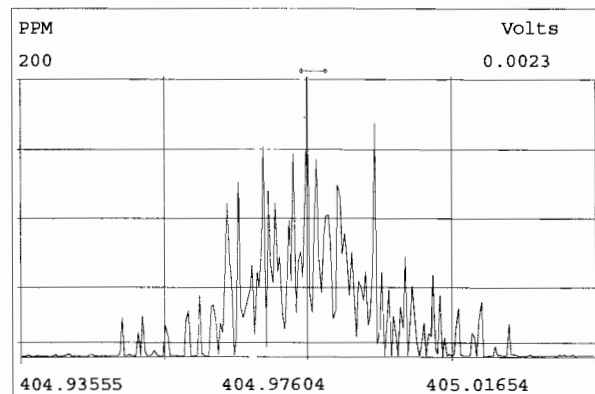
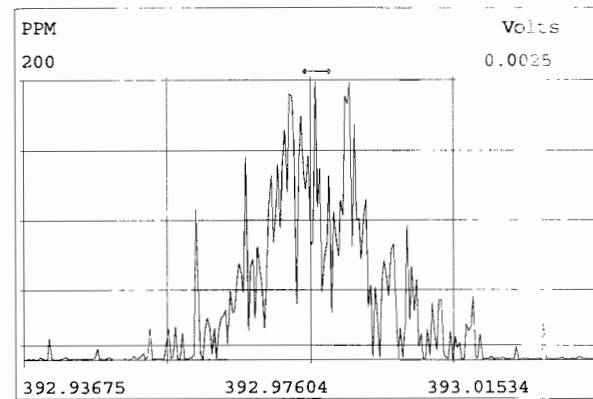
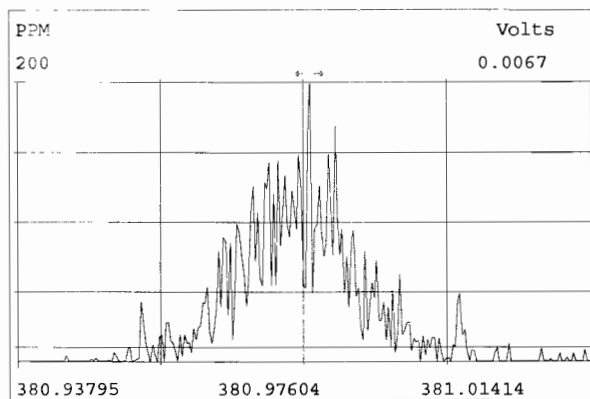
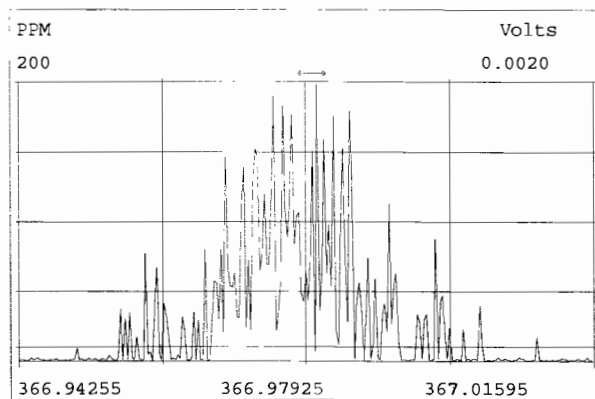
Peak Locate Examination: 1-NOV-2019:11:51 File:RES_CHECK

Experiment:OCDD_DB5 Function:2 Reference:PFK



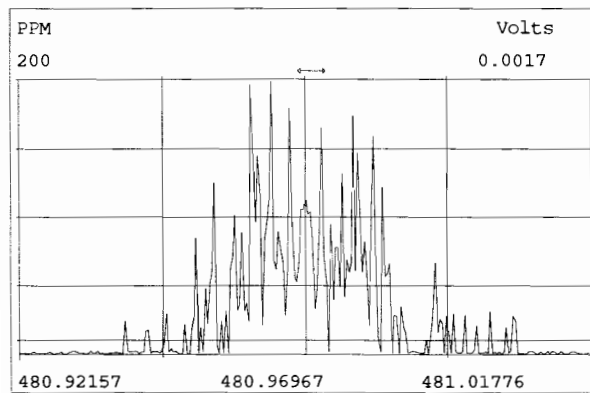
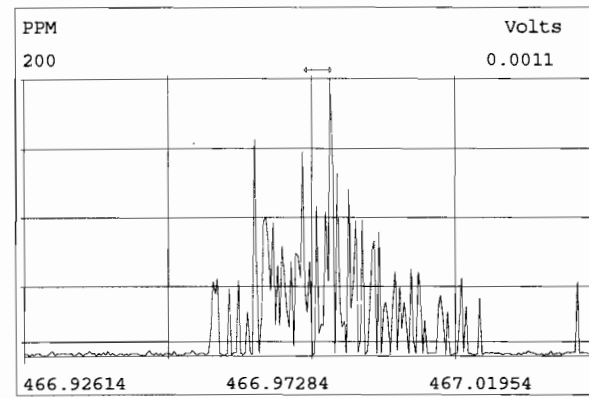
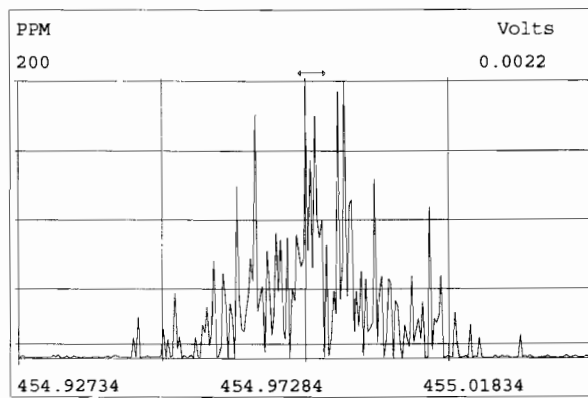
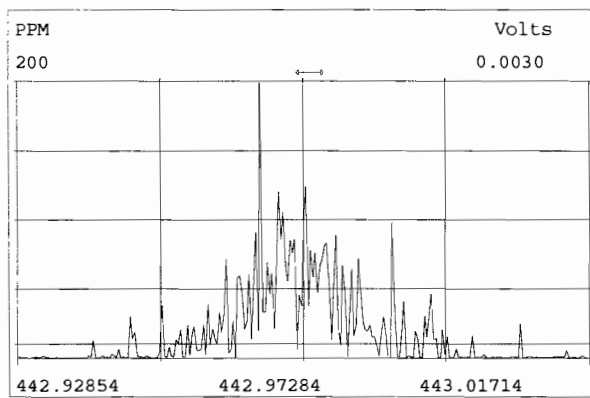
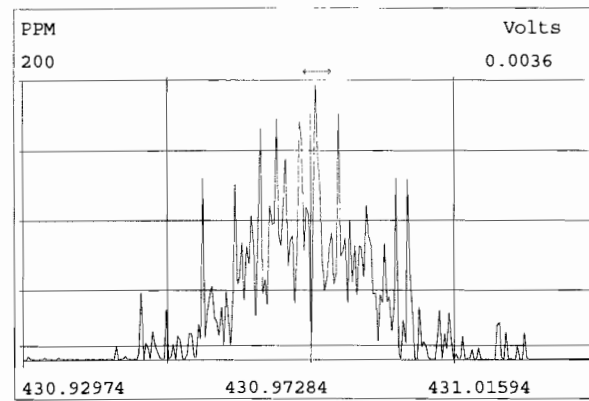
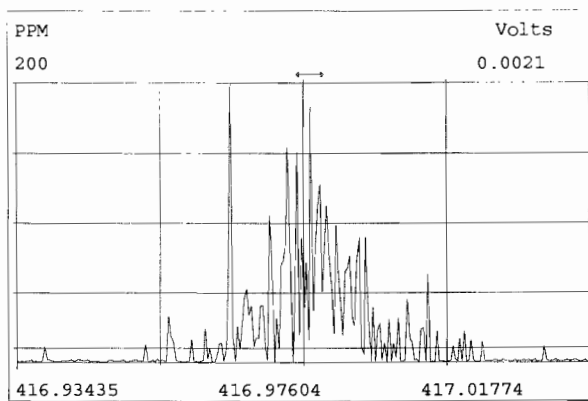
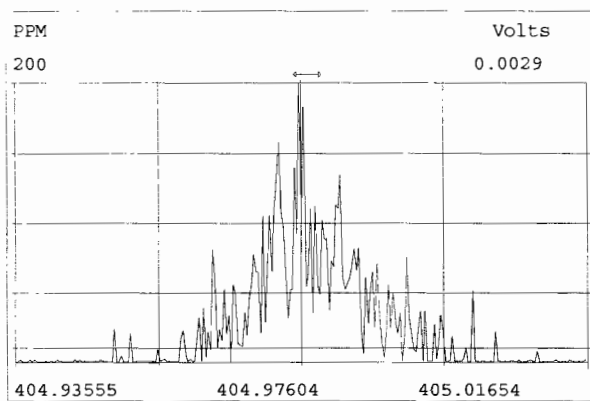
Peak Locate Examination: 1-NOV-2019:11:52 File:RES_CHECK

Experiment:OCDD_DB5 Function:3 Reference:PFK



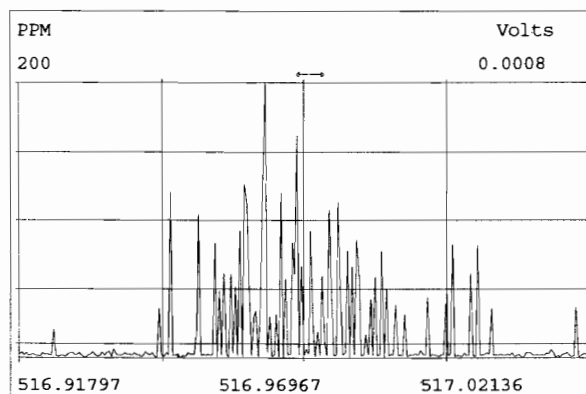
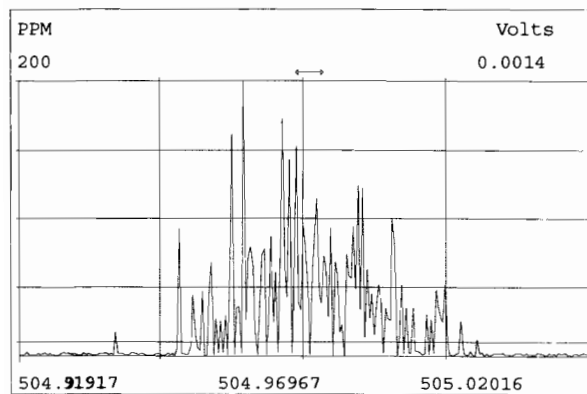
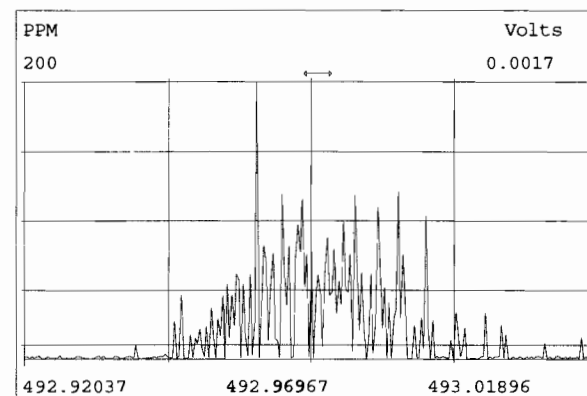
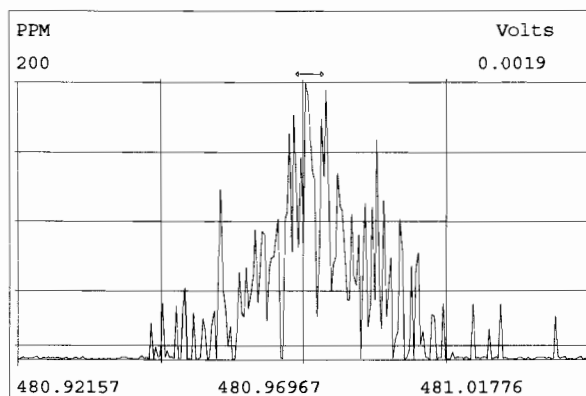
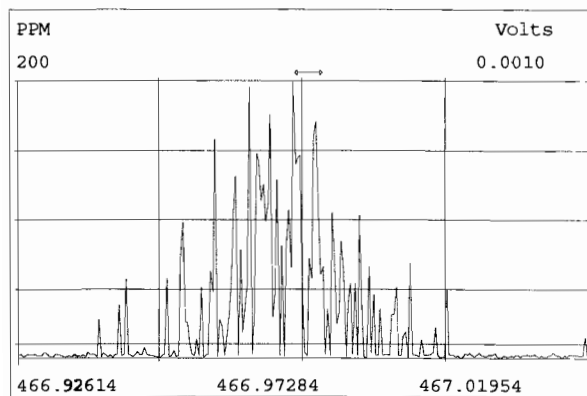
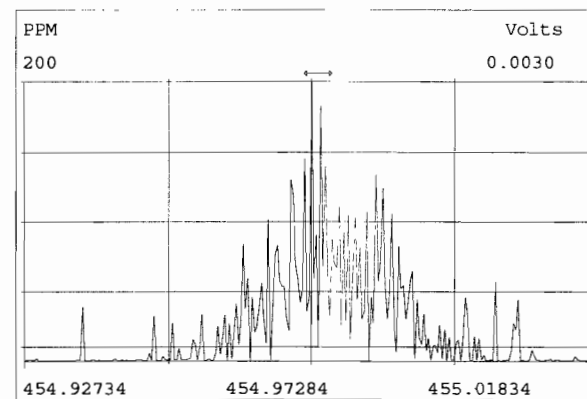
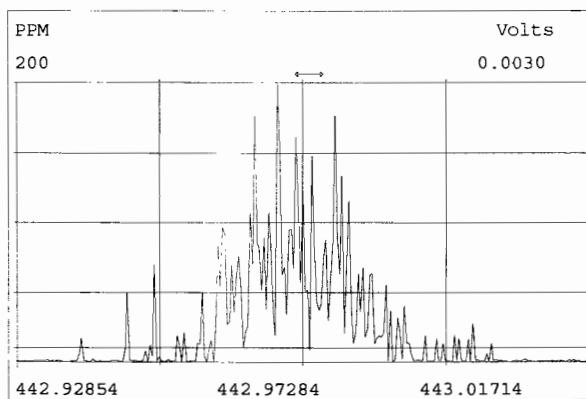
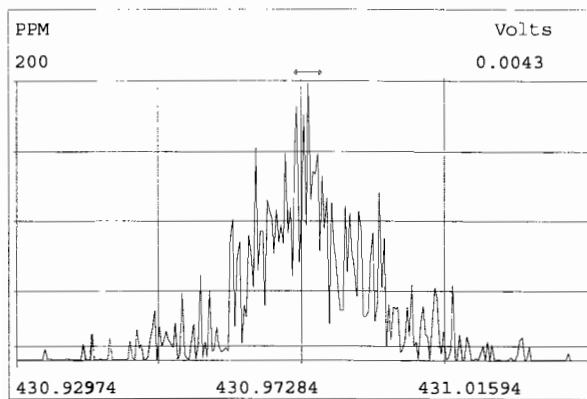
Peak Locate Examination: 1-NOV-2019:11:53 File:RES_CHECK

Experiment:OCDD_DB5 Function:4 Reference:PFK



Peak Locate Examination: 1-NOV-2019:11:54 File:RES_CHECK

Experiment:OCDD_DB5 Function:5 Reference:PFK



HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191101D1-1

Reviewed By: CT 11/04/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<u>DB</u>
<u>Run Log:</u>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
- Bottle position verified?	<u>DB</u>	

Mass resolution \geq

5k 6-8K 8K 10K
 1614 1699 429 1613/1668/8280

Intergrated peaks display correctly?

GC Break <20%

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours

Comments:

Vista Analytical Laboratory - Injection Log Run file: 191101D1 Instrument ID: V9-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191101D1	1	ST191101D1-1	DB	1-NOV-19	13:59:13	ST191101D1-1	NA
191101D1	2	ST191101D1-2	DB	1-NOV-19	14:47:02	ST191101D1-2	ST191101D1-3
191101D1	3	B9J0312-BS1	DB	1-NOV-19	15:34:58	ST191101D1-1	NA
191101D1	4	SOLVENT BLANK	DB	1-NOV-19	16:22:53	NA	NA
191101D1	5	B9J0312-BLK1	DB	1-NOV-19	17:10:44	ST191101D1-1	NA
191101D1	6	1903546-07RE2	DB	1-NOV-19	17:58:35	ST191101D1-1	NA
191101D1	7	B9J0312-DUP1	DB	1-NOV-19	18:46:30	ST191101D1-1	NA
191101D1	8	1903546-09RE1	DB	1-NOV-19	19:34:14	ST191101D1-1	NA
191101D1	9	1903546-15RE1	DB	1-NOV-19	20:21:58	ST191101D1-1	NA
191101D1	10	1903565-09RE1	DB	1-NOV-19	21:09:47	ST191101D1-1	NA
191101D1	11	1903565-14RE1	DB	1-NOV-19	21:57:30	ST191101D1-1	NA
191101D1	12	1903565-15RE1	DB	1-NOV-19	22:45:15	ST191101D1-1	NA
191101D1	13	1903565-16RE1@20X	DB	1-NOV-19	23:32:58	ST191101D1-1	NA
191101D1	14	1903260-01RE2@10X	DB	2-NOV-19	00:20:37	ST191101D1-2	ST191101D1-3
191101D1	15	SOLVENT BLANK	DB	2-NOV-19	01:08:28	NA	NA
191101D1	16	ST191101D1-3	DB	2-NOV-19	01:56:13	ST191101D1-2	ST191101D1-3

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191101D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
2,3,7,8-TCDD	M/M+2	0.79	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	0.64	0.54-0.72	y	50.6	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	47.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	51.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	51.3	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	0.88	0.76-1.02	y	99.8	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.74	0.65-0.89	y	9.83	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	51.8	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	51.8	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	46.2	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.6	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	46.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	46.6	43.0 - 58.0
OCDF	M+2/M+4	0.87	0.76-1.02	y	92.6	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: JB

Date: 11/1/19

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: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

LABELLED 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	0.78	0.65-0.89	y	106	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	103	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	111	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	92.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	100	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	109	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	239	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.80	0.65-0.89	y	99.8	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	106	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.67	1.32-1.78	y	101	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	112	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	101	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	100	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	105	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.45	0.37-0.51	y	98.7	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	110	77.0 - 129.0
13C-OCDF	M+2/M+4	0.86	0.76-1.02	y	239	96.0 - 415.0
CLEANUP STANDARD (3) 37Cl-2,3,7,8-TCDD					9.51	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: 11/1/19

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: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

ZB-5MS IS Data Filename: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

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)	22:54	1,3,6,8-TCDF (F)	20:47
1,2,8,9-TCDD (L)	27:07	1,2,8,9-TCDF (L)	27:15
1,2,4,7,9-PeCDD (F)	28:42	1,3,4,6,8-PeCDF (F)	27:13
1,2,3,8,9-PeCDD (L)	31:06	1,2,3,8,9-PeCDF (L)	31:20
1,2,4,6,7,9-HxCDD (F)	32:31	1,2,3,4,6,8-HxCDF (F)	31:59
1,2,3,7,8,9-HxCDD (L)	34:28	1,2,3,7,8,9-HxCDF (L)	34:50
1,2,3,4,6,7,9-HpCDD (F)	37:04	1,2,3,4,6,7,8-HpCDF (F)	36:41
1,2,3,4,6,7,8-HpCDD (L)	37:54	1,2,3,4,7,8,9-HpCDF (L)	38:26

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<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: 11/1/19

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: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	RRT
	REFERENCE		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	1.001	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	1.021	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.196	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	1.151	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.185	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: 11/1/19

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: 191101D1 S#1 Analysis Date: 1-NOV-19 Time: 13:59:13

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	1.000	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	1.001	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	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	0.992	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	1.018	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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: 11/1/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191101D1-1

Filename: 191101D1 S:1 Acq: 1-NOV-19 13:59:13
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191101D1-1
EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	7.33e+05	0.79 y	0.91	26:16	10.229		* 2.5		*	Total Tetra-Dioxins	74.2	74.8	*	*	
1,2,3,7,8-PeCDD	2.83e+06	0.64 y	0.90	30:45	50.570		* 2.5		*	Total Penta-Dioxins	201	202	*	*	
1,2,3,4,7,8-HxCDD	2.75e+06	1.25 y	1.10	34:03	47.317		* 2.5		*	Total Hexa-Dioxins	219	220	*	*	
1,2,3,6,7,8-HxCDD	2.85e+06	1.23 y	0.94	34:10	51.789		* 2.5		*	Total Hepta-Dioxins	111	113	*	*	
1,2,3,7,8,9-HxCDD	2.95e+06	1.24 y	0.96	34:28	51.334		* 2.5		*	Total Tetra-Furans	37.6	38.5	*	*	
1,2,3,4,6,7,8-HpCDD	2.50e+06	1.03 y	0.98	37:54	48.355		* 2.5		*	Total Penta-Furans	225.38	226.79	*	*	
OCDD	4.90e+06	0.88 y	0.96	41:11	99.819		* 2.5		*	Total Hexa-Furans	253	254	*	*	
										Total Hepta-Furans	93.6	94.9	*	*	
2,3,7,8-TCDF	1.05e+06	0.74 y	0.95	25:28	9.8324		* 2.5		*						
1,2,3,7,8-PeCDF	4.87e+06	1.60 y	0.96	29:35	51.787		* 2.5		*						
2,3,4,7,8-PeCDF	4.87e+06	1.60 y	1.01	30:28	51.831		* 2.5		*						
1,2,3,4,7,8-HxCDF	3.75e+06	1.25 y	1.18	33:10	46.232		* 2.5		*						
1,2,3,6,7,8-HxCDF	3.95e+06	1.23 y	1.07	33:17	47.630		* 2.5		*						
2,3,4,6,7,8-HxCDF	3.86e+06	1.23 y	1.11	33:53	48.962		* 2.5		*						
1,2,3,7,8,9-HxCDF	3.28e+06	1.24 y	1.06	34:50	47.983		* 2.5		*						
1,2,3,4,6,7,8-HpCDF	2.92e+06	1.04 y	1.13	36:41	46.792		* 2.5		*						
1,2,3,4,7,8,9-HpCDF	2.81e+06	1.02 y	1.28	38:26	46.553		* 2.5		*						
OCDF	5.34e+06	0.87 y	0.95	41:25	92.554		* 2.5		*						
IS	13C-2,3,7,8-TCDD	7.91e+06	0.78 y	1.10	26:14	105.52				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	6.19e+06	0.63 y	0.88	30:44	102.58				106					
IS	13C-1,2,3,4,7,8-HxCDD	5.28e+06	1.25 y	0.64	34:02	111.19				103					
IS	13C-1,2,3,6,7,8-HxCDD	5.87e+06	1.27 y	0.86	34:09	92.752				111					
IS	13C-1,2,3,7,8,9-HxCDD	5.98e+06	1.27 y	0.81	34:27	100.20				92.8					
IS	13C-1,2,3,4,6,7,8-HpCDD	5.28e+06	1.05 y	0.65	37:53	109.19				100					
IS	13C-OCDD	1.03e+07	0.89 y	0.58	41:11	239.04				109					
IS	13C-2,3,7,8-TCDF	1.12e+07	0.80 y	1.03	25:28	99.845				120					
IS	13C-1,2,3,7,8-PeCDF	9.79e+06	1.63 y	0.85	29:34	105.55				99.8					
IS	13C-2,3,4,7,8-PeCDF	9.26e+06	1.67 y	0.85	30:27	100.73				106					
IS	13C-1,2,3,4,7,8-HxCDF	6.88e+06	0.51 y	0.83	33:09	111.90				101					
IS	13C-1,2,3,6,7,8-HxCDF	7.75e+06	0.52 y	1.03	33:17	101.26				112					
IS	13C-2,3,4,6,7,8-HxCDF	7.09e+06	0.53 y	0.95	33:52	100.49				101					
IS	13C-1,2,3,7,8,9-HxCDF	6.44e+06	0.53 y	0.83	34:49	105.25				100					
IS	13C-1,2,3,4,6,7,8-HpCDF	5.53e+06	0.45 y	0.76	36:40	98.710				105					
IS	13C-1,2,3,4,7,8,9-HpCDF	4.72e+06	0.44 y	0.58	38:26	109.86				98.7					
IS	13C-OCDF	1.22e+07	0.86 y	0.69	41:24	239.07				110					
C/Up	37Cl-2,3,7,8-TCDD	7.80e+05		1.20	26:15	9.5098				120					
RS/RT	13C-1,2,3,4-TCDD	6.85e+06	0.80 y	1.00	25:41	100.00				95.1					
RS	13C-1,2,3,4-TCDF	1.09e+07	0.79 y	1.00	24:15	100.00									
RS/RT	13C-1,2,3,4,6,9-HxCDF	7.40e+06	0.52 y	1.00	33:33	100.00									

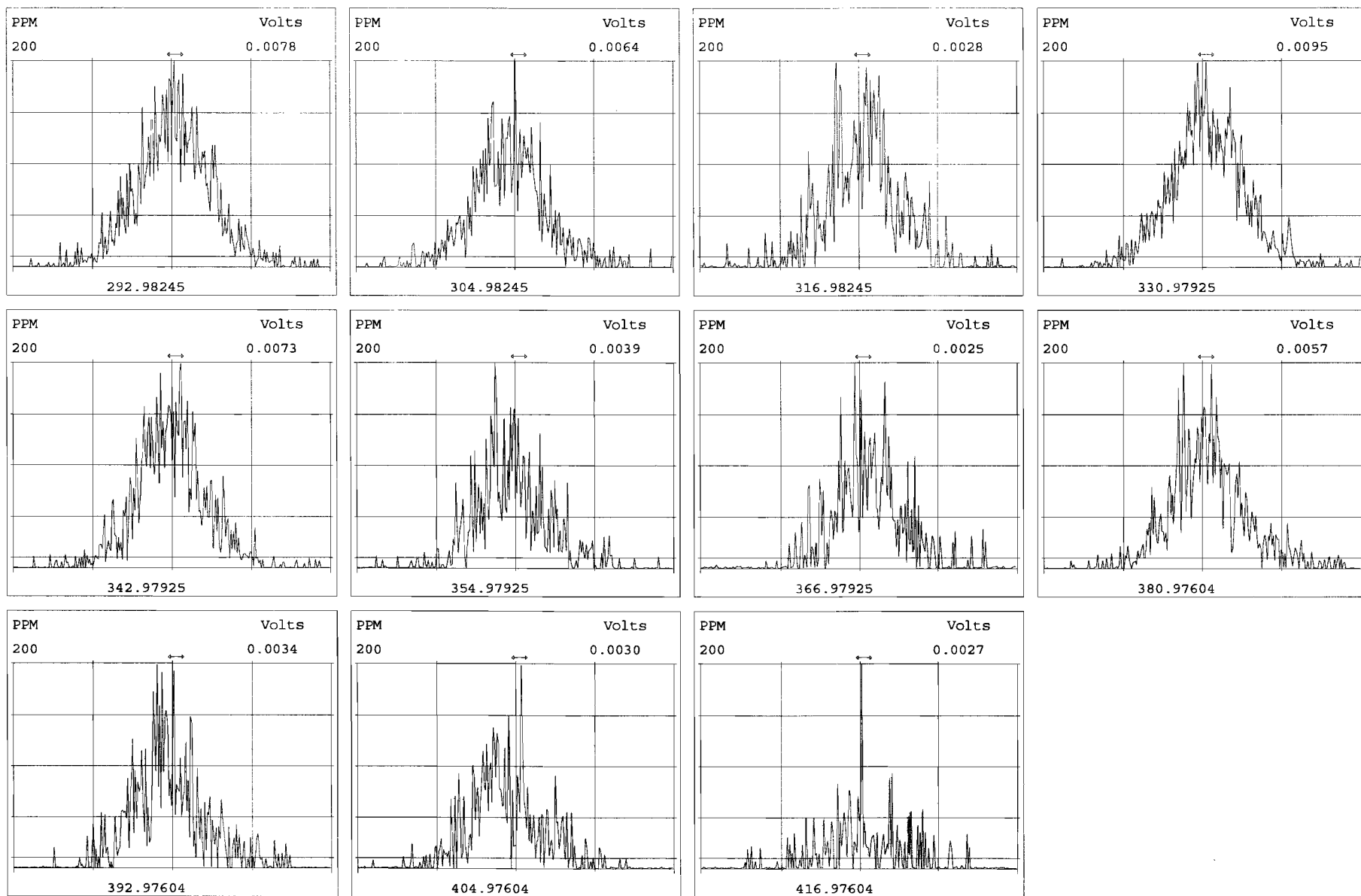
Integrations
by DB
Analyst: DB
Date: 11/1/19
Reviewed
by CT
Analyst: CT
Date: 11/04/19

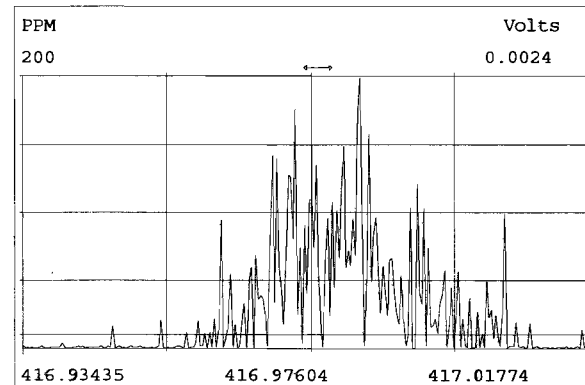
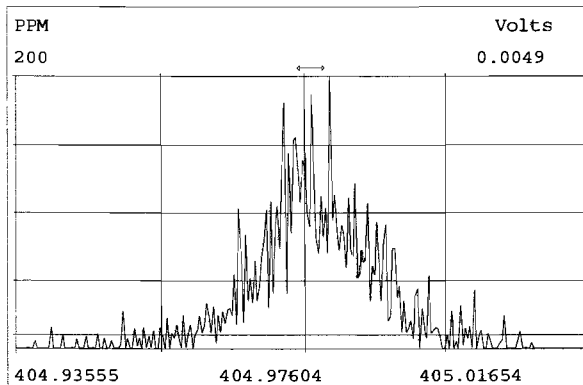
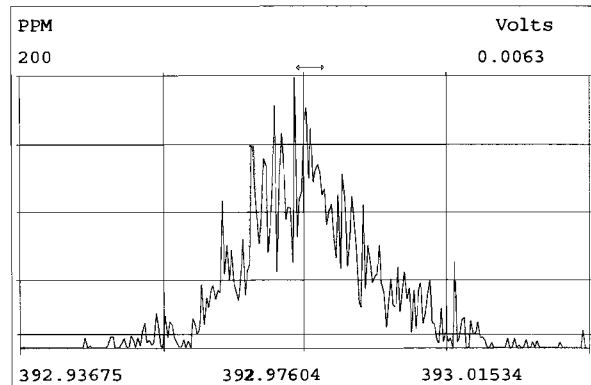
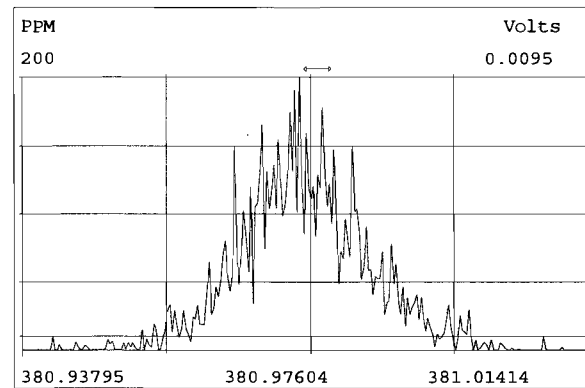
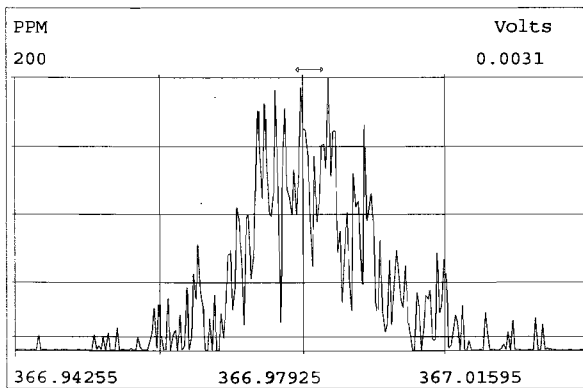
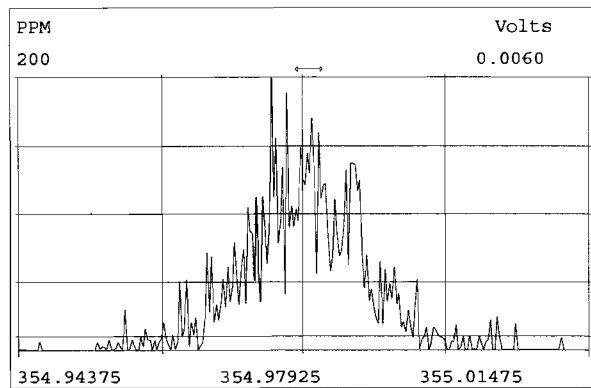
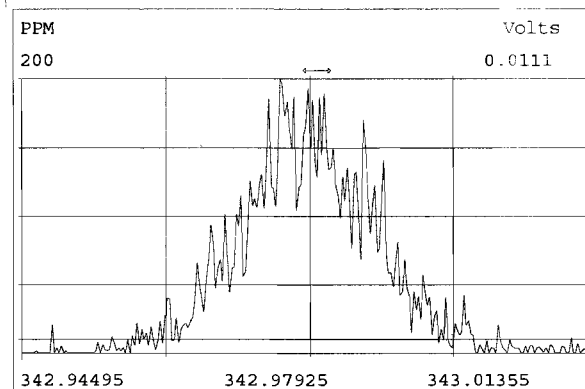
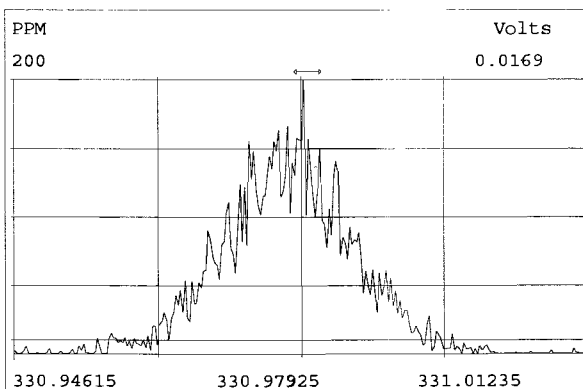
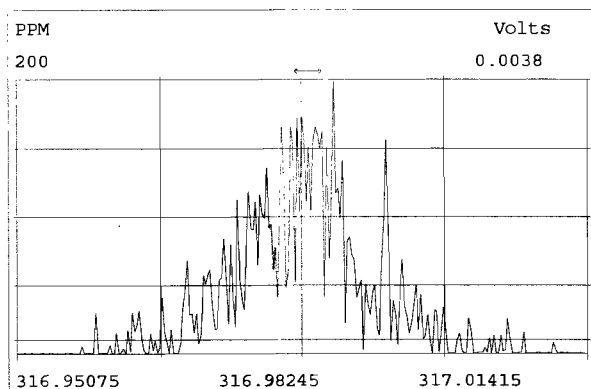
Vista Analytical Laboratory - Injection Log Run file: 191101D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191101D1	1	ST191101D1-1	DB	1-NOV-19	13:59:13	ST191101D1-1	NA
191101D1	2	ST191101D1-2	DB	1-NOV-19	14:47:02	ST191101D1-2	ST191101D1-3
191101D1	3	B9J0312-BS1	DB	1-NOV-19	15:34:58	ST191101D1-1	NA
191101D1	4	SOLVENT BLANK	DB	1-NOV-19	16:22:53	NA	NA
191101D1	5	B9J0312-BLK1	DB	1-NOV-19	17:10:44	ST191101D1-1	NA
191101D1	6	1903546-07RE2	DB	1-NOV-19	17:58:35	ST191101D1-1	NA
191101D1	7	B9J0312-DUP1	DB	1-NOV-19	18:46:30	ST191101D1-1	NA
191101D1	8	1903546-09RE1	DB	1-NOV-19	19:34:14	ST191101D1-1	NA
191101D1	9	1903546-15RE1	DB	1-NOV-19	20:21:58	ST191101D1-1	NA
191101D1	10	1903565-09RE1	DB	1-NOV-19	21:09:47	ST191101D1-1	NA
191101D1	11	1903565-14RE1	DB	1-NOV-19	21:57:30	ST191101D1-1	NA
191101D1	12	1903565-15RE1	DB	1-NOV-19	22:45:15	ST191101D1-1	NA
191101D1	13	1903565-16RE1@20X	DB	1-NOV-19	23:32:58	ST191101D1-1	NA
191101D1	14	1903260-01RE2@10X	DB	2-NOV-19	00:20:37	ST191101D1-2	ST191101D1-3
191101D1	15	SOLVENT BLANK	DB	2-NOV-19	01:08:28	NA	NA
191101D1	16	ST191101D1-3	DB	2-NOV-19	01:56:13	ST191101D1-2	ST191101D1-3

Peak Locate Examination: 1-NOV-2019:13:54 File:191101D1

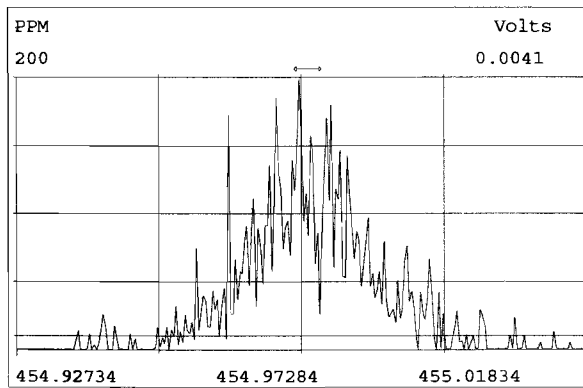
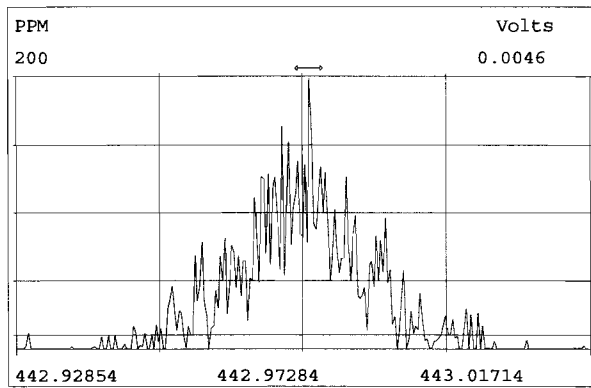
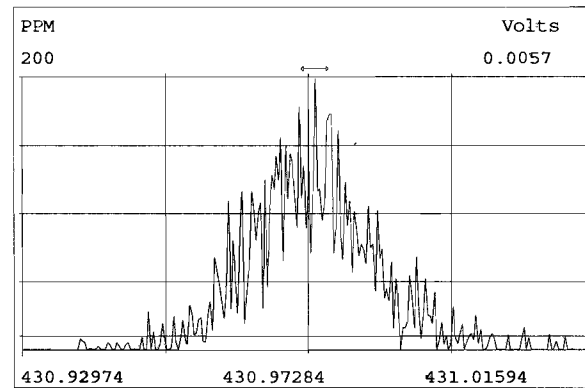
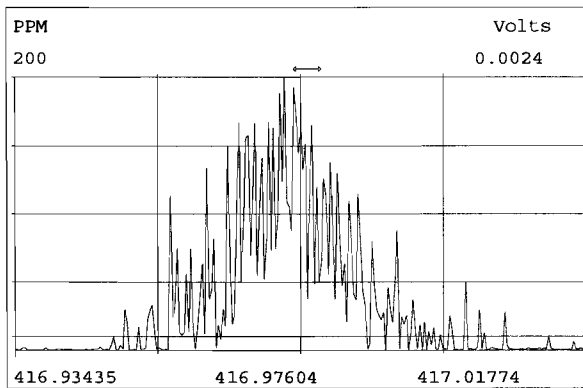
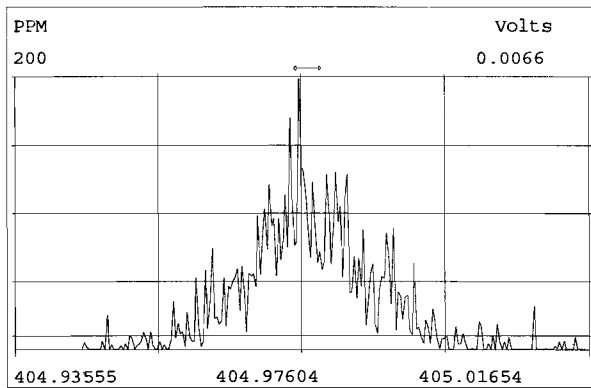
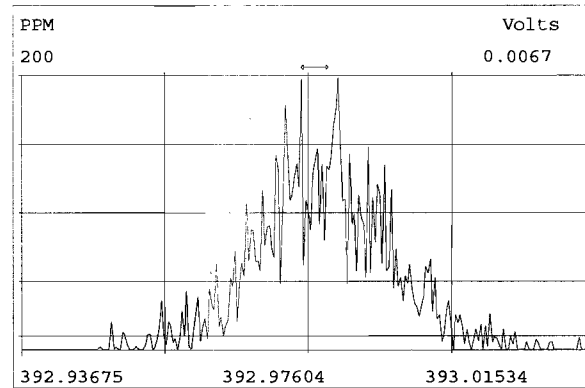
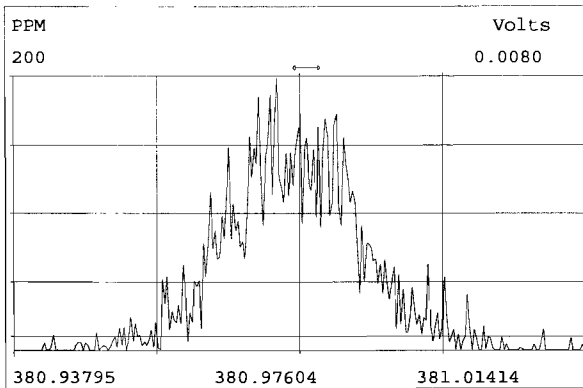
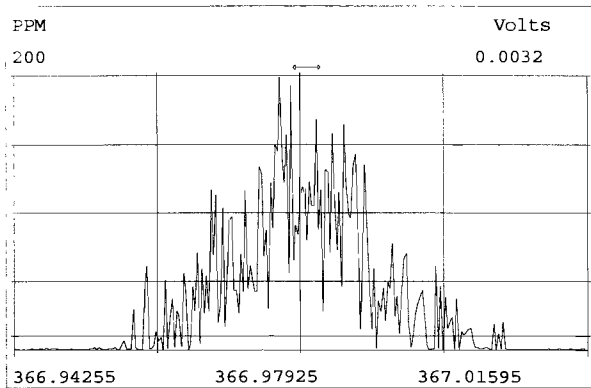
Experiment:OCDD_DB5 Function:1 Reference:PFK





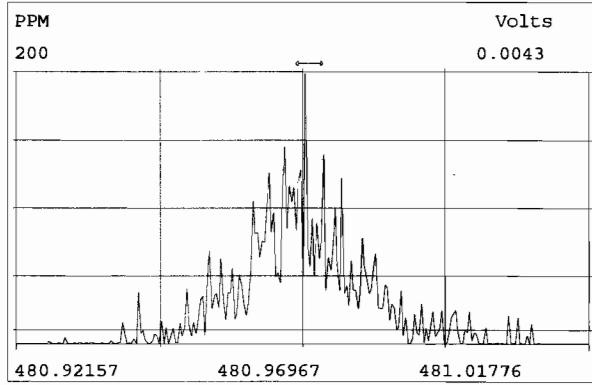
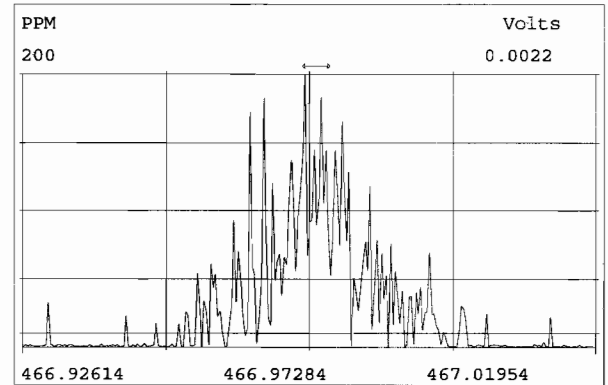
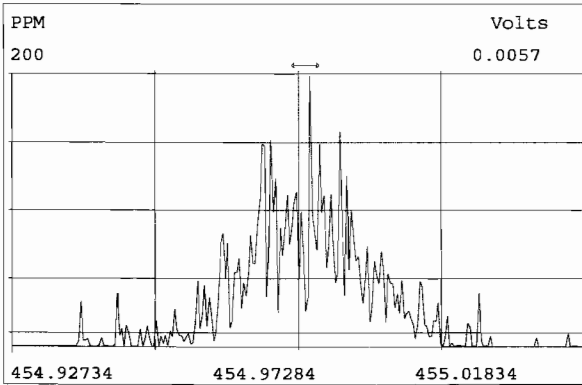
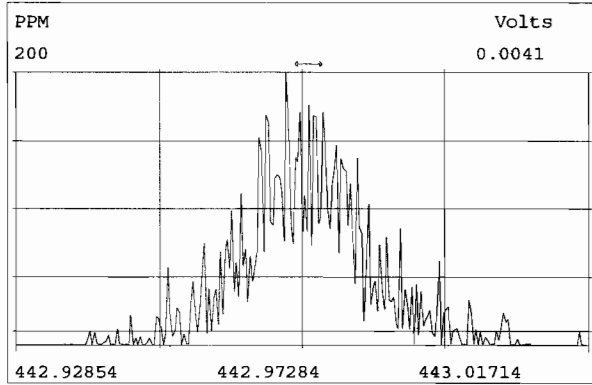
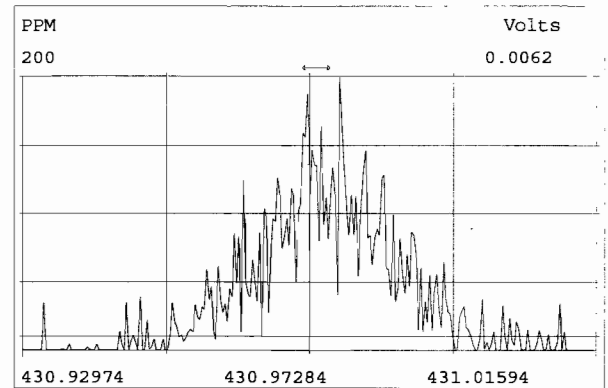
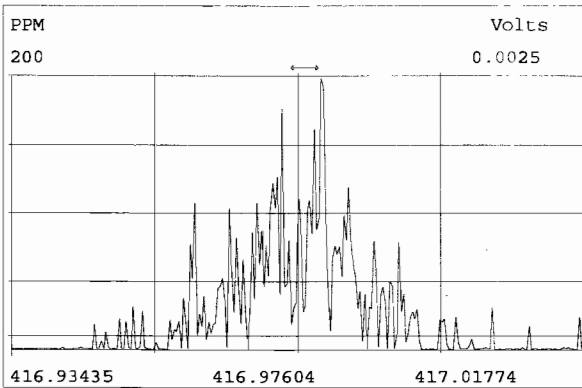
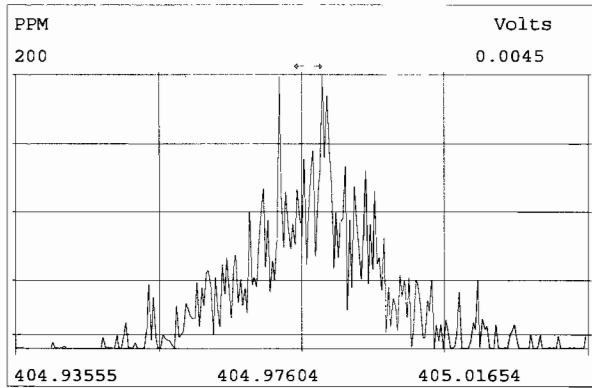
Peak Locate Examination: 1-NOV-2019:13:56 File:191101D1

Experiment:OCDD_DB5 Function:3 Reference:PFK



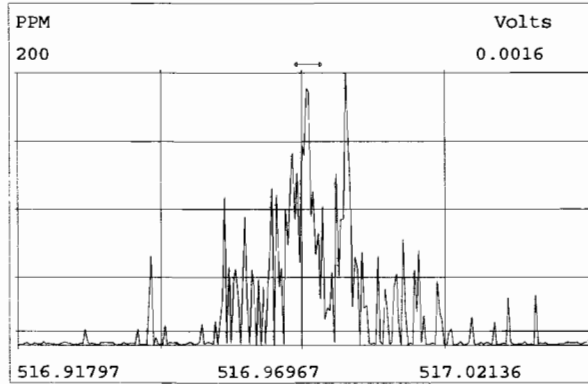
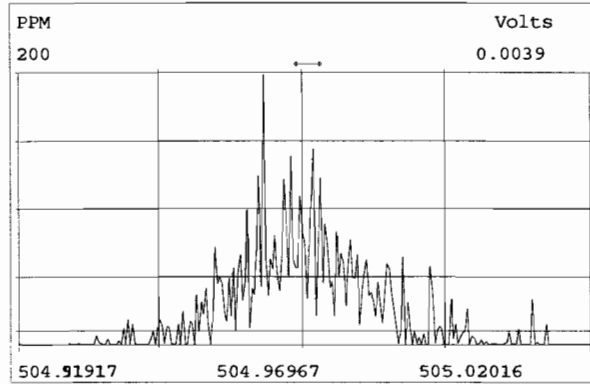
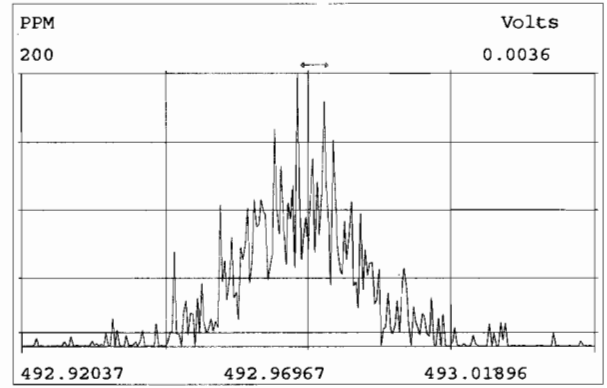
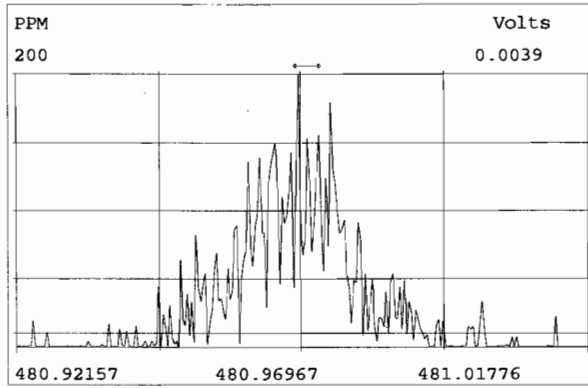
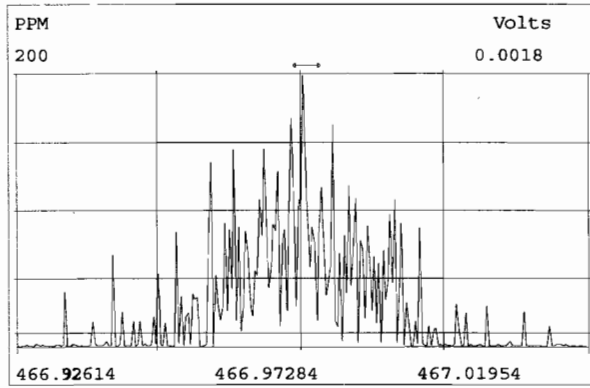
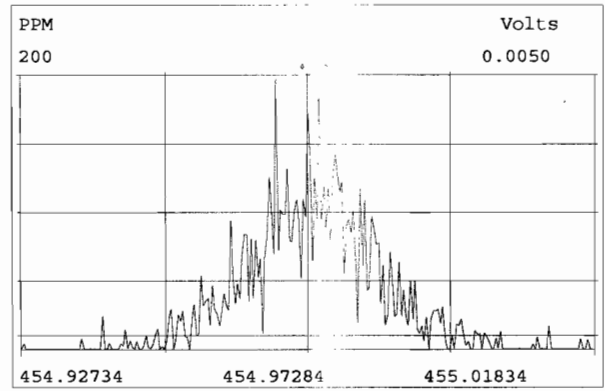
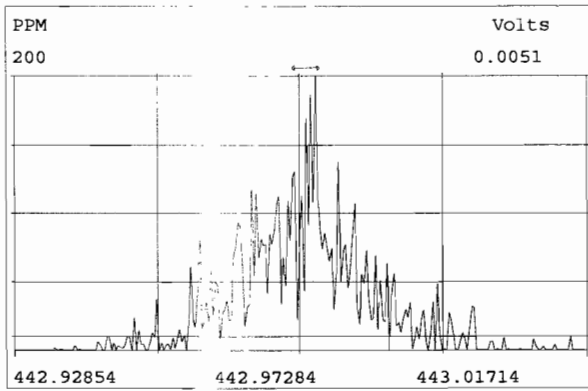
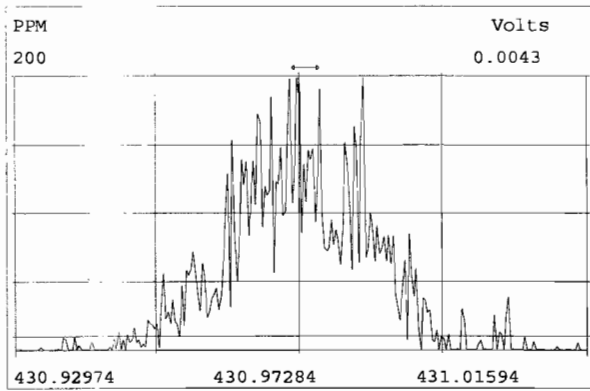
Peak Locate Examination: 1-NOV-2019:13:57 File:191101D1

Experiment:OCDD_DB5 Function:4 Reference:PFK

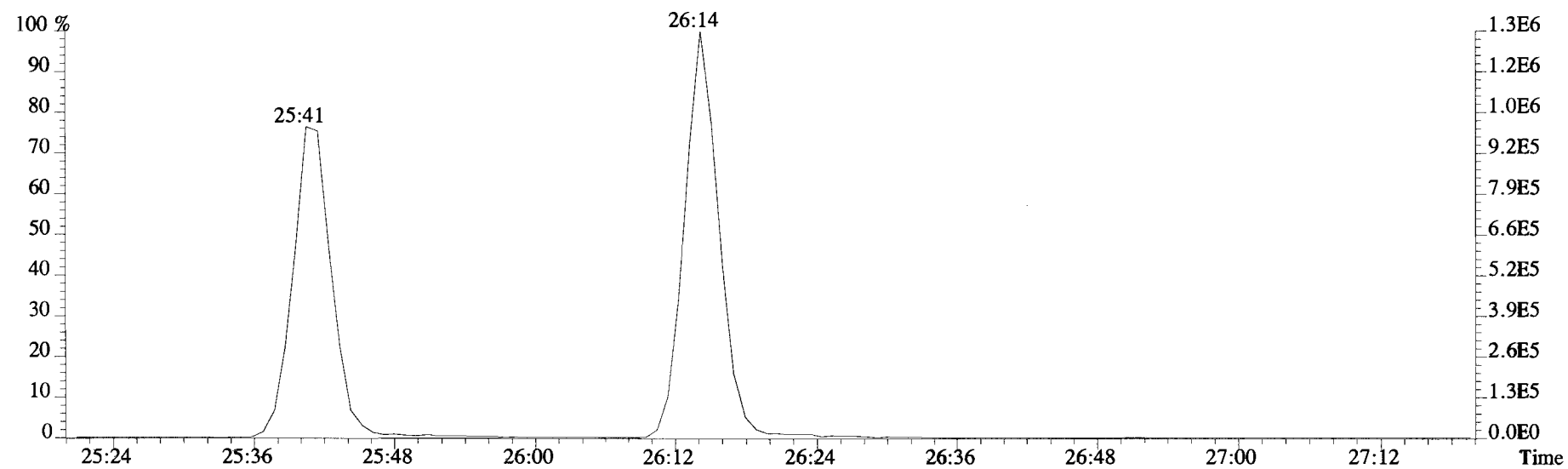
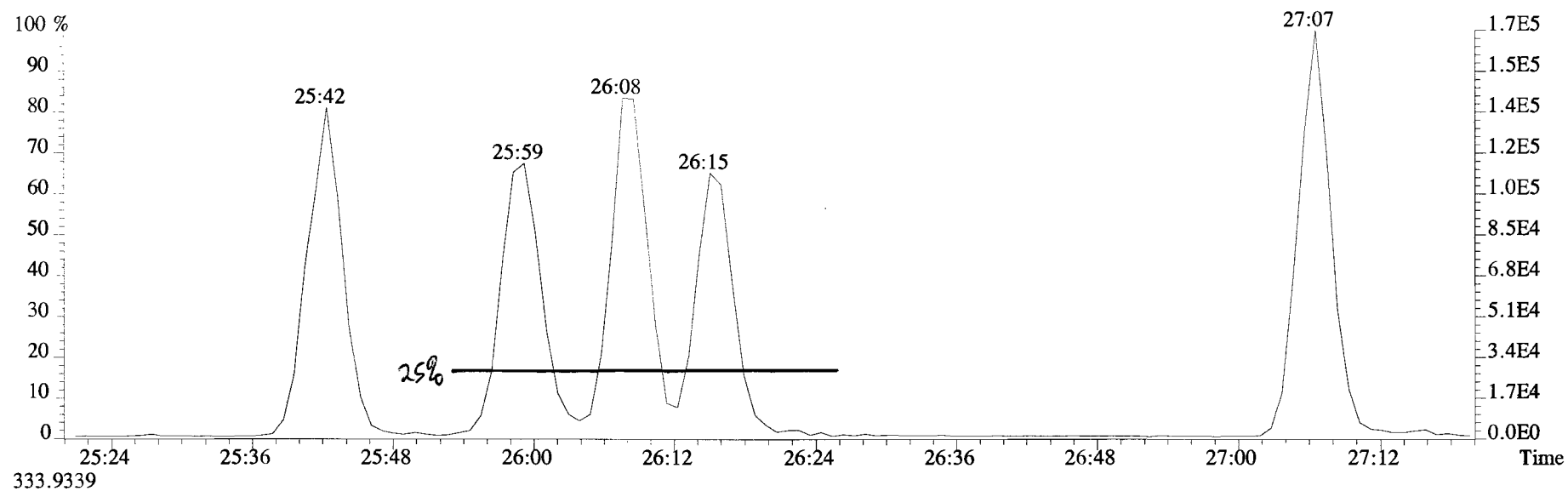


Peak Locate Examination: 1-NOV-2019:13:58 File:191101D1

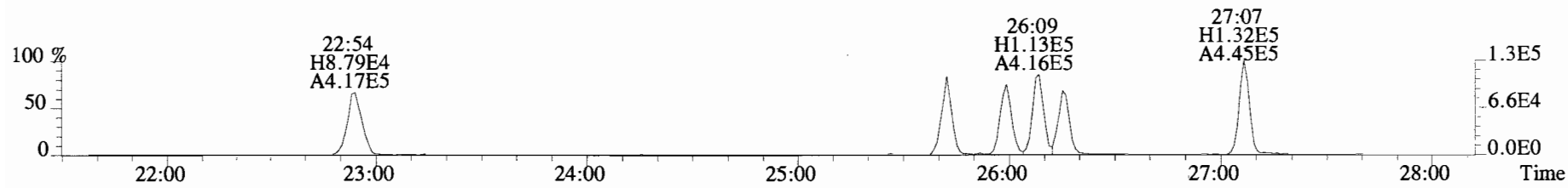
Experiment:OCDD_DB5 Function:5 Reference:PFK



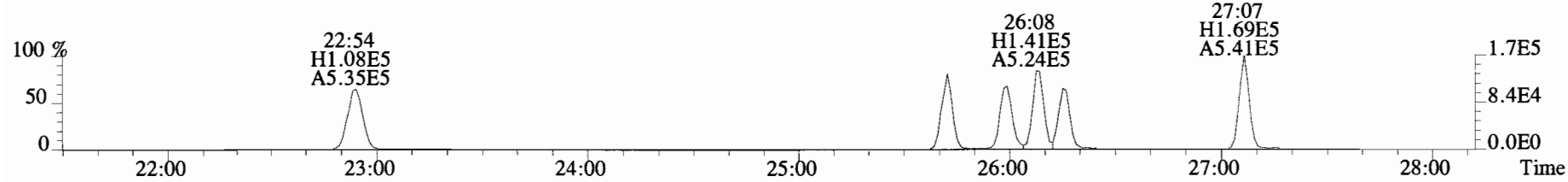
File:191101D1 #1-492 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



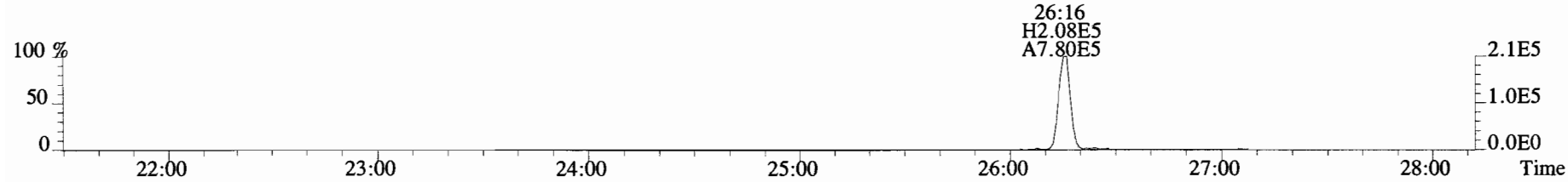
File:191101D1 #1-492 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



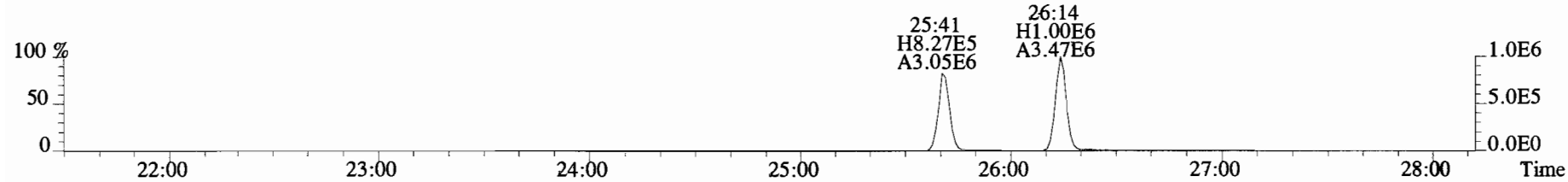
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



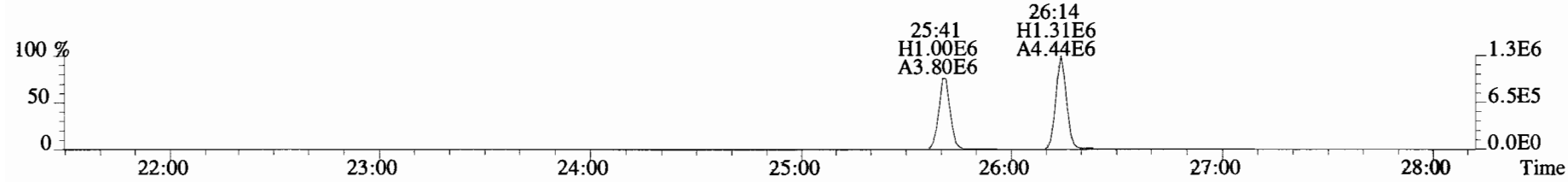
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



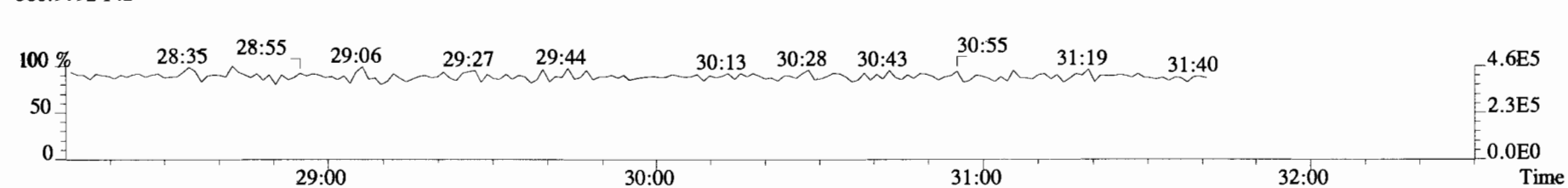
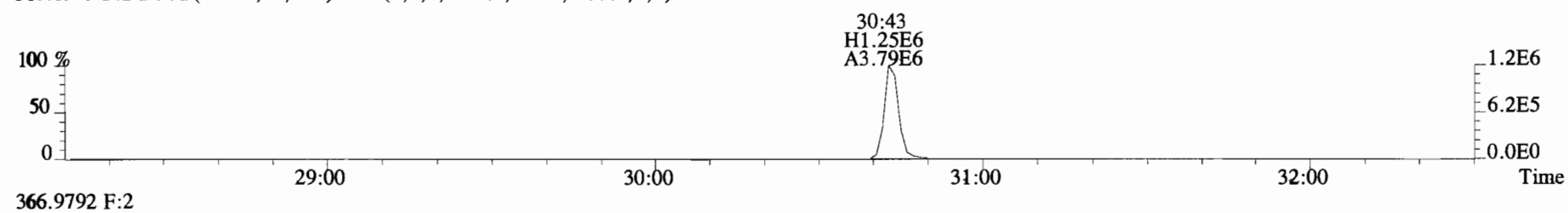
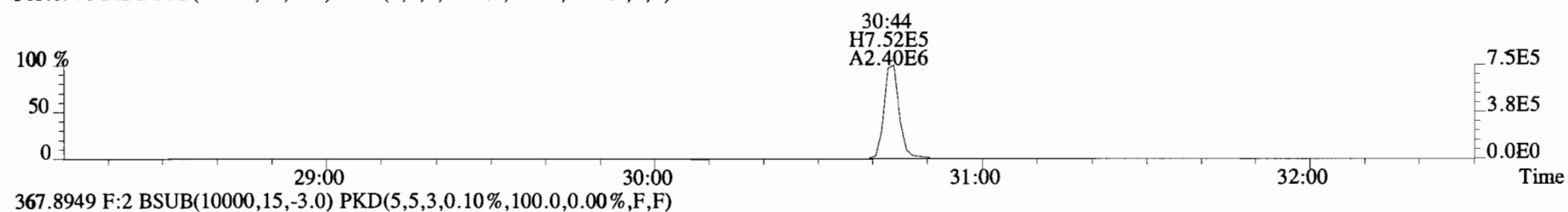
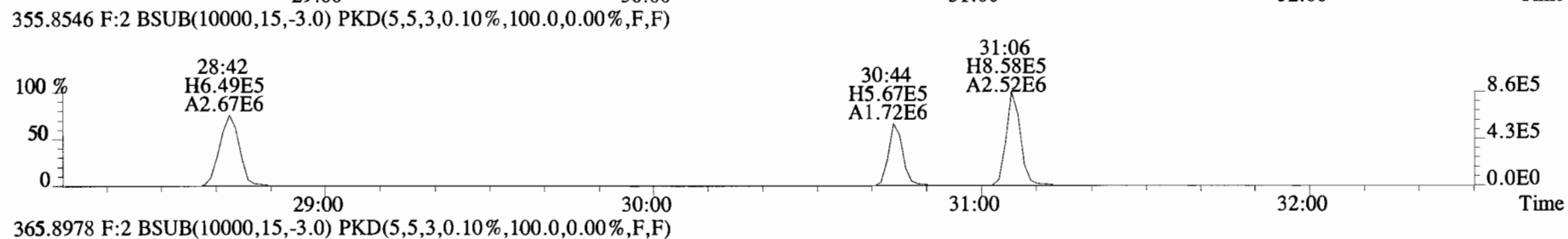
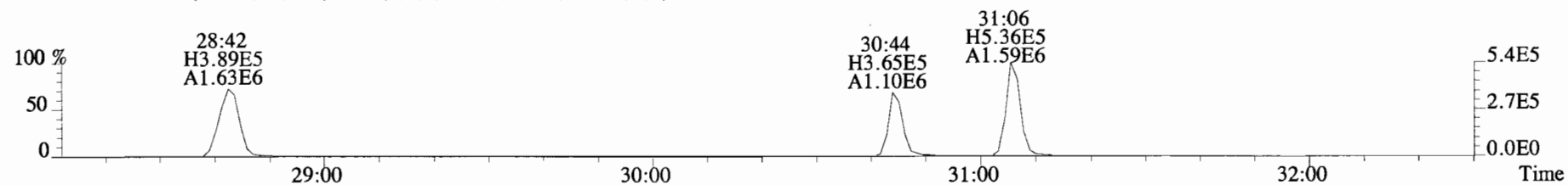
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



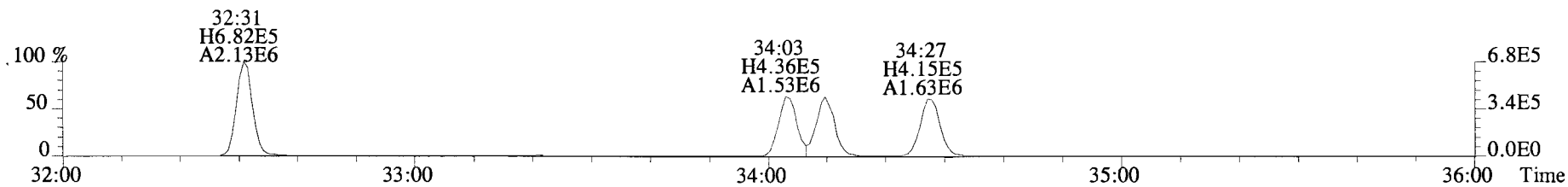
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



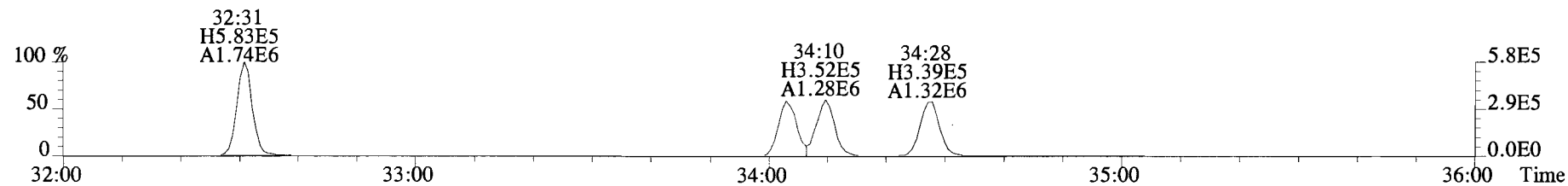
File:191101D1 #1-211 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



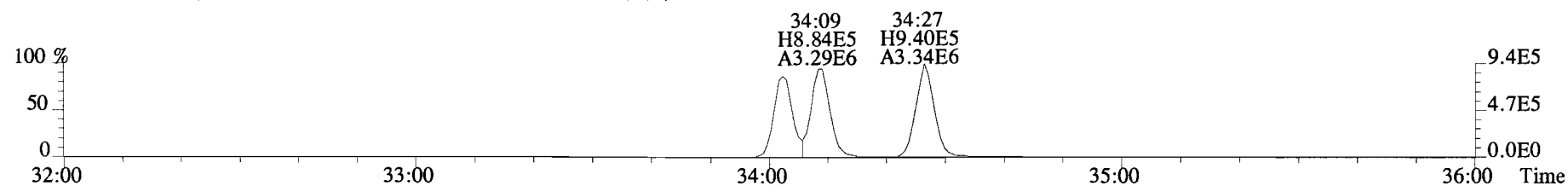
File:191101D1 #1-384 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



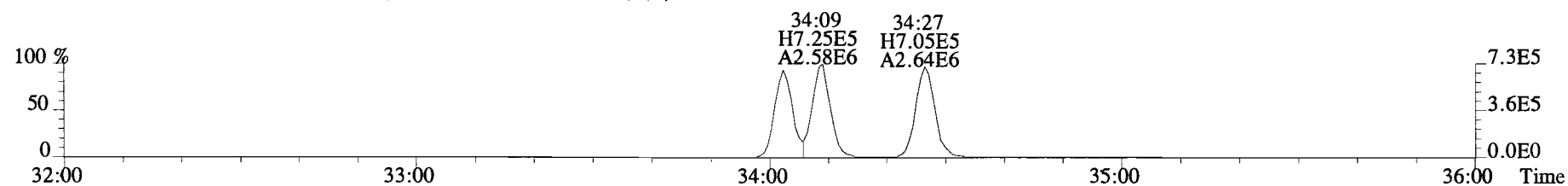
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



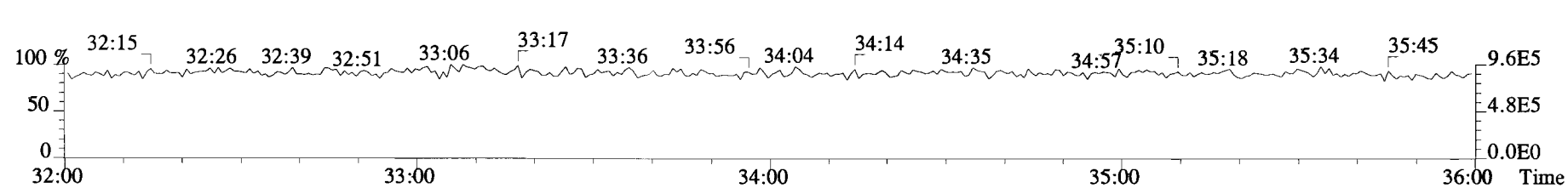
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



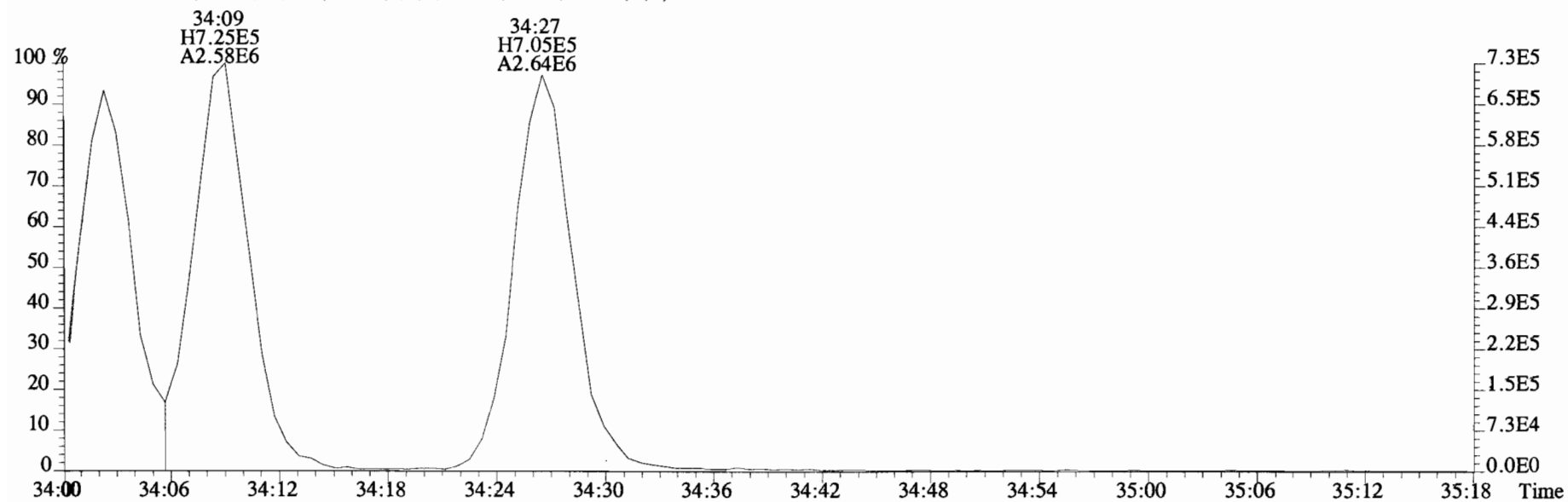
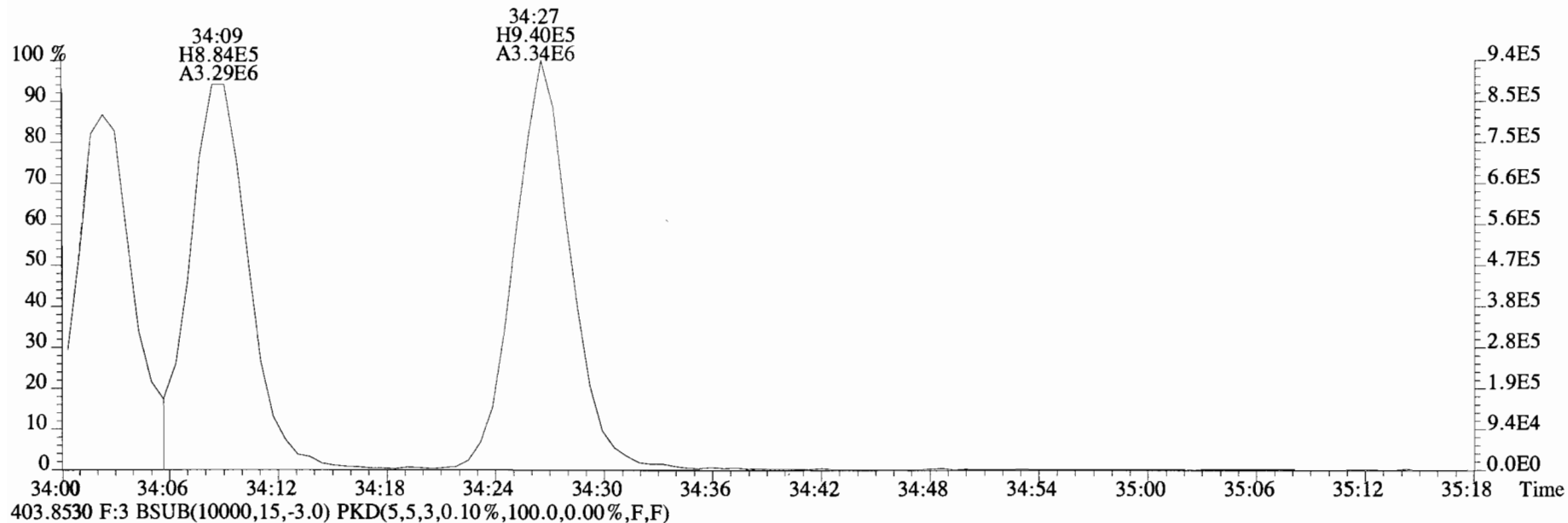
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



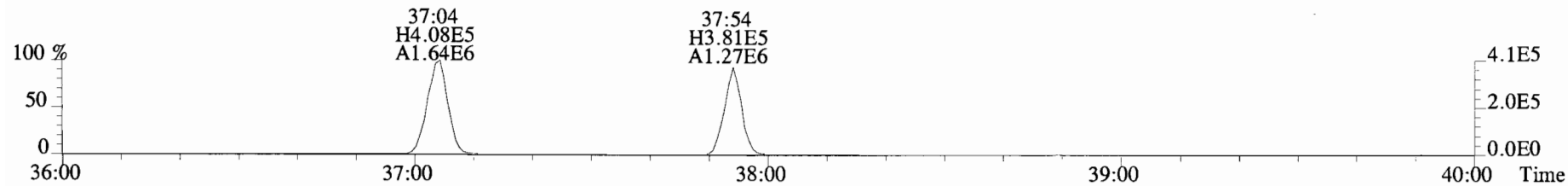
392.9760 F:3



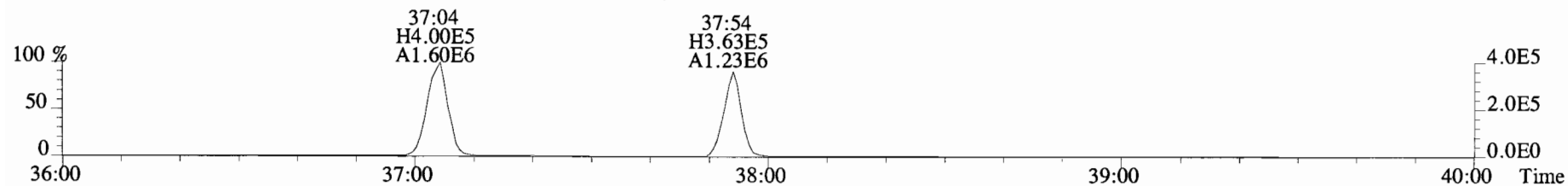
File:191101D1 #1-384 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



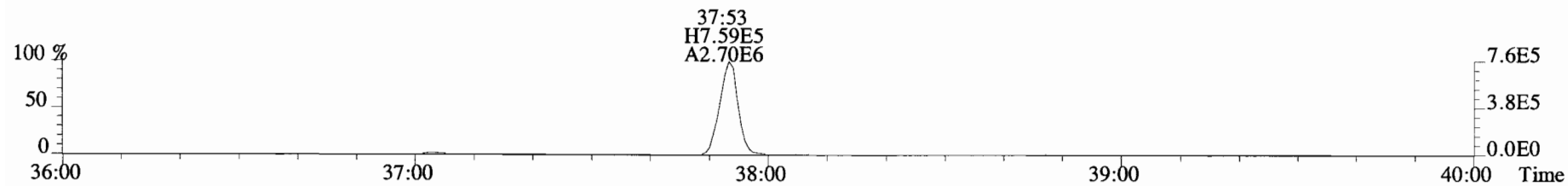
File:191101D1 #1-356 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



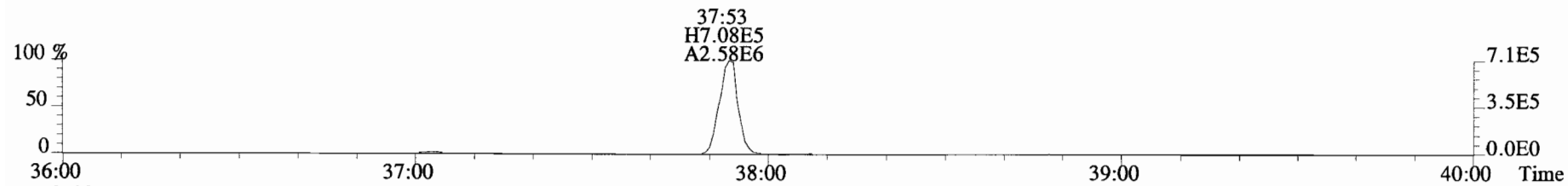
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



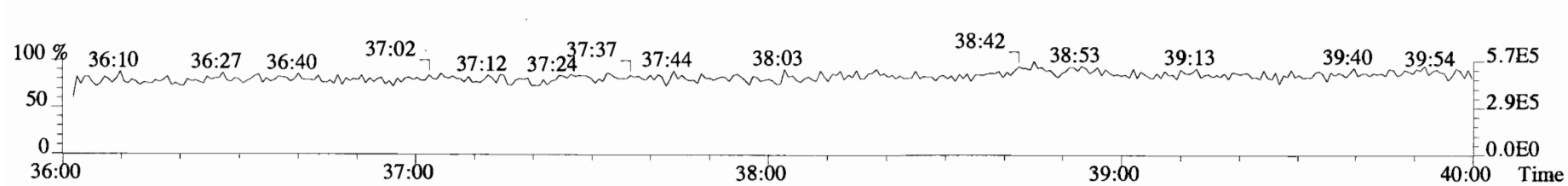
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



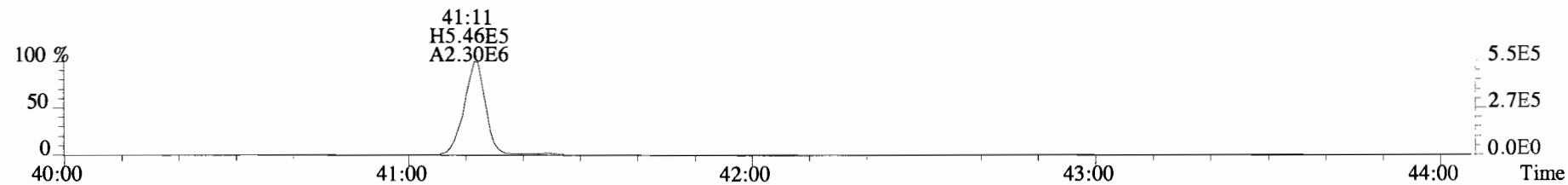
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



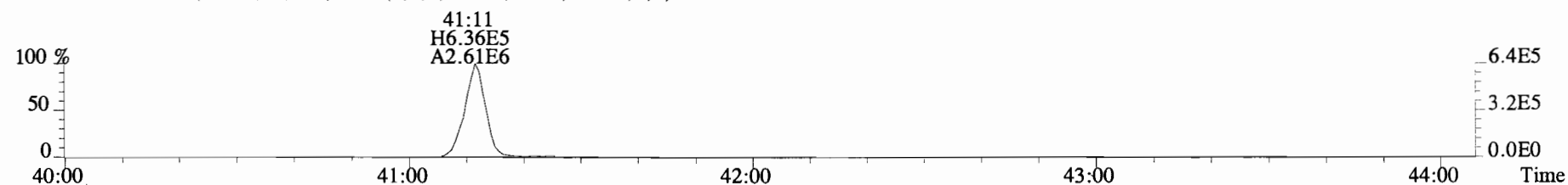
454.9728 F:4



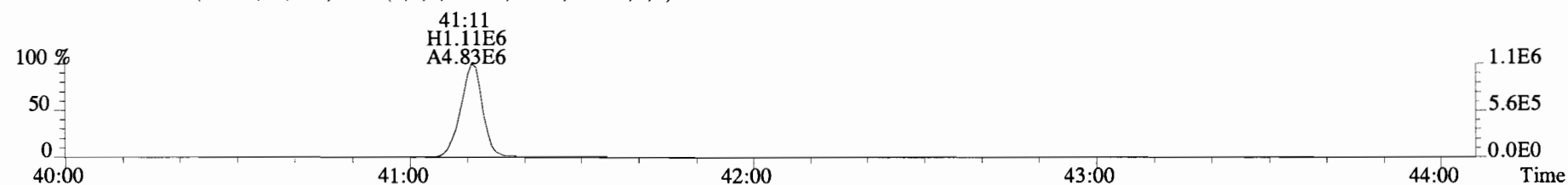
File:191101D1 #1-431 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



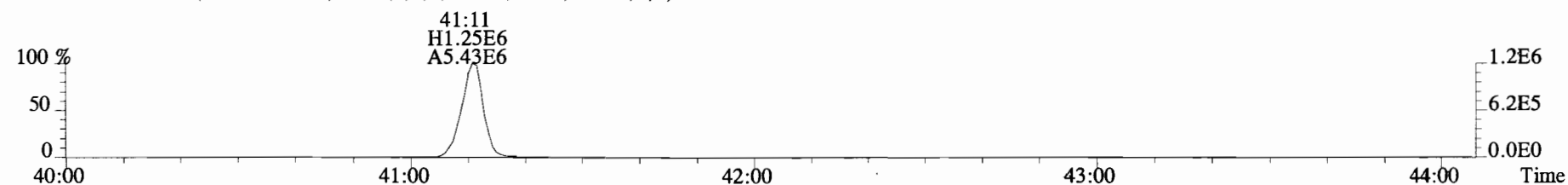
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



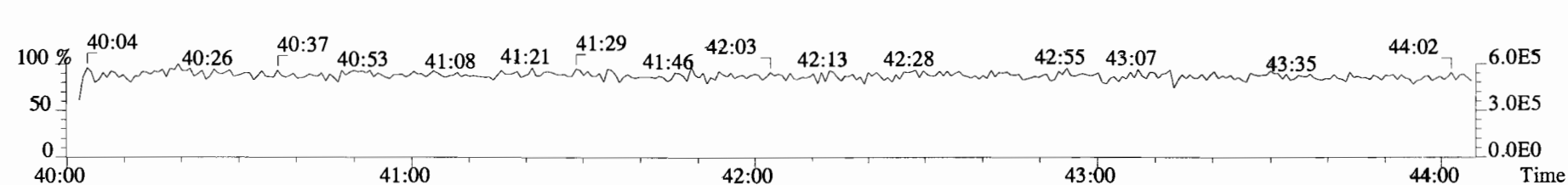
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



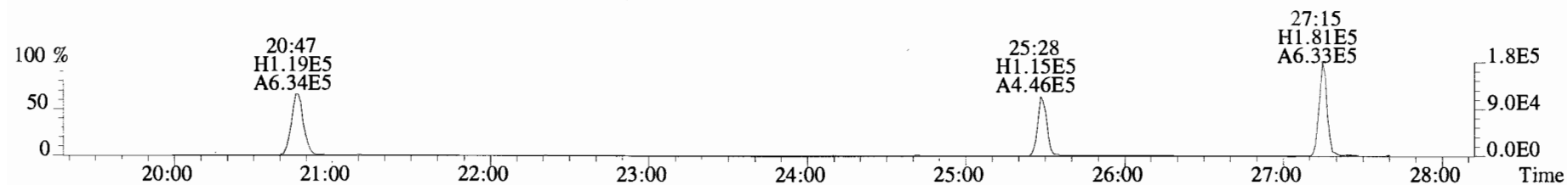
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



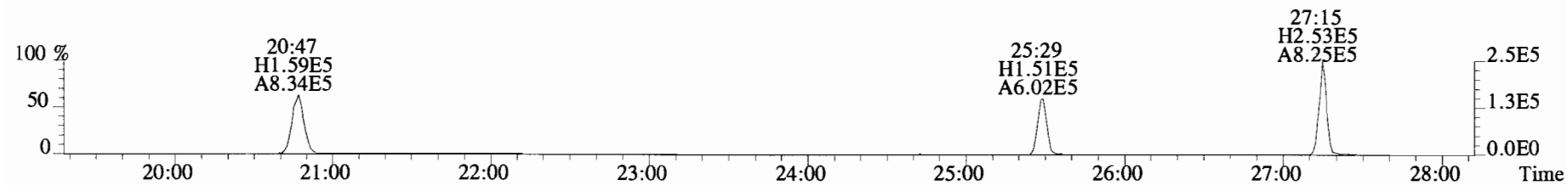
454.9728 F:5



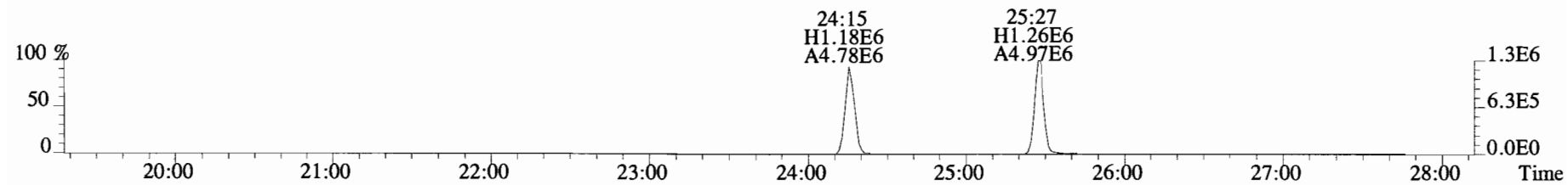
File:191101D1 #1-492 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



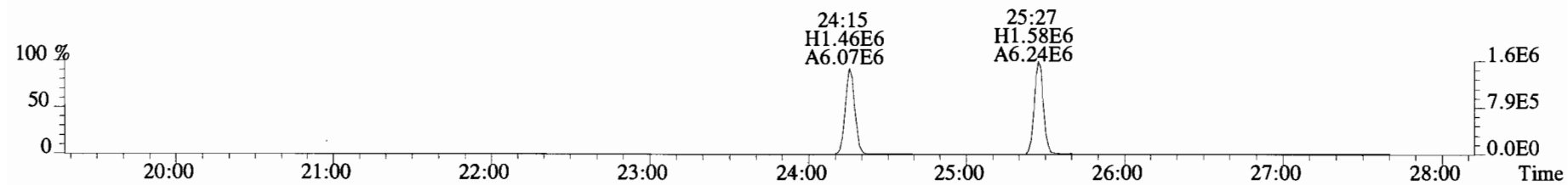
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



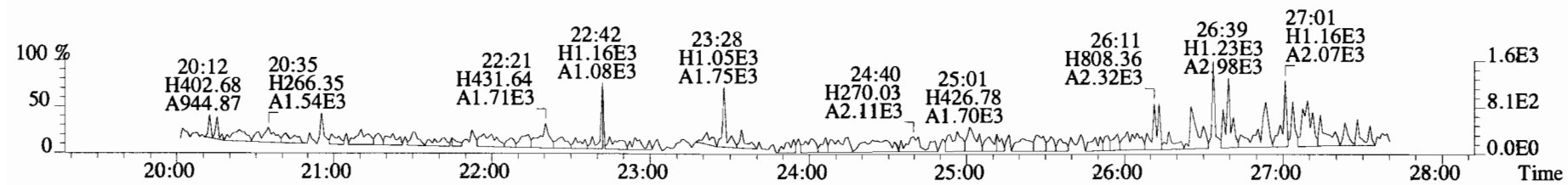
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



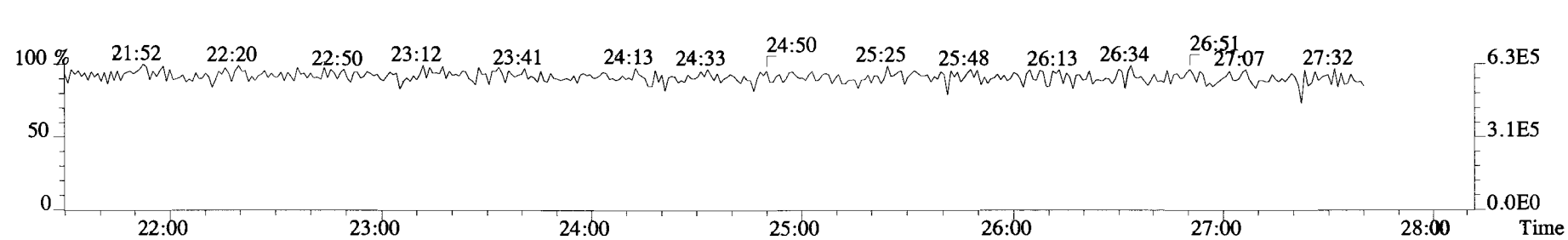
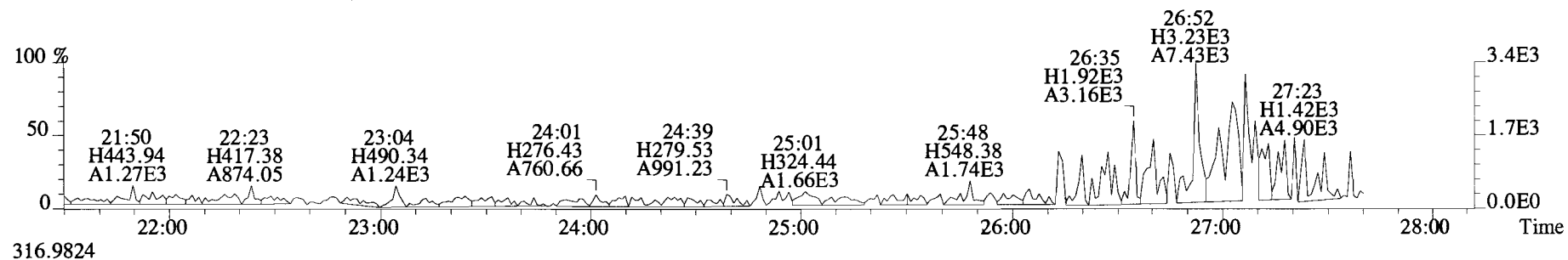
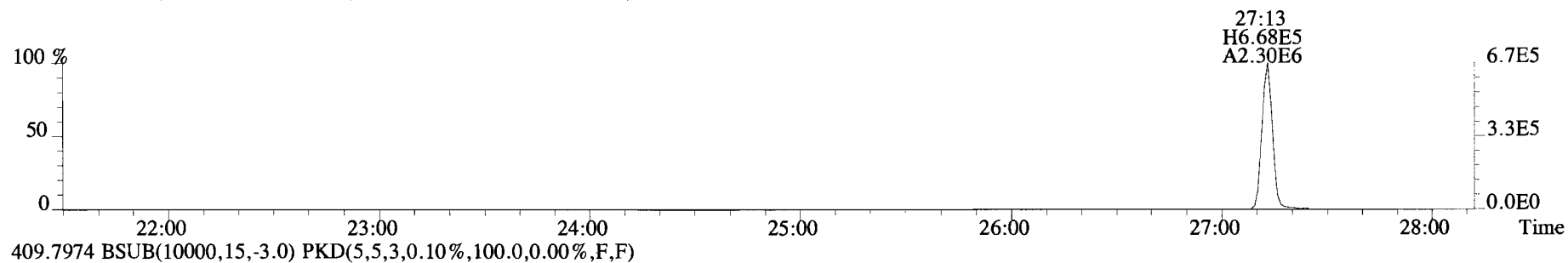
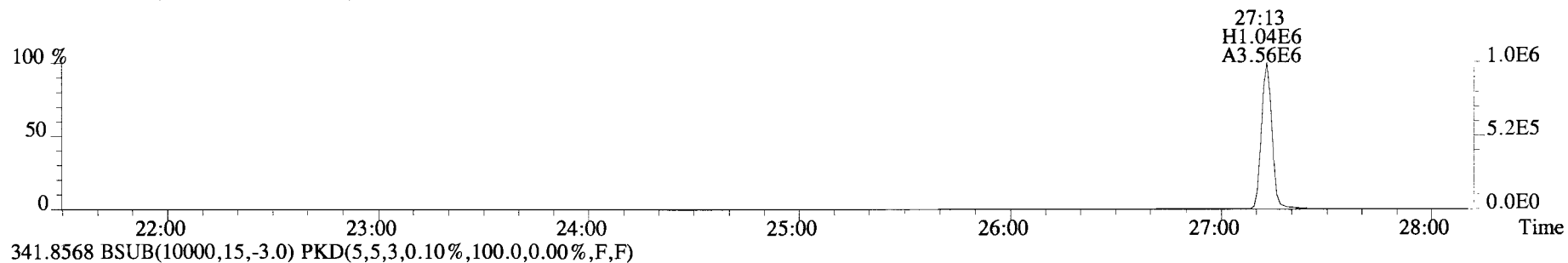
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



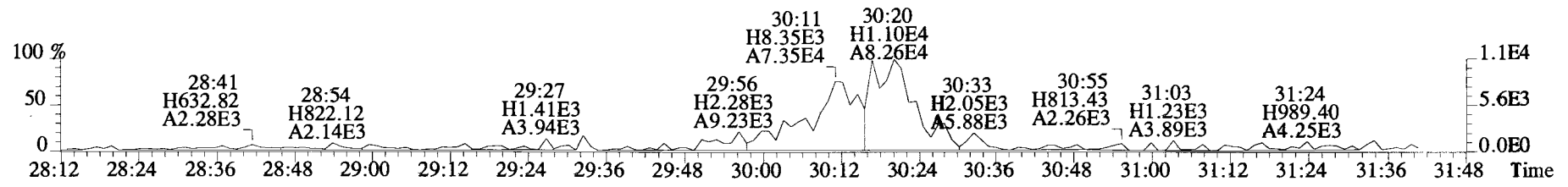
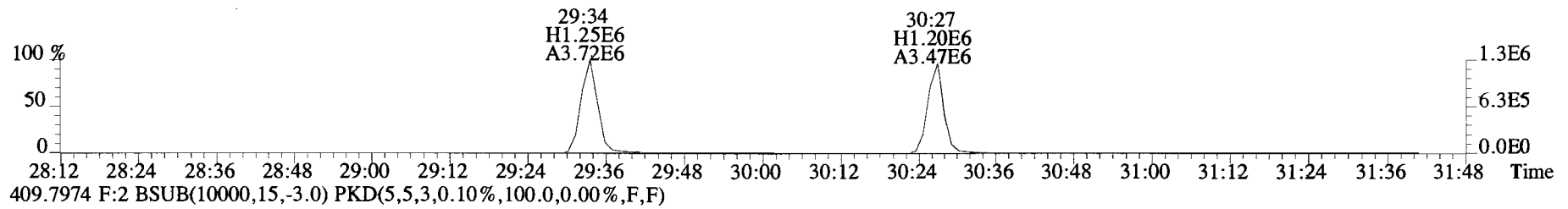
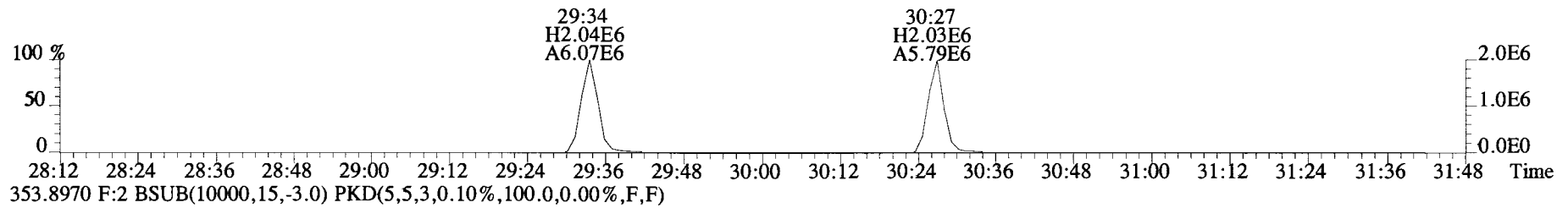
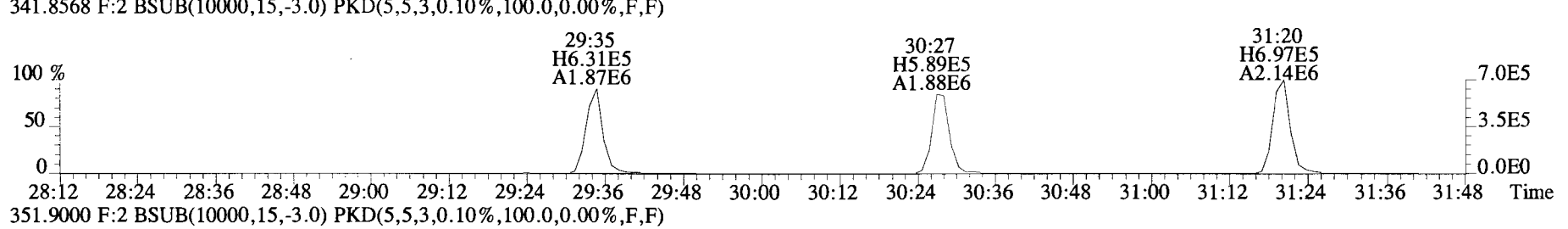
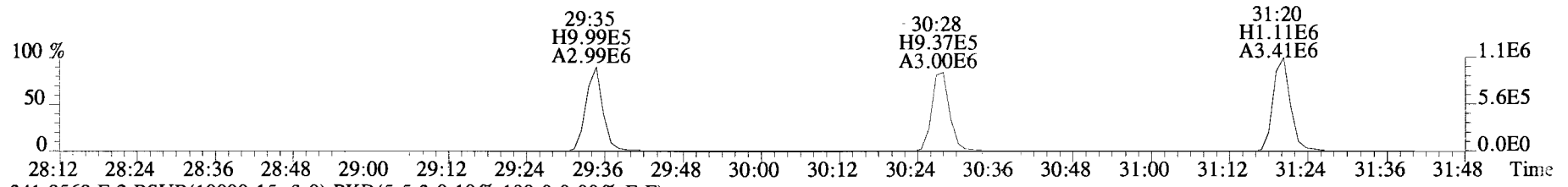
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



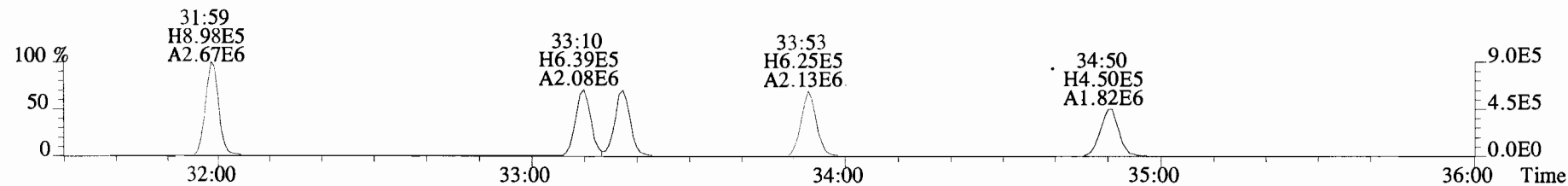
File:191101D1 #1-492 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



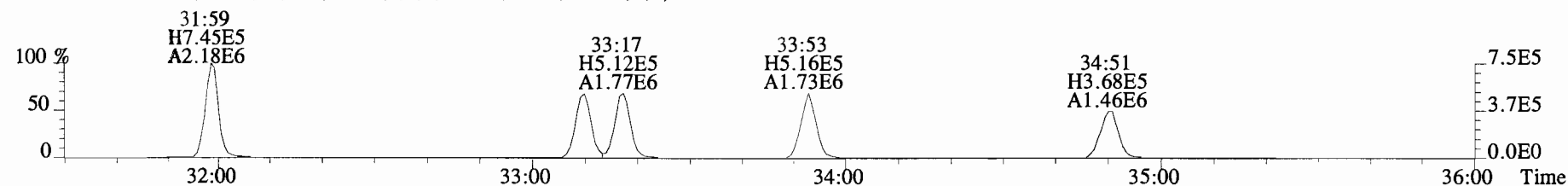
File:191101D1 #1-211 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



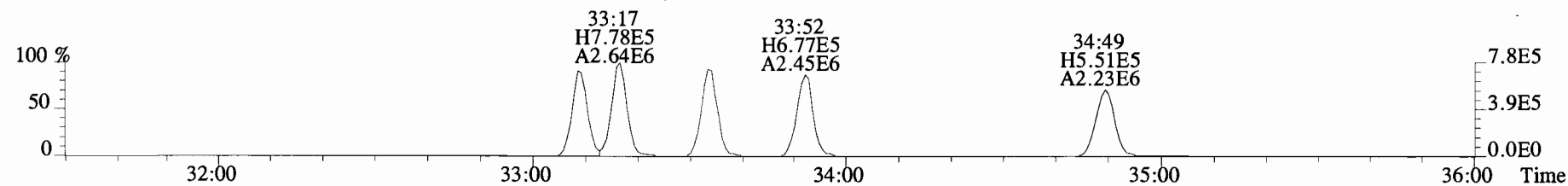
File:191101D1 #1-384 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



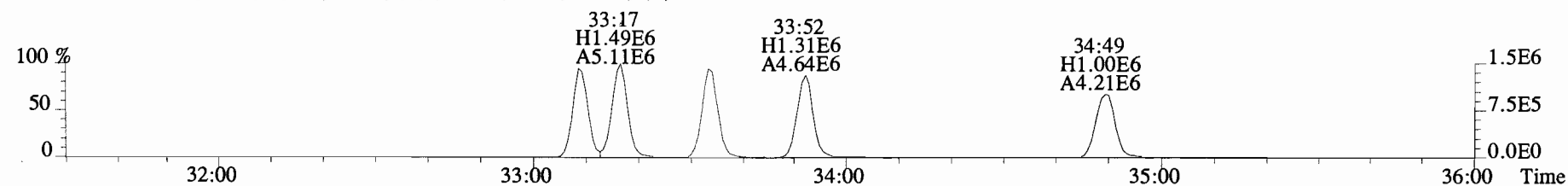
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



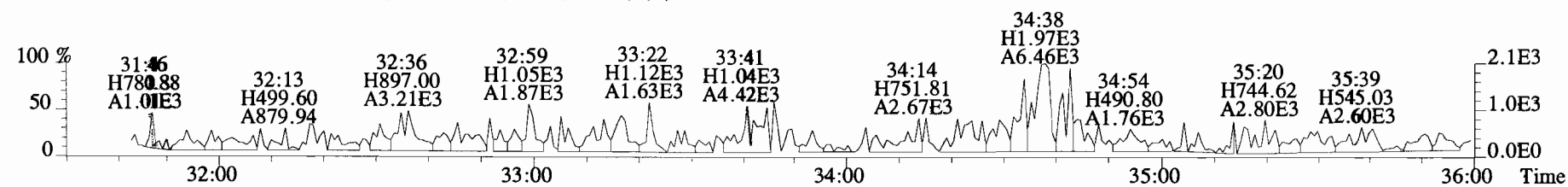
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



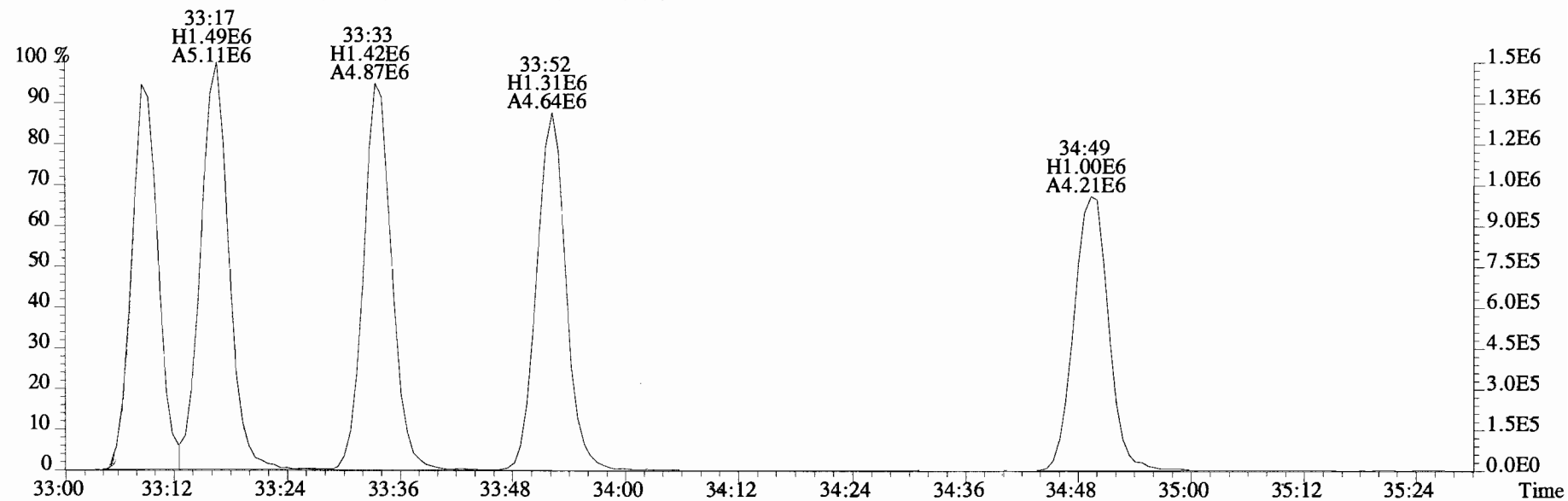
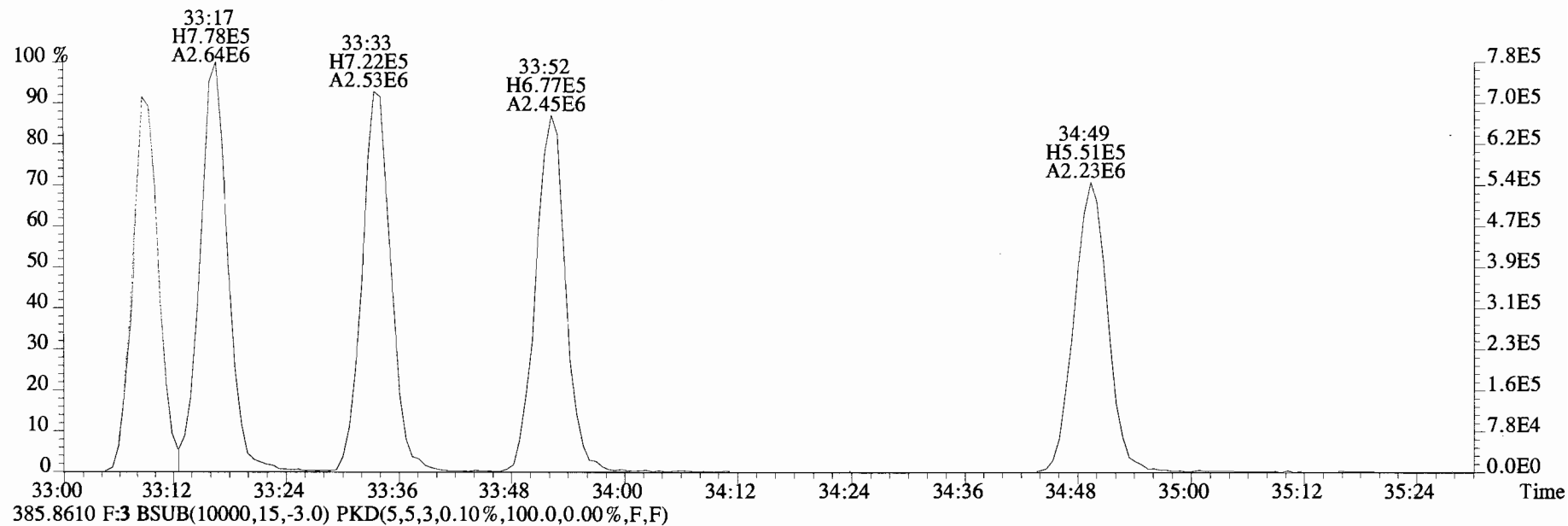
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



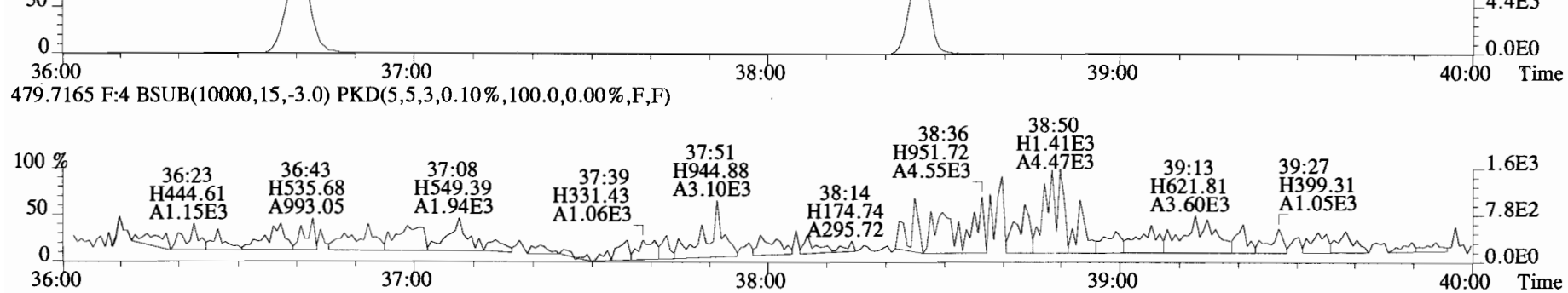
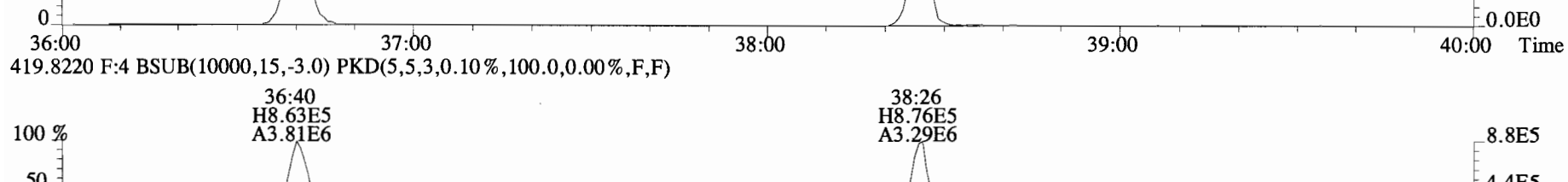
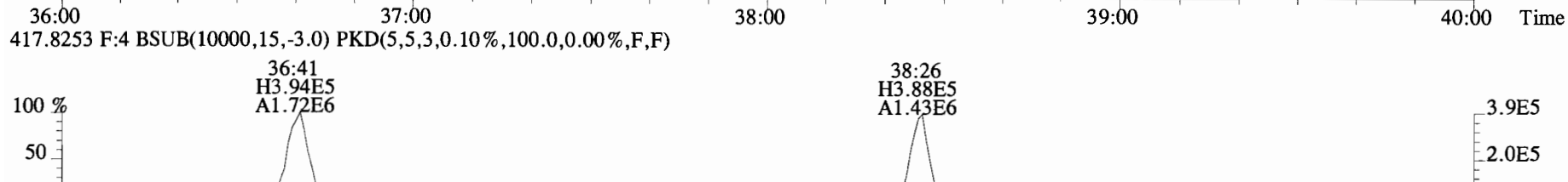
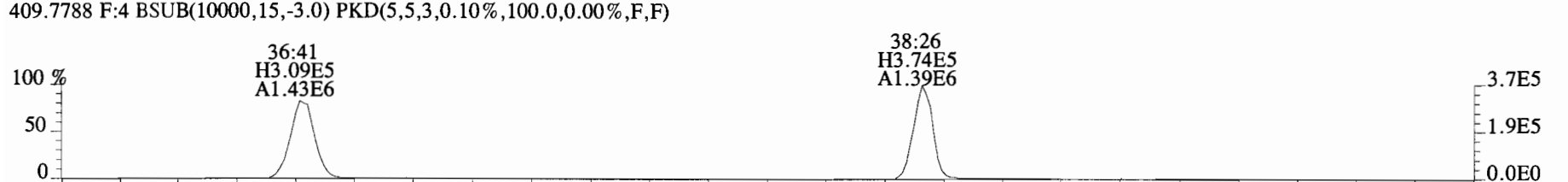
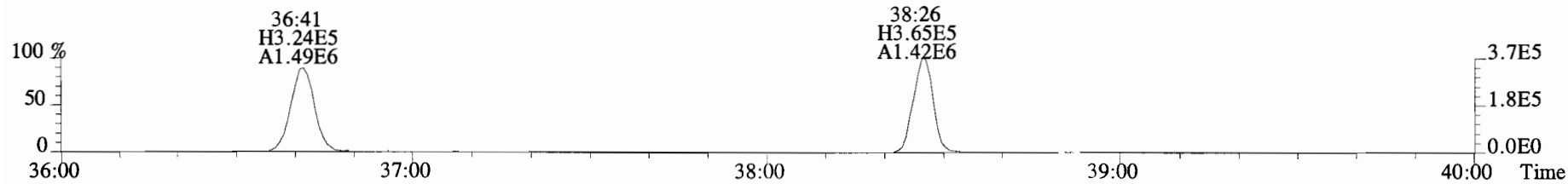
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



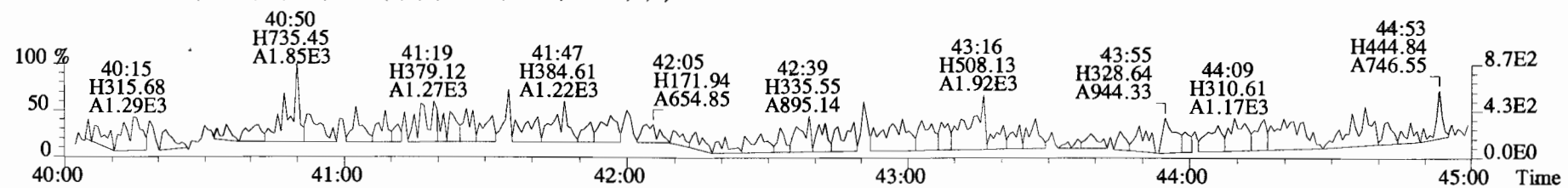
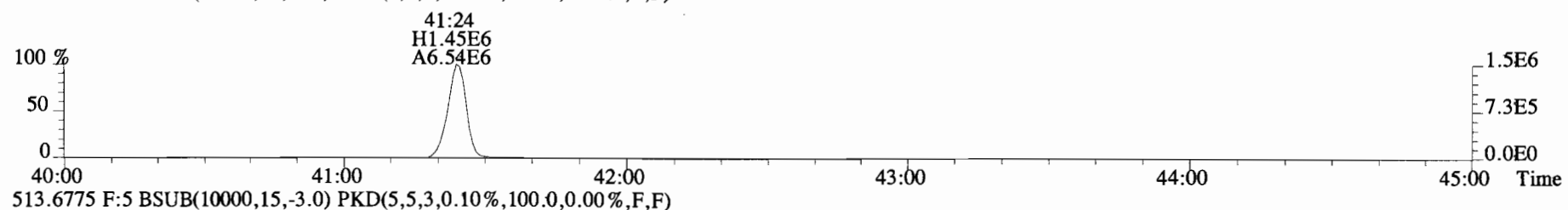
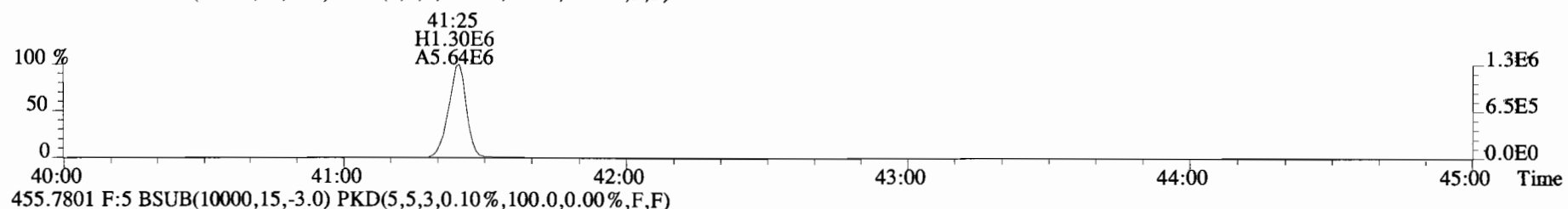
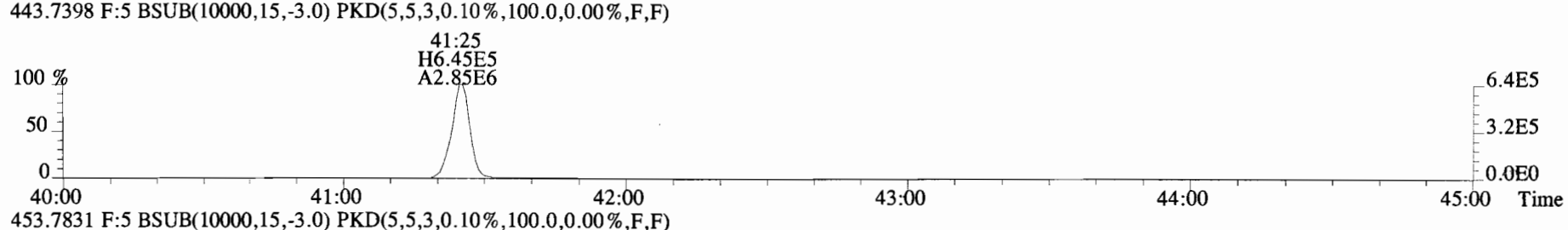
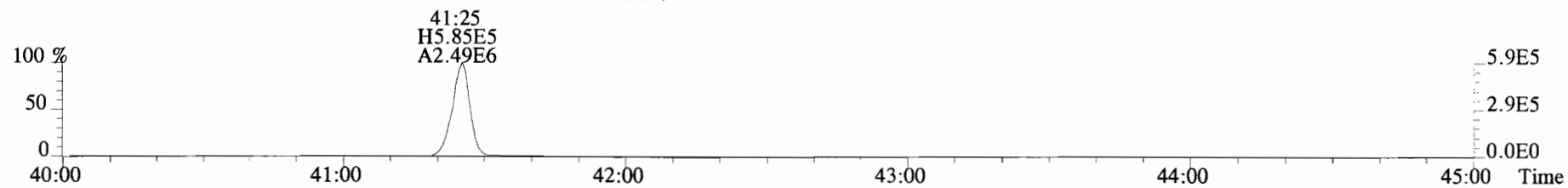
File:191101D1 #1-384 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191101D1 #1-356 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

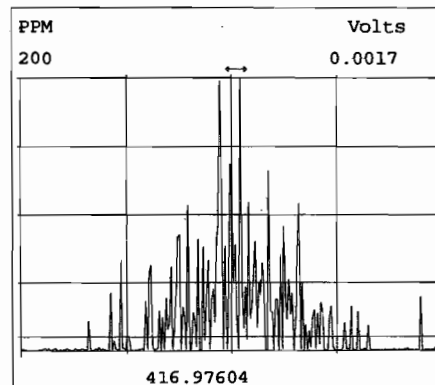
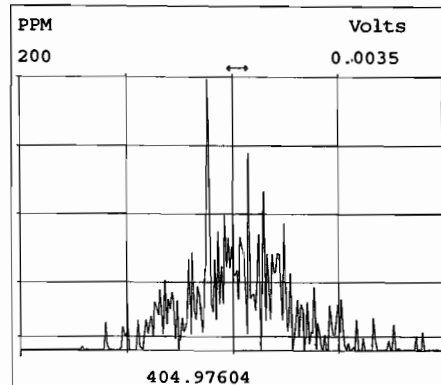
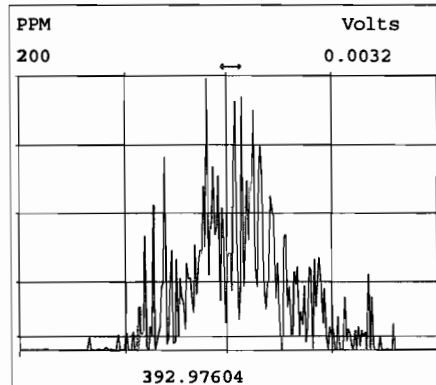
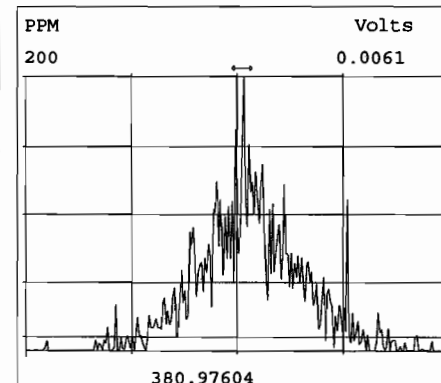
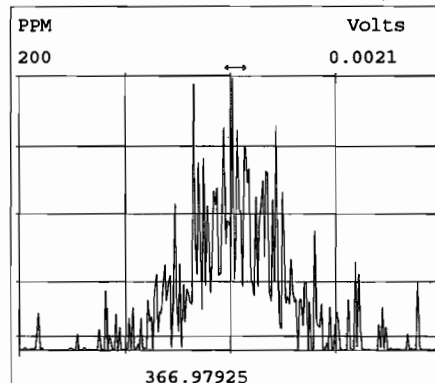
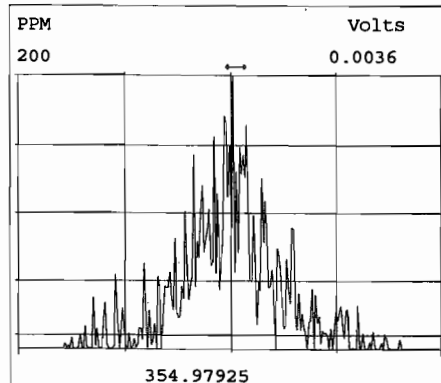
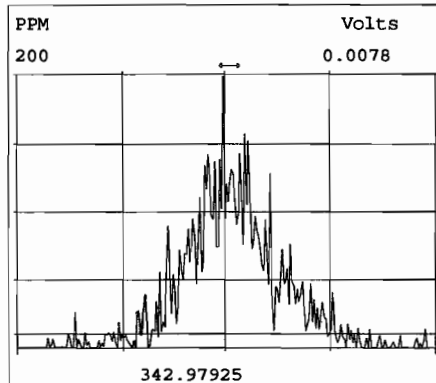
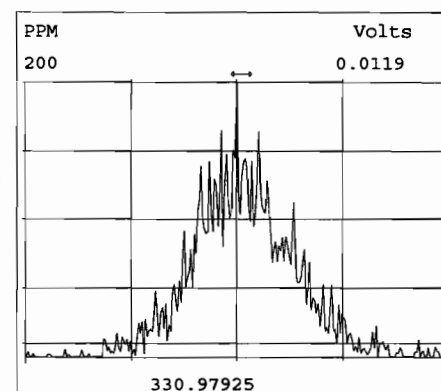
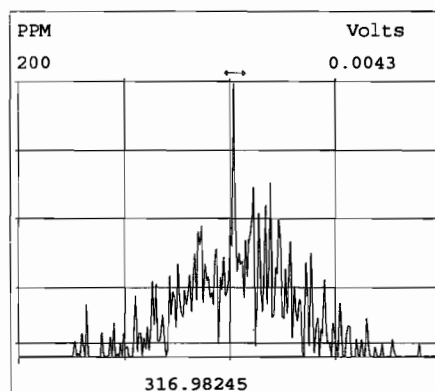
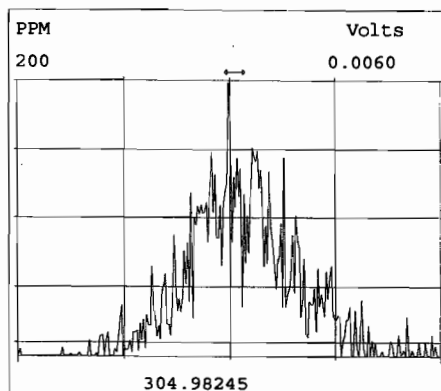
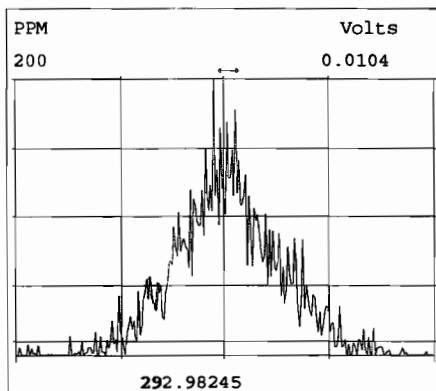


File:191101D1 #1-431 Acq: 1-NOV-2019 13:59:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191101D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



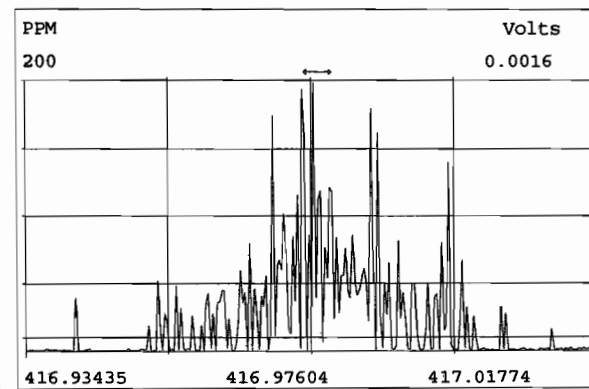
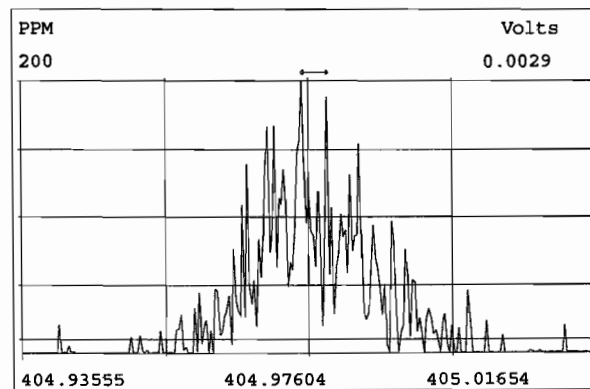
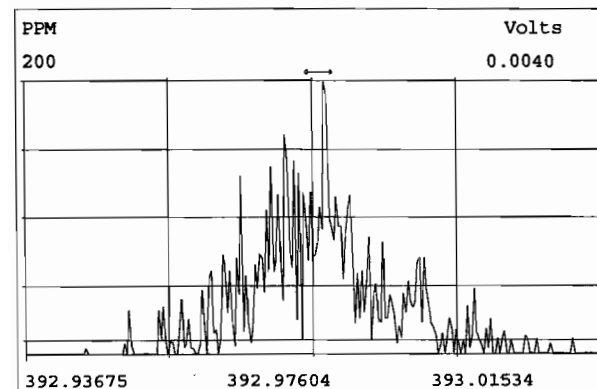
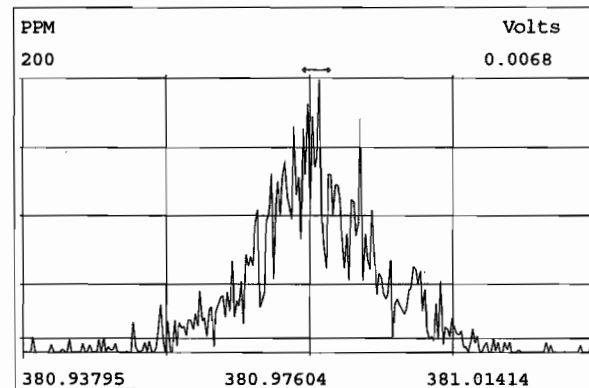
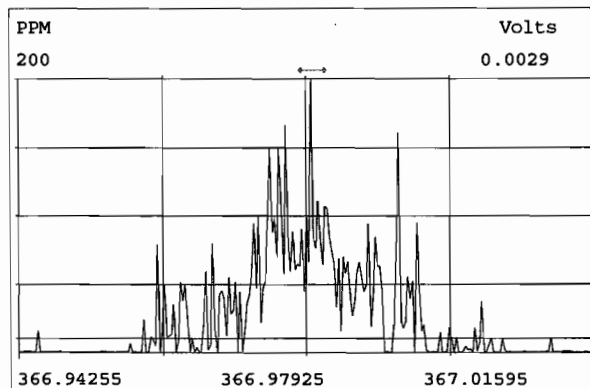
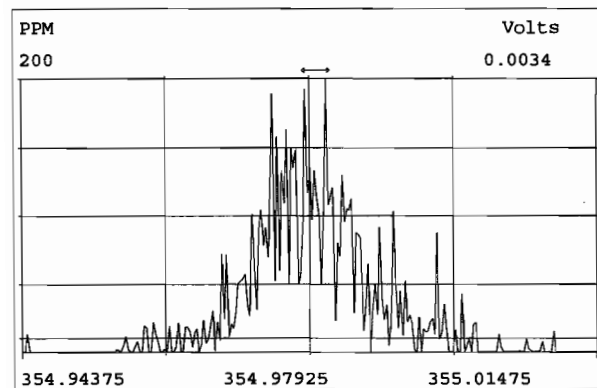
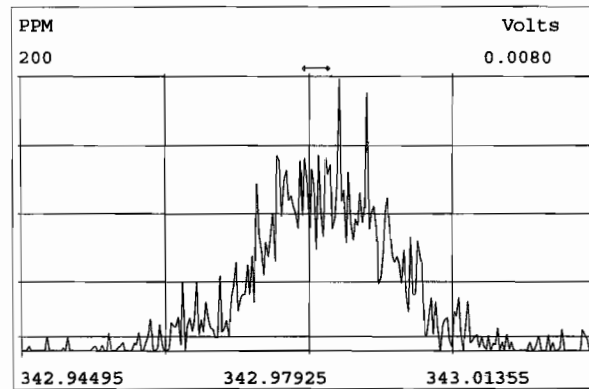
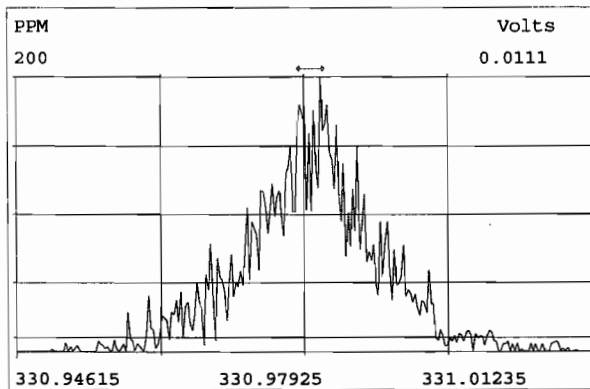
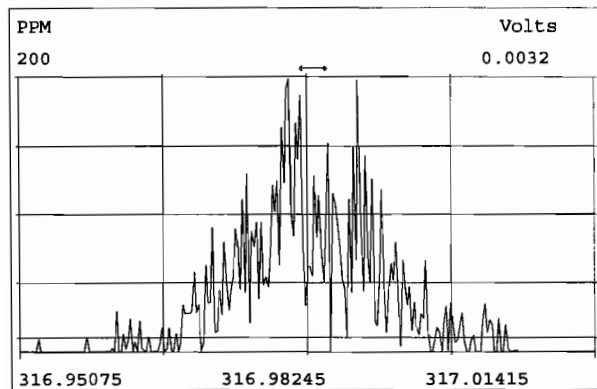
Peak Locate Examination: 2-NOV-2019:02:53 File:RES_CHECK

Experiment:OCDD_DB5 Function:1 Reference:PFK



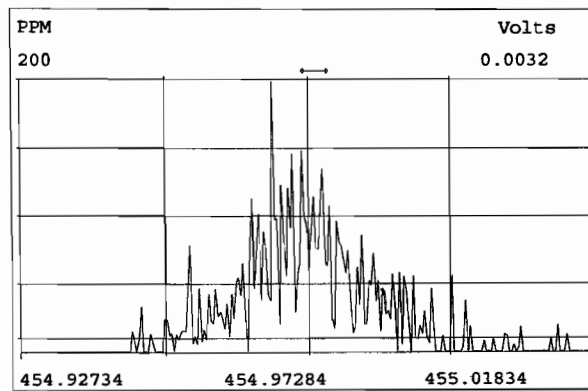
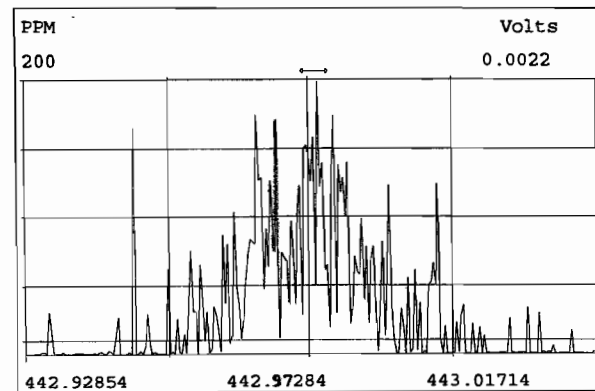
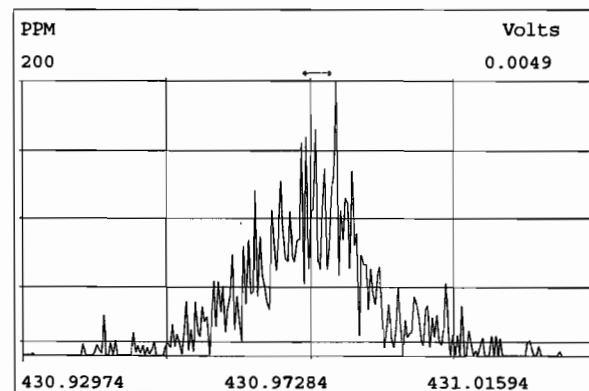
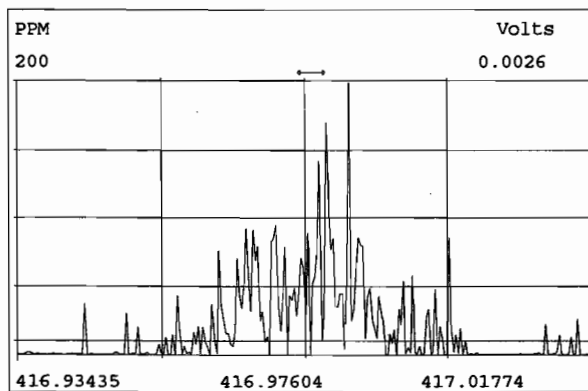
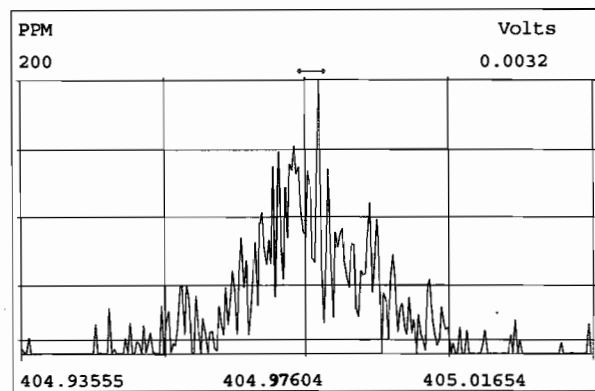
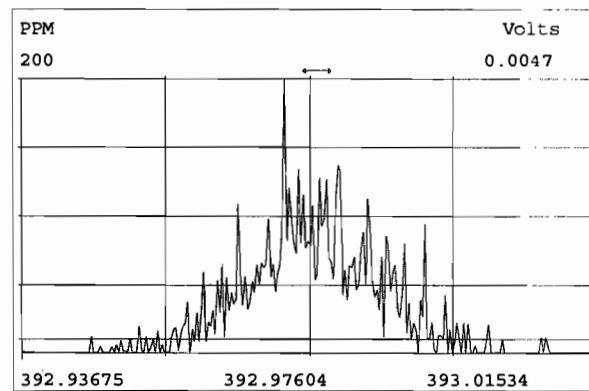
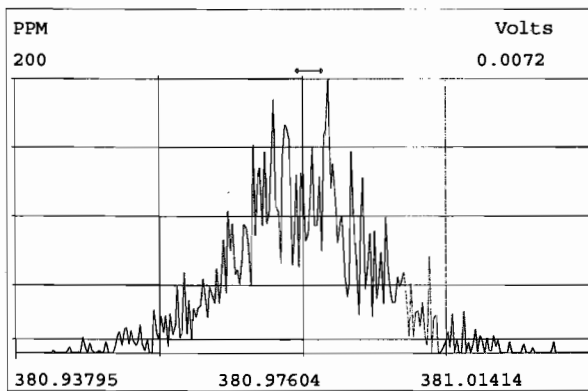
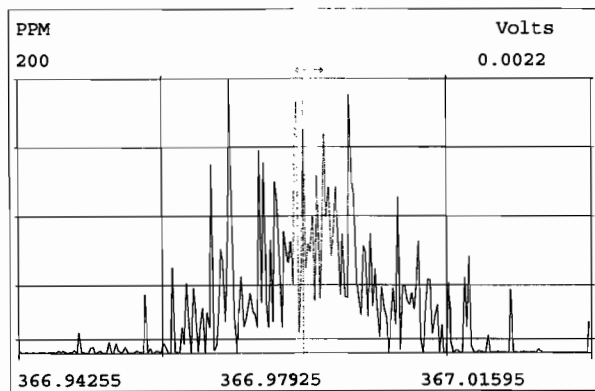
Peak Locate Examination: 2-NOV-2019:02:54 File:RES_CHECK

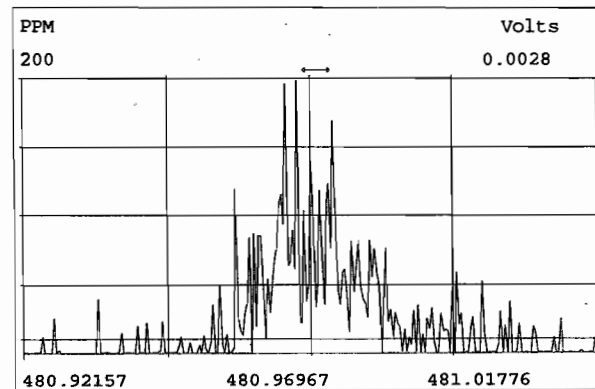
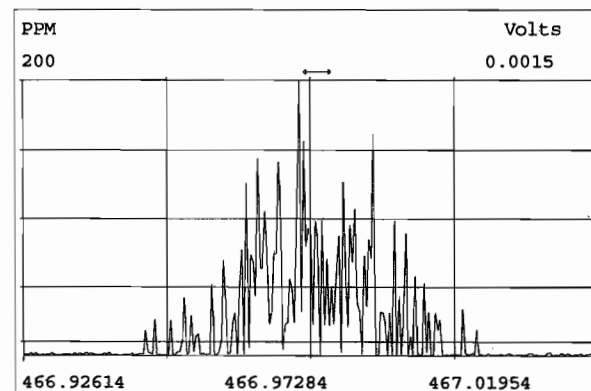
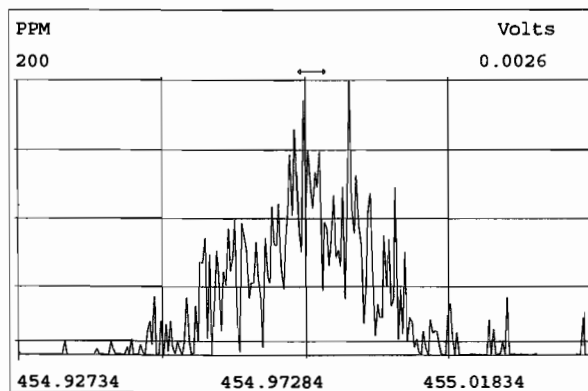
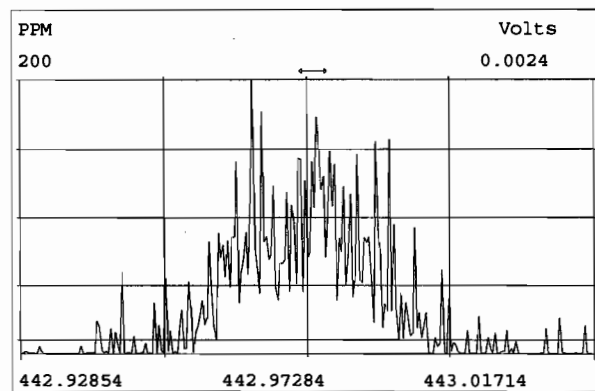
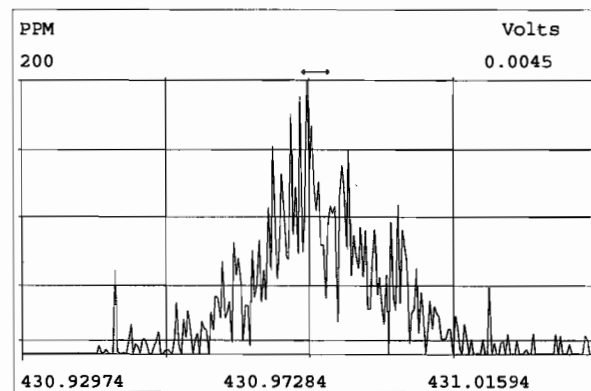
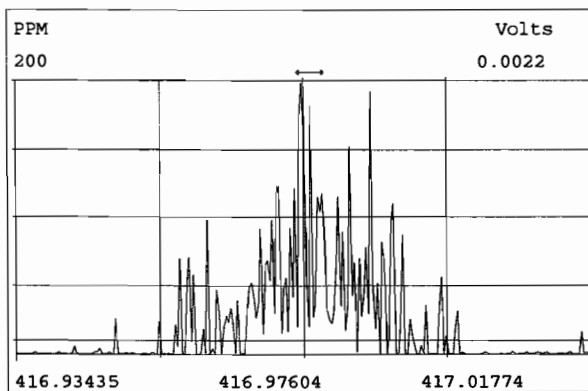
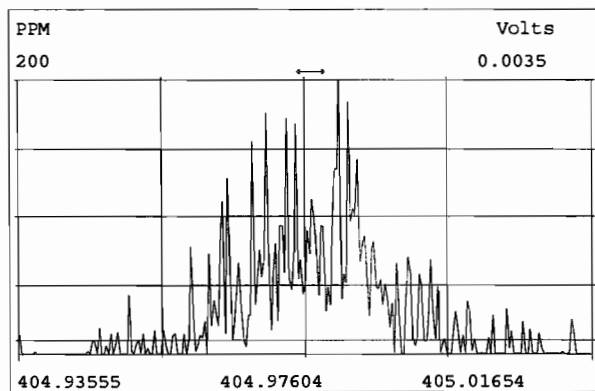
Experiment:OCDD_DB5 Function:2 Reference:PFK



Peak Locate Examination: 2-NOV-2019:02:55 File:RES_CHECK

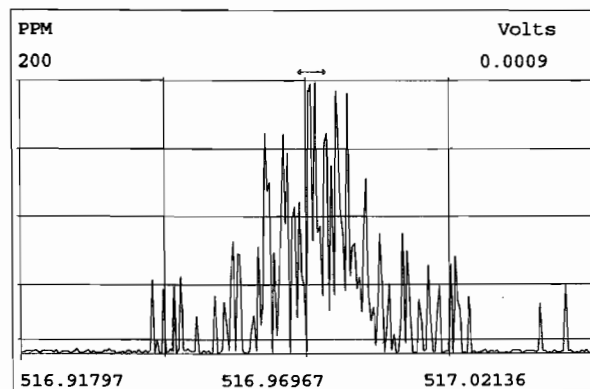
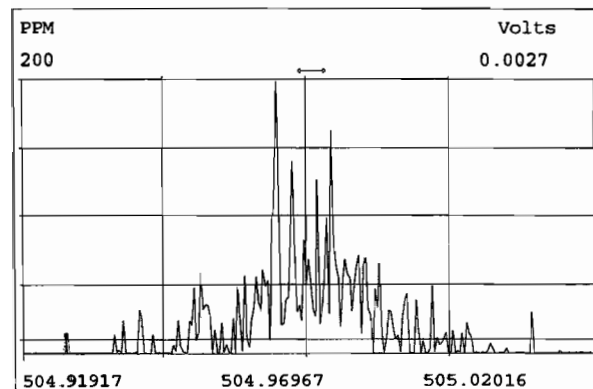
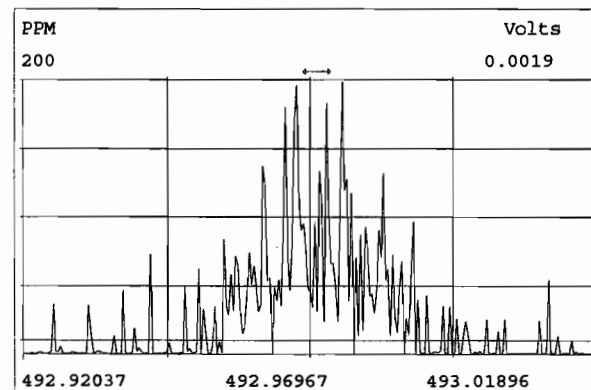
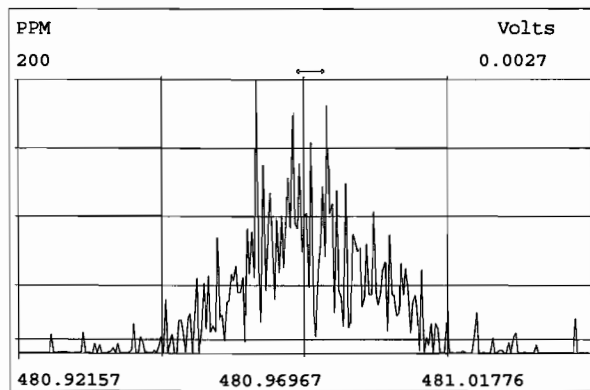
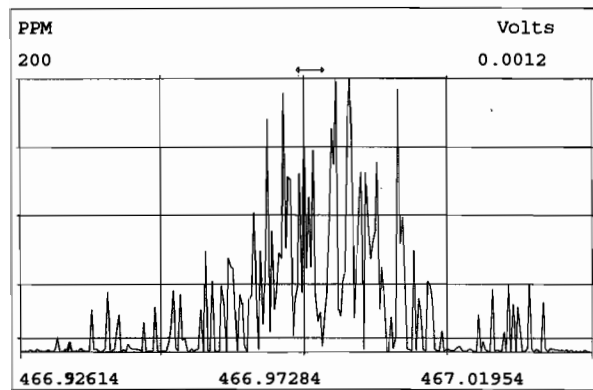
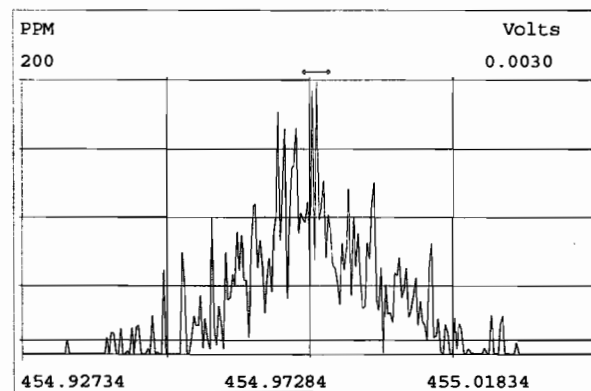
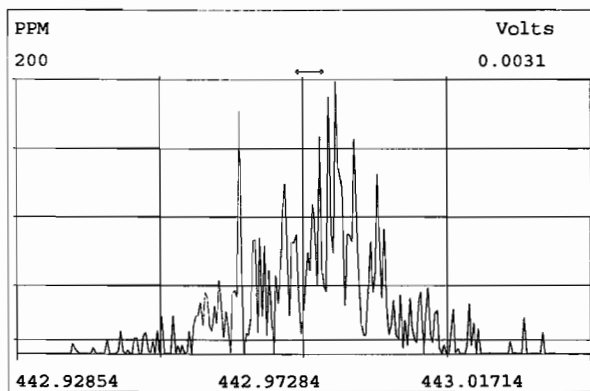
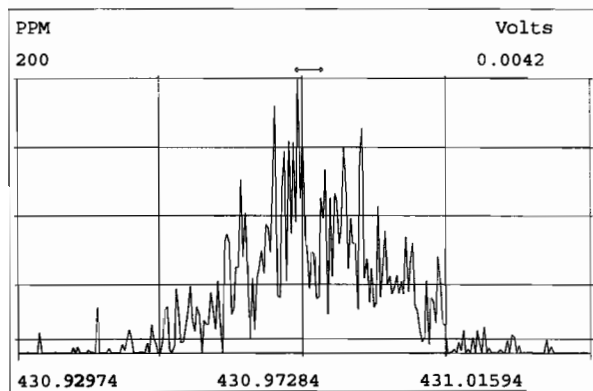
Experiment:OCDD_DB5 Function:3 Reference:PFK





Peak Locate Examination: 2-NOV-2019:02:57 File:RES_CHECK

Experiment:OCDD_DB5 Function:5 Reference:PFK



HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191106D1-1

Reviewed By: CT 11/07/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA	Mass resolution \geq	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614 1699 429 1613/1668/8280		
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GC Break <20%	<input type="checkbox"/> NA	
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>8280 CS1 End Standard:</u>		
Verification Std. named correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	- Ratios within limits, S/N <2.5:1, CS1 within 12 hours	<input type="checkbox"/> NA	
(ST-Year-Month-Day-VG ID)					
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comments:	<div style="height: 150px;"></div>	
Correct ICAL referenced?	<input type="checkbox"/> DB	<input type="checkbox"/>			
<u>Run Log:</u>					
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> V			
- Samples within 12 hour clock?	<input type="checkbox"/> Y	<input type="checkbox"/> N			
- Bottle position verified?	<input type="checkbox"/> DB				

Vista Analytical Laboratory - Injection Log Run file: 191106D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191106D1	1	ST191106D1-1	DB	6-NOV-19	11:41:40	ST191106D1-1	NA
191106D1	2	SOLVENT BLANK	DB	6-NOV-19	12:29:34	ST191106D1-1	NA
191106D1	3	1903565-05RE1@5X	DB	6-NOV-19	13:17:30	ST191106D1-1	NA
191106D1	4	1903565-16RE1	DB	6-NOV-19	14:05:25	ST191106D1-1	NA
191106D1	5	1903460-03	DB	6-NOV-19	14:53:21	ST191106D1-1	NA
191106D1	6	1903651-05	DB	6-NOV-19	15:41:12	ST191106D1-1	NA
191106D1	7	1903651-06	DB	6-NOV-19	16:29:02	ST191106D1-1	NA
191106D1	8	1903651-07	DB	6-NOV-19	17:16:52	ST191106D1-1	NA
191106D1	9	1903653-01	DB	6-NOV-19	18:04:47	ST191106D1-1	NA
191106D1	10	B9J0312-DUP2	DB	6-NOV-19	18:52:31	ST191106D1-1	NA
191106D1	11	1903653-02	DB	6-NOV-19	19:40:15	ST191106D1-1	NA
191106D1	12	1903653-03	DB	6-NOV-19	20:28:00	ST191106D1-1	NA
191106D1	13	1903653-04	DB	6-NOV-19	21:15:43	ST191106D1-1	NA
191106D1	14	1903431-01	DB	6-NOV-19	22:03:32	ST191106D1-1	NA
191106D1	15	1903431-02	DB	6-NOV-19	22:51:22	ST191106D1-1	NA

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191106D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	11.4	7.8 - 12.9
1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	50.5	8.2 - 12.3 (4) 39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.5	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.1	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.3	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	46.8	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	98.8	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.72	0.65-0.89	y	8.85	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	55.7	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	y	54.2	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.9	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.26	1.05-1.43	y	47.8	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	47.2	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	47.7	43.0 - 58.0
OCDF	M+2/M+4	0.86	0.76-1.02	y	96.1	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: 11/6/19

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: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

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	0.84	0.65-0.89	y	95.1	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	98.8	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	y	112	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	97.2	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	99.5	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	107	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	241	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	103	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	95.4	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	92.6	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	108	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	103	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	102	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	105	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	0.44	0.37-0.51	y	106	77.0 - 129.0
13C-OCDF	M+2/M+4	0.86	0.76-1.02	y	242	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.45	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: 11/6/19

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: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

ZB-5MS IS Data Filename: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

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)	22:54	1,3,6,8-TCDF (F)	20:47
1,2,8,9-TCDD (L)	27:07	1,2,8,9-TCDF (L)	27:15
1,2,4,7,9-PeCDD (F)	28:43	1,3,4,6,8-PeCDF (F)	27:13
1,2,3,8,9-PeCDD (L)	31:07	1,2,3,8,9-PeCDF (L)	31:21
1,2,4,6,7,9-HxCDD (F)	32:32	1,2,3,4,6,8-HxCDF (F)	31:60
1,2,3,7,8,9-HxCDD (L)	34:29	1,2,3,7,8,9-HxCDF (L)	34:51
1,2,3,4,6,7,9-HpCDD (F)	37:05	1,2,3,4,6,7,8-HpCDF (F)	36:43
1,2,3,4,6,7,8-HpCDD (L)	37:55	1,2,3,4,7,8,9-HpCDF (L)	38:28

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DBDate: 11/6/19

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: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	RRT
	REFERENCE		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	1.196	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	1.151	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.186	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: 11/6/19

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: 191106D1 S#1 Analysis Date: 6-NOV-19 Time: 11:41:40

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	1.000	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	1.001	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	1.038	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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: 11/6/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191106D1-1

Filename: 191106D1 S:1 Acq: 6-NOV-19 11:41:40
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191106D1-1
EndCAL: NA

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	6.82e+05	0.77 y	0.91	26:16	11.450		* 2.5		*	Total Tetra-Dioxins	86.8	87.8	*	*	
1,2,3,7,8-PeCDD	2.51e+06	0.63 y	0.90	30:45	50.469		* 2.5		*	Total Penta-Dioxins	198	198	*	*	
1,2,3,4,7,8-HxCDD	2.74e+06	1.25 y	1.10	34:04	50.478		* 2.5		*	Total Hexa-Dioxins	222	223	*	*	
1,2,3,6,7,8-HxCDD	2.68e+06	1.29 y	0.94	34:11	50.148		* 2.5		*	Total Hepta-Dioxins	122	123	*	*	
1,2,3,7,8,9-HxCDD	2.65e+06	1.26 y	0.96	34:29	50.280		* 2.5		*	Total Tetra-Furans	34.0	34.9	*	*	
1,2,3,4,6,7,8-HpCDD	2.19e+06	1.02 y	0.98	37:55	46.849		* 2.5		*	Total Penta-Furans	238.77	240.08	*	*	
OCDD	4.52e+06	0.87 y	0.96	41:14	98.839		* 2.5		*	Total Hexa-Furans	257	258	*	*	
										Total Hepta-Furans	95.3	96.2	*	*	
2,3,7,8-TCDF	9.41e+05	0.72 y	0.95	25:29	8.8480		* 2.5		*						
1,2,3,7,8-PeCDF	4.56e+06	1.54 y	0.96	29:35	55.662		* 2.5		*						
2,3,4,7,8-PeCDF	4.51e+06	1.52 y	1.01	30:28	54.177		* 2.5		*						
1,2,3,4,7,8-HxCDF	3.55e+06	1.24 y	1.18	33:10	48.899		* 2.5		*						
1,2,3,6,7,8-HxCDF	3.70e+06	1.23 y	1.07	33:18	47.690		* 2.5		*						
2,3,4,6,7,8-HxCDF	3.72e+06	1.25 y	1.11	33:54	50.074		* 2.5		*						
1,2,3,7,8,9-HxCDF	3.02e+06	1.26 y	1.06	34:51	47.785		* 2.5		*						
1,2,3,4,6,7,8-HpCDF	2.69e+06	1.03 y	1.13	36:43	47.193		* 2.5		*						
1,2,3,4,7,8,9-HpCDF	2.58e+06	1.04 y	1.28	38:28	47.715		* 2.5		*						
OCDF	5.18e+06	0.86 y	0.95	41:27	96.090		* 2.5		*						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	6.58e+06	0.84 y	1.10	26:15	95.114					95.1					
IS 13C-1,2,3,7,8-PeCDD	5.51e+06	0.63 y	0.88	30:44	98.847					98.8					
IS 13C-1,2,3,4,7,8-HxCDD	4.94e+06	1.33 y	0.64	34:03	112.46					112					
IS 13C-1,2,3,6,7,8-HxCDD	5.68e+06	1.30 y	0.86	34:10	97.212					97.2					
IS 13C-1,2,3,7,8,9-HxCDD	5.48e+06	1.26 y	0.81	34:28	99.459					99.5					
IS 13C-1,2,3,4,6,7,8-HpCDD	4.78e+06	1.05 y	0.65	37:55	106.99					107					
IS 13C-OCDD	9.54e+06	0.89 y	0.58	41:13	240.70					120					
IS 13C-2,3,7,8-TCDF	1.12e+07	0.77 y	1.03	25:28	103.38					103					
IS 13C-1,2,3,7,8-PeCDF	8.53e+06	1.62 y	0.85	29:34	95.413					95.4					
IS 13C-2,3,4,7,8-PeCDF	8.21e+06	1.62 y	0.85	30:28	92.617					92.6					
IS 13C-1,2,3,4,7,8-HxCDF	6.17e+06	0.51 y	0.83	33:10	108.47					108					
IS 13C-1,2,3,6,7,8-HxCDF	7.26e+06	0.51 y	1.03	33:17	102.72					103					
IS 13C-2,3,4,6,7,8-HxCDF	6.68e+06	0.51 y	0.95	33:53	102.49					102					
IS 13C-1,2,3,7,8,9-HxCDF	5.95e+06	0.52 y	0.83	34:51	105.22					105					
IS 13C-1,2,3,4,6,7,8-HpCDF	5.05e+06	0.44 y	0.76	36:42	97.470					97.5					
IS 13C-1,2,3,4,7,8,9-HpCDF	4.22e+06	0.44 y	0.58	38:27	106.34					106					
IS 13C-OCDF	1.14e+07	0.86 y	0.69	41:26	241.89					121					
C/Up 37C1-2,3,7,8-TCDD	7.15e+05		1.20	26:16	9.4475					94.5					
RS/RT 13C-1,2,3,4-TCDD	6.32e+06	0.86 y	1.00	25:41	100.00										
RS 13C-1,2,3,4-TCDF	1.05e+07	0.80 y	1.00	24:16	100.00										
RS/RT 13C-1,2,3,4,6,9-HxCDF	6.84e+06	0.51 y	1.00	33:35	100.00										

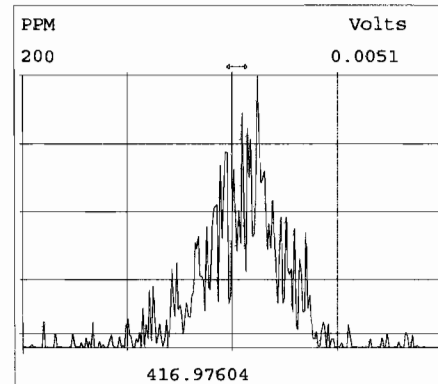
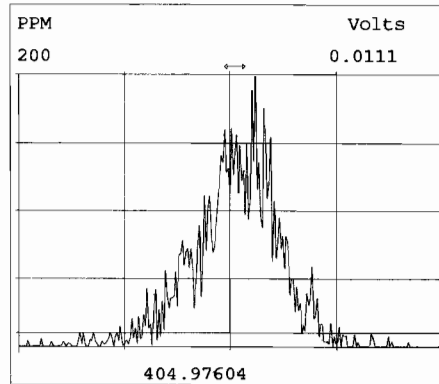
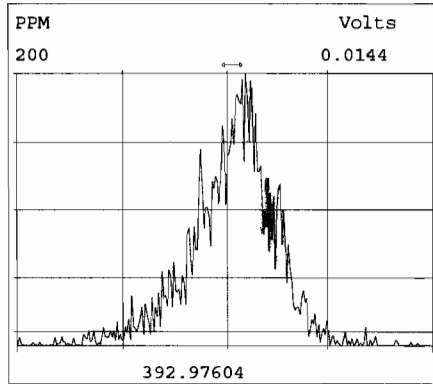
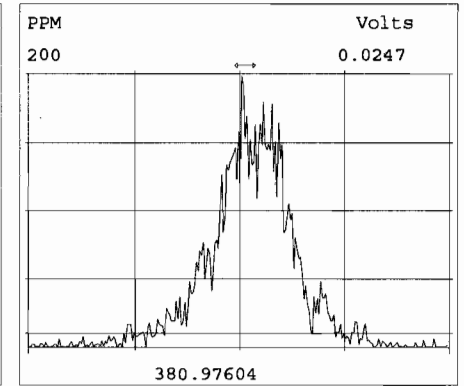
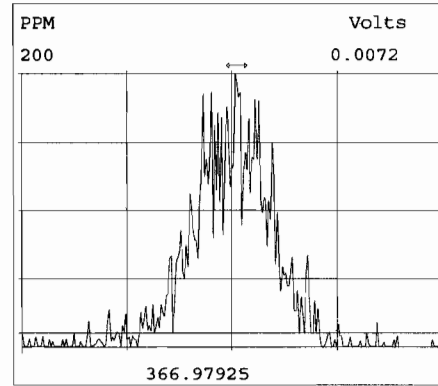
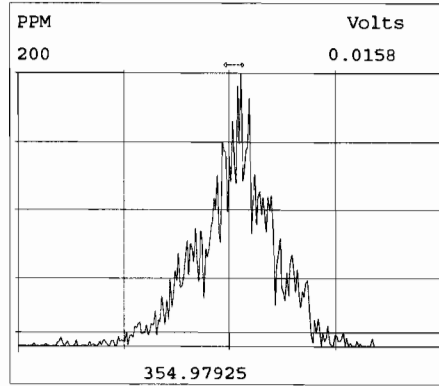
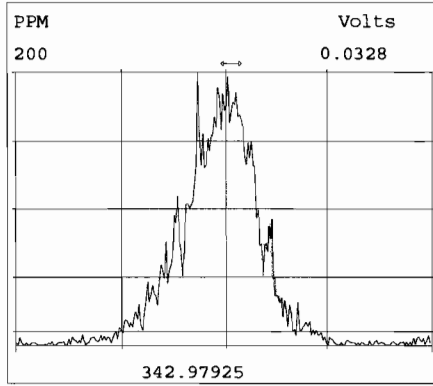
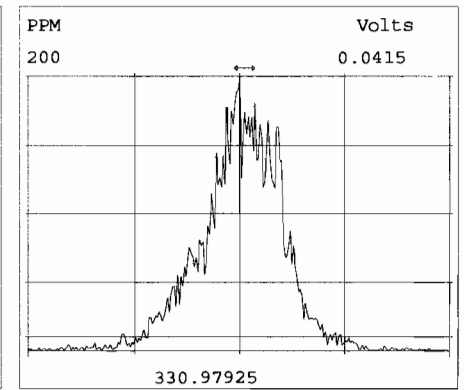
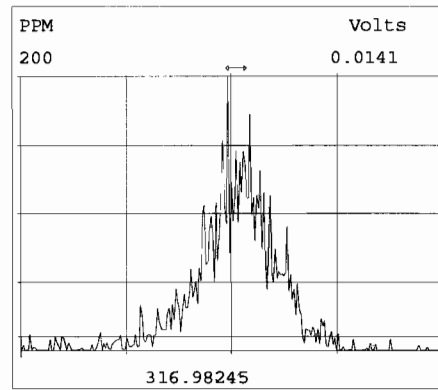
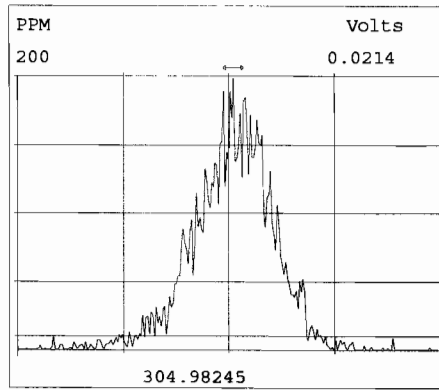
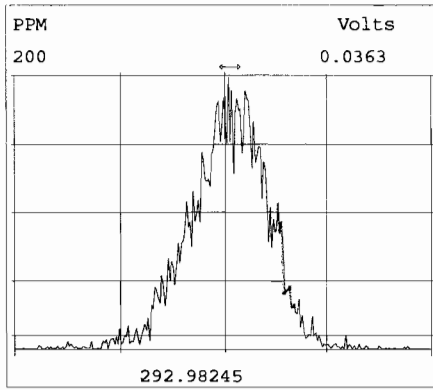
Integrations
by DB
Analyst: DB
Date: 11/6/19
Reviewed
by CT
Analyst: CT
Date: 11/07/19

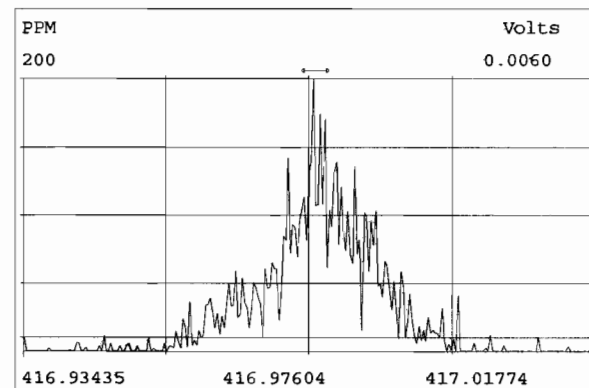
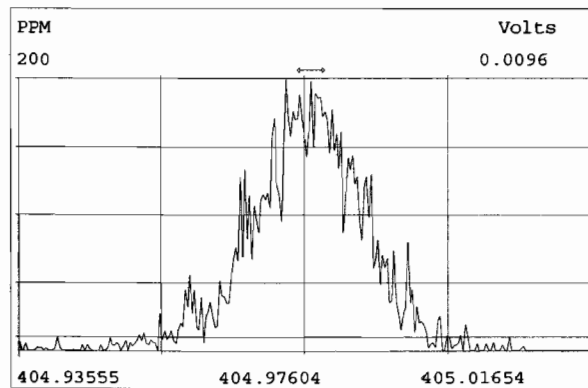
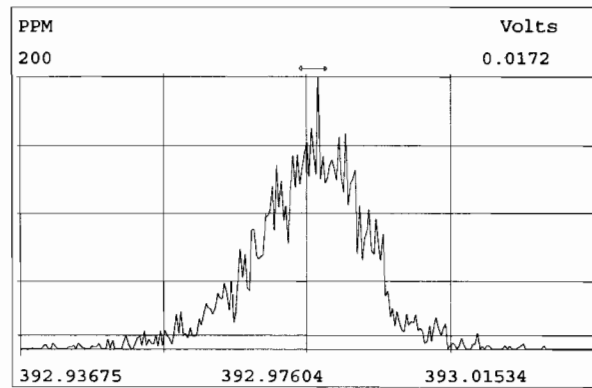
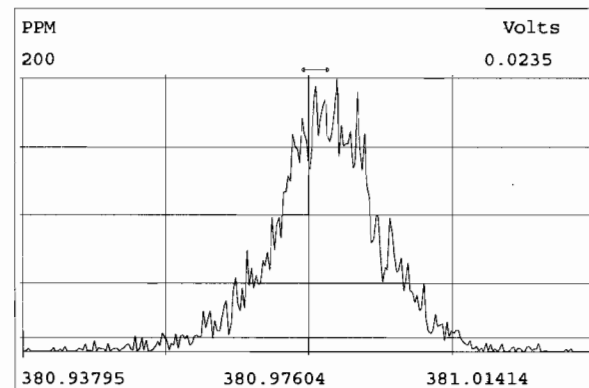
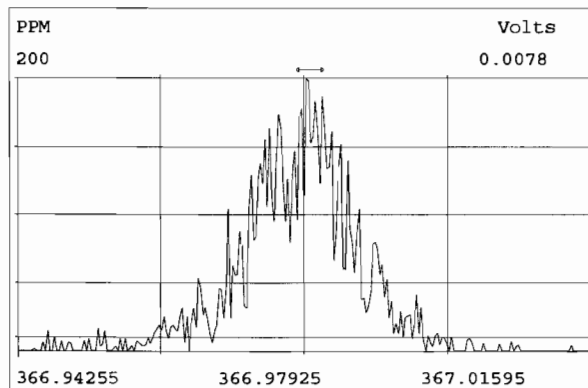
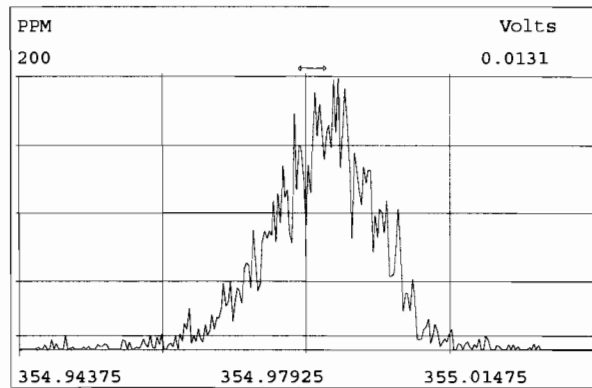
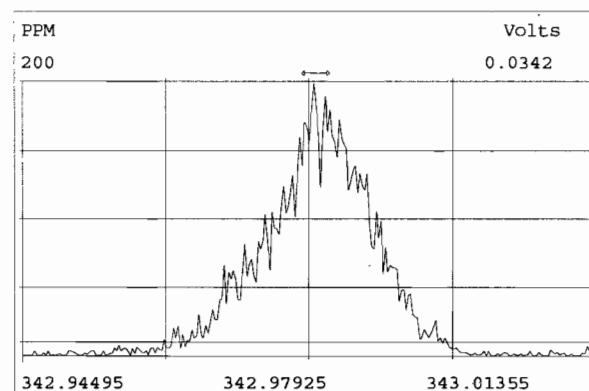
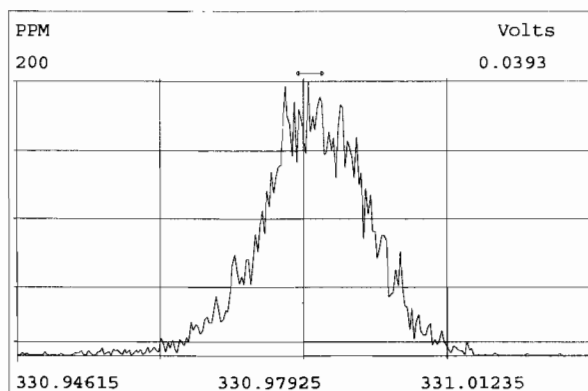
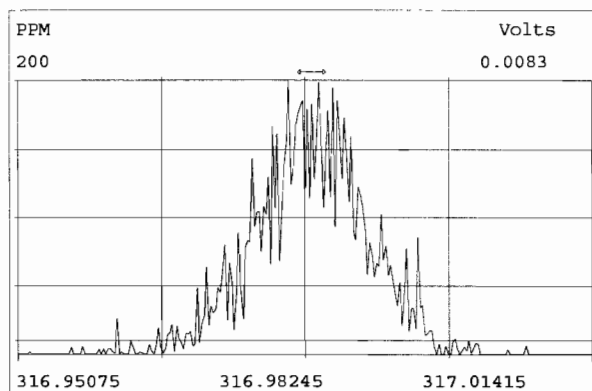
Vista Analytical Laboratory - Injection Log Run file: 191106D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191106D1	1	ST191106D1-1	DB	6-NOV-19	11:41:40	ST191106D1-1	NA
191106D1	2	SOLVENT BLANK	DB	6-NOV-19	12:29:34	ST191106D1-1	NA
191106D1	3	1903565-05RE1@5X	DB	6-NOV-19	13:17:30	ST191106D1-1	NA
191106D1	4	1903565-16RE1	DB	6-NOV-19	14:05:25	ST191106D1-1	NA
191106D1	5	1903460-03	DB	6-NOV-19	14:53:21	ST191106D1-1	NA
191106D1	6	1903651-05	DB	6-NOV-19	15:41:12	ST191106D1-1	NA
191106D1	7	1903651-06	DB	6-NOV-19	16:29:02	ST191106D1-1	NA
191106D1	8	1903651-07	DB	6-NOV-19	17:16:52	ST191106D1-1	NA
191106D1	9	1903653-01	DB	6-NOV-19	18:04:47	ST191106D1-1	NA
191106D1	10	B9J0312-DUP2	DB	6-NOV-19	18:52:31	ST191106D1-1	NA
191106D1	11	1903653-02	DB	6-NOV-19	19:40:15	ST191106D1-1	NA
191106D1	12	1903653-03	DB	6-NOV-19	20:28:00	ST191106D1-1	NA
191106D1	13	1903653-04	DB	6-NOV-19	21:15:43	ST191106D1-1	NA
191106D1	14	1903431-01	DB	6-NOV-19	22:03:32	ST191106D1-1	NA
191106D1	15	1903431-02	DB	6-NOV-19	22:51:22	ST191106D1-1	NA

Peak Locate Examination: 6-NOV-2019:11:38 File:191106D1

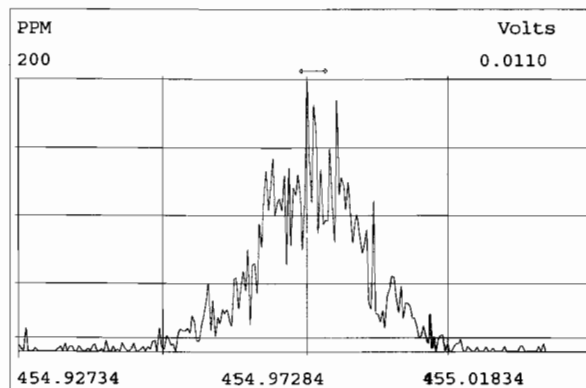
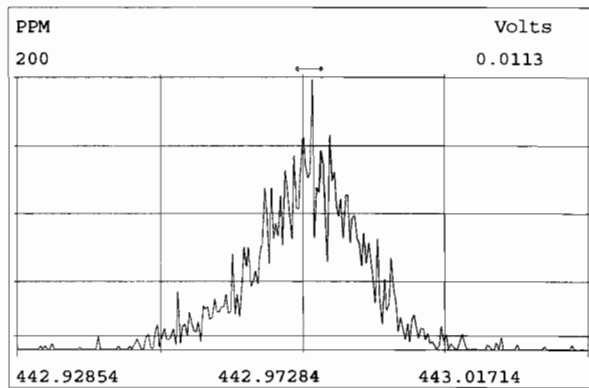
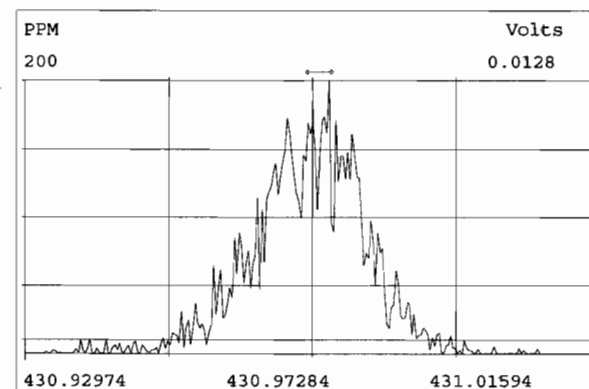
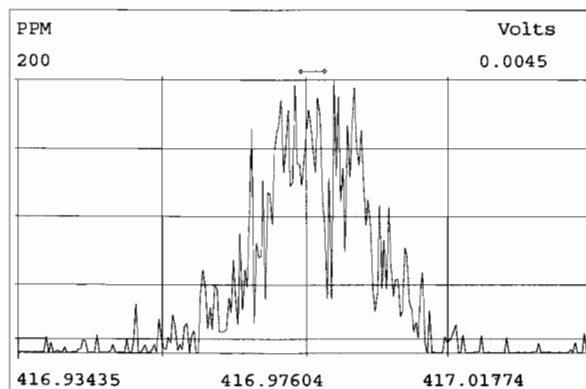
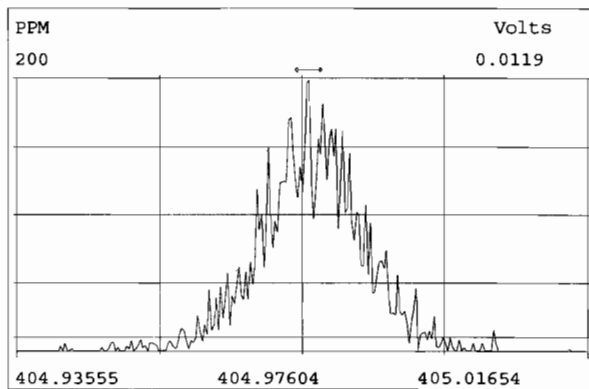
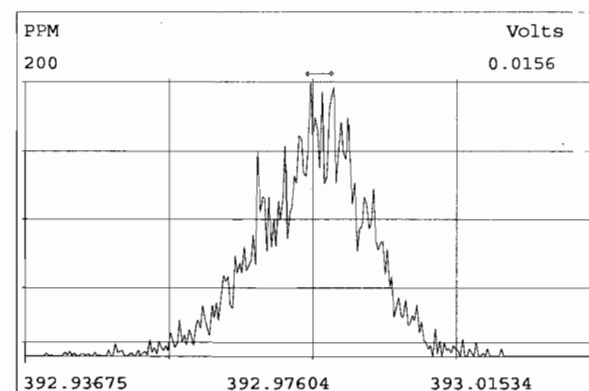
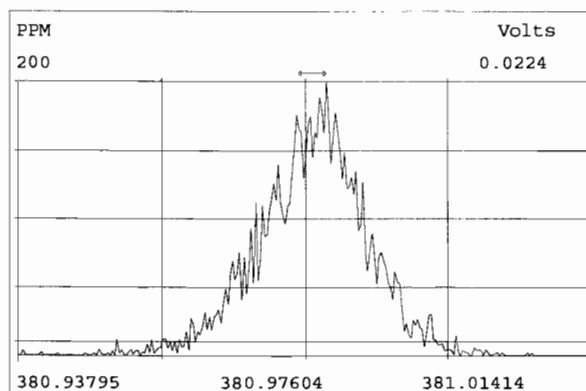
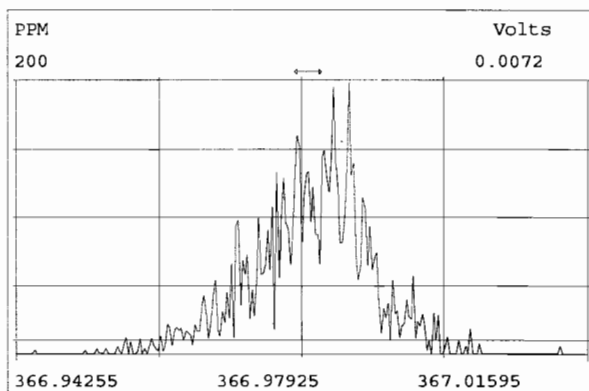
Experiment:OCDD_DB5 Function:1 Reference:PFK

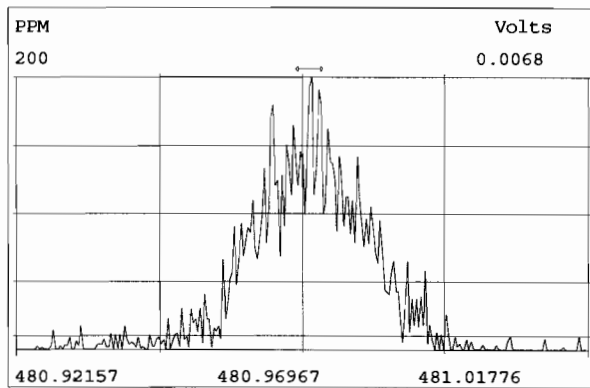
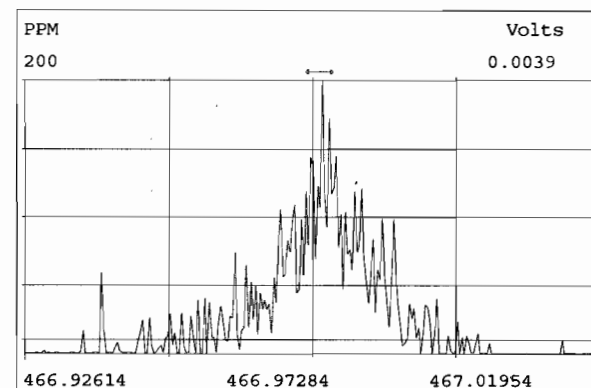
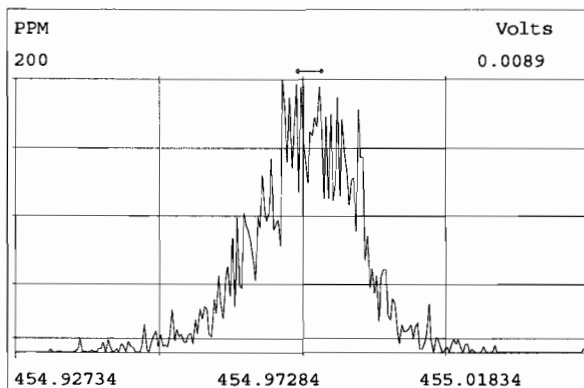
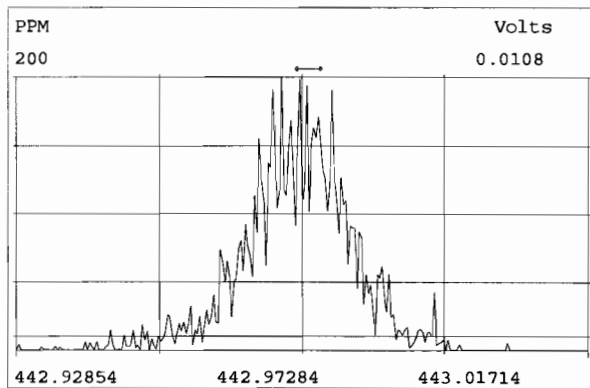
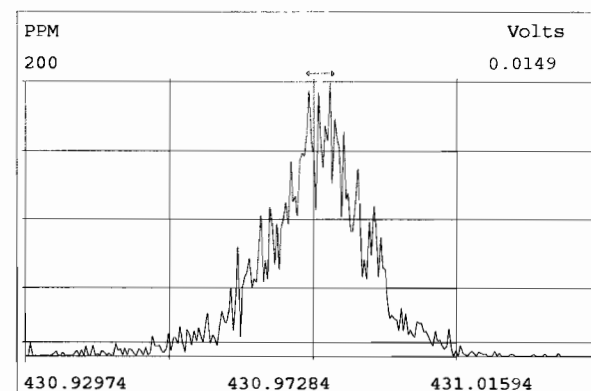
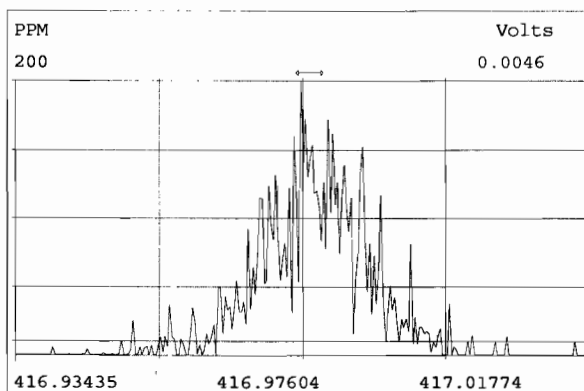
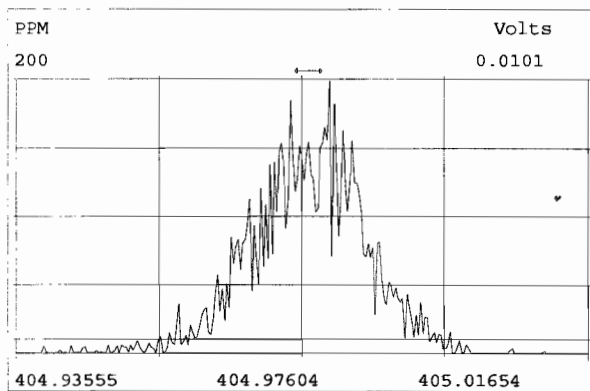


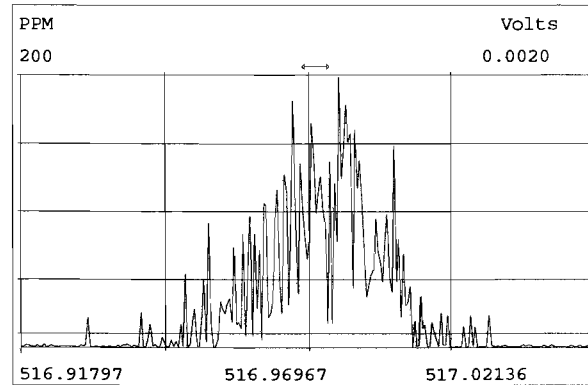
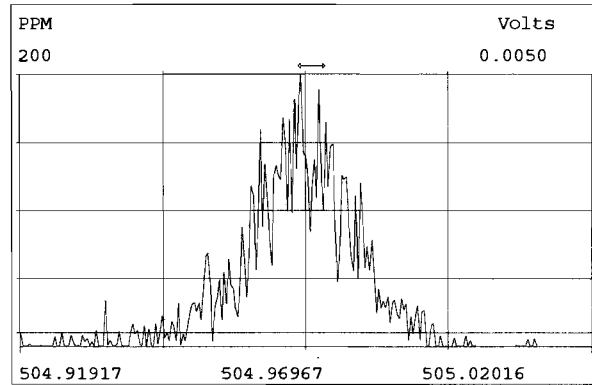
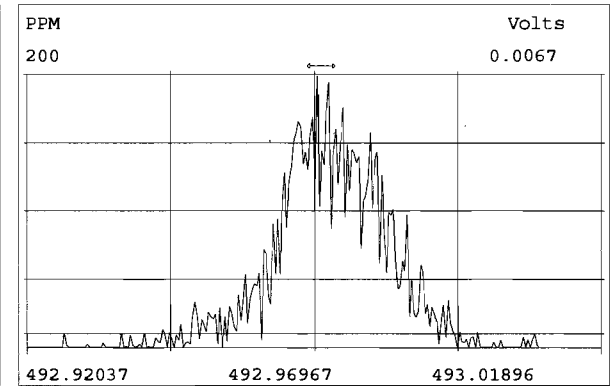
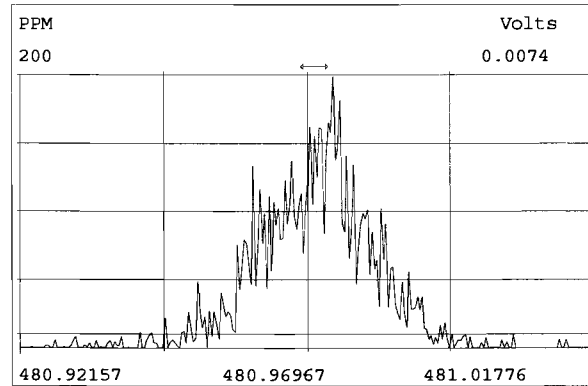
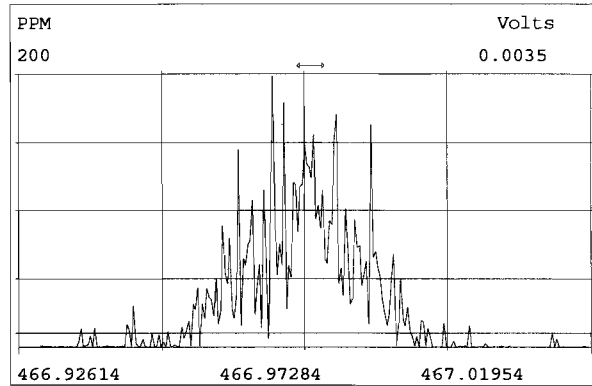
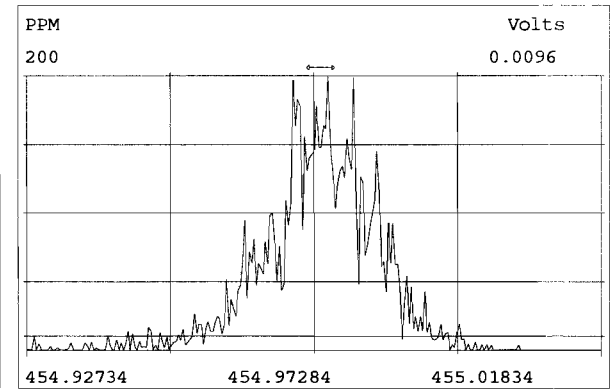
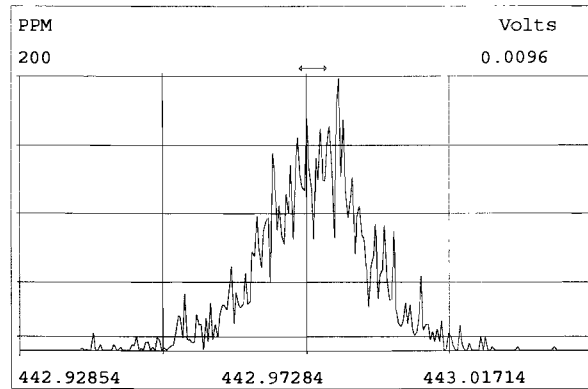
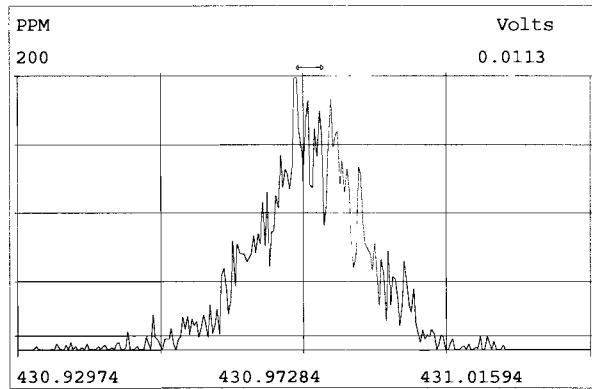


Peak Locate Examination: 6-NOV-2019:11:39 File:191106D1

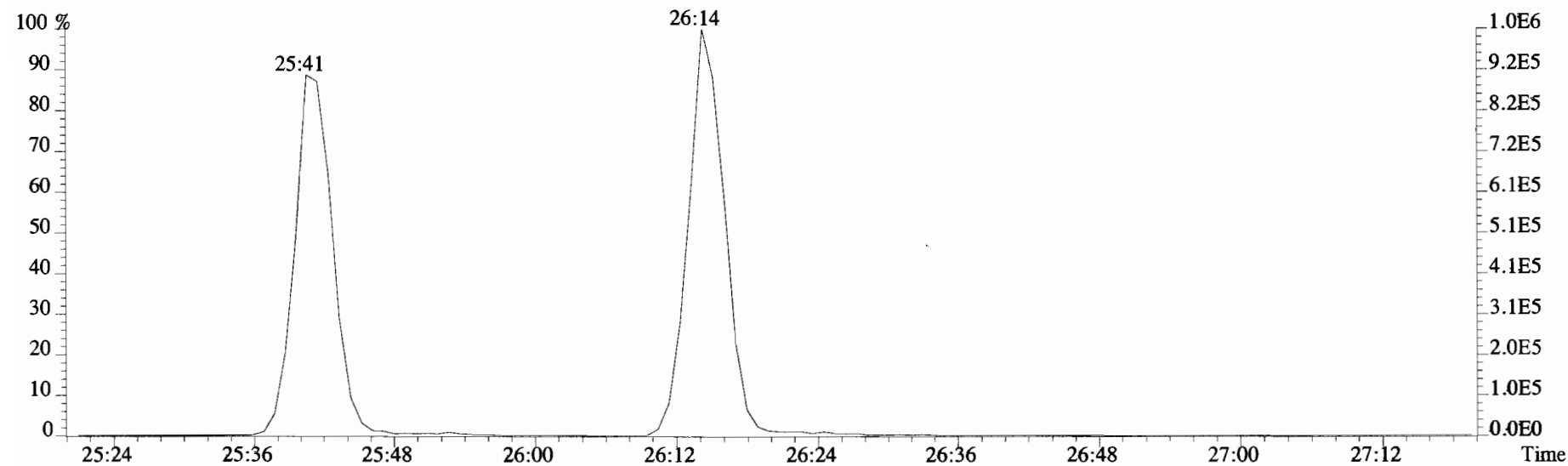
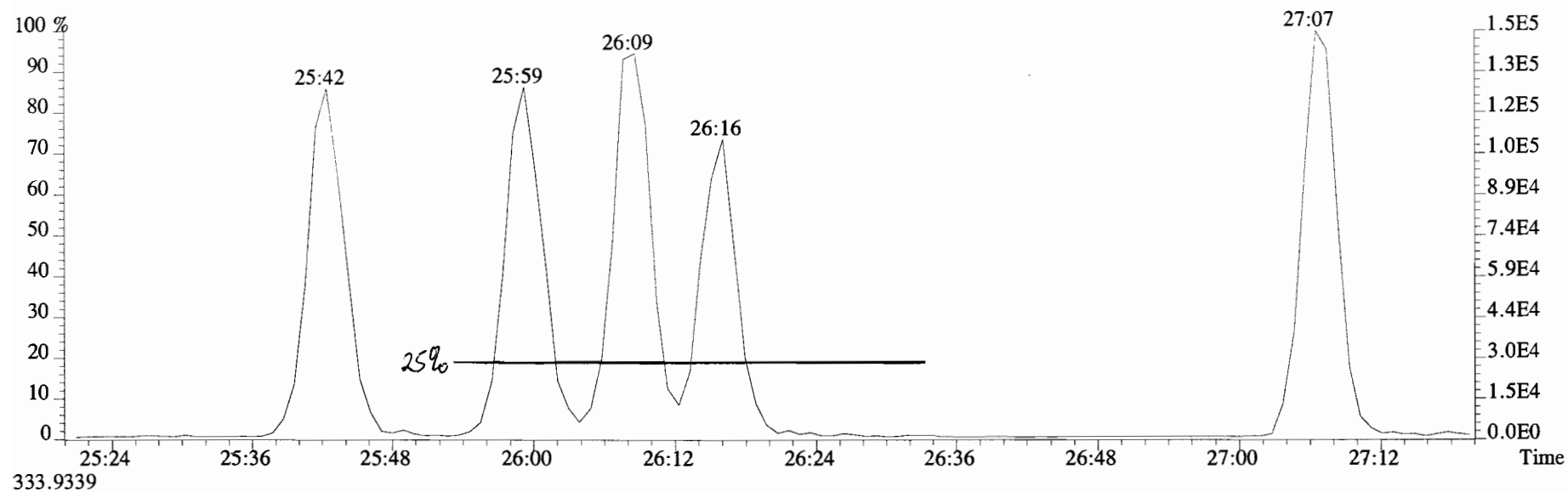
Experiment:OCDD_DB5 Function:3 Reference:PFK



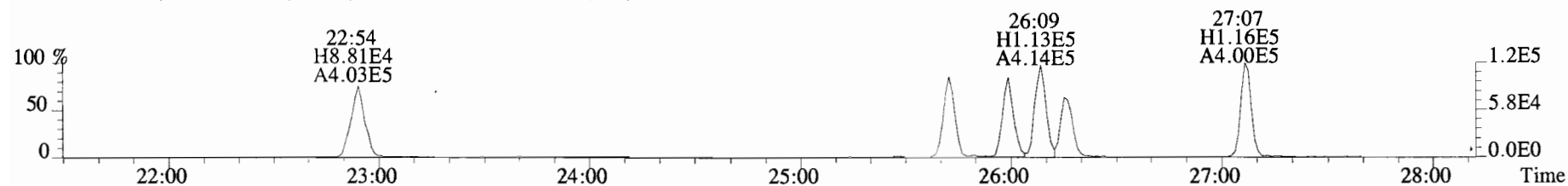




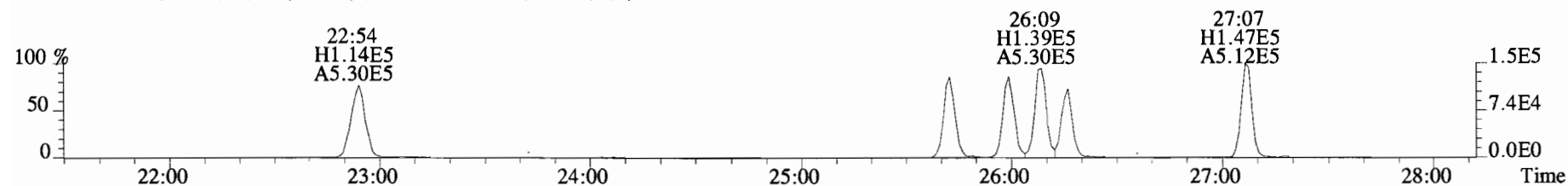
File:191106D1 #1-492 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



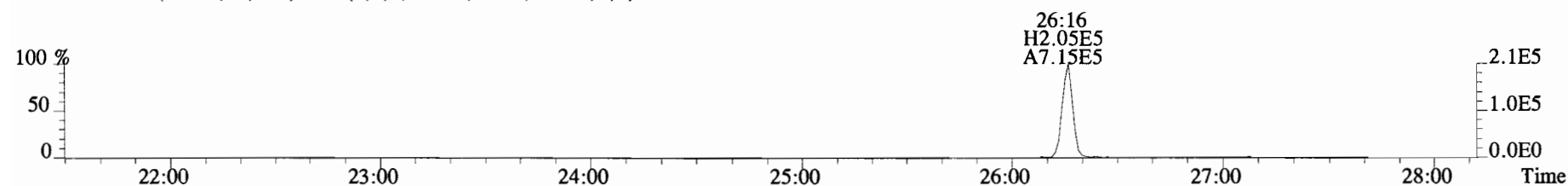
File:191106D1 #1-492 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



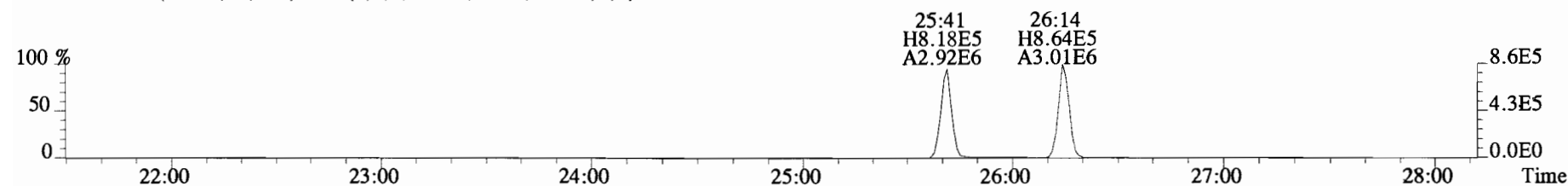
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



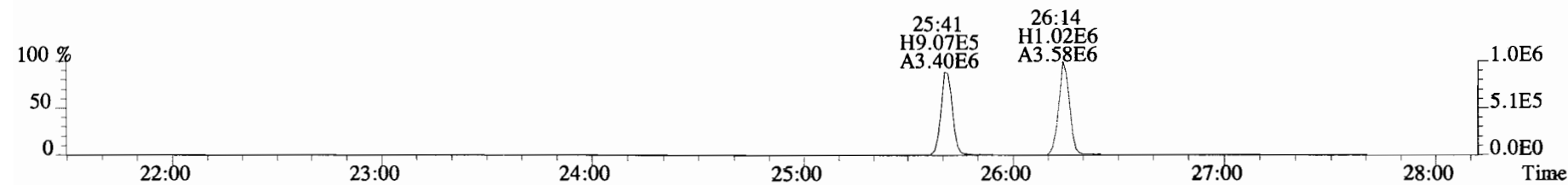
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



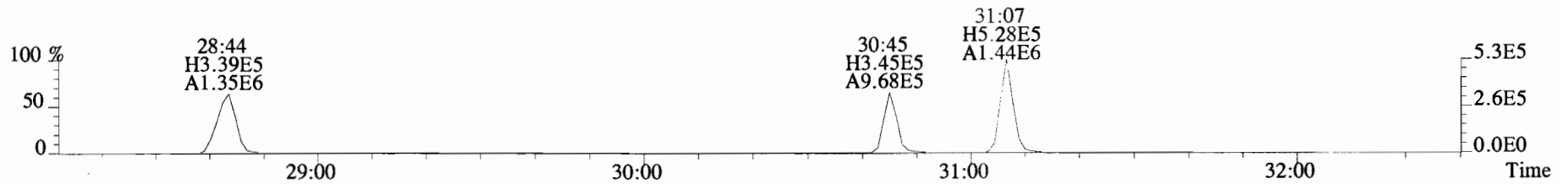
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



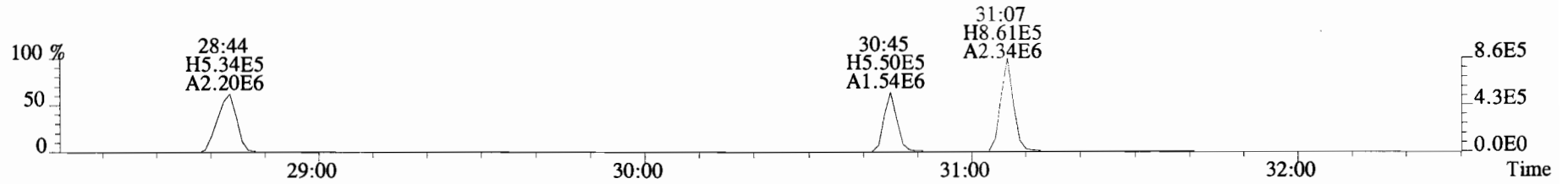
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



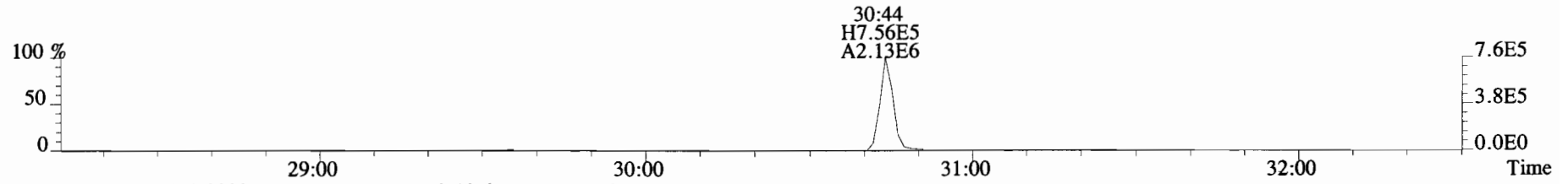
File:191106D1 #1-211 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



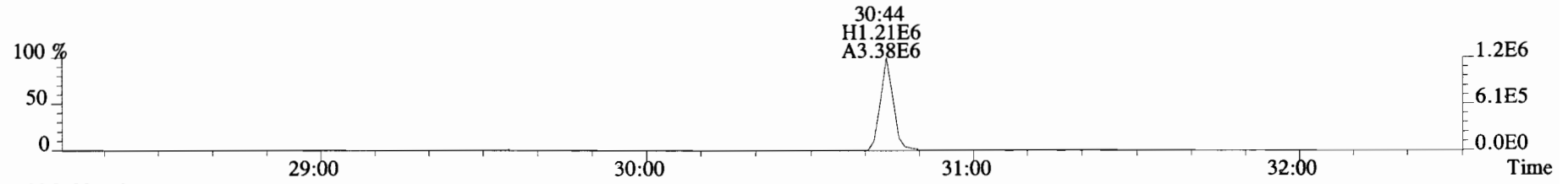
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



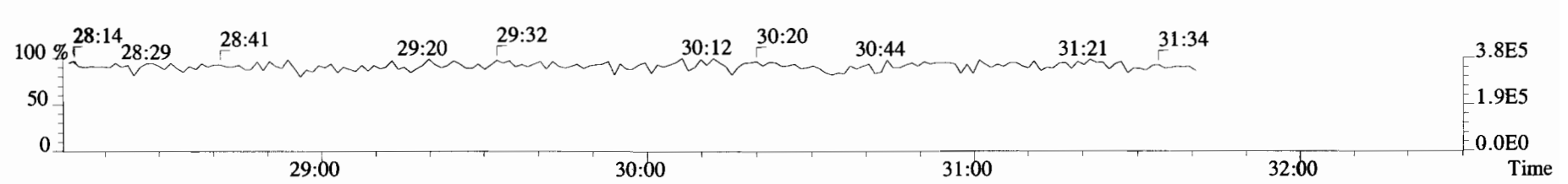
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



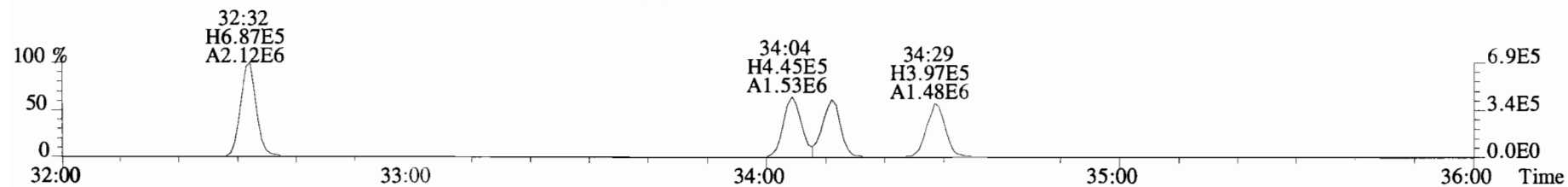
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



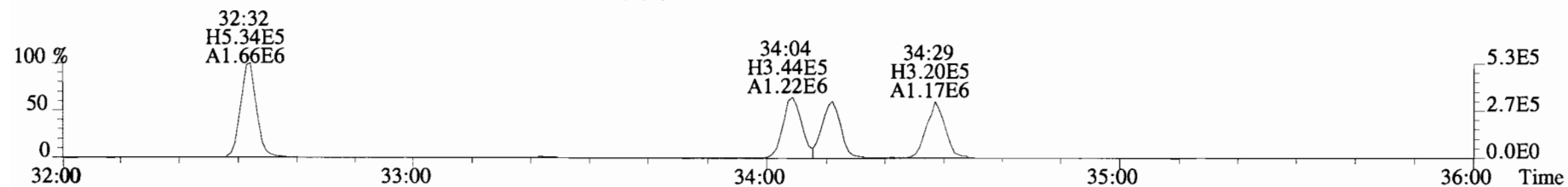
366.9792 F:2



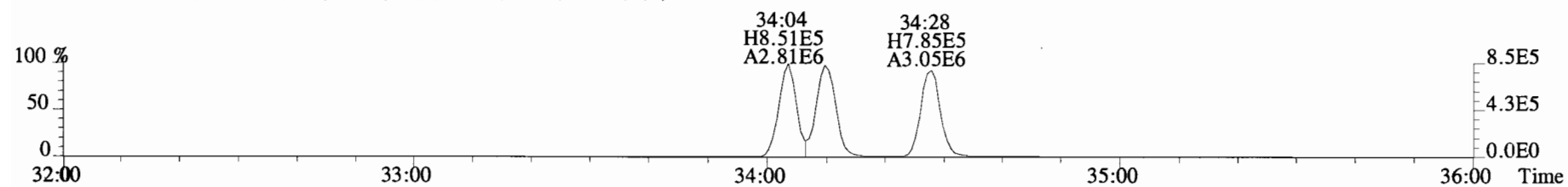
File:191106D1 #1-384 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



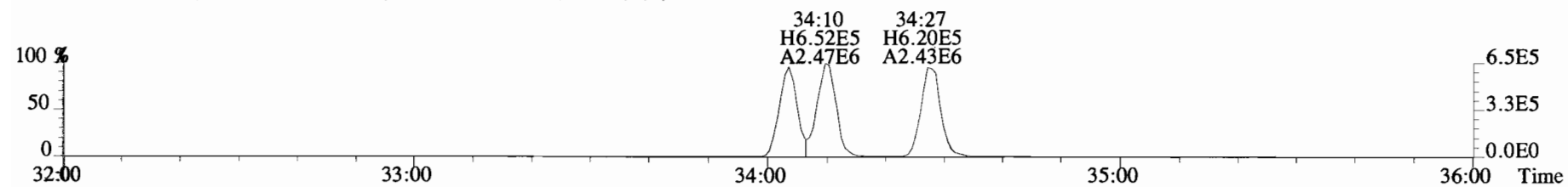
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



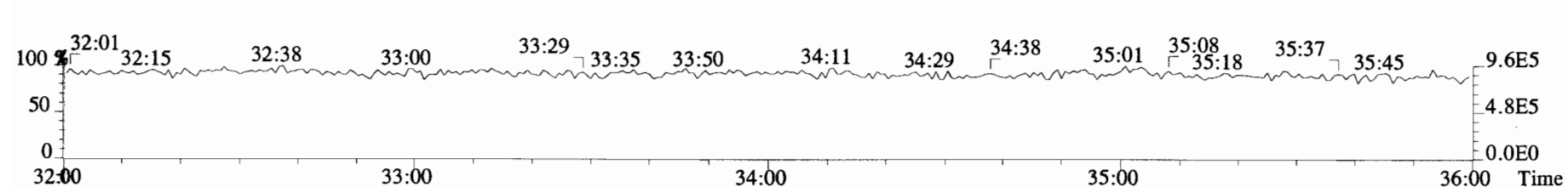
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



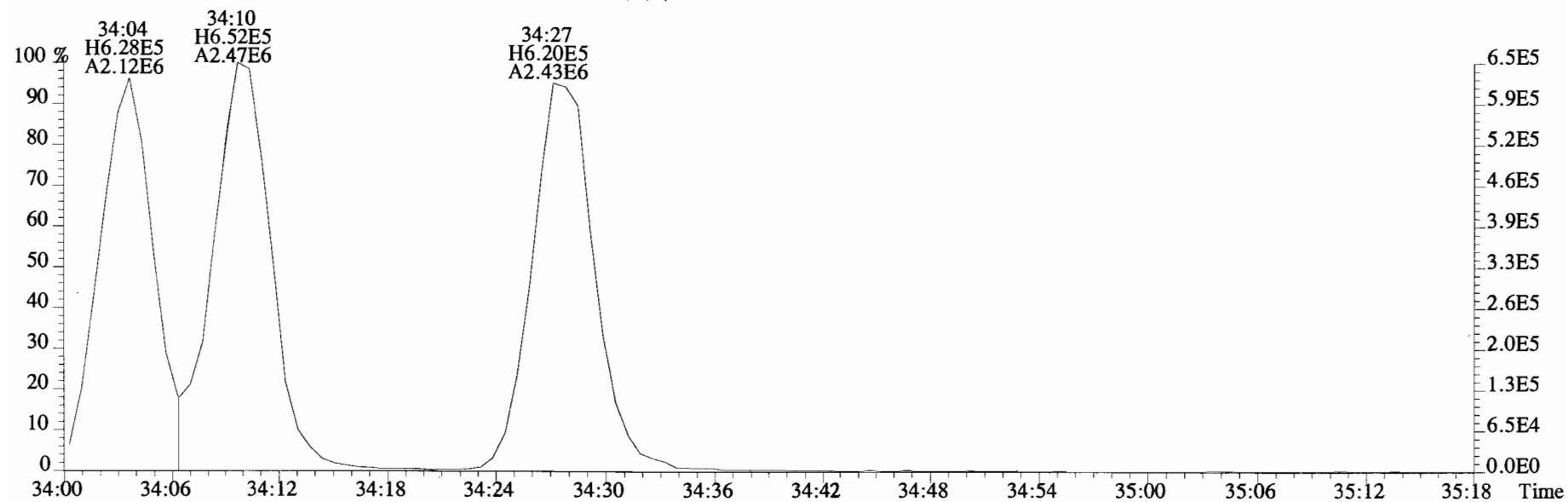
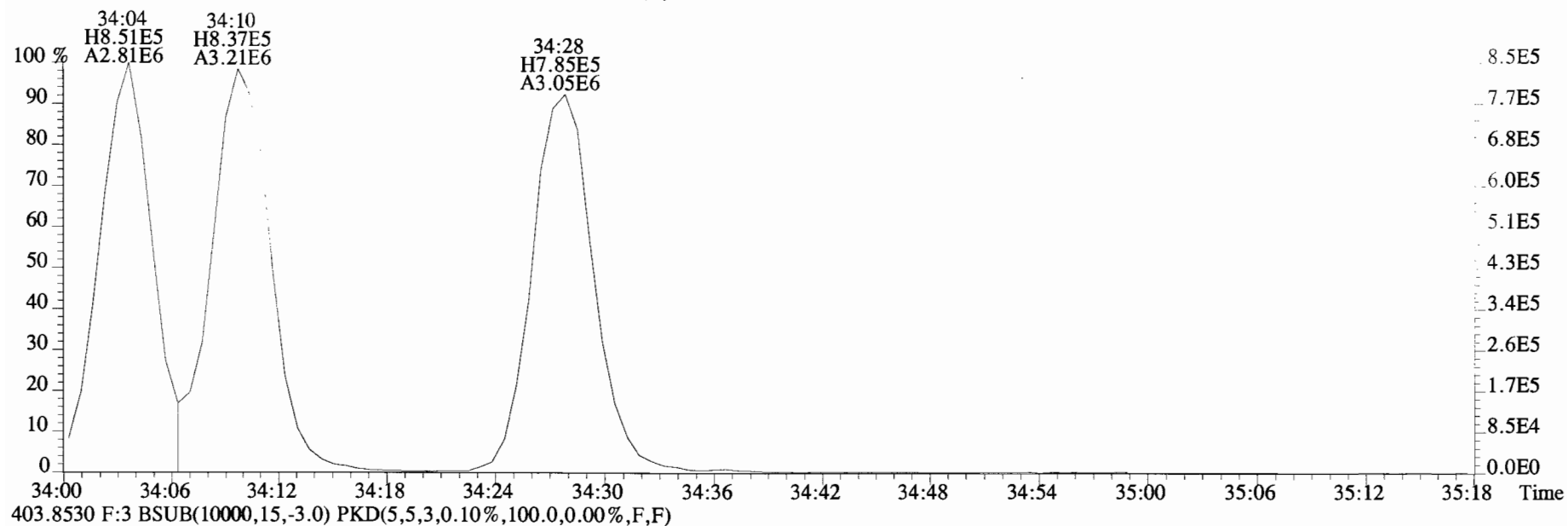
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



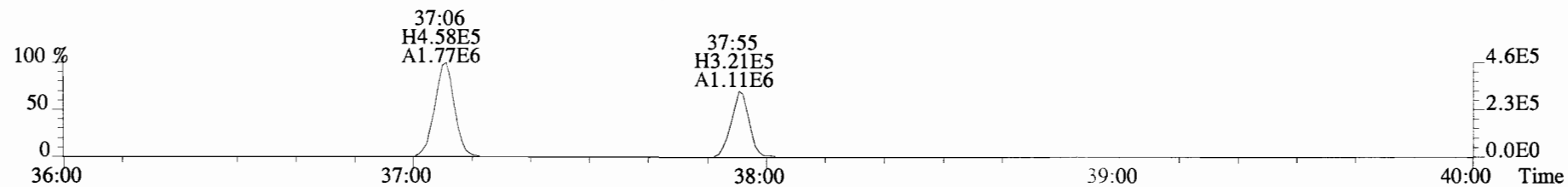
392.9760 F:3



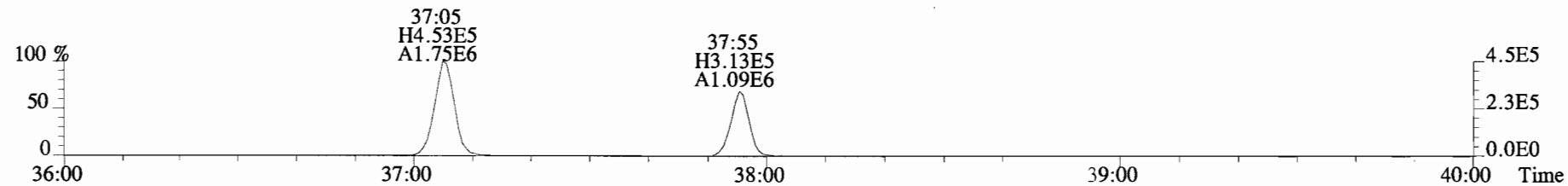
File:191106D1 #1-384 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



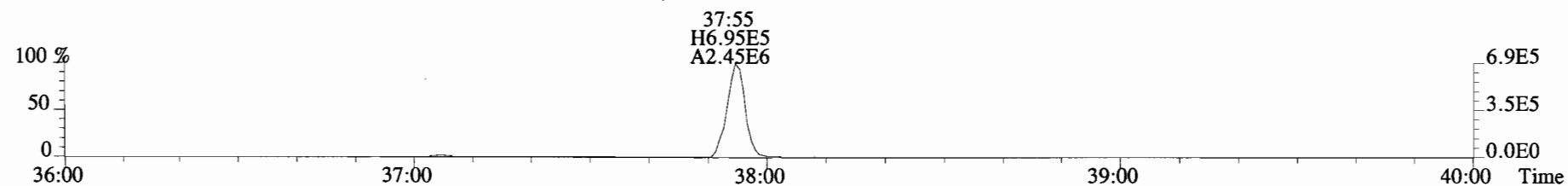
File:191106D1 #1-356 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



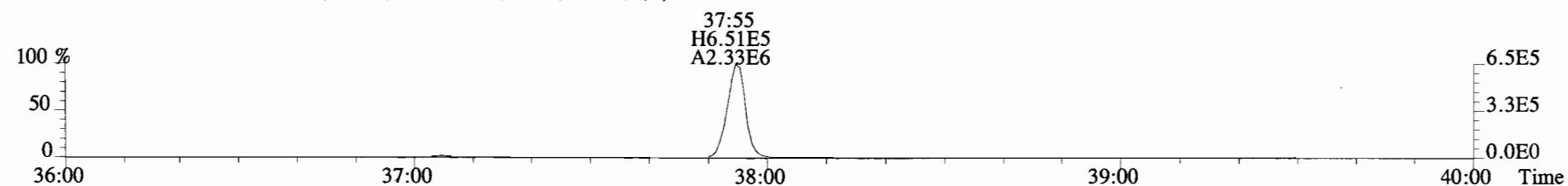
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



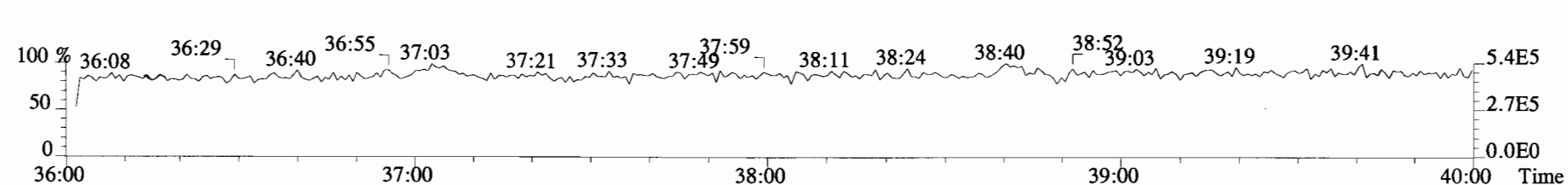
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



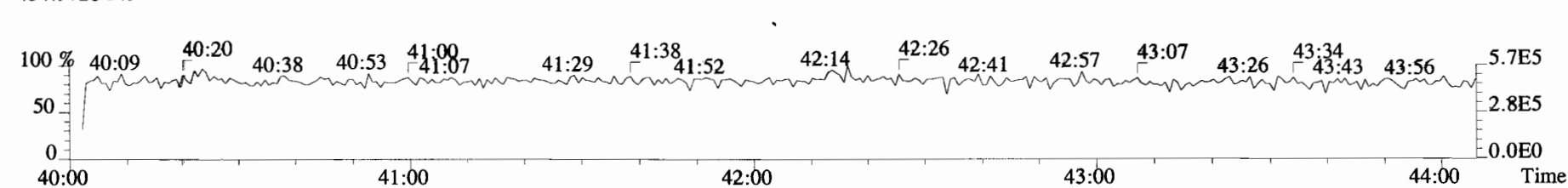
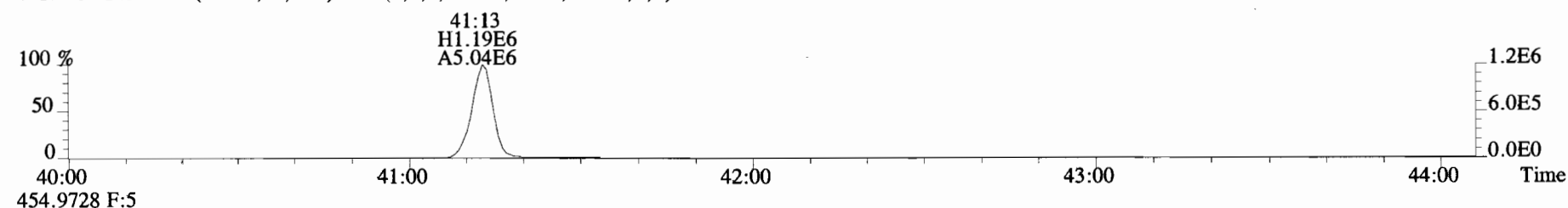
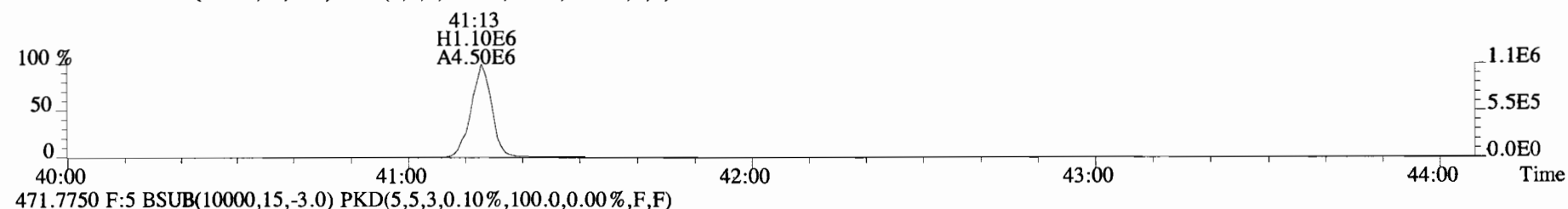
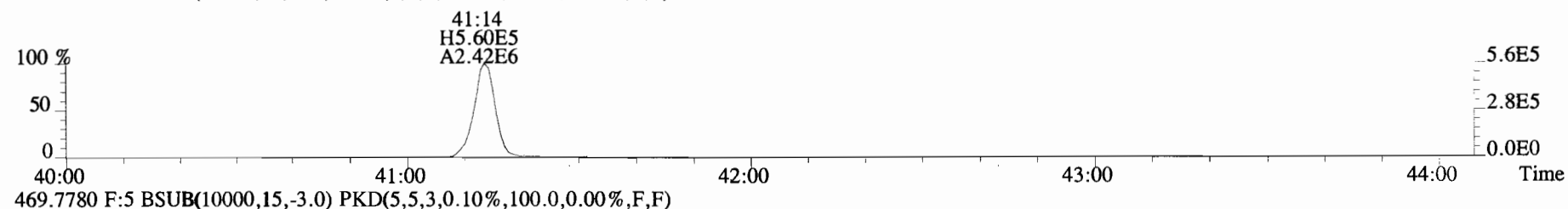
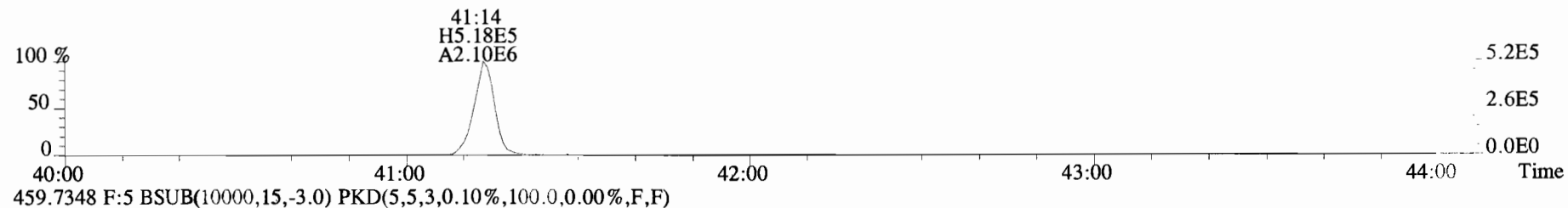
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



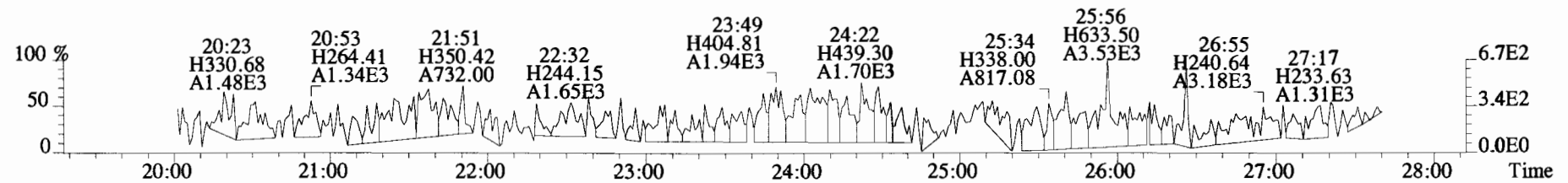
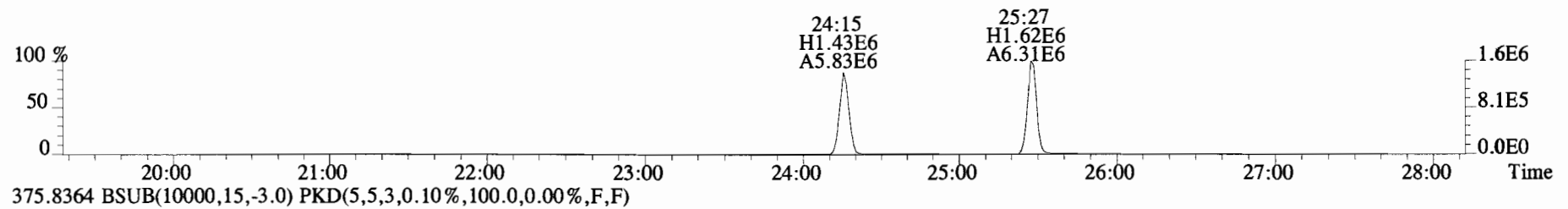
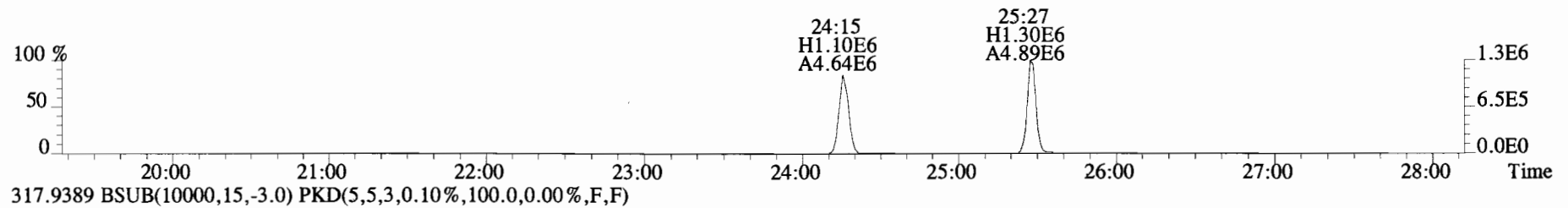
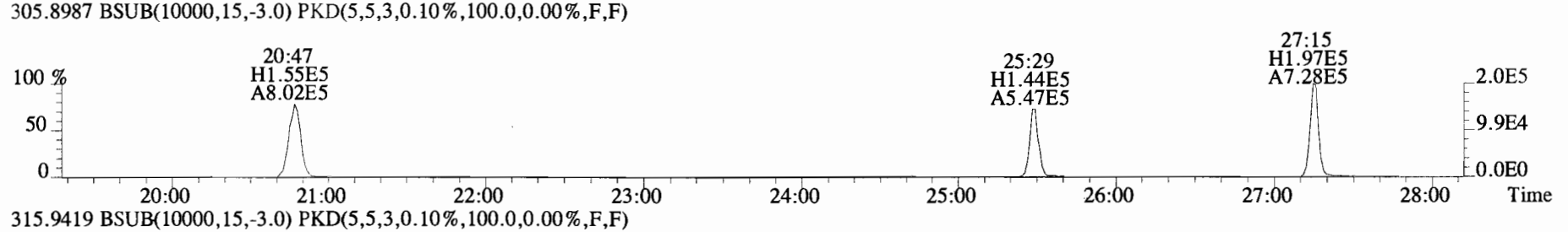
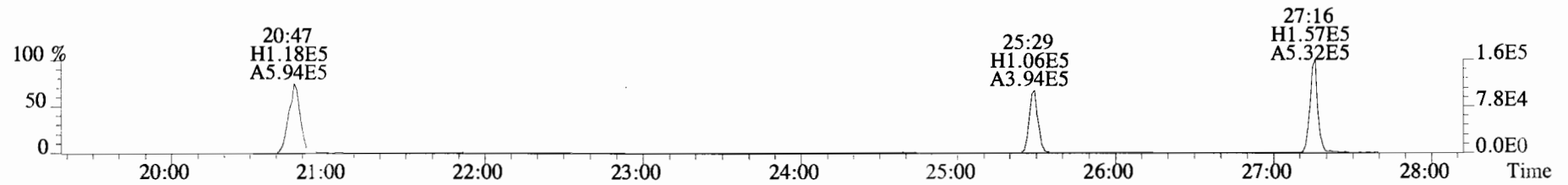
454.9728 F:4



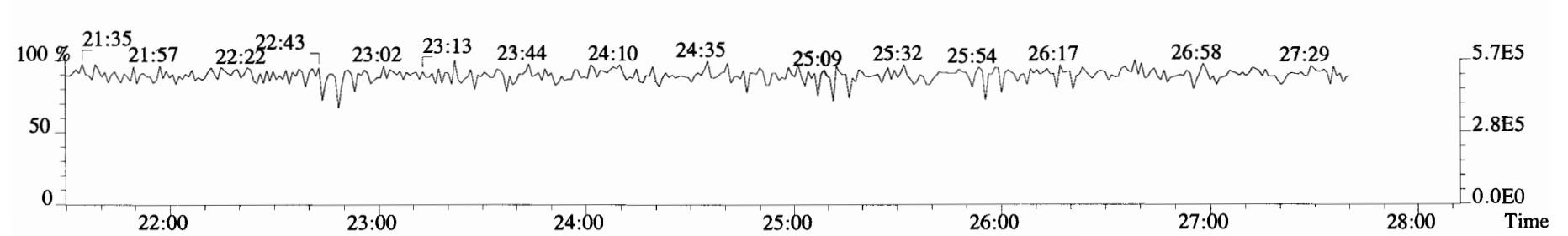
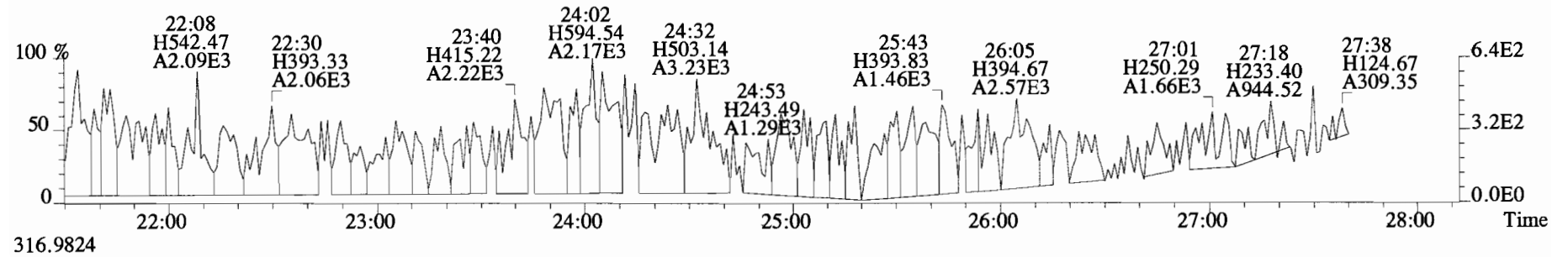
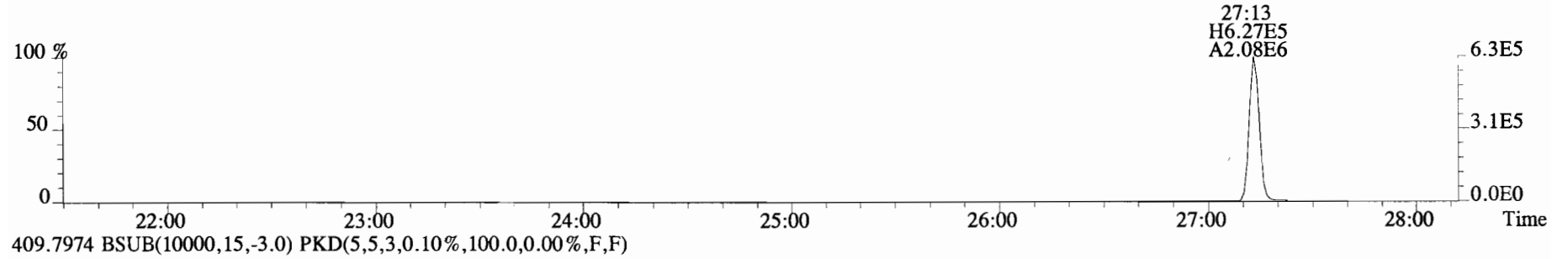
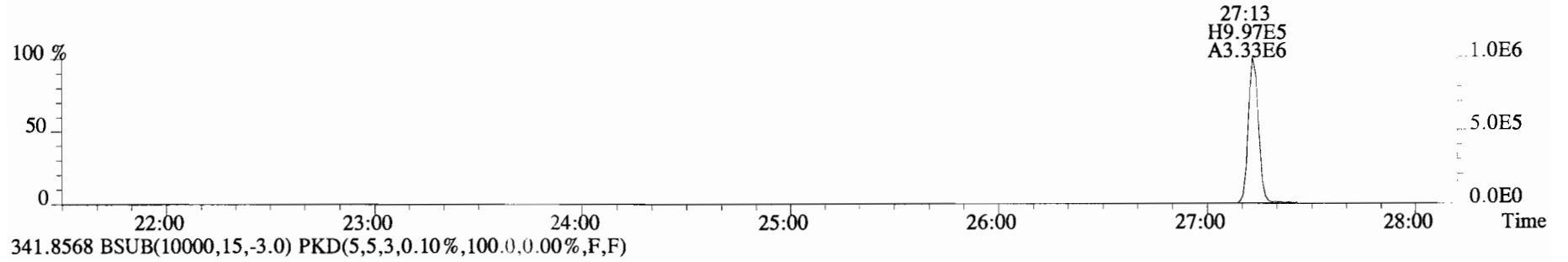
File:191106D1 #1-431 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



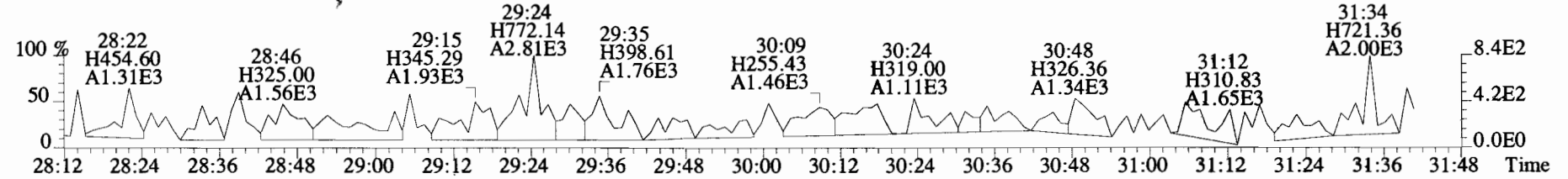
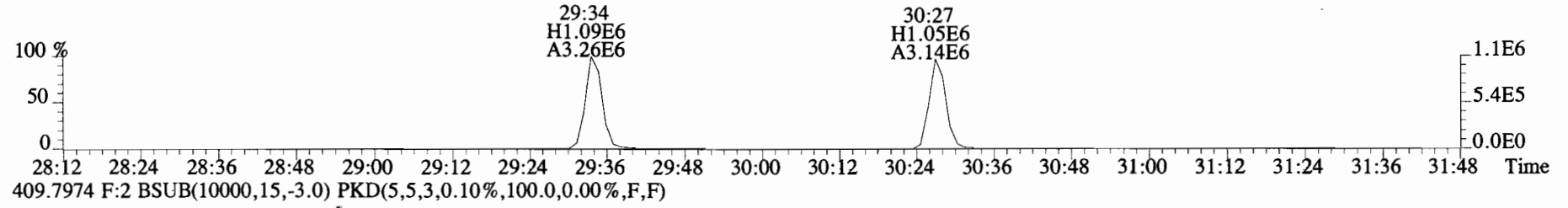
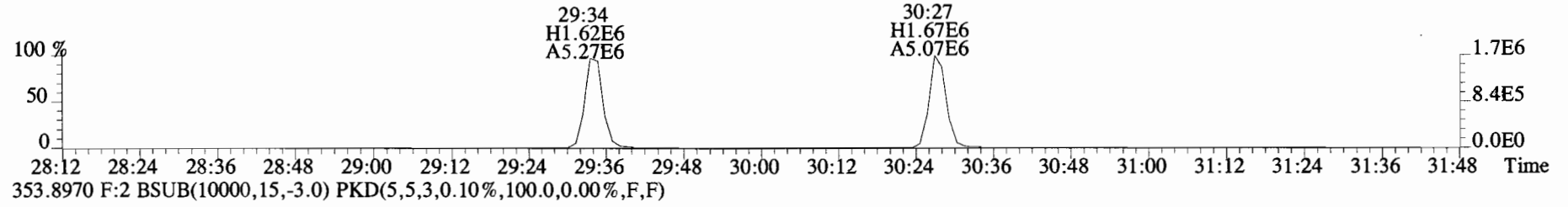
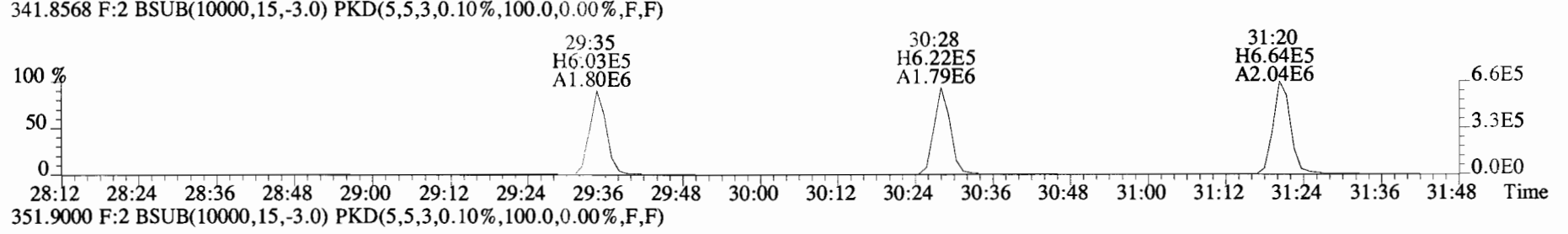
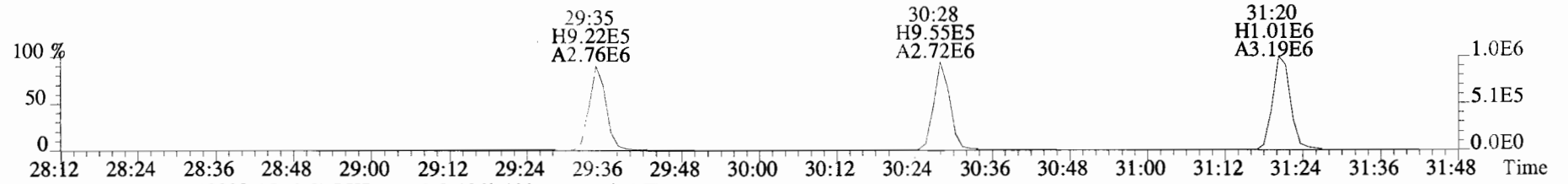
File:191106D1 #1-492 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



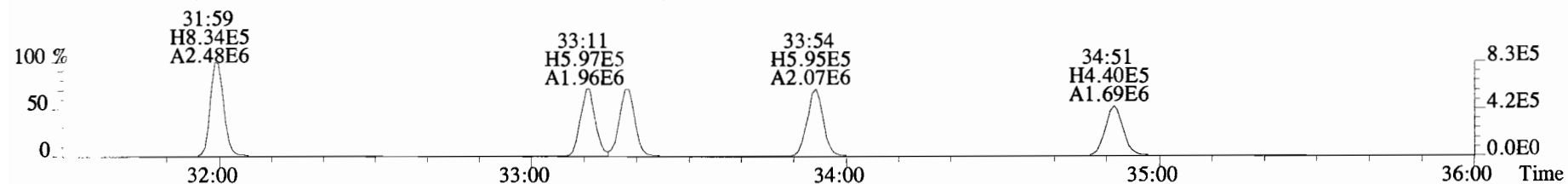
File:191106D1 #1-492 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



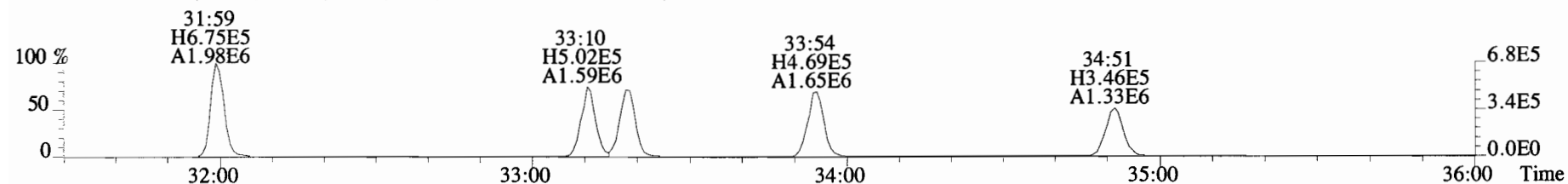
File:191106D1 #1-211 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



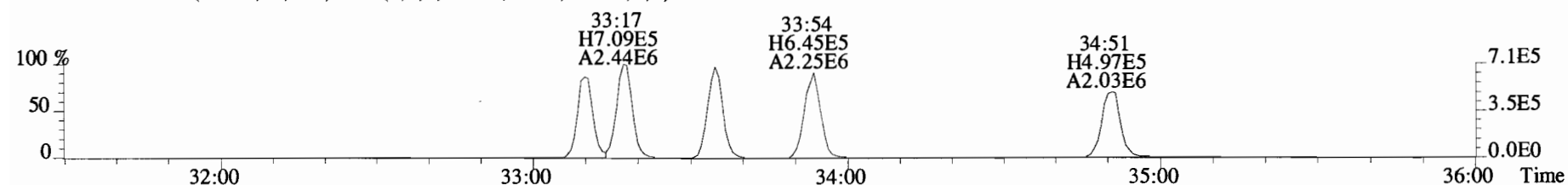
File:191106D1 #1-384 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



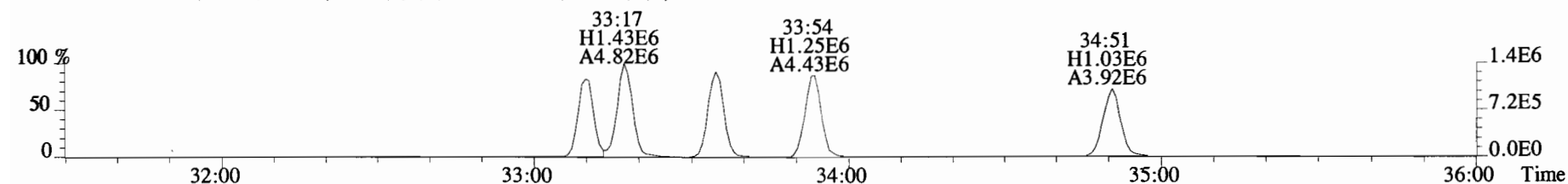
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



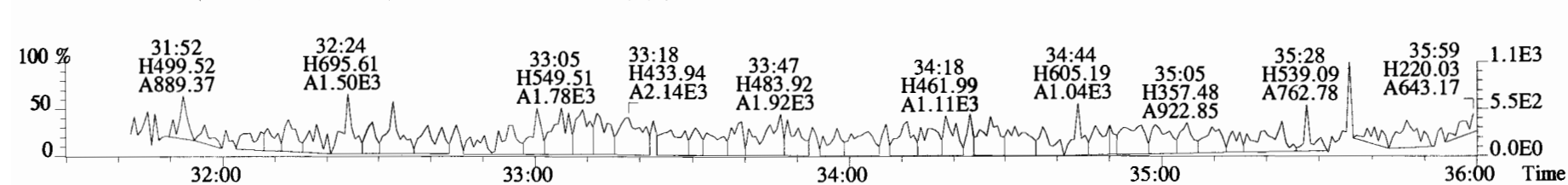
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



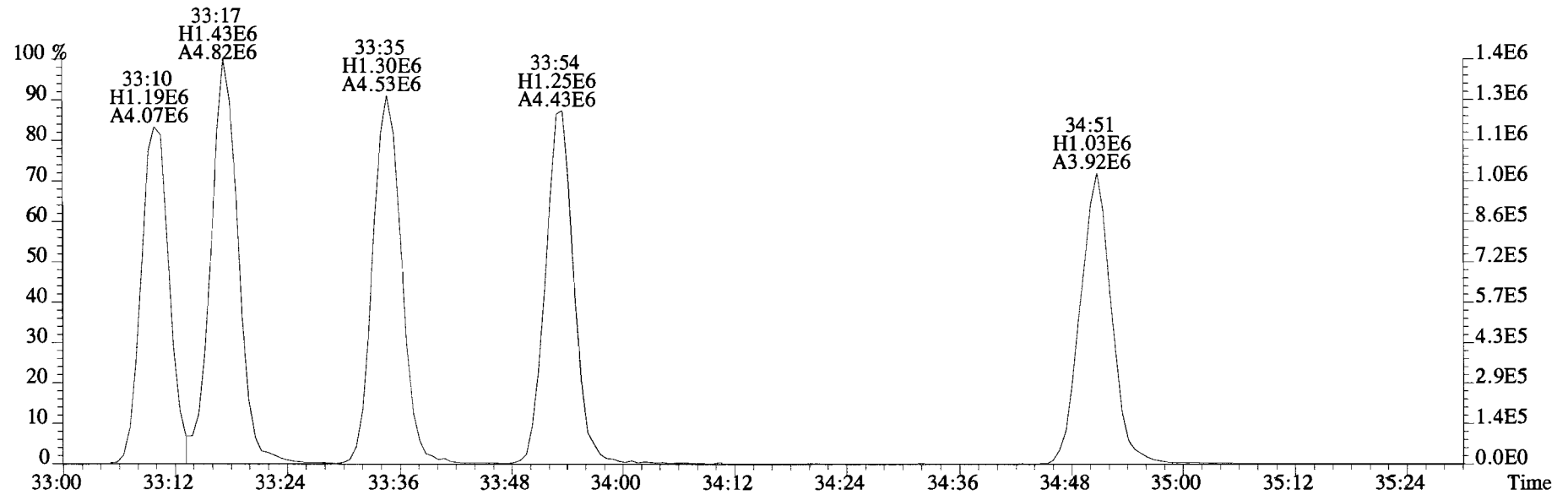
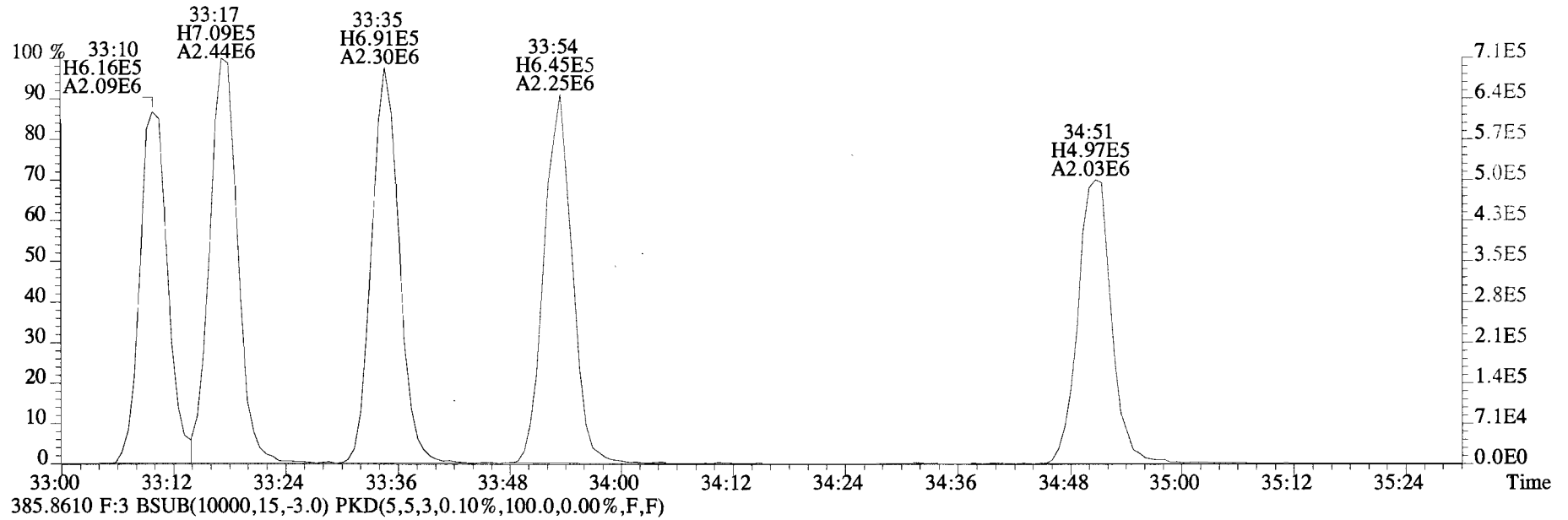
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



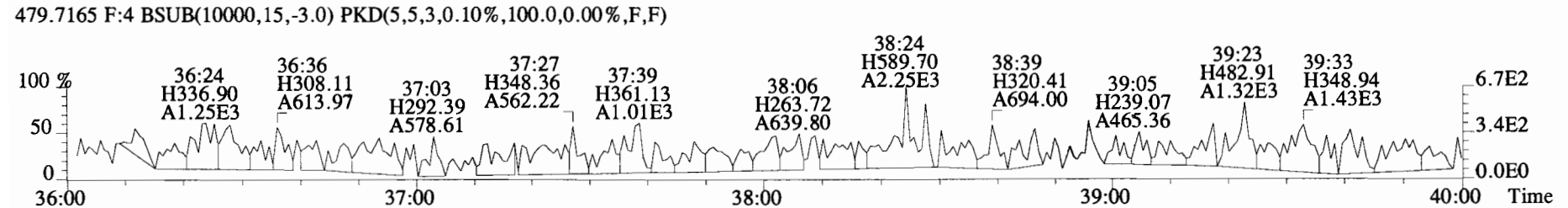
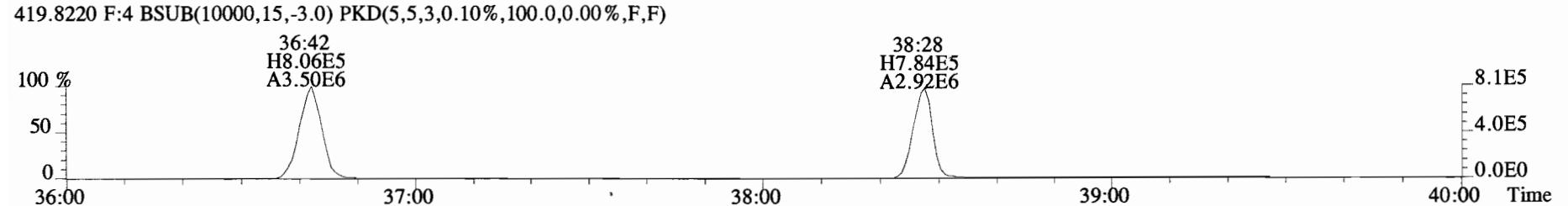
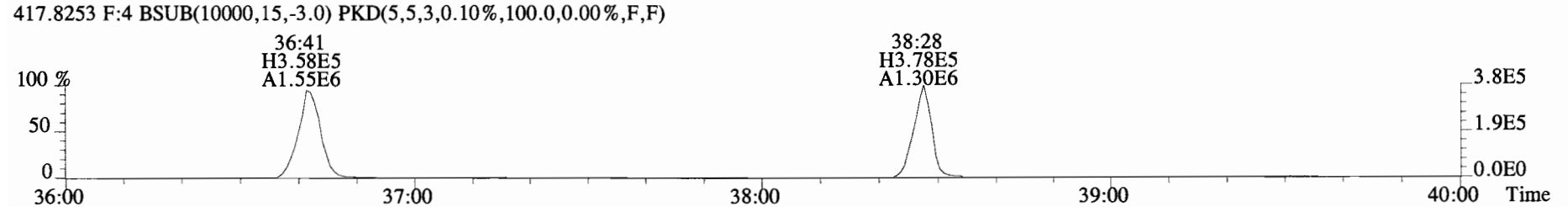
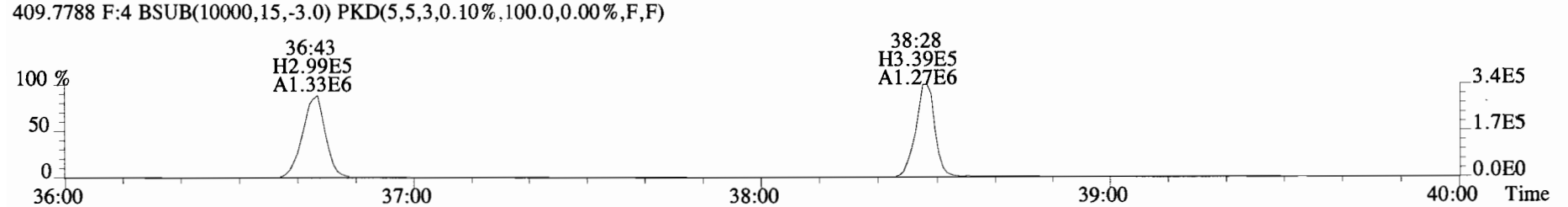
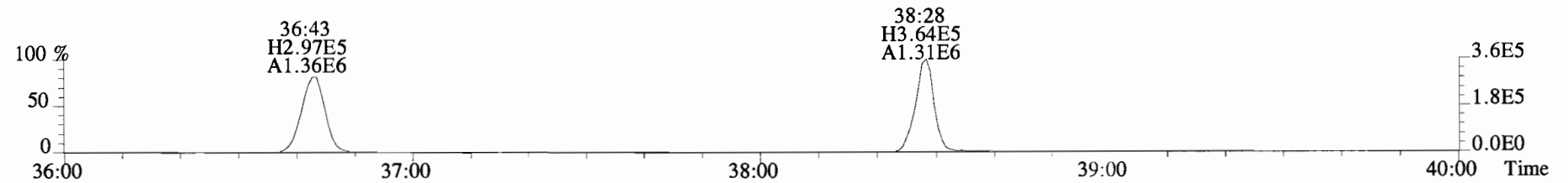
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



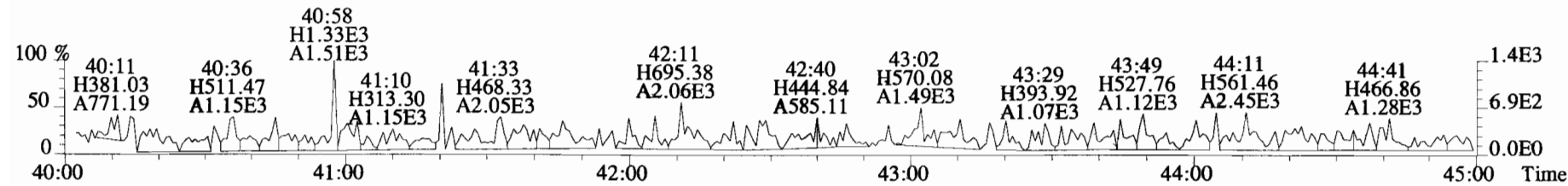
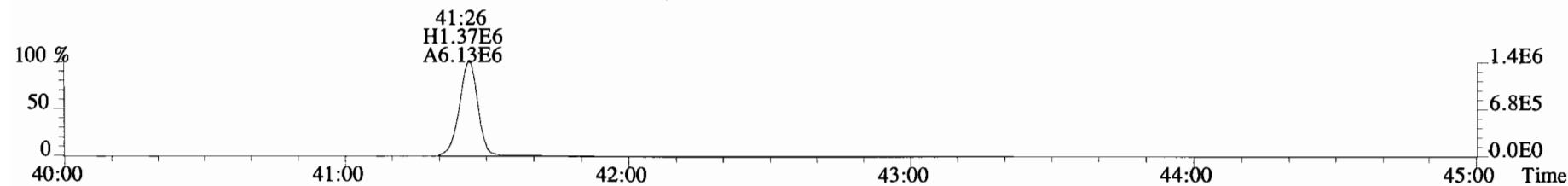
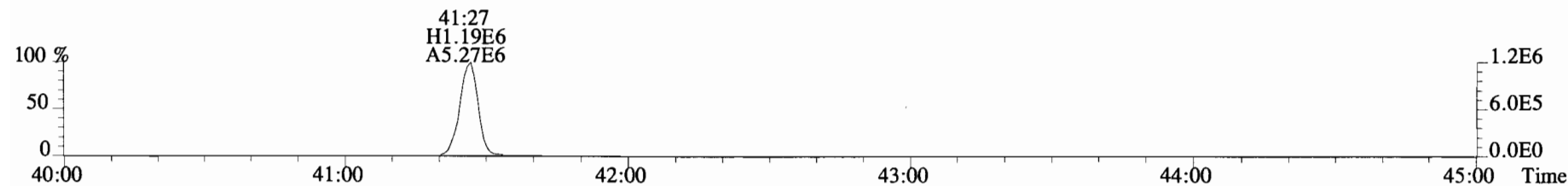
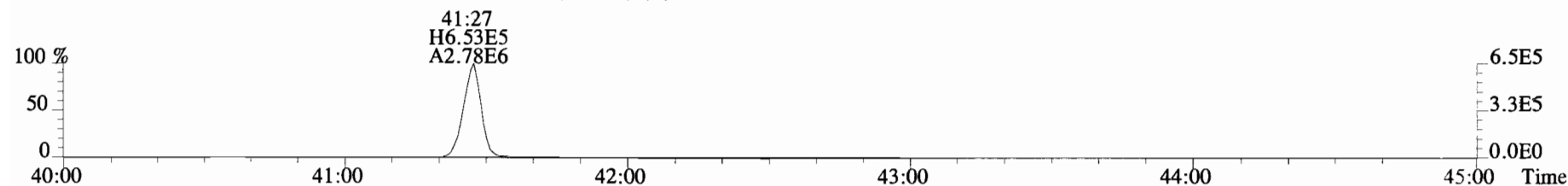
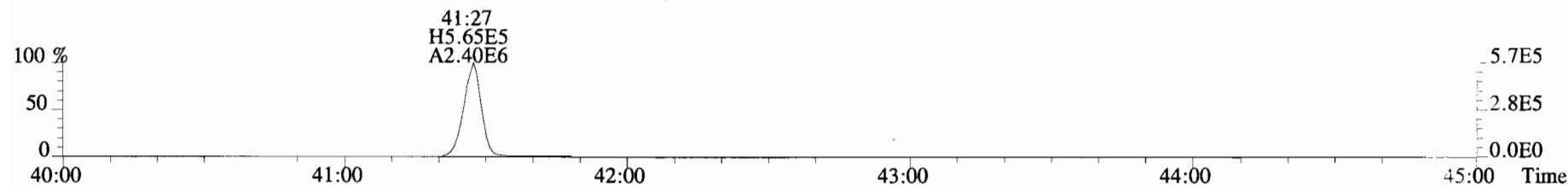
File:191106D1 #1-384 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

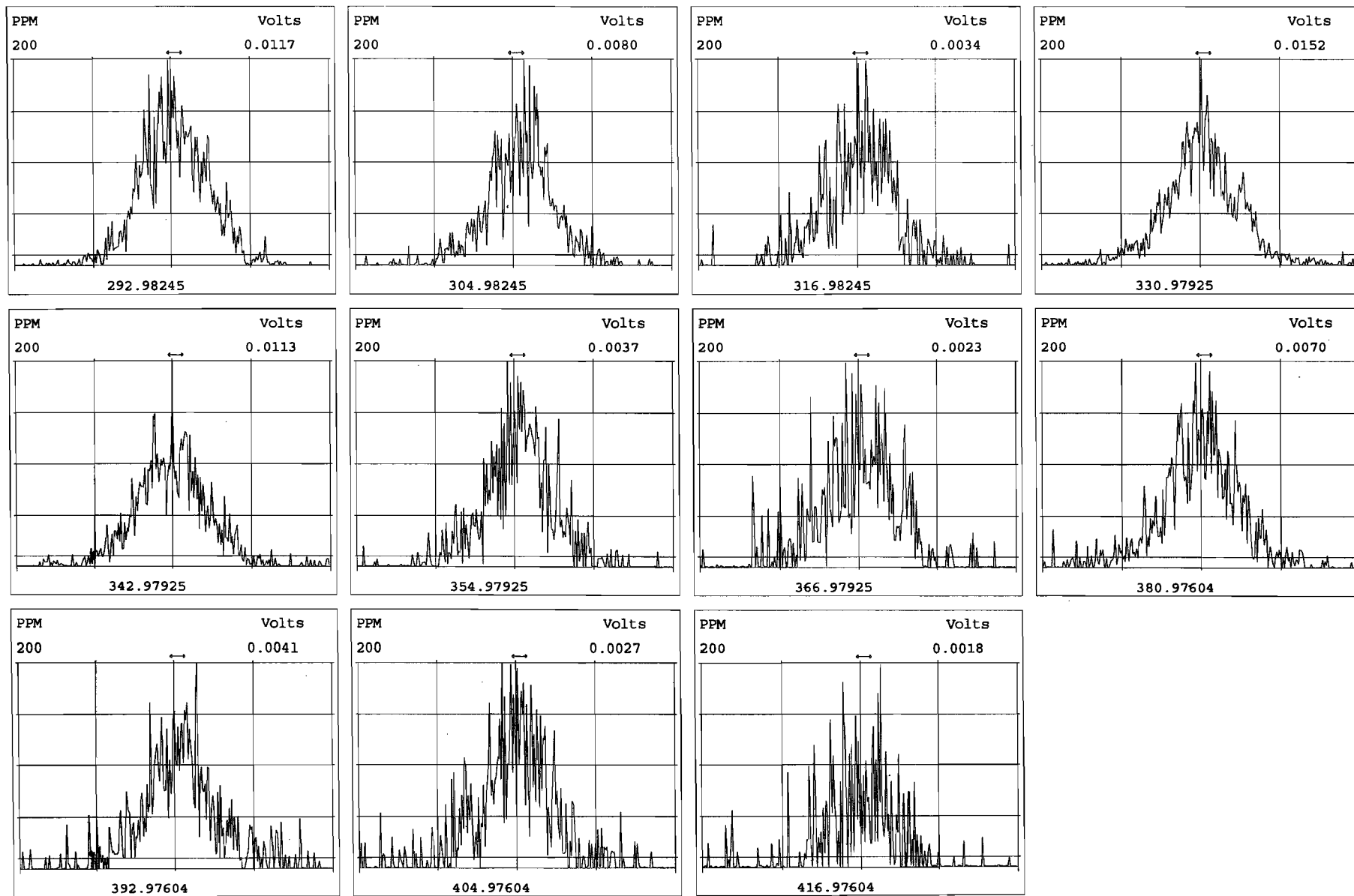


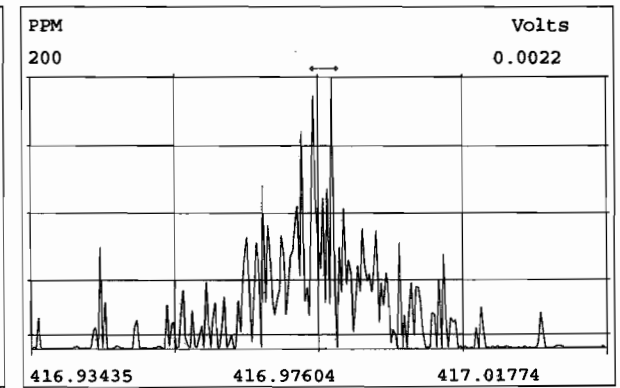
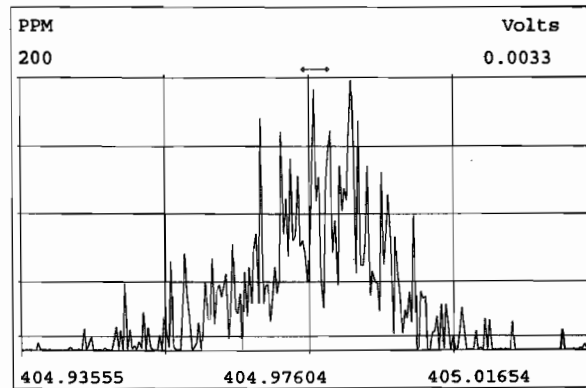
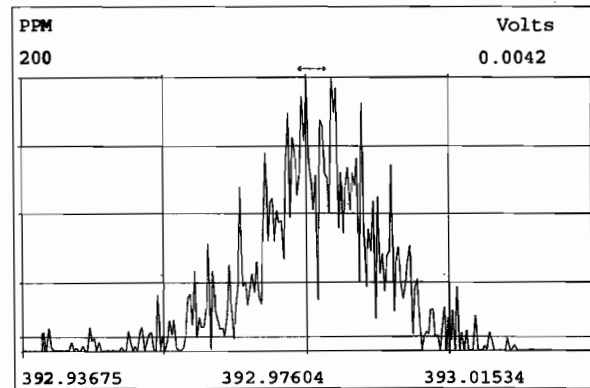
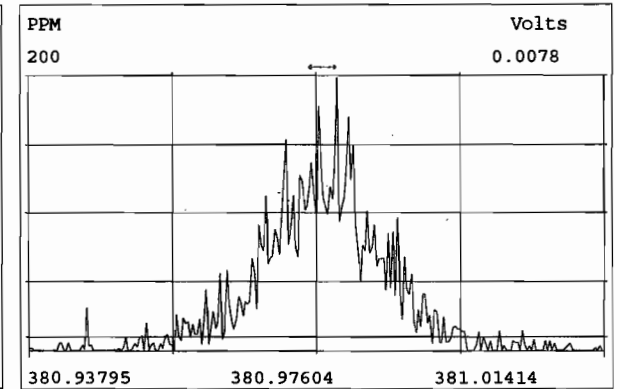
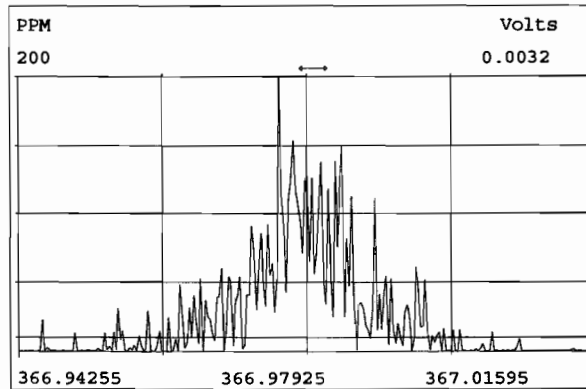
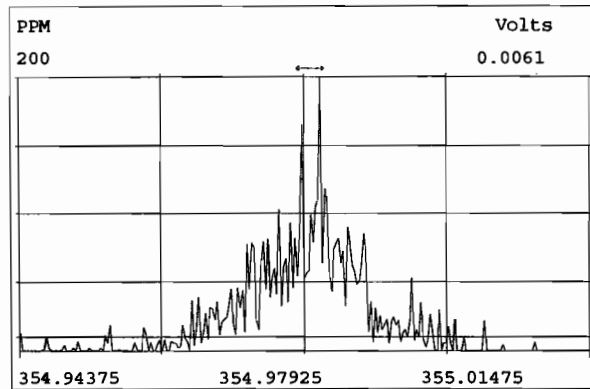
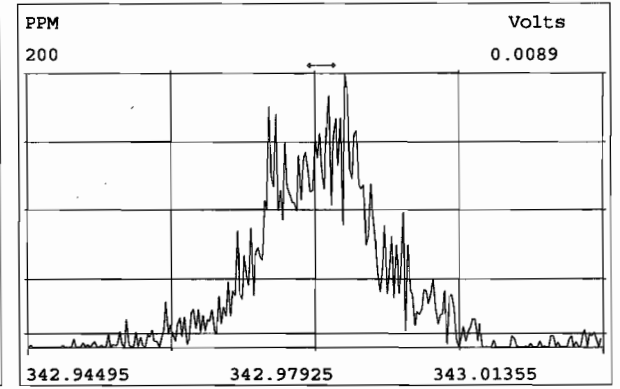
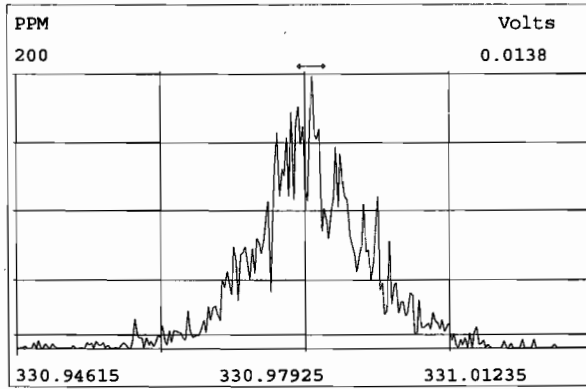
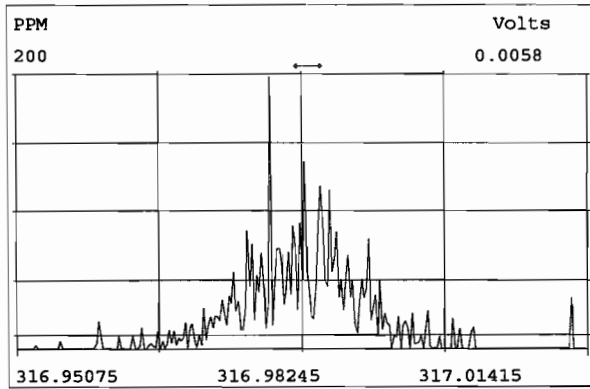
File:191106D1 #1-356 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%.100.0,0.00%,F,F)

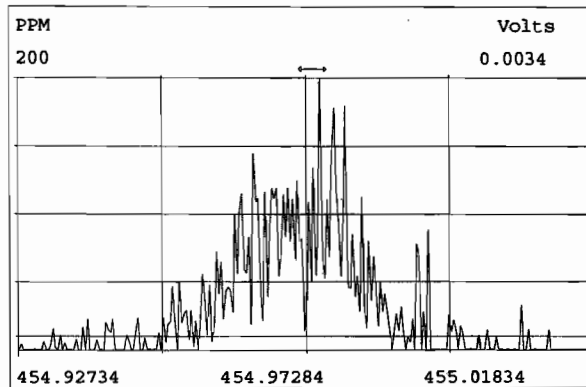
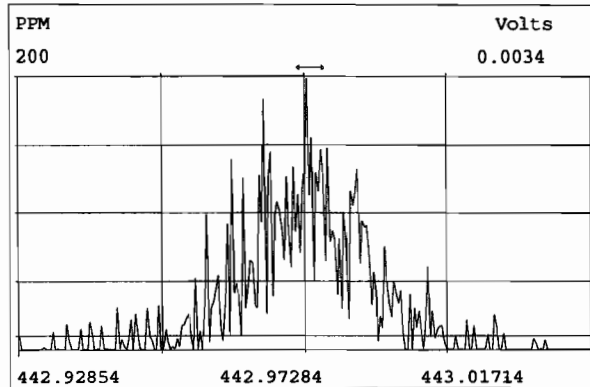
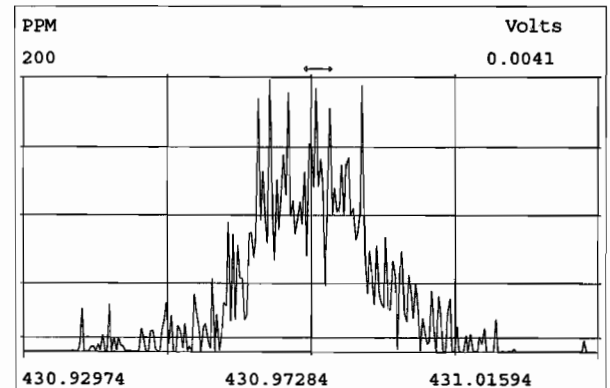
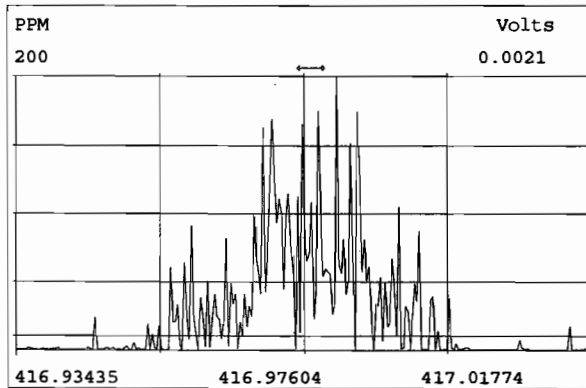
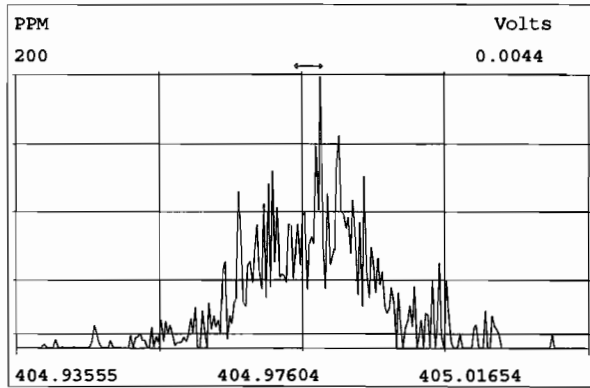
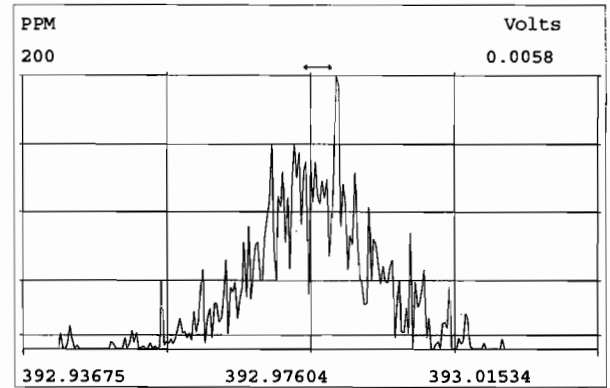
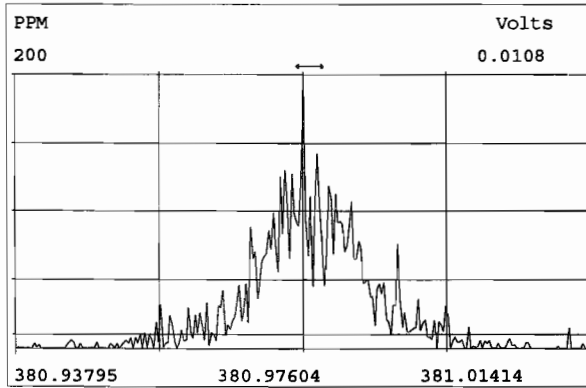
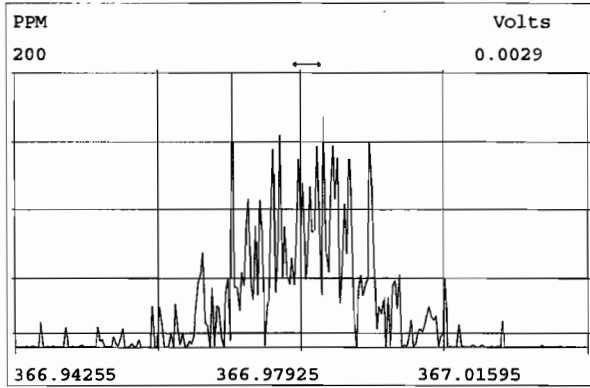


File:191106D1 #1-431 Acq: 6-NOV-2019 11:41:40 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191106D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



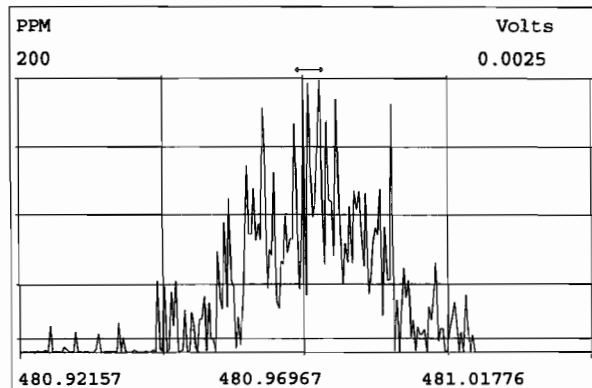
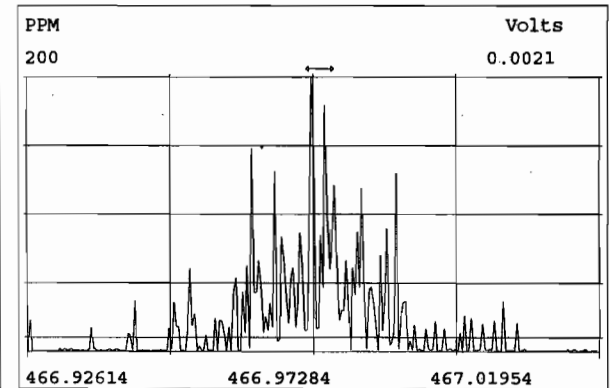
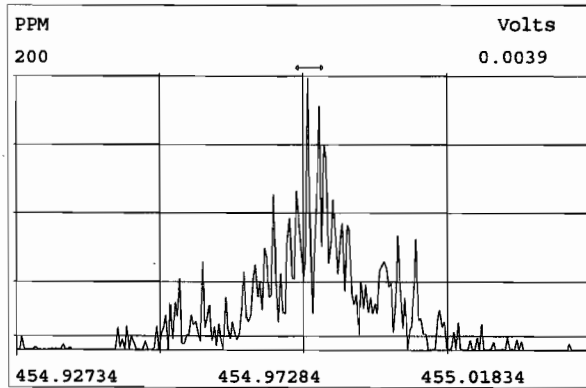
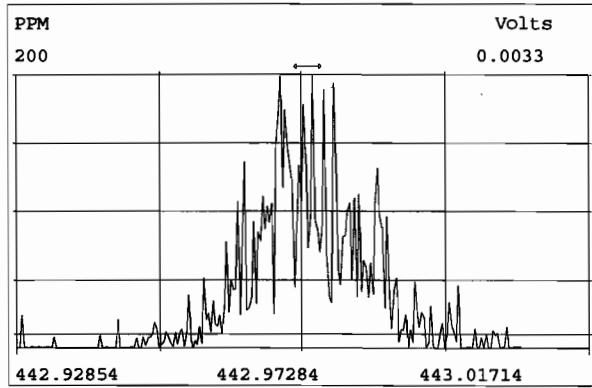
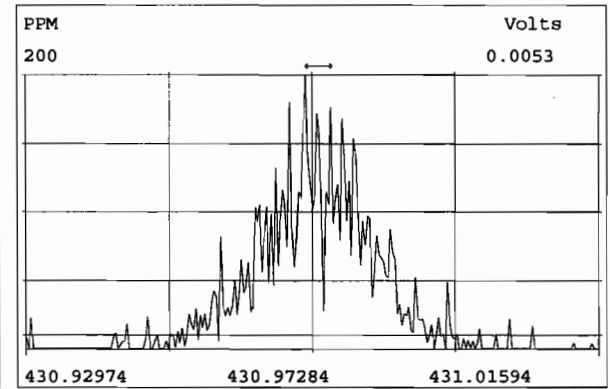
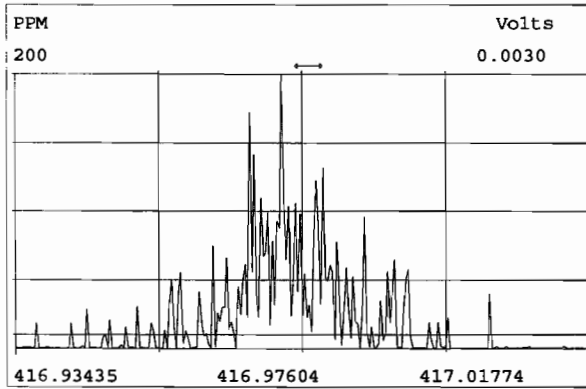
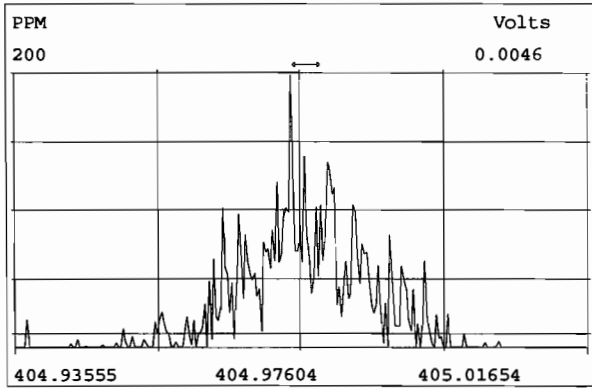






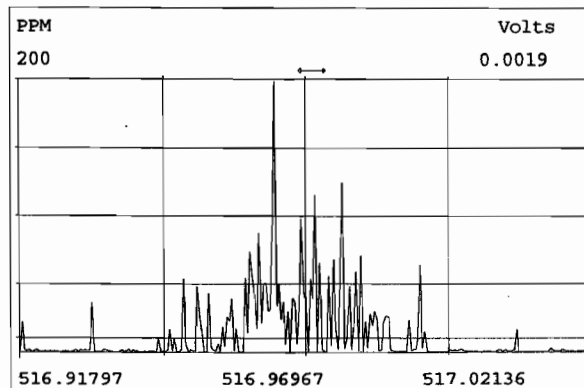
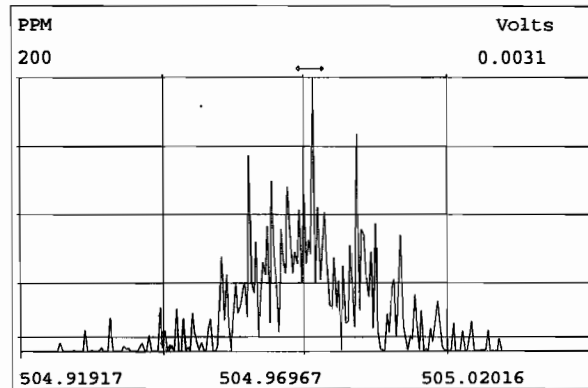
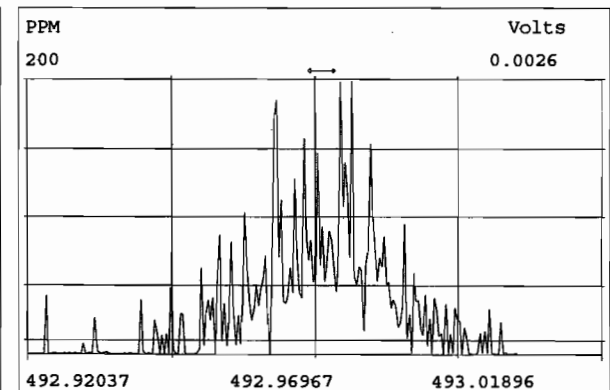
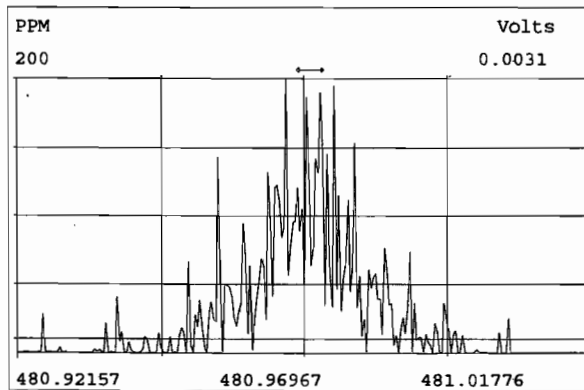
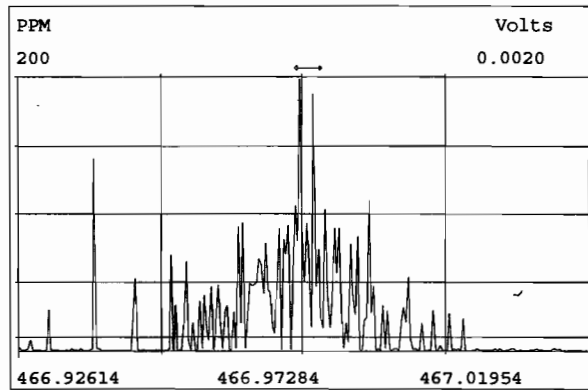
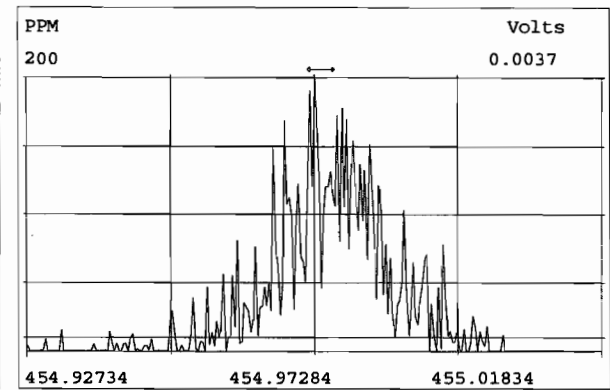
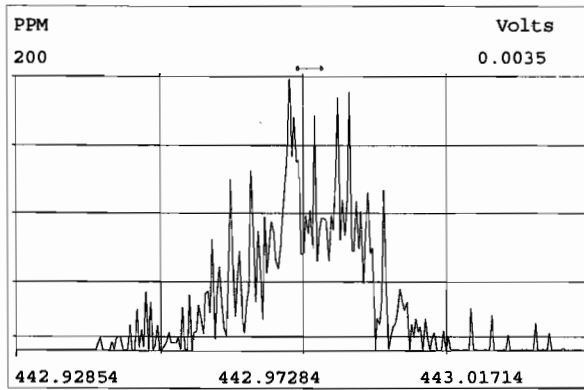
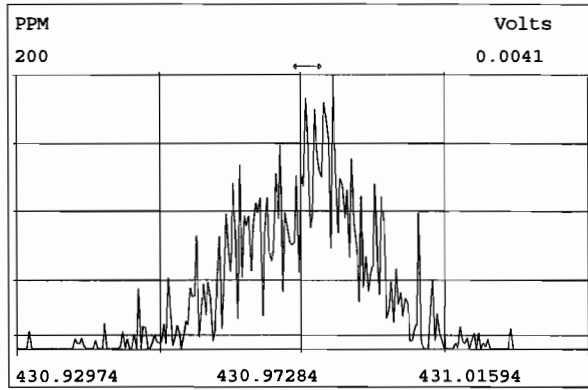
Peak Locate Examination: 6-NOV-2019:23:51 File:RES_CHECK

Experiment:OCDD_DB5 Function:4 Reference:PFK



Peak Locate Examination: 6-NOV-2019:23:52 File:RES_CHECK

Experiment:OCDD_DB5 Function:5 Reference:PFK



HKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191119D1-1

Reviewed By: CT 11/20/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<u>DB</u>
Run Log:		
- Correct Instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> Y
- Samples within 12 hour clock?	<input type="checkbox"/> (Y)	<input type="checkbox"/> N
- Bottle position verified?	<u>DB</u>	

	<u>Beg.</u>	<u>End</u>
Mass resolution \geq	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> A)
<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
GC Break <20%		<input type="checkbox"/> NA
<u>8280 CS1 End Standard:</u>		
- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input type="checkbox"/> NA

Comments:
 A) SIOS CRASHED DURING END R/S CHECK
 2 FUNCTIONS PRINTED.
 DB 11/20/19

Vista Analytical Laboratory - Injection Log Run file: 191119D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191119D1	1	ST191119D1-1	DB	19-NOV-19	12:43:27	ST191119D1-1	NA
191119D1	2	B9K0094-BS1	DB	19-NOV-19	13:31:22	ST191119D1-1	NA
191119D1	3	B9K0124-BS1	DB	19-NOV-19	14:19:14	ST191119D1-1	NA
191119D1	4	B9K0051-BS1	DB	19-NOV-19	15:07:00	ST191119D1-1	NA
191119D1	5	B9K0034-BS1	DB	19-NOV-19	15:54:57	ST191119D1-1	NA
191119D1	6	SOLVENT BLANK	DB	19-NOV-19	16:42:53	ST191119D1-1	NA
191119D1	7	B9K0094-BLK1	DB	19-NOV-19	17:30:39	ST191119D1-1	NA
191119D1	8	B9K0124-BLK1	DB	19-NOV-19	18:18:25	ST191119D1-1	NA
191119D1	9	B9K0051-BLK1	DB	19-NOV-19	19:06:15	ST191119D1-1	NA
191119D1	10	B9K0034-BLK1	DB	19-NOV-19	19:53:57	ST191119D1-1	NA
191119D1	11	1903994-01	DB	19-NOV-19	20:41:41	ST191119D1-1	NA
191119D1	12	1903856-01	DB	19-NOV-19	21:29:30	ST191119D1-1	NA
191119D1	13	1903784-01	DB	19-NOV-19	22:17:14	ST191119D1-1	NA
191119D1	14	1903784-02	DB	19-NOV-19	23:04:57	ST191119D1-1	NA
191119D1	15	1903784-03	DB	19-NOV-19	23:52:05	ST191119D1-1	NA

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191119D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC.	CONC.
	FORMING	ABUND.	LIMITS		FOUND	RANGE (3)
	RATIO (1)	RATIO	(2)			(ng/mL)
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.4	7.8 - 12.9
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	52.1	8.2 - 12.3 (4) 39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	51.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	52.4	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	52.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	51.8	43.0 - 58.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	103	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.98	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	52.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	51.5	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	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	51.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	52.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	51.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	0.88-1.20	y	48.7	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.2	43.0 - 58.0
OCDF	M+2/M+4	0.89	0.76-1.02	y	100.0	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: 11/19/19

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: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

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	0.78	0.65-0.89	y	102	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	101	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	106	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	92.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	99.5	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	110	72.0 - 138.0
13C-OCDD	M/M+2	0.87	0.76-1.02	y	260	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.79	0.65-0.89	y	103	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	103	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	101	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	107	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	98.6	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	101	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	107	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	111	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.45	0.37-0.51	y	117	77.0 - 129.0
13C-OCDF	M+2/M+4	0.87	0.76-1.02	y	267	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.68	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: 11/19/19

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: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

ZB-5MS IS Data Filename: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

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)	22:49	1,3,6,8-TCDF (F)	20:41
1,2,8,9-TCDD (L)	27:04	1,2,8,9-TCDF (L)	27:12
1,2,4,7,9-PeCDD (F)	28:40	1,3,4,6,8-PeCDF (F)	27:10
1,2,3,8,9-PeCDD (L)	31:04	1,2,3,8,9-PeCDF (L)	31:18
1,2,4,6,7,9-HxCDD (F)	32:29	1,2,3,4,6,8-HxCDF (F)	31:57
1,2,3,7,8,9-HxCDD (L)	34:25	1,2,3,7,8,9-HxCDF (L)	34:48
1,2,3,4,6,7,9-HpCDD (F)	37:02	1,2,3,4,6,7,8-HpCDF (F)	36:39
1,2,3,4,6,7,8-HpCDD (L)	37:52	1,2,3,4,7,8,9-HpCDF (L)	38:25

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirements, %Valley Height Between Compared
Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DBDate: 11/19/19

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-SMS

VER Data Filename: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME		RRT
	REFERENCE	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	1.001	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	1.198	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	1.152	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.187	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: 11/19/19

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: 191119D1 S#1 Analysis Date: 19-NOV-19 Time: 12:43:27

NATIVE ANALYTES	RETENTION TIME		RRT	QC LIMITS (1)
	REFERENCE	RRT		
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	1.000	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	1.001	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	0.992	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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	1.233	1.091-1.371

Analyst: DB

Date: 11/19/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191119D1-1

Filename: 191119D1 S:1 Acq:19-NOV-19 12:43:27
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191119D1-1
EndCAL: NA

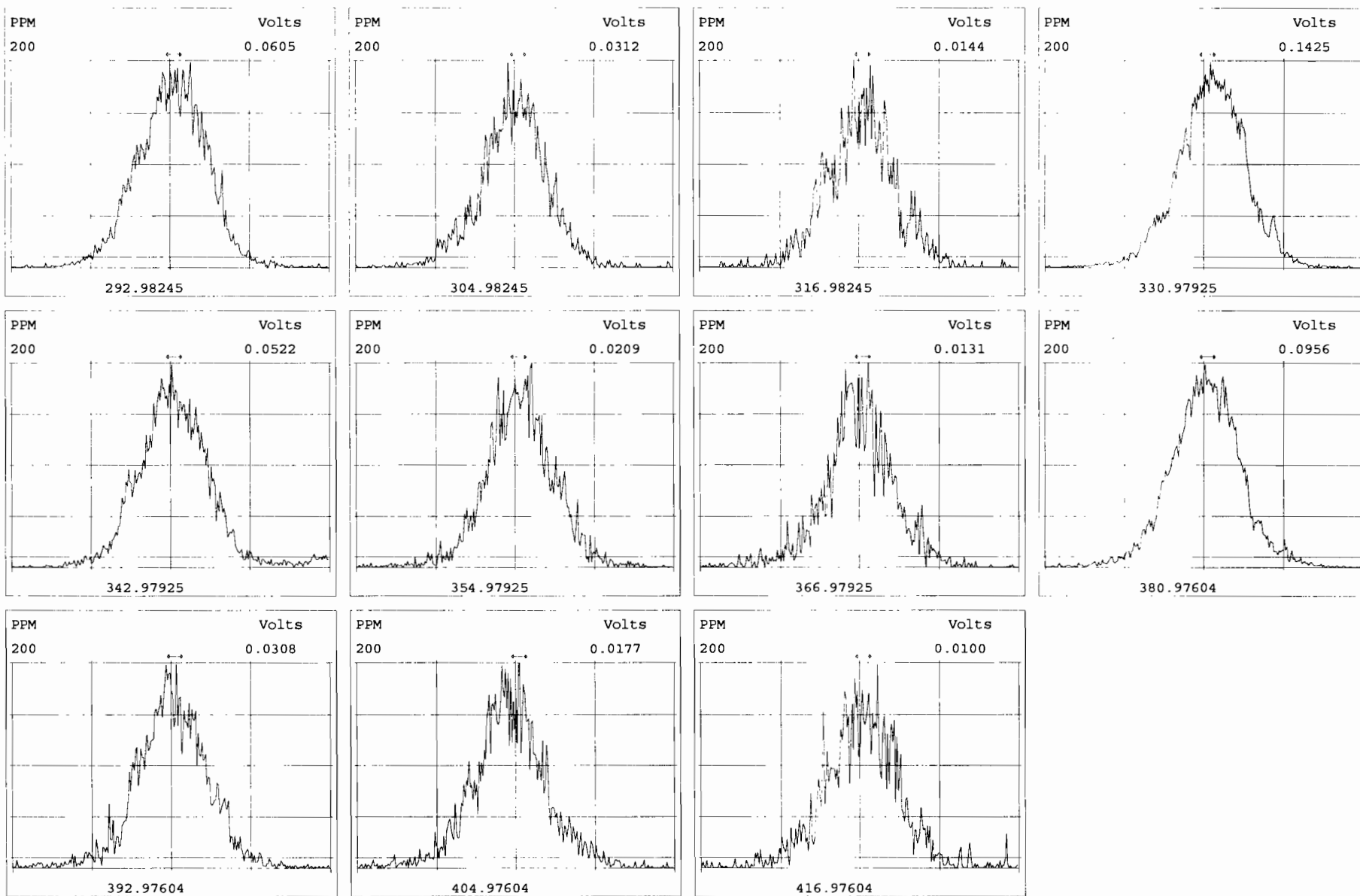
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	1.20e+06	0.79 y	0.91	26:12	10.368		* 2.5	*	*	Total Tetra-Dioxins	75.4	76.1	*	*	*
1,2,3,7,8-PeCDD	4.76e+06	0.61 y	0.90	30:42	52.086		* 2.5	*	*	Total Penta-Dioxins	194	194	*	*	*
1,2,3,4,7,8-HxCDD	4.99e+06	1.25 y	1.10	34:01	51.854		* 2.5	*	*	Total Hexa-Dioxins	228	229	*	*	*
1,2,3,6,7,8-HxCDD	5.00e+06	1.25 y	0.94	34:08	52.358		* 2.5	*	*	Total Hepta-Dioxins	120	121	*	*	*
1,2,3,7,8,9-HxCDD	5.15e+06	1.27 y	0.96	34:25	52.062		* 2.5	*	*	Total Tetra-Furans	37.0	37.4	*	*	*
1,2,3,4,6,7,8-HpCDD	4.67e+06	1.05 y	0.98	37:52	51.781		* 2.5	*	*	Total Penta-Furans	231.17	232.11	*	*	*
OCDD	9.61e+06	0.88 y	0.96	41:08	103.50		* 2.5	*	*	Total Hexa-Furans	273	274	*	*	*
										Total Hepta-Furans	98.7	99.1	*	*	*
2,3,7,8-TCDF	1.71e+06	0.77 y	0.95	25:26	9.9832		* 2.5	*	*						
1,2,3,7,8-PeCDF	7.47e+06	1.58 y	0.96	29:32	52.572		* 2.5	*	*						
2,3,4,7,8-PeCDF	7.53e+06	1.56 y	1.01	30:26	51.482		* 2.5	*	*						
1,2,3,4,7,8-HxCDF	6.84e+06	1.24 y	1.18	33:08	51.055		* 2.5	*	*						
1,2,3,6,7,8-HxCDF	7.19e+06	1.23 y	1.07	33:15	51.442		* 2.5	*	*						
2,3,4,6,7,8-HxCDF	7.20e+06	1.23 y	1.11	33:51	52.114		* 2.5	*	*						
1,2,3,7,8,9-HxCDF	6.19e+06	1.27 y	1.06	34:48	51.561		* 2.5	*	*						
1,2,3,4,6,7,8-HpCDF	5.92e+06	1.00 y	1.13	36:39	48.717		* 2.5	*	*						
1,2,3,4,7,8,9-HpCDF	5.49e+06	1.04 y	1.28	38:25	49.174		* 2.5	*	*						
OCDF	1.12e+07	0.89 y	0.95	41:22	99.967		* 2.5	*	*						
IS 13C-2,3,7,8-TCDD	1.28e+07	0.78 y	1.10	26:11	102.43					Rec	Qual				
IS 13C-1,2,3,7,8-PeCDD	1.01e+07	0.62 y	0.88	30:42	100.84					102					
IS 13C-1,2,3,4,7,8-HxCDD	8.75e+06	1.27 y	0.64	34:00	106.17					101					
IS 13C-1,2,3,6,7,8-HxCDD	1.02e+07	1.25 y	0.86	34:06	92.782					106					
IS 13C-1,2,3,7,8,9-HxCDD	1.03e+07	1.25 y	0.81	34:24	99.524					92.8					
IS 13C-1,2,3,4,6,7,8-HpCDD	9.20e+06	1.06 y	0.65	37:51	109.72					99.5					
IS 13C-OCDD	1.94e+07	0.87 y	0.58	41:08	260.42					110					
IS 13C-2,3,7,8-TCDF	1.80e+07	0.79 y	1.03	25:24	103.42					130					
IS 13C-1,2,3,7,8-PeCDF	1.48e+07	1.60 y	0.85	29:31	103.11					103					
IS 13C-2,3,4,7,8-PeCDF	1.44e+07	1.59 y	0.85	30:25	101.32					103					
IS 13C-1,2,3,4,7,8-HxCDF	1.14e+07	0.52 y	0.83	33:07	106.70					101					
IS 13C-1,2,3,6,7,8-HxCDF	1.31e+07	0.53 y	1.03	33:14	98.555					107					
IS 13C-2,3,4,6,7,8-HxCDF	1.24e+07	0.52 y	0.95	33:50	101.42					98.6					
IS 13C-1,2,3,7,8,9-HxCDF	1.13e+07	0.53 y	0.83	34:47	106.58					101					
IS 13C-1,2,3,4,6,7,8-HpCDF	1.08e+07	0.44 y	0.76	36:38	110.99					107					
IS 13C-1,2,3,4,7,8,9-HpCDF	8.72e+06	0.45 y	0.58	38:24	116.89					111					
IS 13C-OCDF	2.36e+07	0.87 y	0.69	41:21	266.76					117					
C/Up 37C1-2,3,7,8-TCDD	1.32e+06		1.20	26:12	9.6843					133					
RS/RT 13C-1,2,3,4-TCDD	1.14e+07	0.79 y	1.00	25:38	100.00					96.8					
RS 13C-1,2,3,4-TCDF	1.68e+07	0.79 y	1.00	24:12	100.00						Integrations				Reviewed
RS/RT 13C-1,2,3,4,6,9-HxCDF	1.28e+07	0.53 y	1.00	33:31	100.00						by				by

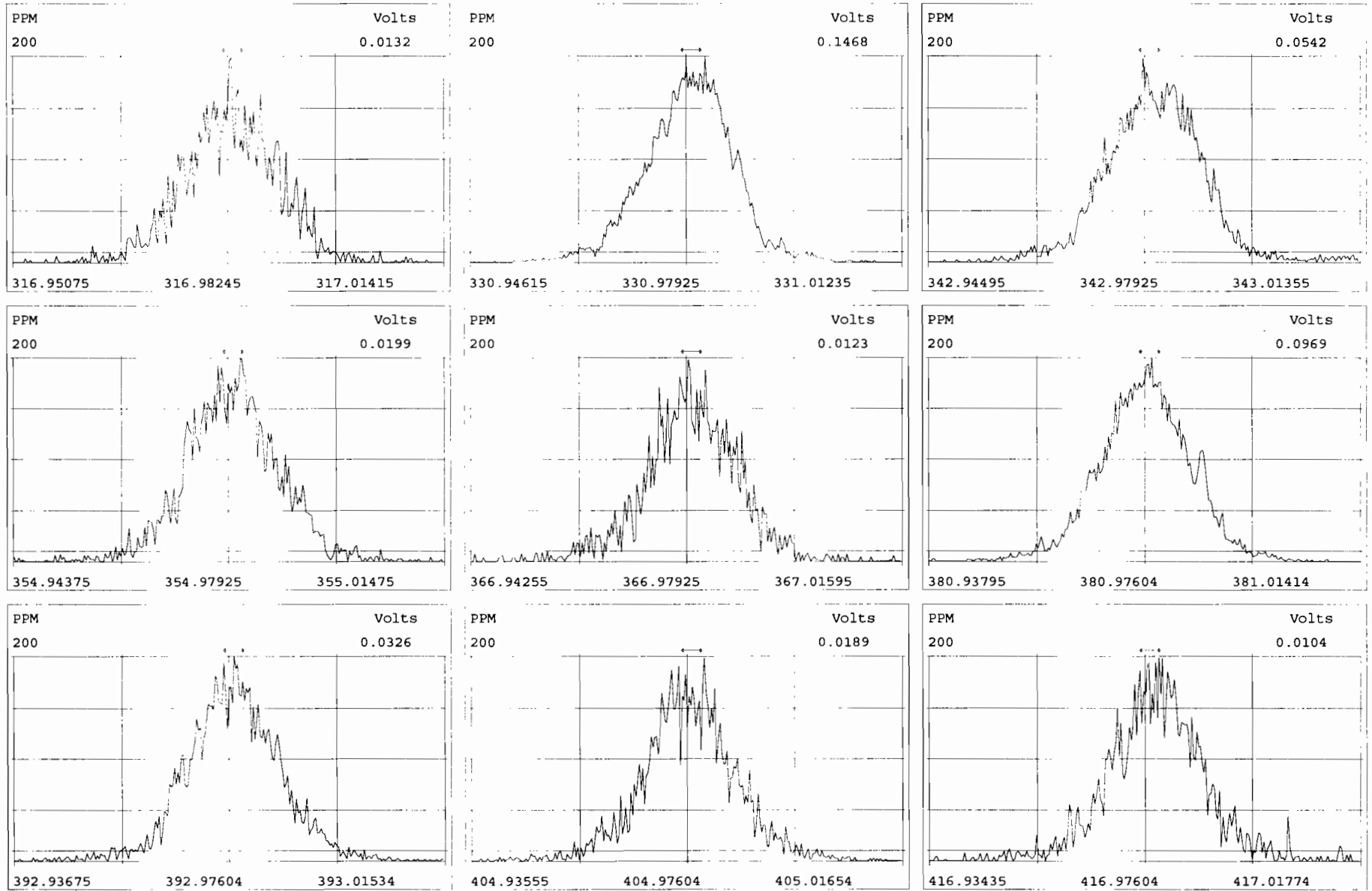
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Analyst: OT Date: 11/20/19

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191119D1	5	B9K0034-BS1	DB	19-NOV-19	15:54:57	ST191119D1-1	NA
191119D1	6	SOLVENT BLANK	DB	19-NOV-19	16:42:53	ST191119D1-1	NA
191119D1	7	B9K0094-BLK1	DB	19-NOV-19	17:30:39	ST191119D1-1	NA
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Peak Locate Examination:19-NOV-2019:12:39 File:191119D1

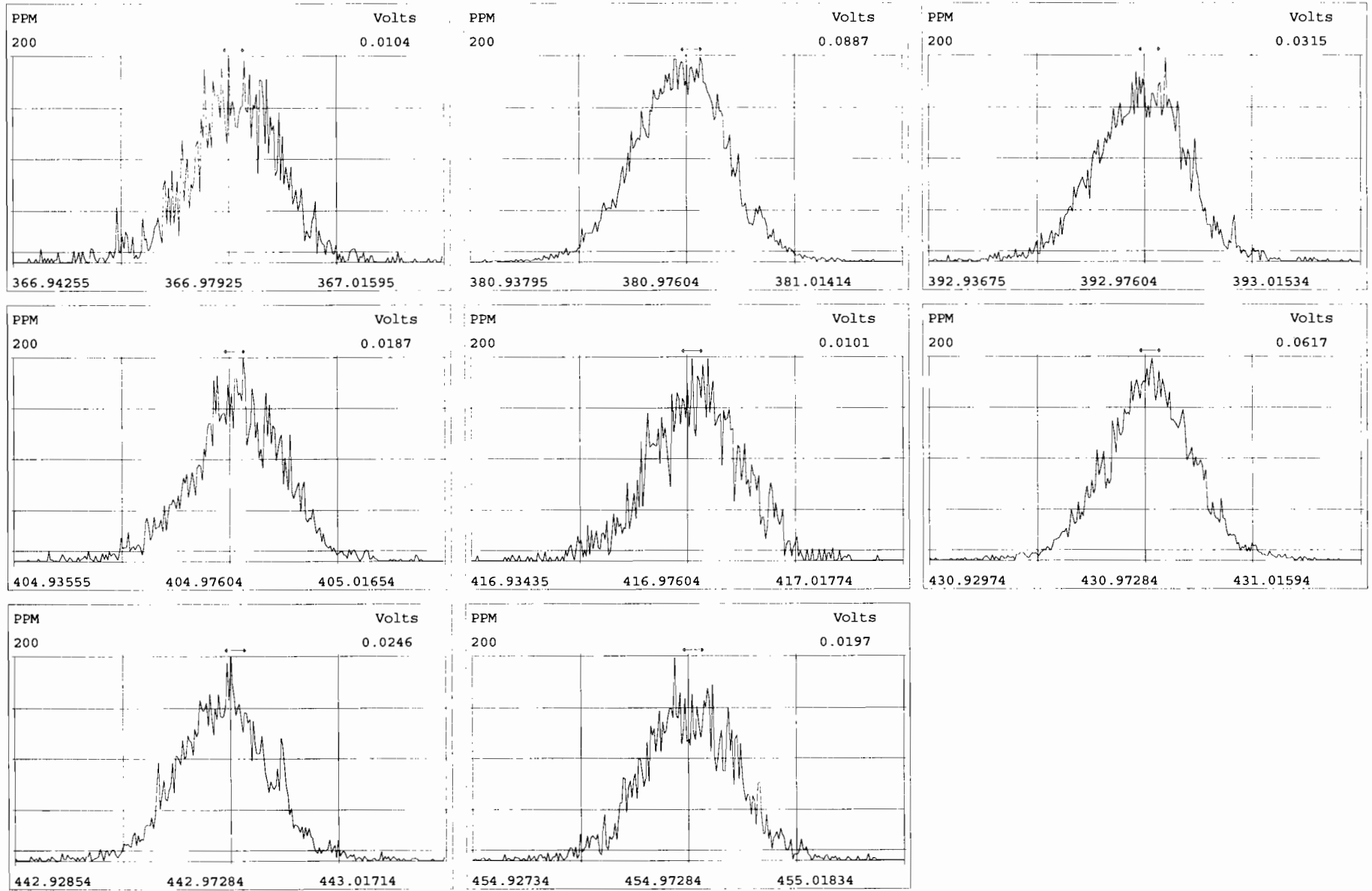
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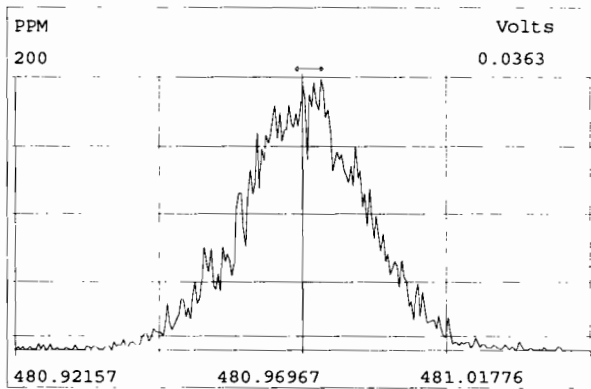
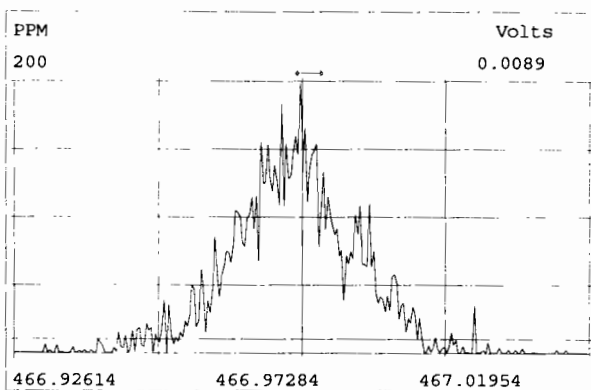
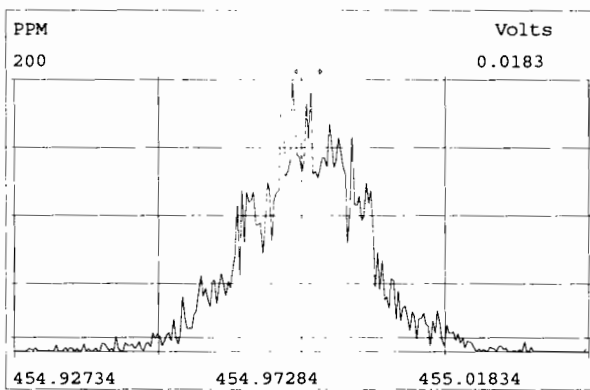
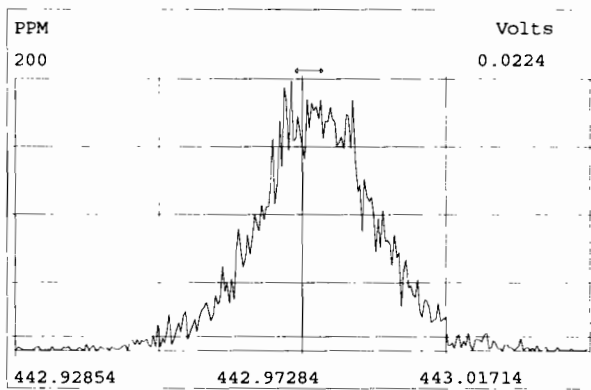
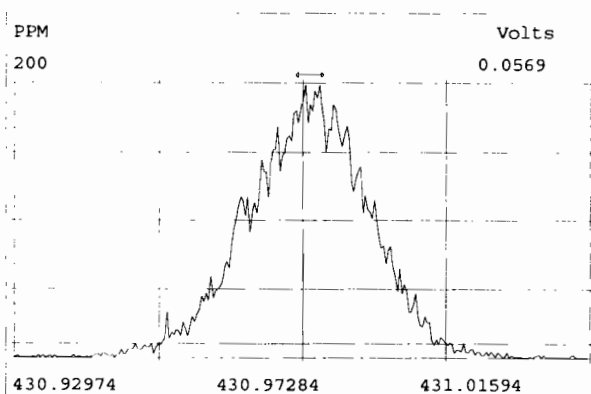
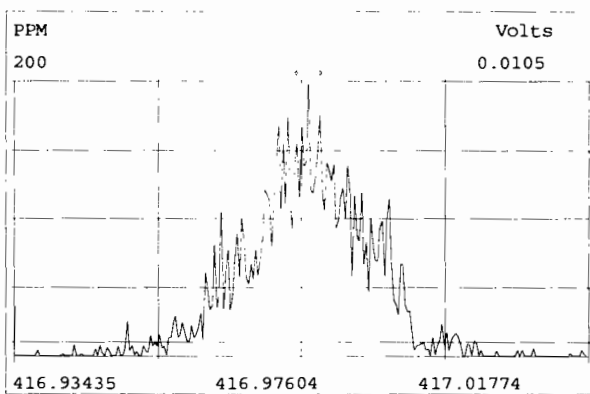
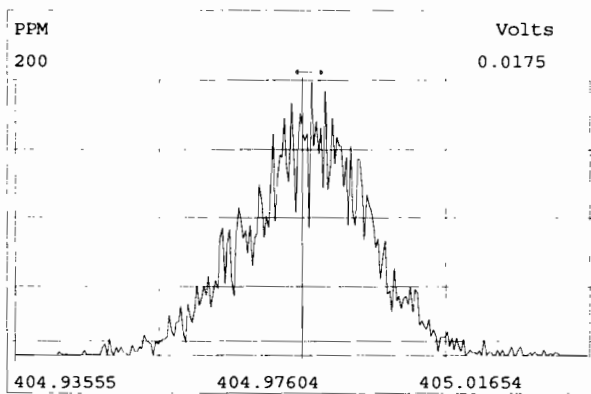


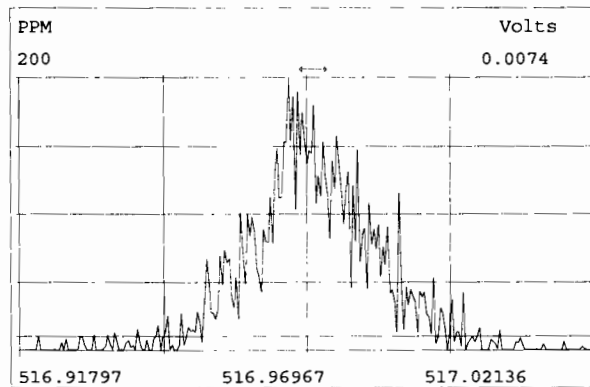
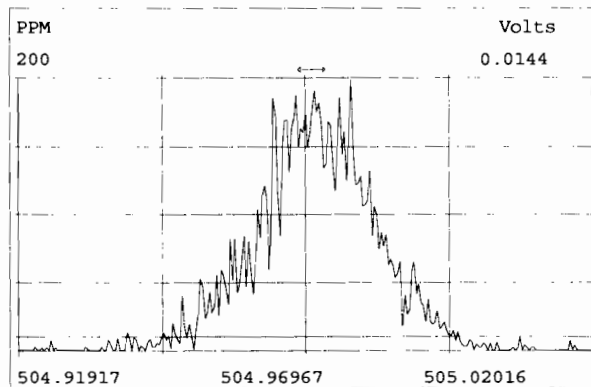
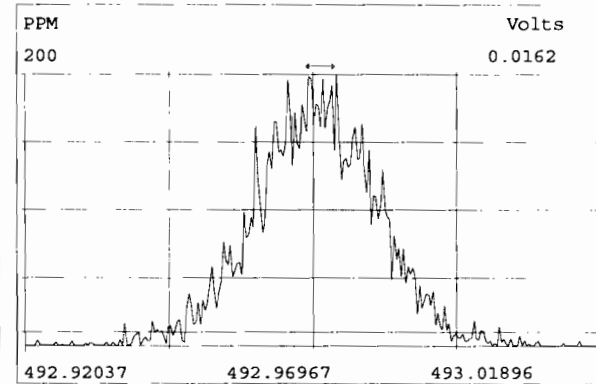
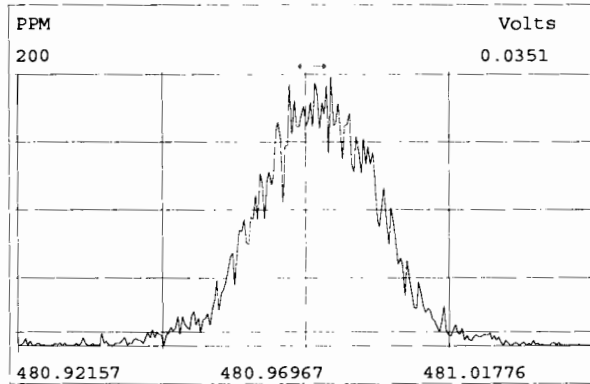
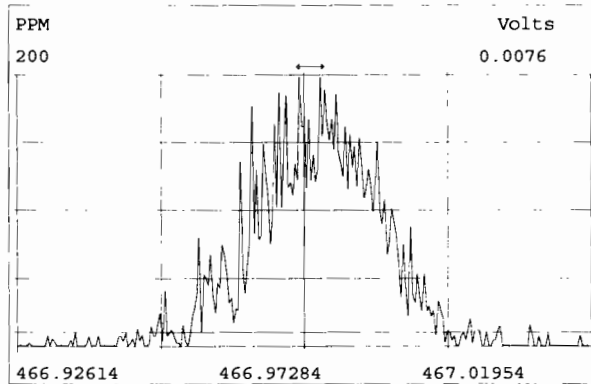
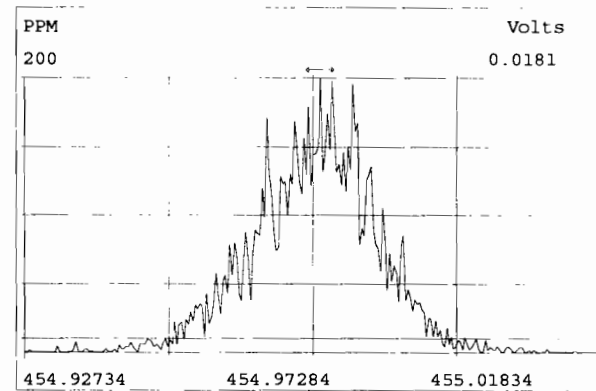
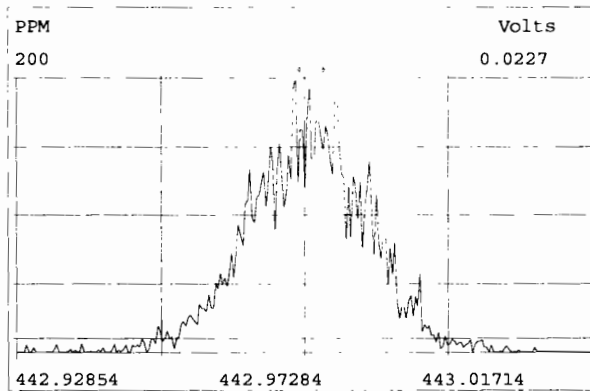
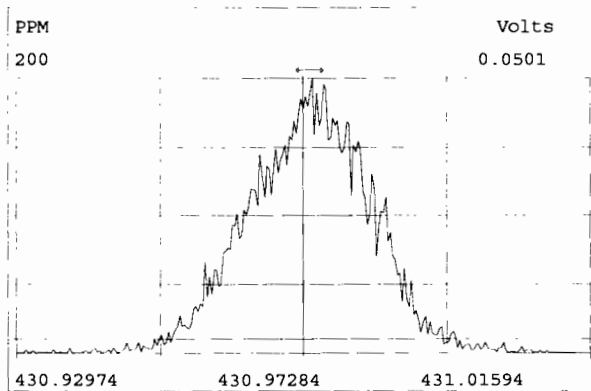


Peak Locate Examination:19-NOV-2019:12:41 File:191119D1

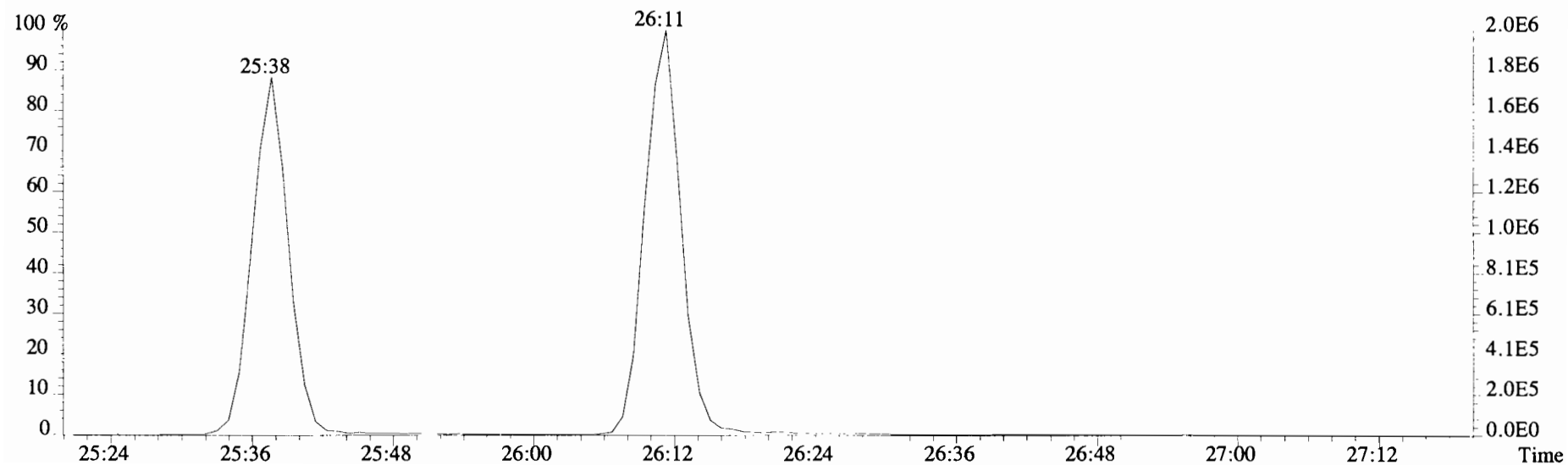
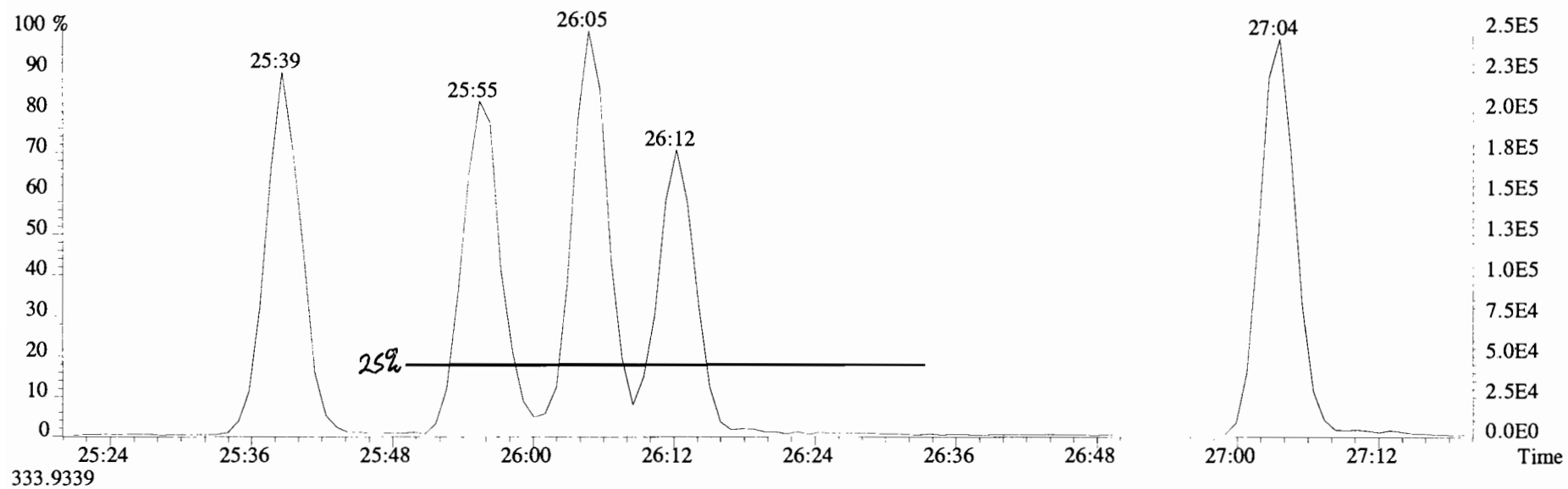
Experiment:OCDD_DB5 Function:3 Reference:PFK



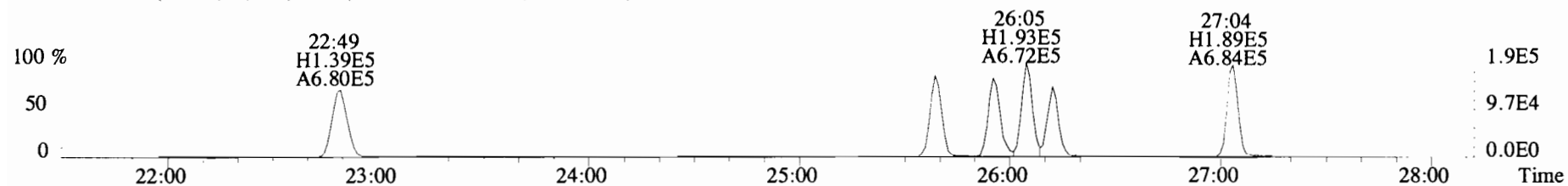




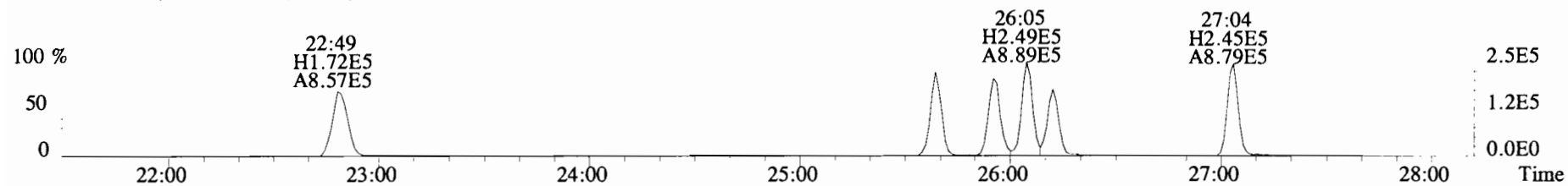
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Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



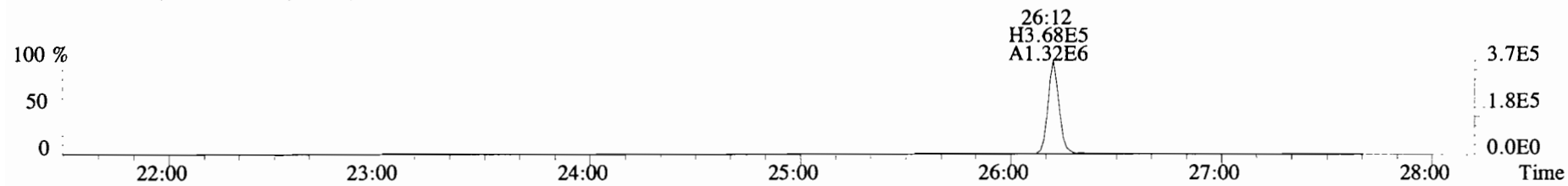
File:191119D1 #1-492 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



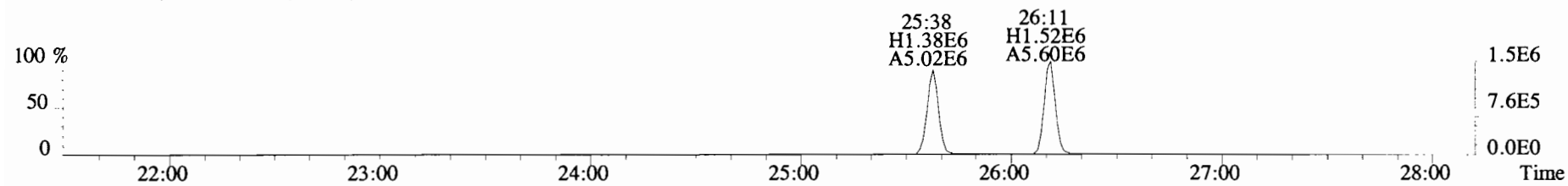
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



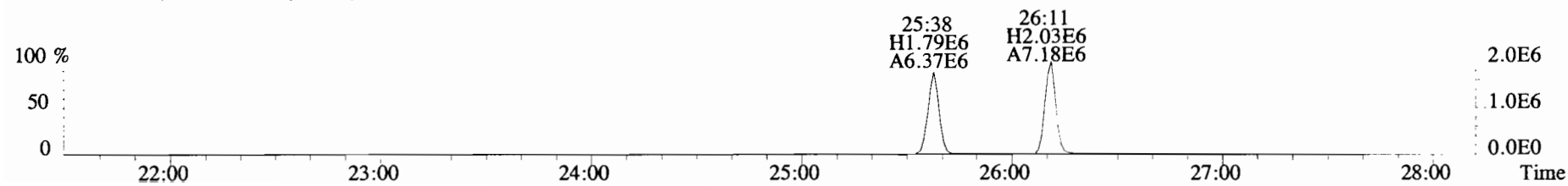
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



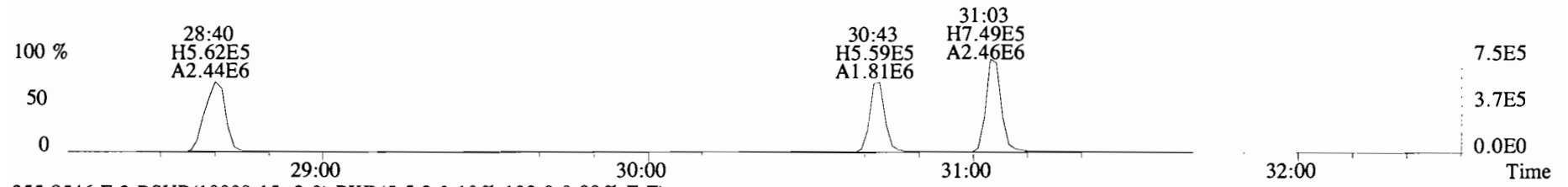
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



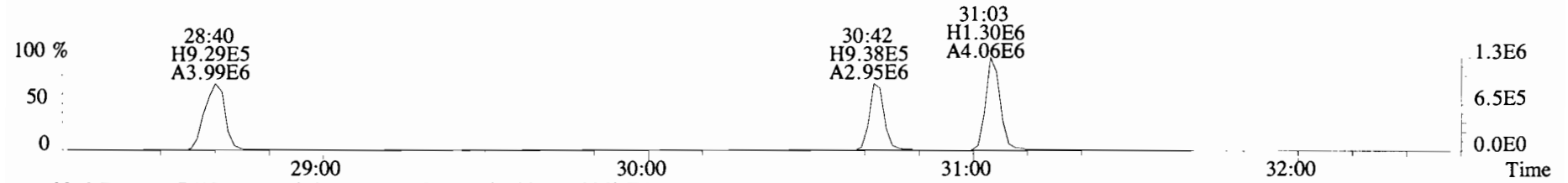
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



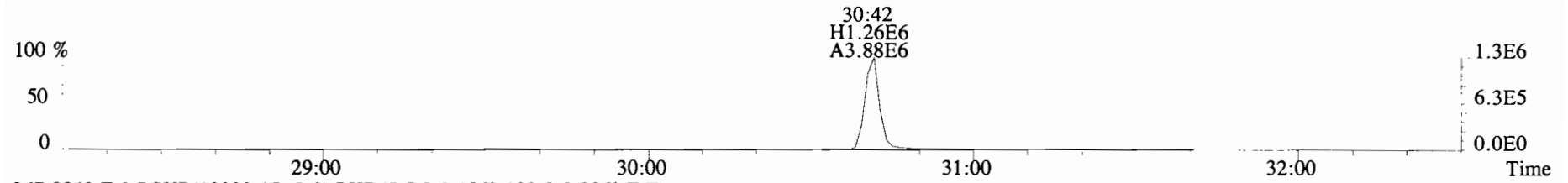
File:191119D1 #1-211 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



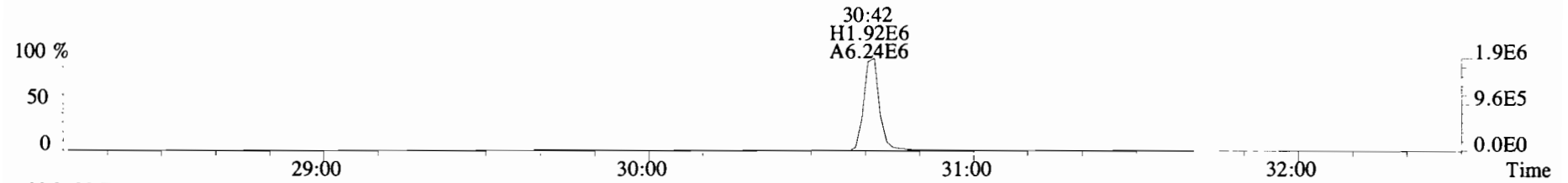
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



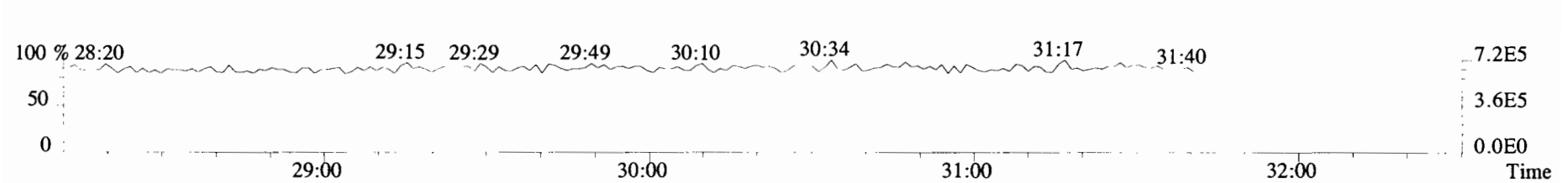
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



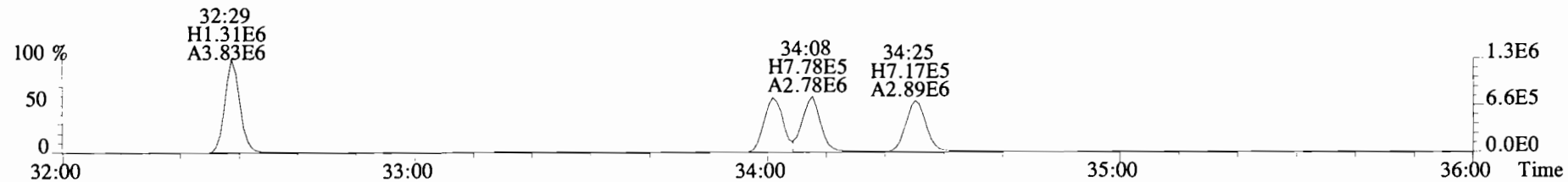
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



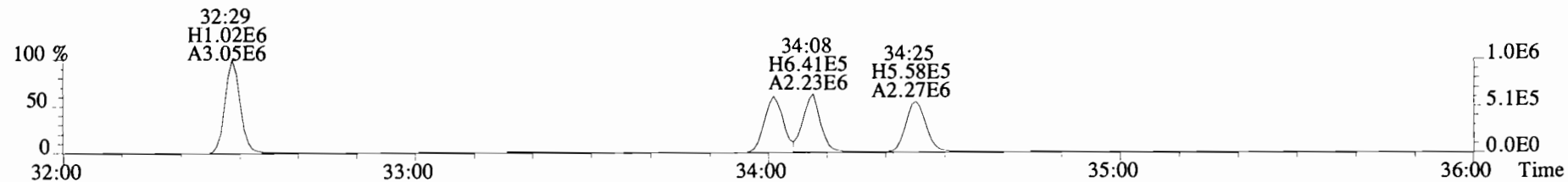
366.9792 F:2



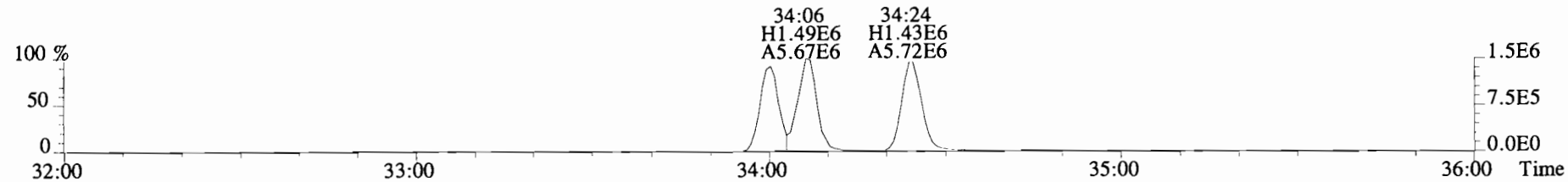
File:191119D1 #1-385 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



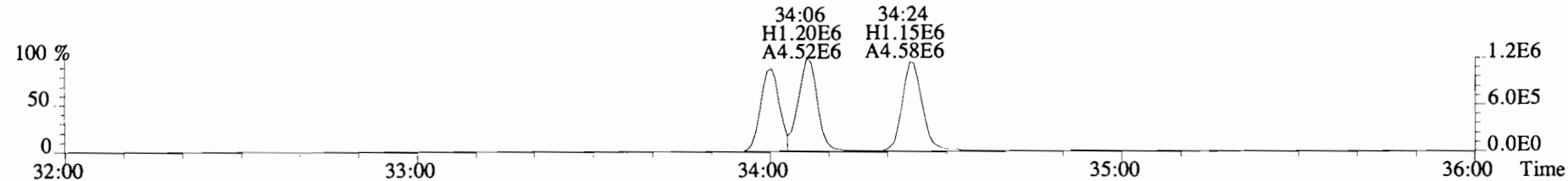
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



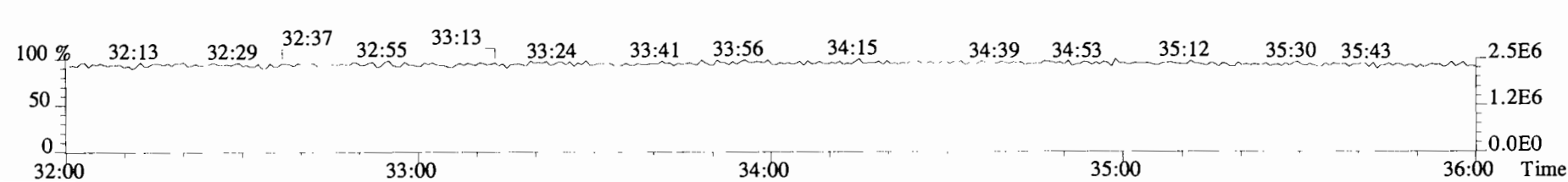
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



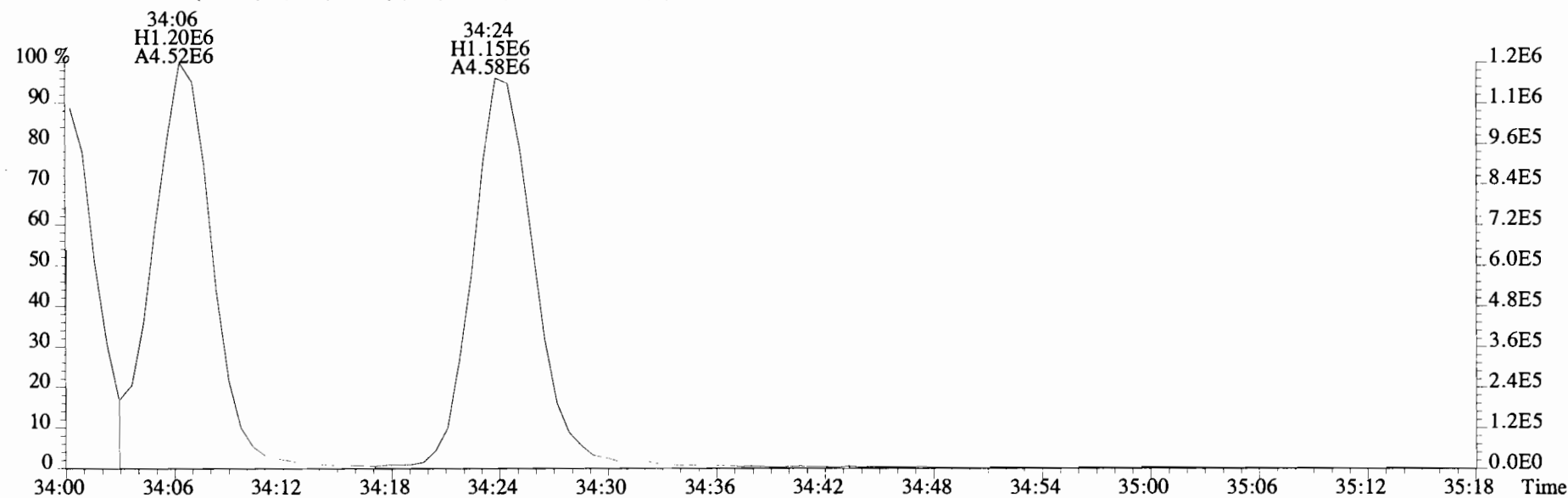
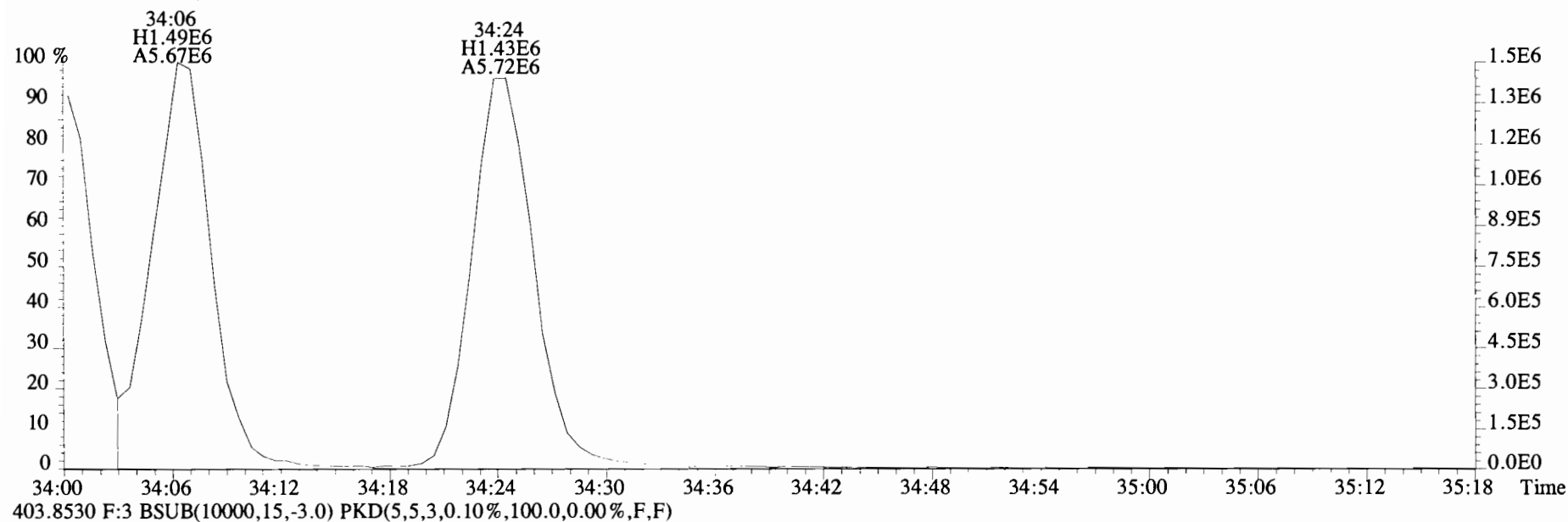
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



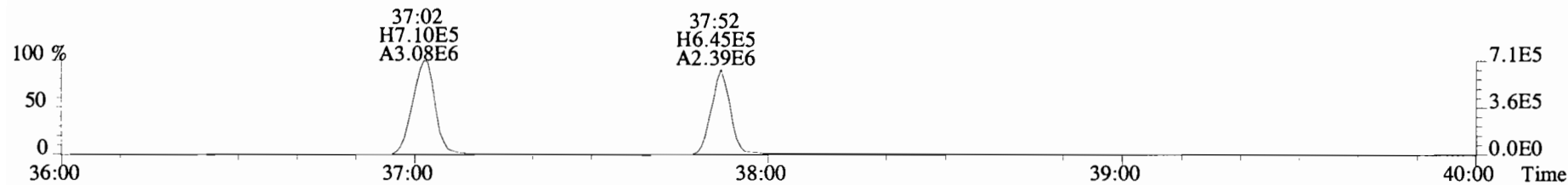
392.9760 F:3



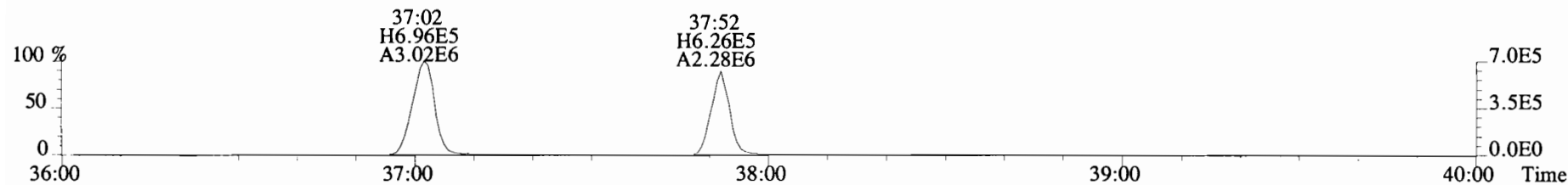
File:191119D1 #1-385 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



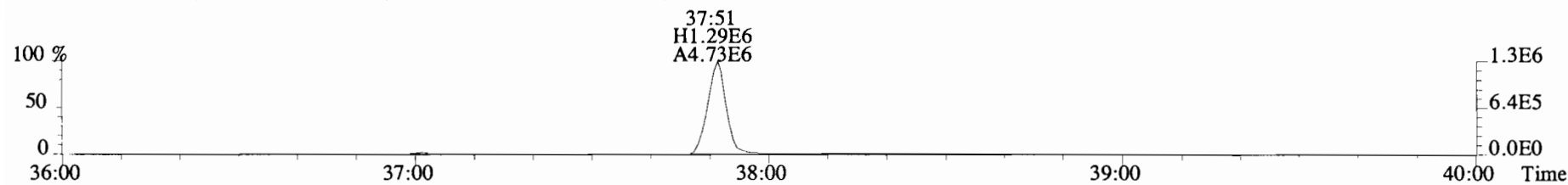
File:191119D1 #1-355 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



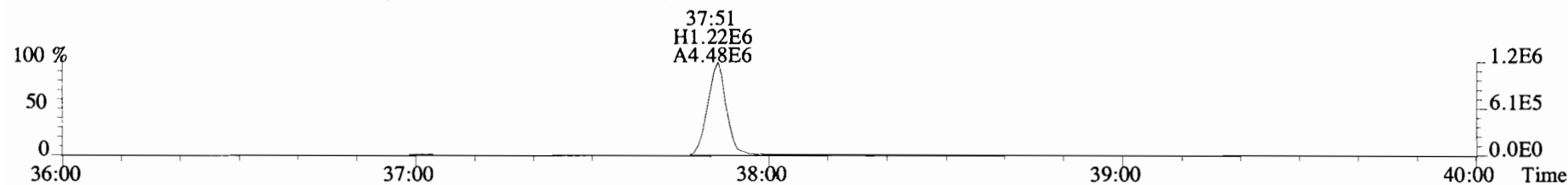
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



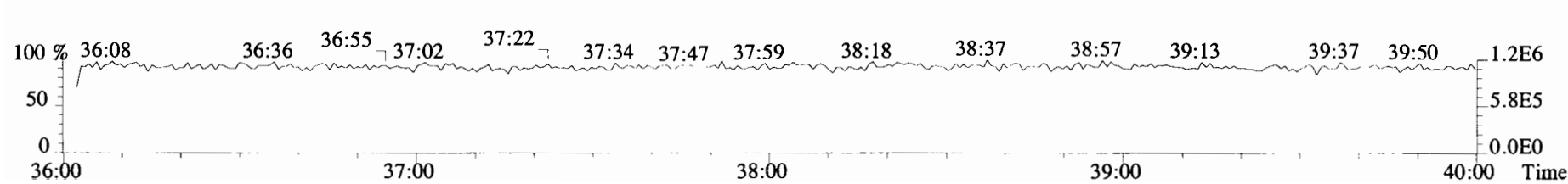
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



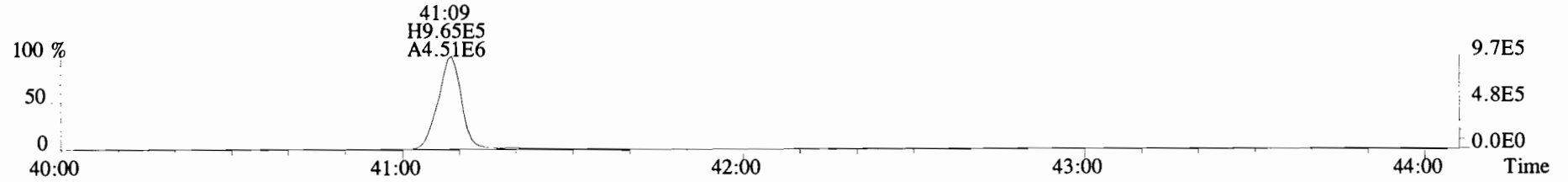
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



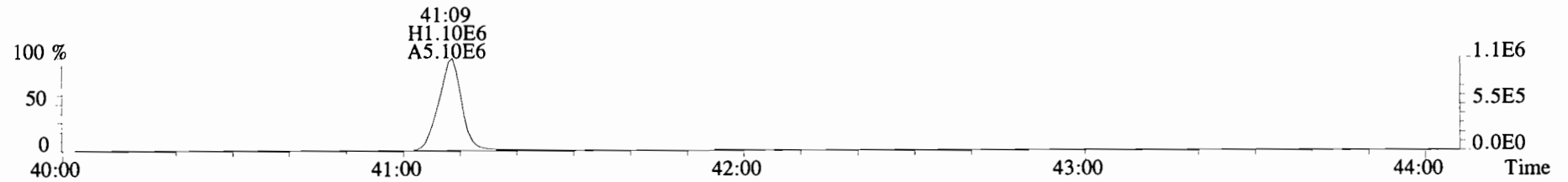
454.9728 F:4



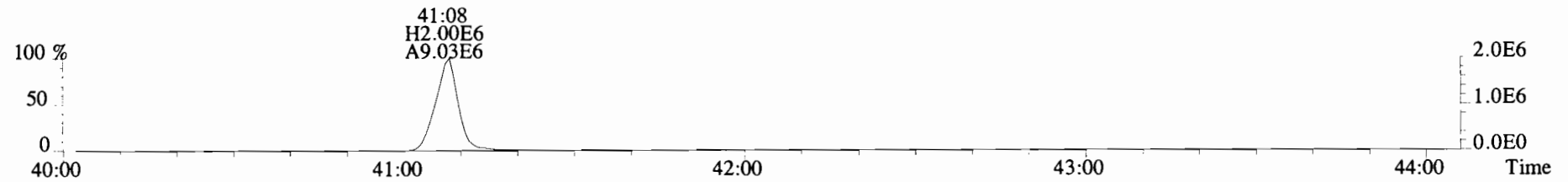
File:191119D1 #1-431 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



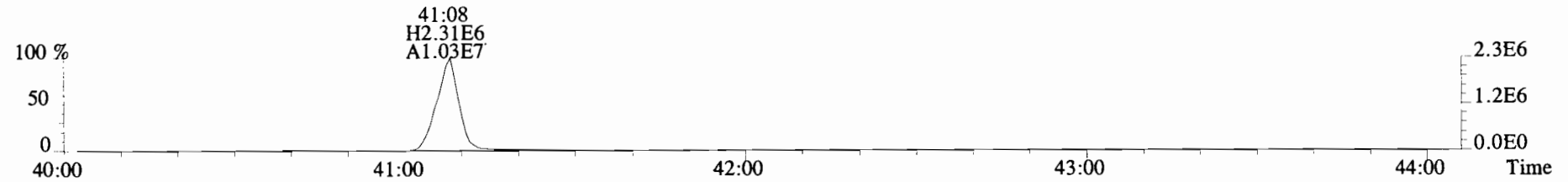
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



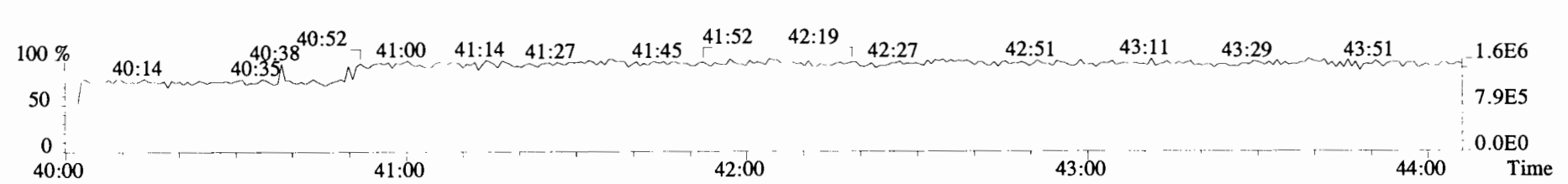
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



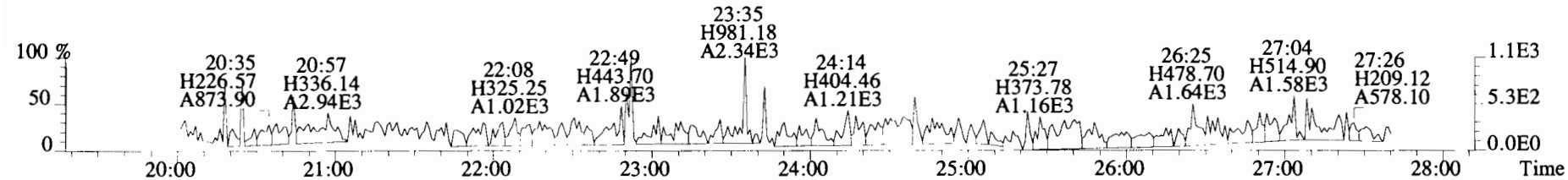
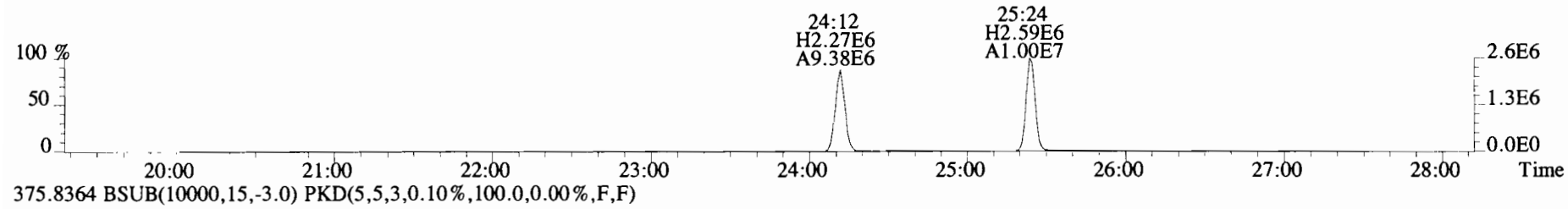
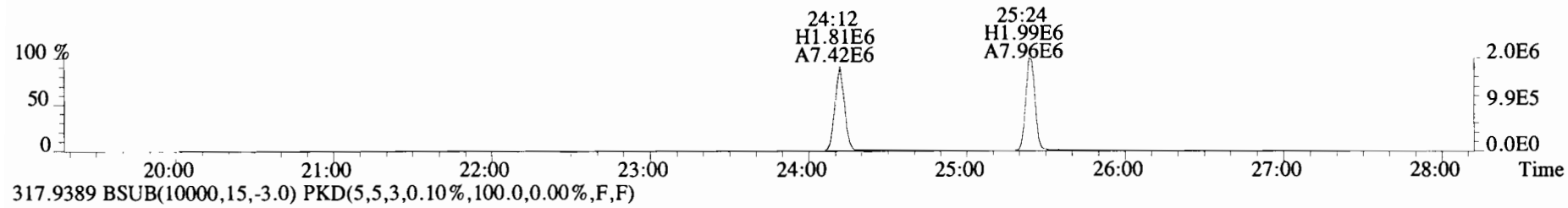
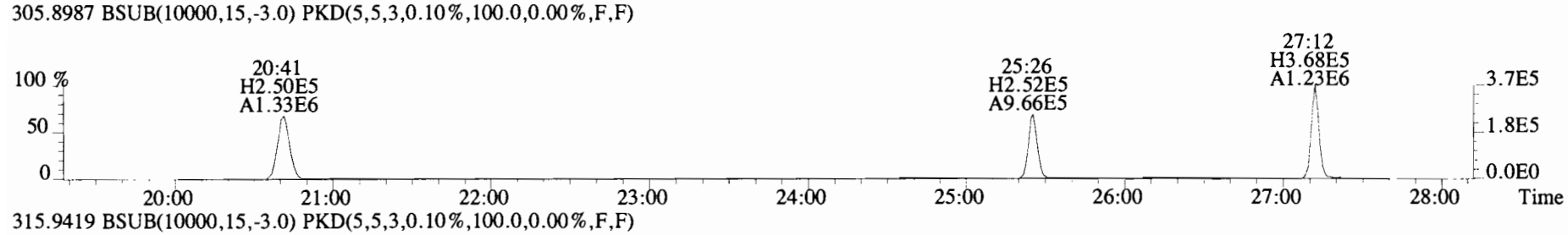
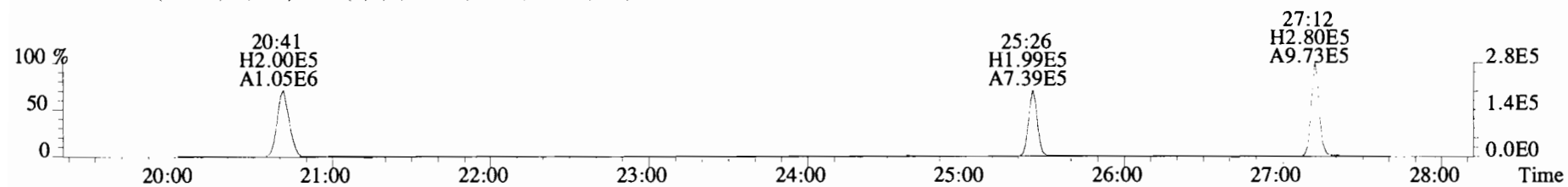
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



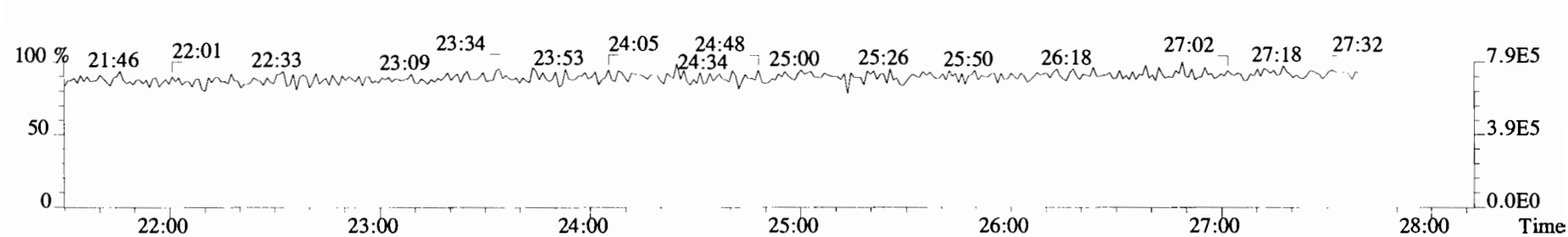
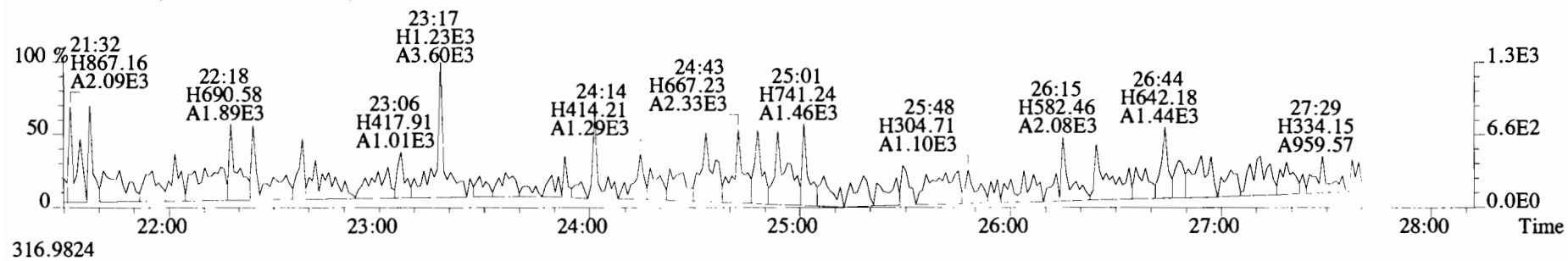
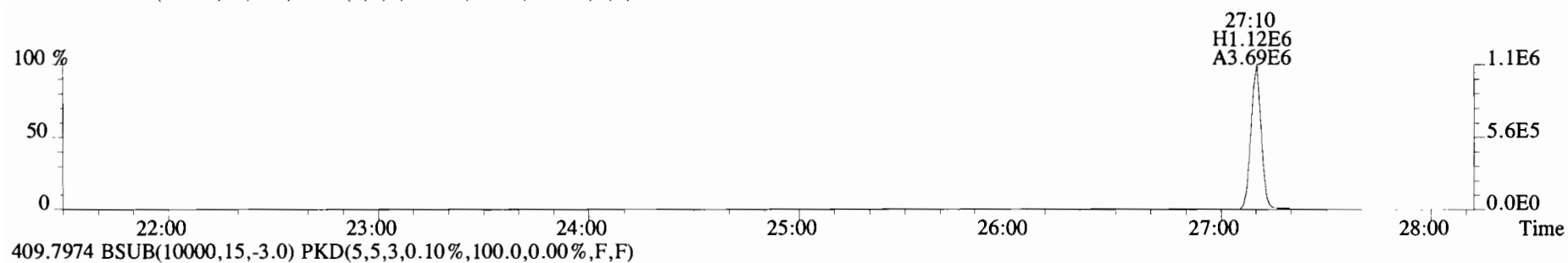
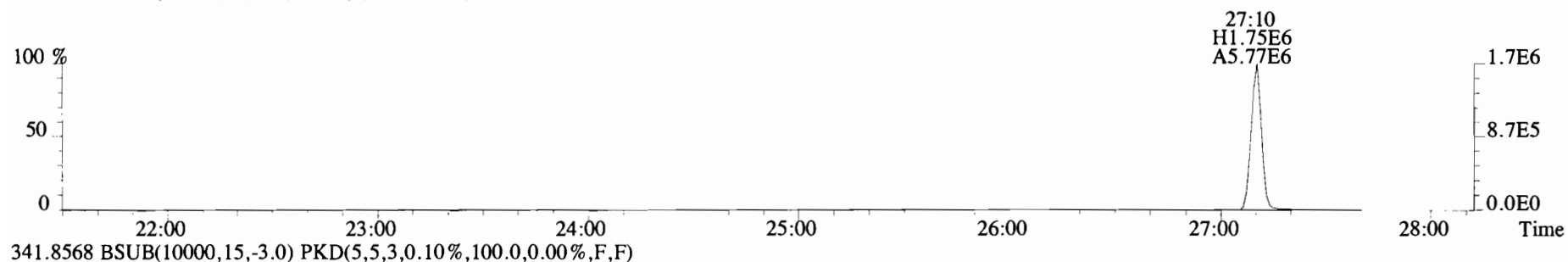
454.9728 F:5



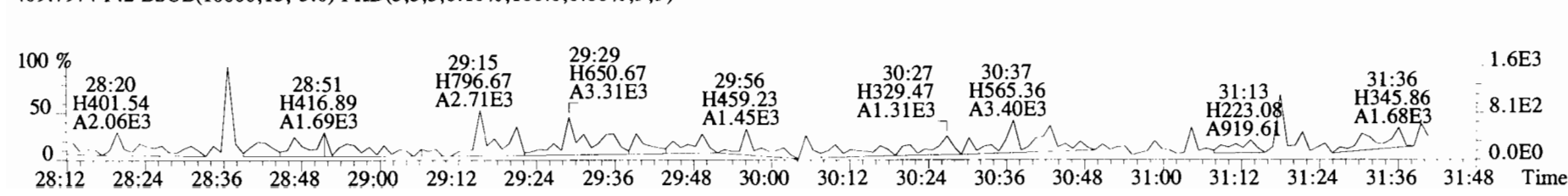
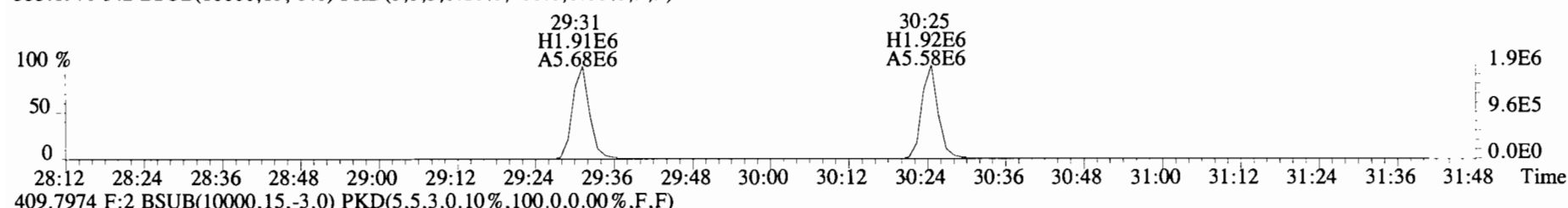
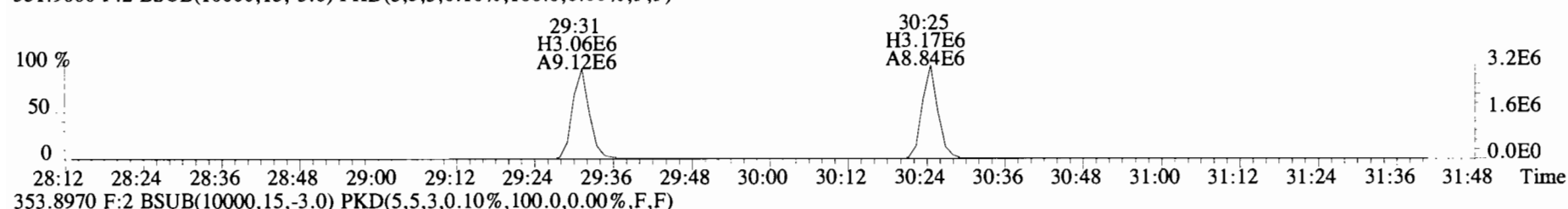
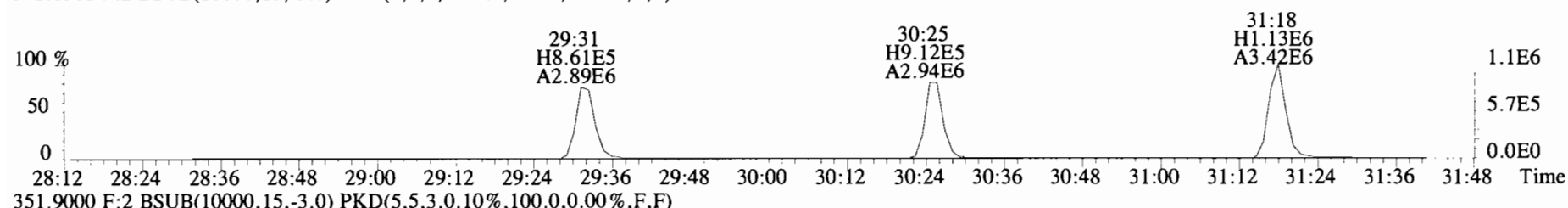
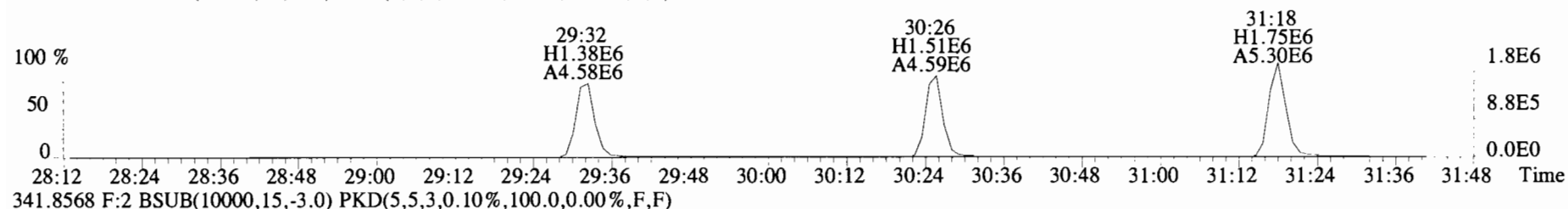
File:191119D1 #1-492 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



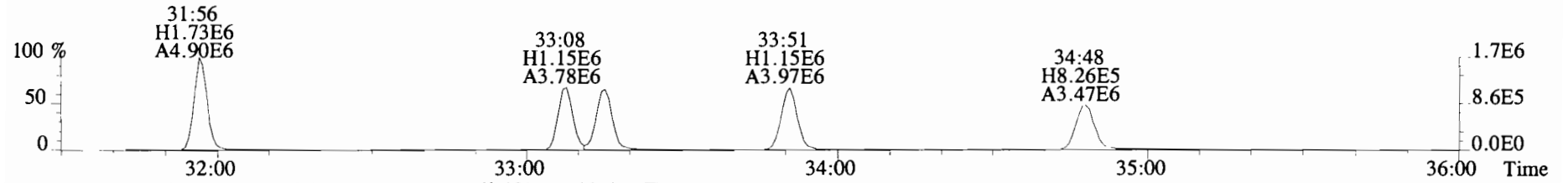
File:191119D1 #1-492 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



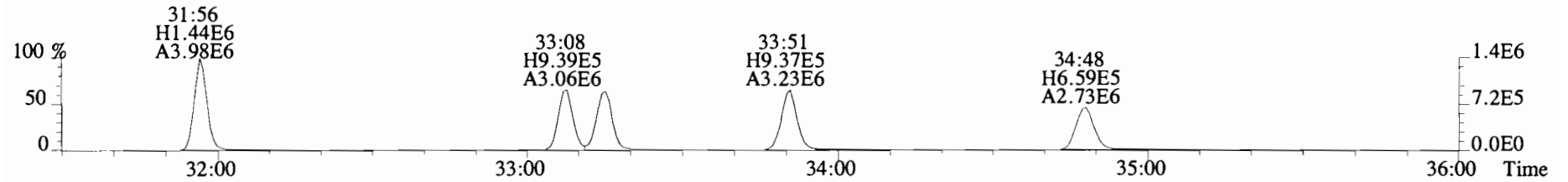
File:191119D1 #1-211 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



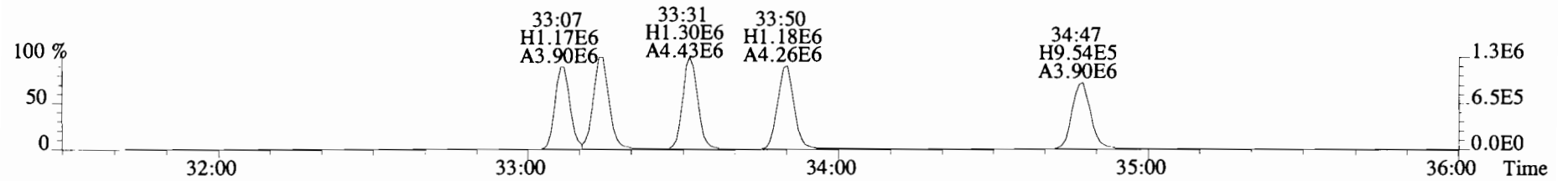
File:191119D1 #1-385 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



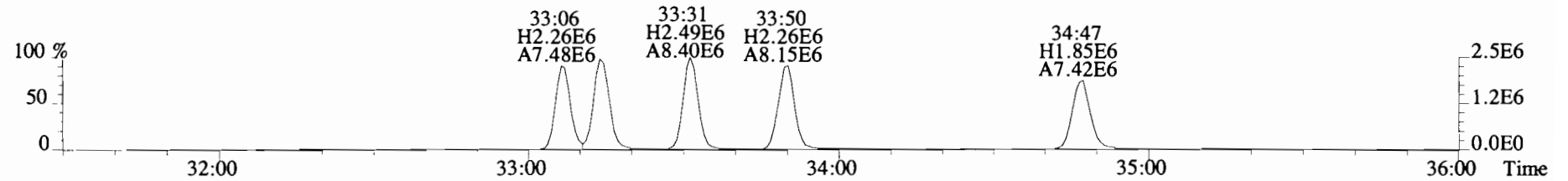
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



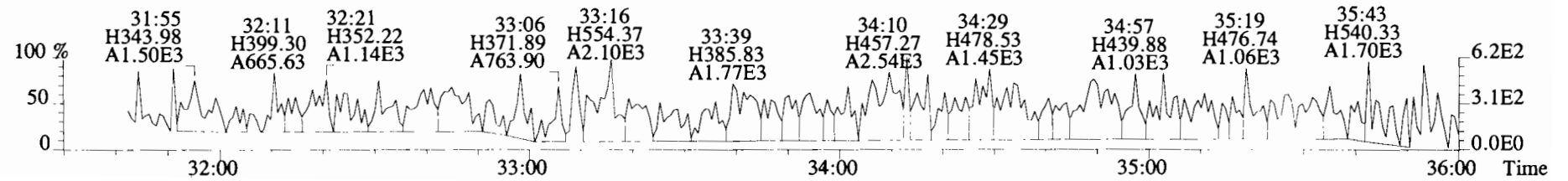
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



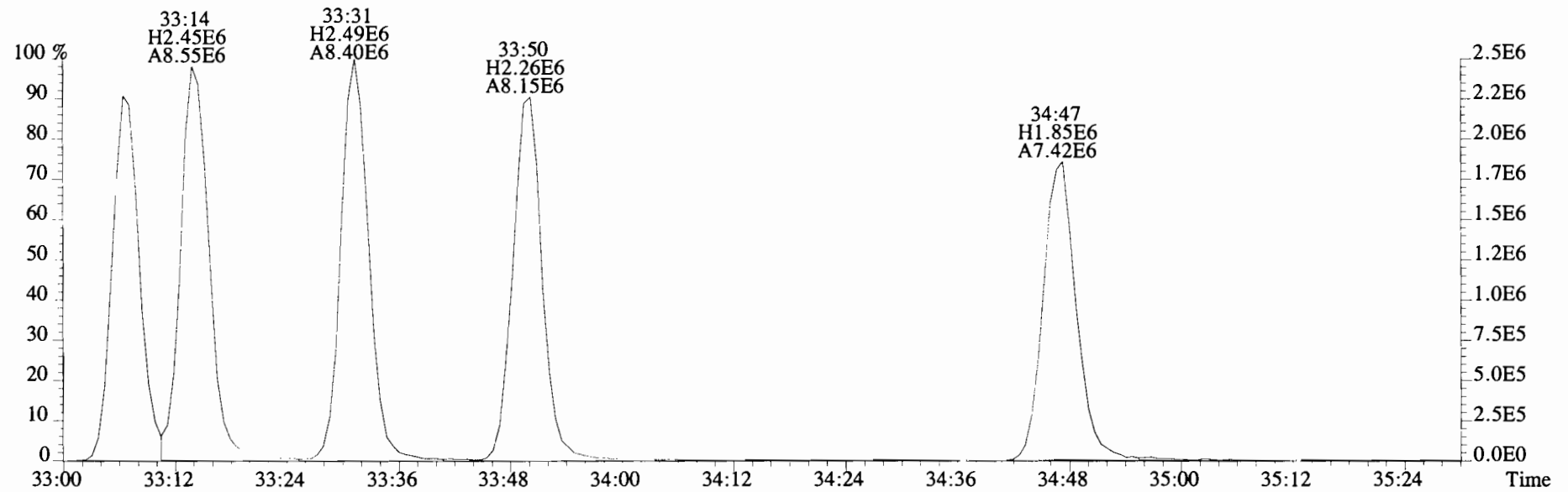
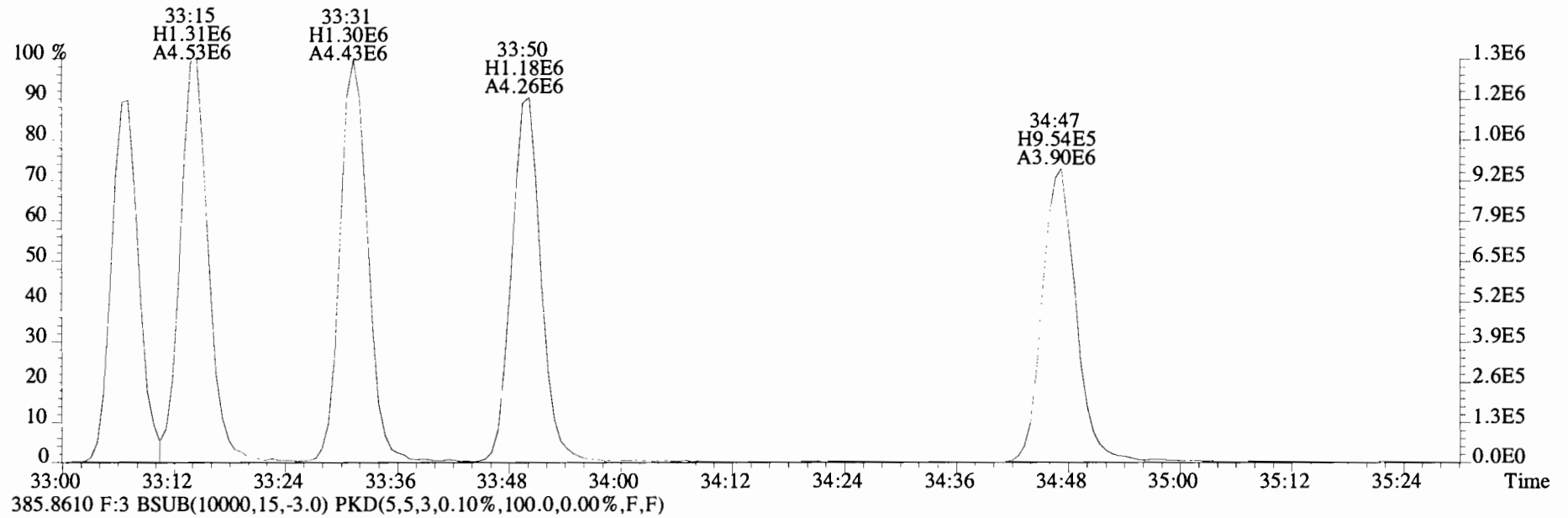
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



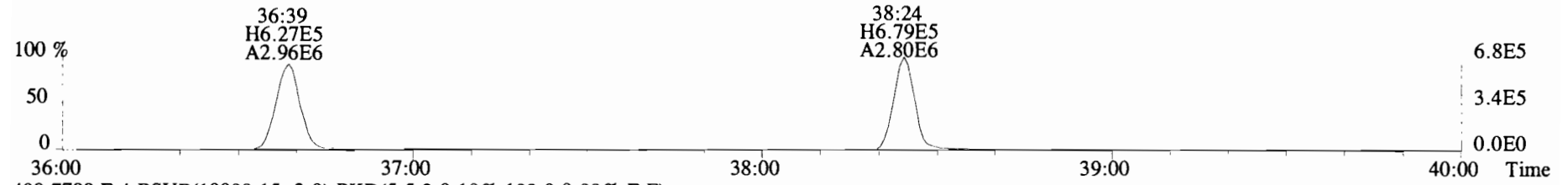
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



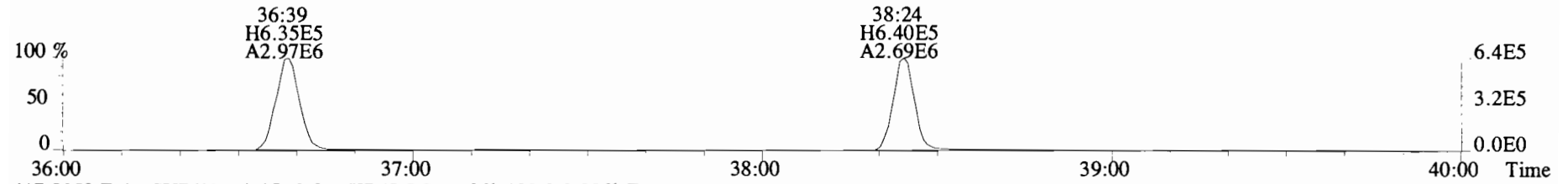
File:191119D1 #1-385 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



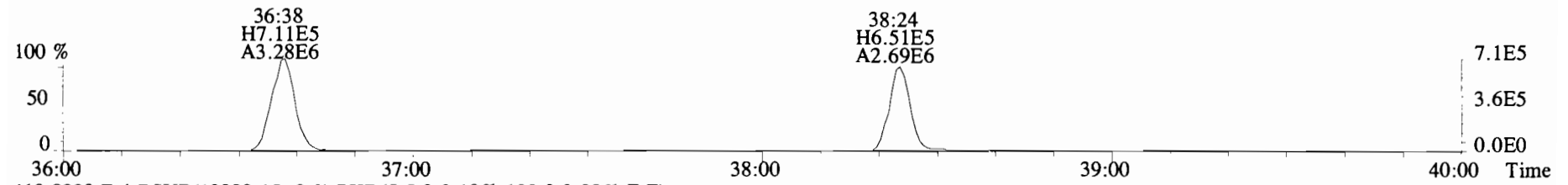
File:191119D1 #1-355 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



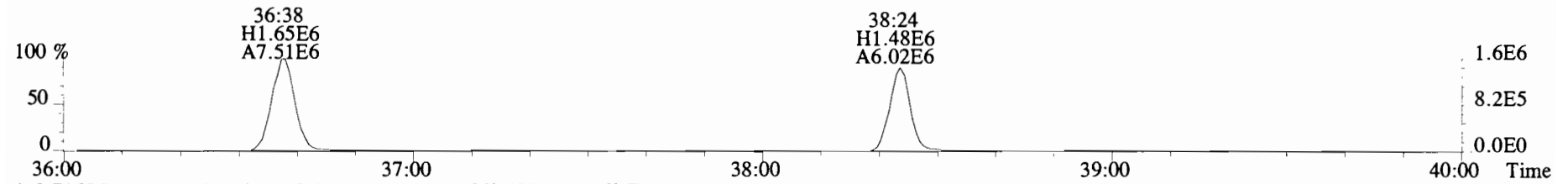
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



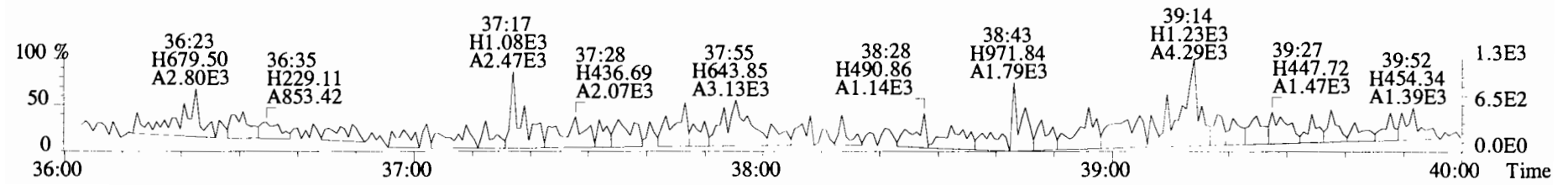
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



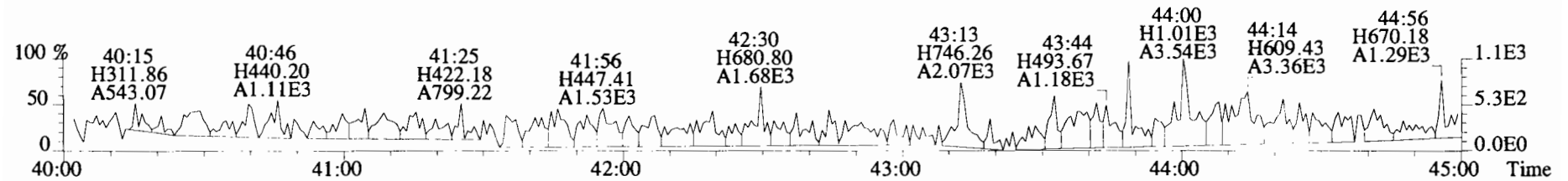
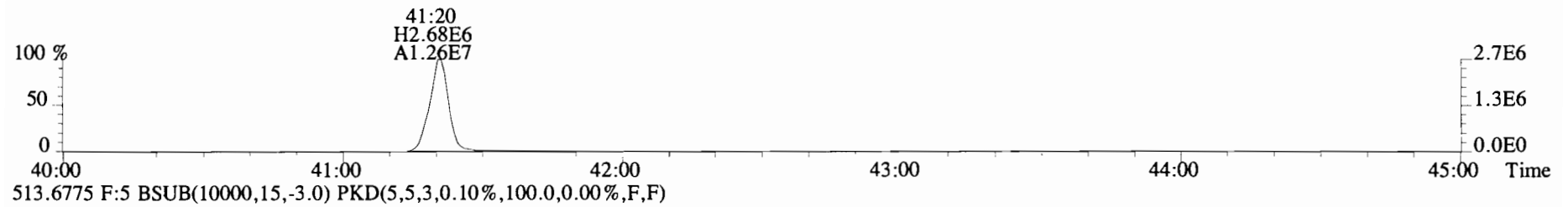
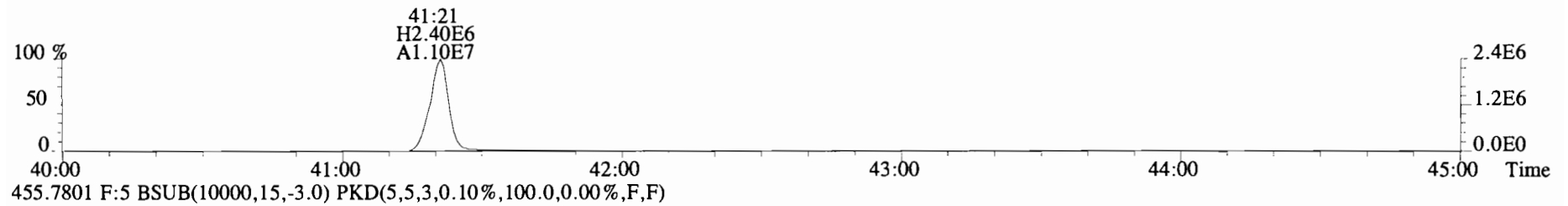
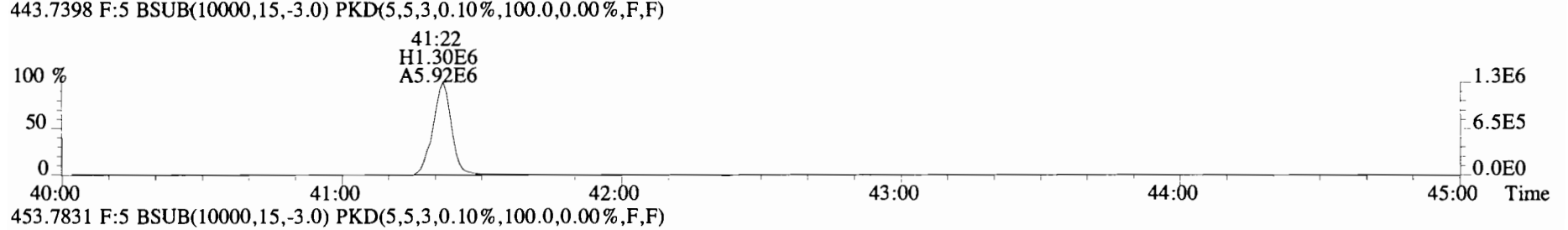
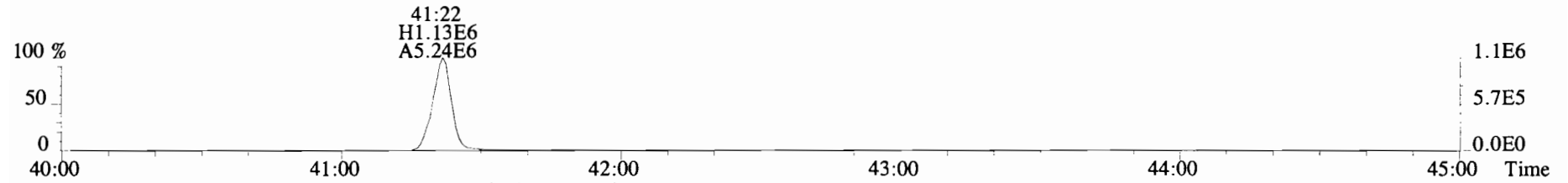
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

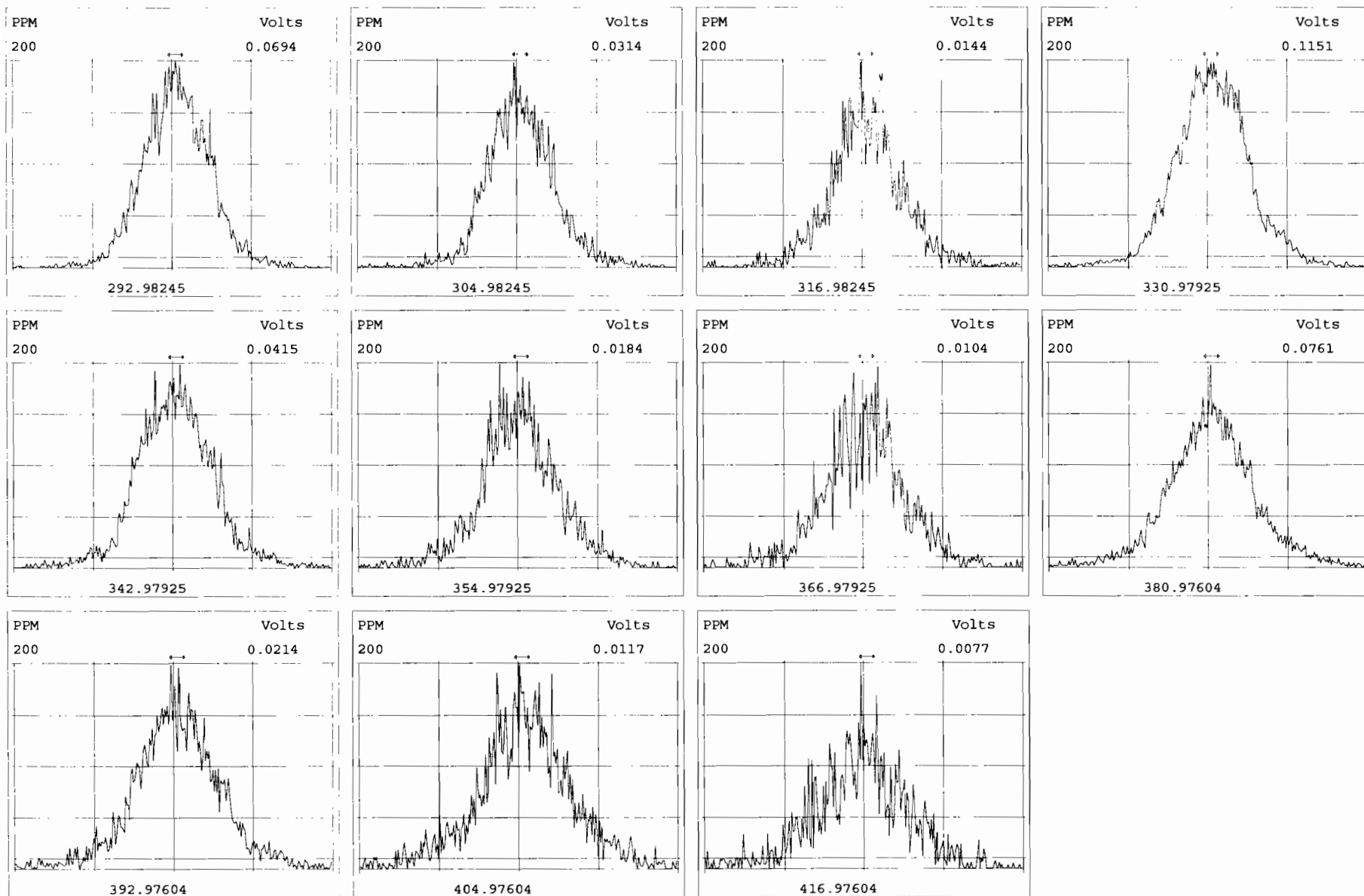


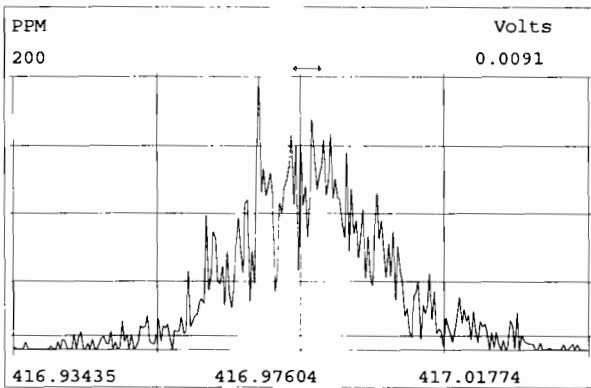
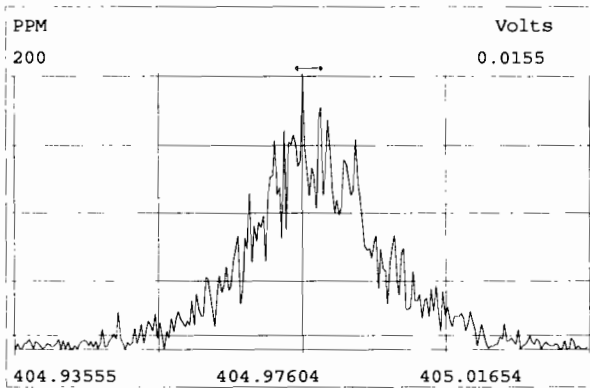
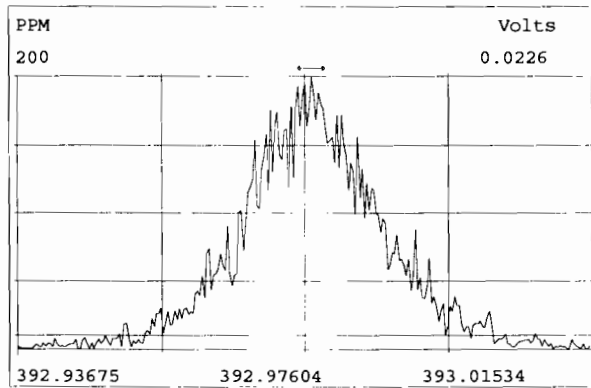
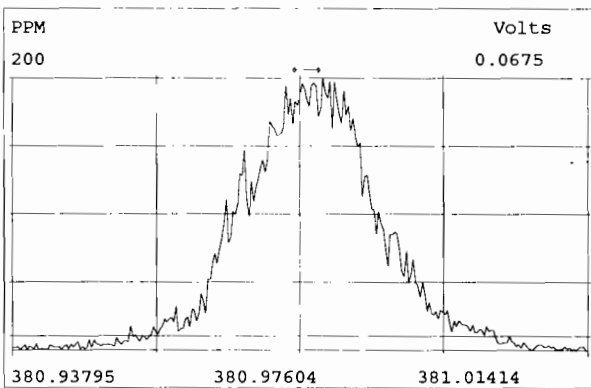
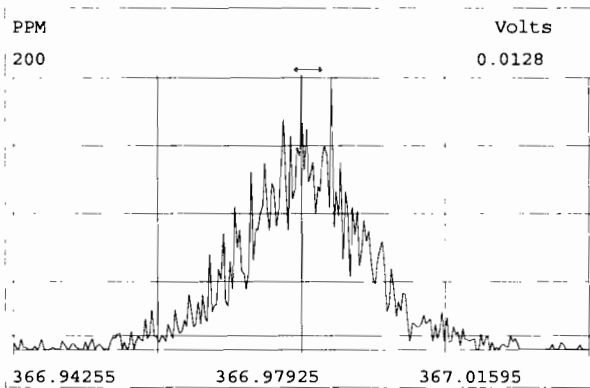
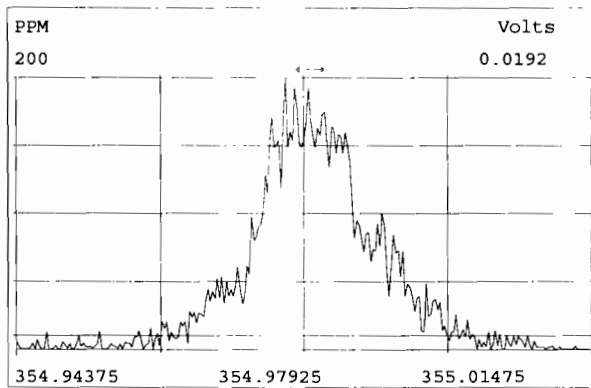
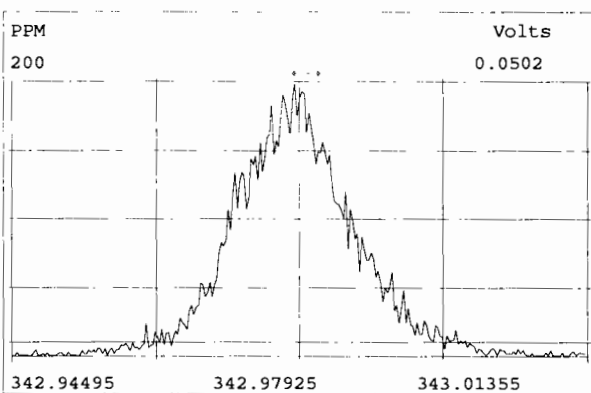
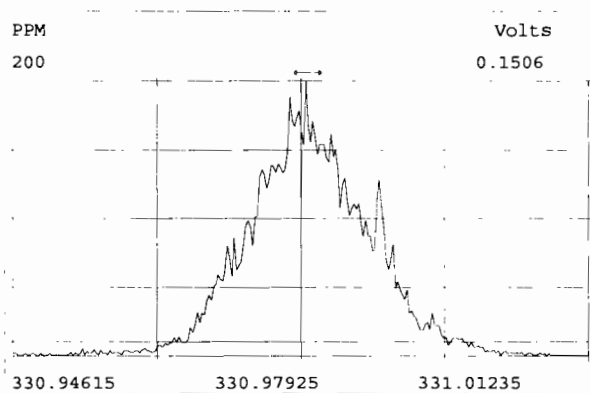
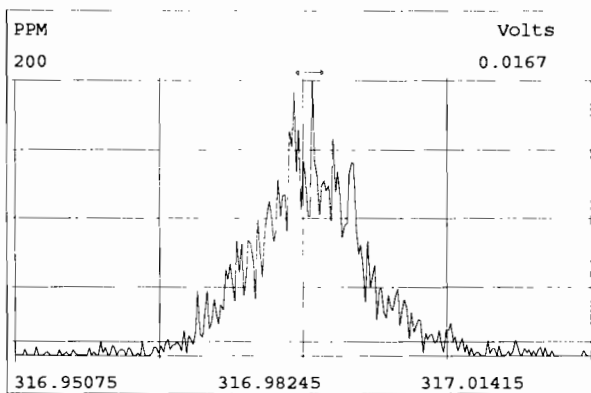
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191119D1 #1-431 Acq:19-NOV-2019 12:43:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191119D1-1 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)







HKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191120D1-1

Reviewed By: CT 11/20/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA	Mass resolution \geq	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K		
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1614 1699 429 1613/1668/8280		
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GC Break <20%	<input type="checkbox"/> NA	
Verification Std. named correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>8280 CS1 End Standard:</u>		
(ST-Year-Month-Day-VG ID)			- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input type="checkbox"/> NA
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comments:		
Correct ICAL referenced?	<u>DB</u>	<u>DB</u>			
<u>Run Log:</u>					
- Correct Instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> Y			
- Samples within 12 hour clock?	<input type="checkbox"/> (Y)	<input type="checkbox"/> N			
- Bottle position verified?	<input type="checkbox"/>	<input type="checkbox"/>			

Vista Analytical Laboratory - Injection Log Run file: 191120D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191120D1	1	ST191120D1-1	DB	20-NOV-19	14:00:50	ST191120D1-1	NA
191120D1	2	ST191120D1-2	DB	20-NOV-19	14:48:37	ST191120D1-2	NA
191120D1	3	B9J0334-BS1	DB	20-NOV-19	15:36:27	ST191120D1-1	NA
191120D1	4	B9K0068-BS1	DB	20-NOV-19	16:24:12	ST191120D1-1	NA
191120D1	5	SOLVENT BLANK	DB	20-NOV-19	17:11:58	NA	NA
191120D1	6	B9J0334-BLK1	DB	20-NOV-19	17:59:44	ST191120D1-1	NA
191120D1	7	B9K0068-BLK1	DB	20-NOV-19	18:47:28	ST191120D1-1	NA
191120D1	8	QC191120D1-1	DB	20-NOV-19	19:35:16	ST191120D1-2	NA
191120D1	9	QC191120D1-2	DB	20-NOV-19	20:22:58	ST191120D1-2	NA
191120D1	10	QC191120D1-3	DB	20-NOV-19	21:10:49	ST191120D1-2	NA
191120D1	11	1903565-18RE2	DB	20-NOV-19	21:58:32	ST191120D1-1	NA
191120D1	12	1903565-17RE2	DB	20-NOV-19	22:46:18	ST191120D1-1	NA
191120D1	13	1903565-15RE2	DB	20-NOV-19	23:34:02	ST191120D1-1	NA
191120D1	14	1903779-02	DB	21-NOV-19	00:21:47	ST191120D1-1	NA
191120D1	15	QC191120D1-4	DB	21-NOV-19	01:09:32	ST191120D1-2	NA

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST191120D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.4	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	51.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.19	1.05-1.43	y	52.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.9	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	y	50.2	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	100	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.54	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.64	1.32-1.78	y	50.0	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	50.0	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	47.6	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	48.8	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	49.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	y	46.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	y	46.0	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	98.0	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: 11/20/19

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: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

Labeled Compounds	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	103	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	105	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	107	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	93.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	105	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	113	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	238	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.79	0.65-0.89	y	104	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	112	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	111	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	106	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	97.3	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	103	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	105	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	108	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	121	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	239	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.71	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: 11/20/19

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: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

ZB-5MS IS Data Filename: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

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)	22:49	1,3,6,8-TCDF (F)	20:41
1,2,8,9-TCDD (L)	27:03	1,2,8,9-TCDF (L)	27:12
1,2,4,7,9-PeCDD (F)	28:40	1,3,4,6,8-PeCDF (F)	27:10
1,2,3,8,9-PeCDD (L)	31:04	1,2,3,8,9-PeCDF (L)	31:18
1,2,4,6,7,9-HxCDD (F)	32:29	1,2,3,4,6,8-HxCDF (F)	31:57
1,2,3,7,8,9-HxCDD (L)	34:26	1,2,3,7,8,9-HxCDF (L)	34:48
1,2,3,4,6,7,9-HpCDD (F)	37:01	1,2,3,4,6,7,8-HpCDF (F)	36:39
1,2,3,4,6,7,8-HpCDD (L)	37:52	1,2,3,4,7,8,9-HpCDF (L)	38:25

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DBDate: 11/20/19

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: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

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	1.001	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	1.198	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	1.187	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: 11/20/19

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: 191120D1 S#1 Analysis Date: 20-NOV-19 Time: 14:00:50

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	1.001	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	1.000	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	1.001	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	1.001	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	0.992	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	1.145	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.129	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: 11/20/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191120D1-1

Filename: 191120D1 S:1 Acq:20-NOV-19 14:00:50
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

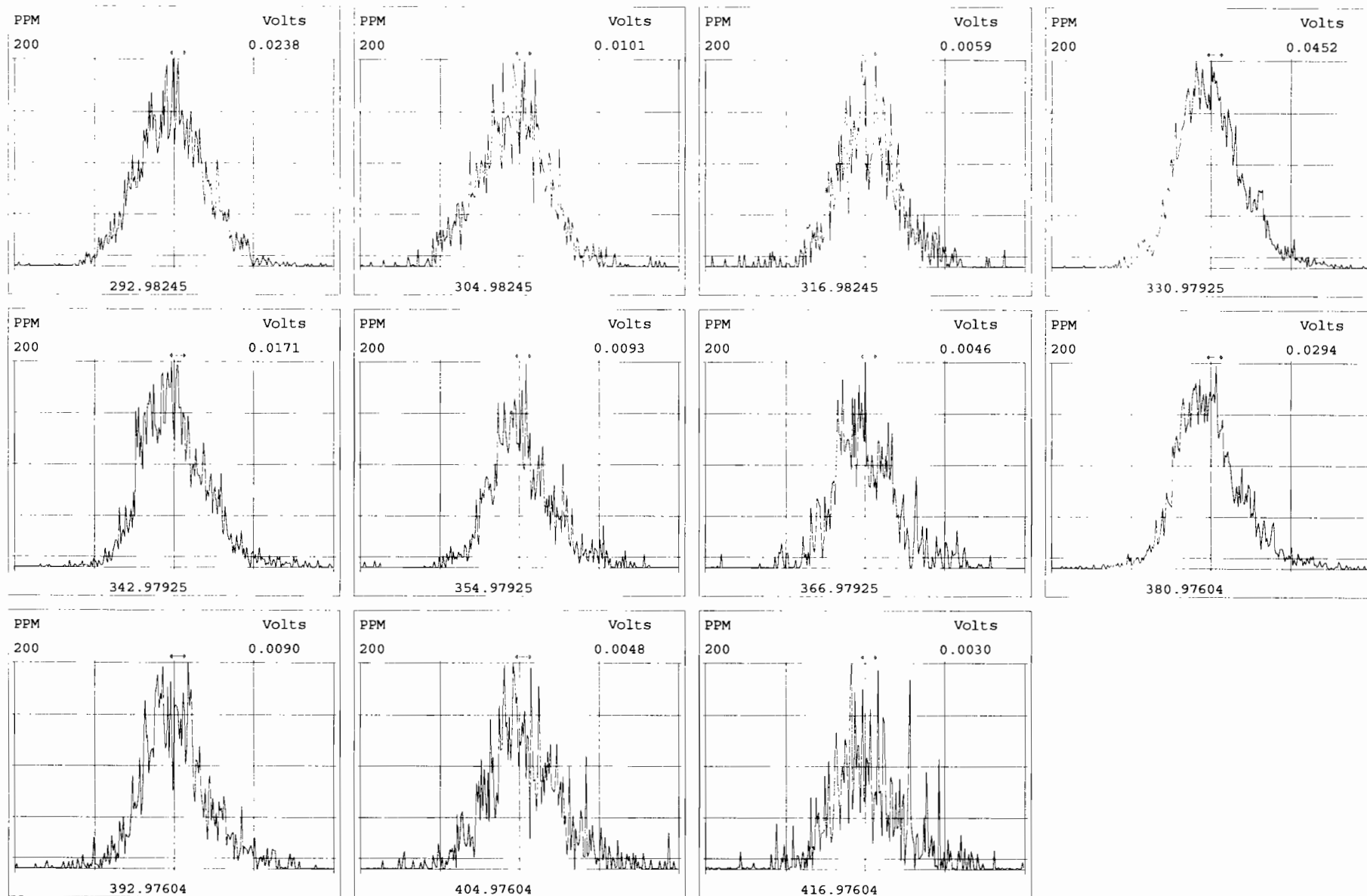
ConCal: ST191120D1-1
EndCAL: NA

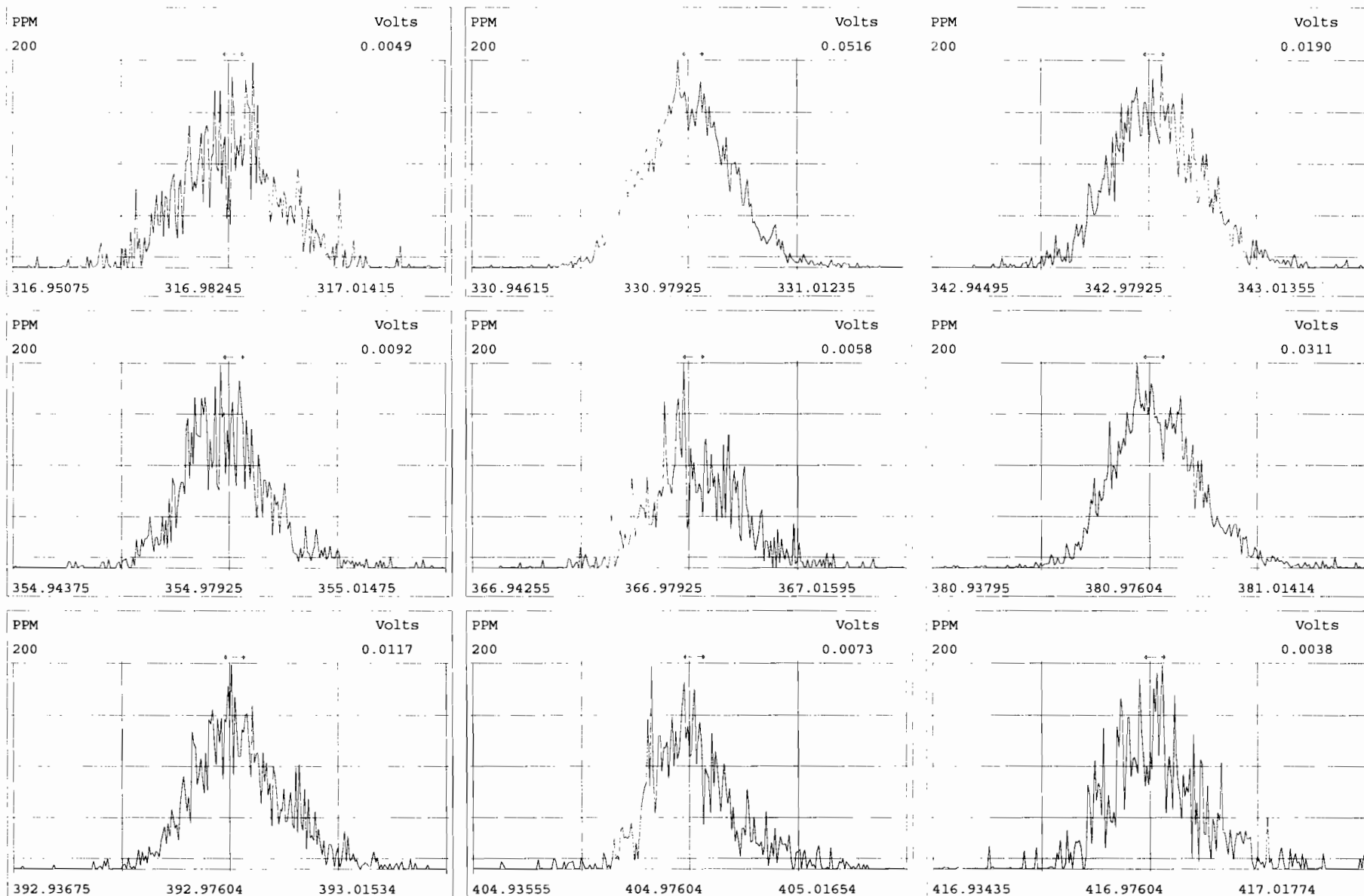
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	6.96e+05	0.79 y	0.91	26:12	10.401		*	2.5	*	Total Tetra-Dioxins	75.0	75.9		*	*
1,2,3,7,8-PeCDD	2.80e+06	0.62 y	0.90	30:43	51.337		*	2.5	*	Total Penta-Dioxins	188	188		*	*
1,2,3,4,7,8-HxCDD	2.70e+06	1.29 y	1.10	34:01	50.316		*	2.5	*	Total Hexa-Dioxins	225	226		*	*
1,2,3,6,7,8-HxCDD	2.80e+06	1.19 y	0.94	34:08	52.341		*	2.5	*	Total Hepta-Dioxins	116	117		*	*
1,2,3,7,8,9-HxCDD	2.94e+06	1.25 y	0.96	34:26	50.892		*	2.5	*	Total Tetra-Furans	35.8	37.5		*	*
1,2,3,4,6,7,8-HpCDD	2.58e+06	1.01 y	0.98	37:52	50.231		*	2.5	*	Total Penta-Furans	226.33	226.98		*	*
OCDD	4.72e+06	0.90 y	0.96	41:09	100.44		*	2.5	*	Total Hexa-Furans	258	259		*	*
										Total Hepta-Furans	94.0	95.5		*	*
2,3,7,8-TCDF	8.93e+05	0.77 y	0.95	25:25	9.5409		*	2.5	*						
1,2,3,7,8-PeCDF	4.19e+06	1.64 y	0.96	29:32	50.031		*	2.5	*						
2,3,4,7,8-PeCDF	4.34e+06	1.59 y	1.01	30:26	50.040		*	2.5	*						
1,2,3,4,7,8-HxCDF	3.49e+06	1.21 y	1.18	33:08	47.593		*	2.5	*						
1,2,3,6,7,8-HxCDF	3.73e+06	1.23 y	1.07	33:15	48.817		*	2.5	*						
2,3,4,6,7,8-HxCDF	3.83e+06	1.22 y	1.11	33:51	49.152		*	2.5	*						
1,2,3,7,8,9-HxCDF	3.24e+06	1.25 y	1.06	34:48	49.365		*	2.5	*						
1,2,3,4,6,7,8-HpCDF	3.08e+06	1.02 y	1.13	36:39	46.934		*	2.5	*						
1,2,3,4,7,8,9-HpCDF	2.94e+06	1.00 y	1.28	38:25	46.042		*	2.5	*						
OCDF	5.41e+06	0.88 y	0.95	41:22	97.962		*	2.5	*						
										Rec	Qual				
IS 13C-2,3,7,8-TCDD	7.39e+06	0.79 y	1.10	26:11	103.17					103					
IS 13C-1,2,3,7,8-PeCDD	6.05e+06	0.63 y	0.88	30:42	104.99					105					
IS 13C-1,2,3,4,7,8-HxCDD	4.87e+06	1.28 y	0.64	33:60	107.03					107					
IS 13C-1,2,3,6,7,8-HxCDD	5.69e+06	1.23 y	0.86	34:06	93.847					93.8					
IS 13C-1,2,3,7,8,9-HxCDD	6.01e+06	1.26 y	0.81	34:24	105.01					105					
IS 13C-1,2,3,4,6,7,8-HpCDD	5.25e+06	1.06 y	0.65	37:51	113.27					113					
IS 13C-OCDD	9.80e+06	0.89 y	0.58	41:08	238.40					119					
IS 13C-2,3,7,8-TCDF	9.85e+06	0.79 y	1.03	25:24	104.48					104					
IS 13C-1,2,3,7,8-PeCDF	8.72e+06	1.62 y	0.85	29:31	112.02					112					
IS 13C-2,3,4,7,8-PeCDF	8.55e+06	1.59 y	0.85	30:25	110.74					111					
IS 13C-1,2,3,4,7,8-HxCDF	6.22e+06	0.52 y	0.83	33:06	105.53					106					
IS 13C-1,2,3,6,7,8-HxCDF	7.14e+06	0.53 y	1.03	33:14	97.296					97.3					
IS 13C-2,3,4,6,7,8-HxCDF	6.99e+06	0.51 y	0.95	33:50	103.36					103					
IS 13C-1,2,3,7,8,9-HxCDF	6.18e+06	0.53 y	0.83	34:47	105.35					105					
IS 13C-1,2,3,4,6,7,8-HpCDF	5.81e+06	0.44 y	0.76	36:38	108.20					108					
IS 13C-1,2,3,4,7,8,9-HpCDF	4.99e+06	0.44 y	0.58	38:24	121.17					121					
IS 13C-OCDF	1.17e+07	0.88 y	0.69	41:21	238.80					119					
C/Up 37C1-2,3,7,8-TCDD	7.60e+05		1.20	26:12	9.7058					97.1					
RS/RT 13C-1,2,3,4-TCDD	6.54e+06	0.76 y	1.00	25:37	100.00						Integrations		Reviewed		
RS 13C-1,2,3,4-TCDF	9.11e+06	0.80 y	1.00	24:12	100.00						by		by		
RS/RT 13C-1,2,3,4,6,9-HxCDF	7.09e+06	0.51 y	1.00	33:31	100.00						Analyst: <u>DB</u>		Analyst: <u>CT</u>		

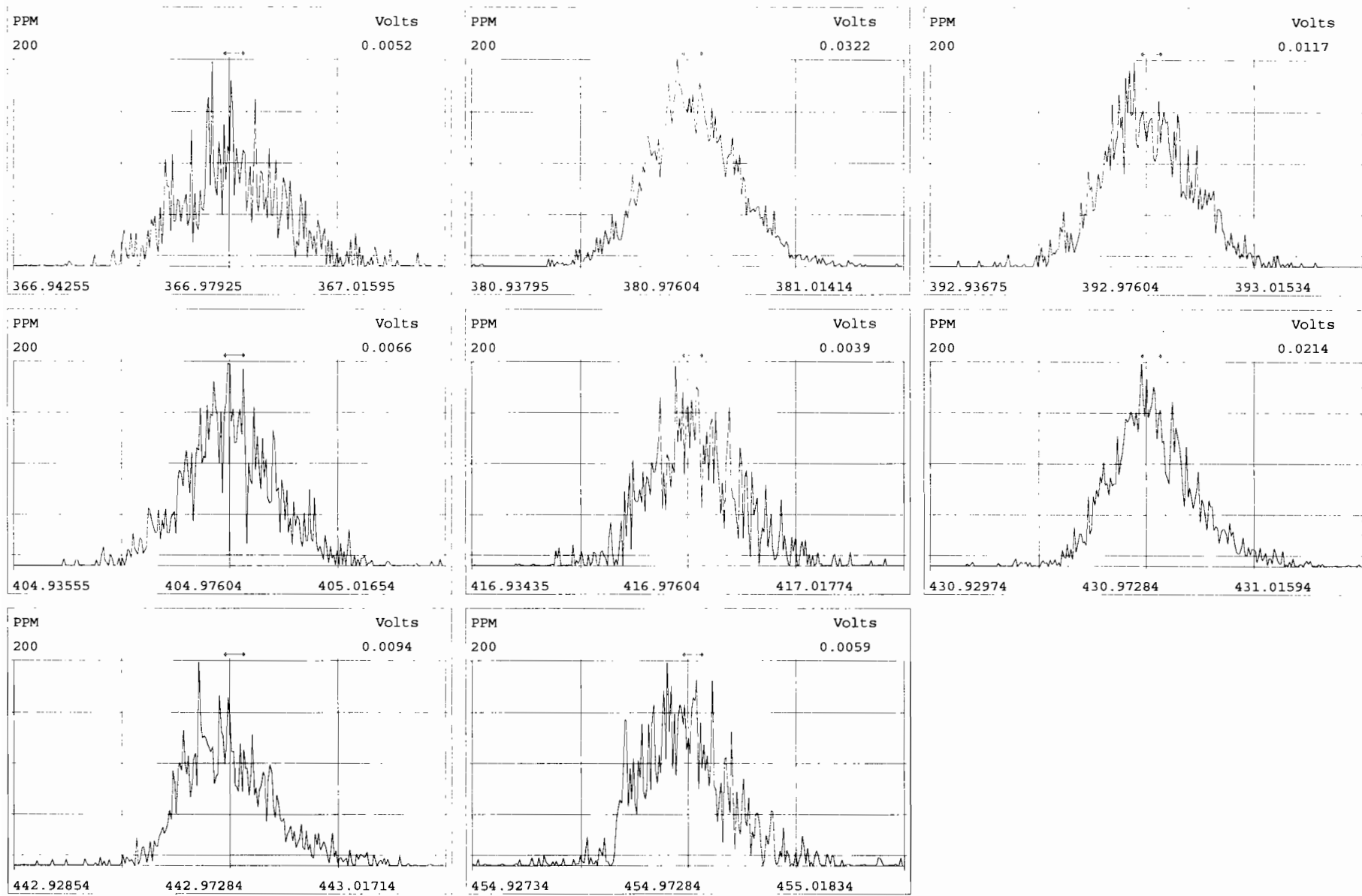
Date: 11/20/19 Date: 11/26/19

Vista Analytical Laboratory - Injection Log Run file: 191120D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191120D1	1	ST191120D1-1	DB	20-NOV-19	14:00:50	ST191120D1-1	NA
191120D1	2	ST191120D1-2	DB	20-NOV-19	14:48:37	ST191120D1-2	NA
191120D1	3	B9J0334-BS1	DB	20-NOV-19	15:36:27	ST191120D1-1	NA
191120D1	4	B9K0068-BS1	DB	20-NOV-19	16:24:12	ST191120D1-1	NA
191120D1	5	SOLVENT BLANK	DB	20-NOV-19	17:11:58	NA	NA
191120D1	6	B9J0334-BLK1	DB	20-NOV-19	17:59:44	ST191120D1-1	NA
191120D1	7	B9K0068-BLK1	DB	20-NOV-19	18:47:28	ST191120D1-1	NA
191120D1	8	QC191120D1-1	DB	20-NOV-19	19:35:16	ST191120D1-2	NA
191120D1	9	QC191120D1-2	DB	20-NOV-19	20:22:58	ST191120D1-2	NA
191120D1	10	QC191120D1-3	DB	20-NOV-19	21:10:49	ST191120D1-2	NA
191120D1	11	1903565-18RE2	DB	20-NOV-19	21:58:32	ST191120D1-1	NA
191120D1	12	1903565-17RE2	DB	20-NOV-19	22:46:18	ST191120D1-1	NA
191120D1	13	1903565-15RE2	DB	20-NOV-19	23:34:02	ST191120D1-1	NA
191120D1	14	1903779-02	DB	21-NOV-19	00:21:47	ST191120D1-1	NA
191120D1	15	QC191120D1-4	DB	21-NOV-19	01:09:32	ST191120D1-2	NA

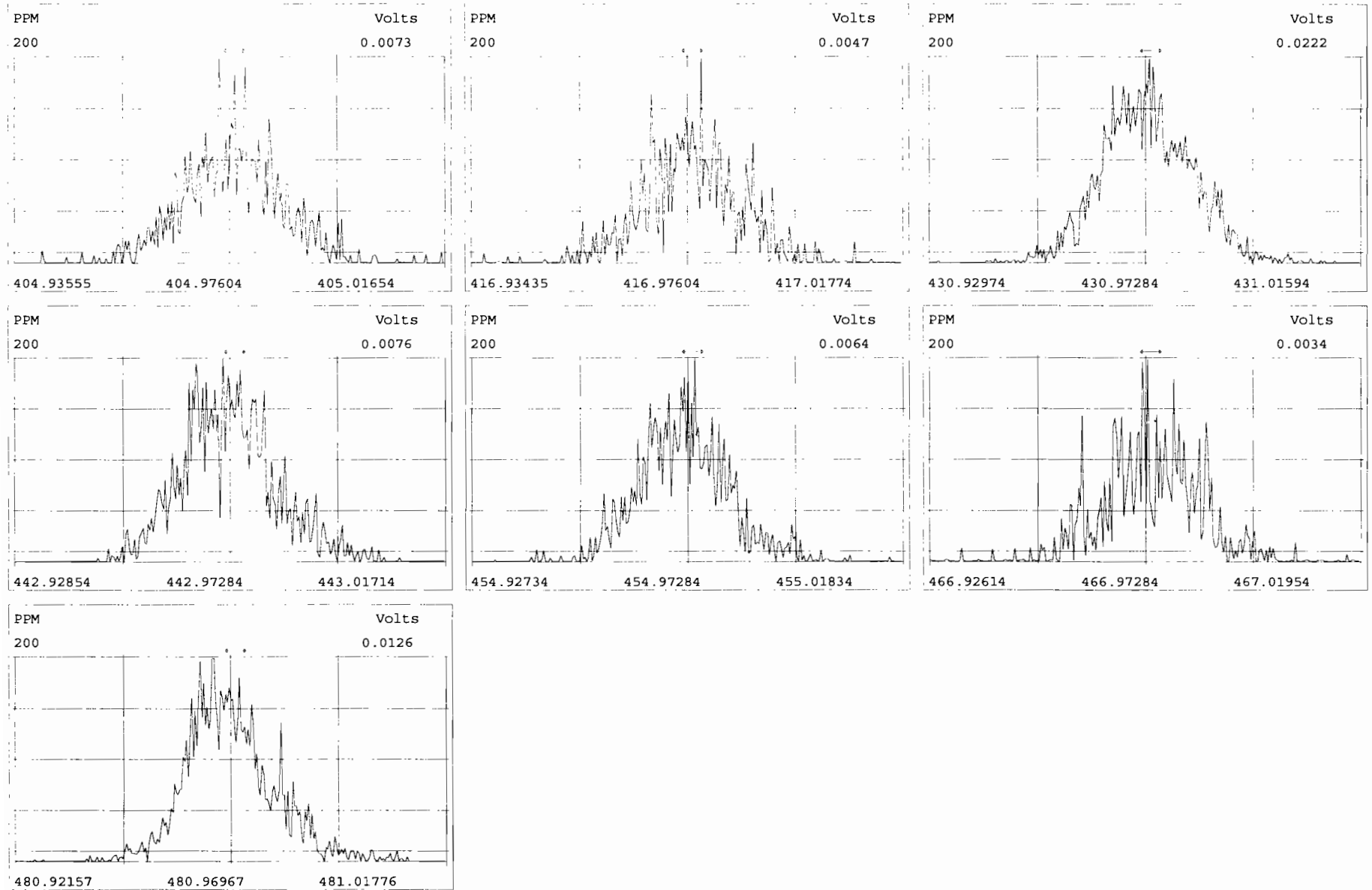


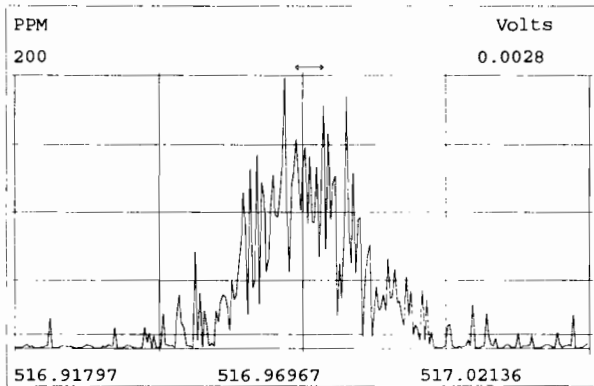
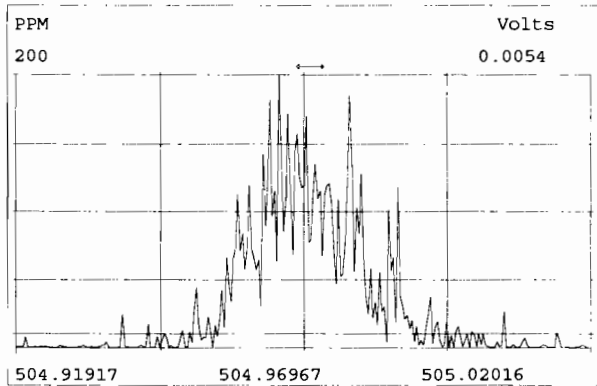
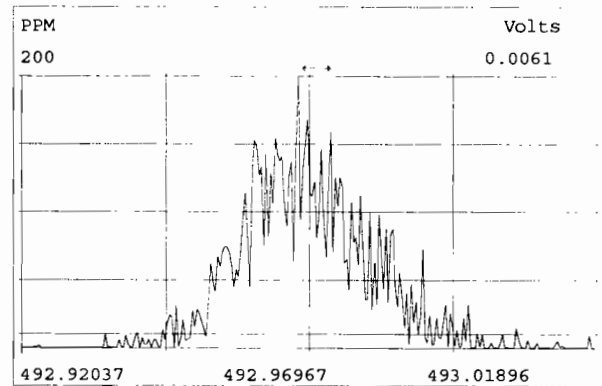
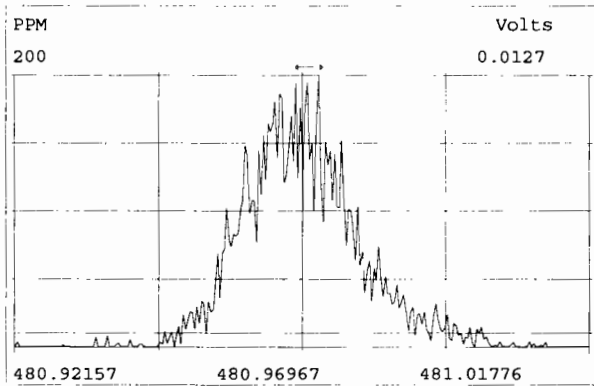
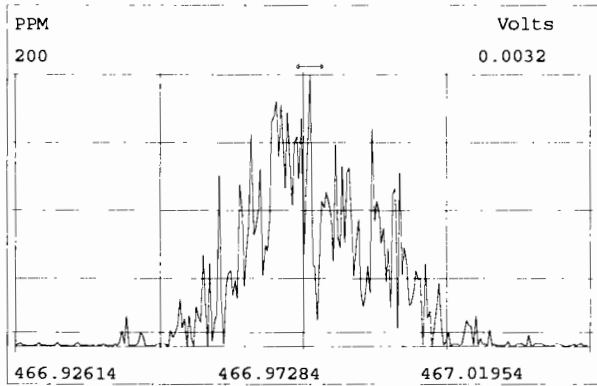
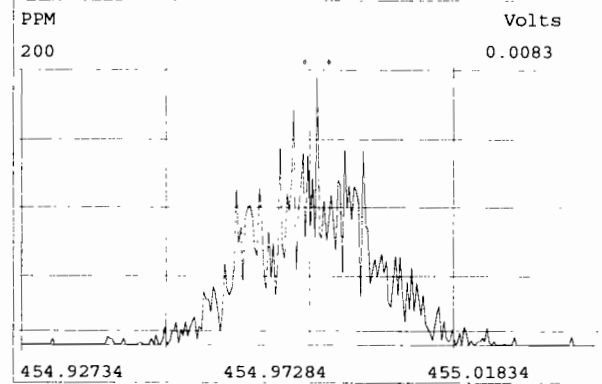
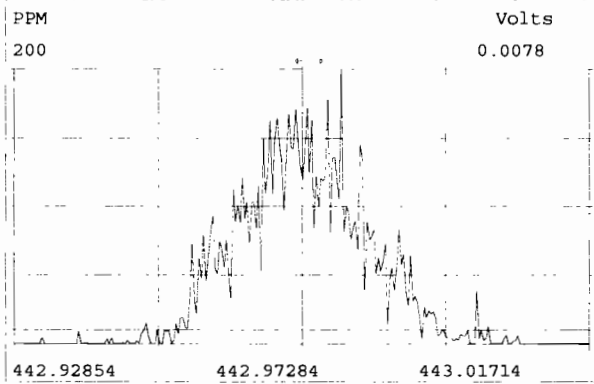
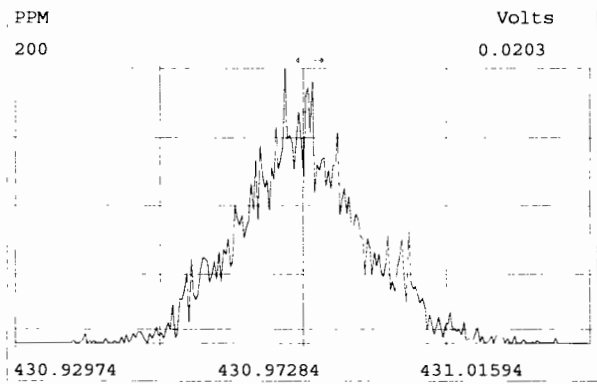




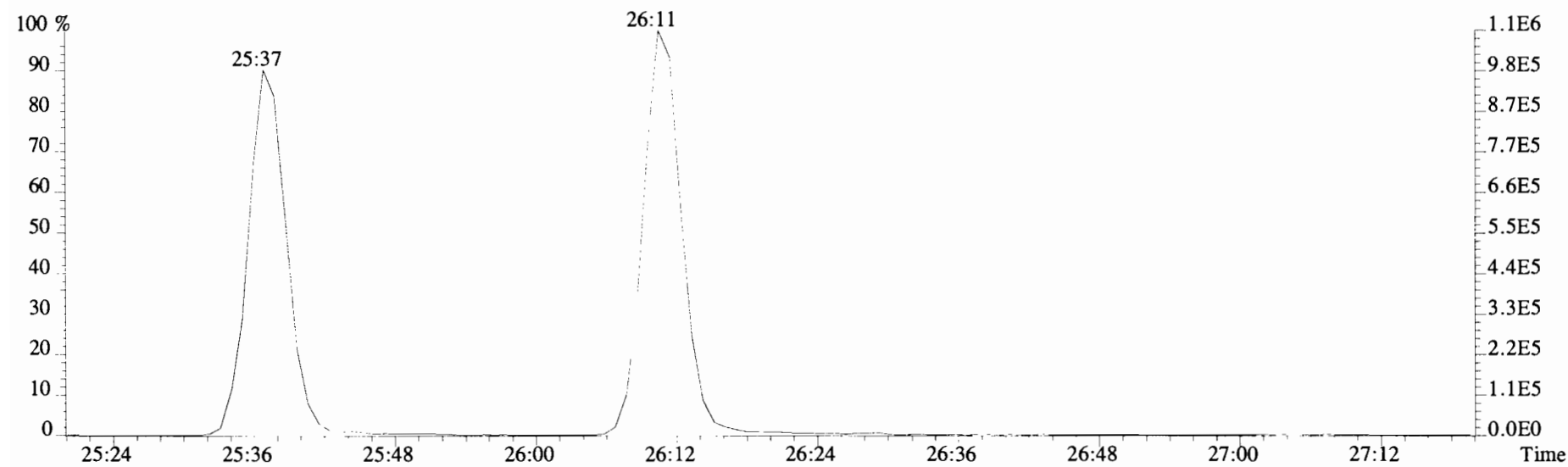
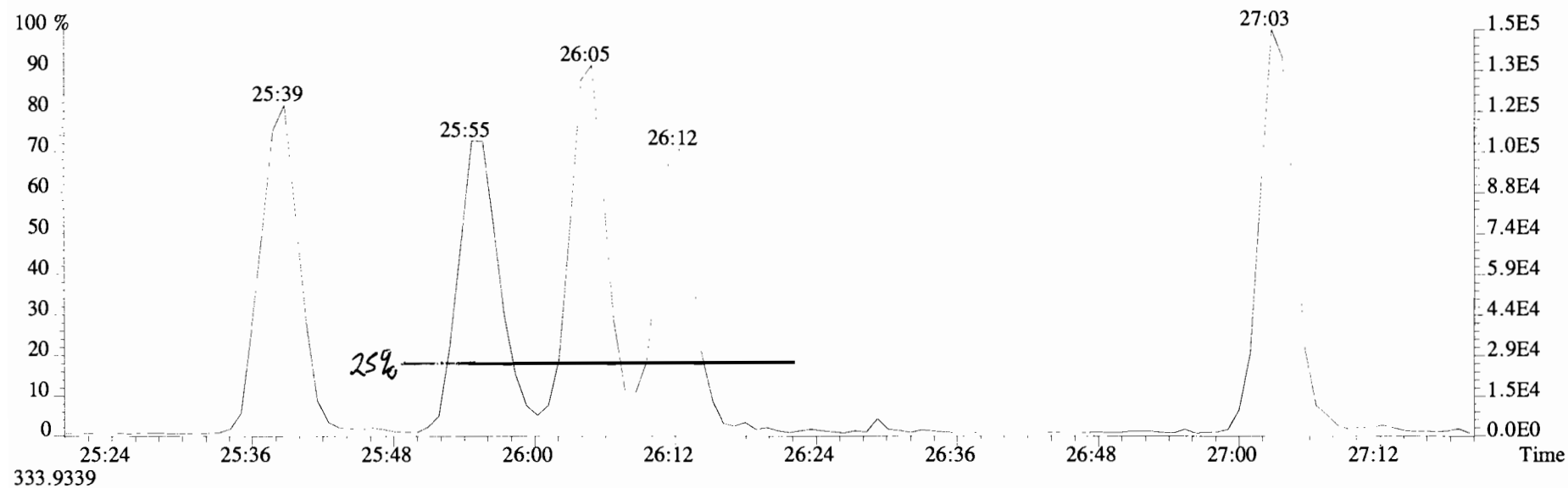
Peak Locate Examination:20-NOV-2019:13:59 File:191120D1

Experiment:OCDD_DB5 Function:4 Reference:PFK

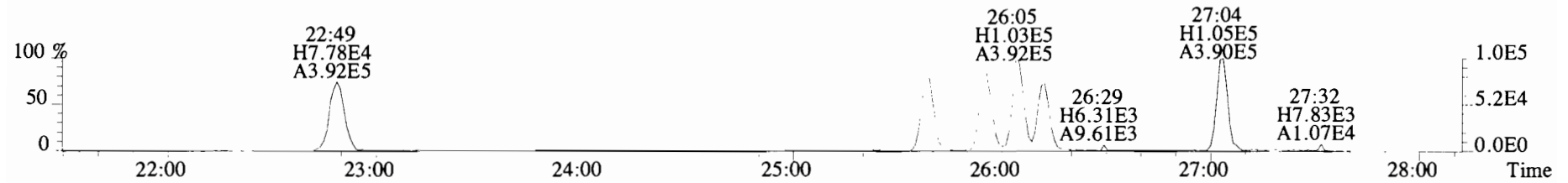




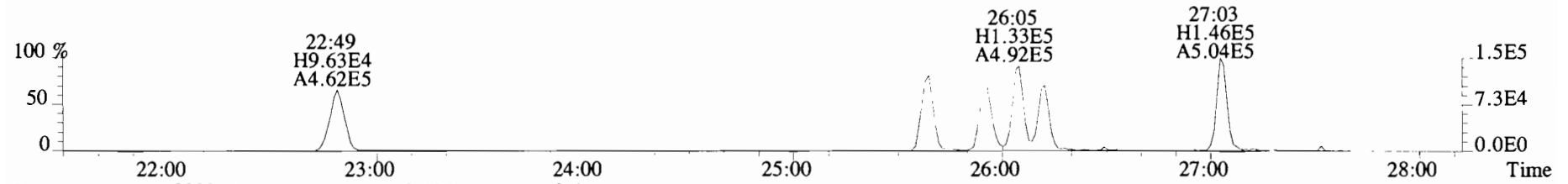
File:191120D1 #1-492 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
321.8936



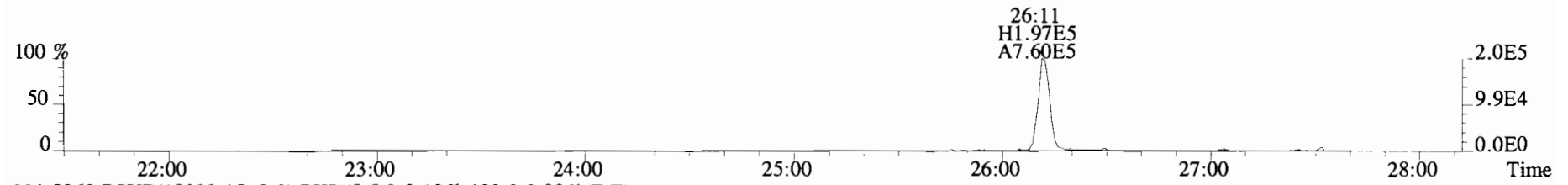
File:191120D1 #1-492 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



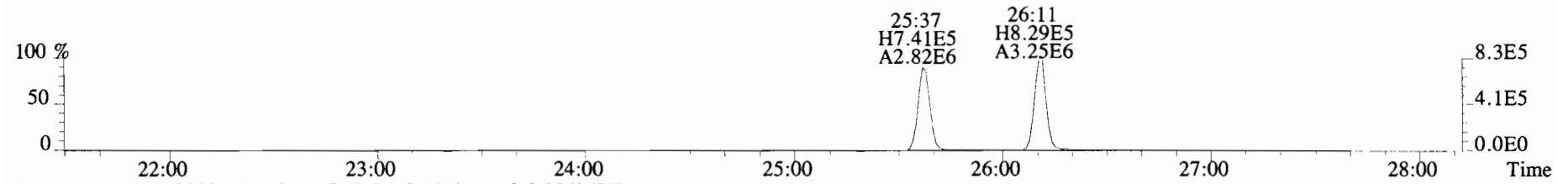
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



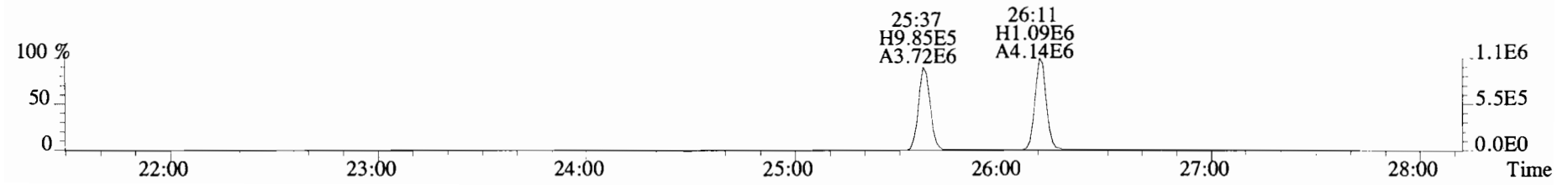
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



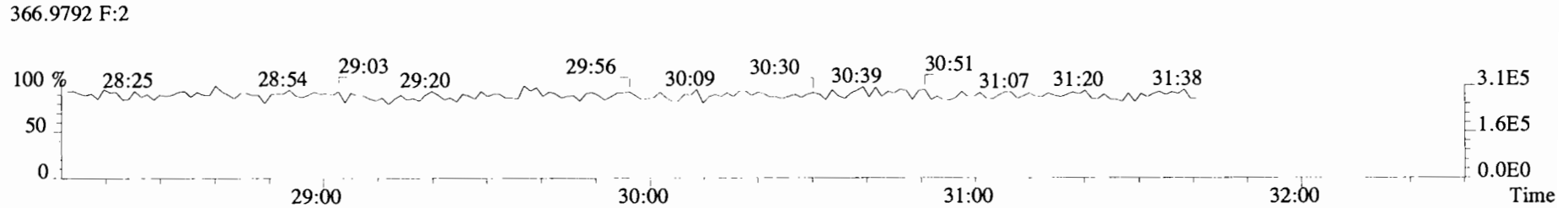
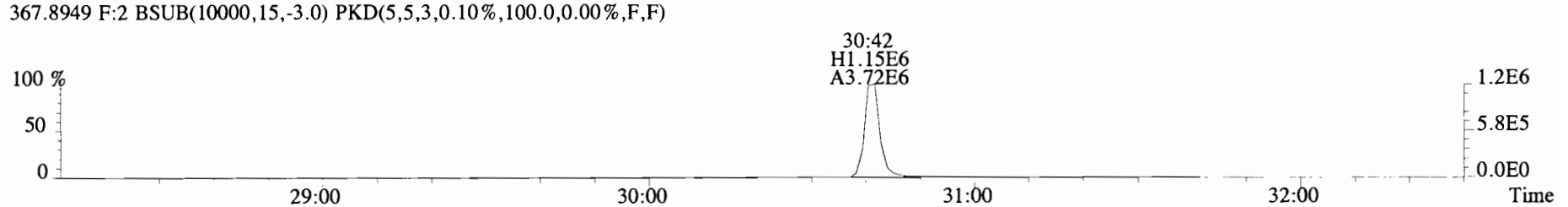
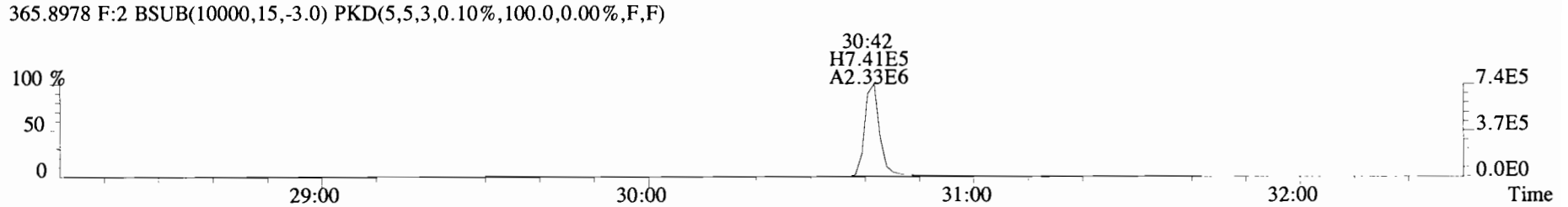
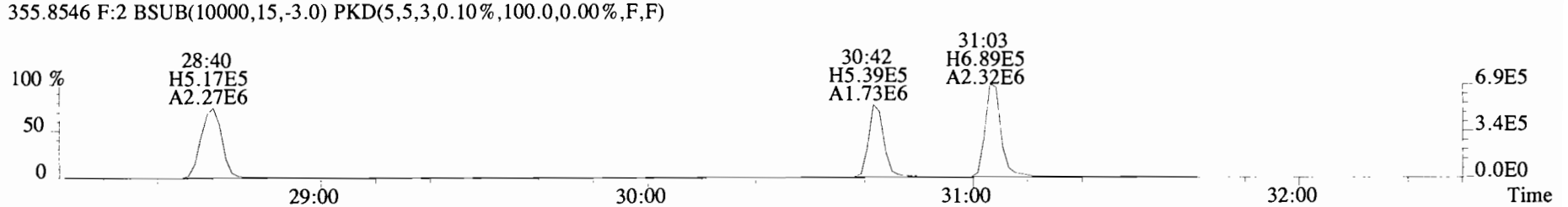
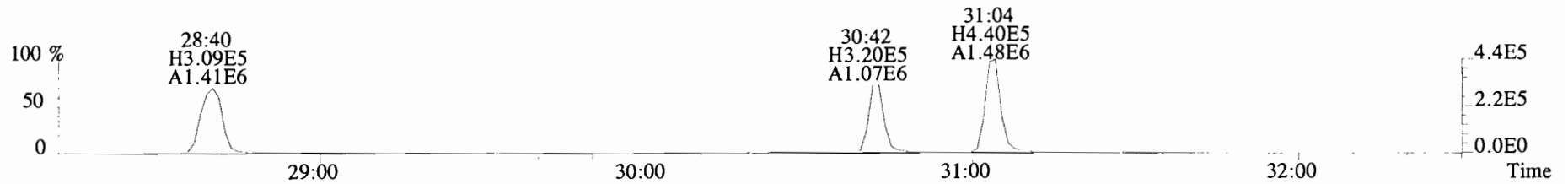
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



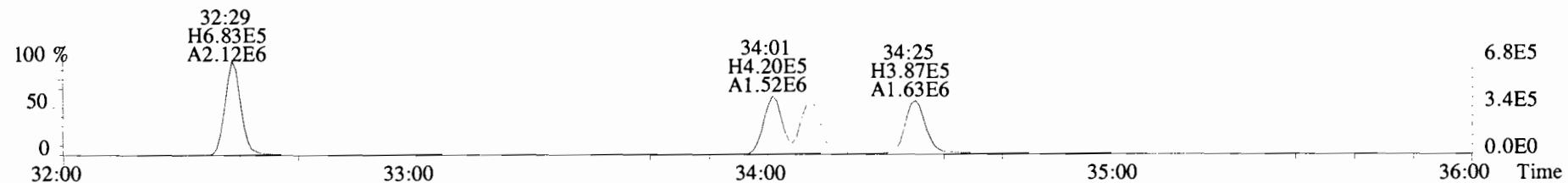
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



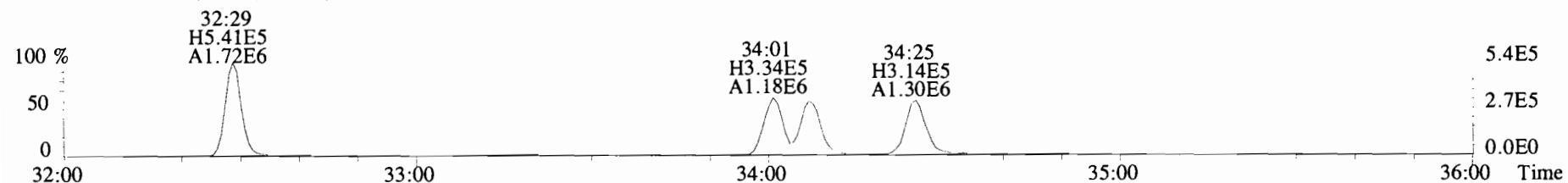
File:191120D1 #1-211 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



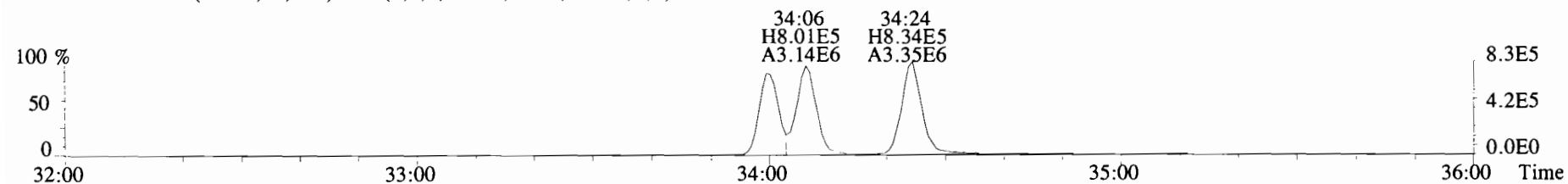
File:191120D1 #1-385 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



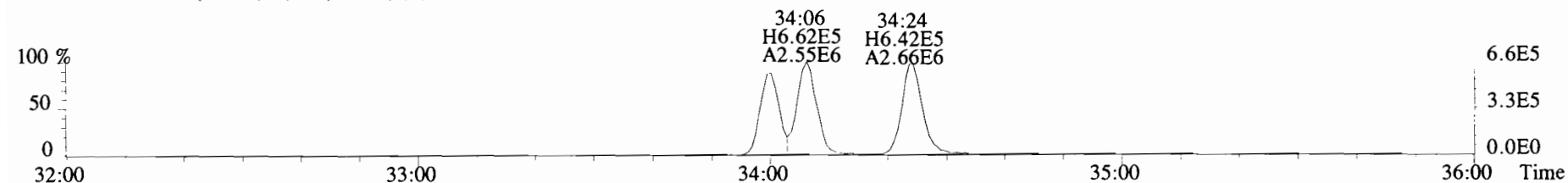
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



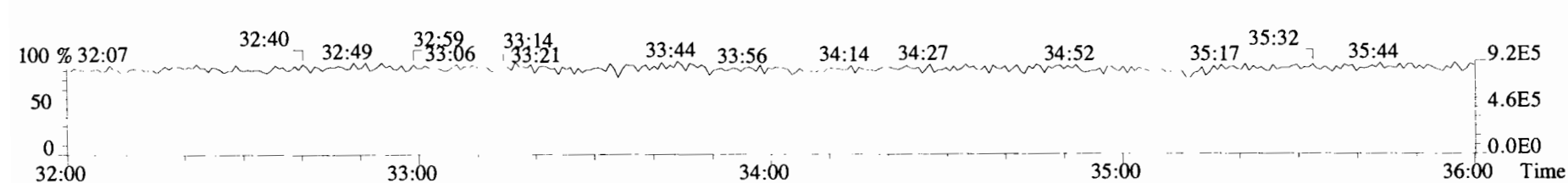
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



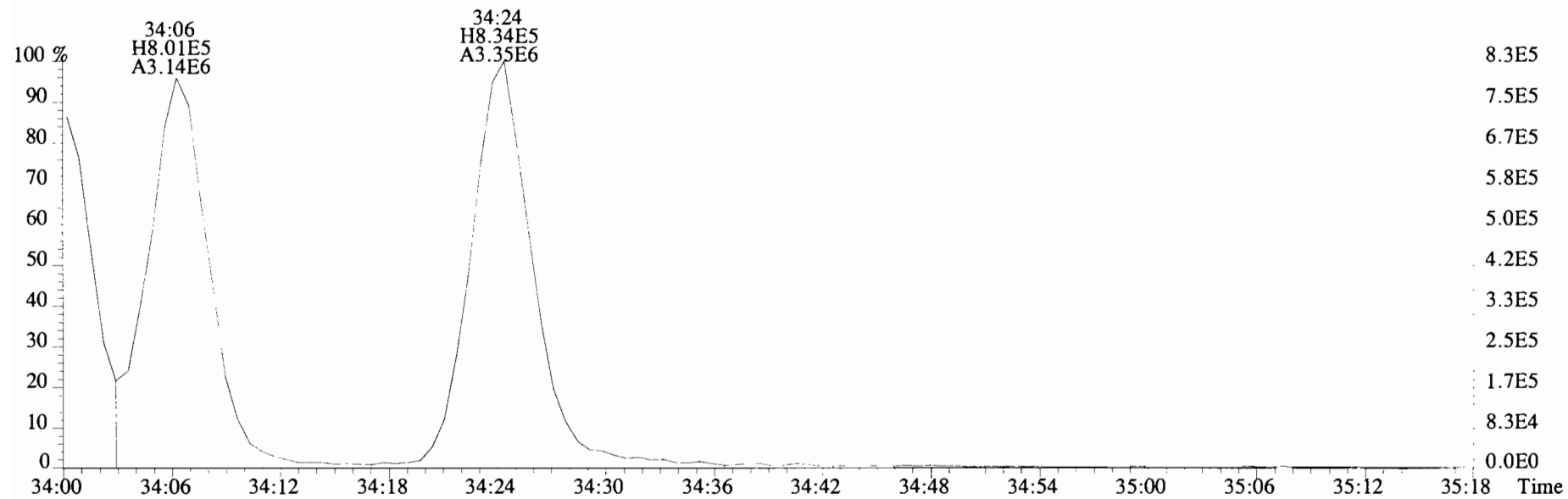
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



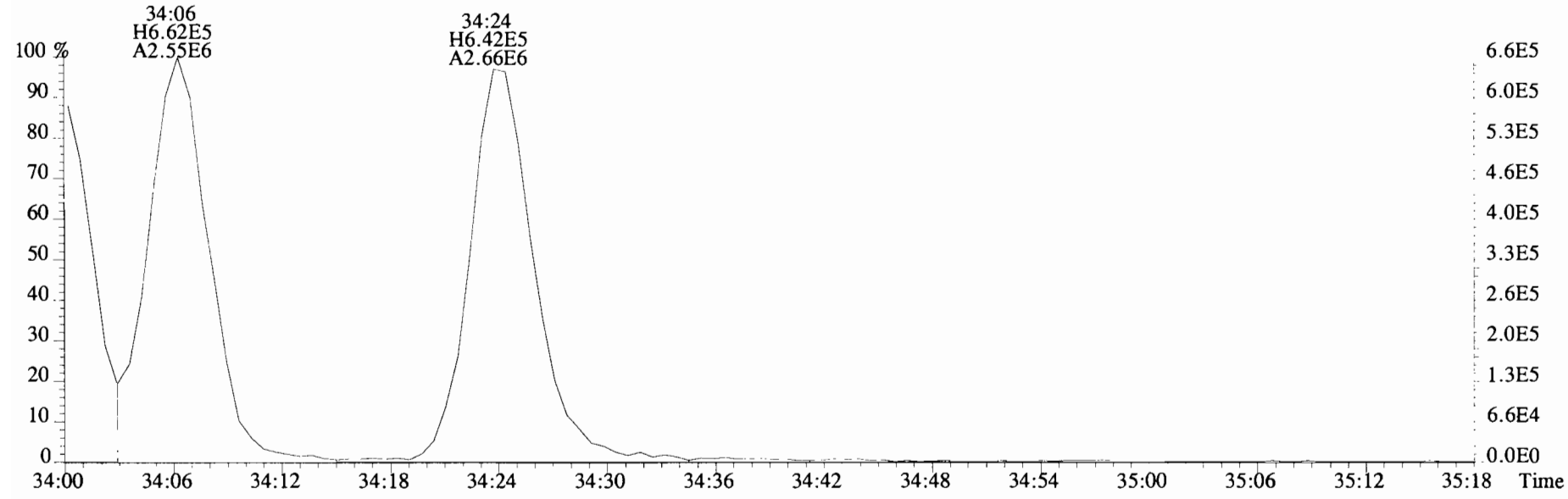
392.9760 F:3



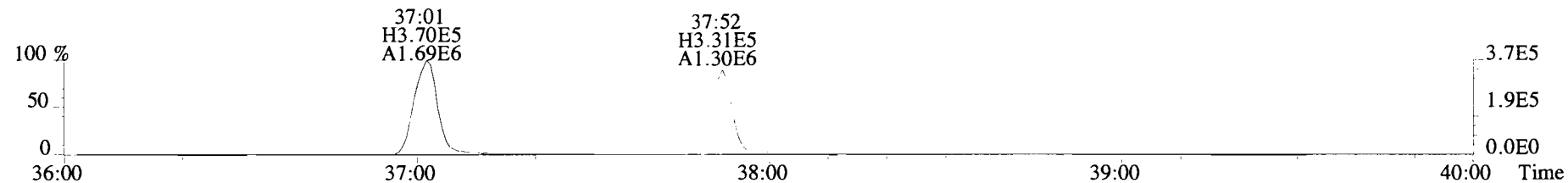
File:191120D1 #1-385 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



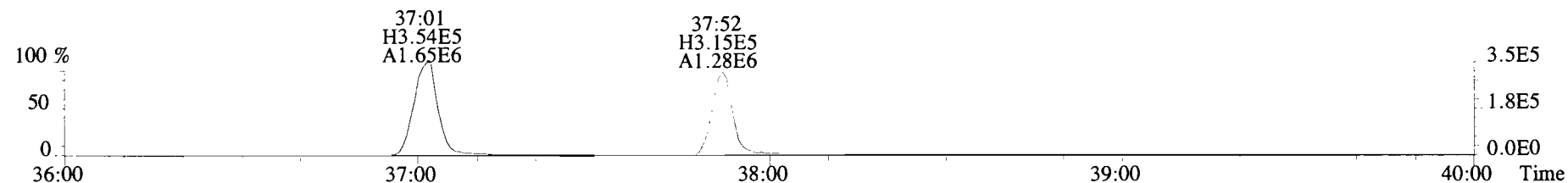
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



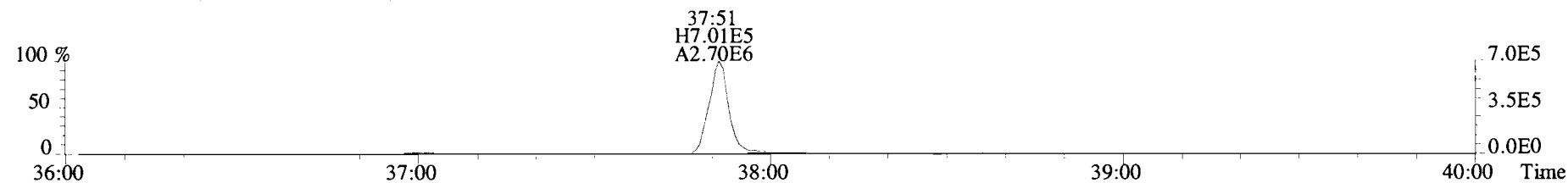
File:191120D1 #1-355 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



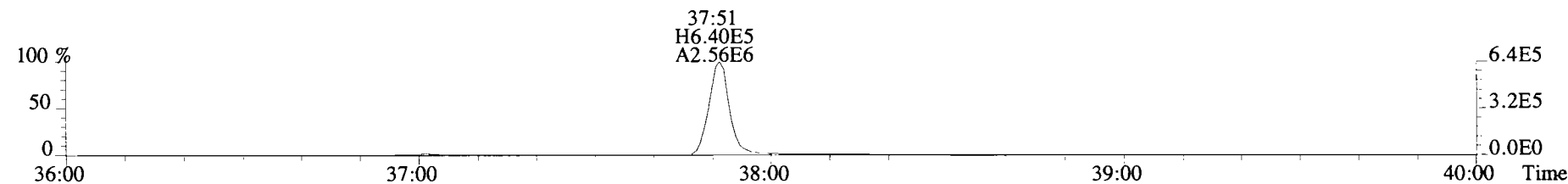
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



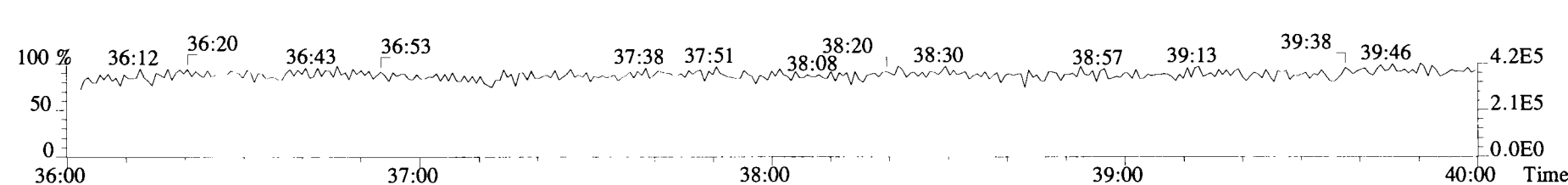
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



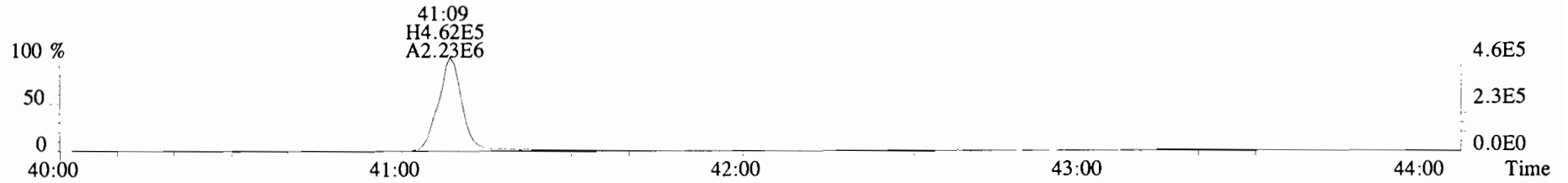
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



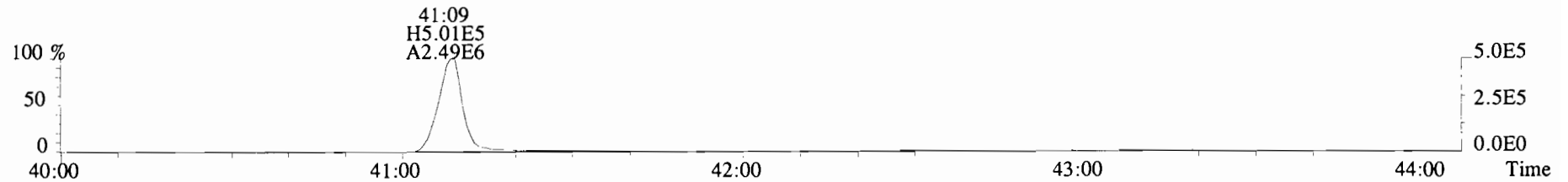
454.9728 F:4



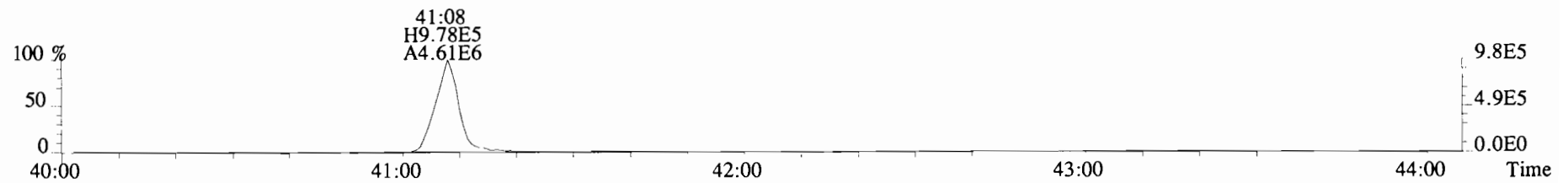
File:191120D1 #1-432 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



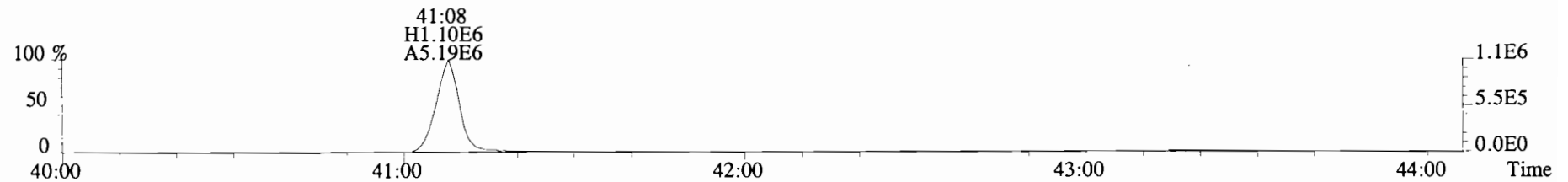
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



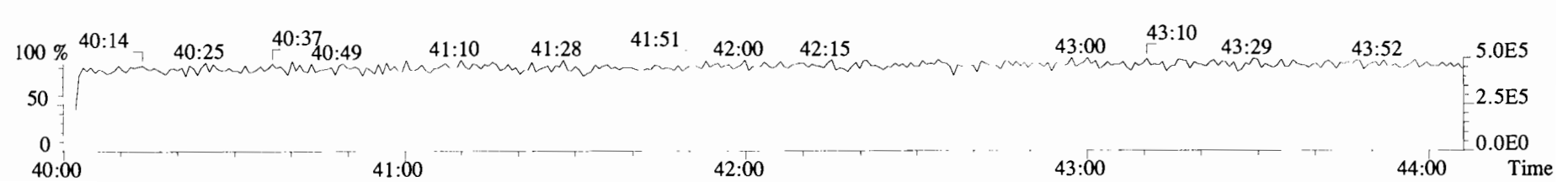
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



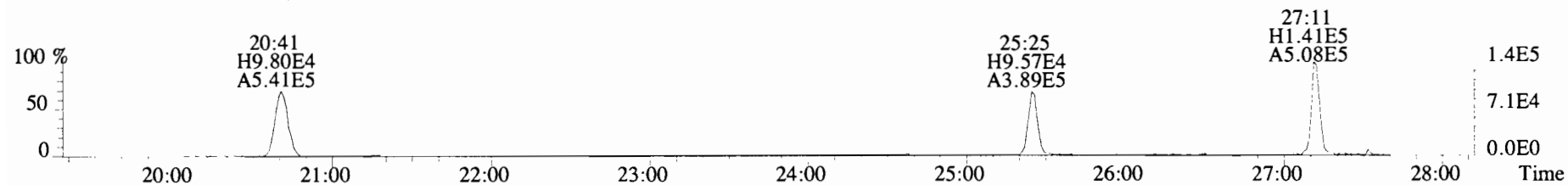
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



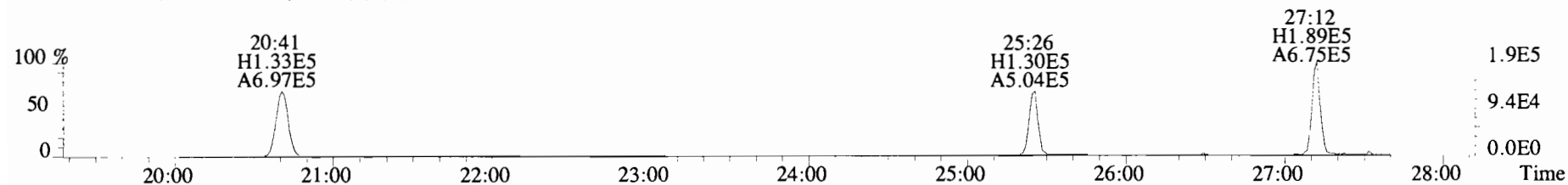
454.9728 F:5



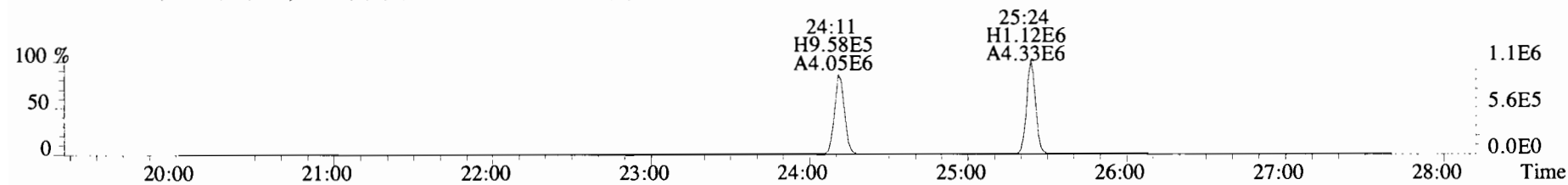
File:191120D1 #1-492 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



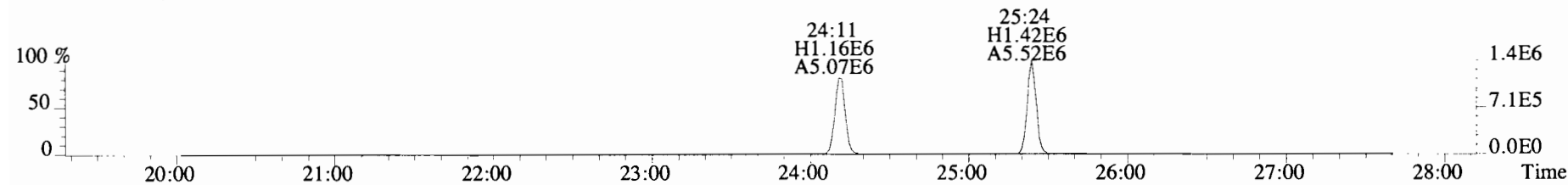
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



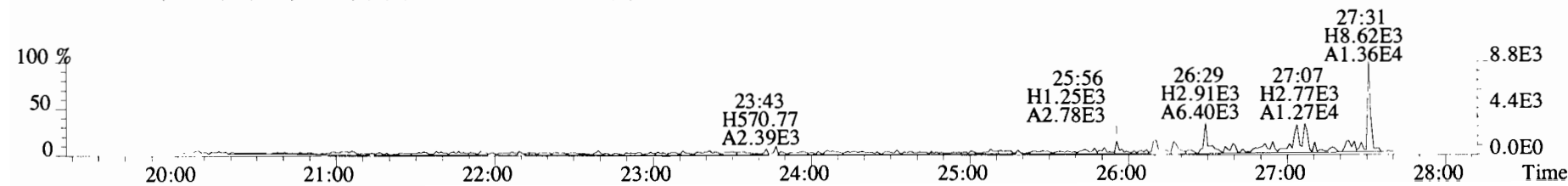
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



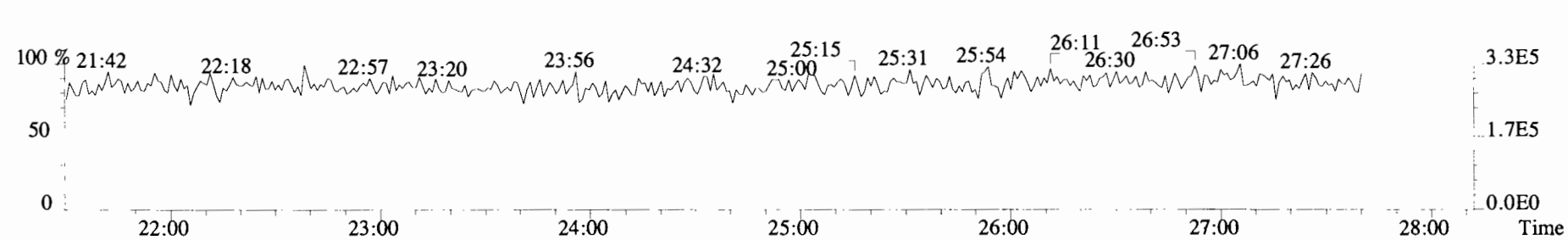
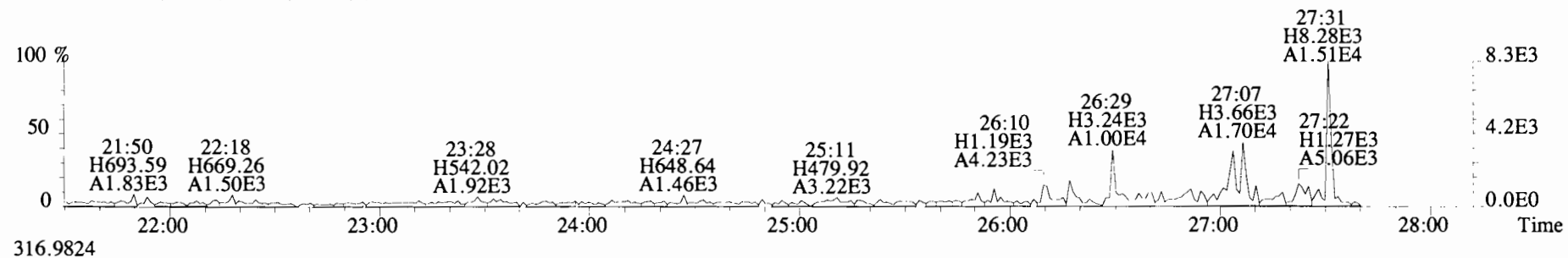
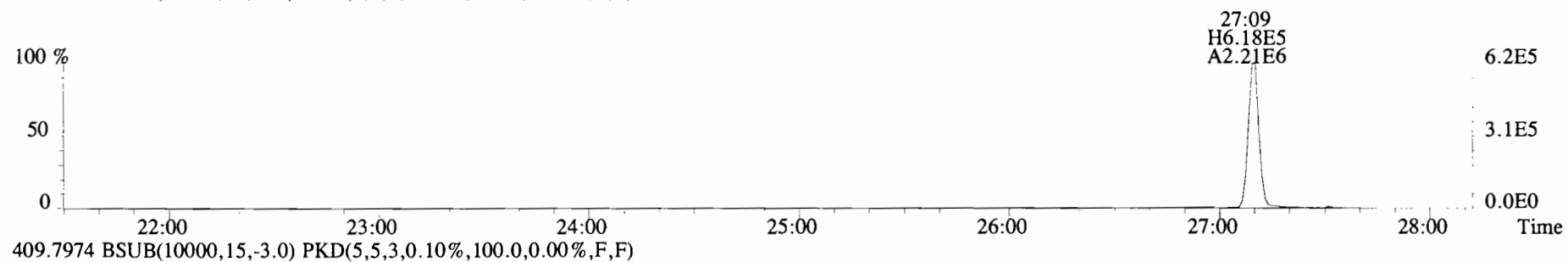
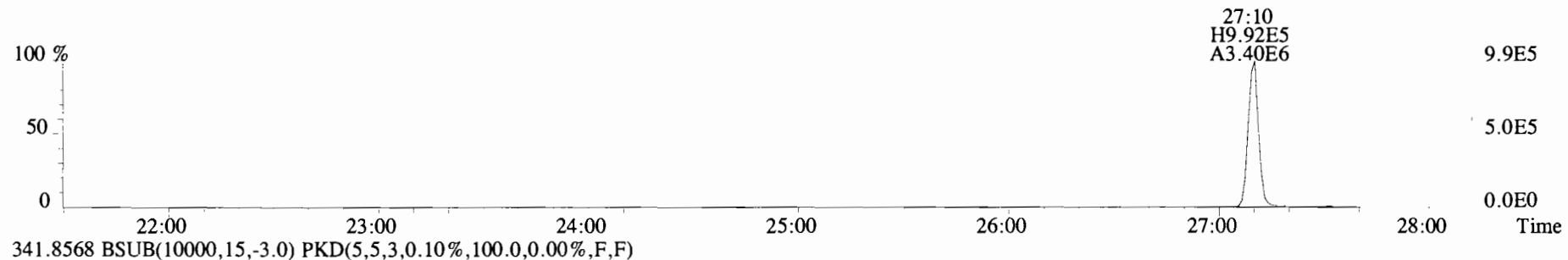
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



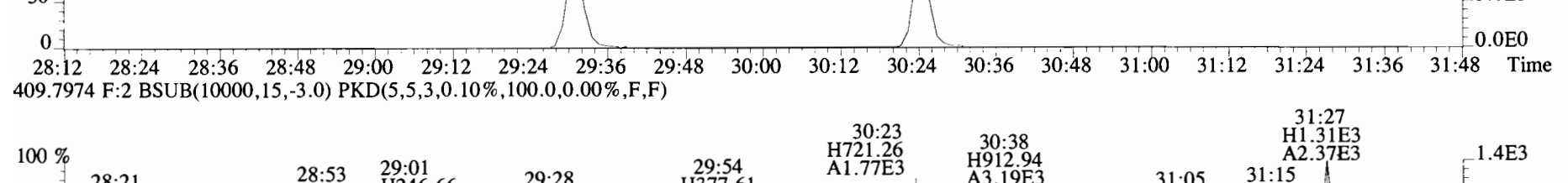
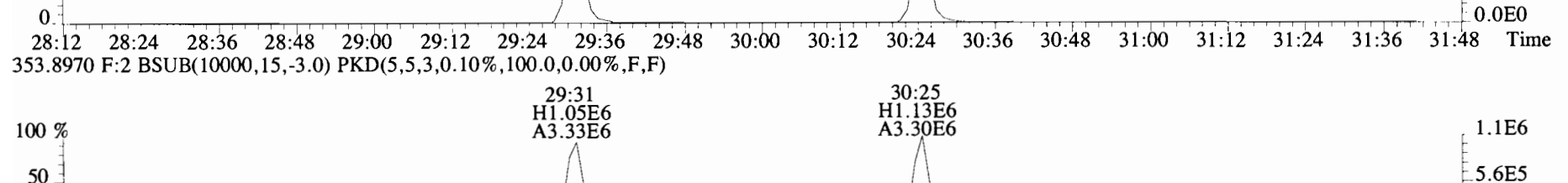
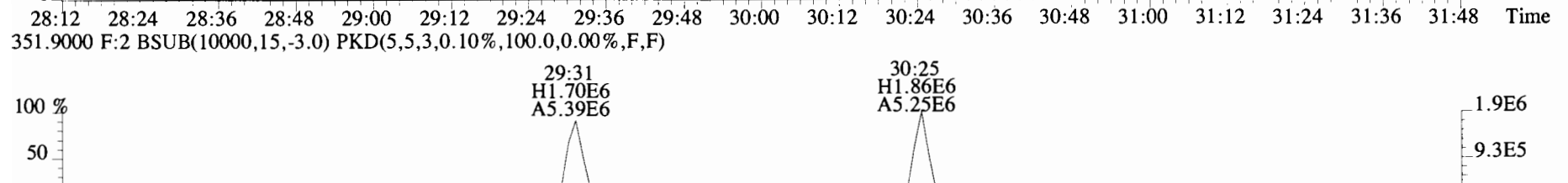
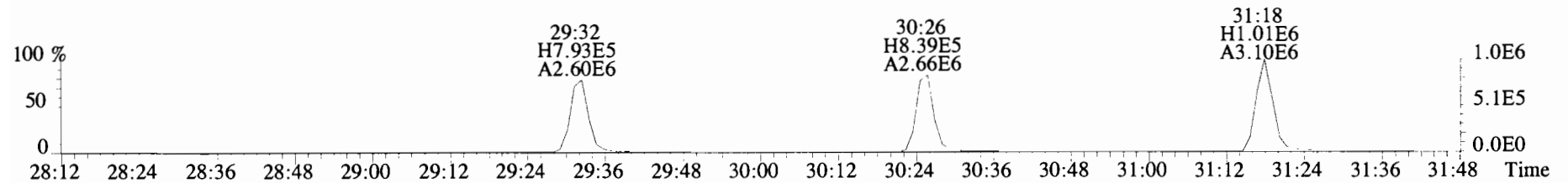
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



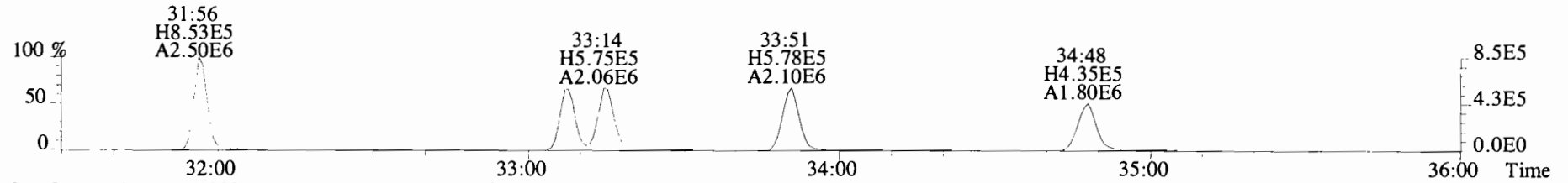
File:191120D1 #1-492 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



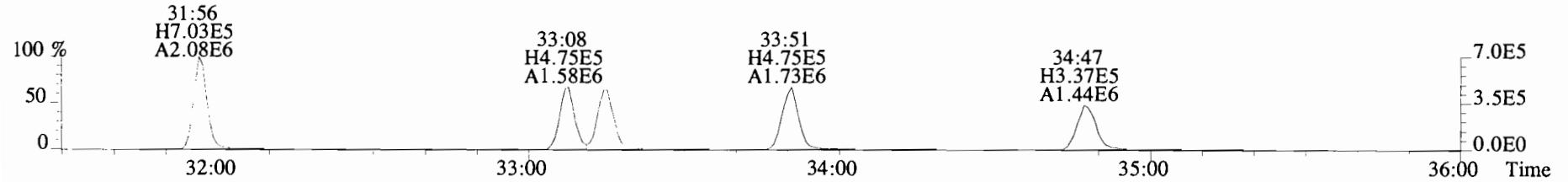
File:191120D1 #1-211 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



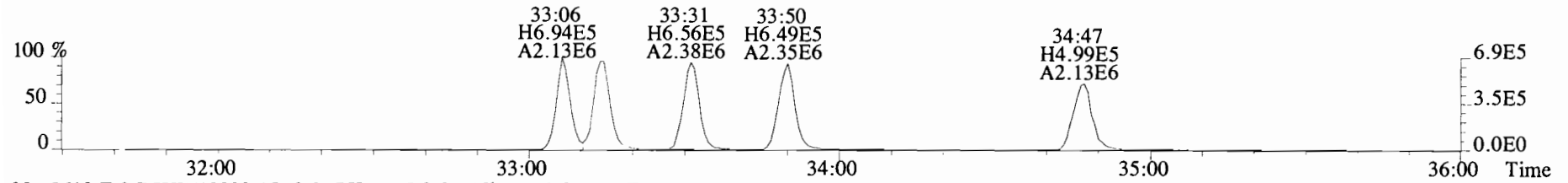
File:191120D1 #1-385 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



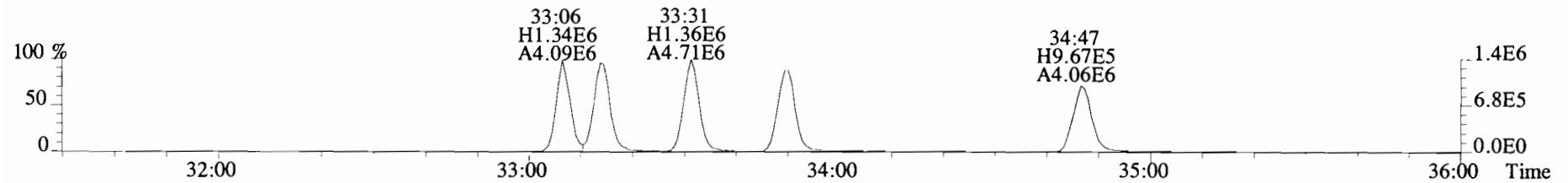
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



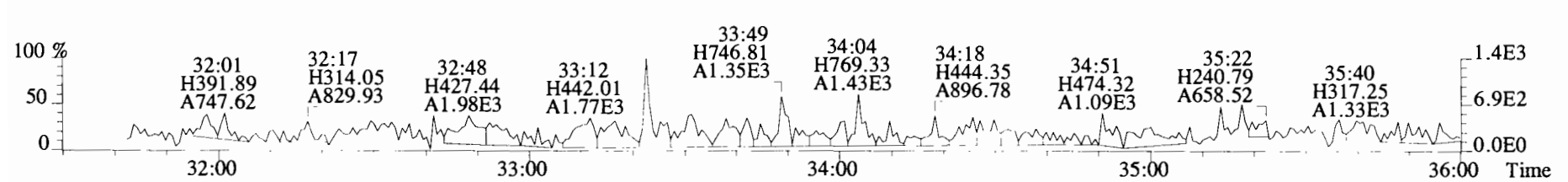
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



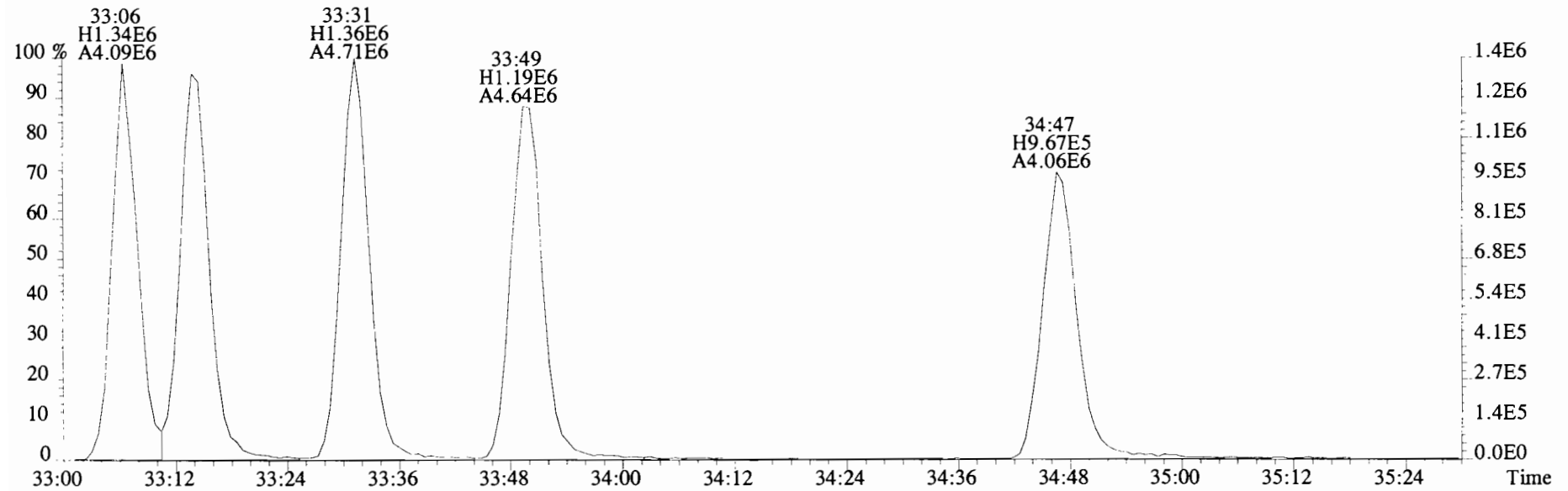
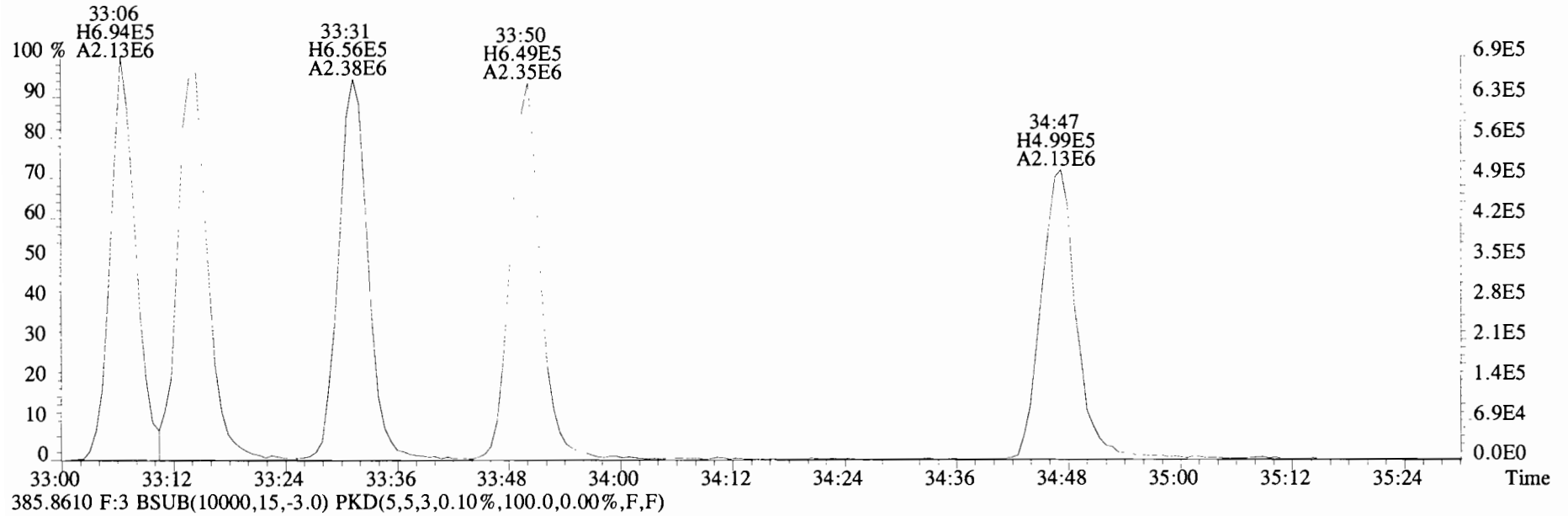
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



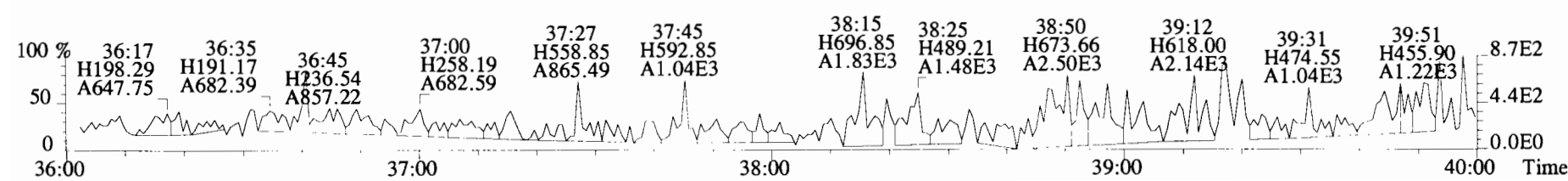
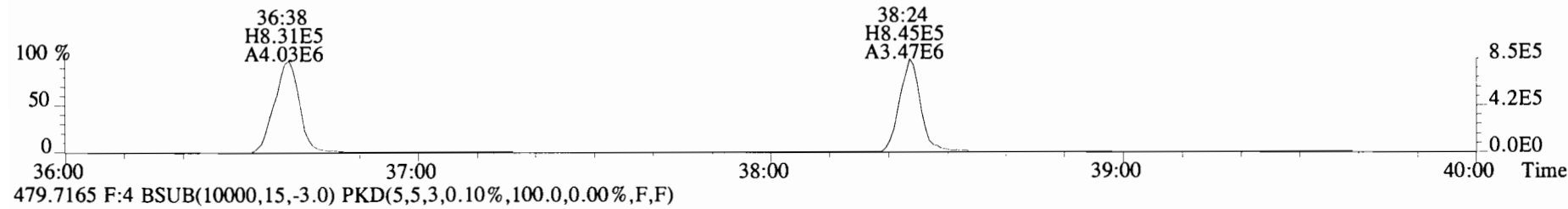
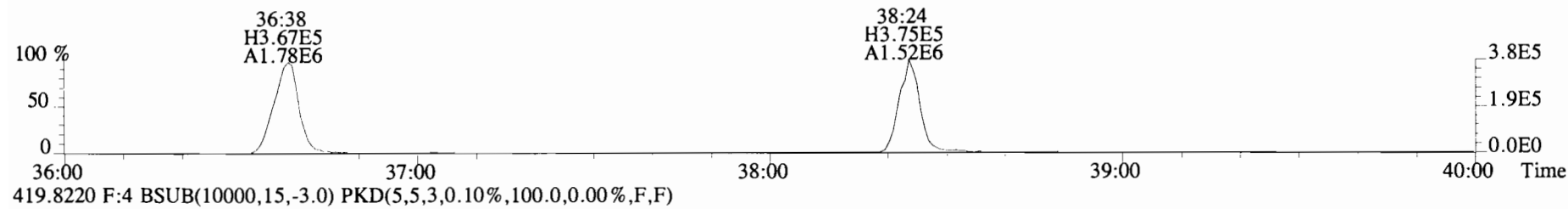
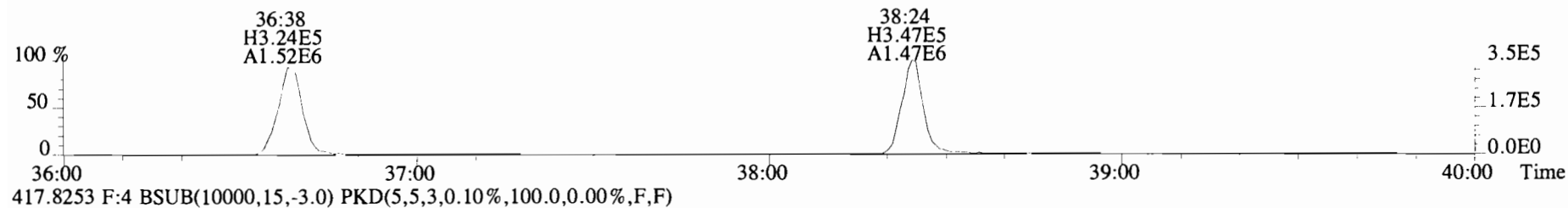
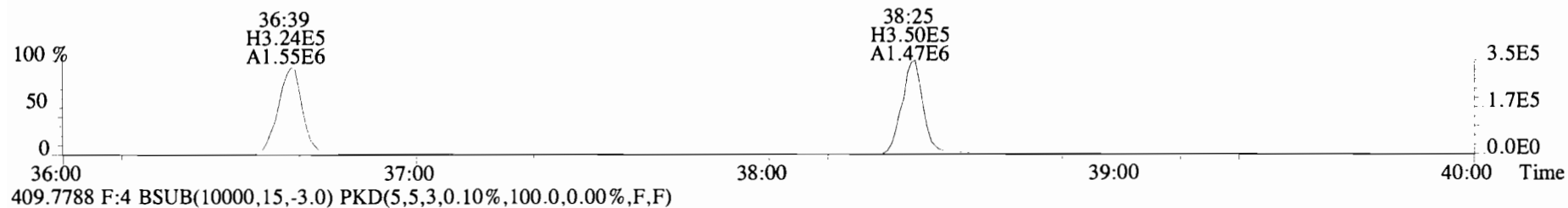
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



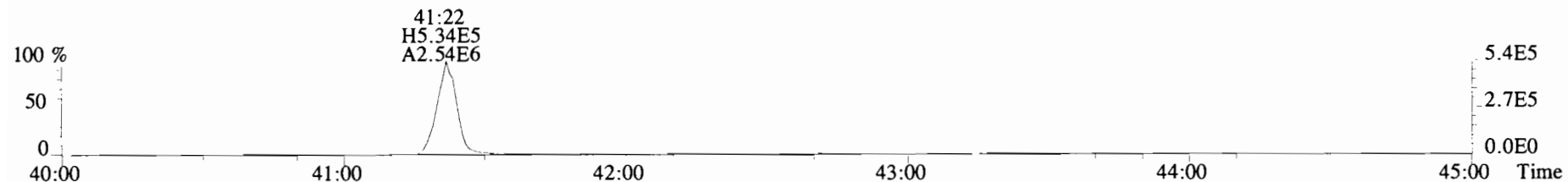
File:191120D1 #1-385 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



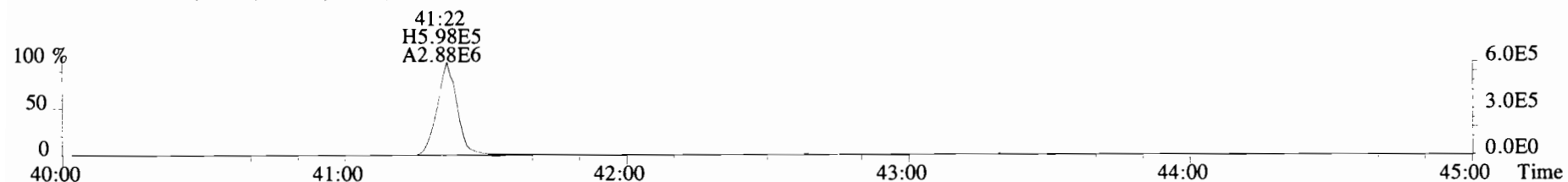
File:191120D1 #1-355 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



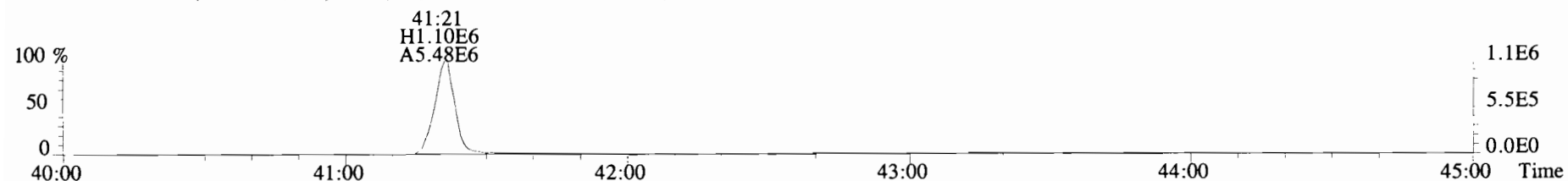
File:191120D1 #1-432 Acq:20-NOV-2019 14:00:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191120D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



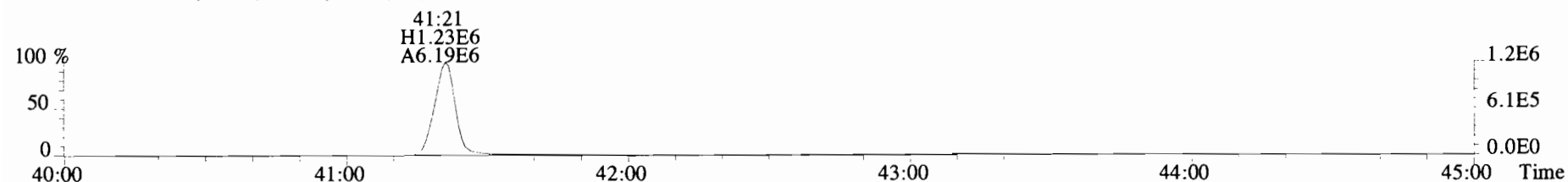
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



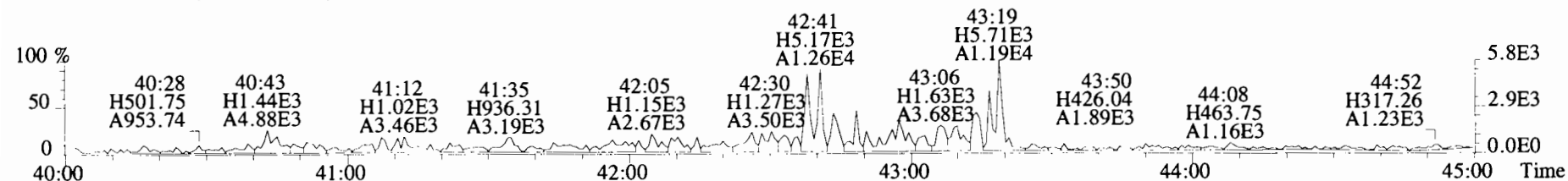
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

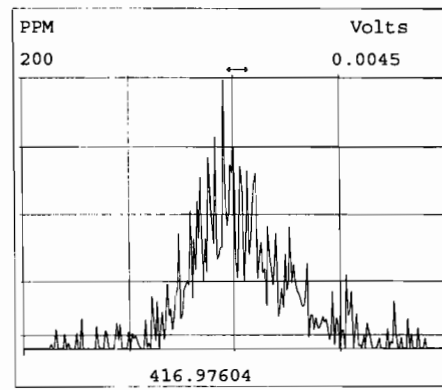
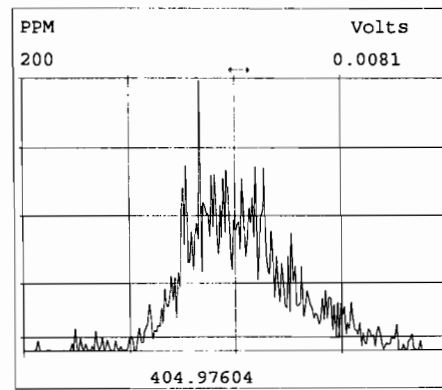
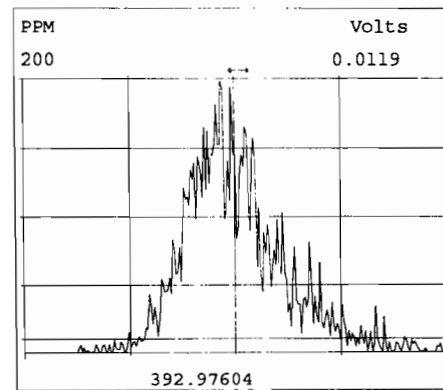
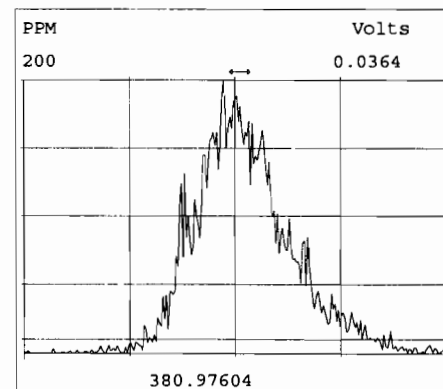
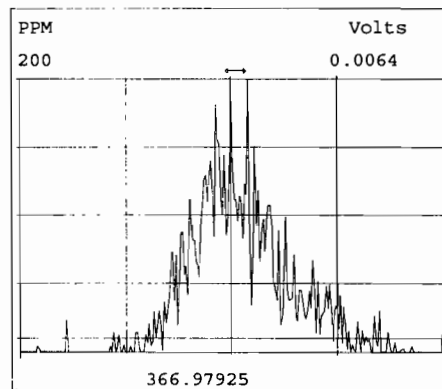
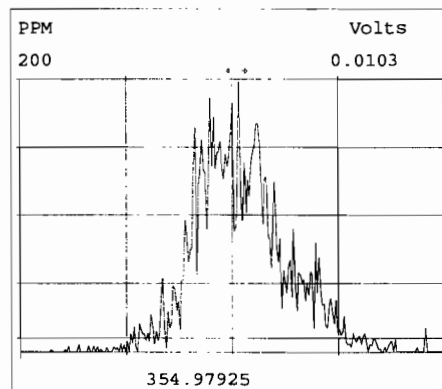
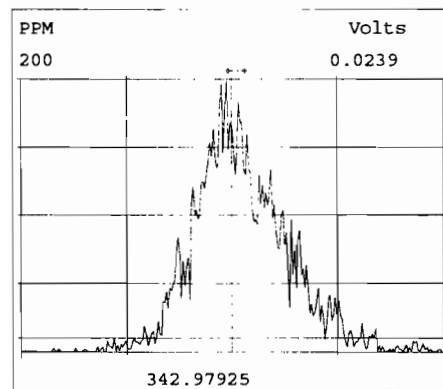
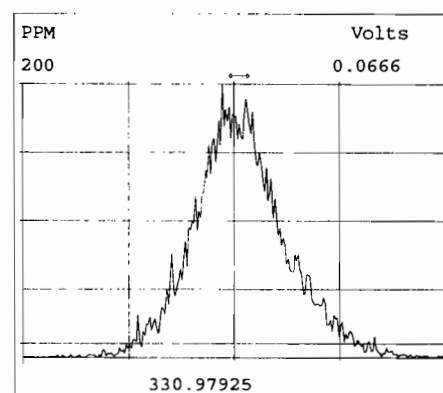
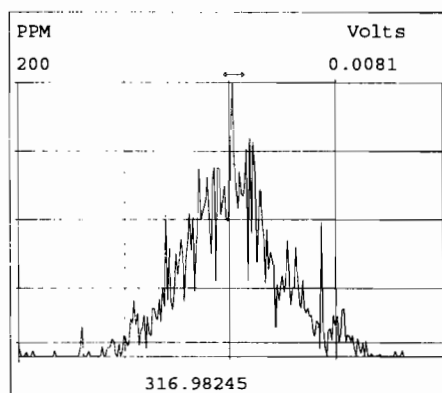
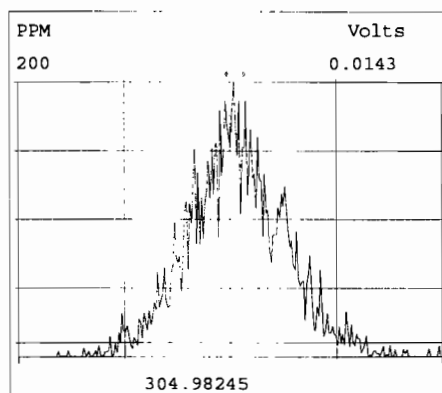
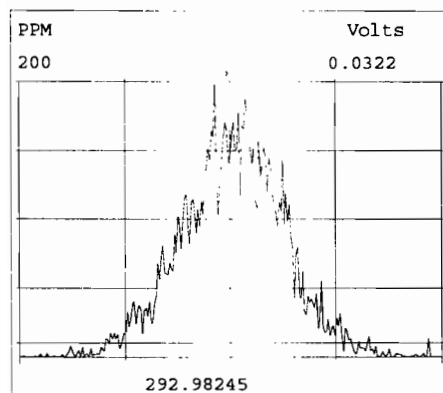


513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



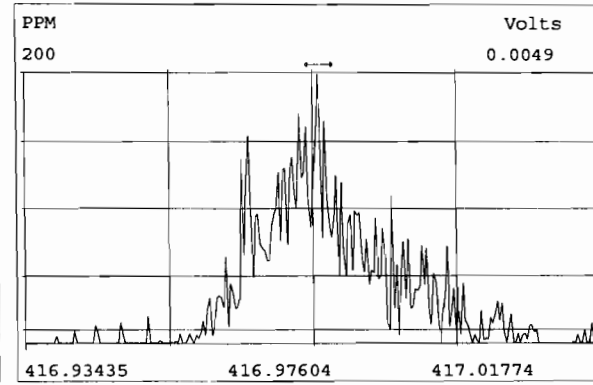
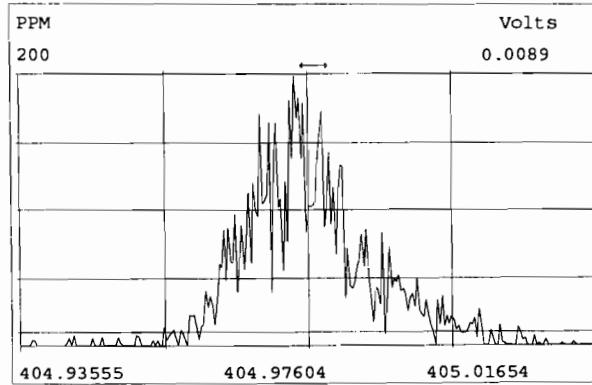
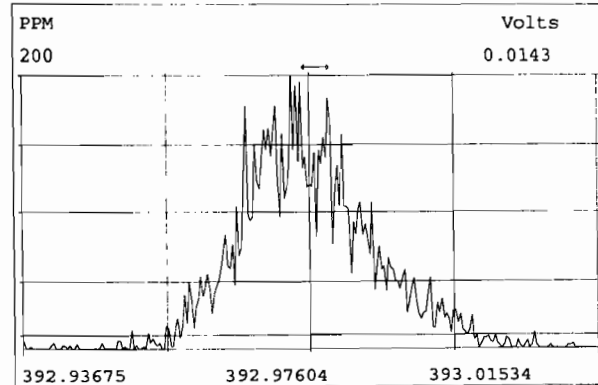
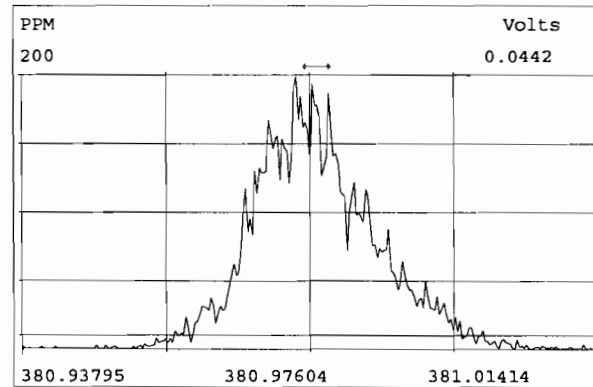
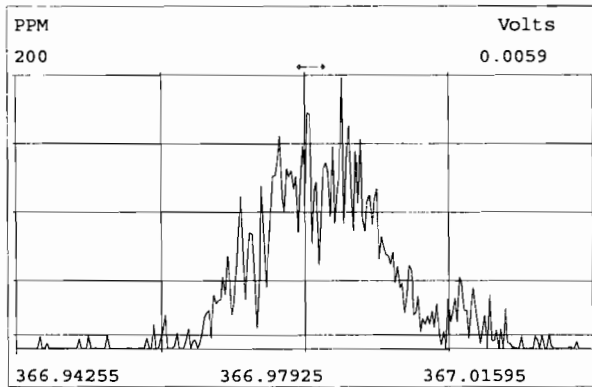
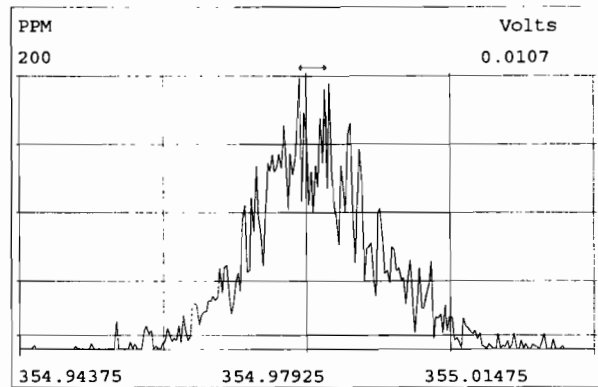
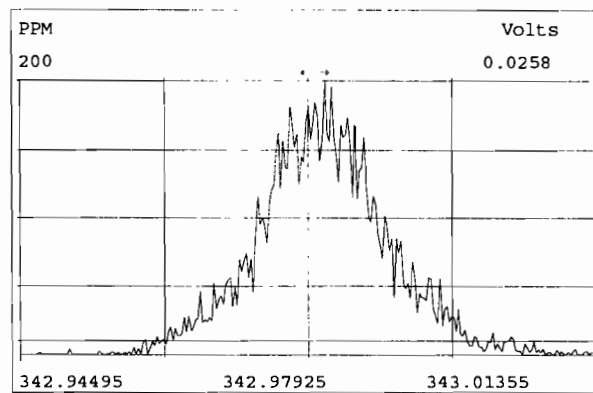
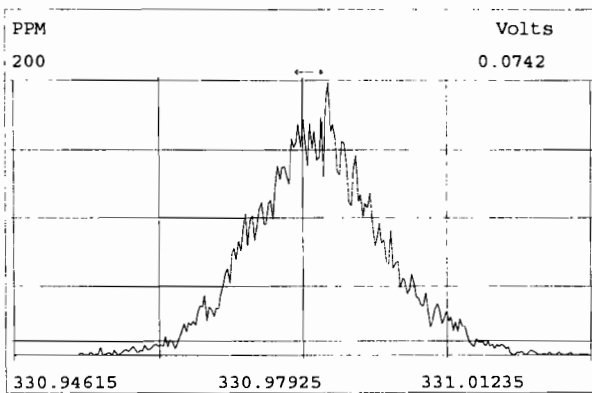
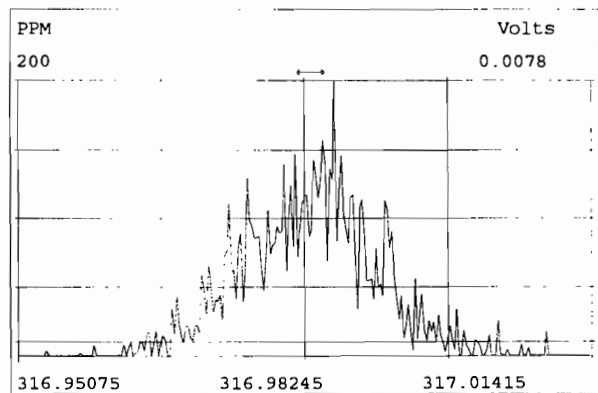
Peak Locate Examination:21-NOV-2019:02:07 File:RES_CHECK

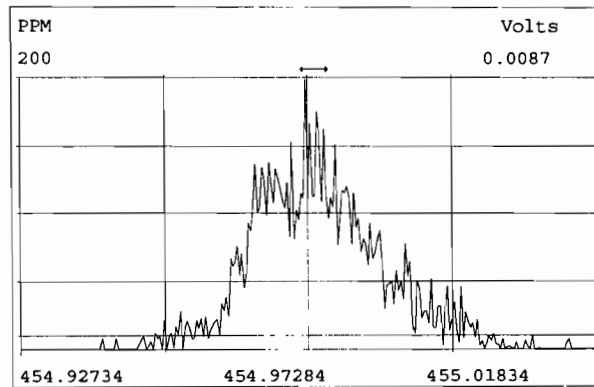
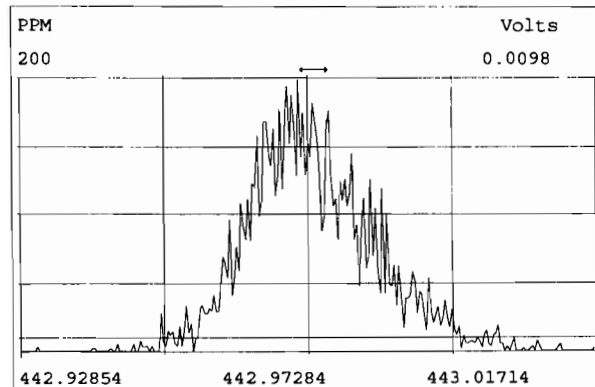
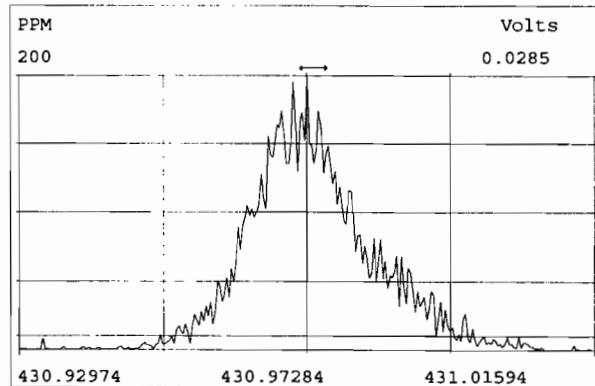
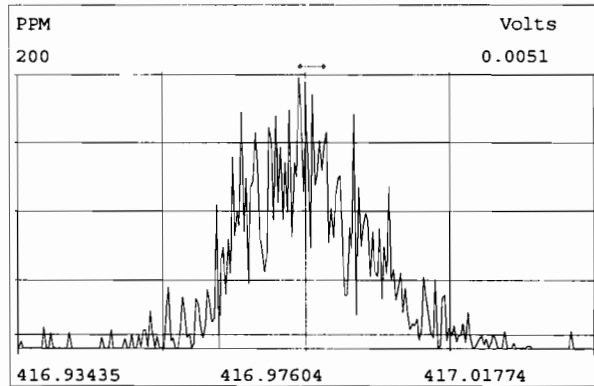
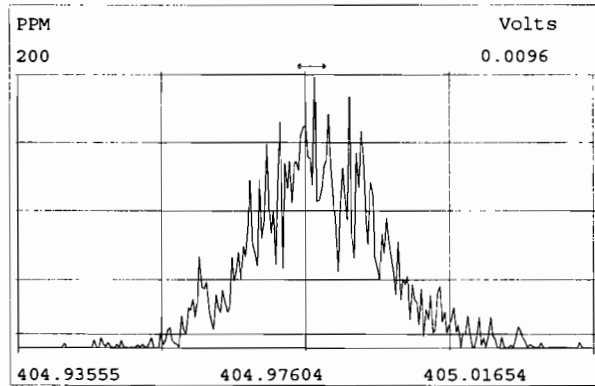
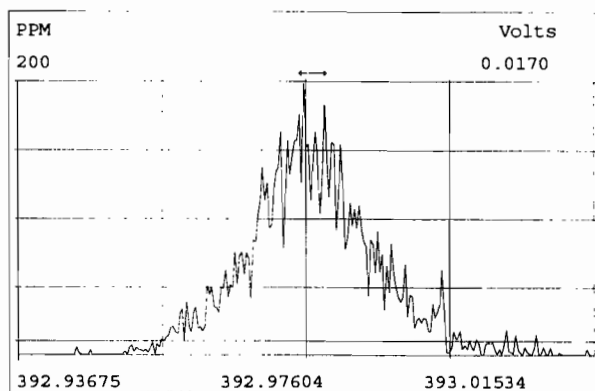
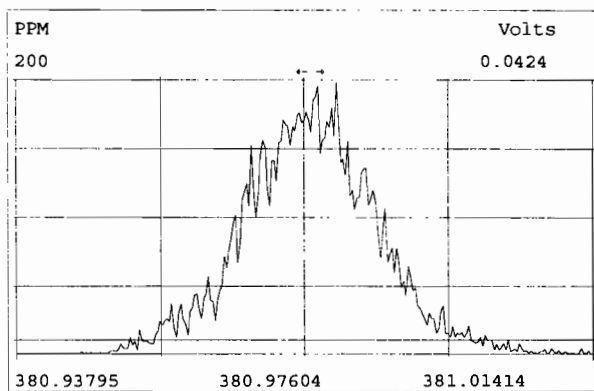
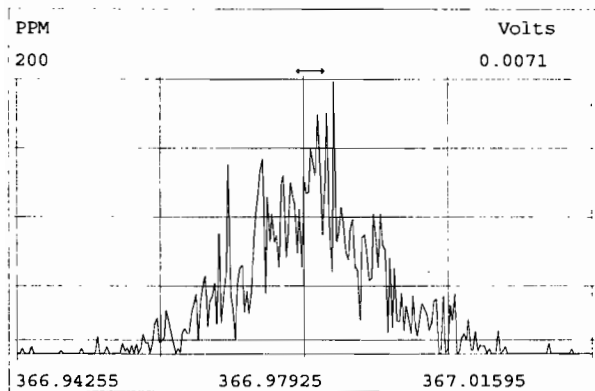
Experiment:OCDD_DB5 Function:1 Reference:PFK



Peak Locate Examination:21-NOV-2019:02:08 File:RES_CHECK

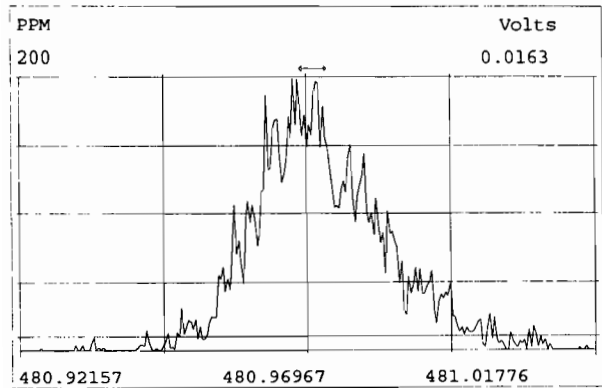
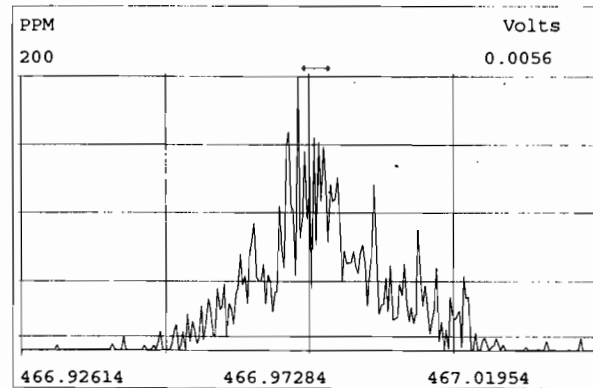
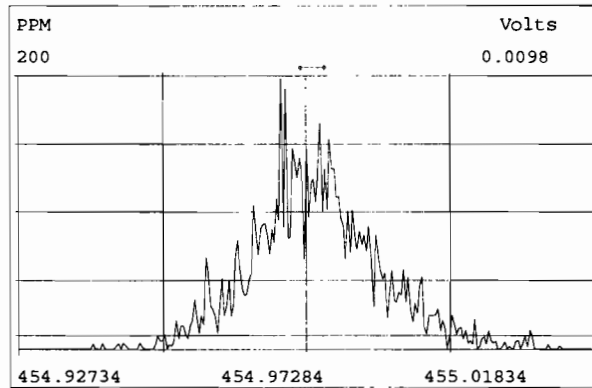
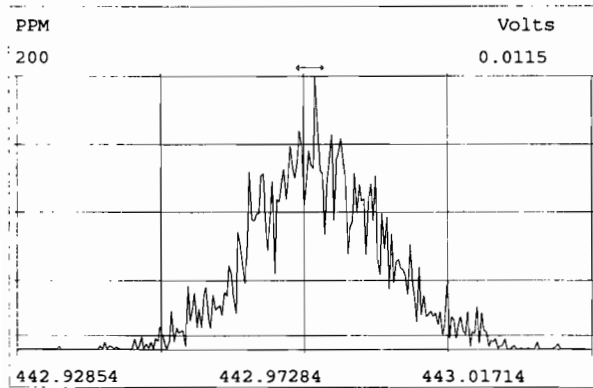
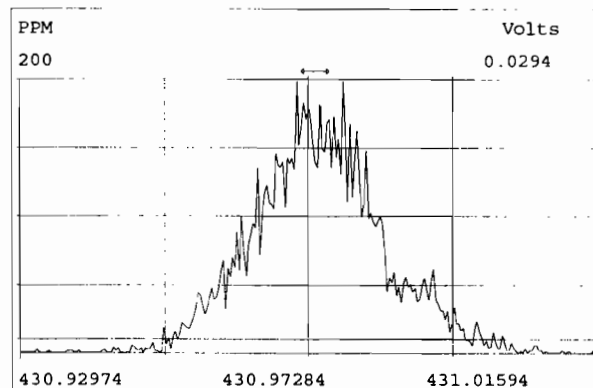
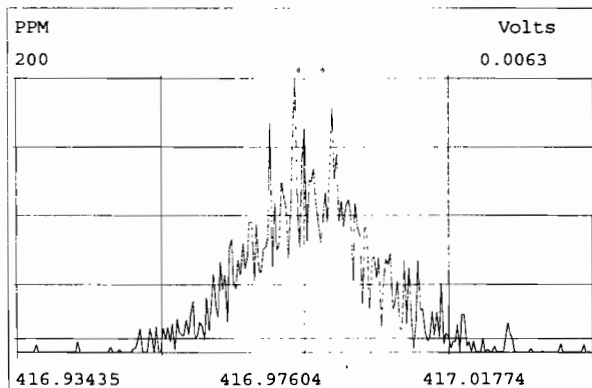
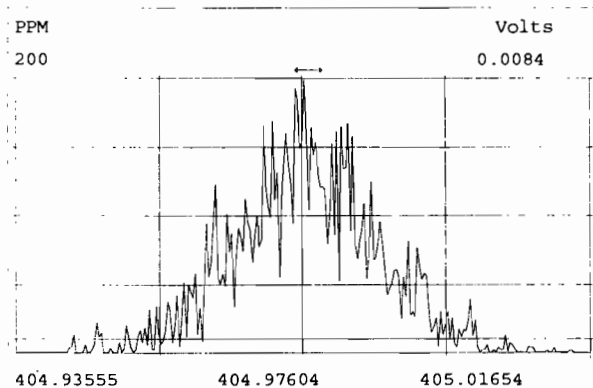
Experiment:OCDD_DB5 Function:2 Reference:PFK





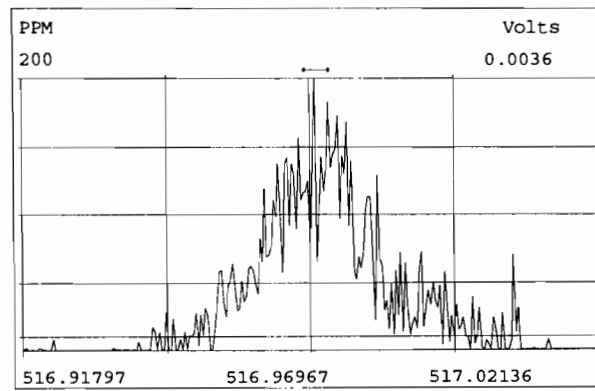
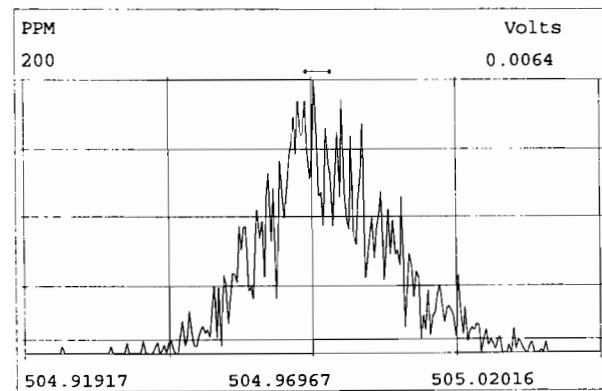
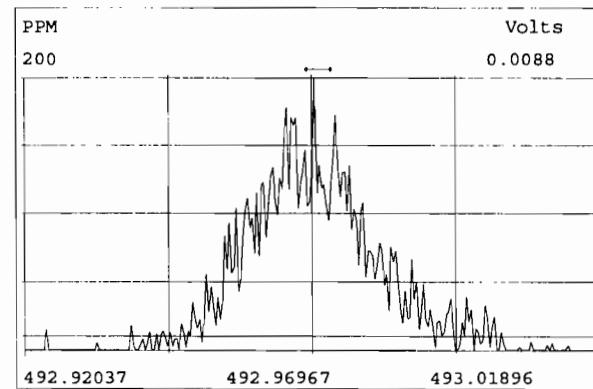
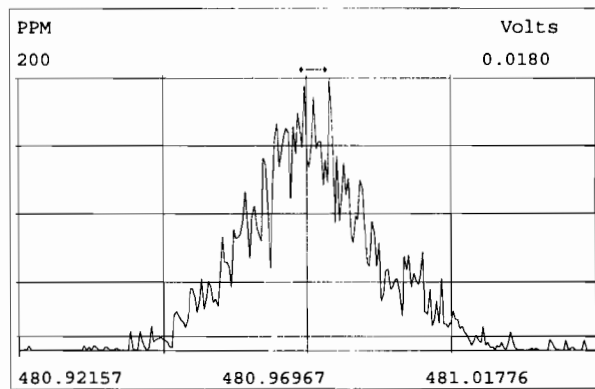
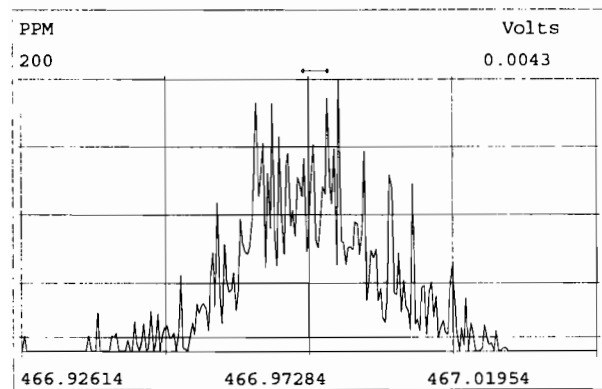
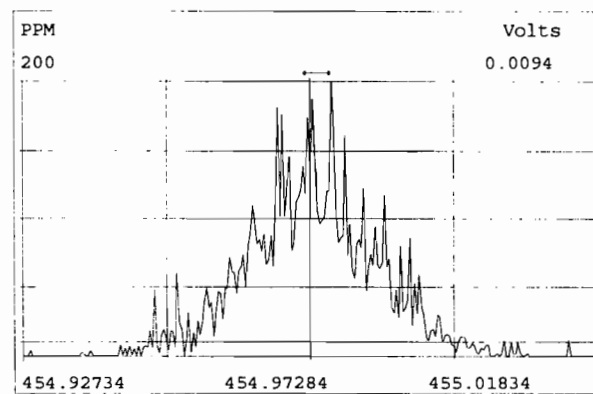
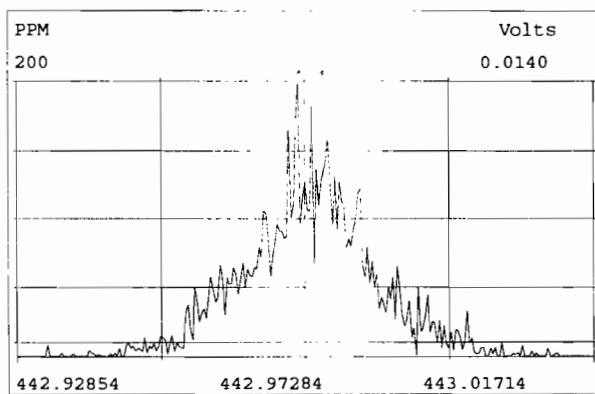
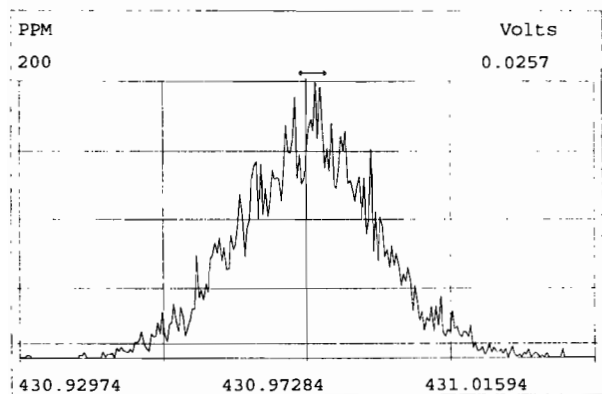
Peak Locate Examination:21-NOV-2019:02:10 File:RES_CHECK

Experiment:OCDD_DB5 Function:4 Reference:PFK



Peak Locate Examination:21-NOV-2019:02:10 File:RES_CHECK

Experiment:OCDD_DB5 Function:5 Reference:PFK



HKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191127D1-1

Reviewed By: CT 12/02/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<input type="checkbox"/>
<u>Run Log:</u>		
- Correct Instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> Y
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
- Bottle position verified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Mass resolution \geq
 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: ST191127D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-9-19

Instrument ID: VG-7

GC Column ID: ZB-5MS

VER Data Filename: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)			
2,3,7,8-TCDD	M/M+2	0.82	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	0.64	0.54-0.72	y	53.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.7	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	52.5	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.0	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	103	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.62	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	53.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	51.4	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	48.9	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	47.8	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.8	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	47.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	45.7	43.0 - 58.0
OCDF	M+2/M+4	0.88	0.76-1.02	y	96.3	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: 11/27/19

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: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

LABELLED 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	0.80	0.65-0.89	y	103	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	91.7	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	1.27	1.05-1.43	y	89.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	95.5	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	106	72.0 - 138.0
13C-OCDD	M/M+2	0.90	0.76-1.02	y	234	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	100	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	97.7	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	94.5	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	110	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	102	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	99.6	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	105	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	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	114	77.0 - 129.0
13C-OCDF	M+2/M+4	0.87	0.76-1.02	y	242	96.0 - 415.0
CLEANUP STANDARD (3) 37Cl-2,3,7,8-TCDD					9.68	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: 11/27/19

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: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

ZB-5MS IS Data Filename: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

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)	22:49	1,3,6,8-TCDF (F)	20:41
1,2,8,9-TCDD (L)	27:03	1,2,8,9-TCDF (L)	27:12
1,2,4,7,9-PeCDD (F)	28:40	1,3,4,6,8-PeCDF (F)	27:10
1,2,3,8,9-PeCDD (L)	31:03	1,2,3,8,9-PeCDF (L)	31:18
1,2,4,6,7,9-HxCDD (F)	32:29	1,2,3,4,6,8-HxCDF (F)	31:57
1,2,3,7,8,9-HxCDD (L)	34:25	1,2,3,7,8,9-HxCDF (L)	34:48
1,2,3,4,6,7,9-HpCDD (F)	37:01	1,2,3,4,6,7,8-HpCDF (F)	36:39
1,2,3,4,6,7,8-HpCDD (L)	37:52	1,2,3,4,7,8,9-HpCDF (L)	38:24

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<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: 11/27/19

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: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME		RRT	QC LIMITS (1)
	REFERENCE	RRT		
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	1.001	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	1.198	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	1.152	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.187	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: 11/27/19

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: 191127D1 S#1 Analysis Date: 27-NOV-19 Time: 15:55:01

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	1.001	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	1.001	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	1.001	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	1.092	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	1.129	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: 11/27/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191127D1-1

Filename: 191127D1 S:1 Acq:27-NOV-19 15:55:01
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191127D1-1
EndCAL: NA

Page 1 of 1

Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
2,3,7,8-TCDD	1.46e+06	0.82 y	0.91	26:12	10.598	*	2.5	*	*
1,2,3,7,8-PeCDD	5.23e+06	0.64 y	0.90	30:42	52.996	*	2.5	*	*
1,2,3,4,7,8-HxCDD	5.39e+06	1.29 y	1.10	34:01	50.244	*	2.5	*	*
1,2,3,6,7,8-HxCDD	5.49e+06	1.22 y	0.94	34:07	51.715	*	2.5	*	*
1,2,3,7,8,9-HxCDD	5.73e+06	1.23 y	0.96	34:25	52.523	*	2.5	*	*
1,2,3,4,6,7,8-HpCDD	4.99e+06	1.04 y	0.98	37:52	49.964	*	2.5	*	*
OCDD	9.89e+06	0.87 y	0.96	41:09	103.15	*	2.5	*	*
2,3,7,8-TCDF	2.07e+06	0.78 y	0.95	25:25	9.6214	*	2.5	*	*
1,2,3,7,8-PeCDF	9.26e+06	1.56 y	0.96	29:32	53.085	*	2.5	*	*
2,3,4,7,8-PeCDF	9.10e+06	1.59 y	1.01	30:25	51.443	*	2.5	*	*
1,2,3,4,7,8-HxCDF	7.74e+06	1.22 y	1.18	33:07	48.939	*	2.5	*	*
1,2,3,6,7,8-HxCDF	7.92e+06	1.20 y	1.07	33:15	47.774	*	2.5	*	*
2,3,4,6,7,8-HxCDF	7.82e+06	1.24 y	1.11	33:51	50.255	*	2.5	*	*
1,2,3,7,8,9-HxCDF	6.66e+06	1.24 y	1.06	34:48	48.832	*	2.5	*	*
1,2,3,4,6,7,8-HpCDF	6.00e+06	1.01 y	1.13	36:39	47.102	*	2.5	*	*
1,2,3,4,7,8,9-HpCDF	5.70e+06	1.01 y	1.28	38:24	45.670	*	2.5	*	*
OCDF	1.12e+07	0.88 y	0.95	41:22	96.329	*	2.5	*	*
IS 13C-2,3,7,8-TCDD	1.52e+07	0.80 y	1.10	26:10	102.78				
IS 13C-1,2,3,7,8-PeCDD	1.09e+07	0.63 y	0.88	30:41	91.720				
IS 13C-1,2,3,4,7,8-HxCDD	9.73e+06	1.29 y	0.64	33:60	102.92				
IS 13C-1,2,3,6,7,8-HxCDD	1.13e+07	1.27 y	0.86	34:06	89.777				
IS 13C-1,2,3,7,8,9-HxCDD	1.14e+07	1.27 y	0.81	34:24	95.546				
IS 13C-1,2,3,4,6,7,8-HpCDD	1.02e+07	1.03 y	0.65	37:51	105.83				
IS 13C-OCDD	2.00e+07	0.90 y	0.58	41:08	234.38				
IS 13C-2,3,7,8-TCDF	2.26e+07	0.78 y	1.03	25:24	100.31				
IS 13C-1,2,3,7,8-PeCDF	1.82e+07	1.61 y	0.85	29:31	97.672				
IS 13C-2,3,4,7,8-PeCDF	1.74e+07	1.58 y	0.85	30:24	94.544				
IS 13C-1,2,3,4,7,8-HxCDF	1.34e+07	0.53 y	0.83	33:06	109.66				
IS 13C-1,2,3,6,7,8-HxCDF	1.55e+07	0.51 y	1.03	33:14	101.75				
IS 13C-2,3,4,6,7,8-HxCDF	1.40e+07	0.52 y	0.95	33:50	99.573				
IS 13C-1,2,3,7,8,9-HxCDF	1.29e+07	0.52 y	0.83	34:47	105.45				
IS 13C-1,2,3,4,6,7,8-HpCDF	1.13e+07	0.44 y	0.76	36:37	101.32				
IS 13C-1,2,3,4,7,8,9-HpCDF	9.75e+06	0.43 y	0.58	38:24	113.91				
IS 13C-OCDF	2.45e+07	0.87 y	0.69	41:21	241.94				
C/Up 37C1-2,3,7,8-TCDD	1.57e+06		1.20	26:12	9.6783				
RS/RT 13C-1,2,3,4-TCDD	1.35e+07	0.81 y	1.00	25:37	100.00				
RS 13C-1,2,3,4-TCDF	2.18e+07	0.79 y	1.00	24:11	100.00				
RS/RT 13C-1,2,3,4,6,9-HxCDF	1.47e+07	0.51 y	1.00	33:31	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	76.7	77.0	*	*	*
Total Penta-Dioxins	204	204	*	*	*
Total Hexa-Dioxins	228	229	*	*	*
Total Hepta-Dioxins	114	115	*	*	*
Total Tetra-Furans	37.7	38.0	*	*	*
Total Penta-Furans	230.76	231.98	*	*	*
Total Hexa-Furans	260	260	*	*	*
Total Hepta-Furans	93.2	93.7	*	*	*

Rec Qual

103
91.7
103
89.8
95.5
106
117
100
97.7
94.5
110
102
99.6
105
101
114
121

96.8

Integrations
by
Analyst: DB

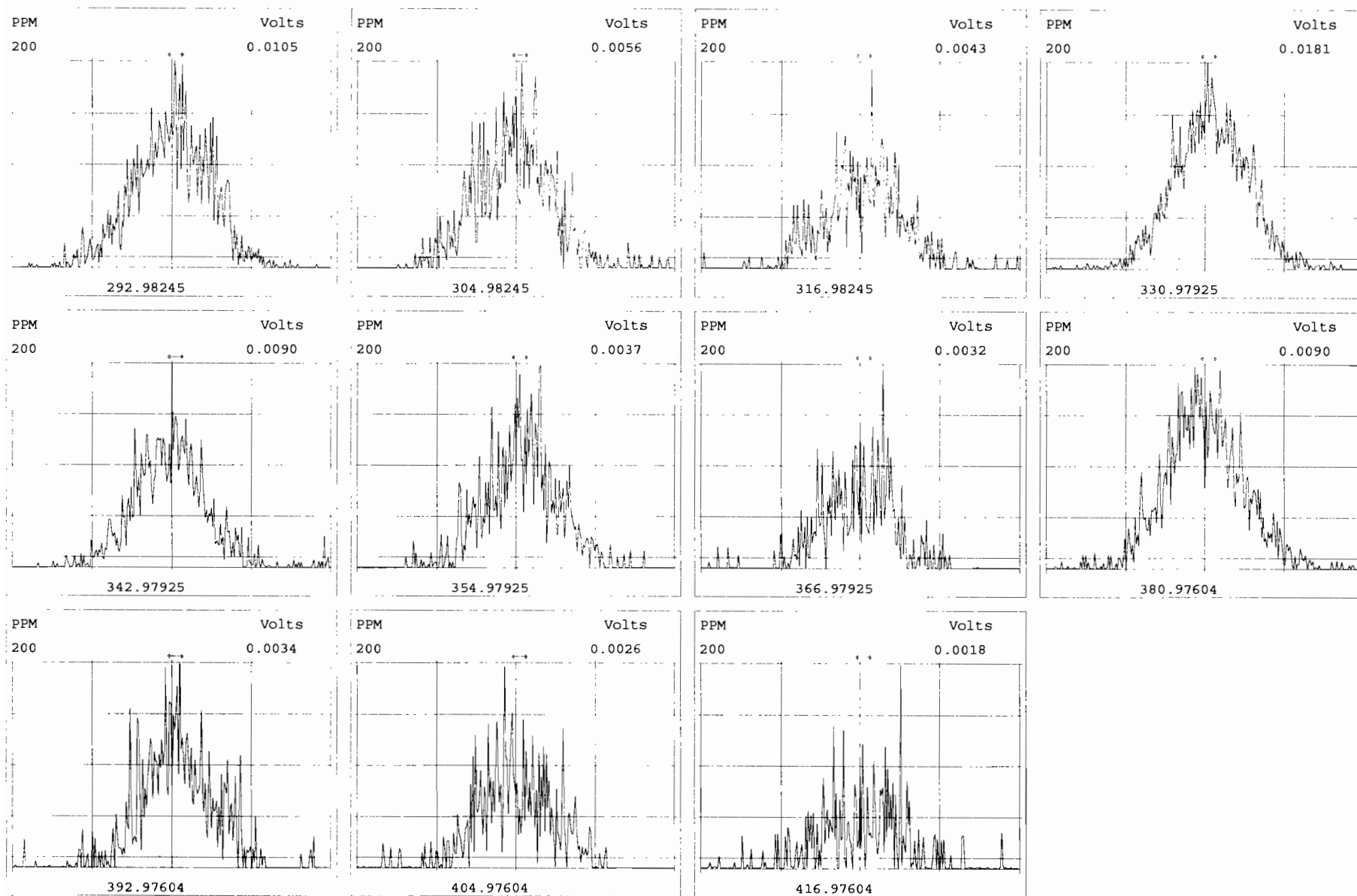
Reviewed
by
Analyst: CT

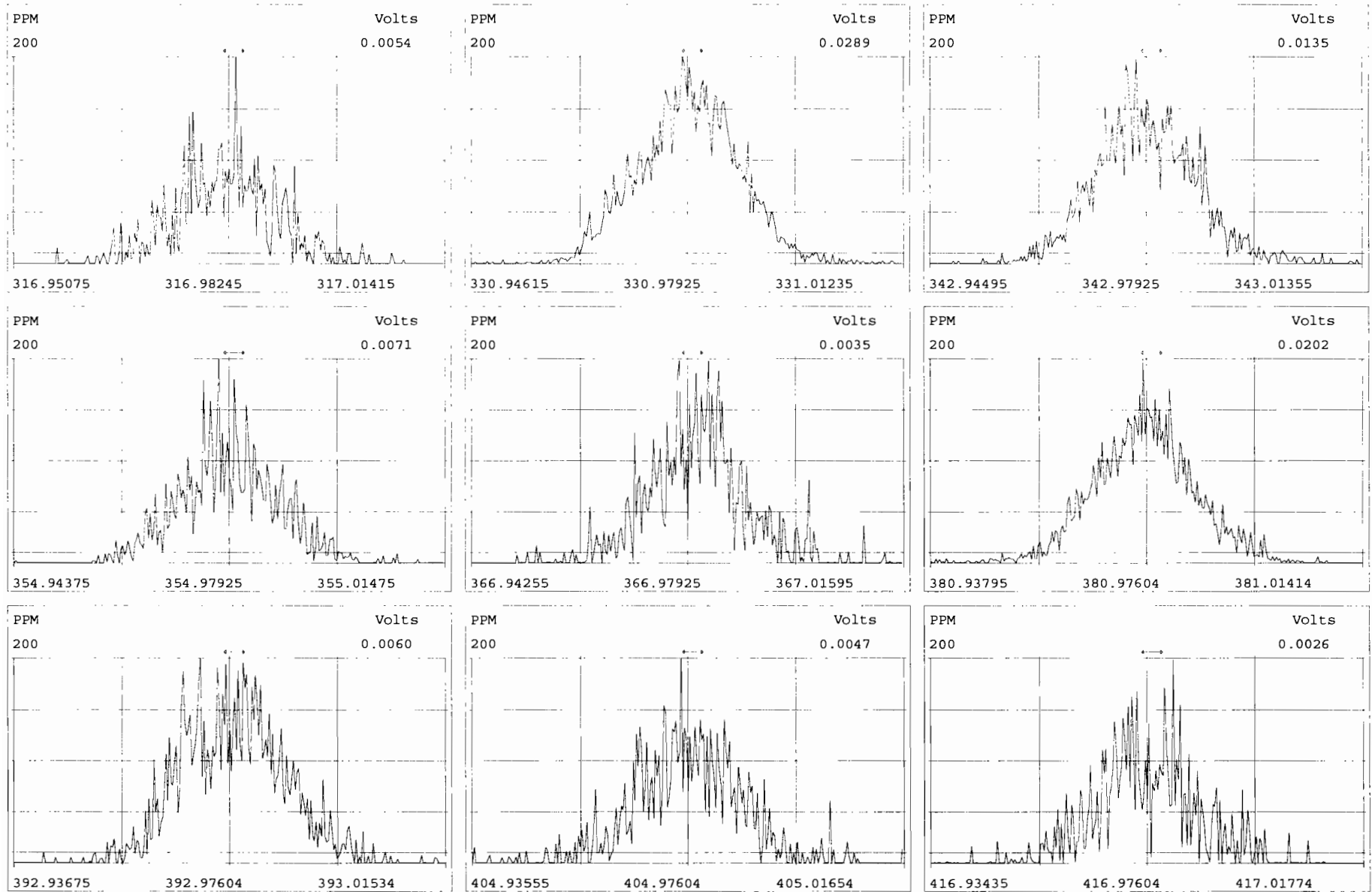
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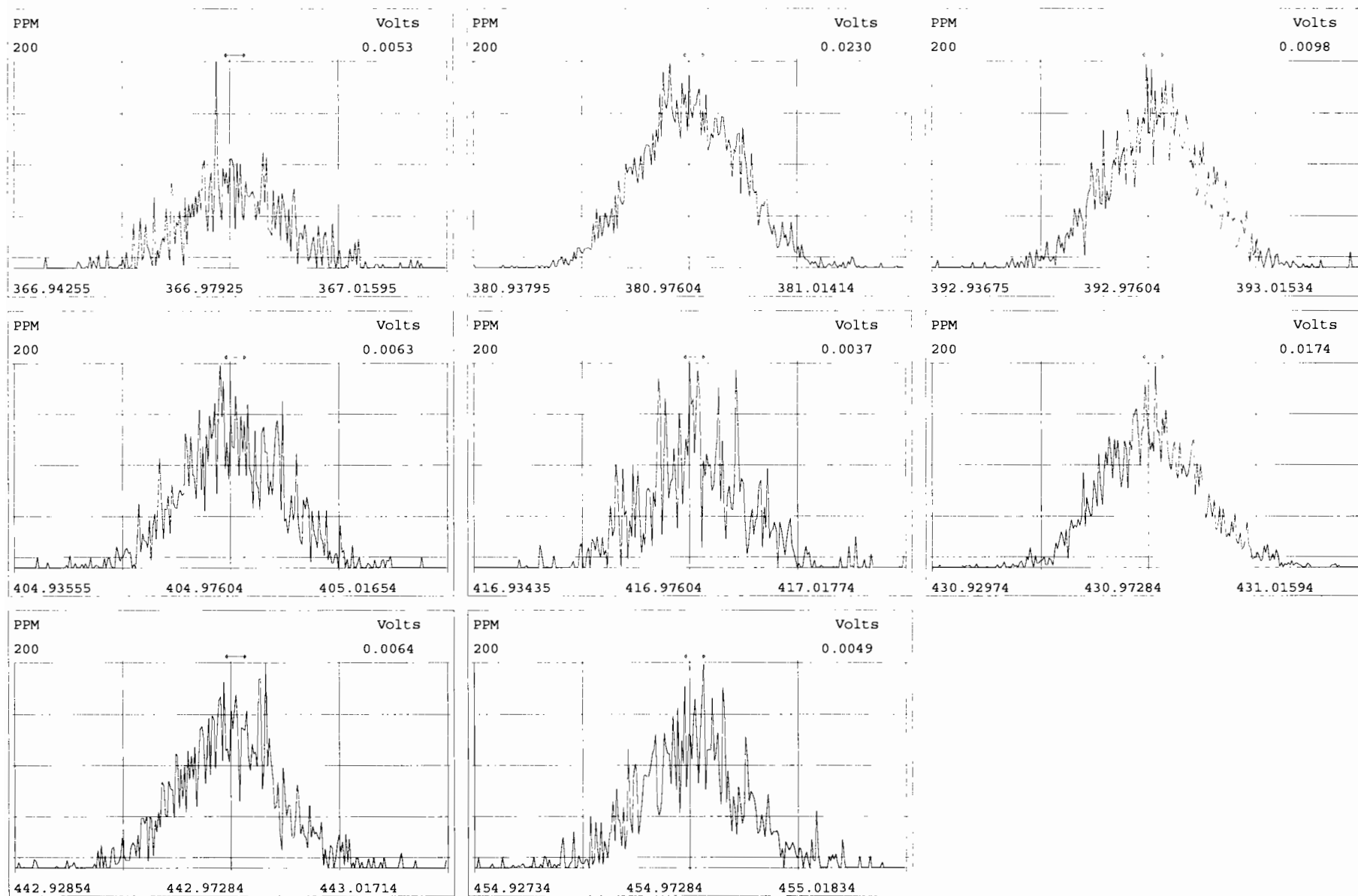
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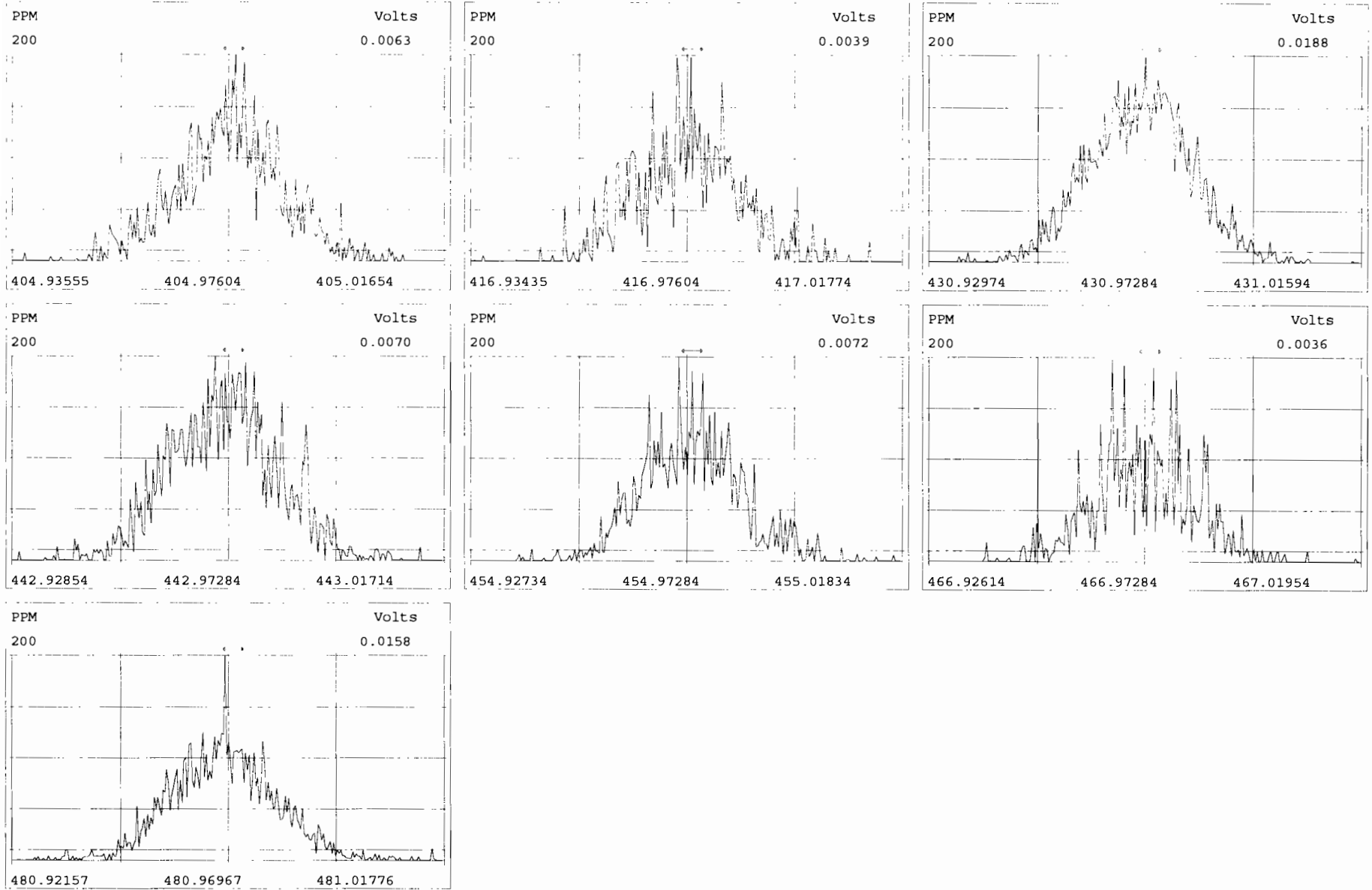
Vista Analytical Laboratory - Injection Log Run file: 191127D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

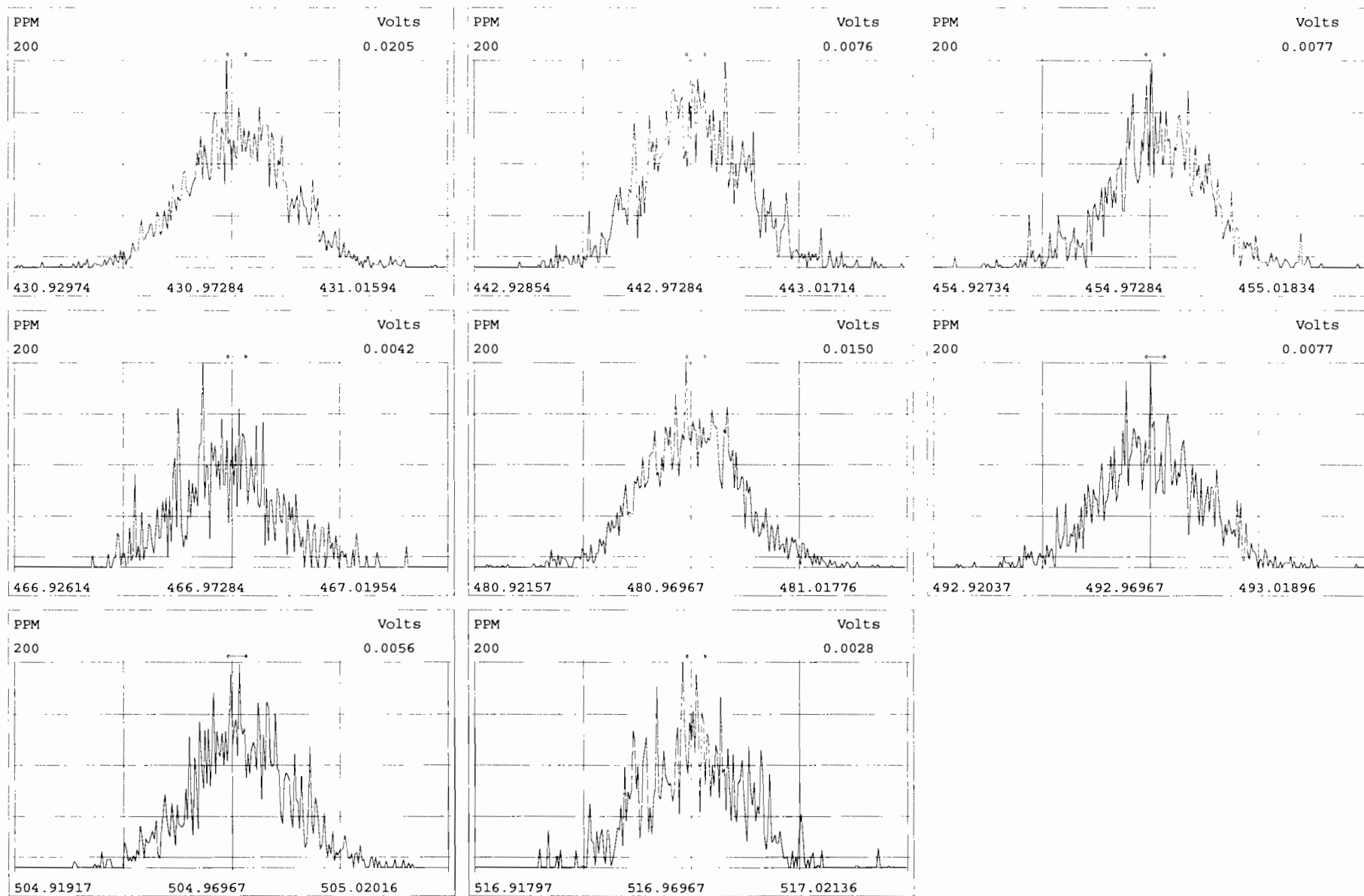
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191127D1	3	B9K0098-BS1	DB	27-NOV-19	17:30:41	ST191127D1-1	NA
191127D1	4	SOLVENT BLANK	DB	27-NOV-19	18:18:26	ST191127D1-1	NA
191127D1	5	B9K0089-BLK1	DB	27-NOV-19	19:06:16	ST191127D1-1	NA
191127D1	6	B9K0098-BLK1	DB	27-NOV-19	19:54:02	ST191127D1-1	NA
191127D1	7	1903844-11	DB	27-NOV-19	20:41:52	ST191127D1-1	NA
191127D1	8	1903918-01	DB	27-NOV-19	21:29:37	ST191127D1-1	NA
191127D1	9	1903844-01	DB	27-NOV-19	22:17:22	ST191127D1-1	NA
191127D1	10	1903844-02	DB	27-NOV-19	23:05:05	ST191127D1-1	NA
191127D1	11	1903844-03	DB	27-NOV-19	23:52:49	ST191127D1-1	NA
191127D1	12	1903844-04	DB	28-NOV-19	00:39:57	ST191127D1-1	NA
191127D1	13	1903844-05	DB	28-NOV-19	01:27:46	ST191127D1-1	NA
191127D1	14	1903565-17RE2@5X	DB	28-NOV-19	02:15:30	ST191127D1-1	NA
191127D1	15	1903565-18RE2@5X	DB	28-NOV-19	03:03:14	ST191127D1-1	NA



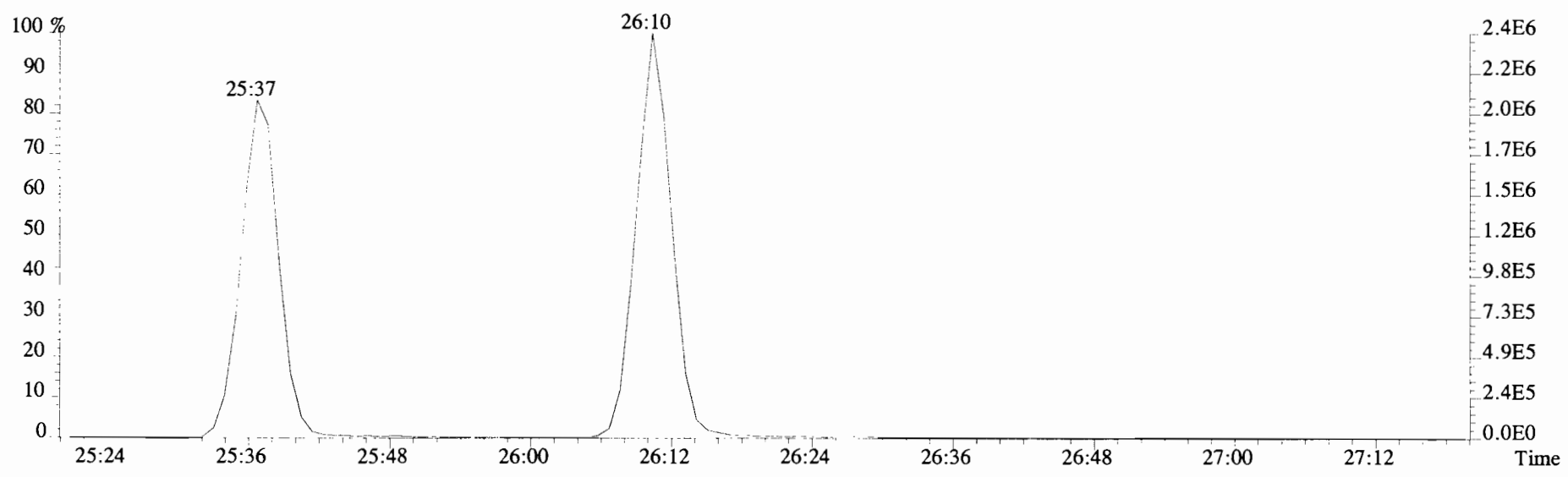
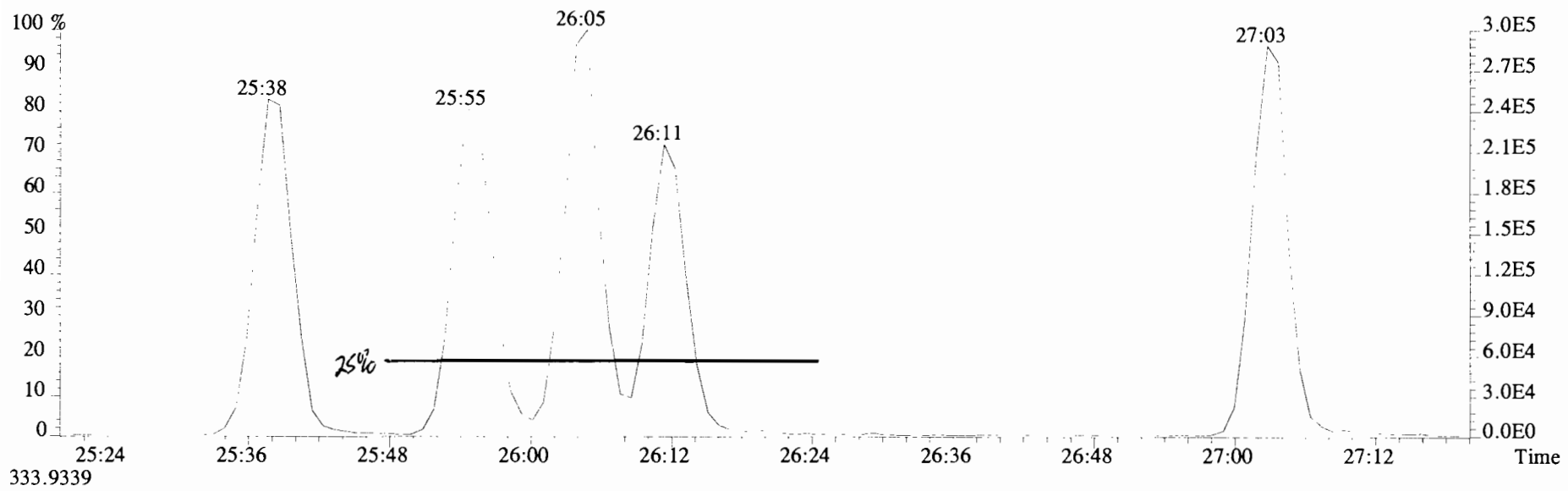




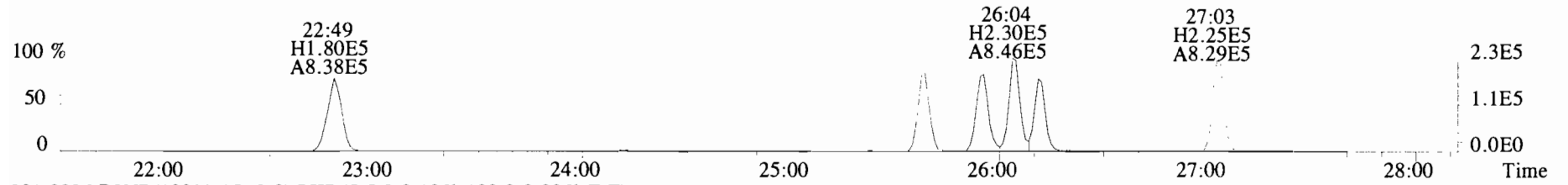




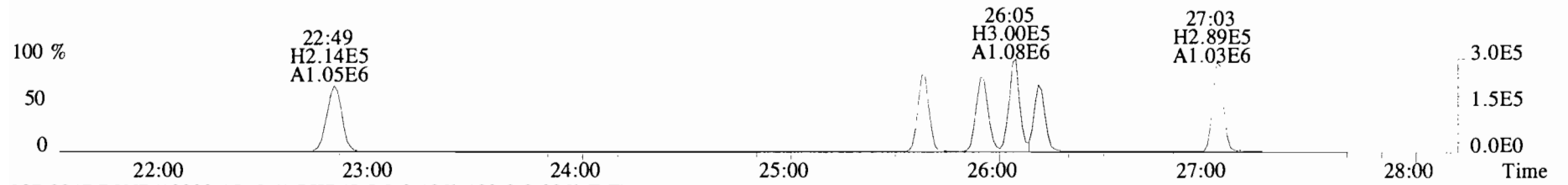
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321.8936



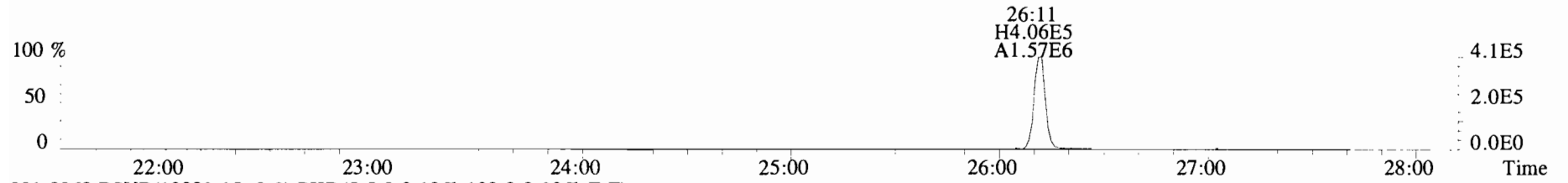
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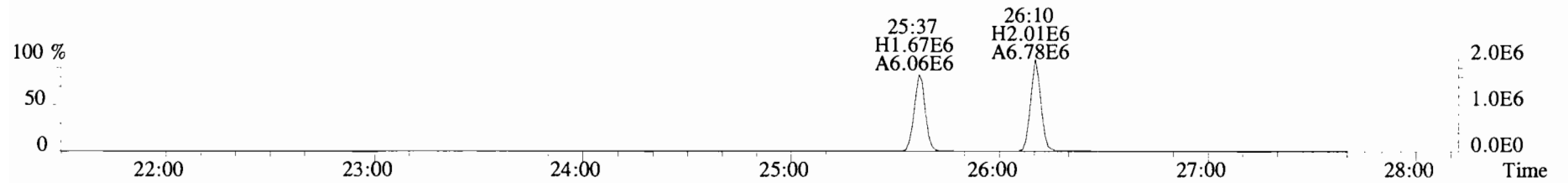
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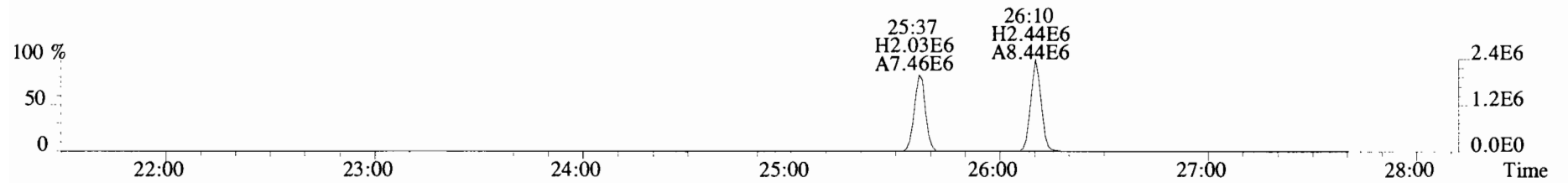
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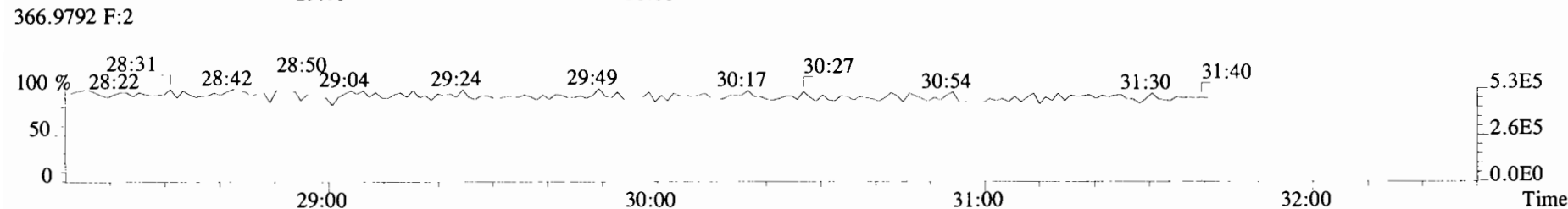
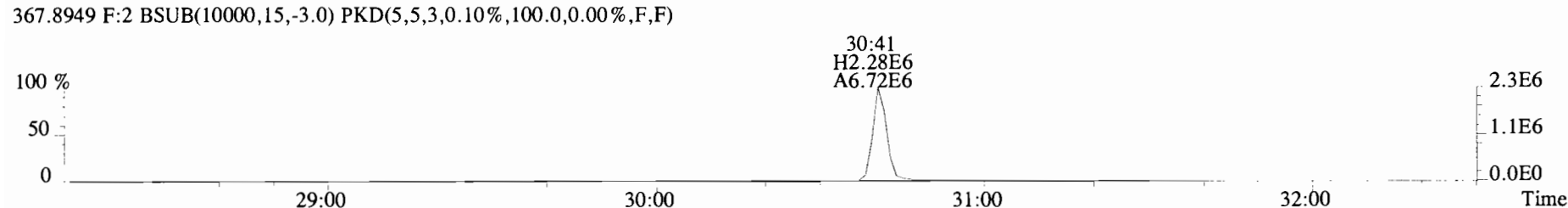
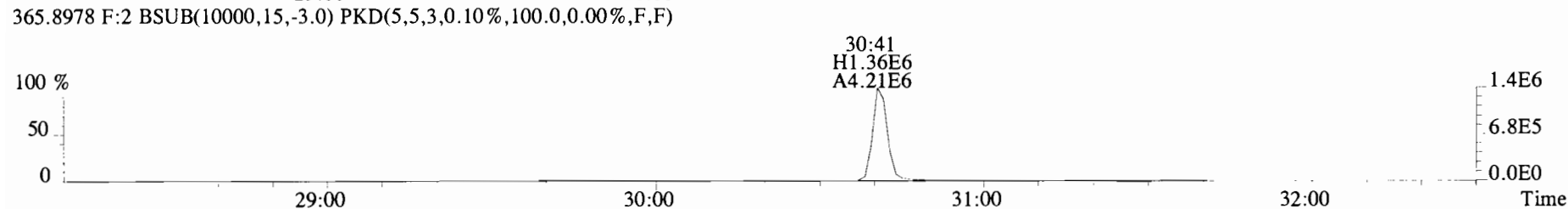
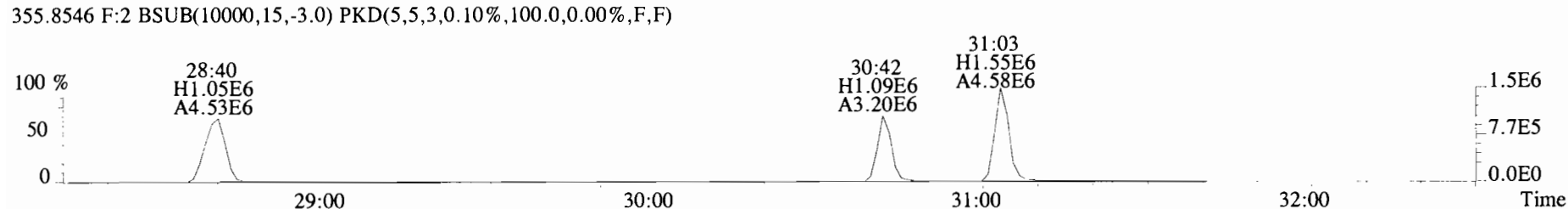
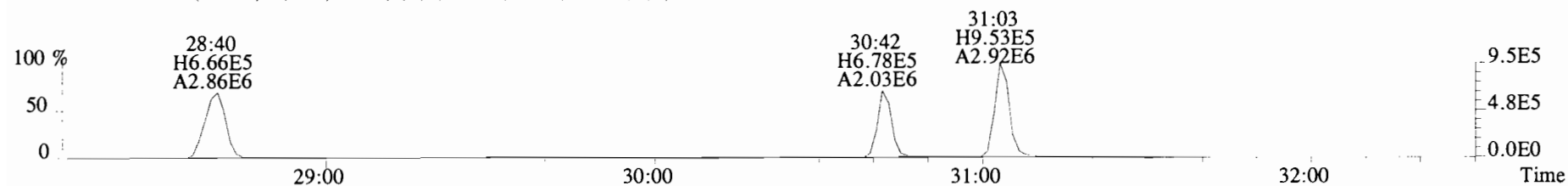
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



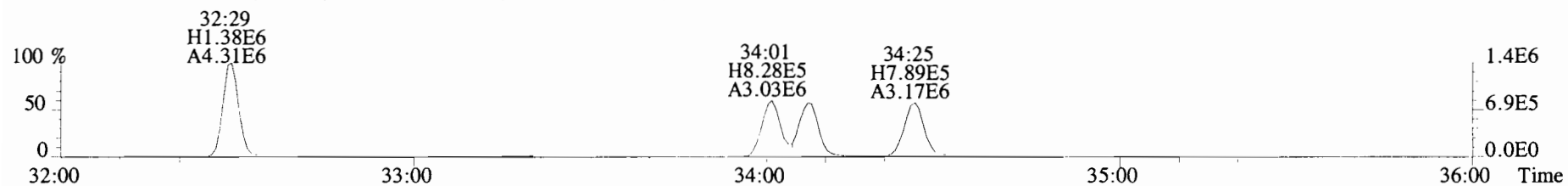
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



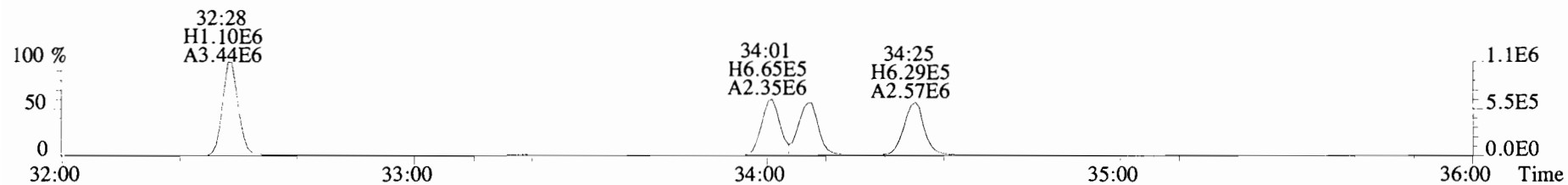
File:191127D1 #1-211 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



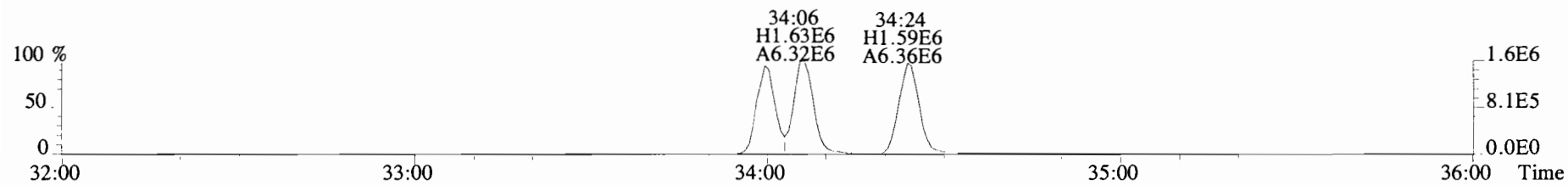
File:191127D1 #1-384 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



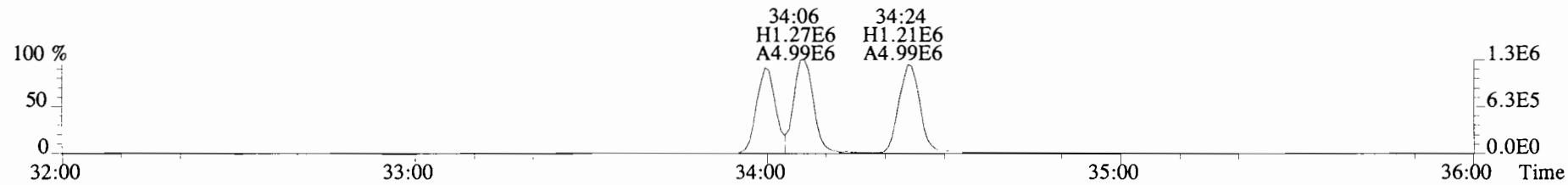
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



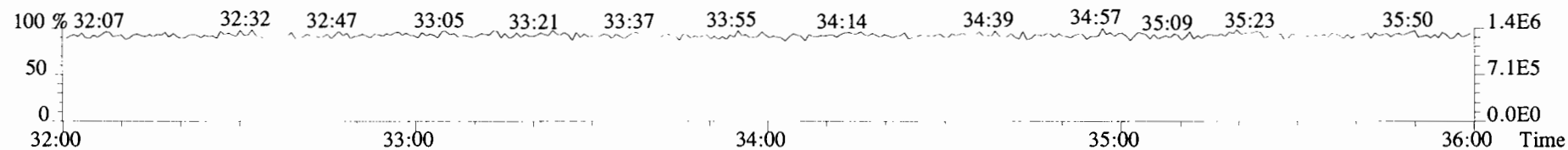
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



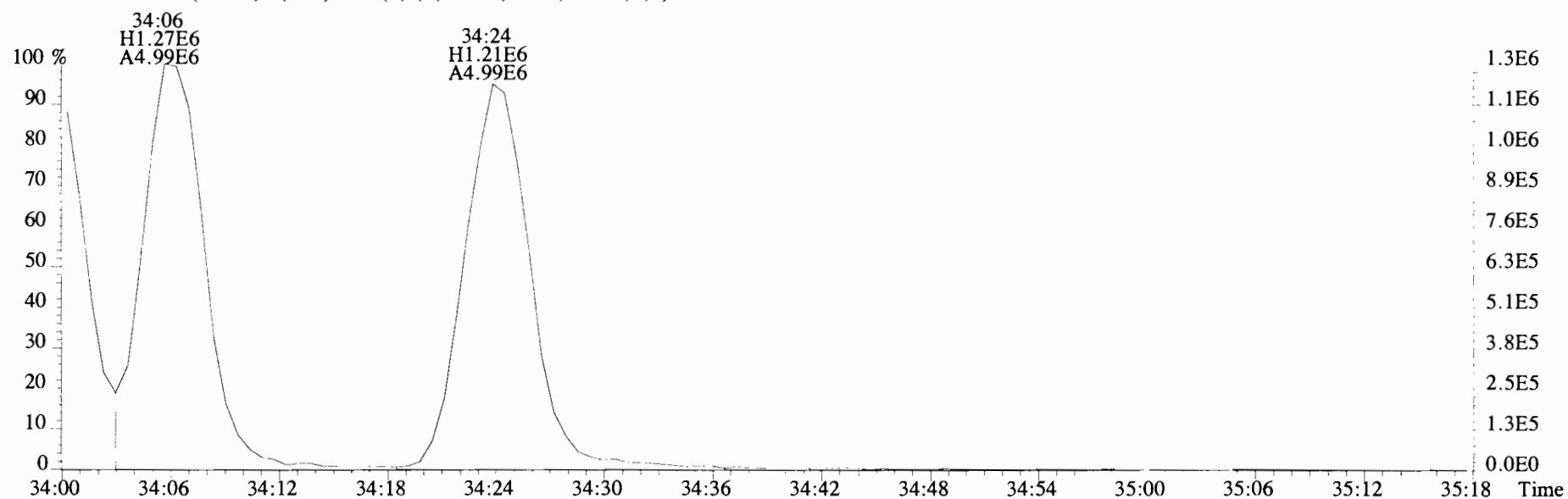
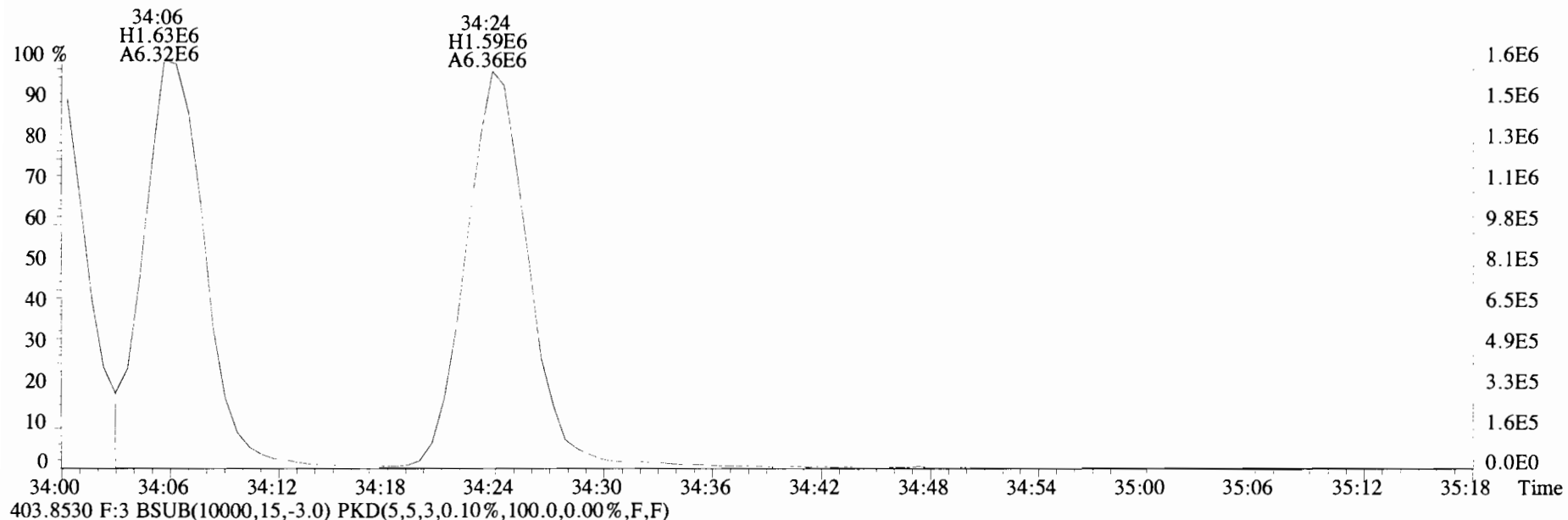
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



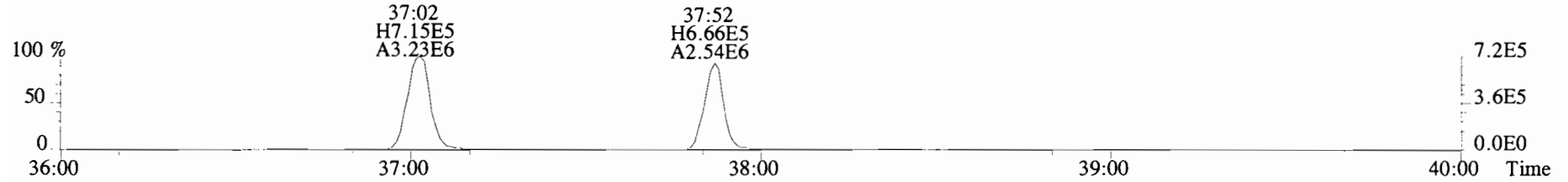
392.9760 F:3



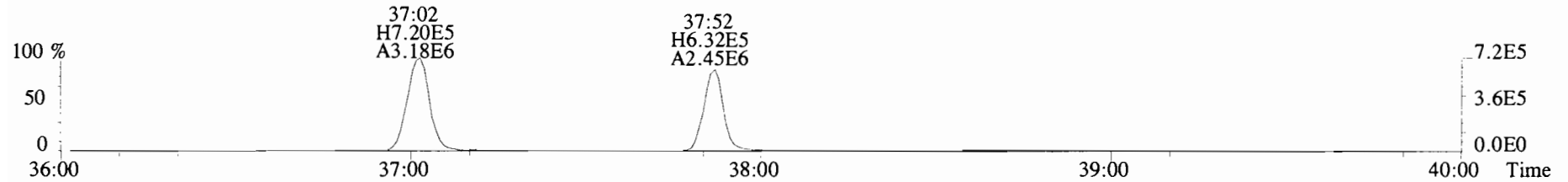
File:191127D1 #1-384 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



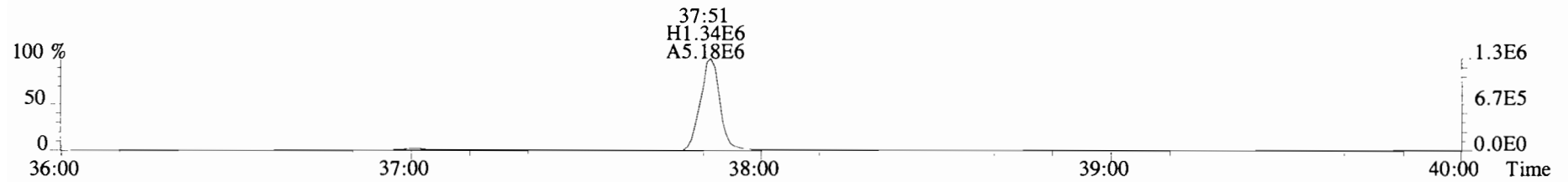
File:191127D1 #1-356 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



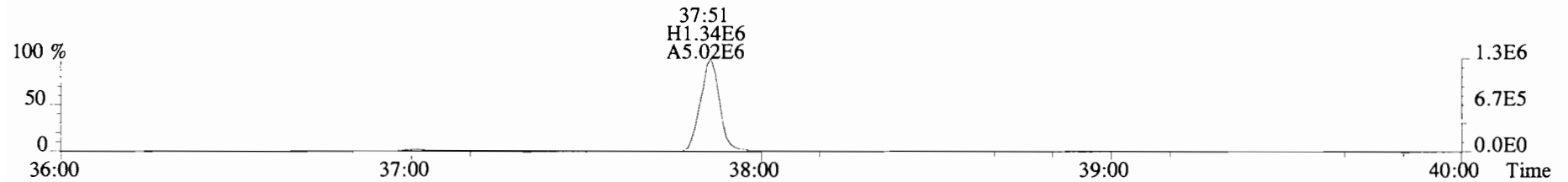
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



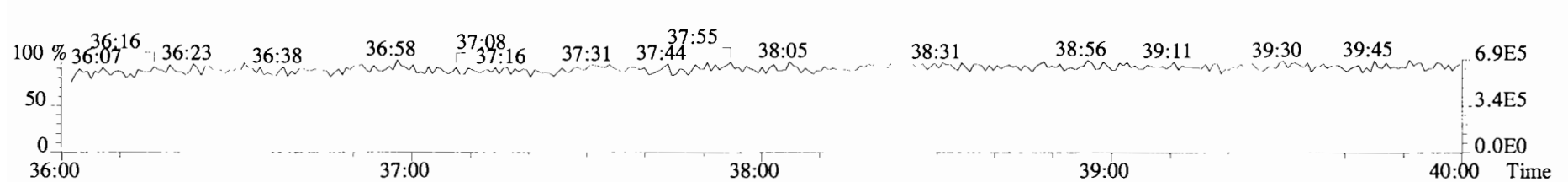
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



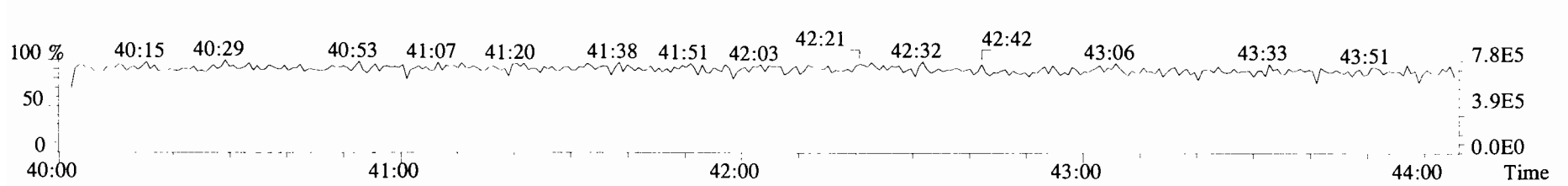
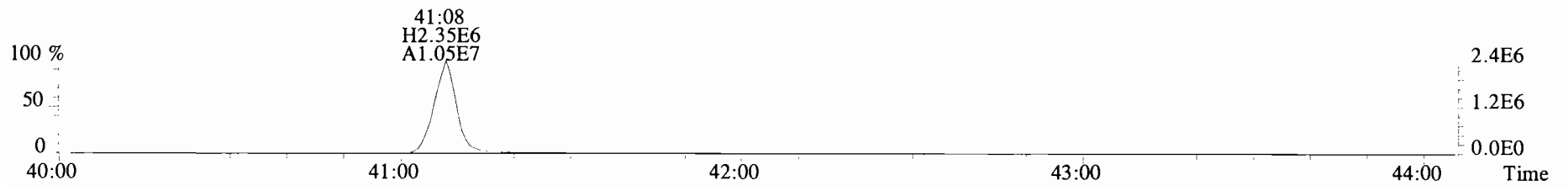
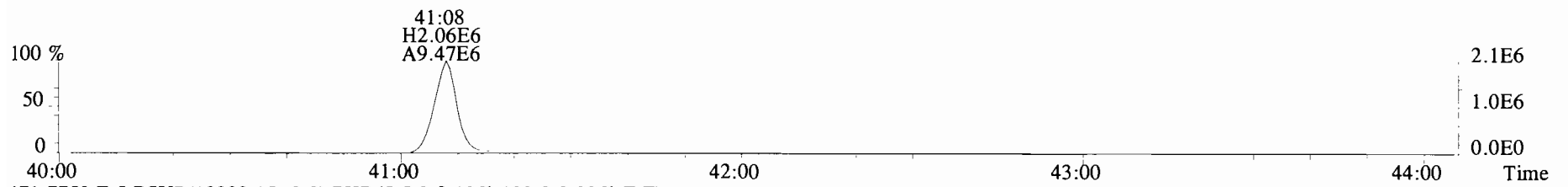
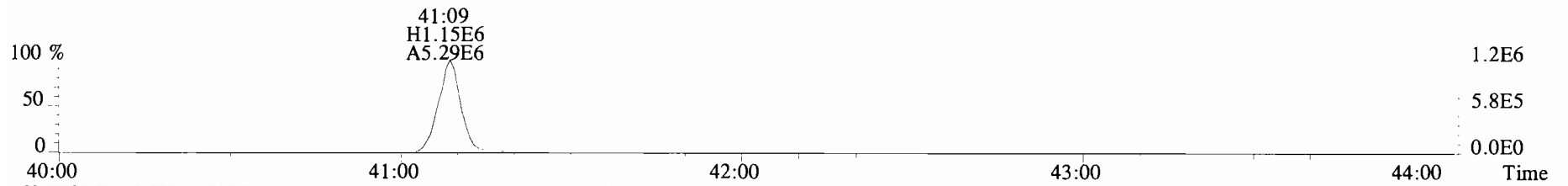
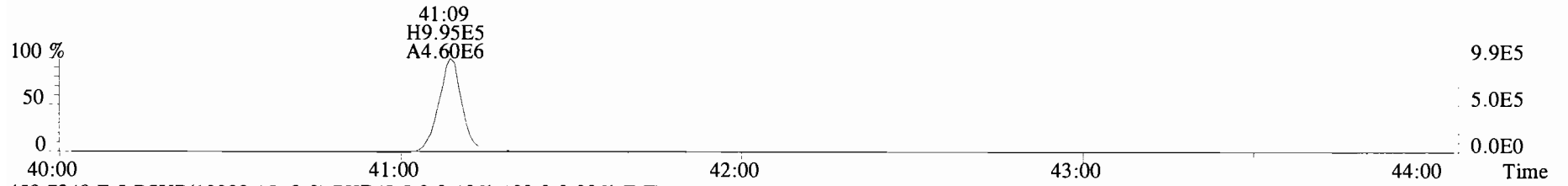
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



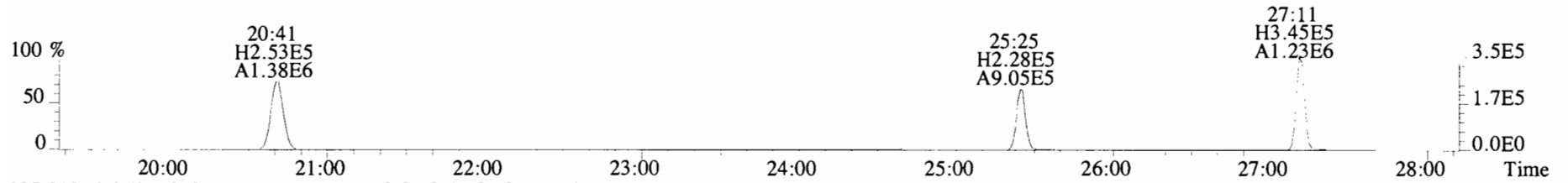
454.9728 F:4



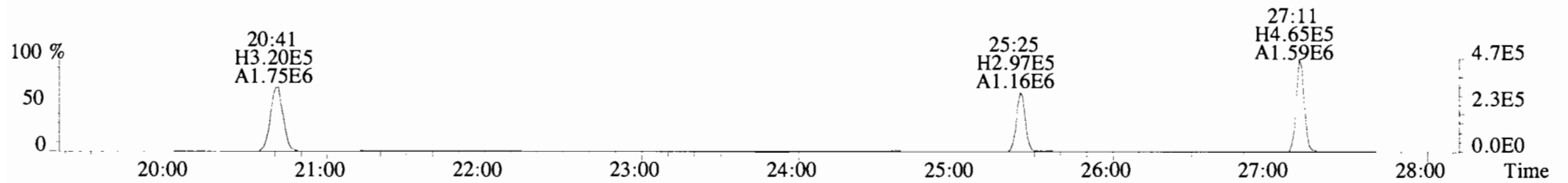
File:191127D1 #1-431 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



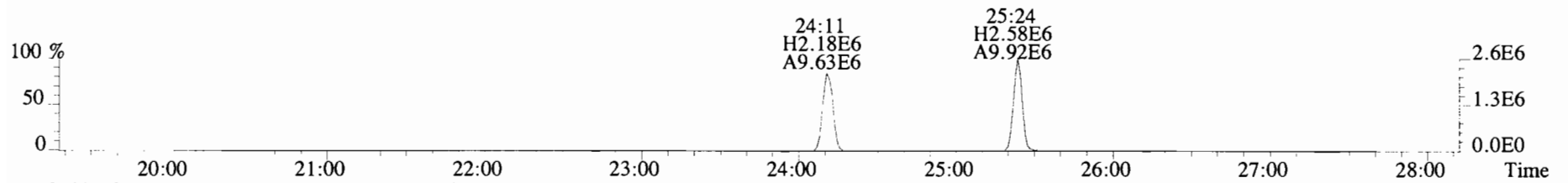
File:191127D1 #1-492 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



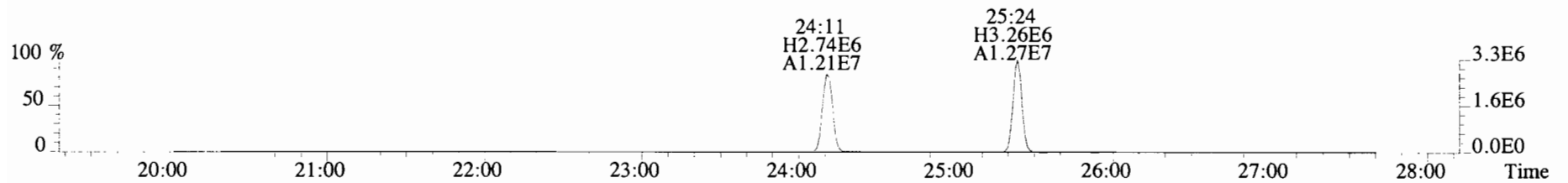
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



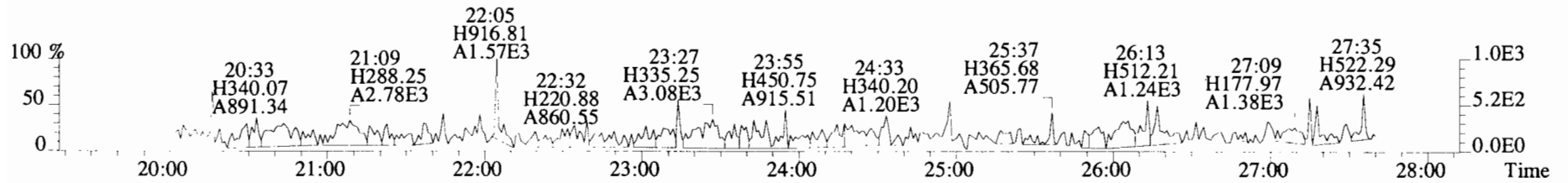
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



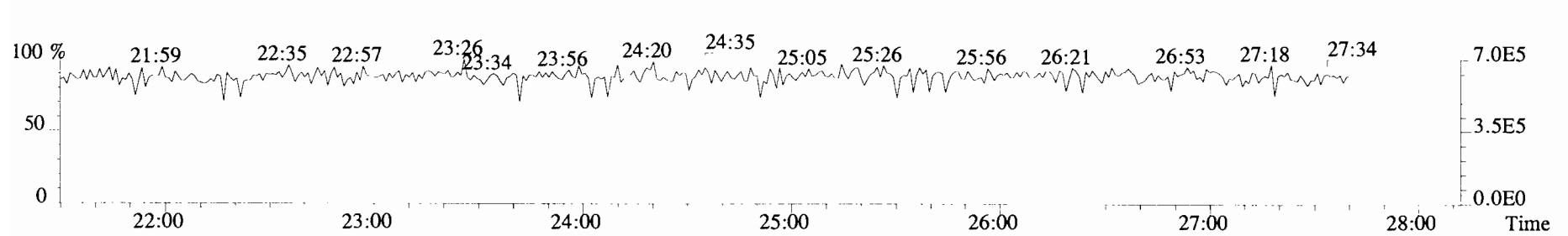
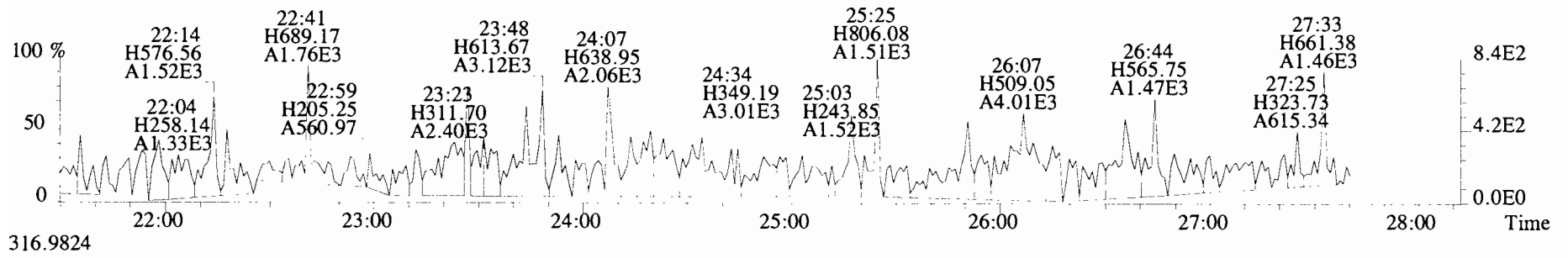
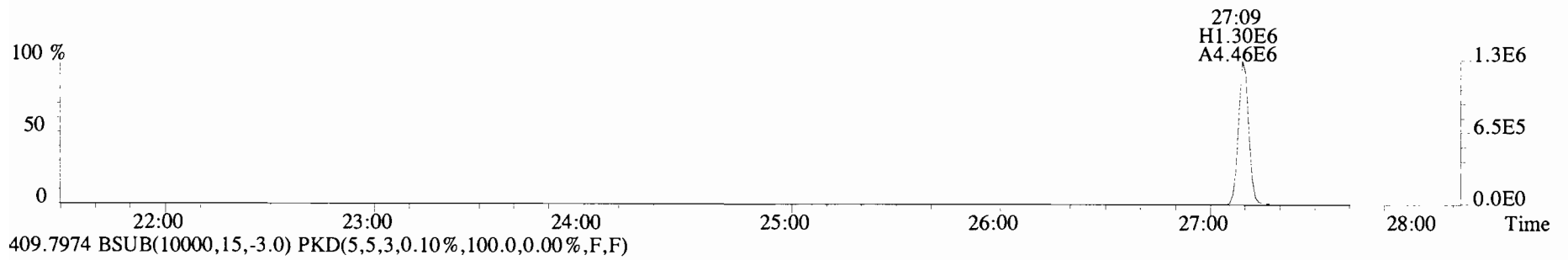
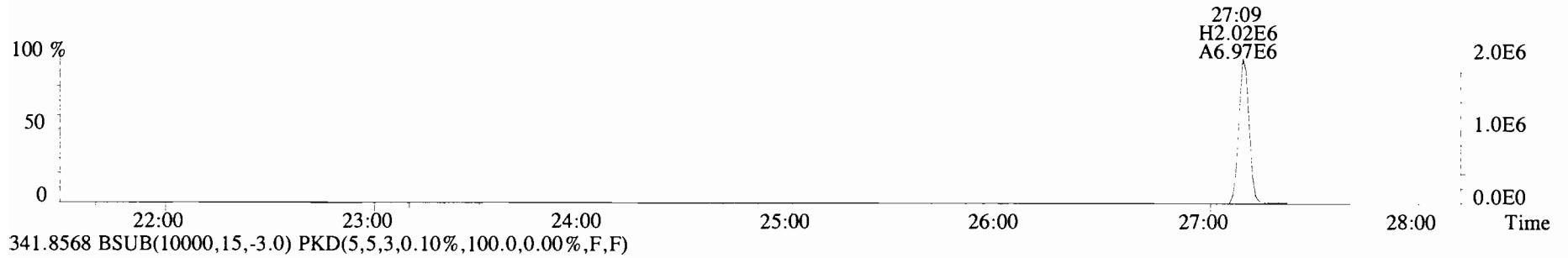
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



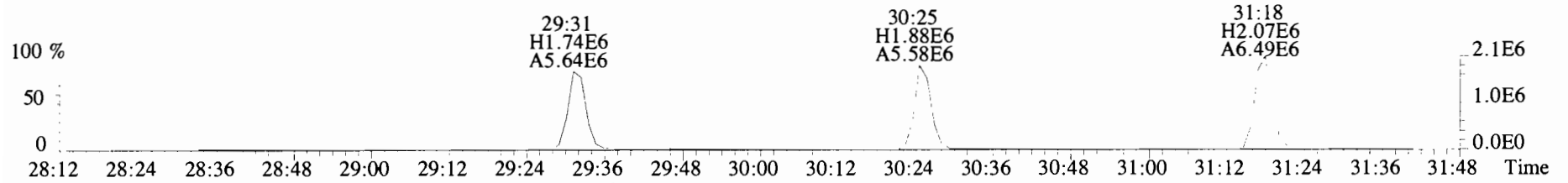
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



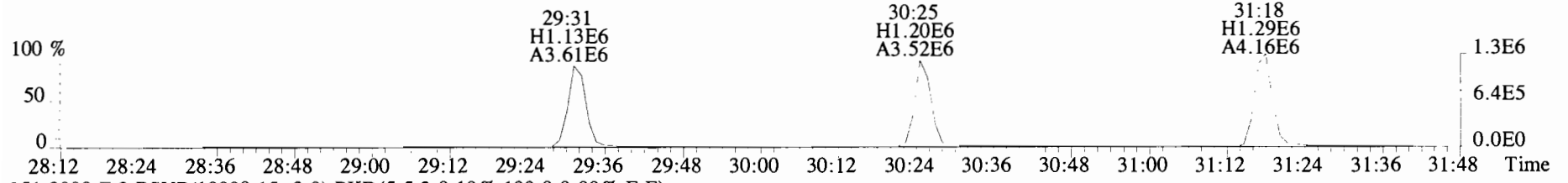
File:191127D1 #1-492 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



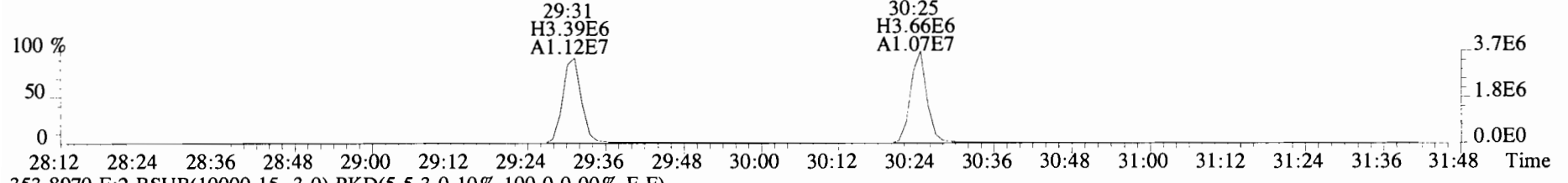
File:191127D1 #1-211 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



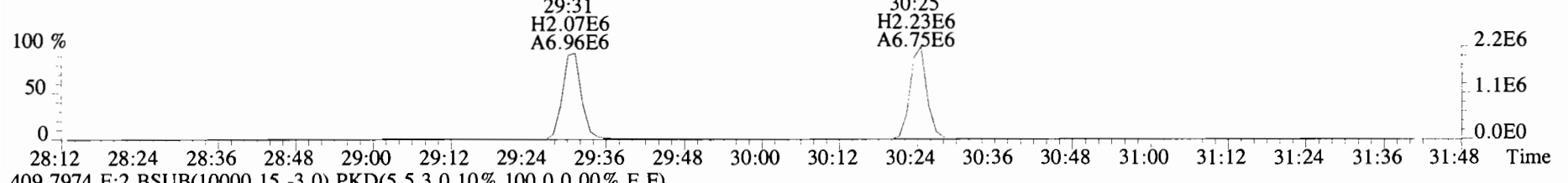
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



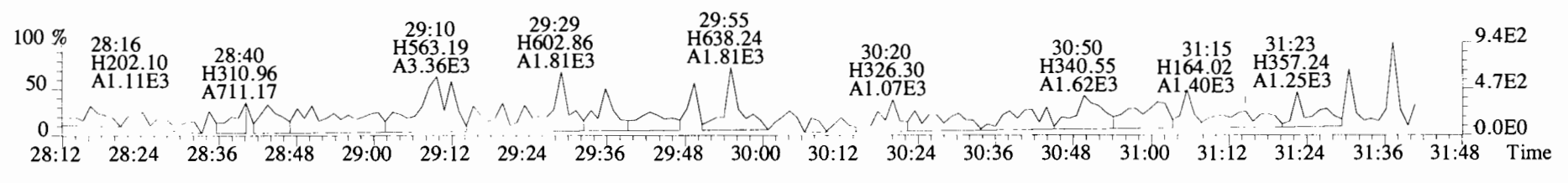
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



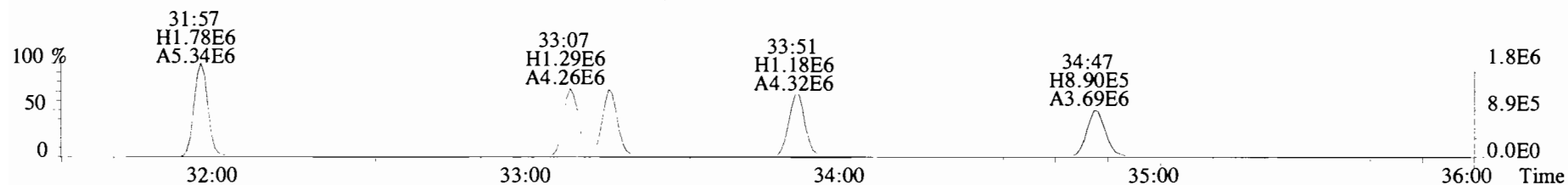
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



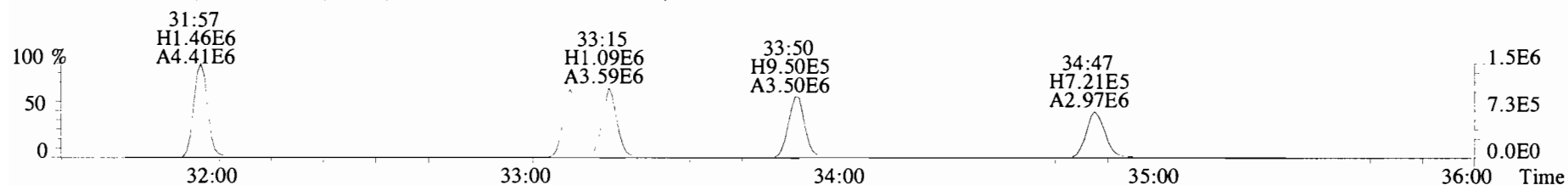
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



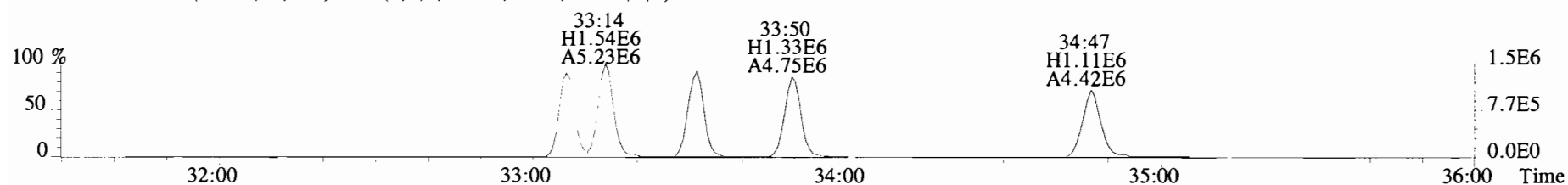
File:191127D1 #1-384 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



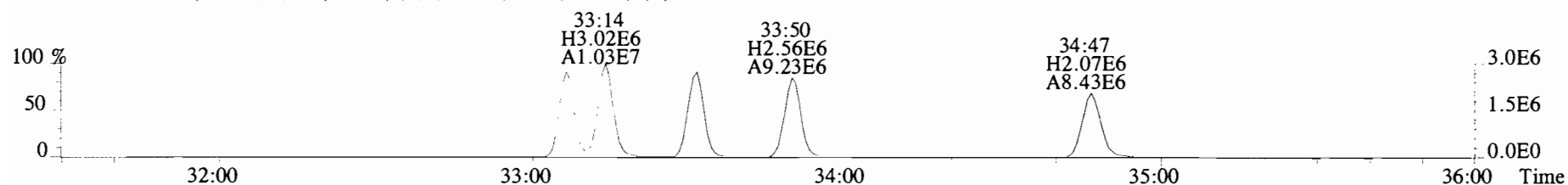
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



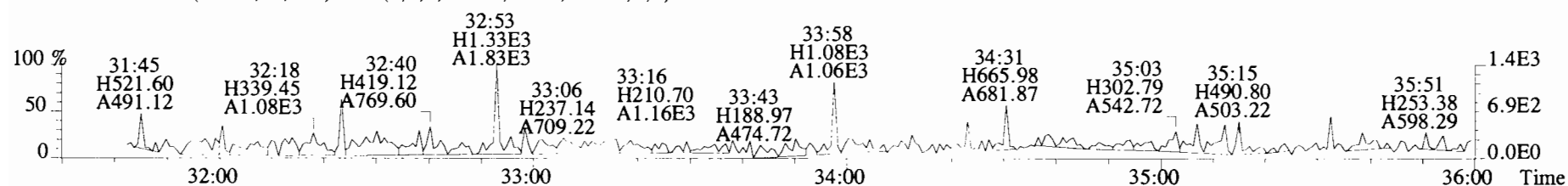
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



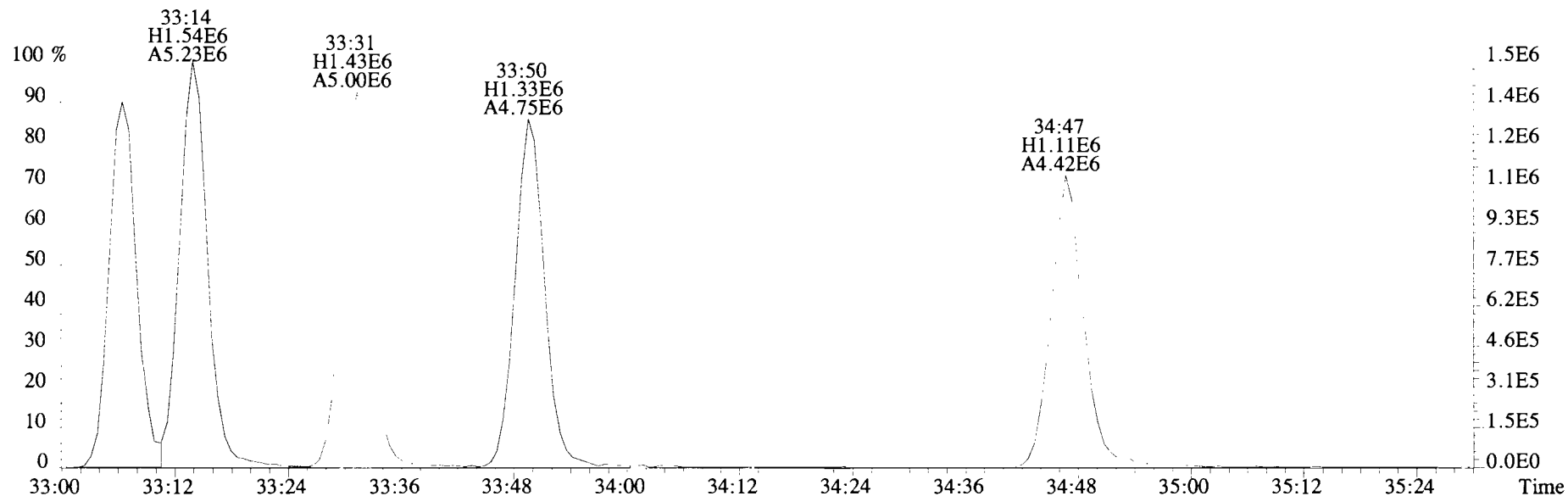
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



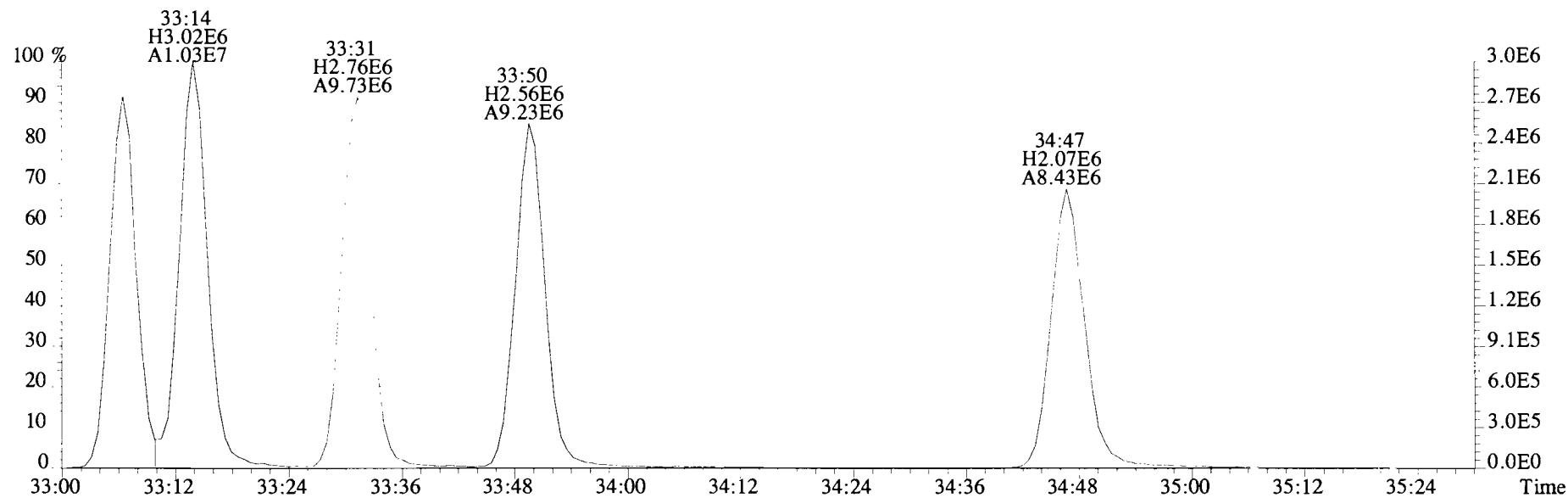
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



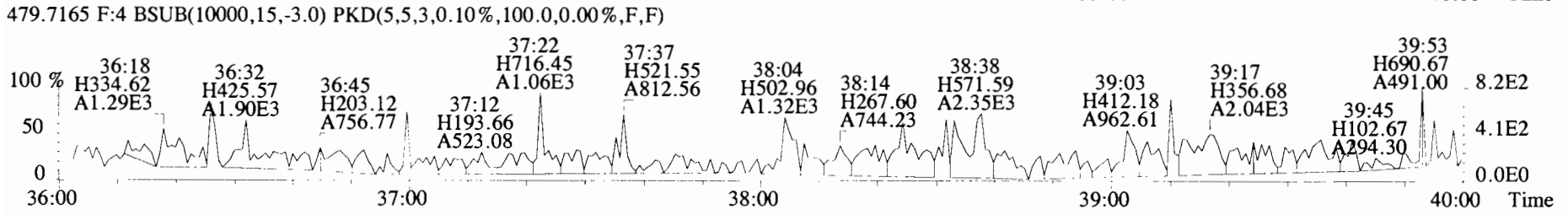
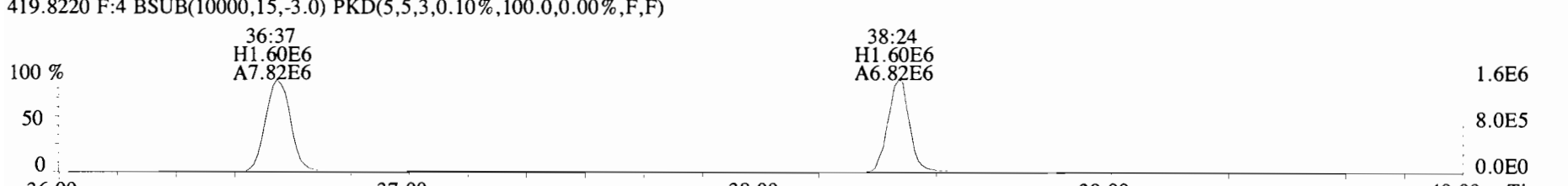
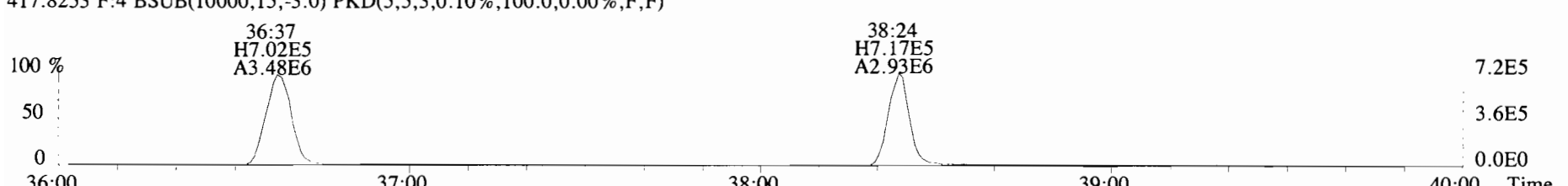
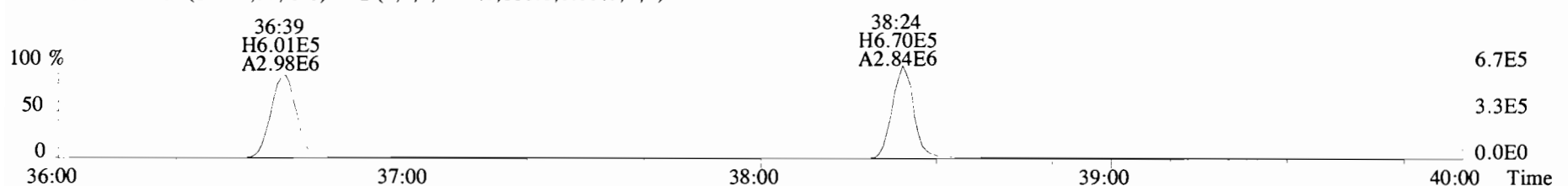
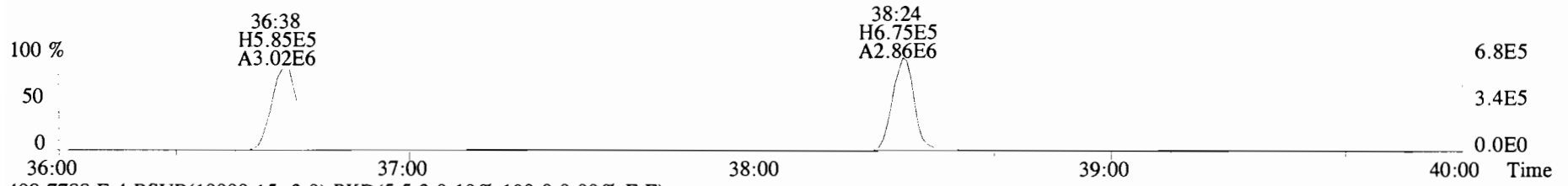
File:191127D1 #1-384 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



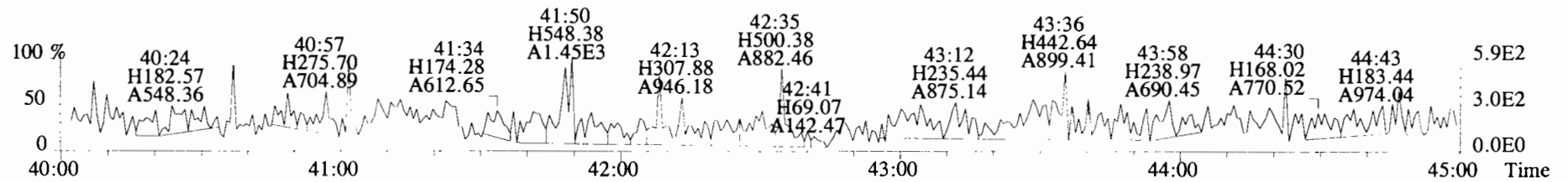
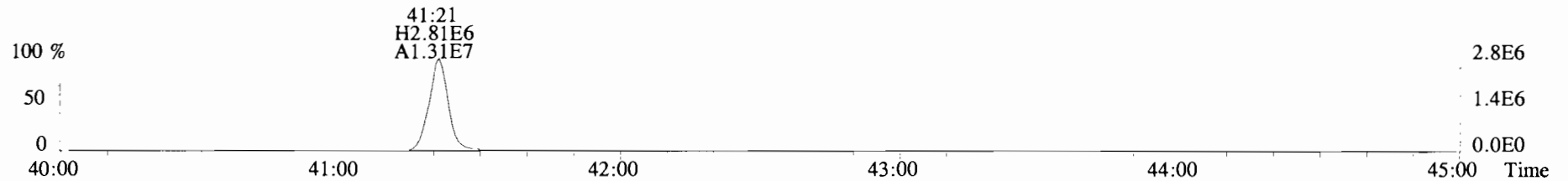
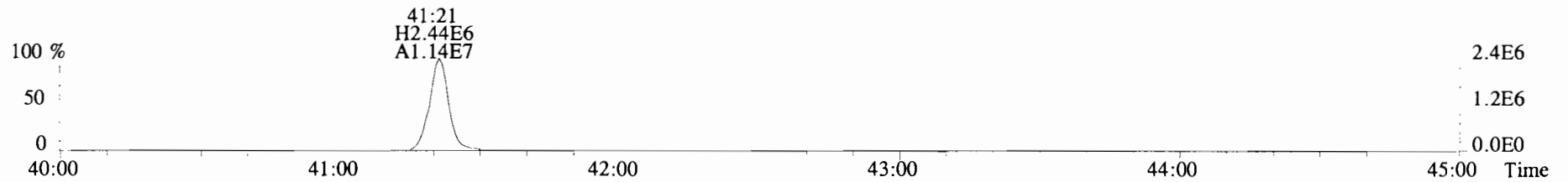
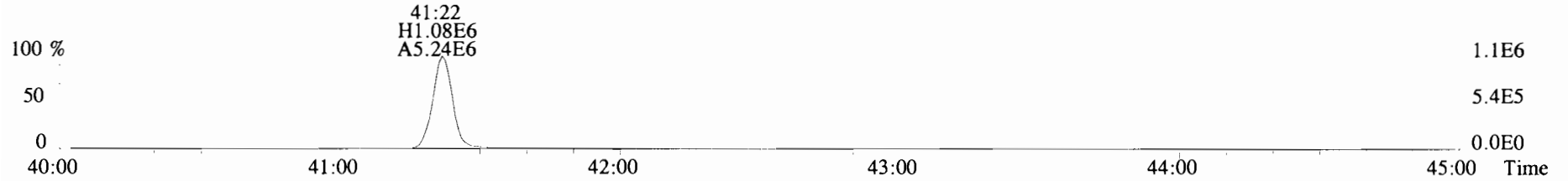
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

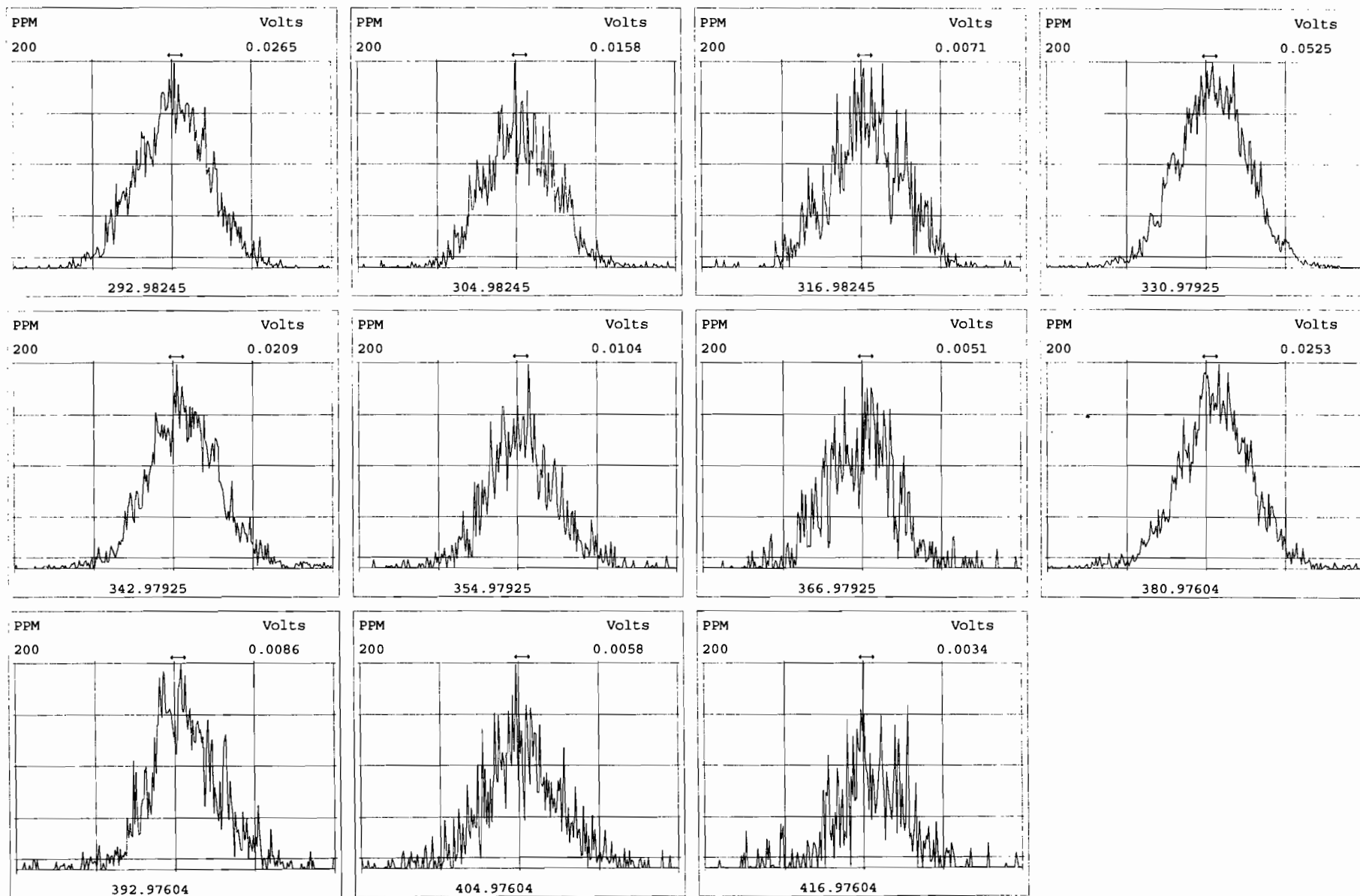


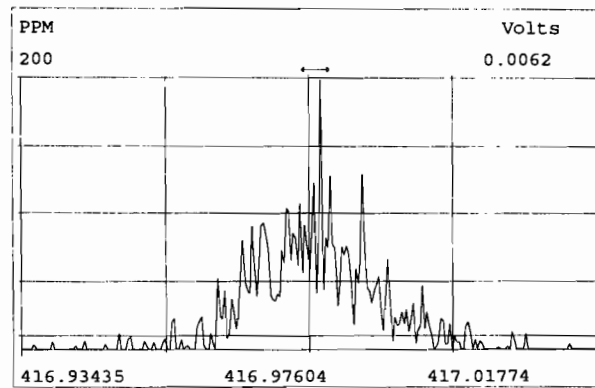
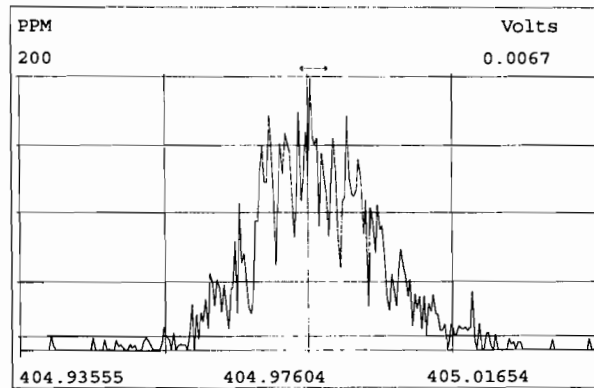
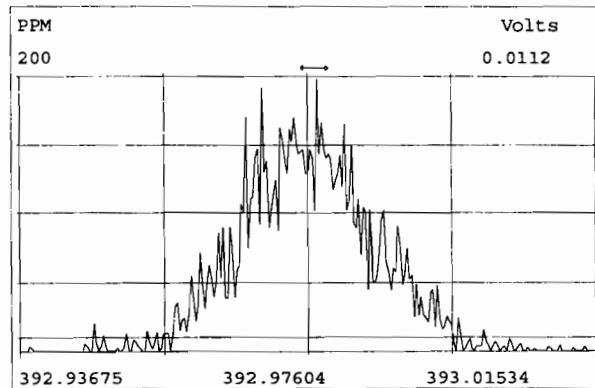
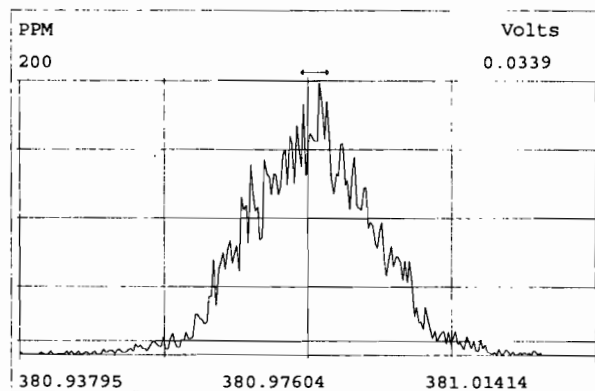
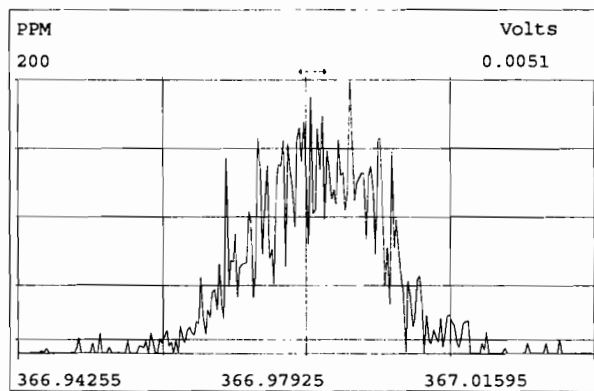
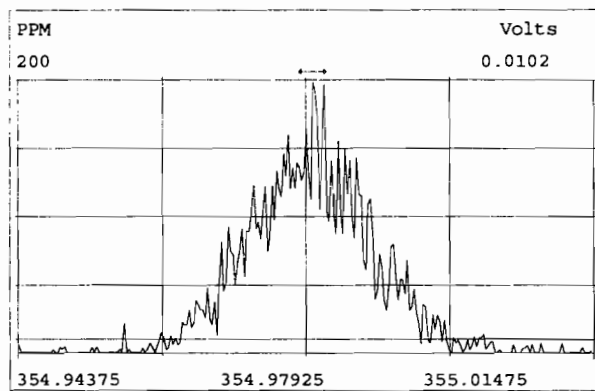
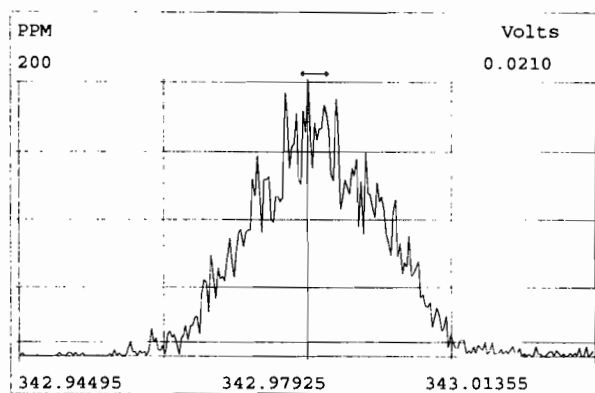
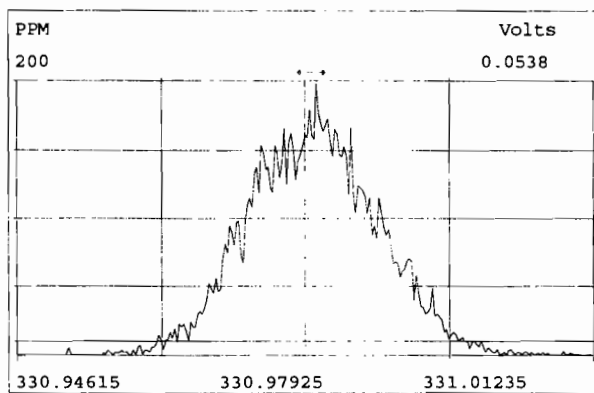
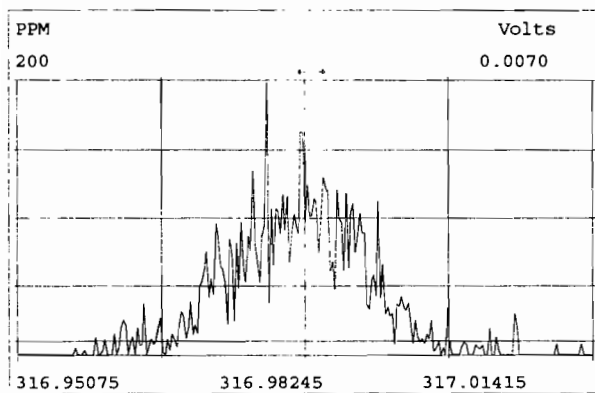
File:191127D1 #1-356 Acq:27-NOV-2019 15:55:01 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

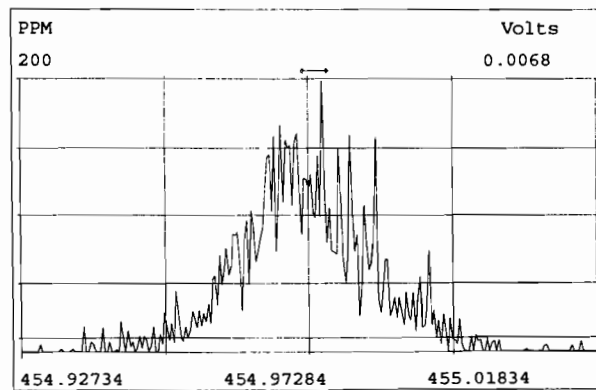
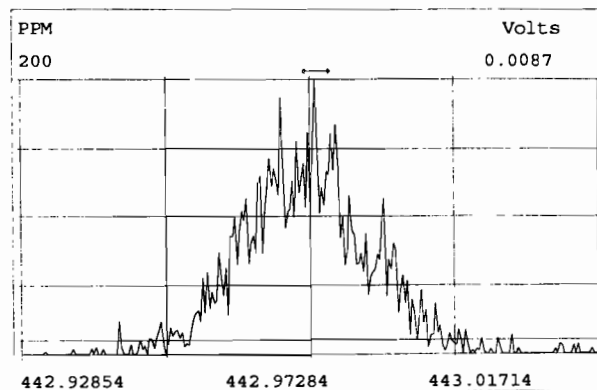
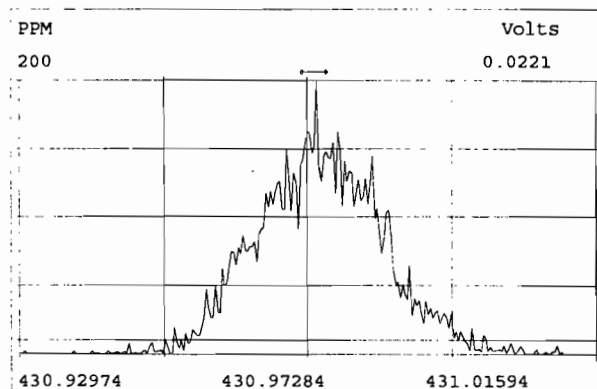
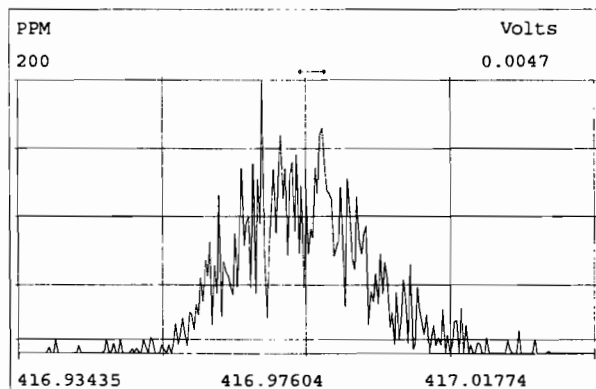
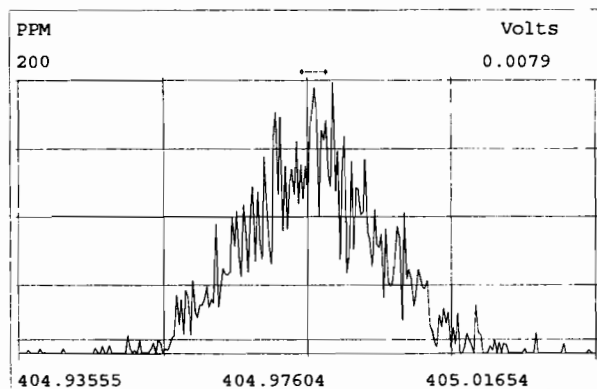
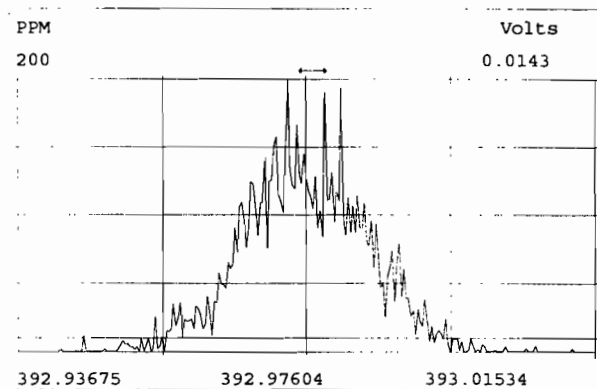
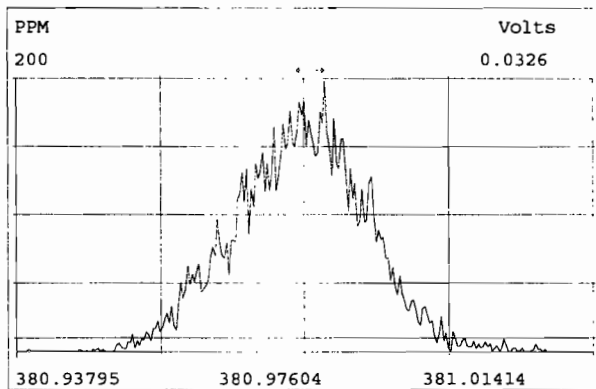
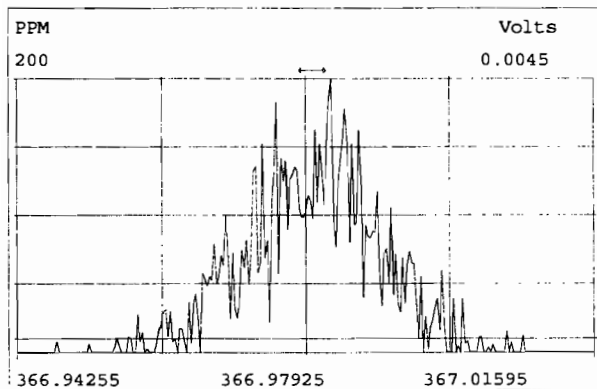


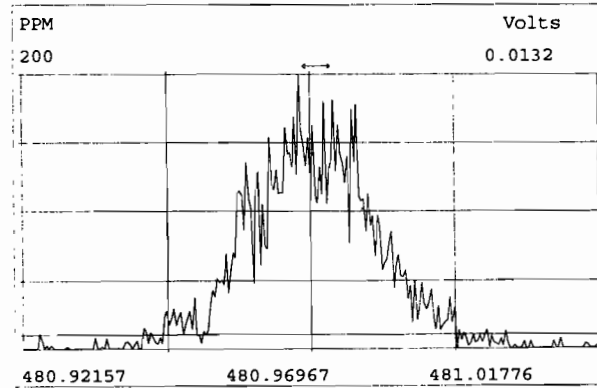
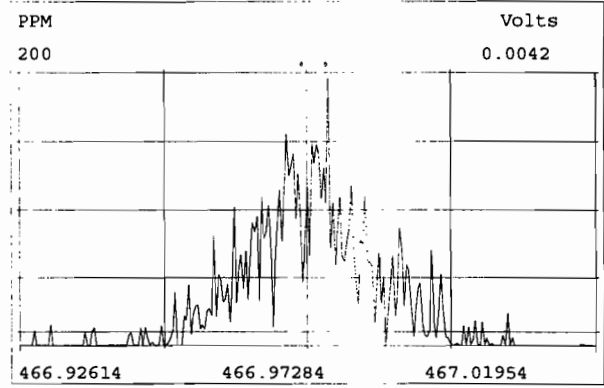
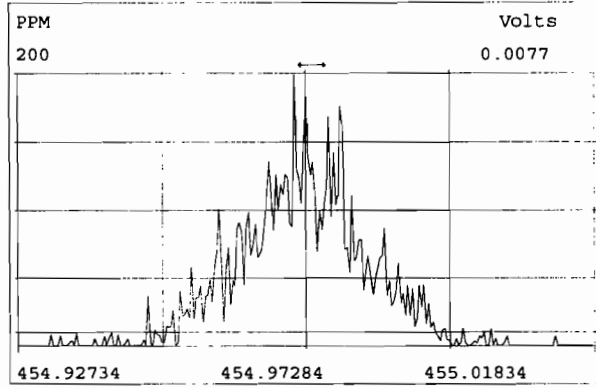
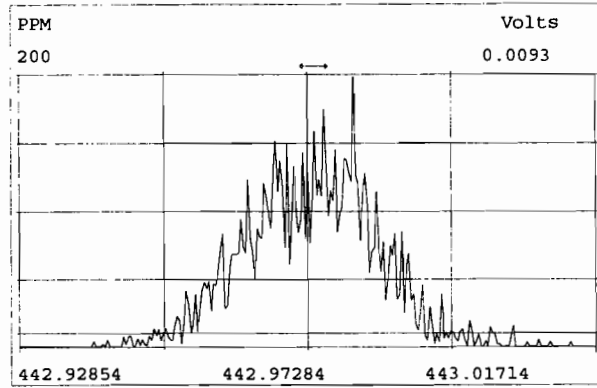
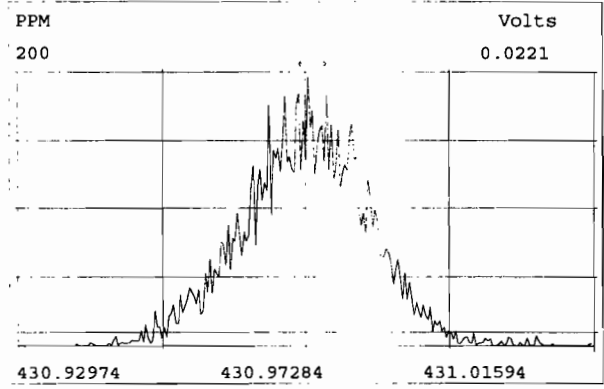
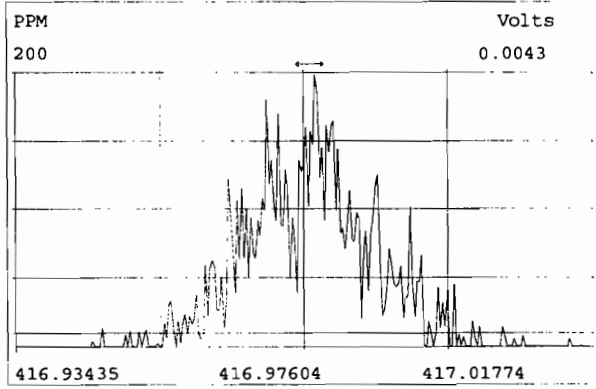
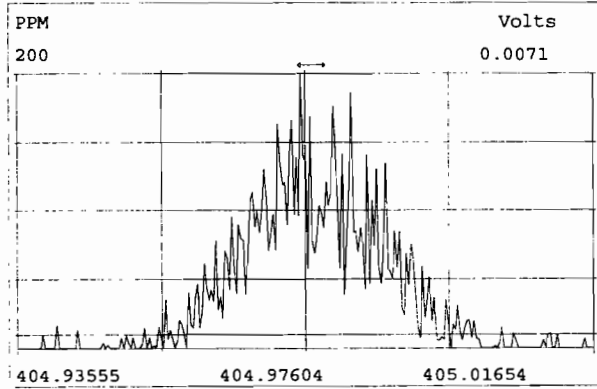
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Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:ST191127D1-1 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

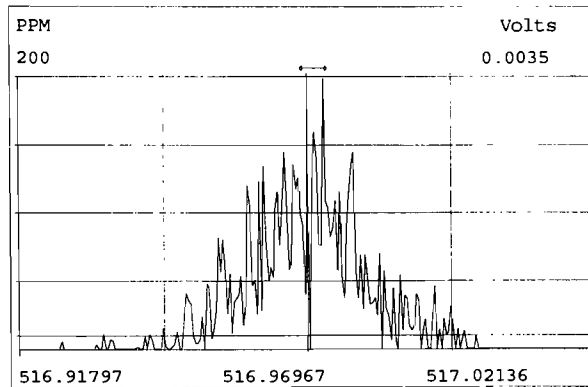
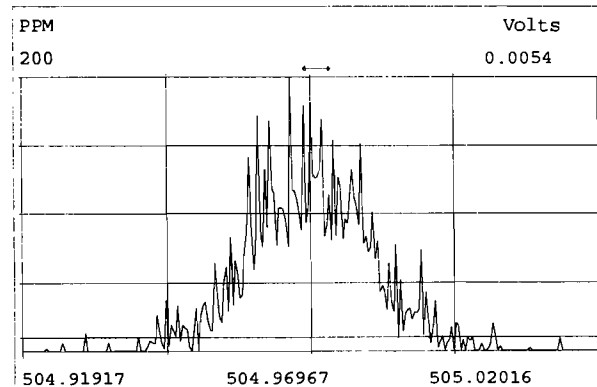
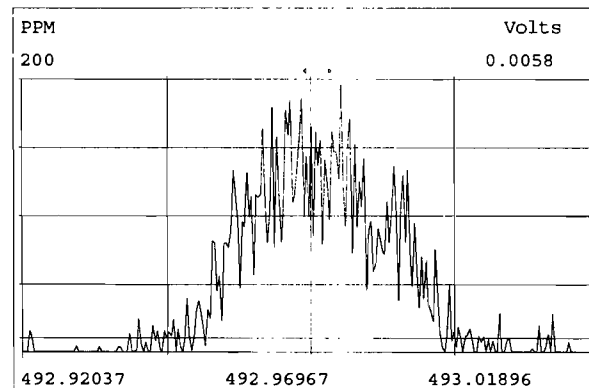
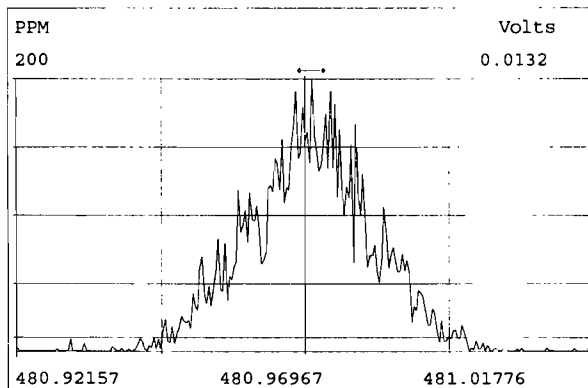
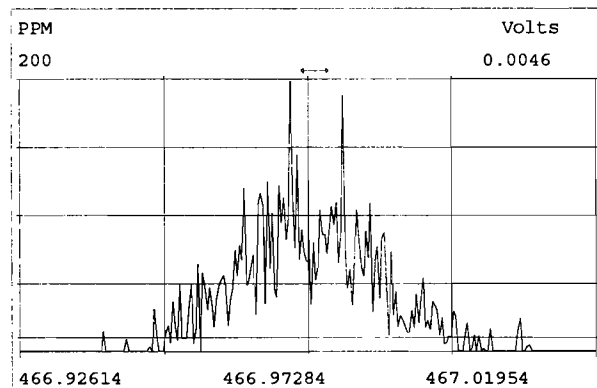
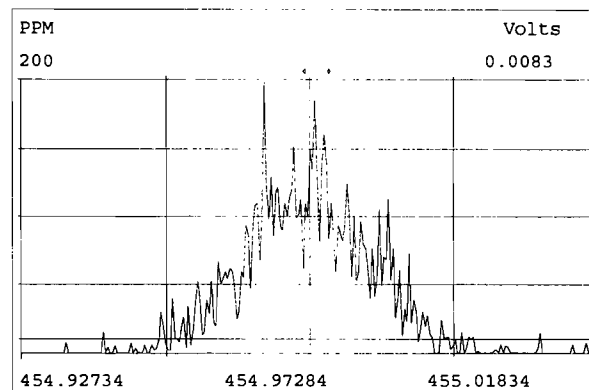
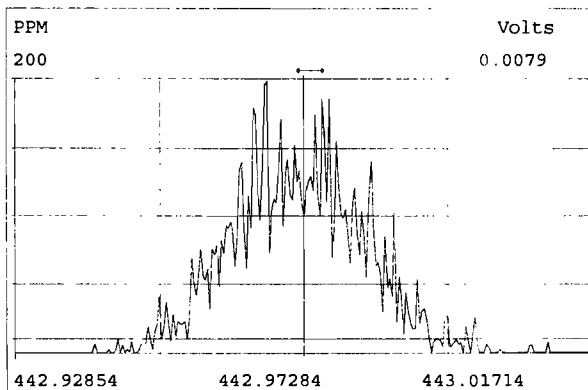
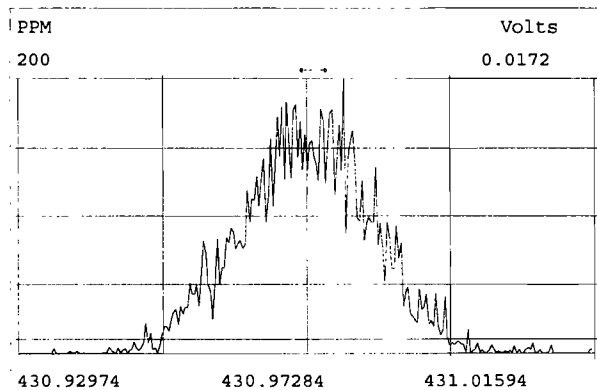












HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191105D1-1

Reviewed By: CT 11/06/19

Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<input type="checkbox"/>
<u>Run Log:</u>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> V
- Samples within 12 hour clock?	(Y)	N
- Bottle position verified?	<u>DB</u>	<input type="checkbox"/>

Mass resolution \geq

5k 6-8K 8K 10K
 1614 1699 429 1613/1668/8280

Intergrated peaks display correctly?

GC Break <20%

8280 CS1 End Standard:

- Ratios within limits, S/N <2.5:1, CS1 within 12 hours

Comments:

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST191105D1-1

Initial Calibration Date: 5-30-19

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 191105D1 S#2 Analysis Date: 5-NOV-19 Time: 12:13:59

ANALYTES	M/Z'S	ION	QC	CONC.	CONC. RANGE	CONC. RANGE
	FORMING RATIO (1)	ABUND. RATIO	LIMITS (2)		1613 (ng/mL)	8290 (ng/mL)
2,3,7,8-TCDF	M/M+2	0.74	0.65-0.89	9.4	8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	105.0	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: DBDate: 11/5/19

Client ID: 1613 CS3 19C2204

Filename: 191105D1 S:2 Acq: 5-NOV-19 12:13:59

ConCal: ST191105D1-1

Page 1 of 1

Lab ID: ST191105D1-1

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	1.22e+07	0.81 y	15:37	1.00	100.0	-
13C-2,3,7,8-TCDF	1.31e+07	0.80 y	17:50	1.02	105.0	105.0
2,3,7,8-TCDF	1.16e+06	0.74 y	17:51	0.95	9.373	

Integrations

by
Analyst: DB

Date: 11/5/19

Reviewed

by
Analyst: CT

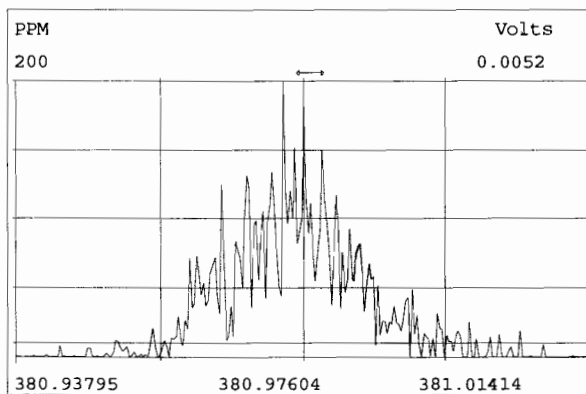
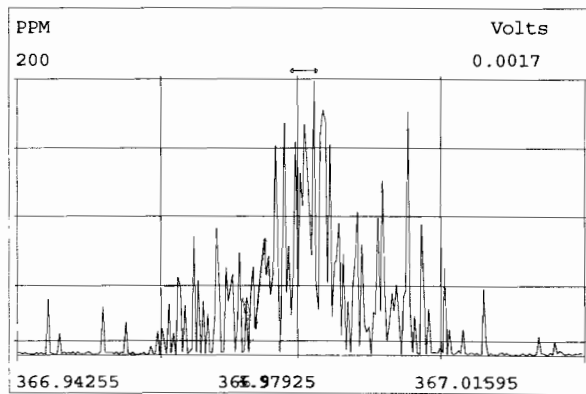
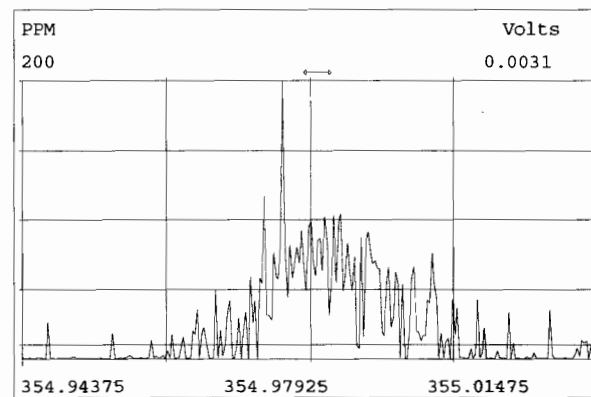
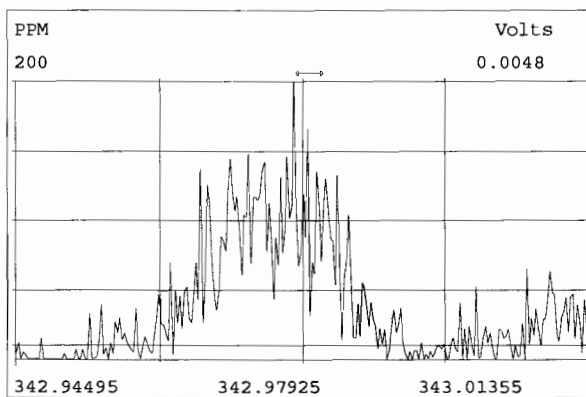
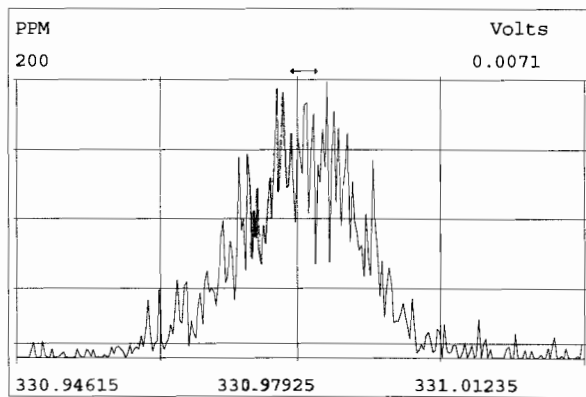
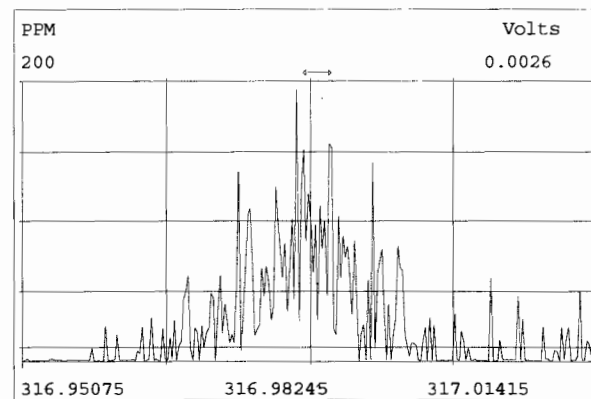
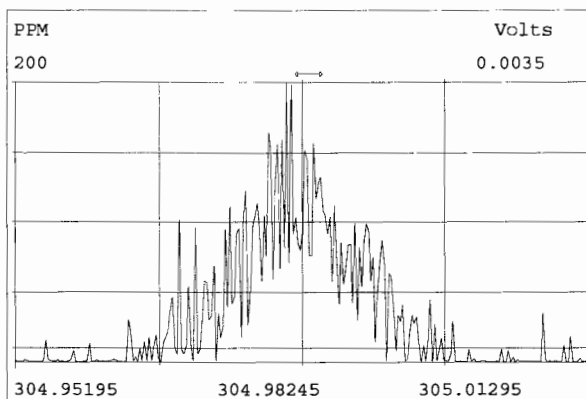
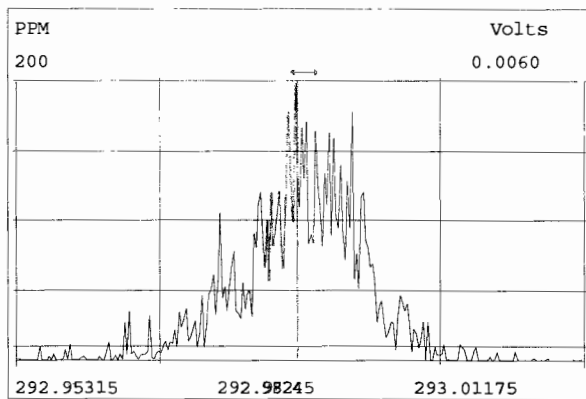
Date: 11/06/19

Vista Analytical Laboratory - Injection Log Run file: 191105D1 Instrument ID: VG-7 GC Column ID: DB-225

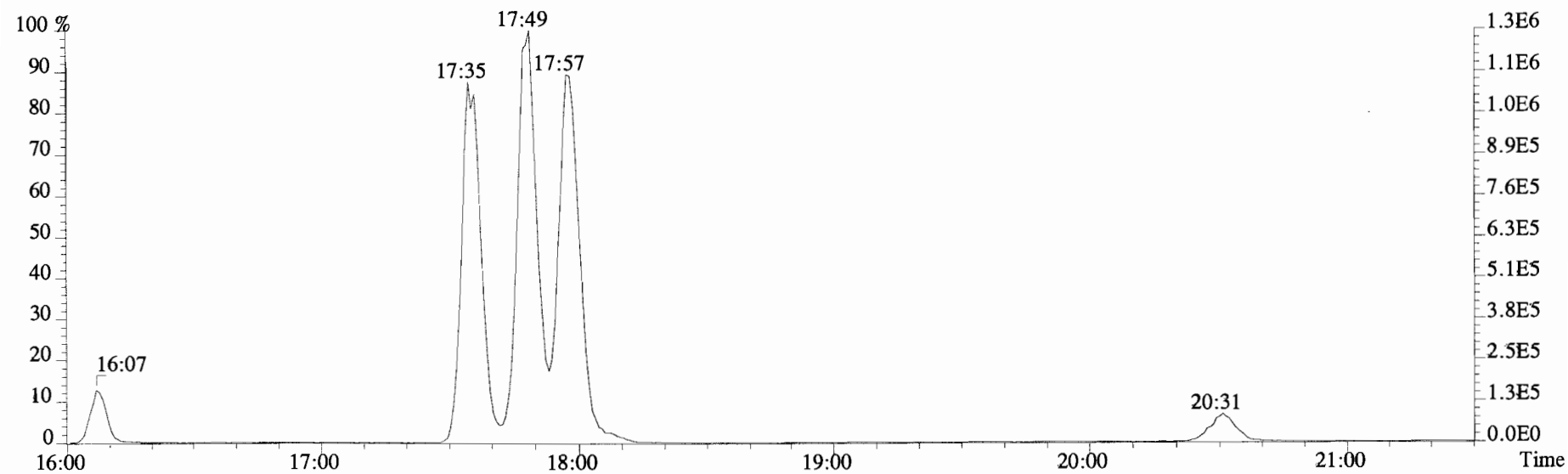
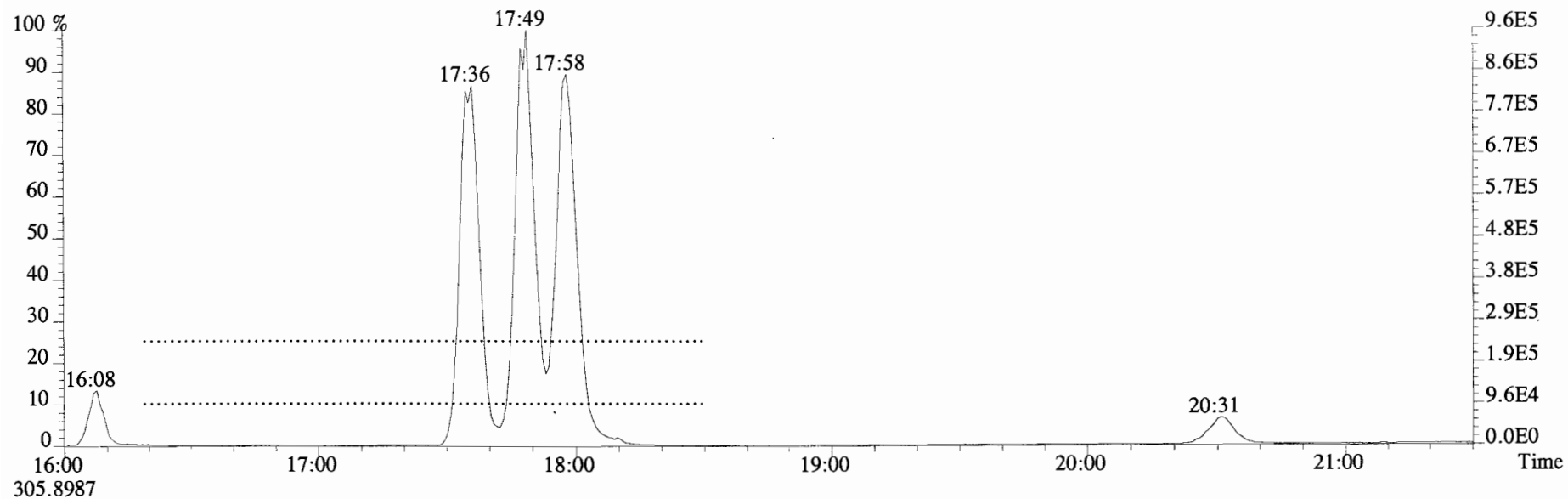
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191105D1	1	CP191105D1-1	DB	5-NOV-19	11:42:14	ST191105D1-1	NA
191105D1	2	ST191105D1-1	DB	5-NOV-19	12:13:59	ST191105D1-1	NA
191105D1	3	SOLVENT BLANK	DB	5-NOV-19	12:45:45	ST191105D1-1	NA
191105D1	4	1903642-01RE1	DB	5-NOV-19	13:17:30	ST191105D1-1	NA
191105D1	5	1903565-09RE2	DB	5-NOV-19	13:49:16	ST191105D1-1	NA
191105D1	6	1903565-11RE2	DB	5-NOV-19	14:21:00	ST191105D1-1	NA
191105D1	7	1903565-13RE2	DB	5-NOV-19	14:52:46	ST191105D1-1	NA
191105D1	8	1903565-04RE2	DB	5-NOV-19	15:24:31	ST191105D1-1	NA
191105D1	9	1903565-06RE2	DB	5-NOV-19	15:56:15	ST191105D1-1	NA
191105D1	10	1903565-08RE2	DB	5-NOV-19	16:28:05	ST191105D1-1	NA
191105D1	11	1903565-07RE2	DB	5-NOV-19	16:59:54	ST191105D1-1	NA
191105D1	12	B9J0288-DUP1RE1	DB	5-NOV-19	17:31:44	ST191105D1-1	NA
191105D1	13	1903565-05RE2	DB	5-NOV-19	18:03:34	ST191105D1-1	NA
191105D1	14	1903565-12RE2	DB	5-NOV-19	18:35:23	ST191105D1-1	NA

Peak Locate Examination: 5-NOV-2019:11:41 File:191105D1

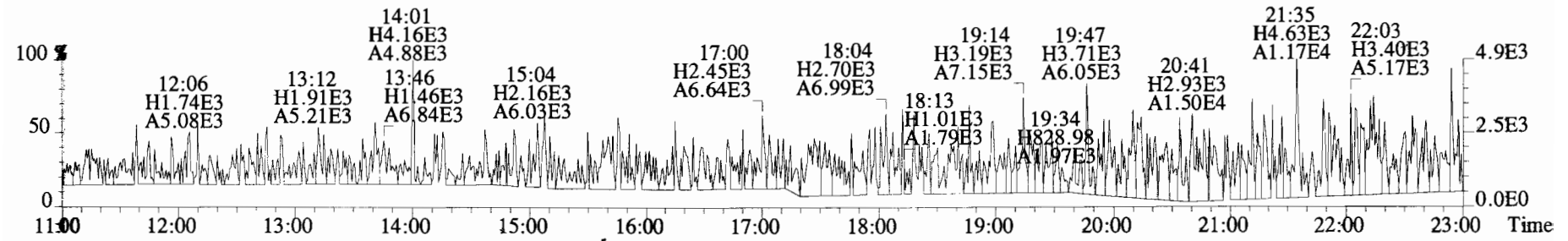
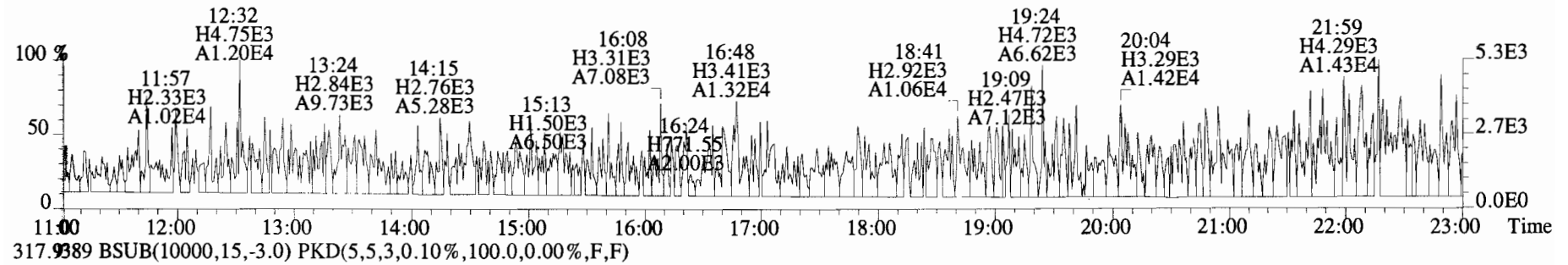
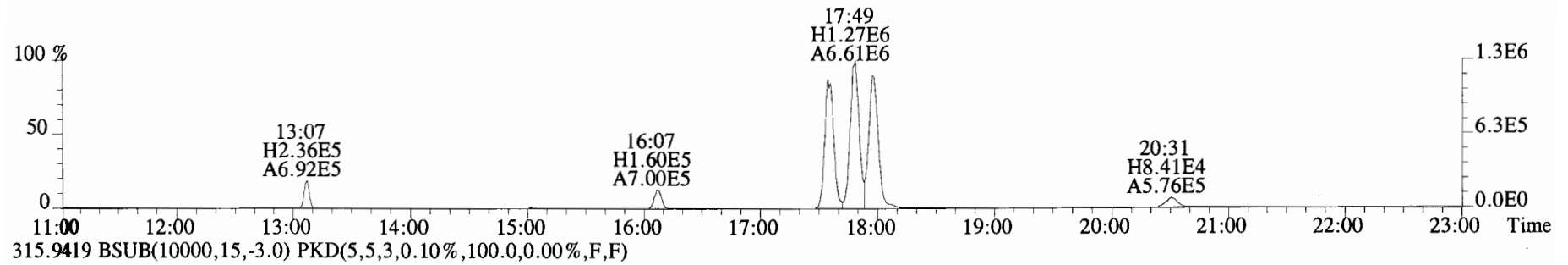
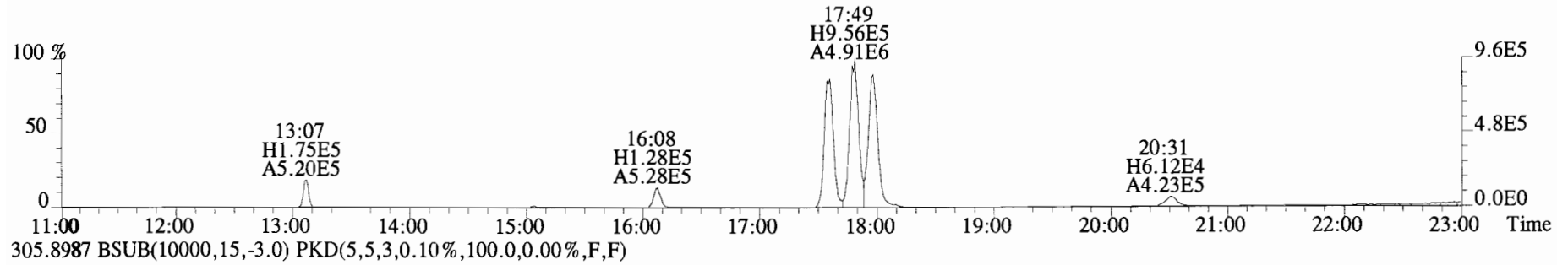
Experiment:TCDF_DB225 Function:1 Reference:PFK



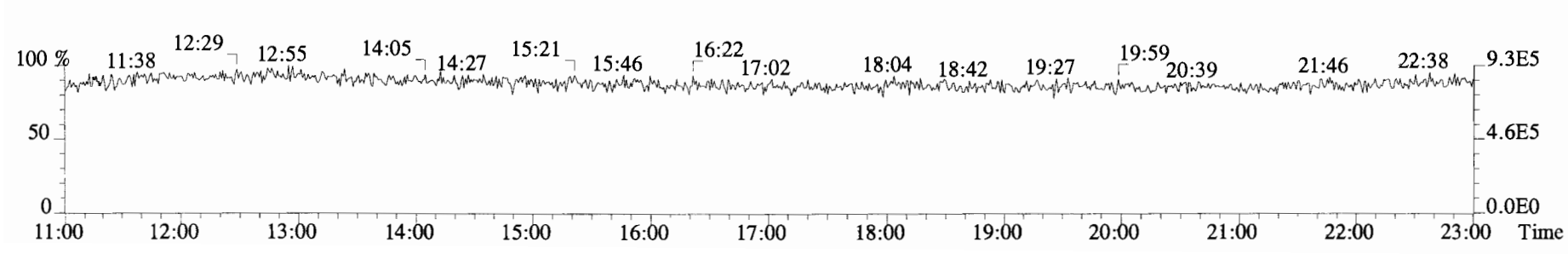
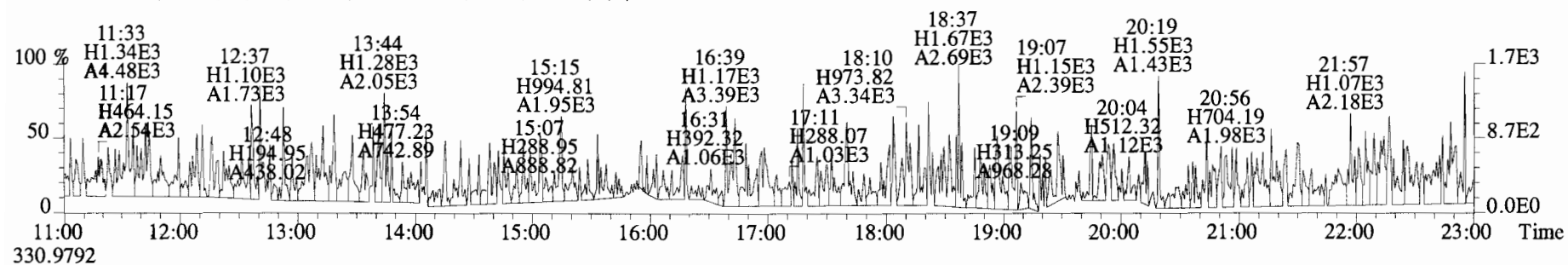
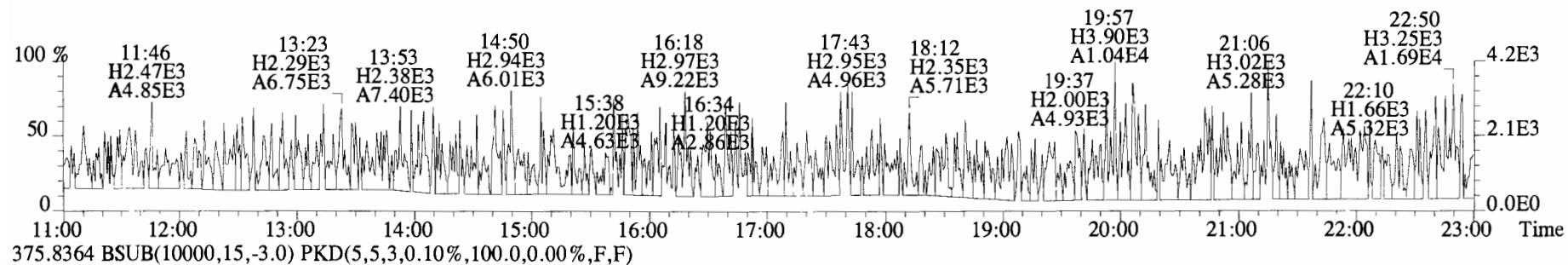
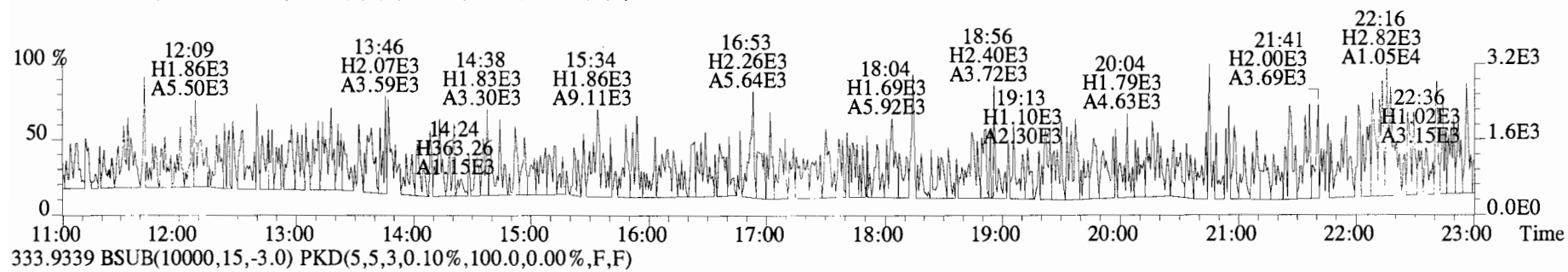
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Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:CP191105D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016



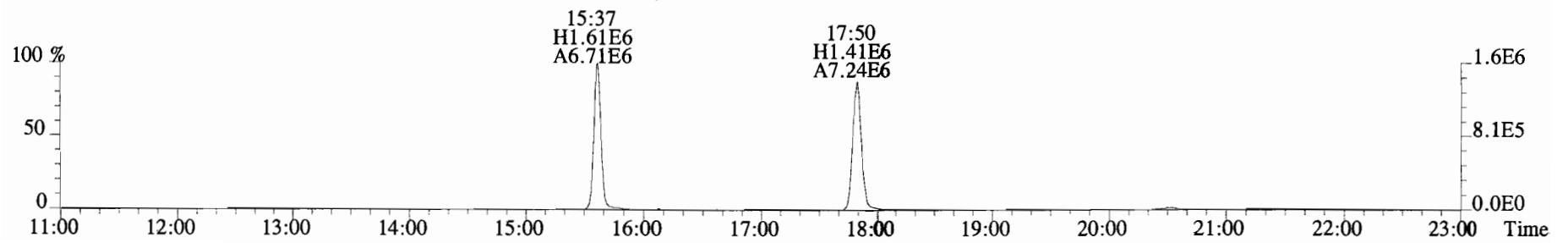
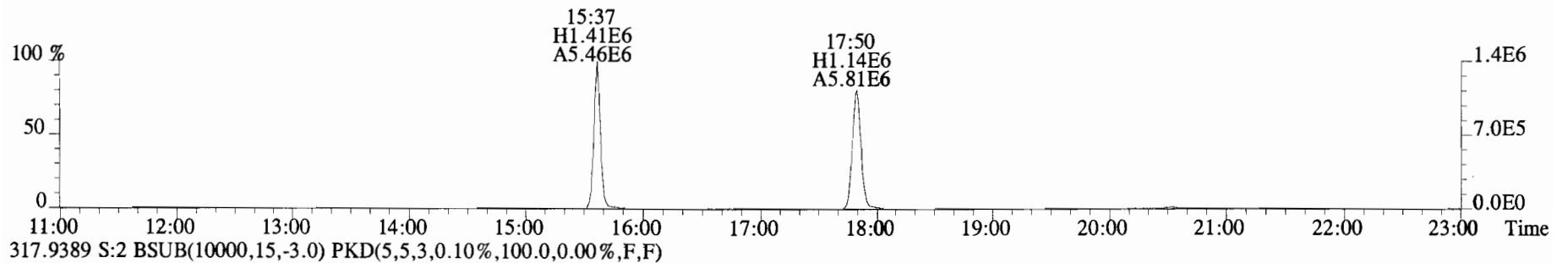
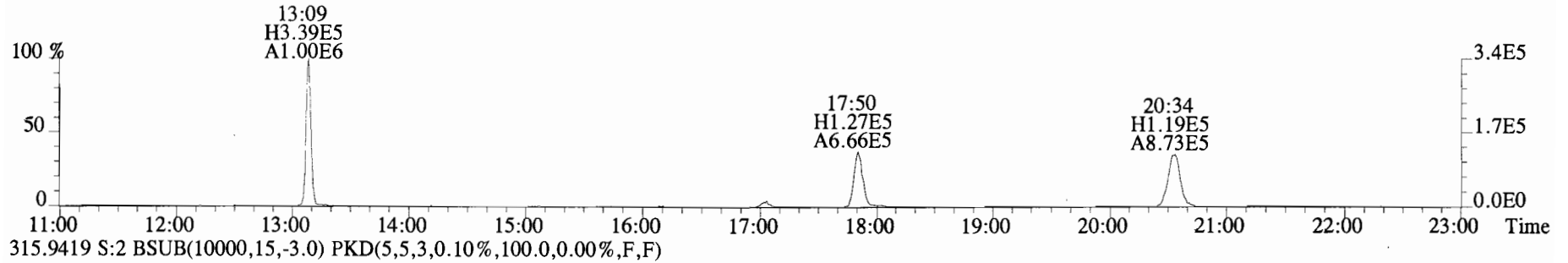
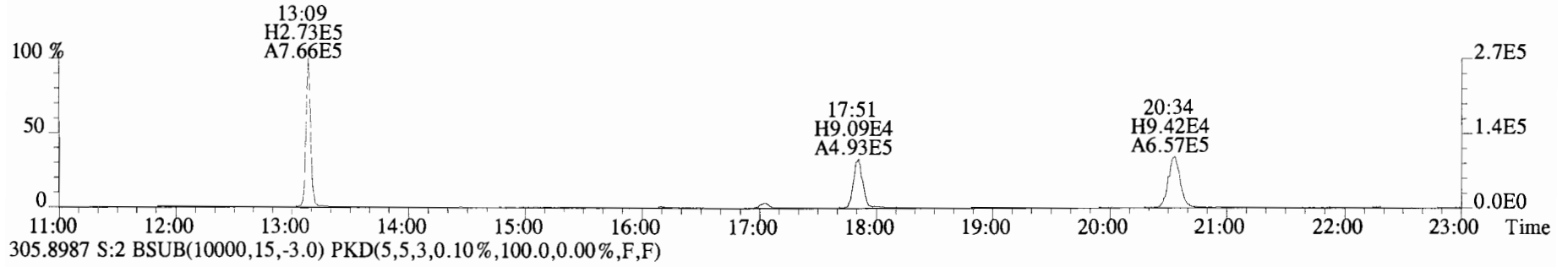
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Sample#1 File Text:Viata Analytical Laboratory VG7 Text:CP191105D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



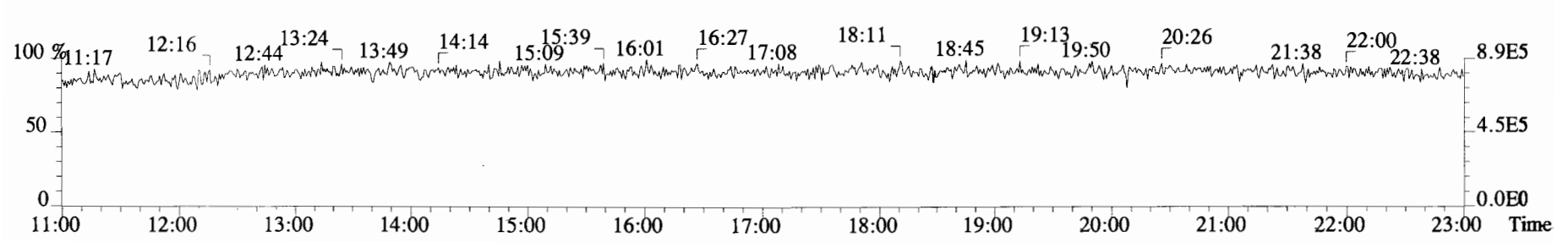
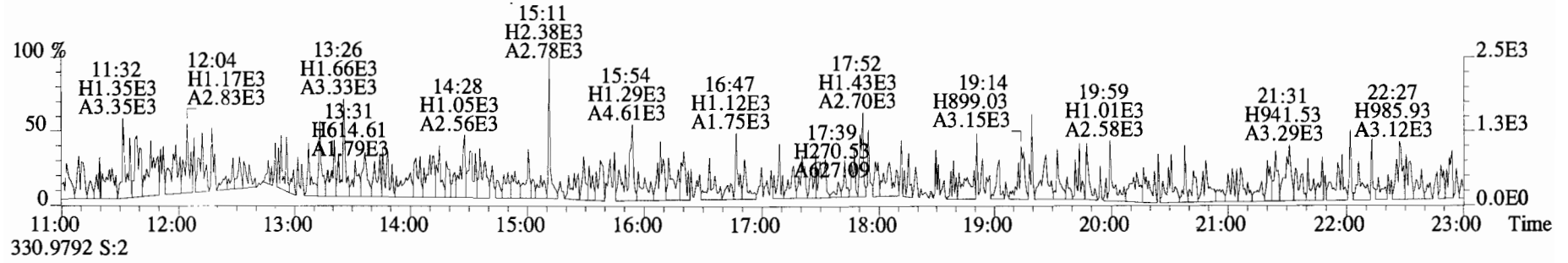
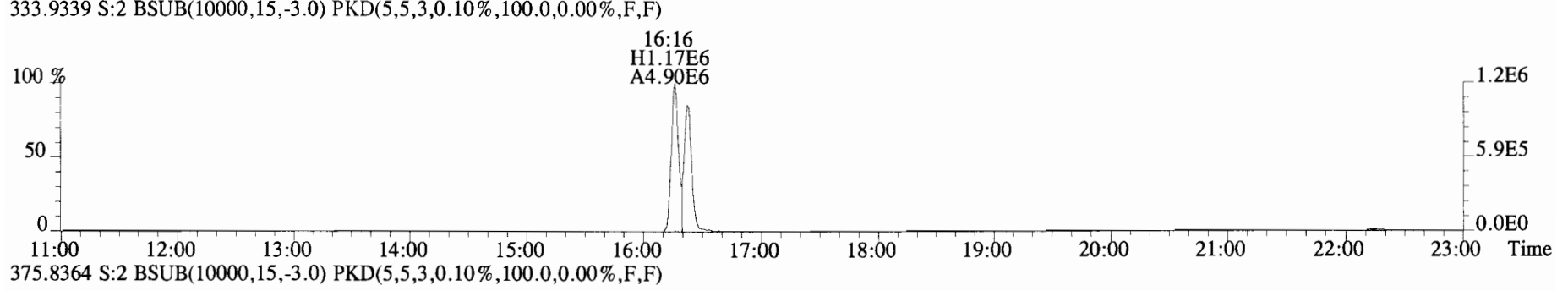
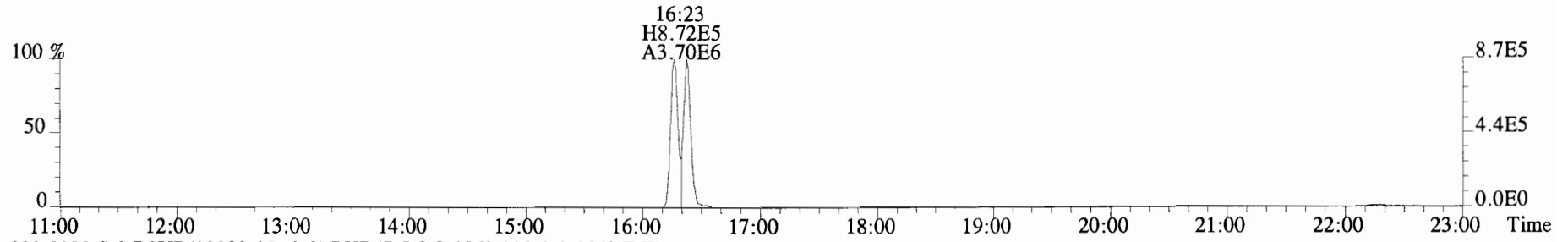
File:191105D1 #1-1683 Acq: 5-NOV-2019 11:42:14 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Viata Analytical Laboratory VG7 Text:CP191105D1-1 DB225 CPSM Exp:TCDF_DB225
 331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

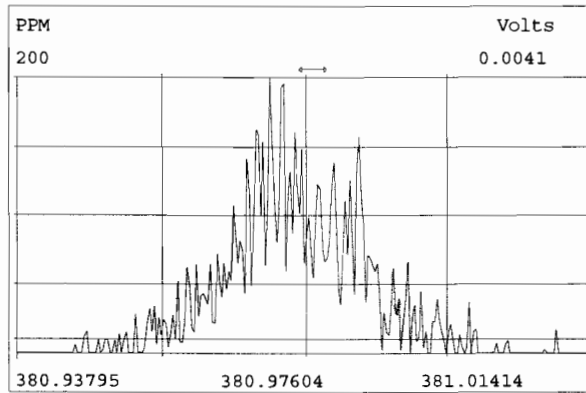
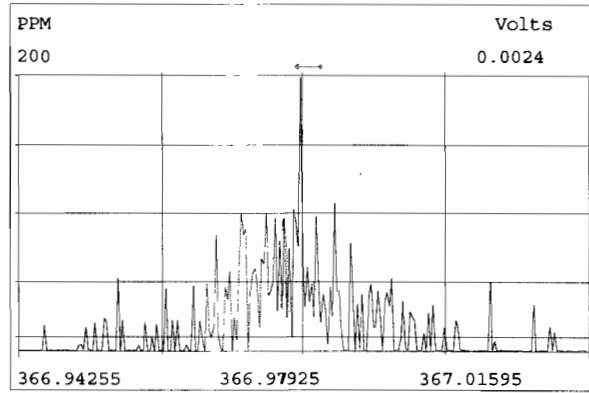
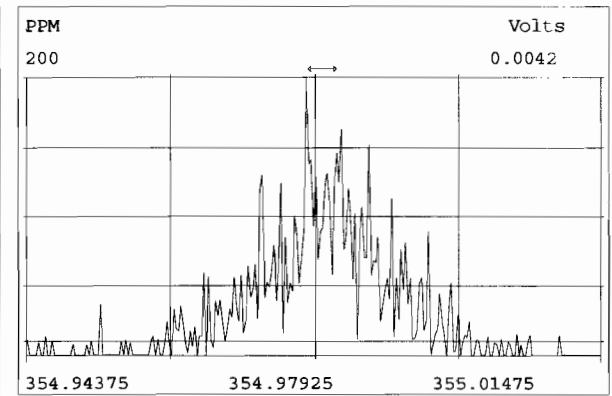
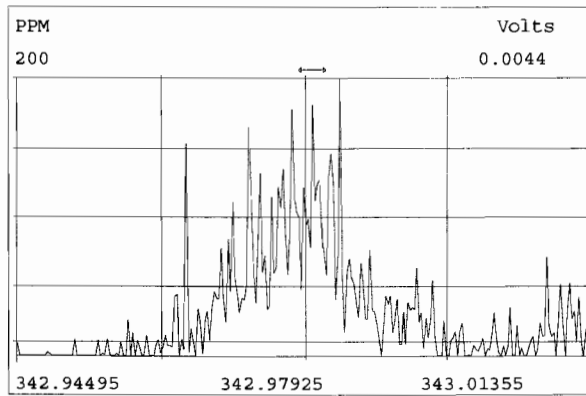
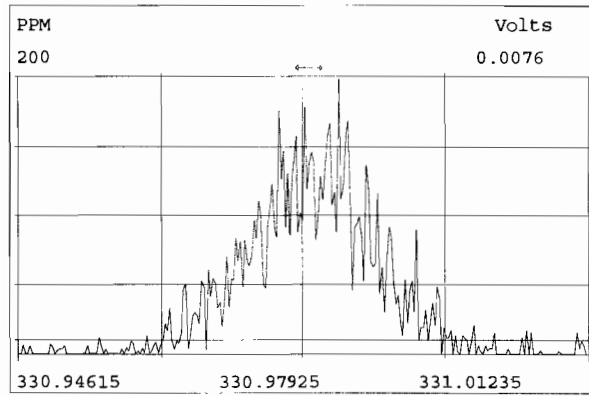
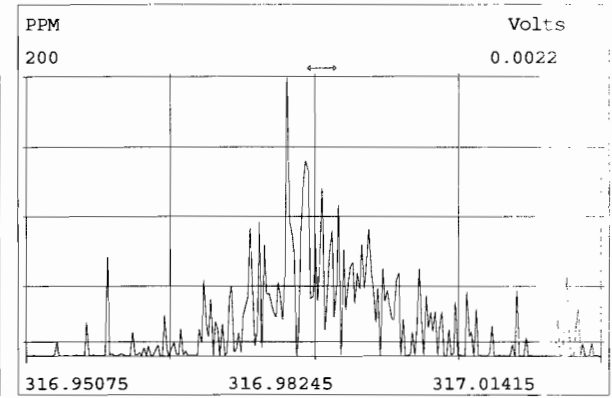
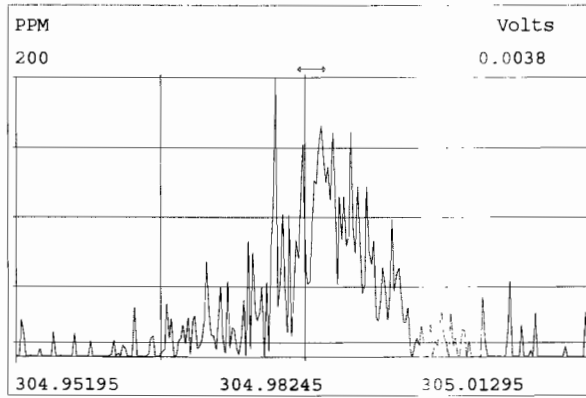
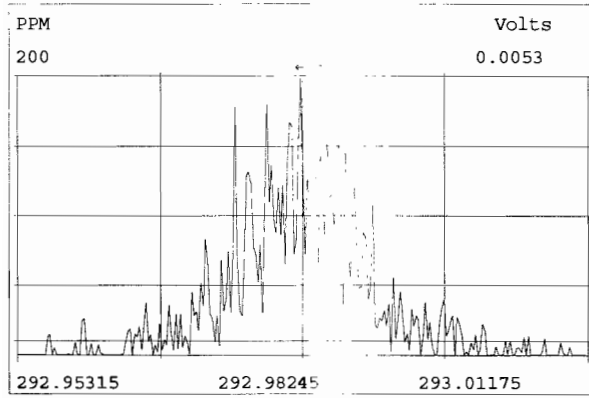


File:191105D1 #1-1683 Acq: 5-NOV-2019 12:13:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory_VG7 Text:ST191105D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191105D1 #1-1683 Acq: 5-NOV-2019 12:13:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory VG7 Text:ST191105D1-1 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)





HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191107D1-1

Reviewed By: CT 11/07/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<input type="checkbox"/>
<u>Run Log:</u>		
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
- Bottle position verified?		

Mass resolution \geq
 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: ST191107D1-1

Initial Calibration Date: 5-30-19

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 191107D1 S#2 Analysis Date: 7-NOV-19 Time: 11:22:48

ANALYTES	M/Z'S	ION	QC	CONC.	CONC. RANGE	CONC. RANGE
	FORMING	ABUND.	LIMITS		1613	8290
	RATIO (1)	RATIO	(2)	FOUND	(ng/mL)	(ng/mL)
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	10.5	8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	109.1	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: DBDate: 11/7/19

Client ID: 1613 CS3 19C2204

Filename: 191107D1 S:2 Acq: 7-NOV-19 11:22:48

ConCal: ST191107D1-1

Page 1 of 1

Lab ID: ST191107D1-1

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	1.37e+07	0.82 y	15:35	1.00	100.0	-
13C-2,3,7,8-TCDF	1.53e+07	0.80 y	17:47	1.02	109.1	109.1
2,3,7,8-TCDF	1.52e+06	0.78 y	17:48	0.95	10.50	

Integrations

by
Analyst: DB

Date: 11/7/19

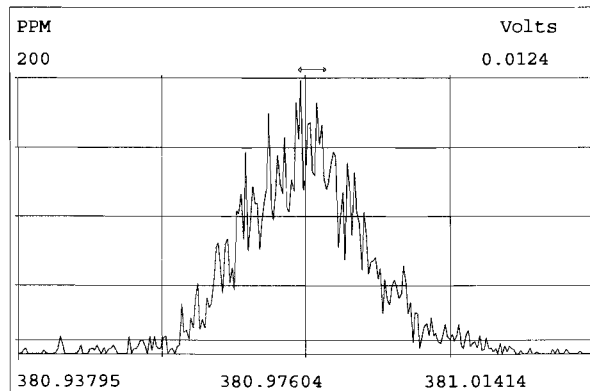
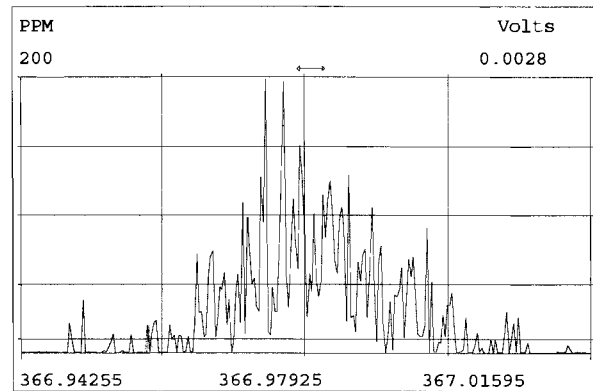
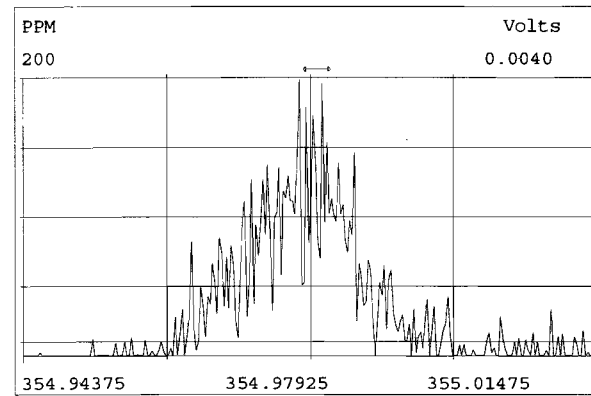
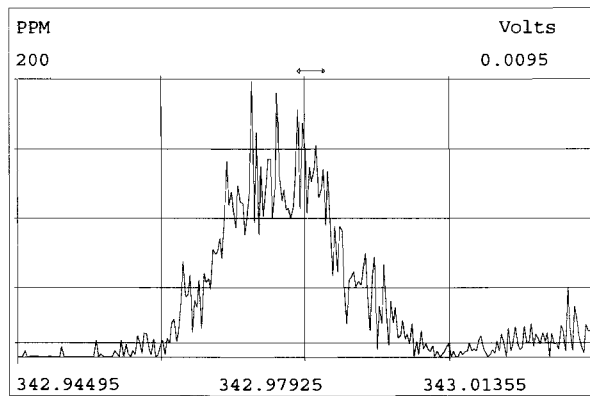
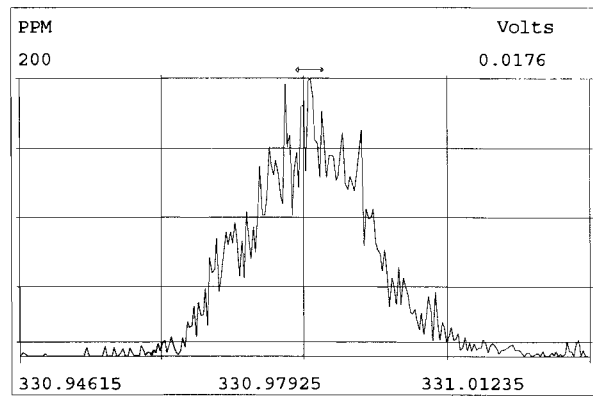
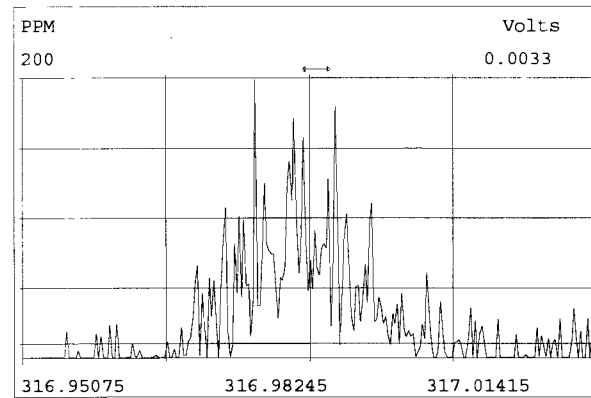
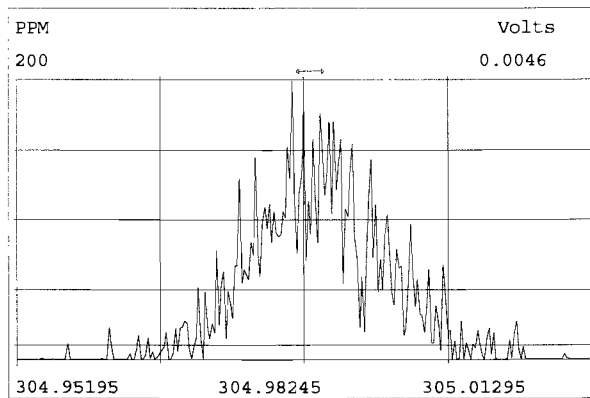
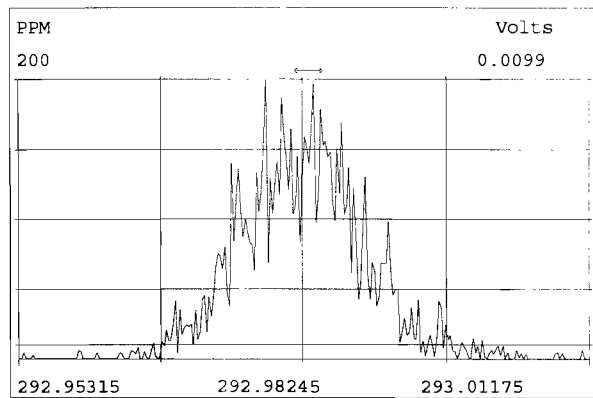
Reviewed

by
Analyst: CT

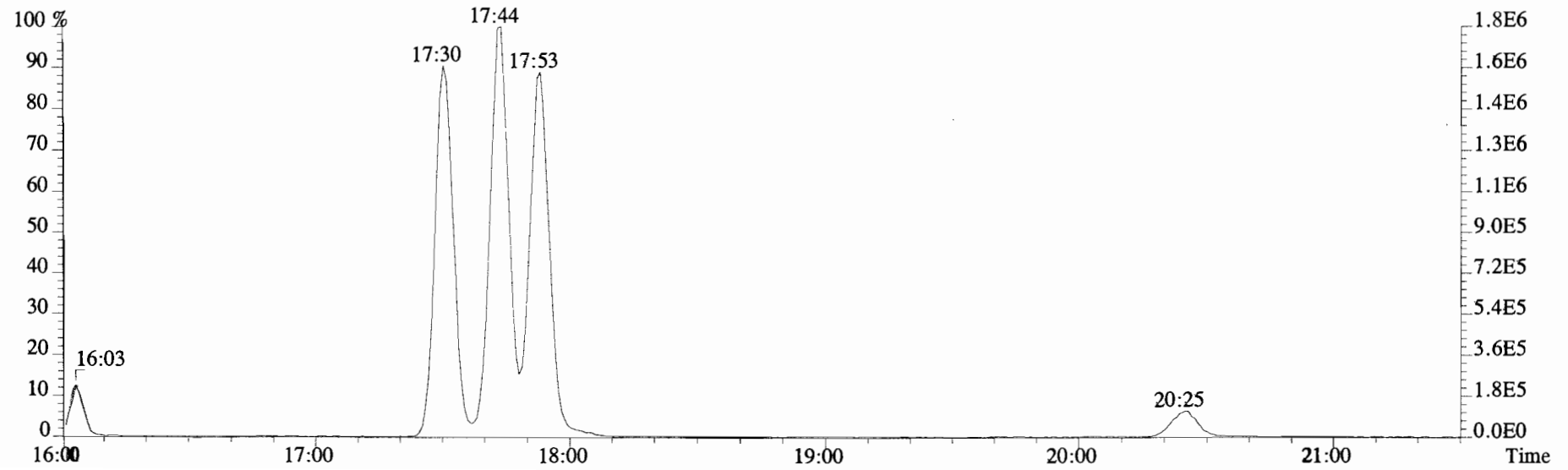
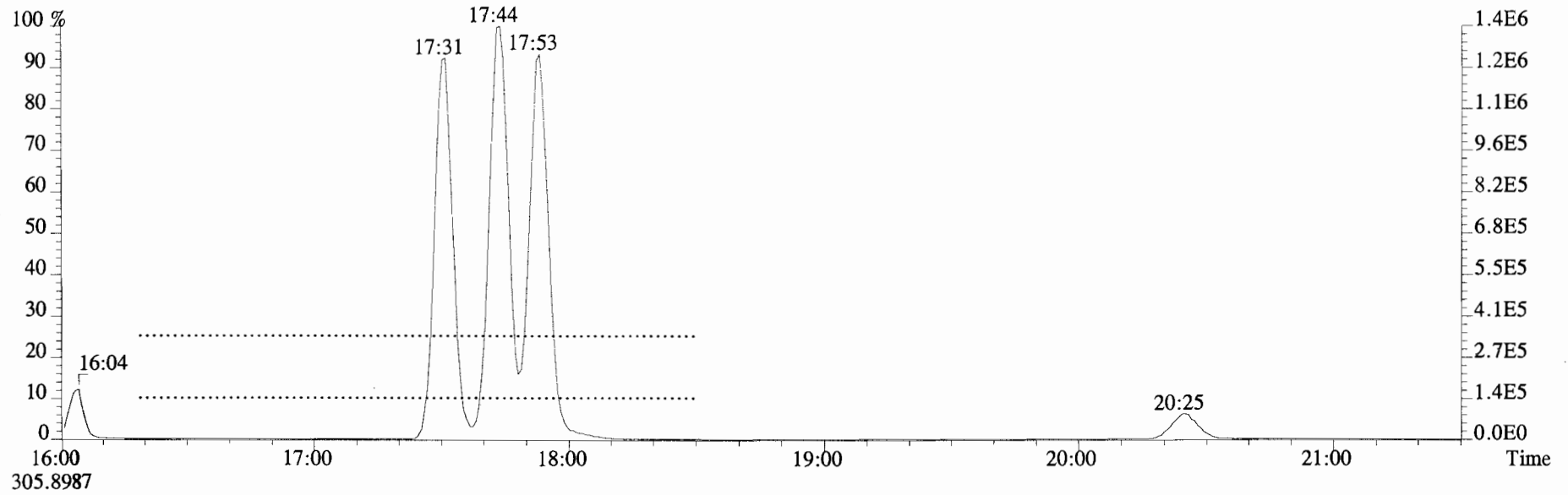
Date: 11/07/19

Vista Analytical Laboratory - Injection Log Run file: 191107D1 Instrument ID: VG-7 GC Column ID: DB-225

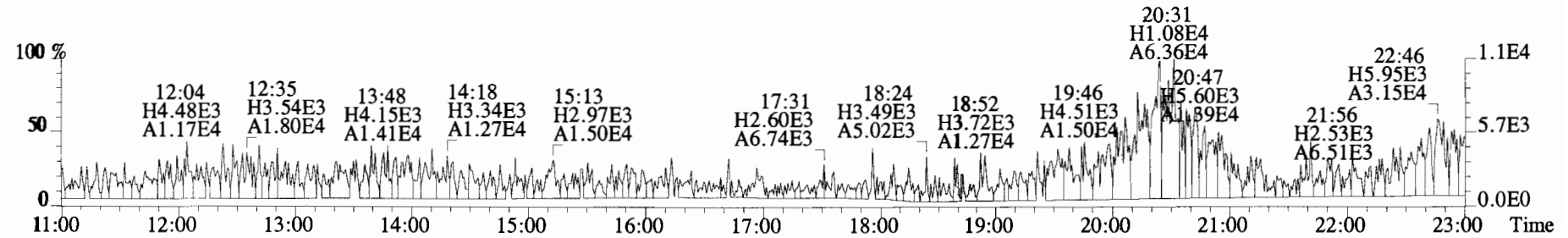
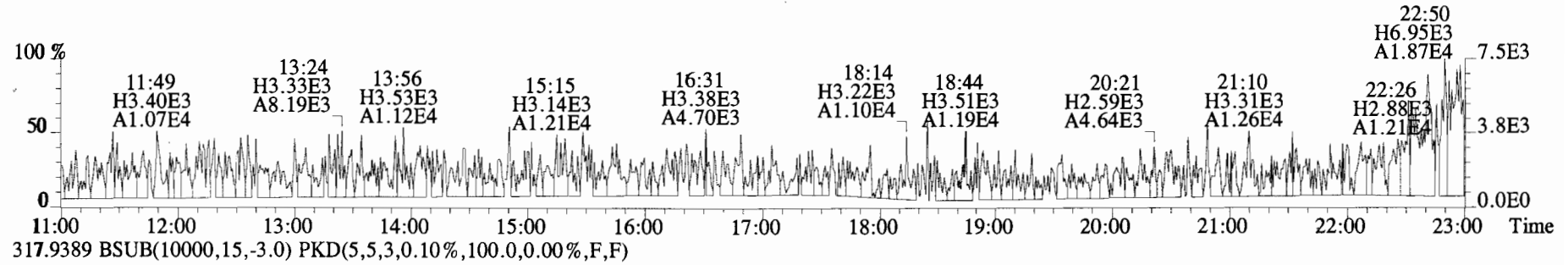
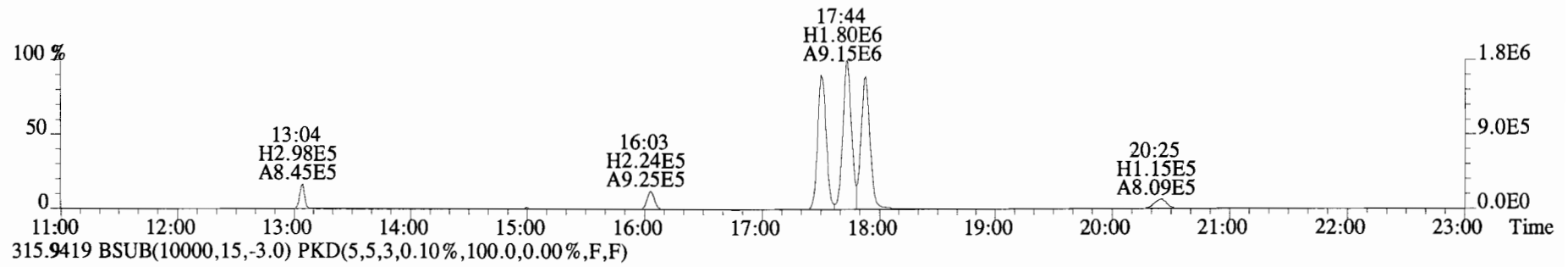
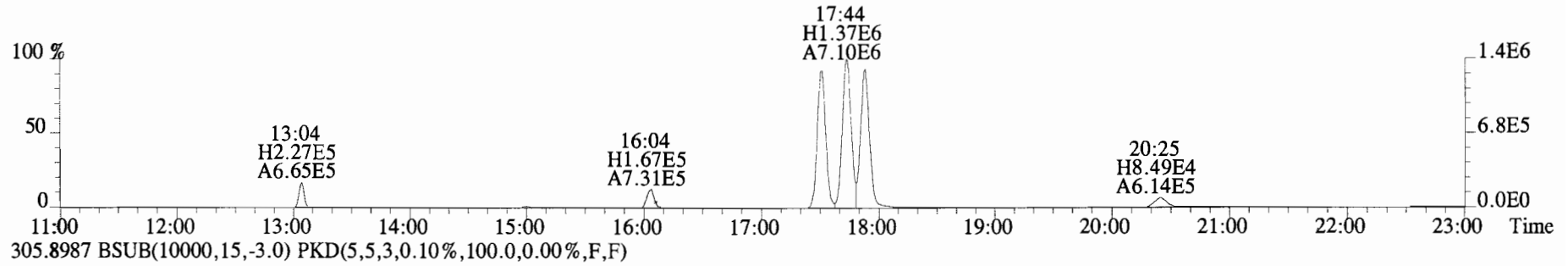
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191107D1	1	CP191107D1-1	DB	7-NOV-19	10:51:03	ST191107D1-1	NA
191107D1	2	ST191107D1-1	DB	7-NOV-19	11:22:48	ST191107D1-1	NA
191107D1	3	SOLVENT BLANK	DB	7-NOV-19	11:54:33	ST191107D1-1	NA
191107D1	4	1903651-04RE1	DB	7-NOV-19	12:26:19	ST191107D1-1	NA
191107D1	5	1903546-15RE2	DB	7-NOV-19	12:58:04	ST191107D1-1	NA
191107D1	6	1903565-16RE2	DB	7-NOV-19	13:29:50	ST191107D1-1	NA
191107D1	7	1903431-06RE1	DB	7-NOV-19	14:01:35	ST191107D1-1	NA



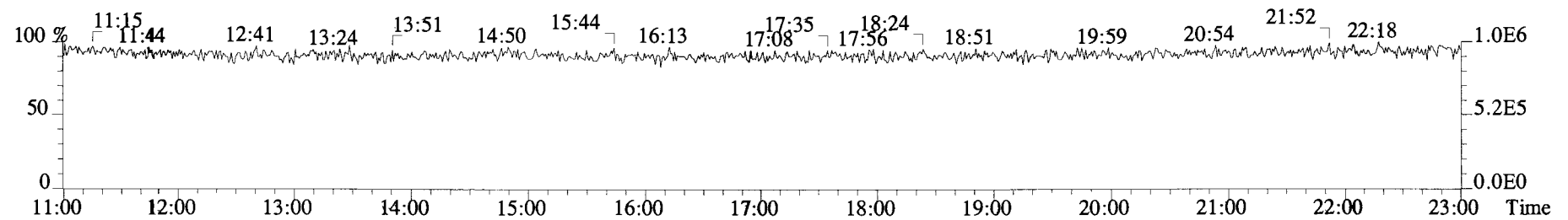
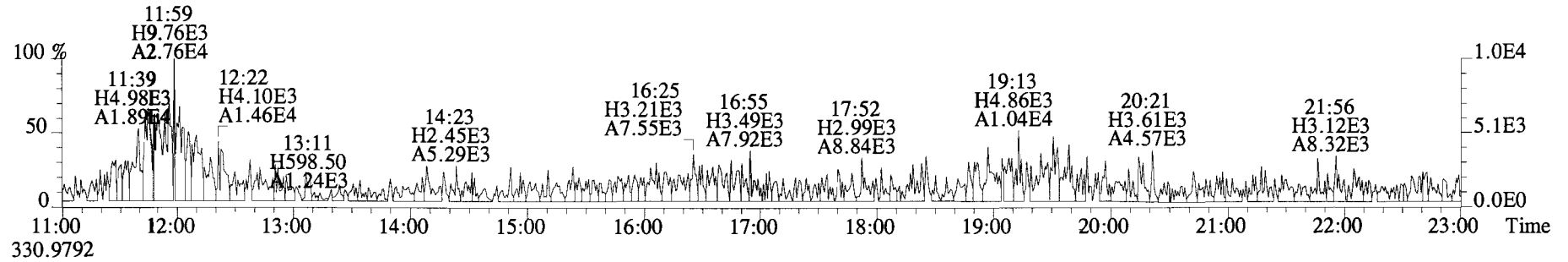
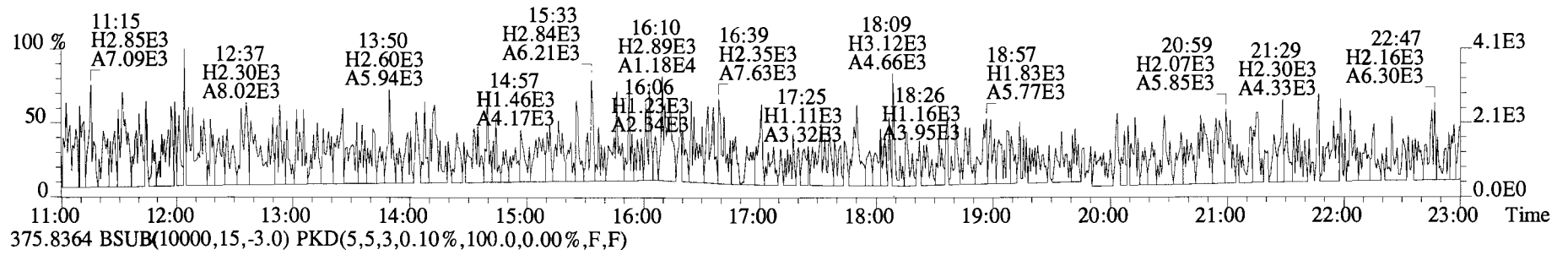
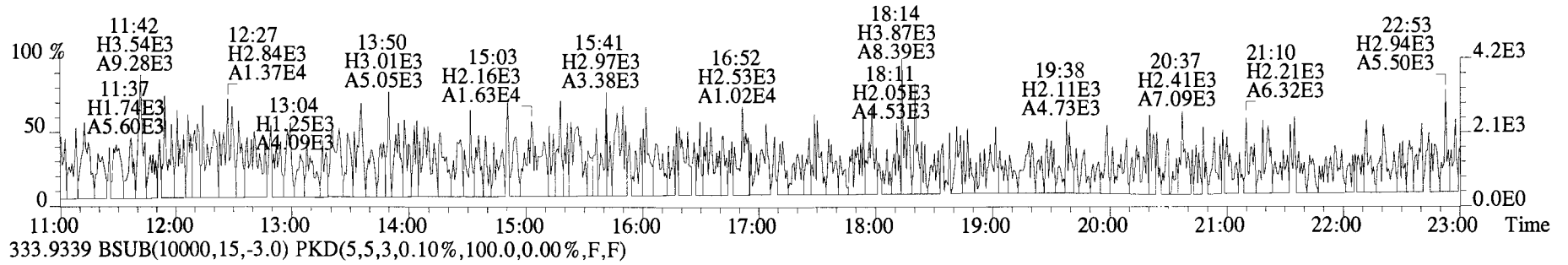
File:191107D1 #1-1683 Acq: 7-NOV-2019 10:51:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:CP191107D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016



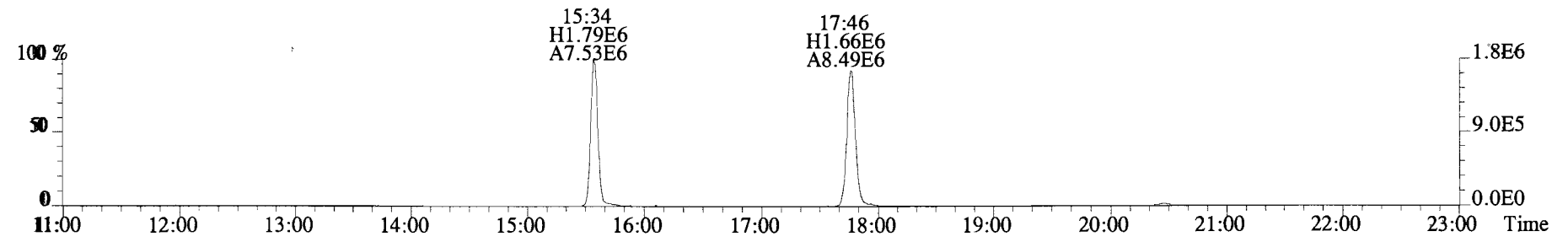
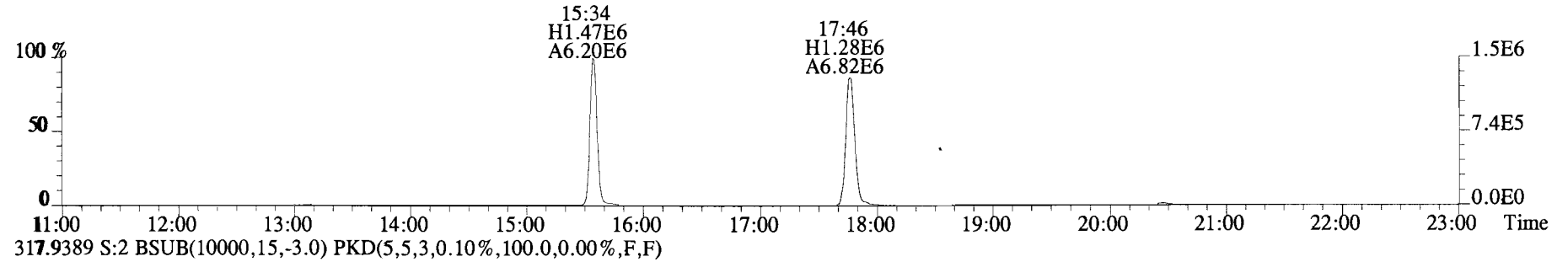
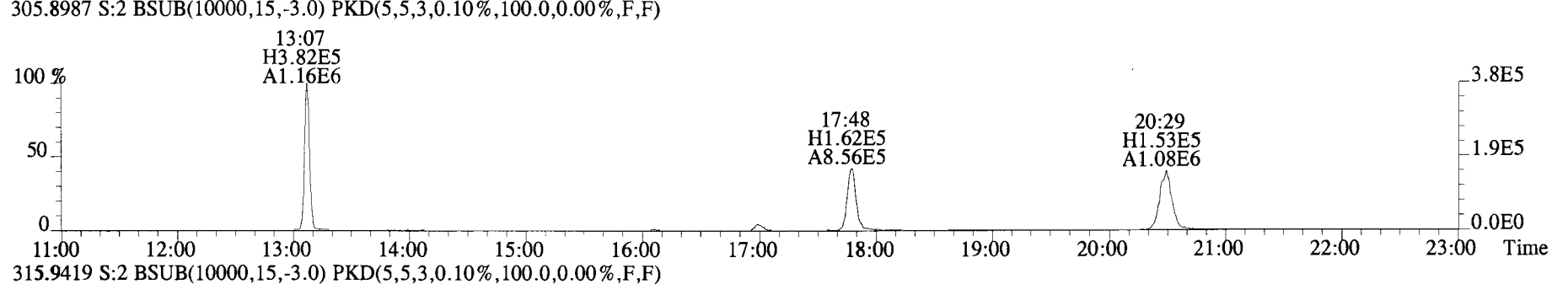
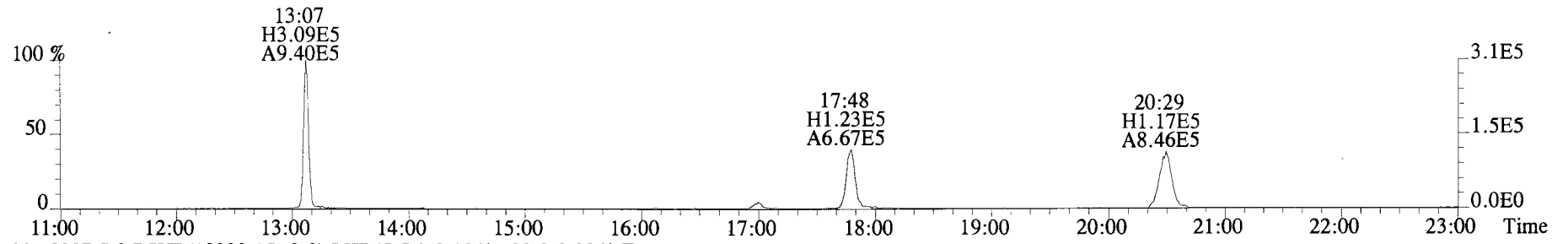
File:191107D1 #1-1683 Acq: 7-NOV-2019 10:51:03 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text: Viata Analytical Laboratory VG7 Text:CP191107D1-1 DB225 CPSM Exp:TCDF_DB225
 303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



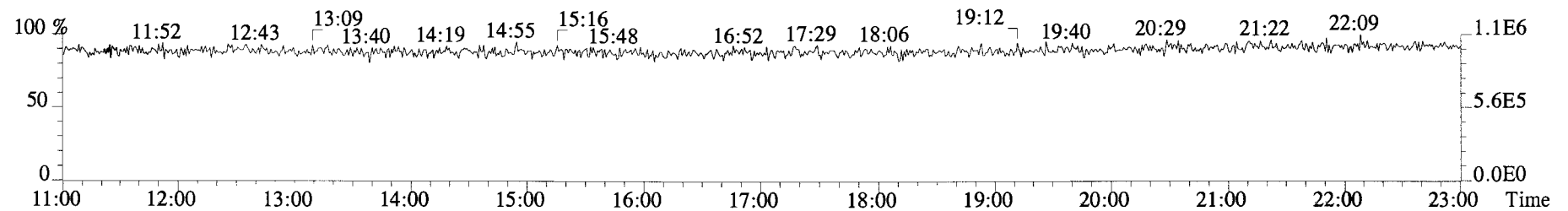
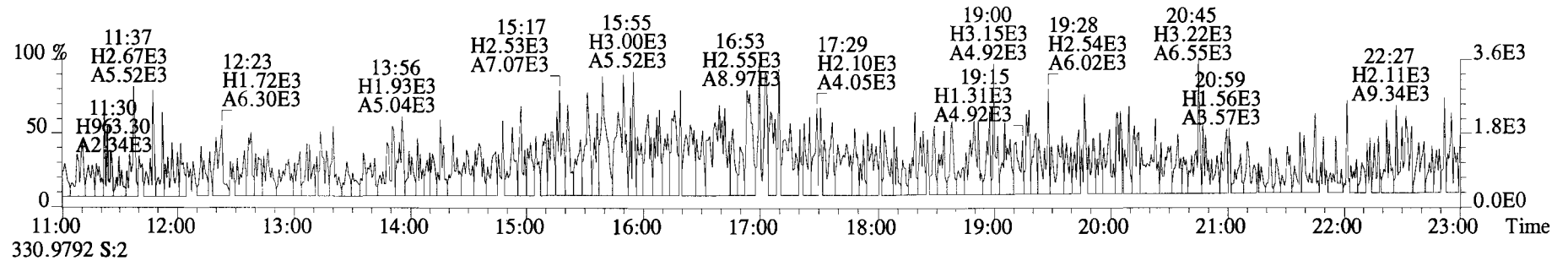
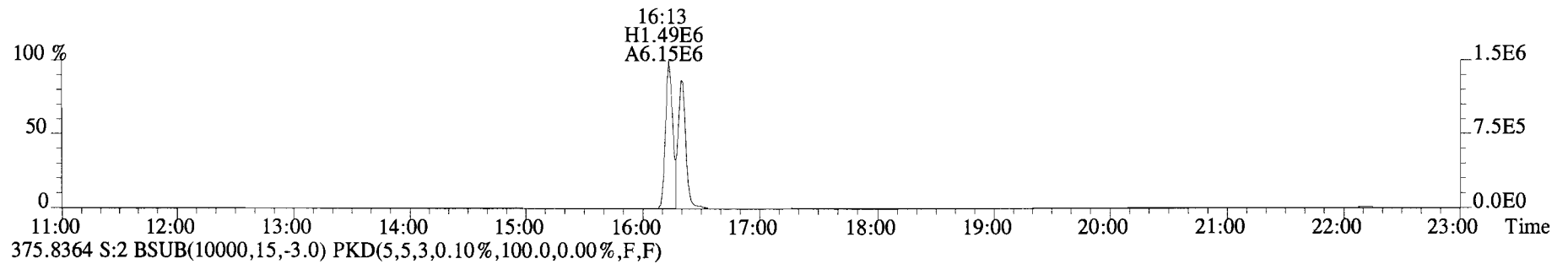
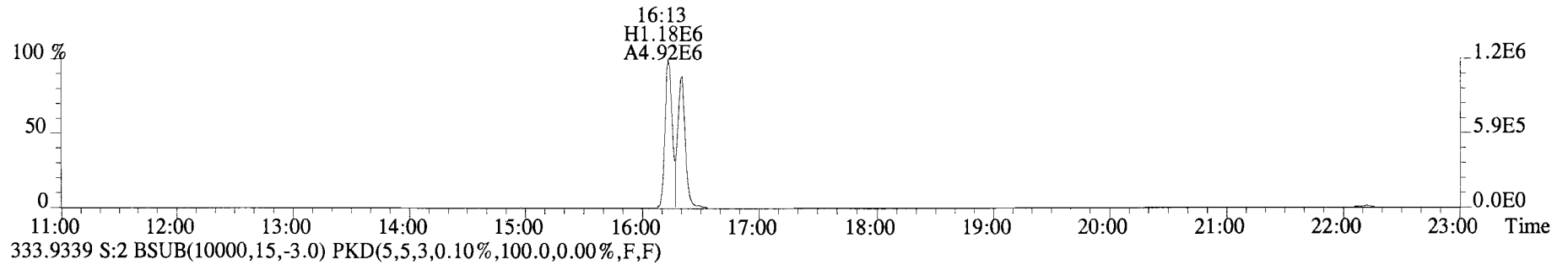
File:191107D1 #1-1683 Acq: 7-NOV-2019 10:51:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:CP191107D1-1 DB225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191107D1 #1-1682 Acq: 7-NOV-2019 11:22:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory_VG7 Text:ST191107D1-1 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)

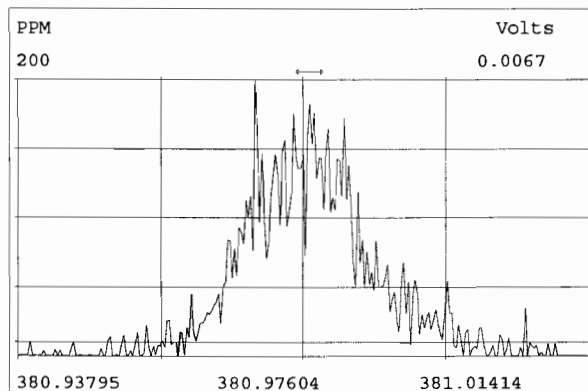
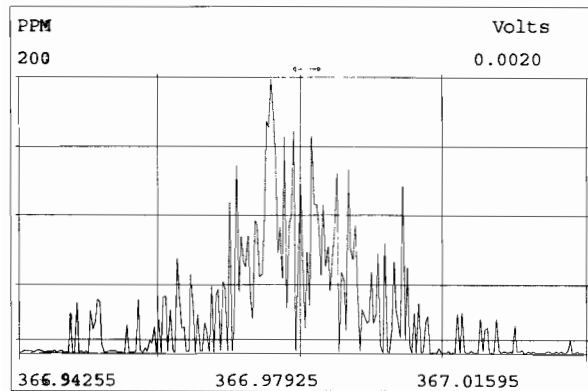
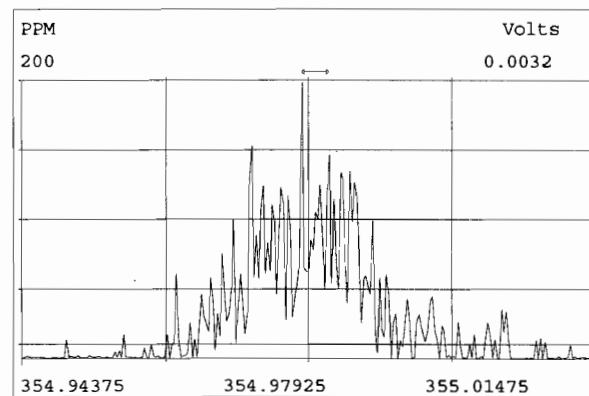
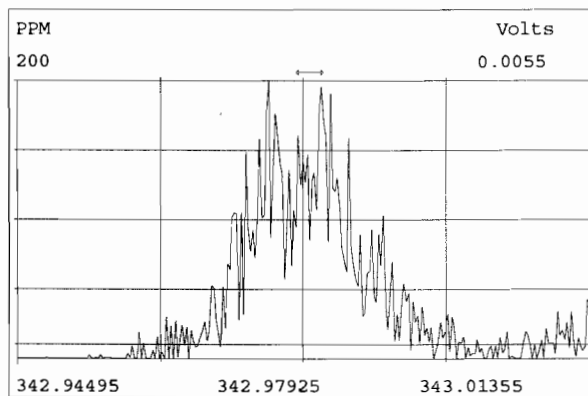
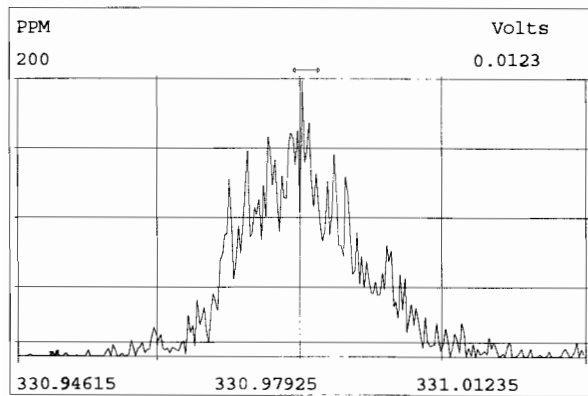
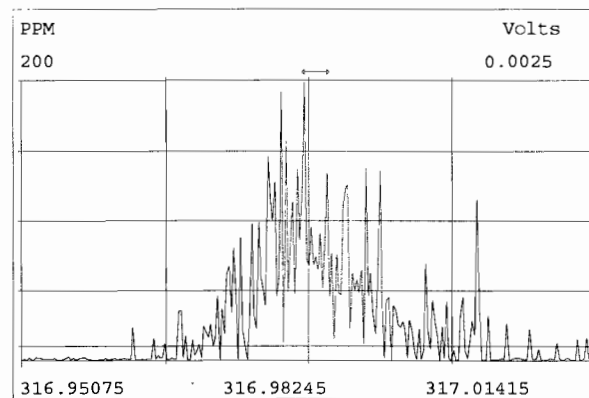
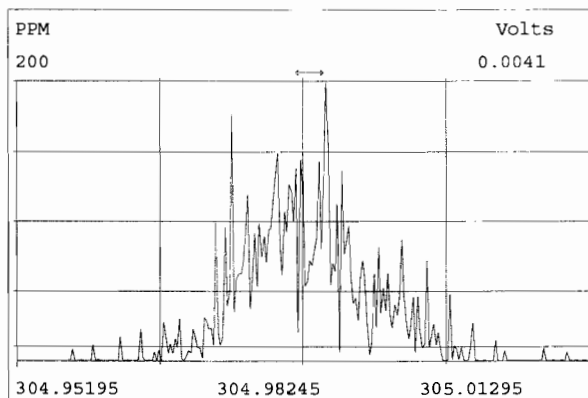
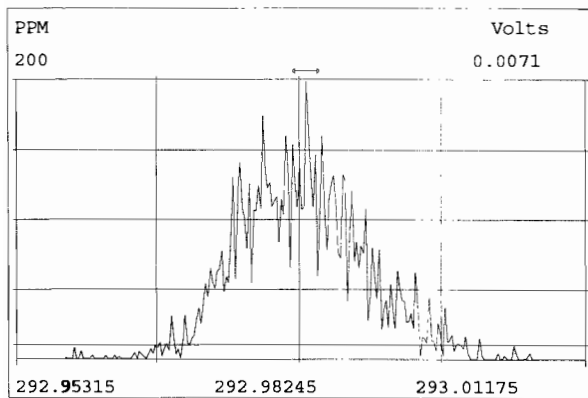


File:191107D1 #1-1682 Acq: 7-NOV-2019 11:22:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory_VG7 Text:ST191107D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Peak Locate Examination: 7-NOV-2019:14:42 File:RES_CHECK

Experiment:TCDF_DB225 Function:1 Reference:PFK



HKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191118D1-1

Reviewed By: CP 11/19/19
Initials & Date

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<u>DB</u>	<u>DB</u>
<u>Run Log:</u>		
- Correct Instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Samples within 12 hour clock?	<input checked="" type="checkbox"/> (Y)	<input type="checkbox"/> N
- Bottle position verified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>Beg.</u>	<u>End</u>
Mass resolution \geq	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614 1699 429 1613/1668/8280		
Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
GC Break <20%		<input type="checkbox"/> NA
<u>8280 CS1 End Standard:</u>		
- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input type="checkbox"/> NA

Comments:

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST191118D1-1

Initial Calibration Date: 5-30-19

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 191118D1 S#2 Analysis Date: 18-NOV-19 Time: 14:10:43

ANALYTES	M/Z'S	ION	QC	CONC.	CONC. RANGE	CONC. RANGE
	FORMING	ABUND.	LIMITS		1613	8290
	RATIO (1)	RATIO	(2)	FOUND	(ng/mL)	(ng/mL)
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	10.1	8.4 - 12.0 (3)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	108.5	8.6 - 11.6 (4)	70.0 - 130.0
					71.0 - 140.0 (3)	
					76.0 - 131.0 (4)	

- (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: DBDate: 11/18/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191118D1-1

Filename: 191118D1 S:2 Acq:18-NOV-19 14:10:43
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 1.000

ConCal: ST191118D1-1
EndCAL: NA

Page 1 of 1

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	2.11e+07	0.80 y	15:39	1.00	100.0	-
13C-2,3,7,8-TCDF	2.34e+07	0.79 y	17:47	1.02	108.5	108.5
2,3,7,8-TCDF	2.24e+06	0.80 y	17:48	0.95	10.07	

Integrations
by
Analyst: DB

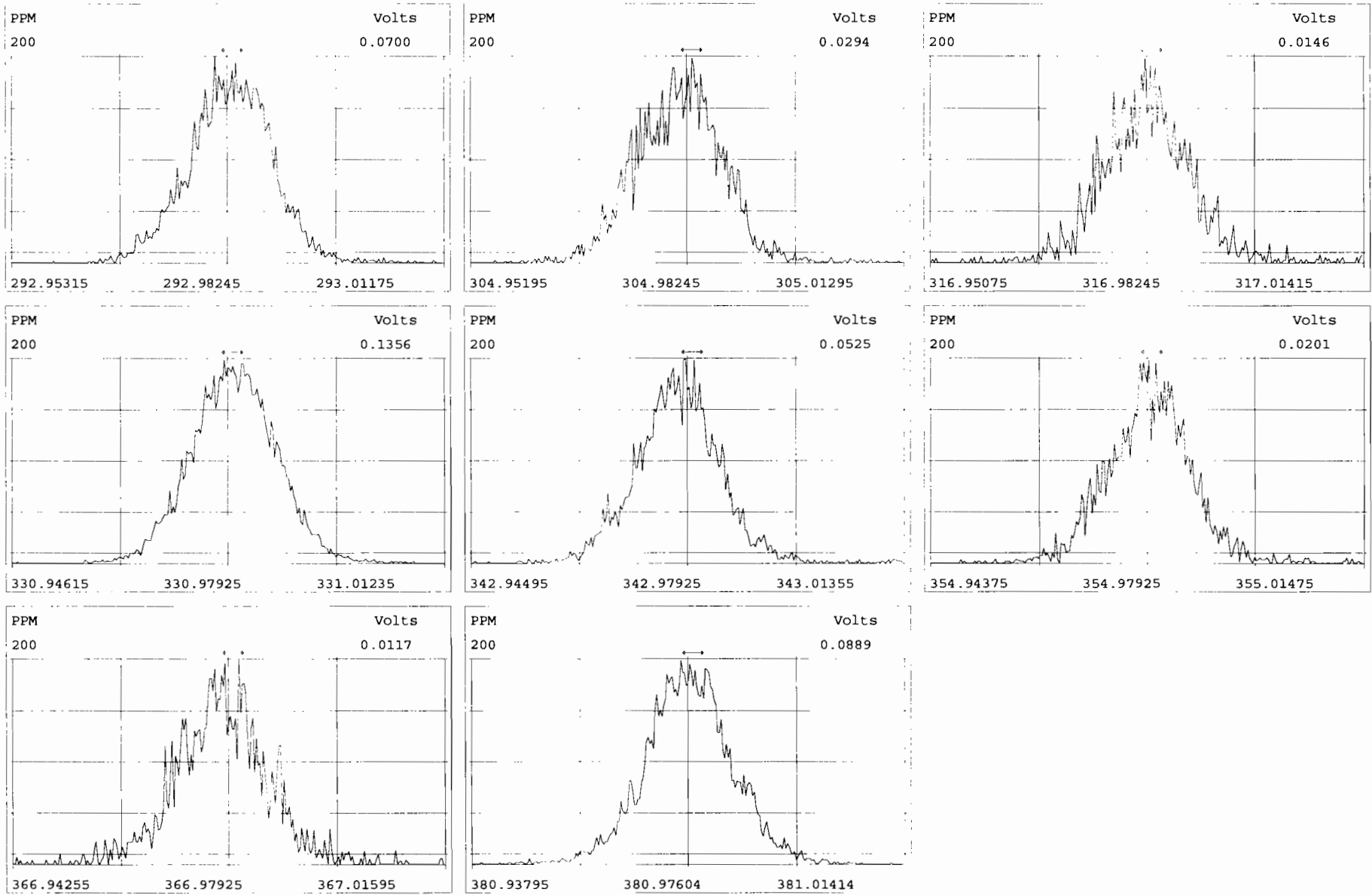
Date: 11/18/19

Reviewed
by
Analyst: CT

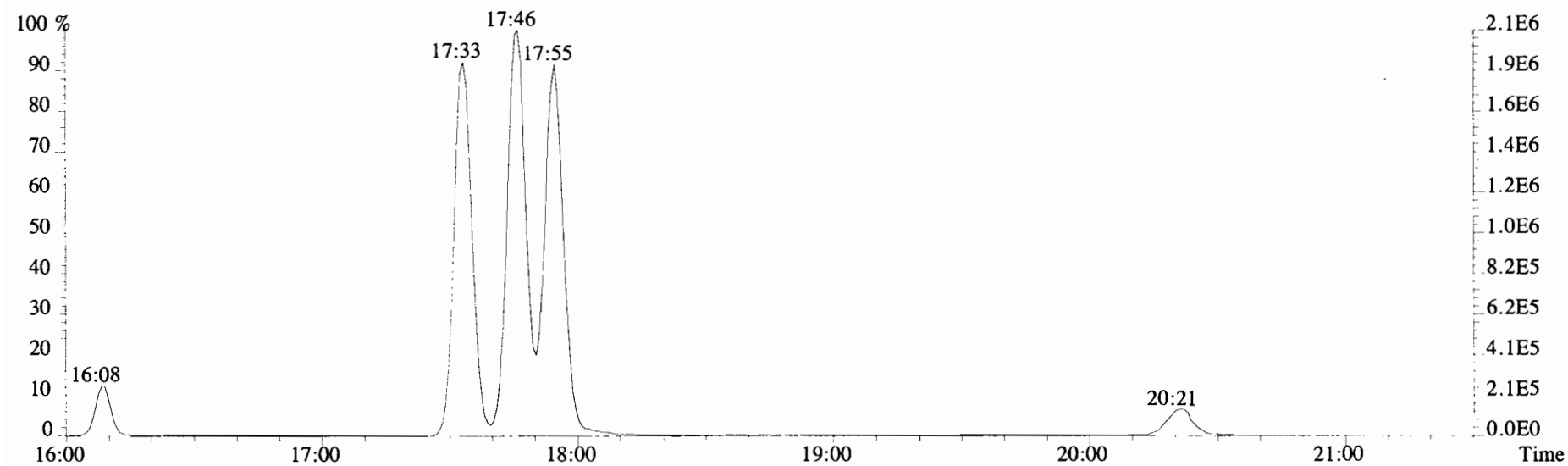
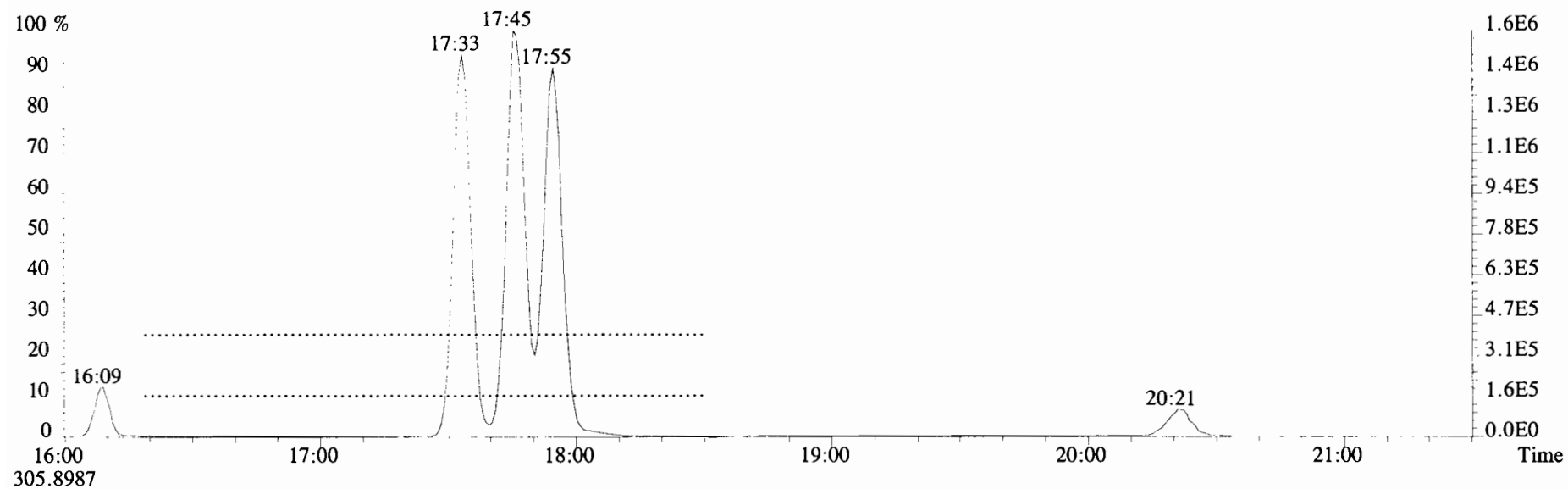
Date: 11/19/19

Vista Analytical Laboratory - Injection Log Run file: 191118D1 Instrument ID: VG-7 GC Column ID: DB-225

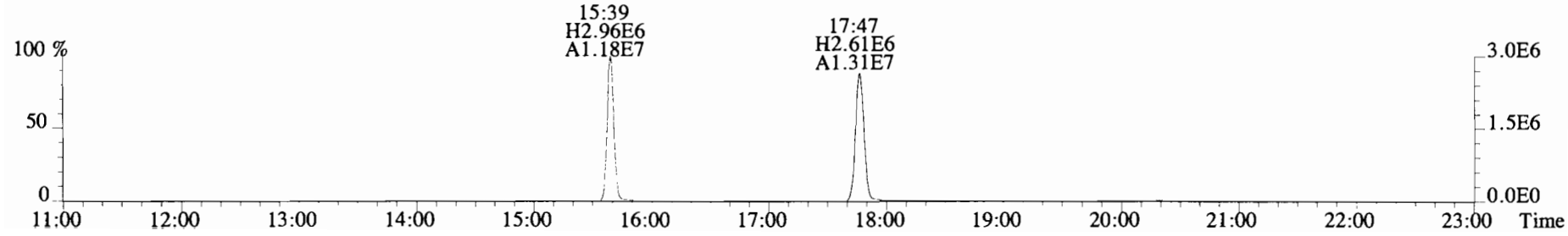
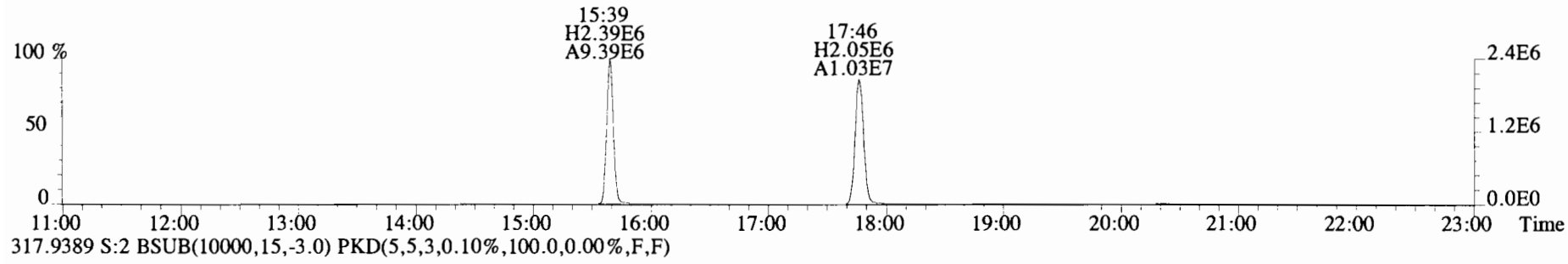
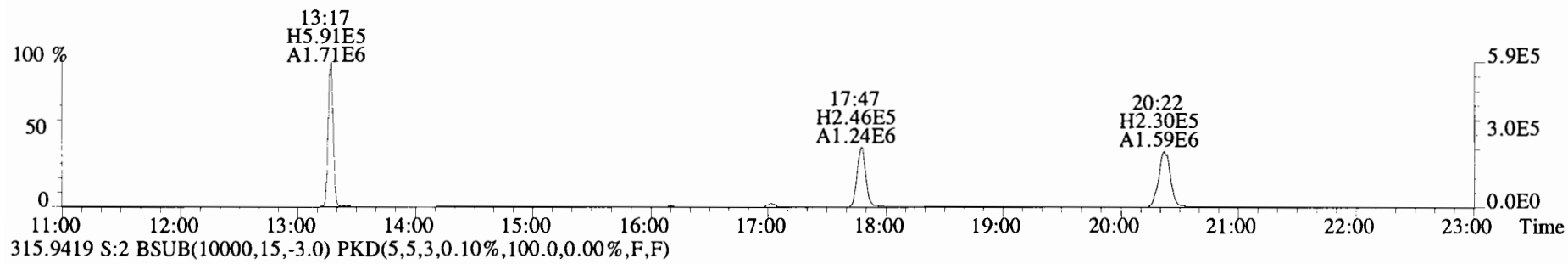
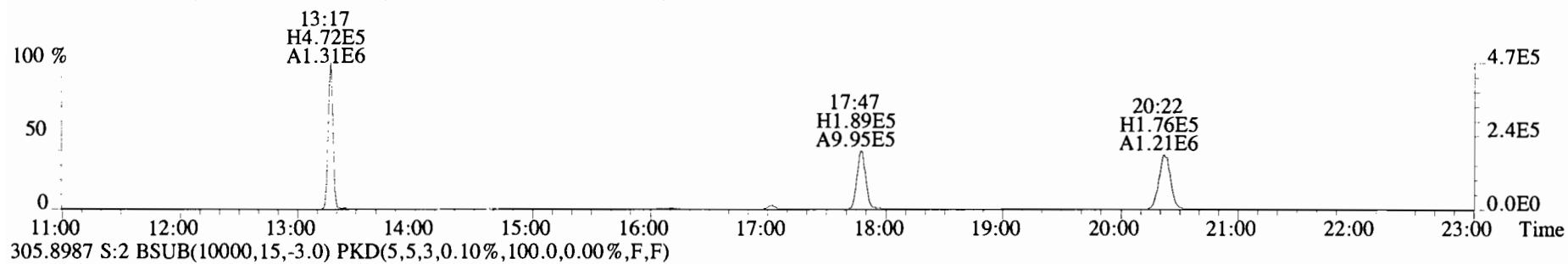
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191118D1	1	CP191118D1-1	DB	18-NOV-19	13:38:29	ST191118D1-1	NA
191118D1	2	ST191118D1-1	DB	18-NOV-19	14:10:43	ST191118D1-1	NA
191118D1	3	SOLVENT BLANK	DB	18-NOV-19	14:43:04	ST191118D1-1	NA
191118D1	4	1903659-03RE1	DB	18-NOV-19	15:15:25	ST191118D1-1	NA
191118D1	5	1903659-02RE1	DB	18-NOV-19	15:47:40	ST191118D1-1	NA
191118D1	6	1903565-18RE3	DB	18-NOV-19	16:20:00	ST191118D1-1	NA
191118D1	7	1903420-11RE2	DB	18-NOV-19	16:52:22	ST191118D1-1	NA
191118D1	8	1903565-17RE3	DB	18-NOV-19	17:24:37	ST191118D1-1	NA
191118D1	9	1903565-15RE3	DB	18-NOV-19	17:56:56	ST191118D1-1	NA



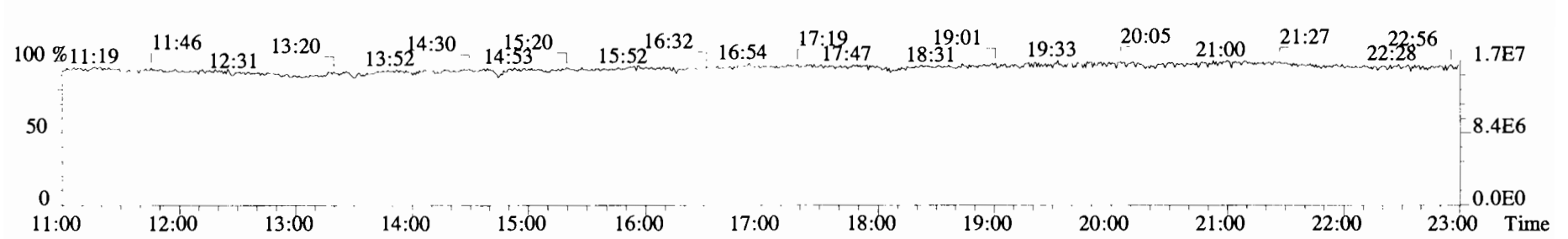
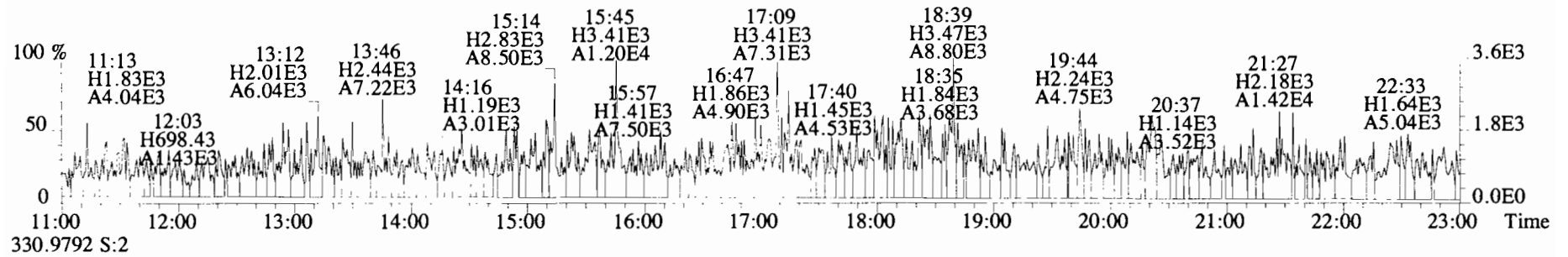
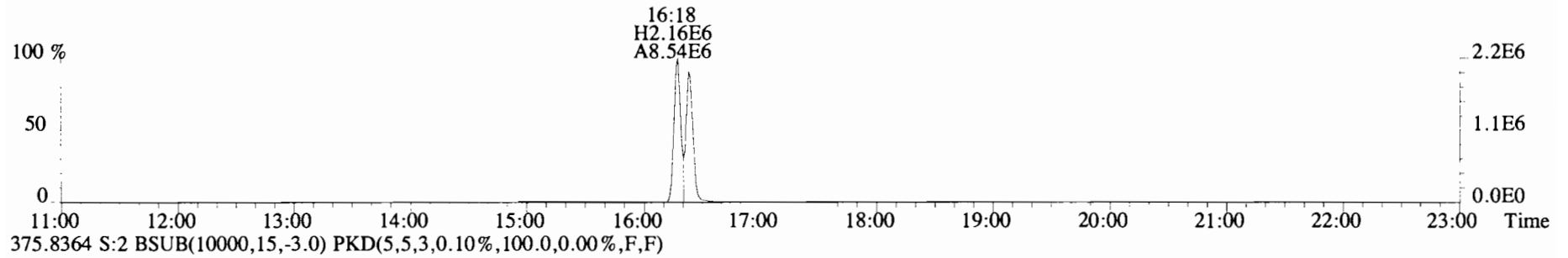
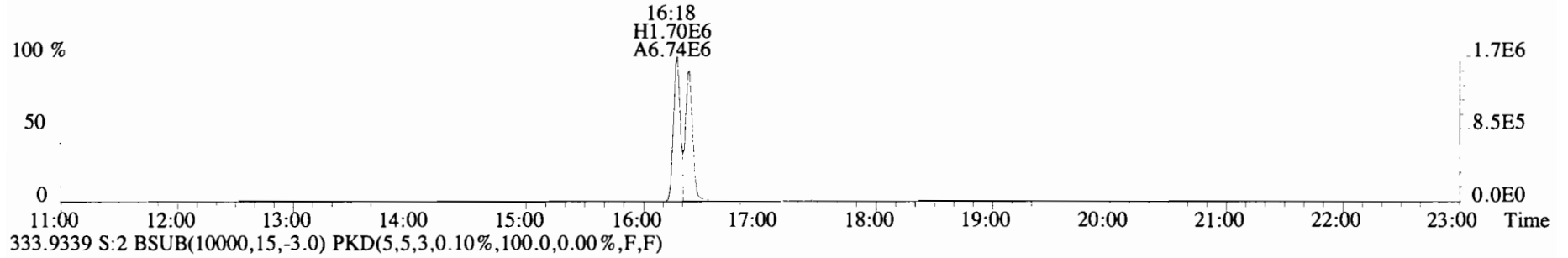
File:191118D1 #1-972 Acq:18-NOV-2019 13:38:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:CP191118D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016

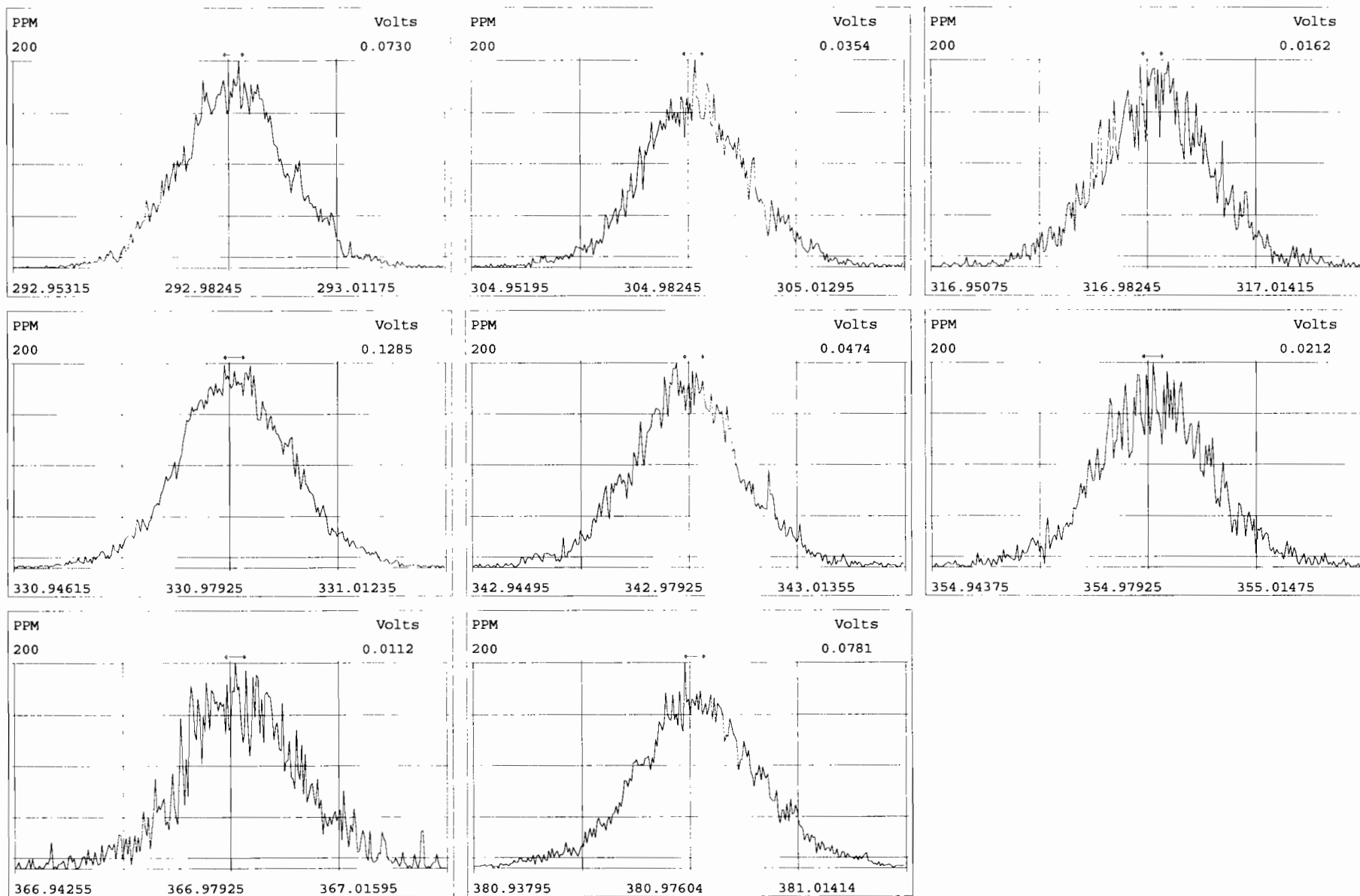


File:191118D1 #1-1682 Acq:18-NOV-2019 14:10:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory VG7 Text:ST191118D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:191118D1 #1-1682 Acq:18-NOV-2019 14:10:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory VG7 Text:ST191118D1-1 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)





HKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST191202D1-1

Reviewed By: CT 12/03/19
Initials & Date

End Calibration ID: ST191202D1-2

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mass resolution \geq	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentrations within criteria?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5k <input type="checkbox"/> 6-8K <input type="checkbox"/> 8K <input checked="" type="checkbox"/> 10K 1614 1699 429 1613/1668/8280		
TCDD/TCDF Valleys <25%	<input checked="" type="checkbox"/>	<input type="checkbox"/> NA	Intergrated peaks display correctly?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
First and last eluters present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GC Break <20%	<input type="checkbox"/> NA	
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8280 CS1 End Standard:</u>		
Verification Std. named correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		<input type="checkbox"/> NA
(ST-Year-Month-Day-VG ID)					
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comments:		
Correct ICAL referenced?	<u>DB</u>	<u>DB</u>			
<u>Run Log:</u>					
- Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
- Samples within 12 hour clock?	<u>(Y)</u>	<u>N</u>			
- Bottle position verified?	<u>DB</u>				

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST191202D1-1

Initial Calibration Date: 5-30-19

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 191202D1 S#2 Analysis Date: 2-DEC-19 Time: 11:35:06

ANALYTES	M/Z'S	ION	QC	CONC.	CONC. RANGE	CONC. RANGE
	FORMING	ABUND.	LIMITS		1613	8290
	RATIO (1)	RATIO	(2)	FOUND	(ng/mL)	(ng/mL)
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	9.8	8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	110.0	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: 12/2/19

Client ID: 1613 CS3 19C2204
Lab ID: ST191202D1-1

Filename: 191202D1 S:2 Acq: 2-DEC-19 11:35:06
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 1.000

ConCal: ST191202D1-1
EndCAL: ST191202D1-2

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	1.22e+07	0.80 y	15:36	1.00	100.0	-
13C-2,3,7,8-TCDF	1.37e+07	0.80 y	17:42	1.02	110.0	110.0
2,3,7,8-TCDF	1.28e+06	0.80 y	17:43	0.95	9.842	

Integrations
by
Analyst: DB

Date: 12/2/19

Reviewed
by
Analyst: C7

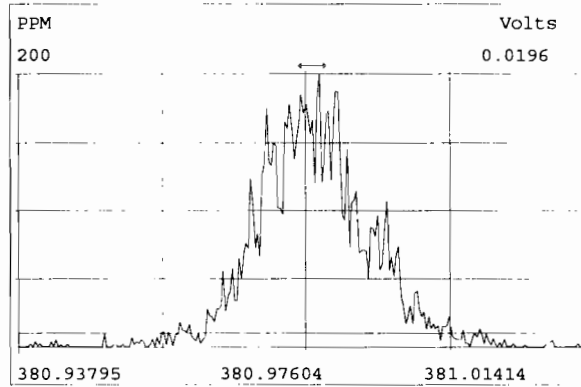
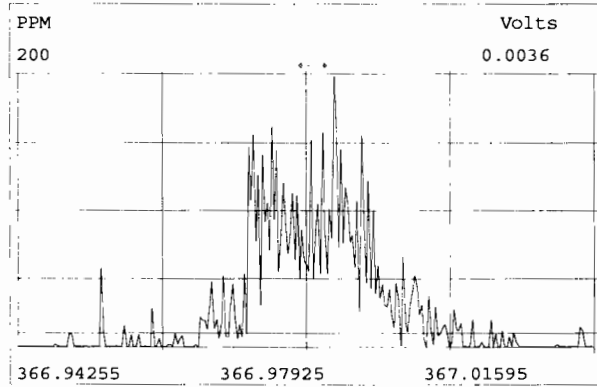
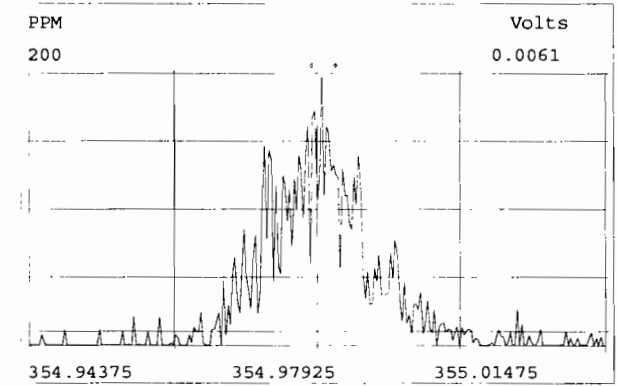
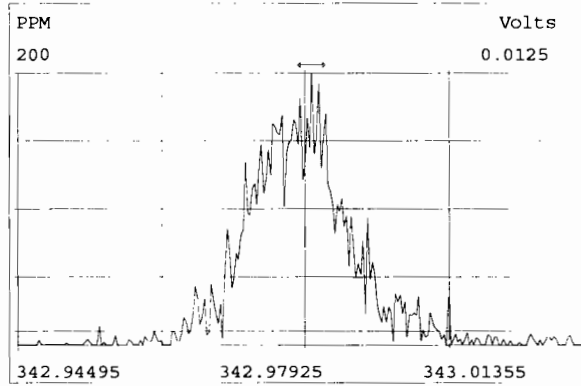
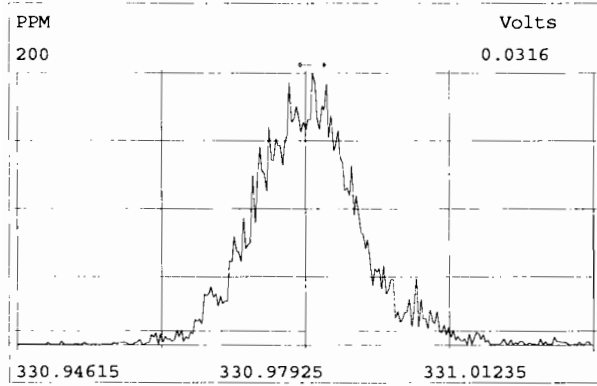
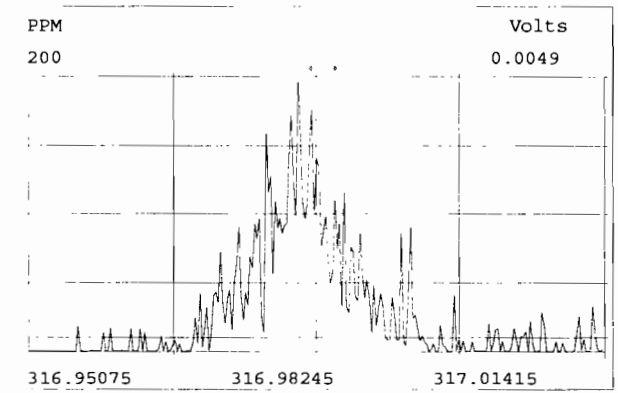
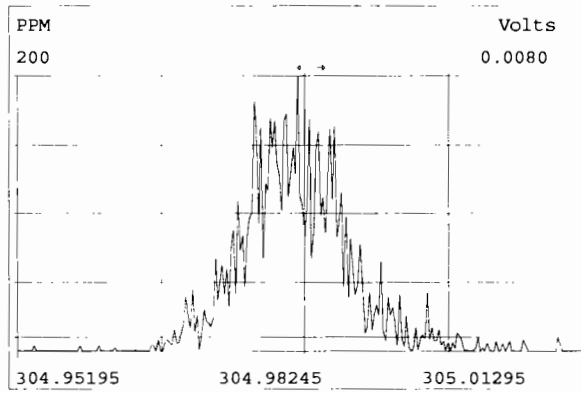
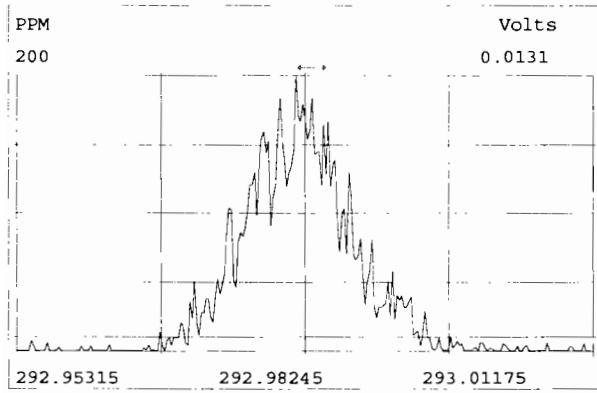
Date: 12/03/19

Vista Analytical Laboratory - Injection Log Run file: 191202D1 Instrument ID: VG-7 GC Column ID: DB-225

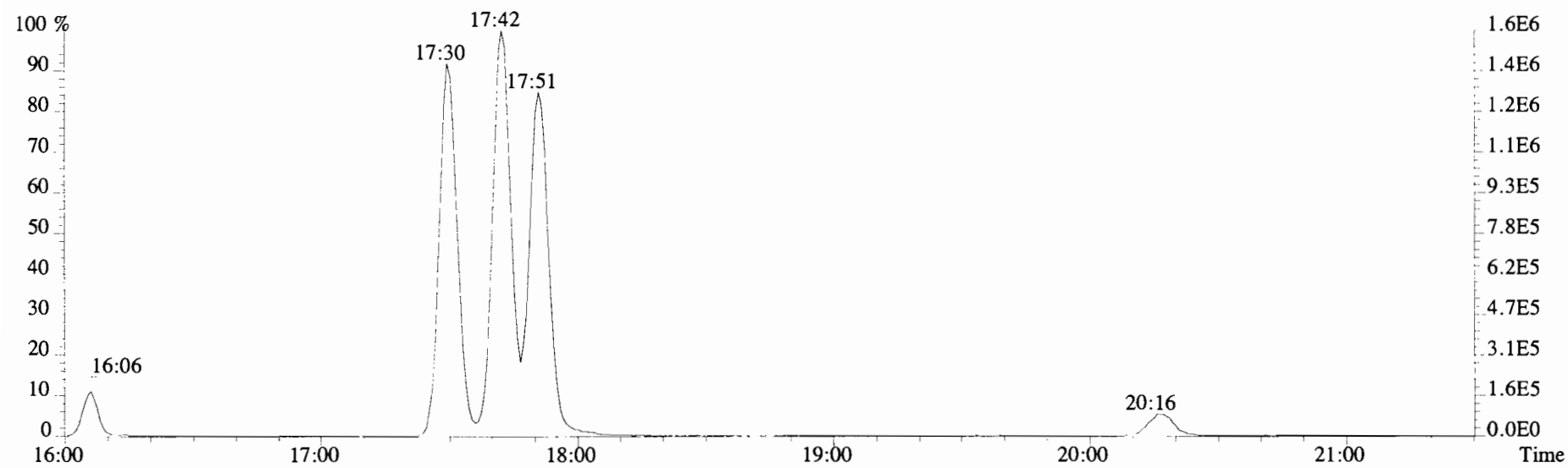
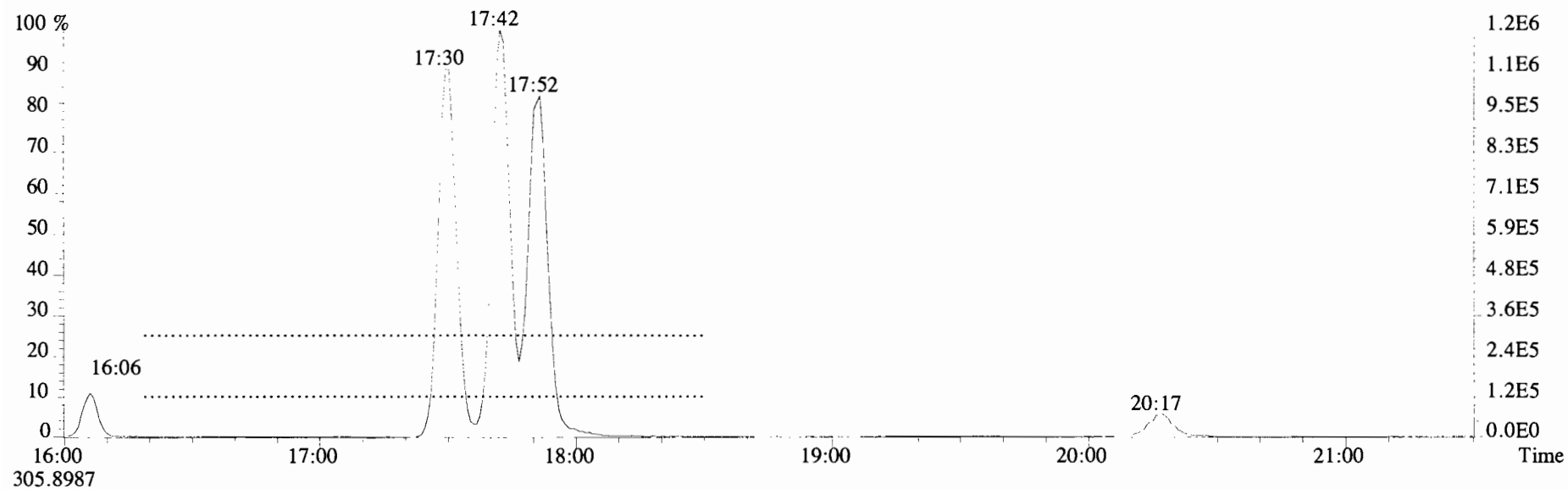
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
191202D1	1	CP191202D1-1	DB	2-DEC-19	11:02:50	ST191202D1-1	ST191202D1-2
191202D1	2	ST191202D1-1	DB	2-DEC-19	11:35:06	ST191202D1-1	ST191202D1-2
191202D1	3	SOLVENT BLANK	DB	2-DEC-19	12:07:23	NA	NA
191202D1	4	1903888-01RE1	DB	2-DEC-19	12:39:39	ST191202D1-1	ST191202D1-2
191202D1	5	1903565-14RE2	DB	2-DEC-19	13:11:55	ST191202D1-1	NA
191202D1	6	SOLVENT BLANK	DB	2-DEC-19	13:44:12	NA	NA
191202D1	7	ST191202D1-2	DB	2-DEC-19	14:16:29	ST191202D1-1	ST191202D1-2

Peak Locate Examination: 2-DEC-2019:11:01 File:191202D1

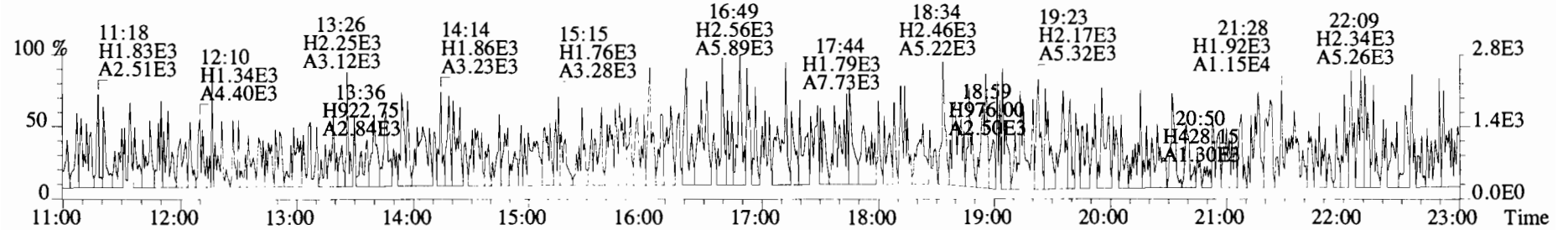
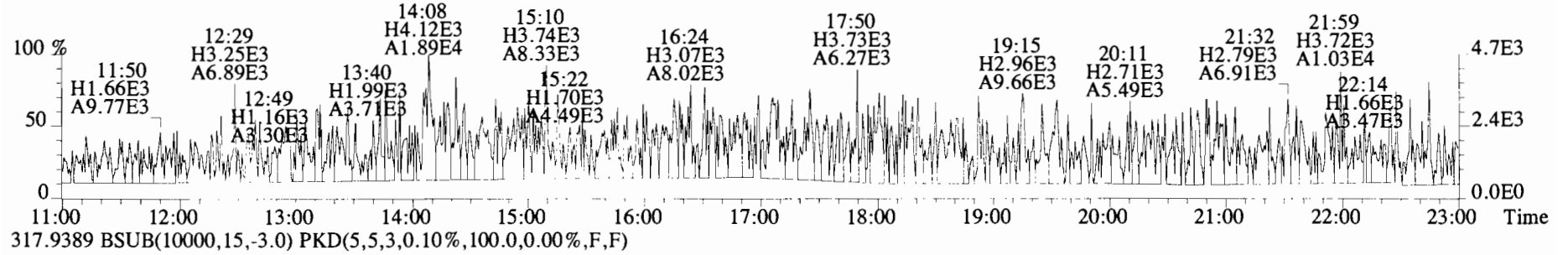
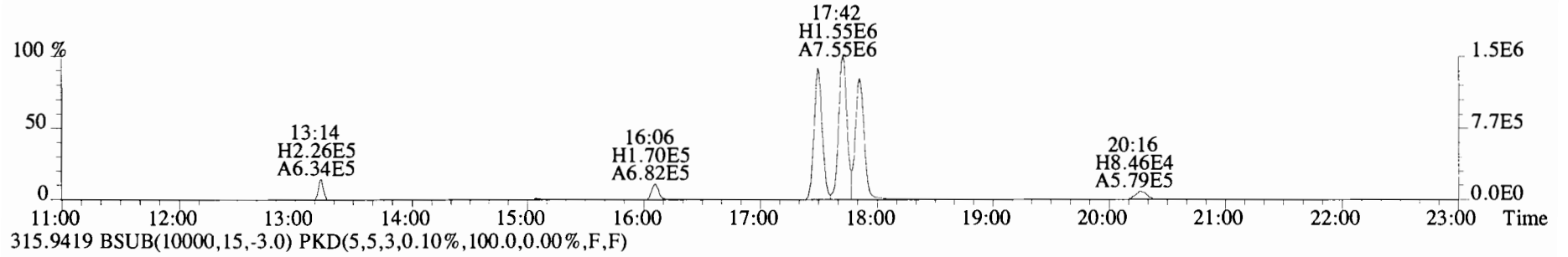
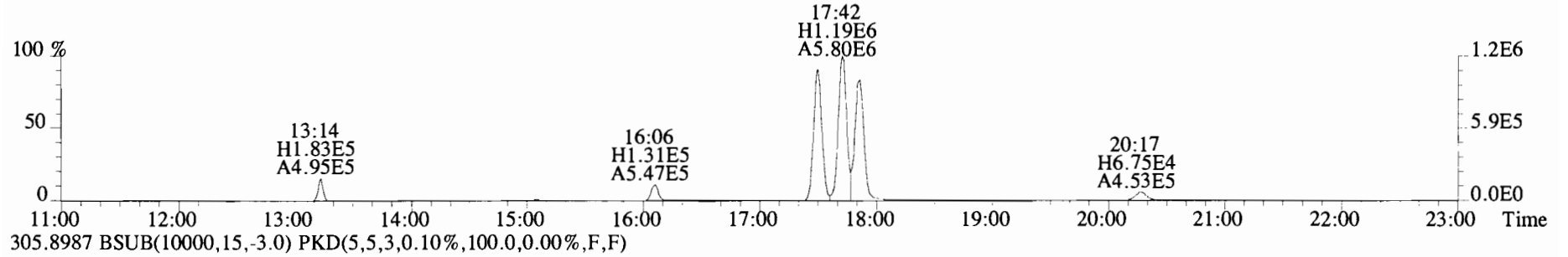
Experiment:TCDF_DB225 Function:1 Reference:PFK



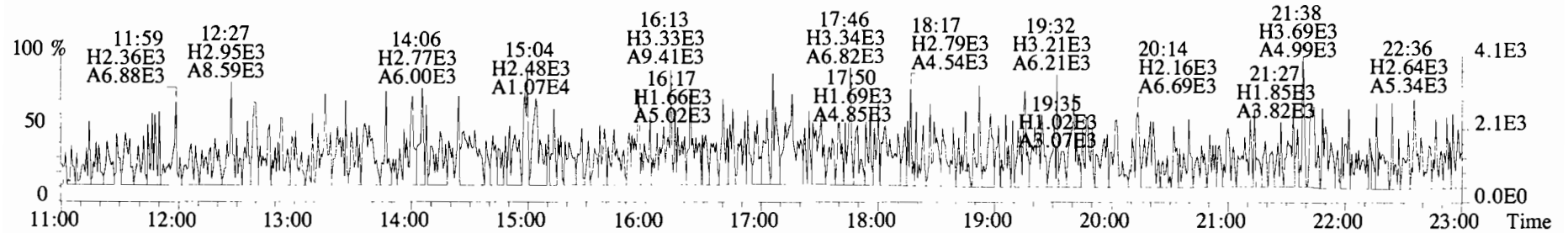
File:191202D1 #1-1208 Acq: 2-DEC-2019 11:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata_Analytical_Laboratory_VG7 Text:CP191202D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016



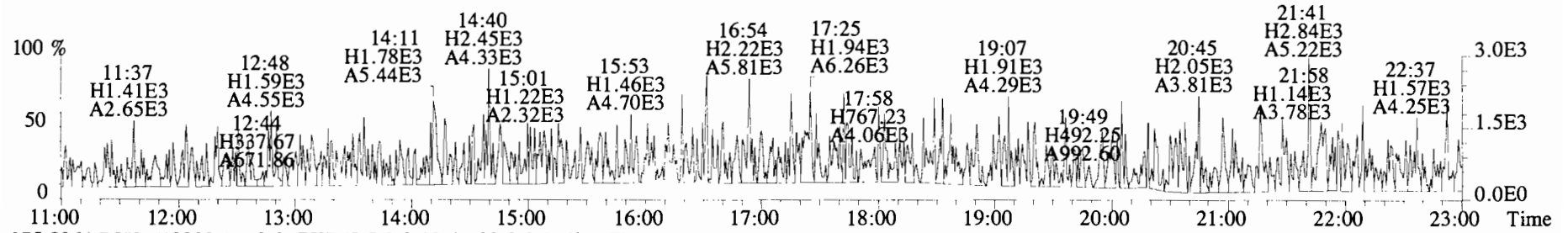
File:191202D1 #1-1683 Acq: 2-DEC-2019 11:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:CP191202D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



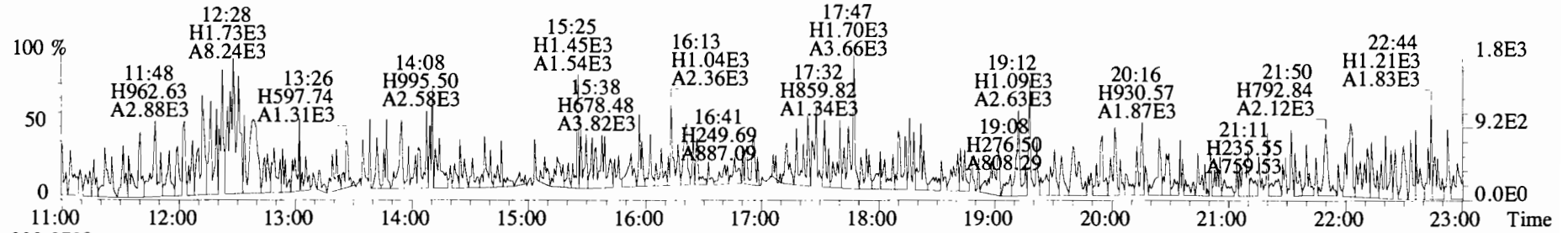
File:191202D1 #1-1683 Acq: 2-DEC-2019 11:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Viata Analytical Laboratory VG7 Text:CP191202D1-1 DB225 CPSM Exp:TCDF_DB225
331.9368 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



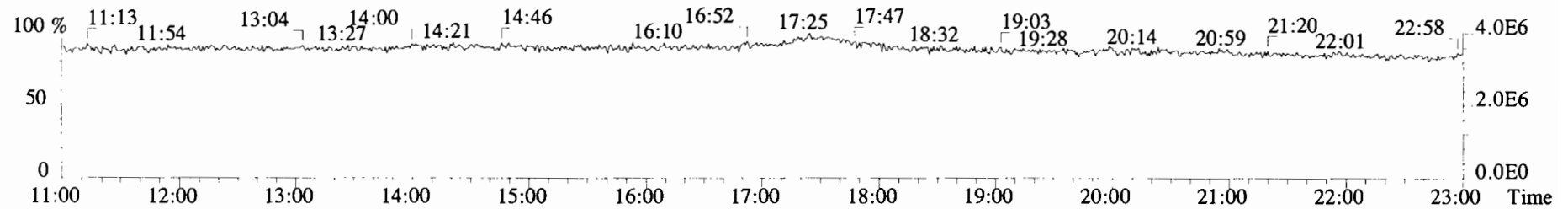
333.9339 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



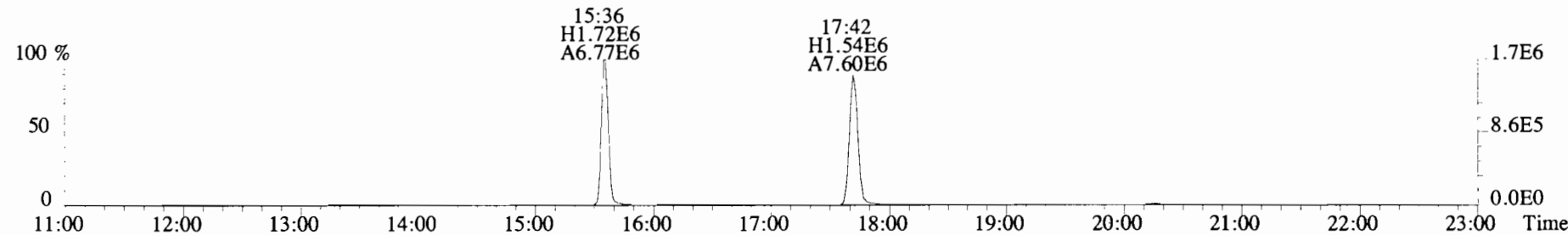
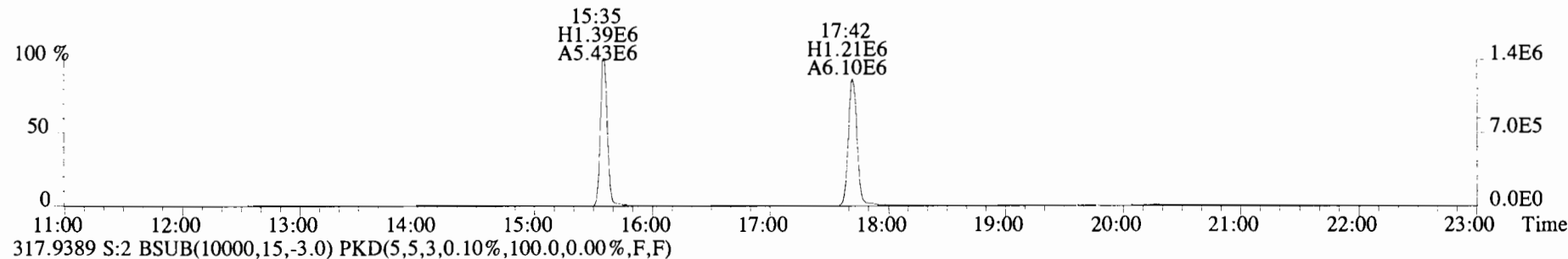
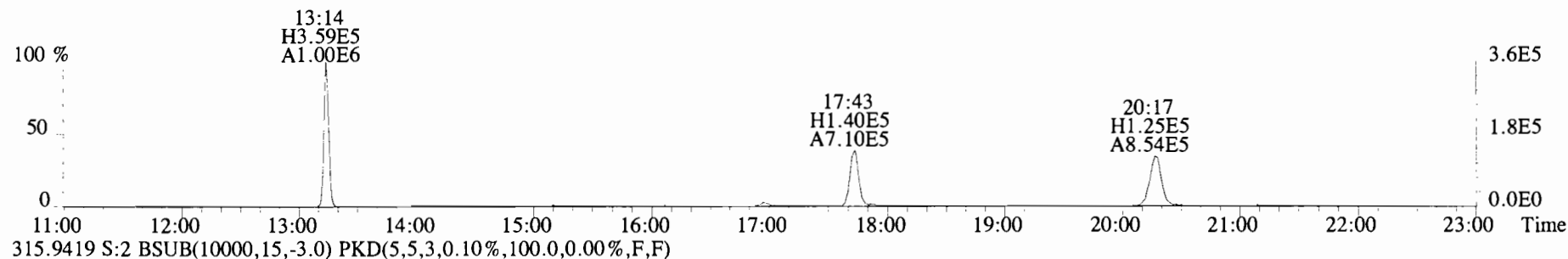
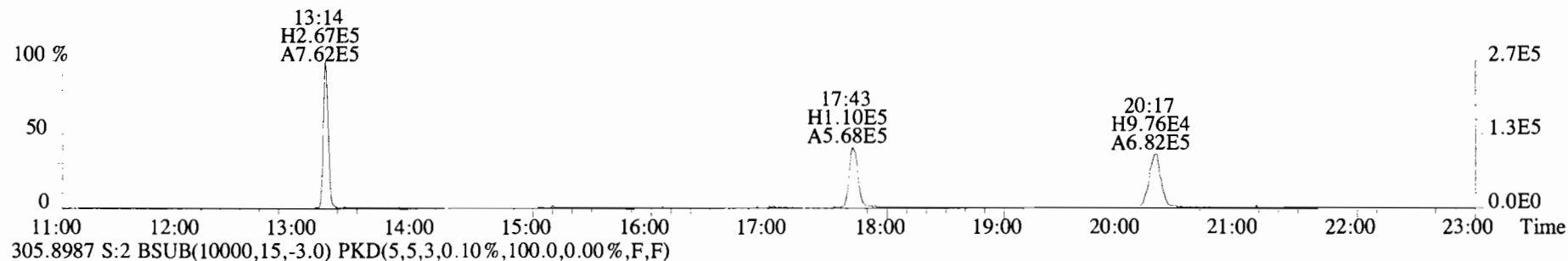
375.8364 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



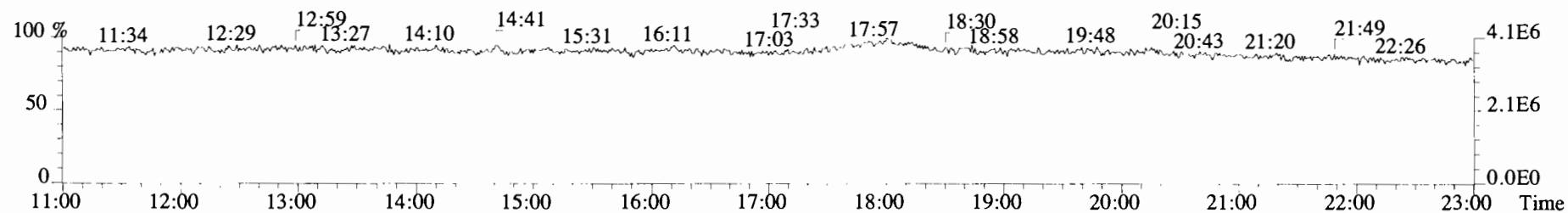
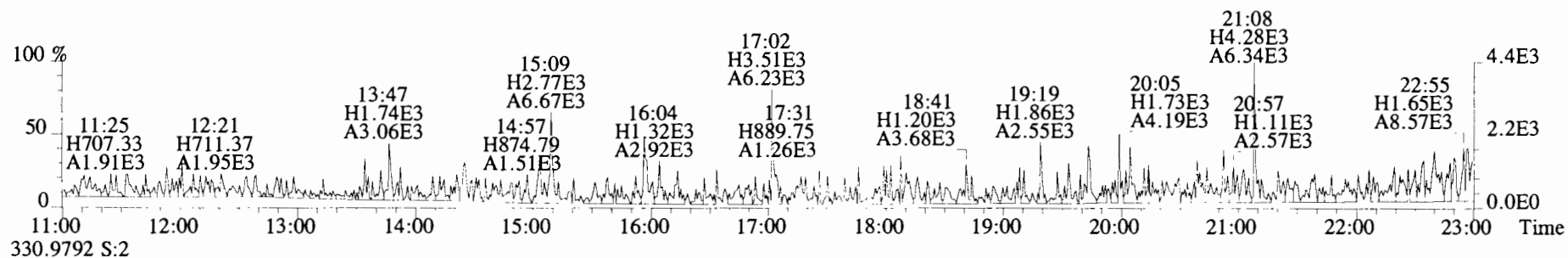
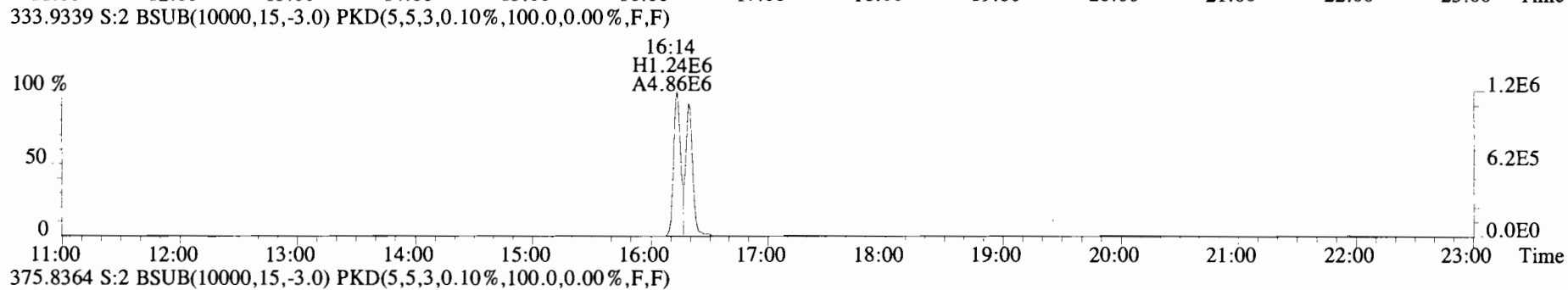
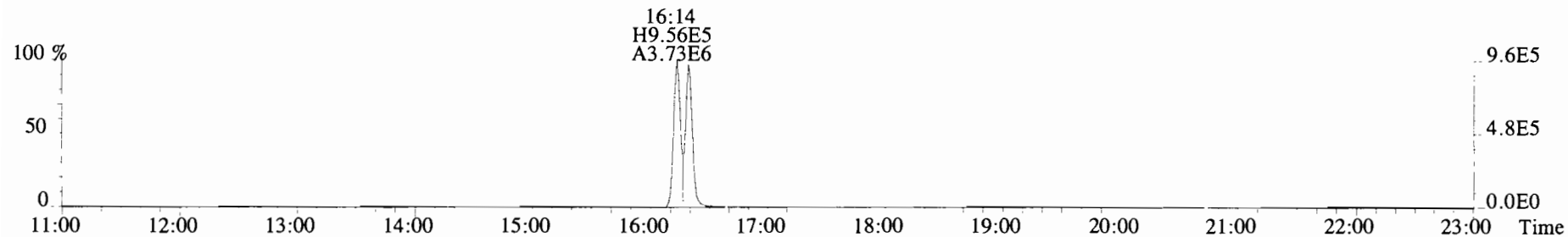
330.9792



File:191202D1 #1-1682 Acq: 2-DEC-2019 11:35:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Viata Analytical Laboratory VG7 Text:ST191202D1-1 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)

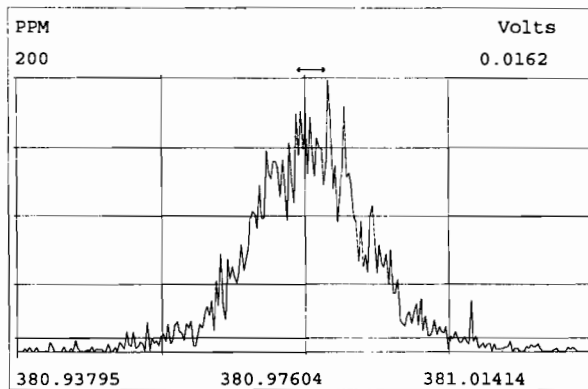
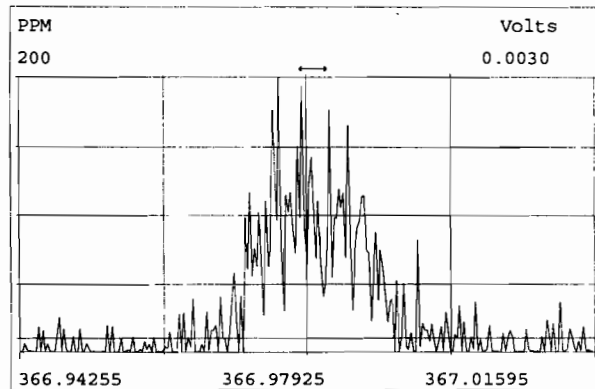
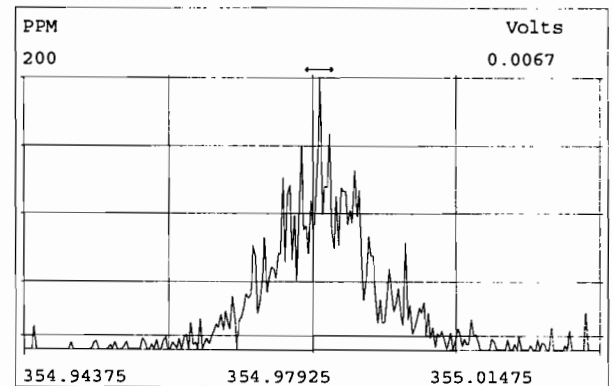
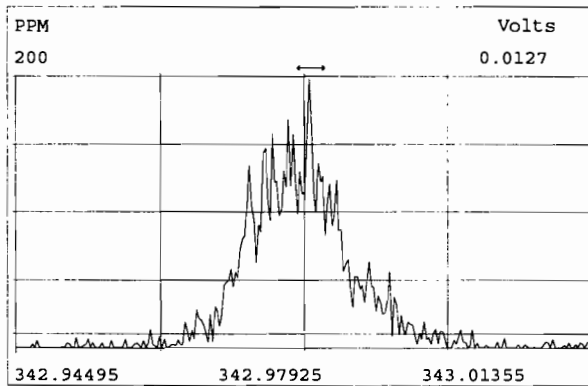
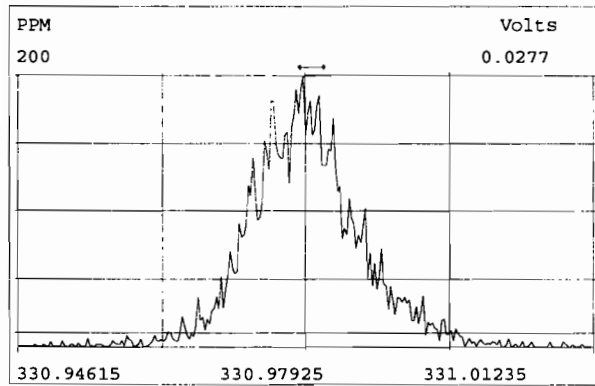
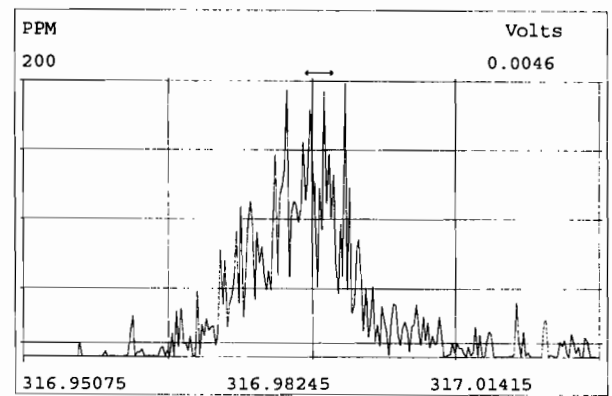
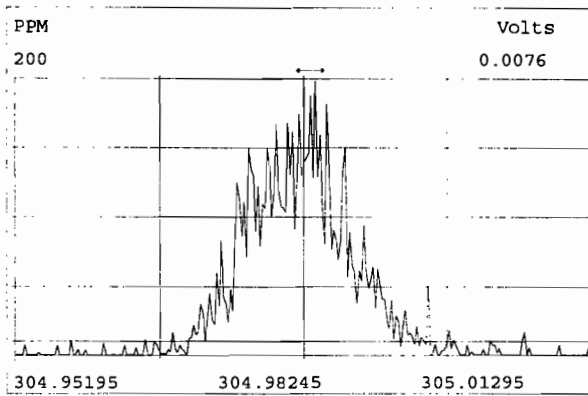
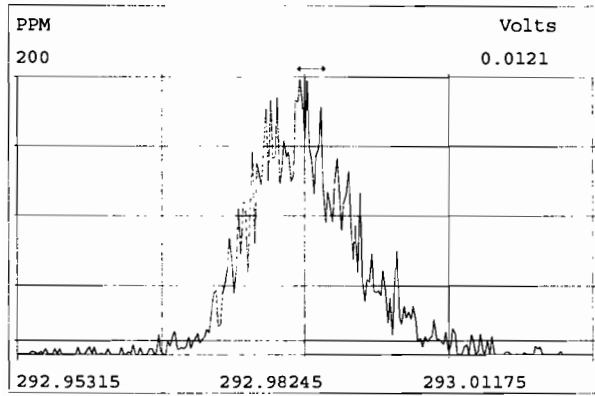


File:191202D1 #1-1682 Acq: 2-DEC-2019 11:35:06 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Viata Analytical Laboratory VG7 Text:ST191202D1-1 1613 CS3 19C2204 Exp:TCDF_DB225
 331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Peak Locate Examination: 2-DEC-2019:14:50 File:RES_CHECK

Experiment:TCDF_DB225 Function:1 Reference:PFK



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

Samp# 1	Samp# 2	Samp# 3	Samp# 4	Samp# 5	Samp# 6
0.25	0.50	2.0	10	40	300

Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	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 CT
10/10/19 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

DB
10/10/14

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

D)B
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

Samp# 1	Samp# 2	Samp# 3	Samp# 4	Samp# 5	Samp# 6
0.25	0.50	2.0	10	40	300

Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
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

		Samp# 1	Samp# 2	Samp# 3	Samp# 4	Samp# 5	Samp# 6	
		0.25	0.50	2.0	10	40	300	
	RRT Limits							
Name	Lower	Upper	RRT#1	RRT#2	RRT#3	RRT#4	RRT#5	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	*	*	*	*	*	*

D)B
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

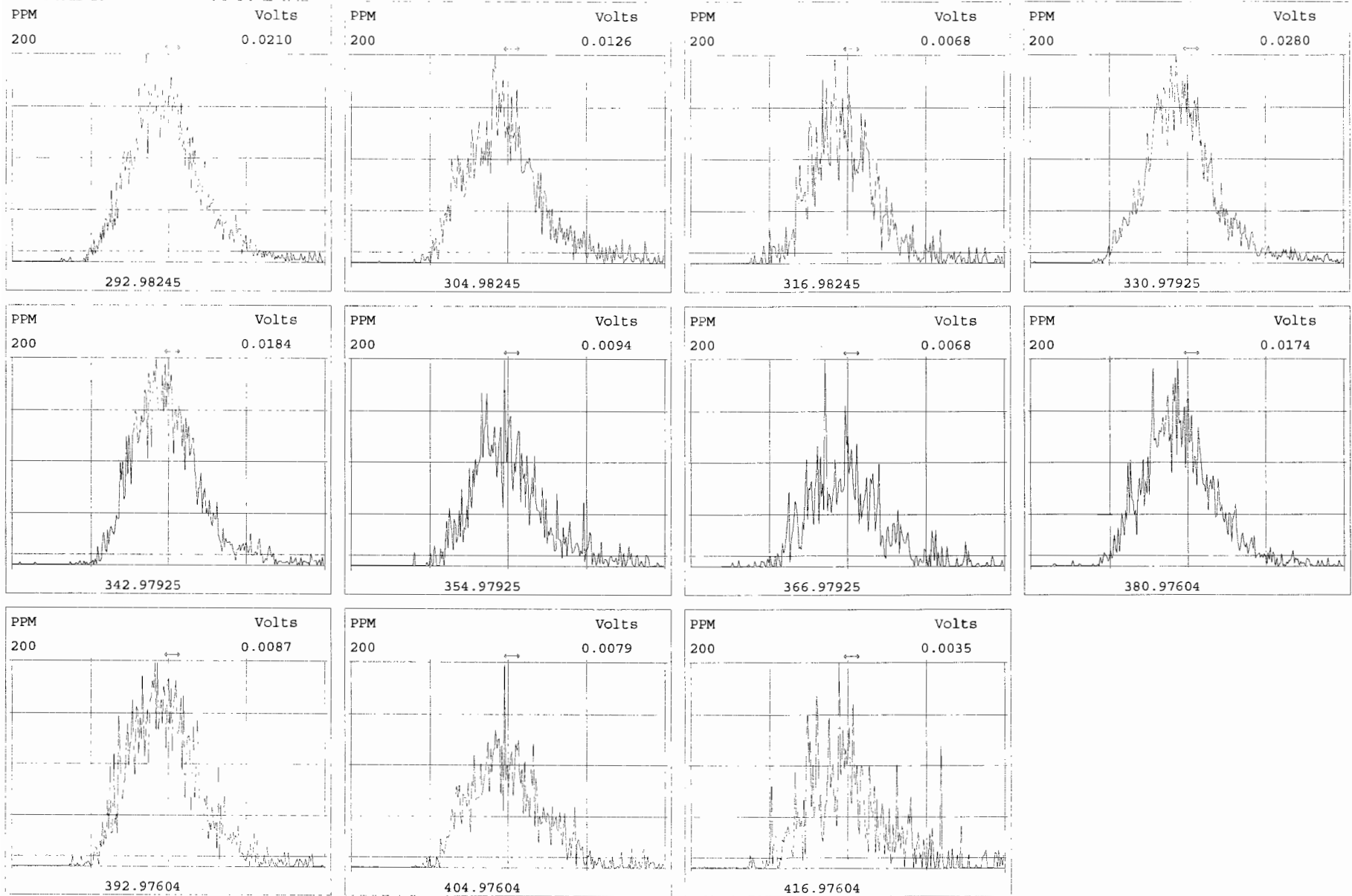
% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

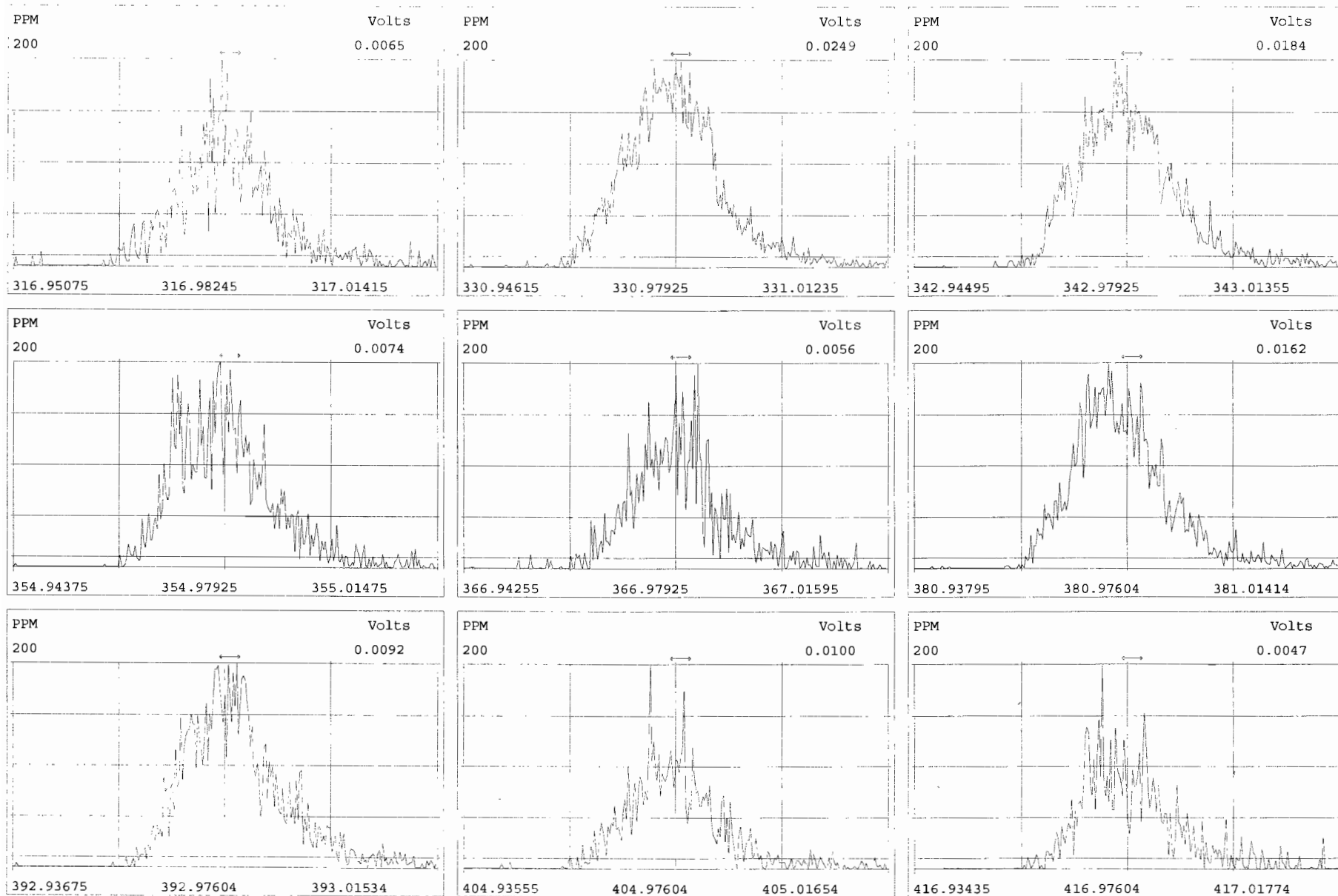
Analyst: DB

Date: 10/10/19



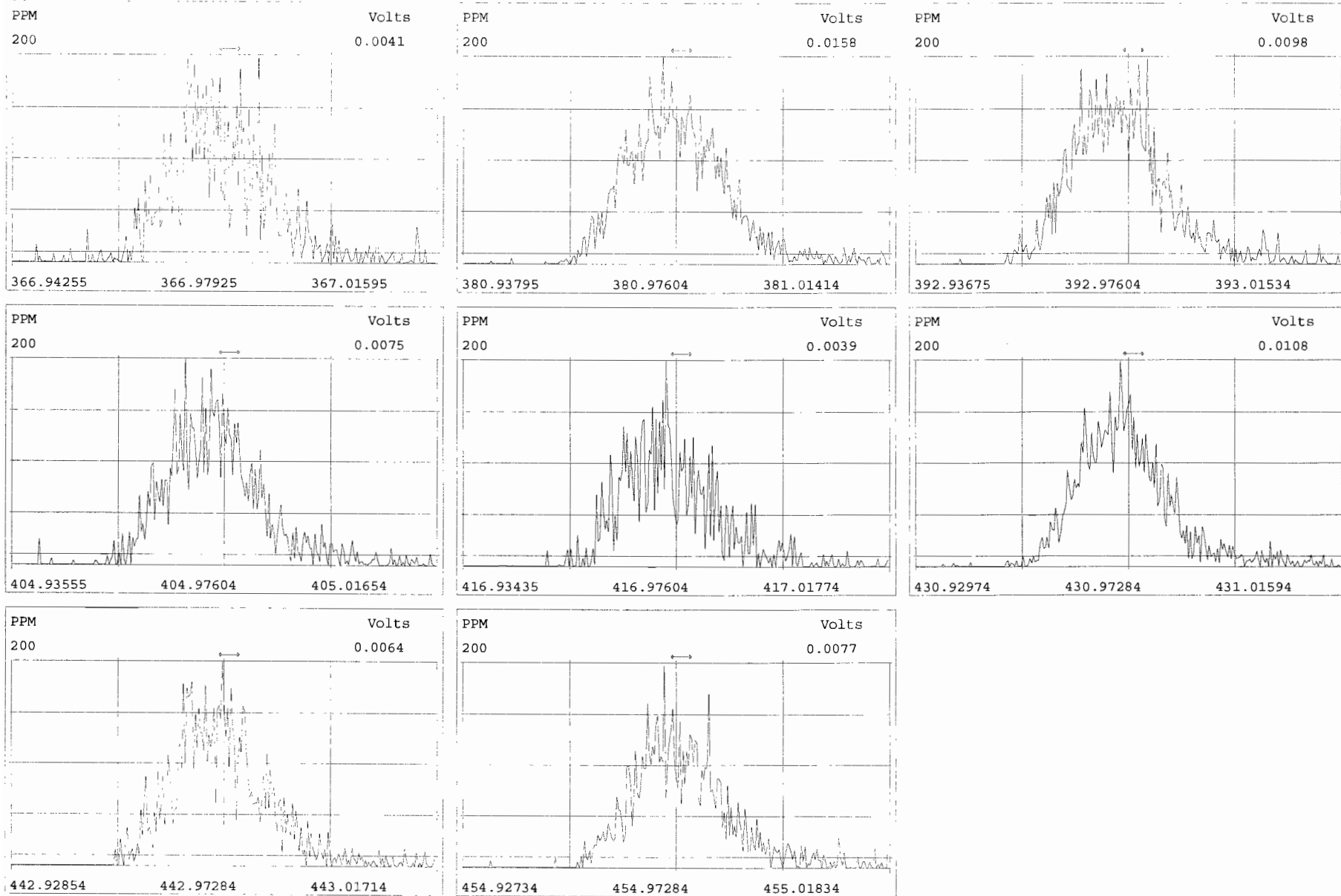
Peak Locate Examination: 9-OCT-2019:16:10 File:191009D1

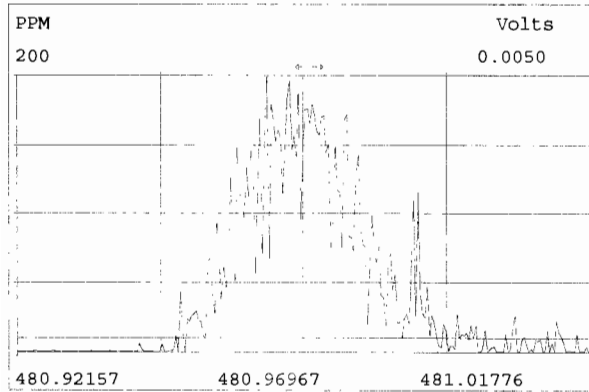
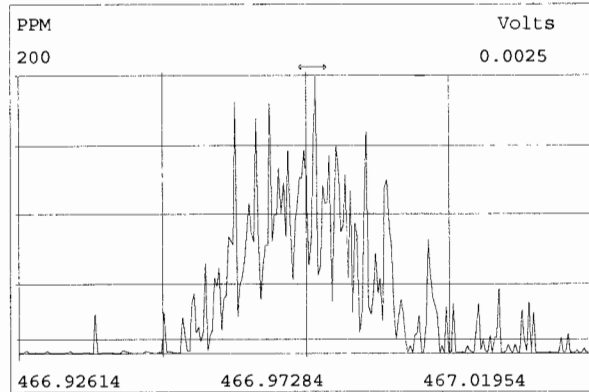
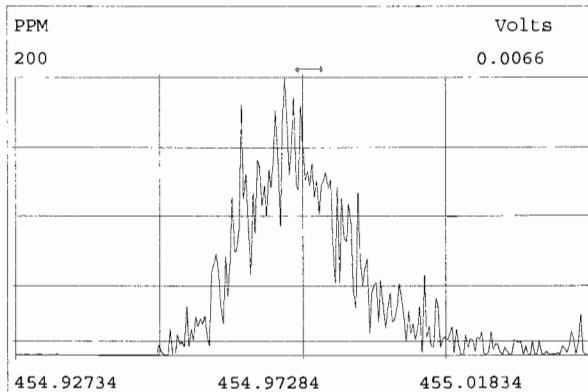
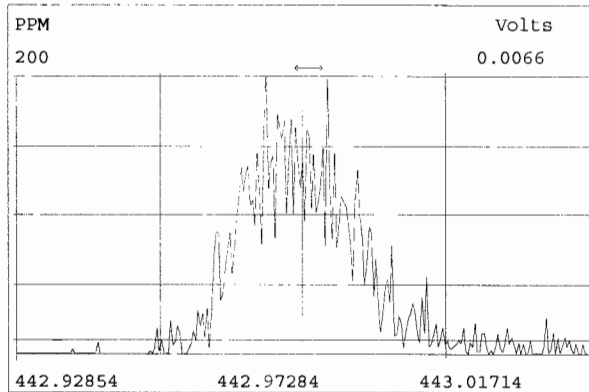
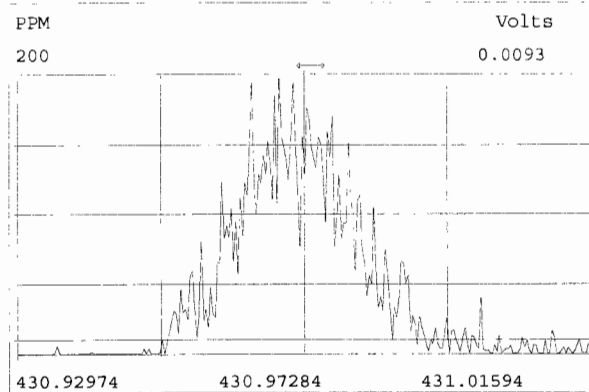
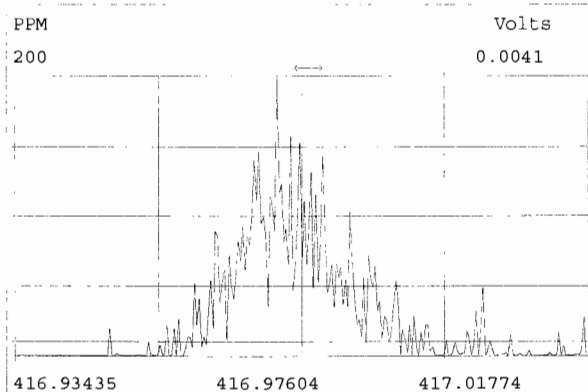
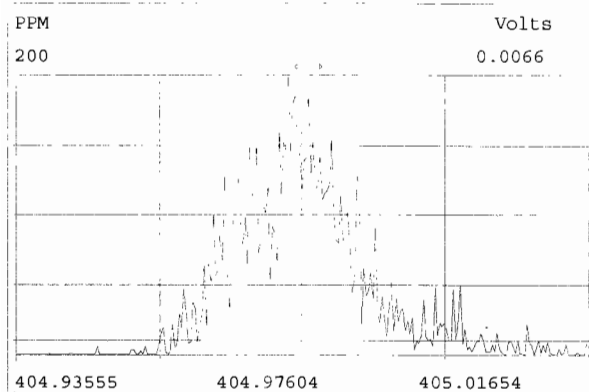
Experiment:OCDD_DB5 Function:2 Reference:PFK

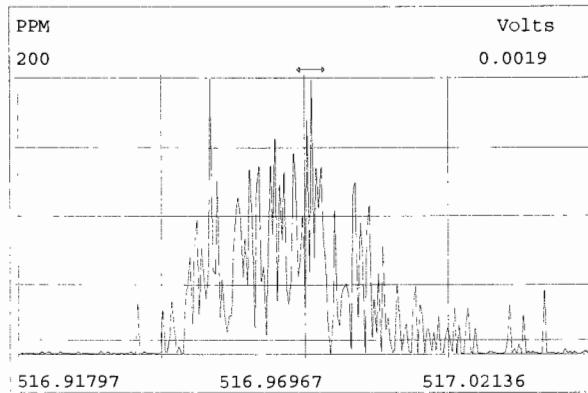
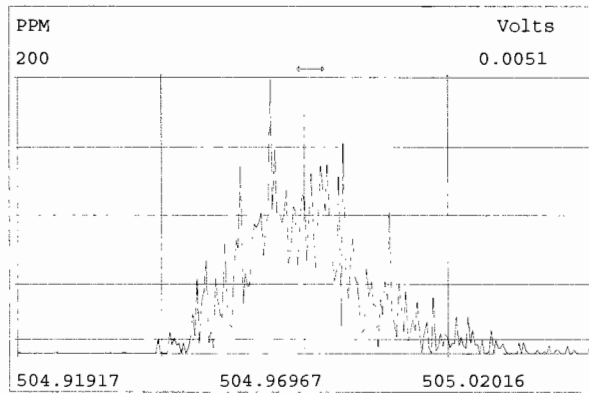
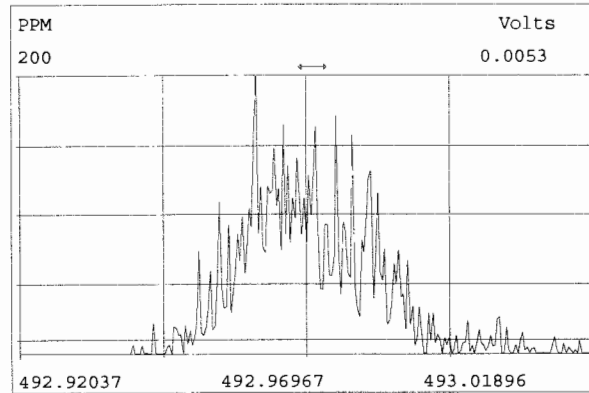
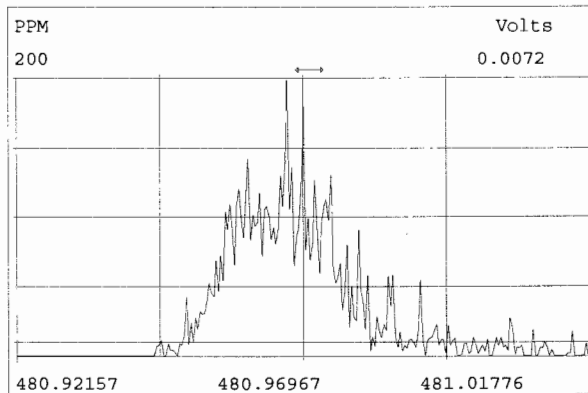
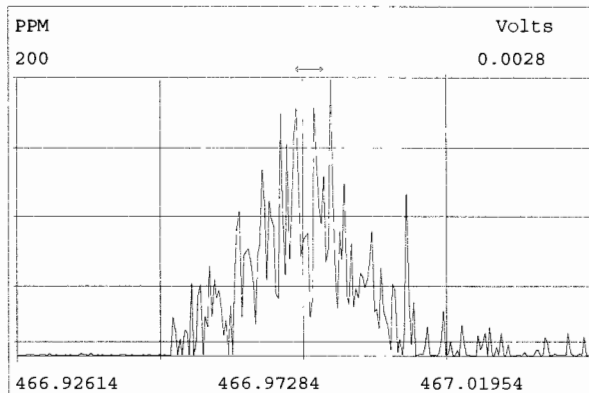
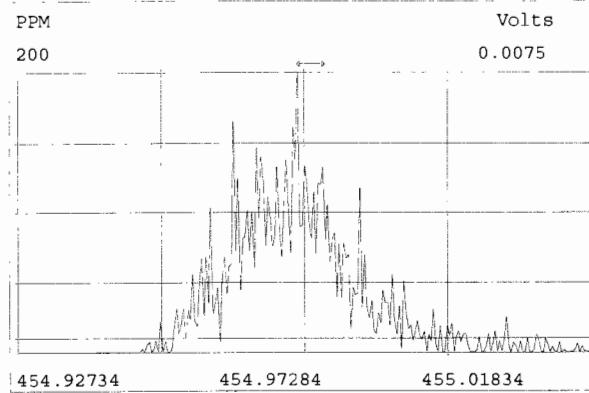
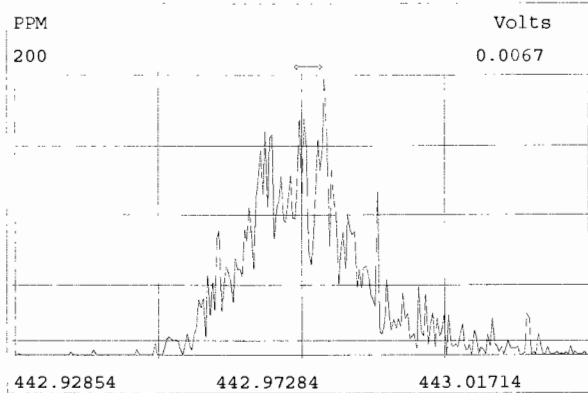
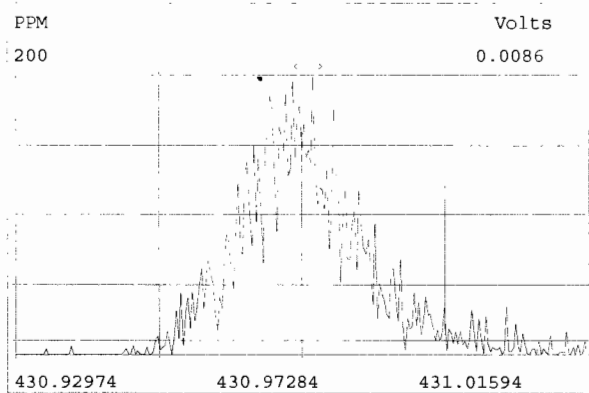


Peak Locate Examination: 9-OCT-2019:16:11 File:191009D1

Experiment:OCDD_DB5 Function:3 Reference:PFK



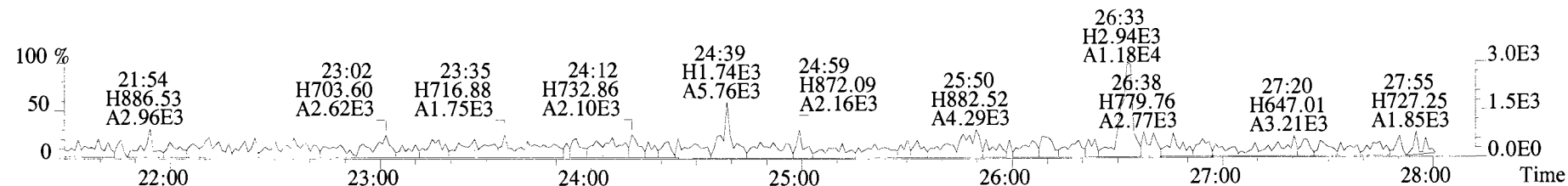




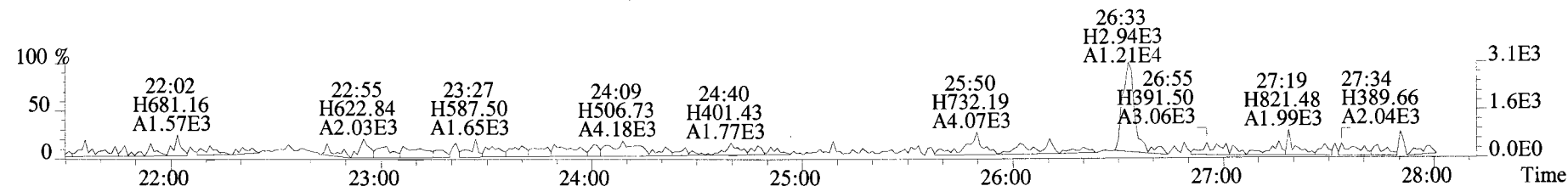
Vista Analytical Laboratory - Injection Log Run file: 191009D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
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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
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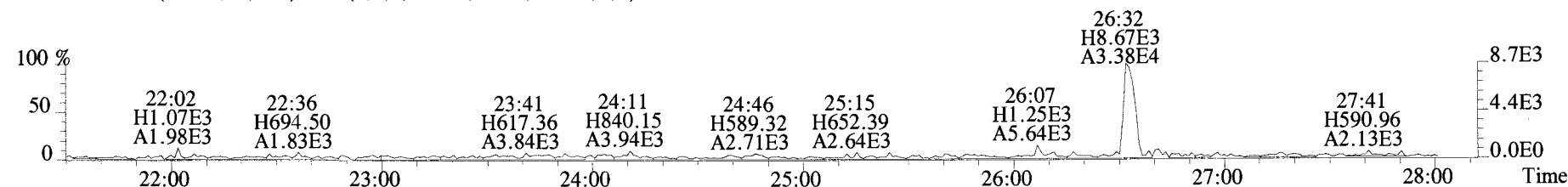
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Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



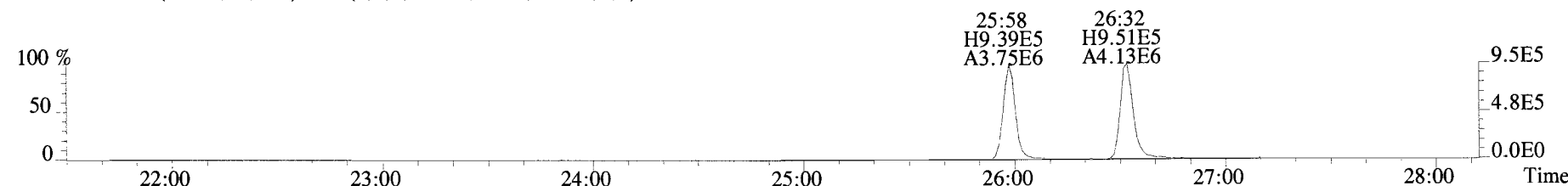
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



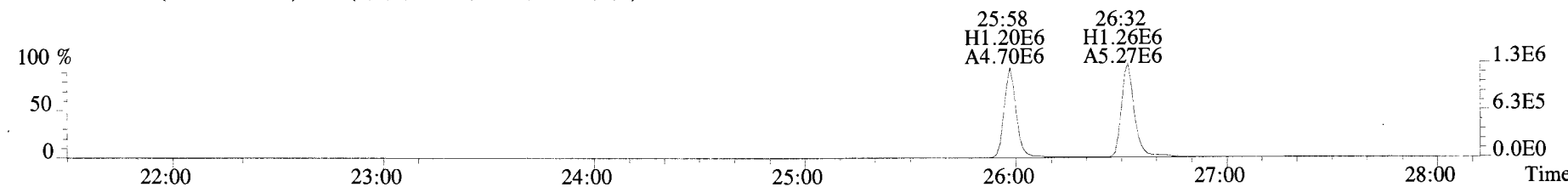
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



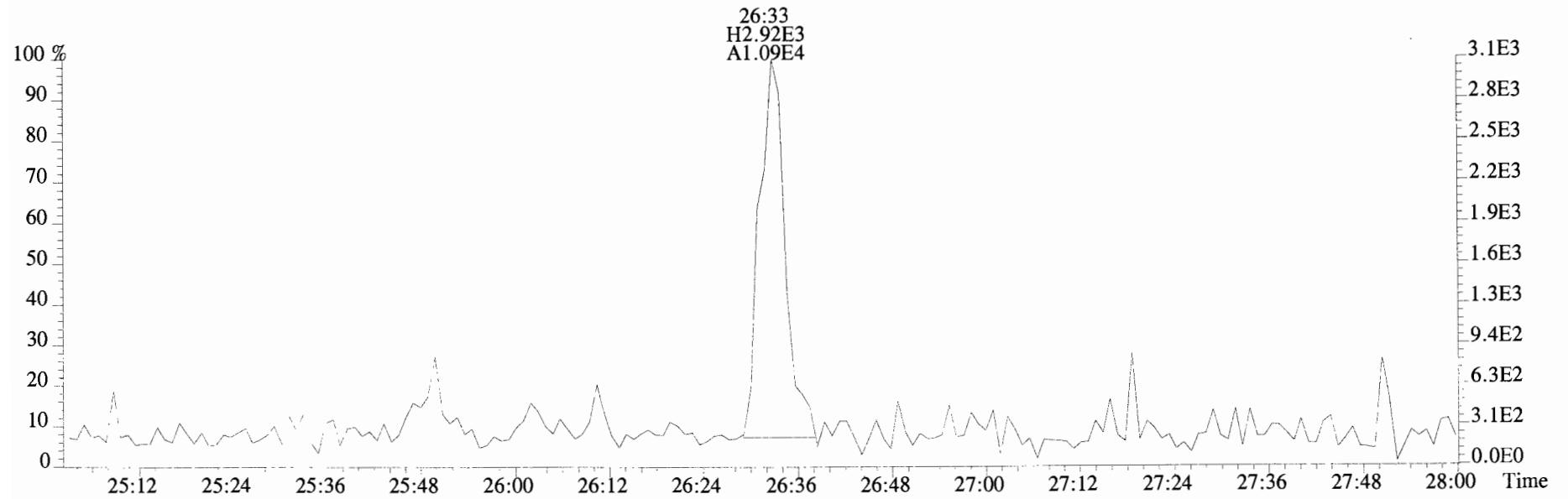
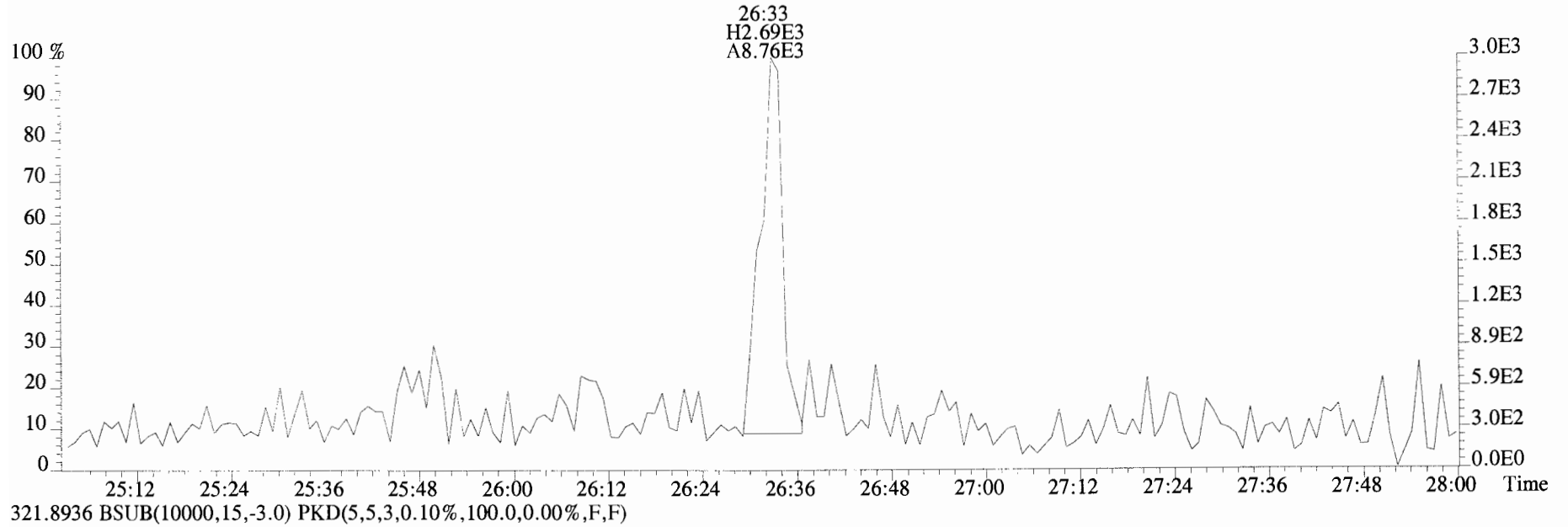
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



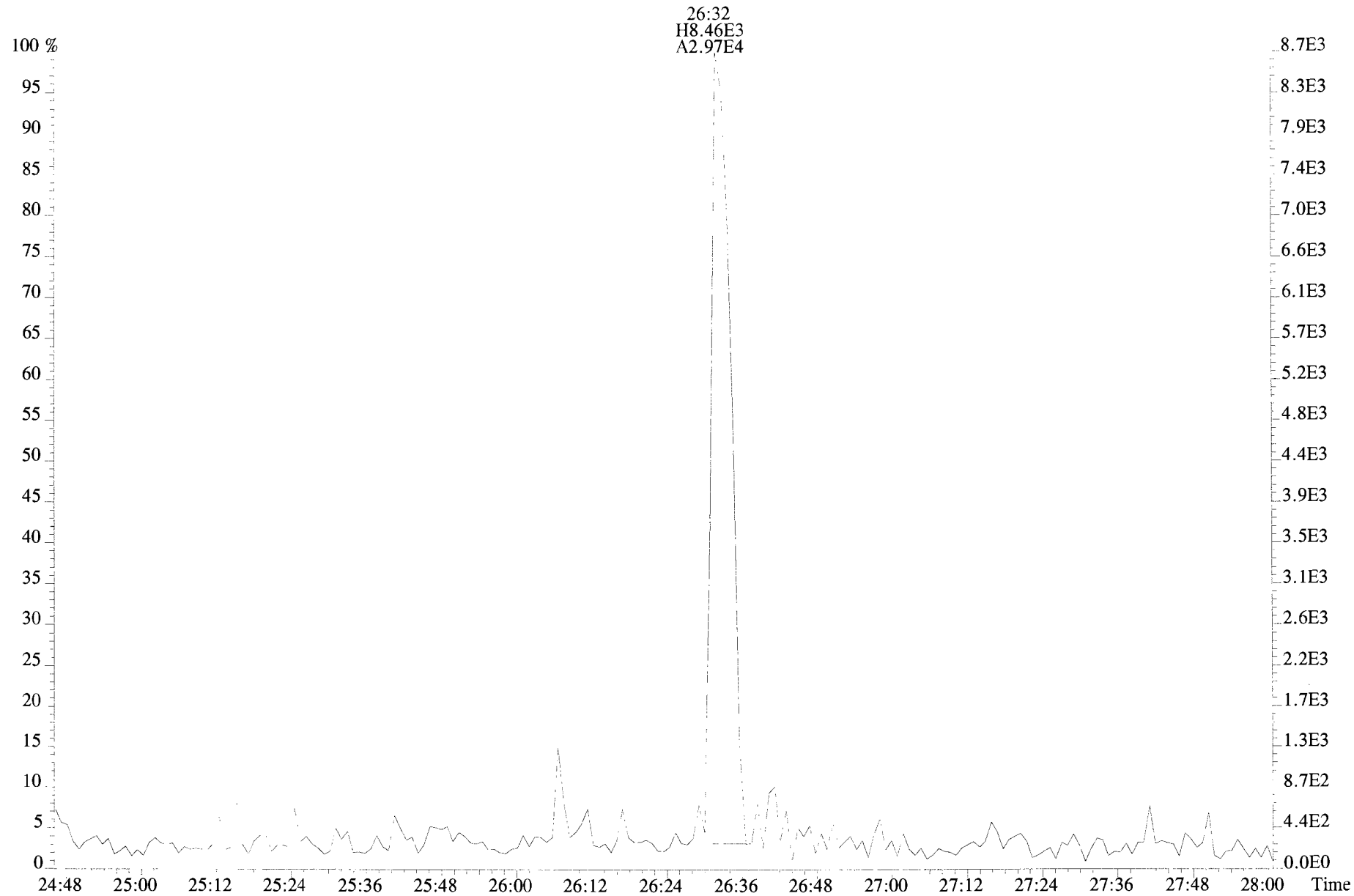
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



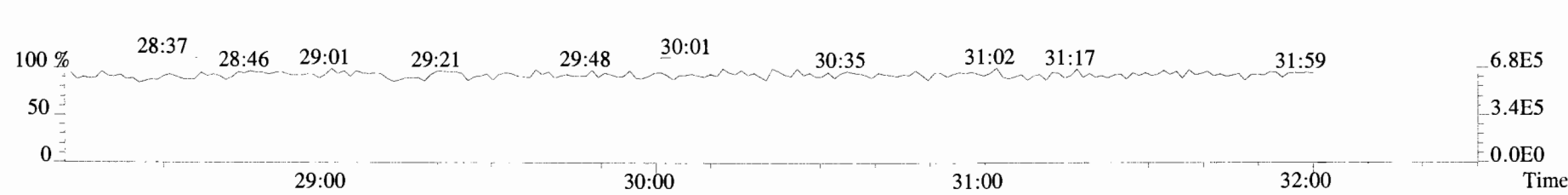
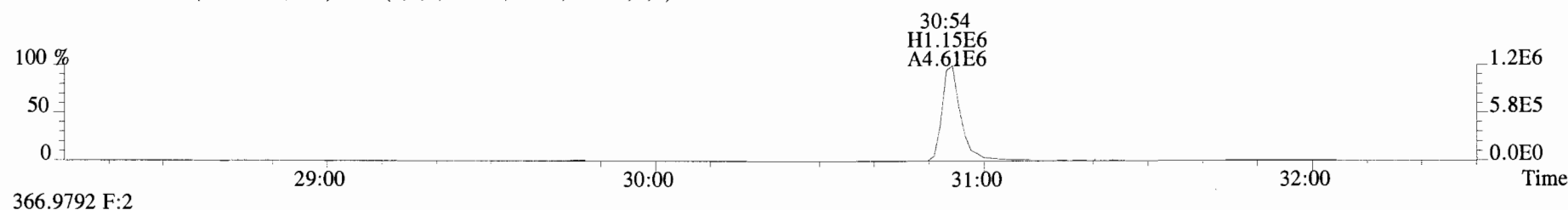
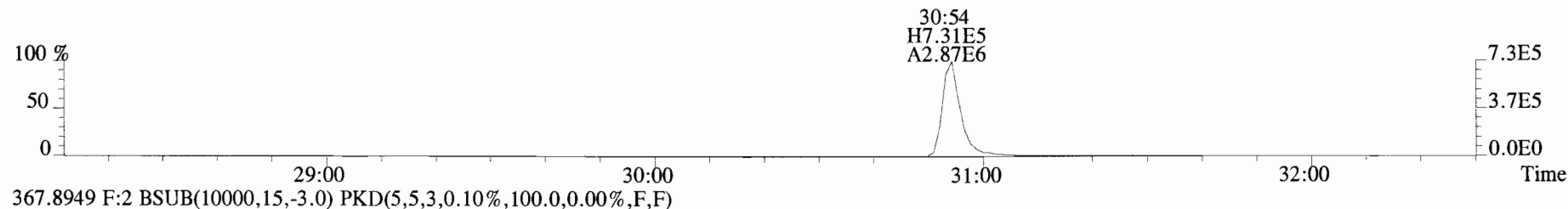
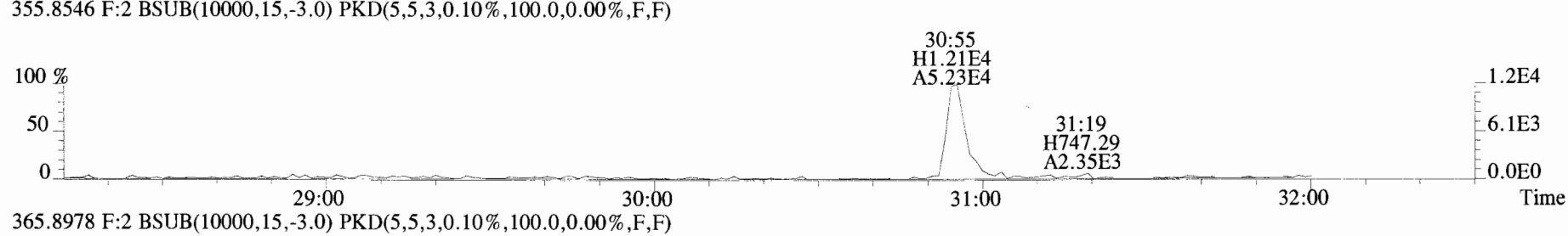
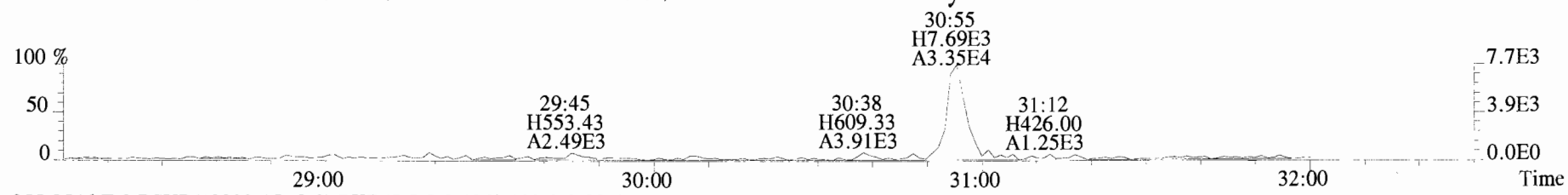
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



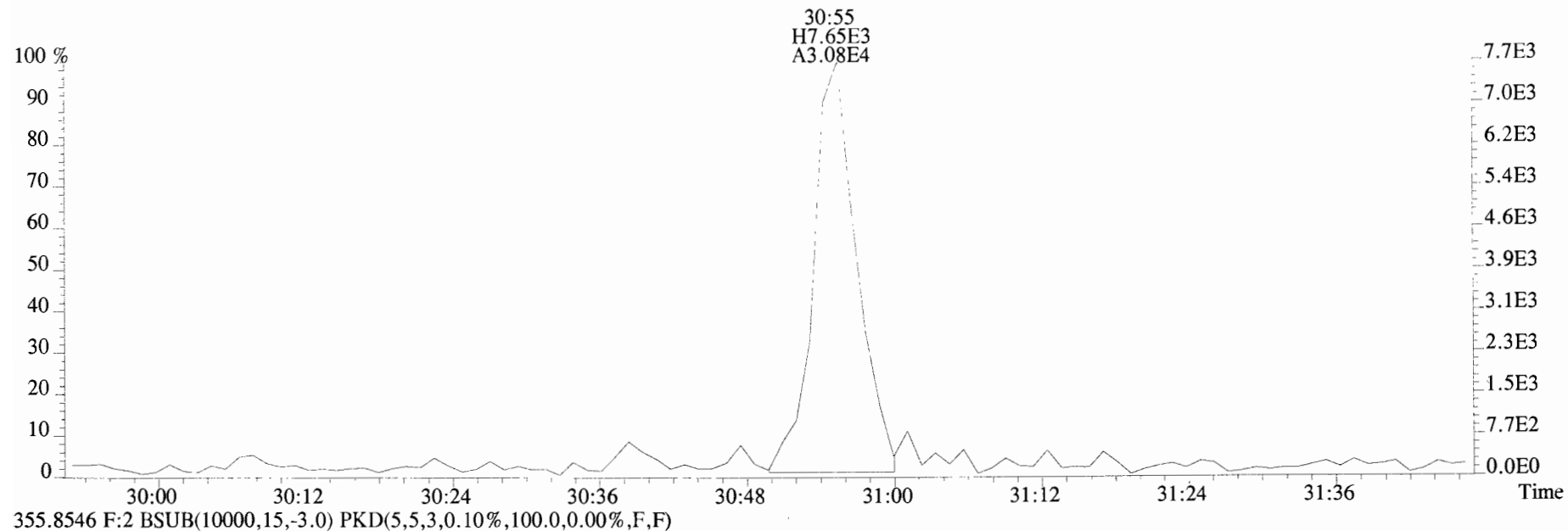
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
327.8847 BSUB(10000,15,-3.0)



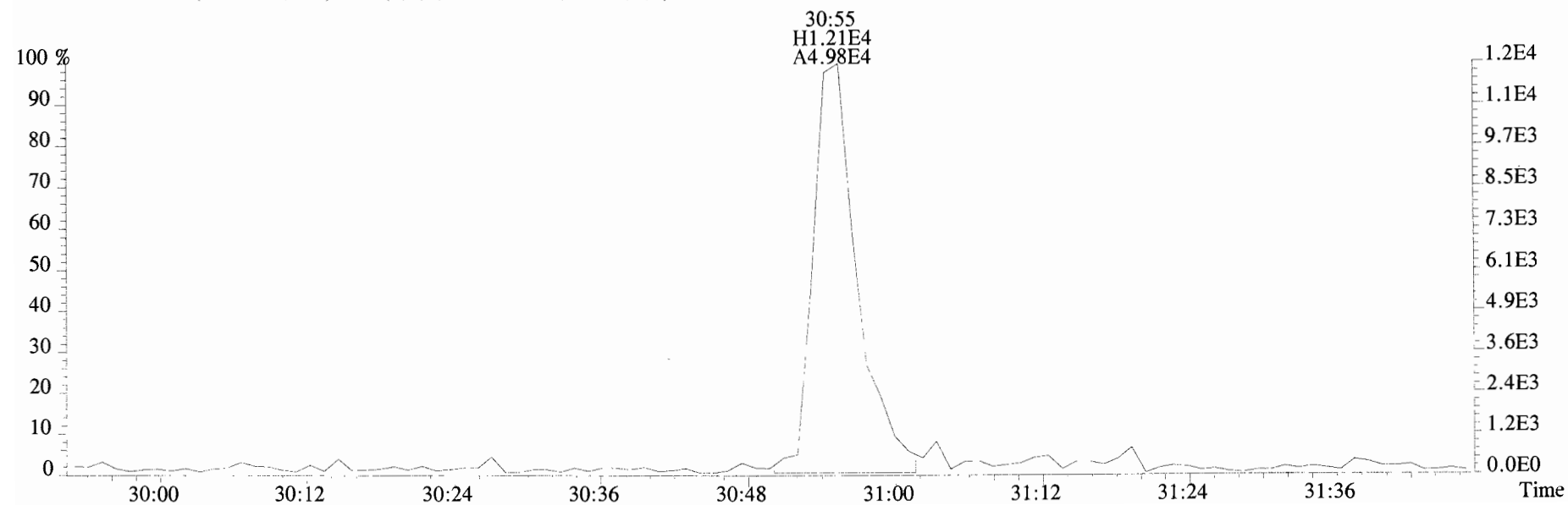
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



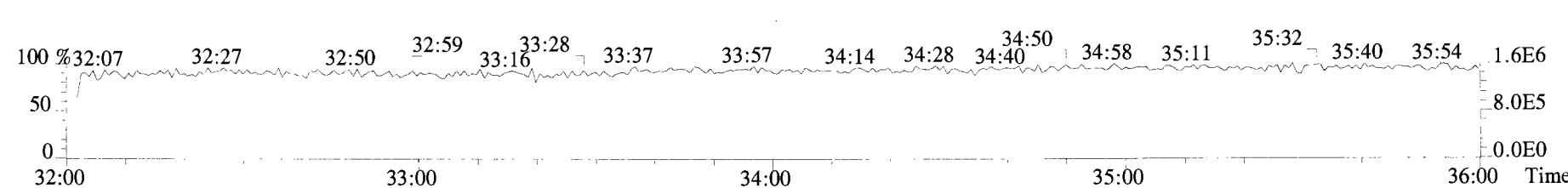
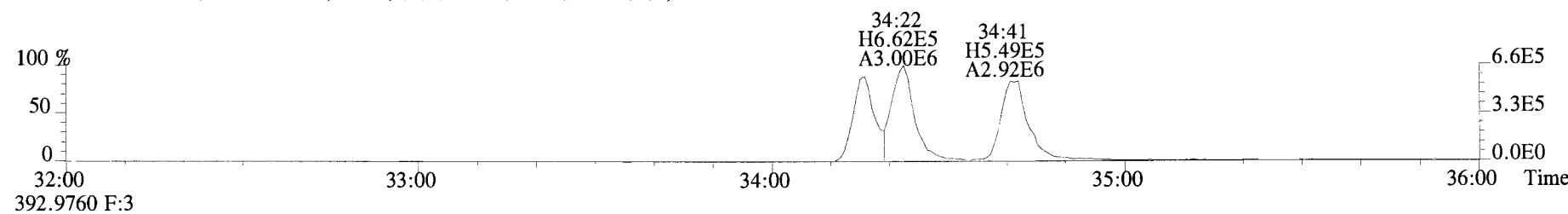
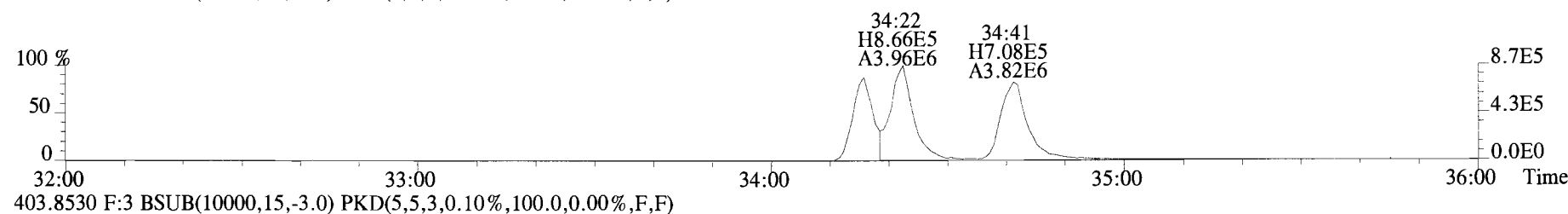
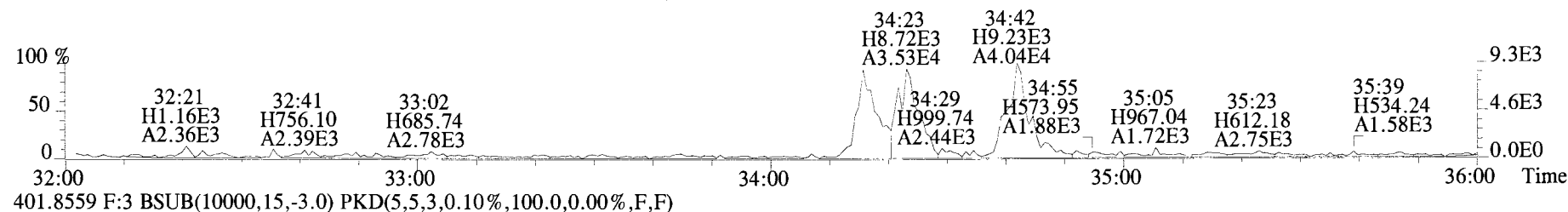
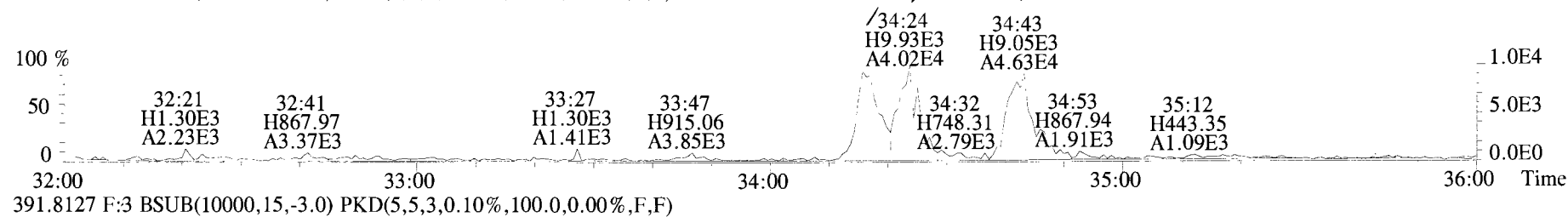
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



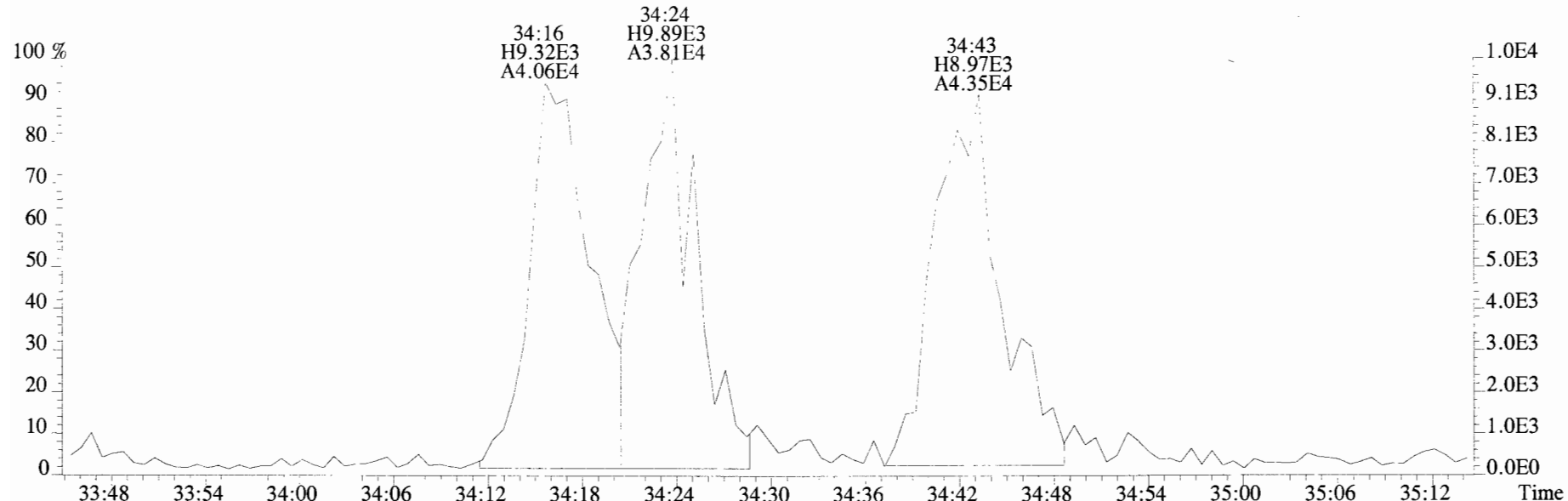
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



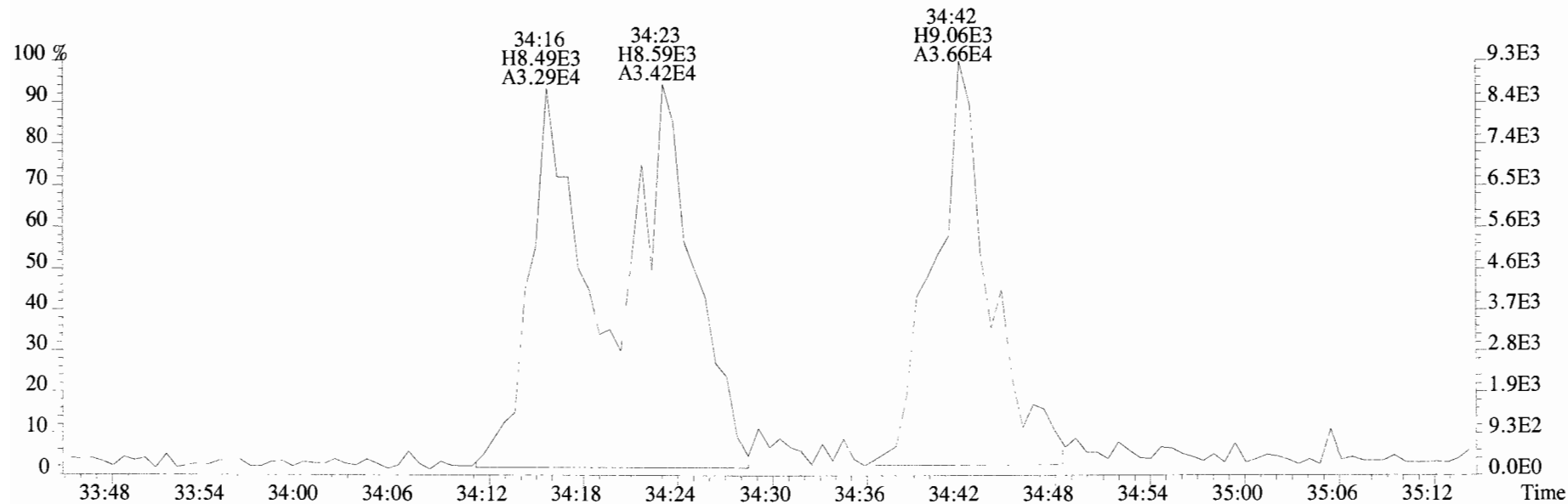
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
 389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



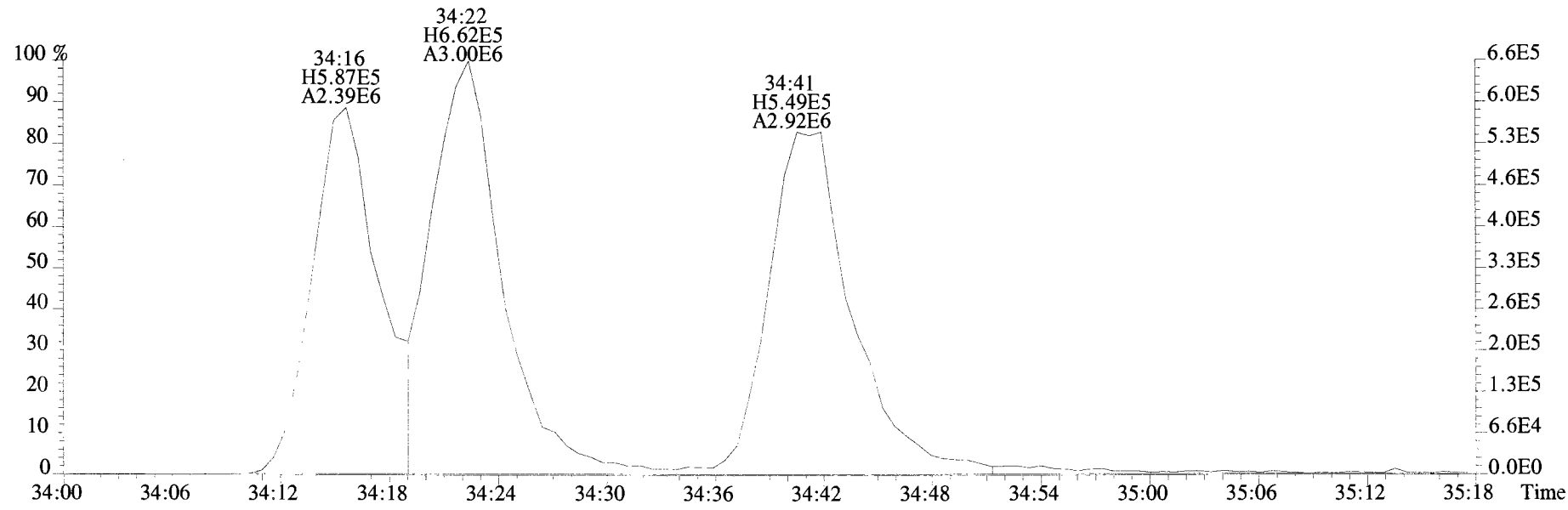
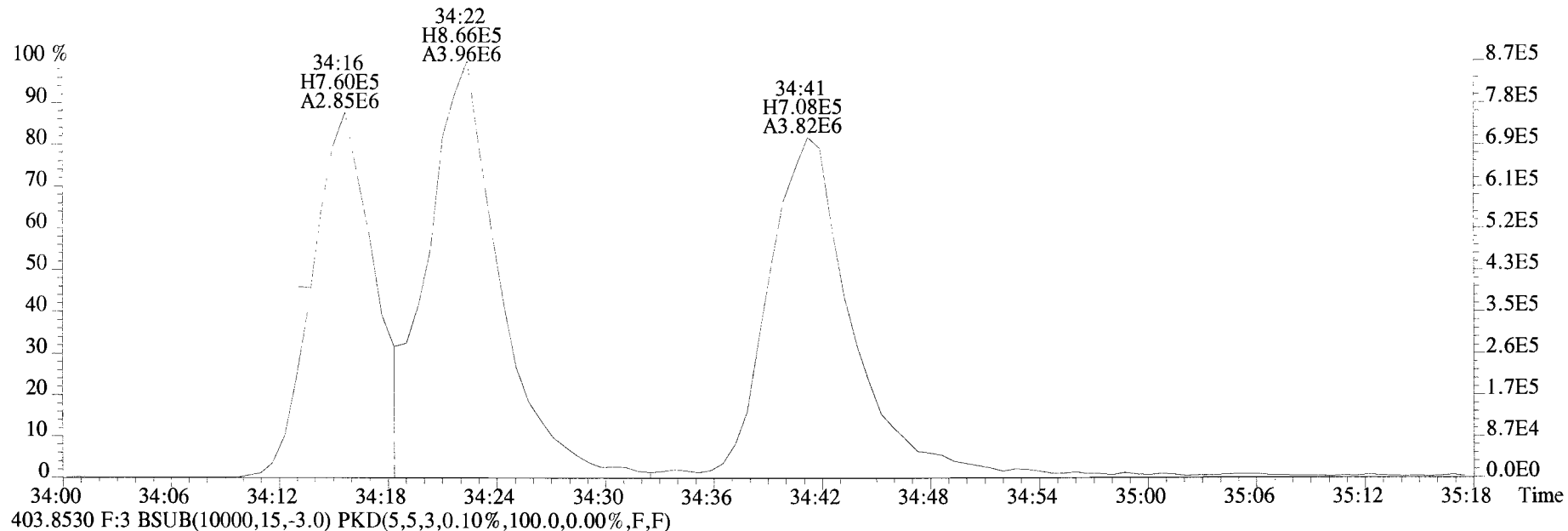
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



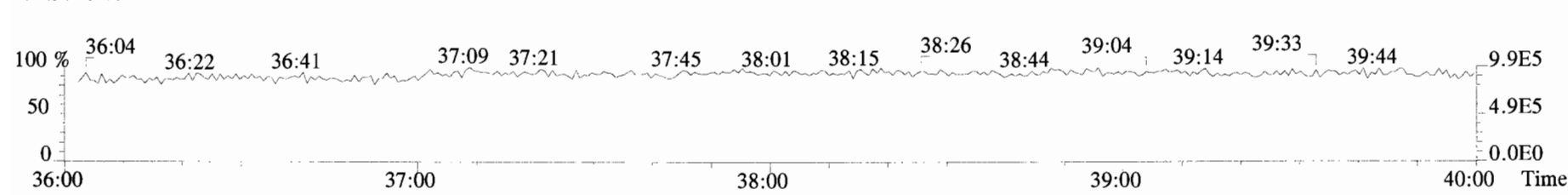
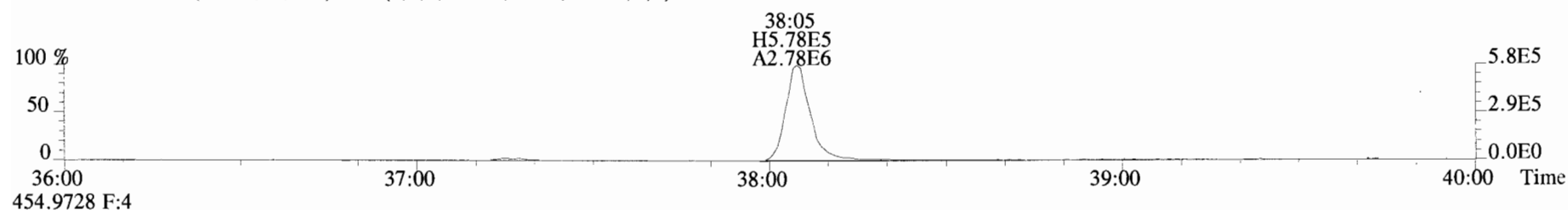
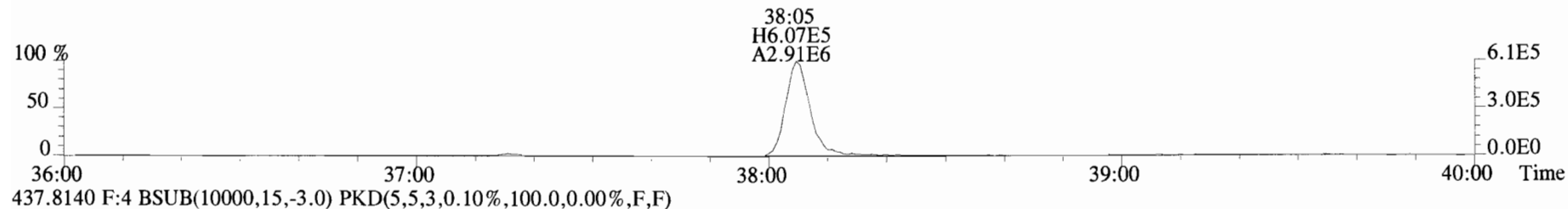
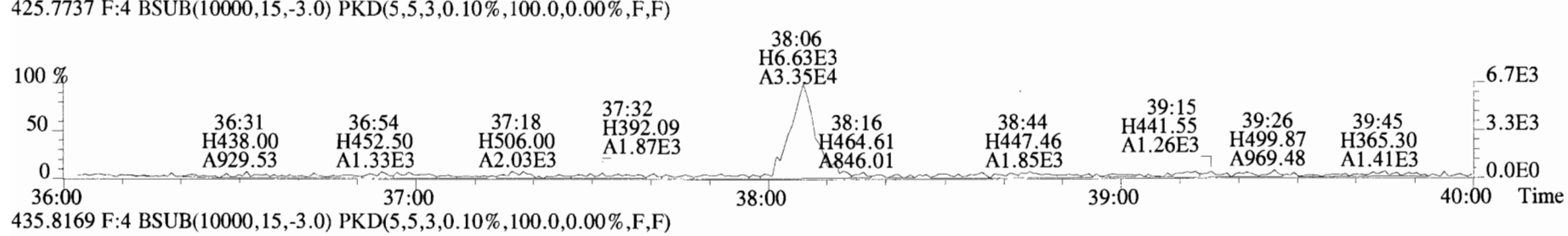
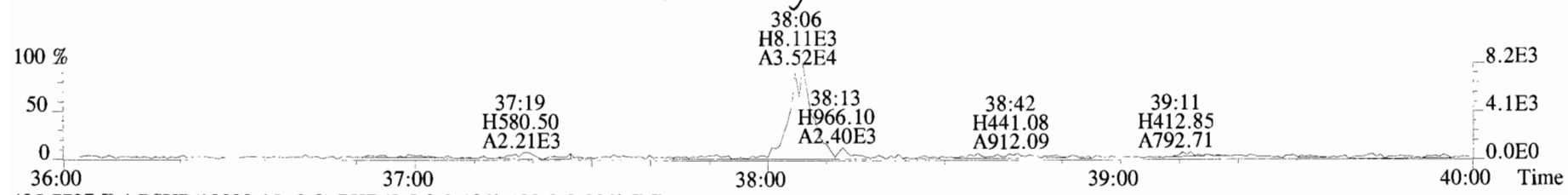
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



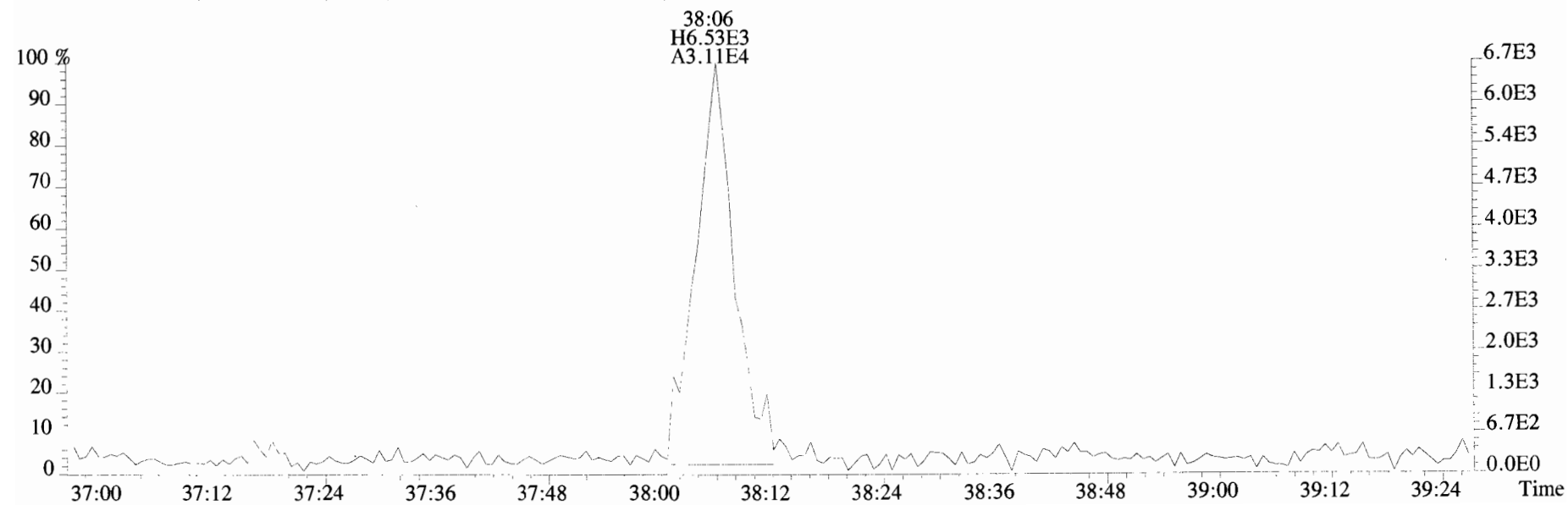
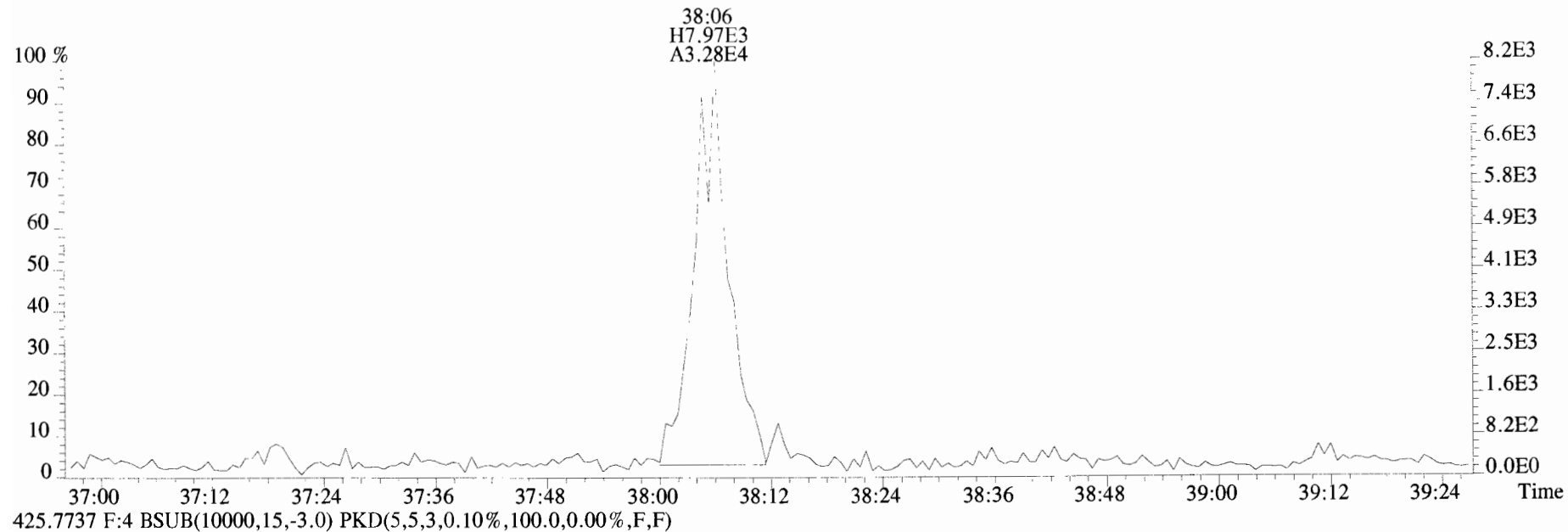
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



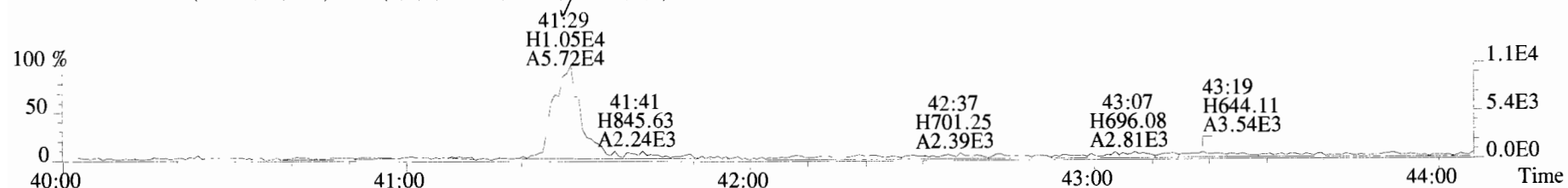
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
 423.7767 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



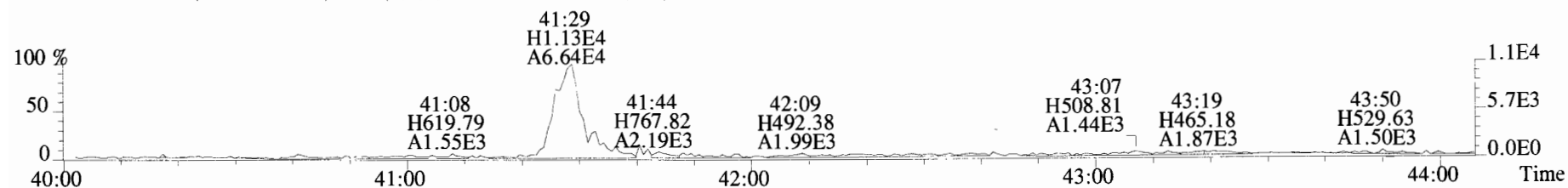
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



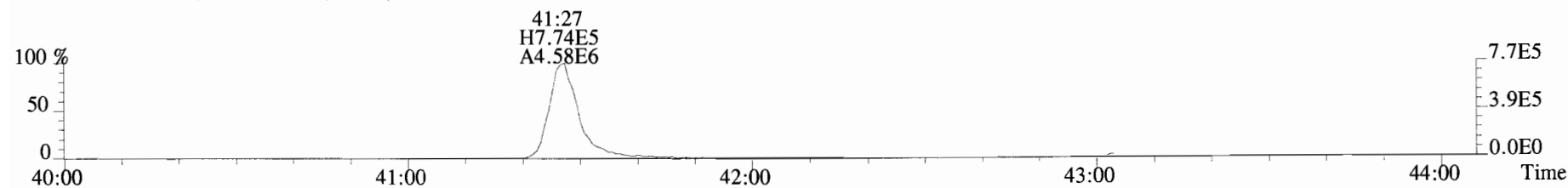
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



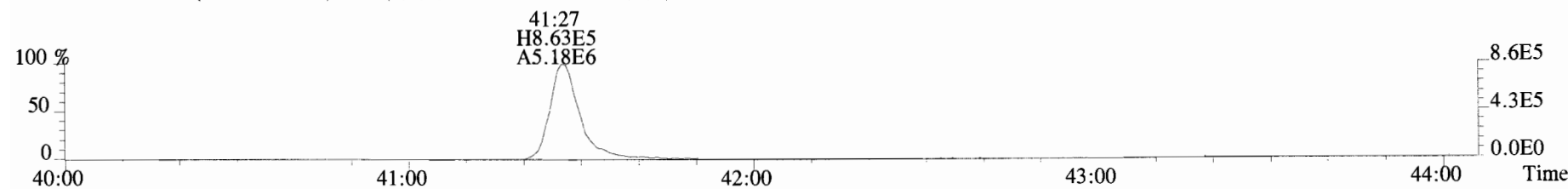
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



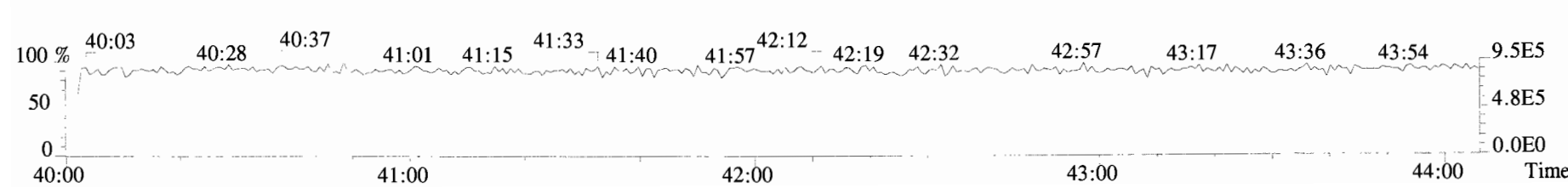
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



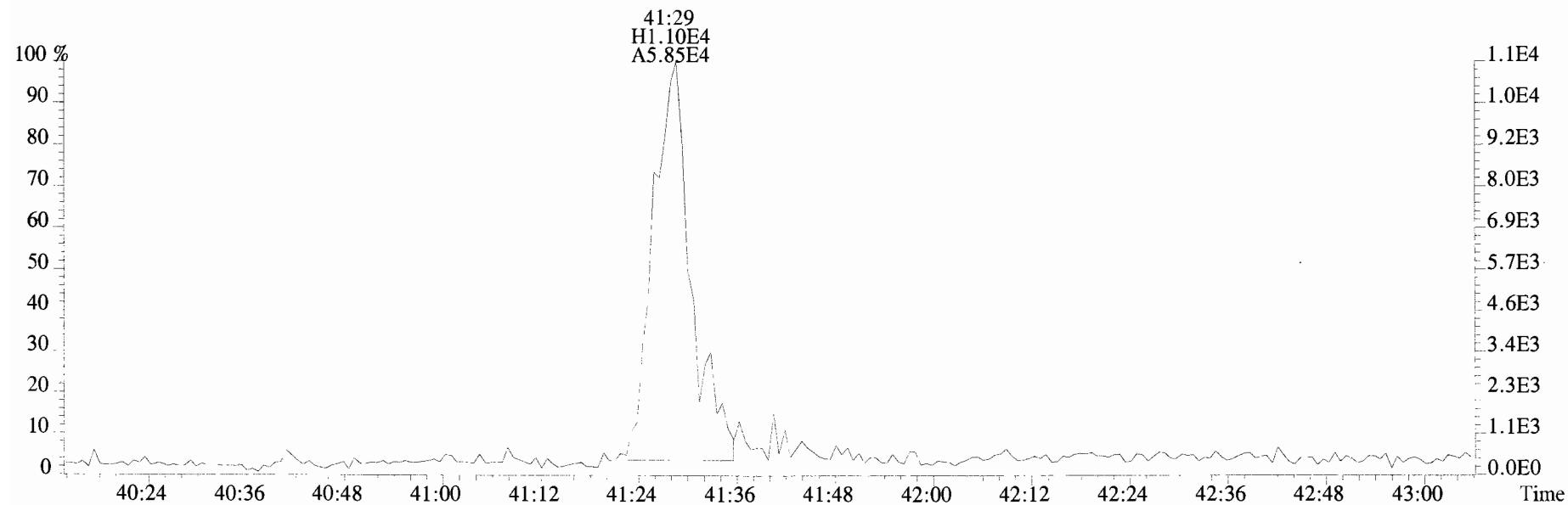
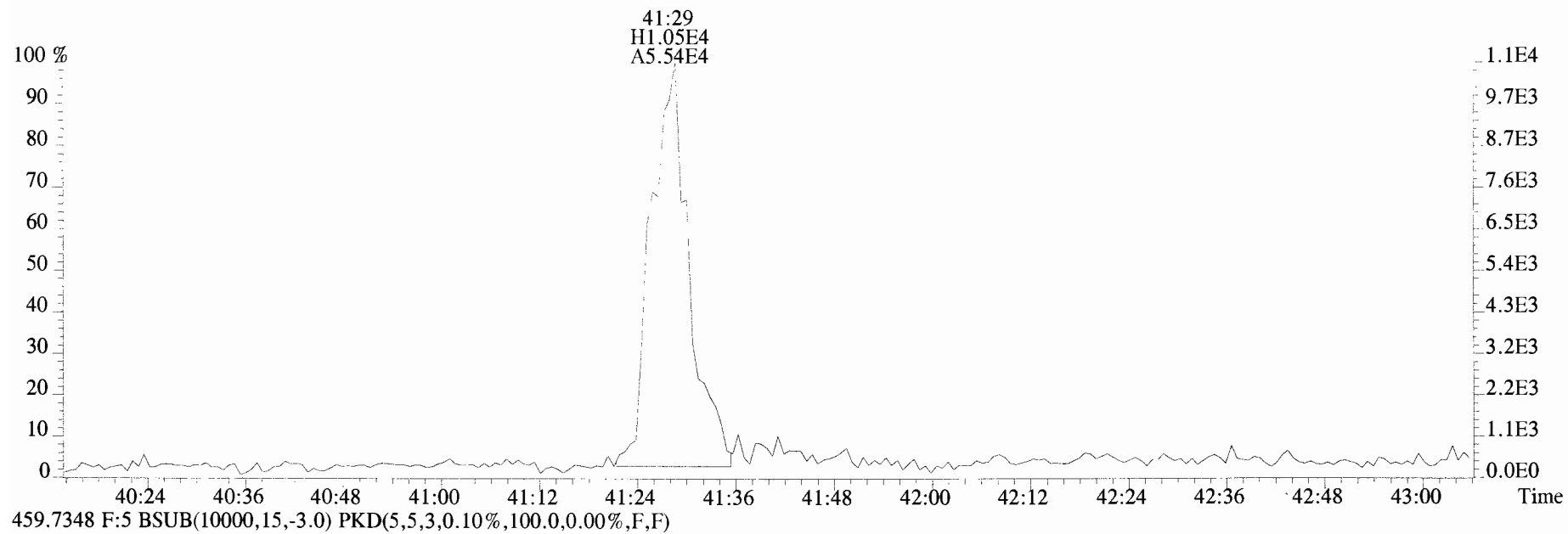
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



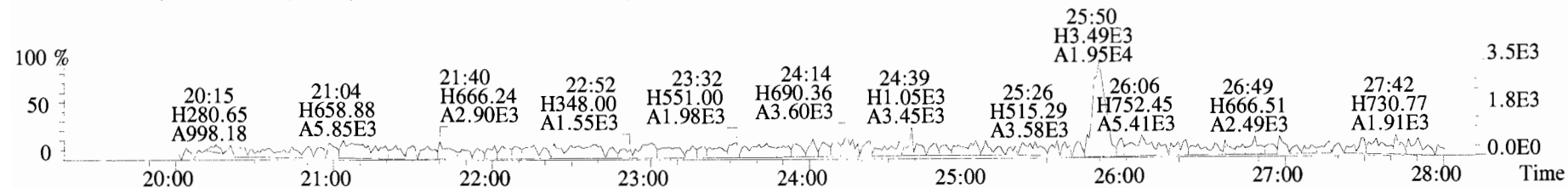
454.9728 F:5



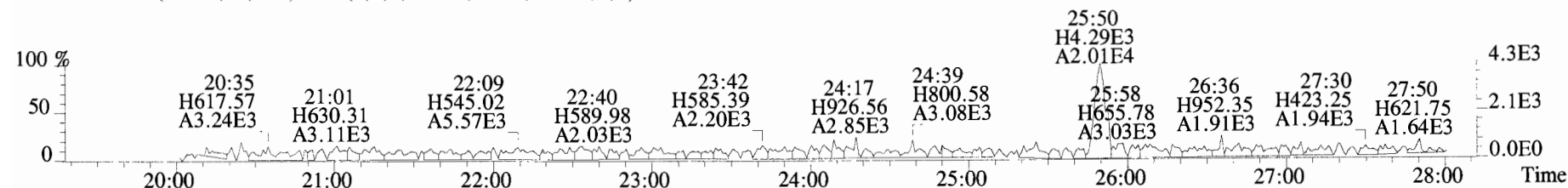
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



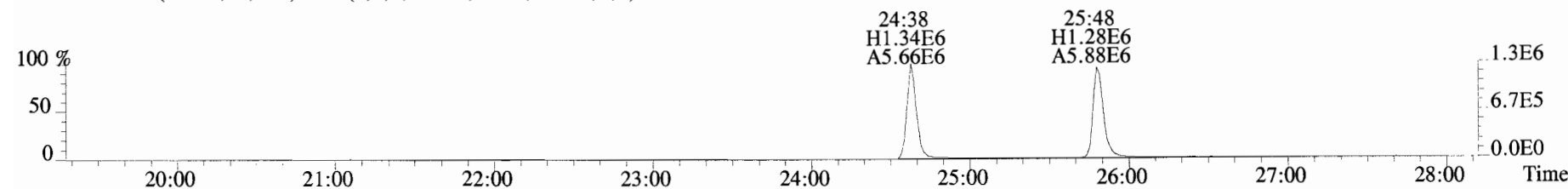
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
 303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



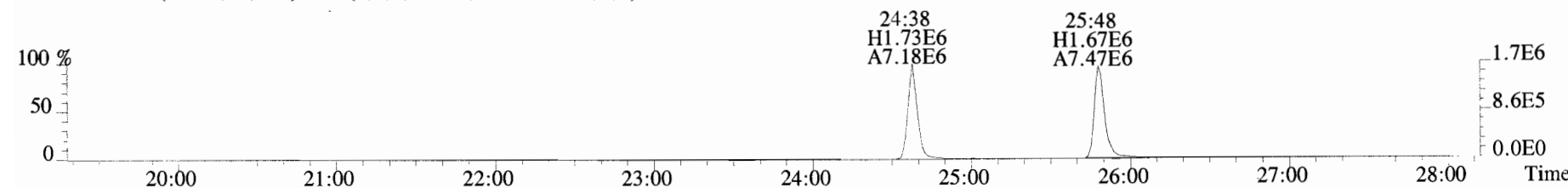
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



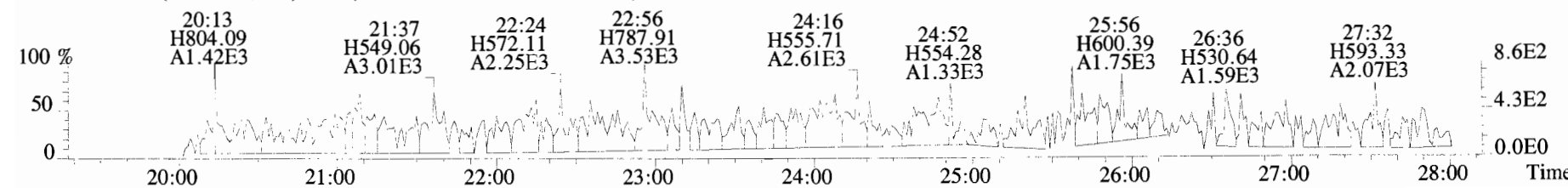
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



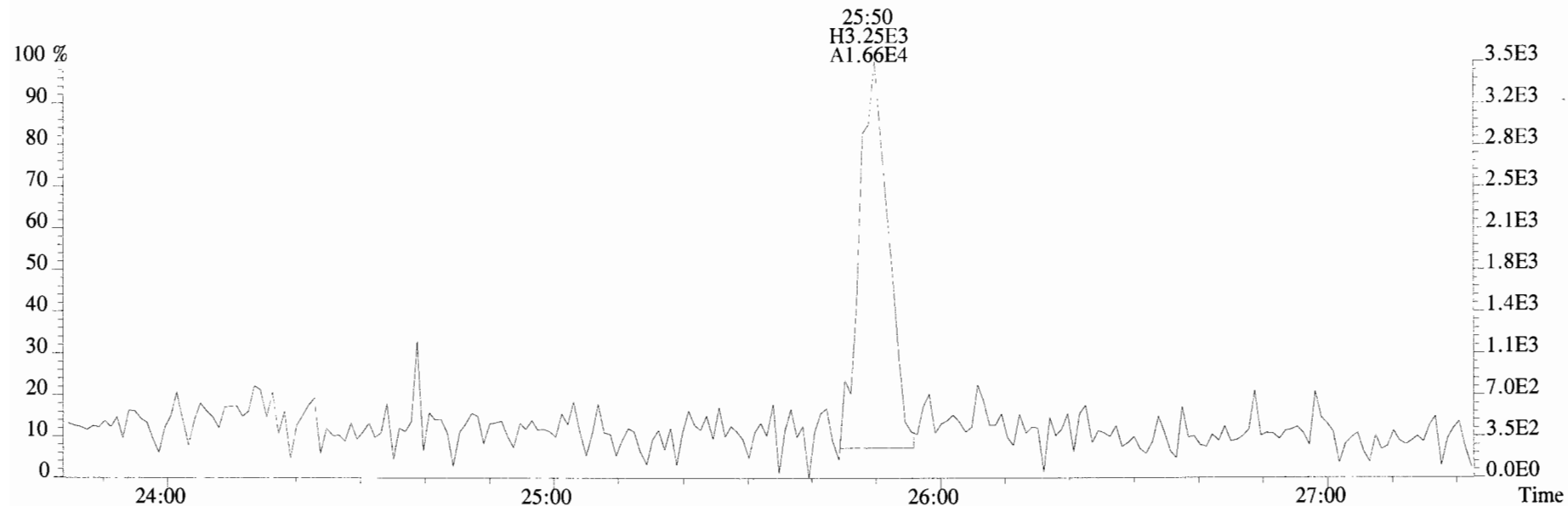
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



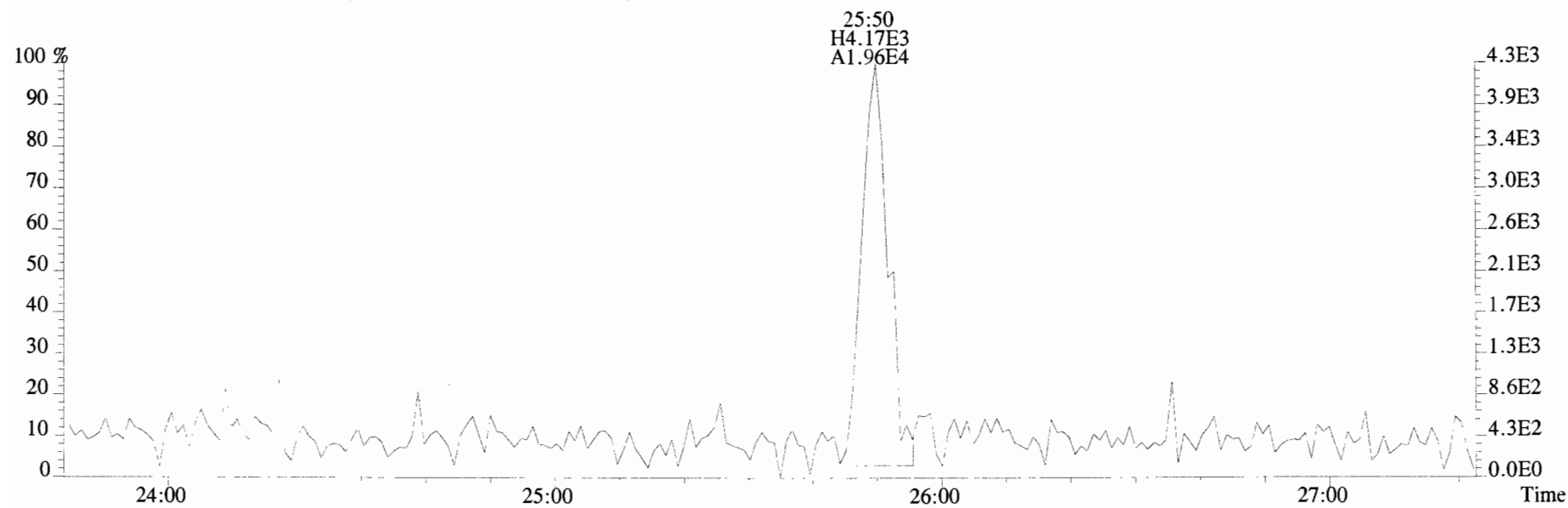
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



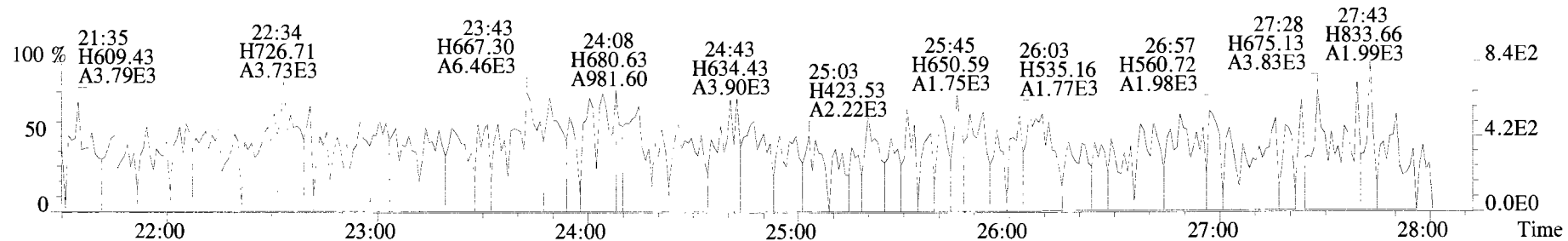
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



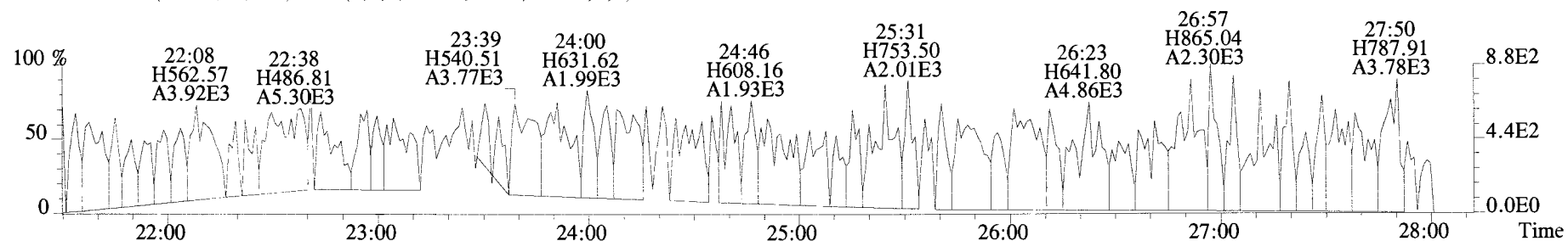
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



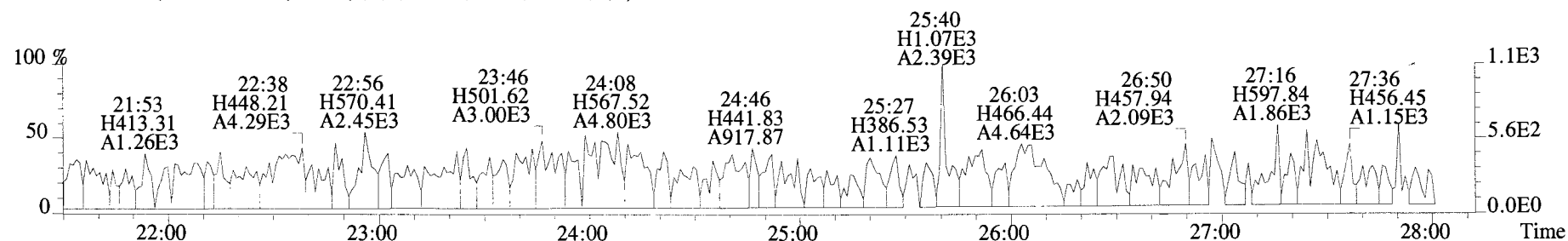
File:191009D1 #1-514 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
 339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



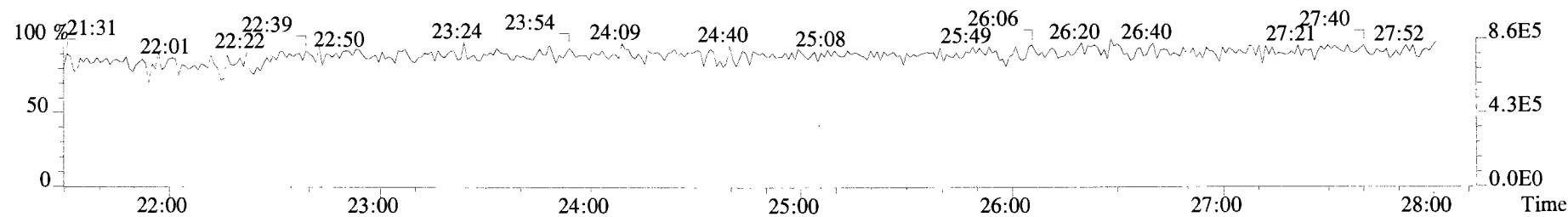
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



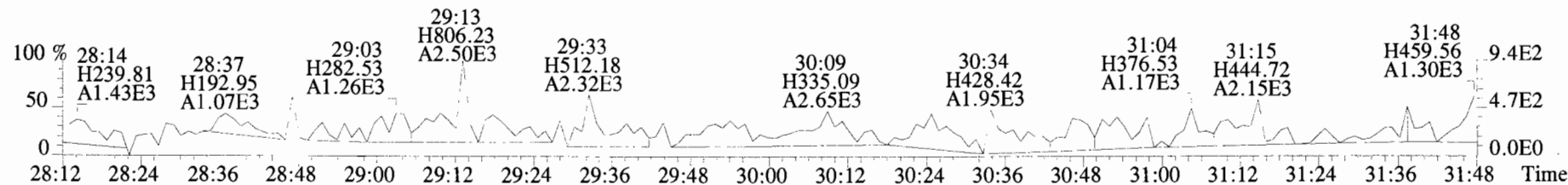
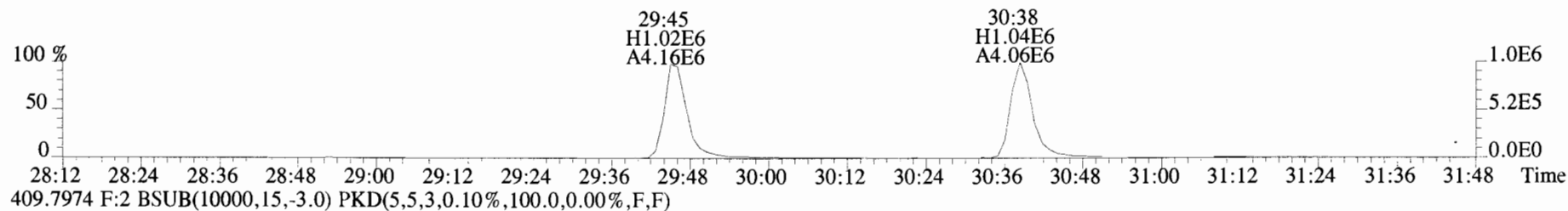
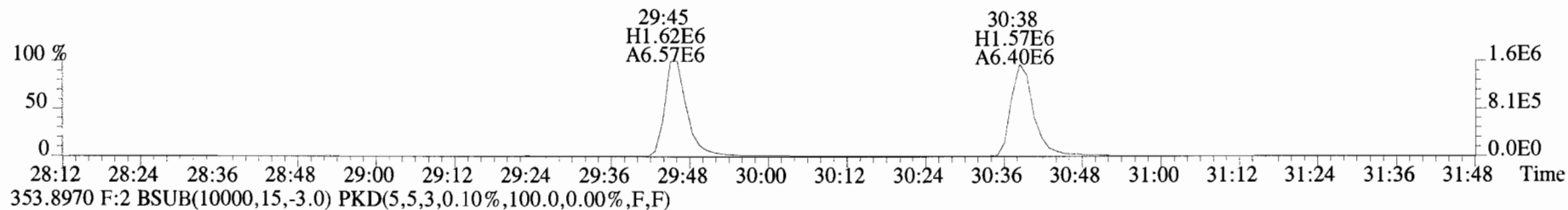
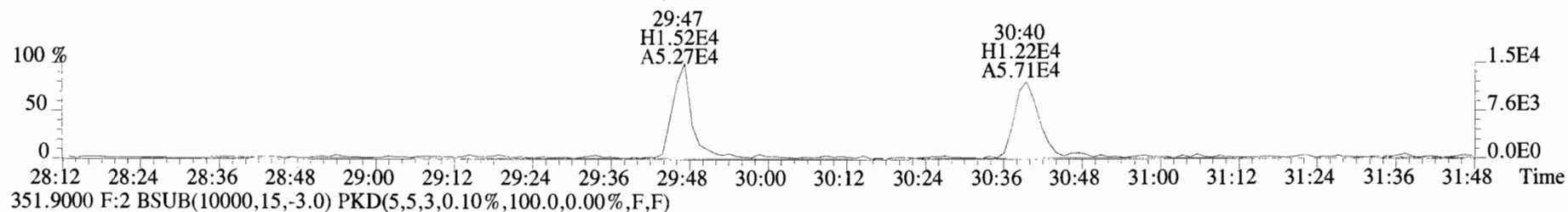
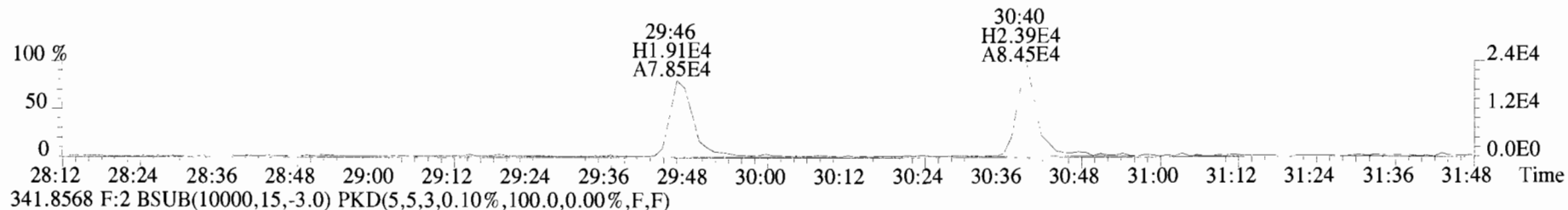
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



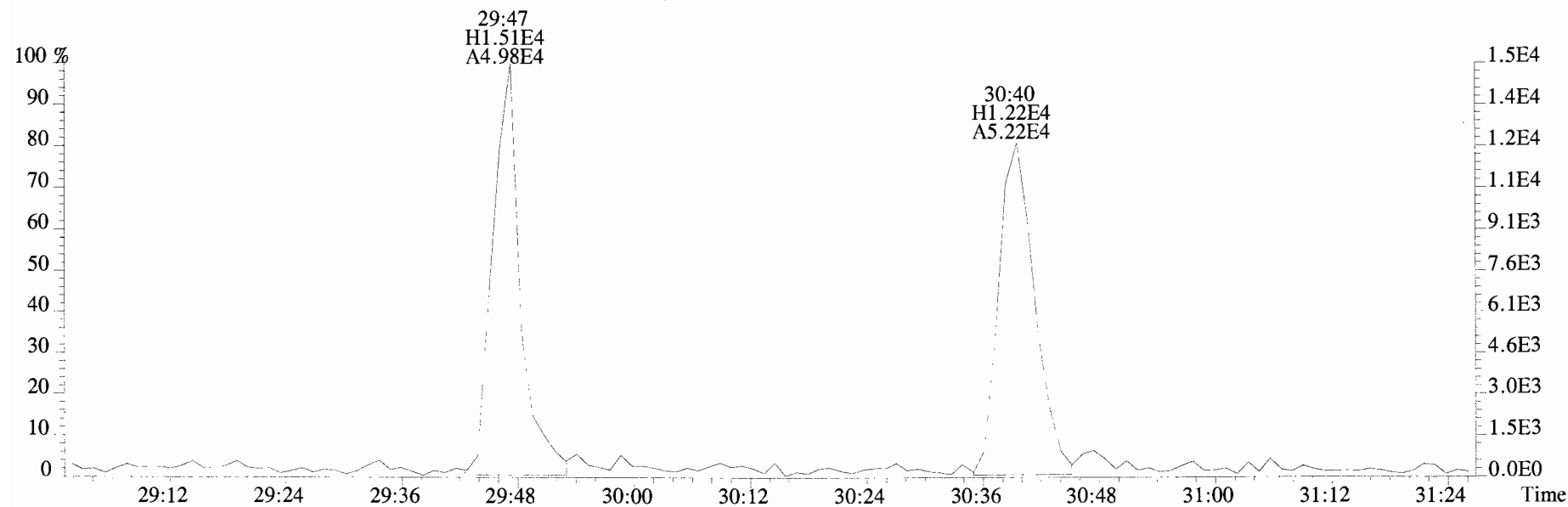
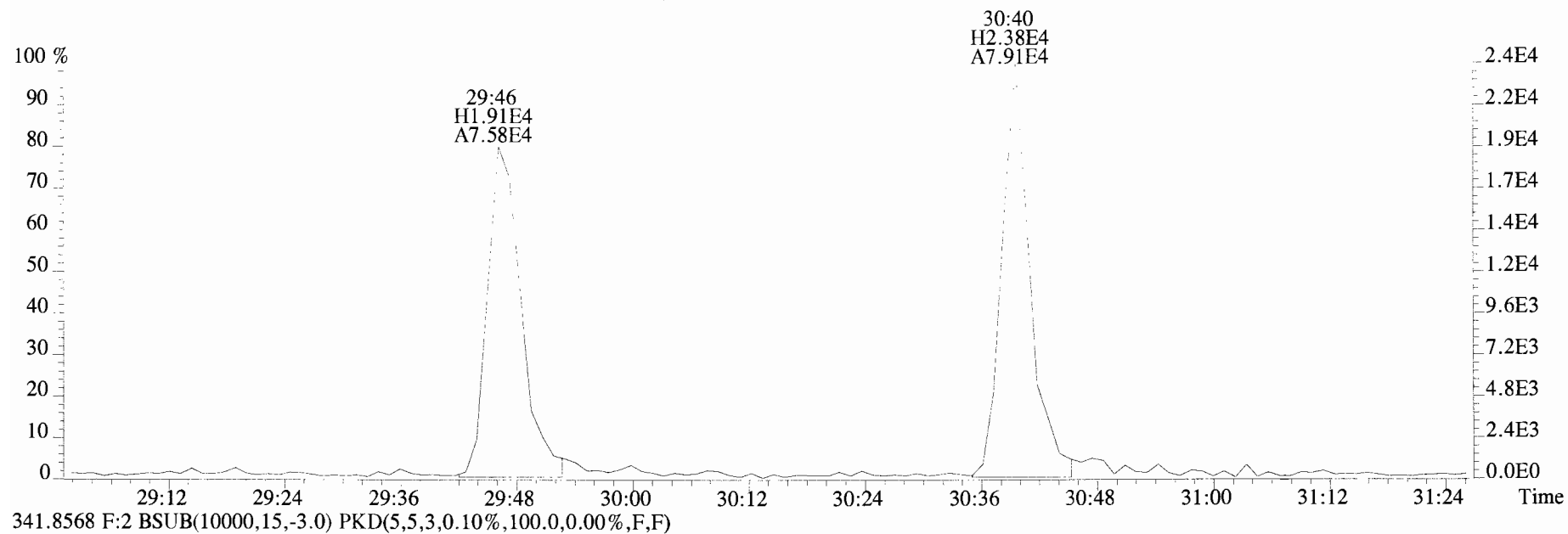
316.9824



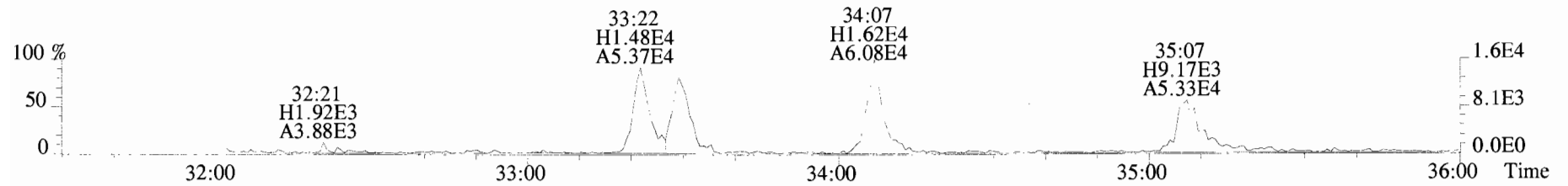
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



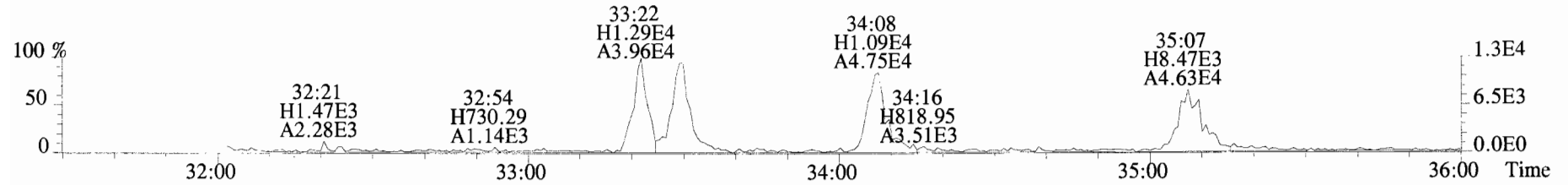
File:191009D1 #1-210 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



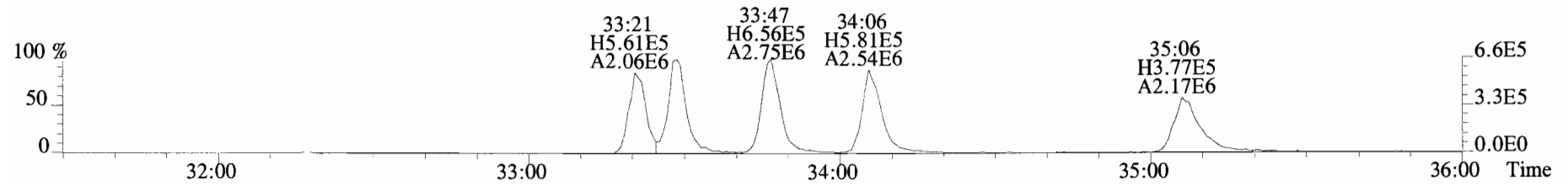
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#1 File Text:Vista_Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
 373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



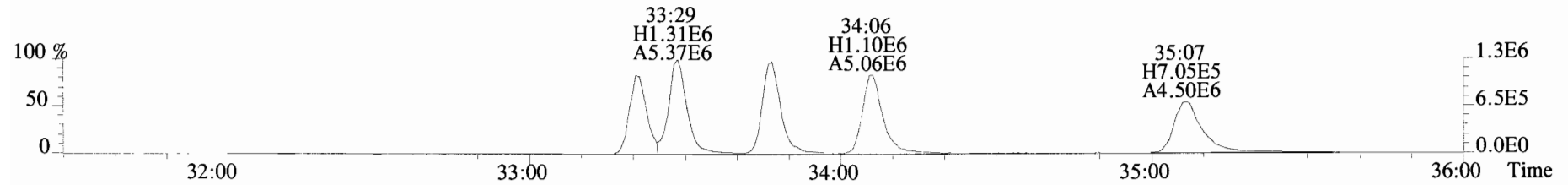
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



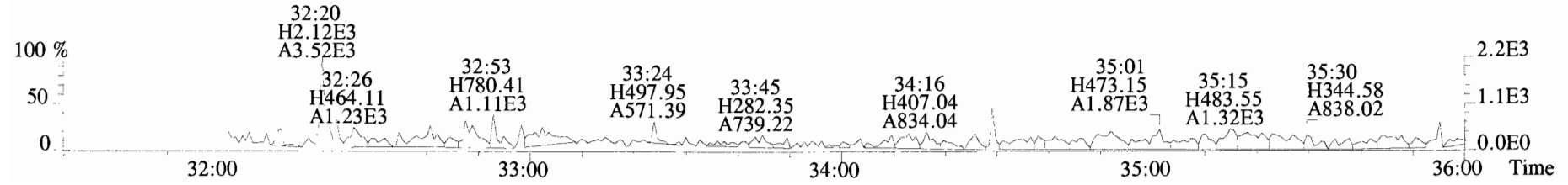
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



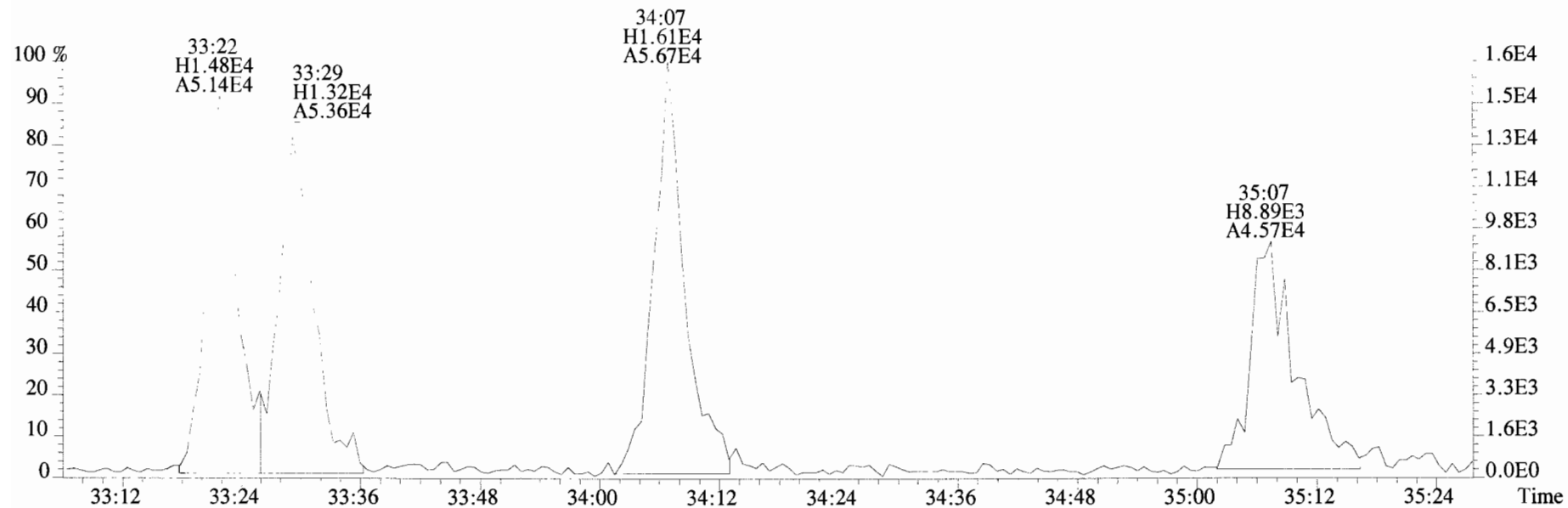
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



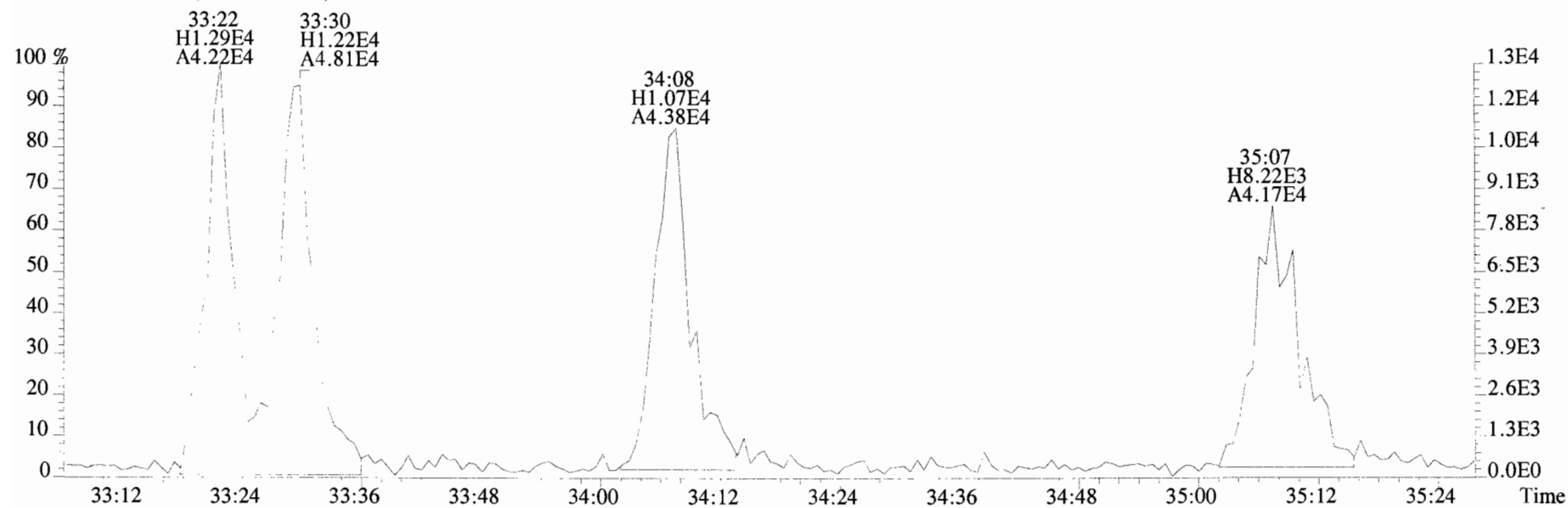
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



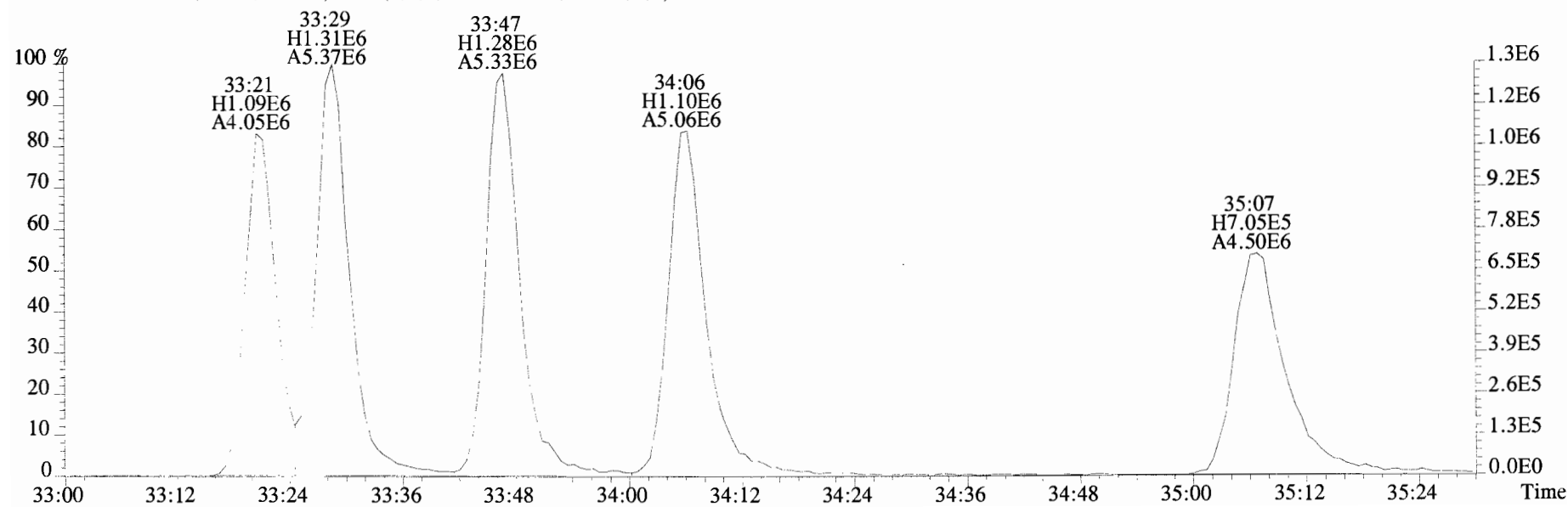
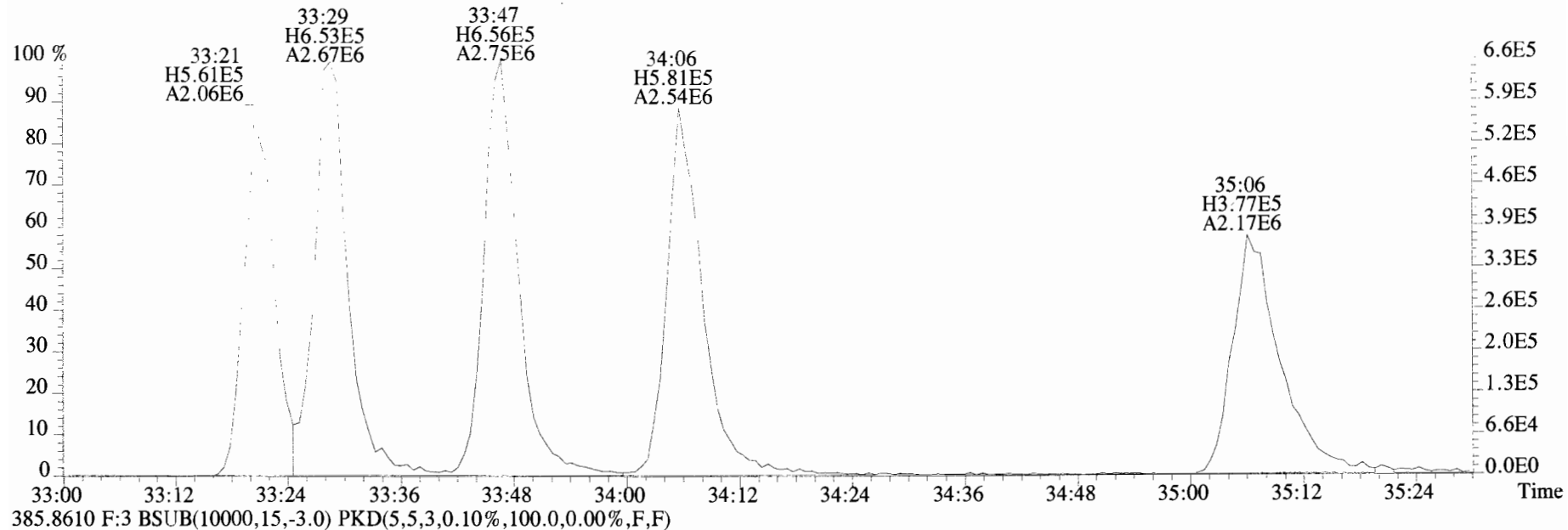
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0)



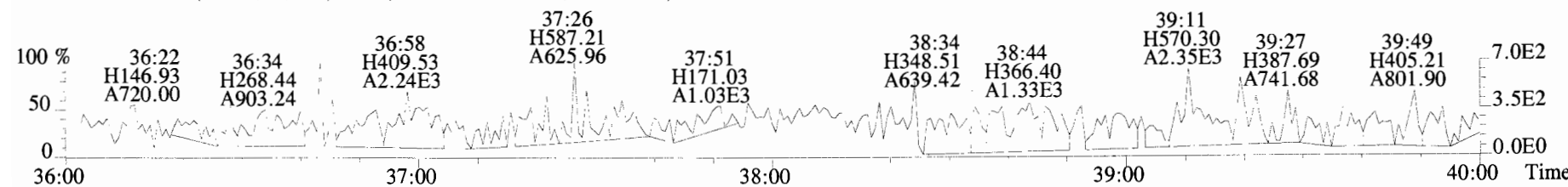
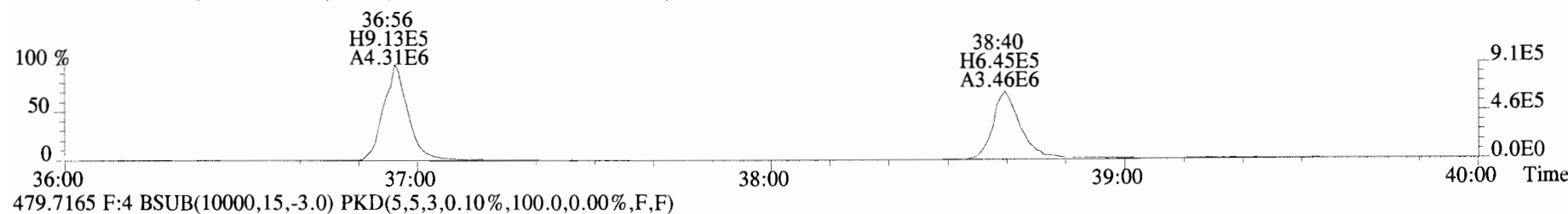
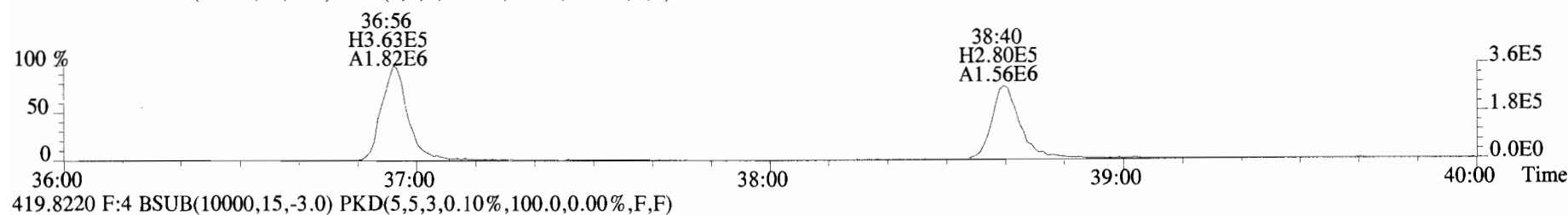
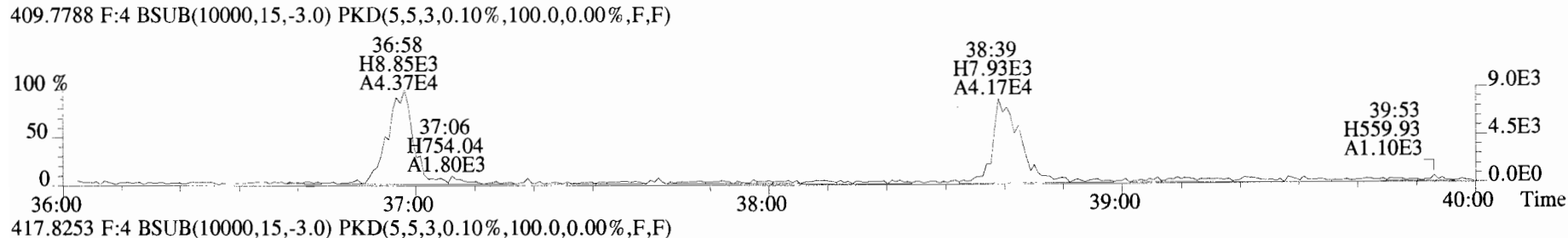
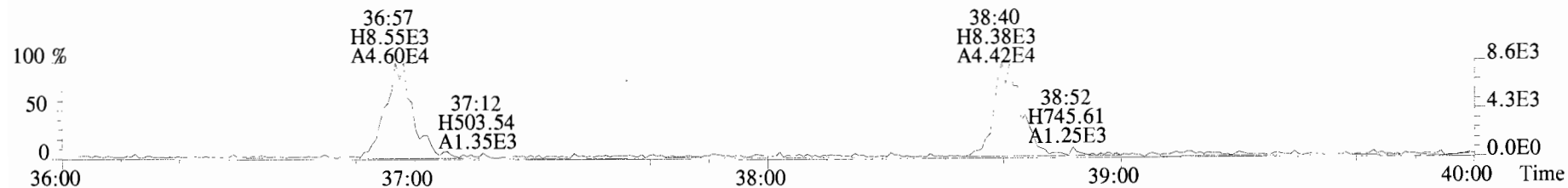
375.8178 F:3 BSUB(10000,15,-3.0)



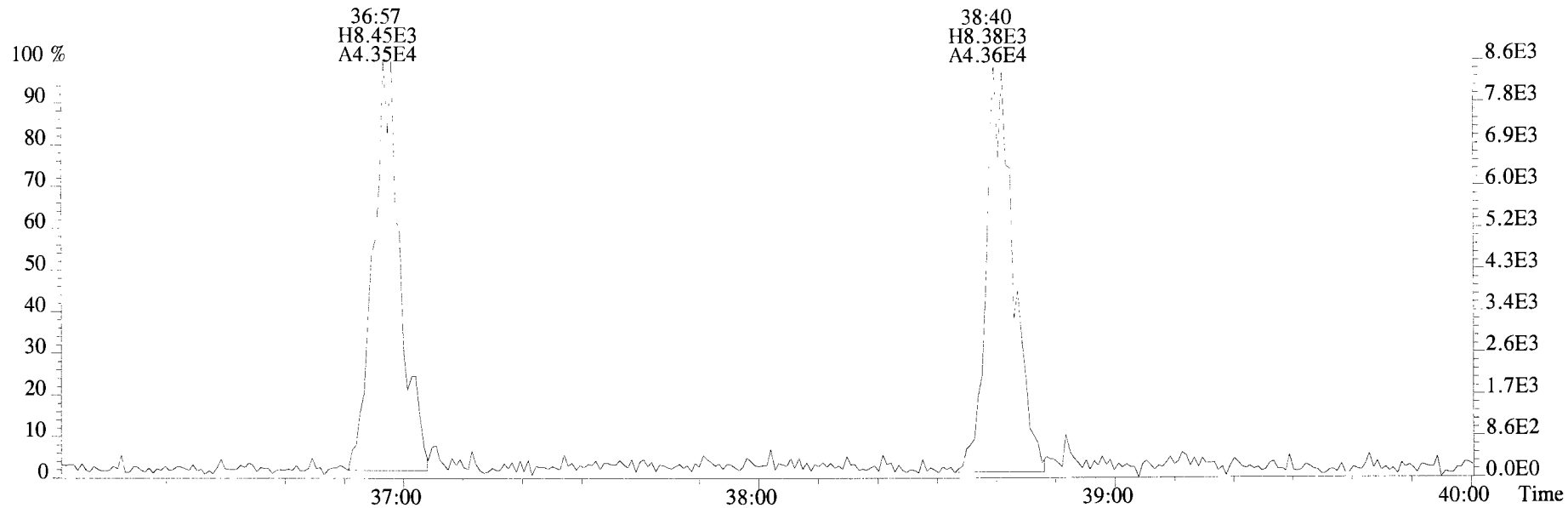
File:191009D1 #1-356 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



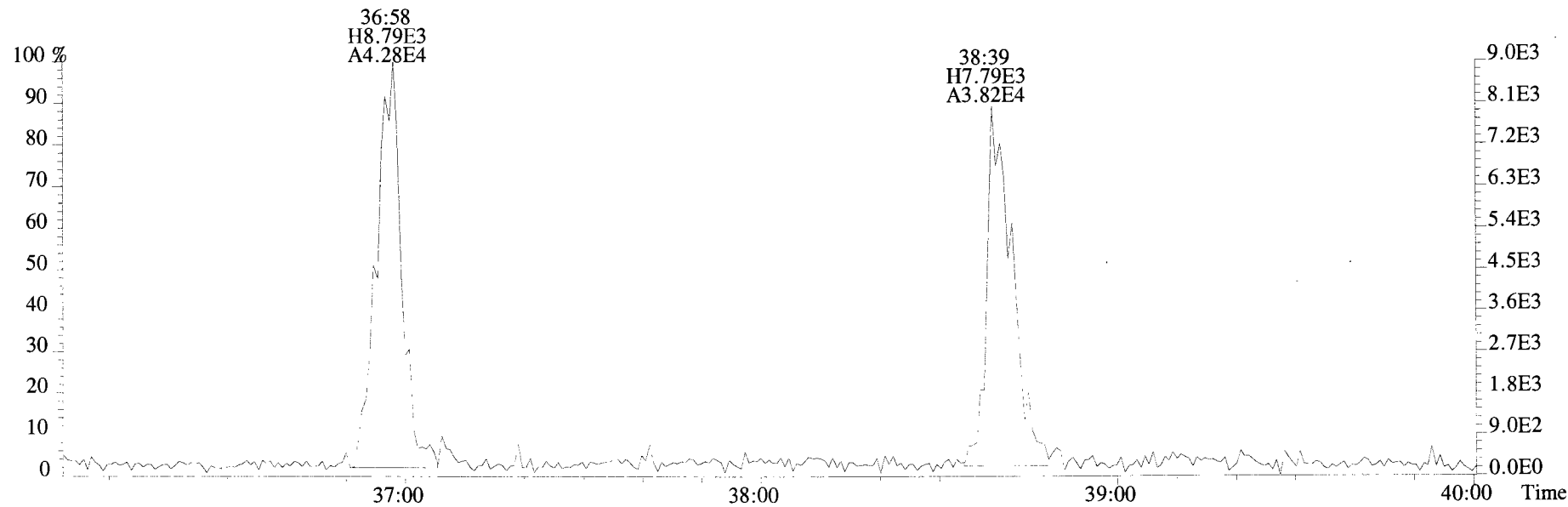
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



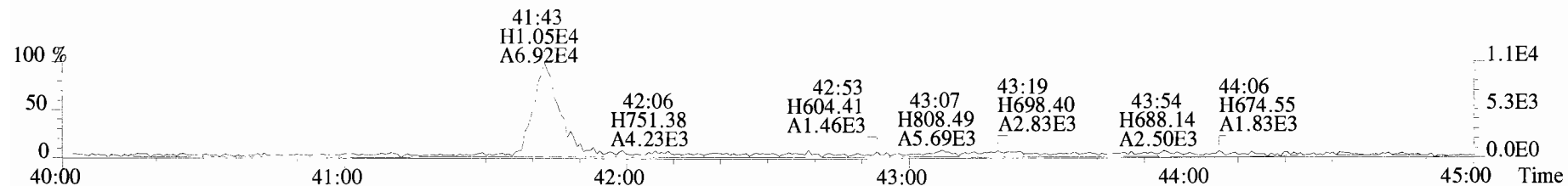
File:191009D1 #1-355 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



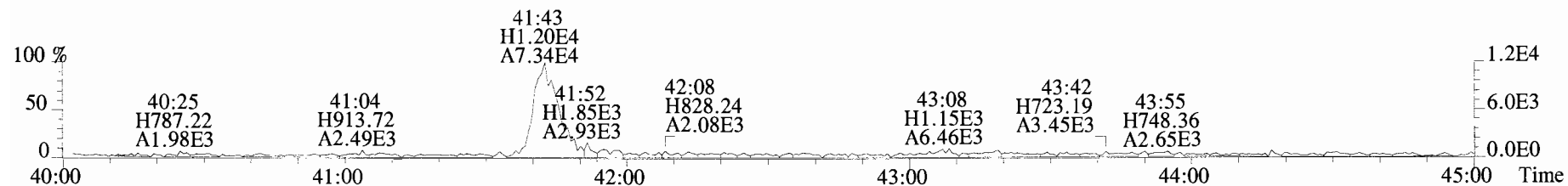
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



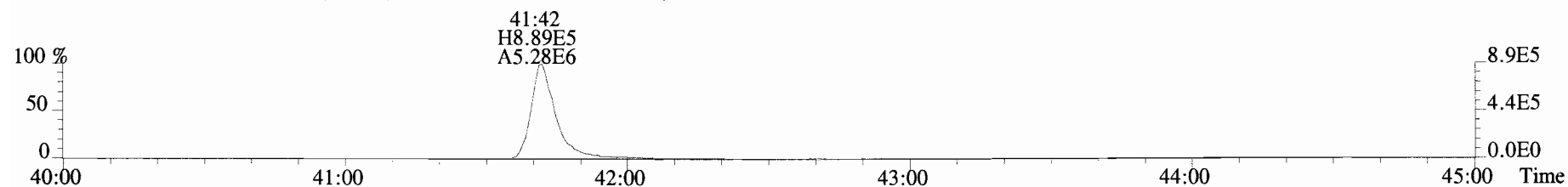
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



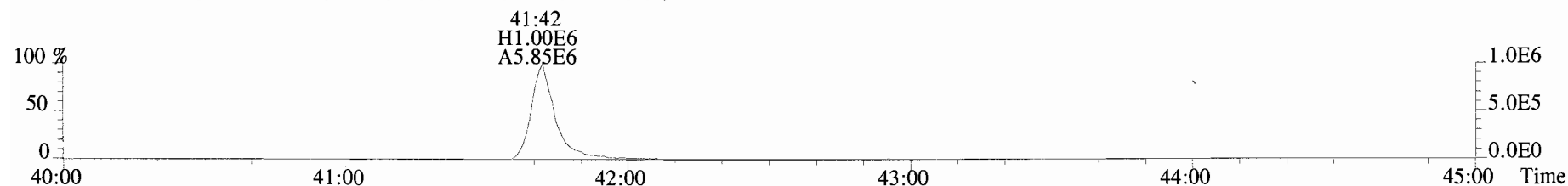
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



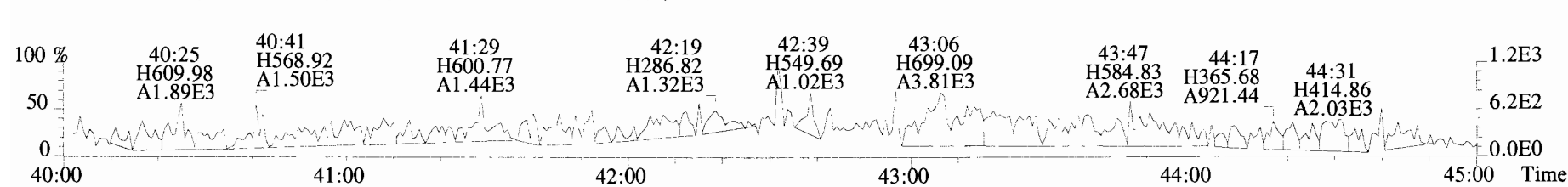
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



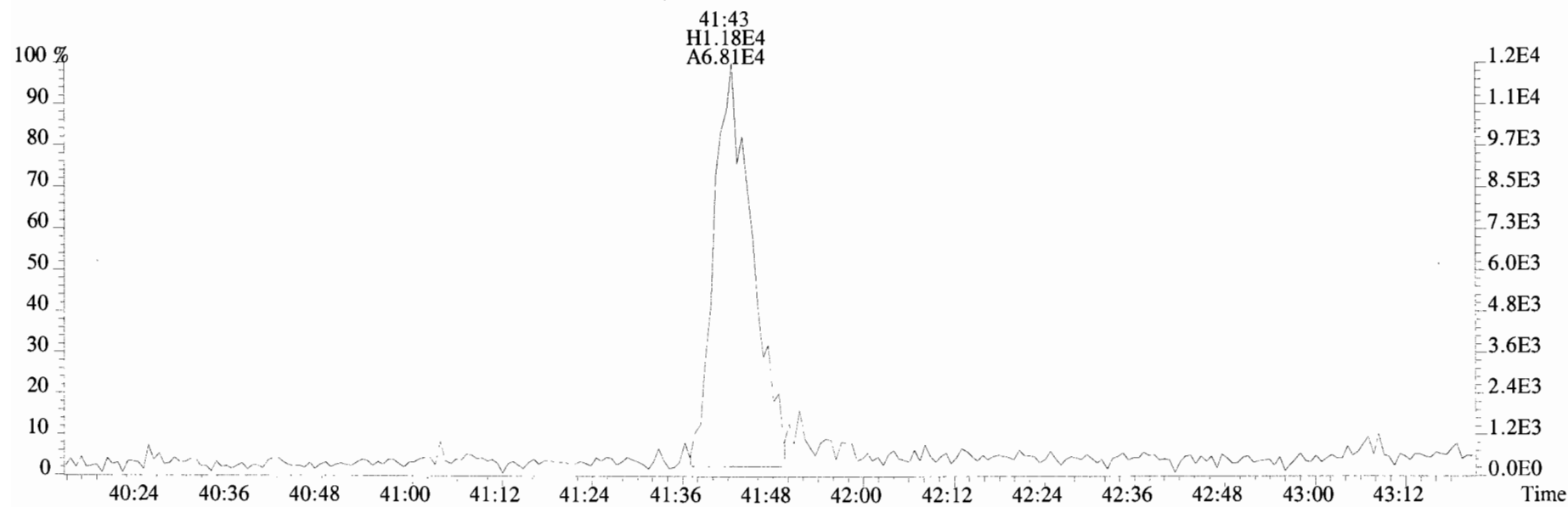
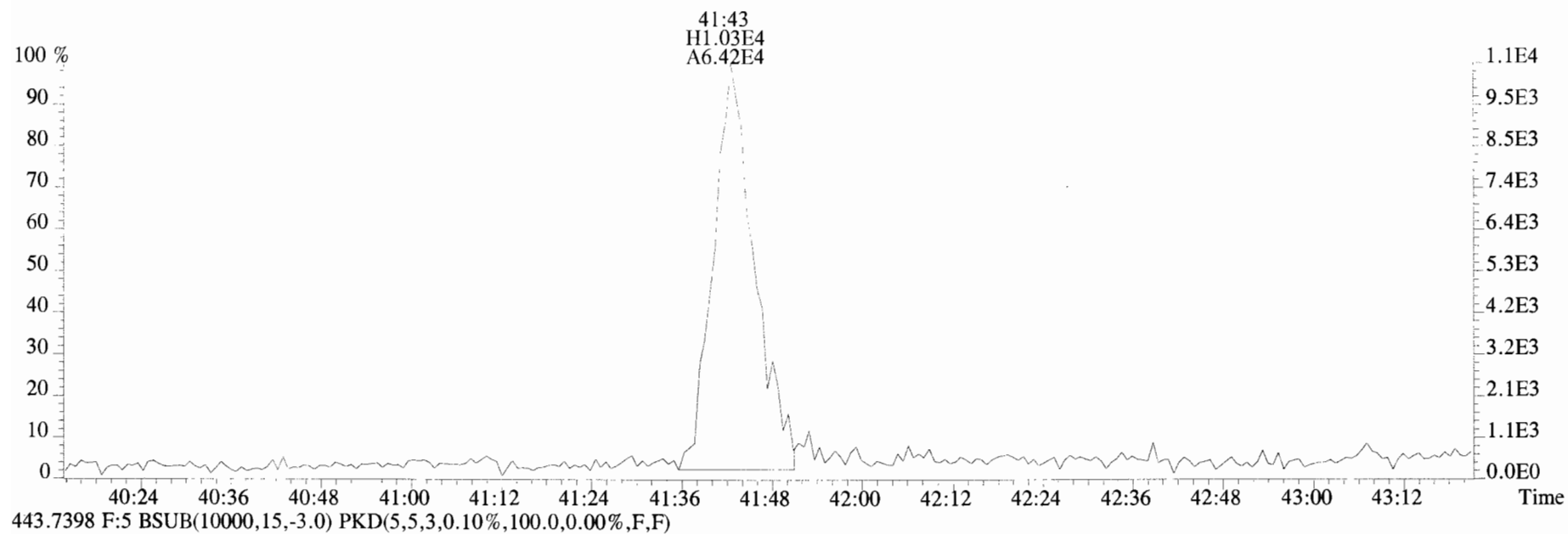
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



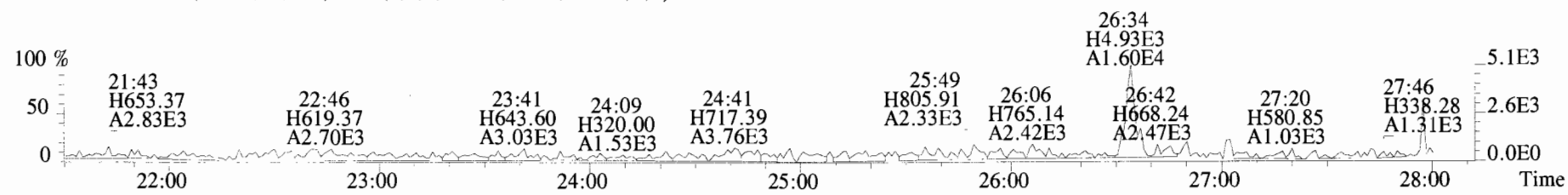
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



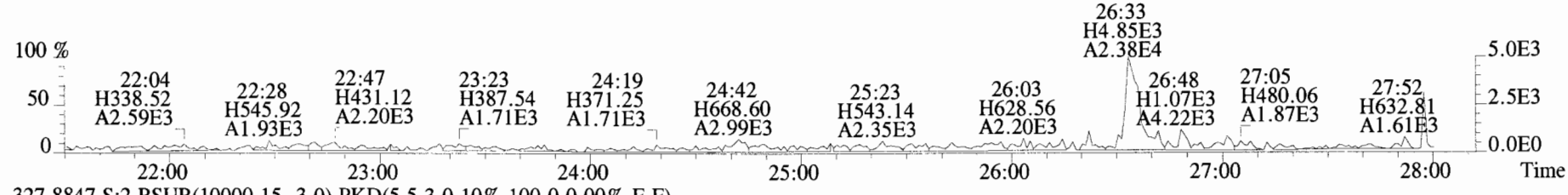
File:191009D1 #1-432 Acq: 9-OCT-2019 16:13:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-1 1613 CS0 19C2201 Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



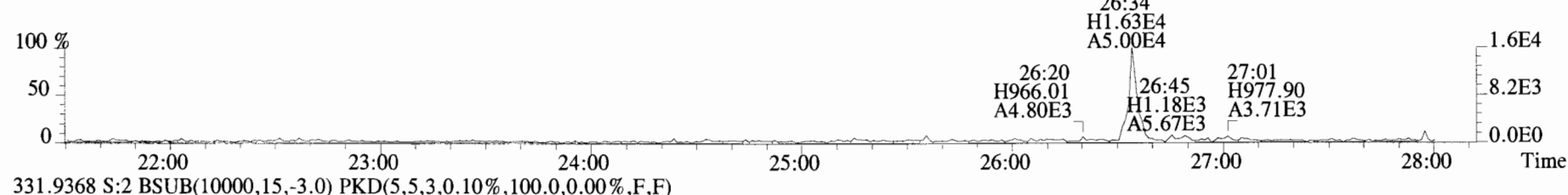
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



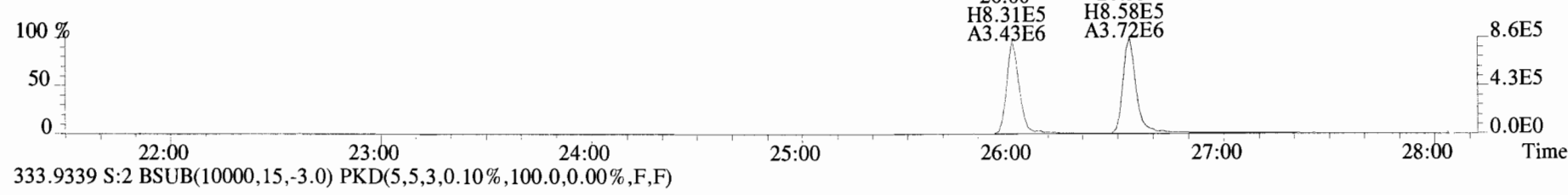
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



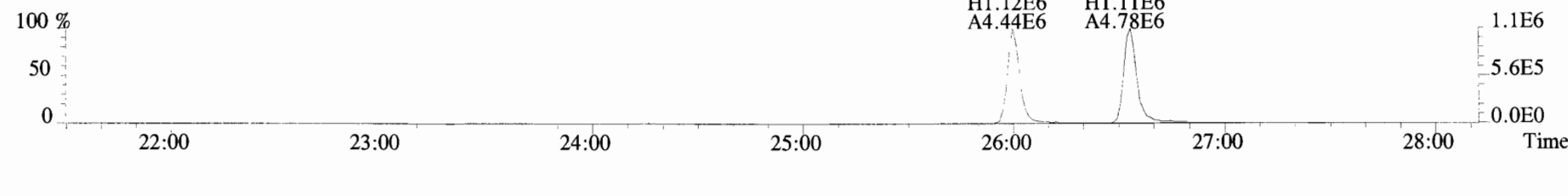
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



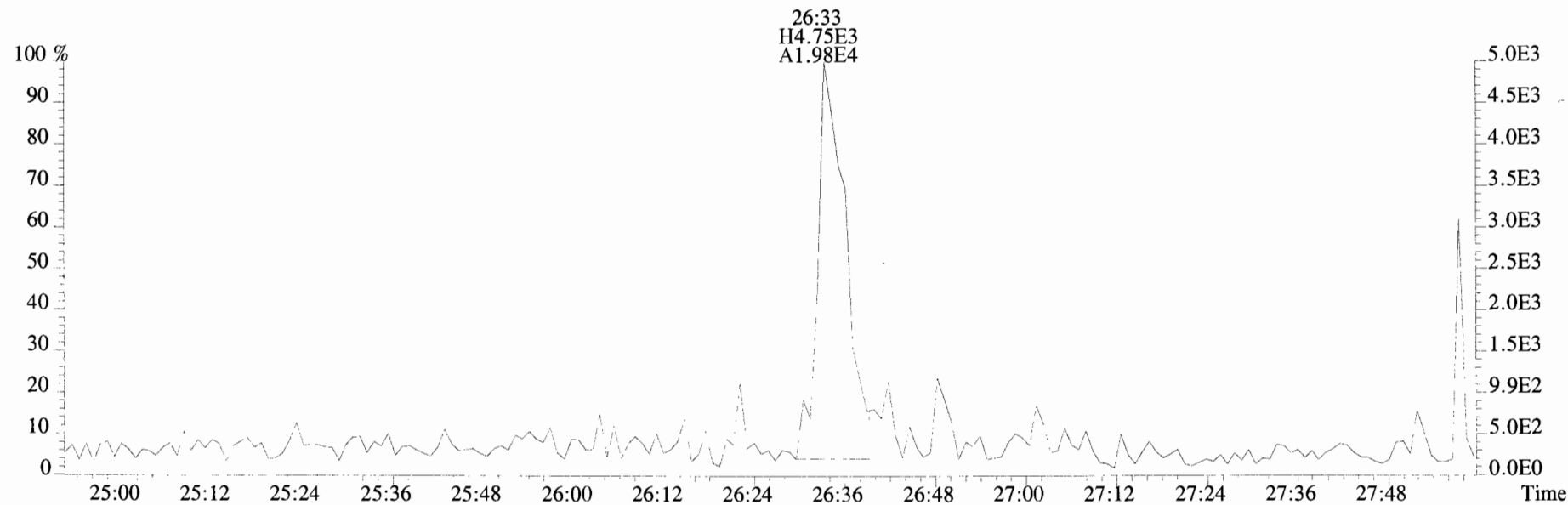
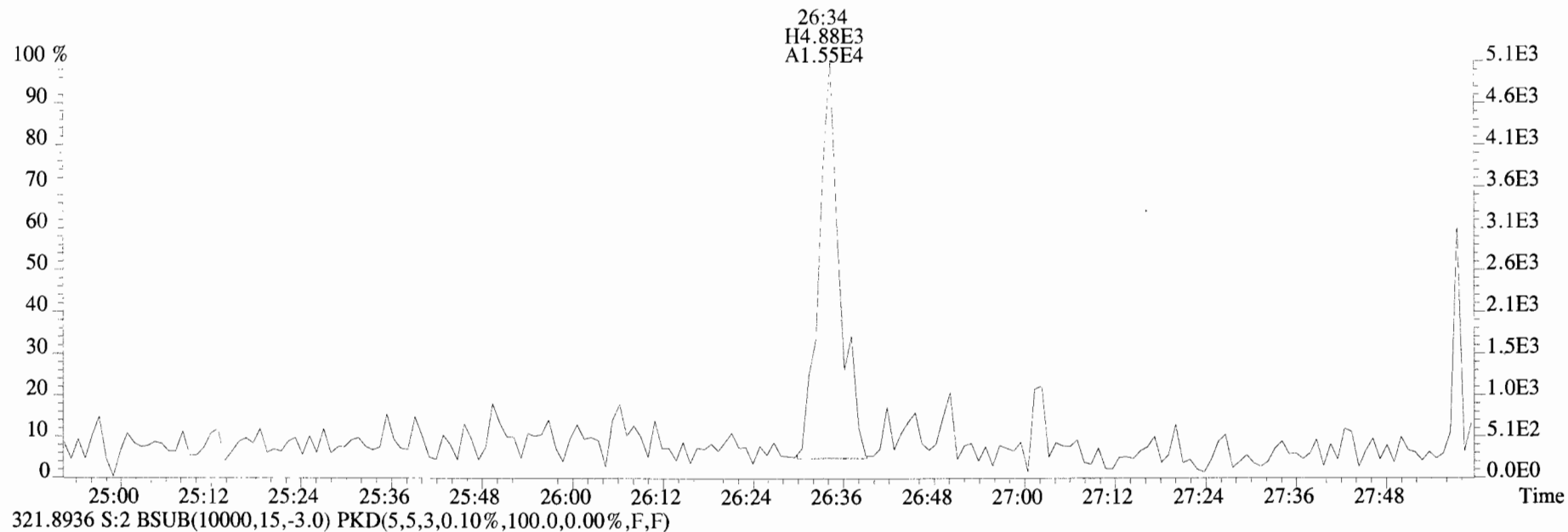
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



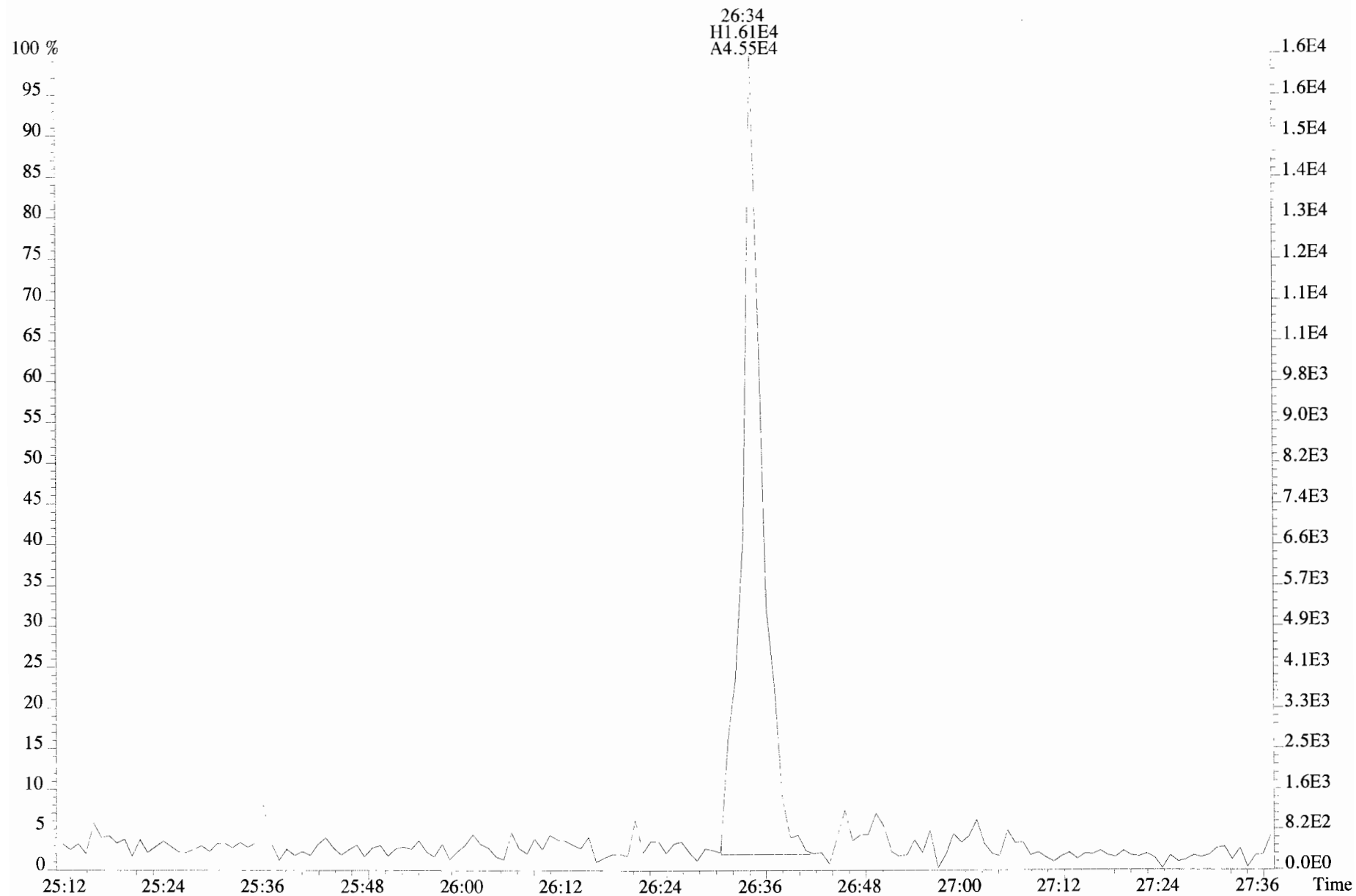
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



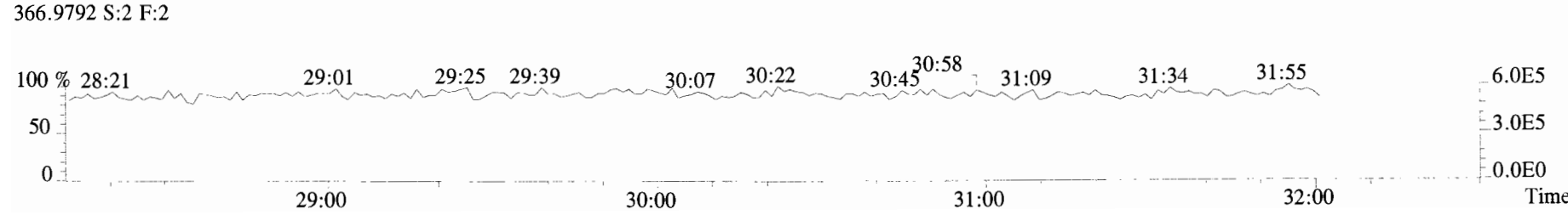
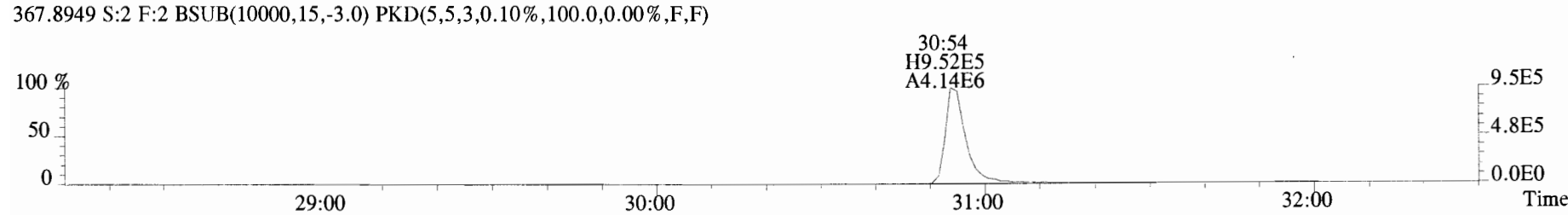
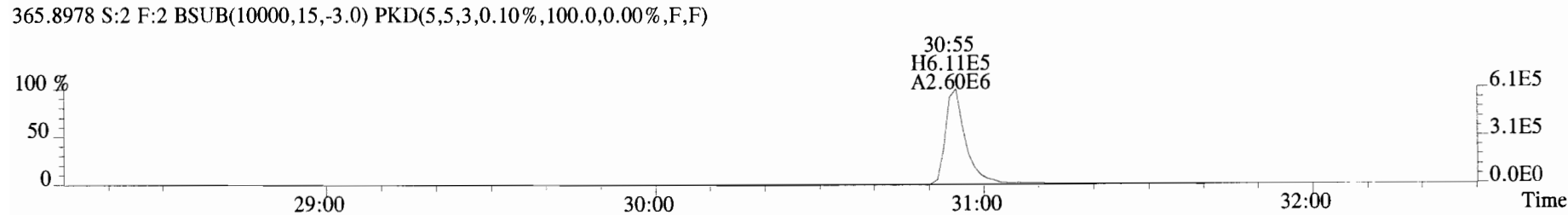
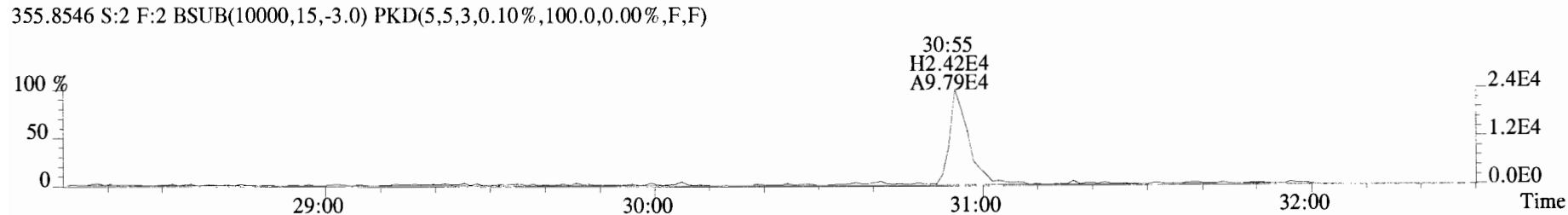
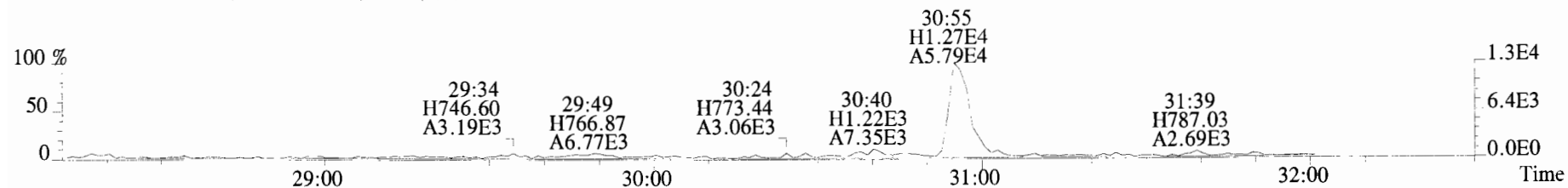
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



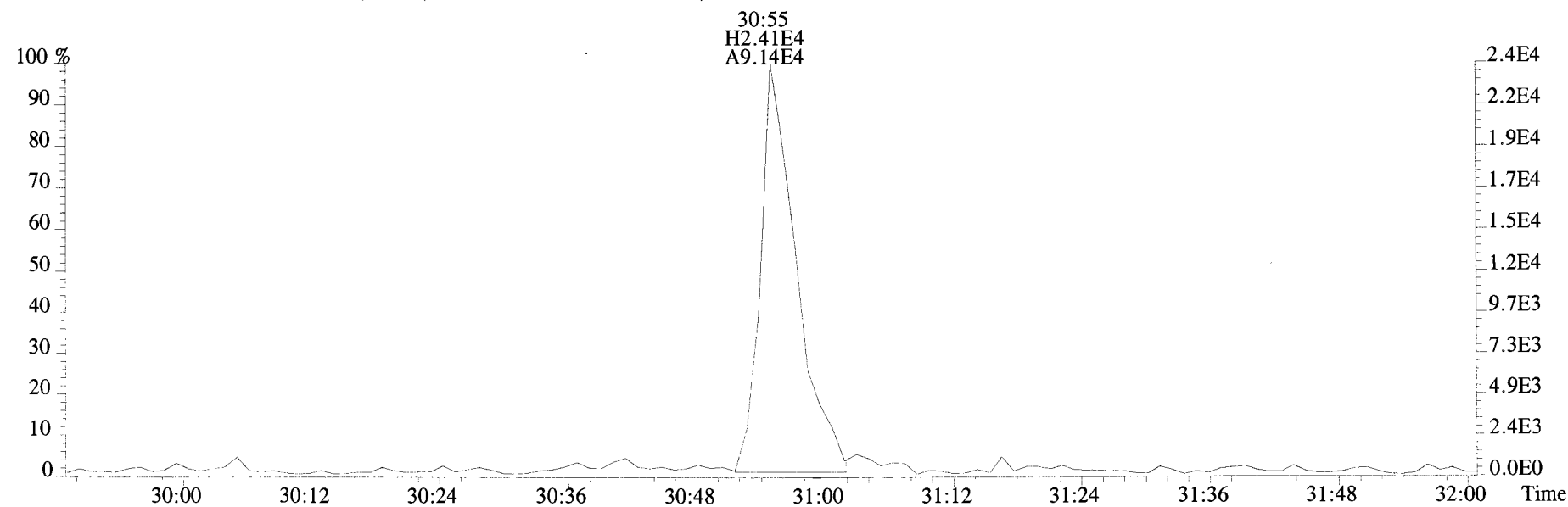
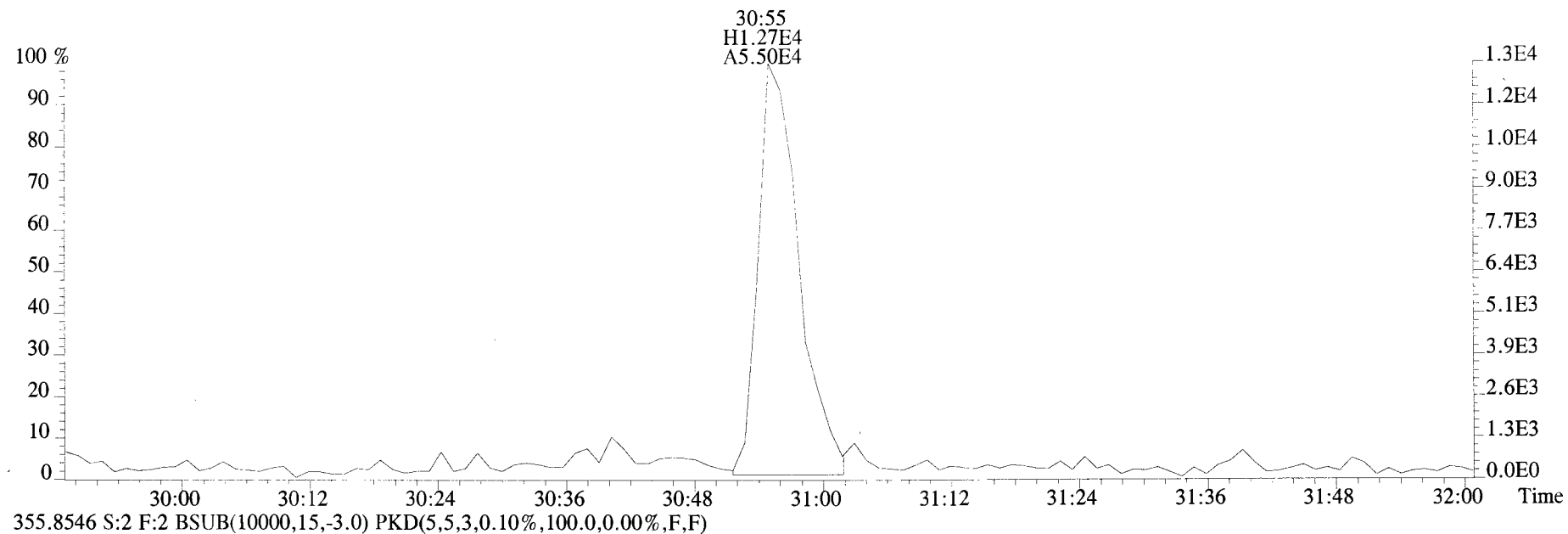
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
327.8847 S:2 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



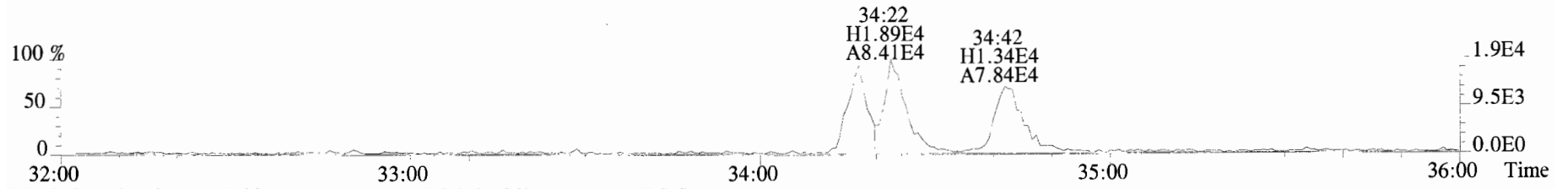
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text: Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



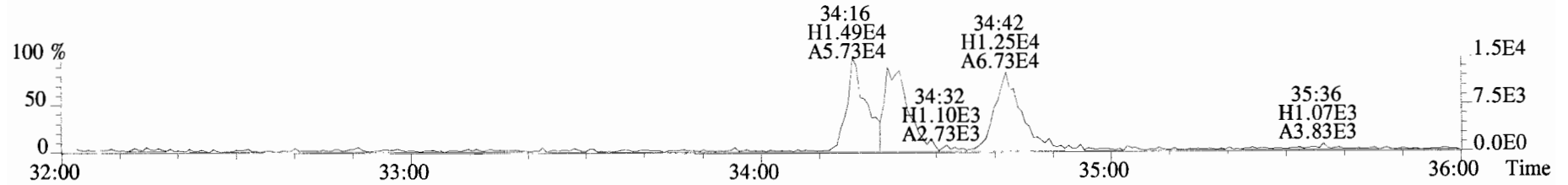
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



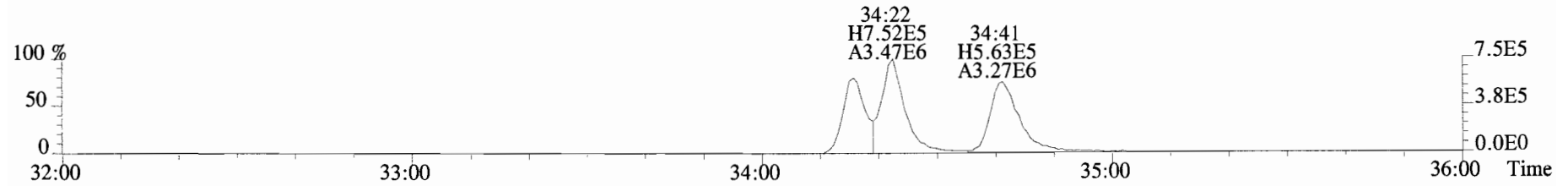
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



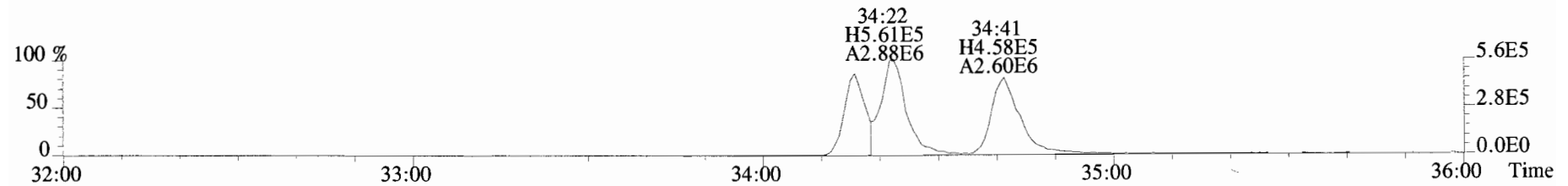
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



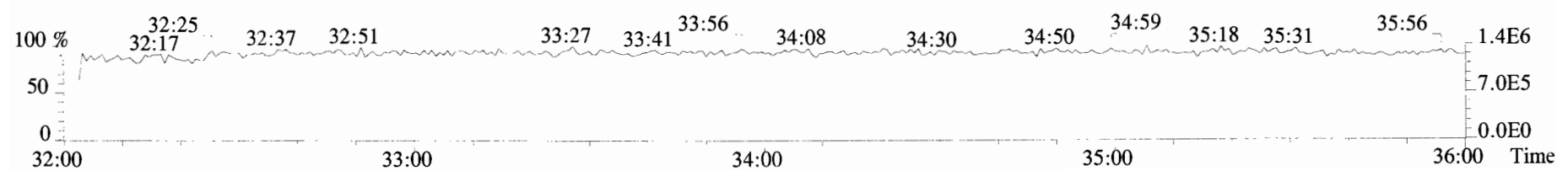
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



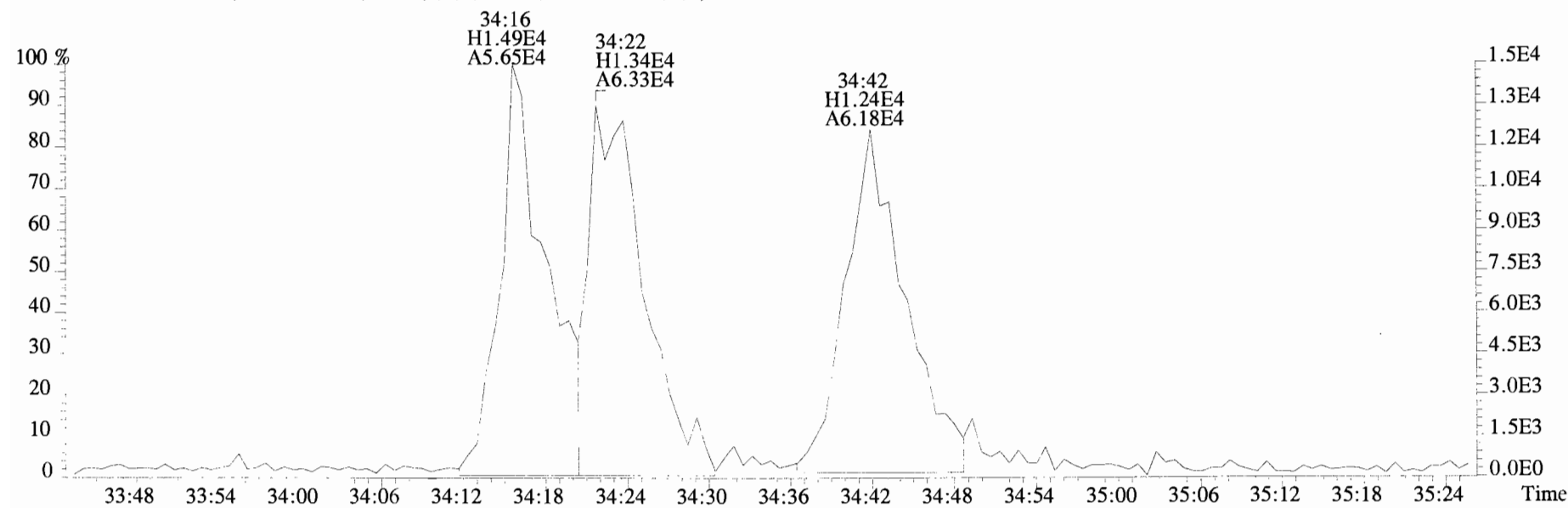
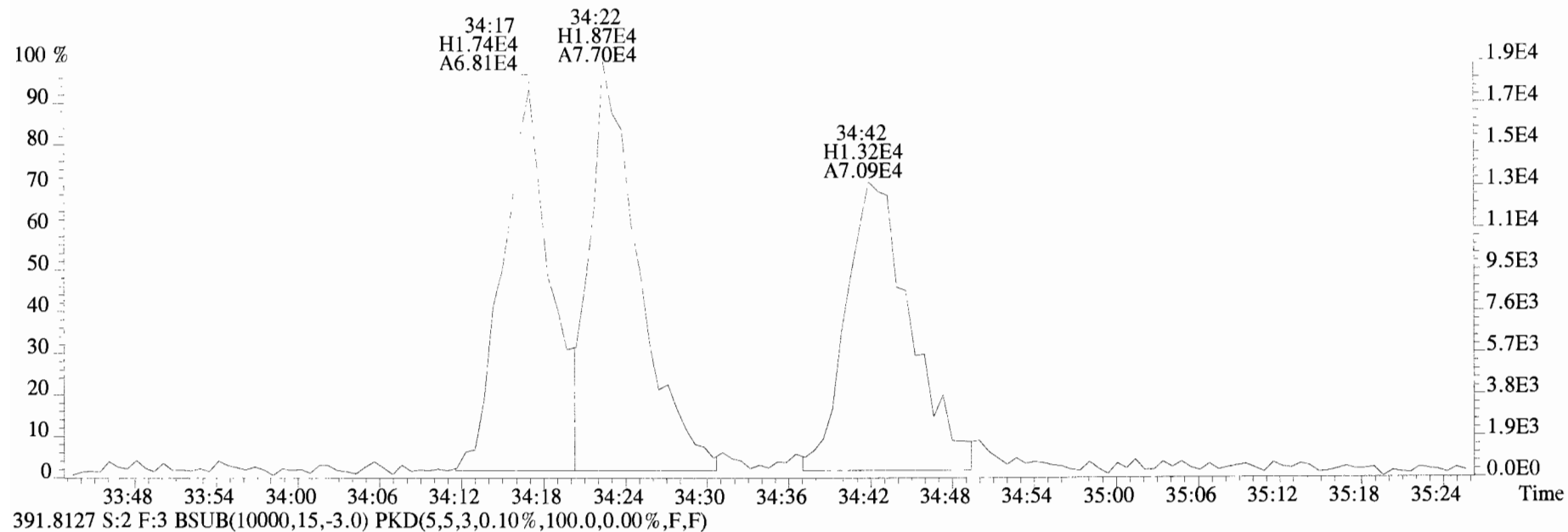
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



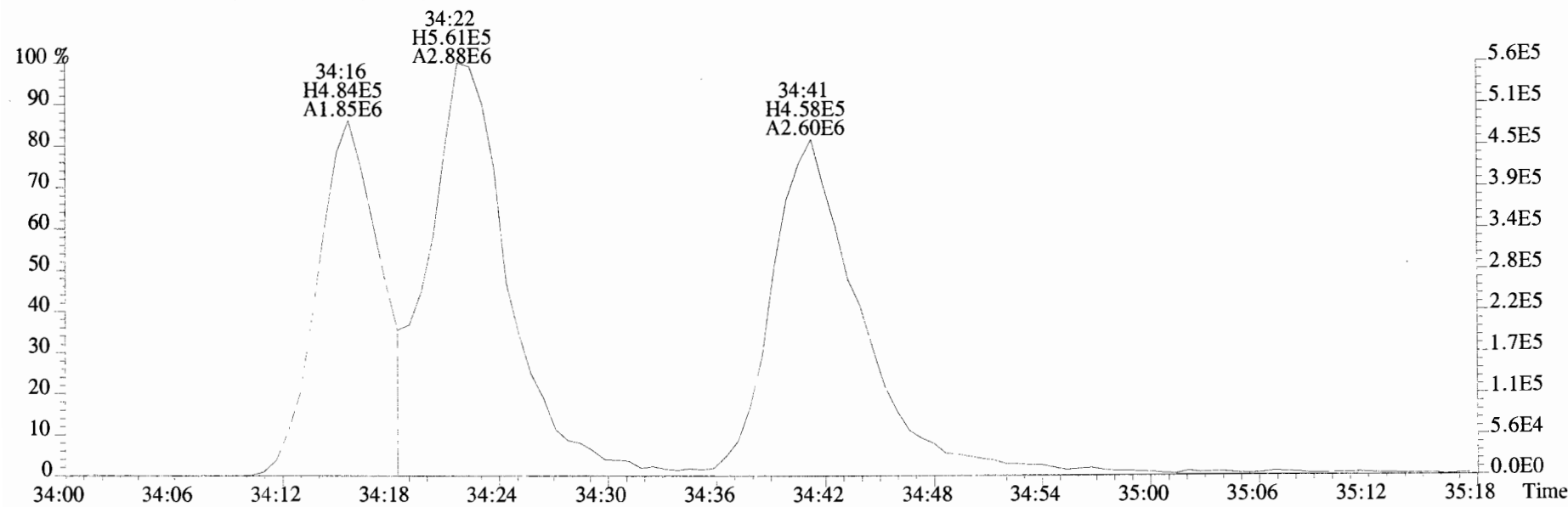
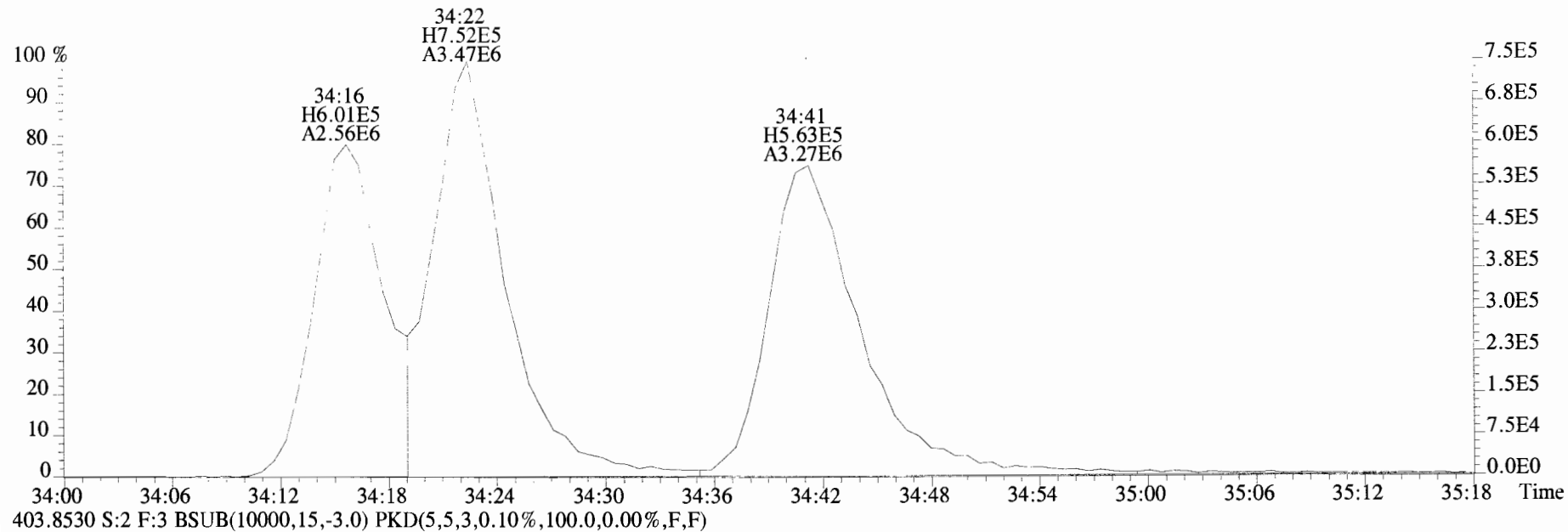
392.9760 S:2 F:3



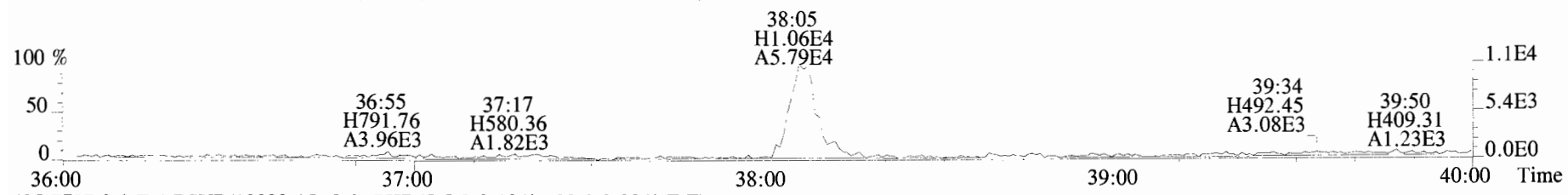
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



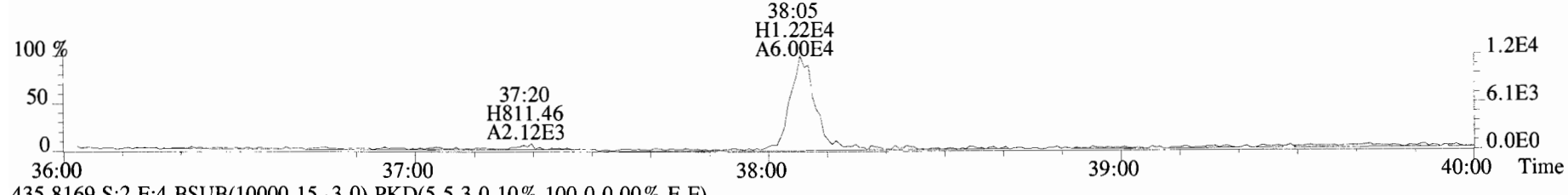
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



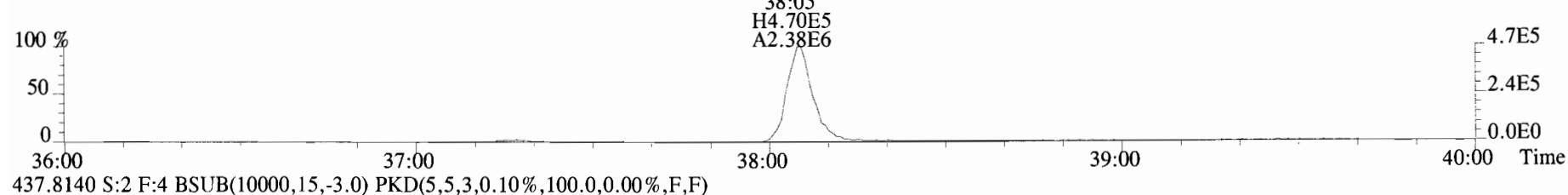
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



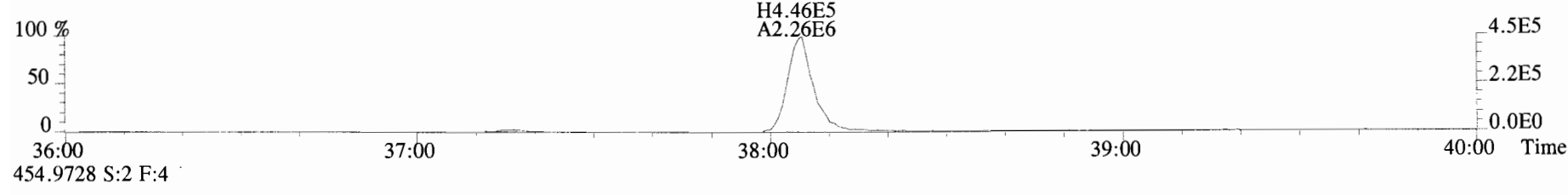
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



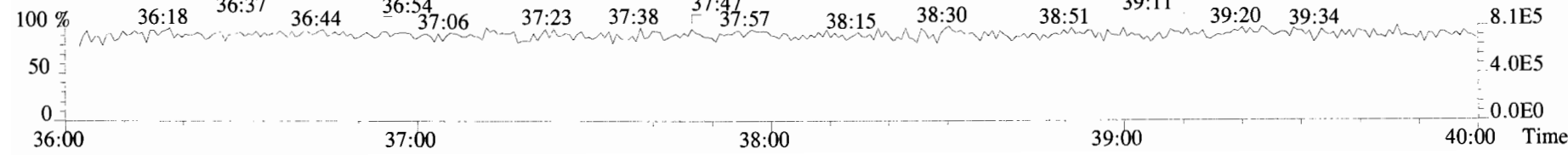
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



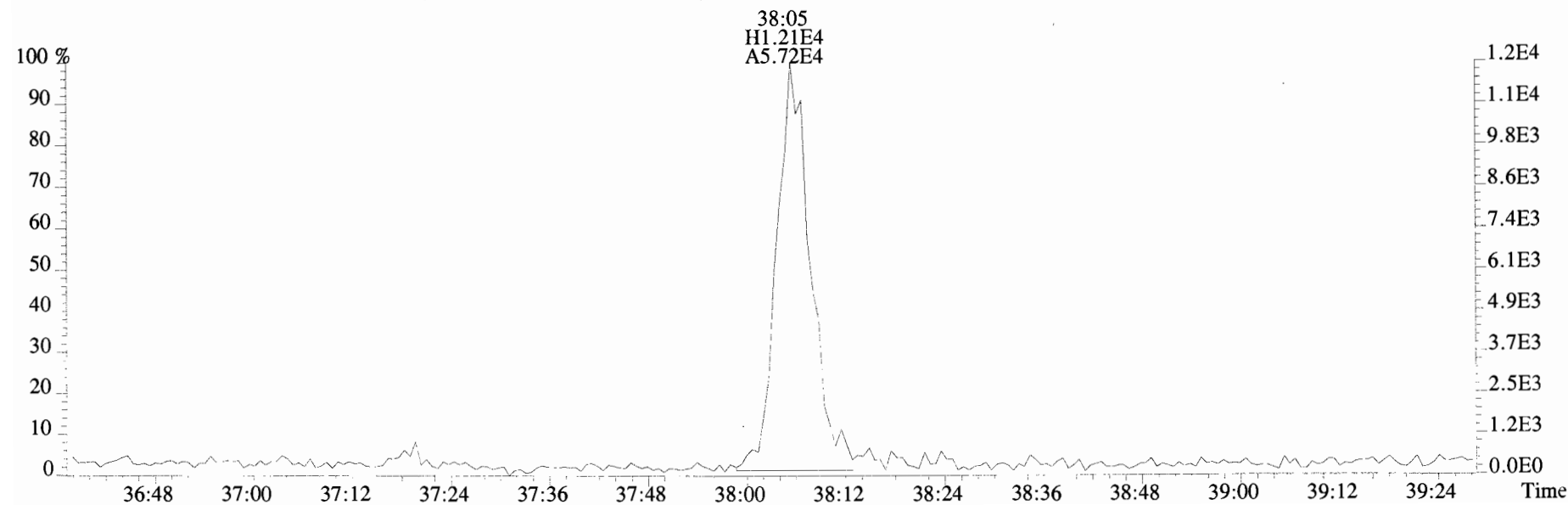
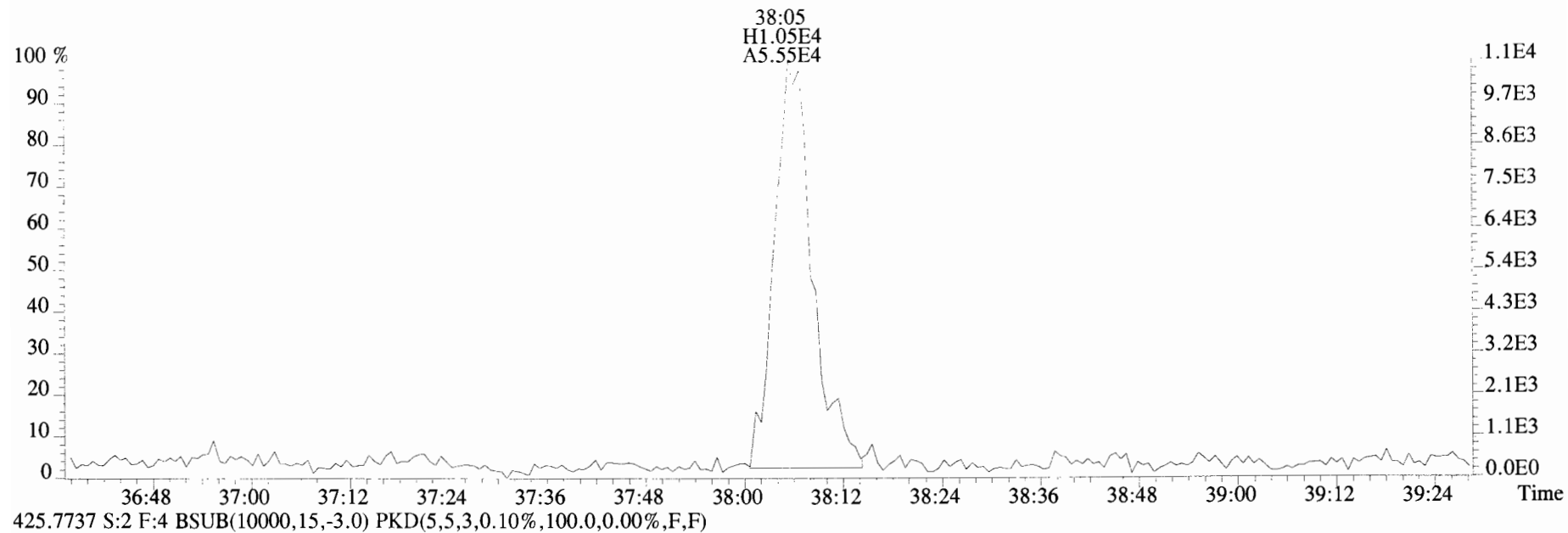
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



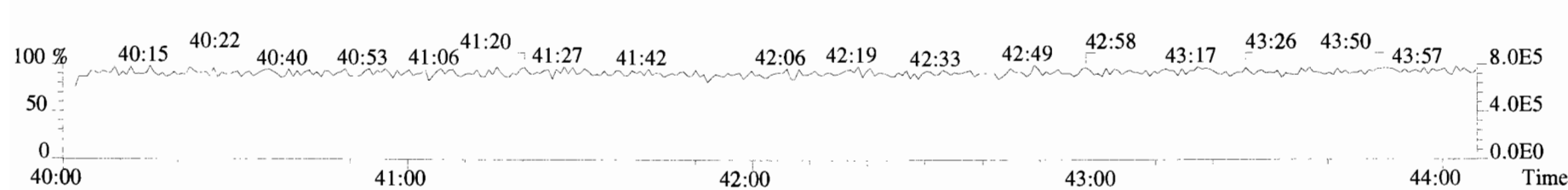
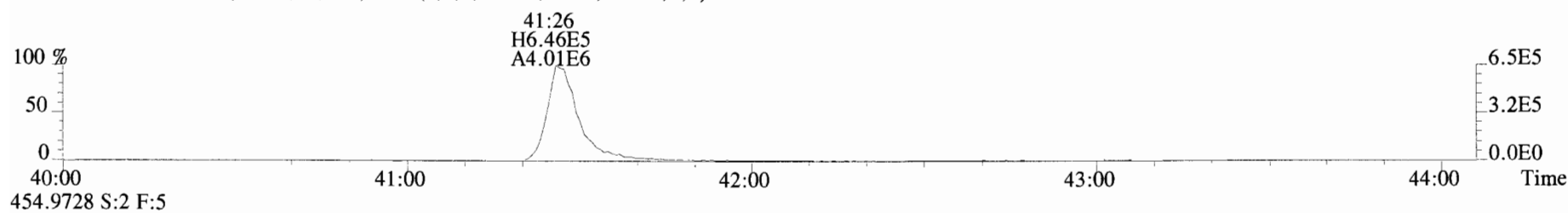
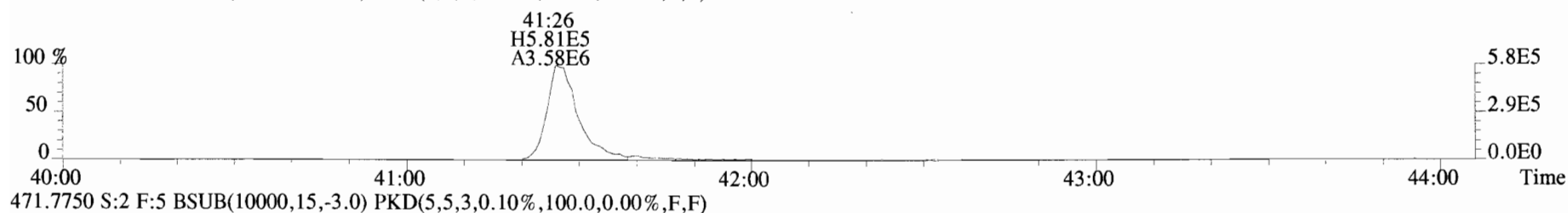
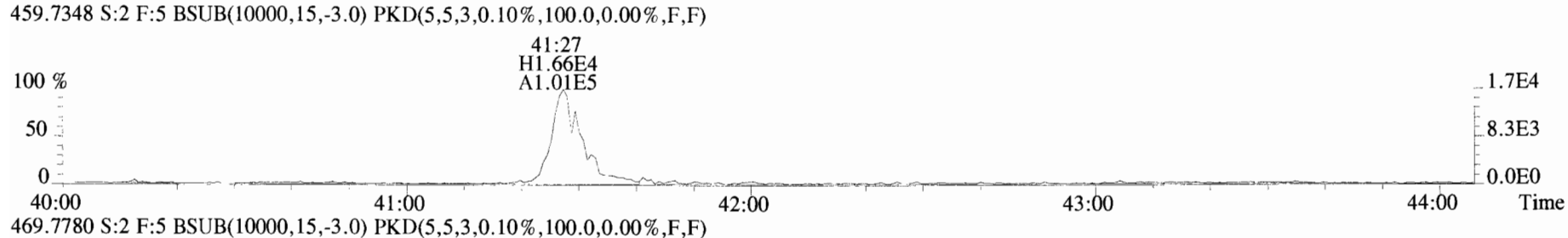
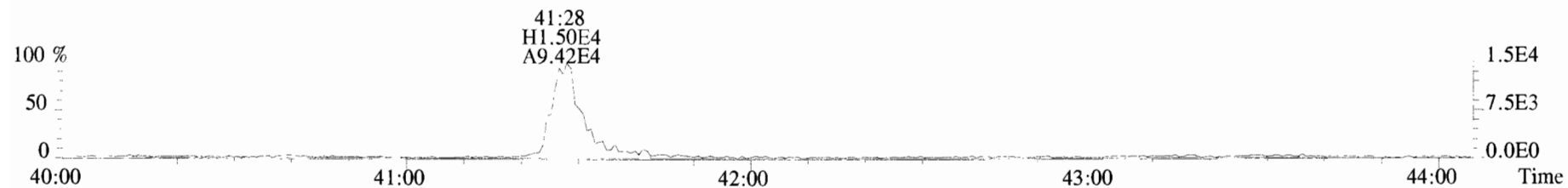
454.9728 S:2 F:4



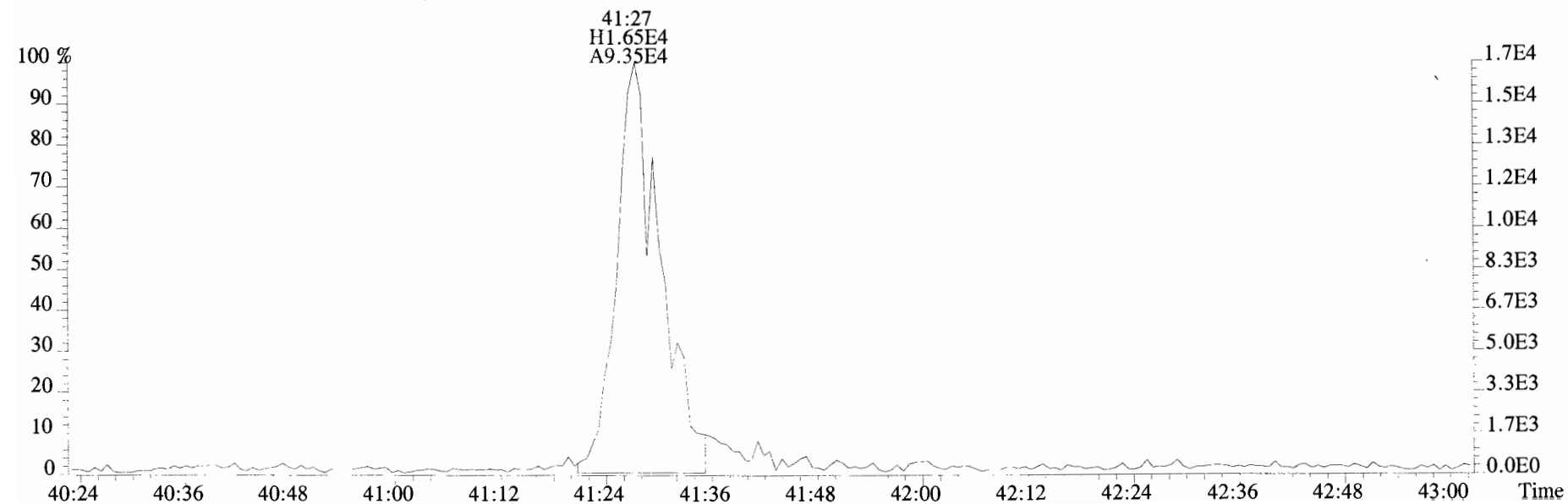
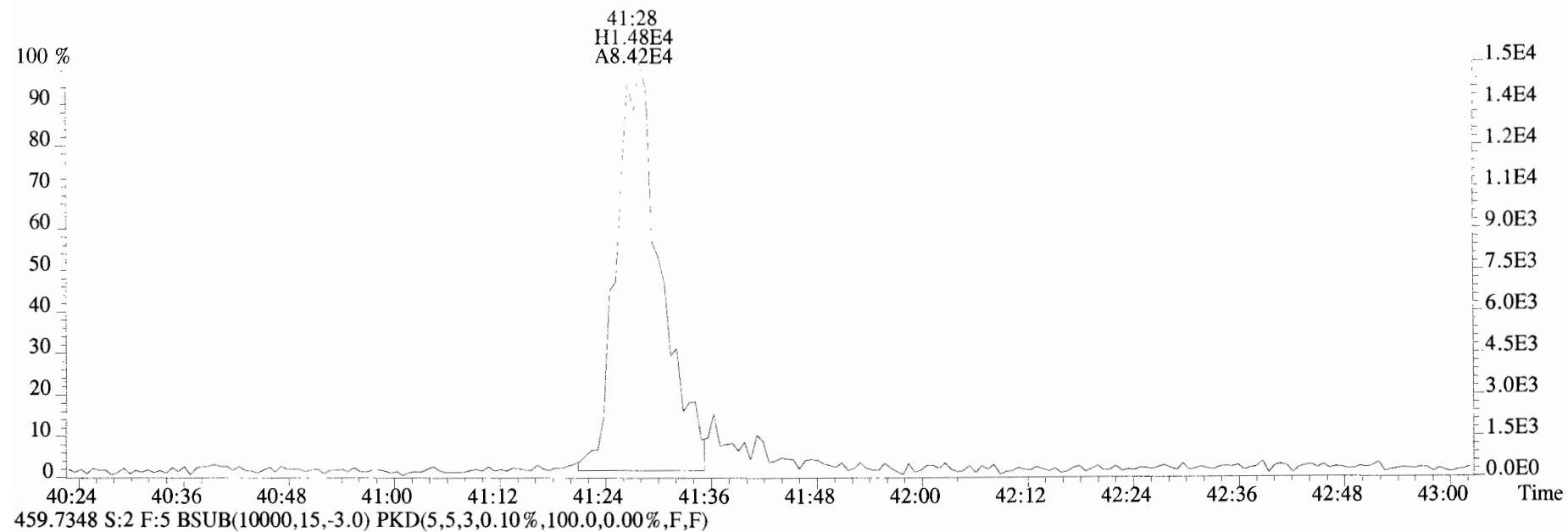
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
423.7767 S:2 F:4 BSub(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



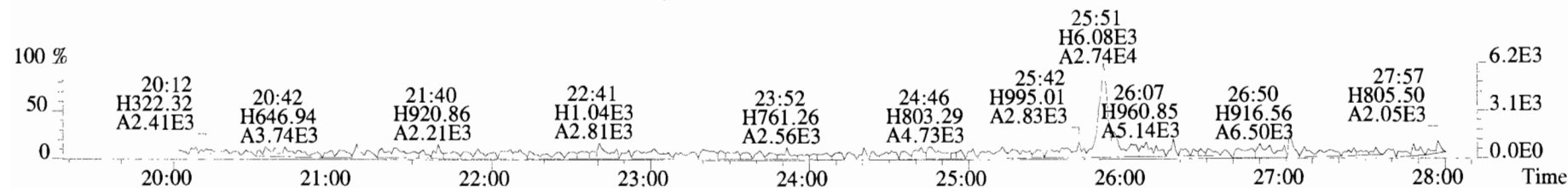
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



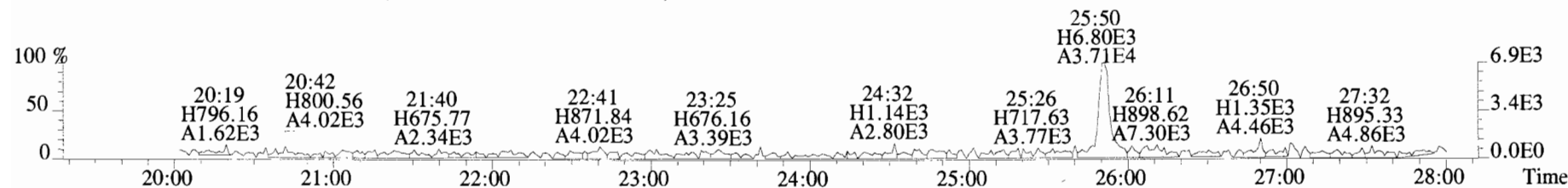
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



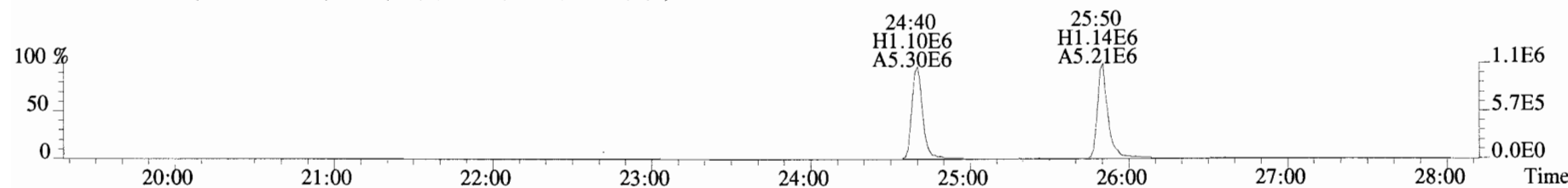
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



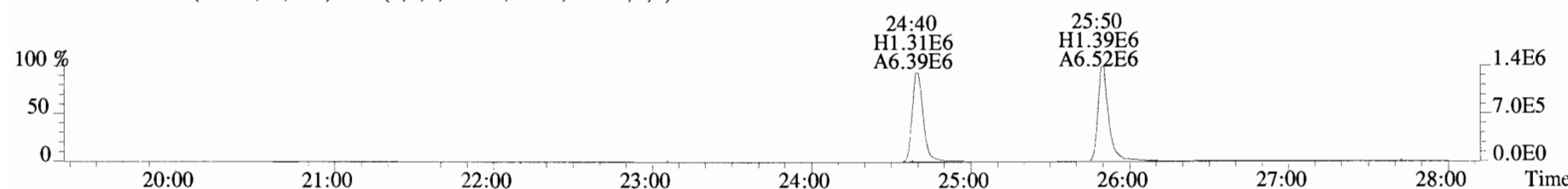
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



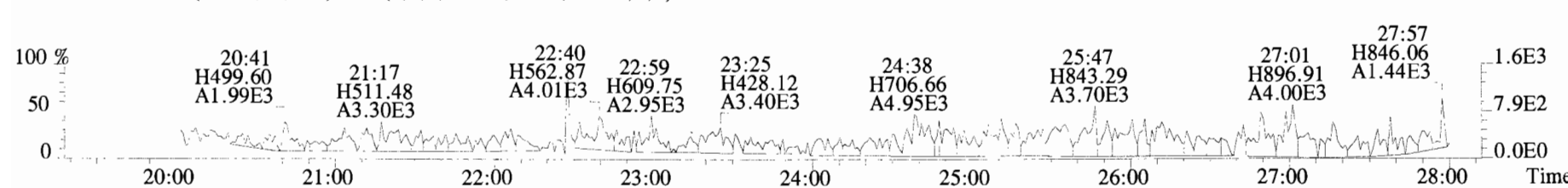
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



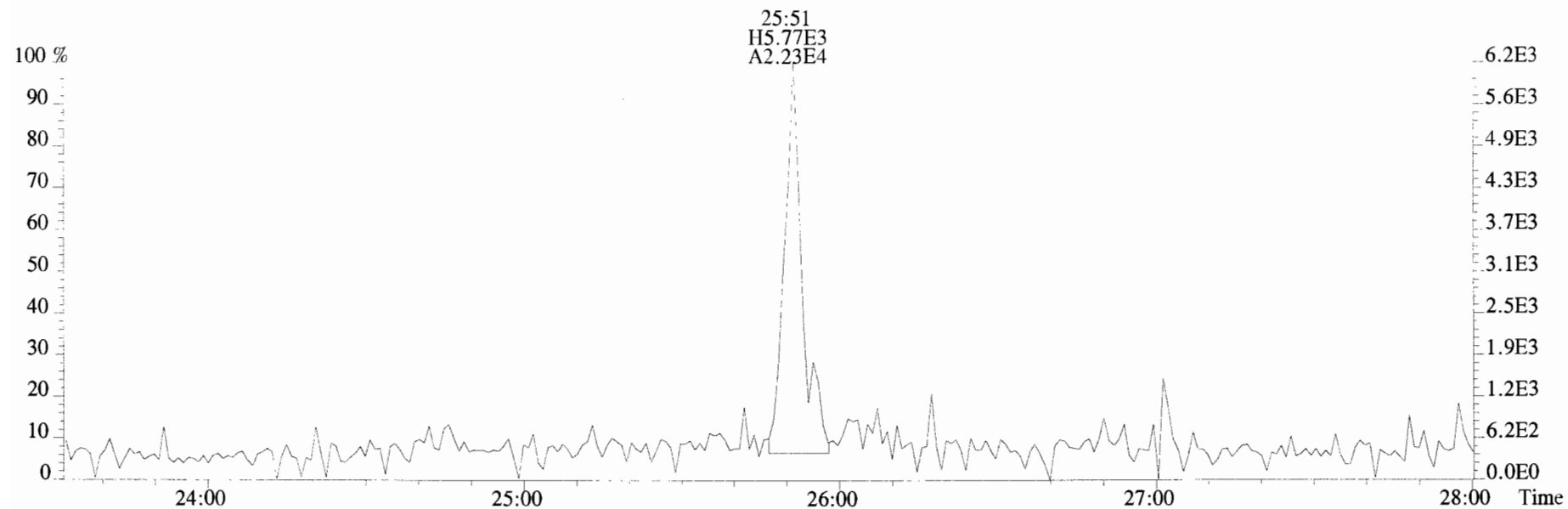
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



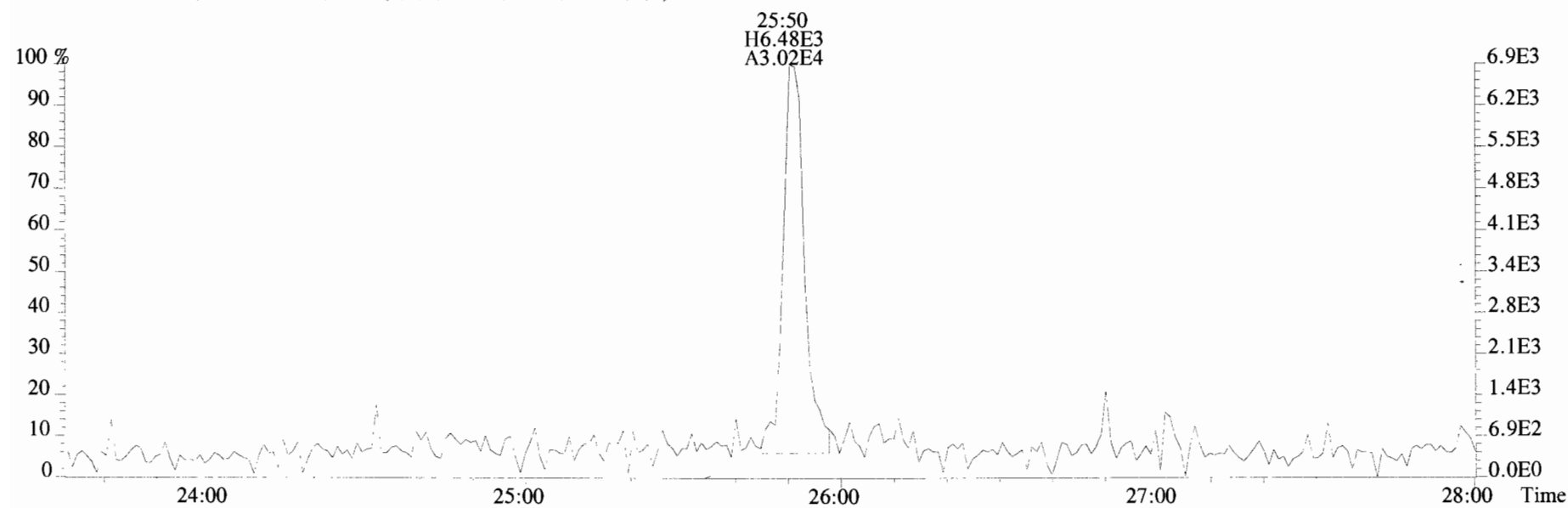
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



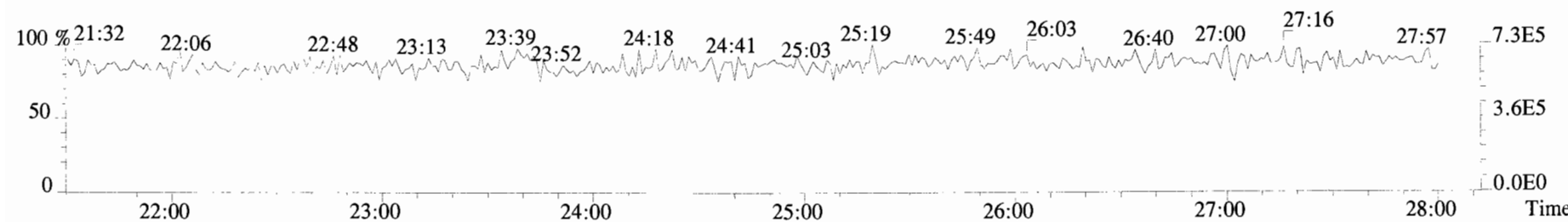
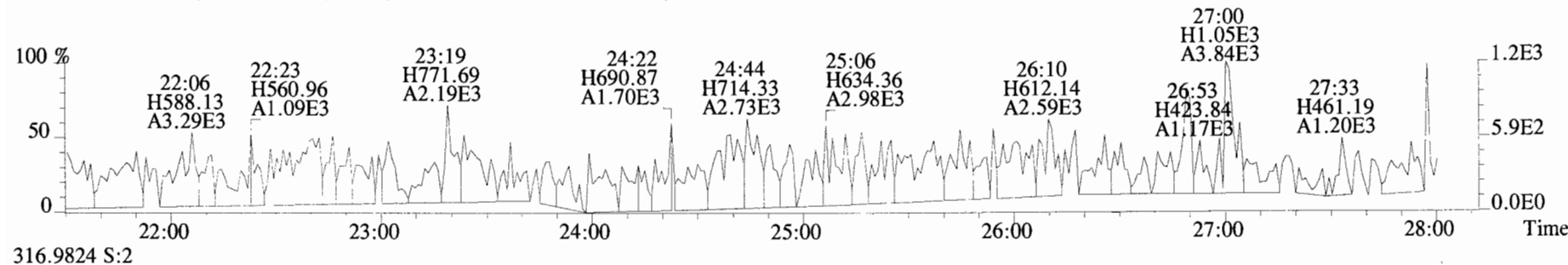
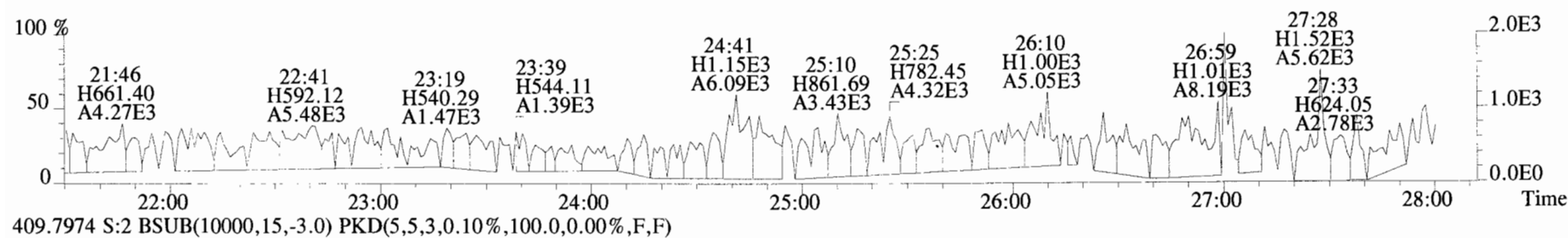
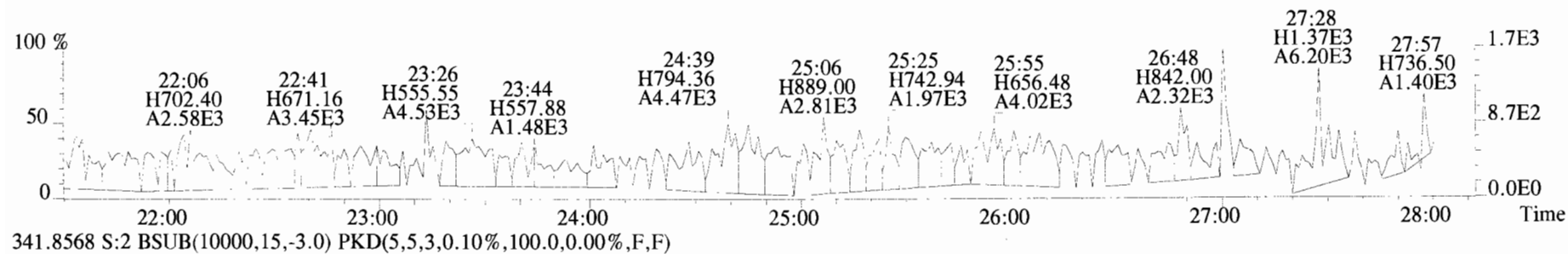
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



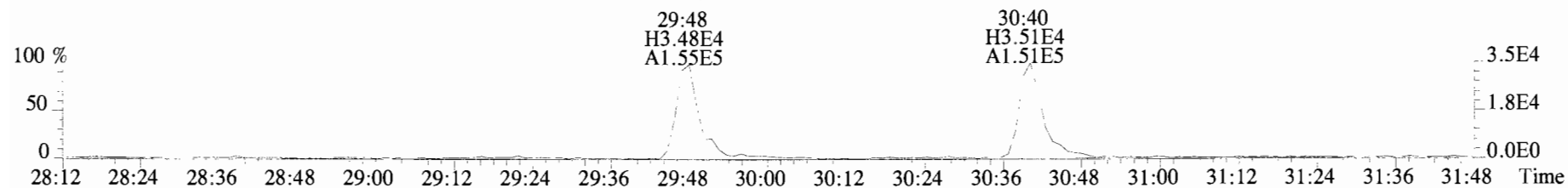
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



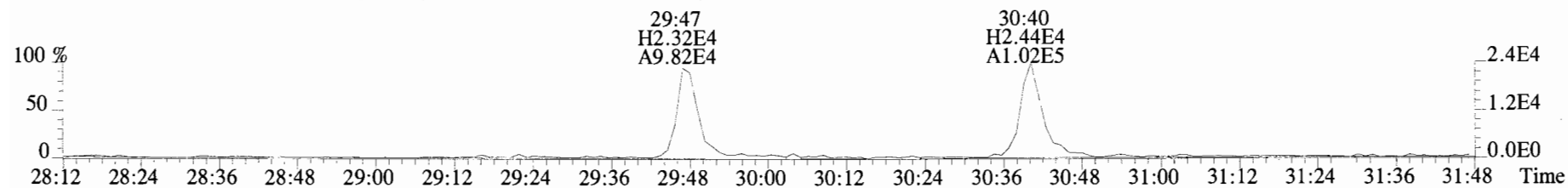
File:191009D1 #1-513 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



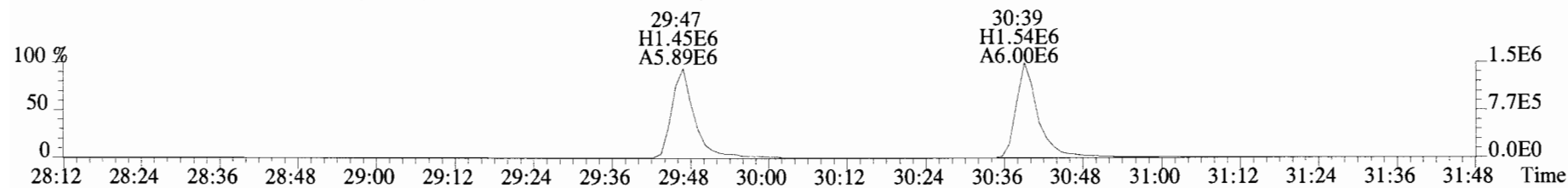
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



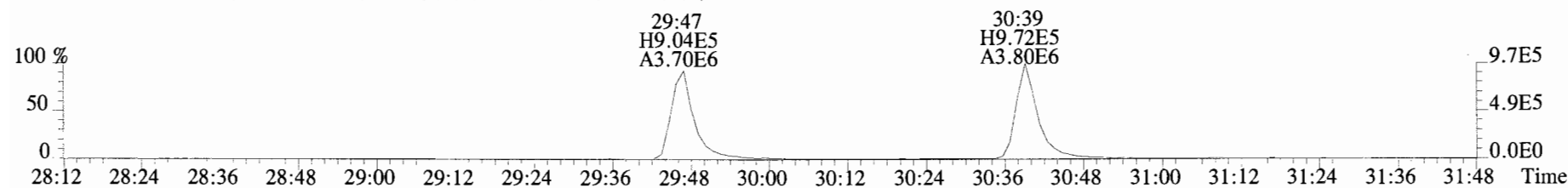
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



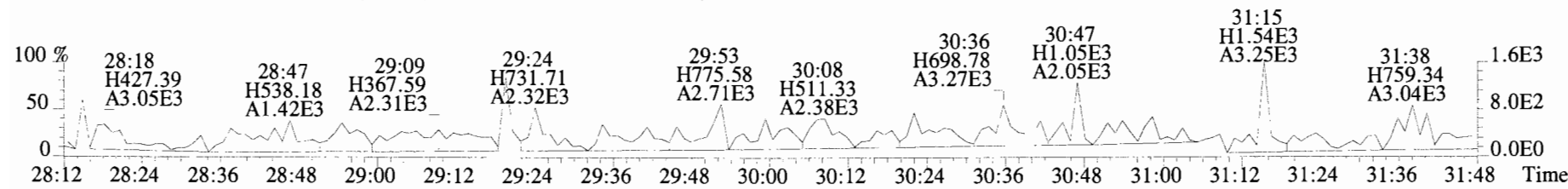
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



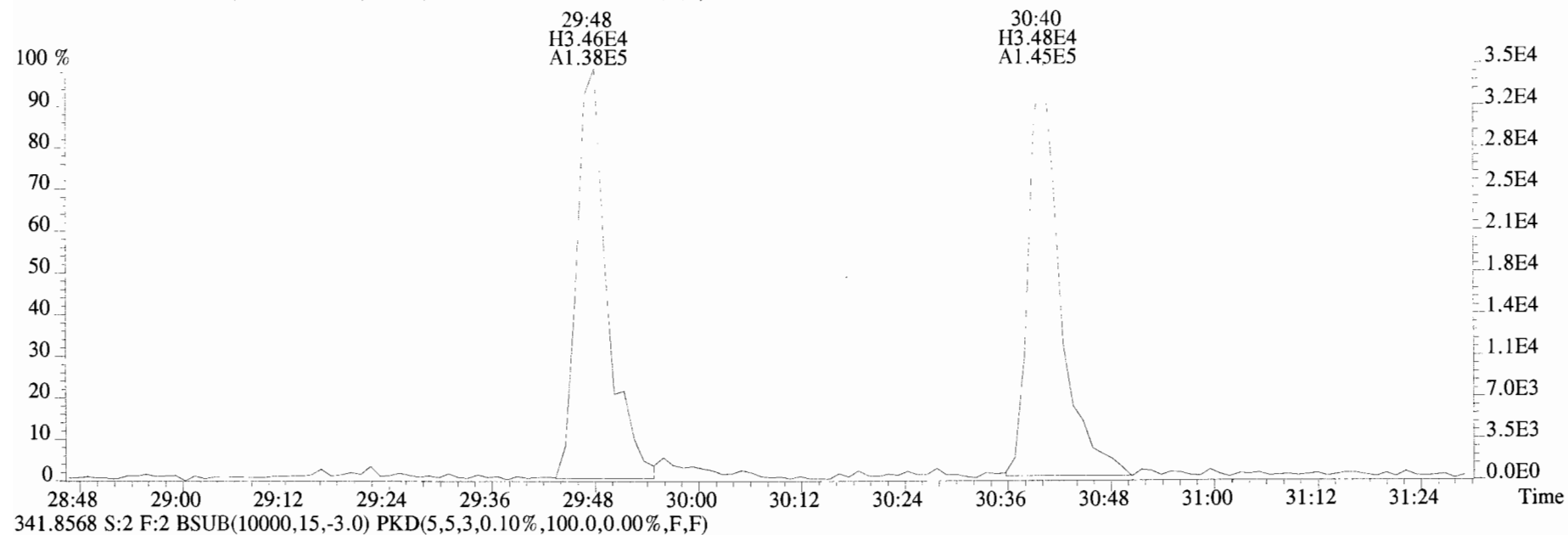
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



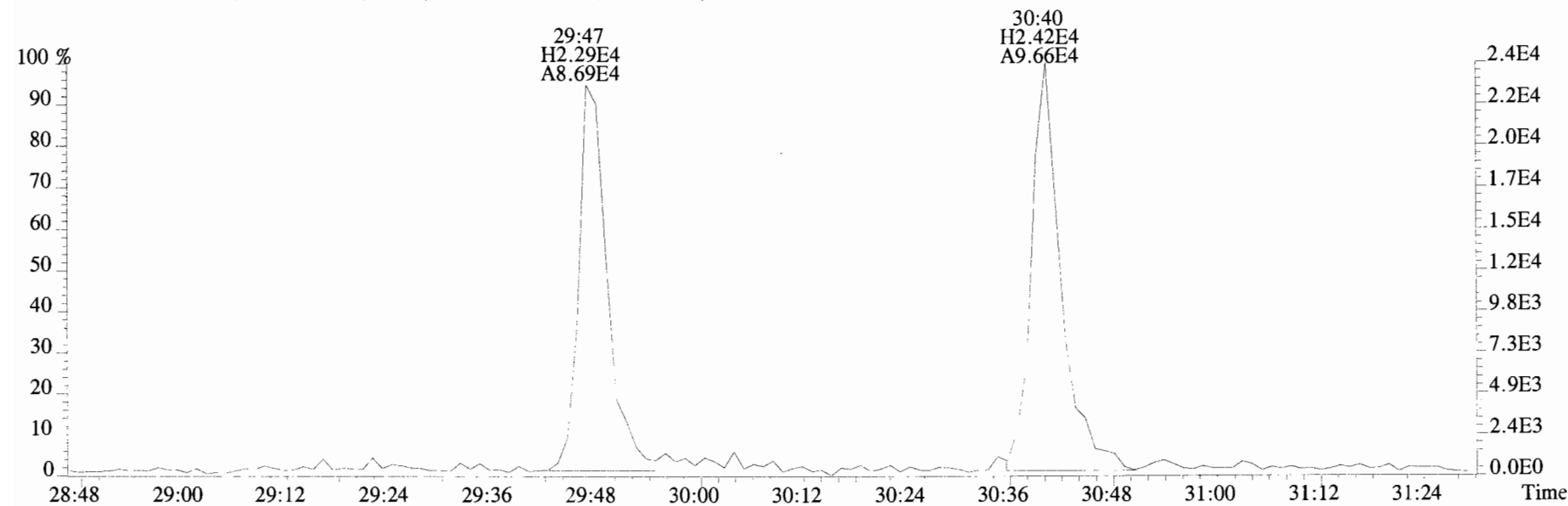
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



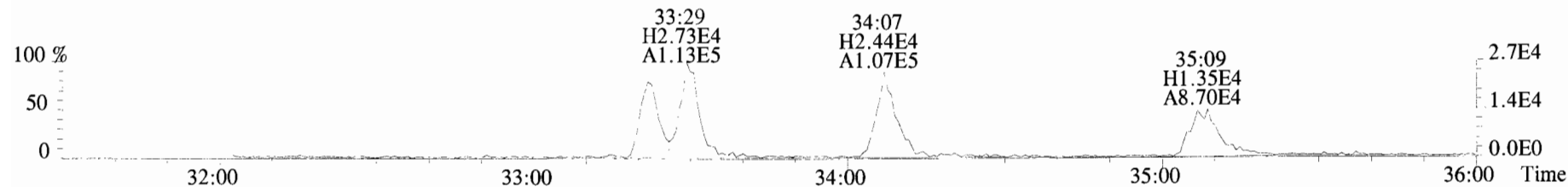
File:191009D1 #1-211 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



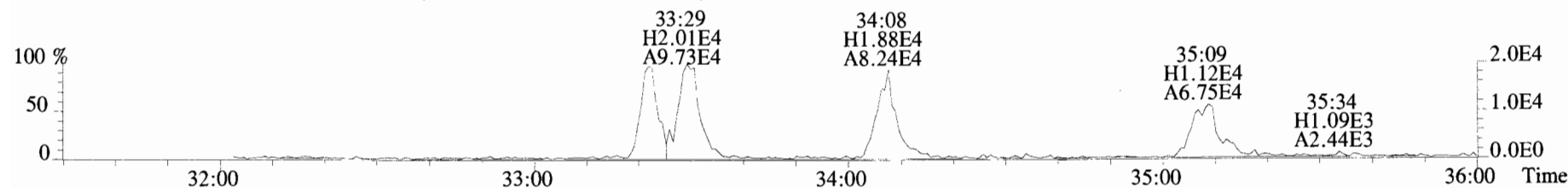
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



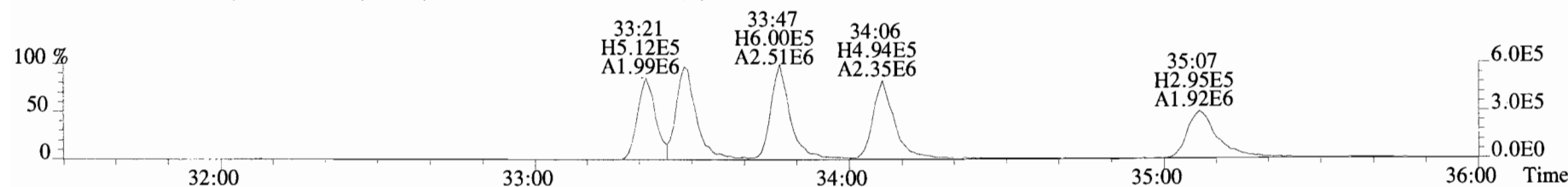
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



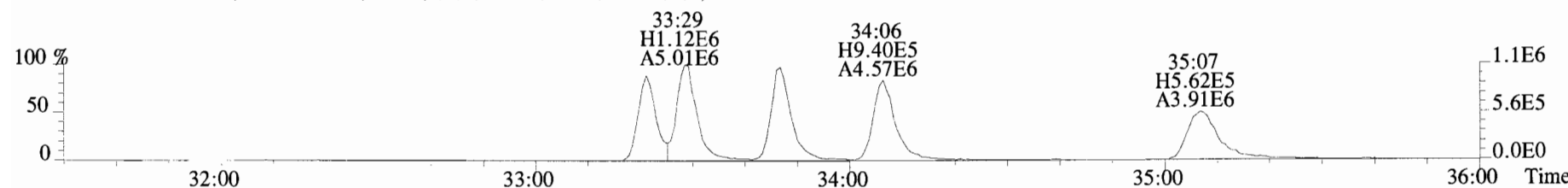
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



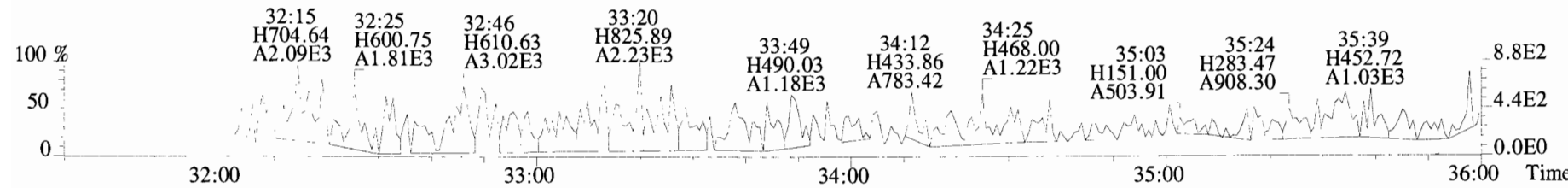
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



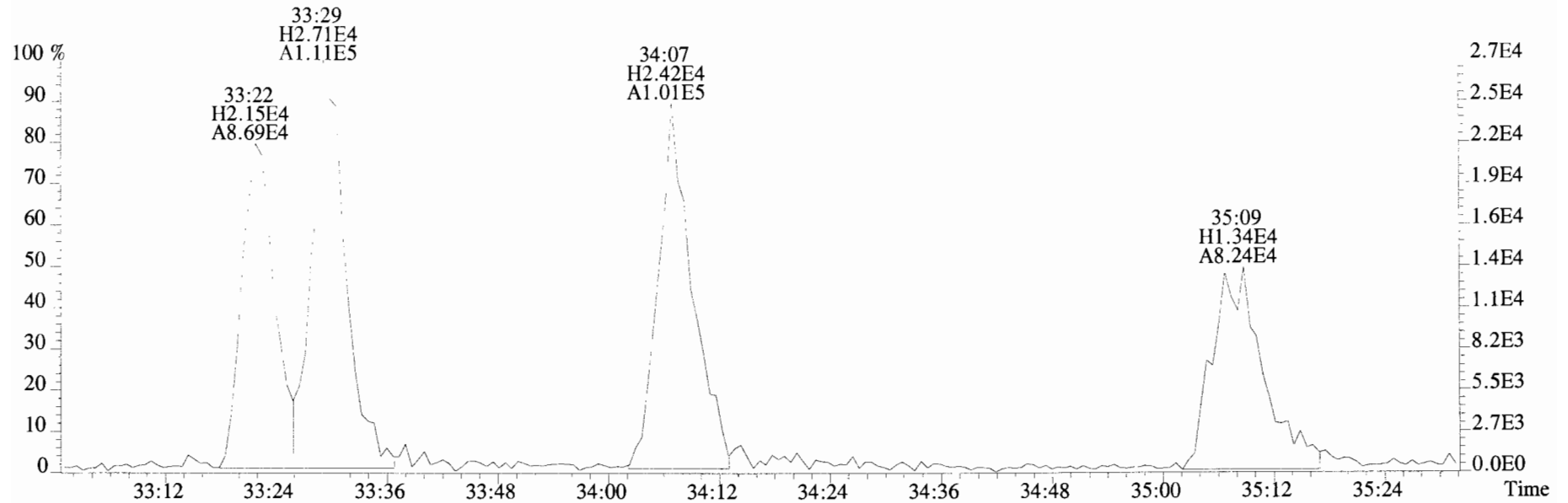
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



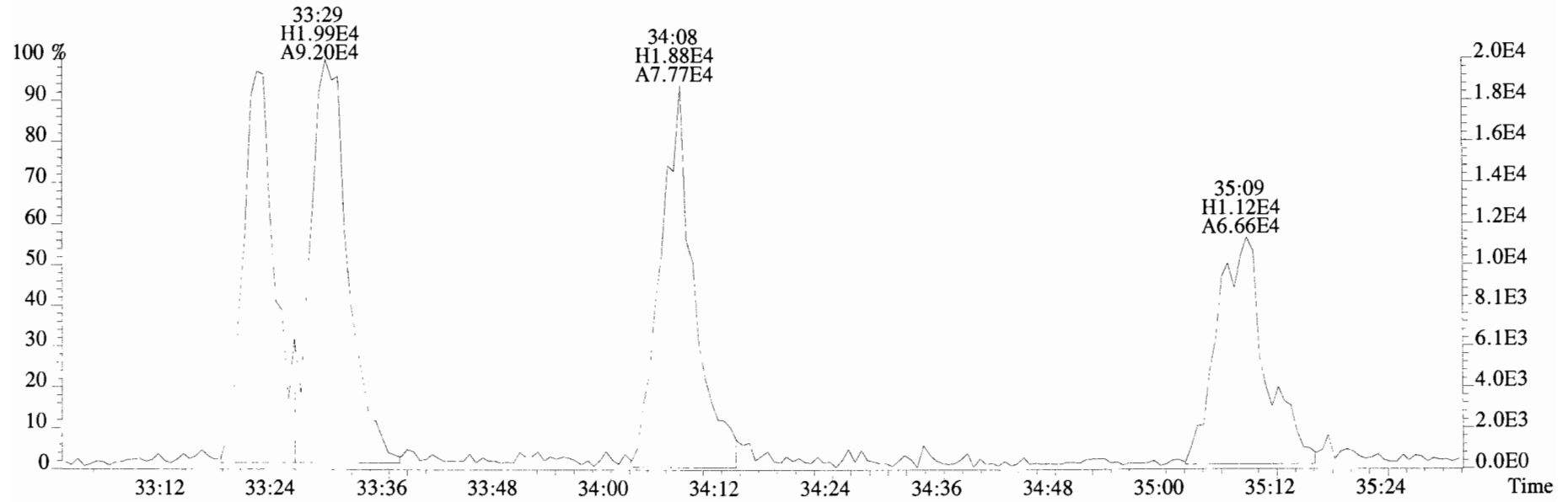
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



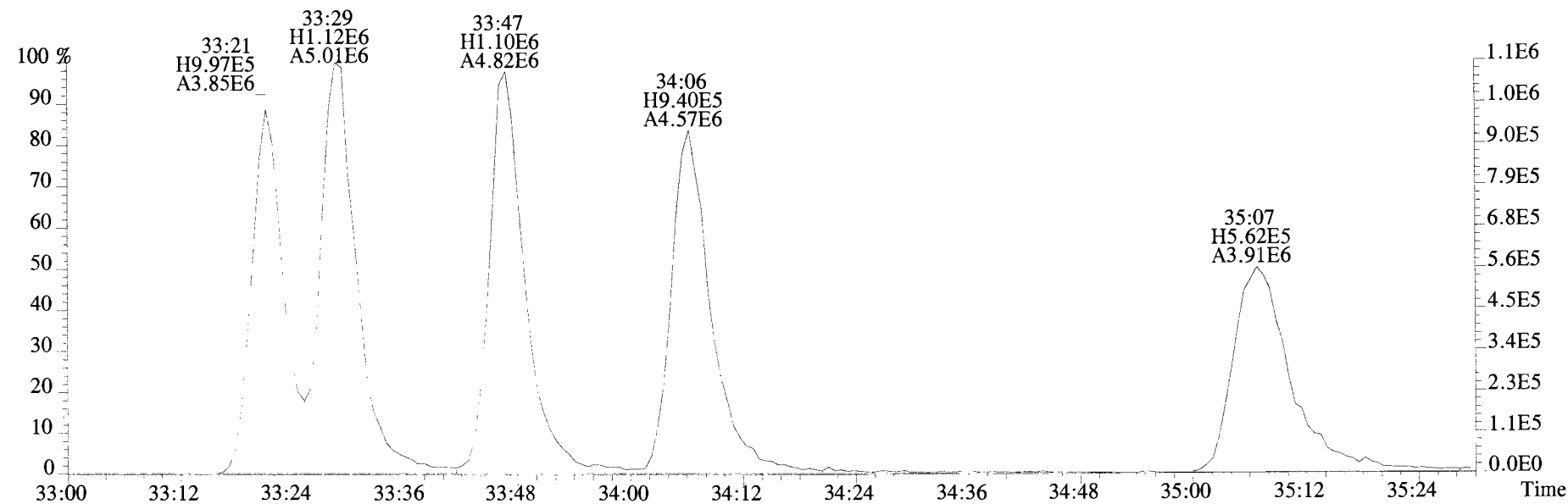
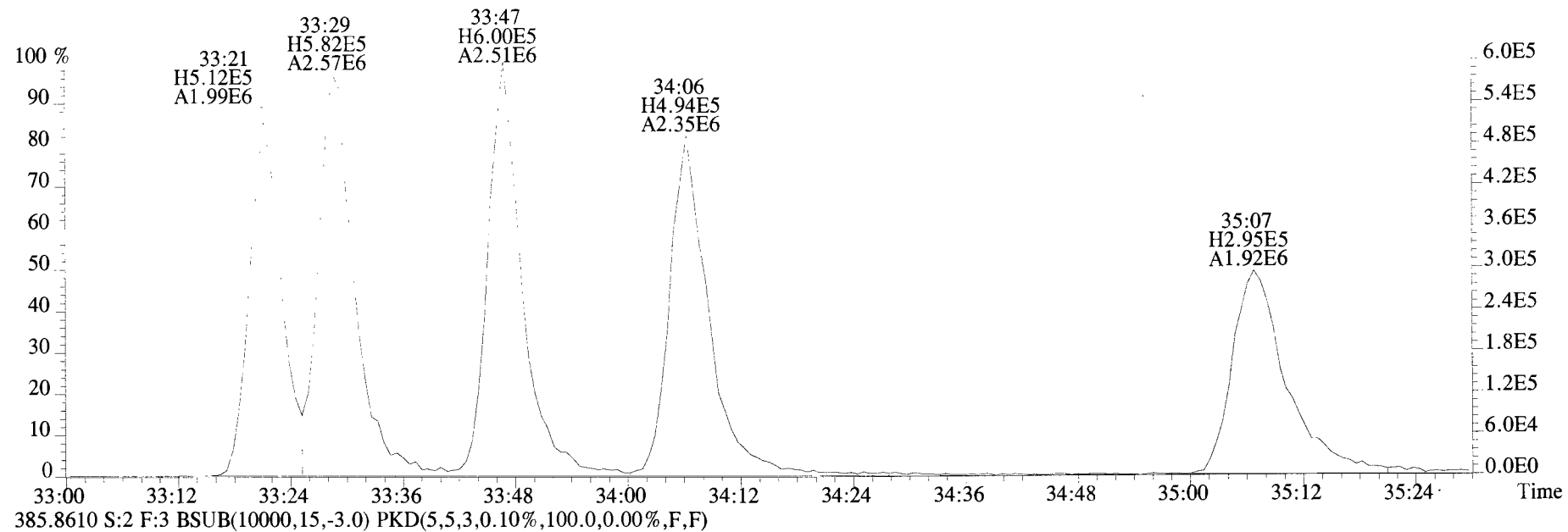
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



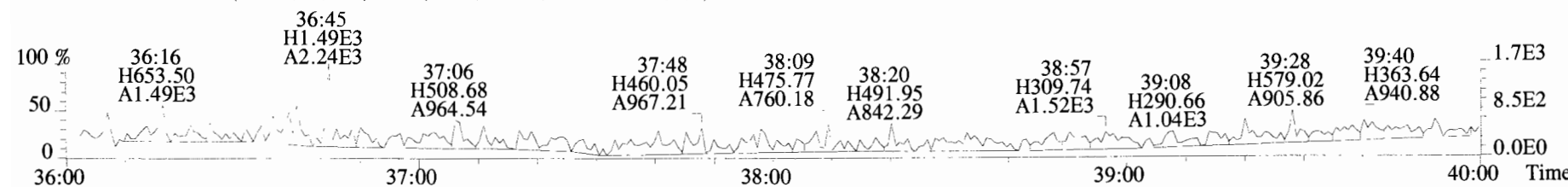
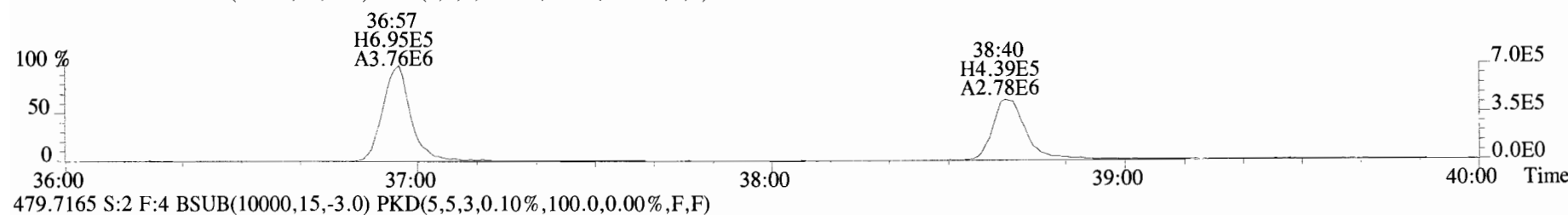
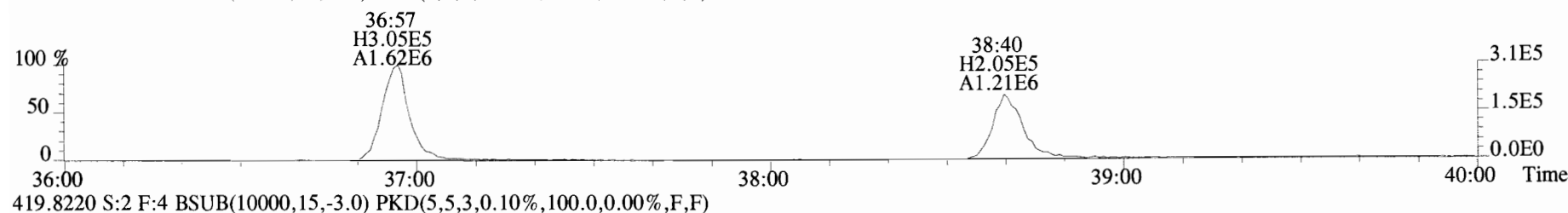
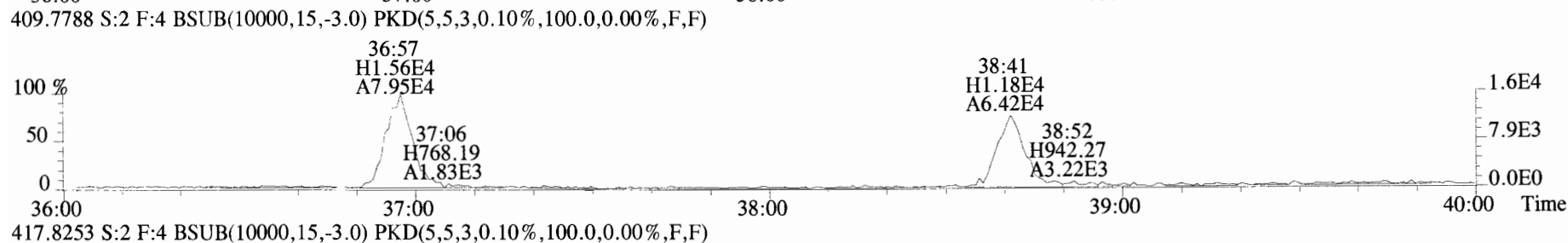
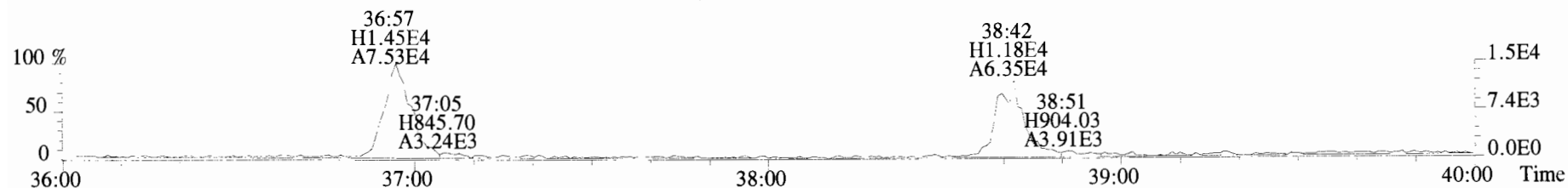
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



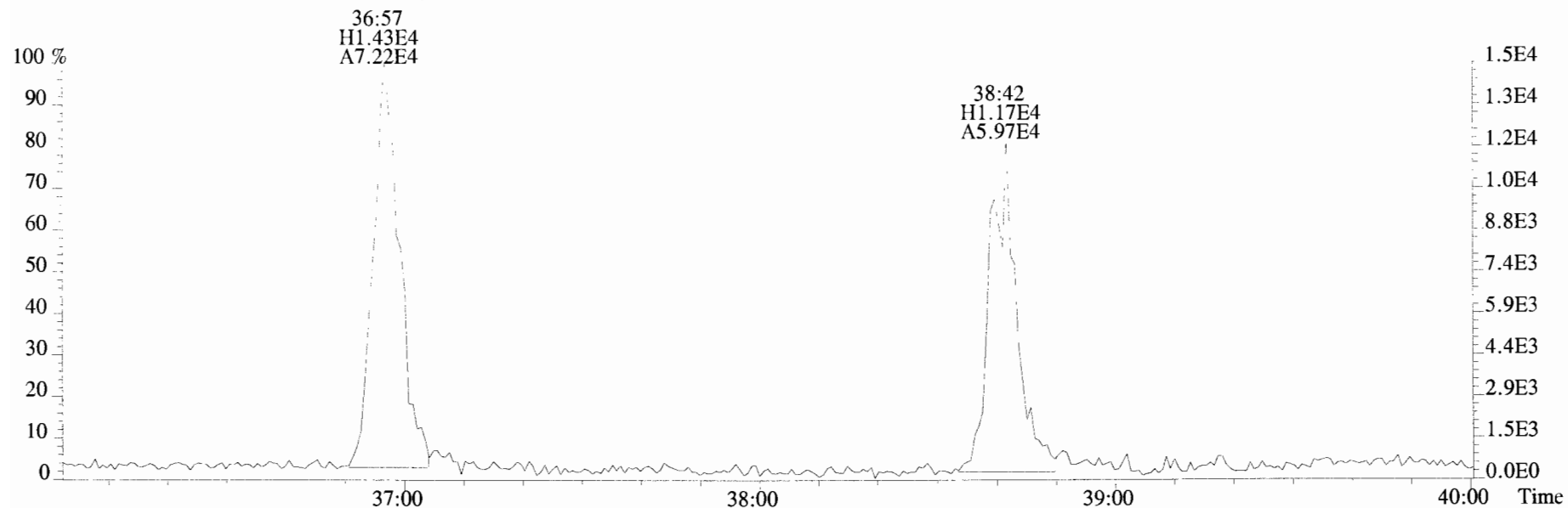
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



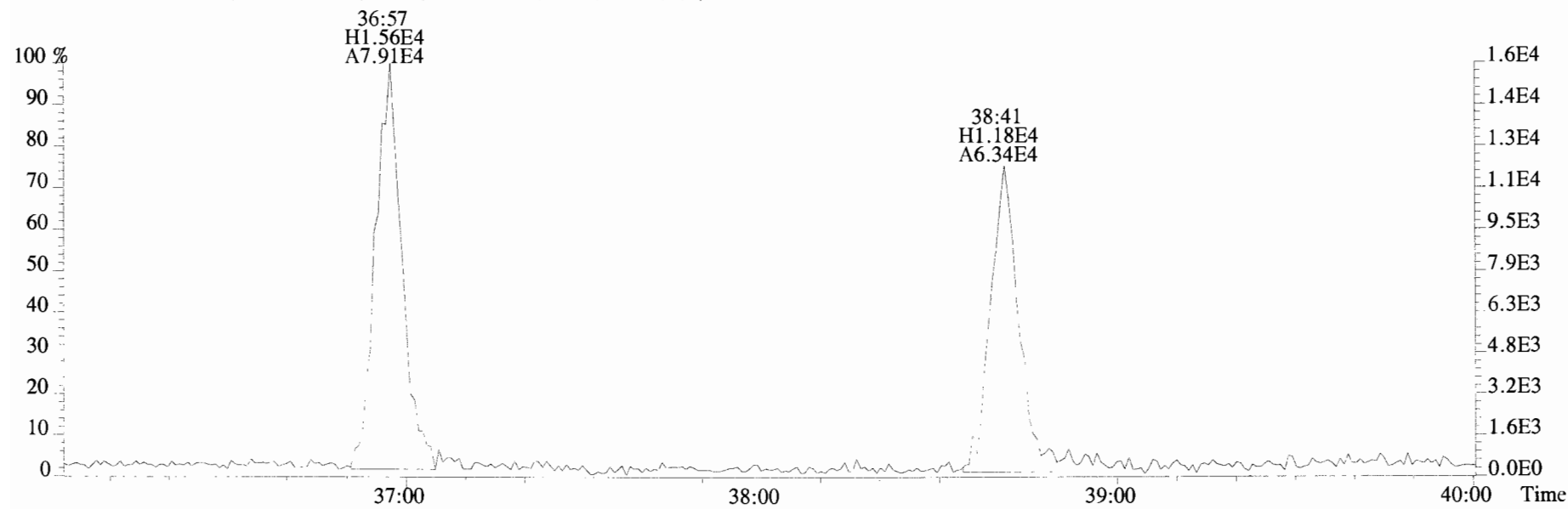
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text: Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



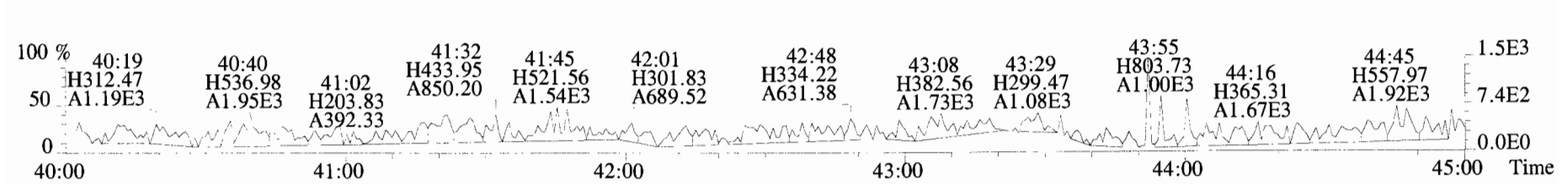
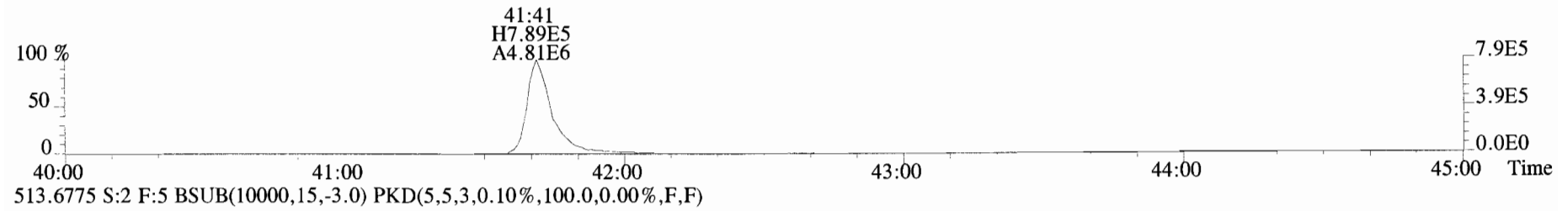
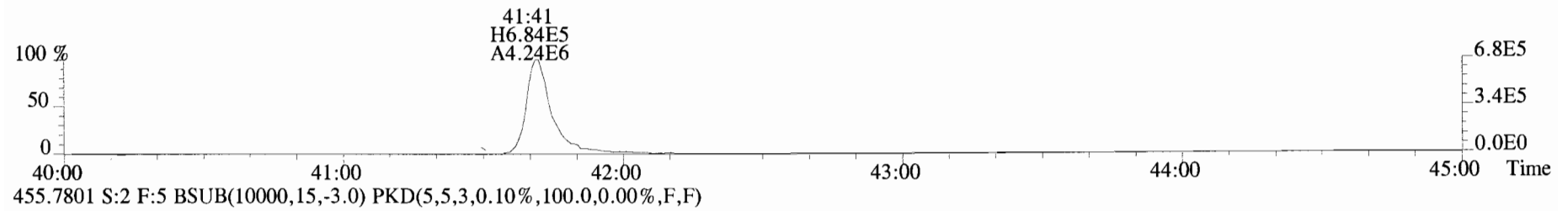
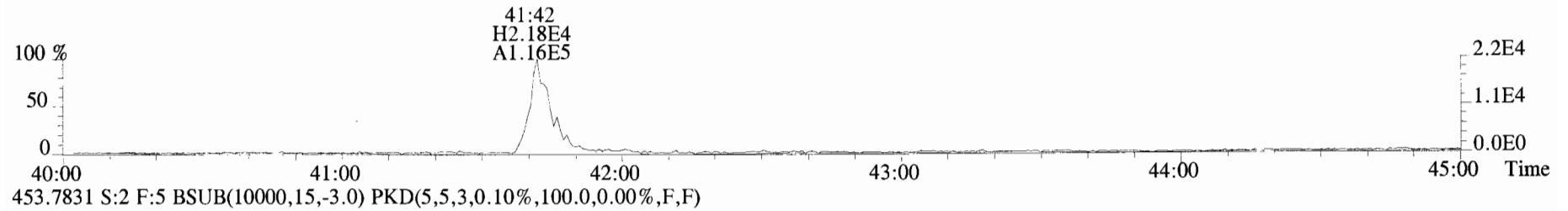
File:191009D1 #1-355 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



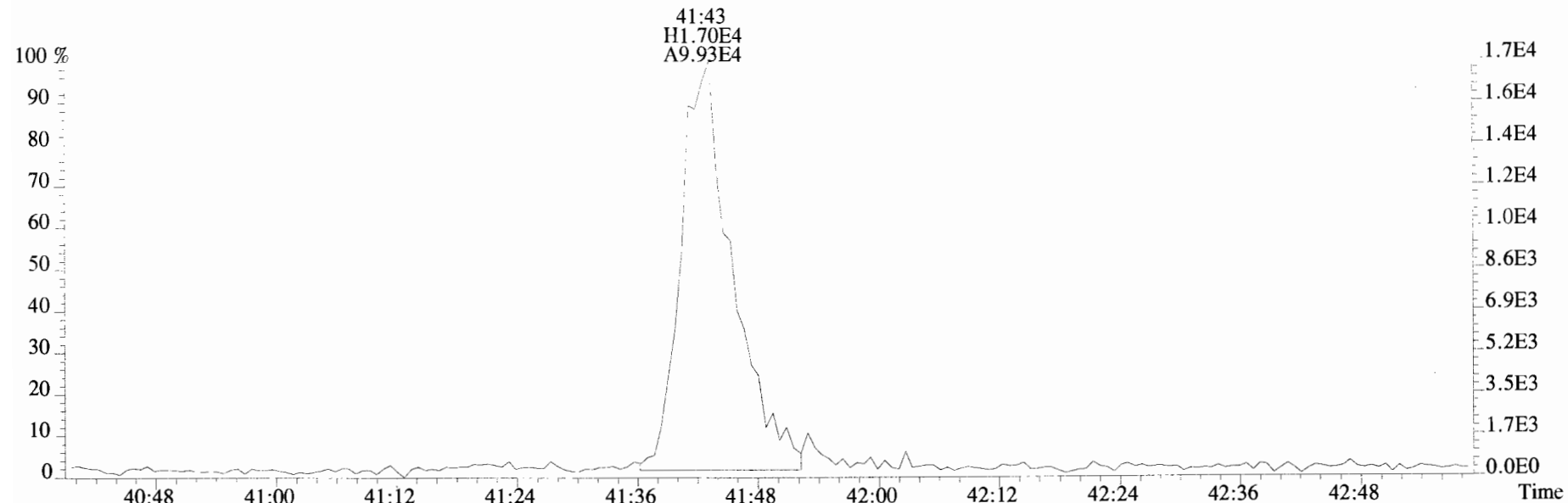
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



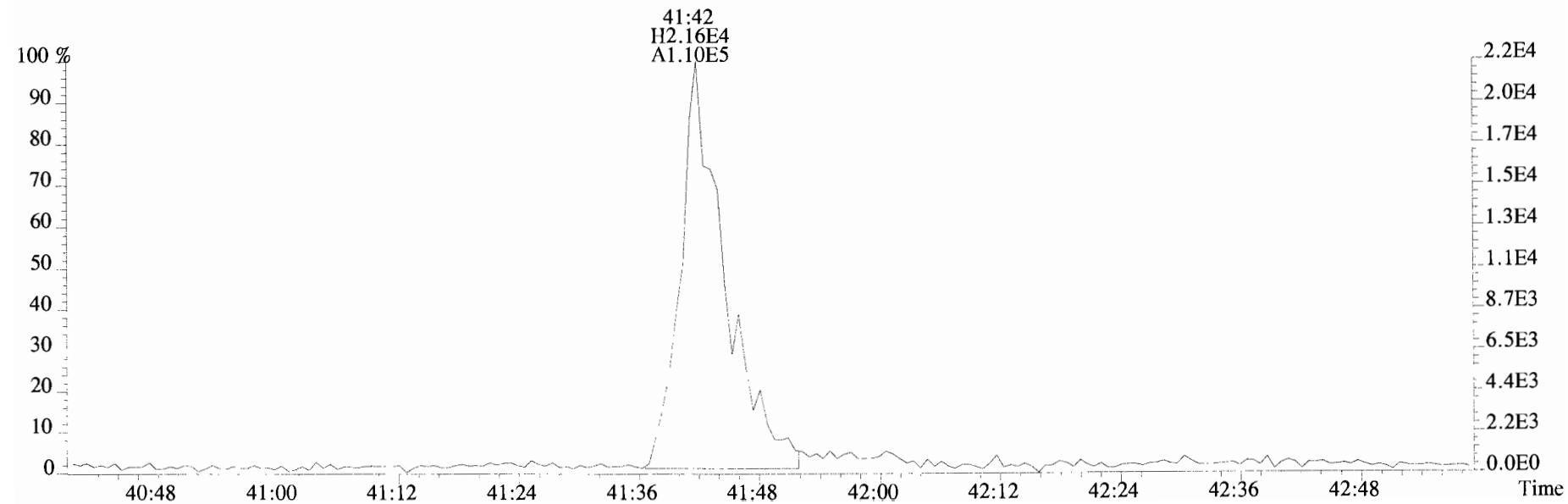
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
 441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



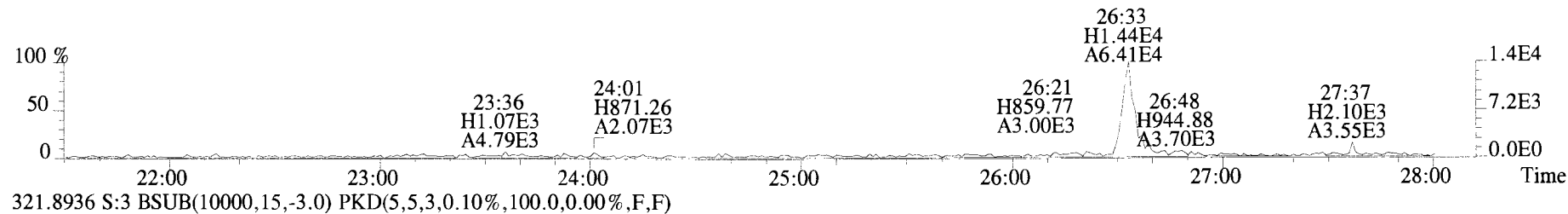
File:191009D1 #1-432 Acq: 9-OCT-2019 17:00:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-2 1613 CS1 19C2202 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



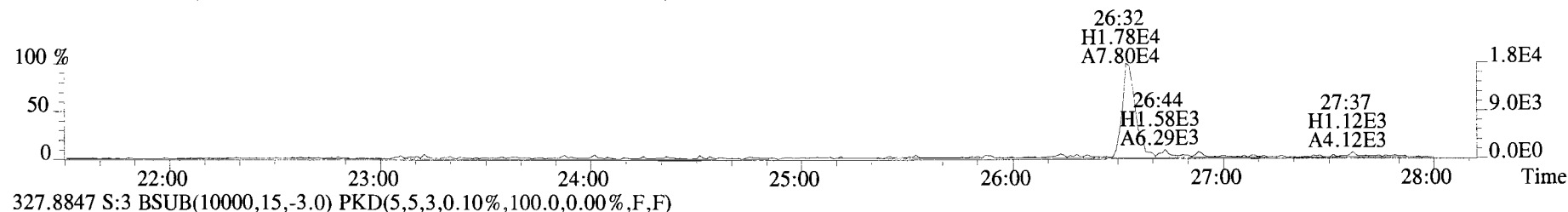
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



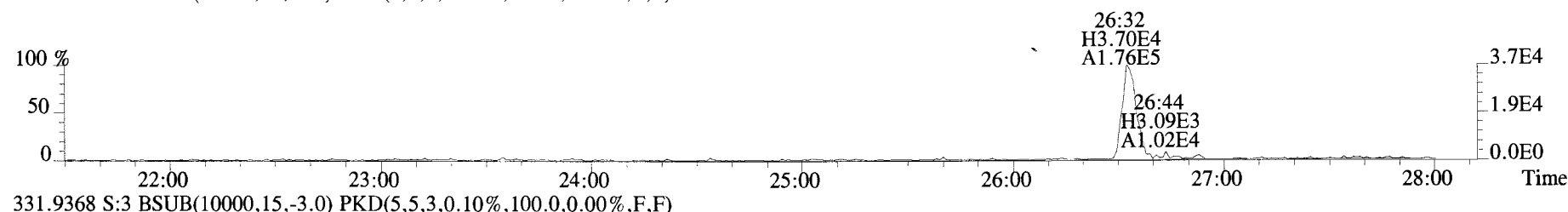
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



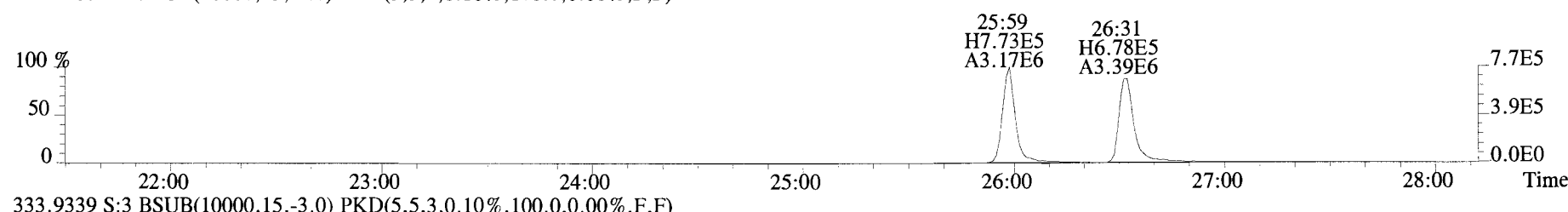
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



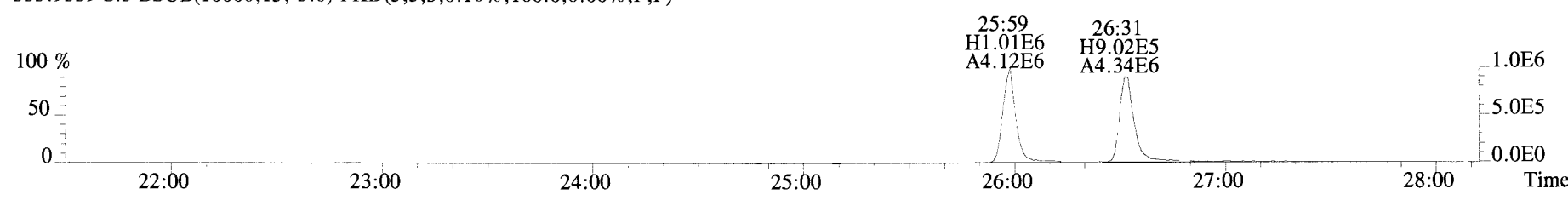
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



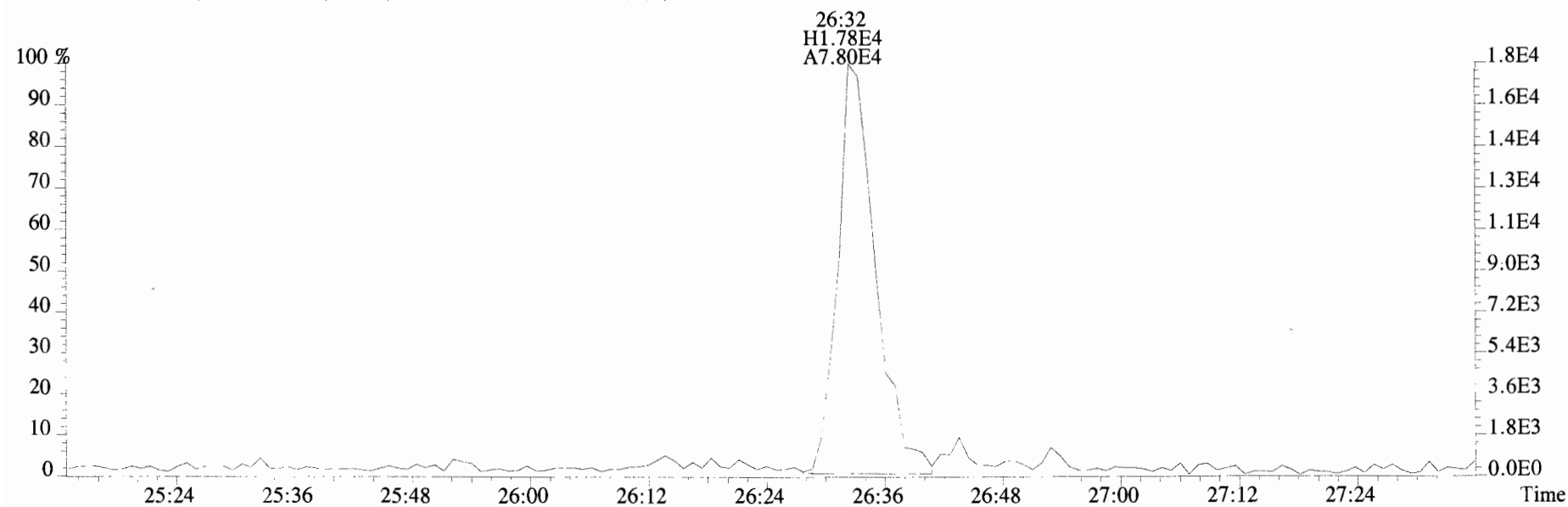
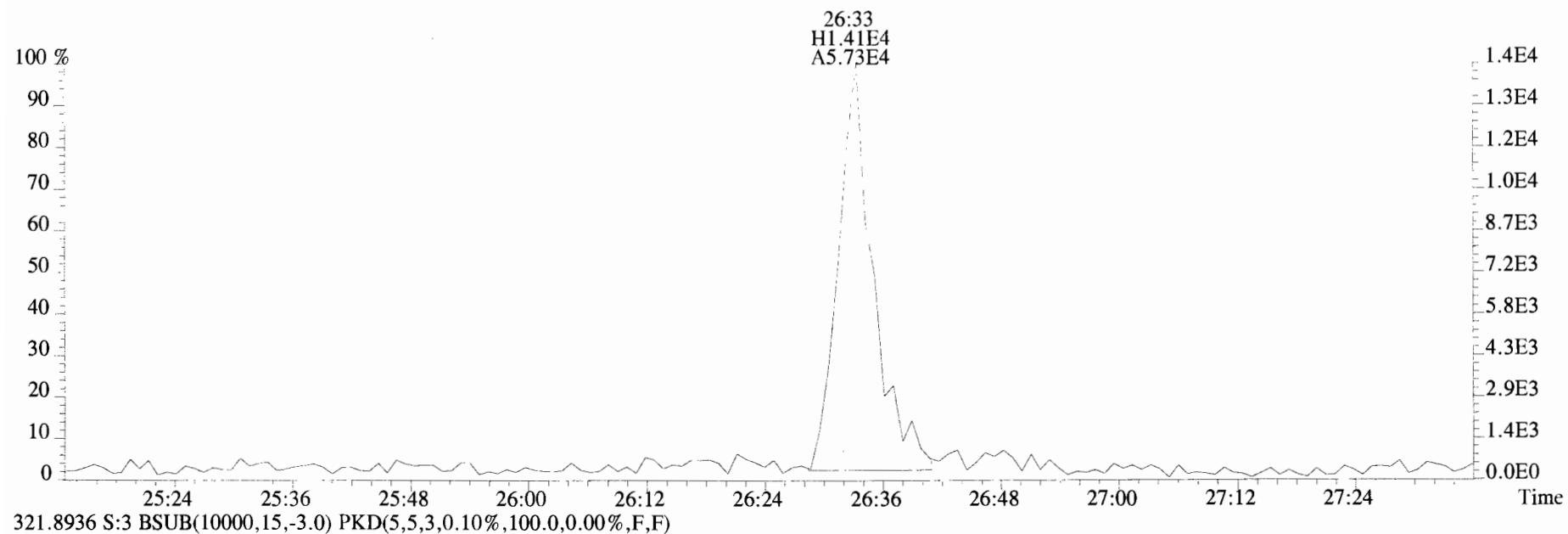
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



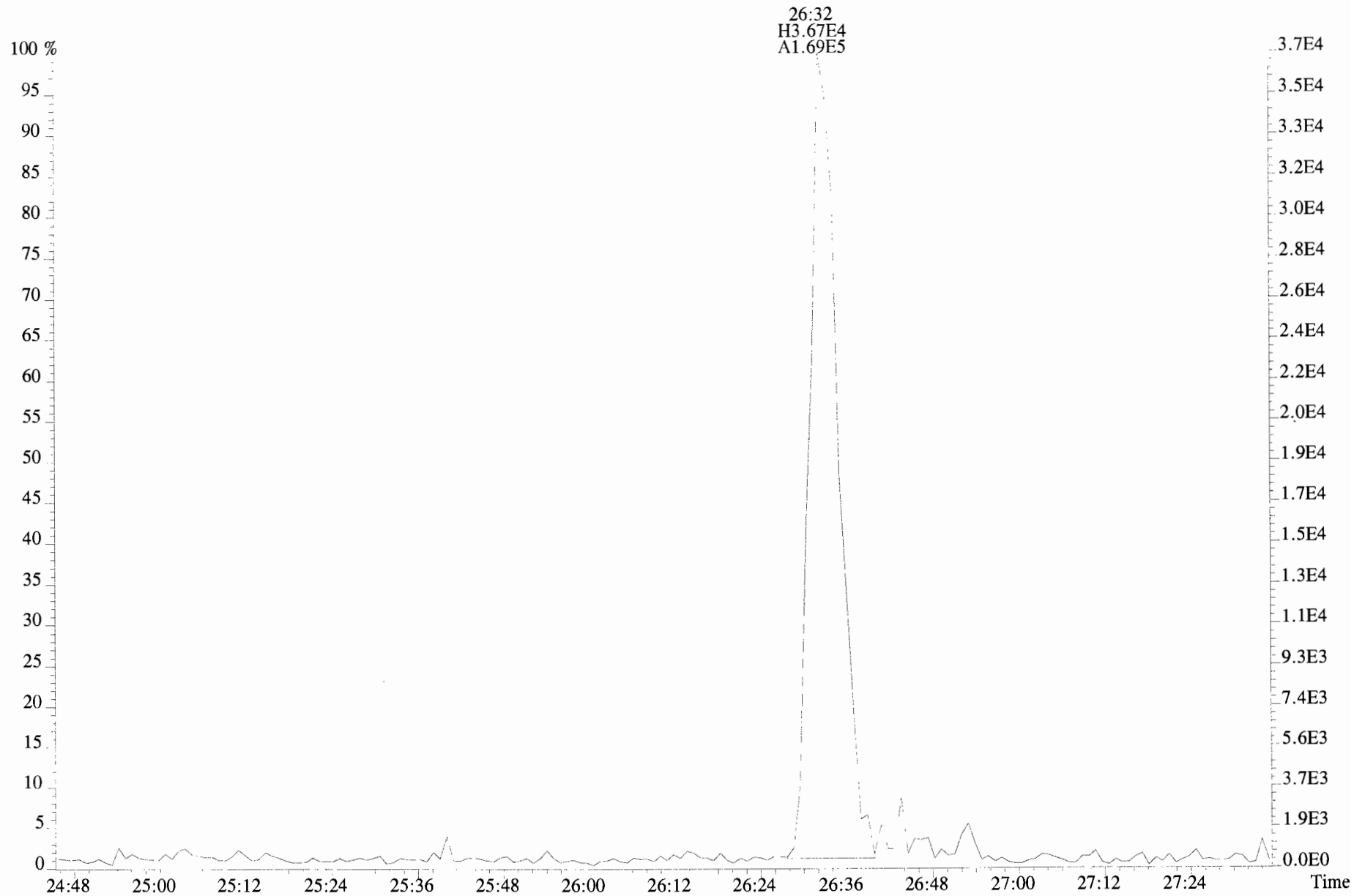
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



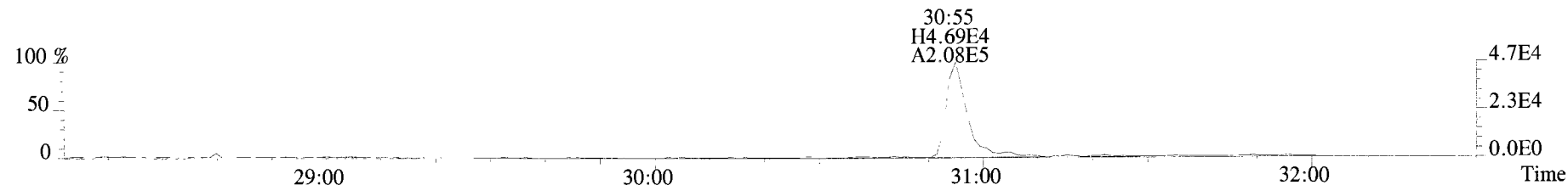
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



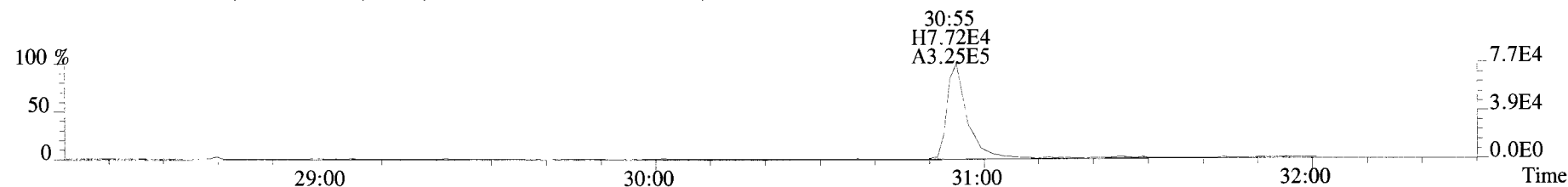
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



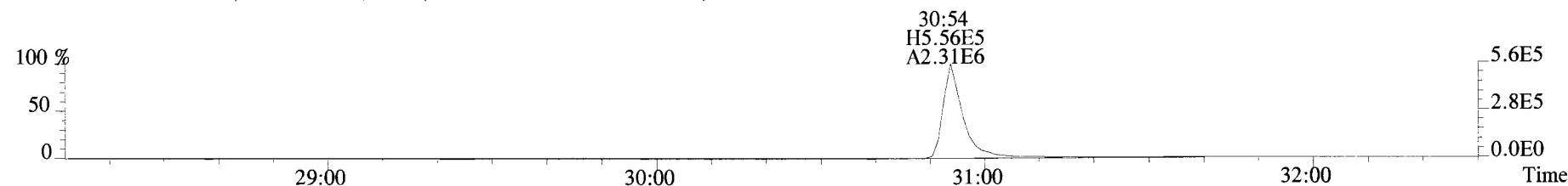
File:191009D1 #1-211 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



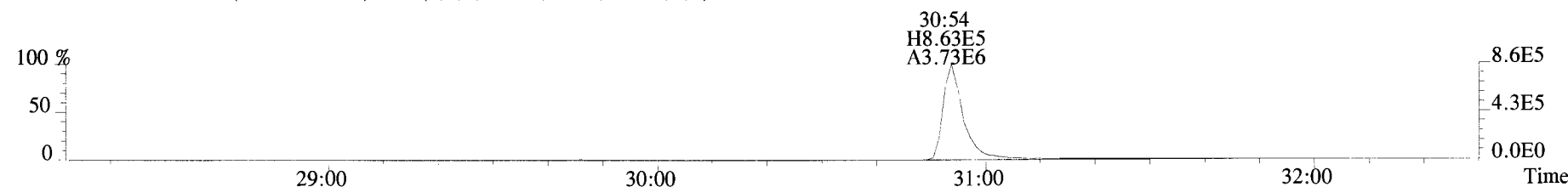
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



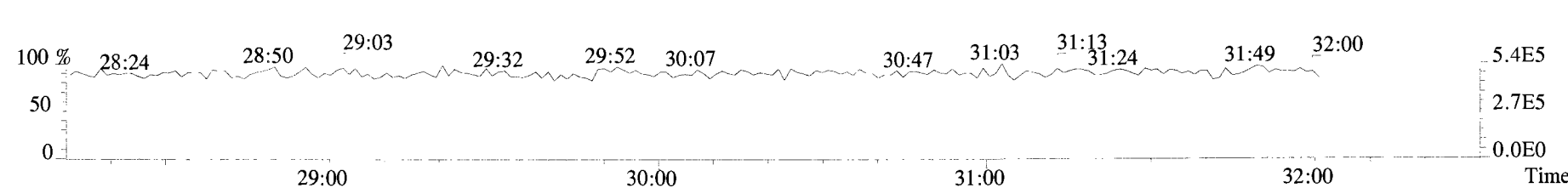
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



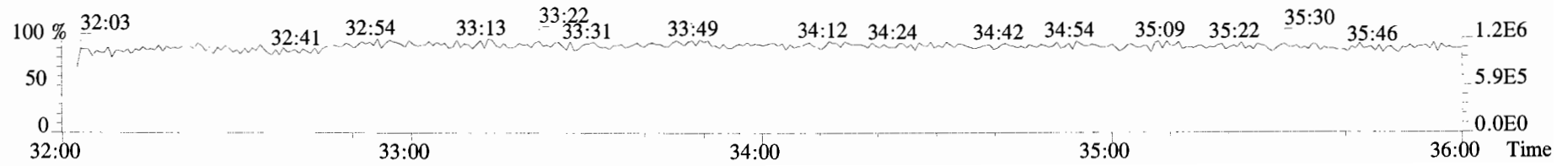
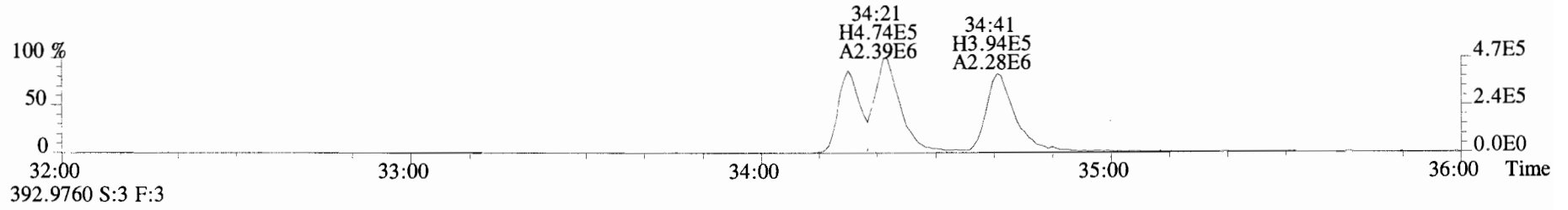
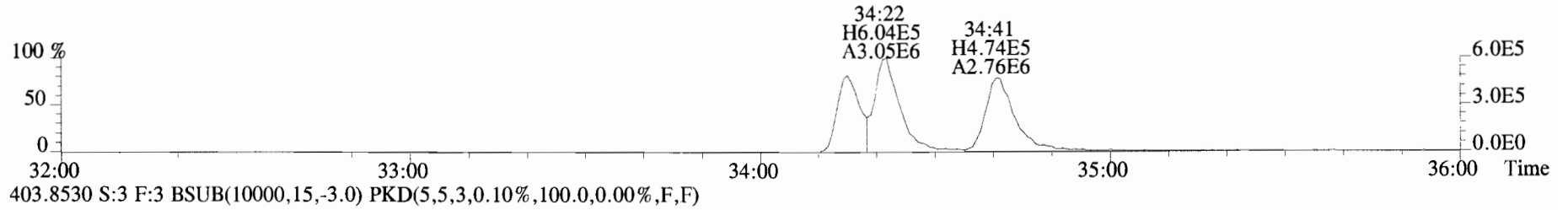
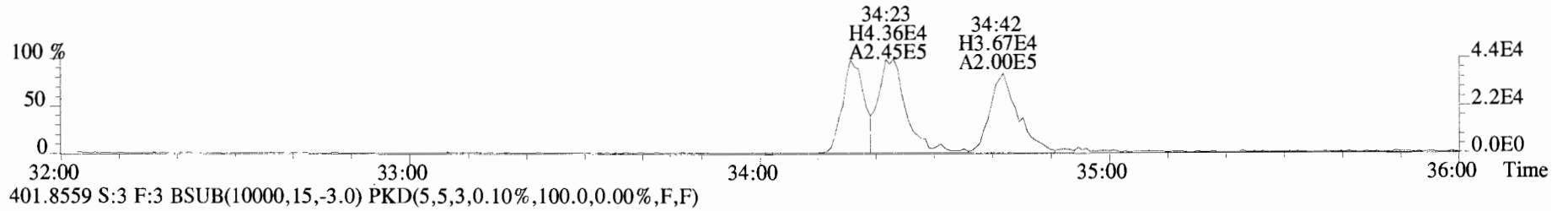
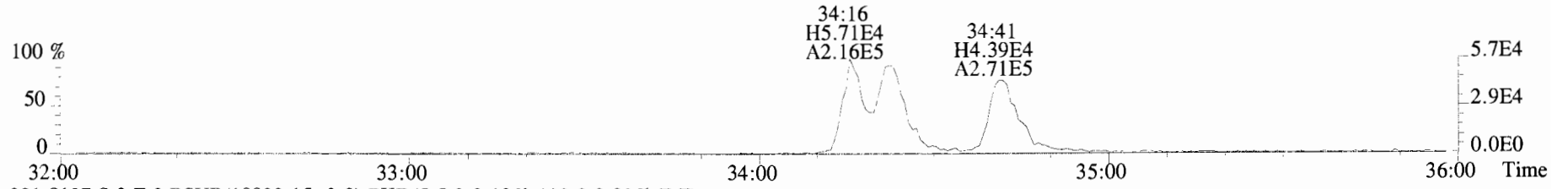
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



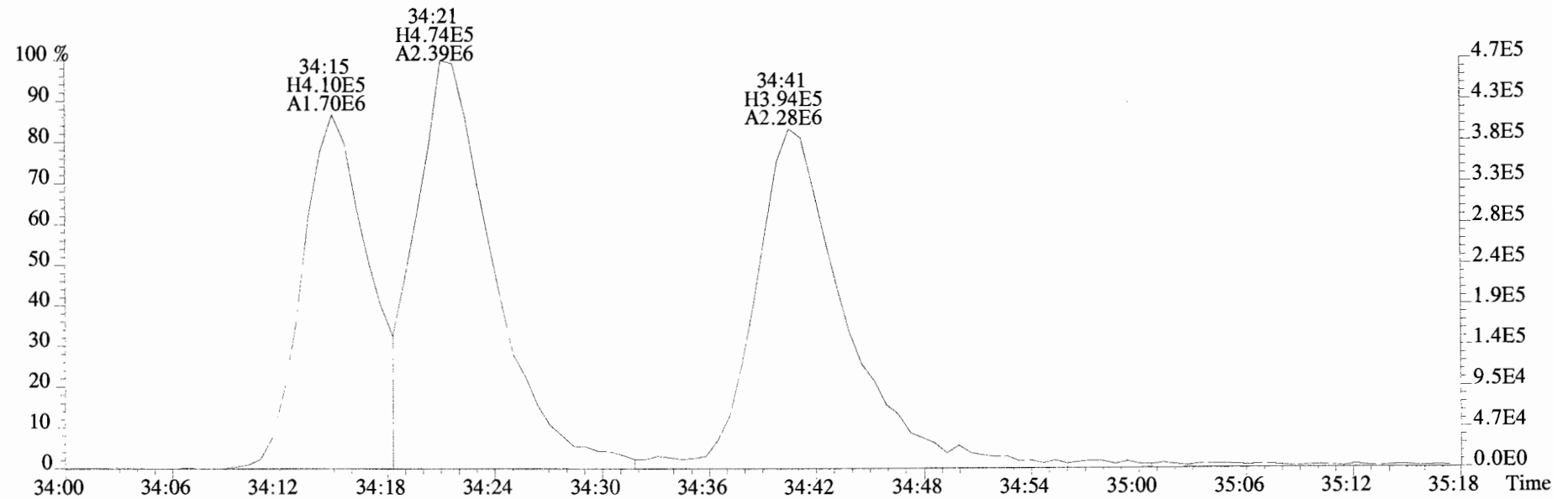
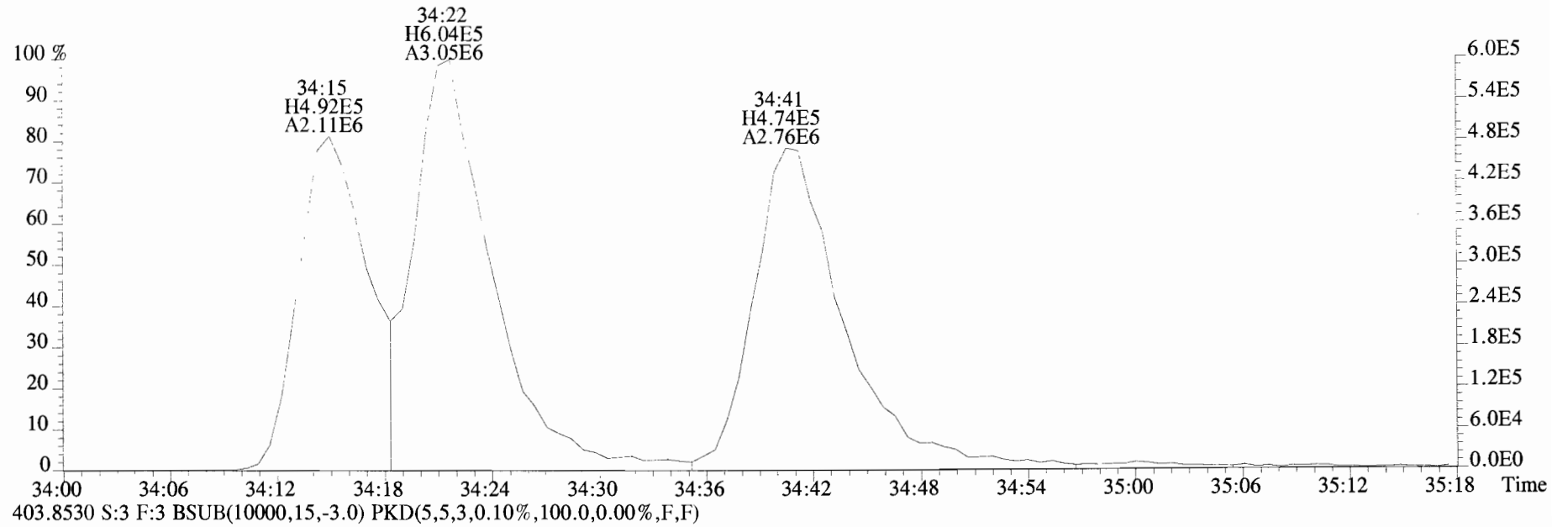
366.9792 S:3 F:2



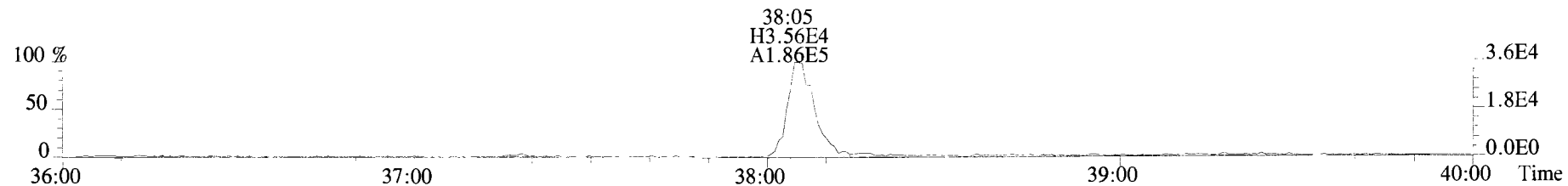
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



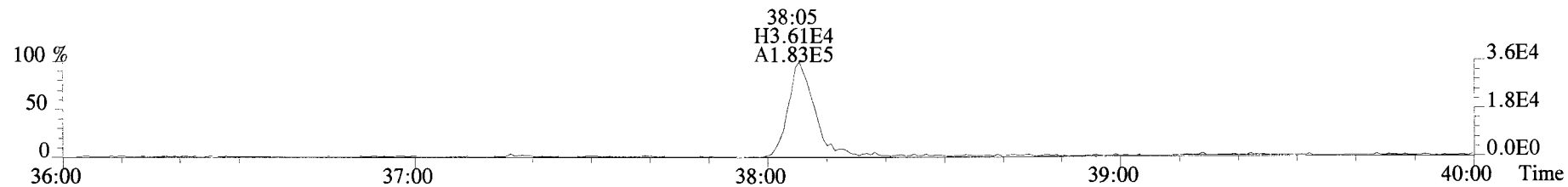
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text: Vista Analytical Laboratory VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



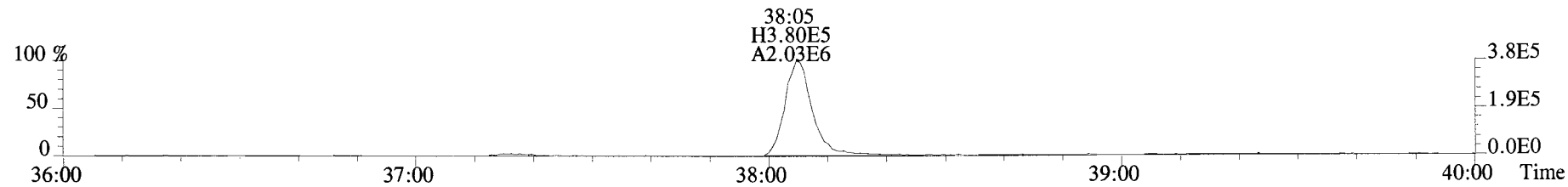
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



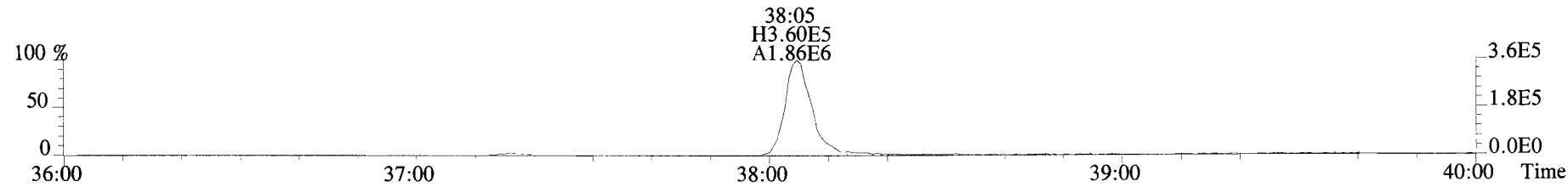
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



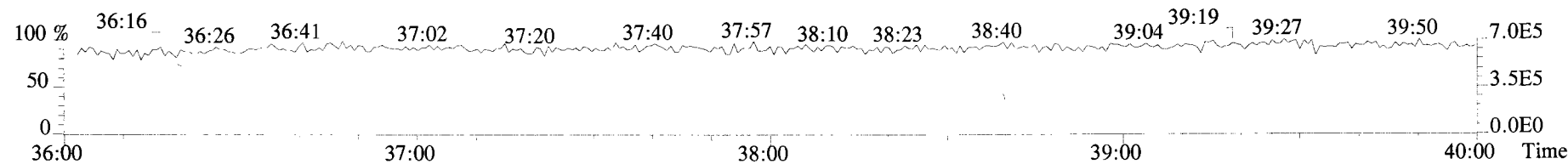
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



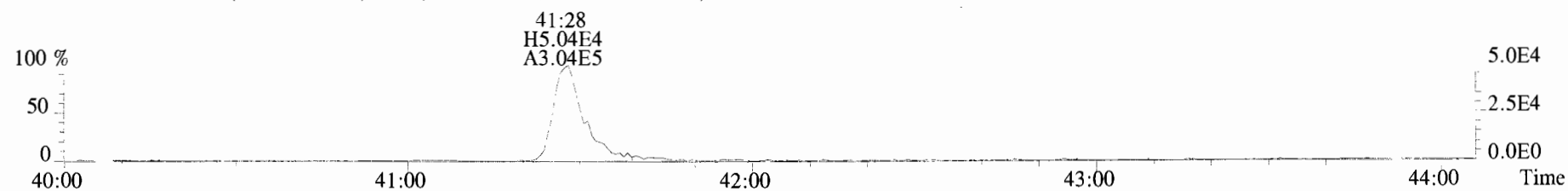
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



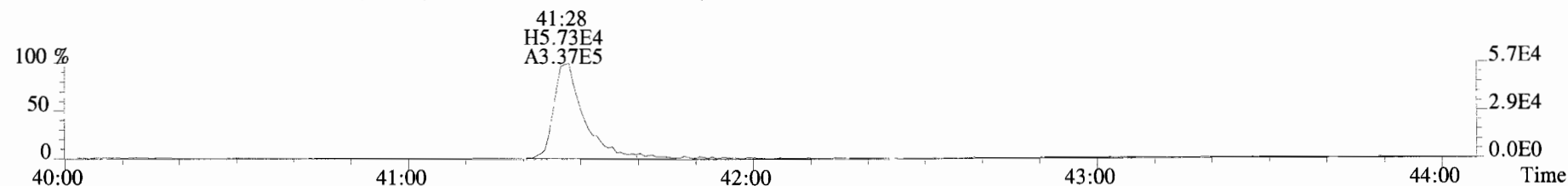
454.9728 S:3 F:4



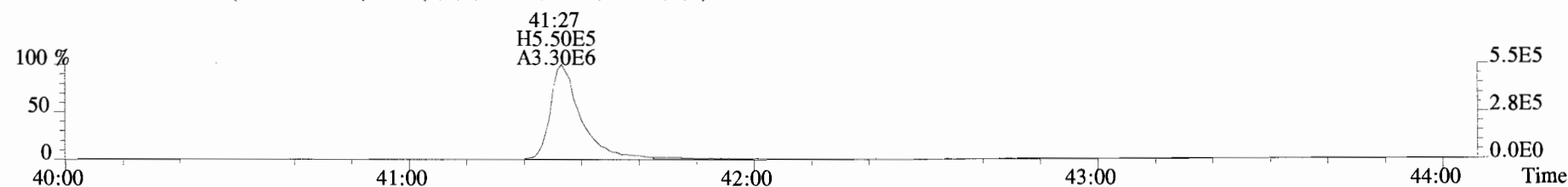
File:191009D1 #1-432 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



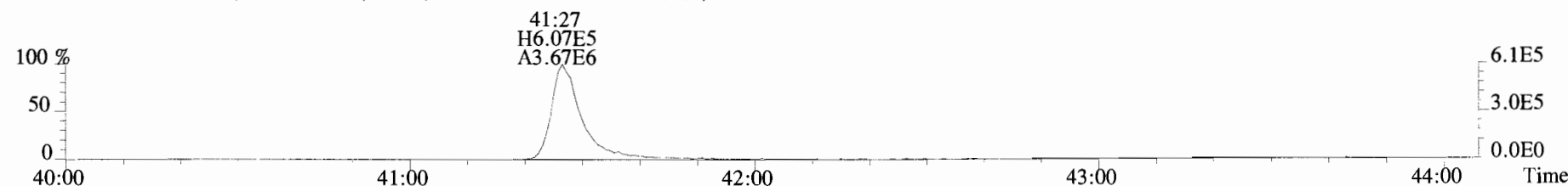
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



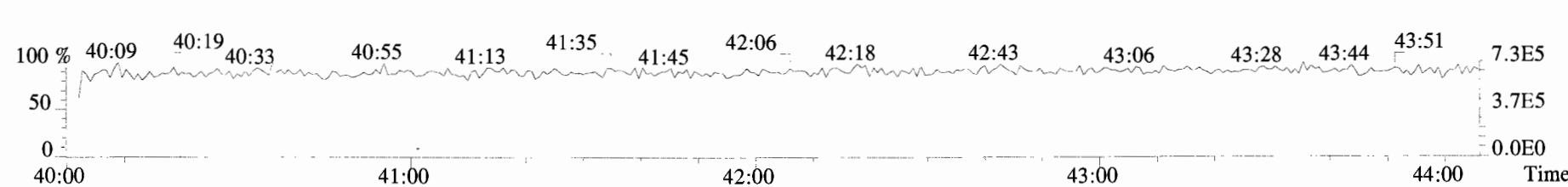
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



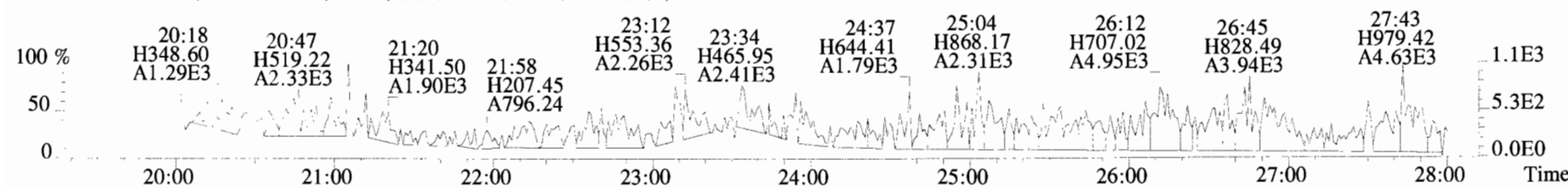
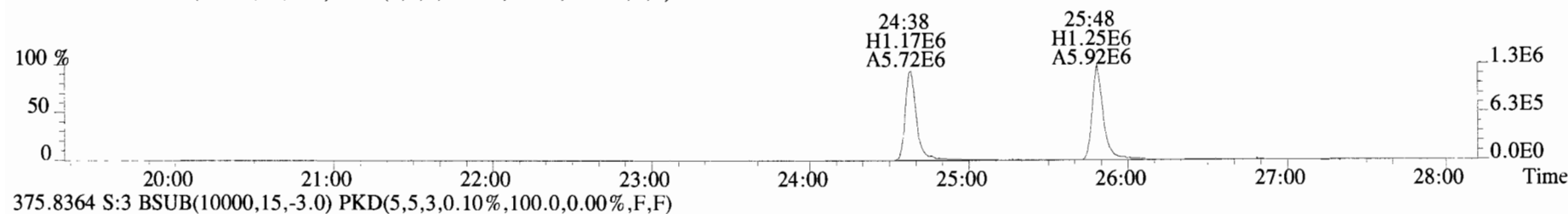
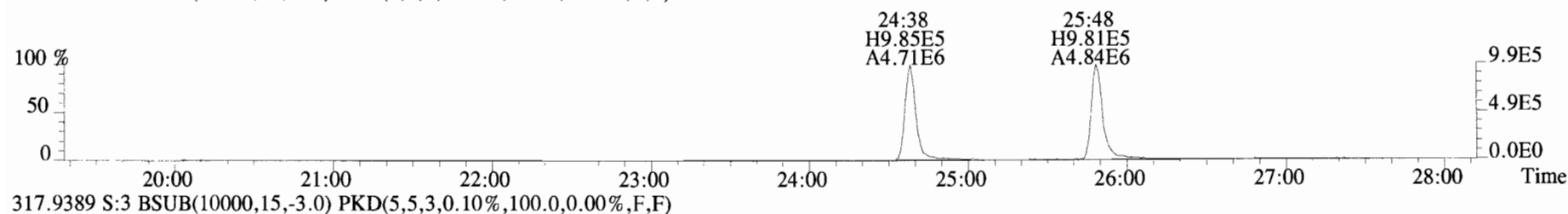
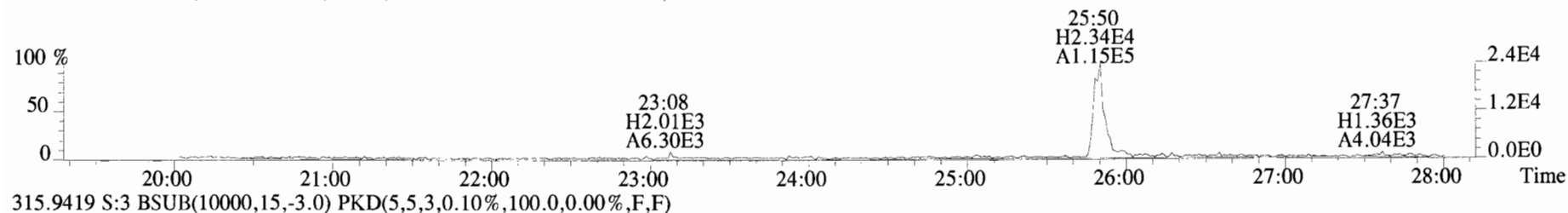
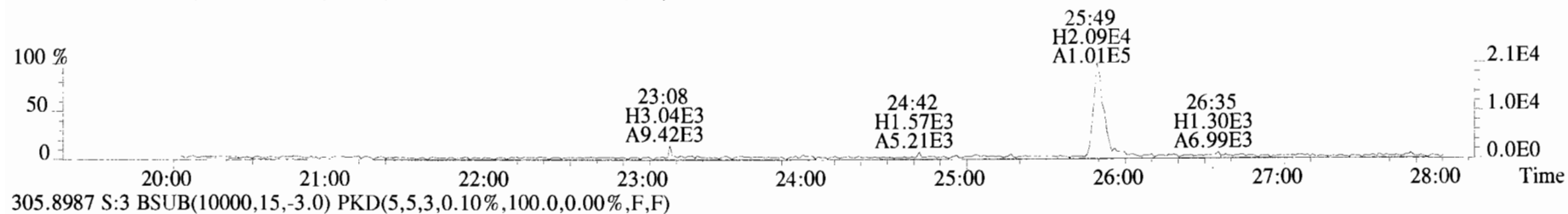
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



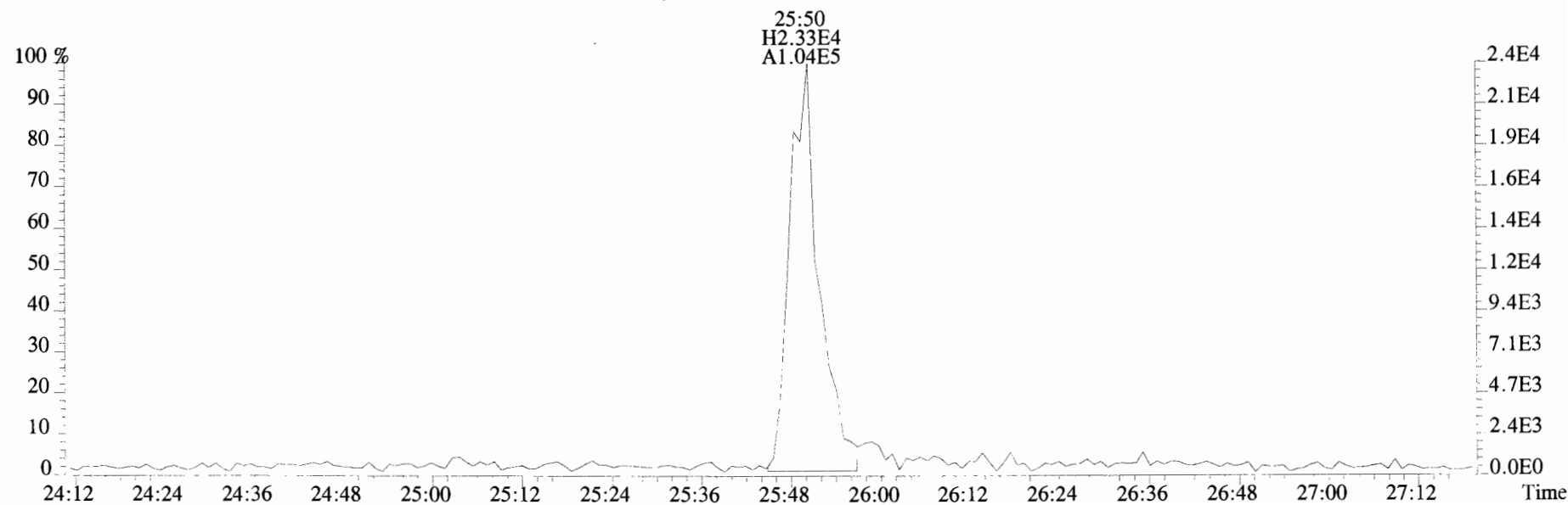
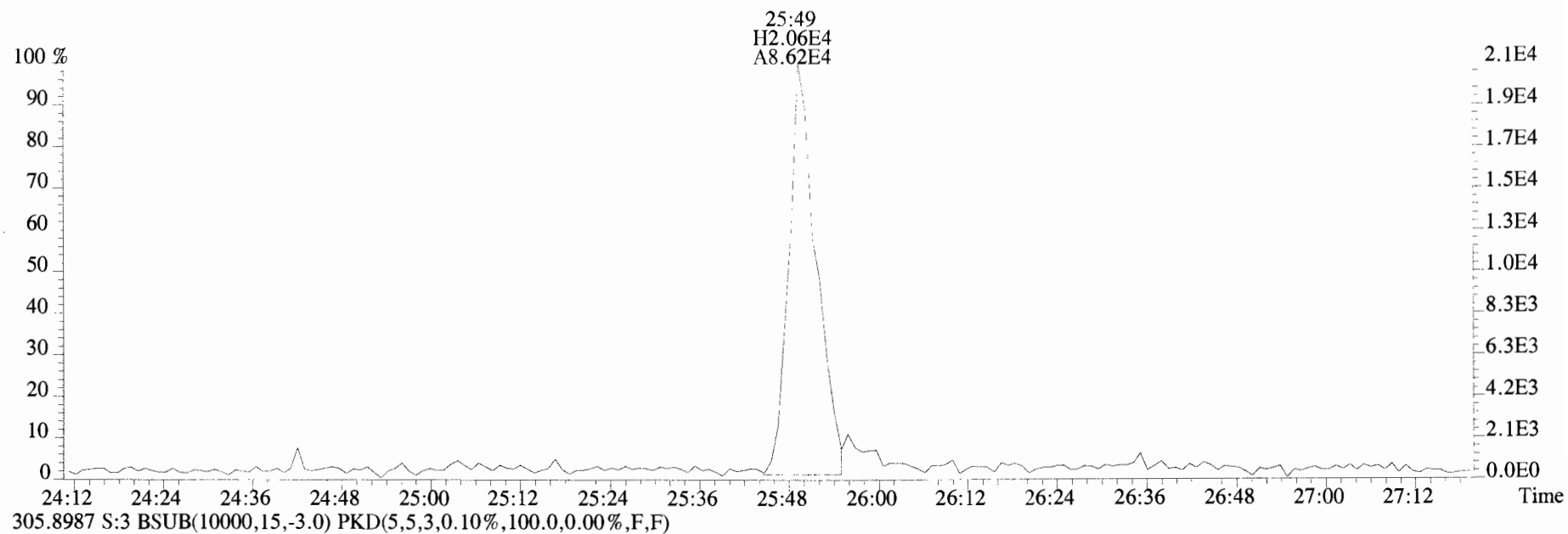
454.9728 S:3 F:5



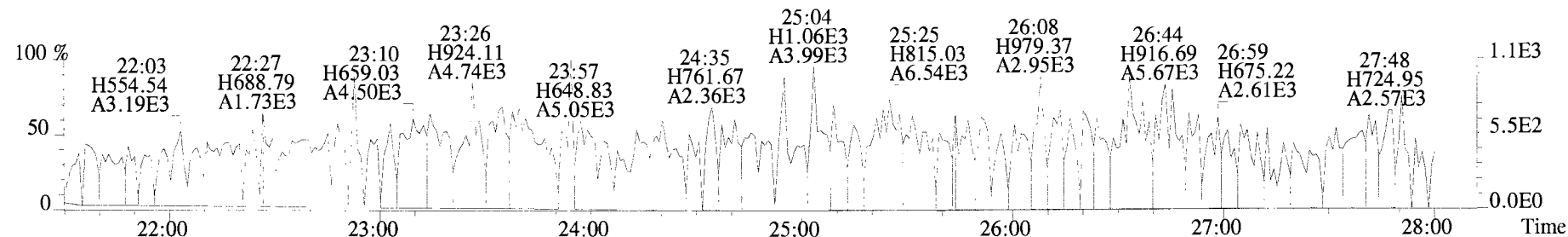
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



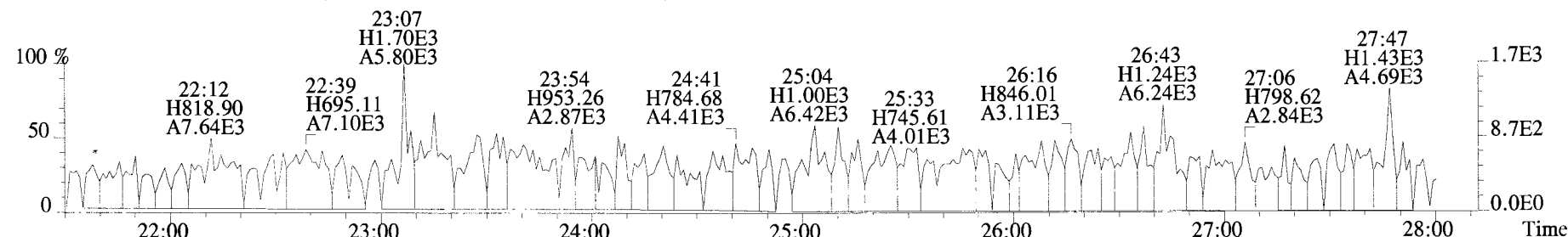
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



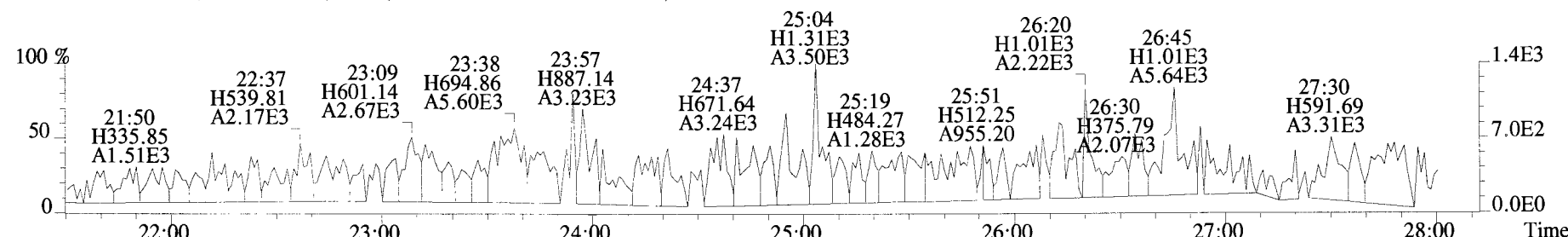
File:191009D1 #1-513 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



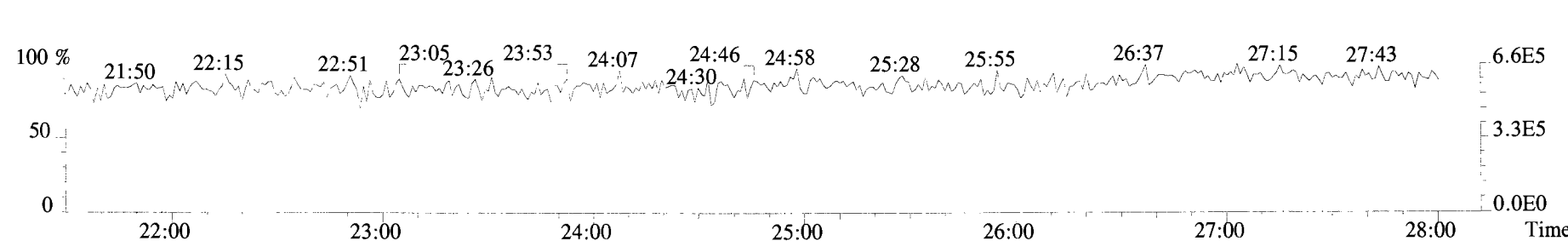
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



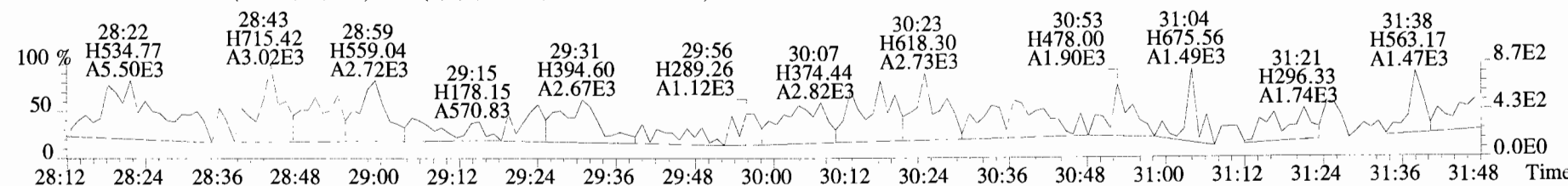
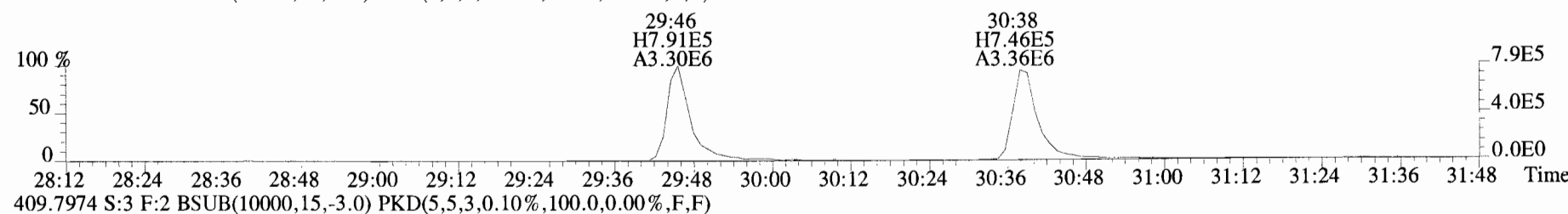
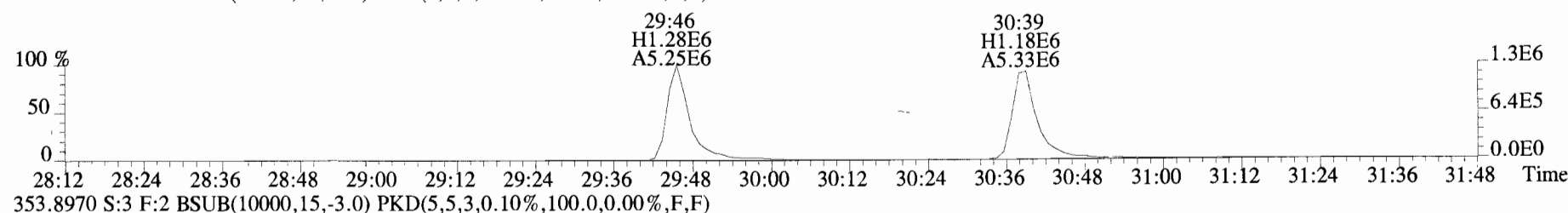
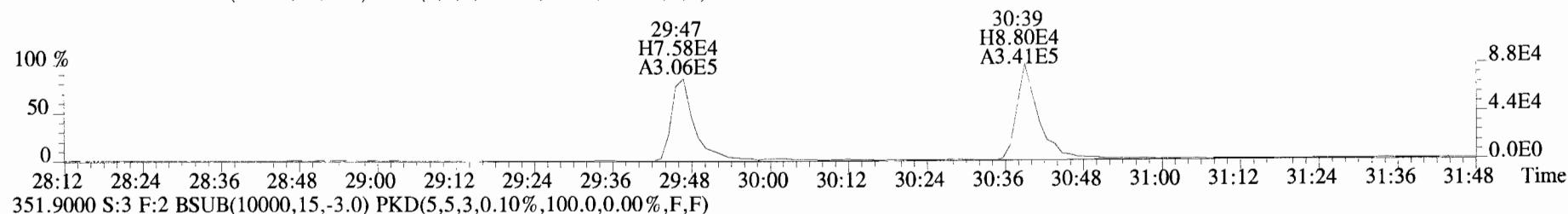
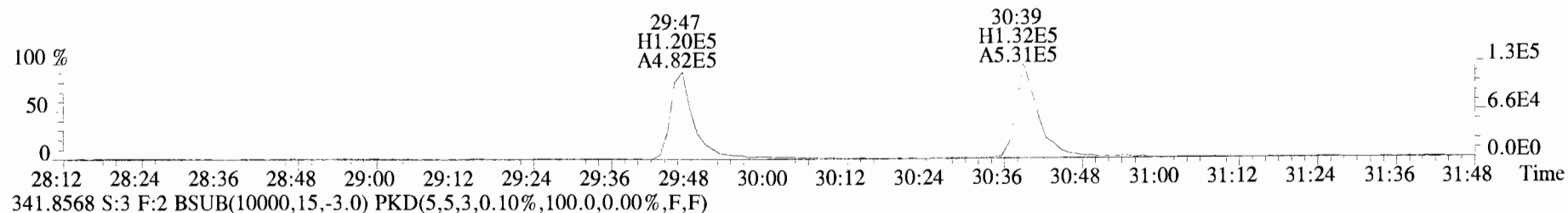
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



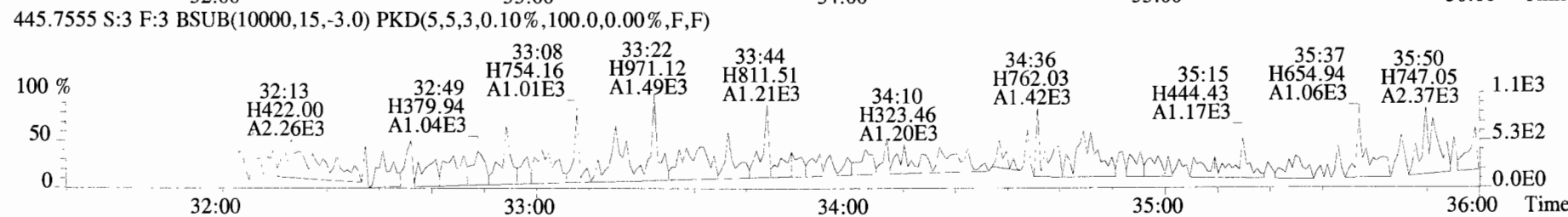
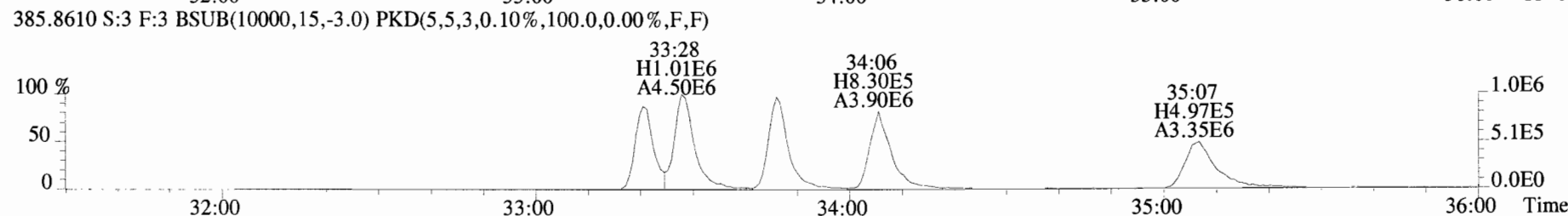
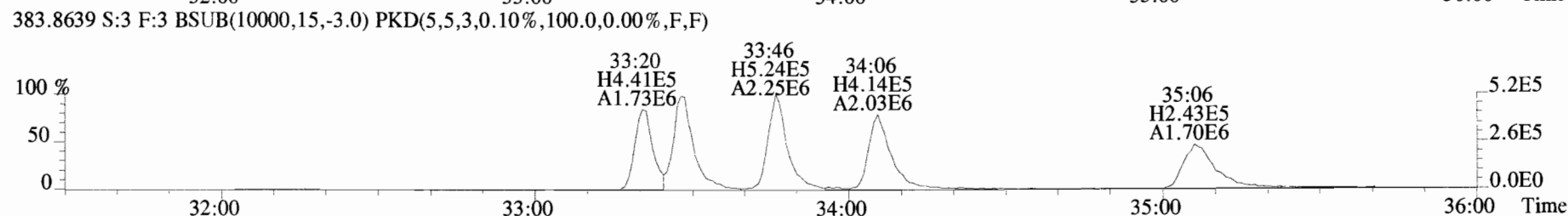
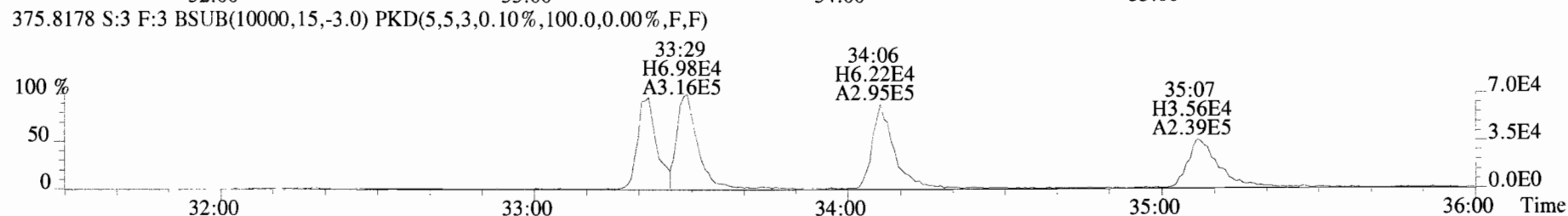
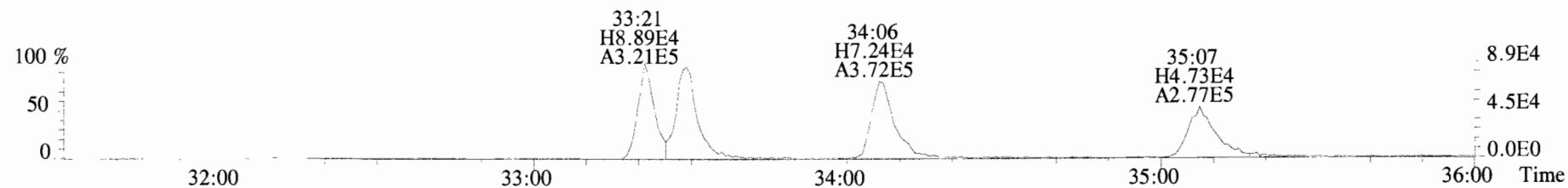
316.9824 S:3



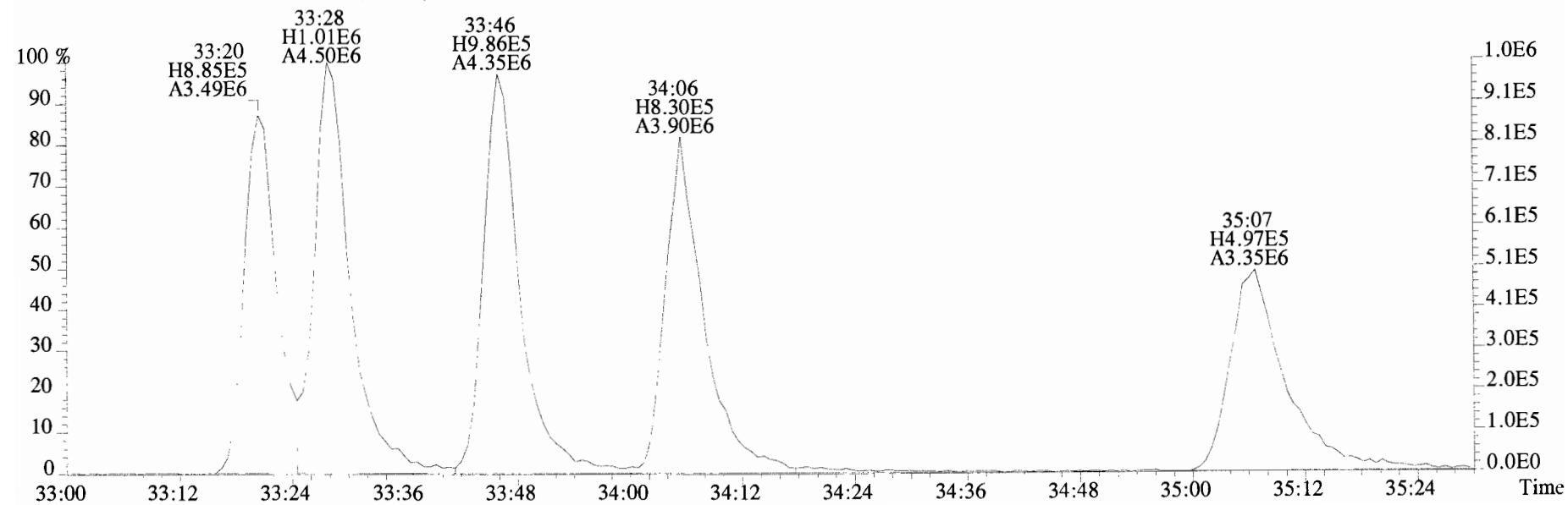
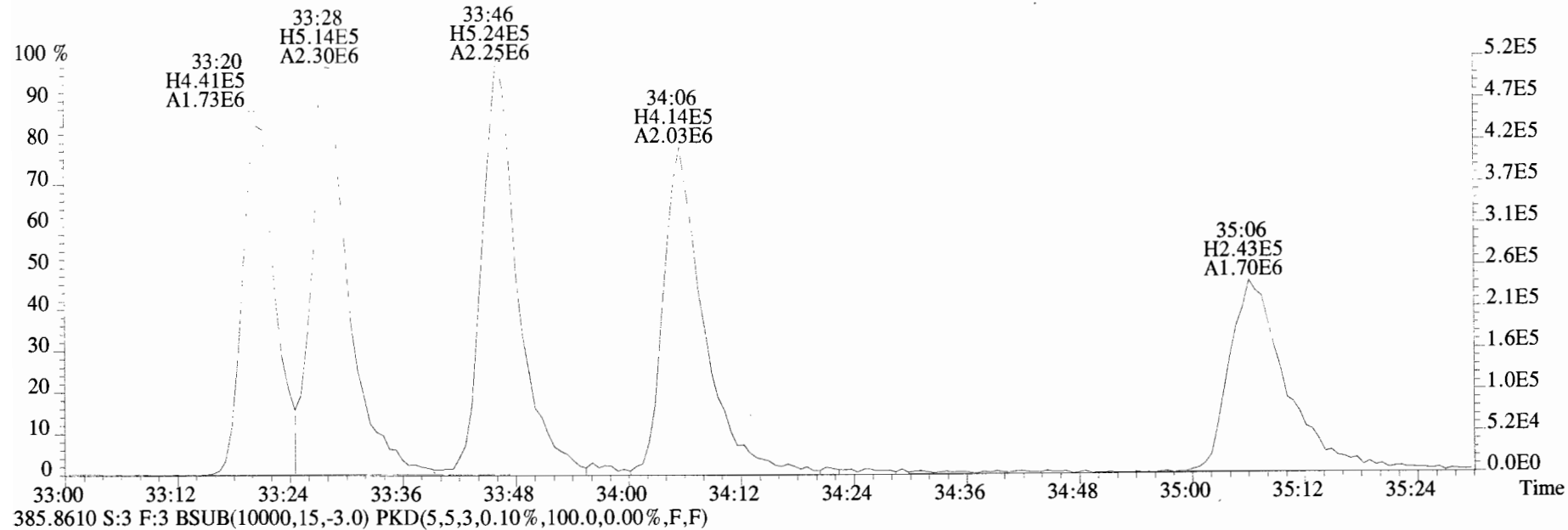
File:191009D1 #1-211 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
 339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



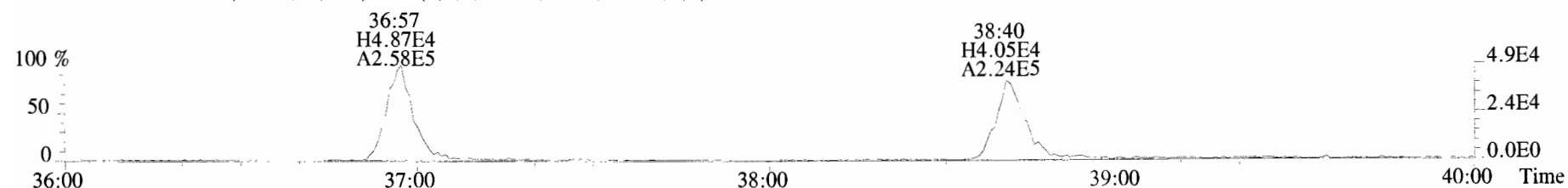
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
 373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



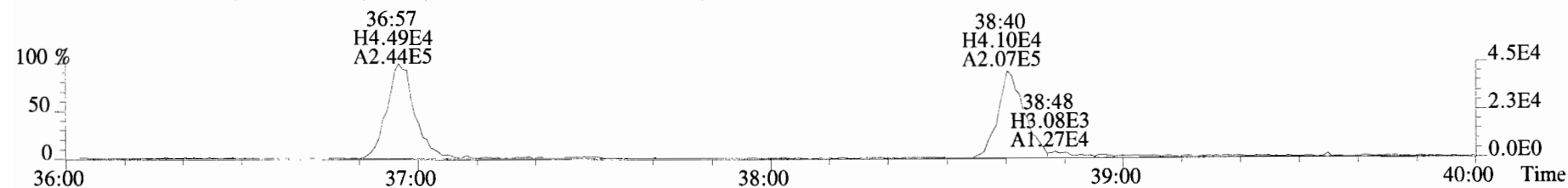
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



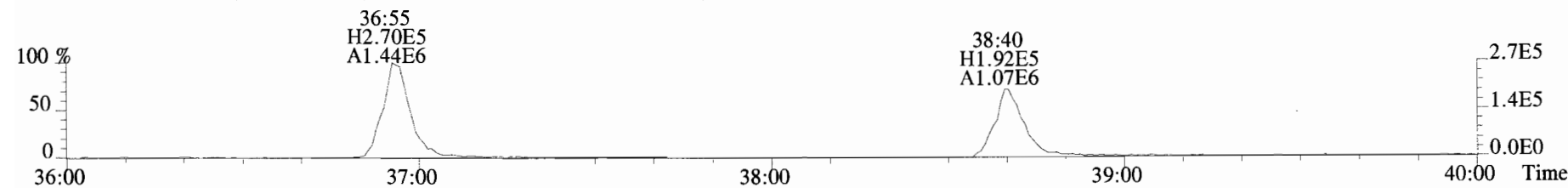
File:191009D1 #1-355 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



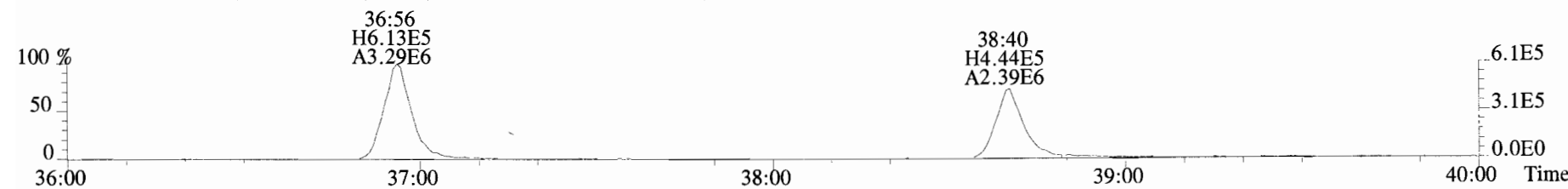
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



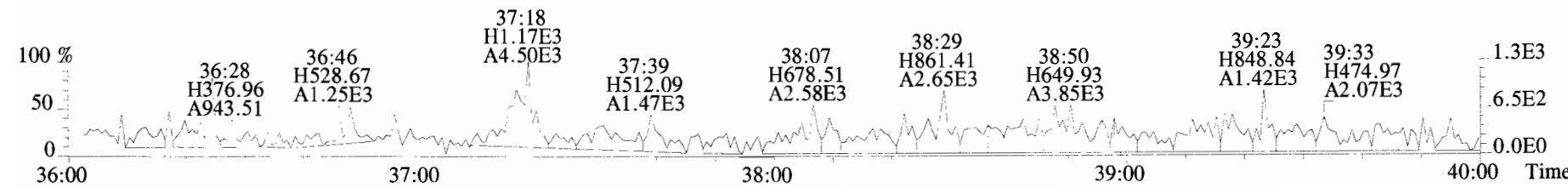
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



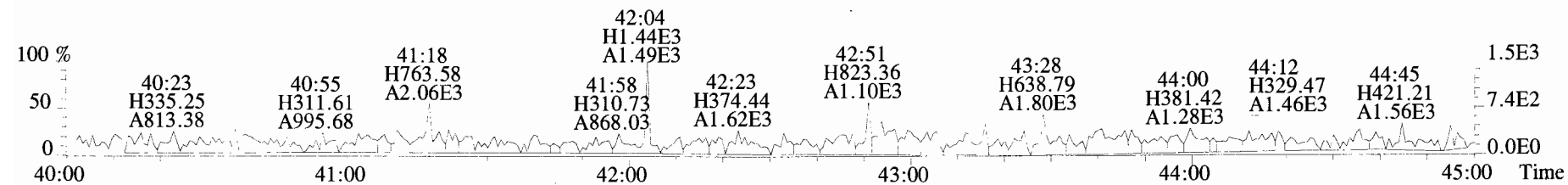
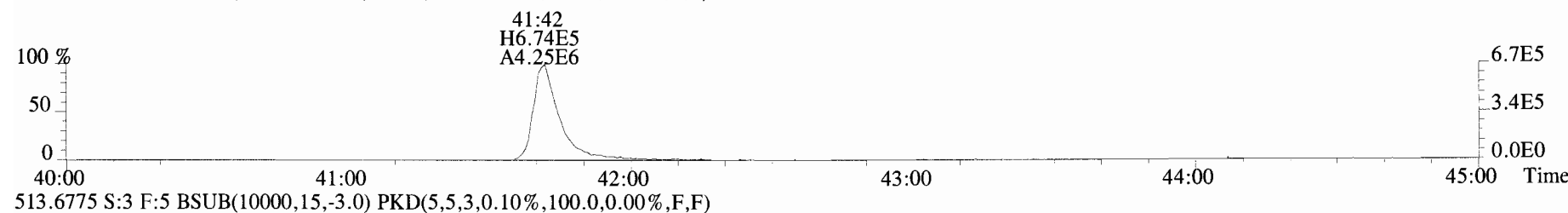
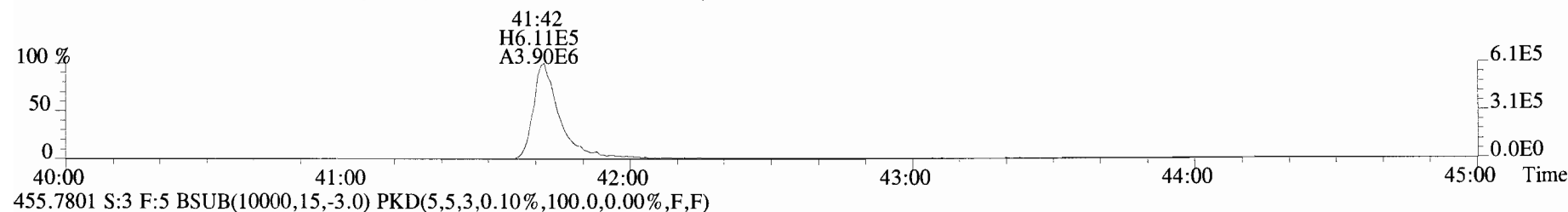
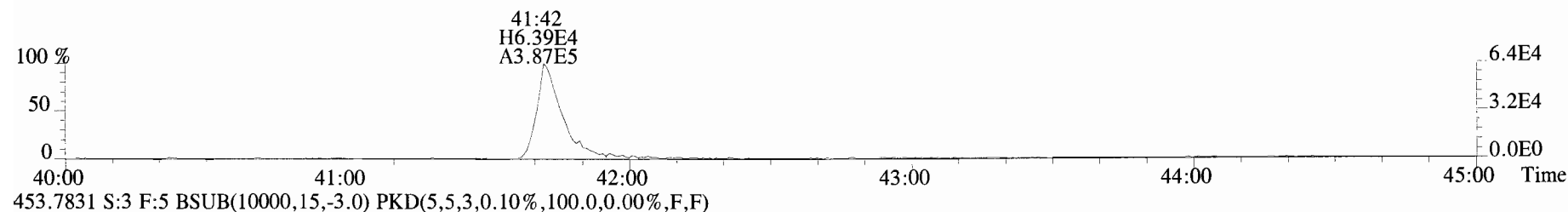
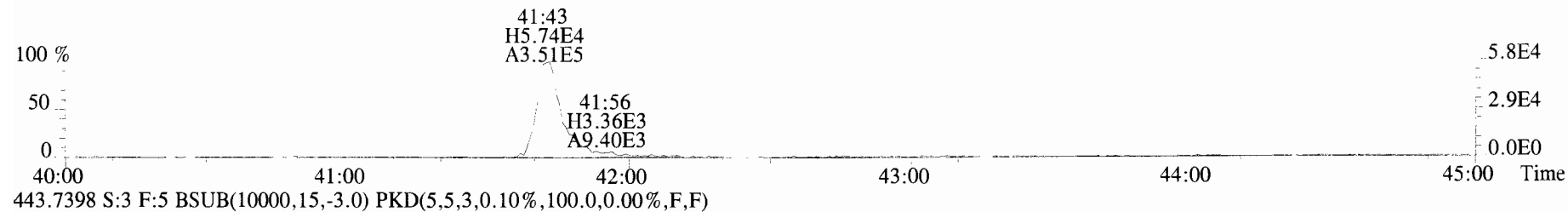
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



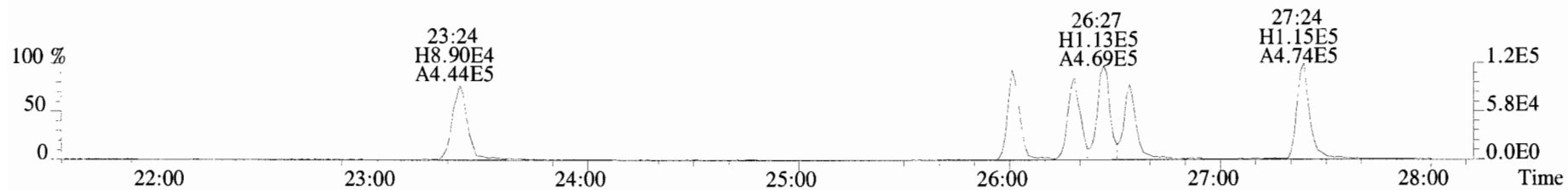
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



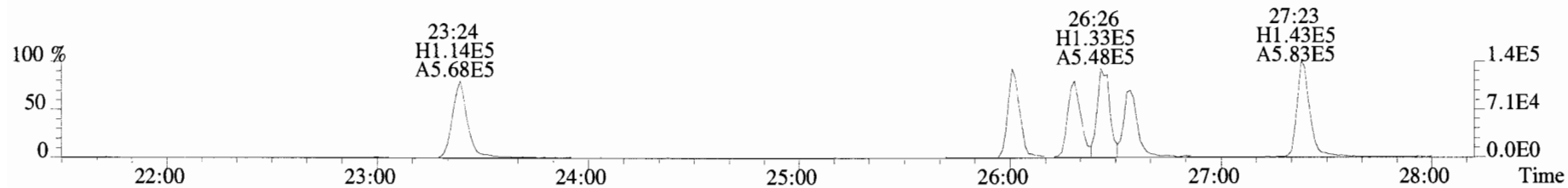
File:191009D1 #1-432 Acq: 9-OCT-2019 17:48:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-3 1613 CS2 19C2203 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



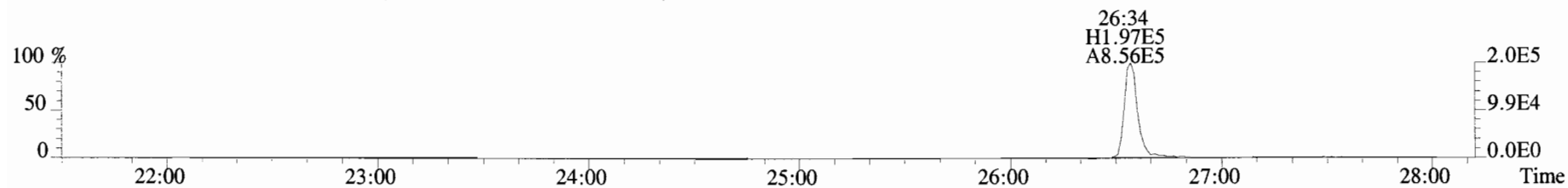
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



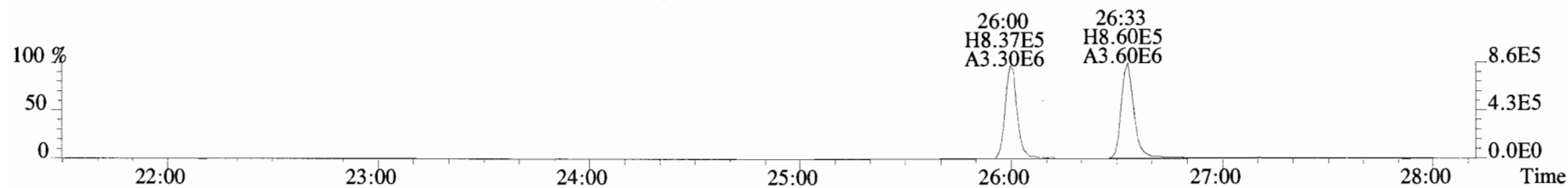
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



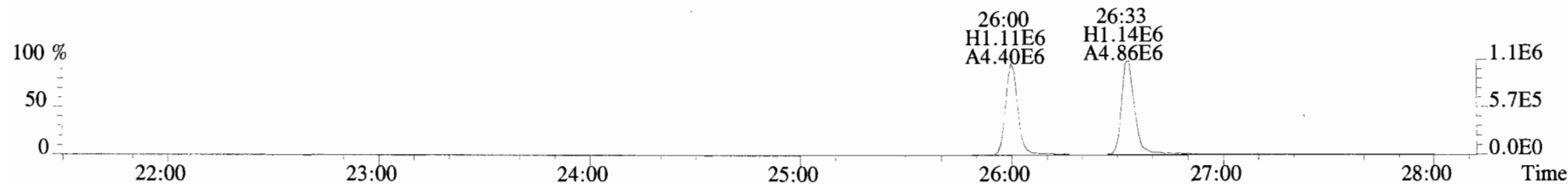
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



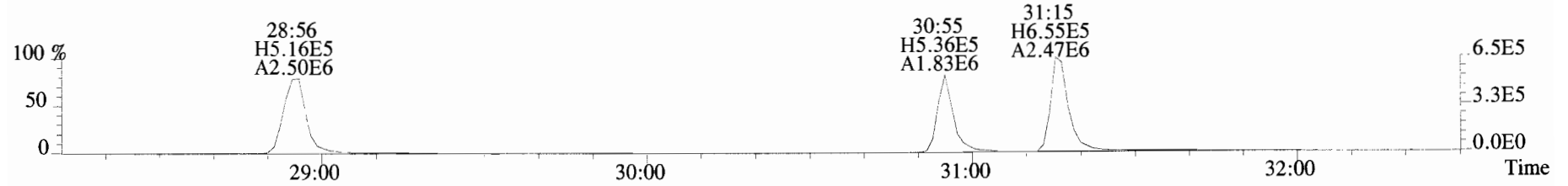
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



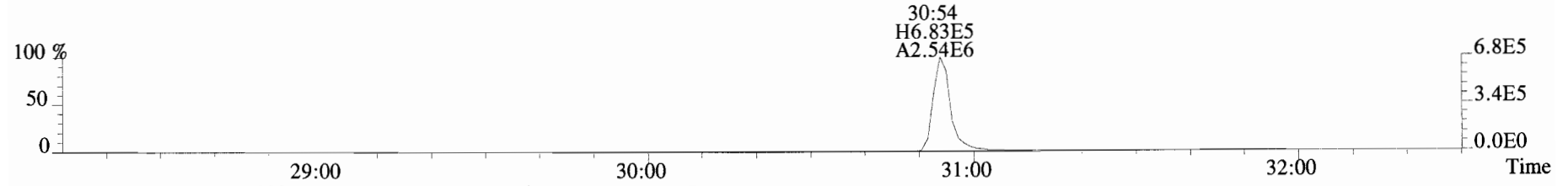
File:191009D1 #1-211 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



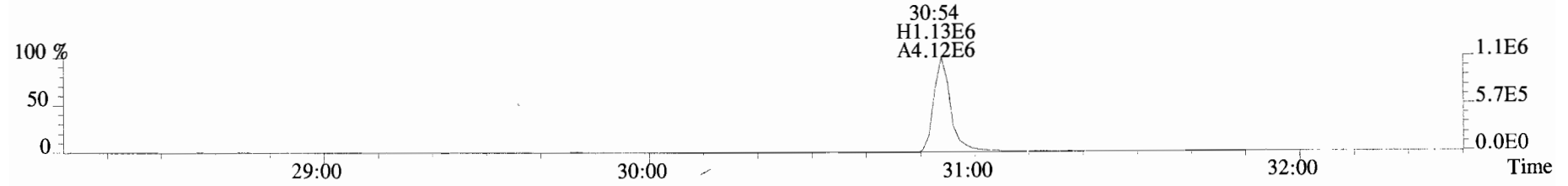
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



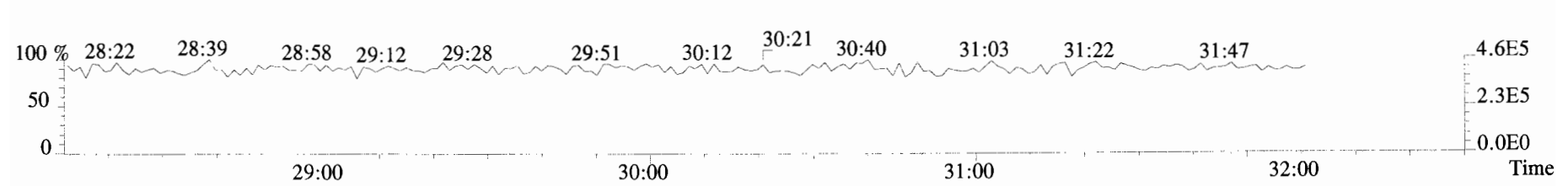
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



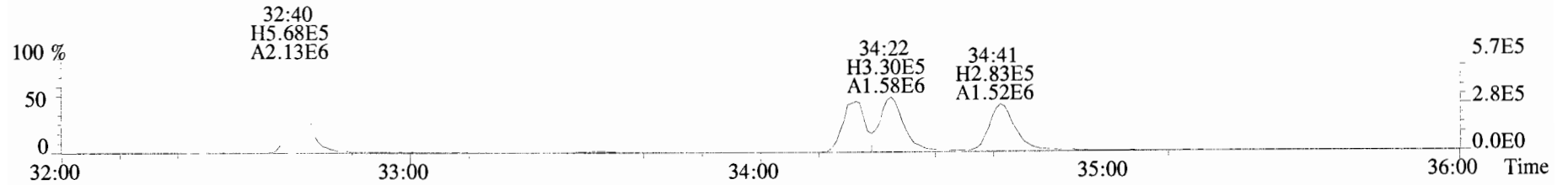
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



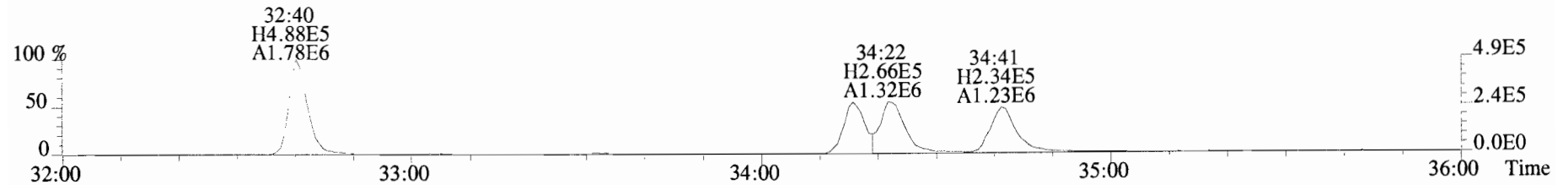
366.9792 S:4 F:2



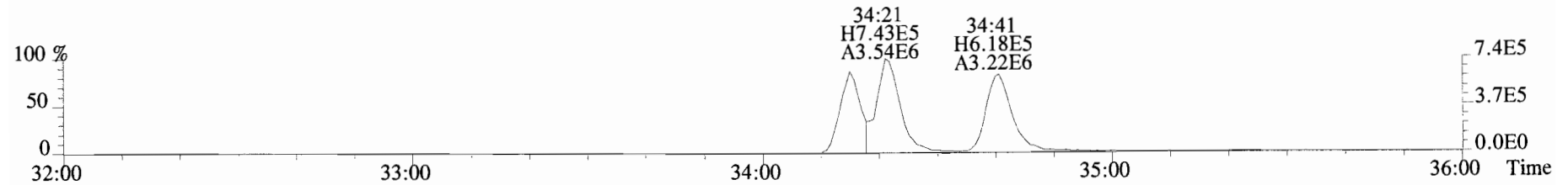
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



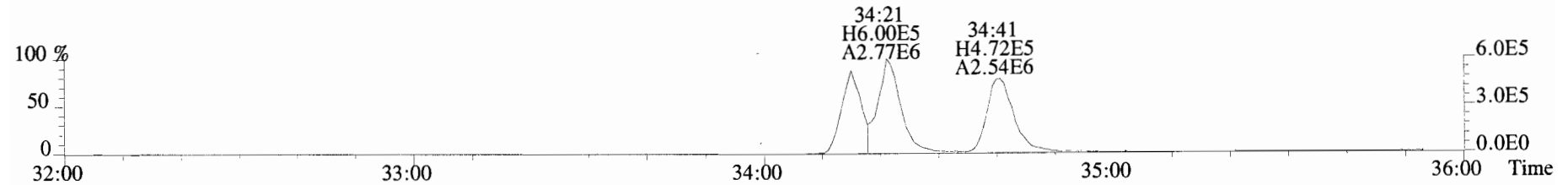
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



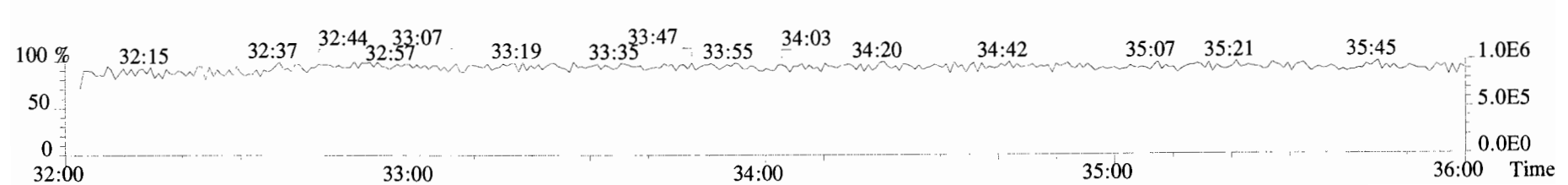
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



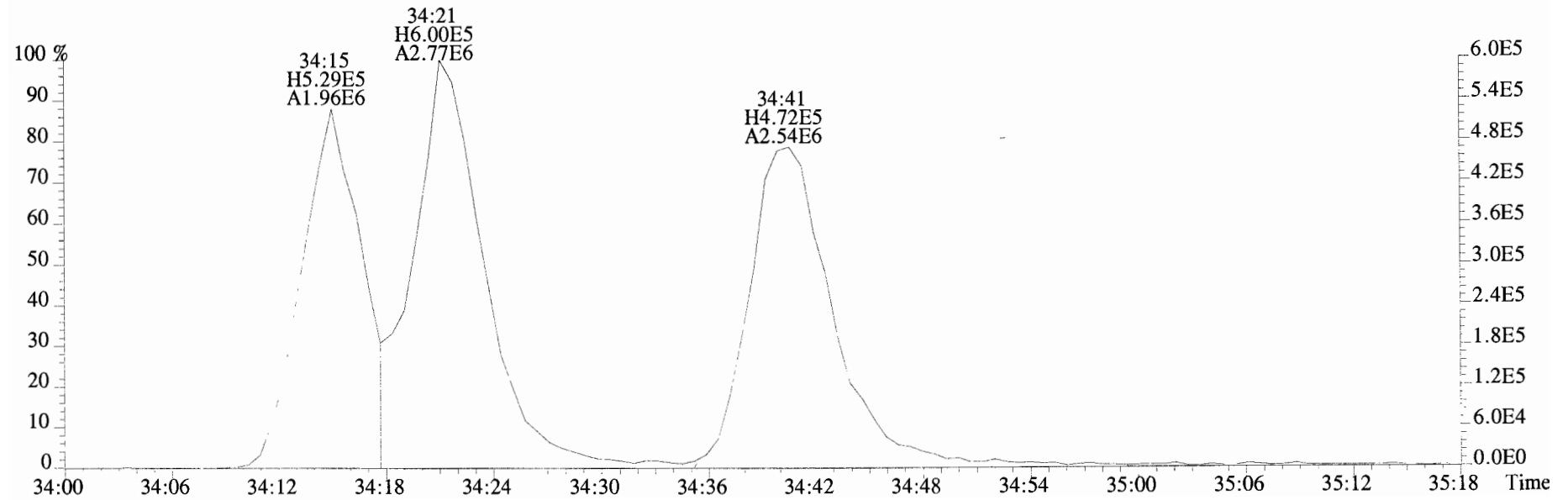
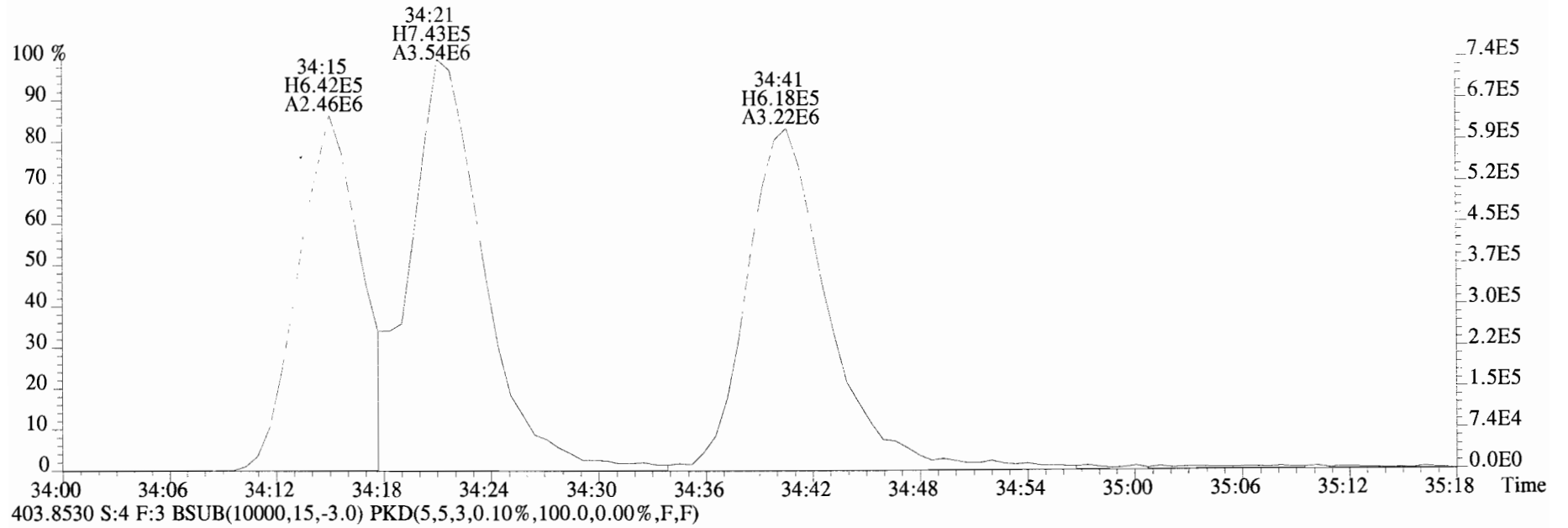
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



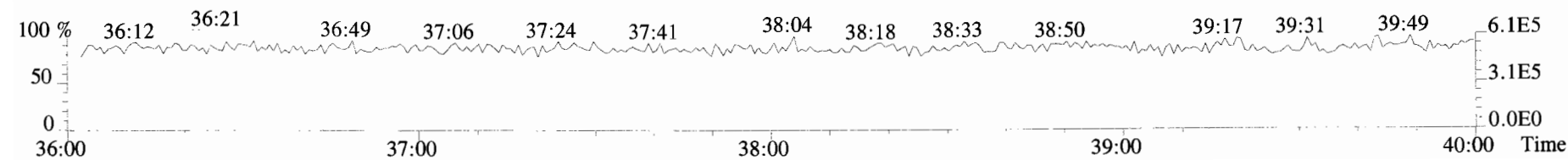
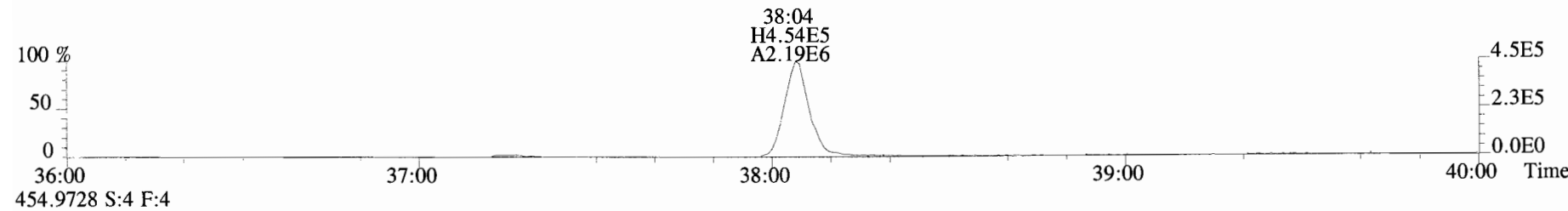
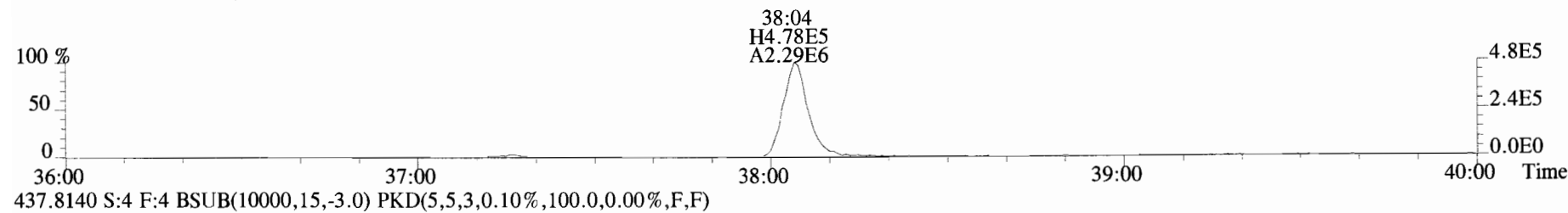
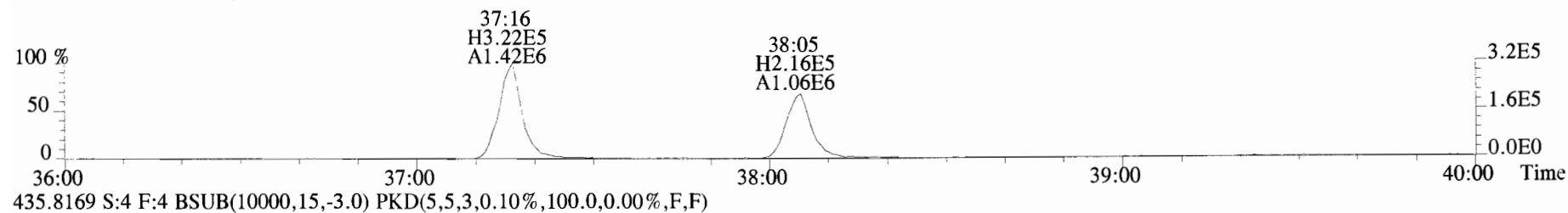
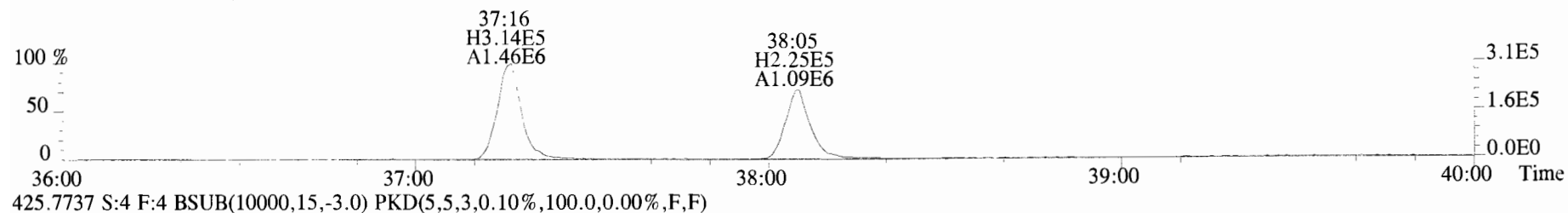
392.9760 S:4 F:3



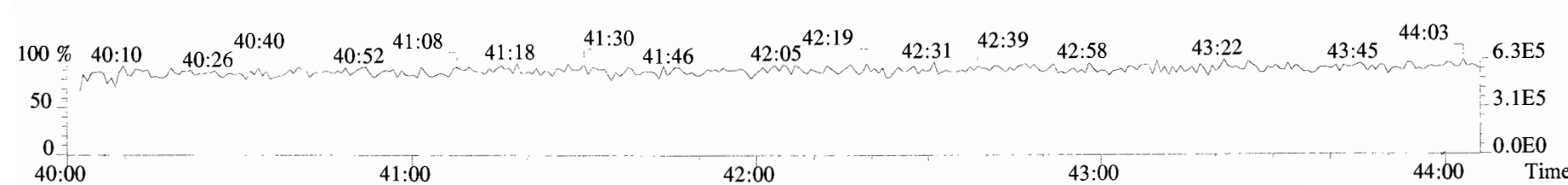
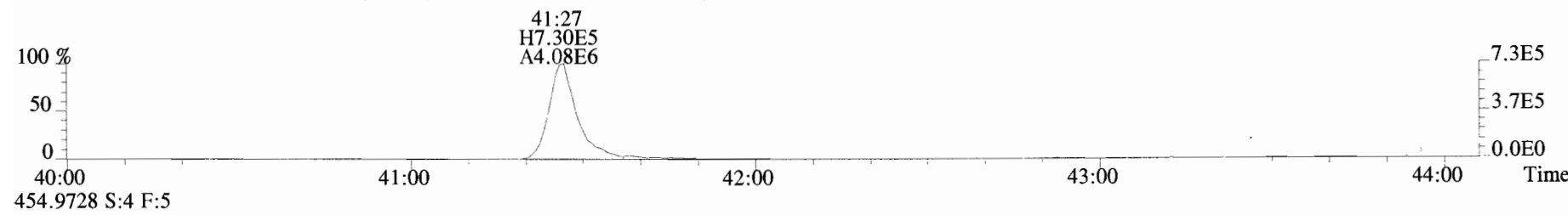
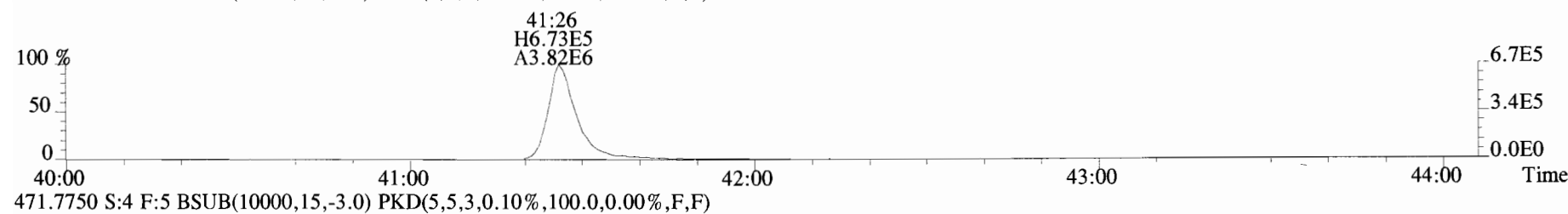
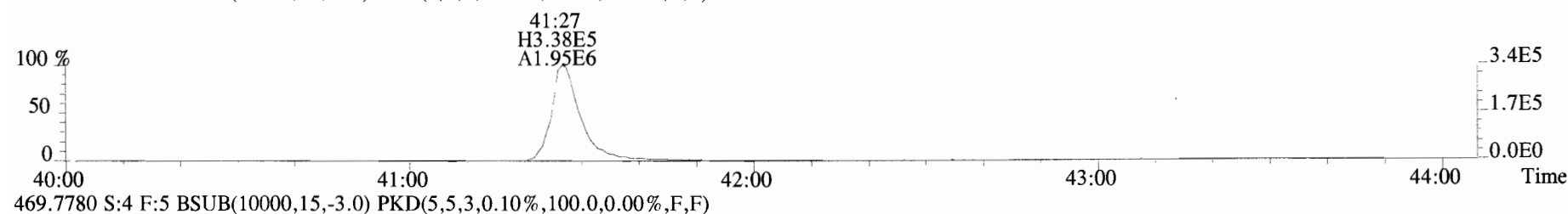
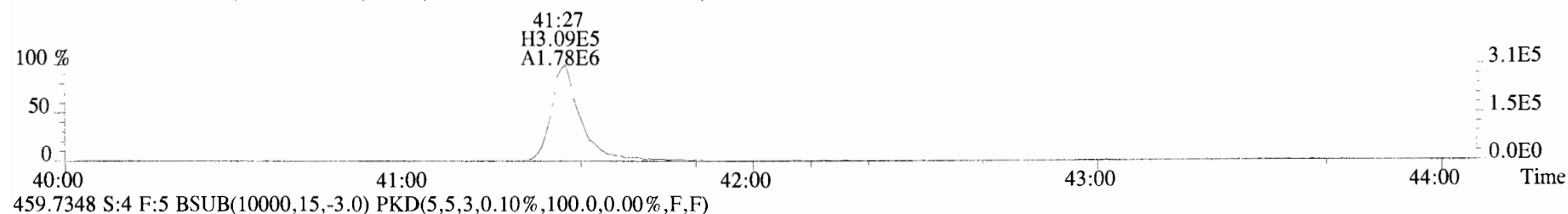
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



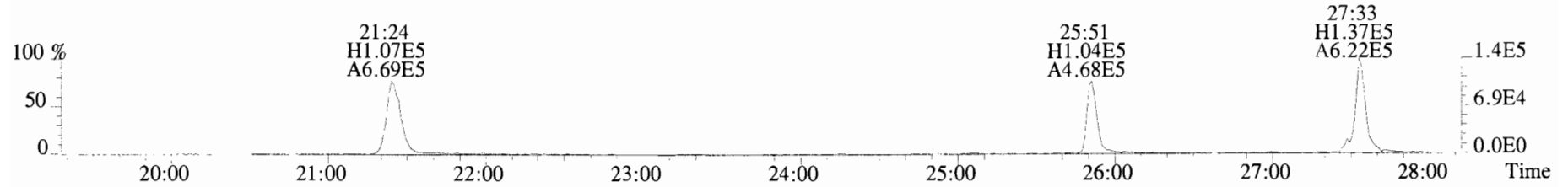
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



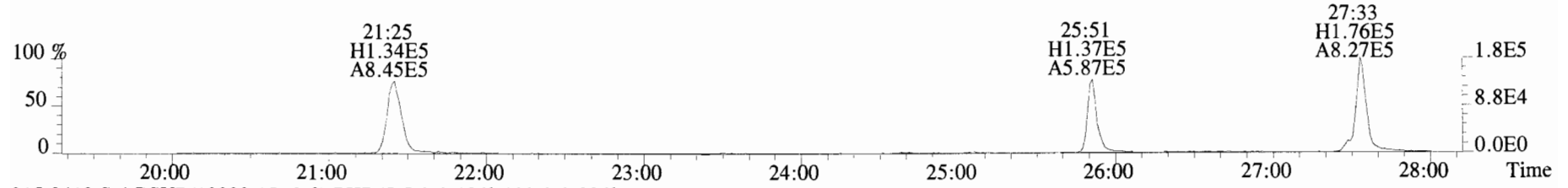
File:191009D1 #1-432 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



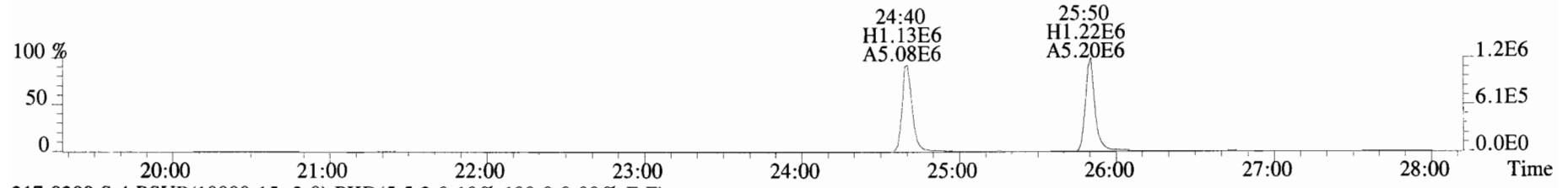
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



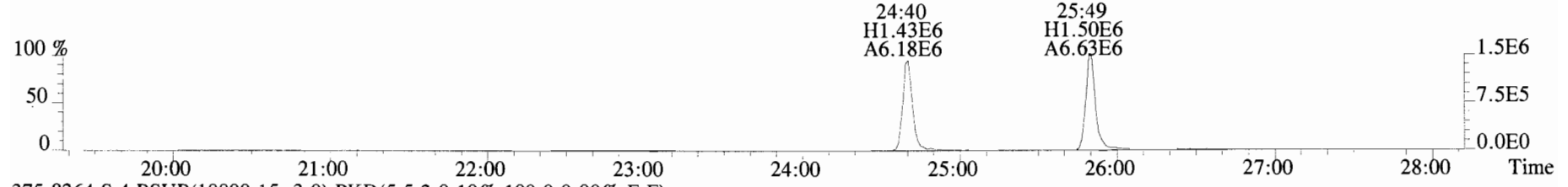
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



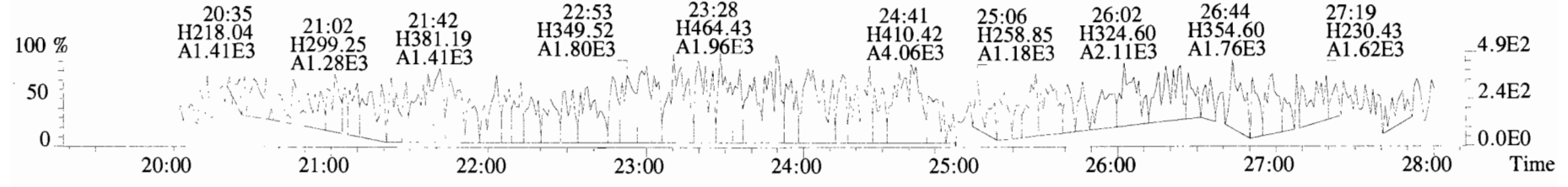
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



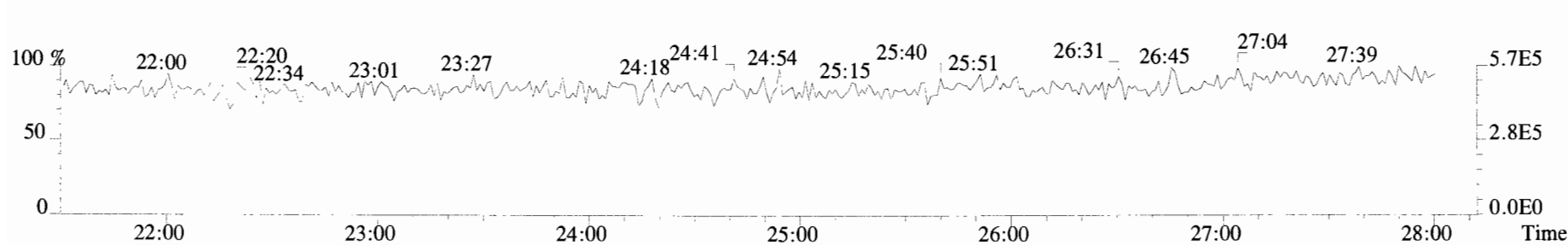
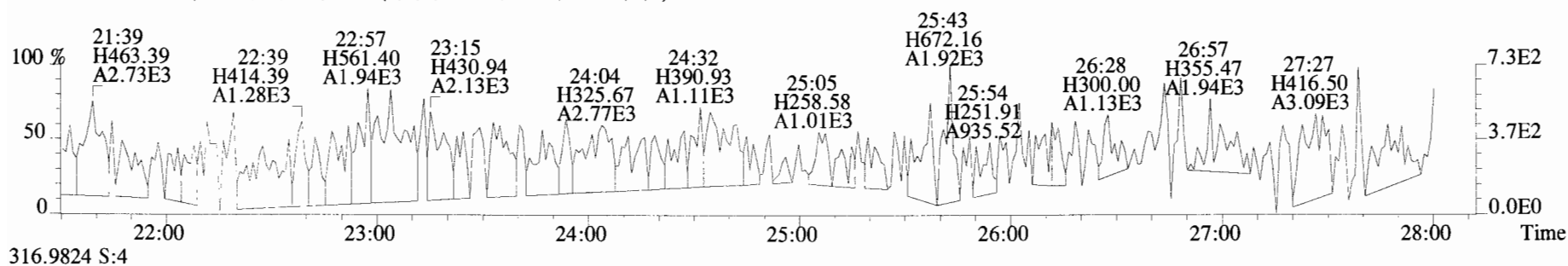
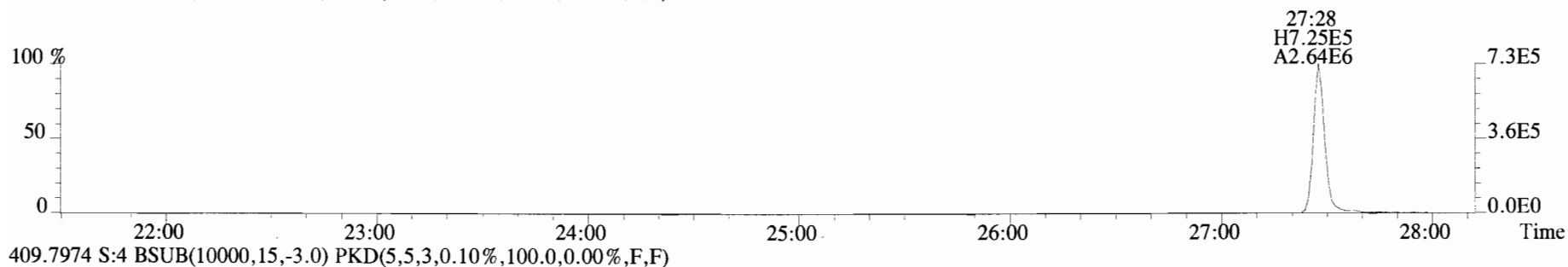
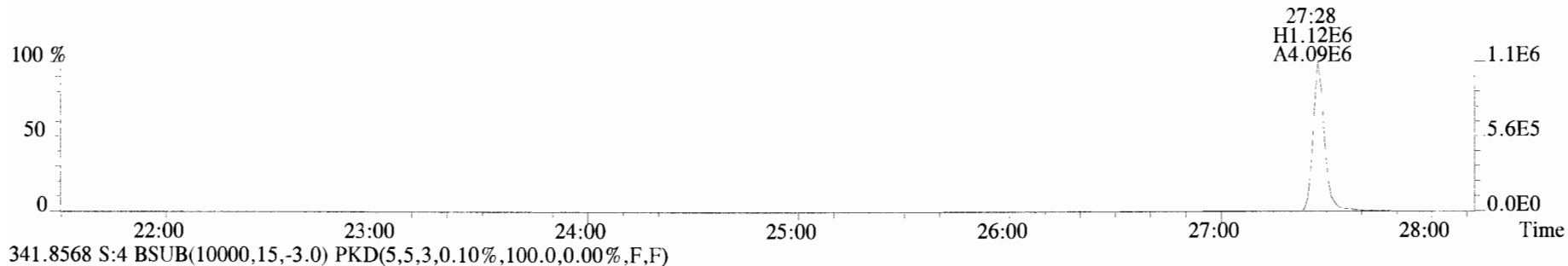
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



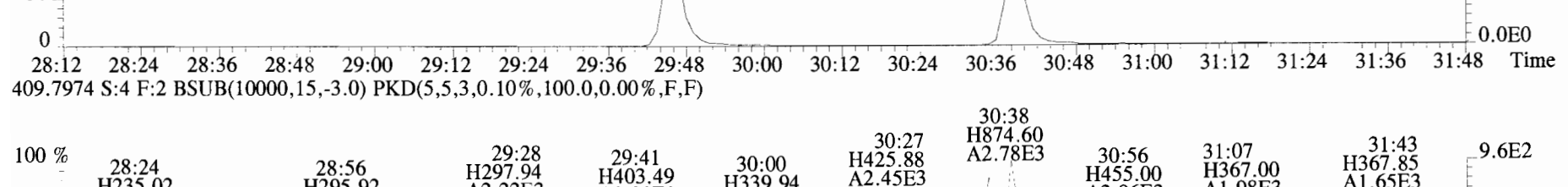
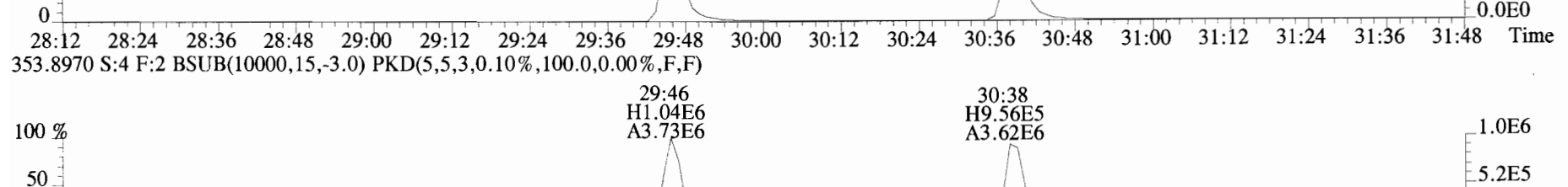
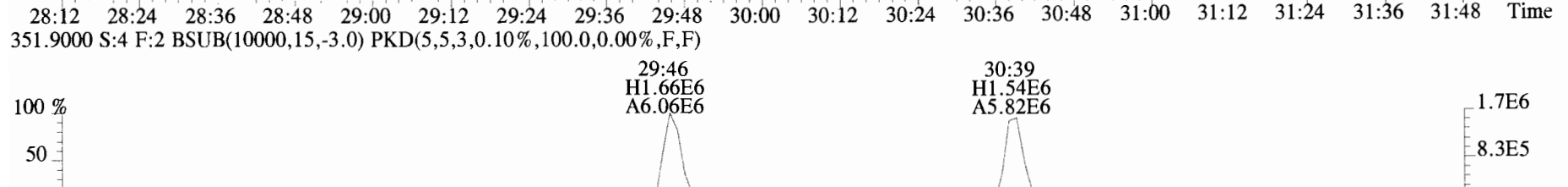
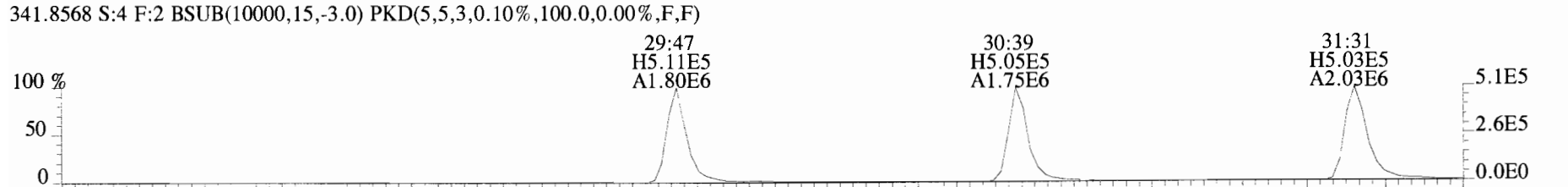
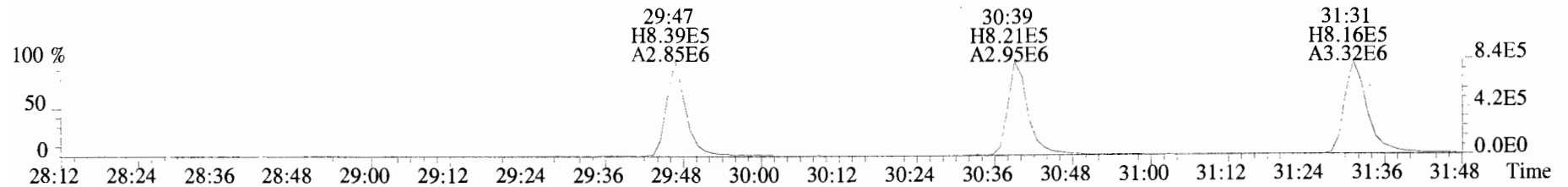
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



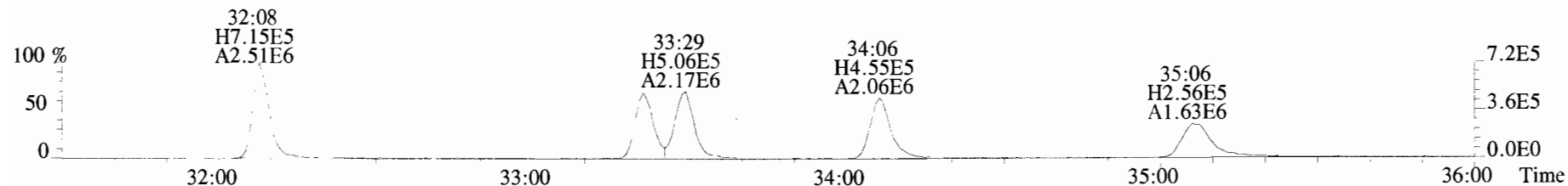
File:191009D1 #1-513 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



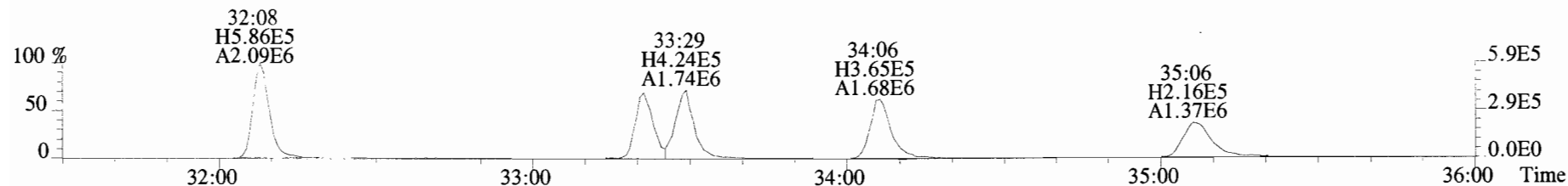
File:191009D1 #1-211 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



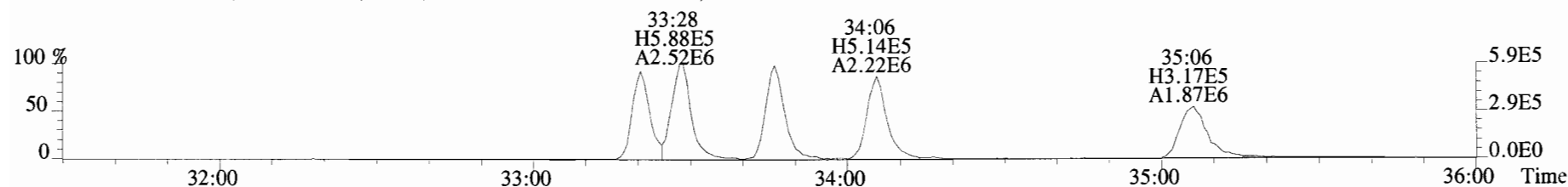
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
 373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



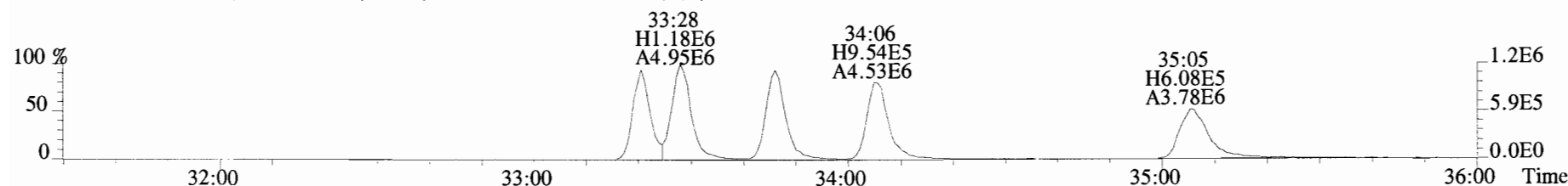
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



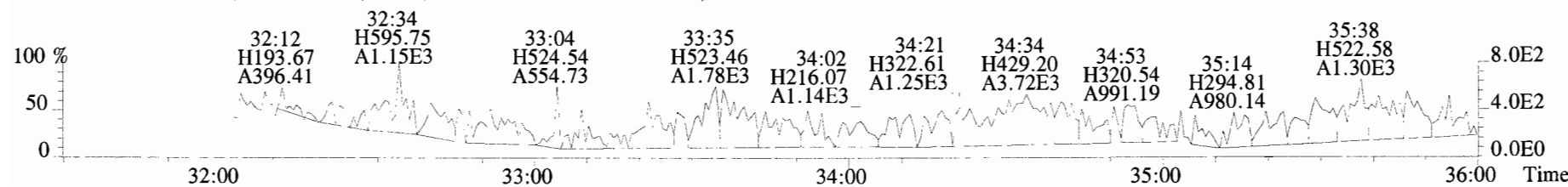
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



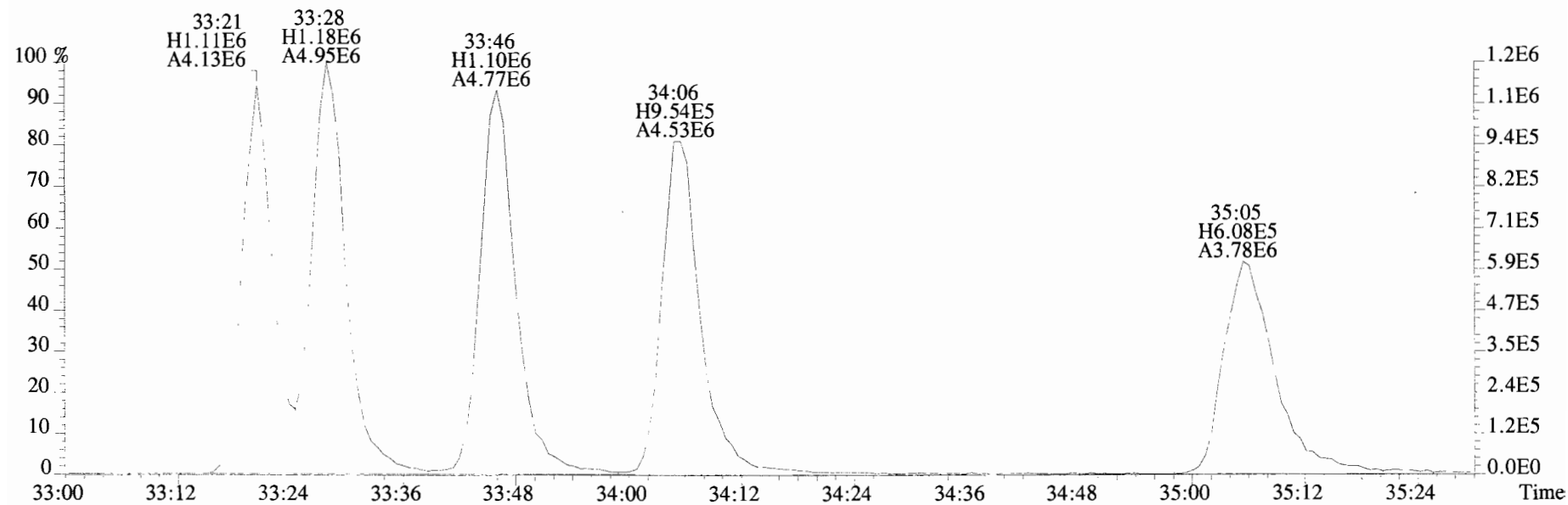
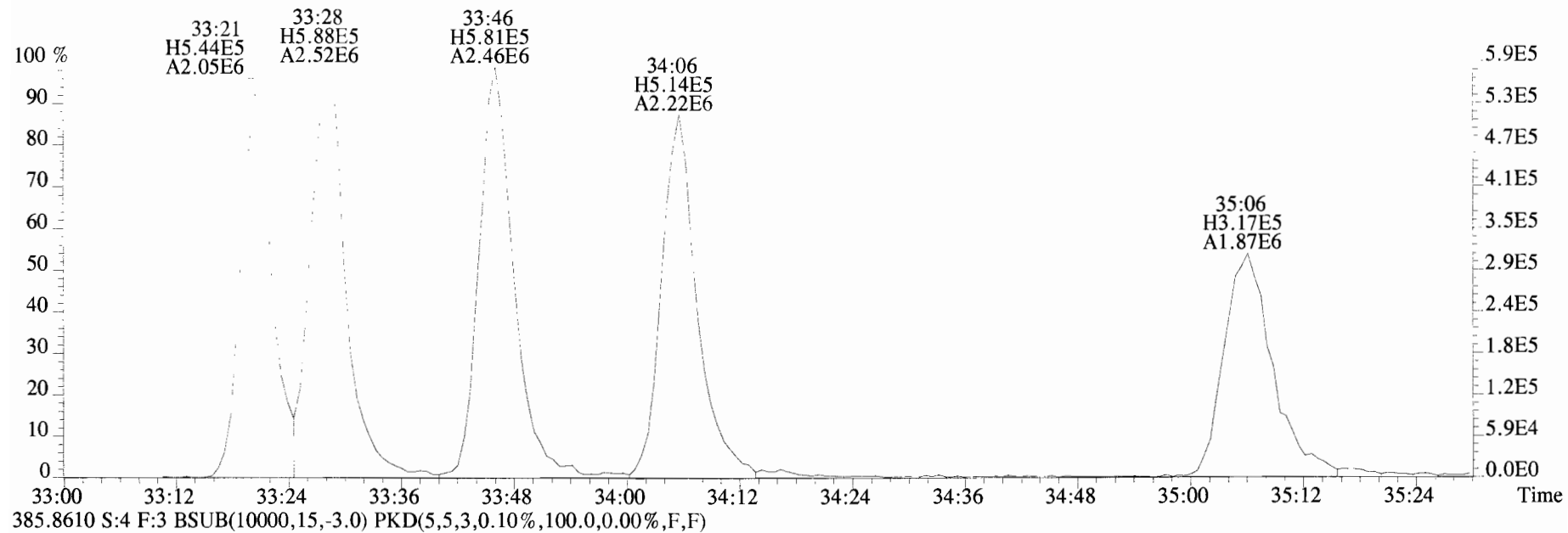
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



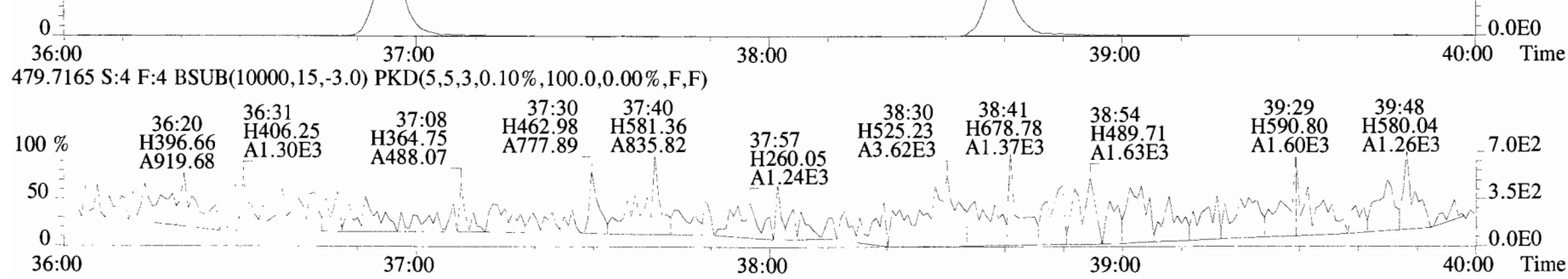
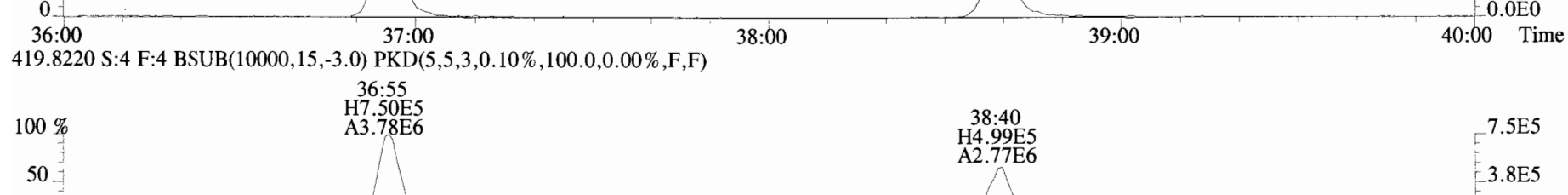
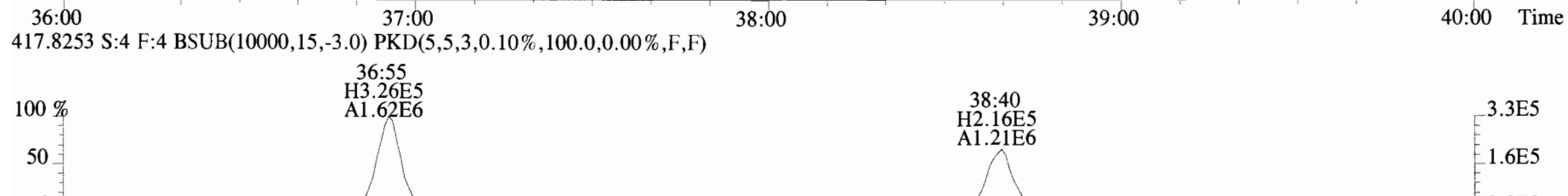
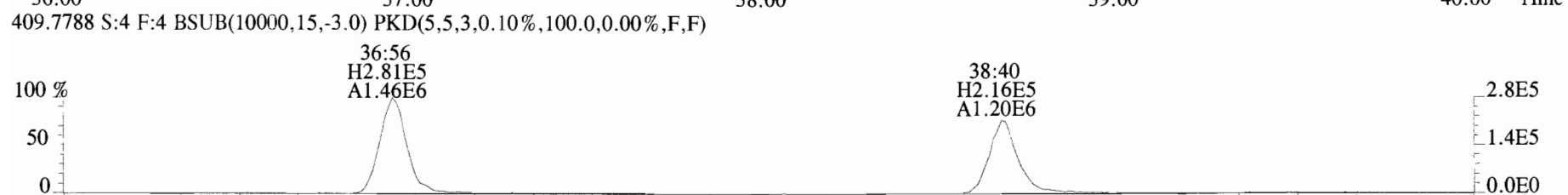
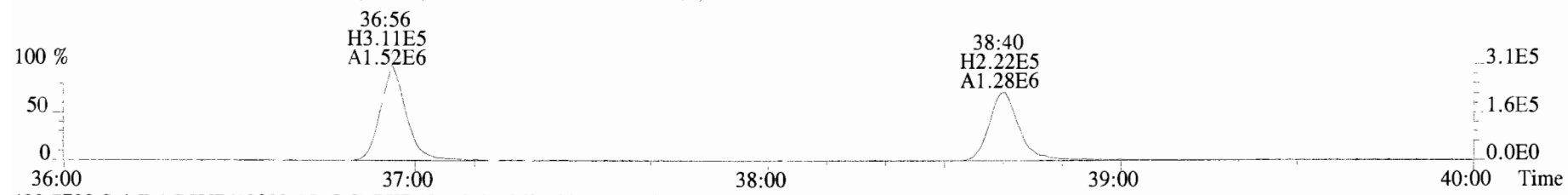
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



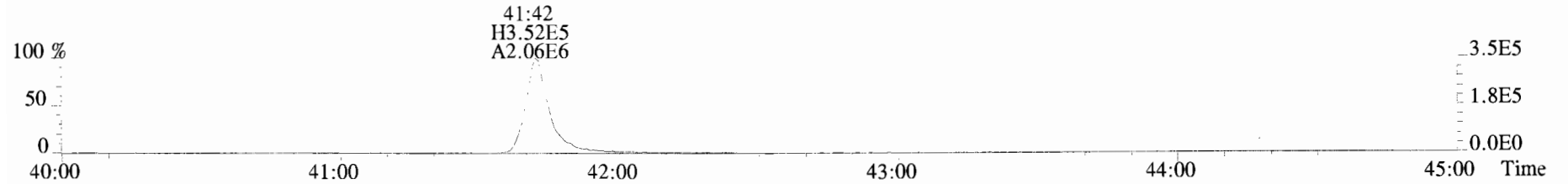
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



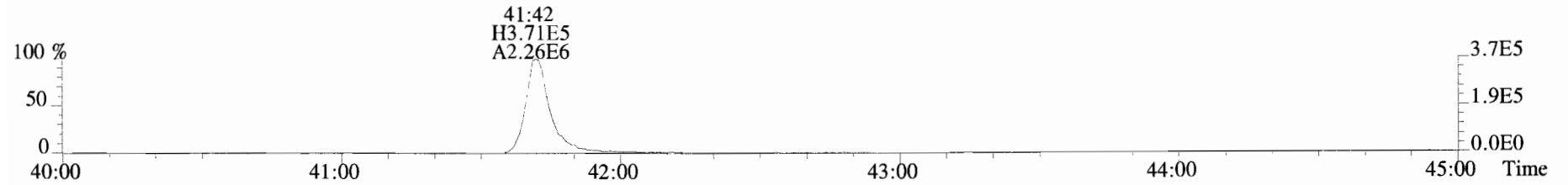
File:191009D1 #1-355 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
 407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



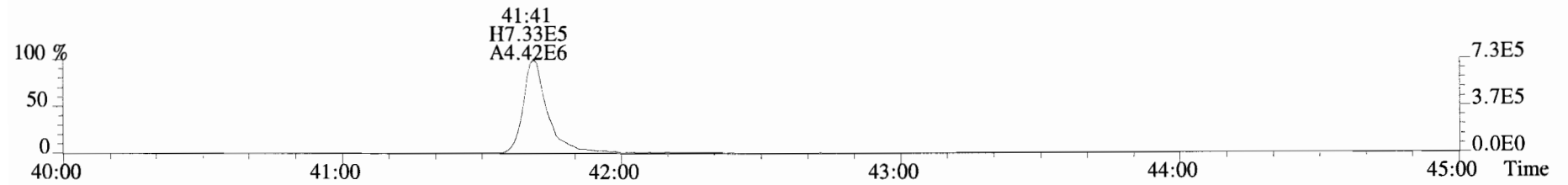
File:191009D1 #1-432 Acq: 9-OCT-2019 18:36:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical_Laboratory_VG7 Text:ST191009D1-4 1613 CS3 19C2204 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



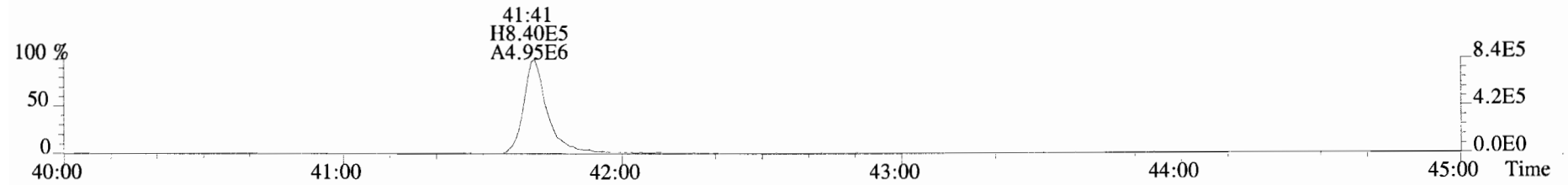
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



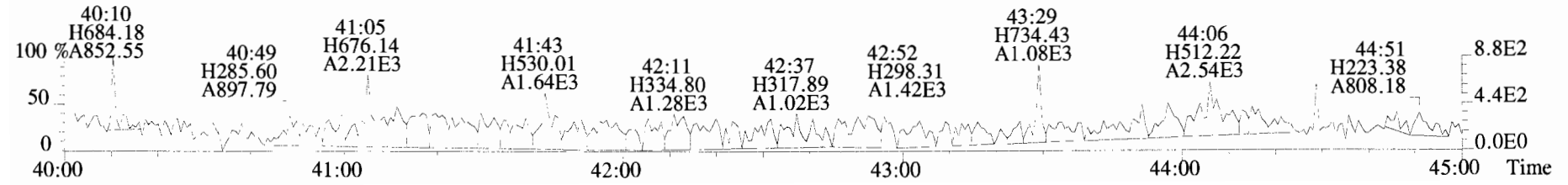
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



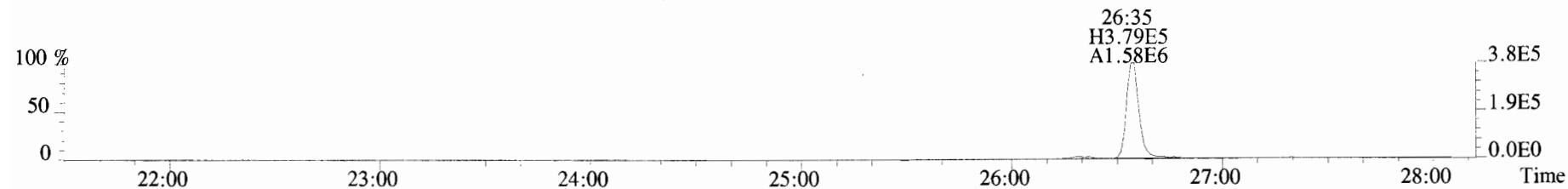
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



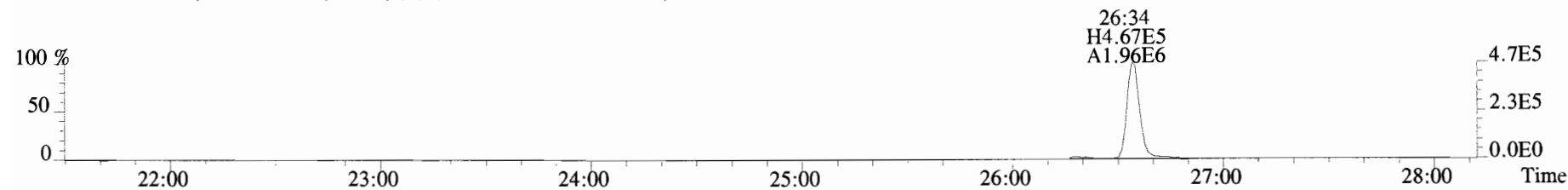
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



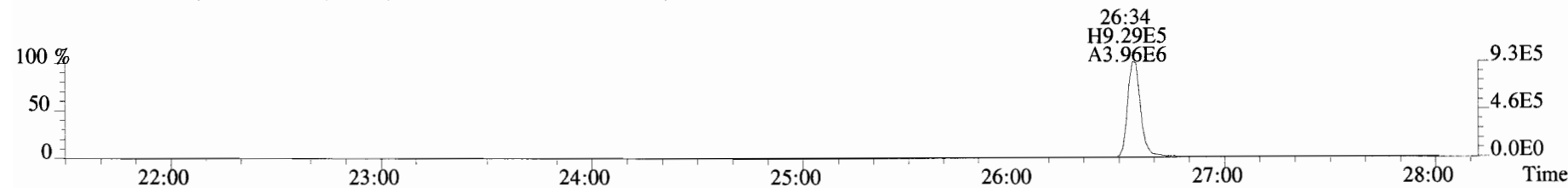
File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



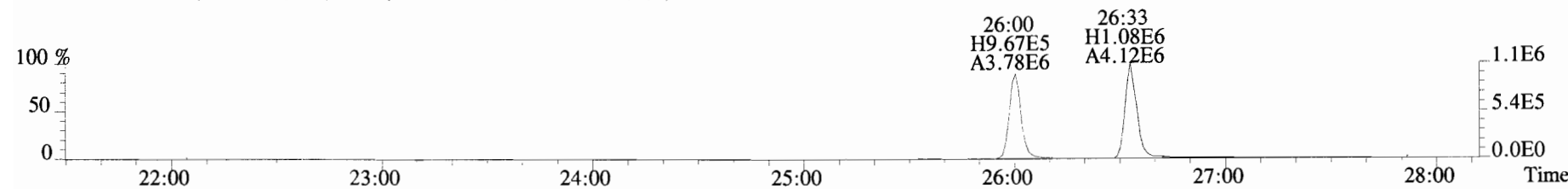
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



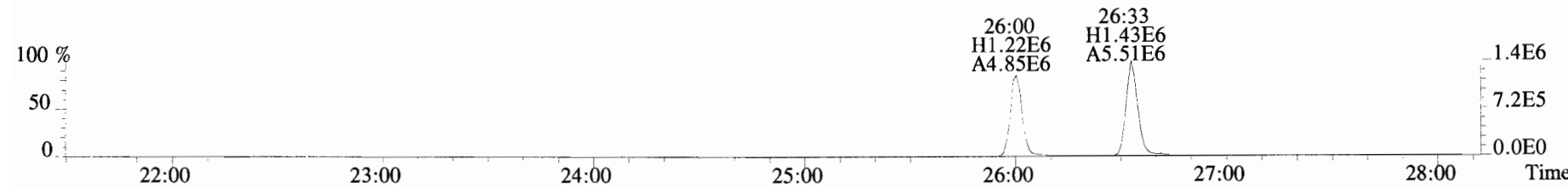
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



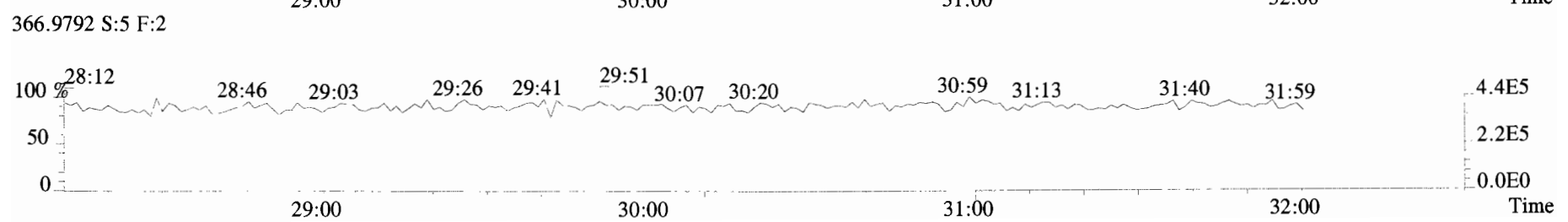
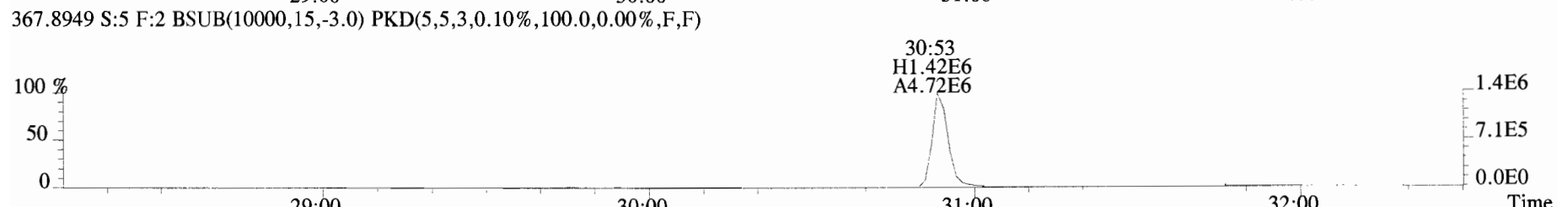
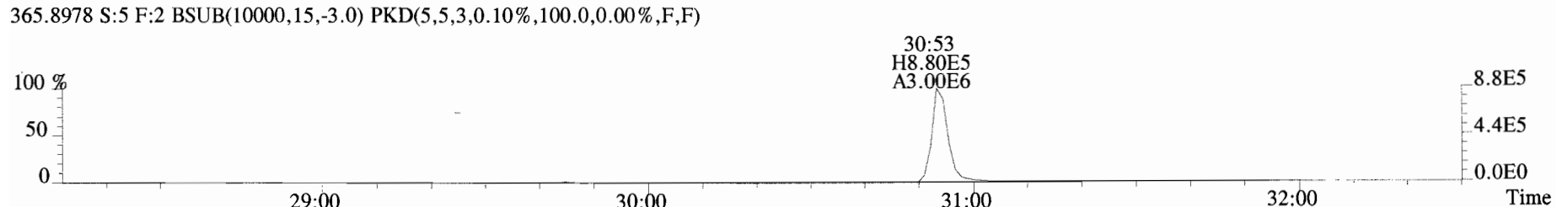
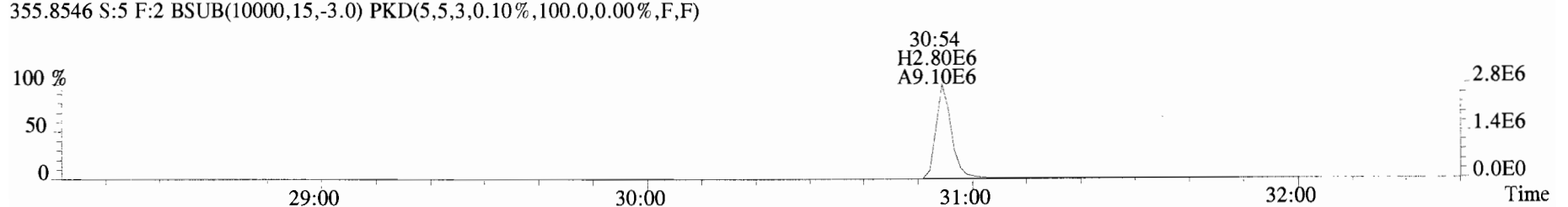
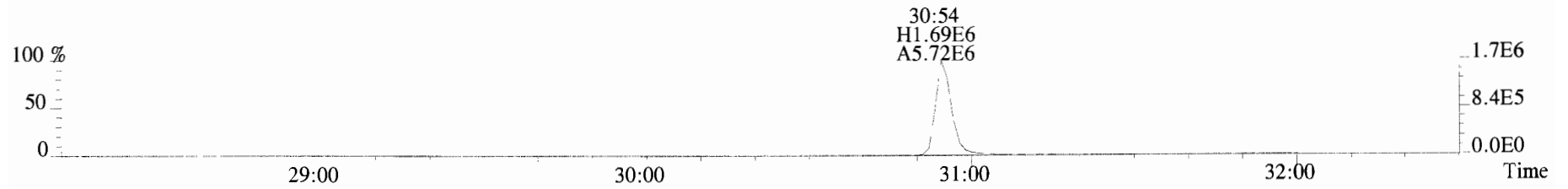
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



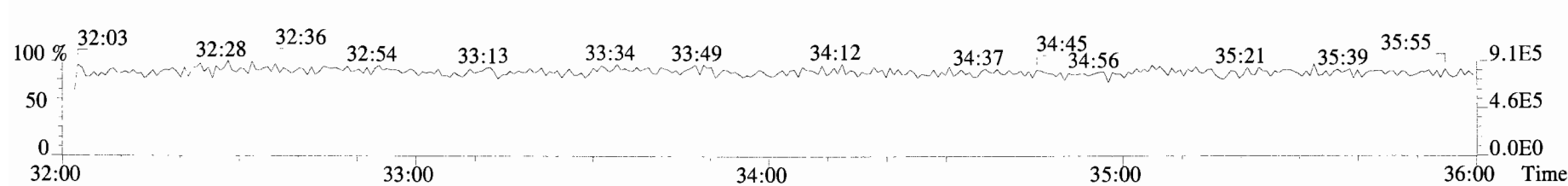
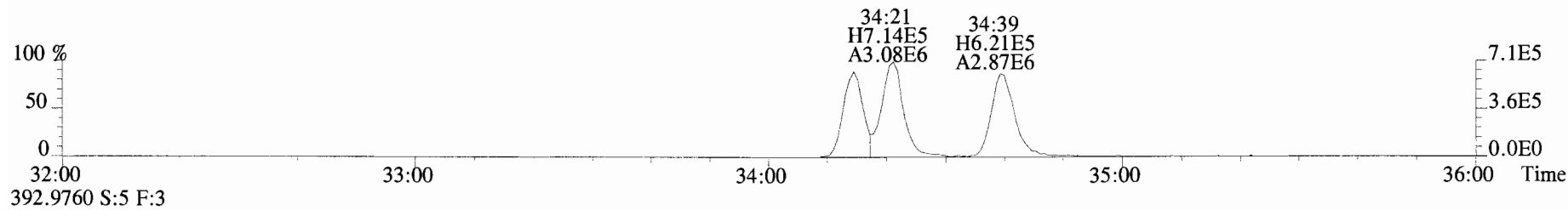
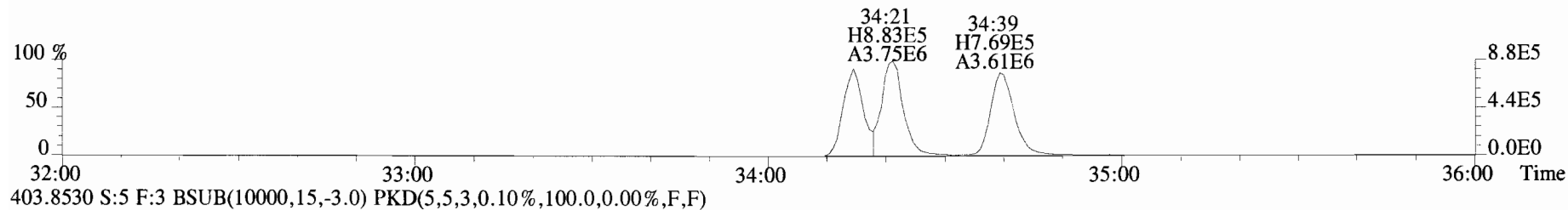
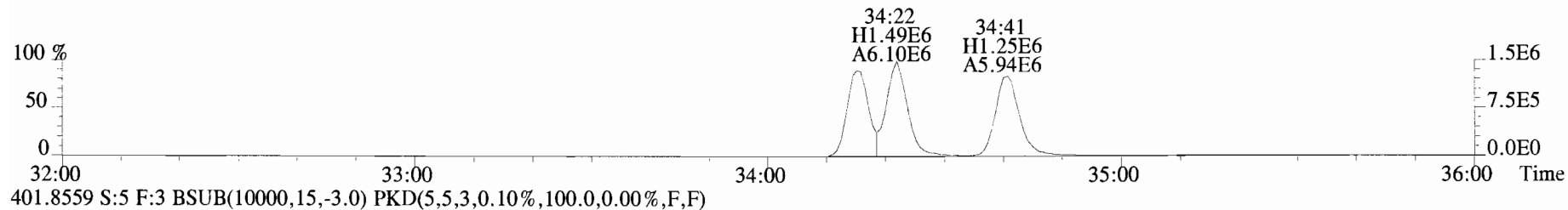
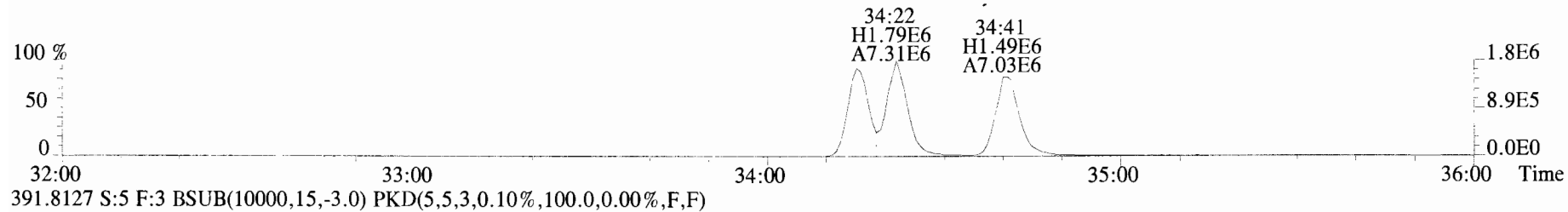
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



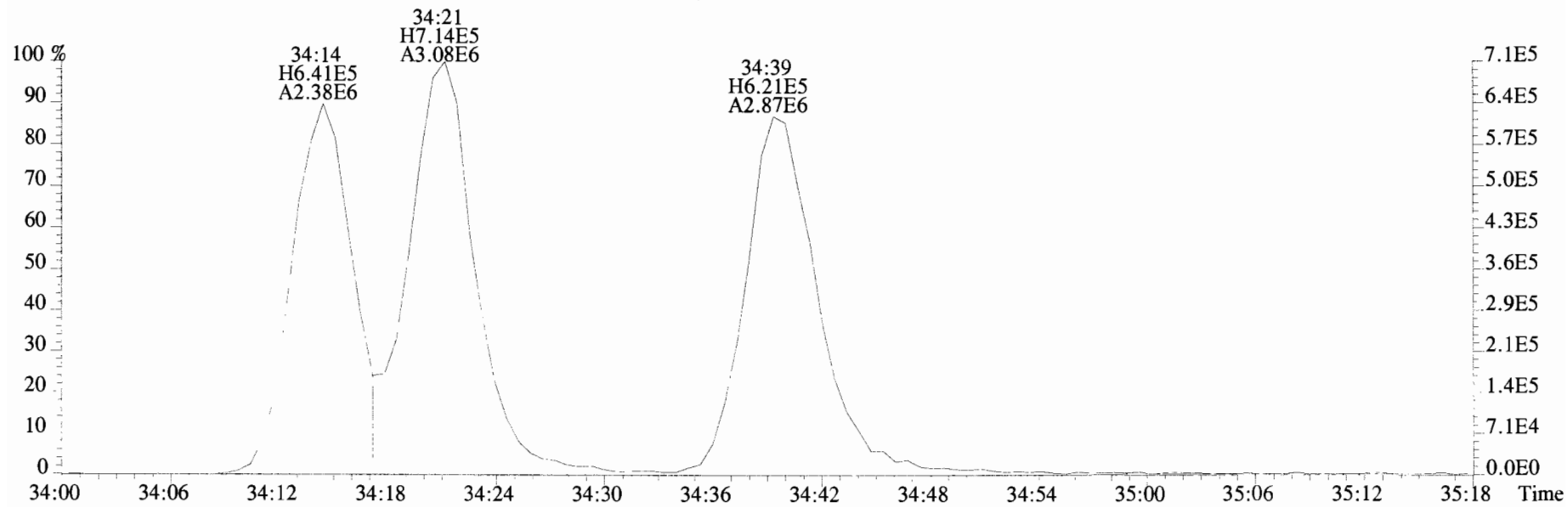
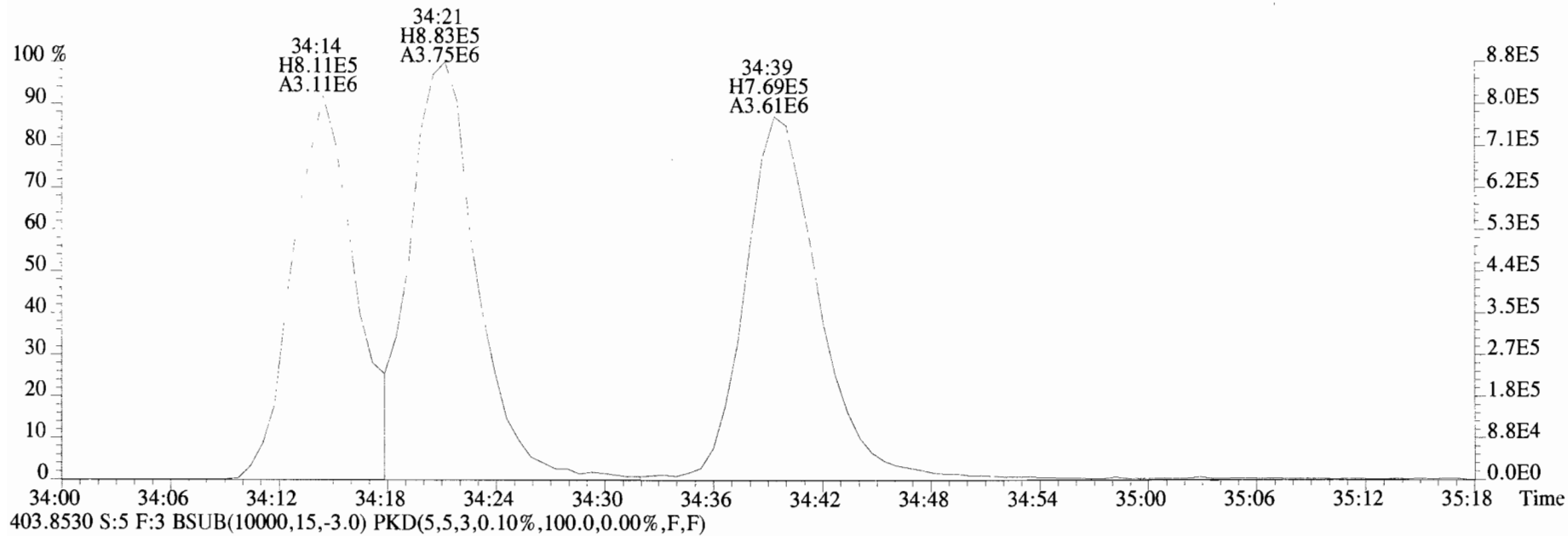
File:191009D1 #1-210 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



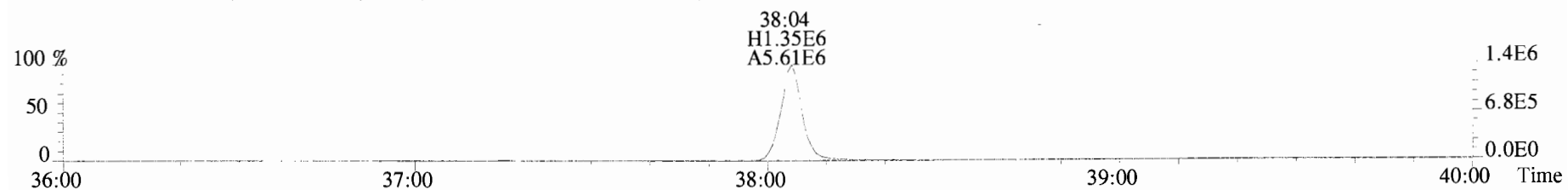
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



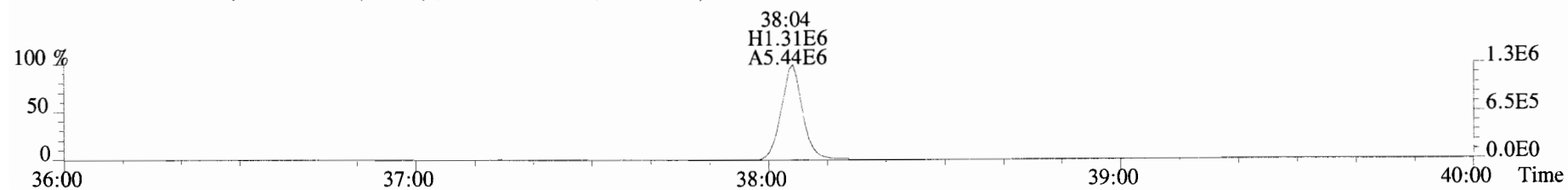
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Vista Analytical Laboratory VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



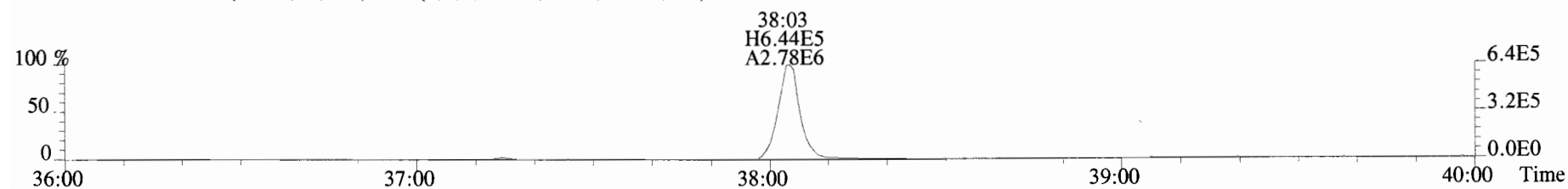
File:191009D1 #1-356 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



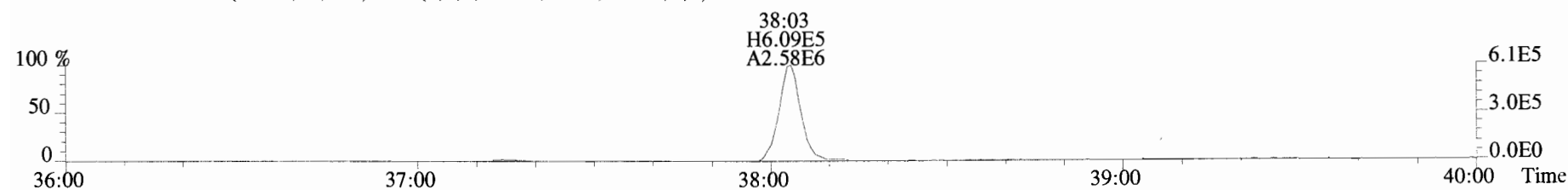
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



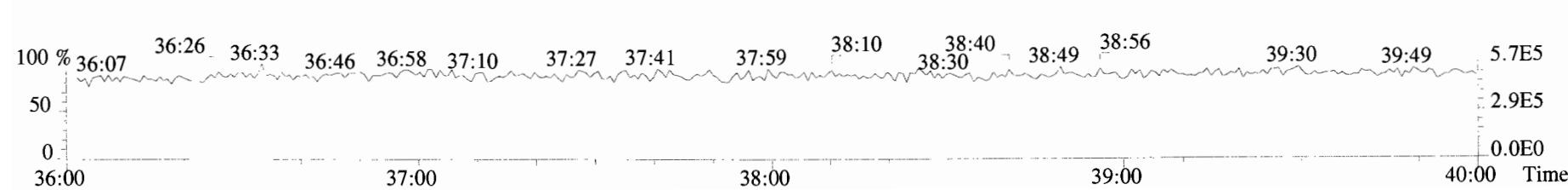
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



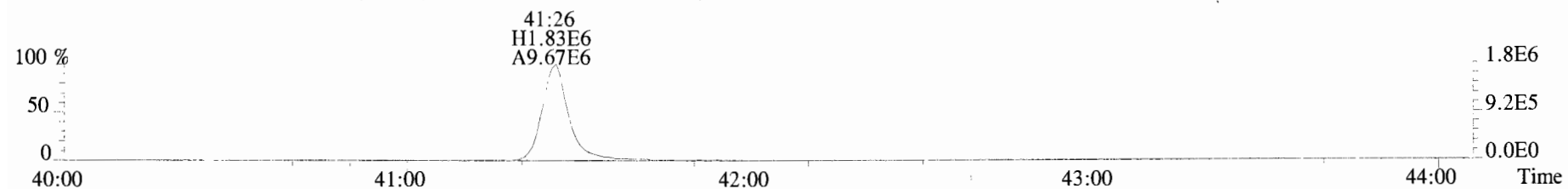
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



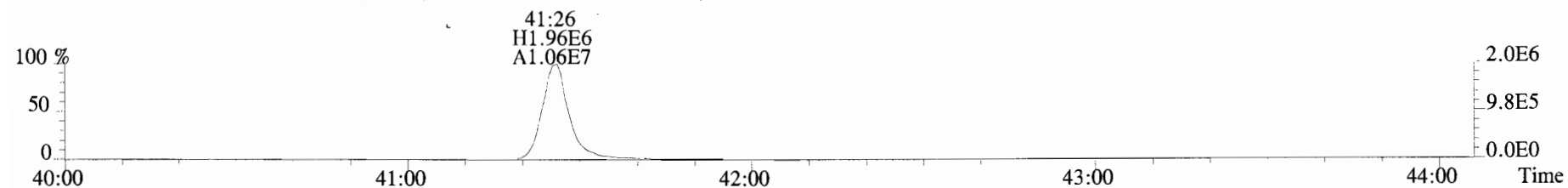
454.9728 S:5 F:4



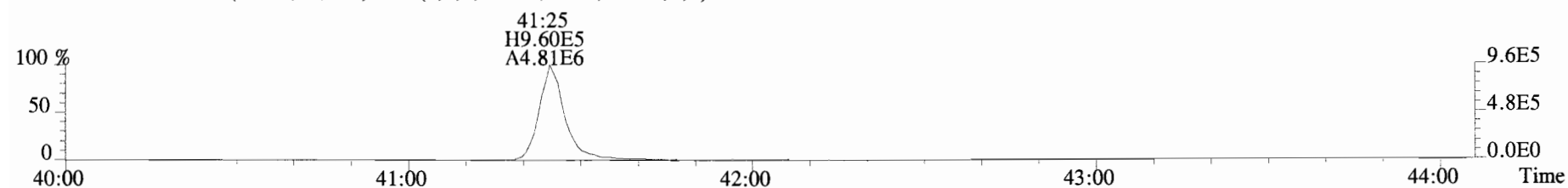
File:191009D1 #1-431 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



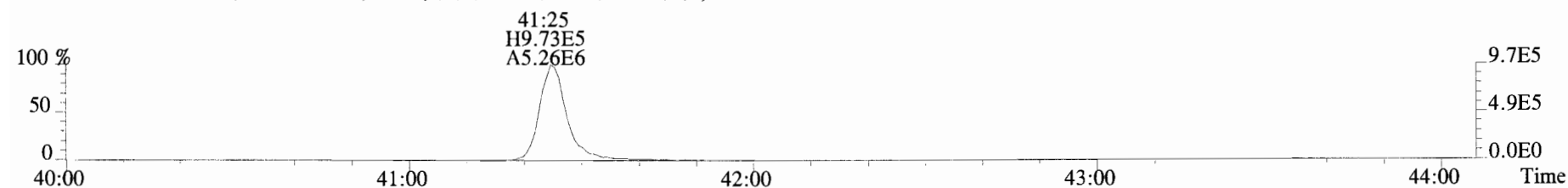
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



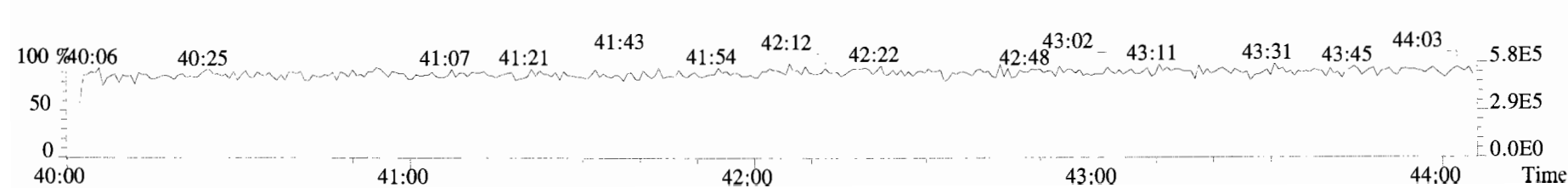
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



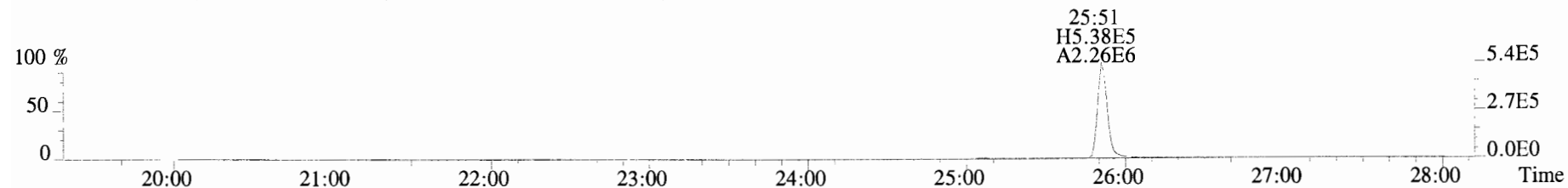
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



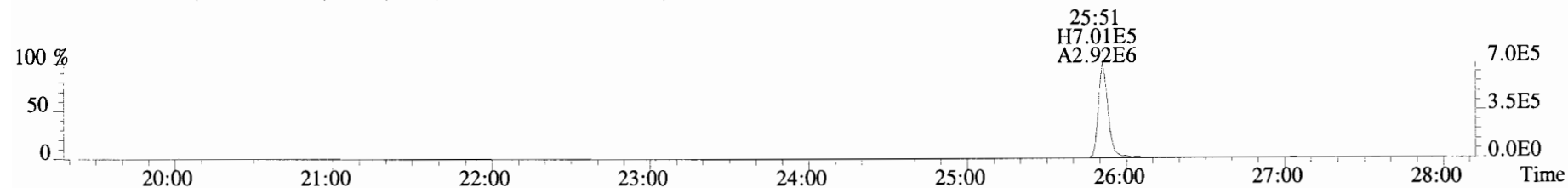
454.9728 S:5 F:5



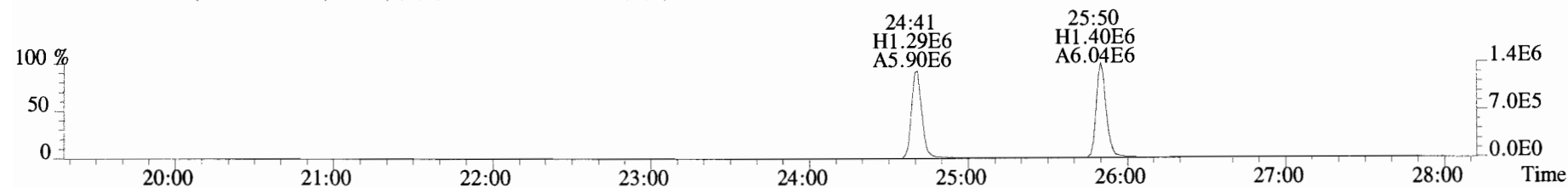
File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



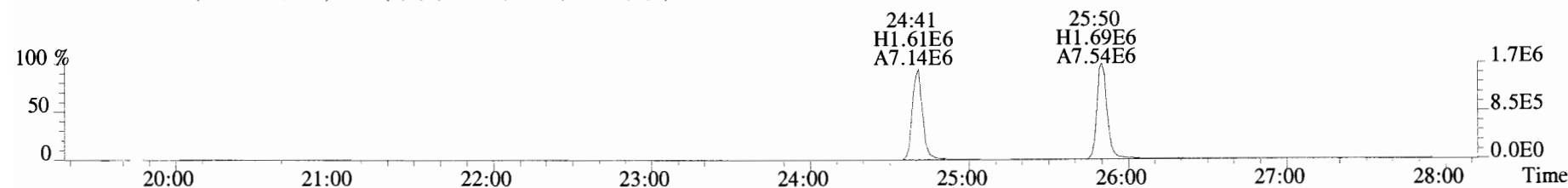
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



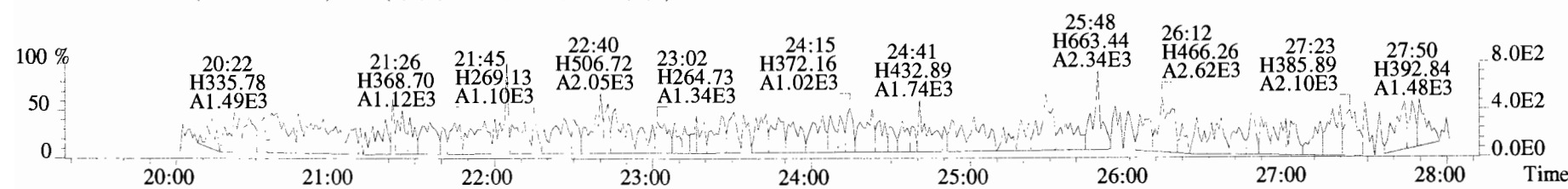
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



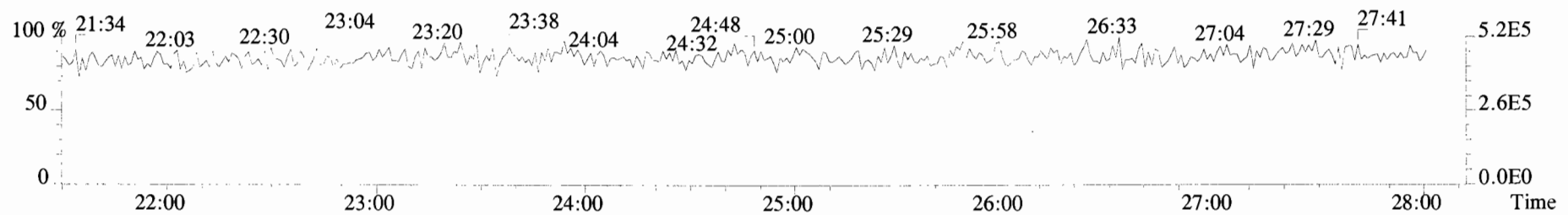
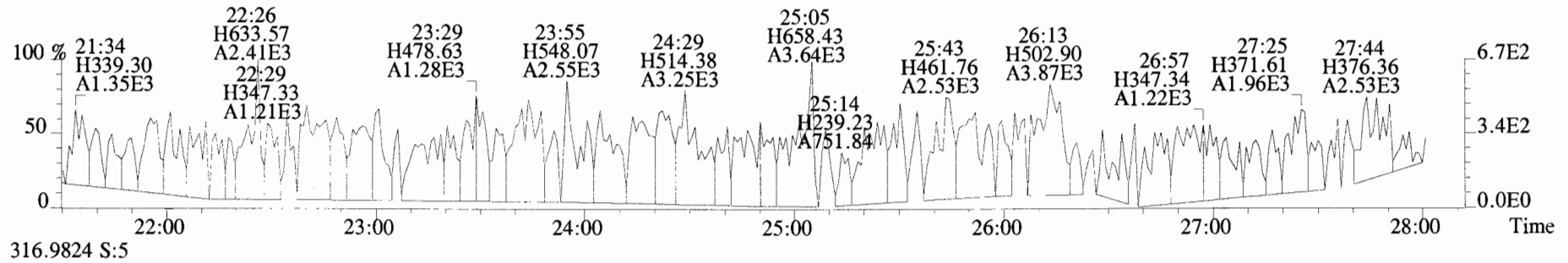
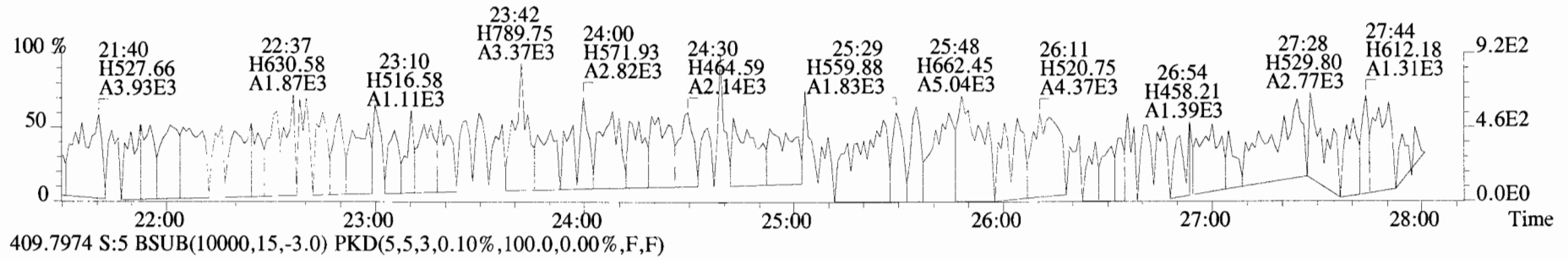
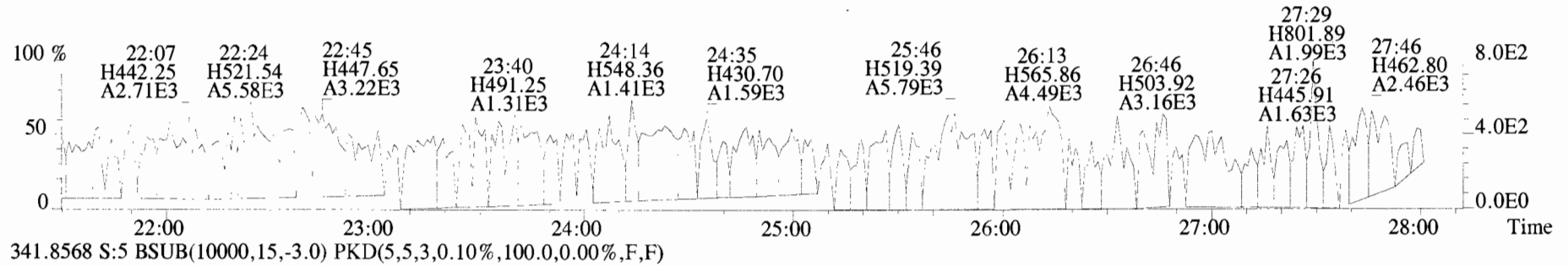
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



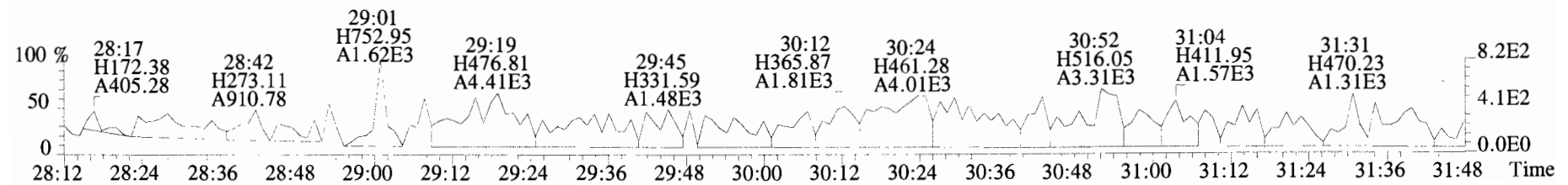
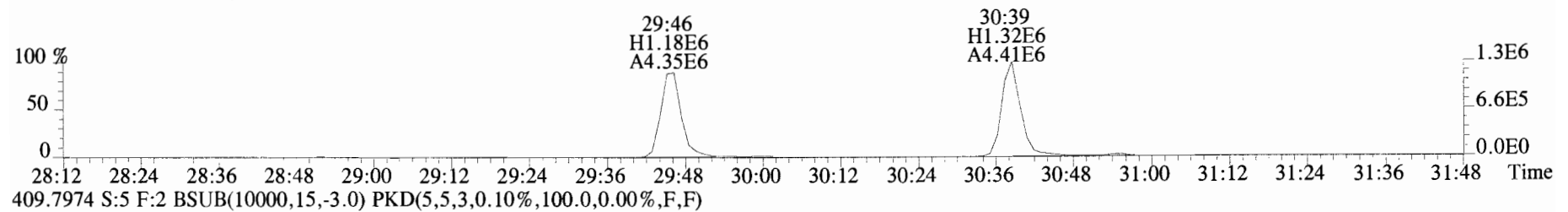
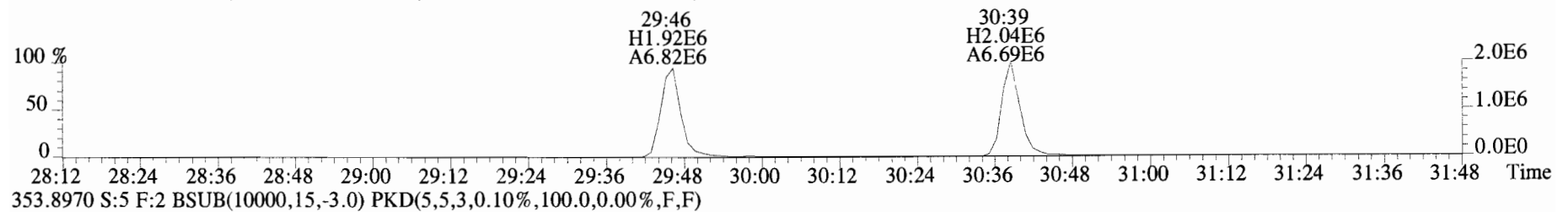
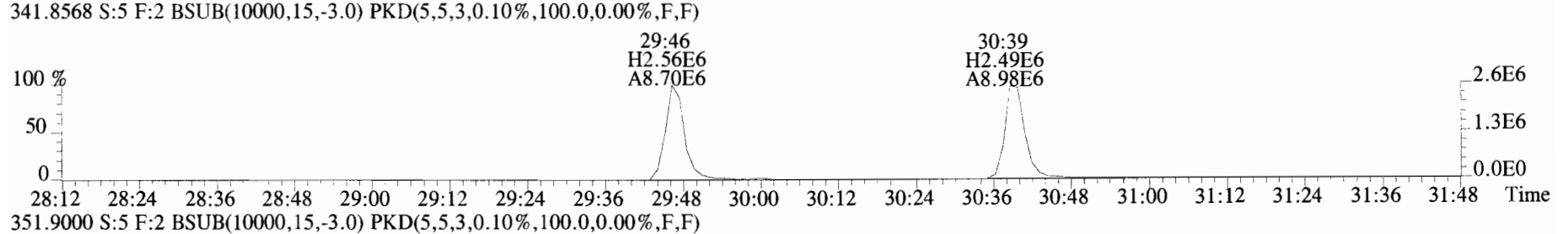
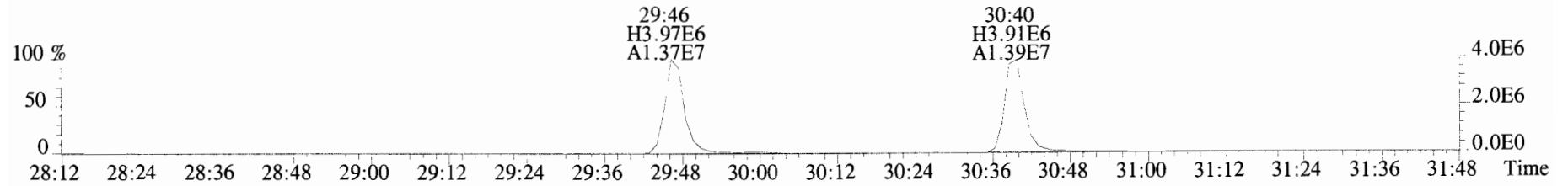
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



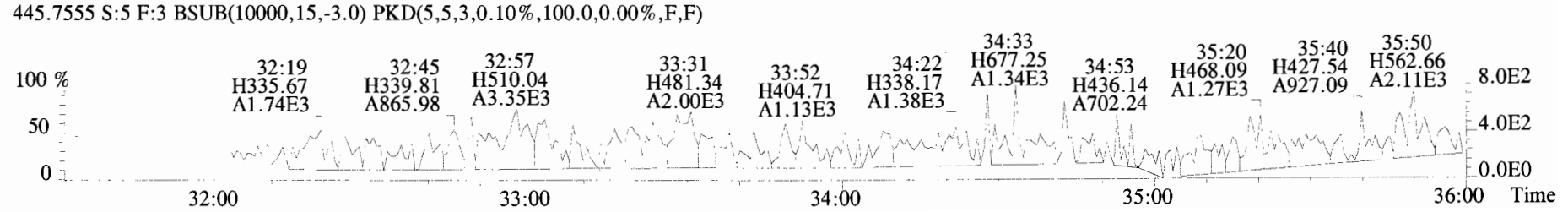
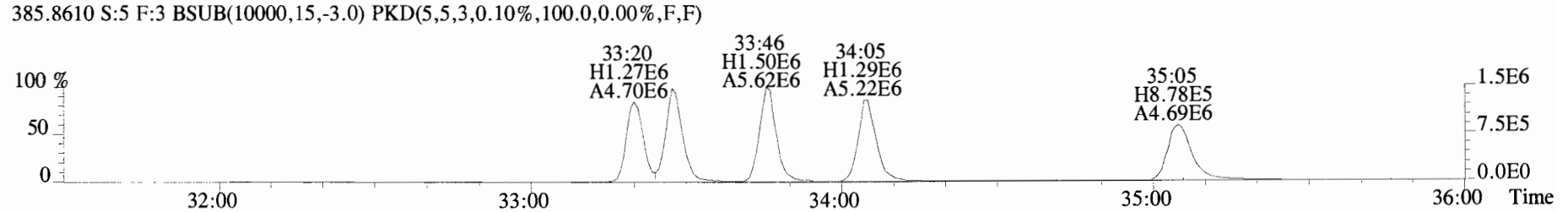
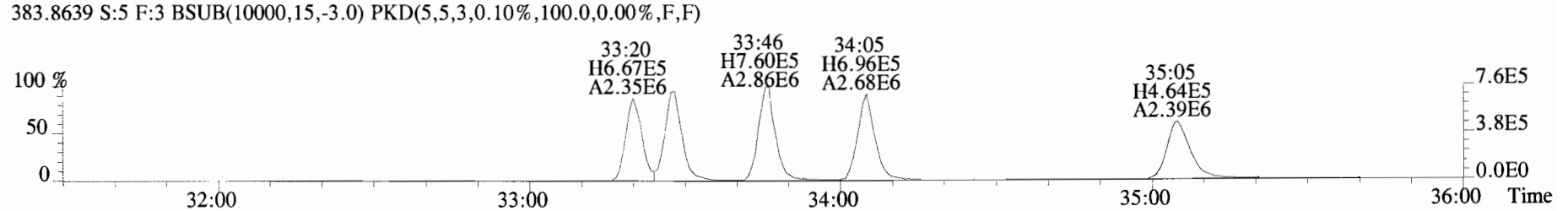
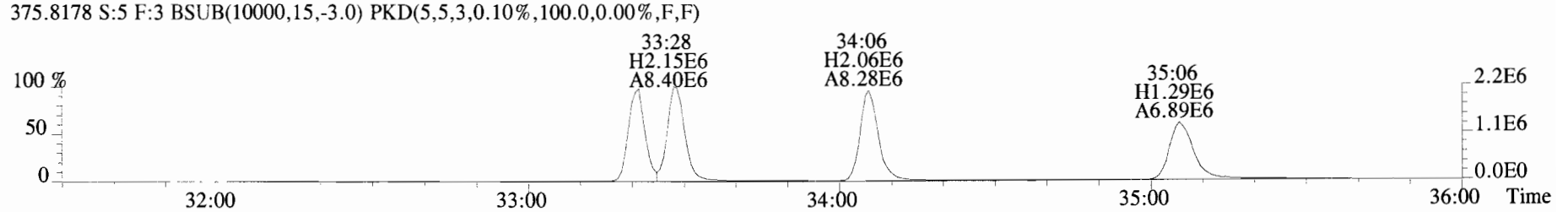
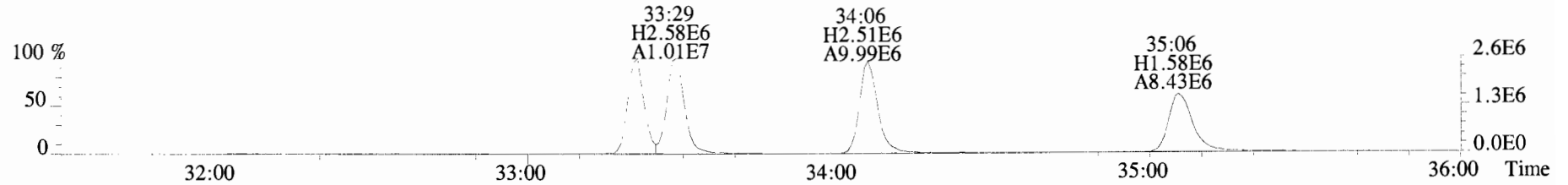
File:191009D1 #1-514 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



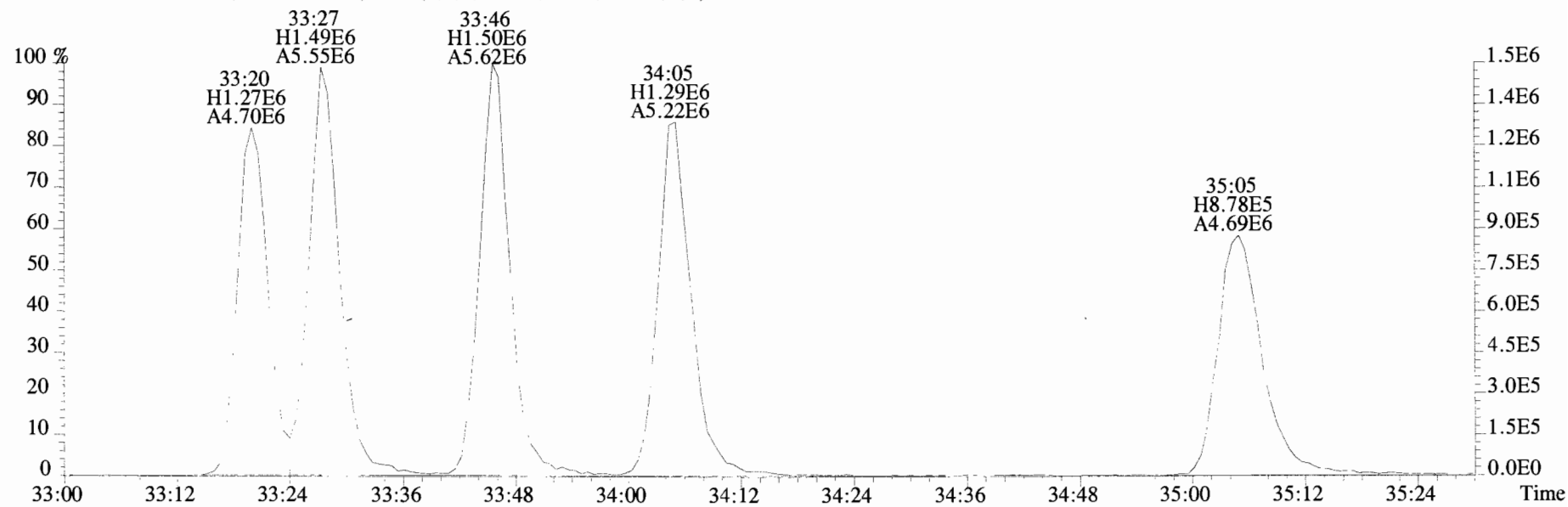
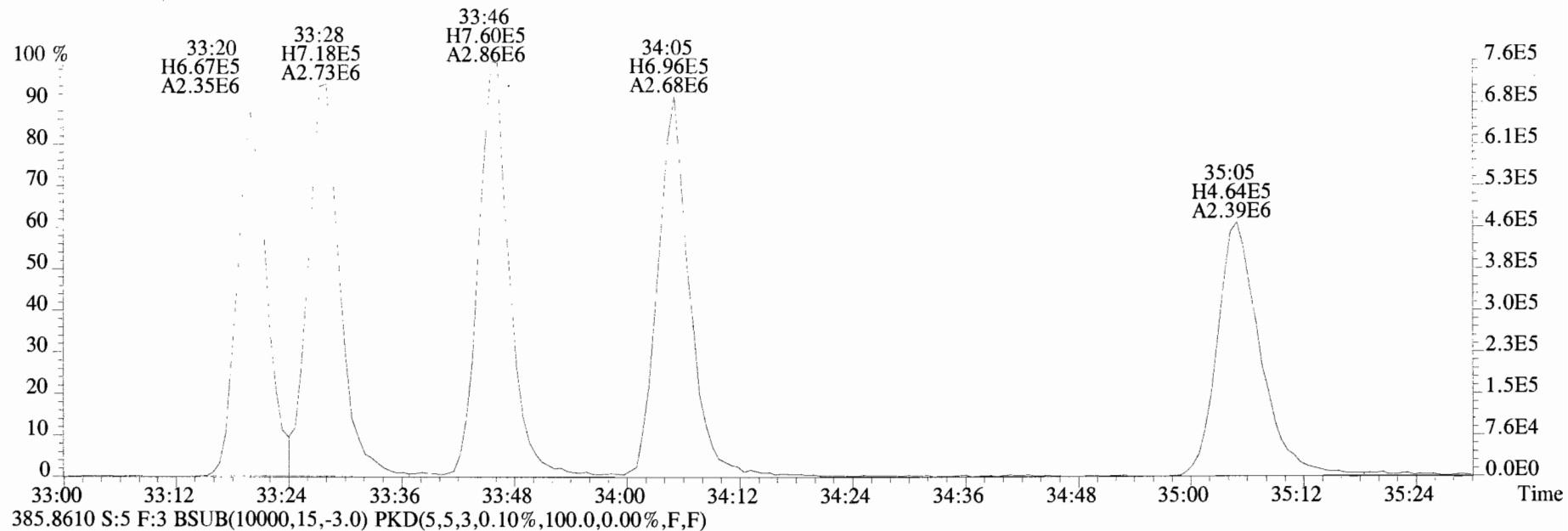
File:191009D1 #1-210 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



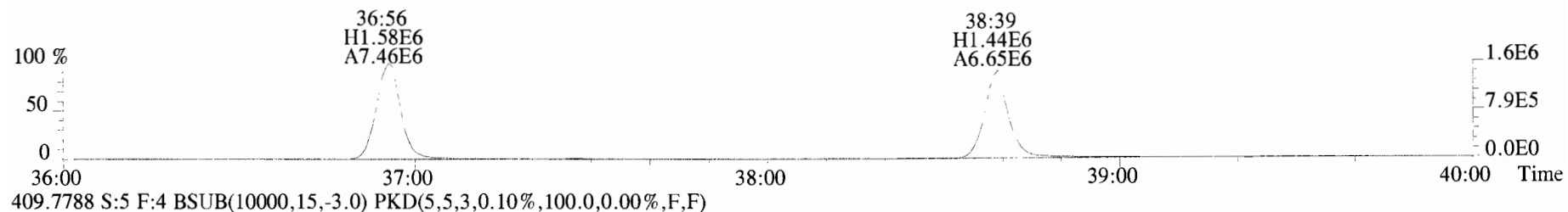
File:191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
 373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



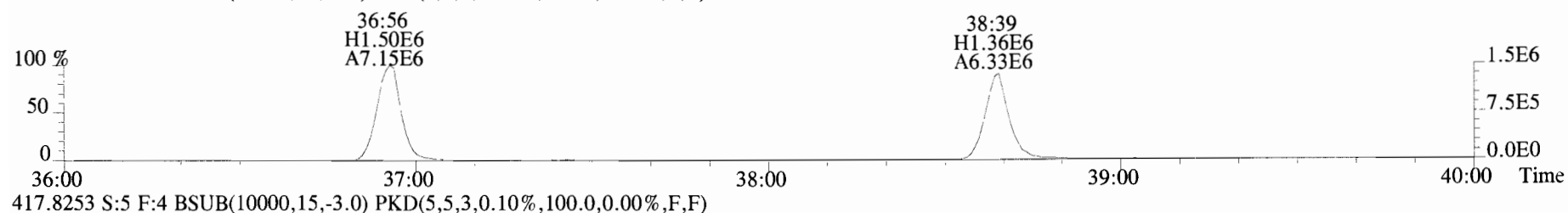
File: 191009D1 #1-355 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text: Vista Analytical Laboratory VG7 Text: ST191009D1-5 1613 CS4 19C2205 Exp: OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



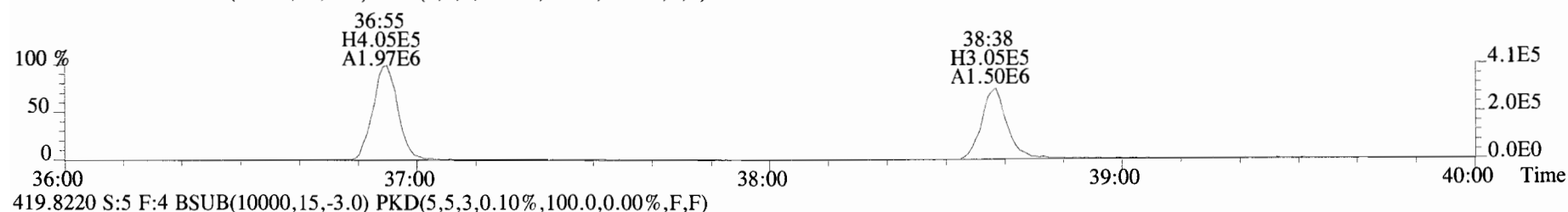
File:191009D1 #1-356 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



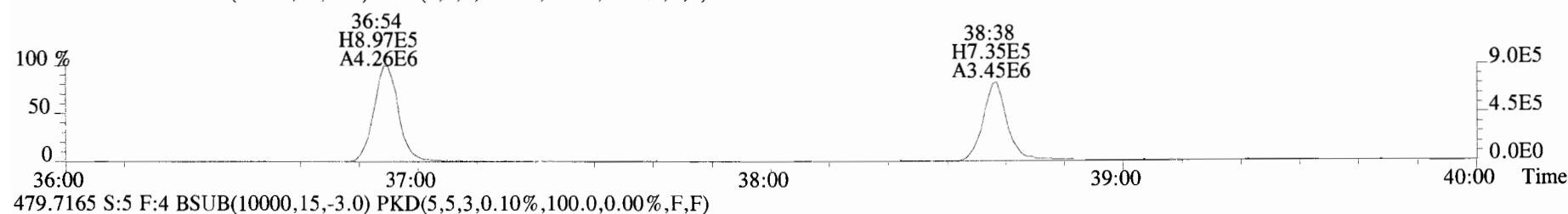
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



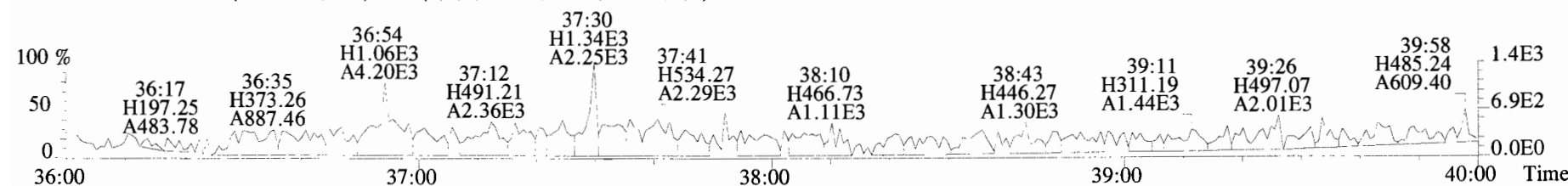
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



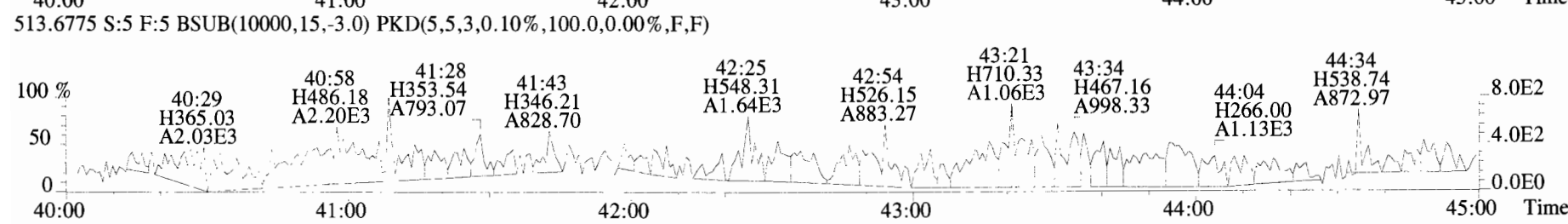
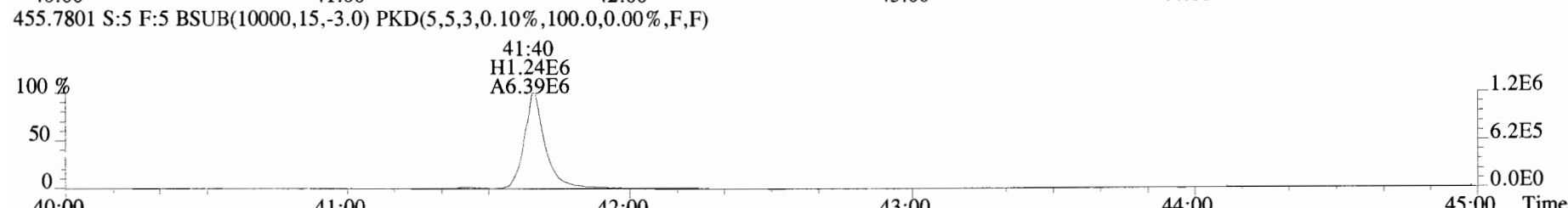
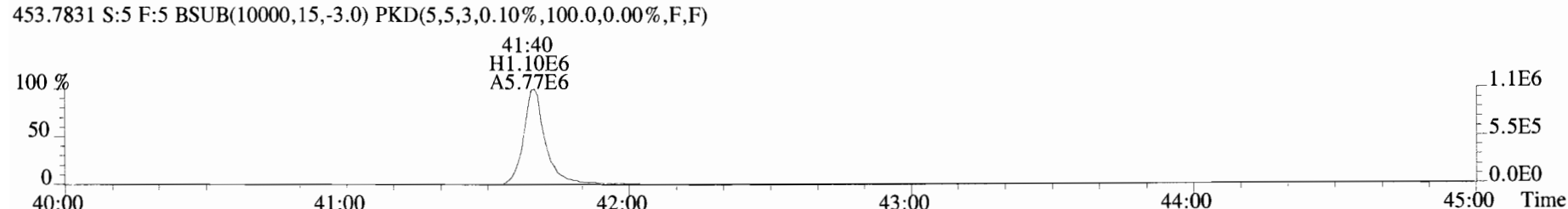
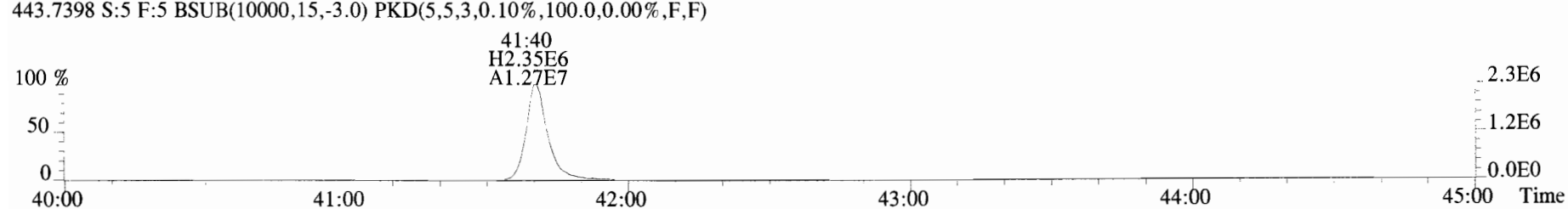
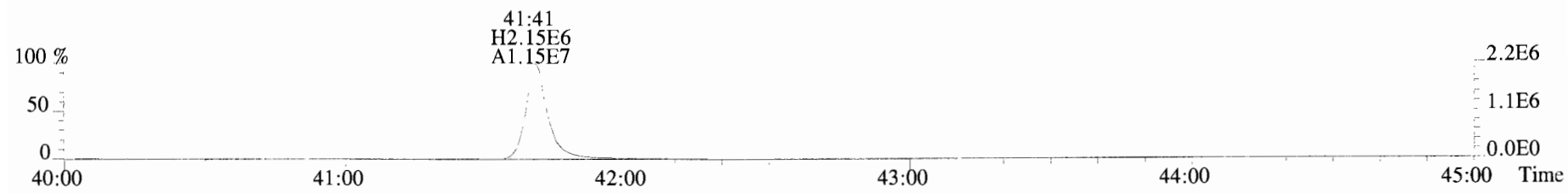
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



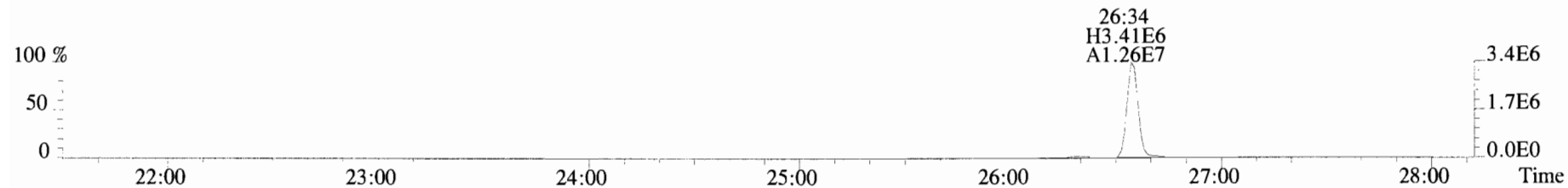
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



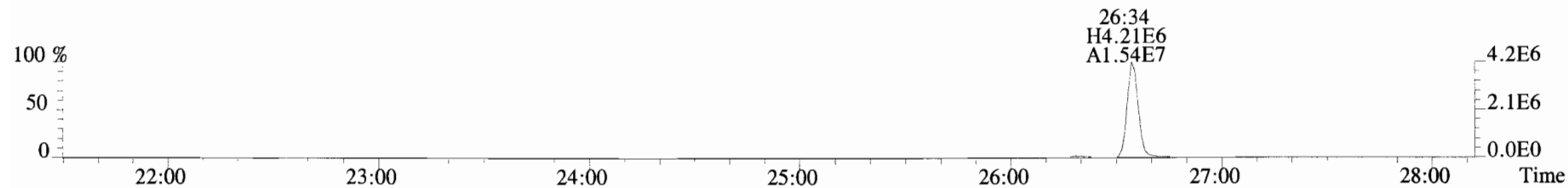
File:191009D1 #1-431 Acq: 9-OCT-2019 19:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-5 1613 CS4 19C2205 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



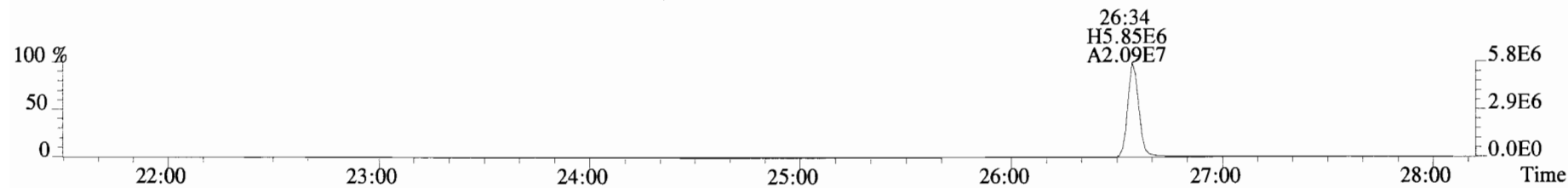
File:191009D1 #1-513 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



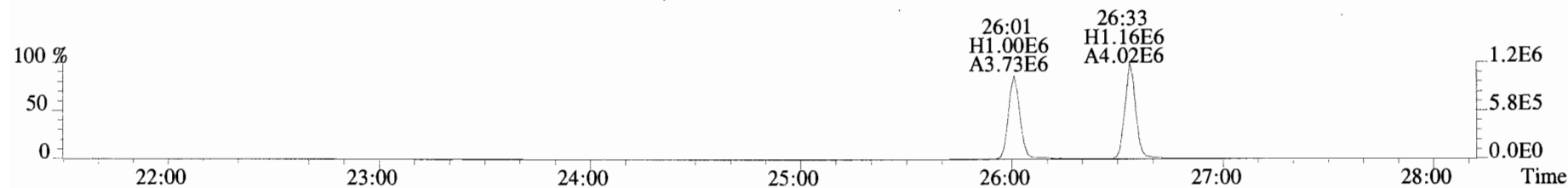
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



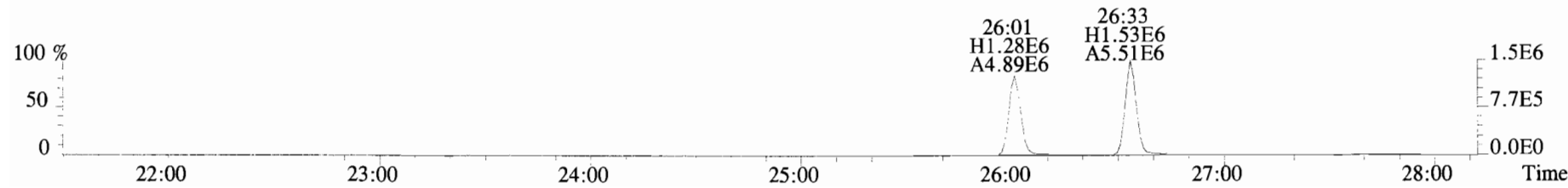
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



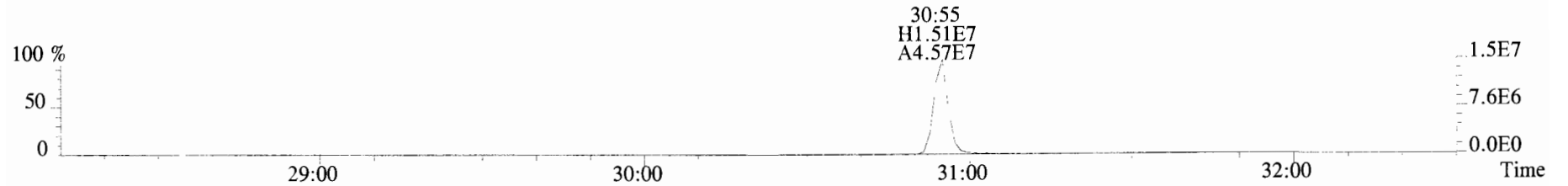
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



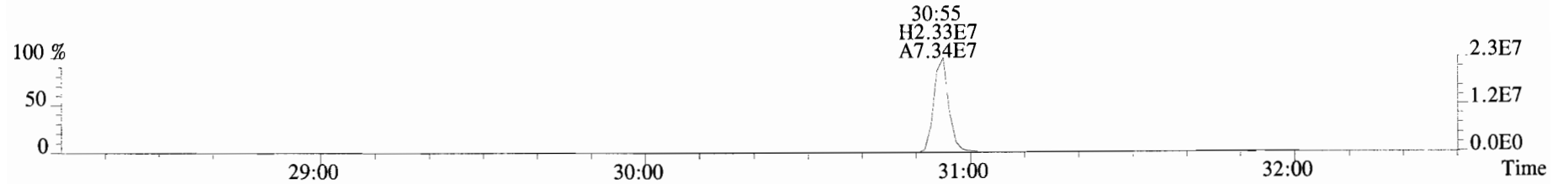
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



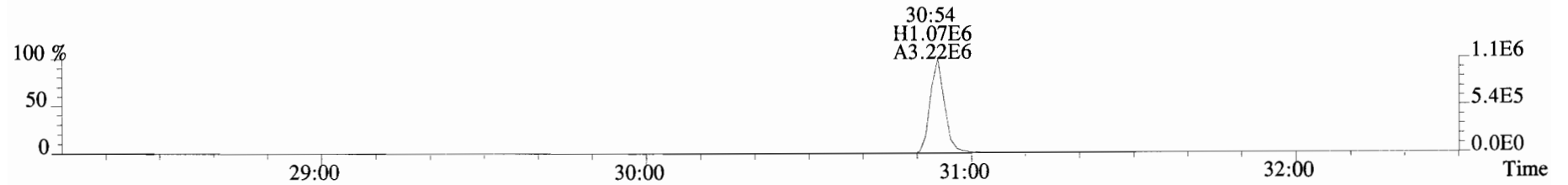
File:191009D1 #1-211 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



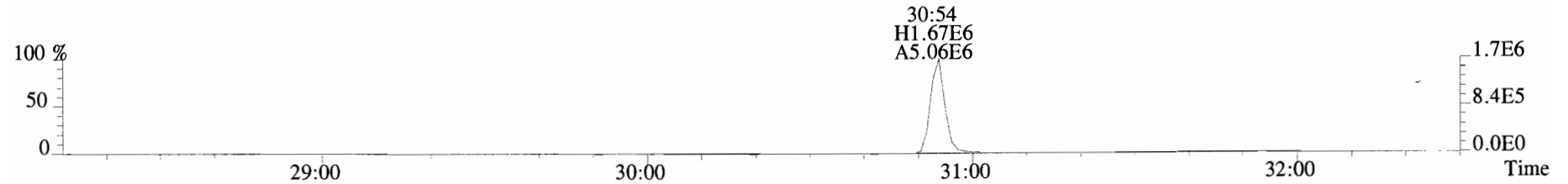
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



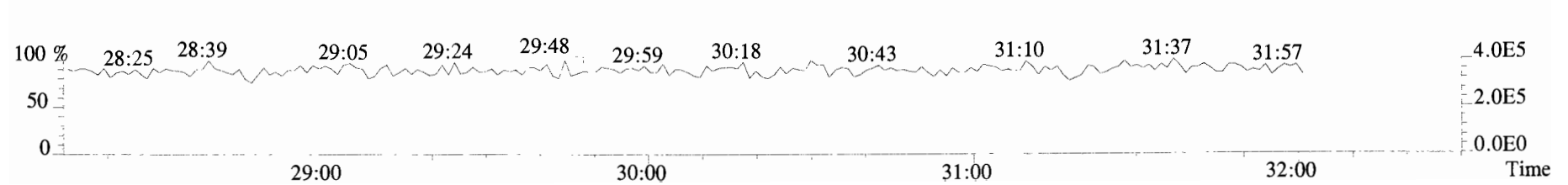
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



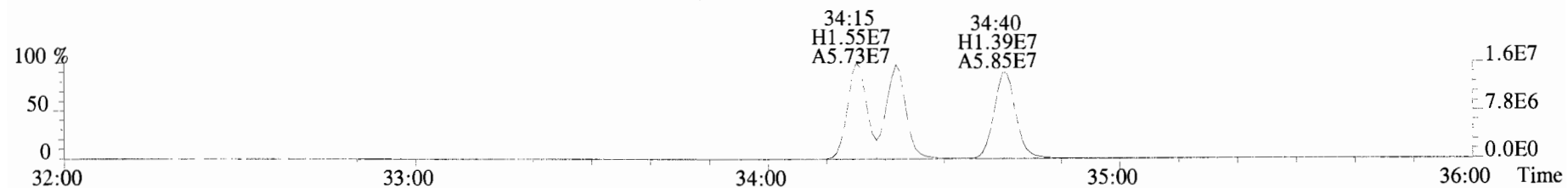
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



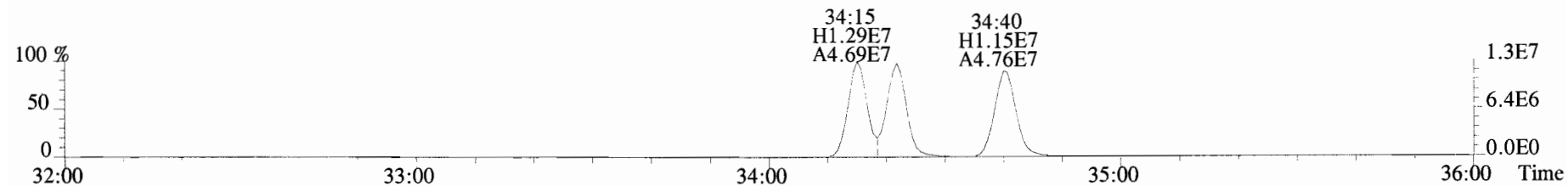
366.9792 S:6 F:2



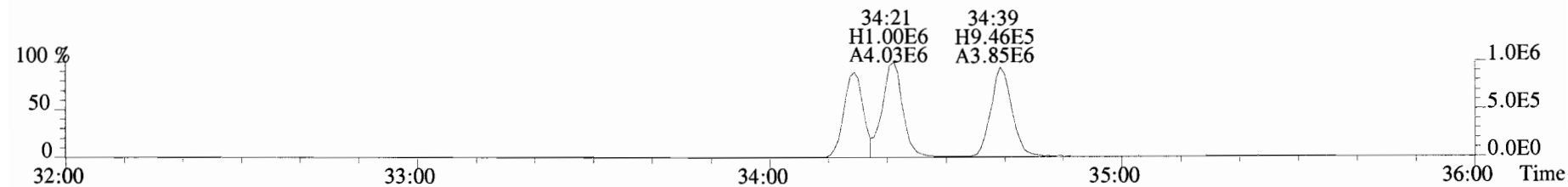
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



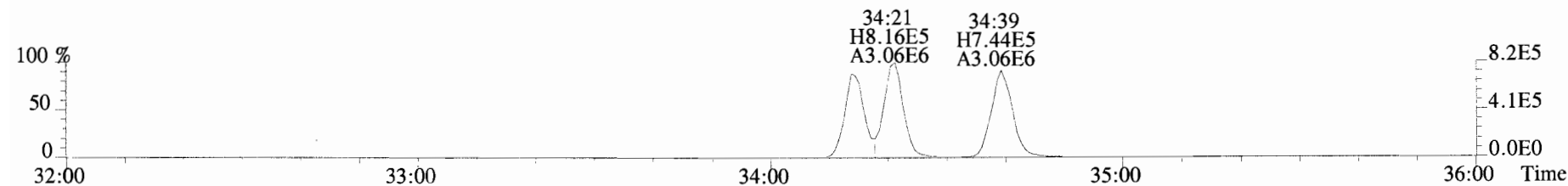
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



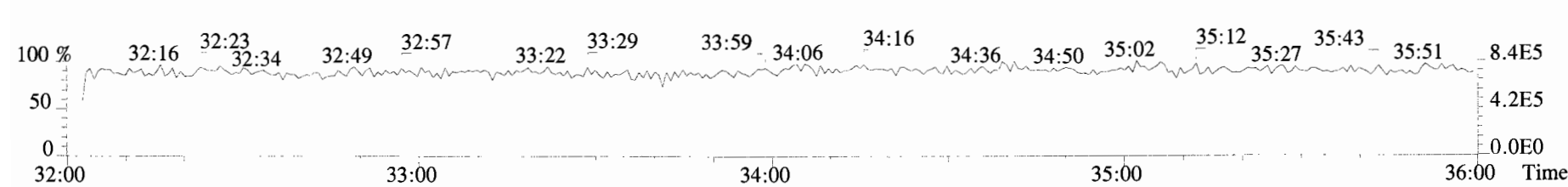
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



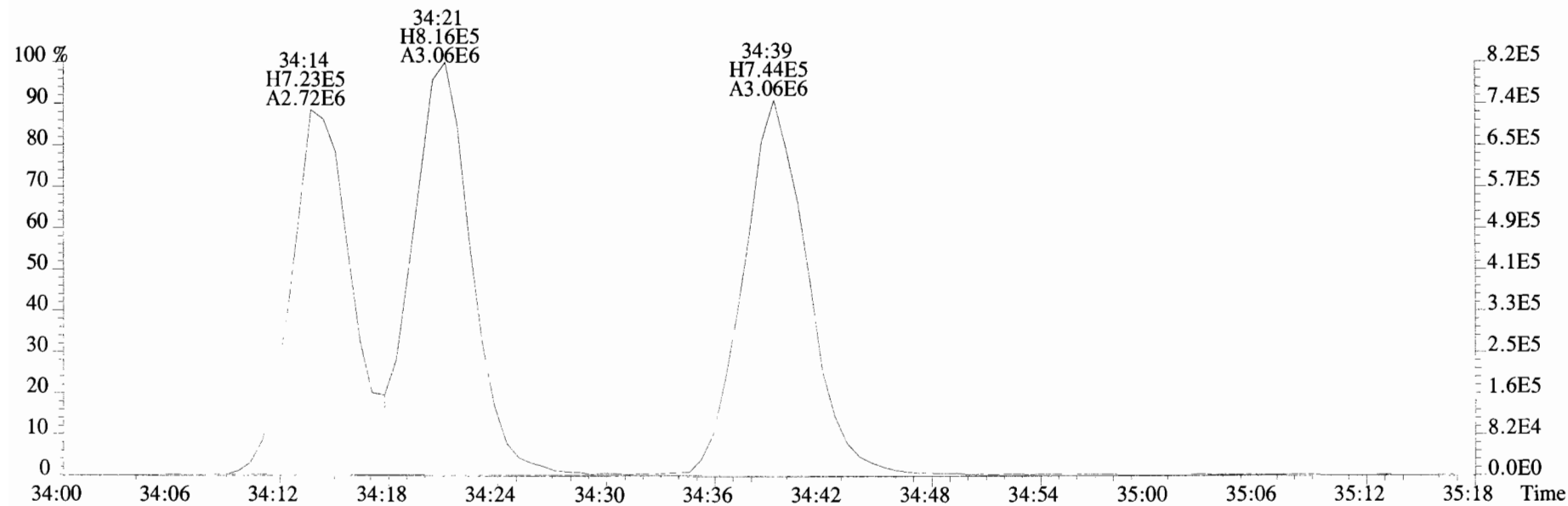
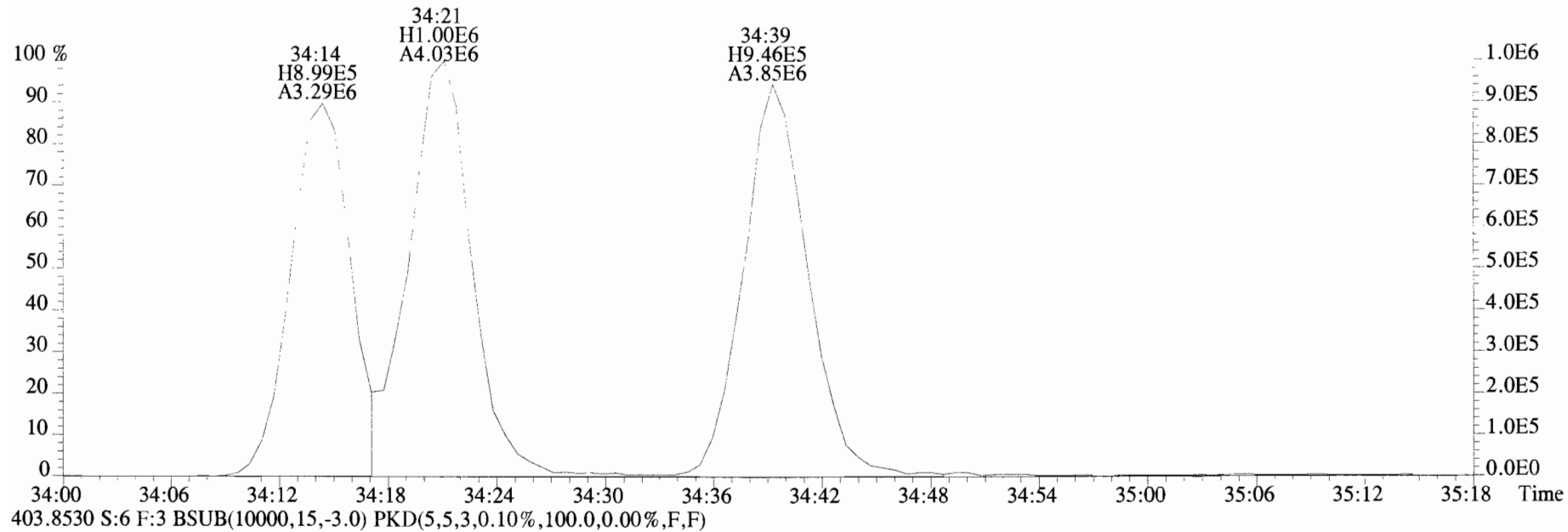
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



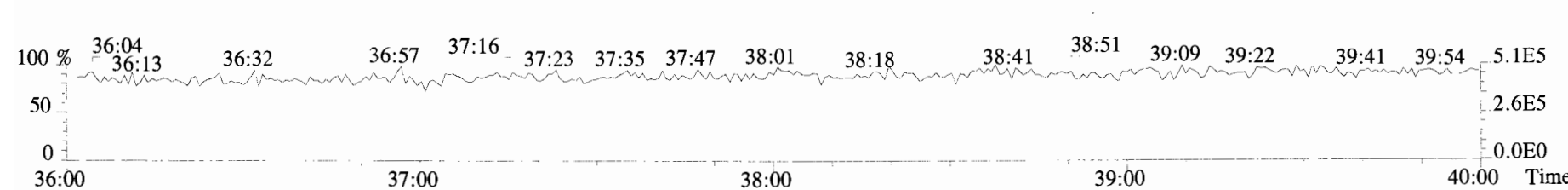
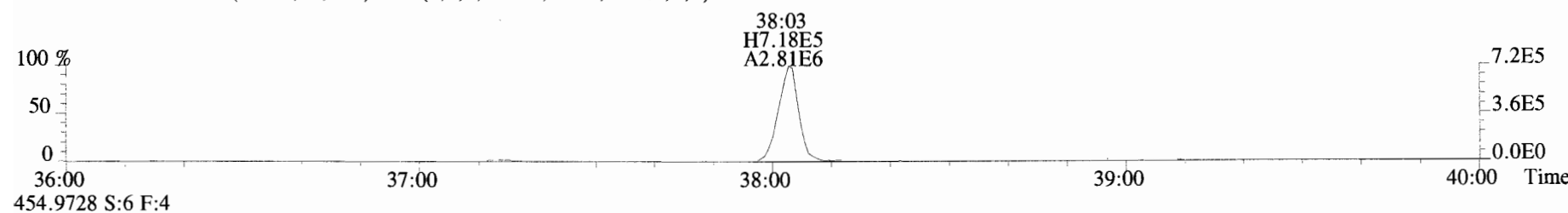
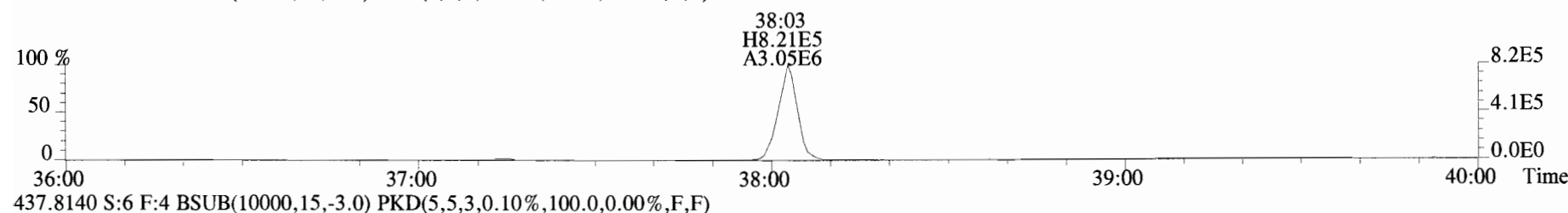
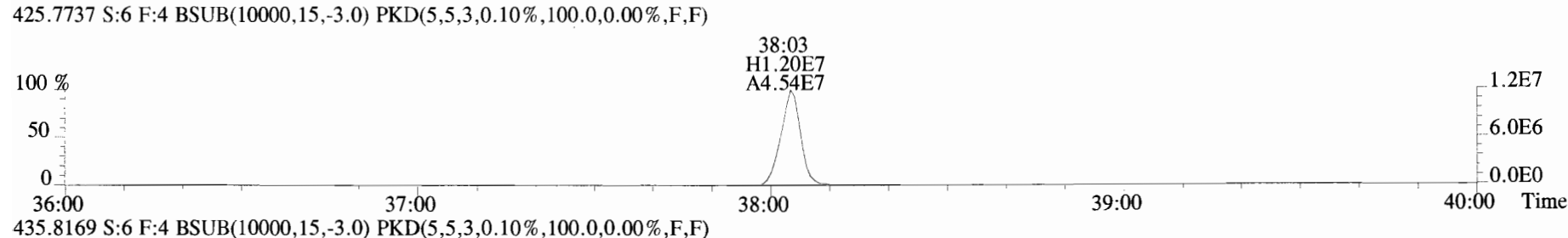
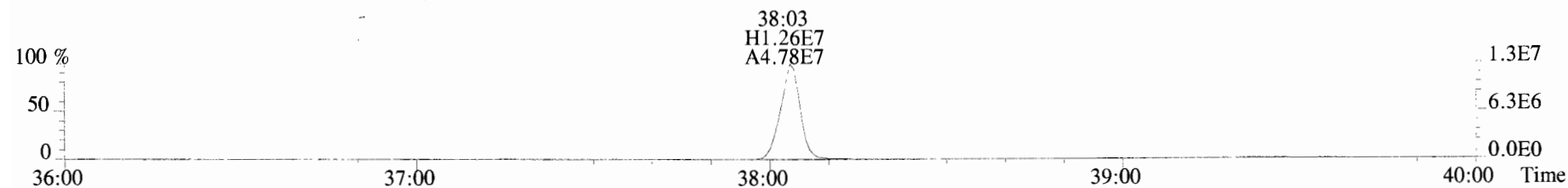
392.9760 S:6 F:3



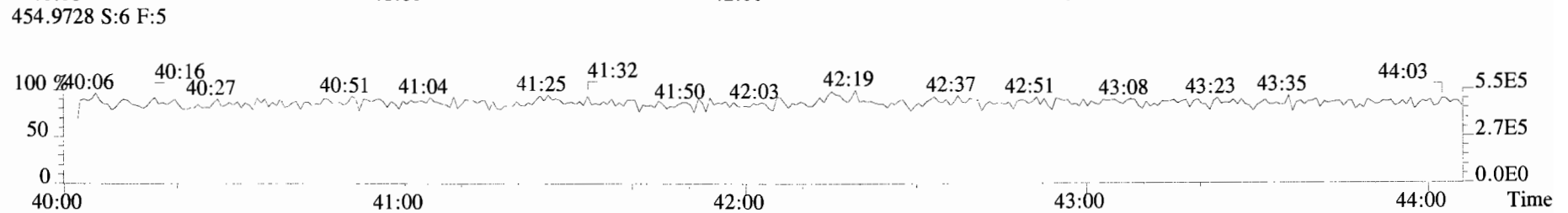
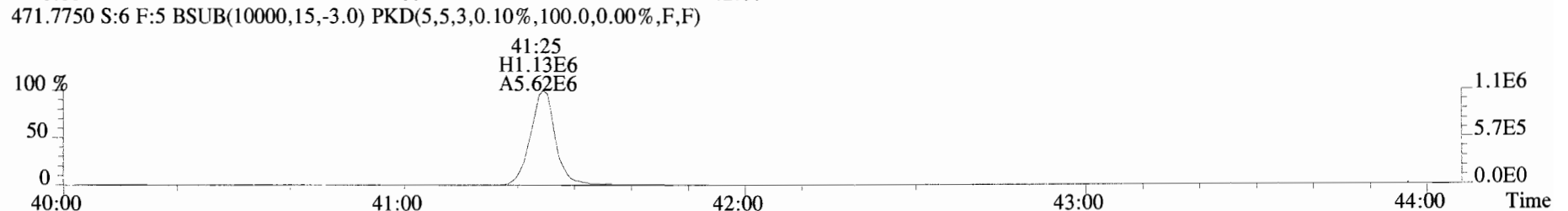
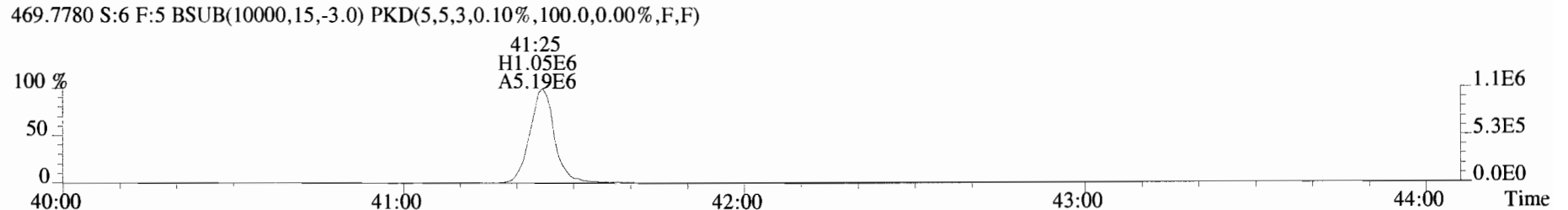
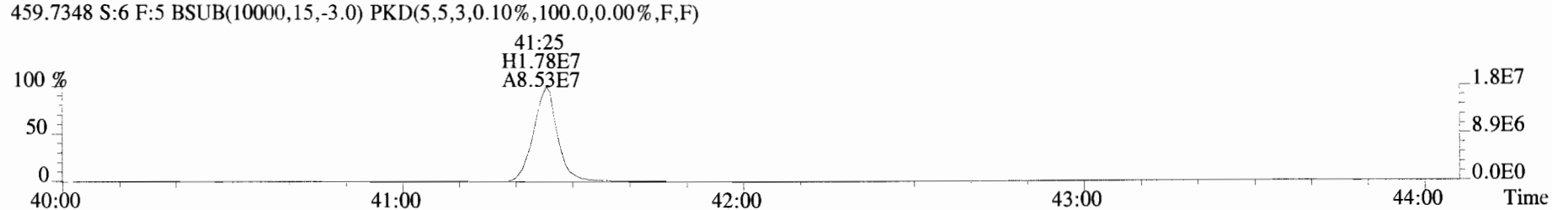
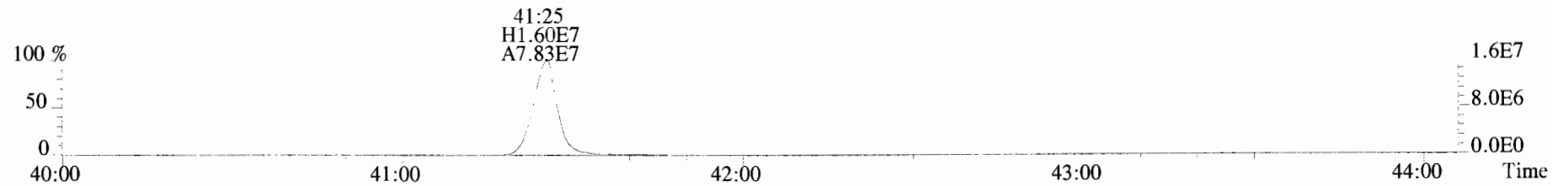
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



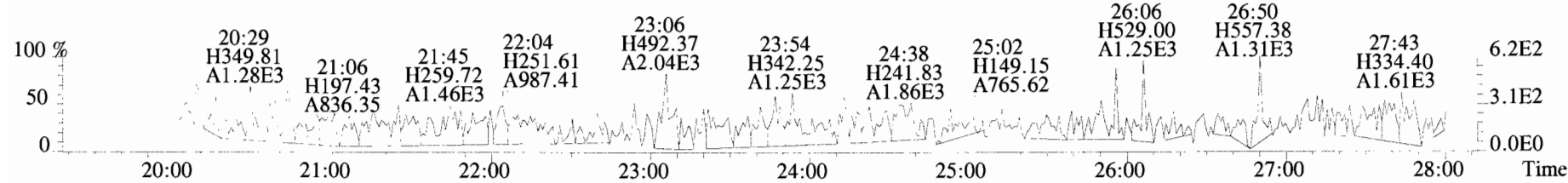
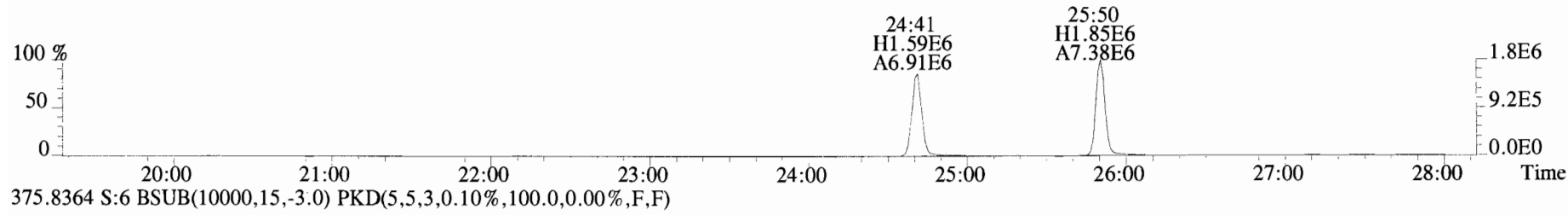
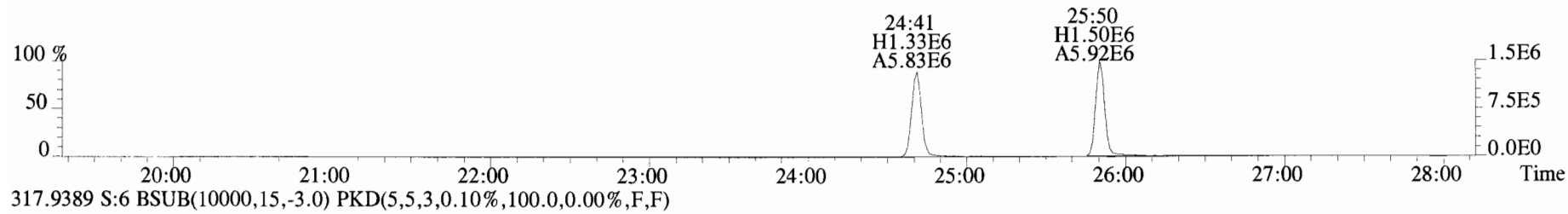
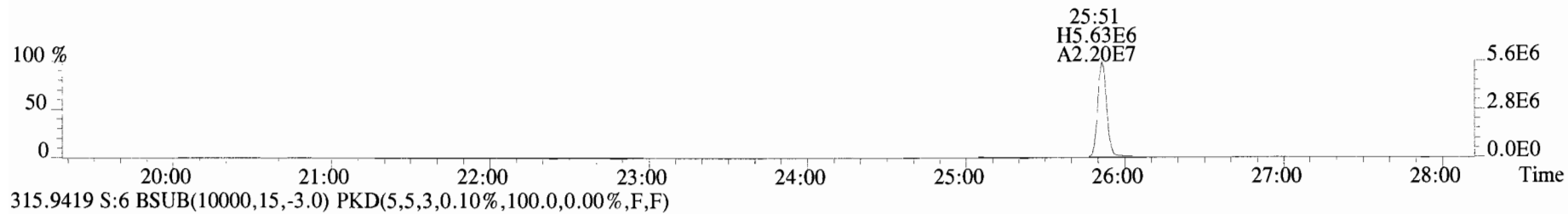
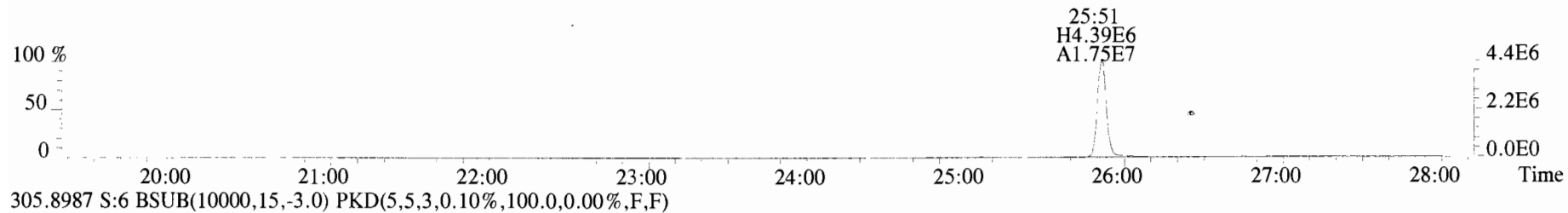
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Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



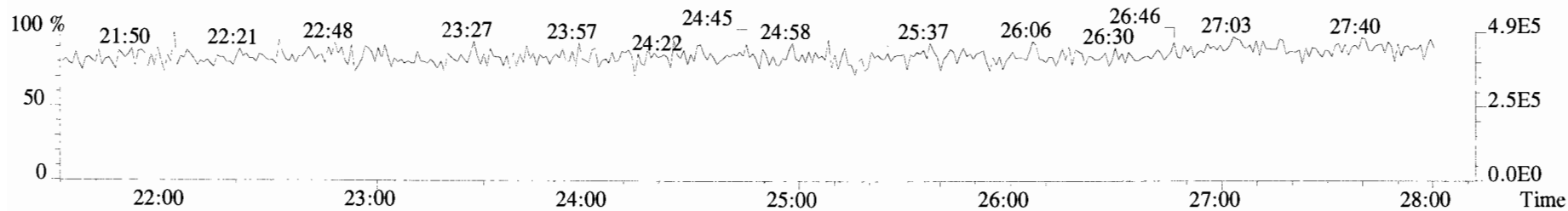
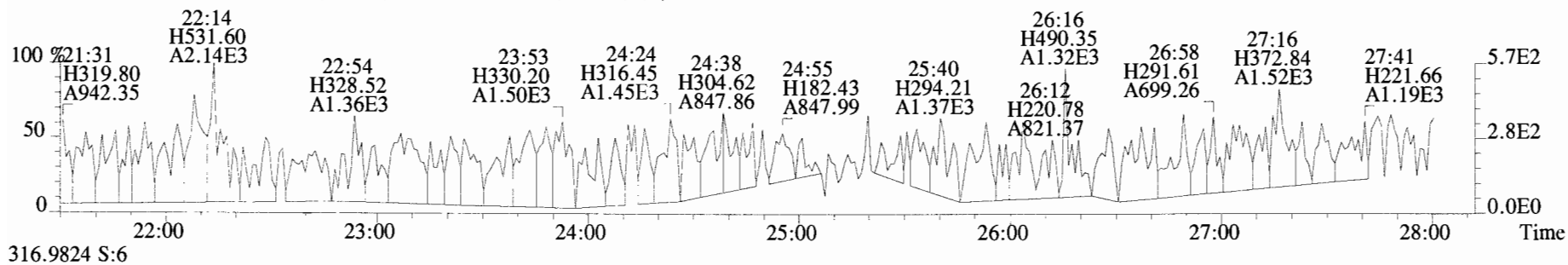
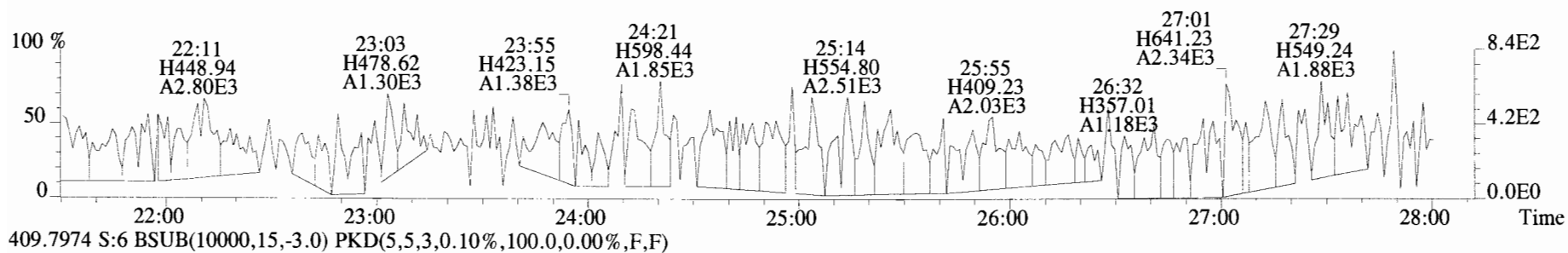
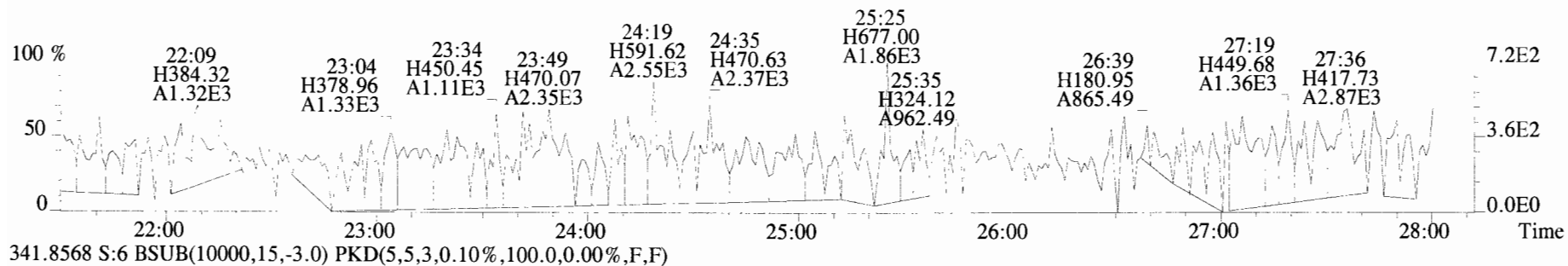
File:191009D1 #1-431 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



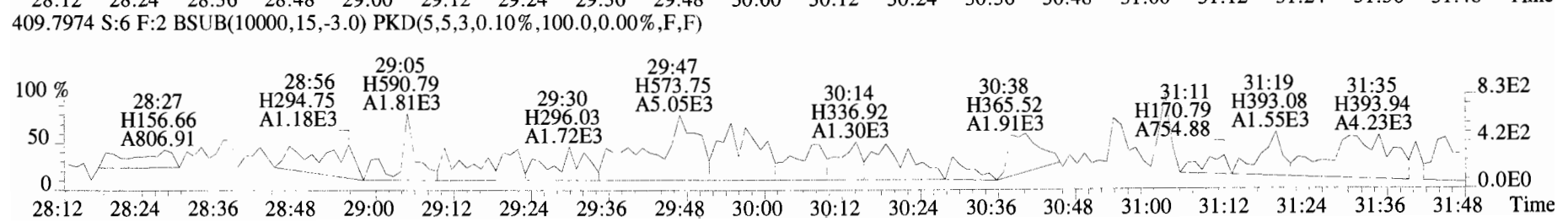
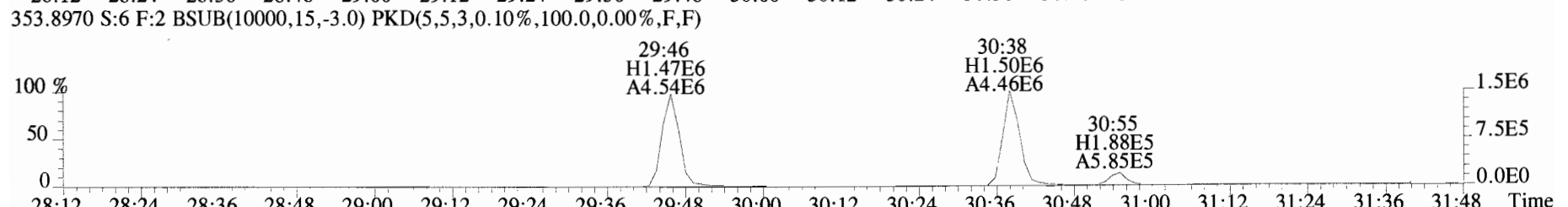
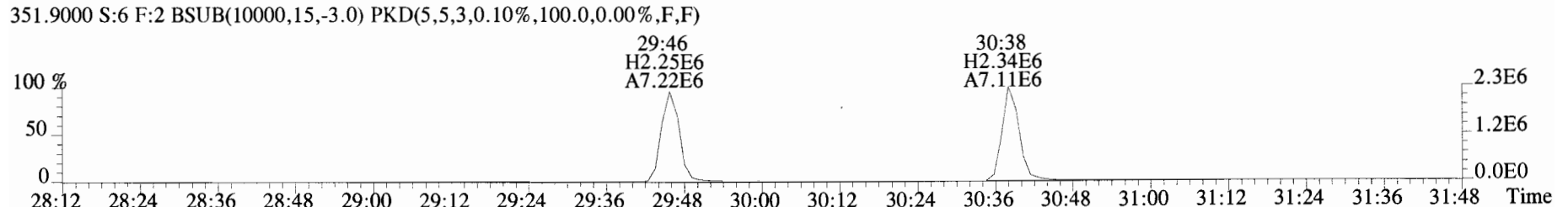
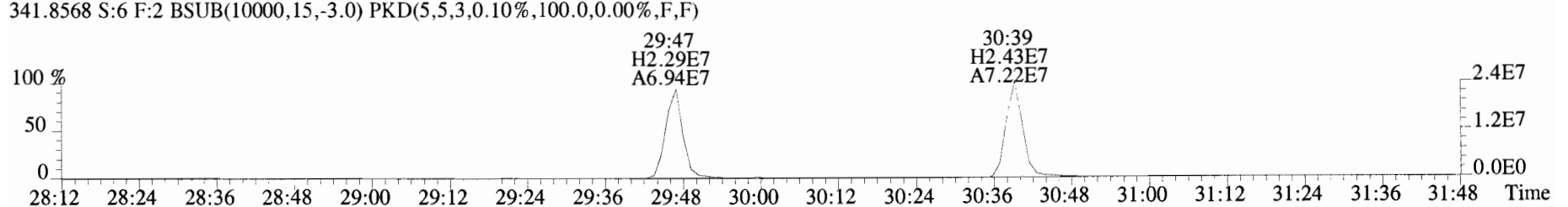
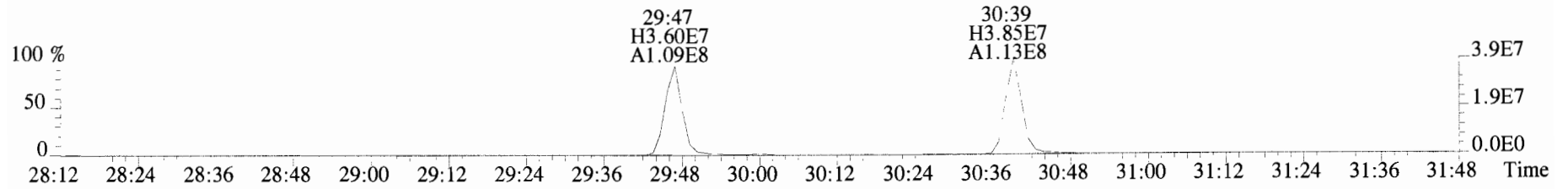
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Sample#6 File Text:Vista_Analytical_Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



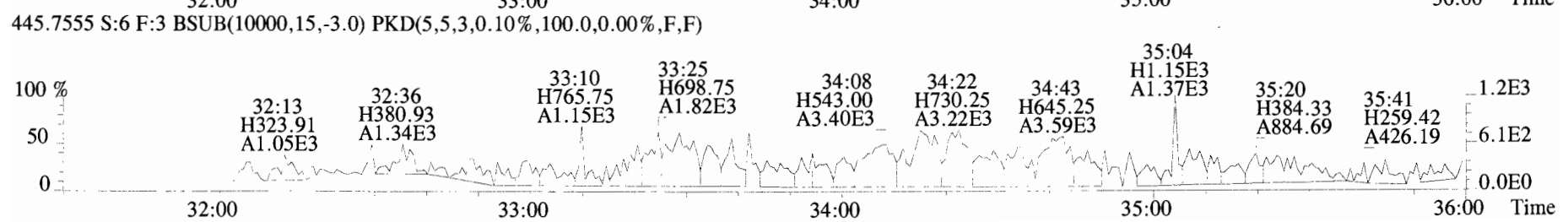
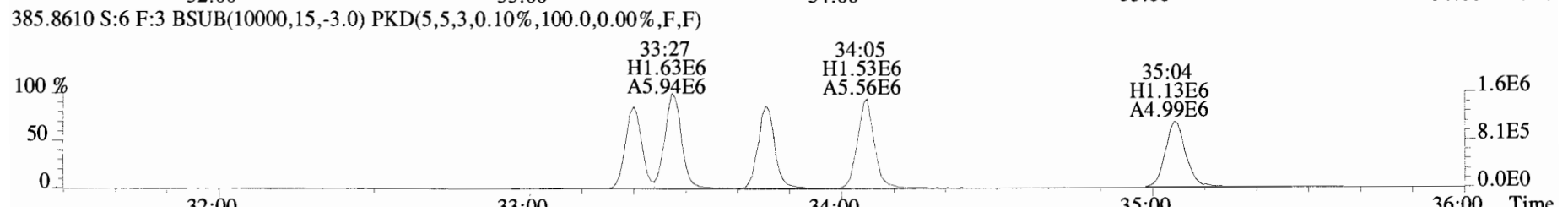
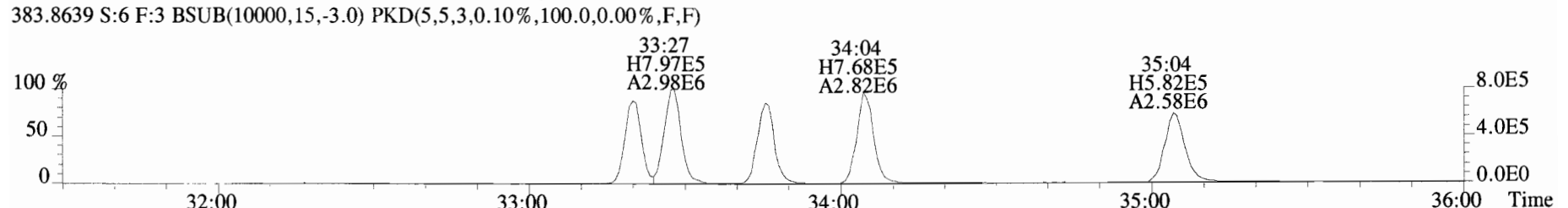
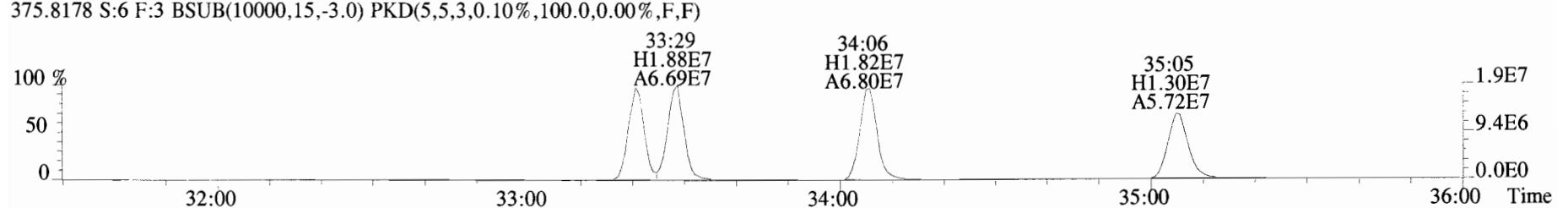
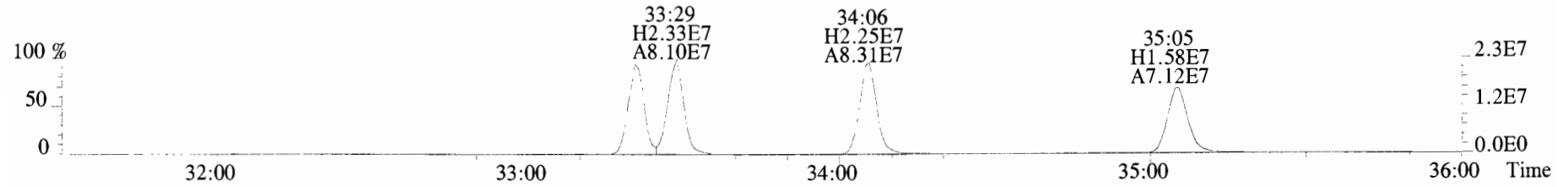
File:191009D1 #1-513 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
 339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



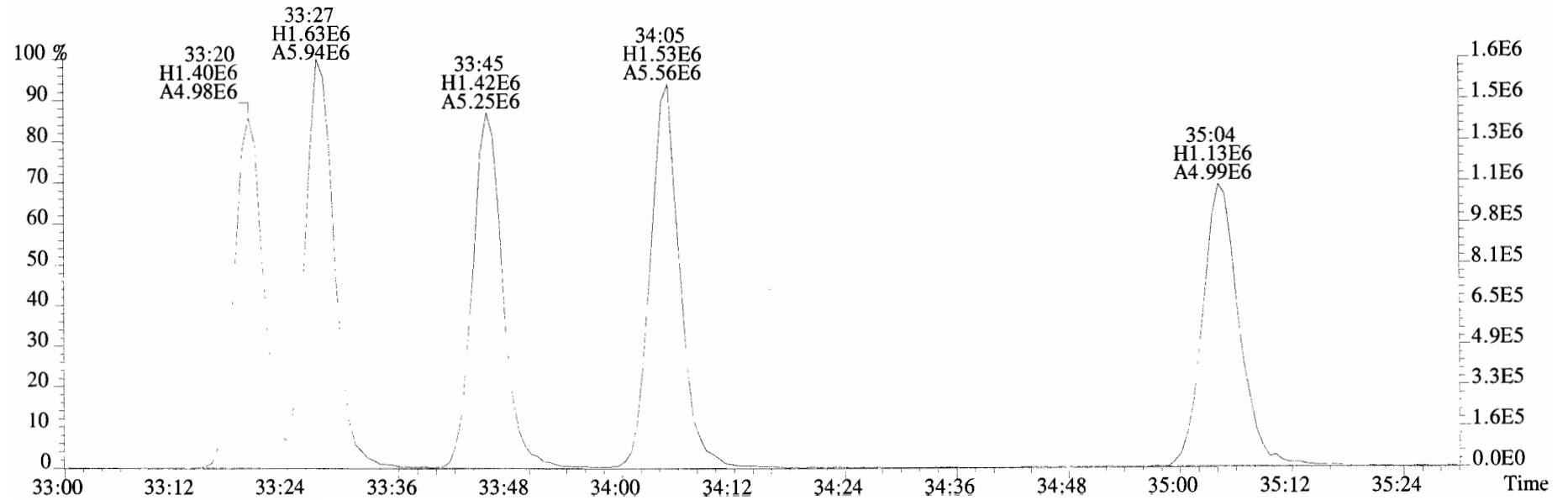
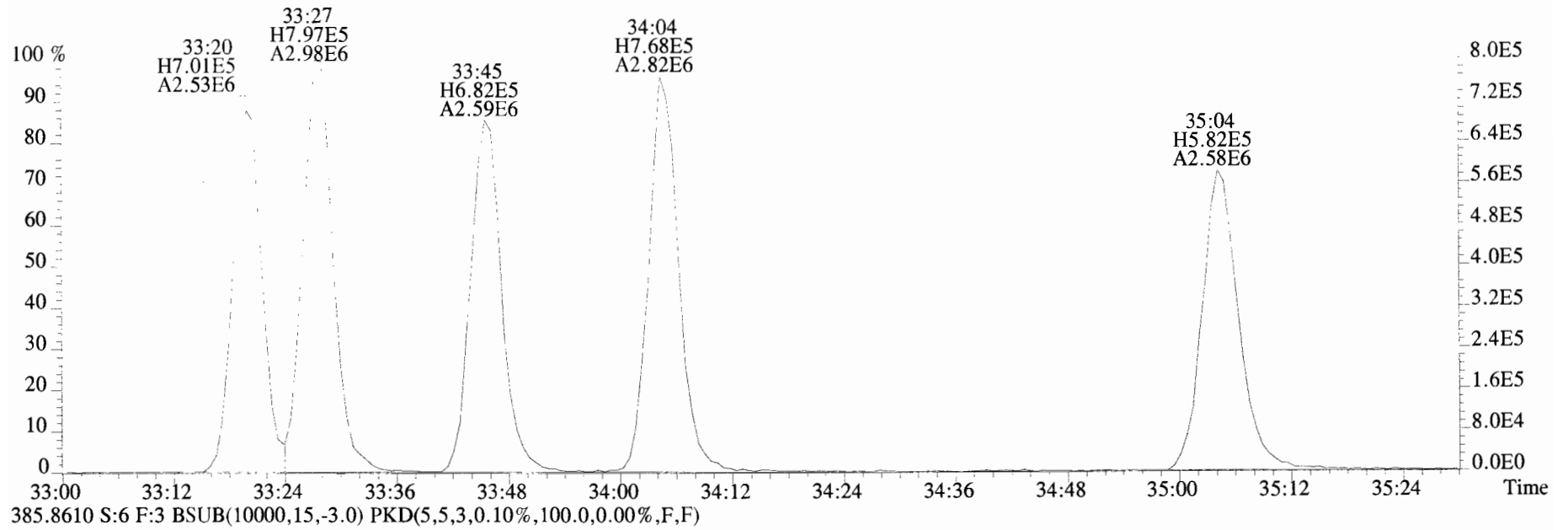
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Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



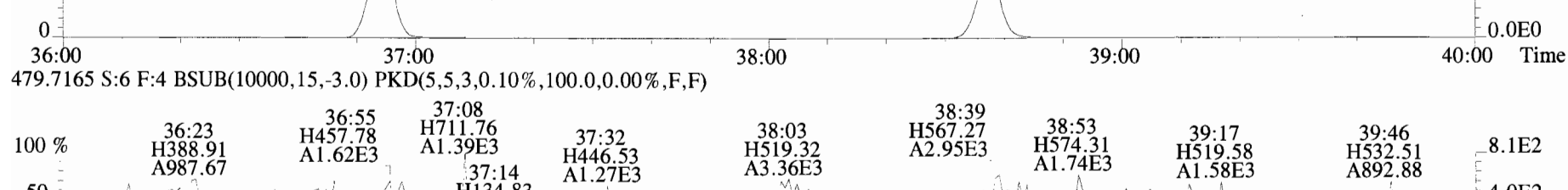
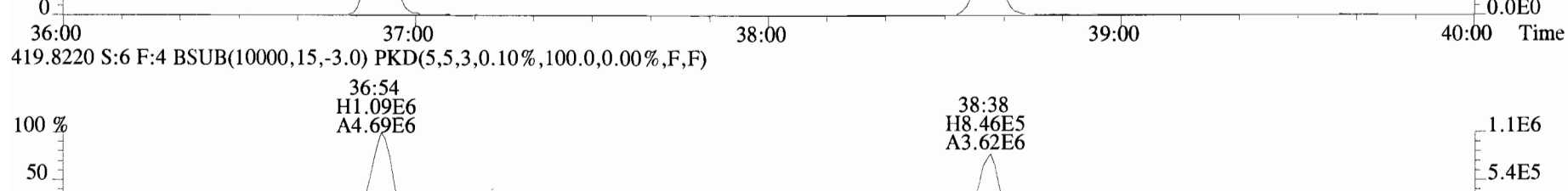
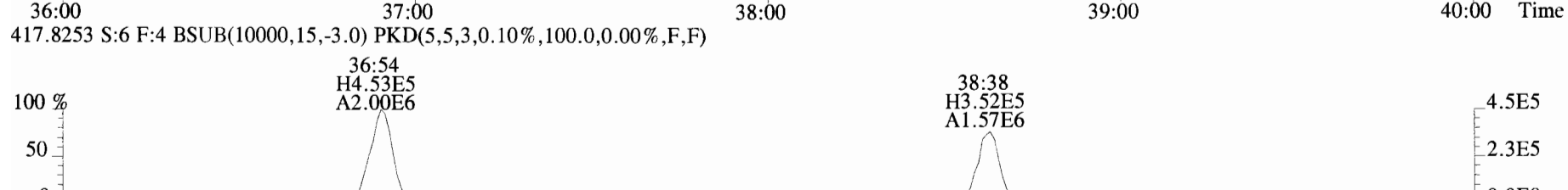
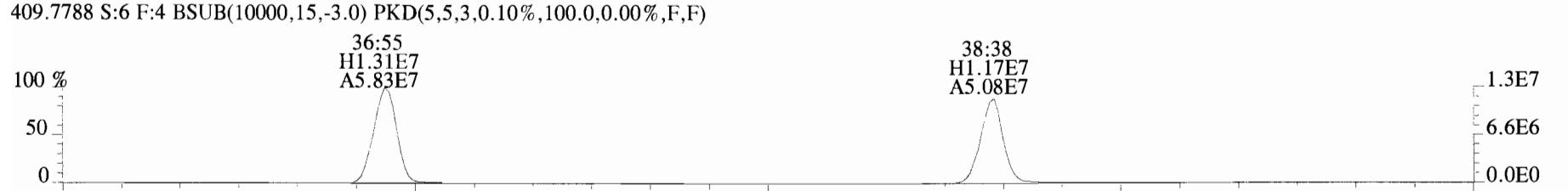
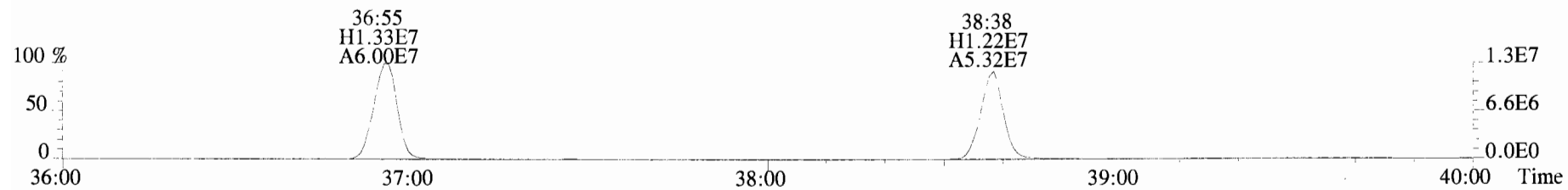
File:191009D1 #1-354 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



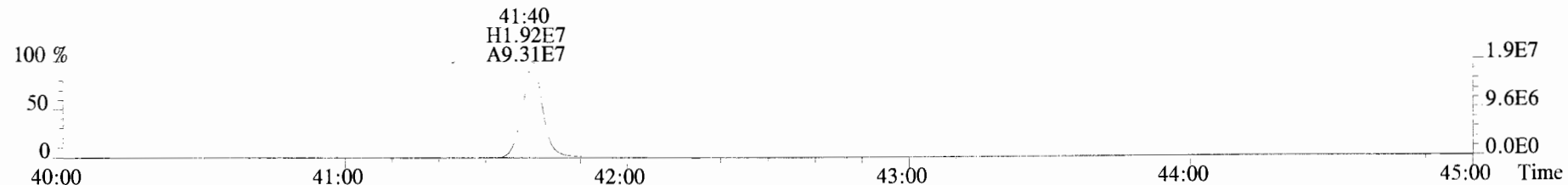
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Sample#6 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



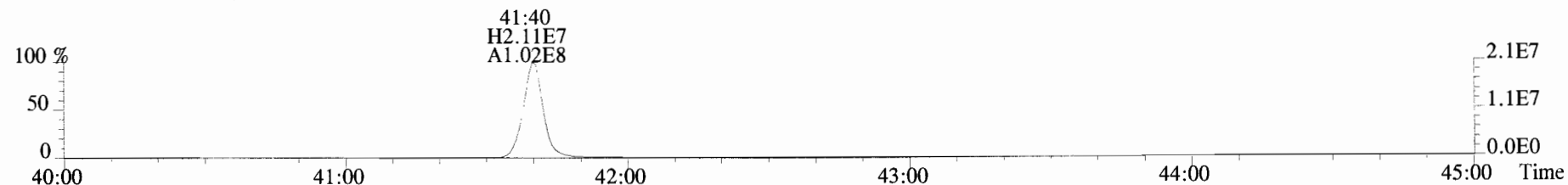
File:191009D1 #1-356 Acq: 9-OCT-2019 20:11:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
 407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



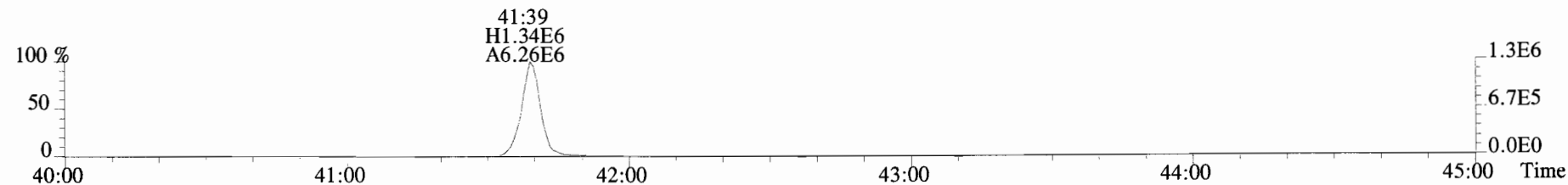
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 Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST191009D1-6 1613 CS5 19C2206 Exp:OCDD_DB5
 441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



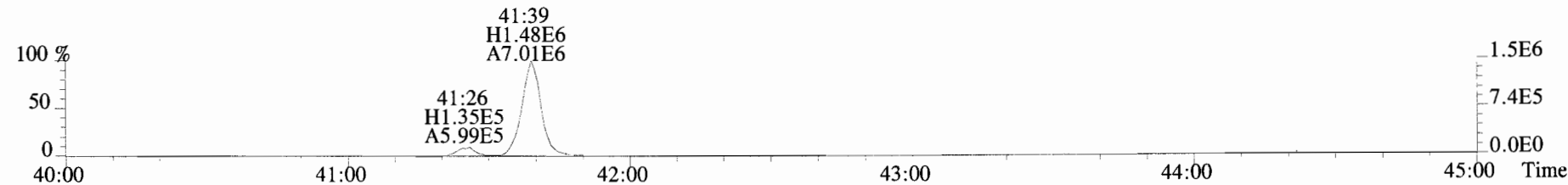
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



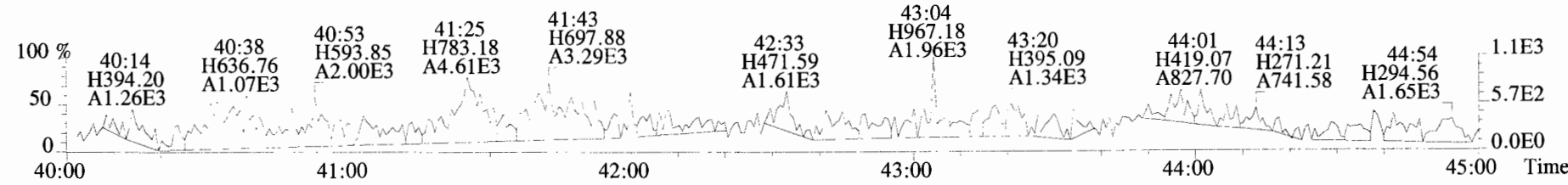
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

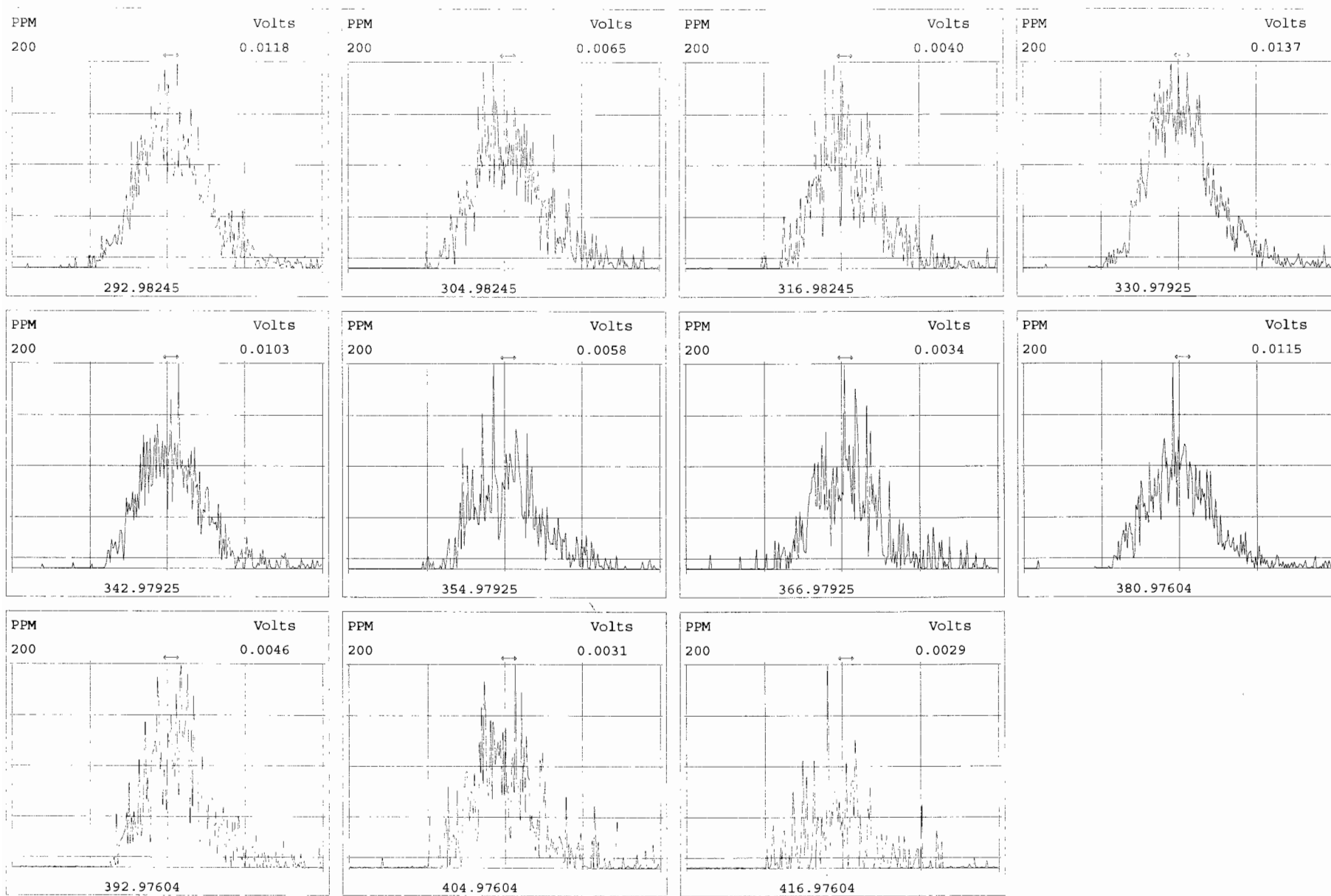


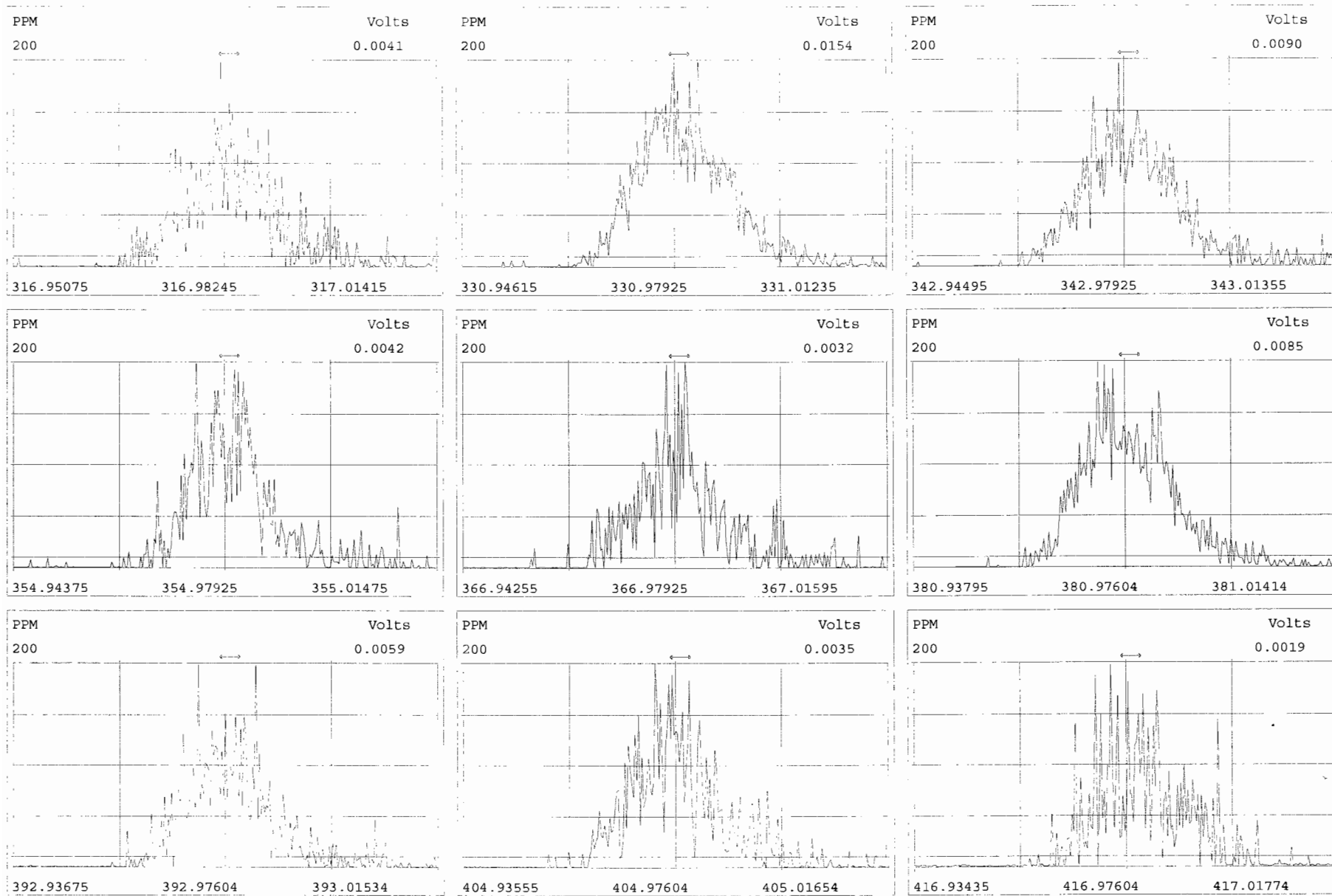
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

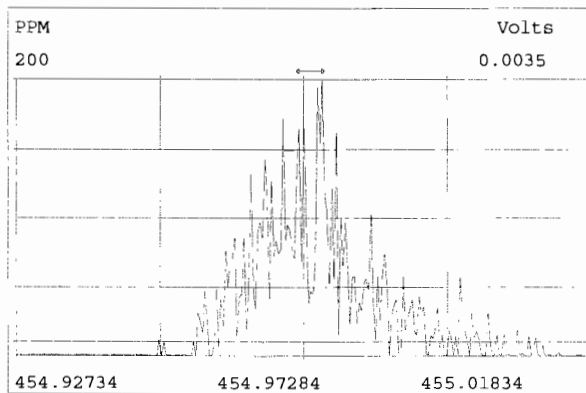
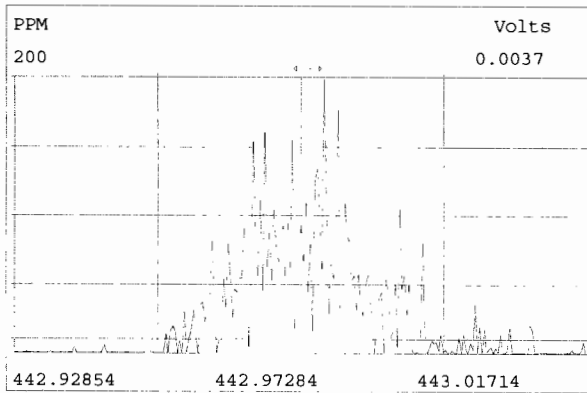
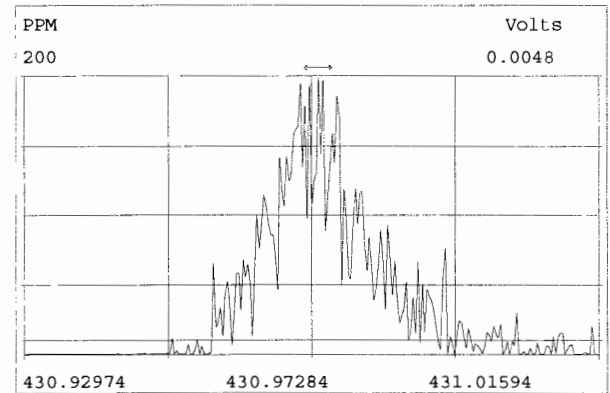
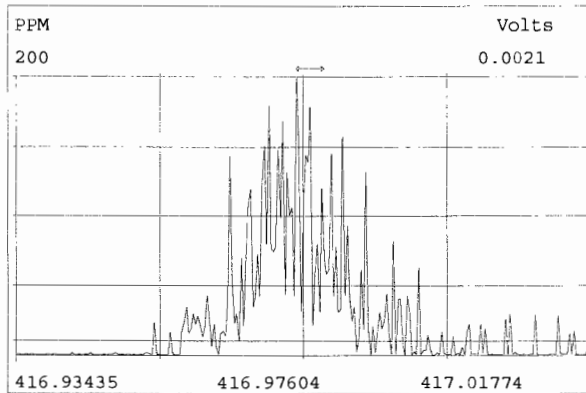
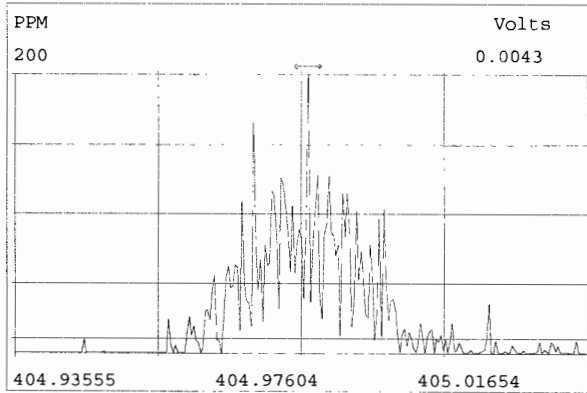
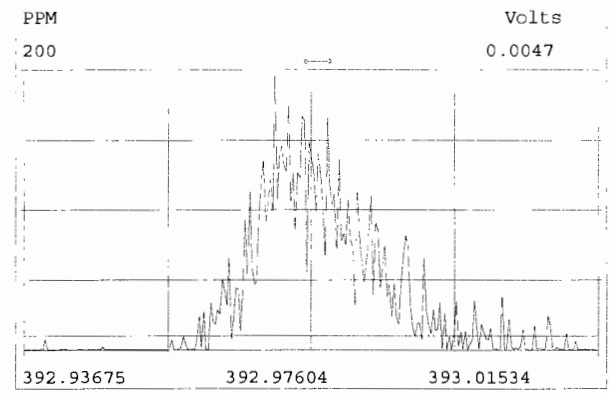
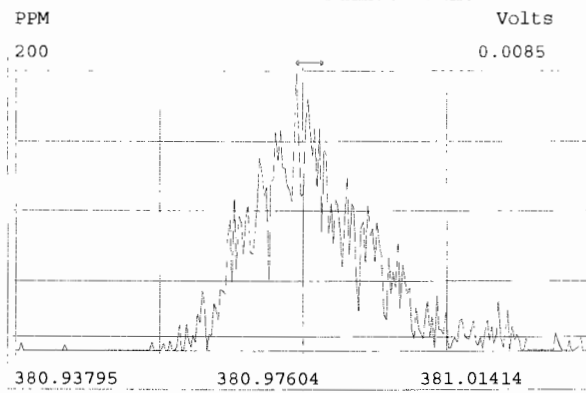
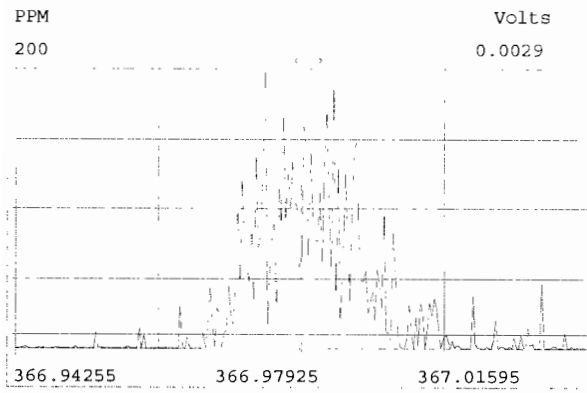


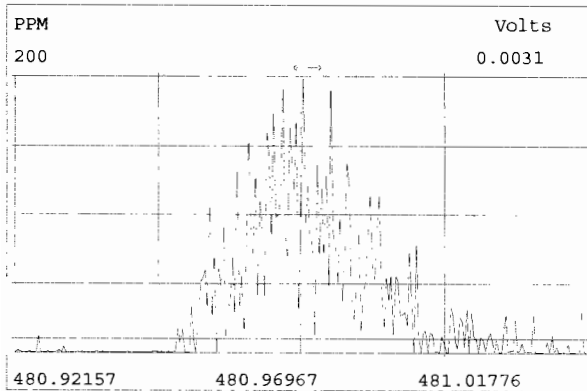
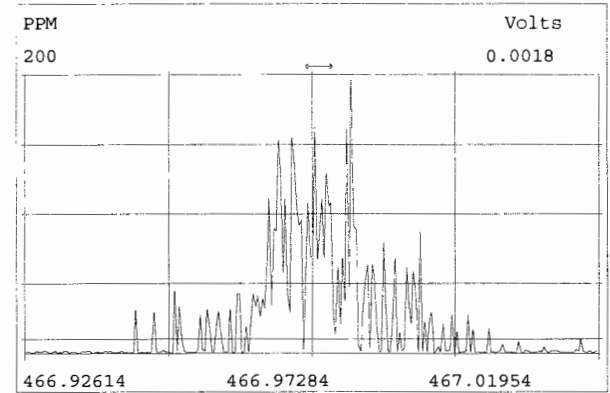
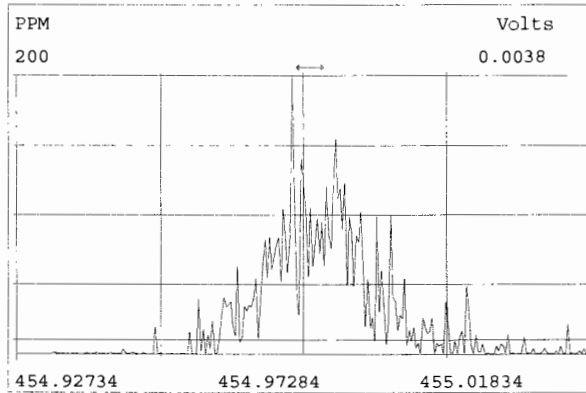
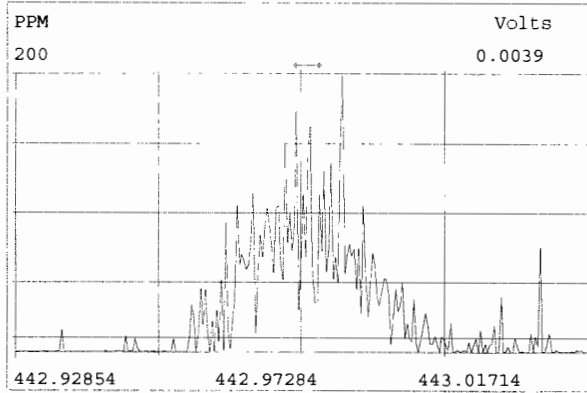
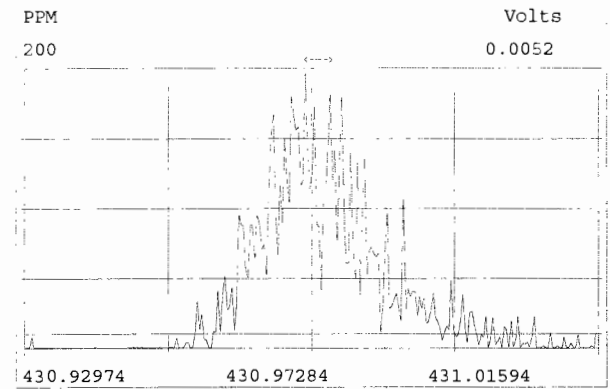
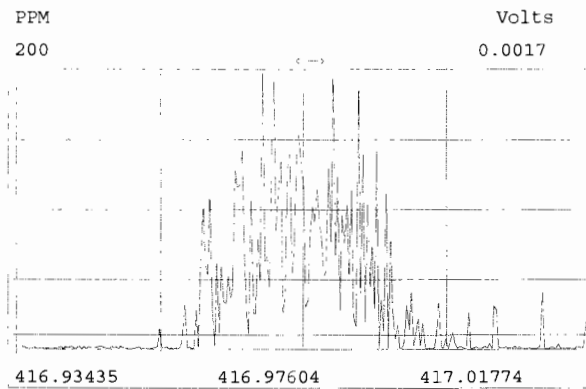
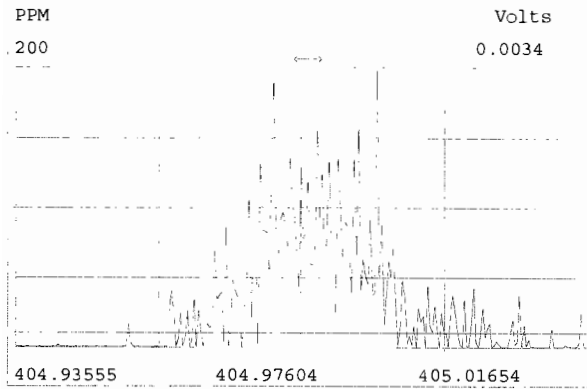
Peak Locate Examination:10-OCT-2019:06:40 File:RES_CHECK

Experiment:OCDD_DB5 Function:1 Reference:PFK

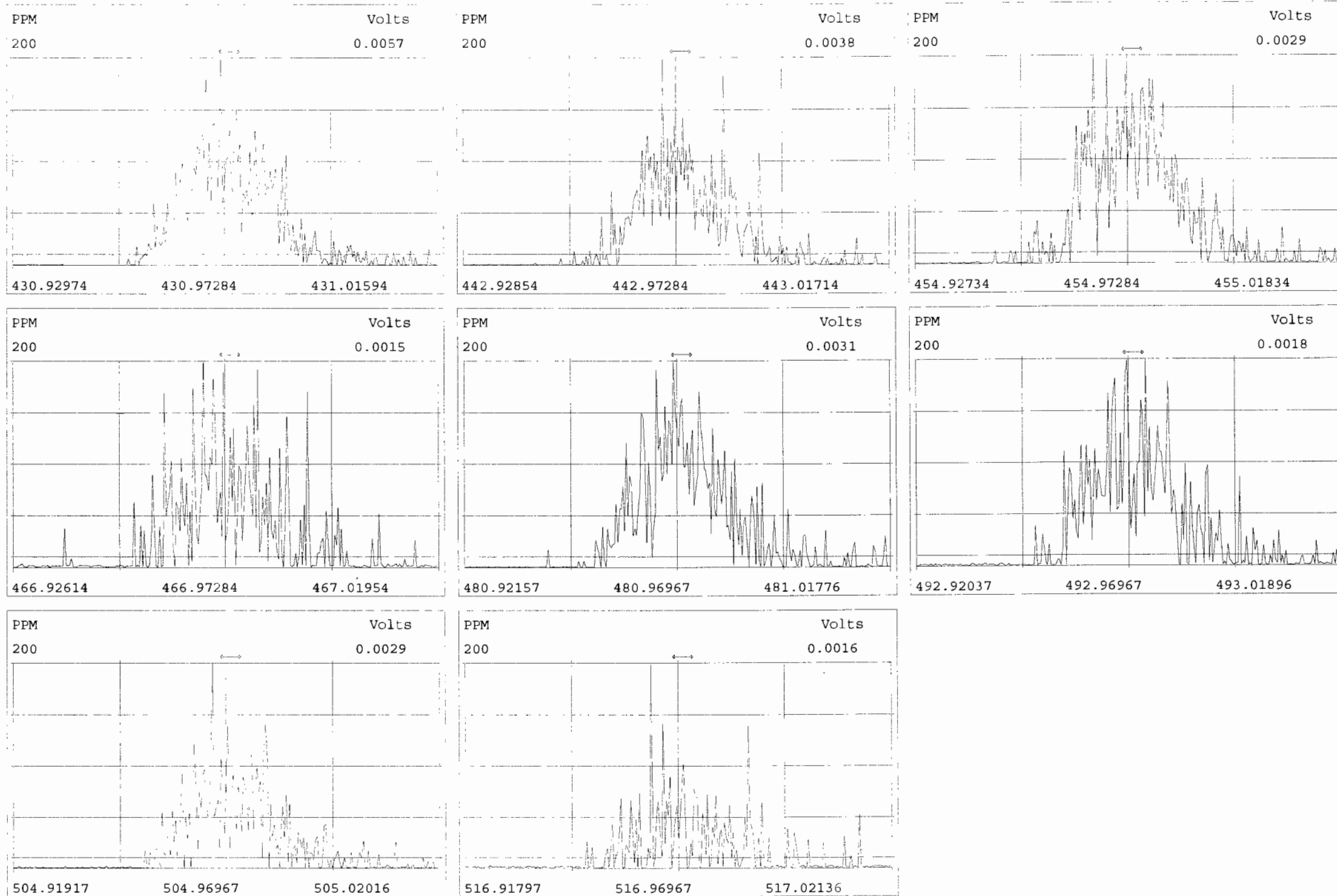








Experiment:OCDD_DB5 Function:5 Reference:PFK



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

NATIVE ANALYTES	M/Z'S	ION	QC	Pass	CONC.	CONC.
	FORMING	ABUND.	LIMITS		FOUND	RANGE (3)
	RATIO (1)	RATIO	(2)		FOUND	(ng/mL)
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

LABELLED 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	RRT	RRT
	REFERENCE		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	RRT	RRT
	REFERENCE		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
Lab ID: SS191009D1-1

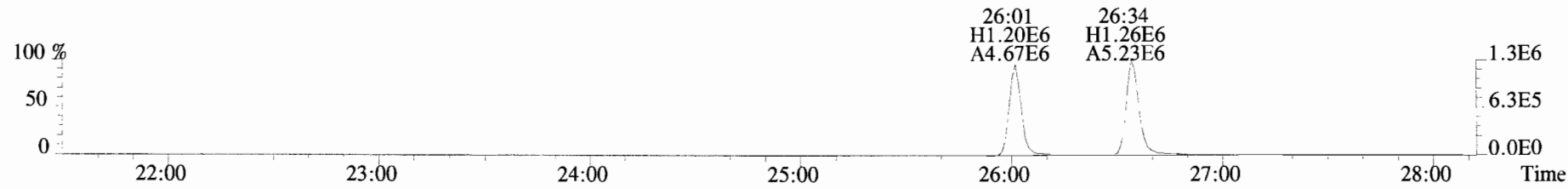
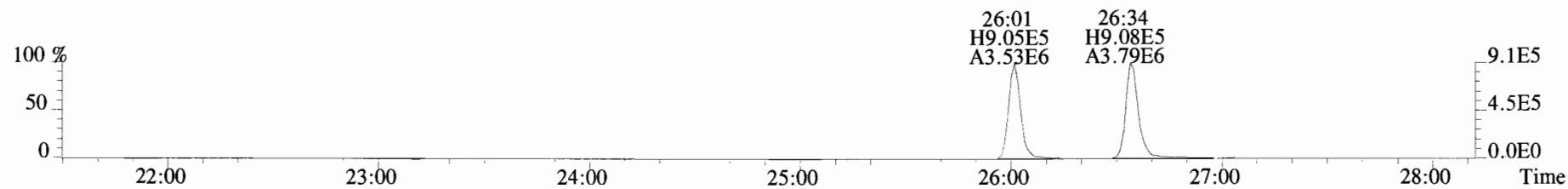
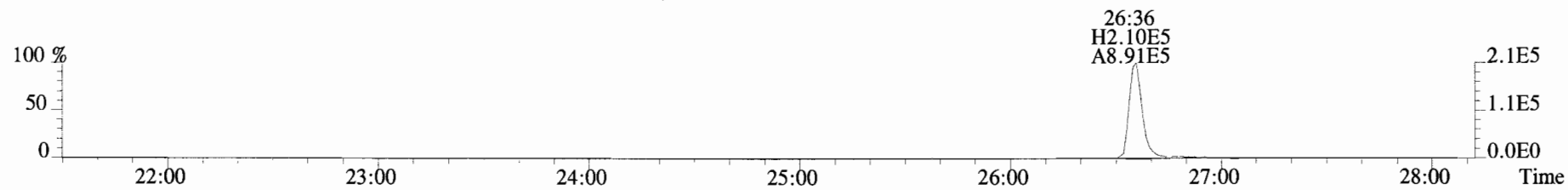
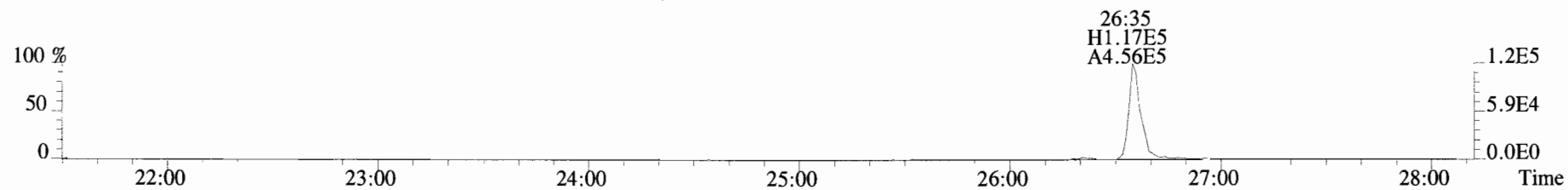
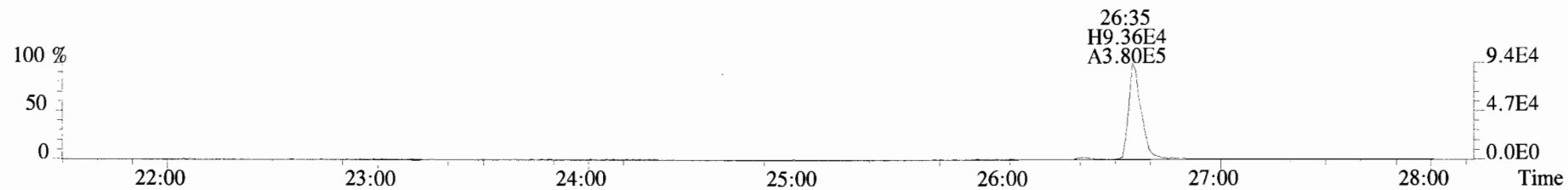
Filename: 191009D1 S:8 Acq: 9-OCT-19 21:46:34
GC Column ID: ZB-5MS ICal: 1613VG7-10-9-19 wt/vol: 1.000

ConCal: ST191009D1-4
EndCAL: NA

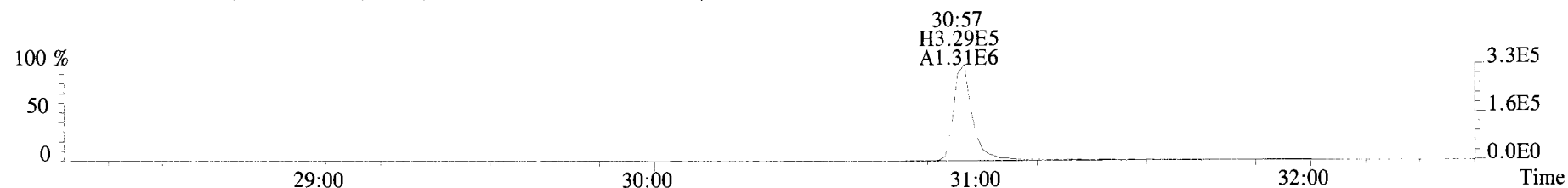
Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	8.36e+05	0.83 y	0.91	26:36	10.234		* 2.5		*	Total Tetra-Dioxins	10.4	11.4		*	*
1,2,3,7,8-PeCDD	3.38e+06	0.63 y	0.90	30:57	51.323		* 2.5		*	Total Penta-Dioxins	51.4	51.7		*	*
1,2,3,4,7,8-HxCDD	2.55e+06	1.31 y	1.10	34:18	48.909		* 2.5		*	Total Hexa-Dioxins	153	153		*	*
1,2,3,6,7,8-HxCDD	3.09e+06	1.18 y	0.94	34:24	52.378		* 2.5		*	Total Hepta-Dioxins	53.5	54.4		*	*
1,2,3,7,8,9-HxCDD	2.83e+06	1.17 y	0.96	34:44	50.434		* 2.5		*	Total Tetra-Furans	10.7	11.4		*	*
1,2,3,4,6,7,8-HpCDD	2.34e+06	1.02 y	0.98	38:07	51.915		* 2.5		*	Total Penta-Furans	110.38	111.73		*	*
OCDD	4.27e+06	0.92 y	0.96	41:30	105.37		* 2.5		*	Total Hexa-Furans	205	207		*	*
										Total Hepta-Furans	104	106		*	*
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				Rec	Qual				
IS	13C-1,2,3,7,8-PeCDD	7.29e+06	0.64 y	0.88	30:56	100.87				100					
IS	13C-1,2,3,4,7,8-HxCDD	4.73e+06	1.23 y	0.64	34:16	95.948				101					
IS	13C-1,2,3,6,7,8-HxCDD	6.28e+06	1.25 y	0.86	34:24	95.558				95.9					
IS	13C-1,2,3,7,8,9-HxCDD	5.85e+06	1.26 y	0.81	34:43	94.306				95.6					
IS	13C-1,2,3,4,6,7,8-HpCDD	4.61e+06	1.06 y	0.65	38:06	91.680				94.3					
IS	13C-OCDD	8.45e+06	0.92 y	0.58	41:29	189.68				91.7					
IS	13C-2,3,7,8-TCDF	1.26e+07	0.78 y	1.03	25:52	97.199				94.8					
IS	13C-1,2,3,7,8-PeCDF	1.04e+07	1.62 y	0.85	29:48	97.425				97.2					
IS	13C-2,3,4,7,8-PeCDF	1.03e+07	1.59 y	0.85	30:41	96.649				97.4					
IS	13C-1,2,3,4,7,8-HxCDF	6.55e+06	0.51 y	0.83	33:22	102.43				96.6					
IS	13C-1,2,3,6,7,8-HxCDF	8.06e+06	0.51 y	1.03	33:30	101.42				102					
IS	13C-2,3,4,6,7,8-HxCDF	7.11e+06	0.51 y	0.95	34:08	97.073				101					
IS	13C-1,2,3,7,8,9-HxCDF	6.30e+06	0.51 y	0.83	35:09	98.999				97.1					
IS	13C-1,2,3,4,6,7,8-HpCDF	5.62e+06	0.43 y	0.76	36:57	96.588				99.0					
IS	13C-1,2,3,4,7,8,9-HpCDF	4.58e+06	0.44 y	0.58	38:42	102.46				96.6					
IS	13C-OCDF	1.04e+07	0.88 y	0.69	41:44	196.65				102					
C/Up	37Cl-2,3,7,8-TCDD	8.91e+05		1.20	26:36	9.0817				98.3					
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									

Integrations
by DB
Analyst: DB
Reviewed
by CT
Analyst: CT
Date: 10/10/19
Date: 10/10/19

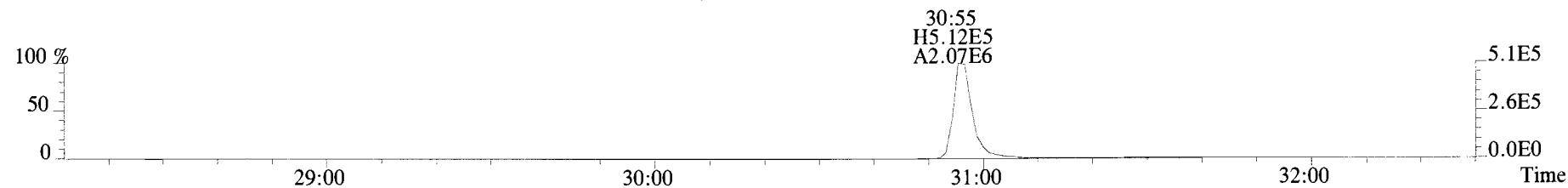
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Sample#8 File Text:Vista Analytical Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



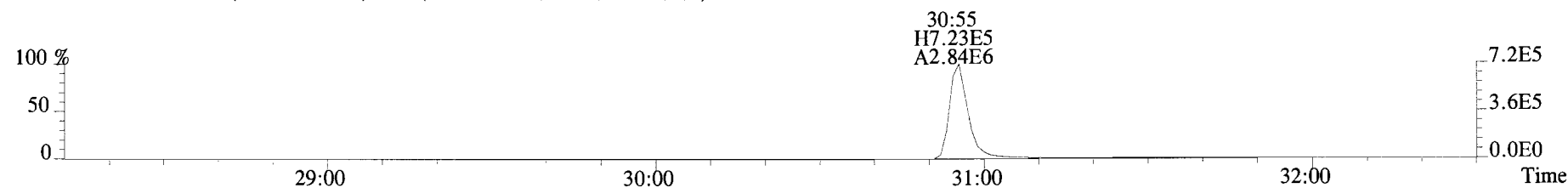
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Sample#8 File Text: Vista Analytical Laboratory VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
353.8576 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



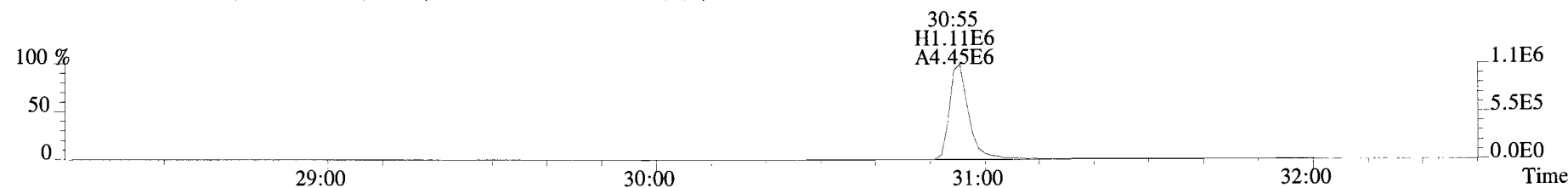
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



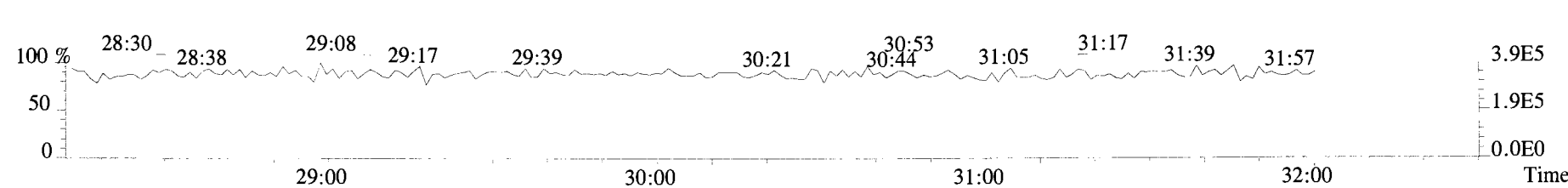
365.8978 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



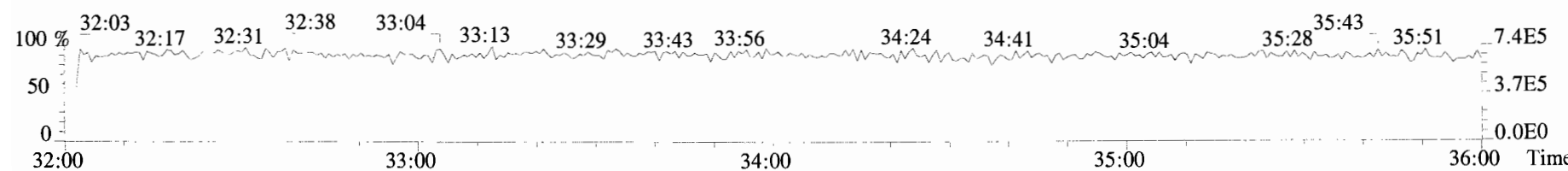
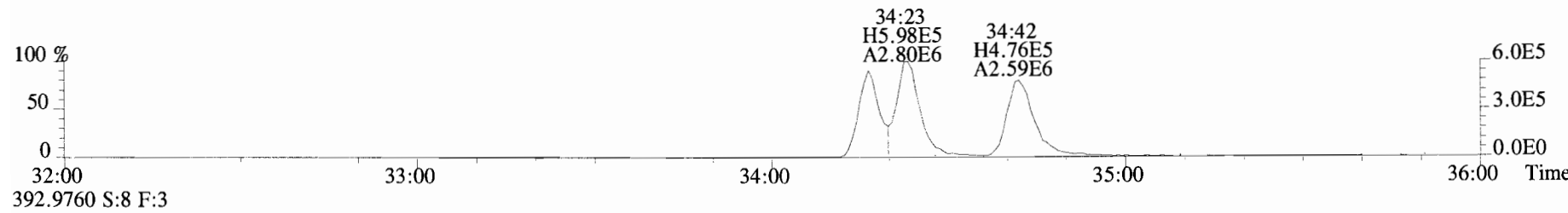
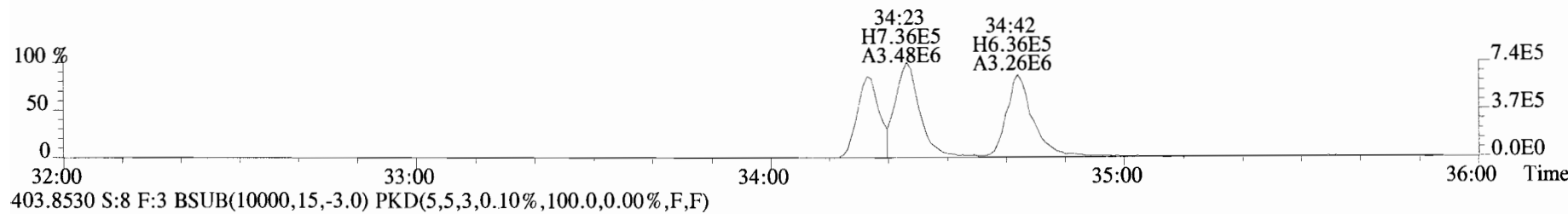
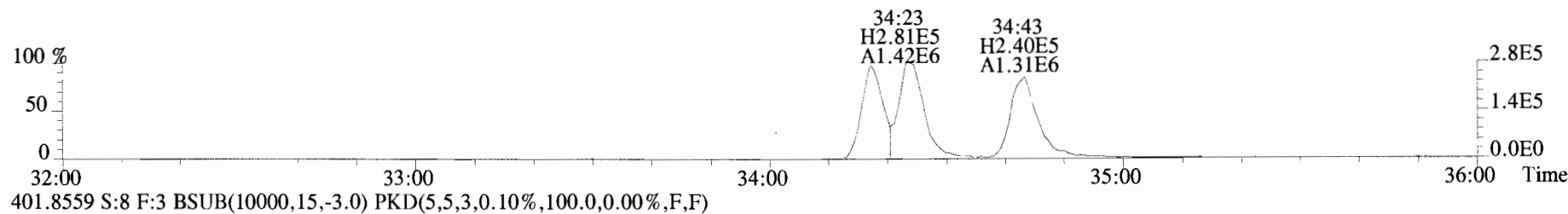
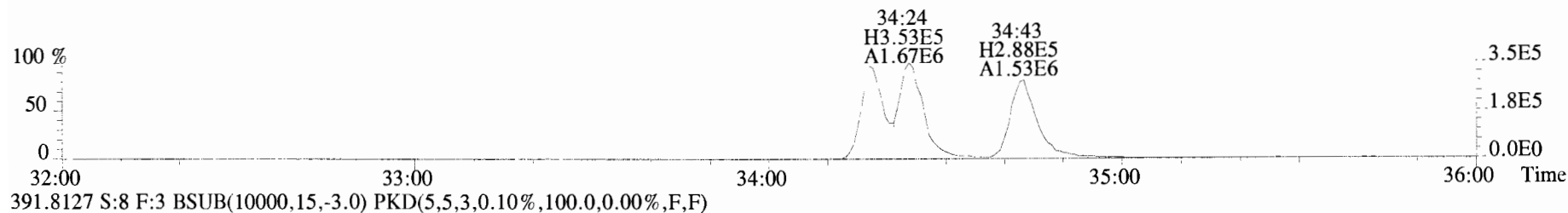
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



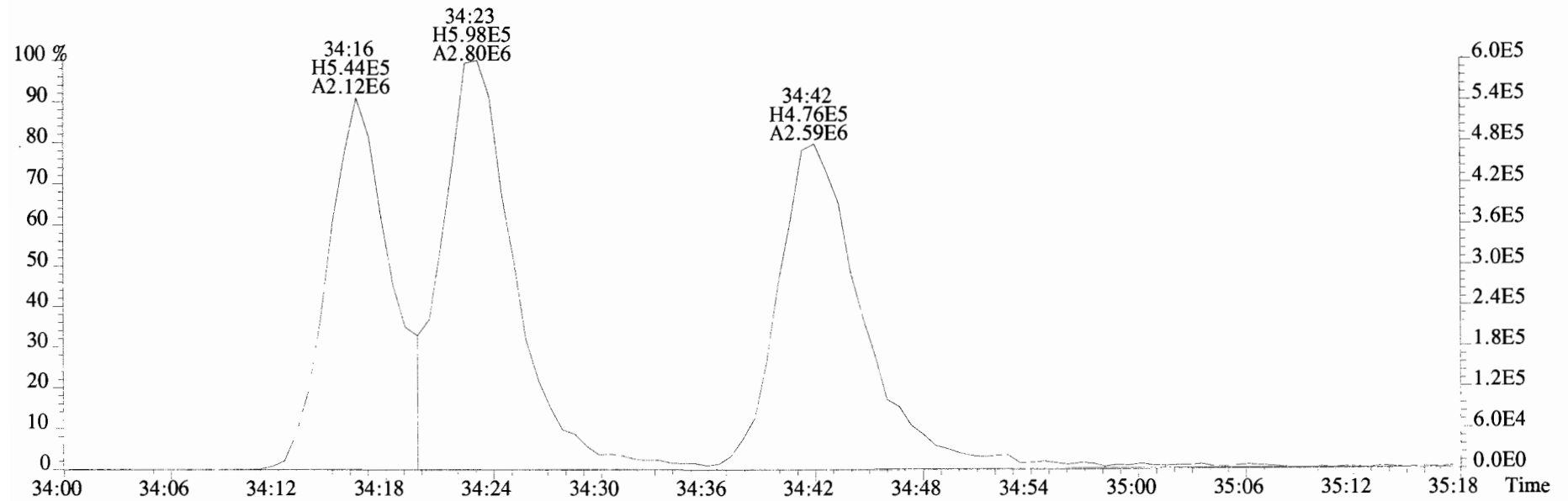
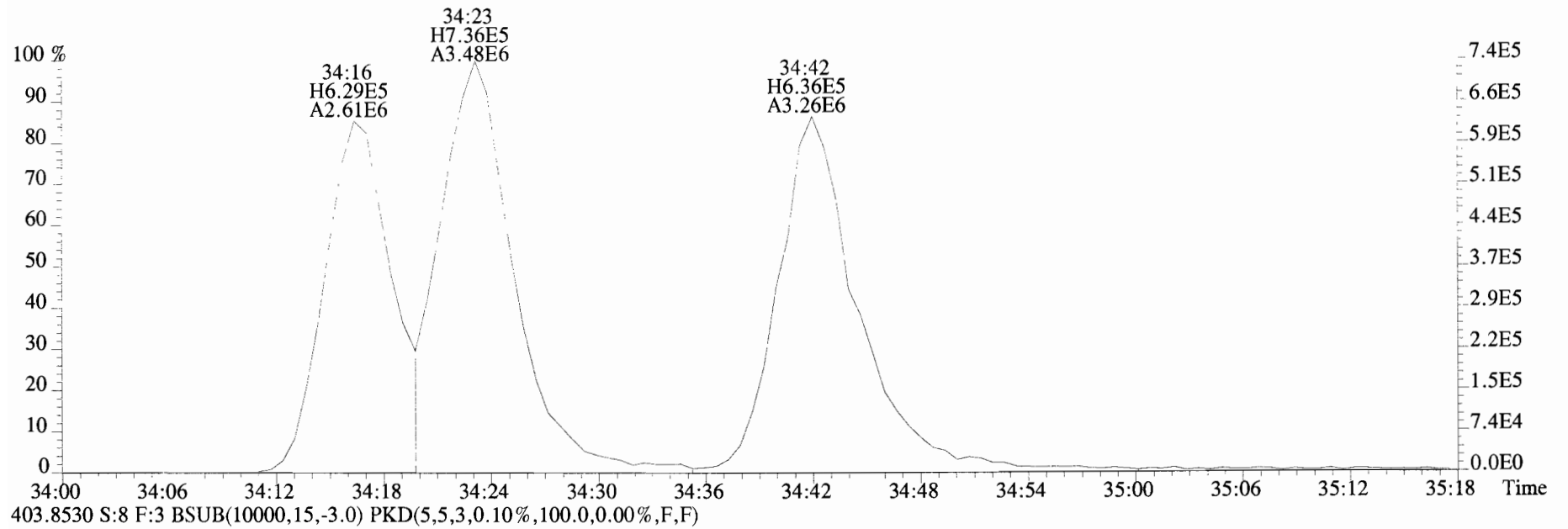
366.9792 S:8 F:2



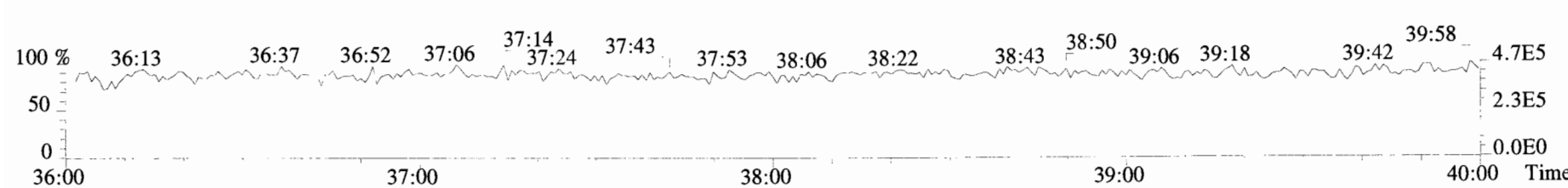
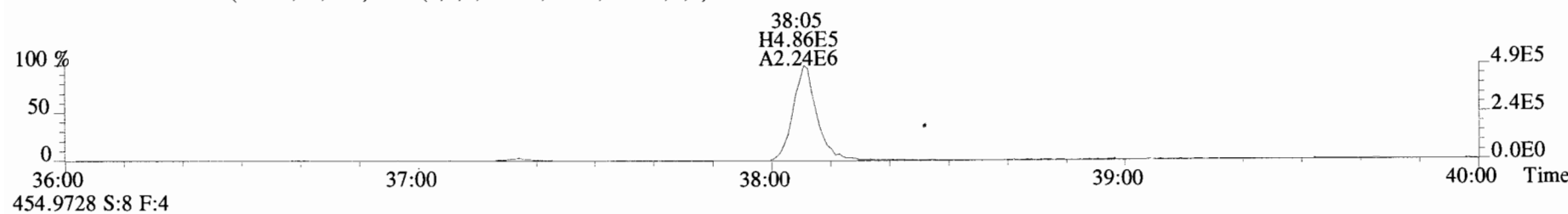
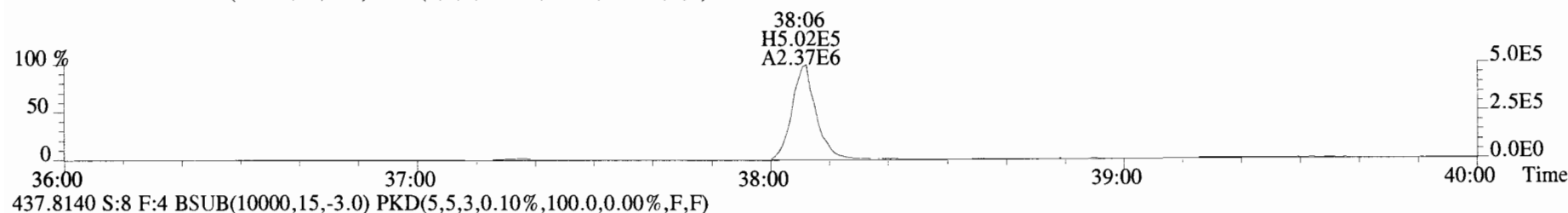
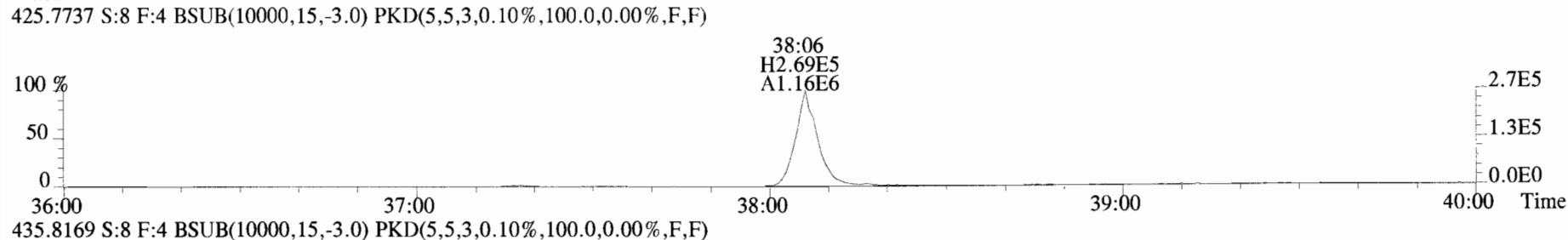
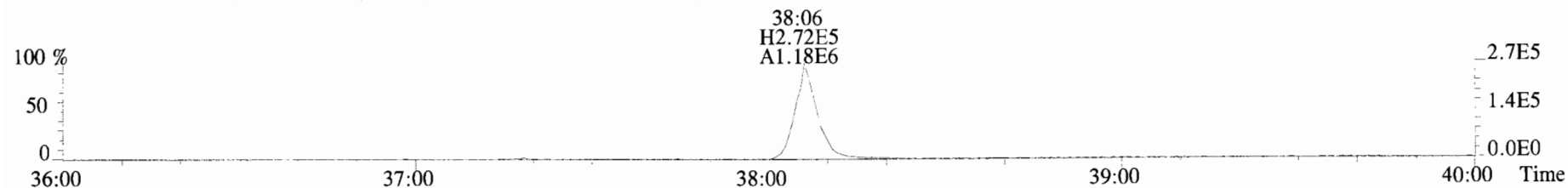
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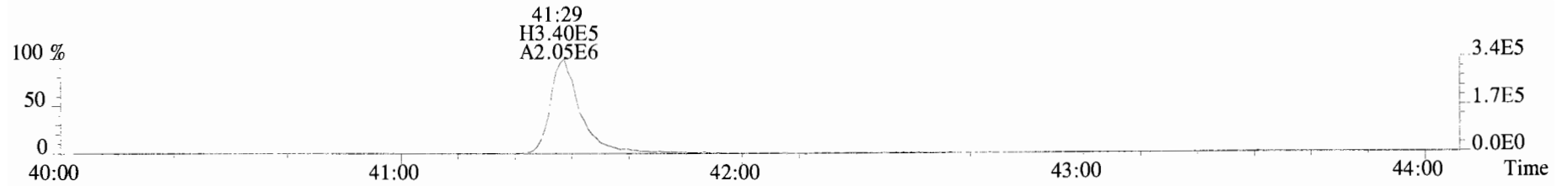
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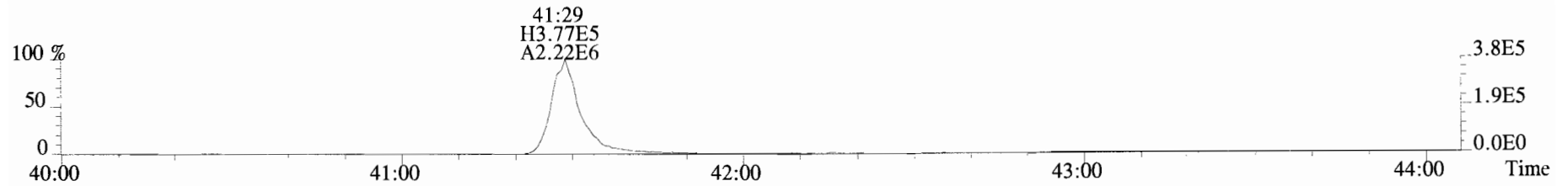
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Sample#8 File Text:Vista Analytical Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



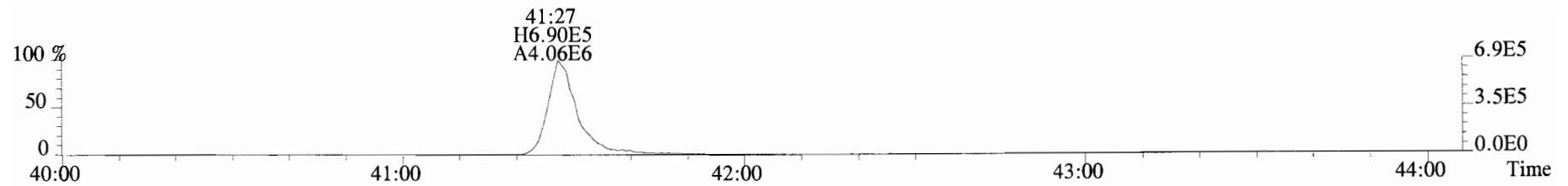
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Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



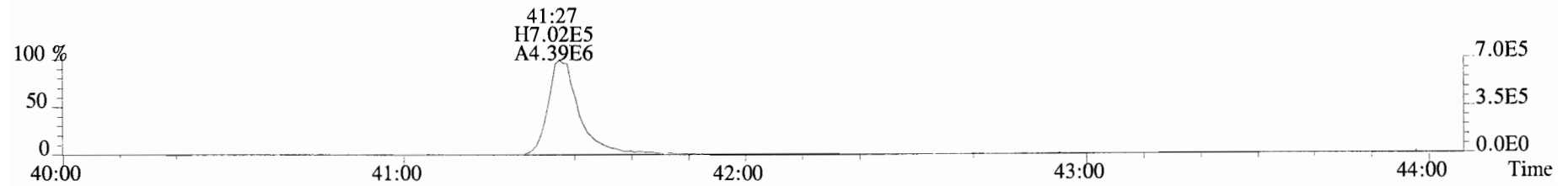
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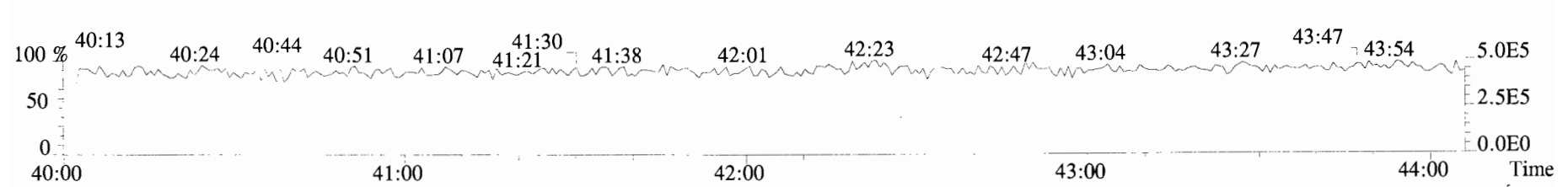
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



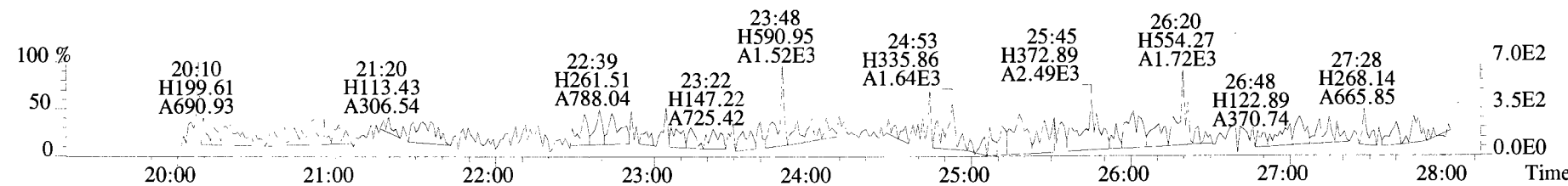
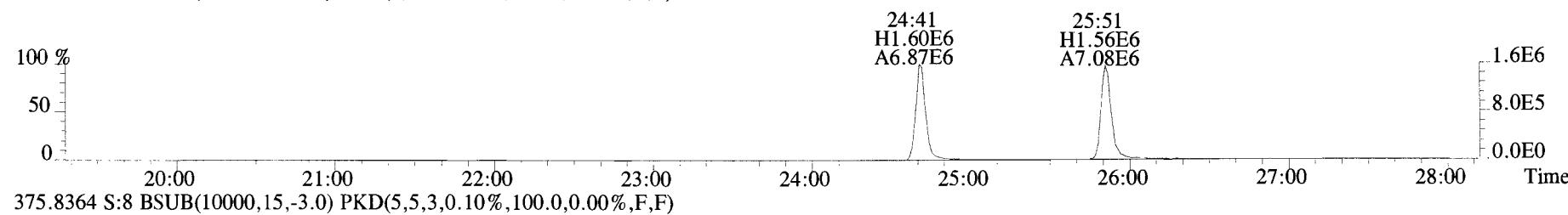
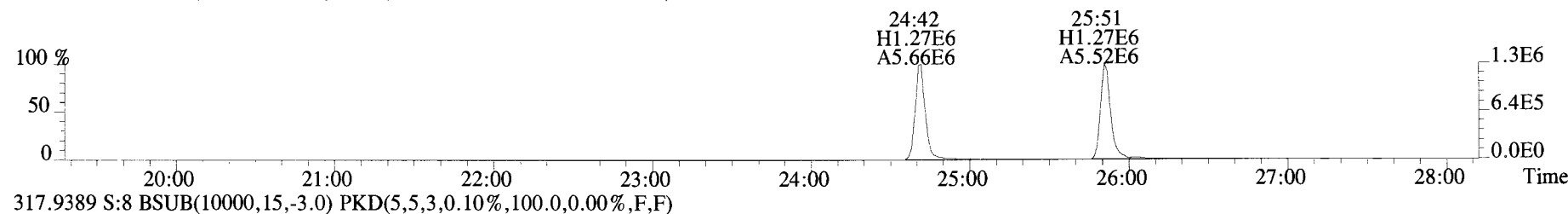
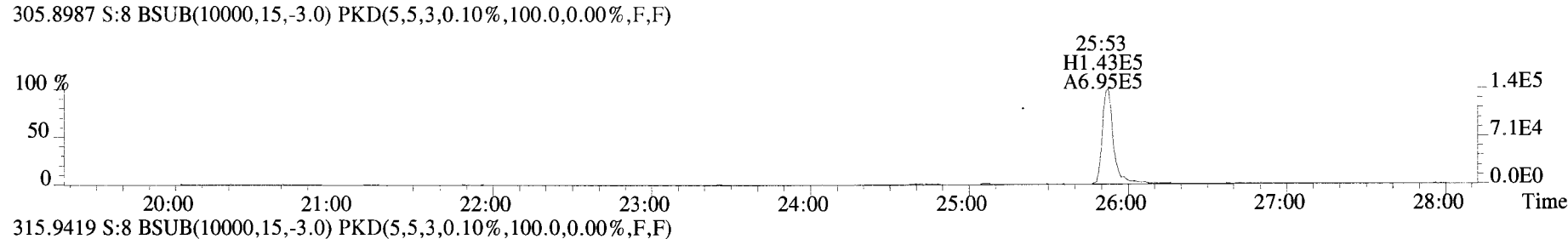
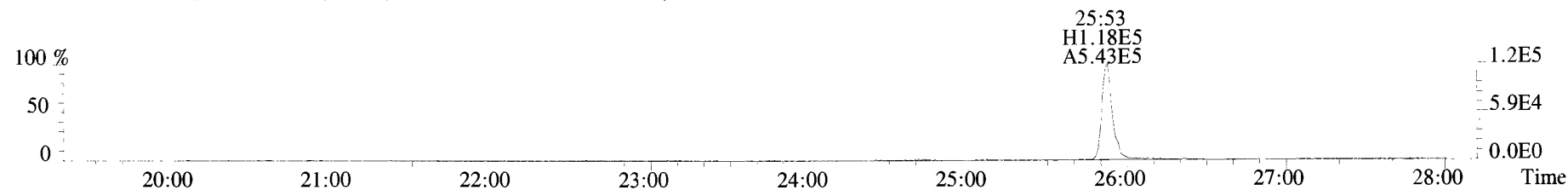
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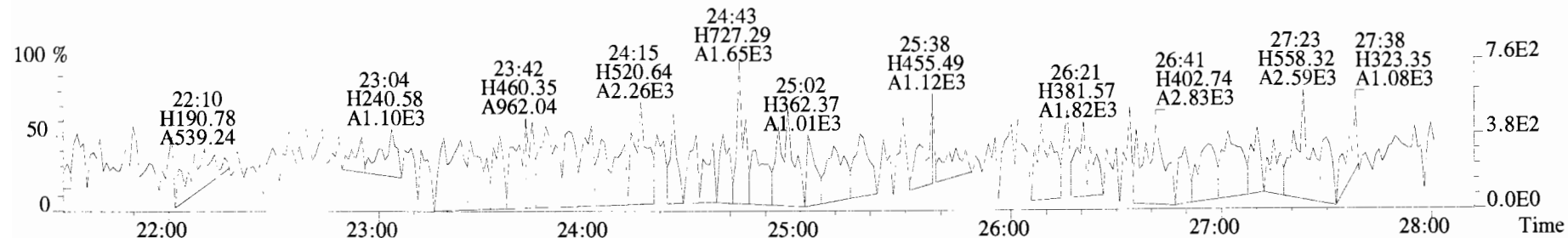
454.9728 S:8 F:5



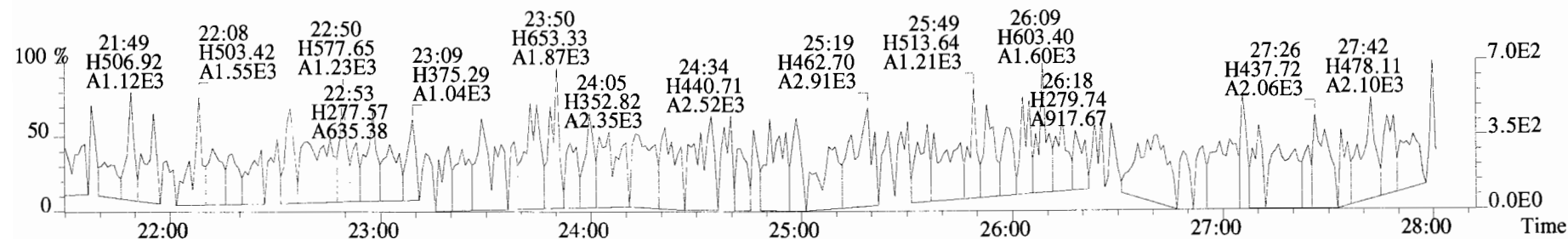
File:191009D1 #1-514 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
 303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



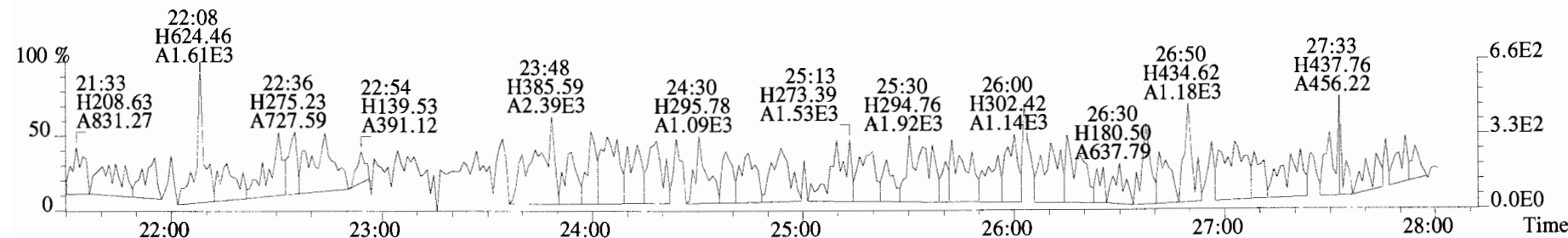
File:191009D1 #1-514 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
 339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



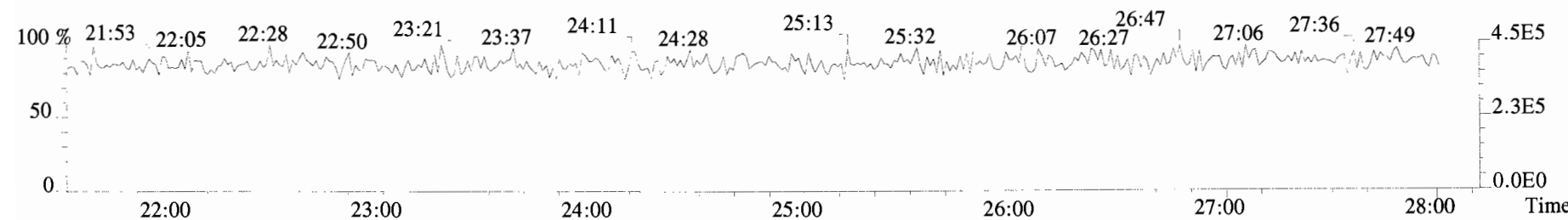
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



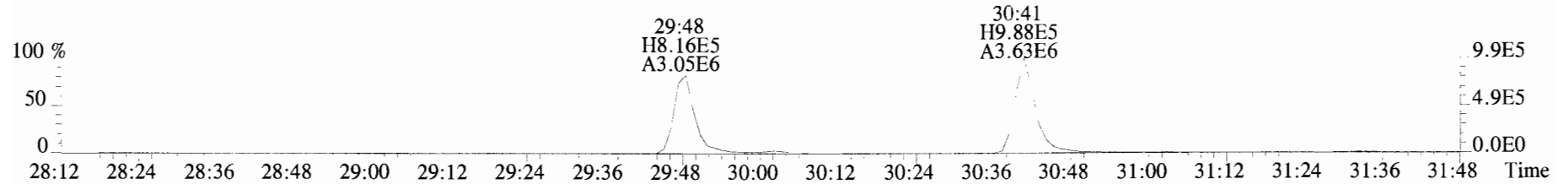
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



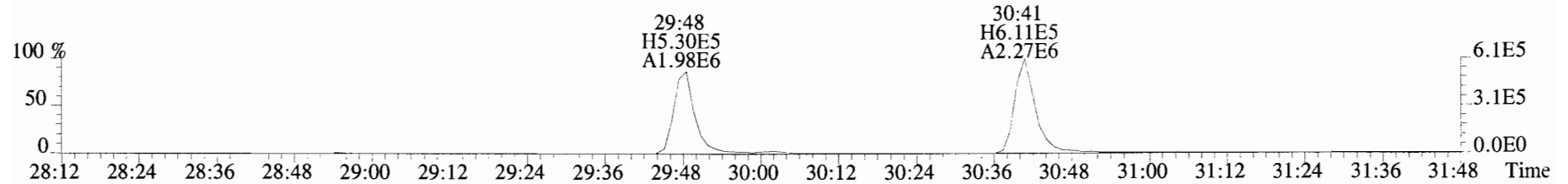
316.9824 S:8



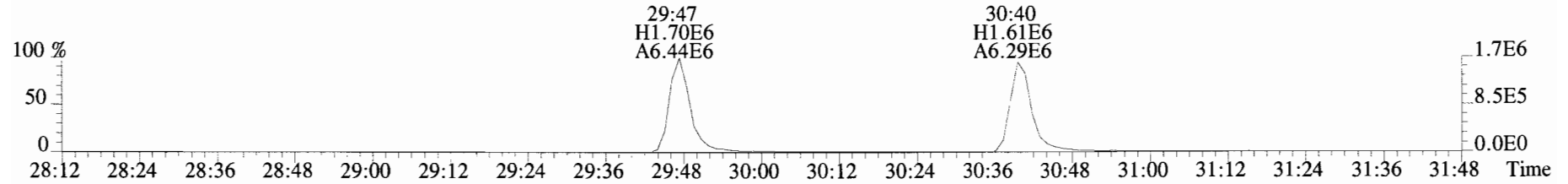
File:191009D1 #1-210 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
 339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



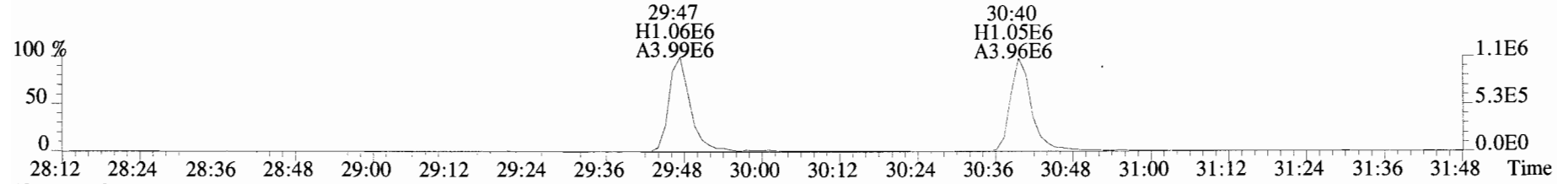
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



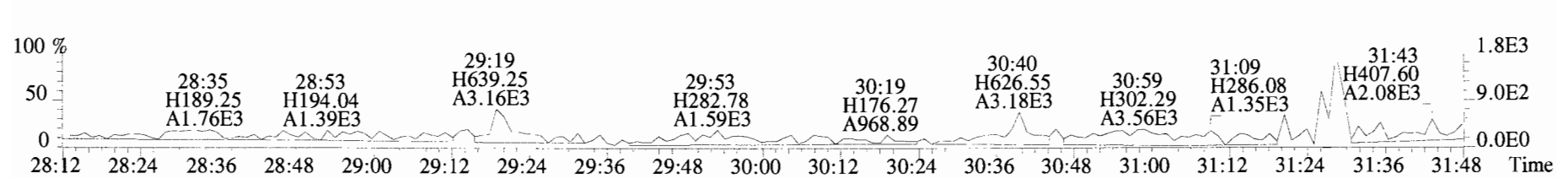
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



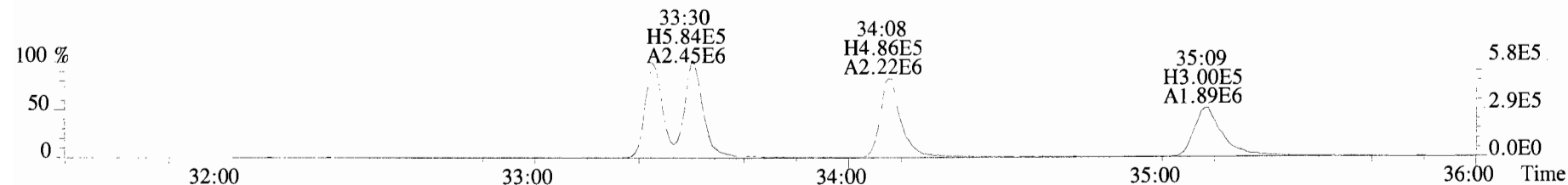
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



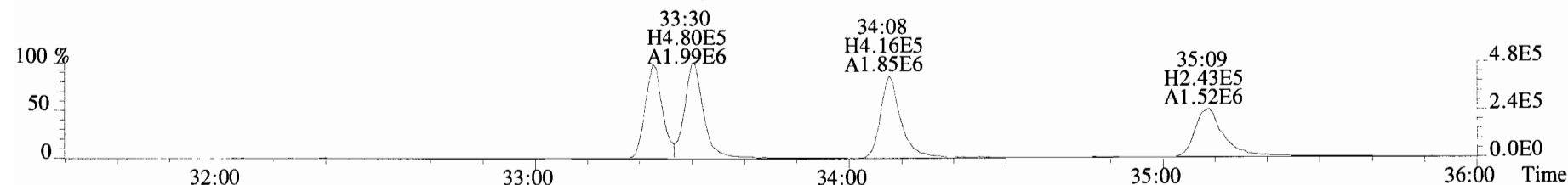
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



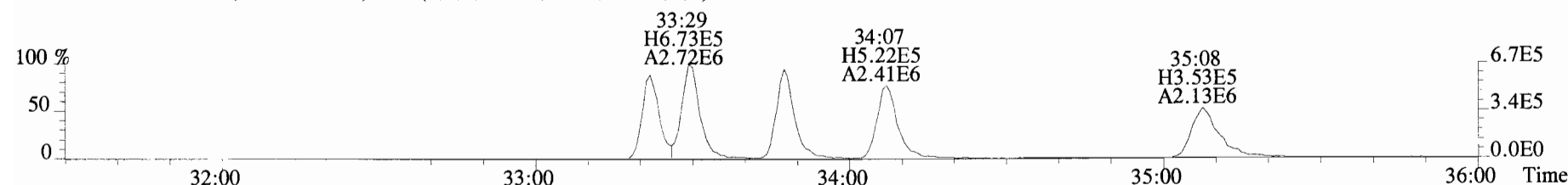
File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista_Analytical_Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



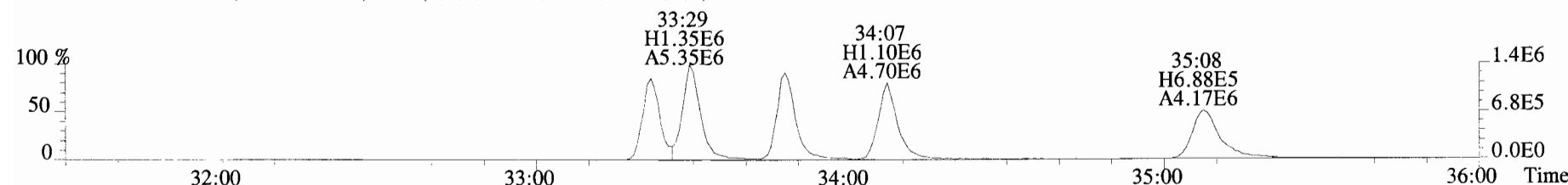
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



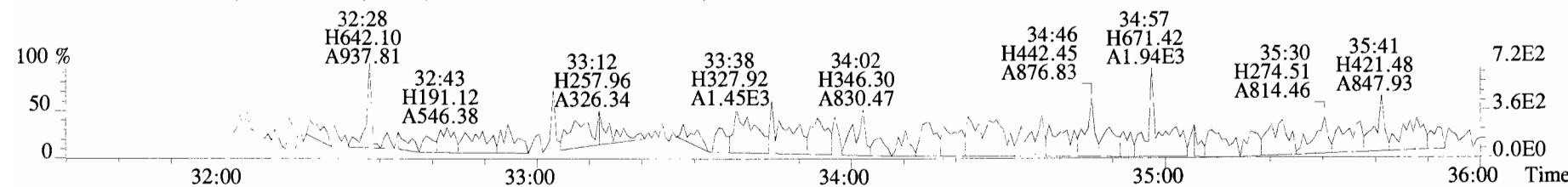
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



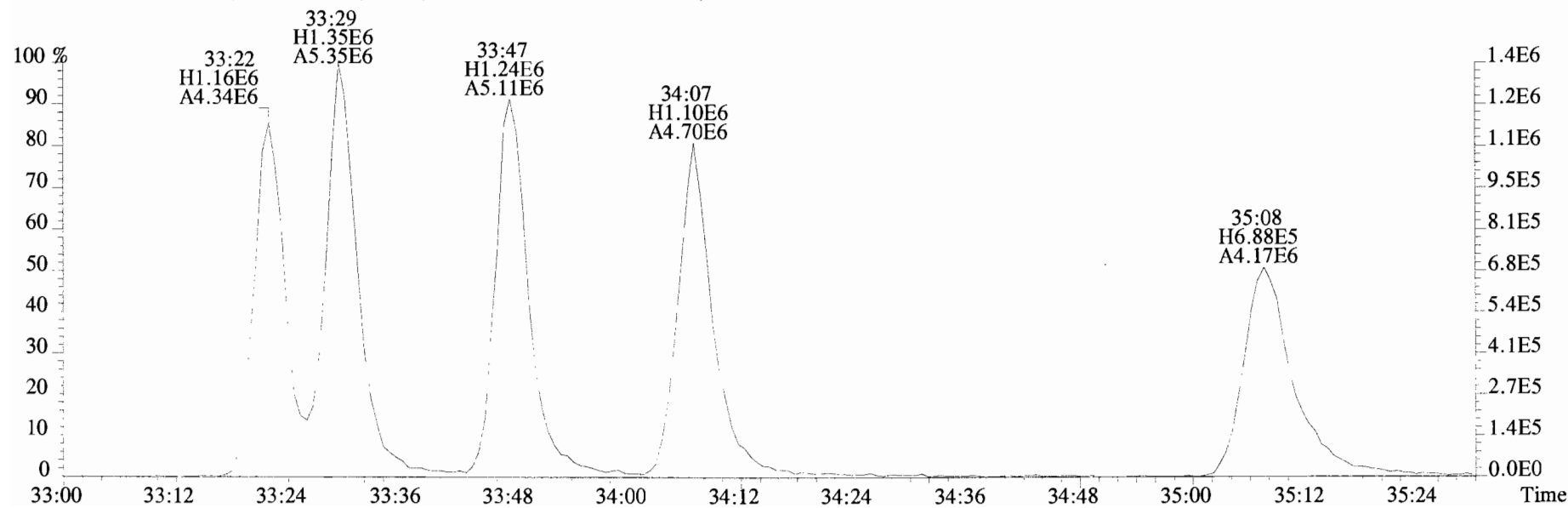
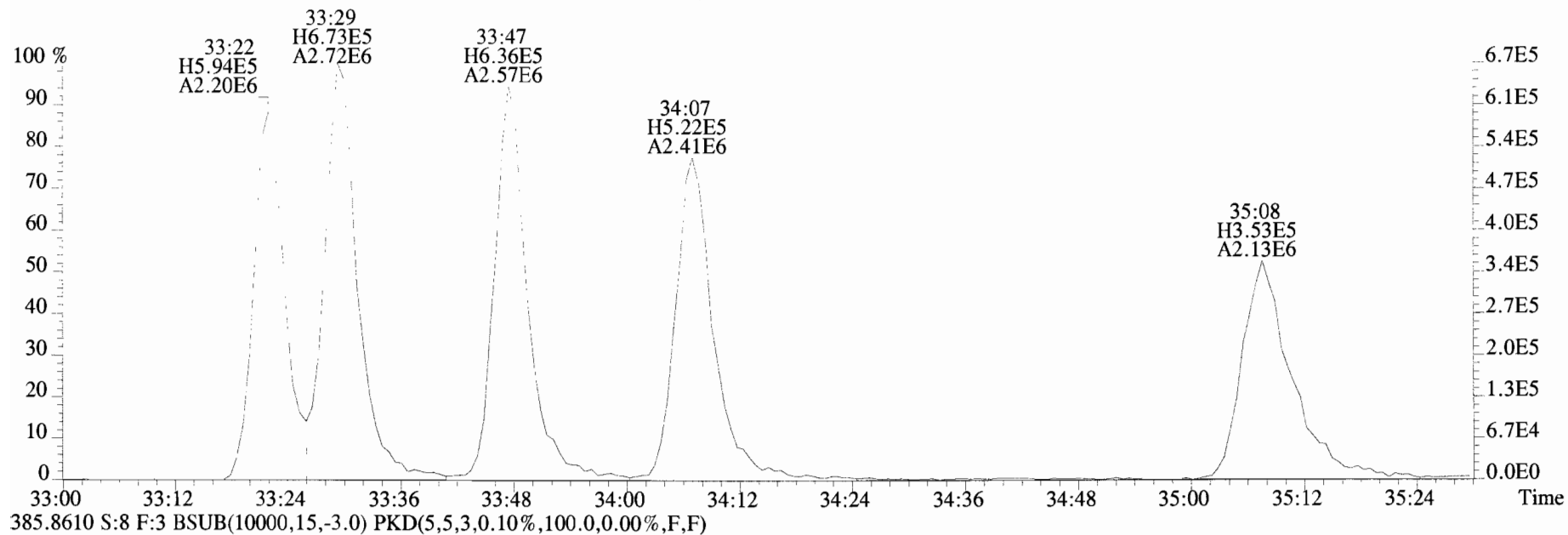
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



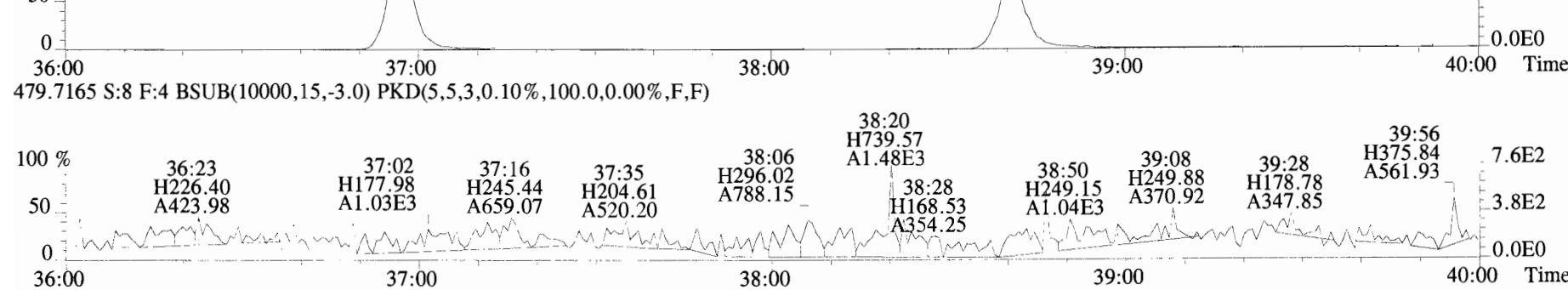
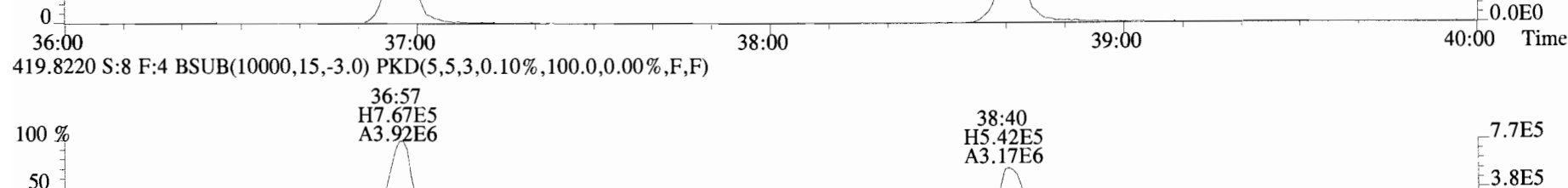
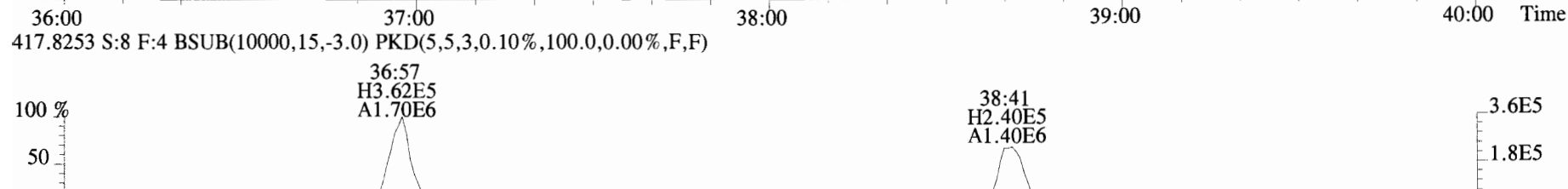
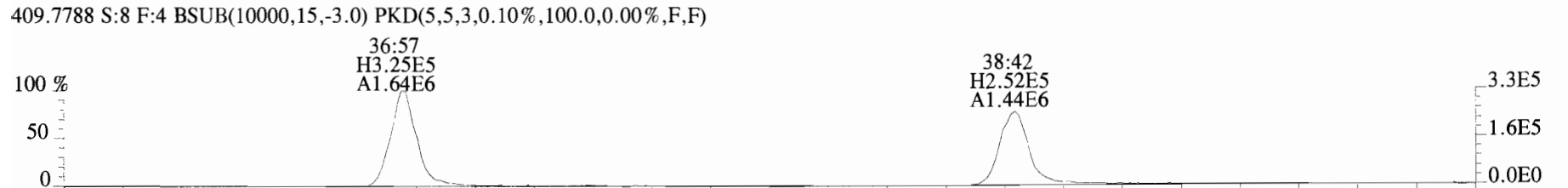
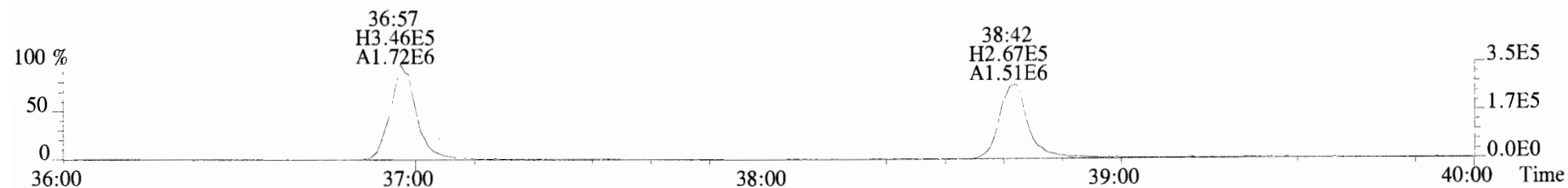
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



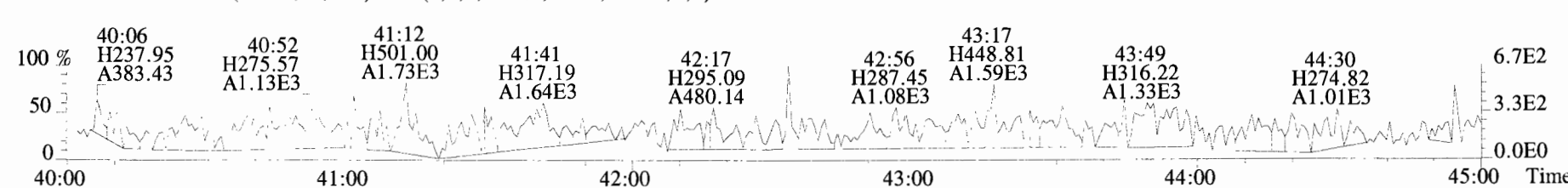
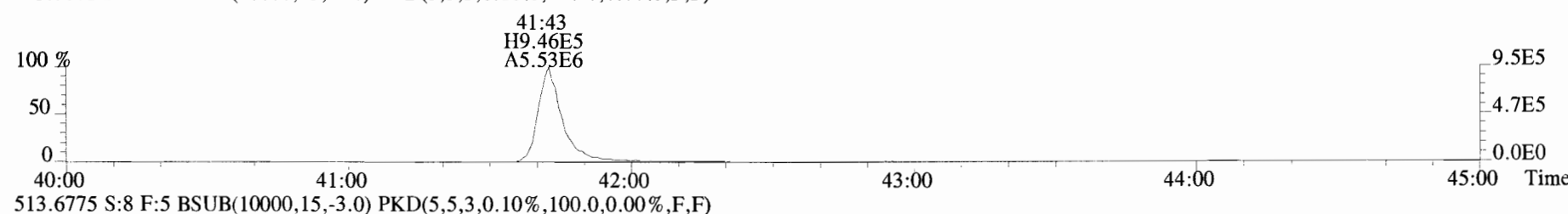
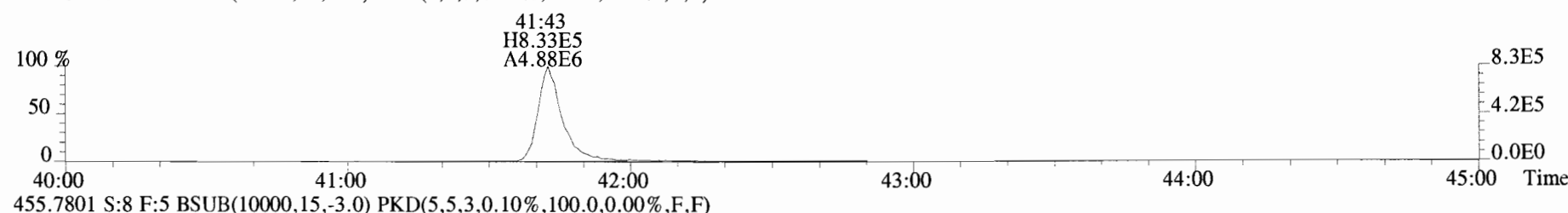
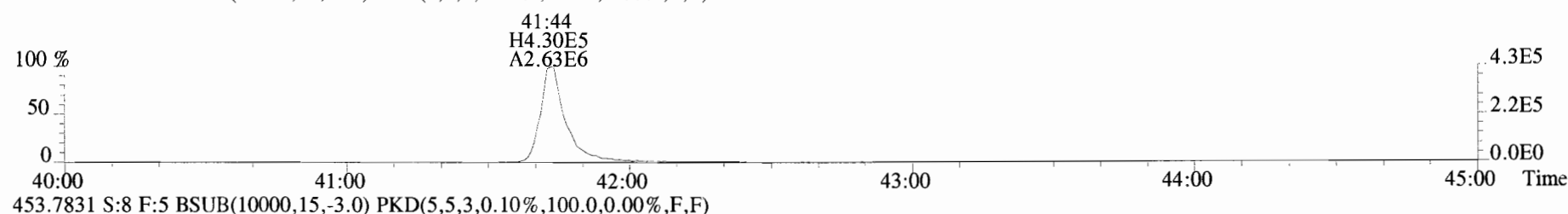
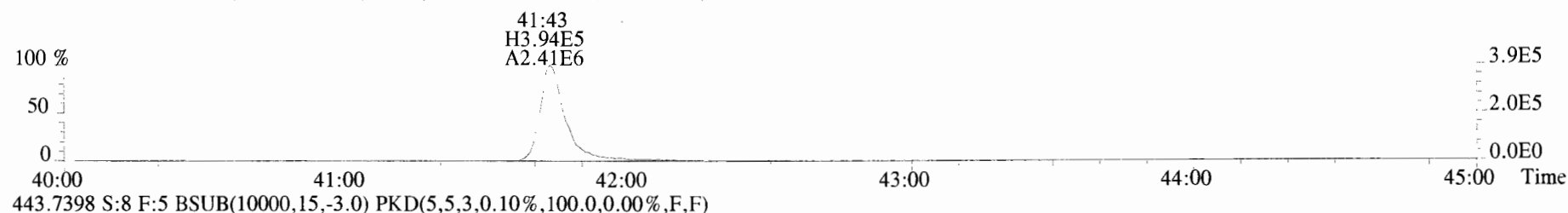
File:191009D1 #1-355 Acq: 9-OCT-2019 21:46:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory_VG7 Text:SS191009D1-1 1613 SSS 19C2207 Exp:OCDD_DB5
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)



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)



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 CT
5/30/19 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

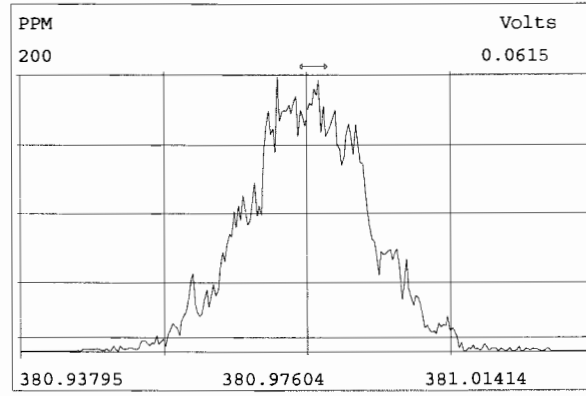
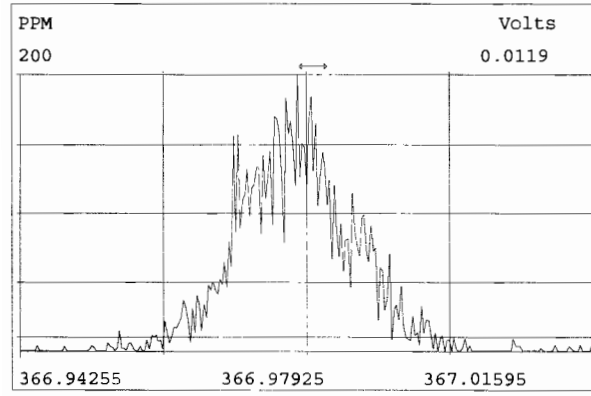
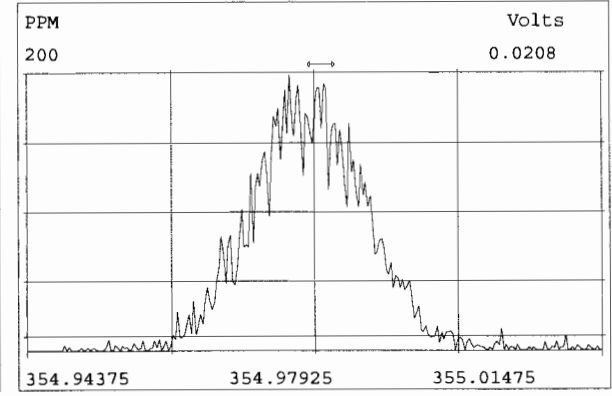
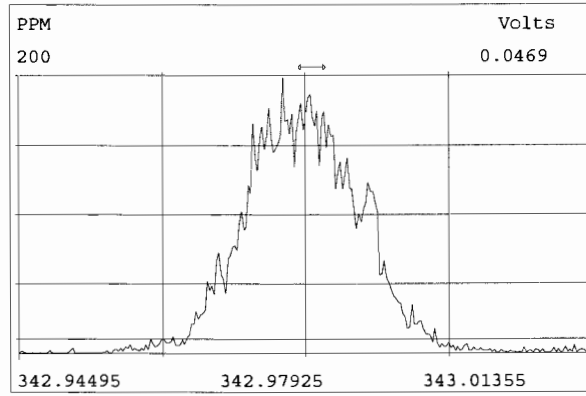
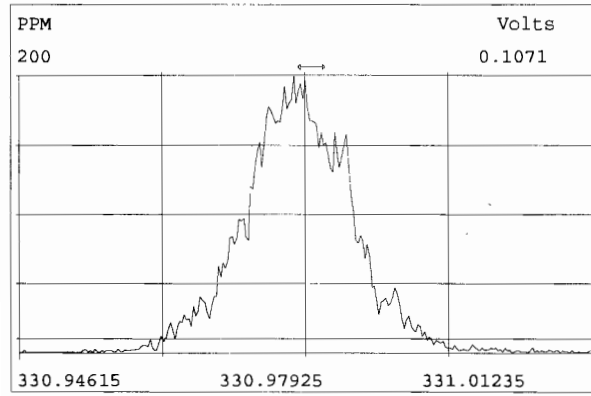
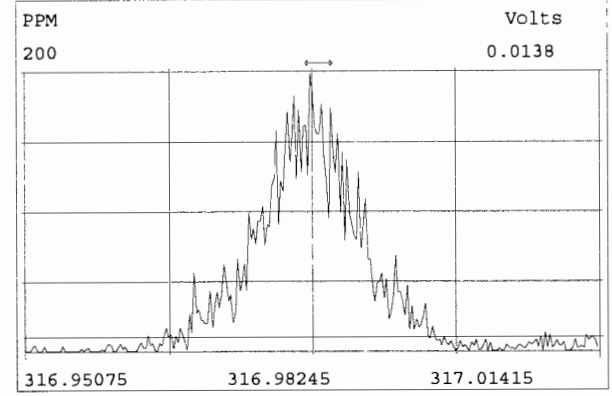
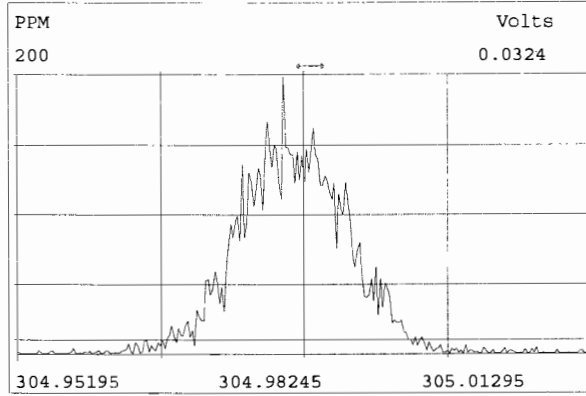
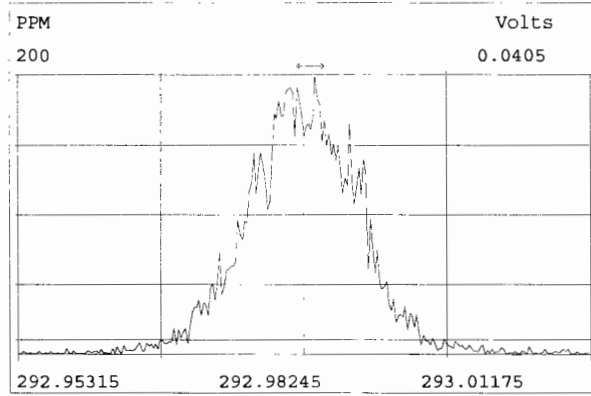
Filename: 190530D1 S: 8 Acquired: 30-MAY-19 14:44:52
Run: Analyte: TCDF Cal: 1613TCDFVG7-5-30-19Results:
Sample text: ST190530D1-6 1613 CS5 19C2206

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

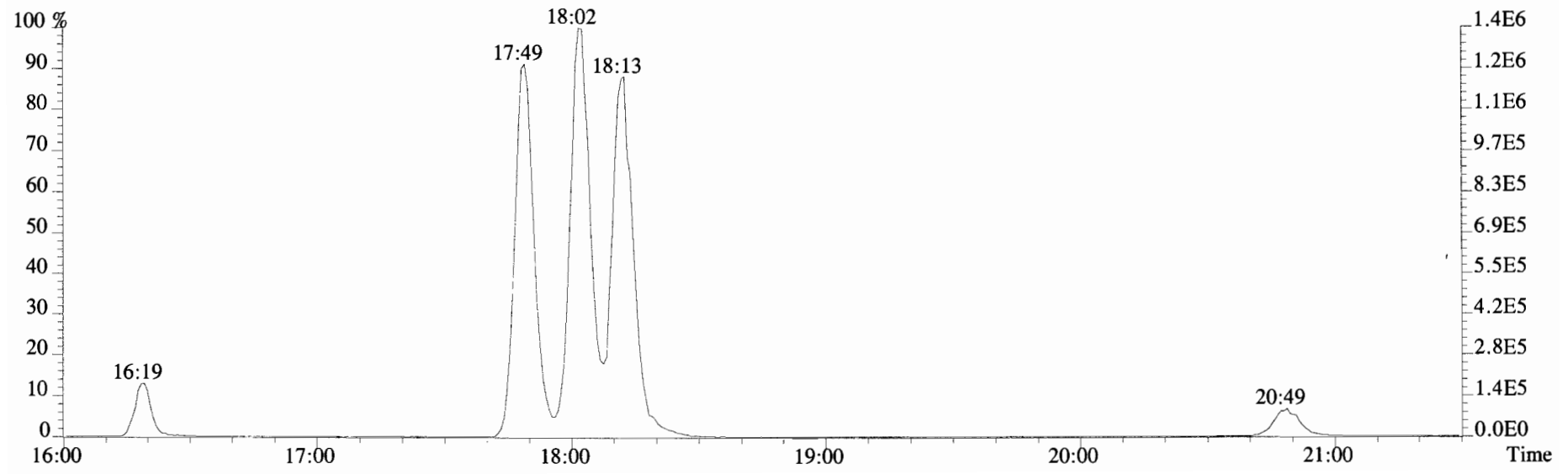
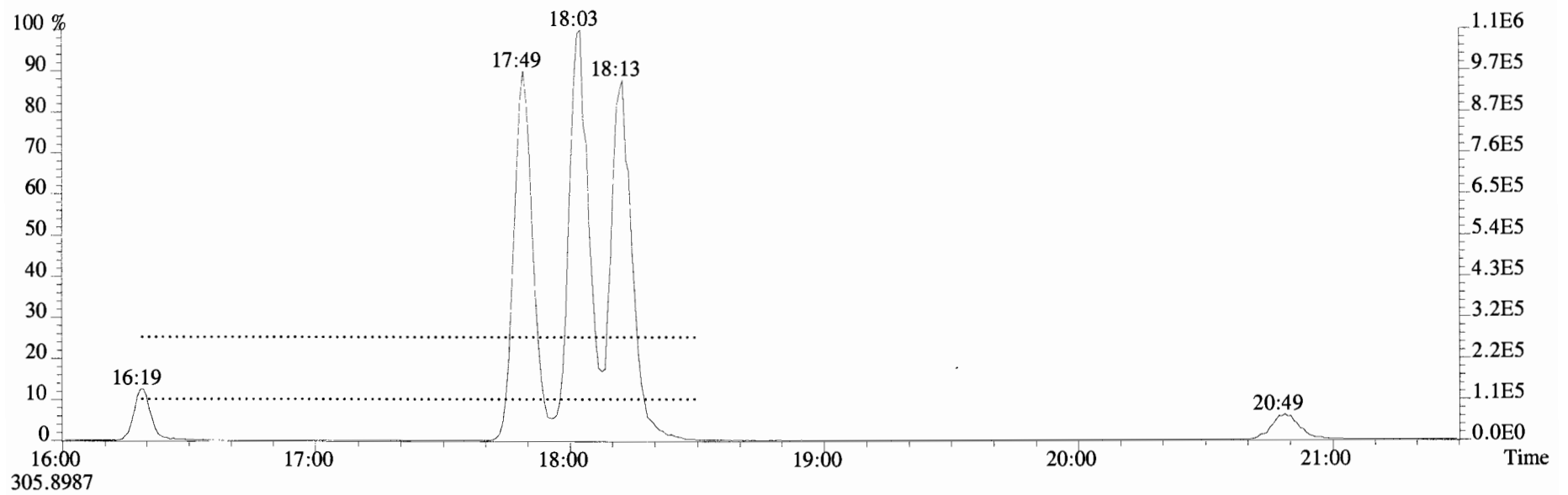
DB
5/30/19

Vista Analytical Laboratory - Injection Log Run file: 190530D1 Instrument ID: VG-7 GC Column ID: DB-225

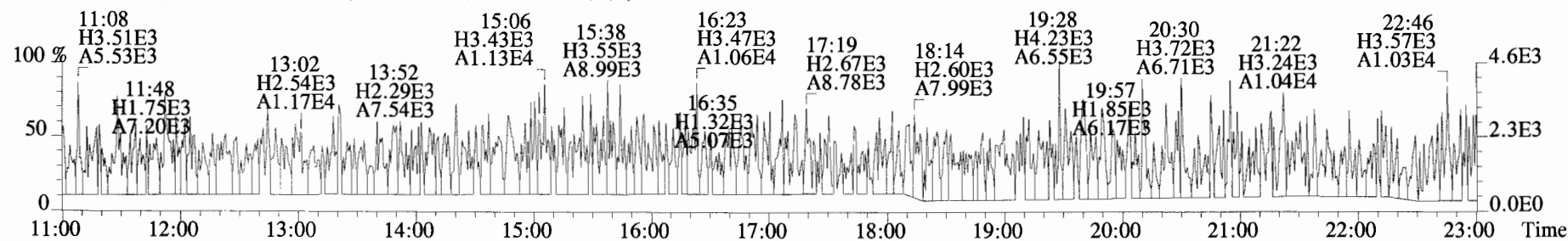
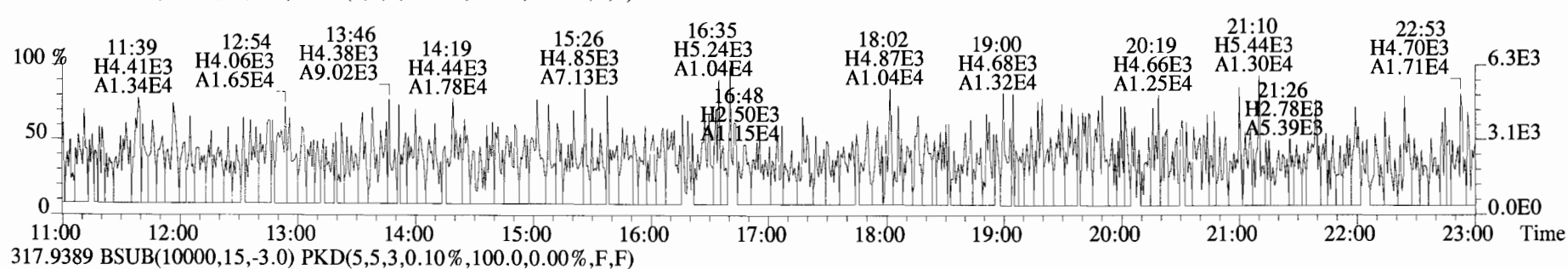
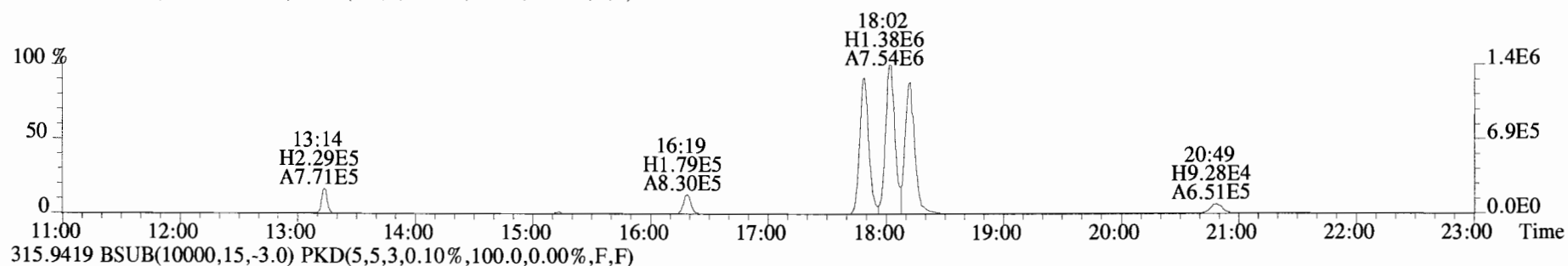
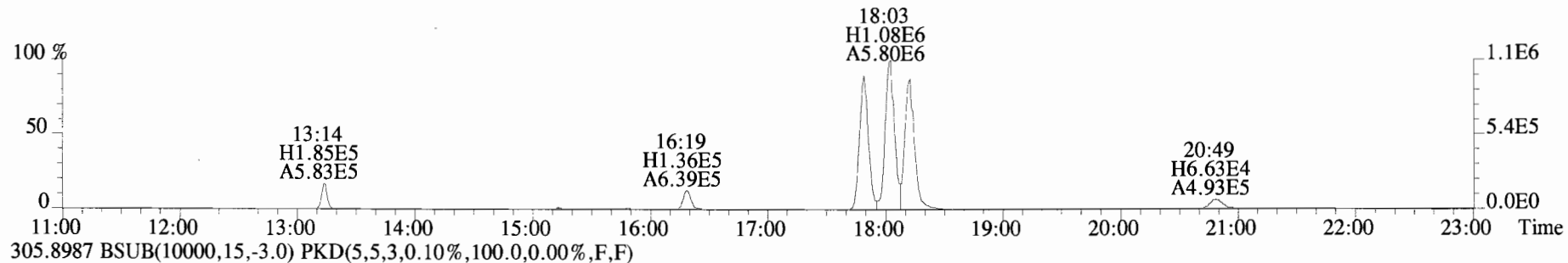
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
190530D1	1	CP190530D1-1	DB	30-MAY-19	11:02:08	ST190530D1-4	NA
190530D1	2	SOLVENT BLANK	DB	30-MAY-19	11:33:52	ST190530D1-4	NA
190530D1	3	ST190530D1-1	DB	30-MAY-19	12:05:38	ST190530D1-4	NA
190530D1	4	ST190530D1-2	DB	30-MAY-19	12:37:29	ST190530D1-4	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



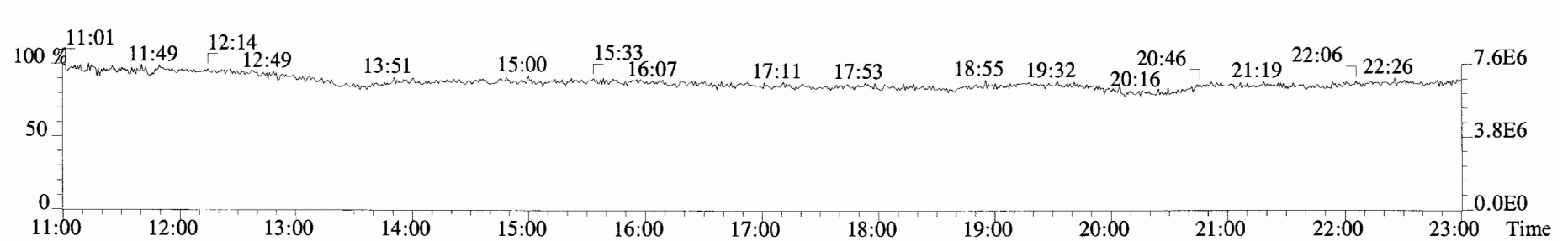
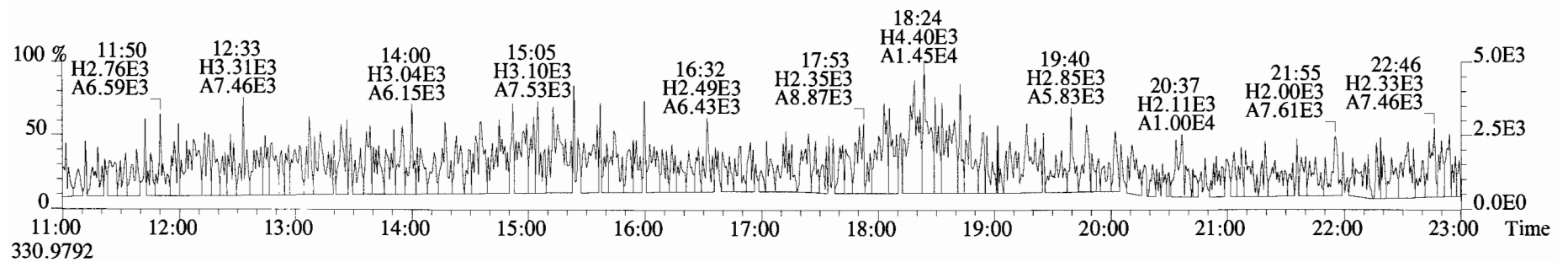
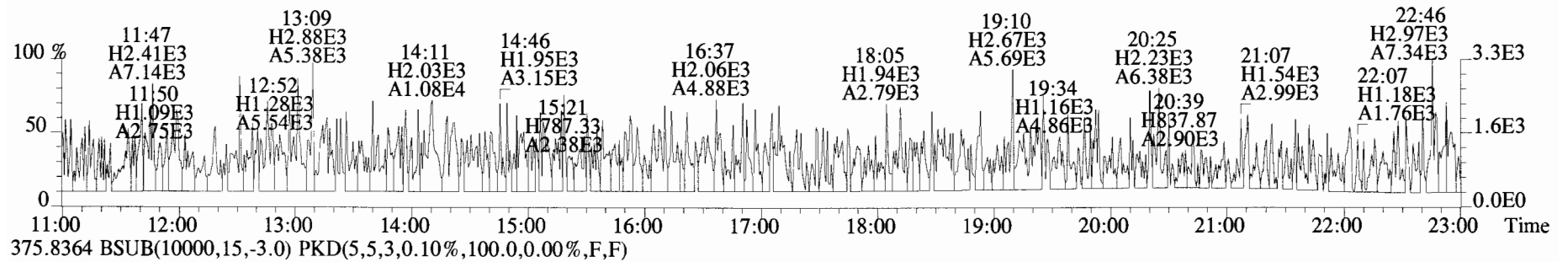
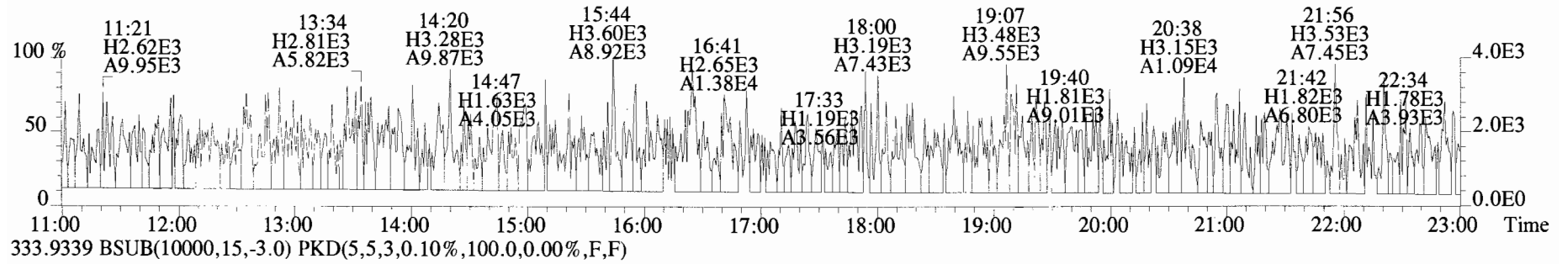
File:190530D1 #1-1559 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista_Analytical_Laboratory_VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016



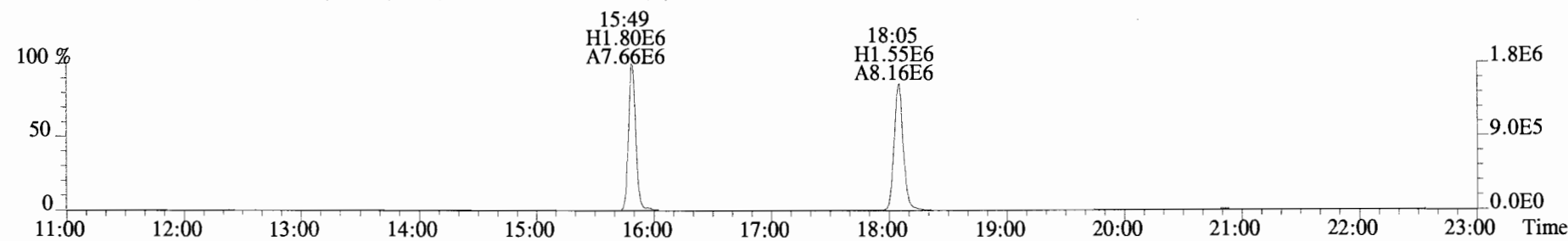
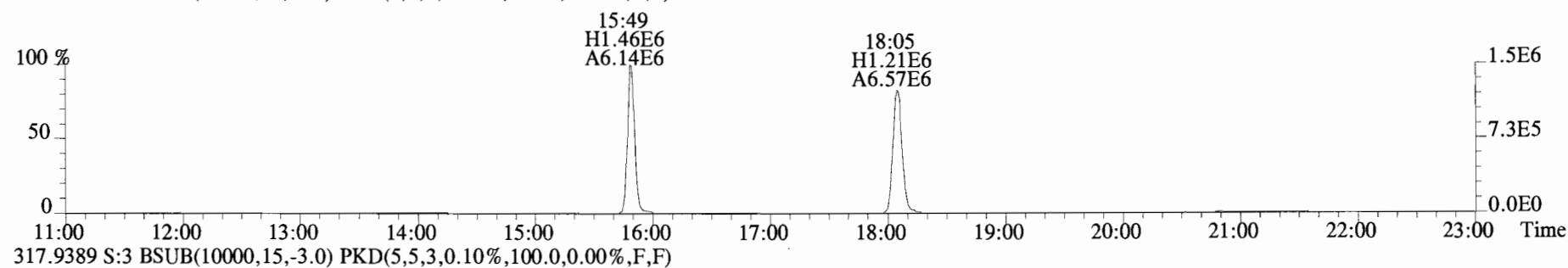
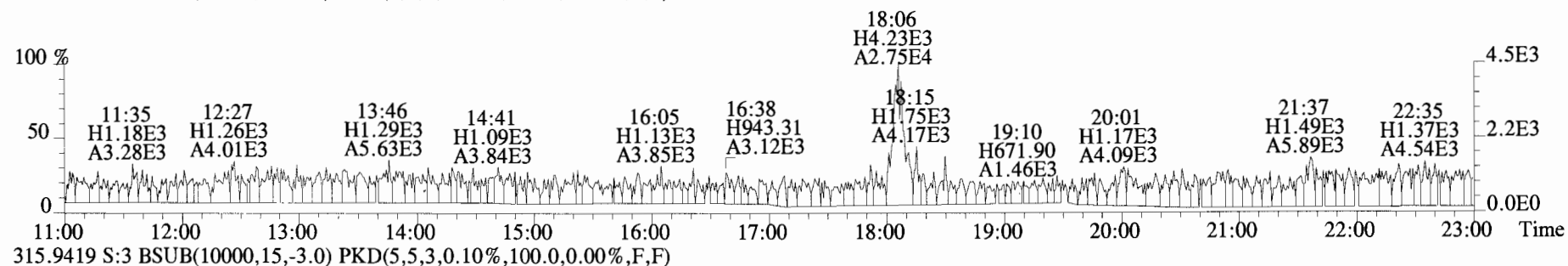
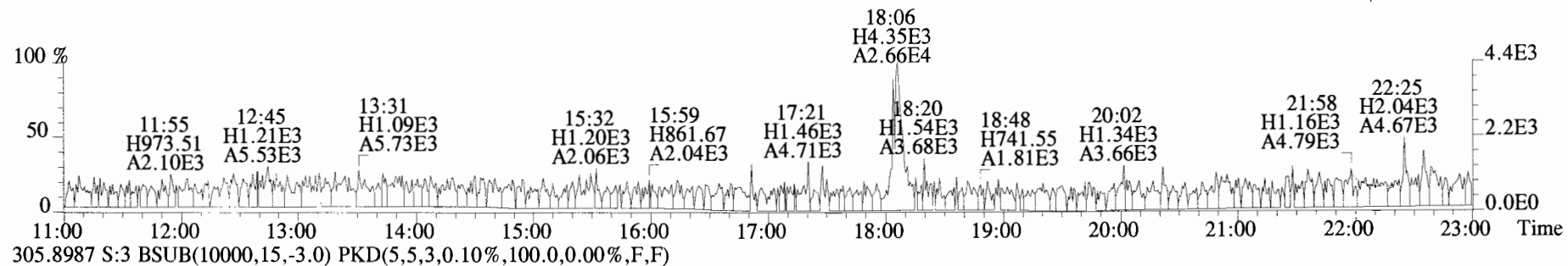
File:190530D1 #1-1682 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



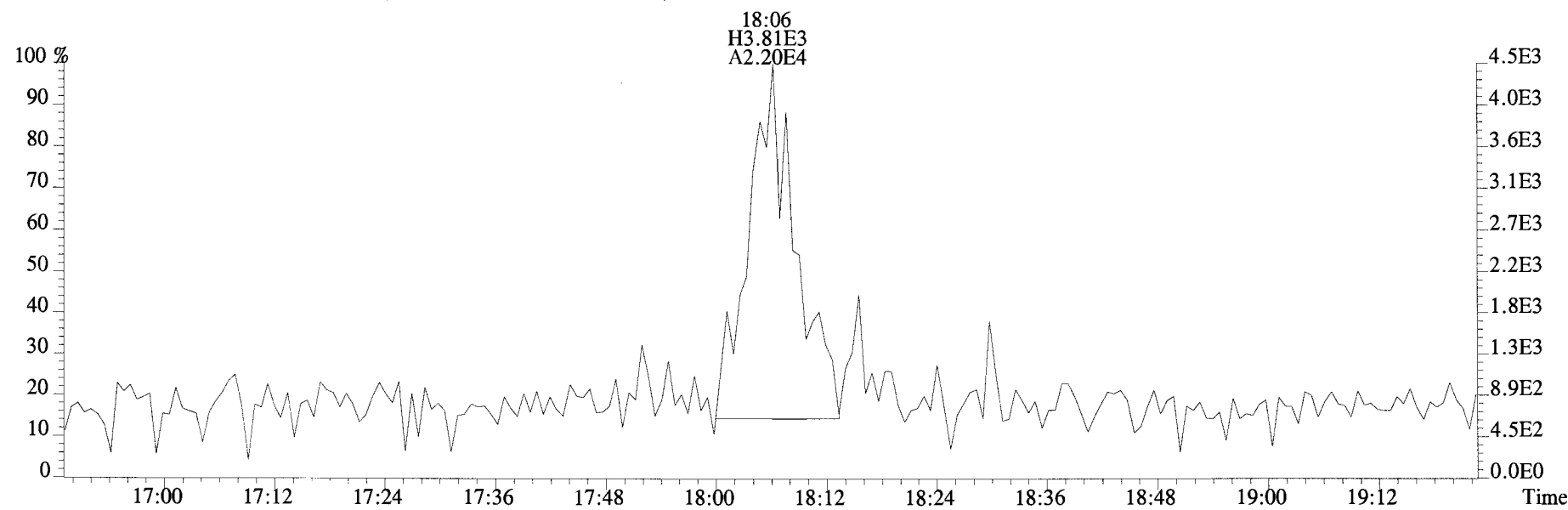
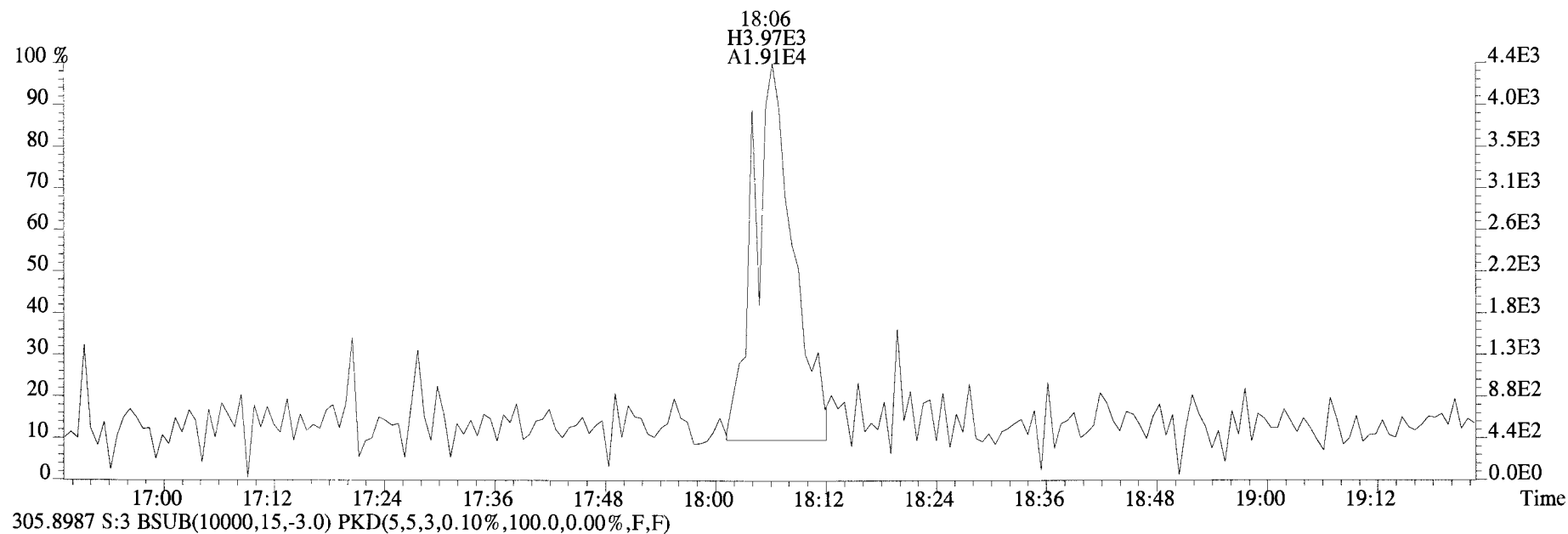
File:190530D1 #1-1682 Acq:30-MAY-2019 11:02:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Vista Analytical Laboratory VG7 Text:CP190530D1-1 DB225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



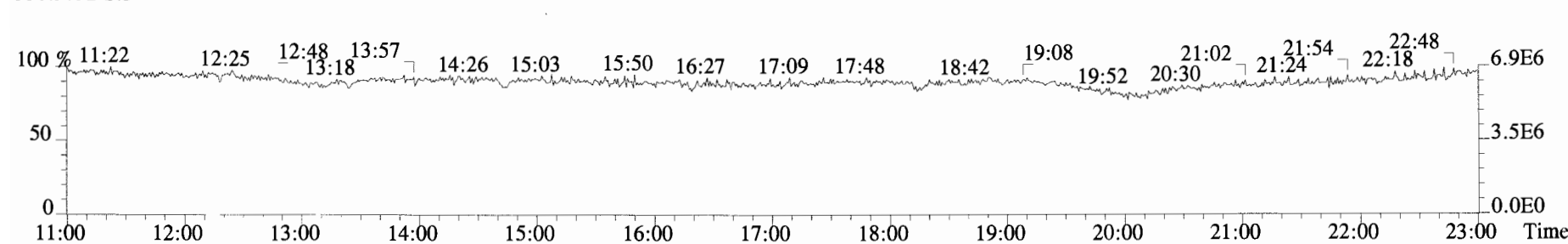
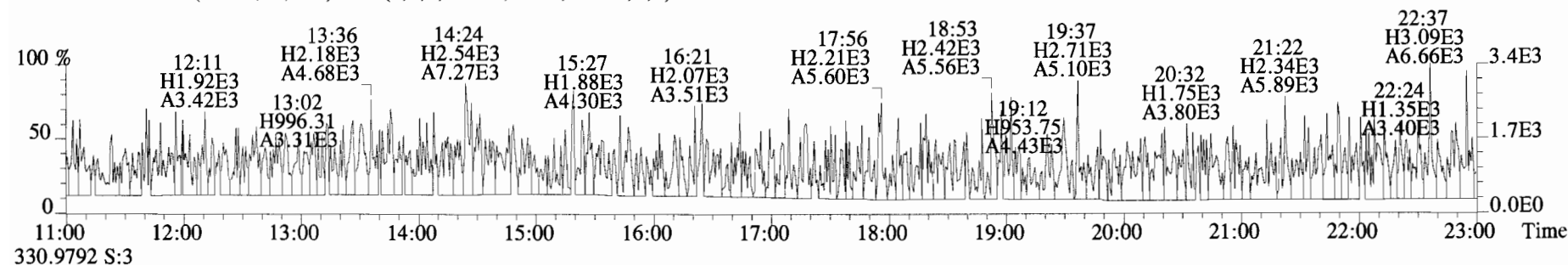
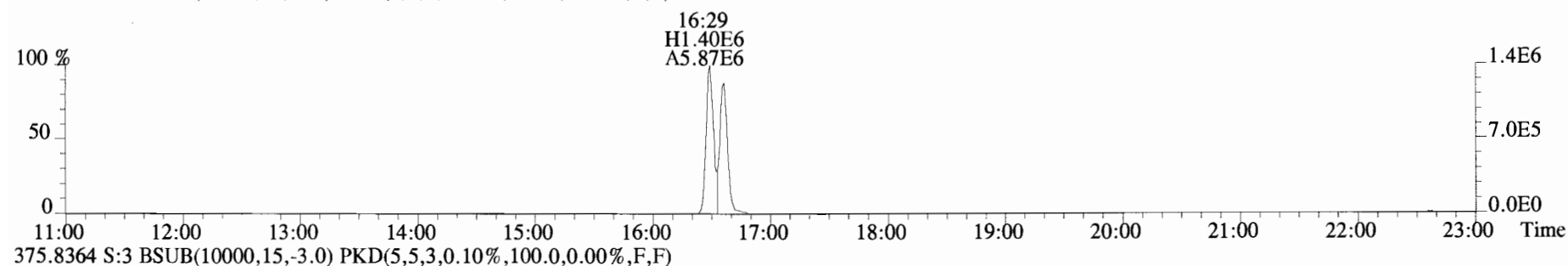
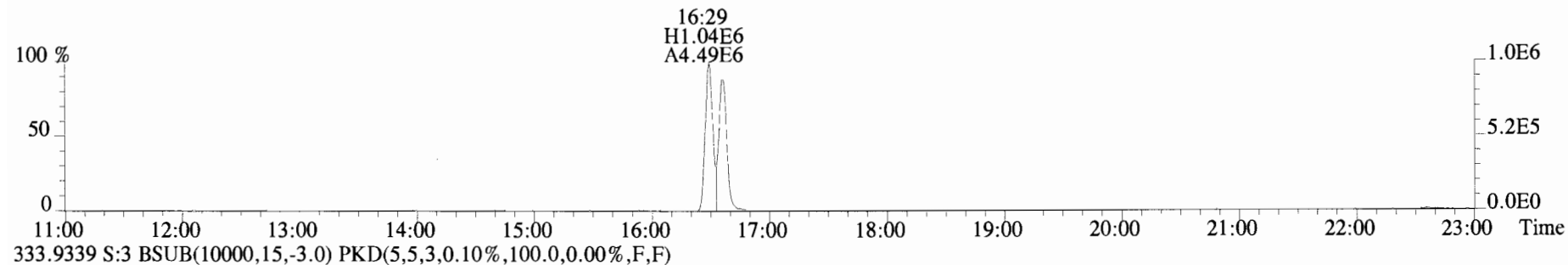
File:190530D1 #1-1682 Acq:30-MAY-2019 12:05:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



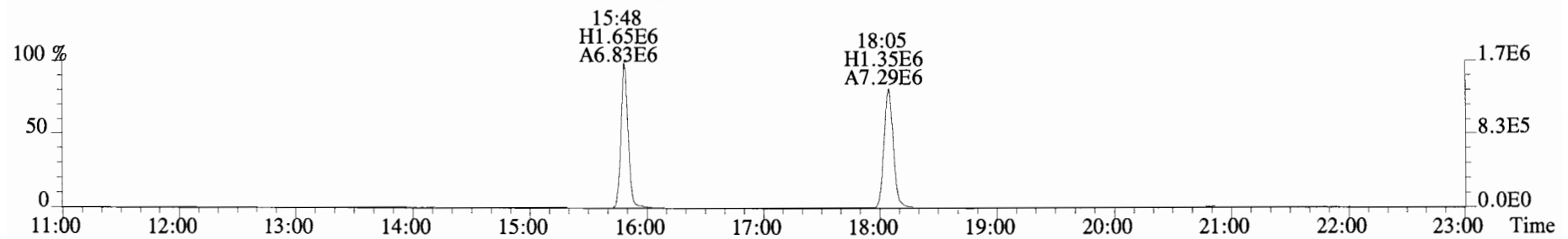
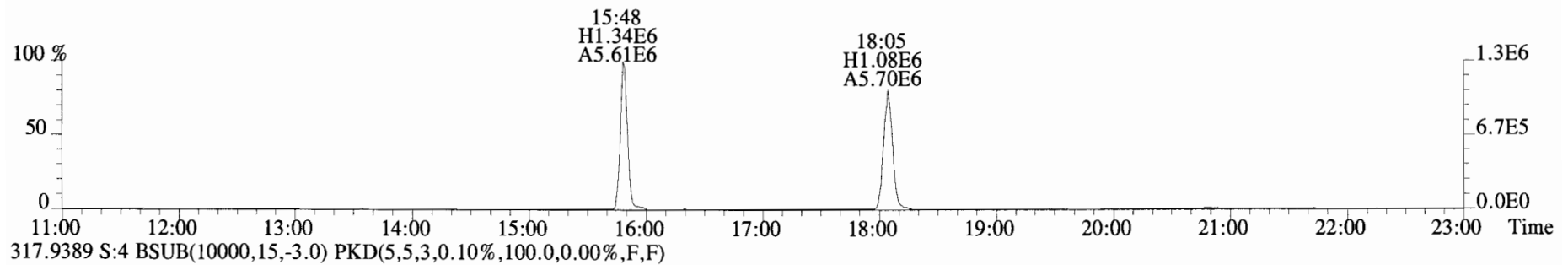
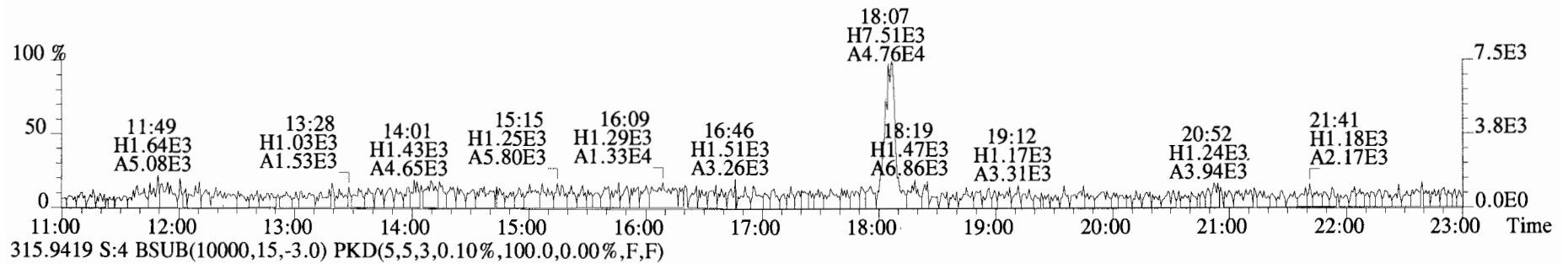
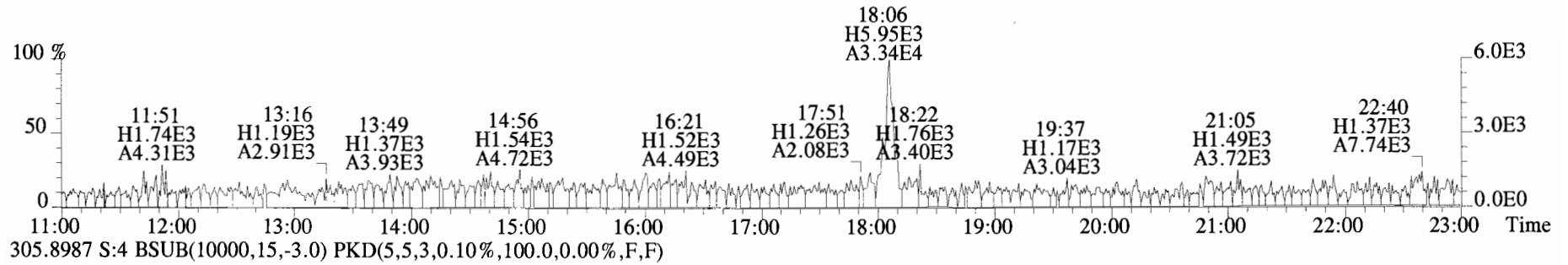
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Sample#3 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



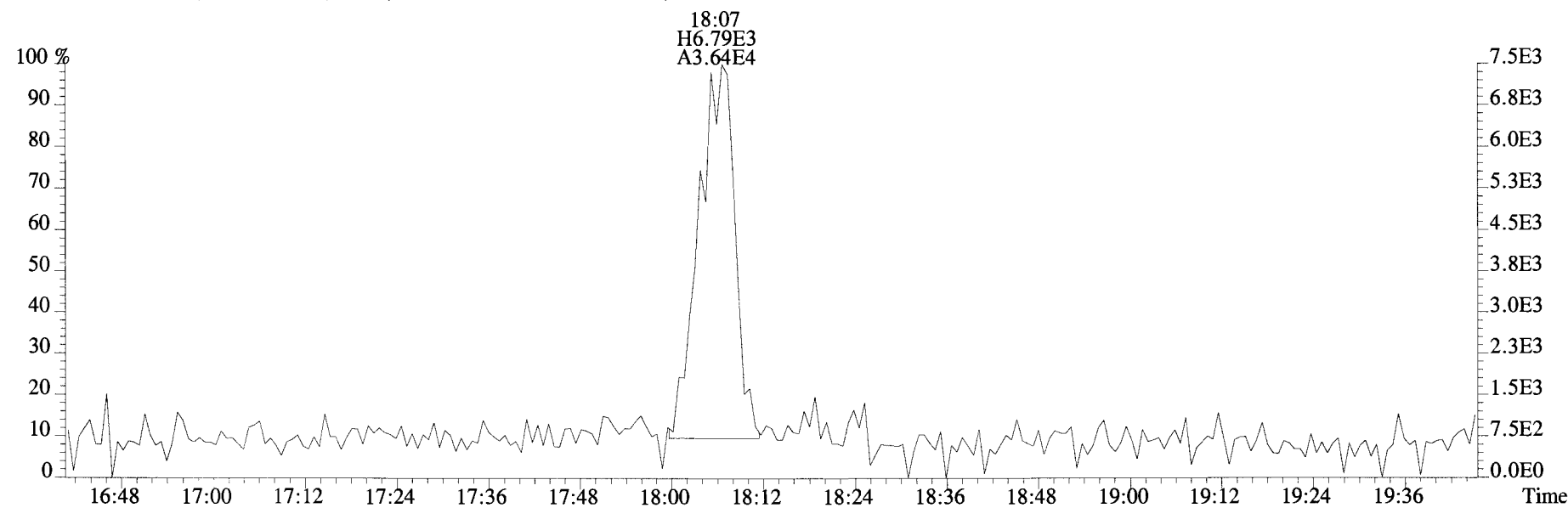
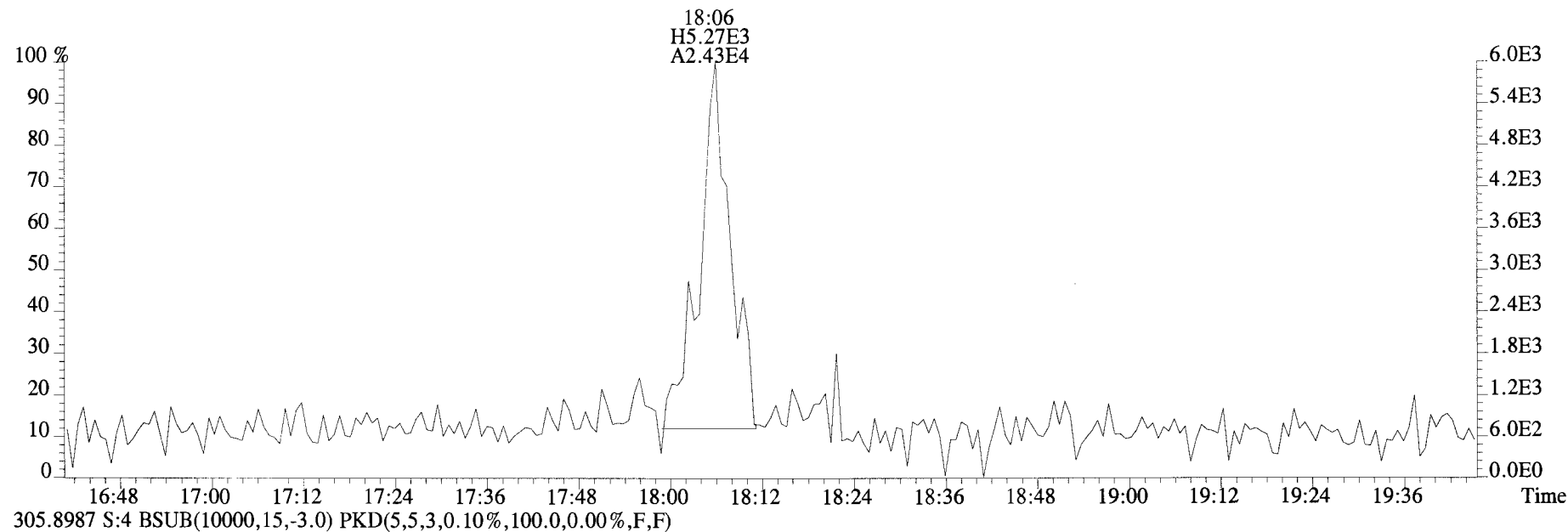
File:190530D1 #1-1682 Acq:30-MAY-2019 12:05:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory_VG7 Text:ST190530D1-1 1613 CS0 19C2201 Exp:TCDF_DB225
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



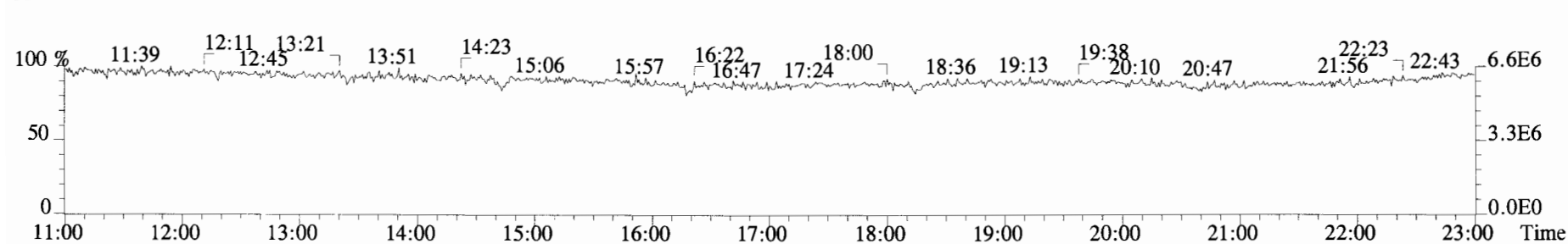
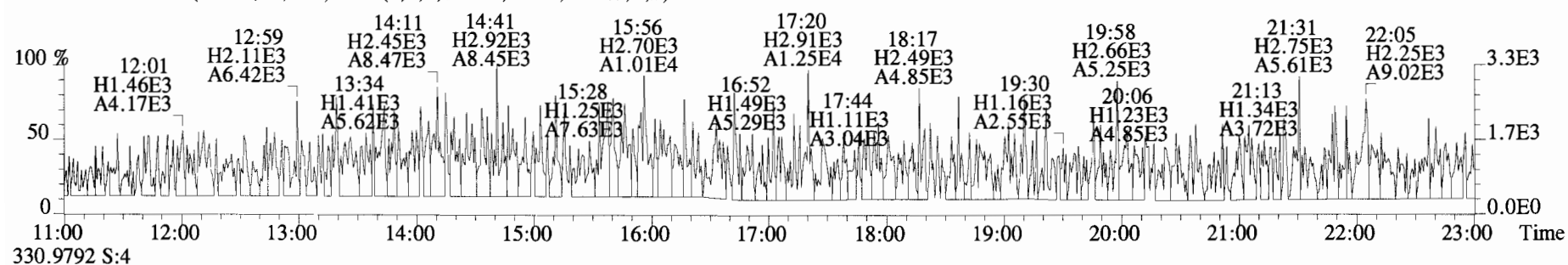
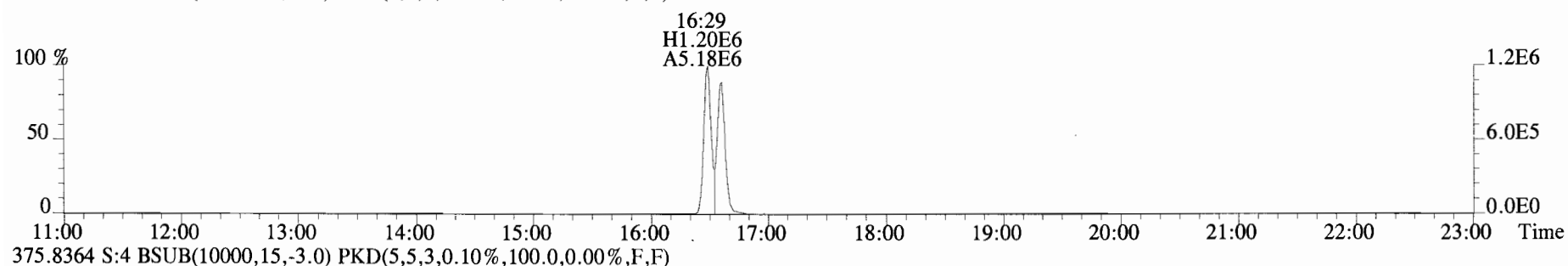
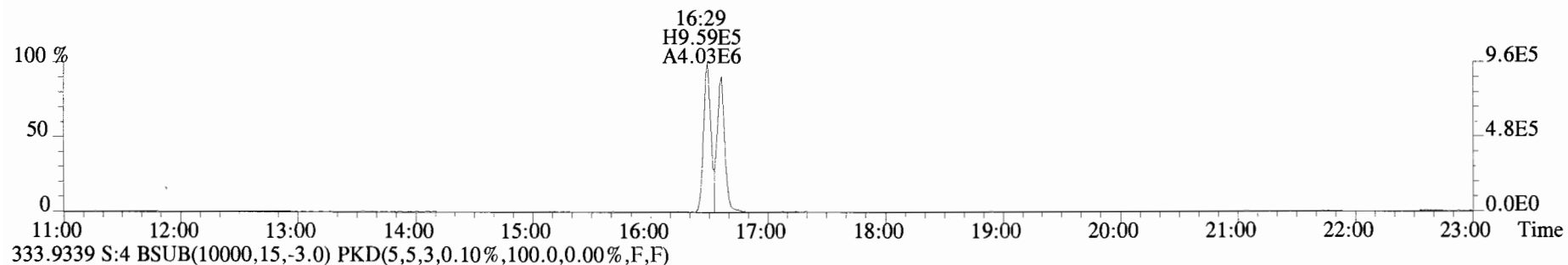
File:190530D1 #1-1683 Acq:30-MAY-2019 12:37:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-2 1613 CS1 19C2202 Exp:TCDF_DB225
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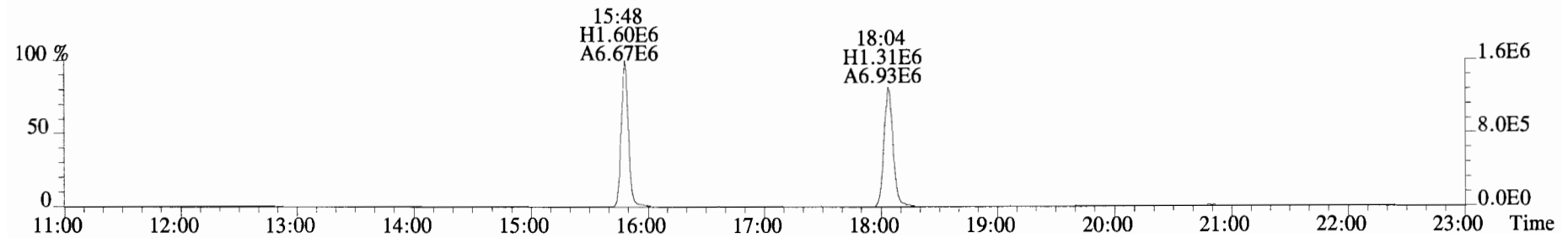
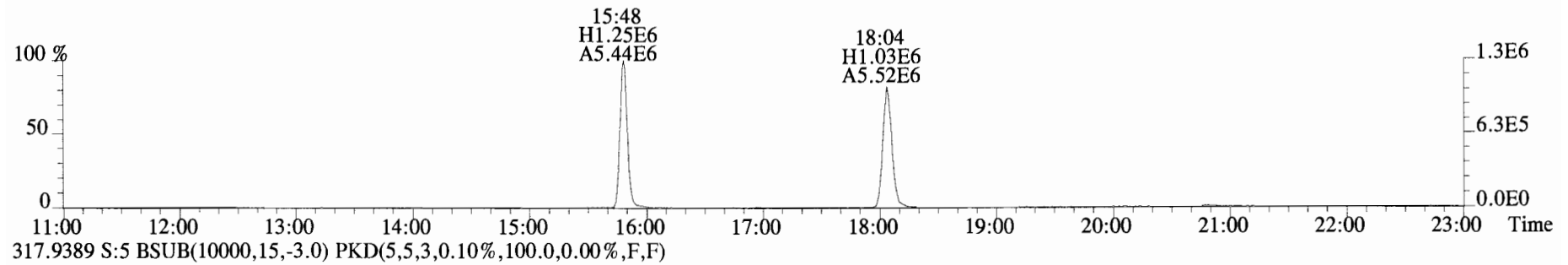
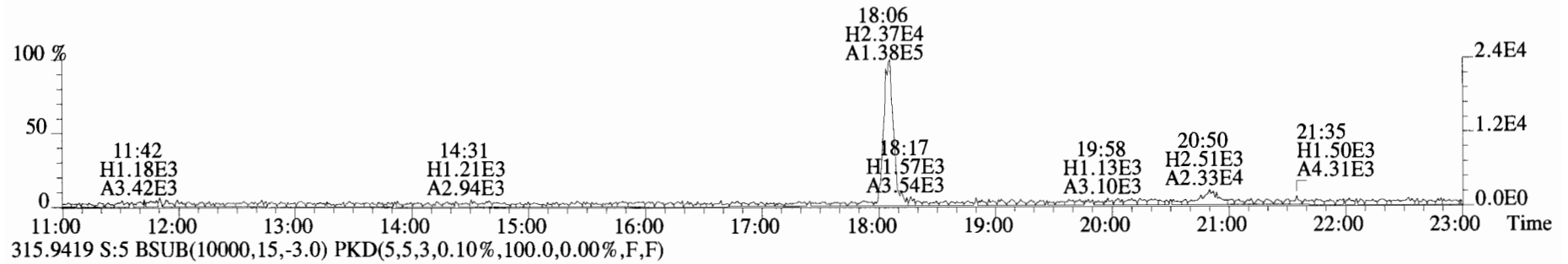
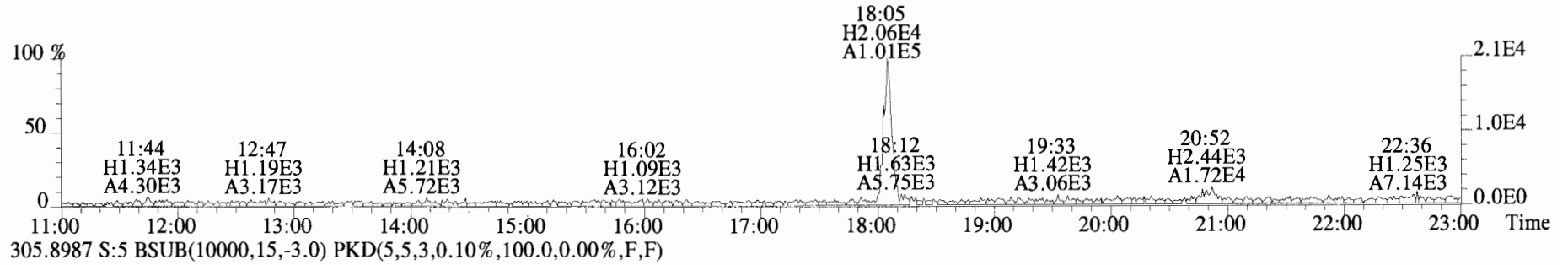
File:190530D1 #1-1683 Acq:30-MAY-2019 12:37:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-2 1613 CS1 19C2202 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



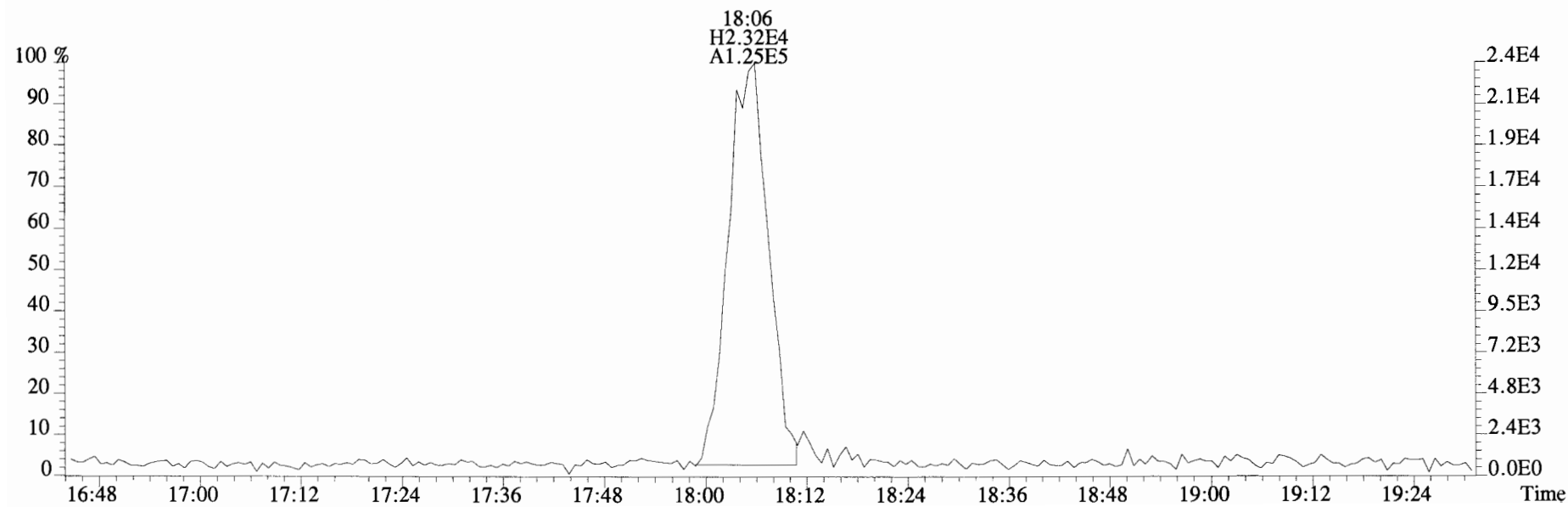
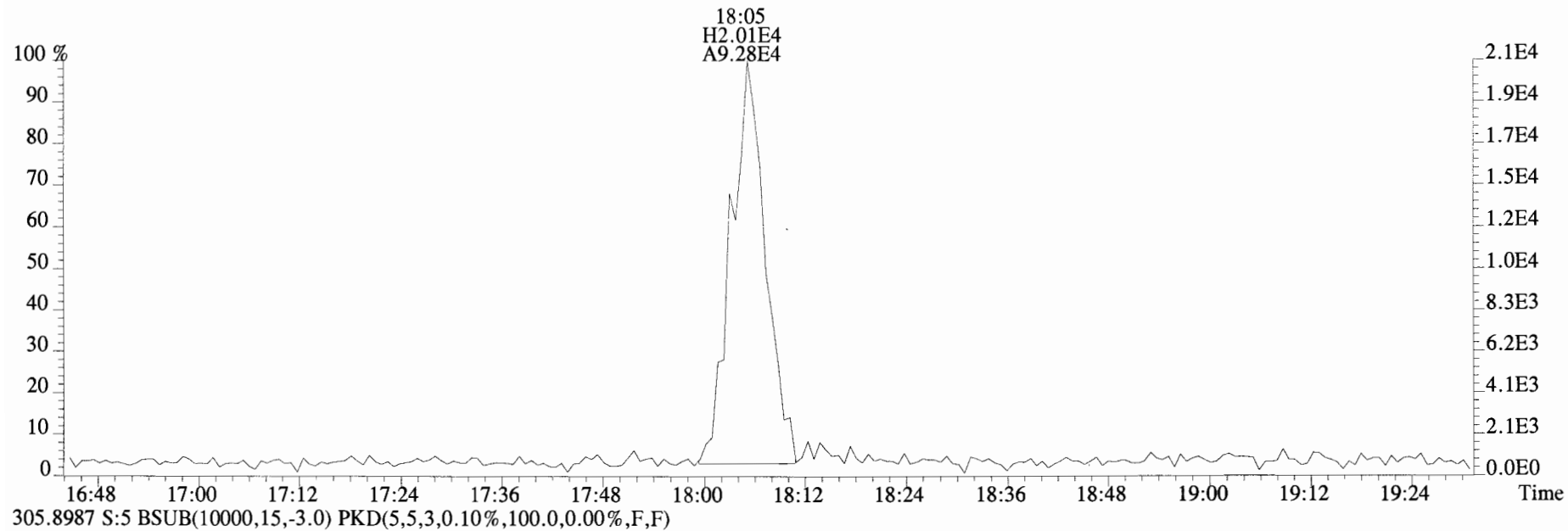
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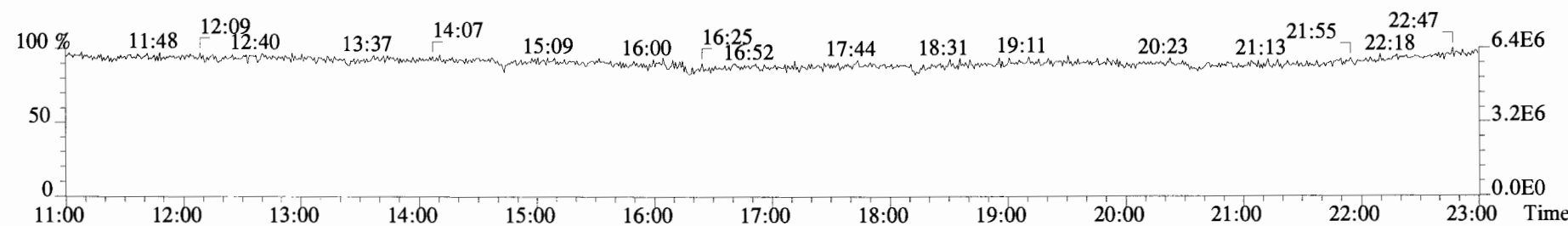
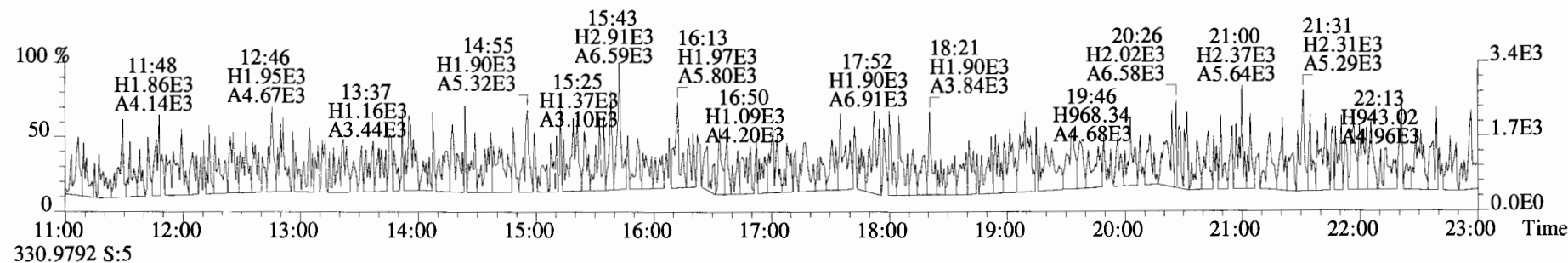
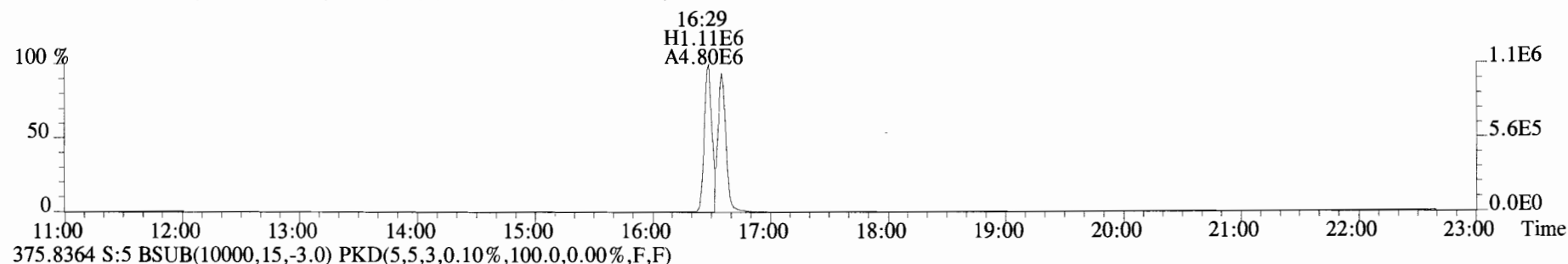
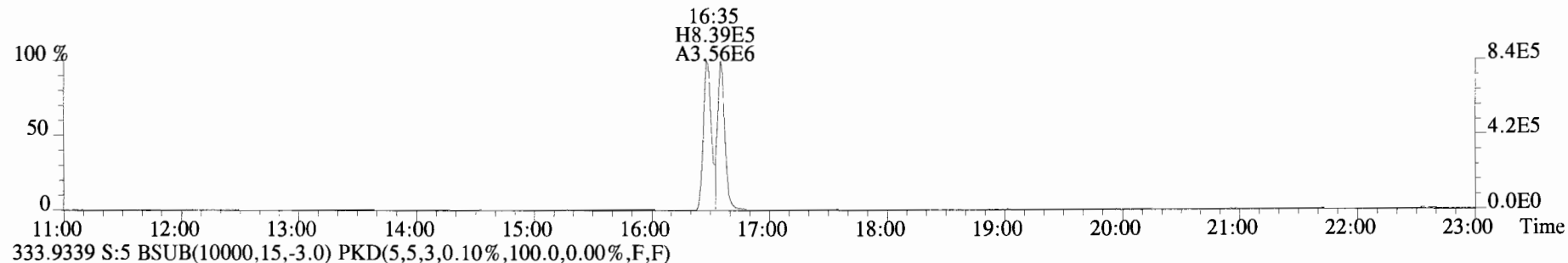
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 Sample#5 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-3 1613 CS2 19C2203 Exp:TCDF_DB225
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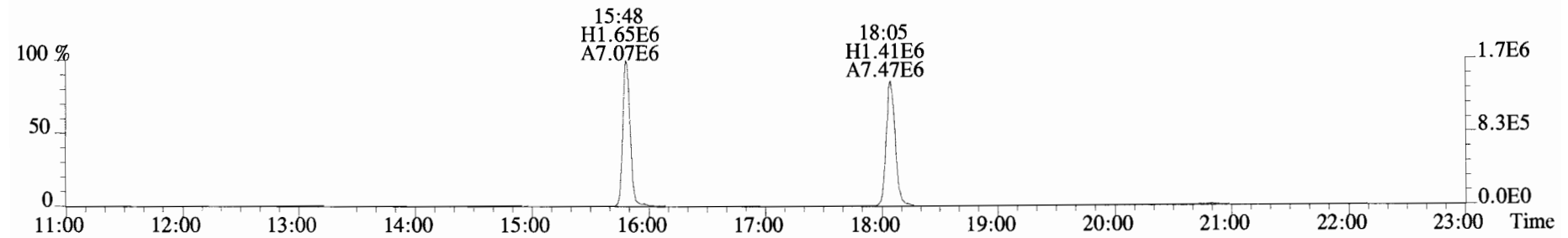
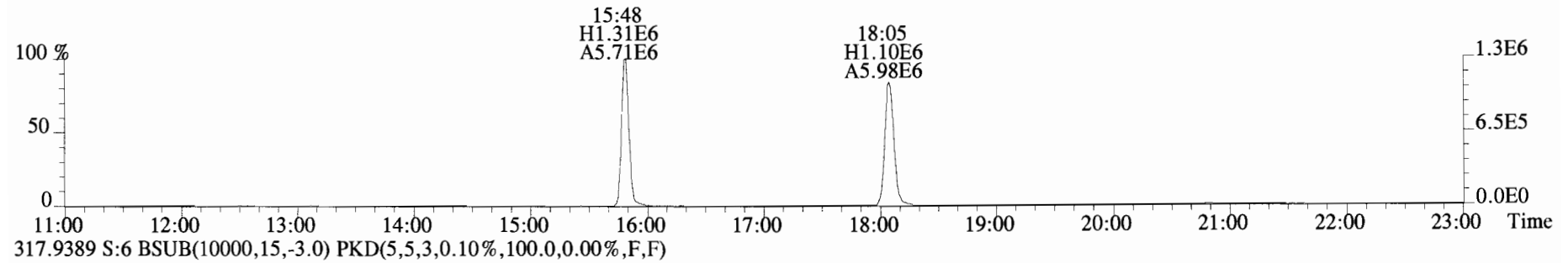
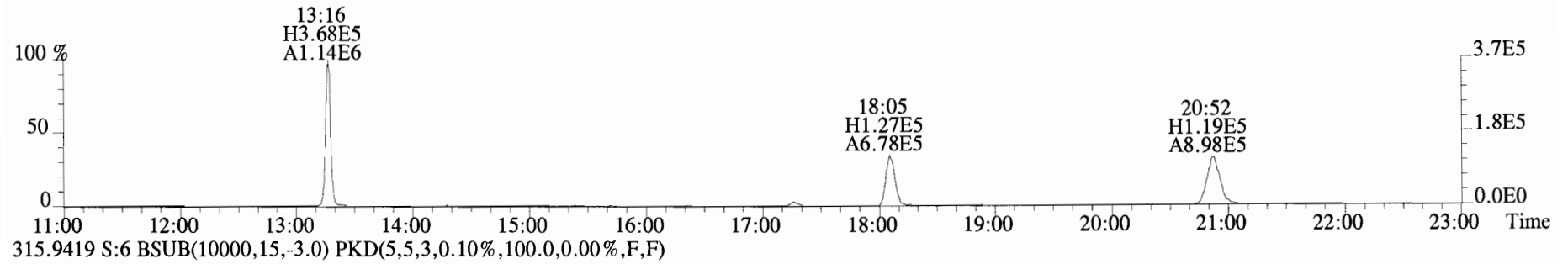
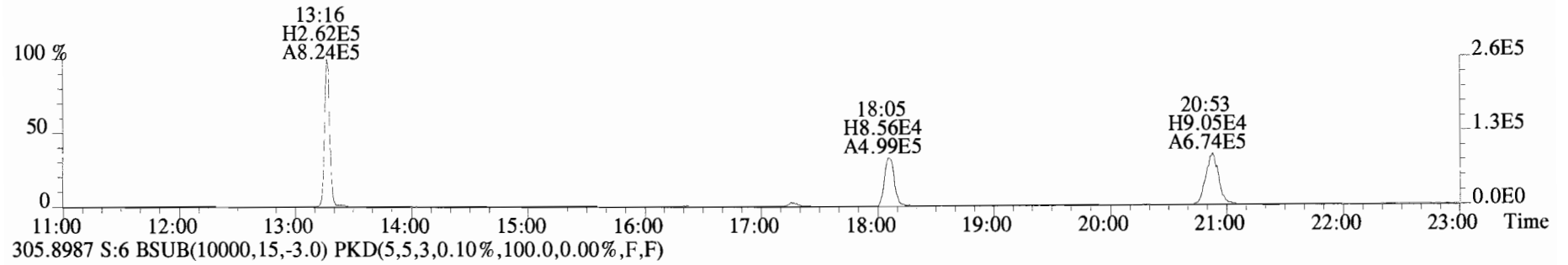
File:190530D1 #1-1683 Acq:30-MAY-2019 13:09:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-3 1613 CS2 19C2203 Exp:TCDF_DB225
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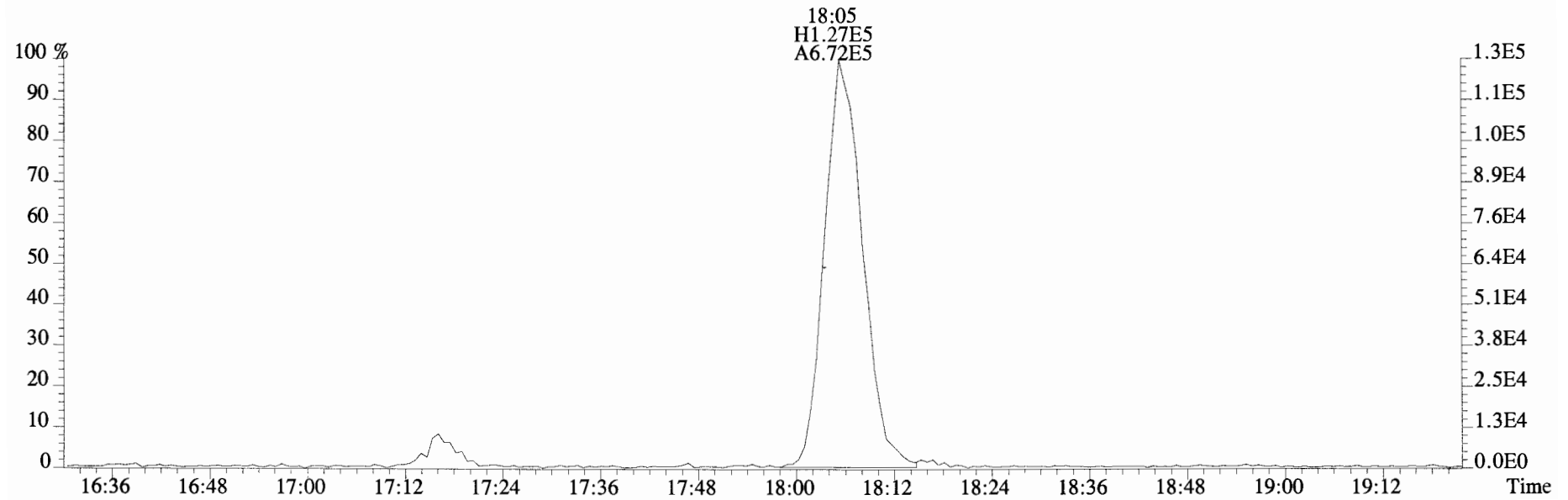
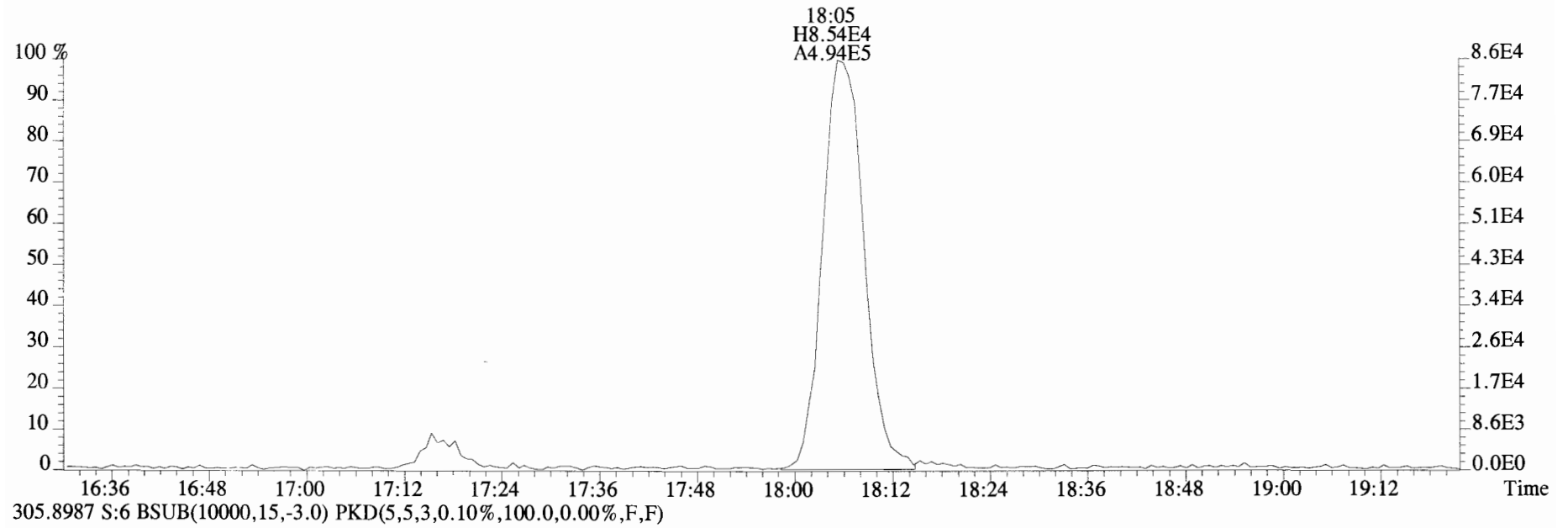
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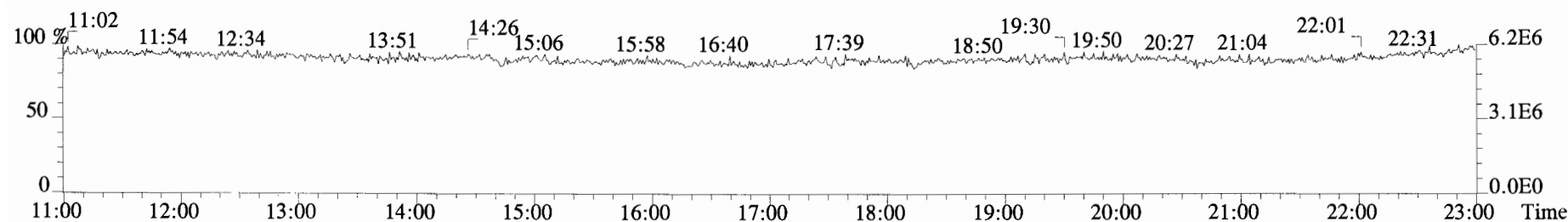
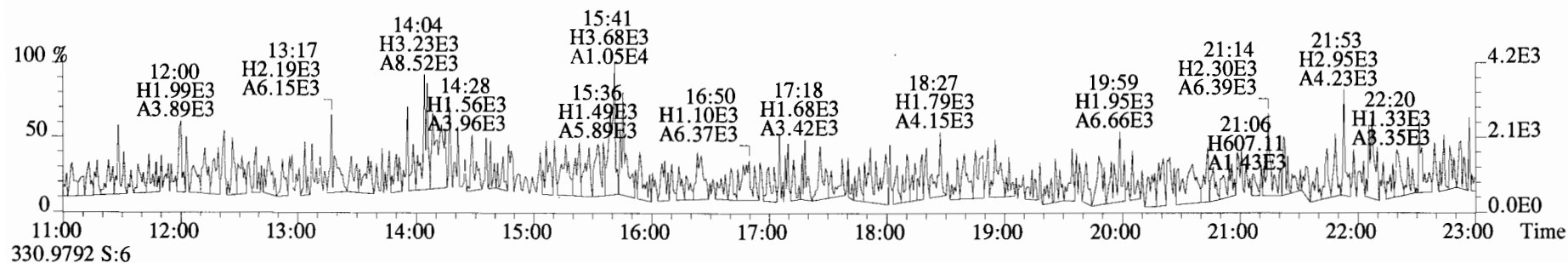
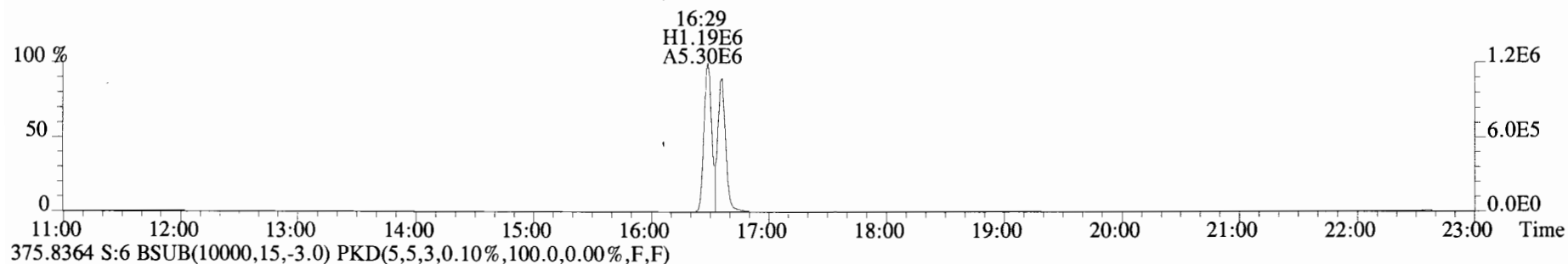
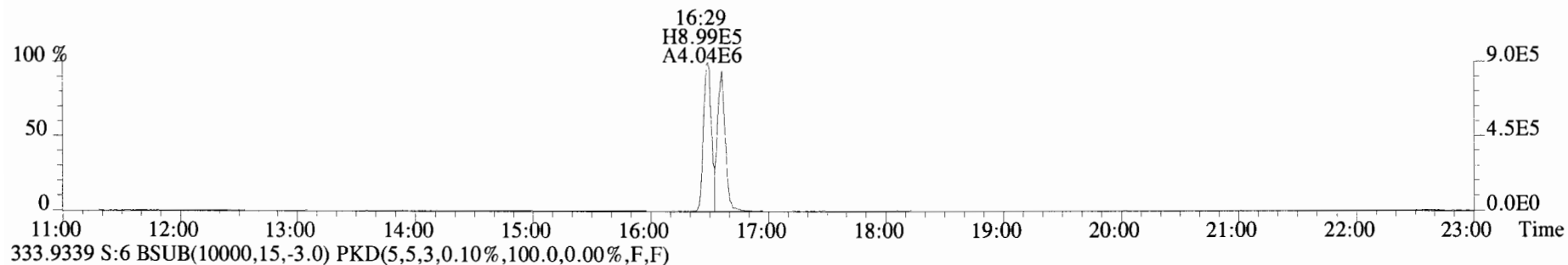
File:190530D1 #1-1682 Acq:30-MAY-2019 13:41:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-4 1613 CS3 19C2204 Exp:TCDF_DB225
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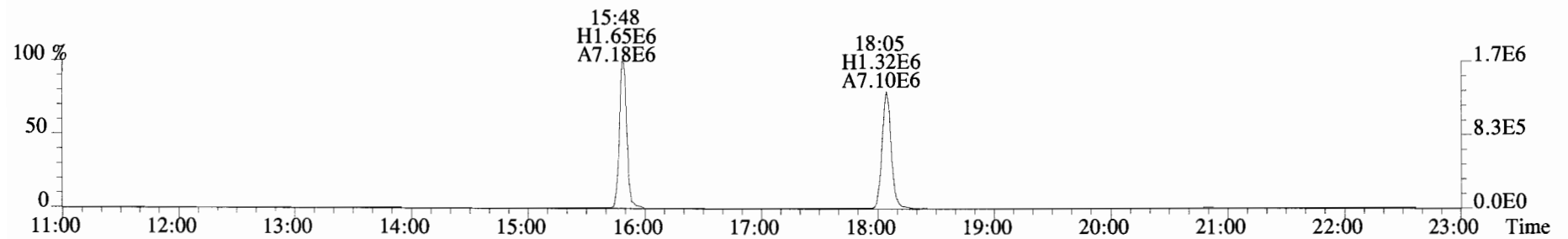
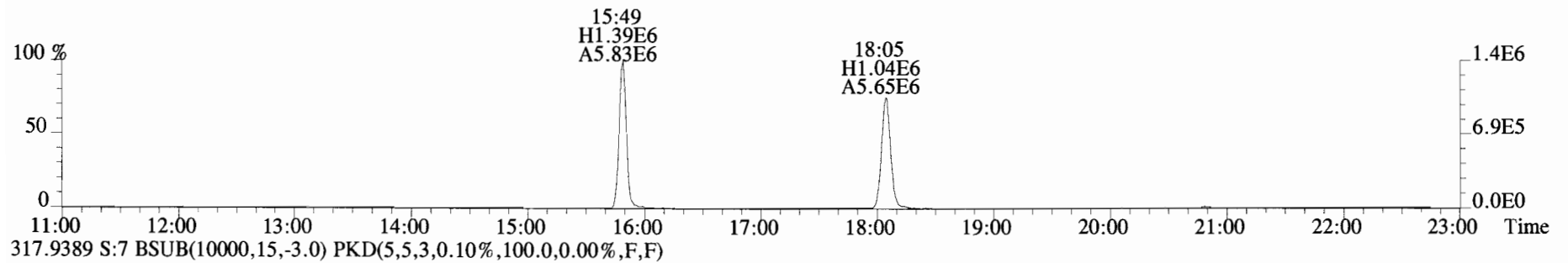
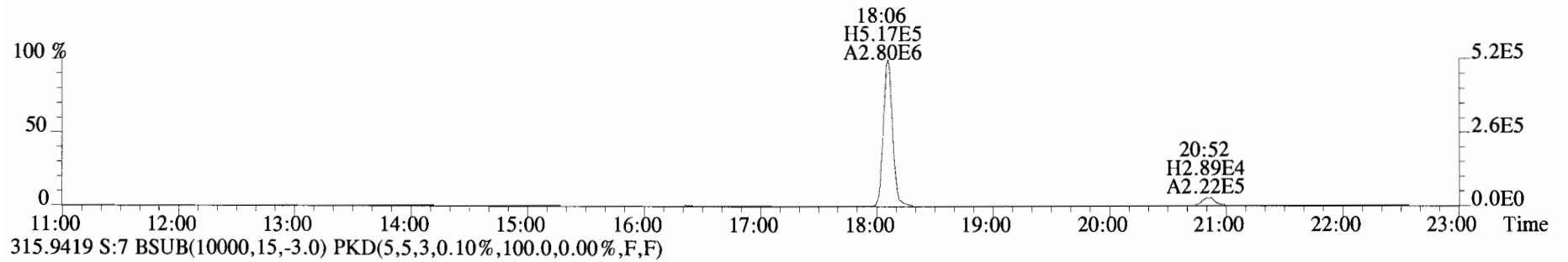
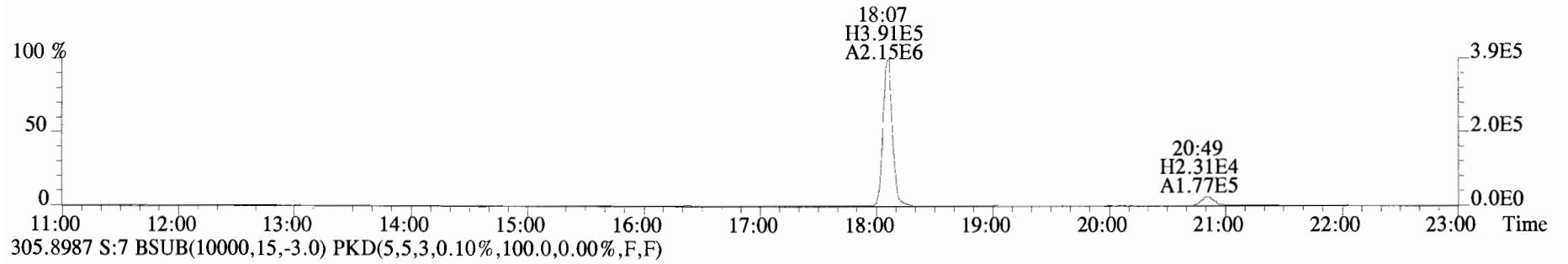
File:190530D1 #1-1682 Acq:30-MAY-2019 13:41:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory_VG7 Text:ST190530D1-4 1613 CS3 19C2204 Exp:TCDF_DB225
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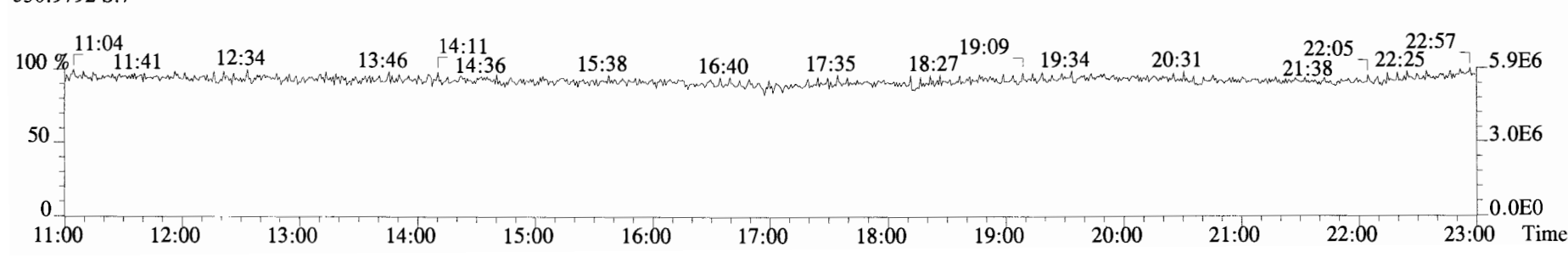
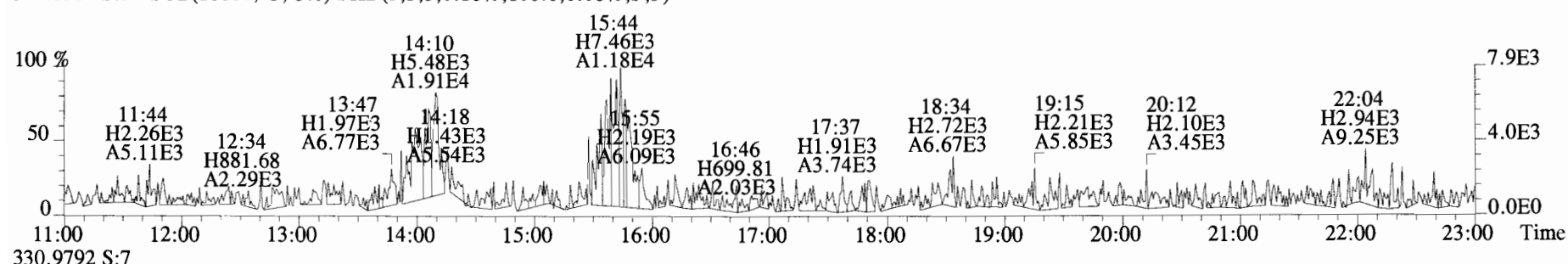
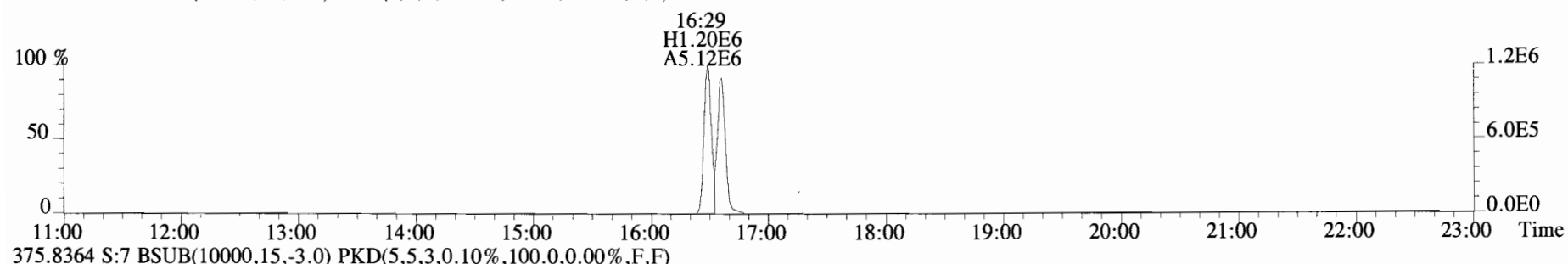
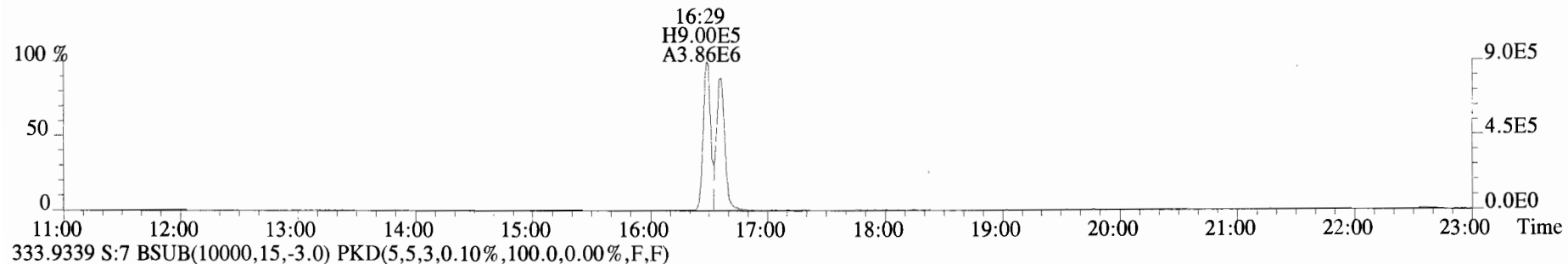
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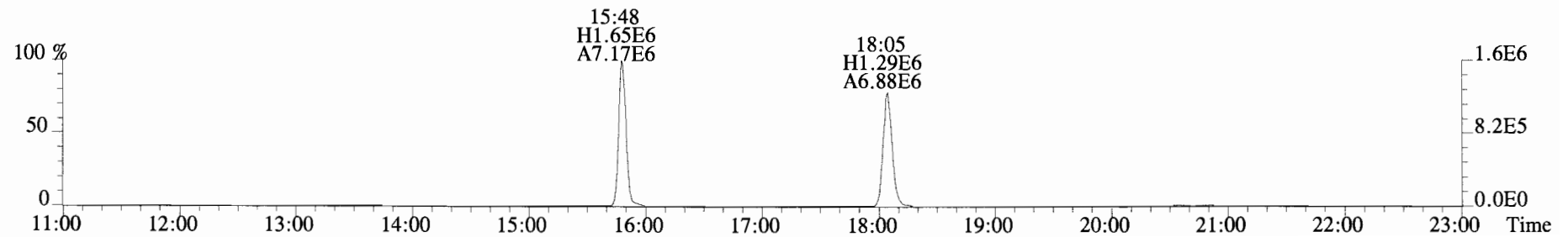
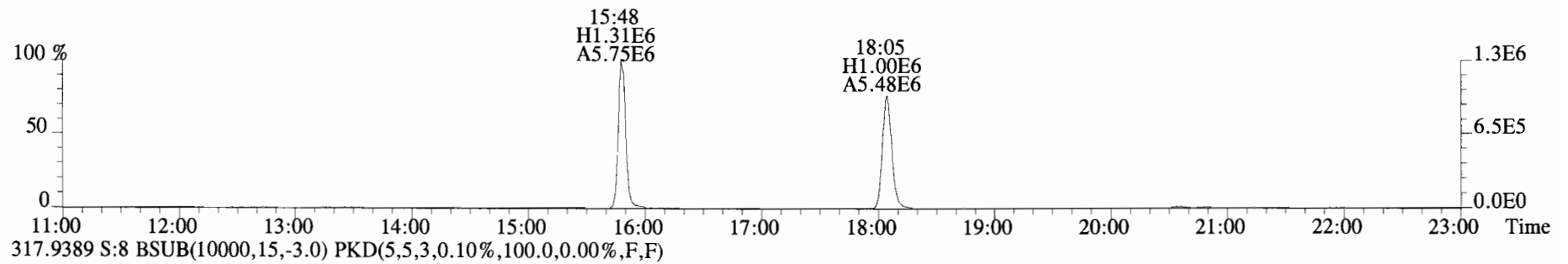
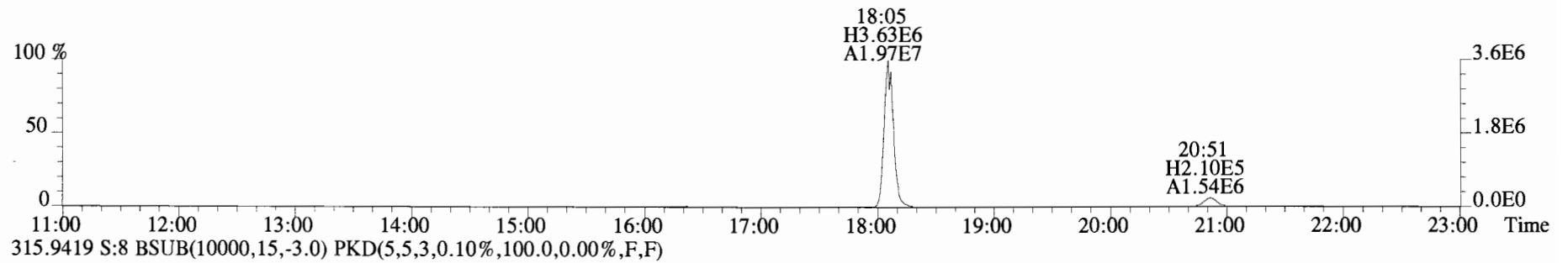
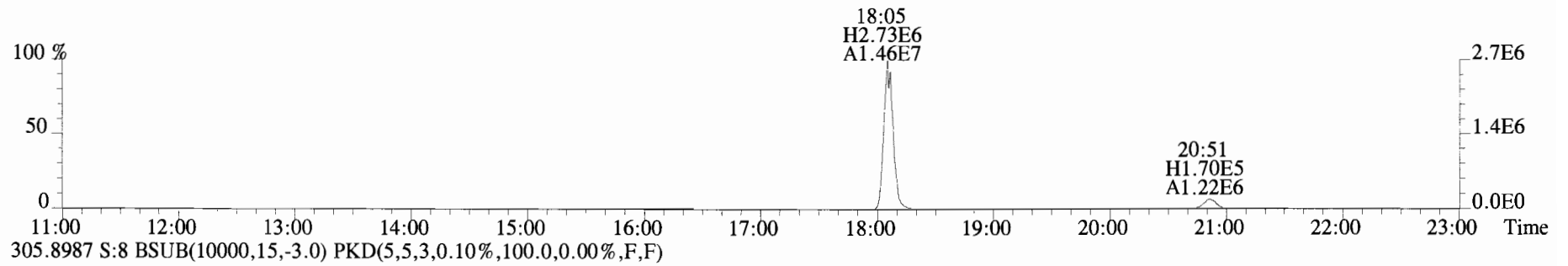
File:190530D1 #1-1682 Acq:30-MAY-2019 14:13:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-5 1613 CS4 19C2205 Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



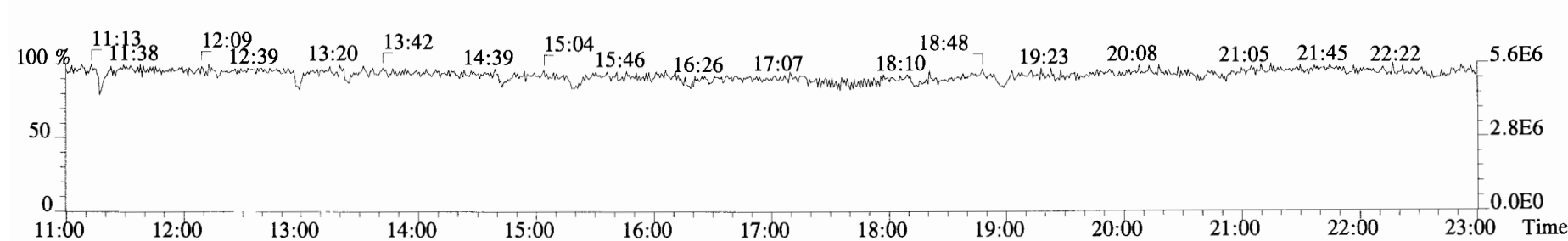
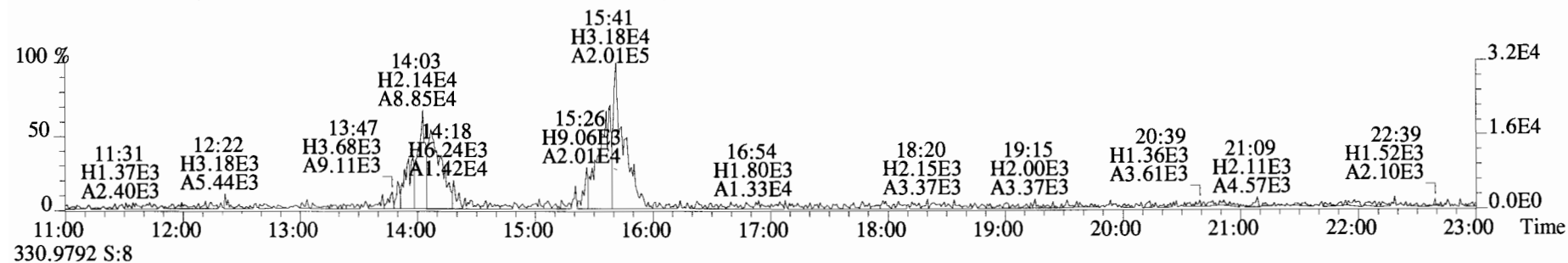
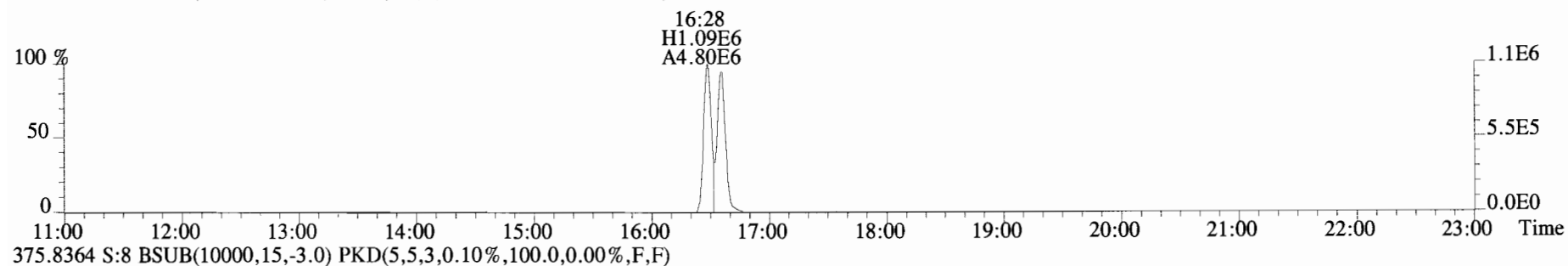
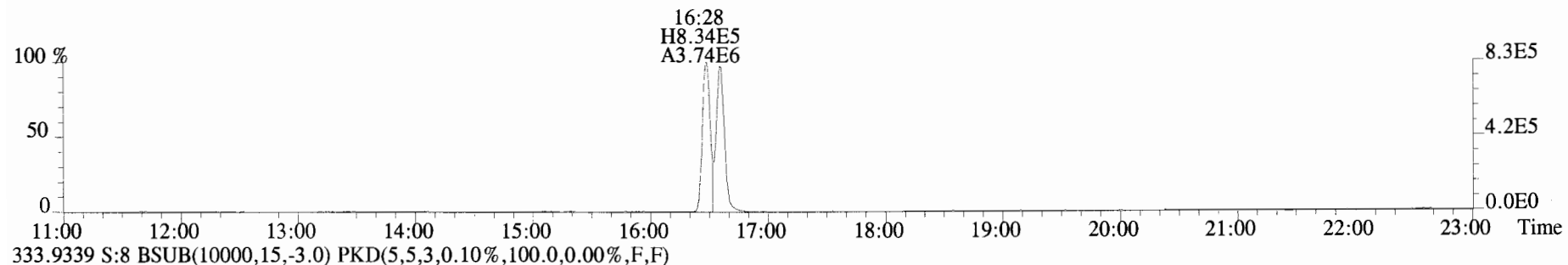
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 Sample#7 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-5 1613 CS4 19C2205 Exp:TCDF_DB225
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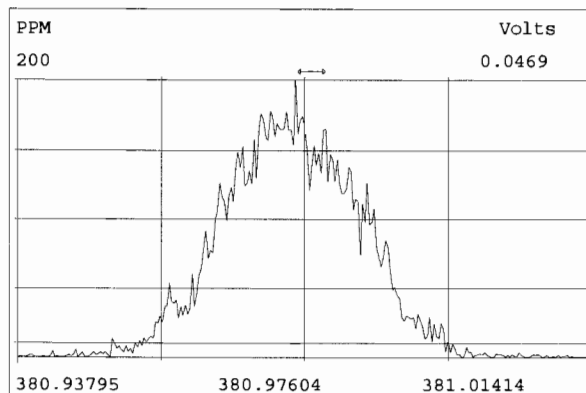
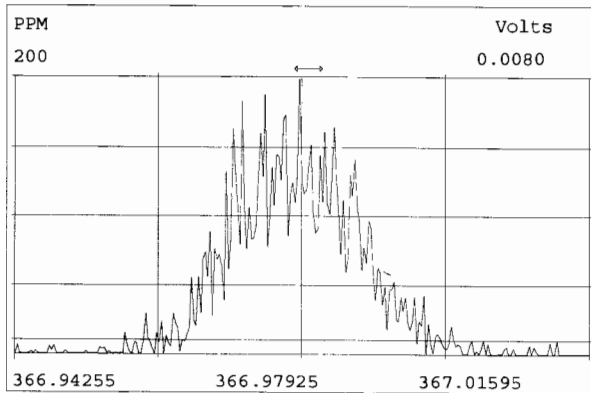
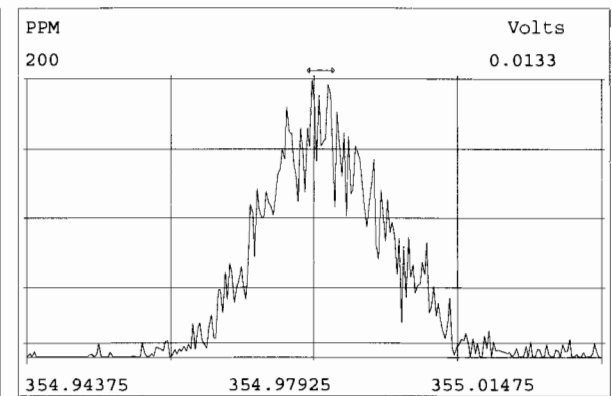
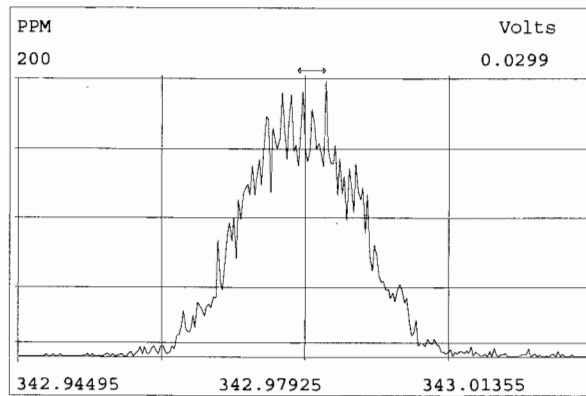
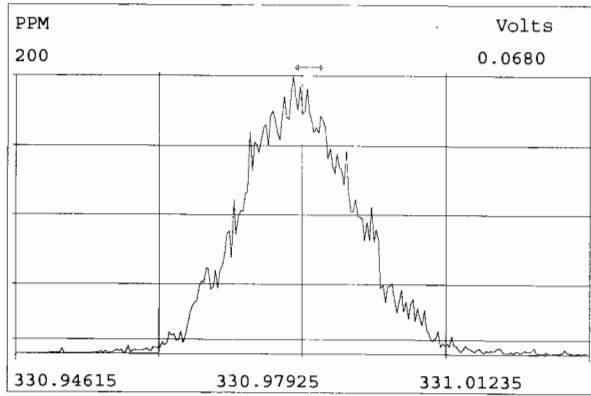
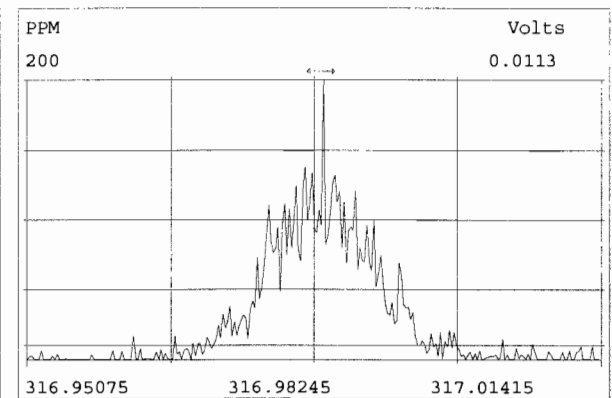
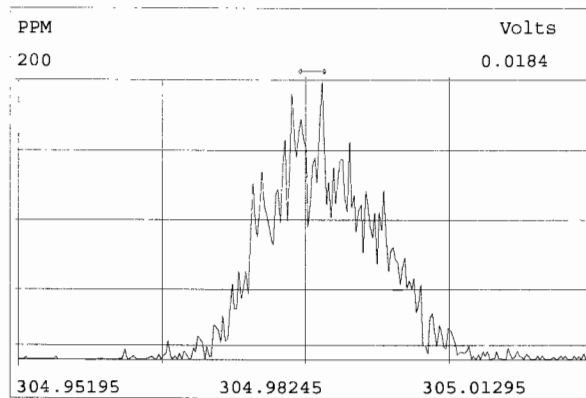
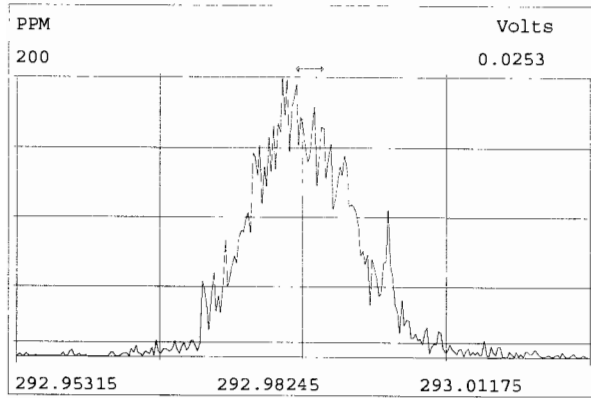


File:190530D1 #1-1682 Acq:30-MAY-2019 14:44:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG7 Text:ST190530D1-6 1613 CS5 19C2206 Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)





Client ID: 1613 SSS 19C2207
Lab ID: SS190528D1-1

Filename: 190530D1 S:10 Acq:30-MAY-19 15:48:32
GC Column ID: DB-225 ICal: 1613TCDFVG7-5-30-19 wt/vol: 1.000

ConCal: ST190530D1-4
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

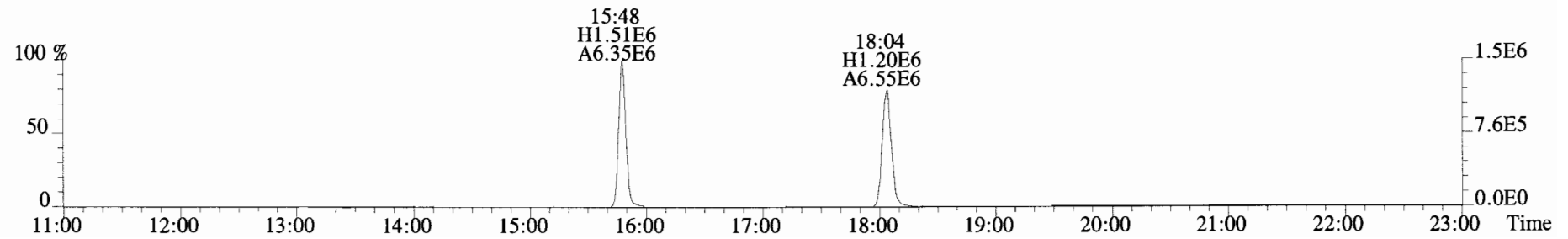
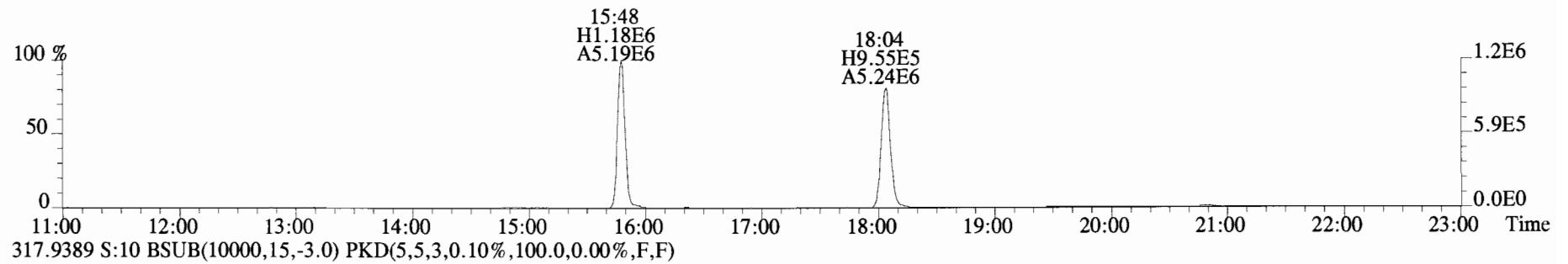
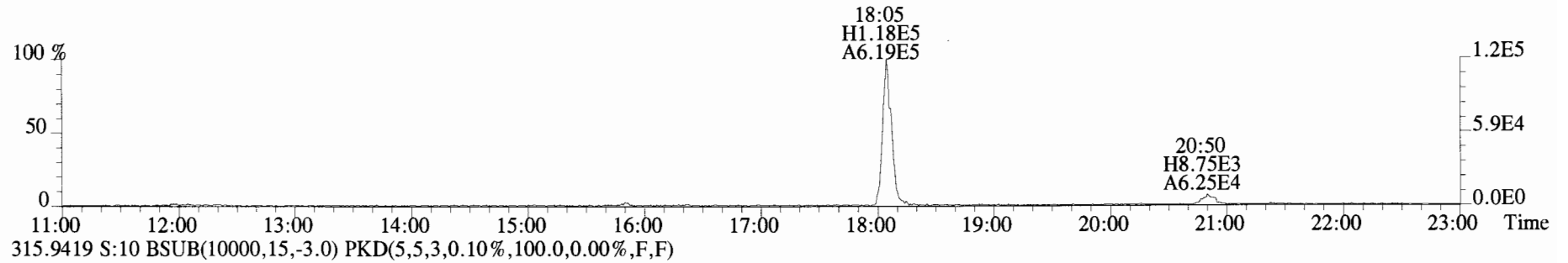
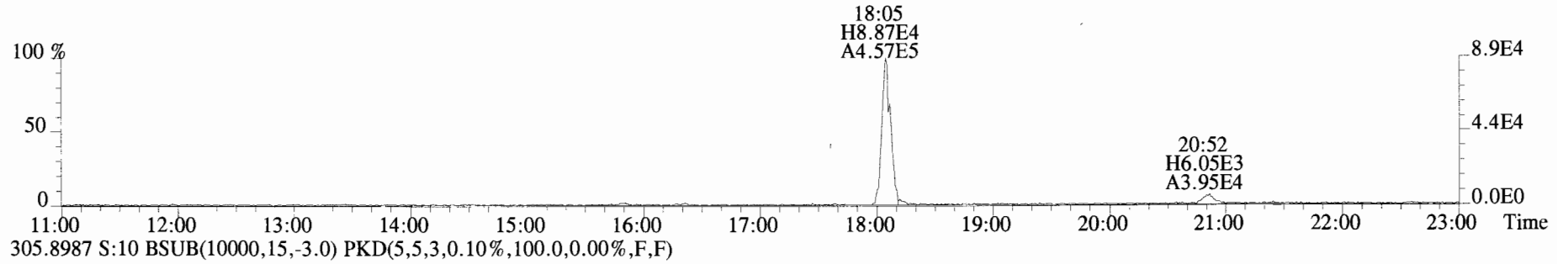
Date: 5/31/19

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
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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)

